

CE SAR Test Report

APPLICANT : Xiaomi Communications Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : POCO
MODEL NAME : 25102PCBEG
STANDARD : EN 50360:2017
EN 50360:2017/A1:2023
EN 50566:2017
EN 50566:2017/A1:2023
EN 62479:2010
EN 50663:2017
EN IEC 62311:2020
EN 50665:2017

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures and had been in compliance with the applicable technical standards.

This report contains data (Appendix F) that were produced under subcontract by Laboratory Sporton International Inc. (Shenzhen) Laboratory.

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
EA581310	Rev. 01	Initial issue of report	Sep. 23, 2025

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Xiaomi Communications Co., Ltd., Mobile Phone, 25102PCBEG**, are as follows.

Frequency Band		Highest SAR Summary			Highest Head Simultaneous Transmission 10g SAR (W/kg)	Highest Body Simultaneous Transmission 10g SAR (W/kg)	Highest Limbs Simultaneous Transmission 10g SAR (W/kg)		
		Head (Separation 0mm)	Body (Separation 5mm)	Limbs (Separation 0mm)					
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)					
GSM	GSM850	0.979	0.902	2.104	1.762	1.950	3.909		
	GSM900	0.808	0.821	1.968					
	GSM1800	0.834	0.655	2.087					
WCDMA	WCDMA I	0.843	0.890	2.537					
	WCDMA V	0.677	0.852	2.220					
	WCDMA VIII	0.656	0.822	2.109					
LTE	LTE Band 1	0.786	0.955	2.567					
	LTE Band 3	0.818	0.990	2.278					
	LTE Band 5	0.697	0.825	2.562					
	LTE Band 7	0.866	0.795	2.202					
	LTE Band 8	0.631	0.763	2.474					
	LTE Band 20	0.598	0.805	2.398					
	LTE Band 26	0.680	0.874	2.524					
	LTE Band 28	0.551	0.997	1.771					
	LTE Band 40	0.899	0.957	2.221					
	LTE Band 41/38	0.949	0.883	2.188					
	LTE Band 42	0.946	0.907	2.583					
FR1	FR1 n1	0.864	0.953	2.548					
	FR1 n3	0.994	0.967	2.403					
	FR1 n5	0.671	0.902	2.475					
	FR1 n7	0.887	0.873	2.206					
	FR1 n8	0.597	0.716	1.827					
	FR1 n20	0.581	0.766	2.203					
	FR1 n26	0.874	0.944	2.412					
	FR1 n28	0.604	0.874	2.045					
	FR1 n40	0.850	0.877	2.261					
	FR1 n41/38	0.786	0.785	1.766					
WLAN	2.4GHz WLAN	0.953	0.943	1.725					
	5GHz WLAN	0.993	0.780	2.579					
Bluetooth	Bluetooth	0.675	0.759	1.819					
NFC	NFC			0.012					
Date of Testing:		2025/08/26 ~ 2025/09/17							

Remark:

- This device supports LTE B38 and B41. Since the supported frequency span for LTE B38 falls completely within the support's frequency span for LTE B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B41.
- This device supports 5GNR n38/n78 and n41/n77. Since the supported frequency span for 5GNR n38/n78 falls completely within the support's frequency span for n41/n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n41/n77.

Declaration of Conformity:

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

Comments and Explanations:

The declared 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.



According to REDCA Technical Guidance on the publication with a restriction in the Official Journal of Europe of the reference of standard EN 50566: 2017, ensuring the safe a separation distance of 5 mm or less is applied for handheld device and body-mounted wireless communication devices used by the general public, the 5mm distance is used for SAR testing for body, 0mm distance is used for SAR testing for Limbs and this device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure (Localized 10-gram SAR for head and trunk, limit: 2.0W/kg, Localized 10-gram SAR for Limbs, limit: 4.0W/kg) specified in Council Recommendation 1999/519/EC, and ICNIRP Guidelines, and RED (Directive 2014/53/EU), and Radio Equipment Regulations 2017, and had been tested in accordance with the measurement methods and procedures specified in EN 50360:2017, EN 50360:2017/A1:2023, EN50566:2017, EN 50566:2017/A1:2023, EN 62479:2010, EN 50663:2017, EN 62209-1:2016 and EN 62209-2:2010, EN 62209-2:2010/A1:2019, EN IEC 62209-3:2019, EN IEC 62311:2020, EN 50665:2017, EN IEC/IEEE 62209-1528:2021.

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.	SAR03-KS, SAR06-KS, cSAR01-KS

Sporton International Inc. (Shenzhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

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Test Site No.	SAR02-SZ

Applicant	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

3. Guidance Applied

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

- Council Recommendation 1999/519/EC
- EN 50360:2017
- EN 50360:2017/A1:2023
- EN 50566:2017
- EN 50566:2017/A1:2023
- EN 62209-1:2016
- EN 62209-2:2010
- EN 62209-2:2010/A1:2019
- EN 62479:2010
- EN 50663:2017
- EN IEC 62311:2020
- EN 50665:2017
- EN IEC/IEEE 62209-1528:2021
- EN IEC 62209-3:2019

4. Equipment Under Test (EUT)

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Phone
Brand Name	POCO
Model Name	25102PCBEG
IMEI Code	863784080033926/863784080033934, 863784080036143/863784080036150, 863784080033801/863784080033819, 863784080036267/863784080036275, 863784080034064/863784080034072, 863784080039600/863784080039618
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM900: 880 MHz ~ 915 MHz GSM1800: 1710 MHz ~ 1785 MHz WCDMA Band I: 1920 MHz ~ 1980 MHz WCDMA Band V: 824 MHz ~ 849 MHz WCDMA Band VIII: 880 MHz ~ 915 MHz LTE Band 1: 1920 MHz ~ 1980 MHz LTE Band 3: 1710 MHz ~ 1785 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 8: 880 MHz ~ 915 MHz LTE Band 20: 832 MHz ~ 862 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 28: 703 MHz ~ 748 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 40: 2300 MHz ~ 2400 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3400 MHz ~ 3600 MHz 5G NR n1: 1920 MHz ~ 1980 MHz 5G NR n3: 1710 MHz ~ 1785 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n8: 880 MHz ~ 915 MHz 5G NR n20: 832 MHz ~ 862 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n28: 703 MHz ~ 748 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n40: 2300 MHz ~ 2400 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n77: 3300 MHz ~ 4200 MHz 5G NR n78: 3300 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz WLAN 5GHz Band: 5180 MHz ~ 5320 MHz, 5500 MHz ~ 5700 MHz, 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz WPT: 111 kHz~ 148.5 kHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA/HSUPA DC-HSDPA HSPA+(16QAM uplink is not 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/be HE20/HE40/EHT20/EHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 5GHz 802.11be EHT20/EHT40/EHT80/EHT160 Bluetooth BR/EDR/LE NFC: ASK

	WPT: ASK
HW Version	1351P2501
SW Version	Xiaomi HyperOS 3.0
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype

Remark:

1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5G NR (e.g. for 3rd-party VoIP) and LTE supports VoLTE operation.
2. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 33.
3. The 2.4GHz/5GHz WLAN can transmit in SISO/MIMO antenna mode. And 802.11b/g supports SISO mode for 2.4GHz WLAN.
4. For dual SIM card mobile has two SIM slots and supports Dual SIM Dual Access. Dual-SIM Dual-Access means that two mobile phone cards can be inserted into the mobile phone and it can answer calls at the same time.
5. The device implements Proximity sensors/receiver detect mechanism/handheld trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body, Limbs) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. 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.
6. 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, using FTM to perform SAR with default 100% transmission.
7. This device supports HPUE mode for 5G NR n41/n77/n78 with higher power. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
8. Bluetooth BR/EDR supports Beamforming mode, and BLE don't supports Beamforming mode.
9. There are three samples. The difference between them are memory/storage capacity and back cover, sample 1 is 16+512G with PU back cover, sample 2 is 16+512G with glass fiber back cover and sample 3 is 12+256G with glass fiber back cover. According to the difference, sample 1 was chosen to perform full SAR test.
10. For 5G NR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance.
11. RF exposure report for WPC (Wireless power charging) will be separately submitted.
12. This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
SA	n1	FDD	15	5, 10, 15, 20, 25, 30, 40, 45, 50
	n3	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n8	FDD	15	5, 10, 15, 20
	n20	FDD	15	5, 10, 15, 20
	n26	FDD	15	5, 10, 15, 20
	n28	FDD	15	5, 10, 15, 20, 25, 30
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n40	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
NSA	n1	FDD	15	5, 10, 15, 20, 25, 30, 40, 45, 50
	n3	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n8	FDD	15	5, 10, 15, 20
	n20	FDD	15	5, 10, 15, 20
	n28	FDD	15	5, 10, 15, 20, 25, 30
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n40	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

5. Smart Transmit feature for RF Exposure compliance

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

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) version 24 to enable the Smart Transmit GEN2 Feature.

<Terminologies in this report>

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

<SAR Characterization>

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

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

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

Antenna Group:

Antenna Group 0 (AG0)	ANT1 & ANT4 & ANT5 & ANT7 & ANT8 & ANT9 & ANT10 & ANT12 & ANT11
Antenna Group 1 (AG1)	ANT0 & ANT6

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

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

<P_{limit} for supported technologies and bands>

Band	Antenna	Head DSI 1 Power	Body&Limbs DSI3 sensor on	Body&Limbs DSI4 Sensor off	Pmax*	Total Uncertainty dB (k=2)
GSM850	Ant 0	30.40	24.90	24.90	24.0	1.00
GSM850	Ant 1	23.00	21.00	41.00	24.0	1.50
GSM900	Ant 0	29.20	24.80	24.80	24.0	1.00
GSM900	Ant 1	21.50	20.50	33.50	24.0	1.50
GSM1800	Ant 4	20.00	23.00	34.40	21.0	1.50
GSM1800	Ant 6	33.50	22.00	22.00	21.0	1.00
WCDMA I	Ant 4	19.50	20.00	33.20	24.0	1.00
WCDMA I	Ant 5	18.00	18.50	30.30	22.5	1.50
WCDMA I	Ant 6	34.00	19.00	19.00	23.0	1.50
WCDMA I	Ant 7	22.00	20.00	20.00	22.5	1.50
WCDMA V	Ant 0	30.90	23.50	23.50	24.0	1.00
WCDMA V	Ant 1	21.00	20.00	35.00	24.0	1.50
WCDMA VIII	Ant 0	28.80	24.90	24.90	24.0	1.00
WCDMA VIII	Ant 1	20.50	20.00	35.00	24.0	1.50
LTE Band 1_Main PA	Ant 4	19.00	19.50	33.70	25.0	0.70
LTE Band 1_Main PA	Ant 5	17.50	18.50	30.70	23.5	1.50
LTE Band 1_Main PA	Ant 6	33.70	19.00	19.00	24.0	1.50
LTE Band 1_Main PA	Ant 7	21.50	20.00	20.00	23.5	1.50
LTE Band 1_Other PA	Ant 4	19.00	19.50	33.70	24.0	1.50
LTE Band 1_Other PA	Ant 5	17.50	18.50	30.70	23.0	1.50
LTE Band 1_Other PA	Ant 6	33.70	19.00	19.00	24.0	1.00
LTE Band 1_Other PA	Ant 7	21.50	20.00	20.00	22.5	1.50
LTE Band 3_Main PA	Ant 4	19.00	20.00	25.00	25.0	0.70
LTE Band 3_Main PA	Ant 5	17.50	18.50	30.50	23.5	1.50
LTE Band 3_Main PA	Ant 6	32.40	19.50	19.50	24.0	1.50
LTE Band 3_Main PA	Ant 7	20.00	19.00	19.00	23.5	1.50
LTE Band 3_Other PA	Ant 4	19.00	20.00	25.00	24.0	1.50
LTE Band 3_Other PA	Ant 5	17.50	18.50	30.50	23.0	1.50
LTE Band 3_Other PA	Ant 6	32.40	19.50	19.50	24.0	1.00
LTE Band 3_Other PA	Ant 7	20.00	19.00	19.00	22.5	1.50
LTE Band 5_Main PA	Ant 0	31.40	25.00	25.00	25.0	0.70
LTE Band 5_Main PA	Ant 1	21.00	19.50	33.50	24.5	1.20
LTE Band 5_Other PA	Ant 0	31.40	24.50	24.50	24.0	1.00
LTE Band 5_Other PA	Ant 1	21.00	19.50	33.50	23.5	1.50
LTE Band 7	Ant 4	19.50	20.00	34.80	25.0	0.70
LTE Band 7	Ant 5	19.00	18.50	33.60	23.5	1.50
LTE Band 7	Ant 6	31.30	19.50	19.50	24.0	1.50
LTE Band 7	Ant 7	19.00	19.00	19.00	23.0	1.50
LTE Band 8_Main PA	Ant 0	29.40	25.10	25.10	25.0	0.70
LTE Band 8_Main PA	Ant 1	20.50	19.50	34.30	24.5	1.20
LTE Band 8_Other PA	Ant 0	29.40	25.10	25.10	24.0	1.00
LTE Band 8_Other PA	Ant 1	20.50	19.50	34.30	23.5	1.50
LTE Band 20_Main PA	Ant 0	30.30	24.40	24.40	24.0	1.00
LTE Band 20_Main PA	Ant 1	20.50	19.50	34.60	23.5	1.50
LTE Band 20_Other PA	Ant 0	30.30	24.40	24.40	24.0	1.00
LTE Band 20_Other PA	Ant 1	20.50	19.50	34.60	23.5	1.50
LTE Band 26	Ant 0	31.40	25.10	25.10	25.0	0.70

LTE Band 26	Ant 1	21.50	20.50	35.50	24.5	1.20
LTE Band 28_Main PA	Ant 0	31.90	24.80	24.80	24.0	1.00
LTE Band 28_Main PA	Ant 1	26.10	21.50	38.40	23.5	1.50
LTE Band 28_Other PA	Ant 0	31.90	24.80	24.80	24.0	1.00
LTE Band 28_Other PA	Ant 1	26.10	21.50	38.40	23.5	1.50
LTE Band 38	Ant 4	19.50	19.50	32.70	23.0	0.70
LTE Band 38	Ant 5	19.50	18.00	32.50	21.5	1.50
LTE Band 38	Ant 6	31.90	19.50	19.50	22.0	1.50
LTE Band 38	Ant 7	20.00	20.00	20.00	21.0	1.50
LTE Band 40	Ant 4	20.00	19.00	34.60	22.0	1.00
LTE Band 40	Ant 5	19.50	19.50	32.00	20.5	1.50
LTE Band 40	Ant 6	32.50	20.00	20.00	21.0	1.50
LTE Band 41	Ant 4	19.50	19.50	32.70	23.0	0.70
LTE Band 41	Ant 5	19.50	18.50	32.50	21.5	1.50
LTE Band 41	Ant 6	31.90	19.50	19.50	22.0	1.50
LTE Band 41	Ant 7	20.00	20.50	20.50	21.0	1.50
LTE Band 42	Ant 8	20.00	18.50	18.50	23.0	1.00
LTE Band 42	Ant 9	21.80	17.50	32.70	18.5	1.50
LTE Band 42	Ant 10	18.50	16.50	28.40	22.5	1.50
LTE Band 42	Ant 11	20.10	17.50	32.90	19.5	1.50
FR1 n1_Main PA	Ant 4	19.00	19.00	34.10	25.0	0.70
FR1 n1_Main PA	Ant 5	17.50	18.00	29.30	23.5	1.50
FR1 n1_Main PA	Ant 6	33.90	19.50	19.50	24.0	1.50
FR1 n1_Main PA	Ant 7	21.50	20.00	20.00	23.5	1.50
FR1 n1_Other PA	Ant 4	19.00	19.00	34.10	24.0	1.50
FR1 n1_Other PA	Ant 5	17.50	18.00	29.30	23.0	1.50
FR1 n1_Other PA	Ant 6	33.90	19.50	19.50	24.0	1.00
FR1 n1_Other PA	Ant 7	21.50	20.00	20.00	22.5	1.50
FR1 n3_Main PA	Ant 4	19.00	20.00	32.60	25.0	0.70
FR1 n3_Main PA	Ant 5	17.50	17.50	31.50	23.5	1.50
FR1 n3_Main PA	Ant 6	31.90	19.00	19.00	24.0	1.50
FR1 n3_Main PA	Ant 7	19.50	18.50	18.50	23.5	1.50
FR1 n3_Other PA	Ant 4	19.00	20.00	32.60	24.0	1.50
FR1 n3_Other PA	Ant 5	17.50	17.50	31.50	23.0	1.50
FR1 n3_Other PA	Ant 6	31.90	19.00	19.00	24.0	1.00
FR1 n3_Other PA	Ant 7	19.50	18.50	18.50	22.5	1.50
FR1 n5_Main PA	Ant 0	31.00	24.50	24.50	25.0	0.70
FR1 n5_Main PA	Ant 1	21.00	20.00	34.10	24.5	1.20
FR1 n5_Other PA	Ant 0	31.00	24.50	24.50	24.0	1.00
FR1 n5_Other PA	Ant 1	21.00	20.00	34.10	23.5	1.50
FR1 n7	Ant 4	18.50	19.00	32.50	25.0	0.70
FR1 n7	Ant 5	18.00	18.00	33.10	23.5	1.50
FR1 n7	Ant 6	31.80	19.00	19.00	24.0	1.50
FR1 n7	Ant 7	19.00	18.50	18.50	23.0	1.50
FR1 n8_Main PA	Ant 0	29.70	24.00	24.00	25.0	0.70
FR1 n8_Main PA	Ant 1	20.50	19.50	34.80	24.5	1.20
FR1 n8_Other PA	Ant 0	29.70	24.00	24.00	24.0	1.00
FR1 n8_Other PA	Ant 1	20.50	19.50	34.80	23.5	1.50
FR1 n20_Main PA	Ant 0	30.50	24.70	24.70	24.0	1.00
FR1 n20_Main PA	Ant 1	20.50	19.50	36.20	23.5	1.50
FR1 n20_Other PA	Ant 0	30.50	24.70	24.70	24.0	1.00
FR1 n20_Other PA	Ant 1	20.50	19.50	36.20	23.5	1.50
FR1 n26	Ant 0	31.40	24.50	24.50	25.0	0.70
FR1 n26	Ant 1	22.50	20.50	38.70	24.5	1.20
FR1 n28_Main PA	Ant 0	33.40	25.10	25.10	24.0	1.00
FR1 n28_Main PA	Ant 1	25.70	21.00	25.40	23.5	1.50

FR1 n28_Other PA	Ant 0	33.40	25.10	25.10	24.0	1.00
FR1 n28_Other PA	Ant 1	25.70	21.00	25.40	23.5	1.50
FR1 n38	Ant 4	19.00	18.50	31.50	25.0	0.70
FR1 n38	Ant 5	17.50	17.00	30.20	23.5	1.50
FR1 n38	Ant 6	31.90	18.50	18.50	24.0	1.50
FR1 n38	Ant 7	19.00	18.50	18.50	23.0	1.50
FR1 n40	Ant 4	19.50	18.00	34.40	24.0	1.00
FR1 n40	Ant 5	19.50	20.50	34.50	22.5	1.50
FR1 n40	Ant 6	32.60	19.00	19.00	23.0	1.50
FR1 n41 PC3	Ant 4	19.00	18.50	31.50	25.0	0.70
FR1 n41 PC2	Ant 4	19.00	18.50	31.50	24.0	1.00
FR1 n41 PC3	Ant 5	17.50	17.00	32.20	23.5	1.50
FR1 n41 PC2	Ant 5	17.50	17.00	32.20	22.5	1.50
FR1 n41 PC3	Ant 6	31.90	18.50	18.50	24.0	1.50
FR1 n41 PC2	Ant 6	31.90	18.50	18.50	23.0	1.50
FR1 n41 PC3	Ant 7	19.00	18.50	18.50	23.0	1.50
FR1 n41 PC2	Ant 7	19.00	18.50	18.50	22.0	1.50
FR1 n77 PC3	Ant 8	19.00	17.50	17.50	25.0	1.00
FR1 n77 PC2	Ant 8	19.00	17.50	17.50	24.0	1.50
FR1 n77 PC3	Ant 9	19.50	18.00	37.60	21.0	1.50
FR1 n77 PC2	Ant 9	19.50	18.00	37.60	20.0	1.50
FR1 n77 PC3	Ant 10	15.50	15.50	25.50	24.5	1.50
FR1 n77 PC2	Ant 10	15.50	15.50	25.50	23.5	1.50
FR1 n77 PC3	Ant 11	17.00	18.50	40.70	21.5	1.50
FR1 n77 PC2	Ant 11	17.00	18.50	40.70	20.5	1.50
FR1 n78 PC3	Ant 8	19.00	17.50	17.50	25.0	1.00
FR1 n78 PC2	Ant 8	19.00	17.50	17.50	24.5	1.50
FR1 n78 PC3	Ant 9	19.50	18.00	37.50	21.0	1.50
FR1 n78 PC2	Ant 9	19.50	18.00	37.50	20.0	1.50
FR1 n78 PC3	Ant 10	15.50	15.50	25.60	24.5	1.50
FR1 n78 PC2	Ant 10	15.50	15.50	25.60	24.0	1.50
FR1 n78 PC3	Ant 11	17.00	18.50	40.70	21.5	1.50
FR1 n78 PC2	Ant 11	17.00	18.50	40.70	20.5	1.50

Band	Antenna	Head DSI1	Body/Limbs DSI3/4	Pmax*	Total Uncertainty dB (k=2)
WLAN2.4GHz	Ant 7	17.5	17.5	17.5	2.00
WLAN2.4GHz	Ant 12	17.5	17.5	18.0	2.00
WLAN2.4GHz	Ant 7+12	17.5,17.5	17.5,17.5	20.5	2.00
Bluetooth	Ant 7	20.4	19.9	18.9	2.00
Bluetooth	Ant 12	19.8	18.5	17.9	2.00
WLAN5GHz(B1&B2)	Ant8	15.0	14.5	18.5	2.00
WLAN5GHz(B1&B2)	Ant10	15.0	14.5	18.5	2.00
WLAN5GHz(B1&B2)	Ant8+10	15,15	14.5,14.5	21.5	2.00
WLAN5GHz(B3)	Ant8	17.0	14.5	18.5	2.00
WLAN5GHz(B3)	Ant10	17.0	14.5	18.5	2.00
WLAN5GHz(B3)	Ant8+10	17,17	14.5,14.5	21.5	2.00
WLAN5GHz(B4)	Ant8	18.1	16.6	10.5	2.00
WLAN5GHz(B4)	Ant10	18.1	16.6	10.5	2.00
WLAN5GHz(B4)	Ant8+10	18.1,18.1	16.6,16.6	13.5	2.00

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

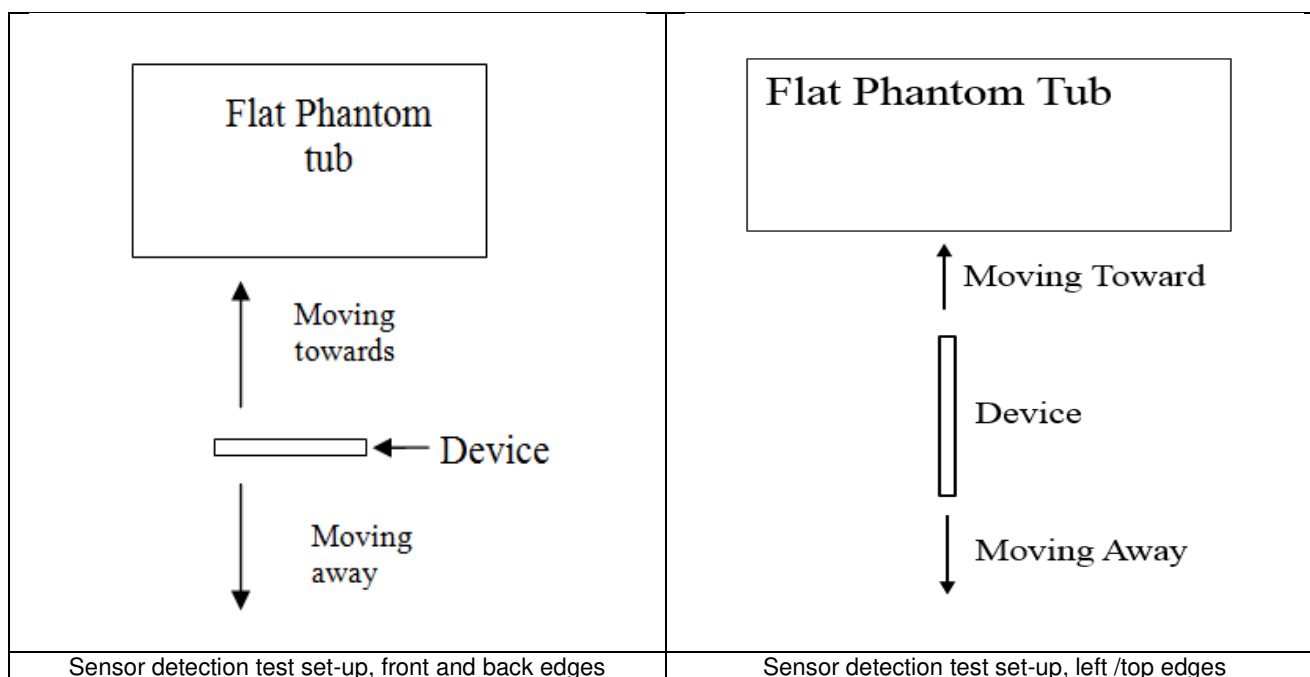
2) All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).

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

6. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according 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 (4200MHz) and lowest (750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top of left sides of the phone are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or left or top edge of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or top or left edge of the device use a detection threshold distance. When front/back/top/ left edge of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.



<Sensor for Ant 1&4&5&9&10&11>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Edge		Top Edge	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	16	16	16	16	16	16	16	16

7. Basic Restrictions

Depending on frequency, the following physical quantities (dosimetric/exposimetric quantities) are used to specify the basic restrictions on electromagnetic fields:

- between 0 and 1 Hz basic restrictions are provided for magnetic flux density for static magnetic fields (0 Hz) and current density for time-varying fields up to 1 Hz, in order to prevent effects on the cardiovascular and central nervous system.
- Between 1 Hz and 10 MHz basic restrictions are provided for current density to prevent effects on nervous system functions.
- Between 100 kHz and 10 GHz basic restrictions on SAR are provided to prevent whole-body heat stress and excessive localized heating of tissues. In the range 100 kHz to 10 MHz, restrictions on both current density and SAR are provided.
- Between 10 GHz and 300 GHz basic restrictions on power density are provided to prevent heating in tissue at or near the body surface.

The basic restrictions, given in Table 1, are set so as to account for uncertainties related to individual sensitivities, environmental conditions, and for the fact that the age and health status of members of the public vary.

Table 1

Basic restrictions for electric, magnetic and electromagnetic fields
(0 Hz to 300 GHz)

Frequency range	Magnetic flux density (mT)	Current density (mA/m ²) (rms)	Whole body average SAR (W/kg)	Localised SAR (head and trunk) (W/kg)	Localised SAR (limbs) (W/kg)	Power density, S (W/m ²)
0 Hz	40	—	—	—	—	—
>0-1 Hz	—	8	—	—	—	—
1-4 Hz	—	8/f	—	—	—	—
4-1 000 Hz	—	2	—	—	—	—
1 000 Hz-100 kHz	—	f/500	—	—	—	—
100 kHz-10 MHz	—	f/500	0,08	2	4	—
10 MHz-10 GHz	—	—	0,08	2	4	—
10-300 GHz	—	—	—	—	—	10

8. Specific Absorption Rate (SAR)

8.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

8.2 SAR Definition

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

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

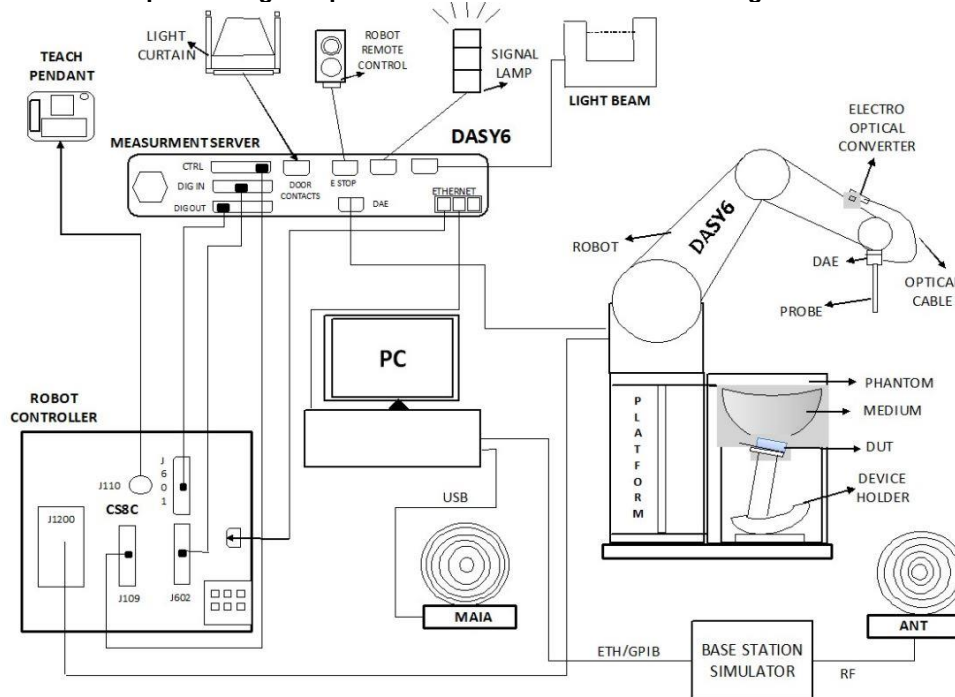
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

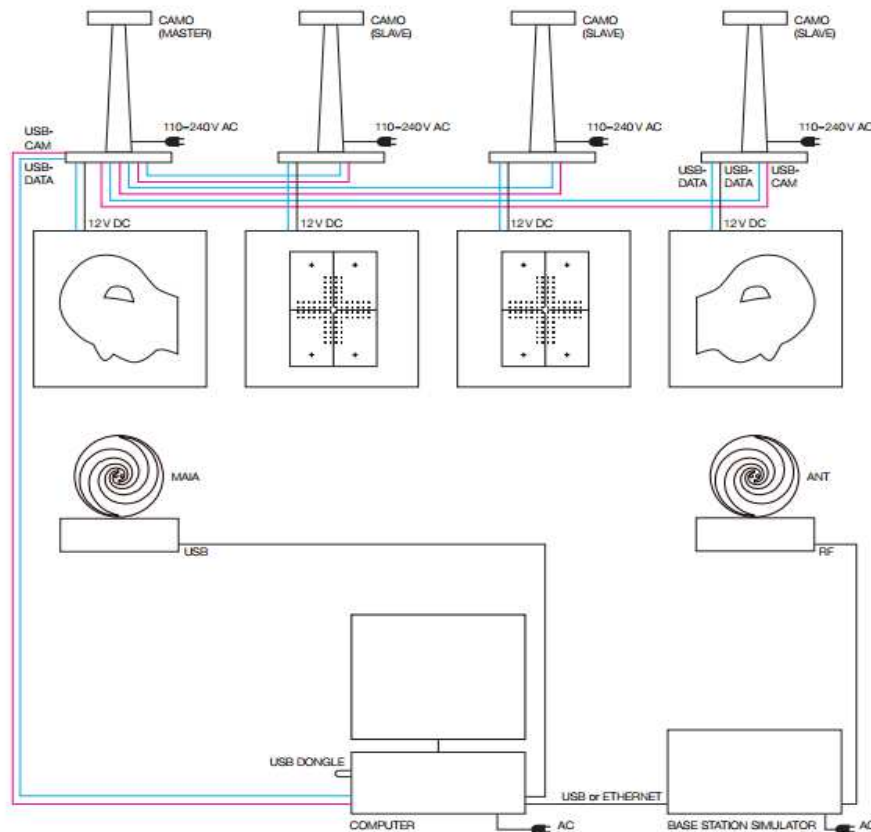
9. System Description and Setup

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



- 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 DASY5 or 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.

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



cSAR3D System Block Diagram

Item	Description
cSAR3D	cSAR3D Flat cSAR3D Left Head cSAR3D Right Head
Spacers	Set of low-loss, low permittivity spacers for cSAR3D Flat. Set includes 1, 2, 2, 5, 10 and 15 mm thickness.
Masks	Set of low loss, low permittivity masks for cSAR3D Left and Right Heads for positioning the device at 15 degrees.
Tablet Positioner	Positioning device to hold tablets and other devices (maximum width of 30 cm) for testing of device edges.
Laptop Positioner	Positioning device to hold laptops and other devices (maximum width of 60 cm) for testing of device edges.
Calibration	Files & Calibration certificates
Software Installer	Installation files and driver for cSAR3D software, including dongle
System Handbook	Manual
Data cable	USB max. 4.5 m (cSAR3D Flat/ Head only) Ethernet 10 m (cSAR3D Quad only)
AC/DC transformer	12 V DC output (cSAR3D Flat/ Head only)
Power cable	100 { 240 VAC input
Verification sources (Optional)	Calibrated sources, holder and masks
MAIA	Automated determination & validation of communication signal settings
ANT	Wideband communication antenna: 698 - 6000 MHz
CAMO	Overhead Camera Module for cSAR3D Left, Right or Flat Overhead Camera Module for cSAR3D Quad
PC or Laptop (optional)	with Windows operating system
Packaging material	Boxes and protective foam (cSAR3D Flat, cSAR3D Head separately) Shipping crate, ramp for unloading (cSAR3D Quad only)

Table 1 Parts of the cSAR3D system

9.1 E-Field Probe

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

<EX3DV4 Probe>

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

9.2 Data Acquisition Electronics (DAE)

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

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



Photo of DAE

9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

<cSAR3D Right Head and Left Head>

The cSAR3D Head (Left and Right) is equivalent to the cSAR3D Flat except that the shape of the measurement surface is the SAM Head Phantom as specified in IEEE 1528, IEC 62209-1, FCC, etc.

The cSAR3D Head is also equipped with a Device Holder to ensure secure positioning of the DUT. The Device Holder is an elastic arm secured to the base of the cSAR3D Head. A set of masks enabling easy and accurate positioning of the device in tilt positions is available (see below Figure). Masks are available for 15° tilt positions with respect to the cheek position.



cSAR3D Head without (left) and with (right) 15° mask

<cSAR3D Flat and spacers>

Typical permittivity and conductivity values of the cSAR3D dielectric medium for head tissue versus frequency. The dashed lines show the $\pm 10\%$ tolerance from the target dielectric parameters specified in IEEE 1528 and IEC 62209-2. The values are within the tolerance over the 500 to 10 GHz frequency range.



cSAR3D Flat



Set of low-loss, low-permittivity spacers

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

- (a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the middle channel.
- (b) Keep EUT to radiate maximum output power or 100% duty factor (if applicable)
- (c) Measure output power through RF cable and power meter.
- (d) Place the EUT in the positions as setup photos demonstrates.
- (e) Set scan area, grid size and other setting on the DASY software.
- (f) Measure SAR transmitting at the middle channel for all applicable exposure positions.
- (g) Identify the exposure position and device configuration resulting the highest SAR
- (h) Measure SAR at the lowest and highest channels at the worst exposure position and device configuration.

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

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

10.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

10.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

10.3 Area & Zoom Scan Procedures

- a) Measure the local SAR at a test point within 8 mm of the phantom inner surface that is closest to the DUT.
- b) Measure the two-dimensional SAR distribution within the phantom (area scan procedure). The boundary of the measurement area shall not be closer than 20 mm from the phantom side walls. The distance between the measurement points should enable the detection of the location of local maximum with an accuracy of better than half the linear dimension of the tissue cube after interpolation. A maximum grid spacing of 20 mm for frequencies below 3 GHz and $(60/f \text{ [GHz]})$ mm for frequencies of 3 GHz and greater is recommended. The maximum distance between the geometrical center of the probe detectors and the inner surface of the phantom shall be 5 mm for frequencies below 3 GHz and $\ln(2)/2$ mm for frequencies of 3 GHz and greater, where $\ln$ is the plane wave skin depth and $\ln(x)$ is the natural logarithm. The maximum variation of the sensor-phantom surface distance shall be 1 mm for frequencies below 3 GHz and 0,5 mm for frequencies of 3 GHz and greater. At all measurement points the angle of the probe with respect to the line normal to the surface should be less than 5°. If this cannot be achieved for a measurement distance to the phantom inner surface shorter than the probe diameter, additional uncertainty evaluation is needed.
- c) From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks; additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g., 1 W/kg for 1,6 W/kg 1 g limit, or 1,26 W/kg for 2 W/kg, 10 g limit).
- d) Measure the three-dimensional SAR distribution at the local maxima locations identified in step c) (zoom scan procedure). The horizontal grid step shall be $(24 / f \text{ [GHz]})$ mm or less but not more than 8 mm. The minimum zoom scan size is 30 mm by 30 mm by 30 mm for frequencies below 3 GHz. For higher frequencies, the minimum zoom scan size can be reduced to 22 mm by 22 mm by 22 mm. The grid step in the vertical direction shall be $(8 \cdot f \text{ [GHz]})$ mm or less but not more than 5 mm, if uniform spacing is used (Annex C.3.3 of IEC 62209-1:2016). If variable spacing is used in the vertical direction, the maximum spacing between the two closest measured points to the phantom shell shall be $(12/f \text{ [GHz]})$ mm or less but not more than 4 mm, and the spacing between farther points shall increase by an incremental factor not exceeding 1,5. When variable spacing is used, extrapolation routines shall be tested with the same spacing as used in measurements. The maximum distance between the geometrical center of the probe detectors and the inner surface of the phantom shall be 5 mm for frequencies below 3 GHz and $\ln(2)/2$ mm for frequencies of 3 GHz and greater, where $\ln$ is the plane wave skin depth and $\ln(x)$ is the natural logarithm. Separate grids shall be centered on each of the local SAR maxima found in step c). Uncertainties due to field distortion between the media boundary and the dielectric enclosure of the probe should also be minimized, which is achieved if the distance between the phantom surface and physical tip of the probe is larger than probe tip diameter. Other methods may utilize correction procedures for these boundary effects that enable high precision measurements closer than half the probe diameter. For all measurement points, the angle of the probe with respect to the flat phantom surface shall be less than 5°.

10.4 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g or 10g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

10.5 SAR Averaged Methods

In DASY, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

10.6 Power Drift Monitoring

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

10.7 Reconstruction algorithm and peak spatial-averaging specifications

Reconstruction methods are applicable to both scanning systems and array systems.

A vector measurement-based system does not determine the psSAR directly from measurement results at points on a 3D grid covering the peak spatial averaging volume. Therefore, the purpose of the reconstruction algorithm is to determine the distribution of the SAR values in the volume of interest such that the psSAR can be evaluated with known uncertainty using the electric fields and/or magnetic fields measured by the vector measurement-based system.

The following requirements on reconstruction and psSAR shall be met:

- The reconstruction algorithm shall determine the SAR distribution in the phantom from the measured electric field and/or magnetic field measured by the sensors.
- The SAR distribution shall be determined within the volume of interest containing all SAR peaks (primary and secondary).
- The averaging volume shall be in the shape of a cube, except that the front face of the averaging volume shall conform to the phantom shell and the back face shall be equally distorted. The four side walls of the cube shall be parallel to the line normal to the phantom at the centre of the front face of the averaging volume.
- The software of the measurement system shall provide error messages to the user if the psSAR is outside the spatial region for which the measurement uncertainty requirements of this document are not met.

10.8 Scanning systems

The following procedure and requirements shall be applied:

- a) Take a reference measurement with a fully charged battery at a specific location within the phantom.
- b) Measure the electric field or magnetic field within the volume of interest.
- c) If applicable to the method, refine the scanning with higher spatial resolution at the location of interest.
- d) Apply the reconstruction algorithm to reconstruct the field for determining the psSAR distributions.
- e) Apply the averaging algorithm as described in Sec.10.7 to determine the psSAR.
- f) The reference measurement in step a) shall be repeated at the end of each measurement.
- g) The relative difference between the first and each subsequent reference measurement should be within 5 %.
Otherwise, the measurements shall be repeated, or all SAR values

10.9 Array systems

The following procedure and requirements shall be applied:

- a) Measure the electric field or magnetic field over the measurement region.
- b) Apply the reconstruction algorithm to reconstruct the SAR distribution in the volume of interest.
- c) Apply the averaging algorithm as described in Sec.10.7 to determine the psSAR.
- d) If a sequence of different configurations is evaluated without recharging the battery, then the first measurement shall be repeated at the end of each measurement and the relative difference between the first and last measurement shall be within the repeatability tolerance of the system but not larger than 5 %. If the SAR difference exceeds 5 % then the measurements shall be repeated with full charged battery or all SAR values shall be increased by the absolute percentage difference between the first and last measurement.

**11. Test Equipment List**

Manufacturer	Name of Equipment	Type/Model	Serial Number	Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1099	Dec. 13, 2024	Dec. 12, 2025
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 13, 2024	Dec. 12, 2025
SPEAG	900MHz System Validation Kit ⁽²⁾	D900V2	1d135	Nov. 03, 2023	Nov. 01, 2025
SPEAG	1800MHz System Validation Kit ⁽²⁾	D1800V2	2d177	Nov. 22, 2023	Nov. 20, 2025
SPEAG	2000MHz System Validation Kit	D2000V2	1071	Mar. 13, 2025	Mar. 12, 2026
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1055	Aug. 21, 2023	Aug. 19, 2026
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	1095	Feb. 08, 2024	Feb. 06, 2026
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1112	Dec. 18, 2023	Dec. 16, 2025
SPEAG	3300MHz System Validation Kit	D3300V2	1033	Jun. 13, 2025	Jun. 12, 2026
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1037	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3700MHz System Validation Kit ⁽²⁾	D3700V2	1008	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1048	Mar. 09, 2023	Mar. 06, 2026
SPEAG	5000MHz System Validation Kit ⁽²⁾	D5GHzV2	1113	Sep. 23, 2022	Sep. 21, 2025
SPEAG	13MHz System Validation Kit	CLA13	1020	Jun. 05, 2025	Jun. 04, 2026
SPEAG	Data Acquisition Electronics	DAE4	690	Oct. 08, 2024	Oct. 07, 2025
SPEAG	Data Acquisition Electronics	DAE4	1303	Dec. 06, 2024	Dec. 05, 2025
SPEAG	Data Acquisition Electronics	DAE4	1650	Nov. 25, 2024	Nov. 24, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	3857	Feb. 19, 2025	Feb. 18, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7706	May 22, 2025	May 21, 2026
SPEAG	SAM Twin Phantom	SAM Twin	TP-1697	NCR	NCR
SPEAG	ELI Phantom	ELI V8.0	TP-2151	NCR	NCR
Beichuang	Thermo-Hygrometer	HTC-1	1959628	May 27, 2025	May 26, 2026
Beichuang	Thermo-Hygrometer	HTC-1	1959630	May 27, 2025	May 26, 2026
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8820C	6201563900	Jul. 02, 2025	Jul. 01, 2026
Agilent	ENA Series Network Analyzer	E5071C	MY46112129	Jul. 02, 2025	Jul. 01, 2026
SPEAG	Dielectric Probe Kit	DAK-3.5	1071	Feb. 24, 2025	Feb. 23, 2026
SPEAG	Dielectric Probe Kit	DAK-12	1170	Sep. 19, 2024	Sep. 18, 2025
Anritsu	Vector Signal Generator	MG3710A	6201682672	Jan. 03, 2025	Jan. 02, 2026
Rohde & Schwarz	Vector Signal Generator	SMBV100A	258305	Jan. 02, 2025	Jan. 01, 2026
Keysight	5G Wireless Test Platform	E7515B	MY59321532	Jul. 03, 2025	Jul. 02, 2026
R&S	Wideband Radio Communication Tester	CMW500	157651	Dec. 26, 2024	Dec. 25, 2025
R&S	Wideband Radio Communication Tester	CMW500	116159	Oct. 15, 2024	Oct. 14, 2025
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	NCR	NCR
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	NCR	NCR
Agilent	Dual Directional Coupler	778D	20500	Jul. 02, 2025	Jul. 01, 2026
Agilent	Dual Directional Coupler	11691D	MY48151020	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Meter	NRVD	102081	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRP50S	101385	Oct. 15, 2024	Oct. 14, 2025
R&S	Power Sensor	NRP50S	101254	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP50S	101548	Jan. 15, 2025	Jan. 14, 2026
R&S	Power Sensor	NRP8S	109228	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP33S	102184	Oct. 15, 2024	Oct. 14, 2025
ARRA	Power Divider	A3200-2	N/A	NCR	NCR
MCL	Attenuation1	BW-S10W5+	N/A	NCR	NCR
MCL	Attenuation2	BW-S10W5+	N/A	NCR	NCR
MCL	Attenuation3	BW-S10W5+	N/A	NCR	NCR
R&S	BLUETOOTH TESTER	CBT	101246	Jul. 03, 2025	Jul. 02, 2026
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	Oct. 11, 2024	Oct. 10, 2025
TES	DIGITAC THERMOMETER	TYPE-K	220305411	Jan. 02, 2025	Jan. 01, 2026
SPEAG	cSAR3D	Flat HSL	5158	May 17, 2025	May 16, 2026
SPEAG	cSAR3D	Head Left-v2	7127	May 13, 2025	May 12, 2026
SPEAG	cSAR3D	Head Right-v2	8223	May 16, 2025	May 15, 2026
SPEAG	PowerSource1	SE UMS 160 BB	4204	Jan. 03, 2025	Jan. 02, 2026
BONN Elektronik	Power Amplifier	BSA 0125-150	076577A	Jan. 06, 2025	Jan. 05, 2026
Hongyitong	Shielding Box	182-200	AGTE2013182200016	Oct. 14, 2024	Oct. 13, 2025
TRM	Directional Coupler	DCS1070	50021-1		Note 1
TRM	Directional Coupler	DCS1070	50021-2		Note 1
PE	Directional Coupler	2214-10	53919		Note 1
AGILENT	Directional Coupler	0955-0148	116232-1		Note 1
AGILENT	Directional Coupler	0955-0148	116232-2		Note 1
Keysight	Attenuator-110dB	8496B	MY42150897		Note 1
AGILENT	Attenuator-10dB	8494B	MY42150999		Note 1
AGILENT	Attenuator-110dB	8494B	MY42148574		Note 1
WI	3G High Pass Filter	WHKX3.0/18G-10SS	4		Note 1
WI	Band Reject Filter	WRCJV12-5120-5150-5350-5380-40SS	30		Note 1
WI	Band Reject Filter	WRCJV12-5695-5725-5850-5880-40SS	33		Note 1

WI	Band Reject Filter	WRCJV16-5440-5470-5725-5755-40SS	36	Note 1
WI	Band Reject Filter	WRCQV14-6025-6425-7125-7525-60SS	5	Note 1

Note:

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

12. System Verification

12.1 Tissue Simulating Liquids

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18°C to 25°C, measured with calibrated instruments and apparatuses, such as network analyzers and temperature probes. The temperature of the tissue-equivalent medium during SAR measurement must also be within 18°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized. 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. The liquid tissue depth was at least 15cm in the phantom for all SAR testing, which is shown in Fig. 12.1 and Fig.12.2.

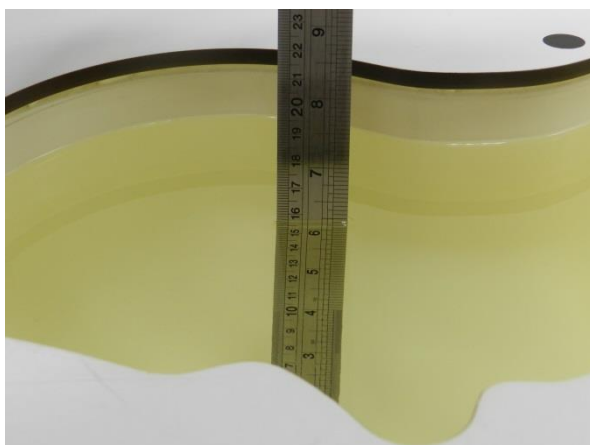


Fig 12.1 Photo of Liquid Height for Head SAR



Fig 12.2 Photo of Liquid Height for Body SAR

12.2 Tissue Verification

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

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (ϵ_r)
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
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	22.9	0.885	42.99	0.89	41.9	-0.56	2.60	±5.0	2025-08-26
750	22.8	0.884	43.023	0.89	41.9	-0.67	2.68	±5.0	2025-09-02
835	22.7	0.92	42.583	0.9	41.5	2.22	2.61	±5.0	2025-08-27
835	22.8	0.914	42.593	0.9	41.5	1.56	2.63	±5.0	2025-09-03
900	22.6	0.947	42.554	0.97	41.5	-2.37	2.54	±5.0	2025-08-28
900	22.7	0.945	42.361	0.97	41.5	-2.58	2.07	±5.0	2025-09-04
1800	22.8	1.419	40.246	1.4	40.0	1.36	0.62	±5.0	2025-08-29
1800	22.8	1.41	40.099	1.4	40.0	0.71	0.25	±5.0	2025-09-05
2000	22.8	1.44	39.184	1.4	40.0	2.86	-2.04	±5.0	2025-08-30
2000	22.8	1.446	39.201	1.4	40.0	3.29	-2.00	±5.0	2025-09-06
2300	22.8	1.613	39.657	1.67	39.5	-3.41	0.40	±5.0	2025-08-31
2300	22.7	1.602	39.626	1.67	39.5	-4.07	0.32	±5.0	2025-09-07
2450	22.6	1.771	39.28	1.8	39.2	-1.61	0.20	±5.0	2025-09-14
2600	22.7	1.915	38.85	1.96	39.0	-2.30	-0.38	±5.0	2025-09-01
2600	22.8	1.915	38.784	1.96	39.0	-2.30	-0.55	±5.0	2025-09-08
3300	22.8	2.77	37.882	2.7	38.13	2.59	-0.65	±5.0	2025-09-09
3500	22.9	2.957	37.817	2.91	37.9	1.62	-0.22	±5.0	2025-09-10
3700	22.9	3.166	37.577	3.12	37.7	1.47	-0.33	±5.0	2025-09-11
3900	22.6	3.399	37.352	3.33	37.51	2.07	-0.42	±5.0	2025-09-12
4100	22.8	3.609	37.045	3.53	37.28	2.24	-0.63	±5.0	2025-09-13
5250	22.9	4.669	36.333	4.71	35.95	-0.87	1.07	±5.0	2025-09-15
5600	22.8	4.996	35.758	5.07	35.5	-1.46	0.73	±5.0	2025-09-16
5750	22.6	5.137	35.508	5.22	35.35	-1.59	0.45	±5.0	2025-09-17
13	22.7	0.744	56.2	0.75	55.00	-0.80	2.18	±5	2025/9/8

12.3 System Performance Check Results

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

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2025-08-26	750	50.00	D750V3 - 1099	EX3DV4 - SN3857	DAE4 Sn690	0.273	5.370	5.460	1.68
2025-09-02	750	50.00	D750V3 - 1099	EX3DV4 - SN3857	DAE4 Sn690	0.274	5.370	5.480	2.05
2025-08-27	835	50.00	D835V2 - 4d162	EX3DV4 - SN3857	DAE4 Sn690	0.317	5.850	6.340	8.38
2025-09-03	835	50.00	D835V2 - 4d162	EX3DV4 - SN3857	DAE4 Sn690	0.311	5.850	6.220	6.32
2025-08-28	900	50.00	D900V2 - 1d135	EX3DV4 - SN3857	DAE4 Sn690	0.370	7.010	7.400	5.56
2025-09-04	900	50.00	D900V2 - 1d135	EX3DV4 - SN3857	DAE4 Sn690	0.333	7.010	6.660	-4.99
2025-08-29	1800	50.00	D1800V2 - 2d177	EX3DV4 - SN3857	DAE4 Sn690	0.975	20.500	19.500	-4.88
2025-09-05	1800	50.00	D1800V2 - 2d177	EX3DV4 - SN3857	DAE4 Sn690	0.975	20.500	19.500	-4.88
2025-08-30	2000	50.00	D2000V2 - 1071	EX3DV4 - SN3857	DAE4 Sn690	1.020	21.300	20.400	-4.23
2025-09-06	2000	50.00	D2000V2 - 1071	EX3DV4 - SN3857	DAE4 Sn690	1.030	21.300	20.600	-3.29
2025-08-31	2300	50.00	D2300V2 - 1055	EX3DV4 - SN3857	DAE4 Sn690	1.150	23.700	23.000	-2.95
2025-09-07	2300	50.00	D2300V2 - 1055	EX3DV4 - SN3857	DAE4 Sn690	1.140	23.700	22.800	-3.80
2025-09-14	2450	50.00	D2450V2 - 1095	EX3DV4 - SN3857	DAE4 Sn690	1.220	24.700	24.400	-1.21
2025-09-01	2600	50.00	D2600V2 - 1112	EX3DV4 - SN3857	DAE4 Sn690	1.260	24.800	25.200	1.61
2025-09-08	2600	50.00	D2600V2 - 1112	EX3DV4 - SN3857	DAE4 Sn690	1.160	24.800	23.200	-6.45
2025-09-09	3300	50.00	D3300V2 - 1033	EX3DV4 - SN3857	DAE4 Sn690	1.400	26.000	28.000	7.69
2025-09-10	3500	50.00	D3500V2 - 1037	EX3DV4 - SN3857	DAE4 Sn690	1.230	24.700	24.600	-0.40
2025-09-11	3700	50.00	D3700V2 - 1008	EX3DV4 - SN3857	DAE4 Sn690	1.340	24.400	26.800	9.84
2025-09-12	3900	50.00	D3900V2 - 1048	EX3DV4 - SN3857	DAE4 Sn690	1.240	24.100	24.800	2.90
2025-09-13	4100	50.00	D3900V2 - 1048	EX3DV4 - SN3857	DAE4 Sn690	1.120	23.300	22.400	-3.86
2025-09-15	5250	50.00	D5GHzV2 - 1113	EX3DV4 - SN3857	DAE4 Sn690	1.200	23.300	24.000	3.00
2025-09-16	5600	50.00	D5GHzV2 - 1113	EX3DV4 - SN3857	DAE4 Sn1303	1.250	23.700	25.000	5.49
2025-09-17	5750	50.00	D5GHzV2 - 1113	EX3DV4 - SN3857	DAE4 Sn1303	1.160	23.000	23.200	0.87
2025/9/8	13	1000	CLA13 - SN:1020	EX3DV4 - SN7706	DAE4 Sn1650	0.329	0.338	0.329	-3.24

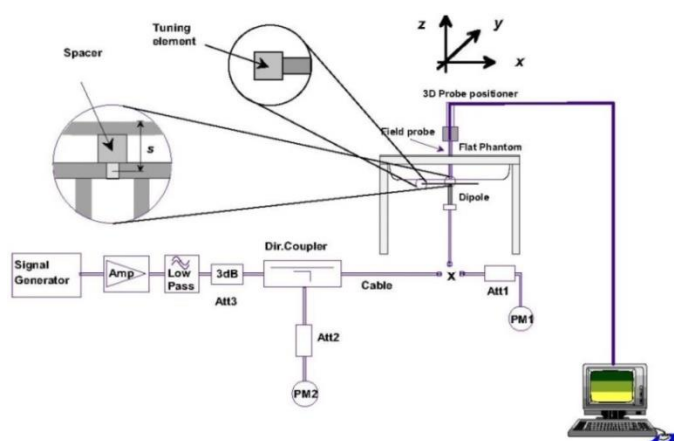


Fig 12.2.1 System Performance Check Setup



Fig 12.2.2 Setup Photo



Fig 12.2.3 Setup Photo

12.4 Additional System Check on cSAR system

General Note:

1. The ambient temperature shall be within the range of 18 °C to 25 °C.
2. For systems using open phantom (eg: scanning system system), the dielectric properties of the tissue-equivalent medium shall be measured within 24 h before the SAR measurements and every two days of continuous use.
3. In hermetically sealed systems and array systems, system check shall be performed within seven days prior to SAR evaluation because of the small drift.
4. In case of scanning systems, the system check shall be performed in the center location of the flat phantom. For the head phantom, the system check shall be performed at one of the four locations: C(0), D(90), F(90) and H(0) selected equally over time. The test may be limited to the flat phantom (i.e. head phantom is optional) if the same sensors, tissue-equivalent medium and reconstruction algorithm are used in each flat phantom and in each head phantom and each phantom. The locations of the nine points are shown in Figure below.

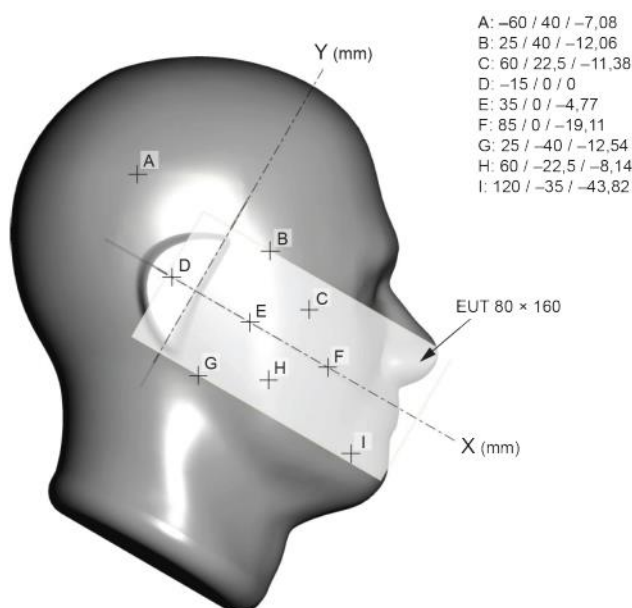


Fig 12.4.1 System Check Locations

5. The target values vary slightly based on what angle the dipole is oriented in. The three possible dipole arm orientations for which target values are defined are shown below.

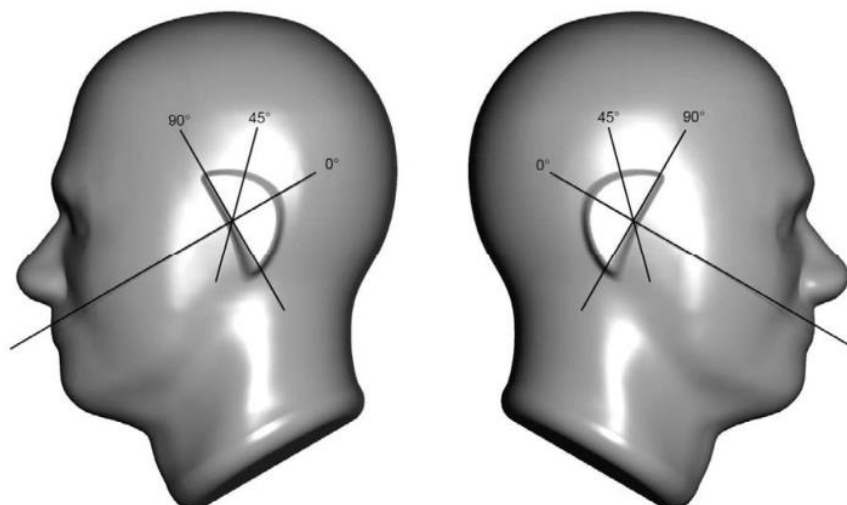


Fig 12.4.2 Definition of rotation angles for dipoles

6. Since the dipole calibration certificates do not have target values for use with this phantom, the target

values from the EN IEC 62209-3 standard are used, leading to additional uncertainty from the target values used. The recommendation from the system manufacturer, from their application note for use of this phantom, is that the combined dipole target uncertainty + measurement system uncertainty be used as the acceptable deviation from target values.

7. Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. For different positions and orientations, this is -20% to +10% as explained in the Application Note. Below table shows the target SAR and measured SAR after normalized to 1W input power. The cSAR system measurement uncertainty detailed in Section 18 is 1.1 dB (k=2). The combined uncertainty of target values (0.4 dB) and cSAR system uncertainty (1.1 dB) is 1.2 dB (k=2). All deviations of the measured SAR from the normalized dipole target values below are within this 1.2 dB measurement uncertainty, meeting the agreed upon criteria to demonstrate system performance.

Head Left																											
Serial Number	7217									Verification Against Numerical Targets								Verification Against Measured Reference Values									
Dipole Type	Dipole Serial Number	frequency	Location	Power	Measured SAR		Reported Uncertainty (k = 2)		Measured SAR Normalized to 1 W		Numerical Target		Deviation from Target		Total Uncertainty (k = 2)		Verified Against Numerical Targets?		SAR from cSAR3D Certificate		Deviation from Cal. Cert.		Tolerance		Verified Against Measured Values?		Test Date
		(MHz)		(dBm)	(W/kg)		(dB)	(W/kg)	(W/kg)	(dB)	(%)	(dB)			(W/kg)	(dB)	(%)	(dB)									
					1g	10g	1g	10g	1g	10g	1g	10g			1g	10g	1g	10g	1g	10g	1g	10g			1g	10g	
D835V2	4d298	835	C(0°) (top)	17	0.439	0.277	1.05	1.05	8.76	5.53	9.28	6.12	-0.3	-0.4	31.7%	1.2	Yes	Yes	8.66	5.69	0.0	-0.1	10%	0.4	Yes	Yes	2025/8/26
			F(90°) (mouth)	17	0.463	0.298	1.05	1.05	9.24	5.95	9.74	6.52	-0.2	-0.4	31.7%	1.2	Yes	Yes	9.58	6.22	-0.2	-0.2	10%	0.4	Yes	Yes	
			H(0°) (neck)	17	0.450	0.299	1.05	1.05	8.98	5.97	9.26	6.24	-0.1	-0.2	31.7%	1.2	Yes	Yes	9.06	5.97	0.0	0.0	10%	0.4	Yes	Yes	
			D(90°) (ear)	17	0.415	0.280	1.05	1.05	8.28	5.59	7.95	5.34	0.2	0.2	31.7%	1.2	Yes	Yes	8.01	5.47	0.1	0.1	10%	0.4	Yes	Yes	
D1950V3	1260	1950	C(0°) (top)	17	2.050	1.030	1.06	1.05	40.90	20.55	42.6	22.0	-0.2	-0.3	31.9%	1.2	Yes	Yes	39.70	20.30	0.1	0.1	10%	0.4	Yes	Yes	2025/8/29
			F(90°) (mouth)	17	1.910	1.020	1.05	1.05	38.11	20.35	43.4	23.1	-0.6	-0.6	31.7%	1.2	Yes	Yes	39.40	21.10	-0.1	-0.2	10%	0.4	Yes	Yes	
			H(0°) (neck)	17	1.860	0.923	1.06	1.05	37.11	18.42	41.9	21.8	-0.5	-0.7	31.9%	1.2	Yes	Yes	38.40	18.90	-0.1	-0.1	10%	0.4	Yes	Yes	
			D(90°) (ear)	17	1.580	0.875	1.05	1.05	31.53	17.46	30.6	16.9	0.1	0.1	31.7%	1.2	Yes	Yes	31.00	16.90	0.1	0.1	10%	0.4	Yes	Yes	
D2450V2	1095	2450	C(0°) (top)	17	2.610	1.170	1.08	1.06	52.08	23.34	56.3	26.3	-0.3	-0.5	32.5%	1.2	Yes	Yes	50.50	23.00	0.1	0.1	10%	0.4	Yes	Yes	2025/8/31
			F(90°) (mouth)	17	2.410	1.180	1.07	1.28	48.09	23.54	57.4	27.6	-0.8	-0.7	32.2%	1.2	Yes	Yes	49.80	24.60	-0.2	-0.2	10%	0.4	Yes	Yes	
			H(0°) (neck)	17	2.480	1.100	1.07	1.06	49.48	21.95	54.0	25.2	-0.4	-0.6	32.2%	1.2	Yes	Yes	50.80	22.20	-0.1	0.0	10%	0.4	Yes	Yes	
			D(90°) (ear)	17	1.770	0.866	1.06	1.05	35.32	17.28	34.6	17.5	0.1	-0.1	31.9%	1.2	Yes	Yes	38.00	18.80	-0.3	-0.4	10%	0.4	Yes	Yes	
D5GHzV2	1365	5200	C(0°) (top)	17	4.260	1.140	1.16	1.16	85.00	22.75	83.5	24.2	0.1	-0.3	34.5%	1.3	Yes	Yes	82.60	22.40	0.1	0.1	10%	0.4	Yes	Yes	2025/9/15
			F(90°) (mouth)	17	3.720	1.040	1.05	1.05	74.22	20.75	87.3	25.4	-0.7	-0.9	31.7%	1.2	Yes	Yes	68.30	19.90	0.4	0.2	10%	0.4	Yes	Yes	
			H(0°) (neck)	17	4.030	1.080	1.17	1.16	80.41	21.55	83.4	23.9	-0.2	-0.4	34.8%	1.3	Yes	Yes	83.10	21.10	-0.1	0.1	10%	0.4	Yes	Yes	
			D(90°) (ear)	17	3.030	1.000	1.16	1.16	60.46	19.95	53.1	18.2	0.6	0.4	34.5%	1.3	Yes	Yes	56.20	18.10	0.3	0.4	10%	0.4	Yes	Yes	
D5GHzV2	1365	5800	C(0°) (top)	17	4.150	1.080	1.17	1.16	82.80	21.55	84.3	23.8	-0.1	-0.4	34.8%	1.3	Yes	Yes	81.30	21.30	0.1	0.1	10%	0.4	Yes	Yes	2025/9/16
			F(90°) (mouth)	17	4.050	1.070	1.05	1.05	80.81	21.35	91.2	25.8	-0.5	-0.8	31.7%	1.2	Yes	Yes	78.60	20.70	0.1	0.1	10%	0.4	Yes	Yes	
			H(0°) (neck)	17	3.910	1.030	1.17	1.16	78.01	20.55	81.4	22.8	-0.2	-0.5	34.8%	1.3	Yes	Yes	79.80	19.80	-0.1	0.2	10%	0.4	Yes	Yes	
			D(90°) (ear)	17	2.880	0.911	1.17	1.16	57.46	18.18	58.0	19.4	0.0	-0.3	34.8%	1.3	Yes	Yes	53.00	16.90	0.4	0.3	10%	0.4	Yes	Yes	



Head Right																													
Serial Number	8223									Verification Against Absolute Targets								Verification Against Measured Reference Values											
Dipole Type	Dipole Serial Number	frequency	Location	Power	Measured SAR		Reported Uncertainty (k = 2)		Measured SAR Normalized to 1 W		Numerical Target		Deviation from Target		Total Uncertainty (k = 2)		Verified Against Numerical Targets?		SAR from cSAR3D Certificate		Deviation from Cal. Cert.		Tolerance		Verified Against Measured Values?				
		(MHz)		(dBm)	(W/kg)		(dB)		(W/kg)		(W/kg)		(dB)		(%)		(dB)		(W/kg)		(dB)		(%)		(dB)				
					1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	1g	10g	
D835V2	4d298	835	C(0°) (top)	17	0.412	0.267	1.05	1.05	8.22	5.33	9.28	6.12	-0.5	-0.6	31.7%	1.2	Yes	Yes	8.48	5.45	-0.1	-0.1	10%	0.4	Yes	Yes		2025/8/26	
			F(90°) (mouth)	17	0.444	0.283	1.05	1.05	8.86	5.65	9.74	6.52	-0.4	-0.6	31.7%	1.2	Yes	Yes	9.43	6.05	-0.3	-0.3	10%	0.4	Yes	Yes			
			H(0°) (neck)	17	0.440	0.287	1.05	1.05	8.78	5.73	9.26	6.24	-0.2	-0.4	31.7%	1.2	Yes	Yes	8.92	5.85	-0.1	-0.1	10%	0.4	Yes	Yes			
			D(90°) (ear)	17	0.373	0.254	1.05	1.05	7.44	5.07	7.95	5.34	-0.3	-0.2	31.7%	1.2	Yes	Yes	8.10	5.44	-0.4	-0.3	10%	0.4	Yes	Yes			
D1950V3	1260	1950	C(0°) (top)	17	1.880	0.940	1.06	1.05	37.51	18.76	42.6	22.0	-0.6	-0.7	31.9%	1.2	Yes	Yes	40.30	20.20	-0.3	-0.3	10%	0.4	Yes	Yes		2025/8/29	
			F(90°) (mouth)	17	1.830	0.944	1.28	1.27	36.51	18.84	43.4	23.1	-0.8	-0.9	37.8%	1.4	Yes	Yes	38.90	20.60	-0.3	-0.4	10%	0.4	Yes	Yes			
			H(0°) (neck)	17	1.830	0.900	1.05	1.05	36.51	17.96	41.9	21.8	-0.6	-0.8	31.7%	1.2	Yes	Yes	38.70	19.20	-0.3	-0.3	10%	0.4	Yes	Yes			
			D(90°) (ear)	17	1.480	0.811	1.05	1.05	29.53	16.18	30.6	16.9	-0.2	-0.2	31.7%	1.2	Yes	Yes	31.10	16.70	-0.2	-0.1	10%	0.4	Yes	Yes			
D2450V2	1095	2450	C(0°) (top)	17	2.490	1.130	1.08	1.06	49.68	22.55	56.3	26.3	-0.5	-0.7	32.5%	1.2	Yes	Yes	54.10	24.10	-0.4	-0.3	10%	0.4	Yes	Yes		2025/8/31	
			F(90°) (mouth)	17	2.390	1.210	1.30	1.28	47.69	24.14	57.4	27.6	-0.8	-0.6	38.4%	1.4	Yes	Yes	48.50	23.50	-0.1	0.1	10%	0.4	Yes	Yes			
			H(0°) (neck)	17	2.460	1.090	1.08	1.06	49.08	21.75	54.0	25.2	-0.4	-0.6	32.5%	1.2	Yes	Yes	50.20	22.10	-0.1	-0.1	10%	0.4	Yes	Yes			
			D(90°) (ear)	17	1.670	0.812	1.05	1.05	33.32	16.20	34.6	17.5	-0.2	-0.3	31.7%	1.2	Yes	Yes	36.50	17.90	-0.4	-0.4	10%	0.4	Yes	Yes			
D5GHzV2	1365	5200	C(0°) (top)	17	4.270	1.130	1.16	1.16	85.20	22.55	83.5	24.2	0.1	-0.3	34.5%	1.3	Yes	Yes	81.90	21.50	0.2	0.2	10%	0.4	Yes	Yes		2025/9/15	
			F(90°) (mouth)	17	3.450	0.994	1.48	1.40	68.84	19.83	87.3	25.4	-1.0	-1.1	43.6%	1.6	Yes	Yes	69.60	20.10	0.0	-0.1	10%	0.4	Yes	Yes			
			H(0°) (neck)	17	4.160	1.060	1.16	1.16	83.00	21.15	83.4	23.9	0.0	-0.5	34.5%	1.3	Yes	Yes	81.10	20.90	0.1	0.1	10%	0.4	Yes	Yes			
			D(90°) (ear)	17	2.960	0.951	1.16	1.16	59.06	18.97	53.1	18.2	0.5	0.2	34.5%	1.3	Yes	Yes	55.10	18.00	0.3	0.2	10%	0.4	Yes	Yes			
D5GHzV2	1365	5800	C(0°) (top)	17	4.200	1.070	1.18	1.16	83.80	21.35	84.3	23.8	0.0	-0.5	35.1%	1.3	Yes	Yes	85.10	21.50	-0.1	0.0	10%	0.4	Yes	Yes		2025/9/16	
			F(90°) (mouth)	17	4.020	1.020	1.50	1.41	80.21	20.35	91.2	25.8	-0.6	-1.0	44.2%	1.6	Yes	Yes	78.00	20.10	0.1	0.1	10%	0.4	Yes	Yes			
			H(0°) (neck)	17	3.980	0.989	1.17	1.16	79.41	19.73	81.4	22.8	-0.1	-0.6	34.8%	1.3	Yes	Yes	76.20	19.40	0.2	0.1	10%	0.4	Yes	Yes			
			D(90°) (ear)	17	2.920	0.918	1.16	1.16	58.26	18.32	58.0	19.4	0.0	-0.2	34.5%	1.3	Yes	Yes	55.00	17.50	0.3	0.2	10%	0.4	Yes	Yes			

Flat HSL																											
Serial Number	5185										Verification Against Absolute Targets								Verification Against Measured Reference Values								
Dipole Type	Dipole Serial Number	frequency	Location (Orientation)	Power	Measured SAR		Reported Uncertainty (k = 2)		Measured SAR Normalized to 1 W		Numerical Target		Deviation from Target		Total Uncertainty (k = 2)		Verified Against Numerical Targets?		SAR from cSAR3D Certificate		Deviation from Cal. Cert.		Tolerance		Verified Against Measured Values?		Test Date
		(MHz)		(dBm)	(W/kg)		(dB)	(W/kg)	(W/kg)	(dB)	(%)	(dB)			(W/kg)	(dB)	(%)	(dB)			1g	10g					
					1g	10g	1g	10g	1g	10g	1g	10g	1g	10g			1g	10g	1g	10g	1g	10g			1g	10g	
D835V2	D835V2 - SN:4d298	835	A0 (0°)	17	0.433	0.270	1.00	1.00	8.64	5.39	9.76	6.34	-0.5	-0.7	30.4%	1.2	Yes	Yes	8.65	5.38	0.0	0.0	10%	0.4	Yes	Yes	2025/9/2
D1950V3	D1950V2 - SN:1260	1950	A0 (0°)	17	1.980	0.990	1.00	1.00	39.51	19.75	40.7	21.0	-0.1	-0.3	30.4%	1.2	Yes	Yes	38.60	18.90	0.1	0.2	10%	0.4	Yes	Yes	2025/9/5
D2450V2	D2450V2 - SN:1095	2450	A0 (0°)	17	2.490	1.140	1.02	1.00	49.68	22.75	52.7	24.8	-0.3	-0.4	30.9%	1.2	Yes	Yes	50.20	22.30	0.0	0.1	10%	0.4	Yes	Yes	2025/9/7
D5GHzV2	D5GHzV2 - SN:1365	5200	A0 (0°)	17	3.930	1.130	1.20	1.12	78.41	22.55	78.8	22.7	0.0	0.0	35.6%	1.3	Yes	Yes	82.20	22.70	-0.2	0.0	10%	0.4	Yes	Yes	2025/9/15
D5GHzV2	D5GHzV2 - SN:1365	5800	A0 (0°)	17	4.150	1.140	1.19	1.13	82.80	22.75	81.2	22.9	0.1	0.0	35.4%	1.3	Yes	Yes	82.50	22.60	0.0	0.0	10%	0.4	Yes	Yes	2025/9/16

13. RF Exposure Positions

13.1 Ear and handset reference point

Figure 11.1.1 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 11.1.2 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 11.1.3). 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 11.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

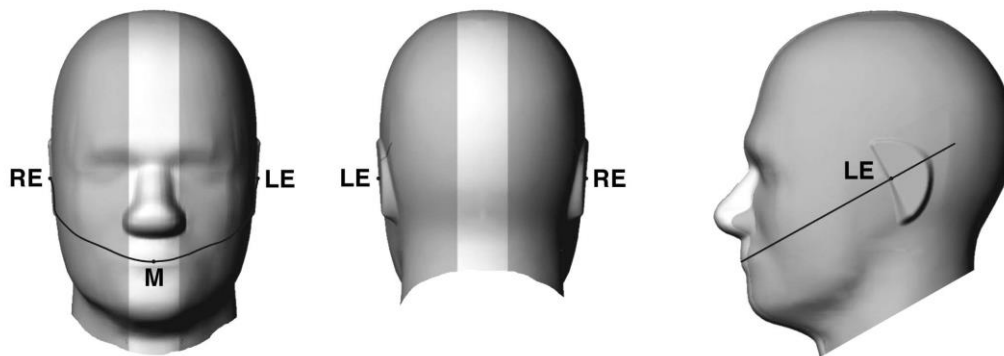


Fig 11.1.1 Front, back, and side views of SAM twin phantom

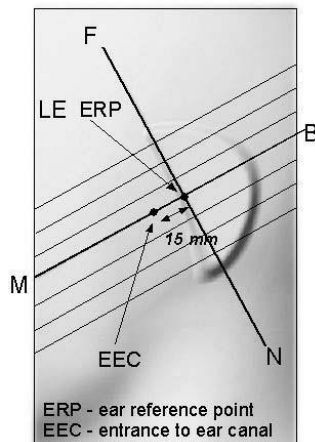


Fig 11.1.2 Close-up side view of phantom showing the ear region.

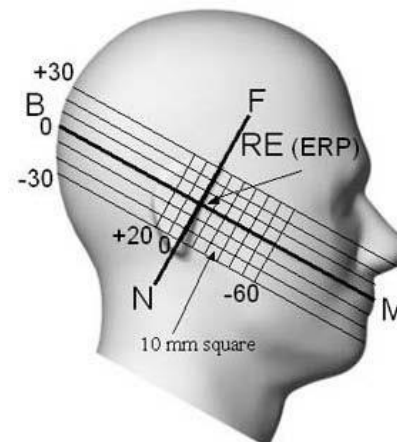


Fig 11.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 11.2.1 and Figure 11.2.2), 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 11.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 11.2.2), 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 11.2.3), 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 11.2.3. The actual rotation angles should be documented in the test report.

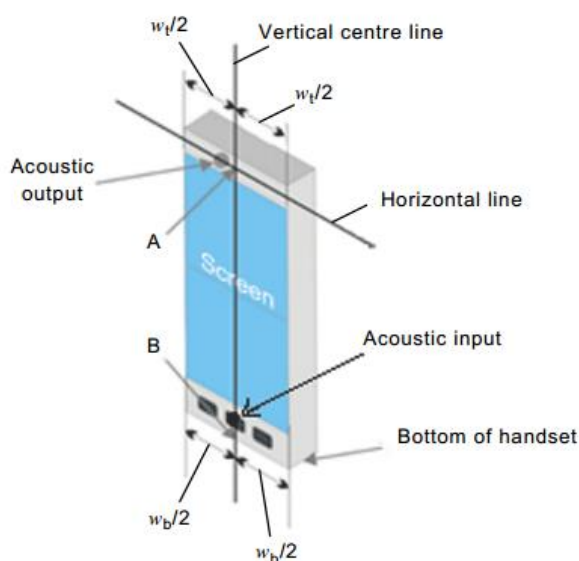


Fig 11.2.1 Handset vertical and horizontal reference lines—"a full touch screen smart phone"

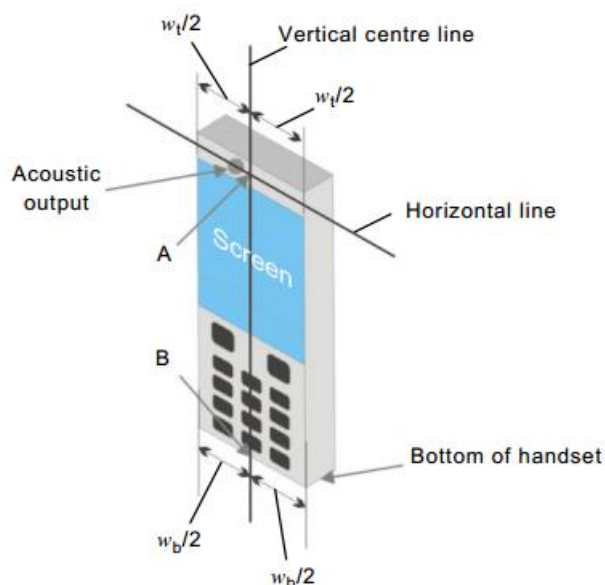


Fig 11.2.2 Handset vertical and horizontal reference lines—"a keyboard handset"



Fig 11.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

13.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See below figure 11.3.1. 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

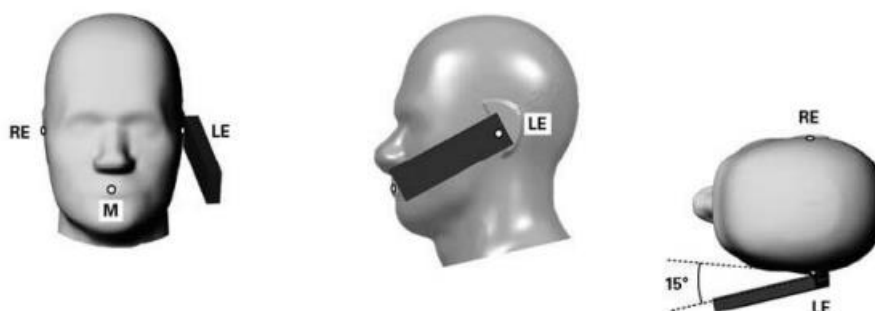


Fig 11.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

13.4 Body Device

- (a) To position the device parallel to the phantom surface with all surfaces of the device.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 5mm.

13.5 Hand-Held Device

- (a) The device shall be placed directly against the flat phantom, for those sides of the device that are in contact with the hand during intended use.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 0 cm.

14. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

General Note:

1. For head, body and Limbs SAR testing, according to EN62209 test procedure was based on the highest source-based time-average power.
2. Start tests at middle channel and determine the worst configuration for further high/low channel tests.

<WCDMA Conducted Power>

General Note:

Choose the RMC 12.2Kbps for each band at middle channel to test SAR and determine the worst configuration for further high/low channel test.

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:

HSDPA Setup Configuration:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$. Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$. Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases. Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.							

Setup Configuration

HSUPA Setup Configuration:

- 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. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - 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, C11.1.3, quoted from the TS 34.121
 - iii. Set Cell Power = -86 dBm
 - iv. Set Channel Type = 12.2k + HSPA
 - v. Set UE Target Power
 - vi. Power Ctrl Mode= Alternating bits
 - vii. Set and observe the E-TFCI
 - viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- d. 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, TF0) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

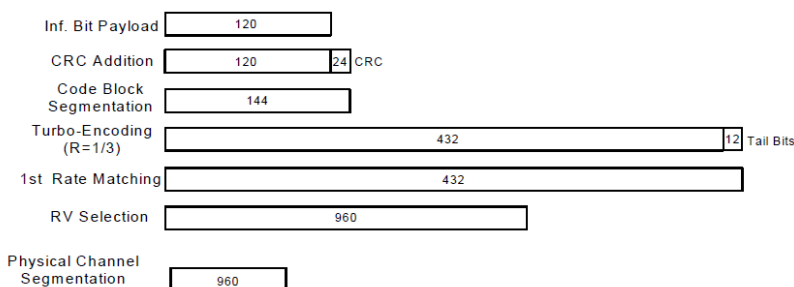


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

- 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. 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 Params
 - 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
- d. 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 $\beta_{HS} = 30/15 * \beta_c$.

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

<FDD LTE Conducted Power>

General Note: Choose the highest output power among all configurations of bandwidths, RBs, modulations to test SAR at middle channel and determine the worst configuration for further high/low channel test.

<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

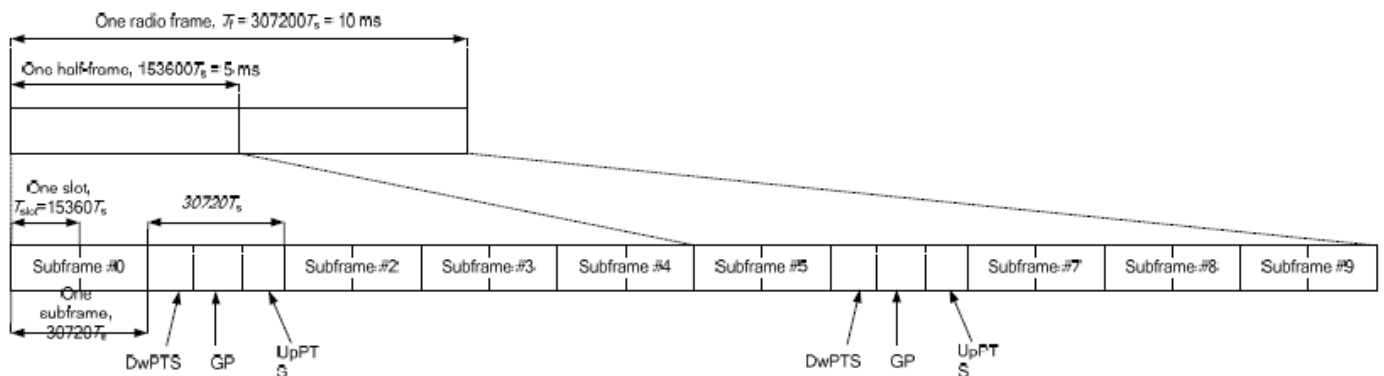


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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 SAR measurement the duty cycle 1:1.59 (62.9 %) was used perform testing.
- vi. 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 Uplink CA Power>
<Intra-Band Power Measurement>**General Note:**

1. The device supports intra-band contiguous uplink carrier aggregation with a maximum of two uplink component carriers. The maximum power of Intra-band contiguous uplink carrier aggregation is not higher than the maximum tune up power in LTE non-CA Rel.8 operation. So SAR measurement will be done for non-CA operation for all applicable exposure positions.
2. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_3C	Ant4/5/6/7
CA_38C	Ant4/5/6/7
CA_40C	Ant4/5/6
CA_7C	Ant4/5/6/7

<5G NR Conducted Power>

General Note:

1. 5G NR n1 / n3 / n5 / n7 / n8 / n20 / n26 / n28 / n38 / n40 / n41 / n77 / n78 support SA mode.
2. 5G NR n1 / n3 / n5 / n7 / n8 / n20 / n28 / n38 / n40 / n41 / n77 / n78 support NSA mode.
3. Choose the highest output power among all configurations of bandwidths, RBs, modulations to test SAR at middle channel and determine the worst configuration for further high/low channel test.
4. 5G NR operation does not have the fixed UL/DL frame structure, but during the transmitting/receiving it can be operated in the slot structure of 100% UL duty cycle, we are proposing the conservative way to evaluate SAR at 100% duty cycle. For the purpose of test 5G NR standalone SAR, and also test SAR level at 100% TX duty cycle.
5. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
6. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary
7. NSA and SA mode should perform SAR separately. For the maximum power of SA mode is the same as NSA total power level, so SA standalone total power level SAR can represent NSA mode SAR.
8. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
9. For 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, using FTM to perform SAR with default 100% transmission.
10. This device supports HPUE mode for 5G NR n41/n77/n78 with higher power. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
11. For 5G NR inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two 5G NR bands. Smart Transmit algorithm controls the total RF exposure base on 5G NR inter CA bands to not exceed CE limit.

<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	

Inter Band EN-DC Configuration

ENDC	Main Antenna Tx			
	LTE TX	PA	NR TX	PA
DC_1A_n28A	B1:ANT6/7/4/5	Other_PA	n28:ANT0/1	Main_PA
DC_1A_n38A	B1:ANT6/5	Other_PA	n38:ANT4/5/6/7	Main_PA
DC_1A_n3A	B1:ANT4/5/6/7	Main_PA	n3:ANT6/7/4/5	Other_PA
DC_1A_n40A	B1:ANT6/4/5	Other_PA	n40:ANT4/5/6	Main_PA
DC_1A_n41A	B1:ANT6/5	Other_PA	n41:ANT4/5/6/7	Main_PA
DC_1A_n5A	B1:ANT6/7/4/5	Other_PA	n5:ANT0/1	Main_PA
DC_1A_n78A	B1:ANT4/5/6/7	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_1A_n7A	B1:ANT6/5	Other_PA	n7:ANT4/5/6/7	Main_PA
DC_1A_n8A	B1:ANT6/7/4/5	Other_PA	n8:ANT0/1	Main_PA
DC_20A_n1A	B20:ANT0/1	Main_PA	n1:ANT6/7/4/5	Other_PA
DC_20A_n3A	B20:ANT0/1	Main_PA	n3:ANT6/7/4/5	Other_PA
DC_20A_n78A	B20:ANT0/1	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_20A_n7A	B20:ANT0/1	Other_PA	n7:ANT4/5/6/7	Main_PA
DC_28A_n1A	B28:ANT0/1	Main_PA	n1:ANT6/7/4/5	Other_PA
DC_28A_n3A	B28:ANT0/1	Main_PA	n3:ANT6/7/4/5	Other_PA
DC_28A_n40A	B28:ANT0/1	Other_PA	n40:ANT4/5/6	Main_PA
DC_28A_n41A	B28:ANT0/1	Other_PA	n41:ANT4/5/6/7	Main_PA
DC_28A_n78A	B28:ANT0/1	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_28A_n7A	B28:ANT0/1	Other_PA	n7:ANT4/5/6/7	Main_PA
DC_38A_n78A	B38:ANT4/5/6/7	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_3A_n1A	B3:ANT4/5/6/7	Main_PA	n1:ANT6/7/4/5	Other_PA
DC_3A_n28A	B3:ANT6/7/4/5	Other_PA	n28:ANT0/1	Main_PA
DC_3A_n38A	B3:ANT6/5	Other_PA	n38:ANT4/5/6/7	Main_PA
DC_3A_n40A	B3:ANT6/4/5	Other_PA	n40:ANT4/5/6	Main_PA
DC_3A_n41A	B3:ANT6/5	Other_PA	n41:ANT4/5/6/7	Main_PA
DC_3A_n5A	B3:ANT6/7/4/5	Other_PA	n5:ANT0/1	Main_PA
DC_3A_n78A	B3:ANT4/5/6/7	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_3A_n7A	B3:ANT6/5	Other_PA	n7:ANT4/5/6/7	Main_PA
DC_41A_n78A	B41:ANT4/5/6/7	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_5A_n78A	B5:ANT0/1	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_7A_n1A	B7:ANT4/5	Main_PA	n1:ANT6/7/4/5	Other_PA
DC_7A_n28A	B7:ANT4/5/6/7	Main_PA	n28:ANT0/1	Other_PA
DC_7A_n3A	B7:ANT4/5	Main_PA	n3:ANT6/7/4/5	Other_PA
DC_7A_n78A	B7:ANT4/5/6/7	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_7A_n8A	B7:ANT4/5/6/7	Main_PA	n8:ANT0/1	Other_PA
DC_8A_n1A	B8:ANT0/1	Main_PA	n1:ANT6/7/4/5	Other_PA
DC_8A_n3A	B8:ANT0/1	Main_PA	n3:ANT6/7/4/5	Other_PA
DC_8A_n40A	B8:ANT0/1	Other_PA	n40:ANT4/5/6	Main_PA
DC_8A_n41A	B8:ANT0/1	Other_PA	n41:ANT4/5/6/7	Main_PA
DC_8A_n78A	B8:ANT0/1	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_7A_n5A	B7:ANT4/5/6/7	Main_PA	n5:ANT0/1	Other_PA
DC_1A_n77A	B1:ANT4/5/6/7	Main_PA	n77:ANT8/9/10/11	Main_PA
DC_3A_n77A	B3:ANT4/5/6/7	Main_PA	n77:ANT8/9/10/11	Main_PA
DC_8A_n77A	B8:ANT0/1	Main_PA	n77:ANT8/9/10/11	Main_PA
DC_5A_n40A	B5:ANT0/1	Other_PA	n40:ANT4/5/6	Main_PA
DC_28A_n77A	B28:ANT0/1	Main_PA	n77:ANT8/9/10/11	Main_PA
DC_5A_n7A	B5:ANT0/1	Other_PA	n7:ANT4/5/6/7	Main_PA
DC_1A_n20A	B1:ANT4/5/6/7	Main_PA	n20:ANT0/1	Other_PA
DC_3A_n20A	B3:ANT4/5/6/7	Main_PA	n20:ANT0/1	Other_PA
DC_7A_n20A	B7:ANT4/5/6/7	Main_PA	n20:ANT0/1	Other_PA

DC_38A_n28A	B38:ANT4/5/6/7	Main_PA	n28:ANT0/1	Other_PA
DC_40A_n78A	B40:ANT4/5/6	Main_PA	n78:ANT8/9/10/11	Main_PA
DC_40A_n1A	B40:ANT4/5/6	Main_PA	n1:ANT6/4/5	Other_PA
DC_42A_n1A	B42:ANT8/9/10/11	Main_PA	n1:ANT6/7/4/5	Main_PA
DC_26A_n78A	B26:ANT0/1	Main_PA	n78:ANT8/9/10/11	Main_PA

Inter Band CA Configuration

NR Uplink CA	2CC Uplink Carrier Aggregation			
Inter-band	Antenna Tx	PA	Antenna Tx	PA
CA_n1A-n28A	n1 Ant4/5/6/7	Other_PA	n28 Ant0/1	Main_PA
CA_n1A-n78A	n1 Ant4/5/6/7	Main_PA	n78 Ant8/9/10/11	Main_PA
CA_n28A-n78A	n28 Ant0/1	Main_PA	n78 Ant8/9/10/11	Main_PA
CA_n3A-n28A	n3 Ant4/5/6/7	Other_PA	n28 Ant0/1	Main_PA
CA_n3A-n78A	n3 Ant4/5/6/7	Main_PA	n78 Ant8/9/10/11	Main_PA
CA_n3A-n7A	n3 Ant5/6	Other_PA	n7 Ant4/5/6/7	Main_PA

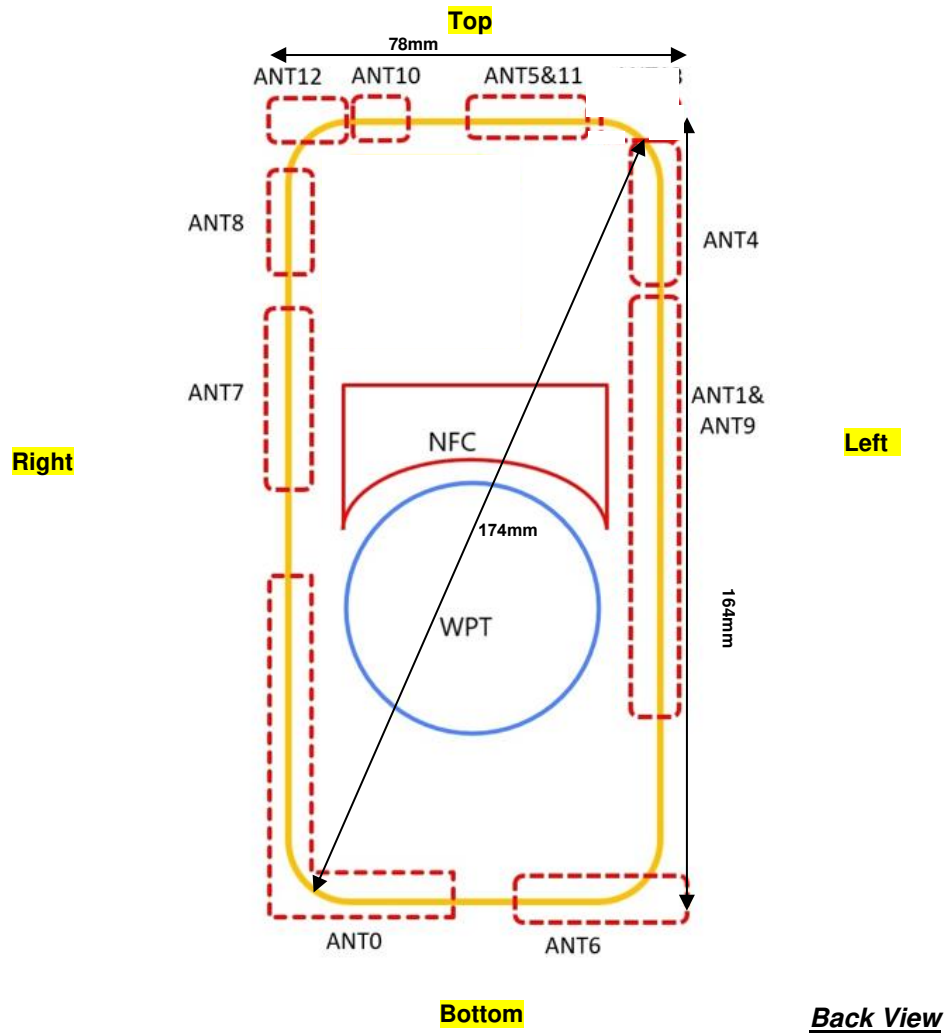
<Bluetooth Conducted Power>**General Note:**

1. For Bluetooth SAR testing chose the mode with highest output power, which is 1Mbps at middle channel to test SAR and determine the worst configuration for further high/low channel testing.

<WLAN Conducted Power>

1. For 2.4GHz WLAN, choose the mode with highest output power, at middle channel to test SAR and determine the worst configuration for further high/low channel testing.
2. For 5.2&5.3&5.5&5.8 WLAN, choose the mode with highest output power, at middle channel to test SAR and determine the worst configuration for further high/low channel testing.
3. 802.11 ax/be 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.
4. For WLAN 2.4GHz SAR testing was performed on single antenna, due to RF power in SISO mode is larger or equal to per single antenna RF power in MIMO mode, and additional MIMO mode was chosen to perform SAR testing.
5. SISO and MIMO all supported by 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.
6. 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.

15. Antenna Location



Antenna	Support Band
Antenna 0	GSM: 850/900<TX/RX> WCDMA: B5/8<TX/RX> LTE: B5/8/20/26/28 <TX/RX> NR: n5/n8/n20/n26/n28 <TX/RX>
Antenna 1	GSM: 850/900<TX/RX> WCDMA: B5/8<TX/RX> LTE: B5/8/20/26/28 <TX/RX> NR: n5/n8/n20/n26/n28<TX/RX>
Antenna 4	GSM: 1800<TX/RX> WCDMA: B1 <TX/RX> LTE: B1/3/7/38/40/41<TX/RX> NR: n1/n3/n7/n38/n40/n41 <TX/RX>
Antenna 5	WCDMA: B1 <TX/RX> LTE: B1/3/7/38/40/41<TX/RX> NR: n1/n3/n7/n38/n40/n41 <TX/RX>
Antenna 6	GSM: 1800<TX/RX> WCDMA: B1 <TX/RX> LTE: B1/3/7/38/40/41<TX/RX> NR: n1/n3/n7/n38/n40/n41 <TX/RX>
Antenna 7	WCDMA: B1 <TX/RX> LTE: B1/3/7/38/41<TX/RX> NR: n1/n3/n7/n38/n41 <TX/RX> Bluetooth <TX/RX> WLAN 2.4GHz <TX/RX>
Antenna 8	LTE: B42<TX/RX> NR: n77/n78 <TX/RX> WLAN 5GHz <TX/RX>
Antenna 9	LTE: B42 <TX/RX> NR: n77/n78 <TX/RX>
Antenna 10	LTE: B42 <TX/RX> NR: n77/n78 <TX/RX> WLAN 5GHz <TX/RX>
Antenna 11	LTE: B42 <TX/RX> NR: n77/n78 <TX/RX>
Antenna 12	Bluetooth <TX/RX> WLAN 2.4GHz <TX/RX>
NFC Antenna	NFC<TX/RX>
WPT Antenna	WPT<TX/RX>

16. SAR Test Results

General Note:

1. The reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *83.3%".
 - d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - e. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - f. 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)* scaling factor for extended cyclic prefix.
2. When the WLAN transmission was verified using a spectrum analyzer.
3. The device implements Proximity sensors/receiver detect mechanism/handheld trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body, Limbs) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. 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.
4. For 5G NR n41/n77/n78 HPUE, 5G NR n41/n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands, using FTM to perform SAR with default 100% transmission.
5. NFC mainly operate in hand-held extremity exposure conditions, therefore Standalone 10-g SAR testing for NFC will be performed with active mode and max power mode by test software with 100% duty cycle at 0mm separation distance.
6. NFC SAR test tissue-simulating liquid parameter: refer to EN IEC/IEEE 62209-1528:2021.
7. LTE B5/8/20/28 and 5G NR n5/8/20/28 at ant0/1, LTE B1/3 and 5G NR n1/3 at ant4/5/6/7, support different PAs for same antennas. And some LTE/NR bands support Other PA only under ENDC& UL CA. Some LTE/NR bands support different PAs for some antennas, whether it is the maximum power of Main PA is higher than and very close to the other PA, for RF exposure, after verification all PAs in a same position, so the worst-case PA was chosen to perform full SAR testing to ensure the RF exposure is compliance and another PA verified the worst case.
8. For cSAR system, the power drift is obtained by the relative difference between the first and the last measurement, which should be within the tolerance of the system repeatability and should not be greater than 5%.
9. For cSAR test and the test plan is as follows:
 - a. Perform complete SAR testing using the cSAR system and verify worst-case CSAR test SAR results using the DASY system;
 - b. If cSAR test SAR result is in the part where head/body SAR exceeds 0.7W/kg or limb SAR exceeds 1.8W/kg, and all tests are performed full SAR test using DASY system.
 - c. For NFC band, the DASY system is used to perform full SAR testing.

DSI status description:

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

This WWAN and WLAN/BT bands enabled with Qualcomm Smart Transmit feature which located at chapter 5. The default power is Pmax power, When Plimit power higher than Pmax power, the output power will be limited at Pmax, and so the SAR will use Pmax power to do the testing.

Exposure Condition	DSI	Trigger conditions
Head SAR	DSI 1	Earpiece On
Body worn/Limbs SAR	DSI 3	Sensor on
Body worn/Limbs SAR	DSI 4	Sensor off

16.1 Head SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	GSM900	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	DS11	37	897.4	26.76	28.00	1.33	0.04	0.185	0.246	Csar
	GSM900	GPRS 4 Tx slots	Right Tilted	0mm	Ant0	DS11	37	897.4	26.76	28.00	1.33	0.16	0.097	0.129	Csar
	GSM900	GPRS 4 Tx slots	Left Cheek	0mm	Ant0	DS11	37	897.4	26.76	28.00	1.33	0.15	0.121	0.161	Csar
	GSM900	GPRS 4 Tx slots	Left Tilted	0mm	Ant0	DS11	37	897.4	26.76	28.00	1.33	0.06	0.072	0.096	Csar
	GSM900	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	DS11	975	880.2	26.61	28.00	1.377	0.00	0.171	0.235	Csar
	GSM900	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	DS11	124	914.8	26.52	28.00	1.406	0.01	0.214	0.301	Csar
	GSM900	GPRS 4 Tx slots	Right Cheek	0mm	Ant1	DS11	37	897.4	24.57	26.00	1.39	0.10	0.343	0.477	Csar
	GSM900	GPRS 4 Tx slots	Right Tilted	0mm	Ant1	DS11	37	897.4	24.57	26.00	1.39	-0.01	0.064	0.089	Csar
	GSM900	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	DS11	37	897.4	24.57	26.00	1.39	0.10	0.562	0.781	Dasy
	GSM900	GPRS 4 Tx slots	Left Tilted	0mm	Ant1	DS11	37	897.4	24.57	26.00	1.39	0.15	0.083	0.115	Csar
	GSM900	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	DS11	975	880.2	24.51	26.00	1.409	-0.14	0.525	0.740	Dasy
01	GSM900	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	DS11	124	914.8	24.54	26.00	1.4	0.05	0.577	0.808	Dasy
	GSM1800	GPRS 4 Tx slots	Right Cheek	0mm	Ant4	DS11	698	1747.4	23.13	24.50	1.371	-0.03	0.574	0.787	Dasy
	GSM1800	GPRS 4 Tx slots	Right Tilted	0mm	Ant4	DS11	698	1747.4	23.13	24.50	1.371	-0.12	0.231	0.317	Csar
	GSM1800	GPRS 4 Tx slots	Left Cheek	0mm	Ant4	DS11	698	1747.4	23.13	24.50	1.371	-0.01	0.250	0.343	Csar
	GSM1800	GPRS 4 Tx slots	Left Tilted	0mm	Ant4	DS11	698	1747.4	23.13	24.50	1.371	-0.13	0.163	0.223	Csar
	GSM1800	GPRS 4 Tx slots	Right Cheek	0mm	Ant4	DS11	885	1784.8	23.10	24.50	1.38	-0.13	0.490	0.676	Csar
02	GSM1800	GPRS 4 Tx slots	Right Cheek	0mm	Ant4	DS11	512	1710.2	23.08	24.50	1.387	-0.02	0.601	0.834	Dasy
	GSM1800	GPRS 4 Tx slots	Right Cheek	0mm	Ant6	DS11	698	1747.4	23.68	25.00	1.355	0.17	0.001	0.001	Csar
	GSM1800	GPRS 4 Tx slots	Right Tilted	0mm	Ant6	DS11	698	1747.4	23.68	25.00	1.355	0.06	0.001	0.001	Csar
	GSM1800	GPRS 4 Tx slots	Left Cheek	0mm	Ant6	DS11	698	1747.4	23.68	25.00	1.355	-0.17	0.026	0.035	Csar
	GSM1800	GPRS 4 Tx slots	Left Tilted	0mm	Ant6	DS11	698	1747.4	23.68	25.00	1.355	0.10	0.001	0.001	Csar
	GSM1800	GPRS 4 Tx slots	Left Cheek	0mm	Ant6	DS11	512	1710.2	23.62	25.00	1.374	-0.15	0.028	0.038	Csar
	GSM1800	GPRS 4 Tx slots	Left Cheek	0mm	Ant6	DS11	885	1784.8	23.42	25.00	1.439	0.06	0.039	0.056	Csar
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	DS11	189	836.4	26.73	28.00	1.34	-0.01	0.145	0.194	Csar
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant0	DS11	189	836.4	26.73	28.00	1.34	0.05	0.089	0.119	Csar
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant0	DS11	189	836.4	26.73	28.00	1.34	0.10	0.117	0.157	Csar
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant0	DS11	189	836.4	26.73	28.00	1.34	-0.14	0.069	0.092	Csar
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	DS11	128	824.2	26.06	28.00	1.563	0.15	0.146	0.228	Csar
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	DS11	251	848.8	26.41	28.00	1.442	0.07	0.154	0.222	Dasy
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant1	DS11	189	836.4	26.11	27.50	1.377	-0.17	0.411	0.566	Csar
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant1	DS11	189	836.4	26.11	27.50	1.377	0.11	0.082	0.113	Csar
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	DS11	189	836.4	26.11	27.50	1.377	-0.13	0.695	0.957	Dasy
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant1	DS11	189	836.4	26.11	27.50	1.377	0.03	0.114	0.157	Csar
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	DS11	128	824.2	26.03	27.50	1.403	-0.01	0.588	0.825	Dasy
03	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	DS11	251	848.8	26.06	27.50	1.393	-0.01	0.703	0.979	Dasy

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	WCDMA I	RMC 12.2Kbps	Right Cheek	0mm	Ant4	DS11	9750	1950	19.76	20.50	1.186	-0.03	0.606	0.719	Dasy
	WCDMA I	RMC 12.2Kbps	Right Tilted	0mm	Ant4	DS11	9750	1950	19.76	20.50	1.186	0.12	0.242	0.287	Csar
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant4	DS11	9750	1950	19.76	20.50	1.186	0.18	0.251	0.298	Csar
	WCDMA I	RMC 12.2Kbps	Left Tilted	0mm	Ant4	DS11	9750	1950	19.76	20.50	1.186	0.02	0.142	0.168	Csar
	WCDMA I	RMC 12.2Kbps	Right Cheek	0mm	Ant4	DS11	9612	1922.4	19.66	20.50	1.213	0.08	0.595	0.722	Dasy
	WCDMA I	RMC 12.2Kbps	Right Cheek	0mm	Ant4	DS11	9888	1977.6	19.72	20.50	1.197	-0.02	0.588	0.704	Dasy
	WCDMA I	RMC 12.2Kbps	Right Cheek	0mm	Ant5	DS11	9750	1950	18.63	19.50	1.222	0.03	0.629	0.769	Dasy
	WCDMA I	RMC 12.2Kbps	Right Tilted	0mm	Ant5	DS11	9750	1950	18.63	19.50	1.222	0.01	0.633	0.774	Dasy
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant5	DS11	9750	1950	18.63	19.50	1.222	0.09	0.531	0.649	Csar
	WCDMA I	RMC 12.2Kbps	Left Tilted	0mm	Ant5	DS11	9750	1950	18.63	19.50	1.222	-0.01	0.559	0.683	Csar
04	WCDMA I	RMC 12.2Kbps	Right Tilted	0mm	Ant5	DS11	9612	1922.4	18.58	19.50	1.236	0.08	0.682	0.843	Dasy
	WCDMA I	RMC 12.2Kbps	Right Tilted	0mm	Ant5	DS11	9888	1977.6	18.60	19.50	1.23	-0.14	0.556	0.684	Dasy
	WCDMA I	RMC 12.2Kbps	Right Cheek	0mm	Ant6	DS11	9750	1950	23.85	24.50	1.161	0.16	0.061	0.071	Csar
	WCDMA I	RMC 12.2Kbps	Right Tilted	0mm	Ant6	DS11	9750	1950	23.85	24.50	1.161	-0.06	0.038	0.044	Csar
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant6	DS11	9750	1950	23.85	24.50	1.161	0.03	0.069	0.080	Csar
	WCDMA I	RMC 12.2Kbps	Left Tilted	0mm	Ant6	DS11	9750	1950	23.85	24.50	1.161	0.12	0.037	0.043	Csar
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant6	DS11	9612	1922.4	23.76	24.50	1.186	-0.07	0.061	0.072	Csar
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant6	DS11	9888	1977.6	23.81	24.50	1.172	0.10	0.055	0.064	Csar
	WCDMA I	RMC 12.2Kbps	Right Cheek	0mm	Ant7	DS11	9750	1950	22.39	23.50	1.291	0.10	0.407	0.525	Csar
	WCDMA I	RMC 12.2Kbps	Right Tilted	0mm	Ant7	DS11	9750	1950	22.39	23.50	1.291	0.13	0.073	0.094	Csar
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant7	DS11	9750	1950	22.39	23.50	1.291	0.07	0.565	0.729	Csar
	WCDMA I	RMC 12.2Kbps	Left Tilted	0mm	Ant7	DS11	9750	1950	22.39	23.50	1.291	0.06	0.118	0.152	Csar
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant7	DS11	9612	1922.4	22.37	23.50	1.297	0.07	0.617	0.800	Dasy
	WCDMA I	RMC 12.2Kbps	Left Cheek	0mm	Ant7	DS11	9888	1977.6	22.32	23.50	1.312	-0.11	0.569	0.747	Dasy
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant0	DS11	4182	836.4	24.21	25.00	1.199	0.03	0.153	0.183	Csar



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	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant0	DS11	4182	836.4	24.21	25.00	1.199	0.03	0.103	0.123	Csar
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant0	DS11	4182	836.4	24.21	25.00	1.199	0.03	0.162	0.194	Csar
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant0	DS11	4182	836.4	24.21	25.00	1.199	-0.03	0.078	0.094	Csar
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant0	DS11	4132	826.4	24.18	25.00	1.208	0.08	0.168	0.203	Csar
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant0	DS11	4233	846.6	24.19	25.00	1.205	0.09	0.134	0.161	Csar
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant1	DS11	4182	836.4	21.62	22.50	1.225	0.10	0.333	0.408	Csar
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant1	DS11	4182	836.4	21.62	22.50	1.225	-0.12	0.068	0.083	Csar
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant1	DS11	4182	836.4	21.62	22.50	1.225	0.11	0.545	0.668	Dasy
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant1	DS11	4182	836.4	21.62	22.50	1.225	0.03	0.092	0.113	Csar
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant1	DS11	4132	826.4	21.60	22.50	1.23	-0.19	0.492	0.605	Csar
05	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant1	DS11	4233	846.6	21.58	22.50	1.236	0.02	0.548	0.677	Dasy
	WCDMA VIII	RMC 12.2Kbps	Right Cheek	0mm	Ant0	DS11	2788	897.6	24.25	25.00	1.189	-0.06	0.235	0.279	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Tilted	0mm	Ant0	DS11	2788	897.6	24.25	25.00	1.189	-0.17	0.130	0.155	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Cheek	0mm	Ant0	DS11	2788	897.6	24.25	25.00	1.189	0.03	0.171	0.203	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Tilted	0mm	Ant0	DS11	2788	897.6	24.25	25.00	1.189	-0.06	0.098	0.117	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Cheek	0mm	Ant0	DS11	2712	882.4	24.19	25.00	1.205	0.00	0.212	0.255	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Cheek	0mm	Ant0	DS11	2863	912.6	24.23	25.00	1.194	0.03	0.276	0.330	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Cheek	0mm	Ant1	DS11	2788	897.6	21.16	22.00	1.213	-0.16	0.329	0.399	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Tilted	0mm	Ant1	DS11	2788	897.6	21.16	22.00	1.213	-0.18	0.060	0.073	Csar
06	WCDMA VIII	RMC 12.2Kbps	Left Cheek	0mm	Ant1	DS11	2788	897.6	21.16	22.00	1.213	0.16	0.541	0.656	Dasy
	WCDMA VIII	RMC 12.2Kbps	Left Tilted	0mm	Ant1	DS11	2788	897.6	21.16	22.00	1.213	0.16	0.076	0.092	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Cheek	0mm	Ant1	DS11	2712	882.4	21.14	22.00	1.219	-0.00	0.442	0.539	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Cheek	0mm	Ant1	DS11	2863	912.6	21.11	22.00	1.227	-0.12	0.524	0.643	Dasy

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Power State Note	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11	Other PA	18300	1950	19.53	20.50	1.25			0.13	0.619	0.774	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant4	DS11	Other PA	18300	1950	19.53	20.50	1.25			0.06	0.240	0.300	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant4	DS11	Other PA	18300	1950	19.53	20.50	1.25			-0.11	0.264	0.330	Csar
	LTE Band 1	20M	QPSK	1	0	Left Tilted	0mm	Ant4	DS11	Other PA	18300	1950	19.53	20.50	1.25			-0.18	0.147	0.184	Csar
07	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11	Other PA	18100	1930	19.48	20.50	1.265			-0.06	0.621	0.786	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11	Other PA	18500	1970	19.44	20.50	1.276			-0.06	0.600	0.766	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11		18100	1930	19.21	19.70	1.119			0.08	0.512	0.573	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant5	DS11	Other PA	18300	1950	18.04	19.00	1.247			-0.07	0.546	0.681	Csar
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11	Other PA	18300	1950	18.04	19.00	1.247			-0.15	0.583	0.727	Dasy
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant5	DS11	Other PA	18300	1950	18.04	19.00	1.247			-0.05	0.466	0.581	Csar
	LTE Band 1	20M	QPSK	1	0	Left Tilted	0mm	Ant5	DS11	Other PA	18300	1950	18.04	19.00	1.247			0.12	0.521	0.650	Csar
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11	Other PA	18100	1930	17.96	19.00	1.271			-0.06	0.610	0.775	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11	Other PA	18500	1970	17.99	19.00	1.262			0.11	0.514	0.649	Csar
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11		18100	1930	17.72	19.00	1.343			-0.03	0.566	0.760	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant6	DS11		18300	1950	24.42	25.50	1.282			-0.18	0.072	0.092	Csar
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant6	DS11		18300	1950	24.42	25.50	1.282			0.10	0.030	0.038	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DS11		18300	1950	24.42	25.50	1.282			-0.09	0.076	0.097	Csar
	LTE Band 1	20M	QPSK	1	0	Left Tilted	0mm	Ant6	DS11		18300	1950	24.42	25.50	1.282			-0.05	0.034	0.044	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DS11		18100	1930	24.32	25.50	1.312			0.08	0.081	0.106	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DS11		18500	1970	24.36	25.50	1.3			-0.04	0.070	0.091	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DS11	Other PA	18100	1930	24.17	25.00	1.211			-0.03	0.062	0.075	Dasy
	LTE Band 1	20M	QPSK	1	0	Right Cheek	0mm	Ant7	DS11		18300	1950	21.45	23.00	1.429			-0.17	0.336	0.480	Csar
	LTE Band 1	20M	QPSK	1	0	Right Tilted	0mm	Ant7	DS11		18300	1950	21.45	23.00	1.429			0.14	0.060	0.086	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DS11		18300	1950	21.45	23.00	1.429			-0.04	0.453	0.647	Csar
	LTE Band 1	20M	QPSK	1	0	Left Tilted	0mm	Ant7	DS11		18300	1950	21.45	23.00	1.429			-0.01	0.105	0.150	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DS11		18100	1930	21.38	23.00	1.452			0.08	0.487	0.707	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DS11		18500	1970	21.41	23.00	1.442			0.03	0.427	0.616	Csar
	LTE Band 1	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DS11	Other PA	18100	1930	22.13	23.00	1.222			0.03	0.523	0.639	Dasy
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11	Other PA	19575	1747.5	19.57	20.50	1.239			0.07	0.541	0.670	Csar
	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant4	DS11	Other PA	19575	1747.5	19.57	20.50	1.239			-0.05	0.204	0.253	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant4	DS11	Other PA	19575	1747.5	19.57	20.50	1.239			-0.16	0.246	0.305	Csar
	LTE Band 3	20M	QPSK	1	0	Left Tilted	0mm	Ant4	DS11	Other PA	19575	1747.5	19.57	20.50	1.239			0.09	0.138	0.171	Csar
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11	Other PA	19300	1720	19.52	20.50	1.253			0.17	0.577	0.723	Dasy
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11	Other PA	19850	1775	19.46	20.50	1.271			-0.16	0.512	0.651	Csar
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DS11		19300	1720	19.03	19.70	1.167			0.16	0.506	0.591	Dasy
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant5	DS11		19575	1747.5	17.85	19.00	1.303			0.11	0.525	0.684	Csar
	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11		19575	1747.5	17.85	19.00	1.303			0.17	0.592	0.771	Dasy
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant5	DS11		19575	1747.5	17.85	19.00	1.303			0.18	0.443	0.577	Csar
	LTE Band 3	20M	QPSK	1	0	Left Tilted	0mm	Ant5	DS11		19575	1747.5	17.85	19.00	1.303			0.10	0.532	0.693	Csar
08	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11		19300	1720	17.81	19.00	1.315			-0.03	0.622	0.818	Dasy
	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11		19850	1775	17.72	19.00	1.343			-0.00	0.513	0.689	Csar
	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DS11	Other PA	19300	1720	17.91	19.00	1.285			-0.09	0.598	0.768	Dasy
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant6	DS11		19575	1747.5	24.39	25.50	1.291			-0.01	0.070	0.090	Csar
	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant6	DS11		19575	1747.5	24.39	25.50	1.291			0.09	0.055	0.071	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DS11		19575	1747.5	24.39	25.50	1.291			0.02	0.098	0.127	Csar



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	LTE Band 3	20M	QPSK	1	0	Left Tilted	0mm	Ant6	DSI1		19575	1747.5	24.39	25.50	1.291			0.02	0.044	0.057	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		19300	1720	24.37	25.50	1.297			-0.12	0.083	0.108	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		19850	1775	24.31	25.50	1.315			0.09	0.110	0.145	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI 1	Other PA	19850	1775	24.21	25.00	1.199			0.09	0.110	0.132	Dasy
	LTE Band 3	20M	QPSK	1	0	Right Cheek	0mm	Ant7	DSI1		19575	1747.5	20.25	21.50	1.334			0.15	0.399	0.532	Csar
	LTE Band 3	20M	QPSK	1	0	Right Tilted	0mm	Ant7	DSI1		19575	1747.5	20.25	21.50	1.334			-0.16	0.059	0.079	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		19575	1747.5	20.25	21.50	1.334			-0.07	0.488	0.651	Csar
	LTE Band 3	20M	QPSK	1	0	Left Tilted	0mm	Ant7	DSI1		19575	1747.5	20.25	21.50	1.334			-0.14	0.102	0.136	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		19300	1720	20.16	21.50	1.361			0.10	0.434	0.591	Csar
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		19850	1775	20.11	21.50	1.377			0.16	0.586	0.807	Dasy
	LTE Band 3	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI 1	Other PA	19850	1775	20.42	21.50	1.282			-0.02	0.588	0.754	Dasy
	LTE Band 5	10M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		20525	836.5	25.02	25.70	1.169			-0.13	0.179	0.209	Csar
	LTE Band 5	10M	QPSK	1	0	Right Tilted	0mm	Ant0	DSI1		20525	836.5	25.02	25.70	1.169			-0.14	0.118	0.138	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		20525	836.5	25.02	25.70	1.169			0.09	0.195	0.228	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI 1	Other PA	20525	836.5	24.17	25.00	1.211			-0.03	0.158	0.191	Dasy
	LTE Band 5	10M	QPSK	1	0	Left Tilted	0mm	Ant0	DSI1		20525	836.5	25.02	25.70	1.169			0.13	0.089	0.104	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		20450	829	24.92	25.70	1.197			-0.12	0.183	0.219	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		20600	844	24.98	25.70	1.18			0.08	0.175	0.206	Csar
	LTE Band 5	10M	QPSK	1	0	Right Cheek	0mm	Ant1	DSI 1	Other PA	20525	836.5	21.53	22.50	1.25			0.02	0.318	0.398	Csar
	LTE Band 5	10M	QPSK	1	0	Right Tilted	0mm	Ant1	DSI 1	Other PA	20525	836.5	21.53	22.50	1.25			0.18	0.071	0.089	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	20525	836.5	21.53	22.50	1.25			0.11	0.535	0.669	Csar
	LTE Band 5	10M	QPSK	1	0	Left Tilted	0mm	Ant1	DSI 1	Other PA	20525	836.5	21.53	22.50	1.25			-0.08	0.094	0.117	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	20450	829	21.46	22.50	1.271			-0.13	0.504	0.641	Csar
	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		20600	844	21.33	22.20	1.222			-0.07	0.488	0.596	Dasy
09	LTE Band 5	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	20600	844	21.42	22.50	1.282			0.14	0.544	0.697	Dasy
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		21100	2535	19.85	20.20	1.084			-0.07	0.659	0.714	Dasy
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant4	DSI1		21100	2535	19.85	20.20	1.084			0.15	0.273	0.296	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant4	DSI1		21100	2535	19.85	20.20	1.084			0.00	0.290	0.314	Csar
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant4	DSI1		21100	2535	19.85	20.20	1.084			0.18	0.172	0.186	Csar
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		20850	2510	19.72	20.20	1.117			-0.01	0.645	0.720	Dasy
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		21350	2560	19.78	20.20	1.102			0.12	0.699	0.770	Dasy
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant5	DSI1		21100	2535	19.31	20.50	1.315			-0.09	0.487	0.640	Csar
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		21100	2535	19.31	20.50	1.315			-0.09	0.643	0.846	Dasy
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant5	DSI1		21100	2535	19.31	20.50	1.315			0.19	0.335	0.441	Csar
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant5	DSI1		21100	2535	19.31	20.50	1.315			0.11	0.468	0.615	Csar
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		20850	2510	19.28	20.50	1.324			0.06	0.571	0.756	Dasy
10	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		21350	2560	19.22	20.50	1.343			0.08	0.645	0.866	Dasy
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant6	DSI1		21100	2535	24.56	25.50	1.242			0.18	0.100	0.124	Csar
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant6	DSI1		21100	2535	24.56	25.50	1.242			0.01	0.031	0.039	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		21100	2535	24.56	25.50	1.242			0.06	0.149	0.185	Csar
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant6	DSI1		21100	2535	24.56	25.50	1.242			0.18	0.035	0.043	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		20850	2510	24.40	25.50	1.288			-0.06	0.132	0.170	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		21350	2560	24.46	25.50	1.271			0.06	0.148	0.188	Csar
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant7	DSI1		21100	2535	19.59	20.50	1.233			0.05	0.367	0.453	Csar
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant7	DSI1		21100	2535	19.59	20.50	1.233			0.06	0.089	0.110	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		21100	2535	19.59	20.50	1.233			0.09	0.543	0.670	Csar
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant7	DSI1		21100	2535	19.59	20.50	1.233			-0.03	0.201	0.248	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		20850	2510	19.53	20.50	1.25			0.16	0.478	0.597	Csar
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		21350	2560	19.46	20.50	1.271			0.12	0.534	0.679	Csar
	LTE Band 8	10M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		21625	897.5	25.06	25.70	1.159			0.02	0.276	0.320	Csar
	LTE Band 8	10M	QPSK	1	0	Right Tilted	0mm	Ant0	DSI1		21625	897.5	25.06	25.70	1.159			-0.01	0.156	0.181	Csar
	LTE Band 8	10M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		21625	897.5	25.06	25.70	1.159			0.09	0.201	0.233	Csar
	LTE Band 8	10M	QPSK	1	0	Left Tilted	0mm	Ant0	DSI1		21625	897.5	25.06	25.70	1.159			0.04	0.119	0.138	Csar
	LTE Band 8	10M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		21500	885	25.03	25.70	1.167			0.07	0.254	0.296	Csar
	LTE Band 8	10M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		21750	910	25.05	25.70	1.161			0.09	0.310	0.360	Csar
	LTE Band 8	10M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI 1	Other PA	21750	910	24.23	25.00	1.194			0.04	0.246	0.294	Dasy
	LTE Band 8	10M	QPSK	1	0	Right Cheek	0mm	Ant1	DSI 1	Other PA	21625	897.5	21.07	22.00	1.239			0.06	0.305	0.378	Csar
	LTE Band 8	10M	QPSK	1	0	Right Tilted	0mm	Ant1	DSI 1	Other PA	21625	897.5	21.07	22.00	1.239			0.17	0.060	0.074	Csar
	LTE Band 8	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		21625	897.5	20.99	21.70	1.178			-0.07	0.469	0.552	Dasy
11	LTE Band 8	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	21625	897.5	21.07	22.00	1.239			0.14	0.509	0.631	Dasy
	LTE Band 8	10M	QPSK	1	0	Left Tilted	0mm	Ant1	DSI 1	Other PA	21625	897.5	21.07	22.00	1.239			-0.12	0.078	0.097	Csar
	LTE Band 8	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	21500	885	20.95	22.00	1.274			-0.04	0.433	0.552	Csar
	LTE Band 8	10M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	21750	910	21.01	22.00	1.256			-0.15	0.474	0.595	Csar
	LTE Band 20	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		24300	847	24.13	25.00	1.222			-0.03	0.161	0.197	Csar
	LTE Band 20	20M	QPSK	1	0	Right Tilted	0mm	Ant0	DSI1		24300	847	24.13	25.00	1.222			-0.19	0.103	0.126	Csar
	LTE Band 20	20M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		24300	847	24.13	25.00	1.222			-0.13	0.144	0.176	Csar
	LTE Band 20	20M	QPSK	1	0	Left Tilted	0mm	Ant0	DSI1		24300	847	24.13	25.00	1.222			-0.02	0.084	0.103	Csar
	LTE Band 20	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		24250	842	24.10	25.00	1.23			0.04	0.188	0.231	Csar
	LTE Band 20	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		24350	852	24.08	25.00	1.236			0.07	0.166	0.205	Csar
	LTE Band 20	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI 1	Other PA	24250	842	24.24	25.00	1.191			-0.18	0.184	0.219	Dasy
	LTE Band 20	20M	QPSK	1	0	Right Cheek	0mm	Ant1	DSI 1	Other PA	24300	847	21.23	22.00	1.194			0.11	0.284	0.3	



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	LTE Band 20	20M	QPSK	1	0	Left Tilted	0mm	Ant1	DSI 1	Other PA	24300	847	21.23	22.00	1.194			-0.01	0.083	0.099	Csar
12	LTE Band 20	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	24250	842	21.16	22.00	1.213			0.03	0.493	0.598	Dasy
	LTE Band 20	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	24350	852	21.19	22.00	1.205			0.19	0.474	0.571	Csar
	LTE Band 20	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		24250	842	20.91	22.00	1.285			0.05	0.423	0.544	Dasy
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		26865	831.5	25.08	25.70	1.153			-0.07	0.186	0.214	Csar
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant0	DSI1		26865	831.5	25.08	25.70	1.153			0.02	0.123	0.142	Csar
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		26865	831.5	25.08	25.70	1.153			0.06	0.199	0.229	Csar
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant0	DSI1		26865	831.5	25.08	25.70	1.153			0.13	0.097	0.112	Csar
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		26765	821.5	25.03	25.70	1.167			0.12	0.189	0.221	Csar
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		26965	841.5	25.05	25.70	1.161			0.09	0.183	0.212	Csar
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant1	DSI1		26865	831.5	21.76	22.70	1.242			-0.01	0.297	0.369	Csar
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant1	DSI1		26865	831.5	21.76	22.70	1.242			-0.16	0.068	0.084	Csar
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		26865	831.5	21.76	22.70	1.242			-0.19	0.493	0.612	Csar
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant1	DSI1		26865	831.5	21.76	22.70	1.242			0.02	0.091	0.113	Csar
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		26765	821.5	21.72	22.70	1.253			0.12	0.441	0.553	Csar
13	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		26965	841.5	21.63	22.70	1.279			0.01	0.532	0.680	Dasy
	LTE Band 28	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		27460	728	24.06	25.00	1.242			-0.12	0.110	0.137	Csar
	LTE Band 28	20M	QPSK	1	0	Right Tilted	0mm	Ant0	DSI1		27460	728	24.06	25.00	1.242			-0.10	0.082	0.102	Csar
	LTE Band 28	20M	QPSK	1	0	Left Cheek	0mm	Ant0	DSI1		27460	728	24.06	25.00	1.242			0.05	0.108	0.134	Csar
	LTE Band 28	20M	QPSK	1	0	Left Tilted	0mm	Ant0	DSI1		27460	728	24.06	25.00	1.242			-0.17	0.062	0.077	Csar
	LTE Band 28	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		27310	713	23.97	25.00	1.268			0.08	0.128	0.162	Csar
	LTE Band 28	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI1		27560	738	24.01	25.00	1.256			-0.06	0.120	0.151	Csar
	LTE Band 28	20M	QPSK	1	0	Right Cheek	0mm	Ant0	DSI 1	Other PA	27310	713	23.92	25.00	1.282			-0.19	0.112	0.144	Dasy
	LTE Band 28	20M	QPSK	1	0	Right Cheek	0mm	Ant1	DSI 1	Other PA	27460	728	24.03	25.00	1.25			0.01	0.194	0.242	Csar
	LTE Band 28	20M	QPSK	1	0	Right Tilted	0mm	Ant1	DSI 1	Other PA	27460	728	24.03	25.00	1.25			0.08	0.048	0.060	Csar
	LTE Band 28	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	27460	728	24.03	25.00	1.25			0.06	0.321	0.401	Csar
	LTE Band 28	20M	QPSK	1	0	Left Tilted	0mm	Ant1	DSI 1	Other PA	27460	728	24.03	25.00	1.25			-0.15	0.067	0.084	Csar
	LTE Band 28	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	27310	713	23.94	25.00	1.276			0.08	0.311	0.397	Csar
	LTE Band 28	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI1		27560	738	23.87	25.00	1.297			-0.06	0.391	0.507	Dasy
14	LTE Band 28	20M	QPSK	1	0	Left Cheek	0mm	Ant1	DSI 1	Other PA	27560	738	23.93	25.00	1.279			0.04	0.431	0.551	Dasy
	LTE Band 40	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		39150	2350	22.21	23.00	1.199	62.9	1.006	0.13	0.548	0.661	Csar
	LTE Band 40	20M	QPSK	1	0	Right Tilted	0mm	Ant4	DSI1		39150	2350	22.21	23.00	1.199	62.9	1.006	0.16	0.227	0.274	Csar
	LTE Band 40	20M	QPSK	1	0	Left Cheek	0mm	Ant4	DSI1		39150	2350	22.21	23.00	1.199	62.9	1.006	0.14	0.194	0.234	Csar
	LTE Band 40	20M	QPSK	1	0	Left Tilted	0mm	Ant4	DSI1		39150	2350	22.21	23.00	1.199	62.9	1.006	-0.09	0.085	0.103	Csar
	LTE Band 40	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		38750	2310	22.11	23.00	1.227	62.9	1.006	-0.07	0.539	0.665	Csar
	LTE Band 40	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		39550	2390	22.14	23.00	1.219	62.9	1.006	0.02	0.562	0.689	Dasy
	LTE Band 40	20M	QPSK	1	0	Right Cheek	0mm	Ant5	DSI1		39150	2350	21.91	23.00	1.285	62.9	1.006	0.09	0.599	0.774	Csar
	LTE Band 40	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.01	0.638	0.825	Dasy
	LTE Band 40	20M	QPSK	1	0	Left Cheek	0mm	Ant5	DSI1		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.16	0.432	0.558	Csar
	LTE Band 40	20M	QPSK	1	0	Left Tilted	0mm	Ant5	DSI1		39150	2350	21.91	23.00	1.285	62.9	1.006	0.13	0.400	0.517	Csar
	LTE Band 40	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		38750	2310	21.80	23.00	1.318	62.9	1.006	-0.08	0.613	0.813	Dasy
15	LTE Band 40	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		39550	2390	21.76	23.00	1.33	62.9	1.006	0.02	0.672	0.899	Dasy
	LTE Band 40	20M	QPSK	1	0	Right Cheek	0mm	Ant6	DSI1		39150	2350	23.60	24.50	1.23	62.9	1.006	-0.03	0.028	0.035	Csar
	LTE Band 40	20M	QPSK	1	0	Right Tilted	0mm	Ant6	DSI1		39150	2350	23.60	24.50	1.23	62.9	1.006	-0.02	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		39150	2350	23.60	24.50	1.23	62.9	1.006	-0.10	0.045	0.056	Csar
	LTE Band 40	20M	QPSK	1	0	Left Tilted	0mm	Ant6	DSI1		39150	2350	23.60	24.50	1.23	62.9	1.006	0.02	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		38750	2310	23.52	24.50	1.253	62.9	1.006	0.13	0.040	0.050	Csar
	LTE Band 40	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		39550	2390	23.56	24.50	1.242	62.9	1.006	0.06	0.058	0.072	Csar
16	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		40620	2593	21.73	22.20	1.114	62.9	1.006	0.08	0.847	0.949	Dasy
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant4	DSI1		40620	2593	21.73	22.20	1.114	62.9	1.006	0.12	0.359	0.402	Csar
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant4	DSI1		40620	2593	21.73	22.20	1.114	62.9	1.006	0.06	0.368	0.412	Csar
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant4	DSI1		40620	2593	21.73	22.20	1.114	62.9	1.006	-0.18	0.149	0.167	Csar
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		39750	2506	21.68	22.20	1.127	62.9	1.006	0.00	0.776	0.880	Dasy
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant4	DSI1		41490	2680	21.62	22.20	1.143	62.9	1.006	0.16	0.727	0.836	Dasy
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant5	DSI1		40620	2593	21.99	23.00	1.262	62.9	1.006	-0.01	0.529	0.672	Csar
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		40620	2593	21.99	23.00	1.262	62.9	1.006	0.06	0.661	0.839	Dasy
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant5	DSI1		40620	2593	21.99	23.00	1.262	62.9	1.006	0.18	0.555	0.705	Dasy
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant5	DSI1		40620	2593	21.99	23.00	1.262	62.9	1.006	0.17	0.531	0.674	Csar
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		39750	2506	21.95	23.00	1.274	62.9	1.006	0.09	0.670	0.859	Dasy
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	DSI1		41490	2680	21.91	23.00	1.285	62.9	1.006	-0.16	0.565	0.730	Dasy
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant6	DSI1		40620	2593	24.63	25.50	1.222	62.9	1.006	0.00	0.049	0.060	Csar
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant6	DSI1		40620	2593	24.63	25.50	1.222	62.9	1.006	0.02	0.031	0.038	Csar
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		40620	2593	24.63	25.50	1.222	62.9	1.006	0.07	0.075	0.092	Csar
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant6	DSI1		40620	2593	24.63	25.50	1.222	62.9	1.006	0.05	0.022	0.027	Csar
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		39750	2506	24.52	25.50	1.253	62.9	1.006	0.09	0.082	0.103	Csar
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant6	DSI1		41490	2680	24.56	25.50	1.242	62.9	1.006	-0.05	0.074	0.092	Csar
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant7	DSI1		40620	2593	22.48	23.50	1.265	62.9	1.006	-0.17	0.093	0.118	Csar
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant7	DSI1		40620	2593	22.48	23.50	1.265	62.9	1.006	0.16	0.570	0.725	Dasy
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant7													



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	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant8	DSI1		42590	3500	22.26	23.00	1.186	62.9	1.006	-0.17	0.128	0.153	Csar
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant8	DSI1		42590	3500	22.26	23.00	1.186	62.9	1.006	-0.12	0.736	0.878	Dasy
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant8	DSI1		42590	3500	22.26	23.00	1.186	62.9	1.006	-0.12	0.196	0.234	Csar
17	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant8	DSI1		41690	3410	22.21	23.00	1.199	62.9	1.006	0.02	0.784	0.946	Dasy
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant8	DSI1		43490	3590	22.17	23.00	1.211	62.9	1.006	0.09	0.622	0.758	Dasy
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant9	DSI1		42590	3500	21.10	22.00	1.23	62.9	1.006	0.12	0.332	0.411	Csar
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant9	DSI1		42590	3500	21.10	22.00	1.23	62.9	1.006	0.16	0.200	0.247	Csar
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant9	DSI1		42590	3500	21.10	22.00	1.23	62.9	1.006	-0.07	0.171	0.212	Csar
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant9	DSI1		42590	3500	21.10	22.00	1.23	62.9	1.006	-0.07	0.089	0.110	Csar
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant9	DSI1		41690	3410	21.02	22.00	1.253	62.9	1.006	0.03	0.319	0.402	Csar
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant9	DSI1		43490	3590	20.93	22.00	1.279	62.9	1.006	0.01	0.366	0.471	Csar
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant10	DSI1		42590	3500	20.87	22.00	1.297	62.9	1.006	0.02	0.370	0.483	Csar
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant10	DSI1		42590	3500	20.87	22.00	1.297	62.9	1.006	-0.16	0.427	0.557	Csar
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant10	DSI1		42590	3500	20.87	22.00	1.297	62.9	1.006	0.12	0.582	0.759	Dasy
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant10	DSI1		42590	3500	20.87	22.00	1.297	62.9	1.006	-0.11	0.595	0.776	Dasy
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant10	DSI1		41690	3410	20.82	22.00	1.312	62.9	1.006	-0.07	0.611	0.806	Dasy
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant10	DSI1		43490	3590	20.84	22.00	1.306	62.9	1.006	0.11	0.590	0.775	Dasy
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant11	DSI1		42590	3500	21.86	23.00	1.3	62.9	1.006	-0.10	0.488	0.638	Csar
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant11	DSI1		42590	3500	21.86	23.00	1.3	62.9	1.006	0.07	0.591	0.773	Dasy
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant11	DSI1		42590	3500	21.86	23.00	1.3	62.9	1.006	-0.05	0.369	0.483	Csar
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant11	DSI1		42590	3500	21.86	23.00	1.3	62.9	1.006	0.15	0.449	0.587	Csar
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant11	DSI1		41690	3410	21.51	23.00	1.409	62.9	1.006	0.11	0.627	0.889	Dasy
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant11	DSI1		43490	3590	21.82	23.00	1.312	62.9	1.006	0.09	0.571	0.754	Dasy

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Power State Note	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI 1	Other PA	390000	1950	19.64	20.50	1.219			-0.17	0.634	0.773	Dasy
	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant4	DSI 1	Other PA	390000	1950	19.64	20.50	1.219			-0.07	0.261	0.318	Csar
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant4	DSI 1	Other PA	390000	1950	19.64	20.50	1.219			-0.19	0.262	0.319	Csar
	FR1 n1	50M	BPSK	135	67	Left Tilted	0mm	Ant4	DSI 1	Other PA	390000	1950	19.64	20.50	1.219			0.12	0.142	0.173	Csar
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI 1	Other PA	389000	1945	19.61	20.50	1.227			0.02	0.645	0.791	Dasy
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI 1	Other PA	391000	1955	19.56	20.50	1.242			0.14	0.634	0.787	Dasy
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		389000	1945	19.11	19.70	1.146			0.02	0.686	0.786	Dasy
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant5	DSI 1	Other PA	390000	1950	17.69	19.00	1.352			0.17	0.604	0.817	Dasy
	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI 1	Other PA	390000	1950	17.69	19.00	1.352			-0.07	0.621	0.840	Dasy
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant5	DSI 1	Other PA	390000	1950	17.69	19.00	1.352			0.13	0.530	0.717	Dasy
	FR1 n1	50M	BPSK	135	67	Left Tilted	0mm	Ant5	DSI 1	Other PA	390000	1950	17.69	19.00	1.352			0.11	0.554	0.749	Dasy
18	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI 1	Other PA	389000	1945	17.66	19.00	1.361			-0.03	0.635	0.864	Dasy
	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI 1	Other PA	391000	1955	17.62	19.00	1.374			0.10	0.619	0.851	Dasy
	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		389000	1945	17.90	19.00	1.288			-0.04	0.635	0.818	Dasy
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant6	DSI1		390000	1950	24.57	25.50	1.239			-0.08	0.065	0.081	Csar
	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant6	DSI1		390000	1950	24.57	25.50	1.239			0.08	0.043	0.053	Csar
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		390000	1950	24.57	25.50	1.239			0.12	0.083	0.103	Dasy
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI 1	Other PA	390000	1950	24.29	25.00	1.178			0.02	0.072	0.085	Dasy
	FR1 n1	50M	BPSK	135	67	Left Tilted	0mm	Ant6	DSI1		390000	1950	24.57	25.50	1.239			0.13	0.041	0.051	Csar
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		389000	1945	24.52	25.50	1.253			0.02	0.074	0.093	Csar
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		391000	1955	24.48	25.50	1.265			0.08	0.071	0.090	Csar
	FR1 n1	50M	BPSK	135	67	Right Cheek	0mm	Ant7	DSI 1	Other PA	390000	1950	21.65	23.00	1.365			0.10	0.423	0.577	Csar
	FR1 n1	50M	BPSK	135	67	Right Tilted	0mm	Ant7	DSI 1	Other PA	390000	1950	21.65	23.00	1.365			0.18	0.070	0.096	Csar
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI 1	Other PA	390000	1950	21.65	23.00	1.365			-0.18	0.548	0.748	Dasy
	FR1 n1	50M	BPSK	135	67	Left Tilted	0mm	Ant7	DSI 1	Other PA	390000	1950	21.65	23.00	1.365			0.01	0.118	0.161	Csar
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI 1	Other PA	389000	1945	21.61	23.00	1.377			0.04	0.579	0.797	Dasy
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI 1	Other PA	391000	1955	21.53	23.00	1.403			-0.17	0.552	0.774	Dasy
	FR1 n1	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI1		389000	1945	21.91	23.00	1.285			0.16	0.483	0.621	Dasy
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI 1	Other PA	349500	1747.5	19.65	20.50	1.216			-0.07	0.678	0.824	Dasy
	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant4	DSI 1	Other PA	349500	1747.5	19.65	20.50	1.216			0.19	0.248	0.302	Csar
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant4	DSI 1	Other PA	349500	1747.5	19.65	20.50	1.216			-0.03	0.285	0.347	Csar
	FR1 n3	50M	BPSK	135	67	Left Tilted	0mm	Ant4	DSI 1	Other PA	349500	1747.5	19.65	20.50	1.216			0.11	0.169	0.206	Csar
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI 1	Other PA	347000	1735	19.58	20.50	1.236			0.09	0.685	0.847	Dasy
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI 1	Other PA	352000	1760	19.62	20.50	1.225			-0.01	0.652	0.799	Dasy
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		347000	1735	19.16	19.70	1.132			0.08	0.670	0.758	Dasy
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant5	DSI 1	Other PA	349500	1747.5	17.82	19.00	1.312			-0.05	0.697	0.914	Dasy
	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI 1	Other PA	349500	1747.5	17.82	19.00	1.312			0.11	0.742	0.974	Dasy
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant5	DSI 1	Other PA	349500	1747.5	17.82	19.00	1.312			-0.12	0.565	0.741	Dasy
	FR1 n3	50M	BPSK	135	67	Left Tilted	0mm	Ant5	DSI 1	Other PA	349500	1747.5	17.82	19.00	1.312			-0.05	0.729	0.956	Dasy
19	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI 1	Other PA	347000	1735	17.81	19.00	1.315			-0.06	0.756	0.994	Dasy
	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI 1	Other PA	352000	1760	17.74	19.00	1.337			0.10	0.727	0.972	Dasy
	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		347000	1735	18.11	19.00	1.227			-0.11	0.721	0.885	Dasy
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant6	DSI1		349500	1747.5	24.54	25.50	1.247			-0.05	0.081	0.101	Csar
	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant6	DSI1		349500	1747.5	24.54	25.50	1.247			0.08	0.058	0.072	Csar
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		349500	1747.5	24.54	25.50	1.247			-0.01	0.117	0.146	Csar



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	FR1 n3	50M	BPSK	135	67	Left Tilted	0mm	Ant6	DSI1		349500	1747.5	24.54	25.50	1.247			0.16	0.056	0.070	Csar
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		347000	1735	24.49	25.50	1.262			0.03	0.130	0.164	Dasy
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		352000	1760	24.46	25.50	1.271			-0.16	0.112	0.142	Csar
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI 1	Other PA	347000	1735	24.10	25.00	1.23			-0.14	0.109	0.134	Dasy
	FR1 n3	50M	BPSK	135	67	Right Cheek	0mm	Ant7	DSI 1	Other PA	349500	1747.5	19.69	21.00	1.352			-0.10	0.471	0.637	Csar
	FR1 n3	50M	BPSK	135	67	Right Tilted	0mm	Ant7	DSI 1	Other PA	349500	1747.5	19.69	21.00	1.352			0.19	0.078	0.105	Csar
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI 1	Other PA	349500	1747.5	19.69	21.00	1.352			0.08	0.594	0.803	Dasy
	FR1 n3	50M	BPSK	135	67	Left Tilted	0mm	Ant7	DSI 1	Other PA	349500	1747.5	19.69	21.00	1.352			-0.06	0.119	0.161	Csar
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI 1	Other PA	352000	1760	19.58	21.00	1.387			0.07	0.672	0.932	Dasy
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI 1	Other PA	347000	1735	19.63	21.00	1.371			0.09	0.554	0.760	Dasy
	FR1 n3	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI1		352000	1760	19.58	21.00	1.387			0.03	0.539	0.748	Dasy
	FR1 n5	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		167300	836.5	25.16	25.70	1.132			-0.03	0.194	0.220	Csar
	FR1 n5	20M	BPSK	50	25	Right Tilted	0mm	Ant0	DSI1		167300	836.5	25.16	25.70	1.132			-0.02	0.139	0.157	Csar
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		167300	836.5	25.16	25.70	1.132			0.18	0.205	0.232	Csar
	FR1 n5	20M	BPSK	50	25	Left Tilted	0mm	Ant0	DSI1		167300	836.5	25.16	25.70	1.132			0.02	0.104	0.118	Csar
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		166800	834	24.95	25.70	1.189			0.04	0.210	0.250	Dasy
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		167800	839	25.03	25.70	1.167			-0.12	0.203	0.237	Csar
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI 1	Other PA	166800	834	24.15	25.00	1.216			-0.03	0.161	0.196	Dasy
	FR1 n5	20M	BPSK	50	25	Right Cheek	0mm	Ant1	DSI 1	Other PA	167300	836.5	21.58	22.50	1.236			0.16	0.298	0.368	Csar
	FR1 n5	20M	BPSK	50	25	Right Tilted	0mm	Ant1	DSI 1	Other PA	167300	836.5	21.58	22.50	1.236			-0.17	0.068	0.084	Csar
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	167300	836.5	21.58	22.50	1.236			0.00	0.494	0.611	Csar
	FR1 n5	20M	BPSK	50	25	Left Tilted	0mm	Ant1	DSI 1	Other PA	167300	836.5	21.58	22.50	1.236			-0.06	0.088	0.109	Csar
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	166800	834	21.52	22.50	1.253			0.12	0.487	0.610	Dasy
	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		167800	839	21.58	22.20	1.153			0.18	0.561	0.647	Dasy
20	FR1 n5	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	167800	839	21.55	22.50	1.245			0.05	0.539	0.671	Dasy
	FR1 n7	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		507000	2535	18.86	19.20	1.081			-0.15	0.807	0.872	Dasy
	FR1 n7	50M	BPSK	135	67	Right Tilted	0mm	Ant4	DSI1		507000	2535	18.86	19.20	1.081			0.15	0.348	0.376	Csar
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant4	DSI1		507000	2535	18.86	19.20	1.081			0.03	0.301	0.325	Csar
	FR1 n7	50M	BPSK	135	67	Left Tilted	0mm	Ant4	DSI1		507000	2535	18.86	19.20	1.081			0.18	0.221	0.239	Csar
	FR1 n7	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		505000	2525	18.82	19.20	1.091			0.04	0.784	0.855	Dasy
21	FR1 n7	50M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		509000	2545	18.84	19.20	1.086			0.06	0.817	0.887	Dasy
	FR1 n7	50M	BPSK	135	67	Right Cheek	0mm	Ant5	DSI1		507000	2535	18.57	19.50	1.239			-0.13	0.514	0.637	Csar
	FR1 n7	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		507000	2535	18.57	19.50	1.239			0.14	0.604	0.748	Dasy
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant5	DSI1		507000	2535	18.57	19.50	1.239			-0.13	0.371	0.460	Csar
	FR1 n7	50M	BPSK	135	67	Left Tilted	0mm	Ant5	DSI1		507000	2535	18.57	19.50	1.239			-0.03	0.477	0.591	Csar
	FR1 n7	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		505000	2525	18.52	19.50	1.253			0.01	0.595	0.746	Dasy
	FR1 n7	50M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		509000	2545	18.48	19.50	1.265			-0.02	0.541	0.684	Dasy
	FR1 n7	50M	BPSK	135	67	Right Cheek	0mm	Ant6	DSI1		507000	2535	24.75	25.50	1.189			-0.11	0.087	0.103	Csar
	FR1 n7	50M	BPSK	135	67	Right Tilted	0mm	Ant6	DSI1		507000	2535	24.75	25.50	1.189			0.01	0.043	0.051	Csar
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		507000	2535	24.75	25.50	1.189			-0.08	0.131	0.156	Csar
	FR1 n7	50M	BPSK	135	67	Left Tilted	0mm	Ant6	DSI1		507000	2535	24.75	25.50	1.189			-0.12	0.069	0.082	Csar
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		505000	2525	24.65	25.50	1.216			0.02	0.137	0.167	Dasy
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		509000	2545	24.71	25.50	1.199			0.12	0.130	0.156	Csar
	FR1 n7	50M	BPSK	135	67	Right Cheek	0mm	Ant7	DSI1		507000	2535	20.01	20.50	1.119			-0.19	0.357	0.399	Csar
	FR1 n7	50M	BPSK	135	67	Right Tilted	0mm	Ant7	DSI1		507000	2535	20.01	20.50	1.119			0.18	0.084	0.094	Csar
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI1		507000	2535	20.01	20.50	1.119			-0.06	0.517	0.579	Csar
	FR1 n7	50M	BPSK	135	67	Left Tilted	0mm	Ant7	DSI1		507000	2535	20.01	20.50	1.119			-0.01	0.188	0.210	Csar
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI1		505000	2525	19.93	20.50	1.14			0.14	0.531	0.605	Csar
	FR1 n7	50M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI1		509000	2545	19.86	20.50	1.159			0.07	0.524	0.607	Dasy
	FR1 n8	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		179500	897.5	25.09	25.70	1.151			-0.03	0.279	0.321	Csar
	FR1 n8	20M	BPSK	50	25	Right Tilted	0mm	Ant0	DSI1		179500	897.5	25.09	25.70	1.151			0.16	0.169	0.195	Csar
	FR1 n8	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		179500	897.5	25.09	25.70	1.151			-0.15	0.219	0.252	Csar
	FR1 n8	20M	BPSK	50	25	Left Tilted	0mm	Ant0	DSI1		179500	897.5	25.09	25.70	1.151			-0.09	0.122	0.140	Csar
	FR1 n8	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		178000	890	25.03	25.70	1.167			0.13	0.271	0.316	Csar
	FR1 n8	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		181000	905	25.06	25.70	1.159			0.15	0.290	0.336	Dasy
	FR1 n8	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI 1	Other PA	181000	905	24.30	25.00	1.175			0.05	0.226	0.266	Dasy
	FR1 n8	20M	BPSK	50	25	Right Cheek	0mm	Ant1	DSI 1	Other PA	179500	897.5	21.22	22.00	1.197			-0.06	0.301	0.360	Csar
	FR1 n8	20M	BPSK	50	25	Right Tilted	0mm	Ant1	DSI 1	Other PA	179500	897.5	21.22	22.00	1.197			0.10	0.059	0.071	Csar
	FR1 n8	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		179500	897.5	21.07	21.70	1.156			0.19	0.454	0.525	Dasy
22	FR1 n8	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	179500	897.5	21.22	22.00	1.197			0.07	0.499	0.597	Dasy
	FR1 n8	20M	BPSK	50	25	Left Tilted	0mm	Ant1	DSI 1	Other PA	179500	897.5	21.22	22.00	1.197			-0.07	0.074	0.089	Csar
	FR1 n8	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	178000	890	21.06	22.00	1.242			0.14	0.440	0.546	Csar
	FR1 n8	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	181000	905	21.15	22.00	1.216			-0.19	0.403	0.490	Csar
	FR1 n20	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		169400	847	24.27	25.00	1.183			-0.02	0.178	0.211	Csar
	FR1 n20	20M	BPSK	50	25	Right Tilted	0mm	Ant0	DSI1		169400	847	24.27	25.00	1.183			0.14	0.116	0.137	Csar
	FR1 n20	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		169400	847	24.27	25.00	1.183			-0.13	0.147	0.174	Csar
	FR1 n20	20M	BPSK	50	25	Left Tilted	0mm	Ant0	DSI1		169400	847	24.27	25.00	1.183			0.18	0.090	0.106	Csar
	FR1 n20	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		168400	842	24.24	25.00	1.191			0.16	0.172	0.205	Csar
	FR1 n20	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		170400	852	24.22	25.00	1.197			0.02	0.187	0.224	Dasy
	FR1 n20	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI 1	Other PA	170400	852	24.35	25.00	1.161						



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	FR1 n20	20M	BPSK	50	25	Left Tilted	0mm	Ant1	DSI1		169400	847	21.52	22.00	1.117			0.18	0.086	0.096	Csar
	FR1 n20	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		168400	842	21.46	22.00	1.132			0.15	0.478	0.541	Csar
23	FR1 n20	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		170400	852	21.43	22.00	1.14			0.01	0.510	0.581	Dasy
	FR1 n20	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI 1	Other PA	170400	852	21.33	22.00	1.167			0.12	0.490	0.572	Dasy
	FR1 n26	20M	BPSK	50	25	Right Cheek	0mm	Ant0	DSI1		166300	831.5	25.21	25.70	1.119			-0.15	0.195	0.218	Csar
	FR1 n26	20M	BPSK	50	25	Right Tilted	0mm	Ant0	DSI1		166300	831.5	25.21	25.70	1.119			0.11	0.139	0.156	Csar
	FR1 n26	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		166300	831.5	25.21	25.70	1.119			-0.12	0.199	0.223	Csar
	FR1 n26	20M	BPSK	50	25	Left Tilted	0mm	Ant0	DSI1		166300	831.5	25.21	25.70	1.119			0.11	0.101	0.113	Csar
	FR1 n26	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		164800	824	25.13	25.70	1.14			0.09	0.191	0.218	Csar
	FR1 n26	20M	BPSK	50	25	Left Cheek	0mm	Ant0	DSI1		167800	839	25.07	25.70	1.156			0.03	0.199	0.230	Dasy
	FR1 n26	20M	BPSK	50	25	Right Cheek	0mm	Ant1	DSI1		166300	831.5	22.89	23.70	1.205			0.05	0.398	0.480	Csar
	FR1 n26	20M	BPSK	50	25	Right Tilted	0mm	Ant1	DSI1		166300	831.5	22.89	23.70	1.205			0.04	0.092	0.111	Csar
	FR1 n26	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		166300	831.5	22.89	23.70	1.205			0.18	0.649	0.782	Dasy
	FR1 n26	20M	BPSK	50	25	Left Tilted	0mm	Ant1	DSI1		166300	831.5	22.89	23.70	1.205			0.09	0.117	0.141	Csar
	FR1 n26	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		164800	824	22.83	23.70	1.222			0.17	0.562	0.687	Dasy
24	FR1 n26	20M	BPSK	50	25	Left Cheek	0mm	Ant1	DSI1		167800	839	22.85	23.70	1.216			0.07	0.719	0.874	Dasy
	FR1 n28	30M	BPSK	80	40	Right Cheek	0mm	Ant0	DSI1		143600	718	23.88	25.00	1.294			-0.07	0.080	0.104	Csar
	FR1 n28	30M	BPSK	80	40	Right Tilted	0mm	Ant0	DSI1		143600	718	23.88	25.00	1.294			0.06	0.058	0.075	Csar
	FR1 n28	30M	BPSK	80	40	Left Cheek	0mm	Ant0	DSI1		143600	718	23.88	25.00	1.294			-0.03	0.084	0.109	Csar
	FR1 n28	30M	BPSK	80	40	Left Tilted	0mm	Ant0	DSI1		143600	718	23.88	25.00	1.294			-0.05	0.049	0.063	Csar
	FR1 n28	30M	BPSK	80	40	Left Cheek	0mm	Ant0	DSI1		146600	733	23.82	25.00	1.312			0.05	0.088	0.115	Dasy
	FR1 n28	30M	BPSK	80	40	Left Cheek	0mm	Ant0	DSI 1	Other PA	146600	733	23.98	25.00	1.265			0.14	0.081	0.102	Dasy
	FR1 n28	30M	BPSK	80	40	Right Cheek	0mm	Ant1	DSI 1	Other PA	143600	718	24.37	25.00	1.156			0.08	0.312	0.361	Csar
	FR1 n28	30M	BPSK	80	40	Right Tilted	0mm	Ant1	DSI 1	Other PA	143600	718	24.37	25.00	1.156			0.12	0.087	0.101	Csar
	FR1 n28	30M	BPSK	80	40	Left Cheek	0mm	Ant1	DSI 1	Other PA	143600	718	24.37	25.00	1.156			-0.17	0.516	0.596	Csar
	FR1 n28	30M	BPSK	80	40	Left Tilted	0mm	Ant1	DSI 1	Other PA	143600	718	24.37	25.00	1.156			-0.04	0.128	0.148	Csar
25	FR1 n28	30M	BPSK	80	40	Left Cheek	0mm	Ant1	DSI 1	Other PA	146600	733	24.35	25.00	1.161			0.09	0.520	0.604	Dasy
	FR1 n28	30M	BPSK	80	40	Left Cheek	0mm	Ant1	DSI1		146600	733	23.74	25.00	1.337			-0.12	0.405	0.541	Dasy
	FR1 n40	80M	BPSK	108	54	Right Cheek	0mm	Ant4	DSI1		470000	2350	20.06	20.50	1.107			-0.13	0.643	0.712	Dasy
	FR1 n40	80M	BPSK	108	54	Right Tilted	0mm	Ant4	DSI1		470000	2350	20.06	20.50	1.107			-0.13	0.251	0.278	Csar
	FR1 n40	80M	BPSK	108	54	Left Cheek	0mm	Ant4	DSI1		470000	2350	20.06	20.50	1.107			-0.04	0.225	0.249	Csar
	FR1 n40	80M	BPSK	108	54	Left Tilted	0mm	Ant4	DSI1		470000	2350	20.06	20.50	1.107			0.17	0.122	0.135	Csar
	FR1 n40	80M	BPSK	108	54	Right Cheek	0mm	Ant4	DSI1		468000	2340	20.01	20.50	1.119			0.09	0.662	0.741	Dasy
	FR1 n40	80M	BPSK	108	54	Right Cheek	0mm	Ant4	DSI1		472000	2360	19.92	20.50	1.143			0.03	0.661	0.756	Dasy
	FR1 n40	80M	BPSK	108	54	Right Cheek	0mm	Ant5	DSI1		470000	2350	20.17	21.00	1.211			0.07	0.606	0.734	Dasy
	FR1 n40	80M	BPSK	108	54	Right Tilted	0mm	Ant5	DSI1		470000	2350	20.17	21.00	1.211			0.08	0.674	0.816	Dasy
	FR1 n40	80M	BPSK	108	54	Left Cheek	0mm	Ant5	DSI1		470000	2350	20.17	21.00	1.211			0.07	0.456	0.552	Csar
	FR1 n40	80M	BPSK	108	54	Left Tilted	0mm	Ant5	DSI1		470000	2350	20.17	21.00	1.211			0.02	0.435	0.527	Csar
	FR1 n40	80M	BPSK	108	54	Right Tilted	0mm	Ant5	DSI1		468000	2340	20.16	21.00	1.213			0.09	0.648	0.786	Dasy
26	FR1 n40	80M	BPSK	108	54	Right Tilted	0mm	Ant5	DSI1		472000	2360	20.14	21.00	1.219			-0.14	0.697	0.850	Dasy
	FR1 n40	80M	BPSK	108	54	Right Cheek	0mm	Ant6	DSI1		470000	2350	24.07	24.50	1.104			-0.04	0.063	0.070	Csar
	FR1 n40	80M	BPSK	108	54	Right Tilted	0mm	Ant6	DSI1		470000	2350	24.07	24.50	1.104			-0.14	0.039	0.043	Csar
	FR1 n40	80M	BPSK	108	54	Left Cheek	0mm	Ant6	DSI1		470000	2350	24.07	24.50	1.104			0.19	0.097	0.107	Csar
	FR1 n40	80M	BPSK	108	54	Left Tilted	0mm	Ant6	DSI1		470000	2350	24.07	24.50	1.104			0.09	0.033	0.036	Csar
	FR1 n40	80M	BPSK	108	54	Left Cheek	0mm	Ant6	DSI1		468000	2340	23.98	24.50	1.127			-0.01	0.094	0.106	Csar
	FR1 n40	80M	BPSK	108	54	Left Cheek	0mm	Ant6	DSI1		472000	2360	23.95	24.50	1.135			0.06	0.096	0.109	Dasy
	FR1 n41	100M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		518598	2592.99	19.49	19.70	1.05			-0.10	0.649	0.681	Csar
	FR1 n41	100M	BPSK	135	67	Right Tilted	0mm	Ant4	DSI1		518598	2592.99	19.49	19.70	1.05			-0.10	0.288	0.302	Csar
	FR1 n41	100M	BPSK	135	67	Left Cheek	0mm	Ant4	DSI1		518598	2592.99	19.49	19.70	1.05			0.18	0.241	0.253	Csar
	FR1 n41	100M	BPSK	135	67	Left Tilted	0mm	Ant4	DSI1		518598	2592.99	19.49	19.70	1.05			-0.09	0.123	0.129	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		518598	2592.99	22.54	23.00	1.112	50.0	1.0	0.18	0.645	0.717	Dasy
	FR1 n41_HPUE	100M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		509202	2546.01	22.51	23.00	1.119	50.0	1.0	0.07	0.635	0.711	Dasy
	FR1 n41_HPUE	100M	BPSK	135	67	Right Cheek	0mm	Ant4	DSI1		528000	2640	22.46	23.00	1.132	50.0	1.0	0.06	0.645	0.730	Dasy
	FR1 n41	100M	BPSK	135	67	Right Cheek	0mm	Ant5	DSI1		518598	2592.99	18.09	19.00	1.233			0.00	0.446	0.550	Csar
	FR1 n41	100M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		518598	2592.99	18.09	19.00	1.233			0.04	0.535	0.660	Csar
	FR1 n41	100M	BPSK	135	67	Left Cheek	0mm	Ant5	DSI1		518598	2592.99	18.09	19.00	1.233			-0.07	0.332	0.409	Csar
	FR1 n41	100M	BPSK	135	67	Left Tilted	0mm	Ant5	DSI1		518598	2592.99	18.09	19.00	1.233			0.13	0.426	0.525	Csar
	FR1 n41	100M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		509202	2546.01	18.02	19.00	1.253			0.06	0.592	0.742	Dasy
	FR1 n41	100M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		528000	2640	18.06	19.00	1.242			0.08	0.490	0.609	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Right Tilted	0mm	Ant5	DSI1		509202	2546.01	21.14	22.00	1.219	50.0	1.0	0.18	0.583	0.711	Dasy
	FR1 n41	100M	BPSK	135	67	Right Cheek	0mm	Ant6	DSI1		518598	2592.99	25.02	25.50	1.117			0.14	0.067	0.075	Csar
	FR1 n41	100M	BPSK	135	67	Right Tilted	0mm	Ant6	DSI1		518598	2592.99	25.02	25.50	1.117			-0.15	0.053	0.059	Csar
	FR1 n41	100M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		518598	2592.99	25.02	25.50	1.117			0.03	0.129	0.144	Csar
	FR1 n41	100M	BPSK	135	67	Left Tilted	0mm	Ant6	DSI1		518598	2592.99	25.02	25.50	1.117			-0.04	0.043	0.048	Csar
	FR1 n41	100M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		509202	2546.01	24.83	25.50	1.167			0.01	0.118	0.138	Csar
	FR1 n41	100M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		528000	2640	24.73	25.50	1.194			0.01	0.137	0.164	Dasy
	FR1 n41_HPUE	100M	BPSK	135	67	Left Cheek	0mm	Ant6	DSI1		528000	2640	26.69	27.50	1.205	50.0	1.0	-0.09	0.069	0.083	Dasy
	FR1 n41	100M	BPSK	135	67	Right Cheek	0mm	Ant7	DSI1		518598	2592.99	19.84	20.50	1.164			-0.04	0.404	0.470	Csar
	FR1 n41	100M	BPSK	135	67	Right Tilted	0mm	Ant7	DSI1		518598	2592.99	19.84	20.50	1.164			-0.12	0.090	0.105	Csar
	FR1 n4																				



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	FR1 n41_HPUE	100M	BPSK	135	67	Left Cheek	0mm	Ant7	DSI1		509202	2546.01	22.42	23.50	1.282	50.0	1.0	-0.05	0.610	0.782	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant8	DSI1		650000	3750	19.14	20.00	1.219			0.15	0.159	0.194	Csar
	FR1 n77	100M	BPSK	135	67	Right Tilted	0mm	Ant8	DSI1		650000	3750	19.14	20.00	1.219			-0.05	0.092	0.112	Csar
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		650000	3750	19.14	20.00	1.219			-0.02	0.755	0.920	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant8	DSI1		650000	3750	19.14	20.00	1.219			-0.05	0.186	0.227	Csar
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		623334	3350.01	18.97	20.00	1.268			0.16	0.695	0.881	Dasy
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		633332	3499.98	19.01	20.00	1.256			0.17	0.687	0.863	Dasy
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		640000	3600	19.06	20.00	1.242			0.18	0.675	0.838	Dasy
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		660000	3900	18.94	20.00	1.276			0.06	0.702	0.896	Dasy
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		666666	3999.99	19.07	20.00	1.239			-0.18	0.692	0.857	Dasy
28	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		676666	4149.99	19.11	20.00	1.227			-0.07	0.808	0.991	Dasy
	FR1 n77_HPUE	100M	BPSK	135	67	Left Cheek	0mm	Ant8	DSI1		676666	4149.99	21.53	22.00	1.114	50.0	1.0	0.17	0.792	0.882	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		650000	3750	20.44	21.00	1.138			0.02	0.606	0.690	Csar
	FR1 n77	100M	BPSK	135	67	Right Tilted	0mm	Ant9	DSI1		650000	3750	20.44	21.00	1.138			0.02	0.223	0.254	Csar
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant9	DSI1		650000	3750	20.44	21.00	1.138			0.16	0.300	0.341	Csar
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant9	DSI1		650000	3750	20.44	21.00	1.138			0.06	0.095	0.108	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		623334	3350.01	20.29	21.00	1.178			0.15	0.573	0.675	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		633332	3499.98	20.31	21.00	1.172			0.16	0.583	0.683	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		640000	3600	20.36	21.00	1.159			0.03	0.641	0.743	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		660000	3900	20.22	21.00	1.197			-0.02	0.443	0.530	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		666666	3999.99	20.32	21.00	1.169			0.17	0.492	0.575	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		676666	4149.99	20.26	21.00	1.186			0.13	0.467	0.554	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Right Cheek	0mm	Ant9	DSI1		640000	3600	23.27	24.50	1.327	50.0	1.0	-0.17	0.557	0.739	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant10	DSI1		650000	3750	16.07	17.00	1.239			-0.01	0.360	0.446	Csar
	FR1 n77	100M	BPSK	135	67	Right Tilted	0mm	Ant10	DSI1		650000	3750	16.07	17.00	1.239			-0.14	0.431	0.534	Csar
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant10	DSI1		650000	3750	16.07	17.00	1.239			-0.18	0.548	0.679	Csar
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		650000	3750	16.07	17.00	1.239			0.13	0.677	0.839	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		623334	3350.01	15.96	17.00	1.271			0.17	0.660	0.839	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		633332	3499.98	15.92	17.00	1.282			0.00	0.685	0.878	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		640000	3600	16.01	17.00	1.256			-0.13	0.727	0.913	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		660000	3900	16.04	17.00	1.247			-0.07	0.605	0.754	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		666666	3999.99	15.88	17.00	1.294			0.03	0.604	0.782	Dasy
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		676666	4149.99	15.93	17.00	1.279			0.12	0.605	0.774	Dasy
	FR1 n77_HPUE	100M	BPSK	135	67	Left Tilted	0mm	Ant10	DSI1		640000	3600	18.56	20.00	1.393	50.0	1.0	0.17	0.615	0.857	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		650000	3750	17.48	18.50	1.265			0.18	0.578	0.731	Dasy
	FR1 n77	100M	BPSK	135	67	Right Tilted	0mm	Ant11	DSI1		650000	3750	17.48	18.50	1.265			-0.04	0.545	0.689	Csar
	FR1 n77	100M	BPSK	135	67	Left Cheek	0mm	Ant11	DSI1		650000	3750	17.48	18.50	1.265			0.08	0.282	0.357	Csar
	FR1 n77	100M	BPSK	135	67	Left Tilted	0mm	Ant11	DSI1		650000	3750	17.48	18.50	1.265			0.12	0.310	0.392	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		623334	3350.01	17.33	18.50	1.309			0.01	0.611	0.800	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		633332	3499.98	17.36	18.50	1.3			0.03	0.621	0.807	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		640000	3600	17.41	18.50	1.285			0.02	0.578	0.743	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		660000	3900	17.45	18.50	1.274			-0.12	0.616	0.785	Dasy
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		666666	3999.99	17.39	18.50	1.291			-0.01	0.526	0.679	Csar
	FR1 n77	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		676666	4149.99	17.33	18.50	1.309			-0.09	0.583	0.763	Dasy
	FR1 n77_HPUE	100M	BPSK	135	67	Right Cheek	0mm	Ant11	DSI1		633332	3499.98	20.26	21.50	1.33	50.0	1.0	-0.11	0.588	0.782	Dasy

[WLAN 2.4GHz_5GHz SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant7	Head Standalone	1	2412	18.80	19.50	1.175	98.98	1.01	-0.01	0.324	0.385	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant7	Head Standalone	1	2412	18.80	19.50	1.175	98.98	1.01	-0.18	0.066	0.078	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant7	Head Standalone	1	2412	18.80	19.50	1.175	98.98	1.01	0.19	0.433	0.514	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant7	Head Standalone	1	2412	18.80	19.50	1.175	98.98	1.01	0.06	0.125	0.148	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant7	Head Standalone	7	2442	18.78	19.50	1.18	98.98	1.01	0.00	0.525	0.626	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant7	Head Standalone	13	2472	18.62	19.50	1.225	98.98	1.01	0.05	0.588	0.728	Dasy
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant12	Head Standalone	7	2442	19.34	20.00	1.164	99.31	1.007	0.00	0.313	0.367	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant12	Head Standalone	7	2442	19.34	20.00	1.164	99.31	1.007	-0.13	0.413	0.484	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant12	Head Standalone	7	2442	19.34	20.00	1.164	99.31	1.007	-0.17	0.504	0.591	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant12	Head Standalone	7	2442	19.34	20.00	1.164	99.31	1.007	-0.06	0.490	0.574	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant12	Head Standalone	1	2412	19.11	20.00	1.227	99.31	1.007	-0.02	0.585	0.723	Dasy
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant12	Head Standalone	13	2472	19.21	20.00	1.199	99.31	1.007	0.13	0.580	0.700	Dasy
	WLAN2.4GHz	802.11n-HT20 MCS0	Right Cheek	0mm	Ant 7+12	Head Standalone	13	2472	21.53	22.50	1.251	100.0	1.0	-0.02	0.476	0.595	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Right Tilted	0mm	Ant 7+12	Head Standalone	13	2472	21.53	22.50	1.251	100.0	1.0	0.12	0.527	0.659	Csar
29	WLAN2.4GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 7+12	Head Standalone	13	2472	21.53	22.50	1.251	100.0	1.0	-0.15	0.762	0.953	Dasy
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Tilted	0mm	Ant 7+12	Head Standalone	13	2472	21.53	22.50	1.251	100.0	1.0	-0.16	0.675	0.844	Dasy
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 7+12	Head Standalone	1	2412	21.42	22.50	1.284	100.0	1.0	0.01	0.670	0.860	Dasy
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 7+12	Head Standalone	7	2442	21.47	22.50	1.267	100.0	1.0	0.15	0.722	0.915	Dasy
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+10	Head Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.14	0.420	0.530	Csar
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+10	Head Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	-0.11	0.491	0.620	Csar
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+10	Head Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.00	0.706	0.891	Dasy
30	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+10	Head Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	-0.02	0.787	0.993	Dasy
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+10	Head Standalone	36	5180	18.46	19.50	1.272	99.32	1.007	-0.07	0.740	0.948	Dasy



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	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+10	Head Standalone	52	5260	18.80	19.50	1.175	99.32	1.007	0.07	0.686	0.812	Dasy
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+10	Head Standalone	140	5700	21.11	22.00	1.228	99.32	1.007	-0.16	0.427	0.528	Csar
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+10	Head Standalone	140	5700	21.11	22.00	1.228	99.32	1.007	-0.06	0.466	0.576	Csar
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+10	Head Standalone	140	5700	21.11	22.00	1.228	99.32	1.007	-0.13	0.741	0.916	Dasy
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+10	Head Standalone	140	5700	21.11	22.00	1.228	99.32	1.007	-0.06	0.798	0.987	Dasy
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+10	Head Standalone	100	5500	20.37	21.50	1.298	99.32	1.007	0.03	0.731	0.955	Dasy
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+10	Head Standalone	116	5580	20.48	21.50	1.265	99.32	1.007	-0.16	0.767	0.977	Dasy
	WLAN5GHz	802.11be-EHT20 MCS0	Right Cheek	0mm	Ant 8+10	Head Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	-0.03	0.077	0.096	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Right Tilted	0mm	Ant 8+10	Head Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	0.06	0.087	0.109	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Left Cheek	0mm	Ant 8+10	Head Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	-0.04	0.122	0.153	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Left Tilted	0mm	Ant 8+10	Head Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	-0.09	0.138	0.173	Dasy
	WLAN5GHz	802.11be-EHT20 MCS0	Left Tilted	0mm	Ant 8+10	Head Standalone	149	5745	14.49	15.50	1.262	100.0	1.0	-0.17	0.128	0.162	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Left Tilted	0mm	Ant 8+10	Head Standalone	157	5785	14.38	15.50	1.295	100.0	1.0	-0.09	0.129	0.167	Csar

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	Bluetooth	1Mbps	Right Cheek	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.07	0.385	0.551	Csar
	Bluetooth	1Mbps	Right Tilted	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.16	0.064	0.092	Csar
31	Bluetooth	1Mbps	Left Cheek	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.04	0.471	0.675	Dasy
	Bluetooth	1Mbps	Left Tilted	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0	0.141	0.202	Csar
	Bluetooth	1Mbps	Left Cheek	0mm	Ant7	Full power	0	2402	19.23	21.00	1.503	77.32	1.077	0.04	0.385	0.623	Csar
	Bluetooth	1Mbps	Left Cheek	0mm	Ant7	Full power	78	2480	19.90	21.50	1.445	77.32	1.077	0.00	0.380	0.591	Csar
	Bluetooth	1Mbps	Right Cheek	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.02	0.212	0.341	Csar
	Bluetooth	1Mbps	Right Tilted	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.10	0.233	0.375	Csar
	Bluetooth	1Mbps	Left Cheek	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.07	0.286	0.460	Csar
	Bluetooth	1Mbps	Left Tilted	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	0.18	0.369	0.594	Csar
	Bluetooth	1Mbps	Left Tilted	0mm	Ant12	Full power	39	2441	19.25	21.00	1.496	77.06	1.081	-0.01	0.326	0.527	Csar
	Bluetooth	1Mbps	Left Tilted	0mm	Ant12	Full power	78	2480	19.11	20.50	1.377	77.06	1.081	0.01	0.419	0.624	Dasy

16.2 Body SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Headset	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	GSM900	GPRS 4 Tx slots	Front	5mm	Ant0	DSI4	-	37	897.4	26.76	28.00	1.33	0.09	0.476	0.633	Csar
32	GSM900	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	-	37	897.4	26.76	28.00	1.33	-0.01	0.617	0.821	DASY
	GSM900	GPRS 4 Tx slots	Left Edge	5mm	Ant0	DSI4	-	37	897.4	26.76	28.00	1.33	0.10	0.055	0.073	Csar
	GSM900	GPRS 4 Tx slots	Right Edge	5mm	Ant0	DSI4	-	37	897.4	26.76	28.00	1.33	0.08	0.605	0.805	DASY
	GSM900	GPRS 4 Tx slots	Top Edge	5mm	Ant0	DSI4	-	37	897.4	26.76	28.00	1.33	-0.14	0.001	0.001	Csar
	GSM900	GPRS 4 Tx slots	Bottom Edge	5mm	Ant0	DSI4	-	37	897.4	26.76	28.00	1.33	0.15	0.423	0.563	Csar
	GSM900	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	Headset	37	897.4	26.76	28.00	1.33	0.01	0.606	0.806	DASY
	GSM900	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	-	975	880.2	26.61	28.00	1.377	0.09	0.497	0.684	Csar
	GSM900	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	-	124	914.8	26.52	28.00	1.406	-0.09	0.483	0.679	Csar
	GSM900	GPRS 4 Tx slots	Front	5mm	Ant1	DSI3	-	37	897.4	23.54	25.00	1.4	-0.18	0.382	0.535	Csar
	GSM900	GPRS 4 Tx slots	Back	5mm	Ant1	DSI3	-	37	897.4	23.54	25.00	1.4	-0.01	0.457	0.640	Csar
	GSM900	GPRS 4 Tx slots	Back	5mm	Ant1	DSI3	Headset	37	897.4	23.54	25.00	1.4	-0.05	0.475	0.665	Csar
	GSM900	GPRS 4 Tx slots	Left Edge	5mm	Ant1	DSI3	-	37	897.4	23.54	25.00	1.4	0.06	0.569	0.797	DASY
	GSM900	GPRS 4 Tx slots	Left Edge	5mm	Ant1	DSI3	-	975	880.2	23.48	25.00	1.419	0.06	0.527	0.748	DASY
	GSM900	GPRS 4 Tx slots	Left Edge	5mm	Ant1	DSI3	-	124	914.8	23.51	25.00	1.409	-0.10	0.535	0.754	DASY
	GSM900	GPRS 4 Tx slots	Right Edge	5mm	Ant1	DSI4	-	37	897.4	26.98	28.50	1.419	-0.08	0.049	0.070	Csar
	GSM900	GPRS 4 Tx slots	Top Edge	5mm	Ant1	DSI3	-	37	897.4	23.54	25.00	1.4	-0.01	0.001	0.001	Csar
	GSM900	GPRS 4 Tx slots	Bottom Edge	5mm	Ant1	DSI4	-	37	897.4	26.98	28.50	1.419	-0.05	0.079	0.112	Csar
	GSM1800	GPRS 4 Tx slots	Front	5mm	Ant4	DSI3	-	698	1747.4	24.11	25.50	1.377	0.02	0.286	0.394	Csar
	GSM1800	GPRS 4 Tx slots	Back	5mm	Ant4	DSI3	-	698	1747.4	24.11	25.50	1.377	-0.18	0.448	0.617	Csar
	GSM1800	GPRS 4 Tx slots	Left Edge	5mm	Ant4	DSI3	-	698	1747.4	24.11	25.50	1.377	0.15	0.384	0.529	Csar
	GSM1800	GPRS 4 Tx slots	Right Edge	5mm	Ant4	DSI4	-	698	1747.4	24.11	25.50	1.377	0.04	0.016	0.022	Csar
	GSM1800	GPRS 4 Tx slots	Top Edge	5mm	Ant4	DSI3	-	698	1747.4	24.11	25.50	1.377	0.06	0.152	0.209	Csar
	GSM1800	GPRS 4 Tx slots	Bottom Edge	5mm	Ant4	DSI4	-	698	1747.4	24.11	25.50	1.377	-0.13	0.023	0.032	Csar
	GSM1800	GPRS 4 Tx slots	Back	5mm	Ant4	DSI3	Headset	698	1747.4	24.11	25.50	1.377	-0.15	0.455	0.627	DASY
	GSM1800	GPRS 4 Tx slots	Back	5mm	Ant4	DSI3	Headset	512	1710.2	24.07	25.50	1.39	-0.04	0.384	0.534	Csar
	GSM1800	GPRS 4 Tx slots	Back	5mm	Ant4	DSI3	Headset	885	1784.8	24.09	25.50	1.384	-0.06	0.408	0.565	Csar
	GSM1800	GPRS 4 Tx slots	Front	5mm	Ant6	DSI4	-	698	1747.4	23.68	25.00	1.355	0.15	0.115	0.156	Csar
	GSM1800	GPRS 4 Tx slots	Back	5mm	Ant6	DSI4	-	698	1747.4	23.68	25.00	1.355	-0.02	0.240	0.325	Csar
	GSM1800	GPRS 4 Tx slots	Left Edge	5mm	Ant6	DSI4	-	698	1747.4	23.68	25.00	1.355	0.17	0.130	0.176	Csar
	GSM1800	GPRS 4 Tx slots	Right Edge	5mm	Ant6	DSI4	-	698	1747.4	23.68	25.00	1.355	0.17	0.069	0.093	Csar
	GSM1800	GPRS 4 Tx slots	Top Edge	5mm	Ant6	DSI4	-	698	1747.4	23.68	25.00	1.355	0.17	0.001	0.001	Csar
	GSM1800	GPRS 4 Tx slots	Bottom Edge	5mm	Ant6	DSI4	-	698	1747.4	23.68	25.00	1.355	-0.14	0.382	0.518	Csar
	GSM1800	GPRS 4 Tx slots	Back	5mm	Ant6	DSI4	Headset	698	1747.4	23.68	25.00	1.355	-0.12	0.318	0.431	Csar
	GSM1800	GPRS 4 Tx slots	Bottom Edge	5mm	Ant6	DSI4	-	512	1710.2	23.62	25.00	1.374	0.16	0.397	0.545	Csar
33	GSM1800	GPRS 4 Tx slots	Bottom Edge	5mm	Ant6	DSI4	-	885	1784.8	23.42	25.00	1.439	0.05	0.455	0.655	DASY
	GSM850	GPRS 4 Tx slots	Front	5mm	Ant0	DSI4	-	189	836.4	26.73	28.00	1.34	-0.04	0.457	0.612	Csar
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	-	189	836.4	26.73	28.00	1.34	-0.15	0.588	0.788	DASY
	GSM850	GPRS 4 Tx slots	Left Edge	5mm	Ant0	DSI4	-	189	836.4	26.73	28.00	1.34	-0.09	0.142	0.190	Csar
	GSM850	GPRS 4 Tx slots	Right Edge	5mm	Ant0	DSI4	-	189	836.4	26.73	28.00	1.34	-0.08	0.545	0.730	DASY
	GSM850	GPRS 4 Tx slots	Top Edge	5mm	Ant0	DSI4	-	189	836.4	26.73	28.00	1.34	-0.11	0.001	0.001	Csar
	GSM850	GPRS 4 Tx slots	Bottom Edge	5mm	Ant0	DSI4	-	189	836.4	26.73	28.00	1.34	-0.05	0.368	0.493	Csar
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	Headset	189	836.4	26.73	28.00	1.34	-0.13	0.579	0.776	DASY
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	-	128	824.2	26.06	28.00	1.563	0.04	0.386	0.603	Csar
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant0	DSI4	-	251	848.8	26.41	28.00	1.442	0.12	0.524	0.756	DASY
	GSM850	GPRS 4 Tx slots	Front	5mm	Ant1	DSI3	-	189	836.4	23.98	25.50	1.419	-0.09	0.361	0.512	Csar
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant1	DSI3	-	189	836.4	23.98	25.50	1.419	0.02	0.420	0.596	Csar
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant1	DSI3	Headset	189	836.4	23.98	25.50	1.419	0.03	0.387	0.549	Csar
34	GSM850	GPRS 4 Tx slots	Left Edge	5mm	Ant1	DSI3	-	189	836.4	23.98	25.50	1.419	0.07	0.636	0.902	DASY
	GSM850	GPRS 4 Tx slots	Left Edge	5mm	Ant1	DSI3	-	128	824.2	23.67	25.50	1.524	0.06	0.581	0.885	DASY
	GSM850	GPRS 4 Tx slots	Left Edge	5mm	Ant1	DSI3	-	251	848.8	23.95	25.50	1.429	0.01	0.593	0.847	DASY
	GSM850	GPRS 4 Tx slots	Right Edge	5mm	Ant1	DSI4	-	189	836.4	26.98	28.50	1.419	-0.09	0.014	0.020	Csar
	GSM850	GPRS 4 Tx slots	Top Edge	5mm	Ant1	DSI3	-	189	836.4	23.98	25.50	1.419	0.06	0.026	0.037	Csar
	GSM850	GPRS 4 Tx slots	Bottom Edge	5mm	Ant1	DSI4	-	189	836.4	26.98	28.50	1.419	0.09	0.001	0.001	Csar



[WCDMA SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Headset	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	WCDMA I	RMC 12.2Kbps	Front	5mm	Ant4	DSI3	-	9750	1950	20.20	21.00	1.202	-0.01	0.423	0.508	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant4	DSI3	-	9750	1950	20.20	21.00	1.202	0.07	0.604	0.726	DASY
	WCDMA I	RMC 12.2Kbps	Left Edge	5mm	Ant4	DSI3	-	9750	1950	20.20	21.00	1.202	0.08	0.656	0.789	DASY
	WCDMA I	RMC 12.2Kbps	Right Edge	5mm	Ant4	DSI4	-	9750	1950	24.23	25.00	1.194	0.13	0.080	0.096	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	5mm	Ant4	DSI3	-	9750	1950	20.20	21.00	1.202	0.06	0.157	0.189	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	5mm	Ant4	DSI4	-	9750	1950	24.23	25.00	1.194	-0.05	0.099	0.118	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant4	DSI3	Headset	9750	1950	20.20	21.00	1.202	0.00	0.590	0.709	DASY
	WCDMA I	RMC 12.2Kbps	Left Edge	5mm	Ant4	DSI3	-	9612	1922.4	20.11	21.00	1.227	0.02	0.625	0.767	DASY
	WCDMA I	RMC 12.2Kbps	Left Edge	5mm	Ant4	DSI3	-	9888	1977.6	20.18	21.00	1.208	-0.01	0.638	0.771	DASY
	WCDMA I	RMC 12.2Kbps	Front	5mm	Ant5	DSI3	-	9750	1950	19.09	20.00	1.233	0.13	0.518	0.639	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant5	DSI3	-	9750	1950	19.09	20.00	1.233	-0.04	0.541	0.667	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	5mm	Ant5	DSI3	-	9750	1950	19.09	20.00	1.233	0.02	0.064	0.079	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	5mm	Ant5	DSI4	-	9750	1950	23.22	24.00	1.197	-0.02	0.138	0.165	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	5mm	Ant5	DSI3	-	9750	1950	19.09	20.00	1.233	0.08	0.595	0.734	DASY
	WCDMA I	RMC 12.2Kbps	Bottom Edge	5mm	Ant5	DSI4	-	9750	1950	23.22	24.00	1.197	-0.08	0.001	0.001	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant5	DSI3	Headset	9750	1950	19.09	20.00	1.233	-0.19	0.539	0.665	Csar
35	WCDMA I	RMC 12.2Kbps	Top Edge	5mm	Ant5	DSI3	-	9612	1922.4	19.03	20.00	1.25	0.08	0.712	0.890	DASY
	WCDMA I	RMC 12.2Kbps	Top Edge	5mm	Ant5	DSI3	-	9888	1977.6	18.96	20.00	1.271	0.13	0.541	0.688	DASY
	WCDMA I	RMC 12.2Kbps	Front	5mm	Ant6	DSI4	-	9750	1950	19.59	20.50	1.233	0.18	0.305	0.376	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant6	DSI4	-	9750	1950	19.59	20.50	1.233	-0.10	0.378	0.466	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	5mm	Ant6	DSI4	-	9750	1950	19.59	20.50	1.233	0.17	0.108	0.133	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	5mm	Ant6	DSI4	-	9750	1950	19.59	20.50	1.233	-0.12	0.058	0.072	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	5mm	Ant6	DSI4	-	9750	1950	19.59	20.50	1.233	0.08	0.001	0.001	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	5mm	Ant6	DSI4	-	9750	1950	19.59	20.50	1.233	-0.09	0.691	0.852	DASY
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant6	DSI4	Headset	9750	1950	19.59	20.50	1.233	0.10	0.382	0.471	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	5mm	Ant6	DSI4	-	9612	1922.4	19.56	20.50	1.242	0.05	0.705	0.876	DASY
	WCDMA I	RMC 12.2Kbps	Bottom Edge	5mm	Ant6	DSI4	-	9888	1977.6	19.57	20.50	1.239	-0.07	0.598	0.741	DASY
	WCDMA I	RMC 12.2Kbps	Front	5mm	Ant7	DSI4	-	9750	1950	20.33	21.50	1.309	-0.03	0.244	0.319	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant7	DSI4	-	9750	1950	20.33	21.50	1.309	0.02	0.285	0.373	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	5mm	Ant7	DSI4	-	9750	1950	20.33	21.50	1.309	-0.06	0.001	0.001	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	5mm	Ant7	DSI4	-	9750	1950	20.33	21.50	1.309	-0.13	0.517	0.677	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	5mm	Ant7	DSI4	-	9750	1950	20.33	21.50	1.309	0.10	0.028	0.037	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	5mm	Ant7	DSI4	-	9750	1950	20.33	21.50	1.309	-0.06	0.001	0.001	Csar
	WCDMA I	RMC 12.2Kbps	Back	5mm	Ant7	DSI4	Headset	9750	1950	20.33	21.50	1.309	-0.17	0.294	0.385	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	5mm	Ant7	DSI4	-	9612	1922.4	20.31	21.50	1.315	0.05	0.585	0.769	DASY
	WCDMA I	RMC 12.2Kbps	Right Edge	5mm	Ant7	DSI4	-	9888	1977.6	20.29	21.50	1.321	0.10	0.500	0.660	Csar
	WCDMA V	RMC 12.2Kbps	Front	5mm	Ant0	DSI4	-	4182	836.4	23.66	24.50	1.213	-0.15	0.416	0.505	Csar
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant0	DSI4	-	4182	836.4	23.66	24.50	1.213	0.11	0.514	0.623	Csar
	WCDMA V	RMC 12.2Kbps	Left Edge	5mm	Ant0	DSI4	-	4182	836.4	23.66	24.50	1.213	0.10	0.125	0.152	Csar
	WCDMA V	RMC 12.2Kbps	Right Edge	5mm	Ant0	DSI4	-	4182	836.4	23.66	24.50	1.213	0.06	0.527	0.639	DASY
	WCDMA V	RMC 12.2Kbps	Top Edge	5mm	Ant0	DSI4	-	4182	836.4	23.66	24.50	1.213	0.00	0.001	0.001	Csar
	WCDMA V	RMC 12.2Kbps	Bottom Edge	5mm	Ant0	DSI4	-	4182	836.4	23.66	24.50	1.213	0.05	0.337	0.409	Csar
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant0	DSI4	Headset	4182	836.4	23.66	24.50	1.213	0.17	0.492	0.597	Csar
	WCDMA V	RMC 12.2Kbps	Right Edge	5mm	Ant0	DSI4	-	4132	826.4	23.59	24.50	1.233	-0.17	0.508	0.626	Csar
	WCDMA V	RMC 12.2Kbps	Right Edge	5mm	Ant0	DSI4	-	4233	846.6	23.62	24.50	1.225	-0.05	0.497	0.609	Csar
	WCDMA V	RMC 12.2Kbps	Front	5mm	Ant1	DSI3	-	4182	836.4	20.58	21.50	1.236	-0.04	0.440	0.544	Csar
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant1	DSI3	-	4182	836.4	20.58	21.50	1.236	0.04	0.521	0.644	Csar
36	WCDMA V	RMC 12.2Kbps	Left Edge	5mm	Ant1	DSI3	-	4182	836.4	20.58	21.50	1.236	0.02	0.689	0.852	DASY
	WCDMA V	RMC 12.2Kbps	Right Edge	5mm	Ant1	DSI4	-	4182	836.4	24.75	25.50	1.189	0.06	0.067	0.080	Csar
	WCDMA V	RMC 12.2Kbps	Top Edge	5mm	Ant1	DSI3	-	4182	836.4	20.58	21.50	1.236	0.13	0.001	0.001	Csar
	WCDMA V	RMC 12.2Kbps	Bottom Edge	5mm	Ant1	DSI4	-	4182	836.4	24.75	25.50	1.189	0.04	0.042	0.050	Csar
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant1	DSI3	Headset	4182	836.4	20.58	21.50	1.236	-0.03	0.509	0.629	Csar
	WCDMA V	RMC 12.2Kbps	Left Edge	5mm	Ant1	DSI3	-	4132	826.4	20.56	21.50	1.242	-0.09	0.622	0.773	DASY
	WCDMA V	RMC 12.2Kbps	Left Edge	5mm	Ant1	DSI3	-	4233	846.6	20.53	21.50	1.25	0.10	0.654	0.818	DASY
	WCDMA VIII	RMC 12.2Kbps	Front	5mm	Ant0	DSI4	-	2788	897.6	24.25	25.00	1.189	0.09	0.465	0.553	Csar
	WCDMA VIII	RMC 12.2Kbps	Back	5mm	Ant0	DSI4	-	2788	897.6	24.25	25.00	1.189	0.05	0.624	0.742	DASY
	WCDMA VIII	RMC 12.2Kbps	Left Edge	5mm	Ant0	DSI4	-	2788	897.6	24.25	25.00	1.189	0.12	0.053	0.063	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Edge	5mm	Ant0	DSI4	-	2788	897.6	24.25	25.00	1.189	0.04	0.592	0.704	DASY
	WCDMA VIII	RMC 12.2Kbps	Top Edge	5mm	Ant0	DSI4	-	2788	897.6	24.25	25.00	1.189	0.13	0.038	0.045	Csar
	WCDMA VIII	RMC 12.2Kbps	Bottom Edge	5mm	Ant0	DSI4	-	2788	897.6	24.25	25.00	1.189	0.02	0.406	0.483	Csar
	WCDMA VIII	RMC 12.2Kbps	Back	5mm	Ant0	DSI4	Headset	2788	897.6	24.25	25.00	1.189	-0.04	0.602	0.716	DASY
	WCDMA VIII	RMC 12.2Kbps	Back	5mm	Ant0	DSI4	-	2712	882.4	24.19	25.00	1.205	0.17	0.581	0.700	DASY
	WCDMA VIII	RMC 12.2Kbps	Back	5mm	Ant0	DSI4	-	2863	912.6	24.23	25.00	1.194	-0.14	0.588	0.702	DASY
	WCDMA VIII	RMC 12.2Kbps	Front	5mm	Ant1	DSI3	-	2788	897.6	20.66	21.50	1.213	-0.15	0.476	0.577	Csar
	WCDMA VIII	RMC 12.2Kbps	Back	5mm	Ant1	DSI3	-	2788	897.6	20.66	21.50	1.213	0.14	0.559	0.678	Csar
37	WCDMA VIII	RMC 12.2Kbps	Left Edge	5mm	Ant1	DSI3	-	2788	897.6	20.66	21.50	1.213	0.09	0.678	0.822	DASY
	WCDMA VIII	RMC 12.2Kbps	Right Edge	5mm	Ant1	DSI4	-	2788	897.6	24.81	25.50	1.172	-0.07	0.050	0.059	Csar
	WCDMA VIII	RMC 12.2Kbps	Top Edge	5mm	Ant1	DSI3	-	2788	897.6	20.66	21.50	1.213	-0.14	0.041	0.050	Csar



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	WCDMA VIII	RMC 12.2Kbps	Bottom Edge	5mm	Ant1	DSI4	-	2788	897.6	24.81	25.50	1.172	-0.14	0.055	0.064	Csar
	WCDMA VIII	RMC 12.2Kbps	Back	5mm	Ant1	DSI3	Headset	2788	897.6	20.66	21.50	1.213	0.14	0.555	0.673	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Edge	5mm	Ant1	DSI3	-	2712	882.4	20.62	21.50	1.225	-0.03	0.584	0.715	DASY
	WCDMA VIII	RMC 12.2Kbps	Left Edge	5mm	Ant1	DSI3	-	2863	912.6	20.63	21.50	1.222	0.16	0.652	0.797	DASY

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Headset	Power State Note	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	LTE Band 1	20M	QPSK	1	0	Front	5mm	Ant4	DSI 3	-	Other PA	18300	1950	20.23	21.00	1.194			0.18	0.325	0.388	Csar
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant4	DSI 3	-	Other PA	18300	1950	20.23	21.00	1.194			0.05	0.438	0.523	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI 3	-	Other PA	18300	1950	20.23	21.00	1.194			0.16	0.477	0.570	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant4	DSI 4	-	Other PA	18300	1950	24.69	25.50	1.205			0.01	0.058	0.070	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant4	DSI 3	-	Other PA	18300	1950	20.23	21.00	1.194			0.03	0.132	0.158	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant4	DSI 4	-	Other PA	18300	1950	24.69	25.50	1.205			-0.14	0.090	0.108	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI 3	-	Other PA	18100	1930	20.16	21.00	1.213			0.09	0.504	0.611	Csar
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant4	DSI 3	Headset	Other PA	18300	1950	20.23	21.00	1.194			-0.12	0.418	0.499	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI 3	-	Other PA	18500	1970	20.12	21.00	1.225			0.05	0.548	0.671	DASY
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		18500	1970	19.57	20.20	1.156			0.05	0.430	0.497	DASY
	LTE Band 1	20M	QPSK	1	0	Front	5mm	Ant5	DSI 3	-	Other PA	18300	1950	19.03	20.00	1.25			-0.06	0.441	0.551	Csar
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant5	DSI 3	-	Other PA	18300	1950	19.03	20.00	1.25			-0.17	0.449	0.561	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant5	DSI 3	-	Other PA	18300	1950	19.03	20.00	1.25			-0.08	0.057	0.071	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant5	DSI 4	-	Other PA	18300	1950	23.64	24.50	1.219			0.02	0.135	0.165	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI 3	-	Other PA	18300	1950	19.03	20.00	1.25			0.16	0.597	0.746	DASY
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant5	DSI 4	-	Other PA	18300	1950	23.64	24.50	1.219			-0.01	0.001	0.001	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI 3	-	Other PA	18100	1930	18.98	20.00	1.265			0.06	0.679	0.859	DASY
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI 3	-	Other PA	18500	1970	18.92	20.00	1.282			-0.19	0.512	0.656	Csar
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant5	DSI 3	Headset	Other PA	18300	1950	19.03	20.00	1.25			0.00	0.455	0.569	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		18100	1930	18.72	20.00	1.343			0.13	0.604	0.811	DASY
	LTE Band 1	20M	QPSK	1	0	Front	5mm	Ant6	DSI4	-		18300	1950	19.28	20.50	1.324			0.18	0.283	0.375	Csar
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	-		18300	1950	19.28	20.50	1.324			0.03	0.321	0.425	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant6	DSI4	-		18300	1950	19.28	20.50	1.324			0.09	0.115	0.152	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant6	DSI4	-		18300	1950	19.28	20.50	1.324			-0.15	0.049	0.065	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant6	DSI4	-		18300	1950	19.28	20.50	1.324			-0.09	0.001	0.001	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		18300	1950	19.28	20.50	1.324			-0.19	0.619	0.820	DASY
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		18500	1970	19.15	20.50	1.365			0.08	0.604	0.824	DASY
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		18300	1950	19.28	20.50	1.324			-0.05	0.339	0.449	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI 4		Other PA	18100	1930	19.16	20.00	1.213			0.07	0.734	0.890	DASY
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		18100	1930	19.26	20.50	1.33			0.11	0.684	0.910	DASY
	LTE Band 1	20M	QPSK	1	0	Front	5mm	Ant7	DSI 4	-	Other PA	18300	1950	20.61	21.50	1.227			0.10	0.351	0.431	Csar
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant7	DSI 4	-	Other PA	18300	1950	20.61	21.50	1.227			-0.04	0.432	0.530	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	5mm	Ant7	DSI 4	-	Other PA	18300	1950	20.61	21.50	1.227			0.13	0.001	0.001	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI 4	-	Other PA	18300	1950	20.61	21.50	1.227			-0.09	0.689	0.845	DASY
	LTE Band 1	20M	QPSK	1	0	Top Edge	5mm	Ant7	DSI 4	-	Other PA	18300	1950	20.61	21.50	1.227			-0.08	0.036	0.044	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	5mm	Ant7	DSI 4	-	Other PA	18300	1950	20.61	21.50	1.227			-0.10	0.414	0.508	Csar
38	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI 4	-	Other PA	18100	1930	20.58	21.50	1.236			0.03	0.773	0.955	DASY
	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI 4	-	Other PA	18500	1970	20.52	21.50	1.253			-0.12	0.671	0.841	DASY
	LTE Band 1	20M	QPSK	1	0	Back	5mm	Ant7	DSI 4	Headset	Other PA	18300	1950	20.61	21.50	1.227			0.06	0.405	0.497	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI4	-		18100	1930	20.24	21.50	1.337			0.03	0.636	0.850	DASY
	LTE Band 3	20M	QPSK	1	0	Front	5mm	Ant4	DSI 3	-	Other PA	19575	1747.5	20.61	21.50	1.227			-0.16	0.414	0.508	Csar
	LTE Band 3	20M	QPSK	1	0	Back	5mm	Ant4	DSI 3	-	Other PA	19575	1747.5	20.61	21.50	1.227			-0.00	0.607	0.745	DASY
	LTE Band 3	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI 3	-	Other PA	19575	1747.5	20.61	21.50	1.227			0.07	0.651	0.799	DASY
	LTE Band 3	20M	QPSK	1	0	Right Edge	5mm	Ant4	DSI 4	-	Other PA	19575	1747.5	24.76	25.50	1.186			-0.16	0.052	0.062	Csar
	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm	Ant4	DSI 3	-	Other PA	19575	1747.5	20.61	21.50	1.227			0.08	0.168	0.206	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant4	DSI 4	-	Other PA	19575	1747.5	24.76	25.50	1.186			0.01	0.097	0.115	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI 3	-	Other PA	19300	1720	20.52	21.50	1.253			-0.08	0.615	0.771	DASY
	LTE Band 3	20M	QPSK	1	0	Back	5mm	Ant4	DSI 3	Headset	Other PA	19575	1747.5	20.61	21.50	1.227			-0.04	0.610	0.748	DASY
	LTE Band 3	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		19850	1775	20.06	20.70	1.159			-0.13	0.602	0.698	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI 3	-	Other PA	19850	1775	20.55	21.50	1.245			0.04	0.742	0.924	DASY
	LTE Band 3	20M	QPSK	1	0	Front	5mm	Ant5	DSI 3	-	Other PA	19575	1747.5	18.97	20.00	1.268			-0.09	0.495	0.628	Csar
	LTE Band 3	20M	QPSK	1	0	Back	5mm	Ant5	DSI 3	-	Other PA	19575	1747.5	18.97	20.00	1.268			-0.01	0.545	0.691	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	5mm	Ant5	DSI 3	-	Other PA	19575	1747.5	18.97	20.00	1.268			-0.12	0.077	0.098	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	5mm	Ant5	DSI 4	-	Other PA	19575	1747.5	23.63	24.50	1.222			0.05	0.120	0.147	Csar
	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		19575	1747.5	18.84	20.00	1.306			0.03	0.639	0.835	DASY
	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI 3	-	Other PA	19575	1747.5	18.97	20.00	1.268			0.04	0.761	0.965	DASY
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant5	DSI 4	-	Other PA	19575	1747.5	23.63	24.50	1.222			0.00	0.001	0.001	Csar
	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI 3	-	Other PA	19300	1720	18.92	20.00	1.282			-0.04	0.605	0.776	DASY
	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm															



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	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm	Ant6	DSI4	-		19575	1747.5	19.76	21.00	1.33			0.02	0.001	0.001	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		19575	1747.5	19.76	21.00	1.33			0.03	0.599	0.797	DASY
	LTE Band 3	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		19575	1747.5	19.76	21.00	1.33			0.13	0.485	0.645	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		19300	1720	19.68	21.00	1.355			0.01	0.580	0.786	DASY
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		19850	1775	19.71	21.00	1.346			0.06	0.605	0.814	DASY
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI 4	-	Other PA	19850	1775	19.63	20.50	1.222			0.01	0.637	0.778	DASY
	LTE Band 3	20M	QPSK	1	0	Front	5mm	Ant7	DSI 4	-	Other PA	19575	1747.5	19.67	20.50	1.211			0.10	0.470	0.569	Csar
	LTE Band 3	20M	QPSK	1	0	Back	5mm	Ant7	DSI 4	-	Other PA	19575	1747.5	19.67	20.50	1.211			0.13	0.592	0.717	DASY
	LTE Band 3	20M	QPSK	1	0	Left Edge	5mm	Ant7	DSI 4	-	Other PA	19575	1747.5	19.67	20.50	1.211			0.02	0.027	0.033	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI 4	-	Other PA	19575	1747.5	19.67	20.50	1.211			0.18	0.807	0.977	DASY
	LTE Band 3	20M	QPSK	1	0	Top Edge	5mm	Ant7	DSI 4	-	Other PA	19575	1747.5	19.67	20.50	1.211			0.15	0.058	0.070	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	5mm	Ant7	DSI 4	-	Other PA	19575	1747.5	19.67	20.50	1.211			0.19	0.001	0.001	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI 4	-	Other PA	19300	1720	19.62	20.50	1.225			-0.01	0.783	0.959	DASY
	LTE Band 3	20M	QPSK	1	0	Back	5mm	Ant7	DSI 4	Headset	Other PA	19575	1747.5	19.67	20.50	1.211			0.13	0.559	0.677	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI4	-		19850	1775	19.26	20.50	1.33			0.11	0.692	0.920	DASY
39	LTE Band 3	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI 4	-	Other PA	19850	1775	19.66	20.50	1.213			0.07	0.816	0.990	DASY
	LTE Band 5	10M	QPSK	1	0	Front	5mm	Ant0	DSI4	-		20525	836.5	25.02	25.70	1.169			0.15	0.428	0.500	Csar
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		20525	836.5	25.02	25.70	1.169			-0.19	0.533	0.623	Csar
	LTE Band 5	10M	QPSK	1	0	Left Edge	5mm	Ant0	DSI4	-		20525	836.5	25.02	25.70	1.169			-0.11	0.039	0.046	Csar
	LTE Band 5	10M	QPSK	1	0	Right Edge	5mm	Ant0	DSI4	-		20525	836.5	25.02	25.70	1.169			-0.03	0.529	0.618	Csar
	LTE Band 5	10M	QPSK	1	0	Top Edge	5mm	Ant0	DSI4	-		20525	836.5	25.02	25.70	1.169			-0.02	0.001	0.001	Csar
	LTE Band 5	10M	QPSK	1	0	Bottom Edge	5mm	Ant0	DSI4	-		20525	836.5	25.02	25.70	1.169			-0.11	0.361	0.422	Csar
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		20450	829	24.92	25.70	1.197			0.03	0.516	0.618	Csar
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		20600	844	24.98	25.70	1.18			0.18	0.555	0.655	DASY
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	Headset		20525	836.5	25.02	25.70	1.169			-0.01	0.530	0.620	Csar
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant0	DSI 4	-	Other PA	20600	844	24.12	25.00	1.225			-0.06	0.528	0.647	DASY
	LTE Band 5	10M	QPSK	1	0	Front	5mm	Ant1	DSI 3	-	Other PA	20525	836.5	20.04	21.00	1.247			-0.04	0.445	0.555	Csar
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant1	DSI 3	-	Other PA	20525	836.5	20.04	21.00	1.247			0.08	0.507	0.632	Csar
	LTE Band 5	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	20525	836.5	20.04	21.00	1.247			-0.19	0.636	0.793	DASY
	LTE Band 5	10M	QPSK	1	0	Right Edge	5mm	Ant1	DSI 4	-	Other PA	20525	836.5	24.15	25.00	1.216			0.05	0.082	0.100	Csar
	LTE Band 5	10M	QPSK	1	0	Top Edge	5mm	Ant1	DSI 3	-	Other PA	20525	836.5	20.04	21.00	1.247			0.17	0.001	0.001	Csar
	LTE Band 5	10M	QPSK	1	0	Bottom Edge	5mm	Ant1	DSI 4	-	Other PA	20525	836.5	24.15	25.00	1.216			-0.12	0.046	0.056	Csar
	LTE Band 5	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	20450	829	19.95	21.00	1.274			-0.00	0.620	0.790	DASY
	LTE Band 5	10M	QPSK	1	0	Back	5mm	Ant1	DSI 3	Headset	Other PA	20525	836.5	20.04	21.00	1.247			-0.16	0.511	0.637	Csar
	LTE Band 5	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		20600	844	19.76	20.70	1.242			-0.05	0.460	0.571	DASY
40	LTE Band 5	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	20600	844	19.91	21.00	1.285			0.07	0.642	0.825	DASY
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant4	DSI3	-		21100	2535	20.24	20.70	1.112			0.14	0.402	0.447	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant4	DSI3	-		21100	2535	20.24	20.70	1.112			-0.11	0.517	0.575	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		21100	2535	20.24	20.70	1.112			-0.11	0.638	0.709	DASY
	LTE Band 7	20M	QPSK	1	0	Right Edge	5mm	Ant4	DSI4	-		21100	2535	25.31	25.70	1.094			-0.15	0.041	0.045	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	5mm	Ant4	DSI3	-		21100	2535	20.24	20.70	1.112			0.05	0.206	0.229	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	5mm	Ant4	DSI4	-		21100	2535	25.31	25.70	1.094			-0.02	0.079	0.086	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant4	DSI3	Headset		21100	2535	20.24	20.70	1.112			0.15	0.512	0.569	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		20850	2510	20.21	20.70	1.119			-0.03	0.586	0.656	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		21350	2560	20.15	20.70	1.135			0.06	0.676	0.767	DASY
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant5	DSI3	-		21100	2535	18.82	20.00	1.312			-0.16	0.208	0.273	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant5	DSI3	-		21100	2535	18.82	20.00	1.312			0.09	0.316	0.415	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	5mm	Ant5	DSI3	-		21100	2535	18.82	20.00	1.312			0.10	0.234	0.307	Csar
	LTE Band 7	20M	QPSK	1	0	Right Edge	5mm	Ant5	DSI4	-		21100	2535	23.92	25.00	1.282			-0.04	0.059	0.076	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		21100	2535	18.82	20.00	1.312			-0.09	0.516	0.677	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	5mm	Ant5	DSI4	-		21100	2535	23.92	25.00	1.282			-0.08	0.001	0.001	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant5	DSI3	Headset		21100	2535	18.82	20.00	1.312			-0.17	0.311	0.408	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		20850	2510	18.76	20.00	1.33			-0.18	0.562	0.747	DASY
41	LTE Band 7	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		21350	2560	18.80	20.00	1.318			0.01	0.603	0.795	DASY
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant6	DSI4	-		21100	2535	19.93	21.00	1.279			-0.07	0.365	0.467	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	-		21100	2535	19.93	21.00	1.279			-0.17	0.443	0.567	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	5mm	Ant6	DSI4	-		21100	2535	19.93	21.00	1.279			-0.12	0.099	0.127	Csar
	LTE Band 7	20M	QPSK	1	0	Right Edge	5mm	Ant6	DSI4	-		21100	2535	19.93	21.00	1.279			0.02	0.090	0.115	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	5mm	Ant6	DSI4	-		21100	2535	19.93	21.00	1.279			-0.10	0.018	0.023	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		21100	2535	19.93	21.00	1.279			0.03	0.618	0.790	DASY
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		21100	2535	19.93	21.00	1.279			-0.04	0.563	0.720	DASY
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		20850	2510	19.84	21.00	1.306			-0.16	0.573	0.748	DASY
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		21350	2560	19.88	21.00	1.294			0.09	0.611	0.791	DASY
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant7	DSI4	-		21100	2535	19.59	20.50	1.233			-0.15	0.319	0.393	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant7	DSI4	-		21100	2535	19.59	20.50	1.233			0.04	0.399	0.492	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	5mm	Ant7	DSI4	-		21100	2535	19.59	20.50	1.233			-0.03	0.001	0.001	Csar
	LTE Band 7	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI4	-		21100	2535	19.59	20.50	1.233			0.06	0.508	0.626	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	5mm	Ant7	DSI4	-		21100	2535	19.59	20.50	1.233			-0.08	0.051	0.063	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	5mm	Ant7	DSI4	-		21100	2535	19.59	20.50	1.233			-0.07	0.021	0.026	Csar
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant7	DSI													



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42	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		21625	897.5	25.06	25.70	1.159			-0.02	0.658	0.763	DASY
	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant0	DSI 4	-	Other PA	21625	897.5	24.28	25.00	1.18			0.02	0.641	0.756	DASY
	LTE Band 8	10M	QPSK	1	0	Left Edge	5mm	Ant0	DSI4	-		21625	897.5	25.06	25.70	1.159			0.00	0.041	0.048	Csar
	LTE Band 8	10M	QPSK	1	0	Right Edge	5mm	Ant0	DSI4	-		21625	897.5	25.06	25.70	1.159			-0.15	0.649	0.752	DASY
	LTE Band 8	10M	QPSK	1	0	Top Edge	5mm	Ant0	DSI4	-		21625	897.5	25.06	25.70	1.159			-0.08	0.037	0.043	Csar
	LTE Band 8	10M	QPSK	1	0	Bottom Edge	5mm	Ant0	DSI4	-		21625	897.5	25.06	25.70	1.159			0.00	0.435	0.504	Csar
	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	Headset		21625	897.5	25.06	25.70	1.159			0.16	0.626	0.726	DASY
	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		21500	885	25.03	25.70	1.167			-0.13	0.602	0.703	DASY
	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		21750	910	25.05	25.70	1.161			0.11	0.629	0.730	DASY
	LTE Band 8	10M	QPSK	1	0	Front	5mm	Ant1	DSI 3	-	Other PA	21625	897.5	20.09	21.00	1.233			0.10	0.418	0.515	Csar
	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant1	DSI 3	-	Other PA	21625	897.5	20.09	21.00	1.233			0.18	0.477	0.588	Csar
	LTE Band 8	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	21625	897.5	20.09	21.00	1.233			-0.09	0.528	0.651	Csar
	LTE Band 8	10M	QPSK	1	0	Right Edge	5mm	Ant1	DSI 4	-	Other PA	21625	897.5	24.21	25.00	1.199			-0.10	0.031	0.037	Csar
	LTE Band 8	10M	QPSK	1	0	Top Edge	5mm	Ant1	DSI 3	-	Other PA	21625	897.5	20.09	21.00	1.233			0.18	0.001	0.001	Csar
	LTE Band 8	10M	QPSK	1	0	Bottom Edge	5mm	Ant1	DSI 4	-	Other PA	21625	897.5	24.21	25.00	1.199			0.14	0.058	0.070	Csar
	LTE Band 8	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	21500	885	19.93	21.00	1.279			-0.19	0.507	0.648	Csar
	LTE Band 8	10M	QPSK	1	0	Back	5mm	Ant1	DSI 3	Headset	Other PA	21625	897.5	20.09	21.00	1.233			-0.14	0.489	0.603	Csar
	LTE Band 8	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		21750	910	19.89	20.70	1.205			0.12	0.444	0.535	DASY
	LTE Band 8	10M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	21750	910	20.02	21.00	1.253			0.06	0.537	0.673	DASY
	LTE Band 20	20M	QPSK	1	0	Front	5mm	Ant0	DSI 4	-	Other PA	24300	847	24.25	25.00	1.189			-0.09	0.431	0.512	Csar
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant0	DSI 4	-	Other PA	24300	847	24.25	25.00	1.189			0.12	0.535	0.636	Csar
	LTE Band 20	20M	QPSK	1	0	Left Edge	5mm	Ant0	DSI 4	-	Other PA	24300	847	24.25	25.00	1.189			0.16	0.069	0.082	Csar
	LTE Band 20	20M	QPSK	1	0	Right Edge	5mm	Ant0	DSI 4	-	Other PA	24300	847	24.25	25.00	1.189			-0.15	0.516	0.614	Csar
	LTE Band 20	20M	QPSK	1	0	Top Edge	5mm	Ant0	DSI 4	-	Other PA	24300	847	24.25	25.00	1.189			-0.10	0.001	0.001	Csar
	LTE Band 20	20M	QPSK	1	0	Bottom Edge	5mm	Ant0	DSI 4	-	Other PA	24300	847	24.25	25.00	1.189			0.15	0.347	0.413	Csar
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant0	DSI 4	-	Other PA	24250	842	24.24	25.00	1.191			0.05	0.503	0.599	Csar
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant0	DSI 4	-	Other PA	24350	852	24.20	25.00	1.202			-0.09	0.547	0.657	DASY
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant0	DSI 4	Headset	Other PA	24300	847	24.25	25.00	1.189			-0.06	0.521	0.619	Csar
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		24350	852	24.08	25.00	1.236			0.05	0.528	0.653	DASY
	LTE Band 20	20M	QPSK	1	0	Front	5mm	Ant1	DSI 3	-	Other PA	24300	847	20.20	21.00	1.202			-0.07	0.483	0.581	Csar
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant1	DSI 3	-	Other PA	24300	847	20.20	21.00	1.202			0.07	0.567	0.682	Csar
	LTE Band 20	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	24300	847	20.20	21.00	1.202			0.15	0.651	0.783	DASY
	LTE Band 20	20M	QPSK	1	0	Right Edge	5mm	Ant1	DSI 4	-	Other PA	24300	847	24.34	25.00	1.164			-0.17	0.063	0.073	Csar
	LTE Band 20	20M	QPSK	1	0	Top Edge	5mm	Ant1	DSI 3	-	Other PA	24300	847	20.20	21.00	1.202			-0.06	0.001	0.001	Csar
	LTE Band 20	20M	QPSK	1	0	Bottom Edge	5mm	Ant1	DSI 4	-	Other PA	24300	847	24.34	25.00	1.164			0.13	0.049	0.057	Csar
	LTE Band 20	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	24250	842	20.14	21.00	1.219			-0.16	0.651	0.794	DASY
	LTE Band 20	20M	QPSK	1	0	Back	5mm	Ant1	DSI 3	Headset	Other PA	24300	847	20.20	21.00	1.202			0.08	0.569	0.684	Csar
	LTE Band 20	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		24350	852	19.77	21.00	1.327			0.02	0.560	0.743	DASY
43	LTE Band 20	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	24350	852	20.16	21.00	1.213			0.08	0.664	0.805	DASY
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant0	DSI4	-		26865	831.5	25.18	25.70	1.127			0.05	0.493	0.556	Csar
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		26865	831.5	25.18	25.70	1.127			0.07	0.617	0.695	Csar
	LTE Band 26	15M	QPSK	1	0	Left Edge	5mm	Ant0	DSI4	-		26865	831.5	25.18	25.70	1.127			0.04	0.047	0.053	Csar
	LTE Band 26	15M	QPSK	1	0	Right Edge	5mm	Ant0	DSI4	-		26865	831.5	25.18	25.70	1.127			-0.12	0.612	0.690	Csar
	LTE Band 26	15M	QPSK	1	0	Top Edge	5mm	Ant0	DSI4	-		26865	831.5	25.18	25.70	1.127			0.15	0.001	0.001	Csar
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	5mm	Ant0	DSI4	-		26865	831.5	25.18	25.70	1.127			-0.07	0.409	0.461	Csar
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant0	DSI4	Headset		26865	831.5	25.18	25.70	1.127			0.09	0.597	0.673	Csar
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		26765	821.5	25.13	25.70	1.14			-0.08	0.615	0.701	DASY
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant0	DSI4	-		26965	841.5	25.15	25.70	1.135			-0.11	0.643	0.730	DASY
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant1	DSI3	-		26865	831.5	20.74	21.70	1.247			-0.18	0.429	0.535	Csar
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant1	DSI3	-		26865	831.5	20.74	21.70	1.247			0.03	0.484	0.604	Csar
	LTE Band 26	15M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		26865	831.5	20.74	21.70	1.247			-0.00	0.656	0.818	DASY
	LTE Band 26	15M	QPSK	1	0	Right Edge	5mm	Ant1	DSI4	-		26865	831.5	24.85	25.70	1.216			0.18	0.066	0.080	Csar
	LTE Band 26	15M	QPSK	1	0	Top Edge	5mm	Ant1	DSI3	-		26865	831.5	20.74	21.70	1.247			0.02	0.001	0.001	Csar
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	5mm	Ant1	DSI4	-		26865	831.5	24.85	25.70	1.216			-0.12	0.034	0.041	Csar
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant1	DSI3	Headset		26865	831.5	20.74	21.70	1.247			-0.15	0.489	0.610	Csar
	LTE Band 26	15M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		26765	821.5	20.71	21.70	1.256			-0.09	0.581	0.730	DASY
44	LTE Band 26	15M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		26965	841.5	20.68	21.70	1.265			0.01	0.691	0.874	DASY
	LTE Band 28	20M	QPSK	1	0	Front	5mm	Ant0	DSI 4	-	Other PA	27460	728	24.01	25.00	1.256			-0.08	0.386	0.485	Csar
	LTE Band 28	20M	QPSK	1	0	Back	5mm	Ant0	DSI 4	-	Other PA	27460	728	24.01	25.00	1.256			-0.14	0.466	0.585	Csar
	LTE Band 28	20M	QPSK	1	0	Left Edge	5mm	Ant0	DSI 4	-	Other PA	27460	728	24.01	25.00	1.256			-0.10	0.099	0.124	Csar
	LTE Band 28	20M	QPSK	1	0	Right Edge	5mm	Ant0	DSI 4	-	Other PA	27460	728	24.01	25.00	1.256			0.03	0.527	0.662	Csar
	LTE Band 28	20M	QPSK	1	0	Top Edge	5mm	Ant0	DSI 4	-	Other PA	27460	728	24.01	25.00	1.256			-0.17	0.001	0.001	Csar
	LTE Band 28	20M	QPSK	1	0	Bottom Edge	5mm	Ant0	DSI 4	-	Other PA	27460	728	24.01	25.00	1.256			0.04	0.260	0.327	Csar
	LTE Band 28	20M	QPSK	1	0	Right Edge	5mm	Ant0	DSI 4	-	Other PA	27310	713	23.92	25.00	1.282			-0.09	0.582	0.746	DASY
	LTE Band 28	20M	QPSK	1	0	Back	5mm	Ant0	DSI 4	Headset	Other PA	27460	728	24.01	25.00	1.256			-0.07	0.461	0.579	Csar
	LTE Band 28	20M	QPSK	1	0	Right Edge	5mm	Ant0	DSI4	-		27560	738	24.01	25.00	1.256			0.19	0.591	0.742	DASY
	LTE Band 28	20M	QPSK	1	0	Right Edge	5mm	Ant0	DSI 4	-	Other PA	27560	738	24.00	25.00	1.259			-0.17	0.656	0.826	DASY
	LTE Band 28	20M	QPSK	1	0	Front	5mm	Ant1	DSI 3	-	Other PA	27460	728	21.86	23.00	1.3			-0.09	0.360	0.468	Csar
	LTE Band 28	20M	QPSK	1	0	Back	5mm	Ant1	DSI 3	-	Other PA	27460	728	21.86	23.00	1.3			0.00	0.414</		



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	LTE Band 28	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	27310	713	21.77	23.00	1.327			0.13	0.677	0.898	DASY
	LTE Band 28	20M	QPSK	1	0	Back	5mm	Ant1	DSI 3	Headset	Other PA	27460	728	21.86	23.00	1.3			0.14	0.400	0.520	Csar
	LTE Band 28	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI3	-		27560	738	21.85	23.00	1.303			-0.12	0.566	0.737	DASY
45	LTE Band 28	20M	QPSK	1	0	Left Edge	5mm	Ant1	DSI 3	-	Other PA	27560	738	21.79	23.00	1.321			0.01	0.755	0.997	DASY
	LTE Band 40	20M	QPSK	1	0	Front	5mm	Ant4	DSI3	-		39150	2350	21.16	22.00	1.213	62.9	1.006	-0.14	0.374	0.456	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant4	DSI3	-		39150	2350	21.16	22.00	1.213	62.9	1.006	-0.05	0.464	0.566	Csar
	LTE Band 40	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		39150	2350	21.16	22.00	1.213	62.9	1.006	0.14	0.576	0.703	DASY
	LTE Band 40	20M	QPSK	1	0	Right Edge	5mm	Ant4	DSI4	-		39150	2350	24.26	25.00	1.186	62.9	1.006	0.11	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	5mm	Ant4	DSI3	-		39150	2350	21.16	22.00	1.213	62.9	1.006	0.08	0.057	0.070	Csar
	LTE Band 40	20M	QPSK	1	0	Bottom Edge	5mm	Ant4	DSI4	-		39150	2350	24.26	25.00	1.186	62.9	1.006	0.18	0.046	0.055	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant4	DSI3	Headset		39150	2350	21.16	22.00	1.213	62.9	1.006	-0.13	0.456	0.556	Csar
	LTE Band 40	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		38750	2310	21.13	22.00	1.222	62.9	1.006	-0.16	0.582	0.715	DASY
	LTE Band 40	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		39550	2390	21.11	22.00	1.227	62.9	1.006	0.06	0.633	0.781	DASY
	LTE Band 40	20M	QPSK	1	0	Front	5mm	Ant5	DSI3	-		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.10	0.398	0.514	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant5	DSI3	-		39150	2350	21.91	23.00	1.285	62.9	1.006	0.18	0.569	0.736	DASY
	LTE Band 40	20M	QPSK	1	0	Left Edge	5mm	Ant5	DSI3	-		39150	2350	21.91	23.00	1.285	62.9	1.006	0.16	0.128	0.165	Csar
	LTE Band 40	20M	QPSK	1	0	Right Edge	5mm	Ant5	DSI4	-		39150	2350	23.08	24.00	1.236	62.9	1.006	0.05	0.057	0.071	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		39150	2350	21.91	23.00	1.285	62.9	1.006	0.00	0.645	0.834	DASY
	LTE Band 40	20M	QPSK	1	0	Bottom Edge	5mm	Ant5	DSI4	-		39150	2350	23.08	24.00	1.236	62.9	1.006	-0.04	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant5	DSI3	Headset		39150	2350	21.91	23.00	1.285	62.9	1.006	0.17	0.580	0.750	DASY
	LTE Band 40	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		38750	2310	21.80	23.00	1.318	62.9	1.006	-0.11	0.531	0.704	DASY
46	LTE Band 40	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		39550	2390	21.76	23.00	1.33	62.9	1.006	0.06	0.715	0.957	DASY
	LTE Band 40	20M	QPSK	1	0	Front	5mm	Ant6	DSI4	-		39150	2350	22.47	23.50	1.268	62.9	1.006	0.06	0.291	0.371	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	-		39150	2350	22.47	23.50	1.268	62.9	1.006	-0.07	0.337	0.430	Csar
	LTE Band 40	20M	QPSK	1	0	Left Edge	5mm	Ant6	DSI4	-		39150	2350	22.47	23.50	1.268	62.9	1.006	0.02	0.074	0.094	Csar
	LTE Band 40	20M	QPSK	1	0	Right Edge	5mm	Ant6	DSI4	-		39150	2350	22.47	23.50	1.268	62.9	1.006	-0.18	0.044	0.056	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	5mm	Ant6	DSI4	-		39150	2350	22.47	23.50	1.268	62.9	1.006	0.00	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		39150	2350	22.47	23.50	1.268	62.9	1.006	-0.01	0.431	0.550	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		39150	2350	22.47	23.50	1.268	62.9	1.006	-0.17	0.468	0.597	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		38750	2310	22.45	23.50	1.274	62.9	1.006	0.07	0.455	0.583	Csar
	LTE Band 40	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		39550	2390	22.42	23.50	1.282	62.9	1.006	-0.01	0.477	0.615	DASY
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant4	DSI3	-		40620	2593	21.73	22.20	1.114	62.9	1.006	0.10	0.450	0.504	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant4	DSI3	-		40620	2593	21.73	22.20	1.114	62.9	1.006	0.07	0.560	0.628	Csar
47	LTE Band 41	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		40620	2593	21.73	22.20	1.114	62.9	1.006	0.09	0.788	0.883	DASY
	LTE Band 41	20M	QPSK	1	0	Right Edge	5mm	Ant4	DSI4	-		40620	2593	25.23	25.70	1.114	62.9	1.006	0.04	0.001	0.001	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	5mm	Ant4	DSI3	-		40620	2593	21.73	22.20	1.114	62.9	1.006	0.15	0.073	0.082	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	5mm	Ant4	DSI4	-		40620	2593	25.23	25.70	1.114	62.9	1.006	0.14	0.097	0.109	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant4	DSI3	Headset		40620	2593	21.73	22.20	1.114	62.9	1.006	0.04	0.547	0.613	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		39750	2506	21.68	22.20	1.127	62.9	1.006	0.19	0.638	0.723	DASY
	LTE Band 41	20M	QPSK	1	0	Left Edge	5mm	Ant4	DSI3	-		41490	2680	21.62	22.20	1.143	62.9	1.006	-0.18	0.680	0.782	DASY
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant5	DSI3	-		40620	2593	21.05	22.00	1.245	62.9	1.006	-0.15	0.260	0.326	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	DSI3	-		40620	2593	21.05	22.00	1.245	62.9	1.006	-0.18	0.331	0.415	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	5mm	Ant5	DSI3	-		40620	2593	21.05	22.00	1.245	62.9	1.006	-0.03	0.356	0.446	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	5mm	Ant5	DSI4	-		40620	2593	24.18	25.00	1.208	62.9	1.006	0.09	0.051	0.062	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		40620	2593	21.05	22.00	1.245	62.9	1.006	0.06	0.638	0.799	DASY
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	5mm	Ant5	DSI4	-		40620	2593	24.18	25.00	1.208	62.9	1.006	0.07	0.005	0.006	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	DSI3	Headset		40620	2593	21.05	22.00	1.245	62.9	1.006	0.06	0.335	0.420	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		39750	2506	21.01	22.00	1.256	62.9	1.006	-0.04	0.387	0.489	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	5mm	Ant5	DSI3	-		41490	2680	20.93	22.00	1.279	62.9	1.006	0.09	0.527	0.678	Csar
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant6	DSI4	-		40620	2593	21.91	23.00	1.285	62.9	1.006	-0.06	0.419	0.542	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	-		40620	2593	21.91	23.00	1.285	62.9	1.006	-0.01	0.506	0.654	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	5mm	Ant6	DSI4	-		40620	2593	21.91	23.00	1.285	62.9	1.006	0.14	0.106	0.137	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	5mm	Ant6	DSI4	-		40620	2593	21.91	23.00	1.285	62.9	1.006	-0.14	0.070	0.090	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	5mm	Ant6	DSI4	-		40620	2593	21.91	23.00	1.285	62.9	1.006	0.03	0.018	0.023	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		40620	2593	21.91	23.00	1.285	62.9	1.006	0.17	0.665	0.860	DASY
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant6	DSI4	Headset		40620	2593	21.91	23.00	1.285	62.9	1.006	-0.18	0.638	0.825	DASY
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		39750	2506	21.86	23.00	1.3	62.9	1.006	-0.09	0.649	0.849	DASY
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	5mm	Ant6	DSI4	-		41490	2680	21.83	23.00	1.309	62.9	1.006	0.05	0.653	0.860	DASY
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant7	DSI4	-		40620	2593	22.95	24.00	1.274	62.9	1.006	-0.16	0.343	0.440	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant7	DSI4	-		40620	2593	22.95	24.00	1.274	62.9	1.006	-0.19	0.397	0.509	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	5mm	Ant7	DSI4	-		40620	2593	22.95	24.00	1.274	62.9	1.006	0.04	0.001	0.001	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI4	-		40620	2593	22.95	24.00	1.274	62.9	1.006	-0.11	0.466	0.597	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	5mm	Ant7	DSI4	-		40620	2593	22.95	24.00	1.274	62.9	1.006	0.08	0.074	0.095	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	5mm	Ant7	DSI4	-		40620	2593	22.95	24.00	1.274	62.9	1.006	-0.12	0.022	0.028	Csar
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant7	DSI4	Headset		40620	2593	22.95	24.00	1.274	62.9	1.006	-0.04	0.393	0.504	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	5mm	Ant7	DSI4	-		39750	2506	22.91	24.00							



CE SAR Test Report

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LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant8	DSI4	Headset		42590	3500	20.63	21.50	1.222	62.9	1.006	-0.10	0.379	0.466	Csar
LTE Band 42	20M	QPSK	1	0	Right Edge	5mm	Ant8	DSI4	-		41690	3410	20.58	21.50	1.236	62.9	1.006	0.03	0.667	0.829	DASY
LTE Band 42	20M	QPSK	1	0	Right Edge	5mm	Ant8	DSI4	-		43490	3590	20.55	21.50	1.245	62.9	1.006	-0.10	0.552	0.691	Csar
LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant9	DSI3	-		42590	3500	20.04	21.00	1.247	62.9	1.006	-0.08	0.201	0.252	Csar
LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant9	DSI3	-		42590	3500	20.04	21.00	1.247	62.9	1.006	0.06	0.295	0.370	Csar
LTE Band 42	20M	QPSK	1	0	Left Edge	5mm	Ant9	DSI3	-		42590	3500	20.04	21.00	1.247	62.9	1.006	0.05	0.502	0.630	DASY
LTE Band 42	20M	QPSK	1	0	Right Edge	5mm	Ant9	DSI4	-		42590	3500	21.10	22.00	1.23	62.9	1.006	-0.17	0.030	0.037	Csar
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant9	DSI3	-		42590	3500	20.04	21.00	1.247	62.9	1.006	-0.12	0.053	0.066	Csar
LTE Band 42	20M	QPSK	1	0	Bottom Edge	5mm	Ant9	DSI4	-		42590	3500	21.10	22.00	1.23	62.9	1.006	0.04	0.007	0.009	Csar
LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant9	DSI3	Headset		42590	3500	20.04	21.00	1.247	62.9	1.006	-0.09	0.298	0.374	Csar
LTE Band 42	20M	QPSK	1	0	Left Edge	5mm	Ant9	DSI3	-		41690	3410	19.95	21.00	1.274	62.9	1.006	0.01	0.328	0.420	Csar
LTE Band 42	20M	QPSK	1	0	Left Edge	5mm	Ant9	DSI3	-		43490	3590	19.92	21.00	1.282	62.9	1.006	0.07	0.467	0.602	Csar
LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant10	DSI3	-		42590	3500	18.98	20.00	1.265	62.9	1.006	-0.07	0.290	0.369	Csar
LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant10	DSI3	-		42590	3500	18.98	20.00	1.265	62.9	1.006	0.02	0.363	0.462	Csar
LTE Band 42	20M	QPSK	1	0	Left Edge	5mm	Ant10	DSI3	-		42590	3500	18.98	20.00	1.265	62.9	1.006	0.13	0.072	0.092	Csar
LTE Band 42	20M	QPSK	1	0	Right Edge	5mm	Ant10	DSI4	-		42590	3500	24.99	26.00	1.262	62.9	1.006	0.06	0.175	0.222	Csar
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant10	DSI3	-		42590	3500	18.98	20.00	1.265	62.9	1.006	-0.02	0.607	0.772	DASY
LTE Band 42	20M	QPSK	1	0	Bottom Edge	5mm	Ant10	DSI4	-		42590	3500	24.99	26.00	1.262	62.9	1.006	0.18	0.007	0.009	Csar
LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant10	DSI3	Headset		42590	3500	18.98	20.00	1.265	62.9	1.006	-0.16	0.360	0.458	Csar
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant10	DSI3	-		41690	3410	18.96	20.00	1.271	62.9	1.006	0.09	0.594	0.760	DASY
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant10	DSI3	-		43490	3590	18.97	20.00	1.268	62.9	1.006	0.17	0.569	0.726	DASY
LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant11	DSI3	-		42590	3500	19.75	21.00	1.334	62.9	1.006	-0.13	0.206	0.276	Csar
LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant11	DSI3	-		42590	3500	19.75	21.00	1.334	62.9	1.006	0.18	0.186	0.250	Csar
LTE Band 42	20M	QPSK	1	0	Left Edge	5mm	Ant11	DSI3	-		42590	3500	19.75	21.00	1.334	62.9	1.006	0.17	0.111	0.149	Csar
LTE Band 42	20M	QPSK	1	0	Right Edge	5mm	Ant11	DSI4	-		42590	3500	21.86	23.00	1.3	62.9	1.006	0.14	0.035	0.046	Csar
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant11	DSI3	-		42590	3500	19.75	21.00	1.334	62.9	1.006	0.14	0.501	0.672	DASY
LTE Band 42	20M	QPSK	1	0	Bottom Edge	5mm	Ant11	DSI4	-		42590	3500	21.86	23.00	1.3	62.9	1.006	0.14	0.001	0.001	Csar
LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant11	DSI3	Headset		42590	3500	19.75	21.00	1.334	62.9	1.006	-0.11	0.219	0.294	Csar
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant11	DSI3	-		41690	3410	19.66	21.00	1.361	62.9	1.006	0.06	0.483	0.661	Csar
LTE Band 42	20M	QPSK	1	0	Top Edge	5mm	Ant11	DSI3	-		43490	3590	19.63	21.00	1.371	62.9	1.006	0.10	0.431	0.594	Csar

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Headset	Power State Note	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	FR1 n1	50M	BPSK	135	67	Front	5mm	Ant4	DSI 3	-	Other PA	390000	1950	19.64	20.50	1.219			-0.19	0.308	0.375	Csar
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant4	DSI 3	-	Other PA	390000	1950	19.64	20.50	1.219			0.18	0.452	0.551	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI 3	-	Other PA	390000	1950	19.64	20.50	1.219			0.16	0.463	0.564	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant4	DSI 4	-	Other PA	390000	1950	24.71	25.50	1.199			-0.09	0.082	0.098	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant4	DSI 3	-	Other PA	390000	1950	19.64	20.50	1.219			0.01	0.107	0.130	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant4	DSI 4	-	Other PA	390000	1950	24.71	25.50	1.199			-0.04	0.001	0.001	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI 3	-	Other PA	389000	1945	19.61	20.50	1.227			0.03	0.474	0.582	DASY
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI 3	-	Other PA	391000	1955	19.56	20.50	1.242			0.16	0.459	0.570	Csar
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant4	DSI 3	Headset	Other PA	390000	1950	19.64	20.50	1.219			-0.03	0.442	0.539	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		389000	1945	19.11	19.70	1.146			-0.07	0.459	0.526	DASY
	FR1 n1	50M	BPSK	135	67	Front	5mm	Ant5	DSI 3	-	Other PA	390000	1950	18.17	19.50	1.358			-0.02	0.482	0.655	Csar
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant5	DSI 3	-	Other PA	390000	1950	18.17	19.50	1.358			0.03	0.508	0.690	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant5	DSI 3	-	Other PA	390000	1950	18.17	19.50	1.358			0.09	0.059	0.080	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant5	DSI 4	-	Other PA	390000	1950	23.29	24.50	1.321			0.10	0.176	0.232	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI 3	-	Other PA	390000	1950	18.17	19.50	1.358			0.02	0.647	0.879	DASY
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant5	DSI 4	-	Other PA	390000	1950	23.29	24.50	1.321			0.07	0.016	0.021	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI 3	-	Other PA	389000	1945	18.12	19.50	1.374			0.11	0.684	0.940	DASY
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI 3	-	Other PA	391000	1955	18.04	19.50	1.4			-0.08	0.568	0.795	DASY
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant5	DSI 3	Headset	Other PA	390000	1950	18.17	19.50	1.358			-0.18	0.503	0.683	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		389000	1945	18.51	19.50	1.256			0.13	0.616	0.774	DASY
	FR1 n1	50M	BPSK	135	67	Front	5mm	Ant6	DSI4	-		390000	1950	20.00	21.00	1.259			-0.14	0.310	0.390	Csar
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant6	DSI4	-		390000	1950	20.00	21.00	1.259			-0.07	0.386	0.486	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant6	DSI4	-		390000	1950	20.00	21.00	1.259			0.16	0.114	0.144	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant6	DSI4	-		390000	1950	20.00	21.00	1.259			0.09	0.056	0.071	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant6	DSI4	-		390000	1950	20.00	21.00	1.259			-0.02	0.001	0.001	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		390000	1950	20.00	21.00	1.259			0.11	0.672	0.846	DASY
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant6	DSI4	Headset		390000	1950	20.00	21.00	1.259			0.18	0.367	0.462	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		389000	1945	19.93	21.00	1.279			0.09	0.700	0.895	DASY
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		391000	1955	19.86	21.00	1.3			-0.09	0.644	0.837	DASY
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI 4	-	Other PA	389000	1945	19.61	20.50	1.227			0.08	0.702	0.861	DASY
	FR1 n1	50M	BPSK	135	67	Front	5mm	Ant7	DSI 4	-	Other PA	390000	1950	20.27	21.50	1.327			-0.07	0.350	0.464	Csar
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant7	DSI 4	-	Other PA	390000	1950	20.27	21.50	1.327			0.17	0.440	0.584	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	5mm	Ant7	DSI 4	-	Other PA	390000	1950	20.27	21.50	1.327			-0.17	0.001	0.001	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI 4	-	Other PA	390000	1950	20.27	21.50	1.327			-0.15	0.655	0.869	DASY
	FR1 n1	50M	BPSK	135	67	Top Edge	5mm	Ant7	DSI 4	-	Other PA	390000	1950	20.27	21.50	1.327			0.11	0.030	0.040	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	5mm	Ant7	DSI 4	-	Other PA	390000	1950	20.27	21.50	1.327			-0.14	0.001	0.001	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI 4	-	Other PA	389000	1945	20.24	21.50	1.337			0.04	0.683	0.913	DASY
	FR1 n1	50M	BPSK	135	67	Back	5mm	Ant7	DSI 4	Headset	Other PA	390000	1950	20.27	21.50	1.327			-0.06	0.443	0.588	Csar



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	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		391000	1955	20.35	21.50	1.303			-0.14	0.652	0.850	DASY
49	FR1 n1	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI 4	-	Other PA	391000	1955	20.16	21.50	1.361			0.01	0.700	0.953	DASY
	FR1 n3	50M	BPSK	135	67	Front	5mm	Ant4	DSI 3	-	Other PA	349500	1747.5	20.66	21.50	1.213			-0.01	0.387	0.469	Csar
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant4	DSI 3	-	Other PA	349500	1747.5	20.66	21.50	1.213			0.16	0.609	0.739	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI 3	-	Other PA	349500	1747.5	20.66	21.50	1.213			-0.03	0.628	0.762	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant4	DSI 4	-	Other PA	349500	1747.5	24.75	25.50	1.189			0.11	0.074	0.088	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant4	DSI 3	-	Other PA	349500	1747.5	20.66	21.50	1.213			-0.05	0.142	0.172	Csar
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant4	DSI 4	-	Other PA	349500	1747.5	24.75	25.50	1.189			0.13	0.116	0.138	Csar
	FR1 n3	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI 3	-	Other PA	347000	1735	20.62	21.50	1.225			0.06	0.612	0.750	DASY
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant4	DSI 3	Headset	Other PA	349500	1747.5	20.66	21.50	1.213			-0.18	0.620	0.752	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		352000	1760	20.06	20.70	1.159			-0.02	0.571	0.662	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI 3	-	Other PA	352000	1760	20.53	21.50	1.25			0.07	0.657	0.821	DASY
	FR1 n3	50M	BPSK	135	67	Front	5mm	Ant5	DSI3	-		349500	1747.5	18.18	19.00	1.208			0.17	0.428	0.517	Csar
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant5	DSI3	-		349500	1747.5	18.18	19.00	1.208			-0.07	0.474	0.573	Csar
	FR1 n3	50M	BPSK	135	67	Left Edge	5mm	Ant5	DSI3	-		349500	1747.5	18.18	19.00	1.208			0.02	0.074	0.089	Csar
	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant5	DSI4	-		349500	1747.5	24.26	25.00	1.186			0.11	0.087	0.103	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		349500	1747.5	18.18	19.00	1.208			0.09	0.609	0.736	DASY
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant5	DSI4	-		349500	1747.5	24.26	25.00	1.186			0.05	0.001	0.001	Csar
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant5	DSI3	Headset		349500	1747.5	18.18	19.00	1.208			0.04	0.473	0.571	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		347000	1735	18.11	19.00	1.227			0.03	0.629	0.772	DASY
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		352000	1760	18.06	19.00	1.242			0.11	0.579	0.719	DASY
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI 3	-	Other PA	347000	1735	17.81	19.00	1.315			0.11	0.585	0.769	DASY
	FR1 n3	50M	BPSK	135	67	Front	5mm	Ant6	DSI4	-		349500	1747.5	19.48	20.50	1.265			0.12	0.441	0.558	Csar
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant6	DSI4	-		349500	1747.5	19.48	20.50	1.265			-0.07	0.547	0.692	Csar
	FR1 n3	50M	BPSK	135	67	Left Edge	5mm	Ant6	DSI4	-		349500	1747.5	19.48	20.50	1.265			0.12	0.213	0.269	Csar
	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant6	DSI4	-		349500	1747.5	19.48	20.50	1.265			-0.17	0.157	0.199	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant6	DSI4	-		349500	1747.5	19.48	20.50	1.265			-0.13	0.001	0.001	Csar
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		349500	1747.5	19.48	20.50	1.265			0.09	0.666	0.842	DASY
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant6	DSI4	Headset		349500	1747.5	19.48	20.50	1.265			0.01	0.591	0.748	DASY
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		347000	1735	19.41	20.50	1.285			-0.08	0.602	0.774	DASY
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		352000	1760	19.36	20.50	1.3			0.07	0.661	0.859	DASY
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI 4	-	Other PA	352000	1760	18.95	20.00	1.274			0.02	0.550	0.701	DASY
	FR1 n3	50M	BPSK	135	67	Front	5mm	Ant7	DSI4	-		349500	1747.5	18.67	20.00	1.358			-0.18	0.421	0.572	Csar
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant7	DSI4	-		349500	1747.5	18.67	20.00	1.358			0.03	0.555	0.754	DASY
50	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		349500	1747.5	18.67	20.00	1.358			0.06	0.712	0.967	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI 4	-	Other PA	349500	1747.5	18.67	20.00	1.358			0.06	0.658	0.894	DASY
	FR1 n3	50M	BPSK	135	67	Top Edge	5mm	Ant7	DSI4	-		349500	1747.5	18.67	20.00	1.358			0.13	0.054	0.073	Csar
	FR1 n3	50M	BPSK	135	67	Bottom Edge	5mm	Ant7	DSI4	-		349500	1747.5	18.67	20.00	1.358			-0.18	0.033	0.045	Csar
	FR1 n3	50M	BPSK	135	67	Back	5mm	Ant7	DSI4	Headset		349500	1747.5	18.67	20.00	1.358			0.04	0.555	0.754	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		347000	1735	18.62	20.00	1.374			-0.15	0.660	0.907	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		352000	1760	18.59	20.00	1.384			-0.12	0.670	0.927	DASY
	FR1 n5	20M	BPSK	50	25	Front	5mm	Ant0	DSI4	-		167300	836.5	24.64	25.20	1.138			0.11	0.452	0.514	Csar
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	-		167300	836.5	24.64	25.20	1.138			-0.03	0.619	0.704	DASY
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant0	DSI 4	-	Other PA	167300	836.5	24.37	25.00	1.156			-0.08	0.602	0.696	DASY
	FR1 n5	20M	BPSK	50	25	Left Edge	5mm	Ant0	DSI4	-		167300	836.5	24.64	25.20	1.138			-0.06	0.068	0.077	Csar
	FR1 n5	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI4	-		167300	836.5	24.64	25.20	1.138			0.12	0.530	0.603	Csar
	FR1 n5	20M	BPSK	50	25	Top Edge	5mm	Ant0	DSI4	-		167300	836.5	24.64	25.20	1.138			0.12	0.001	0.001	Csar
	FR1 n5	20M	BPSK	50	25	Bottom Edge	5mm	Ant0	DSI4	-		167300	836.5	24.64	25.20	1.138			0.01	0.381	0.434	Csar
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	Headset		167300	836.5	24.64	25.20	1.138			-0.09	0.536	0.610	Csar
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	-		166800	834	24.61	25.20	1.146			0.11	0.543	0.622	Csar
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	-		167800	839	24.58	25.20	1.153			0.14	0.558	0.643	Csar
	FR1 n5	20M	BPSK	50	25	Front	5mm	Ant1	DSI 3	-	Other PA	167300	836.5	20.63	21.50	1.222			0.07	0.415	0.507	Csar
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant1	DSI 3	-	Other PA	167300	836.5	20.63	21.50	1.222			-0.15	0.561	0.686	Csar
	FR1 n5	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI3	-		167300	836.5	20.58	21.20	1.153			0.12	0.624	0.719	DASY
51	FR1 n5	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	167300	836.5	20.63	21.50	1.222			0.03	0.738	0.902	DASY
	FR1 n5	20M	BPSK	50	25	Right Edge	5mm	Ant1	DSI 4	-	Other PA	167300	836.5	24.24	25.00	1.191			-0.11	0.073	0.087	Csar
	FR1 n5	20M	BPSK	50	25	Top Edge	5mm	Ant1	DSI 3	-	Other PA	167300	836.5	20.63	21.50	1.222			-0.13	0.001	0.001	Csar
	FR1 n5	20M	BPSK	50	25	Bottom Edge	5mm	Ant1	DSI 4	-	Other PA	167300	836.5	24.24	25.00	1.191			-0.02	0.001	0.001	Csar
	FR1 n5	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	166800	834	20.59	21.50	1.233			-0.01	0.701	0.864	DASY
	FR1 n5	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	167800	839	20.55	21.50	1.245			-0.10	0.705	0.878	DASY
	FR1 n5	20M	BPSK	50	25	Back	5mm	Ant1	DSI 3	Headset	Other PA	167300	836.5	20.63	21.50	1.222			0.11	0.580	0.709	DASY
	FR1 n7	50M	BPSK	135	67	Front	5mm	Ant4	DSI3	-		507000	2535	19.38	19.70	1.076			-0.13	0.453	0.487	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant4	DSI3	-		507000	2535	19.38	19.70	1.076			-0.02	0.588	0.633	Csar
	FR1 n7	50M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		507000	2535	19.38	19.70	1.076			0.15	0.761	0.819	DASY
	FR1 n7	50M	BPSK	135	67	Right Edge	5mm	Ant4	DSI4	-		507000	2535	25.40	25.70	1.072			0.13	0.058	0.062	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	5mm	Ant4	DSI3	-		507000	2535	19.38	19.70	1.076			0.03	0.169	0.182	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	5mm	Ant4	DSI4	-		507000	2535	25.40	25.70	1.072			-0.19	0.149	0.160	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant4	DSI3	Headset		507000	2535	19.38	19.70	1.076			-0.01	0.605	0.651	Csar



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	FR1 n7	50M	BPSK	135	67	Right Edge	5mm	Ant5	DSI4	-		507000	2535	24.15	25.00	1.216			-0.17	0.067	0.081	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		507000	2535	18.57	19.50	1.239			0.19	0.590	0.731	DASY
	FR1 n7	50M	BPSK	135	67	Bottom Edge	5mm	Ant5	DSI4	-		507000	2535	24.15	25.00	1.216			-0.01	0.001	0.001	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant5	DSI3	Headset		507000	2535	18.57	19.50	1.239			-0.10	0.316	0.392	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		505000	2525	18.52	19.50	1.253			0.03	0.667	0.836	DASY
	FR1 n7	50M	BPSK	135	67	Top Edge	5mm	Ant5	DSI3	-		509000	2545	18.48	19.50	1.265			0.08	0.649	0.821	DASY
	FR1 n7	50M	BPSK	135	67	Front	5mm	Ant6	DSI4	-		507000	2535	19.66	20.50	1.213			0.18	0.299	0.363	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant6	DSI4	-		507000	2535	19.66	20.50	1.213			-0.16	0.367	0.445	Csar
	FR1 n7	50M	BPSK	135	67	Left Edge	5mm	Ant6	DSI4	-		507000	2535	19.66	20.50	1.213			0.16	0.076	0.092	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	5mm	Ant6	DSI4	-		507000	2535	19.66	20.50	1.213			-0.12	0.055	0.067	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	5mm	Ant6	DSI4	-		507000	2535	19.66	20.50	1.213			-0.03	0.001	0.001	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		507000	2535	19.66	20.50	1.213			-0.17	0.510	0.619	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant6	DSI4	Headset		507000	2535	19.66	20.50	1.213			-0.18	0.448	0.543	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		505000	2525	19.63	20.50	1.222			0.09	0.490	0.599	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		509000	2545	19.57	20.50	1.239			0.03	0.517	0.641	DASY
	FR1 n7	50M	BPSK	135	67	Front	5mm	Ant7	DSI4	-		507000	2535	19.50	20.00	1.122			-0.10	0.376	0.422	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant7	DSI4	-		507000	2535	19.50	20.00	1.122			-0.08	0.487	0.546	Csar
	FR1 n7	50M	BPSK	135	67	Left Edge	5mm	Ant7	DSI4	-		507000	2535	19.50	20.00	1.122			-0.05	0.024	0.027	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		507000	2535	19.50	20.00	1.122			0.10	0.634	0.711	DASY
	FR1 n7	50M	BPSK	135	67	Top Edge	5mm	Ant7	DSI4	-		507000	2535	19.50	20.00	1.122			-0.15	0.068	0.076	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	5mm	Ant7	DSI4	-		507000	2535	19.50	20.00	1.122			-0.01	0.024	0.027	Csar
	FR1 n7	50M	BPSK	135	67	Back	5mm	Ant7	DSI4	Headset		507000	2535	19.50	20.00	1.122			-0.04	0.476	0.534	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		505000	2525	19.38	20.00	1.153			0.03	0.684	0.789	DASY
	FR1 n7	50M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		509000	2545	19.46	20.00	1.132			0.15	0.610	0.691	Csar
	FR1 n8	20M	BPSK	50	25	Front	5mm	Ant0	DSI 4	-	Other PA	179500	897.5	24.36	25.00	1.159			-0.11	0.452	0.524	Csar
	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant0	DSI 4	-	Other PA	179500	897.5	24.36	25.00	1.159			0.03	0.580	0.672	Csar
	FR1 n8	20M	BPSK	50	25	Left Edge	5mm	Ant0	DSI 4	-	Other PA	179500	897.5	24.36	25.00	1.159			-0.18	0.069	0.080	Csar
	FR1 n8	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI 4	-	Other PA	179500	897.5	24.36	25.00	1.159			0.00	0.541	0.627	Csar
	FR1 n8	20M	BPSK	50	25	Top Edge	5mm	Ant0	DSI 4	-	Other PA	179500	897.5	24.36	25.00	1.159			0.16	0.036	0.042	Csar
	FR1 n8	20M	BPSK	50	25	Bottom Edge	5mm	Ant0	DSI 4	-	Other PA	179500	897.5	24.36	25.00	1.159			0.09	0.357	0.414	Csar
53	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant0	DSI 4	-	Other PA	178000	890	24.20	25.00	1.202			0.05	0.596	0.716	DASY
	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant0	DSI 4	Headset	Other PA	179500	897.5	24.36	25.00	1.159			-0.12	0.545	0.632	Csar
	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	-		178000	890	24.07	24.70	1.156			-0.06	0.604	0.698	DASY
	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant0	DSI 4	-	Other PA	181000	905	24.30	25.00	1.175			-0.17	0.565	0.664	Csar
	FR1 n8	20M	BPSK	50	25	Front	5mm	Ant1	DSI 3	-	Other PA	179500	897.5	20.24	21.00	1.191			-0.01	0.417	0.497	Csar
	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant1	DSI 3	-	Other PA	179500	897.5	20.24	21.00	1.191			-0.03	0.502	0.598	Csar
	FR1 n8	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI3	-		179500	897.5	20.07	20.70	1.156			-0.16	0.487	0.563	DASY
	FR1 n8	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	179500	897.5	20.24	21.00	1.191			0.04	0.578	0.688	DASY
	FR1 n8	20M	BPSK	50	25	Right Edge	5mm	Ant1	DSI 4	-	Other PA	179500	897.5	24.33	25.00	1.167			-0.11	0.042	0.049	Csar
	FR1 n8	20M	BPSK	50	25	Top Edge	5mm	Ant1	DSI 3	-	Other PA	179500	897.5	20.24	21.00	1.191			-0.06	0.001	0.001	Csar
	FR1 n8	20M	BPSK	50	25	Bottom Edge	5mm	Ant1	DSI 4	-	Other PA	179500	897.5	24.33	25.00	1.167			0.01	0.063	0.074	Csar
	FR1 n8	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	178000	890	20.21	21.00	1.199			-0.19	0.553	0.663	Csar
	FR1 n8	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	181000	905	20.16	21.00	1.213			0.10	0.539	0.654	Csar
	FR1 n8	20M	BPSK	50	25	Back	5mm	Ant1	DSI 3	Headset	Other PA	179500	897.5	20.24	21.00	1.191			-0.07	0.513	0.611	Csar
	FR1 n20	20M	BPSK	50	25	Front	5mm	Ant0	DSI4	-		169400	847	24.27	25.00	1.183			-0.01	0.433	0.512	Csar
	FR1 n20	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	-		169400	847	24.27	25.00	1.183			0.17	0.516	0.610	Csar
	FR1 n20	20M	BPSK	50	25	Left Edge	5mm	Ant0	DSI4	-		169400	847	24.27	25.00	1.183			-0.10	0.117	0.138	Csar
	FR1 n20	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI4	-		169400	847	24.27	25.00	1.183			-0.16	0.536	0.634	Csar
	FR1 n20	20M	BPSK	50	25	Top Edge	5mm	Ant0	DSI4	-		169400	847	24.27	25.00	1.183			0.02	0.001	0.001	Csar
	FR1 n20	20M	BPSK	50	25	Bottom Edge	5mm	Ant0	DSI4	-		169400	847	24.27	25.00	1.183			-0.07	0.327	0.387	Csar
	FR1 n20	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	Headset		169400	847	24.27	25.00	1.183			0.15	0.503	0.595	Csar
	FR1 n20	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI4	-		168400	842	24.24	25.00	1.191			0.05	0.544	0.648	DASY
	FR1 n20	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI4	-		170400	852	24.22	25.00	1.197			0.03	0.487	0.583	Csar
	FR1 n20	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI 4	-	Other PA	168400	842	24.37	25.00	1.156			0.07	0.480	0.555	DASY
	FR1 n20	20M	BPSK	50	25	Front	5mm	Ant1	DSI 3	-	Other PA	169400	847	20.36	21.00	1.159			0.15	0.466	0.540	Csar
	FR1 n20	20M	BPSK	50	25	Back	5mm	Ant1	DSI 3	-	Other PA	169400	847	20.36	21.00	1.159			0.12	0.561	0.650	Csar
	FR1 n20	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	169400	847	20.36	21.00	1.159			0.13	0.654	0.758	DASY
	FR1 n20	20M	BPSK	50	25	Right Edge	5mm	Ant1	DSI 4	-	Other PA	169400	847	24.54	25.00	1.112			-0.12	0.047	0.052	Csar
	FR1 n20	20M	BPSK	50	25	Top Edge	5mm	Ant1	DSI 3	-	Other PA	169400	847	20.36	21.00	1.159			-0.05	0.001	0.001	Csar
	FR1 n20	20M	BPSK	50	25	Bottom Edge	5mm	Ant1	DSI 4	-	Other PA	169400	847	24.54	25.00	1.112			0.11	0.045	0.050	Csar
54	FR1 n20	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	168400	842	20.29	21.00	1.178			0.06	0.650	0.766	DASY
	FR1 n20	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI 3	-	Other PA	170400	852	20.32	21.00	1.169			-0.06	0.630	0.736	DASY
	FR1 n20	20M	BPSK	50	25	Back	5mm	Ant1	DSI 3	Headset	Other PA	169400	847	20.36	21.00	1.159			-0.10	0.562	0.651	Csar
	FR1 n20	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI3	-		168400	842	20.41	21.00	1.146			0.03	0.637	0.730	DASY
	FR1 n26	20M	BPSK	50	25	Front	5mm	Ant0	DSI4	-		166300	831.5	24.73	25.20	1.114			-0.01	0.481	0.536	Csar
	FR1 n26	20M	BPSK	50	25	Back	5mm	Ant0	DSI4	-		166300	831.5	24.73	25.20	1.114			0.15	0.618	0.688	Csar
	FR1 n26	20M	BPSK	50	25	Left Edge	5mm	Ant0	DSI4	-		166300	831.5	24.73	25.20	1.114			0.14	0.058	0.065	Csar
	FR1 n26	20M	BPSK	50	25	Right Edge	5mm	Ant0	DSI4	-		166300	831.5	24.73	25.20	1.114			0.07	0.607	0.676	Csar
	FR1 n26	20M	BPSK	50	25	Top Edge	5mm</															



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	FR1 n26	20M	BPSK	50	25	Front	5mm	Ant1	DSI3	-		166300	831.5	20.89	21.70	1.205			0.15	0.408	0.492	Csar
	FR1 n26	20M	BPSK	50	25	Back	5mm	Ant1	DSI3	-		166300	831.5	20.89	21.70	1.205			0.03	0.509	0.613	Csar
	FR1 n26	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI3	-		166300	831.5	20.89	21.70	1.205			0.03	0.763	0.919	DASY
	FR1 n26	20M	BPSK	50	25	Right Edge	5mm	Ant1	DSI4	-		166300	831.5	24.92	25.70	1.197			0.07	0.032	0.038	Csar
	FR1 n26	20M	BPSK	50	25	Top Edge	5mm	Ant1	DSI3	-		166300	831.5	20.89	21.70	1.205			0.11	0.017	0.020	Csar
	FR1 n26	20M	BPSK	50	25	Bottom Edge	5mm	Ant1	DSI4	-		166300	831.5	24.92	25.70	1.197			0.12	0.017	0.020	Csar
	FR1 n26	20M	BPSK	50	25	Back	5mm	Ant1	DSI3	Headset		166300	831.5	20.89	21.70	1.205			0.12	0.494	0.595	Csar
	FR1 n26	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI3	-		164800	824	20.81	21.70	1.227			0.13	0.588	0.721	DASY
55	FR1 n26	20M	BPSK	50	25	Left Edge	5mm	Ant1	DSI3	-		167800	839	20.86	21.70	1.213			-0.08	0.778	0.944	DASY
	FR1 n28	30M	BPSK	80	40	Front	5mm	Ant0	DSI4	-		143600	718	23.88	25.00	1.294			0.14	0.326	0.422	Csar
	FR1 n28	30M	BPSK	80	40	Back	5mm	Ant0	DSI4	-		143600	718	23.88	25.00	1.294			-0.18	0.403	0.521	Csar
	FR1 n28	30M	BPSK	80	40	Left Edge	5mm	Ant0	DSI4	-		143600	718	23.88	25.00	1.294			-0.00	0.077	0.100	Csar
	FR1 n28	30M	BPSK	80	40	Right Edge	5mm	Ant0	DSI4	-		143600	718	23.88	25.00	1.294			-0.09	0.455	0.589	Csar
	FR1 n28	30M	BPSK	80	40	Top Edge	5mm	Ant0	DSI4	-		143600	718	23.88	25.00	1.294			-0.10	0.001	0.001	Csar
	FR1 n28	30M	BPSK	80	40	Bottom Edge	5mm	Ant0	DSI4	-		143600	718	23.88	25.00	1.294			0.10	0.223	0.289	Csar
	FR1 n28	30M	BPSK	80	40	Right Edge	5mm	Ant0	DSI4	-		146600	733	23.82	25.00	1.312			0.05	0.503	0.660	DASY
	FR1 n28	30M	BPSK	80	40	Back	5mm	Ant0	DSI4	Headset		143600	718	23.88	25.00	1.294			0.13	0.394	0.510	Csar
	FR1 n28	30M	BPSK	80	40	Right Edge	5mm	Ant0	DSI 4	-	Other PA	146600	733	23.98	25.00	1.265			0.01	0.515	0.651	DASY
	FR1 n28	30M	BPSK	80	40	Front	5mm	Ant1	DSI3	-		143600	718	21.32	22.50	1.312			0.11	0.367	0.482	Csar
	FR1 n28	30M	BPSK	80	40	Back	5mm	Ant1	DSI3	-		143600	718	21.32	22.50	1.312			0.02	0.424	0.556	Csar
56	FR1 n28	30M	BPSK	80	40	Left Edge	5mm	Ant1	DSI3	-		143600	718	21.32	22.50	1.312			0.06	0.666	0.874	DASY
	FR1 n28	30M	BPSK	80	40	Left Edge	5mm	Ant1	DSI 3	-	Other PA	143600	718	21.74	22.50	1.191			0.05	0.694	0.827	DASY
	FR1 n28	30M	BPSK	80	40	Right Edge	5mm	Ant1	DSI4	-		143600	718	23.84	25.00	1.306			0.03	0.001	0.001	Csar
	FR1 n28	30M	BPSK	80	40	Top Edge	5mm	Ant1	DSI3	-		143600	718	21.32	22.50	1.312			0.06	0.001	0.001	Csar
	FR1 n28	30M	BPSK	80	40	Bottom Edge	5mm	Ant1	DSI4	-		143600	718	23.84	25.00	1.306			-0.06	0.001	0.001	Csar
	FR1 n28	30M	BPSK	80	40	Left Edge	5mm	Ant1	DSI3	-		146600	733	21.30	22.50	1.318			0.03	0.565	0.745	DASY
	FR1 n28	30M	BPSK	80	40	Back	5mm	Ant1	DSI3	Headset		143600	718	21.32	22.50	1.312			0.17	0.408	0.535	Csar
	FR1 n40	80M	BPSK	108	54	Front	5mm	Ant4	DSI3	-		470000	2350	18.49	19.00	1.125			0.15	0.279	0.314	Csar
	FR1 n40	80M	BPSK	108	54	Back	5mm	Ant4	DSI3	-		470000	2350	18.49	19.00	1.125			-0.16	0.350	0.394	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	5mm	Ant4	DSI3	-		470000	2350	18.49	19.00	1.125			-0.11	0.441	0.496	Csar
	FR1 n40	80M	BPSK	108	54	Right Edge	5mm	Ant4	DSI4	-		470000	2350	24.61	25.00	1.094			-0.14	0.023	0.025	Csar
	FR1 n40	80M	BPSK	108	54	Top Edge	5mm	Ant4	DSI3	-		470000	2350	18.49	19.00	1.125			-0.16	0.045	0.051	Csar
	FR1 n40	80M	BPSK	108	54	Bottom Edge	5mm	Ant4	DSI4	-		470000	2350	24.61	25.00	1.094			0.09	0.062	0.068	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	5mm	Ant4	DSI3	-		468000	2340	18.41	19.00	1.146			0.15	0.436	0.500	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	5mm	Ant4	DSI3	-		472000	2360	18.37	19.00	1.156			0.08	0.462	0.534	DASY
	FR1 n40	80M	BPSK	108	54	Back	5mm	Ant4	DSI3	Headset		470000	2350	18.49	19.00	1.125			-0.03	0.321	0.361	Csar
	FR1 n40	80M	BPSK	108	54	Front	5mm	Ant5	DSI3	-		470000	2350	21.18	22.00	1.208			-0.19	0.404	0.488	Csar
	FR1 n40	80M	BPSK	108	54	Back	5mm	Ant5	DSI3	-		470000	2350	21.18	22.00	1.208			0.04	0.576	0.696	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	5mm	Ant5	DSI3	-		470000	2350	21.18	22.00	1.208			-0.07	0.195	0.236	Csar
	FR1 n40	80M	BPSK	108	54	Right Edge	5mm	Ant5	DSI4	-		470000	2350	23.26	24.00	1.186			0.17	0.047	0.056	Csar
57	FR1 n40	80M	BPSK	108	54	Top Edge	5mm	Ant5	DSI3	-		470000	2350	21.18	22.00	1.208			0.15	0.726	0.877	DASY
	FR1 n40	80M	BPSK	108	54	Bottom Edge	5mm	Ant5	DSI4	-		470000	2350	23.26	24.00	1.186			0.01	0.002	0.002	Csar
	FR1 n40	80M	BPSK	108	54	Top Edge	5mm	Ant5	DSI3	-		468000	2340	21.09	22.00	1.233			0.05	0.667	0.822	DASY
	FR1 n40	80M	BPSK	108	54	Top Edge	5mm	Ant5	DSI3	-		472000	2360	21.13	22.00	1.222			-0.13	0.698	0.853	DASY
	FR1 n40	80M	BPSK	108	54	Back	5mm	Ant5	DSI3	Headset		470000	2350	21.18	22.00	1.208			-0.11	0.538	0.650	Csar
	FR1 n40	80M	BPSK	108	54	Front	5mm	Ant6	DSI4	-		470000	2350	19.96	20.50	1.132			-0.10	0.225	0.255	Csar
	FR1 n40	80M	BPSK	108	54	Back	5mm	Ant6	DSI4	-		470000	2350	19.96	20.50	1.132			-0.16	0.281	0.318	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	5mm	Ant6	DSI4	-		470000	2350	19.96	20.50	1.132			-0.07	0.072	0.082	Csar
	FR1 n40	80M	BPSK	108	54	Right Edge	5mm	Ant6	DSI4	-		470000	2350	19.96	20.50	1.132			0.07	0.059	0.067	Csar
	FR1 n40	80M	BPSK	108	54	Top Edge	5mm	Ant6	DSI4	-		470000	2350	19.96	20.50	1.132			-0.07	0.001	0.001	Csar
	FR1 n40	80M	BPSK	108	54	Bottom Edge	5mm	Ant6	DSI4	-		470000	2350	19.96	20.50	1.132			0.05	0.366	0.414	DASY
	FR1 n40	80M	BPSK	108	54	Bottom Edge	5mm	Ant6	DSI4	-		468000	2340	19.82	20.50	1.169			-0.05	0.345	0.403	Csar
	FR1 n40	80M	BPSK	108	54	Bottom Edge	5mm	Ant6	DSI4	-		472000	2360	19.92	20.50	1.143			0.10	0.357	0.408	Csar
	FR1 n40	80M	BPSK	108	54	Back	5mm	Ant6	DSI4	Headset		470000	2350	19.96	20.50	1.132			-0.03	0.267	0.302	Csar
	FR1 n41	100M	BPSK	135	67	Front	5mm	Ant4	DSI3	-		518598	2592.99	19.01	19.20	1.045			0.02	0.414	0.433	Csar
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant4	DSI3	-		518598	2592.99	19.01	19.20	1.045			0.03	0.538	0.562	Csar
58	FR1 n41	100M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		518598	2592.99	19.01	19.20	1.045			0.08	0.751	0.785	DASY
	FR1 n41_HPUE	100M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		518598	2592.99	21.99	22.50	1.125	50.0	1.0	0.05	0.688	0.774	DASY
	FR1 n41	100M	BPSK	135	67	Right Edge	5mm	Ant4	DSI4	-		518598	2592.99	25.58	25.70	1.028			-0.11	0.058	0.060	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	5mm	Ant4	DSI3	-		518598	2592.99	19.01	19.20	1.045			-0.11	0.063	0.066	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	5mm	Ant4	DSI4	-		518598	2592.99	25.58	25.70	1.028			0.04	0.195	0.200	Csar
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant4	DSI3	Headset		518598	2592.99	19.01	19.20	1.045			0.00	0.514	0.537	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		509202	2546.01	18.96	19.20	1.057			-0.10	0.703	0.743	DASY
	FR1 n41	100M	BPSK	135	67	Left Edge	5mm	Ant4	DSI3	-		528000	2640	18.92	19.20	1.067			0.12	0.699	0.746	DASY
	FR1 n41	100M	BPSK	135	67	Front	5mm	Ant5	DSI3	-		518598	2592.99	17.62	18.50	1.225			0.01	0.166	0.203	Csar
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant5	DSI3	-		518598	2592.99	17.62	18.50	1.225			0.16	0.227	0.278	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	5mm	Ant5	DSI3	-		518598	2592.99	17.62	18.50	1.225			0.18	0.179	0.219	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	5mm	Ant5	DSI4	-		518598	2592.99	24.19	25.00	1.205			-0.02	0.108	0.130	Csar
	FR1 n41	100M	BPSK	13																		



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	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant5	DSI3	Headset		518598	2592.99	17.62	18.50	1.225			0.01	0.211	0.258	Csar
	FR1 n41	100M	BPSK	135	67	Front	5mm	Ant6	DSI4	-		518598	2592.99	19.43	20.00	1.14			0.16	0.306	0.349	Csar
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant6	DSI4	-		518598	2592.99	19.43	20.00	1.14			-0.06	0.391	0.446	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	5mm	Ant6	DSI4	-		518598	2592.99	19.43	20.00	1.14			-0.08	0.079	0.090	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	5mm	Ant6	DSI4	-		518598	2592.99	19.43	20.00	1.14			0.09	0.069	0.079	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	5mm	Ant6	DSI4	-		518598	2592.99	19.43	20.00	1.14			0.04	0.008	0.009	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		518598	2592.99	19.43	20.00	1.14			0.01	0.493	0.562	DASY
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant6	DSI4	Headset		518598	2592.99	19.43	20.00	1.14			0.14	0.356	0.406	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		509202	2546.01	19.38	20.00	1.153			-0.09	0.466	0.537	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		528000	2640	19.33	20.00	1.167			0.18	0.479	0.559	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Bottom Edge	5mm	Ant6	DSI4	-		518598	2592.99	22.32	23.00	1.169	50.0	1.0	-0.04	0.462	0.540	DASY
	FR1 n41	100M	BPSK	135	67	Front	5mm	Ant7	DSI4	-		518598	2592.99	19.37	20.00	1.156			-0.17	0.235	0.272	Csar
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant7	DSI4	-		518598	2592.99	19.37	20.00	1.156			0.04	0.309	0.357	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	5mm	Ant7	DSI4	-		518598	2592.99	19.37	20.00	1.156			-0.05	0.001	0.001	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		518598	2592.99	19.37	20.00	1.156			-0.10	0.311	0.360	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	5mm	Ant7	DSI4	-		518598	2592.99	19.37	20.00	1.156			-0.11	0.051	0.059	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	5mm	Ant7	DSI4	-		518598	2592.99	19.37	20.00	1.156			-0.01	0.005	0.006	Csar
	FR1 n41	100M	BPSK	135	67	Back	5mm	Ant7	DSI4	Headset		518598	2592.99	19.37	20.00	1.156			-0.13	0.284	0.328	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		509202	2546.01	19.33	20.00	1.167			0.05	0.444	0.518	DASY
	FR1 n41	100M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		528000	2640	19.28	20.00	1.18			0.14	0.309	0.365	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Right Edge	5mm	Ant7	DSI4	-		509202	2546.01	22.19	23.00	1.205	50.0	1.0	0.11	0.401	0.483	DASY
	FR1 n77	100M	BPSK	135	67	Front	5mm	Ant8	DSI4	-		650000	3750	17.51	18.50	1.256			0.12	0.161	0.202	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant8	DSI4	-		650000	3750	17.51	18.50	1.256			-0.02	0.223	0.280	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant8	DSI4	-		650000	3750	17.51	18.50	1.256			-0.17	0.008	0.010	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		650000	3750	17.51	18.50	1.256			0.10	0.478	0.600	Csar
	FR1 n77	100M	BPSK	135	67	Top Edge	5mm	Ant8	DSI4	-		650000	3750	17.51	18.50	1.256			0.18	0.053	0.067	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	5mm	Ant8	DSI4	-		650000	3750	17.51	18.50	1.256			-0.09	0.015	0.019	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant8	DSI4	Headset		650000	3750	17.51	18.50	1.256			0.13	0.214	0.269	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		623334	3350.01	17.44	18.50	1.276			-0.06	0.406	0.518	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		633332	3499.98	17.36	18.50	1.3			0.18	0.508	0.660	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		640000	3600	17.48	18.50	1.265			-0.04	0.441	0.558	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		660000	3900	17.46	18.50	1.271			-0.06	0.530	0.674	DASY
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		666666	3999.99	17.39	18.50	1.291			0.18	0.460	0.594	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		676666	4149.99	17.37	18.50	1.297			0.09	0.438	0.568	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Right Edge	5mm	Ant8	DSI4	-		660000	3900	20.06	22.00	1.563	50.0	1.0	-0.11	0.415	0.649	DASY
	FR1 n77	100M	BPSK	135	67	Front	5mm	Ant9	DSI3	-		650000	3750	18.88	19.50	1.153			0.01	0.178	0.205	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant9	DSI3	-		650000	3750	18.88	19.50	1.153			-0.19	0.224	0.258	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		650000	3750	18.88	19.50	1.153			-0.04	0.451	0.520	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		623334	3350.01	18.72	19.50	1.197			0.03	0.485	0.581	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		633332	3499.98	18.76	19.50	1.186			0.04	0.584	0.693	DASY
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		640000	3600	18.71	19.50	1.199			-0.11	0.571	0.685	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		660000	3900	18.82	19.50	1.169			-0.04	0.509	0.595	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		666666	3999.99	18.67	19.50	1.211			0.18	0.494	0.598	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		676666	4149.99	18.84	19.50	1.164			-0.18	0.475	0.553	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant9	DSI4	-		650000	3750	21.98	22.50	1.127			0.05	0.007	0.008	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Left Edge	5mm	Ant9	DSI3	-		633332	3499.98	21.66	22.50	1.213	50.0	1.0	-0.18	0.533	0.647	DASY
	FR1 n77	100M	BPSK	135	67	Top Edge	5mm	Ant9	DSI3	-		650000	3750	18.88	19.50	1.153			0.17	0.050	0.058	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	5mm	Ant9	DSI4	-		650000	3750	21.98	22.50	1.127			-0.04	0.019	0.021	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant9	DSI3	Headset		650000	3750	18.88	19.50	1.153			0.07	0.210	0.242	Csar
	FR1 n77	100M	BPSK	135	67	Front	5mm	Ant10	DSI3	-		650000	3750	16.07	17.00	1.239			-0.00	0.232	0.287	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant10	DSI3	-		650000	3750	16.07	17.00	1.239			-0.16	0.262	0.325	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant10	DSI3	-		650000	3750	16.07	17.00	1.239			-0.12	0.033	0.041	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		650000	3750	25.12	26.00	1.225			0.18	0.521	0.638	Csar
	FR1 n77	100M	BPSK	135	67	Top Edge	5mm	Ant10	DSI3	-		650000	3750	16.07	17.00	1.239			-0.16	0.508	0.629	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	5mm	Ant10	DSI4	-		650000	3750	25.12	26.00	1.225			0.08	0.018	0.022	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant10	DSI3	Headset		650000	3750	16.07	17.00	1.239			-0.07	0.238	0.295	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		633332	3499.98	27.14	28.00	1.219	50.0	1.0	-0.09	0.503	0.613	DASY
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		623334	3350.01	24.81	26.00	1.315			-0.01	0.592	0.778	Csar
59	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		633332	3499.98	25.01	26.00	1.256			0.05	0.636	0.799	DASY
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		640000	3600	24.96	26.00	1.271			0.03	0.585	0.744	DASY
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		660000	3900	24.65	26.00	1.365			0.11	0.428	0.584	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		666666	3999.99	24.93	26.00	1.279			-0.19	0.440	0.563	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant10	DSI4	-		676666	4149.99	24.67	26.00	1.358			-0.07	0.418	0.568	Csar
	FR1 n77	100M	BPSK	135	67	Front	5mm	Ant11	DSI3	-		650000	3750	18.91	20.00	1.285			0.06	0.318	0.409	Csar
	FR1 n77	100M	BPSK	135	67	Back	5mm	Ant11	DSI3	-		650000	3750	18.91	20.00	1.285			-0.05	0.161	0.207	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	5mm	Ant11	DSI3	-		650000	3750	18.91	20.00	1.285			-0.12	0.047	0.060	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	5mm	Ant11	DSI4	-		633332	3499.98	22.05	23.00	1.245			0.03	0.001	0.001	Csar
	FR1 n77	100																				



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FR1 n77_HPUE	100M	BPSK	135	67	Top Edge	5mm	Ant11	DSI3	-		660000	3900	21.85	23.00	1.303	50.0	1.0	0.05	0.380	0.495	DASY
FR1 n77	100M	BPSK	135	67	Top Edge	5mm	Ant11	DSI3	-		666666	3999.99	18.75	20.00	1.334			-0.16	0.363	0.484	Csar
FR1 n77	100M	BPSK	135	67	Top Edge	5mm	Ant11	DSI3	-		676666	4149.99	18.76	20.00	1.33			0.13	0.267	0.355	Csar
FR1 n77	100M	BPSK	135	67	Bottom Edge	5mm	Ant11	DSI4	-		633332	3499.98	22.05	23.00	1.245			0.05	0.001	0.001	Csar

[WLAN 2.4GHz_5GHz SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Headset	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	WLAN2.4GHz	802.11g 6Mbps	Front	5mm	Ant7	Body Standalone	-	1	2412	17.98	18.50	1.127	98.98	1.01	0.03	0.305	0.347	Csar
	WLAN2.4GHz	802.11g 6Mbps	Back	5mm	Ant7	Body Standalone	-	1	2412	17.98	18.50	1.127	98.98	1.01	0.13	0.388	0.442	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Edge	5mm	Ant7	Body Standalone	-	1	2412	17.98	18.50	1.127	98.98	1.01	-0.11	0.001	0.001	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	5mm	Ant7	Body Standalone	-	1	2412	17.98	18.50	1.127	98.98	1.01	0.16	0.470	0.535	Csar
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	5mm	Ant7	Body Standalone	-	1	2412	17.98	18.50	1.127	98.98	1.01	0.11	0.044	0.050	Csar
	WLAN2.4GHz	802.11g 6Mbps	Bottom Edge	5mm	Ant7	Body Standalone	-	1	2412	17.98	18.50	1.127	98.98	1.01	-0.14	0.020	0.023	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	5mm	Ant7	Body Standalone	-	7	2442	17.84	18.50	1.164	98.98	1.01	0.06	0.533	0.627	DASY
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	5mm	Ant7	Body Standalone	-	13	2412	17.66	18.50	1.213	98.98	1.01	-0.04	0.482	0.591	Csar
	WLAN2.4GHz	802.11g 6Mbps	Back	5mm	Ant7	Body Standalone	Headset	1	2412	17.98	18.50	1.127	98.98	1.01	-0.04	0.377	0.429	Csar
	WLAN2.4GHz	802.11g 6Mbps	Front	5mm	Ant12	Body Standalone	-	7	2442	18.41	19.00	1.146	99.31	1.007	0.13	0.244	0.282	Csar
	WLAN2.4GHz	802.11g 6Mbps	Back	5mm	Ant12	Body Standalone	-	7	2442	18.41	19.00	1.146	99.31	1.007	-0.19	0.369	0.426	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Edge	5mm	Ant12	Body Standalone	-	7	2442	18.41	19.00	1.146	99.31	1.007	-0.16	0.001	0.001	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	5mm	Ant12	Body Standalone	-	7	2442	18.41	19.00	1.146	99.31	1.007	-0.13	0.090	0.104	Csar
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	5mm	Ant12	Body Standalone	-	7	2442	18.41	19.00	1.146	99.31	1.007	0.19	0.624	0.720	DASY
	WLAN2.4GHz	802.11g 6Mbps	Bottom Edge	5mm	Ant12	Body Standalone	-	7	2442	18.41	19.00	1.146	99.31	1.007	-0.14	0.001	0.001	Csar
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	5mm	Ant12	Body Standalone	-	1	2412	18.17	19.00	1.211	99.31	1.007	0.05	0.714	0.871	DASY
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	5mm	Ant12	Body Standalone	-	13	2472	18.33	19.00	1.167	99.31	1.007	0.11	0.694	0.816	DASY
	WLAN2.4GHz	802.11g 6Mbps	Back	5mm	Ant12	Body Standalone	Headset	7	2442	18.41	19.00	1.146	99.31	1.007	-0.18	0.357	0.412	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Front	5mm	Ant 7+12	Body Standalone	-	13	2472	21.06	22.00	1.241	100.0	1.0	-0.01	0.396	0.491	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Back	5mm	Ant 7+12	Body Standalone	-	13	2472	21.06	22.00	1.241	100.0	1.0	0.06	0.474	0.588	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Edge	5mm	Ant 7+12	Body Standalone	-	13	2472	21.06	22.00	1.241	100.0	1.0	-0.13	0.034	0.042	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Right Edge	5mm	Ant 7+12	Body Standalone	-	13	2472	21.06	22.00	1.241	100.0	1.0	-0.01	0.557	0.691	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Top Edge	5mm	Ant 7+12	Body Standalone	-	13	2472	21.06	22.00	1.241	100.0	1.0	-0.17	0.691	0.858	DASY
	WLAN2.4GHz	802.11n-HT20 MCS0	Bottom Edge	5mm	Ant 7+12	Body Standalone	-	13	2472	21.06	22.00	1.241	100.0	1.0	0.08	0.022	0.027	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Top Edge	5mm	Ant 7+12	Body Standalone	-	1	2412	20.97	22.00	1.268	100.0	1.0	-0.09	0.679	0.861	DASY
60	WLAN2.4GHz	802.11n-HT20 MCS0	Top Edge	5mm	Ant 7+12	Body Standalone	-	7	2442	21.00	22.00	1.259	100.0	1.0	0.02	0.749	0.943	DASY
	WLAN2.4GHz	802.11n-HT20 MCS0	Back	5mm	Ant 7+12	Body Standalone	Headset	13	2472	21.06	22.00	1.241	100.0	1.0	0.01	0.459	0.570	Csar
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant 8+10	Body Standalone	-	64	5320	19.02	20.00	1.253	99.32	1.007	0.18	0.337	0.425	Csar
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant 8+10	Body Standalone	-	64	5320	19.02	20.00	1.253	99.32	1.007	-0.03	0.360	0.454	Csar
	WLAN5GHz	802.11a 6Mbps	Left Edge	5mm	Ant 8+10	Body Standalone	-	64	5320	19.02	20.00	1.253	99.32	1.007	-0.14	0.044	0.056	Csar
	WLAN5GHz	802.11a 6Mbps	Right Edge	5mm	Ant 8+10	Body Standalone	-	64	5320	19.02	20.00	1.253	99.32	1.007	0.05	0.433	0.546	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	5mm	Ant 8+10	Body Standalone	-	64	5320	19.02	20.00	1.253	99.32	1.007	-0.12	0.606	0.765	DASY
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	5mm	Ant 8+10	Body Standalone	-	64	5320	19.02	20.00	1.253	99.32	1.007	-0.06	0.018	0.023	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	5mm	Ant 8+10	Body Standalone	-	36	5180	18.46	19.50	1.272	99.32	1.007	-0.09	0.506	0.648	Csar
61	WLAN5GHz	802.11a 6Mbps	Top Edge	5mm	Ant 8+10	Body Standalone	-	52	5260	18.80	19.50	1.175	99.32	1.007	0.19	0.659	0.780	DASY
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant 8+10	Body Standalone	Headset	64	5320	19.02	20.00	1.253	99.32	1.007	0.00	0.348	0.439	Csar
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant 8+10	Body Standalone	-	140	5700	19.12	20.00	1.225	99.32	1.007	0.04	0.144	0.178	Csar
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant 8+10	Body Standalone	-	140	5700	19.12	20.00	1.225	99.32	1.007	-0.14	0.171	0.211	Csar
	WLAN5GHz	802.11a 6Mbps	Left Edge	5mm	Ant 8+10	Body Standalone	-	140	5700	19.12	20.00	1.225	99.32	1.007	-0.10	0.032	0.039	Csar
	WLAN5GHz	802.11a 6Mbps	Right Edge	5mm	Ant 8+10	Body Standalone	-	140	5700	19.12	20.00	1.225	99.32	1.007	0.01	0.204	0.252	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	5mm	Ant 8+10	Body Standalone	-	140	5700	19.12	20.00	1.225	99.32	1.007	0.01	0.458	0.565	DASY
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	5mm	Ant 8+10	Body Standalone	-	140	5700	19.12	20.00	1.225	99.32	1.007	0.02	0.010	0.012	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	5mm	Ant 8+10	Body Standalone	-	100	5500	18.41	19.50	1.286	99.32	1.007	0.18	0.297	0.385	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	5mm	Ant 8+10	Body Standalone	-	116	5580	18.57	19.50	1.238	99.32	1.007	-0.05	0.342	0.426	Csar
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant 8+10	Body Standalone	Headset	140	5700	19.12	20.00	1.225	99.32	1.007	0.10	0.163	0.201	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Front	5mm	Ant 8+10	Body Standalone	-	165	5825	14.52	15.50	1.253	100.0	1.0	0.13	0.047	0.059	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Back	5mm	Ant 8+10	Body Standalone	-	165	5825	14.52	15.50	1.253	100.0	1.0	-0.19	0.051	0.064	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Left Edge	5mm	Ant 8+10	Body Standalone	-	165	5825	14.52	15.50	1.253	100.0	1.0	0.14	0.018	0.023	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Right Edge	5mm	Ant 8+10	Body Standalone	-	165	5825	14.52	15.50	1.253	100.0	1.0	-0.06	0.067	0.084	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Top Edge	5mm	Ant 8+10	Body Standalone	-	165	5825	14.52	15.50	1.253	100.0	1.0	0.03	0.133	0.167	DASY
	WLAN5GHz	802.11be-EHT20 MCS0	Bottom Edge	5mm	Ant 8+10	Body Standalone	-	165	5825	14.52	15.50	1.253	100.0	1.0	0.08	0.011	0.014	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Top Edge	5mm	Ant 8+10	Body Standalone	-	149	5745	14.49	15.50	1.262	100.0	1.0	-0.12	0.115	0.145	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Top Edge	5mm	Ant 8+10	Body Standalone	-	157	5785	14.38	15.50	1.295	100.0	1.0	0.10	0.122	0.158	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Back	5mm	Ant 8+10	Body Standalone	Headset	165	5825	14.52	15.50	1.253	100.0	1.0	-0.16	0.044	0.055	Csar

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Headset	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	Bluetooth	1Mbps	Front	5mm	Ant7	Full power	-	39	2441	20.26	21.5	1.33	77.32	1.077	-0.05	0.387	0.554	Csar
	Bluetooth	1Mbps	Back	5mm	Ant7	Full power	-	39	2441	20.26	21.5	1.33	77.32	1.077	-0.19	0.445	0.637	DASY
	Bluetooth	1Mbps	Left Edge	5mm	Ant7	Full power	-	39	2441	20.26	21.5	1.33	77.32	1.077	0.04	0.001	0.001	Csar
62	Bluetooth	1Mbps	Right Edge	5mm	Ant7	Full power	-	39	2441	20.26	21.5	1.33	77.32	1.077	0.07	0.53	0.759	DASY
	Bluetooth	1Mbps	Top Edge	5mm	Ant7	Full power	-	39	2441	20.26	21.5	1.33	77.32	1.077	-0.17	0.001	0.001	Csar
	Bluetooth	1Mbps	Bottom Edge	5mm	Ant7	Full power	-	39	2441	20.26	21.5	1.33	77.32	1.077	-0.08	0.001	0.001	Csar
	Bluetooth	1Mbps	Right Edge	5mm	Ant7	Full power	-	0	2402	19.23	21.00	1.503	77.32	1.077	0.04	0.378	0.612	Csar
	Bluetooth	1Mbps	Right Edge	5mm	Ant7	Full power	-	78	2480	19.90	21.50	1.445	77.32	1.077	-0.03	0.382	0.594	Csar
	Bluetooth	1Mbps	Back	5mm	Ant7	Full power	Headset	39	2441	20.26	21.5	1.33	77.32	1.077	0.03	0.411	0.589	Csar
	Bluetooth	1Mbps	Front	5mm	Ant12	Full power	-	0	2402	19.27	21.00	1.489	77.06	1.081	-0.03	0.157	0.253	Csar
	Bluetooth	1Mbps	Back	5mm	Ant12	Full power	-	0	2402	19.27	21.00	1.489	77.06	1.081	0.02	0.220	0.354	Csar
	Bluetooth	1Mbps	Left Edge	5mm	Ant12	Full power	-	0	2402	19.27	21.00	1.489	77.06	1.081	0.03	0.001	0.002	Csar
	Bluetooth	1Mbps	Right Edge	5mm	Ant12	Full power	-	0	2402	19.27	21.00	1.489	77.06	1.081	0.09	0.049	0.079	Csar
	Bluetooth	1Mbps	Top Edge	5mm	Ant12	Full power	-	0	2402	19.27	21.00	1.489	77.06	1.081	-0.04	0.496	0.798	DASY
	Bluetooth	1Mbps	Bottom Edge	5mm	Ant12	Full power	-	0	2402	19.27	21.00	1.489	77.06	1.081	-0.14	0.001	0.002	Csar
	Bluetooth	1Mbps	Top Edge	5mm	Ant12	Full power	-	39	2441	19.25	21.00	1.496	77.06	1.081	-0.16	0.389	0.629	Csar
	Bluetooth	1Mbps	Top Edge	5mm	Ant12	Full power	-	78	2480	19.11	20.50	1.377	77.06	1.081	0.12	0.554	0.825	DASY
	Bluetooth	1Mbps	Back	5mm	Ant12	Full power	Headset	0	2402	19.27	21.00	1.489	77.06	1.081	0.09	0.205	0.330	Csar

16.3 Limbs SAR

[GSM SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	GSM900	GPRS 4 Tx slots	Front	0mm	Ant0	DSI4	37	897.4	26.76	28.00	1.33	-0.16	1.060	1.410	Csar
	GSM900	GPRS 4 Tx slots	Back	0mm	Ant0	DSI4	37	897.4	26.76	28.00	1.33	0.16	1.140	1.516	Csar
	GSM900	GPRS 4 Tx slots	Left Edge	0mm	Ant0	DSI4	37	897.4	26.76	28.00	1.33	0.03	0.112	0.149	Csar
	GSM900	GPRS 4 Tx slots	Right Edge	0mm	Ant0	DSI4	37	897.4	26.76	28.00	1.33	-0.10	0.733	0.975	Csar
	GSM900	GPRS 4 Tx slots	Top Edge	0mm	Ant0	DSI4	37	897.4	26.76	28.00	1.33	-0.01	0.093	0.124	Csar
63	GSM900	GPRS 4 Tx slots	Bottom Edge	0mm	Ant0	DSI4	37	897.4	26.76	28.00	1.33	0.12	1.480	1.968	DASY
	GSM900	GPRS 4 Tx slots	Bottom Edge	0mm	Ant0	DSI4	975	880.2	26.61	28.00	1.377	-0.04	0.980	1.349	Csar
	GSM900	GPRS 4 Tx slots	Bottom Edge	0mm	Ant0	DSI4	124	914.8	26.52	28.00	1.406	0.14	1.320	1.856	DASY
	GSM900	GPRS 4 Tx slots	Front	0mm	Ant1	DSI3	37	897.4	23.54	25.00	1.4	0.09	0.871	1.219	DASY
	GSM900	GPRS 4 Tx slots	Back	0mm	Ant1	DSI3	37	897.4	23.54	25.00	1.4	-0.14	0.583	0.816	Csar
	GSM900	GPRS 4 Tx slots	Left Edge	0mm	Ant1	DSI3	37	897.4	23.54	25.00	1.4	0.12	0.436	0.610	Csar
	GSM900	GPRS 4 Tx slots	Right Edge	0mm	Ant1	DSI4	37	897.4	26.98	28.50	1.419	-0.01	0.032	0.045	Csar
	GSM900	GPRS 4 Tx slots	Top Edge	0mm	Ant1	DSI3	37	897.4	23.54	25.00	1.4	0.18	0.061	0.085	Csar
	GSM900	GPRS 4 Tx slots	Bottom Edge	0mm	Ant1	DSI4	37	897.4	26.98	28.50	1.419	-0.08	0.027	0.038	Csar
	GSM900	GPRS 4 Tx slots	Front	0mm	Ant1	DSI3	975	880.2	23.48	25.00	1.419	0.05	0.706	1.002	Csar
	GSM900	GPRS 4 Tx slots	Front	0mm	Ant1	DSI3	124	914.8	23.51	25.00	1.409	-0.11	0.671	0.945	Csar
	GSM1800	GPRS 4 Tx slots	Front	0mm	Ant4	DSI3	698	1747.4	24.11	25.50	1.377	-0.13	1.020	1.405	Csar
	GSM1800	GPRS 4 Tx slots	Back	0mm	Ant4	DSI3	698	1747.4	24.11	25.50	1.377	0.19	0.609	0.839	Csar
	GSM1800	GPRS 4 Tx slots	Left Edge	0mm	Ant4	DSI3	698	1747.4	24.11	25.50	1.377	0.12	0.989	1.362	Csar
	GSM1800	GPRS 4 Tx slots	Right Edge	0mm	Ant4	DSI4	698	1747.4	24.11	25.50	1.377	-0.09	0.030	0.041	Csar
	GSM1800	GPRS 4 Tx slots	Top Edge	0mm	Ant4	DSI3	698	1747.4	24.11	25.50	1.377	-0.08	0.453	0.624	Csar
	GSM1800	GPRS 4 Tx slots	Bottom Edge	0mm	Ant4	DSI4	698	1747.4	24.11	25.50	1.377	-0.18	0.086	0.118	Csar
	GSM1800	GPRS 4 Tx slots	Front	0mm	Ant4	DSI3	512	1710.2	24.07	25.50	1.39	-0.18	0.989	1.375	Csar
	GSM1800	GPRS 4 Tx slots	Front	0mm	Ant4	DSI3	885	1784.8	24.09	25.50	1.384	0.02	1.030	1.426	DASY
	GSM1800	GPRS 4 Tx slots	Front	0mm	Ant6	DSI4	698	1747.4	23.68	25.00	1.355	0.13	1.100	1.491	Csar
	GSM1800	GPRS 4 Tx slots	Back	0mm	Ant6	DSI4	698	1747.4	23.68	25.00	1.355	-0.06	1.410	1.911	DASY
	GSM1800	GPRS 4 Tx slots	Left Edge	0mm	Ant6	DSI4	698	1747.4	23.68	25.00	1.355	0.02	0.208	0.282	Csar
	GSM1800	GPRS 4 Tx slots	Right Edge	0mm	Ant6	DSI4	698	1747.4	23.68	25.00	1.355	-0.01	0.181	0.245	Csar
	GSM1800	GPRS 4 Tx slots	Top Edge	0mm	Ant6	DSI4	698	1747.4	23.68	25.00	1.355	0.06	0.001	0.001	Csar
	GSM1800	GPRS 4 Tx slots	Bottom Edge	0mm	Ant6	DSI4	698	1747.4	23.68	25.00	1.355	-0.16	0.715	0.969	Csar
	GSM1800	GPRS 4 Tx slots	Back	0mm	Ant6	DSI4	512	1710.2	23.62	25.00	1.374	0.02	1.230	1.690	Csar
64	GSM1800	GPRS 4 Tx slots	Back	0mm	Ant6	DSI4	885	1784.8	23.42	25.00	1.439	0.09	1.450	2.087	DASY
	GSM850	GPRS 4 Tx slots	Front	0mm	Ant0	DSI4	189	836.4	26.73	28.00	1.34	-0.10	1.350	1.809	DASY
	GSM850	GPRS 4 Tx slots	Back	0mm	Ant0	DSI4	189	836.4	26.73	28.00	1.34	0.11	1.250	1.675	Csar
	GSM850	GPRS 4 Tx slots	Left Edge	0mm	Ant0	DSI4	189	836.4	26.73	28.00	1.34	0.08	0.166	0.222	Csar
	GSM850	GPRS 4 Tx slots	Right Edge	0mm	Ant0	DSI4	189	836.4	26.73	28.00	1.34	-0.16	0.722	0.967	Csar
	GSM850	GPRS 4 Tx slots	Top Edge	0mm	Ant0	DSI4	189	836.4	26.73	28.00	1.34	-0.17	0.071	0.095	Csar
65	GSM850	GPRS 4 Tx slots	Bottom Edge	0mm	Ant0	DSI4	189	836.4	26.73	28.00	1.34	-0.01	1.570	2.104	DASY
	GSM850	GPRS 4 Tx slots	Bottom Edge	0mm	Ant0	DSI4	128	824.2	26.06	28.00	1.563	0.15	1.290	2.016	DASY
	GSM850	GPRS 4 Tx slots	Bottom Edge	0mm	Ant0	DSI4	251	848.8	26.41	28.00	1.442	0.06	1.350	1.947	DASY
	GSM850	GPRS 4 Tx slots	Front	0mm	Ant1	DSI3	189	836.4	23.98	25.50	1.419	0.07	0.636	0.902	DASY
	GSM850	GPRS 4 Tx slots	Back	0mm	Ant1	DSI3	189	836.4	23.98	25.50	1.419	0.13	0.442	0.627	Csar
	GSM850	GPRS 4 Tx slots	Left Edge	0mm	Ant1	DSI3	189	836.4	23.98	25.50	1.419	0.19	0.462	0.656	Csar
	GSM850	GPRS 4 Tx slots	Right Edge	0mm	Ant1	DSI4	189	836.4	26.98	28.50	1.419	0.19	0.026	0.037	Csar
	GSM850	GPRS 4 Tx slots	Top Edge	0mm	Ant1	DSI3	189	836.4	23.98	25.50	1.419	0.08	0.060	0.085	Csar
	GSM850	GPRS 4 Tx slots	Bottom Edge	0mm	Ant1	DSI4	189	836.4	26.98	28.50	1.419	-0.14	0.024	0.034	Csar
	GSM850	GPRS 4 Tx slots	Front	0mm	Ant1	DSI3	128	824.2	23.67	25.50	1.524	0.18	0.579	0.882	Csar
	GSM850	GPRS 4 Tx slots	Front	0mm	Ant1	DSI3	251	848.8	23.95	25.50	1.429	-0.02	0.571	0.816	Csar

[WCDMA SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	WCDMA I	RMC 12.2Kbps	Front	0mm	Ant4	DSI3	9750	1950	20.20	21.00	1.202	0.04	1.340	1.611	Csar
	WCDMA I	RMC 12.2Kbps	Back	0mm	Ant4	DSI3	9750	1950	20.20	21.00	1.202	-0.04	0.643	0.773	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	0mm	Ant4	DSI3	9750	1950	20.20	21.00	1.202	0.12	2.050	2.464	DASY
	WCDMA I	RMC 12.2Kbps	Left Edge	0mm	Ant4	DSI3	9612	1922.4	20.11	21.00	1.227	-0.14	2.000	2.454	DASY
66	WCDMA I	RMC 12.2Kbps	Left Edge	0mm	Ant4	DSI3	9888	1977.6	20.18	21.00	1.208	0.03	2.100	2.537	DASY
	WCDMA I	RMC 12.2Kbps	Right Edge	0mm	Ant4	DSI4	9750	1950	24.23	25.00	1.194	-0.06	0.110	0.131	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	0mm	Ant4	DSI3	9750	1950	20.20	21.00	1.202	0.09	0.292	0.351	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	0mm	Ant4	DSI4	9750	1950	24.23	25.00	1.194	0.00	0.158	0.189	Csar
	WCDMA I	RMC 12.2Kbps	Front	0mm	Ant5	DSI3	9750	1950	19.09	20.00	1.233	0.00	1.320	1.628	Csar
	WCDMA I	RMC 12.2Kbps	Back	0mm	Ant5	DSI3	9750	1950	19.09	20.00	1.233	-0.02	0.475	0.586	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	0mm	Ant5	DSI3	9750	1950	19.09	20.00	1.233	0.11	0.185	0.228	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	0mm	Ant5	DSI4	9750	1950	23.22	24.00	1.197	0.11	0.256	0.306	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	0mm	Ant5	DSI3	9750	1950	19.09	20.00	1.233	-0.01	0.755	0.931	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	0mm	Ant5	DSI4	9750	1950	23.22	24.00	1.197	-0.03	0.016	0.019	Csar
	WCDMA I	RMC 12.2Kbps	Front	0mm	Ant5	DSI3	9612	1922.4	19.03	20.00	1.25	0.09	1.330	1.663	DASY
	WCDMA I	RMC 12.2Kbps	Front	0mm	Ant5	DSI3	9888	1977.6	18.96	20.00	1.271	-0.15	1.160	1.474	Csar
	WCDMA I	RMC 12.2Kbps	Front	0mm	Ant6	DSI4	9750	1950	19.59	20.50	1.233	0.14	1.120	1.381	Csar
	WCDMA I	RMC 12.2Kbps	Back	0mm	Ant6	DSI4	9750	1950	19.59	20.50	1.233	0.01	1.270	1.566	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	0mm	Ant6	DSI4	9750	1950	19.59	20.50	1.233	-0.11	0.271	0.334	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	0mm	Ant6	DSI4	9750	1950	19.59	20.50	1.233	0.11	0.140	0.173	Csar
	WCDMA I	RMC 12.2Kbps	Top Edge	0mm	Ant6	DSI4	9750	1950	19.59	20.50	1.233	0.05	0.001	0.001	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	0mm	Ant6	DSI4	9750	1950	19.59	20.50	1.233	0.16	1.500	1.850	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	0mm	Ant6	DSI4	9612	1922.4	19.56	20.50	1.242	0.04	1.560	1.938	DASY
	WCDMA I	RMC 12.2Kbps	Bottom Edge	0mm	Ant6	DSI4	9888	1977.6	19.57	20.50	1.239	0.19	1.480	1.834	Csar
	WCDMA I	RMC 12.2Kbps	Front	0mm	Ant7	DSI4	9750	1950	20.33	21.50	1.309	0.08	1.060	1.388	Csar
	WCDMA I	RMC 12.2Kbps	Back	0mm	Ant7	DSI4	9750	1950	20.33	21.50	1.309	0.12	0.503	0.658	Csar
	WCDMA I	RMC 12.2Kbps	Left Edge	0mm	Ant7	DSI4	9750	1950	20.33	21.50	1.309	0.06	0.001	0.001	Csar
	WCDMA I	RMC 12.2Kbps	Right Edge	0mm	Ant7	DSI4	9750	1950	20.33	21.50	1.309	-0.02	1.700	2.225	DASY
	WCDMA I	RMC 12.2Kbps	Right Edge	0mm	Ant7	DSI4	9612	1922.4	20.31	21.50	1.315	0.04	1.820	2.393	DASY
	WCDMA I	RMC 12.2Kbps	Right Edge	0mm	Ant7	DSI4	9888	1977.6	20.29	21.50	1.321	-0.14	1.630	2.153	DASY
	WCDMA I	RMC 12.2Kbps	Top Edge	0mm	Ant7	DSI4	9750	1950	20.33	21.50	1.309	-0.03	0.078	0.102	Csar
	WCDMA I	RMC 12.2Kbps	Bottom Edge	0mm	Ant7	DSI4	9750	1950	20.33	21.50	1.309	0.13	0.057	0.075	Csar
	WCDMA V	RMC 12.2Kbps	Front	0mm	Ant0	DSI4	4182	836.4	23.66	24.50	1.213	-0.11	1.150	1.395	Csar
	WCDMA V	RMC 12.2Kbps	Back	0mm	Ant0	DSI4	4182	836.4	23.66	24.50	1.213	-0.17	1.210	1.468	Csar
	WCDMA V	RMC 12.2Kbps	Left Edge	0mm	Ant0	DSI4	4182	836.4	23.66	24.50	1.213	0.15	0.121	0.147	Csar
	WCDMA V	RMC 12.2Kbps	Right Edge	0mm	Ant0	DSI4	4182	836.4	23.66	24.50	1.213	0.05	0.937	1.137	Csar
	WCDMA V	RMC 12.2Kbps	Top Edge	0mm	Ant0	DSI4	4182	836.4	23.66	24.50	1.213	-0.14	0.068	0.082	Csar
67	WCDMA V	RMC 12.2Kbps	Bottom Edge	0mm	Ant0	DSI4	4182	836.4	23.66	24.50	1.213	0.08	1.830	2.220	DASY
	WCDMA V	RMC 12.2Kbps	Bottom Edge	0mm	Ant0	DSI4	4132	826.4	23.59	24.50	1.233	0.04	1.680	2.071	DASY
	WCDMA V	RMC 12.2Kbps	Bottom Edge	0mm	Ant0	DSI4	4233	846.6	23.62	24.50	1.225	-0.18	1.740	2.131	DASY
	WCDMA V	RMC 12.2Kbps	Front	0mm	Ant1	DSI3	4182	836.4	20.58	21.50	1.236	0.06	0.816	1.009	DASY
	WCDMA V	RMC 12.2Kbps	Back	0mm	Ant1	DSI3	4182	836.4	20.58	21.50	1.236	-0.11	0.570	0.705	Csar
	WCDMA V	RMC 12.2Kbps	Left Edge	0mm	Ant1	DSI3	4182	836.4	20.58	21.50	1.236	0.14	0.525	0.649	Csar
	WCDMA V	RMC 12.2Kbps	Right Edge	0mm	Ant1	DSI4	4182	836.4	24.75	25.50	1.189	-0.12	0.062	0.074	Csar
	WCDMA V	RMC 12.2Kbps	Top Edge	0mm	Ant1	DSI3	4182	836.4	20.58	21.50	1.236	0.04	0.111	0.137	Csar
	WCDMA V	RMC 12.2Kbps	Bottom Edge	0mm	Ant1	DSI4	4182	836.4	24.75	25.50	1.189	-0.17	0.138	0.164	Csar
	WCDMA V	RMC 12.2Kbps	Front	0mm	Ant1	DSI3	4132	826.4	20.56	21.50	1.242	0.17	0.765	0.950	Csar
	WCDMA V	RMC 12.2Kbps	Front	0mm	Ant1	DSI3	4233	846.6	20.53	21.50	1.25	-0.12	0.720	0.900	Csar
	WCDMA VIII	RMC 12.2Kbps	Front	0mm	Ant0	DSI4	2788	897.6	24.25	25.00	1.189	0.10	1.330	1.581	Csar
	WCDMA VIII	RMC 12.2Kbps	Back	0mm	Ant0	DSI4	2788	897.6	24.25	25.00	1.189	0.07	1.310	1.558	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Edge	0mm	Ant0	DSI4	2788	897.6	24.25	25.00	1.189	-0.16	0.120	0.143	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Edge	0mm	Ant0	DSI4	2788	897.6	24.25	25.00	1.189	0.10	0.791	0.940	Csar
	WCDMA VIII	RMC 12.2Kbps	Top Edge	0mm	Ant0	DSI4	2788	897.6	24.25	25.00	1.189	0.11	0.100	0.119	Csar
	WCDMA VIII	RMC 12.2Kbps	Bottom Edge	0mm	Ant0	DSI4	2788	897.6	24.25	25.00	1.189	-0.01	1.700	2.021	DASY
68	WCDMA VIII	RMC 12.2Kbps	Bottom Edge	0mm	Ant0	DSI4	2712	882.4	24.19	25.00	1.205	0.02	1.750	2.109	DASY
	WCDMA VIII	RMC 12.2Kbps	Bottom Edge	0mm	Ant0	DSI4	2863	912.6	24.23	25.00	1.194	-0.10	1.600	1.910	DASY
	WCDMA VIII	RMC 12.2Kbps	Front	0mm	Ant1	DSI3	2788	897.6	20.66	21.50	1.213	-0.11	0.858	1.041	Csar
	WCDMA VIII	RMC 12.2Kbps	Back	0mm	Ant1	DSI3	2788	897.6	20.66	21.50	1.213	0.04	0.645	0.782	Csar
	WCDMA VIII	RMC 12.2Kbps	Left Edge	0mm	Ant1	DSI3	2788	897.6	20.66	21.50	1.213	0.04	0.536	0.650	Csar
	WCDMA VIII	RMC 12.2Kbps	Right Edge	0mm	Ant1	DSI4	2788	897.6	24.81	25.50	1.172	-0.10	0.071	0.083	Csar
	WCDMA VIII	RMC 12.2Kbps	Top Edge	0mm	Ant1	DSI3	2788	897.6	20.66	21.50	1.213	-0.14	0.056	0.068	Csar
	WCDMA VIII	RMC 12.2Kbps	Bottom Edge	0mm	Ant1	DSI4	2788	897.6	24.81	25.50	1.172	-0.12	0.175	0.205	Csar
	WCDMA VIII	RMC 12.2Kbps	Front	0mm	Ant1	DSI3	2712	882.4	20.62	21.50	1.225	0.17	0.851	1.042	Csar
	WCDMA VIII	RMC 12.2Kbps	Front	0mm	Ant1	DSI3	2863	912.6	20.63	21.50	1.222	0.09	0.913	1.116	DASY



【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Power State Note	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant4	DSI 3	Other PA	18300	1950	20.23	21.00	1.194			-0.12	0.984	1.175	Csar
	LTE Band 1	20M	QPSK	1	0	Back	0mm	Ant4	DSI 3	Other PA	18300	1950	20.23	21.00	1.194			0.13	0.466	0.556	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3		18300	1950	19.66	20.20	1.132			0.09	1.560	1.766	DASY
69	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3	Other PA	18300	1950	20.23	21.00	1.194			0.01	2.150	2.567	DASY
	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3	Other PA	18100	1930	20.16	21.00	1.213			0.09	1.440	1.747	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3	Other PA	18500	1970	20.12	21.00	1.225			0.09	1.370	1.678	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant4	DSI 4	Other PA	18300	1950	24.69	25.50	1.205			0.11	0.097	0.117	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	0mm	Ant4	DSI 3	Other PA	18300	1950	20.23	21.00	1.194			0.01	0.162	0.193	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant4	DSI 4	Other PA	18300	1950	24.69	25.50	1.205			0.13	0.218	0.263	Csar
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3	Other PA	18300	1950	19.03	20.00	1.25			-0.08	1.280	1.600	Csar
	LTE Band 1	20M	QPSK	1	0	Back	0mm	Ant5	DSI 3	Other PA	18300	1950	19.03	20.00	1.25			0.03	0.492	0.615	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant5	DSI 3	Other PA	18300	1950	19.03	20.00	1.25			0.07	0.267	0.334	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant5	DSI 4	Other PA	18300	1950	23.64	24.50	1.219			0.04	0.361	0.440	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI 3	Other PA	18300	1950	19.03	20.00	1.25			-0.04	0.930	1.163	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant5	DSI 4	Other PA	18300	1950	23.64	24.50	1.219			-0.06	0.034	0.041	Csar
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3	Other PA	18100	1930	18.98	20.00	1.265			0.09	1.330	1.682	DASY
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3	Other PA	18500	1970	18.92	20.00	1.282			-0.10	1.180	1.513	Csar
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3		18100	1930	18.72	20.00	1.343			0.18	1.160	1.558	DASY
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant6	DSI 4		18300	1950	19.28	20.50	1.324			-0.05	1.190	1.576	Csar
	LTE Band 1	20M	QPSK	1	0	Back	0mm	Ant6	DSI 4		18300	1950	19.28	20.50	1.324			-0.02	1.330	1.761	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant6	DSI 4		18300	1950	19.28	20.50	1.324			-0.12	0.289	0.383	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant6	DSI 4		18300	1950	19.28	20.50	1.324			0.18	0.141	0.187	Csar
	LTE Band 1	20M	QPSK	1	0	Top Edge	0mm	Ant6	DSI 4		18300	1950	19.28	20.50	1.324			0.17	0.006	0.008	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI 4		18300	1950	19.28	20.50	1.324			0.07	1.490	1.973	DASY
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI 4		18100	1930	19.26	20.50	1.33			0.03	1.570	2.088	DASY
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI 4		18500	1970	19.15	20.50	1.365			-0.18	1.430	1.952	DASY
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI 4	Other PA	18100	1930	19.16	20.00	1.213			0.05	1.650	2.001	DASY
	LTE Band 1	20M	QPSK	1	0	Front	0mm	Ant7	DSI 4	Other PA	18300	1950	20.61	21.50	1.227			-0.15	1.170	1.436	Csar
	LTE Band 1	20M	QPSK	1	0	Back	0mm	Ant7	DSI 4	Other PA	18300	1950	20.61	21.50	1.227			-0.03	0.534	0.655	Csar
	LTE Band 1	20M	QPSK	1	0	Left Edge	0mm	Ant7	DSI 4	Other PA	18300	1950	20.61	21.50	1.227			0.17	0.001	0.001	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI 4	Other PA	18300	1950	20.61	21.50	1.227			-0.04	1.800	2.209	DASY
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI 4	Other PA	18100	1930	20.58	21.50	1.236			0.09	2.070	2.559	DASY
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI 4	Other PA	18500	1970	20.52	21.50	1.253			0.04	1.810	2.268	DASY
	LTE Band 1	20M	QPSK	1	0	Top Edge	0mm	Ant7	DSI 4	Other PA	18300	1950	20.61	21.50	1.227			0.09	0.088	0.108	Csar
	LTE Band 1	20M	QPSK	1	0	Bottom Edge	0mm	Ant7	DSI 4	Other PA	18300	1950	20.61	21.50	1.227			-0.13	0.001	0.001	Csar
	LTE Band 1	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI 4		18100	1930	20.24	21.50	1.337			-0.03	1.700	2.273	DASY
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant4	DSI 3	Other PA	19575	1747.5	20.61	21.50	1.227			-0.10	1.340	1.644	Csar
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant4	DSI 3	Other PA	19575	1747.5	20.61	21.50	1.227			-0.01	0.697	0.855	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3	Other PA	19575	1747.5	20.61	21.50	1.227			-0.14	1.750	2.147	DASY
	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3	Other PA	19300	1720	20.52	21.50	1.253			0.06	1.680	2.105	DASY
70	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3	Other PA	19850	1775	20.55	21.50	1.245			0.03	1.830	2.278	DASY
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant4	DSI 4	Other PA	19575	1747.5	24.76	25.50	1.186			-0.17	0.101	0.120	Csar
	LTE Band 3	20M	QPSK	1	0	Top Edge	0mm	Ant4	DSI 3	Other PA	19575	1747.5	20.61	21.50	1.227			0.01	0.222	0.272	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	0mm	Ant4	DSI 4	Other PA	19575	1747.5	24.76	25.50	1.186			0.14	0.247	0.293	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI 3		19850	1775	20.06	20.70	1.159			0.07	1.470	1.704	DASY
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3		19575	1747.5	18.84	20.00	1.306			0.01	1.230	1.606	DASY
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3	Other PA	19575	1747.5	18.97	20.00	1.268			0.03	1.460	1.851	DASY
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant5	DSI 3	Other PA	19575	1747.5	18.97	20.00	1.268			0.14	0.557	0.706	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant5	DSI 3	Other PA	19575	1747.5	18.97	20.00	1.268			0.11	0.278	0.353	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant5	DSI 4	Other PA	19575	1747.5	23.63	24.50	1.222			0.15	0.381	0.466	Csar
	LTE Band 3	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI 3	Other PA	19575	1747.5	18.97	20.00	1.268			0.18	1.060	1.344	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	0mm	Ant5	DSI 4	Other PA	19575	1747.5	23.63	24.50	1.222			0.11	0.037	0.045	Csar
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3	Other PA	19300	1720	18.92	20.00	1.282			0.12	1.400	1.795	DASY
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant5	DSI 3	Other PA	19850	1775	18.95	20.00	1.274			-0.08	1.380	1.758	Csar
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant6	DSI 4		19575	1747.5	19.76	21.00	1.33			0.09	1.080	1.436	Csar
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant6	DSI 4		19575	1747.5	19.76	21.00	1.33			-0.04	1.290	1.716	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant6	DSI 4		19575	1747.5	19.76	21.00	1.33			0.15	0.245	0.326	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant6	DSI 4		19575	1747.5	19.76	21.00	1.33			0.01	0.209	0.278	Csar
	LTE Band 3	20M	QPSK	1	0	Top Edge	0mm	Ant6	DSI 4		19575	1747.5	19.76	21.00	1.33			0.06	0.001	0.001	Csar
	LTE Band 3	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI 4		19575	1747.5	19.76	21.00	1.33			0.18	0.674	0.896	Csar
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant6	DSI 4		19300	1720	19.68	21.00	1.355			0.09	1.210	1.640	Csar
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant6	DSI 4		19850	1775	19.71	21.00	1.346			0.01	1.420	1.911	DASY
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant6	DSI 4	Other PA	19850	1775	19.63	20.50	1.222			0.03	1.510	1.845	DASY
	LTE Band 3	20M	QPSK	1	0	Front	0mm	Ant7	DSI 4		19575	1747.5	19.29	20.50	1.321			-0.13	1.080	1.427	Csar
	LTE Band 3	20M	QPSK	1	0	Back	0mm	Ant7	DSI 4		19575	1747.5	19.29	20.50	1.321			-0.16	0.600	0.793	Csar
	LTE Band 3	20M	QPSK	1	0	Left Edge	0mm	Ant7	DSI 4		19575	1747.5	19.29	20.50	1.321			-0.17	0.016	0.021	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI 4		19575	1747.5	19.29	20.50	1.321			0.05	1.440	1.902	DASY
	LTE Band 3	20M	QPSK	1	0	Top Edge	0mm	Ant7	DSI 4		19575	1747.5	19.29	20.50	1.321			-0.11	0.097	0.128	Csar



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	LTE Band 3	20M	QPSK	1	0	Bottom Edge	0mm	Ant7	DSI4		19575	1747.5	19.29	20.50	1.321		0.06	0.064	0.085	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI4		19300	1720	19.23	20.50	1.34		-0.15	1.290	1.729	Csar
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI4		19850	1775	19.26	20.50	1.33		0.06	1.620	2.155	DASY
	LTE Band 3	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI 4	Other PA	19850	1775	19.66	20.50	1.213		0.08	1.740	2.111	DASY
	LTE Band 5	10M	QPSK	1	0	Front	0mm	Ant0	DSI4		20525	836.5	25.02	25.70	1.169		-0.05	1.400	1.637	Csar
	LTE Band 5	10M	QPSK	1	0	Back	0mm	Ant0	DSI4		20525	836.5	25.02	25.70	1.169		-0.16	1.530	1.789	Csar
	LTE Band 5	10M	QPSK	1	0	Left Edge	0mm	Ant0	DSI4		20525	836.5	25.02	25.70	1.169		0.09	0.146	0.171	Csar
	LTE Band 5	10M	QPSK	1	0	Right Edge	0mm	Ant0	DSI4		20525	836.5	25.02	25.70	1.169		-0.14	1.120	1.309	Csar
	LTE Band 5	10M	QPSK	1	0	Top Edge	0mm	Ant0	DSI4		20525	836.5	25.02	25.70	1.169		-0.09	0.073	0.085	Csar
	LTE Band 5	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		20525	836.5	25.02	25.70	1.169		0.13	1.870	2.186	DASY
71	LTE Band 5	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		20450	829	24.92	25.70	1.197		0.06	2.140	2.562	DASY
	LTE Band 5	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		20600	844	24.98	25.70	1.18		-0.02	1.960	2.313	DASY
	LTE Band 5	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI 4	Other PA	20450	829	24.06	25.00	1.242		0.11	1.880	2.335	DASY
	LTE Band 5	10M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	20525	836.5	20.04	21.00	1.247		0.06	0.668	0.833	Csar
	LTE Band 5	10M	QPSK	1	0	Back	0mm	Ant1	DSI 3	Other PA	20525	836.5	20.04	21.00	1.247		0.06	0.469	0.585	Csar
	LTE Band 5	10M	QPSK	1	0	Left Edge	0mm	Ant1	DSI 3	Other PA	20525	836.5	20.04	21.00	1.247		-0.16	0.413	0.515	Csar
	LTE Band 5	10M	QPSK	1	0	Right Edge	0mm	Ant1	DSI 4	Other PA	20525	836.5	24.15	25.00	1.216		-0.06	0.064	0.078	Csar
	LTE Band 5	10M	QPSK	1	0	Top Edge	0mm	Ant1	DSI 3	Other PA	20525	836.5	20.04	21.00	1.247		0.16	0.033	0.041	Csar
	LTE Band 5	10M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	20450	829	19.95	21.00	1.274		0.08	0.779	0.992	DASY
	LTE Band 5	10M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	20600	844	19.91	21.00	1.285		-0.17	0.658	0.846	Csar
	LTE Band 5	10M	QPSK	1	0	Bottom Edge	0mm	Ant1	DSI 4	Other PA	20525	836.5	24.15	25.00	1.216		0.03	0.138	0.168	Csar
	LTE Band 5	10M	QPSK	1	0	Front	0mm	Ant1	DSI3		20450	829	19.81	20.70	1.227		0.05	0.680	0.834	DASY
	LTE Band 7	20M	QPSK	1	0	Front	0mm	Ant4	DSI3		21100	2535	20.24	20.70	1.112		0.01	1.270	1.412	Csar
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant4	DSI3		21100	2535	20.24	20.70	1.112		0.09	0.611	0.679	Csar
72	LTE Band 7	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		21100	2535	20.24	20.70	1.112		0.07	1.980	2.202	DASY
	LTE Band 7	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		20850	2510	20.21	20.70	1.119		0.03	1.910	2.137	DASY
	LTE Band 7	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		21350	2560	20.15	20.70	1.135		-0.07	1.880	2.134	DASY
	LTE Band 7	20M	QPSK	1	0	Right Edge	0mm	Ant4	DSI4		21100	2535	25.31	25.70	1.094		-0.08	0.104	0.114	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	0mm	Ant4	DSI3		21100	2535	20.24	20.70	1.112		0.12	0.322	0.358	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	0mm	Ant4	DSI4		21100	2535	25.31	25.70	1.094		-0.05	0.250	0.274	Csar
	LTE Band 7	20M	QPSK	1	0	Front	0mm	Ant5	DSI3		21100	2535	18.82	20.00	1.312		-0.16	1.040	1.364	Csar
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant5	DSI3		21100	2535	18.82	20.00	1.312		0.18	0.349	0.458	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	0mm	Ant5	DSI3		21100	2535	18.82	20.00	1.312		-0.01	0.766	1.005	Csar
	LTE Band 7	20M	QPSK	1	0	Right Edge	0mm	Ant5	DSI4		21100	2535	23.92	25.00	1.282		-0.01	0.200	0.256	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		21100	2535	18.82	20.00	1.312		0.05	1.160	1.522	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	0mm	Ant5	DSI4		21100	2535	23.92	25.00	1.282		-0.07	0.028	0.036	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		20850	2510	18.76	20.00	1.33		0.05	1.190	1.583	DASY
	LTE Band 7	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		21350	2560	18.80	20.00	1.318		0.01	1.150	1.516	Csar
	LTE Band 7	20M	QPSK	1	0	Front	0mm	Ant6	DSI4		21100	2535	19.93	21.00	1.279		0.06	1.130	1.445	Csar
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		21100	2535	19.93	21.00	1.279		-0.06	1.510	1.931	DASY
	LTE Band 7	20M	QPSK	1	0	Left Edge	0mm	Ant6	DSI4		21100	2535	19.93	21.00	1.279		-0.08	0.313	0.400	Csar
	LTE Band 7	20M	QPSK	1	0	Right Edge	0mm	Ant6	DSI4		21100	2535	19.93	21.00	1.279		0.13	0.126	0.161	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	0mm	Ant6	DSI4		21100	2535	19.93	21.00	1.279		0.17	0.015	0.019	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI4		21100	2535	19.93	21.00	1.279		0.02	1.480	1.893	DASY
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		20850	2510	19.84	21.00	1.306		-0.16	1.400	1.828	DASY
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		21350	2560	19.88	21.00	1.294		-0.05	1.500	1.941	DASY
	LTE Band 7	20M	QPSK	1	0	Front	0mm	Ant7	DSI4		21100	2535	19.59	20.50	1.233		0.08	1.260	1.554	DASY
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant7	DSI4		21100	2535	19.59	20.50	1.233		-0.06	0.576	0.710	Csar
	LTE Band 7	20M	QPSK	1	0	Left Edge	0mm	Ant7	DSI4		21100	2535	19.59	20.50	1.233		-0.18	0.001	0.001	Csar
	LTE Band 7	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI4		21100	2535	19.59	20.50	1.233		-0.13	1.170	1.443	Csar
	LTE Band 7	20M	QPSK	1	0	Top Edge	0mm	Ant7	DSI4		21100	2535	19.59	20.50	1.233		-0.00	0.202	0.249	Csar
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	0mm	Ant7	DSI4		21100	2535	19.59	20.50	1.233		-0.19	0.059	0.073	Csar
	LTE Band 7	20M	QPSK	1	0	Front	0mm	Ant7	DSI4		20850	2510	19.53	20.50	1.25		0.02	1.190	1.487	Csar
	LTE Band 7	20M	QPSK	1	0	Front	0mm	Ant7	DSI4		21350	2560	19.46	20.50	1.271		0.14	0.959	1.219	Csar
	LTE Band 8	10M	QPSK	1	0	Front	0mm	Ant0	DSI4		21625	897.5	25.06	25.70	1.159		0.03	1.640	1.901	DASY
	LTE Band 8	10M	QPSK	1	0	Back	0mm	Ant0	DSI4		21625	897.5	25.06	25.70	1.159		-0.09	1.710	1.982	DASY
	LTE Band 8	10M	QPSK	1	0	Left Edge	0mm	Ant0	DSI4		21625	897.5	25.06	25.70	1.159		0.03	0.161	0.187	Csar
	LTE Band 8	10M	QPSK	1	0	Right Edge	0mm	Ant0	DSI4		21625	897.5	25.06	25.70	1.159		0.12	0.976	1.131	Csar
	LTE Band 8	10M	QPSK	1	0	Top Edge	0mm	Ant0	DSI4		21625	897.5	25.06	25.70	1.159		0.04	0.128	0.148	Csar
	LTE Band 8	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		21625	897.5	25.06	25.70	1.159		0.19	2.100	2.434	DASY
73	LTE Band 8	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		21500	885	25.03	25.70	1.167		0.05	2.120	2.474	DASY
	LTE Band 8	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		21750	910	25.05	25.70	1.161		0.11	2.020	2.345	DASY
	LTE Band 8	10M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI 4	Other PA	21500	885	24.23	25.00	1.194		0.06	1.700	2.030	DASY
	LTE Band 8	10M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	21625	897.5	20.09	21.00	1.233		-0.04	0.743	0.916	Csar
	LTE Band 8	10M	QPSK	1	0	Back	0mm	Ant1	DSI 3	Other PA	21625	897.5	20.09	21.00	1.233		0.19	0.514	0.634	Csar
	LTE Band 8	10M	QPSK	1	0	Left Edge	0mm	Ant1	DSI 3	Other PA	21625	897.5	20.09	21.00	1.233		-0.08	0.436	0.538	Csar
	LTE Band 8	10M	QPSK	1	0	Right Edge	0mm	Ant1	DSI 4	Other PA	21625	897.5	24.21	25.00	1.199		-0.19	0.071	0.085	Csar
	LTE Band 8	10M	QPSK	1	0	Top Edge	0mm	Ant1	DSI 3	Other PA	21625	897.5	20.09	21.00	1.233		-0.18	0.038	0.047	Csar
	LTE Band 8	10M	QPSK	1	0	Bottom Edge	0mm	Ant1	DSI 4	Other PA	21625	897.5	24.21	25.00	1.199		-0.04	0.181	0.217	Csar
	LTE Band 8	10M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	21500	885	19.93	21.00	1.279		-0.04	0.719	0.920	Csar
	LTE Band 8	10M	QPSK	1	0	Front	0mm	Ant1	DSI3		21750	910	19.89	20.70	1.205		0.05	0.774	0.933	DASY
	LTE Band 8	10M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	21750	910	20.02	21.00	1.253		0.06	0.758	0.950	DASY
	LTE Band 20	20M	QPSK	1	0	Front	0mm	Ant0	DSI4		24300	847	24.13	25.00	1.222		0.06	1.110	1.356	Csar



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	LTE Band 20	20M	QPSK	1	0	Back	0mm	Ant0	DSI4		24300	847	24.13	25.00	1.222			-0.14	1.260	1.540	Csar
	LTE Band 20	20M	QPSK	1	0	Left Edge	0mm	Ant0	DSI4		24300	847	24.13	25.00	1.222			0.08	0.115	0.141	Csar
	LTE Band 20	20M	QPSK	1	0	Right Edge	0mm	Ant0	DSI4		24300	847	24.13	25.00	1.222			-0.08	0.879	1.074	Csar
	LTE Band 20	20M	QPSK	1	0	Top Edge	0mm	Ant0	DSI4		24300	847	24.13	25.00	1.222			-0.13	0.051	0.062	Csar
	LTE Band 20	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		24300	847	24.13	25.00	1.222			0.01	1.830	2.236	DASY
	LTE Band 20	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		24250	842	24.10	25.00	1.23			0.08	1.770	2.177	DASY
74	LTE Band 20	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		24350	852	24.08	25.00	1.236			0.05	1.940	2.398	DASY
	LTE Band 20	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI 4	Other PA	24350	852	24.20	25.00	1.202			0.00	1.910	2.296	DASY
	LTE Band 20	20M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	24300	847	20.20	21.00	1.202			-0.12	0.813	0.977	Csar
	LTE Band 20	20M	QPSK	1	0	Back	0mm	Ant1	DSI 3	Other PA	24300	847	20.20	21.00	1.202			-0.01	0.621	0.746	Csar
	LTE Band 20	20M	QPSK	1	0	Left Edge	0mm	Ant1	DSI 3	Other PA	24300	847	20.20	21.00	1.202			-0.04	0.498	0.599	Csar
	LTE Band 20	20M	QPSK	1	0	Right Edge	0mm	Ant1	DSI 4	Other PA	24300	847	24.34	25.00	1.164			0.12	0.082	0.095	Csar
	LTE Band 20	20M	QPSK	1	0	Top Edge	0mm	Ant1	DSI 3	Other PA	24300	847	20.20	21.00	1.202			-0.15	0.046	0.055	Csar
	LTE Band 20	20M	QPSK	1	0	Bottom Edge	0mm	Ant1	DSI 4	Other PA	24300	847	24.34	25.00	1.164			-0.07	0.154	0.179	Csar
	LTE Band 20	20M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	24250	842	20.14	21.00	1.219			0.09	0.827	1.008	DASY
	LTE Band 20	20M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	24350	852	20.16	21.00	1.213			0.18	0.738	0.895	Csar
	LTE Band 20	20M	QPSK	1	0	Front	0mm	Ant1	DSI3		24250	842	19.82	21.00	1.312			0.13	0.697	0.914	DASY
	LTE Band 26	15M	QPSK	1	0	Front	0mm	Ant0	DSI4		26865	831.5	25.18	25.70	1.127			-0.02	1.440	1.623	Csar
	LTE Band 26	15M	QPSK	1	0	Back	0mm	Ant0	DSI4		26865	831.5	25.18	25.70	1.127			0.00	1.580	1.781	Csar
	LTE Band 26	15M	QPSK	1	0	Left Edge	0mm	Ant0	DSI4		26865	831.5	25.18	25.70	1.127			-0.15	0.163	0.184	Csar
	LTE Band 26	15M	QPSK	1	0	Right Edge	0mm	Ant0	DSI4		26865	831.5	25.18	25.70	1.127			0.08	1.050	1.183	Csar
	LTE Band 26	15M	QPSK	1	0	Top Edge	0mm	Ant0	DSI4		26865	831.5	25.18	25.70	1.127			0.03	0.079	0.089	Csar
75	LTE Band 26	15M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		26865	831.5	25.18	25.70	1.127			0.06	2.240	2.524	DASY
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		26765	821.5	25.13	25.70	1.14			0.16	1.820	2.075	DASY
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		26965	841.5	25.15	25.70	1.135			-0.10	1.540	1.748	Csar
	LTE Band 26	15M	QPSK	1	0	Front	0mm	Ant1	DSI3		26865	831.5	20.74	21.70	1.247			0.08	0.856	1.067	DASY
	LTE Band 26	15M	QPSK	1	0	Back	0mm	Ant1	DSI3		26865	831.5	20.74	21.70	1.247			0.16	0.580	0.723	Csar
	LTE Band 26	15M	QPSK	1	0	Left Edge	0mm	Ant1	DSI3		26865	831.5	20.74	21.70	1.247			-0.05	0.556	0.693	Csar
	LTE Band 26	15M	QPSK	1	0	Right Edge	0mm	Ant1	DSI4		26865	831.5	24.85	25.70	1.216			0.02	0.065	0.079	Csar
	LTE Band 26	15M	QPSK	1	0	Top Edge	0mm	Ant1	DSI3		26865	831.5	20.74	21.70	1.247			0.05	0.040	0.050	Csar
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	0mm	Ant1	DSI4		26865	831.5	24.85	25.70	1.216			-0.03	0.127	0.154	Csar
	LTE Band 26	15M	QPSK	1	0	Front	0mm	Ant1	DSI3		26765	821.5	20.71	21.70	1.256			0.15	0.819	1.029	Csar
	LTE Band 26	15M	QPSK	1	0	Front	0mm	Ant1	DSI3		26965	841.5	20.68	21.70	1.265			0.05	0.832	1.052	Csar
	LTE Band 28	20M	QPSK	1	0	Front	0mm	Ant0	DSI 4	Other PA	27460	728	24.01	25.00	1.256			-0.18	1.060	1.331	Csar
	LTE Band 28	20M	QPSK	1	0	Back	0mm	Ant0	DSI 4	Other PA	27460	728	24.01	25.00	1.256			0.08	0.966	1.213	Csar
	LTE Band 28	20M	QPSK	1	0	Left Edge	0mm	Ant0	DSI 4	Other PA	27460	728	24.01	25.00	1.256			-0.10	0.083	0.104	Csar
	LTE Band 28	20M	QPSK	1	0	Right Edge	0mm	Ant0	DSI 4	Other PA	27460	728	24.01	25.00	1.256			-0.16	0.809	1.016	Csar
	LTE Band 28	20M	QPSK	1	0	Top Edge	0mm	Ant0	DSI 4	Other PA	27460	728	24.01	25.00	1.256			0.04	0.030	0.038	Csar
	LTE Band 28	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI4		27460	728	24.06	25.00	1.242			0.15	1.320	1.639	DASY
76	LTE Band 28	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI 4	Other PA	27460	728	24.01	25.00	1.256			-0.01	1.410	1.771	DASY
	LTE Band 28	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI 4	Other PA	27310	713	23.92	25.00	1.282			-0.13	1.200	1.538	Csar
	LTE Band 28	20M	QPSK	1	0	Bottom Edge	0mm	Ant0	DSI 4	Other PA	27560	738	24.00	25.00	1.259			0.13	1.250	1.574	Csar
	LTE Band 28	20M	QPSK	1	0	Front	0mm	Ant1	DSI 3	Other PA	27460	728	21.86	23.00	1.3			-0.15	0.628	0.816	Csar
	LTE Band 28	20M	QPSK	1	0	Back	0mm	Ant1	DSI 3	Other PA	27460	728	21.86	23.00	1.3			-0.12	0.390	0.507	Csar
	LTE Band 28	20M	QPSK	1	0	Left Edge	0mm	Ant1	DSI 3	Other PA	27460	728	21.86	23.00	1.3			0.09	1.060	1.378	Csar
	LTE Band 28	20M	QPSK	1	0	Right Edge	0mm	Ant1	DSI 4	Other PA	27460	728	24.03	25.00	1.25			-0.15	0.048	0.060	Csar
	LTE Band 28	20M	QPSK	1	0	Top Edge	0mm	Ant1	DSI 3	Other PA	27460	728	21.86	23.00	1.3			-0.01	0.022	0.029	Csar
	LTE Band 28	20M	QPSK	1	0	Bottom Edge	0mm	Ant1	DSI 4	Other PA	27460	728	24.03	25.00	1.25			0.12	0.067	0.084	Csar
	LTE Band 28	20M	QPSK	1	0	Left Edge	0mm	Ant1	DSI 3	Other PA	27310	713	21.77	23.00	1.327			0.03	1.230	1.632	DASY
	LTE Band 28	20M	QPSK	1	0	Left Edge	0mm	Ant1	DSI 3	Other PA	27560	738	21.79	23.00	1.321			-0.03	1.010	1.334	Csar
	LTE Band 28	20M	QPSK	1	0	Left Edge	0mm	Ant1	DSI3		27310	713	21.96	23.00	1.271			0.08	1.170	1.487	DASY
	LTE Band 40	20M	QPSK	1	0	Front	0mm	Ant4	DSI3		39150	2350	21.16	22.00	1.213	62.9	1.006	0.16	0.927	1.131	Csar
	LTE Band 40	20M	QPSK	1	0	Back	0mm	Ant4	DSI3		39150	2350	21.16	22.00	1.213	62.9	1.006	-0.02	0.405	0.494	Csar
77	LTE Band 40	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		39150	2350	21.16	22.00	1.213	62.9	1.006	0.12	1.820	2.221	DASY
	LTE Band 40	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		38750	2310	21.13	22.00	1.222	62.9	1.006	-0.09	1.720	2.114	DASY
	LTE Band 40	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		39550	2390	21.11	22.00	1.227	62.9	1.006	-0.16	1.720	2.123	DASY
	LTE Band 40	20M	QPSK	1	0	Right Edge	0mm	Ant4	DSI4		39150	2350	24.26	25.00	1.186	62.9	1.006	0.06	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	0mm	Ant4	DSI3		39150	2350	21.16	22.00	1.213	62.9	1.006	0.13	0.152	0.185	Csar
	LTE Band 40	20M	QPSK	1	0	Bottom Edge	0mm	Ant4	DSI4		39150	2350	24.26	25.00	1.186	62.9	1.006	0.17	0.094	0.112	Csar
	LTE Band 40	20M	QPSK	1	0	Front	0mm	Ant5	DSI3		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.11	1.130	1.461	Csar
	LTE Band 40	20M	QPSK	1	0	Back	0mm	Ant5	DSI3		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.06	0.499	0.645	Csar
	LTE Band 40	20M	QPSK	1	0	Left Edge	0mm	Ant5	DSI3		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.17	0.515	0.666	Csar
	LTE Band 40	20M	QPSK	1	0	Right Edge	0mm	Ant5	DSI4		39150	2350	23.08	24.00	1.236	62.9	1.006	-0.11	0.119	0.148	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		39150	2350	21.91	23.00	1.285	62.9	1.006	-0.14	1.170	1.512	Csar
	LTE Band 40	20M	QPSK	1	0	Bottom Edge	0mm	Ant5	DSI4		39150	2350	23.08	24.00	1.236	62.9	1.006	-0.12	0.001	0.001	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		38750	2310	21.80	23.00	1.318	62.9	1.006	-0.12	1.210	1.604	Csar
	LTE Band 40	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		39550	2390	21.76	23.00	1.33	62.9	1.006	0.06	1.600	2.141	DASY
	LTE Band 40	20M	QPSK	1	0	Front	0mm	Ant6	DSI4		39150	2350	22.47	23.50	1.268	62.9	1.006	0.01	1.290	1.646	Csar
	LTE Band 40	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		39150	2350	22.47	23.50	1.268	62.9	1.006	-0.05	1.520	1.939	DASY
	LTE Band 40	20M	QPSK	1	0	Left Edge	0mm	Ant6	DSI4		39150	2350	22.47	23.50	1.268	62.9	1.006	-0.14	0.246	0.314	Csar



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	LTE Band 40	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		38750	2310	22.45	23.50	1.274	62.9	1.006	-0.07	1.550	1.987	DASY
	LTE Band 40	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		39550	2390	22.42	23.50	1.282	62.9	1.006	-0.07	1.630	2.102	DASY
	LTE Band 41	20M	QPSK	1	0	Front	0mm	Ant4	DSI3		40620	2593	21.73	22.20	1.114	62.9	1.006	0.07	1.160	1.300	Csar
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant4	DSI3		40620	2593	21.73	22.20	1.114	62.9	1.006	-0.15	0.598	0.670	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		40620	2593	21.73	22.20	1.114	62.9	1.006	-0.06	1.760	1.972	DASY
	LTE Band 41	20M	QPSK	1	0	Right Edge	0mm	Ant4	DSI4		40620	2593	25.23	25.70	1.114	62.9	1.006	-0.14	0.070	0.078	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	0mm	Ant4	DSI3		40620	2593	21.73	22.20	1.114	62.9	1.006	0.04	0.277	0.310	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	0mm	Ant4	DSI4		40620	2593	25.23	25.70	1.114	62.9	1.006	0.14	0.251	0.281	Csar
78	LTE Band 41	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		39750	2506	21.68	22.20	1.127	62.9	1.006	0.11	1.930	2.188	DASY
	LTE Band 41	20M	QPSK	1	0	Left Edge	0mm	Ant4	DSI3		41490	2680	21.62	22.20	1.143	62.9	1.006	-0.01	1.160	1.334	Csar
	LTE Band 41	20M	QPSK	1	0	Front	0mm	Ant5	DSI3		40620	2593	21.05	22.00	1.245	62.9	1.006	-0.17	1.030	1.290	Csar
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant5	DSI3		40620	2593	21.05	22.00	1.245	62.9	1.006	-0.16	0.350	0.438	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	0mm	Ant5	DSI3		40620	2593	21.05	22.00	1.245	62.9	1.006	-0.10	0.807	1.011	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	0mm	Ant5	DSI4		40620	2593	24.18	25.00	1.208	62.9	1.006	0.02	0.170	0.207	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		40620	2593	21.05	22.00	1.245	62.9	1.006	0.14	1.080	1.353	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	0mm	Ant5	DSI4		40620	2593	24.18	25.00	1.208	62.9	1.006	-0.05	0.033	0.040	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		39750	2506	21.01	22.00	1.256	62.9	1.006	0.08	1.260	1.592	DASY
	LTE Band 41	20M	QPSK	1	0	Top Edge	0mm	Ant5	DSI3		41490	2680	20.93	22.00	1.279	62.9	1.006	0.01	1.160	1.493	Csar
	LTE Band 41	20M	QPSK	1	0	Front	0mm	Ant6	DSI4		40620	2593	21.91	23.00	1.285	62.9	1.006	0.00	1.200	1.551	Csar
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		40620	2593	21.91	23.00	1.285	62.9	1.006	-0.05	1.650	2.133	DASY
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		39750	2506	21.86	23.00	1.3	62.9	1.006	-0.14	1.560	2.040	DASY
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant6	DSI4		41490	2680	21.83	23.00	1.309	62.9	1.006	-0.02	1.540	2.028	DASY
	LTE Band 41	20M	QPSK	1	0	Left Edge	0mm	Ant6	DSI4		40620	2593	21.91	23.00	1.285	62.9	1.006	0.15	0.330	0.427	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	0mm	Ant6	DSI4		40620	2593	21.91	23.00	1.285	62.9	1.006	-0.13	0.140	0.181	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	0mm	Ant6	DSI4		40620	2593	21.91	23.00	1.285	62.9	1.006	0.01	0.001	0.001	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	0mm	Ant6	DSI4		40620	2593	21.91	23.00	1.285	62.9	1.006	0.05	1.540	1.991	DASY
	LTE Band 41	20M	QPSK	1	0	Front	0mm	Ant7	DSI4		40620	2593	22.95	24.00	1.274	62.9	1.006	0.12	1.180	1.512	Csar
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant7	DSI4		40620	2593	22.95	24.00	1.274	62.9	1.006	0.17	0.537	0.688	Csar
	LTE Band 41	20M	QPSK	1	0	Left Edge	0mm	Ant7	DSI4		40620	2593	22.95	24.00	1.274	62.9	1.006	0.08	0.017	0.022	Csar
	LTE Band 41	20M	QPSK	1	0	Right Edge	0mm	Ant7	DSI4		40620	2593	22.95	24.00	1.274	62.9	1.006	0.08	0.879	1.127	Csar
	LTE Band 41	20M	QPSK	1	0	Top Edge	0mm	Ant7	DSI4		40620	2593	22.95	24.00	1.274	62.9	1.006	0.13	0.246	0.315	Csar
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	0mm	Ant7	DSI4		40620	2593	22.95	24.00	1.274	62.9	1.006	0.02	0.061	0.078	Csar
	LTE Band 41	20M	QPSK	1	0	Front	0mm	Ant7	DSI4		39750	2506	22.91	24.00	1.285	62.9	1.006	0.02	1.480	1.913	DASY
	LTE Band 41	20M	QPSK	1	0	Front	0mm	Ant7	DSI4		41490	2680	22.88	24.00	1.294	62.9	1.006	0.10	1.170	1.523	Csar
	LTE Band 42	20M	QPSK	1	0	Front	0mm	Ant8	DSI4		42590	3500	20.63	21.50	1.222	62.9	1.006	-0.04	0.924	1.136	Csar
	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant8	DSI4		42590	3500	20.63	21.50	1.222	62.9	1.006	-0.09	0.405	0.498	Csar
	LTE Band 42	20M	QPSK	1	0	Left Edge	0mm	Ant8	DSI4		42590	3500	20.63	21.50	1.222	62.9	1.006	0.08	0.025	0.031	Csar
	LTE Band 42	20M	QPSK	1	0	Right Edge	0mm	Ant8	DSI4		42590	3500	20.63	21.50	1.222	62.9	1.006	-0.08	1.820	2.237	DASY
	LTE Band 42	20M	QPSK	1	0	Right Edge	0mm	Ant8	DSI4		41690	3410	20.58	21.50	1.236	62.9	1.006	0.06	1.870	2.325	DASY
	LTE Band 42	20M	QPSK	1	0	Right Edge	0mm	Ant8	DSI4		43490	3590	20.55	21.50	1.245	62.9	1.006	0.00	1.760	2.204	DASY
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant8	DSI4		42590	3500	20.63	21.50	1.222	62.9	1.006	-0.01	0.167	0.205	Csar
	LTE Band 42	20M	QPSK	1	0	Bottom Edge	0mm	Ant8	DSI4		42590	3500	20.63	21.50	1.222	62.9	1.006	0.16	0.035	0.043	Csar
	LTE Band 42	20M	QPSK	1	0	Front	0mm	Ant9	DSI3		42590	3500	20.04	21.00	1.247	62.9	1.006	0.06	1.170	1.468	Csar
	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant9	DSI3		42590	3500	20.04	21.00	1.247	62.9	1.006	0.13	0.365	0.458	Csar
	LTE Band 42	20M	QPSK	1	0	Left Edge	0mm	Ant9	DSI3		42590	3500	20.04	21.00	1.247	62.9	1.006	-0.01	1.270	1.593	Csar
	LTE Band 42	20M	QPSK	1	0	Right Edge	0mm	Ant9	DSI4		42590	3500	21.10	22.00	1.23	62.9	1.006	0.06	0.081	0.100	Csar
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant9	DSI3		42590	3500	20.04	21.00	1.247	62.9	1.006	0.00	0.206	0.258	Csar
	LTE Band 42	20M	QPSK	1	0	Bottom Edge	0mm	Ant9	DSI4		42590	3500	21.10	22.00	1.23	62.9	1.006	-0.01	0.032	0.040	Csar
	LTE Band 42	20M	QPSK	1	0	Left Edge	0mm	Ant9	DSI3		41690	3410	19.95	21.00	1.274	62.9	1.006	0.07	1.360	1.743	DASY
	LTE Band 42	20M	QPSK	1	0	Left Edge	0mm	Ant9	DSI3		43490	3590	19.92	21.00	1.282	62.9	1.006	0.02	0.950	1.225	Csar
	LTE Band 42	20M	QPSK	1	0	Front	0mm	Ant10	DSI3		42590	3500	18.99	20	1.262	62.9	1.006	-0.06	1.35	1.714	Csar
	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant10	DSI3		42590	3500	18.99	20	1.262	62.9	1.006	0.15	0.342	0.434	Csar
	LTE Band 42	20M	QPSK	1	0	Left Edge	0mm	Ant10	DSI3		42590	3500	18.99	20	1.262	62.9	1.006	-0.05	0.12	0.152	Csar
	LTE Band 42	20M	QPSK	1	0	Right Edge	0mm	Ant10	DSI4		42590	3500	24.99	26	1.262	62.9	1.006	-0.07	0.537	0.682	Csar
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant10	DSI3		42590	3500	18.99	20	1.262	62.9	1.006	-0.06	2	2.539	DASY
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant10	DSI3		41690	3410	18.96	20	1.271	62.9	1.006	0.07	1.8	2.302	DASY
79	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant10	DSI3		43490	3590	18.98	20	1.265	62.9	1.006	0.02	2.03	2.583	DASY
	LTE Band 42	20M	QPSK	1	0	Bottom Edge	0mm	Ant10	DSI4		42590	3500	24.99	26	1.262	62.9	1.006	0.05	0.017	0.022	Csar
	LTE Band 42	20M	QPSK	1	0	Front	0mm	Ant11	DSI3		42590	3500	19.75	21.00	1.334	62.9	1.006	-0.03	0.820	1.100	Csar
	LTE Band 42	20M	QPSK	1	0	Back	0mm	Ant11	DSI3		42590	3500	19.75	21.00	1.334	62.9	1.006	0.09	0.825	1.107	Csar
	LTE Band 42	20M	QPSK	1	0	Left Edge	0mm	Ant11	DSI3		42590	3500	19.75	21.00	1.334	62.9	1.006	0.07	0.200	0.268	Csar
	LTE Band 42	20M	QPSK	1	0	Right Edge	0mm	Ant11	DSI4		42590	3500	21.86	23.00	1.3	62.9	1.006	0.08	0.062	0.081	Csar
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant11	DSI3		42590	3500	19.75	21.00	1.334	62.9	1.006	0.08	1.470	1.973	DASY
	LTE Band 42	20M	QPSK	1	0	Bottom Edge	0mm	Ant11	DSI4		42590	3500	21.86	23.00	1.3	62.9	1.006	0.03	0.001	0.001	Csar
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant11	DSI3		41690	3410	19.66	21.00	1.361	62.9	1.006	0.04	1.660	2.273	DASY
	LTE Band 42	20M	QPSK	1	0	Top Edge	0mm	Ant11	DSI3		43490	3590	19.63	21.00	1.371	62.9	1.006	0.02	1.460	2.014	DASY



【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Power State Note	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant4	DSI 3	Other PA	390000	1950	19.64	20.50	1.219			-0.00	0.952	1.160	Csar
	FR1 n1	50M	BPSK	135	67	Back	0mm	Ant4	DSI 3	Other PA	390000	1950	19.64	20.50	1.219			-0.11	0.599	0.730	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI 3	Other PA	390000	1950	19.64	20.50	1.219			-0.02	1.590	1.938	DASY
	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant4	DSI 4	Other PA	390000	1950	24.71	25.50	1.199			-0.18	0.103	0.123	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	0mm	Ant4	DSI 3	Other PA	390000	1950	19.64	20.50	1.219			0.00	0.119	0.145	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant4	DSI 4	Other PA	390000	1950	24.71	25.50	1.199			0.03	0.182	0.218	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI 3	Other PA	389000	1945	19.61	20.50	1.227			-0.08	1.650	2.025	DASY
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		391000	1955	19.14	19.70	1.138			0.09	1.680	1.912	DASY
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI 3	Other PA	391000	1955	19.56	20.50	1.242			0.06	1.820	2.260	DASY
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant5	DSI 3	Other PA	390000	1950	18.17	19.50	1.358			0.04	1.120	1.521	Csar
	FR1 n1	50M	BPSK	135	67	Back	0mm	Ant5	DSI 3	Other PA	390000	1950	18.17	19.50	1.358			-0.09	0.476	0.646	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant5	DSI 3	Other PA	390000	1950	18.17	19.50	1.358			-0.03	0.274	0.372	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant5	DSI 4	Other PA	390000	1950	23.29	24.50	1.321			0.09	0.320	0.423	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	0mm	Ant5	DSI 3	Other PA	390000	1950	18.17	19.50	1.358			0.03	0.671	0.911	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant5	DSI 4	Other PA	390000	1950	23.29	24.50	1.321			0.12	0.023	0.030	Csar
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant5	DSI 3	Other PA	389000	1945	18.12	19.50	1.374			0.09	1.260	1.731	DASY
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant5	DSI 3	Other PA	391000	1955	18.04	19.50	1.4			-0.06	1.100	1.540	Csar
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant5	DSI3		389000	1945	18.51	19.50	1.256			-0.02	1.140	1.432	DASY
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant6	DSI4		390000	1950	20.00	21.00	1.259			-0.18	1.200	1.511	Csar
	FR1 n1	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		390000	1950	20.00	21.00	1.259			-0.08	1.460	1.838	DASY
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant6	DSI4		390000	1950	20.00	21.00	1.259			-0.13	0.431	0.543	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant6	DSI4		390000	1950	20.00	21.00	1.259			0.02	0.064	0.081	Csar
	FR1 n1	50M	BPSK	135	67	Top Edge	0mm	Ant6	DSI4		390000	1950	20.00	21.00	1.259			-0.12	0.001	0.001	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		390000	1950	20.00	21.00	1.259			0.12	1.580	1.989	DASY
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		389000	1945	19.93	21.00	1.279			0.10	1.710	2.187	DASY
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		391000	1955	19.86	21.00	1.3			-0.06	1.640	2.132	DASY
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI 4	Other PA	389000	1945	19.61	20.50	1.227			0.06	1.690	2.074	DASY
	FR1 n1	50M	BPSK	135	67	Front	0mm	Ant7	DSI 4	Other PA	390000	1950	20.27	21.50	1.327			-0.04	1.040	1.380	Csar
	FR1 n1	50M	BPSK	135	67	Back	0mm	Ant7	DSI 4	Other PA	390000	1950	20.27	21.50	1.327			0.07	0.527	0.699	Csar
	FR1 n1	50M	BPSK	135	67	Left Edge	0mm	Ant7	DSI 4	Other PA	390000	1950	20.27	21.50	1.327			-0.01	0.020	0.027	Csar
	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		390000	1950	20.47	21.50	1.268			0.08	1.590	2.016	DASY
80	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI 4	Other PA	390000	1950	20.27	21.50	1.327			0.04	1.920	2.548	DASY
	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI 4	Other PA	389000	1945	20.24	21.50	1.337			0.17	1.750	2.340	DASY
	FR1 n1	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI 4	Other PA	391000	1955	20.16	21.50	1.361			0.04	1.840	2.504	DASY
	FR1 n1	50M	BPSK	135	67	Top Edge	0mm	Ant7	DSI 4	Other PA	390000	1950	20.27	21.50	1.327			-0.18	0.066	0.088	Csar
	FR1 n1	50M	BPSK	135	67	Bottom Edge	0mm	Ant7	DSI 4	Other PA	390000	1950	20.27	21.50	1.327			0.01	0.054	0.072	Csar
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant4	DSI 3	Other PA	349500	1747.5	20.66	21.50	1.213			-0.17	1.230	1.492	Csar
	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant4	DSI 3	Other PA	349500	1747.5	20.66	21.50	1.213			0.02	0.682	0.827	Csar
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		352000	1760	20.06	20.70	1.159			0.04	1.920	2.225	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI 3	Other PA	349500	1747.5	20.66	21.50	1.213			-0.02	1.750	2.123	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI 3	Other PA	347000	1735	20.62	21.50	1.225			0.13	1.750	2.144	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI 3	Other PA	352000	1760	20.53	21.50	1.25			0.08	1.810	2.263	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant4	DSI 4	Other PA	349500	1747.5	24.75	25.50	1.189			-0.05	0.097	0.115	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	0mm	Ant4	DSI 3	Other PA	349500	1747.5	20.66	21.50	1.213			0.16	0.212	0.257	Csar
	FR1 n3	50M	BPSK	135	67	Bottom Edge	0mm	Ant4	DSI 4	Other PA	349500	1747.5	24.75	25.50	1.189			0.02	0.221	0.263	Csar
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant5	DSI 3	Other PA	349500	1747.5	17.82	19.00	1.312			-0.17	1.070	1.404	Csar
	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant5	DSI 3	Other PA	349500	1747.5	17.82	19.00	1.312			0.08	0.464	0.609	Csar
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant5	DSI 3	Other PA	349500	1747.5	17.82	19.00	1.312			0.14	0.255	0.335	Csar
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant5	DSI 4	Other PA	349500	1747.5	23.15	24.50	1.365			-0.09	0.266	0.363	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	0mm	Ant5	DSI 3	Other PA	349500	1747.5	17.82	19.00	1.312			0.13	0.838	1.099	Csar
	FR1 n3	50M	BPSK	135	67	Bottom Edge	0mm	Ant5	DSI 4	Other PA	349500	1747.5	23.15	24.50	1.365			-0.09	0.029	0.040	Csar
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant5	DSI 3	Other PA	352000	1760	17.74	19.00	1.337			0.09	1.060	1.417	DASY
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant5	DSI 3	Other PA	347000	1735	17.81	19.00	1.315			-0.14	1.070	1.407	Csar
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant5	DSI3		352000	1760	18.06	19.00	1.242			0.06	1.130	1.403	DASY
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant6	DSI4		349500	1747.5	19.48	20.50	1.265			0.10	1.540	1.948	Csar
	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		349500	1747.5	19.48	20.50	1.265			-0.12	1.790	2.264	DASY
81	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		347000	1735	19.41	20.50	1.285			0.02	1.870	2.403	DASY
	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		352000	1760	19.36	20.50	1.3			-0.04	1.750	2.275	DASY
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant6	DSI4		349500	1747.5	19.48	20.50	1.265			-0.04	0.381	0.482	Csar
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant6	DSI4		349500	1747.5	19.48	20.50	1.265			-0.09	0.314	0.397	Csar
	FR1 n3	50M	BPSK	135	67	Top Edge	0mm	Ant6	DSI4		349500	1747.5	19.48	20.50	1.265			-0.14	0.012	0.015	Csar
	FR1 n3	50M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		349500	1747.5	19.48	20.50	1.265			0.05	0.966	1.222	Csar
	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant6	DSI 4	Other PA	347000	1735	19.03	20.00	1.25			-0.05	1.490	1.863	DASY
	FR1 n3	50M	BPSK	135	67	Front	0mm	Ant7	DSI4		349500	1747.5	18.67	20.00	1.358			-0.15	1.290	1.752	Csar
	FR1 n3	50M	BPSK	135	67	Back	0mm	Ant7	DSI4		349500	1747.5	18.67	20.00	1.358			-0.14	0.695	0.944	Csar
	FR1 n3	50M	BPSK	135	67	Left Edge	0mm	Ant7	DSI4		349500	1747.5	18.67	20.00	1.358			-0.09	0.022	0.030	Csar
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		349500	1747.5	18.67	20.00	1.358			-0.16	1.650	2.241	DASY
	FR1 n3	50M	BPSK	135	67	Top Edge	0mm	Ant7	DSI4		349500	1747.5	18.67	20.00	1.358			0.07	0.112	0.152	Csar



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	FR1 n3	50M	BPSK	135	67	Bottom Edge	0mm	Ant7	DSI4		349500	1747.5	18.67	20.00	1.358			-0.03	0.049	0.067	Csar
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		347000	1735	18.62	20.00	1.374			0.06	1.680	2.308	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		352000	1760	18.59	20.00	1.384			0.01	1.640	2.270	DASY
	FR1 n3	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI 4	Other PA	347000	1735	18.62	20.00	1.374			0.03	1.410	1.937	DASY
	FR1 n5	20M	BPSK	50	25	Front	0mm	Ant0	DSI4		167300	836.5	24.64	25.20	1.138			-0.12	1.490	1.696	Csar
	FR1 n5	20M	BPSK	50	25	Back	0mm	Ant0	DSI4		167300	836.5	24.64	25.20	1.138			-0.00	1.470	1.673	Csar
	FR1 n5	20M	BPSK	50	25	Left Edge	0mm	Ant0	DSI4		167300	836.5	24.64	25.20	1.138			-0.18	0.164	0.187	Csar
	FR1 n5	20M	BPSK	50	25	Right Edge	0mm	Ant0	DSI4		167300	836.5	24.64	25.20	1.138			-0.15	1.170	1.331	Csar
	FR1 n5	20M	BPSK	50	25	Top Edge	0mm	Ant0	DSI4		167300	836.5	24.64	25.20	1.138			0.03	0.067	0.076	Csar
	FR1 n5	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		167300	836.5	24.64	25.20	1.138			0.09	1.940	2.208	DASY
82	FR1 n5	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		166800	834	24.61	25.20	1.146			0.06	2.160	2.475	DASY
	FR1 n5	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		167800	839	24.58	25.20	1.153			-0.13	2.060	2.375	DASY
	FR1 n5	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI 4	Other PA	166800	834	24.15	25.00	1.216			0.04	1.750	2.128	DASY
	FR1 n5	20M	BPSK	50	25	Front	0mm	Ant1	DSI3		167300	836.5	20.58	21.20	1.153			0.08	0.857	0.988	DASY
	FR1 n5	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	167300	836.5	20.63	21.50	1.222			0.06	0.892	1.090	DASY
	FR1 n5	20M	BPSK	50	25	Back	0mm	Ant1	DSI 3	Other PA	167300	836.5	20.63	21.50	1.222			-0.13	0.766	0.936	Csar
	FR1 n5	20M	BPSK	50	25	Left Edge	0mm	Ant1	DSI 3	Other PA	167300	836.5	20.63	21.50	1.222			-0.11	0.541	0.661	Csar
	FR1 n5	20M	BPSK	50	25	Right Edge	0mm	Ant1	DSI 4	Other PA	167300	836.5	24.24	25.00	1.191			-0.10	0.087	0.104	Csar
	FR1 n5	20M	BPSK	50	25	Top Edge	0mm	Ant1	DSI 3	Other PA	167300	836.5	20.63	21.50	1.222			-0.15	0.053	0.065	Csar
	FR1 n5	20M	BPSK	50	25	Bottom Edge	0mm	Ant1	DSI 4	Other PA	167300	836.5	24.24	25.00	1.191			-0.12	0.143	0.170	Csar
	FR1 n5	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	166800	834	20.59	21.50	1.233			0.16	0.837	1.032	Csar
	FR1 n5	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	167800	839	20.55	21.50	1.245			-0.06	0.825	1.027	Csar
	FR1 n7	50M	BPSK	135	67	Front	0mm	Ant4	DSI3		507000	2535	19.38	19.70	1.076			0.07	1.330	1.431	Csar
	FR1 n7	50M	BPSK	135	67	Back	0mm	Ant4	DSI3		507000	2535	19.38	19.70	1.076			-0.04	0.903	0.972	Csar
83	FR1 n7	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		507000	2535	19.38	19.70	1.076			0.03	2.050	2.206	DASY
	FR1 n7	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		505000	2525	19.36	19.70	1.081			0.07	1.890	2.043	DASY
	FR1 n7	50M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		509000	2545	19.31	19.70	1.094			0.08	1.930	2.111	DASY
	FR1 n7	50M	BPSK	135	67	Right Edge	0mm	Ant4	DSI4		507000	2535	25.40	25.70	1.072			0.16	0.158	0.169	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	0mm	Ant4	DSI3		507000	2535	19.38	19.70	1.076			0.17	0.306	0.329	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	0mm	Ant4	DSI4		507000	2535	25.40	25.70	1.072			0.05	0.434	0.465	Csar
	FR1 n7	50M	BPSK	135	67	Front	0mm	Ant5	DSI3		507000	2535	18.57	19.50	1.239			0.06	0.958	1.187	DASY
	FR1 n7	50M	BPSK	135	67	Back	0mm	Ant5	DSI3		507000	2535	18.57	19.50	1.239			0.12	0.428	0.530	Csar
	FR1 n7	50M	BPSK	135	67	Left Edge	0mm	Ant5	DSI3		507000	2535	18.57	19.50	1.239			0.04	0.718	0.890	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	0mm	Ant5	DSI4		507000	2535	24.15	25.00	1.216			0.13	0.237	0.288	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	0mm	Ant5	DSI3		507000	2535	18.57	19.50	1.239			0.10	0.871	1.079	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	0mm	Ant5	DSI4		507000	2535	24.15	25.00	1.216			0.09	0.044	0.054	Csar
	FR1 n7	50M	BPSK	135	67	Front	0mm	Ant5	DSI3		505000	2525	18.52	19.50	1.253			-0.06	0.916	1.148	Csar
	FR1 n7	50M	BPSK	135	67	Front	0mm	Ant5	DSI3		509000	2545	18.48	19.50	1.265			0.12	0.921	1.165	Csar
	FR1 n7	50M	BPSK	135	67	Front	0mm	Ant6	DSI4		507000	2535	19.66	20.50	1.213			-0.07	1.200	1.456	Csar
	FR1 n7	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		507000	2535	19.66	20.50	1.213			0.02	1.580	1.917	DASY
	FR1 n7	50M	BPSK	135	67	Left Edge	0mm	Ant6	DSI4		507000	2535	19.66	20.50	1.213			0.05	0.364	0.442	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	0mm	Ant6	DSI4		507000	2535	19.66	20.50	1.213			-0.05	0.178	0.216	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	0mm	Ant6	DSI4		507000	2535	19.66	20.50	1.213			-0.06	0.018	0.022	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		507000	2535	19.66	20.50	1.213			-0.12	1.570	1.904	DASY
	FR1 n7	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		505000	2525	19.63	20.50	1.222			0.02	1.760	2.151	DASY
	FR1 n7	50M	BPSK	135	67	Back	0mm	Ant6	DSI4		509000	2545	19.57	20.50	1.239			0.03	1.610	1.995	DASY
	FR1 n7	50M	BPSK	135	67	Front	0mm	Ant7	DSI4		507000	2535	19.50	20.00	1.122			-0.11	1.250	1.403	Csar
	FR1 n7	50M	BPSK	135	67	Back	0mm	Ant7	DSI4		507000	2535	19.50	20.00	1.122			0.16	0.605	0.679	Csar
	FR1 n7	50M	BPSK	135	67	Left Edge	0mm	Ant7	DSI4		507000	2535	19.50	20.00	1.122			-0.05	0.021	0.024	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		507000	2535	19.50	20.00	1.122			0.15	1.280	1.436	Csar
	FR1 n7	50M	BPSK	135	67	Top Edge	0mm	Ant7	DSI4		507000	2535	19.50	20.00	1.122			0.16	0.247	0.277	Csar
	FR1 n7	50M	BPSK	135	67	Bottom Edge	0mm	Ant7	DSI4		507000	2535	19.50	20.00	1.122			0.13	0.043	0.048	Csar
	FR1 n7	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		505000	2525	19.38	20.00	1.153			0.06	1.300	1.499	DASY
	FR1 n7	50M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		509000	2545	19.46	20.00	1.132			-0.08	1.120	1.268	Csar
	FR1 n8	20M	BPSK	50	25	Front	0mm	Ant0	DSI 4	Other PA	179500	897.5	24.36	25.00	1.159			0.01	1.200	1.391	Csar
	FR1 n8	20M	BPSK	50	25	Back	0mm	Ant0	DSI 4	Other PA	179500	897.5	24.36	25.00	1.159			0.05	1.130	1.310	Csar
	FR1 n8	20M	BPSK	50	25	Left Edge	0mm	Ant0	DSI 4	Other PA	179500	897.5	24.36	25.00	1.159			-0.01	0.089	0.103	Csar
	FR1 n8	20M	BPSK	50	25	Right Edge	0mm	Ant0	DSI 4	Other PA	179500	897.5	24.36	25.00	1.159			-0.07	0.706	0.818	Csar
	FR1 n8	20M	BPSK	50	25	Top Edge	0mm	Ant0	DSI 4	Other PA	179500	897.5	24.36	25.00	1.159			-0.18	0.081	0.094	Csar
	FR1 n8	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI 4	Other PA	179500	897.5	24.36	25.00	1.159			-0.01	1.400	1.623	Csar
84	FR1 n8	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI 4	Other PA	178000	890	24.20	25.00	1.202			0.05	1.520	1.827	DASY
	FR1 n8	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI 4	Other PA	181000	905	24.30	25.00	1.175			-0.06	1.360	1.598	Csar
	FR1 n8	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		178000	890	24.07	24.70	1.156			0.05	1.560	1.803	DASY
	FR1 n8	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	179500	897.5	20.24	21.00	1.191			-0.04	0.762	0.908	Csar
	FR1 n8	20M	BPSK	50	25	Back	0mm	Ant1	DSI 3	Other PA	179500	897.5	20.24	21.00	1.191			-0.09	0.665	0.792	Csar
	FR1 n8	20M	BPSK	50	25	Left Edge	0mm	Ant1	DSI 3	Other PA	179500	897.5	20.24	21.00	1.191			0.02	0.452	0.538	Csar
	FR1 n8	20M	BPSK	50	25	Right Edge	0mm	Ant1	DSI 4	Other PA	179500	897.5	24.33	25.00	1.167			-0.13	0.086	0.100	Csar
	FR1 n8	20M	BPSK	50	25	Top Edge	0mm	Ant1	DSI 3	Other PA	179500	897.5	20.24	21.00	1.191			-0.08	0.039	0.046	Csar
	FR1 n8	20M	BPSK	50	25	Bottom Edge	0mm	Ant1	DSI 4	Other PA	179500	897.5	24.33	25.00	1.167			0.10	0.139	0.162	Csar
	FR1 n8	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	178000	890	20.21	21.00	1.199			0.07	0.841	1.008	DASY
	FR1 n8	20M	BPSK	50	25	Front	0mm	Ant1													



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	FR1 n20	20M	BPSK	50	25	Back	0mm	Ant0	DSI4		169400	847	24.27	25.00	1.183		0.12	1.190	1.408	Csar
	FR1 n20	20M	BPSK	50	25	Left Edge	0mm	Ant0	DSI4		169400	847	24.27	25.00	1.183		0.02	0.119	0.141	Csar
	FR1 n20	20M	BPSK	50	25	Right Edge	0mm	Ant0	DSI4		169400	847	24.27	25.00	1.183		0.02	1.010	1.195	Csar
	FR1 n20	20M	BPSK	50	25	Top Edge	0mm	Ant0	DSI4		169400	847	24.27	25.00	1.183		-0.13	0.063	0.075	Csar
	FR1 n20	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		169400	847	24.27	25.00	1.183		-0.09	1.790	2.118	DASY
85	FR1 n20	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		168400	842	24.24	25.00	1.191		0.11	1.850	2.203	DASY
	FR1 n20	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		170400	852	24.22	25.00	1.197		0.14	1.650	1.975	DASY
	FR1 n20	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI 4	Other PA	168400	842	24.37	25.00	1.156		0.04	1.540	1.780	DASY
	FR1 n20	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	169400	847	20.36	21.00	1.159		0.17	0.730	0.846	Csar
	FR1 n20	20M	BPSK	50	25	Back	0mm	Ant1	DSI 3	Other PA	169400	847	20.36	21.00	1.159		0.17	0.684	0.793	Csar
	FR1 n20	20M	BPSK	50	25	Left Edge	0mm	Ant1	DSI 3	Other PA	169400	847	20.36	21.00	1.159		0.01	0.491	0.569	Csar
	FR1 n20	20M	BPSK	50	25	Right Edge	0mm	Ant1	DSI 4	Other PA	169400	847	24.54	25.00	1.112		0.09	0.084	0.093	Csar
	FR1 n20	20M	BPSK	50	25	Top Edge	0mm	Ant1	DSI 3	Other PA	169400	847	20.36	21.00	1.159		-0.05	0.044	0.051	Csar
	FR1 n20	20M	BPSK	50	25	Bottom Edge	0mm	Ant1	DSI 4	Other PA	169400	847	24.54	25.00	1.112		0.05	0.126	0.140	Csar
	FR1 n20	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	168400	842	20.29	21.00	1.178		0.07	0.875	1.031	DASY
	FR1 n20	20M	BPSK	50	25	Front	0mm	Ant1	DSI 3	Other PA	170400	852	20.32	21.00	1.169		-0.05	0.705	0.824	Csar
	FR1 n20	20M	BPSK	50	25	Front	0mm	Ant1	DSI3		168400	842	20.41	21.00	1.146		0.02	0.797	0.913	DASY
	FR1 n26	20M	BPSK	50	25	Front	0mm	Ant0	DSI4		166300	831.5	24.73	25.20	1.114		-0.15	1.330	1.482	Csar
	FR1 n26	20M	BPSK	50	25	Back	0mm	Ant0	DSI4		166300	831.5	24.73	25.20	1.114		0.08	1.280	1.426	Csar
	FR1 n26	20M	BPSK	50	25	Left Edge	0mm	Ant0	DSI4		166300	831.5	24.73	25.20	1.114		0.10	0.129	0.144	Csar
	FR1 n26	20M	BPSK	50	25	Right Edge	0mm	Ant0	DSI4		166300	831.5	24.73	25.20	1.114		0.03	1.020	1.136	Csar
	FR1 n26	20M	BPSK	50	25	Top Edge	0mm	Ant0	DSI4		166300	831.5	24.73	25.20	1.114		-0.01	0.058	0.065	Csar
	FR1 n26	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		166300	831.5	24.73	25.20	1.114		-0.02	2.130	2.373	DASY
86	FR1 n26	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		164800	824	24.62	25.20	1.143		0.07	2.110	2.412	DASY
	FR1 n26	20M	BPSK	50	25	Bottom Edge	0mm	Ant0	DSI4		167800	839	24.69	25.20	1.125		-0.16	2.040	2.295	DASY
	FR1 n26	20M	BPSK	50	25	Front	0mm	Ant1	DSI3		166300	831.5	20.89	21.70	1.205		-0.12	0.880	1.060	Csar
	FR1 n26	20M	BPSK	50	25	Back	0mm	Ant1	DSI3		166300	831.5	20.89	21.70	1.205		0.11	0.678	0.817	Csar
	FR1 n26	20M	BPSK	50	25	Left Edge	0mm	Ant1	DSI3		166300	831.5	20.89	21.70	1.205		-0.06	0.590	0.711	Csar
	FR1 n26	20M	BPSK	50	25	Right Edge	0mm	Ant1	DSI4		166300	831.5	24.92	25.70	1.197		-0.10	0.027	0.032	Csar
	FR1 n26	20M	BPSK	50	25	Top Edge	0mm	Ant1	DSI3		166300	831.5	20.89	21.70	1.205		-0.12	0.041	0.049	Csar
	FR1 n26	20M	BPSK	50	25	Bottom Edge	0mm	Ant1	DSI4		166300	831.5	24.92	25.70	1.197		0.11	0.059	0.071	Csar
	FR1 n26	20M	BPSK	50	25	Front	0mm	Ant1	DSI3		164800	824	20.81	21.70	1.227		0.16	0.838	1.028	Csar
	FR1 n26	20M	BPSK	50	25	Front	0mm	Ant1	DSI3		167800	839	20.86	21.70	1.213		0.05	0.923	1.120	DASY
	FR1 n28	30M	BPSK	80	40	Front	0mm	Ant0	DSI4		143600	718	23.88	25.00	1.294		-0.03	1.040	1.346	Csar
	FR1 n28	30M	BPSK	80	40	Back	0mm	Ant0	DSI4		143600	718	23.88	25.00	1.294		-0.14	1.090	1.410	Csar
	FR1 n28	30M	BPSK	80	40	Left Edge	0mm	Ant0	DSI4		143600	718	23.88	25.00	1.294		-0.15	0.077	0.100	Csar
	FR1 n28	30M	BPSK	80	40	Right Edge	0mm	Ant0	DSI4		143600	718	23.88	25.00	1.294		-0.08	0.920	1.190	Csar
	FR1 n28	30M	BPSK	80	40	Top Edge	0mm	Ant0	DSI4		143600	718	23.88	25.00	1.294		-0.18	0.032	0.041	Csar
87	FR1 n28	30M	BPSK	80	40	Bottom Edge	0mm	Ant0	DSI4		143600	718	23.88	25.00	1.294		0.07	1.580	2.045	DASY
	FR1 n28	30M	BPSK	80	40	Bottom Edge	0mm	Ant0	DSI4		146600	733	23.82	25.00	1.312		-0.07	1.460	1.916	DASY
	FR1 n28	30M	BPSK	80	40	Bottom Edge	0mm	Ant0	DSI 4	Other PA	143600	718	24.05	25.00	1.245		0.08	1.550	1.930	DASY
	FR1 n28	30M	BPSK	80	40	Front	0mm	Ant1	DSI 3	Other PA	143600	718	21.74	22.50	1.191		-0.03	0.973	1.159	Csar
	FR1 n28	30M	BPSK	80	40	Back	0mm	Ant1	DSI 3	Other PA	143600	718	21.74	22.50	1.191		-0.13	0.641	0.763	Csar
	FR1 n28	30M	BPSK	80	40	Left Edge	0mm	Ant1	DSI 3	Other PA	143600	718	21.74	22.50	1.191		-0.04	1.070	1.274	Csar
	FR1 n28	30M	BPSK	80	40	Right Edge	0mm	Ant1	DSI 4	Other PA	143600	718	24.37	25.00	1.156		-0.15	0.046	0.053	Csar
	FR1 n28	30M	BPSK	80	40	Top Edge	0mm	Ant1	DSI 3	Other PA	143600	718	21.74	22.50	1.191		-0.00	0.040	0.048	Csar
	FR1 n28	30M	BPSK	80	40	Bottom Edge	0mm	Ant1	DSI 4	Other PA	143600	718	24.37	25.00	1.156		0.15	0.080	0.092	Csar
	FR1 n28	30M	BPSK	80	40	Left Edge	0mm	Ant1	DSI 3	Other PA	146600	733	21.46	22.50	1.271		0.05	1.220	1.551	DASY
	FR1 n28	30M	BPSK	80	40	Left Edge	0mm	Ant1	DSI3		146600	733	21.30	22.50	1.318		0.08	1.080	1.423	DASY
	FR1 n40	80M	BPSK	108	54	Front	0mm	Ant4	DSI3		470000	2350	18.49	19.00	1.125		0.18	1.040	1.170	Csar
	FR1 n40	80M	BPSK	108	54	Back	0mm	Ant4	DSI3		470000	2350	18.49	19.00	1.125		-0.03	0.450	0.506	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	0mm	Ant4	DSI3		470000	2350	18.49	19.00	1.125		-0.17	1.620	1.823	DASY
	FR1 n40	80M	BPSK	108	54	Right Edge	0mm	Ant4	DSI4		470000	2350	24.61	25.00	1.094		-0.06	0.039	0.043	Csar
	FR1 n40	80M	BPSK	108	54	Top Edge	0mm	Ant4	DSI3		470000	2350	18.49	19.00	1.125		0.11	0.178	0.200	Csar
	FR1 n40	80M	BPSK	108	54	Bottom Edge	0mm	Ant4	DSI4		470000	2350	24.61	25.00	1.094		0.05	0.216	0.236	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	0mm	Ant4	DSI3		468000	2340	18.41	19.00	1.146		0.08	1.630	1.868	DASY
	FR1 n40	80M	BPSK	108	54	Left Edge	0mm	Ant4	DSI3		472000	2360	18.37	19.00	1.156		0.10	1.610	1.861	DASY
	FR1 n40	80M	BPSK	108	54	Front	0mm	Ant5	DSI3		470000	2350	21.18	22.00	1.208		-0.17	1.610	1.945	DASY
	FR1 n40	80M	BPSK	108	54	Back	0mm	Ant5	DSI3		470000	2350	21.18	22.00	1.208		0.18	0.661	0.798	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	0mm	Ant5	DSI3		470000	2350	21.18	22.00	1.208		-0.00	0.774	0.935	Csar
	FR1 n40	80M	BPSK	108	54	Right Edge	0mm	Ant5	DSI4		470000	2350	23.26	24.00	1.186		-0.18	0.138	0.164	Csar
	FR1 n40	80M	BPSK	108	54	Top Edge	0mm	Ant5	DSI3		470000	2350	21.18	22.00	1.208		0.10	1.810	2.186	DASY
	FR1 n40	80M	BPSK	108	54	Top Edge	0mm	Ant5	DSI3		468000	2340	21.09	22.00	1.233		-0.10	1.800	2.219	DASY
88	FR1 n40	80M	BPSK	108	54	Top Edge	0mm	Ant5	DSI3		472000	2360	21.13	22.00	1.222		0.03	1.850	2.261	DASY
	FR1 n40	80M	BPSK	108	54	Bottom Edge	0mm	Ant5	DSI4		470000	2350	23.26	24.00	1.186		-0.06	0.002	0.002	Csar
	FR1 n40	80M	BPSK	108	54	Front	0mm	Ant6	DSI4		470000	2350	19.96	20.50	1.132		-0.13	0.893	1.011	Csar
	FR1 n40	80M	BPSK	108	54	Back	0mm	Ant6	DSI4		470000	2350	19.96	20.50	1.132		0.03	1.110	1.257	Csar
	FR1 n40	80M	BPSK	108	54	Left Edge	0mm	Ant6	DSI4		470000	2350	19.96	20.50	1.132		0.17	0.235	0.266	Csar
	FR1 n40	80M	BPSK	108	54	Right Edge	0mm	Ant6	DSI4		470000	2350	19.96	20.50	1.132		-0.10	0.117	0.132	Csar
	FR1 n40	80M	BPSK	108	54	Top Edge	0mm	Ant6	DSI4		470000	2350	19.96	20.50	1.132		0.18	0.001	0.001	Csar
	FR1 n40	80M	BPSK	108	54	Bottom Edge	0mm	Ant6	DSI4		470000	2350	19.96	20.50	1.132		0.06	1.250	1.415	DASY
	FR1 n40	80M	BPSK	108	54	Bottom Edge	0mm	Ant6	DSI4		468000	2340	19.82	20.50	1.169		-0.07	1.190	1.391	Csar
	FR1 n40	8																		



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	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant4	DSI3		518598	2592.99	19.01	19.20	1.045			-0.16	1.140	1.191	Csar
	FR1 n41	100M	BPSK	135	67	Back	0mm	Ant4	DSI3		518598	2592.99	19.01	19.20	1.045			-0.10	0.667	0.697	Csar
89	FR1 n41	100M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		518598	2592.99	19.01	19.20	1.045			0.01	1.690	1.766	DASY
	FR1 n41_HPUE	100M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		518598	2592.99	21.99	22.50	1.125	50.0	1.0	0.18	1.560	1.755	DASY
	FR1 n41	100M	BPSK	135	67	Right Edge	0mm	Ant4	DSI4		518598	2592.99	25.58	25.70	1.028			0.17	0.116	0.119	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	0mm	Ant4	DSI3		518598	2592.99	19.01	19.20	1.045			0.07	0.239	0.250	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	0mm	Ant4	DSI4		518598	2592.99	25.58	25.70	1.028			-0.08	0.561	0.577	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		509202	2546.01	18.96	19.20	1.057			-0.15	1.500	1.585	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	0mm	Ant4	DSI3		528000	2640	18.92	19.20	1.067			-0.06	1.270	1.355	Csar
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant5	DSI3		518598	2592.99	17.62	18.50	1.225			0.13	0.622	0.762	Csar
	FR1 n41	100M	BPSK	135	67	Back	0mm	Ant5	DSI3		518598	2592.99	17.62	18.50	1.225			0.06	0.238	0.292	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	0mm	Ant5	DSI3		518598	2592.99	17.62	18.50	1.225			-0.17	0.470	0.576	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	0mm	Ant5	DSI4		518598	2592.99	24.19	25.00	1.205			-0.02	0.293	0.353	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	0mm	Ant5	DSI3		518598	2592.99	17.62	18.50	1.225			0.07	0.587	0.719	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	0mm	Ant5	DSI4		518598	2592.99	24.19	25.00	1.205			-0.14	0.001	0.001	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Front	0mm	Ant5	DSI3		509202	2546.01	20.62	21.50	1.225	50.0	1.0	-0.04	0.588	0.720	DASY
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant5	DSI3		509202	2546.01	17.53	18.50	1.25			0.06	0.664	0.830	DASY
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant5	DSI3		528000	2640	17.46	18.50	1.271			0.01	0.634	0.806	Csar
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant6	DSI4		518598	2592.99	19.43	20.00	1.14			0.16	0.952	1.085	Csar
	FR1 n41	100M	BPSK	135	67	Back	0mm	Ant6	DSI4		518598	2592.99	19.43	20.00	1.14			0.07	1.400	1.596	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	0mm	Ant6	DSI4		518598	2592.99	19.43	20.00	1.14			-0.05	0.284	0.324	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	0mm	Ant6	DSI4		518598	2592.99	19.43	20.00	1.14			0.18	0.149	0.170	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	0mm	Ant6	DSI4		518598	2592.99	19.43	20.00	1.14			-0.13	0.008	0.009	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		518598	2592.99	19.43	20.00	1.14			0.02	1.460	1.664	DASY
	FR1 n41	100M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		509202	2546.01	19.38	20.00	1.153			0.15	1.380	1.591	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		528000	2640	19.33	20.00	1.167			0.09	1.400	1.634	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Bottom Edge	0mm	Ant6	DSI4		518598	2592.99	22.32	23.00	1.169	50.0	1.0	0.04	1.390	1.625	DASY
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant7	DSI4		518598	2592.99	19.37	20.00	1.156			0.12	0.900	1.040	Csar
	FR1 n41	100M	BPSK	135	67	Back	0mm	Ant7	DSI4		518598	2592.99	19.37	20.00	1.156			-0.17	0.447	0.517	Csar
	FR1 n41	100M	BPSK	135	67	Left Edge	0mm	Ant7	DSI4		518598	2592.99	19.37	20.00	1.156			0.13	0.001	0.001	Csar
	FR1 n41	100M	BPSK	135	67	Right Edge	0mm	Ant7	DSI4		518598	2592.99	19.37	20.00	1.156			0.11	0.679	0.785	Csar
	FR1 n41	100M	BPSK	135	67	Top Edge	0mm	Ant7	DSI4		518598	2592.99	19.37	20.00	1.156			-0.17	0.199	0.230	Csar
	FR1 n41	100M	BPSK	135	67	Bottom Edge	0mm	Ant7	DSI4		518598	2592.99	19.37	20.00	1.156			0.18	0.036	0.042	Csar
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant7	DSI4		509202	2546.01	19.33	20.00	1.167			0.11	1.050	1.225	DASY
	FR1 n41	100M	BPSK	135	67	Front	0mm	Ant7	DSI4		528000	2640	19.28	20.00	1.18			0.15	0.781	0.922	Csar
	FR1 n41_HPUE	100M	BPSK	135	67	Front	0mm	Ant7	DSI4		509202	2546.01	22.19	23.00	1.205	50.0	1.0	0.16	1.010	1.217	DASY
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant8	DSI4		650000	3750	17.51	18.50	1.256			-0.15	0.748	0.939	Csar
	FR1 n77	100M	BPSK	135	67	Back	0mm	Ant8	DSI4		650000	3750	17.51	18.50	1.256			-0.11	0.237	0.298	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	0mm	Ant8	DSI4		650000	3750	17.51	18.50	1.256			-0.06	0.015	0.019	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		650000	3750	17.51	18.50	1.256			-0.11	1.390	1.746	Csar
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant8	DSI4		650000	3750	17.51	18.50	1.256			-0.14	0.117	0.147	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	0mm	Ant8	DSI4		650000	3750	17.51	18.50	1.256			0.00	0.027	0.034	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		623334	3350.01	17.44	18.50	1.276			0.06	1.480	1.888	DASY
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		633332	3499.98	17.36	18.50	1.3			0.15	1.370	1.781	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		640000	3600	17.48	18.50	1.265			-0.01	1.370	1.733	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		660000	3900	17.46	18.50	1.271			-0.04	1.170	1.487	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		666666	3999.99	17.39	18.50	1.291			0.15	0.942	1.216	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		676666	4149.99	17.37	18.50	1.297			-0.06	1.040	1.349	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Right Edge	0mm	Ant8	DSI4		623334	3350.01	20.16	22.00	1.528	50.0	1.0	-0.06	0.977	1.493	DASY
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		650000	3750	18.88	19.50	1.153			-0.06	1.130	1.303	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		633332	3499.98	21.66	22.50	1.213	50.0	1.0	-0.13	1.160	1.407	DASY
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		623334	3350.01	18.72	19.50	1.197			-0.10	1.030	1.233	Csar
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		633332	3499.98	18.76	19.50	1.186			0.02	1.370	1.625	DASY
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		640000	3600	18.71	19.50	1.199			-0.15	1.340	1.607	Csar
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		660000	3900	18.82	19.50	1.169			-0.03	1.070	1.251	Csar
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		666666	3999.99	18.67	19.50	1.211			0.13	1.050	1.272	Csar
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant9	DSI3		676666	4149.99	18.84	19.50	1.164			-0.08	1.040	1.211	Csar
	FR1 n77	100M	BPSK	135	67	Back	0mm	Ant9	DSI3		650000	3750	18.88	19.50	1.153			-0.06	0.318	0.367	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	0mm	Ant9	DSI3		650000	3750	18.88	19.50	1.153			0.01	0.992	1.144	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant9	DSI4		650000	3750	21.98	22.50	1.127			0.06	0.020	0.023	Csar
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant9	DSI3		650000	3750	18.88	19.50	1.153			0.16	0.158	0.182	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	0mm	Ant9	DSI4		650000	3750	21.98	22.50	1.127			0.04	0.051	0.057	Csar
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant10	DSI3		650000	3750	16.07	17.00	1.239			-0.04	0.916	1.135	Csar
	FR1 n77	100M	BPSK	135	67	Back	0mm	Ant10	DSI3		650000	3750	16.07	17.00	1.239			-0.04	0.191	0.237	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	0mm	Ant10	DSI3		650000	3750	16.07	17.00	1.239			-0.18	0.098	0.121	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant10	DSI4		650000	3750	25.12	26.00	1.225			-0.07	1.410	1.727	Csar
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant10	DSI3		650000	3750	16.07	17.00	1.239			0.02	1.340	1.660	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	0mm	Ant10	DSI4		650000	3750	25.12	26.00	1.225			0.18	0.023	0.028	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Right Edge	0mm	Ant10	DSI4		640000	3600	26.88	28.00	1.294	50.0	1.0	-0.07	1.180	1.527	



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	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant10	DSI4		666666	3999.99	24.93	26.00	1.279			-0.16	0.998	1.276	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant10	DSI4		676666	4149.99	24.67	26.00	1.358			-0.10	0.974	1.323	Csar
	FR1 n77	100M	BPSK	135	67	Front	0mm	Ant11	DSI3		650000	3750	18.91	20.00	1.285			-0.05	0.977	1.255	Csar
	FR1 n77	100M	BPSK	135	67	Back	0mm	Ant11	DSI3		650000	3750	18.91	20.00	1.285			0.17	0.150	0.193	Csar
	FR1 n77	100M	BPSK	135	67	Left Edge	0mm	Ant11	DSI3		650000	3750	18.91	20.00	1.285			-0.17	0.240	0.308	Csar
	FR1 n77	100M	BPSK	135	67	Right Edge	0mm	Ant11	DSI4		633332	3499.98	22.05	23.00	1.245			0.03	0.025	0.031	Csar
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		650000	3750	18.91	20.00	1.285			0.10	1.660	2.133	DASY
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		623334	3350.01	18.79	20.00	1.321			0.12	1.430	1.889	DASY
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		633332	3499.98	18.86	20.00	1.3			-0.01	1.560	2.028	DASY
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		640000	3600	18.77	20.00	1.327			0.11	1.330	1.765	Csar
90	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		660000	3900	18.82	20.00	1.312			0.15	1.730	2.270	DASY
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		666666	3999.99	18.75	20.00	1.334			0.16	1.360	1.814	DASY
	FR1 n77	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		676666	4149.99	18.76	20.00	1.33			0.18	1.210	1.609	Csar
	FR1 n77	100M	BPSK	135	67	Bottom Edge	0mm	Ant11	DSI4		633332	3499.98	22.05	23.00	1.245			0.06	0.016	0.020	Csar
	FR1 n77_HPUE	100M	BPSK	135	67	Top Edge	0mm	Ant11	DSI3		660000	3900	21.85	23.00	1.303	50.0	1.0	0.07	1.190	1.551	DASY

[WLAN 2.4GHz_5GHz SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	WLAN2.4GHz	802.11g 6Mbps	Front	0mm	Ant7	Limbs Standalone	1	2412	17.98	18.50	1.127	98.98	1.01	-0.04	1.030	1.172	Csar
	WLAN2.4GHz	802.11g 6Mbps	Back	0mm	Ant7	Limbs Standalone	1	2412	17.98	18.50	1.127	98.98	1.01	0.06	0.518	0.590	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Edge	0mm	Ant7	Limbs Standalone	1	2412	17.98	18.50	1.127	98.98	1.01	0.13	0.001	0.001	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	0mm	Ant7	Limbs Standalone	1	2412	17.98	18.50	1.127	98.98	1.01	-0.07	1.130	1.286	Csar
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	0mm	Ant7	Limbs Standalone	1	2412	17.98	18.50	1.127	98.98	1.01	0.08	0.152	0.173	Csar
	WLAN2.4GHz	802.11g 6Mbps	Bottom Edge	0mm	Ant7	Limbs Standalone	1	2412	17.98	18.50	1.127	98.98	1.01	-0.18	0.063	0.072	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	0mm	Ant7	Limbs Standalone	7	2442	17.84	18.50	1.164	98.98	1.01	0.05	1.180	1.387	DASY
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	0mm	Ant7	Limbs Standalone	13	2472	17.66	18.50	1.213	98.98	1.01	-0.16	1.090	1.335	Csar
	WLAN2.4GHz	802.11g 6Mbps	Front	0mm	Ant12	Limbs Standalone	7	2442	18.41	19.00	1.146	99.31	1.007	0.12	1.090	1.258	Csar
	WLAN2.4GHz	802.11g 6Mbps	Back	0mm	Ant12	Limbs Standalone	7	2442	18.41	19.00	1.146	99.31	1.007	0.18	0.320	0.369	Csar
	WLAN2.4GHz	802.11g 6Mbps	Left Edge	0mm	Ant12	Limbs Standalone	7	2442	18.41	19.00	1.146	99.31	1.007	0.04	0.074	0.085	Csar
	WLAN2.4GHz	802.11g 6Mbps	Right Edge	0mm	Ant12	Limbs Standalone	7	2442	18.41	19.00	1.146	99.31	1.007	0.00	0.264	0.305	Csar
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	0mm	Ant12	Limbs Standalone	7	2442	18.41	19.00	1.146	99.31	1.007	-0.10	1.270	1.466	Csar
	WLAN2.4GHz	802.11g 6Mbps	Bottom Edge	0mm	Ant12	Limbs Standalone	7	2442	18.41	19.00	1.146	99.31	1.007	0.09	0.001	0.001	Csar
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	0mm	Ant12	Limbs Standalone	1	2412	18.17	19.00	1.211	99.31	1.007	0.05	1.320	1.610	DASY
	WLAN2.4GHz	802.11g 6Mbps	Top Edge	0mm	Ant12	Limbs Standalone	13	2472	18.33	19.00	1.167	99.31	1.007	-0.08	1.220	1.434	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Front	0mm	Ant 7+12	Limbs Standalone	13	2472	21.06	22.00	1.241	100.0	1.0	0.15	1.160	1.440	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Back	0mm	Ant 7+12	Limbs Standalone	13	2472	21.06	22.00	1.241	100.0	1.0	-0.01	0.569	0.706	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Edge	0mm	Ant 7+12	Limbs Standalone	13	2472	21.06	22.00	1.241	100.0	1.0	-0.17	0.084	0.104	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Right Edge	0mm	Ant 7+12	Limbs Standalone	13	2472	21.06	22.00	1.241	100.0	1.0	0.13	1.070	1.328	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Top Edge	0mm	Ant 7+12	Limbs Standalone	13	2472	21.06	22.00	1.241	100.0	1.0	0.14	1.180	1.464	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Bottom Edge	0mm	Ant 7+12	Limbs Standalone	13	2472	21.06	22.00	1.241	100.0	1.0	0.04	0.057	0.071	Csar
	WLAN2.4GHz	802.11n-HT20 MCS0	Top Edge	0mm	Ant 7+12	Limbs Standalone	1	2412	20.97	22.00	1.268	100.0	1.0	0.05	1.200	1.522	Csar
91	WLAN2.4GHz	802.11n-HT20 MCS0	Top Edge	0mm	Ant 7+12	Limbs Standalone	7	2442	21.00	22.00	1.259	100.0	1.0	0.06	1.370	1.725	DASY
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 8+10	Limbs Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.11	1.200	1.514	Csar
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 8+10	Limbs Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.11	0.322	0.406	Csar
	WLAN5GHz	802.11a 6Mbps	Left Edge	0mm	Ant 8+10	Limbs Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.10	0.103	0.130	Csar
	WLAN5GHz	802.11a 6Mbps	Right Edge	0mm	Ant 8+10	Limbs Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.08	0.990	1.249	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant 8+10	Limbs Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.16	1.950	2.460	DASY
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant 8+10	Limbs Standalone	36	5180	18.46	19.50	1.272	99.32	1.007	-0.02	1.920	2.459	DASY
92	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant 8+10	Limbs Standalone	52	5260	18.80	19.50	1.175	99.32	1.007	0.03	2.180	2.579	DASY
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	0mm	Ant 8+10	Limbs Standalone	64	5320	19.02	20.00	1.253	99.32	1.007	0.09	0.039	0.049	Csar
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 8+10	Limbs Standalone	140	5700	19.12	20.00	1.225	99.32	1.007	0.10	1.030	1.271	Csar
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 8+10	Limbs Standalone	140	5700	19.12	20.00	1.225	99.32	1.007	0.14	0.268	0.331	Csar
	WLAN5GHz	802.11a 6Mbps	Left Edge	0mm	Ant 8+10	Limbs Standalone	140	5700	19.12	20.00	1.225	99.32	1.007	0.08	0.130	0.160	Csar
	WLAN5GHz	802.11a 6Mbps	Right Edge	0mm	Ant 8+10	Limbs Standalone	140	5700	19.12	20.00	1.225	99.32	1.007	0.08	1.350	1.665	Csar
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant 8+10	Limbs Standalone	140	5700	19.12	20.00	1.225	99.32	1.007	-0.07	1.960	2.418	DASY
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant 8+10	Limbs Standalone	100	5500	18.41	19.50	1.286	99.32	1.007	0.02	1.980	2.564	DASY
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant 8+10	Limbs Standalone	116	5580	18.57	19.50	1.238	99.32	1.007	-0.03	1.950	2.431	DASY
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	0mm	Ant 8+10	Limbs Standalone	140	5700	19.12	20.00	1.225	99.32	1.007	-0.05	0.040	0.049	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Front	0mm	Ant 8+10	Limbs Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	-0.11	0.266	0.333	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Back	0mm	Ant 8+10	Limbs Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	-0.12	0.068	0.085	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Left Edge	0mm	Ant 8+10	Limbs Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	-0.17	0.026	0.033	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Right Edge	0mm	Ant 8+10	Limbs Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	0.02	0.243	0.304	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Top Edge	0mm	Ant 8+10	Limbs Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	0.06	0.507	0.635	DASY
	WLAN5GHz	802.11be-EHT20 MCS0	Bottom Edge	0mm	Ant 8+10	Limbs Standalone	165	5825	14.52	15.50	1.253	100.0	1.0	0.17	0.018	0.023	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Top Edge	0mm	Ant 8+10	Limbs Standalone	149	5745	14.49	15.50	1.262	100.0	1.0	0.12	0.442	0.558	Csar
	WLAN5GHz	802.11be-EHT20 MCS0	Top Edge	0mm	Ant 8+10	Limbs Standalone	157	5785	14.38	15.50	1.295	100.0	1.0	0.03	0.447	0.579	Csar

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Note1
	Bluetooth	1Mbps	Front	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.18	1.02	1.461	Csar
	Bluetooth	1Mbps	Back	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	-0.08	0.51	0.731	Csar
	Bluetooth	1Mbps	Left Edge	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	-0.1	0.004	0.006	Csar
	Bluetooth	1Mbps	Right Edge	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.04	1.05	1.504	DASY
	Bluetooth	1Mbps	Top Edge	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.01	0.137	0.196	Csar
	Bluetooth	1Mbps	Bottom Edge	0mm	Ant7	Full power	39	2441	20.26	21.5	1.33	77.32	1.077	0.15	0.032	0.046	Csar
	Bluetooth	1Mbps	Right Edge	0mm	Ant7	Full power	0	2402	19.23	21.00	1.503	77.32	1.077	0.04	0.642	1.039	Csar
	Bluetooth	1Mbps	Right Edge	0mm	Ant7	Full power	78	2480	19.90	21.50	1.445	77.32	1.077	0.06	0.765	1.191	Csar
	Bluetooth	1Mbps	Front	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.03	0.610	0.982	Csar
	Bluetooth	1Mbps	Back	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.15	0.226	0.364	Csar
	Bluetooth	1Mbps	Left Edge	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.13	0.001	0.002	Csar
	Bluetooth	1Mbps	Right Edge	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	-0.12	0.148	0.238	Csar
93	Bluetooth	1Mbps	Top Edge	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	0.09	1.130	1.819	DASY
	Bluetooth	1Mbps	Bottom Edge	0mm	Ant12	Full power	0	2402	19.27	21.00	1.489	77.06	1.081	0.02	0.001	0.002	Csar
	Bluetooth	1Mbps	Top Edge	0mm	Ant12	Full power	39	2441	19.25	21.00	1.496	77.06	1.081	0.13	0.700	1.132	Csar
	Bluetooth	1Mbps	Top Edge	0mm	Ant12	Full power	78	2480	19.11	20.50	1.377	77.06	1.081	0.03	0.613	0.912	Csar

<NFC SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Freq. (MHz)	Power Drift (dB)	Measured 10g SAR (W/kg)
	NFC	ASK	Front	0mm	13.56	0.1	0.001
94	NFC	ASK	Back	0mm	13.56	0.08	0.012
	NFC	ASK	Left Edge	0mm	13.56	0.01	0.001
	NFC	ASK	Right Edge	0mm	13.56	0.03	0.001
	NFC	ASK	Top Edge	0mm	13.56	-0.08	0.001
	NFC	ASK	Bottom Edge	0mm	13.56	-0.08	0.001

17. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Mobile Phone		
		Head	Body	Limbs
1.	WWAN + 2.4GHz WLAN	Yes	Yes	Yes
2.	WWAN + 5GHz WLAN	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes
4.	5GHz WLAN + Bluetooth	Yes	Yes	Yes
5.	5GHz WLAN + 2.4GHz WLAN	Yes	Yes	Yes
6.	WWAN +5GHz WLAN + Bluetooth	Yes	Yes	Yes
7.	WWAN +5GHz WLAN + 2.4GHz WLAN	Yes	Yes	Yes
8.	WWAN + 2.4GHz WLAN+NFC			Yes
9.	WWAN + 5GHz WLAN+NFC			Yes
10.	WWAN + Bluetooth + NFC			Yes
11.	5GHz WLAN + Bluetooth + NFC			Yes
12.	5GHz WLAN + 2.4GHz WLAN + NFC			Yes
13.	WWAN +5GHz WLAN + Bluetooth + NFC			Yes
14.	WWAN +5GHz WLAN + 2.4GHz WLAN+NFC			Yes

Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP) and LTE supports VoLTE operation.
- The Above table WWAN included 5GNR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- WLAN5GHz MIMO SAR can represent SISO SAR to do co-located SAR analysis.
- For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed SAR exposure limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in this Report (Appendix F) during algorithm validation.
- WLAN 2.4GHz and Bluetooth share the same antenna, and they cannot transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth cannot transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can transmit simultaneously.
- Bluetooth BR/EDR supports Beamforming mode, so Bluetooth BR/EDR standalone SAR summed together as Bluetooth BR/EDR Beamforming SAR.
- The NFC only operate on limbs exposure condition.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- 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 Headset SAR and non-Headset SAR always chose higher SAR to do co-located analysis.
- For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN/BT together. This is the worst co-located analysis and can represent each band.
- The equipment under test (EUT) contains the Qualcomm modems supporting 2G/3G/4G/5G technologies and WLAN/BT technologies. these modems are always enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure follows the CE requirement. Each antenna band has controlled the total RF exposure from all transmitter to not exceed CE limit. Therefore, in this report, it is evaluated whether the sum of the groups of each antenna does not exceed CE limit or spatial separation is applied. In addition, each antenna needs to satisfy simultaneous transmission analysis with External radios (NFC) in this report at limbs exposure condition.
- If 10g-SAR scalar summation < 2.0W/kg for head/Body, 10g-SAR scalar summation < 4.0W/kg for Limbs, simultaneous SAR measurement is not necessary.
- If 10g-SAR summation > 2.0W/kg for head and body, 10g-SAR summation > 4.0W/kg for limbs, the highest summation SAR is according to EN 62209-2 section 6.3.2.4, the procedure is used existing area scans in combination with interpolation and extrapolation for generation of volumetric SAR data by "SMCAD X" software and is a rapid way of obtaining the multiband SAR results, More detail please refers section 17.5.

17.1 Sub6 Antenna Groups

1. Qualcomm® Smart Transmit™ Plus of Smart Transmit (GEN2) Feature operates based on pre-defined sub6 antenna groups (AG). Sub6 Tx antennas in the device are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from other AG. This is accomplished by demonstrating either of below conditions for all exposure scenarios:

- 1) Case 1: Demonstrate that Sum of maximum reported SAR from each of the sub6 AGs and the reported normalized SAR values from radios outside Smart Transmit should be less than regulatory limits for each supported DSI. This condition must be demonstrated for all antenna combinations of sub6 AGs.
- 2) Case 2: Sum of SAR of one antenna from each of the sub6 AGs and the RF exposure from radios outside Smart Transmit is more than regulatory limits (2.0W/kg for Head/body and 4.0W/kg for limbs). The highest summation SAR is according to EN 62209-2 section6.3.2.4, the procedure is used existing area scans in combination with interpolation and extrapolation for generation of volumetric SAR data by "SMCAD X" software and is a rapid way of obtaining the multiband SAR results, more detail please refers section 17.5.

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

Antenna Group 0 (AG0)	ANT1 & ANT4 & ANT5 & ANT7 & ANT8 & ANT9 & ANT10 & ANT12 & ANT11
Antenna Group 1 (AG1)	ANT0 & ANT6

- 4) This model's multi_Tx_factor is 1.2.

This device supports two sub6 AG: AG0 and AG1. For detailed analysis, please refer to section 17.2/17.3/17.4/17.5 of this report. That summed SAR results and Multi-Band Combined SAR results for all of the combinations of sub6 antenna groups are sufficient to show that AG0 is mutually exclusive from AG1 and that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per EN 62209-2 section6.3.2.4.

2. Calculations for multi_Tx_factor set to >1.0 in EFS v19: Multi_Tx_factor: ONLY applicable for Smart Transmit EFS version 19 (or higher). The EFS version 19 (or higher) provides the entry to improve performance of sub6 radios in simultaneous transmission scenarios.
- 1) With EFS version 19 or higher: In single Tx transmission scenarios, Smart Transmit ensures time-averaged RF exposure is $\leq (SAR_{design_target} * 10^{(+sub6\ device\ uncertainty/10)}) < \text{regulatory RF exposure limit for sub6 radio managed by Smart Transmit}$. In simultaneous Tx transmission scenarios, Smart Transmit ensures time-averaged RF exposure is $\leq (SAR_{design_target} * multi_Tx_factor * 10^{(+sub6\ device\ uncertainty/10)}) < \text{regulatory RF exposure limit for sub6 radios managed by Smart Transmit}$.

The multi_Tx_factor can be determined using

$$multi_Tx_factor \leq \frac{SAR_{regulatory_limit}}{SAR_{design_target} \times 10^{\frac{-total\ uncertainty}{10}}} = \frac{SAR_{regulatory_limit}}{report\ SAR}$$

- 2) In EFS version 19 (or later) multi_Tx_factor is set to > 1.0, so considered the antenna grouping and Simultaneous Transmission Analysis requirements described in Qualcomm's document.
 - a) Smart Transmit applies multi_Tx_factor if 2-or-more radios are transmitting irrespective if they are in same AGs or different AGs.
 - b) With multi_Tx_factor > 1.0, for a given exposure position, analysis for antenna grouping Case 1 described in this Section must be performed by scaling reported SAR with multi_Tx_factor for all Smart Transmit radios. This can be accomplished by modifying.
 - c) multi_Tx_factor > 1.0: reported SAR for a given tech/band/ant/DSI corresponds to its scaled reported power (i.e., $\min\{(P_{limit} \text{ in mW}) * multi_Tx_factor * 10^{(+sub6\ device\ uncertainty/10)}, \text{rated } P_{max} \text{ in mW}\}$) in the calculations for Case 1 described in this Section.
 - d) reported.norm.exp is the scaled reported SAR normalized to regulatory limit for a given antenna/radio. Based on these scaled levels, max.norm.exp is the maximum reported.norm.exp out of all antennas for a given antenna group. Clearly, for tech/band/ant/DSI with $(P_{limit} \text{ in mW}) * 10^{(+sub6\ device\ uncertainty/10)} \geq \text{rated } P_{max} \text{ in mW}$, multi_Tx_factor will not alter the reported SAR level.
 - e) reported SAR(Antxx), reported.norm.exp.sAnt.AGxx, max.norm.exp.AGxx, max.norm.exp.without.sAnt.AGxx and combined SAR(AGxx) terms must include multi_Tx_factor for all Smart Transmit enabled radios in the calculations described in this Section Case 1 analysis.
 - f) multi_Tx_factor is 1.2 for this model.
3. For detailed analysis, please refer to section 17.2/17.3/17.4/17.5 of this report.

17.2 Head Exposure Conditions

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant5	Ant7	Ant8	Ant9	Ant10	Ant11	WLAN2.4GHz Ant7	WLAN2.4GHz Ant12	WLAN2.4GHz Ant7+12	WLAN5GHz Ant8+10	BT Ant7	BT Ant12	MAX
Right Cheek	0.566	0.949	0.914	0.637	0.212	0.743	0.483	0.807	0.385	0.367	0.595	0.530	0.551	0.341	0.949
Right Tilted	0.113	0.402	0.994	0.118	0.153	0.254	0.557	0.889	0.078	0.484	0.659	0.620	0.092	0.375	0.994
Left Cheek	0.979	0.412	0.741	0.932	0.991	0.341	0.759	0.483	0.728	0.723	0.953	0.916	0.675	0.460	0.991
Left Tilted	0.157	0.239	0.956	0.276	0.234	0.110	0.913	0.587	0.148	0.574	0.844	0.993	0.202	0.624	0.993

Test Position	Multi Tx Factor	MAX	AG0
Right Cheek	1.2	0.949	1.139
Right Tilted	1.2	0.994	1.193
Left Cheek	1.2	0.991	1.189
Left Tilted	1.2	0.993	1.192

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant6	MAX
Right Cheek	0.360	0.124	0.360
Right Tilted	0.195	0.072	0.195
Left Cheek	0.252	0.188	0.252
Left Tilted	0.140	0.082	0.140

Test Position	Multi Tx Factor	MAX	AG1
Right Cheek	1.2	0.360	0.432
Right Tilted	1.2	0.195	0.234
Left Cheek	1.2	0.252	0.302
Left Tilted	1.2	0.140	0.168

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case >:

Test Position	AG0	AG1	AG0+AG1
Right Cheek	1.139	0.432	1.571
Right Tilted	1.193	0.234	1.427
Left Cheek	1.189	0.302	1.491
Left Tilted	1.192	0.168	1.360

Bluetooth MIMO
<AG0 maximum reported SAR>:

Test Position	BT Ant7	BT Ant12	BT Ant7+12	MAX
Right Cheek	0.551	0.341	0.892	0.892
Right Tilted	0.092	0.375	0.467	0.467
Left Cheek	0.675	0.460	1.135	1.135
Left Tilted	0.202	0.624	0.826	0.826

Test Position	Multi Tx Factor	BT Ant7	BT Ant12	BT Ant7+12	MAX
Right Cheek	1.2	0.661	0.409	1.070	1.070
Right Tilted	1.2	0.110	0.450	0.560	0.560
Left Cheek	1.2	0.810	0.552	1.362	1.362
Left Tilted	1.2	0.242	0.749	0.991	0.991

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant6	MAX
Right Cheek	0.360	0.124	0.360
Right Tilted	0.195	0.072	0.195
Left Cheek	0.252	0.188	0.252
Left Tilted	0.140	0.082	0.140

Test Position	Multi Tx Factor	Ant0	Ant6	MAX
Right Cheek	1.2	0.432	0.149	0.432
Right Tilted	1.2	0.234	0.086	0.234
Left Cheek	1.2	0.302	0.226	0.302
Left Tilted	1.2	0.168	0.098	0.168

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case >:

Test Position	AG0	AG1	AG0+AG1
Right Cheek	1.070	0.432	1.502
Right Tilted	0.560	0.234	0.794
Left Cheek	1.362	0.302	1.664
Left Tilted	0.991	0.168	1.159

17.3 Body Exposure Conditions

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

Test Position	Ant1	Ant4	Ant5	Ant7	Ant8	Ant9	Ant10	Ant11	WLAN2.4GHz Ant7	WLAN2.4GHz Ant12	WLAN2.4GHz Ant7+12	WLAN5GHz Ant8+10	BT Ant7	BT Ant12	MAX
Front	0.581	0.508	0.655	0.572	0.366	0.252	0.369	0.409	0.347	0.282	0.491	0.425	0.554	0.253	0.655
Back	0.709	0.752	0.750	0.754	0.466	0.374	0.462	0.383	0.442	0.426	0.588	0.454	0.637	0.354	0.754
Left Edge	0.997	0.924	0.446	0.033	0.010	0.693	0.092	0.149	0.001	0.001	0.042	0.056	0.001	0.002	0.997
Right Edge	0.100	0.098	0.232	0.990	0.907	0.037	0.799	0.046	0.627	0.104	0.691	0.546	0.759	0.079	0.990
Top Edge	0.050	0.229	0.965	0.095	0.068	0.066	0.772	0.672	0.050	0.871	0.943	0.780	0.001	0.825	0.965
Bottom Edge	0.112	0.200	0.021	0.508	0.023	0.021	0.022	0.001	0.023	0.001	0.027	0.023	0.001	0.002	0.508

Test Position	Multi Tx Factor	Ant1	Ant4	Ant5	Ant7	Ant8	Ant9	Ant10	Ant11	WLAN2.4GHz Ant7	WLAN2.4GHz Ant12	WLAN2.4GHz Ant7+12	WLAN5GHz Ant8+10	BT Ant7	BT Ant12	MAX
Front	1.200	0.697	0.610	0.786	0.686	0.439	0.302	0.443	0.491	0.416	0.338	0.589	0.510	0.665	0.304	0.786
Back	1.200	0.851	0.902	0.900	0.905	0.559	0.449	0.554	0.460	0.530	0.511	0.706	0.545	0.764	0.425	0.905
Left Edge	1.200	1.196	1.109	0.535	0.040	0.012	0.832	0.110	0.179	0.001	0.001	0.050	0.067	0.001	0.002	1.196
Right Edge	1.200	0.120	0.118	0.278	1.188	1.088	0.044	0.959	0.055	0.752	0.125	0.829	0.655	0.911	0.095	1.188
Top Edge	1.200	0.060	0.275	1.158	0.114	0.082	0.079	0.926	0.806	0.060	1.045	1.132	0.936	0.001	0.990	1.158
Bottom Edge	1.200	0.134	0.240	0.025	0.610	0.028	0.025	0.026	0.001	0.028	0.001	0.032	0.028	0.001	0.002	0.610

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant6	MAX
Front	0.633	0.558	0.633
Back	0.821	0.825	0.825
Left Edge	0.190	0.269	0.269
Right Edge	0.826	0.199	0.826
Top Edge	0.045	0.023	0.045
Bottom Edge	0.563	0.910	0.910

Test Position	Multi Tx Factor	Ant0	Ant6	MAX
Front	1.200	0.760	0.670	0.760
Back	1.200	0.985	0.990	0.990
Left Edge	1.200	0.228	0.323	0.323
Right Edge	1.200	0.991	0.239	0.991
Top Edge	1.200	0.054	0.028	0.054
Bottom Edge	1.200	0.676	1.092	1.092

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case >:

Test Position	AG0	AG1	AG0+AG1
Front	0.786	0.760	1.546
Back	0.905	0.990	1.895
Left Edge	1.196	0.323	1.519
Right Edge	1.188	0.991	2.179
Top Edge	1.158	0.054	1.212
Bottom Edge	0.610	1.092	1.702

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

Right Edge				
Ant combination	AG1	AG0	AG0+AG1	Combined
	SAR	SAR		
Ant0-Ant1	0.991	0.120	1.111	
Ant0-Ant4	0.991	0.118	1.109	
Ant0-Ant5	0.991	0.278	1.269	
Ant0-Ant7	0.991	1.188	2.179	1
Ant0-Ant8	0.991	1.088	2.079	2
Ant0-Ant9	0.991	0.044	1.035	
Ant0-Ant10	0.991	0.959	1.950	
Ant0-Ant11	0.991	0.055	1.046	
Ant0-WLAN2.4GHz Ant7	0.991	0.752	1.743	
Ant0-WLAN2.4GHz Ant12	0.991	0.125	1.116	
Ant0-WLAN2.4GHz Ant7+12	0.991	0.829	1.820	
Ant0-WLAN5GHz Ant8+10	0.991	0.655	1.646	
Ant0-BT Ant7	0.991	0.911	1.902	
Ant0-BT Ant12	0.991	0.095	1.086	
Ant6-Ant1	0.239	0.120	0.359	
Ant6-Ant4	0.239	0.118	0.357	
Ant6-Ant5	0.239	0.278	0.517	
Ant6-Ant7	0.239	1.188	1.427	
Ant6-Ant8	0.239	1.088	1.327	
Ant6-Ant9	0.239	0.044	0.283	
Ant6-Ant10	0.239	0.959	1.198	
Ant6-Ant11	0.239	0.055	0.294	
Ant6-WLAN2.4GHz Ant7	0.239	0.752	0.991	
Ant6-WLAN2.4GHz Ant12	0.239	0.125	0.364	
Ant6-WLAN2.4GHz Ant7+12	0.239	0.829	1.068	
Ant6-WLAN5GHz Ant8+10	0.239	0.655	0.894	
Ant6-BT Ant7	0.239	0.911	1.150	
Ant6-BT Ant12	0.239	0.095	0.334	

Bluetooth MIMO
<AG0 maximum reported SAR>:

Test Position	BT Ant7	BT Ant12	BT Ant7+12	MAX
Front	0.554	0.253	0.807	0.807
Back	0.637	0.354	0.991	0.991
Left Edge	0.001	0.002	0.003	0.003
Right Edge	0.759	0.079	0.838	0.838
Top Edge	0.001	0.825	0.826	0.826
Bottom Edge	0.001	0.002	0.003	0.003

Test Position	Multi Tx Factor	BT Ant7	BT Ant12	BT Ant7+12	MAX
Front	1.200	0.665	0.304	0.968	0.968
Back	1.200	0.764	0.425	1.189	1.189
Left Edge	1.200	0.001	0.002	0.004	0.004
Right Edge	1.200	0.911	0.095	1.006	1.006
Top Edge	1.200	0.001	0.990	0.991	0.991
Bottom Edge	1.200	0.001	0.002	0.004	0.004

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant6	MAX
Front	0.633	0.558	0.633
Back	0.821	0.825	0.825
Left Edge	0.190	0.269	0.269
Right Edge	0.826	0.199	0.826
Top Edge	0.045	0.023	0.045
Bottom Edge	0.563	0.910	0.910

Test Position	Multi Tx Factor	Ant0	Ant6	MAX
Front	1.200	0.760	0.670	0.760
Back	1.200	0.985	0.990	0.990
Left Edge	1.200	0.228	0.323	0.323
Right Edge	1.200	0.991	0.239	0.991
Top Edge	1.200	0.054	0.028	0.054
Bottom Edge	1.200	0.676	1.092	1.092

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case >:

Test Position	AG0	AG1	AG0+AG1
Front	0.968	0.760	1.728
Back	1.189	0.990	2.179
Left Edge	0.004	0.323	0.327
Right Edge	1.006	0.991	1.997
Top Edge	0.991	0.054	1.045
Bottom Edge	0.004	1.092	1.096

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

Back				
Ant combination	AG1	AG0	AG0+AG1	Combined
	SAR	SAR		
Ant0-BT Ant7	0.985	0.764	1.749	
Ant0-BT Ant12	0.985	0.425	1.410	
Ant0-BT Ant7+12	0.985	1.189	2.174	26
Ant6-BT Ant7	0.990	0.764	1.754	
Ant6-BT Ant12	0.990	0.425	1.415	
Ant6-BT Ant7+12	0.990	1.189	2.179	27

Right Edge				
Ant combination	AG1	AG0	AG0+AG1	Combined
	SAR	SAR		
Ant0-BT Ant7	0.991	0.911	1.902	
Ant0-BT Ant12	0.991	0.095	1.086	
Ant0-BT Ant7+12	0.991	1.006	1.997	29
Ant6-BT Ant7	0.239	0.911	1.150	
Ant6-BT Ant12	0.239	0.095	0.334	
Ant6-BT Ant7+12	0.239	1.006	1.245	

17.4 Limbs Exposure Conditions

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

Test Position	Ant1	Ant4	Ant5	Ant7	Ant8	Ant9	Ant10	Ant11	WLAN2.4GHz Ant7	WLAN2.4GHz Ant12	WLAN2.4GHz Ant7+12	WLAN5GHz Ant8+10	BT Ant7	BT Ant12	MAX
Front	1.219	1.644	1.945	1.913	1.136	1.625	1.714	1.255	1.172	1.258	1.440	1.514	1.461	0.982	1.945
Back	0.936	0.972	0.798	0.944	0.498	0.458	0.434	1.107	0.590	0.369	0.706	0.406	0.731	0.364	1.107
Left Edge	1.632	2.567	1.011	0.030	0.031	1.743	0.152	0.308	0.001	0.085	0.104	0.160	0.006	0.002	2.567
Right Edge	0.104	0.169	0.466	2.559	2.325	0.100	1.881	0.081	1.387	0.305	1.328	1.665	1.504	0.238	2.559
Top Edge	0.137	0.624	2.261	0.315	0.205	0.258	2.583	2.273	0.173	1.610	1.725	2.579	0.196	1.819	2.583
Bottom Edge	0.217	0.577	0.054	0.085	0.043	0.057	0.028	0.020	0.072	0.001	0.071	0.049	0.046	0.002	0.577

Test Position	Multi Tx Factor	Ant1	Ant4	Ant5	Ant7	Ant8	Ant9	Ant10	Ant11	WLAN2.4GHz Ant7	WLAN2.4GHz Ant12	WLAN2.4GHz Ant7+12	WLAN5GHz Ant8+10	BT Ant7	BT Ant12	MAX
Front	1.200	1.463	1.973	2.334	2.296	1.363	1.950	2.057	1.506	1.406	1.510	1.728	1.817	1.753	1.178	2.334
Back	1.200	1.123	1.166	0.958	1.133	0.598	0.550	0.521	1.328	0.708	0.443	0.847	0.487	0.877	0.437	1.328
Left Edge	1.200	1.958	3.080	1.213	0.036	0.037	2.092	0.182	0.370	0.001	0.102	0.125	0.192	0.007	0.002	3.080
Right Edge	1.200	0.125	0.203	0.559	3.071	2.790	0.120	2.257	0.097	1.664	0.366	1.594	1.998	1.805	0.286	3.071
Top Edge	1.200	0.164	0.749	2.713	0.378	0.246	0.310	3.100	2.728	0.208	1.932	2.070	3.095	0.235	2.183	3.100
Bottom Edge	1.200	0.260	0.692	0.065	0.102	0.052	0.068	0.034	0.024	0.086	0.001	0.085	0.059	0.055	0.002	0.692

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant6	MAX
Front	1.901	1.948	1.948
Back	1.982	2.403	2.403
Left Edge	0.222	0.543	0.543
Right Edge	1.331	0.397	1.331
Top Edge	0.148	0.022	0.148
Bottom Edge	2.562	2.187	2.562

Test Position	Multi Tx Factor	Ant0	Ant6	MAX
Front	1.200	2.281	2.338	2.338
Back	1.200	2.378	2.884	2.884
Left Edge	1.200	0.266	0.652	0.652
Right Edge	1.200	1.597	0.476	1.597
Top Edge	1.200	0.178	0.026	0.178
Bottom Edge	1.200	3.074	2.624	3.074

<Simultaneous Transmission analysis of AG0 + AG1 + NFC>:

Test Position	AG0	AG1	NFC	AG0+AG1+NFC
Front	2.334	2.338	0.001	4.673
Back	1.328	2.884	0.012	4.224
Left Edge	3.080	0.652	0.001	3.733
Right Edge	3.071	1.597	0.001	4.669
Top Edge	3.100	0.178	0.001	3.279
Bottom Edge	0.692	3.074	0.001	3.767

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

Front					
Ant combination	AG1	AG0	NFC	AG0+AG1+NFC	Combined
	SAR	SAR			
Ant0-Ant1	2.281	1.463	0.001	3.745	
Ant0-Ant4	2.281	1.973	0.001	4.255	4
Ant0-Ant5	2.281	2.334	0.001	4.616	5
Ant0-Ant7	2.281	2.296	0.001	4.578	6
Ant0-Ant8	2.281	1.363	0.001	3.645	
Ant0-Ant9	2.281	1.950	0.001	4.232	7
Ant0-Ant10	2.281	2.057	0.001	4.339	8
Ant0-Ant11	2.281	1.506	0.001	3.788	
Ant0-WLAN2.4GHz Ant7	2.281	1.406	0.001	3.688	
Ant0-WLAN2.4GHz Ant12	2.281	1.510	0.001	3.792	
Ant0-WLAN2.4GHz Ant7+12	2.281	1.728	0.001	4.010	9
Ant0-WLAN5GHz Ant8+10	2.281	1.817	0.001	4.099	10
Ant0-BT Ant7	2.281	1.753	0.001	4.035	11
Ant0-BT Ant12	2.281	1.178	0.001	3.460	
Ant6-Ant1	2.338	1.463	0.001	3.802	
Ant6-Ant4	2.338	1.973	0.001	4.312	12
Ant6-Ant5	2.338	2.334	0.001	4.673	13
Ant6-Ant7	2.338	2.296	0.001	4.635	14
Ant6-Ant8	2.338	1.363	0.001	3.702	
Ant6-Ant9	2.338	1.950	0.001	4.289	15
Ant6-Ant10	2.338	2.057	0.001	4.396	16
Ant6-Ant11	2.338	1.506	0.001	3.845	
Ant6-WLAN2.4GHz Ant7	2.338	1.406	0.001	3.745	
Ant6-WLAN2.4GHz Ant12	2.338	1.510	0.001	3.849	
Ant6-WLAN2.4GHz Ant7+12	2.338	1.728	0.001	4.067	17
Ant6-WLAN5GHz Ant8+10	2.338	1.817	0.001	4.156	18
Ant6-BT Ant7	2.338	1.753	0.001	4.092	19
Ant6-BT Ant12	2.338	1.178	0.001	3.517	

Back					
Ant combination	AG1	AG0	NFC	AG0+AG1+NFC	Combined
	SAR	SAR			
Ant0-Ant1	2.378	1.123	0.012	3.513	
Ant0-Ant4	2.378	1.166	0.012	3.556	
Ant0-Ant5	2.378	0.958	0.012	3.348	
Ant0-Ant7	2.378	1.133	0.012	3.523	
Ant0-Ant8	2.378	0.598	0.012	2.988	
Ant0-Ant9	2.378	0.550	0.012	2.940	
Ant0-Ant10	2.378	0.521	0.012	2.911	
Ant0-Ant11	2.378	1.328	0.012	3.718	
Ant0-WLAN2.4GHz Ant7	2.378	0.708	0.012	3.098	
Ant0-WLAN2.4GHz Ant12	2.378	0.443	0.012	2.833	
Ant0-WLAN2.4GHz Ant7+12	2.378	0.847	0.012	3.237	
Ant0-WLAN5GHz Ant8+10	2.378	0.487	0.012	2.877	
Ant0-BT Ant7	2.378	0.877	0.012	3.267	
Ant0-BT Ant12	2.378	0.437	0.012	2.827	
Ant6-Ant1	2.884	1.123	0.012	4.019	20
Ant6-Ant4	2.884	1.166	0.012	4.062	21
Ant6-Ant5	2.884	0.958	0.012	3.854	
Ant6-Ant7	2.884	1.133	0.012	4.029	22

Ant6-Ant8	2.884	0.598	0.012	3.494	
Ant6-Ant9	2.884	0.550	0.012	3.446	
Ant6-Ant10	2.884	0.521	0.012	3.417	
Ant6-Ant11	2.884	1.328	0.012	4.224	23
Ant6-WLAN2.4GHz Ant7	2.884	0.708	0.012	3.604	
Ant6-WLAN2.4GHz Ant12	2.884	0.443	0.012	3.339	
Ant6-WLAN2.4GHz Ant7+12	2.884	0.847	0.012	3.743	
Ant6-WLAN5GHz Ant8+10	2.884	0.487	0.012	3.383	
Ant6-BT Ant7	2.884	0.877	0.012	3.773	
Ant6-BT Ant12	2.884	0.437	0.012	3.333	

Right Edge					
Ant combination	AG1	AG0	NFC	AG0+AG1+NFC	Combined
	SAR	SAR			
Ant0-Ant1	1.597	0.125	0.001	1.723	
Ant0-Ant4	1.597	0.203	0.001	1.801	
Ant0-Ant5	1.597	0.559	0.001	2.157	
Ant0-Ant7	1.597	3.071	0.001	4.669	24
Ant0-Ant8	1.597	2.790	0.001	4.388	25
Ant0-Ant9	1.597	0.120	0.001	1.718	
Ant0-Ant10	1.597	2.257	0.001	3.855	
Ant0-Ant11	1.597	0.097	0.001	1.695	
Ant0-WLAN2.4GHz Ant7	1.597	1.664	0.001	3.262	
Ant0-WLAN2.4GHz Ant12	1.597	0.366	0.001	1.964	
Ant0-WLAN2.4GHz Ant7+12	1.597	1.594	0.001	3.192	
Ant0-WLAN5GHz Ant8+10	1.597	1.998	0.001	3.596	
Ant0-BT Ant7	1.597	1.805	0.001	3.403	
Ant0-BT Ant12	1.597	0.286	0.001	1.884	
Ant6-Ant1	0.476	0.125	0.001	0.602	
Ant6-Ant4	0.476	0.203	0.001	0.680	
Ant6-Ant5	0.476	0.559	0.001	1.036	
Ant6-Ant7	0.476	3.071	0.001	3.548	
Ant6-Ant8	0.476	2.790	0.001	3.267	
Ant6-Ant9	0.476	0.120	0.001	0.597	
Ant6-Ant10	0.476	2.257	0.001	2.734	
Ant6-Ant11	0.476	0.097	0.001	0.574	
Ant6-WLAN2.4GHz Ant7	0.476	1.664	0.001	2.141	
Ant6-WLAN2.4GHz Ant12	0.476	0.366	0.001	0.843	
Ant6-WLAN2.4GHz Ant7+12	0.476	1.594	0.001	2.071	
Ant6-WLAN5GHz Ant8+10	0.476	1.998	0.001	2.475	
Ant6-BT Ant7	0.476	1.805	0.001	2.282	
Ant6-BT Ant12	0.476	0.286	0.001	0.763	

Note: For the results marked in yellow in the tables above, since the NFC emission transmission SAR scalar sum of the limbs is > 4.0W/kg, therefore, the WWAN and WLAN/BT (except NFC) SAR results are combined using the procedure in Section 6.3.2.4 of IEC 62209-2 and can be referred to section 17.5. And transmitted simultaneously with NFC to show that the SAR scalar sum meets the regulatory requirements.

1	2	1+2
Combined	NFC	Summed
10g SAR (W/kg)	10g SAR (W/kg)	Combined SAR
3.710	0.012	3.722

Note: Select a worse combined SAR and NFC for Sim-Tx analysis to meet the requirements.

Bluetooth MIMO
<AG0 maximum reported SAR>:

Test Position	BT Ant7	BT Ant12	BT Ant7+12	MAX
Front	1.461	0.982	2.443	2.443
Back	0.731	0.364	1.095	1.095
Left Edge	0.006	0.002	0.008	0.008
Right Edge	1.504	0.238	1.742	1.742
Top Edge	0.196	1.819	2.015	2.015
Bottom Edge	0.046	0.002	0.048	0.048

Test Position	Multi Tx Factor	BT Ant7	BT Ant12	BT Ant7+12	MAX
Front	1.200	1.753	1.178	2.932	2.932
Back	1.200	0.877	0.437	1.314	1.314
Left Edge	1.200	0.007	0.002	0.010	0.010
Right Edge	1.200	1.805	0.286	2.090	2.090
Top Edge	1.200	0.235	2.183	2.418	2.418
Bottom Edge	1.200	0.055	0.002	0.058	0.058

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant6	MAX
Front	1.901	1.948	1.948
Back	1.982	2.403	2.403
Left Edge	0.222	0.543	0.543
Right Edge	1.331	0.397	1.331
Top Edge	0.148	0.022	0.148
Bottom Edge	2.562	2.187	2.562

Test Position	Multi Tx Factor	Ant0	Ant6	MAX
Front	1.200	2.281	2.338	2.338
Back	1.200	2.378	2.884	2.884
Left Edge	1.200	0.266	0.652	0.652
Right Edge	1.200	1.597	0.476	1.597
Top Edge	1.200	0.178	0.026	0.178
Bottom Edge	1.200	3.074	2.624	3.074

<Simultaneous Transmission analysis of AG0 + AG1 Worse-case >:

Test Position	AG0	AG1	NFC	AG0+AG1+NFC
Front	2.932	2.338	0.001	5.271
Back	1.314	2.884	0.012	4.210
Left Edge	0.010	0.652	0.001	0.663
Right Edge	2.090	1.597	0.001	3.688
Top Edge	2.418	0.178	0.001	2.597
Bottom Edge	0.058	3.074	0.001	3.133

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

Front					
Ant combination	AG1 SAR	AG0 SAR	NFC	AG0+AG1+NFC	Combined
Ant0-BT Ant7	2.281	1.753	0.001	4.035	30
Ant0-BT Ant12	2.281	1.178	0.001	3.460	
Ant0-BT Ant7+12	2.281	2.932	0.001	5.214	31
Ant6-BT Ant7	2.338	1.753	0.001	4.092	32
Ant6-BT Ant12	2.338	1.178	0.001	3.517	
Ant6-BT Ant7+12	2.338	2.932	0.001	5.271	33

Back					
Ant combination	AG1	AG0	NFC	AG0+AG1+NFC	Combined
	SAR	SAR			
Ant0-BT Ant7	2.378	0.877	0.012	3.267	
Ant0-BT Ant12	2.378	0.437	0.012	2.827	
Ant0-BT Ant7+12	2.378	1.314	0.012	3.704	
Ant6-BT Ant7	2.884	0.877	0.012	3.773	
Ant6-BT Ant12	2.884	0.437	0.012	3.333	
Ant6-BT Ant7+12	2.884	1.314	0.012	4.210	34

17.5 Multi-Band Combined SAR Result

General Note:

- During multi-band SAR combination, the duty cycle scaling factors were input into the SEMCAD X software to account for tune-up tolerance.
- The combine SAR result is in the appendix B.

<For Body>

Case No	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Reported 10g SAR (W/kg)	Multi Tx Factor 1.2	Summed 10g SAR (W/kg)	Multi-Band Combined 10g SAR (W/kg)
1	LTE Band 28	20M	QPSK	1	0		Right Edge	5mm	Ant0	27560	738	0.826	0.991	2.179	1.390
	LTE Band 3	20M	QPSK	1	0		Right Edge	5mm	Ant7	19850	1775	0.99	1.188		
2	LTE Band 28	20M	QPSK	1	0		Right Edge	5mm	Ant0	27560	738	0.826	0.991	2.079	1.110
	LTE Band 42	20M	QPSK	1	0		Right Edge	5mm	Ant8	42590	3500	0.907	1.088		

Case No	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Ch.	Freq. (MHz)	Reported 10g SAR (W/kg)	BT Ant7+12	Multi Tx Factor 1.2	Summed 10g SAR (W/kg)	Multi-Band Combined 10g SAR (W/kg)
26	GSM900					GPRS 4 Tx slots	Back	5mm	Ant0	-	37	897.4	0.821		0.985	2.174	1.670
	Bluetooth					1Mbps	Back	5mm	Ant7	-	39	2441	0.637	0.991	1.189		
	Bluetooth					1Mbps	Back	5mm	Ant12	-	0	2402	0.354				
27	LTE Band 41	20M	QPSK	1	0		Back	5mm	Ant6	Headset	40620	2593	0.825		0.990	2.179	1.610
	Bluetooth					1Mbps	Back	5mm	Ant7	-	39	2441	0.637	0.991	1.189		
	Bluetooth					1Mbps	Back	5mm	Ant12	-	0	2402	0.354				
29	LTE Band 28	20M	QPSK	1	0		Right Edge	5mm	Ant0	-	27560	738	0.826		0.991	1.997	1.700
	Bluetooth					1Mbps	Right Edge	5mm	Ant7	-	39	2441	0.759	0.838	1.006		
	Bluetooth					1Mbps	Right Edge	5mm	Ant12	-	0	2402	0.079				

<For Limbs>

Case No	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Reported 10g SAR (W/kg)	Multi Tx Factor 1.2	Summed 10g SAR (W/kg)	Multi-Band Combined 10g SAR (W/kg)
4	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.254	2.290
	LTE Band 3	20M	QPSK	1	0		Front	0mm	Ant4	19575	1747.5	1.644	1.973		
5	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.615	2.35
	FR1 n40	80M	BPSK	108	54		Front	0mm	Ant5	470000	2350	1.945	2.334		
6	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.577	2.4
	LTE Band 41	20M	QPSK	1	0		Front	0mm	Ant7	39750	2506	1.913	2.296		
7	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.231	2.3
	FR1 n77	100M	BPSK	135	67		Front	0mm	Ant9	633332	3499.98	1.625	1.950		
8	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.338	2.3
	LTE Band 42	20M	QPSK	1	0		Front	0mm	Ant10	42590	3500	1.714	2.057		
9	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.009	2.3

	WLAN2.4GHz					802.11n-HT20 MCS0	Front	0mm	Ant 7+12	13	2472	1.44	1.728		
10	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.098	2.3
	WLAN5GHz					802.11a 6Mbps	Front	0mm	Ant 8+10	64	5320	1.514	1.817		
11	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901	2.281	4.034	2.3
	Bluetooth					1Mbps	Front	0mm	Ant7	39	2441	1.461	1.753		
12	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.311	2.42
	LTE Band 3	20M	QPSK	1	0		Front	0mm	Ant4	19575	1747.5	1.644	1.973		
13	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.672	2.42
	FR1 n40	80M	BPSK	108	54		Front	0mm	Ant5	470000	2350	1.945	2.334		
14	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.634	2.42
	LTE Band 41	20M	QPSK	1	0		Front	0mm	Ant7	39750	2506	1.913	2.296		
15	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.288	2.4
	FR1 n77	100M	BPSK	135	67		Front	0mm	Ant9	633332	3499.98	1.625	1.950		
16	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.395	2.45
	LTE Band 42	20M	QPSK	1	0		Front	0mm	Ant10	42590	3500	1.714	2.057		
17	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.066	2.47
	WLAN2.4GHz					802.11n-HT20 MCS0	Front	0mm	Ant 7+12	13	2472	1.44	1.728		
18	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.155	2.39
	WLAN5GHz					802.11a 6Mbps	Front	0mm	Ant 8+10	64	5320	1.514	1.817		
19	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948	2.338	4.091	2.39
	Bluetooth					1Mbps	Front	0mm	Ant7	39	2441	1.461	1.753		
20	FR1 n3	50M	BPSK	135	67		Back	0mm	Ant6	347000	1735	2.403	2.884	4.007	2.94
	FR1 n5	20M	BPSK	50	25		Back	0mm	Ant1	167300	836.5	0.936	1.123		
21	FR1 n3	50M	BPSK	135	67		Back	0mm	Ant6	347000	1735	2.403	2.884	4.050	2.91
	FR1 n7	50M	BPSK	135	67		Back	0mm	Ant4	507000	2535	0.972	1.166		
22	FR1 n3	50M	BPSK	135	67		Back	0mm	Ant6	347000	1735	2.403	2.884	4.017	2.9
	FR1 n3	50M	BPSK	135	67		Back	0mm	Ant7	349500	1747.5	0.944	1.133		
23	FR1 n3	50M	BPSK	135	67		Back	0mm	Ant6	347000	1735	2.403	2.884	4.212	2.95
	LTE Band 42	20M	QPSK	1	0		Back	0mm	Ant11	42590	3500	1.107	1.328		
24	FR1 n5	20M	BPSK	50	25		Right Edge	0mm	Ant0	167300	836.5	1.331	1.597	4.668	3.71
	LTE Band 1	20M	QPSK	1	0		Right Edge	0mm	Ant7	18100	1930	2.559	3.071		
25	FR1 n5	20M	BPSK	50	25		Right Edge	0mm	Ant0	167300	836.5	1.331	1.597	4.387	3.13
	LTE Band 42	20M	QPSK	1	0		Right Edge	0mm	Ant8	41690	3410	2.325	2.790		

Case No	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Reported 10g SAR (W/kg)	BT Ant7+12	Multi Tx Factor 1.2	Summed 10g SAR (W/kg)	Multi-Band Combined 10g SAR (W/kg)
30	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901			4.034	2.310
	Bluetooth					1Mbps	Front	0mm	Ant7	39	2441	1.461				
31	LTE Band 8	10M	QPSK	1	0		Front	0mm	Ant0	21625	897.5	1.901			5.213	3.530
	Bluetooth					1Mbps	Front	0mm	Ant7	39	2441	1.461				
	Bluetooth					1Mbps	Front	0mm	Ant12	0	2402	0.982	2.443	2.932		
32	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948			4.091	2.350
	Bluetooth					1Mbps	Front	0mm	Ant7	39	2441	1.461				
33	FR1 n3	50M	BPSK	135	67		Front	0mm	Ant6	349500	1747.5	1.948			5.270	3.380
	Bluetooth					1Mbps	Front	0mm	Ant7	39	2441	1.461				
	Bluetooth					1Mbps	Front	0mm	Ant12	0	2402	0.982	2.443	2.932		
34	FR1 n3	50M	BPSK	135	67		Back	0mm	Ant6	347000	1735	2.403			4.198	2.900
	Bluetooth					1Mbps	Back	0mm	Ant7	39	2441	0.731				
	Bluetooth					1Mbps	Back	0mm	Ant12	0	2402	0.364	1.095	1.314		

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

18. Uncertainty Assessment

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

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

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

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

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

(b) κ is the coverage factor

Standard Uncertainty for Assumed Distribution

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

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

Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System							
Probe Calibration	6.00	N	1	1	1	6.0	6.0
Axial Isotropy	4.70	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.60	R	1.732	0.7	0.7	3.9	3.9
Boundary Effects	1.00	R	1.732	1	1	0.6	0.6
Linearity	4.70	R	1.732	1	1	2.7	2.7
System Detection Limits	1.00	R	1.732	1	1	0.6	0.6
Modulation Response	3.50	R	1.732	1	1	2.0	2.0
Readout Electronics	0.30	N	1	1	1	0.3	0.3
Response Time	0.00	R	1.732	1	1	0.0	0.0
Integration Time	2.60	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.00	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.00	R	1.732	1	1	1.7	1.7
Probe Positioner	0.40	R	1.732	1	1	0.2	0.2
Probe Positioning	2.90	R	1.732	1	1	1.7	1.7
Max. SAR Eval.	2.00	R	1.732	1	1	1.2	1.2
Test Sample Related							
Device Positioning	3.04	N	1	1	1	3.0	3.0
Device Holder	3.43	N	1	1	1	3.4	3.4
Power Drift	5.00	R	1.732	1	1	2.9	2.9
Power Scaling	3.04	R	1.732	1	1	0.0	0.0
Phantom and Setup							
Phantom Uncertainty	6.10	R	1.732	1	1	3.5	3.5
SAR correction	0.11	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	5.00	N	1	0.78	0.71	0.1	0.1
Liquid Conductivity (target)	2.50	R	1.732	0.78	0.71	2.3	2.0
Liquid Conductivity (mea.)	0.10	R	1.732	0.78	0.71	1.1	1.0
Temp. unc. - Conductivity	5.00	R	1.732	0.78	0.71	1.4	1.2
Liquid Permittivity Repeatability	2.50	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	6.10	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	0.11	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.59	R	1.732	0.23	0.26	0.1	0.1
Combined Std. Uncertainty						11.4%	11.3%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						22.8%	22.7%

Uncertainty Budget for frequency range 300 MHz to 3 GHz according to EN 62209-1

Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System							
Probe Calibration	7.00	N	1	1	1	7.0	7.0
Axial Isotropy	4.70	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.60	R	1.732	0.7	0.7	3.9	3.9
Boundary Effects	2.00	R	1.732	1	1	1.2	1.2
Linearity	4.70	R	1.732	1	1	2.7	2.7
System Detection Limits	1.00	R	1.732	1	1	0.6	0.6
Modulation Response	3.46	R	1.732	1	1	2.0	2.0
Readout Electronics	0.30	N	1	1	1	0.3	0.3
Response Time	0.00	R	1.732	1	1	0.0	0.0
Integration Time	2.60	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.00	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.00	R	1.732	1	1	1.7	1.7
Probe Positioner	0.40	R	1.732	1	1	0.2	0.2
Probe Positioning	6.70	R	1.732	1	1	3.9	3.9
Max. SAR Eval.	4.00	R	1.732	1	1	2.3	2.3
Test Sample Related							
Device Positioning	3.04	N	1	1	1	3.0	3.0
Device Holder	3.43	N	1	1	1	3.4	3.4
Power Drift	5.00	R	1.732	1	1	2.9	2.9
Power Scaling	0.00	R	1.732	1	1	0.0	0.0
Phantom and Setup							
Phantom Uncertainty	6.60	R	1.732	1	1	3.8	3.8
SAR correction	0.00	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.11	N	1	0.78	0.71	0.1	0.1
Liquid Conductivity (target)	5.00	R	1.732	0.78	0.71	2.3	2.0
Liquid Conductivity (mea.)	2.50	R	1.732	0.78	0.71	1.1	1.0
Temp. unc. - Conductivity	3.01	R	1.732	0.78	0.71	1.4	1.2
Liquid Permittivity Repeatability	0.10	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.00	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.50	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.59	R	1.732	0.23	0.26	0.1	0.1
Combined Std. Uncertainty						12.7%	12.7%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						25.5%	25.4%

Uncertainty Budget for frequency range 3 GHz to 6 GHz according to EN 62209-1

Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System							
Probe Calibration	7.00	N	1	1	1	7.0	7.0
Axial Isotropy	4.70	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.60	R	1.732	0.7	0.7	3.9	3.9
Linearity	4.70	R	1.732	1	1	2.7	2.7
Modulation Response	3.46	R	1.732	1	1	2.0	2.0
System Detection Limits	1.00	R	1.732	1	1	0.6	0.6
Boundary Effects	2.00	R	1.732	1	1	1.2	1.2
Readout Electronics	0.30	N	1	1	1	0.3	0.3
Response Time	0.00	R	1.732	1	1	0.0	0.0
Integration Time	2.60	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.00	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.00	R	1.732	1	1	1.7	1.7
Probe Positioner	0.40	R	1.732	1	1	0.2	0.2
Probe Positioning	6.70	R	1.732	1	1	3.9	3.9
Post-processing	4.00	R	1.732	1	1	2.3	2.3
Test Sample Related							
Device Holder	3.43	N	1	1	1	3.4	3.4
Test sample Positioning	3.04	N	1	1	1	3.0	3.0
Power Scaling	0.00	R	1.732	1	1	0.0	0.0
Power Drift	5.00	R	1.732	1	1	2.9	2.9
Phantom and Setup							
Phantom Uncertainty	7.60	R	1.732	1	1	4.4	4.4
SAR correction	0.00	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.11	N	1	0.78	0.71	0.1	0.1
Liquid Conductivity (target)	5.00	R	1.732	0.78	0.71	2.3	2.0
Liquid Conductivity (mea.)	2.50	R	1.732	0.78	0.71	1.1	1.0
Temp. unc. - Conductivity	3.01	R	1.732	0.78	0.71	1.4	1.2
Liquid Permittivity Repeatability	0.10	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.00	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.50	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.59	R	1.732	0.23	0.26	0.1	0.1
Combined Std. Uncertainty						12.9%	12.7%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						25.8%	25.4%

Uncertainty Budget for frequency range 30 MHz to 6 GHz according to EN 62209-2

Uncertainty Budget According to EN IEC/IEEE 62209-1528 (Frequency band: 4 MHz - 10 GHz range)							
Error Description	Uncert. Value (±%)	Prob. Dist.	Div.	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System errors							
Probe calibration	18.6	N	2	1	1	9.3	9.3
Probe calibration drift	1.7	R	1.732	1	1	1.0	1.0
Probe linearity and detection Limit	4.7	R	1.732	1	1	2.7	2.7
Broadband signal	2.8	R	1.732	1	1	1.6	1.6
Probe isotropy	7.6	R	1.732	1	1	4.4	4.4
Other probe and data acquisition errors	2.4	N	1	1	1	2.4	2.4
RF ambient and noise	1.8	N	1	1	1	1.8	1.8
Probe positioning errors	0.006	N	1	0.5	0.5	0.0	0.0
Data processing errors	4.0	N	1	1	1	4.0	4.0
Phantom and Device Errors							
Measurement of phantom conductivity (σ)	2.5	N	1	0.78	0.71	2.0	1.8
Temperature effects (medium)	5.4	R	1.732	0.78	0.71	2.4	2.2
Shell permittivity	14.0	R	1.732	0.5	0.5	4.0	4.0
Distance between the radiating element of the DUT and the phantom medium	2.0	N	1	2	2	4.0	4.0
Repeatability of positioning the DUT or source against the phantom	1.0	N	1	1	1	1.0	1.0
Device holder effects	3.6	N	1	1	1	3.6	3.6
Effect of operating mode on probe sensitivity	2.4	R	1.732	1	1	1.4	1.4
Time-average SAR	1.7	R	1.732	1	1	1.0	1.0
Variation in SAR due to drift in output of DUT	2.5	N	1	1	1	2.5	2.5
Validation antenna uncertainty (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Uncertainty in accepted power (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Correction to the SAR results							
Phantom deviation from target (ϵ' , σ)	1.9	N	1	1	0.84	1.9	1.6
SAR scaling	0.0	R	1.732	1	1	0.0	0.0
Combined Std. Uncertainty						14.5%	14.4%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						29.0%	28.8%

Applicable for cSAR Measurements:

Quantity xi (source of uncertainty)	Prob. Dist.*	Uncertainty 1g	Uncertainty 10g	Divis or* q	Ci	u(xi) 1g	u(xi) 10g	Ui(y) 1g	Ui(y) 10g
Uncertainty in the measurement system to be specified by the manufacturer (MM)									
Calibration	N	10.0%	10.0%	1	1	10.0%	10.0%	10.0%	10.0%
Isotropy	R	1.4%	0.7%	1.732	1	0.8%	0.4%	0.8%	0.4%
Mutual sensor coupling	R	3.0%	3.0%	1.732	1	1.8%	1.8%	1.8%	1.8%
Scattering due to the the array	R	1.2%	1.2%	1.732	1	0.7%	0.7%	0.7%	0.7%
System linearity	R	0.0%	0.0%	1.732	1	0.0%	0.0%	0.0%	0.0%
Sensitivity limit	R	0.7%	0.7%	1.732	1	0.4%	0.4%	0.4%	0.4%
Boundary Effect	N	0.0%	0.0%	2	1	0.0%	0.0%	0.0%	0.0%
Readout Electronics	N	0.0%	0.0%	2	1	0.0%	0.0%	0.0%	0.0%
Response Time	N	0.0%	0.0%	2	1	0.0%	0.0%	0.0%	0.0%
Probe Positioning	N	0.7%	0.7%	2	1	0.3%	0.3%	0.3%	0.3%
Sampling error	R	5.9%	1.2%	1.732	1	3.4%	0.7%	3.4%	0.7%
Array Boundaries	R	0.0%	0.0%	1.732	1	0.0%	0.0%	0.0%	0.0%
Phantom shell	N	0.7%	0.7%	2	1	0.3%	0.3%	0.3%	0.3%
Phantom shape	R	0.0%	0.0%	1.732	1	0.0%	0.0%	0.0%	0.0%
Material Parameters	R	4.7%	4.7%	1.732	1	2.7%	2.7%	2.7%	2.7%
Phantom Homogeneity	R	4.7%	0.9%	1.732	1	2.7%	0.5%	2.7%	0.5%
Measurement system immunity	R	0.9%	0.9%	1.732	1	0.5%	0.5%	0.5%	0.5%
Uncertainty in corrections and post processing to be specified by the manufacturer (MN)									
Reconstruction	R	14.8%	14.8%	1.732	1	8.6%	8.6%	8.6%	8.6%
Impact of noise on reconstruction	N	0.0%	0.0%	2	1	0.0%	0.0%	0.0%	0.0%
SAR averaging	R	0.2%	0.2%	1.732	1	0.1%	0.1%	0.1%	0.1%
SAR scaling	N	0.0%	0.0%	2	1	0.0%	0.0%	0.0%	0.0%
SAR permittivity correction	N	0.0%	0.0%	2	1	0.0%	0.0%	0.0%	0.0%
Measuring system uncertainties which are dependent on the DUT, MD									
Probe-array coupling with DUT	N	2.3%	2.3%	2	1	1.2%	1.2%	1.2%	1.2%
Modulation response	R	0.9%	0.9%	1.732	1	0.5%	0.5%	0.5%	0.5%
Integration time	R	0.0%	0.0%	1.732	1	0.0%	0.0%	0.0%	0.0%
Measured SAR drift	R	0.0%	0.0%	1.732	1	0.0%	0.0%	0.0%	0.0%
DUT-related uncertainties related uncertainties and environmental factors, ME									
Device holder	N	2.3%	2.3%	2	1	1.2%	1.2%	1.2%	1.2%
Device positioning	N	2.8%	2.8%	2	1	1.4%	1.4%	1.4%	1.4%
RF ambient conditions	R	1.2%	1.2%	1.732	1	0.7%	0.7%	0.7%	0.7%
Drift and noise	R	1.2%	1.2%	1.732	1	0.7%	0.7%	0.7%	0.7%
Combined Std. Uncertainty								15%	14%
Coverage Factor for 95 %								K2	K2
Expanded STD Uncertainty								29%	28%

19. References

- [1] Council Recommendation 1999/519/EC of July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)
- [2] EN 50360: 2017, EN 50360:2017/A1:2023, "Product standard to demonstrate the compliance of wireless communication devices, with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 300 MHz to 6 GHz: devices used next to the ear."
- [3] EN 50566:2017, EN 50566:2017/A1:2023, "Product standard to demonstrate the compliance of wireless communication devices with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 30 MHz to 6 GHz: hand-held and body mounted devices in close proximity to the human body".
- [4] EN 62209-1:2016, "Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Devices used next to the ear (Frequency range of 300 MHz to 6 GHz)", November 2016.
- [5] EN 62209-2:2010, EN 62209-2:2010/A1:2019, "Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices. Human models, instrumentation, and procedures. Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", August 2010
- [6] EN 62479:2010, "Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)", December 2010.
- [7] EN 50663:2017, "Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)", May 2017
- [8] EN IEC 62311:2020, "Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)"
- [9] EN 50665:2017, "Generic standard for assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)"
- [10] EN IEC/IEEE 62209-1528:2021, "Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)"
- [11] EN IEC 62209-3:2019, "Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 3: Vector measurement-based systems (Frequency range of 600 MHz to 6 GHz)"
- [12] SPEAG DASY System Handbook

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

Appendix F. Verify Tx varying smart transmission scenario

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