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SAR TEST REPORT

Applicant Name: **SAMSUNG Electronics Co., Ltd.** 129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677 Rep. of Korea	**Date of Issue:**Feb. 25, 2022 **Test Report No.:**HCT-SR-2202-FC001-R1 **Test Site: HCT CO., LTD.**

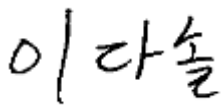
FCC ID: **A3LSMS901B**

Equipment Type:	**Mobile Phone**
Application Type	**Class II Permissive Change**
FCC Rule Part(s):	**CFR §2.1093**
Model Name:	**A3LSMS901B**
Date of Test:	**Jan. 18, 2022 ~ Feb. 23, 2022**

This device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in FCC KDB procedures and had been tested in accordance with the measurement procedures specified in FCC KDB procedures.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Tested By



Da-sol, Lee
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SAR Team
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Reviewed By

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REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	Feb. 25, 2022	Initial Release
1	Mar. 18, 2022	Revised Sections 4.5, 11.1

This test results were applied only to the test methods required by the standard.

The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.

Table of Contents

1. Test Regulations

The tests documented in this report were performed in accordance with FCC CFR § 2.1093, IEEE 1528-2013, ANSI C63.26-2015 the following FCC Published RF exposure KDB procedures:

- FCC KDB Publication 941225 D06 Hot Spot SAR v02r01
- FCC KDB Publication 941225 D05 SAR for LTE Devices v02r05
- FCC KDB Publication 447498 D01 General SAR Guidance v06
- FCC KDB Publication 648474 D04 Handset SAR v01r03
- FCC KDB Publication 616217 D04 v01r02 (Proximity Sensor)
- FCC KDB Publication 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- FCC KDB Publication 865664 D02 SAR Reporting v01r02
- FCC KDB Publication 690783 D01 SAR Listings on Grants v01r03
- FCC KDB Publication 971168 D01 Power Meas License Digital Systems v03r01

2. Test Location

2.1 Test Laboratory

Company Name	HCT Co., Ltd.
Address	74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si,Gyeonggi-do, 17383 KOREA
Telephone	031-645-6300
Fax.	031-645-6401

2.2 Test Facilities

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Korea	National Radio Research Agency (Designation No. KR0032)
	KOLAS (Testing No. KT197)

3. Information of the EUT

3.1 General Information of the EUT

Model Name	SM-S901B/DS
Equipment Type	Mobile Phone
FCC ID	A3LSMS901B
Application Type	Class II Permissive Change
Applicant	SAMSUNG Electronics Co., Ltd.
Note	This permissive change is to enable the following features via SW only: - Enabled for NR n2, n25, n41, n77 bands. Please refer to the technical document for detailed Class II permissive changes to this model.

3.2 Attestation of test result of device under test

The Highest Reported SAR						
Band	Tx. Frequency	Equipment Class	Reported SAR (W/kg)			
			1g Head	1g Body-Worn	1g Hotspot	10g Extremity
NR Band n2(PCS)	1 852.5 ㎒~ 1 907.5 ㎒	PCE	N/A	N/A	N/A	N/A
NR Band n25(PCS)	1 852.5 ㎒~ 1 912.5 ㎒	PCE	0.12	0.48	1.16	1.28
NR Band n41	2 506.02 ㎒~ 2 679.99 ㎒	PCE	0.92	0.12	0.21	N/A
NR Band n77	3 705 ㎒~ 3 975 ㎒	PCE	0.84	0.26	0.40	N/A
NR Band n77 DoD	3 455.04 ㎒~ 3 544.98 ㎒	PCE	0.86	0.20	0.31	N/A
Simultaneous SAR per KDB 690783 D01v01r03			1.596	1.53	1.595	1.743
Date(s) of Tests:			Jan. 18, 2022 ~ Feb. 23, 2022			

4. Device Under Test Description

4.1 DUT specification

Device Wireless specification overview		
Band& Mode	**Operating Mode**	**Tx Frequency**
GSM850	Voice / Data	824.2 ㎒~ 848.8 ㎒
GSM1900	Voice / Data	1 850.2 ㎒~ 1 909.8 ㎒
UMTS Band 5	Voice / Data	826.4 ㎒~ 846.6 ㎒
UMTS Band 4	Voice / Data	1 712.4 ㎒~ 1 752.6 ㎒
UMTS Band 2	Voice / Data	1 852.4 ㎒~ 1 907.6 ㎒
LTE Band 2 (PCS)	Voice / Data	1 850.7 ㎒~ 1 909.3 ㎒
LTE Band 4 (AWS)	Voice / Data	1 710.7 ㎒~ 1 754.3 ㎒
LTE Band 5 (Cell)	Voice / Data	824.7 ㎒~ 848.3 ㎒
LTE Band 12	Voice / Data	699.7 ㎒~ 715.3 ㎒
LTE Band 13	Voice / Data	779.5 ㎒~ 784.5 ㎒
LTE Band 17	Voice / Data	706.5 ㎒~ 713.5 ㎒
LTE Band 25	Voice / Data	1 850.7 ㎒~ 1 914.3 ㎒
LTE Band 26	Voice / Data	814.7 ㎒~ 848.3 ㎒
LTE TDD Band 41	Voice / Data	2 498.5 ㎒ ~ 2 687.5 ㎒
LTE Band 66 (AWS)	Voice / Data	1 710.7 ㎒ ~ 1 779.3 ㎒
NR Band n5	Voice / Data	826.5 ㎒~ 846.5 ㎒
NR Band n66	Voice / Data	1 712.5 ㎒~ 1 777.5 ㎒
NR Band n2(PCS)	Voice / Data	1 852.5 ㎒~ 1 907.5 ㎒
NR Band n25(PCS)	Voice / Data	1 852.5 ㎒~ 1 912.5 ㎒
NR Band n41	Voice / Data	2 506.02 ㎒~ 2 679.99 ㎒
NR Band n77	Voice / Data	3 705 ㎒~ 3 975 ㎒
NR Band n77DoD	Voice / Data	3 455.04 ㎒~ 3 544.98 ㎒
U-NII-1	Voice / Data	5 180 ㎒ ~ 5 240 ㎒
U-NII-2A	Voice / Data	5 260 ㎒ ~ 5 320 ㎒
U-NII-2C	Voice / Data	5 500 ㎒ ~ 5 720 ㎒
U-NII-3	Voice / Data	5 745 ㎒ ~ 5 825 ㎒
U-NII-4	Voice / Data	5 845 ㎒~ 5 885 ㎒
2.4 ㎓ WLAN	Voice / Data	2 412 ㎒ ~ 2 472 ㎒
Bluetooth / LE 5.2	Data	2 402 ㎒ ~ 2 480 ㎒
NFC	Data	13.56 ㎒
WPC	Data	110 kHz ~ 148 kHz
Device Serial Numbers	**Mode**	**Serial Number**
	NR Band n25/n2	UJP1297M / UJP0703M
	NR Band n41 / SRS	UJP1297M / UJP1291M
	NR Band n77 / NR Band n77 DoD	UJP1291M / UJP0703M
	The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics are within operational tolerances expected for production units.	

4.2 Overview of Class II Permissive chage

In this device's class II permissive change certification, the following features are enabled for software only without changing Hardware.
- Enabled for NR n2, n25, n41, n77 bands.
For more detailed changes, please refer to the technical document

4.3 Power Reduction for SAR

This device utilizes a power reduction mechanism for some wireless modes and Bands for SAR compliance under some conditions when the device is being used in close proximity to the user's Body. FCC KDB Publication 616217 D04v01r02 Sec.6 was used as a guideline for selection SAR test distances for device

The reduced powers for the power reduction mechanisms were conformed via conducted power measurements at the RF Port

4.3 Nominal and Maximum Output Power Specifications

This device operates using the following maximum output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB publication 447498 D01v06.

4.3.1 3G/4G/5G Nominal and Maximum Output Power

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

A. GSM Modes

Mode / Band		Voice	Burst Average GMSK (dBm)				Burst Average 8-PSK (dBm)			
		1 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot
GSM/GPRS/EDGE 850	Maximum	34.0	34.0	31.0	30.0	28.0	27.0	25.0	24.0	23.0
	Nominal	33.0	33.0	30.0	29.0	27.0	26.0	24.0	23.0	22.0

Mode / Band		Voice	Burst Average GMSK (dBm)				Burst Average 8-PSK (dBm)			
		1 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot
GSM/GPRS/EDGE1900	Maximum	31.0	31.0	28.0	27.0	25.0	26.0	25.5	24.5	23.0
	Nominal	30.0	30.0	27.0	26.0	24.0	25.0	24.5	23.5	22.0

B. UMTS Modes

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode/ Band			ModulatedAverage(dBm)			
		3GPP Rel.99 (RMC)	3GPP Rel.99 (AMR)	3GPPHSDPA	3GPPHSUPA	DC-HSDPA
UMTS Band 5 (850 ㎒)	Maximum	25.5	23.5	23.0	22.5	24.0
	Nominal	24.5	22.5	22.0	21.5	23.0
UMTS Band 4 (1700 ㎒)	Maximum	24.5	22.5	23.0	21.0	23.5
	Nominal	23.5	21.5	22.0	20.0	22.5
UMTS Band 2 (1900 ㎒)	Maximum	24.5	22.5	22.0	21.0	24.0
	Nominal	23.5	21.5	21.0	20.0	23.0

C. LTE Modes

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode / Band		Modulated Average (dBm)
		Max
LTE Band 2 (PCS)	Maximum	24.0
	Nominal	23.0
LTE Band 4 (AWS)	Maximum	24.5
	Nominal	23.5
LTE Band 5 (Cell)	Maximum	25.0
	Nominal	24.0
LTE Band 12	Maximum	24.5
	Nominal	23.5
LTE Band 13	Maximum	24.5
	Nominal	23.5
LTE Band 17	Maximum	24.5
	Nominal	23.5

LTE Band 25	Maximum	24.0
	Nominal	23.0
LTE Band 26(Cell)	Maximum	25.0
	Nominal	24.0
LTE TDD Band 41PC3	Maximum	25.0
	Nominal	24.0
LTE TDD Band 41 (HPUE) PC2	Maximum	26.0
	Nominal	25.0
LTE Band 66 (AWS)	Maximum	24.5
	Nominal	23.5
LTE Band 2 upper ULCA only	Maximum	22.0
	Nominal	21.0
LTE Band 4 upper ULCA	Maximum	22.0
	Nominal	21.0

D. 5G NR SUB 6

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode / Band		Modulated Average (dBm)
		Max
n5 (SA/NSA)	Maximum	25.0
	Nominal	24.0
n66(Upper, NSA only)	Maximum	23.0
	Nominal	22.0
n66(Lower) SA/NSA	Maximum	25.0
	Nominal	24.0
NR Band n2 (SA/NSA)	Maximum	24.0
	Nominal	23.0
NR Band n25 (SA/NSA)	Maximum	24.0
	Nominal	23.0
NR Band n41 (SA/NSA)	Maximum	25.0
	Nominal	24.0
NR Band n77	Maximum	24.8
	Nominal	23.8
NR Band n77 DoD	Maximum	24.8
	Nominal	23.8

E. 5G NR SUB 6 SRS

Mode / Band		Modulated Average (dBm)
		Max
NR Band n41 SRS1	Maximum	25.0
	Nominal	24.0
NR Band n41 SRS2	Maximum	21.0
	Nominal	20.0
NR Band n41 SRS3	Maximum	22.0
	Nominal	21.0
NR Band n41 SRS4	Maximum	18.0
	Nominal	17.0
NR Band n77 SRS1	Maximum	24.8
	Nominal	23.8
NR Band n77 SRS2	Maximum	23.0
	Nominal	22.0

NR Band n77 SRS3	Maximum	24.5
	Nominal	23.5
NR Band n77 SRS4	Maximum	23.0
	Nominal	22.0
NR Band n77 DoD SRS1	Maximum	24.8
	Nominal	23.8
NR Band n77 DoD SRS2	Maximum	23.0
	Nominal	22.0
NR Band n77 DoD SRS3	Maximum	24.5
	Nominal	23.5
NR Band n77 DoD SRS4	Maximum	23.0
	Nominal	22.0

4.3.2 Reduced PCE Power (Hotspot Mode / Grip Sensor on/ Earjack Insert Mode)

A. GSM Modes

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode / Band		Voice	Burst Average GMSK (dBm)			
		1 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot
GSM/GPRS/EDGE1900 Hotspot Mode	Maximum	29.0	29.0	26.0	25.0	23.0
	Nominal	28.0	28.0	25.0	24.0	22.0
GSM/GPRS/EDGE1900 Grip Sensor on	Maximum	29.0	29.0	26.0	25.0	23.0
	Nominal	28.0	28.0	25.0	24.0	22.0
GSM/GPRS/EDGE1900 Earjack Insert Mode	Maximum	29.0	29.0	26.0	25.0	23.0
	Nominal	28.0	28.0	25.0	24.0	22.0

B. UMTS Modes

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode/ Band		ModulatedAverage(dBm)			
		RMC/AMR	3GPPHSDPA	3GPPHSUPA	DC-HSDPA
UMTS Band 4 (1700 ㎒) Hotspot Mode	Maximum	21.5	20.0	20.0	21.0
	Nominal	20.5	19.0	19.0	20.0
UMTS Band 2 (1900 ㎒) Hotspot Mode	Maximum	20.5	20.0	19.0	20.0
	Nominal	19.5	19.0	18.0	19.0
UMTS Band 4 (1700 ㎒) Grip Sensor on	Maximum	21.5	20.0	20.0	21.0
	Nominal	20.5	19.0	19.0	20.0
UMTS Band 2 (1900 ㎒) Grip Sensor on	Maximum	20.5	20.0	19.0	20.0
	Nominal	19.5	19.0	18.0	19.0
UMTS Band 4 (1700 ㎒) Earjack Insert Mode	Maximum	21.5	20.0	20.0	21.0
	Nominal	20.5	19.0	19.0	20.0
UMTS Band 2 (1900 ㎒) Earjack Insert Mode	Maximum	20.5	20.0	19.0	20.0
	Nominal	19.5	19.0	18.0	19.0

C. LTE Modes

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode / Band		Modulated Average (dBm)			
		Hotspot Mode	Grip Sensor on	Earjack Insert Mode	RCV-ON Mode
LTE Band 2	Maximum	20.0	20.0	20.0	N/A
	Nominal	19.0	19.0	19.0	N/A
LTE Band 4	Maximum	20.5	20.5	20.5	N/A
	Nominal	19.5	19.5	19.5	N/A
LTE Band 25	Maximum	20.0	20.0	20.0	N/A
	Nominal	19.0	19.0	19.0	N/A
LTE TDD Band 41PC3	Maximum	23.0	23.0	23.0	N/A
	Nominal	22.0	22.0	22.0	N/A
LTE TDD Band 41 (HPUE) PC2	Maximum	23.0	23.0	23.0	N/A
	Nominal	22.0	22.0	22.0	N/A
LTE Band 66 (AWS)	Maximum	20.5	20.5	20.5	N/A
	Nominal	19.5	19.5	19.5	N/A
LTE Band 2 upper ULCA only	Maximum	18.0	N/A	N/A	18.0
	Nominal	17.0	N/A	N/A	17.0
LTE Band 4 upper ULCA only	Maximum	18.0	N/A	N/A	18.0
	Nominal	17.0	N/A	N/A	17.0

D. 5G NR SUB 6

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode / Band		Modulated Average (dBm)			
		Hotspot Mode	Grip Sensor on	Earjack Insert Mode	RCV-ON Mode
n66(Upper, NSA only)	Maximum	N/A	N/A	N/A	19.0
	Nominal	N/A	N/A	N/A	18.0
n66(Lower, SA/NSA)	Maximum	20.0	20.0	20.0	N/A
	Nominal	19.0	19.0	19.0	N/A
NR Band n2 (SA/NSA)	Maximum	20.0	20.0	20.0	N/A
	Nominal	19.0	19.0	19.0	N/A
NR Band n25 (SA/NSA)	Maximum	20.0	20.0	20.0	N/A
	Nominal	19.0	19.0	19.0	N/A
NR Band n77 (SA/NSA)	Maximum	20.8	N/A	N/A	22.8
	Nominal	19.8	N/A	N/A	21.8
NR Band n77 DoD (SA/NSA)	Maximum	20.8	N/A	N/A	22.8
	Nominal	19.8	N/A	N/A	21.8

E. 5G NR SUB 6 SRS

(tolerance: Nomial Power -1.5 dB ~ +1.0 dB)

Mode / Band		Modulated Average (dBm)			
		Hotspot Mode	Grip Sensor on	Earjack Insert Mode	RCV-ON Mode
NR Band n77 SRS1	Maximum	20.8	N/A	N/A	22.8
	Nominal	19.8	N/A	N/A	21.8
NR Band n77 SRS2	Maximum	19.0	N/A	N/A	21.0
	Nominal	18.0	N/A	N/A	20.0
NR Band n77 SRS3	Maximum	20.5	N/A	N/A	22.5
	Nominal	19.5	N/A	N/A	21.5
NR Band n77 SRS4	Maximum	19.0	N/A	N/A	21.0
	Nominal	18.0	N/A	N/A	20.0
NR Band n77 DoD SRS1	Maximum	20.8	N/A	N/A	22.8
	Nominal	19.8	N/A	N/A	21.8
NR Band n77 DoD SRS2	Maximum	19.0	N/A	N/A	21.0
	Nominal	18.0	N/A	N/A	20.0
NR Band n77 DoD SRS3	Maximum	20.5	N/A	N/A	22.5
	Nominal	19.5	N/A	N/A	21.5
NR Band n77 DoD SRS4	Maximum	19.0	N/A	N/A	21.0
	Nominal	18.0	N/A	N/A	20.0

4.3.3 Maximum 2.4 ㎓, 5 ㎓ WIFI output power

Maximum Power

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz		18 Ch12:1 Ch13: 0	17 Ch1,11 : 15 Ch12:1 Ch13:1	17 Ch1,11 : 14 Ch12:1 Ch13: 0.5				18 Ch12:1 Ch13: 0	17 Ch1,11 : 15 Ch12:1 Ch13:1	17 Ch1,11 : 14 Ch12:1 Ch13: 0.5				21 Ch12:4 Ch13: 3	20 Ch1,11 : 18 Ch12:4 Ch13: 4	20 Ch1,11 : 17 Ch12:4 Ch13: 3.5			19 Ch12:4 Ch13:3
5GHZ (20MHz)	5200MHz	14			14	14		14			14	14		17			17	17	17 (ANT1/2 14)
	5300MHz	15			15	15		15			15	15		18			18	18	18 (ANT1/2 15)
	5500MHz	14			14	14		14			14	14		17			17	17	17 (ANT1/2 14)
	5800MHz	17			17	17		17			17	17		20			20	20	19 (ANT1/2 16)
	5900MHz	17			17	17		17			17	17		20			20	20	19 (ANT1/2 16)
5GHZ (40MHz)	5200MHz				15	15					15	15					18	18	18 (ANT1/2 15)
	5300MHz				15:	15:					15:	15:					18	18	18 (ANT1/2 15)
	5500MHz				13	14					13	14					16	17	17 (ANT1/2 14)
	5800MHz				15	15					15	15					18	18	18 (ANT1/2 15)
	5900MHz				15	15					15	15					18	18	18 (ANT1/2 15)
5GHZ (80MHz)	5200MHz					14						14						17	17 (ANT1/2 14)
	5300MHz					14						14						17	17 (ANT1/2 14)
	5500MHz					14:						14						17	17 (ANT1/2 14)
	5800MHz					14						14						17-	17 (ANT1/2 14)
	5900MHz					14						14						17-	17 (ANT1/2 14)

(Uppertolerance:target+1.0dB)

Receiver Active(RCV-ON)

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz		13 Ch12:1 Ch13: 0	13 Ch12:1 Ch13: 1	13 Ch12:1 Ch13: 0.5				13 Ch12:1 Ch13: 0	13 Ch12:1 Ch13: 1	13 Ch12:1 Ch13: 0.5				16 Ch12:4 Ch13: 3	16 Ch12:4 Ch13: 4	16 Ch12:4 Ch13: 3.5		16 Ch12:4 Ch13:2
5GHZ (20MHz)	5200MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5300MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5500MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5800MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5900MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
5GHZ (40MHz)	5200MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5300MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5500MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5800MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5900MHz				10	10					10	10					13	13	13 (ANT1/2 10)
5GHZ (80MHz)	5200MHz					10						10						13	13 (ANT1/2 10)
	5300MHz					10						10						13	13 (ANT1/2 10)
	5500MHz					10						10						13	13 (ANT1/2 10)
	5800MHz					10						10						13	13 (ANT1/2 10)
	5900MHz					10						10						13	13 (ANT1/2 10)

(Uppertolerance:target+1.0dB)

RSDB Mode

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz		13 Ch12:1 Ch13: 0	13 Ch12:1 Ch13: 1	13 Ch12:1 Ch13: 0.5				13 Ch12:1 Ch13: 0	13 Ch12:1 Ch13: 1	13 Ch12:1 Ch13: 0.5				16 Ch12:4 Ch13: 3	16 Ch12:4 Ch13: 4	16 Ch12:4 Ch13: 3.5		16 Ch12:4 Ch13:2
5GHZ (20MHz)	5200MHz	12			12	12		12			12	12		15			15	15	15 (ANT1/2 12)
	5300MHz	12			12	12		12			12	12		15			15	15	15 (ANT1/2 12)
	5500MHz	12			12	12		12			12	12		15			15	15	15 (ANT1/2 12)
	5800MHz	12			12	12		12			12	12		15			15	15	15 (ANT1/2 12)
	5900MHz	12			12	12		12			12	12		15			15	15	15 (ANT1/2 12)
5GHZ (40MHz)	5200MHz				12	12					12	12					15	15	15 (ANT1/2 12)
	5300MHz				12	12					12	12					15	15	15 (ANT1/2 12)
	5500MHz				12	12					12	12					15	15	15 (ANT1/2 12)
	5800MHz				12	12					12	12					15	15	15 (ANT1/2 12)
	5900MHz				12	12					12	12					15	15	15 (ANT1/2 12)
5GHZ (80MHz)	5200MHz					12						12						15	15 (ANT1/2 12)
	5300MHz					12						12						15	15 (ANT1/2 12)
	5500MHz					12						12						15	15 (ANT1/2 12)
	5800MHz					12						12						15	15 (ANT1/2 12)
	5900MHz					12						12						15	15 (ANT1/2 12)

(Uppertolerance:target+1.0dB)

RSDB with receiver Active (RCV-ON)

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz		11 Ch12:1 Ch13: 0	11 Ch12:1 Ch13: 1	11 Ch12:1 Ch13: 0.5				11 Ch12:1 Ch13: 0	11 Ch12:1 Ch13: 1	11 Ch12:1 Ch13: 0.5				14 Ch12:4 Ch13: 3	14 Ch12:4 Ch13: 4	14 Ch12:4 Ch13: 3.5		14 Ch12:4 Ch13:2
5GHZ (20MHz)	5200MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5300MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5500MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5800MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
	5900MHz	10			10	10		10			10	10		13			13	13	13 (ANT1/2 10)
5GHZ (40MHz)	5200MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5300MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5500MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5800MHz				10	10					10	10					13	13	13 (ANT1/2 10)
	5900MHz				10	10					10	10					13	13	13 (ANT1/2 10)
5GHZ (80MHz)	5200MHz					10						10						13	13 (ANT1/2 10)
	5300MHz					10						10						13	13 (ANT1/2 10)
	5500MHz					10						10						13	13 (ANT1/2 10)
	5800MHz					10						10						13	13 (ANT1/2 10)
	5900MHz					10						10						13	13 (ANT1/2 10)

(Uppertolerance:target+1.0dB)

802.11ax RU Tx power Tables

	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
Tones	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T									15 Ch12:4 Ch13:2	15 (ANT1/2, 12)	15 (ANT1/2, 12)	15 (ANT1/2, 12)
52T									16 Ch12:4 Ch13:2	16 (ANT1/2, 13)	16 (ANT1/2, 13)	16 (ANT1/2, 13)
106T									17 Ch12:4 Ch13:2	17 (ANT1/2, 14)	17 (ANT1/2, 14) 5500MHz : 15 (ANT1/2 : 12)	17 (ANT1/2, 14) 5300MHz : 16 (ANT1/2 : 13) 5500MHz : 15 (ANT1/2 : 12)
242T									18 Ch1 :15 Ch11 : 13 Ch12:4 Ch13:2	18 (ANT1/2, 15) 5500MHz : 17 (ANT1/2 : 14)	18 (ANT1/2, 15) 5200MHz : 17 (ANT1/2 : 14) 5500MHz : 15 (ANT1/2 : 12)	18 (ANT1/2, 15) 5200MHz : 17 (ANT 1/2 : 14) 5300MHz : 16 (ANT 1/2 : 13) 5500MHz : 15 (ANT 1/2 : 12)
484T											17 (ANT1/2, 14) 5200MHz : 16 (ANT1/2 : 13) 5500MHz : 15 (ANT1/2 : 12)	17 (ANT1/2, 14) 5200MHz : 16 (ANT 1/2 : 13) 5500MHz : 15 (ANT 1/2 : 12)
996T												16 (ANT1/2, 13) 5200MHz : 15.5 (ANT1/2 : 12.5) 5500MHz : 15 (ANT 1/2 : 12)

(Uppertolerance:target+1.0dB)

11ax RU Tx power Tables (RCV-ON)

	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
Tones	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T									15 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
52T									15 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
106T									15 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
242T									15 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
484T											13 (ANT1/2, 10)	13 (ANT1/2, 10)
996T												13 (ANT1/2, 10)

(Uppertolerance:target+1.0dB)

11ax RU Tx power Tables –RSDB

	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
Tones	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T									15 Ch12:4 Ch13:2	15 (ANT1/2, 12)	15 (ANT1/2, 12)	15 (ANT1/2, 12)
52T									15 Ch12:4 Ch13:2	15 (ANT1/2, 12))	15 (ANT1/2, 12))	15 (ANT1/2, 12))
106T									15 Ch12:4 Ch13:2	15 (ANT1/2, 12)	15 (ANT1/2, 12)	15 (ANT1/2, 12)
242T									15 Ch12:4 Ch13:2	15 (ANT1/2, 12))	15 (ANT1/2, 12))	15 (ANT1/2, 12))
484T											15 (ANT1/2, 12)	15 (ANT1/2, 12)
996T												15 (ANT1/2, 12))

(Uppertolerance:target+1.0dB)

11ax RU Tx power Tables –RSDB with receiver Active (RCV-ON)

	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
Tones	*2.4G*	*5G/20 Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*	*2.4G*	*5G/20Mhz*	*5G/40Mhz*	*5G/80Mhz*
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T									14 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
52T									14 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
106T									14 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
242T									14 Ch12:4 Ch13:2	13 (ANT1/2, 10)	13 (ANT1/2, 10)	13 (ANT1/2, 10)
484T											13 (ANT1/2, 10)	13 (ANT1/2, 10)
996T												13 (ANT1/2, 10)

(Uppertolerance:target+1.0dB)

Legacy(11b/g/n/a/ac) Real Simultaneous Dual Band (RSDB) Power

	# TX	5GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		WIFI1	WIFI2	WIFI1	WIFI2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 12 BW40: 12 BW80: 12	BW20: 12 BW40: 12 BW80: 12	13	13	2.4 GHz: b, g, n 5 GHz: a, n, ac

(Upper toler ance:target+1.0dB)

Legacy(11b/g/n/a/ac) Real Simultaneous Dual Band (RSDB) Power with RCV On

	# TX	5GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		WIFI1	WIFI2	WIFI1	WIFI2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	11	11	2.4 GHz: b, g, n 5 GHz: a, n, ac

(Upper tolerance: target+1.0dB)

802.11ax Simultaneous Dual Band (RSDB) Power

	# TX	5GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		WIFI1	WIFI2	WIFI1	WIFI2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 12 BW40: 12 BW80: 12	BW20: 12 BW40: 12 BW80: 12	12	12	2.4 GHz: 11ax 5 GHz: 11ax

(Uppertolerance: target+1.0dB)

802.11ax(SU, 242T) Real Simultaneous Dual Band (RSDB) Power with RCV On

	# TX	5GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		WIFI1	WIFI2	WIFI1	WIFI2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	11	11	2.4 GHz: 11ax 5 GHz: 11ax

(Upper tolerance: target+1.0dB)

4.3.4 Maximum Bluetooth Power

Mode / Band			Modulated Average (dBm)
Bluetooth	1Mbps	Maximum	16.0
		Nominal	15.0
	EDR	Maximum	11.5
		Nominal	10.5
Bluetooth LE	2Mbps High Power	Maximum	14.5
		Nominal	13.5
	2Mbps Normal Power	Maximum	7.0
		Nominal	6.0
	1Mbps, 125/500Kbps High Power	Maximum	14.5
		Nominal	13.5
	1Mbps, 125/500Kbps Normal Power	Maximum	7.0
		Nominal	6.0

(Upper tolerance:Nominal+1.0dB)

4.5 LTE/NR Information

Item.		Description
Frequency Range	LTE Band 2 (PCS)	1 850.7 ㎒~ 1 909.3 ㎒
	LTE Band 4 (AWS)	1 710.7 ㎒~ 1 754.3 ㎒
	LTE Band 5 (Cell)	824.7 ㎒~ 848.3 ㎒
	LTE Band 12	699.7 ㎒~ 715.3 ㎒
	LTE Band 13	779.5 ㎒ ~ 784.5 ㎒
	LTE Band 17	706.5 ㎒~ 713.5 ㎒
	LTE Band 25(PCS)	1 850.7 ㎒ ~ 1 914.3 ㎒
	LTE Band 26 (Cell)	814.7 ㎒~ 848.3 ㎒
	LTE TDD Band 41	2 498.5 ㎒ ~ 2 687.5 ㎒
	LTE Band 66 (AWS)	1 710.7 ㎒ ~ 1 779.3 ㎒
Channel Bandwidths	LTE Band 2 (PCS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 4 (AWS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 5 (Cell)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒
	LTE Band 12	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒
	LTE Band 13	5 ㎒, 10 ㎒
	LTE Band 17	5 ㎒, 10 ㎒
	LTE Band 25 (PCS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 26 (Cell)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒
	LTE TDD Band 41	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 66 (AWS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒

Ch. No.& Freq.(㎒)		Low	Mid	High
LTE Band 2 (PCS)	1.4 ㎒	1 850.7 (18607)	1 880.0 (18900)	1 909.3 (19193)
	3 ㎒	1 851.5 (18615)	1 880.0 (18900)	1 908.5 (19185)
	5 ㎒	1 852.5 (18625)	1 880.0 (18900)	1 907.5 (19175)
	10 ㎒	1 855.0 (18650)	1 880.0 (18900)	1 905.0 (19150)
	15 ㎒	1 857.5 (18675)	1 880.0 (18900)	1 902.5 (19125)
	20 ㎒	1 860.0 (18700)	1 880.0 (18900)	1 900.0 (19100)
LTE Band 4 (AWS)	1.4 ㎒	1 710.7 (19957)	1 732.5 (20175)	1 754.3 (20393)
	3 ㎒	1 711.5 (19965)	1 732.5 (20175)	1 753.5 (20385)
	5 ㎒	1 712.5 (19975)	1 732.5 (20175)	1 752.5 (20375)
	10 ㎒	1 715.0 (20000)	1 732.5 (20175)	1 750.0 (20350)
	15 ㎒	1 717.5 (20025)	1 732.5 (20175)	1 747.5 (20325)
	20 ㎒		1 732.5 (20175)	
LTE Band 5 (Cell)	1.4 ㎒	824.7 (20407)	836.5 (20525)	848.3 (20643)
	3 ㎒	825.5 (20415)	836.5 (20525)	847.5 (20635)
	5 ㎒	826.5 (20425)	836.5 (20525)	846.5 (20625)
	10 ㎒		836.5 (20525)	
LTE Band 12	1.4 ㎒	699.7 (23017)	707.5 (23095)	715.3 (23173)
	3 ㎒	700.5 (23025)	707.5 (23095)	714.5 (23165)
	5 ㎒	701.5 (23035)	707.5 (23095)	713.5 (23155)
	10 ㎒		707.5 (23095)	
LTE Band 13	5 ㎒	779.5 (23205)	782 (23230)	784.5 (23255)
	10 ㎒		782 (23230)	
LTE Band 17	5 ㎒		710.0(23790)	
	10 ㎒		710.0(23790)	

Ch. No.& Freq.(MHz)		Low	Mid	High
LTE Band 25(PCS)	1.4 MHz	1 850.7 (26047)	1 882.5 (26365)	1 914.3 (26683)
	3 MHz	1 851.5 (26055)	1 882.5 (26365)	1 913.5 (26675)
	5 MHz	1 852.5 (26065)	1 882.5 (26365)	1 912.5 (26665)
	10 MHz	1 855 (26090)	1 882.5 (26365)	1 910 (26640)
	15 MHz	1 857.5 (26115)	1 882.5 (26365)	1 907.5 (26615)
	20 MHz	1 860 (26140)	1 882.5 (26365)	1 905 (26590)
LTE Band 26 (Cell)	1.4 MHz	814.7 (26697)	831.5 (26865)	848.3 (27033)
	3 MHz	815.5 (26705)	831.5 (26865)	847.5 (27025)
	5 MHz	816.5 (26715)	831.5 (26865)	846.5 (27015)
	10 MHz	819.0 (26740)	831.5 (26865)	844.0 (26990)
	15 MHz		831.5 (26865)	

Ch. No.& Freq.(MHz)		Low		Mid		High
LTE Band 66 (AWS)	1.4 MHz	1 710.7 (131979)		1 745 (132322)		1 779.3 (132665)
	3 MHz	1 711.5 (131987)		1 745 (132322)		1 778.5 (132657)
	5 MHz	1 712.5 (131997)		1 745 (132322)		1 777.5 (132647)
	10 MHz	1 715.0 (132022)		1 745 (132322)		1 775.0 (132622)
	15 MHz	1 717.5 (132047)		1 745 (132322)		1 772.5 (132597)
	20 MHz	1 720.0 (132072)		1 745 (132322)		1 770.0 (132572)
LTE TDD Band 41	5 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	10 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	15 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	20 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)

UE Category	LTE Rel. 15, DL: Category 20, UL: Category 18
HPUE Power Class	LTE TDD 41 Power Class 3 :(Duty: 63.3%) Power Class 2 : (Duty:43.3%)
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256 QAM
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3	Yes
A-MPR disabled for SAR Testing.	Yes
LTE Carrier Aggregation	This device supports Inter-Band & Intra-Band DL-link Carrier aggregations and intra-Band UL-link Carrier aggregations. Detaled information of Down-Link CA are included in the Appendix.I and Technical Description document.
LTE Release information	This device does not support full CA features on 3GPP Release 15. It supports carrieraggregation, downlink MIMO. All other uplink communications are identical to the release 8 specifications. The following LTE Release 15 Features are not supported: Relay, Hetnet, Enhanced eICI, MDH, cross-carrier Scheduling, Enhanced SC-FDMA.

NR Information

Item.		Description
Frequency Range	NR Band n5 (Cell)	826.5 MHz ~ 846.5 MHz
	NR Band n66 (AWS)	1 712.5 MHz ~ 1 777.5 MHz
	NR Band n2	1 852.5 MHz~ 1 907.5 MHz
	NR Band n25	1 852.5 MHz ~ 1 912.5 MHz
	NR Band n41	2 506.02 MHz~ 2 679.99 MHz
	NR Band n77	3 705 MHz~ 3 975 MHz
	NR Band n77DoD	3455.04 MHz~ 3544.98 MHz
Channel Bandwidths	NR Band n5 (Cell)	5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n66 (AWS)	5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n2	5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n25	5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n41	10 MHz,15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz
	NR Band n77	10 MHz,15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz
	NR Band n77 DoD	10 MHz,15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz

Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High
NR Band n5 (Cell)	5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)
	10 MHz			836.5 (167300)		
	15 MHz			836.5 (167300)		
	20 MHz			836.5 (167300)		
NR Band n66(AWS)	5 MHz	1 712.5 (342500)		1 745 (349000)		1 777.5 (355500)
	10 MHz	1 715 (343000)		1 745 (349000)		1 775 (355000)
	15 MHz	1 717.5 (343500)		1 745 (349000)		1 772.5 (354500)
	20 MHz	1 720 (344000)		1 745 (349000)		1 770 (354000)
NR Band n2	5 MHz	1852.5 (370500)		1880 (376000)		1907.5 (381500)
	10 MHz	1855 (371000)		1880 (376000)		1905 (381000)
	15 MHz	1 857.5 (371500)		1880 (376000)		1902.5 (380500)
	20 MHz	1860 (372000)		1880 (376000)		1900 (380000)
NR Band n25	5 MHz	1852.5 (370500)		1882.5 (376500)		1912.5 (382500)
	10 MHz	1855 (371000)		1882.5 (376500)		1910 (382000)
	15 MHz	1857.5 (371500)		1882.5 (376500)		1907.5 (381500)
	20 MHz	1860 (372000)		1882.5 (376500)		1905 (381000)
NR Band n41	10 MHz	2501.01 (500202)	2547 (509400)	2592.99 (518598)	2639.01(527802)	2685(537000)
	15 MHz	2503.5(500700)	2548.32 (509664)	2592.99 (518598)	2637.81(527562)	2682.48 (536496)
	20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)	2636.49 (527298)	2679.99 (535998)
	30 MHz	2511(502200)	2552.01(510402)	2592.99 (518598)	2634(526800)	2674.98(534996)
	40 MHz	2516.01 (503202)	2567.34 (513468)		2618.67 (523734)	2670 (534000)
	50 MHz	2521.02 (504204)		2592.99 (518598)		2664.99 (532998)
	60 MHz	2526 (505200)		2592.99 (518598)		2659.98 (531996)
	80 MHz	2536.02 (507204)				2649.99 (529998)
	90 MHz	2541 (508200)				2644.98 (528996)
	100 MHz			2592.99 (518598)		

Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High	
NR Band n77	10 MHz	3705 (647000)	3759 (650600)	3813(654200)	3867 (657800)	3921 (661400)	3975 (665000)
	15 MHz	3707.52(647168)	3760.5(650700)	3813.49(654232)	3866.5(657766)	3919.5(661300)	3972.48(664832)
	20 MHz	3710.01(647334)	3762 (650800)	3813.99(654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
	30 MHz	3715.02(647668)	3765 (651000)	3815.01(654334)	3864.99 (657666)	3915 (661000)	3964.98 (664232)
	40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660800)	3960 (664000)
	50 MHz	3725.01(648334)	3782.49 (652166)	3840 (656000)		3897.51 (659834)	3954.99 (663666)
	60 MHz	3730.02(648668)	3803.34(653556)			3876.66(658444)	3949.98 (663332)
	70 MHz	3735 (649000)	3804.99(654336)			3875.01(658334)	3945(663000)
	80 MHz	3740.01(649334)		3840 (656000)		3939.99 (662666)	
	90 MHz	3745.02(649668)		3840 (656000)		3934.98 (662332)	
	100 MHz	3750 (650000)				3930 (662000)	
NR Band n77 DoD	10 MHz	3455.04 (630336)		3500.01 (633334)		3544.98 (630332)	
	15 MHz	3457.53 (630502)		3500.01 (633334)		3542.49 (636166)	
	20 MHz	3460.02 (630668)		3500.01 (633334)		3540 (636000)	
	30 MHz	3465 (631000)		3500.01 (633334)		3534.99 (635666)	
	40 MHz	3470.01 (631334)				3529.98 (635332)	
	50 MHz	3475.02 (631668)				3525 (635000)	
	60 MHz			3500.01 (633334)			
	70 MHz			3500.01 (633334)			
	80 MHz			3500.01 (633334)			
	90 MHz			3500.01 (633334)			
	100 MHz			3500.01 (633334)			

Item.	Description
NR Band n5/n66/ n2/n25	15 kHz
NR Band n41/n77 SCS	30 kHz
3GPP Rel.	Rel.16
A-MPR disabled for SAR Testing.	Yes
5G NR FR1	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM DFT-s-OFDM: π/2-BPSK(UL Only), QPSK, 16QAM, 64QAM, 256QAM
Non-Standalone & Standalone are supported. More detailed specifications of the 5G NR Bands are contained in the Technical description document. n66 Lower(SA/NSA),n66 Upper(NSA). When the lower antenna Main Ant#1-1 is an EN-DC combination of the LTE B2 anchor band of the 5G sub6 n66 is switched to the upper antenna Sub Ant#6.	
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier a regation combinations
LTE Anchor Bands for NR Band n5(Cell)	LTE Band 2/66
LTE Anchor Bands for NR Band n66(AWS) Upper Sub Ant #6	NSA only, LTE Band 2(Man Ant #1-1)
LTE Anchor Bands for NR Band n66(AWS) Lower Main Ant #1-1	LTE Band 5/12/13
LTE Anchor Bands for NR Band n2, n25	LTE Band 5/12/13
LTE Anchor Bands for NR Band n41	LTE Band 4/12
LTE Anchor Bands for NR Band n77,n77 DoD	LTE Band 2/5/7/12/13/66

4.6 DUT Antenna Locations

The overall dimensions of this device are > 9 X 5 cm. A diagram showing device antenna can be found in SAR_setup_photos. Since the diagonal dimension of this device is > 160 mm and < 200 mm, it is considered a "phablet".

This model allows users to exchange data or media files with other Bluetooth enabled devices using Bluetooth, which means they can connect to other Bluetooth enabled devices via Bluetooth tethering. Therefore, SAR test was performed for additional simultaneous transmissions.
Head and Bluetooth Tethering SAR were evaluated for BT BR tethering applications.

Mode	Ant	Rear	Front	Left	Right	Bottom	Top
GSM/GPRS/EDGE 850	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
GSM/GPRS/EDGE 1900	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 5	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 4	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 2	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2 (PCS)	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4 (AWS)	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 5 (Cell)	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 12	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 13	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 17	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 25	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 26	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE TDD Band 41	Main Ant#2-1	Yes	Yes	Yes	No	Yes	No
LTE Band 66 (AWS)	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2 ULCA(SCC)	Sub Ant#6	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4 ULCA(SCC)	Sub Ant#6	Yes	Yes	Yes	Yes	No	Yes
NR Band n5	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
NR Band n66 Upper	Sub Ant#6	Yes	Yes	Yes	Yes	No	Yes
NR Band n66 Lower	Main Ant#1-1	Yes	Yes	Yes	Yes	Yes	No
2.4 ㎓ WLAN	Sub Ant#4/7	Yes	Yes	Yes	No	No	Yes
5 ㎓ WLAN	Sub Ant#4/7	Yes	Yes	Yes	No	No	Yes
Bluetooth	Sub Ant#4	Yes	Yes	Yes	No	No	Yes
NR Band n2	Main Ant. #1-1	Yes	Yes	Yes	Yes	Yes	No
NR Band n25	Main Ant. #1-1	Yes	Yes	Yes	Yes	Yes	No
NR Band n41 SRS1	Main Ant. #1-2	Yes	Yes	Yes	Yes	No	Yes
NR Band n41 SRS2	Main Ant. #1-2	Yes	Yes	Yes	No	Yes	No
NR Band n41 SRS3	Sub Ant. #1	Yes	Yes	No	Yes	No	Yes
NR Band n41 SRS4	Main Ant. #3	Yes	Yes	Yes	No	No	Yes
NR Band n77 SRS1	Sub Ant. #2	Yes	Yes	Yes	No	No	Yes
NR Band n77 SRS2	Main Ant. #3	Yes	Yes	Yes	No	Yes	No
NR Band n77 SRS3	Sub Ant. #8	Yes	Yes	No	Yes	No	Yes
NR Band n77 SRS4	Main Ant. #4	Yes	Yes	No	Yes	No	Yes
NR Band n77 DoD SRS1	Sub Ant. #2	Yes	Yes	Yes	No	No	Yes
NR Band n77 DoD SRS2	Main Ant. #3	Yes	Yes	Yes	No	Yes	No
NR Band n77 DoD SRS3	Sub Ant. #8	Yes	Yes	Yes	No	No	Yes
NR Band n77 DoD SRS4	Main Ant. #4	Yes	Yes	Yes	No	Yes	No

WIFI1=Sub Ant#4, WIFI2=Sub Ant#7

Particular EUT edges were not required to be evaluated for Bluetooth Tethering and Hotspot SAR if the edges were > 25 mm from the transmitting antenna according to FCC KDB 941225 D06v02r01 on page 2.
The distance between the transmit antennas and the edges of the device are included in the filing.
- Note: All test configurations are based on front view position.

4.7 Near Field Communications (NFC) Antenna

This EUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in SAR _ Setup_ photos.

4.8 SAR Summation Scenario

According to FCC KDB 447498 D01v06, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown below paths and are mode in same rectangle to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.
This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB 447498 D01v06.

Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet
GSM voice + 2.4GHz Bluetooth	Yes^	Yes	N/A	Yes
GSM voice + 2.4GHz WI-FI MIMO	Yes	Yes	N/A	Yes
GSM voice + 5GHz WI-FI MIMO	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	N/A	Yes
UMTS + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz WI-FI MIMO	Yes	Yes	Yes	Yes
UMTS + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes
LTE + 5GNR	Yes	Yes	N/A	Yes
LTE + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth + 5GNR	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz WI-FI MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI MIMO + 5GNR	Yes*	Yes	Yes	Yes
LTE + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
LTE + 5GHz WI-FI MIMO + 5GNR	Yes*	Yes	Yes	Yes
LTE + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO + 5GNR	Yes*	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^*	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth + 5GHz WI-FI MIMO + 5GNR	Yes^*	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth	Yes*^	Yes*	Yes^	Yes
GPRS/EDGE Data + 2.4GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes
GPRS/EDGE Data + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes
GPRS/EDGE Data + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth+ 5GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes
5GNR+ 2.4GHz Bluetooth	Yes*^	Yes*	Yes^	Yes
5GNR + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes
5GNR + 2.4GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes
5GNR + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes
5GNR + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	*Yes**	*Yes**	*Yes^*	*Yes*

Note:
1. 2.4GHz WLAN and 2.4GHz Bluetoothcannot transmit simultaneously
2. The device does not support licensed Bands simultaneously transmitting except LTE ULCA.n66 NSA EN-DC configuration
3. UMTS +WLAN scenario also represents the UMTS Voice/DATA + WLAN hotspot scenario.
4. VoIP is supported in GPRS/EDGE
5. The highest reported SAR for each exposure condition is used for SAR summation purpose.
6. Wi-Fi Hotspot is supported for 2.4 GHz/ UNII-3 of 5 GHz WLAN.
7. This device supports Bluetooth tethering. ^ BluetoothTetheringis considered.
8. * Pre-installedVOIP applications areconsidered
9. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held to ear or Body worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFi Direct beyond that listed in the above table.
10. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independentlyor together when operating with MIMO.
11. This device supports VOLTE.
12. This device supports VOWIFI
13. LTE + 5G NR FR1 Scenarios are supported NSA and SA Connectivity.

4.9 SAR Test Considerations

4.9.1 Licensed Transmitter(s)

Per FCC KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is greater than 160 mm and less than 200 mm. Therefore, extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR >1.2 W/kg. When hotspot mode applies, 10g SAR required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1g SAR > 1.2 W/kg.

This device supports LTE/NR capabilities with overlapping transmission frequency ranges. When the supported frequency range of LTE/NR Band falls completely within an LTE/NR Band with a larger transmission frequency range, both LTE/NR Bands have the same target power or the Band with the larger transmission frequency range has a higher target power and both LTE/NR Bands share the same transmission path and signal characteristics, SAR was only tested for the Band with the larger transmission frequency range.

NR capabilities with overlapping transmission frequency ranges were applied to n2(1 852.5 ㎒~ 1 907.5 ㎒) is coverd by n25(1 852.5 ㎒~ 1 912.5 ㎒ of this model each both NR bands have the same target powers.

This device supports NSA(Non-standalone) and SA(Stand alone) connectivity for 5G NR FR1 Bands,More detailed specifications of the Bands are contained in the Technical description document.

5. Introduction

The FCC has adopted the guidelines for evaluating the environmental effects of radio frequency radiation in ET Docket 93-62 on Aug. 6, 1996 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices.

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 ㎓. 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York 10017. The measurement procedure described in IEEE/ANSI C95.3-1992 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave is used for guidance in measuring SAR due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields," NCRP Report No. 86 NCRP, 1986, Bethesda, MD 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative of the incremental electromagnetic energy (d*W*) absorbed by (dissipated in) an incremental mass (d*m*) contained in a volume element (d*V*) of a given density (*r*). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body.

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right)$$

Figure 1. SAR Mathematical Equation
SAR is expressed in units of Watts per Kilogram (W/kg)

Where:
= conductivity of the tissue-simulant material (S/m)
= mass density of the tissue-simulant material (kg/㎥)
= Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.

6. Description of test equipment

6.1 SAR MEASUREMENT SETUP

These measurements are performed using the DASY4 automated dosimetric assessment system. It is made by Schmid& Partner Engineering AG (SPEAG) in Zurich, Switzerland. It consists of high precision robotics system (Staubli), robot controller, Pentium III computer, near-field probe, probe alignment sensor, and the generic twin phantom containing the brain equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF) (see Figure.2).

A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and remote control, is used to drive the robot motors. The PC with Windows XP or Windows 7 is working with SAR Measurement system DASY4 & DASY5, A/D interface card, monitor, mouse, and keyboard. The Staubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

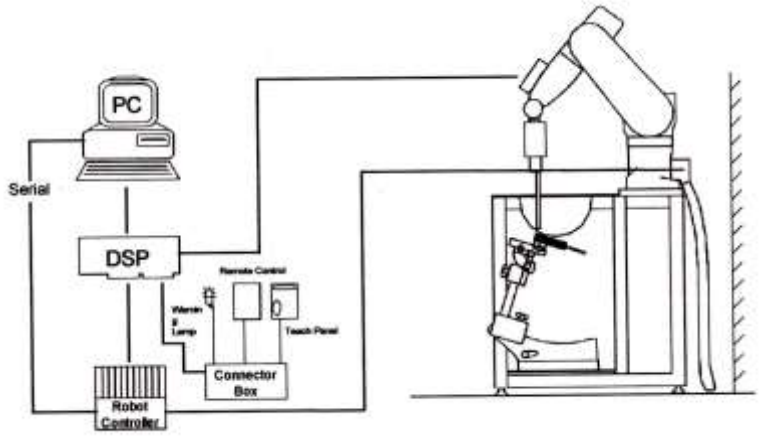


Figure 2. HCT SAR Lab. Test Measurement Set-up

The 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 PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer. The system is described in detail in.

7. SAR Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013.

1. The SAR distribution at the exposed side of the head or body was measured at a distance no more than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the DUT's head and body area and the horizontal grid resolution was depending on the FCC KDB 865664 D01v01r04 table 4-1 & IEEE 1528-2013.

2. Based on step, the area of the maximum absorption was determined by sophisticated interpolations routines implemented in DASY software. When an Area Scan has measured all reachable point. DASY system computes the field maximal found in the scanned are, within a range of the maximum. SAR at this fixed point was measured and used as a reference value.

3. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB 865664 D01v01r04 table 4-1 and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (reference from the DASY manual.)

   a. The data at the surface were extrapolated, since the center of the dipoles is no more than 2.7 mm away from the tip of the probe (it is different from the probe type) and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

   b. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y, and z directions. The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan. If the value changed by more than 5 %, the SAR evaluation and drift measurements were repeated.

Area scan and zoom scan resolution setting follow KDB 865664 D01v01r04 quoted below.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface
normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">MaximumareascanSpatial resolution:Δx_{Area},Δy_{Area}</td><td>≤ 2 GHz: ≤15 mm
2-3 GHz: ≤12 mm</td><td>3-4 GHz: ≤12 mm
4-6 GHz: ≤10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan Spatial resolution: Δx_{zoom},Δy_{zoom}</td><td>≤ 2 GHz: ≤8mm
2-3 GHz: ≤5mm*</td><td>3-4 GHz: ≤5 mm*
4-6 GHz: ≤4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan Spatial resolution normal to phantom surface</td><td colspan="2">uniform grid:$\Delta z_{zoom}(n)$</td><td>≤ 5 mm</td><td>3-4 GHz: ≤4 mm
4-5 GHz: ≤3 mm
5-6 GHz: ≤2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{zoom}(1)$: between1st two Points closest to phantom surface</td><td>≤ 4 mm</td><td>3-4 GHz: ≤3 mm
4-5 GHz: ≤2.5 mm
5-6 GHz: ≤2 mm</td></tr>
<tr><td>$\Delta z_{zoom}(n>1)$:between subsequent Points</td><td colspan="2">≤1.5·$\Delta z_{zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3-4 GHz: ≥28 mm
4-5 GHz: ≥25 mm
5-6 GHz: ≥22 mm</td></tr>
<tr><td colspan="5">Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

8. Description of Test Position

8.1 EAR REFERENCE POINT

Figure 8-2 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 on the B-M (back-mouth) line located 15 mm behind the entrance-to-ear-canal (EEC) point, as shown in Figure 6-1. The Reference Plane is defined as passing through the two ear reference point and point M. The line N-F (Neck-Front), also called the Reference Pivoting Line, is not perpendicular to the reference plane (See Figure 5-1), Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning.

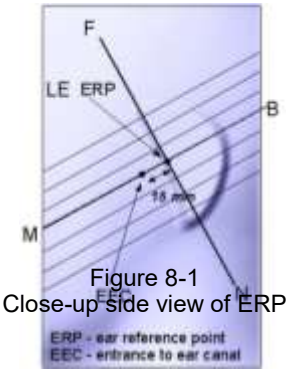


Figure 8-1
Close-up side view of ERP

8.2 HANDSET REFERENCE POINTS

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The device under test was placed in a normal operating position with the acoustic output located along the “vertical centerline” on the front of the device aligned to the “ear reference point”(see Figure 8-3). The acoustic output was than located at the same level as the center of the ear reference point. The device under test was positioned so that the “vertical centerline” was bisecting the front surface of the handset at its top and bottom edges, positioning the “ear reference point” on the outer surface of the both the left and right head phantoms on the ear reference point.

Figure 8-2
Front, back and side views of SAM Twin Phantom

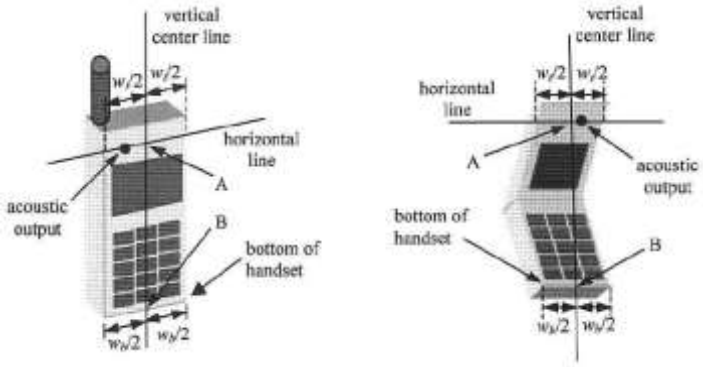


Figure 6-3. Handset vertical and horizontal reference lines

8.3 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameter; relative permittivity ε=3 and loss tangent σ =0.02.

8.4 Position for cheek

Figure 6.4. shows 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.

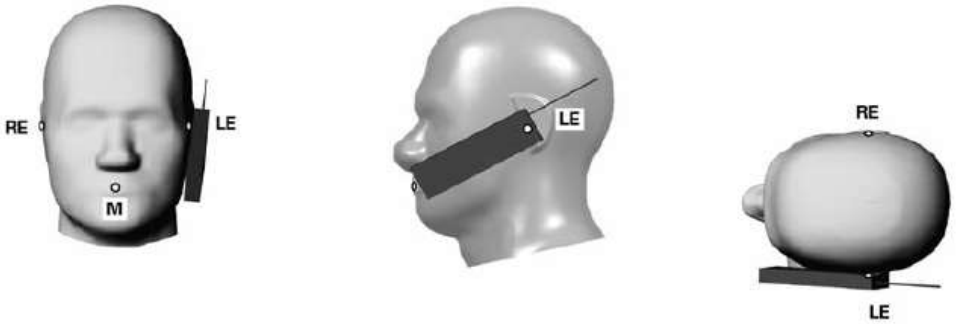


Figure 8.4 Cheek/ Touch position of the wireless device

8.5 Definition of the “tilted” position

Figure 6.5. shows tilted position. Place the device in the cheek position. Then while maintaining the orientation of the device, retract the device parallel to the reference plane far enough away from the phantom to enable a rotation of the device by 15°.

Figure 8.5. Tilt 15°position of the wireless device

8.6 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-dips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6-6). Per FCC KDB Publication 648474 D04v01r03 Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in Body-worn accessories. The Body-worn accessory procedures in FCC KDB Publication 447498 D01v06 should be used to test for Body-worn accessory SAR compliance, without a headset connected to it.. When the reported SAR for a body- worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency Band should be repeated for that body-worn accessory with a headset attached to the handset.

Figure 8-6
Sample Body-Worn Diagram

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

8.7 Wireless Router Configurations

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v02r01 where SAR test considerations for handsets (L x W≥9cmx5 cm) are based on *a* composite test separation distance of 10 mm from the front back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the Body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some Body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 publication procedures. The Portable Hotspot feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

8.8 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions: i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. The 1-g body and 10-g extremity SAR Exclusion Thresholds found in KDB Publication 447498 D01v06 should be applied to determine SAR test requirements.

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear. the phablets procedures outlined in KDB Publication 648474 D04 v01r03 should be applied to evaluate SAR compliance. A device marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance. In addition to the normally required head and body-worm accessory SAR test procedures required for handsets, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna ≤25 mm from that surface or edge, in direct contact with the phantom, for 10-g SAR. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1-g SAR > 1.2 W/kg.

8.9 Additional Test Positions due to Proximity Conditions

This device uses a sensor to reduce output powers in extremity (hand-held) use conditions.

When the sensor detects a user is touching the device on or near to the antenna the device reduces the maximum allowed output power However, the proximity sensor is not active when the device is moved beyond the sensor triggering distance and the maximum output power is no longer limited. Therefore, an additional exposure condition is needed in the vicinity of the triggering distance to ensure SAR is compliant when the device is allowed to operate at a non-reduced output power level.

FCC KDB 616217 D04 v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device at these additional exposure conditions. The smallest separation distance determined by the sensor triggering and sensor coverage for each applicable edge, minus 1 mm. was used as the test separation distance for SAR testing. Sensor triggering distance summary data is included in below table.

Wireless technologies	Position	§6.2 Triggering Distance	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Phablet SAR
NR n2, n25	Rear	10	N/A	N/A	9
	Front	7	N/A	N/A	6
	Bottom	13	N/A	N/A	12

9. RF Exposure Limits

HUMAN EXPOSURE	UNCONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT Occupational (W/kg) or (mW/g)
SPATIAL PEAK SAR * (Partial Body)	1.6	8.0
SPATIAL AVERAGE SAR ** (Whole Body)	0.08	0.4
SPATIAL PEAK SAR *** (Hands / Feet / Ankle / Wrist)	4.0	20.0

NOTES:

* The Spatial Peak value of the SAR averaged over any 1 g of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

** The Spatial Average value of the SAR averaged over the whole-body.

*** The Spatial Peak value of the SAR averaged over any 10 g of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be mad fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

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

10. FCC SAR General Measurement Procedures

Power Measurements for licensed transmitters are performed using a base simulator under digital average power.

10.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as Reported SAR. The highest reported SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

11. Output Power Specifications

This device operates using the following maximum output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB publication 447498 D01v06.

Licensed Bands

Test Description	Test Procedure Used
Conducted Output Power	- KDB 971168 D01 v03r01 - Section 5.2.4 - ANSI C63.26-2015 - Section 5.2.1 & 5.2.4.2

Test Overview

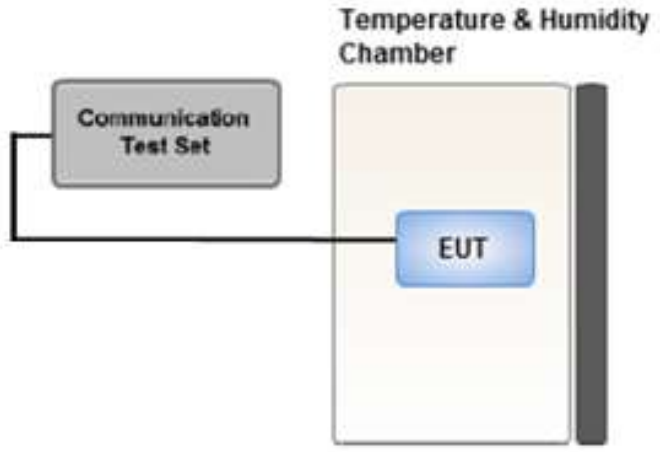
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base station emulator, communications test set, call box, or similar instrumentation that is capable of establishing a communications link with the EUT to enable control over variable parameters (e.g., output power, OBW, etc.).

In some cases, these instruments also include basic digital spectrum analyzer and/or power meter capabilities that can be utilized to measure the RF output power if the specified detectors and requirements can be realized and the measurement functions have been calibrated.

Test Procedure

1. The RF port of the EUT was connected to the Communication Tester via an RF cable.
2. Conducted average power was measured using a calibrated Radio Communication Tester.

Test setup



11.1 NR Maximum Output Power

11.1.1 NR BandMaximum Conducted Power

[NR Band n2 Conducted Power]

NR Band n2_ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 MHz	1880 MHz	1907.5 MHz	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.34	23.14	23.53	0
				1	13	23.24	23.05	23.46	0
				1	23	23.31	23.10	23.53	0
				12	0	22.84	22.60	23.06	0.5
				12	7	23.28	23.09	23.51	0
				12	13	22.78	22.60	23.01	0.5
				25	0	22.82	22.62	23.03	0.5
			QPSK	1	1	23.36	23.15	23.50	0
				1	13	23.23	23.07	23.45	0
				1	23	23.30	23.14	23.54	0
				12	0	22.32	22.13	22.57	1
				12	7	23.29	23.08	23.55	0
				12	13	22.30	22.06	22.58	1
				25	0	22.35	22.09	22.57	1
			16QAM	1	1	22.10	22.21	22.68	1
			64QAM	1	1	20.99	20.88	21.24	2.5
			256QAM	1	1	18.80	18.57	19.02	4.5
		CP	QPSK	1	1	21.91	21.66	22.07	1.5

NR Band n2_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 MHz	1880 MHz	1905 MHz	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.38	23.11	23.53	0
				1	26	23.34	23.14	23.59	0
				1	50	23.34	23.15	23.61	0
				25	0	22.92	22.66	23.11	0.5
				25	14	23.37	23.09	23.55	0
				25	27	22.87	22.62	23.12	0.5
				50	0	22.90	22.61	23.09	0.5
			QPSK	1	1	23.45	23.19	23.64	0
				1	26	23.36	23.10	23.58	0
				1	50	23.35	23.19	23.61	0
				25	0	22.46	22.14	22.62	1
				25	14	23.39	23.08	23.59	0
				25	27	22.36	22.14	22.63	1
				50	0	22.41	22.13	22.64	1
			16QAM	1	1	22.50	22.41	22.62	1
			64QAM	1	1	21.08	20.85	21.32	2.5
			256QAM	1	1	18.94	18.66	19.07	4.5
		CP	QPSK	1	1	22.01	21.73	22.19	1.5

NR Band n2_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.79	23.52	23.53	0
				1	40	23.65	23.35	3.47	0
				1	77	23.64	23.44	23.52	0
				36	0	23.28	22.98	23.04	0.5
				36	22	23.76	23.40	23.55	0
				36	43	23.21	22.93	23.08	0.5
				75	0	23.23	22.97	23.05	0.5
			QPSK	1	1	23.86	23.52	23.50	0
				1	40	23.71	23.34	23.46	0
				1	77	23.65	23.42	23.51	0
				36	0	22.83	22.47	22.55	1
				36	22	23.78	23.39	23.54	0
				36	43	22.75	22.46	22.58	1
				75	0	22.83	22.42	22.54	1
			16QAM	1	1	22.89	22.63	22.56	1
			64QAM	1	1	21.41	21.16	21.23	2.5
			256QAM	1	1	19.25	18.93	19.01	4.5
		CP	QPSK	1	1	22.44	22.08	22.14	1.5

NR Band n2_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.72	23.56	23.57	0
				1	53	23.69	23.41	23.57	0
				1	104	23.46	23.38	23.49	0
				50	0	23.23	22.99	23.06	0.5
				50	28	23.68	23.43	23.55	0
				50	56	23.08	22.92	23.05	0.5
				100	0	23.17	22.95	23.03	0.5
			QPSK	1	1	23.80	23.58	23.53	0
				1	53	23.72	23.41	23.55	0
				1	104	23.51	23.39	23.49	0
				50	0	22.81	22.47	22.55	1
				50	28	23.74	23.41	23.55	0
				50	56	22.65	22.46	22.55	1
				100	0	22.73	22.44	22.56	1
			16QAM	1	1	22.69	22.53	22.66	1
			64QAM	1	1	21.49	21.28	21.19	2.5
			256QAM	1	1	19.32	19.06	19.01	4.5
		CP	QPSK	1	1	22.32	22.22	22.12	1.5

[NR Band n25 Conducted Power]

NR Band n25_5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 MHz	1882.5 MHz	1912.5 MHz	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.38	23.15	23.55	0
				1	13	23.30	23.09	23.40	0
				1	23	23.37	23.24	23.42	0
				12	0	22.87	22.65	23.02	0.5
				12	7	23.36	23.13	23.47	0
				12	13	22.88	22.69	22.94	0.5
				25	0	22.89	22.66	22.98	0.5
			QPSK	1	1	23.41	23.18	23.53	0
				1	13	23.32	23.11	23.39	0
				1	23	23.34	23.23	23.40	0
				12	0	22.39	22.17	22.55	1
				12	7	23.37	23.18	23.47	0
				12	13	22.35	22.22	22.50	1
				25	0	22.40	22.20	22.51	1
			16QAM	1	1	22.48	22.20	22.79	1
			64QAM	1	1	21.05	20.88	21.29	2.5
			256QAM	1	1	18.84	18.61	19.14	4.5
		CP	QPSK	1	1	21.92	21.75	22.12	1.5

NR Band n25 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 MHz	1882.5 MHz	1910 MHz	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.51	23.21	23.64	0
				1	26	23.41	23.18	23.61	0
				1	50	23.39	23.27	23.45	0
				25	0	22.99	22.68	23.13	0.5
				25	14	23.46	23.21	23.60	0
				25	27	22.92	22.77	23.03	0.5
				50	0	22.95	22.73	23.09	0.5
			QPSK	1	1	23.51	23.24	23.60	0
				1	26	23.44	23.20	23.56	0
				1	50	23.37	23.29	23.45	0
				25	0	22.51	22.22	22.65	1
				25	14	23.46	23.24	23.59	0
				25	27	22.43	22.27	22.56	1
				50	0	22.47	22.25	22.63	1
			16QAM	1	1	22.57	22.32	22.80	1
			64QAM	1	1	21.22	20.91	21.37	2.5
			256QAM	1	1	18.96	18.67	19.18	4.5
		CP	QPSK	1	1	22.04	21.73	22.23	1.5

NR Band n25_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.51	23.18	23.60	0
				1	40	23.36	23.18	23.62	0
				1	77	23.32	23.35	23.45	0
				36	0	22.99	22.69	23.13	0.5
				36	22	23.41	23.23	23.65	0
				36	43	22.88	22.82	23.10	0.5
				75	0	22.94	22.74	23.17	0.5
			QPSK	1	1	23.52	23.22	23.57	0
				1	40	23.38	23.21	23.60	0
				1	77	23.36	23.34	23.47	0
				36	0	22.50	22.22	22.64	1
				36	22	23.41	23.23	23.64	0
				36	43	22.40	22.31	22.61	1
				75	0	22.46	22.27	22.69	1
			16QAM	1	1	22.64	22.32	22.81	1
			64QAM	1	1	21.18	20.90	21.31	2.5
			256QAM	1	1	18.96	18.65	19.11	4.5
		CP	QPSK	1	1	22.05	21.72	22.18	1.5

NR Band n25_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.44	23.23	23.54	0
				1	53	23.35	23.21	23.64	0
				1	104	23.18	23.33	23.50	0
				50	0	22.97	22.71	23.11	0.5
				50	28	23.39	23.23	23.67	0
				50	56	22.83	22.79	23.12	0.5
				100	0	22.89	22.74	23.14	0.5
			QPSK	1	1	23.47	23.26	23.52	0
				1	53	23.29	23.21	23.62	0
				1	104	23.21	23.35	23.48	0
				50	0	22.48	22.23	22.59	1
				50	28	23.35	23.26	23.64	0
				50	56	22.34	22.29	22.68	1
				100	0	22.42	22.25	22.65	1
			16QAM	1	1	22.60	22.27	22.54	1
			64QAM	1	1	21.19	20.90	21.24	2.5
			256QAM	1	1	18.91	18.68	19.03	4.5
		CP	QPSK	1	1	22.00	21.78	22.13	1.5

[NR Band n41 Conducted Power]

NR Band n41_10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						500202	509400	518598	527802	53700	
						2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.43	24.08	24.42	24.72	24.27	0
				1	12	24.35	24.09	24.41	24.75	24.25	0
				1	22	24.30	24.15	24.63	24.75	24.25	0
				12	0	23.90	23.61	24.07	24.20	23.76	0.5
				12	6	24.36	24.11	24.63	24.73	24.20	0
				12	12	23.82	23.65	24.15	24.25	23.73	0.5
				24	0	23.85	23.64	24.12	24.24	23.72	0.5
			QPSK	1	1	24.36	24.14	24.60	24.71	24.32	0
				1	12	24.32	24.15	24.69	24.76	24.27	0
				1	22	24.34	24.15	24.70	24.74	24.26	0
				12	0	23.38	23.13	23.59	23.74	23.28	1
				12	6	24.34	24.19	24.66	24.75	24.25	0
				12	12	23.32	23.17	23.66	23.76	23.22	1
				24	0	23.34	23.15	23.64	23.75	23.22	1
			16QAM	1	1	23.65	23.13	23.40	23.74	23.50	1
			64QAM	1	1	21.87	21.93	21.97	22.36	21.94	2.5
			256QAM	1	1	19.92	19.59	19.89	20.09	19.55	4.5
		CP	QPSK	1	1	22.87	22.70	22.99	22.73	22.83	1.5

NR Band n41_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						500700	509664	518598	527562	536496	
						2503.5 MHz	2548.32 MHz	2592.99 MHz	2637.81 MHz	2682.48 MHz	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.45	24.17	24.59	24.63	24.46	0
				1	18	24.26	24.16	24.61	24.64	24.33	0
				1	36	24.23	24.26	24.68	24.77	24.37	0
				18	0	23.91	23.68	24.13	24.18	24.00	0.5
				18	9	24.32	24.63	24.68	24.74	24.44	0
				18	18	23.79	23.72	24.22	24.26	23.86	0.5
				36	0	23.86	23.72	24.17	24.23	23.96	0.5
			QPSK	1	1	24.44	24.22	24.62	24.71	24.53	0
				1	18	24.31	24.17	24.59	24.69	24.57	0
				1	36	24.31	24.28	24.72	24.75	24.33	0
				18	0	23.41	23.20	23.63	23.71	23.47	1
				18	9	24.49	24.23	24.68	24.73	24.40	0
				18	18	23.29	23.25	23.72	23.76	23.36	1
				36	0	23.36	23.23	23.68	23.70	23.44	1
			16QAM	1	1	23.62	23.25	23.46	23.67	23.57	1
			64QAM	1	1	21.84	21.72	21.93	22.28	21.74	2.5
			256QAM	1	1	19.91	19.70	19.75	20.12	19.89	4.5
		CP	QPSK	1	1	22.90	22.69	23.13	23.13	22.99	1.5

NR Band n41_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						501204	509898	518598	527298	535998	
						2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.33	24.24	24.55	24.57	24.55	0
				1	26	24.18	24.14	24.62	24.64	24.37	0
				1	49	24.11	24.25	24.62	24.63	24.35	0
				25	0	23.74	23.68	24.08	24.07	23.98	0.5
				25	13	24.19	24.17	24.66	24.66	24.45	0
				25	26	23.63	23.74	24.17	24.18	23.82	0.5
				50	0	23.69	23.73	24.13	24.17	23.95	0.5
			QPSK	1	1	24.33	24.19	24.58	24.61	24.56	0
				1	26	24.18	24.24	24.64	24.70	24.43	0
				1	49	24.15	24.32	24.66	24.74	24.31	0
				25	0	23.29	23.19	23.59	23.61	23.51	1
				25	13	24.26	24.20	24.67	24.71	24.46	0
				25	26	23.11	23.24	23.67	23.71	23.34	1
				50	0	23.16	23.23	23.62	23.68	23.46	1
			16QAM	1	1	23.24	23.31	23.27	23.61	23.49	1
			64QAM	1	1	21.50	21.78	22.26	22.04	21.69	2.5
			256QAM	1	1	19.83	19.62	19.92	20.04	20.16	4.5
		CP	QPSK	1	1	22.80	22.75	23.11	23.06	23.05	1.5

NR Band n41_ 30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						502200	510402	518598	526800	534996	
						2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz	
30 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.42	24.23	24.50	24.66	24.70	0
				1	39	24.24	24.30	24.66	24.81	24.62	0
				1	76	24.15	24.35	24.64	24.79	24.42	0
				36	0	23.73	23.75	24.06	24.20	24.19	0.5
				36	21	24.23	24.30	24.70	24.78	24.61	0
				36	42	23.68	23.86	23.61	24.33	24.00	0.5
				75	0	23.75	23.78	24.15	24.26	24.09	0.5
			QPSK	1	1	24.38	24.23	24.57	24.70	24.78	0
				1	39	24.22	24.32	24.71	24.79	24.60	0
				1	76	24.12	24.38	24.64	24.83	24.44	0
				36	0	23.36	23.27	23.56	23.72	23.72	1
				36	21	24.24	24.31	24.67	24.79	24.62	0
				36	42	23.16	23.33	23.67	23.84	23.51	1
				75	0	23.26	23.32	23.70	23.77	23.62	1
			16QAM	1	1	23.43	23.36	23.65	23.88	23.58	1
			64QAM	1	1	21.91	21.85	21.93	22.35	22.12	2.5
			256QAM	1	1	19.96	19.61	19.57	20.04	20.10	4.5
		CP	QPSK	1	1	22.90	22.84	23.01	23.13	23.22	1.5

NR Band n41_ 40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						503202	513468		523734	534000	
						2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz	
40 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.38	24.26		24.68	24.84	0
				1	53	24.15	24.30		24.47	24.61	0
				1	104	24.07	24.45		24.69	24.35	0
				50	0	23.74	23.78		24.11	24.25	0.5
				50	28	24.15	24.24		24.56	24.65	0
				50	56	23.59	23.82		24.14	24.01	0.5
				100	0	23.55	23.78		24.11	24.13	0.5
			QPSK	1	1	24.35	24.31		24.79	24.82	0
				1	53	24.14	24.31		24.55	24.57	0
				1	104	24.03	24.42		24.75	24.37	0
				50	0	23.22	23.27		23.62	23.76	1
				50	28	24.12	24.27		24.59	24.61	0
				50	56	23.03	23.28		23.64	23.55	1
				100	0	23.12	23.24		23.86	23.58	1
			16QAM	1	1	23.35	23.62		23.78	23.79	1
			64QAM	1	1	22.16	21.66		22.42	22.43	2.5
			256QAM	1	1	19.54	19.89		19.89	19.98	4.5
		CP	QPSK	1	1	22.96	22.74		23.34	23.37	1.5

NR Band n41_ 50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						504204		518598		532998	
						2521.02 MHz		2592.99 MHz		2664.99 MHz	
50 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.50		24.48		24.90	0
				1	67	24.14		24.62		24.66	0
				1	131	24.18		24.61		24.43	0
				64	0	23.63		24.04		24.37	0.5
				64	35	23.62		24.67		24.72	0
				64	69	23.57		24.12		24.10	0.5
				128	0	23.63		24.19		24.21	0.5
			QPSK	1	1	24.61		24.50		24.90	0
				1	67	24.11		24.64		24.79	0
				1	131	24.16		24.64		24.57	0
				64	0	23.64		23.57		23.90	1
				64	35	23.63		24.71		24.50	0
				64	69	23.07		23.67		23.67	1
				128	0	23.16		23.67		23.71	1
			16QAM	1	1	23.40		23.15		23.89	1
			64QAM	1	1	21.88		22.06		22.46	2.5
			256QAM	1	1	20.12		20.20		20.11	4.5
		CP	QPSK	1	1	22.94		23.05		23.46	1.5

NR Band n41_ 60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						505200		518598		531996	
						2 526 MHz		2 592.99 MHz		2 659.98 MHz	
60 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.97		24.59		24.45	0
				1	81	24.03		24.80		24.72	0
				1	160	23.69		24.19		24.47	0
				81	0	23.28		24.05		24.37	0.5
				81	41	23.90		24.70		24.73	0
				81	81	23.90		24.16		24.08	0.5
				162	0	23.91		24.20		24.28	0.5
			QPSK	1	1	24.51		24.59		24.45	0
				1	81	24.07		24.71		24.55	0
				1	160	23.89		24.21		23.97	0
				81	0	23.37		23.54		23.88	1
				81	41	24.07		24.69		24.71	0
				81	81	23.07		23.67		23.56	1
				162	0	23.11		23.68		23.72	1
			16QAM	1	1	23.32		23.58		23.76	1
			64QAM	1	1	22.02		22.13		22.14	2.5
			256QAM	1	1	19.85		19.90		20.03	4.5
		CP	QPSK	1	1	22.52		23.04		22.94	1.5

NR Band n41_ 80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						507204				529998	
						2536.02 MHz				2649.99 MHz	
80 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.78				24.48	0
				1	109	24.04				24.77	0
				1	215	23.77				24.60	0
				108	0	23.82				24.36	0.5
				108	55	24.11				24.87	0
				108	109	23.82				24.20	0.5
				216	0	23.67				24.44	0.5
			QPSK	1	1	24.84				24.55	0
				1	109	24.09				24.87	0
				1	215	23.76				24.64	0
				108	0	23.36				23.87	1
				108	55	23.89				23.64	0
				108	109	23.39				23.67	1
				216	0	23.38				23.92	1
			16QAM	1	1	23.38				23.67	1
			64QAM	1	1	22.11				21.96	2.5
			256QAM	1	1	19.39				19.44	4.5
		CP	QPSK	1	1	23.21				22.95	1.5

NR Band n41_ 90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						508200				528996	
						2541 MHz				2644.98 MHz	
90 ㎒	30	DFT-s	pi/2 BPSK	1	1	24.78				24.48	0
				1	123	24.04				24.77	0
				1	243	23.77				24.60	0
				120	0	23.82				24.36	0.5
				120	63	24.11				24.87	0
				120	125	23.82				24.20	0.5
				243	0	23.67				24.44	0.5
			QPSK	1	1	24.84				24.55	0
				1	123	24.09				24.87	0
				1	243	23.76				24.64	0
				120	0	23.36				23.87	1
				120	63	23.89				23.64	0
				120	125	23.39				23.67	1
				243	0	23.38				23.92	1
			16QAM	1	1	23.38				23.67	1
			64QAM	1	1	22.11				21.96	2.5
			256QAM	1	1	19.39				19.44	4.5
		CP	QPSK	1	1	23.21				22.95	1.5

NR Band n41_ 100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
								518598			
								2592.99 MHz			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			24.84			0
				1	137			24.69			0
				1	271			24.65			0
				135	0			24.12			0.5
				135	69			24.76			0
				135	138			24.23			0.5
				270	0			24.34			0.5
			QPSK	1	1			24.83			0
				1	137			24.72			0
				1	271			24.67			0
				135	0			23.64			1
				135	69			24.85			0
				135	138			23.74			1
				270	0			23.83			1
			16QAM	1	1			23.76			1
			64QAM	1	1			22.25			2.5
			256QAM	1	1			20.10			4.5
		CP	QPSK	1	1			23.26			1.5

[NR Band n41 Conducted Power] – Antenna: SRS

The output Power of the SRS signal was measured by the manufacturer's FTM Mode as follows.

NR Band n41_ 100 ㎒ Bandwidth - Antenna: SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]					MPR [dB]
					518598			
					2592.99 MHz			
100 ㎒	30	Zad-off chu sequence			23.99			0

NR Band n41_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]					MPR [dB]
					518598			
					2592.99 MHz			
100 ㎒	30	Zad-off chu sequence			20.29			0

NR Band n41_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]					MPR [dB]
					518598			
					2592.99 MHz			
100 ㎒	30	Zad-off chu sequence			21.12			0

NR Band n41_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]					MPR [dB]
					518598			
					2592.99 MHz			
100 ㎒	30	Zad-off chu sequence			17.14			0

[NR Band n77Conducted Power]

NR Band n77_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647000	650600	654200	657800	661400	665000	
						3705 ㎒	3759 ㎒	3813 ㎒	3867 ㎒	3921 ㎒	3975 ㎒	
10MHz	30	DFT-s	pi/2 BPSK	1	1	24.22	24.33	23.58	23.56	23.99	24.30	0
				1	12	24.22	24.25	23.60	23.28	24.25	24.25	0
				1	22	24.32	24.19	23.67	23.34	24.22	24.28	0
				12	0	23.66	23.76	23.05	22.96	23.46	23.79	0.5
				12	6	24.17	24.25	23.55	23.26	24.18	24.17	0
				12	12	23.75	23.67	23.04	22.77	23.69	23.71	0.5
				24	0	23.68	23.71	23.03	22.75	23.70	23.68	0.5
			QPSK	1	1	24.16	24.26	23.48	23.49	23.94	24.27	0
				1	12	24.15	24.22	23.48	23.24	24.14	24.21	0
				1	22	24.30	24.10	23.58	23.25	24.17	24.21	0
				12	0	23.19	23.26	22.52	22.50	22.98	23.30	1
				12	6	24.20	24.25	23.59	23.27	24.19	24.21	0
				12	12	23.30	23.18	22.56	22.30	23.18	23.22	1
				24	0	23.18	23.26	22.56	22.29	23.21	23.20	1
			16QAM	1	1	23.41	23.41	22.72	22.71	23.17	23.44	1
			64QAM	1	1	21.56	21.72	20.94	20.87	21.39	21.70	2.5
			256QAM	1	1	19.62	19.72	18.95	18.94	19.40	19.69	4.5
		CP	QPSK	1	1	22.75	22.84	22.10	22.03	22.54	22.83	1.5

NR Band n77_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647168	650700	654232	657766	661300	664832	
						3707.52 ㎒	3760.5 ㎒	3813.49 ㎒	3866.5 ㎒	3919.5 ㎒	3972.48 ㎒	
15MHz	30	DFT-s	pi/2 BPSK	1	1	23.33	23.27	24.33	23.64	23.92	24.76	0
				1	18	23.12	23.45	24.61	23.37	24.00	24.34	0
				1	36	23.05	23.64	24.62	23.20	24.05	24.17	0
				18	0	22.71	22.84	23.87	23.00	23.43	24.06	0.5
				18	9	23.15	23.45	24.58	23.37	23.98	24.37	0
				18	18	22.59	23.03	24.05	22.79	23.44	23.80	0.5
				36	0	22.63	22.95	24.07	22.87	23.49	23.89	0.5
			QPSK	1	1	23.23	23.16	24.22	23.58	23.80	24.70	0
				1	18	23.00	23.37	24.48	23.26	23.85	24.30	0
				1	36	22.94	23.59	24.49	23.11	23.98	24.10	0
				18	0	22.19	22.35	23.39	22.51	22.93	23.54	1
				18	9	23.13	23.45	24.60	23.34	23.97	24.38	0
				18	18	22.07	22.56	23.59	22.26	22.94	23.28	1
				36	0	22.12	22.45	23.57	22.35	22.96	23.37	1
			16QAM	1	1	22.20	22.19	23.23	22.59	22.79	23.63	1
			64QAM	1	1	20.69	20.65	21.72	21.05	21.28	22.18	2.5
			256QAM	1	1	18.76	18.69	19.74	19.08	19.29	20.17	4.5
		CP	QPSK	1	1	21.69	21.67	22.82	22.14	22.38	23.22	1.5

NR Band n77_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647168	650800	654266	657734	661200	664666	
						3710.01 ㎒	3762 ㎒	3813.99 ㎒	3866.01 ㎒	3918 ㎒	3969.99 ㎒	
20MHz	30	DFT-s	pi/2 BPSK	1	1	23.37	23.28	24.25	23.88	23.62	24.64	0
				1	26	23.13	23.54	24.59	23.36	23.96	24.16	0
				1	49	22.87	23.88	24.76	23.14	24.07	23.84	0
				25	0	22.73	22.91	23.89	23.05	23.33	23.92	0.5
				25	13	23.13	23.55	24.60	23.36	23.95	24.15	0
				25	26	22.40	23.16	24.06	22.72	23.44	23.36	0.5
				50	0	22.61	23.06	24.06	22.89	23.42	23.66	0.5
			QPSK	1	1	23.27	23.18	24.18	23.79	23.56	24.53	0
				1	26	23.07	23.47	24.52	23.28	23.87	24.05	0
				1	49	22.97	23.81	24.67	23.08	23.98	23.76	0
				25	0	22.21	22.37	23.36	22.57	22.81	23.41	1
				25	13	23.14	23.55	24.60	23.38	23.92	24.16	0
				25	26	21.87	22.65	23.59	22.22	22.95	22.88	1
				50	0	22.12	22.51	23.59	22.35	22.93	23.15	1
			16QAM	1	1	22.32	22.22	23.24	22.75	22.50	23.56	1
			64QAM	1	1	20.74	20.65	21.66	21.21	20.97	22.02	2.5
			256QAM	1	1	18.75	18.67	19.67	19.23	19.02	20.03	4.5
		CP	QPSK	1	1	21.83	21.74	22.76	22.34	22.13	23.13	1.5

NR Band n77_30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647668	651000	654334	657666	661000	664334	
						3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	23.26	23.10	23.96	24.22	23.47	24.56	0
				1	39	22.85	23.55	24.48	23.55	23.88	24.23	0
				1	76	22.74	23.82	24.51	23.07	24.04	23.54	0
				36	0	22.63	22.80	23.64	23.49	22.98	24.04	0.5
				36	21	22.83	23.52	24.44	23.57	23.82	24.20	0
				36	42	22.30	23.28	24.15	22.77	23.39	23.24	0.5
				75	0	22.31	23.00	23.94	23.07	23.30	23.71	0.5
			QPSK	1	1	23.22	23.02	23.87	24.11	23.39	24.45	0
				1	39	22.79	23.45	24.38	23.43	23.73	24.11	0
				1	76	22.63	23.70	24.41	22.98	23.94	23.42	0
				36	0	22.10	22.24	23.16	22.98	22.47	23.55	1
				36	21	22.80	23.53	24.46	23.53	23.80	24.18	0
				36	42	21.75	22.80	23.63	22.27	22.86	22.73	1
				75	0	21.79	22.51	23.41	22.55	22.78	23.22	1
			16QAM	1	1	22.13	22.02	22.86	23.15	22.54	23.49	1
			64QAM	1	1	20.81	20.52	21.42	21.66	20.88	21.92	2.5
			256QAM	1	1	18.64	18.50	19.39	19.66	18.89	20.01	4.5
		CP	QPSK	1	1	21.67	21.52	22.36	22.72	21.88	22.97	1.5

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 ㎒	3768 ㎒	3816 ㎒	3864 ㎒	3912 ㎒	3960 ㎒	
40MHz	30	DFT-s	pi/2 BPSK	1	1	23.36	23.18	23.84	24.26	23.21	24.54	0
				1	53	22.98	23.89	24.54	23.59	23.91	24.64	0
				1	104	22.78	23.62	24.37	23.01	24.04	23.77	0
				50	0	22.70	22.86	23.64	23.61	23.10	24.24	0.5
				50	28	22.91	23.85	24.50	23.57	23.86	24.64	0
				50	56	22.29	23.33	24.07	22.70	23.41	23.60	0.5
				100	0	22.40	23.13	23.93	23.09	23.17	24.14	0.5
			QPSK	1	1	23.33	23.07	23.75	24.18	23.13	24.41	0
				1	53	22.84	23.78	24.39	23.42	23.75	24.53	0
				1	104	22.69	23.50	24.28	22.93	23.95	23.66	0
				50	0	22.17	22.33	23.11	23.09	22.57	23.73	1
				50	28	22.88	23.84	24.47	23.55	23.83	24.61	0
				50	56	21.77	22.87	23.57	22.19	22.91	23.09	1
				100	0	21.88	22.62	23.43	22.59	22.66	23.65	1
			16QAM	1	1	22.36	22.08	22.77	23.38	22.11	23.45	1
			64QAM	1	1	20.78	20.57	21.23	21.58	20.59	21.91	2.5
			256QAM	1	1	18.81	18.56	19.25	19.69	18.65	19.92	4.5
		CP	QPSK	1	1	21.85	21.67	22.35	22.78	21.70	23.00	1.5

NR Band n77_ 50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 ㎒	3782.49 ㎒	3840 ㎒		3897.51 ㎒	3954.99 ㎒	
50MHz	30	DFT-s	pi/2 BPSK	1	1	23.28	23.56	24.62		23.31	24.10	0
				1	67	22.76	23.99	24.28		23.35	24.80	0
				1	131	22.99	23.99	23.38		23.90	23.67	0
				64	0	22.54	23.47	24.18		22.47	24.09	0.5
				64	35	22.76	23.95	24.27		23.34	24.77	0
				64	69	22.25	23.30	23.45		23.02	23.71	0.5
				128	0	22.28	23.43	23.88		22.80	24.25	0.5
			QPSK	1	1	23.23	23.47	24.58		23.25	24.03	0
				1	67	22.68	23.90	24.23		23.31	24.73	0
				1	131	22.92	23.95	23.31		23.85	23.63	0
				64	0	22.02	22.99	23.72		22.00	23.61	1
				64	35	22.74	23.96	24.26		23.34	24.78	0
				64	69	21.75	22.80	22.96		22.54	23.24	1
				128	0	21.76	22.95	23.40		22.32	23.75	1
			16QAM	1	1	22.17	22.42	23.55		22.22	23.07	1
			64QAM	1	1	20.63	20.95	22.02		20.69	21.47	2.5
			256QAM	1	1	18.68	18.96	20.05		18.70	19.51	4.5
		CP	QPSK	1	1	21.72	21.94	23.07		21.75	22.55	1.5

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648668	653556			658444	663332	
						3730.02 ㎒	3803.34 ㎒			3876.66 ㎒	3949.98 ㎒	
60MHz	30	DFT-s	pi/2 BPSK	1	1	23.36	24.08			24.11	23.25	0
				1	81	22.84	24.17			23.16	24.77	0
				1	160	22.72	23.83			22.79	23.66	0
				81	0	22.43	23.37			23.09	23.61	0.5
				81	41	22.84	24.14			23.12	24.71	0
				81	81	22.46	23.96			22.45	23.83	0.5
				162	0	22.34	23.56			22.64	24.12	0.5
			QPSK	1	1	23.30	23.99			24.01	23.13	0
				1	81	22.81	24.09			23.04	24.60	0
				1	160	22.64	23.73			22.66	23.51	0
				81	0	21.93	22.87			22.58	23.09	1
				81	41	22.83	24.11			23.11	24.67	0
				81	81	21.94	23.45			21.93	23.33	1
				162	0	21.83	23.05			22.10	23.63	1
			16QAM	1	1	22.23	22.95			23.00	22.11	1
			64QAM	1	1	20.77	21.49			21.50	20.59	2.5
			256QAM	1	1	18.78	19.49			19.51	18.70	4.5
		CP	QPSK	1	1	21.82	22.52			22.53	21.65	1.5

NR Band n77_ 70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649000	654334			658334	663000	
						3735 MHz	3805.01 MHz			3875.01 MHz	3945 MHz	
70MHz	30	DFT-s	pi/2 BPSK	1	1	23.30	24.11			24.29	22.93	0
				1	95	22.81	24.28			23.15	24.55	0
				1	187	23.24	23.63			22.84	23.71	0
				90	0	22.32	23.39			23.36	23.29	0.5
				90	50	22.97	24.19			23.14	24.51	0
				90	99	22.55	24.11			22.44	23.87	0.5
				180	0	22.57	23.58			22.73	23.88	0.5
			QPSK	1	1	23.19	24.06			24.24	22.87	0
				1	95	22.90	24.23			23.11	24.49	0
				1	187	23.18	23.60			23.80	23.67	0
				90	0	22.81	22.90			22.84	22.77	1
				90	50	23.77	24.20			23.13	24.48	0
				90	99	22.06	23.62			21.95	23.33	1
				180	0	22.77	23.08			22.21	23.41	1
			16QAM	1	1	22.21	23.08			23.17	21.93	1
			64QAM	1	1	20.72	21.53			21.68	20.77	2.5
			256QAM	1	1	18.72	19.58			19.74	18.35	4.5
		CP	QPSK	1	1	21.66	22.46			22.67	21.76	1.5

NR Band n77_ 80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649334		656000		662666		
						3740.01 ㎒		3840 ㎒		3939.99 ㎒		
80MHz	30	DFT-s	pi/2 BPSK	1	1	23.40		24.15		23.17		0
				1	109	22.90		24.29		24.74		0
				1	215	23.20		23.39		23.93		0
				108	0	23.19		24.10		23.60		0.5
				108	55	22.88		24.26		24.70		0
				108	109	22.81		23.07		24.12		0.5
				216	0	22.38		23.83		24.16		0.5
			QPSK	1	1	23.31		24.08		23.11		0
				1	109	22.85		24.24		24.69		0
				1	215	23.17		23.33		23.87		0
				108	0	21.87		23.61		23.09		1
				108	55	22.87		24.23		24.70		0
				108	109	22.31		22.55		23.62		1
				216	0	21.90		23.32		23.63		1
			16QAM	1	1	22.30		23.16		22.05		1
			64QAM	1	1	20.80		21.55		20.57		2.5
			256QAM	1	1	18.85		19.58		18.56		4.5
		CP	QPSK	1	1	21.75		22.54		21.56		1.5

NR Band n77_ 90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649668		656000		662332		
						3745.02 ㎒		3840 ㎒		3934.98 ㎒		
90MHz	30	DFT-s	pi/2 BPSK	1	1	23.38		24.00		22.84		0
				1	123	22.99		24.32		24.48		0
				1	243	23.58		22.86		23.81		0
				120	0	22.32		24.10		23.49		0.5
				120	63	22.96		24.26		24.39		0
				120	125	23.05		22.93		23.34		0.5
				243	0	22.51		23.83		23.77		0.5
			QPSK	1	1	23.29		23.96		23.74		0
				1	123	22.92		24.25		24.39		0
				1	243	23.54		22.82		23.70		0
				120	0	21.83		23.64		22.98		1
				120	63	22.96		24.27		23.38		0
				120	125	22.57		22.46		22.84		1
				243	0	22.01		23.31		22.29		1
			16QAM	1	1	22.32		22.88		21.85		1
			64QAM	1	1	20.93		21.43		21.24		2.5
			256QAM	1	1	18.84		19.47		19.28		4.5
		CP	QPSK	1	1	21.76		22.43		22.20		1.5

NR Band n77_ 100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						650000				662000		
						3750 ㎒				3930 ㎒		
100MHz	30	DFT-s	pi/2 BPSK	1	1	24.23				24.61		0
				1	137	23.87				24.15		0
				1	271	23.89				24.60		0
				135	0	23.96				23.34		0.5
				135	69	23.95				24.19		0
				135	138	22.90				23.46		0.5
				270	0	23.39				23.82		0.5
			QPSK	1	1	24.17				24.57		0
				1	137	23.84				24.10		0
				1	271	23.84				24.56		0
				135	0	23.44				22.88		1
				135	69	23.93				24.16		0
				135	138	23.39				23.01		1
				270	0	22.90				23.31		1
			16QAM	1	1	23.23				22.65		1
			64QAM	1	1	21.70				21.04		2.5
			256QAM	1	1	19.61				19.02		4.5
		CP	QPSK	1	1	22.67				22.07		1.5

[NR Band n77 Conducted Power] – Antenna : SRS

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	24.65				24.42		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	22.15				22.25		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	24.31				24.15		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	22.27				22.25		0

[NR Band n77 DOD Conducted Power]

Band n77 DoD_10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630336	633334	636332	
						3455.04 ㎒	3500.01 ㎒	3544.98 ㎒	
10MHz	30	DFT-s	pi/2 BPSK	1	1	24.18	23.57	24.43	0
				1	12	24.21	23.41	24.34	0
				1	22	24.09	23.50	24.29	0
				12	0	23.64	23.02	23.86	0.5
				12	6	24.13	23.39	24.35	0
				12	12	23.55	22.93	23.80	0.5
				24	0	23.63	22.87	23.83	0.5
			QPSK	1	1	24.11	23.53	24.35	0
				1	12	24.06	23.39	24.24	0
				1	22	24.05	23.44	24.23	0
				12	0	23.15	22.52	23.37	1
				12	6	24.13	23.38	24.31	0
				12	12	23.07	22.43	23.32	1
				24	0	23.11	22.39	23.35	1
			16QAM	1	1	23.34	22.81	23.53	1
			64QAM	1	1	21.54	20.96	21.85	2.5
			256QAM	1	1	19.60	19.01	19.84	4.5
		CP	QPSK	1	1	22.70	22.13	22.96	1.5

Band n77 DoD_15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630502	633334	636166	
						3457.53 ㎒	3500.01 ㎒	3542.49 ㎒	
15MHz	30	DFT-s	pi/2 BPSK	1	1	24.21	23.61	24.50	0
				1	18	24.09	23.37	24.32	0
				1	36	24.00	23.54	24.26	0
				18	0	23.71	23.03	23.89	0.5
				18	9	24.11	23.36	24.30	0
				18	18	23.52	22.92	23.77	0.5
				36	0	23.60	22.87	23.82	0.5
			QPSK	1	1	24.18	23.60	24.41	0
				1	18	24.04	23.33	24.22	0
				1	36	23.97	23.50	24.19	0
				18	0	23.19	22.58	23.40	1
				18	9	24.12	23.37	24.34	0
				18	18	23.05	22.44	23.27	1
				36	0	23.11	22.37	23.34	1
			16QAM	1	1	23.40	22.87	23.60	1
			64QAM	1	1	21.58	21.06	21.91	2.5
			256QAM	1	1	19.63	19.08	19.90	4.5
		CP	QPSK	1	1	22.76	22.18	23.02	1.5

Band n77 DoD_20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630668	633334	636000	
						3460.02 MHz	3500.01 MHz	3540 MHz	
20MHz	30	DFT-s	pi/2 BPSK	1	1	24.29	23.69	24.38	0
				1	26	24.07	23.39	24.33	0
				1	49	23.96	23.51	24.22	0
				25	0	23.72	23.05	23.90	0.5
				25	13	24.11	23.40	24.32	0
				25	26	23.50	22.98	23.73	0.5
				50	0	23.59	22.86	23.81	0.5
			QPSK	1	1	24.22	23.63	24.31	0
				1	26	24.08	23.32	24.22	0
				1	49	23.90	23.50	24.14	0
				25	0	23.22	22.59	23.44	1
				25	13	24.11	23.40	24.31	0
				25	26	23.00	22.49	23.25	1
				50	0	23.11	22.37	23.33	1
			16QAM	1	1	23.37	22.87	23.50	1
			64QAM	1	1	21.65	21.06	21.78	2.5
			256QAM	1	1	19.69	19.09	19.76	4.5
		CP	QPSK	1	1	22.80	22.24	22.89	1.5

Band n77 DoD_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631000	633334	635666	
						3465 MHz	3500.01 MHz	3534.99 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	24.18	23.72	24.41	0
				1	39	23.92	23.42	24.58	0
				1	76	23.58	23.77	24.29	0
				36	0	23.55	23.13	24.03	0.5
				36	21	23.89	23.41	24.54	0
				36	42	23.15	22.94	23.87	0.5
				75	0	23.41	22.85	24.07	0.5
			QPSK	1	1	24.15	23.69	24.30	0
				1	39	23.89	23.37	24.55	0
				1	76	23.55	23.76	24.22	0
				36	0	23.09	22.64	23.51	1
				36	21	23.90	23.42	24.54	0
				36	42	22.65	22.49	23.39	1
				75	0	22.92	22.37	23.55	1
			16QAM	1	1	23.34	22.94	23.52	1
			64QAM	1	1	21.58	21.11	21.78	2.5
			256QAM	1	1	19.62	19.14	19.80	4.5
		CP	QPSK	1	1	22.66	22.25	22.87	1.5

Band n77 DoD_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631334		635332	
						3470.01 ㎒		3529.98 ㎒	
40MHz	30	DFT-s	pi/2 BPSK	1	1	24.33		23.82	0
				1	53	23.98		24.35	0
				1	104	23.68		24.25	0
				50	0	23.63		23.69	0.5
				50	28	23.92		24.36	0
				50	56	23.22		23.84	0.5
				100	0	23.44		23.86	0.5
			QPSK	1	1	24.32		23.65	0
				1	53	23.88		24.38	0
				1	104	23.63		24.20	0
				50	0	23.15		23.16	1
				50	28	23.92		24.36	0
				50	56	22.74		23.31	1
				100	0	22.94		23.37	1
			16QAM	1	1	23.52		22.80	1
			64QAM	1	1	21.73		21.11	2.5
			256QAM	1	1	19.75		19.20	4.5
		CP	QPSK	1	1	22.80		22.25	1.5

Band n77 DoD_50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631668		635000	
						3475.02 ㎒		3525 ㎒	
50MHz	30	DFT-s	pi/2 BPSK	1	1	24.27		23.48	0
				1	67	23.60		24.28	0
				1	131	23.40		24.22	0
				64	0	23.50		23.13	0.5
				64	35	23.57		24.27	0
				64	69	23.08		23.80	0.5
				128	0	23.13		23.74	0.5
			QPSK	1	1	24.30		23.41	0
				1	67	23.57		24.21	0
				1	131	23.35		24.16	0
				64	0	23.02		22.66	1
				64	35	23.59		24.26	0
				64	69	22.61		23.31	1
				128	0	22.66		23.24	1
			16QAM	1	1	23.47		22.60	1
			64QAM	1	1	21.68		20.82	2.5
			256QAM	1	1	19.73		18.89	4.5
		CP	QPSK	1	1	22.77		21.98	1.5

Band n77 DoD_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
60MHz	30	DFT-s	pi/2 BPSK	1	1		23.15		0
				1	81		23.43		0
				1	160		24.44		0
				81	0		23.18		0.5
				81	41		23.45		0
				81	81		23.33		0.5
				162	0		22.91		0.5
			QPSK	1	1		23.09		0
				1	81		23.39		0
				1	160		24.41		0
				81	0		22.75		1
				81	41		23.41		0
				81	81		22.83		1
				162	0		22.41		1
			16QAM	1	1		22.20		1
			64QAM	1	1		20.53		2.5
			256QAM	1	1		18.51		4.5
		CP	QPSK	1	1		21.51		1.5

Band n77 DoD_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
70MHz	30	DFT-s	pi/2 BPSK	1	1		23.24		0
				1	95		23.44		0
				1	187		24.46		0
				90	0		23.27		0.5
				90	50		23.39		0
				90	99		23.56		0.5
				180	0		22.86		0.5
			QPSK	1	1		23.23		0
				1	95		23.43		0
				1	187		24.45		0
				90	0		22.79		1
				90	50		23.42		0
				90	99		23.11		1
				180	0		22.36		1
			16QAM	1	1		22.06		1
			64QAM	1	1		20.68		2.5
			256QAM	1	1		18.72		4.5
		CP	QPSK	1	1		21.75		1.5

Band n77 DoD_80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
80MHz	30	DFT-s	pi/2 BPSK	1	1		23.40		0
				1	109		23.42		0
				1	215		24.58		0
				108	0		23.32		0.5
				108	55		23.39		0
				108	109		23.66		0.5
				216	0		22.89		0.5
			QPSK	1	1		23.41		0
				1	109		23.38		0
				1	215		24.56		0
				108	0		22.83		1
				108	55		23.44		0
				108	109		23.19		1
				216	0		22.42		1
			16QAM	1	1		22.61		1
			64QAM	1	1		20.89		2.5
			256QAM	1	1		18.85		4.5
		CP	QPSK	1	1		21.89		1.5

Band n77 DoD_90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
90MHz	30	DFT-s	pi/2 BPSK	1	1		23.64		0
				1	123		23.43		0
				1	243		24.57		0
				120	0		23.29		0.5
				120	63		23.41		0
				120	125		23.81		0.5
				243	0		22.92		0.5
			QPSK	1	1		23.64		0
				1	123		23.41		0
				1	243		24.52		0
				120	0		22.86		1
				120	63		23.41		0
				120	125		23.32		1
				243	0		22.41		1
			16QAM	1	1		22.82		1
			64QAM	1	1		21.10		2.5
			256QAM	1	1		19.07		4.5
		CP	QPSK	1	1		22.14		1.5

Band n77 DoD_100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
100MHz	30	DFT-s	pi/2 BPSK	1	1		23.81		0
				1	137		23.42		0
				1	271		24.58		0
				135	0		23.33		0.5
				135	69		23.37		0
				135	138		23.92		0.5
				270	0		22.93		0.5
			QPSK	1	1		24.07		0
				1	137		24.18		0
				1	271		24.11		0
				135	0		23.27		1
				135	69		24.01		0
				135	138		23.43		1
				270	0		22.41		1
			16QAM	1	1		22.97		1
			64QAM	1	1		21.18		2.5
			256QAM	1	1		19.24		4.5
		CP	QPSK	1	1		22.36		1.5

[NR Band n77 DOD Conducted Power] – Antenna : SRS

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		24.65		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		22.33		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		24.42		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		22.33		0

11.1.2 NR Band Reduced Conducted Power(Hotspot activated)

[NR Band n2 Conducted Power]

NR Band n2_ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 MHz	1880 MHz	1907.5 MHz	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.92	19.65	19.84	0
				1	13	19.89	19.56	19.75	0
				1	23	19.95	19.64	19.78	0
				12	0	19.99	19.65	19.78	0
				12	7	19.97	19.61	19.79	0
				12	13	19.95	19.59	19.76	0
				25	0	19.97	19.60	19.80	0
			QPSK	1	1	19.90	19.65	19.84	0
				1	13	19.87	19.53	19.72	0
				1	23	19.93	19.63	19.79	0
				12	0	19.92	19.62	19.81	0
				12	7	19.97	19.60	19.77	0
				12	13	19.97	19.61	19.75	0
				25	0	19.99	19.62	19.78	0
			16QAM	1	1	19.95	19.68	19.86	0
			64QAM	1	1	19.90	19.73	19.90	0
			256QAM	1	1	19.27	19.01	19.15	0.5
		CP	QPSK	1	1	19.96	19.61	19.77	0

NR Band n2_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 MHz	1880 MHz	1905 MHz	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.99	19.56	19.67	0
				1	26	19.98	19.52	19.69	0
				1	50	19.93	19.49	19.67	0
				25	0	19.91	19.53	19.70	0
				25	14	19.95	19.50	19.65	0
				25	27	19.92	19.49	19.67	0
				50	0	19.94	19.49	19.68	0
			QPSK	1	1	19.98	19.56	19.65	0
				1	26	19.99	19.48	19.64	0
				1	50	19.93	19.48	19.65	0
				25	0	19.96	19.50	19.69	0
				25	14	19.92	19.47	19.66	0
				25	27	19.91	19.49	19.66	0
				50	0	19.88	19.51	19.65	0
			16QAM	1	1	19.95	19.45	19.76	0
			64QAM	1	1	19.94	19.67	19.74	0
			256QAM	1	1	19.27	18.88	19.01	0.5
		CP	QPSK	1	1	19.93	19.46	19.57	0

NR Band n2_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.94	19.59	19.63	0
				1	40	19.79	19.46	19.54	0
				1	77	19.75	19.47	19.55	0
				36	0	19.89	19.53	19.58	0
				36	22	19.84	19.47	19.56	0
				36	43	19.79	19.50	19.59	0
				75	0	19.87	19.48	19.56	0
			QPSK	1	1	19.92	19.57	19.57	0
				1	40	19.78	19.43	19.54	0
				1	77	19.74	19.46	19.58	0
				36	0	19.87	19.51	19.57	0
				36	22	19.88	19.49	19.57	0
				36	43	19.80	19.48	19.55	0
				75	0	19.89	19.48	19.56	0
			16QAM	1	1	19.85	19.57	19.46	0
			64QAM	1	1	19.99	19.65	19.64	0
			256QAM	1	1	19.24	18.94	18.88	0.5
		CP	QPSK	1	1	19.88	19.57	19.52	0

NR Band n2_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.88	19.62	19.58	0
				1	53	19.84	19.47	19.59	0
				1	104	19.54	19.46	19.52	0
				50	0	19.85	19.53	19.57	0
				50	28	19.80	19.48	19.62	0
				50	56	19.68	19.50	19.62	0
				100	0	19.78	19.50	19.58	0
			QPSK	1	1	19.89	19.66	19.57	0
				1	53	19.83	19.44	19.58	0
				1	104	19.57	19.47	19.53	0
				50	0	19.88	19.52	19.58	0
				50	28	19.82	19.47	19.59	0
				50	56	19.71	19.46	19.59	0
				100	0	19.81	19.48	19.57	0
			16QAM	1	1	19.98	19.68	19.71	0
			64QAM	1	1	19.85	19.82	19.65	0
			256QAM	1	1	19.21	19.00	18.90	0.5
		CP	QPSK	1	1	19.84	19.52	19.52	0

[NR Band n25 Conducted Power]

NR Band n25_5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 MHz	1882.5 MHz	1912.5 MHz	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.85	19.50	19.63	0
				1	13	19.76	19.43	19.45	0
				1	23	19.81	19.52	19.45	0
				12	0	19.86	19.49	19.56	0
				12	7	19.84	19.50	19.52	0
				12	13	19.84	19.51	19.49	0
				25	0	19.82	19.51	19.49	0
			QPSK	1	1	19.90	19.52	19.66	0
				1	13	19.76	19.46	19.50	0
				1	23	19.88	19.58	19.48	0
				12	0	19.83	19.48	19.56	0
				12	7	19.83	19.46	19.48	0
				12	13	19.81	19.50	19.46	0
				25	0	19.86	19.47	19.49	0
			16QAM	1	1	19.67	19.55	19.44	0
			64QAM	1	1	19.93	19.66	19.72	0
			256QAM	1	1	19.22	18.81	18.94	0.5
		CP	QPSK	1	1	19.84	19.45	19.53	0

NR Band n25 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 MHz	1882.5 MHz	1910 MHz	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.99	19.56	19.68	0
				1	26	19.92	19.51	19.62	0
				1	50	19.90	19.49	19.43	0
				25	0	19.97	19.50	19.64	0
				25	14	19.89	19.49	19.62	0
				25	27	19.90	19.52	19.54	0
				50	0	19.90	19.51	19.63	0
			QPSK	1	1	19.97	19.53	19.67	0
				1	26	19.87	19.45	19.55	0
				1	50	19.89	19.50	19.42	0
				25	0	19.96	19.51	19.66	0
				25	14	19.91	19.47	19.59	0
				25	27	19.91	19.50	19.50	0
				50	0	19.92	19.49	19.64	0
			16QAM	1	1	19.87	19.58	19.77	0
			64QAM	1	1	19.94	19.67	19.84	0
			256QAM	1	1	19.29	18.85	18.98	0.5
		CP	QPSK	1	1	19.90	19.48	19.63	0

NR Band n25_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.93	19.52	19.68	0
				1	40	19.81	19.40	19.64	0
				1	77	19.74	19.49	19.43	0
				36	0	19.93	19.54	19.65	0
				36	22	19.88	19.51	19.70	0
				36	43	19.80	19.5	19.54	0
				75	0	19.88	19.51	19.67	0
			QPSK	1	1	19.92	19.55	19.68	0
				1	40	19.79	19.45	19.64	0
				1	77	19.69	19.48	19.48	0
				36	0	19.89	19.49	19.65	0
				36	22	19.87	19.48	19.62	0
				36	43	19.78	19.50	19.55	0
				75	0	19.85	19.50	19.64	0
			16QAM	1	1	19.93	19.58	19.71	0
			64QAM	1	1	19.95	19.62	19.78	0
			256QAM	1	1	19.32	18.89	19.01	0.5
		CP	QPSK	1	1	19.93	19.46	19.61	0

NR Band n25_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.89	19.59	19.64	0
				1	53	19.87	19.48	19.68	0
				1	104	19.62	19.47	19.45	0
				50	0	19.89	19.51	19.64	0
				50	28	19.82	19.50	19.72	0
				50	56	19.69	19.52	19.63	0
				100	0	19.81	19.51	19.69	0
			QPSK	1	1	19.91	19.58	19.68	0
				1	53	19.81	19.48	19.66	0
				1	104	19.56	19.52	19.43	0
				50	0	19.91	19.55	19.84	0
				50	28	19.84	19.52	19.70	0
				50	56	19.71	19.49	19.61	0
				100	0	19.83	19.49	19.68	0
			16QAM	1	1	19.80	19.48	19.70	0
			64QAM	1	1	19.98	19.69	19.72	0
			256QAM	1	1	19.21	18.90	18.96	0.5
		CP	QPSK	1	1	19.80	19.58	19.61	0

[NR Band n77Conducted Power]

NR Band n77_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647000	650600	654200	657800	661400	665000	
						3705 ㎒	3759 ㎒	3813 ㎒	3867 ㎒	3921 ㎒	3975 ㎒	
10MHz	30	DFT-s	pi/2 BPSK	1	1	20.50	20.65	19.87	19.84	20.32	20.63	0
				1	12	20.54	20.57	19.87	19.62	20.57	20.50	0
				1	22	20.63	20.51	19.96	19.65	20.50	20.55	0
				12	0	20.50	20.58	19.81	19.79	20.28	20.60	0
				12	6	20.51	20.57	19.85	19.62	20.54	20.53	0
				12	12	20.59	20.51	19.90	19.61	20.50	20.55	0
				24	0	20.52	20.55	19.87	19.60	20.51	20.52	0
			QPSK	1	1	20.47	20.60	19.83	19.80	20.25	20.57	0
				1	12	20.48	20.52	19.83	19.60	20.46	20.54	0
				1	22	20.62	20.42	19.93	19.59	20.45	20.55	0
				12	0	20.48	20.60	19.84	19.78	20.29	20.60	0
				12	6	20.50	20.61	19.86	19.59	20.52	20.53	0
				12	12	20.59	20.52	19.91	19.61	20.48	20.53	0
				24	0	20.52	20.57	19.85	19.62	20.51	20.52	0
			16QAM	1	1	20.62	20.64	19.99	19.96	20.40	20.70	0
			64QAM	1	1	19.93	20.04	19.28	19.24	19.76	20.07	0
			256QAM	1	1	18.88	19.00	19.24	19.23	18.70	18.98	0.5
		CP	QPSK	1	1	20.46	20.55	19.81	19.80	20.27	20.55	0

NR Band n77_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647168	650700	654232	657766	661300	664832	
						3707.52 ㎒	3760.5 ㎒	3813.49 ㎒	3866.5 ㎒	3919.5 ㎒	3972.48 ㎒	
15MHz	30	DFT-s	pi/2 BPSK	1	1	20.24	20.54	19.80	19.58	20.29	20.40	0
				1	18	20.27	20.46	19.67	19.40	20.42	20.37	0
				1	36	20.50	20.41	19.80	19.52	20.29	20.41	0
				18	0	20.23	20.34	19.77	19.68	19.98	20.45	0
				18	9	20.44	20.52	19.71	19.58	20.50	20.40	0
				18	18	20.56	20.42	19.75	19.31	20.28	20.41	0
				36	0	20.49	20.54	19.58	19.59	20.31	20.32	0
			QPSK	1	1	20.18	20.31	19.66	19.50	20.07	20.46	0
				1	18	20.31	20.36	19.60	19.31	20.45	20.43	0
				1	36	20.49	20.30	19.82	19.37	20.26	20.28	0
				18	0	20.22	20.38	19.56	19.51	20.24	20.43	0
				18	9	20.31	20.40	19.59	19.51	20.40	20.29	0
				18	18	20.37	20.41	19.89	19.32	20.30	20.26	0
				36	0	20.49	20.41	19.59	19.38	20.24	20.38	0
			16QAM	1	1	20.33	20.44	19.98	19.85	20.34	20.58	0
			64QAM	1	1	19.82	19.81	19.01	19.13	19.55	20.01	0
			256QAM	1	1	18.66	18.73	19.08	18.96	18.50	18.79	0.5
		CP	QPSK	1	1	20.16	20.48	19.57	19.69	19.99	20.31	0

NR Band n77_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647168	650800	654266	657734	661200	664666	
						3710.01 ㎒	3762 ㎒	3813.99 ㎒	3866.01 ㎒	3918 ㎒	3969.99 ㎒	
20MHz	30	DFT-s	pi/2 BPSK	1	1	20.17	20.65	19.67	19.51	20.20	20.57	0
				1	26	20.41	20.28	19.87	19.38	20.46	20.18	0
				1	49	20.47	20.50	19.96	19.42	20.44	20.25	0
				25	0	20.47	20.52	19.54	19.57	20.28	20.34	0
				25	13	20.21	20.42	19.56	19.53	20.43	20.29	0
				25	26	20.39	20.30	19.85	19.37	20.27	20.29	0
				50	0	20.50	20.43	19.68	19.44	20.47	20.47	0
			QPSK	1	1	20.26	20.35	19.71	19.61	20.14	20.28	0
				1	26	20.45	20.41	19.78	19.42	20.45	20.49	0
				1	49	20.50	20.41	19.85	19.41	20.41	20.49	0
				25	0	20.35	20.38	19.75	19.59	20.10	20.28	0
				25	13	20.33	20.59	19.72	19.26	20.37	20.33	0
				25	26	20.53	20.26	19.64	19.53	20.23	20.25	0
				50	0	20.37	20.27	19.65	19.52	20.30	20.50	0
			16QAM	1	1	20.33	20.49	19.87	19.70	20.17	20.53	0
			64QAM	1	1	19.74	20.03	19.18	19.21	19.52	20.03	0
			256QAM	1	1	18.81	18.80	19.10	18.98	18.69	18.66	0.5
		CP	QPSK	1	1	20.35	20.52	19.50	19.58	19.97	20.48	0

NR Band n77_30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647668	651000	654334	657666	661000	664334	
						3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	20.24	20.63	19.57	19.51	20.11	20.56	0
				1	39	20.48	20.50	19.63	19.53	20.32	20.21	0
				1	76	20.53	20.26	19.79	19.56	20.39	20.29	0
				36	0	20.40	20.30	19.71	19.73	19.95	20.51	0
				36	21	20.47	20.49	19.54	19.39	20.31	20.26	0
				36	42	20.46	20.31	19.86	19.30	20.30	20.38	0
				75	0	20.32	20.42	19.55	19.36	20.25	20.41	0
			QPSK	1	1	20.28	20.30	19.50	19.74	19.93	20.46	0
				1	39	20.21	20.30	19.79	19.52	20.29	20.25	0
				1	76	20.46	20.36	19.81	19.54	20.44	20.47	0
				36	0	20.30	20.47	19.71	19.69	20.00	20.34	0
				36	21	20.45	20.29	19.81	19.54	20.49	20.36	0
				36	42	20.43	20.27	19.79	19.43	20.19	20.24	0
				75	0	20.25	20.29	19.74	19.30	20.23	20.42	0
			16QAM	1	1	20.36	20.57	19.73	19.84	20.30	20.61	0
			64QAM	1	1	19.76	19.96	19.18	19.23	19.58	19.88	0
			256QAM	1	1	18.73	18.80	19.16	19.16	18.64	18.65	0.5
		CP	QPSK	1	1	20.16	20.45	19.52	19.70	19.98	20.22	0

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 ㎒	3768 ㎒	3816 ㎒	3864 ㎒	3912 ㎒	3960 ㎒	
40MHz	30	DFT-s	pi/2 BPSK	1	1	20.32	20.55	19.84	19.56	20.29	20.62	0
				1	53	20.43	20.27	19.54	19.46	20.24	20.35	0
				1	104	20.33	20.33	19.92	19.37	20.31	20.36	0
				50	0	20.47	20.26	19.64	19.54	20.18	20.44	0
				50	28	20.30	20.51	19.77	19.45	20.42	20.48	0
				50	56	20.47	20.22	19.82	19.48	20.36	20.54	0
				100	0	20.42	20.42	19.56	19.37	20.24	20.32	0
			QPSK	1	1	20.38	20.36	19.53	19.72	19.92	20.50	0
				1	53	20.26	20.33	19.74	19.49	20.17	20.31	0
				1	104	20.32	20.15	19.87	19.47	20.36	20.54	0
				50	0	20.24	20.43	19.63	19.62	20.18	20.59	0
				50	28	20.32	20.57	19.76	19.28	20.39	20.28	0
				50	56	20.48	20.35	19.66	19.41	20.44	20.48	0
				100	0	20.25	20.41	19.70	19.45	20.19	20.48	0
			16QAM	1	1	20.34	20.31	19.78	19.64	20.32	20.50	0
			64QAM	1	1	19.85	20.03	19.09	19.00	19.55	19.79	0
			256QAM	1	1	18.58	18.72	19.07	19.18	18.67	18.66	0.5
		CP	QPSK	1	1	20.26	20.41	19.80	19.47	20.08	20.37	0

NR Band n77_ 50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 ㎒	3782.49 ㎒	3840 ㎒		3897.51 ㎒	3954.99 ㎒	
50MHz	30	DFT-s	pi/2 BPSK	1	1	20.32	20.57	19.81		20.24	20.31	0
				1	67	20.50	20.50	19.86		20.54	20.28	0
				1	131	20.47	20.18	19.77		20.48	20.22	0
				64	0	20.36	20.33	19.76		20.08	20.51	0
				64	35	20.37	20.44	19.57		20.41	20.34	0
				64	69	20.37	20.29	19.79		20.27	20.40	0
				128	0	20.40	20.38	19.85		20.44	20.52	0
			QPSK	1	1	20.29	20.28	19.83		20.06	20.54	0
				1	67	20.28	20.44	19.53		20.26	20.44	0
				1	131	20.52	20.15	19.90		20.34	20.41	0
				64	0	20.34	20.44	19.70		19.97	20.43	0
				64	35	20.47	20.46	19.57		20.46	20.39	0
				64	69	20.33	20.26	19.75		20.42	20.25	0
				128	0	20.29	20.32	19.67		20.44	20.45	0
			16QAM	1	1	20.54	20.54	19.84		20.17	20.54	0
			64QAM	1	1	19.64	19.96	19.19		19.70	20.00	0
			256QAM	1	1	18.78	18.85	19.20		18.47	18.77	0.5
		CP	QPSK	1	1	20.32	20.47	19.75		20.22	20.54	0

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648668	653556			658444	663332	
						3730.02 ㎒	3803.34 ㎒			3876.66 ㎒	3949.98 ㎒	
60MHz	30	DFT-s	pi/2 BPSK	1	1	20.38	20.34			20.14	20.45	0
				1	81	20.43	20.34			20.46	20.48	0
				1	160	20.40	20.40			20.33	20.53	0
				81	0	20.26	20.50			20.01	20.31	0
				81	41	20.27	20.26			20.42	20.52	0
				81	81	20.30	20.38			20.47	20.53	0
				162	0	20.48	20.31			20.38	20.25	0
			QPSK	1	1	20.32	20.58			20.05	20.38	0
				1	81	20.45	20.24			20.37	20.51	0
				1	160	20.29	20.31			20.26	20.27	0
				81	0	20.37	20.41			20.18	20.38	0
				81	41	20.38	20.35			20.46	20.24	0
				81	81	20.45	20.51			20.38	20.29	0
				162	0	20.32	20.35			20.19	20.32	0
			16QAM	1	1	20.45	20.43			20.20	20.67	0
			64QAM	1	1	19.76	19.72			19.60	19.93	0
			256QAM	1	1	18.69	18.95			18.48	18.73	0.5
		CP	QPSK	1	1	20.19	20.38			19.99	20.27	0

NR Band n77_ 70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649000	654334			658334	663000	
						3735 MHz	3805.01 MHz			3875.01 MHz	3945 MHz	
70MHz	30	DFT-s	pi/2 BPSK	1	1	20.21	20.36			20.15	20.35	0
				1	95	20.33	20.39			20.45	20.43	0
				1	187	20.51	20.24			20.41	20.26	0
				90	0	20.33	20.45			19.99	20.34	0
				90	50	20.39	20.50			20.30	20.23	0
				90	99	20.45	20.20			20.31	20.36	0
				180	0	20.49	20.52			20.42	20.25	0
			QPSK	1	1	20.15	20.56			20.04	20.28	0
				1	95	20.46	20.32			20.24	20.49	0
				1	187	20.56	20.24			20.40	20.26	0
				90	0	20.29	20.27			20.21	20.43	0
				90	50	20.44	20.38			20.29	20.35	0
				90	99	20.42	20.28			20.46	20.31	0
				180	0	20.32	20.42			20.40	20.51	0
			16QAM	1	1	20.56	20.36			20.23	20.63	0
			64QAM	1	1	19.73	19.89			19.71	19.93	0
			256QAM	1	1	18.83	18.72			18.70	18.92	0.5
		CP	QPSK	1	1	20.25	20.42			19.96	20.25	0

NR Band n77_ 80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649334		656000		662666		
						3740.01 ㎒		3840 ㎒		3939.99 ㎒		
80MHz	30	DFT-s	pi/2 BPSK	1	1	20.29		19.79		20.20		0
				1	109	20.40		19.55		20.45		0
				1	215	20.31		19.80		20.33		0
				108	0	20.46		19.73		20.26		0
				108	55	20.50		19.77		20.33		0
				108	109	20.42		19.89		20.27		0
				216	0	20.25		19.84		20.43		0
			QPSK	1	1	20.35		19.54		20.24		0
				1	109	20.40		19.75		20.32		0
				1	215	20.57		19.79		20.20		0
				108	0	20.42		19.62		20.28		0
				108	55	20.40		19.74		20.25		0
				108	109	20.37		19.86		20.39		0
				216	0	20.20		19.82		20.24		0
			16QAM	1	1	20.52		19.73		20.14		0
			64QAM	1	1	19.68		19.04		19.47		0
			256QAM	1	1	18.77		19.04		18.52		0.5
		CP	QPSK	1	1	20.36		19.77		20.24		0

NR Band n77_ 90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649668		656000		662332		
						3745.02 ㎒		3840 ㎒		3934.98 ㎒		
90MHz	30	DFT-s	pi/2 BPSK	1	1	20.36		19.64		20.15		0
				1	123	20.33		19.76		20.50		0
				1	243	20.41		19.81		20.48		0
				120	0	20.23		19.58		20.18		0
				120	63	20.36		19.69		20.37		0
				120	125	20.27		19.71		20.40		0
				243	0	20.28		19.76		20.18		0
			QPSK	1	1	20.32		19.64		20.14		0
				1	123	20.19		19.64		20.38		0
				1	243	20.46		19.81		20.18		0
				120	0	20.16		19.60		20.27		0
				120	63	20.27		19.79		20.52		0
				120	125	20.31		19.78		20.36		0
				243	0	20.30		19.53		20.40		0
			16QAM	1	1	20.61		19.97		20.31		0
			64QAM	1	1	19.73		19.10		19.44		0
			256QAM	1	1	18.68		19.13		18.60		0.5
		CP	QPSK	1	1	20.42		19.73		20.17		0

NR Band n77_ 100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						650000				662000		
						3750 ㎒				3930 ㎒		
100MHz	30	DFT-s	pi/2 BPSK	1	1	20.17				18.94		0
				1	137	19.77				19.45		0
				1	271	18.83				19.94		0
				135	0	20.36				19.19		0
				135	69	19.81				19.49		0
				135	138	19.30				19.30		0
				270	0	19.80				19.63		0
			QPSK	1	1	20.10				18.88		0
				1	137	19.68				19.35		0
				1	271	19.75				19.84		0
				135	0	20.35				19.16		0
				135	69	19.79				19.47		0
				135	138	19.27				19.29		0
				270	0	19.79				19.61		0
			16QAM	1	1	20.30				19.03		0
			64QAM	1	1	20.10				18.83		0
			256QAM	1	1	19.51				18.35		0.5
		CP	QPSK	1	1	20.10				18.83		0

[NR Band n77 Conducted Power] – Antenna : SRS

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	19.91				19.96		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	16.82				17.13		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	19.72				19.39		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	17.91				18.35		0

[NR Band n77 DOD Conducted Power]

Band n77 DoD_10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630336	633334	636332	
						3455.04 ㎒	3500.01 ㎒	3544.98 ㎒	
10MHz	30	DFT-s	pi/2 BPSK	1	1	20.08	19.52	20.33	0
				1	12	20.10	19.35	20.28	0
				1	22	19.98	19.41	20.24	0
				12	0	20.03	19.45	20.28	0
				12	6	20.03	19.29	20.25	0
				12	12	19.98	19.36	20.21	0
				24	0	20.03	19.31	20.27	0
			QPSK	1	1	19.99	19.46	20.28	0
				1	12	19.96	19.26	20.19	0
				1	22	19.88	19.36	20.16	0
				12	0	20.05	19.43	20.29	0
				12	6	20.04	19.29	20.25	0
				12	12	19.99	19.37	20.22	0
				24	0	20.00	19.34	20.21	0
			16QAM	1	1	19.87	19.29	20.28	0
			64QAM	1	1	19.99	19.43	20.21	0
			256QAM	1	1	19.43	18.93	19.75	0.5
		CP	QPSK	1	1	19.99	19.44	20.37	0

Band n77 DoD_15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630502	633334	636166	
						3457.53 ㎒	3500.01 ㎒	3542.49 ㎒	
15MHz	30	DFT-s	pi/2 BPSK	1	1	20.11	19.71	20.40	0
				1	18	20.02	19.47	20.22	0
				1	36	19.92	19.64	20.16	0
				18	0	20.10	19.63	20.09	0
				18	9	20.02	19.46	20.20	0
				18	18	19.94	19.52	19.97	0
				36	0	20.03	19.47	20.02	0
			QPSK	1	1	20.04	19.70	20.31	0
				1	18	19.97	19.43	20.12	0
				1	36	19.87	19.60	20.09	0
				18	0	20.12	19.68	20.50	0
				18	9	20.05	19.47	20.24	0
				18	18	19.93	19.54	20.37	0
				36	0	20.04	19.47	20.44	0
			16QAM	1	1	19.93	19.97	20.70	0
			64QAM	1	1	20.04	20.16	20.51	0
			256QAM	1	1	19.53	18.98	19.50	0.5
		CP	QPSK	1	1	19.96	19.28	20.12	0

Band n77 DoD_20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630668	633334	636000	
						3460.02 MHz	3500.01 MHz	3540 MHz	
20MHz	30	DFT-s	pi/2 BPSK	1	1	20.39	19.79	20.28	0
				1	26	20.17	19.49	20.23	0
				1	49	20.06	19.61	20.12	0
				25	0	20.32	19.65	20.10	0
				25	13	20.21	19.50	20.22	0
				25	26	20.10	19.58	19.93	0
				50	0	20.19	19.46	20.01	0
			QPSK	1	1	20.32	19.73	20.21	0
				1	26	20.18	19.42	20.12	0
				1	49	20.00	19.60	20.04	0
				25	0	20.32	19.69	20.54	0
				25	13	20.21	19.50	20.21	0
				25	26	20.10	19.59	20.35	0
				50	0	20.21	19.47	20.43	0
			16QAM	1	1	20.47	19.97	20.60	0
			64QAM	1	1	20.75	20.16	20.58	0
			256QAM	1	1	19.59	18.99	19.36	0.5
		CP	QPSK	1	1	19.90	19.34	19.99	0

Band n77 DoD_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631000	633334	635666	
						3465 MHz	3500.01 MHz	3534.99 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	20.28	19.82	20.31	0
				1	39	20.02	19.52	20.48	0
				1	76	19.68	19.87	20.19	0
				36	0	20.15	19.73	20.23	0
				36	21	19.99	19.51	20.44	0
				36	42	19.75	19.54	20.07	0
				75	0	20.01	19.45	20.27	0
			QPSK	1	1	20.25	19.79	20.20	0
				1	39	19.99	19.47	20.45	0
				1	76	19.65	19.86	20.12	0
				36	0	20.19	19.74	20.61	0
				36	21	20.00	19.52	20.44	0
				36	42	19.75	19.59	20.49	0
				75	0	20.02	19.47	20.65	0
			16QAM	1	1	20.44	20.04	20.62	0
			64QAM	1	1	20.68	20.21	20.58	0
			256QAM	1	1	19.52	19.04	19.40	0.5
		CP	QPSK	1	1	19.76	19.35	19.97	0

Band n77 DoD_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631334		635332	
						3470.01 ㎒		3529.98 ㎒	
40MHz	30	DFT-s	pi/2 BPSK	1	1	20.43		19.72	0
				1	53	20.08		20.25	0
				1	104	19.78		20.15	0
				50	0	20.23		19.89	0
				50	28	20.02		20.26	0
				50	56	19.82		20.04	0
				100	0	20.04		20.06	0
			QPSK	1	1	20.42		19.55	0
				1	53	19.98		20.28	0
				1	104	19.73		20.10	0
				50	0	20.25		20.26	0
				50	28	20.02		20.26	0
				50	56	19.84		20.41	0
				100	0	20.04		20.47	0
			16QAM	1	1	20.62		19.90	0
			64QAM	1	1	20.53		20.21	0
			256QAM	1	1	19.65		18.80	0.5
		CP	QPSK	1	1	19.90		19.35	0

Band n77 DoD_50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631668		635000	
						3475.02 ㎒		3525 ㎒	
50MHz	30	DFT-s	pi/2 BPSK	1	1	20.37		19.38	0
				1	67	19.70		20.18	0
				1	131	19.50		20.12	0
				64	0	20.10		19.33	0
				64	35	19.67		20.17	0
				64	69	19.68		20.00	0
				128	0	19.73		19.94	0
			QPSK	1	1	20.40		19.31	0
				1	67	19.67		20.11	0
				1	131	19.45		20.06	0
				64	0	20.12		19.76	0
				64	35	19.69		20.16	0
				64	69	19.71		20.41	0
				128	0	19.76		20.34	0
			16QAM	1	1	20.57		19.70	0
			64QAM	1	1	20.78		19.92	0
			256QAM	1	1	19.63		18.49	0.5
		CP	QPSK	1	1	19.87		19.08	0

Band n77 DoD_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
60MHz	30	DFT-s	pi/2 BPSK	1	1		19.05		0
				1	81		19.53		0
				1	160		20.54		0
				81	0		19.78		0
				81	41		19.55		0
				81	81		19.93		0
				162	0		19.51		0
			QPSK	1	1		18.99		0
				1	81		19.49		0
				1	160		20.51		0
				81	0		19.85		0
				81	41		19.51		0
				81	81		19.93		0
				162	0		19.51		0
			16QAM	1	1		19.30		0
			64QAM	1	1		19.43		0
			256QAM	1	1		18.51		0.5
		CP	QPSK	1	1		18.91		0

Band n77 DoD_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
70MHz	30	DFT-s	pi/2 BPSK	1	1		19.34		0
				1	95		19.54		0
				1	187		20.56		0
				90	0		19.87		0
				90	50		19.49		0
				90	99		20.16		0
				180	0		19.46		0
			QPSK	1	1		19.33		0
				1	95		19.53		0
				1	187		20.55		0
				90	0		19.89		0
				90	50		19.52		0
				90	99		20.21		0
				180	0		19.46		0
			16QAM	1	1		19.06		0
			64QAM	1	1		19.78		0
			256QAM	1	1		18.62		0.5
		CP	QPSK	1	1		19.05		0

Band n77 DoD_80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
80MHz	30	DFT-s	pi/2 BPSK	1	1		19.50		0
				1	109		19.52		0
				1	215		20.68		0
				108	0		19.92		0
				108	55		19.49		0
				108	109		20.26		0
				216	0		19.49		0
			QPSK	1	1		19.51		0
				1	109		19.48		0
				1	215		20.66		0
				108	0		19.93		0
				108	55		19.54		0
				108	109		20.29		0
				216	0		19.52		0
			16QAM	1	1		19.71		0
			64QAM	1	1		19.99		0
			256QAM	1	1		18.75		0.5
		CP	QPSK	1	1		18.99		0

Band n77 DoD_90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
90MHz	30	DFT-s	pi/2 BPSK	1	1		19.74		0
				1	123		19.53		0
				1	243		20.67		0
				120	0		19.89		0
				120	63		19.51		0
				120	125		20.41		0
				243	0		19.52		0
			QPSK	1	1		19.74		0
				1	123		19.51		0
				1	243		20.62		0
				120	0		19.96		0
				120	63		19.51		0
				120	125		20.42		0
				243	0		19.51		0
			16QAM	1	1		19.92		0
			64QAM	1	1		20.20		0
			256QAM	1	1		18.97		0.5
		CP	QPSK	1	1		19.24		0

Band n77 DoD_100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
100MHz	30	DFT-s	pi/2 BPSK	1	1		20.14		0
				1	137		19.77		0
				1	271		20.16		0
				135	0		19.72		0
				135	69		19.73		0
				135	138		20.13		0
				270	0		19.73		0
			QPSK	1	1		20.11		0
				1	137		20.23		0
				1	271		20.24		0
				135	0		19.71		0
				135	69		19.70		0
				135	138		20.23		0
				270	0		19.72		0
			16QAM	1	1		19.98		0
			64QAM	1	1		20.14		0
			256QAM	1	1		19.58		0.5
		CP	QPSK	1	1		19.95		0

[NR Band n77 DOD Conducted Power] – Antenna : SRS

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		20.66		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		18.31		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		20.41		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		18.32		0

11.1.3 NR Band Reduced Conducted Power(Grip-sensor on,Ear jack Activated)

[NR Band n2 Conducted Power]

NR Band n2_ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 MHz	1880 MHz	1907.5 MHz	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.89	19.55	19.71	0
				1	13	19.79	19.41	19.61	0
				1	23	19.83	19.51	19.65	0
				12	0	19.85	19.47	19.70	0
				12	7	19.85	19.47	19.66	0
				12	13	19.83	19.48	19.63	0
				25	0	19.84	19.50	19.67	0
			QPSK	1	1	19.88	19.56	19.70	0
				1	13	19.76	19.40	19.57	0
				1	23	19.80	19.52	19.61	0
				12	0	19.86	19.51	19.67	0
				12	7	19.84	19.48	19.64	0
				12	13	19.82	19.46	19.62	0
				25	0	19.83	19.46	19.66	0
			16QAM	1	1	19.92	19.56	19.75	0
			64QAM	1	1	19.95	19.62	19.76	0
			256QAM	1	1	19.19	18.83	19.00	0.5
		CP	QPSK	1	1	19.81	19.45	19.60	0

NR Band n2_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 MHz	1880 MHz	1905 MHz	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.99	19.54	19.66	0
				1	26	19.93	19.46	19.68	0
				1	50	19.86	19.52	19.65	0
				25	0	19.93	19.53	19.68	0
				25	14	19.90	19.49	19.71	0
				25	27	19.86	19.49	19.69	0
				50	0	19.90	19.48	19.71	0
			QPSK	1	1	19.97	19.56	19.69	0
				1	26	19.88	19.47	19.64	0
				1	50	19.86	19.48	19.64	0
				25	0	19.91	19.59	19.68	0
				25	14	19.87	19.49	19.69	0
				25	27	19.86	19.49	19.67	0
				50	0	19.89	19.48	19.71	0
			16QAM	1	1	19.92	19.58	19.68	0
			64QAM	1	1	19.97	19.65	19.76	0
			256QAM	1	1	19.28	18.87	18.98	0.5
		CP	QPSK	1	1	19.89	19.43	19.60	0

NR Band n2_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.96	19.63	19.55	0
				1	40	19.83	19.40	19.57	0
				1	77	19.76	19.52	19.57	0
				36	0	19.90	19.55	19.59	0
				36	22	19.84	19.50	19.61	0
				36	43	19.81	19.54	19.57	0
				75	0	19.89	19.53	19.59	0
			QPSK	1	1	19.93	19.61	19.58	0
				1	40	19.81	19.47	19.53	0
				1	77	19.72	19.49	19.56	0
				36	0	19.93	19.51	19.58	0
				36	22	19.88	19.48	19.59	0
				36	43	19.86	19.52	19.60	0
				75	0	19.87	19.46	19.58	0
			16QAM	1	1	19.95	19.47	19.45	0
			64QAM	1	1	19.90	19.69	19.70	0
			256QAM	1	1	19.27	18.96	18.96	0.5
		CP	QPSK	1	1	19.87	19.62	19.54	0

NR Band n2_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.92	19.66	19.59	0
				1	53	19.84	19.47	19.62	0
				1	104	19.57	19.47	19.57	0
				50	0	19.88	19.55	19.65	0
				50	28	19.80	19.51	19.62	0
				50	56	19.73	19.52	19.66	0
				100	0	19.80	19.52	19.61	0
			QPSK	1	1	19.89	19.64	19.65	0
				1	53	19.85	19.48	19.67	0
				1	104	19.60	19.45	19.58	0
				50	0	19.87	19.57	19.62	0
				50	28	19.83	19.50	19.61	0
				50	56	19.73	19.49	19.64	0
				100	0	19.82	19.49	19.63	0
			16QAM	1	1	19.91	19.75	19.62	0
			64QAM	1	1	19.91	19.84	19.75	0
			256QAM	1	1	19.22	18.95	18.91	0.5
		CP	QPSK	1	1	19.85	19.56	19.54	0

[NR Band n25 Conducted Power]

NR Band n25_5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 MHz	1882.5 MHz	1912.5 MHz	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.90	19.52	19.59	0
				1	13	19.81	19.40	19.42	0
				1	23	19.86	19.48	19.47	0
				12	0	19.91	19.49	19.57	0
				12	7	19.85	19.49	19.52	0
				12	13	19.82	19.50	19.41	0
				25	0	19.85	19.48	19.51	0
			QPSK	1	1	19.87	19.51	19.61	0
				1	13	19.78	19.44	19.45	0
				1	23	19.84	19.52	19.42	0
				12	0	19.91	19.54	19.56	0
				12	7	19.86	19.49	19.49	0
				12	13	19.86	19.50	19.43	0
				25	0	19.85	19.49	19.49	0
			16QAM	1	1	19.95	19.43	19.69	0
			64QAM	1	1	19.98	19.61	19.65	0
			256QAM	1	1	19.23	18.81	18.91	0.5
		CP	QPSK	1	1	19.84	19.47	19.60	0

NR Band n25 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 MHz	1882.5 MHz	1910 MHz	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.97	19.54	19.68	0
				1	26	19.91	19.46	19.64	0
				1	50	19.88	19.51	19.49	0
				25	0	19.95	19.46	19.68	0
				25	14	19.90	19.48	19.61	0
				25	27	19.86	19.50	19.53	0
				50	0	19.90	19.47	19.62	0
			QPSK	1	1	19.96	19.50	19.64	0
				1	26	19.87	19.46	19.59	0
				1	50	19.86	19.53	19.44	0
				25	0	19.94	19.49	19.68	0
				25	14	19.89	19.48	19.65	0
				25	27	19.86	19.52	19.52	0
				50	0	19.93	19.52	19.64	0
			16QAM	1	1	19.91	19.51	19.65	0
			64QAM	1	1	19.90	19.61	19.75	0
			256QAM	1	1	19.23	18.82	19.04	0.5
		CP	QPSK	1	1	19.89	19.44	19.63	0

NR Band n25_ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.92	19.53	19.65	0
				1	40	19.82	19.43	19.60	0
				1	77	19.72	19.51	19.43	0
				36	0	19.87	19.51	19.65	0
				36	22	19.87	19.46	19.69	0
				36	43	19.81	19.51	19.58	0
				75	0	19.89	19.51	19.64	0
			QPSK	1	1	19.91	19.54	19.67	0
				1	40	19.82	19.42	19.60	0
				1	77	19.76	19.49	19.43	0
				36	0	19.94	19.52	19.63	0
				36	22	19.90	19.49	19.70	0
				36	43	19.80	19.50	19.56	0
				75	0	19.87	19.48	19.68	0
			16QAM	1	1	19.90	19.57	19.70	0
			64QAM	1	1	19.95	19.68	19.84	0
			256QAM	1	1	19.24	18.87	19.01	0.5
		CP	QPSK	1	1	19.88	19.50	19.63	0

NR Band n25_ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.90	19.56	19.69	0
				1	53	19.84	19.50	19.71	0
				1	104	19.55	19.52	19.45	0
				50	0	19.94	19.51	19.66	0
				50	28	19.83	19.54	19.69	0
				50	56	19.71	19.48	19.60	0
				100	0	19.82	19.49	19.67	0
			QPSK	1	1	19.86	19.58	19.69	0
				1	53	19.80	19.44	19.64	0
				1	104	19.57	19.47	19.45	0
				50	0	19.86	19.54	19.67	0
				50	28	19.85	19.49	19.72	0
				50	56	19.74	19.48	19.62	0
				100	0	19.82	19.48	19.67	0
			16QAM	1	1	19.97	19.56	19.73	0
			64QAM	1	1	19.99	19.77	19.89	0
			256QAM	1	1	19.20	18.90	19.00	0.5
		CP	QPSK	1	1	19.90	19.58	19.68	0

11.1.4 NR Band Reduced Conducted Power(RCV on)

[NR Band n77Conducted Power]

NR Band n77_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647000	650600	654200	657800	661400	665000	
						3705 ㎒	3759 ㎒	3813 ㎒	3867 ㎒	3921 ㎒	3975 ㎒	
10MHz	30	DFT-s	pi/2 BPSK	1	1	22.20	22.35	21.57	21.54	22.02	22.33	0
				1	12	22.24	22.27	21.57	21.32	22.27	22.20	0
				1	22	22.33	22.21	21.66	21.35	22.20	22.25	0
				12	0	22.20	22.28	21.51	21.49	21.98	22.30	0
				12	6	22.21	22.27	21.55	21.32	22.24	22.23	0
				12	12	22.29	22.21	21.60	21.31	22.20	22.25	0
				24	0	22.22	22.25	21.57	21.30	22.21	22.22	0
			QPSK	1	1	22.17	22.30	21.53	21.50	21.95	22.27	0
				1	12	22.18	22.22	21.53	21.30	22.16	22.24	0
				1	22	22.32	22.12	21.63	21.29	22.15	22.25	0
				12	0	22.18	22.30	21.54	21.48	21.99	22.30	0
				12	6	22.20	22.31	21.56	21.29	22.22	22.23	0
				12	12	22.29	22.22	21.61	21.31	22.18	22.23	0
				24	0	22.22	22.27	21.55	21.32	22.21	22.22	0
			16QAM	1	1	22.32	22.34	21.69	21.66	22.10	22.40	0
			64QAM	1	1	21.63	21.74	20.98	20.94	21.46	21.77	0.5
			256QAM	1	1	19.58	19.70	18.94	18.93	19.40	19.68	2.5
		CP	QPSK	1	1	22.16	22.25	21.51	21.50	21.97	22.25	0

NR Band n77_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647168	650700	654232	657766	661300	664832	
						3707.52 ㎒	3760.5 ㎒	3813.49 ㎒	3866.5 ㎒	3919.5 ㎒	3972.48 ㎒	
15MHz	30	DFT-s	pi/2 BPSK	1	1	22.02	22.22	21.37	21.16	21.83	22.23	0
				1	18	22.05	22.23	21.38	21.29	22.06	21.92	0
				1	36	22.16	22.06	21.63	21.16	21.97	22.19	0
				18	0	22.03	22.06	21.32	21.41	21.76	22.00	0
				18	9	22.09	22.06	21.54	21.29	21.99	22.00	0
				18	18	22.10	21.94	21.43	21.02	21.95	22.05	0
				36	0	21.99	22.10	21.30	21.12	21.97	21.88	0
			QPSK	1	1	21.93	22.01	21.27	21.23	21.65	22.17	0
				1	18	22.14	22.10	21.38	21.05	21.83	22.09	0
				1	36	22.08	21.97	21.42	21.14	21.87	22.07	0
				18	0	22.04	22.05	21.41	21.28	21.66	21.98	0
				18	9	22.06	22.02	21.31	21.12	22.12	22.15	0
				18	18	22.11	22.00	21.37	21.00	22.07	22.12	0
				36	0	21.93	22.02	21.38	21.16	22.06	22.14	0
			16QAM	1	1	21.96	22.22	21.53	21.39	21.89	22.21	0
			64QAM	1	1	21.51	21.57	20.80	20.82	21.19	21.41	0.5
			256QAM	1	1	19.40	19.56	18.74	18.61	19.14	19.57	2.5
		CP	QPSK	1	1	22.00	22.05	21.44	21.46	21.67	22.05	0

NR Band n77_ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647168	650800	654266	657734	661200	664666	
						3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20MHz	30	DFT-s	pi/2 BPSK	1	1	22.09	22.19	21.56	21.43	21.84	22.24	0
				1	26	22.10	22.25	21.37	21.16	22.19	22.11	0
				1	49	22.32	22.21	21.62	21.26	22.00	22.21	0
				25	0	22.19	22.24	21.40	21.33	21.88	22.12	0
				25	13	22.19	22.09	21.47	21.20	22.21	22.08	0
				25	26	22.16	22.05	21.57	21.20	22.06	22.19	0
				50	0	22.10	22.09	21.45	21.24	22.15	22.21	0
			QPSK	1	1	22.09	22.27	21.42	21.40	21.87	22.11	0
				1	26	22.08	22.06	21.42	21.27	22.04	22.04	0
				1	49	22.24	22.05	21.62	21.26	21.96	22.21	0
				25	0	22.00	22.11	21.37	21.42	21.86	22.17	0
				25	13	22.15	22.29	21.38	21.23	22.03	22.17	0
				25	26	22.18	22.09	21.54	21.17	21.99	22.09	0
				50	0	22.19	22.24	21.47	21.23	22.01	22.13	0
			16QAM	1	1	22.16	22.14	21.61	21.59	21.94	22.20	0
			64QAM	1	1	21.50	21.71	20.86	20.89	21.29	21.63	0.5
			256QAM	1	1	19.48	19.52	18.79	18.79	19.31	19.62	2.5
		CP	QPSK	1	1	22.16	22.09	21.47	21.36	21.84	22.06	0

NR Band n77_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647668	651000	654334	657666	661000	664334	
						3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	22.02	22.32	21.42	21.36	21.89	22.22	0
				1	39	22.18	22.07	21.44	21.16	22.16	22.04	0
				1	76	22.20	22.04	21.66	21.15	22.05	22.19	0
				36	0	22.18	22.14	21.32	21.32	21.90	22.16	0
				36	21	22.03	22.22	21.47	21.26	22.13	22.21	0
				36	42	22.13	22.09	21.59	21.13	22.16	22.18	0
				75	0	22.19	22.15	21.44	21.20	22.17	22.05	0
			QPSK	1	1	22.13	22.17	21.37	21.40	21.83	22.16	0
				1	39	22.14	22.09	21.43	21.15	22.00	22.17	0
				1	76	22.19	22.07	21.60	21.27	22.07	22.17	0
				36	0	22.00	22.27	21.44	21.42	21.83	22.29	0
				36	21	22.11	22.19	21.47	21.14	22.14	22.19	0
				36	42	22.13	22.15	21.46	21.30	22.07	22.13	0
				75	0	22.22	22.08	21.43	21.27	22.18	22.14	0
			16QAM	1	1	22.21	22.17	21.50	21.48	21.93	22.31	0
			64QAM	1	1	21.59	21.64	20.94	20.88	21.41	21.58	0.5
			256QAM	1	1	19.51	19.59	18.78	18.77	19.29	19.56	2.5
		CP	QPSK	1	1	22.05	22.06	21.46	21.43	21.87	22.16	0

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 ㎒	3768 ㎒	3816 ㎒	3864 ㎒	3912 ㎒	3960 ㎒	
40MHz	30	DFT-s	pi/2 BPSK	1	1	22.12	22.34	21.45	21.42	21.99	22.17	0
				1	53	22.10	22.20	21.44	21.16	22.27	22.18	0
				1	104	22.20	22.09	21.55	21.21	22.04	22.15	0
				50	0	22.12	22.26	21.32	21.38	21.96	22.11	0
				50	28	22.18	22.24	21.50	21.13	22.13	22.12	0
				50	56	22.18	22.10	21.50	21.26	22.10	22.14	0
				100	0	22.16	22.23	21.54	21.29	22.21	22.20	0
			QPSK	1	1	22.10	22.24	21.48	21.38	21.88	22.09	0
				1	53	22.09	22.21	21.39	21.29	21.99	22.14	0
				1	104	22.30	21.96	21.48	21.13	22.03	22.21	0
				50	0	22.05	22.27	21.53	21.46	21.88	22.11	0
				50	28	22.15	22.12	21.54	21.14	22.04	22.14	0
				50	56	22.21	22.04	21.42	21.19	22.13	22.14	0
				100	0	22.06	22.24	21.39	21.21	22.01	22.20	0
			16QAM	1	1	22.24	22.24	21.65	21.65	21.92	22.22	0
			64QAM	1	1	21.52	21.68	20.93	20.78	21.27	21.71	0.5
			256QAM	1	1	19.38	19.64	18.78	18.77	19.23	19.66	2.5
		CP	QPSK	1	1	22.14	22.12	21.34	21.36	21.94	22.09	0

NR Band n77_ 50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 ㎒	3782.49 ㎒	3840 ㎒		3897.51 ㎒	3954.99 ㎒	
50MHz	30	DFT-s	pi/2 BPSK	1	1	22.04	22.28	21.43		21.88	22.22	0
				1	67	22.08	22.11	21.41		22.12	22.14	0
				1	131	22.18	22.11	21.49		22.02	22.18	0
				64	0	22.00	22.16	21.45		21.93	22.26	0
				64	35	22.14	22.24	21.49		22.15	22.19	0
				64	69	22.24	22.18	21.52		22.09	22.11	0
				128	0	22.18	22.06	21.54		22.06	22.08	0
			QPSK	1	1	22.00	22.26	21.51		21.95	22.18	0
				1	67	22.15	22.10	21.51		22.12	22.06	0
				1	131	22.24	22.11	21.48		22.14	22.11	0
				64	0	22.05	22.10	21.35		21.97	22.28	0
				64	35	22.19	22.13	21.39		22.16	22.15	0
				64	69	22.18	22.05	21.47		22.09	22.08	0
				128	0	22.09	22.14	21.45		22.06	22.14	0
			16QAM	1	1	22.17	22.14	21.63		21.97	22.37	0
			64QAM	1	1	21.52	21.55	20.93		21.43	21.69	0.5
			256QAM	1	1	19.55	19.51	18.74		19.32	19.61	2.5
		CP	QPSK	1	1	22.06	22.07	21.48		21.85	22.20	0

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648668	653556			658444	663332	
						3730.02 ㎒	3803.34 ㎒			3876.66 ㎒	3949.98 ㎒	
60MHz	30	DFT-s	pi/2 BPSK	1	1	22.16	22.34			21.97	22.31	0
				1	81	22.18	22.23			22.09	22.16	0
				1	160	22.15	22.12			22.06	22.18	0
				81	0	22.19	22.13			21.98	22.23	0
				81	41	22.07	22.10			22.05	22.11	0
				81	81	22.10	22.13			22.09	22.20	0
				162	0	22.05	22.20			22.04	22.20	0
			QPSK	1	1	22.00	22.29			21.94	22.25	0
				1	81	22.15	22.16			22.02	22.05	0
				1	160	22.22	21.94			22.11	22.08	0
				81	0	22.15	22.26			21.93	22.19	0
				81	41	22.07	22.16			22.21	22.13	0
				81	81	22.18	22.04			22.06	22.06	0
				162	0	22.20	22.23			22.19	22.20	0
			16QAM	1	1	22.18	22.30			22.00	22.29	0
			64QAM	1	1	21.51	21.66			21.41	21.59	0.5
			256QAM	1	1	19.47	19.52			19.28	19.56	2.5
		CP	QPSK	1	1	22.10	22.24			21.86	22.13	0

NR Band n77_ 70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649000	654334			658334	663000	
						3735 MHz	3805.01 MHz			3875.01 MHz	3945 MHz	
70MHz	30	DFT-s	pi/2 BPSK	1	1	22.03	22.27			22.01	22.30	0
				1	95	22.21	22.21			22.16	22.15	0
				1	187	22.24	22.14			22.00	22.06	0
				90	0	22.11	22.15			21.79	22.13	0
				90	50	22.11	22.27			22.05	22.06	0
				90	99	22.25	22.14			22.07	22.23	0
				180	0	22.08	22.16			22.01	22.16	0
			QPSK	1	1	22.01	22.29			21.83	22.17	0
				1	95	22.15	22.14			22.15	22.24	0
				1	187	22.28	21.96			21.97	22.15	0
				90	0	22.17	22.21			21.90	22.15	0
				90	50	22.17	22.12			22.07	22.20	0
				90	99	22.22	22.03			22.02	22.15	0
				180	0	22.10	22.07			22.17	22.06	0
			16QAM	1	1	22.17	22.25			21.95	22.34	0
			64QAM	1	1	21.45	21.61			21.46	21.73	0.5
			256QAM	1	1	19.46	19.51			19.26	19.51	2.5
		CP	QPSK	1	1	22.06	22.15			21.80	22.19	0

NR Band n77_ 80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649334		656000		662666		
						3740.01 ㎒		3840 ㎒		3939.99 ㎒		
80MHz	30	DFT-s	pi/2 BPSK	1	1	22.20		21.39		21.96		0
				1	109	22.11		21.39		22.19		0
				1	215	22.21		21.61		22.12		0
				108	0	22.04		21.39		21.86		0
				108	55	22.15		21.42		22.18		0
				108	109	22.26		21.56		22.12		0
				216	0	22.13		21.39		22.03		0
			QPSK	1	1	22.02		21.39		21.94		0
				1	109	22.13		21.53		22.08		0
				1	215	22.28		21.60		22.01		0
				108	0	22.07		21.43		21.81		0
				108	55	22.12		21.44		22.05		0
				108	109	22.13		21.50		22.09		0
				216	0	22.15		21.50		22.07		0
			16QAM	1	1	22.23		21.61		21.90		0
			64QAM	1	1	21.52		20.81		21.42		0.5
			256QAM	1	1	19.42		18.90		19.21		2.5
		CP	QPSK	1	1	22.12		21.50		21.84		0

NR Band n77_ 90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649668		656000		662332		
						3745.02 ㎒		3840 ㎒		3934.98 ㎒		
90MHz	30	DFT-s	pi/2 BPSK	1	1	22.01		21.54		22.00		0
				1	123	22.10		21.38		22.22		0
				1	243	22.19		21.51		22.19		0
				120	0	22.05		21.41		21.83		0
				120	63	22.11		21.37		22.16		0
				120	125	22.18		21.51		22.13		0
				243	0	22.06		21.51		22.11		0
			QPSK	1	1	21.99		21.39		21.77		0
				1	123	22.01		21.36		22.10		0
				1	243	22.27		21.47		22.04		0
				120	0	22.01		21.52		21.85		0
				120	63	22.15		21.42		22.19		0
				120	125	22.25		21.59		22.03		0
				243	0	22.21		21.39		22.11		0
			16QAM	1	1	22.16		21.53		22.01		0
			64QAM	1	1	21.49		20.94		21.35		0.5
			256QAM	1	1	19.44		18.80		19.24		2.5
		CP	QPSK	1	1	22.03		21.45		21.86		0

NR Band n77_ 100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						650000				662000		
						3750 ㎒				3930 ㎒		
100MHz	30	DFT-s	pi/2 BPSK	1	1	22.14				20.92		0
				1	137	21.78				21.46		0
				1	271	21.80				21.89		0
				135	0	22.34				21.18		0
				135	69	21.78				21.47		0
				135	138	21.29				21.32		0
				270	0	21.79				21.65		0
			QPSK	1	1	22.12				20.88		0
				1	137	21.72				21.38		0
				1	271	21.75				21.83		0
				135	0	22.35				21.19		0
				135	69	21.85				21.48		0
				135	138	21.33				21.33		0
				270	0	21.82				21.64		0
			16QAM	1	1	22.10				21.18		0
			64QAM	1	1	21.62				20.38		0.5
			256QAM	1	1	19.52				18.34		2.5
		CP	QPSK	1	1	22.14				20.92		0

[NR Band n77 Conducted Power] – Antenna : SRS

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	22.13				22.04		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	19.09				19.48		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	21.84				21.55		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100 MHz	30	Zad-off chu sequence	19.22				19.42		0

[NR Band n77 DOD Conducted Power]

Band n77 DoD_10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630336	633334	636332	
						3455.04 ㎒	3500.01 ㎒	3544.98 ㎒	
10MHz	30	DFT-s	pi/2 BPSK	1	1	22.17	21.59	22.46	0
				1	12	22.21	21.38	22.34	0
				1	22	22.07	21.49	22.29	0
				12	0	22.15	21.55	22.35	0
				12	6	22.11	21.36	22.31	0
				12	12	22.07	21.42	22.31	0
				24	0	22.14	21.39	22.33	0
			QPSK	1	1	22.12	21.56	22.36	0
				1	12	22.09	21.41	22.28	0
				1	22	22.03	21.44	22.23	0
				12	0	22.15	21.53	22.39	0
				12	6	22.12	21.38	22.33	0
				12	12	22.08	21.43	22.33	0
				24	0	22.12	21.39	22.37	0
			16QAM	1	1	22.24	21.66	22.43	0
			64QAM	1	1	21.57	21.02	21.88	0.5
			256QAM	1	1	19.56	19.02	19.86	2.5
		CP	QPSK	1	1	22.13	21.55	22.38	0

Band n77 DoD_15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630502	633334	636166	
						3457.53 ㎒	3500.01 ㎒	3542.49 ㎒	
15MHz	30	DFT-s	pi/2 BPSK	1	1	22.23	21.81	22.50	0
				1	18	22.12	21.57	22.32	0
				1	36	22.03	21.74	22.26	0
				18	0	22.21	21.73	22.19	0
				18	9	22.14	21.56	22.30	0
				18	18	22.04	21.62	22.07	0
				36	0	22.14	21.57	22.12	0
			QPSK	1	1	22.20	21.80	22.41	0
				1	18	22.09	21.53	22.22	0
				1	36	21.97	21.70	22.19	0
				18	0	22.22	21.78	22.60	0
				18	9	22.17	21.57	22.34	0
				18	18	22.07	21.64	22.47	0
				36	0	22.14	21.57	22.54	0
			16QAM	1	1	22.36	22.07	22.60	0
			64QAM	1	1	21.21	22.26	22.11	0.5
			256QAM	1	1	19.63	20.08	19.90	2.5
		CP	QPSK	1	1	22.76	21.38	22.22	0

Band n77 DoD_20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630668	633334	636000	
						3460.02 ㎒	3500.01 ㎒	3540 ㎒	
20MHz	30	DFT-s	pi/2 BPSK	1	1	22.49	21.89	22.38	0
				1	26	22.27	21.59	22.33	0
				1	49	22.16	21.71	22.22	0
				25	0	22.42	21.75	22.20	0
				25	13	22.31	21.60	22.32	0
				25	26	22.20	21.68	22.03	0
				50	0	22.29	21.56	22.11	0
			QPSK	1	1	22.42	21.83	22.31	0
				1	26	22.28	21.52	22.22	0
				1	49	22.10	21.70	22.14	0
				25	0	22.42	21.79	22.64	0
				25	13	22.31	21.60	22.31	0
				25	26	22.20	21.69	22.45	0
				50	0	22.31	21.57	22.53	0
			16QAM	1	1	22.57	22.07	22.70	0
			64QAM	1	1	21.85	21.26	21.88	0.5
			256QAM	1	1	19.69	19.09	20.16	2.5
		CP	QPSK	1	1	22.00	21.84	22.09	0

Band n77 DoD_30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631000	633334	635666	
						3465 ㎒	3500.01 ㎒	3534.99 ㎒	
30MHz	30	DFT-s	pi/2 BPSK	1	1	22.38	21.92	22.41	0
				1	39	22.12	21.62	22.58	0
				1	76	21.78	21.97	22.29	0
				36	0	22.25	21.83	22.33	0
				36	21	22.09	21.61	22.54	0
				36	42	21.85	21.64	22.17	0
				75	0	22.11	21.55	22.37	0
			QPSK	1	1	22.35	21.89	22.30	0
				1	39	22.09	21.57	22.55	0
				1	76	21.75	21.96	22.22	0
				36	0	22.29	21.84	22.71	0
				36	21	22.10	21.62	22.54	0
				36	42	21.85	21.69	22.59	0
				75	0	22.12	21.57	22.75	0
			16QAM	1	1	22.54	22.14	22.72	0
			64QAM	1	1	21.78	21.31	21.98	0.5
			256QAM	1	1	19.62	19.14	19.50	2.5
		CP	QPSK	1	1	21.86	21.45	22.07	0

Band n77 DoD_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631334		635332	
						3470.01 ㎒		3529.98 ㎒	
40MHz	30	DFT-s	pi/2 BPSK	1	1	22.53		21.82	0
				1	53	22.18		22.35	0
				1	104	21.88		22.25	0
				50	0	22.33		21.99	0
				50	28	22.12		22.36	0
				50	56	21.92		22.14	0
				100	0	22.14		22.16	0
			QPSK	1	1	22.52		21.65	0
				1	53	22.08		22.38	0
				1	104	21.83		22.20	0
				50	0	22.35		22.36	0
				50	28	22.12		22.36	0
				50	56	21.94		22.51	0
				100	0	22.14		22.57	0
			16QAM	1	1	22.72		22.00	0
			64QAM	1	1	21.93		21.31	0.5
			256QAM	1	1	19.75		19.90	2.5
		CP	QPSK	1	1	22.00		21.45	0

Band n77 DoD_50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631668		635000	
						3475.02 ㎒		3525 ㎒	
50MHz	30	DFT-s	pi/2 BPSK	1	1	22.47		21.48	0
				1	67	21.80		22.28	0
				1	131	21.60		22.22	0
				64	0	22.20		21.43	0
				64	35	21.77		22.27	0
				64	69	21.78		22.10	0
				128	0	21.83		22.04	0
			QPSK	1	1	22.50		21.41	0
				1	67	21.77		22.21	0
				1	131	21.55		22.16	0
				64	0	22.22		21.86	0
				64	35	21.79		22.26	0
				64	69	21.81		22.51	0
				128	0	21.86		22.44	0
			16QAM	1	1	22.67		21.80	0
			64QAM	1	1	21.88		21.02	0.5
			256QAM	1	1	19.73		19.59	2.5
		CP	QPSK	1	1	21.97		21.18	0

Band n77 DoD_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
60MHz	30	DFT-s	pi/2 BPSK	1	1		21.15		0
				1	81		21.63		0
				1	160		22.64		0
				81	0		21.88		0
				81	41		21.65		0
				81	81		22.03		0
				162	0		21.61		0
			QPSK	1	1		21.09		0
				1	81		21.59		0
				1	160		22.61		0
				81	0		21.95		0
				81	41		21.61		0
				81	81		22.03		0
				162	0		21.61		0
			16QAM	1	1		21.40		0
			64QAM	1	1		21.53		0.5
			256QAM	1	1		19.41		2.5
		CP	QPSK	1	1		21.11		0

Band n77 DoD_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
70MHz	30	DFT-s	pi/2 BPSK	1	1		21.44		0
				1	95		21.64		0
				1	187		22.66		0
				90	0		21.97		0
				90	50		21.59		0
				90	99		22.26		0
				180	0		21.56		0
			QPSK	1	1		21.43		0
				1	95		21.63		0
				1	187		22.65		0
				90	0		21.99		0
				90	50		21.62		0
				90	99		22.31		0
				180	0		21.56		0
			16QAM	1	1		21.16		0
			64QAM	1	1		21.88		0.5
			256QAM	1	1		19.72		2.5
		CP	QPSK	1	1		21.15		0

Band n77 DoD_80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
80MHz	30	DFT-s	pi/2 BPSK	1	1		21.60		0
				1	109		21.62		0
				1	215		22.78		0
				108	0		22.02		0
				108	55		21.59		0
				108	109		22.36		0
				216	0		21.59		0
			QPSK	1	1		21.61		0
				1	109		21.58		0
				1	215		22.76		0
				108	0		22.03		0
				108	55		21.64		0
				108	109		22.39		0
				216	0		21.62		0
			16QAM	1	1		21.81		0
			64QAM	1	1		22.09		0.5
			256QAM	1	1		19.85		2.5
		CP	QPSK	1	1		21.09		0

Band n77 DoD_90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
90MHz	30	DFT-s	pi/2 BPSK	1	1		21.84		0
				1	123		21.63		0
				1	243		22.77		0
				120	0		21.99		0
				120	63		21.61		0
				120	125		22.51		0
				243	0		21.62		0
			QPSK	1	1		21.84		0
				1	123		21.61		0
				1	243		22.72		0
				120	0		22.06		0
				120	63		21.61		0
				120	125		22.52		0
				243	0		21.61		0
			16QAM	1	1		22.02		0
			64QAM	1	1		22.20		0.5
			256QAM	1	1		20.07		2.5
		CP	QPSK	1	1		21.34		0

Band n77 DoD_100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
100MHz	30	DFT-s	pi/2 BPSK	1	1		21.84		0
				1	137		22.18		0
				1	271		22.63		0
				135	0		21.91		0
				135	69		21.41		0
				135	138		22.43		0
				270	0		21.43		0
			QPSK	1	1		21.80		0
				1	137		21.37		0
				1	271		22.60		0
				135	0		21.87		0
				135	69		22.42		0
				135	138		22.44		0
				270	0		21.41		0
			16QAM	1	1		22.06		0
			64QAM	1	1		21.21		0.5
			256QAM	1	1		19.24		2.5
		CP	QPSK	1	1		22.28		0

[NR Band n77 DOD Conducted Power] – Antenna : SRS

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 1

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		22.57		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		20.29		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		22.32		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100 MHz	30	Zad-off chu sequence		20.32		0

12. System Verification

12.1 Tissue Verification

The body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity.

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (㎒)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
01/20/2022	20.2	1900H	1850	1.362	41.509	1.400	40.000	-2.71	3.77
			1900	1.413	41.321	1.400	40.000	0.93	3.30
			1910	1.421	41.290	1.400	40.000	1.50	3.23
01/18/2022	21.4	1900H	1850	1.386	41.074	1.400	40.000	-1.00	2.69
			1900	1.438	40.888	1.400	40.000	2.71	2.22
			1910	1.446	40.858	1.400	40.000	3.29	2.14
02/23/2022	20.4	2600H	2500	1.902	38.530	1.855	39.140	2.53	-1.56
			2600	2.000	38.101	1.964	39.010	0.56	-0.75
			2690	2.085	37.662	2.062	38.894	1.12	-3.17
02/21/2022	18.9	2600H	2500	1.913	38.511	1.855	39.140	3.13	-1.61
			2600	2.037	38.068	1.964	39.010	3.72	-2.41
			2690	2.120	37.646	2.062	38.894	2.81	-3.21
02/21/2022	18.9	2600H	2500	1.878	39.165	1.855	39.140	1.24	0.06
			2600	1.975	38.719	1.964	39.010	0.56	-0.75
			2690	2.063	38.315	2.062	38.894	0.05	-1.49
02/20/2022	22.0	3400H~3550	3400	2.943	37.936	2.810	38.040	4.73	-0.27
			3500	2.983	37.589	2.913	37.930	2.40	-0.90
			3550	3.007	37.368	2.964	37.870	1.45	-1.33
02/19/2022	22.0	3700H~3970	3700	3.120	37.433	3.118	37.700	0.06	-0.71
			3750	3.171	37.422	3.169	37.640	0.06	-0.58
			3800	3.224	37.604	3.220	37.590	0.12	0.04
			3900	3.292	37.520	3.233	37.470	1.82	0.13
			3970	3.309	37.201	3.394	37.390	-2.50	-0.51
02/21/2022	20.1	3700H~3970	3700	3.129	37.348	3.118	37.700	0.35	-0.93
			3750	3.180	37.337	3.169	37.640	0.35	-0.80
			3800	3.233	37.520	3.220	37.590	0.40	-0.19
			3900	3.292	37.436	3.233	37.470	1.82	-0.09
			3970	3.295	37.116	3.394	37.390	-2.92	-0.73
02/22/2022	21.0	3400H~3970	3400	2.835	38.209	2.810	38.040	0.89	0.44
			3500	2.965	37.953	2.913	37.930	1.79	0.06
			3550	2.938	37.227	2.964	37.870	-0.88	-1.70
			3700	3.145	37.376	3.118	37.700	0.87	-0.86
			3800	3.239	37.470	3.169	37.640	2.21	-0.45
			3900	3.296	37.422	3.220	37.590	2.36	-0.45
			3970	3.296	37.218	3.233	37.470	1.95	-0.67

12.2 System Verification

Input Power: 50 mW

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]
1 900	01/18/2022	7681	5d061	Head	21.5	21.4	41.2	2.10	42.0	+ 1.94	± 10
2 600	02/23/2022	7654	1106	Head	20.5	20.4	56.3	2.75	55.0	- 2.31	± 10
2 600	02/21/2022	7654	1106	Head	19.0	18.9	56.3	2.86	57.2	+ 1.60	± 10
2 600	02/21/2022	7654	1106	Head	19.0	18.9	56.3	2.67	53.4	- 5.15	± 10
3 500	02/20/2022	3903	1132	Head	22.1	22.0	66.3	3.41	68.2	+ 2.87	± 10
3 500	02/22/2022	3903	1132	Head	21.1	21.0	66.3	3.06	61.2	-7.69	± 10
3 500	02/19/2022	3903	1132	Head	22.1	22.0	66.3	3.38	67.6	+ 1.96	± 10
3500	02/19/2022	3903	1132	Head	22.1	22.0	66.3	3.03	60.6	-8.60	± 10
3500	02/21/2022	7655	1132	Head	20.2	20.1	66.3	3.18	63.6	- 4.07	± 10
3 700	02/22/2022	3903	1105	Head	21.1	21.0	66.6	3.17	63.4	- 4.80	± 10
3 700	02/19/2022	3903	1105	Head	22.1	22.0	66.6	3.10	62.0	- 6.91	± 10
3 700	02/19/2022	3903	1105	Head	22.1	22.0	66.6	3.17	63.4	- 4.80	± 10
3 700	02/21/2022	7655	1105	Head	20.2	20.1	66.6	3.53	70.6	+ 6.01	± 10
3 900	02/22/2022	3903	1019	Head	21.1	21.0	70.4	3.56	71.2	+ 1.14	± 10
3 900	02/19/2022	3903	1019	Head	22.1	22.0	70.4	3.72	74.4	+ 5.68	± 10
3 900	02/19/2022	3903	1019	Head	22.1	22.0	70.4	3.21	64.2	- 8.81	± 10
3 900	02/21/2022	7655	1019	Head	20.2	20.1	70.4	3.19	63.8	- 9.38	± 10

System Verification Results – Extremity SAR

Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{10g} (SPEAG)	50mW Measured SAR_{10g}	1 W Normalized SAR_{10g}	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
1 900	01/20/2022	7681	5d061	Head	20.3	20.2	21.4	1.15	23.0	+ 7.48	± 10

12.3 System Verification Procedure

SAR measurement was prior to assessment, the system is verified to the ± 10 % of the specifications at each frequency Band by using the system verification kit. (Graphic Plots Attached)
- Cabling the system, using the verification kit equipment.
- Generate about 50 mW Input level from the signal generator to the Dipole Antenna.
- Dipole antenna was placed below the flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.
- The results are normalized to 1 W input power.

Note;
SAR Verification was performed according to the FCC KDB 865664 D01v01r04.

13. SAR Test Data Summary

13.1 SAR Measurement Results

NR Band n25 Head SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	0.07	Left Cheek	0	1	53	1:1	0.088	1.091	0.096	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	-0.10	Left Cheek	0	50	28	1:1	0.075	1.086	0.081	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	0.08	Left Tilt	0	1	53	1:1	0.037	1.091	0.040	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	0.10	Left Tilt	0	50	28	1:1	0.027	1.086	0.029	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	-0.11	Right Cheek	0	1	53	1:1	0.111	1.091	**0.121**	1
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	0.14	Right Cheek	0	50	28	1:1	0.100	1.086	0.109	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	0.18	Right Tilt	0	1	53	1:1	0.054	1.091	0.059	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	0.18	Right Tilt	0	50	28	1:1	0.042	1.086	0.046	-
1 905	381000	CP OFDM QPSK	20	22.5	22.13	-0.18	Right Cheek	1.5	1	1	1:1	0.058	1.089	0.063	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

NR Band n41 Head SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	-0.17	Left Cheek	0	1	1	1:4.37	0.796	1.040	0.828	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	0.01	Left Cheek	0	135	69	1:4.37	0.633	1.035	0.655	-
2592.99	518598	DFT-s OFDM QPSK	100	24.0	23.83	0.03	Left Cheek	1	270	0	1:4.37	0.532	1.040	0.553	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.08	Left Tilt	0	1	1	1:4.37	0.888	1.040	**0.923**	2
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	-0.06	Left Tilt	0	135	69	1:4.37	0.751	1.035	0.777	-
2592.99	518598	DFT-s OFDM QPSK	100	24.0	23.83	0.04	Left Tilt	1	270	0	1:4.37	0.582	1.040	0.605	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	-0.12	Right Cheek	0	1	1	1:4.37	0.500	1.040	0.520	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	-0.15	Right Cheek	0	135	69	1:4.37	0.509	1.035	0.527	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	-0.17	Right Tilt	0	1	1	1:4.37	0.626	1.040	0.651	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	0.07	Right Tilt	0	135	69	1:4.37	0.494	1.035	0.511	-
2592.99	518598	DFT-s OFDM QPSK	100	24.0	23.83	0.04	Right Tilt	1	270	0	1:4.37	0.354	1.040	0.368	-
2592.99	518598	CP OFDM QPSK	100	23.5	23.26	0.15	Left Tilt	1.5	1	1	1:4.37	0.726	1.057	0.767	-
2592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.06	Left Tilt	0	1	1	1:4.37	0.876	1.040	0.911	*
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

Note: * Data entry indicate Variability measurement.

NR Band n41 Head SAR SRS													
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(W/kg)		(W/kg)	
2592.99	518598	SRS 2	100	21.0	20.29	0.00	Left Cheek	0	1:3.5	0.033	1.178	0.039	-
2592.99	518598	SRS 2	100	21.0	20.29	-0.07	Left Tilt	0	1:3.5	0.029	1.178	0.034	-
2592.99	518598	SRS 2	100	21.0	20.29	-0.01	Right Cheek	0	1:3.5	0.00765	1.178	0.009	-
2592.99	518598	SRS 2	100	21.0	20.29	0.09	Right Tilt	0	1:3.5	0.015	1.178	0.018	-
2592.99	518598	SRS 3	100	22.0	21.12	-0.12	Left Cheek	0	1:3.5	0.245	1.225	0.300	-
2592.99	518598	SRS 3	100	22.0	21.12	-0.04	Left Tilt	0	1:3.5	0.246	1.225	0.301	-
2592.99	518598	SRS 3	100	22.0	21.12	-0.03	Right Cheek	0	1:3.5	0.356	1.225	0.436	-
2592.99	518598	SRS 3	100	22.0	21.12	0.10	Right Tilt	0	1:3.5	0.355	1.225	0.435	-
2592.99	518598	SRS 4	100	18.0	17.14	0.00	Left Cheek	0	1:3.5	0	1.219	0.000	-
2592.99	518598	SRS 4	100	18.0	17.14	0.00	Left Tilt	0	1:3.5	0.00364	1.219	0.004	-
2592.99	518598	SRS 4	100	18.0	17.14	0.00	Right Cheek	0	1:3.5	0	1.219	0.000	-
2592.99	518598	SRS 4	100	18.0	17.14	0.00	Right Tilt	0	1:3.5	0	1.219	0.000	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

NR Band n77 Head SAR														
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.14	0.13	Left Cheek	0	1	1	1:4.37	0.163	1.164	0.190	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.35	-0.18	Left Cheek	0	135	0	1:4.37	0.155	1.109	0.172	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.14	-0.02	Left Tilt	0	1	1	1:4.37	0.228	1.164	0.265	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.35	-0.03	Left Tilt	0	135	0	1:4.37	0.165	1.109	0.183	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.14	-0.19	Right Cheek	0	1	1	1:4.37	0.697	1.164	0.811	-
3 930	662000	DFT-s OFDMQPSK	100	22.8	21.83	-0.18	Right Cheek	0	1	271	1:4.37	0.628	1.250	0.785	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.35	0.11	Right Cheek	0	135	0	1:4.37	0.589	1.109	0.653	-
3 930	662000	DFT-s OFDM QPSK	100	22.8	21.48	-0.17	Right Cheek	0	135	69	1:4.37	0.578	1.355	0.783	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	21.82	-0.10	Right Cheek	0	270	0	1:4.37	0.668	1.253	0.837	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.14	0.08	Right Tilt	0	1	1	1:4.37	0.450	1.164	0.524	-
3 930	662000	DFT-s OFDM QPSK	100	22.8	21.83	-0.14	Right Tilt	0	1	271	1:4.37	0.330	1.250	0.413	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	22.35	0.13	Right Tilt	0	135	0	1:4.37	0.383	1.109	0.425	-
3 930	662000	DFT-s OFDM QPSK	100	22.8	21.48	0.18	Right Tilt	0	135	69	1:4.37	0.401	1.355	0.543	-
3 750	650000	DFT-s OFDM QPSK	100	22.8	21.82	0.17	Right Tilt	0	270	0	1:4.37	0.434	1.253	0.544	-
3 750	650000	CP OFDM QPSK	100	22.8	22.14	-0.16	Right Cheek	0	1	1	1:4.37	0.720	1.164	**0.838**	3
3 930	662000	CP OFDM QPSK	100	22.8	20.92	-0.19	Right Cheek	0	1	1	1:4.37	0.462	1.542	0.712	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

NR Band n77 Head SAR SRS													
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(W/kg)		(W/kg)	
3 930	6620000	SRS 2	100	21.0	19.48	-0.06	Left Cheek	0	1:3.5	0.091	1.419	0.129	-
3 930	6620000	SRS 2	100	21.0	19.48	-0.19	Left Tilt	0	1:3.5	0.035	1.419	0.050	-
3 930	6620000	SRS 2	100	21.0	19.48	0.00	Right Cheek	0	1:3.5	0.044	1.419	0.062	-
3 930	6620000	SRS 2	100	21.0	19.48	-0.07	Right Tilt	0	1:3.5	0.042	1.419	0.060	-
3 930	662000	SRS 3	100	22.5	21.55	-0.10	Left Cheek	0	1:3.5	0.074	1.245	0.092	-
3 930	662000	SRS 3	100	22.5	21.55	0.18	Left Tilt	0	1:3.5	0.077	1.245	0.096	-
3 930	662000	SRS 3	100	22.5	21.55	-0.11	Right Cheek	0	1:3.5	0.097	1.245	0.121	-
3 930	662000	SRS 3	100	22.5	21.55	-0.16	Right Tilt	0	1:3.5	0.092	1.245	0.114	-
3 930	662000	SRS 4	100	21.0	19.42	-0.00	Left Cheek	0	1:3.5	0	1.439	0.000	-
3 930	662000	SRS 4	100	21.0	19.42	-0.00	Left Tilt	0	1:3.5	0	1.439	0.000	-
3 930	662000	SRS 4	100	21.0	19.42	-0.00	Right Cheek	0	1:3.5	0	1.439	0.000	-
3 930	662000	SRS 4	100	21.0	19.42	-0.00	Right Tilt	0	1:3.5	0	1.439	0.000	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

NR Band n77 DoD Head SAR														
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.60	-0.02	Left Cheek	0	1	271	1:4.37	0.208	1.047	0.218	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.44	-0.07	Left Cheek	0	135	138	1:4.37	0.141	1.086	0.153	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.60	0.13	Left Tilt	0	1	271	1:4.37	0.246	1.047	0.258	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.44	0.02	Left Tilt	0	135	138	1:4.37	0.173	1.086	0.188	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.60	0.10	Right Cheek	0	1	271	1:4.37	0.594	1.047	0.622	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.44	0.10	Right Cheek	0	135	138	1:4.37	0.635	1.086	0.690	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.60	-0.13	Right Tilt	0	1	271	1:4.37	0.420	1.047	0.440	-
3500.01	633334	DFT-s OFDM QPSK	100	22.8	22.44	0.15	Right Tilt	0	135	138	1:4.37	0.326	1.086	0.354	-
3500.01	633334	CP OFDM QPSK	100	22.8	22.28	0.10	Right Cheek	0	1	1	1:4.37	0.762	1.127	**0.859**	4
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

NR Band n77 DoD Head SAR SRS													
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(W/kg)		(W/kg)	
3500.01	633334	SRS 2	100	21.0	20.29	0.00	Left Cheek	0	1:3.5	0.044	1.178	0.052	-
3500.01	633334	SRS 2	100	21.0	20.29	0.00	Left Tilt	0	1:3.5	0.000	1.178	0.000	-
3500.01	633334	SRS 2	100	21.0	20.29	0.00	Right Cheek	0	1:3.5	0.014	1.178	0.016	-
3500.01	633334	SRS 2	100	21.0	20.29	0.00	Right Tilt	0	1:3.5	0.013	1.178	0.015	-
3500.01	633334	SRS 3	100	22.5	22.32	0.15	Left Cheek	0	1:3.5	0.052	1.042	0.054	-
3500.01	633334	SRS 3	100	22.5	22.32	-0.19	Left Tilt	0	1:3.5	0.064	1.042	0.067	-
3500.01	633334	SRS 3	100	22.5	22.32	-0.12	Right Cheek	0	1:3.5	0.035	1.042	0.036	-
3500.01	633334	SRS 3	100	22.5	22.32	0.13	Right Tilt	0	1:3.5	0.040	1.042	0.042	-
3500.01	633334	SRS 4	100	21.0	20.32	-0.00	Left Cheek	0	1:3.5	0	1.169	0.000	-
3500.01	633334	SRS 4	100	21.0	20.32	-0.00	Left Tilt	0	1:3.5	0	1.169	0.000	-
3500.01	633334	SRS 4	100	21.0	20.32	-0.00	Right Cheek	0	1:3.5	0	1.169	0.000	-
3500.01	633334	SRS 4	100	21.0	20.32	-0.00	Right Tilt	0	1:3.5	0	1.169	0.000	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

13.2 Body-worn SAR Measurement Results

NR Band Body-Worn SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
1 905.00	381000	NR n25 DFT-s OFDM QPSK	20	24.0	23.62	0.05	Rear	0	1	53	1:1	15	0.428	1.091	0.467	-
1 905.00	381000		20	24.0	23.64	-0.10	Rear	0	50	28	1:1	15	0.439	1.086	**0.477**	5
1 905.00	381000		20	24.0	23.62	0.10	Front	0	1	53	1:1	15	0.384	1.091	0.419	-
1 905.00	381000		20	24.0	23.64	-0.11	Front	0	50	28	1:1	15	0.347	1.086	0.377	-
1 905.00	381000	CP OFDM QPSK	20	22.5	22.13	-0.13	Rear	1.5	1	1	1:1	15	0.300	1.089	0.327	-
2 592.99	518598	NR n41 DFT-s OFDM QPSK	100	25.0	24.83	0.10	Rear	0	1	1	1:4.37	15	0.111	1.040	0.115	-
2 592.99	518598		100	25.0	24.85	0.19	Rear	0	135	69	1:4.37	15	0.118	1.035	**0.122**	6
2 592.99	518598		100	25.0	24.83	-0.10	Front	0	1	1	1:4.37	15	0.068	1.040	0.071	-
2 592.99	518598		100	25.0	24.85	-0.11	Front	0	135	69	1:4.37	15	0.065	1.035	0.067	-
2 592.99	518598	CP OFDM QPSK	100	23.5	23.26	0.00	Rear	1.5	1	1	1:4.37	15	0.069	1.057	0.073	-
3 930.00	662000	NR n77 DFT-s OFDM QPSK	100	24.8	24.57	-0.15	Rear	0	1	1	1:4.37	15	0.083	1.054	0.088	-
3 930.00	662000		100	24.8	24.16	-0.12	Rear	0	135	69	1:4.37	15	0.083	1.159	0.096	-
3 930.00	662000		100	24.8	24.57	-0.18	Front	0	1	1	1:4.37	15	0.112	1.054	0.118	-
3 930.00	662000		100	24.8	24.16	-0.19	Front	0	135	69	1:4.37	15	0.114	1.159	**0.132**	7
3 750.00	650000	CP OFDM QPSK	100	23.3	22.69	-0.11	Front	1.5	1	1	1:4.37	15	0.067	1.151	0.077	-
3 500.01	633334	NR n77 DoD DFT-s OFDM QPSK	100	24.8	24.18	-0.04	Rear	0	1	137	1:4.37	15	0.169	1.153	**0.195**	8
3 500.01	633334		100	24.8	24.01	-0.06	Rear	0	135	69	1:4.37	15	0.158	1.199	0.190	-
3 500.01	633334		100	24.8	24.18	-0.05	Front	0	1	137	1:4.37	15	0.090	1.153	0.104	-
3 500.01	633334		100	24.8	24.01	-0.02	Front	0	135	69	1:4.37	15	0.110	1.199	0.132	-
3 500.01	633334	CP OFDM QPSK	100	23.3	22.36	-0.01	Rear	1.5	1	1	1:4.37	15	0.111	1.242	0.138	-
ANSI/ IEEE C95.1 –2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram								

NR Band Body-Worn SAR SRS														
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(mm)	(W/kg)		(W/kg)	
2 592.99	518598	NR n41 SRS 2	100	21.0	20.29	0.03	Rear	0	1:3.5	15	0.057	1.178	0.067	-
2 592.99	518598		100	21.0	20.29	-0.02	Front	0	1:3.5	15	0.030	1.178	0.035	-
3 930.00	662000	NR n77 SRS 2	100	23.0	22.25	-0.17	Rear	0	1:3.5	15	0.069	1.189	0.082	-
3 930.00	662000		100	23.0	22.25	0.16	Front	0	1:3.5	15	0.054	1.189	0.064	-
3 500.01	633334	NR n77 DoD SRS 2	100	23.0	22.33	-0.01	Rear	0	1:3.5	15	0.081	1.167	0.095	-
3 500.01	633334		100	23.0	22.33	0.00	Front	0	1:3.5	15	0.032	1.167	0.037	-
2 592.99	518598	NR n41 SRS 3	100	22.0	21.12	0.00	Rear	0	1:3.5	15	0.013	1.225	0.016	-
2 592.99	518598		100	22.0	21.12	-0.04	Front	0	1:3.5	15	0.041	1.225	0.050	-
3 930.00	662000	NR n77 SRS 3	100	24.5	24.15	-0.15	Rear	0	1:3.5	15	0.244	1.084	**0.264**	9
3 930.00	662000		100	24.5	24.15	0.00	Front	0	1:3.5	15	0.011	1.084	0.012	-
3 500.01	633334	NR n77 DoD SRS 3	100	24.5	24.42	0.02	Rear	0	1:3.5	15	0.158	1.019	0.161	-
3 500.01	633334		100	24.5	24.42	0.00	Front	0	1:3.5	15	0.010	1.019	0.010	-
2 592.99	518598	NR n41 SRS 4	100	18.0	17.14	-0.07	Rear	0	1:3.5	15	0.020	1.219	0.024	-
2 592.99	518598		100	18.0	17.14	0.00	Front	0	1:3.5	15	0.006	1.219	0.007	-
3 930.00	662000	NR n77 SRS 4	100	23.0	22.18	0.00	Rear	0	1:3.5	15	0.046	1.208	0.056	-
3 930.00	662000		100	23.0	22.18	0.00	Front	0	1:3.5	15	0.000108	1.208	0.000	-
3 500.01	633334	NR n77 DoD SRS 4	100	23.0	22.33	0.00	Rear	0	1:3.5	15	0.125	1.167	0.146	-
3 500.01	633334		100	23.0	22.33	0.00	Front	0	1:3.5	15	0.00617	1.167	0.007	-
ANSI/ IEEE C95.1 –2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

13.3 Hotspot SAR Measurement Results

NR Band n25 Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	-0.16	Rear	0	1	1	1:1	10	0.486	1.021	0.496	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.07	Rear	0	50	0	1:1	10	0.449	1.021	0.458	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.12	Front	0	1	1	1:1	10	0.392	1.021	0.400	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.07	Front	0	50	0	1:1	10	0.383	1.021	0.391	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.11	Left	0	1	1	1:1	10	0.109	1.021	0.111	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.05	Left	0	50	0	1:1	10	0.112	1.021	0.114	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	-0.08	Right	0	1	1	1:1	10	0.035	1.021	0.036	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.10	Right	0	50	0	1:1	10	0.032	1.021	0.033	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	-0.01	Bottom	0	1	1	1:1	10	0.834	1.021	0.851	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.58	-0.01	Bottom	0	1	1	1:1	10	0.958	1.102	1.055	-
1 905.0	381000	DFT-s OFDM QPSK	20	20.0	19.68	0.03	Bottom	0	1	1	1:1	10	0.993	1.076	1.069	-
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.91	0.01	Bottom	0	50	0	1:1	10	0.844	1.021	0.862	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.55	-0.03	Bottom	0	50	0	1:1	10	0.970	1.109	1.076	-
1 905.0	381000	DFT-s OFDM QPSK	20	20.0	19.84	0.10	Bottom	0	50	0	1:1	10	1.050	1.109	**1.164**	10
1 860.0	372000	DFT-s OFDM QPSK	20	20.0	19.83	-0.03	Bottom	0	100	0	1:1	10	0.929	1.040	0.966	-
1 860.0	372000	CP QPSK	20	20.0	19.80	-0.05	Bottom	0	1	1	1:1	10	0.818	1.047	0.857	-
1 882.5	376500	CP QPSK	20	20.0	19.58	0.10	Bottom	0	1	1	1:1	10	0.783	1.102	0.863	-
1 905.0	381000	CP QPSK	20	20.0	19.61	0.10	Bottom	0	1	1	1:1	10	0.808	1.094	0.884	-
1 905.0	381000	DFT-s OFDM QPSK	20	20.0	19.84	-0.04	Bottom	0	50	0	1:1	10	0.997	1.038	1.034	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram								

Note: * Data entry indicate Variability measurement.

NR Band n41 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.15	Rear	0	1	1	1:4.37	10	0.195	1.040	0.203	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	-0.01	Rear	0	135	69	1:4.37	10	0.152	1.035	0.157	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.10	Front	0	1	1	1:4.37	10	0.128	1.040	0.133	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	0.18	Front	0	135	69	1:4.37	10	0.112	1.035	0.116	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.18	Left	0	1	1	1:4.37	10	0.092	1.040	0.096	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	0.11	Left	0	135	69	1:4.37	10	0.072	1.035	0.075	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.14	Right	0	1	1	1:4.37	10	0.056	1.040	0.058	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	0.18	Right	0	135	69	1:4.37	10	0.054	1.035	0.056	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.83	0.06	Top	0	1	1	1:4.37	10	0.198	1.040	0.206	-
2 592.99	518598	DFT-s OFDM QPSK	100	25.0	24.85	-0.08	Top	0	135	69	1:4.37	10	0.201	1.035	**0.208**	11
2 592.99	518598	CP QPSK	100	23.5	23.26	0.00	Top	1.5	1	1	1:4.37	10	0.154	1.057	0.163	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

NR Band n41 Hotspot SAR_SRS 2

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(mm)	(W/kg)		(W/kg)	
3 930	662000	SRS 2	100	21.0	20.29	0.00	Rear	0	1:3.5	10	0.144	1.178	0.170	-
3 930	662000	SRS 2	100	21.0	20.29	-0.09	Front	0	1:3.5	10	0.067	1.178	0.079	-
3 930	662000	SRS 2	100	21.0	20.29	-0.07	Left	0	1:3.5	10	0.121	1.178	0.142	-
3 930	662000	SRS 2	100	21.0	20.29	0.12	Bottom	0	1:3.5	10	0.127	1.178	0.150	-
3 930	662000	SRS 3	100	22.0	21.12	0.00	Rear	0	1:3.5	10	0.020	1.225	0.016	-
3 930	662000	SRS 3	100	22.0	21.12	0.04	Front	0	1:3.5	10	0.095	1.225	0.116	-
3 930	662000	SRS 3	100	22.0	21.12	0.00	Right	0	1:3.5	10	0.00000822	1.225	0.000	-
3 930	662000	SRS 3	100	22.0	21.12	0.00	Top	0	1:3.5	10	0.000315	1.225	0.000	-
3 930	662000	SRS 4	100	18.0	17.14	-0.04	Rear	0	1:3.5	10	0.037	1.219	0.045	-
3 930	662000	SRS 4	100	18.0	17.14	0.00	Front	0	1:3.5	10	0.00905	1.219	0.011	-
3 930	662000	SRS 4	100	18.0	17.14	0.11	Left	0	1:3.5	10	0.00654	1.219	0.008	-
3 930	662000	SRS 4	100	18.0	17.14	-0.16	Top	0	1:3.5	10	0.00978	1.219	0.012	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

NR Band n77 Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.17	0.00	Rear	0	1	1	1:4.37	10	0.070	1.156	0.081	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.36	0.00	Rear	0	135	0	1:4.37	10	0.056	1.107	0.062	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.17	0.00	Front	0	1	1	1:4.37	10	0.024	1.156	0.028	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.36	0.00	Front	0	135	0	1:4.37	10	0.025	1.107	0.028	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.17	0.10	Left	0	1	1	1:4.37	10	0.197	1.156	0.228	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.36	0.16	Left	0	135	0	1:4.37	10	0.154	1.107	0.170	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.17	0.00	Right	0	1	1	1:4.37	10	0.00157	1.156	0.002	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.36	0.00	Right	0	135	0	1:4.37	10	0.0000993	1.107	0.000	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.17	0.11	Top	0	1	1	1:4.37	10	0.052	1.156	0.060	-
3 750	650000	DFT-s OFDM QPSK	100	20.8	20.36	0.10	Top	0	135	0	1:4.37	10	0.043	1.107	0.048	-
3 750	650000	CP QPSK	100	20.8	20.10	0.13	Left	0	1	1	1:4.37	10	0.228	1.175	**0.268**	12
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

NR Band n77 Hotspot SAR														
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(mm)	(W/kg)		(W/kg)	
3 930	662000	SRS 2	100	19.0	17.13	-0.03	Rear	0	1:3.5	10	0.093	1.538	0.143	-
3 930	662000	SRS 2	100	19.0	17.13	0.03	Front	0	1:3.5	10	0.065	1.538	0.100	-
3 930	662000	SRS 2	100	19.0	17.13	-0.01	Left	0	1:3.5	10	0.175	1.538	0.269	-
3 930	662000	SRS 2	100	19.0	17.13	0.18	Bottom	0	1:3.5	10	0.018	1.538	0.028	-
3 930	662000	SRS 3	100	20.5	19.39	-0.15	Rear	0	1:3.5	10	0.312	1.291	**0.403**	13
3 930	662000	SRS 3	100	20.5	19.39	-0.01	Front	0	1:3.5	10	0.010	1.291	0.013	-
3 930	662000	SRS 3	100	20.5	19.39	0.00	Right	0	1:3.5	10	0.00109	1.291	0.001	-
3 930	662000	SRS 3	100	20.5	19.39	0.13	Top	0	1:3.5	10	0.029	1.291	0.037	-
3 930	662000	SRS 4	100	19.0	18.35	-0.01	Rear	0	1:3.5	10	0.068	1.161	0.079	-
3 930	662000	SRS 4	100	19.0	18.35	0.00	Front	0	1:3.5	10	0.00182	1.161	0.002	-
3 930	662000	SRS 4	100	19.0	18.35	-0.01	Right	0	1:3.5	10	0.00308	1.161	0.004	-
3 930	662000	SRS 4	100	19.0	18.35	0.15	Bottom	0	1:3.5	10	0.011	1.161	0.013	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

NR Band n77 DoD Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.24	0.16	Rear	0	1	271	1:4.37	10	0.109	1.138	0.124	-
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.23	-0.15	Rear	0	135	138	1:4.37	10	0.172	1.140	0.196	-
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.24	-0.14	Front	0	1	271	1:4.37	10	0.074	1.138	0.084	-
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.23	-0.14	Front	0	135	138	1:4.37	10	0.113	1.140	0.129	-
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.24	-0.15	Left	0	1	271	1:4.37	10	0.215	1.138	0.245	-
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.23	-0.06	Left	0	135	138	1:4.37	10	0.275	1.140	**0.314**	14
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.24	-0.17	Top	0	1	271	1:4.37	10	0.00498	1.138	0.006	-
3 500.01	633334	DFT-s OFDM QPSK	100	20.8	20.23	-0.10	Top	0	135	138	1:4.37	10	0.00948	1.140	0.011	-
3 500.01	633334	CP QPSK	100	20.8	19.95	-0.12	Left	0	1	1	1:4.37	10	0.192	1.216	0.234	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

NR Band n77 DoD Hotspot SAR															
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)		(mm)	(W/kg)		(W/kg)	
3 500.01	633334	SRS 2	100	19.0	18.31	0.00	Rear	0	1:3.5	10	0.094	1.172	0.110	-
3 500.01	633334	SRS 2	100	19.0	18.31	0.00	Front	0	1:3.5	10	0.048	1.172	0.056	-
3 500.01	633334	SRS 2	100	19.0	18.31	-0.10	Left	0	1:3.5	10	0.073	1.172	0.086	-
3 500.01	633334	SRS 2	100	19.0	18.31	0.03	Bottom	0	1:3.5	10	0.024	1.172	0.028	-
3 500.01	633334	SRS 3	100	20.5	20.41	0.00	Rear	0	1:3.5	10	0.152	1.021	0.155	-
3 500.01	633334	SRS 3	100	20.5	20.41	0.00	Front	0	1:3.5	10	0.011	1.021	0.011	-
3 500.01	633334	SRS 3	100	20.5	20.41	0.00	Left	0	1:3.5	10	0.00692	1.021	0.007	-
3 500.01	633334	SRS 3	100	20.5	20.41	0.14	Top	0	1:3.5	10	0.038	1.021	0.039	-
3 500.01	633334	SRS 4	100	19.0	18.32	0.03	Rear	0	1:3.5	10	0.191	1.169	0.223	-
3 500.01	633334	SRS 4	100	19.0	18.32	0.00	Front	0	1:3.5	10	0.0095	1.169	0.011	-
3 500.01	633334	SRS 4	100	19.0	18.32	-0.04	Left	0	1:3.5	10	0.00791	1.169	0.009	-
3 500.01	633334	SRS 4	100	19.0	18.32	0.19	Bottom	0	1:3.5	10	0.024	1.169	0.028	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

13.4 Phablet SAR Measurement Considerations

Per FCC KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is greater than 160 mm and less than 200 mm. Therefore, extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR >1.2 W/kg. When hotspot mode applies, 10g SAR required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1g SAR > 1.2 W/kg.

13.5 Phablet SAR Measurement Results

NR Band n25 Phablet SAR 10g																	
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
1 860	372000	DFT-s OFDM QPSK	20	20.0	19.86	0.00	Rear	ON	0	1	1	1:1	0	1.230	1.033	1.270	-
1 860	372000	DFT-s OFDM QPSK	20	20.0	19.86	0.01	Rear	ON	0	50	0	1:1	0	1.240	1.033	**1.281**	15
1 860	372000	DFT-s OFDM QPSK	20	20.0	19.86	0.00	Front	ON	0	1	1	1:1	0	0.760	1.033	0.785	-
1 860	372000	DFT-s OFDM QPSK	20	20.0	19.86	0.00	Front	ON	0	50	0	1:1	0	0.899	1.033	0.928	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	0.12	Left	N/A	0	1	53	1:1	0	0.507	1.091	0.553	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	-0.10	Left	N/A	0	50	28	1:1	0	0.527	1.086	0.573	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	0.12	Right	N/A	0	1	53	1:1	0	0.186	1.091	0.203	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	0.12	Right	N/A	0	50	28	1:1	0	0.184	1.086	0.200	-
1 860	372000	DFT-s OFDM QPSK	20	20.0	19.86	0.04	Bottom	ON	0	1	1	1:1	0	1.050	1.033	1.084	-
1 860	372000	DFT-s OFDM QPSK	20	20.0	19.86	0.07	Bottom	ON	0	50	0	1:1	0	0.975	1.033	1.007	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	-0.15	Rear	OFF	0	1	53	1:1	9	0.655	1.091	0.715	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	-0.11	Rear	OFF	0	50	28	1:1	9	0.603	1.086	0.655	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	-0.10	Front	OFF	0	1	53	1:1	6	0.778	1.091	0.849	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	-0.12	Front	OFF	0	50	28	1:1	6	0.720	1.086	0.782	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.62	-0.04	Bottom	OFF	0	1	53	1:1	12	0.950	1.091	1.037	-
1 905	381000	DFT-s OFDM QPSK	20	24.0	23.64	-0.07	Bottom	OFF	0	50	28	1:1	12	0.952	1.086	1.034	-
1 905	381000	CP QPSK	20	20.0	19.90	-0.19	Rear	ON	0	50	0	1:1	0	0.867	1.023	0.887	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram									

13.6 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Procedure.
2. Batteries are fully charged at the beginning of the SAR measurements. A standard battery was used for all SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 15 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB 648474 D04v01r03, SAR was evaluated without a headset connected to the device. Since the standalone reported SAR was 1.2 W/kg, no additional SAR evaluation using a headset cable were required.
8. Per KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is > 160 mm and < 200 mm. When hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance) is 1 g SAR > 1.2 W/kg.
9. Per FCC KDB 865664 D01v01r04, variability SAR measurement were performed when the measured SAR results for a frequency Band were greater than or equal to 0.8 W/kg for 1g SAR and >2 for 10g SAR Please see Section 15 for variability analysis.
10. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
11. During SAR testing for the Hotspot conditions per KDB 941225 D06v02r01, the actual portable hotspotoperation (with actual simultaneous transmission of a transmitter with WiFi) was not activated.

NR Notes:

1. This device supports SA and NSA mode for NR implemeatation. In EN-DC Mode, NR operate with the LTE Bands shown in the NR FR1 checklist acting as anchor Bands.
2. Due to Limitations of the SAR measurement equipment, SAR testing for NR FDD and LTE achor Bands was performed separately using test mode (FTM) software.
3. More detailed specifications of the NR Bands are contained in the Technical descriptiondocument.
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. For NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power was evaluated for SAR tests.
6. For NR TDD bands, the output Power and SAR were measured by setting the maximum frame average power condition. When measuring SAR under the maximum frame average power condition of the NR TDD bands, the output Power of the LTE band, which is the Anchor band, was set to 0 without affecting the maximum output Power of the NR TDD bands.For more information, please refer to the technical document.
7. The output Power and SAR measurement of the SRS signal were measured by the manufacturer's FTM Mode

14. Simultaneous SAR Analysis

This device is containing transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per KDB Publication 447498 D01v06 4.3.2, simultaneous transmission SAR test exclusion may be applied when the sum of 1g SAR and 10g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6W/kg for 1g SAR and ≤4 W/kg for 10g SAR. The different test positions in an exposure condition may be considered collectively to determine SAR exclusion according to the sum of 1g or 10g SAR.

For the simultaneous transmission analysis of this model, it was evaluated by referring to the report [no:HCT-SR-2110-FC011-R3]of the original model.

14.1 Head SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Scenario with Head														
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	1+2+3	1+2+5	1+2+6	1+2+4+5	1+2+5+6	
NR n25 (2)	LTE 26(5)	Left Touch	0.096	0.193	0.234	0.131	0.129	0.282	0.523	0.418	0.571	0.549	0.700	NO
		Left Tilt	0.040	0.133	0.063	0.030	0.015	0.044	0.236	0.188	0.217	0.218	0.232	NO
		Right Touch	0.121	0.227	0.605	0.272	0.402	0.549	0.953	0.750	0.897	1.022	1.299	NO
		Right Tilt	0.059	0.122	0.117	0.054	0.034	0.110	0.298	0.215	0.291	0.269	0.325	NO
	LTE 12	Left Touch	0.096	0.195	0.234	0.131	0.129	0.282	0.525	0.420	0.573	0.551	0.702	NO
		Left Tilt	0.040	0.107	0.063	0.030	0.015	0.044	0.210	0.162	0.191	0.192	0.206	NO
		Right Touch	0.121	0.188	0.605	0.272	0.402	0.549	0.914	0.711	0.858	0.983	1.260	NO
		Right Tilt	0.059	0.082	0.117	0.054	0.034	0.110	0.258	0.175	0.251	0.229	0.285	NO
	LTE 13	Left Touch	0.096	0.229	0.234	0.131	0.129	0.282	0.559	0.454	0.607	0.585	0.736	NO
		Left Tilt	0.040	0.098	0.063	0.030	0.015	0.044	0.201	0.153	0.182	0.183	0.197	NO
		Right Touch	0.121	0.196	0.605	0.272	0.402	0.549	0.922	0.719	0.866	0.991	1.268	NO
		Right Tilt	0.059	0.109	0.117	0.054	0.034	0.110	0.285	0.202	0.278	0.256	0.312	NO
NR n41 (Sub #6)	LTE 66(4)	Left Touch	0.828	0.127	0.234	0.131	0.129	0.282	1.189	1.084	1.237	1.215	1.366	NO
		Left Tilt	0.923	0.047	0.063	0.030	0.015	0.044	1.033	0.985	1.014	1.015	1.029	NO
		Right Touch	0.527	0.127	0.605	0.272	0.402	0.549	1.259	1.056	1.203	1.328	1.605	YES
		Right Tilt	0.651	0.052	0.117	0.054	0.034	0.110	0.820	0.737	0.813	0.791	0.847	NO
	LTE 12	Left Touch	0.828	0.195	0.234	0.131	0.129	0.282	1.257	1.152	1.305	1.283	1.434	NO
		Left Tilt	0.923	0.107	0.063	0.030	0.015	0.044	1.093	1.045	1.074	1.075	1.089	NO
		Right Touch	0.527	0.188	0.605	0.272	0.402	0.549	1.320	1.117	1.264	1.389	1.666	YES
		Right Tilt	0.651	0.082	0.117	0.054	0.034	0.110	0.850	0.767	0.843	0.821	0.877	NO
NR n41 (Main #1-2)	LTE 66(4)	Left Touch	0.039	0.127	0.234	0.131	0.129	0.282	0.400	0.295	0.448	0.426	0.577	NO
		Left Tilt	0.034	0.047	0.063	0.030	0.015	0.044	0.144	0.096	0.125	0.126	0.140	NO
		Right Touch	0.009	0.127	0.605	0.272	0.402	0.549	0.741	0.538	0.685	0.810	1.087	NO
		Right Tilt	0.018	0.052	0.117	0.054	0.034	0.110	0.187	0.104	0.180	0.158	0.214	NO
	LTE 12	Left Touch	0.039	0.195	0.234	0.131	0.129	0.282	0.468	0.363	0.516	0.494	0.645	NO
		Left Tilt	0.034	0.107	0.063	0.030	0.015	0.044	0.204	0.156	0.185	0.186	0.200	NO
		Right Touch	0.009	0.188	0.605	0.272	0.402	0.549	0.802	0.599	0.746	0.871	1.148	NO
		Right Tilt	0.018	0.082	0.117	0.054	0.034	0.110	0.217	0.134	0.210	0.188	0.244	NO
NR n41 (Sub #3)	LTE 66(4)	Left Touch	0.300	0.127	0.234	0.131	0.129	0.282	0.661	0.556	0.709	0.687	0.838	NO
		Left Tilt	0.301	0.047	0.063	0.030	0.015	0.044	0.411	0.363	0.392	0.393	0.407	NO
		Right Touch	0.436	0.127	0.605	0.272	0.402	0.549	1.168	0.965	1.112	1.237	1.514	NO
		Right Tilt	0.435	0.052	0.117	0.054	0.034	0.110	0.604	0.521	0.597	0.575	0.631	NO
	LTE 12	Left Touch	0.300	0.195	0.234	0.131	0.129	0.282	0.729	0.624	0.777	0.755	0.906	NO
		Left Tilt	0.301	0.107	0.063	0.030	0.015	0.044	0.471	0.423	0.452	0.453	0.467	NO
		Right Touch	0.436	0.188	0.605	0.272	0.402	0.549	1.229	1.026	1.173	1.298	1.575	NO
		Right Tilt	0.435	0.082	0.117	0.054	0.034	0.110	0.634	0.551	0.627	0.605	0.661	NO

Simultaneous Transmission Scenario with Head														
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	1+2+3	1+2+5	1+2+6	1+2+4+5	1+2+5+6	
NR n41 (Main #3)	LTE 66(4)	Left Touch	0.000	0.127	0.234	0.131	0.129	0.282	0.361	0.256	0.409	0.387	0.538	NO
		Left Tilt	0.004	0.047	0.063	0.030	0.015	0.044	0.114	0.066	0.095	0.096	0.110	NO
		Right Touch	0.000	0.127	0.605	0.272	0.402	0.549	0.732	0.529	0.676	0.801	1.078	NO
		Right Tilt	0.000	0.052	0.117	0.054	0.034	0.110	0.169	0.086	0.162	0.140	0.196	NO
	LTE 12	Left Touch	0.000	0.195	0.234	0.131	0.129	0.282	0.429	0.324	0.477	0.455	0.606	NO
		Left Tilt	0.004	0.107	0.063	0.030	0.015	0.044	0.174	0.126	0.155	0.156	0.170	NO
		Right Touch	0.000	0.188	0.605	0.272	0.402	0.549	0.793	0.590	0.737	0.862	1.139	NO
		Right Tilt	0.000	0.082	0.117	0.054	0.034	0.110	0.199	0.116	0.192	0.170	0.226	NO
NR n77 (Sub #2)	LTE 25(2)	Left Touch	0.190	0.090	0.234	0.131	0.129	0.282	0.514	0.409	0.562	0.540	0.691	NO
		Left Tilt	0.264	0.036	0.063	0.030	0.015	0.044	0.363	0.315	0.344	0.345	0.359	NO
		Right Touch	0.838	0.094	0.605	0.272	0.402	0.549	1.537	1.334	1.481	1.606	1.883	YES
		Right Tilt	0.544	0.048	0.117	0.054	0.034	0.110	0.709	0.626	0.702	0.680	0.736	NO
	LTE 26(5)	Left Touch	0.190	0.193	0.234	0.131	0.129	0.282	0.617	0.512	0.665	0.643	0.794	NO
		Left Tilt	0.264	0.133	0.063	0.030	0.015	0.044	0.460	0.412	0.441	0.442	0.456	NO
		Right Touch	0.838	0.227	0.605	0.272	0.402	0.549	1.670	1.467	1.614	1.739	2.016	YES
		Right Tilt	0.544	0.122	0.117	0.054	0.034	0.110	0.783	0.700	0.776	0.754	0.810	NO
	LTE 12	Left Touch	0.190	0.195	0.234	0.131	0.129	0.282	0.619	0.514	0.667	0.645	0.796	NO
		Left Tilt	0.264	0.107	0.063	0.030	0.015	0.044	0.434	0.386	0.415	0.416	0.430	NO
		Right Touch	0.838	0.188	0.605	0.272	0.402	0.549	1.631	1.428	1.575	1.700	1.977	YES
		Right Tilt	0.544	0.082	0.117	0.054	0.034	0.110	0.743	0.660	0.736	0.714	0.770	NO
	LTE 13	Left Touch	0.190	0.229	0.234	0.131	0.129	0.282	0.653	0.548	0.701	0.679	0.830	NO
		Left Tilt	0.264	0.098	0.063	0.030	0.015	0.044	0.425	0.377	0.406	0.407	0.421	NO
		Right Touch	0.838	0.196	0.605	0.272	0.402	0.549	1.639	1.436	1.583	1.708	1.985	YES
		Right Tilt	0.544	0.109	0.117	0.054	0.034	0.110	0.770	0.687	0.763	0.741	0.797	NO
	LTE 66	Left Touch	0.190	0.127	0.234	0.131	0.129	0.282	0.551	0.446	0.599	0.577	0.728	NO
		Left Tilt	0.264	0.047	0.063	0.030	0.015	0.044	0.374	0.326	0.355	0.356	0.370	NO
		Right Touch	0.838	0.127	0.605	0.272	0.402	0.549	1.570	1.367	1.514	1.639	1.916	YES
		Right Tilt	0.544	0.052	0.117	0.054	0.034	0.110	0.713	0.630	0.706	0.684	0.740	NO
NR n77 (Main #3)	LTE 25(2)	Left Touch	0.129	0.090	0.234	0.131	0.129	0.282	0.453	0.348	0.501	0.479	0.630	NO
		Left Tilt	0.050	0.036	0.063	0.030	0.015	0.044	0.149	0.101	0.130	0.131	0.145	NO
		Right Touch	0.062	0.094	0.605	0.272	0.402	0.549	0.761	0.558	0.705	0.830	1.107	NO
		Right Tilt	0.060	0.048	0.117	0.054	0.034	0.110	0.225	0.142	0.218	0.196	0.252	NO
	LTE 26(5)	Left Touch	0.129	0.193	0.234	0.131	0.129	0.282	0.556	0.451	0.604	0.582	0.733	NO
		Left Tilt	0.050	0.133	0.063	0.030	0.015	0.044	0.246	0.198	0.227	0.228	0.242	NO
		Right Touch	0.062	0.227	0.605	0.272	0.402	0.549	0.894	0.691	0.838	0.963	1.240	NO
		Right Tilt	0.060	0.122	0.117	0.054	0.034	0.110	0.299	0.216	0.292	0.270	0.326	NO
	LTE 12	Left Touch	0.129	0.195	0.234	0.131	0.129	0.282	0.558	0.453	0.606	0.584	0.735	NO
		Left Tilt	0.050	0.107	0.063	0.030	0.015	0.044	0.220	0.172	0.201	0.202	0.216	NO
		Right Touch	0.062	0.188	0.605	0.272	0.402	0.549	0.855	0.652	0.799	0.924	1.201	NO
		Right Tilt	0.060	0.082	0.117	0.054	0.034	0.110	0.259	0.176	0.252	0.230	0.286	NO
	LTE 13	Left Touch	0.129	0.229	0.234	0.131	0.129	0.282	0.592	0.487	0.640	0.618	0.769	NO
		Left Tilt	0.050	0.098	0.063	0.030	0.015	0.044	0.211	0.163	0.192	0.193	0.207	NO
		Right Touch	0.062	0.196	0.605	0.272	0.402	0.549	0.863	0.660	0.807	0.932	1.209	NO
		Right Tilt	0.060	0.109	0.117	0.054	0.034	0.110	0.286	0.203	0.279	0.257	0.313	NO
	LTE 66	Left Touch	0.129	0.127	0.234	0.131	0.129	0.282	0.490	0.385	0.538	0.516	0.667	NO
		Left Tilt	0.050	0.047	0.063	0.030	0.015	0.044	0.160	0.112	0.141	0.142	0.156	NO
		Right Touch	0.062	0.127	0.605	0.272	0.402	0.549	0.794	0.591	0.738	0.863	1.140	NO
		Right Tilt	0.060	0.052	0.117	0.054	0.034	0.110	0.229	0.146	0.222	0.200	0.256	NO

Simultaneous Transmission Scenario with Head														
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	1+2+3	1+2+5	1+2+6	1+2+4+5	1+2+5+6	
NR n77 (Sub #8)	LTE 25(2)	Left Touch	0.092	0.090	0.234	0.131	0.129	0.282	0.416	0.311	0.464	0.442	0.593	NO
		Left Tilt	0.096	0.036	0.063	0.030	0.015	0.044	0.195	0.147	0.176	0.177	0.191	NO
		Right Touch	0.121	0.094	0.605	0.272	0.402	0.549	0.820	0.617	0.764	0.889	1.166	NO
		Right Tilt	0.114	0.048	0.117	0.054	0.034	0.110	0.279	0.196	0.272	0.250	0.306	NO
	LTE 26(5)	Left Touch	0.092	0.193	0.234	0.131	0.129	0.282	0.519	0.414	0.567	0.545	0.696	NO
		Left Tilt	0.096	0.133	0.063	0.030	0.015	0.044	0.292	0.244	0.273	0.274	0.288	NO
		Right Touch	0.121	0.227	0.605	0.272	0.402	0.549	0.953	0.750	0.897	1.022	1.299	NO
		Right Tilt	0.114	0.122	0.117	0.054	0.034	0.110	0.353	0.270	0.346	0.324	0.380	NO
	LTE 12	Left Touch	0.092	0.195	0.234	0.131	0.129	0.282	0.521	0.416	0.569	0.547	0.698	NO
		Left Tilt	0.096	0.107	0.063	0.030	0.015	0.044	0.266	0.218	0.247	0.248	0.262	NO
		Right Touch	0.121	0.188	0.605	0.272	0.402	0.549	0.914	0.711	0.858	0.983	1.260	NO
		Right Tilt	0.114	0.082	0.117	0.054	0.034	0.110	0.313	0.230	0.306	0.284	0.340	NO
	LTE 13	Left Touch	0.092	0.229	0.234	0.131	0.129	0.282	0.555	0.450	0.603	0.581	0.732	NO
		Left Tilt	0.096	0.098	0.063	0.030	0.015	0.044	0.257	0.209	0.238	0.239	0.253	NO
		Right Touch	0.121	0.196	0.605	0.272	0.402	0.549	0.922	0.719	0.866	0.991	1.268	NO
		Right Tilt	0.114	0.109	0.117	0.054	0.034	0.110	0.340	0.257	0.333	0.311	0.367	NO
	LTE 66	Left Touch	0.092	0.127	0.234	0.131	0.129	0.282	0.453	0.348	0.501	0.479	0.630	NO
		Left Tilt	0.096	0.047	0.063	0.030	0.015	0.044	0.206	0.158	0.187	0.188	0.202	NO
		Right Touch	0.121	0.127	0.605	0.272	0.402	0.549	0.853	0.650	0.797	0.922	1.199	NO
		Right Tilt	0.114	0.052	0.117	0.054	0.034	0.110	0.283	0.200	0.276	0.254	0.310	NO
NR n77 (Main #4)	LTE 25(2)	Left Touch	0.000	0.090	0.234	0.131	0.129	0.282	0.324	0.219	0.372	0.350	0.501	NO
		Left Tilt	0.000	0.036	0.063	0.030	0.015	0.044	0.099	0.051	0.080	0.081	0.095	NO
		Right Touch	0.000	0.094	0.605	0.272	0.402	0.549	0.699	0.496	0.643	0.768	1.045	NO
		Right Tilt	0.000	0.048	0.117	0.054	0.034	0.110	0.165	0.082	0.158	0.136	0.192	NO
	LTE 26(5)	Left Touch	0.000	0.193	0.234	0.131	0.129	0.282	0.427	0.322	0.475	0.453	0.604	NO
		Left Tilt	0.000	0.133	0.063	0.030	0.015	0.044	0.196	0.148	0.177	0.178	0.192	NO
		Right Touch	0.000	0.227	0.605	0.272	0.402	0.549	0.832	0.629	0.776	0.901	1.178	NO
		Right Tilt	0.000	0.122	0.117	0.054	0.034	0.110	0.239	0.156	0.232	0.210	0.266	NO
	LTE 12	Left Touch	0.000	0.195	0.234	0.131	0.129	0.282	0.429	0.324	0.477	0.455	0.606	NO
		Left Tilt	0.000	0.107	0.063	0.030	0.015	0.044	0.170	0.122	0.151	0.152	0.166	NO
		Right Touch	0.000	0.188	0.605	0.272	0.402	0.549	0.793	0.590	0.737	0.862	1.139	NO
		Right Tilt	0.000	0.082	0.117	0.054	0.034	0.110	0.199	0.116	0.192	0.170	0.226	NO
	LTE 13	Left Touch	0.000	0.229	0.234	0.131	0.129	0.282	0.463	0.358	0.511	0.489	0.640	NO
		Left Tilt	0.000	0.098	0.063	0.030	0.015	0.044	0.161	0.113	0.142	0.143	0.157	NO
		Right Touch	0.000	0.196	0.605	0.272	0.402	0.549	0.801	0.598	0.745	0.870	1.147	NO
		Right Tilt	0.000	0.109	0.117	0.054	0.034	0.110	0.226	0.143	0.219	0.197	0.253	NO
	LTE 66	Left Touch	0.000	0.127	0.234	0.131	0.129	0.282	0.361	0.256	0.409	0.387	0.538	NO
		Left Tilt	0.000	0.047	0.063	0.030	0.015	0.044	0.110	0.062	0.091	0.092	0.106	NO
		Right Touch	0.000	0.127	0.605	0.272	0.402	0.549	0.732	0.529	0.676	0.801	1.078	NO
		Right Tilt	0.000	0.052	0.117	0.054	0.034	0.110	0.169	0.086	0.162	0.140	0.196	NO

Simultaneous Transmission Scenario with Head														
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	1+2+3	1+2+5	1+2+6	1+2+4+5	1+2+5+6	
NR n77 DoD (Main #3)	LTE 25(2)	Left Touch	0.218	0.090	0.234	0.131	0.129	0.282	0.542	0.437	0.590	0.568	0.719	NO
		Left Tilt	0.258	0.036	0.063	0.030	0.015	0.044	0.357	0.309	0.338	0.339	0.353	NO
		Right Touch	0.859	0.094	0.605	0.272	0.402	0.549	1.558	1.355	1.502	1.627	1.904	YES
		Right Tilt	0.440	0.048	0.117	0.054	0.034	0.110	0.605	0.522	0.598	0.576	0.632	NO
	LTE 26(5)	Left Touch	0.218	0.193	0.234	0.131	0.129	0.282	0.645	0.540	0.693	0.671	0.822	NO
		Left Tilt	0.258	0.133	0.063	0.030	0.015	0.044	0.454	0.406	0.435	0.436	0.450	NO
		Right Touch	0.859	0.227	0.605	0.272	0.402	0.549	1.691	1.488	1.635	1.760	2.037	YES
		Right Tilt	0.440	0.122	0.117	0.054	0.034	0.110	0.679	0.596	0.672	0.650	0.706	NO
	LTE 12	Left Touch	0.218	0.195	0.234	0.131	0.129	0.282	0.647	0.542	0.695	0.673	0.824	NO
		Left Tilt	0.258	0.107	0.063	0.030	0.015	0.044	0.428	0.380	0.409	0.410	0.424	NO
		Right Touch	0.859	0.188	0.605	0.272	0.402	0.549	1.652	1.449	1.596	1.721	1.998	YES
		Right Tilt	0.440	0.082	0.117	0.054	0.034	0.110	0.639	0.556	0.632	0.610	0.666	NO
	LTE 13	Left Touch	0.218	0.229	0.234	0.131	0.129	0.282	0.681	0.576	0.729	0.707	0.858	NO
		Left Tilt	0.258	0.098	0.063	0.030	0.015	0.044	0.419	0.371	0.400	0.401	0.415	NO
		Right Touch	0.859	0.196	0.605	0.272	0.402	0.549	1.660	1.457	1.604	1.729	2.006	YES
		Right Tilt	0.440	0.109	0.117	0.054	0.034	0.110	0.666	0.583	0.659	0.637	0.693	NO
	LTE 66	Left Touch	0.218	0.127	0.234	0.131	0.129	0.282	0.579	0.474	0.627	0.605	0.756	NO
		Left Tilt	0.258	0.047	0.063	0.030	0.015	0.044	0.368	0.320	0.349	0.350	0.364	NO
		Right Touch	0.859	0.127	0.605	0.272	0.402	0.549	1.591	1.388	1.535	1.660	1.937	YES
		Right Tilt	0.440	0.052	0.117	0.054	0.034	0.110	0.609	0.526	0.602	0.580	0.636	NO
NR n77 DoD (Main #3)	LTE 25(2)	Left Touch	0.052	0.090	0.234	0.131	0.129	0.282	0.376	0.271	0.424	0.402	0.553	NO
		Left Tilt	0.000	0.036	0.063	0.030	0.015	0.044	0.099	0.051	0.080	0.081	0.095	NO
		Right Touch	0.016	0.094	0.605	0.272	0.402	0.549	0.715	0.512	0.659	0.784	1.061	NO
		Right Tilt	0.015	0.048	0.117	0.054	0.034	0.110	0.180	0.097	0.173	0.151	0.207	NO
	LTE 26(5)	Left Touch	0.052	0.193	0.234	0.131	0.129	0.282	0.479	0.374	0.527	0.505	0.656	NO
		Left Tilt	0.000	0.133	0.063	0.030	0.015	0.044	0.196	0.148	0.177	0.178	0.192	NO
		Right Touch	0.016	0.227	0.605	0.272	0.402	0.549	0.848	0.645	0.792	0.917	1.194	NO
		Right Tilt	0.015	0.122	0.117	0.054	0.034	0.110	0.254	0.171	0.247	0.225	0.281	NO
	LTE 12	Left Touch	0.052	0.195	0.234	0.131	0.129	0.282	0.481	0.376	0.529	0.507	0.658	NO
		Left Tilt	0.000	0.107	0.063	0.030	0.015	0.044	0.170	0.122	0.151	0.152	0.166	NO
		Right Touch	0.016	0.188	0.605	0.272	0.402	0.549	0.809	0.606	0.753	0.878	1.155	NO
		Right Tilt	0.015	0.082	0.117	0.054	0.034	0.110	0.214	0.131	0.207	0.185	0.241	NO
	LTE 13	Left Touch	0.052	0.229	0.234	0.131	0.129	0.282	0.515	0.410	0.563	0.541	0.692	NO
		Left Tilt	0.000	0.098	0.063	0.030	0.015	0.044	0.161	0.113	0.142	0.143	0.157	NO
		Right Touch	0.016	0.196	0.605	0.272	0.402	0.549	0.817	0.614	0.761	0.886	1.163	NO
		Right Tilt	0.015	0.109	0.117	0.054	0.034	0.110	0.241	0.158	0.234	0.212	0.268	NO
	LTE 66	Left Touch	0.052	0.127	0.234	0.131	0.129	0.282	0.413	0.308	0.461	0.439	0.590	NO
		Left Tilt	0.000	0.047	0.063	0.030	0.015	0.044	0.110	0.062	0.091	0.092	0.106	NO
		Right Touch	0.016	0.127	0.605	0.272	0.402	0.549	0.748	0.545	0.692	0.817	1.094	NO
		Right Tilt	0.015	0.052	0.117	0.054	0.034	0.110	0.184	0.101	0.177	0.155	0.211	NO

Simultaneous Transmission Scenario with Head														
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	1+2+3	1+2+5	1+2+6	1+2+4+5	1+2+5+6	
NR n77 DoD (Sub #8)	LTE 25(2)	Left Touch	0.054	0.090	0.234	0.131	0.129	0.282	0.378	0.273	0.426	0.404	0.555	NO
		Left Tilt	0.067	0.036	0.063	0.030	0.015	0.044	0.166	0.118	0.147	0.148	0.162	NO
		Right Touch	0.036	0.094	0.605	0.272	0.402	0.549	0.735	0.532	0.679	0.804	1.081	NO
		Right Tilt	0.042	0.048	0.117	0.054	0.034	0.110	0.207	0.124	0.200	0.178	0.234	NO
	LTE 26(5)	Left Touch	0.054	0.193	0.234	0.131	0.129	0.282	0.481	0.376	0.529	0.507	0.658	NO
		Left Tilt	0.067	0.133	0.063	0.030	0.015	0.044	0.263	0.215	0.244	0.245	0.259	NO
		Right Touch	0.036	0.227	0.605	0.272	0.402	0.549	0.868	0.665	0.812	0.937	1.214	NO
		Right Tilt	0.042	0.122	0.117	0.054	0.034	0.110	0.281	0.198	0.274	0.252	0.308	NO
	LTE 12	Left Touch	0.054	0.195	0.234	0.131	0.129	0.282	0.483	0.378	0.531	0.509	0.660	NO
		Left Tilt	0.067	0.107	0.063	0.030	0.015	0.044	0.237	0.189	0.218	0.219	0.233	NO
		Right Touch	0.036	0.188	0.605	0.272	0.402	0.549	0.829	0.626	0.773	0.898	1.175	NO
		Right Tilt	0.042	0.082	0.117	0.054	0.034	0.110	0.241	0.158	0.234	0.212	0.268	NO
	LTE 13	Left Touch	0.054	0.229	0.234	0.131	0.129	0.282	0.517	0.412	0.565	0.543	0.694	NO
		Left Tilt	0.067	0.098	0.063	0.030	0.015	0.044	0.228	0.180	0.209	0.210	0.224	NO
		Right Touch	0.036	0.196	0.605	0.272	0.402	0.549	0.837	0.634	0.781	0.906	1.183	NO
		Right Tilt	0.042	0.109	0.117	0.054	0.034	0.110	0.268	0.185	0.261	0.239	0.295	NO
	LTE 66	Left Touch	0.054	0.127	0.234	0.131	0.129	0.282	0.415	0.310	0.463	0.441	0.592	NO
		Left Tilt	0.067	0.047	0.063	0.030	0.015	0.044	0.177	0.129	0.158	0.159	0.173	NO
		Right Touch	0.036	0.127	0.605	0.272	0.402	0.549	0.768	0.565	0.712	0.837	1.114	NO
		Right Tilt	0.042	0.052	0.117	0.054	0.034	0.110	0.211	0.128	0.204	0.182	0.238	NO
NR n77 DoD (Main #4)	LTE 25(2)	Left Touch	0.000	0.090	0.234	0.131	0.129	0.282	0.324	0.219	0.372	0.350	0.501	NO
		Left Tilt	0.000	0.036	0.063	0.030	0.015	0.044	0.099	0.051	0.080	0.081	0.095	NO
		Right Touch	0.000	0.094	0.605	0.272	0.402	0.549	0.699	0.496	0.643	0.768	1.045	NO
		Right Tilt	0.000	0.048	0.117	0.054	0.034	0.110	0.165	0.082	0.158	0.136	0.192	NO
	LTE 26(5)	Left Touch	0.000	0.193	0.234	0.131	0.129	0.282	0.427	0.322	0.475	0.453	0.604	NO
		Left Tilt	0.000	0.133	0.063	0.030	0.015	0.044	0.196	0.148	0.177	0.178	0.192	NO
		Right Touch	0.000	0.227	0.605	0.272	0.402	0.549	0.832	0.629	0.776	0.901	1.178	NO
		Right Tilt	0.000	0.122	0.117	0.054	0.034	0.110	0.239	0.156	0.232	0.210	0.266	NO
	LTE 12	Left Touch	0.000	0.195	0.234	0.131	0.129	0.282	0.429	0.324	0.477	0.455	0.606	NO
		Left Tilt	0.000	0.107	0.063	0.030	0.015	0.044	0.170	0.122	0.151	0.152	0.166	NO
		Right Touch	0.000	0.188	0.605	0.272	0.402	0.549	0.793	0.590	0.737	0.862	1.139	NO
		Right Tilt	0.000	0.082	0.117	0.054	0.034	0.110	0.199	0.116	0.192	0.170	0.226	NO
	LTE 13	Left Touch	0.000	0.229	0.234	0.131	0.129	0.282	0.463	0.358	0.511	0.489	0.640	NO
		Left Tilt	0.000	0.098	0.063	0.030	0.015	0.044	0.161	0.113	0.142	0.143	0.157	NO
		Right Touch	0.000	0.196	0.605	0.272	0.402	0.549	0.801	0.598	0.745	0.870	1.147	NO
		Right Tilt	0.000	0.109	0.117	0.054	0.034	0.110	0.226	0.143	0.219	0.197	0.253	NO
	LTE 66	Left Touch	0.000	0.127	0.234	0.131	0.129	0.282	0.361	0.256	0.409	0.387	0.538	NO
		Left Tilt	0.000	0.047	0.063	0.030	0.015	0.044	0.110	0.062	0.091	0.092	0.106	NO
		Right Touch	0.000	0.127	0.605	0.272	0.402	0.549	0.732	0.529	0.676	0.801	1.078	NO
		Right Tilt	0.000	0.052	0.117	0.054	0.034	0.110	0.169	0.086	0.162	0.140	0.196	NO

14.2 Body-Worn SAR Simultaneous Transmission Analysis.

Simultaneous radiation evaluation of body horn in RSDB mode of 2.4Ghz WLAN was evaluated as a result of body horn measurement in max mode of 2.4GHz WLAN, which is a higher output.

Simultaneous Transmission Scenario with BodyWorn															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes /No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n25(2)	LTE 26(5)	Rear	0.477	0.341	0.281	0.281	0.541	0.216	0.098	1.099	1.359	0.916	1.315	1.457	NO
		Front	0.419	0.366	0.281	0.281	0.128	0.049	0.071	1.066	0.913	0.856	1.115	0.984	NO
	LTE 12	Rear	0.477	0.265	0.281	0.281	0.541	0.216	0.098	1.023	1.283	0.840	1.239	1.381	NO
		Front	0.419	0.239	0.281	0.281	0.128	0.049	0.071	0.939	0.786	0.729	0.988	0.857	NO
	LTE 13	Rear	0.477	0.337	0.281	0.281	0.541	0.216	0.098	1.095	1.355	0.912	1.311	1.453	NO
		Front	0.419	0.328	0.281	0.281	0.128	0.049	0.071	1.028	0.875	0.818	1.077	0.946	NO
NR n41 (Sub #6)	LTE 66(4)	Rear	0.121	0.630	0.281	0.281	0.541	0.216	0.098	1.032	1.292	0.849	1.248	1.390	NO
		Front	0.071	0.539	0.281	0.281	0.128	0.049	0.071	0.891	0.738	0.681	0.940	0.809	NO
	LTE 12	Rear	0.121	0.265	0.281	0.281	0.541	0.216	0.098	0.667	0.927	0.484	0.883	1.025	NO
		Front	0.071	0.239	0.281	0.281	0.128	0.049	0.071	0.591	0.438	0.381	0.640	0.509	NO
NR n41 (Main 1-2)	LTE 66(4)	Rear	0.067	0.630	0.281	0.281	0.541	0.216	0.098	0.978	1.238	0.795	1.194	1.336	NO
		Front	0.035	0.539	0.281	0.281	0.128	0.049	0.071	0.855	0.702	0.645	0.904	0.773	NO
	LTE 12	Rear	0.067	0.265	0.281	0.281	0.541	0.216	0.098	0.613	0.873	0.430	0.829	0.971	NO
		Front	0.035	0.239	0.281	0.281	0.128	0.049	0.071	0.555	0.402	0.345	0.604	0.473	NO
NR n41 (Sub #3)	LTE 66(4)	Rear	0.016	0.630	0.281	0.281	0.541	0.216	0.098	0.927	1.187	0.744	1.143	1.285	NO
		Front	0.050	0.539	0.281	0.281	0.128	0.049	0.071	0.870	0.717	0.660	0.919	0.788	NO
	LTE 12	Rear	0.016	0.265	0.281	0.281	0.541	0.216	0.098	0.562	0.822	0.379	0.778	0.920	NO
		Front	0.050	0.239	0.281	0.281	0.128	0.049	0.071	0.570	0.417	0.360	0.619	0.488	NO
NR n41 (Main #3)	LTE 66(4)	Rear	0.024	0.630	0.281	0.281	0.541	0.216	0.098	0.935	1.195	0.752	1.151	1.293	NO
		Front	0.007	0.539	0.281	0.281	0.128	0.049	0.071	0.827	0.674	0.617	0.876	0.745	NO
	LTE 12	Rear	0.024	0.265	0.281	0.281	0.541	0.216	0.098	0.570	0.830	0.387	0.786	0.928	NO
		Front	0.007	0.239	0.281	0.281	0.128	0.049	0.071	0.527	0.374	0.317	0.576	0.445	NO
NR n77 (Sub #2)	LTE 25(2)	Rear	0.096	0.478	0.281	0.281	0.541	0.216	0.098	0.855	1.115	0.672	1.071	1.213	NO
		Front	0.132	0.462	0.281	0.281	0.128	0.049	0.071	0.875	0.722	0.665	0.924	0.793	NO
	LTE 26(5)	Rear	0.096	0.341	0.281	0.281	0.541	0.216	0.098	0.718	0.978	0.535	0.934	1.076	NO
		Front	0.132	0.366	0.281	0.281	0.128	0.049	0.071	0.779	0.626	0.569	0.828	0.697	NO
	LTE 12	Rear	0.096	0.265	0.281	0.281	0.541	0.216	0.098	0.642	0.902	0.459	0.858	1.000	NO
		Front	0.132	0.239	0.281	0.281	0.128	0.049	0.071	0.652	0.499	0.442	0.701	0.570	NO
	LTE 13	Rear	0.096	0.337	0.281	0.281	0.541	0.216	0.098	0.714	0.974	0.531	0.930	1.072	NO
		Front	0.132	0.328	0.281	0.281	0.128	0.049	0.071	0.741	0.588	0.531	0.790	0.659	NO
	LTE 66	Rear	0.096	0.630	0.281	0.281	0.541	0.216	0.098	1.007	1.267	0.824	1.223	1.365	NO
		Front	0.132	0.639	0.281	0.281	0.128	0.049	0.071	1.052	0.899	0.842	1.101	0.970	NO
NR n77 (Main #3)	LTE 25(2)	Rear	0.082	0.478	0.281	0.281	0.541	0.216	0.098	0.841	1.101	0.658	1.057	1.199	NO
		Front	0.064	0.462	0.281	0.281	0.128	0.049	0.071	0.807	0.654	0.597	0.856	0.725	NO
	LTE 26(5)	Rear	0.082	0.341	0.281	0.281	0.541	0.216	0.098	0.704	0.964	0.521	0.920	1.062	NO
		Front	0.064	0.366	0.281	0.281	0.128	0.049	0.071	0.711	0.558	0.501	0.760	0.629	NO
	LTE 12	Rear	0.082	0.265	0.281	0.281	0.541	0.216	0.098	0.628	0.888	0.445	0.844	0.986	NO
		Front	0.064	0.239	0.281	0.281	0.128	0.049	0.071	0.584	0.431	0.374	0.633	0.502	NO
	LTE 13	Rear	0.082	0.337	0.281	0.281	0.541	0.216	0.098	0.700	0.960	0.517	0.916	1.058	NO
		Front	0.064	0.328	0.281	0.281	0.128	0.049	0.071	0.673	0.520	0.463	0.722	0.591	NO
	LTE 66	Rear	0.082	0.630	0.281	0.281	0.541	0.216	0.098	0.993	1.253	0.810	1.209	1.351	NO
		Front	0.064	0.639	0.281	0.281	0.128	0.049	0.071	0.984	0.831	0.774	1.033	0.902	NO

Simultaneous Transmission Scenario with BodyWorn															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes /No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 (Sub #8)	LTE 25(2)	Rear	0.264	0.478	0.281	0.281	0.541	0.216	0.098	1.023	1.283	0.840	1.239	1.381	NO
		Front	0.012	0.462	0.281	0.281	0.128	0.049	0.071	0.755	0.602	0.545	0.804	0.673	NO
	LTE 26(5)	Rear	0.264	0.341	0.281	0.281	0.541	0.216	0.098	0.886	1.146	0.703	1.102	1.244	NO
		Front	0.012	0.366	0.281	0.281	0.128	0.049	0.071	0.659	0.506	0.449	0.708	0.577	NO
	LTE 12	Rear	0.264	0.265	0.281	0.281	0.541	0.216	0.098	0.810	1.070	0.627	1.026	1.168	NO
		Front	0.012	0.239	0.281	0.281	0.128	0.049	0.071	0.532	0.379	0.322	0.581	0.450	NO
	LTE 13	Rear	0.264	0.337	0.281	0.281	0.541	0.216	0.098	0.882	1.142	0.699	1.098	1.240	NO
		Front	0.012	0.328	0.281	0.281	0.128	0.049	0.071	0.621	0.468	0.411	0.670	0.539	NO
	LTE 66	Rear	0.264	0.630	0.281	0.281	0.541	0.216	0.098	1.175	1.435	0.992	1.391	1.533	NO
		Front	0.012	0.639	0.281	0.281	0.128	0.049	0.071	0.932	0.779	0.722	0.981	0.850	NO
NR n77 (Main #4)	LTE 25(2)	Rear	0.056	0.478	0.281	0.281	0.541	0.216	0.098	0.815	1.075	0.632	1.031	1.173	NO
		Front	0.000	0.462	0.281	0.281	0.128	0.049	0.071	0.743	0.590	0.533	0.792	0.661	NO
	LTE 26(5)	Rear	0.056	0.341	0.281	0.281	0.541	0.216	0.098	0.678	0.938	0.495	0.894	1.036	NO
		Front	0.000	0.366	0.281	0.281	0.128	0.049	0.071	0.647	0.494	0.437	0.696	0.565	NO
	LTE 12	Rear	0.056	0.265	0.281	0.281	0.541	0.216	0.098	0.602	0.862	0.419	0.818	0.960	NO
		Front	0.000	0.239	0.281	0.281	0.128	0.049	0.071	0.520	0.367	0.310	0.569	0.438	NO
	LTE 13	Rear	0.056	0.337	0.281	0.281	0.541	0.216	0.098	0.674	0.934	0.491	0.890	1.032	NO
		Front	0.000	0.328	0.281	0.281	0.128	0.049	0.071	0.609	0.456	0.399	0.658	0.527	NO
	LTE 66	Rear	0.056	0.630	0.281	0.281	0.541	0.216	0.098	0.967	1.227	0.784	1.183	1.325	NO
		Front	0.000	0.639	0.281	0.281	0.128	0.049	0.071	0.920	0.767	0.710	0.969	0.838	NO
NR n77 DoD (Sub #2)	LTE 25(2)	Rear	0.195	0.478	0.281	0.281	0.541	0.216	0.098	0.954	1.214	0.771	1.170	1.312	NO
		Front	0.132	0.462	0.281	0.281	0.128	0.049	0.071	0.875	0.722	0.665	0.924	0.793	NO
	LTE 26(5)	Rear	0.195	0.341	0.281	0.281	0.541	0.216	0.098	0.817	1.077	0.634	1.033	1.175	NO
		Front	0.132	0.366	0.281	0.281	0.128	0.049	0.071	0.779	0.626	0.569	0.828	0.697	NO
	LTE 12	Rear	0.195	0.265	0.281	0.281	0.541	0.216	0.098	0.741	1.001	0.558	0.957	1.099	NO
		Front	0.132	0.239	0.281	0.281	0.128	0.049	0.071	0.652	0.499	0.442	0.701	0.570	NO
	LTE 13	Rear	0.195	0.337	0.281	0.281	0.541	0.216	0.098	0.813	1.073	0.630	1.029	1.171	NO
		Front	0.132	0.328	0.281	0.281	0.128	0.049	0.071	0.741	0.588	0.531	0.790	0.659	NO
	LTE 66	Rear	0.195	0.630	0.281	0.281	0.541	0.216	0.098	1.106	1.366	0.923	1.322	1.464	NO
		Front	0.132	0.639	0.281	0.281	0.128	0.049	0.071	1.052	0.899	0.842	1.101	0.970	NO
NR n77 DoD(Main #3)	LTE 25(2)	Rear	0.095	0.478	0.281	0.281	0.541	0.216	0.098	0.854	1.114	0.671	1.070	1.212	NO
		Front	0.037	0.462	0.281	0.281	0.128	0.049	0.071	0.780	0.627	0.570	0.829	0.698	NO
	LTE 26(5)	Rear	0.095	0.341	0.281	0.281	0.541	0.216	0.098	0.717	0.977	0.534	0.933	1.075	NO
		Front	0.037	0.366	0.281	0.281	0.128	0.049	0.071	0.684	0.531	0.474	0.733	0.602	NO
	LTE 12	Rear	0.095	0.265	0.281	0.281	0.541	0.216	0.098	0.641	0.901	0.458	0.857	0.999	NO
		Front	0.037	0.239	0.281	0.281	0.128	0.049	0.071	0.557	0.404	0.347	0.606	0.475	NO
	LTE 13	Rear	0.095	0.337	0.281	0.281	0.541	0.216	0.098	0.713	0.973	0.530	0.929	1.071	NO
		Front	0.037	0.328	0.281	0.281	0.128	0.049	0.071	0.646	0.493	0.436	0.695	0.564	NO
	LTE 66	Rear	0.095	0.630	0.281	0.281	0.541	0.216	0.098	1.006	1.266	0.823	1.222	1.364	NO
		Front	0.037	0.639	0.281	0.281	0.128	0.049	0.071	0.957	0.804	0.747	1.006	0.875	NO

Simultaneous Transmission Scenario with BodyWorn															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes /No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 DoD (Sub #8)	LTE 25(2)	Rear	0.161	0.478	0.281	0.281	0.541	0.216	0.098	0.920	1.180	0.737	1.136	1.278	NO
		Front	0.010	0.462	0.281	0.281	0.128	0.049	0.071	0.753	0.600	0.543	0.802	0.671	NO
	LTE 26(5)	Rear	0.161	0.341	0.281	0.281	0.541	0.216	0.098	0.783	1.043	0.600	0.999	1.141	NO
		Front	0.010	0.366	0.281	0.281	0.128	0.049	0.071	0.657	0.504	0.447	0.706	0.575	NO
	LTE 12	Rear	0.161	0.265	0.281	0.281	0.541	0.216	0.098	0.707	0.967	0.524	0.923	1.065	NO
		Front	0.010	0.239	0.281	0.281	0.128	0.049	0.071	0.530	0.377	0.320	0.579	0.448	NO
	LTE 13	Rear	0.161	0.337	0.281	0.281	0.541	0.216	0.098	0.779	1.039	0.596	0.995	1.137	NO
		Front	0.010	0.328	0.281	0.281	0.128	0.049	0.071	0.619	0.466	0.409	0.668	0.537	NO
	LTE 66	Rear	0.161	0.630	0.281	0.281	0.541	0.216	0.098	1.072	1.332	0.889	1.288	1.430	NO
		Front	0.010	0.639	0.281	0.281	0.128	0.049	0.071	0.930	0.777	0.720	0.979	0.848	NO
NR n77 DoD (Main #4)	LTE 25(2)	Rear	0.146	0.478	0.281	0.281	0.541	0.216	0.098	0.905	1.165	0.722	1.121	1.263	NO
		Front	0.007	0.462	0.281	0.281	0.128	0.049	0.071	0.750	0.597	0.540	0.799	0.668	NO
	LTE 26(5)	Rear	0.146	0.341	0.281	0.281	0.541	0.216	0.098	0.768	1.028	0.585	0.984	1.126	NO
		Front	0.007	0.366	0.281	0.281	0.128	0.049	0.071	0.654	0.501	0.444	0.703	0.572	NO
	LTE 12	Rear	0.146	0.265	0.281	0.281	0.541	0.216	0.098	0.692	0.952	0.509	0.908	1.050	NO
		Front	0.007	0.239	0.281	0.281	0.128	0.049	0.071	0.527	0.374	0.317	0.576	0.445	NO
	LTE 13	Rear	0.146	0.337	0.281	0.281	0.541	0.216	0.098	0.764	1.024	0.581	0.980	1.122	NO
		Front	0.007	0.328	0.281	0.281	0.128	0.049	0.071	0.616	0.463	0.406	0.665	0.534	NO
	LTE 66	Rear	0.146	0.630	0.281	0.281	0.541	0.216	0.098	1.057	1.317	0.874	1.273	1.415	NO
		Front	0.007	0.639	0.281	0.281	0.128	0.049	0.071	0.927	0.774	0.717	0.976	0.845	NO

14.3 Hotspot SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Scenario with Body															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n25(2)	LTE 26(5)	Rear	0.496	0.558	0.553	0.222	0.923	0.368	0.210	1.607	1.977	1.264	1.644	2.187	YES(Hybrid)
		Front	0.400	0.370	0.307	0.091	0.197	0.082	0.122	1.077	0.967	0.892	0.943	1.089	NO
		Left	0.114	0.216	0.535	0.195	0.411	0.105	0.282	0.865	0.741	0.612	0.630	1.023	NO
		Right	0.036	0.534						0.570	0.570	0.570	0.570	0.570	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	1.164	0.143						1.307	1.307	1.307	1.307	1.307	NO
	LTE 12	Rear	0.496	0.429	0.553	0.222	0.923	0.368	0.210	1.478	1.848	1.135	1.515	2.058	YES(#1)
		Front	0.400	0.268	0.307	0.091	0.197	0.082	0.122	0.975	0.865	0.790	0.841	0.987	NO
		Left	0.114	0.231	0.535	0.195	0.411	0.105	0.282	0.880	0.756	0.627	0.645	1.038	NO
		Right	0.036	0.241						0.277	0.277	0.277	0.277	0.277	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	1.164	0.066						1.230	1.230	1.230	1.230	1.230	NO
	LTE 13	Rear	0.496	0.433	0.553	0.222	0.923	0.368	0.210	1.482	1.852	1.139	1.519	2.062	YES(#2)
		Front	0.400	0.332	0.307	0.091	0.197	0.082	0.122	1.039	0.929	0.854	0.905	1.051	NO
		Left	0.114	0.391	0.535	0.195	0.411	0.105	0.282	1.040	0.916	0.787	0.805	1.198	NO
		Right	0.036	0.352						0.388	0.388	0.388	0.388	0.388	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	1.164	0.055						1.219	1.219	1.219	1.219	1.219	NO
NR n41 (Sub #6)	LTE 66(4)	Rear	0.203	0.396	0.553	0.222	0.923	0.368	0.210	1.152	1.522	0.809	1.189	1.732	YES(#3)
		Front	0.133	0.334	0.307	0.091	0.197	0.082	0.122	0.774	0.664	0.589	0.640	0.786	NO
		Left	0.096	0.081	0.535	0.195	0.411	0.105	0.282	0.712	0.588	0.459	0.477	0.870	NO
		Right	0.058	0.067						0.125	0.125	0.125	0.125	0.125	NO
		Top	0.208		0.056	0.026	0.199	0.061	0.023	0.264	0.407	0.231	0.295	0.430	NO
		Bottom		0.912						0.912	0.912	0.912	0.912	0.912	NO
	LTE 12	Rear	0.203	0.429	0.553	0.222	0.923	0.368	0.210	1.185	1.555	0.842	1.222	1.765	YES(#4)
		Front	0.133	0.268	0.307	0.091	0.197	0.082	0.122	0.708	0.598	0.523	0.574	0.720	NO
		Left	0.096	0.231	0.535	0.195	0.411	0.105	0.282	0.862	0.738	0.609	0.627	1.020	NO
		Right	0.058	0.241						0.299	0.299	0.299	0.299	0.299	NO
		Top	0.208		0.056	0.026	0.199	0.061	0.023	0.264	0.407	0.231	0.295	0.430	NO
		Bottom		0.066						0.066	0.066	0.066	0.066	0.066	NO
NR n41 (Main #1-2)	LTE 66(4)	Rear	0.170	0.396	0.553	0.222	0.923	0.368	0.210	1.119	1.489	0.776	1.156	1.699	YES(#5)
		Front	0.079	0.334	0.307	0.091	0.197	0.082	0.122	0.720	0.610	0.535	0.586	0.732	NO
		Left	0.142	0.081	0.535	0.195	0.411	0.105	0.282	0.758	0.634	0.505	0.523	0.916	NO
		Right		0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.150	0.912						1.062	1.062	1.062	1.062	1.062	NO
	LTE 12	Rear	0.170	0.429	0.553	0.222	0.923	0.368	0.210	1.152	1.522	0.809	1.189	1.732	YES(#6)
		Front	0.079	0.268	0.307	0.091	0.197	0.082	0.122	0.654	0.544	0.469	0.520	0.666	NO
		Left	0.142	0.231	0.535	0.195	0.411	0.105	0.282	0.908	0.784	0.655	0.673	1.066	NO
		Right		0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.150	0.066						0.216	0.216	0.216	0.216	0.216	NO

Simultaneous Transmission Scenario with Body															
Band			WWAN SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n41 (Sub #3)	LTE 66(4)	Rear	0.016	0.396	0.553	0.222	0.923	0.368	0.210	0.965	1.335	0.622	1.002	1.545	NO
		Front	0.116	0.334	0.307	0.091	0.197	0.082	0.122	0.757	0.647	0.572	0.623	0.769	NO
		Left		0.081	0.535	0.195	0.411	0.105	0.282	0.616	0.492	0.363	0.381	0.774	NO
		Right	0.000	0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top	0.000		0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom		0.912						0.912	0.912	0.912	0.912	0.912	NO
	LTE 12	Rear	0.025	0.429	0.553	0.222	0.923	0.368	0.210	1.007	1.377	0.664	1.044	1.587	NO
		Front	0.119	0.268	0.307	0.091	0.197	0.082	0.122	0.694	0.584	0.509	0.560	0.706	NO
		Left		0.231	0.535	0.195	0.411	0.105	0.282	0.766	0.642	0.513	0.531	0.924	NO
		Right	0.000	0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top	0.000		0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom		0.066						0.066	0.066	0.066	0.066	0.066	NO
NR n41 (Main #3)	LTE 66(4)	Rear	0.045	0.396	0.553	0.222	0.923	0.368	0.210	0.994	1.364	0.651	1.031	1.574	NO
		Front	0.011	0.334	0.307	0.091	0.197	0.082	0.122	0.652	0.542	0.467	0.518	0.664	NO
		Left	0.008	0.081	0.535	0.195	0.411	0.105	0.282	0.624	0.500	0.371	0.389	0.782	NO
		Right		0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.012	0.912						0.924	0.924	0.924	0.924	0.924	NO
	LTE 12	Rear	0.045	0.429	0.553	0.222	0.923	0.368	0.210	1.027	1.397	0.684	1.064	1.607	YES(#7)
		Front	0.011	0.268	0.307	0.091	0.197	0.082	0.122	0.586	0.476	0.401	0.452	0.598	NO
		Left	0.008	0.231	0.535	0.195	0.411	0.105	0.282	0.774	0.650	0.521	0.539	0.932	NO
		Right		0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.012	0.066						0.078	0.078	0.078	0.078	0.078	NO
NR n77 (Sub #2)	LTE 25(2)	Rear	0.081	0.266	0.553	0.222	0.923	0.368	0.210	0.900	1.270	0.557	0.937	1.480	NO
		Front	0.028	0.247	0.307	0.091	0.197	0.082	0.122	0.582	0.472	0.397	0.448	0.594	NO
		Left	0.268	0.079	0.535	0.195	0.411	0.105	0.282	0.882	0.758	0.629	0.647	1.040	NO
		Right		0.031						0.031	0.031	0.031	0.031	0.031	NO
		Top	0.060		0.056	0.026	0.199	0.061	0.023	0.116	0.259	0.083	0.147	0.282	NO
		Bottom		0.797						0.797	0.797	0.797	0.797	0.797	NO
	LTE 26(5)	Rear	0.081	0.558	0.553	0.222	0.923	0.368	0.210	1.192	1.562	0.849	1.229	1.772	YES(Hybrid)
		Front	0.028	0.370	0.307	0.091	0.197	0.082	0.122	0.705	0.595	0.520	0.571	0.717	NO
		Left	0.268	0.216	0.535	0.195	0.411	0.105	0.282	1.019	0.895	0.766	0.784	1.177	NO
		Right		0.534						0.534	0.534	0.534	0.534	0.534	NO
		Top	0.060		0.056	0.026	0.199	0.061	0.023	0.116	0.259	0.083	0.147	0.282	NO
		Bottom		0.143						0.143	0.143	0.143	0.143	0.143	NO
	LTE 12	Rear	0.081	0.429	0.553	0.222	0.923	0.368	0.210	1.063	1.433	0.720	1.100	1.643	YES(Hybrid)
		Front	0.028	0.268	0.307	0.091	0.197	0.082	0.122	0.603	0.493	0.418	0.469	0.615	NO
		Left	0.268	0.231	0.535	0.195	0.411	0.105	0.282	1.034	0.910	0.781	0.799	1.192	NO
		Right		0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top	0.060		0.056	0.026	0.199	0.061	0.023	0.116	0.259	0.083	0.147	0.282	NO
		Bottom		0.066						0.066	0.066	0.066	0.066	0.066	NO
	LTE 13	Rear	0.081	0.433	0.553	0.222	0.923	0.368	0.210	1.067	1.437	0.724	1.104	1.647	YES(Hybrid)
		Front	0.028	0.332	0.307	0.091	0.197	0.082	0.122	0.667	0.557	0.482	0.533	0.679	NO
		Left	0.268	0.391	0.535	0.195	0.411	0.105	0.282	1.194	1.070	0.941	0.959	1.352	NO
		Right		0.352						0.352	0.352	0.352	0.352	0.352	NO
		Top	0.060		0.056	0.026	0.199	0.061	0.023	0.116	0.259	0.083	0.147	0.282	NO
		Bottom		0.055						0.055	0.055	0.055	0.055	0.055	NO

Simultaneous Transmission Scenario with Body															
Band			WWAN SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 (Sub #2)	LTE 66	Rear	0.081	0.396	0.553	0.222	0.923	0.368	0.210	1.030	1.400	0.687	1.067	1.610	YES(Hybrid)
		Front	0.028	0.334	0.307	0.091	0.197	0.082	0.122	0.669	0.559	0.484	0.535	0.681	NO
		Left	0.268	0.081	0.535	0.195	0.411	0.105	0.282	0.884	0.760	0.631	0.649	1.042	NO
		Right		0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top	0.060		0.056	0.026	0.199	0.061	0.023	0.116	0.259	0.083	0.147	0.282	NO
		Bottom		0.912						0.912	0.912	0.912	0.912	0.912	NO
NR n77 (Main #3)	LTE 25(2)	Rear	0.143	0.266	0.553	0.222	0.923	0.368	0.210	0.962	1.332	0.619	0.999	1.542	NO
		Front	0.100	0.247	0.307	0.091	0.197	0.082	0.122	0.654	0.544	0.469	0.520	0.666	NO
		Left	0.269	0.079	0.535	0.195	0.411	0.105	0.282	0.883	0.759	0.630	0.648	1.041	NO
		Right		0.031						0.031	0.031	0.031	0.031	0.031	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.797						0.825	0.825	0.825	0.825	0.825	NO
	LTE 26(5)	Rear	0.143	0.558	0.553	0.222	0.923	0.368	0.210	1.254	1.624	0.911	1.291	1.834	YES(#8)
		Front	0.100	0.370	0.307	0.091	0.197	0.082	0.122	0.777	0.667	0.592	0.643	0.789	NO
		Left	0.269	0.216	0.535	0.195	0.411	0.105	0.282	1.020	0.896	0.767	0.785	1.178	NO
		Right		0.534						0.534	0.534	0.534	0.534	0.534	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.143						0.171	0.171	0.171	0.171	0.171	NO
	LTE 12	Rear	0.143	0.429	0.553	0.222	0.923	0.368	0.210	1.125	1.495	0.782	1.162	1.705	YES(#9)
		Front	0.100	0.268	0.307	0.091	0.197	0.082	0.122	0.675	0.565	0.490	0.541	0.687	NO
		Left	0.269	0.231	0.535	0.195	0.411	0.105	0.282	1.035	0.911	0.782	0.800	1.193	NO
		Right		0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.066						0.094	0.094	0.094	0.094	0.094	NO
	LTE 13	Rear	0.143	0.433	0.553	0.222	0.923	0.368	0.210	1.129	1.499	0.786	1.166	1.709	YES(#10)
		Front	0.100	0.332	0.307	0.091	0.197	0.082	0.122	0.739	0.629	0.554	0.605	0.751	NO
		Left	0.269	0.391	0.535	0.195	0.411	0.105	0.282	1.195	1.071	0.942	0.960	1.353	NO
		Right		0.352						0.352	0.352	0.352	0.352	0.352	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.055						0.083	0.083	0.083	0.083	0.083	NO
	LTE 66	Rear	0.143	0.396	0.553	0.222	0.923	0.368	0.210	1.092	1.462	0.749	1.129	1.672	YES(#11)
		Front	0.100	0.334	0.307	0.091	0.197	0.082	0.122	0.741	0.631	0.556	0.607	0.753	NO
		Left	0.269	0.081	0.535	0.195	0.411	0.105	0.282	0.885	0.761	0.632	0.650	1.043	NO
		Right		0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.912						0.940	0.940	0.940	0.940	0.940	NO
NR n77 (Sub #8))	LTE 25(2)	Rear	0.403	0.266	0.553	0.222	0.923	0.368	0.210	1.222	1.592	0.879	1.259	1.802	YES(Hybrid)
		Front	0.013	0.247	0.307	0.091	0.197	0.082	0.122	0.567	0.457	0.382	0.433	0.579	NO
		Left		0.079	0.535	0.195	0.411	0.105	0.282	0.614	0.490	0.361	0.379	0.772	NO
		Right	0.001	0.031						0.032	0.032	0.032	0.032	0.032	NO
		Top	0.037		0.056	0.026	0.199	0.061	0.023	0.093	0.236	0.060	0.124	0.259	NO
		Bottom		0.797						0.797	0.797	0.797	0.797	0.797	NO
	LTE 26(5)	Rear	0.403	0.558	0.553	0.222	0.923	0.368	0.210	1.514	1.884	1.171	1.551	2.094	YES(Hybrid)
		Front	0.013	0.370	0.307	0.091	0.197	0.082	0.122	0.690	0.580	0.505	0.556	0.702	NO
		Left		0.216	0.535	0.195	0.411	0.105	0.282	0.751	0.627	0.498	0.516	0.909	NO
		Right	0.001	0.534						0.535	0.535	0.535	0.535	0.535	NO
		Top	0.037		0.056	0.026	0.199	0.061	0.023	0.093	0.236	0.060	0.124	0.259	NO
		Bottom		0.143						0.143	0.143	0.143	0.143	0.143	NO

Simultaneous Transmission Scenario with Body															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 (Sub #8)	LTE 12	Rear	0.403	0.429	0.553	0.222	0.923	0.368	0.210	1.385	1.755	1.042	1.422	1.965	YES(Hybrid)
		Front	0.013	0.268	0.307	0.091	0.197	0.082	0.122	0.588	0.478	0.403	0.454	0.600	NO
		Left		0.231	0.535	0.195	0.411	0.105	0.282	0.766	0.642	0.513	0.531	0.924	NO
		Right	0.001	0.241						0.242	0.242	0.242	0.242	0.242	NO
		Top	0.037		0.056	0.026	0.199	0.061	0.023	0.093	0.236	0.060	0.124	0.259	NO
		Bottom		0.066						0.066	0.066	0.066	0.066	0.066	NO
	LTE 13	Rear	0.403	0.433	0.553	0.222	0.923	0.368	0.210	1.389	1.759	1.046	1.426	1.969	YES(Hybrid)
		Front	0.013	0.332	0.307	0.091	0.197	0.082	0.122	0.652	0.542	0.467	0.518	0.664	NO
		Left		0.391	0.535	0.195	0.411	0.105	0.282	0.926	0.802	0.673	0.691	1.084	NO
		Right	0.001	0.352						0.353	0.353	0.353	0.353	0.353	NO
		Top	0.037		0.056	0.026	0.199	0.061	0.023	0.093	0.236	0.060	0.124	0.259	NO
		Bottom		0.055						0.055	0.055	0.055	0.055	0.055	NO
	LTE 66	Rear	0.403	0.396	0.553	0.222	0.923	0.368	0.210	1.352	1.722	1.009	1.389	1.932	YES(Hybrid)
		Front	0.013	0.334	0.307	0.091	0.197	0.082	0.122	0.654	0.544	0.469	0.520	0.666	NO
		Left		0.081	0.535	0.195	0.411	0.105	0.282	0.616	0.492	0.363	0.381	0.774	NO
		Right	0.001	0.067						0.068	0.068	0.068	0.068	0.068	NO
		Top	0.037		0.056	0.026	0.199	0.061	0.023	0.093	0.236	0.060	0.124	0.259	NO
		Bottom		0.912						0.912	0.912	0.912	0.912	0.912	NO
NR n77 (Main #4)	LTE 25(2)	Rear	0.079	0.266	0.553	0.222	0.923	0.368	0.210	0.898	1.268	0.555	0.935	1.478	NO
		Front	0.002	0.247	0.307	0.091	0.197	0.082	0.122	0.556	0.446	0.371	0.422	0.568	NO
		Left		0.079	0.535	0.195	0.411	0.105	0.282	0.614	0.490	0.361	0.379	0.772	NO
		Right	0.004	0.031						0.035	0.035	0.035	0.035	0.035	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.013	0.797						0.810	0.810	0.810	0.810	0.810	NO
	LTE 26(5)	Rear	0.079	0.558	0.553	0.222	0.923	0.368	0.210	1.190	1.560	0.847	1.227	1.770	YES(#12)
		Front	0.002	0.370	0.307	0.091	0.197	0.082	0.122	0.679	0.569	0.494	0.545	0.691	NO
		Left		0.216	0.535	0.195	0.411	0.105	0.282	0.751	0.627	0.498	0.516	0.909	NO
		Right	0.004	0.534						0.538	0.538	0.538	0.538	0.538	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.013	0.143						0.156	0.156	0.156	0.156	0.156	NO
	LTE 12	Rear	0.079	0.429	0.553	0.222	0.923	0.368	0.210	1.061	1.431	0.718	1.098	1.641	YES(#13)
		Front	0.002	0.268	0.307	0.091	0.197	0.082	0.122	0.577	0.467	0.392	0.443	0.589	NO
		Left		0.231	0.535	0.195	0.411	0.105	0.282	0.766	0.642	0.513	0.531	0.924	NO
		Right	0.004	0.241						0.245	0.245	0.245	0.245	0.245	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.013	0.066						0.079	0.079	0.079	0.079	0.079	NO
	LTE 13	Rear	0.079	0.433	0.553	0.222	0.923	0.368	0.210	1.065	1.435	0.722	1.102	1.645	YES(#14)
		Front	0.002	0.332	0.307	0.091	0.197	0.082	0.122	0.641	0.531	0.456	0.507	0.653	NO
		Left		0.391	0.535	0.195	0.411	0.105	0.282	0.926	0.802	0.673	0.691	1.084	NO
		Right	0.004	0.352						0.356	0.356	0.356	0.356	0.356	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.013	0.055						0.068	0.068	0.068	0.068	0.068	NO
	LTE 66	Rear	0.079	0.396	0.553	0.222	0.923	0.368	0.210	1.028	1.398	0.685	1.065	1.608	YES(#15)
		Front	0.002	0.334	0.307	0.091	0.197	0.082	0.122	0.643	0.533	0.458	0.509	0.655	NO
		Left		0.081	0.535	0.195	0.411	0.105	0.282	0.616	0.492	0.363	0.381	0.774	NO
		Right	0.004	0.067						0.071	0.071	0.071	0.071	0.071	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.013	0.912						0.925	0.925	0.925	0.925	0.925	NO

Simultaneous Transmission Scenario with Body															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 DoD (Sub #2)	LTE 25(2)	Rear	0.196	0.266	0.553	0.222	0.923	0.368	0.210	1.015	1.385	0.672	1.052	1.595	NO
		Front	0.129	0.247	0.307	0.091	0.197	0.082	0.122	0.683	0.573	0.498	0.549	0.695	NO
		Left	0.314	0.079	0.535	0.195	0.411	0.105	0.282	0.928	0.804	0.675	0.693	1.086	NO
		Right		0.031						0.031	0.031	0.031	0.031	0.031	NO
		Top	0.011		0.056	0.026	0.199	0.061	0.023	0.067	0.210	0.034	0.098	0.233	NO
		Bottom		0.797						0.797	0.797	0.797	0.797	0.797	NO
	LTE 26(5)	Rear	0.196	0.558	0.553	0.222	0.923	0.368	0.210	1.307	1.677	0.964	1.344	1.887	YES(Hybrid)
		Front	0.129	0.370	0.307	0.091	0.197	0.082	0.122	0.806	0.696	0.621	0.672	0.818	NO
		Left	0.314	0.216	0.535	0.195	0.411	0.105	0.282	1.065	0.941	0.812	0.830	1.223	NO
		Right		0.534						0.534	0.534	0.534	0.534	0.534	NO
		Top	0.011		0.056	0.026	0.199	0.061	0.023	0.067	0.210	0.034	0.098	0.233	NO
		Bottom		0.143						0.143	0.143	0.143	0.143	0.143	NO
	LTE 12	Rear	0.196	0.429	0.553	0.222	0.923	0.368	0.210	1.178	1.548	0.835	1.215	1.758	YES(Hybrid)
		Front	0.129	0.268	0.307	0.091	0.197	0.082	0.122	0.704	0.594	0.519	0.570	0.716	NO
		Left	0.314	0.231	0.535	0.195	0.411	0.105	0.282	1.080	0.956	0.827	0.845	1.238	NO
		Right		0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top	0.011		0.056	0.026	0.199	0.061	0.023	0.067	0.210	0.034	0.098	0.233	NO
		Bottom		0.066						0.066	0.066	0.066	0.066	0.066	NO
	LTE 13	Rear	0.196	0.433	0.553	0.222	0.923	0.368	0.210	1.182	1.552	0.839	1.219	1.762	YES(Hybrid)
		Front	0.129	0.332	0.307	0.091	0.197	0.082	0.122	0.768	0.658	0.583	0.634	0.780	NO
		Left	0.314	0.391	0.535	0.195	0.411	0.105	0.282	1.240	1.116	0.987	1.005	1.398	NO
		Right		0.352						0.352	0.352	0.352	0.352	0.352	NO
		Top	0.011		0.056	0.026	0.199	0.061	0.023	0.067	0.210	0.034	0.098	0.233	NO
		Bottom		0.055						0.055	0.055	0.055	0.055	0.055	NO
	LTE 66	Rear	0.196	0.396	0.553	0.222	0.923	0.368	0.210	1.145	1.515	0.802	1.182	1.725	YES(Hybrid)
		Front	0.129	0.334	0.307	0.091	0.197	0.082	0.122	0.770	0.660	0.585	0.636	0.782	NO
		Left	0.314	0.081	0.535	0.195	0.411	0.105	0.282	0.930	0.806	0.677	0.695	1.088	NO
		Right		0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top	0.011		0.056	0.026	0.199	0.061	0.023	0.067	0.210	0.034	0.098	0.233	NO
		Bottom		0.912						0.912	0.912	0.912	0.912	0.912	NO
NR n77 DoD (Main #3)	LTE 25(2)	Rear	0.110	0.266	0.553	0.222	0.923	0.368	0.210	0.929	1.299	0.586	0.966	1.509	NO
		Front	0.056	0.247	0.307	0.091	0.197	0.082	0.122	0.610	0.500	0.425	0.476	0.622	NO
		Left	0.086	0.079	0.535	0.195	0.411	0.105	0.282	0.700	0.576	0.447	0.465	0.858	NO
		Right		0.031						0.031	0.031	0.031	0.031	0.031	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.797						0.825	0.825	0.825	0.825	0.825	NO
	LTE 26(5)	Rear	0.110	0.558	0.553	0.222	0.923	0.368	0.210	1.221	1.591	0.878	1.258	1.801	YES(#16)
		Front	0.056	0.370	0.307	0.091	0.197	0.082	0.122	0.733	0.623	0.548	0.599	0.745	NO
		Left	0.086	0.216	0.535	0.195	0.411	0.105	0.282	0.837	0.713	0.584	0.602	0.995	NO
		Right		0.534						0.534	0.534	0.534	0.534	0.534	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.143						0.171	0.171	0.171	0.171	0.171	NO
	LTE 12	Rear	0.110	0.429	0.553	0.222	0.923	0.368	0.210	1.092	1.462	0.749	1.129	1.672	YES(#17)
		Front	0.056	0.268	0.307	0.091	0.197	0.082	0.122	0.631	0.521	0.446	0.497	0.643	NO
		Left	0.086	0.231	0.535	0.195	0.411	0.105	0.282	0.852	0.728	0.599	0.617	1.010	NO
		Right		0.241						0.241	0.241	0.241	0.241	0.241	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.066						0.094	0.094	0.094	0.094	0.094	NO

Simultaneous Transmission Scenario with Body															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 DoD (Main #3)	LTE 13	Rear	0.110	0.433	0.553	0.222	0.923	0.368	0.210	1.096	1.466	0.753	1.133	1.676	YES(#18)
		Front	0.056	0.332	0.307	0.091	0.197	0.082	0.122	0.695	0.585	0.510	0.561	0.707	NO
		Left	0.086	0.391	0.535	0.195	0.411	0.105	0.282	1.012	0.888	0.759	0.777	1.170	NO
		Right		0.352						0.352	0.352	0.352	0.352	0.352	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.055						0.083	0.083	0.083	0.083	0.083	NO
	LTE 66	Rear	0.110	0.396	0.553	0.222	0.923	0.368	0.210	1.059	1.429	0.716	1.096	1.639	YES(#19)
		Front	0.056	0.334	0.307	0.091	0.197	0.082	0.122	0.697	0.587	0.512	0.563	0.709	NO
		Left	0.086	0.081	0.535	0.195	0.411	0.105	0.282	0.702	0.578	0.449	0.467	0.860	NO
		Right		0.067						0.067	0.067	0.067	0.067	0.067	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.028	0.912						0.940	0.940	0.940	0.940	0.940	NO
NR n77 DoD (Sub #8)	LTE 25(2)	Rear	0.155	0.266	0.553	0.222	0.923	0.368	0.210	0.974	1.344	0.631	1.011	1.554	NO
		Front	0.011	0.247	0.307	0.091	0.197	0.082	0.122	0.565	0.455	0.380	0.431	0.577	NO
		Left		0.079	0.535	0.195	0.411	0.105	0.282	0.614	0.490	0.361	0.379	0.772	NO
		Right	0.007	0.031						0.038	0.038	0.038	0.038	0.038	NO
		Top	0.039		0.056	0.026	0.199	0.061	0.023	0.095	0.238	0.062	0.126	0.261	NO
		Bottom		0.797						0.797	0.797	0.797	0.797	0.797	NO
	LTE 26(5)	Rear	0.155	0.558	0.553	0.222	0.923	0.368	0.210	1.266	1.636	0.923	1.303	1.846	YES(Hybrid)
		Front	0.011	0.370	0.307	0.091	0.197	0.082	0.122	0.688	0.578	0.503	0.554	0.700	NO
		Left		0.216	0.535	0.195	0.411	0.105	0.282	0.751	0.627	0.498	0.516	0.909	NO
		Right	0.007	0.534						0.541	0.541	0.541	0.541	0.541	NO
		Top	0.039		0.056	0.026	0.199	0.061	0.023	0.095	0.238	0.062	0.126	0.261	NO
		Bottom		0.143						0.143	0.143	0.143	0.143	0.143	NO
	LTE 12	Rear	0.155	0.429	0.553	0.222	0.923	0.368	0.210	1.137	1.507	0.794	1.174	1.717	YES(Hybrid)
		Front	0.011	0.268	0.307	0.091	0.197	0.082	0.122	0.586	0.476	0.401	0.452	0.598	NO
		Left		0.231	0.535	0.195	0.411	0.105	0.282	0.766	0.642	0.513	0.531	0.924	NO
		Right	0.007	0.241						0.248	0.248	0.248	0.248	0.248	NO
		Top	0.039		0.056	0.026	0.199	0.061	0.023	0.095	0.238	0.062	0.126	0.261	NO
		Bottom		0.066						0.066	0.066	0.066	0.066	0.066	NO
	LTE 13	Rear	0.155	0.433	0.553	0.222	0.923	0.368	0.210	1.141	1.511	0.798	1.178	1.721	YES(Hybrid)
		Front	0.011	0.332	0.307	0.091	0.197	0.082	0.122	0.650	0.540	0.465	0.516	0.662	NO
		Left		0.391	0.535	0.195	0.411	0.105	0.282	0.926	0.802	0.673	0.691	1.084	NO
		Right	0.007	0.352						0.359	0.359	0.359	0.359	0.359	NO
		Top	0.039		0.056	0.026	0.199	0.061	0.023	0.095	0.238	0.062	0.126	0.261	NO
		Bottom		0.055						0.055	0.055	0.055	0.055	0.055	NO
	LTE 66	Rear	0.155	0.396	0.553	0.222	0.923	0.368	0.210	1.104	1.474	0.761	1.141	1.684	YES(Hybrid)
		Front	0.011	0.334	0.307	0.091	0.197	0.082	0.122	0.652	0.542	0.467	0.518	0.664	NO
		Left		0.081	0.535	0.195	0.411	0.105	0.282	0.616	0.492	0.363	0.381	0.774	NO
		Right	0.007	0.067						0.074	0.074	0.074	0.074	0.074	NO
		Top	0.039		0.056	0.026	0.199	0.061	0.023	0.095	0.238	0.062	0.126	0.261	NO
		Bottom		0.912						0.912	0.912	0.912	0.912	0.912	NO

Simultaneous Transmission Scenario with Body															
Band			NR SAR	ENDC LTE Band SAR	2.4 GHz WLAN MIMO SAR	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO SAR	5 GHz WLAN MIMO RSDB SAR	BT SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
			(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
			1	2	3	4	5	6	7	1+2+3	1+2+5	1+2+7	1+2+4+6	1+2+5+7	
NR n77 DoD (Main #4)	LTE 25(2)	Rear	0.223	0.266	0.553	0.222	0.923	0.368	0.210	1.042	1.412	0.699	1.079	1.622	YES(#20)
		Front	0.011	0.247	0.307	0.091	0.197	0.082	0.122	0.565	0.455	0.380	0.431	0.577	NO
		Left		0.079	0.535	0.195	0.411	0.105	0.282	0.614	0.490	0.361	0.379	0.772	NO
		Right	0.009	0.031						0.040	0.040	0.040	0.040	0.040	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.029	0.797						0.826	0.826	0.826	0.826	0.826	NO
	LTE 26(5)	Rear	0.223	0.558	0.553	0.222	0.923	0.368	0.210	1.334	1.704	0.991	1.371	1.914	YES(#21)
		Front	0.011	0.370	0.307	0.091	0.197	0.082	0.122	0.688	0.578	0.503	0.554	0.700	NO
		Left		0.216	0.535	0.195	0.411	0.105	0.282	0.751	0.627	0.498	0.516	0.909	NO
		Right	0.009	0.534						0.543	0.543	0.543	0.543	0.543	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.029	0.143						0.172	0.172	0.172	0.172	0.172	NO
	LTE 12	Rear	0.223	0.429	0.553	0.222	0.923	0.368	0.210	1.205	1.575	0.862	1.242	1.785	YES(#22)
		Front	0.011	0.268	0.307	0.091	0.197	0.082	0.122	0.586	0.476	0.401	0.452	0.598	NO
		Left		0.231	0.535	0.195	0.411	0.105	0.282	0.766	0.642	0.513	0.531	0.924	NO
		Right	0.009	0.241						0.250	0.250	0.250	0.250	0.250	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.029	0.066						0.095	0.095	0.095	0.095	0.095	NO
	LTE 13	Rear	0.223	0.433	0.553	0.222	0.923	0.368	0.210	1.209	1.579	0.866	1.246	1.789	YES(#23)
		Front	0.011	0.332	0.307	0.091	0.197	0.082	0.122	0.650	0.540	0.465	0.516	0.662	NO
		Left		0.391	0.535	0.195	0.411	0.105	0.282	0.926	0.802	0.673	0.691	1.084	NO
		Right	0.009	0.352						0.361	0.361	0.361	0.361	0.361	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.029	0.055						0.084	0.084	0.084	0.084	0.084	NO
	LTE 66	Rear	0.223	0.396	0.553	0.222	0.923	0.368	0.210	1.172	1.542	0.829	1.209	1.752	YES(#24)
		Front	0.011	0.334	0.307	0.091	0.197	0.082	0.122	0.652	0.542	0.467	0.518	0.664	NO
		Left		0.081	0.535	0.195	0.411	0.105	0.282	0.616	0.492	0.363	0.381	0.774	NO
		Right	0.009	0.067						0.076	0.076	0.076	0.076	0.076	NO
		Top			0.056	0.026	0.199	0.061	0.023	0.056	0.199	0.023	0.087	0.222	NO
		Bottom	0.029	0.912						0.941	0.941	0.941	0.941	0.941	NO

14.4 Phablet SAR Simultaneous Transmission Analysis

Simultaneous Transmission Scenario with 5GHz WLAN Phablet					
Band	Position	WWAN SAR (W/kg) 1	5 GHz WLAN MIMO SAR (W/kg) 2	∑ 10-g SAR (W/kg) 1+2	SPLSR (Yes/No)
NR n25	Rear	1.281	2.929	4.210	YES(#25)
	Front	0.928	0.815	1.743	NO
	Left	0.573	1.097	1.670	NO
	Right	0.203		0.203	NO
	Top		0.820	0.820	NO
	Bottom	1.084		1.084	NO

14.5 SAR to Peak Location Separation Ratio (SPLSR)

FCC KDB 447498 D01v06 General RF Exposure Guidance introduces a new formula for calculating the SAR a Peak Location Separation Ratio(SPLSR) between pairs of simultaneously transmitting antennas:
$\boldsymbol{SPLSR_i}$=$(\boldsymbol{SAR_1}+\boldsymbol{SAR_2})^{1.5}/\boldsymbol{R_i}$
Where:
$\boldsymbol{SAR_1}$ is the highest measured or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition

$\boldsymbol{SAR_2}$ is the highest measured of estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first

$\boldsymbol{R_i}$ is the separation distance between the pair of simultaneous transmitting antennas, When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of $[(\mathbf{X_1}-\mathbf{X_2})^2+(\mathbf{Y_1}-\mathbf{Y_2})^2+(\mathbf{Z_1}-\mathbf{Z_2})^2]$

In order for a pair of simultaneous transmitting antennas with the sum 1-g of SAR> 1.6 W/kg and with the sum 10-g of SAR >4 W/Kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:
$(\boldsymbol{SAR_1}+\boldsymbol{SAR_2})^{1.5}/\boldsymbol{R_i}\leq \mathbf{0.04}$ for 1g SAR and $(\boldsymbol{SAR_1}+\boldsymbol{SAR_2})^{1.5}/\boldsymbol{R_i}\leq \mathbf{0.1}$ for 10g SAR

SPLSR Hotspot Combination
Per November 2019 TCB Workshop Notes, SPLSR Hotspot Combination procedure can be applied to evaluate to simultaneous transmission SAR analysis.

The antennas for the unlicensed transmitters are closely located. As a result, the associated SAR Hotspots are also closely located. Some of the sum of SAR calculations yielded results over 1.6W/kg. The SPLSR calculations for these situations were performed by treating the unlicensed SAR values as a single transmitter. The most conservative distance between all the unlicensed hotspots to the licensed hotspot was used for the value of d in SPLSR calculation.

Hybrid SPLSR and enlarged zoom scan (Volume scan) can be applied when Simultaneous transmission SAR is over 1.6 W/kg for 1g or 4.0W/kg for 10g respectively, it does not meet SPLSR criteria, and antenna pair is co-located. Antenna co-location means that SAR distributions overlap because the antenna pair are notsignificantly spatially separated.

Test Procedure:
Step.1 perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR.
Step.2 Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair.

Per Sec. 14, below simultaneous transmission summations need to be calculated SPLSR.

14.5.1 SPLSR Evaluation

-The Peak Location of Hotspot Mode

Mode/Band	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
LTE Band 26(5)	-2	-61	-206	0.558
LTE Band12	-2	-61	-206	0.429
LTE Band 13	-2	-61	-206	0.433
LTE Band 25(2)	-15.5	-76.5	-203	0.266
LTE Band 66(4)	-20	-76.5	-203	0.396
NR Band n25	-25	-72	-206	0.496
NR Band n41(Sub #6)	-49	52.8	-207	0.203
NR Band n41(Main #1-2)	13.4	-62.4	-207	0.170
NR Band n41(Main #3)	-39.4	-52.8	-206	0.045
NR Band n77(Sub #2)	16.6	61.2	-210	0.081
NR Band n77(Main #3)	14.2	-42	-207	0.143
NR Band n77(Sub #8)	-18.2	59.4	-207	0.403
NR Band n77(Main #4)	-32.6	-58.2	-207	0.079
NR Band n77 DoD(Sub #2)	16.6	61.2	-210	0.196
NR Band n77 DoD(Main #3)	11.4	-54.8	-206	0.110
NR Band n77 DoD(Sub #8)	-26.6	54.6	-206	0.155
NR Band n77 DoD(Main #4)	-35.4	-57.2	-206	0.223
WLAN 2.4G	-11.4	58	-206	0.553
WLAN 5G	-6	58	-206	0.923
WLAN 2.4G RSDB	-15.4	61.6	-206	0.222
WLAN 5G RSDB	-3	54	-206	0.368
Bluetooth	15.4	34	-206	0.210

-The Peak Location of Phablet Mode

Mode/Band	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
NR Band n25 Rear	-4	-70	-206	1.281
WLAN 5G Rear	-4	60	-205	2.929

-Hotspot Mode

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n25	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.496	0.429	0.210	0.923	0.925	25.4951	0.0349	#1
				1+3			
				0.706	113.4379	0.0052	
				1+4			
				1.419	131.3811	0.0129	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	
Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n25	LTE Band 13	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.496	0.433	0.210	0.923	0.929	25.4951	0.0351	#2
				1+3			
				0.706	113.4379	0.0052	
				1+4			
				1.419	131.3811	0.0129	
				2+3			
				0.643	96.5803	0.0053	
				2+4			
				1.356	119.0672	0.0133	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n41(Sub #6)	LTE Band 66	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.203	0.396	0.210	0.923	0.599	132.5726	0.0035	#3
				1+3			
				0.413	67.0955	0.0040	
				1+4			
				1.126	43.3248	0.0276	
				2+3			
				0.606	116.0707	0.0041	
				2+4			
				1.319	135.2599	0.0112	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n41(Sub #6)	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.203	0.429	0.210	0.923	0.630	123.1277	0.0041	#4
				1+3			
				0.411	67.0955	0.0039	
				1+4			
				1.124	43.3248	0.0275	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n41(Main #1-2)	LTE Band 66	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.170	0.396	0.210	0.923	0.566	36.4742	0.0117	#5
				1+3			
				0.380	96.4259	0.0024	
				1+4			
				1.093	121.9570	0.0094	
				2+3			
				0.606	116.0707	0.0041	
				2+4			
				1.319	135.2599	0.0112	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n41(Main #1-2)	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.170	0.429	0.210	0.923	0.599	15.4958	0.0299	#6
				1+3			
				0.380	96.4259	0.0024	
				1+4			
				1.093	121.9570	0.0094	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n41(Main #3)	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.045	0.429	0.210	0.923	0.474	38.2884	0.0085	#7
				1+3			
				0.255	102.6513	0.0013	
				1+4			
				0.968	115.7247	0.0082	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77(Main #3)	LTE Band 26	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.143	0.558	0.210	0.923	0.701	24.9888	0.0235	#8
				1+3			
				0.353	76.0161	0.0028	
				1+4			
				1.066	102.0247	0.0108	
				2+3			
				0.768	96.5803	0.0070	
				2+4			
				1.481	119.0672	0.0151	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77(Main #3)	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.143	0.429	0.210	0.923	0.572	24.9888	0.0173	#9
				1+3			
				0.353	76.0161	0.0028	
				1+4			
				1.066	102.0247	0.0108	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance[mm]	SPLSR	Plot No
NR Band n77(Main #3)	LTE Band 13	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.143	0.433	0.210	0.923	0.576	24.9888	0.0175	#10
				1+3			
				0.353	76.0161	0.0028	
				1+4			
				1.066	102.0247	0.0108	
				2+3			
				0.643	96.5803	0.0053	
				2+4			
				1.356	119.0672	0.0133	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77(Main #3)	LTE Band 66	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.143	0.396	0.210	0.923	0.539	48.7431	0.0081	#11
				1+3			
				0.353	76.0161	0.0028	
				1+4			
				1.066	102.0247	0.0108	
				2+3			
				0.606	116.0707	0.0041	
				2+4			
				1.319	135.2599	0.0112	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77(Main #4)	LTE Band 26(5)	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.079	0.558	0.210	0.923	0.637	30.7441	0.0165	#12
				1+3			
				0.289	103.9511	0.0015	
				1+4			
				1.002	119.2099	0.0084	
				2+3			
				0.768	96.5803	0.0070	
				2+4			
				1.481	119.0672	0.0151	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance[mm] [mm]	SPLSR	Plot No
NR Band n77(Main #4)	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.079	0.429	0.210	0.923	0.508	30.7441	0.0118	#13
				1+3			
				0.289	103.9511	0.0015	
				1+4			
				1.002	119.2099	0.0084	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77(Main #4)	LTE Band 13	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.079	0.433	0.210	0.923	0.512	30.7441	0.0119	#14
				1+3			
				0.289	103.9511	0.0015	
				1+4			
				1.002	119.2099	0.0084	
				2+3			
				0.643	96.5803	0.0053	
				2+4			
				1.356	119.0672	0.0133	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77(Main #4)	LTE Band 66	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.079	0.396	0.210	0.923	0.475	22.5754	0.0145	#15
				1+3			
				0.289	103.9511	0.0015	
				1+4			
				1.002	119.2099	0.0084	
				2+3			
				0.606	116.0707	0.0041	
				2+4			
				1.319	135.2599	0.0112	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance[mm] [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #3)	LTE Band 26(5)	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.110	0.558	0.210	0.923	0.668	14.7648	0.0370	#16
				1+3			
				0.320	88.8900	0.0020	
				1+4			
				1.033	114.1341	0.0092	
				2+3			
				0.768	96.5803	0.0070	
				2+4			
				1.481	119.0672	0.0151	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #3)	LTE Band 12	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.110	0.429	0.210	0.923	0.539	14.7648	0.0268	#17
				1+3			
				0.320	88.8900	0.0020	
				1+4			
				1.033	114.1341	0.0092	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #3)	LTE Band 13	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.110	0.433	0.210	0.923	0.543	14.7648	0.0271	#18
				1+3			
				0.320	89.8900	0.0020	
				1+4			
				1.033	114.1341	0.0092	
				2+3			
				0.643	96.5803	0.0053	
				2+4			
				1.356	119.0672	0.0133	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance[mm] [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #3)	LTE Band 66	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.110	0.396	0.210	0.923	0.506	38.2864	0.0094	#19
				1+3			
				0.320	88.8900	0.0020	
				1+4			
				1.033	114.1341	0.0092	
				2+3			
				0.606	116.0707	0.0041	
				2+4			
				1.319	135.2599	0.0112	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #4)	LTE Band 25(2)	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.223	0.266	0.210	0.923	0.489	27.8837	0.0123	#20
				1+3			
				0.433	104.3939	0.0027	
				1+4			
				1.146	118.8924	0.0103	
				2+3			
				0.476	114.7783	0.0029	
				2+4			
				1.189	134.8685	0.0096	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #4)	LTE Band 26(5)	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.223	0.558	0.210	0.923	0.781	33.6155	0.0205	#21
				1+3			
				0.433	104.3939	0.0027	
				1+4			
				1.146	118.8924	0.0103	
				2+3			
				0.768	96.5803	0.0070	
				2+4			
				1.481	119.0672	0.0151	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance[mm]	SPLSR	Plot No
NR Band n77 DoD(Main #4)	LTE Band 12	BT	WLAN 5G MIMO		[mm]		
1	2	3	4	1+2			
0.223	0.429	0.210	0.923	0.652	33.6155	0.0157	#22
				1+3			
				0.433	104.3939	0.0027	
				1+4			
				1.146	118.8924	0.0103	
				2+3			
				0.639	96.5803	0.0053	
				2+4			
				1.352	119.0672	0.0132	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #4)	LTE Band 13	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.223	0.433	0.210	0.923	0.656	33.6155	0.0158	#23
				1+3			
				0.433	104.3939	0.0027	
				1+4			
				1.146	118.8924	0.0103	
				2+3			
				0.643	96.5803	0.0053	
				2+4			
				1.356	119.0672	0.0133	
				3+4			
				1.133	32.1552	0.0375	

Mode				Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n77 DoD(Main #4)	LTE Band 66	BT	WLAN 5G MIMO				
1	2	3	4	1+2			
0.223	0.396	0.210	0.923	0.619	24.8727	0.0196	#24
				1+3			
				0.433	104.3939	0.0027	
				1+4			
				1.146	118.8924	0.0103	
				2+3			
				0.606	116.0707	0.0041	
				2+4			
				1.319	132.2599	0.0112	
				3+4			
				1.133	32.1552	0.0375	

-Phablet Mode

1) WWAN Mode + 5GHz WLAN Mode Rear

Max Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR Band n25	WLAN 5GHz MIMO				
1	2	1+2	1+2		
1.281	2.929	4.210	130.0038	0.0112	#25

SPLSR Hotspot Combination
This Procedure can only be applied when simultaneous transmission SAR is > 1.6 W/kg, it does not meet SPLSR criteria, and antenna pair is co-located

Test Procedure:
1.Perform enlarged zoom scan/volume scan on the co-located antenna pair to determine 1g aggregate SAR:

Enlarged zoom Scan/Volume scan Result Head

Configuration	Band	Masured SAR	Volume SAR	Scaled factor	Combined 1g SAR(W/kg)	Plot No.
NR n41(Sub #6) + BT + WLAN5G	NR n41	0.509	0.556	1.035	0.937	#26
	BT	0.364	0.414	1.509		
	WLAN 5G	0.272	0.218	1.477		
NR n77(Sub #2) + BT + WLAN5G	NR n77(Sub #2)	0.720	0.725	1.164	1.35	#27
	BT	0.364	0.414	1.508		
	WLAN 5G	0.272	0.218	1.477		
NR n77(Sub #2) + WLAN 2.4G	NR n77(Sub #2)	0.720	0.725	1.164	1.21	#28
	WLAN 2.4G	0.491	0.444	1.231		
NR n77(Sub #2) + WLAN2.4G RSDB + WLAN5G	NR n77(Sub #2)	0.720	0.725	1.164	1.17	#29
	WLAN 2.4G RSDB	0.216	0.316	1.181		
	WLAN 5G	0.272	0.218	1.477		
NR n77 DoD(Sub #2) + BT + WLAN5G	NR n77 DoD(Sub #2)	0.762	0.673	1.127	1.19	#30
	BT	0.364	0.414	1.508		
	WLAN 5G	0.272	0.218	1.477		
NR n77 DoD(Sub #2) + WLAN 2.4G	NR n77 DoD(Sub #2)	0.762	0.673	1.127	1.02	#31
	WLAN 2.4G	0.491	0.444	1.231		
NR n77 DoD(Sub #2)+ WLAN2.4G RSDB + WLAN5G	NR n77 DoD(Sub #2)	0.762	0.673	1.127	1.05	#32
	WLAN 2.4G RSDB	0.216	0.316	1.181		
	WLAN 5G	0.272	0.218	1.477		

Enlarged zoom Scan/Volume scan Result Body

Configuration	Band	Masured SAR	Volume SAR	Scaled factor	Combined 1g SAR(W/kg)	Plot No.
NR n25 + LTE 26(5)	NR n25	0.486	0.439	1.021	0.677	#33
	LTE 26(5)	0.488	0.379	1.143		
NR n77(Sub #2) + BT + WLAN 5G	NR n77(Sub #2)	0.070	0.084	1.156	1.20	#34
	BT	0.139	0.093	1.508		
	WLAN 5G	0.609	0.731	1.515		
NR n77(Sub #8) + BT + WLAN 5G	NR n77(Sub #8)	0.312	0.275	1.291	1.17	#35
	BT	0.139	0.093	1.508		
	WLAN 5G	0.609	0.731	1.515		
NR n77 DoD(Sub #2) + BT + WLAN 5G	NR n77 DoD(Sub #2)	0.172	0.157	1.040	1.24	#36
	BT	0.139	0.093	1.508		
	WLAN 5G	0.609	0.731	1.515		
NR n77 DoD(Sub #8) + BT + WLAN 5G	NR n77 DoD(Sub #8)	0.152	0.220	1.021	1.20	#37
	BT	0.139	0.093	1.508		
	WLAN 5G	0.609	0.731	1.515		

2. Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair

-The Peak location ofaggregate SAR distribution Head

Mode/Band	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
NR n41(Sub #6) + BT + WLAN5G	54	-322	-176	1.477
NR n77(Sub #2) + BT + WLAN5G	40	-331	-176	1.818
NR n77(Sub #2) + WLAN 2.4G	37.9	-327	-177	1.472
NR n77(Sub #2) + WLAN2.4G RSDB + WLAN5G	40	-331	-176	1.541
NR n77 DoD(Sub #2) + BT + WLAN5G	40	-331	-176	1.913
NR n77 DoD(Sub #2) + WLAN 2.4G	37.9	-327	-177	1.567
NR n77 DoD(Sub #2) + WLAN2.4G RSDB + WLAN5G	40	-331	-176	1.636

-The Peak location ofaggregate SAR distribution Body

Mode/Band	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
NR n25(2) + LTE 26(5)	-20	-74	-206	1.054
NR n77(Sub #2) + BT + WLAN 5G	-7	54	-207	1.214
NR n77(Sub #8) + BT + WLAN 5G	-7	54	-207	1.536
NR n77 DoD(Sub #2) + BT + WLAN 5G	-7	54	-207	1.329
NR n77 DoD(Sub #8) + BT + WLAN 5G	-7	54	-207	1.288

3. Hybrid Volume SAR Simultaneous

-Head Simultaneous Transmission

Simultaneous Transmission Summation Scenario with Head					
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n41(sub #6) + BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 12	Right Touch	0.188	0.937	1.125	No
LTE 66(4)	Right Touch	0.127	0.937	1.064	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77(sub #2) + BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 25(2)	Right Touch	0.094	1.35	1.444	No
LTE 26(5)	Right Touch	0.227	1.35	1.577	No
LTE 12	Right Touch	0.188	1.35	1.538	No
LTE 13	Right Touch	0.196	1.35	1.546	No
LTE 66	Right Touch	0.127	1.35	1.477	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77(Sub #2) + WLAN 2.4G MIMO RSDB +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 25(2)	Right Touch	0.094	1.21	1.304	No
LTE 26(5)	Right Touch	0.227	1.21	1.437	No
LTE 12	Right Touch	0.188	1.21	1.398	No
LTE 13	Right Touch	0.196	1.21	1.406	No
LTE 66	Right Touch	0.127	1.21	1.337	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77(Sub #2) + WLAN 2.4G MIMO	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 26(5)	Right Touch	0.227	1.17	1.397	No
LTE 12	Right Touch	0.188	1.17	1.358	No
LTE 13	Right Touch	0.196	1.17	1.366	No

Simultaneous Transmission Summation Scenario with Head					
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77 DoD(Sub #2) + BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 25(2)	Right Touch	0.094	1.19	1.284	No
LTE 26(5)	Right Touch	0.227	1.19	1.417	No
LTE 12	Right Touch	0.188	1.19	1.378	No
LTE 13	Right Touch	0.196	1.19	1.386	No
LTE 66	Right Touch	0.127	1.19	1.317	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77 DoD(Sub #2) + WLAN 2.4G MIMO RSDB +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 25(2)	Right Touch	0.094	1.02	1.114	No
LTE 26(5)	Right Touch	0.227	1.02	1.247	No
LTE 12	Right Touch	0.188	1.02	1.208	No
LTE 13	Right Touch	0.196	1.02	1.216	No
LTE 66	Right Touch	0.127	1.02	1.147	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77 DoD(Sub #2) + WLAN 2.4G MIMO	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 26(5)	Right Touch	0.227	1.05	1.277	No
LTE 12	Right Touch	0.188	1.05	1.238	No
LTE 13	Right Touch	0.196	1.05	1.246	No

-Hotspot Simultaneous Transmission

Simultaneous Transmission Summation Scenario with 2.4 GHz WLAN Hotspot					
Co-located Anntena PairBand	Postion	Main	2.4GHz WLAN MIMO	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
NR n25(2) + LTE 26(5)	Rear	0.677	0.553	1.230	No

Simultaneous Transmission Summation Scenario with 2.4 GHz RSDB &5 GHz RSDB WLAN						
Co-located Anntena Pair Band	Postion	Main	2.4 GHz WLAN MIMO RSDB SAR	5 GHz WLAN MIMO RSDB SAR	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	
		1	2	3	1+2+3	Yes/No
NR n25(2) + LTE 26(5)	Rear	0.677	0.222	0.368	1.267	No

Simultaneous Transmission Summation Scenario with BT &5 GHz WLAN							
Co-located Anntena PairBand	Postion	Main	5GHz WLAN MIMO	Bluetooth	∑ 1-g SAR	∑ 1-g SAR	Hybrid SPLSR
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	
		1	2	3	1+2	1+2+3	Yes/No
NR n25(2) + LTE 26(5)	Rear	0.677	0.923	0.210	1.600	1.810	Yes(#38)

Simultaneous Transmission Summation Scenario with Hotspot					
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77(Sub #2) + BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 26(5)	Rear	0.558	1.20	1.758	Yes(#39)
LTE 12	Rear	0.429	1.20	1.629	Yes(#40)
LTE 13	Rear	0.433	1.20	1.633	Yes(#41)
LTE 66	Rear	0.396	1.20	1.596	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77(Sub #8) + BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 25(2)	Rear	0.266	1.17	1.436	No
LTE 26(5)	Rear	0.558	1.17	1.728	Yes(#42)
LTE 12	Rear	0.429	1.17	1.599	Yes(#43)
LTE 13	Rear	0.433	1.17	1.603	Yes(#44)
LTE 66	Rear	0.396	1.17	1.566	No
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77 DoD(Sub #2) +BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 26(5)	Rear	0.558	1.24	1.798	Yes(#45)
LTE 12	Rear	0.429	1.24	1.669	Yes(#46)
LTE 13	Rear	0.433	1.24	1.673	Yes(#47)
LTE 66	Rear	0.396	1.24	1.636	Yes(#48)
ENDC Anchor	Postion	ENDC Anchor	Co-located Anntena Pair BandNR n77 DoD(Sub #8) +BT +WLAN 5G	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	
		1	2	1+2	Yes/No
LTE 26(5)	Rear	0.558	1.20	1.758	Yes(#49)
LTE 12	Rear	0.429	1.20	1.629	Yes(#50)
LTE 13	Rear	0.433	1.20	1.633	Yes(#51)
LTE 66	Rear	0.396	1.20	1.596	No

4. Performed Hybrid SPLSR

Mode			Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n25 + LTE26(5)	5GHz WLAN MIMO	Bluetooth				
1	2	3	1+2			
0.677	0.923	0.210	1.600	132.7403	0.0152	#38
			1+3			
			0.887	113.6537	0.0074	
			2+3			
			1.133	32.1552	0.0375	

Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n77(Sub #2)+BT +WLAN 5G	LTE 26(5)				
1	2	1+2			
1.20	0.558	1.758	115.1130	0.0202	#39

Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n77(Sub #2)+BT +WLAN 5G	LTE 12				
1	2	1+2			
1.20	0.429	1.629	115.1130	0.0181	#40

Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n77(Sub #2)+BT +WLAN 5G	LTE 13				
1	2	1+2			
1.20	0.433	1.633	115.1130	0.0181	#41

Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n77(Sub #8)+BT +WLAN 5G	LTE 26(5)				
1	2	1+2			
1.17	0.558	1.728	115.1130	0.0197	#42

Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n77(Sub #8)+BT +WLAN 5G	LTE 12				
1	2	1+2			
1.17	0.429	1.599	115.1130	0.0176	#43

Mode		Sum 1g SAR	Peak SAR Separation Distance [mm]	SPLSR	Plot No
NR n77(Sub #8)+BT +WLAN 5G	LTE 13				
1	2	1+2			
1.17	0.433	1.603	115.1130	0.0176	#44

Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 26(5)		[mm]		
1	2	1+2			
1.24	0.558	1.798	115.1130	0.0209	#45

Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 12		[mm]		
1	2	1+2			
1.24	0.429	1.669	115.1130	0.0187	#46

Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 13		[mm]		
1	2	1+2			
1.24	0.433	1.673	115.1130	0.0188	#47

Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 66		[mm]		
1	2	1+2			
1.24	0.396	1.636	131.2069	0.0159	#48

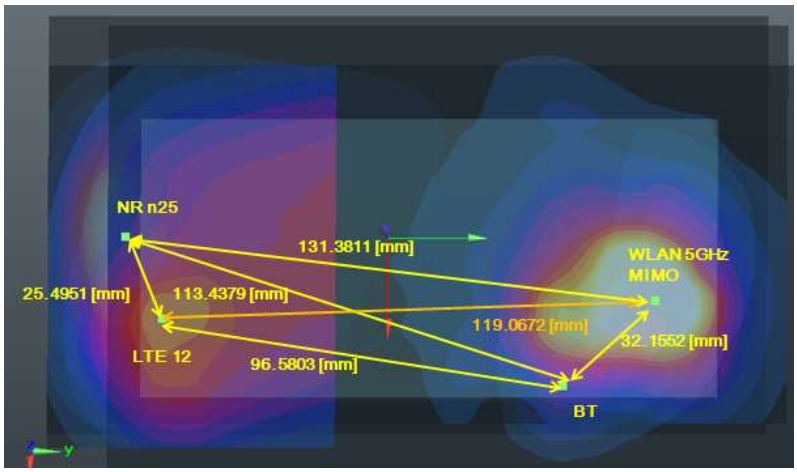
Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 26(5)		[mm]		
1	2	1+2			
1.20	0.558	1.758	115.1130	0.0202	#49

Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 12		[mm]		
1	2	1+2			
1.20	0.429	1.629	115.1130	0.0181	#50

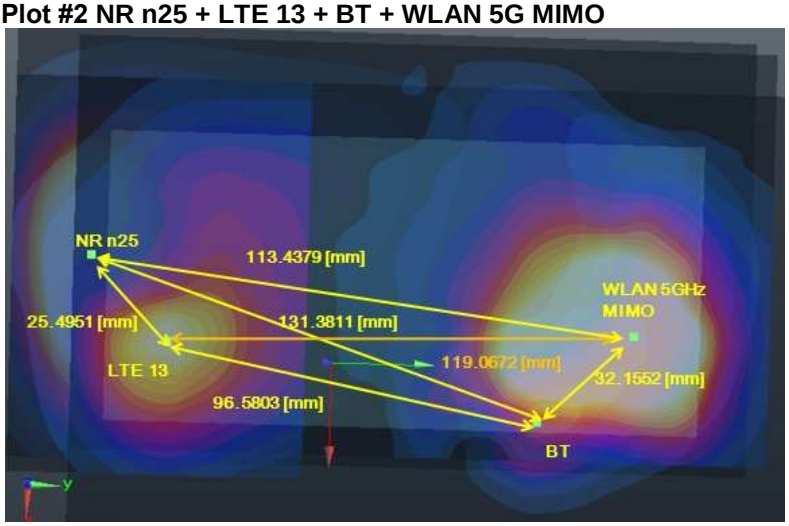
Mode		Sum 1g SAR	Peak SAR Separation Distance	SPLSR	Plot No
NR n77 DoD(Sub #2) +BT +WLAN 5G	LTE 13		[mm]		
1	2	1+2			
1.20	0.433	1.633	115.1130	0.0181	#51

14.5.2Combined SAR / SPLSR Plot

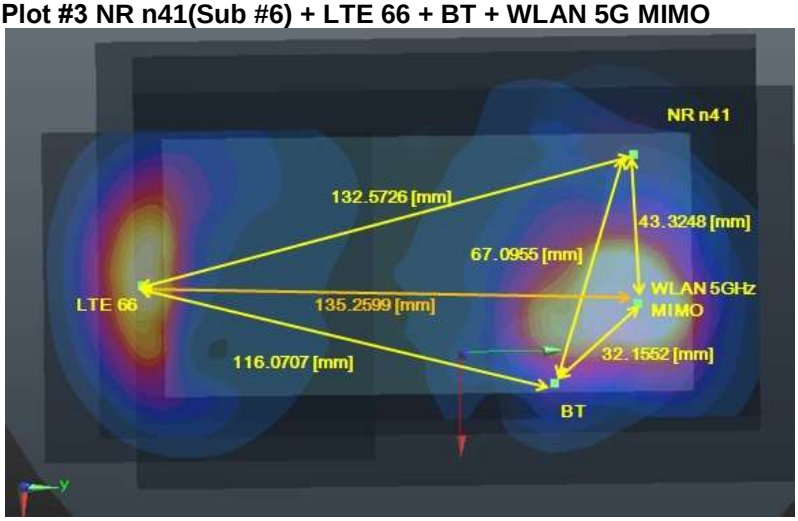
Plot #1 NR n25 + LTE 12 + BT + WLAN 5G MIMO



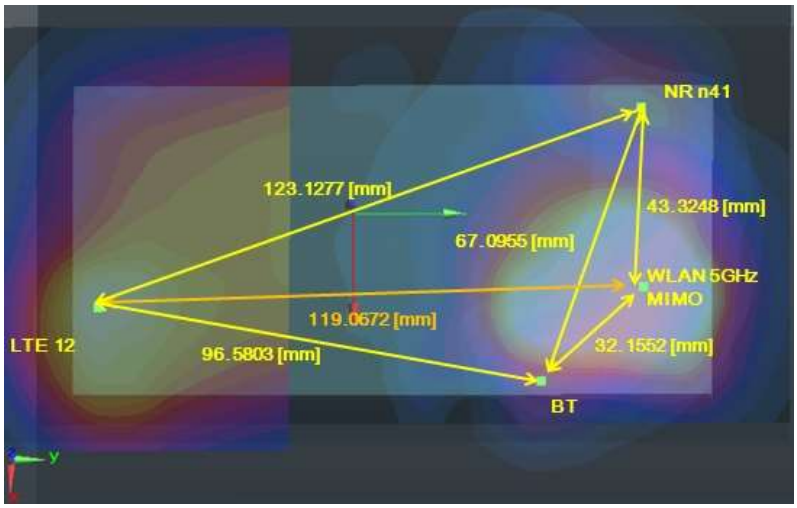
Plot #2 NR n25 + LTE 13 + BT + WLAN 5G MIMO



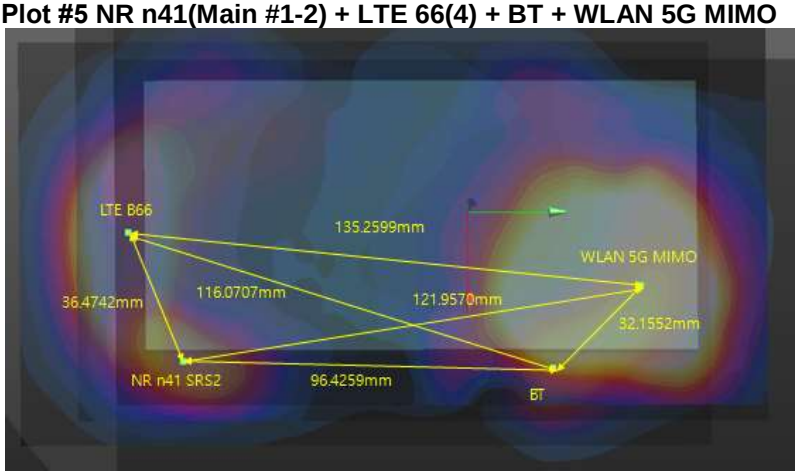
Plot #3 NR n41(Sub #6) + LTE 66 + BT + WLAN 5G MIMO



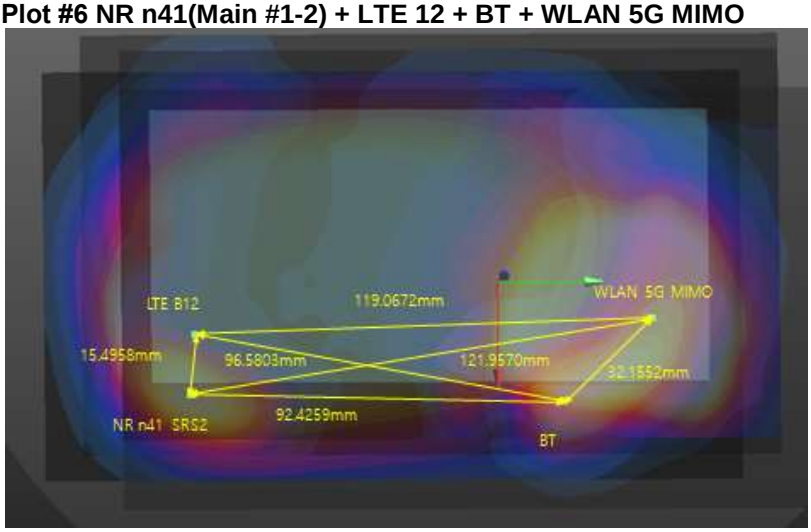
Plot #4 NR n41(Sub #6) + LTE 12 + BT + WLAN 5G MIMO



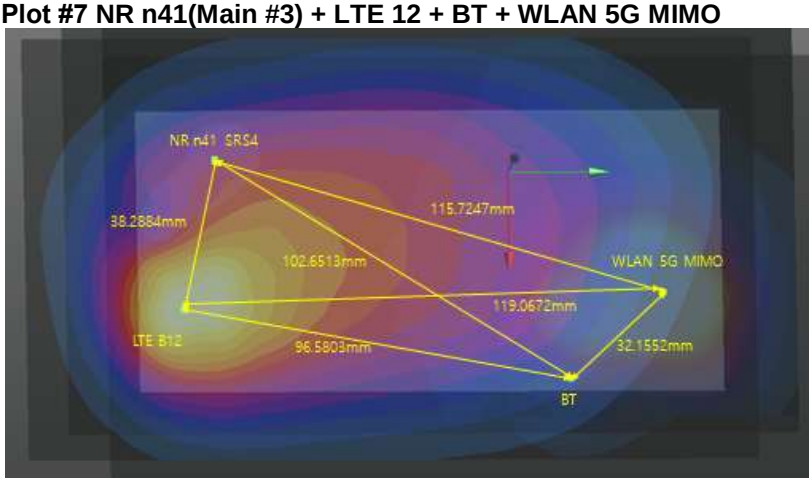
Plot #5 NR n41(Main #1-2) + LTE 66(4) + BT + WLAN 5G MIMO



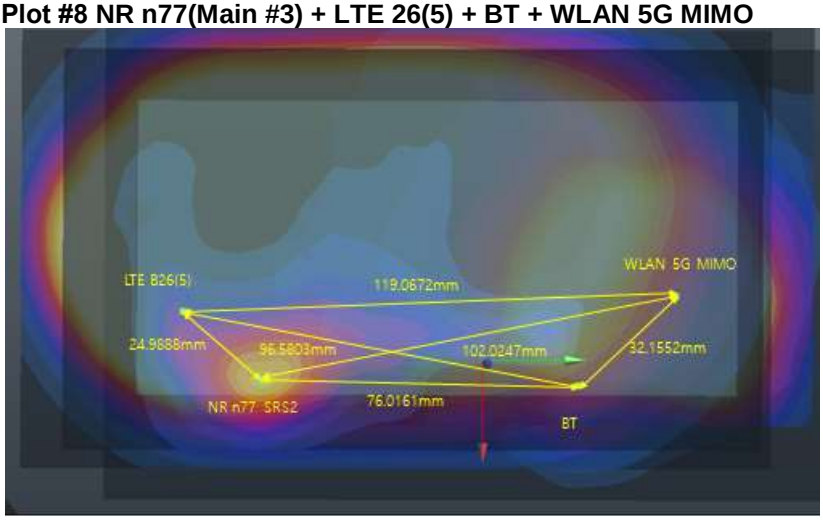
Plot #6 NR n41(Main #1-2) + LTE 12 + BT + WLAN 5G MIMO



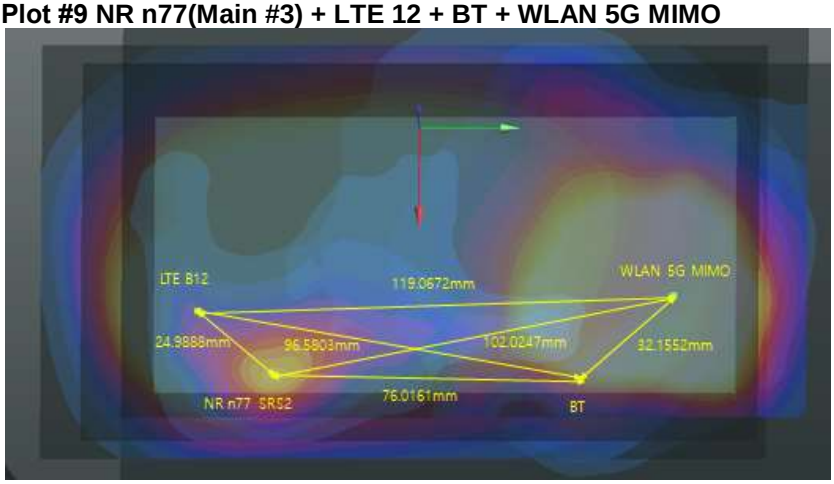
Plot #7 NR n41(Main #3) + LTE 12 + BT + WLAN 5G MIMO



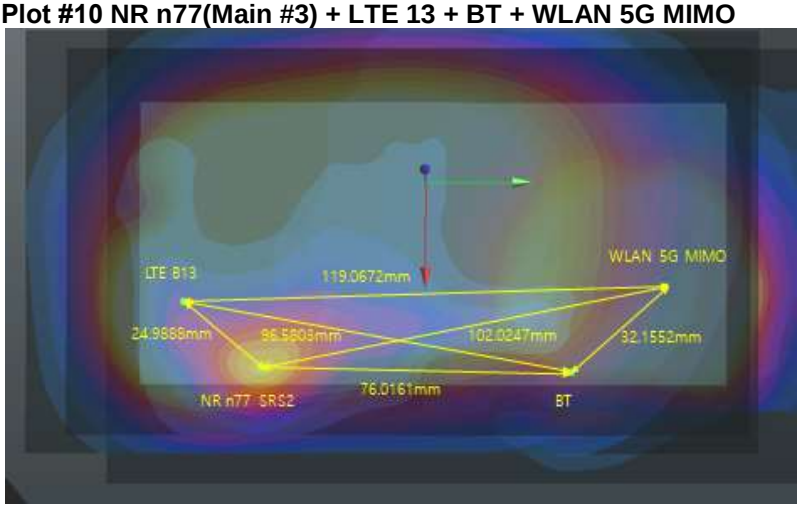
Plot #8 NR n77(Main #3) + LTE 26(5) + BT + WLAN 5G MIMO



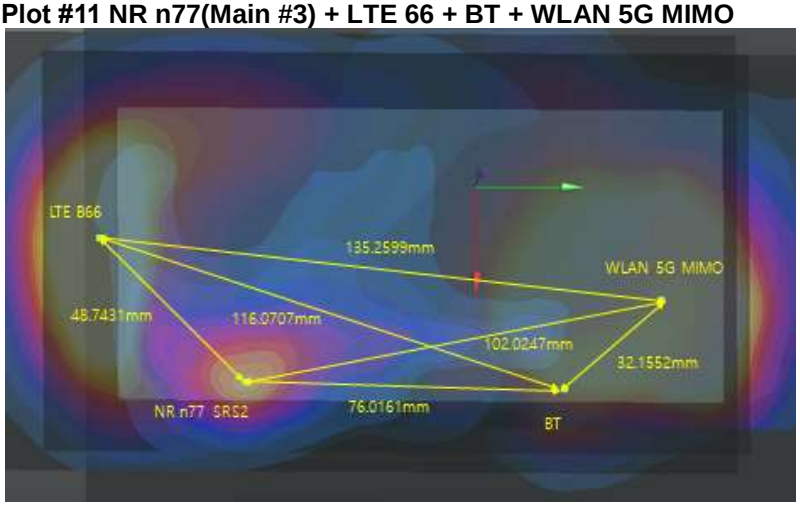
Plot #9 NR n77(Main #3) + LTE 12 + BT + WLAN 5G MIMO



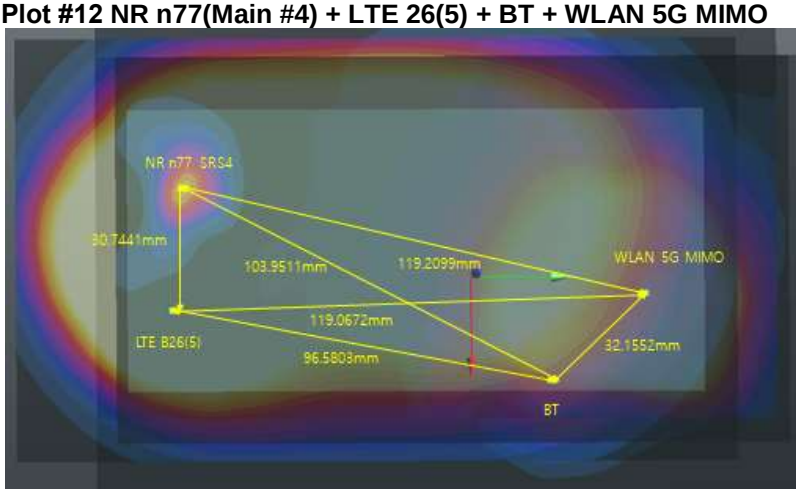
Plot #10 NR n77(Main #3) + LTE 13 + BT + WLAN 5G MIMO



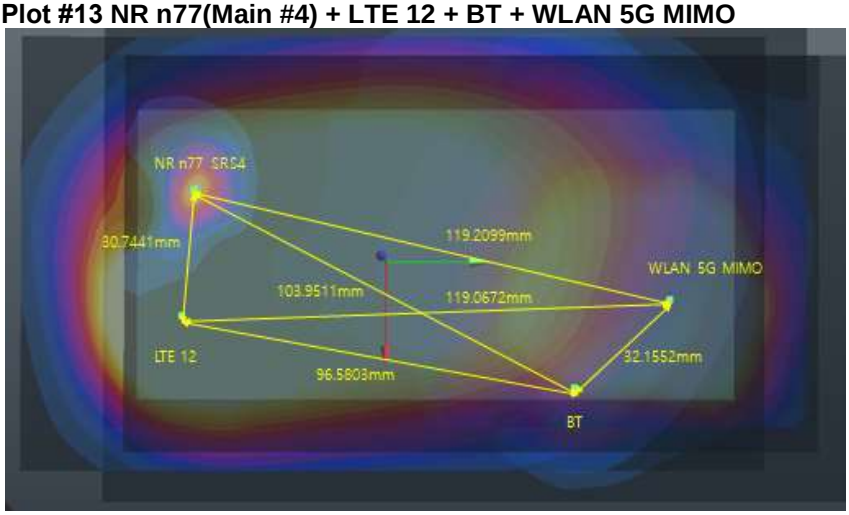
Plot #11 NR n77(Main #3) + LTE 66 + BT + WLAN 5G MIMO



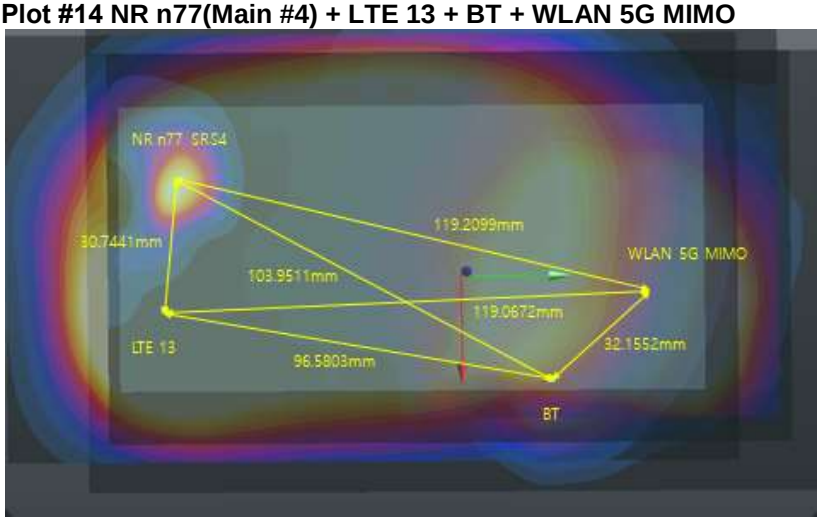
Plot #12 NR n77(Main #4) + LTE 26(5) + BT + WLAN 5G MIMO



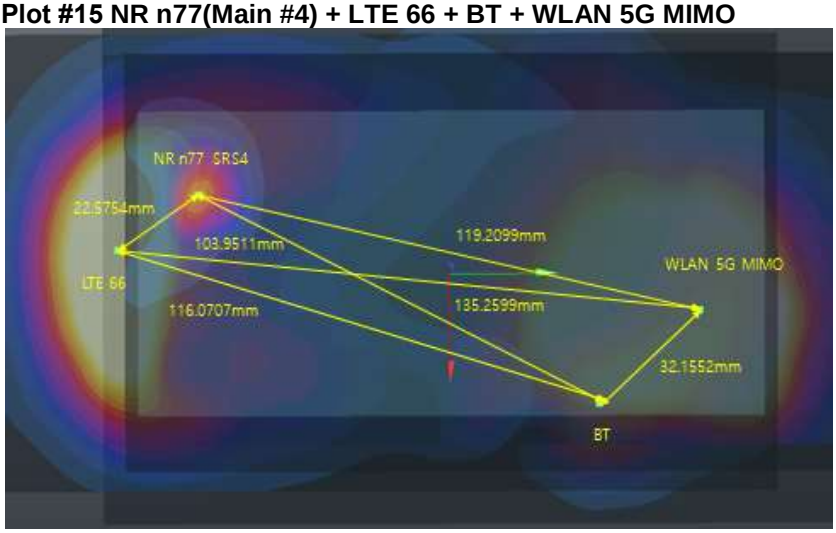
Plot #13 NR n77(Main #4) + LTE 12 + BT + WLAN 5G MIMO



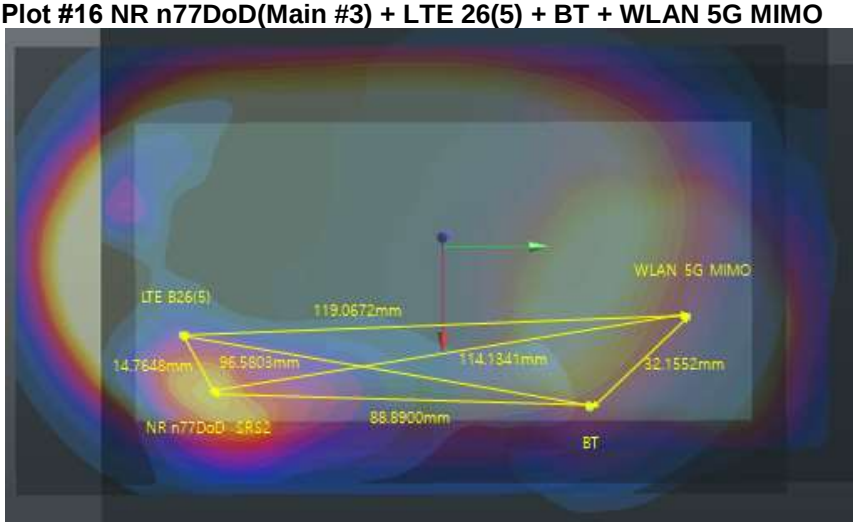
Plot #14 NR n77(Main #4) + LTE 13 + BT + WLAN 5G MIMO



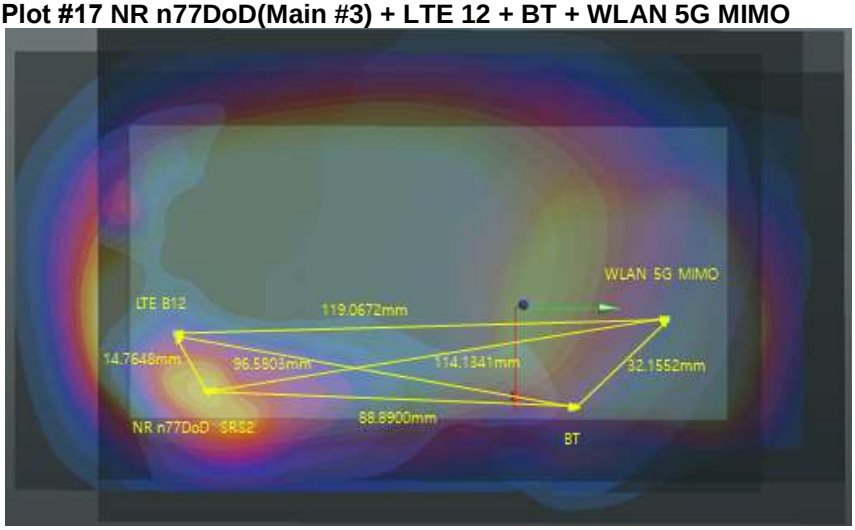
Plot #15 NR n77(Main #4) + LTE 66 + BT + WLAN 5G MIMO



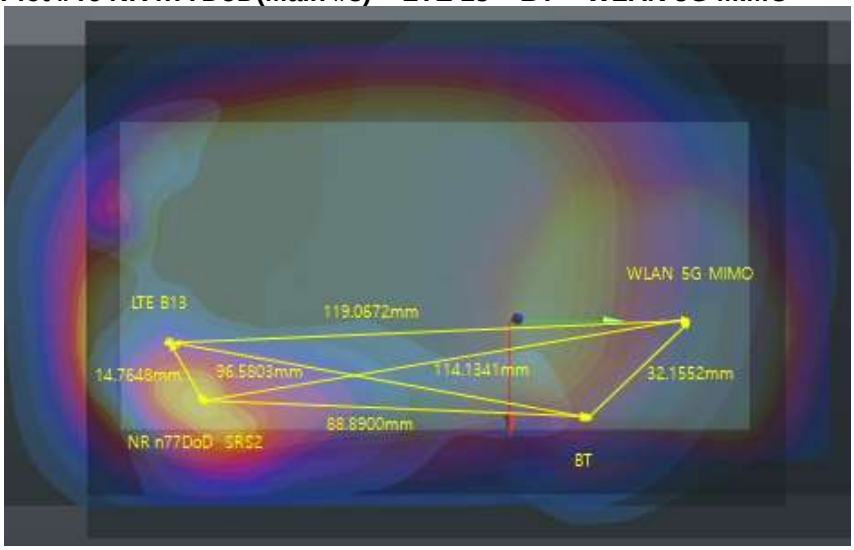
Plot #16 NR n77DoD(Main #3) + LTE 26(5) + BT + WLAN 5G MIMO



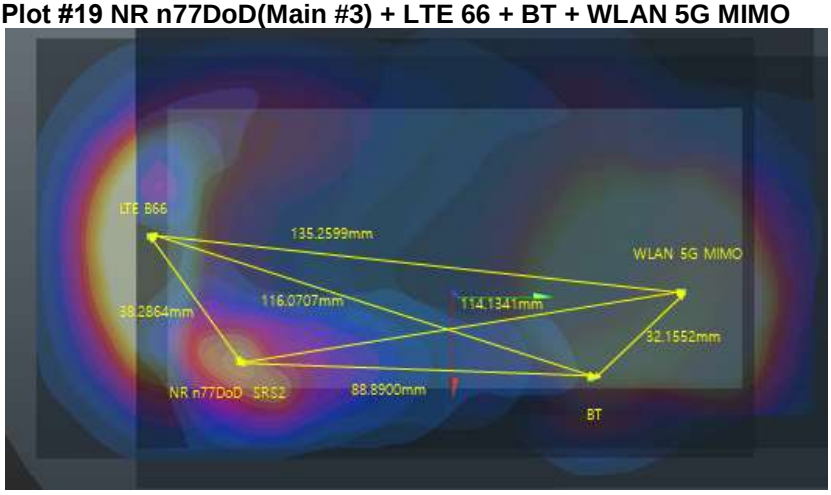
Plot #17 NR n77DoD(Main #3) + LTE 12 + BT + WLAN 5G MIMO



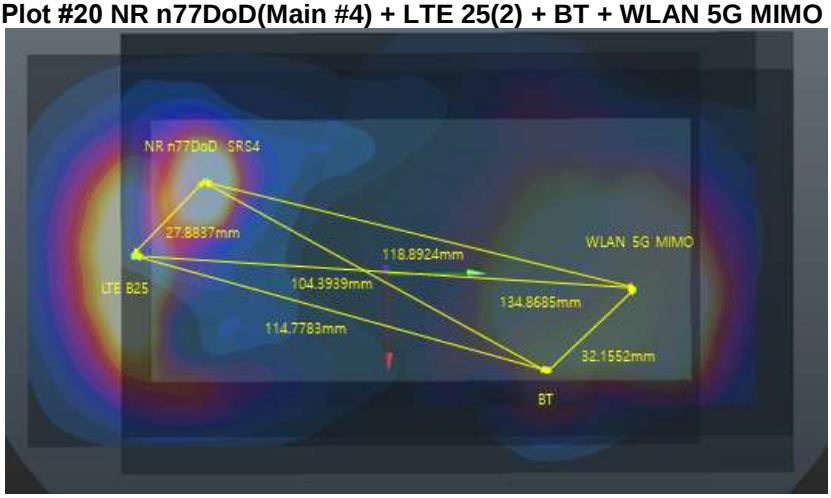
Plot #18 NR n77DoD(Main #3) + LTE 13 + BT + WLAN 5G MIMO



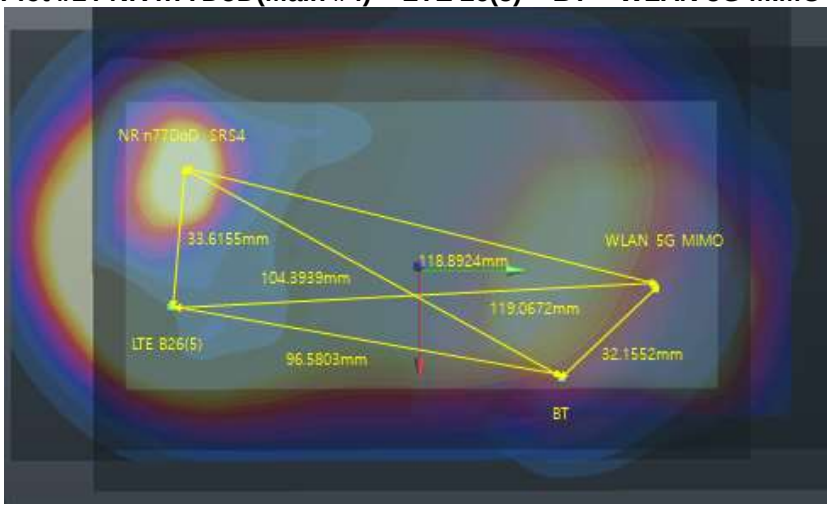
Plot #19 NR n77DoD(Main #3) + LTE 66 + BT + WLAN 5G MIMO



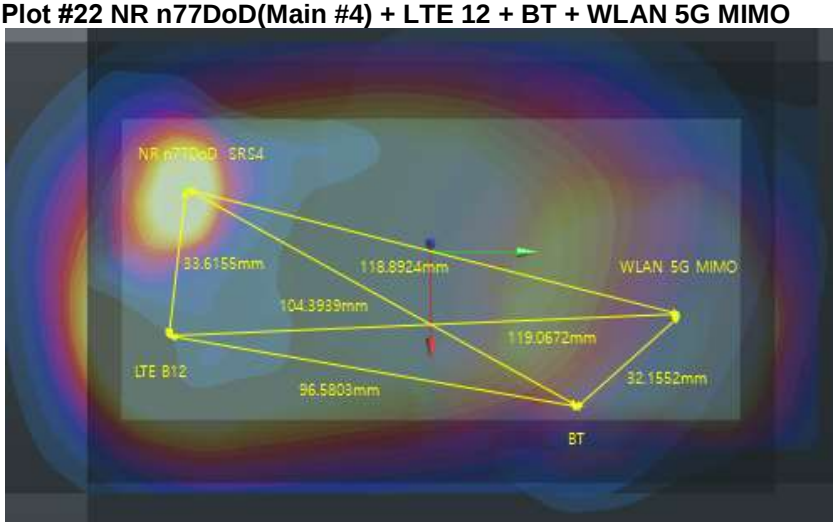
Plot #20 NR n77DoD(Main #4) + LTE 25(2) + BT + WLAN 5G MIMO



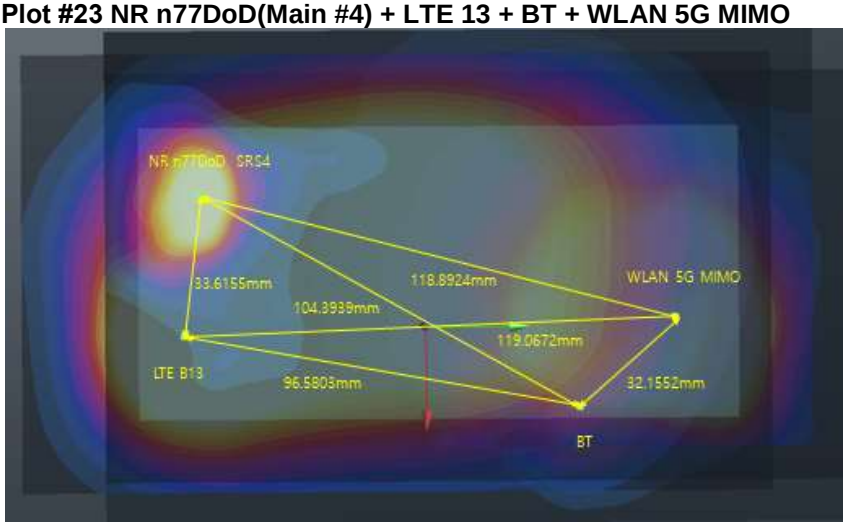
Plot #21 NR n77DoD(Main #4) + LTE 26(5) + BT + WLAN 5G MIMO



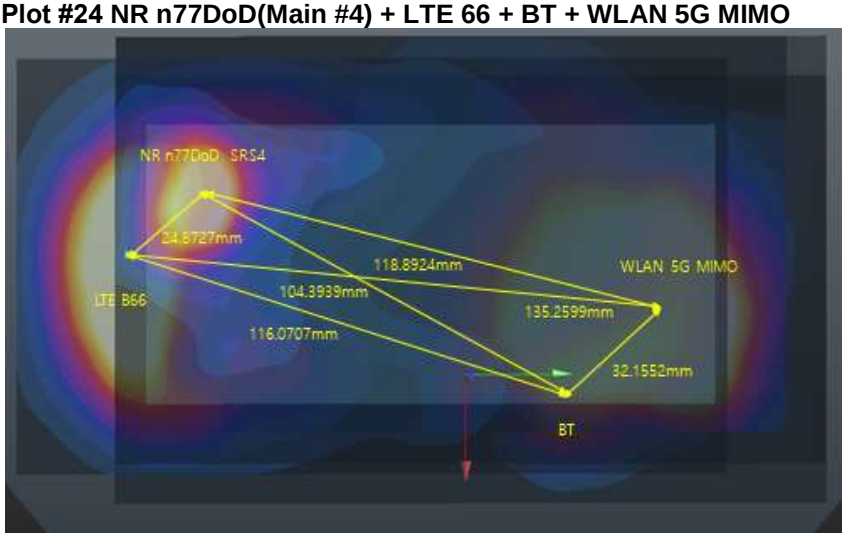
Plot #22 NR n77DoD(Main #4) + LTE 12 + BT + WLAN 5G MIMO



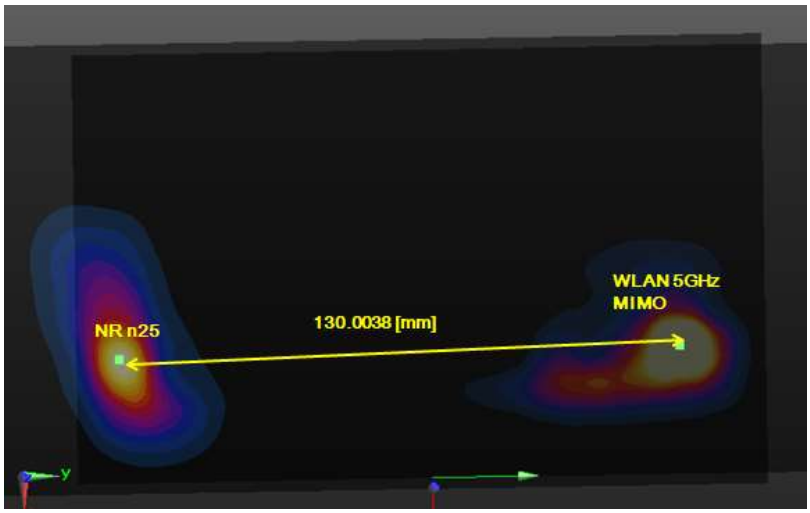
Plot #23 NR n77DoD(Main #4) + LTE 13 + BT + WLAN 5G MIMO



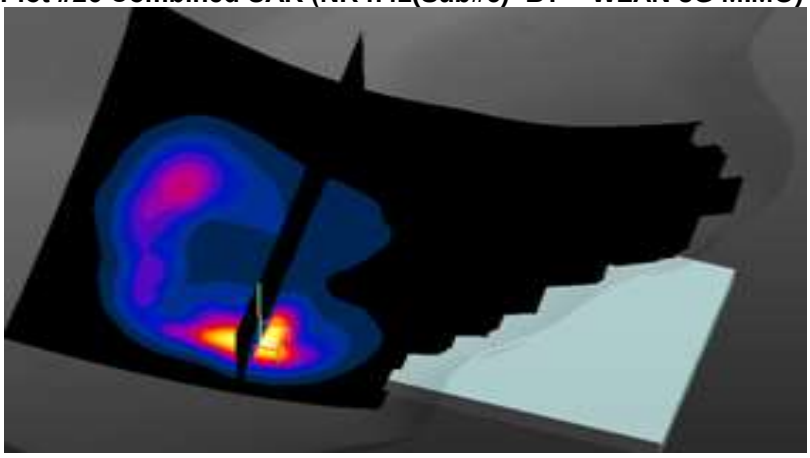
Plot #24 NR n77DoD(Main #4) + LTE 66 + BT + WLAN 5G MIMO



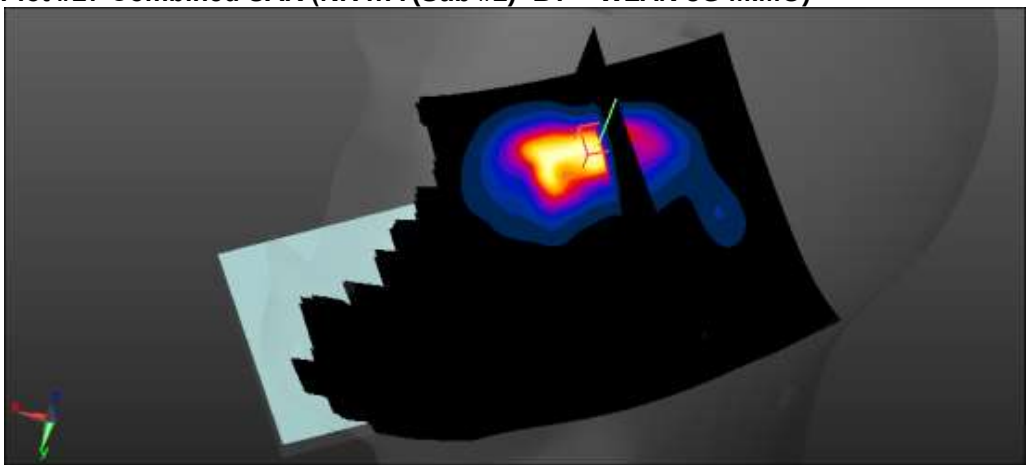
Plot #25 NR n25 + WLAN 5G MIMO Rear(Phablet)



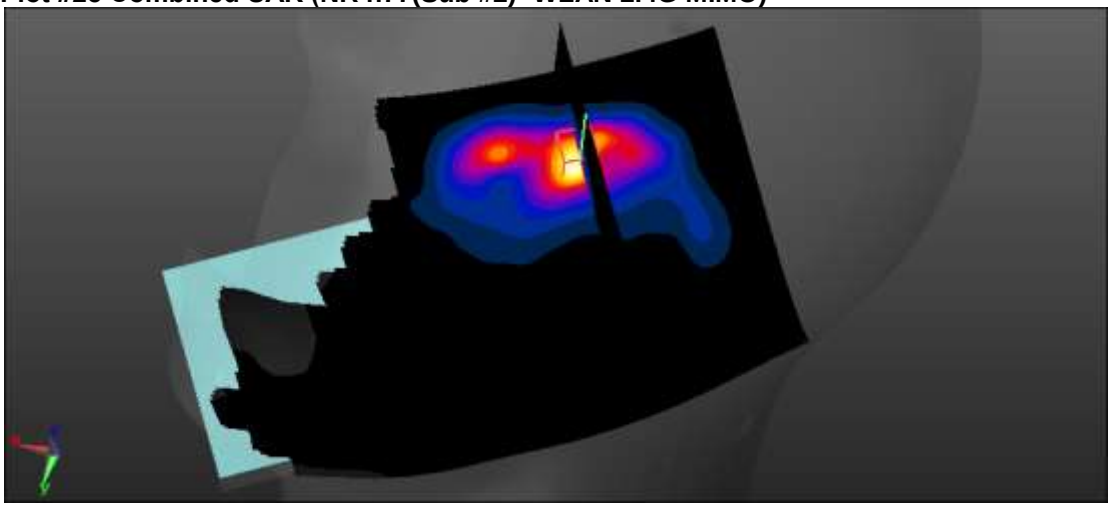
Plot #26 Combined SAR (NR n41(Sub#6)+BT + WLAN 5G MIMO)



Plot #27 Combined SAR (NR n77(Sub #2)+BT + WLAN 5G MIMO)



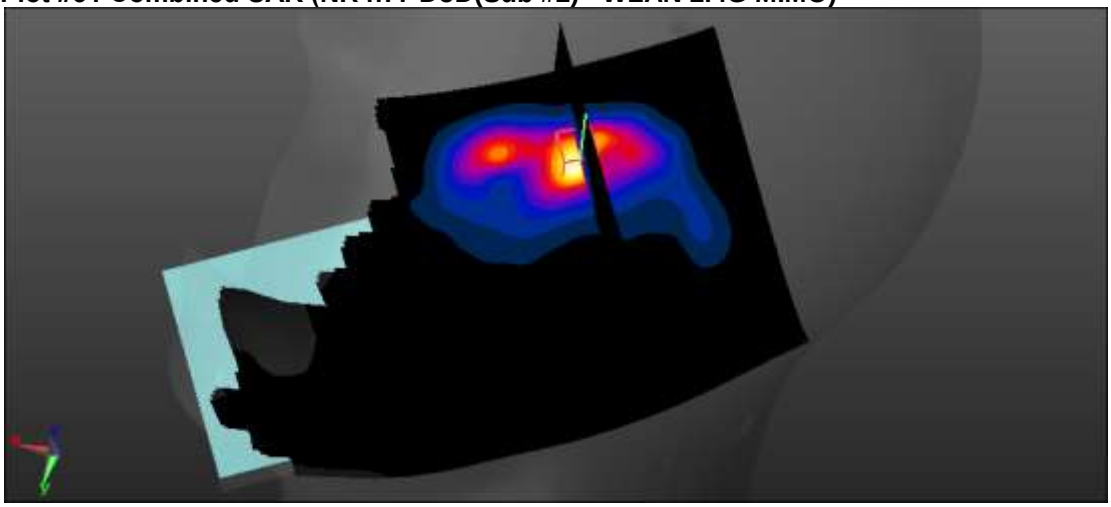
Plot #28 Combined SAR (NR n77(Sub #2)+WLAN 2.4G MIMO)



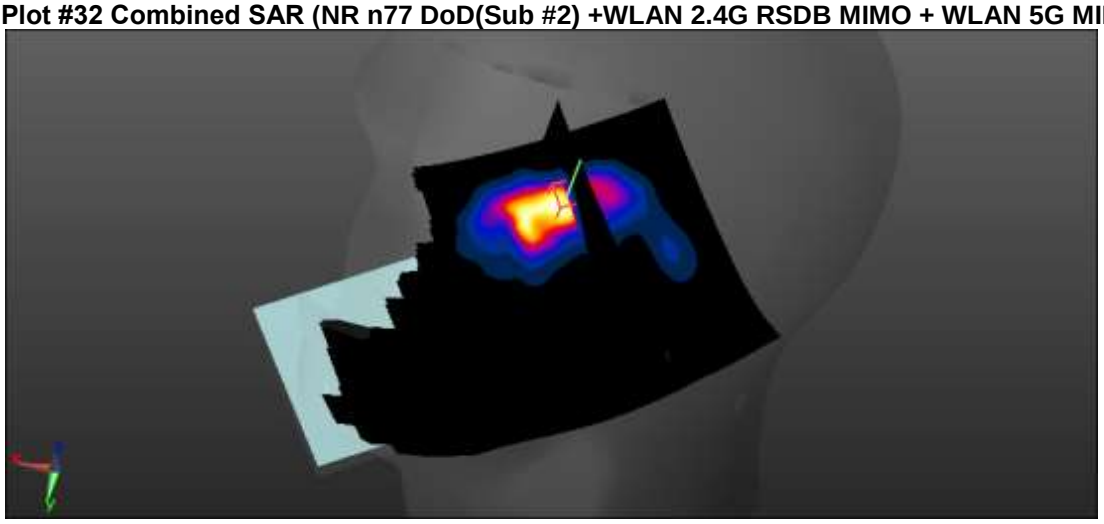
Plot #29 Combined SAR (NR n77(Sub#2)+WLAN 2.4G RSDB MIMO + WLAN 5G MIMO)

Plot #30 Combined SAR (NR n77 DoD(Sub #2) +BT + WLAN 5G MIMO)

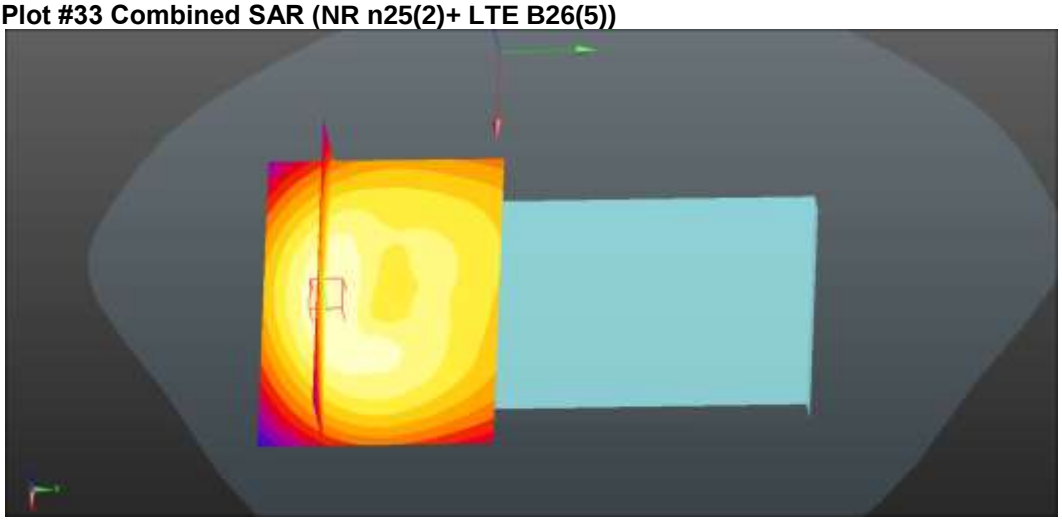
Plot #31 Combined SAR (NR n77 DoD(Sub #2) +WLAN 2.4G MIMO)



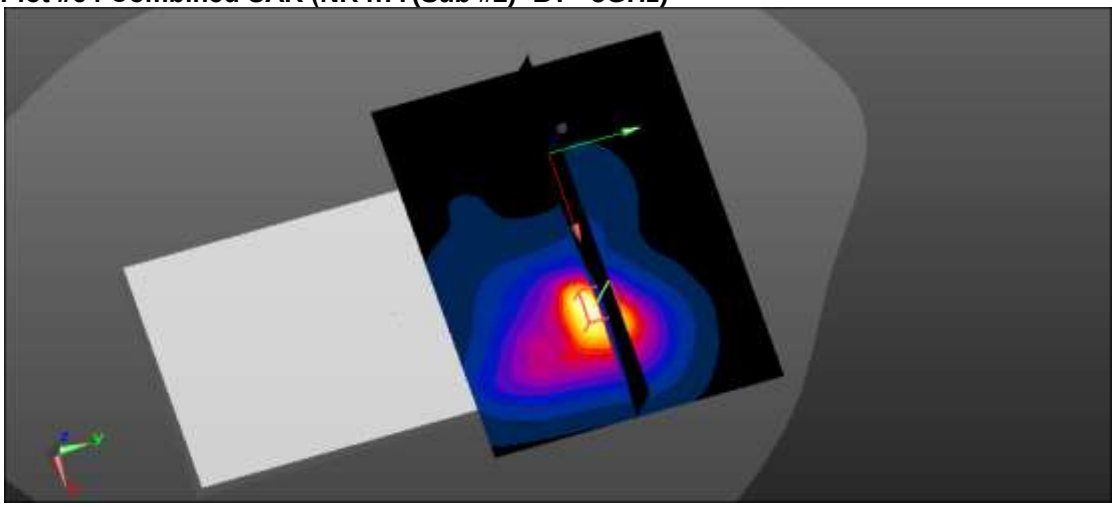
Plot #32 Combined SAR (NR n77 DoD(Sub #2) +WLAN 2.4G RSDB MIMO + WLAN 5G MIMO)



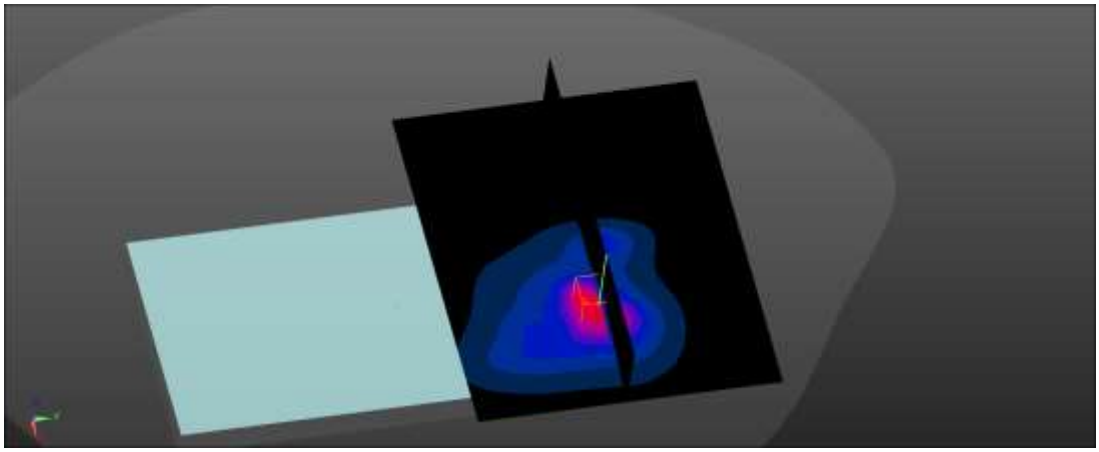
Plot #33 Combined SAR (NR n25(2)+ LTE B26(5))



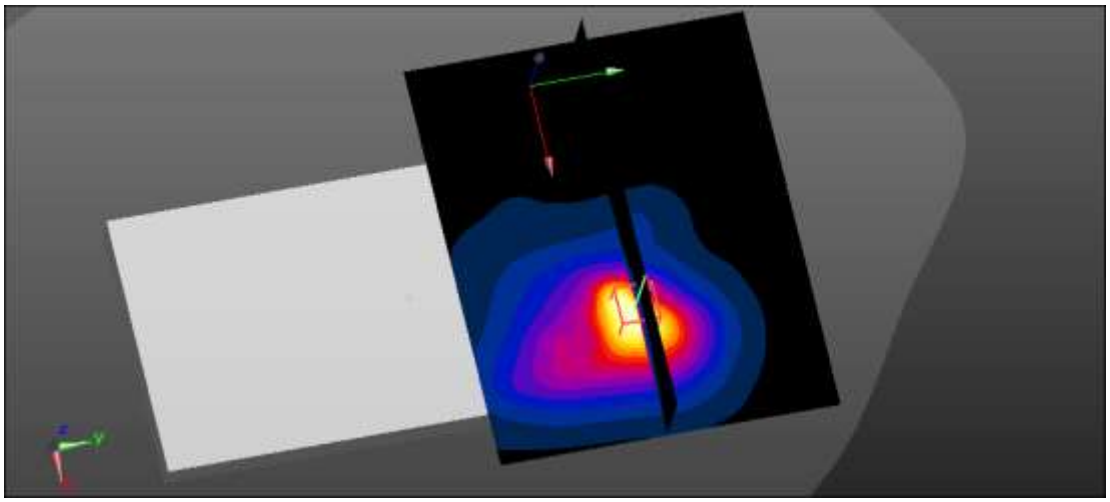
Plot #34 Combined SAR (NR n77(Sub #2)+BT +5GHz)



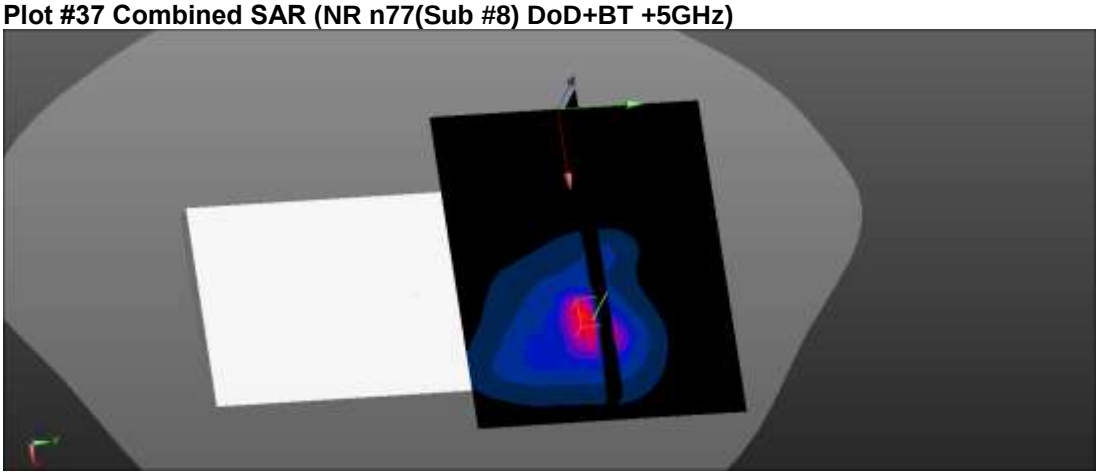
Plot #35 Combined SAR (NR n77(Sub #8)+BT +5GHz)



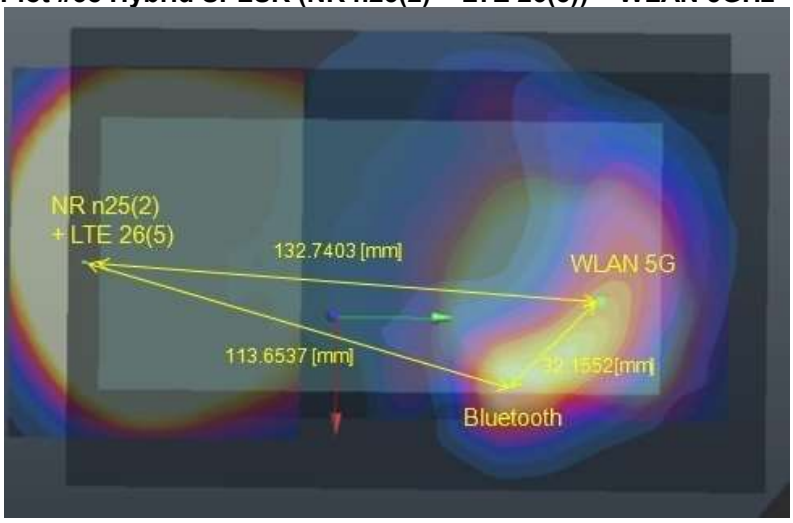
Plot #36 Combined SAR (NR n77(Sub #2) DoD+BT +5GHz)



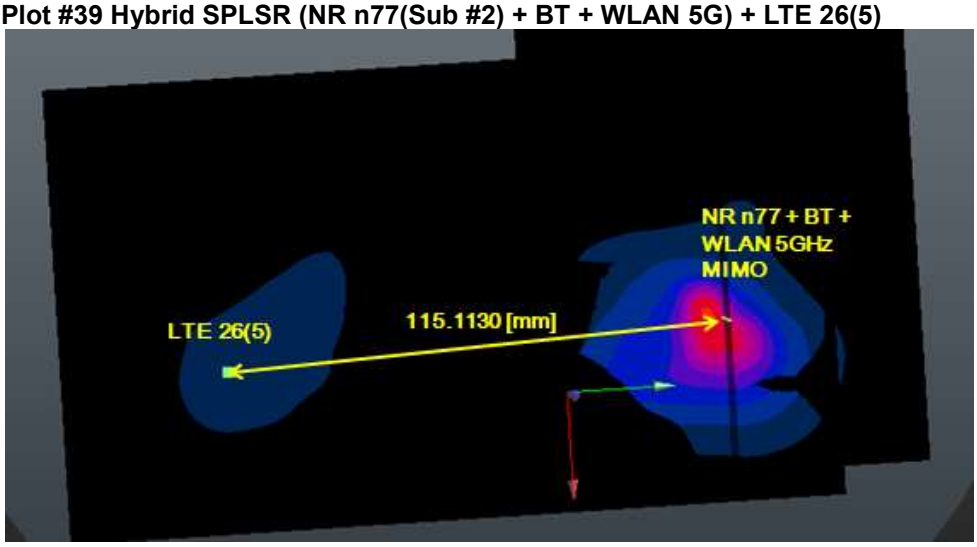
Plot #37 Combined SAR (NR n77(Sub #8) DoD+BT +5GHz)



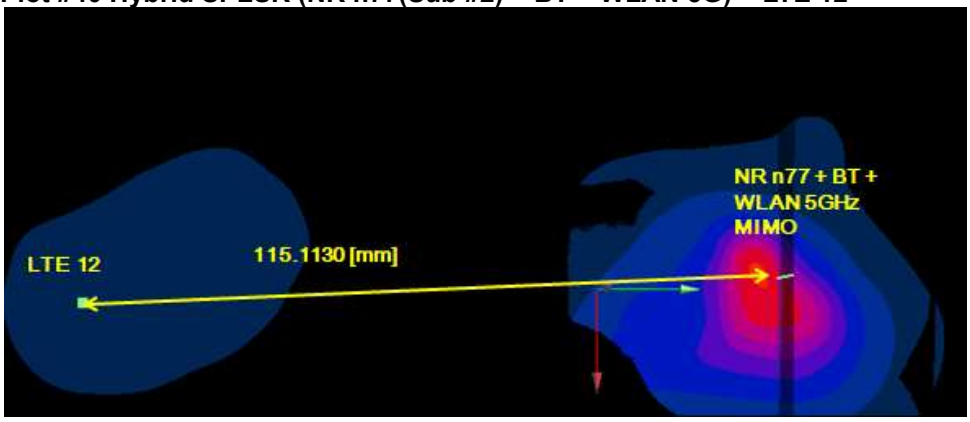
Plot #38 Hybrid SPLSR (NR n25(2) + LTE 26(5)) + WLAN 5GHz+ BT



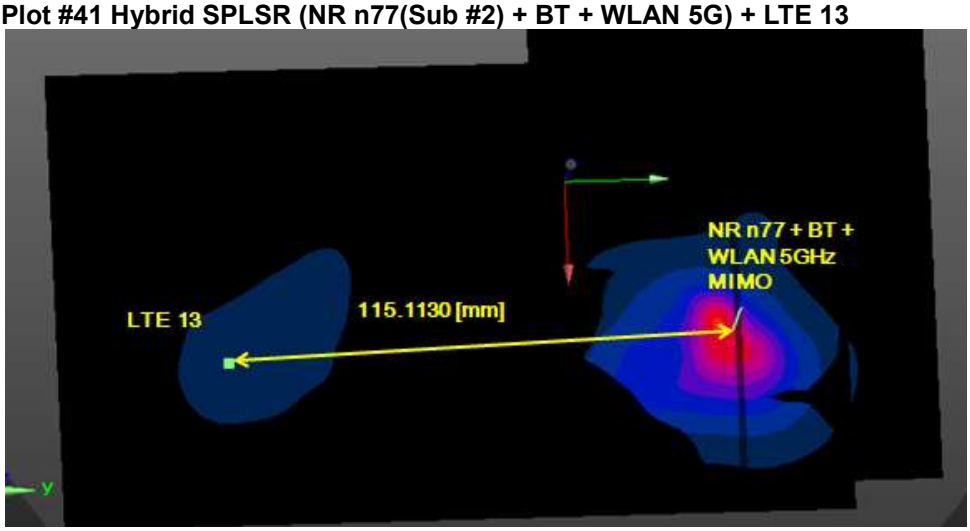
Plot #39 Hybrid SPLSR (NR n77(Sub #2) + BT + WLAN 5G) + LTE 26(5)



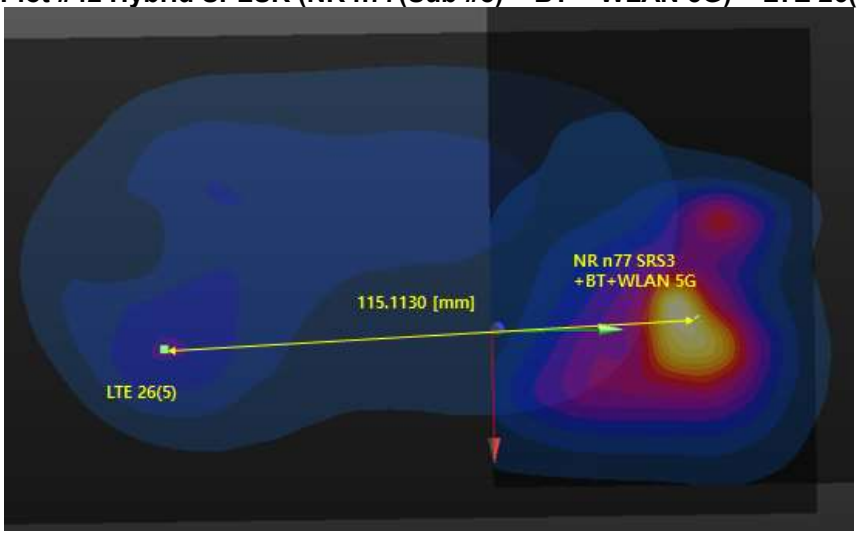
Plot #40 Hybrid SPLSR (NR n77(Sub #2) + BT + WLAN 5G) + LTE 12



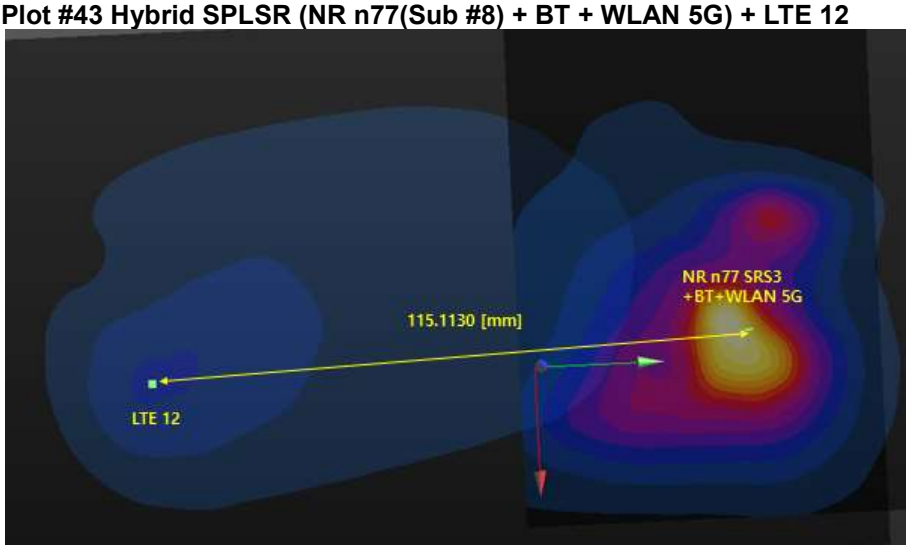
Plot #41 Hybrid SPLSR (NR n77(Sub #2) + BT + WLAN 5G) + LTE 13



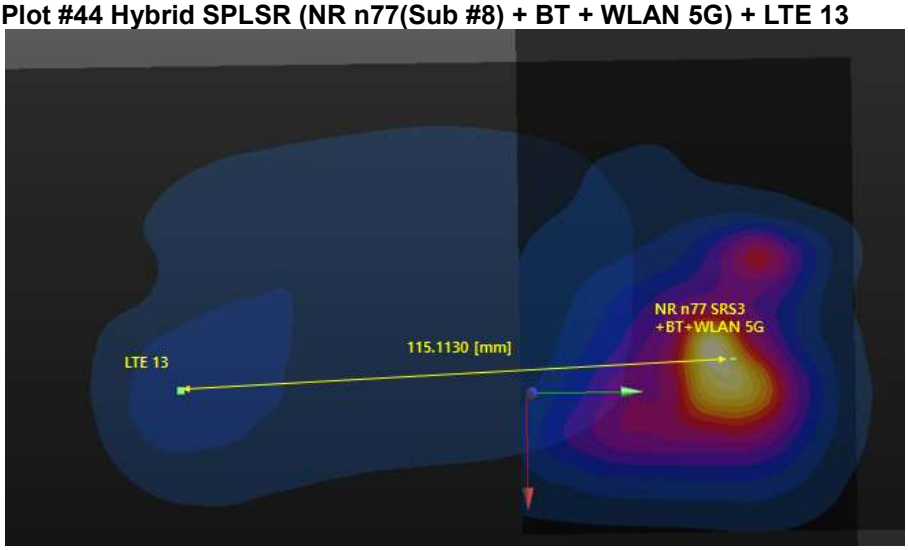
Plot #42 Hybrid SPLSR (NR n77(Sub #8) + BT + WLAN 5G) + LTE 26(5)



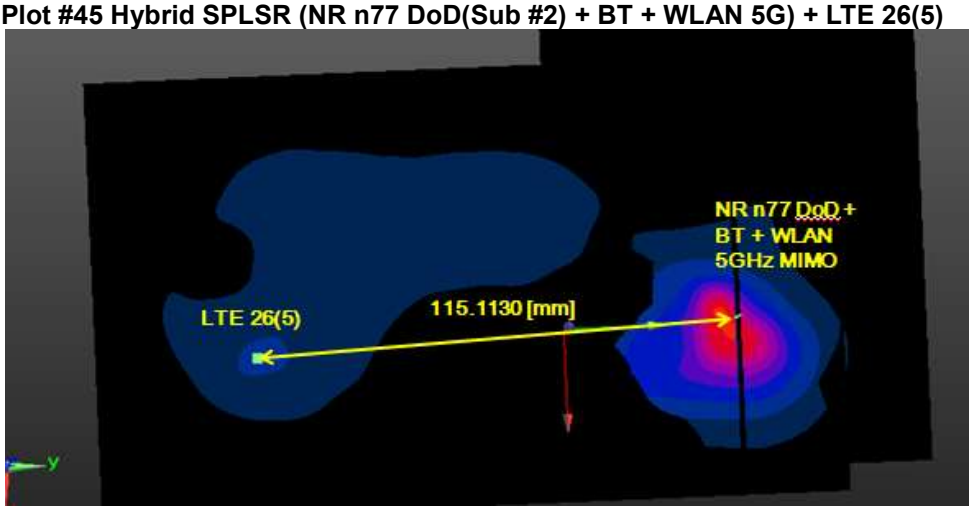
Plot #43 Hybrid SPLSR (NR n77(Sub #8) + BT + WLAN 5G) + LTE 12



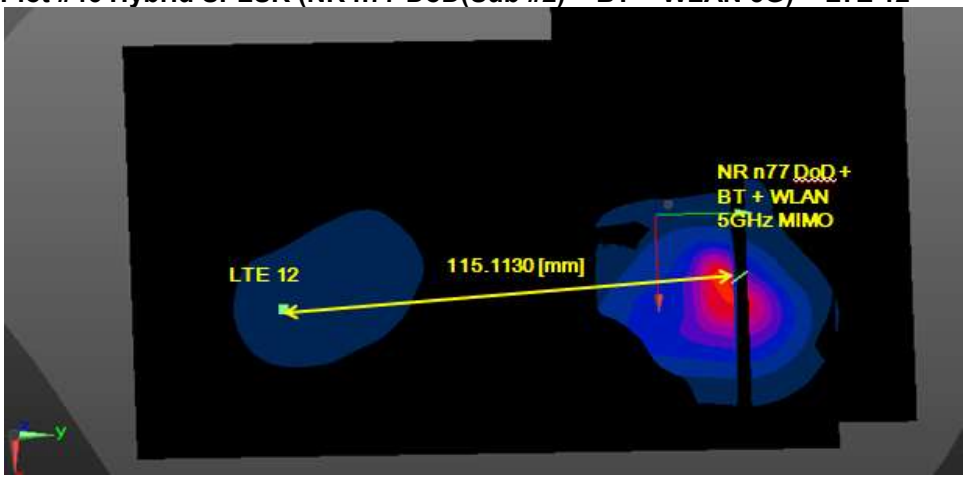
Plot #44 Hybrid SPLSR (NR n77(Sub #8) + BT + WLAN 5G) + LTE 13



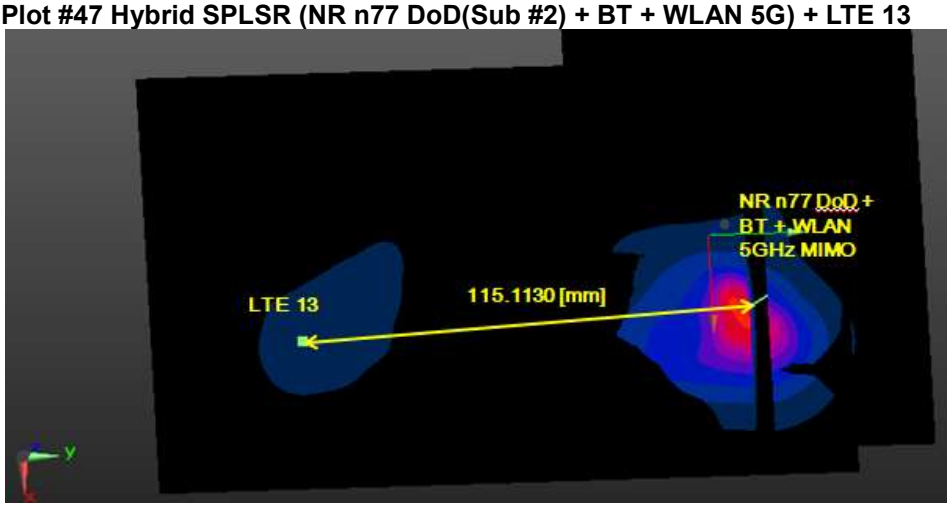
Plot #45 Hybrid SPLSR (NR n77 DoD(Sub #2) + BT + WLAN 5G) + LTE 26(5)



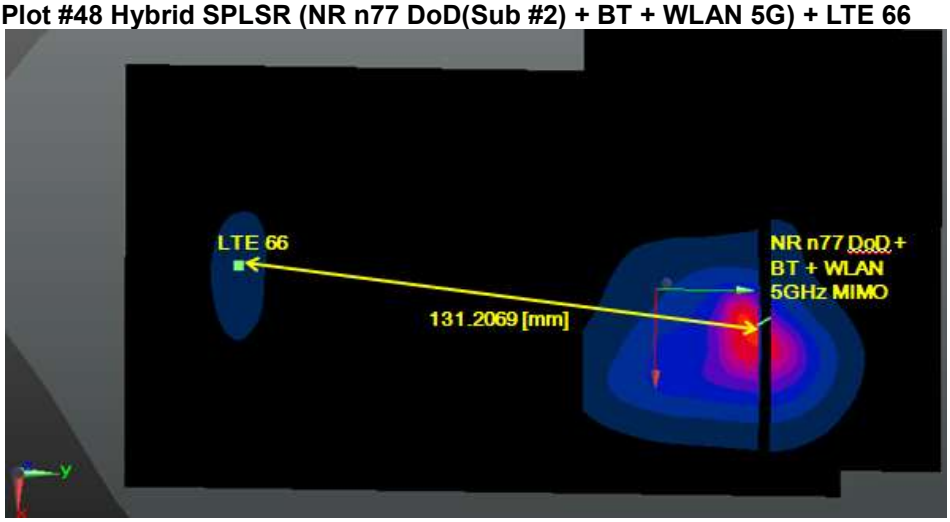
Plot #46 Hybrid SPLSR (NR n77 DoD(Sub #2) + BT + WLAN 5G) + LTE 12



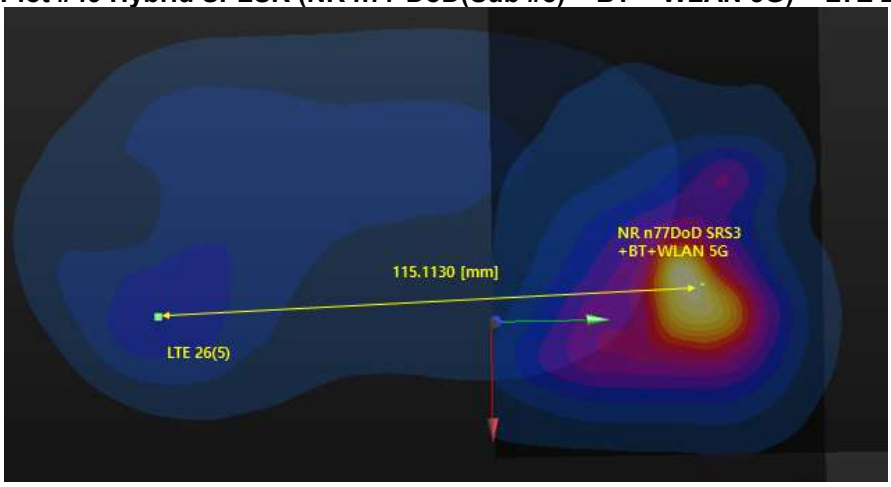
Plot #47 Hybrid SPLSR (NR n77 DoD(Sub #2) + BT + WLAN 5G) + LTE 13



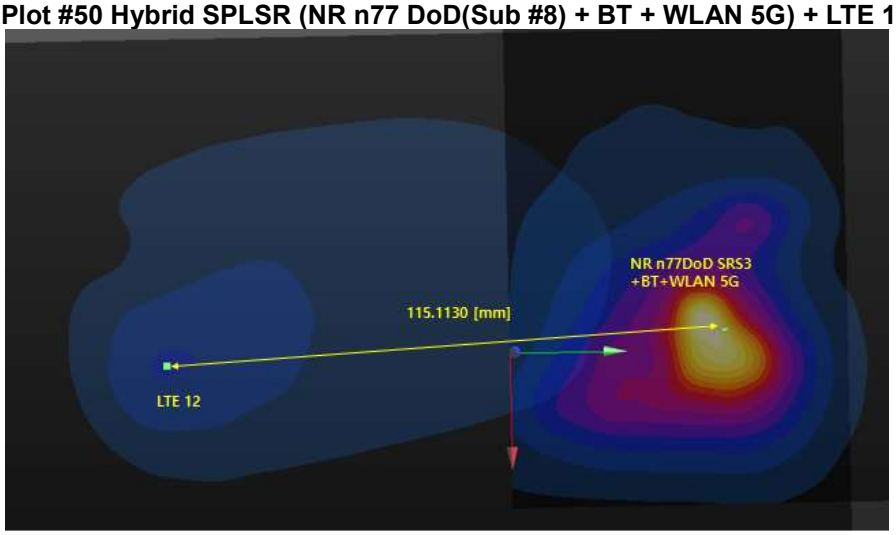
Plot #48 Hybrid SPLSR (NR n77 DoD(Sub #2) + BT + WLAN 5G) + LTE 66



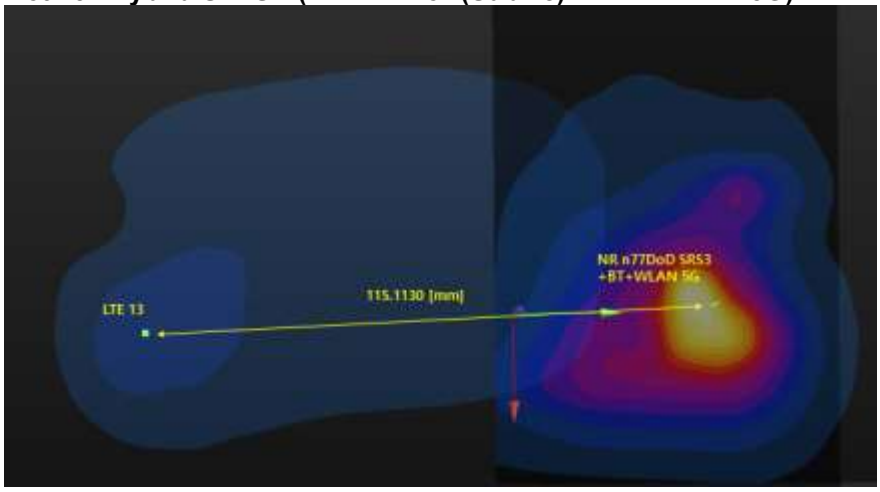
Plot #49 Hybrid SPLSR (NR n77 DoD(Sub #8) + BT + WLAN 5G) + LTE 26(5)



Plot #50 Hybrid SPLSR (NR n77 DoD(Sub #8) + BT + WLAN 5G) + LTE 12



Plot #51 Hybrid SPLSR (NR n77 DoD(Sub #8) + BT + WLAN 5G) + LTE 13



14.6 Simultaneous Transmission Conclusion

The above numerical summed SAR Results are sufficient to determine that simultaneous transmission cases will not exceed the SAR Limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE1528-2013.

15. SAR Measurement Variability and Uncertainty

In accordance with KDB procedure 865664 D01v01r04 SAR measurement 100 ㎒ to 6 ㎓, SAR additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency Band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement variability was assessed using the following procedures for each frequency Band:

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg for 1g SAR or < 2.0 W/kg for 10g SAR; steps 2) through 4) do not apply.

2) When the original highest measured 1g SAR is ≥ 0.80 W/kg or 10g SAR ≥ 2.0W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg for 1g SAR or ≥ 3.625 W/kg for 10g SAR (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg for 1g SAR or ≥3.75 W/kg for 10g SAR and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Hotspot SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
1 905	381000	NR Band n25	Bottom	1.05	0.997	1.05

16. Measurement Uncertainty

The measured SAR was <1.5 W/Kg for 1g SAR and <3.75 W/Kg For 10g SAR for all frequency Bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE1528-2013 was not required.

17. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/ 59CHA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/ 59RAA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/ 5SD0A1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F12/ 5K9GA1/ C/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/ 59CHA1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/ 59RAA1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F08/5AJ0A1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/ 5SD0A1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F12/ 5K9GA1/ A/ 01	N/A	N/A	N/A
Staubli	Teach Pendant (JoystickD21142606B)	010963	N/A	N/A	N/A
Staubli	Teach Pendant (JoystickD21142606B)	011578	N/A	N/A	N/A
Staubli	Teach Pendant (JoystickD21143300)	S-0008	N/A	N/A	N/A
Staubli	Teach Pendant (JoystickD21142605)	001729	N/A	N/A	N/A
Staubli	Teach Pendant (JoystickD2114210603)	S-1206 0513	N/A	N/A	N/A
SPEAG	DAE4	446	09/30/2021	Annual	09/30/2022
SPEAG	DAE4	466	04/23/2021	Annual	04/23/2022
SPEAG	DAE4	1687	06/21/2021	Annual	06/21/2022
SPEAG	DAE4	648	06/02/2021	Annual	06/02/2022
SPEAG	DAE4	1629	07/26/2021	Annual	07/26/2022
SPEAG	E-Field Probe EX3DV4	7681	12/14/2021	Annual	12/14/2022
SPEAG	E-Field Probe EX3DV4	7654	05/21/2021	Annual	05/21/2022
SPEAG	E-Field Probe EX3DV4	3903	03/24/2021	Annual	03/24/2022
SPEAG	E-Field Probe EX3DV4	7655	05/21/2021	Annual	05/21/2022
SPEAG	Dipole D1900V2	5d061	11/24/2021	Annual	11/24/2022
SPEAG	Dipole D2600V2	1106	07/30/2021	Annual	07/30/2022
SPEAG	Dipole D3500V2	1132	01/24/2022	Annual	01/24/2023
SPEAG	Dipole D3700V2	1105	11/22/2021	Annual	11/22/2022
SPEAG	Dipole D3900V2	1019	06/09/2021	Annual	06/09/2022
Agilent	Power Meter E4419B	MY41291386	10/06/2021	Annual	10/06/2022
Agilent	Power Meter N1911A	MY45101406	07/08/2021	Annual	07/08/2022
Agilent	Power Sensor 8481A	SG1091286	10/06/2021	Annual	10/06/2022
Agilent	Power Sensor 8481A	MY41090675	10/06/2021	Annual	10/06/2022
Agilent	Power Sensor N1921A	MY55220026	08/05/2021	Annual	08/05/2022
Agilent	Power Divider	11636B	02/26/2021	Annual	02/26/2022
SPEAG	DAKS 3.5	1038	03/17/2021	Annual	03/17/2022
H.P	Network Analyzer /8753ES	JP39240221	01/11/2021	Annual	01/11/2022
Agilent	Signal Generator N5182A	MY47070230	01/26/2021	Annual	01/26/2022
TESTO	175-H1/Thermometer	40331915309	01/04/2022	Annual	01/04/2023
TESTO	175-H1/Thermometer	40331922309	01/04/2022	Annual	01/04/2023
TESTO	175-H1/Thermometer	40331949309	01/04/2022	Annual	01/04/2023
TESTO	608-H1	83348029	05/06/2021	Annua	05/06/2022
TESTO	175-H1/Thermometer	40331939309	01/04/2022	Annual	01/04/2023
EMPOWER	RF Power Amplifier	1084	06/25/2021	Annual	06/25/2022
EMPOWER	RF Power Amplifier	1011	10/06/2021	Annual	10/06/2022
MICRO LAB	LP Filter / LA-15N	10453	10/06/2021	Annual	10/05/2022
MICRO LAB	LP Filter / LA-30N	-	10/06/2021	Annual	10/06/2022
MICRO LAB	LP Filter / LA-60N	32011	10/06/2021	Annual	10/06/2022
HP	Attenuator (3dB) 33340A	02427	09/06/2021	Annual	09/06/2022
HP	Attenuator (20dB) 8493C	09271	09/06/2021	Annual	09/06/2022
Agilent	Directional Bridge 86205A	3140A03878	05/28/2021	Annual	05/28/2022
Agilent	Power Divider	3	06/25/2021	Annual	06/25/2022
Agilent	MXA Signal Analyzer N9020A	MY50510407	10/22/2021	Annual	10/22/2022
Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due

HP	Dual Directional Coupler	16072	10/05/2021	Annual	10/05/2022
Anritsu	Radio Communication Test Station MT8000A	6262036812	12/20/2021	Annual	12/20/2022
Anritsu	Radio Communication Tester MT8820C	6200695605	04/15/2021	Annual	04/15/2022
Anritsu	Radio Communication Tester MT8821C	6201502997	07/08/2021	Annual	07/08/2022
ROHDE&SCHWARZ	BLUETOOTH TESTER CBT	100272	02/26/2021	Annual	02/26/2022

* The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material.

18. Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/ IEEE C95.1 - 2005.

These measurements were taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the abortion and distribution of electromagnetic energy in the body are very complex phenomena the depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

19. References

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Appendix *A.* DUT Ant. Information & SETUP PHOTO

Please refer to test DUT Ant. Information &setup photo file no. as follows:

Report No.
HCT-SR-2202-FC001-P

Appendix B. – SAR Test Plots

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.4 ℃
Ambient Temperature:	21.5 ℃
Test Date:	01/28/2022
Plot No.:	1

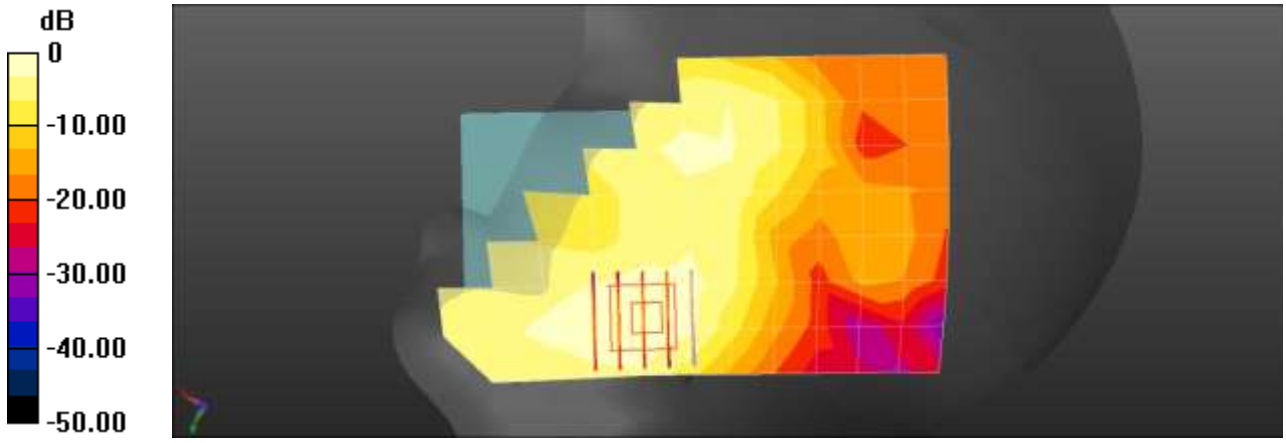
Communication System: UID 0, NR n25 (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1905 MHz; σ = 1.443 S/m; ε_r = 40.873; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.81, 8.81, 8.81) @ 1905 MHz; Calibrated: 2021-12-14
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2021-09-30
- Phantom: Twin-SAM V8.0 (Right-Left)
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n25 Head Right Touch DFT-s QPSK 20MHz 1RB 53offset 381000ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.145 W/kg

NR Band n25 Head Right Touch DFT-s QPSK 20MHz 1RB 53offset 381000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.725 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.169 W/kg
SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.069 W/kg
Maximum value of SAR (measured) = 0.149 W/kg



0 dB = 0.145 W/kg = -8.40 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	18.9 ℃
Ambient Temperature:	19.0 ℃
Test Date:	02/21/2022
Plot No.:	2

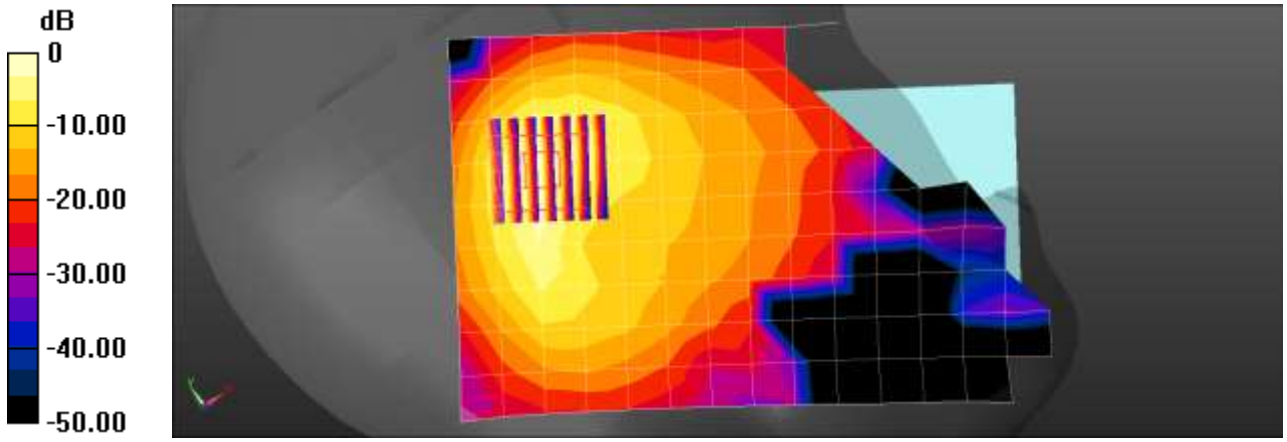
Communication System: UID 0, n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1: 4.3668
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.968 S/m; ε_r = 38.755; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2592.99 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2); Type: QD 000 P41 AA; Serial: 1932
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

NR Band n41 Head Left Tilt DFT-s QPSK 100MHz 1RB 1offset 518598ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.74 W/kg

NR Band n41 Head Left Tilt DFT-s QPSK 100MHz 1RB 1offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.65 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 2.64 W/kg
SAR(1 g) = 0.888 W/kg; SAR(10 g) = 0.335 W/kg
Maximum value of SAR (measured) = 1.88 W/kg



0 dB = 1.74 W/kg = 2.41 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0 ℃
Ambient Temperature:	22.1 ℃
Test Date:	02/19/2022
Plot No.:	3

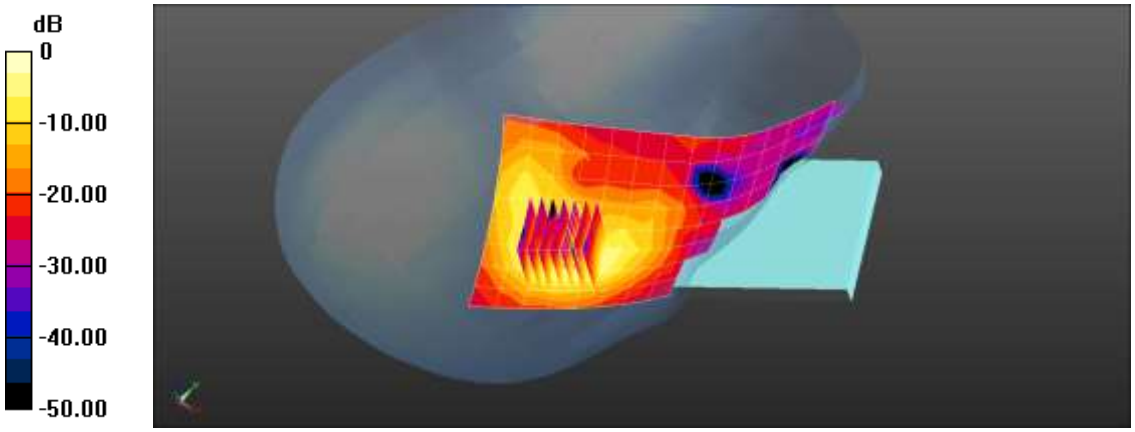
Communication System: UID 0, n77 (0); Frequency: 3750 MHz;Duty Cycle: 1:4.3668
Medium parameters used: f = 3750 MHz; σ = 3.175 S/m; ε_r = 37.422; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.94, 6.94, 6.94) @ 3750 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n77 Head Right Touch CP QPSK 100MHz 1RB 1offset 650000ch/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.57 W/kg

NR Band n77 Head Right Touch CP QPSK 100MHz 1RB 1offset 650000ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 4.439 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 2.60 W/kg
SAR(1 g) = 0.720 W/kg; SAR(10 g) = 0.238 W/kg
Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.63 W/kg = 2.12 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0 ℃
Ambient Temperature:	22.1 ℃
Test Date:	02/20/2022
Plot No.:	4

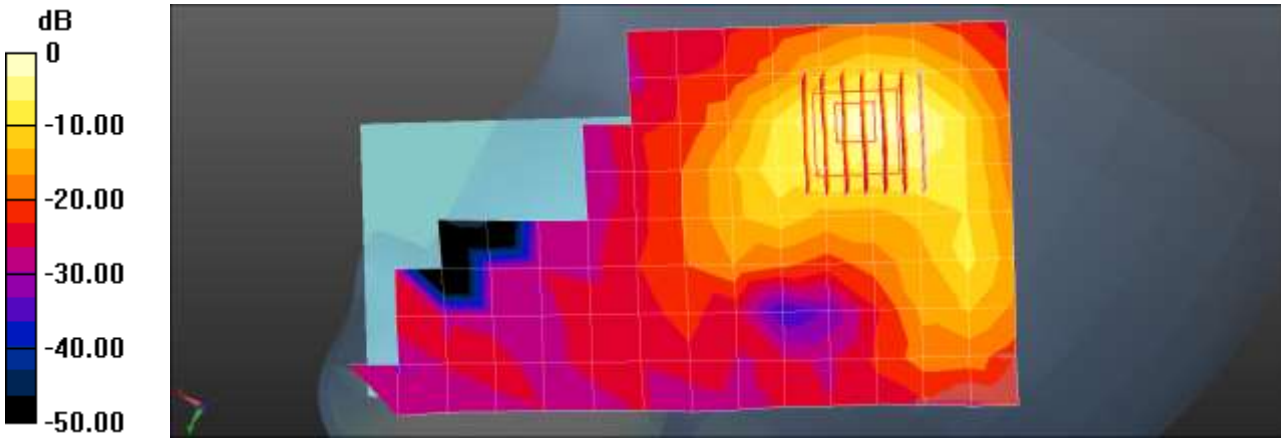
Communication System: UID 0, n77 (0); Frequency: 3500.01 MHz;Duty Cycle: 1:4.3668
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 2.952 S/m; ε_r = 38.034; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500.01 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

NR Band n77 Head Right Touch CP QPSK 100MHz 1RB 1offset 633334ch/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.77 W/kg

NR Band n77 Head Right Touch CP QPSK 100MHz 1RB 1offset 633334ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 4.918 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 2.56 W/kg
SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.261 W/kg
Maximum value of SAR (measured) = 1.74 W/kg



0 dB = 1.77 W/kg = 2.48 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.4 ℃
Ambient Temperature:	21.5 ℃
Test Date:	01/28/2022
Plot No.:	5

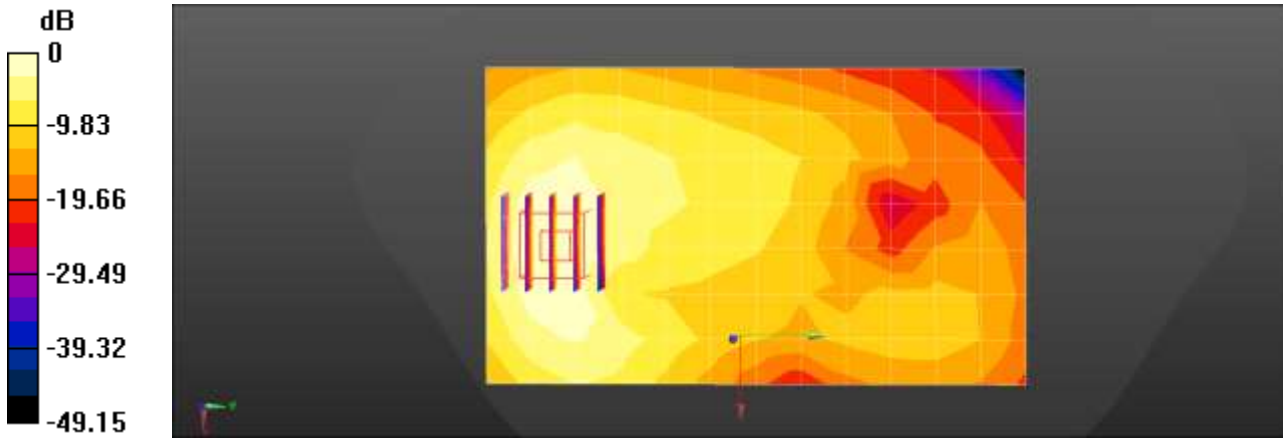
Communication System: UID 0, NR n25 (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1905 MHz; σ = 1.443 S/m; ε_r = 40.873; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.81, 8.81, 8.81) @ 1905 MHz; Calibrated: 2021-12-14
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2021-09-30
- Phantom: Twin-SAM V8.0 (Right-Left)
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n25 BodyWorn Rear DFT-s QPSK 20MHz 50RB 0offset 381000ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.551 W/kg

NR Band n25 BodyWorn Rear DFT-s QPSK 20MHz 50RB 0offset 381000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.745 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.734 W/kg
SAR(1 g) = 0.439 W/kg; SAR(10 g) = 0.257 W/kg
Maximum value of SAR (measured) = 0.629 W/kg



0 dB = 0.551 W/kg = -2.59 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	18.9 ℃
Ambient Temperature:	19.0 ℃
Test Date:	02/21/2022
Plot No.:	6

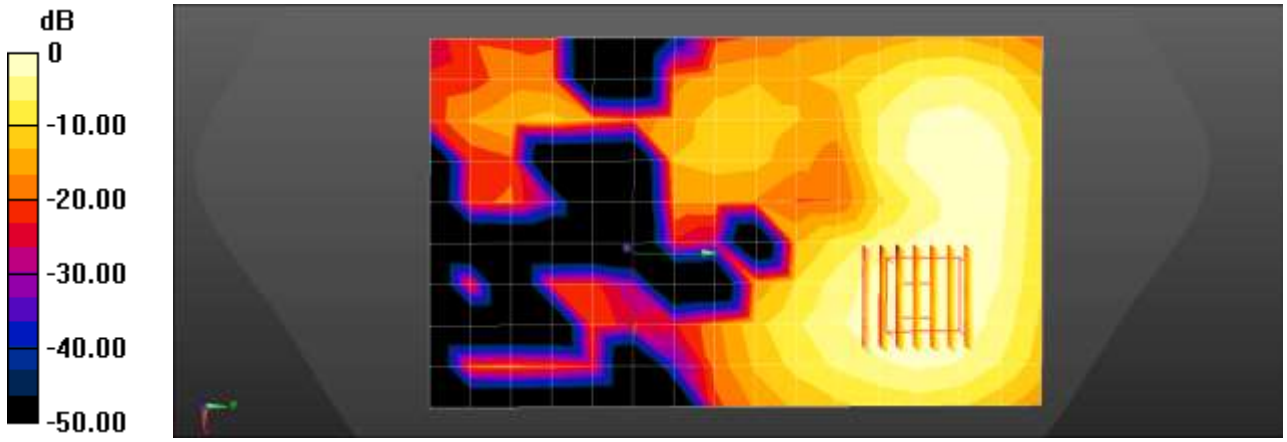
Communication System: UID 0, n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:4.3668
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.968 S/m; ε_r = 38.755; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2592.99 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2); Type: QD 000 P41 AA; Serial: 1932
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

NR Band n41 Bodyworn Rear DFT-s QPSK 100MHz 135RB 69offset 518598ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.182 W/kg

NR Band n41 Bodyworn Rear DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.7840 V/m; Power Drift = 1.69 dB
Peak SAR (extrapolated) = 0.256 W/kg
SAR(1 g) = 0.118 W/kg; SAR(10 g) = 0.061 W/kg
Maximum value of SAR (measured) = 0.197 W/kg



0 dB = 0.182 W/kg = -7.40 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0 ℃
Ambient Temperature:	22.1 ℃
Test Date:	02/19/2022
Plot No.:	7

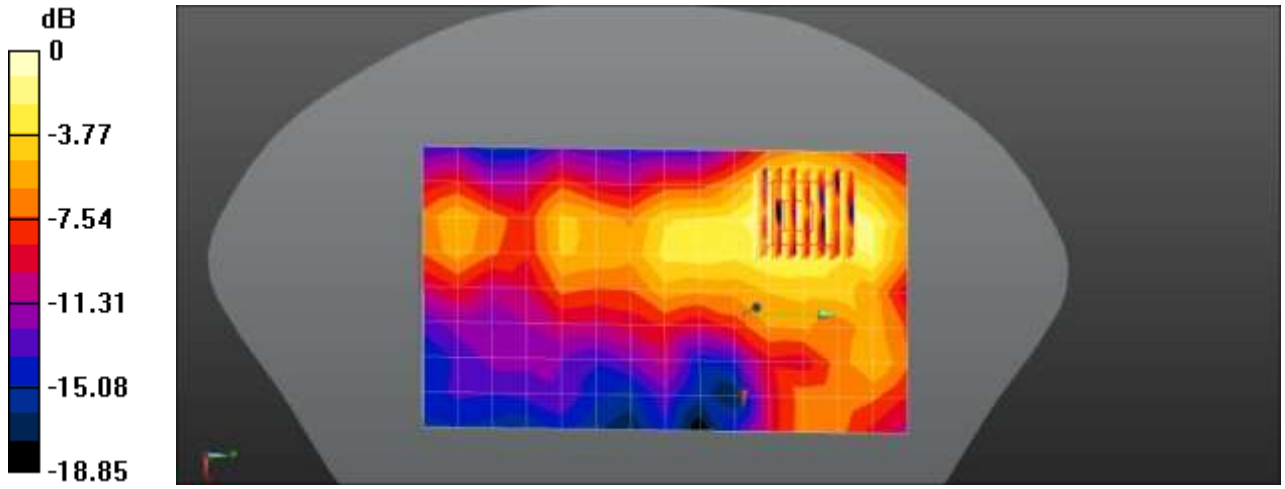
Communication System: UID 0, n77 (0); Frequency: 3930 MHz;Duty Cycle: 1:4.3668
Medium parameters used: f = 3930 MHz; σ = 3.289 S/m; ε_r = 37.369; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.73, 6.73, 6.73) @ 3930 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n77 Body Front DFT-s QPSK 100MHz 135RB 69offset 662000ch/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.212 W/kg

NR Band n77 Body Front DFT-s QPSK 100MHz 135RB 69offset 662000ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 3.580 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.315 W/kg
SAR(1 g) = 0.114 W/kg; SAR(10 g) = 0.048 W/kg
Maximum value of SAR (measured) = 0.223 W/kg



0 dB = 0.212 W/kg = -6.74 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0 ℃
Ambient Temperature:	22.1 ℃
Test Date:	02/20/2022
Plot No.:	8

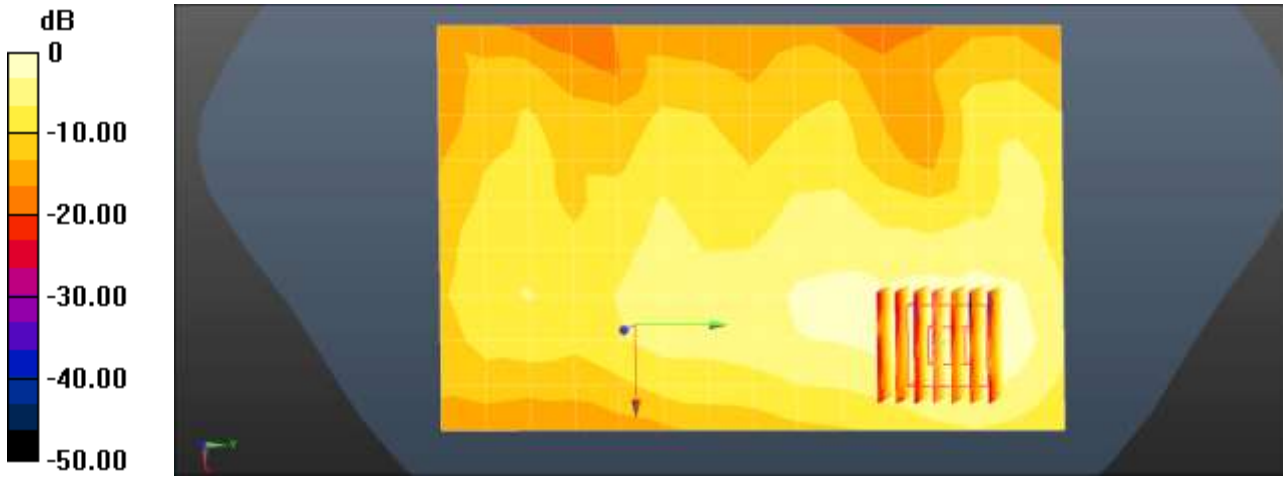
Communication System: UID 0, n77 (0); Frequency: 3500.01 MHz;Duty Cycle: 1:4.3668
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 2.983 S/m; ε_r = 37.589; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500.01 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n77 BodyWorn Rear DFT-s QPSK 100MHz 1RB 137offset 633334ch/Area Scan (10x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.311 W/kg

NR Band n77 BodyWorn Rear DFT-s QPSK 100MHz 1RB 137offset 633334ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 4.413 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.425 W/kg
SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.077 W/kg
Maximum value of SAR (measured) = 0.312 W/kg



0 dB = 0.312 W/kg = -5.06 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	02/22/2022
Plot No.:	9

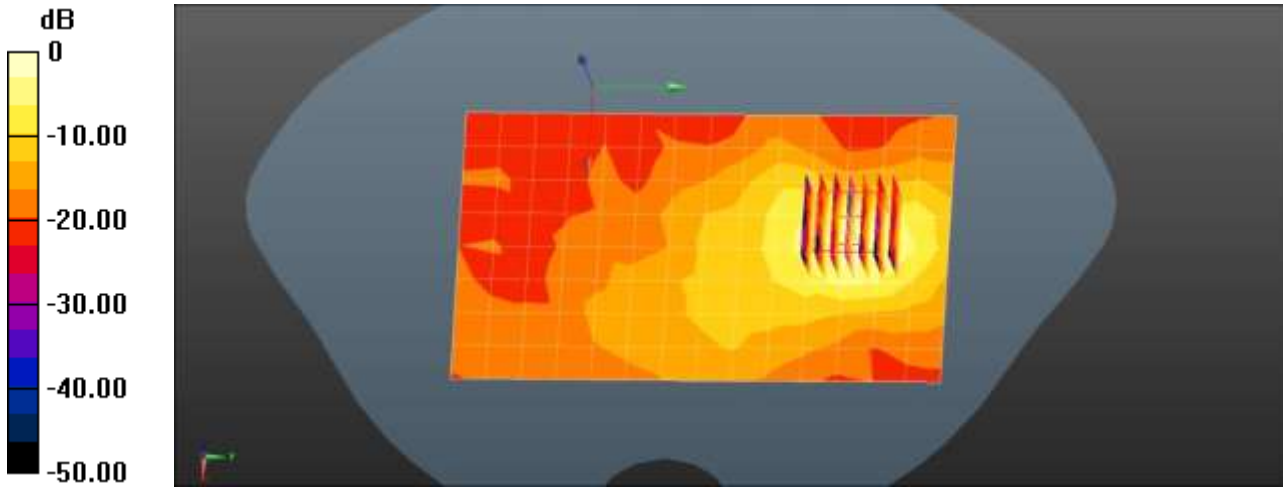
Communication System: UID 0, n77 (0); Frequency: 3930 MHz;Duty Cycle: 1:3.5
Medium parameters used: f = 3930 MHz; σ = 3.276 S/m; ε_r = 37.268; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.73, 6.73, 6.73) @ 3930 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n77 Bodyworn Rear SRS 3 662000ch/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.419 W/kg

NR Band n77 Bodyworn Rear SRS 3 662000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 2.662 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.688 W/kg
SAR(1 g) = 0.244 W/kg; SAR(10 g) = 0.090 W/kg
Maximum value of SAR (measured) = 0.481 W/kg



0 dB = 0.481 W/kg = -3.18 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.4 ℃
Ambient Temperature:	21.5 ℃
Test Date:	01/18/2022
Plot No.:	10

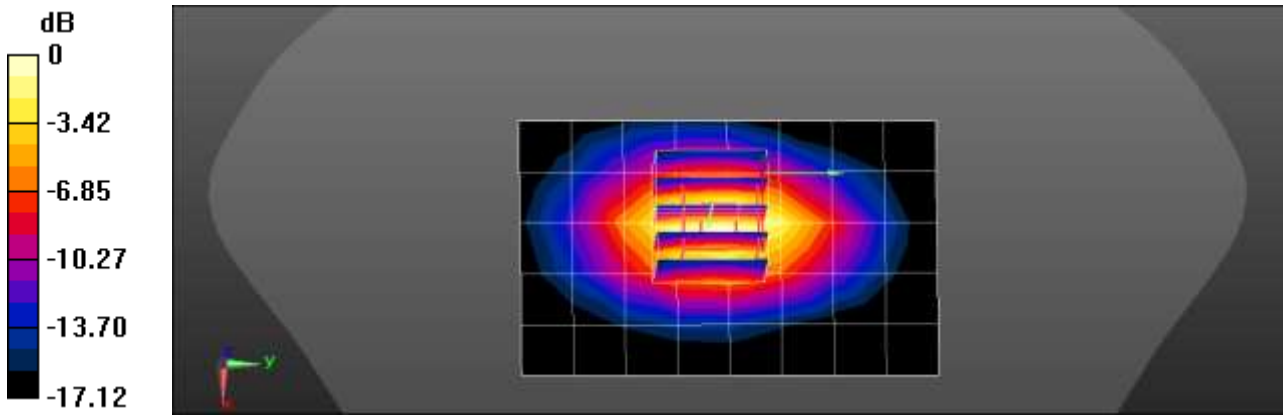
Communication System: UID 0, NR n25 (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1905 MHz; σ = 1.443 S/m; ε_r = 40.873; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.81, 8.81, 8.81) @ 1905 MHz; Calibrated: 2021-12-14
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2021-09-30
- Phantom: Twin-SAM V8.0 (Right-Left); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n25 Body Bottom DFT-s QPSK 20MHz 50RB 0offset 381000ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.49 W/kg

NR Band n25 Body Bottom DFT-s QPSK 20MHz 50RB 0offset 381000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.46 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.563 W/kg
Maximum value of SAR (measured) = 1.54 W/kg



0 dB = 1.54 W/kg = 1.88 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	18.9 ℃
Ambient Temperature:	19.0 ℃
Test Date:	02/21/2022
Plot No.:	11

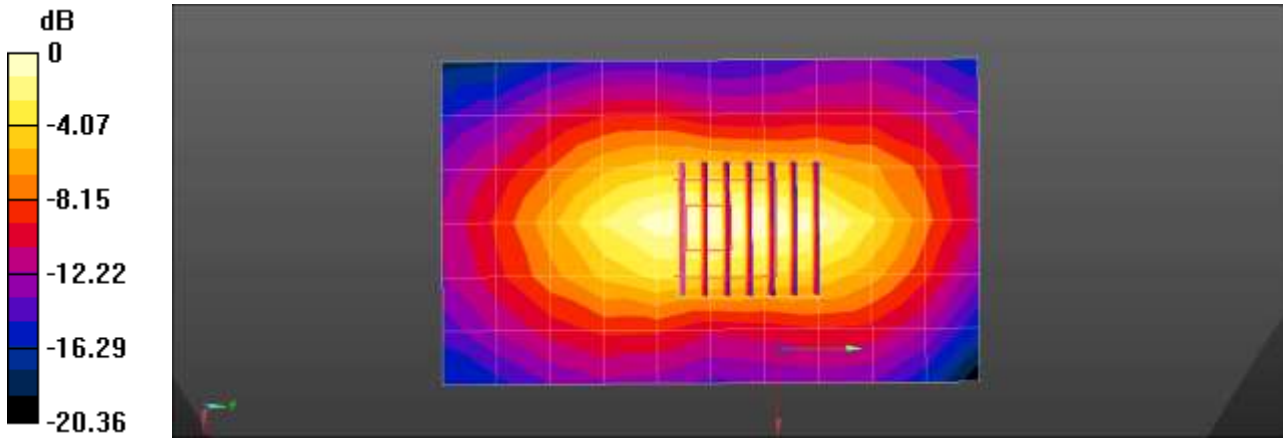
Communication System: UID 0, n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:4.3668
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.968 S/m; ε_r = 38.755; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2592.99 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2)
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n41 Body Top DFT-s QPSK 100MHz 135RB 69offset 518598ch/Area Scan (7x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.354 W/kg

NR Band n41 Body Top DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.83 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.487 W/kg
SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.092 W/kg
Maximum value of SAR (measured) = 0.362 W/kg



0 dB = 0.354 W/kg = -4.51 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.2 ℃
Test Date:	02/21/2022
Plot No.:	12

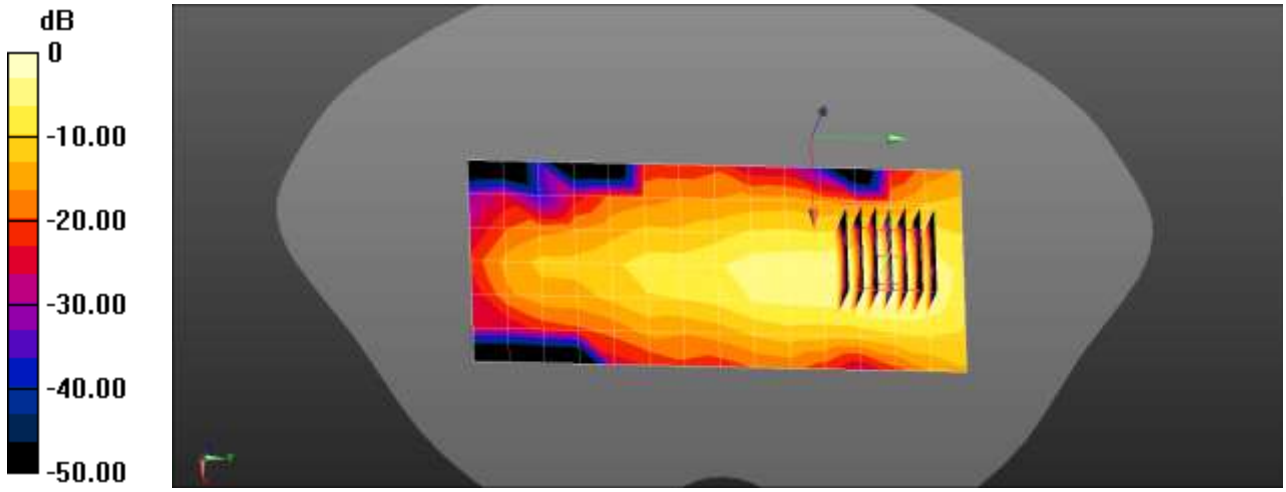
Communication System: UID 0, n77 (0); Frequency: 3750 MHz;Duty Cycle: 1:4.3668
Medium parameters used: f = 3750 MHz; σ = 3.184 S/m; ε_r = 37.337; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7655; ConvF(7.25, 7.25, 7.25) @ 3750 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n77 Body Left CP QPSK 100MHz 1RB 1offset 650000ch/Area Scan (7x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.394 W/kg

NR Band n77 Body Left CP QPSK 100MHz 1RB 1offset 650000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 5.415 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.660 W/kg
SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.087 W/kg
Maximum value of SAR (measured) = 0.460 W/kg



0 dB = 0.460 W/kg = -3.37 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	02/22/2022
Plot No.:	13

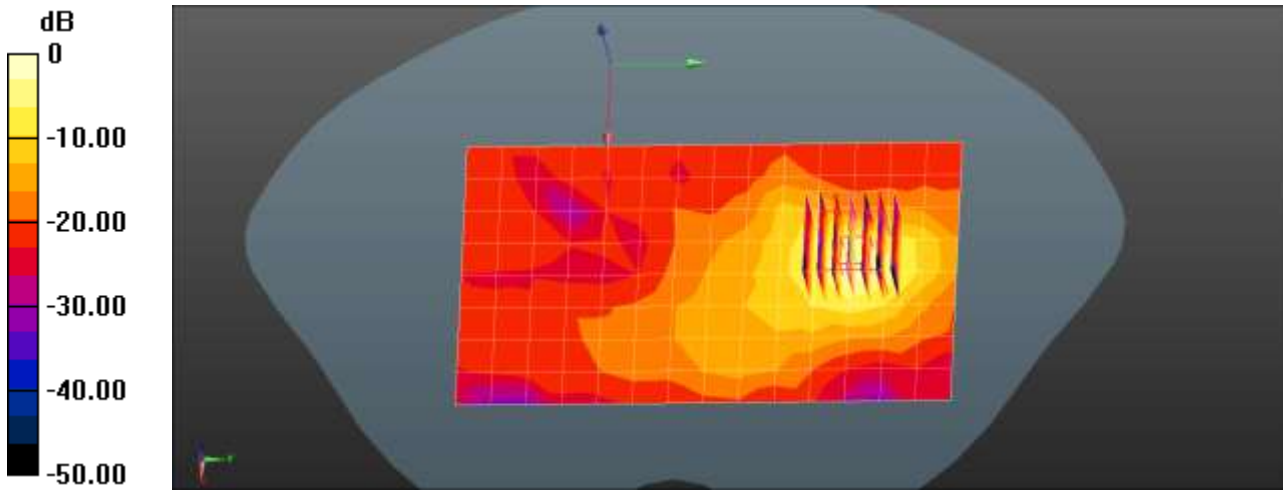
Communication System: UID 0, n77 (0); Frequency: 3930 MHz;Duty Cycle: 1:3.5
Medium parameters used: f = 3930 MHz; σ = 3.276 S/m; ε_r = 37.268; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.73, 6.73, 6.73) @ 3930 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n77 Body Rear SRS 3 662000ch/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.508 W/kg

NR Band n77 Body Rear SRS 3 662000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 1.982 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.947 W/kg
SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.095 W/kg
Maximum value of SAR (measured) = 0.646 W/kg



0 dB = 0.646 W/kg = -1.90 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0 ℃
Ambient Temperature:	22.1 ℃
Test Date:	02/20/2022
Plot No.:	14

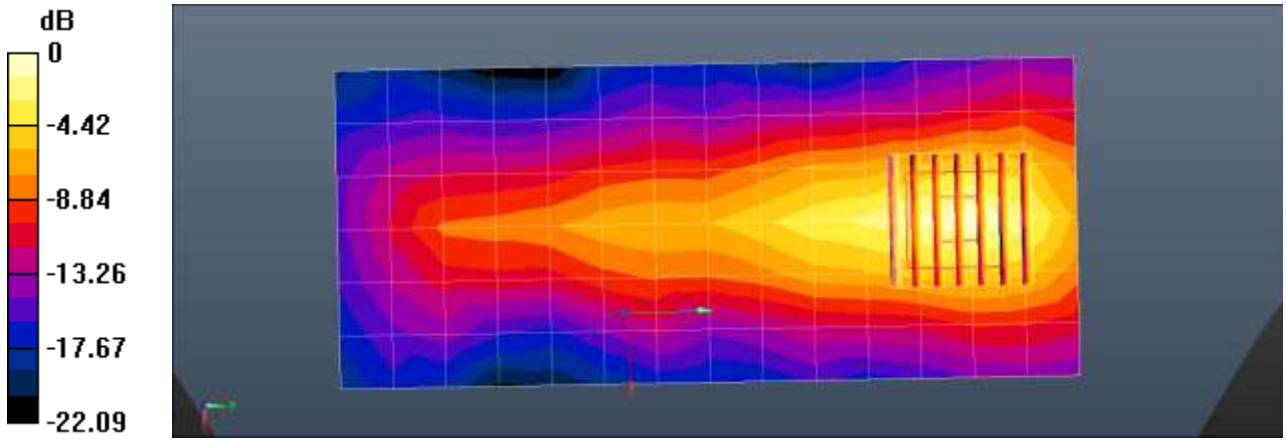
Communication System: UID 0, n77 (0); Frequency: 3500.01 MHz;Duty Cycle: 1:4.3668
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 2.983 S/m; ε_r = 37.589; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500.01 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

NR Band n77 Body Left DFT-s QPSK 100MHz 135RB 138offset 633334ch/Area Scan (7x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.533 W/kg

NR Band n77 Body Left DFT-s QPSK 100MHz 135RB 138offset 633334ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 7.166 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.744 W/kg
SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.111 W/kg
Maximum value of SAR (measured) = 0.538 W/kg



0 dB = 0.533 W/kg = -2.73 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	01/20/2022
Plot No.:	15

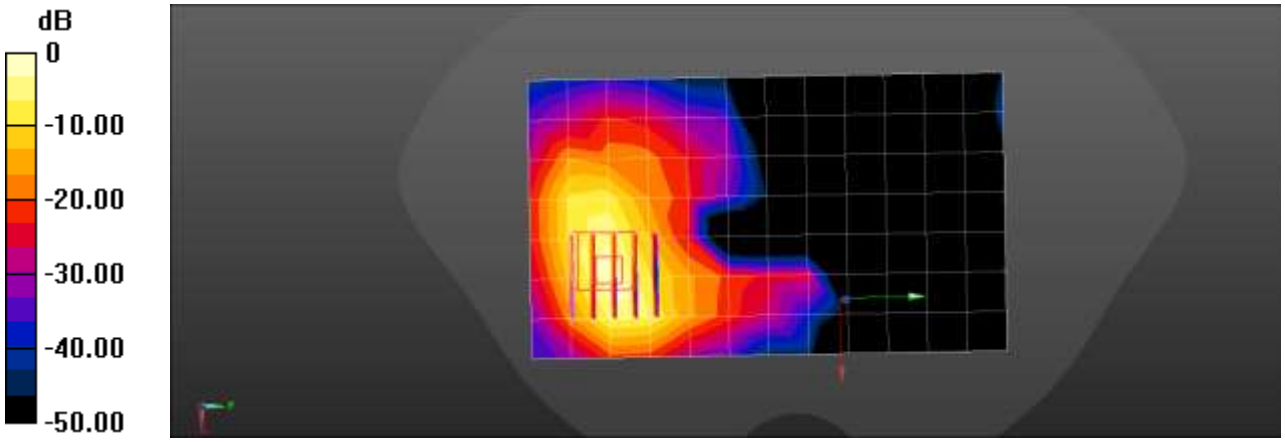
Communication System: UID 0, NR n25 (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.374 S/m; ε_r = 41.466; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.81, 8.81, 8.81) @ 1860 MHz; Calibrated: 2021-12-14
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2021-09-30
- Phantom: Twin-SAM V8.0 (Right-Left)
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n25 Phablet Rear DFT-s QPSK 20MHz 50RB 0offset 372000ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 7.74 W/kg

NR Band n25 Phablet Rear DFT-s QPSK 20MHz 50RB 0offset 372000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 10.2 W/kg
SAR(1 g) = 3 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 7.61 W/kg



0 dB = 7.74 W/kg = 8.89 dBW/kg

Appendix C. – Dipole Verification Plots

Verification Data (1 900㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.4℃
Test Date:	01/18/2022

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

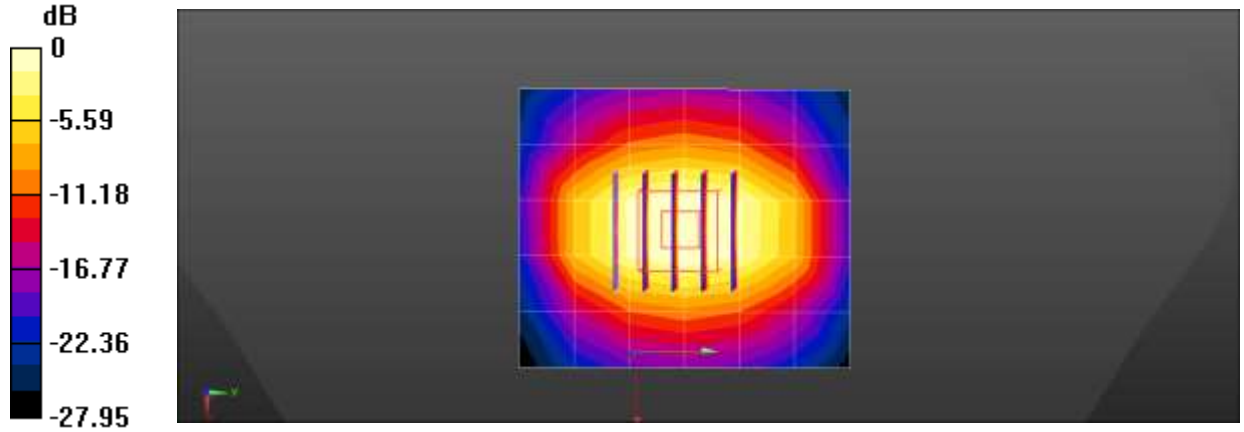
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.438 S/m; ε_r = 40.888; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.81, 8.81, 8.81) @ 1900 MHz; Calibrated: 2021-12-14
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2021-09-30
- Phantom: Twin-SAM V8.0 (Right-Left)
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.19 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.56 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 3.99 W/kg
SAR(1 g) = 2.1 W/kg; SAR(10 g) = 1.09 W/kg
Maximum value of SAR (measured) = 3.33 W/kg



0 dB = 2.19 W/kg = 3.40 dBW/kg

Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5℃
Test Date:	01/24/2022

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;

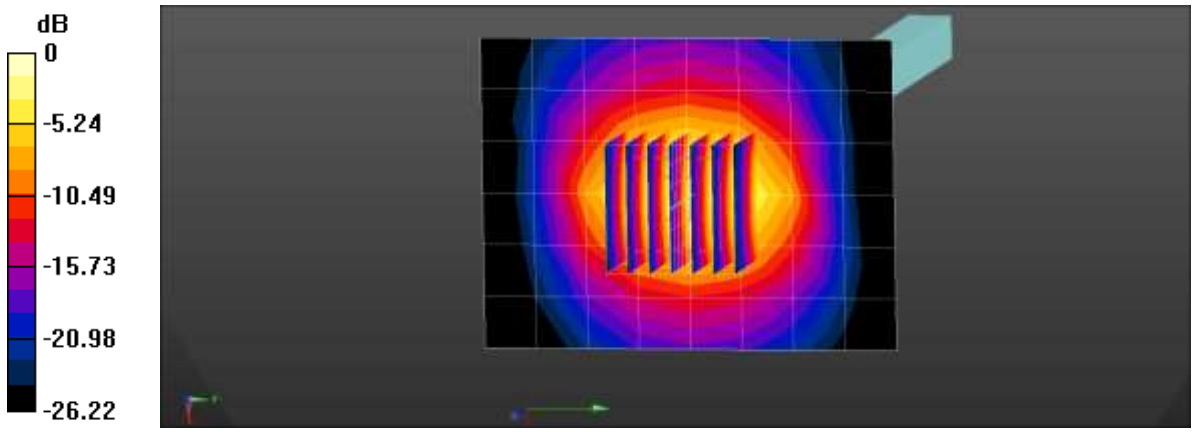
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.039 S/m; ε_r = 38.109; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2); Type: QD 000 P41 AA; Serial: 1932
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2600MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.01 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.41 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 6.44 W/kg
SAR(1 g) = 2.75 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 4.96 W/kg



0 dB = 4.96 W/kg = 6.95 dBW/kg

Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.1℃
Test Date:	01/25/2022

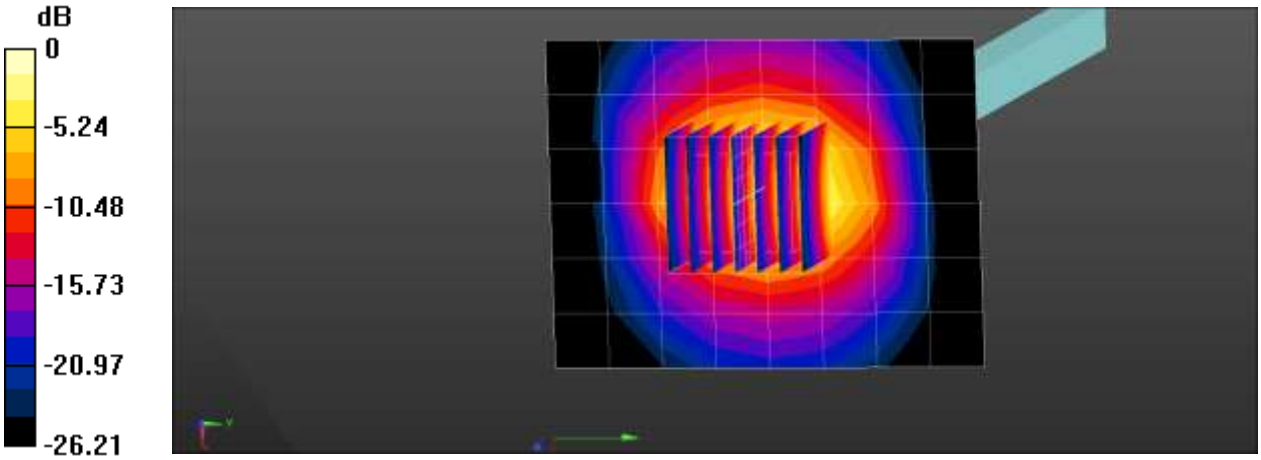
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.003 S/m; ε_r = 38.101; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2); Type: QD 000 P41 AA; Serial: 1932
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2600MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.56 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.20 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 6.58 W/kg
SAR(1 g) = 2.75 W/kg; SAR(10 g) = 1.18 W/kg
Maximum value of SAR (measured) = 5.01 W/kg



0 dB = 5.01 W/kg = 7.00 dBW/kg

Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2℃
Test Date:	01/26/2022

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;

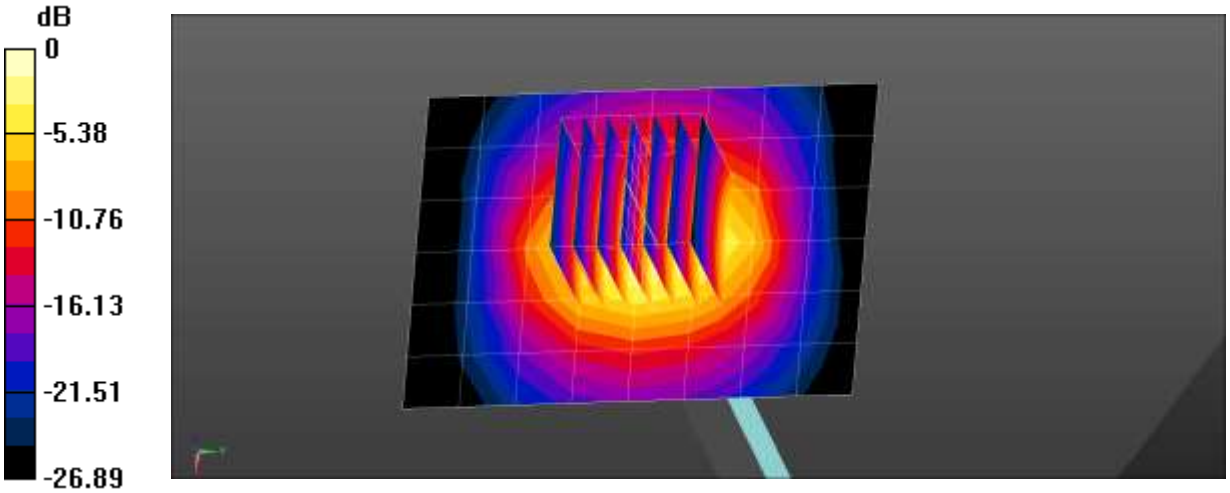
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.037 S/m; ε_r = 38.068; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2)
- Measurement SW: DASY52, Version 52.10 (4)

2600MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.14 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.16 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 6.95 W/kg
SAR(1 g) = 2.86 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 5.22 W/kg



0 dB = 5.22 W/kg = 7.18 dBW/kg

Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0℃
Test Date:	01/19/2022

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;

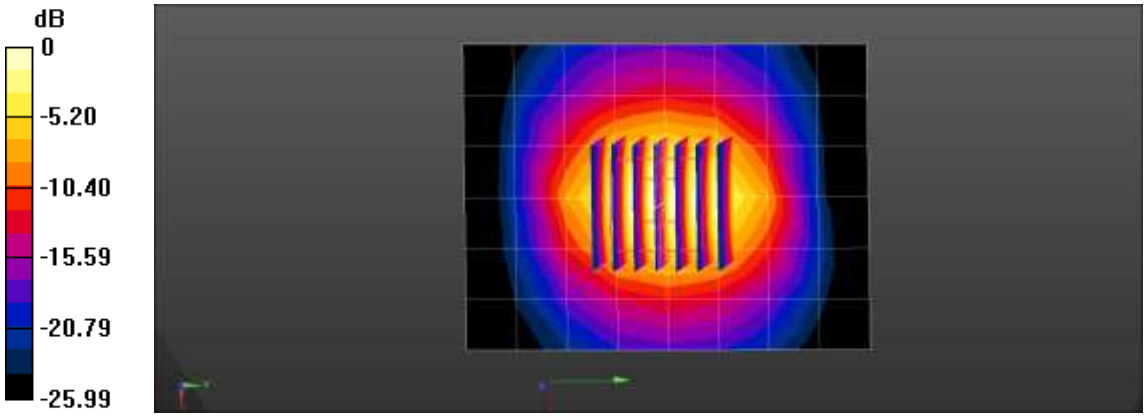
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.975 S/m; ε_r = 38.719; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2); Type: QD 000 P41 AA; Serial: 1932
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2600MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.84 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.16 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.25 W/kg
SAR(1 g) = 2.67 W/kg; SAR(10 g) = 1.16 W/kg
Maximum value of SAR (measured) = 4.80 W/kg



0 dB = 4.80 W/kg = 6.81 dBW/kg

Verification Data (3500 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6℃
Test Date:	01/24/2022

DUT: D3500V2; Type: D3500V2;

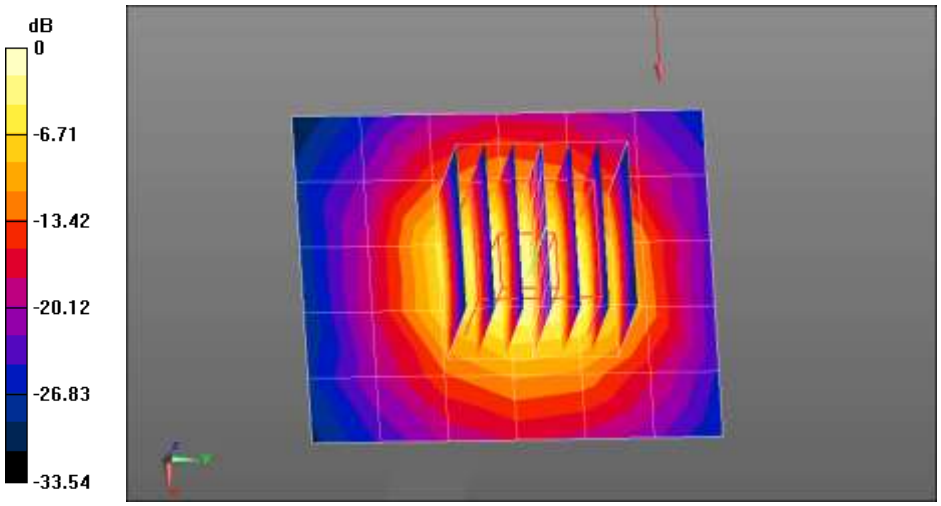
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.983 S/m; ε_r = 37.589; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3500MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.37 W/kg

3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 50.31 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 9.92 W/kg
SAR(1 g) = 3.41 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 6.99 W/kg



0 dB = 6.99 W/kg = 8.44 dBW/kg

Verification Data (3500 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0℃
Test Date:	01/27/2022

DUT: D3500V2; Type: D3500V2;

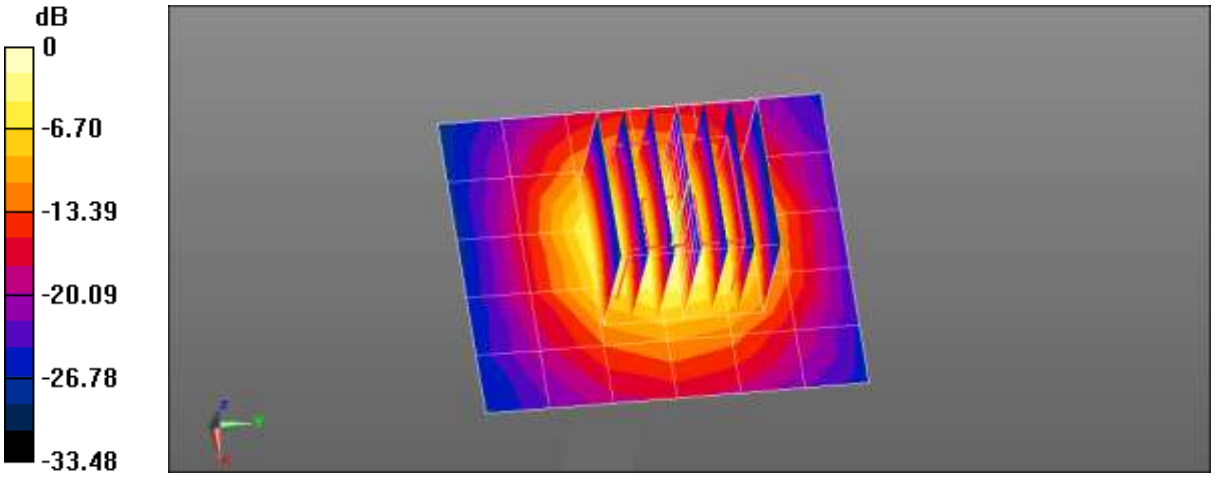
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.978 S/m; ε_r = 38.192; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3500MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.06 W/kg

3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 47.03 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 8.36 W/kg
SAR(1 g) = 3.06 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.04 W/kg



0 dB = 6.04 W/kg = 7.81 dBW/kg

Verification Data (3500 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.2℃
Test Date:	01/28/2022

DUT: D3500V2 -; Type: D3500V2;

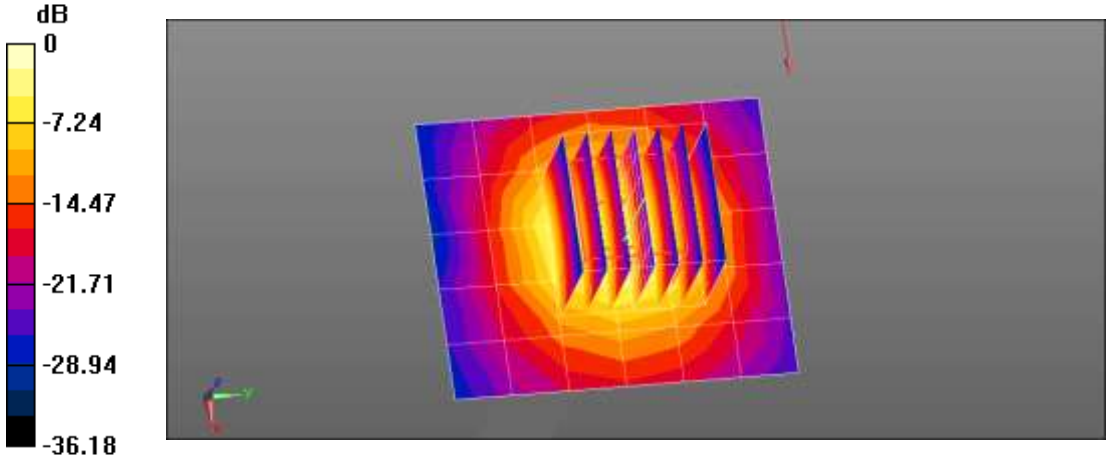
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.978 S/m; ε_r = 38.192; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3500MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.99 W/kg

3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 47.23 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 8.30 W/kg
SAR(1 g) = 3.03 W/kg; SAR(10 g) = 1.13 W/kg
Maximum value of SAR (measured) = 6.01 W/kg



0 dB = 6.01 W/kg = 7.79 dBW/kg

Verification Data (3500 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0℃
Test Date:	02/19/2022

DUT: D3500V2 -; Type: D3500V2;

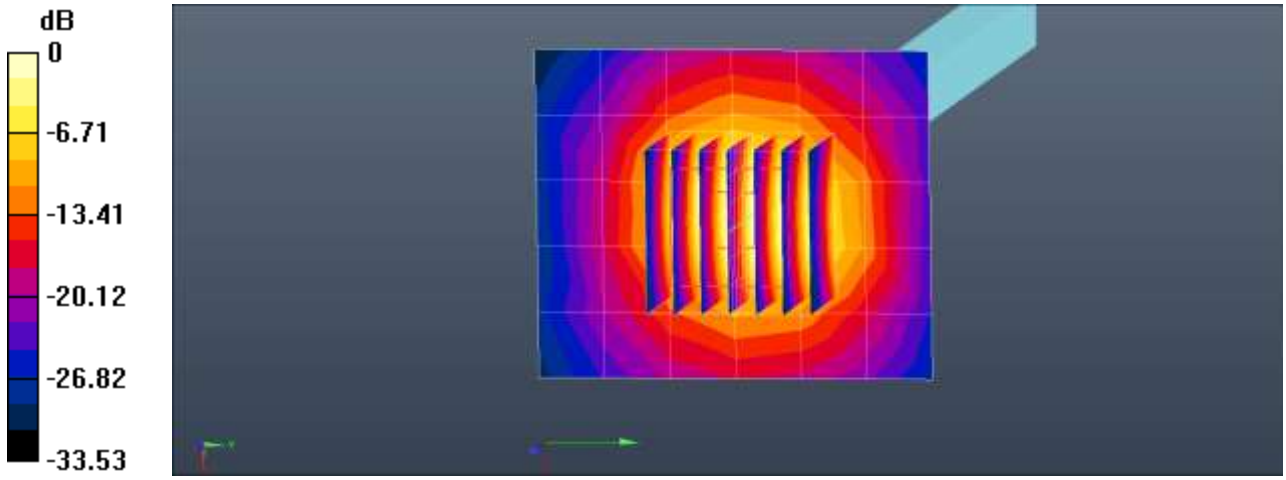
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.952 S/m; ε_r = 38.034; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.07, 7.07, 7.07) @ 3500 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3500MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.32 W/kg

3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 50.31 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 9.82 W/kg
SAR(1 g) = 3.38 W/kg; SAR(10 g) = 1.24 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 41%
Maximum value of SAR (measured) = 6.91 W/kg



0 dB = 6.91 W/kg = 8.39 dBW/kg

Verification Data (3500 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1℃
Test Date:	02/21/2022

DUT: D3500V2 -; Type: D3500V2;

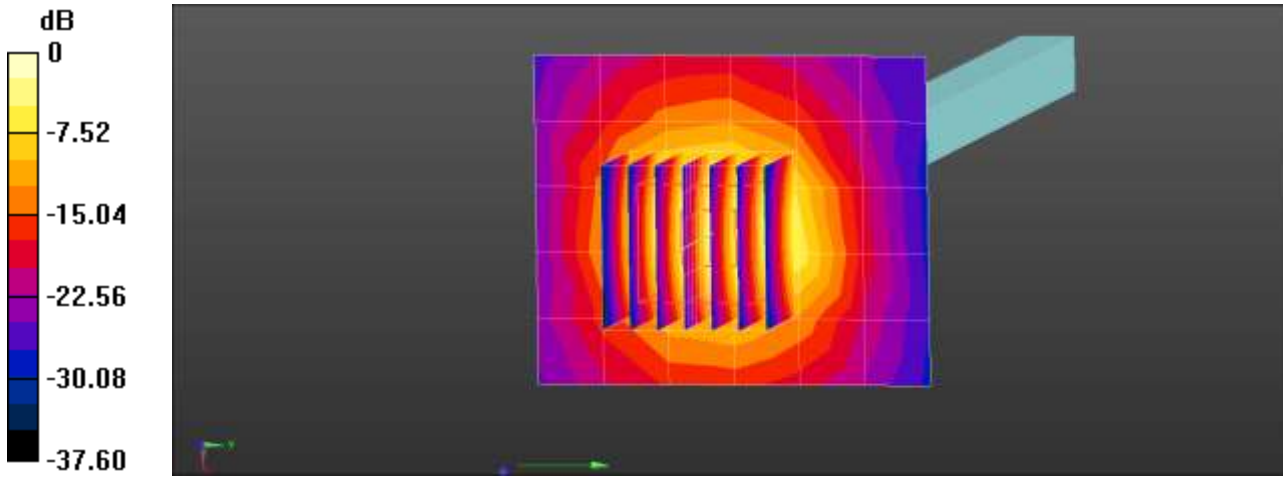
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.961 S/m; ε_r = 37.95; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7655; ConvF(7.3, 7.3, 7.3) @ 3500 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3500MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.19 W/kg

3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 48.32 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 9.36 W/kg
SAR(1 g) = 3.18 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.56 W/kg



0 dB = 6.56 W/kg = 8.17 dBW/kg

Verification Data (3700 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.4℃
Test Date:	01/26/2022

DUT: D3700V2 -; Type: D3700V2;

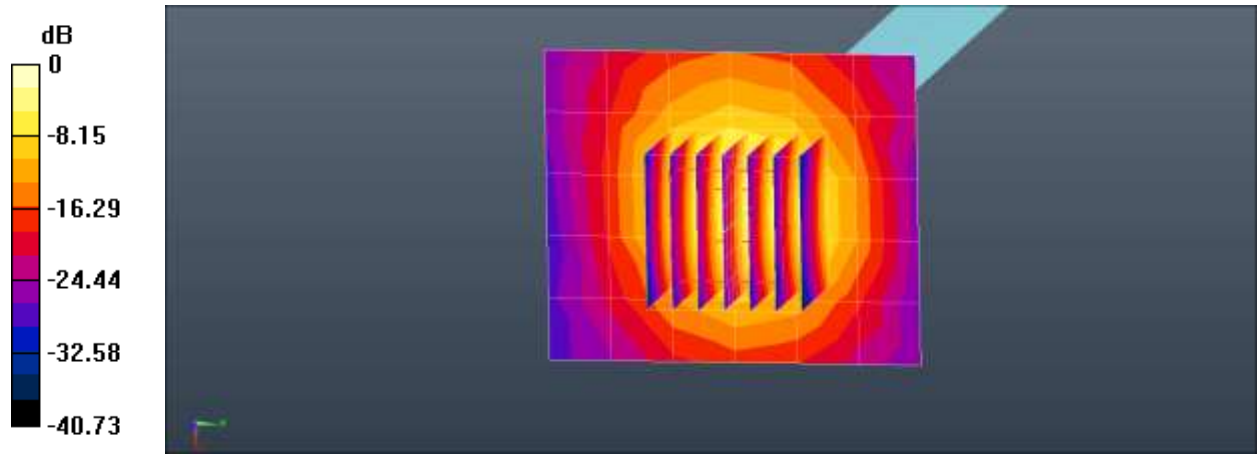
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.12 S/m; ε_r = 37.433; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.94, 6.94, 6.94) @ 3700 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3700MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.31 W/kg

3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 47.79 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 9.13 W/kg
SAR(1 g) = 3.1 W/kg; SAR(10 g) = 1.11 W/kg
Maximum value of SAR (measured) = 6.40 W/kg



0 dB = 6.40 W/kg = 8.06 dBW/kg

Verification Data (3700 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2℃
Test Date:	01/21/2022

DUT: D3700V2 -; Type: D3700V2;

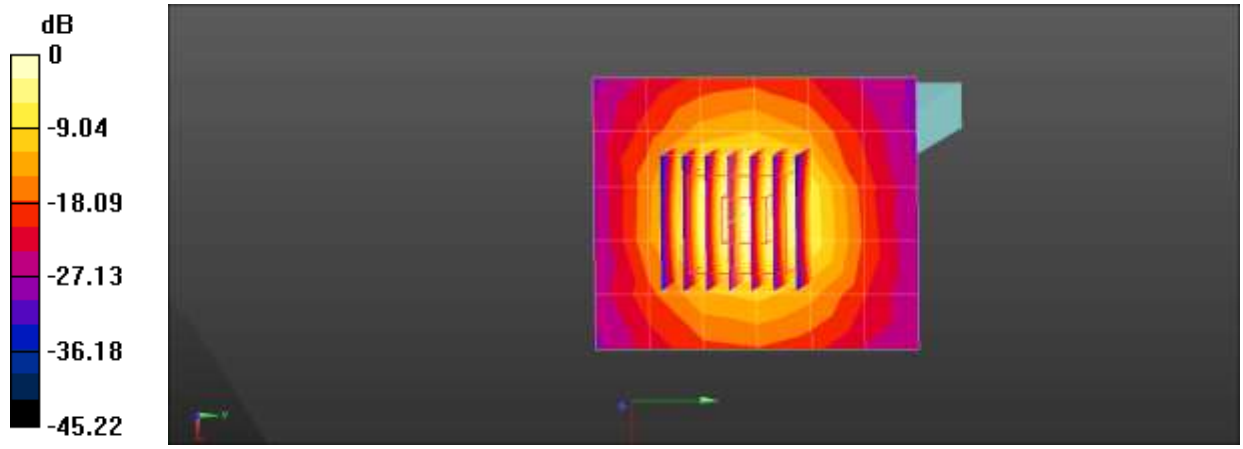
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.129 S/m; ε_r = 37.348; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7655; ConvF(7.25, 7.25, 7.25) @ 3700 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3700MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.89 W/kg

3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 52.15 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 11.0 W/kg
SAR(1 g) = 3.53 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 7.58 W/kg



0 dB = 7.58 W/kg = 8.80 dBW/kg

Verification Data (3700 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0℃
Test Date:	01/27/2022

DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2

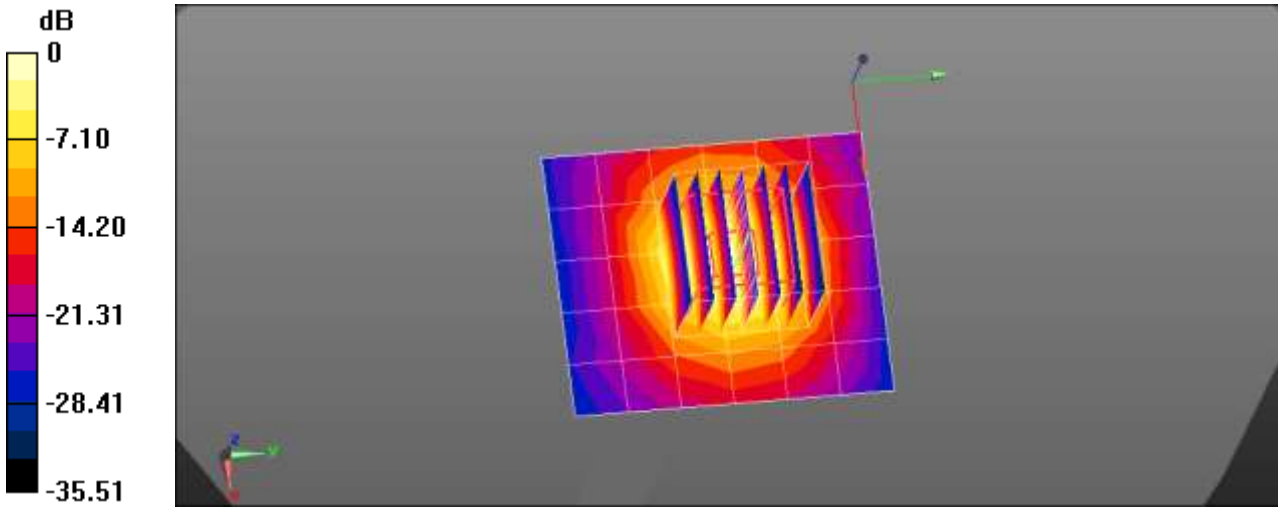
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.145 S/m; ε_r = 37.376; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.94, 6.94, 6.94) @ 3700 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/3700MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.19 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 46.78 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 9.10 W/kg
SAR(1 g) = 3.15 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.48 W/kg



0 dB = 6.48 W/kg = 8.12 dBW/kg

Verification Data (3700 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.2℃
Test Date:	01/28/2022

DUT: Dipole 3700 MHz D3700V2; Type: D3700V2;

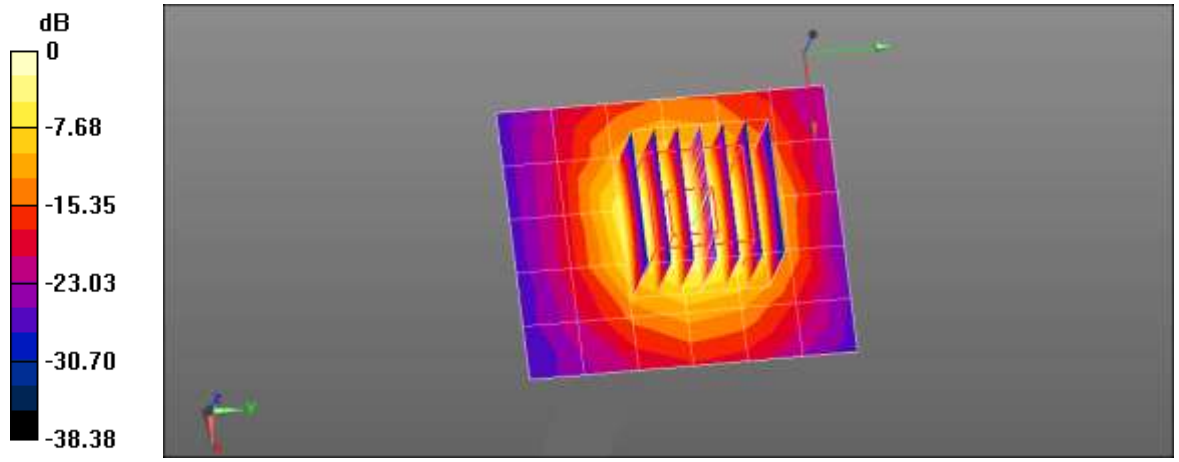
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.165 S/m; ε_r = 37.838; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.94, 6.94, 6.94) @ 3700 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/3700MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.22 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 46.20 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 9.14 W/kg
SAR(1 g) = 3.17 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.50 W/kg



0 dB = 6.50 W/kg = 8.13 dBW/kg

Verification Data (3900 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.2℃
Test Date:	01/26/2022

DUT: Dipole 3900 MHz D3900V2; Type: D3900V2;

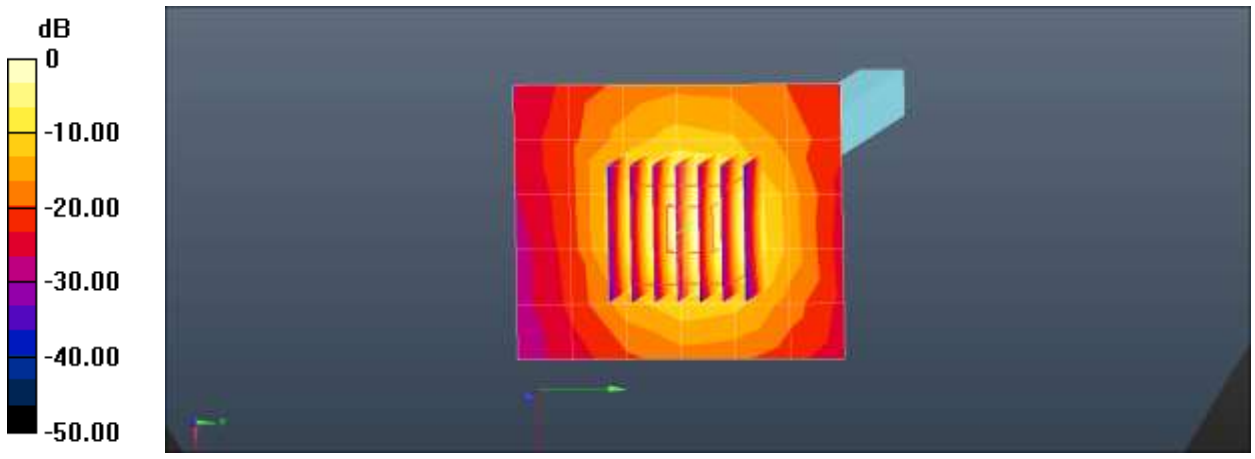
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.292 S/m; ε_r = 37.52; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.73, 6.73, 6.73) @ 3900 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.09 W/kg

3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 51.90 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 11.6 W/kg
SAR(1 g) = 3.72 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 8.00 W/kg



0 dB = 8.00 W/kg = 9.03 dBW/kg

Verification Data (3900 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.2℃
Test Date: 01/21/2022
DUT: Dipole 3900 MHz D3900V2; Type: D3900V2;

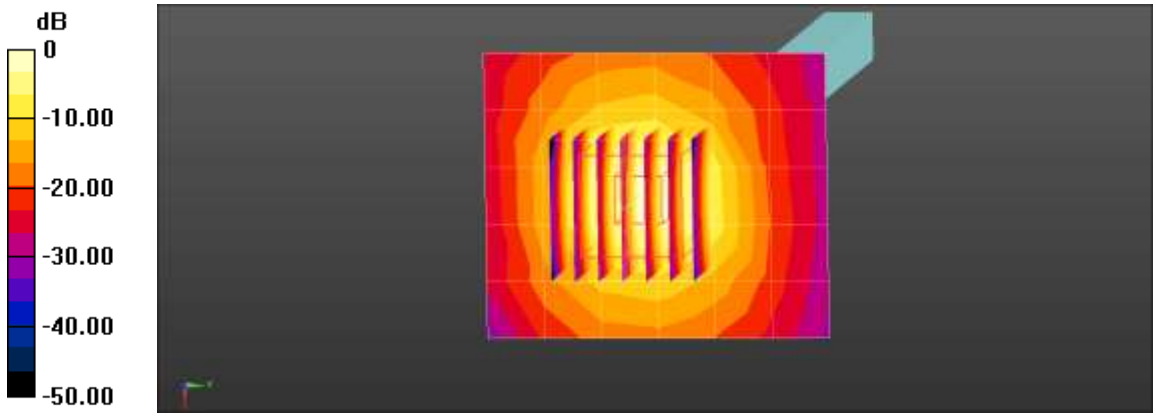
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.292 S/m; ε_r = 37.436; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7655; ConvF(6.85, 6.85, 6.85) @ 3900 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.10 W/kg

3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 48.92 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 9.31 W/kg
SAR(1 g) = 3.19 W/kg; SAR(10 g) = 1.08 W/kg
Maximum value of SAR (measured) = 6.71 W/kg



0 dB = 6.71 W/kg = 8.27 dBW/kg

Verification Data (3900 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2℃
Test Date:	01/21/2022

DUT: D3900V2 -; Type: D3900V2;

Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.296 S/m; ε_r = 37.422; ρ = 1000 kg/m^3
Phantom section: Flat Section

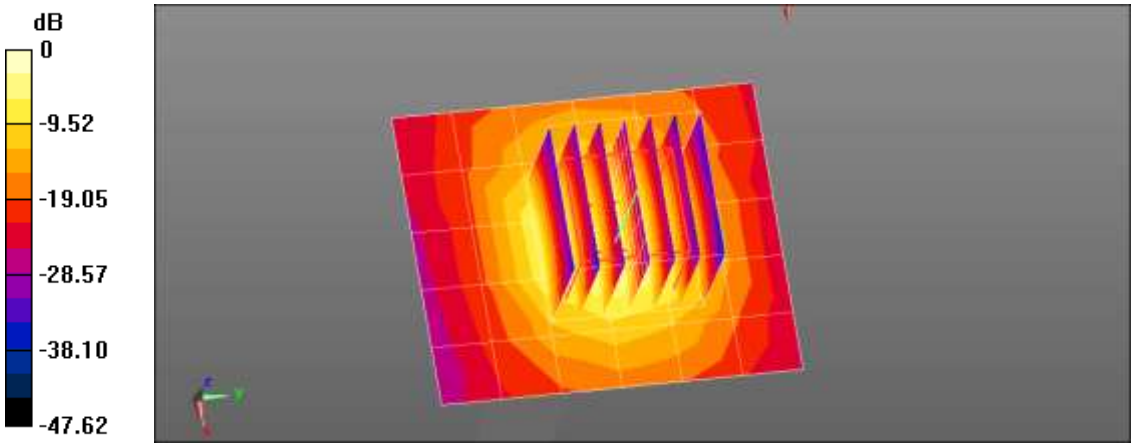
DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.73, 6.73, 6.73) @ 3900 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.91 W/kg

3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 51.11 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 11.0 W/kg
SAR(1 g) = 3.56 W/kg; SAR(10 g) = 1.21 W/kg

Maximum value of SAR (measured) = 7.58 W/kg



0 dB = 7.58 W/kg = 8.80 dBW/kg

Verification Data (3900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2℃
Test Date:	01/21/2022

DUT: Dipole 3900 MHz D3900V2; Type: D3900V2;

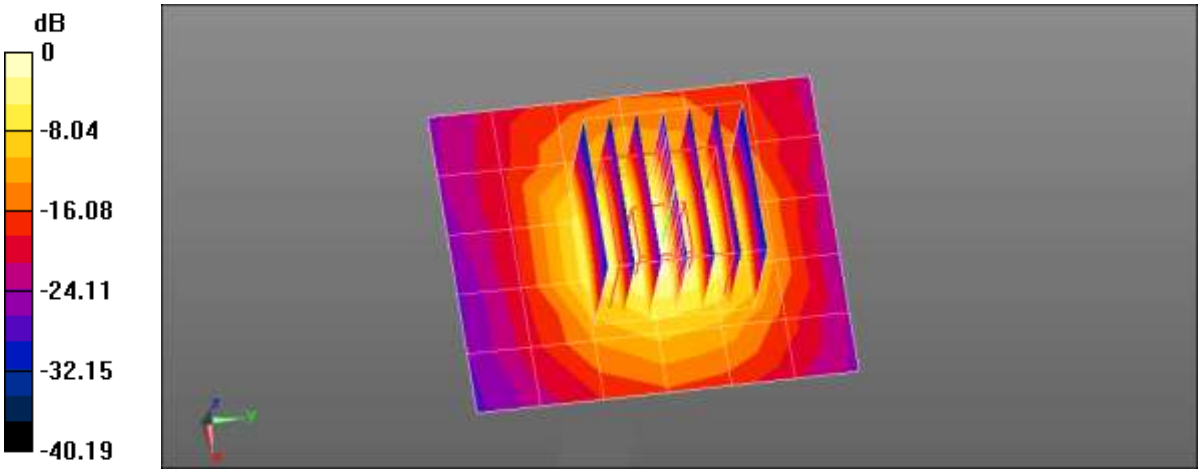
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.287 S/m; ε_r = 37.787; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(6.73, 6.73, 6.73) @ 3900 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: SAM with CRP v5.0(Right)_2014_03_05; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

3900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.65 W/kg

3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 47.82 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 9.74 W/kg
SAR(1 g) = 3.21 W/kg; SAR(10 g) = 1.12 W/kg
Maximum value of SAR (measured) = 6.78 W/kg



0 dB = 6.78 W/kg = 8.31 dBW/kg

Verification Data (1900 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.2℃
Test Date: 01/20/2022
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

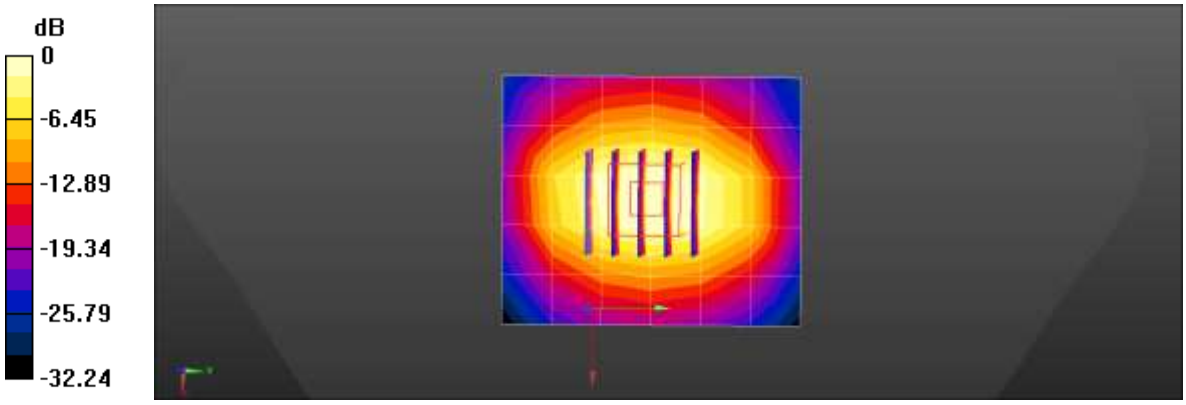
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.413 S/m; ε_r = 41.321; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.81, 8.81, 8.81) @ 1900 MHz; Calibrated: 2021-12-14
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2021-09-30
- Phantom: Twin-SAM V8.0 (Right-Left)
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.36 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.61 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 4.05 W/kg
SAR(1 g) = 2.18 W/kg; SAR(10 g) = 1.15 W/kg
Maximum value of SAR (measured) = 3.39 W/kg



0 dB = 2.36 W/kg = 3.73 dBW/kg

Verification Data (2600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.1℃
Test Date:	01/25/2022

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;

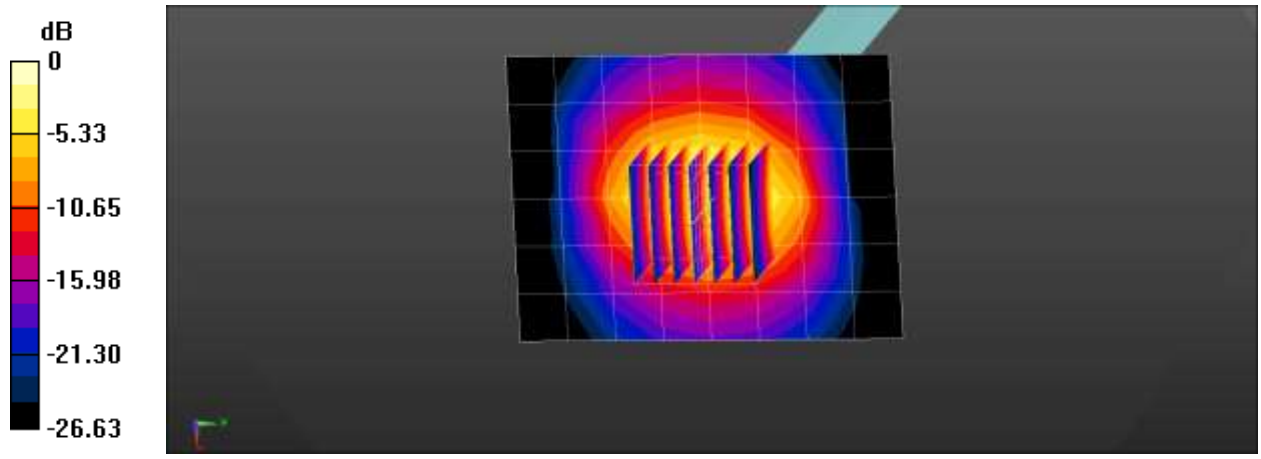
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.039 S/m; ε_r = 38.103; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2021-04-23
- Phantom: Twin-SAM V8.0_20171017(Left2); Type: QD 000 P41 AA; Serial: 1932
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2600MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.15 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.28 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 6.73 W/kg
SAR(1 g) = 2.82 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 5.10 W/kg



0 dB = 5.10 W/kg = 7.08 dBW/kg

Appendix D. – SAR Tissue Characterization

The brain and muscle mixtures consist of a viscous gel using hydrox-ethyl cellulose (HEC) gelling agent and saline solution (see Table 3.1). Preservation with a bacteriacide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Harts grove.

Ingredients (% by weight)	Frequency (㎒)											
	750		835		1 750		1 900		2 450 – 2 700		3500 - 5 800	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	41.1	51.7	40.45	53.06	52.6	68.8	54.9	70.17	71.88	73.2	65.52	78.66
Salt (NaCl)	1.4	0.9	1.45	0.94	0.4	0.2	0.18	0.39	0.16	0.1	0.0	0.0
Sugar	57.0	47.2	57.0	44.9	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
HEC	0.2	0	1.0	1.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Bactericide	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.97	0.0	17.24	10.67
DGBE	0.0	0.0	0.0	0.0	47	31	44.92	29.44	7.99	26.7	0.0	0.0
Diethylene glycol hexyl ether	-	-	-	-	-	-	-	-	-	-	-	-

Salt:	99 % Pure Sodium Chloride	Sugar:	98 % Pure Sucrose
Water:	De-ionized, 16M resistivity	HEC:	Hydroxyethyl Cellulose
DGBE:	99 % Di(ethylene glycol) butyl ether,[2-(2-butoxyethoxy) ethanol]		
Triton X-100(ultra-pure):	Polyethylene glycol mono[4-(1,1,3,3-tetramethylbutyl)phenyl] ether		

Composition of the Tissue Equivalent Matter

Appendix E. – SAR System Validation

Per FCC KCB 865664 D02v01r02, SAR system validation status should be document to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in IEEE 1528-2013 and FCC KDB 865664 D01v01r04. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.
A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
17	7681	EX3DV4	Head	1900	5d061	2021-12-27	40.1	1.42	PASS	PASS	PASS	N/A	N/A	N/A
8	7654	EX3DV4	Head	2600	1106	2021-08-14	39.1	1.94	PASS	PASS	PASS	TDD	PASS	N/A
8	7654	EX3DV4	Head	2600	1106	2021-08-14	39.1	1.94	PASS	PASS	PASS	TDD	PASS	N/A
8	7654	EX3DV4	Head	2600	1106	2021-08-14	39.1	1.94	PASS	PASS	PASS	TDD	PASS	N/A
3	3903	EX3DV4	Head	3500	1132	2021-03-24	37.9	2.92	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3500	1132	2021-03-24	37.9	2.92	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3500	1132	2021-03-24	37.9	2.92	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3500	1132	2021-03-24	37.9	2.92	PASS	PASS	PASS	N/A	PASS	N/A
14	7655	EX3DV4	Head	3500	1132	2021-06-04	37.9	2.92	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3700	1105	2021-12-04	37.5	3.13	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3700	1105	2021-12-04	37.5	3.13	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3700	1105	2021-12-04	37.5	3.13	PASS	PASS	PASS	N/A	PASS	N/A
14	7655	EX3DV4	Head	3700	1105	2021-12-04	37.5	3.13	PASS	PASS	PASS	N/A	PASS	NA
3	3903	EX3DV4	Head	3900	1019	2021-06-20	37.2	3.31	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3900	1019	2021-06-20	37.2	3.31	PASS	PASS	PASS	N/A	PASS	N/A
3	3903	EX3DV4	Head	3900	1019	2021-06-20	37.2	3.31	PASS	PASS	PASS	N/A	PASS	N/A
14	7655	EX3DV4	Head	3900	1019	2021-06-17	37.2	3.31	PASS	PASS	PASS	N/A	PASS	NA

SAR System Validation Summary 1g

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
17	7681	EX3DV4	Head	1900	5d061	2021-12-27	40.1	1.42	PASS	PASS	PASS	N/A	N/A	N/A

SAR System Validation Summary 10g– Extremity SAR Considerations

Note;
All measurements were performed using probes calibrated for CW signal only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04. SAR system were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to KDB 865664 D01v01r04.