



TEST REPORT

No.I21N04025-SAR

For

Guangdong OPPO Mobile Telecommunications Corp., Ltd.

Mobile Phone

Model Name: CPH2363

With

Hardware Version: 11

Software Version: ColorOS V12.1

FCC ID: R9C-CPH2363

Issued Date: 2022-01-21

Designation Number: CN1210

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

Test Laboratory:

SAICT, Shenzhen Academy of Information and Communications Technology

Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518000.

Tel:+86(0)755-33322000, Fax:+86(0)755-33322001

Email: yewu@caict.ac.cn. www.caict.ac.cn



No.I21N04025-SAR

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21N04025-SAR	Rev.0	1st edition	2022-01-21



CONTENTS

1. SUMMARY OF TEST REPORT	5
1.1. TEST ITEMS	5
1.2. TEST STANDARDS	5
1.3. TEST RESULT.....	5
1.4. TESTING LOCATION	5
1.5. PROJECT DATA	5
1.6. SIGNATURE.....	5
2. STATEMENT OF COMPLIANCE	6
3. CLIENT INFORMATION	10
3.1. APPLICANT INFORMATION.....	10
3.2. MANUFACTURER INFORMATION	10
4. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	11
4.1. ABOUT EUT	11
4.2. POWER REDUCTION SPECIFICATION.....	13
4.3. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	14
4.4. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST.....	14
4.5. GENERAL DESCRIPTION.....	14
5. TEST METHODOLOGY	15
5.1. APPLICABLE LIMIT REGULATIONS.....	15
5.2. APPLICABLE MEASUREMENT STANDARDS	15
6. SPECIFIC ABSORPTION RATE (SAR).....	16
6.1. INTRODUCTION.....	16
6.2. SAR DEFINITION.....	16
7. TISSUE SIMULATING LIQUIDS	17
7.1. TARGETS FOR TISSUE SIMULATING LIQUID	17
7.2. DIELECTRIC PERFORMANCE	17
8. SYSTEM VERIFICATION	22
8.1. SYSTEM SETUP	22
8.2. SYSTEM VERIFICATION	23
9. MEASUREMENT PROCEDURES	24
9.1. TESTS TO BE PERFORMED.....	24
9.2. GENERAL MEASUREMENT PROCEDURE	26
9.3. WCDMA MEASUREMENT PROCEDURES FOR SAR	27
9.4. LTE MEASUREMENT PROCEDURES FOR SAR.....	28
9.5. LTE (TDD) CONSIDERATIONS.....	28
9.6. BLUETOOTH & WLAN MEASUREMENT PROCEDURES FOR SAR.....	30
9.7. POWER DRIFT.....	30
10. CONDUCTED OUTPUT POWER	31
10.1. GSM MEASUREMENT RESULT	31



10.2. WCDMA MEASUREMENT RESULT	35
10.3. LTE MEASUREMENT RESULT	41
10.4. WLAN AND BLUETOOTH MEASUREMENT RESULT	188
11. SIMULTANEOUS TX SAR CONSIDERATIONS	193
11.1. INTRODUCTION	193
11.2. TRANSMIT ANTENNA SEPARATION DISTANCES	193
11.3. SAR MEASUREMENT POSITIONS	194
12. EVALUATION OF SIMULTANEOUS	195
13. SUMMARY OF TEST RESULTS	196
13.1. TESTING ENVIRONMENT	197
13.2. SAR RESULTS	197
13.3. WLAN EVALUATION FOR 2.4G	239
13.4. WLAN EVALUATION FOR 5G	241
13.5. PRODUCT SPECIFIC 10G SAR	245
14. SAR MEASUREMENT VARIABILITY	247
15. MEASUREMENT UNCERTAINTY	249
15.1. MEASUREMENT UNCERTAINTY FOR NORMAL SAR TESTS (300MHz~3GHz)	249
15.2. MEASUREMENT UNCERTAINTY FOR NORMAL SAR TESTS (3GHz~6GHz)	250
16. MAIN TEST INSTRUMENTS	251
ANNEX A: GRAPH RESULTS	252
ANNEX B: SYSTEM VERIFICATION RESULTS	304
ANNEX C: SAR MEASUREMENT SETUP	313
C.1. MEASUREMENT SET-UP	313
C.2. DASY5 E-FIELD PROBE SYSTEM	314
C.3. E-FIELD PROBE CALIBRATION	315
C.4. OTHER TEST EQUIPMENT	316
ANNEX D: POSITION OF THE WIRELESS DEVICE IN RELATION TO THE PHANTOM	319
D.1. GENERAL CONSIDERATIONS	319
D.2. BODY-WORN DEVICE	320
D.3. DESKTOP DEVICE	320
D.4. DUT SETUP PHOTOS	321
ANNEX E: EQUIVALENT MEDIA RECIPES	322
ANNEX F: SYSTEM VALIDATION	323
ANNEX G: DAE CALIBRATION CERTIFICATE	324
ANNEX H: PROBE CALIBRATION CERTIFICATE	327
ANNEX I: DIPOLE CALIBRATION CERTIFICATE	358
ANNEX J: EXTENDED CALIBRATION SAR DIPOLE	414



No.I21N04025-SAR

1. Summary of Test Report

1.1. Test Items

Description: Mobile Phone
Model Name: CPH2363
Applicant's name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Manufacturer's Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.

1.2. Test Standards

ANSI C95.1-1992, IEEE 1528-2013

1.3. Test Result

Pass. Please refer to "13. Summary of Test Results"

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project Data

Testing Start Date: 2021-12-22

Testing End Date: 2022-01-13

1.6. Signature

李仲富

Li Yongfu

(Prepared this test report)

张云转

Zhang Yunzhan

(Reviewed this test report)

曹军飞

Cao Junfei

(Approved this test report)



2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Guangdong OPPO Mobile Telecommunications Corp., Ltd. Mobile Phone CPH2363 are as follows:

Table 2.1: Highest Reported SAR for Head (1g)

Exposure Configuration	Technology Band	Highest Reported SAR 1g(W/Kg)	Equipment Class
Head (Separation Distance 0mm)	GSM850	0.75	PCE
	PCS1900	1.03	
	WCDMA Band 2	0.78	
	WCDMA Band 4	1.09	
	WCDMA Band 5	1.15	
	LTE Band 2	1.16	
	LTE Band 4	1.03	
	LTE Band 5	0.88	
	LTE Band 7	1.09	
	LTE Band 12	1.09	
	LTE Band 26	1.11	
	LTE Band 38	0.83	
	LTE Band 41	0.72	
	LTE Band 66	1.10	
	Bluetooth	0.20	DSS
	WLAN 2.4GHz	0.74	DTS
	WLAN 5GHz	1.02	NII

Table 2.2: Highest Reported SAR for Hotspot (1g)

Exposure Configuration	Technology Band	Highest Reported SAR 1g(W/Kg)	Equipment Class
Hotspot (Separation Distance 10mm)	GSM850	0.56	PCE
	PCS1900	1.01	
	WCDMA Band 2	0.56	
	WCDMA Band 4	0.61	
	WCDMA Band 5	0.36	
	LTE Band 2	0.75	
	LTE Band 4	0.92	
	LTE Band 5	0.37	
	LTE Band 7	0.83	
	LTE Band 12	0.31	
	LTE Band 26	0.37	
	LTE Band 38	0.79	
	LTE Band 41	0.75	
	LTE Band 66	0.78	
	Bluetooth	0.16	DSS
	WLAN 2.4GHz	0.53	DTS
	WLAN 5GHz	0.89	NII

Table 2.3: Highest Reported SAR for Body-worn (1g)

Exposure Configuration	Technology Band	Highest Reported SAR 1g(W/Kg)	Equipment Class
Body-worn (Separation Distance 15mm)	GSM850	0.38	PCE
	PCS1900	0.29	
	WCDMA Band 2	0.19	
	WCDMA Band 4	0.26	
	WCDMA Band 5	0.28	
	LTE Band 2	0.24	
	LTE Band 4	0.50	
	LTE Band 5	0.30	
	LTE Band 7	0.30	
	LTE Band 12	0.14	
	LTE Band 26	0.30	
	LTE Band 38	0.29	
	LTE Band 41	0.25	
	LTE Band 66	0.29	
	Bluetooth	0.06	DSS
	WLAN 2.4GHz	0.20	DTS
	WLAN 5GHz	0.49	NII

Table 2.4: Highest Reported Extremity SAR (10g)

Exposure Configuration	Technology Band	Highest Reported SAR 10g(W/Kg)	Equipment Class
Extremity (Separation Distance 0mm)	WLAN 5GHz	1.77	NII

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1g tissue according to the ANSI C95.1-1992.

The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report.

The highest reported SAR value is obtained at the case of (**Table 2.1 & 2.2 & 2.3 & 2.4**), Head value is **1.16 kg (1g)**, Hotspot value is **1.01 kg (1g)**, Body-worn value is **0.50 kg (1g)** and Extremity SAR value is **1.77g (10g)**.

**Table 2.5: The sum of reported SAR values for WWAN antenna and WLAN antenna**

/	Position	WWAN (W/kg)	WLAN (W/kg)	Sum (W/kg)
Highest reported SAR value for Head	Right Tilt	1.16	0.13	1.29
Highest reported SAR value for Hotspot	Top Side	0.92	0.23	1.15
Highest reported SAR value for Body-worn	Rear Side	0.50	0.16	0.66

Note: the test positions of above tables are for the worse case that has been evaluated.

Table 2.6: The sum of reported SAR values for WWAN antenna and Bluetooth antenna

/	Position	WWAN (W/kg)	Bluetooth (W/kg)	Sum (W/kg)
Highest reported SAR value for Head	Right Tilt	1.16	0.05	1.21
Highest reported SAR value for Hotspot	Bottom Side	1.01	<0.01	1.01
Highest reported SAR value for Body-worn	Rear Side	0.50	0.06	0.56

Note: the test positions of above tables are for the worse case that has been evaluated.

According to the above tables, the highest sum of reported SAR values is **1.29 W/kg (1g)**.

The detail for simultaneous transmission consideration is described in chapter 12.



No.I21N04025-SAR

3. Client Information

3.1. Applicant Information

Company Name:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address:	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
City:	DongGuan
Country:	China
Telephone:	(86)76986076999

3.2. Manufacturer Information

Company Name:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address:	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
City:	DongGuan
Country:	China
Telephone:	(86)76986076999

4. Equipment under Test (EUT) and Ancillary Equipment (AE)

4.1. About EUT

Description:	Mobile Phone
Model Name:	CPH2363
Condition of EUT as received:	No obvious damage in appearance
Frequency Bands:	GSM 850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/12/17/26/38/41/66, Bluetooth, WLAN 2.4G/5G
Tested Tx Frequency:	824 – 849MHz (GSM 850)
	1850 – 1910MHz (GSM 1900)
	1850 – 1910MHz (WCDMA Band 2)
	1710 – 1755MHz (WCDMA Band 4)
	824 – 849MHz (WCDMA Band 5)
	1850 – 1910MHz (LTE Band 2)
	1710 – 1755MHz (LTE Band 4)
	824 – 849MHz (LTE Band 5)
	2500 – 2570MHz (LTE Band 7)
	699 – 716MHz (LTE Band 12)
	704 – 716MHz (LTE Band 17)
	814 – 849MHz (LTE Band 26)
	2570 – 2620MHz (LTE Band 38)
	2535 – 2655MHz (LTE Band 41)
	1710 – 1780MHz (LTE Band 66)
	2402 – 2480MHz (Bluetooth)
	2412 – 2462MHz (WLAN 2.4G)
	5180 – 5825MHz (WLAN 5G)
GRPS/EDGE Multislot Class:	33
GRPS capability Class:	B
Test device Production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support
Product Dimensions:	Long 159.9mm; Wide 73.2mm; Overall Diagonal 170.1mm
Remark:	<ol style="list-style-type: none"> 1. This device doesn't support DTM feature. 2. This device WLAN 5.3G/5.5G doesn't support hotspot operation. 3. This device has WWAN Top and Bottom transmitter antennas which can refer to antenna location chapter. 4. The device is capable of switching between the top antenna and bottom antenna based on signal strength. 5. There are totally 6 power reduction levels of WWAN antenna and 3 power reduction levels of WLAN

antenna, detail descriptions of the power reduction mechanism are included in the operational description.

6. For WWAN transmitter (6 sets of power reduction levels).

a) Head exposure conditions:

Reduced power level 1 – GSM850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/26/38/41/66

While the device WWAN is transmitting at the WWAN top antenna and the audio is actively routed through the receiver, power reduction enabled for those bands.

Reduced power level 2 – GSM850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/26/38/41/66

While the device WLAN 2.4G/5G antenna is transmitting simultaneously with the WWAN top antenna, and the audio is actively routed through the receiver, power reduction enabled for those bands.

b) Body exposure condition

Reduced power level 3 – GSM1900, WCDMA Band 2/4, LTE Band 2/4/7/38/41/66

While the device is transmitting at the WWAN top antenna and receiver is not working, power reduction enabled for those bands.

Reduced power level 4 – WCDMA Band 2/4, LTE Band 2/4/7/66

While the device is transmitting at the WWAN bottom antenna and receiver is not working, power reduction enabled for those bands.

Reduced power level 5 – GSM1900, WCDMA Band 2/4, LTE Band 2/4/7/38/41/66

While the device WLAN 2.4G/5G antenna is transmitting simultaneously with the WWAN top antenna and the receiver is not working, power reduction enabled for those bands.

Reduced power level 6 – WCDMA Band 2/4, LTE Band 2/4/7/66

While the device WLAN 2.4G/5G antenna is transmitting simultaneously with the WWAN bottom antenna and the receiver is not working, power reduction enabled for those bands.

7. For WLAN transmitter (3 sets of power reduction levels).

a) Head exposure conditions:

Reduced power level 7 – WLAN 2.4G/5G

While the device WLAN 2.4G/5G antenna is transmitting and the audio is actively routed through the receiver, power reduction enabled for those bands.

Reduced power level 8 – WLAN 2.4G/5G

While the device WLAN 2.4G/5G antenna is transmitting simultaneously with the WWAN antenna and the audio is actively routed through the receiver, power reduction enabled for those bands.

b) Body exposure condition.

Reduced power level 9 – WLAN 2.4G/5G

When the device WLAN 2.4G/5G antenna is transmitting simultaneously with the WWAN antenna and the receiver is not working, power reduction enabled for those bands.

4.2. Power reduction specification

The following tables summarize the key power reduction information. The detailed full power which is the maximum power the state can use and reduced tune-up specifications and conducted power measurement results are provided in chapter 12 of this report.

Band	Top Antenna				Bottom Antenna		
	Head	Head	Body	Body	Head	Body	Body
	Reduced power level 1	Reduced power level 2	Reduced power level 3	Reduced power level 5	Normal	Reduced power level 4	Reduced power level 6
GSM850	-3.1	-3.1	0	0	0	0	0
GSM1900	-2.4	-2.4	-2.7	-2.7	0	0	0
WCDMA B2	-6.1	-6.1	-5.1	-5.1	0	-1.1	-1.1
WCDMA B4	-7.4	-7.4	-3.6	-3.6	0	-1.7	-1.7
WCDMA B5	-1.5	-1.5	0	0	0	0	0
LTE Band2	-6.0	-6.0	-4.6	-4.6	0	-1.2	-1.2
LTE Band4	-7.3	-7.3	-3.8	-3.8	0	-2.1	-2.1
LTE Band5	-2.5	-2.5	0	0	0	0	0
LTE Band7	-6.8	-6.8	-4.1	-4.1	0	-1.4	-1.4
LTE Band12	0	0	0	0	0	0	0
LTE Band17	0	0	0	0	0	0	0
LTE Band26	-1.9	-1.9	0	0	0	0	0
LTE Band38	-4.3	-4.3	-1.0	-1.0	0	0	0
LTE Band41	-5.1	-5.1	-1.3	-1.3	0	0	0
LTE Band66	-6.5	-6.5	-4.1	-4.1	0	-2.2	-2.2
Band	WLAN Antenna						
	Head		Head		Body		
	Reduced power level 7		Reduced power level 8		Reduced power level 9		
WLAN 2.4G	-3.5		-9.0		-4.0		
WLAN 5.2G	-5.0		-9.0		-5.0		
WLAN 5.3G	-5.0		-9.0		-5.0		
WLAN 5.5G	-5.0		-9.0		-5.0		
WLAN 5.8G	-5.0		-9.0		-5.0		



No.I21N04025-SAR

4.3. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Receipt Date
UT10aa	861150050033092	11	ColorOS V12.1	2021-12-20
UT11aa	861150050028316	11	ColorOS V12.1	2021-12-20
UT12aa	861150050026518	11	ColorOS V12.1	2021-12-20
UT13aa	861150050031435	11	ColorOS V12.1	2021-12-20
UT15aa	861150050028092	11	ColorOS V12.1	2021-12-20

*EUT ID: is used to identify the test sample in the lab internally.

Note: It is performed to test SAR with the UT11aa & UT12aa & UT13aa & UT15aa, and conducted power with the UT10aa.

4.4. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery	BLP907	Sunwoda Electronic Co., Ltd.
AE2	Battery	BLP907	Chongqing CosMX battery Co., Ltd.
AE3	Battery	BLP907	TWS Technology (Guangzhou) Limited
AE4	Headset	MH157	/

*AE ID: is used to identify the test sample in the lab internally.

Note: The device has 3 types of batteries. We'll perform the SAR measurement with AE1 battery and Spot check test with AE2/AE3 battery.

4.5. General Description

According to client's description, Mobile phone CPH2363 comes in 2 material shell specifications, the tables below show the differences.

Changes	CPH2363	CPH2363
material shell	plate material shell	leather material shell

We'll perform the SAR measurement with model CPH2363 (plate material shell) and Spot check test with model CPH2363 (leather material shell).



5. Test Methodology

5.1. Applicable Limit Regulations

ANSI C95.1–1992 IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

5.2. Applicable Measurement Standards

IEEE 1528–2013 Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Experimental Techniques.

KDB 447498 D01 General RF Exposure Guidance v06 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

KDB 648474 D04 Handset SAR v01r03 SAR Evaluation Considerations for Wireless Handsets

KDB 941225 D01 SAR test for 3G devices v03r01 SAR Measurement Procedures for 3G Devices

KDB 941225 D05 SAR for LTE Devices v02r05 SAR Evaluation Considerations for LTE Devices

KDB 941225 D06 Hot Spot SAR v02r01 SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

KDB 248227 D01 802.11 Wi-Fi SAR v02r02 SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters.

KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04 SAR Measurement Requirements for 100 MHz to 6 GHz

KDB 865664 D02 RF Exposure Reporting v01r02 RF Exposure Compliance Reporting and Documentation Considerations

KDB 941225 D07 UMPC Mini Tablet v01r02 SAR Evaluation Procedures for UMPC Mini-Tablet Devices

TCB workshop April 2019; RF Exposure Procedures (Tissue Simulating Liquids)

6. Specific Absorption Rate (SAR)

6.1. Introduction

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

6.2. SAR Definition

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

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

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

SAR measurement can be either related to the temperature elevation in tissue by

$$SAR = c \left(\frac{\delta T}{\delta t} \right)$$

Where: C is the specific heat capacity, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

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

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

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

7. Tissue Simulating Liquids

7.1. Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

Frequency (MHz)	Liquid Type	Conductivity (σ)	$\pm 5\%$ Range	Permittivity (ϵ)	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.9	39.8~44.0
835	Head	0.90	0.86~0.95	41.5	39.4~43.6
1750	Head	1.37	1.30~1.44	40.1	38.1~42.1
1900	Head	1.40	1.33~1.47	40.0	38.0~42.0
2450	Head	1.80	1.71~1.89	39.2	37.2~41.2
2550	Head	1.91	1.81~2.01	39.1	37.1~41.0
5250	Head	4.71	4.47~4.95	35.9	34.1~37.7
5600	Head	5.07	4.82~5.32	35.5	33.8~37.3
5750	Head	5.22	4.96~5.48	35.4	33.6~37.1

7.2. Dielectric Performance

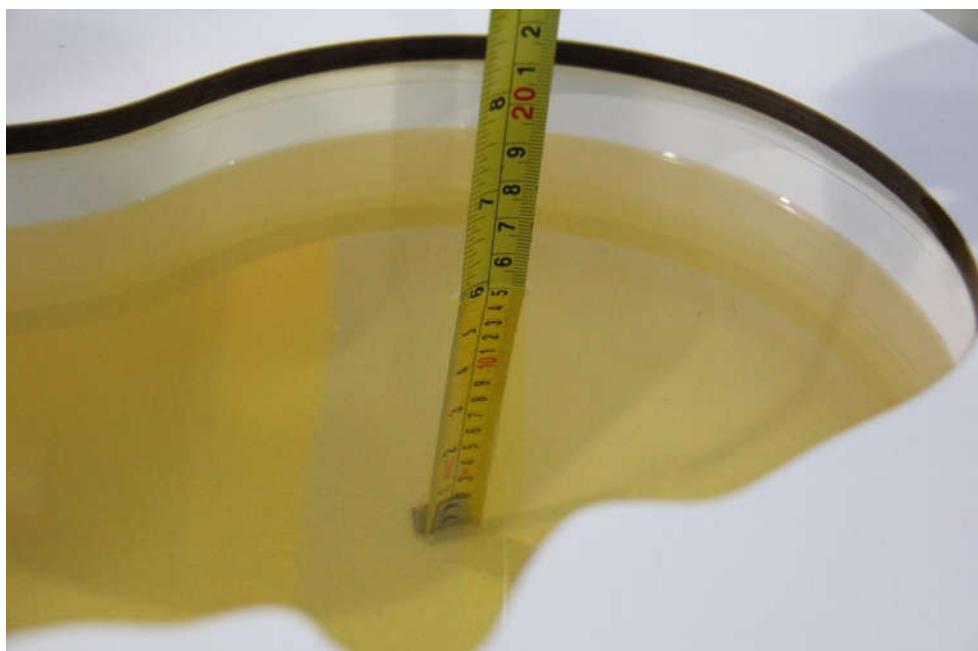
Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Conductivity σ (S/m)	Drift (%)	Permittivity ϵ	Drift (%)
2021-12-30	Head	750	0.908	2.02	40.85	-2.51
2022-01-13	Head	835	0.915	1.67	40.71	-1.90
2022-01-01	Head	1750	1.385	1.09	39.49	-1.52
2021-01-05	Head	1900	1.417	1.21	39.25	-1.88
2022-01-12	Head	2450	1.834	1.89	38.32	-2.24
2021-12-22	Head	2550	1.950	2.09	38.28	-2.10
2021-12-28	Head	5250	4.661	-1.04	36.47	1.59
2021-12-28	Head	5600	5.203	2.62	35.05	-1.27
2021-12-28	Head	5750	5.148	-1.38	36.04	1.81

Note: The liquid temperature is 22.0°C.



Picture 7-1: Liquid depth in the Head Phantom (750MHz)



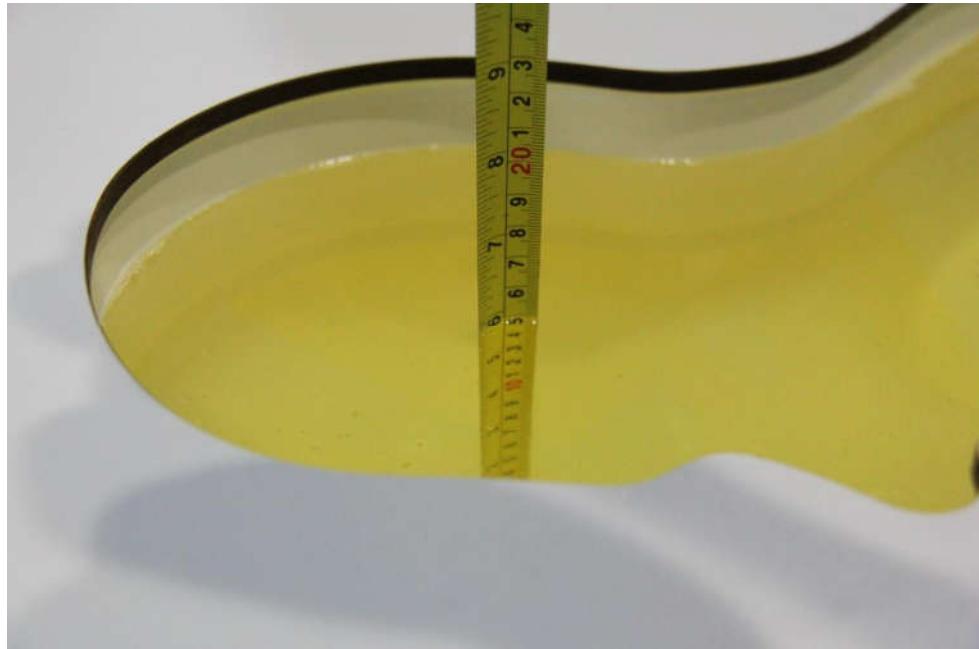
Picture 7-2: Liquid depth in the Head Phantom (835MHz)



Picture 7-3: Liquid depth in the Head Phantom (1750MHz)



Picture 7-4: Liquid depth in the Head Phantom (1900MHz)



Picture 7-5: Liquid depth in the Head Phantom (2450MHz)



Picture 7-6: Liquid depth in the Head Phantom (2550MHz)

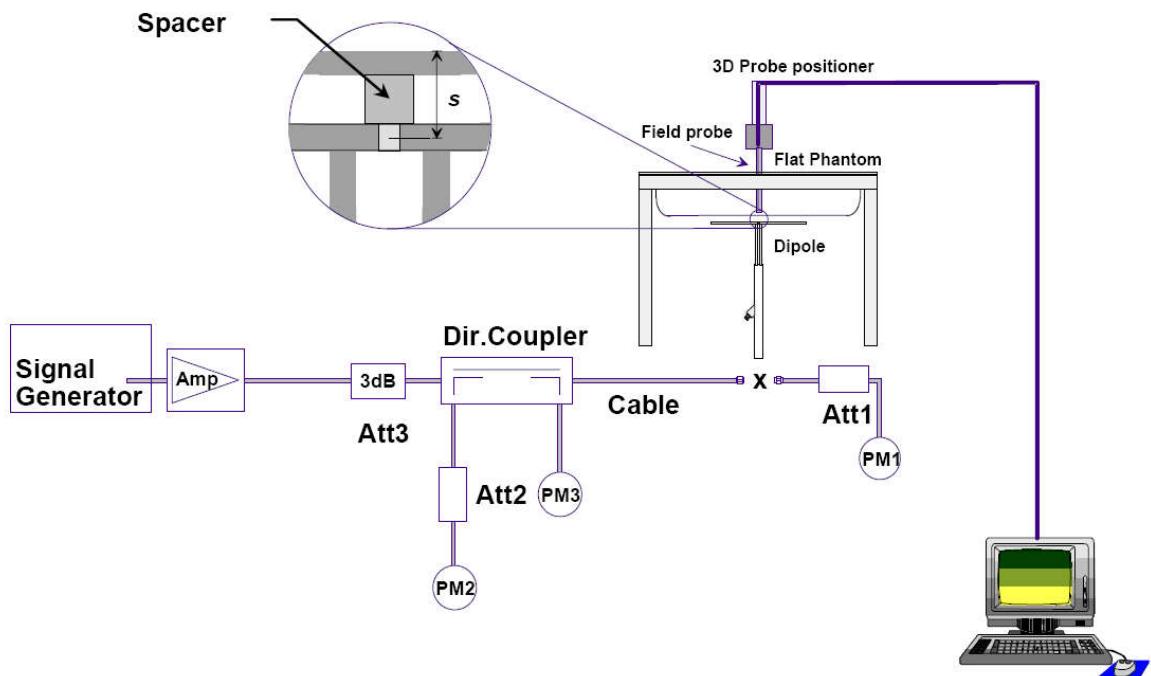


Picture 7-7: Liquid depth in the Head Phantom (5GHz)

8. System verification

8.1. System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



Picture 8.1 System Setup for System Evaluation

For the dipole below 3GHz, the output power on dipole port must be calibrated to 24 dBm (250mW) before dipole is connected.

For the dipole above 3GHz, the output power on dipole port must be calibrated to 20 dBm (100mW) before dipole is connected.



Picture 8.2 Photo of Dipole Setup

8.2. System Verification

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device.

Table 8.1: System Verification of Head

Measurement Date	Frequency (MHz)	Target value (W/kg)		Measured value (W/kg)				Deviation (%)	
		10 g	1 g	10 g	1 g	10 g	1 g		
2021-12-30	750	5.70	8.53	1.45	2.19	5.80	8.76	1.75	2.70
2022-01-13	835	6.29	9.24	1.59	2.37	6.36	9.48	1.11	2.60
2022-01-01	1750	19.30	36.40	4.88	9.30	19.52	37.20	1.14	2.20
2021-01-05	1900	20.50	40.20	5.27	10.5	21.08	42.00	2.83	4.48
2022-01-12	2450	24.20	53.20	6.15	13.7	24.60	54.80	1.65	3.01
2021-12-22	2550	25.20	55.90	6.48	14.6	25.92	58.40	2.86	4.47
2021-12-28	5250	22.30	78.00	2.20	7.62	22.00	76.20	-1.35	-2.31
2021-12-28	5600	22.70	79.50	2.33	8.29	23.30	82.90	2.64	4.28
2021-12-28	5750	22.20	78.40	2.18	7.56	21.80	75.60	-1.80	-3.57

9. Measurement Procedures

9.1. Tests to be performed

In order to determine the highest value of the peak spatial-average SAR of a handset, all device positions, configurations and operational modes shall be tested for each frequency band according to steps 1 to 3 below. A flowchart of the test process is shown in picture 9.1.

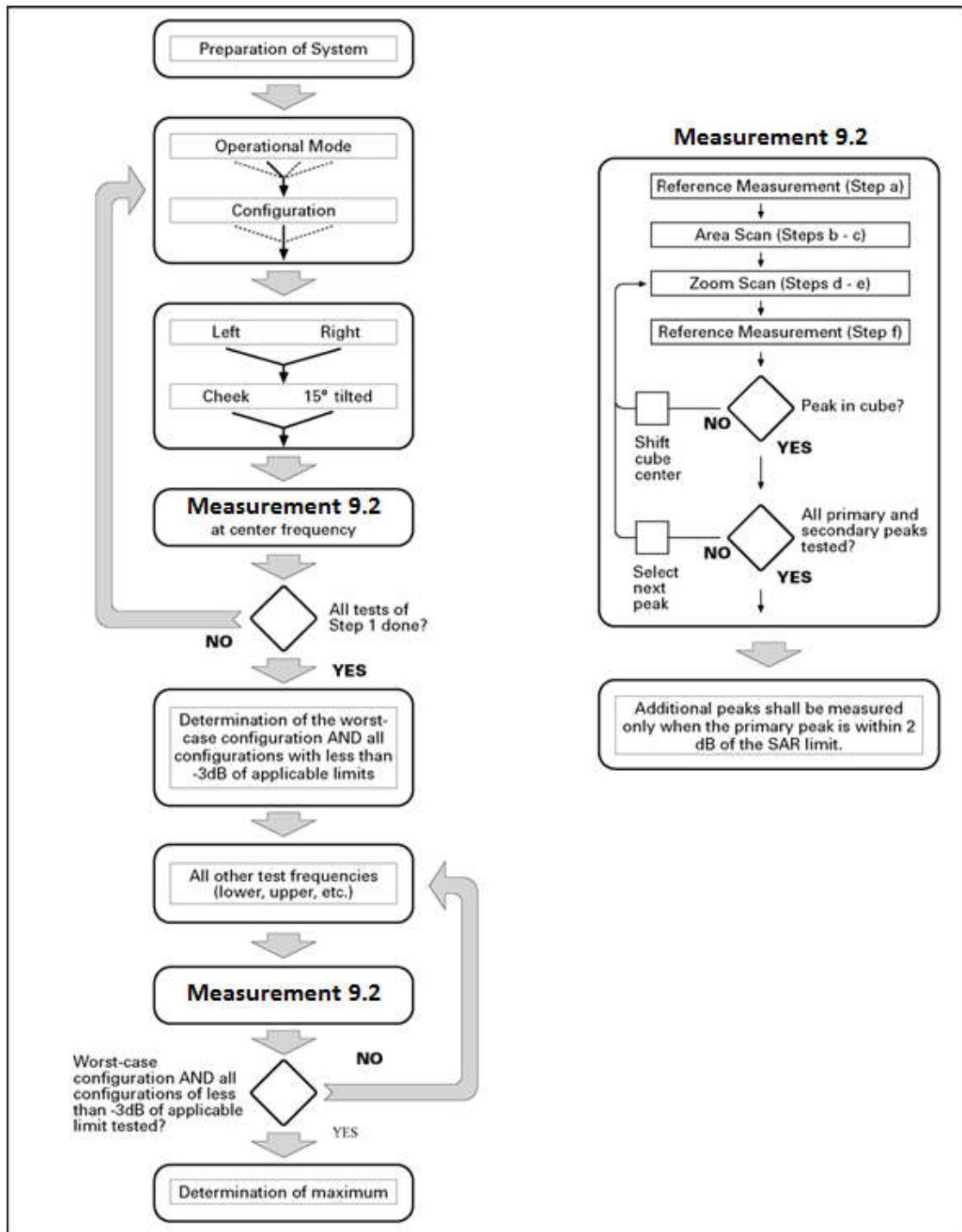
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the center of the transmit frequency band (f_c) for:

- a) all device positions (cheek and tilt, for both left and right sides of the SAM phantom, as described in annex D),
- b) all configurations for each device position in a), e.g., antenna extended and retracted, and
- c) all operational modes, e.g., analogue and digital, for each device position in a) and configuration in b) in each frequency band.

If more than three frequencies need to be tested according to 11.1 (i.e., $N_C > 3$), then all frequencies, configurations and modes shall be tested for all of the above test conditions.

Step 2: For the condition providing highest peak spatial-average SAR determined in Step 1, perform all tests described in 9.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within 3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

Step 3: Examine all data to determine the highest value of the peak spatial-average SAR found in Steps 1 to 2.



Picture 9.1 Block diagram of the tests to be performed



9.2. General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

		≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	$\frac{1}{2} \cdot 5 \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
		≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}		≤ 2 GHz: ≤ 8 mm $2 - 3$ GHz: ≤ 5 mm*	$3 - 4$ GHz: ≤ 5 mm* $4 - 6$ GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$	≤ 5 mm	$3 - 4$ GHz: ≤ 4 mm $4 - 5$ GHz: ≤ 3 mm $5 - 6$ GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$3 - 4$ GHz: ≤ 3 mm $4 - 5$ GHz: ≤ 2.5 mm $5 - 6$ GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$
Minimum zoom scan volume	x, y, z	≥ 30 mm	$3 - 4$ GHz: ≥ 28 mm $4 - 5$ GHz: ≥ 25 mm $5 - 6$ GHz: ≥ 22 mm
Note: 5 is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.			
* When zoom scan is required and the <u>reported</u> SAR from the 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.			



9.3. WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & DPDCH_n), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

For Release 5 HSDPA Data Devices:

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

For Release 6 HSPA Data Devices

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	3.0	2.0	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.0	0.0	21	81



9.4. LTE Measurement Procedures for SAR

SAR tests for LTE are performed with a base station simulator, Anristu MT8820C. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the Anristu MT8820C. It is performed for conducted power and SAR based on the KDB941225 D05.

SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is $\leq 0.8 \text{ W/kg}$, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is $> 1.45 \text{ W/kg}$, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are $\leq 0.8 \text{ W/kg}$. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is $> 1.45 \text{ W/kg}$, the remaining required test channels must also be tested.

9.5. LTE (TDD) Considerations

According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.

LTE TDD Band 38/41 support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Special subframe configuration	Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
	DwPTS	UpPTS			DwPTS	UpPTS		
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$5120 \cdot T_s$	$10240 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$				
2	$21952 \cdot T_s$			$23040 \cdot T_s$				
3	$24144 \cdot T_s$			$25600 \cdot T_s$				
4	$26336 \cdot T_s$			$7680 \cdot T_s$				
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$10240 \cdot T_s$	$20480 \cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$				
7	$21952 \cdot T_s$			$12800 \cdot T_s$				
8	$24144 \cdot T_s$			-				
9	$13168 \cdot T_s$			-				

Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number									Calculated Duty Cycle (%)	
		0	1	2	3	4	5	6	7	8		
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Calculated Duty Cycle

Calculated Duty Cycle = Extended cyclic prefix in uplink x (T_s) x # of S + # of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle = $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

Where

$T_s = 1/(15000 \times 2048)$ seconds



9.6. Bluetooth & WLAN Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

9.7. Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in Section 14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10. Conducted Output Power

10.1. GSM Measurement result

During the process of testing, the EUT was controlled via Agilent Digital Radio Communication tester (E5515C) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

Table 10.1: The conducted power measurement results for GSM / GPRS/ EGPRS

Top Antenna – Full Power								
GSM 850 Speech	Tune up	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		Ch.251	Ch.190	Ch.128
1Tx slot	33.5	32.75	32.55	32.94	/	/	/	/
GPRS850/ EGPRS850	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		/	Ch.251	Ch.190
1Tx-slots	33.5	32.73	32.53	32.92	-9.03dB	23.70	23.50	23.89
2Tx-slots	31.5	31.05	30.79	30.85	-6.02dB	25.03	24.77	24.83
3Tx-slots	30.0	29.06	28.81	29.00	-4.26dB	24.80	24.55	24.74
4Tx-slots	29.5	28.12	28.06	28.18	-3.01dB	25.11	25.05	25.17
EGPRS 850 (8PSK)	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		Ch.251	Ch.190	Ch.128
1Tx-slots	27.8	26.66	26.81	26.79	-9.03dB	17.63	17.78	17.76
2Tx-slots	25.5	24.20	24.38	24.37	-6.02dB	18.18	18.36	18.35
3Tx-slots	24.5	23.01	23.19	23.18	-4.26dB	18.75	18.93	18.92
4Tx-slots	24.0	22.33	22.54	22.53	-3.01dB	19.32	19.53	19.52
Top Antenna – Reduced Power Level 1/2								
GSM 850 Speech	Tune up	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		Ch.251	Ch.190	Ch.128
1Tx slot	30.4	30.10	30.03	30.20	/	/	/	/
GPRS850/ EGPRS850	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		/	Ch.251	Ch.190
1Tx-slots	30.4	30.09	30.01	30.18	-9.03dB	21.06	20.98	21.15
2Tx-slots	28.4	27.53	27.41	27.62	-6.02dB	21.51	21.39	21.60
3Tx-slots	26.9	25.65	25.67	25.81	-4.26dB	21.39	21.41	21.55
4Tx-slots	26.4	24.89	25.04	25.04	-3.01dB	21.88	22.03	22.03
EGPRS 850 (8PSK)	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		Ch.251	Ch.190	Ch.128
1Tx-slots	24.7	23.58	23.75	23.83	-9.03dB	14.55	14.72	14.80
2Tx-slots	22.4	21.19	21.37	21.42	-6.02dB	15.17	15.35	15.40
3Tx-slots	21.4	19.97	20.18	20.21	-4.26dB	15.71	15.92	15.95
4Tx-slots	20.9	19.33	19.52	19.55	-3.01dB	16.32	16.51	16.54

Bottom Antenna – Full Power								
GSM 850 Speech	Tune up	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		Ch.251	Ch.190	Ch.128
1Tx slot	33.5	32.95	32.75	33.07	/	/	/	/
GPRS850/ EGPRS850	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128	/	Ch.251	Ch.190	Ch.128
1Tx-slots	33.5	32.93	32.74	33.05	-9.03dB	23.90	23.71	24.02
2Tx-slots	31.5	31.19	30.97	31.03	-6.02dB	25.17	24.95	25.01
3Tx-slots	30.0	29.28	28.95	29.14	-4.26dB	25.02	24.69	24.88
4Tx-slots	29.5	28.35	28.28	28.27	-3.01dB	25.34	25.27	25.26
EGPRS 850 (8PSK)	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.251	Ch.190	Ch.128		Ch.251	Ch.190	Ch.128
1Tx-slots	27.8	26.68	26.85	26.94	-9.03dB	17.65	17.82	17.91
2Tx-slots	25.5	24.27	24.49	24.48	-6.02dB	18.25	18.47	18.46
3Tx-slots	24.5	23.08	23.33	23.28	-4.26dB	18.82	19.07	19.02
4Tx-slots	24.0	22.43	22.67	22.57	-3.01dB	19.42	19.66	19.56

Top Antenna – Reduced Power Level 1/2								
GSM 1900 Speech	Tune up	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		Ch.810	Ch.661	Ch.512
1Tx slot	28.1	26.90	27.15	27.20	/	/	/	/
GPRS1900/ EGPRS1900	<i>/</i>	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		/	Ch.810	Ch.661
1Tx-slots	28.1	26.87	27.13	27.19	-9.03dB	17.84	18.10	18.16
2Tx-slots	26.6	24.89	25.15	25.07	-6.02dB	18.87	19.13	19.05
3Tx-slots	25.6	23.75	24.03	23.95	-4.26dB	19.49	19.77	19.69
4Tx-slots	24.6	23.01	23.29	23.06	-3.01dB	20.00	20.28	20.05
EGPRS1900 (8PSK)	<i>/</i>	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		Ch.810	Ch.661	Ch.512
1Tx-slots	24.6	23.37	23.64	23.71	-9.03dB	14.34	14.61	14.68
2Tx-slots	22.6	21.52	21.67	21.80	-6.02dB	15.50	15.65	15.78
3Tx-slots	21.6	20.29	20.52	20.63	-4.26dB	16.03	16.26	16.37
4Tx-slots	20.6	18.78	18.97	19.03	-3.01dB	15.77	15.96	16.02
Top Antenna – Reduced Power Level 3/5								
GSM 1900 Speech	Tune up	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		Ch.810	Ch.661	Ch.512
1Tx slot	27.8	26.58	26.83	26.92	/	/	/	/
GPRS1900/ EGPRS1900	<i>/</i>	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		/	Ch.810	Ch.661
1Tx-slots	27.8	26.55	26.81	26.91	-9.03dB	17.52	17.78	17.88
2Tx-slots	26.3	24.59	24.79	24.74	-6.02dB	18.57	18.77	18.72
3Tx-slots	25.3	23.46	23.67	23.74	-4.26dB	19.20	19.41	19.48
4Tx-slots	24.3	22.54	22.75	22.82	-3.01dB	19.53	19.74	19.81
EGPRS1900 (8PSK)	<i>/</i>	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		Ch.810	Ch.661	Ch.512
1Tx-slots	24.3	23.11	23.41	23.38	-9.03dB	14.08	14.38	14.35
2Tx-slots	22.3	20.98	21.29	21.22	-6.02dB	14.96	15.27	15.20
3Tx-slots	21.3	19.78	19.97	19.67	-4.26dB	15.52	15.71	15.41
4Tx-slots	20.3	18.41	18.79	18.74	-3.01dB	15.40	15.78	15.73

Bottom Antenna – Full Power								
GSM 1900 Speech	Tune up	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		Ch.810	Ch.661	Ch.512
1Tx slot	30.5	29.64	29.67	29.35	/	/	/	/
GPRS1900/ EGPRS1900	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512	/	Ch.810	Ch.661	Ch.512
1Tx-slots	30.5	29.61	29.65	29.34	-9.03dB	20.58	20.62	20.31
2Tx-slots	29.0	27.28	27.44	27.32	-6.02dB	21.26	21.42	21.30
3Tx-slots	28.0	26.26	26.35	26.46	-4.26dB	22.00	22.09	22.20
4Tx-slots	27.0	25.35	25.49	25.53	-3.01dB	22.34	22.48	22.52
EGPRS1900 (8PSK)	/	Measured Power (dBm)			calculation	Averaged Power (dBm)		
		Ch.810	Ch.661	Ch.512		Ch.810	Ch.661	Ch.512
1Tx-slots	27.0	25.89	26.15	26.11	-9.03dB	16.86	17.12	17.08
2Tx-slots	25.0	23.73	24.06	23.98	-6.02dB	17.71	18.04	17.96
3Tx-slots	24.0	22.63	22.92	22.85	-4.26dB	18.37	18.66	18.59
4Tx-slots	23.0	21.54	21.75	21.77	-3.01dB	18.53	18.74	18.76

Notes:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850 and GSM1900.

10.2. WCDMA Measurement result

Table 10.2: The conducted power measurement results WCDMA

Top Antenna - Reduced power level 1/2					
Item	band	WCDMA Band 2 result			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	17.9	17.4	17.6	17.7
HSUPA	1	17.1	16.2	16.4	16.6
	2	16.6	15.7	15.9	16.1
	3	17.1	16.2	16.5	16.5
	4	17.1	16.2	16.4	16.6
	5	17.1	16.2	16.5	16.6
HSDPA	1	17.1	16.3	16.5	16.6
	2	17.1	16.3	16.5	16.6
	3	16.6	15.8	16.0	16.0
	4	16.6	15.8	16.0	16.1
DC-HSDPA	1	17.1	16.5	16.5	16.5
	2	17.1	16.3	16.4	16.5
	3	16.6	15.8	15.9	16.0
	4	16.6	15.8	16.0	16.0
Top Antenna - Reduced power level 3/5					
Item	band	WCDMA Band 2 result			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	18.9	18.3	18.3	18.4
HSUPA	1	18.1	17.0	17.3	17.3
	2	16.1	15.0	15.2	15.3
	3	17.1	16.0	16.2	16.3
	4	16.1	14.9	15.2	15.3
	5	18.1	17.0	17.2	17.4
HSDPA	1	18.1	17.0	17.2	17.2
	2	18.1	17.0	17.3	17.3
	3	17.6	16.6	16.8	16.8
	4	17.6	16.6	16.7	16.8
DC-HSDPA	1	18.1	17.0	17.1	17.2
	2	18.1	17.1	17.3	17.3
	3	17.6	16.6	16.7	16.8
	4	17.6	16.7	16.7	16.7

Bottom Antenna - Full Power					
Item	band	WCDMA Band 2 result			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	24.0	23.6	23.9	23.6
HSUPA	1	23.7	22.5	22.8	22.6
	2	21.7	20.5	20.8	20.6
	3	22.7	21.6	21.8	21.7
	4	21.7	20.5	20.8	20.7
	5	23.7	22.6	22.8	22.6
HSDPA	1	23.7	22.7	22.9	22.7
	2	23.7	22.6	22.8	22.7
	3	23.2	22.2	22.4	22.2
	4	23.2	22.2	22.4	22.2
DC-HSDPA	1	23.7	22.7	22.7	22.7
	2	23.7	22.6	22.8	22.6
	3	23.2	22.2	22.2	22.2
	4	23.2	22.2	22.4	22.3
Bottom Antenna - Reduced power level 4/6					
Item	band	WCDMA Band 2 result			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	22.9	22.5	22.7	22.6
HSUPA	1	22.6	21.2	21.5	21.4
	2	20.6	19.3	19.4	19.4
	3	21.6	20.2	20.4	20.4
	4	20.6	19.2	19.5	19.4
	5	22.6	21.3	21.6	21.4
HSDPA	1	22.6	21.4	21.6	21.5
	2	22.6	21.3	21.6	21.4
	3	22.1	20.8	21.1	20.9
	4	22.1	20.8	21.1	20.9
DC-HSDPA	1	22.6	21.5	21.5	21.5
	2	22.6	21.5	21.6	21.4
	3	22.1	20.8	21.0	20.9
	4	22.1	20.9	21.1	20.9

Top Antenna - Reduced power level 1/2					
Item	band	WCDMA Band 4 result			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	16.6	16.2	16.3	16.3
HSUPA	1	15.8	15.5	15.6	15.2
	2	15.3	14.9	15.0	14.7
	3	15.8	15.5	15.7	15.3
	4	15.8	15.5	15.5	15.2
	5	15.8	15.5	15.6	15.3
HSDPA	1	15.8	15.4	15.6	15.2
	2	15.8	15.5	15.6	15.3
	3	15.3	14.9	15.1	14.8
	4	15.3	14.9	15.0	14.7
DC-HSDPA	1	15.8	15.4	15.6	15.5
	2	15.8	15.5	15.5	15.4
	3	15.3	14.9	15.0	14.8
	4	15.3	14.8	14.9	14.7
Top Antenna - Reduced power level 3/5					
Item	band	WCDMA Band 4 result			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	20.4	20.1	20.1	20.2
HSUPA	1	17.6	16.8	17.0	16.8
	2	15.6	14.9	15.0	14.7
	3	16.6	15.9	16.0	15.8
	4	15.6	14.9	15.0	14.8
	5	17.6	17.0	17.0	16.7
HSDPA	1	17.6	16.9	17.0	16.8
	2	17.6	16.9	17.0	16.8
	3	17.1	16.4	16.6	16.2
	4	17.1	16.4	16.6	16.2
DC-HSDPA	1	17.6	16.8	16.8	16.8
	2	17.6	17.7	17.0	16.8
	3	17.1	16.3	16.5	16.2
	4	17.1	16.5	16.6	16.3

Bottom Antenna - Full Power					
Item	band	WCDMA Band 4 result			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	24.0	23.9	23.9	23.9
HSUPA	1	23.7	22.7	22.9	22.9
	2	21.7	20.8	20.9	20.9
	3	22.7	21.7	21.9	21.9
	4	21.7	20.8	21.0	20.7
	5	23.7	22.8	22.9	22.9
HSDPA	1	23.7	22.9	23.0	23.0
	2	23.7	22.8	22.9	22.9
	3	23.2	22.3	22.4	22.4
	4	23.2	22.3	22.5	22.4
DC-HSDPA	1	23.7	23.0	23.0	23.0
	2	23.7	22.8	22.9	23.0
	3	23.2	22.4	22.4	22.4
	4	23.2	22.3	22.5	22.3
Bottom Antenna - Reduced power level 4/6					
Item	band	WCDMA Band 4 result			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	22.3	22.2	22.2	22.1
HSUPA	1	22.0	21.0	21.0	21.0
	2	20.0	19.0	19.0	18.9
	3	21.0	20.0	20.0	20.0
	4	20.0	19.0	19.0	19.6
	5	22.0	21.0	21.0	21.0
HSDPA	1	22.0	21.1	21.2	21.0
	2	22.0	21.1	21.1	21.0
	3	21.5	20.6	20.6	20.5
	4	21.5	20.6	20.6	20.5
DC-HSDPA	1	22.0	21.1	21.1	21.1
	2	22.0	21.0	21.1	21.0
	3	21.5	20.6	20.6	20.6
	4	21.5	20.4	20.5	20.5

Top Antenna - Full Power					
Item	band	WCDMA Band 5 result			
	ARFCN	Tune up	Ch.4233 (846.6MHz)	Ch.4183 (836.6MHz)	Ch.4132 (826.4MHz)
WCDMA	\	24.5	23.2	23.3	23.3
HSUPA	1	23.7	22.3	22.4	22.5
	2	21.7	20.3	20.4	20.5
	3	22.7	21.2	21.4	21.5
	4	21.7	20.3	20.4	20.5
	5	23.7	22.3	22.4	22.5
HSDPA	1	23.7	22.3	22.4	22.5
	2	23.7	22.3	22.3	22.4
	3	23.2	21.8	21.8	21.9
	4	23.2	21.8	21.8	21.9
DC-HSDPA	1	23.7	22.4	22.4	22.4
	2	23.7	22.2	22.3	22.4
	3	23.2	21.8	21.8	21.8
	4	23.2	21.6	21.8	21.9
Top Antenna - Reduced power level 1/2					
Item	band	WCDMA Band 5 result			
	ARFCN	Tune up	Ch.4233 (846.6MHz)	Ch.4183 (836.6MHz)	Ch.4132 (826.4MHz)
WCDMA	\	23.0	22.0	22.1	22.1
HSUPA	1	22.2	20.8	21.0	21.1
	2	20.2	18.7	18.8	18.9
	3	21.2	19.8	19.8	19.9
	4	20.2	18.8	18.9	18.9
	5	22.2	20.9	21.0	21.2
HSDPA	1	22.2	21.0	21.0	21.0
	2	22.2	21.0	21.1	21.1
	3	21.7	20.3	20.5	20.6
	4	21.7	20.3	20.5	20.6
DC-HSDPA	1	22.2	20.9	21.0	21.0
	2	22.2	20.9	20.9	21.1
	3	21.7	20.3	20.4	20.5
	4	21.7	20.4	20.5	20.6



Bottom Antenna - Full Power					
Item	band	WCDMA Band 5 result			
	ARFCN	Tune up	Ch.4233 (846.6MHz)	Ch.4183 (836.6MHz)	Ch.4132 (826.4MHz)
WCDMA	1	24.5	23.3	23.4	23.4
HSUPA	1	23.7	22.4	22.5	22.5
	2	21.7	20.3	20.6	20.6
	3	22.7	21.4	21.6	21.6
	4	21.7	20.4	20.5	20.6
	5	23.7	22.3	22.5	22.6
HSDPA	1	23.7	22.4	22.5	22.6
	2	23.7	22.4	22.5	22.5
	3	23.2	22.0	22.0	22.1
	4	23.2	22.0	22.0	22.1
DC-HSDPA	1	23.7	22.4	22.5	22.6
	2	23.7	22.5	22.5	22.5
	3	23.2	22.0	22.0	22.0
	4	23.2	21.9	22.0	22.1

10.3. LTE Measurement result

According to April 2015 TCB workshop, SAR Test exclusion can be applied for testing overlapping LTE Bands as follows:

- a) The maximum out power, including tolerance, for the smaller band must be \leq the larger band to qualify for SAR test exclusion.
- b) The channel bandwidth and other operating parameters for the smaller band must be fully supported by the larger band.

LTE Band 17 (704-716 MHz) is covered by LTE Band 12 (699-716 MHz)

Table 10.3: The conducted Power for LTE

LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	16.90	16.90	16.90	18.0	18.0	18.0
		1880.0	16.90	16.90	17.30			
		1850.7	16.70	17.10	17.30			
	1RB_3	1909.3	17.00	16.90	17.00			
		1880.0	17.00	17.00	17.30			
		1850.7	16.80	17.20	17.40			
	1RB_0	1909.3	17.00	16.80	16.90			
		1880.0	16.90	16.90	17.20			
		1850.7	16.70	16.80	17.20			
	3RB_3	1909.3	17.00	17.20	16.80			
		1880.0	17.10	16.70	16.90			
		1850.7	17.00	17.30	17.00			
	3RB_1	1909.3	17.10	17.00	17.00			
		1880.0	17.10	16.90	17.00			
		1850.7	17.00	17.40	17.00			
	3RB_0	1909.3	17.00	17.00	16.90			
		1880.0	17.00	16.70	16.90			
		1850.7	16.90	17.30	16.90			
	6RB_0	1909.3	16.90	16.90	17.00	18.0	18.0	18.0
		1880.0	16.90	16.90	16.90			
		1850.7	17.00	17.10	16.90			



Top Antenna - Reduced power level 1/2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	16.80	16.41	16.90	18.0	18.0	18.0
		1880.0	16.77	16.84	16.95			
		1851.5	16.99	16.92	17.26			
	1RB_7	1908.5	16.76	16.68	17.23			
		1880.0	16.92	16.82	17.02			
		1851.5	17.14	16.79	17.15			
	1RB_0	1908.5	16.85	16.49	17.01			
		1880.0	16.86	16.61	16.89			
		1851.5	17.05	16.67	16.96			
	8RB_7	1908.5	17.00	16.94	16.79			
		1880.0	16.89	17.06	16.97			
		1851.5	16.96	17.09	16.99			
	8RB_4	1908.5	16.96	16.89	16.80			
		1880.0	16.94	17.00	16.98			
		1851.5	16.97	17.08	16.99			
	8RB_0	1908.5	16.93	16.97	16.79			
		1880.0	16.95	17.12	16.99			
		1851.5	16.95	16.96	16.84			
	15RB_0	1908.5	16.92	16.99	17.01			
		1880.0	16.98	16.91	17.21			
		1851.5	17.02	17.02	17.12			



Top Antenna - Reduced power level 1/2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	16.45	16.74	16.75	18.0	18.0	18.0
		1880.0	16.87	16.78	16.70			
		1852.5	16.81	16.73	16.75			
	1RB_12	1907.5	16.60	16.55	17.34			
		1880.0	16.86	16.86	16.76			
		1852.5	17.13	16.84	17.32			
	1RB_0	1907.5	16.56	16.00	16.79			
		1880.0	16.74	16.73	16.84			
		1852.5	16.64	16.76	16.89			
	12RB_13	1907.5	16.88	16.95	16.81			
		1880.0	17.00	17.14	16.98			
		1852.5	17.00	17.07	17.09			
	12RB_6	1907.5	16.92	16.84	16.85			
		1880.0	17.02	17.15	16.98			
		1852.5	16.97	16.86	17.13			
	12RB_0	1907.5	16.95	16.78	16.87			
		1880.0	17.01	17.15	16.99			
		1852.5	17.12	16.95	16.93			
	25RB_0	1907.5	16.97	16.92	16.98			
		1880.0	16.98	17.00	16.92			
		1852.5	16.91	17.09	17.11			



Top Antenna - Reduced power level 1/2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	16.99	16.77	16.99	18.0	18.0	18.0
		1880.0	16.90	16.84	17.40			
		1855.0	17.14	16.88	17.38			
	1RB_24	1905.0	17.15	16.84	17.75			
		1880.0	17.08	16.83	17.81			
		1855.0	17.03	16.66	17.66			
	1RB_0	1905.0	17.00	16.89	16.98			
		1880.0	17.08	16.91	16.97			
		1855.0	16.98	16.96	17.04			
	25RB_25	1905.0	16.98	16.93	16.81			
		1880.0	16.98	17.19	17.16			
		1855.0	16.98	16.90	17.15			
	25RB_12	1905.0	16.98	16.88	17.13			
		1880.0	16.98	17.19	17.15			
		1855.0	17.01	17.02	17.17			
	25RB_0	1905.0	16.99	17.06	17.13			
		1880.0	17.01	17.18	16.86			
		1855.0	16.95	17.03	17.15			
	50RB_0	1905.0	17.02	17.00	16.98			
		1880.0	16.93	16.97	16.90			
		1855.0	16.96	17.05	16.93			



Top Antenna - Reduced power level 1/2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	16.85	16.88	16.72	18.0	18.0	18.0
		1880.0	17.00	16.90	16.88			
		1857.5	16.94	16.88	17.28			
	1RB_37	1902.5	16.78	16.88	17.13			
		1880.0	17.09	16.76	17.17			
		1857.5	16.99	16.92	17.19			
	1RB_0	1902.5	16.97	16.95	16.88			
		1880.0	16.80	16.92	16.97			
		1857.5	17.07	16.98	17.19			
	36RB_38	1902.5	16.98	16.84	16.83			
		1880.0	16.98	16.90	17.10			
		1857.5	16.97	17.01	17.01			
	36RB_19	1902.5	16.96	16.95	17.04			
		1880.0	16.94	16.99	17.09			
		1857.5	16.98	17.01	17.02			
	36RB_0	1902.5	16.94	17.01	17.02			
		1880.0	16.99	16.97	16.87			
		1857.5	16.92	17.01	16.89			
	75RB_0	1902.5	17.00	17.07	16.86			
		1880.0	16.93	16.95	16.89			
		1857.5	16.98	17.00	16.99			



Top Antenna - Reduced power level 1/2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	16.85	16.70	16.68	18.0	18.0	18.0
		1880.0	16.99	16.77	17.29			
		1860.0	16.95	16.65	17.30			
	1RB_50	1900.0	17.06	16.97	17.54			
		1880.0	17.09	16.99	17.45			
		1860.0	17.10	16.90	17.44			
	1RB_0	1900.0	17.05	16.83	17.16			
		1880.0	16.97	16.79	17.03			
		1860.0	16.80	16.81	17.11			
	50RB_50	1900.0	16.91	16.92	16.96			
		1880.0	16.96	17.11	16.97			
		1860.0	16.98	16.98	16.99			
	50RB_25	1900.0	17.02	17.01	16.98			
		1880.0	17.03	17.04	17.03			
		1860.0	17.05	17.07	17.00			
	50RB_0	1900.0	17.01	17.13	16.95			
		1880.0	17.01	16.91	17.01			
		1860.0	17.01	16.91	17.01			
	100RB_0	1900.0	16.98	17.05	17.04			
		1880.0	16.97	17.04	16.92			
		1860.0	17.02	17.08	17.00			

Top Antenna - Reduced power level 3/5							
LTE Band 2			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
1.4 MHz	1RB_5	1909.3	17.72	17.51	18.16	19.4	19.4
		1880.0	17.76	17.69	18.04		
		1850.7	17.72	17.58	18.19		
	1RB_3	1909.3	17.78	17.88	18.22		
		1880.0	17.83	17.78	18.29		
		1850.7	17.75	17.87	18.04		
	1RB_0	1909.3	17.68	17.53	18.15		
		1880.0	17.75	17.72	18.10		
		1850.7	17.69	17.58	17.88		
	3RB_3	1909.3	17.79	17.63	17.86		
		1880.0	17.80	17.66	17.90		
		1850.7	17.92	17.75	17.81		
	3RB_1	1909.3	17.82	17.89	17.82		
		1880.0	17.87	17.85	17.92		
		1850.7	17.91	17.99	18.02		
	3RB_0	1909.3	17.66	17.64	17.77		
		1880.0	17.68	17.64	17.88		
		1850.7	17.84	17.91	17.89		
	6RB_0	1909.3	17.78	17.90	17.69	19.4	19.4
		1880.0	17.80	17.48	17.72		
		1850.7	17.98	18.01	17.79		



Top Antenna - Reduced power level 3/5								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	17.68	17.99	17.84	19.4	19.4	19.4
		1880.0	17.78	17.71	17.80			
		1851.5	17.75	17.85	18.26			
	1RB_7	1908.5	18.01	17.64	18.07			
		1880.0	17.85	17.72	17.50			
		1851.5	17.83	17.82	18.16			
	1RB_0	1908.5	17.79	17.52	17.87			
		1880.0	17.68	17.51	17.82			
		1851.5	17.83	17.65	17.80			
	8RB_7	1908.5	17.77	17.83	17.74			
		1880.0	17.90	18.06	17.68			
		1851.5	17.92	17.96	17.80			
	8RB_4	1908.5	17.80	17.76	17.80			
		1880.0	17.84	18.05	17.62			
		1851.5	17.84	18.05	17.87			
	8RB_0	1908.5	17.79	17.85	17.85			
		1880.0	17.85	18.07	17.63			
		1851.5	17.87	17.91	17.78			
	15RB_0	1908.5	17.87	17.66	17.76			
		1880.0	17.88	18.02	17.87			
		1851.5	17.86	17.93	17.84			



Top Antenna - Reduced power level 3/5								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	17.78	17.53	17.62	19.4	19.4	19.4
		1880.0	17.75	17.60	17.74			
		1852.5	17.83	17.56	18.27			
	1RB_12	1907.5	17.86	17.70	18.13			
		1880.0	17.50	17.65	17.83			
		1852.5	17.83	17.68	18.21			
	1RB_0	1907.5	17.62	17.66	17.69			
		1880.0	17.61	17.43	17.54			
		1852.5	17.73	17.53	17.70			
	12RB_13	1907.5	17.75	17.73	17.89			
		1880.0	17.81	17.71	17.92			
		1852.5	17.79	17.87	18.20			
	12RB_6	1907.5	17.82	17.87	17.92			
		1880.0	17.83	17.82	17.94			
		1852.5	17.82	17.71	18.24			
	12RB_0	1907.5	17.77	17.69	17.94			
		1880.0	17.84	17.76	17.96			
		1852.5	17.83	17.82	18.03			
	25RB_0	1907.5	17.82	17.94	17.67			
		1880.0	17.78	17.81	17.71			
		1852.5	17.87	17.73	17.77			



Top Antenna - Reduced power level 3/5								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	17.80	17.68	17.82	19.4	19.4	19.4
		1880.0	18.00	17.71	18.29			
		1855.0	17.97	17.72	18.21			
	1RB_24	1905.0	17.93	17.73	18.12			
		1880.0	18.03	17.69	17.91			
		1855.0	17.96	17.73	18.01			
	1RB_0	1905.0	17.67	17.79	17.88			
		1880.0	17.69	17.75	17.87			
		1855.0	17.67	17.78	17.98			
	25RB_25	1905.0	17.76	17.94	17.58			
		1880.0	17.83	17.86	17.97			
		1855.0	17.79	18.01	18.03			
	25RB_12	1905.0	17.88	17.96	18.01			
		1880.0	17.90	17.94	18.01			
		1855.0	17.91	18.04	18.04			
	25RB_0	1905.0	17.91	17.83	17.66			
		1880.0	17.88	17.84	17.72			
		1855.0	17.90	17.77	17.76			
	50RB_0	1905.0	17.80	17.80	17.76			
		1880.0	17.87	17.83	17.72			
		1855.0	17.86	17.81	17.78			



Top Antenna - Reduced power level 3/5								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	17.86	17.51	17.95	19.4	19.4	19.4
		1880.0	17.98	17.56	18.05			
		1857.5	17.87	17.67	18.27			
	1RB_37	1902.5	17.67	17.62	17.62			
		1880.0	17.76	17.53	18.06			
		1857.5	17.73	17.64	18.05			
	1RB_0	1902.5	17.62	17.67	17.74			
		1880.0	17.76	17.70	17.80			
		1857.5	17.75	17.84	17.98			
	36RB_38	1902.5	17.81	17.77	17.85			
		1880.0	17.91	17.86	17.87			
		1857.5	17.80	17.85	17.91			
	36RB_19	1902.5	17.81	17.86	17.94			
		1880.0	17.87	17.81	17.67			
		1857.5	17.82	17.84	17.98			
	36RB_0	1902.5	17.90	17.81	17.90			
		1880.0	17.90	17.82	17.76			
		1857.5	17.90	17.84	17.66			
	75RB_0	1902.5	17.82	17.90	17.84			
		1880.0	17.86	17.90	17.77			
		1857.5	17.83	17.87	17.76			



Top Antenna - Reduced power level 3/5								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	17.55	17.56	17.84	19.4	19.4	19.4
		1880.0	17.69	17.67	17.80			
		1860.0	17.81	17.51	18.01			
	1RB_50	1900.0	17.88	17.57	18.34			
		1880.0	17.96	17.89	18.05			
		1860.0	17.97	17.67	17.98			
	1RB_0	1900.0	17.72	17.65	17.88			
		1880.0	17.95	17.59	17.89			
		1860.0	17.73	17.57	17.91			
	50RB_50	1900.0	17.82	17.70	17.78			
		1880.0	17.80	17.87	17.88			
		1860.0	17.78	17.85	17.90			
	50RB_25	1900.0	17.82	17.90	17.93			
		1880.0	17.84	17.90	17.75			
		1860.0	17.87	17.90	17.91			
	50RB_0	1900.0	17.92	17.93	17.90			
		1880.0	17.92	17.78	17.93			
		1860.0	17.94	17.87	17.81			
	100RB_0	1900.0	17.87	17.88	17.86			
		1880.0	17.86	17.81	17.79			
		1860.0	17.90	17.95	17.94			



Bottom Antenna - Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	22.42	21.13	20.84	24.0	23.0	22.0
		1880.0	22.33	21.51	20.52			
		1850.7	22.41	21.32	20.89			
	1RB_3	1909.3	22.46	21.44	20.96			
		1880.0	22.41	21.69	20.54			
		1850.7	22.54	21.38	21.05			
	1RB_0	1909.3	22.38	21.25	20.84			
		1880.0	22.31	21.60	20.67			
		1850.7	22.49	21.31	20.87			
	3RB_3	1909.3	22.39	21.34	20.14			
		1880.0	22.39	21.39	20.63			
		1850.7	22.62	21.22	20.58			
	3RB_1	1909.3	22.39	21.43	20.14			
		1880.0	22.50	21.48	20.64			
		1850.7	22.69	21.34	20.61			
	3RB_0	1909.3	22.27	21.43	20.18			
		1880.0	22.27	21.39	20.69			
		1850.7	22.52	21.16	20.53			
	6RB_0	1909.3	21.38	20.39	19.62	23.0	22.0	21.0
		1880.0	21.44	20.32	19.45			
		1850.7	21.37	20.52	19.55			



Bottom Antenna - Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	22.24	21.21	20.83	24.0	23.0	22.0
		1880.0	22.45	21.57	20.44			
		1851.5	22.32	21.20	20.46			
	1RB_7	1908.5	22.40	21.17	20.42			
		1880.0	22.63	21.12	20.80			
		1851.5	22.36	21.23	20.59			
	1RB_0	1908.5	22.30	21.21	20.67			
		1880.0	22.47	21.18	20.49			
		1851.5	22.36	21.33	20.54			
	8RB_7	1908.5	21.39	20.59	19.33			
		1880.0	21.36	20.51	19.56			
		1851.5	21.44	20.51	19.51			
	8RB_4	1908.5	21.37	20.56	19.34			
		1880.0	21.42	20.48	19.62			
		1851.5	21.35	20.50	19.60			
	8RB_0	1908.5	21.41	20.51	19.40			
		1880.0	21.43	20.39	19.63			
		1851.5	21.40	20.44	19.51			
	15RB_0	1908.5	21.40	20.44	19.63			
		1880.0	21.35	20.45	19.65			
		1851.5	21.38	20.52	19.47			



Bottom Antenna - Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	22.38	21.16	20.40	24.0	23.0	22.0
		1880.0	22.31	21.24	20.44			
		1852.5	22.32	21.09	20.87			
	1RB_12	1907.5	22.41	21.16	20.49			
		1880.0	22.29	21.21	20.95			
		1852.5	22.65	21.25	20.87			
	1RB_0	1907.5	22.22	21.15	20.42			
		1880.0	22.23	21.19	20.49			
		1852.5	22.23	21.23	20.49			
	12RB_13	1907.5	21.40	20.19	19.66	23.0	22.0	21.0
		1880.0	21.35	20.46	19.44			
		1852.5	21.31	20.43	19.62			
	12RB_6	1907.5	21.43	20.26	19.67			
		1880.0	21.40	20.41	19.49			
		1852.5	21.35	20.49	19.45			
	12RB_0	1907.5	21.38	20.22	19.72			
		1880.0	21.42	20.42	19.40			
		1852.5	21.36	20.40	19.68			
	25RB_0	1907.5	21.39	20.39	19.48			
		1880.0	21.35	20.33	19.48			
		1852.5	21.41	20.32	19.60			



Bottom Antenna - Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	22.38	21.37	20.58	24.0	23.0	22.0
		1880.0	22.59	21.80	20.53			
		1855.0	22.46	21.23	20.86			
	1RB_24	1905.0	22.56	21.33	20.62			
		1880.0	22.52	21.28	20.61			
		1855.0	22.51	21.26	20.65			
	1RB_0	1905.0	22.53	21.42	20.63			
		1880.0	22.53	21.27	20.48			
		1855.0	22.26	21.32	20.43			
	25RB_25	1905.0	21.33	20.43	19.60			
		1880.0	21.35	20.57	19.74			
		1855.0	21.30	20.32	19.66			
	25RB_12	1905.0	21.40	20.41	19.77			
		1880.0	21.38	20.40	19.77			
		1855.0	21.39	20.42	19.75			
	25RB_0	1905.0	21.45	20.46	19.71			
		1880.0	21.34	20.40	19.71			
		1855.0	21.37	20.49	19.38			
	50RB_0	1905.0	21.35	20.46	19.49			
		1880.0	21.35	20.36	19.63			
		1855.0	21.34	20.48	19.61			



Bottom Antenna - Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	22.36	21.17	20.57	24.0	23.0	22.0
		1880.0	22.41	21.12	20.72			
		1857.5	22.34	21.16	20.92			
	1RB_37	1902.5	22.38	21.15	20.92			
		1880.0	22.53	21.05	20.46			
		1857.5	22.34	21.15	20.89			
	1RB_0	1902.5	22.48	21.25	20.57			
		1880.0	22.43	21.22	21.03			
		1857.5	22.51	21.16	20.77			
	36RB_38	1902.5	21.40	20.41	19.67	23.0	22.0	21.0
		1880.0	21.33	20.35	19.59			
		1857.5	21.29	20.44	19.65			
	36RB_19	1902.5	21.35	20.46	19.63			
		1880.0	21.37	20.37	19.71			
		1857.5	21.36	20.40	19.60			
	36RB_0	1902.5	21.31	20.42	19.69			
		1880.0	21.33	20.40	19.57			
		1857.5	21.39	20.41	19.65			
	75RB_0	1902.5	21.36	20.36	19.49			
		1880.0	21.34	20.54	19.47			
		1857.5	21.36	20.37	19.47			



Bottom Antenna - Full Power								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	22.32	21.20	20.52	24.0	23.0	22.0
		1880.0	22.29	21.09	20.51			
		1860.0	22.39	21.08	20.52			
	1RB_50	1900.0	22.49	21.45	20.92			
		1880.0	22.44	21.12	20.53			
		1860.0	22.50	21.09	21.04			
	1RB_0	1900.0	22.09	21.25	20.61			
		1880.0	22.20	21.24	20.54			
		1860.0	22.28	21.00	20.70			
	50RB_50	1900.0	21.42	20.31	19.45			
		1880.0	21.40	20.55	19.52			
		1860.0	21.45	20.38	19.46			
	50RB_25	1900.0	21.40	20.51	19.58			
		1880.0	21.34	20.44	19.68			
		1860.0	21.29	20.23	19.62			
	50RB_0	1900.0	21.34	20.54	19.50			
		1880.0	21.39	20.40	19.51			
		1860.0	21.32	20.45	19.52			
	100RB_0	1900.0	21.32	20.45	19.47			
		1880.0	21.37	20.48	19.48			
		1860.0	21.30	20.41	19.62			

Bottom Antenna - Reduced power level 4/6								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	21.58	21.28	20.27	22.8	22.8	22.0
		1880.0	21.69	21.32	20.60			
		1850.7	21.74	21.40	20.45			
	1RB_3	1909.3	21.73	21.38	20.51			
		1880.0	21.77	21.40	20.47			
		1850.7	21.85	21.54	20.64			
	1RB_0	1909.3	21.64	21.30	20.74			
		1880.0	21.58	21.29	20.61			
		1850.7	21.81	21.45	20.87			
	3RB_3	1909.3	21.77	21.65	20.40			
		1880.0	21.64	21.66	20.42			
		1850.7	21.73	21.21	20.61			
	3RB_1	1909.3	21.92	21.48	20.46			
		1880.0	21.67	21.70	20.56			
		1850.7	21.93	21.52	20.62			
	3RB_0	1909.3	21.78	21.76	20.41			
		1880.0	21.61	21.66	20.51			
		1850.7	21.73	21.56	20.55			
	6RB_0	1909.3	21.48	20.55	19.52	22.8	22.0	21.0
		1880.0	21.44	20.40	19.42			
		1850.7	20.50	20.46	19.37			

Bottom Antenna - Reduced power level 4/6								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	21.57	21.31	20.45	22.8	22.8	22.0
		1880.0	21.59	21.57	20.43			
		1851.5	21.66	21.23	20.79			
	1RB_7	1908.5	21.57	21.23	20.62			
		1880.0	21.78	21.26	20.52			
		1851.5	21.74	21.31	20.86			
	1RB_0	1908.5	21.59	21.30	20.48			
		1880.0	21.61	21.09	20.44			
		1851.5	21.65	20.85	20.45			
	8RB_7	1908.5	21.47	20.53	19.48			
		1880.0	21.42	20.67	19.33			
		1851.5	21.46	20.67	19.27			
	8RB_4	1908.5	21.43	20.70	19.46			
		1880.0	21.39	20.60	19.30			
		1851.5	21.42	20.61	19.39			
	8RB_0	1908.5	21.48	20.53	19.55			
		1880.0	21.39	20.65	19.33			
		1851.5	21.46	20.65	19.35			
	15RB_0	1908.5	21.47	20.49	19.49			
		1880.0	21.41	20.56	19.60			
		1851.5	21.54	20.50	19.51			

Bottom Antenna - Reduced power level 4/6								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	21.54	21.50	20.82	22.8	22.8	22.0
		1880.0	21.53	21.24	20.38			
		1852.5	21.49	21.21	20.79			
	1RB_12	1907.5	21.77	21.37	20.85			
		1880.0	21.74	20.82	20.54			
		1852.5	21.83	21.35	20.86			
	1RB_0	1907.5	21.45	21.26	20.86			
		1880.0	21.47	20.37	20.34			
		1852.5	21.32	21.33	20.40			
	12RB_13	1907.5	21.36	20.23	19.40	22.8	22.0	21.0
		1880.0	21.42	20.25	19.24			
		1852.5	21.38	20.49	19.54			
	12RB_6	1907.5	21.47	20.59	19.66			
		1880.0	21.46	20.49	19.43			
		1852.5	21.42	20.53	19.63			
	12RB_0	1907.5	21.42	20.43	19.63			
		1880.0	21.48	20.41	19.24			
		1852.5	21.33	20.42	19.35			
	25RB_0	1907.5	21.45	20.55	19.24			
		1880.0	21.42	20.53	19.41			
		1852.5	21.48	20.50	19.37			



Bottom Antenna - Reduced power level 4/6								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	21.66	21.42	20.50	22.8	22.8	22.0
		1880.0	21.77	21.69	20.37			
		1855.0	21.75	21.35	20.80			
	1RB_24	1905.0	21.83	21.45	20.51			
		1880.0	21.84	21.32	20.38			
		1855.0	21.77	21.23	20.49			
	1RB_0	1905.0	21.82	21.42	20.56			
		1880.0	21.58	21.34	20.38			
		1855.0	21.77	21.34	21.01			
	25RB_25	1905.0	21.40	20.47	19.40			
		1880.0	21.41	20.69	19.50			
		1855.0	21.36	20.47	19.59			
	25RB_12	1905.0	21.45	20.53	19.68			
		1880.0	21.43	20.68	19.53			
		1855.0	21.45	20.47	19.66			
	25RB_0	1905.0	21.48	20.51	19.71			
		1880.0	21.50	20.60	19.38			
		1855.0	21.43	20.51	19.41			
	50RB_0	1905.0	21.48	20.49	19.52			
		1880.0	21.40	20.53	19.51			
		1855.0	21.40	20.42	19.53			



Bottom Antenna - Reduced power level 4/6								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	21.77	21.23	20.52	22.8	22.8	22.0
		1880.0	21.64	21.18	20.97			
		1857.5	21.60	21.24	20.79			
	1RB_37	1902.5	21.72	21.29	20.95			
		1880.0	21.69	21.23	20.87			
		1857.5	21.55	21.23	20.86			
	1RB_0	1902.5	21.77	21.26	20.77			
		1880.0	21.51	21.31	20.55			
		1857.5	21.72	21.37	20.72			
	36RB_38	1902.5	21.44	20.44	19.57	22.8	22.0	21.0
		1880.0	21.49	20.47	19.58			
		1857.5	21.44	20.46	19.56			
	36RB_19	1902.5	21.48	20.47	19.64			
		1880.0	21.42	20.51	19.53			
		1857.5	21.41	20.42	19.54			
	36RB_0	1902.5	21.45	20.43	19.50			
		1880.0	21.47	20.45	19.38			
		1857.5	21.44	20.45	19.56			
	75RB_0	1902.5	21.50	20.60	19.50			
		1880.0	21.49	20.48	19.46			
		1857.5	21.41	20.53	19.53			



Bottom Antenna - Reduced power level 4/6								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	21.64	21.21	20.39	22.8	22.8	22.0
		1880.0	21.57	21.35	20.40			
		1860.0	21.56	21.26	20.46			
	1RB_50	1900.0	21.81	21.53	20.60			
		1880.0	21.78	21.62	20.74			
		1860.0	21.77	21.48	20.61			
	1RB_0	1900.0	21.80	21.38	20.46			
		1880.0	21.77	21.38	21.07			
		1860.0	21.67	21.45	20.57			
	50RB_50	1900.0	21.45	20.36	19.47			
		1880.0	21.43	20.50	19.63			
		1860.0	21.39	20.51	19.52			
	50RB_25	1900.0	21.46	20.58	19.48			
		1880.0	21.41	20.61	19.57			
		1860.0	21.45	20.48	19.57			
	50RB_0	1900.0	21.52	20.62	19.51			
		1880.0	21.46	20.45	19.46			
		1860.0	21.50	20.52	19.41			
	100RB_0	1900.0	21.49	20.48	19.59			
		1880.0	21.45	20.44	19.51			
		1860.0	21.45	20.57	19.52			

Top Antenna - Reduced power level 1/2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	15.23	15.42	15.99	16.7	16.7	16.7
		1732.5	15.53	15.79	15.90			
		1710.7	15.45	15.34	15.73			
	1RB_3	1754.3	15.39	15.51	15.67			
		1732.5	15.50	15.96	15.96			
		1710.7	15.61	15.67	15.66			
	1RB_0	1754.3	15.31	15.32	15.86			
		1732.5	15.43	15.35	15.79			
		1710.7	15.50	15.54	15.74			
	3RB_3	1754.3	15.53	15.61	15.44			
		1732.5	15.47	15.43	15.22			
		1710.7	15.74	16.00	15.65			
	3RB_1	1754.3	15.58	15.56	15.59			
		1732.5	15.52	15.58	15.18			
		1710.7	15.70	15.94	15.69			
	3RB_0	1754.3	15.52	15.61	15.53			
		1732.5	15.46	15.44	15.24			
		1710.7	15.75	15.88	15.18			
	6RB_0	1754.3	15.53	15.36	15.51			
		1732.5	15.62	15.66	15.52			
		1710.7	15.78	15.63	15.64			

Top Antenna - Reduced power level 1/2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	15.40	15.65	15.50	16.7	16.7	16.7
		1732.5	15.42	15.53	15.57			
		1711.5	15.71	15.57	15.72			
	1RB_7	1753.5	15.46	15.73	15.61			
		1732.5	15.42	15.45	15.67			
		1711.5	15.88	15.53	15.82			
	1RB_0	1753.5	15.49	15.66	15.52			
		1732.5	15.40	15.34	15.55			
		1711.5	15.75	15.56	15.76			
	8RB_7	1753.5	15.60	15.51	15.55			
		1732.5	15.54	15.63	15.62			
		1711.5	15.83	15.67	15.55			
	8RB_4	1753.5	15.53	15.56	15.49			
		1732.5	15.61	15.60	15.53			
		1711.5	15.87	15.62	15.53			
	8RB_0	1753.5	15.53	15.38	15.59			
		1732.5	15.54	15.62	15.63			
		1711.5	15.86	15.63	15.58			
	15RB_0	1753.5	15.56	15.62	15.43			
		1732.5	15.65	15.57	15.56			
		1711.5	15.80	15.40	15.80			

Top Antenna - Reduced power level 1/2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	15.63	15.84	15.59	16.7	16.7	16.7
		1732.5	15.61	15.46	15.44			
		1712.5	15.53	15.53	15.63			
	1RB_12	1752.5	15.82	15.48	15.79			
		1732.5	15.56	15.54	15.97			
		1712.5	15.66	15.48	15.85			
	1RB_0	1752.5	15.67	15.50	15.61			
		1732.5	15.64	14.78	15.52			
		1712.5	15.53	15.58	15.67			
	12RB_13	1752.5	15.64	15.49	15.83	16.7	16.7	16.7
		1732.5	15.56	15.57	15.44			
		1712.5	15.72	15.53	15.45			
	12RB_6	1752.5	15.66	15.52	15.83			
		1732.5	15.59	15.60	15.52			
		1712.5	15.79	15.60	15.47			
	12RB_0	1752.5	15.63	15.49	15.79			
		1732.5	15.56	15.62	15.42			
		1712.5	15.77	15.60	15.47			
	25RB_0	1752.5	15.74	15.49	15.51			
		1732.5	15.57	15.64	15.51			
		1712.5	15.72	15.56	15.79			

Top Antenna - Reduced power level 1/2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	15.65	15.46	15.57	16.7	16.7	16.7
		1732.5	15.39	15.34	15.49			
		1715.0	15.60	15.44	15.79			
	1RB_24	1750.0	15.81	15.51	15.76			
		1732.5	15.67	15.36	15.80			
		1715.0	15.73	15.56	15.95			
	1RB_0	1750.0	15.70	15.52	15.63			
		1732.5	15.44	15.43	15.58			
		1715.0	15.76	15.51	15.84			
	25RB_25	1750.0	15.72	15.64	15.85	16.7	16.7	16.7
		1732.5	15.65	15.68	15.76			
		1715.0	15.73	15.83	15.91			
	25RB_12	1750.0	15.76	15.69	15.63			
		1732.5	15.55	15.54	15.72			
		1715.0	15.73	15.82	15.92			
	25RB_0	1750.0	15.74	15.67	15.61			
		1732.5	15.60	15.59	15.46			
		1715.0	15.78	15.85	15.71			
	50RB_0	1750.0	15.72	15.85	15.66			
		1732.5	15.52	15.53	15.56			
		1715.0	15.73	15.71	15.68			



Top Antenna - Reduced power level 1/2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	15.51	15.59	15.72	16.7	16.7	16.7
		1732.5	15.54	15.35	15.97			
		1717.5	15.47	15.38	15.65			
	1RB_37	1747.5	15.54	15.64	16.13			
		1732.5	15.71	15.27	15.94			
		1717.5	15.56	15.40	16.04			
	1RB_0	1747.5	15.75	15.69	15.87			
		1732.5	15.68	15.21	15.74			
		1717.5	15.55	15.47	15.83			
	36RB_38	1747.5	15.70	15.74	15.77			
		1732.5	15.61	15.62	15.75			
		1717.5	15.68	15.67	15.80			
	36RB_19	1747.5	15.71	15.74	15.61			
		1732.5	15.62	15.61	15.66			
		1717.5	15.76	15.67	15.78			
	36RB_0	1747.5	15.73	15.73	15.85			
		1732.5	15.56	15.63	15.55			
		1717.5	15.73	15.67	15.69			
	75RB_0	1747.5	15.68	15.68	15.99			
		1732.5	15.64	15.62	15.62			
		1717.5	15.71	15.76	15.63			



Top Antenna - Reduced power level 1/2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	15.68	15.51	15.90	16.7	16.7	16.7
		1732.5	15.62	15.36	16.02			
		1720.0	15.41	15.80	16.07			
	1RB_50	1745.0	15.74	15.80	16.06			
		1732.5	15.81	15.67	16.11			
		1720.0	15.69	15.73	16.33			
	1RB_0	1745.0	15.56	15.54	15.81			
		1732.5	15.79	15.53	15.81			
		1720.0	15.68	15.50	15.84			
	50RB_50	1745.0	15.68	15.75	15.84			
		1732.5	15.50	15.56	15.55			
		1720.0	15.72	15.62	15.63			
	50RB_25	1745.0	15.73	15.59	15.67			
		1732.5	15.56	15.64	15.63			
		1720.0	15.70	15.60	15.68			
	50RB_0	1745.0	15.84	15.69	15.74			
		1732.5	15.67	15.56	15.55			
		1720.0	15.73	15.63	15.77			
	100RB_0	1745.0	15.75	15.76	15.65			
		1732.5	15.58	15.56	15.71			
		1720.0	15.72	15.83	15.69			



Top Antenna - Reduced power level 3/5							
LTE Band 4			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
1.4 MHz	1RB_5	1754.3	18.65	18.56	18.84	20.2	20.2
		1732.5	18.65	18.47	18.73		
		1710.7	18.70	18.44	18.90		
	1RB_3	1754.3	18.72	18.67	18.94		
		1732.5	18.74	18.54	18.70		
		1710.7	18.75	18.76	18.75		
	1RB_0	1754.3	18.63	18.66	18.88		
		1732.5	18.45	18.43	18.68		
		1710.7	18.77	18.77	19.12		
	3RB_3	1754.3	18.58	18.61	18.44		
		1732.5	18.70	18.90	18.50		
		1710.7	18.95	18.95	18.70		
	3RB_1	1754.3	18.51	18.57	18.54		
		1732.5	18.69	18.84	18.67		
		1710.7	18.96	19.04	18.62		
	3RB_0	1754.3	18.55	18.62	18.58		
		1732.5	18.68	18.80	18.62		
		1710.7	18.81	18.97	18.65		
	6RB_0	1754.3	18.58	18.51	18.50	20.2	20.2
		1732.5	18.69	18.78	18.55		
		1710.7	18.76	18.72	18.53		



Top Antenna - Reduced power level 3/5								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	18.65	18.76	18.56	20.2	20.2	20.2
		1732.5	18.48	18.34	18.63			
		1711.5	18.80	18.68	18.80			
	1RB_7	1753.5	18.62	18.72	18.59			
		1732.5	18.55	18.47	19.03			
		1711.5	18.76	18.49	19.16			
	1RB_0	1753.5	18.69	18.33	18.64			
		1732.5	18.47	18.30	18.66			
		1711.5	18.56	18.65	18.82			
	8RB_7	1753.5	18.67	18.85	18.45			
		1732.5	18.68	18.49	18.59			
		1711.5	18.79	19.06	18.63			
	8RB_4	1753.5	18.59	18.81	18.50			
		1732.5	18.65	18.52	18.67			
		1711.5	18.82	18.87	18.58			
	8RB_0	1753.5	18.59	18.81	18.48			
		1732.5	18.67	18.36	18.75			
		1711.5	18.76	18.53	18.69			
	15RB_0	1753.5	18.60	18.62	18.55			
		1732.5	18.68	18.61	18.72			
		1711.5	18.79	18.90	18.82			



Top Antenna - Reduced power level 3/5							
LTE Band 4			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
5 MHz	1RB_24	1752.5	18.32	18.93	18.59	20.2	20.2
		1732.5	18.54	18.21	18.58		
		1712.5	18.59	18.61	18.77		
	1RB_12	1752.5	18.75	18.61	18.78		
		1732.5	18.72	18.59	19.07		
		1712.5	18.72	18.59	19.14		
	1RB_0	1752.5	18.45	18.64	18.66		
		1732.5	18.67	18.37	18.64		
		1712.5	18.59	18.56	18.77		
	12RB_13	1752.5	18.70	18.66	18.68	20.2	20.2
		1732.5	18.68	18.66	18.80		
		1712.5	18.79	18.80	18.86		
	12RB_6	1752.5	18.72	18.65	18.74		
		1732.5	18.73	18.61	18.78		
		1712.5	18.87	18.88	18.91		
	12RB_0	1752.5	18.77	18.84	18.77		
		1732.5	18.66	18.65	18.86		
		1712.5	18.84	18.84	18.57		
	25RB_0	1752.5	18.75	18.89	18.69		
		1732.5	18.67	18.58	18.53		
		1712.5	18.84	18.71	18.78		



Top Antenna - Reduced power level 3/5								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	18.66	18.61	18.85	20.2	20.2	20.2
		1732.5	18.71	18.56	18.55			
		1715.0	18.64	18.62	18.78			
	1RB_24	1750.0	18.88	18.73	18.87			
		1732.5	18.80	18.55	18.69			
		1715.0	18.85	18.67	18.80			
	1RB_0	1750.0	18.90	18.74	18.87			
		1732.5	18.68	18.44	18.69			
		1715.0	18.80	18.53	18.87			
	25RB_25	1750.0	18.77	18.87	18.69			
		1732.5	18.61	18.84	18.56			
		1715.0	18.76	18.76	18.69			
	25RB_12	1750.0	18.81	18.94	18.98			
		1732.5	18.71	18.81	18.86			
		1715.0	18.80	18.80	18.71			
	25RB_0	1750.0	18.79	18.70	18.68			
		1732.5	18.65	18.66	18.58			
		1715.0	18.87	18.87	18.69			
	50RB_0	1750.0	18.77	18.87	18.72			
		1732.5	18.69	18.78	18.62			
		1715.0	18.85	18.75	18.80			



Top Antenna - Reduced power level 3/5							
LTE Band 4			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
15 MHz	1RB_74	1747.5	18.73	18.45	18.73	20.2	20.2
		1732.5	18.63	18.41	18.70		
		1717.5	18.70	18.32	18.90		
	1RB_37	1747.5	18.88	18.63	19.00		
		1732.5	18.67	18.41	18.99		
		1717.5	18.73	18.32	19.19		
	1RB_0	1747.5	18.78	18.56	18.77		
		1732.5	18.51	18.49	18.86		
		1717.5	18.73	18.52	18.94		
	36RB_38	1747.5	18.77	18.70	18.75	20.2	20.2
		1732.5	18.67	18.66	18.67		
		1717.5	18.80	18.74	18.62		
	36RB_19	1747.5	18.78	18.77	18.96		
		1732.5	18.71	18.69	18.78		
		1717.5	18.84	18.81	18.83		
	36RB_0	1747.5	18.87	18.78	18.96		
		1732.5	18.62	18.68	18.75		
		1717.5	18.81	18.78	18.66		
	75RB_0	1747.5	18.83	18.80	18.66		
		1732.5	18.69	18.78	18.61		
		1717.5	18.79	18.76	18.70		



Top Antenna - Reduced power level 3/5							
LTE Band 4			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
20 MHz	1RB_99	1745.0	18.72	18.63	18.98	20.2	20.2
		1732.5	18.86	18.62	18.87		
		1720.0	18.64	18.33	18.61		
	1RB_50	1745.0	18.68	18.91	19.15		
		1732.5	18.79	18.72	18.64		
		1720.0	18.86	18.82	19.23		
	1RB_0	1745.0	18.91	18.64	18.85		
		1732.5	18.86	18.60	18.78		
		1720.0	18.87	18.50	18.71		
	50RB_50	1745.0	18.78	18.87	18.72		20.2
		1732.5	18.62	18.71	18.61		
		1720.0	18.79	18.69	18.78		
	50RB_25	1745.0	18.85	18.82	18.90		
		1732.5	18.71	18.59	18.80		
		1720.0	18.84	18.88	18.76		
	50RB_0	1745.0	18.84	18.79	18.81		
		1732.5	18.67	18.63	18.71		
		1720.0	18.83	18.81	18.78		
	100RB_0	1745.0	18.82	18.73	18.66		
		1732.5	18.64	18.70	18.58		
		1720.0	18.77	18.84	18.81		



Bottom Antenna - Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	22.46	21.44	20.83	24.0	23.0	22.0
		1732.5	22.51	21.25	20.95			
		1710.7	22.58	21.91	20.71			
	1RB_3	1754.3	22.50	21.54	21.07			
		1732.5	22.56	21.56	20.86			
		1710.7	22.64	22.11	20.65			
	1RB_0	1754.3	22.39	21.47	20.88			
		1732.5	22.47	21.51	20.81			
		1710.7	22.53	21.69	20.75			
	3RB_3	1754.3	22.54	21.77	20.49			
		1732.5	22.51	21.86	20.74			
		1710.7	22.60	21.79	20.29			
	3RB_1	1754.3	22.56	21.81	20.65			
		1732.5	22.48	21.81	20.65			
		1710.7	22.61	21.82	20.24			
	3RB_0	1754.3	22.40	21.77	20.54			
		1732.5	22.68	21.76	20.62			
		1710.7	22.55	21.90	20.31			
	6RB_0	1754.3	21.57	20.56	19.44	23.0	22.0	21.0
		1732.5	21.61	20.61	19.47			
		1710.7	21.73	20.40	19.57			

Bottom Antenna - Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	22.48	21.46	20.62	24.0	23.0	22.0
		1732.5	22.40	21.30	20.51			
		1711.5	22.58	21.77	20.65			
	1RB_7	1753.5	22.58	21.34	21.08			
		1732.5	22.49	21.43	20.87			
		1711.5	22.63	21.65	20.36			
	1RB_0	1753.5	22.52	21.27	20.61			
		1732.5	22.51	21.40	20.56			
		1711.5	22.39	21.56	20.65			
	8RB_7	1753.5	21.54	20.61	19.40			
		1732.5	21.61	20.58	19.61			
		1711.5	21.67	20.32	19.67			
	8RB_4	1753.5	21.52	20.30	19.48			
		1732.5	21.58	20.54	19.67			
		1711.5	21.72	20.46	19.60			
	8RB_0	1753.5	21.63	20.30	19.50			
		1732.5	21.60	20.46	19.58			
		1711.5	21.84	20.37	19.48			
	15RB_0	1753.5	21.54	20.45	19.78			
		1732.5	21.62	20.54	19.57			
		1711.5	21.66	20.52	19.80			



Bottom Antenna - Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	22.48	21.61	20.66	24.0	23.0	22.0
		1732.5	22.18	21.38	20.57			
		1712.5	22.59	21.38	20.56			
	1RB_12	1752.5	22.74	21.53	20.81			
		1732.5	22.54	21.49	21.08			
		1712.5	22.87	21.51	20.48			
	1RB_0	1752.5	22.53	21.61	20.69			
		1732.5	22.45	21.30	20.53			
		1712.5	22.36	21.24	20.48			
	12RB_13	1752.5	21.70	20.43	19.89			
		1732.5	21.60	20.54	19.80			
		1712.5	21.74	20.60	19.83			
	12RB_6	1752.5	21.74	20.47	19.93			
		1732.5	21.65	20.57	19.82			
		1712.5	21.67	20.68	19.83			
	12RB_0	1752.5	21.74	20.49	19.93			
		1732.5	21.56	20.58	19.83			
		1712.5	21.65	20.78	19.58			
	25RB_0	1752.5	21.68	20.52	19.89			
		1732.5	21.60	20.54	19.50			
		1712.5	21.73	20.75	19.63			



Bottom Antenna - Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	22.47	21.65	20.64	24.0	23.0	22.0
		1732.5	22.44	21.41	20.56			
		1715.0	22.68	21.55	20.71			
	1RB_24	1750.0	22.72	21.60	20.91			
		1732.5	22.63	21.51	20.90			
		1715.0	22.82	21.60	21.04			
	1RB_0	1750.0	22.76	21.66	20.73			
		1732.5	22.67	21.50	20.59			
		1715.0	22.73	21.70	20.82			
	25RB_25	1750.0	21.66	20.65	19.87			
		1732.5	21.55	20.42	19.80			
		1715.0	21.69	20.94	19.81			
	25RB_12	1750.0	21.70	20.62	19.93			
		1732.5	21.53	20.43	19.87			
		1715.0	21.74	20.63	19.97			
	25RB_0	1750.0	21.68	20.68	19.90			
		1732.5	21.58	20.61	19.70			
		1715.0	21.76	20.67	19.77			
	50RB_0	1750.0	21.75	20.70	19.70			
		1732.5	21.61	20.53	19.77			
		1715.0	21.74	20.71	19.73			



Bottom Antenna - Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	22.65	21.54	20.75	24.0	23.0	22.0
		1732.5	22.50	21.74	20.66			
		1717.5	22.66	21.54	20.73			
	1RB_37	1747.5	22.72	21.54	21.11			
		1732.5	22.54	21.43	21.01			
		1717.5	22.57	21.57	21.08			
	1RB_0	1747.5	22.73	21.47	20.93			
		1732.5	22.53	21.21	20.82			
		1717.5	22.78	21.75	20.90			
	36RB_38	1747.5	21.71	20.54	19.75			
		1732.5	21.61	20.41	19.71			
		1717.5	21.73	20.55	19.70			
	36RB_19	1747.5	21.72	20.65	19.85			
		1732.5	21.60	20.52	19.81			
		1717.5	21.69	20.59	19.97			
	36RB_0	1747.5	21.79	20.61	19.69			
		1732.5	21.60	20.44	19.78			
		1717.5	21.73	20.55	19.90			
	75RB_0	1747.5	21.77	20.58	19.65			
		1732.5	21.55	20.53	19.66			
		1717.5	21.74	20.56	19.76			



Bottom Antenna - Full Power								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	22.68	21.48	20.69	24.0	23.0	22.0
		1732.5	22.74	21.50	20.56			
		1720.0	22.61	21.33	20.65			
	1RB_50	1745.0	22.80	21.40	21.15			
		1732.5	22.66	21.55	20.71			
		1720.0	22.61	21.71	21.33			
	1RB_0	1745.0	22.90	21.60	20.81			
		1732.5	22.79	21.60	20.74			
		1720.0	22.65	21.57	20.82			
	50RB_50	1745.0	21.71	20.63	19.72			
		1732.5	21.55	20.58	19.75			
		1720.0	21.65	20.54	19.70			
	50RB_25	1745.0	21.75	20.69	19.75			
		1732.5	21.62	20.44	19.60			
		1720.0	21.67	20.55	19.83			
	50RB_0	1745.0	21.77	20.67	19.76			
		1732.5	21.65	20.68	19.61			
		1720.0	21.71	20.60	19.85			
	100RB_0	1745.0	21.73	20.63	19.86			
		1732.5	21.57	20.46	19.73			
		1720.0	21.68	20.56	19.81			

Bottom Antenna - Reduced power level 4/6								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	21.34	21.28	20.58	21.9	21.9	21.9
		1732.5	21.36	20.85	20.95			
		1710.7	21.26	21.67	20.85			
	1RB_3	1754.3	21.41	21.37	20.53			
		1732.5	21.34	21.11	21.08			
		1710.7	21.33	21.75	20.72			
	1RB_0	1754.3	21.33	21.30	20.64			
		1732.5	21.26	20.94	20.94			
		1710.7	21.32	21.64	20.75			
	3RB_3	1754.3	21.35	21.50	19.96			
		1732.5	21.30	21.64	20.63			
		1710.7	21.61	21.27	20.75			
	3RB_1	1754.3	21.27	21.55	20.10			
		1732.5	21.42	21.55	20.67			
		1710.7	21.76	21.51	20.78			
	3RB_0	1754.3	21.24	21.54	20.04			
		1732.5	21.18	21.59	20.61			
		1710.7	21.58	21.25	20.77			
	6RB_0	1754.3	21.24	19.95	19.43	21.9	21.9	21.0
		1732.5	21.38	20.59	19.62			
		1710.7	21.46	20.66	19.76			

Bottom Antenna - Reduced power level 4/6								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	21.38	21.60	20.46	21.9	21.9	21.9
		1732.5	21.41	21.26	20.55			
		1711.5	21.43	21.42	20.69			
	1RB_7	1753.5	21.41	20.99	20.29			
		1732.5	21.46	21.23	20.62			
		1711.5	21.50	21.34	20.76			
	1RB_0	1753.5	21.30	20.96	20.52			
		1732.5	21.34	21.05	20.57			
		1711.5	21.35	21.17	20.71			
	8RB_7	1753.5	21.33	20.50	19.49	21.9	21.9	21.0
		1732.5	21.41	20.57	19.56			
		1711.5	21.47	20.46	19.54			
	8RB_4	1753.5	21.30	20.56	19.52			
		1732.5	21.35	20.50	19.64			
		1711.5	21.50	20.52	19.51			
	8RB_0	1753.5	21.41	20.49	19.59			
		1732.5	21.37	20.55	19.56			
		1711.5	21.51	20.94	19.62			
	15RB_0	1753.5	21.33	20.43	19.45			
		1732.5	21.40	20.53	19.58			
		1711.5	21.57	20.63	19.79			

Bottom Antenna - Reduced power level 4/6								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	21.34	21.60	20.52	21.9	21.9	21.9
		1732.5	21.27	21.52	20.82			
		1712.5	21.28	21.72	21.02			
	1RB_12	1752.5	21.58	21.32	20.72			
		1732.5	21.21	21.30	20.90			
		1712.5	21.50	21.38	21.12			
	1RB_0	1752.5	21.45	21.20	20.57			
		1732.5	21.16	21.16	20.59			
		1712.5	21.34	21.17	20.60			
	12RB_13	1752.5	21.45	20.76	19.81	21.9	21.9	21.0
		1732.5	21.30	20.51	19.68			
		1712.5	21.52	20.59	19.46			
	12RB_6	1752.5	21.47	20.79	19.85			
		1732.5	21.33	20.49	19.71			
		1712.5	21.61	20.66	19.51			
	12RB_0	1752.5	21.47	20.79	19.86			
		1732.5	21.34	20.51	19.62			
		1712.5	21.46	20.63	19.49			
	25RB_0	1752.5	21.50	20.58	19.53			
		1732.5	21.37	20.51	19.59			
		1712.5	21.55	20.83	19.84			



Bottom Antenna - Reduced power level 4/6								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	21.49	21.41	20.68	21.9	21.9	21.9
		1732.5	21.47	21.51	20.52			
		1715.0	21.32	21.26	20.54			
	1RB_24	1750.0	21.64	21.32	20.82			
		1732.5	21.53	21.17	20.77			
		1715.0	21.67	21.34	20.72			
	1RB_0	1750.0	21.65	21.50	20.72			
		1732.5	21.18	21.21	20.50			
		1715.0	21.39	21.10	20.61			
	25RB_25	1750.0	21.47	20.73	19.89			
		1732.5	21.36	20.47	19.29			
		1715.0	21.48	20.69	19.84			
	25RB_12	1750.0	21.51	20.79	19.84			
		1732.5	21.42	20.53	19.34			
		1715.0	21.53	20.63	19.94			
	25RB_0	1750.0	21.49	20.63	19.80			
		1732.5	21.37	20.46	19.47			
		1715.0	21.55	20.75	19.87			
	50RB_0	1750.0	21.57	20.65	19.61			
		1732.5	21.42	20.50	19.52			
		1715.0	21.57	20.69	19.70			



Bottom Antenna - Reduced power level 4/6								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	21.50	21.40	20.58	21.9	21.9	21.9
		1732.5	21.39	21.57	20.94			
		1717.5	21.49	21.33	20.72			
	1RB_37	1747.5	21.63	21.45	20.93			
		1732.5	21.29	21.37	20.93			
		1717.5	21.40	21.35	20.99			
	1RB_0	1747.5	21.56	21.57	20.84			
		1732.5	21.39	21.37	20.79			
		1717.5	21.61	21.50	20.81			
	36RB_38	1747.5	21.58	20.64	19.74			
		1732.5	21.43	20.50	19.66			
		1717.5	21.44	20.58	19.59			
	36RB_19	1747.5	21.59	20.66	19.84			
		1732.5	21.43	20.53	19.76			
		1717.5	21.60	20.72	19.63			
	36RB_0	1747.5	21.52	20.71	19.78			
		1732.5	21.44	20.43	19.45			
		1717.5	21.56	20.68	19.58			
	75RB_0	1747.5	21.51	20.79	19.53			
		1732.5	21.42	20.54	19.54			
		1717.5	21.56	20.57	19.57			



Bottom Antenna - Reduced power level 4/6								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	21.38	21.38	20.97	21.9	21.9	21.9
		1732.5	21.53	21.35	20.83			
		1720.0	21.24	21.25	20.47			
	1RB_50	1745.0	21.67	21.61	20.84			
		1732.5	21.60	21.18	20.84			
		1720.0	21.56	21.59	21.03			
	1RB_0	1745.0	21.54	21.50	20.80			
		1732.5	21.40	21.35	20.70			
		1720.0	21.55	21.40	20.66			
	50RB_50	1745.0	21.54	20.85	19.87			
		1732.5	21.38	20.38	19.51			
		1720.0	21.44	20.42	19.69			
	50RB_25	1745.0	21.57	20.60	19.90			
		1732.5	21.42	20.54	19.56			
		1720.0	21.56	20.81	19.72			
	50RB_0	1745.0	21.63	20.75	19.76			
		1732.5	21.46	20.56	19.61			
		1720.0	21.61	20.85	19.76			
	100RB_0	1745.0	21.53	20.64	19.86			
		1732.5	21.45	20.46	19.62			
		1720.0	21.58	20.71	19.59			



Top Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3MHz	23.06	21.91	21.38	24.5	23.5	22.5
		836.5MHz	23.20	22.05	21.52			
		824.7MHz	23.31	22.07	21.69			
	1RB_3	848.3MHz	23.14	21.85	21.45			
		836.5MHz	23.10	22.09	21.61			
		824.7MHz	23.31	22.33	21.74			
	1RB_0	848.3MHz	23.01	21.97	21.32			
		836.5MHz	23.12	22.06	21.44			
		824.7MHz	23.22	22.09	21.54			
	3RB_3	848.3MHz	23.09	22.37	20.97			
		836.5MHz	23.16	21.94	20.94			
		824.7MHz	23.36	22.09	21.05			
	3RB_1	848.3MHz	23.10	22.46	21.06			
		836.5MHz	23.11	22.11	21.10			
		824.7MHz	23.34	22.29	21.15			
	3RB_0	848.3MHz	23.06	21.89	21.02	23.5	22.5	21.5
		836.5MHz	23.15	21.96	21.06			
		824.7MHz	23.21	22.10	21.15			
	6RB_0	848.3MHz	22.08	21.17	19.74			
		836.5MHz	22.20	21.28	20.08			
		824.7MHz	22.26	20.88	20.19			

Top Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5MHz	22.99	22.35	21.17	24.5	23.5	22.5
		836.5MHz	23.08	22.10	21.14			
		825.5MHz	23.23	21.92	21.52			
	1RB_7	847.5MHz	23.15	22.02	21.20			
		836.5MHz	23.15	21.96	21.19			
		825.5MHz	23.45	22.06	20.98			
	1RB_0	847.5MHz	23.09	22.11	21.10			
		836.5MHz	23.03	22.10	21.10			
		825.5MHz	23.32	22.10	20.78			
	8RB_7	847.5MHz	22.06	21.09	20.01			
		836.5MHz	22.09	20.94	19.94			
		825.5MHz	22.27	21.19	20.18			
	8RB_4	847.5MHz	22.18	21.02	20.03			
		836.5MHz	22.18	21.06	19.94			
		825.5MHz	22.20	21.23	20.23			
	8RB_0	847.5MHz	22.18	21.05	20.12	23.5	22.5	21.5
		836.5MHz	22.09	20.87	19.93			
		825.5MHz	22.23	21.16	20.25			
	15RB_0	847.5MHz	22.07	21.08	19.99			
		836.5MHz	22.19	21.13	20.21			
		825.5MHz	22.25	21.31	20.14			



Top Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5MHz	23.06	21.92	20.92	24.5	23.5	22.5
		836.5MHz	23.03	21.83	21.02			
		826.5MHz	22.94	21.92	21.13			
	1RB_12	846.5MHz	23.13	22.63	20.87			
		836.5MHz	23.28	21.95	21.84			
		826.5MHz	23.39	22.21	21.33			
	1RB_0	846.5MHz	22.96	21.95	20.51			
		836.5MHz	23.01	21.92	21.40			
		826.5MHz	22.96	21.74	20.81			
	12RB_13	846.5MHz	22.02	21.08	20.14	23.5	22.5	21.5
		836.5MHz	22.10	20.88	19.91			
		826.5MHz	22.16	21.08	20.01			
	12RB_6	846.5MHz	22.06	21.04	20.19			
		836.5MHz	22.11	21.02	19.92			
		826.5MHz	22.19	21.12	19.96			
	12RB_0	846.5MHz	22.00	20.97	20.12			
		836.5MHz	22.11	20.90	19.92			
		826.5MHz	22.18	21.11	20.02			
	25RB_0	846.5MHz	22.06	21.23	19.95			
		836.5MHz	22.12	20.97	20.05			
		826.5MHz	22.23	21.21	20.13			



Top Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0MHz	23.23	21.82	21.02	24.5	23.5	22.5
		836.5MHz	23.13	22.35	21.03			
		829.0MHz	23.29	22.06	21.51			
	1RB_24	844.0MHz	23.25	21.95	21.21			
		836.5MHz	23.21	21.97	21.10			
		829.0MHz	23.33	22.14	22.00			
	1RB_0	844.0MHz	23.06	21.98	20.96			
		836.5MHz	23.20	21.97	21.11			
		829.0MHz	23.13	21.89	21.53			
	25RB_25	844.0MHz	22.03	21.39	20.24			
		836.5MHz	22.10	21.16	19.86			
		829.0MHz	22.14	21.34	20.31			
	25RB_12	844.0MHz	22.05	21.39	20.24			
		836.5MHz	22.16	21.25	19.95			
		829.0MHz	22.19	21.28	20.04			
	25RB_0	844.0MHz	22.08	21.35	20.26			
		836.5MHz	22.20	21.26	19.99			
		829.0MHz	22.23	21.32	19.99			
	50RB_0	844.0MHz	22.05	21.03	20.06			
		836.5MHz	22.19	20.98	20.09			
		829.0MHz	22.24	21.13	20.38			

Top Antenna - Reduced power level 1/2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3MHz	21.03	21.15	21.06	22.0	22.0	22.0
		836.5MHz	20.83	20.78	21.07			
		824.7MHz	21.16	21.05	21.42			
	1RB_3	848.3MHz	21.02	21.33	21.42			
		836.5MHz	21.13	21.13	20.98			
		824.7MHz	21.19	21.20	21.45			
	1RB_0	848.3MHz	20.96	21.25	21.26			
		836.5MHz	21.04	21.04	21.05			
		824.7MHz	21.10	21.12	21.28			
	3RB_3	848.3MHz	20.97	21.04	20.81			
		836.5MHz	21.08	21.19	20.89			
		824.7MHz	21.13	21.29	20.87			
	3RB_1	848.3MHz	21.05	21.06	20.91			
		836.5MHz	21.12	21.15	20.95			
		824.7MHz	21.12	21.23	20.97			
	3RB_0	848.3MHz	20.92	21.03	20.85			
		836.5MHz	20.98	21.20	20.98			
		824.7MHz	21.10	21.23	20.95			
	6RB_0	848.3MHz	21.08	20.14	19.96	22.0	22.0	21.5
		836.5MHz	21.09	20.16	20.04			
		824.7MHz	21.26	20.34	20.06			



Top Antenna - Reduced power level 1/2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5MHz	20.97	21.03	20.78	22.0	22.0	22.0
		836.5MHz	20.97	21.01	20.94			
		825.5MHz	21.07	21.16	21.02			
	1RB_7	847.5MHz	21.20	20.91	20.94			
		836.5MHz	21.05	20.95	21.27			
		825.5MHz	21.11	21.05	21.33			
	1RB_0	847.5MHz	20.82	21.06	20.85			
		836.5MHz	21.06	21.09	20.96			
		825.5MHz	21.23	20.92	21.00			
	8RB_7	847.5MHz	21.01	20.05	20.20			
		836.5MHz	21.16	20.49	20.07			
		825.5MHz	21.25	20.40	20.33			
	8RB_4	847.5MHz	21.03	20.17	20.11			
		836.5MHz	21.13	20.50	20.05			
		825.5MHz	21.18	20.42	20.32			
	8RB_0	847.5MHz	20.95	20.09	20.25			
		836.5MHz	21.15	20.41	20.09			
		825.5MHz	21.20	20.35	20.23			
	15RB_0	847.5MHz	21.02	20.14	20.18			
		836.5MHz	21.09	20.44	20.11			
		825.5MHz	21.23	20.15	20.36			



Top Antenna - Reduced power level 1/2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5MHz	21.02	20.81	20.74	22.0	22.0	22.0
		836.5MHz	20.86	20.91	20.75			
		826.5MHz	21.10	20.95	20.72			
	1RB_12	846.5MHz	21.09	20.93	20.90			
		836.5MHz	21.36	20.93	21.15			
		826.5MHz	21.24	21.15	21.03			
	1RB_0	846.5MHz	20.70	20.92	20.76			
		836.5MHz	20.95	20.78	20.71			
		826.5MHz	20.82	20.95	20.29			
	12RB_13	846.5MHz	21.06	20.32	20.07			
		836.5MHz	21.14	20.26	20.00			
		826.5MHz	21.22	20.51	20.32			
	12RB_6	846.5MHz	21.08	20.36	20.10			
		836.5MHz	21.15	20.27	20.02			
		826.5MHz	21.15	20.55	20.46			
	12RB_0	846.5MHz	21.11	20.31	20.06			
		836.5MHz	21.04	20.25	20.01			
		826.5MHz	21.13	20.53	20.33			
	25RB_0	846.5MHz	21.08	20.25	19.99			
		836.5MHz	21.15	20.42	20.41			
		826.5MHz	21.18	20.38	20.16			



Top Antenna - Reduced power level 1/2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0MHz	21.08	20.86	21.20	22.0	22.0	22.0
		836.5MHz	21.20	21.02	20.87			
		829.0MHz	21.31	21.03	21.36			
	1RB_24	844.0MHz	21.15	21.18	20.90			
		836.5MHz	21.24	20.78	21.67			
		829.0MHz	21.32	21.10	21.70			
	1RB_0	844.0MHz	21.14	20.83	20.72			
		836.5MHz	21.16	20.77	20.84			
		829.0MHz	21.19	20.83	20.90			
	25RB_25	844.0MHz	21.17	20.19	20.11			
		836.5MHz	21.19	20.49	20.06			
		829.0MHz	21.25	20.65	20.44			
	25RB_12	844.0MHz	21.08	20.20	20.14			
		836.5MHz	21.18	20.36	20.11			
		829.0MHz	21.23	20.70	20.50			
	25RB_0	844.0MHz	21.12	20.15	20.06			
		836.5MHz	21.13	20.40	20.04			
		829.0MHz	21.17	20.64	20.44			
	50RB_0	844.0MHz	21.07	20.33	20.23			
		836.5MHz	21.11	20.48	20.25			
		829.0MHz	21.27	20.42	20.22			



Bottom Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3MHz	23.15	21.95	21.35	24.5	23.5	22.5
		836.5MHz	23.32	22.16	21.77			
		824.7MHz	23.44	22.45	21.79			
	1RB_3	848.3MHz	23.26	22.10	21.85			
		836.5MHz	23.28	22.30	21.86			
		824.7MHz	23.47	22.58	21.91			
	1RB_0	848.3MHz	23.26	22.00	21.67			
		836.5MHz	23.22	22.21	21.69			
		824.7MHz	23.37	22.47	21.81			
	3RB_3	848.3MHz	23.23	22.05	21.40			
		836.5MHz	23.34	22.16	21.26			
		824.7MHz	23.29	22.74	21.56			
	3RB_1	848.3MHz	23.24	22.18	21.42			
		836.5MHz	23.58	22.24	21.42			
		824.7MHz	23.33	22.74	21.57			
	3RB_0	848.3MHz	23.13	22.07	21.34			
		836.5MHz	23.22	22.11	21.38			
		824.7MHz	23.36	22.73	21.54			
	6RB_0	848.3MHz	22.22	21.25	20.16	23.5	22.5	21.5
		836.5MHz	22.28	21.37	20.32			
		824.7MHz	22.37	21.49	20.39			



Bottom Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5MHz	23.02	22.21	20.91	24.5	23.5	22.5
		836.5MHz	23.12	22.25	21.30			
		825.5MHz	23.53	22.32	21.39			
	1RB_7	847.5MHz	23.34	22.08	21.11			
		836.5MHz	23.37	22.16	21.33			
		825.5MHz	23.46	22.30	21.77			
	1RB_0	847.5MHz	23.02	22.08	20.97			
		836.5MHz	23.34	22.08	21.25			
		825.5MHz	23.38	22.18	21.38			
	8RB_7	847.5MHz	22.17	21.17	20.22			
		836.5MHz	22.31	21.01	20.27			
		825.5MHz	22.36	21.36	20.27			
	8RB_4	847.5MHz	22.23	21.40	20.31			
		836.5MHz	22.31	21.00	20.19			
		825.5MHz	22.38	21.28	20.38			
	8RB_0	847.5MHz	22.11	21.37	20.27			
		836.5MHz	22.34	21.24	20.23			
		825.5MHz	22.30	21.11	20.41			
	15RB_0	847.5MHz	22.22	21.17	20.24			
		836.5MHz	22.23	21.27	20.54			
		825.5MHz	22.34	21.30	20.60			



Bottom Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5MHz	23.10	21.98	21.22	24.5	23.5	22.5
		836.5MHz	23.04	21.89	21.33			
		826.5MHz	23.43	22.02	21.34			
	1RB_12	846.5MHz	23.05	22.03	21.12			
		836.5MHz	23.54	22.15	21.83			
		826.5MHz	23.55	22.25	21.94			
	1RB_0	846.5MHz	23.11	22.06	20.74			
		836.5MHz	23.27	22.09	21.32			
		826.5MHz	23.21	21.83	21.40			
	12RB_13	846.5MHz	22.21	21.11	20.46	23.5	22.5	21.5
		836.5MHz	22.24	21.08	20.18			
		826.5MHz	22.31	21.37	20.61			
	12RB_6	846.5MHz	22.19	21.22	20.75			
		836.5MHz	22.29	21.14	20.33			
		826.5MHz	22.33	21.38	20.59			
	12RB_0	846.5MHz	22.15	21.18	20.42			
		836.5MHz	22.20	21.06	20.15			
		826.5MHz	22.28	21.35	20.23			
	25RB_0	846.5MHz	22.17	21.40	20.27			
		836.5MHz	22.28	21.38	20.27			
		826.5MHz	22.37	21.31	20.26			



Bottom Antenna - Full Power								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0MHz	23.35	21.98	21.26	24.5	23.5	22.5
		836.5MHz	23.26	22.12	21.09			
		829.0MHz	23.38	22.16	21.76			
	1RB_24	844.0MHz	23.44	22.05	21.38			
		836.5MHz	23.46	22.06	21.42			
		829.0MHz	23.47	22.36	21.54			
	1RB_0	844.0MHz	23.32	22.06	21.20			
		836.5MHz	23.25	22.06	21.16			
		829.0MHz	23.21	22.23	21.45			
	25RB_25	844.0MHz	22.23	21.16	20.18			
		836.5MHz	22.32	21.44	20.25			
		829.0MHz	22.40	21.36	20.65			
	25RB_12	844.0MHz	22.31	21.17	20.58			
		836.5MHz	22.34	21.16	20.59			
		829.0MHz	22.46	21.22	20.63			
	25RB_0	844.0MHz	22.30	21.35	20.43			
		836.5MHz	22.31	21.15	20.62			
		829.0MHz	22.37	21.42	20.61			
	50RB_0	844.0MHz	22.31	21.18	20.41			
		836.5MHz	22.36	21.30	20.37			
		829.0MHz	22.39	21.34	20.42			

Top Antenna - Reduced power level 1/2								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2567.5	16.36	16.38	16.19	17.2	17.2	17.2
		2535.0	16.04	15.92	16.05			
		2502.5	15.82	15.70	15.74			
	1RB_12	2567.5	16.17	16.06	16.70			
		2535.0	16.35	16.09	16.10			
		2502.5	16.15	15.80	15.95			
	1RB_0	2567.5	16.00	15.68	16.23			
		2535.0	15.85	15.87	15.88			
		2502.5	15.72	15.52	15.95			
	12RB_13	2567.5	16.38	16.50	16.44	17.2	17.2	17.2
		2535.0	16.15	16.01	16.12			
		2502.5	15.99	15.76	16.04			
	12RB_6	2567.5	16.39	16.50	16.41			
		2535.0	16.19	16.04	16.06			
		2502.5	16.03	15.81	16.02			
	12RB_0	2567.5	16.28	16.41	16.40			
		2535.0	16.17	15.91	16.11			
		2502.5	15.94	15.73	16.04			
	25RB_0	2567.5	16.28	16.29	16.20			
		2535.0	16.12	16.23	16.16			
		2502.5	15.93	16.11	16.09			



Top Antenna - Reduced power level 1/2								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2565.0	16.42	16.17	16.36	17.2	17.2	17.2
		2535.0	16.19	15.98	16.69			
		2505.0	15.96	15.84	15.99			
	1RB_24	2565.0	16.48	16.10	16.36			
		2535.0	16.17	15.93	16.45			
		2505.0	16.09	15.83	16.10			
	1RB_0	2565.0	16.26	16.00	16.23			
		2535.0	16.19	15.89	16.14			
		2505.0	15.85	15.72	15.97			
	25RB_25	2565.0	16.43	16.54	16.63			
		2535.0	16.22	16.34	16.36			
		2505.0	16.01	15.93	15.88			
	25RB_12	2565.0	16.43	16.45	16.54			
		2535.0	16.16	16.38	16.40			
		2505.0	15.94	16.11	15.91			
	25RB_0	2565.0	16.32	16.43	16.29			
		2535.0	16.16	16.37	16.27			
		2505.0	15.95	16.09	15.80			
	50RB_0	2565.0	16.44	16.45	16.33			
		2535.0	16.24	16.16	16.20			
		2505.0	15.94	15.97	16.04			



Top Antenna - Reduced power level 1/2								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2562.5	16.44	16.74	16.44	17.2	17.2	17.2
		2535.0	16.33	16.19	16.59			
		2507.5	15.93	15.90	16.08			
	1RB_37	2562.5	16.40	16.00	16.71			
		2535.0	16.10	16.00	16.53			
		2507.5	15.94	15.86	16.27			
	1RB_0	2562.5	16.25	16.22	16.37			
		2535.0	15.82	16.05	16.17			
		2507.5	15.91	15.63	15.91			
	36RB_38	2562.5	16.39	16.42	16.40	17.2	17.2	17.2
		2535.0	16.28	16.24	16.35			
		2507.5	16.12	15.96	16.02			
	36RB_19	2562.5	16.44	16.27	16.52			
		2535.0	16.16	16.20	16.34			
		2507.5	15.99	15.94	16.11			
	36RB_0	2562.5	16.31	16.34	16.45			
		2535.0	16.10	16.02	16.27			
		2507.5	15.94	15.97	15.88			
	75RB_0	2562.5	16.36	16.47	16.34			
		2535.0	16.16	16.19	16.31			
		2507.5	16.05	15.98	16.11			



Top Antenna - Reduced power level 1/2								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2560.0	16.42	16.15	16.61	17.2	17.2	17.2
		2535.0	16.32	16.11	16.74			
		2510.0	16.02	15.89	16.52			
	1RB_50	2560.0	16.39	16.04	16.65			
		2535.0	16.02	16.13	16.71			
		2510.0	15.95	15.80	16.66			
	1RB_0	2560.0	16.31	15.99	16.33			
		2535.0	15.87	15.78	16.60			
		2510.0	15.87	15.83	15.88			
	50RB_50	2560.0	16.44	16.46	16.37			
		2535.0	16.24	16.21	16.35			
		2510.0	16.09	16.08	16.23			
	50RB_25	2560.0	16.41	16.44	16.35			
		2535.0	16.19	16.23	16.28			
		2510.0	16.07	16.10	16.07			
	50RB_0	2560.0	16.33	16.25	16.26			
		2535.0	16.11	16.12	16.27			
		2510.0	15.99	16.02	15.99			
	100RB_0	2560.0	16.39	16.31	16.42			
		2535.0	16.26	16.28	16.24			
		2510.0	15.97	15.89	16.08			



Top Antenna - Reduced power level 3/5								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2567.5	18.63	18.58	18.60	19.9	19.9	19.9
		2535.0	18.46	18.39	18.42			
		2502.5	18.10	18.15	18.10			
	1RB_12	2567.5	18.68	18.57	19.05			
		2535.0	18.52	18.40	18.60			
		2502.5	18.32	18.22	18.32			
	1RB_0	2567.5	18.70	18.57	18.50			
		2535.0	18.41	18.11	18.45			
		2502.5	18.12	17.91	18.34			
	12RB_13	2567.5	18.77	18.70	18.77	19.9	19.9	19.9
		2535.0	18.58	18.53	18.64			
		2502.5	18.31	18.16	18.17			
	12RB_6	2567.5	18.76	18.82	18.87			
		2535.0	18.64	18.57	18.67			
		2502.5	18.32	18.21	18.24			
	12RB_0	2567.5	18.67	18.79	18.78			
		2535.0	18.62	18.51	18.58			
		2502.5	18.30	18.22	18.22			
	25RB_0	2567.5	18.79	18.59	18.40			
		2535.0	18.56	18.67	18.38			
		2502.5	18.28	18.31	18.18			



Top Antenna - Reduced power level 3/5								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2565.0	18.53	18.64	18.69	19.9	19.9	19.9
		2535.0	18.49	18.56	18.98			
		2505.0	18.35	18.36	18.43			
	1RB_24	2565.0	18.98	18.61	19.44			
		2535.0	18.71	18.58	18.60			
		2505.0	18.52	18.35	19.15			
	1RB_0	2565.0	18.78	18.56	18.55			
		2535.0	18.49	18.44	18.44			
		2505.0	18.40	18.22	18.28			
	25RB_25	2565.0	18.80	18.72	18.80			
		2535.0	18.65	18.68	18.45			
		2505.0	18.42	18.46	18.22			
	25RB_12	2565.0	18.82	18.75	18.80			
		2535.0	18.63	18.60	18.49			
		2505.0	18.39	18.54	18.23			
	25RB_0	2565.0	18.79	18.69	18.74			
		2535.0	18.55	18.49	18.45			
		2505.0	18.38	18.51	18.21			
	50RB_0	2565.0	18.79	18.83	18.67			
		2535.0	18.62	18.59	18.55			
		2505.0	18.44	18.28	18.25			



Top Antenna - Reduced power level 3/5								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2562.5	18.90	18.65	18.79	19.9	19.9	19.9
		2535.0	18.52	18.44	19.08			
		2507.5	18.33	18.19	18.76			
	1RB_37	2562.5	18.80	18.48	18.77			
		2535.0	18.67	18.44	18.91			
		2507.5	18.30	18.15	18.65			
	1RB_0	2562.5	18.68	18.48	18.76			
		2535.0	18.36	18.29	18.61			
		2507.5	18.24	18.16	18.29			
	36RB_38	2562.5	18.89	18.91	18.67	19.9	19.9	19.9
		2535.0	18.63	18.55	18.67			
		2507.5	18.51	18.39	18.50			
	36RB_19	2562.5	18.79	18.76	18.83			
		2535.0	18.65	18.74	18.64			
		2507.5	18.43	18.48	18.45			
	36RB_0	2562.5	18.77	18.68	18.77			
		2535.0	18.61	18.55	18.42			
		2507.5	18.36	18.39	18.39			
	75RB_0	2562.5	18.85	18.75	18.70			
		2535.0	18.64	18.50	18.49			
		2507.5	18.39	18.38	18.36			



Top Antenna - Reduced power level 3/5								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2560.0	18.76	18.68	18.96	19.9	19.9	19.9
		2535.0	18.67	18.58	18.92			
		2510.0	18.50	18.30	18.66			
	1RB_50	2560.0	18.85	18.78	19.17			
		2535.0	18.69	18.65	18.96			
		2510.0	18.53	18.39	18.71			
	1RB_0	2560.0	18.66	18.53	18.68			
		2535.0	18.48	18.23	18.38			
		2510.0	18.33	18.08	18.23			
	50RB_50	2560.0	18.88	18.91	18.78			
		2535.0	18.69	18.59	18.74			
		2510.0	18.53	18.56	18.49			
	50RB_25	2560.0	18.82	18.87	18.64			
		2535.0	18.63	18.53	18.56			
		2510.0	18.44	18.46	18.40			
	50RB_0	2560.0	18.75	18.75	18.68			
		2535.0	18.55	18.53	18.51			
		2510.0	18.35	18.48	18.33			
	100RB_0	2560.0	18.82	18.71	18.51			
		2535.0	18.59	18.54	18.58			
		2510.0	18.48	18.47	18.38			



Bottom Antenna - Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2567.5	22.22	21.20	20.42	24.0	23.0	22.0
		2535.0	22.16	21.12	20.26			
		2502.5	22.18	21.27	20.12			
	1RB_12	2567.5	22.35	21.13	20.88			
		2535.0	22.13	21.11	20.73			
		2502.5	22.09	21.19	20.62			
	1RB_0	2567.5	22.00	21.06	20.31			
		2535.0	22.13	21.23	20.24			
		2502.5	22.10	21.42	20.02			
	12RB_13	2567.5	21.35	20.44	19.48			
		2535.0	21.17	20.29	19.20			
		2502.5	21.19	20.25	19.36			
	12RB_6	2567.5	21.39	20.47	19.45			
		2535.0	21.21	20.27	19.13			
		2502.5	21.13	20.20	19.14			
	12RB_0	2567.5	21.38	20.38	19.41			
		2535.0	21.15	20.21	19.10			
		2502.5	21.16	20.11	19.25			
	25RB_0	2567.5	21.38	20.26	19.50			
		2535.0	21.23	20.14	19.23			
		2502.5	21.14	20.08	19.28			



Bottom Antenna - Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2565.0	22.41	21.82	20.58	24.0	23.0	22.0
		2535.0	22.23	21.14	20.35			
		2505.0	22.38	21.18	20.02			
	1RB_24	2565.0	22.39	21.28	20.70			
		2535.0	22.31	21.06	20.57			
		2505.0	22.06	21.26	20.24			
	1RB_0	2565.0	22.32	21.26	20.43			
		2535.0	22.06	21.13	20.22			
		2505.0	22.16	21.37	20.02			
	25RB_25	2565.0	21.39	20.56	19.51		23.0	22.0
		2535.0	21.21	20.43	19.14			
		2505.0	21.01	20.38	19.09			
	25RB_12	2565.0	21.42	20.48	19.77			
		2535.0	21.18	20.37	19.19			
		2505.0	21.15	20.02	19.31			
	25RB_0	2565.0	21.36	20.44	19.79			
		2535.0	21.24	20.26	19.14			
		2505.0	21.24	20.07	19.29			
	50RB_0	2565.0	21.38	20.48	19.51			
		2535.0	21.24	20.35	19.36			
		2505.0	21.02	20.01	19.05			



Bottom Antenna - Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2562.5	22.47	21.23	20.84	24.0	23.0	22.0
		2535.0	22.14	21.18	20.51			
		2507.5	22.19	21.19	20.28			
	1RB_37	2562.5	22.41	21.07	20.96			
		2535.0	22.28	21.18	20.75			
		2507.5	22.08	21.22	20.54			
	1RB_0	2562.5	22.20	21.10	20.61			
		2535.0	22.12	21.01	20.51			
		2507.5	22.17	21.28	20.26			
	36RB_38	2562.5	21.50	20.47	19.69			
		2535.0	21.33	20.36	19.49			
		2507.5	21.06	20.10	19.23			
	36RB_19	2562.5	21.44	20.43	19.65			
		2535.0	21.20	20.27	19.51			
		2507.5	21.04	20.09	19.30			
	36RB_0	2562.5	21.34	20.35	19.63			
		2535.0	21.14	20.22	19.42			
		2507.5	21.16	20.01	19.25			
	75RB_0	2562.5	21.42	20.52	19.59			
		2535.0	21.20	20.41	19.42			
		2507.5	21.08	20.00	19.15			



Bottom Antenna - Full Power								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2560.0	22.41	21.28	20.99	24.0	23.0	22.0
		2535.0	22.33	21.03	20.53			
		2510.0	22.06	21.13	20.66			
	1RB_50	2560.0	22.43	21.40	20.68			
		2535.0	22.35	21.11	20.51			
		2510.0	22.16	21.08	20.75			
	1RB_0	2560.0	22.25	21.07	20.37			
		2535.0	22.19	21.18	20.29			
		2510.0	22.15	21.25	20.55			
	50RB_50	2560.0	21.46	20.45	19.55			
		2535.0	21.29	20.29	19.59			
		2510.0	21.11	20.15	19.29			
	50RB_25	2560.0	21.41	20.52	19.67			
		2535.0	21.26	20.29	19.46			
		2510.0	21.02	20.18	19.13			
	50RB_0	2560.0	21.30	20.44	19.47			
		2535.0	21.16	20.06	19.44			
		2510.0	21.03	20.09	19.10			
	100RB_0	2560.0	21.37	20.46	19.64			
		2535.0	21.23	20.32	19.46			
		2510.0	21.04	20.07	19.06			



Bottom Antenna - Reduced power level 4/6								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2567.5	21.36	21.29	20.38	22.6	22.6	22.0
		2535.0	21.26	21.17	20.27			
		2502.5	21.11	20.94	20.09			
	1RB_12	2567.5	21.68	21.32	20.23			
		2535.0	21.37	21.15	20.80			
		2502.5	21.27	20.96	20.50			
	1RB_0	2567.5	21.25	21.31	20.36			
		2535.0	21.21	21.07	20.24			
		2502.5	20.90	20.62	20.04			
	12RB_13	2567.5	21.41	20.67	19.58			
		2535.0	21.35	20.43	19.23			
		2502.5	21.03	20.14	19.17			
	12RB_6	2567.5	21.42	20.67	19.58			
		2535.0	21.38	20.37	19.27			
		2502.5	21.01	20.11	19.28			
	12RB_0	2567.5	21.41	20.46	19.24			
		2535.0	21.31	20.40	19.30			
		2502.5	21.05	20.06	19.17			
	25RB_0	2567.5	21.41	20.24	19.43			
		2535.0	21.30	20.29	19.22			
		2502.5	21.08	20.21	19.05			



Bottom Antenna - Reduced power level 4/6								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2565.0	21.47	21.45	20.50	22.6	22.6	22.0
		2535.0	21.59	21.27	20.34			
		2505.0	21.36	21.02	20.21			
	1RB_24	2565.0	21.56	21.29	20.53			
		2535.0	21.57	21.21	20.42			
		2505.0	21.27	20.97	20.27			
	1RB_0	2565.0	21.47	21.32	20.39			
		2535.0	21.08	21.18	20.27			
		2505.0	21.21	20.94	20.17			
	25RB_25	2565.0	21.47	20.61	19.47			
		2535.0	21.34	20.53	19.14			
		2505.0	21.04	20.06	19.12			
	25RB_12	2565.0	21.48	20.54	19.39			
		2535.0	21.37	20.34	19.14			
		2505.0	21.12	20.09	19.32			
	25RB_0	2565.0	21.45	20.44	19.38			
		2535.0	21.35	20.32	19.11			
		2505.0	21.09	20.06	19.26			
	50RB_0	2565.0	21.57	20.54	19.59			
		2535.0	21.32	20.31	19.40			
		2505.0	21.07	20.01	19.06			



Bottom Antenna - Reduced power level 4/6								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2562.5	21.61	21.47	20.67	22.6	22.6	22.0
		2535.0	21.56	21.57	20.90			
		2507.5	21.26	21.16	20.28			
	1RB_37	2562.5	21.52	21.25	20.93			
		2535.0	21.47	21.25	20.73			
		2507.5	21.17	21.03	20.47			
	1RB_0	2562.5	21.35	21.28	20.59			
		2535.0	21.36	21.19	20.30			
		2507.5	21.00	21.07	20.09			
	36RB_38	2562.5	21.56	20.57	19.60			
		2535.0	21.33	20.38	19.38			
		2507.5	21.12	20.33	19.28			
	36RB_19	2562.5	21.44	20.45	19.60			
		2535.0	21.31	20.26	19.36			
		2507.5	21.10	20.11	19.26			
	36RB_0	2562.5	21.39	20.34	19.59			
		2535.0	21.24	20.29	19.27			
		2507.5	21.10	20.10	19.25			
	75RB_0	2562.5	21.52	20.54	19.46			
		2535.0	21.28	20.48	19.43			
		2507.5	21.12	20.21	19.05			



Bottom Antenna - Reduced power level 4/6								
LTE Band 7			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2560.0	21.62	21.38	20.68	22.6	22.6	22.0
		2535.0	21.51	21.17	20.76			
		2510.0	21.18	20.99	20.29			
	1RB_50	2560.0	21.65	21.41	20.59			
		2535.0	21.53	21.29	20.35			
		2510.0	21.30	21.13	20.34			
	1RB_0	2560.0	21.48	21.33	20.50			
		2535.0	21.36	20.94	20.78			
		2510.0	20.89	20.89	20.19			
	50RB_50	2560.0	21.50	20.43	19.54			
		2535.0	21.42	20.48	19.40			
		2510.0	21.18	20.27	19.20			
	50RB_25	2560.0	21.49	20.62	19.57			
		2535.0	21.35	20.46	19.39			
		2510.0	21.17	20.21	19.16			
	50RB_0	2560.0	21.43	20.47	19.45			
		2535.0	21.35	20.35	19.30			
		2510.0	21.06	20.20	19.05			
	100RB_0	2560.0	21.46	20.56	19.42			
		2535.0	21.32	20.41	19.45			
		2510.0	21.08	20.19	19.24			



Top Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	715.3	23.20	21.99	21.10	24.5	23.5	22.5
		707.5	23.22	22.08	21.12			
		699.7	23.34	22.14	21.77			
	1RB_3	715.3	23.30	22.25	21.07			
		707.5	23.32	22.19	21.31			
		699.7	23.37	22.33	21.87			
	1RB_0	715.3	23.18	22.15	21.19			
		707.5	23.16	22.15	21.46			
		699.7	23.29	21.86	21.61			
	3RB_3	715.3	23.32	22.31	21.19			
		707.5	23.26	22.07	21.13			
		699.7	23.39	22.57	21.25			
	3RB_1	715.3	23.40	22.56	21.26			
		707.5	23.32	22.25	21.21			
		699.7	23.49	22.55	21.37			
	3RB_0	715.3	23.39	22.56	21.25			
		707.5	23.16	22.10	21.28			
		699.7	23.27	22.59	21.38			
	6RB_0	715.3	22.28	21.38	20.12	23.5	22.5	21.5
		707.5	22.24	21.21	20.13			
		699.7	22.29	21.22	20.19			



Top Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	714.5	23.10	22.00	21.20	24.5	23.5	22.5
		707.5	23.27	22.00	21.18			
		700.5	23.40	22.24	21.66			
	1RB_7	714.5	23.30	22.07	21.65			
		707.5	23.44	22.01	21.56			
		700.5	23.44	22.16	21.70			
	1RB_0	714.5	23.29	22.17	21.22			
		707.5	23.24	22.12	21.23			
		700.5	23.27	21.99	21.20			
	8RB_7	714.5	22.40	21.26	20.34	23.5	22.5	21.5
		707.5	22.31	21.26	20.15			
		700.5	22.36	21.34	20.34			
	8RB_4	714.5	22.31	21.26	20.24			
		707.5	22.18	21.52	20.20			
		700.5	22.33	21.30	20.31			
	8RB_0	714.5	22.33	21.18	20.26			
		707.5	22.25	21.19	20.21			
		700.5	22.32	21.41	20.30			
	15RB_0	714.5	22.32	21.45	20.23			
		707.5	22.21	21.11	20.20			
		700.5	22.31	21.33	20.29			



Top Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	713.5	22.99	22.06	20.97	24.5	23.5	22.5
		707.5	23.26	22.40	21.03			
		701.5	23.28	22.12	21.25			
	1RB_12	713.5	23.44	22.11	21.43			
		707.5	23.30	22.08	21.54			
		701.5	23.29	22.13	21.46			
	1RB_0	713.5	23.23	22.04	21.00			
		707.5	23.14	22.13	20.99			
		701.5	23.22	22.18	20.82			
	12RB_13	713.5	22.19	21.07	20.07			
		707.5	22.31	21.24	20.01			
		701.5	22.30	21.32	20.09			
	12RB_6	713.5	22.19	21.01	20.13			
		707.5	22.17	21.11	20.17			
		701.5	22.41	21.23	20.41			
	12RB_0	713.5	22.19	21.28	20.16			
		707.5	22.21	21.22	20.09			
		701.5	22.32	21.15	20.42			
	25RB_0	713.5	22.19	21.20	20.17			
		707.5	22.27	21.39	20.11			
		701.5	22.28	21.28	20.22			



Top Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	711.0	23.37	22.16	21.15	24.5	23.5	22.5
		707.5	23.38	22.17	21.65			
		704.0	23.42	22.10	21.73			
	1RB_24	711.0	23.33	22.19	21.28			
		707.5	23.32	22.07	22.01			
		704.0	23.37	22.18	22.08			
	1RB_0	711.0	23.24	22.02	21.19			
		707.5	23.26	22.06	21.20			
		704.0	23.01	22.11	21.27			
	25RB_25	711.0	22.22	21.13	20.13	23.5	22.5	21.5
		707.5	22.21	21.17	20.42			
		704.0	22.21	21.61	20.25			
	25RB_12	711.0	22.27	21.18	20.41			
		707.5	22.27	21.39	20.39			
		704.0	22.25	21.52	20.20			
	25RB_0	711.0	22.29	21.41	20.11			
		707.5	22.28	21.36	20.14			
		704.0	22.31	21.50	20.23			
	50RB_0	711.0	22.26	21.27	20.39			
		707.5	22.22	21.23	20.23			
		704.0	22.30	21.21	20.23			



Bottom Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	715.3	23.33	22.12	21.52	24.5	23.5	22.5
		707.5	23.35	22.44	21.49			
		699.7	23.48	22.45	21.98			
	1RB_3	715.3	23.40	22.42	22.05			
		707.5	23.47	22.41	22.00			
		699.7	23.33	22.08	22.03			
	1RB_0	715.3	23.37	22.24	21.82			
		707.5	23.48	22.24	21.84			
		699.7	23.23	22.09	21.85			
	3RB_3	715.3	23.48	22.41	21.43			
		707.5	23.38	22.24	21.50			
		699.7	23.54	22.40	21.57			
	3RB_1	715.3	23.48	22.69	21.65			
		707.5	23.64	22.29	21.57			
		699.7	23.52	22.44	21.69			
	3RB_0	715.3	23.42	22.61	21.54			
		707.5	23.49	22.16	21.61			
		699.7	23.50	22.41	21.57			
	6RB_0	715.3	22.39	21.21	20.37	23.5	22.5	21.5
		707.5	22.31	20.98	20.37			
		699.7	22.55	21.32	20.44			



Bottom Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	714.5	23.42	22.40	21.59	24.5	23.5	22.5
		707.5	23.40	22.18	21.58			
		700.5	23.48	22.44	21.39			
	1RB_7	714.5	23.63	22.31	21.97			
		707.5	23.59	22.29	21.88			
		700.5	23.52	22.38	21.75			
	1RB_0	714.5	23.37	22.40	21.98			
		707.5	23.40	22.38	21.46			
		700.5	23.59	22.13	21.41			
	8RB_7	714.5	22.45	21.32	20.42			
		707.5	22.42	21.41	20.21			
		700.5	22.45	21.62	20.52			
	8RB_4	714.5	22.44	21.29	20.44			
		707.5	22.37	21.43	20.46			
		700.5	22.41	21.58	20.54			
	8RB_0	714.5	22.40	21.33	20.45			
		707.5	22.40	21.35	20.40			
		700.5	22.49	21.54	20.44			
	15RB_0	714.5	22.40	21.19	20.60			
		707.5	22.37	21.38	20.59			
		700.5	22.48	21.10	20.44			



Bottom Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	713.5	23.38	22.27	21.39	24.5	23.5	22.5
		707.5	23.34	22.27	21.41			
		701.5	23.39	22.34	21.54			
	1RB_12	713.5	23.63	22.02	21.77			
		707.5	23.50	21.87	21.92			
		701.5	23.37	22.35	21.94			
	1RB_0	713.5	23.31	22.32	21.41			
		707.5	23.04	22.21	21.43			
		701.5	23.35	22.35	21.49			
	12RB_13	713.5	22.35	21.37	20.22	23.5	22.5	21.5
		707.5	22.37	21.41	20.54			
		701.5	22.45	21.23	20.58			
	12RB_6	713.5	22.41	21.42	20.44			
		707.5	22.45	21.38	20.63			
		701.5	22.58	21.44	20.64			
	12RB_0	713.5	22.25	21.26	20.37			
		707.5	22.34	21.37	20.60			
		701.5	22.40	21.43	20.67			
	25RB_0	713.5	22.33	21.53	20.51			
		707.5	22.44	21.32	20.32			
		701.5	22.44	21.66	20.52			



Bottom Antenna - Full Power								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	711.0	23.37	22.27	21.74	24.5	23.5	22.5
		707.5	23.49	22.26	21.70			
		704.0	23.40	22.12	21.48			
	1RB_24	711.0	23.53	22.25	21.46			
		707.5	23.49	22.19	22.05			
		704.0	23.48	22.09	22.17			
	1RB_0	711.0	23.40	22.18	21.31			
		707.5	23.46	22.16	21.27			
		704.0	23.33	22.11	21.50			
	25RB_25	711.0	22.51	21.57	20.54			
		707.5	22.37	21.51	20.59			
		704.0	22.48	21.49	20.65			
	25RB_12	711.0	22.45	21.40	20.71			
		707.5	22.33	21.52	20.63			
		704.0	22.41	21.52	20.62			
	25RB_0	711.0	22.44	21.49	20.32			
		707.5	22.36	21.44	20.40			
		704.0	22.46	21.58	20.64			
	50RB_0	711.0	22.45	21.47	20.45			
		707.5	22.40	21.28	20.40			
		704.0	22.43	21.45	20.51			



Top Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3	22.95	21.76	21.05	24.5	23.5	22.5
		831.5	22.82	22.18	21.33			
		814.7	23.36	22.04	21.12			
	1RB_3	848.3	23.03	21.85	21.34			
		831.5	22.97	22.33	21.60			
		814.7	23.01	22.22	21.25			
	1RB_0	848.3	22.99	21.84	21.16			
		831.5	22.93	22.20	21.39			
		814.7	22.99	21.89	21.15			
	3RB_3	848.3	23.14	21.72	21.05			
		831.5	23.11	22.03	21.08			
		814.7	23.15	22.00	21.00			
	3RB_1	848.3	23.18	21.74	21.13			
		831.5	23.13	22.07	21.12			
		814.7	23.16	22.06	20.71			
	3RB_0	848.3	23.02	21.79	21.00	23.5	22.5	21.5
		831.5	23.05	22.00	21.05			
		814.7	23.22	22.17	20.72			
	6RB_0	848.3	21.93	21.10	19.87			
		831.5	22.00	20.99	20.00			
		814.7	22.14	21.03	20.12			



Top Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5	22.76	21.92	21.33	24.5	23.5	22.5
		831.5	22.93	22.07	21.50			
		815.5	23.07	22.14	21.46			
	1RB_7	847.5	22.80	21.85	21.57			
		831.5	23.00	21.97	21.43			
		815.5	23.01	22.01	21.16			
	1RB_0	847.5	22.68	21.95	21.08			
		831.5	22.87	22.08	21.14			
		815.5	22.94	22.12	21.18			
	8RB_7	847.5	21.82	20.69	19.81			
		831.5	22.01	20.90	20.11			
		815.5	22.15	21.01	20.13			
	8RB_4	847.5	21.91	20.82	19.72			
		831.5	22.06	20.87	20.17			
		815.5	22.11	21.24	20.18			
	8RB_0	847.5	21.83	20.77	19.80			
		831.5	22.09	20.90	19.92			
		815.5	22.13	21.35	20.10			
	15RB_0	847.5	21.95	21.16	20.07			
		831.5	22.05	21.27	20.18			
		815.5	22.19	21.24	20.33			



Top Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5	22.85	21.83	21.23	24.5	23.5	22.5
		831.5	22.94	21.98	21.05			
		816.5	23.08	21.79	20.96			
	1RB_12	846.5	23.09	21.84	21.23			
		831.5	23.12	21.99	21.46			
		816.5	23.28	22.07	21.27			
	1RB_0	846.5	22.83	21.91	20.89			
		831.5	22.84	21.75	21.01			
		816.5	23.06	21.93	21.14			
	12RB_13	846.5	21.89	20.87	20.11			
		831.5	21.99	20.99	20.24			
		816.5	22.11	21.13	20.28			
	12RB_6	846.5	21.91	21.03	20.04			
		831.5	22.00	21.01	20.25			
		816.5	22.16	21.12	20.34			
	12RB_0	846.5	21.92	20.94	19.79			
		831.5	22.01	21.02	20.18			
		816.5	22.09	21.14	20.36			
	25RB_0	846.5	21.91	20.88	20.18			
		831.5	22.01	21.04	20.02			
		816.5	22.14	21.16	20.00			



Top Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0	22.93	21.93	21.33	24.5	23.5	22.5
		831.5	23.16	22.14	21.53			
		820.0	23.32	22.39	21.61			
	1RB_24	844.0	23.04	22.01	21.09			
		831.5	23.13	22.01	21.38			
		820.0	23.25	22.34	21.32			
	1RB_0	844.0	22.90	21.97	21.04			
		831.5	23.03	22.00	21.19			
		820.0	23.30	22.14	21.20			
	25RB_25	844.0	21.92	20.98	19.78			
		831.5	22.04	21.27	20.02			
		820.0	22.04	21.37	20.11			
	25RB_12	844.0	21.93	21.02	19.77			
		831.5	22.07	21.20	19.97			
		820.0	22.11	21.32	20.06			
	25RB_0	844.0	21.97	20.96	19.77			
		831.5	22.06	21.21	19.97			
		820.0	22.11	21.24	20.01			
	50RB_0	844.0	21.98	21.18	20.10			
		831.5	22.02	21.12	20.26			
		820.0	22.11	21.25	20.22			



Top Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	841.5	22.95	21.83	21.14	24.5	23.5	22.5
		831.5	23.11	21.85	21.05			
		822.5	23.18	22.01	21.15			
	1RB_37	841.5	22.96	21.86	21.05			
		831.5	23.07	21.90	21.38			
		822.5	23.09	21.92	21.39			
	1RB_0	841.5	23.01	21.86	21.12			
		831.5	23.14	21.94	21.18			
		822.5	23.23	21.82	21.16			
	36RB_38	841.5	22.03	20.97	20.18		23.5	22.5
		831.5	22.10	21.15	20.30			
		822.5	22.16	21.12	20.20			
	36RB_19	841.5	21.97	20.92	20.12			
		831.5	22.06	21.11	20.18			
		822.5	22.15	21.09	20.16			
	36RB_0	841.5	22.02	20.95	20.13			
		831.5	22.08	21.13	20.21			
		822.5	22.07	21.09	20.30			
	75RB_0	841.5	21.98	20.99	19.96			
		831.5	22.05	21.16	20.13			
		822.5	22.12	21.15	20.22			



Top Antenna - Reduced power level 1/2							
LTE Band 26			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
1.4 MHz	1RB_5	848.3	21.52	21.43	20.69	22.6	22.6
		831.5	21.61	21.81	21.47		
		814.7	21.83	21.68	21.68		
	1RB_3	848.3	21.63	21.57	20.68		
		831.5	21.68	21.69	21.54		
		814.7	21.84	21.88	21.75		
	1RB_0	848.3	21.58	21.45	20.75		
		831.5	21.66	21.63	21.43		
		814.7	21.57	21.45	21.60		
	3RB_3	848.3	21.52	21.69	21.01		
		831.5	21.83	21.85	21.15		
		814.7	21.86	21.77	21.34		
	3RB_1	848.3	21.78	21.71	21.02		
		831.5	21.85	21.70	21.16		
		814.7	21.90	21.80	20.86		
	3RB_0	848.3	21.61	21.72	20.92		
		831.5	21.78	21.69	21.20		
		814.7	21.85	21.82	20.88		
	6RB_0	848.3	21.46	20.62	20.03	22.6	22.5
		831.5	21.62	21.19	20.02		
		814.7	21.78	21.25	20.22		



Top Antenna - Reduced power level 1/2								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5	21.53	21.55	21.05	22.6	22.6	22.5
		831.5	21.70	21.50	21.58			
		815.5	21.72	21.57	21.66			
	1RB_7	847.5	21.55	21.45	21.22			
		831.5	21.87	21.77	21.38			
		815.5	21.75	21.78	21.43			
	1RB_0	847.5	21.53	21.64	21.51			
		831.5	21.75	21.72	21.21			
		815.5	21.75	21.48	21.31			
	8RB_7	847.5	21.60	20.95	19.85			
		831.5	21.71	20.98	20.23			
		815.5	21.76	21.52	20.26			
	8RB_4	847.5	21.48	21.07	19.82			
		831.5	21.66	20.93	20.24			
		815.5	21.73	21.22	20.31			
	8RB_0	847.5	21.58	21.19	19.91			
		831.5	21.62	20.98	20.05			
		815.5	21.70	21.34	20.15			
	15RB_0	847.5	21.56	21.07	20.19			
		831.5	21.67	21.19	20.08			
		815.5	21.75	21.35	20.36			



Top Antenna - Reduced power level 1/2								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5	21.49	21.21	21.27	22.6	22.6	22.5
		831.5	21.62	21.48	21.41			
		816.5	21.69	21.58	21.65			
	1RB_12	846.5	21.58	21.36	20.75			
		831.5	21.66	21.77	21.27			
		816.5	21.51	21.58	21.42			
	1RB_0	846.5	21.36	21.41	20.63			
		831.5	21.48	21.51	20.55			
		816.5	21.51	21.47	20.74			
	12RB_13	846.5	21.59	20.78	20.10			
		831.5	21.64	21.04	20.09			
		816.5	21.67	21.29	20.42			
	12RB_6	846.5	21.60	20.95	20.20			
		831.5	21.65	21.05	20.21			
		816.5	21.81	21.32	20.47			
	12RB_0	846.5	21.63	20.84	20.16			
		831.5	21.57	21.05	20.02			
		816.5	21.75	21.25	20.40			
	25RB_0	846.5	21.51	20.90	19.83			
		831.5	21.67	21.25	19.96			
		816.5	21.72	21.22	20.33			



Top Antenna - Reduced power level 1/2								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0	21.72	21.46	21.06	22.6	22.6	22.5
		831.5	21.57	21.42	21.18			
		820.0	21.90	21.54	21.53			
	1RB_24	844.0	21.66	21.57	21.29			
		831.5	21.72	21.80	21.28			
		820.0	21.82	21.49	21.39			
	1RB_0	844.0	21.54	21.54	21.18			
		831.5	21.75	21.90	21.22			
		820.0	21.78	21.59	21.16			
	25RB_25	844.0	21.57	21.25	20.33			
		831.5	21.62	21.20	20.08			
		820.0	21.72	21.11	20.18			
	25RB_12	844.0	21.57	21.19	20.20			
		831.5	21.65	21.22	20.16			
		820.0	21.77	21.35	20.46			
	25RB_0	844.0	21.55	21.15	20.13			
		831.5	21.75	21.24	20.05			
		820.0	21.78	21.35	20.46			
	50RB_0	844.0	21.63	20.93	20.14			
		831.5	21.68	21.28	20.29			
		820.0	21.71	21.19	20.30			



Top Antenna - Reduced power level 1/2								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	841.5	21.53	21.79	21.37	22.6	22.6	22.5
		831.5	21.46	21.42	21.53			
		822.5	21.69	21.40	21.34			
	1RB_37	841.5	21.69	21.73	21.32			
		831.5	21.55	21.45	21.48			
		822.5	21.82	21.56	21.58			
	1RB_0	841.5	21.67	21.82	21.33			
		831.5	21.52	21.51	21.48			
		822.5	21.67	21.48	21.37			
	36RB_38	841.5	21.60	21.17	20.13			
		831.5	21.72	21.12	20.22			
		822.5	21.73	21.20	20.30			
	36RB_19	841.5	21.57	21.11	20.21			
		831.5	21.71	21.18	20.20			
		822.5	21.71	21.17	20.36			
	36RB_0	841.5	21.58	21.03	20.14			
		831.5	21.71	21.09	20.13			
		822.5	21.72	21.18	20.28			
	75RB_0	841.5	21.56	21.12	20.10			
		831.5	21.71	21.17	20.04			
		822.5	21.77	21.25	20.23			



Bottom Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3	22.99	21.84	21.55	24.5	23.5	22.5
		831.5	23.13	21.92	21.52			
		814.7	23.23	22.13	21.53			
	1RB_3	848.3	23.09	21.98	21.18			
		831.5	23.20	22.11	21.37			
		814.7	23.36	22.27	21.75			
	1RB_0	848.3	23.02	21.82	21.49			
		831.5	23.07	21.94	21.17			
		814.7	23.19	21.83	21.59			
	3RB_3	848.3	23.05	22.04	21.05			
		831.5	23.15	22.11	21.15			
		814.7	23.38	22.28	20.94			
	3RB_1	848.3	23.10	22.09	21.18			
		831.5	23.26	22.17	21.23			
		814.7	23.31	22.31	21.41			
	3RB_0	848.3	22.96	22.07	20.79	23.5	22.5	21.5
		831.5	23.19	22.19	21.25			
		814.7	23.44	22.37	21.25			
	6RB_0	848.3	22.05	20.79	20.10			
		831.5	22.13	21.04	19.91			
		814.7	22.25	21.22	20.29			



Bottom Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5	23.16	21.95	21.43	24.5	23.5	22.5
		831.5	23.06	22.18	21.24			
		815.5	23.22	22.10	21.73			
	1RB_7	847.5	23.36	21.93	20.85			
		831.5	23.13	22.23	21.37			
		815.5	23.19	22.15	21.15			
	1RB_0	847.5	23.18	22.02	20.70			
		831.5	23.18	21.91	21.28			
		815.5	23.42	22.08	21.02			
	8RB_7	847.5	22.06	21.04	20.16			
		831.5	22.22	21.22	20.28			
		815.5	22.31	21.14	20.37			
	8RB_4	847.5	22.03	21.07	20.13			
		831.5	22.18	21.18	20.35			
		815.5	22.25	21.22	20.35			
	8RB_0	847.5	22.08	21.09	20.29			
		831.5	22.13	21.23	20.31			
		815.5	22.35	21.07	20.30			
	15RB_0	847.5	22.02	21.06	20.05			
		831.5	22.18	20.96	20.46			
		815.5	22.34	21.36	20.45			

Bottom Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5	23.06	21.88	21.02	24.5	23.5	22.5
		831.5	23.04	21.98	21.49			
		816.5	23.25	21.97	21.17			
	1RB_12	846.5	23.11	21.89	21.51			
		831.5	23.09	22.21	21.57			
		816.5	23.26	22.35	21.68			
	1RB_0	846.5	22.96	21.99	21.11			
		831.5	22.90	22.04	21.06			
		816.5	23.10	22.17	21.22			
	12RB_13	846.5	21.91	21.06	19.98			
		831.5	22.12	21.05	20.45			
		816.5	22.19	21.25	20.46			
	12RB_6	846.5	21.97	21.12	19.94			
		831.5	22.10	21.09	20.24			
		816.5	22.24	21.36	20.57			
	12RB_0	846.5	21.96	21.05	19.92			
		831.5	22.06	21.00	20.15			
		816.5	22.20	21.33	20.52			
	25RB_0	846.5	22.02	21.09	20.06			
		831.5	22.16	21.09	20.42			
		816.5	22.24	21.46	20.13			



Bottom Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0	23.28	21.97	21.23	24.5	23.5	22.5
		831.5	23.37	22.13	21.08			
		820.0	23.26	22.17	21.82			
	1RB_24	844.0	23.15	21.99	21.31			
		831.5	23.29	22.15	21.40			
		820.0	23.33	22.13	21.53			
	1RB_0	844.0	23.23	22.06	21.30			
		831.5	23.24	22.20	21.33			
		820.0	23.14	22.22	21.46			
	25RB_25	844.0	22.08	21.20	20.21			
		831.5	22.12	21.47	20.46			
		820.0	22.25	21.30	20.33			
	25RB_12	844.0	22.04	21.27	20.01			
		831.5	22.20	21.42	20.18			
		820.0	22.21	21.26	20.65			
	25RB_0	844.0	22.11	21.22	20.04			
		831.5	22.21	21.42	20.19			
		820.0	22.23	21.28	20.59			
	50RB_0	844.0	22.03	21.07	20.20			
		831.5	22.11	21.15	20.29			
		820.0	22.25	21.31	20.42			



Bottom Antenna - Full Power								
LTE Band 26			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	841.5	23.24	21.90	21.32	24.5	23.5	22.5
		831.5	23.20	21.94	21.36			
		822.5	23.28	22.06	21.28			
	1RB_37	841.5	23.20	21.97	21.29			
		831.5	23.12	21.94	21.56			
		822.5	23.25	22.03	21.58			
	1RB_0	841.5	23.23	21.98	21.32			
		831.5	23.08	22.00	21.37			
		822.5	23.28	22.18	21.39			
	36RB_38	841.5	22.16	21.06	20.38	23.5	22.5	21.5
		831.5	22.19	21.23	20.33			
		822.5	22.25	21.31	20.43			
	36RB_19	841.5	22.13	21.07	20.37			
		831.5	22.19	21.23	20.35			
		822.5	22.20	21.34	20.44			
	36RB_0	841.5	22.14	20.98	20.37			
		831.5	22.18	21.23	20.38			
		822.5	22.18	21.33	20.47			
	75RB_0	841.5	22.05	21.07	20.33			
		831.5	22.15	21.18	20.22			
		822.5	22.27	21.22	20.32			



Top Antenna - Reduced power level 1/2								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2617.5	18.91	18.69	17.91	19.7	19.7	19.7
		2595.0	18.57	18.60	18.04			
		2572.5	18.49	17.96	17.90			
	1RB_12	2617.5	18.89	18.80	18.37			
		2595.0	18.74	18.59	18.27			
		2572.5	18.67	18.42	18.02			
	1RB_0	2617.5	18.70	18.71	18.25			
		2595.0	18.66	18.48	18.00			
		2572.5	18.53	18.27	18.14			
	12RB_13	2617.5	18.82	18.63	18.71	19.7	19.7	19.7
		2595.0	18.76	18.71	18.55			
		2572.5	18.65	18.40	18.44			
	12RB_6	2617.5	18.96	18.81	18.68			
		2595.0	18.64	18.79	18.61			
		2572.5	18.65	18.43	18.55			
	12RB_0	2617.5	18.74	18.70	18.68			
		2595.0	18.70	18.67	18.59			
		2572.5	18.56	18.35	18.46			
	25RB_0	2617.5	18.77	18.77	18.87			
		2595.0	18.75	18.94	18.86			
		2572.5	18.68	18.77	18.69			



Top Antenna - Reduced power level 1/2								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2615.0	18.94	18.34	18.22	19.7	19.7	19.7
		2595.0	18.84	18.19	17.93			
		2575.0	18.77	18.65	17.92			
	1RB_24	2615.0	18.96	18.41	18.43			
		2595.0	19.06	18.44	18.26			
		2575.0	18.74	18.60	18.19			
	1RB_0	2615.0	18.77	18.69	18.20			
		2595.0	18.74	18.30	17.75			
		2575.0	18.78	18.05	17.90			
	25RB_25	2615.0	18.83	19.00	18.75		19.7	19.7
		2595.0	18.74	19.04	18.75			
		2575.0	18.69	18.70	18.57			
	25RB_12	2615.0	18.90	19.00	18.74			
		2595.0	18.72	19.01	18.83			
		2575.0	18.70	18.90	18.77			
	25RB_0	2615.0	18.85	19.03	18.76			
		2595.0	18.65	19.03	18.75			
		2575.0	18.63	18.90	18.78			
	50RB_0	2615.0	18.89	18.69	18.77			
		2595.0	18.80	18.81	18.68			
		2575.0	18.71	18.62	18.50			



Top Antenna - Reduced power level 1/2								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2612.5	18.87	18.26	18.25	19.7	19.7	19.7
		2595.0	18.83	18.69	18.14			
		2577.5	18.63	18.64	17.98			
	1RB_37	2612.5	18.74	18.84	18.50			
		2595.0	18.75	18.61	18.46			
		2577.5	18.54	18.48	17.97			
	1RB_0	2612.5	18.83	18.55	18.21			
		2595.0	18.65	18.11	18.06			
		2577.5	18.57	18.03	17.91			
	36RB_38	2612.5	18.91	18.75	18.79	19.7	19.7	19.7
		2595.0	18.85	18.70	18.77			
		2577.5	18.65	18.48	18.53			
	36RB_19	2612.5	18.90	18.92	18.74			
		2595.0	18.84	18.59	18.75			
		2577.5	18.74	18.58	18.56			
	36RB_0	2612.5	18.83	18.85	18.72			
		2595.0	18.80	18.61	18.70			
		2577.5	18.68	18.41	18.50			
	75RB_0	2612.5	18.91	18.71	18.72			
		2595.0	18.77	18.76	18.68			
		2577.5	18.71	18.52	18.58			



Top Antenna - Reduced power level 1/2								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2610.0	18.77	18.72	18.10	19.7	19.7	19.7
		2595.0	18.75	18.66	18.02			
		2580.0	18.61	18.65	17.98			
	1RB_50	2610.0	18.88	18.73	18.59			
		2595.0	18.81	18.83	18.24			
		2580.0	18.63	18.17	18.61			
	1RB_0	2610.0	18.86	18.50	18.07			
		2595.0	18.66	18.02	17.92			
		2580.0	18.31	17.94	17.91			
	50RB_50	2610.0	18.88	18.94	18.76			
		2595.0	18.68	18.76	18.77			
		2580.0	18.76	18.83	18.67			
	50RB_25	2610.0	18.92	18.91	18.91			
		2595.0	18.83	18.73	18.75			
		2580.0	18.77	18.74	18.59			
	50RB_0	2610.0	18.73	18.83	18.93			
		2595.0	18.66	18.76	18.70			
		2580.0	18.67	18.68	18.63			
	100RB_0	2610.0	18.84	18.75	18.75			
		2595.0	18.67	18.77	18.80			
		2580.0	18.72	18.61	18.75			



Top Antenna - Reduced power level 3/5								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2617.5	21.36	21.55	20.60	23.0	23.0	22.0
		2595.0	21.36	21.43	20.48			
		2572.5	21.14	21.32	20.35			
	1RB_12	2617.5	21.80	21.50	20.72			
		2595.0	21.70	21.36	20.44			
		2572.5	21.32	21.27	20.31			
	1RB_0	2617.5	21.47	21.48	20.57			
		2595.0	21.37	21.41	20.48			
		2572.5	21.16	21.25	20.20			
	12RB_13	2617.5	21.58	20.71	19.58			
		2595.0	21.49	20.44	19.47			
		2572.5	21.42	20.26	19.46			
	12RB_6	2617.5	21.64	20.72	19.57			
		2595.0	21.48	20.44	19.49			
		2572.5	21.35	20.21	19.46			
	12RB_0	2617.5	21.55	20.70	19.59			
		2595.0	21.44	20.35	19.44			
		2572.5	21.34	20.23	19.57			
	25RB_0	2617.5	21.58	20.50	19.74			
		2595.0	21.48	20.59	19.41			
		2572.5	21.25	20.35	19.26			



Top Antenna - Reduced power level 3/5								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2615.0	21.60	21.57	20.36	23.0	23.0	22.0
		2595.0	21.41	21.46	20.20			
		2575.0	21.31	21.63	20.23			
	1RB_24	2615.0	21.66	21.50	20.17			
		2595.0	21.81	21.52	20.07			
		2575.0	21.63	21.34	20.80			
	1RB_0	2615.0	21.51	21.66	20.73			
		2595.0	21.55	21.51	20.46			
		2575.0	21.24	21.40	20.32			
	25RB_25	2615.0	21.52	20.69	19.83			
		2595.0	21.46	20.77	19.46			
		2575.0	21.36	20.36	19.48			
	25RB_12	2615.0	21.59	20.71	19.76			
		2595.0	21.46	20.46	19.41			
		2575.0	21.40	20.50	19.43			
	25RB_0	2615.0	21.54	20.73	19.77			
		2595.0	21.48	20.48	19.41			
		2575.0	21.39	20.50	19.43			
	50RB_0	2615.0	21.57	20.67	19.77			
		2595.0	21.51	20.53	19.62			
		2575.0	21.37	20.39	19.48			



Top Antenna - Reduced power level 3/5								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2612.5	21.60	21.06	20.07	23.0	23.0	22.0
		2595.0	21.46	21.53	20.05			
		2577.5	21.32	21.49	20.52			
	1RB_37	2612.5	21.51	21.53	20.31			
		2595.0	21.28	21.37	20.57			
		2577.5	21.42	21.33	20.48			
	1RB_0	2612.5	21.45	21.19	20.06			
		2595.0	21.43	21.30	20.04			
		2577.5	21.40	21.18	20.39			
	36RB_38	2612.5	21.48	20.60	19.55			
		2595.0	21.54	20.60	19.43			
		2577.5	21.37	20.54	19.45			
	36RB_19	2612.5	21.48	20.50	19.64			
		2595.0	21.47	20.57	19.44			
		2577.5	21.42	20.46	19.41			
	36RB_0	2612.5	21.49	20.43	19.56			
		2595.0	21.50	20.54	19.46			
		2577.5	21.28	20.26	19.29			
	75RB_0	2612.5	21.49	20.68	19.67			
		2595.0	21.48	20.59	19.56			
		2577.5	21.36	20.36	19.35			



Top Antenna - Reduced power level 3/5								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2610.0	21.47	21.54	20.01	23.0	23.0	22.0
		2595.0	21.50	21.49	20.31			
		2580.0	21.37	21.37	20.57			
	1RB_50	2610.0	21.78	21.21	20.09			
		2595.0	21.55	21.05	20.65			
		2580.0	21.71	21.38	20.04			
	1RB_0	2610.0	21.47	21.05	20.06			
		2595.0	21.33	21.46	20.20			
		2580.0	21.20	21.63	20.23			
	50RB_50	2610.0	21.65	20.82	19.71			
		2595.0	21.57	20.57	19.57			
		2580.0	21.50	20.50	19.58			
	50RB_25	2610.0	21.49	20.71	19.65			
		2595.0	21.55	20.55	19.54			
		2580.0	21.42	20.53	19.51			
	50RB_0	2610.0	21.52	20.63	19.67			
		2595.0	21.49	20.61	19.58			
		2580.0	21.32	20.45	19.54			
	100RB_0	2610.0	21.63	20.62	19.60			
		2595.0	21.48	20.48	19.74			
		2580.0	21.36	20.39	19.67			



Bottom Antenna - Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2617.5	22.63	21.03	20.33	24.0	23.0	22.0
		2595.0	22.56	21.29	20.24			
		2572.5	22.38	21.15	20.06			
	1RB_12	2617.5	23.03	21.60	20.63			
		2595.0	22.71	21.53	20.14			
		2572.5	22.71	21.39	20.18			
	1RB_0	2617.5	22.59	21.43	20.10			
		2595.0	22.46	21.02	20.42			
		2572.5	22.31	21.15	20.11			
	12RB_13	2617.5	21.63	20.65	19.64	23.0	22.0	21.0
		2595.0	21.57	20.54	19.46			
		2572.5	21.42	20.58	19.36			
	12RB_6	2617.5	21.75	20.61	19.66			
		2595.0	21.57	20.55	19.55			
		2572.5	21.45	20.53	19.44			
	12RB_0	2617.5	21.62	20.59	19.63			
		2595.0	21.53	20.61	19.51			
		2572.5	21.45	20.53	19.33			
	25RB_0	2617.5	21.64	20.65	19.82			
		2595.0	21.57	20.59	19.58			
		2572.5	21.46	20.48	19.26			



Bottom Antenna - Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2615.0	22.78	21.15	20.41	24.0	23.0	22.0
		2595.0	22.70	21.65	20.26			
		2575.0	22.65	21.11	20.15			
	1RB_24	2615.0	22.76	21.70	20.54			
		2595.0	23.01	21.55	20.43			
		2575.0	22.77	21.47	20.33			
	1RB_0	2615.0	22.75	21.09	20.41			
		2595.0	22.79	21.29	20.30			
		2575.0	22.61	21.20	20.10			
	25RB_25	2615.0	21.69	20.69	19.61			
		2595.0	21.61	20.54	19.44			
		2575.0	21.46	20.48	19.48			
	25RB_12	2615.0	21.69	21.01	19.73			
		2595.0	21.64	20.56	19.47			
		2575.0	21.49	20.42	19.41			
	25RB_0	2615.0	21.74	20.96	19.77			
		2595.0	21.55	20.57	19.47			
		2575.0	21.48	20.40	19.51			
	50RB_0	2615.0	21.68	20.61	19.75			
		2595.0	21.59	20.82	19.69			
		2575.0	21.47	20.61	19.57			



Bottom Antenna - Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2612.5	22.74	21.11	20.47	24.0	23.0	22.0
		2595.0	22.72	21.49	20.26			
		2577.5	22.59	21.56	20.24			
	1RB_37	2612.5	22.76	21.62	20.34			
		2595.0	22.56	21.62	20.54			
		2577.5	22.46	21.45	20.15			
	1RB_0	2612.5	22.67	21.17	20.44			
		2595.0	22.70	21.05	20.26			
		2577.5	22.56	21.04	20.15			
	36RB_38	2612.5	21.72	20.69	19.68			
		2595.0	21.70	20.56	19.56			
		2577.5	21.58	20.56	19.44			
	36RB_19	2612.5	21.75	20.61	19.65			
		2595.0	21.63	20.59	19.47			
		2577.5	21.51	20.58	19.37			
	36RB_0	2612.5	21.62	20.55	19.84			
		2595.0	21.56	20.59	19.52			
		2577.5	21.51	20.46	19.37			
	75RB_0	2612.5	21.68	20.78	19.74			
		2595.0	21.64	20.65	19.62			
		2577.5	21.56	20.46	19.44			



Bottom Antenna - Full Power								
LTE Band 38			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2610.0	22.62	21.67	20.23	24.0	23.0	22.0
		2595.0	22.64	21.61	20.16			
		2580.0	22.52	21.50	20.10			
	1RB_50	2610.0	22.69	21.16	20.36			
		2595.0	22.65	21.14	20.27			
		2580.0	22.89	21.08	20.20			
	1RB_0	2610.0	22.62	21.06	20.25			
		2595.0	22.36	21.09	20.24			
		2580.0	22.47	21.08	20.08			
	50RB_50	2610.0	21.67	20.78	19.65			
		2595.0	21.68	20.72	19.59			
		2580.0	21.78	20.73	19.57			
	50RB_25	2610.0	21.65	20.58	19.67			
		2595.0	21.57	20.71	19.77			
		2580.0	21.69	20.73	19.49			
	50RB_0	2610.0	21.62	20.64	19.59			
		2595.0	21.60	20.63	19.70			
		2580.0	21.69	20.55	19.48			
	100RB_0	2610.0	21.70	20.72	19.79			
		2595.0	21.61	20.63	19.48			
		2580.0	21.75	20.69	19.59			



Top Antenna - Reduced power level 1/2								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2652.5	18.04	17.56	17.41	18.9	18.9	18.9
		2595.0	17.89	17.74	17.26			
		2537.5	17.46	17.49	17.19			
	1RB_12	2652.5	18.08	17.63	17.60			
		2595.0	17.99	17.89	17.32			
		2537.5	17.61	17.47	17.01			
	1RB_0	2652.5	18.07	17.54	17.41			
		2595.0	17.76	17.37	17.23			
		2537.5	17.49	17.24	17.14			
	12RB_13	2652.5	18.10	17.95	18.01			
		2595.0	17.96	17.86	17.77			
		2537.5	17.54	17.52	17.39			
	12RB_6	2652.5	18.09	18.12	18.10			
		2595.0	17.91	17.89	17.87			
		2537.5	17.49	17.46	17.47			
	12RB_0	2652.5	18.09	18.09	18.03			
		2595.0	17.90	17.84	17.82			
		2537.5	17.46	17.48	17.41			
	25RB_0	2652.5	18.08	18.07	18.22			
		2595.0	17.94	18.13	17.71			
		2537.5	17.62	17.83	17.61			



Top Antenna - Reduced power level 1/2								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2650.0	18.19	17.56	17.49	18.9	18.9	18.9
		2595.0	18.02	17.46	17.29			
		2540.0	17.66	17.63	17.19			
	1RB_24	2650.0	18.30	18.14	17.68			
		2595.0	18.18	17.63	17.43			
		2540.0	17.73	17.60	17.07			
	1RB_0	2650.0	18.05	17.59	17.52			
		2595.0	17.99	17.46	17.31			
		2540.0	17.55	17.52	16.97			
	25RB_25	2650.0	18.07	17.95	18.09		18.9	18.9
		2595.0	18.07	17.83	17.97			
		2540.0	17.63	17.82	17.65			
	25RB_12	2650.0	18.12	18.09	18.36			
		2595.0	18.03	18.02	17.96			
		2540.0	17.67	17.57	17.57			
	25RB_0	2650.0	18.12	18.14	18.35			
		2595.0	17.97	17.83	17.92			
		2540.0	17.65	17.47	17.61			
	50RB_0	2650.0	18.09	18.14	18.17			
		2595.0	17.97	18.00	17.97			
		2540.0	17.55	17.61	17.61			



Top Antenna - Reduced power level 1/2								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2647.5	18.21	17.66	17.57	18.9	18.9	18.9
		2595.0	18.09	17.43	17.35			
		2542.5	17.64	17.09	17.05			
	1RB_37	2647.5	17.99	18.08	17.46			
		2595.0	17.92	17.91	17.43			
		2542.5	17.55	17.43	16.92			
	1RB_0	2647.5	18.15	17.65	17.53			
		2595.0	17.83	17.34	17.31			
		2542.5	17.52	16.99	17.22			
	36RB_38	2647.5	18.09	18.06	18.17		18.9	18.9
		2595.0	17.91	17.95	18.01			
		2542.5	17.63	17.67	17.54			
	36RB_19	2647.5	18.14	17.95	18.22			
		2595.0	17.90	17.95	18.03			
		2542.5	17.64	17.58	17.57			
	36RB_0	2647.5	18.11	17.99	18.25			
		2595.0	17.90	17.87	17.82			
		2542.5	17.59	17.47	17.68			
	75RB_0	2647.5	18.15	18.08	18.11			
		2595.0	17.93	17.91	17.94			
		2542.5	17.75	17.51	17.58			



Top Antenna - Reduced power level 1/2								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2645.0	18.13	17.61	17.44	18.9	18.9	18.9
		2595.0	18.03	17.93	17.28			
		2545.0	17.57	17.56	17.05			
	1RB_50	2645.0	18.26	18.07	17.96			
		2595.0	18.19	17.98	17.36			
		2545.0	17.96	17.64	17.11			
	1RB_0	2645.0	18.13	17.60	17.49			
		2595.0	17.83	17.32	17.30			
		2545.0	17.62	17.00	17.00			
	50RB_50	2645.0	18.16	18.05	18.14			
		2595.0	17.99	18.02	18.03			
		2545.0	17.66	17.53	17.70			
	50RB_25	2645.0	18.13	18.01	18.10			
		2595.0	17.98	17.99	17.92			
		2545.0	17.63	17.57	17.73			
	50RB_0	2645.0	18.12	17.98	18.20			
		2595.0	17.94	17.81	17.86			
		2545.0	17.61	17.51	17.55			
	100RB_0	2645.0	18.14	18.22	18.22			
		2595.0	17.92	18.01	18.04			
		2545.0	17.67	17.56	17.73			



Top Antenna - Reduced power level 3/5								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2652.5	21.41	20.84	20.22	22.7	22.7	22.0
		2595.0	21.27	21.28	20.05			
		2537.5	20.86	20.96	20.13			
	1RB_12	2652.5	21.50	20.98	20.79			
		2595.0	21.34	21.29	20.62			
		2537.5	20.95	20.92	20.25			
	1RB_0	2652.5	21.34	20.86	20.20			
		2595.0	21.17	20.72	20.08			
		2537.5	20.83	20.78	20.11			
	12RB_13	2652.5	21.56	20.85	19.81			
		2595.0	21.42	20.50	19.55			
		2537.5	20.96	20.07	19.55			
	12RB_6	2652.5	21.63	20.95	19.81			
		2595.0	21.40	20.56	19.59			
		2537.5	21.02	20.37	19.42			
	12RB_0	2652.5	21.52	20.89	19.70			
		2595.0	21.37	20.60	19.50			
		2537.5	20.98	20.33	19.29			
	25RB_0	2652.5	21.53	20.67	19.80			
		2595.0	21.41	20.96	19.76			
		2537.5	20.97	20.55	19.24			



Top Antenna - Reduced power level 3/5							
LTE Band 41			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
10 MHz	1RB_49	2650.0	21.54	21.23	20.23	22.7	22.0
		2595.0	21.43	21.53	20.07		
		2540.0	21.05	20.86	20.12		
	1RB_24	2650.0	21.64	21.33	21.22		
		2595.0	21.56	20.99	20.24		
		2540.0	21.27	20.81	20.06		
	1RB_0	2650.0	21.45	20.93	20.25		
		2595.0	21.23	20.71	20.11		
		2540.0	20.99	20.80	20.14		
	25RB_25	2650.0	21.53	20.86	19.67	22.7	22.0
		2595.0	21.42	20.86	19.67		
		2540.0	21.04	20.32	19.46		
	25RB_12	2650.0	21.56	21.12	19.72		
		2595.0	21.39	20.59	19.66		
		2540.0	21.01	20.28	19.40		
	25RB_0	2650.0	21.60	21.11	19.72		
		2595.0	21.43	20.55	19.70		
		2540.0	21.02	20.21	19.32		
	50RB_0	2650.0	21.65	20.79	19.88		
		2595.0	21.37	20.75	19.70		
		2540.0	21.08	20.47	19.36		



Top Antenna - Reduced power level 3/5								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2647.5	21.61	21.11	20.34	22.7	22.7	22.0
		2595.0	21.42	21.39	20.74			
		2542.5	21.09	21.17	20.18			
	1RB_37	2647.5	21.49	21.35	20.80			
		2595.0	21.32	21.37	20.61			
		2542.5	20.99	20.98	20.30			
	1RB_0	2647.5	21.50	21.46	20.35			
		2595.0	21.33	21.22	20.15			
		2542.5	21.13	20.88	20.11			
	36RB_38	2647.5	21.66	20.73	19.74			
		2595.0	21.37	20.75	19.65			
		2542.5	20.98	20.29	19.21			
	36RB_19	2647.5	21.61	20.79	19.81			
		2595.0	21.39	20.68	19.72			
		2542.5	21.06	20.20	19.22			
	36RB_0	2647.5	21.56	20.72	19.71			
		2595.0	21.41	20.68	19.49			
		2542.5	20.88	20.15	19.19			
	75RB_0	2647.5	21.60	20.84	19.90			
		2595.0	21.37	20.83	19.59			
		2542.5	21.07	20.53	19.23			



Top Antenna - Reduced power level 3/5								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2645.0	21.45	20.90	20.34	22.7	22.7	22.0
		2595.0	21.30	21.21	20.14			
		2545.0	21.03	20.88	20.14			
	1RB_50	2645.0	21.80	21.39	21.05			
		2595.0	21.35	21.16	20.20			
		2545.0	21.04	20.99	20.09			
	1RB_0	2645.0	21.39	21.03	20.30			
		2595.0	21.32	20.80	20.04			
		2545.0	20.97	20.80	20.16			
	50RB_50	2645.0	21.53	20.87	19.89			
		2595.0	21.39	20.72	19.56			
		2545.0	21.08	20.55	19.38			
	50RB_25	2645.0	21.65	20.77	19.96			
		2595.0	21.41	20.72	19.66			
		2545.0	21.09	20.51	19.35			
	50RB_0	2645.0	21.62	20.73	19.95			
		2595.0	21.33	20.63	19.63			
		2545.0	21.03	20.41	19.35			
	100RB_0	2645.0	21.61	20.86	19.99			
		2595.0	21.29	20.64	19.71			
		2545.0	21.12	20.18	19.52			



Bottom Antenna - Full Power								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	2652.5	22.87	21.37	20.23	24.0	23.0	22.0
		2595.0	22.73	21.70	20.08			
		2537.5	22.20	21.32	20.13			
	1RB_12	2652.5	22.86	21.84	20.84			
		2595.0	22.70	21.64	20.16			
		2537.5	22.35	21.32	20.18			
	1RB_0	2652.5	22.70	21.23	20.23			
		2595.0	22.51	21.05	20.03			
		2537.5	22.21	21.15	20.23			
	12RB_13	2652.5	21.87	20.95	19.83			
		2595.0	21.80	20.69	19.69			
		2537.5	21.26	20.29	19.22			
	12RB_6	2652.5	21.94	21.06	19.91			
		2595.0	21.81	20.80	19.69			
		2537.5	21.35	20.31	19.25			
	12RB_0	2652.5	21.89	21.00	19.83			
		2595.0	21.77	20.76	19.61			
		2537.5	21.41	20.39	19.21			
	25RB_0	2652.5	21.94	21.18	19.72			
		2595.0	21.72	20.83	19.76			
		2537.5	21.32	20.67	19.28			



Bottom Antenna - Full Power								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	2650.0	22.93	21.27	20.26	24.0	23.0	22.0
		2595.0	22.71	21.79	20.09			
		2540.0	22.48	21.37	20.19			
	1RB_24	2650.0	22.99	21.52	20.54			
		2595.0	22.81	21.73	20.24			
		2540.0	22.50	21.35	20.28			
	1RB_0	2650.0	22.89	21.06	20.36			
		2595.0	22.75	21.74	20.15			
		2540.0	22.21	21.06	20.12			
	25RB_25	2650.0	21.92	21.16	19.70		23.0	22.0
		2595.0	21.79	20.73	19.97			
		2540.0	21.45	20.45	19.28			
	25RB_12	2650.0	22.05	21.20	19.86			
		2595.0	21.80	20.71	19.97			
		2540.0	21.41	20.41	19.23			
	25RB_0	2650.0	21.93	20.96	19.94			
		2595.0	21.84	20.67	19.90			
		2540.0	21.47	20.42	19.15			
	50RB_0	2650.0	21.93	20.98	19.93			
		2595.0	21.77	20.80	19.79			
		2540.0	21.40	20.42	19.37			



Bottom Antenna - Full Power								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	2647.5	23.02	21.48	20.34	24.0	23.0	22.0
		2595.0	22.78	21.76	20.15			
		2542.5	22.50	21.25	20.11			
	1RB_37	2647.5	22.90	21.35	20.34			
		2595.0	22.67	21.76	20.06			
		2542.5	22.39	21.18	20.09			
	1RB_0	2647.5	22.92	21.15	20.40			
		2595.0	22.73	21.61	20.11			
		2542.5	22.38	21.24	20.07			
	36RB_38	2647.5	22.01	20.92	19.96	23.0	22.0	21.0
		2595.0	21.84	20.72	19.74			
		2542.5	21.43	20.39	19.37			
	36RB_19	2647.5	22.06	20.83	19.91			
		2595.0	21.79	20.69	19.69			
		2542.5	21.46	20.32	19.32			
	36RB_0	2647.5	21.98	20.84	20.03			
		2595.0	21.71	20.65	19.65			
		2542.5	21.42	20.35	19.30			
	75RB_0	2647.5	21.96	21.00	19.81			
		2595.0	21.79	20.83	19.68			
		2542.5	21.61	20.36	19.41			



Bottom Antenna - Full Power								
LTE Band 41			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	2645.0	22.84	21.33	20.27	24.0	23.0	22.0
		2595.0	22.72	21.24	20.24			
		2545.0	22.33	21.45	20.18			
	1RB_50	2645.0	22.90	21.66	20.49			
		2595.0	23.08	21.80	20.18			
		2545.0	22.36	21.42	20.04			
	1RB_0	2645.0	22.88	21.39	20.36			
		2595.0	22.70	21.20	20.10			
		2545.0	22.32	21.25	20.13			
	50RB_50	2645.0	21.98	21.02	19.83			
		2595.0	21.74	20.69	19.77			
		2545.0	21.35	20.37	19.41			
	50RB_25	2645.0	21.92	20.98	19.97			
		2595.0	21.84	20.68	19.79			
		2545.0	21.47	20.29	19.35			
	50RB_0	2645.0	21.99	21.01	19.97			
		2595.0	21.87	20.61	19.71			
		2545.0	21.53	20.31	19.30			
	100RB_0	2645.0	22.02	20.96	20.00			
		2595.0	21.92	20.69	19.90			
		2545.0	21.52	20.42	19.31			



Top Antenna - Reduced power level 1/2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	16.51	16.60	16.74	17.5	17.5	17.5
		1745.0	16.45	16.15	16.39			
		1710.7	16.07	16.40	16.54			
	1RB_3	1779.3	16.58	16.73	17.02			
		1745.0	16.53	16.52	16.56			
		1710.7	16.22	16.57	16.38			
	1RB_0	1779.3	16.47	16.62	16.86			
		1745.0	16.43	16.41	16.86			
		1710.7	16.21	16.40	16.49			
	3RB_3	1779.3	16.50	16.53	16.52			
		1745.0	16.49	16.70	16.55			
		1710.7	16.49	16.73	16.44			
	3RB_1	1779.3	16.52	16.57	16.58			
		1745.0	16.64	16.55	16.60			
		1710.7	16.52	16.83	16.48			
	3RB_0	1779.3	16.49	16.52	16.53			
		1745.0	16.49	16.50	16.55			
		1710.7	16.46	16.77	16.52			
	6RB_0	1779.3	16.60	16.49	16.58	17.5	17.5	17.5
		1745.0	16.48	16.19	16.38			
		1710.7	16.37	16.38	16.39			



Top Antenna - Reduced power level 1/2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	16.43	16.29	16.68	17.5	17.5	17.5
		1745.0	16.56	16.72	16.85			
		1711.5	16.41	16.35	16.59			
	1RB_7	1778.5	16.35	16.08	16.62			
		1745.0	16.55	16.00	16.82			
		1711.5	16.51	16.09	16.63			
	1RB_0	1778.5	16.49	16.20	16.43			
		1745.0	16.49	15.76	16.44			
		1711.5	16.46	16.22	16.73			
	8RB_7	1778.5	16.61	16.45	16.28			
		1745.0	16.62	16.66	16.35			
		1711.5	16.45	16.46	16.36			
	8RB_4	1778.5	16.55	16.45	16.33			
		1745.0	16.46	16.54	16.41			
		1711.5	16.38	16.50	16.29			
	8RB_0	1778.5	16.48	16.42	16.33			
		1745.0	16.46	16.44	16.41			
		1711.5	16.48	16.49	16.39			
	15RB_0	1778.5	16.58	16.50	16.62			
		1745.0	16.47	16.54	16.68			
		1711.5	16.31	16.50	16.40			



Top Antenna - Reduced power level 1/2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	16.07	16.22	16.35	17.5	17.5	17.5
		1745.0	16.40	16.44	16.40			
		1712.5	16.30	16.06	16.21			
	1RB_12	1777.5	16.27	16.29	16.57			
		1745.0	16.21	16.31	16.62			
		1712.5	16.59	16.07	16.44			
	1RB_0	1777.5	16.21	16.30	16.46			
		1745.0	16.32	16.28	16.40			
		1712.5	16.42	16.11	16.34			
	12RB_13	1777.5	16.48	16.32	16.34			
		1745.0	16.47	16.55	16.63			
		1712.5	16.39	16.39	16.48			
	12RB_6	1777.5	16.52	16.40	16.27			
		1745.0	16.43	16.56	16.74			
		1712.5	16.40	16.46	16.54			
	12RB_0	1777.5	16.49	16.36	16.36			
		1745.0	16.52	16.51	16.75			
		1712.5	16.34	16.40	16.52			
	25RB_0	1777.5	16.49	16.64	16.38			
		1745.0	16.45	16.35	16.48			
		1712.5	16.42	16.25	16.27			



Top Antenna - Reduced power level 1/2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	16.50	16.34	16.54	17.5	17.5	17.5
		1745.0	16.51	16.34	16.72			
		1715.0	16.46	16.18	16.28			
	1RB_24	1775.0	16.62	16.38	16.63			
		1745.0	16.49	16.35	16.54			
		1715.0	16.50	16.21	16.39			
	1RB_0	1775.0	16.45	16.43	16.53			
		1745.0	16.31	16.33	16.51			
		1715.0	16.57	16.21	16.33			
	25RB_25	1775.0	16.46	16.62	16.43			
		1745.0	16.48	16.49	16.61			
		1715.0	16.32	16.42	16.59			
	25RB_12	1775.0	16.55	16.62	16.51			
		1745.0	16.59	16.53	16.43			
		1715.0	16.34	16.42	16.63			
	25RB_0	1775.0	16.58	16.56	16.43			
		1745.0	16.57	16.49	16.70			
		1715.0	16.44	16.42	16.59			
	50RB_0	1775.0	16.46	16.63	16.68			
		1745.0	16.52	16.62	16.56			
		1715.0	16.44	16.41	16.39			



Top Antenna - Reduced power level 3/5								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	16.49	16.28	16.43	17.5	17.5	17.5
		1745.0	16.47	16.23	16.82			
		1717.5	16.15	16.15	16.43			
	1RB_37	1772.5	16.52	16.65	16.77			
		1745.0	16.39	16.30	16.88			
		1717.5	16.22	16.16	16.76			
	1RB_0	1772.5	16.53	16.36	16.67			
		1745.0	16.58	16.40	16.65			
		1717.5	16.45	16.09	16.89			
	36RB_38	1772.5	16.58	16.42	16.59			
		1745.0	16.51	16.52	16.53			
		1717.5	16.39	16.44	16.40			
	36RB_19	1772.5	16.47	16.44	16.64			
		1745.0	16.49	16.51	16.43			
		1717.5	16.42	16.45	16.48			
	36RB_0	1772.5	16.58	16.52	16.59			
		1745.0	16.55	16.44	16.43			
		1717.5	16.41	16.34	16.44			
	75RB_0	1772.5	16.53	16.66	16.59			
		1745.0	16.54	16.53	16.45			
		1717.5	16.41	16.35	16.29			



Top Antenna - Reduced power level 3/5								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1777.0	16.33	16.25	16.49	17.5	17.5	17.5
		1745.0	16.28	16.47	16.87			
		1720.0	16.00	16.17	16.26			
	1RB_50	1777.0	16.65	16.35	16.65			
		1745.0	16.55	16.37	17.00			
		1720.0	16.46	16.45	16.70			
	1RB_0	1777.0	16.43	16.28	16.68			
		1745.0	16.48	16.34	16.56			
		1720.0	16.32	16.34	16.35			
	50RB_50	1777.0	16.50	16.42	16.59			
		1745.0	16.44	16.42	16.55			
		1720.0	16.36	16.35	16.47			
	50RB_25	1777.0	16.59	16.65	16.62			
		1745.0	16.49	16.57	16.56			
		1720.0	16.37	16.46	16.43			
	50RB_0	1777.0	16.54	16.60	16.62			
		1745.0	16.48	16.45	16.49			
		1720.0	16.36	16.45	16.50			
	100RB_0	1777.0	16.51	16.49	16.63			
		1745.0	16.46	16.44	16.47			
		1720.0	16.32	16.39	16.33			



Top Antenna - Reduced power level 3/5							
LTE Band 66			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
1.4 MHz	1RB_5	1779.3	18.44	18.23	18.30	19.9	19.9
		1745.0	18.44	18.24	18.72		
		1710.7	18.22	18.15	18.30		
	1RB_3	1779.3	18.44	18.36	18.32		
		1745.0	18.41	18.30	18.78		
		1710.7	18.35	18.33	18.77		
	1RB_0	1779.3	18.35	18.29	18.34		
		1745.0	18.33	18.08	18.71		
		1710.7	18.24	18.20	18.72		
	3RB_3	1779.3	18.37	18.25	18.43		
		1745.0	18.38	18.69	18.27		
		1710.7	18.34	18.36	18.44		
	3RB_1	1779.3	18.47	18.42	18.52		
		1745.0	18.52	18.65	18.21		
		1710.7	18.46	18.42	18.44		
	3RB_0	1779.3	18.34	18.25	18.40		
		1745.0	18.47	18.60	18.23		
		1710.7	18.41	18.38	18.37		
	6RB_0	1779.3	18.49	18.46	18.37	19.9	19.9
		1745.0	18.48	18.11	18.38		
		1710.7	18.31	18.14	18.22		



Top Antenna - Reduced power level 3/5							
LTE Band 66			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
3 MHz	1RB_14	1778.5	18.31	18.28	18.45	19.9	19.9
		1745.0	18.27	18.28	18.28		
		1711.5	18.30	18.06	18.22		
	1RB_7	1778.5	18.26	18.31	18.28		
		1745.0	18.22	18.13	18.86		
		1711.5	18.53	18.02	18.25		
	1RB_0	1778.5	18.46	18.45	18.29		
		1745.0	18.40	18.10	17.96		
		1711.5	18.35	18.05	18.20		
	8RB_7	1778.5	18.54	18.40	18.15		19.9
		1745.0	18.46	18.50	18.42		
		1711.5	18.37	18.31	18.27		
	8RB_4	1778.5	18.44	18.39	18.19		
		1745.0	18.41	18.56	18.40		
		1711.5	18.30	18.45	18.26		
	8RB_0	1778.5	18.51	18.41	18.22		
		1745.0	18.42	18.48	18.35		
		1711.5	18.40	18.14	18.32		
	15RB_0	1778.5	18.52	18.35	18.42		
		1745.0	18.44	18.43	18.39		
		1711.5	18.34	18.22	18.24		



Top Antenna - Reduced power level 3/5							
LTE Band 66			Actual output Power (dBm)			Tune up	
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation	
			QPSK	16QAM	64QAM	QPSK	16QAM
5 MHz	1RB_24	1777.5	18.37	18.26	18.15	19.9	19.9
		1745.0	18.35	18.48	18.70		
		1712.5	18.19	18.06	18.17		
	1RB_12	1777.5	18.55	18.31	18.23		
		1745.0	18.37	18.31	18.78		
		1712.5	18.04	18.02	18.33		
	1RB_0	1777.5	18.48	18.31	18.23		
		1745.0	18.25	18.28	18.33		
		1712.5	18.30	18.19	18.16		
	12RB_13	1777.5	18.39	18.42	18.22	19.9	19.9
		1745.0	18.41	18.43	18.21		
		1712.5	18.29	18.11	18.25		
	12RB_6	1777.5	18.47	18.50	18.19		
		1745.0	18.49	18.46	18.17		
		1712.5	18.34	18.10	18.33		
	12RB_0	1777.5	18.40	18.42	18.22		
		1745.0	18.45	18.38	18.24		
		1712.5	18.23	18.14	18.29		
	25RB_0	1777.5	18.51	18.52	18.28		
		1745.0	18.40	18.51	18.45		
		1712.5	18.34	18.22	18.41		



Top Antenna - Reduced power level 3/5								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	18.37	18.63	18.39	19.9	19.9	19.9
		1745.0	18.60	18.26	18.88			
		1715.0	18.14	18.11	18.21			
	1RB_24	1775.0	18.43	18.26	18.53			
		1745.0	18.50	18.16	19.21			
		1715.0	18.35	18.23	18.38			
	1RB_0	1775.0	18.51	18.34	18.47			
		1745.0	18.59	18.37	18.57			
		1715.0	18.40	18.18	18.27			
	25RB_25	1775.0	18.41	18.40	18.49		19.9	19.9
		1745.0	18.43	18.25	18.58			
		1715.0	18.33	18.45	18.36			
	25RB_12	1775.0	18.39	18.39	18.44			
		1745.0	18.46	18.52	18.59			
		1715.0	18.39	18.44	18.22			
	25RB_0	1775.0	18.44	18.44	18.50			
		1745.0	18.45	18.46	18.38			
		1715.0	18.47	18.38	18.27			
	50RB_0	1775.0	18.51	18.43	18.39			
		1745.0	18.49	18.39	18.44			
		1715.0	18.35	18.24	18.45			



Top Antenna - Reduced power level 3/5								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	18.41	18.06	18.40	19.9	19.9	19.9
		1745.0	18.15	18.17	18.34			
		1717.5	18.09	18.04	18.16			
	1RB_37	1772.5	18.43	18.01	18.69			
		1745.0	18.34	18.04	18.72			
		1717.5	18.23	18.11	18.56			
	1RB_0	1772.5	18.54	18.07	18.51			
		1745.0	18.51	18.35	18.60			
		1717.5	18.16	18.00	18.37			
	36RB_38	1772.5	18.48	18.49	18.49	19.9	19.9	19.9
		1745.0	18.45	18.36	18.41			
		1717.5	18.36	18.24	18.36			
	36RB_19	1772.5	18.48	18.51	18.54			
		1745.0	18.45	18.41	18.50			
		1717.5	18.33	18.36	18.36			
	36RB_0	1772.5	18.50	18.47	18.57			
		1745.0	18.47	18.29	18.44			
		1717.5	18.41	18.40	18.41			
	75RB_0	1772.5	18.44	18.43	18.38			
		1745.0	18.47	18.48	18.39			
		1717.5	18.28	18.26	18.25			



Top Antenna - Reduced power level 3/5								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1777.0	18.48	18.23	18.52	19.9	19.9	19.9
		1745.0	18.45	18.72	18.60			
		1720.0	18.24	18.01	18.66			
	1RB_50	1777.0	18.58	18.37	18.95			
		1745.0	18.46	18.55	18.56			
		1720.0	18.45	18.44	18.83			
	1RB_0	1777.0	18.57	18.52	18.62			
		1745.0	18.42	18.18	18.56			
		1720.0	18.37	18.19	18.30			
	50RB_50	1777.0	18.42	18.46	18.49			
		1745.0	18.44	18.48	18.52			
		1720.0	18.27	18.18	18.29			
	50RB_25	1777.0	18.45	18.56	18.52			
		1745.0	18.43	18.49	18.48			
		1720.0	18.34	18.38	18.28			
	50RB_0	1777.0	18.52	18.54	18.51			
		1745.0	18.50	18.41	18.57			
		1720.0	18.40	18.52	18.31			
	100RB_0	1777.0	18.53	18.52	18.30			
		1745.0	18.46	18.48	18.55			
		1720.0	18.35	18.44	18.36			



Bottom Antenna - Full Power								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	22.50	21.57	20.59	24.0	23.0	22.0
		1745.0	22.48	21.37	20.98			
		1710.7	22.44	21.28	20.79			
	1RB_3	1779.3	22.55	21.53	20.60			
		1745.0	22.60	21.47	21.05			
		1710.7	22.45	21.37	20.46			
	1RB_0	1779.3	22.48	21.16	20.87			
		1745.0	22.45	21.36	20.87			
		1710.7	22.40	21.28	20.50			
	3RB_3	1779.3	22.55	21.80	20.56			
		1745.0	22.58	21.65	20.17			
		1710.7	22.45	21.46	20.54			
	3RB_1	1779.3	22.61	21.87	20.68			
		1745.0	22.54	21.65	20.11			
		1710.7	22.48	21.45	20.57			
	3RB_0	1779.3	22.46	21.83	20.56			
		1745.0	22.55	21.64	20.09			
		1710.7	22.33	21.45	20.01			
	6RB_0	1779.3	21.63	20.63	19.65	23.0	22.0	21.0
		1745.0	21.71	20.09	19.51			
		1710.7	21.43	20.15	19.44			



Bottom Antenna - Full Power								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	22.47	21.44	20.60	24.0	23.0	22.0
		1745.0	22.44	21.57	20.88			
		1711.5	22.45	21.93	20.48			
	1RB_7	1778.5	22.59	21.46	20.65			
		1745.0	22.52	21.39	20.62			
		1711.5	22.36	21.55	20.33			
	1RB_0	1778.5	22.56	21.66	20.66			
		1745.0	22.68	21.58	20.70			
		1711.5	22.48	21.35	20.48			
	8RB_7	1778.5	21.69	20.65	19.68			
		1745.0	21.62	20.79	19.60			
		1711.5	21.50	20.17	19.24			
	8RB_4	1778.5	21.77	20.54	19.66			
		1745.0	21.58	20.67	19.67			
		1711.5	21.45	20.26	19.29			
	8RB_0	1778.5	21.68	20.45	19.66			
		1745.0	21.58	20.69	19.68			
		1711.5	21.43	20.16	19.27			
	15RB_0	1778.5	21.59	20.54	19.53			
		1745.0	21.51	20.46	19.54			
		1711.5	21.39	20.12	19.57			



Bottom Antenna - Full Power								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	22.16	21.42	20.51	24.0	23.0	22.0
		1745.0	22.48	21.40	20.87			
		1712.5	22.15	21.46	20.25			
	1RB_12	1777.5	22.67	21.30	20.66			
		1745.0	22.68	21.39	20.85			
		1712.5	22.39	21.18	20.49			
	1RB_0	1777.5	22.59	21.55	20.58			
		1745.0	22.27	21.46	20.47			
		1712.5	22.20	21.29	20.34			
	12RB_13	1777.5	21.55	20.48	19.72			
		1745.0	21.50	20.55	19.48			
		1712.5	21.38	20.32	19.57			
	12RB_6	1777.5	21.61	20.54	19.67			
		1745.0	21.55	20.31	19.72			
		1712.5	21.49	20.42	19.37			
	12RB_0	1777.5	21.52	20.48	19.69			
		1745.0	21.54	20.67	19.71			
		1712.5	21.46	20.40	19.35			
	25RB_0	1777.5	21.65	20.39	19.80			
		1745.0	21.59	20.63	19.53			
		1712.5	21.46	20.49	19.19			



Bottom Antenna - Full Power								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	22.35	21.35	20.56	24.0	23.0	22.0
		1745.0	22.59	21.41	20.86			
		1715.0	22.33	21.29	20.29			
	1RB_24	1775.0	22.33	21.43	20.87			
		1745.0	22.57	21.36	20.76			
		1715.0	22.52	21.41	20.58			
	1RB_0	1775.0	22.63	21.31	21.04			
		1745.0	22.63	21.52	20.46			
		1715.0	22.46	21.27	20.32			
	25RB_25	1775.0	21.53	20.45	19.76			
		1745.0	21.53	20.34	19.78			
		1715.0	21.42	20.27	19.34			
	25RB_12	1775.0	21.54	20.38	19.68			
		1745.0	21.61	20.63	19.56			
		1715.0	21.46	20.37	19.39			
	25RB_0	1775.0	21.63	20.64	19.67			
		1745.0	21.60	20.53	19.57			
		1715.0	21.47	20.32	19.60			
	50RB_0	1775.0	21.63	20.62	19.62			
		1745.0	21.57	20.61	19.61			
		1715.0	21.49	20.52	19.43			



Bottom Antenna - Full Power								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	22.51	21.73	20.44	24.0	23.0	22.0
		1745.0	22.32	21.31	20.86			
		1717.5	22.38	21.05	20.84			
	1RB_37	1772.5	22.58	21.35	20.76			
		1745.0	22.50	21.23	20.84			
		1717.5	22.39	21.10	20.41			
	1RB_0	1772.5	22.57	21.46	20.54			
		1745.0	22.56	21.40	20.61			
		1717.5	22.61	21.26	20.67			
	36RB_38	1772.5	21.58	20.51	19.64			
		1745.0	21.52	20.47	19.59			
		1717.5	21.36	20.29	19.50			
	36RB_19	1772.5	21.54	20.45	19.60			
		1745.0	21.58	20.42	19.66			
		1717.5	21.42	20.34	19.47			
	36RB_0	1772.5	21.59	20.52	19.66			
		1745.0	21.60	20.47	19.69			
		1717.5	21.45	20.37	19.69			
	75RB_0	1772.5	21.53	20.46	19.66			
		1745.0	21.52	20.56	19.48			
		1717.5	21.37	20.30	19.28			



Bottom Antenna - Full Power								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1777.0	22.57	21.82	20.88	24.0	23.0	22.0
		1745.0	22.45	21.34	20.57			
		1720.0	22.21	21.18	20.21			
	1RB_50	1777.0	22.69	21.65	21.01			
		1745.0	22.50	21.57	20.65			
		1720.0	22.37	21.49	20.57			
	1RB_0	1777.0	22.65	21.57	20.65			
		1745.0	22.47	21.34	20.61			
		1720.0	22.36	21.38	20.73			
	50RB_50	1777.0	21.48	20.43	19.54			
		1745.0	21.50	20.46	19.55			
		1720.0	21.32	20.38	19.38			
	50RB_25	1777.0	21.57	20.46	19.51			
		1745.0	21.54	20.50	19.59			
		1720.0	21.35	20.31	19.54			
	50RB_0	1777.0	21.61	20.52	19.59			
		1745.0	21.59	20.53	19.55			
		1720.0	21.39	20.43	19.45			
	100RB_0	1777.0	21.60	20.54	19.54			
		1745.0	21.50	20.54	19.65			
		1720.0	21.36	20.29	19.67			

Bottom Antenna - Reduced power level 4/6								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	21.16	21.02	20.81	21.8	21.8	21.8
		1745.0	20.90	20.99	20.94			
		1710.7	21.03	20.61	20.60			
	1RB_3	1779.3	21.20	21.16	20.55			
		1745.0	20.96	21.14	21.00			
		1710.7	21.09	20.83	20.45			
	1RB_0	1779.3	21.11	21.10	20.80			
		1745.0	20.96	20.95	20.56			
		1710.7	20.98	20.83	20.58			
	3RB_3	1779.3	21.22	21.47	20.56			
		1745.0	21.23	21.41	20.45			
		1710.7	21.03	21.17	20.53			
	3RB_1	1779.3	21.18	21.48	20.65			
		1745.0	21.25	21.33	20.11			
		1710.7	21.05	21.30	20.50			
	3RB_0	1779.3	21.23	21.44	20.59			
		1745.0	21.21	21.44	20.15			
		1710.7	20.90	21.25	20.54			
	6RB_0	1779.3	21.21	20.67	19.54	21.8	21.8	21.0
		1745.0	21.22	20.58	19.54			
		1710.7	21.03	20.19	19.38			



Bottom Antenna - Reduced power level 4/6								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	21.19	21.10	20.48	21.8	21.8	21.8
		1745.0	21.11	21.14	20.77			
		1711.5	21.13	20.73	20.38			
	1RB_7	1778.5	21.11	21.02	20.60			
		1745.0	20.96	20.67	20.54			
		1711.5	21.24	20.99	20.45			
	1RB_0	1778.5	21.20	21.19	20.53			
		1745.0	21.20	20.32	20.46			
		1711.5	21.05	20.98	20.41			
	8RB_7	1778.5	21.27	20.64	19.62			
		1745.0	21.21	20.60	19.43			
		1711.5	21.08	20.55	19.53			
	8RB_4	1778.5	21.34	20.64	19.59			
		1745.0	21.17	20.55	19.40			
		1711.5	21.03	20.39	19.43			
	8RB_0	1778.5	21.35	20.54	19.68			
		1745.0	21.17	20.75	19.43			
		1711.5	21.01	20.48	19.60			
	15RB_0	1778.5	21.25	20.62	19.61			
		1745.0	21.19	20.77	19.49			
		1711.5	20.97	20.31	19.41			



Bottom Antenna - Reduced power level 4/6								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	21.13	21.32	20.42	21.8	21.8	21.8
		1745.0	21.04	20.86	20.92			
		1712.5	20.70	20.81	20.41			
	1RB_12	1777.5	21.12	21.01	20.94			
		1745.0	21.12	20.97	20.75			
		1712.5	20.94	20.47	20.59			
	1RB_0	1777.5	21.14	21.07	20.48			
		1745.0	20.97	20.94	20.56			
		1712.5	20.78	20.67	20.42			
	12RB_13	1777.5	21.25	20.65	19.69	21.8	21.8	21.0
		1745.0	21.10	20.61	19.95			
		1712.5	20.98	20.41	19.30			
	12RB_6	1777.5	21.19	20.41	19.74			
		1745.0	21.14	20.36	19.39			
		1712.5	20.96	20.49	19.30			
	12RB_0	1777.5	21.21	20.44	19.76			
		1745.0	21.11	20.34	19.36			
		1712.5	20.93	20.50	19.26			
	25RB_0	1777.5	21.24	20.66	19.74			
		1745.0	21.16	20.59	19.67			
		1712.5	21.02	20.23	19.41			

Bottom Antenna - Reduced power level 4/6								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	21.10	20.95	20.53	21.8	21.8	21.8
		1745.0	21.25	21.02	20.95			
		1715.0	21.03	20.32	20.32			
	1RB_24	1775.0	21.26	21.06	20.63			
		1745.0	21.24	21.00	20.74			
		1715.0	21.20	20.49	20.65			
	1RB_0	1775.0	21.27	21.09	20.61			
		1745.0	21.07	21.06	20.68			
		1715.0	21.18	20.40	20.38			
	25RB_25	1775.0	21.22	20.62	19.41			
		1745.0	21.13	20.53	19.73			
		1715.0	21.00	20.33	19.51			
	25RB_12	1775.0	21.24	20.63	19.43			
		1745.0	21.21	20.70	19.51			
		1715.0	21.04	20.48	19.53			
	25RB_0	1775.0	21.33	20.61	19.71			
		1745.0	21.29	20.51	19.79			
		1715.0	21.05	20.78	19.63			
	50RB_0	1775.0	21.22	20.63	19.62			
		1745.0	21.16	20.67	19.67			
		1715.0	21.07	20.30	19.56			



Bottom Antenna - Reduced power level 4/6								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	21.14	20.71	20.59	21.8	21.8	21.8
		1745.0	21.10	20.83	20.99			
		1717.5	20.78	20.78	20.51			
	1RB_37	1772.5	21.22	20.93	20.91			
		1745.0	21.09	20.82	20.94			
		1717.5	20.90	20.79	20.86			
	1RB_0	1772.5	21.27	20.80	20.82			
		1745.0	21.25	21.10	20.76			
		1717.5	21.00	20.98	20.97			
	36RB_38	1772.5	21.29	20.64	19.71			
		1745.0	21.23	20.56	19.66			
		1717.5	20.95	20.48	19.45			
	36RB_19	1772.5	21.25	20.73	19.64			
		1745.0	21.11	20.60	19.56			
		1717.5	21.01	20.55	19.53			
	36RB_0	1772.5	21.28	20.68	19.70			
		1745.0	21.22	20.51	19.53			
		1717.5	21.04	20.63	19.55			
	75RB_0	1772.5	21.23	20.54	19.73			
		1745.0	21.12	20.53	19.62			
		1717.5	21.05	20.56	19.54			



Bottom Antenna - Reduced power level 4/6								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1777.0	21.24	21.12	20.90	21.8	21.8	21.8
		1745.0	21.15	21.04	20.61			
		1720.0	20.86	20.79	20.34			
	1RB_50	1777.0	21.40	21.29	20.99			
		1745.0	21.31	21.22	20.97			
		1720.0	21.15	20.93	20.97			
	1RB_0	1777.0	21.39	21.23	20.70			
		1745.0	21.05	21.11	20.54			
		1720.0	21.02	20.84	20.91			
	50RB_50	1777.0	21.24	20.57	19.56			
		1745.0	21.15	20.36	19.57			
		1720.0	21.05	20.49	19.45			
	50RB_25	1777.0	21.23	20.55	19.61			
		1745.0	21.19	20.39	19.60			
		1720.0	21.09	20.52	19.49			
	50RB_0	1777.0	21.34	20.45	19.64			
		1745.0	21.23	20.64	19.64			
		1720.0	21.10	20.54	19.52			
	100RB_0	1777.0	21.25	20.54	19.64			
		1745.0	21.24	20.55	19.53			
		1720.0	20.97	20.51	19.37			

10.4. WLAN and Bluetooth Measurement result

Table 10.4: The conducted Power measurement results for Bluetooth

Mode	Tune up	Averaged Power (dBm)		
		Ch.0 (2402MHz)	Ch.39 (2441MHz)	Ch.78 (2480MHz)
GFSK	16.0	14.16	14.21	13.50
EDR2M-4_DQPSK	14.0	13.79	13.70	13.13
EDR3M-8DPSK	14.0	13.93	13.89	13.27
/	/	Ch.0 (2402MHz)	Ch.19 (2440MHz)	Ch.39 (2480MHz)
BLE(1M)	11.0	9.13	9.15	9.72
BLE(2M)	11.0	9.12	9.13	9.64

Table 10.5: The conducted Power measurement results for WLAN 2.4G

Full Power				
Mode	Tune up	Averaged Power (dBm) Duty Cycle: 100%		
		Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	20.0	18.41	18.63	18.70
802.11g	19.0	17.32	17.49	17.59
802.11n(20MHz)	19.0	17.18	17.43	17.52
802.11ac(20MHz)	18.0	16.17	16.32	16.36
/	/	Ch.3 (2422MHz)	Ch.6 (2437MHz)	Ch.9 (2452MHz)
802.11n(40MHz)	19.0	17.52	17.59	12.64
802.11ac(40MHz)	18.0	10.41	16.72	16.75
Reduced power level 7				
Mode	Tune up	Averaged Power (dBm) Duty Cycle: 100%		
		Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	16.5	14.94	15.17	15.23
802.11g	16.5	14.84	15.02	15.14
802.11n(20MHz)	16.5	14.72	14.97	15.06
802.11ac(20MHz)	16.5	14.68	14.85	14.86
/	/	Ch.3 (2422MHz)	Ch.6 (2437MHz)	Ch.9 (2452MHz)
802.11n(40MHz)	16.5	15.02	15.13	12.64
802.11ac(40MHz)	16.5	10.41	15.23	15.30



Reduced power level 8				
Mode	Tune up	Averaged Power (dBm) Duty Cycle: 100%		
		Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	11.0	9.42	9.65	9.71
802.11g	11.0	9.35	9.50	9.62
802.11n(20MHz)	11.0	9.23	9.46	9.56
802.11ac(20MHz)	11.0	9.19	9.35	9.39
/	/	Ch.3 (2422MHz)	Ch.6 (2437MHz)	Ch.9 (2452MHz)
802.11n(40MHz)	11.0	9.56	9.64	9.66
802.11ac(40MHz)	11.0	9.41	9.72	9.76
Reduced power level 9				
Mode	Tune up	Averaged Power (dBm) Duty Cycle: 100%		
		Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	16.0	14.42	14.68	14.75
802.11g	16.0	14.33	14.51	14.61
802.11n(20MHz)	16.0	14.19	14.48	14.52
802.11ac(20MHz)	16.0	14.21	14.36	14.39
/	/	Ch.3 (2422MHz)	Ch.6 (2437MHz)	Ch.9 (2452MHz)
802.11n(40MHz)	16.0	14.54	14.61	12.64
802.11ac(40MHz)	16.0	10.41	14.74	14.80

Table 10.6: The conducted Power measurement results for WLAN 5G

Full Power								
Averaged Power (dBm) Duty Cycle: 100%								
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0
<U-NII-1>								
Tune up	19.0	19.0	19.0	/	18.0	19.0	/	12.0
36(5180MHz)	17.41	17.27	17.20	38(5190MHz)	12.29	12.28	42(5210MHz)	10.11
40(5200MHz)	17.39	17.20	17.18	46(5230MHz)	16.35	17.21	/	/
44(5220MHz)	17.35	17.21	17.17	/	/	/	/	/
48(5240MHz)	17.32	17.12	17.10	/	/	/	/	/
<U-NII-2A>								
Tune up	19.0	19.0	19.0	/	18.0	19.0	/	12.0
52(5260MHz)	17.31	17.12	17.09	54(5270MHz)	16.26	17.13	58(5290MHz)	10.12
56(5280MHz)	17.23	17.05	17.04	62(5310MHz)	13.21	13.24	/	/
60(5300MHz)	17.21	17.09	17.07	/	/	/	/	/
64(5320MHz)	17.17	17.05	17.08	/	/	/	/	/
<U-NII-2C>								
Tune up	19.0	19.0	19.0	/	18.0	19.0	/	18.0
100(5500MHz)	17.58	17.40	17.39	102(5510MHz)	13.56	13.57	106(5530MHz)	9.48
116(5580MHz)	17.82	17.75	17.64	110(5550MHz)	16.84	17.85	122(5610MHz)	16.82
124(5620MHz)	17.85	17.79	17.74	126(5630MHz)	16.91	17.86	138(5690MHz)	16.84
132(5660MHz)	17.93	17.82	17.80	134(5670MHz)	17.05	18.01	/	/
140(5700MHz)	12.05	11.91	11.88	/	/	/	/	/
<U-NII-3>								
Tune up	19.0	19.0	19.0	/	18.0	19.0	/	18.0
149(5745MHz)	18.13	17.98	17.93	151(5755MHz)	17.18	18.11	155(5775MHz)	16.84
157(5785MHz)	17.90	17.72	17.68	159(5795MHz)	16.98	17.90	/	/
165(5825MHz)	17.69	17.49	17.50	/	/	/	/	/



Reduced power level 7/9								
Averaged Power (dBm) Duty Cycle: 100%								
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0
<U-NII-1>								
Tune up	14.0	14.0	14.0	/	14.0	14.0	/	12.0
36(5180MHz)	12.43	12.28	12.20	38(5190MHz)	12.29	12.28	42(5210MHz)	10.11
40(5200MHz)	12.40	12.23	12.21	46(5230MHz)	12.39	12.23	/	/
44(5220MHz)	12.36	12.26	12.18	/	/	/	/	/
48(5240MHz)	12.33	12.13	12.14	/	/	/	/	/
<U-NII-2A>								
Tune up	14.0	14.0	14.0	/	14.0	14.0	/	12.0
52(5260MHz)	12.35	12.14	12.10	54(5270MHz)	12.30	12.14	58(5290MHz)	10.12
56(5280MHz)	12.26	12.07	12.05	62(5310MHz)	12.23	12.27	/	/
60(5300MHz)	12.23	12.13	12.08	/	/	/	/	/
64(5320MHz)	12.20	12.05	12.13	/	/	/	/	/
<U-NII-2C>								
Tune up	14.0	14.0	14.0	/	14.0	14.0	/	14.0
100(5500MHz)	12.63	12.43	12.44	102(5510MHz)	12.58	12.57	106(5530MHz)	9.48
116(5580MHz)	12.85	12.79	12.64	110(5550MHz)	12.88	12.86	122(5610MHz)	12.84
124(5620MHz)	12.87	12.83	12.77	126(5630MHz)	12.94	12.88	138(5690MHz)	
132(5660MHz)	12.94	12.87	12.84	134(5670MHz)	13.07	13.02	/	/
140(5700MHz)	12.05	11.92	11.90	/	/	/	/	/
<U-NII-3>								
Tune up	14.0	14.0	14.0	/	14.0	14.0	/	14.0
149(5745MHz)	13.17	13.01	12.97	151(5755MHz)	13.21	13.15	155(5775MHz)	12.86
157(5785MHz)	12.94	12.77	12.69	159(5795MHz)	12.99	12.91	/	/
165(5825MHz)	12.73	12.53	12.53	/	/	/	/	/



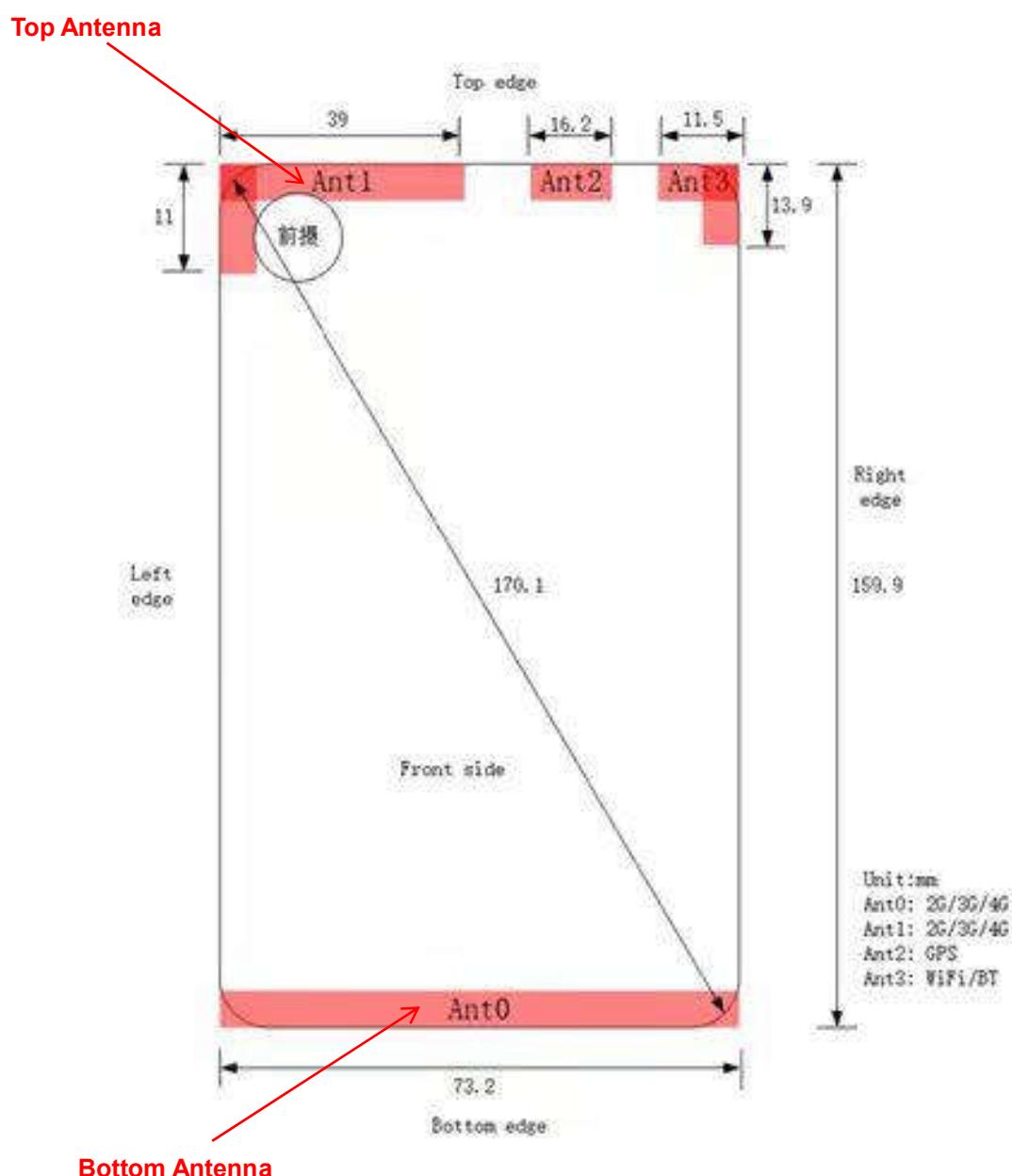
Reduced power level 8								
Averaged Power (dBm) Duty Cycle: 100%								
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0
<U-NII-1>								
Tune up	10.0	10.0	10.0	/	10.0	10.0	/	10.0
36(5180MHz)	8.46	8.31	8.23	38(5190MHz)	8.32	8.32	42(5210MHz)	8.14
40(5200MHz)	8.40	8.20	8.18	46(5230MHz)	8.39	8.24	/	/
44(5220MHz)	8.40	8.26	8.19	/	/	/	/	/
48(5240MHz)	8.33	8.14	8.14	/	/	/	/	/
<U-NII-2A>								
Tune up	10.0	10.0	10.0	/	10.0	10.0	/	10.0
52(5260MHz)	8.36	8.14	8.14	54(5270MHz)	8.26	8.13	58(5290MHz)	8.14
56(5280MHz)	8.25	8.05	8.04	62(5310MHz)	8.21	8.24	/	/
60(5300MHz)	8.23	8.09	8.11	/	/	/	/	/
64(5320MHz)	8.20	8.07	8.13	/	/	/	/	/
<U-NII-2C>								
Tune up	10.0	10.0	10.0	/	10.0	10.0	/	10.0
100(5500MHz)	8.59	8.44	8.40	102(5510MHz)	8.59	8.60	106(5530MHz)	8.52
116(5580MHz)	8.83	8.77	8.68	110(5550MHz)	8.85	8.90	122(5610MHz)	8.85
124(5620MHz)	8.85	8.81	8.78	126(5630MHz)	8.94	8.87	138(5690MHz)	8.79
132(5660MHz)	8.95	8.85	8.82	134(5670MHz)	9.06	9.01	/	/
140(5700MHz)	9.07	8.94	8.90	/	/	/	/	/
<U-NII-3>								
Tune up	10.0	10.0	10.0	/	10.0	10.0	/	10.0
149(5745MHz)	9.16	9.02	8.94	151(5755MHz)	9.21	9.13	155(5775MHz)	8.87
157(5785MHz)	8.93	8.76	8.68	159(5795MHz)	9.00	8.95	/	/
165(5825MHz)	8.71	8.51	8.54	/	/	/	/	/

11. Simultaneous TX SAR Considerations

11.1. Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter. For this device, the Bluetooth and WLAN can transmit simultaneous with other transmitters.

11.2. Transmit Antenna Separation Distances



Picture 11.1 Antenna Locations (Front View)



11.3. SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 25mm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
Top antenna	Yes	Yes	Yes	Yes	Yes	No
Bottom antenna	Yes	Yes	Yes	Yes	No	Yes
WLAN antenna	Yes	Yes	Yes	Yes	Yes	No

12. Evaluation of Simultaneous

Table 12.1: The sum of reported SAR values for WWAN antenna and WLAN antenna

/	Position	WWAN (W/kg)	WLAN (W/kg)	Sum (W/kg)
Highest reported SAR value for Head	Right Tilt	1.16	0.13	1.29
Highest reported SAR value for Hotspot	Top Side	0.92	0.23	1.15
Highest reported SAR value for Body-worn	Rear Side	0.50	0.16	0.66

Note: the test positions of above tables are for the worse case that has been evaluated.

Table 12.2: The sum of reported SAR values for WWAN antenna and Bluetooth antenna

/	Position	WWAN (W/kg)	Bluetooth (W/kg)	Sum (W/kg)
Highest reported SAR value for Head	Right Tilt	1.16	0.05	1.21
Highest reported SAR value for Hotspot	Bottom Side	1.01	<0.01	1.01
Highest reported SAR value for Body-worn	Rear Side	0.50	0.06	0.56

Note: the test positions of above tables are for the worse case that has been evaluated.

Conclusion:

According to the above tables, the sum of reported SAR values is < 1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.



13. Summary of Test Results

According to the client's decision rule in the test registration form, which is "based on the measurement results as the basis of the conformity statement", the test conclusion of this report meets the limit requirements.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{\text{Target}} - P_{\text{Measured}})/10}$$

Where P_{Target} is the power of manufacturing upper limit;

P_{Measured} is the measured power in chapter 10.

General Note:

1. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. WLAN 5.3G/5.5G tested the product specific 10g SAR since it has no hotspot mode.
 - b. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
2. The device support dual SIMs, SIM1 was used for the all configuration SAR testing and SIM2 test the worst case SAR of SIM1.
3. M2: Mobile phone CPH2363 (leather material shell)
B2: Battery (Chongqing CosMX battery Co., Ltd.)
B3: Battery (TWS Technology (Guangzhou) Limited)

Duty Cycle

Mode	Duty Cycle
Speech for GSM850/1900	1:8.3
GPRS for GSM850/1900	1:2
WCDMA Band 2/4/5	1:1
FDD_LTE Band 2/4/5/7/12/17/26/66	1:1
TDD_LTE Band 38/41	1:1.58
Bluetooth	1:1



13.1. Testing Environment

Temperature:	18°C~25°C
Relative humidity:	30%~70%
Ground system resistance:	<4Ω
Ambient noise & Reflection:	< 0.012 W/kg

13.2. SAR results

Table 13.1: SAR Values (GSM 850 - Head) – Top Antenna

		Ambient Temperature: 22.8°C			Liquid Temperature: 22.3°C				
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
190	836.6	Speech	Left Cheek	/	30.03	30.4	0.445	0.48	0.02
190	836.6	Speech	Left Tilt	/	30.03	30.4	0.371	0.40	-0.05
190	836.6	Speech	Right Cheek	/	30.03	30.4	0.625	0.68	0.02
190	836.6	Speech	Right Tilt	/	30.03	30.4	0.536	0.58	-0.05
190	836.6	Speech	Right Cheek	1/M2	30.03	30.4	0.689	0.75	0.05
190	836.6	Speech	Right Cheek	B2	30.03	30.4	0.664	0.72	-0.10
190	836.6	Speech	Right Cheek	B3	30.03	30.4	0.677	0.74	0.06

Table 13.2: SAR Values (GSM 850 - Head) – Bottom Antenna

		Ambient Temperature: 22.8°C			Liquid Temperature: 22.3°C				
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
190	836.6	Speech	Left Cheek	/	32.75	33.5	0.169	0.20	0.01
190	836.6	Speech	Left Tilt	/	32.75	33.5	0.082	0.10	0.03
190	836.6	Speech	Right Cheek	/	32.75	33.5	0.139	0.17	0.04
190	836.6	Speech	Right Tilt	/	32.75	33.5	0.072	0.09	0.07
190	836.6	Speech	Left Cheek	M2	32.75	33.5	0.143	0.17	0.10
190	836.6	Speech	Left Cheek	B2	32.75	33.5	0.154	0.18	0.03
190	836.6	Speech	Left Cheek	B3	32.75	33.5	0.161	0.19	0.05



No.I21N04025-SAR

Table 13.3: SAR Values (GSM 850 -Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
190	836.6	GPRS-4	Front	/	28.06	29.5	0.290	0.40	0.04
190	836.6	GPRS-4	Rear	2	28.06	29.5	0.404	0.56	0.03
190	836.6	GPRS-4	Left	/	28.06	29.5	0.343	0.48	0.14
190	836.6	GPRS-4	Right	/	28.06	29.5	0.234	0.33	0.04
190	836.6	GPRS-4	Top	/	28.06	29.5	0.267	0.37	0.05
190	836.6	GPRS-4	Rear	M2	28.06	29.5	0.361	0.50	-0.08
190	836.6	GPRS-4	Rear	B2	28.06	29.5	0.375	0.52	0.13
190	836.6	GPRS-4	Rear	B3	28.06	29.5	0.392	0.55	0.02
Body-Worn Test Data (15mm)									
190	836.6	GPRS-4	Front	/	28.06	29.5	0.240	0.33	0.03
190	836.6	GPRS-4	Rear	/	28.06	29.5	0.262	0.37	0.05

Table 13.4: SAR Values (GSM 850 -Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
190	836.6	GPRS-4	Front	/	28.28	29.5	0.216	0.29	-0.07
190	836.6	GPRS-4	Rear	/	28.28	29.5	0.400	0.53	-0.09
190	836.6	GPRS-4	Left	/	28.28	29.5	0.401	0.53	0.06
190	836.6	GPRS-4	Right	/	28.28	29.5	0.237	0.31	0.17
190	836.6	GPRS-4	Bottom	/	28.28	29.5	0.235	0.31	0.18
190	836.6	GPRS-4	Left	M2	28.28	29.5	0.387	0.51	0.03
190	836.6	GPRS-4	Left	B2	28.28	29.5	0.382	0.51	0.06
190	836.6	GPRS-4	Left	B3	28.28	29.5	0.393	0.52	-0.01
Body-Worn Test Data (15mm)									
190	836.6	GPRS-4	Front	/	28.28	29.5	0.207	0.27	-0.07
190	836.6	GPRS-4	Rear	3	28.28	29.5	0.290	0.38	0.06



No.I21N04025-SAR

Table 13.5: SAR Values (GSM 1900 - Head) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
661	1880.0	Speech	Left Cheek	/	27.15	28.1	0.345	0.43	0.04
661	1880.0	Speech	Left Tilt	/	27.15	28.1	0.440	0.55	0.00
661	1880.0	Speech	Right Cheek	/	27.15	28.1	0.584	0.73	0.04
661	1880.0	Speech	Right Tilt	/	27.15	28.1	0.731	0.91	-0.04
810	1909.8	Speech	Right Tilt	4	26.90	28.1	0.782	1.03	0.01
512	1850.2	Speech	Right Tilt	/	27.20	28.1	0.655	0.81	-0.01
810	1909.8	Speech	Right Tilt	M2	26.90	28.1	0.696	0.92	-0.04
810	1909.8	Speech	Right Tilt	B2	26.90	28.1	0.749	0.99	0.08
810	1909.8	Speech	Right Tilt	B3	26.90	28.1	0.755	1.00	0.03

Table 13.6: SAR Values (GSM 1900 - Head) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
661	1880.0	Speech	Left Cheek	/	29.67	30.5	0.113	0.14	-0.03
661	1880.0	Speech	Left Tilt	/	29.67	30.5	0.063	0.08	-0.08
661	1880.0	Speech	Right Cheek	/	29.67	30.5	0.080	0.10	0.06
661	1880.0	Speech	Right Tilt	/	29.67	30.5	0.059	0.07	0.09
661	1880.0	Speech	Left Cheek	M2	29.67	30.5	0.102	0.12	0.07
661	1880.0	Speech	Left Cheek	B2	29.67	30.5	0.106	0.13	-0.08
661	1880.0	Speech	Left Cheek	B3	29.67	30.5	0.110	0.13	-0.04



No.I21N04025-SAR

Table 13.7: SAR Values (GSM 1900 - Body) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
661	1880.0	GPRS-4	Front	/	22.75	24.3	0.168	0.24	-0.10
661	1880.0	GPRS-4	Rear	/	22.75	24.3	0.298	0.43	0.02
661	1880.0	GPRS-4	Left	/	22.75	24.3	0.041	0.06	0.04
661	1880.0	GPRS-4	Right	/	22.75	24.3	0.019	0.03	0.03
661	1880.0	GPRS-4	Top	/	22.75	24.3	0.475	0.68	0.07
661	1880.0	GPRS-4	Top	M2	22.75	24.3	0.352	0.50	0.02
661	1880.0	GPRS-4	Top	B2	22.75	24.3	0.443	0.63	0.13
661	1880.0	GPRS-4	Top	B3	22.75	24.3	0.458	0.65	-0.05
Body-Worn Test Data (15mm) - Reduced power level 3/5									
661	1880.0	GPRS-4	Front	/	22.75	24.3	0.085	0.12	0.09
661	1880.0	GPRS-4	Rear	/	22.75	24.3	0.155	0.22	0.04

Table 13.8: SAR Values (GSM 1900 - Body) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
661	1880.0	GPRS-4	Front	/	25.49	27.0	0.204	0.29	0.06
661	1880.0	GPRS-4	Rear	/	25.49	27.0	0.381	0.54	0.12
661	1880.0	GPRS-4	Left	/	25.49	27.0	0.103	0.15	0.12
661	1880.0	GPRS-4	Right	/	25.49	27.0	0.134	0.19	0.07
661	1880.0	GPRS-4	Bottom	/	25.49	27.0	0.583	0.83	0.01
810	1909.8	GPRS-4	Bottom	/	25.35	27.0	0.682	1.00	0.03
512	1850.2	GPRS-4	Bottom	5	25.53	27.0	0.719	1.01	0.09
512	1850.2	GPRS-4	Bottom	M2	25.53	27.0	0.624	0.88	0.03
512	1850.2	GPRS-4	Bottom	B2	25.53	27.0	0.694	0.97	-0.10
512	1850.2	GPRS-4	Bottom	B3	25.53	27.0	0.708	0.99	0.13
512	1850.2	GPRS-4	Bottom	SIM2	25.53	27.0	0.711	1.00	-0.05
Body-Worn Test Data (15mm)									
661	1880.0	GPRS-4	Front	/	25.49	27.0	0.121	0.17	0.00
661	1880.0	GPRS-4	Rear	6	25.49	27.0	0.206	0.29	0.06



No.I21N04025-SAR

Table 13.9: SAR Values (WCDMA Band 2 - Head) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
9400	1880.0	RMC	Left Cheek	/	17.60	17.9	0.464	0.50	-0.10
9400	1880.0	RMC	Left Tilt	/	17.60	17.9	0.551	0.59	0.01
9400	1880.0	RMC	Right Cheek	/	17.60	17.9	0.535	0.57	-0.02
9400	1880.0	RMC	Right Tilt	7	17.60	17.9	0.731	0.78	-0.12
9400	1880.0	RMC	Right Tilt	M2	17.60	17.9	0.556	0.60	-0.02
9400	1880.0	RMC	Right Tilt	B2	17.60	17.9	0.704	0.75	0.05
9400	1880.0	RMC	Right Tilt	B3	17.60	17.9	0.720	0.77	0.07

Table 13.10: SAR Values (WCDMA Band 2 - Head) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
9400	1880.0	RMC	Left Cheek	/	23.90	24.0	0.124	0.13	0.05
9400	1880.0	RMC	Left Tilt	/	23.90	24.0	0.103	0.11	0.06
9400	1880.0	RMC	Right Cheek	/	23.90	24.0	0.098	0.10	0.03
9400	1880.0	RMC	Right Tilt	/	23.90	24.0	0.086	0.09	0.11
9400	1880.0	RMC	Left Cheek	M2	23.90	24.0	0.112	0.11	0.05
9400	1880.0	RMC	Left Cheek	B2	23.90	24.0	0.120	0.12	-0.06
9400	1880.0	RMC	Left Cheek	B3	23.90	24.0	0.117	0.12	-0.01



No.I21N04025-SAR

Table 13.11: SAR Values (WCDMA Band 2 - Body) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
9400	1880.0	RMC	Front	/	18.30	18.9	0.151	0.17	-0.03
9400	1880.0	RMC	Rear	/	18.30	18.9	0.261	0.30	0.05
9400	1880.0	RMC	Left	/	18.30	18.9	0.038	0.04	0.01
9400	1880.0	RMC	Right	/	18.30	18.9	0.020	0.02	0.07
9400	1880.0	RMC	Top	/	18.30	18.9	0.357	0.41	0.06
9400	1880.0	RMC	Top	M2	18.30	18.9	0.267	0.31	0.05
9400	1880.0	RMC	Top	B2	18.30	18.9	0.320	0.37	0.05
9400	1880.0	RMC	Top	B3	18.30	18.9	0.338	0.39	0.05
Body-Worn Test Data - Reduced power level 3/5									
9400	1880.0	RMC	Front	/	18.30	18.9	0.074	0.08	0.19
9400	1880.0	RMC	Rear	/	18.30	18.9	0.121	0.14	0.19

Table 13.12: SAR Values (WCDMA Band 2 - Body) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 4/6									
9400	1880.0	RMC	Front	/	22.70	22.9	0.210	0.22	0.06
9400	1880.0	RMC	Rear	/	22.70	22.9	0.350	0.37	0.13
9400	1880.0	RMC	Left	/	22.70	22.9	0.092	0.10	0.03
9400	1880.0	RMC	Right	/	22.70	22.9	0.114	0.12	0.08
9400	1880.0	RMC	Bottom	/	22.70	22.9	0.523	0.55	0.07
9400	1880.0	RMC	Bottom	8/M2	22.70	22.9	0.533	0.56	0.08
9400	1880.0	RMC	Bottom	B2	22.70	22.9	0.516	0.54	-0.09
9400	1880.0	RMC	Bottom	B3	22.70	22.9	0.520	0.54	-0.03
Body-Worn Test Data (15mm) - Reduced power level 4/6									
9400	1880.0	RMC	Front	/	22.70	22.9	0.120	0.13	0.06
9400	1880.0	RMC	Rear	9	22.70	22.9	0.186	0.19	0.10



No.I21N04025-SAR

Table 13.13: SAR Values (WCDMA Band 4 - Head) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
1413	1732.6	RMC	Left Cheek	/	16.30	16.6	0.560	0.60	0.14
1413	1732.6	RMC	Left Tilt	/	16.30	16.6	0.603	0.65	0.01
1413	1732.6	RMC	Right Cheek	/	16.30	16.6	0.676	0.72	0.14
1413	1732.6	RMC	Right Tilt	/	16.30	16.6	0.960	1.03	0.09
1513	1752.6	RMC	Right Tilt	/	16.20	16.6	0.953	1.04	0.04
1312	1712.4	RMC	Right Tilt	10	16.30	16.6	1.020	1.09	0.12
1312	1712.4	RMC	Right Tilt	M2	16.30	16.6	0.778	0.83	-0.03
1312	1712.4	RMC	Right Tilt	B2	16.30	16.6	0.986	1.06	0.10
1312	1712.4	RMC	Right Tilt	B3	16.30	16.6	1.000	1.07	-0.05

Table 13.14: SAR Values (WCDMA Band 4 - Head) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
1413	1732.6	RMC	Left Cheek	/	23.90	24.0	0.143	0.15	0.06
1413	1732.6	RMC	Left Tilt	/	23.90	24.0	0.118	0.12	0.09
1413	1732.6	RMC	Right Cheek	/	23.90	24.0	0.096	0.10	0.05
1413	1732.6	RMC	Right Tilt	/	23.90	24.0	0.088	0.09	0.03
1413	1732.6	RMC	Left Cheek	M2	23.90	24.0	0.131	0.13	0.05
1413	1732.6	RMC	Left Cheek	B2	23.90	24.0	0.133	0.14	0.01
1413	1732.6	RMC	Left Cheek	B3	23.90	24.0	0.139	0.14	0.12



No.I21N04025-SAR

Table 13.15: SAR Values (WCDMA Band 4 - Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
1413	1732.6	RMC	Front	/	20.10	20.4	0.303	0.32	0.03
1413	1732.6	RMC	Rear	/	20.10	20.4	0.465	0.50	0.01
1413	1732.6	RMC	Left	/	20.10	20.4	0.072	0.08	0.04
1413	1732.6	RMC	Right	/	20.10	20.4	0.044	0.05	0.12
1413	1732.6	RMC	Top	11	20.10	20.4	0.570	0.61	0.06
1413	1732.6	RMC	Top	M2	20.10	20.4	0.554	0.59	0.03
1413	1732.6	RMC	Top	B2	20.10	20.4	0.561	0.60	0.13
1413	1732.6	RMC	Top	B3	20.10	20.4	0.543	0.58	0.08
Body-Worn Test Data (15mm) - Reduced power level 3/5									
1413	1732.6	RMC	Front	/	20.10	20.4	0.157	0.17	-0.12
1413	1732.6	RMC	Rear	12	20.10	20.4	0.241	0.26	-0.03

Table 13.16: SAR Values (WCDMA Band 4 - Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 4/6									
1413	1732.6	RMC	Front	/	22.20	22.3	0.340	0.35	-0.01
1413	1732.6	RMC	Rear	/	22.20	22.3	0.382	0.39	0.09
1413	1732.6	RMC	Left	/	22.20	22.3	0.128	0.13	0.03
1413	1732.6	RMC	Right	/	22.20	22.3	0.181	0.19	0.05
1413	1732.6	RMC	Bottom	/	22.20	22.3	0.562	0.58	0.07
1413	1732.6	RMC	Bottom	M2	22.20	22.3	0.559	0.57	-0.01
1413	1732.6	RMC	Bottom	B2	22.20	22.3	0.533	0.55	0.14
1413	1732.6	RMC	Bottom	B3	22.20	22.3	0.548	0.56	-0.08
Body-Worn Test Data (15mm) - Reduced power level 4/6									
1413	1732.6	RMC	Front	/	22.20	22.3	0.212	0.22	0.02
1413	1732.6	RMC	Rear	/	22.20	22.3	0.216	0.22	0.05



No.I21N04025-SAR

Table 13.17: SAR Values (WCDMA Band 5 - Head) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
4183	836.6	RMC	Left Cheek	/	22.10	23.0	0.669	0.82	-0.02
4183	836.6	RMC	Left Tilt	/	22.10	23.0	0.628	0.77	-0.03
4183	836.6	RMC	Right Cheek	/	22.10	23.0	0.801	0.99	0.04
4183	836.6	RMC	Right Tilt	/	22.10	23.0	0.847	1.04	0.08
4233	846.6	RMC	Left Cheek	/	22.00	23.0	0.722	0.91	0.06
4132	826.4	RMC	Left Cheek	/	22.10	23.0	0.588	0.72	0.02
4233	846.6	RMC	Right Cheek	/	22.00	23.0	0.883	1.11	0.04
4132	826.4	RMC	Right Cheek	/	22.10	23.0	0.703	0.86	0.05
4233	846.6	RMC	Right Tilt	13	22.00	23.0	0.914	1.15	0.03
4132	826.4	RMC	Right Tilt	/	22.10	23.0	0.745	0.92	0.04
4233	846.6	RMC	Right Tilt	M2	22.00	23.0	0.747	0.94	-0.03
4233	846.6	RMC	Right Tilt	B2	22.00	23.0	0.893	1.12	0.08
4233	846.6	RMC	Right Tilt	B3	22.00	23.0	0.880	1.11	0.06

Table 13.18: SAR Values (WCDMA Band 5 - Head) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
4183	836.6	RMC	Left Cheek	/	23.40	24.5	0.084	0.11	-0.09
4183	836.6	RMC	Left Tilt	/	23.40	24.5	0.041	0.05	0.00
4183	836.6	RMC	Right Cheek	/	23.40	24.5	0.079	0.10	0.12
4183	836.6	RMC	Right Tilt	/	23.40	24.5	0.037	0.05	-0.06
4183	836.6	RMC	Left Cheek	M2	23.40	24.5	0.082	0.11	-0.05
4183	836.6	RMC	Left Cheek	B2	23.40	24.5	0.068	0.09	0.10
4183	836.6	RMC	Left Cheek	B3	23.40	24.5	0.075	0.10	0.08



No.I21N04025-SAR

Table 13.19: SAR Values (WCDMA Band 5 -Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
4183	836.6	RMC	Front	/	23.30	24.5	0.193	0.25	0.07
4183	836.6	RMC	Rear	/	23.30	24.5	0.268	0.35	0.03
4183	836.6	RMC	Left	/	23.30	24.5	0.141	0.19	0.04
4183	836.6	RMC	Right	/	23.30	24.5	0.150	0.20	0.08
4183	836.6	RMC	Top	/	23.30	24.5	0.156	0.21	0.12
4183	836.6	RMC	Rear	M2	23.30	24.5	0.245	0.32	0.04
4183	836.6	RMC	Rear	B2	23.30	24.5	0.252	0.33	0.08
4183	836.6	RMC	Rear	B3	23.30	24.5	0.236	0.31	0.13
Body-Worn Test Data (15mm)									
4183	836.6	RMC	Front	/	23.30	24.5	0.136	0.18	0.19
4183	836.6	RMC	Rear	/	23.30	24.5	0.161	0.21	0.02

Table 13.20: SAR Values (WCDMA Band 5 -Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
4183	836.6	RMC	Front	/	23.40	24.5	0.187	0.24	0.01
4183	836.6	RMC	Rear	14	23.40	24.5	0.278	0.36	0.02
4183	836.6	RMC	Left	/	23.40	24.5	0.252	0.32	0.04
4183	836.6	RMC	Right	/	23.40	24.5	0.163	0.21	0.13
4183	836.6	RMC	Bottom	/	23.40	24.5	0.185	0.24	0.10
4183	836.6	RMC	Rear	M2	23.40	24.5	0.252	0.32	0.03
4183	836.6	RMC	Rear	B2	23.40	24.5	0.257	0.33	-0.02
4183	836.6	RMC	Rear	B3	23.40	24.5	0.266	0.34	-0.06
Body-Worn Test Data (15mm)									
4183	836.6	RMC	Front	/	23.40	24.5	0.211	0.27	0.01
4183	836.6	RMC	Rear	15	23.40	24.5	0.221	0.28	0.06



No.I21N04025-SAR

Table 13.21: SAR Values (LTE Band 2 - Head) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
18700	1860.0	1RB50	Left Cheek	/	17.10	18.0	0.476	0.59	0.04
18700	1860.0	50RB25	Left Cheek	/	17.05	18.0	0.455	0.57	0.02
18700	1860.0	1RB50	Left Tilt	/	17.10	18.0	0.500	0.62	-0.12
18700	1860.0	50RB25	Left Tilt	/	17.05	18.0	0.504	0.63	0.00
18700	1860.0	1RB50	Right Cheek	/	17.10	18.0	0.572	0.70	-0.10
18700	1860.0	50RB25	Right Cheek	/	17.05	18.0	0.580	0.72	0.10
18700	1860.0	1RB50	Right Tilt	/	17.10	18.0	0.735	0.90	0.00
18700	1860.0	50RB25	Right Tilt	/	17.05	18.0	0.890	1.11	0.00
19100	1900.0	1RB50	Right Tilt	/	17.06	18.0	0.792	0.98	0.05
18900	1880.0	1RB50	Right Tilt	/	17.09	18.0	0.647	0.80	0.02
19100	1900.0	50RB25	Right Tilt	16	17.02	18.0	0.927	1.16	0.01
18900	1880.0	50RB25	Right Tilt	/	17.03	18.0	0.783	0.98	-0.03
18700	1860.0	100RB	Right Tilt	/	17.02	18.0	0.754	0.94	-0.01
19100	1900.0	50RB25	Right Tilt	M2	17.02	18.0	0.760	0.95	-0.08
19100	1900.0	50RB25	Right Tilt	B2	17.02	18.0	0.913	1.14	0.10
19100	1900.0	50RB25	Right Tilt	B3	17.02	18.0	0.901	1.13	0.06
19100	1900.0	50RB25	Right Tilt	SIM2	17.02	18.0	0.891	1.12	0.03

Table 13.22: SAR Values (LTE Band 2 - Head) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
18700	1860.0	1RB50	Left Cheek	/	22.50	24.0	0.111	0.16	-0.03
18700	1860.0	50RB50	Left Cheek	/	21.45	23.0	0.100	0.14	-0.08
18700	1860.0	1RB50	Left Tilt	/	22.50	24.0	0.057	0.08	0.06
18700	1860.0	50RB50	Left Tilt	/	21.45	23.0	0.053	0.08	0.09
18700	1860.0	1RB50	Right Cheek	/	22.50	24.0	0.077	0.11	0.05
18700	1860.0	50RB50	Right Cheek	/	21.45	23.0	0.072	0.10	0.06
18700	1860.0	1RB50	Right Tilt	/	22.50	24.0	0.059	0.08	0.05
18700	1860.0	50RB50	Right Tilt	/	21.45	23.0	0.055	0.08	0.07
18700	1860.0	1RB50	Left Cheek	M2	22.50	24.0	0.101	0.14	-0.03
18700	1860.0	1RB50	Left Cheek	B2	22.50	24.0	0.098	0.14	0.13
18700	1860.0	1RB50	Left Cheek	B3	22.50	24.0	0.105	0.15	0.05



No.I21N04025-SAR

Table 13.23: SAR Values (LTE Band 2 - Body) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
18700	1860.0	1RB50	Front	/	17.97	19.4	0.148	0.21	0.08
18700	1860.0	50RB0	Front	/	17.94	19.4	0.149	0.21	0.04
18700	1860.0	1RB50	Rear	/	17.97	19.4	0.276	0.38	0.01
18700	1860.0	50RB0	Rear	/	17.94	19.4	0.251	0.35	0.06
18700	1860.0	1RB50	Left	/	17.97	19.4	0.042	0.06	0.02
18700	1860.0	50RB0	Left	/	17.94	19.4	0.039	0.05	0.08
18700	1860.0	1RB50	Right	/	17.97	19.4	0.017	0.02	0.10
18700	1860.0	50RB0	Right	/	17.94	19.4	0.017	0.02	0.08
18700	1860.0	1RB50	Top	/	17.97	19.4	0.383	0.53	0.07
18700	1860.0	50RB0	Top	/	17.94	19.4	0.350	0.49	0.05
18700	1860.0	1RB50	Top	M2	17.97	19.4	0.315	0.44	0.05
18700	1860.0	1RB50	Top	B2	17.97	19.4	0.342	0.48	0.11
18700	1860.0	1RB50	Top	B3	17.97	19.4	0.365	0.51	0.09
Body-Worn Test Data (15mm) - Reduced power level 3/5									
18700	1860.0	1RB50	Front	/	17.97	19.4	0.074	0.10	0.04
18700	1860.0	50RB0	Front	/	17.94	19.4	0.076	0.11	0.08
18700	1860.0	1RB50	Rear	/	17.97	19.4	0.133	0.18	0.18
18700	1860.0	50RB0	Rear	/	17.94	19.4	0.124	0.17	0.18



No.I21N04025-SAR

Table 13.24: SAR Values (LTE Band 2 - Body) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 4/6									
19100	1900.0	1RB50	Front	/	21.81	22.8	0.237	0.30	-0.02
19100	1900.0	50RB0	Front	/	21.52	22.8	0.232	0.31	0.15
19100	1900.0	1RB50	Rear	/	21.81	22.8	0.403	0.51	0.03
19100	1900.0	50RB0	Rear	/	21.52	22.8	0.376	0.50	-0.02
19100	1900.0	1RB50	Left	/	21.81	22.8	0.102	0.13	0.16
19100	1900.0	50RB0	Left	/	21.52	22.8	0.099	0.13	0.09
19100	1900.0	1RB50	Right	/	21.81	22.8	0.128	0.16	0.09
19100	1900.0	50RB0	Right	/	21.52	22.8	0.122	0.16	0.01
19100	1900.0	1RB50	Bottom	17	21.81	22.8	0.582	0.73	0.08
19100	1900.0	50RB0	Bottom	/	21.52	22.8	0.556	0.75	0.10
19100	1900.0	50RB0	Bottom	M2	21.52	22.8	0.549	0.74	-0.09
19100	1900.0	50RB0	Bottom	B2	21.52	22.8	0.520	0.70	0.11
19100	1900.0	50RB0	Bottom	B3	21.52	22.8	0.533	0.72	0.06
Body-Worn Test Data (15mm) - Reduced power level 4/6									
19100	1900.0	1RB50	Front	/	21.81	22.8	0.112	0.14	-0.05
19100	1900.0	50RB0	Front	/	21.52	22.8	0.113	0.15	0.11
19100	1900.0	1RB50	Rear	/	21.81	22.8	0.174	0.22	-0.15
19100	1900.0	50RB0	Rear	18	21.52	22.8	0.176	0.24	-0.08



No.I21N04025-SAR

Table 13.25: SAR Values (LTE Band 4 - Head) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
20175	1732.5	1RB50	Left Cheek	/	15.81	16.7	0.408	0.50	0.00
20300	1745.0	50RB0	Left Cheek	/	15.84	16.7	0.428	0.52	0.01
20175	1732.5	1RB50	Left Tilt	/	15.81	16.7	0.437	0.54	0.02
20300	1745.0	50RB0	Left Tilt	/	15.84	16.7	0.439	0.54	0.03
20175	1732.5	1RB50	Right Cheek	/	15.81	16.7	0.662	0.81	0.04
20300	1745.0	50RB0	Right Cheek	/	15.84	16.7	0.695	0.85	0.05
20175	1732.5	1RB50	Right Tilt	/	15.81	16.7	0.688	0.84	0.01
20300	1745.0	50RB0	Right Tilt	19	15.84	16.7	0.841	1.03	0.04
20300	1745.0	1RB50	Right Cheek	/	15.74	16.7	0.510	0.64	0.11
20050	1720.0	1RB50	Right Cheek	/	15.69	16.7	0.512	0.65	0.09
20175	1732.5	50RB0	Right Cheek	/	15.67	16.7	0.534	0.68	0.07
20050	1720.0	50RB0	Right Cheek	/	15.73	16.7	0.536	0.67	0.05
20300	1745.0	100RB	Right Cheek	/	15.75	16.7	0.643	0.80	0.06
20300	1745.0	1RB50	Right Tilt	/	15.74	16.7	0.604	0.75	0.08
20050	1720.0	1RB50	Right Tilt	/	15.69	16.7	0.622	0.78	0.07
20175	1732.5	50RB0	Right Tilt	/	15.67	16.7	0.657	0.83	0.03
20050	1720.0	50RB0	Right Tilt	/	15.73	16.7	0.679	0.85	0.01
20300	1745.0	100RB	Right Tilt	/	15.75	16.7	0.668	0.83	-0.07
20300	1745.0	50RB0	Right Tilt	M2	15.84	16.7	0.755	0.92	0.04
20300	1745.0	50RB0	Right Tilt	B2	15.84	16.7	0.805	0.98	-0.05
20300	1745.0	50RB0	Right Tilt	B3	15.84	16.7	0.822	1.00	0.11



No.I21N04025-SAR

Table 13.26: SAR Values (LTE Band 4 - Head) – Bottom Antenna

Frequency		Ambient Temperature: 22.8°C		Liquid Temperature: 22.3°C					
Ch.	MHz	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
20300	1745.0	1RB0	Left Cheek	/	22.90	24.0	0.147	0.19	0.07
20300	1745.0	50RB0	Left Cheek	/	21.77	23.0	0.121	0.16	0.09
20300	1745.0	1RB0	Left Tilt	/	22.90	24.0	0.079	0.10	-0.02
20300	1745.0	50RB0	Left Tilt	/	21.77	23.0	0.061	0.08	0.03
20300	1745.0	1RB0	Right Cheek	/	22.90	24.0	0.082	0.10	0.09
20300	1745.0	50RB0	Right Cheek	/	21.77	23.0	0.060	0.08	0.04
20300	1745.0	1RB0	Right Tilt	/	22.90	24.0	0.073	0.09	0.09
20300	1745.0	50RB0	Right Tilt	/	21.77	23.0	0.060	0.08	0.05
20300	1745.0	1RB0	Left Cheek	M2	22.90	24.0	0.124	0.16	0.07
20300	1745.0	1RB0	Left Cheek	B2	22.90	24.0	0.128	0.16	-0.03
20300	1745.0	1RB0	Left Cheek	B3	22.90	24.0	0.135	0.17	-0.15



No.I21N04025-SAR

Table 13.27: SAR Values (LTE Band 4 - Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
20300	1745.0	1RB0	Front	/	18.91	20.2	0.290	0.39	0.11
20300	1745.0	50RB25	Front	/	18.85	20.2	0.288	0.39	-0.06
20300	1745.0	1RB0	Rear	/	18.91	20.2	0.493	0.66	0.08
20300	1745.0	50RB25	Rear	/	18.85	20.2	0.512	0.70	-0.02
20300	1745.0	1RB0	Left	/	18.91	20.2	0.075	0.10	0.09
20300	1745.0	50RB25	Left	/	18.85	20.2	0.075	0.10	0.03
20300	1745.0	1RB0	Right	/	18.91	20.2	0.044	0.06	0.03
20300	1745.0	50RB25	Right	/	18.85	20.2	0.043	0.06	0.04
20300	1745.0	1RB0	Top	/	18.91	20.2	0.633	0.85	0.07
20300	1745.0	50RB25	Top	/	18.85	20.2	0.570	0.78	-0.05
20175	1732.5	1RB0	Top	/	18.86	20.2	0.576	0.78	0.06
20050	1720.0	1RB0	Top	/	18.87	20.2	0.605	0.82	0.05
20300	1745.0	100RB	Top	/	18.82	20.2	0.611	0.84	0.10
20300	1745.0	1RB0	Top	M2	18.91	20.2	0.682	0.92	0.13
20300	1745.0	1RB0	Top	B2	18.91	20.2	0.654	0.88	-0.08
20300	1745.0	1RB0	Top	B3	18.91	20.2	0.670	0.90	-0.04
Body-Worn Test Data (15mm) - Reduced power level 3/5									
20300	1745.0	1RB0	Front	/	18.91	20.2	0.150	0.20	0.00
20300	1745.0	50RB25	Front	/	18.85	20.2	0.145	0.20	0.03
20300	1745.0	1RB0	Rear	/	18.91	20.2	0.243	0.33	0.07
20300	1745.0	50RB25	Rear	/	18.85	20.2	0.234	0.32	0.10



No.I21N04025-SAR

Table 13.28: SAR Values (LTE Band 4 - Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 4/6									
20300	1745.0	1RB0	Front	/	21.67	21.9	0.600	0.63	-0.02
20300	1745.0	50RB0	Front	/	21.63	21.9	0.485	0.52	-0.01
20300	1745.0	1RB0	Rear	/	21.67	21.9	0.759	0.80	0.11
20300	1745.0	50RB0	Rear	/	21.63	21.9	0.629	0.67	-0.01
20300	1745.0	1RB0	Left	/	21.67	21.9	0.241	0.25	0.14
20300	1745.0	50RB0	Left	/	21.63	21.9	0.181	0.19	0.08
20300	1745.0	1RB0	Right	/	21.67	21.9	0.341	0.36	0.10
20300	1745.0	50RB0	Right	/	21.63	21.9	0.273	0.29	0.02
20300	1745.0	1RB0	Bottom	20	21.67	21.9	0.839	0.88	0.07
20300	1745.0	50RB0	Bottom	/	21.63	21.9	0.815	0.87	0.09
20175	1732.5	1RB0	Bottom	/	21.60	21.9	0.723	0.77	0.09
20050	1720.0	1RB0	Bottom	/	21.56	21.9	0.734	0.79	0.03
20175	1732.5	50RB0	Bottom	/	21.46	21.9	0.687	0.76	0.06
20050	1720.0	50RB0	Bottom	/	21.61	21.9	0.699	0.75	0.05
20050	1720.0	100RB	Bottom	/	21.58	21.9	0.734	0.79	0.03
20300	1745.0	1RB0	Bottom	M2	21.67	21.9	0.587	0.62	0.03
20300	1745.0	1RB0	Bottom	B2	21.67	21.9	0.825	0.87	-0.03
20300	1745.0	1RB0	Bottom	B3	21.67	21.9	0.814	0.86	0.07
Body-Worn Test Data (15mm) - Reduced power level 4/6									
20300	1745.0	1RB0	Front	/	21.67	21.9	0.380	0.40	0.04
20300	1745.0	50RB0	Front	/	21.63	21.9	0.313	0.33	-0.04
20300	1745.0	1RB0	Rear	21	21.67	21.9	0.477	0.50	-0.03
20300	1745.0	50RB0	Rear	/	21.63	21.9	0.384	0.41	0.17
20300	1745.0	50RB25	Rear	SIM2	21.67	21.9	0.455	0.48	-0.03



No.I21N04025-SAR

Table 13.29: SAR Values (LTE Band 5 - Head) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
20450	829.0	1RB24	Left Cheek	/	21.32	22.0	0.482	0.56	0.08
20450	829.0	25RB25	Left Cheek	/	21.25	22.0	0.458	0.54	0.10
20450	829.0	1RB24	Left Tilt	/	21.32	22.0	0.359	0.42	-0.11
20450	829.0	25RB25	Left Tilt	/	21.25	22.0	0.365	0.43	-0.18
20450	829.0	1RB24	Right Cheek	/	21.32	22.0	0.731	0.85	0.07
20450	829.0	25RB25	Right Cheek	22	21.25	22.0	0.738	0.88	-0.02
20450	829.0	1RB24	Right Tilt	/	21.32	22.0	0.517	0.60	-0.17
20450	829.0	25RB25	Right Tilt	/	21.25	22.0	0.466	0.55	-0.15
20600	844.0	1RB24	Right Cheek	/	21.15	22.0	0.600	0.73	-0.16
20525	836.5	1RB24	Right Cheek	/	21.24	22.0	0.684	0.81	-0.18
20600	844.0	25RB25	Right Cheek	/	21.17	22.0	0.709	0.86	0.05
20525	836.5	25RB25	Right Cheek	/	21.19	22.0	0.731	0.88	-0.15
20450	829.0	50RB	Right Cheek	/	21.27	22.0	0.731	0.86	0.12
20525	836.5	25RB25	Right Cheek	M2	21.25	22.0	0.612	0.73	0.19
20525	836.5	25RB25	Right Cheek	B2	21.25	22.0	0.678	0.81	0.12
20525	836.5	25RB25	Right Cheek	B3	21.25	22.0	0.709	0.84	-0.01

Table 13.30: SAR Values (LTE Band 5 - Head) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
20450	829.0	1RB24	Left Cheek	/	23.47	24.5	0.167	0.21	0.06
20450	829.0	25RB12	Left Cheek	/	22.46	23.5	0.145	0.18	0.03
20450	829.0	1RB24	Left Tilt	/	23.47	24.5	0.083	0.11	0.04
20450	829.0	25RB12	Left Tilt	/	22.46	23.5	0.069	0.09	0.07
20450	829.0	1RB24	Right Cheek	/	23.47	24.5	0.140	0.18	0.16
20450	829.0	25RB12	Right Cheek	/	22.46	23.5	0.126	0.16	0.05
20450	829.0	1RB24	Right Tilt	/	23.47	24.5	0.067	0.08	0.03
20450	829.0	25RB12	Right Tilt	/	22.46	23.5	0.051	0.06	0.06
20450	829.0	1RB24	Left Cheek	M2	23.47	24.5	0.154	0.20	0.06
20450	829.0	1RB24	Left Cheek	B2	23.47	24.5	0.150	0.19	0.11
20450	829.0	1RB24	Left Cheek	B3	23.47	24.5	0.161	0.20	0.05



No.I21N04025-SAR

Table 13.31: SAR Values (LTE Band 5 - Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
20450	829.0	1RB24	Front	/	23.33	24.5	0.206	0.27	0.04
20450	829.0	25RB0	Front	/	22.23	23.5	0.157	0.21	0.08
20450	829.0	1RB24	Rear	/	23.33	24.5	0.277	0.36	-0.05
20450	829.0	25RB0	Rear	/	22.23	23.5	0.243	0.33	0.04
20450	829.0	1RB24	Left	/	23.33	24.5	0.185	0.24	0.17
20450	829.0	25RB0	Left	/	22.23	23.5	0.153	0.20	0.02
20450	829.0	1RB24	Right	/	23.33	24.5	0.189	0.25	0.16
20450	829.0	25RB0	Right	/	22.23	23.5	0.148	0.20	0.17
20450	829.0	1RB24	Top	/	23.33	24.5	0.179	0.23	-0.03
20450	829.0	25RB0	Top	/	22.23	23.5	0.134	0.18	0.11
20450	829.0	1RB24	Rear	M2	23.33	24.5	0.262	0.34	-0.08
20450	829.0	1RB24	Rear	B2	23.33	24.5	0.266	0.35	0.11
20450	829.0	1RB24	Rear	B3	23.33	24.5	0.274	0.36	-0.07
Body-Worn Test Data (15mm)									
20450	829.0	1RB24	Front	/	23.33	24.5	0.140	0.18	-0.10
20450	829.0	25RB0	Front	/	22.23	23.5	0.112	0.15	0.09
20450	829.0	1RB24	Rear	/	23.33	24.5	0.221	0.29	0.02
20450	829.0	25RB0	Rear	/	22.23	23.5	0.163	0.22	0.04



No.I21N04025-SAR

Table 13.32: SAR Values (LTE Band 5 - Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
20450	829.0	1RB24	Front	/	23.47	24.5	0.198	0.25	0.00
20450	829.0	25RB12	Front	/	22.46	23.5	0.158	0.20	0.02
20450	829.0	1RB24	Rear	/	23.47	24.5	0.262	0.33	0.06
20450	829.0	25RB12	Rear	/	22.46	23.5	0.187	0.24	0.01
20450	829.0	1RB24	Left	23	23.47	24.5	0.295	0.37	0.08
20450	829.0	25RB12	Left	/	22.46	23.5	0.230	0.29	0.18
20450	829.0	1RB24	Right	/	23.47	24.5	0.180	0.23	-0.01
20450	829.0	25RB12	Right	/	22.46	23.5	0.142	0.18	0.02
20450	829.0	1RB24	Bottom	/	23.47	24.5	0.179	0.23	0.04
20450	829.0	25RB12	Bottom	/	22.46	23.5	0.141	0.18	0.04
20450	829.0	1RB24	Left	M2	23.47	24.5	0.255	0.32	-0.16
20450	829.0	1RB24	Left	B2	23.47	24.5	0.270	0.34	-0.03
20450	829.0	1RB24	Left	B3	23.47	24.5	0.288	0.37	0.12
Body-Worn Test Data (15mm)									
20450	829.0	1RB24	Front	/	23.47	24.5	0.188	0.24	0.03
20450	829.0	25RB12	Front	/	22.46	23.5	0.145	0.18	0.05
20450	829.0	1RB24	Rear	24	23.47	24.5	0.235	0.30	-0.01
20450	829.0	25RB12	Rear	/	22.46	23.5	0.178	0.23	-0.05



No.I21N04025-SAR

Table 13.33: SAR Values (LTE Band 7 - Head) – Top Antenna

Frequency		Test Mode		Test Position		Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz										
Reduced power level 1/2											
21350	2560.0	1RB99	Left Cheek	/	16.42	17.2	0.353	0.42	0.06		
21350	2560.0	50RB50	Left Cheek	/	16.44	17.2	0.357	0.43	0.02		
21350	2560.0	1RB99	Left Tilt	/	16.42	17.2	0.457	0.55	0.04		
21350	2560.0	50RB50	Left Tilt	/	16.44	17.2	0.470	0.56	0.05		
21350	2560.0	1RB99	Right Cheek	/	16.42	17.2	0.801	0.96	0.14		
21350	2560.0	50RB50	Right Cheek	/	16.44	17.2	0.831	0.99	0.10		
21350	2560.0	1RB99	Right Tilt	25	16.42	17.2	0.913	1.09	-0.15		
21350	2560.0	50RB50	Right Tilt	/	16.44	17.2	0.894	1.06	0.11		
21100	2535.0	1RB99	Right Cheek	/	16.32	17.2	0.795	0.97	0.08		
20850	2510.0	1RB99	Right Cheek	/	16.02	17.2	0.704	0.92	0.13		
21100	2535.0	50RB50	Right Cheek	/	16.32	17.2	0.808	0.99	-0.05		
20850	2510.0	50RB50	Right Cheek	/	16.02	17.2	0.716	0.94	-0.03		
21350	2560.0	100RB	Right Cheek	/	16.39	17.2	0.784	0.94	0.05		
21100	2535.0	1RB99	Right Tilt	/	16.32	17.2	0.882	1.08	0.07		
20850	2510.0	1RB99	Right Tilt	/	16.02	17.2	0.727	0.95	0.12		
21100	2535.0	50RB50	Right Tilt	/	16.32	17.2	0.834	1.02	0.06		
20850	2510.0	50RB50	Right Tilt	/	16.02	17.2	0.716	0.94	0.05		
21350	2560.0	100RB	Right Tilt	/	16.39	17.2	0.894	1.08	0.15		
21350	2560.0	1RB99	Right Tilt	M2	16.42	17.2	0.842	1.01	0.04		
21350	2560.0	1RB99	Right Tilt	B2	16.42	17.2	0.898	1.07	-0.08		
21350	2560.0	1RB99	Right Tilt	B3	16.42	17.2	0.865	1.04	0.15		



No.I21N04025-SAR

Table 13.34: SAR Values (LTE Band 7 - Head) – Bottom Antenna

Frequency		Ambient Temperature: 22.3°C		Liquid Temperature: 21.8°C					
Ch.	MHz	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
21350	2560.0	1RB50	Left Cheek	/	22.43	24.0	0.096	0.14	0.09
21350	2560.0	50RB50	Left Cheek	/	21.46	23.0	0.089	0.13	-0.09
21350	2560.0	1RB50	Left Tilt	/	22.43	24.0	0.089	0.13	0.03
21350	2560.0	50RB50	Left Tilt	/	21.46	23.0	0.081	0.12	0.09
21350	2560.0	1RB50	Right Cheek	/	22.43	24.0	0.201	0.29	0.02
21350	2560.0	50RB50	Right Cheek	/	21.46	23.0	0.167	0.24	0.04
21350	2560.0	1RB50	Right Tilt	/	22.43	24.0	0.091	0.13	0.09
21350	2560.0	50RB50	Right Tilt	/	21.46	23.0	0.088	0.12	0.07
21350	2560.0	1RB50	Right Cheek	M2	22.43	24.0	0.184	0.26	0.02
21350	2560.0	1RB50	Right Cheek	B2	22.43	24.0	0.180	0.26	-0.05
21350	2560.0	1RB50	Right Cheek	B3	22.43	24.0	0.193	0.28	-0.14



No.I21N04025-SAR

Table 13.35: SAR Values (LTE Band 7 - Body) – Top Antenna

Frequency		Test Mode	Test Position	Figure No./ Note	Ambient Temperature: 22.3°C		Liquid Temperature: 21.8°C		
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Hotspot Test Data (10mm) - Reduced power level 3/5									
21350	2560.0	1RB50	Front	/	18.85	19.9	0.159	0.20	0.12
21350	2560.0	50RB50	Front	/	18.88	19.9	0.159	0.20	-0.02
21350	2560.0	1RB50	Rear	/	18.85	19.9	0.578	0.74	0.06
21350	2560.0	50RB50	Rear	/	18.88	19.9	0.518	0.66	0.05
21350	2560.0	1RB50	Left	/	18.85	19.9	0.203	0.26	0.07
21350	2560.0	50RB50	Left	/	18.88	19.9	0.195	0.25	0.06
21350	2560.0	1RB50	Right	/	18.85	19.9	0.022	0.03	0.05
21350	2560.0	50RB50	Right	/	18.88	19.9	0.021	0.03	0.07
21350	2560.0	1RB50	Top	26	18.85	19.9	0.651	0.83	0.09
21350	2560.0	50RB50	Top	/	18.88	19.9	0.525	0.66	0.07
21100	2535.0	1RB50	Top	/	18.69	19.9	0.558	0.74	0.04
20850	2510.0	1RB50	Top	/	18.53	19.9	0.524	0.72	0.02
21350	2560.0	100RB	Top	/	18.82	19.9	0.543	0.70	0.05
21350	2560.0	1RB50	Top	M2	18.85	19.9	0.484	0.62	0.03
21350	2560.0	1RB50	Top	B2	18.85	19.9	0.614	0.78	-0.14
21350	2560.0	1RB50	Top	B3	18.85	19.9	0.637	0.81	-0.08
Body-Worn Test Data (15mm) - Reduced power level 3/5									
21350	2560.0	1RB50	Front	/	18.85	19.9	0.084	0.11	-0.09
21350	2560.0	50RB50	Front	/	18.88	19.9	0.083	0.10	0.03
21350	2560.0	1RB50	Rear	/	18.85	19.9	0.205	0.26	0.05
21350	2560.0	50RB50	Rear	27	18.88	19.9	0.238	0.30	0.01



No.I21N04025-SAR

Table 13.36: SAR Values (LTE Band 7 - Body) – Bottom Antenna

Frequency		Test Mode		Test Position	Figure No./ Note	Ambient Temperature: 22.3°C		Liquid Temperature: 21.8°C		
Ch.	MHz	Test Mode	Test Position			Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Hotspot Test Data (10mm) - Reduced power level 4/6										
21350	2560.0	1RB50	Front	/	21.65	22.6	0.309	0.38	-0.16	
21350	2560.0	50RB50	Front	/	21.50	22.6	0.317	0.41	0.06	
21350	2560.0	1RB50	Rear	/	21.65	22.6	0.389	0.48	0.17	
21350	2560.0	50RB50	Rear	/	21.50	22.6	0.362	0.47	0.01	
21350	2560.0	1RB50	Left	/	21.65	22.6	0.063	0.08	0.05	
21350	2560.0	50RB50	Left	/	21.50	22.6	0.063	0.08	0.01	
21350	2560.0	1RB50	Right	/	21.65	22.6	0.177	0.22	0.04	
21350	2560.0	50RB50	Right	/	21.50	22.6	0.180	0.23	0.02	
21350	2560.0	1RB50	Bottom	/	21.65	22.6	0.223	0.28	0.01	
21350	2560.0	50RB50	Bottom	/	21.50	22.6	0.223	0.29	0.03	
21350	2560.0	1RB50	Rear	M2	21.65	22.6	0.379	0.47	-0.13	
21350	2560.0	1RB50	Rear	B2	21.65	22.6	0.332	0.41	0.06	
21350	2560.0	1RB50	Rear	B3	21.65	22.6	0.365	0.45	-0.10	
Body-Worn Test Data (15mm) - Reduced power level 4/6										
21350	2560.0	1RB50	Front	/	21.65	22.6	0.172	0.21	-0.16	
21350	2560.0	50RB50	Front	/	21.50	22.6	0.173	0.22	0.12	
21350	2560.0	1RB50	Rear	/	21.65	22.6	0.178	0.22	-0.18	
21350	2560.0	50RB50	Rear	/	21.50	22.6	0.189	0.24	-0.03	



No.I21N04025-SAR

Table 13.37: SAR Values (LTE Band 12 - Head) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
23060	704.0	1RB49	Left Cheek	/	23.42	24.5	0.500	0.64	-0.17
23060	704.0	25RB0	Left Cheek	/	22.31	23.5	0.340	0.45	0.04
23060	704.0	1RB49	Left Tilt	/	23.42	24.5	0.417	0.53	-0.04
23060	704.0	25RB0	Left Tilt	/	22.31	23.5	0.300	0.39	-0.04
23060	704.0	1RB49	Right Cheek	/	23.42	24.5	0.757	0.97	0.07
23060	704.0	25RB0	Right Cheek	/	22.31	23.5	0.573	0.75	0.02
23060	704.0	1RB49	Right Tilt	/	23.42	24.5	0.699	0.90	0.42
23060	704.0	25RB0	Right Tilt	/	22.31	23.5	0.514	0.68	0.01
23130	711.0	1RB49	Right Cheek	28	23.37	24.5	0.841	1.09	0.07
23095	707.5	1RB49	Right Cheek	/	23.38	24.5	0.797	1.03	0.01
23060	704.0	50RB	Right Cheek	/	22.30	23.5	0.606	0.80	0.01
23130	711.0	1RB49	Right Tilt	/	23.37	24.5	0.766	0.99	0.08
23095	707.5	1RB49	Right Tilt	/	23.38	24.5	0.723	0.94	0.08
23060	704.0	50RB	Right Tilt	/	22.30	23.5	0.560	0.74	-0.06
23130	711.0	1RB49	Right Cheek	M2	23.37	24.5	0.826	1.07	0.08
23130	711.0	1RB49	Right Cheek	B2	23.37	24.5	0.815	1.06	-0.02
23130	711.0	1RB49	Right Cheek	B3	23.37	24.5	0.808	1.05	-0.06

Table 13.38: SAR Values (LTE Band 12 - Head) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
23130	711.0	1RB24	Left Cheek	/	23.53	24.5	0.164	0.21	0.11
23130	711.0	25RB25	Left Cheek	/	22.51	23.5	0.146	0.18	0.02
23130	711.0	1RB24	Left Tilt	/	23.53	24.5	0.077	0.10	0.09
23130	711.0	25RB25	Left Tilt	/	22.51	23.5	0.053	0.07	-0.19
23130	711.0	1RB24	Right Cheek	/	23.53	24.5	0.158	0.20	-0.01
23130	711.0	25RB25	Right Cheek	/	22.51	23.5	0.141	0.18	-0.15
23130	711.0	1RB24	Right Tilt	/	23.53	24.5	0.068	0.08	-0.09
23130	711.0	25RB25	Right Tilt	/	22.51	23.5	0.051	0.06	-0.17
23130	711.0	1RB24	Left Cheek	M2	23.53	24.5	0.148	0.19	0.07
23130	711.0	1RB24	Left Cheek	B2	23.53	24.5	0.142	0.18	-0.04
23130	711.0	1RB24	Left Cheek	B3	23.53	24.5	0.153	0.19	0.08

Note: SAR for LTE Band 17 is covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.



No.I21N04025-SAR

Table 13.39: SAR Values (LTE Band 12 - Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
23060	704.0	1RB49	Front	/	23.42	24.5	0.109	0.14	-0.03
23060	704.0	25RB0	Front	/	22.31	23.5	0.076	0.10	0.11
23060	704.0	1RB49	Rear	/	23.42	24.5	0.132	0.17	0.02
23060	704.0	25RB0	Rear	/	22.31	23.5	0.102	0.13	0.03
23060	704.0	1RB49	Left	/	23.42	24.5	0.185	0.24	0.04
23060	704.0	25RB0	Left	/	22.31	23.5	0.157	0.21	0.13
23060	704.0	1RB49	Right	/	23.42	24.5	0.170	0.22	0.15
23060	704.0	25RB0	Right	/	22.31	23.5	0.131	0.17	0.12
23060	704.0	1RB49	Top	/	23.42	24.5	0.078	0.10	0.10
23060	704.0	25RB0	Top	/	22.31	23.5	0.055	0.07	0.09
23060	704.0	1RB49	Left	M2	23.42	24.5	0.204	0.26	-0.07
23060	704.0	1RB49	Left	B2	23.42	24.5	0.180	0.23	0.13
23060	704.0	1RB49	Left	B3	23.42	24.5	0.196	0.25	0.08
Body-Worn Test Data (15mm)									
23060	704.0	1RB49	Front	/	23.42	24.5	0.064	0.08	-0.08
23060	704.0	25RB0	Front	/	22.31	23.5	0.047	0.06	0.13
23060	704.0	1RB49	Rear	/	23.42	24.5	0.105	0.13	0.06
23060	704.0	25RB0	Rear	/	22.31	23.5	0.079	0.10	0.12

Note: SAR for LTE Band 17 is covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.



No.I21N04025-SAR

Table 13.40: SAR Values (LTE Band 12 - Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
23130	711.0	1RB24	Front	/	23.53	24.5	0.144	0.18	0.04
23130	711.0	25RB25	Front	/	22.51	23.5	0.119	0.15	0.03
23130	711.0	1RB24	Rear	/	23.53	24.5	0.164	0.21	0.02
23130	711.0	25RB25	Rear	/	22.51	23.5	0.131	0.16	0.04
23130	711.0	1RB24	Left	/	23.53	24.5	0.186	0.23	0.05
23130	711.0	25RB25	Left	/	22.51	23.5	0.146	0.18	0.17
23130	711.0	1RB24	Right	/	23.53	24.5	0.150	0.19	0.13
23130	711.0	25RB25	Right	/	22.51	23.5	0.121	0.15	0.14
23130	711.0	1RB24	Bottom	/	23.53	24.5	0.102	0.13	0.18
23130	711.0	25RB25	Bottom	/	22.51	23.5	0.083	0.10	0.01
23130	711.0	1RB24	Left	29/M2	23.53	24.5	0.251	0.31	-0.09
23130	711.0	1RB24	Left	B2	23.53	24.5	0.233	0.29	0.12
23130	711.0	1RB24	Left	B3	23.53	24.5	0.241	0.30	0.08
Body-Worn Test Data (15mm)									
23130	711.0	1RB24	Front	/	23.53	24.5	0.112	0.14	-0.07
23130	711.0	25RB25	Front	/	22.51	23.5	0.092	0.12	0.03
23130	711.0	1RB24	Rear	30	23.53	24.5	0.113	0.14	0.01
23130	711.0	25RB25	Rear	/	22.51	23.5	0.090	0.11	0.02

Note: SAR for LTE Band 17 is covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.



No.I21N04025-SAR

Table 13.41: SAR Values (LTE Band 26 - Head) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
26775	822.5	1RB37	Left Cheek	/	21.82	22.6	0.602	0.72	-0.09
26775	822.5	36RB38	Left Cheek	/	21.73	22.6	0.589	0.72	0.00
26775	822.5	1RB37	Left Tilt	/	21.82	22.6	0.544	0.65	-0.03
26775	822.5	36RB38	Left Tilt	/	21.73	22.6	0.529	0.65	-0.01
26775	822.5	1RB37	Right Cheek	31	21.82	22.6	0.893	1.07	-0.03
26775	822.5	36RB38	Right Cheek	/	21.73	22.6	0.867	1.06	0.05
26775	822.5	1RB37	Right Tilt	/	21.82	22.6	0.854	1.02	0.09
26775	822.5	36RB38	Right Tilt	/	21.73	22.6	0.866	1.06	0.03
26965	841.5	1RB37	Right Cheek	/	21.69	22.6	0.840	1.04	0.04
26865	831.5	1RB37	Right Cheek	/	21.55	22.6	0.872	1.11	0.05
26965	841.5	36RB38	Right Cheek	/	21.60	22.6	0.848	1.07	0.05
26865	831.5	36RB38	Right Cheek	/	21.72	22.6	0.891	1.09	0.04
26775	822.5	75RB	Right Cheek	/	21.77	22.6	0.841	1.02	0.03
26965	841.5	1RB37	Right Tilt	/	21.69	22.6	0.803	0.99	-0.04
26865	831.5	1RB37	Right Tilt	/	21.55	22.6	0.834	1.06	-0.11
26965	841.5	36RB38	Right Tilt	/	21.60	22.6	0.811	1.02	0.00
26865	831.5	36RB38	Right Tilt	/	21.72	22.6	0.852	1.04	-0.07
26775	822.5	75RB	Right Tilt	/	21.77	22.6	0.804	0.97	0.06
26865	831.5	1RB37	Right Cheek	M2	21.55	22.6	0.784	1.00	0.14
26865	831.5	1RB37	Right Cheek	B2	21.55	22.6	0.831	1.06	0.14
26865	831.5	1RB37	Right Cheek	B3	21.55	22.6	0.855	1.09	0.14



No.I21N04025-SAR

Table 13.42: SAR Values (LTE Band 26 - Head) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
26775	822.5	1RB74	Left Cheek	/	23.28	24.5	0.136	0.18	0.06
26775	822.5	36RB38	Left Cheek	/	22.25	23.5	0.117	0.16	0.05
26775	822.5	1RB74	Left Tilt	/	23.28	24.5	0.063	0.08	0.09
26775	822.5	36RB38	Left Tilt	/	22.25	23.5	0.050	0.07	0.04
26775	822.5	1RB74	Right Cheek	/	23.28	24.5	0.137	0.18	0.02
26775	822.5	36RB38	Right Cheek	/	22.25	23.5	0.122	0.16	0.04
26775	822.5	1RB74	Right Tilt	/	23.28	24.5	0.059	0.08	0.16
26775	822.5	36RB38	Right Tilt	/	22.25	23.5	0.049	0.07	0.05
26775	822.5	1RB74	Right Cheek	M2	23.28	24.5	0.124	0.16	0.03
26775	822.5	1RB74	Right Cheek	B2	23.28	24.5	0.125	0.17	0.12
26775	822.5	1RB74	Right Cheek	B3	23.28	24.5	0.130	0.17	0.10



No.I21N04025-SAR

Table 13.43: SAR Values (LTE Band 26 - Body) – Top Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
26775	822.5	1RB0	Front	/	23.34	24.5	0.156	0.20	-0.01
26775	822.5	36RB38	Front	/	22.16	23.5	0.148	0.20	0.09
26775	822.5	1RB0	Rear	/	23.34	24.5	0.237	0.31	-0.02
26775	822.5	36RB38	Rear	/	22.16	23.5	0.221	0.30	-0.08
26775	822.5	1RB0	Left	/	23.34	24.5	0.160	0.21	-0.05
26775	822.5	36RB38	Left	/	22.16	23.5	0.143	0.19	0.14
26775	822.5	1RB0	Right	/	23.34	24.5	0.150	0.20	0.16
26775	822.5	36RB38	Right	/	22.16	23.5	0.140	0.19	0.14
26775	822.5	1RB0	Top	/	23.34	24.5	0.130	0.17	0.14
26775	822.5	36RB38	Top	/	22.16	23.5	0.126	0.17	0.10
26775	822.5	1RB0	Rear	M2	23.34	24.5	0.215	0.28	0.04
26775	822.5	1RB0	Rear	B2	23.34	24.5	0.219	0.29	0.08
26775	822.5	1RB0	Rear	B3	23.34	24.5	0.227	0.30	0.01
Body-Worn Test Data (15mm)									
26775	822.5	1RB0	Front	/	23.34	24.5	0.084	0.11	0.07
26775	822.5	36RB38	Front	/	22.16	23.5	0.084	0.11	0.11
26775	822.5	1RB0	Rear	/	23.34	24.5	0.171	0.22	0.06
26775	822.5	36RB38	Rear	/	22.16	23.5	0.154	0.21	0.02



No.I21N04025-SAR

Table 13.44: SAR Values (LTE Band 26 - Body) – Bottom Antenna

Ambient Temperature: 22.8°C				Liquid Temperature: 22.3°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
26775	822.5	1RB74	Front	/	23.28	24.5	0.193	0.26	0.04
26775	822.5	36RB38	Front	/	22.25	23.5	0.148	0.20	0.05
26775	822.5	1RB74	Rear	/	23.28	24.5	0.259	0.34	0.08
26775	822.5	36RB38	Rear	/	22.25	23.5	0.189	0.25	0.05
26775	822.5	1RB74	Left	32	23.28	24.5	0.279	0.37	0.13
26775	822.5	36RB38	Left	/	22.25	23.5	0.213	0.28	0.10
26775	822.5	1RB74	Right	/	23.28	24.5	0.180	0.24	-0.11
26775	822.5	36RB38	Right	/	22.25	23.5	0.138	0.18	0.06
26775	822.5	1RB74	Bottom	/	23.28	24.5	0.178	0.24	0.15
26775	822.5	36RB38	Bottom	/	22.25	23.5	0.141	0.19	0.09
26775	822.5	1RB74	Left	M2	23.28	24.5	0.273	0.36	0.01
26775	822.5	1RB74	Left	B2	23.28	24.5	0.250	0.33	-0.05
26775	822.5	1RB74	Left	B3	23.28	24.5	0.266	0.35	-0.01
Body-Worn Test Data (15mm)									
26775	822.5	1RB74	Front	/	23.28	24.5	0.201	0.27	0.06
26775	822.5	36RB38	Front	/	22.25	23.5	0.154	0.21	0.03
26775	822.5	1RB74	Rear	33	23.28	24.5	0.227	0.30	-0.14
26775	822.5	36RB38	Rear	/	22.25	23.5	0.169	0.23	0.01



No.I21N04025-SAR

Table 13.45: SAR Values (LTE Band 38 - Head) – Top Antenna

Ambient Temperature: 22.1°C				Liquid Temperature: 21.6°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
38150	2610.0	1RB50	Left Cheek	/	18.88	19.7	0.259	0.31	0.07
38150	2610.0	50RB25	Left Cheek	/	18.92	19.7	0.243	0.29	0.02
38150	2610.0	1RB50	Left Tilt	/	18.88	19.7	0.322	0.39	0.02
38150	2610.0	50RB25	Left Tilt	/	18.92	19.7	0.303	0.36	0.08
38150	2610.0	1RB50	Right Cheek	/	18.88	19.7	0.511	0.62	0.02
38150	2610.0	50RB25	Right Cheek	/	18.92	19.7	0.507	0.61	0.12
38150	2610.0	1RB50	Right Tilt	/	18.88	19.7	0.681	0.82	0.13
38150	2610.0	50RB25	Right Tilt	/	18.92	19.7	0.553	0.66	0.13
38000	2595.0	1RB50	Right Tilt	/	18.81	19.7	0.516	0.63	0.12
37850	2580.0	1RB50	Right Tilt	/	18.63	19.7	0.489	0.63	0.01
38150	2610.0	100RB	Right Tilt	/	18.84	19.7	0.658	0.80	0.13
38150	2610.0	1RB50	Right Tilt	34/M2	18.88	19.7	0.690	0.83	0.08
38150	2610.0	1RB50	Right Tilt	B2	18.88	19.7	0.681	0.82	0.12
38150	2610.0	1RB50	Right Tilt	B3	18.88	19.7	0.670	0.81	0.01

Table 13.46: SAR Values (LTE Band 38 - Head) – Bottom Antenna

Ambient Temperature: 22.1°C				Liquid Temperature: 21.6°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
37850	2580.0	1RB50	Left Cheek	/	22.89	24.0	0.097	0.12	0.03
37850	2580.0	50RB50	Left Cheek	/	21.78	23.0	0.085	0.11	-0.12
37850	2580.0	1RB50	Left Tilt	/	22.89	24.0	0.087	0.11	0.01
37850	2580.0	50RB50	Left Tilt	/	21.78	23.0	0.083	0.11	0.01
37850	2580.0	1RB50	Right Cheek	/	22.89	24.0	0.148	0.19	-0.02
37850	2580.0	50RB50	Right Cheek	/	21.78	23.0	0.131	0.17	-0.04
37850	2580.0	1RB50	Right Tilt	/	22.89	24.0	0.066	0.09	0.06
37850	2580.0	50RB50	Right Tilt	/	21.78	23.0	0.063	0.08	0.15
37850	2580.0	1RB50	Right Cheek	M2	22.89	24.0	0.125	0.16	0.04
37850	2580.0	1RB50	Right Cheek	B2	22.89	24.0	0.133	0.17	-0.08
37850	2580.0	1RB50	Right Cheek	B3	22.89	24.0	0.141	0.18	-0.02



No.I21N04025-SAR

Table 13.47: SAR Values (LTE Band 38 - Body) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
38150	2610.0	1RB50	Front	/	21.78	23.0	0.166	0.22	0.01
38150	2610.0	50RB50	Front	/	21.65	23.0	0.168	0.23	-0.07
38150	2610.0	1RB50	Rear	/	21.78	23.0	0.524	0.69	0.01
38150	2610.0	50RB50	Rear	35	21.65	23.0	0.580	0.79	0.06
38150	2610.0	1RB50	Left	/	21.78	23.0	0.240	0.32	0.03
38150	2610.0	50RB50	Left	/	21.65	23.0	0.245	0.33	0.06
38150	2610.0	1RB50	Right	/	21.78	23.0	0.017	0.02	0.04
38150	2610.0	50RB50	Right	/	21.65	23.0	0.011	0.02	0.03
38150	2610.0	1RB50	Top	/	21.78	23.0	0.568	0.75	0.04
38150	2610.0	50RB50	Top	/	21.65	23.0	0.476	0.65	0.06
38150	2610.0	50RB50	Rear	M2	21.65	23.0	0.448	0.61	0.08
38150	2610.0	50RB50	Rear	B2	21.65	23.0	0.565	0.77	-0.05
38150	2610.0	50RB50	Rear	B3	21.65	23.0	0.539	0.74	0.11
Body-Worn Test Data (15mm) - Reduced power level 3/5									
38150	2610.0	1RB50	Front	/	21.78	23.0	0.081	0.11	0.08
38150	2610.0	50RB50	Front	/	21.65	23.0	0.084	0.11	-0.02
38150	2610.0	1RB50	Rear	36	21.78	23.0	0.220	0.29	0.01
38150	2610.0	50RB50	Rear	/	21.65	23.0	0.188	0.26	0.02



No.I21N04025-SAR

Table 13.48: SAR Values (LTE Band 38 - Body) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm)									
37850	2580.0	1RB50	Front	/	22.89	24.0	0.257	0.33	0.07
37850	2580.0	50RB50	Front	/	21.78	23.0	0.190	0.25	-0.03
37850	2580.0	1RB50	Rear	/	22.89	24.0	0.265	0.34	-0.07
37850	2580.0	50RB50	Rear	/	21.78	23.0	0.200	0.26	0.11
37850	2580.0	1RB50	Left	/	22.89	24.0	0.041	0.05	0.07
37850	2580.0	50RB50	Left	/	21.78	23.0	0.033	0.04	0.04
37850	2580.0	1RB50	Right	/	22.89	24.0	0.132	0.17	0.13
37850	2580.0	50RB50	Right	/	21.78	23.0	0.104	0.14	0.04
37850	2580.0	1RB50	Bottom	/	22.89	24.0	0.154	0.20	0.07
37850	2580.0	50RB50	Bottom	/	21.78	23.0	0.111	0.15	0.08
37850	2580.0	1RB50	Rear	M2	22.89	24.0	0.212	0.27	0.09
37850	2580.0	1RB50	Rear	B2	22.89	24.0	0.242	0.31	-0.13
37850	2580.0	1RB50	Rear	B3	22.89	24.0	0.255	0.33	0.05
Body-Worn Test Data (15mm)									
37850	2580.0	1RB50	Front	/	22.89	24.0	0.122	0.16	0.14
37850	2580.0	50RB50	Front	/	21.78	23.0	0.093	0.12	0.12
37850	2580.0	1RB50	Rear	/	22.89	24.0	0.132	0.17	0.09
37850	2580.0	50RB50	Rear	/	21.78	23.0	0.099	0.13	0.04



No.I21N04025-SAR

Table 13.49: SAR Values (LTE Band 41 - Head) – Top Antenna

Ambient Temperature: 22.1°C				Liquid Temperature: 21.6°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
41140	2645.0	1RB50	Left Cheek	/	18.26	18.9	0.247	0.29	-0.12
41140	2645.0	50RB50	Left Cheek	/	18.16	18.9	0.244	0.29	0.07
41140	2645.0	1RB50	Left Tilt	/	18.26	18.9	0.300	0.35	0.12
41140	2645.0	50RB50	Left Tilt	/	18.16	18.9	0.280	0.33	0.03
41140	2645.0	1RB50	Right Cheek	/	18.26	18.9	0.521	0.60	0.03
41140	2645.0	50RB50	Right Cheek	/	18.16	18.9	0.508	0.60	0.13
41140	2645.0	1RB50	Right Tilt	/	18.26	18.9	0.579	0.67	0.16
41140	2645.0	50RB50	Right Tilt	37	18.16	18.9	0.608	0.72	0.16
41140	2645.0	50RB50	Right Tilt	M2	18.16	18.9	0.566	0.67	0.07
41140	2645.0	50RB50	Right Tilt	B2	18.16	18.9	0.584	0.69	-0.03
41140	2645.0	50RB50	Right Tilt	B3	18.16	18.9	0.570	0.68	-0.14

Table 13.50: SAR Values (LTE Band 41 - Head) – Bottom Antenna

Ambient Temperature: 22.1°C				Liquid Temperature: 21.6°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
40640	2595.0	1RB50	Left Cheek	/	23.08	24.0	0.107	0.13	0.07
41140	2645.0	50RB0	Left Cheek	/	21.99	23.0	0.072	0.09	0.09
40640	2595.0	1RB50	Left Tilt	/	23.08	24.0	0.067	0.08	0.06
41140	2645.0	50RB0	Left Tilt	/	21.99	23.0	0.063	0.08	0.03
40640	2595.0	1RB50	Right Cheek	/	23.08	24.0	0.147	0.18	0.05
41140	2645.0	50RB0	Right Cheek	/	21.99	23.0	0.112	0.14	0.02
40640	2595.0	1RB50	Right Tilt	/	23.08	24.0	0.094	0.12	0.07
41140	2645.0	50RB0	Right Tilt	/	21.99	23.0	0.068	0.09	0.05
40640	2595.0	1RB50	Right Cheek	M2	23.08	24.0	0.128	0.16	0.13
40640	2595.0	1RB50	Right Cheek	B2	23.08	24.0	0.131	0.16	0.15
40640	2595.0	1RB50	Right Cheek	B3	23.08	24.0	0.135	0.17	0.04



No.I21N04025-SAR

Table 13.51: SAR Values (LTE Band 41 - Body) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
41140	2645.0	1RB50	Front	/	21.80	22.7	0.189	0.23	-0.01
41140	2645.0	50RB25	Front	/	21.65	22.7	0.176	0.22	-0.10
41140	2645.0	1RB50	Rear	38	21.80	22.7	0.611	0.75	0.09
41140	2645.0	50RB25	Rear	/	21.65	22.7	0.553	0.70	0.05
41140	2645.0	1RB50	Left	/	21.80	22.7	0.306	0.38	0.02
41140	2645.0	50RB25	Left	/	21.65	22.7	0.285	0.36	0.08
41140	2645.0	1RB50	Right	/	21.80	22.7	0.016	0.02	0.06
41140	2645.0	50RB25	Right	/	21.65	22.7	0.016	0.02	0.09
41140	2645.0	1RB50	Top	/	21.80	22.7	0.536	0.66	0.06
41140	2645.0	50RB25	Top	/	21.65	22.7	0.431	0.55	0.03
41140	2645.0	1RB50	Rear	M2	21.80	22.7	0.430	0.53	0.09
41140	2645.0	1RB50	Rear	B2	21.80	22.7	0.586	0.72	-0.03
41140	2645.0	1RB50	Rear	B3	21.80	22.7	0.564	0.69	0.12
Body-Worn Test Data (15mm) - Reduced power level 3/5									
41140	2645.0	1RB50	Front	/	21.80	22.7	0.105	0.13	0.17
41140	2645.0	50RB25	Front	/	21.65	22.7	0.098	0.12	-0.09
41140	2645.0	1RB50	Rear	39	21.80	22.7	0.207	0.25	0.02
41140	2645.0	50RB25	Rear	/	21.65	22.7	0.199	0.25	0.09



No.I21N04025-SAR

Table 13.52: SAR Values (LTE Band 41 - Body) – Bottom Antenna

Frequency		Test Mode		Test Position		Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz					Hotspot Test Data (10mm)					
Hotspot Test Data (10mm)											
40640	2595.0	1RB50	Front	/	23.08	24.0	0.276	0.34	-0.04		
41140	2645.0	50RB0	Front	/	21.99	23.0	0.262	0.33	0.10		
40640	2595.0	1RB50	Rear	/	23.08	24.0	0.300	0.37	-0.09		
41140	2645.0	50RB0	Rear	/	21.99	23.0	0.274	0.35	-0.08		
40640	2595.0	1RB50	Left	/	23.08	24.0	0.039	0.05	0.06		
41140	2645.0	50RB0	Left	/	21.99	23.0	0.030	0.04	0.04		
40640	2595.0	1RB50	Right	/	23.08	24.0	0.122	0.15	0.03		
41140	2645.0	50RB0	Right	/	21.99	23.0	0.096	0.12	0.05		
40640	2595.0	1RB50	Bottom	/	23.08	24.0	0.137	0.17	0.05		
41140	2645.0	50RB0	Bottom	/	21.99	23.0	0.106	0.13	0.04		
40640	2595.0	1RB50	Rear	M2	23.08	24.0	0.248	0.31	-0.02		
40640	2595.0	1RB50	Rear	B2	23.08	24.0	0.275	0.34	0.09		
40640	2595.0	1RB50	Rear	B3	23.08	24.0	0.288	0.36	-0.06		
Body-Worn Test Data (15mm)											
40640	2595.0	1RB50	Front	/	23.08	24.0	0.129	0.16	0.05		
41140	2645.0	50RB0	Front	/	21.99	23.0	0.134	0.17	0.06		
40640	2595.0	1RB50	Rear	/	23.08	24.0	0.138	0.17	-0.03		
41140	2645.0	50RB0	Rear	/	21.99	23.0	0.106	0.13	0.06		



No.I21N04025-SAR

Table 13.53: SAR Values (LTE Band 66 - Head) – Top Antenna

Ambient Temperature: 22.1°C				Liquid Temperature: 21.6°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 1/2									
132572	1770.0	1RB50	Left Cheek	/	16.65	17.5	0.421	0.51	0.04
132572	1770.0	50RB25	Left Cheek	/	16.59	17.5	0.419	0.52	0.12
132572	1770.0	1RB50	Left Tilt	/	16.65	17.5	0.486	0.59	0.03
132572	1770.0	50RB25	Left Tilt	/	16.59	17.5	0.475	0.59	0.04
132572	1770.0	1RB50	Right Cheek	/	16.65	17.5	0.691	0.84	0.03
132572	1770.0	50RB25	Right Cheek	/	16.59	17.5	0.727	0.90	0.04
132572	1770.0	1RB50	Right Tilt	/	16.65	17.5	0.873	1.06	0.10
132572	1770.0	50RB25	Right Tilt	40	16.59	17.5	0.893	1.10	-0.01
132322	1745.0	1RB50	Right Cheek	/	16.55	17.5	0.523	0.65	0.05
132072	1720.0	1RB50	Right Cheek	/	16.46	17.5	0.490	0.62	-0.06
132322	1745.0	50RB25	Right Cheek	/	16.49	17.5	0.550	0.69	0.06
132072	1720.0	50RB25	Right Cheek	/	16.37	17.5	0.515	0.67	-0.11
132572	1770.0	100RB0	Right Cheek	/	16.51	17.5	0.649	0.82	-0.09
132322	1745.0	1RB50	Right Tilt	/	16.55	17.5	0.660	0.82	0.08
132072	1720.0	1RB50	Right Tilt	/	16.46	17.5	0.618	0.79	0.05
132322	1745.0	50RB25	Right Tilt	/	16.49	17.5	0.675	0.85	-0.01
132072	1720.0	50RB25	Right Tilt	/	16.37	17.5	0.632	0.82	0.05
132572	1770.0	100RB0	Right Tilt	/	16.51	17.5	0.624	0.78	-0.02
132572	1770.0	50RB25	Right Tilt	M2	16.59	17.5	0.821	1.01	-0.07
132572	1770.0	50RB25	Right Tilt	B2	16.59	17.5	0.851	1.05	0.10
132572	1770.0	50RB25	Right Tilt	B3	16.59	17.5	0.866	1.07	-0.06



No.I21N04025-SAR

Table 13.54: SAR Values (LTE Band 66 - Head) – Bottom Antenna

Frequency		Ambient Temperature: 22.1°C		Liquid Temperature: 21.6°C					
Ch.	MHz	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
132572	1770.0	1RB50	Left Cheek	/	22.69	24.0	0.149	0.20	0.07
132572	1770.0	50RB0	Left Cheek	/	21.61	23.0	0.112	0.15	0.09
132572	1770.0	1RB50	Left Tilt	/	22.69	24.0	0.080	0.11	-0.02
132572	1770.0	50RB0	Left Tilt	/	21.61	23.0	0.073	0.10	0.03
132572	1770.0	1RB50	Right Cheek	/	22.69	24.0	0.085	0.12	0.09
132572	1770.0	50RB0	Right Cheek	/	21.61	23.0	0.082	0.11	0.04
132572	1770.0	1RB50	Right Tilt	/	22.69	24.0	0.071	0.10	0.09
132572	1770.0	50RB0	Right Tilt	/	21.61	23.0	0.065	0.09	0.11
132572	1770.0	1RB50	Left Cheek	M2	22.69	24.0	0.126	0.17	0.14
132572	1770.0	1RB50	Left Cheek	B2	22.69	24.0	0.144	0.19	-0.07
132572	1770.0	1RB50	Left Cheek	B3	22.69	24.0	0.137	0.19	-0.01



No.I21N04025-SAR

Table 13.55: SAR Values (LTE Band 66 - Body) – Top Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 3/5									
132572	1770.0	1RB50	Front	/	18.58	19.9	0.232	0.31	0.01
132572	1770.0	50RB0	Front	/	18.52	19.9	0.228	0.31	0.09
132572	1770.0	1RB50	Rear	/	18.58	19.9	0.332	0.45	0.10
132572	1770.0	50RB0	Rear	/	18.52	19.9	0.342	0.47	0.06
132572	1770.0	1RB50	Left	/	18.58	19.9	0.045	0.06	0.06
132572	1770.0	50RB0	Left	/	18.52	19.9	0.048	0.07	0.04
132572	1770.0	1RB50	Right	/	18.58	19.9	0.026	0.04	0.03
132572	1770.0	50RB0	Right	/	18.52	19.9	0.029	0.04	0.14
132572	1770.0	1RB50	Top	/	18.58	19.9	0.404	0.55	0.06
132572	1770.0	50RB0	Top	/	18.52	19.9	0.454	0.62	0.05
132572	1770.0	50RB0	Top	M2	18.52	19.9	0.492	0.68	0.17
132572	1770.0	50RB0	Top	B2	18.52	19.9	0.460	0.63	0.13
132572	1770.0	50RB0	Top	B3	18.52	19.9	0.474	0.65	0.05
Body-Worn Test Data (15mm) - Reduced power level 3/5									
132572	1770.0	1RB50	Front	/	18.58	19.9	0.104	0.14	0.03
132572	1770.0	50RB0	Front	/	18.52	19.9	0.108	0.15	0.17
132572	1770.0	1RB50	Rear	/	18.58	19.9	0.152	0.21	0.05
132572	1770.0	50RB0	Rear	/	18.52	19.9	0.165	0.23	-0.16



No.I21N04025-SAR

Table 13.56: SAR Values (LTE Band 66 - Body) – Bottom Antenna

Ambient Temperature: 22.3°C				Liquid Temperature: 21.8°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Reduced power level 4/6									
132572	1770.0	1RB50	Front	/	21.40	21.8	0.352	0.39	0.17
132572	1770.0	50RB0	Front	/	21.34	21.8	0.346	0.38	-0.07
132572	1770.0	1RB50	Rear	/	21.40	21.8	0.450	0.49	-0.01
132572	1770.0	50RB0	Rear	/	21.34	21.8	0.425	0.47	0.10
132572	1770.0	1RB50	Left	/	21.40	21.8	0.152	0.17	0.07
132572	1770.0	50RB0	Left	/	21.34	21.8	0.150	0.17	0.02
132572	1770.0	1RB50	Right	/	21.40	21.8	0.226	0.25	0.02
132572	1770.0	50RB0	Right	/	21.34	21.8	0.227	0.25	0.05
132572	1770.0	1RB50	Bottom	41	21.40	21.8	0.715	0.78	0.06
132572	1770.0	50RB0	Bottom	/	21.34	21.8	0.693	0.77	0.05
132572	1770.0	1RB50	Bottom	M2	21.40	21.8	0.644	0.71	0.03
132572	1770.0	1RB50	Bottom	B2	21.40	21.8	0.699	0.77	0.06
132572	1770.0	1RB50	Bottom	B3	21.40	21.8	0.675	0.74	-0.02
Body-Worn Test Data (15mm) - Reduced power level 4/6									
132572	1770.0	1RB50	Front	/	21.40	21.8	0.222	0.24	-0.13
132572	1770.0	50RB0	Front	/	21.34	21.8	0.216	0.24	-0.04
132572	1770.0	1RB50	Rear	42	21.40	21.8	0.267	0.29	-0.03
132572	1770.0	50RB0	Rear	/	21.34	21.8	0.262	0.29	0.15



No.I21N04025-SAR

Table 13.57: SAR Values (Bluetooth - Head)

Frequency			Ambient Temperature: 23.0°C			Liquid Temperature: 22.5°C			
Ch.	MHz	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
39	2441.0	GFSK	Left Cheek	43	14.21	16.0	0.130	0.20	-0.03
39	2441.0	GFSK	Left Tilt	/	14.21	16.0	0.099	0.15	-0.09
39	2441.0	GFSK	Right Cheek	/	14.21	16.0	0.038	0.06	0.08
39	2441.0	GFSK	Right Tilt	/	14.21	16.0	0.035	0.05	0.06
39	2441.0	GFSK	Left Cheek	M2	14.21	16.0	0.120	0.18	-0.07
39	2441.0	GFSK	Left Cheek	B2	14.21	16.0	0.117	0.18	-0.05
39	2441.0	GFSK	Left Cheek	B3	14.21	16.0	0.114	0.17	0.01

Table 13.58: SAR Values (Bluetooth - Body)

Frequency			Ambient Temperature: 23.0°C			Liquid Temperature: 22.5°C			
Ch.	MHz	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Test Data (10mm)									
39	2441.0	GFSK	Front	/	14.21	16.0	0.064	0.10	0.03
39	2441.0	GFSK	Rear	44	14.21	16.0	0.108	0.16	0.02
39	2441.0	GFSK	Left	/	14.21	16.0	0.009	0.01	-0.03
39	2441.0	GFSK	Right	/	14.21	16.0	0.020	0.03	-0.02
39	2441.0	GFSK	Top	/	14.21	16.0	0.028	0.04	0.08
39	2441.0	GFSK	Rear	M2	14.21	16.0	0.086	0.13	-0.04
39	2441.0	GFSK	Rear	B2	14.21	16.0	0.101	0.15	0.09
39	2441.0	GFSK	Rear	B3	14.21	16.0	0.097	0.15	-0.02
Test Data (15mm)									
39	2441.0	GFSK	Front	/	14.21	16.0	0.027	0.04	0.03
39	2441.0	GFSK	Rear	45	14.21	16.0	0.043	0.06	0.02



No.I21N04025-SAR

13.3. WLAN Evaluation for 2.4G

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

Table 13.59: SAR Values (WLAN 2.4G - Head)

Ambient Temperature: 23.0°C				Liquid Temperature: 22.5°C					
Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Reduced power level 7									
11	2462.0	802.11b	Left Cheek	46	15.23	16.5	0.556	0.74	0.05
11	2462.0	802.11b	Left Tilt	/	15.23	16.5	0.501	0.67	0.12
11	2462.0	802.11b	Right Cheek	/	15.23	16.5	0.206	0.28	-0.07
11	2462.0	802.11b	Right Tilt	/	15.23	16.5	0.213	0.29	-0.12
11	2462.0	802.11b	Left Cheek	M2	15.23	16.5	0.532	0.71	0.03
11	2462.0	802.11b	Left Cheek	B2	15.23	16.5	0.546	0.73	-0.06
11	2462.0	802.11b	Left Cheek	B3	15.23	16.5	0.540	0.72	0.10
Reduced power level 8									
11	2462.0	802.11b	Left Cheek	/	9.71	11.0	0.180	0.24	0.03
11	2462.0	802.11b	Left Tilt	/	9.71	11.0	0.162	0.22	0.05
11	2462.0	802.11b	Right Cheek	/	9.71	11.0	0.068	0.09	0.12
11	2462.0	802.11b	Right Tilt	/	9.71	11.0	0.069	0.09	0.07

Note: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

Table 13.60: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
11	2462.0	Left Cheek	100%	100%	0.74	0.74

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.



No.I21N04025-SAR

Table 13.61: SAR Values (WLAN 2.4G - Body)

Frequency			Test Mode	Test Position	Figure No./ Note	Ambient Temperature: 23.0°C		Liquid Temperature: 22.5°C	
Ch.	MHz	Conducted Power (dBm)				Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Hotspot Test Data (10mm)									
11	2462.0	802.11b	Front	/	18.70	20.0	0.239	0.32	0.05
11	2462.0	802.11b	Rear	47	18.70	20.0	0.391	0.53	0.04
11	2462.0	802.11b	Left	/	18.70	20.0	0.034	0.05	0.02
11	2462.0	802.11b	Right	/	18.70	20.0	0.229	0.31	-0.05
11	2462.0	802.11b	Top	/	18.70	20.0	0.095	0.13	-0.01
11	2462.0	802.11b	Rear	M2	18.70	20.0	0.324	0.44	0.04
11	2462.0	802.11b	Rear	B2	18.70	20.0	0.361	0.49	-0.13
11	2462.0	802.11b	Rear	B3	18.70	20.0	0.375	0.51	-0.05
Body-Worn Test Data (15mm)									
11	2462.0	802.11b	Front	/	18.70	20.0	0.103	0.14	0.08
11	2462.0	802.11b	Rear	48	18.70	20.0	0.145	0.20	0.03
Hotspot Test Data (10mm) - Reduced power level 9									
11	2462.0	802.11b	Front	/	14.75	16.0	0.086	0.11	0.03
11	2462.0	802.11b	Rear	/	14.75	16.0	0.143	0.19	0.07
11	2462.0	802.11b	Left	/	14.75	16.0	0.012	0.02	-0.03
11	2462.0	802.11b	Right	/	14.75	16.0	0.081	0.11	-0.02
11	2462.0	802.11b	Top	/	14.75	16.0	0.032	0.04	-0.12
Body-Worn Test Data (15mm) - Reduced power level 9									
11	2462.0	802.11b	Front	/	14.75	16.0	0.034	0.05	-0.06
11	2462.0	802.11b	Rear	/	14.75	16.0	0.051	0.07	0.03

Note: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit..

Table 13.62: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
11	2462.0	Rear	100%	100%	0.53	0.53

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.



13.4. WLAN Evaluation for 5G

Table 13.63: SAR Values (WLAN 5G - Head)

		Ambient Temperature: 22.6°C			Liquid Temperature: 22.1°C				
Frequency	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)	
Ch.	MHz								
U-NII-2A - Reduced power level 7									
54	5270.0	802.11n-40	Left Cheek	/	12.30	14.0	0.638	0.94	0.11
54	5270.0	802.11n-40	Left Tilt	/	12.30	14.0	0.405	0.60	-0.07
54	5270.0	802.11n-40	Right Cheek	/	12.30	14.0	0.192	0.28	0.16
54	5270.0	802.11n-40	Right Tilt	/	12.30	14.0	0.220	0.33	0.04
62	5310.0	802.11n-40	Left Cheek	49	12.23	14.0	0.676	1.02	0.07
62	5310.0	802.11n-40	Left Cheek	M2	12.23	14.0	0.506	0.76	0.11
62	5310.0	802.11n-40	Left Cheek	B2	12.23	14.0	0.621	0.93	-0.02
62	5310.0	802.11n-40	Left Cheek	B3	12.23	14.0	0.643	0.97	0.12
U-NII-2C - Reduced power level 7									
122	5610.0	802.11ac-80	Left Cheek	/	12.84	14.0	0.470	0.61	0.09
122	5610.0	802.11ac-80	Left Tilt	/	12.84	14.0	0.349	0.46	0.02
122	5610.0	802.11ac-80	Right Cheek	/	12.84	14.0	0.227	0.30	0.07
122	5610.0	802.11ac-80	Right Tilt	/	12.84	14.0	0.121	0.16	0.05
122	5610.0	802.11ac-80	Left Cheek	M2	12.84	14.0	0.262	0.34	0.06
122	5610.0	802.11ac-80	Left Cheek	B2	12.84	14.0	0.456	0.60	-0.03
122	5610.0	802.11ac-80	Left Cheek	B3	12.84	14.0	0.439	0.57	-0.08
U-NII-3 - Reduced power level 7									
155	5775.0	802.11ac-80	Left Cheek	/	12.86	14.0	0.427	0.56	-0.09
155	5775.0	802.11ac-80	Left Tilt	/	12.86	14.0	0.313	0.41	0.07
155	5775.0	802.11ac-80	Right Cheek	/	12.86	14.0	0.194	0.25	-0.11
155	5775.0	802.11ac-80	Right Tilt	/	12.86	14.0	0.198	0.26	-0.02
155	5775.0	802.11ac-80	Left Cheek	M2	12.86	14.0	0.306	0.40	0.00
155	5775.0	802.11ac-80	Left Cheek	B2	12.86	14.0	0.397	0.52	-0.05
155	5775.0	802.11ac-80	Left Cheek	B3	12.86	14.0	0.410	0.53	0.13
U-NII-2A - Reduced power level 8									
58	5290.0	802.11ac-80	Left Cheek	/	8.14	10.0	0.241	0.37	0.04
58	5290.0	802.11ac-80	Left Tilt	/	8.14	10.0	0.154	0.24	-0.09
58	5290.0	802.11ac-80	Right Cheek	/	8.14	10.0	0.073	0.11	0.05
58	5290.0	802.11ac-80	Right Tilt	/	8.14	10.0	0.083	0.13	0.08
U-NII-2C - Reduced power level 8									
122	5610.0	802.11ac-80	Left Cheek	/	8.85	10.0	0.100	0.13	0.00
122	5610.0	802.11ac-80	Left Tilt	/	8.85	10.0	0.074	0.10	0.14
122	5610.0	802.11ac-80	Right Cheek	/	8.85	10.0	0.048	0.06	-0.01
122	5610.0	802.11ac-80	Right Tilt	/	8.85	10.0	0.026	0.03	0.16
U-NII-3 - Reduced power level 8									



No.I21N04025-SAR

155	5775.0	802.11ac-80	Left Cheek	/	8.87	10.0	0.125	0.16	-0.11
155	5775.0	802.11ac-80	Left Tilt	/	8.87	10.0	0.091	0.12	-0.08
155	5775.0	802.11ac-80	Right Cheek	/	8.87	10.0	0.057	0.07	-0.14
155	5775.0	802.11ac-80	Right Tilt	/	8.87	10.0	0.058	0.07	0.14

Note:

1. U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is $\leq 1.2\text{W/kg}$, SAR is not required for U-NII-1 band.
2. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is $> 0.8 \text{ W/kg}$, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is $\leq 1.2 \text{ W/kg}$ or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

Table 13.64: SAR Values (WLAN - Head) – 802.11n-40M (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
62	5310.0	Left Cheek	100%	100%	1.02	1.02



Table 13.65: SAR Values (WLAN 5G - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Ambient Temperature: 22.6°C		Liquid Temperature: 22.1°C		
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
U-NII-1 Hotspot Test Data (10mm)									
46	5230.0	802.11ac-40	Front	/	17.21	19.0	0.270	0.41	0.01
46	5230.0	802.11ac-40	Rear	/	17.21	19.0	0.459	0.69	0.08
46	5230.0	802.11ac-40	Left	/	17.21	19.0	0.023	0.04	0.09
46	5230.0	802.11ac-40	Right	/	17.21	19.0	0.357	0.54	0.06
46	5230.0	802.11ac-40	Top	/	17.21	19.0	0.501	0.76	0.02
46	5230.0	802.11ac-40	Top	M2	17.21	19.0	0.372	0.56	0.09
46	5230.0	802.11ac-40	Top	B2	17.21	19.0	0.468	0.71	0.07
46	5230.0	802.11ac-40	Top	B3	17.21	19.0	0.481	0.73	0.05
U-NII-3 Hotspot Test Data (10mm)									
151	5755.0	802.11ac-40	Front	/	18.11	19.0	0.194	0.24	-0.01
151	5755.0	802.11ac-40	Rear	/	18.11	19.0	0.682	0.84	0.06
151	5755.0	802.11ac-40	Left	/	18.11	19.0	0.053	0.07	0.08
151	5755.0	802.11ac-40	Right	/	18.11	19.0	0.379	0.47	0.15
151	5755.0	802.11ac-40	Top	/	18.11	19.0	0.474	0.58	0.07
159	5795.0	802.11ac-40	Rear	50	17.90	19.0	0.688	0.89	0.05
159	5795.0	802.11ac-40	Rear	M2	17.90	19.0	0.525	0.68	0.00
159	5795.0	802.11ac-40	Rear	B2	17.90	19.0	0.639	0.82	-0.02
159	5795.0	802.11ac-40	Rear	B3	17.90	19.0	0.658	0.85	0.12
U-NII-1 Hotspot Test Data (10mm) - Reduced power level 9									
46	5230.0	802.11n-40	Front	/	12.39	14.0	0.087	0.13	-0.05
46	5230.0	802.11n-40	Rear	/	12.39	14.0	0.148	0.21	0.18
46	5230.0	802.11n-40	Left	/	12.39	14.0	0.007	0.01	-0.01
46	5230.0	802.11n-40	Right	/	12.39	14.0	0.115	0.17	0.08
46	5230.0	802.11n-40	Top	/	12.39	14.0	0.161	0.23	-0.01
U-NII-3 Hotspot Test Data (10mm) - Reduced power level 9									
155	5775.0	802.11ac-80	Front	/	12.86	14.0	0.054	0.07	0.02
155	5775.0	802.11ac-80	Rear	/	12.86	14.0	0.190	0.25	0.04
155	5775.0	802.11ac-80	Left	/	12.86	14.0	0.015	0.02	-0.17
155	5775.0	802.11ac-80	Right	/	12.86	14.0	0.106	0.14	0.15
155	5775.0	802.11ac-80	Top	/	12.86	14.0	0.132	0.17	0.02
U-NII-2A Body-Worn Test Data (15mm)									
54	5270.0	802.11ac-40	Front	/	17.13	19.0	0.180	0.28	-0.01
54	5270.0	802.11ac-40	Rear	/	17.13	19.0	0.319	0.49	0.06
U-NII-2C Body-Worn Test Data (15mm)									
134	5670.0	802.11ac-40	Front	/	18.01	19.0	0.125	0.16	0.07
134	5670.0	802.11ac-40	Rear	/	18.01	19.0	0.322	0.40	0.09
U-NII-3 Body-Worn Test Data (15mm)									



No.I21N04025-SAR

151	5755.0	802.11ac-40	Front	/	18.11	19.0	0.124	0.15	0.01
151	5755.0	802.11ac-40	Rear	51	18.11	19.0	0.326	0.40	0.06
U-NII-2A Body-Worn Test Data (15mm) - Reduced power level 9									
54	5270.0	802.11n-40	Front	/	12.30	14.0	0.059	0.09	0.10
54	5270.0	802.11n-40	Rear	/	12.30	14.0	0.106	0.16	0.12
U-NII-2C Body-Worn Test Data (15mm) - Reduced power level 9									
122	5610.0	802.11ac-80	Front	/	12.84	14.0	0.038	0.05	0.02
122	5610.0	802.11ac-80	Rear	/	12.84	14.0	0.098	0.13	0.09
U-NII-3 Body-Worn Test Data (15mm) - Reduced power level 9									
155	5775.0	802.11ac-80	Front	/	12.86	14.0	0.035	0.05	0.08
155	5775.0	802.11ac-80	Rear	/	12.86	14.0	0.091	0.12	-0.12

Note:

1. U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is $\leq 1.2\text{W/kg}$, SAR is not required for U-NII-1 band.
2. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is $> 0.8 \text{ W/kg}$, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is $\leq 1.2 \text{ W/kg}$ or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

Table 13.66: SAR Values (WLAN - Body) – 802.11ac-40M (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
159	5795.0	Rear	100%	100%	0.89	0.89



13.5. Product specific 10g SAR

Table 13.67: SAR Values (WLAN 5G - Body)

		Ambient Temperature: 22.6°C			Liquid Temperature: 22.1°C				
Frequency	Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)	
Ch.	MHz								
U-NII-2A Test Data (0mm)									
54	5270.0	802.11ac-40	Front	/	17.13	19.0	0.956	1.47	0.09
54	5270.0	802.11ac-40	Rear	/	17.13	19.0	0.806	1.24	0.04
54	5270.0	802.11ac-40	Left	/	17.13	19.0	0.010	0.02	0.09
54	5270.0	802.11ac-40	Right	/	17.13	19.0	1.030	1.58	0.04
54	5270.0	802.11ac-40	Top	/	17.13	19.0	1.150	1.77	0.09
54	5270.0	802.11ac-40	Top	M2	17.13	19.0	0.735	1.13	0.07
54	5270.0	802.11ac-40	Top	B2	17.13	19.0	1.060	1.63	0.05
54	5270.0	802.11ac-40	Top	B3	17.13	19.0	1.110	1.71	0.13
U-NII-2C Test Data (0mm)									
134	5670.0	802.11ac-40	Front	/	18.01	19.0	0.551	0.69	0.09
134	5670.0	802.11ac-40	Rear	52	18.01	19.0	1.200	1.51	0.07
134	5670.0	802.11ac-40	Left	/	18.01	19.0	0.013	0.02	0.09
134	5670.0	802.11ac-40	Right	/	18.01	19.0	0.926	1.16	0.07
134	5670.0	802.11ac-40	Top	/	18.01	19.0	0.666	0.84	-0.03
134	5670.0	802.11ac-40	Rear	M2	18.01	19.0	0.742	0.93	0.03
134	5670.0	802.11ac-40	Rear	B2	18.01	19.0	1.120	1.41	-0.10
134	5670.0	802.11ac-40	Rear	B3	18.01	19.0	1.060	1.33	0.06
U-NII-2A Test Data (0mm) - Reduced power level 9									
54	5270.0	802.11n-40	Front	/	12.30	14.0	0.377	0.56	0.10
54	5270.0	802.11n-40	Rear	/	12.30	14.0	0.317	0.47	0.11
54	5270.0	802.11n-40	Left	/	12.30	14.0	0.004	0.01	-0.06
54	5270.0	802.11n-40	Right	/	12.30	14.0	0.406	0.60	0.05
54	5270.0	802.11n-40	Top	/	12.30	14.0	0.453	0.67	0.16
U-NII-2C Test Data (0mm) - Reduced power level 9									
122	5610.0	802.11ac-80	Front	/	12.84	14.0	0.162	0.21	0.02
122	5610.0	802.11ac-80	Rear	/	12.84	14.0	0.353	0.46	0.09
122	5610.0	802.11ac-80	Left	/	12.84	14.0	0.004	0.01	-0.16
122	5610.0	802.11ac-80	Right	/	12.84	14.0	0.272	0.36	0.15
122	5610.0	802.11ac-80	Top	/	12.84	14.0	0.196	0.26	-0.10

Note: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 2.0 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 2.0 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.



No.I21N04025-SAR

Table 13.68: SAR Values (WLAN - Body) – 802.11ac-40M (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (10g)(W/kg)	Scaled reported SAR (10g)(W/kg)
Ch.	MHz					
54	5270.0	Rear	100%	100%	1.77	1.77

14. SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/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 ($\sim 10\%$ 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 and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

Table 14.1: SAR Measurement Variability for WCDMA Band 4 Head – Top Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1312	1712.4	Right Tilt	1.02	1.00	1.02	/

Table 14.2: SAR Measurement Variability for LTE Band 2 Head – Top Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
19100	1900.0	Right Tilt	0.927	0.908	1.02	/

Table 14.3: SAR Measurement Variability for LTE Band 4 Head – Top Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
20300	1745.0	Right Tilt	0.841	0.816	1.03	/

Table 14.4: SAR Measurement Variability for LTE Band 4 Body – Bottom Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
20300	1745.0	Bottom	0.839	0.820	1.02	/

Table 14.5: SAR Measurement Variability for LTE Band 7 Head – Top Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
21350	2560.0	Right Tilt	0.913	0.887	1.03	/

**Table 14.6: SAR Measurement Variability for LTE Band 12 Head – Top Antenna**

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
23130	711.0	Right Cheek	0.841	0.834	1.01	/

Table 14.7: SAR Measurement Variability for LTE Band 26 Head – Top Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
26775	822.5	Right Cheek	0.893	0.865	1.03	/

Table 14.8: SAR Measurement Variability for LTE Band 66 Head – Top Antenna

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
132572	1770.0	Right Tilt	0.893	0.874	1.02	/

15. Measurement Uncertainty

15.1. Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	12	N	2	1	1	6.0	6.0	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	Modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
19	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
20	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
21	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	9
22	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
23	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	9
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{23} c_i^2 u_i^2}$						11.3	11.2	95.5
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						22.6	22.4	

15.2. Measurement Uncertainty for Normal SAR Tests (3GHz~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	13.1	N	2	1	1	6.65	6.65	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.0	R	$\sqrt{3}$	1	1	0.0	0.0	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. Restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
19	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
20	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
21	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	43
22	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
23	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						11.6	11.5	257
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						23.2	23.0	

16. Main Test Instruments

Table 16.1: List of Main Instruments for original sample test

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46103759	2021-11-15	One year
02	Dielectric probe	85070E	MY44300317	/	/
03	Power meter	E4418B	MY50000366	2021-12-13	One year
04	Power sensor	E9304A	MY50000188		
05	Power meter	NRP	101460	2021-01-15	One year
06	Power sensor	NRP-Z91	100553		
07	Signal Generator	E8257D	MY47461211	2021-01-15	One year
08	Amplifier	VTL5400	0404	/	/
09	E-field Probe	ES3DV3	3151	2021-04-26	One year
10	E-field Probe	EX3DV4	3753	2021-07-26	One year
11	DAE	DAE4	786	2021-04-09	One year
12	Dipole Validation Kit	D750V3	1163	2019-09-03	Three years
13	Dipole Validation Kit	D835V2	4d057	2021-10-18	Three years
14	Dipole Validation Kit	D1750V2	1152	2019-08-30	Three years
15	Dipole Validation Kit	D1900V2	5d088	2021-10-18	Three years
16	Dipole Validation Kit	D2450V2	873	2021-10-21	Three years
17	Dipole Validation Kit	D2550V2	1010	2021-05-21	Three years
18	Dipole Validation Kit	D5GHzV2	1238	2019-08-29	Three years
19	BTS	MT8820C	6201341853	2021-01-15	One year
20	BTS	E5515C	GB46110722	2021-01-15	One year
21	BTS	CMW500	152499	2021-07-16	One year
22	Software	DASY5	/	/	/

ANNEX A: Graph Results

GSM850 Head

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.916$ S/m; $\epsilon_r = 40.694$; $\rho = 1000$ kg/m³

Communication System: UID 0, GSM (0) Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Right Cheek Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.905 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.44 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.689 W/kg; SAR(10 g) = 0.399 W/kg

Maximum value of SAR (measured) = 0.855 W/kg

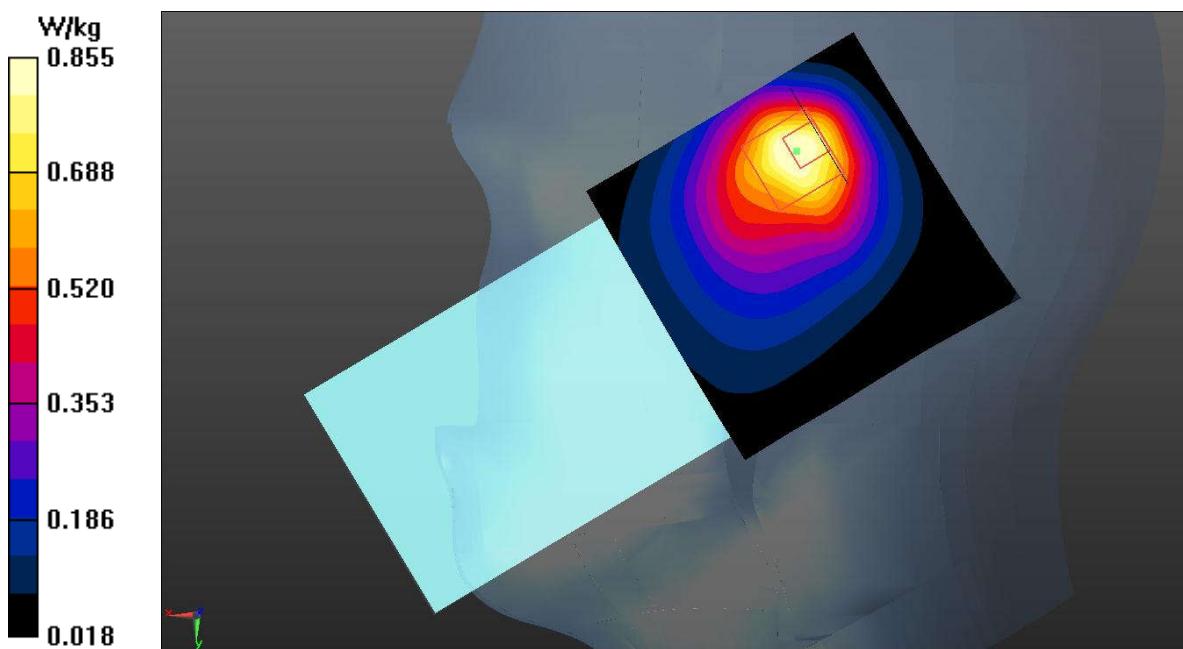


Fig.1 GSM 850

GSM850 Hotspot

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.916$ S/m; $\epsilon_r = 40.694$; $\rho = 1000$ kg/m³

Communication System: UID 0, 4 slot GPRS (0) Frequency: 836.6 MHz Duty Cycle: 1:2

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side Middle/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.524 W/kg

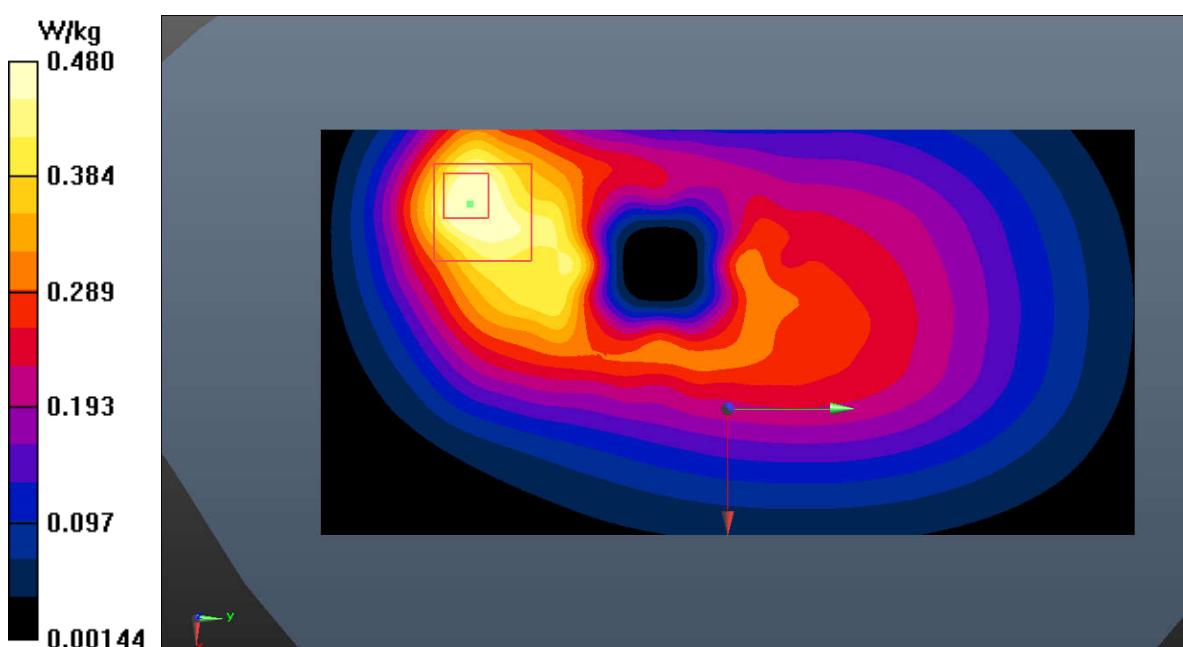
Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.32 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.785 W/kg

SAR(1 g) = 0.404 W/kg; SAR(10 g) = 0.246 W/kg

Maximum value of SAR (measured) = 0.480 W/kg


Fig.2 GSM 850

GSM850 Body-worn

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 40.694$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, 4 slot GPRS (0) Frequency: 836.6 MHz Duty Cycle: 1:2

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side Middle/Area Scan (61x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.322 W/kg

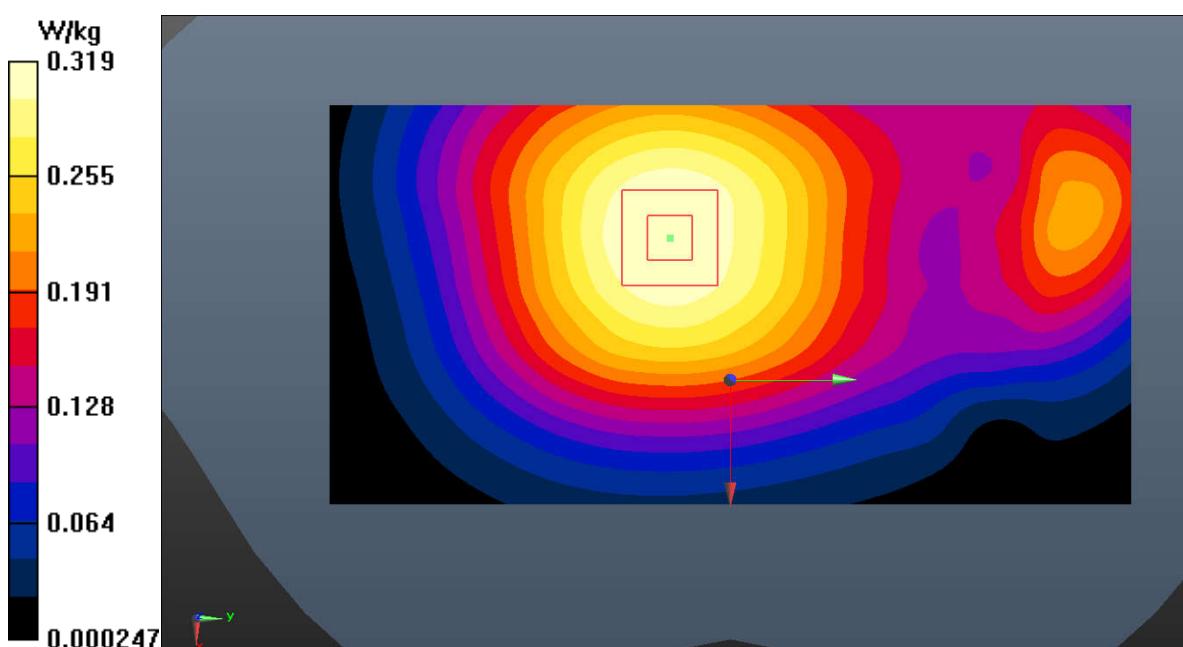
Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.73 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.290 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.319 W/kg


Fig.3 GSM 850

GSM1900 Head

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.426$ S/m; $\epsilon_r = 39.214$; $\rho = 1000$ kg/m³

Communication System: UID 0, GSM (0) Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Right Tilt High/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.902 W/kg

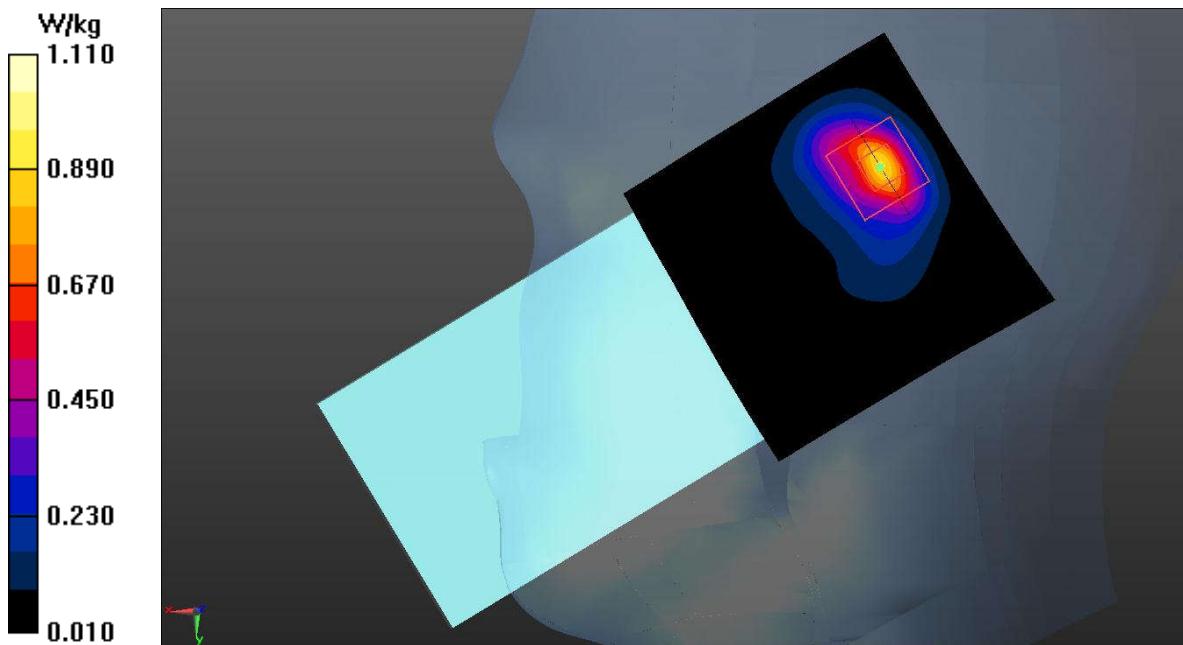
Right Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.26 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 0.782 W/kg; SAR(10 g) = 0.344 W/kg

Maximum value of SAR (measured) = 1.11 W/kg

**Fig.4 GSM 1900**

GSM1900 Hotspot

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

 Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.373$ S/m; $\epsilon_r = 39.447$; $\rho = 1000$ kg/m³

Communication System: UID 0, 4 slot GPRS (0) Frequency: 1850.2 MHz Duty Cycle: 1:2

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Bottom Side Low/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.887 W/kg

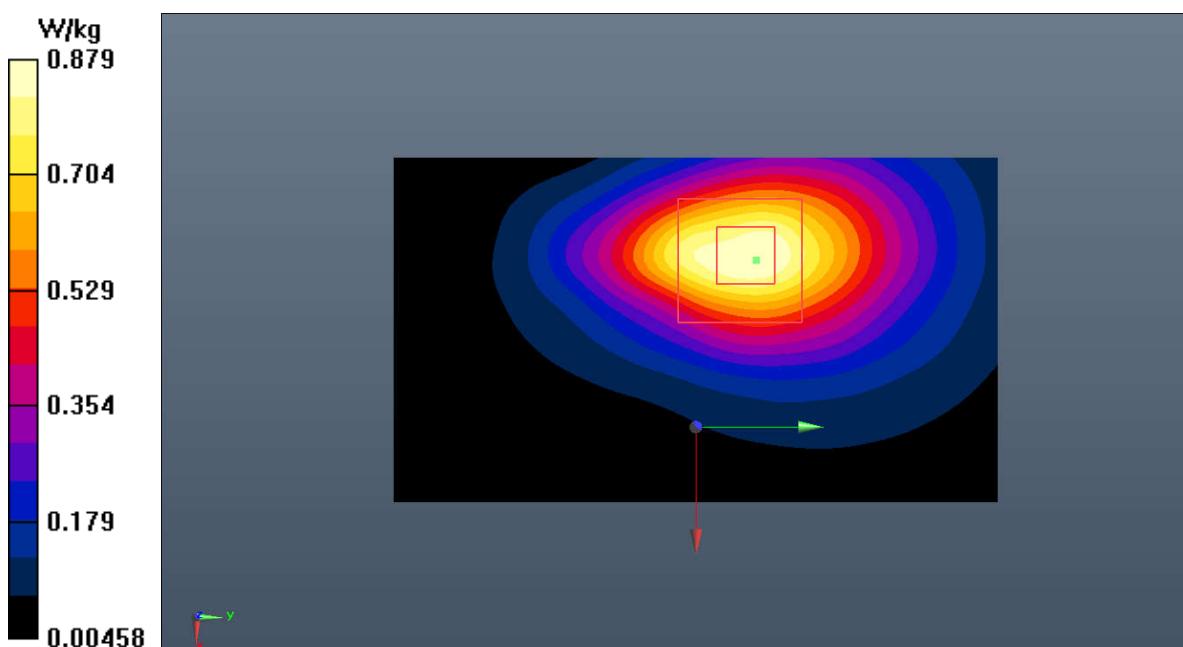
Bottom Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.75 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.719 W/kg; SAR(10 g) = 0.392 W/kg

Maximum value of SAR (measured) = 0.879 W/kg


Fig.5 GSM 1900

GSM1900 Body-worn

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.399$ S/m; $\epsilon_r = 39.331$; $\rho = 1000$ kg/m³

Communication System: UID 0, 4 slot GPRS (0) Frequency: 1880 MHz Duty Cycle: 1:2

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Rear Side Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.243 W/kg

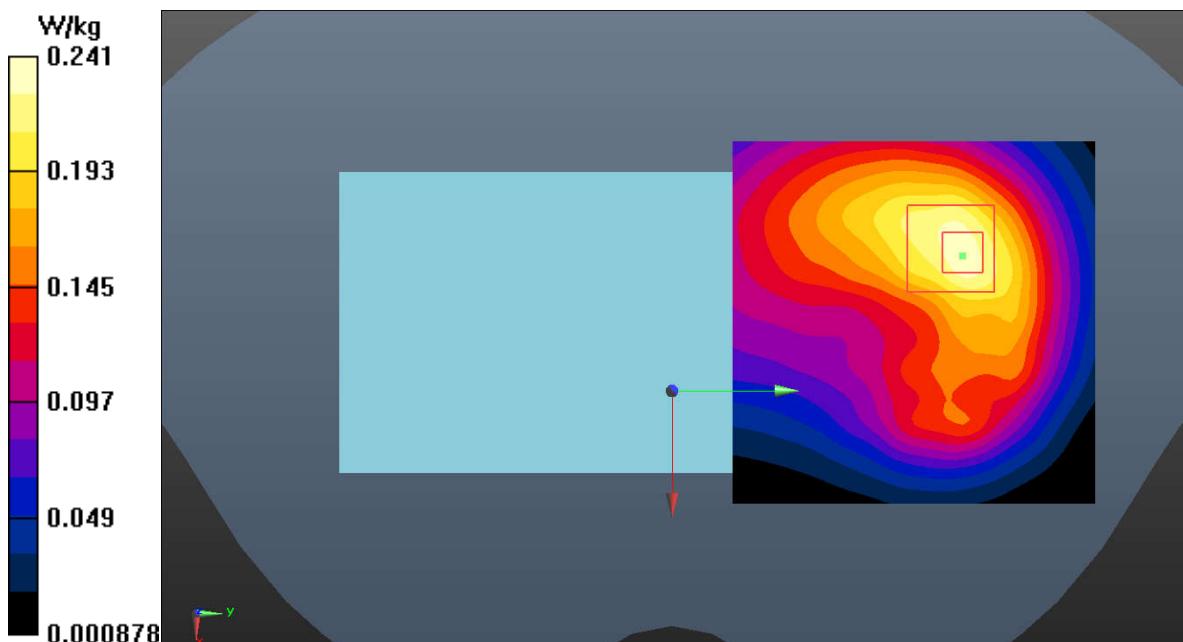
Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.647 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.321 W/kg

SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.131 W/kg

Maximum value of SAR (measured) = 0.241 W/kg


Fig.6 GSM 1900

WCDMA Band 2 Head

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.399$ S/m; $\epsilon_r = 39.331$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Right Tilt Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.856 W/kg

Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.78 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.731 W/kg; SAR(10 g) = 0.324 W/kg

Maximum value of SAR (measured) = 1.00 W/kg

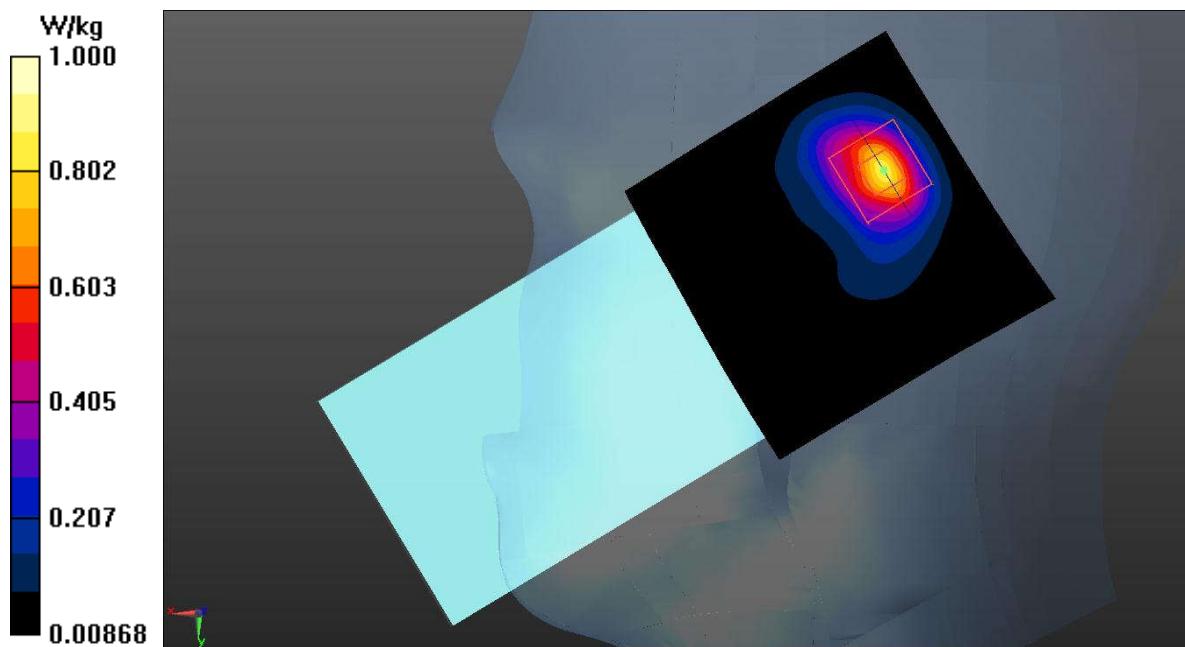


Fig.7 WCDMA Band 2

WCDMA Band 2 Hotspot

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.399$ S/m; $\epsilon_r = 39.331$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Bottom Side Middle/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.653 W/kg

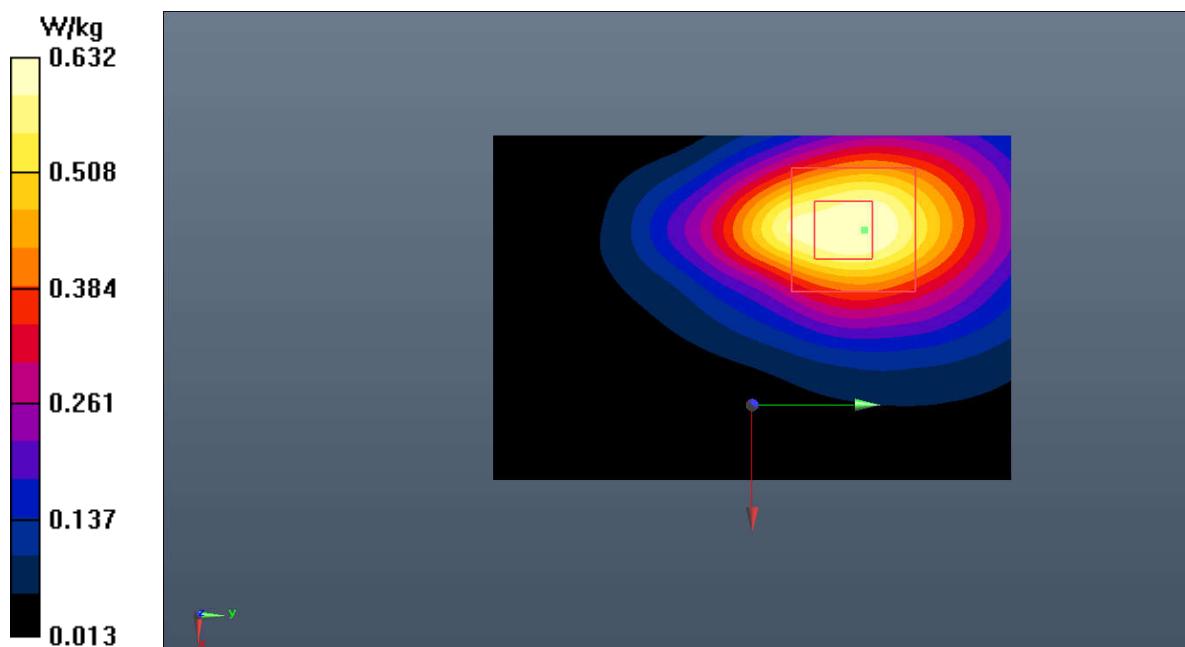
Bottom Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.59 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.897 W/kg

SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 0.632 W/kg


Fig.8 WCDMA Band 2

WCDMA Band 2 Body-worn

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.399 \text{ S/m}$; $\epsilon_r = 39.331$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WCDMA (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Rear Side Middle/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.215 W/kg

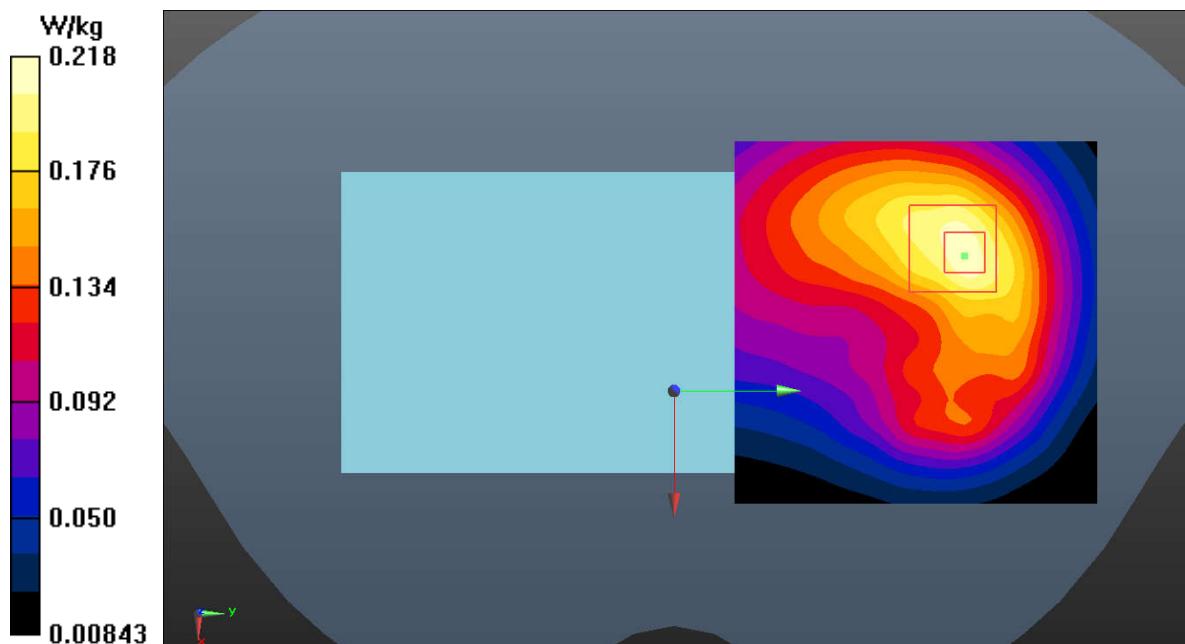
Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.440 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.286 W/kg

SAR(1 g) = 0.186 W/kg; SAR(10 g) = 0.119 W/kg

Maximum value of SAR (measured) = 0.218 W/kg


Fig.9 WCDMA Band 2

WCDMA Band 4 Head

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.352$ S/m; $\epsilon_r = 39.634$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Right Tilt Low/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.12 W/kg

Right Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.61 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.20 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.455 W/kg

Maximum value of SAR (measured) = 1.36 W/kg

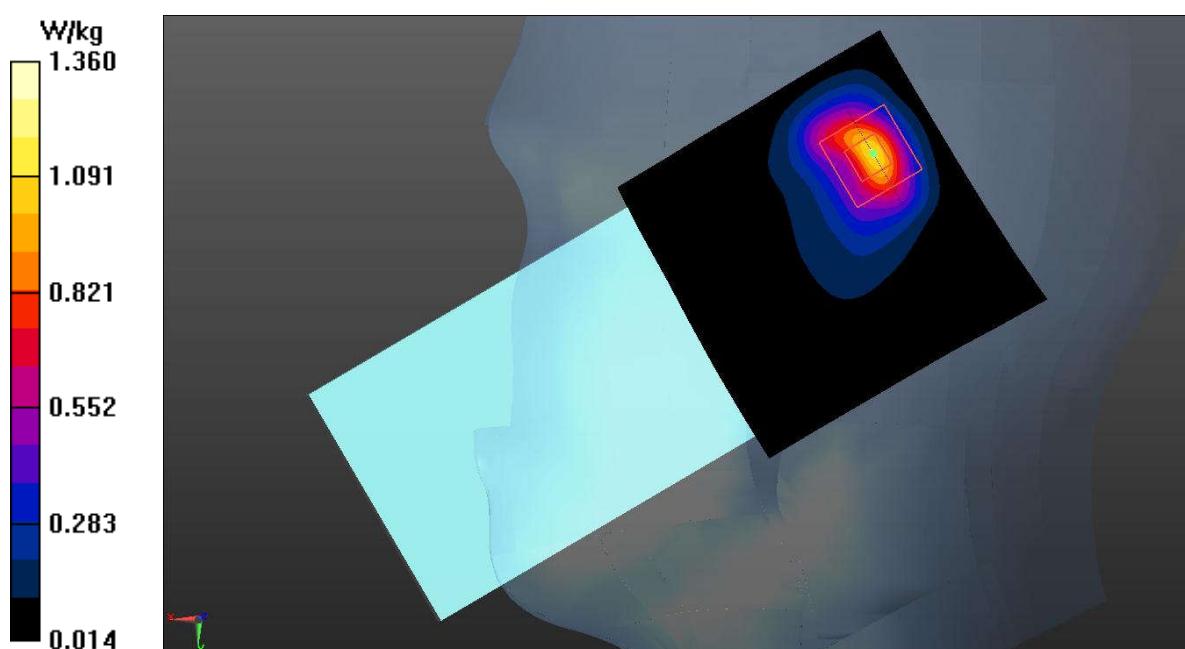


Fig.10 WCDMA Band 4

WCDMA Band 4 Hotspot

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

 Medium parameters used: $f = 1733$ MHz; $\sigma = 1.37$ S/m; $\epsilon_r = 39.553$; $\rho = 1000$ kg/m 3

Communication System: UID 0, WCDMA (0) Frequency: 1732.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Top Side Middle/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.743 W/kg

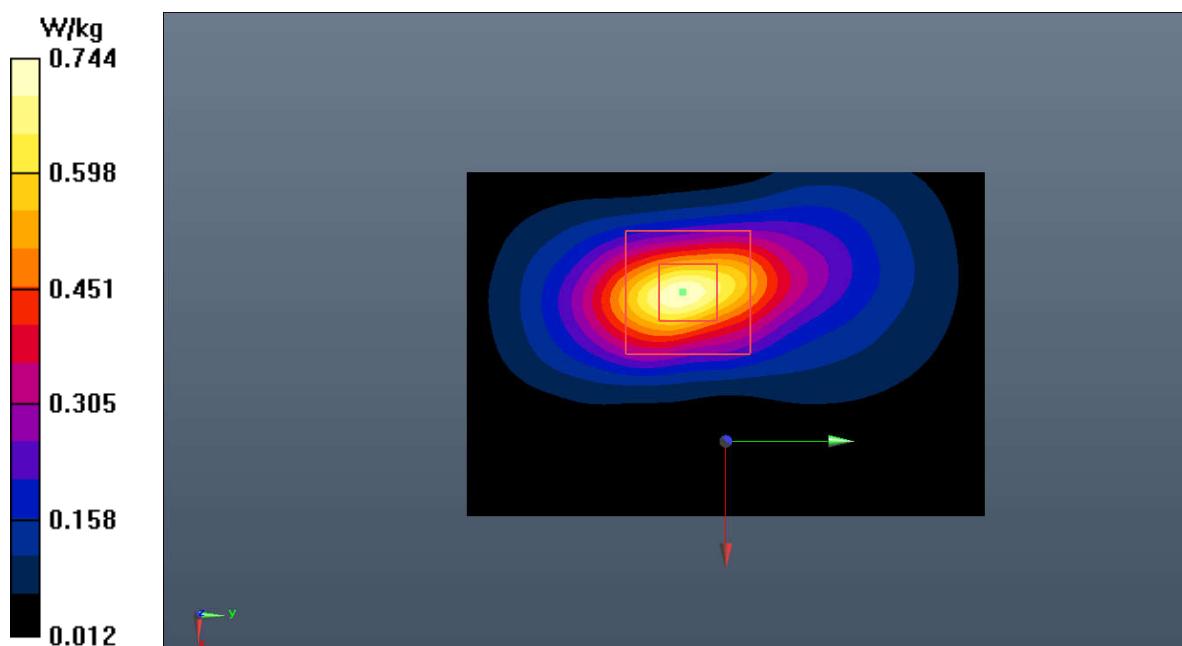
Top Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.48 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.570 W/kg; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 0.744 W/kg


Fig.11 WCDMA Band 4

WCDMA Band 4 Body-worn

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

 Medium parameters used: $f = 1733 \text{ MHz}$; $\sigma = 1.37 \text{ S/m}$; $\epsilon_r = 39.553$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WCDMA (0) Frequency: 1732.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Rear Side Middle/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.534 W/kg

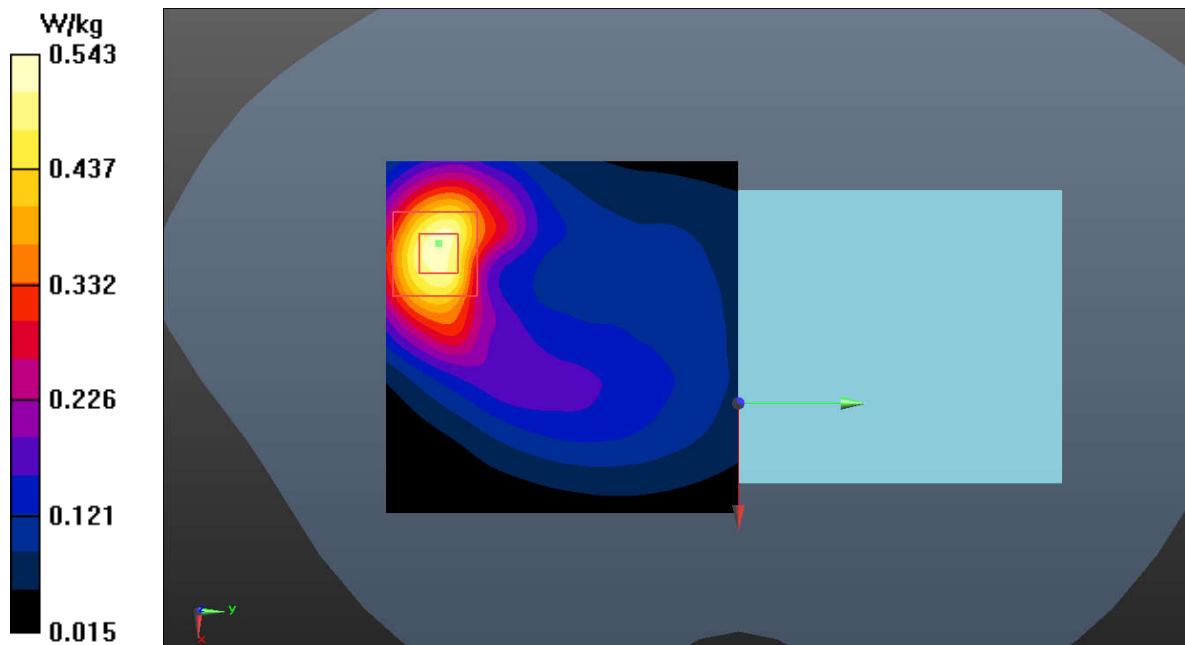
Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.570 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.136 W/kg

Maximum value of SAR (measured) = 0.543 W/kg


Fig.12 WCDMA Band 4

WCDMA Band 5 Head

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 40.575$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 846.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Right Tilt High/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.990 W/kg

Right Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.75 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.52 W/kg

SAR(1 g) = 0.914 W/kg; SAR(10 g) = 0.428 W/kg

Maximum value of SAR (measured) = 1.19 W/kg

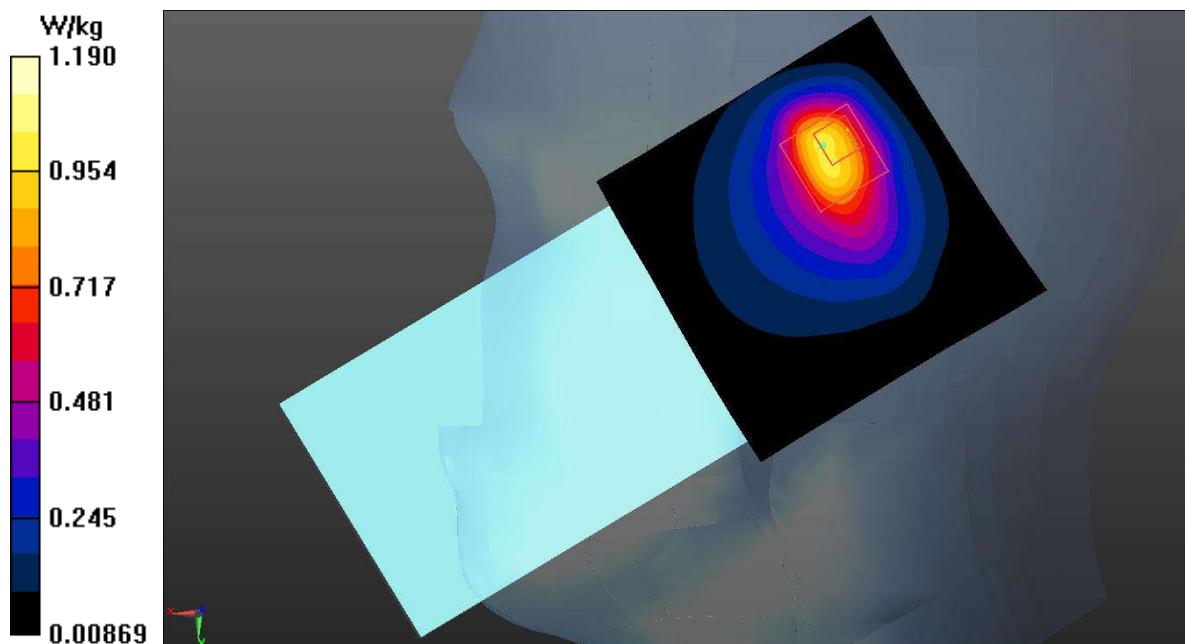


Fig.13 WCDMA Band 5

WCDMA Band 5 Hotspot

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 40.694$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WCDMA (0) Frequency: 836.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side Middle/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.334 W/kg

Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.69 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.522 W/kg

SAR(1 g) = 0.278 W/kg; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 0.349 W/kg

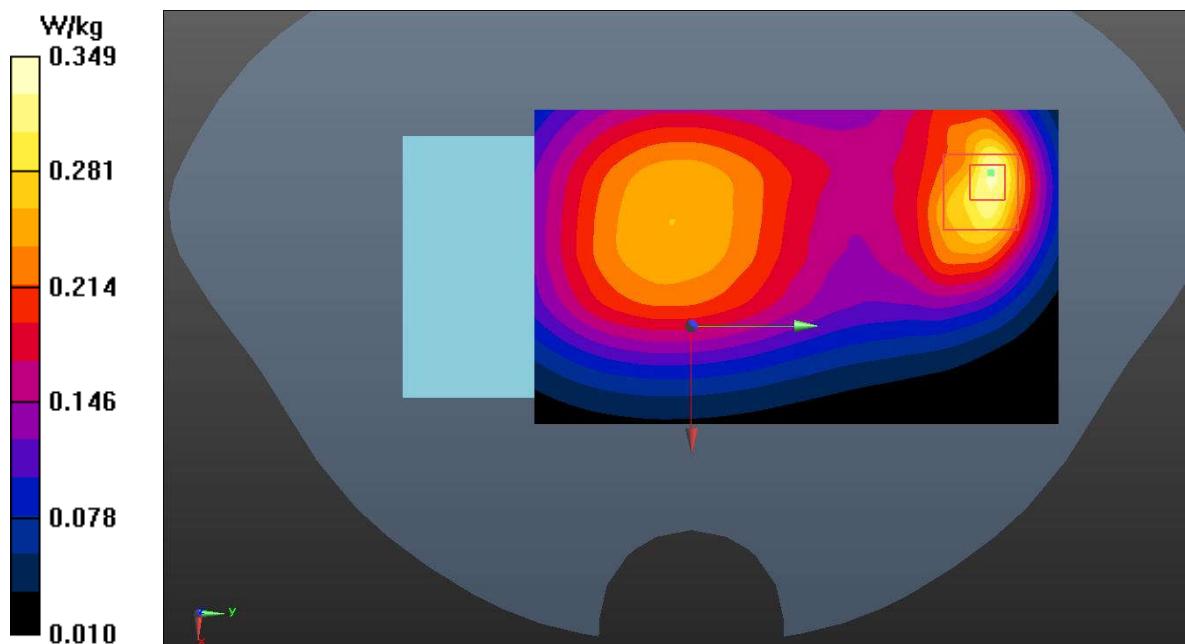


Fig.14 WCDMA Band 5

WCDMA Band 5 Body-worn

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 40.694$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WCDMA (0) Frequency: 836.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side Middle/Area Scan (61x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.228 W/kg

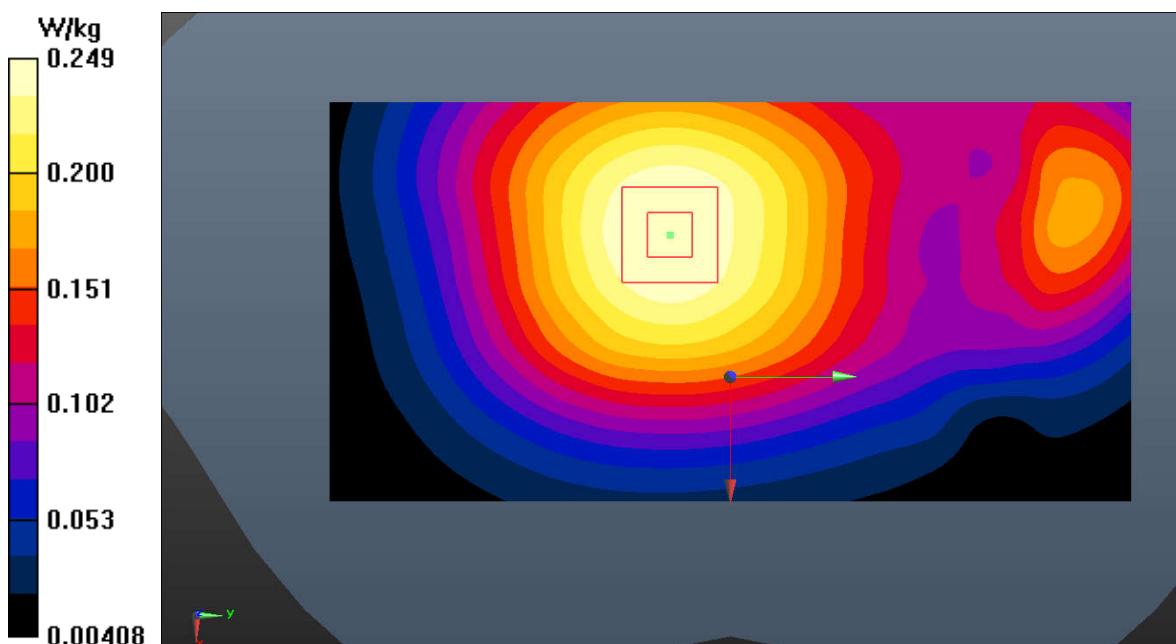
Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.71 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (interpolated) = 0.249 W/kg


Fig.15 WCDMA Band 5

LTE Band 2 Head

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.417$ S/m; $\epsilon_r = 39.253$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1900 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Right Tilt High 50RB25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.11 W/kg

Right Tilt High 50RB25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.37 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 0.927 W/kg; SAR(10 g) = 0.411 W/kg

Maximum value of SAR (measured) = 1.29 W/kg

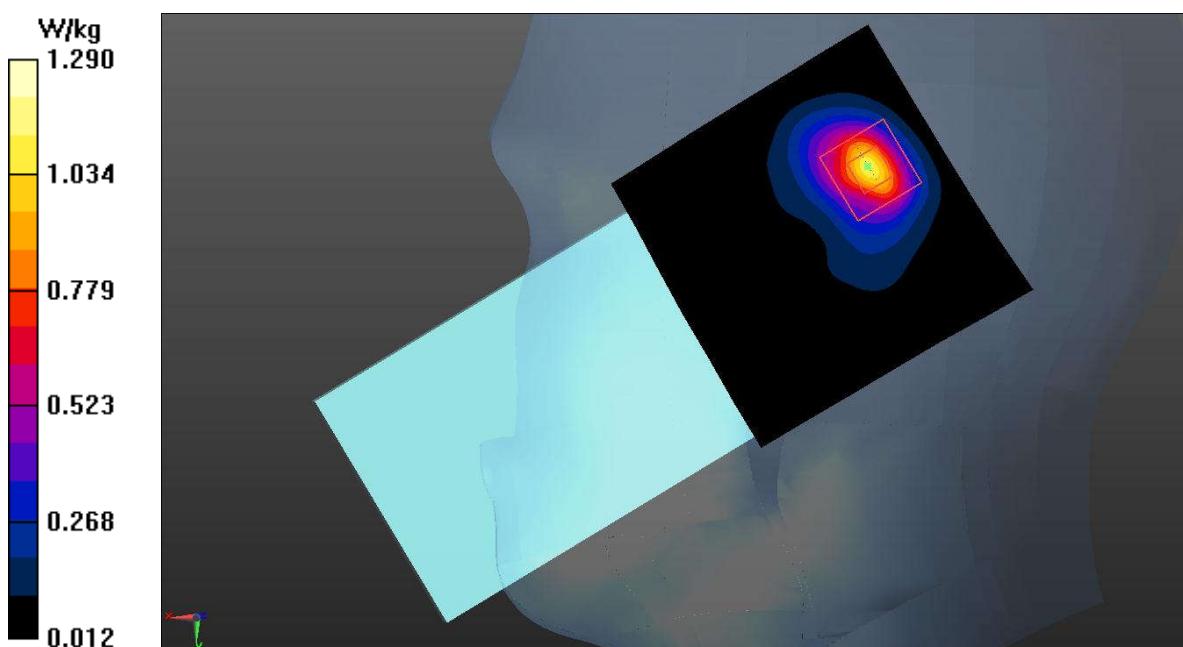


Fig.16 LTE Band 2

LTE Band 2 Hotspot

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.417$ S/m; $\epsilon_r = 39.253$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1900 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Bottom Side High 1RB50/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.745 W/kg

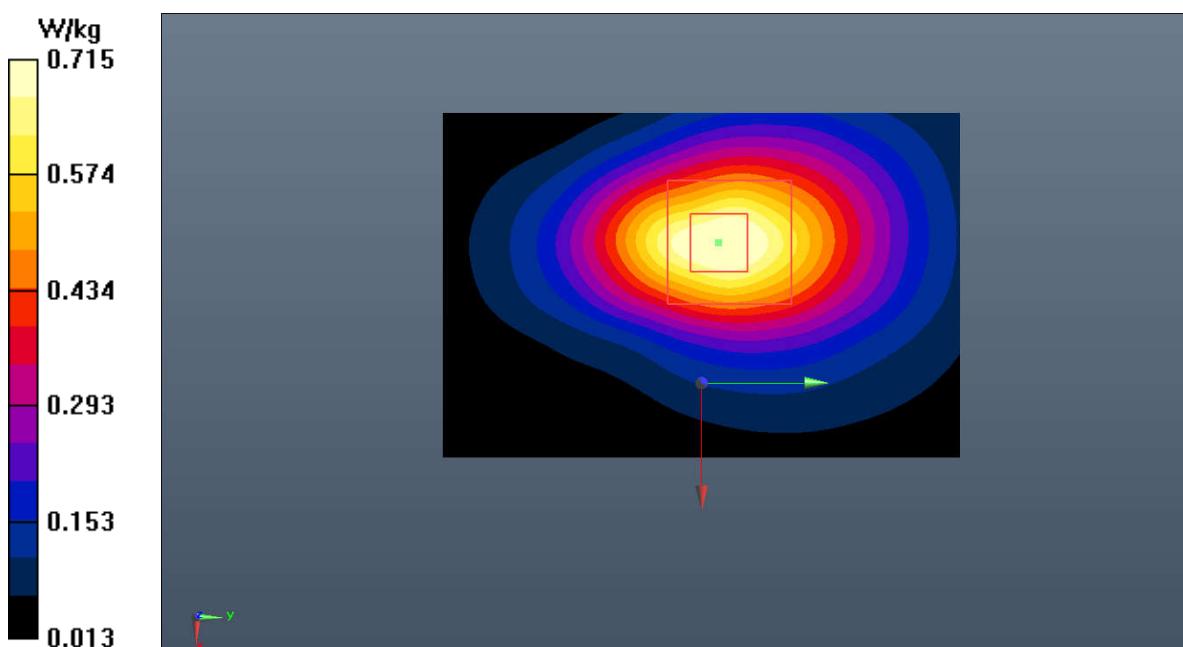
Bottom Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.44 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.993 W/kg

SAR(1 g) = 0.582 W/kg; SAR(10 g) = 0.330 W/kg

Maximum value of SAR (measured) = 0.715 W/kg


Fig.17 LTE Band 2

LTE Band 2 Body-worn

Date: 2022-1-5

Electronics: DAE4 Sn786

Medium: Head 1900MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.417$ S/m; $\epsilon_r = 39.253$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1900 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.09, 5.09, 5.09);

Rear Side High 50RB0/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.214 W/kg

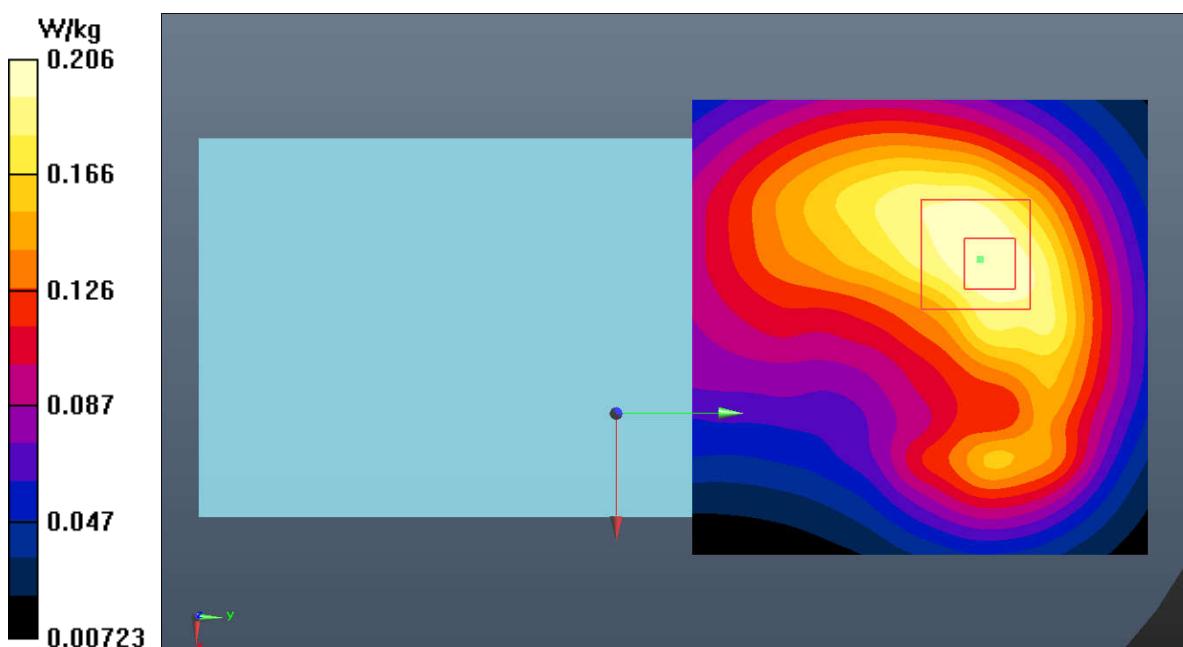
Rear Side High 50RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.707 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.274 W/kg

SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.112 W/kg

Maximum value of SAR (measured) = 0.206 W/kg

**Fig.18 LTE Band 2**

LTE Band 4 Head

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.381$ S/m; $\epsilon_r = 39.507$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Right Tilt High 50RB0/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.990 W/kg

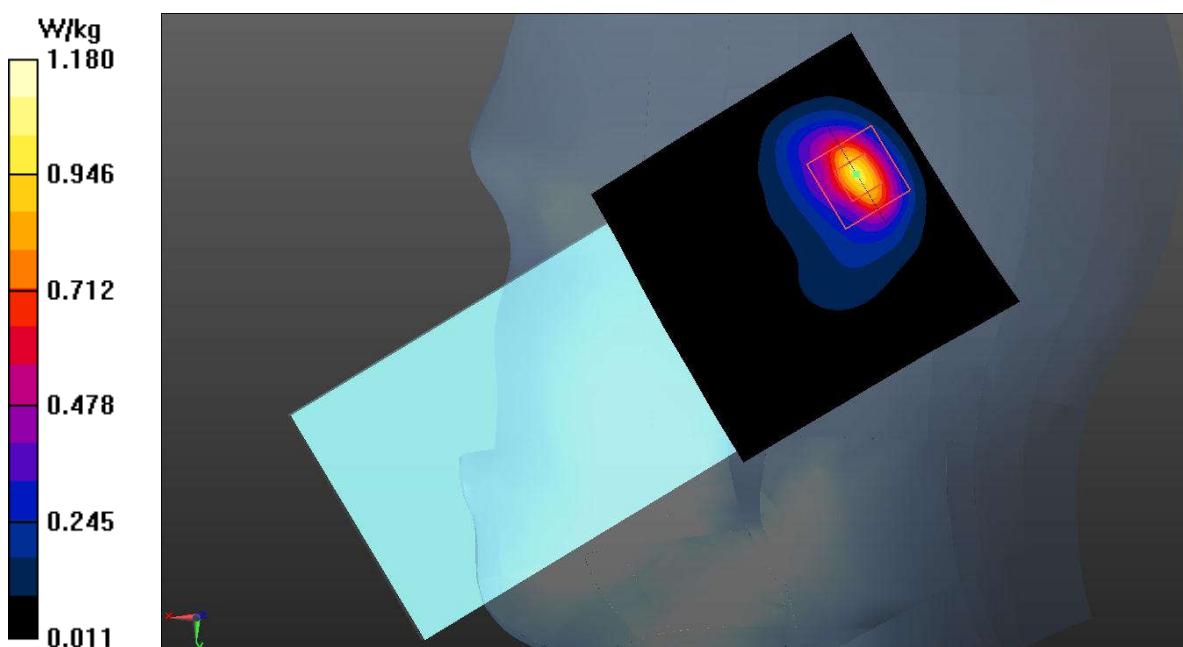
Right Tilt High 50RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.83 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.841 W/kg; SAR(10 g) = 0.376 W/kg

Maximum value of SAR (measured) = 1.18 W/kg

**Fig.19 LTE Band 4**

LTE Band 4 Hotspot

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

 Medium parameters used: $f = 1745$ MHz; $\sigma = 1.381$ S/m; $\epsilon_r = 39.507$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Bottom Side High 1RB50/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

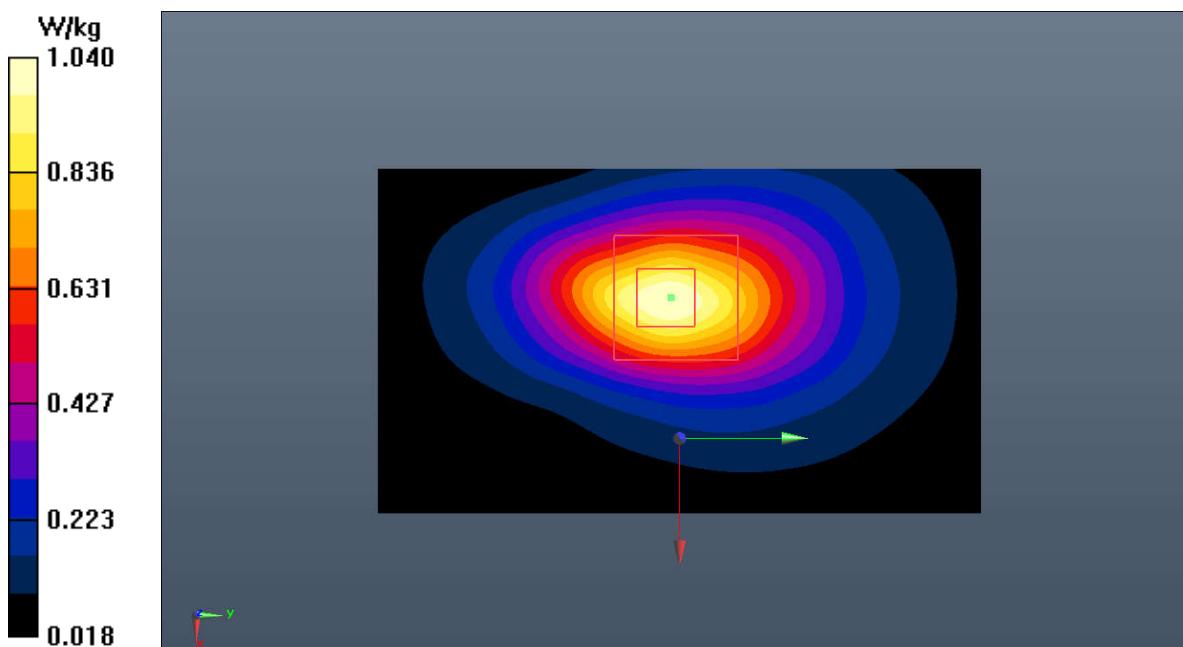
Bottom Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.93 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.464 W/kg

Maximum value of SAR (measured) = 1.04 W/kg


Fig.20 LTE Band 4

LTE Band 4 Body-worn

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

 Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.381 \text{ S/m}$; $\epsilon_r = 39.507$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Rear Side High 1RB50/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.581 W/kg

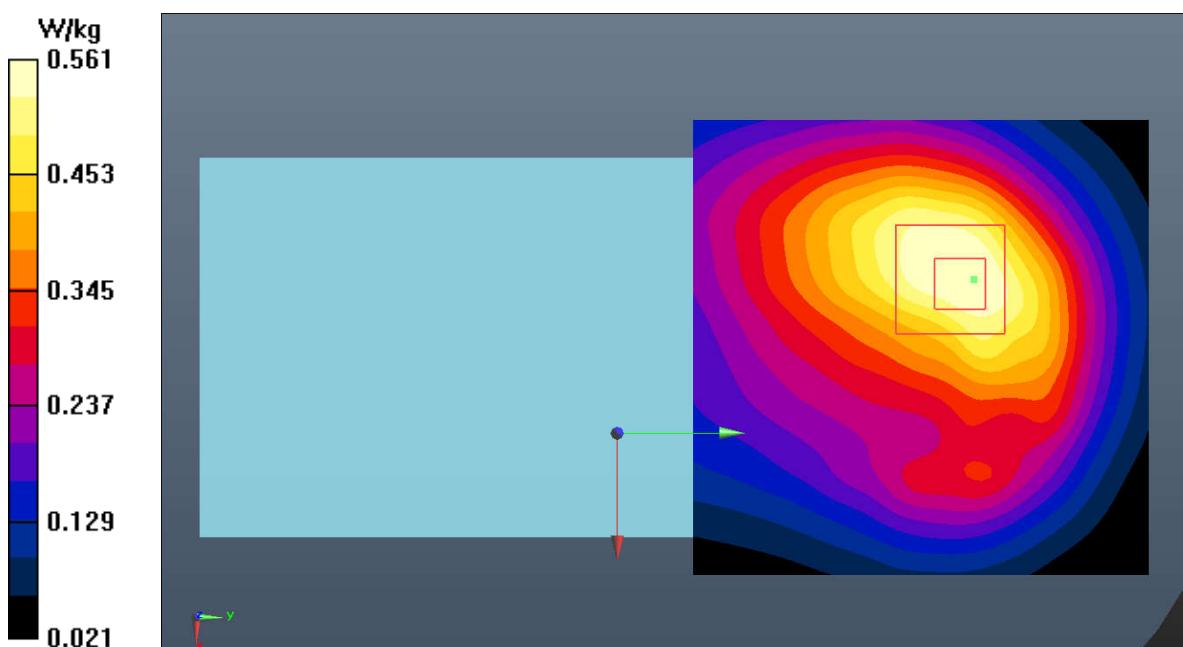
Rear Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.269 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.738 W/kg

SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.309 W/kg

Maximum value of SAR (measured) = 0.561 W/kg


Fig.21 LTE Band 4

LTE Band 5 Head

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 40.785$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 829 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Right Cheek Low 25RB25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.03 W/kg

Right Cheek Low 25RB25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.49 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.738 W/kg; SAR(10 g) = 0.407 W/kg

Maximum value of SAR (measured) = 0.956 W/kg

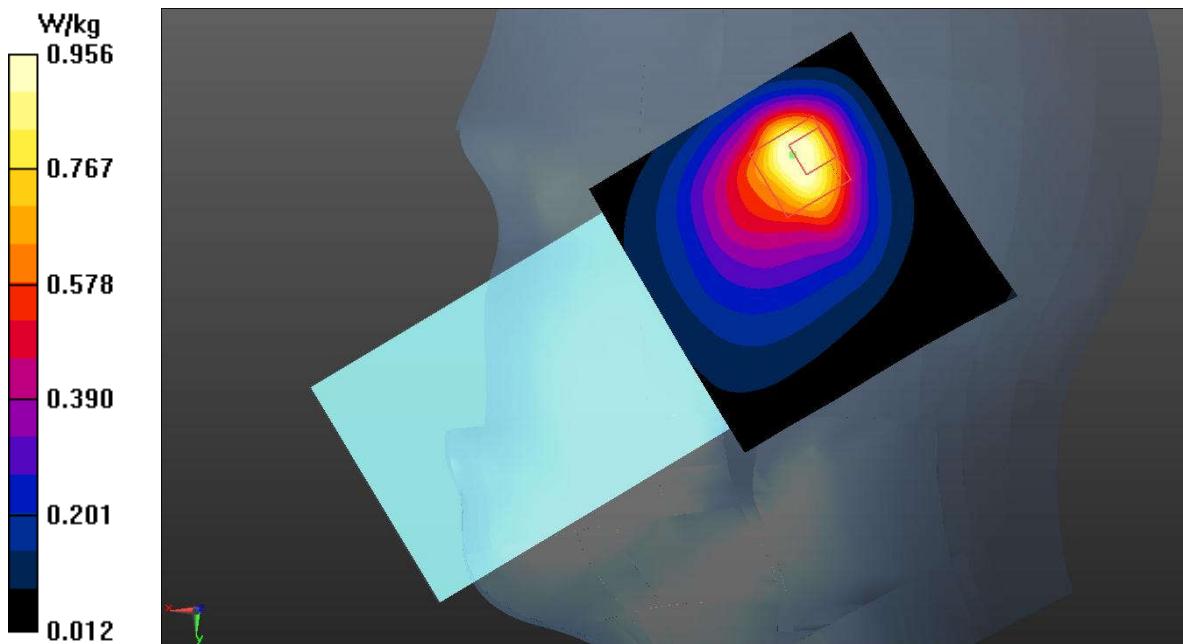


Fig.22 LTE Band 5

LTE Band 5 Hotspot

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

 Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 40.785$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 829 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Left Side Low 1RB24/Area Scan (41x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.329 W/kg

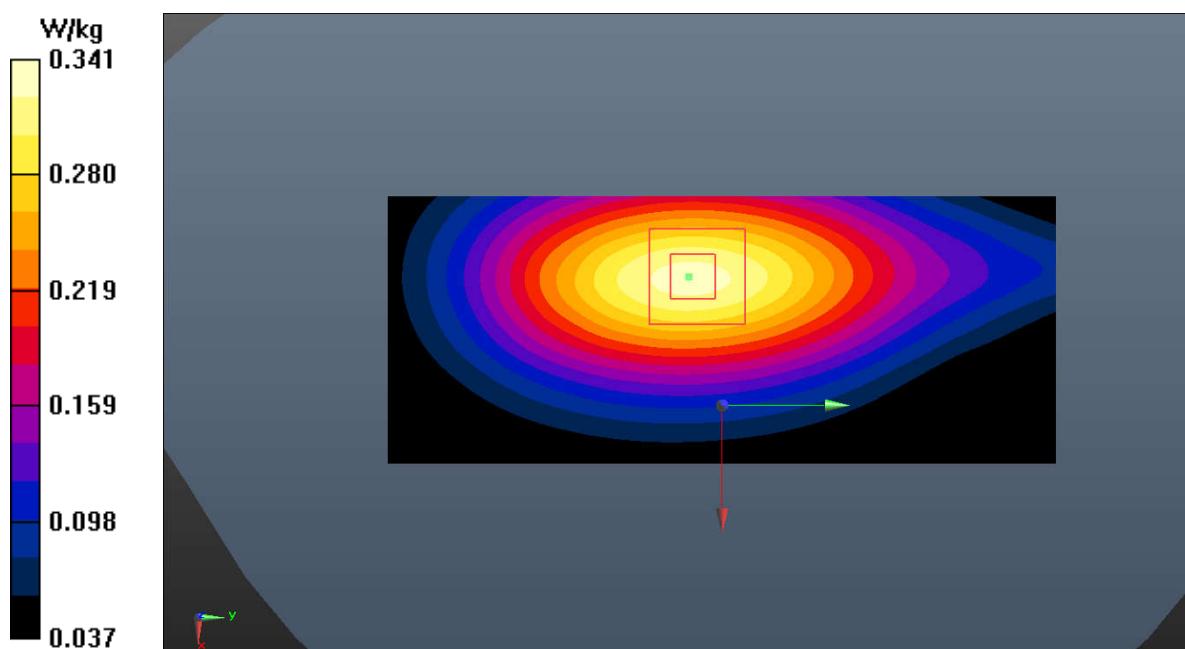
Left Side Low 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.71 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.295 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.341 W/kg


Fig.23 LTE Band 5

LTE Band 5 Body-worn

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

 Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 40.785$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 829 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side Low 1RB24/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.254 W/kg

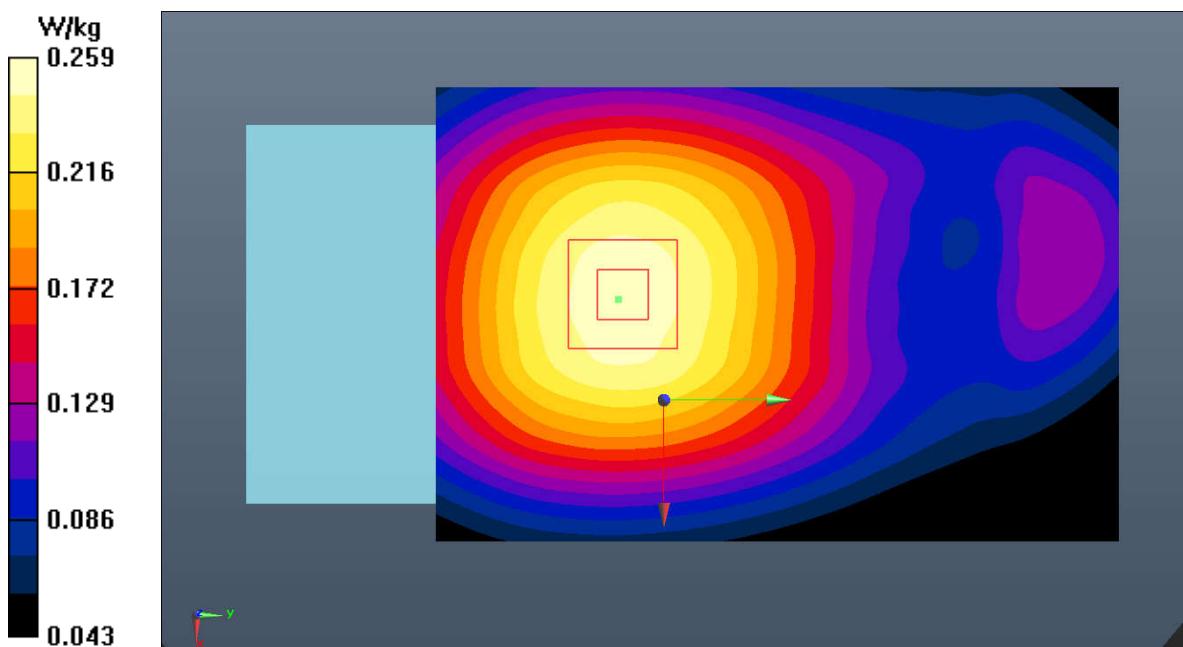
Rear Side Low 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.94 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.302 W/kg

SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.179 W/kg

Maximum value of SAR (measured) = 0.259 W/kg


Fig.24 LTE Band 5

LTE Band 7 Head

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.962$ S/m; $\epsilon_r = 38.249$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 2560 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Right Tilt High 1RB99/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.02 W/kg

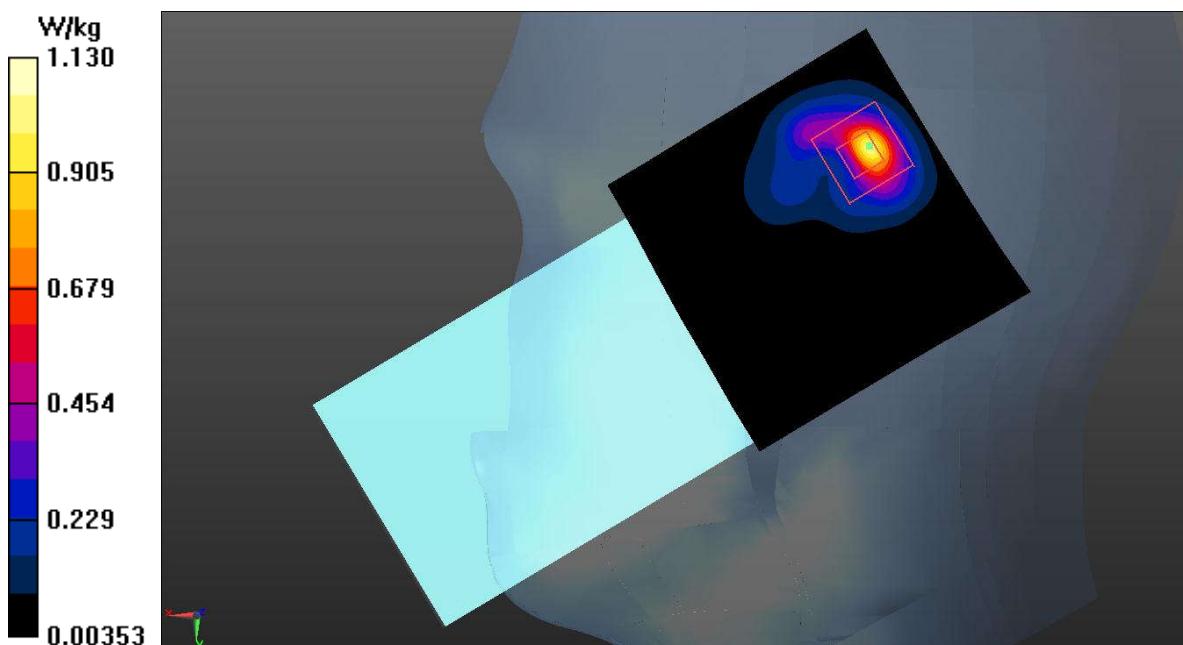
Right Tilt High 1RB99/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.859 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 2.38 W/kg

SAR(1 g) = 0.913 W/kg; SAR(10 g) = 0.349 W/kg

Maximum value of SAR (measured) = 1.13 W/kg

**Fig.25 LTE Band 7**

LTE Band 7 Hotspot

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.962$ S/m; $\epsilon_r = 38.249$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 2560 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Top Side High 1RB50/Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.814 W/kg

Top Side High 1RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.480 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.651 W/kg; SAR(10 g) = 0.279 W/kg

Maximum value of SAR (measured) = 0.853 W/kg

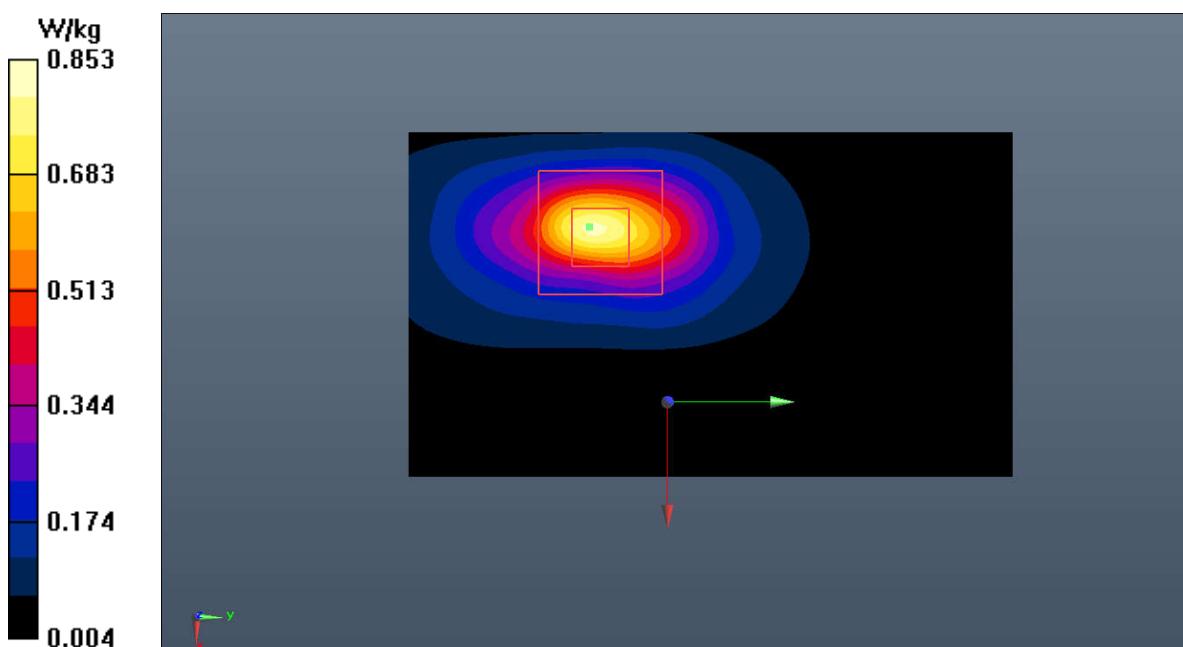


Fig.26 LTE Band 7

LTE Band 7 Body-worn

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.962$ S/m; $\epsilon_r = 38.249$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 2560 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Rear Side High 50RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.263 W/kg

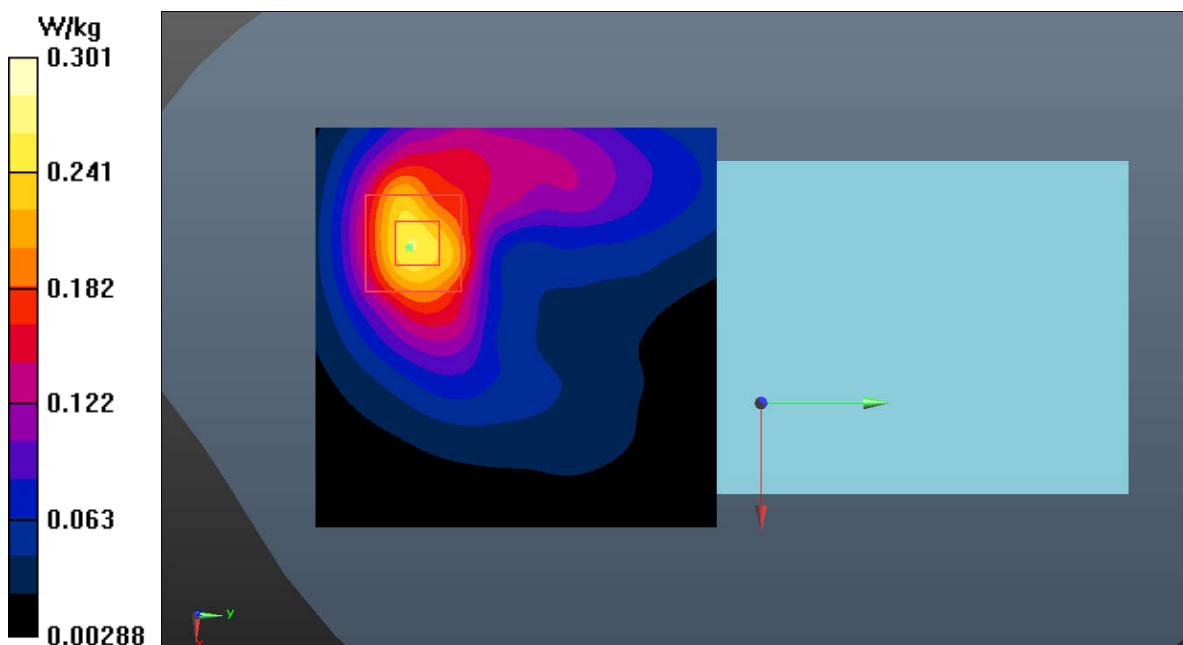
Rear Side High 50RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.602 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.482 W/kg

SAR(1 g) = 0.238 W/kg; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 0.301 W/kg

**Fig.27 LTE Band 7**

LTE Band 12 Head

Date: 2021-12-30

Electronics: DAE4 Sn786

Medium: Head 750MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.883$ S/m; $\epsilon_r = 41.32$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 711 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Right Cheek High 1RB49/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

Right Cheek High 1RB49/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.77 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.12 W/kg

SAR(1 g) = 0.841 W/kg; SAR(10 g) = 0.449 W/kg

Maximum value of SAR (measured) = 1.10 W/kg

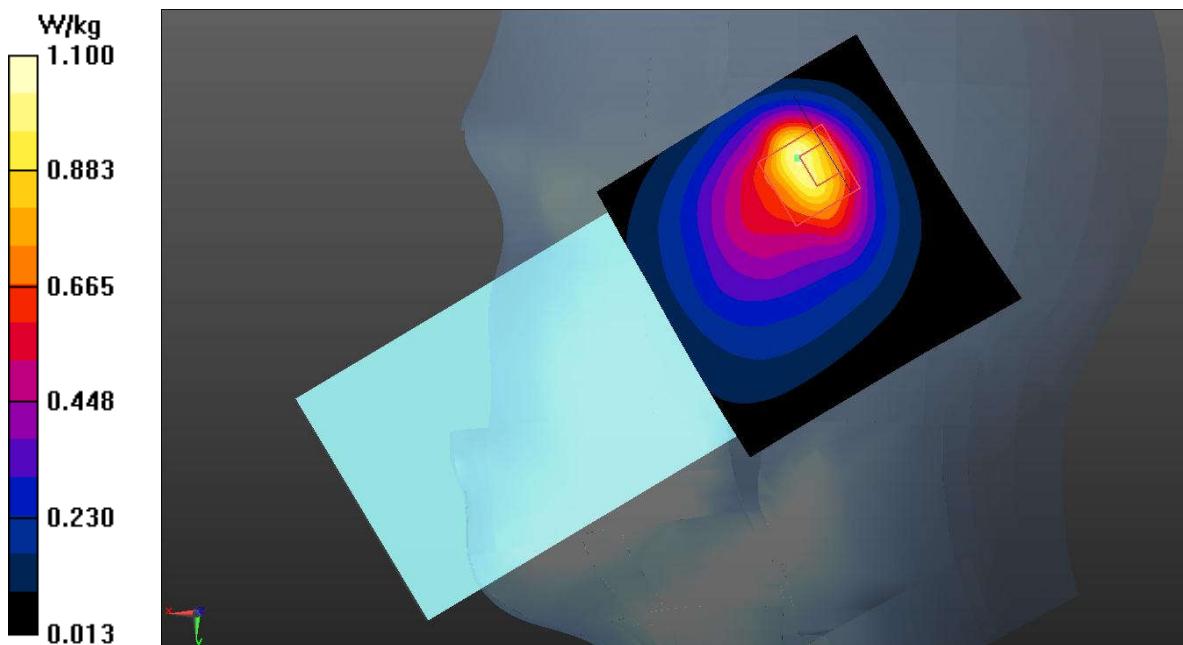


Fig.28 LTE Band 12

LTE Band 12 Hotspot

Date: 2021-12-30

Electronics: DAE4 Sn786

Medium: Head 750MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.883$ S/m; $\epsilon_r = 41.32$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 711 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Left Side High 1RB24/Area Scan (41x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.387 W/kg

Left Side High 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.30 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.568 W/kg

SAR(1 g) = 0.251 W/kg; SAR(10 g) = 0.175 W/kg

Maximum value of SAR (measured) = 0.355 W/kg

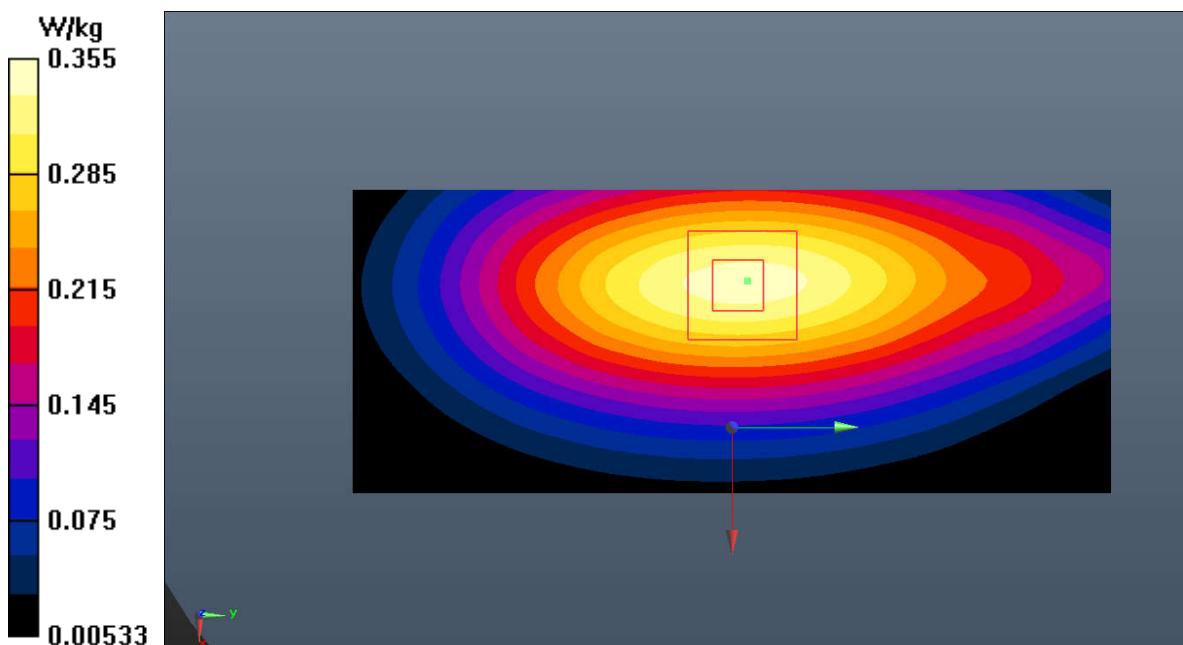


Fig.29 LTE Band 12

LTE Band 12 Body-worn

Date: 2021-12-30

Electronics: DAE4 Sn786

Medium: Head 750MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.883$ S/m; $\epsilon_r = 41.32$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 711 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side High 1RB24/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.118 W/kg

Rear Side High 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.88 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.087 W/kg

Maximum value of SAR (measured) = 0.124 W/kg

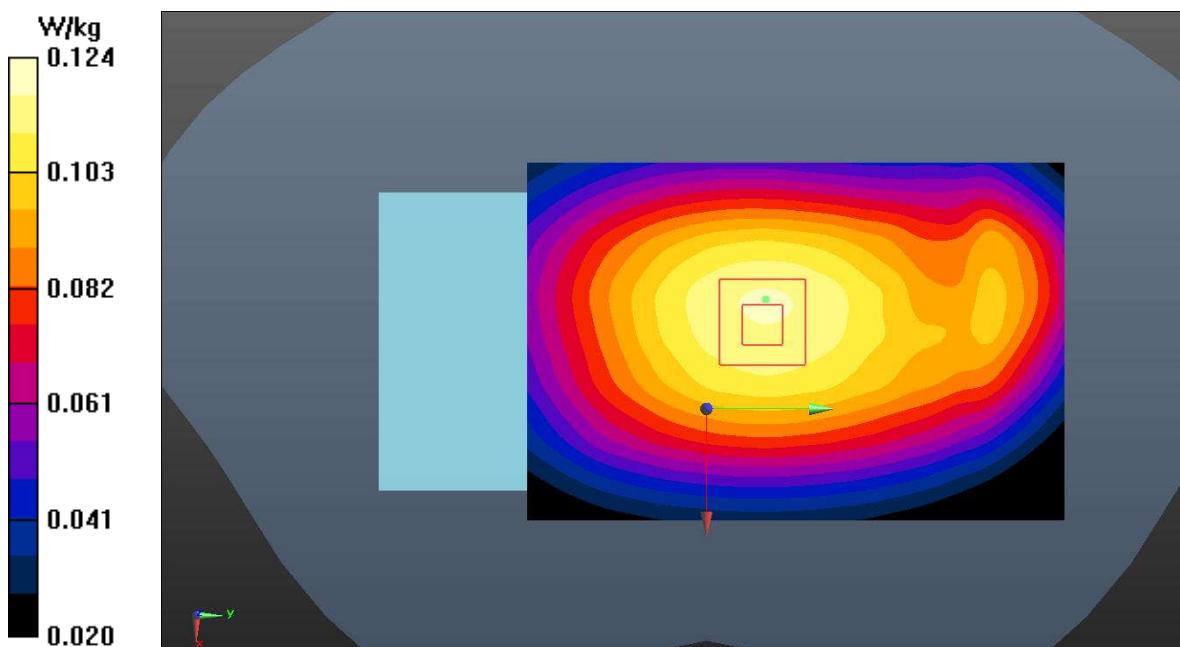


Fig.30 LTE Band 12

LTE Band 26 Head

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 822.5$ MHz; $\sigma = 0.904$ S/m; $\epsilon_r = 40.862$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 822.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Right Cheek Low 1RB37/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.21 W/kg

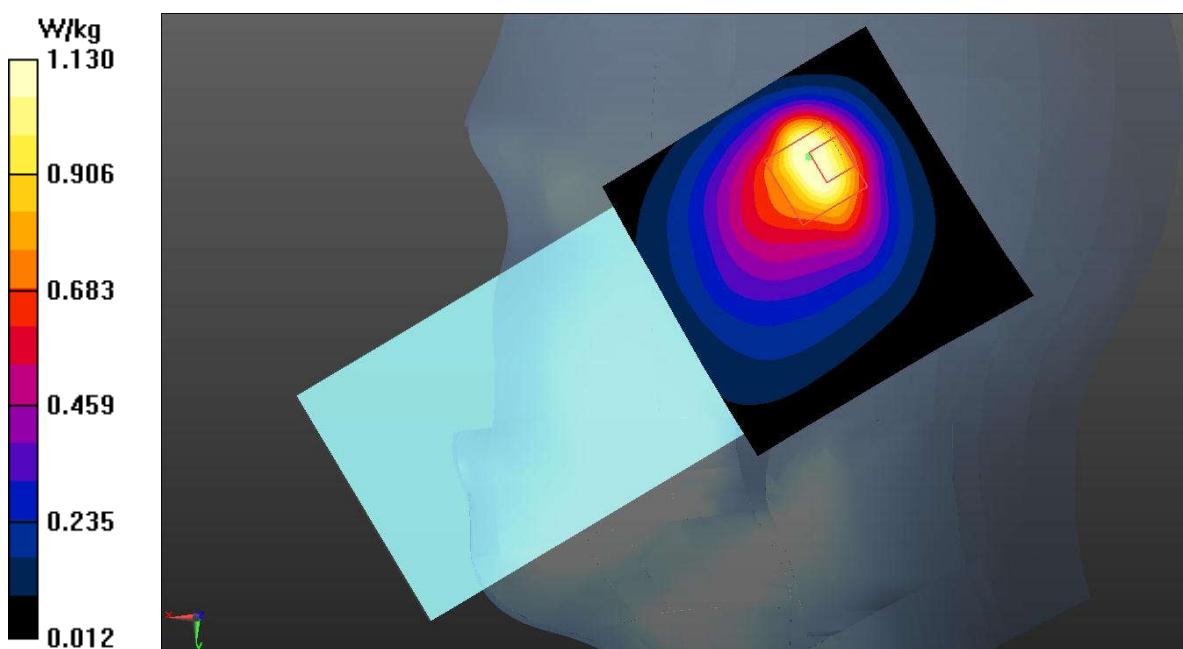
Right Cheek Low 1RB37/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.15 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.23 W/kg

SAR(1 g) = 0.893 W/kg; SAR(10 g) = 0.478 W/kg

Maximum value of SAR (measured) = 1.13 W/kg

**Fig.31 LTE Band 26**

LTE Band 26 Hotspot

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

 Medium parameters used (interpolated): $f = 822.5 \text{ MHz}$; $\sigma = 0.904 \text{ S/m}$; $\epsilon_r = 40.862$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 822.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Left Side Low 1RB74/Area Scan (41x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.303 W/kg

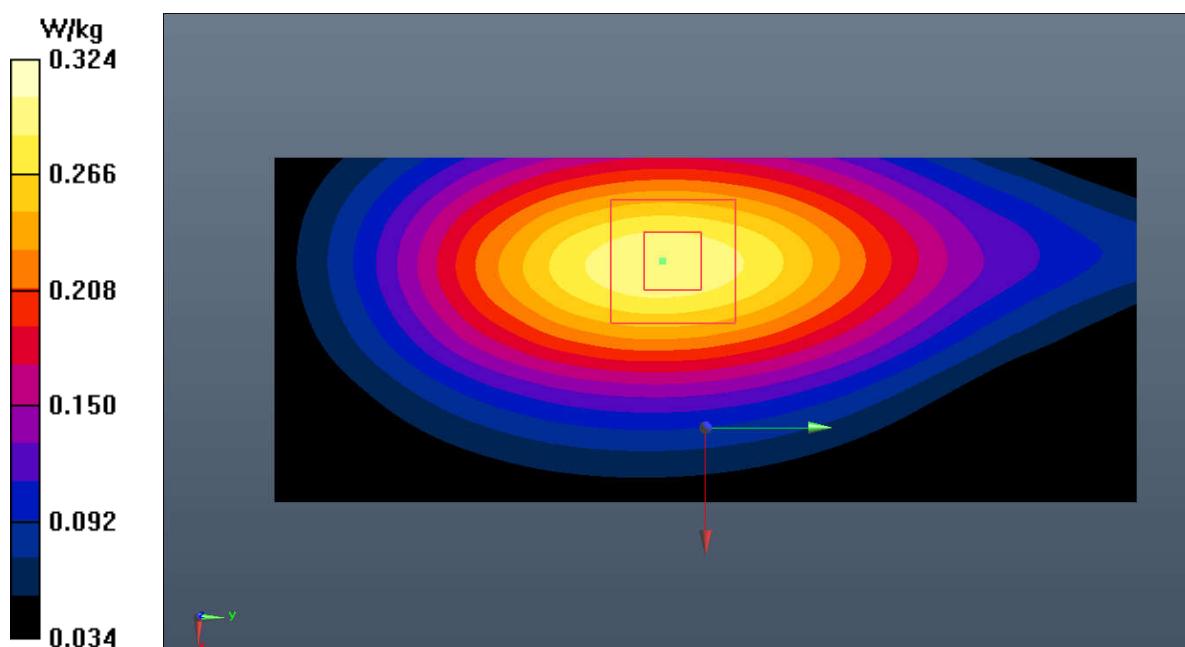
Left Side Low 1RB74/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.89 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.189 W/kg

Maximum value of SAR (measured) = 0.324 W/kg


Fig.32 LTE Band 26

LTE Band 26 Body-worn

Date: 2022-1-13

Electronics: DAE4 Sn786

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 822.5 \text{ MHz}$; $\sigma = 0.904 \text{ S/m}$; $\epsilon_r = 40.862$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 822.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (6.40, 6.40, 6.40);

Rear Side Low 1RB74/Area Scan (61x91x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.244 W/kg

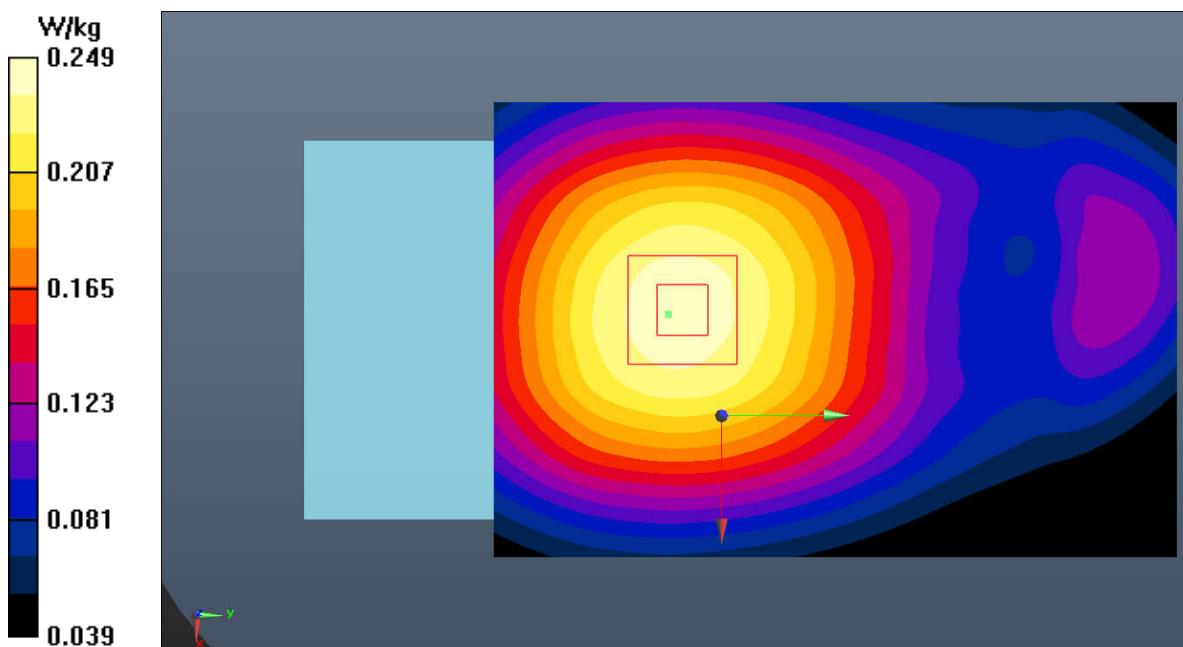
Rear Side Low 1RB74/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.94 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.172 W/kg

Maximum value of SAR (measured) = 0.249 W/kg

**Fig.33 LTE Band 26**

LTE Band 38 Head

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: $f = 2610$ MHz; $\sigma = 2.021$ S/m; $\epsilon_r = 38.084$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_TDD (0) Frequency: 2610 MHz Duty Cycle: 1:1.58

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Right Tilt High 1RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.944 W/kg

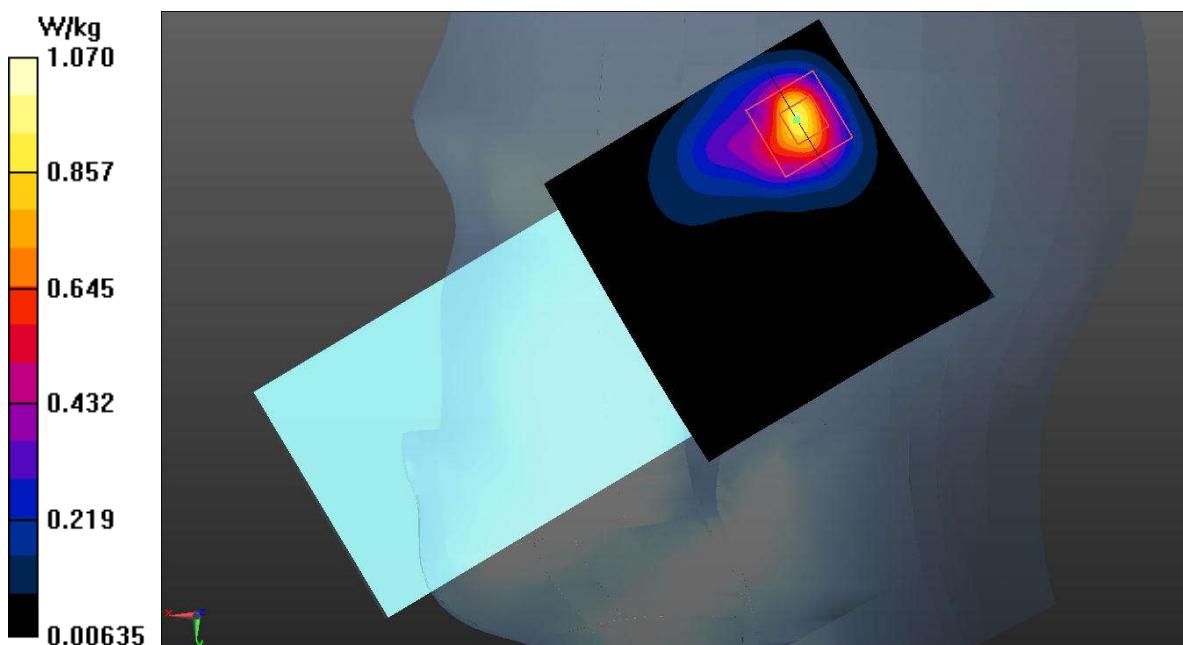
Right Tilt High 1RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.735 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 0.690 W/kg; SAR(10 g) = 0.280 W/kg

Maximum value of SAR (measured) = 1.07 W/kg

**Fig.34 LTE Band 38**

LTE Band 38 Hotspot

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: $f = 2610$ MHz; $\sigma = 2.021$ S/m; $\epsilon_r = 38.084$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_TDD (0) Frequency: 2610 MHz Duty Cycle: 1:1.58

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Rear Side High 50RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.802 W/kg

Rear Side High 50RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.074 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 0.781 W/kg

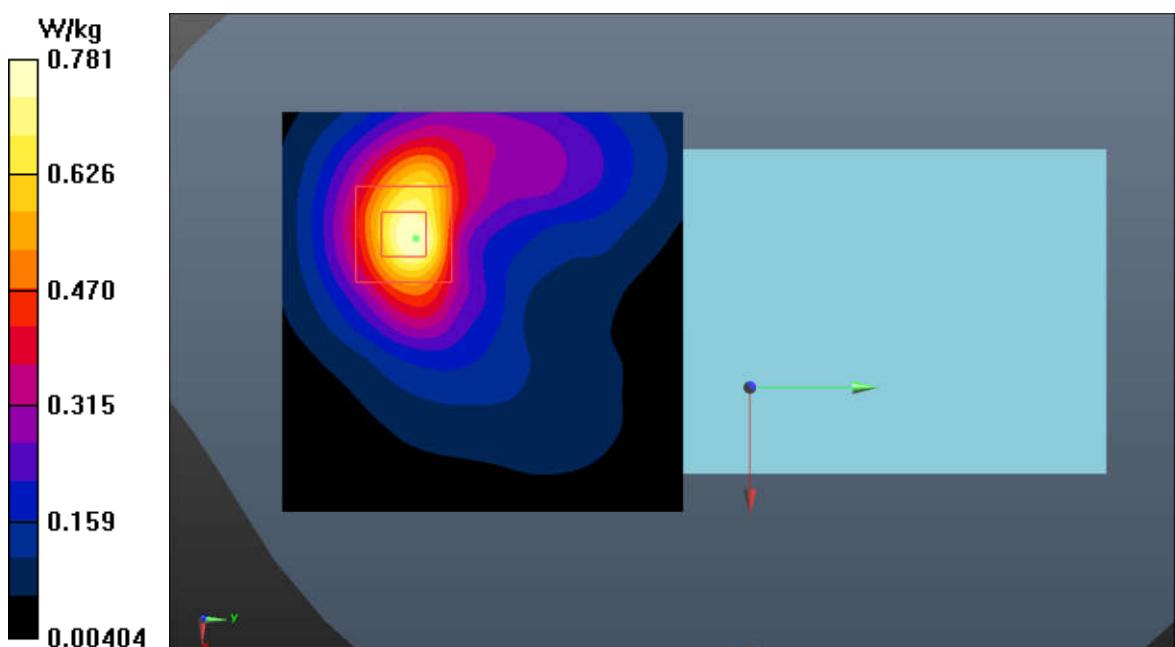


Fig.35 LTE Band 38

LTE Band 38 Body-worn

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used: $f = 2610$ MHz; $\sigma = 2.021$ S/m; $\epsilon_r = 38.084$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_TDD (0) Frequency: 2610 MHz Duty Cycle: 1:1.58

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Rear Side High 1RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.245 W/kg

Rear Side High 1RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.511 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.448 W/kg

SAR(1 g) = 0.220 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.268 W/kg

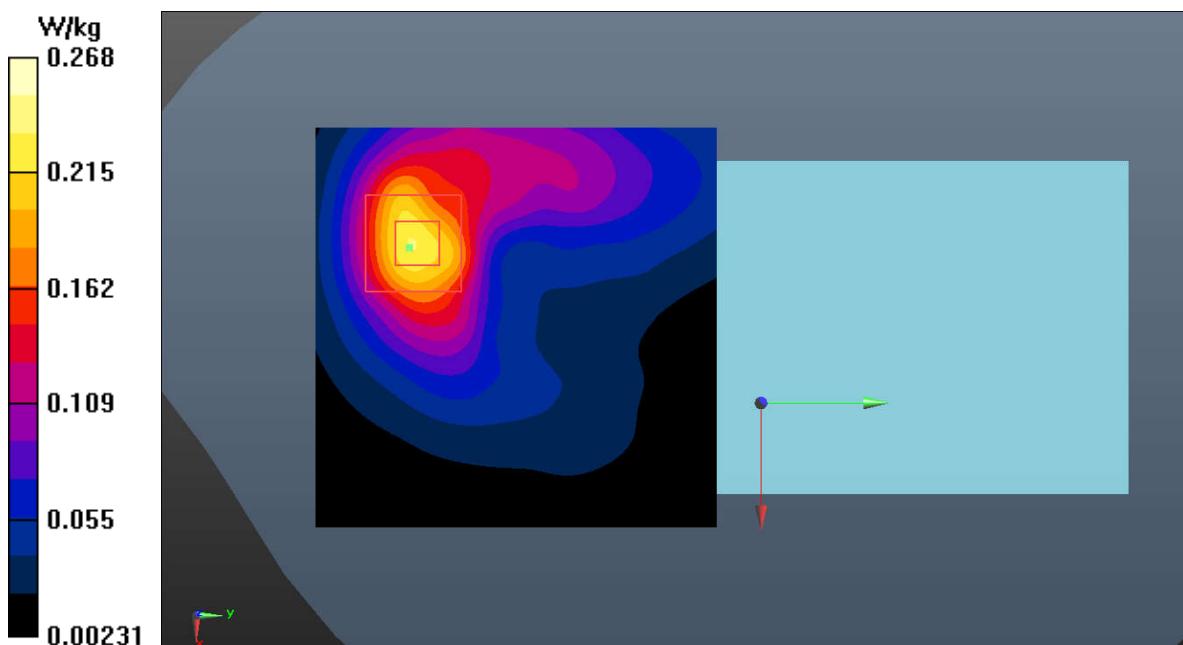


Fig.36 LTE Band 38

LTE Band 41 Head

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used (interpolated): $f = 2645$ MHz; $\sigma = 2.063$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_TDD (0) Frequency: 2645 MHz Duty Cycle: 1:1.58

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Right Tilt High 50RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.861 W/kg

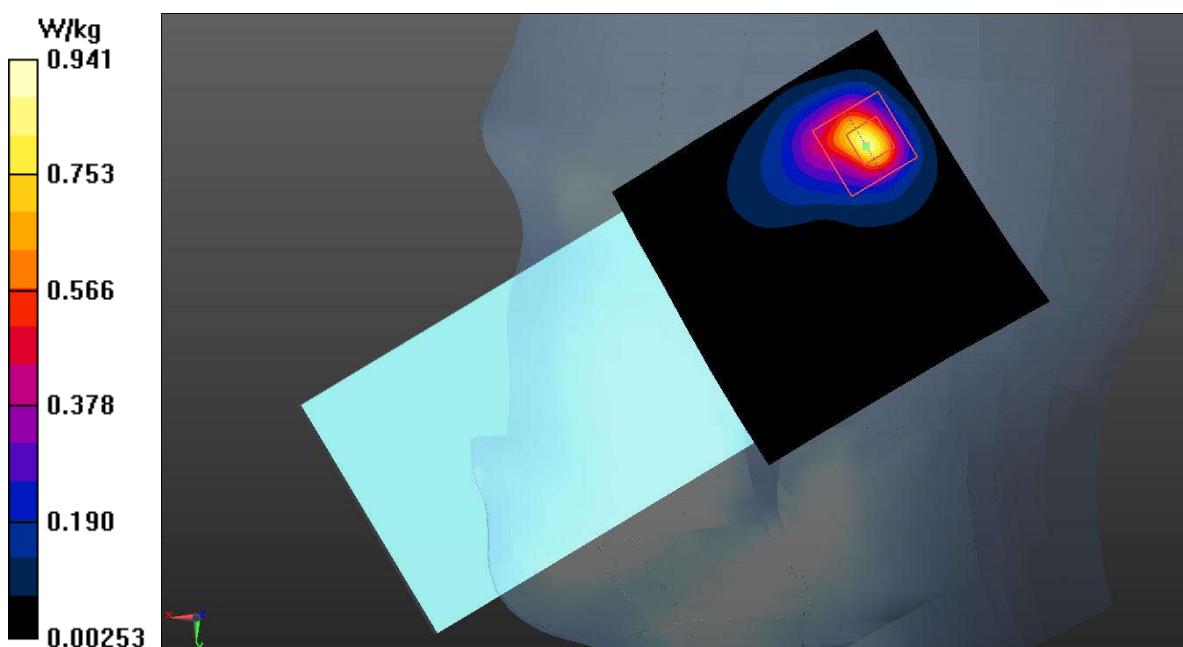
Right Tilt High 50RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.366 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.608 W/kg; SAR(10 g) = 0.232 W/kg

Maximum value of SAR (measured) = 0.941 W/kg

**Fig.37 LTE Band 41**

LTE Band 41 Hotspot

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used (interpolated): $f = 2645$ MHz; $\sigma = 2.063$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_TDD (0) Frequency: 2645 MHz Duty Cycle: 1:1.58

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Rear Side High 1RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.876 W/kg

Rear Side High 1RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.565 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.271 W/kg

Maximum value of SAR (measured) = 0.831 W/kg

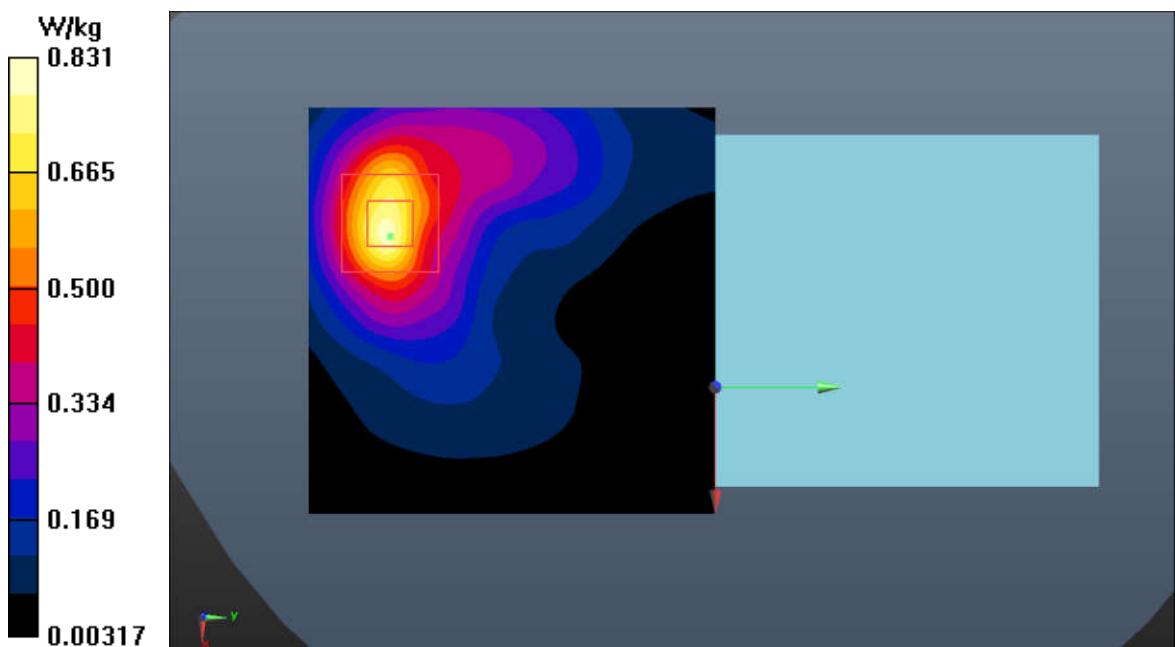


Fig.38 LTE Band 41

LTE Band 41 Body-worn

Date: 2021-12-22

Electronics: DAE4 Sn786

Medium: Head 2550MHz

Medium parameters used (interpolated): $f = 2645$ MHz; $\sigma = 2.063$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_TDD (0) Frequency: 2645 MHz Duty Cycle: 1:1.58

Probe: ES3DV3 – SN3151 ConvF (4.39, 4.39, 4.39);

Rear Side High 1RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.285 W/kg

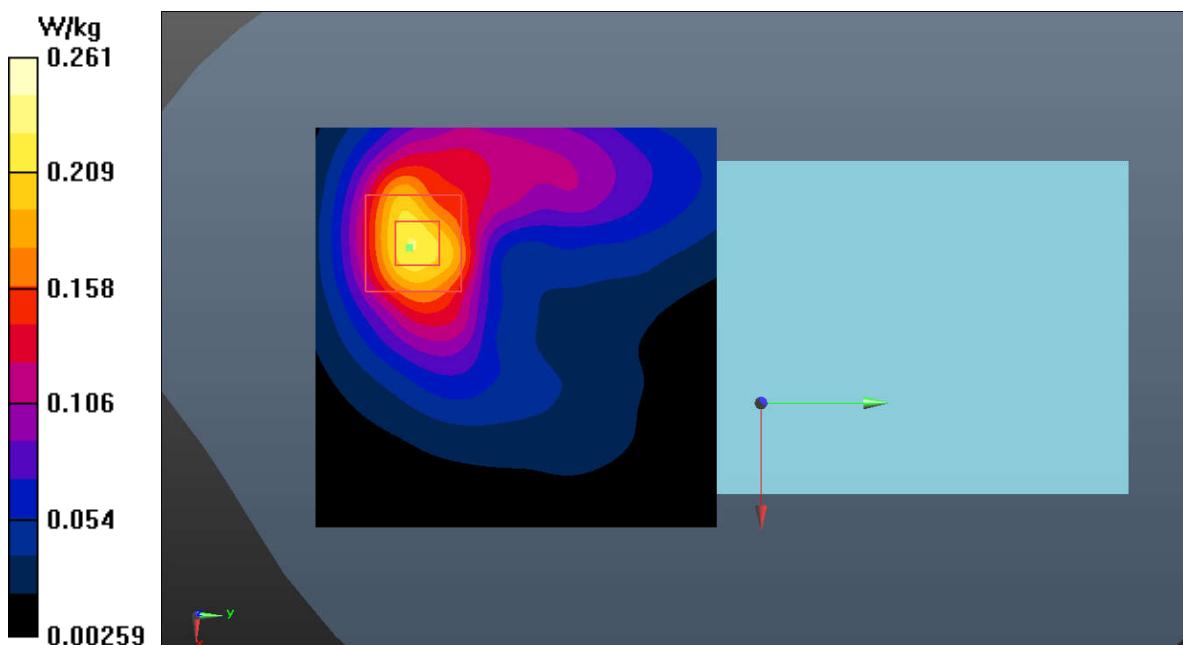
Rear Side High 1RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.942 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.261 W/kg

**Fig.39 LTE Band 41**

LTE Band 66 Head

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.403$ S/m; $\epsilon_r = 39.409$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1770 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Right Tilt High 50RB0/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.07 W/kg

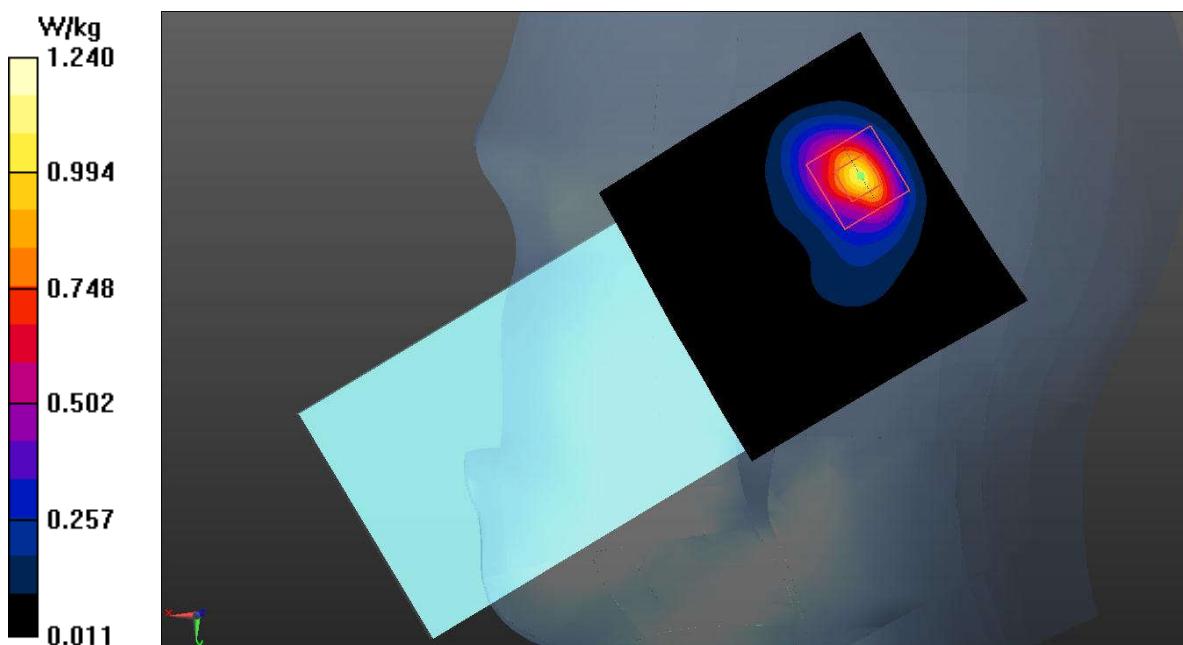
Right Tilt High 50RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.36 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 0.893 W/kg; SAR(10 g) = 0.393 W/kg

Maximum value of SAR (measured) = 1.24 W/kg

**Fig.40 LTE Band 66**

LTE Band 66 Hotspot

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.403$ S/m; $\epsilon_r = 39.409$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1770 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Bottom Side High 1RB50/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.884 W/kg

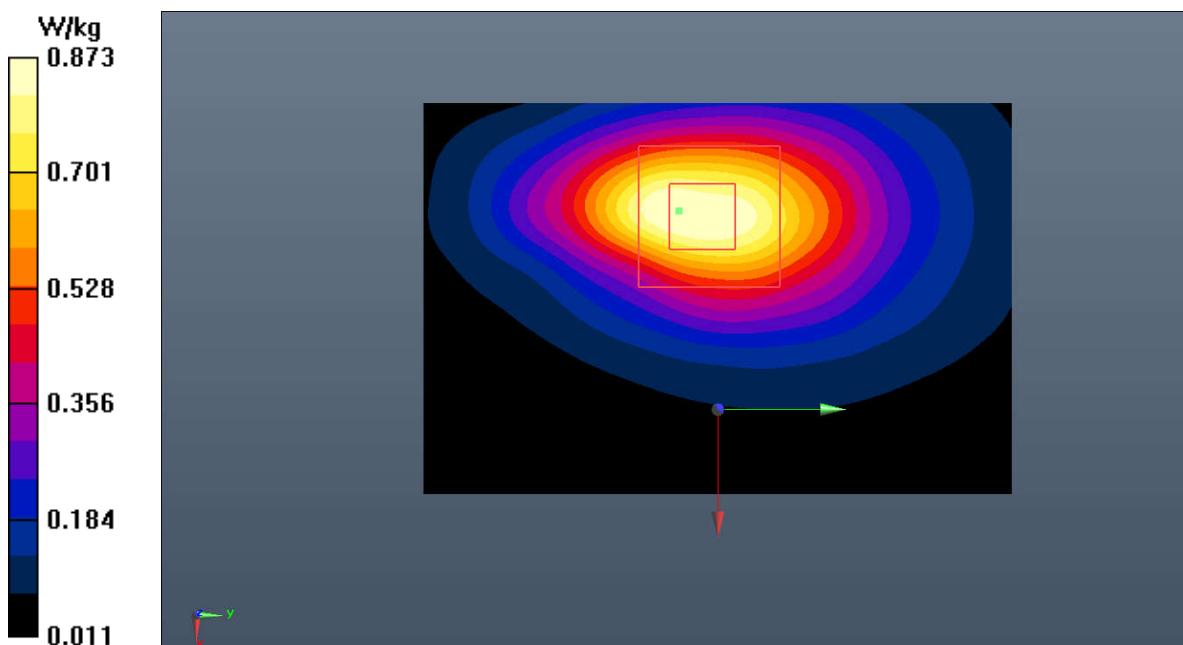
Bottom Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.45 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.715 W/kg; SAR(10 g) = 0.396 W/kg

Maximum value of SAR (measured) = 0.873 W/kg

**Fig.41 LTE Band 66**

LTE Band 66 Body-worn

Date: 2022-1-1

Electronics: DAE4 Sn786

Medium: Head 1750MHz

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.403$ S/m; $\epsilon_r = 39.409$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1770 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (5.25, 5.25, 5.25);

Rear Side High 1RB50/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.317 W/kg

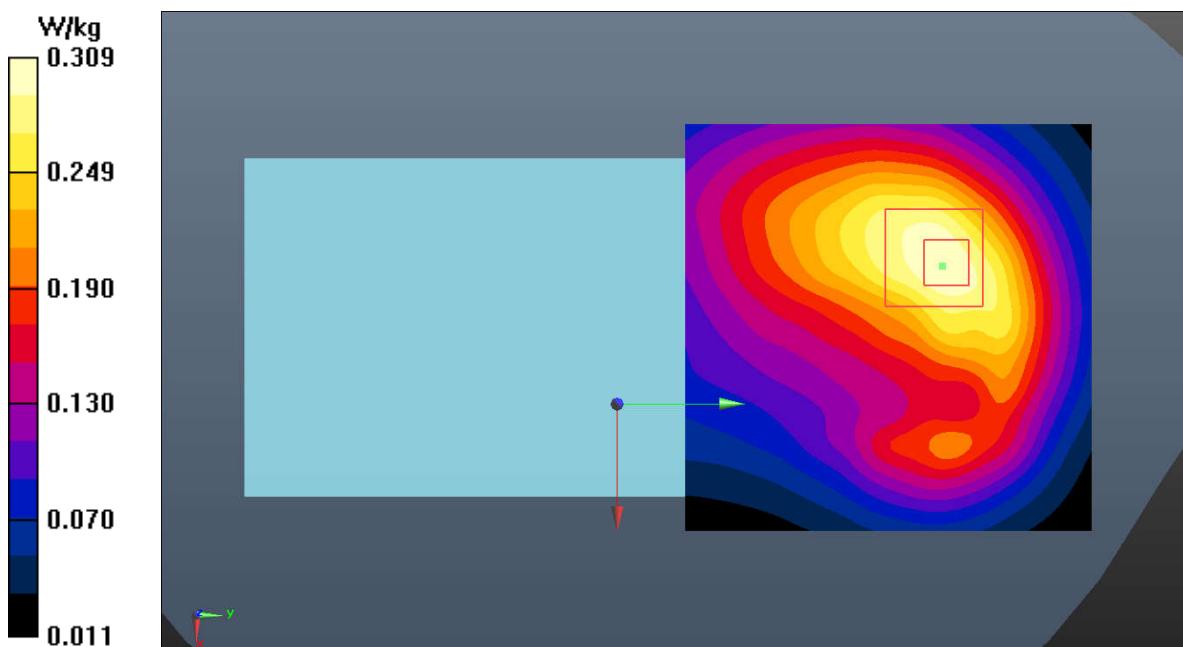
Rear Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.132 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.403 W/kg

SAR(1 g) = 0.267 W/kg; SAR(10 g) = 0.173 W/kg

Maximum value of SAR (measured) = 0.309 W/kg

**Fig.42 LTE Band 66**

Bluetooth Head

Date: 2022-1-12

Electronics: DAE4 Sn786

Medium: Head 2450MHz

Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.823$ S/m; $\epsilon_r = 38.353$; $\rho = 1000$ kg/m³

Communication System: UID 0, BT (0) Frequency: 2441 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (4.58, 4.58, 4.58);

Left Cheek Middle/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.208 W/kg

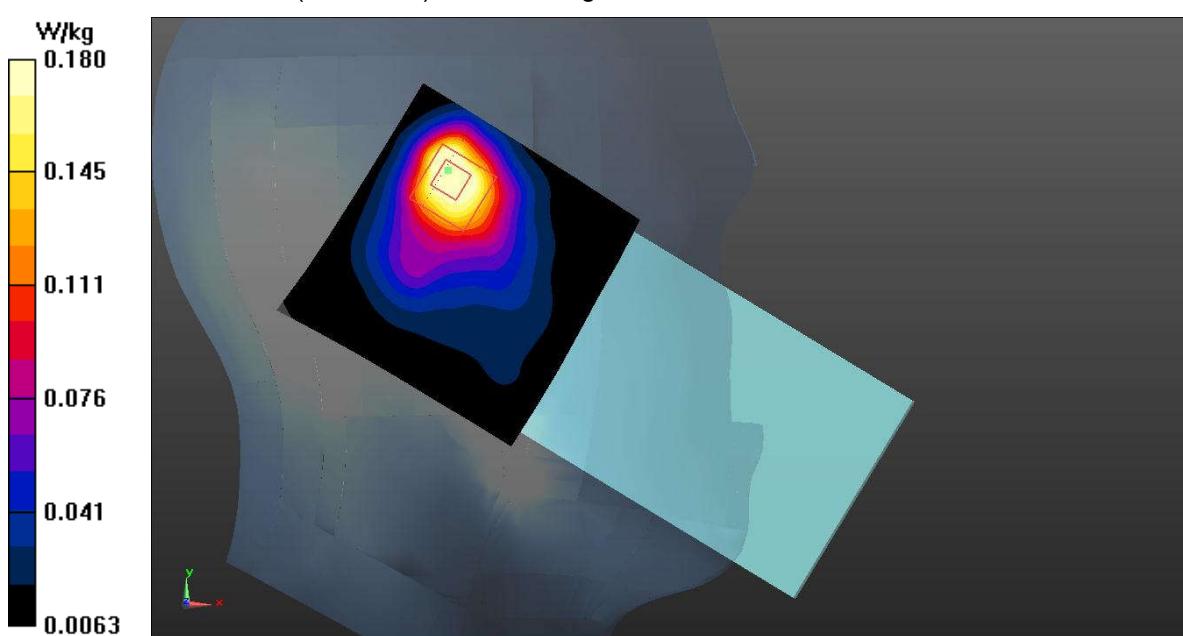
Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.786 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.363 W/kg

SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.065 W/kg

Maximum value of SAR (measured) = 0.180 W/kg

**Fig.43 Bluetooth**

Bluetooth Hotspot

Date: 2022-1-12

Electronics: DAE4 Sn786

Medium: Head 2450MHz

Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.823$ S/m; $\epsilon_r = 38.353$; $\rho = 1000$ kg/m³

Communication System: UID 0, BT (0) Frequency: 2441 MHz Duty Cycle: 1:1

Probe: ES3DV3 – SN3151 ConvF (4.58, 4.58, 4.58);

Rear Side Middle/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.141 W/kg

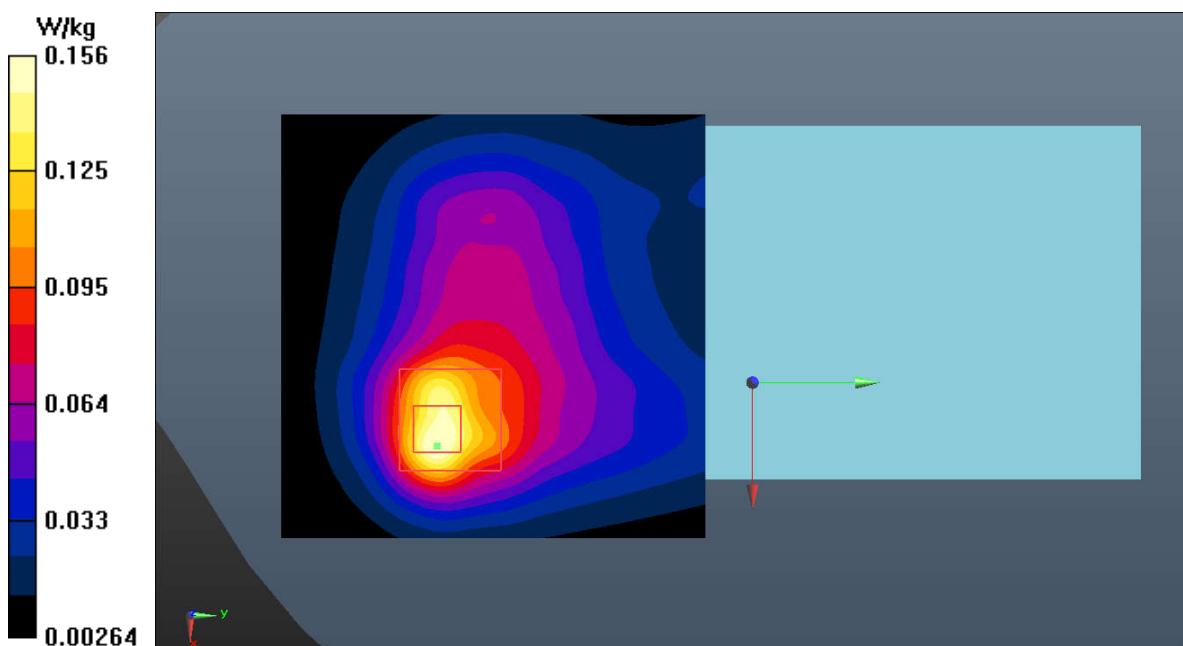
Rear Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.239 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.249 W/kg

SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.156 W/kg

**Fig.44 Bluetooth**