SAR Compliance Test Report

Test report no.:	FCC_RM-1128_01	**Date of report:**	2015-08-21
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Measurements made by:	Yuan Rui, Wang Weike, He Ying		
Tested device:	RM-1128, HW1510		
FCC ID:	PYARM-1128	**IC:**	661X-RM1128
Supplement reports:	SAR_Photo_RM-1128_02		
Testing has been carried out in accordance with:	**47CFR §2.1093** Radiofrequency Radiation Exposure Evaluation: Portable Devices **FCC published RF exposure KDB procedures** **RSS-102, Issue 4** Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields **IEEE 1528 - 2013** IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique		
Documentation:	The documentation of the testing performed on the tested devices is archived for 15 years at TCC Microsoft.		
Test results:	**The tested device complies with the requirements in respect of all parameters subject to the test.** The test results and statements relate only to the items tested. The test report shall not be reproduced except in full, without written approval of the laboratory.		

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2015-07-10 to 2015-08-12
HW and SW numbers of tested device	RM-1128, HW: 1510, SW: 01065.00000.15265.37000
Batteries used in testing	BL-T5A
Headsets used in testing	WH-108
Other accessories used in testing	-
State of sample	Prototype unit
Notes	-

1.2 Maximum Results

The maximum reported SAR values for Head, Body-worn 15 mm and Wireless Router 10 mm configurations are given in section 1.2.1, 1.2.2 and 1.2.3 respectively. The device conforms to the requirements of the standards when the maximum measured SAR value is less than or equal to the limit.

1.2.1 Head Configuration

Mode	Reported* SAR value (1g avg)	SAR limit (1g avg)	Result	Plot #
LTE700 (Band 12)	**0.33 W/kg**	1.6 W/kg	**PASSED**	**H1**
LTE700 (Band 17)	**0.29 W/kg**	1.6 W/kg	**PASSED**	**H2**
GSM850 / 2-slot GPRS850	**0.58 W/kg**	1.6 W/kg	**PASSED**	**H3**
WCDMA850 (Band 5)	**0.51 W/kg**	1.6 W/kg	**PASSED**	**H4**
LTE850 (Band 5)	**0.42 W/kg**	1.6 W/kg	**PASSED**	**H5**
WCDMA1700/2100 (Band 4)	**0.58 W/kg**	1.6 W/kg	**PASSED**	**H6**
LTE1700/2100 (Band 4)	**0.41 W/kg**	1.6 W/kg	**PASSED**	**H7**
GSM1900 / 4-slot GPRS1900	**0.34 W/kg**	1.6 W/kg	**PASSED**	**H8**
WCDMA1900 (Band 2)	**0.69 W/kg**	1.6 W/kg	**PASSED**	**H9**
LTE1900 (Band 2)	**0.65 W/kg**	1.6 W/kg	**PASSED**	**H10**
LTE2500 (Band 7)	**0.77 W/kg**	1.6 W/kg	**PASSED**	**H11**
WLAN2450	**0.67 W/kg**	1.6 W/kg	**PASSED**	**H12**
Maximum of SPEAG combined multiband algorithm/combined Volume scan results				
WCDMA1700/2100 (Band 4)+WLAN2450	**0.85 W/kg**	1.6 W/kg	**PASSED**	

1.2.2 Body-worn 15 mm Configuration

Mode	Reported* SAR value (1g avg)	SAR limit (1g avg)	Result	Plot #
LTE700 (Band 12)	**0.42 W/kg**	1.6 W/kg	**PASSED**	**B1**
LTE700 (Band 17)	**0.38 W/kg**	1.6 W/kg	**PASSED**	**B2**
GSM850 / 2-slot GPRS850	**0.55 W/kg**	1.6 W/kg	**PASSED**	**B3**
WCDMA850 (Band 5)	**0.61 W/kg**	1.6 W/kg	**PASSED**	**B4**
LTE850 (Band 5)	**0.41 W/kg**	1.6 W/kg	**PASSED**	**B5**
WCDMA1700/2100 (Band 4)	**0.77 W/kg**	1.6 W/kg	**PASSED**	**B6**
LTE1700/2100 (Band 4)	**0.64 W/kg**	1.6 W/kg	**PASSED**	**B7**
GSM1900 / 4-slot GPRS1900	**0.33 W/kg**	1.6 W/kg	**PASSED**	**B8**
WCDMA1900 (Band 2)	**0.63 W/kg**	1.6 W/kg	**PASSED**	**B9**
LTE1900 (Band 2)	**0.55 W/kg**	1.6 W/kg	**PASSED**	**B10**
LTE2500 (Band 7)	**0.58 W/kg**	1.6 W/kg	**PASSED**	**B11**
WLAN2450	**0.07 W/kg**	1.6 W/kg	**PASSED**	**B12**
Maximum of SPEAG combined multiband algorithm/combined Volume scan results				
WCDMA1700/2100 (Band 4) + WLAN2450	**0.79 W/kg**	1.6 W/kg	**PASSED**	

1.2.3 Wireless Router 10 mm Configuration

Mode	Reported* SAR value (1g avg)	SAR limit (1g avg)	Result	Plot #
LTE700 (Band 12)	**0.57 W/kg**	1.6 W/kg	**PASSED**	**W1**
LTE700 (Band 17)	**0.52 W/kg**	1.6 W/kg	**PASSED**	**W2**
GSM850 / 2-slot GPRS850	**0.63 W/kg**	1.6 W/kg	**PASSED**	**W3**
WCDMA850 (Band 5)	**0.56 W/kg**	1.6 W/kg	**PASSED**	**W4**
LTE850 (Band 5)	**0.48 W/kg**	1.6 W/kg	**PASSED**	**W5**
WCDMA1700/2100 (Band 4)	**0.79 W/kg**	1.6 W/kg	**PASSED**	**W6**
LTE1700/2100 (Band 4)	**0.60 W/kg**	1.6 W/kg	**PASSED**	**W7**
GSM1900 / 4-slot GPRS1900	**0.60 W/kg**	1.6 W/kg	**PASSED**	**W8**
WCDMA1900 (Band 2)	**0.86 W/kg**	1.6 W/kg	**PASSED**	**W9**
LTE1900 (Band 2)	**0.70 W/kg**	1.6 W/kg	**PASSED**	**W10**
LTE2500 (Band 7)	**0.85 W/kg**	1.6 W/kg	**PASSED**	**W11**
WLAN2450	**0.30 W/kg**	1.6 W/kg	**PASSED**	**W12**
Maximum of SPEAG combined multiband algorithm/combined Volume scan results				
LTE2500 (Band 7)+WLAN2450	**0.87 W/kg**	1.6 W/kg	**PASSED**	

* Reported SAR values are scaled to, or measured at, upper limit of power tuning tolerance.

All bands/communication systems and all surfaces and edges have Wireless Router 10 mm Reported SAR less than or equal to 1.2 W/kg (when scaled to maximum power if WR power reduction applied), therefore there is no need to test Phablet 10g Extremity 0 mm SAR according to KDB 648474 D04 Handset SAR v01r01.

1.2.4 Summary SAR data

Description	FCC-defined SAR values for the Grants of Equipment Authorization		
	PCE	DTS	NII
Maximum Head SAR values	0.77	0.67	-
{Max + Max} Simultaneous Head SAR value	1.355		
Maximum Body-worn 15 mm SAR values	0.77	0.07	-
{Max + Max} Simultaneous Body-worn 15 mm SAR value	0.841		
Maximum Product Specific (Wireless Router 10 mm) SAR values	0.86	0.30	-
{Max + Max} Simultaneous Product Specific (Wireless Router 10 mm) SAR value	1.163		
Maximum Simultaneous SAR value **Head SAR: WCDMA1900(Band2) + WLAN2450**	1.355		

Note:

PCE contains the highest results between all cellular modes (cellular, AWS and PCS bands)
DTS contains the highest results between WLAN 2.4 GHz + RLAN 5725-5850 MHz
NII contains the highest results between RLAN 5150-5250, 5250-5350 and 5470-5725 MHz

1.2.5 Maximum Drift

Maximum drift during measurements	≤ 0.2 dB

1.2.6 Measurement Uncertainty

Expanded Uncertainty (k=2) 95 %	± 29.8 %

2. DESCRIPTION OF THE DEVICE UNDER TEST

Device category	Portable
Exposure environment	General population / uncontrolled

2.1 Bands and Modes of the DUT

Bands	Modes of Operation	Modulation Mode	Duty Cycle	Channel Bandwidth (MHz)	Transmitter Frequency Range (MHz)	Power Reduction in Wireless Router (Hotspot) Mode (dB)			
700 (Band 12)	LTE	QPSK / 16QAM	1	1.4, 3, 5, 10	699 – 716	-			
700 (Band 17)	LTE	QPSK / 16QAM	1	5, 10	704 – 716	-			
850	GSM/GPRS	GMSK	1/8 to 4/8		824 – 849	1-slot	2-slot	3-slot	4-slot
						-	-	-	-
850	EGPRS	GMSK / 8PSK	1/8 to 4/8		824 – 849	-	-	-	-
850 (Band 5)	WCDMA		1		826 – 847	-			
850 (Band 5)	HSUPA		1		826 – 847	-			
850 (Band 5)	DC-HSDPA		1		826 – 847	-			
850 (Band 5)	LTE	QPSK / 16QAM	1	1.4, 3, 5, 10	824 – 849	-			
1700/2100 (Band 4)	WCDMA		1		1712 - 1753	1.5			
1700/2100 (Band 4)	HSUPA		1		1712 - 1753	1.5			
1700/2100 (Band 4)	DC-HSDPA		1		1712 - 1753	1.5			
1700/2100 (Band 4)	LTE	QPSK / 16QAM	1	1.4, 3, 5, 10, 15, 20	1710 – 1755	1.5			
1900	GSM/GPRS	GMSK	1/8 to 4/8		1850 – 1910	1-slot	2-slot	3-slot	4-slot
						-	-	-	-
1900	EGPRS	GMSK / 8PSK	1/8 to 4/8		1850 – 1910	-	-	-	-
1900 (Band 2)	WCDMA		1		1852 – 1908	1.5			
1900 (Band 2)	HSUPA		1		1852 – 1908	1.5			
1900 (Band 2)	DC-HSDPA		1		1852 – 1908	1.5			
1900 (Band 2)	LTE	QPSK / 16QAM	1	1.4, 3, 5, 10, 15, 20	1850 – 1910	1.5			
2500 (Band 7)	LTE	QPSK / 16QAM	1	5, 10, 15, 20	2500 - 2570	1.5			
2450	WLAN b-mode	DSSS	1	20	2412 – 2462	-			
2450	WLAN g-mode	OFDM	1	20	2412 – 2462	-			
2450	WLAN n-mode	OFDM	1	20	2412 – 2462	-			
2450	WLAN n-mode	OFDM	1	40	2412 – 2462	-			

2.2 DUT Features and Test Requirements

Common features	Testing / Specification / KDB
Bands operating outside USA and Canada	These bands are not part of this filing: GSM/GPRS/EGPRS900 GSM/GPRS/EGPRS1800 WCDMA/HSUPA/DC-HSDPA2100 (Band 1) WCDMA/HSUPA/DC-HSDPA900 (Band 8) LTE700(Band 28)
Number of SIM cards:	1
Ambient temperature:	20.5 – 22.5 °C / Controlled
Ambient humidity (RH %):	35 – 55 % RH / Controlled
Output power and batteries	The device output power was set to maximum power level for all tests. A fully charged battery was used for every test sequence.
Test channels	In all operating bands the measurements were performed on lowest, middle and highest channels, and/or on all required test channels as defined in Published FCC KDB Procedures.
VOIP	This device has Voice-over-IP capability for use at the ear. Therefore SAR for data modes was evaluated against the head profile of the phantom for all communication systems.
Antennas	See the antenna drawing in the report SAR_Photo_RM-1128_02, Section 3. Two antennas are used for transmission of all the cellular bands in diversity-Tx mode. In this mode the antennas can not transmit at the same time. See table below for applicable antennas in each transmission band and mode. A separate single antenna is used for WLAN. All antennas are fully and separately SAR tested for individual transmission. Simultaneous transmissions with WLAN2450 are assessed separately for both cellular antennas. Same RF PA circuitry is used for both antennas and therefore same output power targets and conducted power results apply to both antennas. Control software was used to route the TX power to the chosen antenna during the SAR test sequence.

Band	Tx Antennas	
	Antenna 1	Antenna 2
LTE700 (Band 12)	✓	✓
LTE700 (Band 17)	✓	✓
GSM/GPRS/EGPRS850	✓	✓
WCDMA850 (Band 5)	✓	✓
LTE850 (Band 5)	✓	✓
WCDMA1700/2100 (Band 4)	✓	✓
LTE1700/2100 (Band 4)	✓	✓
GSM/GPRS/EGPRS1900	✓	✓
WCDMA1900 (Band 2)	✓	✓
LTE1900 (Band 2)	✓	✓
LTE2500 (Band 7)	✓	✓

(Table continues)

(Table continues)

GSM/GPRS/EGPRS	KDB 941225 D03 SAR Test Reduction Procedures for GSM/GPRS/EDGE
Device Class	A
GSM multi slot class	33
DTM class	DTM class 11. Dual Transfer Mode was not specifically tested as the average power in multi-slot GMSK GPRS mode is always greater than, or equal to, the average power in Dual Transfer Mode in Microsoft devices.
EGPRS	8PSK EGPRS mode was not measured, because maximum averaged output power is lower in 8PSK EGPRS mode than in GPRS mode.
Call tester settings	CMU200 : MS signal was always set to maximum power: Pmax 5 for GSM850 and 0 for GSM1900.
Number of slots used in testing	The number of Tx slots in all GSM/GPRS mode tests was based on tuning target/conducted power data, see Section 3. The number of slots with highest or equal highest time-average power was tested.
WCDMA	**KDB 941225 D01 SAR Measurement Procedures for 3G Devices**
WCDMA	Rel9. Conducted power measurements for WCDMA modes have been carried out in accordance with 3GPP TS34.1083 and GPP TS 34.121-1. See conducted power results in section 3
Call test settings for WCDMA	CMU200: UE uplink signal was configured to 12.2kbps RMC with all TPC bit set to 1.
HSUPA	SAR tests for HSUPA mode have not been performed as no HSUPA Sub-test mode has an average power > 0.25 dB above the basic WCDMA 12.2 kbps RMC mode.
DC-HSDPA	SAR tests for DC-HSDPA mode have not been performed as no DC-HSDPA Sub-test mode has an average power > 0.25 dB above the basic WCDMA 12.2 kbps RMC mode.
LTE	**KDB 941225 D05 SAR for LTE Devices v02r02 DR07-41372**
LTE Category	4
Call tester settings	CMW500: Uplink Power Control was set to 'Max Power'. Additional Spectrum Emission was set to 'NS_01' to disable A-MPR.
LTE MPR	MPR values as stipulated in Table 6.2.3_1 of 3GPP TS 36.101 (presented below) have been incorporated into the device; these MPR values are dependent on the modulation, Channel Bandwidth and Resource Block allocations as shown:

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

No additional MPR settings have been incorporated into the design of the device and therefore no A-MPR settings have been active during its testing.

Conducted Power Tables in Section 3: "Nominal" column lists measured powers with MPR active. The "A-MPR active" column lists measured powers with MPR and A-MPR active (as defined by 3GPP TS 36.101).

(Table continues)

(Table continues)

WLAN	**KDB 248227 SAR Measurement Procedures for 802.11 a/b/g Transmitters**
WLAN modes tested	The standard transmission mode of the device in all WLAN tests was b-mode. In the tables in Section 3 it is shown if other transmission modes are used for check measurements.
WLAN test settings	The device was put into operation by using control software.
BT	**KDB 447498 D01 General RF Exposure Guidance v05**
BT Class	2
BT testing	BT power tuning target upper limit is 1.5 dBm. WLAN2450 power tuning target upper limit is 18.5 dBm. Since WLAN2450 and BT use same frequency and antenna, WLAN2450 power is 17.0 dB higher, and they cannot transmit simultaneously, the WLAN2450 standalone SAR is conservative estimation of BT SAR. As WLAN2450 SAR result is below limit, also BT SAR can be deemed to comply without further analysis or standalone measurements. Also WLAN2450+cellular bands combined SAR results can be regarded as conservative estimation of BT+cellular combined SARs. As WLAN2450+cellular combined SAR result are below limit, also BT+cellular combined SAR can be deemed to comply without further analysis.
Simultaneous transmission	**KDB 447498 D01 General RF Exposure Guidance v05**
In Head and Body-worn use	Simultaneous transmission of any singular cellular, PCS or AWS with WLAN2450 is possible.
Wireless Router "Hotspot" mode	Yes
In Wireless Router use	Simultaneous transmission of any singular cellular, AWS or PCS band with WLAN2450 is possible. The hotspot mode (Wireless Router mode) may operate concurrently in DTM mode with voice calls. The reported SAR test results are conservative regarding that use case, since output power in hotspot mode is equal to or lower than in normal voice and data modes. See Section 2.1 for hotspot mode power reductions. Also simultaneous transmissions with WLANs are already conservatively assessed for head and body-worn exposure conditions due to VoIP capability.
Power reduction for Wireless Router mode	See the table in Section 2.1.
KDBs used in testing	**KDB 248227 SAR Measurement Procedures for 802.11 a/b/g Transmitters** **KDB 447498 D01 General RF Exposure Guidance v05** **KDB 648474 D04 Handset SAR v01r01** **KDB 690783 D01 SAR Listings on Grants** **KDB 865664 D01 SAR Measurements 100 MHz to 6 GHz v01** **KDB 865664 D02 SAR Reporting v01** **KDB 941225 D01 SAR Measurement Procedures for 3G Devices** **KDB 941225 D03 SAR Test Reduction Procedures for GSM/GPRS/EDGE** **KDB 941225 D05 SAR for LTE Devices v02r02 DR07-41372**

3. CONDUCTED POWERS

The conducted output power of the device was measured by a separate test laboratory on the same units as used for SAR testing.

Shaded lines in the tables below show which mode/configuration is used in testing.

3.1 GSM/GPRS/EGPRS

3.1.1 GSM850 Head, Body-worn 15 mm and Wireless Router 10 mm, Antenna 1 & Antenna 2

GSM 850								
SN: 00440272352671			Conducted power (dBm)			Time-averaged power (dBm)		
Slot configuration	Tuning target (dBm)	Upper limit (dBm)	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz
GSM 1-slot	**33.0**	**33.4**	33.0	33.1	33.2	24.0	24.1	24.2
GPRS 2-slot	**31.0**	**31.4**	31.2	31.2	31.0	**25.2**	**25.2**	25.0
GPRS 3-slot	**29.2**	**29.6**	28.9	29.0	29.1	24.6	24.7	24.8
GPRS 4-slot	**28.0**	**28.4**	27.5	27.6	27.7	24.5	24.6	24.7
EGRPS 1-slot	**27.0**	**27.4**	26.9	26.9	26.8	17.9	17.9	17.8
EGPRS 2-slot	**26.0**	**26.4**	25.7	25.7	25.7	19.7	19.7	19.7
EGPRS 3-slot	**24.2**	**24.6**	23.9	23.9	23.9	19.6	19.6	19.6
EGPRS 4-slot	**23.0**	**23.4**	22.6	22.7	22.6	19.6	19.7	19.6

3.1.2 GSM1900 Head, Body-worn 15 mm Wireless Router 10 mm, Antenna 1 & Antenna 2

GSM 1900								
SN: 00440272352069			Conducted power (dBm)			Time-averaged power (dBm)		
Slot configuration	Tuning target (dBm)	Upper limit (dBm)	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz
GSM 1-slot	**30.5**	**30.9**	30.0	30.2	30.5	21.0	21.2	21.5
GPRS 2-slot	**28.5**	**28.9**	28.1	28.3	28.7	22.1	22.3	22.7
GPRS 3-slot	**26.7**	**27.1**	26.2	26.4	26.7	21.9	22.1	22.4
GPRS 4-slot	**25.5**	**25.9**	25.3	25.4	25.8	22.3	22.4	**22.8**
EGRPS 1-slot	**26.0**	**26.4**	25.5	25.7	26.3	16.5	16.7	17.3
EGPRS 2-slot	**26.0**	**26.4**	25.5	25.6	26.1	19.5	19.6	20.1
EGPRS 3-slot	**24.2**	**24.6**	23.7	23.8	24.3	19.4	19.5	20.0
EGPRS 4-slot	**23.0**	**23.4**	22.7	22.8	23.2	19.7	19.8	20.2

3.2 WCDMA

3.2.1 WCDMA850 (Band 5) Head, Body-worn 15 mm and Wireless Router 10 mm, Antenna 1 & Antenna 2

SN: 00440272352671	WCDMA 5				
Mode	Tuning target (dBm)	Upper limit (dBm)	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz
WCDMA	**24**	**24.4**	23.6	23.5	23.6
HSUPA Sub-mode 1	**23**	**23.4**	22.0	22.6	21.9
HSUPA Sub-mode 2	**21**	**21.4**	21.4	21.3	21.5
HSUPA Sub-mode 3	**22**	**22.4**	21.0	21.5	21.1
HSUPA Sub-mode 4	**21**	**21.4**	21.9	22.0	22.1
HSUPA Sub-mode 5	**23**	**23.4**	22.5	22.5	22.5

3.2.2 WCMA1700/2100 (Band 4) Head, Body-worn 15 mm, Antenna 1 & Antenna 2

SN: 00440272352010	WCDMA 4				
Mode	Tuning target (dBm)	Upper limit (dBm)	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz
WCDMA	**24**	**24.4**	23.5	23.7	23.6
HSUPA Sub-mode 1	**23**	**23.4**	22.5	22.1	22.1
HSUPA Sub-mode 2	**21**	**21.4**	21.3	21.1	21.2
HSUPA Sub-mode 3	**22**	**22.4**	21.5	21.2	21.4
HSUPA Sub-mode 4	**21**	**21.4**	22.1	22.3	22.3
HSUPA Sub-mode 5	**23**	**23.4**	22.7	22.7	22.8

3.2.3 WCMA1700/2100 (Band 4) Wireless Router 10 mm, Antenna 1 & Antenna 2

SN: 00440272352697	WCDMA 4				
Mode	Tuning target (dBm)	Upper limit (dBm)	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz
WCDMA	**22.5**	**22.9**	22.5	22.8	22.4
HSUPA Sub-mode 1	**21.5**	**21.9**	21.2	21.6	21.3
HSUPA Sub-mode 2	**19.5**	**19.9**	19.8	20.6	19.8
HSUPA Sub-mode 3	**20.5**	**20.9**	19.4	20.3	19.4
HSUPA Sub-mode 4	**19.5**	**19.9**	20.8	21.2	20.9
HSUPA Sub-mode 5	**21.5**	**21.9**	21.4	21.6	21.4

3.2.4 WCDMA1900 (Band 2) Head, Body-worn 15 mm, Antenna 1 & Antenna 2

SN: 00440272352069	WCDMA 2				
Mode	Tuning target (dBm)	Upper limit (dBm)	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz
WCDMA	**24**	**24.4**	23.7	23.7	23.6
HSUPA Sub-mode 1	**23**	**23.4**	22.5	21.9	22.6
HSUPA Sub-mode 2	**21**	**21.4**	21.2	21.5	21.2
HSUPA Sub-mode 3	**22**	**22.4**	21.0	21.7	21.4
HSUPA Sub-mode 4	**21**	**21.4**	22.2	22.2	22.1
HSUPA Sub-mode 5	**23**	**23.4**	22.6	22.6	22.6

3.2.5 WCDMA1900 (Band 2) Wireless Router 10 mm, Antenna 1 & Antenna 2

SN: 00440272352705	WCDMA 2				
Mode	Tuning target (dBm)	Upper limit (dBm)	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz
WCDMA	**22.5**	**22.9**	22.5	22.4	22.5
HSUPA Sub-mode 1	**21.5**	**21.9**	21.1	21.4	21.4
HSUPA Sub-mode 2	**19.5**	**19.9**	20.5	20.4	20.0
HSUPA Sub-mode 3	**20.5**	**20.9**	20.1	20.1	20.4
HSUPA Sub-mode 4	**19.5**	**19.9**	21.0	21.0	21.0
HSUPA Sub-mode 5	**21.5**	**21.9**	21.6	21.4	21.5

3.3 LTE

3.3.1 LTE700 (Band 12) Head, Body-worn 15 mm and Wireless Router 10 mm , Antenna 1 & Antenna 2

SN: 00440272352663						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch23017 / 699.7 MHz	Ch23095 / 707.5 MHz	Ch23173 / 715.3 MHz	Ch23017 / 699.7 MHz	Ch23095 / 707.5 MHz	Ch23173 / 715.3 MHz
LTE12 1.4 MHz	QPSK	1	0	23.5	23.9	23.0	23.2	23.2			
		1	2	23.5	23.9	23.1	23.4	23.3			
		1	5	23.5	23.9	23.0	23.1	23.2			
		3	0	23.5	23.9	23.0	23.2	23.3			
		3	2	23.5	23.9	23.1	23.2	23.3			
		3	3	23.5	23.9	23.2	23.3	23.3			
		6	0	22.5	22.9	22.2	22.2	22.3			
	16QAM	1	0	22.5	22.9	22.7	22.5	22.6			
		1	2	22.5	22.9	22.6	22.4	22.6			
		1	5	22.5	22.9	22.8	22.4	22.6			
		3	0	22.5	22.9	22.5	22.6	22.5			
		3	2	22.5	22.9	22.5	22.6	22.5			
		3	3	22.5	22.9	22.4	22.7	22.4			
		6	0	21.5	21.9	21.1	21.4	21.0			
SN: 00440272352663						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch23025 / 700.5 MHz	Ch23095 / 707.5 MHz	Ch23165 / 714.5 MHz	Ch23025 / 700.5 MHz	Ch23095 / 707.5 MHz	Ch23165 / 714.5 MHz
LTE12 3 MHz	QPSK	1	0	23.5	23.9	23.1	23.1	23.0			
		1	7	23.5	23.9	23.1	23.3	23.2			
		1	14	23.5	23.9	23.1	23.2	23.1			
		8	0	22.5	22.9	22.2	22.4	22.3			
		8	3	22.5	22.9	22.1	22.3	22.3			
		8	7	22.5	22.9	22.2	22.3	22.4			
		15	0	22.5	22.9	22.2	22.3	22.3			
	16QAM	1	0	22.5	22.9	22.8	22.5	22.0			
		1	7	22.5	22.9	22.7	22.4	22.2			
		1	14	22.5	22.9	22.8	22.4	22.1			
		8	0	21.5	21.9	21.5	21.5	21.5			
		8	3	21.5	21.9	21.5	21.5	21.6			
		8	7	21.5	21.9	21.6	21.4	21.4			
		15	0	21.5	21.9	21.3	21.4	21.3			
SN: 00440272352663						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch23035 / 701.5 MHz	Ch23095 / 707.5 MHz	Ch23155 / 713.5 MHz	Ch23035 / 701.5 MHz	Ch23095 / 707.5 MHz	Ch23155 / 713.5 MHz
LTE12 5 MHz	QPSK	1	0	23.5	23.9	23.1	23.3	23.2			
		1	12	23.5	23.9	23.1	23.2	23.2			
		1	24	23.5	23.9	23.1	23.1	23.1			
		12	0	22.5	22.9	22.1	22.3	22.4			
		12	6	22.5	22.9	22.1	22.3	22.3			
		12	13	22.5	22.9	22.2	22.2	22.3			
		25	0	22.5	22.9	22.2	22.3	22.4			
	16QAM	1	0	22.5	22.9	22.6	22.5	22.3			
		1	12	22.5	22.9	22.2	22.8	22.4			
		1	24	22.5	22.9	22.8	22.3	22.3			
		12	0	21.5	21.9	21.0	21.2	21.4			
		12	6	21.5	21.9	21.2	21.3	21.3			
		12	13	21.5	21.9	21.1	21.0	21.3			
		25	0	21.5	21.9	21.3	21.5	21.4			

(Table continues)

(Table continues)

SN: 00440272352663						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch23060 / 704 MHz	Ch23095 / 707.5 MHz	Ch23130 / 711 MHz	Ch23060 / 704 MHz	Ch23095 / 707.5 MHz	Ch23130 / 711 MHz
LTE12 10 MHz	QPSK	1	0	23.5	23.9	23.0	23.0	23.3			
		1	24	23.5	23.9	23.2	23.1	23.3			
		1	49	23.5	23.9	23.2	23.2	23.4			
		25	0	22.5	22.9	22.1	22.3	22.4			
		25	12	22.5	22.9	22.2	22.3	22.3			
		25	25	22.5	22.9	22.3	22.3	22.4			
		50	0	22.5	22.9	22.2	22.3	22.3			
	16QAM	1	0	22.5	22.9	22.3	22.7	22.9			
		1	24	22.5	22.9	22.6	22.8	22.8			
		1	49	22.5	22.9	22.4	22.7	22.9			
		25	0	21.5	21.9	21.3	21.5	21.5			
		25	12	21.5	21.9	21.3	21.4	21.3			
		25	25	21.5	21.9	21.5	21.3	21.6			
		50	0	21.5	21.9	21.1	21.1	21.3			

3.3.2 LTE700 (Band 17) Head, Body-worn 15 mm and Wireless Router 10 mm , Antenna 1 & Antenna 2

SN: 00440272352663						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch23755 / 706.5 MHz	Ch23790 / 710 MHz	Ch23825 / 713.5 MHz	Ch23755 / 706.5 MHz	Ch23790 / 710 MHz	Ch23825 / 713.5 MHz
LTE17 5 MHz	QPSK	1	0	23.5	23.9	23.1	23.2	23.2			
		1	12	23.5	23.9	23.1	23.2	23.6			
		1	24	23.5	23.9	23.1	23.4	23.2			
		12	0	22.5	22.9	22.0	22.3	22.3			
		12	6	22.5	22.9	22.1	22.3	22.3			
		12	13	22.5	22.9	22.2	22.3	22.3			
		25	0	22.5	22.9	22.0	22.3	22.3			
	16QAM	1	0	22.5	22.9	22.2	22.6	22.0			
		1	12	22.5	22.9	22.0	22.6	22.2			
		1	24	22.5	22.9	22.5	22.9	21.7			
		12	0	21.5	21.9	21.1	21.2	21.3			
		12	6	21.5	21.9	21.1	21.2	21.4			
		12	13	21.5	21.9	21.2	21.1	21.3			
		25	0	21.5	21.9	21.1	21.3	21.3			
SN: 00440272352663						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch23780 / 709 MHz	Ch23790 / 710 MHz	Ch23800 / 711 MHz	Ch23780 / 709 MHz	Ch23790 / 710 MHz	Ch23800 / 711 MHz
LTE17 10 MHz	QPSK	1	0	23.5	23.9	23.2	23.2	23.2			
		1	24	23.5	23.9	23.4	23.4	23.6			
		1	49	23.5	23.9	23.3	23.4	23.3			
		25	0	22.5	22.9	22.2	22.3	22.4			
		25	12	22.5	22.9	22.3	22.4	22.3			
		25	25	22.5	22.9	22.3	22.3	22.4			
		50	0	22.5	22.9	22.3	22.3	22.4			
	16QAM	1	0	22.5	22.9	22.8	22.6	22.4			
		1	24	22.5	22.9	22.4	22.6	22.5			
		1	49	22.5	22.9	22.8	22.7	22.5			
		25	0	21.5	21.9	21.4	21.3	21.3			
		25	12	21.5	21.9	21.4	21.3	21.3			
		25	25	21.5	21.9	21.4	21.3	21.4			
		50	0	21.5	21.9	21.3	21.5	21.4			

3.3.3 LTE850 (Band 5) Head, Body-worn 15 mm and Wireless Router 10 mm , Antenna 1 & Antenna 2

SN: 00440272352671						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20407 / 824.7 MHz	Ch20525 / 836.5 MHz	Ch20643 / 848.3 MHz	Ch20407 / 824.7 MHz	Ch20525 / 836.5 MHz	Ch20643 / 848.3 MHz
LTE5 1.4 MHz	QPSK	1	0	23.5	23.9	23.2	23.4	23.3			
		1	2	23.5	23.9	23.5	23.6	23.4			
		1	5	23.5	23.9	23.3	23.3	23.4			
		3	0	23.5	23.9	23.3	23.3	23.4			
		3	2	23.5	23.9	23.4	23.3	23.2			
		3	3	23.5	23.9	23.5	23.3	23.4			
		6	0	22.5	22.9	22.5	22.4	22.4			
	16QAM	1	0	22.5	22.9	22.5	22.5	22.0			
		1	2	22.5	22.9	22.2	22.5	22.5			
		1	5	22.5	22.9	22.2	22.5	22.4			
		3	0	22.5	22.9	22.8	22.7	22.6			
		3	2	22.5	22.9	22.6	22.6	22.6			
		3	3	22.5	22.9	22.7	22.5	22.6			
		6	0	21.5	21.9	21.4	21.3	21.0			

SN: 00440272352671						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20415 / 825.5 MHz	Ch20525 / 836.5 MHz	Ch20635 / 847.5 MHz	Ch20415 / 825.5 MHz	Ch20525 / 836.5 MHz	Ch20635 / 847.5 MHz
LTE5 3 MHz	QPSK	1	0	23.5	23.9	23.5	23.4	23.3			
		1	7	23.5	23.9	23.4	23.4	23.2			
		1	14	23.5	23.9	23.1	23.2	23.2			
		8	0	22.5	22.9	22.4	22.4	22.4			
		8	3	22.5	22.9	22.4	22.4	22.4			
		8	7	22.5	22.9	22.5	22.3	22.3			
		15	0	22.5	22.9	22.5	22.3	22.4			
	16QAM	1	0	22.5	22.9	22.8	22.9	22.7			
		1	7	22.5	22.9	22.8	22.7	22.9			
		1	14	22.5	22.9	22.6	22.7	22.1			
		8	0	21.5	21.9	21.3	21.3	21.6			
		8	3	21.5	21.9	21.7	21.5	21.4			
		8	7	21.5	21.9	21.3	21.3	21.2			
		15	0	21.5	21.9	21.1	21.4	21.2			

SN: 00440272352671						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20425 / 826.5 MHz	Ch20525 / 836.5 MHz	Ch20625 / 846.5 MHz	Ch20425 / 826.5 MHz	Ch20525 / 836.5 MHz	Ch20625 / 846.5 MHz
LTE5 5 MHz	QPSK	1	0	23.5	23.9	23.4	23.4	23.3			
		1	12	23.5	23.9	23.3	23.2	23.2			
		1	24	23.5	23.9	23.1	23.1	23.1			
		12	0	22.5	22.9	22.5	22.4	22.2			
		12	6	22.5	22.9	22.3	22.3	22.4			
		12	13	22.5	22.9	22.2	22.3	22.2			
		25	0	22.5	22.9	22.3	22.3	22.3			
	16QAM	1	0	22.5	22.9	23.0	22.6	22.6			
		1	12	22.5	22.9	22.8	22.6	22.4			
		1	24	22.5	22.9	22.8	22.5	22.5			
		12	0	21.5	21.9	21.3	21.5	21.3			
		12	6	21.5	21.9	21.3	21.3	21.2			
		12	13	21.5	21.9	21.0	21.3	21.2			
		25	0	21.5	21.9	21.3	21.5	21.5			

(Table continues)

(Table continues)

SN: 00440272352671						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20450 / 829 MHz	Ch20525 / 836.5 MHz	Ch20600 / 844 MHz	Ch20450 / 829 MHz	Ch20525 / 836.5 MHz	Ch20600 / 844 MHz
LTE5 10 MHz	QPSK	1	0	23.5	23.9	23.4	23.3	23.3			
		1	24	23.5	23.9	23.2	23.6	23.3			
		1	49	23.5	23.9	23.4	23.3	23.1			
		25	0	22.5	22.9	22.4	22.4	22.3			
		25	12	22.5	22.9	22.3	22.4	22.2			
		25	25	22.5	22.9	22.4	22.3	22.3			
		50	0	22.5	22.9	22.3	22.4	22.3			
	16QAM	1	0	22.5	22.9	22.5	22.3	22.4			
		1	24	22.5	22.9	22.6	22.2	22.4			
		1	49	22.5	22.9	22.2	22.5	22.3			
		25	0	21.5	21.9	21.3	21.3	21.5			
		25	12	21.5	21.9	21.2	21.5	21.4			
		25	25	21.5	21.9	21.3	21.3	21.3			
		50	0	21.5	21.9	21.1	21.3	21.2			

3.3.4 LTE1700/2100 (Band 4) Head, Body-worn 15 mm , Antenna 1 & Antenna 2

SN: 00440272352010						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch19957 / 1710.7 MHz	Ch20175 / 1732.5 MHz	Ch20393 / 1754.3 MHz	Ch19957 / 1710.7 MHz	Ch20175 / 1732.5 MHz	Ch20393 / 1754.3 MHz
LTE4 1.4 MHz	QPSK	1	0	23.5	23.9	23.5	23.4	23.4			
		1	2	23.5	23.9	23.5	23.4	23.5			
		1	5	23.5	23.9	23.6	23.4	23.4			
		3	0	23.5	23.9	23.4	23.3	23.4			
		3	2	23.5	23.9	23.4	23.3	23.3			
		3	3	23.5	23.9	23.6	23.4	23.5			
		6	0	22.5	22.9	22.5	22.4	22.4			
	16QAM	1	0	22.5	22.9	23.1	22.3	22.6			
		1	2	22.5	22.9	23.0	22.5	22.7			
		1	5	22.5	22.9	23.1	22.4	22.9			
		3	0	22.5	22.9	22.7	22.7	22.6			
		3	2	22.5	22.9	22.7	22.7	22.7			
		3	3	22.5	22.9	22.7	22.7	22.8			
		6	0	21.5	21.9	21.4	21.2	21.2			
SN: 00440272352010						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch19965 / 1711.5 MHz	Ch20175 / 1732.5 MHz	Ch20385 / 1753.5 MHz	Ch19965 / 1711.5 MHz	Ch20175 / 1732.5 MHz	Ch20385 / 1753.5 MHz
LTE4 3 MHz	QPSK	1	0	23.5	23.9	23.3	23.3	23.3	23.5	23.2	23.0
		1	7	23.5	23.9	23.4	23.3	23.3	23.5	23.0	23.1
		1	14	23.5	23.9	23.2	23.3	23.2	23.2	23.1	23.0
		8	0	22.5	22.9	22.4	22.4	22.6	21.2	21.3	21.3
		8	3	22.5	22.9	22.3	22.4	22.5	21.2	21.1	21.2
		8	7	22.5	22.9	22.6	22.4	22.5	21.2	21.2	21.2
		15	0	22.5	22.9	22.5	22.4	22.5	21.1	21.0	21.2
	16QAM	1	0	22.5	22.9	23.1	22.9	22.9	22.8	22.3	22.6
		1	7	22.5	22.9	23.0	22.9	22.6	22.7	22.3	22.4
		1	14	22.5	22.9	23.1	22.8	22.4	22.8	22.1	22.6
		8	0	21.5	21.9	21.5	21.3	21.8	20.6	20.1	20.1
		8	3	21.5	21.9	21.3	21.2	21.8	20.5	20.2	20.1
		8	7	21.5	21.9	21.7	21.2	21.7	20.5	20.3	20.1
		15	0	21.5	21.9	21.6	21.1	21.4	20.2	20.3	20.1

(Table continues)

(Table continues)

SN: 00440272352010						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch19975 / 1712.5 MHz	Ch20175 / 1732.5 MHz	Ch20375 / 1752.5 MHz	Ch19975 / 1712.5 MHz	Ch20175 / 1732.5 MHz	Ch20375 / 1752.5 MHz
LTE4 5 MHz	QPSK	1	0	23.5	23.9	23.4	23.3	23.5	23.1	23.2	23.2
		1	12	23.5	23.9	23.4	23.3	23.3	23.2	23.0	23.1
		1	24	23.5	23.9	23.4	23.4	23.4	23.1	23.0	23.1
		12	0	22.5	22.9	22.4	22.3	22.5	21.2	21.2	21.3
		12	6	22.5	22.9	22.4	22.4	22.6	21.2	21.2	21.4
		12	13	22.5	22.9	22.3	22.3	22.4	21.1	21.1	21.2
		25	0	22.5	22.9	22.5	22.4	22.5	21.2	21.1	21.3
	16QAM	1	0	22.5	22.9	23.0	23.0	22.2	22.8	22.4	22.5
		1	12	22.5	22.9	22.9	22.9	22.7	22.8	22.3	22.3
		1	24	22.5	22.9	22.9	22.9	22.6	22.6	22.3	22.3
		12	0	21.5	21.9	21.5	21.3	21.4	20.3	20.1	20.1
		12	6	21.5	21.9	21.5	21.4	21.4	20.3	20.1	20.1
		12	13	21.5	21.9	21.2	21.3	21.4	20.2	20.1	20.4
		25	0	21.5	21.9	21.4	21.4	21.4	20.3	20.1	20.3
SN: 00440272352010						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20000 / 1715 MHz	Ch20175 / 1732.5 MHz	Ch20350 / 1750 MHz	Ch20000 / 1715 MHz	Ch20175 / 1732.5 MHz	Ch20350 / 1750 MHz
LTE4 10 MHz	QPSK	1	0	23.5	23.9	23.6	23.4	23.4	23.3	23.3	23.0
		1	24	23.5	23.9	23.4	23.5	23.6	23.2	23.4	22.7
		1	49	23.5	23.9	23.5	23.4	23.4	23.2	23.2	21.3
		25	0	22.5	22.9	22.5	22.5	22.6	21.3	21.2	21.2
		25	12	22.5	22.9	22.4	22.4	22.6	21.2	21.2	21.3
		25	25	22.5	22.9	22.5	22.4	22.6	21.2	21.1	21.3
		50	0	22.5	22.9	22.6	22.4	22.6	21.2	21.1	21.3
	16QAM	1	0	22.5	22.9	23.2	23.0	22.7	22.8	22.3	21.7
		1	24	22.5	22.9	23.1	22.9	22.7	22.8	22.3	22.5
		1	49	22.5	22.9	23.3	22.4	22.6	22.8	22.2	21.9
		25	0	21.5	21.9	21.6	21.4	21.6	20.5	20.2	21.0
		25	12	21.5	21.9	21.5	21.5	21.6	20.3	20.5	20.6
		25	25	21.5	21.9	21.6	21.4	21.7	20.4	20.2	21.9
		50	0	21.5	21.9	21.7	21.6	21.6	20.2	20.2	19.4
SN: 00440272352010						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20025 / 1717.5 MHz	Ch20175 / 1732.5 MHz	Ch20325 / 1747.5 MHz	Ch20025 / 1717.5 MHz	Ch20175 / 1732.5 MHz	Ch20325 / 1747.5 MHz
LTE4 15 MHz	QPSK	1	0	23.5	23.9	23.6	23.5	23.6	23.3	23.3	23.4
		1	36	23.5	23.9	23.5	23.4	23.5	23.3	23.1	23.3
		1	74	23.5	23.9	23.5	23.4	23.4	23.2	23.1	23.1
		36	0	22.5	22.9	22.5	22.5	22.6	21.3	21.2	21.4
		36	18	22.5	22.9	22.4	22.4	22.6	21.2	21.1	21.3
		36	38	22.5	22.9	22.5	22.4	22.6	21.2	21.2	21.3
		75	0	22.5	22.9	22.6	22.5	22.6	21.2	21.1	21.3
	16QAM	1	0	22.5	22.9	22.7	23.0	22.9	22.5	22.3	22.9
		1	36	22.5	22.9	22.5	22.7	22.6	22.4	22.4	22.7
		1	74	22.5	22.9	22.9	22.5	22.8	22.7	22.0	22.7
		36	0	21.5	21.9	21.6	21.5	21.6	20.4	20.3	20.4
		36	18	21.5	21.9	21.6	21.5	21.6	20.5	20.2	20.3
		36	38	21.5	21.9	21.6	21.4	21.7	20.4	20.1	20.3
		75	0	21.5	21.9	21.4	21.4	21.6	20.3	20.3	20.3

(Table continues)

(Table continues)

SN: 00440272352010						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20050 / 1720 MHz	Ch20175 / 1732.5 MHz	Ch20300 / 1745 MHz	Ch20050 / 1720 MHz	Ch20175 / 1732.5 MHz	Ch20300 / 1745 MHz
LTE4 20 MHz	QPSK	1	0	23.5	23.9	23.6	23.7	23.7	23.3	23.1	23.4
		1	49	23.5	23.9	23.5	23.4	23.3	23.3	23.0	23.2
		1	99	23.5	23.9	23.3	23.4	23.3	22.9	23.0	23.1
		50	0	22.5	22.9	22.5	22.5	22.6	21.4	21.2	21.4
		50	24	22.5	22.9	22.5	22.4	22.6	21.2	21.2	21.3
		50	50	22.5	22.9	22.4	22.5	22.6	21.2	21.2	21.3
		100	0	22.5	22.9	22.4	22.5	22.6	21.2	21.2	21.3
	16QAM	1	0	22.5	22.9	22.8	22.4	22.9	22.9	22.7	22.8
		1	49	22.5	22.9	23.1	22.9	22.5	22.6	22.4	22.5
		1	99	22.5	22.9	22.8	22.2	22.7	22.2	22.4	22.6
		50	0	21.5	21.9	21.5	21.5	21.7	20.2	20.2	20.3
		50	24	21.5	21.9	21.6	21.5	21.7	20.3	20.2	20.4
		50	50	21.5	21.9	21.3	21.4	21.5	20.3	20.0	20.2
		100	0	21.5	21.9	21.5	21.5	21.6	20.1	20.2	20.5

3.3.5 LTE1700/2100 (Band 4) Wireless Router 10 mm , Antenna 1 & Antenna 2

SN: 00440272352697						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch19957 / 1710.7 MHz	Ch20175 / 1732.5 MHz	Ch20393 / 1754.3 MHz	Ch19957 / 1710.7 MHz	Ch20175 / 1732.5 MHz	Ch20393 / 1754.3 MHz
LTE4 1.4 MHz	QPSK	1	0	22.0	22.4	21.6	21.8	21.6			
		1	2	22.0	22.4	21.6	22.0	21.9			
		1	5	22.0	22.4	21.6	21.5	21.5			
		3	0	22.0	22.4	21.6	21.6	21.6			
		3	2	22.0	22.4	21.6	21.7	21.7			
		3	3	22.0	22.4	21.6	21.5	21.7			
		6	0	21.0	21.4	20.6	20.7	20.6			
	16QAM	1	0	21.0	21.4	20.8	20.9	20.8			
		1	2	21.0	21.4	20.7	20.8	21.1			
		1	5	21.0	21.4	20.9	20.8	20.7			
		3	0	21.0	21.4	20.7	21.0	20.9			
		3	2	21.0	21.4	20.8	21.0	21.0			
		3	3	21.0	21.4	20.9	20.8	21.0			
		6	0	20.0	20.4	19.3	19.6	19.3			
SN: 00440272352697						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch19965 / 1711.5 MHz	Ch20175 / 1732.5 MHz	Ch20385 / 1753.5 MHz	Ch19965 / 1711.5 MHz	Ch20175 / 1732.5 MHz	Ch20385 / 1753.5 MHz
LTE4 3 MHz	QPSK	1	0	22.0	22.4	21.7	21.8	21.6	21.7	21.7	21.6
		1	7	22.0	22.4	21.8	21.7	21.8	21.5	21.7	21.7
		1	14	22.0	22.4	21.6	21.7	21.5	21.6	21.7	21.7
		8	0	21.0	21.4	20.7	20.6	20.8	19.5	19.8	19.8
		8	3	21.0	21.4	20.6	20.5	20.6	19.5	19.7	19.7
		8	7	21.0	21.4	20.6	20.7	20.7	19.7	19.7	19.9
		15	0	21.0	21.4	20.6	20.5	20.7	19.6	19.7	19.7
	16QAM	1	0	21.0	21.4	21.0	21.1	21.3	21.2	21.4	21.0
		1	7	21.0	21.4	20.9	20.9	21.2	21.2	21.0	20.9
		1	14	21.0	21.4	21.0	21.0	21.0	21.2	21.2	20.7
		8	0	20.0	20.4	19.8	19.5	19.9	18.5	18.8	18.6
		8	3	20.0	20.4	19.8	19.5	19.9	18.5	18.9	18.6
		8	7	20.0	20.4	19.8	19.4	20.0	18.6	18.8	18.7
		15	0	20.0	20.4	19.8	19.4	19.9	18.8	18.7	18.6

(Table continues)

(Table continues)

SN: 00440272352697						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch19975 / 1712.5 MHz	Ch20175 / 1732.5 MHz	Ch20375 / 1752.5 MHz	Ch19975 / 1712.5 MHz	Ch20175 / 1732.5 MHz	Ch20375 / 1752.5 MHz
LTE4 5 MHz	QPSK	1	0	22.0	22.4	21.6	21.9	21.6	21.6	21.8	21.7
		1	12	22.0	22.4	21.6	21.6	21.7	21.6	21.6	21.7
		1	24	22.0	22.4	21.6	21.6	21.6	21.5	21.6	21.6
		12	0	21.0	21.4	20.6	20.6	20.7	19.5	19.6	19.6
		12	6	21.0	21.4	20.5	20.6	20.7	19.5	19.7	19.6
		12	13	21.0	21.4	20.6	20.5	20.7	19.5	19.6	19.6
		25	0	21.0	21.4	20.7	20.6	20.7	19.6	19.6	19.6
	16QAM	1	0	21.0	21.4	21.2	21.1	20.9	21.2	21.0	21.0
		1	12	21.0	21.4	21.2	20.8	20.5	21.2	20.8	21.0
		1	24	21.0	21.4	21.1	20.9	20.7	21.2	20.8	20.9
		12	0	20.0	20.4	19.6	19.8	19.6	18.6	18.7	18.5
		12	6	20.0	20.4	19.6	19.5	19.6	18.7	18.8	18.6
		12	13	20.0	20.4	19.5	19.5	19.5	18.6	18.5	18.5
		25	0	20.0	20.4	19.6	19.5	19.9	18.6	18.7	18.7
SN: 00440272352697						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20000 / 1715 MHz	Ch20175 / 1732.5 MHz	Ch20350 / 1750 MHz	Ch20000 / 1715 MHz	Ch20175 / 1732.5 MHz	Ch20350 / 1750 MHz
LTE4 10 MHz	QPSK	1	0	22.0	22.4	21.7	21.8	21.8	21.6	21.7	21.8
		1	24	22.0	22.4	21.7	21.9	22.0	21.8	21.9	21.7
		1	49	22.0	22.4	21.8	21.7	21.8	21.8	21.5	21.7
		25	0	21.0	21.4	20.7	20.6	20.7	19.6	19.6	19.7
		25	12	21.0	21.4	20.6	20.6	20.7	19.5	19.6	19.7
		25	25	21.0	21.4	20.7	20.6	20.7	19.5	19.6	19.7
		50	0	21.0	21.4	20.7	20.6	20.8	19.7	19.6	19.8
	16QAM	1	0	21.0	21.4	21.0	21.2	21.3	21.3	21.3	21.0
		1	24	21.0	21.4	20.7	21.0	21.2	21.2	21.1	20.9
		1	49	21.0	21.4	21.1	21.2	20.9	21.3	21.1	20.9
		25	0	20.0	20.4	19.7	19.7	19.7	18.8	18.6	18.7
		25	12	20.0	20.4	19.7	19.7	19.7	18.7	18.7	18.8
		25	25	20.0	20.4	19.7	19.7	19.9	18.8	18.7	18.8
		50	0	20.0	20.4	19.5	19.5	19.8	18.7	18.7	18.6
SN: 00440272352697						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20025 / 1717.5 MHz	Ch20175 / 1732.5 MHz	Ch20325 / 1747.5 MHz	Ch20025 / 1717.5 MHz	Ch20175 / 1732.5 MHz	Ch20325 / 1747.5 MHz
LTE4 15 MHz	QPSK	1	0	22.0	22.4	21.7	22.0	21.9	21.7	21.9	21.5
		1	36	22.0	22.4	21.6	21.7	21.6	21.6	21.7	21.5
		1	74	22.0	22.4	21.7	21.5	21.7	21.7	21.5	21.4
		36	0	21.0	21.4	20.7	20.8	20.7	19.6	19.8	19.7
		36	18	21.0	21.4	20.6	20.6	20.6	19.6	19.7	19.7
		36	38	21.0	21.4	20.6	20.6	20.7	19.6	19.6	19.7
		75	0	21.0	21.4	20.7	20.7	20.7	19.6	19.8	19.6
	16QAM	1	0	21.0	21.4	20.9	21.2	21.1	20.4	21.0	21.4
		1	36	21.0	21.4	20.7	20.9	20.8	20.1	20.7	20.9
		1	74	21.0	21.4	21.3	20.8	20.9	20.8	20.7	20.7
		36	0	20.0	20.4	19.7	19.9	19.5	18.8	18.9	18.7
		36	18	20.0	20.4	19.6	19.7	19.7	18.8	18.7	18.8
		36	38	20.0	20.4	19.4	19.7	19.5	18.8	18.6	18.6
		75	0	20.0	20.4	19.6	19.6	19.8	18.7	18.8	18.7

(Table continues)

(Table continues)

SN: 00440272352697						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20050 / 1720 MHz	Ch20175 / 1732.5 MHz	Ch20300 / 1745 MHz	Ch20050 / 1720 MHz	Ch20175 / 1732.5 MHz	Ch20300 / 1745 MHz
LTE4 20 MHz	QPSK	1	0	22.0	22.4	21.9	22.1	21.8	21.9	21.9	21.8
		1	49	22.0	22.4	21.8	21.8	21.8	21.8	21.6	21.7
		1	99	22.0	22.4	21.8	21.8	21.6	21.8	21.6	21.7
		50	0	21.0	21.4	20.8	20.8	20.7	19.7	19.8	19.8
		50	24	21.0	21.4	20.8	20.6	20.7	19.7	19.7	19.7
		50	50	21.0	21.4	20.8	20.6	20.7	19.7	19.6	19.7
		100	0	21.0	21.4	20.8	20.6	20.8	19.7	19.7	19.7
	16QAM	1	0	21.0	21.4	21.0	21.1	21.0	21.5	21.0	21.1
		1	49	21.0	21.4	21.4	21.3	21.0	21.4	21.0	21.0
		1	99	21.0	21.4	21.3	20.7	20.4	21.4	20.3	20.9
		50	0	20.0	20.4	19.8	19.8	19.7	18.7	18.8	18.6
		50	24	20.0	20.4	19.8	19.7	19.7	18.8	18.8	18.5
		50	50	20.0	20.4	19.8	19.6	19.6	18.8	18.6	18.5
		100	0	20.0	20.4	19.7	19.7	19.7	18.8	18.7	18.6

3.3.6 LTE1900 (Band 2) Head, Body-worn 15 mm ,Antenna 1 & Antenna 2

SN: 00440272352069						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18607 / 1850.7 MHz	Ch18900 / 1880 MHz	Ch19193 / 1909.3 MHz	Ch18607 / 1850.7 MHz	Ch18900 / 1880 MHz	Ch19193 / 1909.3 MHz
LTE2 1.4 MHz	QPSK	1	0	23.5	23.9	23.1	23.2	23.1			
		1	2	23.5	23.9	23.2	23.3	23.2			
		1	5	23.5	23.9	23.1	23.1	23.0			
		3	0	23.5	23.9	23.2	23.2	23.2			
		3	2	23.5	23.9	23.2	23.3	23.2			
		3	3	23.5	23.9	23.2	23.3	23.2			
		6	0	22.5	22.9	22.2	22.2	22.3			
	16QAM	1	0	22.5	22.9	22.4	22.8	22.3			
		1	2	22.5	22.9	22.4	22.9	22.3			
		1	5	22.5	22.9	22.4	22.8	22.4			
		3	0	22.5	22.9	22.1	22.5	22.5			
		3	2	22.5	22.9	22.3	22.6	22.6			
		3	3	22.5	22.9	22.4	22.4	22.6			
		6	0	21.5	21.9	21.1	21.4	21.3			
SN: 00440272352069						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18615 / 1851.5 MHz	Ch18900 / 1880 MHz	Ch19185 / 1908.5 MHz	Ch18615 / 1851.5 MHz	Ch18900 / 1880 MHz	Ch19185 / 1908.5 MHz
LTE2 3 MHz	QPSK	1	0	23.5	23.9	23.5	23.2	23.2	23.3	23.0	23.1
		1	7	23.5	23.9	23.6	23.4	23.2	23.4	23.1	23.1
		1	14	23.5	23.9	23.4	23.1	23.0	23.3	23.2	23.1
		8	0	22.5	22.9	22.3	22.2	22.3	21.3	21.2	21.2
		8	3	22.5	22.9	22.3	22.3	22.3	21.3	21.1	21.2
		8	7	22.5	22.9	22.3	22.2	22.4	21.4	21.3	21.3
		15	0	22.5	22.9	22.4	22.2	22.2	21.3	21.2	21.1
	16QAM	1	0	22.5	22.9	22.6	22.7	22.3	22.8	22.3	22.7
		1	7	22.5	22.9	22.6	22.6	22.3	22.8	22.3	22.7
		1	14	22.5	22.9	22.6	22.7	21.9	22.8	22.4	22.4
		8	0	21.5	21.9	21.5	21.2	21.3	20.6	20.4	20.3
		8	3	21.5	21.9	21.4	21.3	21.3	20.5	20.4	20.4
		8	7	21.5	21.9	21.5	21.3	21.3	20.6	20.4	20.4
		15	0	21.5	21.9	21.4	21.0	21.2	20.3	20.4	20.3

(Table continues)

(Table continues)

SN: 00440272352069						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18625 / 1852.5 MHz	Ch18900 / 1880 MHz	Ch19175 / 1907.5 MHz	Ch18625 / 1852.5 MHz	Ch18900 / 1880 MHz	Ch19175 / 1907.5 MHz
LTE2 5 MHz	QPSK	1	0	23.5	23.9	23.3	23.2	23.1	23.3	23.2	22.9
		1	12	23.5	23.9	23.3	23.3	23.2	23.2	23.3	23.1
		1	24	23.5	23.9	23.2	23.3	23.1	23.2	23.3	23.2
		12	0	22.5	22.9	22.3	22.2	22.3	21.3	21.3	21.1
		12	6	22.5	22.9	22.4	22.2	22.2	21.4	21.3	21.2
		12	13	22.5	22.9	22.3	22.3	22.3	21.3	21.3	21.2
		25	0	22.5	22.9	22.3	22.3	22.2	21.3	21.3	21.2
	16QAM	1	0	22.5	22.9	23.0	22.6	22.3	22.8	22.6	22.7
		1	12	22.5	22.9	22.8	22.4	22.4	22.7	22.4	22.4
		1	24	22.5	22.9	22.9	22.7	21.9	22.9	22.6	22.7
		12	0	21.5	21.9	21.5	21.1	21.2	20.4	20.2	20.1
		12	6	21.5	21.9	21.4	21.1	21.1	20.4	20.2	20.1
		12	13	21.5	21.9	21.3	21.0	21.2	20.2	20.5	20.2
		25	0	21.5	21.9	21.6	21.2	21.2	20.4	20.3	20.1
SN: 00440272352069						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18650 / 1855 MHz	Ch18900 / 1880 MHz	Ch19150 / 1905 MHz	Ch18650 / 1855 MHz	Ch18900 / 1880 MHz	Ch19150 / 1905 MHz
LTE2 10 MHz	QPSK	1	0	23.5	23.9	23.4	23.4	23.3	23.3	23.4	23.1
		1	24	23.5	23.9	23.4	23.4	23.3	23.3	23.1	23.1
		1	49	23.5	23.9	23.3	23.3	23.1	23.1	23.3	23.1
		25	0	22.5	22.9	22.4	22.3	22.2	21.3	21.1	21.3
		25	12	22.5	22.9	22.4	22.3	22.2	21.4	21.2	21.2
		25	25	22.5	22.9	22.3	22.3	22.2	21.3	21.2	21.2
		50	0	22.5	22.9	22.4	22.3	22.3	21.3	21.1	21.2
	16QAM	1	0	22.5	22.9	22.4	22.2	22.4	22.9	22.6	22.4
		1	24	22.5	22.9	22.5	22.6	21.9	23.2	22.3	22.4
		1	49	22.5	22.9	22.5	22.6	22.1	22.8	22.6	22.3
		25	0	21.5	21.9	21.4	21.2	21.5	20.5	20.4	20.1
		25	12	21.5	21.9	21.4	21.2	21.5	20.5	20.3	20.2
		25	25	21.5	21.9	21.5	21.1	21.3	20.3	20.2	20.2
		50	0	21.5	21.9	21.3	21.2	21.2	20.4	20.4	20.1
SN: 00440272352069						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18675 / 1857.5 MHz	Ch18900 / 1880 MHz	Ch19125 / 1902.5 MHz	Ch18675 / 1857.5 MHz	Ch18900 / 1880 MHz	Ch19125 / 1902.5 MHz
LTE2 15 MHz	QPSK	1	0	23.5	23.9	23.5	23.5	23.3	23.5	23.5	23.3
		1	36	23.5	23.9	23.3	23.1	23.2	23.3	23.1	23.0
		1	74	23.5	23.9	23.3	23.3	23.1	23.3	23.3	23.1
		36	0	22.5	22.9	22.4	22.4	22.3	21.4	21.3	21.3
		36	18	22.5	22.9	22.4	22.2	22.2	21.4	21.3	21.2
		36	38	22.5	22.9	22.3	22.3	22.2	21.4	21.2	21.2
		75	0	22.5	22.9	22.4	22.3	22.2	21.4	21.3	21.2
	16QAM	1	0	22.5	22.9	22.8	22.4	21.9	22.7	22.5	22.0
		1	36	22.5	22.9	22.5	22.5	22.0	22.5	22.5	21.6
		1	74	22.5	22.9	22.6	22.8	21.9	22.6	22.8	22.0
		36	0	21.5	21.9	21.3	21.2	21.2	20.5	20.3	20.3
		36	18	21.5	21.9	21.3	21.2	21.2	20.4	20.3	20.2
		36	38	21.5	21.9	21.2	21.3	21.2	20.4	20.3	20.2
		75	0	21.5	21.9	21.3	21.2	21.1	20.4	20.3	20.3

(Table continues)

(Table continues)

SN: 00440272352069						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18700 / 1860 MHz	Ch18900 / 1880 MHz	Ch19100 / 1900 MHz	Ch18700 / 1860 MHz	Ch18900 / 1880 MHz	Ch19100 / 1900 MHz
LTE2 20 MHz	QPSK	1	0	23.5	23.9	23.4	23.4	23.4	23.4	23.3	23.5
		1	49	23.5	23.9	23.3	23.2	23.1	23.2	23.1	23.0
		1	99	23.5	23.9	23.2	23.3	23.0	23.1	23.2	22.8
		50	0	22.5	22.9	22.3	22.4	22.3	21.4	21.3	21.4
		50	24	22.5	22.9	22.4	22.2	22.3	21.4	21.2	21.3
		50	50	22.5	22.9	22.3	22.3	22.1	21.2	21.3	21.1
		100	0	22.5	22.9	22.4	22.3	22.4	21.4	21.2	21.3
	16QAM	1	0	22.5	22.9	22.7	22.5	22.6	22.5	22.9	22.5
		1	49	22.5	22.9	22.8	22.8	22.1	22.7	22.4	22.3
		1	99	22.5	22.9	22.3	22.7	22.2	22.1	22.7	22.2
		50	0	21.5	21.9	21.5	21.2	21.4	20.5	20.3	20.3
		50	24	21.5	21.9	21.5	21.1	21.2	20.5	20.2	20.2
		50	50	21.5	21.9	21.4	21.3	21.0	20.4	20.4	20.1
		100	0	21.5	21.9	21.4	21.2	21.2	20.4	20.4	20.2

3.3.7 LTE1900 (Band 2) Wireless Router 10 mm ,Antenna 1 & Antenna 2

SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18607 / 1850.7 MHz	Ch18900 / 1880 MHz	Ch19193 / 1909.3 MHz	Ch18607 / 1850.7 MHz	Ch18900 / 1880 MHz	Ch19193 / 1909.3 MHz
LTE2 1.4 MHz	QPSK	1	0	22.0	22.4	21.9	22.0	22.0			
		1	2	22.0	22.4	22.1	22.2	22.2			
		1	5	22.0	22.4	21.8	22.0	22.0			
		3	0	22.0	22.4	21.9	22.1	22.0			
		3	2	22.0	22.4	22.0	22.0	22.1			
		3	3	22.0	22.4	22.0	22.0	21.9			
		6	0	21.0	21.4	21.0	21.0	21.0			
	16QAM	1	0	21.0	21.4	21.1	21.5	21.7			
		1	2	21.0	21.4	21.2	21.5	21.5			
		1	5	21.0	21.4	21.1	21.5	21.6			
		3	0	21.0	21.4	20.8	21.2	21.0			
		3	2	21.0	21.4	21.0	21.2	21.3			
		3	3	21.0	21.4	20.6	21.4	21.4			
		6	0	20.0	20.4	19.8	19.8	19.9			
SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18615 / 1851.5 MHz	Ch18900 / 1880 MHz	Ch19185 / 1908.5 MHz	Ch18615 / 1851.5 MHz	Ch18900 / 1880 MHz	Ch19185 / 1908.5 MHz
LTE2 3 MHz	QPSK	1	0	22.0	22.4	22.1	21.9	22.0	22.0	21.9	22.1
		1	7	22.0	22.4	22.3	22.1	22.0	22.0	22.0	22.0
		1	14	22.0	22.4	22.1	22.0	22.1	22.1	22.0	22.0
		8	0	21.0	21.4	21.1	21.0	21.0	20.1	19.9	19.9
		8	3	21.0	21.4	21.0	21.0	21.1	20.0	20.0	19.9
		8	7	21.0	21.4	21.1	21.1	21.0	20.2	20.1	20.0
		15	0	21.0	21.4	21.0	21.0	21.0	20.1	19.9	19.9
	16QAM	1	0	21.0	21.4	21.1	21.2	21.6	21.6	21.6	21.3
		1	7	21.0	21.4	21.0	21.0	21.3	21.6	21.5	21.3
		1	14	21.0	21.4	21.2	21.2	21.5	21.6	21.6	21.2
		8	0	20.0	20.4	20.0	19.8	19.9	19.3	18.9	19.0
		8	3	20.0	20.4	20.1	20.0	20.0	19.3	18.9	19.1
		8	7	20.0	20.4	20.2	19.8	20.2	19.3	18.8	19.1
		15	0	20.0	20.4	20.1	20.1	19.8	18.8	19.0	18.9

(Table continues)

(Table continues)

SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18625 / 1852.5 MHz	Ch18900 / 1880 MHz	Ch19175 / 1907.5 MHz	Ch18625 / 1852.5 MHz	Ch18900 / 1880 MHz	Ch19175 / 1907.5 MHz
LTE2 5 MHz	QPSK	1	0	22.0	22.4	22.1	22.1	22.1	22.1	22.0	22.0
		1	12	22.0	22.4	22.1	22.1	22.0	22.3	22.1	22.0
		1	24	22.0	22.4	22.0	21.9	22.0	22.0	21.8	22.0
		12	0	21.0	21.4	21.0	21.0	21.1	20.0	19.9	20.0
		12	6	21.0	21.4	21.1	21.1	21.1	20.1	20.0	20.0
		12	13	21.0	21.4	21.0	21.0	21.0	20.0	20.0	20.0
		25	0	21.0	21.4	21.1	21.0	21.0	20.1	19.9	19.9
	16QAM	1	0	21.0	21.4	21.5	21.5	21.2	21.2	21.2	21.3
		1	12	21.0	21.4	21.6	21.5	21.3	21.6	21.1	21.5
		1	24	21.0	21.4	21.6	21.5	21.2	21.2	21.1	21.3
		12	0	20.0	20.4	20.1	19.9	19.9	19.2	18.9	18.9
		12	6	20.0	20.4	20.2	19.9	19.9	19.1	18.9	19.1
		12	13	20.0	20.4	20.3	19.8	19.9	19.1	18.9	18.9
		25	0	20.0	20.4	20.0	19.9	20.0	19.2	18.8	19.0
SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18650 / 1855 MHz	Ch18900 / 1880 MHz	Ch19150 / 1905 MHz	Ch18650 / 1855 MHz	Ch18900 / 1880 MHz	Ch19150 / 1905 MHz
LTE2 10 MHz	QPSK	1	0	22.0	22.4	22.1	22.0	22.1	22.1	22.0	22.1
		1	24	22.0	22.4	22.3	22.2	22.2	22.2	22.2	22.0
		1	49	22.0	22.4	22.1	22.0	22.0	22.1	22.0	21.9
		25	0	21.0	21.4	21.1	21.1	20.9	20.1	20.0	19.9
		25	12	21.0	21.4	21.1	21.1	20.9	20.1	20.0	19.9
		25	25	21.0	21.4	21.0	21.0	20.9	20.1	19.2	19.9
		50	0	21.0	21.4	21.0	21.0	21.0	20.0	20.0	19.9
	16QAM	1	0	21.0	21.4	21.7	21.6	21.3	21.1	21.5	21.3
		1	24	21.0	21.4	21.6	21.5	21.2	21.6	21.5	21.1
		1	49	21.0	21.4	21.4	21.4	21.0	21.0	21.4	21.0
		25	0	20.0	20.4	20.3	20.1	19.9	19.2	19.1	19.0
		25	12	20.0	20.4	20.2	19.9	20.0	19.2	19.1	19.2
		25	25	20.0	20.4	20.3	19.9	19.9	19.1	19.0	19.0
		50	0	20.0	20.4	20.1	19.9	19.8	19.1	19.0	18.7
SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18675 / 1857.5 MHz	Ch18900 / 1880 MHz	Ch19125 / 1902.5 MHz	Ch18675 / 1857.5 MHz	Ch18900 / 1880 MHz	Ch19125 / 1902.5 MHz
LTE2 15 MHz	QPSK	1	0	22.0	22.4	22.2	22.2	21.8	22.2	22.2	22.0
		1	36	22.0	22.4	22.1	22.1	21.9	22.2	22.0	21.9
		1	74	22.0	22.4	21.9	21.9	21.9	21.9	21.9	22.0
		36	0	21.0	21.4	21.1	21.0	21.0	20.1	20.1	19.9
		36	18	21.0	21.4	21.1	21.0	20.9	20.1	20.0	19.8
		36	38	21.0	21.4	21.0	20.9	20.9	20.0	19.9	19.8
		75	0	21.0	21.4	21.1	21.0	20.9	20.1	19.9	19.9
	16QAM	1	0	21.0	21.4	21.7	20.8	21.2	21.4	20.9	21.4
		1	36	21.0	21.4	21.9	21.1	21.1	21.2	20.8	21.2
		1	74	21.0	21.4	21.4	21.0	21.1	20.8	21.3	21.3
		36	0	20.0	20.4	20.2	20.0	20.0	19.1	19.1	19.1
		36	18	20.0	20.4	20.1	20.0	19.9	19.1	19.1	19.0
		36	38	20.0	20.4	20.0	19.9	19.9	18.9	19.0	19.0
		75	0	20.0	20.4	19.9	20.0	19.9	19.1	19.1	19.0

(Table continues)

(Table continues)

SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch18700 / 1860 MHz	Ch18900 / 1880 MHz	Ch19100 / 1900 MHz	Ch18700 / 1860 MHz	Ch18900 / 1880 MHz	Ch19100 / 1900 MHz
LTE2 20 MHz	QPSK	1	0	22.0	22.4	22.2	22.1	22.1	22.2	22.1	22.1
		1	49	22.0	22.4	22.1	22.1	21.9	22.1	22.0	22.0
		1	99	22.0	22.4	21.8	21.7	22.0	21.8	21.7	21.9
		50	0	21.0	21.4	21.1	21.0	20.9	20.1	20.0	19.9
		50	24	21.0	21.4	21.0	21.0	20.8	20.0	20.0	19.8
		50	50	21.0	21.4	20.9	20.9	20.9	19.9	19.7	19.8
		100	0	21.0	21.4	21.0	21.0	20.9	19.9	19.9	19.8
	16QAM	1	0	21.0	21.4	21.3	21.2	21.2	21.4	21.3	21.2
		1	49	21.0	21.4	21.6	21.3	20.9	21.9	21.0	21.0
		1	99	21.0	21.4	20.9	20.9	21.0	20.9	20.8	21.0
		50	0	20.0	20.4	20.2	19.9	19.9	19.3	19.0	18.9
		50	24	20.0	20.4	20.0	20.0	20.0	18.9	19.0	18.7
		50	50	20.0	20.4	19.9	19.8	19.7	18.9	19.0	18.9
		100	0	20.0	20.4	19.8	19.7	19.9	19.1	19.0	19.0

3.3.8 LTE2500 (Band 7) Head, Body-worn 15 mm ,Antenna 1 & Antenna 2

SN: 00440272352655						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20775 / 2502.5 MHz	Ch21100 / 2535 MHz	Ch21425 / 2567.5 MHz	Ch20775 / 2502.5 MHz	Ch21100 / 2535 MHz	Ch21425 / 2567.5 MHz
LTE7 5 MHz	QPSK	1	0	23.0	23.4	22.8	22.7	22.7			
		1	12	23.0	23.4	22.9	22.8	22.9			
		1	24	23.0	23.4	22.7	22.6	22.8			
		12	0	22.0	22.4	21.7	21.8	21.9			
		12	6	22.0	22.4	21.8	21.8	21.8			
		12	13	22.0	22.4	21.7	21.8	21.8			
		25	0	22.0	22.4	21.7	21.8	21.8			
	16QAM	1	0	22.0	22.4	22.1	22.2	21.7			
		1	12	22.0	22.4	22.0	22.1	21.9			
		1	24	22.0	22.4	22.0	22.1	21.8			
		12	0	21.0	21.4	20.8	20.9	20.9			
		12	6	21.0	21.4	20.8	20.8	20.9			
		12	13	21.0	21.4	21.1	20.8	20.9			
		25	0	21.0	21.4	21.1	20.9	21.0			
SN: 00440272352655						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20800 / 2505 MHz	Ch21100 / 2535 MHz	Ch21400 / 2565 MHz	Ch20800 / 2505 MHz	Ch21100 / 2535 MHz	Ch21400 / 2565 MHz
LTE7 10 MHz	QPSK	1	0	23.0	23.4	22.8	22.7	22.8			
		1	24	23.0	23.4	23.0	22.8	22.8			
		1	49	23.0	23.4	22.9	22.8	22.8			
		25	0	22.0	22.4	21.7	21.7	21.9			
		25	12	22.0	22.4	21.8	21.8	22.0			
		25	25	22.0	22.4	21.8	21.8	21.8			
		50	0	22.0	22.4	21.8	21.8	21.9			
	16QAM	1	0	22.0	22.4	21.9	21.5	22.2			
		1	24	22.0	22.4	22.2	21.9	22.3			
		1	49	22.0	22.4	21.9	21.7	21.9			
		25	0	21.0	21.4	21.0	21.0	21.1			
		25	12	21.0	21.4	20.9	21.0	21.2			
		25	25	21.0	21.4	21.2	20.9	21.1			
		50	0	21.0	21.4	20.8	20.8	21.0			

(Table continues)

(Table continues)

SN: 00440272352655						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20825 / 2507.5 MHz	Ch21100 / 2535 MHz	Ch21375 / 2562.5 MHz	Ch20825 / 2507.5 MHz	Ch21100 / 2535 MHz	Ch21375 / 2562.5 MHz
LTE7 15 MHz	QPSK	1	0	23.0	23.4	22.8	22.8	23.1			
		1	36	23.0	23.4	22.8	22.8	22.8			
		1	74	23.0	23.4	23.0	22.9	22.9			
		36	0	22.0	22.4	21.8	21.8	22.0			
		36	18	22.0	22.4	21.8	21.8	21.8			
		36	38	22.0	22.4	22.0	21.9	21.9			
		75	0	22.0	22.4	21.9	21.9	21.8			
	16QAM	1	0	22.0	22.4	22.1	22.4	22.2			
		1	36	22.0	22.4	22.0	22.2	21.9			
		1	74	22.0	22.4	22.1	22.4	21.7			
		36	0	21.0	21.4	21.0	20.9	20.9			
		36	18	21.0	21.4	21.0	20.9	20.8			
		36	38	21.0	21.4	21.2	20.9	21.1			
		75	0	21.0	21.4	21.0	20.9	20.9			

SN: 00440272352655						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20850 / 2510 MHz	Ch21100 / 2535 MHz	Ch21350 / 2560 MHz	Ch20850 / 2510 MHz	Ch21100 / 2535 MHz	Ch21350 / 2560 MHz
LTE7 20 MHz	QPSK	1	0	23.0	23.4	22.7	22.8	22.9			
		1	49	23.0	23.4	22.9	22.7	22.7			
		1	99	23.0	23.4	22.7	22.9	22.8			
		50	0	22.0	22.4	21.8	21.8	22.0			
		50	24	22.0	22.4	21.9	21.8	21.9			
		50	50	22.0	22.4	22.0	21.9	21.8			
		100	0	22.0	22.4	22.0	21.8	21.9			
	16QAM	1	0	22.0	22.4	22.2	21.8	22.4			
		1	49	22.0	22.4	22.4	21.9	22.5			
		1	99	22.0	22.4	22.4	22.1	22.1			
		50	0	21.0	21.4	20.9	20.9	20.9			
		50	24	21.0	21.4	21.0	20.9	20.9			
		50	50	21.0	21.4	21.0	20.9	20.8			
		100	0	21.0	21.4	21.0	20.8	20.9			

3.3.9 LTE2500 (Band 7) Wireless Router 10 mm ,Antenna 1 & Antenna 2

SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20775 / 2502.5 MHz	Ch21100 / 2535 MHz	Ch21425 / 2567.5 MHz	Ch20775 / 2502.5 MHz	Ch21100 / 2535 MHz	Ch21425 / 2567.5 MHz
LTE7 5 MHz	QPSK	1	0	21.5	21.9	21.6	21.7	21.4			
		1	12	21.5	21.9	21.6	21.6	21.5			
		1	24	21.5	21.9	21.7	21.8	21.4			
		12	0	20.5	20.9	20.5	20.7	20.6			
		12	6	20.5	20.9	20.6	20.8	20.5			
		12	13	20.5	20.9	20.6	20.7	20.5			
		25	0	20.5	20.9	20.6	20.8	20.5			
	16QAM	1	0	20.5	20.9	20.9	20.9	20.9			
		1	12	20.5	20.9	21.1	20.7	20.8			
		1	24	20.5	20.9	18.9	21.0	20.7			
		12	0	19.5	19.9	19.5	19.8	19.0			
		12	6	19.5	19.9	19.6	19.7	19.5			
		12	13	19.5	19.9	19.5	19.7	19.4			
		25	0	19.5	19.9	19.6	19.9	19.5			

(Table continues)

(Table continues)

SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20800 / 2505 MHz	Ch21100 / 2535 MHz	Ch21400 / 2565 MHz	Ch20800 / 2505 MHz	Ch21100 / 2535 MHz	Ch21400 / 2565 MHz
LTE7 10 MHz	QPSK	1	0	21.5	21.9	21.4	21.6	21.5			
		1	24	21.5	21.9	21.6	21.7	21.8			
		1	49	21.5	21.9	21.7	21.7	21.4			
		25	0	20.5	20.9	20.6	20.6	20.4			
		25	12	20.5	20.9	20.6	20.6	20.5			
		25	25	20.5	20.9	20.8	20.6	20.5			
		50	0	20.5	20.9	20.7	20.7	20.5			
	16QAM	1	0	20.5	20.9	20.6	20.4	20.5			
		1	24	20.5	20.9	21.3	20.7	20.9			
		1	49	20.5	20.9	20.8	20.5	20.5			
		25	0	19.5	19.9	19.7	19.8	19.6			
		25	12	19.5	19.9	19.5	19.8	19.5			
		25	25	19.5	19.9	19.8	19.8	19.6			
		50	0	19.5	19.9	19.7	19.5	19.5			
SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20825 / 2507.5 MHz	Ch21100 / 2535 MHz	Ch21375 / 2562.5 MHz	Ch20825 / 2507.5 MHz	Ch21100 / 2535 MHz	Ch21375 / 2562.5 MHz
LTE7 15 MHz	QPSK	1	0	21.5	21.9	21.6	21.7	21.7			
		1	36	21.5	21.9	21.9	21.6	21.5			
		1	74	21.5	21.9	21.8	21.5	21.6			
		36	0	20.5	20.9	20.6	20.7	20.6			
		36	18	20.5	20.9	20.7	20.6	20.5			
		36	38	20.5	20.9	20.9	20.7	20.5			
		75	0	20.5	20.9	20.8	20.6	20.5			
	16QAM	1	0	20.5	20.9	21.1	20.7	21.1			
		1	36	20.5	20.9	21.2	20.5	20.9			
		1	74	20.5	20.9	21.3	20.9	20.6			
		36	0	19.5	19.9	19.4	19.6	19.6			
		36	18	19.5	19.9	19.8	19.6	19.5			
		36	38	19.5	19.9	19.8	19.7	19.5			
		75	0	19.5	19.9	19.7	19.6	19.6			
SN: 00440272352705						Nominal			A-MPR active		
Band / BW	Modulation	RB Allocation	RB Offset	Tuning target (dBm)	Upper limit (dBm)	Ch20850 / 2510 MHz	Ch21100 / 2535 MHz	Ch21350 / 2560 MHz	Ch20850 / 2510 MHz	Ch21100 / 2535 MHz	Ch21350 / 2560 MHz
LTE7 20 MHz	QPSK	1	0	21.5	21.9	21.6	21.6	21.7			
		1	49	21.5	21.9	21.8	21.5	21.6			
		1	99	21.5	21.9	21.6	21.6	21.5			
		50	0	20.5	20.9	20.6	20.7	20.6			
		50	24	20.5	20.9	20.8	20.6	20.6			
		50	50	20.5	20.9	20.8	20.7	20.6			
		100	0	20.5	20.9	20.7	20.6	20.6			
	16QAM	1	0	20.5	20.9	20.7	20.5	21.3			
		1	49	20.5	20.9	21.3	20.6	20.9			
		1	99	20.5	20.9	21.1	20.4	20.6			
		50	0	19.5	19.9	19.6	19.6	19.7			
		50	24	19.5	19.9	19.8	19.6	19.5			
		50	50	19.5	19.9	19.7	19.6	19.5			
		100	0	19.5	19.9	19.8	19.7	19.5			

3.4 BT

BT	Tuning target (dBm)	Upper limit (dBm)
	1.5	3.0

3.5 WLAN2450

3.5.1 WLAN2450 Head, Body-worn 15 mm and Wireless Router 10 mm

WLAN 2.4 GHz: 20 MHz channel bandwidth											
						Tuning target (dBm)					
Standard	MCS index	Spatial streams	Transmission mode	Modulation	Data rate [MBPS]	CH 1	CH 2	CH 6	CH 7	CH 10	CH 11
802.11b			DSSS	BPSK	1	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**
802.11b			DSSS	QPSK	2	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**
802.11b			DSSS	QPSK	5.5	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**
802.11b			DSSS	QPSK	11	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**
802.11g			OFDM	BPSK	6	**14.0**	**17.0**	**17.0**	**17.0**	**17.0**	**14.5**
802.11g			OFDM	BPSK	9	**14.0**	**17.0**	**17.0**	**17.0**	**17.0**	**14.5**
802.11g			OFDM	QPSK	12	**14.0**	**17.0**	**17.0**	**17.0**	**17.0**	**14.5**
802.11g			OFDM	QPSK	18	**14.0**	**17.0**	**17.0**	**17.0**	**17.0**	**14.5**
802.11g			OFDM	16QAM	24	**14.0**	**17.0**	**17.0**	**17.0**	**17.0**	**14.5**
802.11g			OFDM	16QAM	36	**14.0**	**16.5**	**16.5**	**16.5**	**16.5**	**14.5**
802.11g			OFDM	64QAM	48	**14.0**	**15.5**	**15.5**	**15.5**	**15.5**	**14.5**
802.11g			OFDM	64QAM	54	**14.0**	**15.0**	**15.0**	**15.0**	**15.0**	**14.5**
802.11n	0	1	OFDM	BPSK	6.5 / 7.2	**14.0**	**16.0**	**16.0**	**16.0**	**16.0**	**14.5**
802.11n	1	1	OFDM	QPSK	13.0 / 14.4	**14.0**	**16.0**	**16.0**	**16.0**	**16.0**	**14.5**
802.11n	2	1	OFDM	QPSK	19.5 / 21.7	**14.0**	**16.0**	**16.0**	**16.0**	**16.0**	**14.5**
802.11n	3	1	OFDM	16QAM	26.0 / 28.9	**14.0**	**16.0**	**16.0**	**16.0**	**16.0**	**14.5**
802.11n	4	1	OFDM	16QAM	39.0 / 43.3	**14.0**	**15.0**	**15.0**	**15.0**	**15.0**	**14.5**
802.11n	5	1	OFDM	64QAM	52.0 / 57.8	**14.0**	**14.5**	**14.5**	**14.5**	**14.5**	**14.5**
802.11n	6	1	OFDM	64QAM	58.5 / 65.0	**14.0**	**14.0**	**14.0**	**14.0**	**14.0**	**14.0**
802.11n	7	1	OFDM	64QAM	65.0 / 72.2	**13.0**	**13.0**	**13.0**	**13.0**	**13.0**	**13.0**

(Table continues)

(Table continues)

WLAN 2.4 GHz: 20 MHz channel bandwidth											
						Upper limit of tuning target (dBm)					
Standard	MCS index	Spatial streams	Transmission mode	Modulation	Data rate [MBPS]	CH 1	CH 2	CH 6	CH 7	CH 10	CH 11
802.11b			DSSS	BPSK	1	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**
802.11b			DSSS	QPSK	2	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**
802.11b			DSSS	QPSK	5.5	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**
802.11b			DSSS	QPSK	11	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**
802.11g			OFDM	BPSK	6	**15.5**	**18.5**	**18.5**	**18.5**	**18.5**	**16.0**
802.11g			OFDM	BPSK	9	**15.5**	**18.5**	**18.5**	**18.5**	**18.5**	**16.0**
802.11g			OFDM	QPSK	12	**15.5**	**18.5**	**18.5**	**18.5**	**18.5**	**16.0**
802.11g			OFDM	QPSK	18	**15.5**	**18.5**	**18.5**	**18.5**	**18.5**	**16.0**
802.11g			OFDM	16QAM	24	**15.5**	**18.5**	**18.5**	**18.5**	**18.5**	**16.0**
802.11g			OFDM	16QAM	36	**15.5**	**18.0**	**18.0**	**18.0**	**18.0**	**16.0**
802.11g			OFDM	64QAM	48	**15.5**	**17.0**	**17.0**	**17.0**	**17.0**	**16.0**
802.11g			OFDM	64QAM	54	**15.5**	**16.5**	**16.5**	**16.5**	**16.5**	**16.0**
802.11n	0	1	OFDM	BPSK	6.5 / 7.2	**15.5**	**17.5**	**17.5**	**17.5**	**17.5**	**16.0**
802.11n	1	1	OFDM	QPSK	13.0 / 14.4	**15.5**	**17.5**	**17.5**	**17.5**	**17.5**	**16.0**
802.11n	2	1	OFDM	QPSK	19.5 / 21.7	**15.5**	**17.5**	**17.5**	**17.5**	**17.5**	**16.0**
802.11n	3	1	OFDM	16QAM	26.0 / 28.9	**15.5**	**17.5**	**17.5**	**17.5**	**17.5**	**16.0**
802.11n	4	1	OFDM	16QAM	39.0 / 43.3	**15.5**	**16.5**	**16.5**	**16.5**	**16.5**	**16.0**
802.11n	5	1	OFDM	64QAM	52.0 / 57.8	**15.5**	**16.0**	**16.0**	**16.0**	**16.0**	**16.0**
802.11n	6	1	OFDM	64QAM	58.5 / 65.0	**15.5**	**15.5**	**15.5**	**15.5**	**15.5**	**15.5**
802.11n	7	1	OFDM	64QAM	65.0 / 72.2	**14.5**	**14.5**	**14.5**	**14.5**	**14.5**	**14.5**

WLAN 2.4 GHz: 20 MHz channel bandwidth											
SN: 004402742352051						**Measured value (dBm)**					
Standard	MCS index	Spatial streams	Transmission mode	Modulation	Data rate [MBPS]	CH 1	CH 2	CH 6	CH 7	CH 10	CH 11
802.11b			DSSS	BPSK	1	17.9	17.6	17.7	17.3	17.7	17.6
802.11b			DSSS	QPSK	2	17.8	17.6	17.7	17.3	17.7	17.5
802.11b			DSSS	QPSK	5.5	17.9	17.6	17.7	17.3	17.7	17.6
802.11b			DSSS	QPSK	11	**17.9**	**17.7**	**17.8**	**17.4**	**17.8**	**17.7**
802.11g			OFDM	BPSK	6	14.8	17.4	17.6	17.2	17.4	15.1
802.11g			OFDM	BPSK	9	14.7	17.4	17.6	17.2	17.4	15.3
802.11g			OFDM	QPSK	12	15.0	17.5	17.7	17.2	17.5	15.4
802.11g			OFDM	QPSK	18	15.1	17.5	17.7	17.3	17.5	15.4
802.11g			OFDM	16QAM	24	15.0	17.5	17.8	17.3	17.5	15.5
802.11g			OFDM	16QAM	36	15.1	17.1	17.4	17.0	17.2	15.5
802.11g			OFDM	64QAM	48	15.0	16.4	16.4	16.2	16.5	15.5
802.11g			OFDM	64QAM	54	15.1	15.9	16.1	15.6	16.1	15.5
802.11n	0	1	OFDM	BPSK	6.5 / 7.2	14.9	16.6	16.8	16.3	16.7	15.1
802.11n	1	1	OFDM	QPSK	13.0 / 14.4	15.0	16.6	16.8	16.4	16.7	15.4
802.11n	2	1	OFDM	QPSK	19.5 / 21.7	14.8	16.6	16.5	16.6	16.9	15.2
802.11n	3	1	OFDM	16QAM	26.0 / 28.9	15.0	16.7	16.9	16.5	16.8	15.5
802.11n	4	1	OFDM	16QAM	39.0 / 43.3	15.1	15.8	16.1	15.7	16.0	15.6
802.11n	5	1	OFDM	64QAM	52.0 / 57.8	15.2	15.4	15.6	15.2	15.6	15.6
802.11n	6	1	OFDM	64QAM	58.5 / 65.0	15.1	14.9	15.1	14.7	15.2	15.1
802.11n	7	1	OFDM	64QAM	65.0 / 72.2	14.2	13.9	14.1	13.8	14.2	14.1

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

The measurements were performed using an automated DASY near-field scanning system manufactured by Schmid & Partner Engineering AG (SPEAG) in Switzerland. The SAR extrapolation algorithm used in all measurements was the 'advanced extrapolation' algorithm.

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration date	Calibration expiry
DAE 4	710	2015-03	2016-03
DAE 4	860	2014-09	2015-09
DAE 4	1319	2014-09	2015-09
DAE 4	480	2014-09	2015-09
DAE 4	887	2015-03	2016-03
E-field Probe EX3DV4	3836	2015-03	2016-03
E-field Probe EX3DV4	3839	2014-09	2015-09
E-field Probe EX3DV4	3823	2014-09	2015-09
E-field Probe EX3DV4	3838	2015-03	2016-03
E-field Probe EX3DV4	3574	2014-09	2015-09
E-field Probe EX3DV4	3837	2014-09	2015-09
Dipole Validation Kit, D750V3	1048	2013-09	2015-09
Dipole Validation Kit, D835V2	4d005	2014-03	2016-03
Dipole Validation Kit, D1750V2	1086	2015-03	2017-03
Dipole Validation Kit, D1900V2	509	2014-09	2016-09
Dipole Validation Kit, D2450V2	883	2014-03	2016-03
Dipole Validation Kit, D2600V2	1082	2014-06	2016-06
DASY5 software	Version 52.8	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration date	Calibration expiry
Signal Generator	8648C	3847M00258	2015-04	2016-04
Signal Generator	SME06	829445/008	2015-04	2016-04
Signal Generator	E4432B	US40052231	2015-04	2016-04
Signal Generator	SME03	846923/014	2015-04	2016-04
Signal Generator	N5181A	MY48180750	2014-10	2015-10
Call Tester	CMU200	835352/008	-	-
Call Tester	CMU200	831593/001	-	-
Call Tester	CMU200	110735	-	-
Call Tester	CMW500	113277	-	-
Call Tester	CMW500	115794	-	-
Amplifier	ZHL-42W	QA1252001	-	-
Amplifier	5S1G4M3	302339	-	-
Amplifier	AR 5S1G4M1	306024	-	-
Amplifier	ZHL-4240W	e060204/1	-	-
RF Network Analyzer	E5071C	MY46104578	2015-04	2016-04
RF Network Analyzer	8753ES	US39170317	2015-04	2016-04
RF Network Analyzer	8753ES	My40002096	2015-04	2016-04
Dielectric Probe Kit	DAK-3.5	1123	-	-
Dielectric Probe Kit	85070C	653	-	-
Dielectric Probe Kit	85070C	2577	-	-
Power Meter	NRP	101293	2015-04	2016-04
Power Sensor	NRP-Z51	100410	2015-04	2016-04
Power Meter	NRP2	103071	2015-04	2016-04
Power Sensor	NRP-Z51	104120	2015-04	2016-04
Power Meter	E4419B	My41291520	2015-04	2016-04
Power Sensor	8482A	US37295410	2015-04	2016-04
Power Meter	NRVD	840297/008	2015-04	2016-04
Power Sensor	NRV-Z51	101135	2015-04	2016-04
Power Meter	NRP2	104228	2015-03	2016-03
Power Sensor	NRP-51	104638	2015-03	2016-03

4.1.1 Isotropic E-field Probe Type EX3DV4

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Calibration certificate in Appendix D
Frequency	10 MHz to >6 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g, Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm Tip length: 10 mm Body diameter: 12 mm Tip diameter: 2.5 mm Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 6 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

4.2 Phantoms

The phantom used for all Head SAR tests i.e. for both system checks and device testing, was the twin-headed "SAM Phantom", manufactured by SPEAG; the SAM phantom conforms to the requirements of IEEE 1528.

The phantom used for all Body SAR tests i.e. for both system checks and device testing, was a flat phantom also manufactured by SPEAG this phantom conform to the requirements of FCC published RF Exposure KDB Procedures.

The SPEAG device holder (see Section 5.1) was used to position the device in all tests whilst a tripod was used to position the validation dipoles against the flat section of phantom.

4.3 Tissue Simulants

Recommended values for the dielectric parameters of the tissue simulants are given in IEEE 1528 and FCC published RF Exposure KDB Procedures. All tests were carried out using simulants whose dielectric parameters were within ± 5% of the recommended values. All tests were carried out within 24 hours of measuring the dielectric parameters.

The depth of the tissue simulant was at least 15.0 cm for all system check and device tests, measured from the ear reference point in the case of the SAM phantom and from the inner surface of the flat phantom.

4.3.1 Tissue Simulant Recipes

The following recipe(s) were used for Head and Body tissue simulant(s):

700 MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	52.13	69.23
Tween 20	46.59	29.56
Salt	1.28	1.21

800 MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	51.50	69.25
Tween 20	47.35	30.00
Salt	1.15	0.75

1750 MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	54.0	70.20
Tween 20	45.6	29.37
Salt	0.4	0.43

1900 MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	54.50	70.25
Tween 20	45.23	29.41
Salt	0.27	0.34

2450-2600 MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	56.0	70.20
Tween 20	44.0	29.62
Salt	-	0.18

4.4 System validation and System checking

4.4.1 System validation status

Probe Calibration Point f / MHz	Test System	DASY SW	Dipole Type / SN	Probe Type / SN	Calibrated signal type(s)	DAE unit Type / SN	Validation done	
							Head tissue simulant	Body tissue simulant
750	TCC Beijing/ SAR-5	V52.8	D750V3 / 1048	EX3DV4 / 3836	CW	DAE4 / 887	2015-05	2015-05
835	TCC Beijing / SAR-1	V52.8	D835V2 / 4d005	EX3DV4/ 3839	CW	DAE4 / 860	2015-03	2015-03
1750	TCC Beijing / SAR-3	V52.8	D1750V2 / 1086	EX3DV4 / 3838	CW	DAE4 / 710	2015-05	2015-05
1900	TCC Beijing / SAR-4	V52.8	D1900V2 / 509	EX3DV4 / 3574	CW	DAE4 / 480	2015-03	2015-03
2450	TCC Beijing / SAR-2	V52.8	D2450V2 / 883	EX3DV4 / 3823	CW	DAE4 / 1319	2014-10	2014-10
2600	TCC Beijing / SAR-2	V52.8	D2600V2 / 1082	EX3DV4 / 3837	CW	DAE4 / 1319	2015-01	2015-01

4.4.2 System checking

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna. The dipole was placed under the flat section of the twin SAM phantom for head system checking, and under the flat phantom for body system checking. The system checking results (dielectric parameters and SAR values) are given in the table below.

System checking, head tissue simulant

Dipole freq. [MHz]	Description	SAR 1g [W/kg]	Estimated SAR 1g [W/kg]	Estimated SAR 1g Dev. dSAR [%]	Scaled 1W SAR 1g [W/kg]	Dielectric Parameters		SAR 1g Deviation from target	Dielectric Parameters Deviation from target		Temp [°C]	Plot #
						e,	s [S/m]	dSAR [%]	de, [%]	ds [%]		
	Tolerances			±3%				±10 %	±5 %	±5 %		
750	Target result **SN:1048**	-	-	-	8.43	41.9	0.89	TCC Beijing / SAR5 3836 Head 750 MHz				
	2015-07-20	2.16	2.18	0.93	8.64	41.0	0.92	2.49	-2.15	3.37	20.6	1
	2015-07-21	2.14	2.15	0.47	8.56	41.0	0.91	1.54	-2.15	2.25	21.1	-
	2015-07-22	2.13	2.14	0.47	8.52	40.7	0.90	1.07	-2.86	1.12	21.1	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
835	Target result **SN:4d005**	-	-	-	9.32	41.5	0.90	TCC Beijing / SAR1 3839 Head 835 MHz				
	2015-07-14	2.33	2.35	0.86	9.32	41.0	0.90	0.00	-1.20	0.00	20.5	-
	2015-07-15	2.32	2.33	0.43	9.28	40.6	0.89	-0.43	-2.17	-1.11	20.9	-
	2015-07-16	2.42	2.44	0.83	9.68	42.2	0.91	3.86	1.69	1.11	20.9	2
	2015-07-17	2.35	2.37	0.85	9.40	40.9	0.90	0.86	-1.45	0.00	20.9	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
1750	Target result **SN:1086**	-	-	-	36.20	40.1	1.37	TCC Beijing / SAR3 3838 Head 1750 MHz				
	2015-07-10	8.84	8.93	1.02	35.36	38.9	1.36	-2.32	-2.99	-0.73	20.5	-
	2015-07-14	8.69	8.75	0.69	34.76	39.3	1.34	-3.98	-2.00	-2.19	0.0	-
	2015-07-16	8.75	8.85	1.14	35.00	39.4	1.34	-3.31	-1.75	-2.19	21.5	-
	2015-07-17	8.64	8.75	1.27	34.56	39.2	1.34	-4.53	-2.24	-2.19	22.5	3
	2015-07-27	8.66	8.85	2.19	34.64	39.7	1.36	-4.31	-1.00	-0.73	22.0	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
1900	Target result **SN:509**	-	-	-	40.10	40.0	1.40	TCC Beijing / SAR4 3574 Head 1900 MHz				
	2015-07-16	10.00	9.97	-0.30	40.00	40.4	1.37	-0.25	1.00	-2.14	21.0	-
	2015-07-17	9.62	9.50	-1.25	38.48	41.5	1.37	-4.04	3.75	-2.14	20.9	4
	2015-07-20	9.81	9.68	-1.33	39.24	41.2	1.37	-2.14	3.00	-2.14	21.1	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
2450	Target result **SN:883**	-	-	-	53.20	39.2	1.80	TCC Beijing / SAR2 3823 Head 2450 MHz				
	2015-07-17	12.50	12.60	0.80	50.00	38.3	1.79	-6.02	-2.30	-0.56	20.9	-
	2015-07-20	12.30	12.40	0.81	49.20	38.0	1.80	-7.52	-3.06	0.00	20.8	5
	2015-07-22	12.30	12.30	0.00	49.20	38.7	1.80	-7.52	-1.28	0.00	20.8	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
2600	Target result **SN:1082**	-	-	-	57.90	39.0	1.96	TCC Beijing / SAR2 3837 Head 2600 MHz				
	2015-07-20	13.70	13.80	0.73	54.80	37.5	1.96	-5.35	-3.85	0.00	20.8	-
	2015-07-21	13.60	13.80	1.47	54.40	38.7	1.96	-6.04	-0.77	0.00	20.9	6
	2015-07-22	13.60	13.90	2.21	54.40	38.1	1.96	-6.04	-2.31	0.00	20.8	-

* Dielectric parameter reference data taken from IEEE1528/IEC62209

System checking, body tissue simulant

Dipole freq. [MHz]	Description	SAR 1g [W/kg]	Estimated SAR 1g [W/kg]	Estimated SAR 1g Dev. dSAR [%]	Scaled 1W SAR 1g [W/kg]	Dielectric Parameters		SAR 1g Deviation from target	Dielectric Parameters Deviation from target		Temp [°C]	Plot #
						e_r	s [S/m]	dSAR [%]	de_r [%]	ds [%]		
	Tolerances			±3%				±10 %	±5 %	±5 %		
750	Target result **SN:1048**	-	-	-	8.65	55.5	0.96	TCC Beijing / SAR5 3836 Body 750 MHz				
	2015-07-22	2.34	2.37	1.28	9.36	52.9	0.99	8.21	-4.68	3.13	21.9	-
	2015-07-24	2.35	2.40	2.13	9.40	53.1	1.00	8.67	-4.32	4.17	20.9	7
	Tolerances			±3%				±10 %	±5 %	±5 %		
835	Target result **SN:4d005**	-	-	-	9.31	55.2	0.97	TCC Beijing / SAR1 3839 Body 835 MHz				
	2015-07-22	2.46	2.48	0.81	9.84	53.4	0.94	5.69	-3.26	-3.09	20.8	8
	2015-07-24	2.43	2.45	0.82	9.72	53.6	0.94	4.40	-2.90	-3.09	20.9	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
1750	Target result **SN:1086**	-	-	-	37.40	53.4	1.49	TCC Beijing / SAR3 3838 Body 1750 MHz				
	2015-07-14	9.51	9.54	0.32	38.04	50.9	1.44	1.71	-4.68	-3.36	20.5	9
	2015-07-15	9.25	9.40	1.62	37.00	52.4	1.44	-1.07	-1.87	-3.36	21.8	-
	2015-07-22	9.38	9.42	0.43	37.52	52.6	1.44	0.32	-1.50	-3.36	22.1	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
1900	Target result **SN:509**	-	-	-	38.70	53.3	1.52	TCC Beijing / SAR4 3574 Body 1900 MHz				
	2015-07-10	9.38	9.24	-1.49	37.52	52.1	1.48	-3.05	-2.25	-2.63	21.2	-
	2015-07-13	9.46	9.52	0.63	37.84	53.1	1.50	-2.22	-0.38	-1.32	21.1	-
	2015-07-14	9.34	9.29	-0.54	37.36	53.7	1.51	-3.46	0.75	-0.66	21.3	10
	2015-07-15	9.45	9.40	-0.53	37.80	53.0	1.52	-2.33	-0.56	0.00	21.2	-
	Tolerances			±3%				±10 %	±5 %	±5 %		
2450	Target result **SN:883**	-	-	-	51.00	52.7	1.95	TCC Beijing / SAR2 3823 Body 2450 MHz				
	2015-07-24	12.80	12.90	0.78	51.20	50.9	1.96	0.39	-3.42	0.51	21.5	11
	Tolerances			±3%				±10 %	±5 %	±5 %		
2600	Target result **SN:1082**	-	-	-	56.00	52.5	2.16	TCC Beijing / SAR2 3837 Body 2600 MHz				
	2015-07-22	13.90	14.10	1.44	55.60	50.6	2.16	-0.71	-3.62	0.00	20.7	-
	2015-07-23	13.80	14.00	1.45	55.20	50.5	2.16	-1.43	-3.81	0.00	21.3	-
	2015-08-03	13.60	13.80	1.47	54.40	50.4	2.17	-2.86	-4.00	0.46	20.7	12
	2015-08-12	13.60	13.80	1.47	54.40	50.9	2.22	-2.86	-3.05	2.78	21.4	

* Dielectric parameter reference data taken from FCC Published RF Exposure KDB Procedures

Plots of the system checking scans are given in Appendix A.

4.5 Tissue Simulants used in the Measurements

Head tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Dielectric Parameters Deviation from recommended value		Temp [°C]
		e_r	s [S/m]	de_r [%]	ds [%]	
707	Tolerances			±5 %	±5 %	
	Recommended value	42.2	0.89			
	2015-07-20	41.6	0.88	-1.42	-1.12	20.6
	2015-07-21	41.6	0.87	-1.42	-2.25	21.1
	2015-07-22	41.3	0.87	-2.13	-2.25	21.1
710	Tolerances			±5 %	±5 %	
	Recommended value	42.1	0.89			
	2015-07-20	41.5	0.88	-1.43	-1.12	20.6
	2015-07-21	41.6	0.87	-1.19	-2.25	21.1
	2015-07-22	41.3	0.87	-1.90	-2.25	21.1
835	Tolerances			±5 %	±5 %	
	Recommended value	41.5	0.90			
	2015-07-14	41.0	0.90	-1.20	0.00	20.5
	2015-07-15	40.6	0.89	-2.17	-1.11	20.9
	2015-07-16	42.2	0.91	1.69	1.11	20.9
	2015-07-17	40.9	0.90	-1.45	0.00	20.9
836	Tolerances			±5 %	±5 %	
	Recommended value	41.5	0.90			
	2015-07-14	41.0	0.90	-1.20	0.00	20.5
	2015-07-15	40.6	0.89	-2.17	-1.11	20.9
	2015-07-16	42.2	0.92	1.69	2.22	20.9
	2015-07-17	40.9	0.90	-1.45	0.00	20.9
1732	Tolerances			±5 %	±5 %	
	Recommended value	40.1	1.36			
	2015-07-10	38.9	1.34	-2.99	-1.47	20.5
	2015-07-14	39.3	1.32	-2.00	-2.94	0.0
	2015-07-16	39.5	1.32	-1.50	-2.94	21.5
	2015-07-17	39.3	1.32	-2.00	-2.94	22.5
	2015-07-27	39.7	1.34	-1.00	-1.47	22.0
1880	Tolerances			±5 %	±5 %	
	Recommended value	40.0	1.40			
	2015-07-16	40.4	1.35	1.00	-3.57	21.0
	2015-07-17	41.5	1.35	3.75	-3.57	20.9
	2015-07-20	41.3	1.35	3.25	-3.57	21.1
2437	Tolerances			±5 %	±5 %	
	Recommended value	39.2	1.79			
	2015-07-17	38.4	1.78	-2.04	-0.56	20.9
	2015-07-20	38.0	1.79	-3.06	0.00	20.8
	2015-07-22	38.7	1.78	-1.28	-0.56	20.8
2535	Tolerances			±5 %	±5 %	
	Recommended value	39.1	1.89			
	2015-07-20	37.7	1.89	-3.58	0.00	20.8
	2015-07-21	38.9	1.89	-0.51	0.00	20.9
	2015-07-22	38.3	1.89	-2.05	0.00	20.8

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters e_r	Dielectric Parameters s [S/m]	Dielectric Parameters Deviation from recommended value de_r [%]	Dielectric Parameters Deviation from recommended value ds [%]	Temp [°C]
707	Tolerances			±5 %	±5 %	
	Recommended value	55.7	0.96			
	2015-07-22	53.4	0.95	-4.13	-1.04	21.9
	2015-07-24	53.6	0.96	-3.77	0.00	20.9
710	Tolerances			±5 %	±5 %	
	Recommended value	55.7	0.96			
	2015-07-22	53.4	0.95	-4.13	-1.04	21.9
	2015-07-24	53.5	0.96	-3.95	0.00	20.9
835	Tolerances			±5 %	±5 %	
	Recommended value	55.2	0.97			
	2015-07-22	53.4	0.94	-3.26	-3.09	20.8
	2015-07-24	53.6	0.94	-2.90	-3.09	20.9
836	Tolerances			±5 %	±5 %	
	Recommended value	55.2	0.97			
	2015-07-22	53.4	0.94	-3.26	-3.09	20.8
	2015-07-24	53.6	0.94	-2.90	-3.09	20.9
1732	Tolerances			±5 %	±5 %	
	Recommended value	53.5	1.48			
	2015-07-14	50.9	1.42	-4.86	-4.05	20.5
	2015-07-15	52.4	1.42	-2.06	-4.05	21.8
	2015-07-22	52.7	1.42	-1.50	-4.05	22.1
1880	Tolerances			±5 %	±5 %	
	Recommended value	53.3	1.52			
	2015-07-10	52.2	1.46	-2.06	-3.95	21.2
	2015-07-13	53.1	1.48	-0.38	-2.63	21.1
	2015-07-14	53.8	1.49	0.94	-1.97	21.3
	2015-07-15	53.1	1.50	-0.38	-1.32	21.2
2437	Tolerances			±5 %	±5 %	
	Recommended value	52.7	1.94			
	2015-07-24	50.9	1.95	-3.42	0.52	21.5
2535	Tolerances			±5 %	±5 %	
	Recommended value	52.6	2.07			
	2015-07-22	50.8	2.08	-3.42	0.48	20.7
	2015-07-23	50.7	2.08	-3.61	0.48	21.3
	2015-08-03	50.6	2.08	-3.80	0.48	20.7
	2015-08-12	51.0	2.21	-0.58	21.43	21.4

Dielectric parameter data for the band edges is given in Appendix C.

5. DESCRIPTION OF THE TEST PROCEDURE

5.1 Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the Dasy system.

Device holder supplied by SPEAG

A spacer (illustrated below) was used to position the device within the SPEAG holder. The spacer positions the device so that the holder has minimal effect on the test results but still holds the device securely. The spacer was removed before the tests.

Spacer

5.2 Test Positions

5.2.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.2.2 Body-worn 15 mm Configuration

The device was placed in the SPEAG holder using the spacer and placed below the flat phantom. The distance between the device and the phantom was kept at the separation distance indicated in Section 1.2 using a separate flat spacer that was removed before the start of the measurements. The device was oriented with both sides facing the phantom to find the highest results.

Microsoft Body-worn accessories are commonly available for the separation distance used in this testing.

5.2.3 Wireless Router 10 mm Configuration

The device was placed in the SPEAG holder and, in sequence, the back, display and each of the 4 edges was positioned 10 mm away from the flat phantom. The spacer was removed before the start of the measurements.

5.3 Scan Procedures

First, area scans were used for determination of the field distribution. Next, a zoom scan, a minimum of 5x5x7 points covering a volume of at least 30x30x30mm, was performed around the highest E-field value to determine the averaged SAR value. Drift was determined by measuring the same point at the start of the area scan and again at the end of the zoom scan. Fast SAR is measured according to the KDB 447498 D01 General RF Exposure Guidance v05r01.

5.4 SAR Averaging Methods

The maximum SAR value was averaged over a cube of tissue using interpolation and extrapolation.

The interpolation, extrapolation and maximum search routines within Dasy52 are all based on the modified Quadratic Shepard's method (Robert J. Renka,"Multivariate Interpolation of Large Sets of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988, pp. 139-148).

The interpolation scheme combines a least-square fitted function method with a weighted average method. A trivariate 3-D / bivariate 2-D quadratic function is computed for each measurement point and fitted to neighbouring points by a least-square method. For the zoom scan, inverse distance weighting is incorporated to fit distant points more accurately. The interpolating function is finally calculated as a weighted average of the quadratics.

In the zoom scan, the interpolation function is used to extrapolate the Peak SAR from the deepest measurement points to the inner surface of the phantom.

6. MEASUREMENT UNCERTAINTY

Table 6.1 – Measurement uncertainty evaluation for 1g Full SAR in 0.3-6G Hz range

Uncertainty Component	Section in IEEE 1528	Tol. (%)	Prob Dist	Div	c_i	$c_i . u_i$ (%)	v_i
Measurement System							
Probe Calibration	E2.1	±6.6	N	1	1	±6.6	∞
Axial Isotropy	E2.2	±4.7	R	√3	$(1-c_p)^{1/2}$	±1.9	∞
Hemispherical Isotropy	E2.2	±9.6	R	√3	$(c_p)^{1/2}$	±3.9	∞
Boundary Effect	E2.3	±2.0	R	√3	1	±1.2	∞
Linearity	E2.4	±4.7	R	√3	1	±2.7	∞
System Detection Limits	E2.5	±1.0	R	√3	1	±0.6	∞
Modulation response	E2.5	±2.4	R	√3	1	±1.4	
Readout Electronics	E2.6	±0.3	N	1	1	±0.3	∞
Response Time	E2.7	±0.8	R	√3	1	±0.5	∞
Integration Time	E2.8	±2.6	R	√3	1	±1.5	∞
RF Ambient Conditions - Noise	E6.1	±3.0	R	√3	1	±1.7	∞
RF Ambient Conditions - Reflections	E6.1	±3.0	R	√3	1	±1.7	∞
Probe Positioner Mechanical Tolerance	E6.2	±0.8	R	√3	1	±0.5	∞
Probe Positioning with respect to Phantom Shell	E6.3	±6.7	R	√3	1	±3.9	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E5	±4.0	R	√3	1	±2.3	∞
Test sample Related							
Test Sample Positioning	E4.2	±6.0	N	1	1	±6.0	11
Device Holder Uncertainty	E4.1	±3.6	N	1	1	±3.6	5
Output Power Variation - SAR drift measurement	E2.9	±5.0	R	√3	1	±2.9	∞
Phantom and Tissue Parameters							
Phantom Uncertainty (shape and thickness tolerances)	E3.1	±6.6	R	√3	1	±3.8	∞
SAR correction	E3.2	±1.9	R	√3	1	±1.1	∞
Conductivity Target - tolerance	E3.4	±5.0	R	√3	0.6	±1.8	∞
Conductivity - measurement uncertainty	E3.3	±5.5	N	1	0.6	±3.5	5
Permittivity Target - tolerance	E3.4	±5.0	R	√3	0.6	±1.7	∞
Permittivity - measurement uncertainty	E3.3	±2.9	N	1	0.6	±1.7	5
Combined Standard Uncertainty			RSS			**±14.0**	198
Coverage Factor for 95%			**k=2**				
Expanded Uncertainty						**±28.2**	

Table 6.2 – Measurement uncertainty evaluation for 1g Fast SAR in 0.3-6G Hz range

Relative DASY5 Uncertainty Budget for Fast SAR Tests According to IEEE 1528/2011 and IEC 62209-1/2011 (0.3-6 GHz range)						
Uncertainty Component	**Tol. (%)**	**Prob Dist.**	**Div.**	c_i	$c_i . u_i$ (%)	v_i
Measurement System						
Probe Calibration	±6.6	N	1	0		
Axial Isotropy	±4.7	R	√3	$(1-c_p)^{1/2}$	±1.9	∞
Hemispherical Isotropy	±9.6	R	√3	$(c_p)^{1/2}$	±3.9	∞
Boundary Effect	±2.0	R	√3	1	±1.2	∞
Linearity	±4.7	R	√3	1	±2.7	∞
System Detection Limits	±1.0	R	√3	1	±0.6	∞
Modulation Response	±2.4	R	√3	1	±1.4	∞
Readout Electronics	±0.3	N	1	0		
Response Time	±0.8	R	√3	0		
Integration Time	±2.6	R	√3	1	±1.5	∞
RF Ambient Conditions - Noise	±3.0	R	√3	1	±1.7	∞
RF Ambient Conditions - Reflections	±3.0	R	√3	0		
Probe Positioner Mechanical Tolerance	±0.8	R	√3	1	±0.5	∞
Probe Positioning with respect to Phantom Shell	±6.7	R	√3	1	±3.9	∞
Spatial x-y Resolution	±10.0	R	√3	1	±5.8	∞
Fast SAR z Approximation	±14.0	R	√3	1	±8.1	∞
Test sample Related						
Test Sample Positioning	±6.0	N	1	1	±6.0	12
Device Holder Uncertainty	±3.6	N	1	1	±3.6	5
Output Power Variation - SAR drift measurement	±5.0	R	√3	1	±2.9	∞
Power Scaling	±0	R	√3	0		
Phantom and Setup						
Phantom Uncertainty (shape and thickness tolerances)	±6.6	R	√3	1	±3.8	∞
SAR correction	±1.9	R	√3	0		
Conductivity Target - tolerance	±1.9	R	√3	0		
Conductivity - measurement uncertainty	±5.0	R	√3	0		
Permittivity Target - tolerance	±5.5	N	1	0		
Permittivity - measurement uncertainty	±5.0	R	√3	0		
Combined Standard Uncertainty		RSS			**±14.9**	748
Coverage Factor for 95%		**k=2**				
Expanded Uncertainty					**±29.8**	

7. RESULTS

7.1 The measured Head SAR values for the test device

7.1.1 LTE700 (Band 12) Head SAR results

Antenna 1

LTE700 (Band 12) - 10MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		**23.9**			**Scaling factor***				
Conducted Power		**23.2**	**23.2**	**23.4**	**0.7**	**0.7**	**0.5**	**dB**	
Time-averaged Power		**23.2**	**23.2**	**23.4**	**1.17**	**1.17**	**1.12**	**Lin**	
Left Cheek	Estimated SAR	-	-	0.215	-	-	0.241	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.121	-	-	0.136	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.290	-	-	0.325	0.01	**H1**
	Full SAR	-	-	0.297	-	-	**0.333**		
Right Tilt	Estimated SAR	-	-	0.163	-	-	0.183	-	-
	Full SAR	-	-	-	-	-	-		
LTE700 (Band 12) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		**22.9**			**Scaling factor***				
Conducted Power		**22.1**	**22.3**	**22.4**	**0.8**	**0.6**	**0.5**	**dB**	
Time-averaged Power		**22.1**	**22.3**	**22.4**	**1.20**	**1.15**	**1.12**	**Lin**	
Left Cheek	Estimated SAR	-	-	0.172	-	-	0.193	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.097	-	-	0.109	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.237	-	-	0.266	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.130	-	-	0.146	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE700 (Band 12) - 10MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.2	23.4	0.7	0.7	0.5	dB	
Time-averaged Power		23.2	23.2	23.4	1.17	1.17	1.12	Lin	
Left Cheek	Estimated SAR	-	-	0.315	-	-	0.353	0.03	-
	Full SAR	-	-	0.288	-	-	0.323		
Left Tilt	Estimated SAR	-	-	0.143	-	-	0.160	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.208	-	-	0.233	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.085	-	-	0.095	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 12) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.1	22.3	22.4	0.8	0.6	0.5	dB	
Time-averaged Power		22.1	22.3	22.4	1.20	1.15	1.12	Lin	
Left Cheek	Estimated SAR	-	-	0.186	-	-	0.209	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.086	-	-	0.097	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.129	-	-	0.145	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.070	-	-	0.079	-	-
	Full SAR	-	-	-	-	-	-		

7.1.2 LTE700 (Band 17) Head SAR results

Antenna 1

LTE700 (Band 17) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.6	0.5	0.5	0.3	dB	
Time-averaged Power		23.4	23.4	23.6	1.12	1.12	1.07	Lin	
Left Cheek	Estimated SAR	-	-	0.262	-	-	0.281	0.01	H2
	Full SAR	-	-	0.271	-	-	**0.290**		
Left Tilt	Estimated SAR	-	-	0.123	-	-	0.132	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.175	-	-	0.188	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.100	-	-	0.107	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 17) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.2	22.3	22.4	0.7	0.6	0.5	dB	
Time-averaged Power		22.2	22.3	22.4	1.17	1.15	1.12	Lin	
Left Cheek	Estimated SAR	-	-	0.186	-	-	0.209	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.086	-	-	0.096	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.123	-	-	0.138	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.068	-	-	0.077	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 17) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.3	22.4	0.6	0.6	0.5	dB	
Time-averaged Power		22.3	22.3	22.4	1.15	1.15	1.12	Lin	
Left Cheek	Estimated SAR	-	-	0.199	-	-	0.223	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE700 (Band 17) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.6	0.5	0.5	0.3	dB	
Time-averaged Power		23.4	23.4	23.6	1.12	1.12	1.07	Lin	
Left Cheek	Estimated SAR	-	-	0.257	-	-	0.275	0.00	-
	Full SAR	-	-	0.261	-	-	0.280		
Left Tilt	Estimated SAR	-	-	0.118	-	-	0.126	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.178	-	-	0.191	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.100	-	-	0.107	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 17) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.2	22.3	22.4	0.7	0.6	0.5	dB	
Time-averaged Power		22.2	22.3	22.4	1.17	1.15	1.12	Lin	
Left Cheek	Estimated SAR	-	-	0.179	-	-	0.201	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.081	-	-	0.091	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.124	-	-	0.139	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.069	-	-	0.078	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 17) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.3	22.4	0.6	0.6	0.5	dB	
Time-averaged Power		22.3	22.3	22.4	1.15	1.15	1.12	Lin	
Left Cheek	Estimated SAR	-	-	0.194	-	-	0.218	-	-
	Full SAR	-	-	-	-	-	-		

7.1.3 GSM/GPRS/EGPRS 850 Head SAR results

Antenna 1

2-slot GPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**31.4**			**Scaling factor***				
Conducted Power		**31.2**	**31.2**	**31.0**	**0.2**	**0.2**	**0.4**	**dB**	
Time-averaged Power		**25.2**	**25.2**	**25.0**	**1.05**	**1.05**	**1.10**	**Lin**	
Left Cheek	Estimated SAR	-	0.219	-	-	0.229	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.137	-	-	0.143	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	0.309	0.353	0.390	0.324	0.370	0.428	0.00	-
	Full SAR	-	-	0.393	-	-	0.431		
Right Tilt	Estimated SAR	-	0.192	-	-	0.201	-	-	-
	Full SAR	-	-	-	-	-	-		

4-slot 8PSK EGPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**23.4**			**Scaling factor***				
Conducted Power		**22.6**	**22.7**	**22.6**	**0.8**	**0.7**	**0.8**	**dB**	
Time-averaged Power		**19.6**	**19.7**	**19.6**	**1.20**	**1.17**	**1.20**	**Lin**	
Right Cheek	Estimated SAR	-	-	0.102	-	-	0.123	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

2-slot GPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**31.4**			**Scaling factor***				
Conducted Power		**31.2**	**31.2**	**31.0**	**0.2**	**0.2**	**0.4**	**dB**	
Time-averaged Power		**25.2**	**25.2**	**25.0**	**1.05**	**1.05**	**1.10**	**Lin**	
Left Cheek	Estimated SAR	0.501	0.482	0.513	0.525	0.505	0.562	0.01	**H3**
	Full SAR	-	-	0.527	-	-	**0.578**		
Left Tilt	Estimated SAR	-	0.276	-	-	0.289	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.391	-	-	0.409	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.238	-	-	0.249	-	-	-
	Full SAR	-	-	-	-	-	-		

4-slot 8PSK EGPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		23.4			Scaling factor*				
Conducted Power		22.6	22.7	22.6	0.8	0.7	0.8	dB	
Time-averaged Power		19.6	19.7	19.6	1.20	1.17	1.20	Lin	
Left Cheek	Estimated SAR	-	-	0.177	-	-	0.213	-	-
	Full SAR	-	-	-	-	-	-		

7.1.4 WCDMA850 (Band 5) Head SAR results

Antenna 1

WCDMA850 (Band 5)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.6	23.5	23.6	0.8	0.9	0.8	dB	
Time-averaged Power		23.6	23.5	23.6	1.20	1.23	1.20	Lin	
Left Cheek	Estimated SAR	-	0.290	-	-	0.357	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.171	-	-	0.210	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	0.303	0.349	0.315	0.364	0.429	0.379	0.01	-
	Full SAR	-	0.337	-	-	0.415	-		
Right Tilt	Estimated SAR	-	0.181	-	-	0.223	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA850 (Band 5)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.6	23.5	23.6	0.8	0.9	0.8	dB	
Time-averaged Power		23.6	23.5	23.6	1.20	1.23	1.20	Lin	
Left Cheek	Estimated SAR	0.377	0.385	0.414	0.453	0.474	0.498	0.01	**H4**
	Full SAR	-	-	0.422	-	-	**0.507**		
Left Tilt	Estimated SAR	-	0.278	-	-	0.342	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.374	-	-	0.460	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.241	-	-	0.296	-	-	-
	Full SAR	-	-	-	-	-	-		

7.1.5 LTE850 (Band 5) Head SAR results

Antenna 1

LTE850 (Band 5) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.6	23.3	0.7	0.3	0.6	dB	
Time-averaged Power		23.2	23.6	23.3	1.17	1.07	1.15	Lin	
Left Cheek	Estimated SAR	-	0.224	-	-	0.240	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.149	-	-	0.160	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.295	-	-	0.316	-	0.01	-
	Full SAR	-	0.285	-	-	0.305	-		
Right Tilt	Estimated SAR	-	0.141	-	-	0.151	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE850 (Band 5) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.4	22.3	0.5	0.5	0.6	dB	
Time-averaged Power		22.4	22.4	22.3	1.12	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.162	-	-	0.182	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.106	-	-	0.119	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.217	-	-	0.243	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.104	-	-	0.117	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE850 (Band 5) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.171	-	-	0.192	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE850 (Band 5) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.6	23.3	0.7	0.3	0.6	dB	
Time-averaged Power		23.2	23.6	23.3	1.17	1.07	1.15	Lin	
Left Cheek	Estimated SAR	-	0.379	-	-	0.406	-	0.01	H5
	Full SAR	-	0.388	-	-	**0.416**	-		
Left Tilt	Estimated SAR	-	0.224	-	-	0.240	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.307	-	-	0.329	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.209	-	-	0.224	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE850 (Band 5) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.4	22.3	0.5	0.5	0.6	dB	
Time-averaged Power		22.4	22.4	22.3	1.12	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.295	-	-	0.331	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.172	-	-	0.193	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.244	-	-	0.274	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.150	-	-	0.168	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE850 (Band 5) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.289	-	-	0.324	-	-	-
	Full SAR	-	-	-	-	-	-		

7.1.6 WCDMA1700/2100 (Band 4) Head SAR results

Antenna 1

WCDMA1700/2100 (Band 4)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz		
Upper limit		**24.4**			**Scaling factor***				
Conducted Power		**23.5**	**23.7**	**23.6**	**0.9**	**0.7**	**0.8**	**dB**	
Time-averaged Power		**23.5**	**23.7**	**23.6**	**1.23**	**1.17**	**1.20**	**Lin**	
Left Cheek	Estimated SAR	0.278	0.265	0.240	0.342	0.311	0.289	0.01	-
	Full SAR	0.287	-	-	0.353	-	-		
Left Tilt	Estimated SAR	-	0.205	-	-	0.241	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.240	-	-	0.282	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.173	-	-	0.203	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA1700/2100 (Band 4)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz		
Upper limit		**24.4**			**Scaling factor***				
Conducted Power		**23.5**	**23.7**	**23.6**	**0.9**	**0.7**	**0.8**	**dB**	
Time-averaged Power		**23.5**	**23.7**	**23.6**	**1.23**	**1.17**	**1.20**	**Lin**	
Left Cheek	Estimated SAR	0.476	0.538	0.504	0.586	0.632	0.606	0.04	**H6**
	Full SAR	-	0.497	-	-	**0.584**	-		
Left Tilt	Estimated SAR	-	0.309	-	-	0.363	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.315	-	-	0.370	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.329	-	-	0.387	-	-	-
	Full SAR	-	-	-	-	-	-		

7.1.7 LTE1700/2100 (Band 4) Head SAR results

Antenna 1

LTE1700/2100 (Band 4) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.6	23.7	23.7	0.3	0.2	0.2	dB	
Time-averaged Power		23.6	23.7	23.7	1.07	1.05	1.05	Lin	
Left Cheek	Estimated SAR	-	0.286	-	-	0.299	-	0.01	-
	Full SAR	-	0.294	-	-	0.308	-		
Left Tilt	Estimated SAR	-	0.188	-	-	0.197	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.196	-	-	0.205	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.168	-	-	0.176	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.5	22.6	0.4	0.4	0.3	dB	
Time-averaged Power		22.5	22.5	22.6	1.10	1.10	1.07	Lin	
Left Cheek	Estimated SAR	-	-	0.215	-	-	0.230	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.139	-	-	0.149	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.145	-	-	0.155	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.107	-	-	0.115	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.5	22.6	0.5	0.4	0.3	dB	
Time-averaged Power		22.4	22.5	22.6	1.12	1.10	1.07	Lin	
Left Cheek	Estimated SAR	-	-	0.215	-	-	0.230	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE1700/2100 (Band 4) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.6	23.7	23.7	0.3	0.2	0.2	dB	
Time-averaged Power		23.6	23.7	23.7	1.07	1.05	1.05	Lin	
Left Cheek	Estimated SAR	-	0.402	-	-	0.421	-	0.01	H7
	Full SAR	-	0.391	-	-	**0.409**	-		
Left Tilt	Estimated SAR	-	0.278	-	-	0.291	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.240	-	-	0.251	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.265	-	-	0.277	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.5	22.6	0.4	0.4	0.3	dB	
Time-averaged Power		22.5	22.5	22.6	1.10	1.10	1.07	Lin	
Left Cheek	Estimated SAR	-	-	0.342	-	-	0.366	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.208	-	-	0.223	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.194	-	-	0.208	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.201	-	-	0.215	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.5	22.6	0.5	0.4	0.3	dB	
Time-averaged Power		22.4	22.5	22.6	1.12	1.10	1.07	Lin	
Left Cheek	Estimated SAR	-	-	0.316	-	-	0.339	-	-
	Full SAR	-	-	-	-	-	-		

7.1.8 GSM/GPRS/EGPRS 1900 Head SAR results

Antenna 1

4-slot GPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		**25.9**			**Scaling factor***				
Conducted Power		**25.3**	**25.4**	**25.8**	**0.6**	**0.5**	**0.1**	**dB**	
Time-averaged Power		**22.3**	**22.4**	**22.8**	**1.15**	**1.12**	**1.02**	**Lin**	
Left Cheek	Estimated SAR	0.127	0.133	0.145	0.146	0.149	0.148	0.00	-
	Full SAR	-	0.136	-	-	0.153	-		
Left Tilt	Estimated SAR	-	0.084	-	-	0.094	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.101	-	-	0.113	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.103	-	-	0.116	-	-	-
	Full SAR	-	-	-	-	-	-		

4-slot 8PSK EGPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		**23.4**			**Scaling factor***				
Conducted Power		**22.7**	**22.8**	**23.2**	**0.7**	**0.6**	**0.2**	**dB**	
Time-averaged Power		**19.7**	**19.8**	**20.2**	**1.17**	**1.15**	**1.05**	**Lin**	
Left Cheek	Estimated SAR	-	-	0.068	-	-	0.071	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

4-slot GPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		**25.9**			**Scaling factor***				
Conducted Power		**25.3**	**25.4**	**25.8**	**0.6**	**0.5**	**0.1**	**dB**	
Time-averaged Power		**22.3**	**22.4**	**22.8**	**1.15**	**1.12**	**1.02**	**Lin**	
Left Cheek	Estimated SAR	0.280	0.289	0.326	0.321	0.324	0.334	0.01	**H8**
	Full SAR	-	-	0.331	-	-	**0.339**		
Left Tilt	Estimated SAR	-	0.151	-	-	0.169	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.198	-	-	0.222	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.180	-	-	0.202	-	-	-
	Full SAR	-	-	-	-	-	-		

4-slot 8PSK EGPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		23.4			Scaling factor*				
Conducted Power		22.7	22.8	23.2	0.7	0.6	0.2	dB	
Time-averaged Power		19.7	19.8	20.2	1.17	1.15	1.05	Lin	
Left Cheek	Estimated SAR	-	-	0.170	-	-	0.178	-	-
	Full SAR	-	-	-	-	-	-		

7.1.9 WCDMA1900 (Band 2) Head SAR results

Antenna 1

WCDMA1900 (Band 2)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.7	23.7	23.6	0.7	0.7	0.8	dB	
Time-averaged Power		23.7	23.7	23.6	1.17	1.17	1.20	Lin	
Left Cheek	Estimated SAR	0.270	0.278	0.299	0.317	0.327	0.359	0.02	-
	Full SAR	-	-	0.318	-	-	0.382		
Left Tilt	Estimated SAR	-	0.175	-	-	0.206	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.231	-	-	0.271	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.204	-	-	0.240	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA1900 (Band 2)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.7	23.7	23.6	0.7	0.7	0.8	dB	
Time-averaged Power		23.7	23.7	23.6	1.17	1.17	1.20	Lin	
Left Cheek	Estimated SAR	0.578	0.589	0.569	0.679	0.692	0.684	0.00	**H9**
	Full SAR	-	0.586	-	-	**0.688**	-		
Left Tilt	Estimated SAR	-	0.315	-	-	0.370	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.401	-	-	0.471	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.381	-	-	0.448	-	-	-
	Full SAR	-	-	-	-	-	-		

7.1.10 LTE1900 (Band 2) Head SAR results

Antenna 1

LTE1900 (Band 2) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.4	0.5	0.5	0.5	dB	
Time-averaged Power		23.4	23.4	23.4	1.12	1.12	1.12	Lin	
Left Cheek	Estimated SAR	-	0.278	-	-	0.312	-	0.02	-
	Full SAR	-	0.298	-	-	0.334	-		
Left Tilt	Estimated SAR	-	0.201	-	-	0.226	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.232	-	-	0.260	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.214	-	-	0.240	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.230	-	-	0.258	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.149	-	-	0.167	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.179	-	-	0.201	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.170	-	-	0.191	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.3	22.4	0.5	0.6	0.5	dB	
Time-averaged Power		22.4	22.3	22.4	1.12	1.15	1.12	Lin	
Left Cheek	Estimated SAR	0.196	-	-	0.220	-	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE1900 (Band 2) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.4	0.5	0.5	0.5	dB	
Time-averaged Power		23.4	23.4	23.4	1.12	1.12	1.12	Lin	
Left Cheek	Estimated SAR	-	0.574	-	-	0.644	-	0.00	**H10**
	Full SAR	-	0.578	-	-	**0.649**	-		
Left Tilt	Estimated SAR	-	0.318	-	-	0.357	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.415	-	-	0.466	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.388	-	-	0.435	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.427	-	-	0.479	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.240	-	-	0.269	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.314	-	-	0.352	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.286	-	-	0.321	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.3	22.4	0.5	0.6	0.5	dB	
Time-averaged Power		22.4	22.3	22.4	1.12	1.15	1.12	Lin	
Left Cheek	Estimated SAR	0.438	-	-	0.491	-	-	-	-
	Full SAR	-	-	-	-	-	-		

7.1.11 LTE2500 (Band 7) Head SAR results

Antenna 1

LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 99									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		23.4			Scaling factor*				
Conducted Power		22.7	22.9	22.8	0.7	0.5	0.6	dB	
Time-averaged Power		22.7	22.9	22.8	1.17	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.350	-	-	0.393	-	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	0.171	-	-	0.192	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.683	-	-	0.766	-	0.00	**H11**
	Full SAR	-	0.685	-	-	**0.769**	-		
Right Tilt	Estimated SAR	-	0.227	-	-	0.255	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		21.8	21.8	22.0	0.6	0.6	0.4	dB	
Time-averaged Power		21.8	21.8	22.0	1.15	1.15	1.10	Lin	
Left Cheek	Estimated SAR	-	-	0.275	-	-	0.302	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.184	-	-	0.202	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.504	-	-	0.553	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.149	-	-	0.163	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		22.0	21.8	21.9	0.4	0.6	0.5	dB	
Time-averaged Power		22.0	21.8	21.9	1.10	1.15	1.12	Lin	
Right Cheek	Estimated SAR	0.510	-	-	0.559	-	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 99									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		23.4			Scaling factor*				
Conducted Power		22.7	22.9	22.8	0.7	0.5	0.6	dB	
Time-averaged Power		22.7	22.9	22.8	1.17	1.12	1.15	Lin	
Left Cheek	Estimated SAR	-	0.140	-	-	0.157	-	0.01	-
	Full SAR	-	0.147	-	-	0.165	-		
Left Tilt	Estimated SAR	-	0.052	-	-	0.059	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.111	-	-	0.125	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.087	-	-	0.098	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		21.8	21.8	22.0	0.6	0.6	0.4	dB	
Time-averaged Power		21.8	21.8	22.0	1.15	1.15	1.10	Lin	
Left Cheek	Estimated SAR	-	-	0.121	-	-	0.133	-	-
	Full SAR	-	-	-	-	-	-		
Left Tilt	Estimated SAR	-	-	0.043	-	-	0.047	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	-	0.098	-	-	0.107	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	-	0.074	-	-	0.081	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		22.0	21.8	21.9	0.4	0.6	0.5	dB	
Time-averaged Power		22.0	21.8	21.9	1.10	1.15	1.12	Lin	
Left Cheek	Estimated SAR	0.135	-	-	0.148	-	-	-	-
	Full SAR	-	-	-	-	-	-		

7.1.12 WLAN2450 Head SAR results

WLAN2450 b-mode DSSS									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1 2412.0 MHz	CH 6 2437.0 MHz	CH 11 2462.0 MHz	CH 1 2412.0 MHz	CH 6 2437.0 MHz	CH 11 2462.0 MHz		
Data rate		1	11	11	Scaling factor*			Mbps	
Upper limit		18.5	18.5	18.5					
Conducted Power		17.9	17.7	17.6	0.6	0.8	0.9	dB	
Time-averaged Power		17.9	17.7	17.6	1.14	1.20	1.23	Lin	
Left Cheek	Estimated SAR	0.500	0.538	0.448	0.572	0.643	0.551	0.02	H12
	Full SAR	-	0.558	-	-	**0.667**	-		
Left Tilt	Estimated SAR	-	0.293	-	-	0.350	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Cheek	Estimated SAR	-	0.242	-	-	0.289	-	-	-
	Full SAR	-	-	-	-	-	-		
Right Tilt	Estimated SAR	-	0.197	-	-	0.236	-	-	-
	Full SAR	-	-	-	-	-	-		

Adjusted SAR calculations for the next OFDM test configurations

Adjusted SAR							
Test configuration used	Next test configuration	Device Orientation	Reported 1g SAR for test cfg used [W/kg]	Tuning target for test cfg used [dBm]*	Tuning target for next test cfg [dBm]*	Adjusted 1g SAR [W/kg]	Adjusted SAR > 1.20 [YES/NO]
DSSS b-mode 20 MHz Data rate 11	OFDM g-mode 20MHz Data rate 6	Left Cheek	0.667	17	17	0.667	NO

* Tuning targets are used as [mW] when calculated Adjusted SAR.

Individual Head SAR plots are given in Appendix B.

Simultaneous transmissions: Combined Head 1g SAR results – WLAN and Individual band Max results - Antenna 1

Test configuration	WLAN 2450	LTE700 (Band 12)	LTE700 (Band 17)	2-slot GPRS850	WCDMA 850 (Band 5)	LTE850 (Band 5)	WCDMA 1700/2100 (Band 4)	LTE 1700/2100 (Band 4)
Left Cheek	0.667	0.241	0.290	0.229	0.357	0.240	0.353	0.308
Left Tilt	0.350	0.136	0.132	0.143	0.210	0.160	0.241	0.197
Right Cheek	0.289	0.333	0.188	0.431	0.415	0.305	0.282	0.205
Right Tilt	0.236	0.183	0.107	0.201	0.223	0.151	0.203	0.176
Test configuration	**4-slot GPRS1900**	**WCDMA 1900 (Band 2)**	**LTE 1900 (Band 2)**	**LTE 2500 (Band 7)**	**-**	**-**	**-**	**-**
Left Cheek	0.153	0.382	0.334	0.393	-	-	-	-
Left Tilt	0.094	0.206	0.226	0.202	-	-	-	-
Right Cheek	0.113	0.271	0.260	0.769	-	-	-	-
Right Tilt	0.116	0.240	0.240	0.255	-	-	-	-

Simultaneous transmissions: Combined Head 1g SAR results – WLAN Max + Max combined results - Antenna 1

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Left Cheek	**0.908**	**0.957**	**0.896**	**1.024**	**0.907**	**1.020**	**0.975**	**0.820**
Left Tilt	0.486	0.482	0.493	0.560	0.510	0.591	0.547	0.444
Right Cheek	0.622	0.477	0.720	0.704	0.594	0.571	0.494	0.402
Right Tilt	0.419	0.343	0.437	0.459	0.387	0.439	0.412	0.352
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Left Cheek	**1.049**	**1.001**	**1.060**	-	-	-	-	-
Left Tilt	0.556	0.576	0.552	-	-	-	-	-
Right Cheek	0.560	0.549	1.058	-	-	-	-	-
Right Tilt	0.476	0.476	0.491	-	-	-	-	-

Simultaneous transmissions: Combined Head 1g SAR results – WLAN and Individual band Max results - Antenna 2

Test configuration	WLAN 2450	LTE700 (Band 12)	LTE700 (Band 17)	2-slot GPRS850	WCDMA 850 (Band 5)	LTE850 (Band 5)	WCDMA 1700/2100 (Band 4)	LTE 1700/2100 (Band 4)
Left Cheek	0.667	0.323	0.280	0.578	0.507	0.416	0.584	0.409
Left Tilt	0.350	0.160	0.126	0.289	0.342	0.240	0.363	0.291
Right Cheek	0.289	0.233	0.191	0.409	0.460	0.329	0.370	0.251
Right Tilt	0.236	0.095	0.107	0.249	0.296	0.224	0.387	0.277
Test configuration	**4-slot GPRS1900**	**WCDMA 1900 (Band 2)**	**LTE 1900 (Band 2)**	**LTE 2500 (Band 7)**	**-**	**-**	**-**	**-**
Left Cheek	0.339	0.688	0.649	0.165	-	-	-	-
Left Tilt	0.169	0.370	0.357	0.059	-	-	-	-
Right Cheek	0.222	0.471	0.466	0.125	-	-	-	-
Right Tilt	0.202	0.448	0.435	0.098	-	-	-	-

Simultaneous transmissions: Combined Head 1g SAR results – WLAN Max + Max combined results - Antenna 2

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Left Cheek	**0.990**	**0.947**	**1.245**	**1.174**	**1.083**	**1.251**	**1.076**	**1.006**
Left Tilt	0.510	0.476	0.639	0.692	0.590	0.713	0.641	0.519
Right Cheek	0.522	0.480	0.698	0.749	0.618	0.659	0.540	0.511
Right Tilt	0.331	0.343	0.485	0.532	0.460	0.623	0.513	0.438
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Left Cheek	**1.355**	**1.316**	**0.832**	-	-	-	-	-
Left Tilt	0.720	0.707	0.409	-	-	-	-	-
Right Cheek	0.760	0.755	0.414	-	-	-	-	-
Right Tilt	0.684	0.671	0.334	-	-	-	-	-

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for Head configurations for this product.

7.1.13 Combined 1g Head SAR data

The Combined SAR data given in the tables below has been voluntarily calculated and should be ignored for FCC certification.

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 and the cellular bands point-by-point and c) calculates the combined average SAR values.

The combinations are done for the maximum Head configuration of the each band or band group. Maximum configurations are given in the Max+Max tables in the Section 7.1 of the report. The same scaling factors are used in plotting as for the individual reported SAR value calculations.

Simultaneous transmissions: Reported* Combined 1g SAR Head results – SPEAG Combined Multiband algorithm results
Antenna 1

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Left Cheek	-	**0.700**	-	-	-	-	-	-
Plot no	-	-	-	-	-	-	-	-
Right Cheek	-	-	-	-	-	-	-	-
Plot no	-	-	-	-	-	-	-	-
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-** **-** **-**	**-** **-** **-**	**-**	**-**	**-**
Left Cheek	-	-	**0.810**	-	-	-	-	-
Plot no	-	-	-	-	-	-	-	-
Right Cheek	-	-	-	-	**-**	-	-	-
Plot no	-	-	-	-	-	-	-	-

Simultaneous transmissions: Reported* Combined 1g SAR Head results – SPEAG Combined Multiband algorithm results
Antenna 2

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Left Cheek	**0.714**	**-**	**0.751**	**0.734**	**0.708**	**0.845**	**0.774**	**0.704**
Plot no	-	-	-	-	-	-	-	-
Right Cheek	-	-	-	-	-	-	-	-
Plot no	-	-	-	-	-	-	-	-
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Left Cheek	**0.772**	**0.771**	**-**	**-**	-	-	-	-
Plot no	-	-	-	-	-	-	-	-
Right Cheek	-	-	-	-	-	-	-	-
Plot no	-	-	-	-	-	-	-	-

2-slot GPRS850 Antenna 2 + WLAN2450 has the highest Max+Max result of the 850MHz Antenna 1 and Antenna 2 grouped bands: 2-slot GPRS850, WCDMA850 (Band 5) and LTE850 (Band 5).

WCDMA1700/2100 (Band 4) Antenna 2 + WLAN2450 has the highest Max+Max result of the 1750MHz Antenna 1 and Antenna 2 grouped bands: WCDMA1700/2100 (Band 4) and LTE1700/2100 (Band 4).

WCDMA1900 (Band 2) Antenna 2 + WLAN2450 has the highest Max+Max result of the 1900MHz Antenna 1 and Antenna 2 grouped bands: 4-slot GPRS1900, WCDMA1900 (Band 2) and LTE1900 (Band 2).

Note:
* Reported SAR values are scaled to, or measured at, upper limit of power tuning tolerance.
The highest result within individual zoom scan or individual expanded zoom scan results is given in Section 1.2 for each transmitter. The highest result within contributing individual zoom scan, individual expanded zoom scan, Speag combined algorithm or combined expanded zoom scan results is given in the Section for the simultaneous transmitter combination giving the highest combinated value.

7.2 The measured Body-worn 15 mm SAR values for the test device

7.2.1 LTE700 (Band 12) Body-worn 15 mm SAR results

Antenna 1

LTE700 (Band 12) - 10MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.2	23.4	0.7	0.7	0.5	dB	
Time-averaged Power		23.2	23.2	23.4	1.17	1.17	1.12	Lin	
Back	Estimated SAR	-	-	0.375	-	-	0.421	0.01	B1
	Full SAR	-	-	0.370	-	-	**0.415**		
Display	Estimated SAR	-	-	0.347	-	-	0.389	-	-
	Full SAR	-	-	-	-	-	-		
LTE700 (Band 12) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.1	22.3	22.4	0.8	0.6	0.5	dB	
Time-averaged Power		22.1	22.3	22.4	1.20	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.283	-	-	0.318	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.265	-	-	0.297	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE700 (Band 12) - 10MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.2	23.4	0.7	0.7	0.5	dB	
Time-averaged Power		23.2	23.2	23.4	1.17	1.17	1.12	Lin	
Back	Estimated SAR	-	-	0.351	-	-	0.394	0.00	-
	Full SAR	-	-	0.347	-	-	0.389		
Display	Estimated SAR	-	-	0.271	-	-	0.304	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 12) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.1	22.3	22.4	0.8	0.6	0.5	dB	
Time-averaged Power		22.1	22.3	22.4	1.20	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.250	-	-	0.281	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.176	-	-	0.197	-	-
	Full SAR	-	-	-	-	-	-		

7.2.2 LTE700 (Band 17) Body-worn 15 mm SAR results

Antenna 1

LTE700 (Band 17) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.6	0.5	0.5	0.3	dB	
Time-averaged Power		23.4	23.4	23.6	1.12	1.12	1.07	Lin	
Back	Estimated SAR	-	-	0.354	-	-	0.379	0.00	B2
	Full SAR	-	-	0.358	-	-	**0.384**		
Display	Estimated SAR	-	-	0.340	-	-	0.364	-	-
	Full SAR	-	-	-	-	-	-		
LTE700 (Band 17) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.2	22.3	22.4	0.7	0.6	0.5	dB	
Time-averaged Power		22.2	22.3	22.4	1.17	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.272	-	-	0.305	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.254	-	-	0.285	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE700 (Band 17) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.6	0.5	0.5	0.3	dB	
Time-averaged Power		23.4	23.4	23.6	1.12	1.12	1.07	Lin	
Back	Estimated SAR	-	-	0.314	-	-	0.336	0.02	-
	Full SAR	-	-	0.296	-	-	0.317		
Display	Estimated SAR	-	-	0.230	-	-	0.246	-	-
	Full SAR	-	-	-	-	-	-		
LTE700 (Band 17) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.2	22.3	22.4	0.7	0.6	0.5	dB	
Time-averaged Power		22.2	22.3	22.4	1.17	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.233	-	-	0.261	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.169	-	-	0.190	-	-
	Full SAR	-	-	-	-	-	-		

7.2.3 GSM/GPRS/EGPRS 850 Body-worn 15 mm SAR results

Antenna 1

2-slot GPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**31.4**			**Scaling factor***				
Conducted Power		**31.2**	**31.2**	**31.0**	**0.2**	**0.2**	**0.4**	**dB**	
Time-averaged Power		**25.2**	**25.2**	**25.0**	**1.05**	**1.05**	**1.10**	**Lin**	
Back	Estimated SAR	0.293	0.292	0.332	0.307	0.306	0.364	0.01	-
	Full SAR	-	-	0.338	-	-	0.371		
Display	Estimated SAR	-	0.277	-	-	0.290	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

2-slot GPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**31.4**			**Scaling factor***				
Conducted Power		**31.2**	**31.2**	**31.0**	**0.2**	**0.2**	**0.4**	**dB**	
Time-averaged Power		**25.2**	**25.2**	**25.0**	**1.05**	**1.05**	**1.10**	**Lin**	
Back	Estimated SAR	0.512	0.473	0.450	0.536	0.495	0.493	0.01	B3
	Full SAR	0.526	-	-	**0.551**	-	-		
Display	Estimated SAR	-	0.411	-	-	0.430	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.4 WCDMA850 (Band 5) Body-worn 15 mm SAR results

Antenna 1

WCDMA850 (Band 5)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz		
Upper limit		**24.4**			**Scaling factor***				
Conducted Power		**23.6**	**23.5**	**23.6**	**0.8**	**0.9**	**0.8**	**dB**	
Time-averaged Power		**23.6**	**23.5**	**23.6**	**1.20**	**1.23**	**1.20**	**Lin**	
Back	Estimated SAR	0.341	0.321	0.329	0.410	0.395	0.396	0.01	-
	Full SAR	0.348	-	-	0.418	-	-		
Display	Estimated SAR	-	0.301	-	-	0.370	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA850 (Band 5)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz		
Upper limit		**24.4**			**Scaling factor***				
Conducted Power		**23.6**	**23.5**	**23.6**	**0.8**	**0.9**	**0.8**	**dB**	
Time-averaged Power		**23.6**	**23.5**	**23.6**	**1.20**	**1.23**	**1.20**	**Lin**	
Back	Estimated SAR	0.495	0.468	0.466	0.595	0.576	0.560	0.01	B4
	Full SAR	0.503	-	-	**0.605**	-	-		
Display	Estimated SAR	-	0.439	-	-	0.540	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.5 LTE850 (Band 5) Body-worn 15 mm SAR results

Antenna 1

LTE850 (Band 5) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.6	23.3	0.7	0.3	0.6	dB	
Time-averaged Power		23.2	23.6	23.3	1.17	1.07	1.15	Lin	
Back	Estimated SAR	-	0.238	-	-	0.255	-	0.00	-
	Full SAR	-	0.233	-	-	0.250	-		
Display	Estimated SAR	-	0.237	-	-	0.254	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE850 (Band 5) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.4	22.3	0.5	0.5	0.6	dB	
Time-averaged Power		22.4	22.4	22.3	1.12	1.12	1.15	Lin	
Back	Estimated SAR	-	0.165	-	-	0.185	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.168	-	-	0.188	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE850 (Band 5) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Back	Estimated SAR	-	0.180	-	-	0.202	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE850 (Band 5) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.6	23.3	0.7	0.3	0.6	dB	
Time-averaged Power		23.2	23.6	23.3	1.17	1.07	1.15	Lin	
Back	Estimated SAR	-	0.374	-	-	0.401	-	0.01	B5
	Full SAR	-	0.380	-	-	**0.407**	-		
Display	Estimated SAR	-	0.354	-	-	0.379	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE850 (Band 5) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.4	22.3	0.5	0.5	0.6	dB	
Time-averaged Power		22.4	22.4	22.3	1.12	1.12	1.15	Lin	
Back	Estimated SAR	-	0.291	-	-	0.327	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.278	-	-	0.312	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE850 (Band 5) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Back	Estimated SAR	-	0.296	-	-	0.332	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.6 WCDMA1700/2100 (Band 4) Body-worn 15 mm SAR results

Antenna 1

WCDMA1700/2100 (Band 4)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.5	23.7	23.6	0.9	0.7	0.8	dB	
Time-averaged Power		23.5	23.7	23.6	1.23	1.17	1.20	Lin	
Back	Estimated SAR	0.600	0.675	0.616	0.738	0.793	0.741	0.02	B6
	Full SAR	-	0.653	-	-	**0.767**	-		
Display	Estimated SAR	-	0.429	-	-	0.504	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA1700/2100 (Band 4)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.5	23.7	23.6	0.9	0.7	0.8	dB	
Time-averaged Power		23.5	23.7	23.6	1.23	1.17	1.20	Lin	
Back	Estimated SAR	0.400	0.438	0.453	0.492	0.515	0.545	0.00	-
	Full SAR	-	-	0.457	-	-	0.549		
Display	Estimated SAR	-	0.382	-	-	0.449	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.7 LTE1700/2100 (Band 4) Body-worn 15 mm SAR results

Antenna 1

LTE1700/2100 (Band 4) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.6	23.7	23.7	0.3	0.2	0.2	dB	
Time-averaged Power		23.6	23.7	23.7	1.07	1.05	1.05	Lin	
Back	Estimated SAR	-	0.602	-	-	0.630	-	0.01	B7
	Full SAR	-	0.610	-	-	**0.639**	-		
Display	Estimated SAR	-	0.441	-	-	0.462	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE1700/2100 (Band 4) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.5	22.6	0.4	0.4	0.3	dB	
Time-averaged Power		22.5	22.5	22.6	1.10	1.10	1.07	Lin	
Back	Estimated SAR	-	-	0.470	-	-	0.504	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.351	-	-	0.376	-	-
	Full SAR	-	-	-	-	-	-		
LTE1700/2100 (Band 4) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.5	22.6	0.5	0.4	0.3	dB	
Time-averaged Power		22.4	22.5	22.6	1.12	1.10	1.07	Lin	
Back	Estimated SAR	-	-	0.462	-	-	0.495	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE1700/2100 (Band 4) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.6	23.7	23.7	0.3	0.2	0.2	dB	
Time-averaged Power		23.6	23.7	23.7	1.07	1.05	1.05	Lin	
Back	Estimated SAR	-	0.340	-	-	0.356	-	0.01	-
	Full SAR	-	0.331	-	-	0.347	-		
Display	Estimated SAR	-	0.310	-	-	0.325	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE1700/2100 (Band 4) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.5	22.6	0.4	0.4	0.3	dB	
Time-averaged Power		22.5	22.5	22.6	1.10	1.10	1.07	Lin	
Back	Estimated SAR	-	-	0.256	-	-	0.274	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.242	-	-	0.259	-	-
	Full SAR	-	-	-	-	-	-		
LTE1700/2100 (Band 4) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.5	22.6	0.5	0.4	0.3	dB	
Time-averaged Power		22.4	22.5	22.6	1.12	1.10	1.07	Lin	
Back	Estimated SAR	-	-	0.324	-	-	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.8 GSM/GPRS/EGPRS 1900 Body-worn 15 mm SAR results

Antenna 1

4-slot GPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		**25.9**			**Scaling factor***				
Conducted Power		**25.3**	**25.4**	**25.8**	**0.6**	**0.5**	**0.1**	**dB**	
Time-averaged Power		**22.3**	**22.4**	**22.8**	**1.15**	**1.12**	**1.02**	**Lin**	
Back	Estimated SAR	-	0.147	-	-	0.165	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.155	0.169	0.172	0.178	0.190	0.176	0.01	-
	Full SAR	-	0.176	-	-	0.197	-		

Antenna 2

4-slot GPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		**25.9**			**Scaling factor***				
Conducted Power		**25.3**	**25.4**	**25.8**	**0.6**	**0.5**	**0.1**	**dB**	
Time-averaged Power		**22.3**	**22.4**	**22.8**	**1.15**	**1.12**	**1.02**	**Lin**	
Back	Estimated SAR	0.284	0.219	0.232	0.326	0.246	0.237	0.01	B8
	Full SAR	0.291	-	-	**0.334**	-	-		
Display	Estimated SAR	-	0.205	-	-	0.230	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.9 WCDMA1900 (Band 2) Body-worn 15 mm SAR results

Antenna 1

WCDMA1900 (Band 2)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz		
Upper limit		**24.4**			**Scaling factor***				
Conducted Power		**23.7**	**23.7**	**23.6**	**0.7**	**0.7**	**0.8**	**dB**	
Time-averaged Power		**23.7**	**23.7**	**23.6**	**1.17**	**1.17**	**1.20**	**Lin**	
Back	Estimated SAR	-	0.376	-	-	0.442	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.390	0.397	0.360	0.458	0.466	0.433	0.01	-
	Full SAR	-	0.403	-	-	0.473	-		

Antenna 2

WCDMA1900 (Band 2)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.7	23.7	23.6	0.7	0.7	0.8	dB	
Time-averaged Power		23.7	23.7	23.6	1.17	1.17	1.20	Lin	
Back	Estimated SAR	0.439	0.509	0.425	0.516	0.598	0.511	0.03	B9
	Full SAR	-	0.535	-	-	**0.629**	-		
Display	Estimated SAR	-	0.358	-	-	0.421	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.10 LTE1900 (Band 2) Body-worn 15 mm SAR results

Antenna 1

LTE1900 (Band 2) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.4	0.5	0.5	0.5	dB	
Time-averaged Power		23.4	23.4	23.4	1.12	1.12	1.12	Lin	
Back	Estimated SAR	-	0.353	-	-	0.396	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.392	-	-	0.440	-	0.01	-
	Full SAR	-	0.405	-	-	0.454	-		
LTE1900 (Band 2) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Back	Estimated SAR	-	0.273	-	-	0.306	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.279	-	-	0.313	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE1900 (Band 2) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.3	22.4	0.5	0.6	0.5	dB	
Time-averaged Power		22.4	22.3	22.4	1.12	1.15	1.12	Lin	
Display	Estimated SAR	0.279	-	-	0.313	-	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE1900 (Band 2) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.4	0.5	0.5	0.5	dB	
Time-averaged Power		23.4	23.4	23.4	1.12	1.12	1.12	Lin	
Back	Estimated SAR	-	0.488	-	-	0.548	-	-	B10
	Full SAR	-	0.488	-	-	**0.548**	-		
Display	Estimated SAR	-	0.370	-	-	0.415	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE1900 (Band 2) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Back	Estimated SAR	-	0.305	-	-	0.342	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.291	-	-	0.327	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE1900 (Band 2) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.3	22.4	0.5	0.6	0.5	dB	
Time-averaged Power		22.4	22.3	22.4	1.12	1.15	1.12	Lin	
Back	Estimated SAR	0.299	-	-	0.335	-	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.11 LTE2500 (Band 7) Body-worn 15 mm SAR results

Antenna 1

LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 99									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		23.4			Scaling factor*				
Conducted Power		22.7	22.9	22.8	0.7	0.5	0.6	dB	
Time-averaged Power		22.7	22.9	22.8	1.17	1.12	1.15	Lin	
Back	Estimated SAR	-	0.529	-	-	0.594	-	0.01	B11
	Full SAR	-	0.519	-	-	**0.582**	-		
Display	Estimated SAR	-	0.410	-	-	0.460	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE2500 (Band 7) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		21.8	21.8	22.0	0.6	0.6	0.4	dB	
Time-averaged Power		21.8	21.8	22.0	1.15	1.15	1.10	Lin	
Back	Estimated SAR	-	-	0.449	-	-	0.492	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.350	-	-	0.384	-	-
	Full SAR	-	-	-	-	-	-		
LTE2500 (Band 7) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		22.0	21.8	21.9	0.4	0.6	0.5	dB	
Time-averaged Power		22.0	21.8	21.9	1.10	1.15	1.12	Lin	
Back	Estimated SAR	0.398	-	-	0.436	-	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 99									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		23.4			Scaling factor*				
Conducted Power		22.7	22.9	22.8	0.7	0.5	0.6	dB	
Time-averaged Power		22.7	22.9	22.8	1.17	1.12	1.15	Lin	
Back	Estimated SAR	-	0.476	-	-	0.534	-	0.02	-
	Full SAR	-	0.495	-	-	0.555	-		
Display	Estimated SAR	-	0.457	-	-	0.513	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		21.8	21.8	22.0	0.6	0.6	0.4	dB	
Time-averaged Power		21.8	21.8	22.0	1.15	1.15	1.10	Lin	
Back	Estimated SAR	-	-	0.391	-	-	0.429	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.352	-	-	0.386	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		22.0	21.8	21.9	0.4	0.6	0.5	dB	
Time-averaged Power		22.0	21.8	21.9	1.10	1.15	1.12	Lin	
Back	Estimated SAR	0.385	-	-	0.422	-	-	-	-
	Full SAR	-	-	-	-	-	-		

7.2.12 WLAN2450 Body-worn 15mm SAR results

WLAN2450 b-mode DSSS									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1 2412.0 MHz	CH 6 2437.0 MHz	CH 11 2462.0 MHz	CH 1 2412.0 MHz	CH 6 2437.0 MHz	CH 11 2462.0 MHz		
Data rate		1	11	11	Scaling factor*			Mbps	
Upper limit		18.5	18.5	18.5					
Conducted Power		17.9	17.7	17.6	0.6	0.8	0.9	dB	
Time-averaged Power		17.9	17.7	17.6	1.14	1.20	1.23	Lin	
Back	Estimated SAR	0.065	0.052	0.034	0.074	0.062	0.042	0.00	B12
	Full SAR	0.065	-	-	**0.074**	-	-		
Display	Estimated SAR	-	0.035	-	-	0.042	-	-	-
	Full SAR	-	-	-	-	-	-		

Adjusted SAR calculations for the next OFDM test configurations

Adjusted SAR							
Test configuration used	Next test configuration	Device Orientation	Reported 1g SAR for test cfg used [W/kg]	Tuning target for test cfg used [dBm]*	Tuning target for next test cfg [dBm]*	Adjusted 1g SAR [W/kg]	Adjusted SAR > 1.20 [YES/NO]
DSSS b-mode 20 MHz Data rate 1	OFDM g-mode 20MHz Data rate 6	Back	0.074	17	17	0.074	NO

* Tuning targets are used as [mW] when calculated Adjusted SAR.

Individual Body-worn 15 mm SAR plots are given Appendix B.

Simultaneous transmissions: Combined Body-worn 15 mm 1g SAR results – WLAN and Individual band Max results - Antenna 1

Test configuration	WLAN 2450	LTE700 (Band 12)	LTE700 (Band 17)	2-slot GPRS850	WCDMA 850 (Band 5)	LTE850 (Band 5)	WCDMA 1700/2100 (Band 4)	LTE 1700/2100 (Band 4)
Back	0.074	0.415	0.384	0.371	0.418	0.250	0.767	0.639
Display	0.042	0.389	0.364	0.290	0.370	0.254	0.504	0.462
Test configuration	**4-slot GPRS1900**	**WCDMA 1900 (Band 2)**	**LTE 1900 (Band 2)**	**LTE 2500 (Band 7)**	**-**	**-**	**-**	**-**
Back	0.165	0.442	0.396	0.582	-	-	-	-
Display	0.197	0.473	0.454	0.460	-	-	-	-

Simultaneous transmissions: Combined Body-worn 15 mm 1g SAR results – WLAN Max + Max combined results - Antenna 1

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	**0.489**	**0.458**	**0.445**	**0.492**	**0.324**	**0.841**	**0.713**	0.239
Display	0.431	0.406	0.332	0.412	0.296	0.546	0.504	**0.239**
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	**0.516**	0.470	**0.656**	-	-	-	-	-
Display	0.515	**0.496**	0.502	-	-	-	-	-

Simultaneous transmissions: Combined Body-worn 15 mm 1g SAR results – WLAN and Individual band Max results - Antenna 2

Test configuration	WLAN 2450	LTE700 (Band 12)	LTE700 (Band 17)	2-slot GPRS850	WCDMA 850 (Band 5)	LTE850 (Band 5)	WCDMA 1700/2100 (Band 4)	LTE 1700/2100 (Band 4)
Back	0.074	0.389	0.317	0.551	0.605	0.407	0.549	0.347
Display	0.042	0.304	0.246	0.430	0.540	0.379	0.449	0.325
Test configuration	**4-slot GPRS1900**	**WCDMA 1900 (Band 2)**	**LTE 1900 (Band 2)**	**LTE 2500 (Band 7)**	**-**	**-**	**-**	**-**
Back	0.334	0.629	0.548	0.555	-	-	-	-
Display	0.230	0.421	0.415	0.513	-	-	-	-

Simultaneous transmissions: Combined Body-worn 15 mm 1g SAR results – WLAN Max + Max combined results - Antenna 2

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	**0.463**	**0.391**	**0.625**	**0.679**	**0.481**	**0.623**	**0.421**	**0.408**
Display	0.346	0.288	0.472	0.582	0.421	0.491	0.367	0.272
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	**0.703**	**0.622**	**0.629**	-	-	-	-	-
Display	0.463	0.457	0.555	-	-	-	-	-

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for Body-worn 15 mm configurations for this product.

7.2.13 Combined 1g Body-worn 15 mm SAR data

The Combined SAR data given in the tables below has been voluntarily calculated and should be ignored for FCC certification.

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 and the cellular bands point-by-point and c) calculates the combined average SAR values.

The combinations are done for the maximum Body configuration of the each band or band group. Maximum configurations are given in the Max+Max tables in the Section 7.2 of the report. The same scaling factors are used in plotting as for the individual reported SAR value calculations.

Simultaneous transmissions: Reported* Combined 1g SAR Body-worn 15 mm results – SPEAG Combined Multiband algorithm results

Antenna 1

Test configuration	**LTE700 (Band 12) + WLAN 2450**	**LTE700 (Band 17) + WLAN 2450**	**2-slot GPRS850 + WLAN 2450**	**WCDMA 850 (Band 5) + WLAN 2450**	**LTE850 (Band 5) + WLAN 2450**	**WCDMA 1700/2100 (Band 4) + WLAN 2450**	**LTE 1700/2100 (Band 4) + WLAN 2450**	**4-slot GPRS1900 + WLAN 2450**
Back	**0.427**	**0.386**	-	-	-	**0.794**	**0.636**	-
Display	-	-	-	-	-	-	-	-
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	-	-	**0.609**	-	**-**	-	-	-
Display	-	-	**-**	-	-	-	-	-

Simultaneous transmissions: Reported* Combined 1g SAR Body-worn 15 mm results – SPEAG Combined Multiband algorithm results
Antenna 2

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	-	-	**0.558**	**0.614**	**0.422**	-	-	**0.342**
Display	-	-	-	-	-	-	-	**-**
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	**0.613**	**0.561**	-	-	-	-	-	-
Display	-	-	-	-	-	-	-	-

WCDMA850 (Band 5)Antenna 2 + WLAN2450 has the highest Max+Max result of the 850MHz Antenna 1 and Antenna 2 grouped bands: 2-slot GPRS850, WCDMA850 (Band 5) and LTE850 (Band 5).

WCDMA1700/2100 (Band 4) Antenna 1 + WLAN2450 has the highest Max+Max result of the 1750MHz Antenna 1 and Antenna 2 grouped bands: WCDMA1700/2100 (Band 4) and LTE1700/2100 (Band 4).

WCDMA1900 (Band 2) Antenna 2 + WLAN2450 has the highest Max+Max result of the 1900MHz Antenna 1 and Antenna 2 grouped bands: 4-slot GPRS1900, WCDMA1900 (Band 2) and LTE1900 (Band 2).

Note:
* Reported SAR values are scaled to, or measured at, upper limit of power tuning tolerance.
The highest result within individual zoom scan or individual expanded zoom scan results is given in Section 1.2 for each transmitter. The highest result within contributing individual zoom scan, individual expanded zoom scan, Speag combined algorithm or combined expanded zoom scan results is given in the Section for the simultaneous transmitter combination giving the highest combinated value.

7.3 The measured Wireless Router 10 mm SAR values for the test device

7.3.1 LTE700 (Band 12) Wireless Router 10 mm SAR results

Antenna 1

LTE700 (Band 12) - 10MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		**23.9**			**Scaling factor***				
Conducted Power		**23.2**	**23.2**	**23.4**	**0.7**	**0.7**	**0.5**	**dB**	
Time-averaged Power		**23.2**	**23.2**	**23.4**	**1.17**	**1.17**	**1.12**	**Lin**	
Back	Estimated SAR	-	-	0.474	-	-	0.532	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.398	-	-	0.447	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.011	-	-	0.012	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.179	-	-	0.201	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.255	-	-	0.286	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.507	-	-	0.569	0.00	W1
	Full SAR	-	-	0.506	-	-	**0.568**		

LTE700 (Band 12) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		**22.9**			**Scaling factor***				
Conducted Power		**22.1**	**22.3**	**22.4**	**0.8**	**0.6**	**0.5**	**dB**	
Time-averaged Power		**22.1**	**22.3**	**22.4**	**1.20**	**1.15**	**1.12**	**Lin**	
Back	Estimated SAR	-	-	0.373	-	-	0.419	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.333	-	-	0.374	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.011	-	-	0.012	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.135	-	-	0.151	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.168	-	-	0.188	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.385	-	-	0.432	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE700 (Band 12) - 10MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.2	23.4	0.7	0.7	0.5	dB	
Time-averaged Power		23.2	23.2	23.4	1.17	1.17	1.12	Lin	
Back	Estimated SAR	-	-	0.528	-	-	0.592	0.04	-
	Full SAR	-	-	0.488	-	-	0.548		
Display	Estimated SAR	-	-	0.354	-	-	0.397	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.016	-	-	0.018	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.197	-	-	0.221	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.410	-	-	0.460	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.182	-	-	0.204	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 12) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz	CH 23060 704.0 MHz	CH 23095 707.5 MHz	CH 23130 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.1	22.3	22.4	0.8	0.6	0.5	dB	
Time-averaged Power		22.1	22.3	22.4	1.20	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.400	-	-	0.449	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.266	-	-	0.298	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.011	-	-	0.012	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.224	-	-	0.251	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.278	-	-	0.312	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.095	-	-	0.106	-	-
	Full SAR	-	-	-	-	-	-		

7.3.2 LTE700 (Band 17) Wireless Router 10 mm SAR results

Antenna 1

LTE700 (Band 17) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.6	0.5	0.5	0.3	dB	
Time-averaged Power		23.4	23.4	23.6	1.12	1.12	1.07	Lin	
Back	Estimated SAR	-	-	0.453	-	-	0.485	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.409	-	-	0.438	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.011	-	-	0.011	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.185	-	-	0.198	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.228	-	-	0.244	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.466	-	-	0.499	0.02	W2
	Full SAR	-	-	0.489	-	-	**0.524**		

LTE700 (Band 17) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.2	22.3	22.4	0.7	0.6	0.5	dB	
Time-averaged Power		22.2	22.3	22.4	1.17	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.350	-	-	0.393	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.323	-	-	0.362	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.010	-	-	0.011	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.147	-	-	0.165	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.152	-	-	0.171	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.359	-	-	0.403	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE700 (Band 17) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.4	23.4	23.6	0.5	0.5	0.3	dB	
Time-averaged Power		23.4	23.4	23.6	1.12	1.12	1.07	Lin	
Back	Estimated SAR	-	-	0.481	-	-	0.515	0.02	-
	Full SAR	-	-	0.464	-	-	0.497		
Display	Estimated SAR	-	-	0.329	-	-	0.353	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.016	-	-	0.018	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.260	-	-	0.279	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.386	-	-	0.414	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.163	-	-	0.175	-	-
	Full SAR	-	-	-	-	-	-		

LTE700 (Band 17) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz	CH 23780 709.0 MHz	CH 23790 710.0 MHz	CH 23800 711.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.2	22.3	22.4	0.7	0.6	0.5	dB	
Time-averaged Power		22.2	22.3	22.4	1.17	1.15	1.12	Lin	
Back	Estimated SAR	-	-	0.247	-	-	0.277	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	-	0.253	-	-	0.284	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	-	0.014	-	-	0.015	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	-	0.228	-	-	0.256	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	-	0.251	-	-	0.282	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	-	0.090	-	-	0.100	-	-
	Full SAR	-	-	-	-	-	-		

7.3.3 GSM/GPRS/EGPRS 850 Wireless Router 10 mm SAR results

Antenna 1

2-slot GPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**31.4**			**Scaling factor***				
Conducted Power		**31.2**	**31.2**	**31.0**	**0.2**	**0.2**	**0.4**	**dB**	
Time-averaged Power		**25.2**	**25.2**	**25.0**	**1.05**	**1.05**	**1.10**	**Lin**	
Back	Estimated SAR	0.397	0.371	0.427	0.416	0.388	0.468	0.01	-
	Full SAR	-	-	0.433	-	-	0.475		
Display	Estimated SAR	-	0.329	-	-	0.345	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.015	-	-	0.015	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.203	-	-	0.213	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.189	-	-	0.198	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.326	-	-	0.341	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

2-slot GPRS850									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz	CH 128 824.2 MHz	CH 190 836.6 MHz	CH 251 848.8 MHz		
Upper limit		**31.4**			**Scaling factor***				
Conducted Power		**31.2**	**31.2**	**31.0**	**0.2**	**0.2**	**0.4**	**dB**	
Time-averaged Power		**25.2**	**25.2**	**25.0**	**1.05**	**1.05**	**1.10**	**Lin**	
Back	Estimated SAR	0.592	0.569	0.532	0.620	0.596	0.583	0.01	W3
	Full SAR	0.604	-	-	**0.632**	-	-		
Display	Estimated SAR	-	0.480	-	-	0.503	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.017	-	-	0.018	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.303	-	-	0.317	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.501	-	-	0.525	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.307	-	-	0.321	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.4 WCDMA850 (Band 5) Wireless Router 10 mm SAR results

Antenna 1

WCDMA850 (Band 5)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.6	23.5	23.6	0.8	0.9	0.8	dB	
Time-averaged Power		23.6	23.5	23.6	1.20	1.23	1.20	Lin	
Back	Estimated SAR	0.412	0.406	0.411	0.495	0.499	0.494	0.01	-
	Full SAR	-	0.412	-	-	0.507	-		
Display	Estimated SAR	-	0.361	-	-	0.444	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.015	-	-	0.018	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.234	-	-	0.288	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.209	-	-	0.257	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.366	-	-	0.450	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA850 (Band 5)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz	CH 4132 826.4 MHz	CH 4175 835.0 MHz	CH 4233 846.6 MHz		
Upper limit		24.4			Scaling factor*				
Conducted Power		23.6	23.5	23.6	0.8	0.9	0.8	dB	
Time-averaged Power		23.6	23.5	23.6	1.20	1.23	1.20	Lin	
Back	Estimated SAR	0.449	0.435	0.432	0.540	0.535	0.519	0.02	W4
	Full SAR	0.469	-	-	**0.564**	-	-		
Display	Estimated SAR	-	0.399	-	-	0.491	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.013	-	-	0.016	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.239	-	-	0.294	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.408	-	-	0.502	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.251	-	-	0.309	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.5 LTE850 (Band 5) Wireless Router 10 mm SAR results

Antenna 1

LTE850 (Band 5) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.6	23.3	0.7	0.3	0.6	dB	
Time-averaged Power		23.2	23.6	23.3	1.17	1.07	1.15	Lin	
Back	Estimated SAR	-	0.326	-	-	0.349	-	0.01	-
	Full SAR	-	0.315	-	-	0.338	-		
Display	Estimated SAR	-	0.288	-	-	0.309	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.016	-	-	0.017	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.276	-	-	0.296	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.135	-	-	0.145	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.325	-	-	0.348	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE850 (Band 5) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.4	22.3	0.5	0.5	0.6	dB	
Time-averaged Power		22.4	22.4	22.3	1.12	1.12	1.15	Lin	
Back	Estimated SAR	-	0.245	-	-	0.275	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.220	-	-	0.247	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.012	-	-	0.014	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.230	-	-	0.258	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.094	-	-	0.105	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.233	-	-	0.261	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE850 (Band 5) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Back	Estimated SAR	-	0.254	-	-	0.285	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE850 (Band 5) - 10MHz - QPSK - 1 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		23.9			Scaling factor*				
Conducted Power		23.2	23.6	23.3	0.7	0.3	0.6	dB	
Time-averaged Power		23.2	23.6	23.3	1.17	1.07	1.15	Lin	
Back	Estimated SAR	-	0.440	-	-	0.471	-	0.01	W5
	Full SAR	-	0.448	-	-	**0.480**	-		
Display	Estimated SAR	-	0.390	-	-	0.418	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.011	-	-	0.012	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.255	-	-	0.273	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.370	-	-	0.396	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.239	-	-	0.256	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE850 (Band 5) - 10MHz - QPSK - 25 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.4	22.4	22.3	0.5	0.5	0.6	dB	
Time-averaged Power		22.4	22.4	22.3	1.12	1.12	1.15	Lin	
Back	Estimated SAR	-	0.349	-	-	0.392	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.310	-	-	0.348	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.008	-	-	0.009	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.189	-	-	0.212	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.313	-	-	0.351	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.205	-	-	0.230	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE850 (Band 5) - 10MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz	CH 20450 829.0 MHz	CH 20525 836.5 MHz	CH 20600 844.0 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.3	22.4	22.3	0.6	0.5	0.6	dB	
Time-averaged Power		22.3	22.4	22.3	1.15	1.12	1.15	Lin	
Back	Estimated SAR	-	0.344	-	-	0.386	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.6 WCDMA1700/2100 (Band 4) Wireless Router 10 mm SAR results

Antenna 1

WCDMA1700/2100 (Band 4)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.8	22.4	0.4	0.1	0.5	dB	
Time-averaged Power		23.5	23.7	23.6	1.10	1.02	1.12	Lin	
Back	Estimated SAR	0.581	0.639	0.575	0.637	0.654	0.645	0.00	-
	Full SAR	-	0.638	-	-	0.653	-		
Display	Estimated SAR	-	0.464	-	-	0.475	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.055	-	-	0.056	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.550	-	-	0.563	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.095	-	-	0.097	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.202	-	-	0.207	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA1700/2100 (Band 4)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz	CH 1312 1712.4 MHz	CH 1412 1732.4 MHz	CH 1513 1752.6 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.8	22.4	0.4	0.1	0.5	dB	
Time-averaged Power		23.5	23.7	23.6	1.10	1.02	1.12	Lin	
Back	Estimated SAR	0.667	0.678	0.700	0.731	0.694	0.785	-	W6
	Full SAR	-	-	0.700	-	-	**0.785**		
Display	Estimated SAR	-	0.552	-	-	0.565	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.029	-	-	0.030	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.459	-	-	0.470	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.208	-	-	0.213	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.134	-	-	0.137	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.7 LTE1700/2100 (Band 4) Wireless Router 10 mm SAR results

Antenna 1

LTE1700/2100 (Band 4) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		21.9	22.1	21.8	0.5	0.3	0.6	dB	
Time-averaged Power		21.9	22.1	21.8	1.12	1.07	1.15	Lin	
Back	Estimated SAR	-	0.481	-	-	0.515	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.489	-	-	0.524	-	0.06	-
	Full SAR	-	0.550	-	-	0.589	-		
Top	Estimated SAR	-	0.030	-	-	0.032	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.357	-	-	0.383	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.086	-	-	0.092	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.143	-	-	0.153	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		20.8	20.8	20.7	0.6	0.6	0.7	dB	
Time-averaged Power		20.8	20.8	20.7	1.15	1.15	1.17	Lin	
Back	Estimated SAR	-	0.383	-	-	0.440	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.387	-	-	0.444	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.026	-	-	0.030	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.281	-	-	0.323	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.067	-	-	0.077	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.111	-	-	0.127	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		20.8	20.6	20.8	0.6	0.8	0.6	dB	
Time-averaged Power		20.8	20.6	20.8	1.15	1.20	1.15	Lin	
Display	Estimated SAR	-	-	0.300	-	-	0.344	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE1700/2100 (Band 4) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		21.9	22.1	21.8	0.5	0.3	0.6	dB	
Time-averaged Power		21.9	22.1	21.8	1.12	1.07	1.15	Lin	
Back	Estimated SAR	-	0.527	-	-	0.565	-	0.03	W7
	Full SAR	-	0.556	-	-	**0.596**	-		
Display	Estimated SAR	-	0.405	-	-	0.434	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.019	-	-	0.020	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.263	-	-	0.282	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.159	-	-	0.170	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.098	-	-	0.105	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1700/2100 (Band 4) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		20.8	20.8	20.7	0.6	0.6	0.7	dB	
Time-averaged Power		20.8	20.8	20.7	1.15	1.15	1.17	Lin	
Back	Estimated SAR	-	0.434	-	-	0.498	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.312	-	-	0.358	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.016	-	-	0.018	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.207	-	-	0.238	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.124	-	-	0.142	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.083	-	-	0.095	-	-	-
	Full SAR	-	-	-	-	-	-		
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz	CH 20050 1720.0 MHz	CH 20175 1732.5 MHz	CH 20300 1745.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		20.8	20.6	20.8	0.6	0.8	0.6	dB	
Time-averaged Power		20.8	20.6	20.8	1.15	1.20	1.15	Lin	
Back	Estimated SAR	-	-	0.420	-	-	0.482	-	-
	Full SAR	-	-	-	-	-	-		

7.3.8 GSM/GPRS/EGPRS 1900 Wireless Router 10 mm SAR results

Antenna 1

4-slot GPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		25.9			Scaling factor*				
Conducted Power		25.3	25.4	25.8	0.6	0.5	0.1	dB	
Time-averaged Power		22.3	22.4	22.8	1.15	1.12	1.02	Lin	
Back	Estimated SAR	-	0.311	-	-	0.349	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	-	0.340	-	-	0.381	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.010	-	-	0.011	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.394	0.392	0.426	0.452	0.440	0.436	0.00	-
	Full SAR	0.395	-	-	0.454	-	-		
Left	Estimated SAR	-	0.054	-	-	0.060	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.111	-	-	0.125	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

4-slot GPRS1900									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz		
Upper limit		25.9			Scaling factor*				
Conducted Power		25.3	25.4	25.8	0.6	0.5	0.1	dB	
Time-averaged Power		22.3	22.4	22.8	1.15	1.12	1.02	Lin	
Back	Estimated SAR	0.477	0.460	0.495	0.548	0.516	0.507	0.05	W8
	Full SAR	0.525	-	-	**0.603**	-	-		
Display	Estimated SAR	-	0.367	-	-	0.412	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.014	-	-	0.016	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.327	-	-	0.367	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.259	-	-	0.291	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.081	-	-	0.091	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.9 WCDMA1900 (Band 2) Wireless Router 10 mm SAR results

Antenna 1

WCDMA1900 (Band 2)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.4	22.5	0.4	0.5	0.4	dB	
Time-averaged Power		22.5	22.5	22.5	1.10	1.12	1.10	Lin	
Back	Estimated SAR	-	0.524	-	-	0.588	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.552	0.546	0.502	0.605	0.613	0.550	0.03	-
	Full SAR	-	0.580	-	-	0.651	-		
Top	Estimated SAR	-	0.018	-	-	0.020	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.472	-	-	0.530	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.149	-	-	0.167	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.166	-	-	0.186	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

WCDMA1900 (Band 2)									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz	CH 9262 1852.4 MHz	CH 9400 1880.0 MHz	CH 9538 1907.6 MHz		
Upper limit		22.9			Scaling factor*				
Conducted Power		22.5	22.4	22.5	0.4	0.5	0.4	dB	
Time-averaged Power		22.5	22.4	22.5	1.10	1.12	1.10	Lin	
Back	Estimated SAR	0.686	0.691	0.658	0.752	0.775	0.721	0.08	W9
	Full SAR	-	0.769	-	-	**0.863**	-		
Display	Estimated SAR	-	0.538	-	-	0.604	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.023	-	-	0.026	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.527	-	-	0.591	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.308	-	-	0.346	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.148	-	-	0.166	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.10 LTE1900 (Band 2) Wireless Router 10 mm SAR results

Antenna 1

LTE1900 (Band 2) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		22.2	22.1	22.1	0.2	0.3	0.3	dB	
Time-averaged Power		22.2	22.1	22.1	1.05	1.07	1.07	Lin	
Back	Estimated SAR	0.484	-	-	0.507	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.529	-	-	0.554	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.009	-	-	0.009	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.621	-	-	0.650	-	-	0.04	W10
	Full SAR	0.665	-	-	**0.696**	-	-		
Left	Estimated SAR	0.094	-	-	0.098	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.193	-	-	0.202	-	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		21.1	21.0	20.9	0.3	0.4	0.5	dB	
Time-averaged Power		21.1	21.0	20.9	1.07	1.10	1.12	Lin	
Back	Estimated SAR	0.372	-	-	0.399	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.428	-	-	0.459	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.009	-	-	0.009	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.485	-	-	0.520	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	0.073	-	-	0.078	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.145	-	-	0.155	-	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		21.0	21.0	20.9	0.4	0.4	0.5	dB	
Time-averaged Power		21.0	21.0	20.9	1.10	1.10	1.12	Lin	
Bottom	Estimated SAR	-	0.433	-	-	0.475	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE1900 (Band 2) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		22.4			Scaling factor*				
Conducted Power		22.2	22.1	22.1	0.2	0.3	0.3	dB	
Time-averaged Power		22.2	22.1	22.1	1.05	1.07	1.07	Lin	
Back	Estimated SAR	0.593	-	-	0.621	-	-	0.04	-
	Full SAR	0.628	-	-	0.658	-	-		
Display	Estimated SAR	0.534	-	-	0.559	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.017	-	-	0.018	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.413	-	-	0.432	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	0.302	-	-	0.316	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.087	-	-	0.092	-	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 50 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		21.1	21.0	20.9	0.3	0.4	0.5	dB	
Time-averaged Power		21.1	21.0	20.9	1.07	1.10	1.12	Lin	
Back	Estimated SAR	0.442	-	-	0.474	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.390	-	-	0.418	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.014	-	-	0.014	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.336	-	-	0.360	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	0.231	-	-	0.248	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.065	-	-	0.070	-	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE1900 (Band 2) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz	CH 18700 1860.0 MHz	CH 18900 1880.0 MHz	CH 19100 1900.0 MHz		
Upper limit		21.4			Scaling factor*				
Conducted Power		21.0	21.0	20.9	0.4	0.4	0.5	dB	
Time-averaged Power		21.0	21.0	20.9	1.10	1.10	1.12	Lin	
Back	Estimated SAR	-	0.430	-	-	0.471	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.11 LTE2500 (Band 7) Wireless Router 10 mm SAR results

Antenna 1

LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		21.9			Scaling factor*				
Conducted Power		21.8	21.5	21.6	0.1	0.4	0.3	dB	
Time-averaged Power		21.8	21.5	21.6	1.02	1.10	1.07	Lin	
Back	Estimated SAR	0.766	-	-	0.784	-	-	0.02	-
	Full SAR	0.782	-	-	0.800	-	-		
Display	Estimated SAR	0.598	-	-	0.612	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.046	-	-	0.047	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.655	-	-	0.670	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	0.049	-	-	0.050	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.398	-	-	0.407	-	-	-	-
	Full SAR	-	-	-	-	-	-		

LTE2500 (Band 7) - 20MHz - QPSK - 50 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		20.9			Scaling factor*				
Conducted Power		20.8	20.6	20.6	0.1	0.3	0.3	dB	
Time-averaged Power		20.8	20.6	20.6	1.02	1.07	1.07	Lin	
Back	Estimated SAR	0.561	-	-	0.574	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.450	-	-	0.460	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.034	-	-	0.035	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.510	-	-	0.522	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	0.047	-	-	0.048	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.292	-	-	0.299	-	-	-	-
	Full SAR	-	-	-	-	-	-		

Antenna 2

LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		21.9			Scaling factor*				
Conducted Power		21.6	21.6	21.7	0.3	0.3	0.2	dB	
Time-averaged Power		21.6	21.6	21.7	1.07	1.07	1.05	Lin	
Back	Estimated SAR	-	0.786	0.727	-	0.842	0.761	0.01	W11
	Full SAR	-	0.792	-	-	**0.849**	-		
LTE2500 (Band 7) - 20MHz - QPSK - 1 RB - Offset 49									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		21.9			Scaling factor*				
Conducted Power		21.8	21.5	21.6	0.1	0.4	0.3	dB	
Time-averaged Power		21.8	21.5	21.6	1.02	1.10	1.07	Lin	
Back	Estimated SAR	0.785	-	-	0.803	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.670	-	-	0.686	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.013	-	-	0.013	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.756	-	-	0.774	-	-	0.01	-
	Full SAR	0.768	-	-	0.786	-	-		
Left	Estimated SAR	0.158	-	-	0.162	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.065	-	-	0.067	-	-	-	-
	Full SAR	-	-	-	-	-	-		

(Table continues)

(Table continues)

LTE2500 (Band 7) - 20MHz - QPSK - 50 RB - Offset 24									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		20.9			Scaling factor*				
Conducted Power		20.8	20.6	20.6	0.1	0.3	0.3	dB	
Time-averaged Power		20.8	20.6	20.6	1.02	1.07	1.07	Lin	
Back	Estimated SAR	0.554	-	-	0.567	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Display	Estimated SAR	0.488	-	-	0.499	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	0.007	-	-	0.007	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	0.575	-	-	0.588	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	0.116	-	-	0.119	-	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	0.048	-	-	0.049	-	-	-	-
	Full SAR	-	-	-	-	-	-		
LTE2500 (Band 7) - 20MHz - QPSK - 100 RB - Offset 0									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz	CH 20850 2510.0 MHz	CH 21100 2535.0 MHz	CH 21350 2560.0 MHz		
Upper limit		20.9			Scaling factor*				
Conducted Power		20.7	20.6	20.6	0.2	0.3	0.3	dB	
Time-averaged Power		20.7	20.6	20.6	1.05	1.07	1.07	Lin	
Back	Estimated SAR	0.409	-	-	0.428	-	-	-	-
	Full SAR	-	-	-	-	-	-		

7.3.12 WLAN2450 Wireless Router 10 mm SAR results

WLAN2450 b-mode DSSS									
Device orientation	SAR measurement	Measured 1g SAR [W/kg]			Reported* 1g SAR [W/kg]			Max Deviation* [W/kg]	Plot #
		CH 1 2412.0 MHz	CH 6 2437.0 MHz	CH 11 2462.0 MHz	CH 1 2412.0 MHz	CH 6 2437.0 MHz	CH 11 2462.0 MHz		
Data rate		1	11	11	Scaling factor*			Mbps	
Upper limit		18.5	18.5	18.5					
Conducted Power		17.9	17.7	17.6	0.6	0.8	0.9	dB	
Time-averaged Power		17.9	17.7	17.6	1.14	1.20	1.23	Lin	
Back	Estimated SAR	0.242	0.257	0.251	0.277	0.307	0.309	0.01	W12
	Full SAR	-	-	0.244	-	-	**0.300**		
Display	Estimated SAR	-	0.121	-	-	0.145	-	-	-
	Full SAR	-	-	-	-	-	-		
Top	Estimated SAR	-	0.045	-	-	0.054	-	-	-
	Full SAR	-	-	-	-	-	-		
Bottom	Estimated SAR	-	0.013	-	-	0.016	-	-	-
	Full SAR	-	-	-	-	-	-		
Left	Estimated SAR	-	0.016	-	-	0.019	-	-	-
	Full SAR	-	-	-	-	-	-		
Right	Estimated SAR	-	0.036	-	-	0.043	-	-	-
	Full SAR	-	-	-	-	-	-		

Adjusted SAR calculations for the next OFDM test configurations

Adjusted SAR							
Test configuration used	Next test configuration	Device Orientation	Reported 1g SAR for test cfg used [W/kg]	Tuning target for test cfg used [dBm]*	Tuning target for next test cfg [dBm]*	Adjusted 1g SAR [W/kg]	Adjusted SAR > 1.20 [YES/NO]
DSSS b-mode 20 MHz Data rate 11	OFDM g-mode 20MHz Data rate 6	Back	0.3	17	17	0.3	NO

* Tuning targets are used as [mW] when calculated Adjusted SAR.

Individual Wireless Router 10 mm SAR plots are given in Appendix B.

Simultaneous transmissions: Combined Wireless Router 10 mm 1g SAR results – WLAN and Individual band Max results - Antenna 1

Test configuration	WLAN 2450	LTE700 (Band 12)	LTE700 (Band 17)	2-slot GPRS850	WCDMA 850 (Band 5)	LTE850 (Band 5)	WCDMA 1700/2100 (Band 4)	LTE 1700/2100 (Band 4)
Back	0.300	0.532	0.485	0.475	0.507	0.338	0.653	0.515
Display	0.145	0.447	0.438	0.345	0.444	0.309	0.475	0.589
Top	0.054	0.012	0.011	0.015	0.018	0.017	0.056	0.032
Bottom	0.016	0.201	0.198	0.213	0.288	0.296	0.563	0.383
Left	0.019	0.286	0.244	0.198	0.257	0.145	0.097	0.092
Right	0.043	0.568	0.524	0.341	0.450	0.348	0.207	0.153
Test configuration	**4-slot GPRS1900**	**WCDMA 1900 (Band 2)**	**LTE 1900 (Band 2)**	**LTE 2500 (Band 7)**	**-**	**-**	**-**	**-**
Back	0.349	0.588	0.507	0.800	-	-	-	-
Display	0.381	0.651	0.554	0.612	-	-	-	-
Top	0.011	0.020	0.009	0.047	-	-	-	-
Bottom	0.454	0.530	0.696	0.670	-	-	-	-
Left	0.060	0.167	0.098	0.050	-	-	-	-
Right	0.125	0.186	0.202	0.407	-	-	-	-

Simultaneous transmissions: Combined Wireless Router 10 mm 1g SAR results – WLAN Max + Max combined results - Antenna 1

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	**0.832**	**0.785**	**0.775**	**0.807**	**0.638**	**0.953**	**0.815**	**0.649**
Display	0.592	0.583	0.490	0.589	0.454	0.620	0.734	0.526
Top	0.066	0.065	0.069	0.072	0.071	0.110	0.086	0.065
Bottom	0.217	0.214	0.229	0.304	0.312	0.579	0.399	0.470
Left	0.305	0.263	0.217	0.276	0.164	0.116	0.111	0.079
Right	0.611	0.567	0.384	0.493	0.391	0.250	0.196	0.168
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	**0.888**	**0.807**	**1.100**	-	-	-	-	-
Display	0.796	0.699	0.757	-	-	-	-	-
Top	0.074	0.063	0.101	-	-	-	-	-
Bottom	0.546	0.712	0.686	-	-	-	-	-
Left	0.186	0.117	0.069	-	-	-	-	-
Right	0.229	0.245	0.450	-	-	-	-	-

Simultaneous transmissions: Combined Wireless Router 10 mm 1g SAR results – WLAN and Individual band Max results - Antenna 2

Test configuration	WLAN 2450	LTE700 (Band 12)	LTE700 (Band 17)	2-slot GPRS850	WCDMA 850 (Band 5)	LTE850 (Band 5)	WCDMA 1700/2100 (Band 4)	LTE 1700/2100 (Band 4)
Back	0.300	0.548	0.497	0.632	0.564	0.480	0.785	0.596
Display	0.145	0.397	0.353	0.503	0.491	0.418	0.565	0.434
Top	0.054	0.018	0.018	0.018	0.016	0.012	0.030	0.020
Bottom	0.016	0.251	0.279	0.317	0.294	0.273	0.470	0.282
Left	0.019	0.460	0.414	0.525	0.502	0.396	0.213	0.170
Right	0.043	0.240	0.175	0.321	0.309	0.256	0.137	0.105
Test configuration	**4-slot GPRS1900**	**WCDMA 1900 (Band 2)**	**LTE 1900 (Band 2)**	**LTE 2500 (Band 7)**	**-**	**-**	**-**	**-**
Back	0.603	0.863	0.658	0.849	-	-	-	-
Display	0.412	0.604	0.559	0.686	-	-	-	-
Top	0.016	0.026	0.018	0.013	-	-	-	-
Bottom	0.367	0.591	0.432	0.786	-	-	-	-
Left	0.291	0.346	0.316	0.162	-	-	-	-
Right	0.091	0.166	0.092	0.067	-	-	-	-

Simultaneous transmissions: Combined Wireless Router 10 mm 1g SAR results – WLAN Max + Max combined results - Antenna 2

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	**0.848**	**0.797**	**0.932**	**0.864**	**0.780**	**1.085**	**0.896**	**0.903**
Display	0.542	0.498	0.648	0.636	0.563	0.710	0.579	0.557
Top	0.072	0.072	0.072	0.070	0.066	0.084	0.074	0.070
Bottom	0.267	0.295	0.333	0.310	0.289	0.486	0.298	0.383
Left	0.479	0.433	0.544	0.521	0.415	0.232	0.189	0.310
Right	0.283	0.218	0.364	0.352	0.299	0.180	0.148	0.134
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	**1.163**	**0.958**	**1.149**	-	-	-	-	-
Display	0.749	0.704	0.831	-	-	-	-	-
Top	0.080	0.072	0.067	-	-	-	-	-
Bottom	0.607	0.448	0.802	-	-	-	-	-
Left	0.365	0.335	0.181	-	-	-	-	-
Right	0.209	0.135	0.110	-	-	-	-	-

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for Wireless Router 10 mm configurations for this product.

7.3.13 Combined 1g Wireless Router 10 mm SAR data

The Combined SAR data given in the tables below has been voluntarily calculated and should be ignored for FCC certification.

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 and the cellular bands point-by-point and c) calculates the combined average SAR values.

The combinations are done for the maximum Wireless Router 10 mm configuration of the each band or band group. Maximum configurations are given in the Max+Max tables in the Section 7.3 of the report. The same scaling factors are used in plotting as for the individual reported SAR value calculations.

Simultaneous transmissions: Reported* Combined 1g SAR Wireless Router 10 mm results – SPEAG Combined Multiband algorithm results

Antenna 1

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	-	-	-	-	-	-	-	-
Display	-	-	-	-	-	-	-	-
Top	-	-	-	-	-	-	-	-
Bottom	-	-	-	-	-	-	-	-
Left	-	-	-	-	-	-	-	-
Right	-	-	-	-	-	-	-	-
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	-	-	-	-	-	-	-	-
Display	-	-	-	-	-	-	-	-
Top	-	-	-	-	-	-	-	-
Bottom	-	-	-	-	-	-	-	-
Left	-	-	-	-	-	-	-	-
Right	-	-	-	-	-	-	-	-

Simultaneous transmissions: Reported* Combined 1g SAR Wireless Router 10 mm results – SPEAG Combined Multiband algorithm results
Antenna 2

Test configuration	LTE700 (Band 12) + WLAN 2450	LTE700 (Band 17) + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 (Band 5) + WLAN 2450	LTE850 (Band 5) + WLAN 2450	WCDMA 1700/2100 (Band 4) + WLAN 2450	LTE 1700/2100 (Band 4) + WLAN 2450	4-slot GPRS1900 + WLAN 2450
Back	**0.621**	**0.546**	**0.674**	**0.593**	**0.531**	**0.821**	**0.600**	**0.585**
Display	-	-	-	-	-	-	-	-
Top	-	-	-	-	-	-	-	-
Bottom	-	-	-	-	-	-	-	-
Left	-	-	-	-	-	-	-	-
Right	-	-	-	-	-	-	-	-
Test configuration	**WCDMA 1900 (Band 2) + WLAN 2450**	**LTE 1900 (Band 2) + WLAN 2450**	**LTE 2500 (Band 7) + WLAN 2450**	**-**	**-**	**-**	**-**	**-**
Back	**0.808**	**0.655**	**0.872**	-	**-**	-	-	-
Display	-	-	-	-	-	-	-	-
Top	-	-	-	-	-	-	-	-
Bottom	-	-	-	-	-	-	-	-
Left	-	-	-	-	-	-	-	-
Right	-	-	-	-	-	-	-	-

2-slot GPRS850 Antenna 2 + WLAN2450 has the highest Max+Max result of the 850MHz Antenna 1 and Antenna 2 grouped bands: 2-slot GPRS850, WCDMA850 (Band 5) and LTE850 (Band 5).

WCDMA1700/2100 (Band 4) Antenna 2 + WLAN2450 has the highest Max+Max result of the 1750MHz Antenna 1 and Antenna 2 grouped bands: WCDMA1700/2100 (Band 4) and LTE1700/2100 (Band 4).

WCDMA1900 (Band 2) Antenna 2 + WLAN2450 has the highest Max+Max result of the 1900MHz Antenna 1 and Antenna 2 grouped bands: 4-slot GPRS1900, WCDMA1900 (Band 2) and LTE1900 (Band 2).

Note:
* Reported SAR values are scaled to, or measured at, upper limit of power tuning tolerance.
The highest result within individual zoom scan or individual expanded zoom scan results is given in Section 1.2 for each transmitter. The highest result within contributing individual zoom scan, individual expanded zoom scan, Speag combined algorithm or combined expanded zoom scan results is given in the Section for the simultaneous transmitter combination giving the highest combinated value.