



## FCC SAR Compliance Test Report

**Product Name:** Smart Phone

**Model:** HUAWEI GRA-UL00,HUAWEI GRA-UL10

**Report No.:** SYBH(Z-SAR)006022015-2

**FCC ID:** QISGRA-ULX0

	APPROVED (Lab Manager)	PREPARED (Test Engineer)
BY	<i>Wei Huanbin</i>	<i>Gong Zhong</i>
DATE	2015-06-23	2015-06-23

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### Reliability Laboratory of Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

Tel: +86 755 28780808 Fax: +86 755 89652518

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※ ※ **Modified History** ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	2015-04-08	Gong Zhong
Rev.1.1	1) Page 9&Page 231:Update the LTE CA description: "The device supports <b>intra-band</b> Release 10 LTE Carrier Aggregation(CA) in the downlink only." 2) Page 9: Add the TX–RX frequency separation description information for CA. 3) Page 230-232: Add the resource blocks and information for the downlink.	2015-05-05	Gong Zhong
Rev.1.2	1) Page 11: Add the E-UTRA CA configuration information in Section 1.3.2 2) Page 12-13: Add the CA channel number and frequency information for the primary and secondary DL carriers in Section 1.3.2	2015-05-06	Gong Zhong
Rev.1.3	Pages 235-237: Add the measured channels for the primary and secondary DL carriers of CA.	2015-05-11	Gong Zhong
Rev.1.4	1) Page 9-13, Page 234-236: Delete the LTE Band 4 CA information. 2) Page 9-11: Add the Channel bandwidth for CA description per 3GPP TS 36.521-1 V12.5.0.	2015-06-15	Gong Zhong
Rev.1.5	Page 9: Update the LTE CA class and the maximum aggregated channel bandwidth description.	2015-06-16	Gong Zhong
Rev.1.6	Page 9-12: Update the LTE CA aggregated channel bandwidth description and explanation with respect to 3GPP TS 36.521-1 V12.5.0 requirements for band gap and channel separation requirements.	2015-06-23	Gong Zhong

# 1 General Information

## 1.1 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for HUAWEI GRA-UL00,HUAWEI GRA-UL10 are as below Table 1.

Band	Max Reported SAR(W/kg)		
	1-g Head	1-g Body-worn (15mm) *	1-g Hotspot (10mm)
GSM850	1.470	0.340	0.511
GSM1900	<b>1.473</b>	0.624	<b>1.456</b>
UMTS Band V	0.931	0.301	0.497
UMTS Band IV	1.322	0.530	1.412
UMTS Band II	1.021	<b>0.967</b>	1.164
LTE Band IV	1.201	0.484	1.290
LTE Band VII	1.308	0.384	0.803
LTE Band XXXVIII	1.430	0.235	0.513
LTE Band XLI	1.422	0.282	0.597
WiFi 2.4G	0.820	0.060	0.168
<b>The highest simultaneous SAR value is 1.587W/kg per KDB690783 D01</b>			

Table 1:Summary of test result

Note:

1)\* For body-worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits according to the FCC rule §2.1093, the ANSI/IEEE C95.1:1992, the NCRP Report Number 86 for uncontrolled environment, according to the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2003 & IEEE Std 1528a-2005.

## 1.2 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
<b>Spatial Peak SAR*</b> (Brain/Body/Arms/Legs)	<b>1.60 W/kg</b>	8.00 W/kg
<b>Spatial Average SAR**</b> (Whole Body)	0.08 W/kg	0.40 W/kg
<b>Spatial Peak SAR***</b> (Hands/Feet/Ankle/Wrist)	4.00 W/kg	20.00 W/kg

Table 2: RF exposure limits

The limit applied in this test report is shown in **bold** letters

**Notes:**

- \* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
- \*\* The Spatial Average value of the SAR averaged over the whole body.
- \*\*\* The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

**Uncontrolled Environments** are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

**Controlled Environments** are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

**1.3 EUT Description**

Device Information:			
Product Name:	Smart Phone		
Model:	HUAWEI GRA-UL00,HUAWEI GRA-UL10		
FCC ID :	QISGRA-ULX0		
SN No.:	Battery 1#: X2P5T15108000039, A7J5T15127000191 Battery 2#: X2P5T15108000139		
Device Type :	Portable device		
Device Phase:	Identical Prototype		
Exposure Category:	Uncontrolled environment / general population		
Hardware Version :	HL2TGRACEM		
Software Version :	GRA-UL00V100R001C900B022		
Antenna Type :	Internal antenna		
Others Accessories	Headset		
Device Operating Configurations:			
Supporting Mode(s)	GSM850/1900, UMTS Band II/IV/V, LTE Band IV/VII/XXXVIII/XLI, WiFi 2.4G(Tested);BT(Untested)		
Test Modulation	GSM(GMSK/8PSK),UMTS(QPSK),LTE(QPSK/16QAM), WiFi(DSSS/OFDM),BT(GFSK)		
Device Class	B		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM850	824-849	869-894
	GSM1900	1850-1910	1930-1990
	UMTS Band V	824-849	869-894
	UMTS Band IV	1710-1755	2110-2155
	UMTS Band II	1850-1910	1930-1990
	LTE Band IV	1710-1755	2110-2155
	LTE Band VII	2500-2570	2620-2690
	LTE Band XXXVIII	2570-2620	2570-2620
	LTE Band XLI	2555-2655	2555-2655
	BT	2400-2483.5	
	WiFi 2.4G	2400-2483.5	
GPRS Multislot Class(12)	Max Number of Timeslots in Uplink:	4	
	Max Number of Timeslots in Downlink:	4	
	Max Total Timeslot:	5	
EGPRS Multislot Class(12)	Max Number of Timeslots in Uplink:	4	
	Max Number of Timeslots in Downlink:	4	
	Max Total Timeslot:	5	
HSDPA UE Category	14		
HSUPA UE Category	6		
DC-HSDPA UE Category	24		
Power Class:	4, tested with power level 5(GSM850)		
	1, tested with power level 0(GSM1900)		
	3, tested with power control "all 1"(UMTS Band II)		
	3, tested with power control "all 1"(UMTS Band IV)		
	3, tested with power control "all 1"(UMTS Band V)		
	3, tested with power control all Max.(LTE Band IV)		
	3, tested with power control all Max.(LTE Band VII)		
	3, tested with power control all Max.(LTE Band XXXVIII)		
3, tested with power control all Max.(LTE Band XLI)			

Test Channels (low-mid-high):	128-190-251(GSM850)
	512-661-810(GSM1900)
	9262-9400-9538(UMTS Band II)
	1312-1413-1512(UMTS Band IV)
	4132-4182-4233(UMTS Band V)
	19957-20175-20393(LTE Band IV BW=1.4MHz)
	19965-20175-20385(LTE Band IV BW=3MHz)
	19975-20175-20375(LTE Band IV BW=5MHz)
	20000-20175-20350(LTE Band IV BW=10MHz)
	20025-20175-20325(LTE Band IV BW=15MHz)
	20050-20175-20300(LTE Band IV BW=20MHz)
	20775-21100-21425(LTE Band VII BW=5MHz)
	20800-21100-21400(LTE Band VII BW=10MHz)
	20825-21100-21375(LTE Band VII BW=15MHz)
	20850-21100-21350(LTE Band VII BW=20MHz)
	37775-38000-38225(LTE Band XXXVIII BW=5MHz)
	37800-38000-38200(LTE Band XXXVIII BW=10MHz)
	37825-38000-38175(LTE Band XXXVIII BW=15MHz)
	37850-38000-38150(LTE Band XXXVIII BW=20MHz)
	40265-40740-41215(LTE Band XLI BW=5MHz)
	40290-40740-41190(LTE Band XLI BW=10MHz)
	40315-40740-41165(LTE Band XLI BW=15MHz)
	40340-40740-41140(LTE Band XLI BW=20MHz)
	802.11b/g/n 20M:1-6-11 (WiFi 2.4G)
802.11n 40M:3-6-9 (WiFi 2.4G)	

Table 3: Device information and operating configuration

**1.3.1 General Description**

HUAWEI GRA-UL00, HUAWEI GRA-UL10 is subscriber equipment in the LTE/UMTS/GSM system. The LTE frequency band is Band I,Band III,Band IV, Band VII, Band XXXVIII,Band XXXIX,Band XL and Band XLI. But only Band IV, Band VII Band XXXVIII and Band XLI test data included in this report. The HSUPA/HSDPA/UMTS frequency band is Band I, Band II, Band IV,Band V and Band VIII, But only Band II, Band IV and Band V test data can be used in this report. The GSM/GPRS/EDGE frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900, but only GSM850 and DCS1900 bands test data included in this report. The Mobile Phone implements such functions as RF signal receiving/transmitting, LTE/UMTS/GSM protocol processing, voice, video, MMS service, GPS, AGPS and WIFI etc. Externally it provides earphone port (to provide voice service) and USIM card interface. It also provides Bluetooth module to synchronize data between a PC and the phone, or to use the built-in modem of the phone to access the Internet with a PC, or to exchange data with other Bluetooth devices.

**Battery information:**

Name	Manufacture	Serials number	Description
Rechargeable Li-ion	Huawei Technologies Co., Ltd.	NA	Battery Model: HB3447A9EBW Rated capacity: 2600mAh Nominal Voltage:  +3.8V Charging Voltage:  +4.35V

**1.3.2 Downlink LTE CA additional specification**

The device supports downlink intra-band contiguous Release 10 LTE Carrier Aggregation(CA). This device is implemented for Carrier Aggregation downlink only. Other Release 10 features are not supported, including Uplink Carrier Aggregation, Enhanced SC-FDMA and Uplink MIMO or other antenna diversity configurations etc.. All uplink communications are identical to the Release 8 Specifications. The possible LTE CA combinations are as below table. The conducted power measurement results of downlink LTE CA are provided in Section 7.1 of this report. According to KDB 941225 D05A, the downlink LTE CA SAR test is not required and PBA requirements can be excluded.

E-UTRA CA Band	CA Class	E-UTRA Band	Uplink (UL) operating band	Downlink (DL) operating band	Duplex Mode	CA Combinations	Maximum aggregated bandwidth(MHz)
CA_7	Class C	7	2500-2570MHz	2620 -2690MHz	FDD	15MHz+15MHz 20MHz+20MHz	40
CA_38	Class C	38	2570-2620MHz	2570 -2620MHz	TDD	15MHz+15MHz 20MHz+20MHz	40
CA_41	Class C	41	2555-2655MHz	2555 -2655MHz	TDD	10MHz+20MHz 15MHz+15MHz 15MHz+20MHz 20MHz+20MHz	40

Note: Per 3GPP TS 36.521-1 V12.5.0 and 3GPP TS 36.508 V12.3.1, some aggregated channel bandwidth is less than the sum of the individual bandwidth for more than one LTE band with respect to 3GPP requirements for band gap and channel separation requirements. The detailed definition of channel spacing and Channel bandwidth for CA and test frequencies for CA are as below:

**1. The TX–RX frequency separation and Channel bandwidth information for CA:**

For intra-band contiguous carrier aggregation, the same TX-RX frequency separation as specified in Table 5.3-1 of 3GPP TS 36.521-1 V12.5.0 is applied to PCC and SCC, respectively.

**1) Channel arrangement(Per3GPP TS 36.521-1 V12.5.0)  
Channel spacing**

The spacing between carriers will depend on the deployment scenario, the size of the frequency block available and the channel bandwidths. The nominal channel spacing between two adjacent E-UTRA carriers is defined as following:

$$\text{Nominal Channel spacing} = (BW_{\text{Channel}(1)} + BW_{\text{Channel}(2)})/2$$

where  $BW_{\text{Channel}(1)}$  and  $BW_{\text{Channel}(2)}$  are the channel bandwidths of the two respective E-UTRA carriers. The channel spacing can be adjusted to optimize performance in a particular deployment scenario.

**Channel spacing for CA**

For intra-band contiguous carrier aggregation with two or more component carriers, the nominal channel spacing between two adjacent E-UTRA component carriers is defined as the following:

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

where  $BW_{\text{Channel}(1)}$  and  $BW_{\text{Channel}(2)}$  are the channel bandwidths of the two respective E-UTRA component carriers according to Table 5.4.2-1 with values in MHz. The channel spacing for intra-band contiguous carrier aggregation can be adjusted to any multiple of 300 kHz less than the nominal channel spacing to optimize performance in a particular deployment scenario.

For intra-band non-contiguous carrier aggregation the channel spacing between two E-UTRA component carriers in different sub-blocks shall be larger than the nominal channel spacing defined in this subclause.

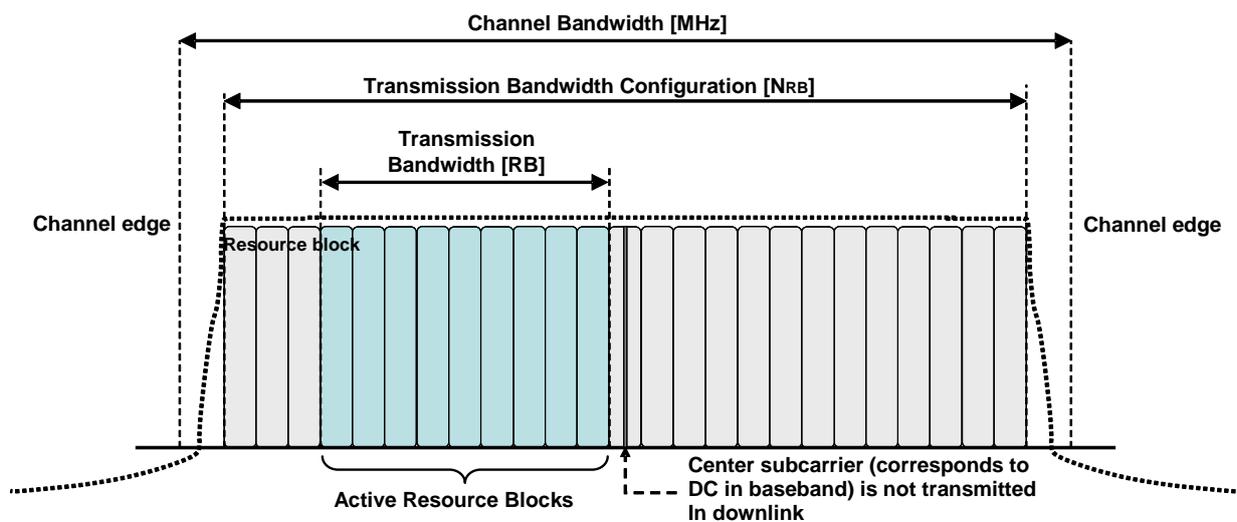
**2) Channel bandwidth(Per3GPP TS 36.521-1 V12.5.0)**

Requirements in present document are specified for the channel bandwidths listed in Table 5.4.2-1

**Table 5.4.2-1: Transmission bandwidth configuration  $N_{RB}$  in E-UTRA channel bandwidths**

Channel bandwidth $BW_{\text{Channel}}$ [MHz]	1.4	3	5	10	15	20
Transmission bandwidth configuration $N_{RB}$	6	15	25	50	75	100

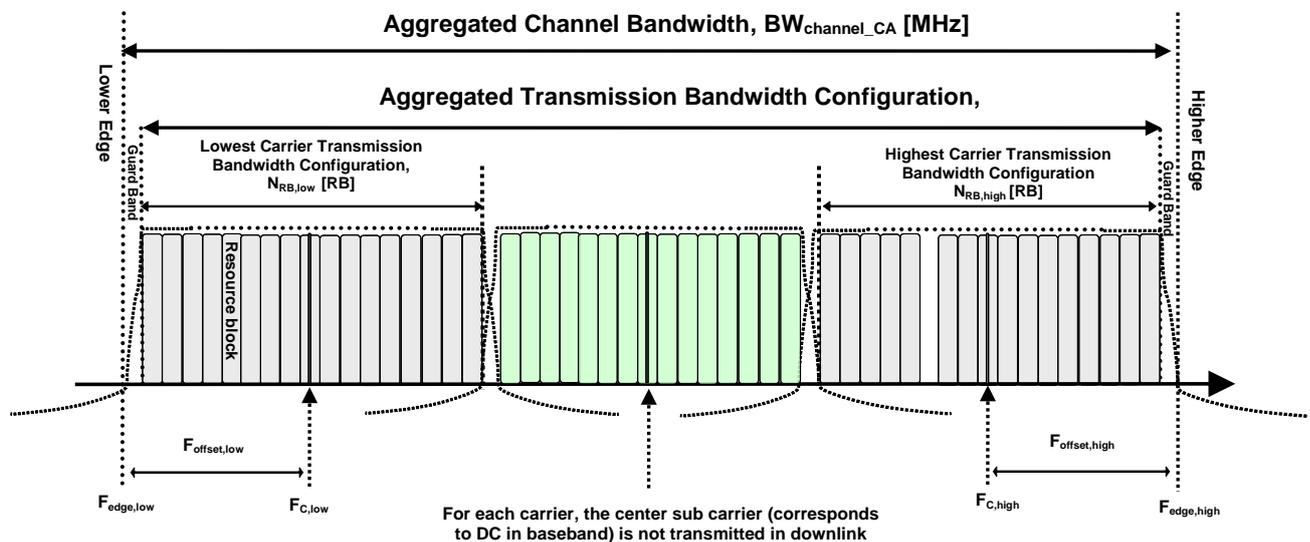
Figure 5.4.2-1 shows the relation between the Channel bandwidth ( $BW_{\text{Channel}}$ ) and the Transmission bandwidth configuration ( $N_{RB}$ ). The channel edges are defined as the lowest and highest frequencies of the carrier separated by the channel bandwidth, i.e. at  $F_C \pm BW_{\text{Channel}}/2$ .



**Figure 5.4.2-1: Definition of channel bandwidth and transmission bandwidth configuration for one E-UTRA carrier**

### 3) Channel bandwidth for CA(Per3GPP TS 36.521-1 V12.5.0)

For intra-band contiguous carrier aggregation *Aggregated Channel Bandwidth*, *Aggregated Transmission Bandwidth Configuration* and *Guard Bands* are defined as follows, see Figure 5.4.2A-1.



**Figure 5.4.2A-1: Definition of Aggregated channel bandwidth and aggregated channel bandwidth edges**

The *aggregated channel bandwidth*,  $BW_{Channel\_CA}$ , is defined as

$$BW_{Channel\_CA} = F_{edge,high} - F_{edge,low} \text{ [MHz]}.$$

The lower bandwidth edge  $F_{edge,low}$  and the upper bandwidth edge  $F_{edge,high}$  of the aggregated channel bandwidth are used as frequency reference points for transmitter and receiver requirements and are defined by

$$F_{edge,low} = F_{C,low} - F_{offset,low}$$

$$F_{edge,high} = F_{C,high} + F_{offset,high}$$

The lower and upper frequency offsets depend on the transmission bandwidth configurations of the lowest and highest assigned edge component carrier and are defined as

$$F_{offset,low} = (0.18N_{RB,low} + \Delta f_1)/2 + BW_{GB} \text{ [MHz]}$$

$$F_{offset,high} = (0.18N_{RB,high} + \Delta f_1)/2 + BW_{GB} \text{ [MHz]}$$

where  $\Delta f_1 = \Delta f$  for the downlink with  $\Delta f$  the subcarrier spacing and  $\Delta f_1 = 0$  for the uplink, while  $N_{RB,low}$  and  $N_{RB,high}$  are the transmission bandwidth configurations according to Table 5.4.2-1 for the lowest and highest assigned component carrier, respectively.  $BW_{GB}$  denotes the *Nominal Guard Band* and is defined in Table 5.4.2A-1, and the factor 0.18 is the PRB bandwidth in MHz.

NOTE: The values of  $BW_{Channel\_CA}$  for UE and BS are the same if the lowest and the highest component carriers are identical.

Aggregated Transmission Bandwidth Configuration is the number of the aggregated RBs within the fully allocated Aggregated Channel bandwidth and is defined per CA Bandwidth Class (Table 5.4.2A-1).

**Table 5.4.2A-1: CA bandwidth classes and corresponding nominal guard bands**

CA Bandwidth Class	Aggregated Transmission Bandwidth Configuration	Number of contiguous CC	Nominal Guard Band $BW_{GB}$
A	$N_{RB,agg} \leq 100$	1	$a_1 BW_{Channel(1)} - 0.5\Delta f_1$ (NOTE 2)
B	$N_{RB,agg} \leq 100$	2	$0.05 \max(BW_{Channel(1)}, BW_{Channel(2)}) - 0.5\Delta f_1$
C	$100 < N_{RB,agg} \leq 200$	2	$0.05 \max(BW_{Channel(1)}, BW_{Channel(2)}) - 0.5\Delta f_1$
D	$200 < N_{RB,agg} \leq 300$	3	$0.05 \max(BW_{Channel(1)}, BW_{Channel(2)}, BW_{Channel(3)}) - 0.5\Delta f_1$
E	$[300] < N_{RB,agg} \leq [400]$	FFS	FFS
F	$[400] < N_{RB,agg} \leq [500]$	FFS	FFS

NOTE 1:  $BW_{Channel(j)}$ ,  $j = 1, 2, 3$ , is the channel bandwidth of an E-UTRA component carrier according to Table 5.4.2-1 and  $\Delta f_1 = \Delta f$  for the downlink with  $\Delta f$  the subcarrier spacing while  $\Delta f_1 = 0$  for the uplink.

NOTE 2:  $a_1 = 0.16/1.4$  for  $BW_{Channel(1)} = 1.4$  MHz whereas  $a_1 = 0.05$  for all other channel bandwidths.

Based on the description and formula defined in 3GPP TS 36.521-1 V12.5.0 above, the channel spacing for intra-band contiguous CA supported by this device is calculated as below:

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

**1) For 10MHz+20MHz:**

step 1:  $[10+20-0.1*|10-20|]/0.6=48.33$ [MHz]

step 2: 48.33 after rounding the number is 48[MHz]

step 3:  $48*0.3$ [MHz]=14.4MHz

The channel spacing is not 15MHz but 14.4MHz instead, so the aggregated channel bandwidth is less than 30MHz(the sum of the individual bandwidth).

**2) For 15MHz+15MHz:**

step 1:  $[15+15-0.1*|15-15|]/0.6=50$ [MHz]

step 2: 50 after rounding the number is 50[MHz]

step 3:  $50*0.3$ [MHz]=15MHz

The channel spacing is 15MHz, so the aggregated channel bandwidth is 30MHz(the sum of the individual bandwidth).

**3) For 15MHz+20MHz:**

step 1:  $[15+20-0.1*|15-20|]/0.6=57.5$ [MHz]

step 2: 57.5 after rounding the number is 57[MHz]

step 3:  $57*0.3$ [MHz]=17.1[MHz]

The channel spacing is not 17.5MHz but 17.1MHz instead, so the aggregated channel bandwidth is less than 35MHz(the sum of the individual bandwidth).

**4) For 20M+ 20M:**

step 1:  $[20+20-0.1*|20-20|]/0.6=66.66$ [MHz]

step 2: 66.66 after rounding the number is 66[MHz]

step 3:  $66*0.3$ [MHz]=19.8MHz

The channel spacing is not 20MHz but 19.8MHz instead, so the aggregated channel bandwidth is less than 40MHz(the sum of the individual bandwidth).

The conclusion can also be proved by the test frequencies table for CA in 3GPP TS 36.508 V12.3.1 as below. So it is acceptable with respect to 3GPP requirements for band gap and channel separation requirements.

**2. The channel number and frequency for the primary and secondary DL carriers:**

Refer to 3GPP TS 36.508 V12.3.1:

1) FDD test frequencies for CA in operating band 7

**Table: Test frequencies for CA\_7C**

Range	CC-Combo / N <sub>RB_agg</sub> [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N <sub>UL</sub>	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	N <sub>UL</sub>	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]
Low	75+75	75	20825	2507.5	2825	2627.5	75	20975	2522.5	2975	2642.5
	100+100	100	20850	2510	2850	2630	100	21048	2529.8	3048	2649.8
Mid	75+75	75	21025	2527.5	3025	2647.5	75	21175	2542.5	3175	2662.5
	100+100	100	21000	2525	3000	2645	100	21198	2544.8	3198	2664.8
High	75+75	75	21225	2547.5	3225	2667.5	75	21375	2562.5	3375	2682.5
	100+100	100	21152	2540.2	3152	2660.2	100	21350	2560	3350	2680

Note 1: Carriers in increasing frequency order.

2) TDD test frequencies for CA in operating band 38

**Table: Test frequencies for CA\_38C**

Range	CC-Combo / N <sub>RB_agg</sub> [RB]	CC1 Note1			CC2 Note1		
		BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]	BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]
Low	75+75	75	37825	2577.5	75	37975	2592.5
	100+100	100	37850	2580	100	38048	2599.8
Mid	75+75	75	37925	2587.5	75	38075	2602.5
	100+100	100	37900	2585	100	38098	2604.8
High	75+75	75	38025	2597.5	75	38175	2612.5
	100+100	100	37952	2590.2	100	38150	2610

Note 1: Carriers in increasing frequency order.

3) TDD test frequencies for CA in operating band 41

**Table: Test frequencies for CA\_41C(2555-2655MHz)**

Range	CC-Combo / N <sub>RB_agg</sub> [RB]	CC1 Note1			CC2 Note1		
		BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]	BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]
Low	50+100	50	40290	2560	100	40434	2574.4
		100	40340	2565	50	40484	2579.4
	75+75	75	41015	2632.5	75	41165	2647.5
		100	40315	2562.5	100	40486	2579.6
	100+100	100	40340	2565	75	40511	2582.1
Mid	50+100	50	40640	2595	100	40784	2609.4
		100	40690	2600	50	40834	2614.4
	75+75	75	40665	2597.5	75	40815	2612.5
		100	40640	2595	100	40811	2612.1
	100+100	100	40665	2597.5	75	40836	2614.6
High	50+100	50	40996	2630.6	100	41140	2645
		100	41046	2635.6	50	41190	2650
	75+75	75	40315	2562.5	75	40465	2577.5
		100	40969	2627.9	100	41140	2645
	100+100	100	40994	2630.4	75	41165	2647.5
100+100	100	40942	2625.2	100	41140	2645	

Note 1: Carriers in increasing frequency order.

### 1.3.3 TDD LTE additional specification

The device supports TDD LTE bands. According to KDB 941225 D05 SAR for LTE Devices v02r03, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

For this device, TDD LTE SAR should be tested with the highest transmission duty factor (63.33%) , which using Uplink-downlink configuration 0. The detailed TDD LTE test configuration description are provided in Section 6.3 of this report.

### 1.3.4 Dynamic antenna switching additional specification

The device supports the dynamic antenna switching function to optimize transmission efficiency for wide range frequency operations. It has two 2G/3G/4G Tx antennas (Main Antenna and Second Antenna). It can transmit from either Main Antenna or Second Antenna. The device is capable of switching between the Main Antenna and Second Antenna based on signal strength. The Main Antenna and Second Antenna can also transmit simultaneously only when two SIM cards work at the same time by using different modems. Main modem (Modem0) can support 2G/3G/4G. Second modem (modem1) only supports 2G and can only be used for SIM2.

For SAR test, the Main Antenna and Second Antenna are set to the MAX transmit power level respectively and test the SAR respectively in all applicable RF exposure conditions. Some AT commands are supplied to fix the operation state and choose the antenna, and some test scripts are supplied to fix the modem state so that only one TX antenna and one modem is chosen and tested at a time. All independent antennas and modems will be completely covered by the appropriate SAR measurements and all simultaneous transmission possibilities will be fully considered to ensure SAR compliance. (Refer to Section 7 for details)

### 1.3.5 Power reduction additional specification

The device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation:

- 1) A fixed level power reduction is applied for some frequency bands when hotspot mode becomes active. When the hotspot is disabled, the power value will be recovered.
- 2) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction.

The detailed full power and reduced tune-up specifications and conducted power measurement results are provided in Section 7.1 and 7.2 of this report.

#### 1.4 Test specification(s)

ANSI Std C95.1-1992	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.( IEEE Std C95.1-1991)
IEEE Std 1528-2003	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
IEEE Std 1528a-2005	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques Amendment 1: CAD File for Human Head Model (SAM Phantom)
RSS-102	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands (Issue 5 of March 2015)
KDB941225 D01	SAR test for 3G devices v03
KDB941225 D05	SAR for LTE Devices v02r03
KDB941225 D05A	LTE Rel.10 KDB Inquiry Sheet v01r01
KDB941225 D06	Hot Spot SAR v02
KDB447498 D01	General RF Exposure Guidance v05r02
KDB648474 D04	Handsets SAR v01r02
KDB248227 D01	SAR meas for 802.11 a/b/g v01r02
KDB865664 D01	SAR measurement 100 MHz to 6 GHz v01r03
KDB865664 D02	SAR Reporting v01r01
KDB690783 D01	SAR Listings on Grants v01r03

#### 1.5 Testing laboratory

Test Site	The Reliability Laboratory of Huawei Technologies Co., Ltd.
Test Location	Zone G1,Huawei Industrial Base, Bantian Industry Area, Longgang District, Shenzhen, Guangdong, China
Telephone	+86 755 28780808
Fax	+86 755 89652518
State of accreditation	The Test laboratory (area of testing) is accredited according to ISO/IEC 17025. CNAS Registration number: L0310 A2LA TESTING CERT #2174.01

#### 1.6 Applicant and Manufacturer

Company Name	HUAWEI TECHNOLOGIES CO., LTD
Address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

#### 1.7 Application details

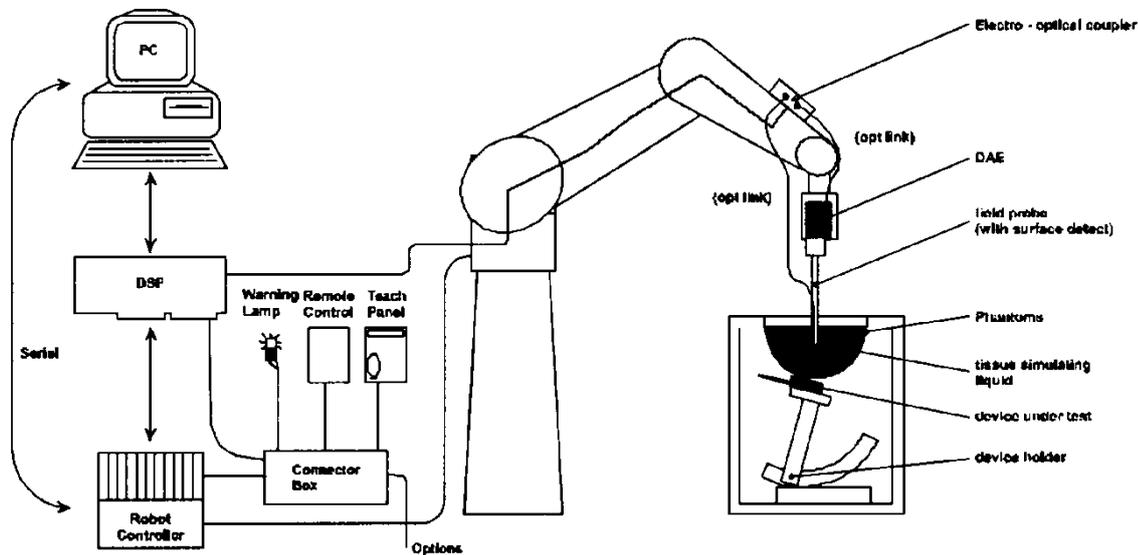
Start Date of test	2015-03-17
End Date of test	2015-04-03

#### 1.8 Ambient Condition

Ambient temperature	20°C – 24°C
Relative Humidity	30% – 70%

## 2 SAR Measurement System

### 2.1 SAR Measurement Set-up



The DASY5 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
- The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 7.
- DASY5 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System check dipoles allowing to validate the proper functioning of the system.

## 2.2 Test environment

The DASY5 measurement system is placed at the head end of a room with dimensions: 5 x 2.5 x 3 m<sup>3</sup>, the SAM phantom is placed in a distance of 75 cm from the side walls and 1.1m from the rear wall. Above the test system a 1.5 x 1.5 m<sup>2</sup> array of pyramid absorbers is installed to reduce reflections from the ceiling.

Picture 1 of the photo documentation shows a complete view of the test environment.

The system allows the measurement of SAR values larger than 0.005 mW/g.

## 2.3 Data Acquisition Electronics description

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

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

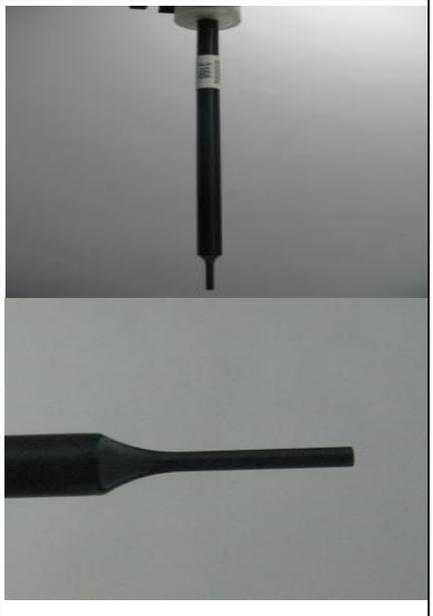
### DAE4

Input Impedance	200MOhm	
The Inputs	symmetrical and floating	
Common mode rejection	above 80 dB	

### 2.4 Probe description

These probes are specially designed and calibrated for use in liquids with high permittivities. They should not be used in air, since the spherical isotropy in air is poor ( $\pm 2$  dB). The dosimetric probes have special calibrations in various liquids at different frequencies.

#### Isotropic E-Field Probe ES3DV3 for Dosimetric Measurements

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	ISO/IEC 17025 calibration service available.	
Frequency	10 MHz to 4 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 4 GHz)	
Directivity	$\pm 0.2$ dB in HSL (rotation around probe axis) $\pm 0.3$ dB in tissue material (rotation normal to probe axis)	
Dynamic range	5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm	
Application	General dosimetry up to 4 GHz Dosimetry in strong gradient fields Compliance tests of mobile phones	

#### Isotropic E-Field Probe EX3DV4 for Dosimetric Measurements

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	ISO/IEC 17025 calibration service available.	
Frequency	10 MHz to >6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)	
Directivity	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)	
Dynamic range	10 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%	

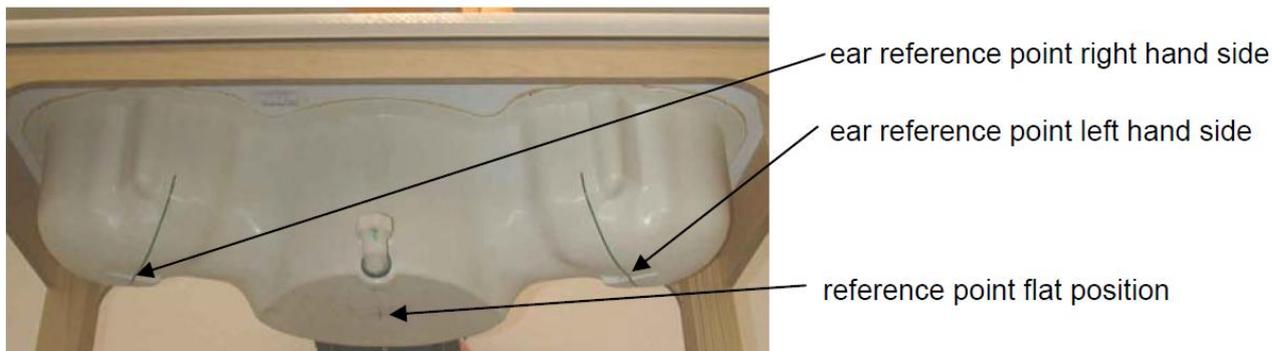
## 2.5 Phantom description

### SAM Twin Phantom

Shell Thickness	2mm±0.2mm;The ear region:6.0±0.2mm	
Filling Volume	Approximately 25 liters	
Dimensions	Length:1000mm; Width:500mm; Height: adjustable feet	
Measurement Areas	Left hand Right hand Flat phantom	

The bottom plate contains three pairs of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to cover the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. Free space scans of devices on top of this phantom cover are possible. Three reference marks are provided on the phantom counter. These reference marks are used to teach the absolute phantom position relative to the robot.

The following figure shows the definition of reference point:



### ELI4 Phantom

Shell Thickness	2mm±0.2mm	
Filling Volume	Approximately 30 liters	
Dimensions	Major axis:600mm; Minor axis:400mm;	
Measurement Areas	Flat phantom	

The ELI4 phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30MHz to 6GHz. ELI4 is fully compatible with the latest draft of the standard IEC 62209-2 and all known tissue simulating liquids.

The phantom shell material is resistant to all ingredients used in the tissue-equivalent liquid recipes. The shell of the phantom including ear spacers is constructed from low permittivity and low loss material, with a relative permittivity  $2 \leq \epsilon_r \leq 5$  at  $\leq 3$  GHz,  $3 \leq \epsilon_r \leq 4$  at  $> 3$  GHz and a loss tangent  $\leq 0.05$ .

## 2.6 Device holder description

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of  $65^\circ$ . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used.



The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity  $\epsilon = 3$  and loss tangent  $\sigma = 0.02$ . The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

The device holder permits the device to be positioned with a tolerance of  $\pm 1^\circ$  in the tilt angle.

Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values.

Therefore those devices are normally only tested at the flat part of the SAM.

## 2.7 Test Equipment List

This table gives a complete overview of the SAR measurement equipment.

Devices used during the test described are marked

	Manufacturer	Device	Type	Serial number	Date of last calibration	Valid period
<input checked="" type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	ES3DV3	3168	2014-09-24	One year
<input type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	EX3DV4	3736	2014-04-24	One year
<input checked="" type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	EX3DV4	3744	2014-07-24	One year
<input checked="" type="checkbox"/>	SPEAG	835 MHz Dipole	D835V2	4d059	2013-05-02	Three years
<input checked="" type="checkbox"/>	SPEAG	1750 MHz Dipole	D1750V2	1123	2014-07-08	Three years
<input checked="" type="checkbox"/>	SPEAG	1900 MHz Dipole	D1900V2	5d143	2014-09-23	Three years
<input type="checkbox"/>	SPEAG	2300 MHz Dipole	D2300V2	1016	2014-11-19	Three years
<input checked="" type="checkbox"/>	SPEAG	2450 MHz Dipole	D2450V2	860	2014-11-19	Three years
<input checked="" type="checkbox"/>	SPEAG	2600 MHz Dipole	D2600V2	1021	2014-07-16	Three years
<input type="checkbox"/>	SPEAG	5GHz Dipole	D5GHzV2	1155	2014-04-24	Three years
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE4	851	2014-07-24	One year
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE4	852	2014-04-30	One year
<input checked="" type="checkbox"/>	SPEAG	Software	DASY 5	N/A	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM1	TP-1475	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM2	TP-1474	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM3	TP-1597	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM4	TP-1620	NCR	NCR
<input type="checkbox"/>	SPEAG	Flat Phantom	ELI 4.0	TP-1038	NCR	NCR
<input type="checkbox"/>	SPEAG	Flat Phantom	ELI 4.0	TP-1111	NCR	NCR
<input checked="" type="checkbox"/>	R & S	Universal Radio Communication Tester	CMU 200	111379	2014-07-11	One year
<input checked="" type="checkbox"/>	R & S	Universal Radio Communication Tester	CMW 500	126855	2014-07-11	One year
<input checked="" type="checkbox"/>	Agilent	Network Analyser	E5071C	MY46213349	2015-02-13	One year
<input checked="" type="checkbox"/>	Agilent	Dielectric Probe Kit	85070E	2484	NCR	NCR
<input checked="" type="checkbox"/>	Agilent	Signal Generator	N5181A	MY47420989	2015-01-07	One year
<input checked="" type="checkbox"/>	MINI-CIRCUITS	Amplifier	ZHL-42W	QA1402001	NCR	NCR
<input checked="" type="checkbox"/>	AR	Directional Coupler	DC7144M1	311190	2014-05-17	One year
<input checked="" type="checkbox"/>	R & S	Power Meter	NRP	100740	2014-07-11	One year
<input checked="" type="checkbox"/>	R & S	Power Meter Sensor	NRP-Z11	106288	2014-07-11	One year
<input checked="" type="checkbox"/>	Agilent	Power Meter	E4417A	MY45101339	2015-01-07	One year
<input checked="" type="checkbox"/>	Agilent	Power Meter Sensor	E9321A	MY44420359	2015-01-07	One year

Note:

1) Per KDB865664D01 requirements for dipole calibration, the test laboratory has adopted three-year extended calibration interval. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.

- a) There is no physical damage on the dipole;
- b) System check with specific dipole is within 10% of calibrated value;
- c) The most recent return-loss result, measured at least annually, deviates by no more than 20% from the previous measurement.
- d) The most recent measurement of the real or imaginary parts of the impedance, measured at least annually is within 5Ω from the previous measurement.

2) Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

### 3 SAR Measurement Procedure

#### 3.1 Scanning procedure

The DASY5 installation includes predefined files with recommended procedures for measurements and system check. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. +/- 5 %.
- The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above  $\pm 0.1\text{mm}$ ). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within  $\pm 30^\circ$ .)
- The “area scan” measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension ( $\leq 2\text{GHz}$ ), 12 mm in x- and y- dimension (2-4 GHz) and 10mm in x- and y- dimension (4-6GHz). If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation. Results of this coarse scan are shown in Appendix B.
- A “zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine grid with maximum scan spatial resolution:  $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}} \leq 2\text{GHz} - \leq 8\text{mm}$ , 2-4GHz -  $\leq 5\text{ mm}$  and 4-6 GHz- $\leq 4\text{mm}$ ;  $\Delta z_{\text{zoom}} \leq 3\text{GHz} - \leq 5\text{ mm}$ , 3-4 GHz-  $\leq 4\text{mm}$  and 4-6GHz- $\leq 2\text{mm}$  where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in Appendix B. Test results relevant for the specified standard (see chapter 1.4.) are shown in table form in chapter 7.2.
- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2 mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in Appendix B.

The following table summarizes the area scan and zoom scan resolutions per FCC KDB 865664D01:

Frequency	Maximum Area Scan resolution ( $\Delta x_{\text{area}}, \Delta y_{\text{area}}$ )	Maximum Zoom Scan spatial resolution ( $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}}$ )	Maximum Zoom Scan spatial resolution			Minimum zoom scan volume (x,y,z)
			Uniform Grid	Graded Grad		
			$\Delta z_{\text{zoom}}(n)$	$\Delta z_{\text{zoom}}(1)^*$	$\Delta z_{\text{zoom}}(n>1)^*$	
≤2GHz	≤15mm	≤8mm	≤5mm	≤4mm	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	≥30mm
2-3GHz	≤12mm	≤5mm	≤5mm	≤4mm	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	≥30mm
3-4GHz	≤12mm	≤5mm	≤4mm	≤3mm	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	≥28mm
4-5GHz	≤10mm	≤4mm	≤3mm	≤2.5mm	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	≥25mm
5-6GHz	≤10mm	≤4mm	≤2mm	≤2mm	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	≥22mm

### 3.2 Spatial Peak SAR Evaluation

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 5 x 5 x 7 points( with 8mm horizontal resolution) or 7 x 7 x 7 points( with 5mm horizontal resolution) or 8 x 8 x 7 points( with 4mm horizontal resolution). The algorithm that finds the maximal averaged volume is separated into three different stages.

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting 'Graph Evaluated'.
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.

#### Extrapolation

The extrapolation is based on a least square algorithm [W. Gander, Computermathematik, p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

#### Interpolation

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computermathematik, p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff ].

#### Volume Averaging

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.

#### Advanced Extrapolation

DASY5 uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

### 3.3 Data Storage and Evaluation

#### Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension "DAE4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm<sup>2</sup>], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

#### Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Norm <sub>i</sub> , a <sub>10</sub> , a <sub>11</sub> , a <sub>12</sub>
	- Conversion factor	ConvF <sub>i</sub>
	- Diode compression point	Dcpi
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	σ
	- Density	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf/dcp_i$$

with	V <sub>i</sub>	= compensated signal of channel i	(i = x, y, z)
	U <sub>i</sub>	= input signal of channel i	(i = x, y, z)
	cf	= crest factor of exciting field (DASY parameter)	
	dcp <sub>i</sub>	= diode compression point	(DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes:  $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$   
 H-field probes:  $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2)/f$

with  $V_i$  = compensated signal of channel i (i = x, y, z)  
 $Norm_i$  = sensor sensitivity of channel i (i = x, y, z)  
 [mV/(V/m)<sup>2</sup>] for E-field Probes  
 $ConvF$  = sensitivity enhancement in solution  
 $a_{ij}$  = sensor sensitivity factors for H-field probes  
 $f$  = carrier frequency [GHz]  
 $E_i$  = electric field strength of channel i in V/m  
 $H_i$  = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot}^2 \cdot \sigma) / (\rho \cdot 1000)$$

with  $SAR$  = local specific absorption rate in mW/g  
 $E_{tot}$  = total field strength in V/m  
 $\sigma$  = conductivity in [mho/m] or [Siemens/m]  
 $\rho$  = equivalent tissue density in g/cm<sup>3</sup>

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^2 \cdot 37.7$$

with  $P_{pwe}$  = equivalent power density of a plane wave in mW/cm<sup>2</sup>  
 $E_{tot}$  = total electric field strength in V/m  
 $H_{tot}$  = total magnetic field strength in A/m

## 4 System Verification Procedure

### 4.1 Tissue Verification

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within  $\pm 5\%$  of the target values.

The following materials are used for producing the tissue-equivalent materials.

Ingredients (% of weight)	Head Tissue					
Frequency Band (MHz)	750	835	1750	1900	2450	2600
Water	39.2	41.45	52.64	55.242	62.7	55.242
Salt (NaCl)	2.7	1.45	0.36	0.306	0.5	0.306
Sugar	57.0	56.0	0.0	0.0	0.0	0.0
HEC	0.0	1.0	0.0	0.0	0.0	0.0
Bactericide	0.0	0.1	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	47.0	44.542	36.8	44.452
Ingredients (% of weight)	Body Tissue					
Frequency Band (MHz)	750	835	1750	1900	2450	2600
Water	50.3	52.4	69.91	69.91	73.2	64.493
Salt (NaCl)	1.60	1.40	0.13	0.13	0.04	0.024
Sugar	47.0	45.0	0.0	0.0	0.0	0.0
HEC	0.0	1.0	0.0	0.0	0.0	0.0
Bactericide	0.0	0.1	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	29.96	29.96	26.7	32.252

Table 4: Tissue Dielectric Properties

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

#### Simulating Head Liquid for 5G(HBBL3500-5800MHz), Manufactured by SPEAG:

Ingredients	(% by weight)
Water	50-65%
Mineral oil	10-30%
Emulsifiers	8-25%
Sodium salt	0-1.5%

#### Simulating Body Liquid for 5G (MBBL3500-5800MHz),Manufactured by SPEAG:

Ingredients	(% by weight)
Water	60-80%
Esters,Emulsifiers,Inhibitors	20-40%
Sodium salt	0-1.5%

Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		$\epsilon_r$ (+/-5%)	$\sigma$ (S/m) (+/-5%)	$\epsilon_r$	$\sigma$ (S/m)		
835H	825	41.60 (39.52~43.68)	0.90 (0.86~0.95)	40.32	0.907	21.4°C	2015-03-17
	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	40.27	0.915		
	850	41.50 (39.43~43.58)	0.92 (0.87~0.96)	40.19	0.925		
835H	825	41.60 (39.52~43.68)	0.90 (0.86~0.95)	42.17	0.896	21.4°C	2015-03-29
	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	42.09	0.903		
	850	41.50 (39.43~43.58)	0.92 (0.87~0.96)	41.96	0.913		
835B	825	55.20 (52.44~57.96)	0.97 (0.92~1.02)	55.88	0.967	21.4°C	2015-03-18
	835	55.20 (52.44~57.96)	0.97 (0.92~1.02)	55.77	0.977		
	850	55.20 (52.44~57.96)	0.99 (0.94~1.04)	55.61	0.993		
835B	825	55.20 (52.44~57.96)	0.97 (0.92~1.02)	54.49	0.941	21.4°C	2015-03-27
	835	55.20 (52.44~57.96)	0.97 (0.92~1.02)	54.35	0.950		
	850	55.20 (52.44~57.96)	0.99 (0.94~1.04)	54.24	0.966		
1750H	1710	40.1 (38.10~42.11)	1.35 (1.28~1.42)	38.99	1.364	21.4°C	2014-03-17
	1730	40.1 (38.10~42.11)	1.36 (1.29~1.43)	38.86	1.385		
	1750	40.1 (38.10~42.11)	1.37 (1.30~1.44)	38.73	1.404		
	1800	40.0 (38.00~42.00)	1.40 (1.33~1.47)	38.46	1.441		
1750B	1710	53.5 (50.83~56.18)	1.46 (1.39~1.53)	51.71	1.492	21.4°C	2014-03-18
	1730	53.5 (50.83~56.18)	1.48 (1.41~1.55)	51.64	1.510		
	1750	53.4 (50.73~56.07)	1.49 (1.42~1.56)	51.58	1.528		
	1800	53.3 (50.64~55.97)	1.52 (1.44~1.60)	51.43	1.571		
1900H	1850	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.86	1.345	21.4°C	2015-03-21
	1880	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.75	1.376		
	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.68	1.394		
	1910	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.64	1.404		

1900B	1850	53.30 (50.64~55.97)	1.52 (1.44~1.60)	52.29	1.525	21.4°C	2015-03-24
	1880	53.30 (50.64~55.97)	1.52 (1.44~1.60)	52.23	1.558		
	1900	53.30 (50.64~55.97)	1.52 (1.44~1.60)	52.10	1.584		
	1910	53.30 (50.64~55.97)	1.52 (1.44~1.60)	52.06	1.591		
2450H	2410	39.30 (37.34~41.26)	1.76 (1.67~1.85)	37.46	1.701	21.4°C	2015-03-23
	2435	39.20 (37.24~41.16)	1.79 (1.70~1.88)	37.32	1.733		
	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	37.30	1.747		
	2460	39.20 (37.24~41.16)	1.81 (1.72~1.90)	37.27	1.759		
2450B	2410	52.80 (50.16~55.44)	1.91 (1.81~2.00)	52.23	1.934	21.4°C	2015-04-01
	2435	52.70 (50.07~55.34)	1.94 (1.84~2.04)	52.17	1.962		
	2450	52.70 (50.07~55.34)	1.95 (1.85~2.05)	52.13	1.980		
	2460	52.70 (50.07~55.34)	1.96 (1.86~2.06)	52.10	1.991		
2600H	2510	39.12 (37.16~41.01)	1.86 (1.77~1.96)	39.10	1.801	21.4°C	2015-03-22
	2535	39.1 (37.13~41.04)	1.89 (1.80~1.98)	39.01	1.827		
	2560	39 (37.05~40.95)	1.917 (1.82~2.01)	38.93	1.855		
	2600	39 (37.05~40.95)	1.96 (1.86~2.05)	38.82	1.897		
2600H	2510	39.12 (37.16~41.01)	1.86 (1.77~1.96)	39.02	1.861	21.4°C	2015-03-26
	2535	39.1 (37.13~41.04)	1.89 (1.80~1.98)	38.89	1.886		
	2560	39 (37.05~40.95)	1.917 (1.82~2.01)	38.82	1.919		
	2600	39 (37.05~40.95)	1.96 (1.86~2.05)	38.69	1.960		
2600H	2510	39.12 (37.16~41.01)	1.86 (1.77~1.96)	39.94	1.936	21.4°C	2015-04-01
	2535	39.1 (37.13~41.04)	1.89 (1.80~1.98)	39.82	1.986		
	2560	39 (37.05~40.95)	1.917 (1.82~2.01)	39.65	2.031		
	2600	39 (37.05~40.95)	1.96 (1.86~2.05)	39.84	1.977		

2600B	2510	52.62 (49.99~55.25)	2.03 (1.93~2.13)	52.24	2.037	21.4°C	2015-03-24
	2535	52.59 (49.96~55.22)	2.07 (1.97~2.17)	52.46	2.066		
	2560	52.57 (49.94~55.20)	2.09 (1.99~2.19)	52.40	2.096		
	2600	52.5 (49.88~55.13)	2.16 (2.05~2.27)	52.31	2.141		
2600B	2510	52.62 (49.99~55.25)	2.03 (1.93~2.13)	52.74	2.110	21.4°C	2015-04-01
	2535	52.59 (49.96~55.22)	2.07 (1.97~2.17)	52.67	2.142		
	2560	52.57 (49.94~55.20)	2.09 (1.99~2.19)	52.61	2.175		
	2600	52.5 (49.88~55.13)	2.16 (2.05~2.27)	52.48	2.226		
$\epsilon_r$ = Relative permittivity, $\sigma$ = Conductivity							

Table 5: Measured Tissue Parameter

Note: 1) The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

2) KDB 865664 was ensured to be applied for probe calibration frequencies greater than or equal to 50MHz of the EUT frequencies.

3) The above measured tissue parameters were used in the DASY software to perform interpolation via the DASY software to determine actual dielectric parameters at the test frequencies. The SAR test plots may slightly differ from the table above since the DASY rounds to three significant digits.

## 4.2 System Check

The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE P1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests(Graphic Plot(s) see Appendix A).

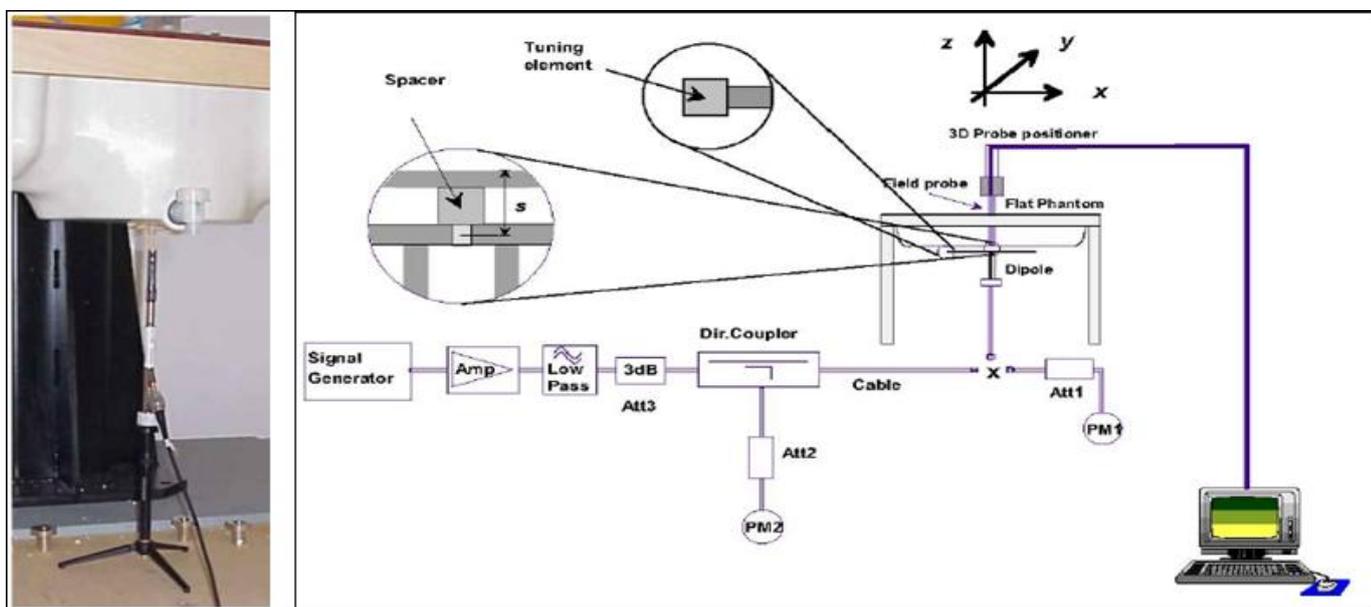
System Check	Target SAR (1W) (+/-10%)		Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (mW/g)	10-g (mW/g)	1-g (mW/g)	10-g (mW/g)		
835MHz Head	9.49 (8.54~10.44)	6.18 (5.56~6.80)	8.96	5.84	21.4°C	2015-03-17
835MHz Head	9.49 (8.54~10.44)	6.18 (5.56~6.80)	9.32	6.08	21.4°C	2015-03-29
1750MHz Head	35.1 (31.59~38.61)	18.6 (16.74~20.46)	33.92	17.68	21.4°C	2015-03-17
1900MHz Head	40.80 (36.72~44.88)	21.40 (19.26~23.54)	40.40	20.80	21.4°C	2015-03-21
2450MHz Head	52.30 (47.07~57.53)	24.50 (22.05~26.95)	51.60	23.76	21.4°C	2015-03-23
2600MHz Head	58.6 (52.74~64.46)	26.2 (23.58~28.82)	59.60	27.28	21.4°C	2015-03-22
2600MHz Head	58.6 (52.74~64.46)	26.2 (23.58~28.82)	58.80	26.04	21.4°C	2015-03-26
2600MHz Head	58.6 (52.74~64.46)	26.2 (23.58~28.82)	60.00	26.80	21.4°C	2015-04-01
835MHz Body	9.42 (8.48~10.36)	6.19 (5.57~6.80)	9.24	6.08	21.4°C	2015-03-18
835MHz Body	9.42 (8.48~10.36)	6.19 (5.57~6.80)	9.56	6.28	21.4°C	2015-03-27
1750MHz Body	36.3 (32.67~39.93)	19.5 (17.55~21.45)	36.84	19.20	21.4°C	2015-03-18
1900MHz Body	40.20 (36.18~44.22)	21.30 (19.17~23.43)	43.20	22.36	21.4°C	2015-03-24
2450MHz Body	51.4 (46.26~56.54)	23.9 (21.51~26.29)	51.20	23.68	21.4°C	2015-04-01
2600MHz Body	57.6 (51.84~63.36)	25.5 (22.95~28.05)	56.80	24.80	21.4°C	2015-03-24
2600MHz Body	57.6 (51.84~63.36)	25.5 (22.95~28.05)	58.80	25.80	21.4°C	2015-04-01

Table 6: System Check Results

### 4.3 System check Procedure

The system check is performed by using a system check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 250 mW(below 5GHz) or 100mW(above 5GHz). To adjust this power a power meter is used. The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system check to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



## 5 SAR measurement variability and uncertainty

### 5.1 SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r03, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is  $< 0.80$  W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is  $> 1.20$  or when the original or repeated measurement is  $\geq 1.45$  W/kg (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ .

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

The detailed repeated measurement results are shown in Section 7.2.

### 5.2 SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03, when the highest measured 1-g SAR within a frequency band is  $< 1.5$  W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2003 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

## 6 SAR Test Configuration

### 6.1 GSM Test Configuration

SAR tests for GSM850 and GSM1900, a communication link is set up with a base station by air link. Using CMU200 the power lever is set to “5”and “0” in SAR of GSM850 and GSM1900. The tests in the band of GSM850 and GSM1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink, and at most 4 timeslots in downlink, the maximum total timeslot is 5.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

### 6.2 UMTS Test Configuration

#### 1) Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the procedures description in section 5.2 of 3GPP TS 34.121,using the appropriate RMC or AMR with TPC(transmit power control) set to all “1s” for WCDMA/HSDPA or applying the required inner loop power control procedure to maintain maximum output power while HSUPA is active. Result for all applicable physical channel configurations(DPCCH,DPDCHn and spreading codes, HSDPA, HSPA) Should be tabulated in the SAR report .All configuration that are not supported by the DUT or cannot be measured due to technical or equipment limitation should be clearly identified.

## 2) WCDMA

### a. Head SAR Measurements

SAR for Head exposure configurations in voice mode is measured using a 12.2 kbps RMC with TPC bits configured to all "1s". SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2 kbps AMR is less than ¼ dB higher than that measured in 12.2 kbps RMC. Otherwise SAR is measured on the maximum output channel in 12.2 kbps AMR with 3.4kbps SRB(signalling radio bearer) using the exposure configuration that results in the highest SAR in 12.2kbps RMC for that RF channel.

### b. Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits configured to all "1s". SAR for other spreading codes and multiple DPDCHn, when supported by the EUT, are not required when the maximum average outputs of each RF channel, for each spreading code and DPDCHn configuration, are less than ¼ dB higher than those measured in 12.2 kbps RMC.

## 3) HSDPA

SAR for body exposure configurations is measured according to the "Body SAR Measurements" procedures of 3G device. In addition, body SAR is also measured for HSDPA when the maximum average outputs of each RF channel with HSDPA active is at ¼ dB higher than that measured without HSDPA using 12.2kbps RMC or the maximum SAR 12.2kbps RMC is above 75% of the SAR limit. Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2kbps RMC configured in Test Loop Mode 1, using the highest body SAR configuration in 12.2 kbps RMC without HSDPA.

HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HAPRQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The  $\beta_c$  and  $\beta_d$  gain factors for DPCCH and DPDCH were set according to the values in the below table,  $\beta_{hs}$  for HS-DPCCH is set automatically to the correct value when  $\Delta ACK, \Delta NACK, \Delta CQI = 8$ . The variation of the  $\beta_c / \beta_d$  ratio causes a power reduction at sub-tests 2 - 4.

Sub-test <sup>Ⓢ</sup>	$\beta_c$ <sup>Ⓢ</sup>	$\beta_d$ <sup>Ⓢ</sup>	$\beta_d$ (SF) <sup>Ⓢ</sup>	$\beta_c/\beta_d$ <sup>Ⓢ</sup>	$\beta_{hs}$ (1) <sup>Ⓢ</sup>	CM(dB)(2) <sup>Ⓢ</sup>	MPR (dB) <sup>Ⓢ</sup>
1 <sup>Ⓢ</sup>	2/15 <sup>Ⓢ</sup>	15/15 <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	2/15 <sup>Ⓢ</sup>	4/15 <sup>Ⓢ</sup>	0.0 <sup>Ⓢ</sup>	0 <sup>Ⓢ</sup>
2 <sup>Ⓢ</sup>	12/15(3) <sup>Ⓢ</sup>	15/15(3) <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	12/15(3) <sup>Ⓢ</sup>	24/15 <sup>Ⓢ</sup>	1.0 <sup>Ⓢ</sup>	0 <sup>Ⓢ</sup>
3 <sup>Ⓢ</sup>	15/15 <sup>Ⓢ</sup>	8/15 <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	15/8 <sup>Ⓢ</sup>	30/15 <sup>Ⓢ</sup>	1.5 <sup>Ⓢ</sup>	0.5 <sup>Ⓢ</sup>
4 <sup>Ⓢ</sup>	15/15 <sup>Ⓢ</sup>	4/15 <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	15/4 <sup>Ⓢ</sup>	30/15 <sup>Ⓢ</sup>	1.5 <sup>Ⓢ</sup>	0.5 <sup>Ⓢ</sup>

Note 1:  $\Delta ACK$ ,  $\Delta NACK$  and  $\Delta CQI = 8$       $A_{hs} = \beta_{hs}/\beta_c = 30/15$       $\beta_{hs} = 30/15 * \beta_c$ <sup>Ⓢ</sup>  
 Note 2 : CM=1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.<sup>Ⓢ</sup>  
 Note 3 : For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ <sup>Ⓢ</sup>

Table 7: Sub-tests for UMTS Release 5 HSDPA

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI's
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

Table 8: settings of required H-Set 1 QPSK acc. to 3GPP 34.121

HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	Maximum HS-DSCH Transport Block Bits/HS-DSCH TTI	Total Soft Channel Bits
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

Table 9:HSDPA UE category

4) HSUPA

Body SAR is also measured for HSDPA when the maximum average outputs of each RF channel with HSDPA active is at ¼ dB higher than that measured without HSDPA using 12.2kbps RMC or the maximum SAR 12.2kbps RMC is above 75% of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-set 1 and QPSK for FRC and 12.2kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA.

Due to inner loop power control requirements in HSDPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSDPA should be configured according to the values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Device' sections of 3G device.

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	$\beta_{ec}$	$\beta_{ed}$	$\beta_{ec}$ (SF)	$\beta_{ed}$ (code)	CM <sup>(2)</sup> (dB)	MP R <sup>(3)</sup> (dB)	AG <sup>(4)</sup> Index	E-TFC I
1	11/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	11/15 <sup>(3)</sup>	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 <sup>(4)</sup>	15/15 <sup>(4)</sup>	64	15/15 <sup>(4)</sup>	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1:  $\Delta ACK, \Delta NACK$  and  $\Delta CQI = 8$      $A_{hs} = \beta_{hs}/\beta_c = 30/15$      $\beta_{hs} = 30/15 * \beta_c$   
 Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15, \beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference  
 Note 3 : For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$   
 Note 4 : For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$   
 Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g  
 Note 6:  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.

Table 10:Subtests for UMTS Release 6 HSUPA

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI(ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	10	2SF2&2SF	11484	5.76
	4	4	2	4	20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2SF	22996	?
	4	4	10	4	20000	?

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM.(TS25.306-7.3.0).

Table 11:HSUPA UE category

#### 5) DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a Second serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

**Table E.5.0: Levels for HSDPA connection setup**

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

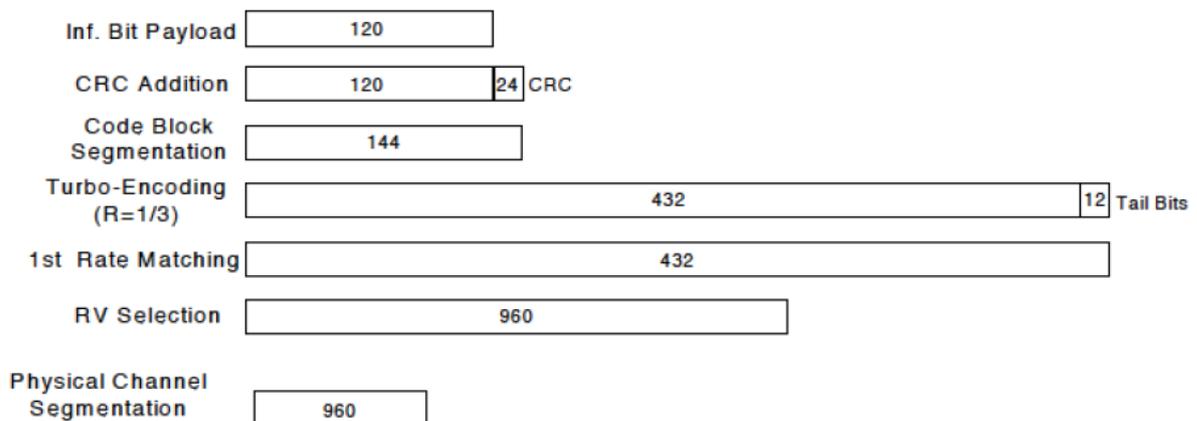
The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK

Parameter	Value
Nominal average inf. bit rate	60 kbit/s
Inter-TTI Distance	1 TTI's
Number of HARQ Processes	6 Processes
Information Bit Payload	120 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	960 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	3200 SMLs
Coding Rate	0.15
Number of Physical Channel Codes	1

Table 12: settings of required H-Set 12 QPSK acc. to 3GPP 34.121

Note:

- 1.The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
- 2.Maximum number of transmission is limited to 1,i.e.,retransmission is not allowed. The redundancy and constellation version 0 shall be used.



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

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest settings are illustrated below:

Sub-test <sup>o</sup>	$\beta_c$ <sup>o</sup>	$\beta_d$ <sup>o</sup>	$\beta_d$ (SF) <sup>o</sup>	$\beta_c/\beta_d$ <sup>o</sup>	$\beta_{hs}(1)$ <sup>o</sup>	CM(dB)(2) <sup>o</sup>	MPR (dB) <sup>o</sup>
1 <sup>o</sup>	2/15 <sup>o</sup>	15/15 <sup>o</sup>	64 <sup>o</sup>	2/15 <sup>o</sup>	4/15 <sup>o</sup>	0.0 <sup>o</sup>	0 <sup>o</sup>
2 <sup>o</sup>	12/15(3) <sup>o</sup>	15/15(3) <sup>o</sup>	64 <sup>o</sup>	12/15(3) <sup>o</sup>	24/15 <sup>o</sup>	1.0 <sup>o</sup>	0 <sup>o</sup>
3 <sup>o</sup>	15/15 <sup>o</sup>	8/15 <sup>o</sup>	64 <sup>o</sup>	15/8 <sup>o</sup>	30/15 <sup>o</sup>	1.5 <sup>o</sup>	0.5 <sup>o</sup>
4 <sup>o</sup>	15/15 <sup>o</sup>	4/15 <sup>o</sup>	64 <sup>o</sup>	15/4 <sup>o</sup>	30/15 <sup>o</sup>	1.5 <sup>o</sup>	0.5 <sup>o</sup>

Note 1:  $\Delta$  ACK,  $\Delta$  NACK and  $\Delta$  CQI=8  $A_{hs} = \beta_{hs}/\beta_c = 30/15$   $\beta_{hs} = 30/15 * \beta_c$ <sup>o</sup>

Note 2: CM=1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.<sup>o</sup>

Note 3: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ <sup>o</sup>

Up commands are set continuously to set the UE to Max power.

Note:

- 1.The Dual Carriers transmission only applies to HSDPA physical channels
- 2.The Dual Carriers belong to the same Node and are on adjacent carriers.
- 3.The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
- 4.The Dual Carriers operate in the same frequency band .
- 5.The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
- 6.The device doesn't support carrier aggregation for it just can operate in Release 8.

### 6.3 LTE Test Configuration

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02r03. The CMW500 WideBand Radio Communication Tester was used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR test were performed with the same number of RB and RB offsets transmitting on all TTI frames(Maximum TTI)

#### 1) Spectrum Plots for RB configurations

A properly configured base station simulator was used for LTE output power measurements and SAR testing. Therefore, spectrum plots for RB configurations were not required to be included in this report.

#### 2) MPR

When MPR is implemented permanently within the UE, regardless of network requirements, only those RB configurations allowed by 3GPP for the channel bandwidth and modulation combinations may be tested with MPR active. Configurations with RB allocations less than the RB thresholds required by 3GPP must be tested without MPR.

The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

**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

#### 3) A-MPR

A-MPR(Additional MPR) has been disabled for all SAR tests by using Network Signalling Value of "NS\_01" on the base station simulator.

#### 4) LTE procedures for SAR testing

A) Largest channel bandwidth standalone SAR test requirements

i) QPSK with 1 RB allocation

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

ii) QPSK with 50% RB allocation

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

iii) QPSK with 100% RB allocation

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

iv) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is  $> \frac{1}{2}$  dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is  $> 1.45$  W/kg.

B) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is  $> \frac{1}{2}$  dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is  $> 1.45$  W/kg.

5) TDD LTE test configuration

According to KDB 941225 D05 SAR for LTE Devices v02r03, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

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

Figure 4.2-1: Frame structure type 2

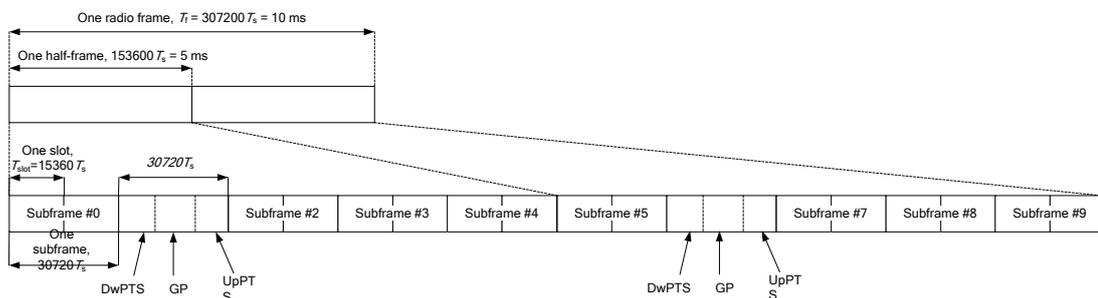


Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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

**Table 4.2-2: Uplink-downlink configurations**

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number											
		0	1	2	3	4	5	6	7	8	9		
0	5 ms	D	S	U	U	U	D	S	U	U	U	U	
1	5 ms	D	S	U	U	D	D	S	U	U	D	D	
2	5 ms	D	S	U	D	D	D	S	U	D	D	D	
3	10 ms	D	S	U	U	U	D	D	D	D	D	D	
4	10 ms	D	S	U	U	D	D	D	D	D	D	D	
5	10 ms	D	S	U	D	D	D	D	D	D	D	D	
6	5 ms	D	S	U	U	U	D	S	U	U	D	D	

According to Figure 4.2-1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table 4.2-2:

$$\text{Duty cycle} = (30720T_s \cdot \text{Ups} + \text{Uplink Component} \cdot \text{Specials}) / (307200T_s)$$

About the uplink component of Special subframes, we can figure out by Table 4.2-1:

$$\text{Uplink Component} = \text{UpPTS}$$

In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below .all these sets are ok when we test, or we can set as below.

$$\text{Duty cycle} = [(30720T_s \cdot \text{Ups}) + \text{UpPTS} \cdot \text{Specials}] / (307200T_s)$$

And we can get different Duty cycles under different configurations:

Uplink-downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
	Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink				
	D	S	U	configuration 0~4	configuration 5~9	configuration 0~4	configuration 5~9	configuration 0~3	configuration 4~7	configuration 0~3	configuration 4~7
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type 2.

## 6.4 WiFi 2.4G Test Configuration

For WiFi SAR testing, a communication link is set up with the testing software for WiFi mode test. The Absolute Radio Frequency Channel Number(ARFCN) is allocated to 1, 6 and 11 respectively in the case of 2450 MHz. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. The RF signal utilized in SAR measurement has 100% duty cycle and its crest factor is 1. Each channel should be tested at the lowest data rate.

802.11b/g operating modes are tested independently according to the service requirements in each frequency band. 802.11b/g modes are tested on channel 1, 6, 11; however, if output power reduction is necessary for channels 1 and/or 11 to meet restricted band requirements the highest output channel closest to each of these channels must be tested instead.

SAR is not required for 802.11g/n channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels.

Mode	Band	GHz	Channel	"Default Test Channels"	
				802.11b	802.11g
802.11b/g	2.4 GHz	2.412	1#	√	△
		2.437	6	√	△
		2.462	11#	√	△

**Notes:**

√ = "default test channels"

△ = possible 802.11g channels with maximum average output  $\frac{1}{4}$  dB the "default test channels"

# = when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels should be tested.

802.11 Test Channels per FCC KDB 248227D01

## 7 SAR Measurement Results

### 7.1 Tune-up tolerance

The device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation:

1) A fixed level power reduction is applied for some frequency bands when hotspot mode becomes active. When the hotspot is disabled, the power value will be recovered.

2) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction.

The full power and reduced tune-up specifications summary is as below tables:

#### Main antenna and Modem 0(Main Modem):

Band\Config.	Full Power	Power Reduciton (dB)				
		Modem0+ Modem1	Modem0+ WiFi	Modem0+Modem1+ WiFi	Hotspot on	Modem0+Modem1 ,Hotspot on
GSM 850	0.0	1.0	0.0	2.0	0.0	1.0
GSM 1900	0.0	1.0	0.0	2.0	0.0	1.0
UMTS B2	0.0	1.0	0.0	1.0	3.0	4.0
UMTS B4	0.0	2.0	0.0	3.0	1.0	2.5
UMTS B5	0.0	1.0	0.0	1.0	0.0	1.0
LTE B4	0.0	1.0	0.0	2.0	1.0	2.0
LTE B7	0.0	0.5	0.0	1.0	0.0	2.0
LTE B38	0.0	0.0	0.0	1.5	0.0	0.0
LTE B41	0.0	0.0	0.0	1.6	0.0	0.0
WiFi	0.0	0.0	2.5	4.0	0.0	0.0

#### Second antenna and Modem 0(Main Modem):

Band\Config.	Full Power	Power Reduciton (dB)				
		Modem0+ Modem1	Modem0+ WiFi	Modem0+Modem1+ WiFi	Hotspot on	Modem0+Modem1 ,Hotspot on
GSM 850	0.0	2.0	0.0	3.0	0.0	2.0
GSM 1900	0.0	1.0	0.5	1.5	0.0	1.0
UMTS B2	0.0	3.5	3.0	4.0	3.0	3.5
UMTS B4	0.0	3.5	3.5	4.5	3.0	3.5
UMTS B5	0.0	1.5	1.5	2.0	1.0	1.5
LTE B4	0.0	4.0	3.5	4.5	3.0	4.0
LTE B7	0.0	5.5	5.0	6.0	4.0	5.5
LTE B38	0.0	1.5	0.0	1.5	0.0	1.5
LTE B41	0.0	4.3	3.0	4.5	3.0	3.5
WiFi	0.0	0.0	2.5	4.0	0.0	0.0

**Main antenna and Modem 1(Second Modem):**

Band\Config.	Full Power	Power Reduciton (dB)				
		Modem0+ Modem1	Modem0+ WiFi	Modem0+Modem1+ WiFi	Hotspot on	Modem0+Modem1 ,Hotspot on
GSM 850	0.0	1.0	NA	1.5	0.0	1.0
GSM 1900	0.0	1.0	NA	1.0	1.0	2.0

**Second antenna and Modem 1(Second Modem):**

Band\Config.	Full Power	Power Reduciton (dB)				
		Modem0+ Modem1	Modem0+ WiFi	Modem0+Modem1+ WiFi	Hotspot on	Modem0+Modem1 ,Hotspot on
GSM 850	0.0	2.0	NA	3.0	0.0	2.0
GSM 1900	0.0	1.0	NA	2.0	0.0	1.0

**7.1.1 Main Antenna and Modem0(Main Modem)**

GSM/GPRS850 (GMSK) :

1TXslot:32.5 dBm [-1dB~~+1dB]

2TXslot:29.5 dBm [-2.0dB~~+1.0dB]

3TXslot:28 dBm [-2.0dB~~+1.0dB]

4TXslot:26.5 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26.5 dBm [-2dB~~+1.0dB]

2TXslot: 24.5 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:32.5 dBm [-1dB~~+1dB]

2TXslot:29.5 dBm [-2dB~~+1dB]

3TXslot:28 dBm [-2dB~~+1dB]

4TXslot:26.5 dBm [-2dB~~+1dB]

After Synchronous transmission with Modem1:

GSM/GPRS850 (GMSK) :

1TXslot:31.5 dBm [-1dB~~+1dB]

2TXslot:28.5 dBm [-2.0dB~~+1.0dB]

3TXslot:27 dBm [-2.0dB~~+1.0dB]

4TXslot:25.5 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26.5 dBm [-2dB~~+1.0dB]

2TXslot: 24.5 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:31.5 dBm [-1dB~~+1dB]  
2TXslot:28.5 dBm [-2dB~~+1dB]  
3TXslot:27 dBm [-2dB~~+1dB]  
4TXslot:25.5 dBm [-2dB~~+1dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

GSM/GPRS850 (GMSK) :

1TXslot:30.5 dBm [-1dB~~+1dB]  
2TXslot:27.5 dBm [-2.0dB~~+1.0dB]  
3TXslot:26 dBm [-2.0dB~~+1.0dB]  
4TXslot:24.5 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26.5 dBm [-2dB~~+1.0dB]  
2TXslot: 24.5 dBm [-2.0dB~~+1dB]  
3TXslot: 22 dBm [-2.5dB~~+1.0dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:30.5 dBm [-1dB~~+1dB]  
2TXslot:27.5 dBm [-2dB~~+1dB]  
3TXslot:26 dBm [-2dB~~+1dB]  
4TXslot:24.5 dBm [-2dB~~+1dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

GSM/GPRS850 (GMSK) :

1TXslot:31.5 dBm [-1dB~~+1dB]  
2TXslot:28.5 dBm [-2.0dB~~+1.0dB]  
3TXslot:27 dBm [-2.0dB~~+1.0dB]  
4TXslot:25.5 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26.5 dBm [-2dB~~+1.0dB]  
2TXslot: 24.5 dBm [-2.0dB~~+1dB]  
3TXslot: 22 dBm [-2.5dB~~+1.0dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:31.5 dBm [-1dB~~+1dB]  
2TXslot:28.5 dBm [-2dB~~+1dB]  
3TXslot:27 dBm [-2dB~~+1dB]  
4TXslot:25.5 dBm [-2dB~~+1dB]

## PCS/GPRS1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]  
2TXslot:26.5 dBm [-2dB~~+1.0dB]  
3TXslot:25 dBm [-2dB~~+1dB]  
4TXslot:23.5 dBm [-2dB~~+1.0dB]

## EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 22.5 dBm [-2.0dB~~+1dB]  
3TXslot:20.5 dBm [-2.5dB~~+1dB]  
4TXslot: 18.5 dBm [-2.5dB~~+1dB]

## EDGE1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]  
2TXslot:26.5 dBm [-2dB~~+1.0dB]  
3TXslot:25 dBm [-2dB~~+1dB]  
4TXslot:23.5 dBm [-2dB~~+1.0dB]

## After Synchronous transmission with Modem1:

## PCS/GPRS1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

## EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 22.5 dBm [-2.0dB~~+1dB]  
3TXslot:20.5 dBm [-2.5dB~~+1dB]  
4TXslot: 18.5 dBm [-2.5dB~~+1dB]

## EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

## After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

## PCS/GPRS1900 (GMSK) :

1TXslot:27.5 dBm [-1dB~~+1dB]  
2TXslot:24.5 dBm [-2dB~~+1.0dB]  
3TXslot:23 dBm [-2dB~~+1dB]  
4TXslot:21.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 22.5 dBm [-2.0dB~~+1dB]

3TXslot:20.5 dBm [-2.5dB~~+1dB]

4TXslot: 18.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:27.5 dBm [-1dB~~+1dB]

2TXslot:24.5 dBm [-2dB~~+1.0dB]

3TXslot:23 dBm [-2dB~~+1dB]

4TXslot:21.5 dBm [-2dB~~+1.0dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

PCS/GPRS1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 22.5 dBm [-2.0dB~~+1dB]

3TXslot:20.5 dBm [-2.5dB~~+1dB]

4TXslot: 18.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

UMTS Band II Output power of range:

WCDMA: 22.5 dBm [-1dB~~+1dB]

HSDPA:

case1: 22.5dBm [-2dB~~+1dB]

case2: 21 dBm [-2dB~~+1dB]

case3: 20.5 dBm [-2dB~~+1dB]

case4: 20.5 dBm [-2dB~~+1dB]

HSUPA:

case1:20.5dBm [-2dB~~+1dB]

case2:19 dBm [-2dB~~+1dB]

case3:21.5 dBm [-2dB~~+1dB]

case4:19 dBm [-2dB~~+1dB]

case5: 20dBm [-2dB~~+1dB]

After Synchronous transmission with Modem1:

WCDMA: 21.5 dBm [-1dB~~+1dB]

HSDPA:

case1: 21.5dBm [-2dB~~+1dB]

case2: 20 dBm [-2dB~~+1dB]

case3: 19.5 dBm [-2dB~~+1dB]

case4: 19.5 dBm [-2dB~~+1dB]

HSUPA:

case1:19.5dBm [-2dB~~+1dB]

case2:18 dBm [-2dB~~+1dB]

case3:20.5 dBm [-2dB~~+1dB]

case4:18 dBm [-2dB~~+1dB]

case5: 19 dBm [-2dB~~+1dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 21.5 dBm [-1dB~~+1dB]

HSDPA:

case1: 21.5dBm [-2dB~~+1dB]

case2: 20 dBm [-2dB~~+1dB]

case3: 19.5 dBm [-2dB~~+1dB]

case4: 19.5 dBm [-2dB~~+1dB]

HSUPA:

case1:19.5dBm [-2dB~~+1dB]

case2:18 dBm [-2dB~~+1dB]

case3:20.5 dBm [-2dB~~+1dB]

case4:18 dBm [-2dB~~+1dB]

case5: 19 dBm [-2dB~~+1dB]

After hotspot function work:

WCDMA: 19.5 dBm [-1dB~~+1dB]

HSDPA:

case1: 19.5dBm [-2dB~~+1dB]

case2: 18 dBm [-2dB~~+1dB]

case3: 17.5 dBm [-2dB~~+1dB]

case4: 17.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:17.5dBm [-2dB~~+1dB]

case2:16 dBm [-2dB~~+1dB]

case3:18.5 dBm [-2dB~~+1dB]

case4:16 dBm [-2dB~~+1dB]

case5: 18 dBm [-2dB~~+1dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 18.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 18.5dBm [-2dB~~+1dB]

case2: 17 dBm [-2dB~~+1dB]

case3: 16.5 dBm [-2dB~~+1dB]

case4: 16.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:16.5dBm [-2dB~~+1dB]

case2:15 dBm [-2dB~~+1dB]

case3:17.5 dBm [-2dB~~+1dB]

case4:15 dBm [-2dB~~+1dB]

case5: 17 dBm [-2dB~~+1dB]

UMTS Band IV Output power of range:

WCDMA: 22.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 22.5dBm [-2dB~~+1dB]

case2: 21 dBm [-2dB~~+1dB]

case3: 21.5 dBm [-2dB~~+1dB]

case4: 21.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:20.5dBm [-2dB~~+1dB]

case2:19 dBm [-2dB~~+1dB]

case3:21.5 dBm [-2dB~~+1dB]

case4:19 dBm [-2dB~~+1dB]

case5: 22dBm [-2dB~~+1dB]

After Synchronous transmission with Modem1:

WCDMA: 20.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 20.5dBm [-2dB~~+1dB]

case2: 19 dBm [-2dB~~+1dB]

case3: 19.5 dBm [-2dB~~+1dB]

case4: 19.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:18.5dBm [-2dB~~+1dB]

case2:17 dBm [-2dB~~+1dB]

case3:19.5 dBm [-2dB~~+1dB]

case4:17 dBm [-2dB~~+1dB]

case5: 20dBm [-2dB~~+1dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 19.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 19.5dBm [-2dB~~+1dB]

case2: 18 dBm [-2dB~~+1dB]

case3: 18.5 dBm [-2dB~~+1dB]

case4: 18.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:17.5dBm [-2dB~~+1dB]

case2:16 dBm [-2dB~~+1dB]

case3:18.5 dBm [-2dB~~+1dB]

case4:16 dBm [-2dB~~+1dB]

case5: 19 dBm [-2dB~~+1dB]

After hotspot function work:

WCDMA: 21.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 21.5dBm [-2dB~~+1dB]

case2: 20 dBm [-2dB~~+1dB]

case3: 20.5 dBm [-2dB~~+1dB]

case4: 20.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:19.5dBm [-2dB~~+1dB]

case2:18 dBm [-2dB~~+1dB]

case3:20.5 dBm [-2dB~~+1dB]

case4:18 dBm [-2dB~~+1dB]

case5: 21 dBm [-2dB~~+1dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 20 dBm [-1dB~~+1dB]

## HSDPA:

case1: 20 dBm [-2dB~~+1dB]

case2: 18.5 dBm [-2dB~~+1dB]

case3: 19 dBm [-2dB~~+1dB]

case4: 19 dBm [-2dB~~+1dB]

## HSUPA:

case1:18dBm [-2dB~~+1dB]  
case2:16.5 dBm [-2dB~~+1dB]  
case3:19 dBm [-2dB~~+1dB]  
case4:16.5 dBm [-2dB~~+1dB]  
case5: 19.5 dBm [-2dB~~+1dB]

## UMTS Band V Output power of range:

WCDMA: 23 dBm [-1dB~~+1.5dB]

## HSDPA:

case1: 23 dBm [-2dB~~+1.5 dB]  
case2: 22 dBm [-2dB~~+1.5 dB]  
case3: 21.5 dBm [-2dB~~+1.5 dB]  
case4: 21.5 dBm [-2dB~~+1.5dB]

## HSUPA:

case1:21dBm [-2dB~~+1.5dB]  
case2:20 dBm [-2dB~~+1.5dB]  
case3:22 dBm [-2dB~~+1.5dB]  
case4:20.5 dBm [-2dB~~+1.5dB]  
case5: 22dBm [-2dB~~+1.5dB]

## After Synchronous transmission with Modem1:

WCDMA: 22 dBm [-1dB~~+1.5dB]

## HSDPA:

case1: 22 dBm [-2dB~~+1.5dB]  
case2: 21 dBm [-2dB~~+1.5dB]  
case3: 20.5 dBm [-2dB~~+1.5dB]  
case4: 20.5 dBm [-2dB~~+1.5dB]

## HSUPA:

case1: 20 dBm [-2dB~~+1.5dB]  
case2:19 dBm [-2dB~~+1.5dB]  
case3:21 dBm [-2dB~~+1.5dB]  
case4:19.5 dBm [-2dB~~+1.5dB]  
case5: 21 dBm [-2dB~~+1.5dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1: :  
WCDMA: 22 dBm [-1dB~~+1.5dB]

HSDPA:

- case1: 22dBm [-2dB~~+1.5dB]
- case2: 21 dBm [-2dB~~+1.5dB]
- case3: 20.5 dBm [-2dB~~+1.5dB]
- case4: 20.5 dBm [-2dB~~+1.5dB]

HSUPA:

- case1: 20 dBm [-2dB~~+1.5dB]
- case2:19 dBm [-2dB~~+1.5dB]
- case3:21 dBm [-2dB~~+1.5dB]
- case4:19.5 dBm [-2dB~~+1.5dB]
- case5: 21 dBm [-2dB~~+1.5dB]

LTE Band IV Output power of range:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	23+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	23+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	22+1/-2.5 dB
16 QAM	1	1	1	1	1	1	22.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	21+1/-2.5 dB

After Synchronous transmission with Modem1:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	22+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21+1/-2.5 dB
16 QAM	1	1	1	1	1	1	21.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20+1/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	21+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	20+1/-2.5 dB
16 QAM	1	1	1	1	1	1	20.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	20+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	19+1/-2.5 dB

After hotspot function work:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	22+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21+1/-2.5 dB
16 QAM	1	1	1	1	1	1	21.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20+1/-2.5 dB

After hotspot function work, Modem0 Synchronous transmission with Modem1:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	21+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	20+1/-2.5 dB
16 QAM	1	1	1	1	1	1	20.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	20+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	19+1/-2.5 dB

LTE Band VII Output power of range:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	22+1/-2.5 dB
16 QAM	1	1	1	1	21.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	21+1/-2.5 dB

After Synchronous transmission with Modem1:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	22.5+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	22.5+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	22+0.5/-2.5 dB
16 QAM	1	1	1	1	21.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	21+1/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	21.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	21+1/-2.5 dB
16 QAM	1	1	1	1	20.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	20.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	20+1/-2.5 dB

After hotspot function work, Modem0 Synchronous transmission with Modem1:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	20.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	20.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	20+1/-2.5 dB
16 QAM	1	1	1	1	19.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	19.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	19+1/-2.5 dB

LTE Band XXXVIII Output power of range:

LTE_B38	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	23.0+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	23.0+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	21.0+1/-2.5 dB
16 QAM	1	1	1	1	22.0+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	22.0+1/-2.5dB
16 QAM	> 8	> 12	> 16	> 18	20+1/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B38	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	21.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB
16 QAM	1	1	1	1	21.0+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21.0+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB

LTE Band XXXVIII Output power of range:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	23.0+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	23.0+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	22.0+1/-2.5 dB
16 QAM	1	1	1	1	22.0+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	22.0+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	21+1/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	21.7+0.7/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	21.7+0.7/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	20.7+1/-2.5 dB
16 QAM	1	1	1	1	20.7+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	20.7+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	19.7+1/-2.5 dB

### 7.1.2 Main Antenna and Modem1(Second Modem)

GSM/GPRS850 (GMSK) :

1TXslot:32.0 dBm [-1dB~~+1dB]

2TXslot:29.0 dBm [-2.0dB~~+1.0dB]

3TXslot:27.5 dBm [-2.0dB~~+1.0dB]

4TXslot:26 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:32 dBm [-1dB~~+1dB]

2TXslot:29 dBm [-2dB~~+1dB]

3TXslot:27.5 dBm [-2dB~~+1dB]

4TXslot:26 dBm [-2dB~~+1dB]

After Synchronous transmission with Modem0:

GSM/GPRS850 (GMSK) :

1TXslot:31 dBm [-1dB~~+1dB]

2TXslot:28 dBm [-2.0dB~~+1.0dB]

3TXslot:26.5 dBm [-2.0dB~~+1.0dB]

4TXslot:25 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:31 dBm [-1dB~~+1dB]

2TXslot:28 dBm [-2dB~~+1dB]

3TXslot:26.5 dBm [-2dB~~+1dB]

4TXslot:25 dBm [-2dB~~+1dB]

After Wi-Fi on function work, Modem1 Synchronous transmission with Modem0:

GSM/GPRS850 (GMSK) :

1TXslot: 30.5 dBm [-1dB~~+1dB]

2TXslot: 27.5 dBm [-2.0dB~~+1.0dB]

3TXslot: 26 dBm [-2.0dB~~+1.0dB]

4TXslot: 24.5 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot: 30.5 dBm [-1dB~~+1dB]

2TXslot: 27.5 dBm [-2dB~~+1dB]

3TXslot: 26 dBm [-2dB~~+1dB]

4TXslot: 24.5 dBm [-2dB~~+1dB]

After hotspot function work, Modem1 Synchronous transmission with Modem0:

GSM/GPRS850 (GMSK) :

1TXslot: 31 dBm [-1dB~~+1dB]

2TXslot: 28 dBm [-2.0dB~~+1.0dB]

3TXslot: 26.5 dBm [-2.0dB~~+1.0dB]

4TXslot: 25 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot: 31 dBm [-1dB~~+1dB]

2TXslot: 28 dBm [-2dB~~+1dB]

3TXslot: 26.5 dBm [-2dB~~+1dB]

4TXslot: 25 dBm [-2dB~~+1dB]

PCS/GPRS1900 (GMSK) :

1TXslot: 29.5 dBm [-1dB~~+1dB]

2TXslot: 26.5 dBm [-2dB~~+1.0dB]

3TXslot: 25 dBm [-2dB~~+1dB]

4TXslot: 23.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 23.5 dBm [-2.0dB~~+1dB]

3TXslot:21.5 dBm [-2.5dB~~+1dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]

2TXslot:26.5 dBm [-2dB~~+1.0dB]

3TXslot:25 dBm [-2dB~~+1dB]

4TXslot:23.5 dBm [-2dB~~+1.0dB]

After Synchronous transmission with Modem0:

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 23.5 dBm [-2.0dB~~+1dB]

3TXslot:21.5 dBm [-2.5dB~~+1dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

PCS/GPRS1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 23.5 dBm [-2.0dB~~+1dB]

3TXslot:21.5 dBm [-2.5dB~~+1dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

After hotspot function work:

PCS/GPRS1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:21.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

After hotspot function work, Modem1 Synchronous transmission with Modem0:

1TXslot:27.5 dBm [-1dB~~+1dB]  
2TXslot:24.5 dBm [-2dB~~+1.0dB]  
3TXslot:23 dBm [-2dB~~+1dB]  
4TXslot:21.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:21.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:27.5 dBm [-1dB~~+1dB]  
2TXslot:24.5 dBm [-2dB~~+1.0dB]  
3TXslot:23 dBm [-2dB~~+1dB]  
4TXslot:21.5 dBm [-2dB~~+1.0dB]

### 7.1.3 Second Antenna and Modem0(Main Modem)

GSM/GPRS850 (GMSK) :

1TXslot:32 dBm [-1dB~~+1dB]

2TXslot:29 dBm [-2.0dB~~+1.0dB]

3TXslot:27.5 dBm [-2.0dB~~+1.0dB]

4TXslot:26 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:32 dBm [-1dB~~+1dB]

2TXslot:29 dBm [-2dB~~+1dB]

3TXslot:27.5 dBm [-2dB~~+1dB]

4TXslot:26 dBm [-2dB~~+1dB]

After Synchronous transmission with Modem1:

GSM/GPRS850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]

2TXslot:27 dBm [-2.0dB~~+1.0dB]

3TXslot:25.5 dBm [-2.0dB~~+1.0dB]

4TXslot:24 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]

2TXslot:27 dBm [-2dB~~+1dB]

3TXslot:25.5 dBm [-2dB~~+1dB]

4TXslot:24 dBm [-2dB~~+1dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

GSM/GPRS850 (GMSK) :

1TXslot:29 dBm [-1dB~~+1dB]

2TXslot:26 dBm [-2.0dB~~+1.0dB]

3TXslot:24.5 dBm [-2.0dB~~+1.0dB]

4TXslot:23 dBm [-2.0dB~~+1.0dB]

## EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]  
2TXslot: 24 dBm [-2.0dB~~+1dB]  
3TXslot: 22 dBm [-2.5dB~~+1.0dB]  
4TXslot: 20 dBm [-2.5dB~~+1dB]

## EDGE850 (GMSK) :

1TXslot:29 dBm [-1dB~~+1dB]  
2TXslot:26 dBm [-2dB~~+1dB]  
3TXslot:24.5 dBm [-2dB~~+1dB]  
4TXslot:23 dBm [-2dB~~+1dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

## GSM/GPRS850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]  
2TXslot:27 dBm [-2.0dB~~+1.0dB]  
3TXslot:25.5 dBm [-2.0dB~~+1.0dB]  
4TXslot:24 dBm [-2.0dB~~+1.0dB]

## EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]  
2TXslot: 24 dBm [-2.0dB~~+1dB]  
3TXslot: 22 dBm [-2.5dB~~+1.0dB]  
4TXslot: 20 dBm [-2.5dB~~+1dB]

## EDGE850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]  
2TXslot:27 dBm [-2dB~~+1dB]  
3TXslot:25.5 dBm [-2dB~~+1dB]  
4TXslot:24 dBm [-2dB~~+1dB]

## PCS/GPRS1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]  
2TXslot:26.5 dBm [-2dB~~+1.0dB]  
3TXslot:25 dBm [-2dB~~+1dB]  
4TXslot:23.5 dBm [-2dB~~+1.0dB]

## EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:20.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]  
2TXslot:26.5 dBm [-2dB~~+1.0dB]  
3TXslot:25 dBm [-2dB~~+1dB]  
4TXslot:23.5 dBm [-2dB~~+1.0dB]

After Synchronous transmission with Modem1:

PCS/GPRS1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:20.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

After Wi-Fi on function work:

PCS/GPRS1900 (GMSK) :

1TXslot:29 dBm [-1dB~~+1dB]  
2TXslot:26 dBm [-2dB~~+1.0dB]  
3TXslot:24.5 dBm [-2dB~~+1dB]  
4TXslot:23 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:20.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot: 29 dBm [-1dB~~+1dB]  
2TXslot: 26 dBm [-2dB~~+1.0dB]  
3TXslot: 24.5 dBm [-2dB~~+1dB]  
4TXslot: 23 dBm [-2dB~~+1.0dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

PCS/GPRS1900 (GMSK) :

1TXslot:28 dBm [-1dB~~+1dB]

2TXslot:25 dBm [-2dB~~+1.0dB]

3TXslot:23.5 dBm [-2dB~~+1dB]

4TXslot:22 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 23.5 dBm [-2.0dB~~+1dB]

3TXslot:20.5 dBm [-2.5dB~~+1dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28 dBm [-1dB~~+1dB]

2TXslot:25 dBm [-2dB~~+1.0dB]

3TXslot:23.5 dBm [-2dB~~+1dB]

4TXslot:22 dBm [-2dB~~+1.0dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

PCS/GPRS1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]

2TXslot: 23.5 dBm [-2.0dB~~+1dB]

3TXslot:20.5 dBm [-2.5dB~~+1dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]

2TXslot:25.5 dBm [-2dB~~+1.0dB]

3TXslot:24 dBm [-2dB~~+1dB]

4TXslot:22.5 dBm [-2dB~~+1.0dB]

UMTS Band II Output power of range:

WCDMA: 22.5 dBm [-1dB~~+1dB]

HSDPA:

case1: 22.5dBm [-2dB~~+1dB]

case2: 21 dBm [-2dB~~+1dB]

case3: 20.5 dBm [-2dB~~+1dB]

case4: 20.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:20.5dBm [-2dB~~+1dB]

case2:19 dBm [-2dB~~+1dB]

case3:21.5 dBm [-2dB~~+1dB]

case4:19 dBm [-2dB~~+1dB]

case5: 20 dBm [-2dB~~+1dB]

## After Synchronous transmission with Modem1:

WCDMA: 19 dBm [-1dB~~+1dB]

## HSDPA:

case1: 19 dBm [-2dB~~+1dB]

case2: 17.5 dBm [-2dB~~+1dB]

case3: 17 dBm [-2dB~~+1dB]

case4: 17 dBm [-2dB~~+1dB]

## HSUPA:

case1:17 dBm [-2dB~~+1dB]

case2:15.5 dBm [-2dB~~+1dB]

case3:18 dBm [-2dB~~+1dB]

case4:15.5 dBm [-2dB~~+1dB]

case5: 17 dBm [-2dB~~+1dB]

## After Wi-Fi on function work:

WCDMA: 19.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 19.5dBm [-2dB~~+1dB]

case2: 18 dBm [-2dB~~+1dB]

case3: 17.5 dBm [-2dB~~+1dB]

case4: 17.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:17.5dBm [-2dB~~+1dB]

case2:16 dBm [-2dB~~+1dB]

case3:18.5 dBm [-2dB~~+1dB]

case4:16 dBm [-2dB~~+1dB]

case5: 17.5 dBm [-2dB~~+1dB]

## After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 18.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 18.5dBm [-2dB~~+1dB]

case2: 17 dBm [-2dB~~+1dB]

case3: 16.5 dBm [-2dB~~+1dB]

case4: 16.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:16.5dBm [-2dB~~+1dB]  
case2:15 dBm [-2dB~~+1dB]  
case3:17.5 dBm [-2dB~~+1dB]  
case4:15 dBm [-2dB~~+1dB]  
case5: 16.5 dBm [-2dB~~+1dB]

## After hotspot function work:

WCDMA: 19.5 dBm [-1dB~~+1dB]

## HSDPA:

case1: 19.5dBm [-2dB~~+1dB]  
case2: 18 dBm [-2dB~~+1dB]  
case3: 17.5 dBm [-2dB~~+1dB]  
case4: 17.5 dBm [-2dB~~+1dB]

## HSUPA:

case1:17.5dBm [-2dB~~+1dB]  
case2:16 dBm [-2dB~~+1dB]  
case3:18.5 dBm [-2dB~~+1dB]  
case4:16 dBm [-2dB~~+1dB]  
case5: 17.5 dBm [-2dB~~+1dB]

## After hotspot function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 19 dBm [-1dB~~+1dB]

## HSDPA:

case1: 19 dBm [-2dB~~+1dB]  
case2: 17.5 dBm [-2dB~~+1dB]  
case3: 17 dBm [-2dB~~+1dB]  
case4: 17 dBm [-2dB~~+1dB]

## HSUPA:

case1:17 dBm [-2dB~~+1dB]  
case2:15.5 dBm [-2dB~~+1dB]  
case3:18 dBm [-2dB~~+1dB]  
case4:15.5 dBm [-2dB~~+1dB]  
case5: 17 dBm [-2dB~~+1dB]

UMTS Band IV Output power of range:

WCDMA: 22.5 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 22.5dBm [-2dB~~+1.5 dB]

case2: 21 dBm [-2dB~~+1.5 dB]

case3: 21.5 dBm [-2dB~~+1.5 dB]

case4: 21.5 dBm [-2dB~~+1.5 dB]

HSUPA:

case1:20.5dBm [-2dB~~+1.5 dB]

case2:19 dBm [-2dB~~+1.5 dB]

case3:21.5 dBm [-2dB~~+1.5 dB]

case4:19 dBm [-2dB~~+1.5 dB]

case5: 22dBm [-2dB~~+1.5 dB]

After Synchronous transmission with Modem1:

WCDMA: 19 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 19 dBm [-2dB~~+1.5 dB]

case2: 17.5 dBm [-2dB~~+1.5 dB]

case3: 18 dBm [-2dB~~+1.5 dB]

case4: 18 dBm [-2dB~~+1.5 dB]

HSUPA:

case1:17 dBm [-2dB~~+1.5 dB]

case2:15.5 dBm [-2dB~~+1.5 dB]

case3:18 dBm [-2dB~~+1.5 dB]

case4:15.5 dBm [-2dB~~+1.5 dB]

case5: 18.5 dBm [-2dB~~+1.5 dB]

After Wi-Fi on function work:

WCDMA: 19 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 19 dBm [-2dB~~+1.5 dB]

case2: 17.5 dBm [-2dB~~+1.5 dB]

case3: 18 dBm [-2dB~~+1.5 dB]

case4: 18 dBm [-2dB~~+1.5 dB]

HSUPA:

case1:17 dBm [-2dB~~+1.5 dB]

case2:15.5 dBm [-2dB~~+1.5 dB]

case3:18 dBm [-2dB~~+1.5 dB]

case4:15.5 dBm [-2dB~~+1.5 dB]

case5: 18.5 dBm [-2dB~~+1.5 dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 18 dBm [-1dB~~+1.5dB]

HSDPA:

case1: 18 dBm [-2dB~~+1.5 dB]

case2: 16.5 dBm [-2dB~~+1.5 dB]

case3: 17 dBm [-2dB~~+1.5 dB]

case4: 17 dBm [-2dB~~+1.5 dB]

HSUPA:

case1:16 dBm [-2dB~~+1.5 dB]

case2:14.5 dBm [-2dB~~+1.5 dB]

case3:17 dBm [-2dB~~+1.5 dB]

case4:14.5 dBm [-2dB~~+1.5 dB]

case5: 17.5 dBm [-2dB~~+1.5 dB]

After hotspot function work:

WCDMA: 19.5 dBm [-1dB~~+1.5dB]

HSDPA:

case1: 19.5 dBm [-2dB~~+1.5 dB]

case2: 18 dBm [-2dB~~+1.5 dB]

case3: 18.5 dBm [-2dB~~+1.5 dB]

case4: 18.5 dBm [-2dB~~+1.5 dB]

HSUPA:

case1:17.5 dBm [-2dB~~+1.5 dB]

case2:16 dBm [-2dB~~+1.5 dB]

case3:18.5 dBm [-2dB~~+1.5 dB]

case4:16 dBm [-2dB~~+1.5 dB]

case5: 19 dBm [-2dB~~+1.5 dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 19 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 19 dBm [-2dB~~+1.5 dB]

case2: 17.5 dBm [-2dB~~+1.5 dB]

case3: 18 dBm [-2dB~~+1.5 dB]

case4: 18 dBm [-2dB~~+1.5 dB]

## HSUPA:

case1:17 dBm [-2dB~~+1.5 dB]  
case2:15.5 dBm [-2dB~~+1.5 dB]  
case3:18 dBm [-2dB~~+1.5 dB]  
case4:15.5 dBm [-2dB~~+1.5 dB]  
case5: 18.5 dBm [-2dB~~+1.5 dB]

## UMTS Band V Output power of range:

WCDMA: 23 dBm [-1dB~~+1.5 dB]

## HSDPA:

case1: 23 dBm [-2dB~~+1.5 dB]  
case2: 22 dBm [-2dB~~+1.5 dB]  
case3: 21.5 dBm [-2dB~~+1.5 dB]  
case4: 21.5 dBm [-2dB~~+1.5 dB]

## HSUPA:

case1:21dBm [-2dB~~+1.5 dB]  
case2:20 dBm [-2dB~~+1.5 dB]  
case3:22 dBm [-2dB~~+1.5 dB]  
case4:20.5 dBm [-2dB~~+1.5 dB]  
case5: 22dBm [-2dB~~+1.5 dB]

## After Synchronous transmission with Modem1:

WCDMA: 21.5 dBm [-1dB~~+1.5 dB]

## HSDPA:

case1: 21.5 dBm [-2dB~~+1.5 dB]  
case2: 20.5 dBm [-2dB~~+1.5 dB]  
case3: 20 dBm [-2dB~~+1.5 dB]  
case4: 20 dBm [-2dB~~+1.5 dB]

## HSUPA:

case1: 19.5 dBm [-2dB~~+1.5 dB]  
case2:18.5 dBm [-2dB~~+1.5 dB]  
case3: 20.5 dBm [-2dB~~+1.5 dB]  
case4: 19 dBm [-2dB~~+1.5 dB]  
case5: 20.5 dBm [-2dB~~+1.5 dB]

After Wi-Fi on function work:

WCDMA: 21.5 dBm [-2dB~~+1.5 dB]

HSDPA:

case1: 21.5 dBm [-2dB~~+1.5 dB]

case2: 20.5 dBm [-2dB~~+1.5 dB]

case3: 20 dBm [-2dB~~+1.5 dB]

case4: 20 dBm [-2dB~~+1.5 dB]

HSUPA:

case1: 19.5 dBm [-2dB~~+1.5 dB]

case2: 18.5 dBm [-2dB~~+1.5 dB]

case3: 20.5 dBm [-2dB~~+1.5 dB]

case4: 19 dBm [-2dB~~+1.5 dB]

case5: 20.5 dBm [-2dB~~+1.5 dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

WCDMA: 21 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 21 dBm [-2dB~~+1.5 dB]

case2: 20 dBm [-2dB~~+1.5 dB]

case3: 19.5 dBm [-2dB~~+1.5 dB]

case4: 19.5 dBm [-2dB~~+1.5 dB]

HSUPA:

case1: 19 dBm [-2dB~~+1.5 dB]

case2: 18 dBm [-2dB~~+1.5 dB]

case3: 20 dBm [-2dB~~+1.5 dB]

case4: 18.5 dBm [-2dB~~+1.5 dB]

case5: 20 dBm [-2dB~~+1.5 dB]

After hotspot function work:

WCDMA: 22 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 22 dBm [-2dB~~+1.5 dB]

case2: 21 dBm [-2dB~~+1.5 dB]

case3: 20.5 dBm [-2dB~~+1.5 dB]

case4: 20.5 dBm [-2dB~~+1.5 dB]

HSUPA:

case1: 20 dBm [-2dB~~+1.5 dB]

case2: 19 dBm [-2dB~~+1.5 dB]

case3: 21 dBm [-2dB~~+1.5 dB]

case4: 19.5 dBm [-2dB~~+1.5 dB]

case5: 21 dBm [-2dB~~+1.5 dB]

After hotspot function work, Modem0 Synchronous transmission with Modem1:  
 WCDMA: 21.5 dBm [-1dB~~+1.5 dB]

HSDPA:

case1: 21.5 dBm [-2dB~~+1.5 dB]

case2: 20.5 dBm [-2dB~~+1.5 dB]

case3: 20 dBm [-2dB~~+1.5 dB]

case4: 20 dBm [-2dB~~+1.5 dB]

HSUPA:

case1: 19.5 dBm [-2dB~~+1.5 dB]

case2: 18.5 dBm [-2dB~~+1.5 dB]

case3: 20.5 dBm [-2dB~~+1.5 dB]

case4: 19 dBm [-2dB~~+1.5 dB]

case5: 20.5 dBm [-2dB~~+1.5 dB]

LTE Band IV Output power of range:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	22.5+0.7/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+0.7/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+0.7/-2.5 dB
16 QAM	1	1	1	1	1	1	21.5+0.7/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21.5+0.7/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+0.7/-2.5 dB

After Synchronous transmission with Modem1:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	18.5+0.7/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18.5+0.7/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	17.5+0.7/-2.5 dB
16 QAM	1	1	1	1	1	1	17.5+0.7/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	17.5+0.7/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	16.5+0.7/-2.5 dB

After Wi-Fi on function work:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	19+0.7/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	19+0.7/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	18+0.7/-2.5 dB
16 QAM	1	1	1	1	1	1	18+0.7/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18+0.7/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	17+0.7/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	18+0.7/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18+0.7/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	17+0.7/-2.5 dB
16 QAM	1	1	1	1	1	1	17+0.7/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	17+0.7/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	16+0.7/-2.5 dB

After hotspot function work:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	19.5+0.7/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	19.5+0.7/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	19.5+0.7/-2.5 dB
16 QAM	1	1	1	1	1	1	18.5+0.7/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18.5+0.7/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	17.5+0.7/-2.5 dB

After hotspot function work, Modem0 Synchronous transmission with Modem1:

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	1	1	18.5+0.7/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18.5+0.7/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	17.5+0.7/-2.5 dB
16 QAM	1	1	1	1	1	1	17.5+0.7/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	17.5+0.7/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	16.5+0.7/-2.5 dB

LTE Band VII Output power of range:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	22+1/-2.5 dB
16 QAM	1	1	1	1	21.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	21+1/-2.5 dB

After Synchronous transmission with Modem1:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	17+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	17+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	16.5+1/-2.5 dB
16 QAM	1	1	1	1	16+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	16+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	15.5+1/-2.5 dB

After Wi-Fi on function work:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	17.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	17.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	17+1/-2.5 dB
16 QAM	1	1	1	1	16.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	16.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	16+1/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	16.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	16.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	16+1/-2.5 dB
16 QAM	1	1	1	1	15.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	15.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	15+1/-2.5 dB

After hotspot function work:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	18.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	18.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	18+1/-2.5 dB
16 QAM	1	1	1	1	17.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	17.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	17+1/-2.5 dB

After hotspot function work, Modem0 Synchronous transmission with Modem1:

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	17+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	17+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	16.5+1/-2.5 dB
16 QAM	1	1	1	1	16+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	16+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	15.5+1/-2.5 dB

LTE Band XXXVIII Output power of range:

LTE_B38	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB
16 QAM	1	1	1	1	21.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	20+1/-2.5 dB

After Synchronous transmission with Modem1:

LTE_B38	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	21.5+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	21.5+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB
16 QAM	1	1	1	1	20.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	20.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B38	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	21+1/-3 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	19+1/-2.5 dB
16 QAM	1	1	1	1	20+1.5/-3 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	20+1.5/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	19+1.5/-2.5 dB

After hotspot function work, Modem0 Synchronous transmission with Modem1:

LTE_B38	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	21.5+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	21.5+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB
16 QAM	1	1	1	1	20.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	20.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB

LTE Band XL Output power of range:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	23.0+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	23.0+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	22.0+1/-2.5 dB
16 QAM	1	1	1	1	22.0+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	22.0+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	21+1/-2.5 dB

After Modem0 Synchronous transmission with Modem1:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	19.2+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	19.2+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	18.2+0.5/-2.5 dB
16 QAM	1	1	1	1	18.2+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	18.2+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	17.2+1/-2.5 dB

After Wi-Fi on function work,

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	20.5+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	20.5+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	19.5+0.5/-2.5 dB
16 QAM	1	1	1	1	19.5+0.5/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	19.5+0.5/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	18.5+0.5/-2.5 dB

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	19+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	19+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	18+0.5/-2.5 dB
16 QAM	1	1	1	1	18+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	18+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	17+1/-2.5 dB

After hotspot function work:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	20.5+0.5/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	20.5+0.5/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	19.5+0.5/-2.5 dB
16 QAM	1	1	1	1	19.5+0.5/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	19.5+0.5/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	18.5+0.5/-2.5 dB

After hotspot function work, Modem0 Synchronous transmission with Modem1:

LTE_B41	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5MHz	10MHz	15MHz	20MHz	
QPSK	1	1	1	1	19.5+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	19.5+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	18.5+1/-2.5 dB
16 QAM	1	1	1	1	18.5+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	18.5+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	17.5+1/-2.5 dB

### 7.1.4 Second Antenna and Modem1(Second Modem)

GSM/GPRS850 (GMSK) :

1TXslot:32 dBm [-1dB~~+1dB]

2TXslot:29 dBm [-2.0dB~~+1.0dB]

3TXslot:27.5 dBm [-2.0dB~~+1.0dB]

4TXslot:26 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:32 dBm [-1dB~~+1dB]

2TXslot:29 dBm [-2dB~~+1dB]

3TXslot:27.5 dBm [-2dB~~+1dB]

4TXslot:26 dBm [-2dB~~+1dB]

After Synchronous transmission with Modem0:

GSM/GPRS850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]

2TXslot:27 dBm [-2.0dB~~+1.0dB]

3TXslot:25.5 dBm [-2.0dB~~+1.0dB]

4TXslot:24 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]

2TXslot:27 dBm [-2dB~~+1dB]

3TXslot:25.5 dBm [-2dB~~+1dB]

4TXslot:24 dBm [-2dB~~+1dB]

After Wi-Fi on function work, Modem1 Synchronous transmission with Modem0:

GSM/GPRS850 (GMSK) :

1TXslot:29 dBm [-1dB~~+1dB]

2TXslot:26 dBm [-2.0dB~~+1.0dB]

3TXslot:24.5 dBm [-2.0dB~~+1.0dB]

4TXslot:23 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:29 dBm [-1dB~~+1dB]

2TXslot:26 dBm [-2dB~~+1dB]

3TXslot:24.5 dBm [-2dB~~+1dB]

4TXslot:23 dBm [-2dB~~+1dB]

After hotspot function work, Modem1 Synchronous transmission with Modem0:

GSM/GPRS850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]

2TXslot:27 dBm [-2.0dB~~+1.0dB]

3TXslot:25.5 dBm [-2.0dB~~+1.0dB]

4TXslot:24 dBm [-2.0dB~~+1.0dB]

EDGE850 (8PSK) :

1TXslot: 26 dBm [-2dB~~+1.0dB]

2TXslot: 24 dBm [-2.0dB~~+1dB]

3TXslot: 22 dBm [-2.5dB~~+1.0dB]

4TXslot: 20 dBm [-2.5dB~~+1dB]

EDGE850 (GMSK) :

1TXslot:30 dBm [-1dB~~+1dB]

2TXslot:27 dBm [-2dB~~+1dB]

3TXslot:25.5 dBm [-2dB~~+1dB]

4TXslot:24 dBm [-2dB~~+1dB]

## PCS/GPRS1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]  
2TXslot:26.5 dBm [-2dB~~+1.0dB]  
3TXslot:25 dBm [-2dB~~+1dB]  
4TXslot:23.5 dBm [-2dB~~+1.0dB]

## EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:21.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

## EDGE1900 (GMSK) :

1TXslot:29.5 dBm [-1dB~~+1dB]  
2TXslot:26.5 dBm [-2dB~~+1.0dB]  
3TXslot:25 dBm [-2dB~~+1dB]  
4TXslot:23.5 dBm [-2dB~~+1.0dB]

## After Synchronous transmission with Modem0:

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

## EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:21.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

## EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

PCS/GPRS1900 (GMSK) :

1TXslot:27.5 dBm [-1dB~~+1dB]  
2TXslot:24.5 dBm [-2dB~~+1.0dB]  
3TXslot:23 dBm [-2dB~~+1dB]  
4TXslot:21.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:21.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:27.5 dBm [-1dB~~+1dB]  
2TXslot:24.5 dBm [-2dB~~+1.0dB]  
3TXslot:23 dBm [-2dB~~+1dB]  
4TXslot:21.5 dBm [-2dB~~+1.0dB]

After hotspot function work, Modem1 Synchronous transmission with Modem0:

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

EDGE1900 (8PSK) :

1TXslot: 25.5 dBm [-2.0dB~~+1dB]  
2TXslot: 23.5 dBm [-2.0dB~~+1dB]  
3TXslot:21.5 dBm [-2.5dB~~+1dB]  
4TXslot: 19.5 dBm [-2.5dB~~+1dB]

EDGE1900 (GMSK) :

1TXslot:28.5 dBm [-1dB~~+1dB]  
2TXslot:25.5 dBm [-2dB~~+1.0dB]  
3TXslot:24 dBm [-2dB~~+1dB]  
4TXslot:22.5 dBm [-2dB~~+1.0dB]

### 7.1.5 WiFi/BT Antenna

**WiFi Average Power:**

802.11b: 15dBm [-1.5dB~~+1.0dB]

802.11g: 14dBm [-1.5dB~~+1.0dB]

802.11n: 12dBm[-1.5dB~~+1.0dB]

After Synchronous work with Modem1 or Modem0:

802.11b: 12.5 dBm [-1.5dB~~+1.0dB]

802.11g: 11.5dBm [-1.5dB~~+1.0dB]

802.11n: 11 dBm[-1.5dB~~+1.0dB]

After Synchronous work with Modem1 & Modem0:

802.11b: 11 dBm [-1.5dB~~+1.0dB]

802.11g: 10 dBm [-1.5dB~~+1.0dB]

802.11n: 10 dBm[-1.5dB~~+1.0dB]

**BT Average Power:** ≤10dBm

## 7.2 Conducted power measurements

For the measurements a Rohde & Schwarz Radio Communication Tester CMU 200&CMW500 was used. SAR drift measured at the same position in liquid before and after each SAR test as below 7.2 chapter.

Note: CMU200 measures GSM peak and average output power for active timeslots. For SAR the timebased average power is relevant. The difference in between depends on the duty cycle of the TDMA signal :

No. of timeslots	1	2	3	4
Duty Cycle	1:8.3	1:4.1	1:2.77	1:2.08
timebased avg. power compared to slotted avg. power	-9.19dB	-6.13dB	-4.42dB	-3.18dB

The signalling modes differ as follows:

mode	coding scheme	modulation
GPRS	CS1 to CS4	GMSK
EDGE	MCS1 to MCS4	GMSK
EDGE	MCS5 to MCS9	8PSK

Apart from modulation change (GMSK/8PSK) coding schemes differ in code rate without influence on the RF signal. Therefore one coding scheme per mode was selected for conducted power measurements.

**7.2.1 Conducted power measurements of GSM850 for Modem0**

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		33.50	32.65	32.55	32.80	-9.19	24.31	23.46	23.36	23.61
GPRS/EDGE (GMSK)	1 Tx Slot	33.50	32.62	32.51	32.78	-9.19	24.31	23.43	23.32	23.59
	2 Tx Slots	30.50	29.80	29.72	30.00	-6.13	24.37	23.67	23.59	23.87
	3 Tx Slots	29.00	28.35	28.25	28.43	-4.42	<b>24.58</b>	<b>23.93</b>	<b>23.83</b>	<b>24.01</b>
	4 Tx Slots	27.50	26.94	26.84	26.95	-3.18	24.32	23.76	23.66	23.77
EDGE (8PSK)	1 Tx Slot	27.50	26.15	26.18	26.12	-9.19	18.31	16.96	16.99	16.93
	2 Tx Slots	25.50	24.14	24.04	24.02	-6.13	19.37	18.01	17.91	17.89
	3 Tx Slots	23.00	21.50	21.37	21.30	-4.42	18.58	17.08	16.95	16.88
	4 Tx Slots	20.50	18.96	18.93	18.81	-3.18	17.32	15.78	15.75	15.63

Table 13:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		32.50	31.95	31.85	32.10	-9.19	23.31	22.76	22.66	22.91
GPRS/ EDGE (GMSK)	1 Tx Slot	32.50	31.83	31.74	31.68	-9.19	23.31	22.64	22.55	22.49
	2 Tx Slots	29.50	28.92	28.83	28.98	-6.13	23.37	22.79	22.70	22.85
	3 Tx Slots	28.00	27.45	27.35	27.50	-4.42	<b>23.58</b>	<b>23.03</b>	<b>22.93</b>	<b>23.08</b>
	4 Tx Slots	26.50	25.92	25.85	25.95	-3.18	23.32	22.74	22.67	22.77
EDGE (8PSK)	1 Tx Slot	27.50	26.09	26.25	26.21	-9.19	18.31	16.90	17.06	17.02
	2 Tx Slots	25.50	24.04	23.98	24.11	-6.13	19.37	17.91	17.85	17.98
	3 Tx Slots	23.00	21.43	21.30	21.45	-4.42	18.58	17.01	16.88	17.03
	4 Tx Slots	20.50	18.83	18.77	19.02	-3.18	17.32	15.65	15.59	15.84

Table 14:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.50	30.85	30.75	30.86	-9.19	22.31	21.66	21.56	21.67
GPRS/ EDGE (GMSK)	1 Tx Slot	31.50	30.78	30.69	30.96	-9.19	22.31	21.59	21.50	21.77
	2 Tx Slots	28.50	27.92	27.78	27.95	-6.13	22.37	21.79	21.65	21.82
	3 Tx Slots	27.00	26.30	26.43	26.45	-4.42	<b>22.58</b>	<b>21.88</b>	<b>22.01</b>	<b>22.03</b>
	4 Tx Slots	25.50	24.92	24.93	24.95	-3.18	22.32	21.74	21.75	21.77
EDGE (8PSK)	1 Tx Slot	27.50	26.30	26.21	26.16	-9.19	18.31	17.11	17.02	16.97
	2 Tx Slots	25.50	23.90	24.06	24.13	-6.13	19.37	17.77	17.93	18.00
	3 Tx Slots	23.00	21.30	21.26	21.42	-4.42	18.58	16.88	16.84	17.00
	4 Tx Slots	20.50	18.81	18.72	18.95	-3.18	17.32	15.63	15.54	15.77

Table 15:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		32.50	31.95	31.85	32.10	-9.19	23.31	22.76	22.66	22.91
GPRS/ EDGE (GMSK)	1 Tx Slot	32.50	31.83	31.74	31.68	-9.19	23.31	22.64	22.55	22.49
	2 Tx Slots	29.50	28.92	28.83	28.98	-6.13	23.37	22.79	22.70	22.85
	3 Tx Slots	28.00	27.45	27.35	27.50	-4.42	<b>23.58</b>	<b>23.03</b>	<b>22.93</b>	<b>23.08</b>
	4 Tx Slots	26.50	25.92	25.85	25.95	-3.18	23.32	22.74	22.67	22.77
EDGE (8PSK)	1 Tx Slot	27.50	26.09	26.25	26.21	-9.19	18.31	16.90	17.06	17.02
	2 Tx Slots	25.50	24.04	23.98	24.11	-6.13	19.37	17.91	17.85	17.98
	3 Tx Slots	23.00	21.43	21.30	21.45	-4.42	18.58	17.01	16.88	17.03
	4 Tx Slots	20.50	18.83	18.77	19.02	-3.18	17.32	15.65	15.59	15.84

Table 16:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		33.00	32.77	32.62	32.86	-9.19	23.81	23.58	23.43	23.67
GPRS/ EDGE (GMSK)	1 Tx Slot	33.00	32.72	32.58	32.84	-9.19	23.81	23.53	23.39	23.65
	2 Tx Slots	30.00	29.79	29.78	29.92	-6.13	23.87	23.66	23.65	23.79
	3 Tx Slots	28.50	28.31	28.29	28.45	-4.42	<b>24.08</b>	<b>23.89</b>	<b>23.87</b>	<b>24.03</b>
	4 Tx Slots	27.00	26.90	26.89	26.98	-3.18	23.82	23.72	23.71	23.80
EDGE (8PSK)	1 Tx Slot	27.00	26.19	26.10	26.08	-9.19	17.81	17.00	16.91	16.89
	2 Tx Slots	25.00	24.06	24.10	24.01	-6.13	18.87	17.93	17.97	17.88
	3 Tx Slots	23.00	21.51	21.52	21.45	-4.42	18.58	17.09	17.10	17.03
	4 Tx Slots	21.00	19.04	19.02	19.04	-3.18	17.82	15.86	15.84	15.86

Table 17:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.00	30.85	30.78	30.88	-9.19	21.81	21.66	21.59	21.69
GPRS/EDGE (GMSK)	1 Tx Slot	31.00	30.78	30.69	30.97	-9.19	21.81	21.59	21.50	21.78
	2 Tx Slots	28.00	27.89	27.77	27.90	-6.13	21.87	21.76	21.64	21.77
	3 Tx Slots	26.50	26.49	26.40	26.40	-4.42	<b>22.08</b>	<b>22.07</b>	<b>21.98</b>	<b>21.98</b>
	4 Tx Slots	25.00	24.98	24.99	24.94	-3.18	21.82	21.80	21.81	21.76
EDGE (8PSK)	1 Tx Slot	27.00	26.21	26.33	26.30	-9.19	17.81	17.02	17.14	17.11
	2 Tx Slots	25.00	24.18	24.16	24.11	-6.13	18.87	18.05	18.03	17.98
	3 Tx Slots	23.00	21.60	21.53	21.43	-4.42	18.58	17.18	17.11	17.01
	4 Tx Slots	21.00	19.06	19.02	19.04	-3.18	17.82	15.88	15.84	15.86

Table 18:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timesolts.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		30.00	29.79	29.82	29.79	-9.19	20.81	20.60	20.63	20.60
GPRS/ EDGE (GMSK)	1 Tx Slot	30.00	29.89	29.80	29.96	-9.19	20.81	20.70	20.61	20.77
	2 Tx Slots	27.00	26.91	26.83	26.96	-6.13	20.87	20.78	20.70	20.83
	3 Tx Slots	25.50	25.48	25.40	25.34	-4.42	<b>21.08</b>	<b>21.06</b>	<b>20.98</b>	<b>20.92</b>
	4 Tx Slots	24.00	23.83	23.83	23.97	-3.18	20.82	20.65	20.65	20.79
EDGE (8PSK)	1 Tx Slot	27.00	26.37	26.38	26.35	-9.19	17.81	17.18	17.19	17.16
	2 Tx Slots	25.00	24.30	24.40	24.33	-6.13	18.87	18.17	18.27	18.20
	3 Tx Slots	23.00	21.71	21.84	21.82	-4.42	18.58	17.29	17.42	17.40
	4 Tx Slots	21.00	19.27	19.42	19.40	-3.18	17.82	16.09	16.24	16.22

Table 19:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timesolts.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Hotspot function work, Modem0 Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.00	30.85	30.78	30.88	-9.19	21.81	21.66	21.59	21.69
GPRS/EDGE (GMSK)	1 Tx Slot	31.00	30.78	30.69	30.97	-9.19	21.81	21.59	21.50	21.78
	2 Tx Slots	28.00	27.89	27.77	27.90	-6.13	21.87	21.76	21.64	21.77
	3 Tx Slots	26.50	26.49	26.40	26.40	-4.42	<b>22.08</b>	<b>22.07</b>	<b>21.98</b>	<b>21.98</b>
	4 Tx Slots	25.00	24.98	24.99	24.94	-3.18	21.82	21.80	21.81	21.76
EDGE (8PSK)	1 Tx Slot	27.00	26.21	26.33	26.30	-9.19	17.81	17.02	17.14	17.11
	2 Tx Slots	25.00	24.18	24.16	24.11	-6.13	18.87	18.05	18.03	17.98
	3 Tx Slots	23.00	21.60	21.53	21.43	-4.42	18.58	17.18	17.11	17.01
	4 Tx Slots	21.00	19.06	19.02	19.04	-3.18	17.82	15.88	15.84	15.86

Table 20:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timesolts.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

### 7.2.2 Conducted power measurements of GSM850 for Modem1

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		33.00	32.63	32.68	32.81	-9.19	23.81	23.44	23.49	23.62
GPRS/ EDGE (GMSK)	1 Tx Slot	33.00	32.66	32.90	32.91	-9.19	23.81	23.47	23.71	23.72
	2 Tx Slots	30.00	29.41	29.67	29.71	-6.13	23.87	23.28	23.54	23.58
	3 Tx Slots	28.50	27.90	28.09	28.15	-4.42	<b>24.08</b>	<b>23.48</b>	<b>23.67</b>	<b>23.73</b>
	4 Tx Slots	27.00	26.37	26.60	26.66	-3.18	23.82	23.19	23.42	23.48
EDGE (8PSK)	1 Tx Slot	27.00	25.60	25.52	25.54	-9.19	17.81	16.41	16.33	16.35
	2 Tx Slots	25.00	23.54	23.49	23.52	-6.13	18.87	17.41	17.36	17.39
	3 Tx Slots	23.00	21.30	21.37	21.32	-4.42	18.58	16.88	16.95	16.90
	4 Tx Slots	21.00	19.05	19.15	19.15	-3.18	17.82	15.87	15.97	15.97

Table 21:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem0:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		32.00	31.68	31.78	31.85	-9.19	22.81	22.49	22.59	22.66
GPRS/EDGE (GMSK)	1 Tx Slot	32.00	31.62	31.85	31.91	-9.19	22.81	22.43	22.66	22.72
	2 Tx Slots	29.00	28.32	28.58	28.64	-6.13	22.87	22.19	22.45	22.51
	3 Tx Slots	27.50	26.86	27.06	27.10	-4.42	<b>23.08</b>	<b>22.44</b>	<b>22.64</b>	<b>22.68</b>
	4 Tx Slots	26.00	25.31	25.49	25.55	-3.18	22.82	22.13	22.31	22.37
EDGE (8PSK)	1 Tx Slot	27.00	25.60	25.52	25.54	-9.19	17.81	16.41	16.33	16.35
	2 Tx Slots	25.00	23.54	23.49	23.52	-6.13	18.87	17.41	17.36	17.39
	3 Tx Slots	23.00	21.30	21.37	21.32	-4.42	18.58	16.88	16.95	16.90
	4 Tx Slots	21.00	19.05	19.15	19.15	-3.18	17.82	15.87	15.97	15.97

Table 22:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem1 Synchronous transmission with Modem0:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.50	31.21	31.40	31.42	-9.19	22.31	22.02	22.21	22.23
GPRS/ EDGE (GMSK)	1 Tx Slot	31.50	31.11	31.33	31.38	-9.19	22.31	21.92	22.14	22.19
	2 Tx Slots	28.50	27.84	28.04	28.12	-6.13	22.37	21.71	21.91	21.99
	3 Tx Slots	27.00	26.35	26.60	26.65	-4.42	<b>22.58</b>	<b>21.93</b>	<b>22.18</b>	<b>22.23</b>
	4 Tx Slots	25.50	24.83	25.00	25.07	-3.18	22.32	21.65	21.82	21.89
EDGE (8PSK)	1 Tx Slot	27.00	25.60	25.52	25.54	-9.19	17.81	16.41	16.33	16.35
	2 Tx Slots	25.00	23.54	23.49	23.52	-6.13	18.87	17.41	17.36	17.39
	3 Tx Slots	23.00	21.30	21.37	21.32	-4.42	18.58	16.88	16.95	16.90
	4 Tx Slots	21.00	19.05	19.15	19.15	-3.18	17.82	15.87	15.97	15.97

Table 23:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timesolts.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Hotspot function work, Modem1 Synchronous transmission with Modem0:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		32.00	31.52	31.75	31.85	-9.19	22.81	22.33	22.56	22.66
GPRS/ EDGE (GMSK)	1 Tx Slot	32.00	31.45	31.71	31.80	-9.19	22.81	22.26	22.52	22.61
	2 Tx Slots	29.00	28.13	28.39	28.48	-6.13	22.87	22.00	22.26	22.35
	3 Tx Slots	27.50	26.62	26.87	26.95	-4.42	23.08	22.20	22.45	22.53
	4 Tx Slots	26.00	25.11	25.30	25.40	-3.18	22.82	21.93	22.12	22.22
EDGE (8PSK)	1 Tx Slot	27.00	25.60	25.52	25.54	-9.19	17.81	16.41	16.33	16.35
	2 Tx Slots	25.00	23.54	23.49	23.52	-6.13	18.87	17.41	17.36	17.39
	3 Tx Slots	23.00	21.30	21.37	21.32	-4.42	18.58	16.88	16.95	16.90
	4 Tx Slots	21.00	19.05	19.15	19.15	-3.18	17.82	15.87	15.97	15.97

Table 24:Conducted power measurement results of GSM850(Main Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timesolts.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		33.00	32.50	32.73	32.68	-9.19	23.81	23.31	23.54	23.49
GPRS/ EDGE (GMSK)	1 Tx Slot	33.00	32.45	32.66	32.67	-9.19	23.81	23.26	23.47	23.48
	2 Tx Slots	30.00	29.18	29.43	29.50	-6.13	23.87	23.05	23.30	23.37
	3 Tx Slots	28.50	27.68	27.91	28.00	-4.42	<b>24.08</b>	<b>23.24</b>	<b>23.49</b>	<b>23.58</b>
	4 Tx Slots	27.00	26.17	26.44	26.51	-3.18	23.82	22.99	23.26	23.33
EDGE (8PSK)	1 Tx Slot	27.00	25.62	25.56	25.58	-9.19	17.81	16.43	16.37	16.39
	2 Tx Slots	25.00	23.57	23.55	23.49	-6.13	18.87	17.44	17.42	17.36
	3 Tx Slots	23.00	21.38	21.35	21.34	-4.42	18.58	16.96	16.93	16.92
	4 Tx Slots	21.00	19.12	19.11	19.09	-3.18	17.82	15.94	15.93	15.91

Table 25:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem0:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.00	30.30	30.63	30.61	-9.19	21.81	21.11	21.44	21.42
GPRS/ EDGE (GMSK)	1 Tx Slot	31.00	30.60	30.87	30.93	-9.19	21.81	21.41	21.68	21.74
	2 Tx Slots	28.00	27.37	27.58	27.63	-6.13	21.87	21.24	21.45	21.50
	3 Tx Slots	26.50	25.76	26.02	26.09	-4.42	<b>22.08</b>	<b>21.34</b>	<b>21.60</b>	<b>21.67</b>
	4 Tx Slots	25.00	24.25	24.56	24.64	-3.18	21.82	21.07	21.38	21.46
EDGE (8PSK)	1 Tx Slot	27.00	25.73	25.72	25.73	-9.19	17.81	16.54	16.53	16.54
	2 Tx Slots	25.00	23.62	23.63	23.61	-6.13	18.87	17.49	17.50	17.48
	3 Tx Slots	23.00	21.48	21.41	21.42	-4.42	18.58	17.06	16.99	17.00
	4 Tx Slots	21.00	19.26	19.15	19.13	-3.18	17.82	16.08	15.97	15.95

Table 26:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.00	30.30	30.63	30.61	-9.19	21.81	21.11	21.44	21.42
GPRS/ EDGE (GMSK)	1 Tx Slot	31.00	30.60	30.87	30.93	-9.19	21.81	21.41	21.68	21.74
	2 Tx Slots	28.00	27.37	27.58	27.63	-6.13	21.87	21.24	21.45	21.50
	3 Tx Slots	26.50	25.76	26.02	26.09	-4.42	<b>22.08</b>	<b>21.34</b>	<b>21.60</b>	<b>21.67</b>
	4 Tx Slots	25.00	24.25	24.56	24.64	-3.18	21.82	21.07	21.38	21.46
EDGE (8PSK)	1 Tx Slot	27.00	25.73	25.72	25.73	-9.19	17.81	16.54	16.53	16.54
	2 Tx Slots	25.00	23.62	23.63	23.61	-6.13	18.87	17.49	17.50	17.48
	3 Tx Slots	23.00	21.48	21.41	21.42	-4.42	18.58	17.06	16.99	17.00
	4 Tx Slots	21.00	19.26	19.15	19.13	-3.18	17.82	16.08	15.97	15.95

Table 27:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem1 Synchronous transmission with Modem1:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		30.00	29.45	29.50	29.55	-9.19	20.81	20.26	20.31	20.36
GPRS/ EDGE (GMSK)	1 Tx Slot	30.00	29.20	29.48	29.58	-9.19	20.81	20.01	20.29	20.39
	2 Tx Slots	27.00	26.07	26.37	26.48	-6.13	20.87	19.94	20.24	20.35
	3 Tx Slots	25.50	24.54	24.79	24.92	-4.42	<b>21.08</b>	<b>20.12</b>	<b>20.37</b>	<b>20.50</b>
	4 Tx Slots	24.00	22.98	23.22	23.36	-3.18	20.82	19.80	20.04	20.18
EDGE (8PSK)	1 Tx Slot	27.00	25.73	25.72	25.73	-9.19	17.81	16.54	16.53	16.54
	2 Tx Slots	25.00	23.62	23.63	23.61	-6.13	18.87	17.49	17.50	17.48
	3 Tx Slots	23.00	21.48	21.41	21.42	-4.42	18.58	17.06	16.99	17.00
	4 Tx Slots	21.00	19.26	19.15	19.13	-3.18	17.82	16.08	15.97	15.95

Table 28:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After hotspot function work, Modem1 Synchronous transmission with Modem0:

GSM850		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	128CH	190CH	251CH		Tune-up	128CH	190CH	251CH
GSM (CS)		31.00	30.30	30.63	30.61	-9.19	21.81	21.11	21.44	21.42
GPRS/ EDGE (GMSK)	1 Tx Slot	31.00	30.60	30.87	30.93	-9.19	21.81	21.41	21.68	21.74
	2 Tx Slots	28.00	27.37	27.58	27.63	-6.13	21.87	21.24	21.45	21.50
	3 Tx Slots	26.50	25.76	26.02	26.09	-4.42	<b>22.08</b>	<b>21.34</b>	<b>21.60</b>	<b>21.67</b>
	4 Tx Slots	25.00	24.25	24.56	24.64	-3.18	21.82	21.07	21.38	21.46
EDGE (8PSK)	1 Tx Slot	27.00	25.73	25.72	25.73	-9.19	17.81	16.54	16.53	16.54
	2 Tx Slots	25.00	23.62	23.63	23.61	-6.13	18.87	17.49	17.50	17.48
	3 Tx Slots	23.00	21.48	21.41	21.42	-4.42	18.58	17.06	16.99	17.00
	4 Tx Slots	21.00	19.26	19.15	19.13	-3.18	17.82	16.08	15.97	15.95

Table 29:Conducted power measurement results of GSM850(Second Antenna)

Note:

- 1) The conducted power of GSM850 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

### 7.2.3 Conducted power measurements of GSM1900 for Modem0

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		30.50	29.95	29.73	29.64	-9.19	21.31	20.76	20.54	20.45
GPRS/ EDGE (GMSK)	1 Tx Slot	30.50	29.86	29.68	29.57	-9.19	21.31	20.67	20.49	20.38
	2 Tx Slots	27.50	27.01	26.88	26.95	-6.13	21.37	20.88	20.75	20.82
	3 Tx Slots	26.00	25.64	25.52	25.55	-4.42	<b>21.58</b>	<b>21.22</b>	<b>21.10</b>	<b>21.13</b>
	4 Tx Slots	24.50	24.21	24.1	24.17	-3.18	21.32	21.03	20.92	20.99
EDGE (8PSK)	1 Tx Slot	26.50	24.63	24.53	24.58	-9.19	17.31	15.44	15.34	15.39
	2 Tx Slots	23.50	22.37	22.27	22.17	-6.13	17.37	16.24	16.14	16.04
	3 Tx Slots	21.50	19.86	19.70	19.67	-4.42	17.08	15.44	15.28	15.25
	4 Tx Slots	19.50	18.33	18.23	18.17	-3.18	16.32	15.15	15.05	14.99

Table 30: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem1:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	29.00	28.75	28.74	-9.19	20.31	19.81	19.56	19.55
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.89	28.71	28.71	-9.19	20.31	19.70	19.52	19.52
	2 Tx Slots	26.50	25.97	25.83	25.93	-6.13	20.37	19.84	19.70	19.80
	3 Tx Slots	25.00	24.57	24.63	24.56	-4.42	<b>20.58</b>	<b>20.15</b>	<b>20.21</b>	<b>20.14</b>
	4 Tx Slots	23.50	23.22	23.08	23.17	-3.18	20.32	20.04	19.90	19.99
EDGE (8PSK)	1 Tx Slot	26.50	24.63	24.53	24.58	-9.19	17.31	15.44	15.34	15.39
	2 Tx Slots	23.50	22.37	22.27	22.17	-6.13	17.37	16.24	16.14	16.04
	3 Tx Slots	21.50	19.86	19.70	19.67	-4.42	17.08	15.44	15.28	15.25
	4 Tx Slots	19.50	18.33	18.23	18.17	-3.18	16.32	15.15	15.05	14.99

Table 31: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		28.50	28.00	28.01	28.01	-9.19	19.31	18.81	18.82	18.82
GPRS/ EDGE (GMSK)	1 Tx Slot	28.50	27.99	27.85	27.96	-9.19	19.31	18.80	18.66	18.77
	2 Tx Slots	25.50	25.10	25.00	25.12	-6.13	19.37	18.97	18.87	18.99
	3 Tx Slots	24.00	23.68	23.60	23.71	-4.42	<b>19.58</b>	<b>19.26</b>	<b>19.18</b>	<b>19.29</b>
	4 Tx Slots	22.50	22.35	22.25	22.40	-3.18	19.32	19.17	19.07	19.22
EDGE (8PSK)	1 Tx Slot	26.50	24.63	24.53	24.58	-9.19	17.31	15.44	15.34	15.39
	2 Tx Slots	23.50	22.37	22.27	22.17	-6.13	17.37	16.24	16.14	16.04
	3 Tx Slots	21.50	19.86	19.70	19.67	-4.42	17.08	15.44	15.28	15.25
	4 Tx Slots	19.50	18.33	18.23	18.17	-3.18	16.32	15.15	15.05	14.99

Table 32: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	29.00	28.75	28.74	-9.19	20.31	19.81	19.56	19.55
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.89	28.71	28.71	-9.19	20.31	19.70	19.52	19.52
	2 Tx Slots	26.50	25.97	25.83	25.93	-6.13	20.37	19.84	19.70	19.80
	3 Tx Slots	25.00	24.57	24.63	24.56	-4.42	<b>20.58</b>	<b>20.15</b>	<b>20.21</b>	<b>20.14</b>
	4 Tx Slots	23.50	23.22	23.08	23.17	-3.18	20.32	20.04	19.90	19.99
EDGE (8PSK)	1 Tx Slot	26.50	24.63	24.53	24.58	-9.19	17.31	15.44	15.34	15.39
	2 Tx Slots	23.50	22.37	22.27	22.17	-6.13	17.37	16.24	16.14	16.04
	3 Tx Slots	21.50	19.86	19.70	19.67	-4.42	17.08	15.44	15.28	15.25
	4 Tx Slots	19.50	18.33	18.23	18.17	-3.18	16.32	15.15	15.05	14.99

Table 33: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		30.50	29.78	29.53	29.45	-9.19	21.31	20.59	20.34	20.26
GPRS/ EDGE (GMSK)	1 Tx Slot	30.50	29.74	29.45	29.38	-9.19	21.31	20.55	20.26	20.19
	2 Tx Slots	27.50	26.87	26.72	26.78	-6.13	21.37	20.74	20.59	20.65
	3 Tx Slots	26.00	25.49	25.34	25.37	-4.42	<b>21.58</b>	<b>21.07</b>	<b>20.92</b>	<b>20.95</b>
	4 Tx Slots	24.50	24.05	23.91	23.98	-3.18	21.32	20.87	20.73	20.80
EDGE (8PSK)	1 Tx Slot	26.50	24.58	24.56	24.53	-9.19	17.31	15.39	15.37	15.34
	2 Tx Slots	24.50	22.58	22.52	22.57	-6.13	18.37	16.45	16.39	16.44
	3 Tx Slots	21.50	20.02	20.12	20.04	-4.42	17.08	15.60	15.70	15.62
	4 Tx Slots	20.50	18.84	18.78	18.71	-3.18	17.32	15.66	15.60	15.53

Table 34: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem1:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.90	28.72	28.73	-9.19	20.31	19.71	19.53	19.54
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.86	28.69	28.69	-9.19	20.31	19.67	19.50	19.50
	2 Tx Slots	26.50	25.93	25.78	25.89	-6.13	20.37	19.80	19.65	19.76
	3 Tx Slots	25.00	24.52	24.39	24.49	-4.42	<b>20.58</b>	<b>20.10</b>	<b>19.97</b>	<b>20.07</b>
	4 Tx Slots	23.50	23.14	23.02	23.11	-3.18	20.32	19.96	19.84	19.93
EDGE (8PSK)	1 Tx Slot	26.50	24.58	24.56	24.53	-9.19	17.31	15.39	15.37	15.34
	2 Tx Slots	24.50	22.58	22.52	22.57	-6.13	18.37	16.45	16.39	16.44
	3 Tx Slots	21.50	20.02	20.12	20.04	-4.42	17.08	15.60	15.70	15.62
	4 Tx Slots	20.50	18.84	18.78	18.71	-3.18	17.32	15.66	15.60	15.53

Table 35: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		30.00	29.35	29.25	29.25	-9.19	20.81	20.16	20.06	20.06
GPRS/ EDGE (GMSK)	1 Tx Slot	30.00	29.33	29.12	29.20	-9.19	20.81	20.14	19.93	20.01
	2 Tx Slots	27.00	26.45	26.3	26.35	-6.13	20.87	20.32	20.17	20.22
	3 Tx Slots	25.50	25.02	24.89	24.99	-4.42	<b>21.08</b>	<b>20.60</b>	<b>20.47</b>	<b>20.57</b>
	4 Tx Slots	24.00	23.6	23.46	23.57	-3.18	20.82	20.42	20.28	20.39
EDGE (8PSK)	1 Tx Slot	26.50	24.58	24.56	24.53	-9.19	17.31	15.39	15.37	15.34
	2 Tx Slots	24.50	22.58	22.52	22.57	-6.13	18.37	16.45	16.39	16.44
	3 Tx Slots	21.50	20.02	20.12	20.04	-4.42	17.08	15.60	15.70	15.62
	4 Tx Slots	20.50	18.84	18.78	18.71	-3.18	17.32	15.66	15.60	15.53

Table 36: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.00	28.52	28.42	28.43	-9.19	19.81	19.33	19.23	19.24
GPRS/ EDGE (GMSK)	1 Tx Slot	29.00	28.46	28.30	28.40	-9.19	19.81	19.27	19.11	19.21
	2 Tx Slots	26.00	25.57	25.44	25.51	-6.13	19.87	19.44	19.31	19.38
	3 Tx Slots	24.50	24.10	23.98	24.08	-4.42	<b>20.08</b>	<b>19.68</b>	<b>19.56</b>	<b>19.66</b>
	4 Tx Slots	23.00	22.76	22.64	22.71	-3.18	19.82	19.58	19.46	19.53
EDGE (8PSK)	1 Tx Slot	26.50	24.58	24.56	24.53	-9.19	17.31	15.39	15.37	15.34
	2 Tx Slots	24.50	22.58	22.52	22.57	-6.13	18.37	16.45	16.39	16.44
	3 Tx Slots	21.50	20.02	20.12	20.04	-4.42	17.08	15.60	15.70	15.62
	4 Tx Slots	20.50	18.84	18.78	18.71	-3.18	17.32	15.66	15.60	15.53

Table 37: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Hotspot function work, Modem0 Synchronous transmission with Modem1:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.90	28.72	28.73	-9.19	20.31	19.71	19.53	19.54
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.86	28.69	28.69	-9.19	20.31	19.67	19.50	19.50
	2 Tx Slots	26.50	25.93	25.78	25.89	-6.13	20.37	19.80	19.65	19.76
	3 Tx Slots	25.00	24.52	24.39	24.49	-4.42	<b>20.58</b>	<b>20.10</b>	<b>19.97</b>	<b>20.07</b>
	4 Tx Slots	23.50	23.14	23.02	23.11	-3.18	20.32	19.96	19.84	19.93
EDGE (8PSK)	1 Tx Slot	26.50	24.58	24.56	24.53	-9.19	17.31	15.39	15.37	15.34
	2 Tx Slots	24.50	22.58	22.52	22.57	-6.13	18.37	16.45	16.39	16.44
	3 Tx Slots	21.50	20.02	20.12	20.04	-4.42	17.08	15.60	15.70	15.62
	4 Tx Slots	20.50	18.84	18.78	18.71	-3.18	17.32	15.66	15.60	15.53

Table 38: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

### 7.2.4 Conducted power measurements of GSM1900 for Modem1

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		30.50	29.66	29.40	29.44	-9.19	21.31	20.47	20.21	20.25
GPRS/ EDGE (GMSK)	1 Tx Slot	30.50	29.67	29.35	29.40	-9.19	21.31	20.48	20.16	20.21
	2 Tx Slots	27.50	26.46	26.27	26.36	-6.13	21.37	20.33	20.14	20.23
	3 Tx Slots	26.00	24.77	24.63	24.72	-4.42	<b>21.58</b>	<b>20.35</b>	<b>20.21</b>	<b>20.30</b>
	4 Tx Slots	24.50	23.27	23.16	23.25	-3.18	21.32	20.09	19.98	20.07
EDGE (8PSK)	1 Tx Slot	26.50	25.57	25.54	25.57	-9.19	17.31	16.38	16.35	16.38
	2 Tx Slots	24.50	23.42	23.44	23.30	-6.13	18.37	17.29	17.31	17.17
	3 Tx Slots	22.50	21.17	21.17	21.08	-4.42	18.08	16.75	16.75	16.66
	4 Tx Slots	20.50	18.96	18.93	18.88	-3.18	17.32	15.78	15.75	15.70

Table 39: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem0:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.55	28.35	28.45	-9.19	20.31	19.36	19.16	19.26
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.53	28.31	28.39	-9.19	20.31	19.34	19.12	19.20
	2 Tx Slots	26.50	25.33	25.14	25.25	-6.13	20.37	19.20	19.01	19.12
	3 Tx Slots	25.00	23.71	23.55	23.67	-4.42	<b>20.58</b>	<b>19.29</b>	<b>19.13</b>	<b>19.25</b>
	4 Tx Slots	23.50	22.14	22.01	22.16	-3.18	20.32	18.96	18.83	18.98
EDGE (8PSK)	1 Tx Slot	26.50	25.50	25.55	25.59	-9.19	17.31	16.31	16.36	16.40
	2 Tx Slots	24.50	23.36	23.35	23.29	-6.13	18.37	17.23	17.22	17.16
	3 Tx Slots	22.50	21.14	21.09	21.09	-4.42	18.08	16.72	16.67	16.67
	4 Tx Slots	20.50	18.85	18.89	18.88	-3.18	17.32	15.67	15.71	15.70

Table 40: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem1 Synchronous transmission with Modem0:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.55	28.35	28.45	-9.19	20.31	19.36	19.16	19.26
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.53	28.31	28.39	-9.19	20.31	19.34	19.12	19.20
	2 Tx Slots	26.50	25.33	25.14	25.25	-6.13	20.37	19.20	19.01	19.12
	3 Tx Slots	25.00	23.71	23.55	23.67	-4.42	<b>20.58</b>	<b>19.29</b>	<b>19.13</b>	<b>19.25</b>
	4 Tx Slots	23.50	22.14	22.01	22.16	-3.18	20.32	18.96	18.83	18.98
EDGE (8PSK)	1 Tx Slot	26.50	25.50	25.55	25.59	-9.19	17.31	16.31	16.36	16.40
	2 Tx Slots	24.50	23.36	23.35	23.29	-6.13	18.37	17.23	17.22	17.16
	3 Tx Slots	22.50	21.14	21.09	21.09	-4.42	18.08	16.72	16.67	16.67
	4 Tx Slots	20.50	18.85	18.89	18.88	-3.18	17.32	15.67	15.71	15.70

Table 41: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After hotspot function work:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.70	28.42	28.54	-9.19	20.31	19.51	19.23	19.35
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.61	28.36	28.43	-9.19	20.31	19.42	19.17	19.24
	2 Tx Slots	26.50	25.42	25.21	25.31	-6.13	20.37	19.29	19.08	19.18
	3 Tx Slots	25.00	23.81	23.65	23.74	-4.42	<b>20.58</b>	<b>19.39</b>	<b>19.23</b>	<b>19.32</b>
	4 Tx Slots	23.50	22.24	22.10	22.21	-3.18	20.32	19.06	18.92	19.03
EDGE (8PSK)	1 Tx Slot	26.50	25.66	25.57	25.58	-9.19	17.31	16.47	16.38	16.39
	2 Tx Slots	24.50	23.40	23.39	23.37	-6.13	18.37	17.27	17.26	17.24
	3 Tx Slots	22.50	21.19	21.13	21.10	-4.42	18.08	16.77	16.71	16.68
	4 Tx Slots	20.50	18.93	18.88	18.91	-3.18	17.32	15.75	15.70	15.73

Table 42: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After hotspot function work, Modem1 Synchronous transmission with Modem0:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		28.50	27.45	27.25	27.42	-9.19	19.31	18.26	18.06	18.23
GPRS/ EDGE (GMSK)	1 Tx Slot	28.50	27.41	27.21	27.32	-9.19	19.31	18.22	18.02	18.13
	2 Tx Slots	25.50	24.29	24.17	24.27	-6.13	19.37	18.16	18.04	18.14
	3 Tx Slots	24.00	22.81	22.56	22.68	-4.42	<b>19.58</b>	<b>18.39</b>	<b>18.14</b>	<b>18.26</b>
	4 Tx Slots	22.50	21.19	21.05	21.17	-3.18	19.32	18.01	17.87	17.99
EDGE (8PSK)	1 Tx Slot	26.50	25.58	25.60	25.62	-9.19	17.31	16.39	16.41	16.43
	2 Tx Slots	24.50	23.43	23.41	23.40	-6.13	18.37	17.30	17.28	17.27
	3 Tx Slots	22.50	21.12	21.12	21.15	-4.42	18.08	16.70	16.70	16.73
	4 Tx Slots	20.50	18.96	18.86	18.94	-3.18	17.32	15.78	15.68	15.76

Table 43: Conducted power measurement results of GSM1900(Main Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		30.50	29.67	29.50	29.45	-9.19	21.31	20.48	20.31	20.26
GPRS/ EDGE (GMSK)	1 Tx Slot	30.50	29.67	29.43	29.38	-9.19	21.31	20.48	20.24	20.19
	2 Tx Slots	27.50	26.48	26.29	26.36	-6.13	21.37	20.35	20.16	20.23
	3 Tx Slots	26.00	24.78	24.63	24.72	-4.42	<b>21.58</b>	<b>20.36</b>	<b>20.21</b>	<b>20.30</b>
	4 Tx Slots	24.50	23.28	23.16	23.26	-3.18	21.32	20.10	19.98	20.08
EDGE (8PSK)	1 Tx Slot	26.50	25.62	25.56	25.61	-9.19	17.31	16.43	16.37	16.42
	2 Tx Slots	24.50	23.46	23.44	23.45	-6.13	18.37	17.33	17.31	17.32
	3 Tx Slots	22.50	21.18	21.16	21.14	-4.42	18.08	16.76	16.74	16.72
	4 Tx Slots	20.50	18.95	18.97	18.93	-3.18	17.32	15.77	15.79	15.75

Table 44: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Synchronous transmission with Modem0:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.60	28.42	28.50	-9.19	20.31	19.41	19.23	19.31
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.59	28.38	28.45	-9.19	20.31	19.40	19.19	19.26
	2 Tx Slots	26.50	25.41	25.22	25.31	-6.13	20.37	19.28	19.09	19.18
	3 Tx Slots	25.00	23.80	23.65	23.75	-4.42	<b>20.58</b>	<b>19.38</b>	<b>19.23</b>	<b>19.33</b>
	4 Tx Slots	23.50	22.25	22.11	22.22	-3.18	20.32	19.07	18.93	19.04
EDGE (8PSK)	1 Tx Slot	26.50	25.71	25.66	25.69	-9.19	17.31	16.52	16.47	16.50
	2 Tx Slots	24.50	23.58	23.54	23.53	-6.13	18.37	17.45	17.41	17.40
	3 Tx Slots	22.50	21.28	21.27	21.32	-4.42	18.08	16.86	16.85	16.90
	4 Tx Slots	20.50	19.16	19.10	19.06	-3.18	17.32	15.98	15.92	15.88

Table 45: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.60	28.40	28.43	-9.19	20.31	19.41	19.21	19.24
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.57	28.33	28.41	-9.19	20.31	19.38	19.14	19.22
	2 Tx Slots	26.50	25.37	25.17	25.27	-6.13	20.37	19.24	19.04	19.14
	3 Tx Slots	25.00	23.74	23.58	23.70	-4.42	<b>20.58</b>	<b>19.32</b>	<b>19.16</b>	<b>19.28</b>
	4 Tx Slots	23.50	22.17	22.05	22.18	-3.18	20.32	18.99	18.87	19.00
EDGE (8PSK)	1 Tx Slot	26.50	25.51	25.46	25.50	-9.19	17.31	16.32	16.27	16.31
	2 Tx Slots	24.50	23.29	23.29	23.30	-6.13	18.37	17.16	17.16	17.17
	3 Tx Slots	22.50	21.02	21.03	21.08	-4.42	18.08	16.60	16.61	16.66
	4 Tx Slots	20.50	18.84	18.79	18.86	-3.18	17.32	15.66	15.61	15.68

Table 46: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Wi-Fi on function work, Modem1 Synchronous transmission with Modem0:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		28.50	27.55	27.40	27.50	-9.19	19.31	18.36	18.21	18.31
GPRS/ EDGE (GMSK)	1 Tx Slot	28.50	27.52	27.35	27.44	-9.19	19.31	18.33	18.16	18.25
	2 Tx Slots	25.50	24.39	24.28	24.38	-6.13	19.37	18.26	18.15	18.25
	3 Tx Slots	24.00	22.91	22.67	22.78	-4.42	<b>19.58</b>	<b>18.49</b>	<b>18.25</b>	<b>18.36</b>
	4 Tx Slots	22.50	21.27	21.13	21.27	-3.18	19.32	18.09	17.95	18.09
EDGE (8PSK)	1 Tx Slot	26.50	25.31	25.30	25.28	-9.19	17.31	16.12	16.11	16.09
	2 Tx Slots	24.50	23.28	23.33	23.28	-6.13	18.37	17.15	17.20	17.15
	3 Tx Slots	22.50	21.08	21.02	21.04	-4.42	18.08	16.66	16.60	16.62
	4 Tx Slots	20.50	18.83	18.79	18.78	-3.18	17.32	15.65	15.61	15.60

Table 47: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

After Hotspot function work, Modem1 Synchronous transmission with Modem0:

GSM1900		Burst-Averaged output Power (dBm)				Division Factors	Frame-Averaged output Power (dBm)			
		Tune-up	512CH	661CH	810CH		Tune-up	512CH	661CH	810CH
GSM (CS)		29.50	28.50	28.40	28.50	-9.19	20.31	19.31	19.21	19.31
GPRS/ EDGE (GMSK)	1 Tx Slot	29.50	28.48	28.37	28.46	-9.19	20.31	19.29	19.18	19.27
	2 Tx Slots	26.50	25.31	25.19	25.29	-6.13	20.37	19.18	19.06	19.16
	3 Tx Slots	25.00	23.69	23.60	23.72	-4.42	<b>20.58</b>	<b>19.27</b>	<b>19.18</b>	<b>19.30</b>
	4 Tx Slots	23.50	22.16	22.06	22.19	-3.18	20.32	18.98	18.88	19.01
EDGE (8PSK)	1 Tx Slot	26.50	25.45	25.55	25.42	-9.19	17.31	16.26	16.36	16.23
	2 Tx Slots	24.50	23.30	23.32	23.31	-6.13	18.37	17.17	17.19	17.18
	3 Tx Slots	22.50	21.04	21.00	21.00	-4.42	18.08	16.62	16.58	16.58
	4 Tx Slots	20.50	18.79	18.84	18.86	-3.18	17.32	15.61	15.66	15.68

Table 48: Conducted power measurement results of GSM1900(Second Antenna)

Note:

- 1) The conducted power of GSM1900 is measured with RMS detector.
- 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

### 7.2.5 Conducted power measurements of UMTS Band V

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	24.50	<b>24.38</b>	<b>24.16</b>	<b>24.21</b>
	64kbps RMC	24.50	24.34	24.11	24.15
	144kbps RMC	24.50	24.30	24.08	24.12
	384kbps RMC	24.50	24.26	24.06	24.09
HSDPA	Subtest 1	24.50	24.42	24.36	24.40
	Subtest 2	23.50	23.05	23.07	23.15
	Subtest 3	23.00	22.40	22.26	22.32
	Subtest 4	23.00	22.32	22.32	22.39
HSUPA	Subtest 1	22.50	22.38	22.01	21.76
	Subtest 2	21.50	21.32	21.28	21.25
	Subtest 3	23.50	23.44	23.29	23.44
	Subtest 4	22.00	21.48	21.52	21.41
	Subtest 5	23.50	22.07	22.61	22.21
DC-HSDPA	Subtest 1	24.50	24.32	24.22	24.25
	Subtest 2	23.50	22.88	22.69	23.02
	Subtest 3	23.00	22.28	22.12	22.25
	Subtest 4	23.00	22.22	22.09	22.22

Table 49: Conducted power measurement results of UMTS Band V(Main Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Synchronous transmission with Modem1:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	23.50	<b>23.27</b>	<b>23.10</b>	<b>23.15</b>
	64kbps RMC	23.50	23.21	23.10	23.17
	144kbps RMC	23.50	23.18	23.08	23.25
	384kbps RMC	23.50	23.16	23.06	23.24
HSDPA	Subtest 1	23.50	23.38	23.32	23.25
	Subtest 2	22.50	22.10	22.27	22.35
	Subtest 3	22.00	21.52	21.44	21.47
	Subtest 4	22.00	21.37	21.52	21.47
HSUPA	Subtest 1	21.50	21.50	21.19	20.91
	Subtest 2	20.50	20.30	20.40	20.43
	Subtest 3	22.50	22.42	22.41	22.42
	Subtest 4	21.00	20.53	20.69	20.63
	Subtest 5	22.50	21.19	21.83	21.39
DC-HSDPA	Subtest 1	23.50	23.32	23.20	23.10
	Subtest 2	22.50	21.86	21.81	22.20
	Subtest 3	22.00	21.33	21.29	21.47
	Subtest 4	22.00	21.34	21.31	21.40

Table 50: Conducted power measurement results of UMTS Band V(Main Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	23.50	<b>23.27</b>	<b>23.10</b>	<b>23.15</b>
	64kbps RMC	23.50	23.21	23.10	23.17
	144kbps RMC	23.50	23.18	23.08	23.25
	384kbps RMC	23.50	23.16	23.06	23.24
HSDPA	Subtest 1	23.50	23.18	23.12	23.25
	Subtest 2	22.50	22.10	22.27	22.35
	Subtest 3	22.00	21.52	21.44	21.47
	Subtest 4	22.00	21.37	21.52	21.47
HSUPA	Subtest 1	21.50	21.50	21.19	20.91
	Subtest 2	20.50	20.30	20.40	20.43
	Subtest 3	22.50	22.42	22.41	22.42
	Subtest 4	21.00	20.53	20.69	20.63
	Subtest 5	22.50	21.19	21.83	21.39
DC-HSDPA	Subtest 1	23.50	23.12	23.00	23.10
	Subtest 2	22.50	21.86	21.81	22.20
	Subtest 3	22.00	21.33	21.29	21.47
	Subtest 4	22.00	21.34	21.31	21.40

Table 51: Conducted power measurement results of UMTS Band V(Main Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	24.50	<b>24.28</b>	<b>24.01</b>	<b>24.03</b>
	64kbps RMC	24.50	24.19	23.95	23.96
	144kbps RMC	24.50	24.14	23.92	23.93
	384kbps RMC	24.50	24.10	23.89	23.91
HSDPA	Subtest 1	24.50	24.25	24.10	24.05
	Subtest 2	23.50	22.96	22.99	23.10
	Subtest 3	23.00	22.25	22.36	22.34
	Subtest 4	23.00	22.25	22.33	22.35
HSUPA	Subtest 1	22.50	21.85	21.62	22.21
	Subtest 2	21.50	21.30	21.29	21.34
	Subtest 3	23.50	23.42	23.25	23.43
	Subtest 4	22.00	21.47	21.53	21.53
	Subtest 5	23.50	22.66	22.60	22.21
DC-HSDPA	Subtest 1	24.50	24.17	24.01	24.03
	Subtest 2	23.50	22.88	22.90	23.03
	Subtest 3	23.00	22.16	22.28	22.26
	Subtest 4	23.00	22.17	22.24	22.28

Table 52: Conducted power measurement results of UMTS Band V(Second Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Synchronous transmission with Modem1:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	23.00	<b>22.91</b>	<b>22.80</b>	<b>22.87</b>
	64kbps RMC	23.00	22.91	22.77	22.84
	144kbps RMC	23.00	22.88	22.75	22.82
	384kbps RMC	23.00	22.88	22.74	22.80
HSDPA	Subtest 1	23.00	22.81	22.71	22.74
	Subtest 2	22.00	21.29	21.44	21.50
	Subtest 3	21.50	20.71	20.77	20.80
	Subtest 4	21.50	20.51	20.77	20.85
HSUPA	Subtest 1	21.00	20.24	20.18	20.77
	Subtest 2	20.00	19.80	19.91	19.86
	Subtest 3	22.00	21.82	21.75	21.90
	Subtest 4	20.50	19.79	20.04	20.05
	Subtest 5	22.00	21.09	21.17	20.77
DC-HSDPA	Subtest 1	23.00	22.73	22.62	22.67
	Subtest 2	22.00	21.21	21.35	21.43
	Subtest 3	21.50	20.62	20.69	20.72
	Subtest 4	21.50	20.43	20.68	20.78

Table 53: Conducted power measurement results of UMTS Band V(Second Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	23.00	<b>22.91</b>	<b>22.80</b>	<b>22.87</b>
	64kbps RMC	23.00	22.91	22.77	22.84
	144kbps RMC	23.00	22.88	22.75	22.82
	384kbps RMC	23.00	22.88	22.74	22.80
HSDPA	Subtest 1	23.00	22.81	22.71	22.74
	Subtest 2	22.00	21.29	21.44	21.50
	Subtest 3	21.50	20.71	20.77	20.80
	Subtest 4	21.50	20.51	20.77	20.85
HSUPA	Subtest 1	21.00	20.24	20.18	20.77
	Subtest 2	20.00	19.80	19.91	19.86
	Subtest 3	22.00	21.82	21.75	21.90
	Subtest 4	20.50	19.79	20.04	20.05
	Subtest 5	22.00	21.09	21.17	20.77
DC-HSDPA	Subtest 1	23.00	22.73	22.62	22.67
	Subtest 2	22.00	21.21	21.35	21.43
	Subtest 3	21.50	20.62	20.69	20.72
	Subtest 4	21.50	20.43	20.68	20.78

Table 54: Conducted power measurement results of UMTS Band V(Second Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	22.50	<b>22.32</b>	<b>22.22</b>	<b>22.29</b>
	64kbps RMC	22.50	22.28	22.20	22.26
	144kbps RMC	22.50	22.27	22.19	22.25
	384kbps RMC	22.50	22.27	22.17	22.23
HSDPA	Subtest 1	22.50	22.27	22.18	22.25
	Subtest 2	21.50	21.06	21.33	21.23
	Subtest 3	21.00	20.38	20.68	20.57
	Subtest 4	21.00	20.42	20.71	20.58
HSUPA	Subtest 1	20.50	19.95	19.92	20.14
	Subtest 2	19.50	19.33	19.28	19.34
	Subtest 3	21.50	21.39	21.37	21.39
	Subtest 4	20.00	19.71	19.89	19.83
	Subtest 5	21.50	20.62	20.84	20.57
DC-HSDPA	Subtest 1	22.50	22.17	22.15	22.22
	Subtest 2	21.50	21.02	21.34	21.19
	Subtest 3	21.00	20.32	20.52	20.56
	Subtest 4	21.00	20.47	20.64	20.48

Table 55: Conducted power measurement results of UMTS Band V(Second Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	23.50	<b>23.45</b>	<b>23.40</b>	<b>23.45</b>
	64kbps RMC	23.50	23.42	23.38	23.46
	144kbps RMC	23.50	23.48	23.39	23.45
	384kbps RMC	23.50	23.45	23.38	23.44
HSDPA	Subtest 1	23.50	23.34	23.33	23.37
	Subtest 2	22.50	22.37	22.34	22.35
	Subtest 3	22.00	21.64	21.68	21.72
	Subtest 4	22.00	21.66	21.61	21.64
HSUPA	Subtest 1	21.50	21.07	21.03	21.01
	Subtest 2	20.50	20.41	20.45	20.43
	Subtest 3	22.50	22.39	22.32	22.34
	Subtest 4	21.00	20.71	20.73	20.70
	Subtest 5	22.50	21.48	21.41	21.38
DC-HSDPA	Subtest 1	23.50	23.26	23.24	23.30
	Subtest 2	22.50	22.28	22.26	22.27
	Subtest 3	22.00	21.56	21.59	21.65
	Subtest 4	22.00	21.57	21.54	21.58

Table 56: Conducted power measurement results of UMTS Band V(Second Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

UMTS Band V		Tune-up	Conducted Power (dBm)		
			4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	23.00	<b>22.91</b>	<b>22.80</b>	<b>22.87</b>
	64kbps RMC	23.00	22.91	22.77	22.84
	144kbps RMC	23.00	22.88	22.75	22.82
	384kbps RMC	23.00	22.88	22.74	22.80
HSDPA	Subtest 1	23.00	22.81	22.71	22.74
	Subtest 2	22.00	21.29	21.44	21.50
	Subtest 3	21.50	20.71	20.77	20.80
	Subtest 4	21.50	20.51	20.77	20.85
HSUPA	Subtest 1	21.00	20.24	20.18	20.77
	Subtest 2	20.00	19.80	19.91	19.86
	Subtest 3	22.00	21.82	21.75	21.90
	Subtest 4	20.50	19.79	20.04	20.05
	Subtest 5	22.00	21.09	21.17	20.77
DC-HSDPA	Subtest 1	23.00	22.73	22.62	22.67
	Subtest 2	22.00	21.21	21.35	21.43
	Subtest 3	21.50	20.62	20.69	20.72
	Subtest 4	21.50	20.43	20.68	20.78

Table 57: Conducted power measurement results of UMTS Band V(Second Antenna)

Note: 1) The conducted power of UMTS Band V is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.2.6 Conducted power measurements of UMTS Band IV

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	23.50	<b>22.97</b>	<b>22.60</b>	<b>22.73</b>
	64kbps RMC	23.50	22.92	22.59	22.72
	144kbps RMC	23.50	22.90	22.53	22.70
	384kbps RMC	23.50	22.85	22.50	22.67
HSDPA	Subtest 1	23.50	22.92	22.64	22.75
	Subtest 2	22.00	21.75	21.56	21.82
	Subtest 3	22.50	21.35	21.13	21.44
	Subtest 4	22.50	21.38	21.12	21.43
HSUPA	Subtest 1	21.50	19.97	19.52	19.63
	Subtest 2	20.00	18.96	18.24	18.67
	Subtest 3	22.50	20.86	20.64	20.83
	Subtest 4	20.00	19.34	18.61	18.99
	Subtest 5	23.00	21.49	21.08	21.26
DC-HSDPA	Subtest 1	23.50	22.83	22.57	22.69
	Subtest 2	22.00	21.66	21.48	21.74
	Subtest 3	22.50	21.27	21.04	21.37
	Subtest 4	22.50	21.29	21.05	21.37

Table 58: Conducted power measurement results of UMTS Band IV(Main Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Synchronous transmission with Modem1:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	21.50	<b>21.41</b>	<b>21.12</b>	<b>21.26</b>
	64kbps RMC	21.50	21.40	21.07	21.23
	144kbps RMC	21.50	21.39	21.04	21.20
	384kbps RMC	21.50	21.35	21.01	21.18
HSDPA	Subtest 1	21.50	21.41	21.24	21.38
	Subtest 2	20.00	19.90	19.75	19.85
	Subtest 3	20.50	19.22	18.89	19.02
	Subtest 4	20.50	19.15	18.90	19.08
HSUPA	Subtest 1	19.50	17.93	17.76	17.99
	Subtest 2	18.00	16.99	16.56	16.93
	Subtest 3	20.50	19.03	18.99	19.20
	Subtest 4	18.00	17.44	16.95	17.35
	Subtest 5	21.00	19.66	19.43	19.63
DC-HSDPA	Subtest 1	21.50	21.33	21.15	21.31
	Subtest 2	20.00	19.82	19.66	19.78
	Subtest 3	20.50	19.13	18.81	18.94
	Subtest 4	20.50	19.07	18.81	19.01

Table 59: Conducted power measurement results of UMTS Band IV(Main Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	20.50	<b>20.10</b>	<b>19.83</b>	<b>20.02</b>
	64kbps RMC	20.50	20.10	19.81	20.03
	144kbps RMC	20.50	20.08	19.79	19.98
	384kbps RMC	20.50	20.08	19.77	20.00
HSDPA	Subtest 1	20.50	20.09	19.86	20.03
	Subtest 2	19.00	18.95	18.95	18.93
	Subtest 3	19.50	18.34	18.07	18.17
	Subtest 4	19.50	18.13	18.02	18.26
HSUPA	Subtest 1	18.50	16.98	16.93	17.21
	Subtest 2	17.00	16.11	15.78	16.11
	Subtest 3	19.50	18.15	18.17	18.35
	Subtest 4	17.00	16.42	16.07	16.53
	Subtest 5	20.00	18.71	18.60	18.85
DC-HSDPA	Subtest 1	20.50	20.01	29.77	20.06
	Subtest 2	19.00	18.86	18.87	18.85
	Subtest 3	19.50	18.26	17.98	18.10
	Subtest 4	19.50	18.04	17.94	18.18

Table 60: Conducted power measurement results of UMTS Band IV(Main Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	22.50	<b>22.33</b>	<b>21.94</b>	<b>22.04</b>
	64kbps RMC	22.50	22.28	21.87	22.05
	144kbps RMC	22.50	22.21	21.83	22.03
	384kbps RMC	22.50	22.23	21.80	22.02
HSDPA	Subtest 1	22.50	21.97	21.81	21.70
	Subtest 2	21.00	20.87	20.78	21.00
	Subtest 3	21.50	20.43	20.25	20.59
	Subtest 4	21.50	20.43	20.32	20.51
HSUPA	Subtest 1	20.50	19.09	18.70	18.78
	Subtest 2	19.00	17.94	17.36	17.85
	Subtest 3	21.50	19.91	19.84	19.91
	Subtest 4	19.00	18.46	17.79	18.14
	Subtest 5	22.00	20.47	20.20	20.44
DC-HSDPA	Subtest 1	22.50	21.88	21.73	21.62
	Subtest 2	21.00	20.79	20.69	20.93
	Subtest 3	21.50	20.35	20.16	20.52
	Subtest 4	21.50	20.34	20.24	20.43

Table 61: Conducted power measurement results of UMTS Band IV(Main Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	21.00	<b>20.89</b>	<b>20.57</b>	<b>20.72</b>
	64kbps RMC	21.00	20.87	20.57	20.66
	144kbps RMC	21.00	20.83	20.56	20.65
	384kbps RMC	21.00	20.80	20.54	20.64
HSDPA	Subtest 1	21.00	20.71	20.47	20.69
	Subtest 2	19.50	19.37	19.33	19.31
	Subtest 3	20.00	18.70	18.38	18.53
	Subtest 4	20.00	18.45	18.32	18.62
HSUPA	Subtest 1	19.00	17.40	17.35	17.63
	Subtest 2	17.50	16.43	16.14	16.41
	Subtest 3	20.00	18.57	18.45	18.65
	Subtest 4	17.50	16.78	16.45	16.88
	Subtest 5	20.50	19.03	19.02	19.25
DC-HSDPA	Subtest 1	21.00	20.62	20.39	20.61
	Subtest 2	19.50	19.29	19.24	19.24
	Subtest 3	20.00	18.61	18.31	18.47
	Subtest 4	20.00	18.36	18.24	18.54

Table 62: Conducted power measurement results of UMTS Band IV(Main Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	24.00	<b>23.32</b>	<b>23.02</b>	<b>23.08</b>
	64kbps RMC	24.00	23.32	22.91	23.05
	144kbps RMC	24.00	23.31	22.93	23.04
	384kbps RMC	24.00	23.30	22.89	23.04
HSDPA	Subtest 1	24.00	23.29	23.06	23.07
	Subtest 2	22.50	21.91	21.67	21.86
	Subtest 3	23.00	21.22	21.15	21.28
	Subtest 4	23.00	21.27	21.07	21.27
HSUPA	Subtest 1	22.00	20.29	20.12	20.09
	Subtest 2	20.50	19.38	18.69	19.05
	Subtest 3	23.00	21.22	21.01	21.22
	Subtest 4	20.50	19.63	19.19	19.39
	Subtest 5	23.50	21.71	21.58	21.62
DC-HSDPA	Subtest 1	24.00	23.21	22.97	23.01
	Subtest 2	22.50	21.82	21.59	21.78
	Subtest 3	23.00	21.14	21.06	21.21
	Subtest 4	23.00	21.18	21.05	21.21

Table 63: Conducted power measurement results of UMTS Band IV(Second Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Synchronous transmission with Modem1:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	20.50	<b>19.78</b>	<b>19.49</b>	<b>19.64</b>
	64kbps RMC	20.50	19.75	19.45	19.62
	144kbps RMC	20.50	19.73	19.43	19.61
	384kbps RMC	20.50	19.71	19.42	19.60
HSDPA	Subtest 1	20.50	19.61	19.54	19.67
	Subtest 2	19.00	18.11	18.47	18.18
	Subtest 3	19.50	17.66	17.67	17.76
	Subtest 4	19.50	17.69	17.55	17.79
HSUPA	Subtest 1	18.50	16.79	16.72	16.55
	Subtest 2	17.00	15.86	15.51	15.65
	Subtest 3	19.50	17.64	17.79	17.94
	Subtest 4	17.00	15.83	15.87	16.27
	Subtest 5	20.00	18.19	18.26	18.34
DC-HSDPA	Subtest 1	20.50	19.52	19.47	19.61
	Subtest 2	19.00	18.12	18.39	18.08
	Subtest 3	19.50	17.58	17.56	17.59
	Subtest 4	19.50	17.88	17.58	17.59

Table 64: Conducted power measurement results of UMTS Band IV(Second Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	20.50	<b>19.90</b>	<b>19.60</b>	<b>19.76</b>
	64kbps RMC	20.50	19.88	19.55	19.75
	144kbps RMC	20.50	19.88	19.54	19.73
	384kbps RMC	20.50	19.87	19.53	19.73
HSDPA	Subtest 1	20.50	19.61	19.54	19.77
	Subtest 2	19.00	18.11	18.47	18.18
	Subtest 3	19.50	17.66	17.67	17.76
	Subtest 4	19.50	17.69	17.55	17.79
HSUPA	Subtest 1	18.50	16.79	16.72	16.55
	Subtest 2	17.00	15.86	15.51	15.65
	Subtest 3	19.50	17.64	17.79	17.94
	Subtest 4	17.00	15.83	15.87	16.27
	Subtest 5	20.00	18.19	18.26	18.34
DC-HSDPA	Subtest 1	20.50	19.52	19.47	19.71
	Subtest 2	19.00	18.12	18.39	18.08
	Subtest 3	19.50	17.58	17.56	17.59
	Subtest 4	19.50	17.88	17.58	17.59

Table 65: Conducted power measurement results of UMTS Band IV(Second Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	19.50	18.71	18.42	18.65
	64kbps RMC	19.50	18.71	18.39	18.61
	144kbps RMC	19.50	18.69	18.40	18.58
	384kbps RMC	19.50	18.68	18.40	18.61
HSDPA	Subtest 1	19.50	18.66	18.34	18.65
	Subtest 2	18.00	17.20	17.35	17.33
	Subtest 3	18.50	16.57	16.67	16.64
	Subtest 4	18.50	16.58	16.63	16.84
HSUPA	Subtest 1	17.50	15.67	15.74	15.59
	Subtest 2	16.00	14.84	14.63	14.83
	Subtest 3	18.50	16.59	16.66	17.16
	Subtest 4	16.00	14.95	15.09	15.45
	Subtest 5	19.00	17.31	17.44	17.49
DC-HSDPA	Subtest 1	19.50	18.50	18.29	18.59
	Subtest 2	18.00	17.17	17.36	17.30
	Subtest 3	18.50	16.52	16.68	16.67
	Subtest 4	18.50	16.58	16.63	16.74

Table 66: Conducted power measurement results of UMTS Band IV(Second Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	21.00	<b>20.70</b>	<b>20.36</b>	<b>20.51</b>
	64kbps RMC	21.00	20.65	20.33	20.49
	144kbps RMC	21.00	20.61	20.31	20.48
	384kbps RMC	21.00	20.58	20.29	20.46
HSDPA	Subtest 1	21.00	20.64	20.36	20.48
	Subtest 2	19.50	19.25	19.03	19.22
	Subtest 3	20.00	18.43	18.15	18.24
	Subtest 4	20.00	18.37	18.06	18.25
HSUPA	Subtest 1	19.00	17.44	17.72	17.33
	Subtest 2	17.50	16.65	16.23	16.50
	Subtest 3	20.00	18.37	18.61	18.46
	Subtest 4	17.50	16.99	16.73	16.84
	Subtest 5	20.50	18.65	18.94	19.16
DC-HSDPA	Subtest 1	21.00	20.66	20.37	20.41
	Subtest 2	19.50	19.16	18.95	19.14
	Subtest 3	20.00	18.35	18.06	18.17
	Subtest 4	20.00	18.28	18.09	18.19

Table 67: Conducted power measurement results of UMTS Band IV(Second Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

UMTS Band IV		Tune-up	Conducted Power (dBm)		
			1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	20.50	<b>19.78</b>	<b>19.49</b>	<b>19.64</b>
	64kbps RMC	20.50	19.75	19.45	19.62
	144kbps RMC	20.50	19.73	19.43	19.61
	384kbps RMC	20.50	19.71	19.42	19.60
HSDPA	Subtest 1	20.50	19.61	19.54	19.57
	Subtest 2	19.00	18.11	18.47	18.18
	Subtest 3	19.50	17.66	17.67	17.76
	Subtest 4	19.50	17.69	17.55	17.79
HSUPA	Subtest 1	18.50	16.79	16.72	16.55
	Subtest 2	17.00	15.86	15.51	15.65
	Subtest 3	19.50	17.64	17.79	17.94
	Subtest 4	17.00	15.83	15.87	16.27
	Subtest 5	20.00	18.19	18.26	18.34
DC-HSDPA	Subtest 1	20.50	19.52	19.47	19.51
	Subtest 2	19.00	18.12	18.39	18.08
	Subtest 3	19.50	17.58	17.56	17.59
	Subtest 4	19.50	17.88	17.58	17.59

Table 68: Conducted power measurement results of UMTS Band IV(Second Antenna)

Note: 1) The conducted power of UMTS Band IV is measured with RMS detector.

2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).

3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.2.7 Conducted power measurements of UMTS Band II

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	23.50	<b>22.74</b>	<b>22.62</b>	<b>22.61</b>
	64kbps RMC	23.50	22.67	22.60	22.54
	144kbps RMC	23.50	22.60	22.55	22.56
	384kbps RMC	23.50	22.60	22.52	22.62
HSDPA	Subtest 1	23.50	22.65	22.54	22.57
	Subtest 2	22.00	21.23	21.18	21.31
	Subtest 3	21.50	20.55	20.54	20.66
	Subtest 4	21.50	20.54	20.52	20.61
HSUPA	Subtest 1	21.50	19.53	19.70	19.50
	Subtest 2	20.00	19.72	19.57	19.71
	Subtest 3	22.50	20.61	20.71	20.70
	Subtest 4	20.00	18.54	18.64	18.54
	Subtest 5	21.00	19.26	20.34	20.37
DC-HSDPA	Subtest 1	23.50	22.56	22.47	22.51
	Subtest 2	22.00	21.14	21.10	21.23
	Subtest 3	21.50	20.47	20.45	20.59
	Subtest 4	21.50	20.45	20.45	20.55

Table 69: Conducted power measurement results of UMTS Band II(Main Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Synchronous transmission with Modem1:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	22.50	<b>21.74</b>	<b>21.59</b>	<b>21.64</b>
	64kbps RMC	22.50	21.71	21.53	21.58
	144kbps RMC	22.50	21.62	21.50	21.56
	384kbps RMC	22.50	21.57	21.49	21.53
HSDPA	Subtest 1	22.50	21.73	21.66	21.72
	Subtest 2	21.00	20.28	20.38	20.39
	Subtest 3	20.50	19.67	19.72	19.81
	Subtest 4	20.50	19.52	19.64	19.79
HSUPA	Subtest 1	20.50	18.58	18.90	18.58
	Subtest 2	19.00	18.84	18.75	18.86
	Subtest 3	21.50	19.59	19.83	19.88
	Subtest 4	19.00	17.59	17.81	17.76
	Subtest 5	20.00	18.38	19.56	19.55
DC-HSDPA	Subtest 1	22.50	21.53	21.60	21.62
	Subtest 2	21.00	20.22	20.31	20.33
	Subtest 3	20.50	19.61	19.65	19.73
	Subtest 4	20.50	19.43	19.57	19.72

Table 70: Conducted power measurement results of UMTS Band II(Main Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	22.50	<b>21.74</b>	<b>21.59</b>	<b>21.64</b>
	64kbps RMC	22.50	21.71	21.53	21.58
	144kbps RMC	22.50	21.62	21.50	21.56
	384kbps RMC	22.50	21.57	21.49	21.53
HSDPA	Subtest 1	22.50	21.73	21.66	21.72
	Subtest 2	21.00	20.28	20.38	20.39
	Subtest 3	20.50	19.67	19.72	19.81
	Subtest 4	20.50	19.52	19.64	19.79
HSUPA	Subtest 1	20.50	18.58	18.90	18.58
	Subtest 2	19.00	18.84	18.75	18.86
	Subtest 3	21.50	19.59	19.83	19.88
	Subtest 4	19.00	17.59	17.81	17.76
	Subtest 5	20.00	18.38	19.56	19.55
DC-HSDPA	Subtest 1	22.50	21.65	21.57	21.65
	Subtest 2	21.00	20.20	20.29	20.32
	Subtest 3	20.50	19.58	19.64	19.73
	Subtest 4	20.50	19.44	19.55	19.72

Table 71: Conducted power measurement results of UMTS Band II(Main Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	20.50	<b>19.72</b>	<b>19.66</b>	<b>19.71</b>
	64kbps RMC	20.50	19.73	19.64	19.76
	144kbps RMC	20.50	19.68	19.63	19.78
	384kbps RMC	20.50	19.64	19.61	19.75
HSDPA	Subtest 1	20.50	19.70	19.61	19.72
	Subtest 2	19.00	18.38	18.72	18.75
	Subtest 3	18.50	17.80	18.04	18.04
	Subtest 4	18.50	17.69	18.02	18.02
HSUPA	Subtest 1	18.50	16.68	17.20	16.91
	Subtest 2	17.00	16.38	16.55	16.66
	Subtest 3	19.50	17.76	18.25	18.14
	Subtest 4	17.00	15.79	16.11	16.06
	Subtest 5	19.00	17.56	18.08	18.13
DC-HSDPA	Subtest 1	20.50	19.61	19.53	19.64
	Subtest 2	19.00	18.30	18.63	18.68
	Subtest 3	18.50	17.71	17.96	17.96
	Subtest 4	18.50	17.61	17.93	17.95

Table 72: Conducted power measurement results of UMTS Band II(Main Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	19.50	<b>18.90</b>	<b>18.77</b>	<b>18.85</b>
	64kbps RMC	19.50	18.78	18.79	18.80
	144kbps RMC	19.50	18.80	18.75	18.77
	384kbps RMC	19.50	18.78	18.74	18.76
HSDPA	Subtest 1	19.50	18.95	18.78	18.77
	Subtest 2	18.00	17.50	17.94	17.93
	Subtest 3	17.50	16.88	17.16	17.19
	Subtest 4	17.50	16.74	17.22	17.10
HSUPA	Subtest 1	17.50	15.80	16.38	16.06
	Subtest 2	16.00	15.36	15.67	15.84
	Subtest 3	18.50	16.81	17.45	17.22
	Subtest 4	16.00	14.91	15.29	15.21
	Subtest 5	18.00	16.64	17.05	17.11
DC-HSDPA	Subtest 1	19.50	18.86	18.70	18.69
	Subtest 2	18.00	17.42	17.85	17.86
	Subtest 3	17.50	16.79	17.08	17.11
	Subtest 4	17.50	16.66	17.13	17.03

Table 73: Conducted power measurement results of UMTS Band II(Main Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	23.50	<b>22.76</b>	<b>22.58</b>	<b>22.56</b>
	64kbps RMC	23.50	22.69	22.55	22.56
	144kbps RMC	23.50	22.58	22.52	22.52
	384kbps RMC	23.50	22.58	22.47	22.54
HSDPA	Subtest 1	23.50	22.73	22.63	22.64
	Subtest 2	22.00	21.31	21.27	21.38
	Subtest 3	21.50	20.64	20.62	20.74
	Subtest 4	21.50	20.62	20.61	20.68
HSUPA	Subtest 1	21.50	19.62	19.78	19.58
	Subtest 2	20.00	19.80	19.66	19.78
	Subtest 3	22.50	20.69	20.80	20.77
	Subtest 4	20.00	18.63	18.72	18.62
	Subtest 5	21.00	19.34	20.43	20.44
DC-HSDPA	Subtest 1	23.50	22.65	22.54	22.57
	Subtest 2	22.00	21.22	21.19	21.30
	Subtest 3	21.50	20.56	20.53	20.67
	Subtest 4	21.50	20.53	20.54	20.62

Table 74: Conducted power measurement results of UMTS Band II(Second Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Synchronous transmission with Modem1:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	20.00	<b>19.34</b>	<b>19.26</b>	<b>19.29</b>
	64kbps RMC	20.00	19.28	19.24	19.25
	144kbps RMC	20.00	19.25	19.21	19.22
	384kbps RMC	20.00	19.22	19.19	19.20
HSDPA	Subtest 1	20.00	19.22	19.24	19.24
	Subtest 2	18.50	17.96	18.44	18.14
	Subtest 3	18.00	17.52	17.68	17.77
	Subtest 4	18.00	17.16	17.52	17.82
HSUPA	Subtest 1	18.00	16.32	16.33	16.37
	Subtest 2	16.50	16.36	16.37	16.35
	Subtest 3	19.00	17.15	17.68	17.89
	Subtest 4	16.50	15.38	15.78	15.88
	Subtest 5	18.00	16.25	17.64	17.53
DC-HSDPA	Subtest 1	20.00	19.14	19.15	19.17
	Subtest 2	18.50	17.87	18.36	18.06
	Subtest 3	18.00	17.44	17.59	17.70
	Subtest 4	18.00	17.07	17.45	17.76

Table 75: Conducted power measurement results of UMTS Band II(Second Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	20.50	<b>19.71</b>	<b>19.61</b>	<b>19.70</b>
	64kbps RMC	20.50	19.64	19.63	19.71
	144kbps RMC	20.50	19.59	19.62	19.76
	384kbps RMC	20.50	19.63	19.60	19.73
HSDPA	Subtest 1	20.50	19.67	19.69	19.78
	Subtest 2	19.00	18.46	18.87	18.62
	Subtest 3	18.50	18.00	18.16	18.19
	Subtest 4	18.50	17.56	17.97	18.22
HSUPA	Subtest 1	18.50	16.77	17.38	16.82
	Subtest 2	17.00	16.86	16.52	16.93
	Subtest 3	19.50	17.63	18.16	18.31
	Subtest 4	17.00	15.78	16.23	16.28
	Subtest 5	18.50	16.70	18.09	18.12
DC-HSDPA	Subtest 1	20.50	19.59	19.60	19.72
	Subtest 2	19.00	18.37	18.79	18.54
	Subtest 3	18.50	17.92	18.07	18.12
	Subtest 4	18.50	17.47	17.90	18.16

Table 76: Conducted power measurement results of UMTS Band II(Second Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	19.50	<b>18.68</b>	<b>18.58</b>	<b>18.66</b>
	64kbps RMC	19.50	18.61	18.60	18.66
	144kbps RMC	19.50	18.60	18.60	18.77
	384kbps RMC	19.50	18.62	18.59	18.76
HSDPA	Subtest 1	19.50	18.60	18.66	18.79
	Subtest 2	18.00	17.01	17.64	17.22
	Subtest 3	17.50	16.64	16.86	16.92
	Subtest 4	17.50	16.14	16.64	17.00
HSUPA	Subtest 1	17.50	15.57	15.53	15.65
	Subtest 2	16.00	15.68	15.55	15.75
	Subtest 3	18.50	16.53	16.80	17.07
	Subtest 4	16.00	14.43	14.95	15.10
	Subtest 5	17.50	15.67	17.16	17.06
DC-HSDPA	Subtest 1	19.50	18.52	18.57	18.52
	Subtest 2	18.00	17.07	17.61	17.26
	Subtest 3	17.50	16.54	16.84	16.85
	Subtest 4	17.50	16.12	16.62	16.98

Table 77: Conducted power measurement results of UMTS Band II(Second Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	20.50	<b>19.71</b>	<b>19.61</b>	<b>19.70</b>
	64kbps RMC	20.50	19.64	19.63	19.71
	144kbps RMC	20.50	19.59	19.62	19.76
	384kbps RMC	20.50	19.63	19.60	19.73
HSDPA	Subtest 1	20.50	19.67	19.59	19.69
	Subtest 2	19.00	18.46	18.87	18.62
	Subtest 3	18.50	18.00	18.16	18.19
	Subtest 4	18.50	17.56	17.97	18.22
HSUPA	Subtest 1	18.50	16.77	17.38	16.82
	Subtest 2	17.00	16.86	16.52	16.93
	Subtest 3	19.50	17.63	18.16	18.31
	Subtest 4	17.00	15.78	16.23	16.28
	Subtest 5	18.50	16.70	18.09	18.12
DC-HSDPA	Subtest 1	20.50	19.59	19.50	19.62
	Subtest 2	19.00	18.37	18.79	18.54
	Subtest 3	18.50	17.92	18.07	18.12
	Subtest 4	18.50	17.47	17.90	18.16

Table 78: Conducted power measurement results of UMTS Band II(Second Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

After hotspot function work, Modem0 Synchronous transmission with Modem1:

UMTS Band II		Tune-up	Conducted Power (dBm)		
			9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	20.00	<b>19.97</b>	<b>19.79</b>	<b>19.81</b>
	64kbps RMC	20.00	19.86	19.74	19.78
	144kbps RMC	20.00	19.79	19.71	19.76
	384kbps RMC	20.00	19.76	19.69	19.74
HSDPA	Subtest 1	20.00	19.52	19.54	19.64
	Subtest 2	18.50	17.96	18.44	18.14
	Subtest 3	18.00	17.52	17.68	17.77
	Subtest 4	18.00	17.16	17.52	17.82
HSUPA	Subtest 1	18.00	16.32	16.33	16.37
	Subtest 2	16.50	16.36	16.37	16.35
	Subtest 3	19.00	17.15	17.68	17.89
	Subtest 4	16.50	15.38	15.78	15.88
	Subtest 5	18.00	16.25	17.64	17.53
DC-HSDPA	Subtest 1	20.00	19.44	19.45	19.57
	Subtest 2	18.50	17.87	18.36	18.06
	Subtest 3	18.00	17.44	17.59	17.70
	Subtest 4	18.00	17.07	17.45	17.76

Table 79: Conducted power measurement results of UMTS Band II(Second Antenna)

Note:

- 1) The conducted power of UMTS Band II is measured with RMS detector.
- 2) The bolded 12.2kbps RMC mode was selected for SAR testing(the primary mode).
- 3) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

**7.2.8 Conducted power measurements of LTE Band IV**

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	24.00	22.05	22.25	22.25
		1	3	24.00	22.16	22.39	22.91
		1	5	24.00	22.35	22.27	22.75
		3	0	24.00	22.09	22.17	22.74
		3	2	24.00	22.25	22.26	22.82
		3	3	24.00	22.23	22.20	22.76
		6	0	23.00	21.22	21.17	21.81
	16QAM	1	0	23.00	21.17	21.05	21.10
		1	3	23.00	21.53	21.22	21.73
		1	5	23.00	21.40	21.15	21.53
		3	0	23.00	21.36	21.10	21.72
		3	2	23.00	21.45	21.22	21.89
		3	3	23.00	21.44	21.21	21.75
		6	0	22.00	20.69	20.17	20.81
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	24.00	22.12	22.07	22.20
		1	7	24.00	22.45	22.13	22.47
		1	14	24.00	22.15	22.05	22.49
		8	0	23.00	21.20	21.05	21.42
		8	4	23.00	21.47	21.16	21.41
		8	7	23.00	21.62	21.18	21.86
		15	0	23.00	21.58	21.08	21.33
	16QAM	1	0	23.00	21.17	21.02	21.28
		1	7	23.00	21.95	21.62	21.50
		1	14	23.00	21.58	21.14	21.65
		8	0	22.00	20.61	20.02	20.76
		8	4	22.00	20.85	20.35	20.77
		8	7	22.00	20.76	20.33	20.93
		15	0	22.00	20.74	20.13	20.65

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175H	20375CH
5MHz	QPSK	1	0	24.00	22.43	22.12	22.42
		1	13	24.00	23.17	22.76	23.04
		1	24	24.00	22.64	22.15	22.62
		12	0	23.00	21.98	21.54	21.98
		12	6	23.00	22.17	21.81	22.20
		12	13	23.00	21.98	21.63	21.81
		25	0	23.00	21.95	21.62	21.84
	16QAM	1	0	23.00	21.41	21.34	21.95
		1	13	23.00	22.53	22.04	22.58
		1	24	23.00	21.86	21.43	22.00
		12	0	22.00	21.13	20.71	21.16
		12	6	22.00	21.32	21.04	21.37
		12	13	22.00	21.13	20.89	21.01
		25	0	22.00	21.11	20.83	21.03
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000H	20175CH	20350CH
10MHz	QPSK	1	0	24.00	22.21	22.72	22.77
		1	25	24.00	22.99	23.29	22.90
		1	49	24.00	22.26	22.88	22.25
		25	0	23.00	21.59	21.82	21.91
		25	13	23.00	21.73	22.17	21.77
		25	25	23.00	21.51	22.04	21.63
		50	0	23.00	21.59	21.96	21.77
	16QAM	1	0	23.00	22.08	21.82	22.07
		1	25	23.00	22.61	22.25	22.62
		1	49	23.00	21.60	21.52	22.19
		25	0	22.00	20.99	20.66	20.95
		25	13	22.00	21.19	20.85	21.13
		25	25	22.00	20.87	20.64	20.99
		50	0	22.00	20.90	20.68	20.90

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	24.00	22.77	22.52	22.91
		1	38	24.00	22.90	22.73	22.94
		1	74	24.00	22.25	22.40	22.67
		36	0	23.00	21.91	21.59	21.70
		36	18	23.00	21.77	21.56	21.91
		36	39	23.00	21.63	21.47	21.83
		75	0	23.00	21.77	21.49	21.81
	16QAM	1	0	23.00	22.20	21.84	22.16
		1	38	23.00	22.04	21.98	22.32
		1	74	23.00	21.57	21.69	22.04
		36	0	22.00	21.10	20.57	20.86
		36	18	22.00	20.96	20.72	20.91
		36	39	22.00	20.84	20.64	20.84
		75	0	22.00	20.96	20.63	20.81
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	24.00	22.96	22.68	22.45
		1	50	24.00	22.78	22.68	22.81
		1	99	24.00	22.47	22.71	22.54
		50	0	23.00	21.97	21.77	21.62
		50	25	23.00	21.63	21.49	21.78
		50	50	23.00	21.80	21.65	21.94
		100	0	23.00	21.95	21.68	21.93
	16QAM	1	0	23.00	22.24	21.88	22.00
		1	50	23.00	21.95	21.87	22.26
		1	99	23.00	21.76	22.09	21.96
		50	0	22.00	21.22	20.80	20.78
		50	25	22.00	20.87	20.68	20.97
		50	50	22.00	20.83	20.85	20.97
		100	0	22.00	20.99	20.89	20.98

Table 80: Conducted power measurement results of LTE Band IV(Main antenna)

After Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	23.00	21.05	21.15	21.23
		1	3	23.00	21.25	21.35	21.55
		1	5	23.00	21.19	21.24	21.48
		3	0	23.00	21.05	21.17	21.43
		3	2	23.00	21.04	21.26	21.53
		3	3	23.00	21.17	21.22	21.49
		6	0	22.00	21.02	20.74	21.43
	16QAM	1	0	22.00	20.66	20.42	20.75
		1	3	22.00	20.88	20.65	21.32
		1	5	22.00	20.80	20.62	21.19
		3	0	22.00	20.86	20.54	21.24
		3	2	22.00	21.01	21.02	21.37
		3	3	22.00	21.02	21.01	21.27
		6	0	21.00	19.86	20.16	20.45
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	23.00	21.08	21.03	21.27
		1	7	23.00	21.16	21.21	21.22
		1	14	23.00	21.25	21.15	21.30
		8	0	22.00	20.98	20.46	21.10
		8	4	22.00	21.24	20.72	21.10
		8	7	22.00	21.12	20.74	21.44
		15	0	22.00	21.08	20.64	21.01
	16QAM	1	0	22.00	20.60	20.23	20.81
		1	7	22.00	21.22	20.75	21.11
		1	14	22.00	21.03	20.58	21.20
		8	0	21.00	19.83	19.47	20.04
		8	4	21.00	20.11	19.77	20.04
		8	7	21.00	20.02	19.81	20.50
		15	0	21.00	19.99	19.66	19.92

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175H	20375CH
5MHz	QPSK	1	0	23.00	21.12	21.19	21.13
		1	13	23.00	21.95	21.57	21.87
		1	24	23.00	21.36	21.13	21.47
		12	0	22.00	21.58	21.16	21.60
		12	6	22.00	21.77	21.43	21.82
		12	13	22.00	21.69	21.25	21.45
		25	0	22.00	21.54	21.23	21.47
	16QAM	1	0	22.00	21.26	21.00	21.18
		1	13	22.00	21.87	21.68	21.91
		1	24	22.00	21.49	21.05	21.45
		12	0	21.00	20.61	20.22	20.67
		12	6	21.00	20.81	20.39	20.90
		12	13	21.00	20.62	20.23	20.56
		25	0	21.00	20.61	20.21	20.57
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000H	20175CH	20350CH
10MHz	QPSK	1	0	23.00	21.35	21.05	21.17
		1	25	23.00	22.02	21.54	21.80
		1	49	23.00	21.14	21.01	21.46
		25	0	22.00	21.40	21.05	21.24
		25	13	22.00	21.48	21.19	21.44
		25	25	22.00	21.17	20.95	21.32
		50	0	22.00	21.45	21.04	21.22
	16QAM	1	0	22.00	21.60	21.28	21.56
		1	25	22.00	21.92	21.76	21.94
		1	49	22.00	21.17	20.96	21.81
		25	0	21.00	20.50	20.20	20.38
		25	13	21.00	20.49	20.25	20.60
		25	25	21.00	20.21	20.03	20.49
		50	0	21.00	20.41	20.10	20.37

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	23.00	21.53	21.07	21.70
		1	38	23.00	21.38	21.16	21.76
		1	74	23.00	21.06	21.03	21.60
		36	0	22.00	21.37	21.31	21.53
		36	18	22.00	21.23	21.43	21.56
		36	39	22.00	21.11	21.29	21.50
		75	0	22.00	21.23	21.33	21.45
	16QAM	1	0	22.00	21.82	21.37	21.71
		1	38	22.00	21.75	21.56	21.81
		1	74	22.00	21.21	21.21	21.90
		36	0	21.00	20.37	20.11	20.32
		36	18	21.00	20.25	20.25	20.37
		36	39	21.00	20.16	20.15	20.33
		75	0	21.00	20.26	20.16	20.26
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	23.00	21.58	21.46	21.33
		1	50	23.00	21.33	21.54	21.62
		1	99	23.00	21.02	21.55	21.51
		50	0	22.00	21.45	21.51	21.44
		50	25	22.00	21.11	21.36	21.58
		50	50	22.00	21.17	21.48	21.60
		100	0	22.00	21.67	21.53	21.59
	16QAM	1	0	22.00	21.85	21.50	21.68
		1	50	22.00	21.61	21.47	21.95
		1	99	22.00	21.34	21.86	21.80
		50	0	21.00	20.51	20.61	20.53
		50	25	21.00	20.19	20.47	20.68
		50	50	21.00	20.38	20.61	20.92
		100	0	21.00	20.52	20.66	20.44

Table 81: Conducted power measurement results of LTE Band IV(Main antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	22.00	20.64	20.33	20.51
		1	3	22.00	20.92	20.53	21.05
		1	5	22.00	20.82	20.49	20.91
		3	0	22.00	20.58	20.33	20.93
		3	2	22.00	20.72	20.43	20.99
		3	3	22.00	20.97	20.42	20.94
		6	0	21.00	19.89	19.52	20.12
	16QAM	1	0	21.00	19.37	19.36	19.41
		1	3	21.00	19.77	19.61	20.30
		1	5	21.00	19.71	19.55	19.98
		3	0	21.00	19.67	19.42	20.12
		3	2	21.00	19.78	19.62	20.18
		3	3	21.00	19.79	19.53	20.15
		6	0	20.00	18.52	18.43	19.13
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	22.00	20.24	20.12	20.39
		1	7	22.00	20.94	20.34	20.70
		1	14	22.00	20.61	20.53	20.74
		8	0	21.00	19.57	19.67	19.65
		8	4	21.00	19.81	19.99	19.66
		8	7	21.00	19.71	20.02	20.13
		15	0	21.00	19.70	19.90	19.60
	16QAM	1	0	21.00	19.29	19.25	19.75
		1	7	21.00	20.18	19.90	20.06
		1	14	21.00	19.88	19.73	20.23
		8	0	20.00	18.58	18.21	18.68
		8	4	20.00	18.82	18.50	18.68
		8	7	20.00	18.99	18.53	19.19
		15	0	20.00	18.63	18.41	18.58

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175H	20375CH
5MHz	QPSK	1	0	22.00	20.79	20.46	20.79
		1	13	22.00	21.54	21.17	21.48
		1	24	22.00	20.89	20.70	21.08
		12	0	21.00	20.39	20.23	20.37
		12	6	21.00	20.57	20.53	20.62
		12	13	21.00	20.35	20.37	20.23
		25	0	21.00	20.35	20.35	20.26
	16QAM	1	0	21.00	20.25	19.90	20.14
		1	13	21.00	20.85	20.50	20.86
		1	24	21.00	20.33	19.89	20.33
		12	0	20.00	19.37	19.02	19.39
		12	6	20.00	19.56	19.31	19.63
		12	13	20.00	19.34	19.14	19.26
		25	0	20.00	19.32	19.10	19.22
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000H	20175CH	20350CH
10MHz	QPSK	1	0	22.00	21.03	20.70	20.87
		1	25	22.00	21.60	21.22	21.82
		1	49	22.00	20.49	20.78	21.44
		25	0	21.00	20.17	20.17	20.34
		25	13	21.00	20.13	20.34	20.52
		25	25	21.00	19.83	20.13	20.41
		50	0	21.00	20.12	20.21	20.33
	16QAM	1	0	21.00	20.58	20.32	20.41
		1	25	21.00	20.75	20.74	20.99
		1	49	21.00	20.10	20.07	20.64
		25	0	20.00	19.22	18.95	19.10
		25	13	20.00	19.12	19.11	19.28
		25	25	20.00	18.81	18.88	19.18
		50	0	20.00	19.13	18.95	19.06

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	22.00	21.27	20.72	21.50
		1	38	22.00	21.02	21.34	21.48
		1	74	22.00	20.53	20.98	21.27
		36	0	21.00	20.09	20.09	20.31
		36	18	21.00	19.93	20.24	20.33
		36	39	21.00	19.84	20.15	20.53
		75	0	21.00	19.97	20.17	20.24
	16QAM	1	0	21.00	20.72	20.21	20.53
		1	38	21.00	20.49	20.52	20.62
		1	74	21.00	20.00	20.12	20.52
		36	0	20.00	19.10	18.95	19.15
		36	18	20.00	18.95	19.09	19.16
		36	39	20.00	18.88	18.98	19.11
		75	0	20.00	18.98	19.03	19.08
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	22.00	21.34	21.06	21.12
		1	50	22.00	21.01	21.30	21.35
		1	99	22.00	20.77	21.32	21.17
		50	0	21.00	20.71	20.34	20.29
		50	25	21.00	19.87	20.23	20.43
		50	50	21.00	20.09	20.38	20.67
		100	0	21.00	20.22	20.42	20.44
	16QAM	1	0	21.00	20.76	20.47	20.46
		1	50	21.00	20.50	20.60	20.63
		1	99	21.00	20.36	20.61	20.41
		50	0	20.00	19.28	19.24	19.15
		50	25	20.00	18.92	19.11	19.27
		50	50	20.00	19.20	19.24	19.25
		100	0	20.00	19.32	19.30	19.30

Table 82: Conducted power measurement results of LTE Band IV(Main antenna)



After hotspot function work:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	23.00	21.05	21.15	21.23
		1	3	23.00	21.25	21.35	21.55
		1	5	23.00	21.19	21.24	21.48
		3	0	23.00	21.05	21.17	21.43
		3	2	23.00	21.04	21.26	21.53
		3	3	23.00	21.17	21.22	21.49
		6	0	22.00	21.02	20.74	21.43
	16QAM	1	0	22.00	20.66	20.42	20.75
		1	3	22.00	20.88	20.65	21.32
		1	5	22.00	20.80	20.62	21.19
		3	0	22.00	20.86	20.54	21.24
		3	2	22.00	21.01	21.02	21.37
		3	3	22.00	21.02	21.01	21.27
		6	0	21.00	19.86	20.16	20.45
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	23.00	21.08	21.03	21.27
		1	7	23.00	21.16	21.21	21.22
		1	14	23.00	21.25	21.15	21.30
		8	0	22.00	20.98	20.46	21.10
		8	4	22.00	21.24	20.72	21.10
		8	7	22.00	21.12	20.74	21.44
		15	0	22.00	21.08	20.64	21.01
	16QAM	1	0	22.00	20.60	20.23	20.81
		1	7	22.00	21.22	20.75	21.11
		1	14	22.00	21.03	20.58	21.20
		8	0	21.00	19.83	19.47	20.04
		8	4	21.00	20.11	19.77	20.04
		8	7	21.00	20.02	19.81	20.50
		15	0	21.00	19.99	19.66	19.92

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175H	20375CH
5MHz	QPSK	1	0	23.00	21.12	21.19	21.13
		1	13	23.00	21.95	21.57	21.87
		1	24	23.00	21.36	21.13	21.47
		12	0	22.00	21.58	21.16	21.60
		12	6	22.00	21.77	21.43	21.82
		12	13	22.00	21.69	21.25	21.45
		25	0	22.00	21.54	21.23	21.47
	16QAM	1	0	22.00	21.26	21.00	21.18
		1	13	22.00	21.87	21.68	21.91
		1	24	22.00	21.49	21.05	21.45
		12	0	21.00	20.61	20.22	20.67
		12	6	21.00	20.81	20.39	20.90
		12	13	21.00	20.62	20.23	20.56
		25	0	21.00	20.61	20.21	20.57
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000H	20175CH	20350CH
10MHz	QPSK	1	0	23.00	21.35	21.05	21.17
		1	25	23.00	22.02	21.54	21.80
		1	49	23.00	21.14	21.01	21.46
		25	0	22.00	21.40	21.05	21.24
		25	13	22.00	21.48	21.19	21.44
		25	25	22.00	21.17	20.95	21.32
		50	0	22.00	21.45	21.04	21.22
	16QAM	1	0	22.00	21.60	21.28	21.56
		1	25	22.00	21.92	21.76	21.94
		1	49	22.00	21.17	20.96	21.81
		25	0	21.00	20.50	20.20	20.38
		25	13	21.00	20.49	20.25	20.60
		25	25	21.00	20.21	20.03	20.49
		50	0	21.00	20.41	20.10	20.37

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	23.00	21.53	21.07	21.70
		1	38	23.00	21.38	21.16	21.76
		1	74	23.00	21.06	21.03	21.60
		36	0	22.00	21.37	21.31	21.53
		36	18	22.00	21.23	21.43	21.56
		36	39	22.00	21.11	21.29	21.50
		75	0	22.00	21.23	21.33	21.45
	16QAM	1	0	22.00	21.82	21.37	21.71
		1	38	22.00	21.75	21.56	21.81
		1	74	22.00	21.21	21.21	21.90
		36	0	21.00	20.37	20.11	20.32
		36	18	21.00	20.25	20.25	20.37
		36	39	21.00	20.16	20.15	20.33
		75	0	21.00	20.26	20.16	20.26
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	23.00	21.58	21.46	21.33
		1	50	23.00	21.33	21.54	21.62
		1	99	23.00	21.02	21.55	21.51
		50	0	22.00	21.45	21.51	21.44
		50	25	22.00	21.11	21.36	21.58
		50	50	22.00	21.17	21.48	21.60
		100	0	22.00	21.67	21.53	21.59
	16QAM	1	0	22.00	21.85	21.50	21.68
		1	50	22.00	21.61	21.47	21.95
		1	99	22.00	21.34	21.86	21.80
		50	0	21.00	20.51	20.61	20.53
		50	25	21.00	20.19	20.47	20.68
		50	50	21.00	20.38	20.61	20.92
		100	0	21.00	20.52	20.66	20.44

Table 83: Conducted power measurement results of LTE Band IV(Main antenna)



After hotspot function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	22.00	20.60	20.55	20.95
		1	3	22.00	21.06	20.85	21.51
		1	5	22.00	21.10	20.74	21.37
		3	0	22.00	20.87	20.70	21.39
		3	2	22.00	21.02	20.78	21.46
		3	3	22.00	21.00	20.77	21.41
		6	0	21.00	19.91	19.87	20.57
	16QAM	1	0	21.00	19.94	19.76	20.11
		1	3	21.00	20.12	19.76	20.82
		1	5	21.00	20.22	19.94	20.68
		3	0	21.00	19.99	19.82	20.49
		3	2	21.00	20.03	19.91	20.69
		3	3	21.00	20.02	19.93	20.54
		6	0	20.00	18.88	18.72	19.54
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	22.00	20.56	20.29	20.80
		1	7	22.00	21.26	20.77	21.10
		1	14	22.00	20.95	20.56	21.17
		8	0	21.00	19.90	19.49	20.02
		8	4	21.00	20.16	19.80	20.03
		8	7	21.00	20.07	19.82	20.51
		15	0	21.00	20.05	19.72	19.98
	16QAM	1	0	21.00	19.53	19.67	19.99
		1	7	21.00	20.28	20.19	20.60
		1	14	21.00	20.05	20.02	20.80
		8	0	20.00	18.86	18.63	19.15
		8	4	20.00	19.15	18.91	19.10
		8	7	20.00	19.30	18.95	19.67
		15	0	20.00	19.06	18.85	19.10

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175H	20375CH
5MHz	QPSK	1	0	22.00	21.11	20.80	21.14
		1	13	22.00	21.89	21.48	21.88
		1	24	22.00	21.27	20.83	21.46
		12	0	21.00	20.66	20.27	20.75
		12	6	21.00	20.87	20.44	20.89
		12	13	21.00	20.66	20.27	20.62
		25	0	21.00	20.65	20.27	20.64
	16QAM	1	0	21.00	20.15	20.26	20.54
		1	13	21.00	20.93	20.82	20.92
		1	24	21.00	20.62	20.19	20.78
		12	0	20.00	19.77	19.45	19.83
		12	6	20.00	19.97	19.72	19.89
		12	13	20.00	19.78	19.54	19.73
		25	0	20.00	19.69	19.49	19.73
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000H	20175CH	20350CH
10MHz	QPSK	1	0	22.00	21.37	21.03	21.17
		1	25	22.00	21.92	21.49	21.78
		1	49	22.00	20.92	20.65	21.44
		25	0	21.00	20.55	20.24	20.43
		25	13	21.00	20.54	20.28	20.65
		25	25	21.00	20.27	20.06	20.55
		50	0	21.00	20.52	20.15	20.44
	16QAM	1	0	21.00	20.61	20.71	20.81
		1	25	21.00	20.92	20.97	20.94
		1	49	21.00	20.43	20.38	20.85
		25	0	20.00	19.65	19.46	19.61
		25	13	20.00	19.61	19.59	19.82
		25	25	20.00	19.37	19.35	19.73
		50	0	20.00	19.61	19.40	19.56

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	22.00	21.59	21.09	21.43
		1	38	22.00	21.43	21.25	21.49
		1	74	22.00	20.90	20.86	21.38
		36	0	21.00	20.44	20.18	20.43
		36	18	21.00	20.32	20.33	20.48
		36	39	21.00	20.25	20.21	20.45
		75	0	21.00	20.37	20.27	20.41
	16QAM	1	0	21.00	20.98	20.86	20.95
		1	38	21.00	20.91	20.96	20.92
		1	74	21.00	20.67	20.72	20.88
		36	0	20.00	19.53	19.35	19.48
		36	18	20.00	19.44	19.47	19.52
		36	39	20.00	19.36	19.34	19.51
		75	0	20.00	19.44	19.41	19.45
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	22.00	21.71	21.43	21.20
		1	50	22.00	21.49	21.34	21.34
		1	99	22.00	21.18	21.33	21.34
		50	0	21.00	20.65	20.53	20.38
		50	25	21.00	20.35	20.39	20.54
		50	50	21.00	20.57	20.49	20.55
		100	0	21.00	20.70	20.57	20.56
	16QAM	1	0	21.00	20.98	20.88	20.73
		1	50	21.00	20.94	20.89	20.92
		1	99	21.00	20.85	20.92	20.81
		50	0	20.00	19.68	19.62	19.47
		50	25	20.00	19.37	19.45	19.60
		50	50	20.00	19.62	19.54	19.63
		100	0	20.00	19.71	19.63	19.62

Table 84: Conducted power measurement results of LTE Band IV(Main antenna)



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	23.20	22.13	22.10	22.16
		1	3	23.20	22.43	22.29	22.79
		1	5	23.20	22.34	22.18	22.72
		3	0	23.20	22.05	22.09	22.74
		3	2	23.20	22.23	22.17	22.80
		3	3	23.20	22.54	22.22	22.74
		6	0	22.20	21.55	21.28	21.94
	16QAM	1	0	22.20	21.11	21.04	21.08
		1	3	22.20	21.58	21.08	21.73
		1	5	22.20	21.52	21.39	21.62
		3	0	22.20	21.29	21.34	21.63
		3	2	22.20	21.45	21.45	21.70
		3	3	22.20	21.46	21.37	21.80
		6	0	21.20	20.38	20.43	20.94
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	23.20	21.79	21.66	22.24
		1	7	23.20	22.72	22.12	22.49
		1	14	23.20	22.45	22.06	22.56
		8	0	22.20	21.45	20.87	21.42
		8	4	22.20	21.70	21.15	21.41
		8	7	22.20	21.60	21.17	21.86
		15	0	22.20	21.57	21.06	21.33
	16QAM	1	0	22.20	21.14	20.73	21.29
		1	7	22.20	21.82	21.31	21.68
		1	14	22.20	21.62	21.14	21.84
		8	0	21.20	20.35	20.02	20.46
		8	4	21.20	20.56	20.26	20.48
		8	7	21.20	20.49	20.29	20.95
		15	0	21.20	20.51	20.22	20.40



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175CH	20375CH
5MHz	QPSK	1	0	23.20	22.40	22.10	22.45
		1	13	23.20	23.13	22.76	23.09
		1	24	23.20	22.61	22.11	22.65
		12	0	22.20	21.98	21.55	22.02
		12	6	22.20	22.18	21.84	22.14
		12	13	22.20	22.00	21.67	21.86
		25	0	22.20	21.97	21.66	21.90
	16QAM	1	0	22.20	21.64	21.59	21.94
		1	13	22.20	22.16	22.07	22.15
		1	24	22.20	21.75	21.63	22.20
		12	0	21.20	21.14	20.61	21.06
		12	6	21.20	21.16	20.91	21.11
		12	13	21.20	21.16	20.77	20.95
		25	0	21.20	21.11	20.72	20.96
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000CH	20175CH	20350CH
10MHz	QPSK	1	0	23.20	22.68	22.27	22.48
		1	25	23.20	23.06	22.76	23.14
		1	49	23.20	22.19	22.33	22.99
		25	0	22.20	21.79	21.68	21.91
		25	13	22.20	21.76	21.83	22.17
		25	25	22.20	21.47	21.61	21.78
		50	0	22.20	21.76	21.68	21.69
	16QAM	1	0	22.20	22.10	21.85	21.99
		1	25	22.20	22.12	22.16	22.18
		1	49	22.20	21.74	21.56	22.14
		25	0	21.20	21.03	20.60	20.76
		25	13	21.20	21.01	20.74	20.94
		25	25	21.20	20.72	20.53	20.84
		50	0	21.20	20.95	20.59	20.77

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	23.20	22.89	22.30	23.00
		1	38	23.20	22.70	22.50	23.02
		1	74	23.20	22.18	22.47	22.79
		36	0	22.20	21.70	21.74	21.81
		36	18	22.20	21.70	21.71	22.02
		36	39	22.20	21.46	21.61	21.96
		75	0	22.20	21.58	21.64	21.93
	16QAM	1	0	22.20	22.13	21.95	22.17
		1	38	22.20	22.16	22.12	22.18
		1	74	22.20	21.48	21.82	22.09
		36	0	21.20	20.91	20.52	20.73
		36	18	21.20	20.79	20.67	20.79
		36	39	21.20	20.70	20.55	20.86
		75	0	21.20	20.79	20.58	20.68
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	23.20	22.82	22.88	22.65
		1	50	23.20	22.56	22.85	22.96
		1	99	23.20	22.30	22.87	22.76
		50	0	22.20	22.14	21.97	21.78
		50	25	22.20	21.64	21.68	21.94
		50	50	22.20	21.63	21.81	22.10
		100	0	22.20	21.80	21.86	22.11
	16QAM	1	0	22.20	22.14	22.00	21.88
		1	50	22.20	22.09	22.06	22.13
		1	99	22.20	21.87	22.10	22.00
		50	0	21.20	21.03	20.75	20.69
		50	25	21.20	20.72	20.63	20.85
		50	50	21.20	20.93	20.76	20.97
		100	0	21.20	21.05	20.86	20.91

Table 85: Conducted power measurement results of LTE Band IV(Second antenna)

After Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	19.20	18.05	18.02	18.17
		1	3	19.20	18.37	18.26	18.90
		1	5	19.20	18.26	18.18	18.76
		3	0	19.20	18.05	18.07	18.78
		3	2	19.20	18.21	18.18	18.87
		3	3	19.20	18.20	18.16	18.80
		6	0	18.20	17.09	17.05	17.79
	16QAM	1	0	18.20	17.01	17.01	17.10
		1	3	18.20	17.15	17.23	17.81
		1	5	18.20	17.25	17.13	17.92
		3	0	18.20	17.03	17.09	17.87
		3	2	18.20	17.30	17.20	17.97
		3	3	18.20	17.32	17.03	17.95
		6	0	17.20	16.10	16.07	16.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	19.20	17.40	17.70	17.83
		1	7	19.20	18.20	18.13	18.23
		1	14	19.20	17.94	17.92	18.43
		8	0	18.20	16.92	16.74	17.08
		8	4	18.20	17.22	16.93	17.09
		8	7	18.20	17.14	16.93	17.59
		15	0	18.20	17.06	16.88	16.98
	16QAM	1	0	18.20	16.80	17.07	17.39
		1	7	18.20	17.62	17.53	17.51
		1	14	18.20	17.32	17.05	17.76
		8	0	17.20	16.03	15.85	16.31
		8	4	17.20	16.33	16.16	16.32
		8	7	17.20	16.25	16.19	16.82
		15	0	17.20	16.17	16.03	16.25

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175CH	20375CH
5MHz	QPSK	1	0	19.20	18.08	18.28	18.29
		1	13	19.20	19.02	18.91	19.14
		1	24	19.20	18.32	18.27	18.77
		12	0	18.20	17.59	17.78	18.05
		12	6	18.20	17.82	18.04	18.12
		12	13	18.20	17.61	17.82	17.97
		25	0	18.20	17.66	17.85	17.94
	16QAM	1	0	18.20	17.55	17.55	17.73
		1	13	18.20	18.13	18.06	18.18
		1	24	18.20	17.74	17.61	18.14
		12	0	17.20	16.94	16.78	17.03
		12	6	17.20	17.16	17.03	17.13
		12	13	17.20	16.96	16.83	16.99
		25	0	17.20	16.84	16.81	16.91
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000CH	20175CH	20350CH
10MHz	QPSK	1	0	19.20	18.59	18.60	18.54
		1	25	19.20	19.16	18.85	18.94
		1	49	19.20	18.42	18.15	18.77
		25	0	18.20	17.82	17.67	17.69
		25	13	18.20	17.81	17.80	17.91
		25	25	18.20	17.56	17.54	17.82
		50	0	18.20	17.81	17.66	17.69
	16QAM	1	0	18.20	17.97	18.00	18.03
		1	25	18.20	18.07	18.09	18.17
		1	49	18.20	17.76	17.73	18.14
		25	0	17.20	16.82	16.72	16.75
		25	13	17.20	16.81	16.85	16.96
		25	25	17.20	16.58	16.61	16.89
		50	0	17.20	16.75	16.69	16.71

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	19.20	18.85	18.67	18.66
		1	38	19.20	18.87	18.52	18.95
		1	74	19.20	18.36	18.19	18.82
		36	0	18.20	17.73	17.60	17.64
		36	18	18.20	17.63	17.69	17.69
		36	39	18.20	17.58	17.52	17.67
		75	0	18.20	17.66	17.61	17.60
	16QAM	1	0	18.20	18.13	18.08	18.12
		1	38	18.20	18.14	18.18	18.13
		1	74	18.20	17.81	17.85	18.19
		36	0	17.20	16.70	16.59	16.65
		36	18	17.20	16.63	16.70	16.70
		36	39	17.20	16.58	16.56	16.67
		75	0	17.20	16.62	16.62	16.60
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	19.20	18.88	18.75	18.51
		1	50	19.20	18.87	18.53	18.55
		1	99	19.20	18.63	18.58	18.52
		50	0	18.20	17.91	17.88	17.62
		50	25	18.20	17.61	17.68	17.66
		50	50	18.20	17.83	17.74	17.72
		100	0	18.20	17.73	17.85	17.78
	16QAM	1	0	18.20	18.19	18.18	17.99
		1	50	18.20	18.18	18.11	18.10
		1	99	18.20	18.05	18.16	18.05
		50	0	17.20	16.83	16.85	16.64
		50	25	17.20	16.53	16.67	16.77
		50	50	17.20	16.77	16.74	16.78
		100	0	17.20	16.89	16.87	16.80

Table 86: Conducted power measurement results of LTE Band IV(Second antenna)

After Wi-Fi on function work:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	19.70	18.51	18.09	18.53
		1	3	19.70	18.88	18.35	18.98
		1	5	19.70	18.76	18.25	18.85
		3	0	19.70	18.59	18.16	18.85
		3	2	19.70	18.76	18.27	18.95
		3	3	19.70	18.76	18.50	18.90
		6	0	18.70	17.60	17.67	18.13
	16QAM	1	0	18.70	17.56	17.74	17.93
		1	3	18.70	17.92	17.61	18.63
		1	5	18.70	17.87	17.92	18.51
		3	0	18.70	17.72	17.68	18.38
		3	2	18.70	17.88	17.80	18.49
		3	3	18.70	17.91	17.74	18.47
		6	0	17.70	16.71	16.69	17.43
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	19.70	18.12	18.09	18.41
		1	7	19.70	18.88	18.57	18.77
		1	14	19.70	18.58	18.38	18.72
		8	0	18.70	17.41	17.41	17.68
		8	4	18.70	17.69	17.68	17.68
		8	7	18.70	17.60	17.71	18.15
		15	0	18.70	17.56	17.63	17.59
	16QAM	1	0	18.70	17.46	17.43	17.52
		1	7	18.70	18.24	17.93	18.10
		1	14	18.70	17.95	17.75	18.09
		8	0	17.70	16.44	16.45	16.66
		8	4	17.70	16.68	16.47	16.64
		8	7	17.70	16.60	16.51	17.18
		15	0	17.70	16.54	16.37	16.62

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175CH	20375CH
5MHz	QPSK	1	0	19.70	18.53	18.52	18.94
		1	13	19.70	19.37	19.41	19.64
		1	24	19.70	18.95	18.77	19.33
		12	0	18.70	18.25	17.93	18.58
		12	6	18.70	18.46	18.20	18.63
		12	13	18.70	18.26	18.01	18.46
		25	0	18.70	18.23	18.02	18.46
	16QAM	1	0	18.70	17.83	17.94	18.41
		1	13	18.70	18.63	18.61	18.65
		1	24	18.70	18.02	17.99	18.56
		12	0	17.70	17.32	17.28	17.68
		12	6	17.70	17.54	17.56	17.63
		12	13	17.70	17.32	17.37	17.34
		25	0	17.70	17.23	17.31	17.24
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000CH	20175CH	20350CH
10MHz	QPSK	1	0	19.70	18.94	18.90	18.99
		1	25	19.70	19.58	19.43	19.60
		1	49	19.70	18.83	18.66	19.37
		25	0	18.70	18.32	17.88	18.28
		25	13	18.70	18.31	18.01	18.48
		25	25	18.70	18.05	17.79	18.38
		50	0	18.70	18.31	17.89	18.26
	16QAM	1	0	18.70	18.34	18.31	18.34
		1	25	18.70	18.62	18.64	18.68
		1	49	18.70	18.06	18.31	18.64
		25	0	17.70	17.17	17.26	17.34
		25	13	17.70	17.14	17.40	17.57
		25	25	17.70	16.89	17.16	17.48
		50	0	17.70	17.14	17.24	17.33

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	19.70	19.25	19.00	19.35
		1	38	19.70	19.17	19.17	19.35
		1	74	19.70	18.92	18.82	19.23
		36	0	18.70	18.30	18.11	18.28
		36	18	18.70	18.19	18.23	18.32
		36	39	18.70	18.12	17.82	18.28
		75	0	18.70	18.22	18.16	18.23
	16QAM	1	0	18.70	18.61	18.27	18.68
		1	38	18.70	18.53	18.46	18.63
		1	74	18.70	18.09	18.32	18.69
		36	0	17.70	17.06	17.20	17.28
		36	18	17.70	16.96	17.30	17.35
		36	39	17.70	16.89	17.16	17.32
		75	0	17.70	16.95	17.19	17.24
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	19.70	19.30	19.31	19.05
		1	50	19.70	19.12	19.16	19.16
		1	99	19.70	19.00	19.19	19.06
		50	0	18.70	18.50	18.41	18.24
		50	25	18.70	18.18	18.25	18.37
		50	50	18.70	18.38	18.07	18.36
		100	0	18.70	18.50	18.42	18.37
	16QAM	1	0	18.70	18.58	18.68	18.60
		1	50	18.70	18.35	18.63	18.67
		1	99	18.70	18.42	18.63	18.64
		50	0	17.70	17.43	17.42	17.24
		50	25	17.70	17.11	17.24	17.38
		50	50	17.70	17.37	17.33	17.42
		100	0	17.70	17.50	17.43	17.43

Table 87: Conducted power measurement results of LTE Band IV(Second antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	18.70	17.10	17.62	17.59
		1	3	18.70	17.44	17.62	18.29
		1	5	18.70	17.37	17.50	18.13
		3	0	18.70	17.11	17.54	18.10
		3	2	18.70	17.28	17.56	18.18
		3	3	18.70	17.54	17.51	18.16
		6	0	17.70	16.42	16.50	17.14
	16QAM	1	0	17.70	16.15	16.41	16.62
		1	3	17.70	16.52	16.53	17.40
		1	5	17.70	16.50	16.59	17.24
		3	0	17.70	16.36	16.53	17.23
		3	2	17.70	16.56	16.70	17.39
		3	3	17.70	16.58	16.57	17.36
		6	0	16.70	15.31	15.37	16.17
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	18.70	16.81	17.13	17.34
		1	7	18.70	17.64	17.52	17.72
		1	14	18.70	17.41	17.61	18.19
		8	0	17.70	16.20	16.52	16.84
		8	4	17.70	16.53	16.69	16.87
		8	7	17.70	16.48	16.67	17.36
		15	0	17.70	16.41	16.64	16.76
	16QAM	1	0	17.70	16.07	16.57	16.77
		1	7	17.70	16.90	16.96	17.19
		1	14	17.70	16.78	16.82	17.42
		8	0	16.70	15.23	15.21	15.65
		8	4	16.70	15.60	15.41	15.70
		8	7	16.70	15.55	15.44	16.20
		15	0	16.70	15.46	15.42	15.60

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175CH	20375CH
5MHz	QPSK	1	0	18.70	17.57	17.90	17.97
		1	13	18.70	18.47	18.54	18.65
		1	24	18.70	17.75	17.89	18.49
		12	0	17.70	17.32	17.28	17.46
		12	6	17.70	17.57	17.50	17.67
		12	13	17.70	17.36	17.27	17.43
		25	0	17.70	17.34	17.33	17.39
	16QAM	1	0	17.70	16.96	17.07	17.13
		1	13	17.70	17.59	17.51	17.63
		1	24	17.70	17.19	17.10	17.66
		12	0	16.70	16.17	16.08	16.30
		12	6	16.70	16.43	16.33	16.61
		12	13	16.70	16.22	16.09	16.24
		25	0	16.70	16.10	16.06	16.15
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000CH	20175CH	20350CH
10MHz	QPSK	1	0	18.70	17.91	18.06	17.87
		1	25	18.70	18.65	18.52	18.66
		1	49	18.70	17.88	17.80	18.40
		25	0	17.70	17.20	17.21	17.12
		25	13	17.70	17.21	17.31	17.34
		25	25	17.70	17.02	17.04	17.29
		50	0	17.70	17.24	17.17	17.14
	16QAM	1	0	17.70	17.28	17.51	17.25
		1	25	17.70	17.66	17.68	17.68
		1	49	17.70	17.22	17.32	17.65
		25	0	16.70	16.06	16.02	15.94
		25	13	16.70	16.07	16.12	16.17
		25	25	16.70	15.87	15.86	16.12
		50	0	16.70	16.05	15.95	15.94

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	18.70	18.05	18.20	18.25
		1	38	18.70	18.27	18.21	18.28
		1	74	18.70	17.84	17.79	18.22
		36	0	17.70	17.14	17.09	17.04
		36	18	17.70	17.11	17.17	17.07
		36	39	17.70	17.07	16.99	17.05
		75	0	17.70	17.11	17.10	16.98
	16QAM	1	0	17.70	17.42	17.54	17.64
		1	38	17.70	17.51	17.60	17.62
		1	74	17.70	17.11	17.26	17.62
		36	0	16.70	15.96	15.93	15.89
		36	18	16.70	15.93	16.00	15.93
		36	39	16.70	15.90	15.83	15.94
		75	0	16.70	15.90	15.90	15.84
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	18.70	18.27	18.19	18.02
		1	50	18.70	18.23	18.16	18.13
		1	99	18.70	18.11	18.05	18.12
		50	0	17.70	17.31	17.35	17.05
		50	25	17.70	17.05	17.14	17.15
		50	50	17.70	17.30	17.18	17.18
		100	0	17.70	17.38	17.33	17.20
	16QAM	1	0	17.70	17.66	17.58	17.50
		1	50	17.70	17.61	17.56	17.58
		1	99	17.70	17.57	17.52	17.56
		50	0	16.70	16.18	16.22	15.92
		50	25	16.70	15.91	16.00	16.01
		50	50	16.70	16.17	16.05	16.05
		100	0	16.70	16.25	16.21	16.07

Table 88: Conducted power measurement results of LTE Band IV(Second antenna)



After hotspot function work:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	20.20	19.03	19.11	19.08
		1	3	20.20	19.20	19.05	19.74
		1	5	20.20	19.58	19.00	19.50
		3	0	20.20	19.24	18.86	19.53
		3	2	20.20	19.40	18.95	19.62
		3	3	20.20	19.40	18.90	19.84
		6	0	20.20	18.25	18.30	18.91
	16QAM	1	0	19.20	17.85	18.05	18.09
		1	3	19.20	18.33	18.46	18.70
		1	5	19.20	18.53	18.37	18.77
		3	0	19.20	18.25	18.36	18.80
		3	2	19.20	18.43	18.37	18.82
		3	3	19.20	18.44	18.35	18.88
		6	0	18.20	17.20	17.15	17.66
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	20.20	18.86	18.58	18.83
		1	7	20.20	19.61	19.01	19.14
		1	14	20.20	19.28	19.08	19.64
		8	0	20.20	18.33	18.36	18.46
		8	4	20.20	18.34	18.33	18.23
		8	7	20.20	18.27	18.25	18.74
		15	0	20.20	18.23	18.24	18.27
	16QAM	1	0	19.20	18.04	18.08	18.12
		1	7	19.20	18.57	18.31	18.62
		1	14	19.20	18.26	18.35	18.72
		8	0	18.20	17.07	17.05	17.25
		8	4	18.20	17.24	17.00	17.21
		8	7	18.20	17.17	17.03	17.69
		15	0	18.20	17.13	17.06	17.13

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175CH	20375CH
5MHz	QPSK	1	0	20.20	19.20	19.13	19.53
		1	13	20.20	20.01	20.01	20.18
		1	24	20.20	19.55	19.31	19.92
		12	0	20.20	19.04	18.57	18.84
		12	6	20.20	19.02	18.86	19.14
		12	13	20.20	18.82	18.67	18.79
		25	0	20.20	18.82	18.70	18.82
	16QAM	1	0	19.20	18.59	18.28	18.45
		1	13	19.20	19.15	18.95	19.11
		1	24	19.20	18.76	18.30	18.90
		12	0	18.20	17.84	17.66	17.93
		12	6	18.20	18.08	17.91	18.18
		12	13	18.20	17.88	17.71	17.85
		25	0	18.20	17.77	17.63	17.76
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000CH	20175CH	20350CH
10MHz	QPSK	1	0	20.20	19.37	19.37	19.60
		1	25	20.20	20.06	20.05	20.20
		1	49	20.20	19.52	19.26	19.98
		25	0	20.20	18.94	18.52	18.56
		25	13	20.20	18.67	18.68	18.76
		25	25	20.20	18.41	18.44	18.69
		50	0	20.20	18.70	18.57	18.59
	16QAM	1	0	19.20	18.97	18.88	18.79
		1	25	19.20	19.11	19.13	19.12
		1	49	19.20	18.70	18.40	18.93
		25	0	18.20	17.77	17.59	17.61
		25	13	18.20	17.75	17.73	17.82
		25	25	18.20	17.50	17.46	17.73
		50	0	18.20	17.67	17.50	17.54

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	20.20	19.67	19.69	19.88
		1	38	20.20	20.07	19.75	19.86
		1	74	20.20	19.29	19.33	19.75
		36	0	20.20	18.86	18.42	18.50
		36	18	20.20	18.80	18.54	18.53
		36	39	20.20	18.72	18.41	18.51
		75	0	20.20	18.82	18.50	18.48
	16QAM	1	0	19.20	19.18	19.06	19.16
		1	38	19.20	19.09	18.96	19.16
		1	74	19.20	18.60	18.58	19.16
		36	0	18.20	17.63	17.51	17.54
		36	18	18.20	17.54	17.58	17.58
		36	39	18.20	17.48	17.42	17.56
		75	0	18.20	17.56	17.50	17.51
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	20.20	19.95	19.79	19.67
		1	50	20.20	19.66	19.75	19.97
		1	99	20.20	19.50	19.67	19.58
		50	0	20.20	18.97	18.67	18.52
		50	25	20.20	18.69	18.54	18.63
		50	50	20.20	18.93	18.64	18.63
		100	0	20.20	19.06	18.76	18.69
	16QAM	1	0	19.20	19.18	19.08	19.05
		1	50	19.20	19.10	18.86	19.07
		1	99	19.20	18.97	18.84	19.17
		50	0	18.20	17.82	17.81	17.75
		50	25	18.20	17.51	17.60	17.92
		50	50	18.20	17.75	17.64	17.75
		100	0	18.20	17.86	17.78	17.69

Table 89: Conducted power measurement results of LTE Band IV(Second antenna)

After hotspot function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	19.20	18.05	18.02	18.17
		1	3	19.20	18.37	18.26	18.90
		1	5	19.20	18.26	18.18	18.76
		3	0	19.20	18.05	18.07	18.78
		3	2	19.20	18.21	18.18	18.87
		3	3	19.20	18.20	18.16	18.80
		6	0	18.20	17.79	17.05	17.79
	16QAM	1	0	18.20	17.06	17.01	17.10
		1	3	18.20	17.15	17.23	17.81
		1	5	18.20	17.25	17.13	17.92
		3	0	18.20	17.03	17.09	17.87
		3	2	18.20	17.30	17.20	17.97
		3	3	18.20	17.32	17.03	17.95
		6	0	17.20	16.10	16.07	16.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19965CH	20175	20385CH
3MHz	QPSK	1	0	19.20	17.40	17.70	17.83
		1	7	19.20	18.20	18.13	18.23
		1	14	19.20	18.04	18.06	18.43
		8	0	18.20	17.02	17.04	17.08
		8	4	18.20	17.22	17.13	17.09
		8	7	18.20	17.14	17.03	17.59
		15	0	18.20	17.06	17.02	17.08
	16QAM	1	0	18.20	17.02	17.07	17.39
		1	7	18.20	17.62	17.53	17.51
		1	14	18.20	17.32	17.05	17.76
		8	0	17.20	16.03	16.05	16.31
		8	4	17.20	16.33	16.16	16.32
		8	7	17.20	16.25	16.19	16.82
		15	0	17.20	16.17	16.03	16.25

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					19975CH	20175CH	20375CH
5MHz	QPSK	1	0	19.20	18.08	18.28	18.29
		1	13	19.20	19.02	18.91	19.14
		1	24	19.20	18.32	18.27	18.77
		12	0	18.20	17.59	17.78	18.05
		12	6	18.20	17.82	18.04	18.12
		12	13	18.20	17.61	17.82	17.97
		25	0	18.20	17.66	17.85	17.94
	16QAM	1	0	18.20	17.55	17.55	17.73
		1	13	18.20	18.13	18.16	18.13
		1	24	18.20	17.74	17.61	18.14
		12	0	17.20	16.94	16.78	17.03
		12	6	17.20	17.16	17.03	17.13
		12	13	17.20	16.96	16.83	16.99
		25	0	17.20	16.84	16.81	16.91
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20000CH	20175CH	20350CH
10MHz	QPSK	1	0	19.20	18.59	18.60	18.54
		1	25	19.20	19.16	18.85	18.94
		1	49	19.20	18.42	18.15	18.77
		25	0	18.20	17.82	17.67	17.69
		25	13	18.20	17.81	17.80	17.91
		25	25	18.20	17.56	17.54	17.82
		50	0	18.20	17.81	17.66	17.69
	16QAM	1	0	18.20	17.97	18.00	18.03
		1	25	18.20	18.17	18.19	18.17
		1	49	18.20	17.76	17.73	18.14
		25	0	17.20	16.82	16.72	16.75
		25	13	17.20	16.81	16.85	16.96
		25	25	17.20	16.58	16.61	16.89
		50	0	17.20	16.75	16.69	16.71

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20025CH	20175CH	20325CH
15MHz	QPSK	1	0	19.20	18.85	18.67	18.66
		1	38	19.20	18.87	18.52	18.95
		1	74	19.20	18.36	18.19	18.82
		36	0	18.20	17.73	17.60	17.64
		36	18	18.20	17.63	17.69	17.69
		36	39	18.20	17.58	17.52	17.67
		75	0	18.20	17.66	17.61	17.60
	16QAM	1	0	18.20	18.13	18.08	18.16
		1	38	18.20	18.14	18.11	18.18
		1	74	18.20	17.81	17.85	18.19
		36	0	17.20	16.70	16.59	16.65
		36	18	17.20	16.63	16.70	16.70
		36	39	17.20	16.58	16.56	16.67
		75	0	17.20	16.62	16.62	16.60
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20050CH	20175CH	20300CH
20MHz	QPSK	1	0	19.20	18.84	18.75	18.71
		1	50	19.20	18.87	18.53	18.55
		1	99	19.20	18.63	18.58	18.71
		50	0	18.20	17.91	17.88	17.62
		50	25	18.20	17.61	17.68	17.76
		50	50	18.20	17.83	17.74	17.79
		100	0	18.20	17.93	17.85	17.78
	16QAM	1	0	18.20	18.19	18.18	17.99
		1	50	18.20	18.18	18.11	18.10
		1	99	18.20	18.05	18.16	18.05
		50	0	17.20	16.83	16.85	16.64
		50	25	17.20	16.53	16.67	16.77
		50	50	17.20	16.77	16.74	16.78
		100	0	17.20	16.89	16.87	16.80

Table 90: Conducted power measurement results of LTE Band IV(Second antenna)

**7.2.9 Conducted power measurements of LTE Band VII**

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	23.50	21.56	22.04	21.90
		1	13	23.50	22.18	22.54	22.42
		1	24	23.50	21.61	21.86	21.76
		12	0	23.00	21.10	21.64	21.59
		12	6	23.00	21.30	21.75	21.71
		12	13	23.00	21.13	21.58	21.45
		25	0	23.00	21.05	21.62	21.50
	16QAM	1	0	22.50	21.03	21.56	21.43
		1	13	22.50	21.66	22.09	21.93
		1	24	22.50	21.18	21.48	21.37
		12	0	22.00	21.32	21.66	21.71
		12	6	22.00	21.54	21.78	21.85
		12	13	22.00	21.39	21.65	21.59
		25	0	22.00	21.29	21.65	21.59
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	23.50	21.59	21.92	22.11
		1	25	23.50	22.19	22.27	22.42
		1	49	23.50	21.91	21.60	21.97
		25	0	23.00	21.06	21.32	21.64
		25	13	23.00	21.32	21.43	21.82
		25	25	23.00	21.28	21.19	21.59
		50	0	23.00	21.16	21.30	21.66
	16QAM	1	0	22.50	21.25	21.78	21.99
		1	25	22.50	22.04	22.19	22.25
		1	49	22.50	21.69	21.48	21.57
		25	0	22.00	21.31	21.57	21.60
		25	13	22.00	21.57	21.70	21.77
		25	25	22.00	21.53	21.46	21.55
		50	0	22.00	21.36	21.51	21.56

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	23.50	21.59	22.24	22.35
		1	38	23.50	21.97	22.10	22.28
		1	74	23.50	21.70	21.73	21.69
		36	0	23.00	21.06	21.35	21.65
		36	18	23.00	21.10	21.34	21.58
		36	39	23.00	21.14	21.19	21.27
		75	0	23.00	21.39	21.38	21.60
	16QAM	1	0	22.50	21.28	21.85	21.94
		1	38	22.50	21.79	21.81	21.92
		1	74	22.50	21.54	21.40	21.31
		36	0	22.00	21.13	21.29	21.60
		36	18	22.00	21.38	21.28	21.53
		36	39	22.00	21.43	21.15	21.23
		75	0	22.00	21.29	21.32	21.54
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	23.50	21.55	21.82	21.82
		1	50	23.50	21.91	21.75	22.08
		1	99	23.50	21.98	21.64	21.50
		50	0	23.00	21.04	21.20	21.37
		50	25	23.00	21.06	21.08	21.30
		50	50	23.00	21.34	21.04	21.22
		100	0	23.00	21.16	21.15	21.44
	16QAM	1	0	22.50	20.86	21.28	21.53
		1	50	22.50	21.63	21.38	21.86
		1	99	22.50	21.54	21.31	21.23
		50	0	22.00	20.90	21.18	21.33
		50	25	22.00	21.01	20.96	21.25
		50	50	22.00	21.28	20.93	21.18
		100	0	22.00	21.11	21.14	21.41

Table 91: Conducted power measurement results of LTE Band VII(Main antenna)

After Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	23.00	21.49	22.22	22.32
		1	13	23.00	22.35	22.79	22.89
		1	24	23.00	21.81	22.10	22.35
		12	0	22.50	21.05	21.64	21.85
		12	6	22.50	21.26	21.77	22.00
		12	13	22.50	21.10	21.61	21.76
		25	0	22.50	21.01	21.64	21.78
	16QAM	1	0	22.50	20.93	21.35	21.48
		1	13	22.50	21.48	21.90	22.09
		1	24	22.50	21.20	21.35	21.45
		12	0	22.00	20.45	20.90	20.93
		12	6	22.00	20.71	20.95	21.22
		12	13	22.00	20.61	20.95	20.92
		25	0	22.00	20.49	20.92	20.89
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	23.00	21.75	22.43	22.70
		1	25	23.00	22.44	22.91	22.96
		1	49	23.00	22.35	22.28	22.37
		25	0	22.50	21.09	21.69	21.68
		25	13	22.50	21.40	21.83	21.88
		25	25	22.50	21.42	21.63	21.70
		50	0	22.50	21.23	21.69	21.73
	16QAM	1	0	22.50	21.19	21.83	22.13
		1	25	22.50	22.03	22.23	22.45
		1	49	22.50	21.87	21.72	21.91
		25	0	22.00	20.23	20.81	20.87
		25	13	22.00	20.55	20.99	21.02
		25	25	22.00	20.75	20.81	20.89
		50	0	22.00	20.69	20.82	20.88

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	23.00	21.74	22.24	22.49
		1	38	23.00	22.45	22.23	22.38
		1	74	23.00	22.48	21.97	21.92
		36	0	22.50	21.08	21.21	21.61
		36	18	22.50	21.44	21.24	21.50
		36	39	22.50	21.63	21.18	21.23
		75	0	22.50	21.41	21.30	21.57
	16QAM	1	0	22.50	21.30	21.86	22.23
		1	38	22.50	22.04	21.87	21.94
		1	74	22.50	22.00	21.61	21.52
		36	0	22.00	20.33	20.45	20.85
		36	18	22.00	20.70	20.50	20.77
		36	39	22.00	20.90	20.48	20.60
		75	0	22.00	20.67	20.59	20.92
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	23.00	21.25	21.91	22.43
		1	50	23.00	22.18	21.81	22.46
		1	99	23.00	22.30	22.00	21.96
		50	0	22.50	20.84	21.01	21.70
		50	25	22.50	21.13	20.82	21.51
		50	50	22.50	21.53	20.91	21.34
		100	0	22.50	21.19	21.29	21.68
	16QAM	1	0	22.50	20.97	21.65	21.91
		1	50	22.50	21.90	21.56	21.98
		1	99	22.50	22.02	21.77	21.46
		50	0	22.00	20.03	20.19	20.69
		50	25	22.00	20.34	20.05	20.51
		50	50	22.00	20.70	20.15	20.45
		100	0	22.00	20.41	20.26	20.73

Table 92: Conducted power measurement results of LTE Band VII(Main antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	22.50	21.21	21.46	21.67
		1	13	22.50	21.83	21.98	22.20
		1	24	22.50	21.27	21.29	21.60
		12	0	22.00	20.80	21.04	21.36
		12	6	22.00	21.01	21.16	21.50
		12	13	22.00	20.85	21.02	21.25
		25	0	22.00	20.78	21.06	21.29
	16QAM	1	0	21.50	20.50	21.02	21.05
		1	13	21.50	21.11	21.42	21.48
		1	24	21.50	20.67	20.97	21.04
		12	0	21.00	19.77	20.15	20.43
		12	6	21.00	20.01	20.28	20.58
		12	13	21.00	19.89	20.16	20.32
		25	0	21.00	19.78	20.18	20.36
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	22.50	21.33	21.76	21.91
		1	25	22.50	22.09	22.10	22.24
		1	49	22.50	21.71	21.43	21.52
		25	0	22.00	20.89	21.14	21.16
		25	13	22.00	21.15	21.27	21.28
		25	25	22.00	21.12	21.04	21.09
		50	0	22.00	21.00	21.14	21.14
	16QAM	1	0	21.50	20.85	21.26	21.48
		1	25	21.50	21.49	21.48	21.43
		1	49	21.50	21.27	21.01	21.14
		25	0	21.00	19.84	20.10	20.29
		25	13	21.00	20.09	20.22	20.50
		25	25	21.00	20.06	20.00	20.28
		50	0	21.00	19.92	20.08	20.29

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	22.50	21.24	21.69	21.87
		1	38	22.50	21.73	21.65	21.72
		1	74	22.50	21.46	21.17	21.16
		36	0	22.00	20.67	20.82	21.10
		36	18	22.00	20.91	20.82	21.04
		36	39	22.00	20.94	20.70	20.83
		75	0	22.00	20.86	20.88	21.15
	16QAM	1	0	21.50	20.80	21.28	21.29
		1	38	21.50	21.32	21.33	21.35
		1	74	21.50	20.94	20.82	20.96
		36	0	21.00	19.66	19.79	20.07
		36	18	21.00	19.88	19.80	20.01
		36	39	21.00	19.91	19.66	19.95
		75	0	21.00	19.80	19.84	20.24
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	22.50	20.82	21.14	21.29
		1	50	22.50	21.36	21.25	21.62
		1	99	22.50	21.25	21.14	20.99
		50	0	22.00	20.34	20.58	20.83
		50	25	22.00	20.45	20.38	20.76
		50	50	22.00	20.71	20.34	20.71
		100	0	22.00	20.53	20.53	20.91
	16QAM	1	0	21.50	20.41	20.87	20.86
		1	50	21.50	21.02	20.90	21.31
		1	99	21.50	21.02	20.74	20.77
		50	0	21.00	19.41	19.70	19.80
		50	25	21.00	19.51	19.50	19.75
		50	50	21.00	19.76	19.47	19.69
		100	0	21.00	19.60	19.65	19.88

Table 93: Conducted power measurement results of LTE Band VII(Main antenna)

After hotspot function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	21.50	19.87	20.26	20.38
		1	13	21.50	20.52	20.82	20.93
		1	24	21.50	19.96	20.11	20.31
		12	0	21.00	19.47	19.82	19.84
		12	6	21.00	19.69	19.94	19.97
		12	13	21.00	19.52	19.79	19.70
		25	0	21.00	19.46	19.84	19.76
	16QAM	1	0	20.50	19.16	19.54	19.58
		1	13	20.50	19.78	20.12	20.13
		1	24	20.50	19.29	19.45	19.68
		12	0	20.00	18.47	18.86	18.96
		12	6	20.00	18.71	19.01	19.10
		12	13	20.00	18.59	18.88	18.85
		25	0	20.00	18.49	18.93	18.90
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	21.50	19.81	20.23	20.46
		1	25	21.50	20.59	20.72	20.96
		1	49	21.50	20.17	19.93	20.23
		25	0	21.00	19.34	19.61	19.62
		25	13	21.00	19.57	19.74	19.80
		25	25	21.00	19.52	19.49	19.58
		50	0	21.00	19.42	19.61	19.66
	16QAM	1	0	20.50	19.46	19.80	20.14
		1	25	20.50	20.26	20.31	20.48
		1	49	20.50	19.87	19.51	19.73
		25	0	20.00	18.52	18.79	18.78
		25	13	20.00	18.78	18.93	18.99
		25	25	20.00	18.74	18.73	18.80
		50	0	20.00	18.61	18.82	18.83

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	21.50	19.78	20.23	20.32
		1	38	21.50	20.26	20.24	20.30
		1	74	21.50	19.94	19.69	19.86
		36	0	21.00	19.11	19.32	19.54
		36	18	21.00	19.34	19.31	19.50
		36	39	21.00	19.35	19.15	19.27
		75	0	21.00	19.29	19.35	19.60
	16QAM	1	0	20.50	19.51	19.90	19.98
		1	38	20.50	19.97	19.90	19.98
		1	74	20.50	19.70	19.45	19.52
		36	0	20.00	18.31	18.52	18.72
		36	18	20.00	18.54	18.55	18.67
		36	39	20.00	18.56	18.42	18.49
		75	0	20.00	18.47	18.59	18.78
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	21.50	19.68	19.85	19.77
		1	50	21.50	19.82	19.79	20.09
		1	99	21.50	19.91	19.66	19.57
		50	0	21.00	19.01	19.22	19.26
		50	25	21.00	19.08	19.09	19.20
		50	50	21.00	19.26	19.04	19.14
		100	0	21.00	19.10	19.14	19.34
	16QAM	1	0	20.50	19.02	19.58	19.51
		1	50	20.50	19.49	19.55	19.87
		1	99	20.50	19.63	19.42	19.26
		50	0	20.00	18.12	18.42	18.46
		50	25	20.00	18.23	18.24	18.40
		50	50	20.00	18.49	18.22	18.38
		100	0	20.00	18.34	18.44	18.57

Table 94: Conducted power measurement results of LTE Band VII(Main antenna)



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	23.50	21.55	22.01	22.03
		1	13	23.50	21.98	22.55	22.55
		1	24	23.50	21.58	21.80	21.92
		12	0	23.00	21.11	21.56	21.74
		12	6	23.00	21.29	21.89	21.86
		12	13	23.00	21.32	21.71	21.58
		25	0	23.00	21.23	21.76	21.64
	16QAM	1	0	22.50	21.02	21.42	21.42
		1	13	22.50	21.73	21.99	21.95
		1	24	22.50	21.15	21.32	21.39
		12	0	22.00	21.21	21.62	21.63
		12	6	22.00	21.43	21.74	21.77
		12	13	22.00	21.28	21.60	21.52
		25	0	22.00	21.17	21.57	21.52
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	23.50	21.53	22.26	22.31
		1	25	23.50	22.31	22.67	22.65
		1	49	23.50	21.87	21.95	22.00
		25	0	23.00	21.11	21.70	21.69
		25	13	23.00	21.34	21.82	21.80
		25	25	23.00	21.62	21.55	21.58
		50	0	23.00	21.50	21.67	21.65
	16QAM	1	0	22.50	21.12	21.61	21.85
		1	25	22.50	21.88	22.06	22.14
		1	49	22.50	21.52	21.32	21.43
		25	0	22.00	21.20	21.49	21.53
		25	13	22.00	21.44	21.61	21.64
		25	25	22.00	21.40	21.37	21.43
		50	0	22.00	21.24	21.44	21.44

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	23.50	21.68	22.22	22.34
		1	38	23.50	22.18	22.21	22.24
		1	74	23.50	21.87	21.69	21.64
		36	0	23.00	21.11	21.32	21.56
		36	18	23.00	21.33	21.31	21.51
		36	39	23.00	21.36	21.15	21.27
		75	0	23.00	21.28	21.35	21.60
	16QAM	1	0	22.50	21.15	21.70	21.80
		1	38	22.50	21.65	21.70	21.75
		1	74	22.50	21.19	21.24	21.21
		36	0	22.00	20.97	21.18	21.42
		36	18	22.00	21.20	21.17	21.37
		36	39	22.00	21.22	21.03	21.15
		75	0	22.00	21.10	21.16	21.42
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	23.50	21.55	21.85	21.71
		1	50	23.50	21.85	21.78	22.08
		1	99	23.50	21.93	21.60	21.53
		50	0	23.00	21.02	21.23	21.23
		50	25	23.00	21.13	21.00	21.18
		50	50	23.00	21.18	21.15	21.13
		100	0	23.00	21.08	21.10	21.32
	16QAM	1	0	22.50	20.61	21.25	21.16
		1	50	22.50	21.20	21.39	21.68
		1	99	22.50	21.21	21.09	21.09
		50	0	22.00	20.62	20.92	21.14
		50	25	22.00	20.72	20.85	21.08
		50	50	22.00	20.98	20.80	21.04
		100	0	22.00	20.78	21.00	21.23

Table 95: Conducted power measurement results of LTE Band VII(Second antenna)

After Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	18.00	16.32	16.85	16.80
		1	13	18.00	17.03	17.24	17.20
		1	24	18.00	16.45	16.69	16.72
		12	0	17.50	15.96	16.44	16.46
		12	6	17.50	16.20	16.58	16.59
		12	13	17.50	16.03	16.42	16.31
		25	0	17.50	15.97	16.48	16.39
	16QAM	1	0	17.00	15.73	16.19	16.16
		1	13	17.00	16.44	16.80	16.76
		1	24	17.00	15.90	16.05	16.11
		12	0	16.50	14.90	15.39	15.42
		12	6	16.50	15.17	15.54	15.56
		12	13	16.50	15.02	15.39	15.30
		25	0	16.50	14.86	15.41	15.35
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	18.00	16.37	16.91	17.04
		1	25	18.00	17.20	17.49	17.45
		1	49	18.00	16.70	16.66	16.75
		25	0	17.50	15.94	16.33	16.27
		25	13	17.50	16.18	16.48	16.46
		25	25	17.50	16.10	16.21	16.24
		50	0	17.50	16.01	16.32	16.31
	16QAM	1	0	17.00	15.85	16.53	16.66
		1	25	17.00	16.67	16.70	16.75
		1	49	17.00	16.20	16.27	16.27
		25	0	16.50	14.94	15.36	15.31
		25	13	16.50	15.17	15.51	15.50
		25	25	16.50	15.10	15.25	15.30
		50	0	16.50	14.98	15.33	15.34

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	18.00	16.29	16.88	16.93
		1	38	18.00	16.81	16.97	16.96
		1	74	18.00	16.42	16.33	16.33
		36	0	17.50	15.68	16.00	16.18
		36	18	17.50	15.89	16.01	16.14
		36	39	17.50	16.09	15.85	15.93
		75	0	17.50	16.06	16.05	16.25
	16QAM	1	0	17.00	15.94	16.44	16.47
		1	38	17.00	16.44	16.56	16.48
		1	74	17.00	16.09	15.93	15.89
		36	0	16.50	14.67	14.97	15.17
		36	18	16.50	14.88	14.98	15.14
		36	39	16.50	14.85	14.82	14.93
		75	0	16.50	14.80	15.01	15.22
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	18.00	16.38	16.51	16.38
		1	50	18.00	16.35	16.54	16.65
		1	99	18.00	16.46	16.32	16.23
		50	0	17.50	15.65	15.89	15.88
		50	25	17.50	15.60	15.68	15.84
		50	50	17.50	15.75	15.62	15.82
		100	0	17.50	15.61	15.83	15.98
	16QAM	1	0	17.00	15.60	16.17	16.08
		1	50	17.00	16.05	16.20	16.38
		1	99	17.00	16.17	16.01	15.85
		50	0	16.50	14.65	14.87	14.84
		50	25	16.50	14.68	14.65	14.80
		50	50	16.50	14.75	14.61	14.79
		100	0	16.50	14.63	14.84	14.96

Table 96: Conducted power measurement results of LTE Band VII(Second antenna)

After Wi-Fi on function work:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	18.50	16.73	17.31	17.23
		1	13	18.50	17.46	17.95	17.77
		1	24	18.50	16.87	17.15	17.15
		12	0	18.00	16.38	16.93	16.93
		12	6	18.00	16.62	17.08	17.04
		12	13	18.00	16.46	16.92	16.77
		25	0	18.00	16.40	16.97	16.84
	16QAM	1	0	17.50	15.90	16.58	16.60
		1	13	17.50	16.67	17.23	17.17
		1	24	17.50	16.09	16.45	16.82
		12	0	17.00	15.28	15.83	16.09
		12	6	17.00	15.54	15.99	16.22
		12	13	17.00	15.41	15.84	15.74
		25	0	17.00	15.30	15.91	16.05
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	18.50	16.74	17.33	17.53
		1	25	18.50	17.60	17.93	17.87
		1	49	18.50	17.08	17.08	17.40
		25	0	18.00	16.34	16.76	16.91
		25	13	18.00	16.59	16.93	17.12
		25	25	18.00	16.50	16.65	16.92
		50	0	18.00	16.41	16.76	16.98
	16QAM	1	0	17.50	16.37	16.97	17.09
		1	25	17.50	17.22	17.36	17.38
		1	49	17.50	16.72	16.71	16.70
		25	0	17.00	15.32	15.76	15.72
		25	13	17.00	15.58	15.93	15.91
		25	25	17.00	15.50	15.65	15.71
		50	0	17.00	15.37	15.73	15.72

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	18.50	16.75	17.32	17.31
		1	38	18.50	17.25	17.44	17.61
		1	74	18.50	16.84	16.79	17.03
		36	0	18.00	16.12	16.45	16.81
		36	18	18.00	16.32	16.47	16.78
		36	39	18.00	16.27	16.30	16.56
		75	0	18.00	16.26	16.50	16.88
	16QAM	1	0	17.50	16.37	16.89	17.13
		1	38	17.50	16.83	17.19	17.16
		1	74	17.50	16.47	16.61	16.50
		36	0	17.00	15.07	15.63	15.74
		36	18	17.00	15.27	15.65	15.70
		36	39	17.00	15.23	15.49	15.50
		75	0	17.00	15.20	15.67	15.80
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	18.50	16.56	16.90	17.07
		1	50	18.50	16.75	16.97	17.40
		1	99	18.50	16.83	16.93	16.82
		50	0	18.00	16.06	16.54	16.50
		50	25	18.00	16.09	16.34	16.48
		50	50	18.00	16.23	16.27	16.46
		100	0	18.00	16.01	16.47	16.61
	16QAM	1	0	17.50	16.11	16.77	16.63
		1	50	17.50	16.59	16.82	16.93
		1	99	17.50	16.68	16.60	16.39
		50	0	17.00	15.03	15.47	15.43
		50	25	17.00	15.06	15.27	15.39
		50	50	17.00	15.30	15.21	15.38
		100	0	17.00	15.18	15.42	15.53

Table 97: Conducted power measurement results of LTE Band VII(Second antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	17.50	15.77	16.34	16.50
		1	13	17.50	16.49	16.99	17.08
		1	24	17.50	15.91	16.19	16.43
		12	0	17.00	15.38	15.91	16.15
		12	6	17.00	15.63	16.28	16.28
		12	13	17.00	15.47	16.12	16.00
		25	0	17.00	15.40	16.18	16.07
	16QAM	1	0	16.50	15.25	15.74	15.88
		1	13	16.50	16.02	16.37	16.48
		1	24	16.50	15.42	15.62	15.81
		12	0	16.00	14.50	15.07	15.13
		12	6	16.00	14.76	15.23	15.25
		12	13	16.00	14.62	15.06	14.99
		25	0	16.00	14.51	15.08	15.01
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	17.50	16.03	16.60	16.76
		1	25	17.50	16.86	17.20	17.16
		1	49	17.50	16.36	16.34	16.35
		25	0	17.00	15.55	15.96	15.90
		25	13	17.00	15.79	16.12	16.10
		25	25	17.00	15.71	15.85	15.88
		50	0	17.00	15.62	15.96	15.96
	16QAM	1	0	16.50	15.44	16.09	16.32
		1	25	16.50	16.23	16.49	16.42
		1	49	16.50	15.80	15.83	15.91
		25	0	16.00	14.55	14.97	14.95
		25	13	16.00	14.80	15.12	15.15
		25	25	16.00	14.72	14.86	14.93
		50	0	16.00	14.60	14.96	14.99

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	17.50	15.97	16.57	16.56
		1	38	17.50	16.45	16.67	16.63
		1	74	17.50	16.06	16.02	15.96
		36	0	17.00	15.30	15.63	15.79
		36	18	17.00	15.50	15.65	15.76
		36	39	17.00	15.47	15.48	15.54
		75	0	17.00	15.44	15.69	15.85
	16QAM	1	0	16.50	15.53	16.03	16.07
		1	38	16.50	15.98	16.20	16.16
		1	74	16.50	15.67	15.61	15.58
		36	0	16.00	14.33	14.65	14.79
		36	18	16.00	14.52	14.66	14.75
		36	39	16.00	14.50	14.50	14.54
		75	0	16.00	14.44	14.70	14.86
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	17.50	15.53	16.14	16.04
		1	50	17.50	15.97	16.18	16.35
		1	99	17.50	16.10	15.94	15.78
		50	0	17.00	15.03	15.50	15.48
		50	25	17.00	15.06	15.29	15.44
		50	50	17.00	15.32	15.24	15.43
		100	0	17.00	15.19	15.43	15.58
	16QAM	1	0	16.50	15.03	15.83	15.72
		1	50	16.50	15.48	15.83	16.04
		1	99	16.50	15.64	15.64	15.46
		50	0	16.00	14.03	14.52	14.50
		50	25	16.00	14.05	14.32	14.46
		50	50	16.00	14.32	14.27	14.44
		100	0	16.00	14.19	14.46	14.59

Table 98: Conducted power measurement results of LTE Band VII(Second antenna)



After hotspot function work:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	19.50	17.82	18.35	18.22
		1	13	19.50	18.50	18.95	18.77
		1	24	19.50	17.96	18.17	18.10
		12	0	19.00	17.42	17.91	17.88
		12	6	19.00	17.67	18.05	18.22
		12	13	19.00	17.51	17.88	17.94
		25	0	19.00	17.45	17.94	18.01
	16QAM	1	0	18.50	17.24	17.87	17.74
		1	13	18.50	17.96	18.49	18.26
		1	24	18.50	17.41	17.71	17.64
		12	0	18.00	16.58	17.10	17.13
		12	6	18.00	16.83	17.25	17.26
		12	13	18.00	16.68	17.08	16.98
		25	0	18.00	16.64	17.09	17.03
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	19.50	17.90	18.62	18.69
		1	25	19.50	18.66	19.12	19.05
		1	49	19.50	18.19	18.32	18.28
		25	0	19.00	17.42	17.99	17.91
		25	13	19.00	17.64	18.12	18.07
		25	25	19.00	17.55	17.85	17.86
		50	0	19.00	17.71	17.98	17.94
	16QAM	1	0	18.50	17.50	18.02	18.32
		1	25	18.50	18.33	18.45	18.42
		1	49	18.50	17.78	17.83	17.93
		25	0	18.00	16.64	17.01	16.94
		25	13	18.00	16.88	17.16	17.17
		25	25	18.00	16.77	16.87	16.95
		50	0	18.00	16.64	16.94	16.98

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	19.50	18.05	18.54	18.53
		1	38	19.50	18.43	18.61	18.57
		1	74	19.50	18.02	17.94	17.91
		36	0	19.00	17.39	17.64	17.77
		36	18	19.00	17.57	17.65	17.74
		36	39	19.00	17.48	17.44	17.54
		75	0	19.00	17.49	17.67	17.84
	16QAM	1	0	18.50	17.50	18.00	18.09
		1	38	18.50	17.91	18.15	18.17
		1	74	18.50	17.49	17.42	17.56
		36	0	18.00	16.39	16.67	16.79
		36	18	18.00	16.56	16.68	16.77
		36	39	18.00	16.48	16.49	16.55
		75	0	18.00	16.46	16.68	16.85
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	19.50	17.62	18.14	17.95
		1	50	19.50	18.03	18.23	18.36
		1	99	19.50	17.99	17.95	17.82
		50	0	19.00	17.14	17.53	17.55
		50	25	19.00	17.14	17.33	17.43
		50	50	19.00	17.31	17.21	17.43
		100	0	19.00	17.23	17.44	17.57
	16QAM	1	0	18.50	17.17	17.67	17.58
		1	50	18.50	17.62	17.77	17.94
		1	99	18.50	17.60	17.39	17.47
		50	0	18.00	16.12	16.53	16.44
		50	25	18.00	16.11	16.33	16.44
		50	50	18.00	16.30	16.22	16.43
		100	0	18.00	16.23	16.47	16.59

Table 99: Conducted power measurement results of LTE Band VII(Second antenna)

After hotspot function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20775CH	21100CH	21425CH
5MHz	QPSK	1	0	18.00	16.32	16.85	16.80
		1	13	18.00	17.03	17.24	17.20
		1	24	18.00	16.45	16.69	16.72
		12	0	17.50	15.96	16.44	16.46
		12	6	17.50	16.20	16.58	16.59
		12	13	17.50	16.03	16.42	16.31
		25	0	17.50	15.97	16.48	16.39
	16QAM	1	0	17.00	15.73	16.19	16.16
		1	13	17.00	16.44	16.80	16.76
		1	24	17.00	15.90	16.05	16.11
		12	0	16.50	14.90	15.39	15.42
		12	6	16.50	15.17	15.54	15.56
		12	13	16.50	15.02	15.39	15.30
		25	0	16.50	14.86	15.41	15.35
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20800CH	21100CH	21400CH
10MHz	QPSK	1	0	18.00	16.37	16.91	17.04
		1	25	18.00	17.20	17.49	17.45
		1	49	18.00	16.70	16.66	16.75
		25	0	17.50	15.94	16.33	16.27
		25	13	17.50	16.18	16.48	16.46
		25	25	17.50	16.10	16.21	16.24
		50	0	17.50	16.01	16.32	16.31
	16QAM	1	0	17.00	15.85	16.53	16.66
		1	25	17.00	16.67	16.70	16.75
		1	49	17.00	16.20	16.27	16.27
		25	0	16.50	14.94	15.36	15.31
		25	13	16.50	15.17	15.51	15.50
		25	25	16.50	15.10	15.25	15.30
		50	0	16.50	14.98	15.33	15.34

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20825CH	21100CH	21375CH
15MHz	QPSK	1	0	18.00	16.29	16.88	16.93
		1	38	18.00	16.81	16.97	16.96
		1	74	18.00	16.42	16.33	16.33
		36	0	17.50	15.68	16.00	16.18
		36	18	17.50	15.89	16.01	16.14
		36	39	17.50	16.09	15.85	15.93
		75	0	17.50	16.06	16.05	16.25
	16QAM	1	0	17.00	15.94	16.44	16.47
		1	38	17.00	16.44	16.56	16.48
		1	74	17.00	16.09	15.93	15.89
		36	0	16.50	14.67	14.97	15.17
		36	18	16.50	14.88	14.98	15.14
		36	39	16.50	14.85	14.82	14.93
		75	0	16.50	14.80	15.01	15.22
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					20850CH	21100CH	21350CH
20MHz	QPSK	1	0	18.00	16.38	16.51	16.38
		1	50	18.00	16.35	16.54	16.65
		1	99	18.00	16.46	16.32	16.23
		50	0	17.50	15.65	15.89	15.88
		50	25	17.50	15.60	15.68	15.84
		50	50	17.50	15.75	15.62	15.82
		100	0	17.50	15.61	15.83	15.98
	16QAM	1	0	17.00	15.60	16.17	16.08
		1	50	17.00	16.05	16.20	16.38
		1	99	17.00	16.17	16.01	15.85
		50	0	16.50	14.65	14.87	14.84
		50	25	16.50	14.68	14.65	14.80
		50	50	16.50	14.75	14.61	14.79
		100	0	16.50	14.63	14.84	14.96

Table 100: Conducted power measurement results of LTE Band VII(Second antenna)

**7.2.10 Conducted power measurements of LTE Band XXXVIII**

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37775CH	38000CH	38225CH
5MHz	QPSK	1	0	24.00	22.03	22.39	22.33
		1	13	24.00	22.61	23.02	22.95
		1	24	24.00	22.01	22.32	22.25
		12	0	22.00	20.29	20.84	20.63
		12	6	22.00	20.66	20.97	20.91
		12	13	22.00	20.58	20.78	20.69
		25	0	22.00	20.42	20.75	20.65
	16QAM	1	0	23.00	21.12	21.83	21.63
		1	13	23.00	22.00	22.44	22.26
		1	24	23.00	21.40	21.76	21.56
		12	0	21.00	20.41	20.86	20.64
		12	6	21.00	20.78	20.99	20.91
		12	13	21.00	20.70	20.81	20.68
		25	0	21.00	20.40	20.68	20.65
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37800CH	38000CH	38200CH
10MHz	QPSK	1	0	24.00	22.03	22.28	22.41
		1	25	24.00	22.69	23.10	22.96
		1	49	24.00	22.13	22.24	22.16
		25	0	22.00	20.23	20.60	20.54
		25	13	22.00	20.52	20.74	20.60
		25	25	22.00	20.38	20.58	20.50
		50	0	22.00	20.36	20.65	20.47
	16QAM	1	0	23.00	21.35	21.46	21.68
		1	25	23.00	22.28	22.28	22.23
		1	49	23.00	21.60	21.46	21.36
		25	0	21.00	20.26	20.62	20.54
		25	13	21.00	20.55	20.76	20.62
		25	25	21.00	20.42	20.59	20.53
		50	0	21.00	20.30	20.61	20.43

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37825CH	38000CH	38175CH
15MHz	QPSK	1	0	24.00	22.43	22.78	22.90
		1	38	24.00	22.90	23.02	22.70
		1	74	24.00	22.29	22.37	22.27
		36	0	22.00	20.58	20.75	20.73
		36	18	22.00	20.71	20.84	20.81
		36	39	22.00	20.57	20.82	20.65
		75	0	22.00	20.65	20.81	20.71
	16QAM	1	0	23.00	21.85	22.23	22.36
		1	38	23.00	22.46	22.44	22.21
		1	74	23.00	21.76	21.84	21.64
		36	0	21.00	20.59	20.79	20.76
		36	18	21.00	20.74	20.88	20.85
		36	39	21.00	20.59	20.85	20.69
		75	0	21.00	20.64	20.82	20.72
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37850CH	38000CH	38150CH
20MHz	QPSK	1	0	24.00	22.55	22.91	22.97
		1	50	24.00	22.99	23.05	22.90
		1	99	24.00	22.69	22.81	22.58
		50	0	22.00	20.78	20.92	21.06
		50	25	22.00	20.81	20.96	20.70
		50	50	22.00	20.91	21.09	20.92
		100	0	22.00	20.79	21.10	20.97
	16QAM	1	0	23.00	22.07	22.37	22.46
		1	50	23.00	22.63	22.48	22.49
		1	99	23.00	22.24	22.31	22.10
		50	0	21.00	20.81	20.94	20.89
		50	25	21.00	20.85	20.97	20.74
		50	50	21.00	20.94	20.99	20.96
		100	0	21.00	20.80	20.98	20.96

Table 101: Conducted power measurement results of LTE Band XXXVIII(Main antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37775CH	38000CH	38225CH
5MHz	QPSK	1	0	22.50	20.56	20.89	20.77
		1	13	22.50	21.18	21.53	21.36
		1	24	22.50	20.57	20.84	20.52
		12	0	20.50	19.77	20.32	20.08
		12	6	20.50	20.12	20.44	20.32
		12	13	20.50	20.03	20.26	20.11
		25	0	20.50	19.89	20.23	20.08
	16QAM	1	0	22.00	20.62	21.01	21.14
		1	13	22.00	21.47	21.64	21.76
		1	24	22.00	20.86	20.96	20.94
		12	0	20.50	19.82	20.45	20.26
		12	6	20.50	20.18	20.48	20.41
		12	13	20.50	20.10	20.41	20.31
		25	0	20.50	19.89	20.28	20.17
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37800CH	38000CH	38200CH
10MHz	QPSK	1	0	22.50	20.55	20.89	21.05
		1	25	22.50	21.30	21.69	21.46
		1	49	22.50	20.67	20.87	20.63
		25	0	20.50	19.73	20.13	20.03
		25	13	20.50	20.02	20.26	20.09
		25	25	20.50	19.89	20.10	19.98
		50	0	20.50	19.86	20.17	19.95
	16QAM	1	0	22.00	20.95	21.15	21.19
		1	25	22.00	21.83	21.93	21.73
		1	49	22.00	21.19	21.13	21.06
		25	0	20.50	19.80	20.22	20.07
		25	13	20.50	20.10	20.36	20.17
		25	25	20.50	19.97	20.18	20.06
		50	0	20.50	19.93	20.21	20.01

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37825CH	38000CH	38175CH
15MHz	QPSK	1	0	22.50	20.98	21.48	21.60
		1	38	22.50	21.55	21.73	21.37
		1	74	22.50	20.84	21.10	20.86
		36	0	20.50	20.10	20.30	20.28
		36	18	20.50	20.23	20.39	20.34
		36	39	20.50	20.09	20.36	20.16
		75	0	20.50	20.18	20.36	20.26
	16QAM	1	0	22.00	20.92	21.72	21.72
		1	38	22.00	21.50	21.92	21.59
		1	74	22.00	20.80	21.32	21.05
		36	0	20.50	19.99	20.34	20.29
		36	18	20.50	20.21	20.42	20.37
		36	39	20.50	20.21	20.39	20.19
		75	0	20.50	20.22	20.34	20.23
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37850CH	38000CH	38150CH
20MHz	QPSK	1	0	22.50	21.25	21.56	21.60
		1	50	22.50	21.56	21.68	21.60
		1	99	22.50	21.30	21.56	21.40
		50	0	20.50	20.33	20.45	20.42
		50	25	20.50	20.35	20.42	20.25
		50	50	20.50	20.46	20.45	20.45
		100	0	20.50	20.35	20.46	20.41
	16QAM	1	0	22.00	21.18	21.72	21.93
		1	50	22.00	21.72	21.83	21.92
		1	99	22.00	21.39	21.69	21.60
		50	0	20.50	20.27	20.42	20.44
		50	25	20.50	20.30	20.45	20.17
		50	50	20.50	20.39	20.47	20.39
		100	0	20.50	20.29	20.45	20.40

Table 102: Conducted power measurement results of LTE Band XXXVIII(Main antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37775CH	38000CH	38225CH
5MHz	QPSK	1	0	23.50	21.74	22.12	22.21
		1	13	23.50	22.42	22.73	22.74
		1	24	23.50	21.77	22.03	22.03
		12	0	21.50	20.11	20.60	20.62
		12	6	21.50	20.47	20.73	20.87
		12	13	21.50	20.37	20.54	20.63
		25	0	21.50	20.22	20.76	20.63
	16QAM	1	0	22.50	20.59	21.04	20.93
		1	13	22.50	21.43	21.68	21.49
		1	24	22.50	20.81	21.01	20.81
		12	0	21.00	20.06	20.39	20.43
		12	6	21.00	20.42	20.43	20.45
		12	13	21.00	20.35	20.44	20.46
		25	0	21.00	20.21	20.50	20.44
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37800CH	38000CH	38200CH
10MHz	QPSK	1	0	23.50	22.00	22.33	22.38
		1	25	23.50	22.71	22.93	22.93
		1	49	23.50	22.07	22.21	22.06
		25	0	21.50	20.23	20.61	20.54
		25	13	21.50	20.53	20.76	20.64
		25	25	21.50	20.39	20.60	20.52
		50	0	21.50	20.37	20.67	20.49
	16QAM	1	0	22.50	20.71	20.87	21.17
		1	25	22.50	21.67	21.66	21.63
		1	49	22.50	20.91	20.88	20.67
		25	0	21.00	20.04	20.40	20.32
		25	13	21.00	20.34	20.44	20.41
		25	25	21.00	20.20	20.39	20.33
		50	0	21.00	20.17	20.41	20.26

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37825CH	38000CH	38175CH
15MHz	QPSK	1	0	23.50	22.27	22.61	22.98
		1	38	23.50	22.70	22.87	22.73
		1	74	23.50	22.18	22.18	22.28
		36	0	21.50	20.60	20.77	20.77
		36	18	21.50	20.74	20.87	20.86
		36	39	21.50	20.59	20.85	20.69
		75	0	21.50	20.67	20.84	20.77
	16QAM	1	0	22.50	21.21	21.47	21.83
		1	38	22.50	21.70	21.69	21.64
		1	74	22.50	21.02	21.08	21.18
		36	0	21.00	20.41	20.39	20.38
		36	18	21.00	20.45	20.47	20.44
		36	39	21.00	20.39	20.44	20.49
		75	0	21.00	20.46	20.43	20.45
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37850CH	38000CH	38150CH
20MHz	QPSK	1	0	23.50	22.24	22.83	22.87
		1	50	23.50	22.59	22.92	22.95
		1	99	23.50	22.27	22.88	22.58
		50	0	21.50	20.80	20.93	21.10
		50	25	21.50	20.83	20.99	20.74
		50	50	21.50	20.91	21.11	20.97
		100	0	21.50	20.81	21.12	21.02
	16QAM	1	0	22.50	21.47	21.85	21.92
		1	50	22.50	21.89	21.93	21.97
		1	99	22.50	21.57	21.85	21.52
		50	0	21.00	20.49	20.44	20.48
		50	25	21.00	20.42	20.48	20.33
		50	50	21.00	20.45	20.49	20.45
		100	0	21.00	20.45	20.90	20.49

Table 103: Conducted power measurement results of LTE Band XXXVIII(Second antenna)

After Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37775CH	38000CH	38225CH
5MHz	QPSK	1	0	22.00	20.03	20.68	20.60
		1	13	22.00	20.89	21.26	21.24
		1	24	22.00	20.55	20.53	20.53
		12	0	20.50	19.67	20.15	19.93
		12	6	20.50	20.03	20.25	20.20
		12	13	20.50	19.96	20.04	20.00
		25	0	20.50	19.77	20.03	19.96
	16QAM	1	0	21.50	20.03	20.63	20.56
		1	13	21.50	20.93	21.23	21.24
		1	24	21.50	20.35	20.50	20.44
		12	0	20.50	19.56	20.12	19.98
		12	6	20.50	19.95	20.21	20.24
		12	13	20.50	19.89	20.03	20.07
		25	0	20.50	19.78	20.02	19.98
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37800CH	38000CH	38200CH
10MHz	QPSK	1	0	22.00	20.29	20.67	20.77
		1	25	22.00	21.22	21.38	21.36
		1	49	22.00	20.66	20.59	20.59
		25	0	20.50	19.58	19.96	19.82
		25	13	20.50	19.93	20.05	19.93
		25	25	20.50	19.83	19.84	19.86
		50	0	20.50	19.76	19.96	19.78
	16QAM	1	0	21.50	20.15	20.73	20.75
		1	25	21.50	21.10	21.41	21.20
		1	49	21.50	20.55	20.60	20.60
		25	0	20.50	19.58	19.97	19.80
		25	13	20.50	19.92	20.06	19.92
		25	25	20.50	19.82	19.86	19.85
		50	0	20.50	19.77	19.94	19.77

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37825CH	38000CH	38175CH
15MHz	QPSK	1	0	22.00	20.80	21.20	21.32
		1	38	22.00	21.50	21.31	21.17
		1	74	22.00	20.83	20.65	20.78
		36	0	20.50	19.97	20.13	19.98
		36	18	20.50	20.16	20.16	20.11
		36	39	20.50	20.05	20.07	19.99
		75	0	20.50	20.08	20.13	20.02
	16QAM	1	0	21.50	20.69	21.10	21.26
		1	38	21.50	21.42	21.18	21.21
		1	74	21.50	20.76	20.51	20.77
		36	0	20.50	19.97	20.15	20.03
		36	18	20.50	20.17	20.20	20.16
		36	39	20.50	20.06	20.10	20.04
		75	0	20.50	20.07	20.17	20.05
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37850CH	38000CH	38150CH
20MHz	QPSK	1	0	22.00	20.88	21.44	21.29
		1	50	22.00	21.51	21.42	21.34
		1	99	22.00	21.07	21.20	21.06
		50	0	20.50	20.22	20.33	20.30
		50	25	20.50	20.30	20.30	19.97
		50	50	20.50	20.39	20.35	20.25
		100	0	20.50	20.26	20.43	20.25
	16QAM	1	0	21.50	21.06	21.47	21.32
		1	50	21.50	21.45	21.43	21.42
		1	99	21.50	21.25	21.36	21.12
		50	0	20.50	20.21	20.33	20.28
		50	25	20.50	20.30	20.28	19.97
		50	50	20.50	20.39	20.34	20.25
		100	0	20.50	20.26	20.42	20.24

Table 104: Conducted power measurement results of LTE Band XXXVIII(Second antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37775CH	38000CH	38225CH
5MHz	QPSK	1	0	22.00	20.07	20.50	20.39
		1	13	22.00	20.70	21.14	21.03
		1	24	22.00	20.28	20.48	20.33
		12	0	20.00	19.46	19.98	19.76
		12	6	20.00	19.78	19.91	19.89
		12	13	20.00	19.70	19.93	19.78
		25	0	20.00	19.55	19.88	19.75
	16QAM	1	0	21.50	20.17	20.81	20.68
		1	13	21.50	20.89	21.42	21.33
		1	24	21.50	20.44	20.76	20.64
		12	0	20.50	19.52	19.94	19.75
		12	6	20.50	19.85	20.08	20.01
		12	13	20.50	19.78	19.89	19.79
		25	0	20.50	19.47	19.78	19.67
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37800CH	38000CH	38200CH
10MHz	QPSK	1	0	22.00	20.12	20.38	20.63
		1	25	22.00	21.01	21.22	21.06
		1	49	22.00	20.37	20.44	20.32
		25	0	20.00	19.36	19.73	19.68
		25	13	20.00	19.63	19.88	19.70
		25	25	20.00	19.48	19.73	19.59
		50	0	20.00	19.46	19.78	19.57
	16QAM	1	0	21.50	20.36	20.34	20.72
		1	25	21.50	20.95	20.86	20.89
		1	49	21.50	20.63	20.40	20.47
		25	0	20.50	19.30	19.67	19.65
		25	13	20.50	19.60	19.82	19.68
		25	25	20.50	19.45	19.66	19.58
		50	0	20.50	19.39	19.69	19.50

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37825CH	38000CH	38175CH
15MHz	QPSK	1	0	22.00	20.57	20.92	21.16
		1	38	22.00	21.12	21.13	21.05
		1	74	22.00	20.46	20.61	20.50
		36	0	20.00	19.68	19.87	19.86
		36	18	20.00	19.80	19.96	19.93
		36	39	20.00	19.65	19.96	19.73
		75	0	20.00	19.74	19.93	19.83
	16QAM	1	0	21.50	20.90	20.99	21.25
		1	38	21.50	21.48	21.19	21.14
		1	74	21.50	20.83	20.66	20.62
		36	0	20.50	19.64	19.87	19.82
		36	18	20.50	19.77	19.95	19.90
		36	39	20.50	19.63	19.94	19.71
		75	0	20.50	19.65	19.86	19.76
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37850CH	38000CH	38150CH
20MHz	QPSK	1	0	22.00	20.60	21.04	21.14
		1	50	22.00	21.10	21.13	21.18
		1	99	22.00	20.82	20.96	20.70
		50	0	20.00	19.85	19.92	19.97
		50	25	20.00	19.87	19.95	19.80
		50	50	20.00	19.97	19.99	19.90
		100	0	20.00	19.86	19.98	19.96
	16QAM	1	0	21.50	20.93	21.47	21.36
		1	50	21.50	21.45	21.44	21.32
		1	99	21.50	21.16	21.48	20.98
		50	0	20.50	19.82	19.99	20.12
		50	25	20.50	19.84	20.02	19.76
		50	50	20.50	19.94	20.14	19.98
		100	0	20.50	19.84	20.13	20.06

Table 105: Conducted power measurement results of LTE Band XXXVIII(Second antenna)

After hotspot function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37775CH	38000CH	38225CH
5MHz	QPSK	1	0	22.00	20.17	20.61	20.55
		1	13	22.00	20.88	21.19	21.17
		1	24	22.00	20.33	20.48	20.34
		12	0	20.50	19.52	20.07	19.87
		12	6	20.50	19.89	20.18	20.14
		12	13	20.50	19.83	19.97	19.96
		25	0	20.50	19.67	19.96	19.90
	16QAM	1	0	21.50	19.93	20.53	20.64
		1	13	21.50	20.75	21.13	21.23
		1	24	21.50	20.17	20.41	20.35
		12	0	20.50	19.55	20.09	19.90
		12	6	20.50	19.94	20.22	20.17
		12	13	20.50	19.87	19.97	20.01
		25	0	20.50	19.68	20.00	19.95
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37800CH	38000CH	38200CH
10MHz	QPSK	1	0	22.00	20.22	20.60	20.70
		1	25	22.00	21.16	21.29	21.29
		1	49	22.00	20.66	20.51	20.52
		25	0	20.50	19.53	19.91	19.76
		25	13	20.50	19.87	20.00	19.87
		25	25	20.50	19.78	19.80	19.80
		50	0	20.50	19.71	19.91	19.72
	16QAM	1	0	21.50	20.24	20.65	20.60
		1	25	21.50	21.20	21.40	21.21
		1	49	21.50	20.62	20.56	20.44
		25	0	20.50	19.55	19.89	19.73
		25	13	20.50	19.89	19.98	19.86
		25	25	20.50	19.80	19.76	19.78
		50	0	20.50	19.73	19.88	19.71

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37825CH	38000CH	38175CH
15MHz	QPSK	1	0	22.00	20.75	21.19	21.28
		1	38	22.00	21.50	21.32	21.13
		1	74	22.00	20.79	20.62	20.74
		36	0	20.50	19.93	20.10	19.95
		36	18	20.50	20.12	20.13	20.07
		36	39	20.50	20.02	20.04	19.95
		75	0	20.50	20.04	20.09	19.98
	16QAM	1	0	21.50	20.76	21.05	21.28
		1	38	21.50	21.49	21.25	21.13
		1	74	21.50	20.83	20.55	20.73
		36	0	20.50	19.93	20.08	19.94
		36	18	20.50	20.11	20.09	20.06
		36	39	20.50	20.01	20.01	19.97
		75	0	20.50	20.04	20.08	19.98
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					37850CH	38000CH	38150CH
20MHz	QPSK	1	0	22.00	20.81	21.35	21.24
		1	50	22.00	21.46	21.33	21.29
		1	99	22.00	20.99	21.14	21.01
		50	0	20.50	20.17	20.28	20.24
		50	25	20.50	20.25	20.24	19.91
		50	50	20.50	20.34	20.29	20.19
		100	0	20.50	20.21	20.38	20.19
	16QAM	1	0	21.50	20.86	21.50	21.30
		1	50	21.50	21.47	21.49	21.33
		1	99	21.50	21.08	21.28	21.03
		50	0	20.50	20.17	20.28	20.22
		50	25	20.50	20.26	20.24	19.91
		50	50	20.50	20.34	20.29	20.19
		100	0	20.50	20.20	20.37	20.19

Table 106: Conducted power measurement results of LTE Band XXXVIII(Second antenna)

**7.2.11 Conducted power measurements of LTE Band XLI**

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	24.00	22.13	22.17	22.49
		1	13	24.00	22.91	22.66	22.96
		1	24	24.00	22.34	22.42	22.33
		12	0	23.00	21.05	21.40	21.48
		12	6	23.00	21.32	21.67	21.72
		12	13	23.00	21.21	21.37	21.44
		25	0	23.00	21.10	21.29	21.44
	16QAM	1	0	23.00	21.66	21.76	21.79
		1	13	23.00	22.57	22.44	22.48
		1	24	23.00	22.02	21.81	21.64
		12	0	22.00	21.75	21.98	21.85
		12	6	22.00	21.87	21.99	21.98
		12	13	22.00	21.95	21.97	21.95
		25	0	22.00	21.81	21.83	21.94
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	24.00	22.04	22.33	22.34
		1	25	24.00	22.92	22.76	22.94
		1	49	24.00	22.27	22.09	22.06
		25	0	23.00	21.09	21.08	21.09
		25	13	23.00	21.09	21.15	21.44
		25	25	23.00	21.01	21.03	21.17
		50	0	23.00	21.07	21.02	21.19
	16QAM	1	0	23.00	21.34	21.70	21.70
		1	25	23.00	22.20	22.24	22.32
		1	49	23.00	21.56	21.47	21.31
		25	0	22.00	21.39	21.44	21.75
		25	13	22.00	21.60	21.56	21.81
		25	25	22.00	21.50	21.40	21.52
		50	0	22.00	21.41	21.38	21.58

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	24.00	22.52	22.70	22.70
		1	38	24.00	22.58	22.74	22.79
		1	74	24.00	22.38	22.31	22.14
		36	0	23.00	21.12	21.07	21.17
		36	18	23.00	21.24	21.18	21.24
		36	39	23.00	21.14	21.07	21.06
		75	0	23.00	21.09	21.05	21.13
	16QAM	1	0	23.00	21.75	21.74	21.72
		1	38	23.00	22.21	21.81	22.24
		1	74	23.00	21.63	21.25	21.24
		36	0	22.00	21.53	21.50	21.63
		36	18	22.00	21.63	21.61	21.71
		36	39	22.00	21.52	21.39	21.52
		75	0	22.00	21.43	21.37	21.56
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	24.00	22.11	22.42	22.53
		1	50	24.00	22.47	22.52	22.76
		1	99	24.00	22.07	22.43	22.34
		50	0	23.00	21.06	21.25	21.20
		50	25	23.00	21.09	21.06	21.12
		50	50	23.00	21.19	21.08	21.15
		100	0	23.00	21.07	21.08	21.07
	16QAM	1	0	23.00	21.76	21.78	21.89
		1	50	23.00	22.09	21.87	22.13
		1	99	23.00	21.73	21.82	21.66
		50	0	22.00	21.33	21.34	21.65
		50	25	22.00	21.36	21.17	21.60
		50	50	22.00	21.39	21.34	21.61
		100	0	22.00	21.40	21.28	21.52

Table 107: Conducted power measurement results of LTE Band XLI(Main antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	22.40	20.47	20.64	21.19
		1	13	22.40	21.43	21.30	21.96
		1	24	22.40	21.05	21.03	21.15
		12	0	21.70	20.46	20.80	21.11
		12	6	21.70	20.79	21.08	21.35
		12	13	21.70	20.71	20.82	21.11
		25	0	21.70	20.56	20.73	21.09
	16QAM	1	0	21.70	20.77	20.83	21.49
		1	13	21.70	21.58	21.53	21.61
		1	24	21.70	21.22	20.96	21.47
		12	0	20.70	20.12	20.23	20.55
		12	6	20.70	20.45	20.53	20.65
		12	13	20.70	20.36	20.28	20.57
		25	0	20.70	20.14	20.14	20.49
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	22.40	20.48	21.06	21.03
		1	25	22.40	21.42	21.33	21.71
		1	49	22.40	21.04	20.69	21.08
		25	0	21.70	20.39	20.33	20.51
		25	13	21.70	20.65	20.45	20.59
		25	25	21.70	20.62	20.36	20.55
		50	0	21.70	20.44	20.27	20.55
	16QAM	1	0	21.70	20.82	21.00	21.16
		1	25	21.70	21.54	21.58	21.64
		1	49	21.70	21.25	20.94	20.96
		25	0	20.70	19.79	19.72	20.12
		25	13	20.70	20.06	19.84	20.33
		25	25	20.70	20.05	19.77	20.11
		50	0	20.70	19.83	19.70	20.09

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	22.40	21.07	21.06	21.05
		1	38	22.40	21.39	21.09	21.46
		1	74	22.40	21.06	20.73	20.60
		36	0	21.70	20.45	20.29	20.52
		36	18	21.70	20.65	20.44	20.61
		36	39	21.70	20.64	20.31	20.48
		75	0	21.70	20.51	20.24	20.51
	16QAM	1	0	21.70	21.05	21.14	21.20
		1	38	21.70	21.65	21.26	21.66
		1	74	21.70	21.22	20.89	20.90
		36	0	20.70	19.91	19.76	20.12
		36	18	20.70	20.10	19.91	20.22
		36	39	20.70	20.10	19.79	20.07
		75	0	20.70	19.95	19.68	20.09
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	22.40	20.58	20.68	21.04
		1	50	22.40	21.12	20.81	21.17
		1	99	22.40	20.89	20.98	20.80
		50	0	21.70	20.38	20.37	20.48
		50	25	21.70	20.53	20.06	20.47
		50	50	21.70	20.65	20.33	20.55
		100	0	21.70	20.53	20.20	20.56
	16QAM	1	0	21.70	20.89	21.14	21.20
		1	50	21.70	21.45	21.28	21.38
		1	99	21.70	21.18	21.45	21.08
		50	0	20.70	19.83	19.61	20.18
		50	25	20.70	19.97	19.50	20.11
		50	50	20.70	20.09	19.77	20.18
		100	0	20.70	19.98	19.67	20.03

Table 108: Conducted power measurement results of LTE Band XLI(Main antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	24.00	22.14	22.28	22.47
		1	13	24.00	22.86	22.91	22.96
		1	24	24.00	22.29	22.27	22.29
		12	0	23.00	21.15	21.35	21.40
		12	6	23.00	21.27	21.62	21.62
		12	13	23.00	21.41	21.31	21.34
		25	0	23.00	21.29	21.23	21.35
	16QAM	1	0	23.00	21.34	21.66	21.56
		1	13	23.00	22.34	22.34	22.22
		1	24	23.00	21.79	21.69	21.40
		12	0	22.00	21.75	21.84	21.99
		12	6	22.00	21.95	21.90	21.98
		12	13	22.00	21.92	21.84	21.92
		25	0	22.00	21.77	21.76	21.92
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	24.00	22.03	22.28	22.50
		1	25	24.00	22.58	22.69	22.79
		1	49	24.00	22.13	22.17	22.07
		25	0	23.00	21.11	21.08	21.28
		25	13	23.00	21.01	21.15	21.34
		25	25	23.00	21.03	21.01	21.05
		50	0	23.00	21.05	21.06	21.08
	16QAM	1	0	23.00	21.44	21.47	22.03
		1	25	23.00	22.28	22.03	22.62
		1	49	23.00	21.62	21.22	21.63
		25	0	22.00	21.34	21.30	21.83
		25	13	22.00	21.52	21.40	21.88
		25	25	22.00	21.42	21.24	21.59
		50	0	22.00	21.27	21.51	21.68

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	24.00	22.41	22.52	22.58
		1	38	24.00	22.86	22.56	22.98
		1	74	24.00	22.22	22.10	22.07
		36	0	23.00	21.04	21.09	21.05
		36	18	23.00	21.14	21.09	21.12
		36	39	23.00	21.03	21.08	21.03
		75	0	23.00	21.09	21.08	21.00
	16QAM	1	0	23.00	21.24	21.47	21.82
		1	38	23.00	21.68	21.67	22.34
		1	74	23.00	21.28	21.20	21.35
		36	0	22.00	21.39	21.67	21.74
		36	18	22.00	21.48	21.77	21.82
		36	39	22.00	21.36	21.54	21.62
		75	0	22.00	21.33	21.51	21.69
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	24.00	22.18	22.33	22.33
		1	50	24.00	22.49	22.43	22.58
		1	99	24.00	22.11	22.30	22.14
		50	0	23.00	21.12	21.12	21.23
		50	25	23.00	21.10	21.08	21.15
		50	50	23.00	21.22	21.05	21.17
		100	0	23.00	21.08	21.08	21.12
	16QAM	1	0	23.00	21.65	21.72	21.87
		1	50	23.00	21.97	21.84	22.17
		1	99	23.00	21.60	21.75	21.66
		50	0	22.00	21.44	21.50	21.70
		50	25	22.00	21.46	21.33	21.67
		50	50	22.00	21.47	21.47	21.68
		100	0	22.00	21.50	21.41	21.59

Table 109: Conducted power measurement results of LTE Band XLI(Second antenna)

After Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	19.70	18.54	18.52	18.71
		1	13	19.70	19.28	19.08	19.40
		1	24	19.70	18.80	18.55	18.64
		12	0	18.70	17.57	17.56	17.57
		12	6	18.70	17.61	17.71	17.79
		12	13	18.70	17.53	17.54	17.56
		25	0	18.70	17.52	17.54	17.56
	16QAM	1	0	19.20	17.54	17.90	17.85
		1	13	19.20	18.48	18.49	18.53
		1	24	19.20	18.01	17.94	17.79
		12	0	18.20	16.76	17.06	17.08
		12	6	18.20	17.10	17.30	17.30
		12	13	18.20	17.02	17.05	17.09
		25	0	18.20	16.78	16.82	17.01
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	19.70	18.19	18.50	18.66
		1	25	19.70	19.17	18.92	19.28
		1	49	19.70	18.67	18.54	18.54
		25	0	18.70	17.04	17.06	17.23
		25	13	18.70	17.29	17.15	17.32
		25	25	18.70	17.27	17.05	17.13
		50	0	18.70	17.09	16.99	17.11
	16QAM	1	0	19.20	17.56	17.88	17.77
		1	25	19.20	18.32	18.39	18.36
		1	49	19.20	17.86	17.77	17.57
		25	0	18.20	16.55	16.53	16.69
		25	13	18.20	16.71	16.60	16.77
		25	25	18.20	16.69	16.52	16.59
		50	0	18.20	16.53	16.56	16.55

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	19.70	18.58	18.62	18.80
		1	38	19.70	19.14	18.62	19.09
		1	74	19.70	18.70	18.56	18.53
		36	0	18.70	17.10	17.05	17.15
		36	18	18.70	17.30	17.16	17.16
		36	39	18.70	17.31	17.00	17.04
		75	0	18.70	17.16	16.97	17.11
	16QAM	1	0	19.20	17.82	18.14	18.34
		1	38	19.20	18.47	18.20	18.35
		1	74	19.20	18.05	17.78	17.62
		36	0	18.20	16.57	16.54	16.82
		36	18	18.20	16.79	16.65	16.83
		36	39	18.20	16.81	16.59	16.70
		75	0	18.20	16.67	16.55	16.74
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	19.70	18.57	18.53	18.77
		1	50	19.70	18.99	18.56	18.80
		1	99	19.70	18.72	18.63	18.51
		50	0	18.70	17.04	16.96	17.31
		50	25	18.70	17.20	16.83	17.11
		50	50	18.70	17.34	16.93	17.01
		100	0	18.70	17.12	16.95	17.13
	16QAM	1	0	19.20	17.71	17.90	18.21
		1	50	19.20	18.33	17.90	18.19
		1	99	19.20	18.11	18.01	17.94
		50	0	18.20	16.54	16.54	17.02
		50	25	18.20	16.70	16.51	16.75
		50	50	18.20	16.85	16.59	16.63
		100	0	18.20	16.71	16.53	16.72

Table 110: Conducted power measurement results of LTE Band XLI(Second antenna)



After Wi-Fi on function work:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	21.00	19.55	19.50	19.62
		1	13	21.00	20.26	20.03	20.58
		1	24	21.00	19.72	19.52	19.70
		12	0	20.00	18.59	18.55	18.70
		12	6	20.00	18.70	18.79	18.91
		12	13	20.00	18.61	18.51	18.67
		25	0	20.00	18.58	18.57	18.68
	16QAM	1	0	20.00	18.59	18.63	19.00
		1	13	20.00	19.49	19.17	19.65
		1	24	20.00	18.99	18.62	18.86
		12	0	19.00	18.01	18.28	18.03
		12	6	19.00	18.32	18.52	18.24
		12	13	19.00	18.23	18.25	17.99
		25	0	19.00	18.03	18.05	18.04
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	21.00	19.58	19.68	19.71
		1	25	21.00	20.21	20.06	20.36
		1	49	21.00	19.73	19.55	19.52
		25	0	20.00	18.59	18.56	18.55
		25	13	20.00	18.50	18.53	18.52
		25	25	20.00	18.53	18.30	18.19
		50	0	20.00	18.29	18.27	18.20
	16QAM	1	0	20.00	18.49	18.65	18.95
		1	25	20.00	19.39	19.03	19.54
		1	49	20.00	18.80	18.47	18.85
		25	0	19.00	17.65	17.76	17.98
		25	13	19.00	17.88	17.82	18.04
		25	25	19.00	17.80	17.68	17.82
		50	0	19.00	17.65	17.65	17.86

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	21.00	19.57	19.81	19.85
		1	38	21.00	20.06	19.78	20.17
		1	74	21.00	19.63	19.29	19.18
		36	0	20.00	18.30	18.31	18.25
		36	18	20.00	18.45	18.40	18.25
		36	39	20.00	18.36	18.18	18.09
		75	0	20.00	18.29	18.20	18.19
	16QAM	1	0	20.00	18.80	19.09	19.08
		1	38	20.00	19.32	19.04	19.59
		1	74	20.00	18.75	18.65	18.73
		36	0	19.00	17.73	17.75	17.94
		36	18	19.00	17.87	17.83	17.92
		36	39	19.00	17.78	17.60	17.76
		75	0	19.00	17.66	17.61	17.84
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	21.00	19.56	19.63	19.66
		1	50	21.00	19.83	19.72	19.99
		1	99	21.00	19.51	19.52	19.28
		50	0	20.00	18.19	18.20	18.58
		50	25	20.00	18.26	18.05	18.42
		50	50	20.00	18.31	18.16	18.28
		100	0	20.00	18.26	18.14	18.41
	16QAM	1	0	20.00	18.72	19.05	19.19
		1	50	20.00	19.16	19.06	19.25
		1	99	20.00	18.81	18.96	18.86
		50	0	19.00	17.63	17.67	18.10
		50	25	19.00	17.69	17.50	17.90
		50	50	19.00	17.75	17.76	17.79
		100	0	19.00	17.68	17.80	17.87

Table 111: Conducted power measurement results of LTE Band XLI(Second antenna)

After Wi-Fi on function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	19.50	18.07	18.06	18.19
		1	13	19.50	18.81	18.61	18.87
		1	24	19.50	18.33	18.09	18.12
		12	0	18.50	17.01	17.08	17.05
		12	6	18.50	17.14	17.23	17.27
		12	13	18.50	17.06	17.07	17.05
		25	0	18.50	17.03	17.99	17.04
	16QAM	1	0	19.00	17.34	17.52	17.41
		1	13	19.00	18.28	18.12	18.09
		1	24	19.00	17.80	17.57	17.35
		12	0	18.00	16.40	16.58	16.84
		12	6	18.00	16.75	16.83	17.05
		12	13	18.00	16.68	16.59	16.82
		25	0	18.00	16.47	16.55	16.71
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	19.50	18.03	18.05	18.34
		1	25	19.50	18.70	18.63	18.95
		1	49	19.50	18.19	18.15	18.12
		25	0	18.50	16.52	16.79	16.96
		25	13	18.50	16.77	16.87	17.04
		25	25	18.50	16.75	16.79	16.86
		50	0	18.50	16.57	16.72	16.84
	16QAM	1	0	19.00	17.08	17.41	17.19
		1	25	19.00	17.91	17.89	17.79
		1	49	19.00	17.46	17.29	17.01
		25	0	18.00	16.15	16.20	16.41
		25	13	18.00	16.43	16.28	16.63
		25	25	18.00	16.41	16.19	16.43
		50	0	18.00	16.25	16.14	16.42

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	19.50	18.24	18.51	18.48
		1	38	19.50	18.87	18.56	18.75
		1	74	19.50	18.44	18.14	18.88
		36	0	18.50	16.83	16.77	16.86
		36	18	18.50	17.03	16.88	16.86
		36	39	18.50	17.04	16.72	16.75
		75	0	18.50	16.89	16.69	16.81
	16QAM	1	0	19.00	17.33	17.69	17.55
		1	38	19.00	17.95	17.74	17.80
		1	74	19.00	17.53	17.35	17.07
		36	0	18.00	16.35	16.23	16.48
		36	18	18.00	16.54	16.33	16.49
		36	39	18.00	16.55	16.19	16.36
		75	0	18.00	16.34	16.12	16.40
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	19.50	18.00	18.29	18.46
		1	50	19.50	18.61	18.33	18.49
		1	99	19.50	18.33	18.39	18.20
		50	0	18.50	16.77	16.67	17.13
		50	25	18.50	16.92	16.53	16.80
		50	50	18.50	17.07	16.74	16.84
		100	0	18.50	16.94	16.66	16.94
	16QAM	1	0	19.00	17.54	17.43	17.80
		1	50	19.00	18.14	17.45	17.76
		1	99	19.00	17.90	17.57	17.53
		50	0	18.00	16.22	16.15	16.56
		50	25	18.00	16.37	16.01	16.39
		50	50	18.00	16.53	16.21	16.27
		100	0	18.00	16.39	16.12	16.42

Table 112: Conducted power measurement results of LTE Band XLI(Second antenna)

After hotspot function work,:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	21.00	19.55	19.50	19.62
		1	13	21.00	20.26	20.03	20.58
		1	24	21.00	19.72	19.52	19.70
		12	0	20.00	18.59	18.55	18.70
		12	6	20.00	18.70	18.79	18.91
		12	13	20.00	18.61	18.51	18.67
		25	0	20.00	18.58	18.57	18.68
	16QAM	1	0	20.00	18.59	18.63	19.00
		1	13	20.00	19.49	19.17	19.65
		1	24	20.00	18.99	18.62	18.86
		12	0	19.00	18.01	18.28	18.03
		12	6	19.00	18.32	18.52	18.24
		12	13	19.00	18.23	18.25	17.99
		25	0	19.00	18.03	18.05	18.04
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	21.00	19.58	19.68	19.71
		1	25	21.00	20.21	20.06	20.36
		1	49	21.00	19.73	19.55	19.52
		25	0	20.00	18.59	18.56	18.55
		25	13	20.00	18.50	18.53	18.52
		25	25	20.00	18.53	18.30	18.19
		50	0	20.00	18.29	18.27	18.20
	16QAM	1	0	20.00	18.49	18.65	18.95
		1	25	20.00	19.39	19.03	19.54
		1	49	20.00	18.80	18.47	18.85
		25	0	19.00	17.65	17.76	17.98
		25	13	19.00	17.88	17.82	18.04
		25	25	19.00	17.80	17.68	17.82
		50	0	19.00	17.65	17.65	17.86

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	21.00	19.57	19.81	19.85
		1	38	21.00	20.06	19.78	20.17
		1	74	21.00	19.63	19.29	19.18
		36	0	20.00	18.30	18.31	18.25
		36	18	20.00	18.45	18.40	18.25
		36	39	20.00	18.36	18.18	18.09
		75	0	20.00	18.29	18.20	18.19
	16QAM	1	0	20.00	18.80	19.09	19.08
		1	38	20.00	19.32	19.04	19.59
		1	74	20.00	18.75	18.65	18.73
		36	0	19.00	17.73	17.75	17.94
		36	18	19.00	17.87	17.83	17.92
		36	39	19.00	17.78	17.60	17.76
		75	0	19.00	17.66	17.61	17.84
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	21.00	19.56	19.63	19.66
		1	50	21.00	19.83	19.72	19.99
		1	99	21.00	19.51	19.52	19.28
		50	0	20.00	18.19	18.20	18.58
		50	25	20.00	18.26	18.05	18.42
		50	50	20.00	18.31	18.16	18.28
		100	0	20.00	18.26	18.14	18.41
	16QAM	1	0	20.00	18.72	19.05	19.19
		1	50	20.00	19.16	19.06	19.25
		1	99	20.00	18.81	18.96	18.86
		50	0	19.00	17.63	17.67	18.10
		50	25	19.00	17.69	17.50	17.90
		50	50	19.00	17.75	17.76	17.79
		100	0	19.00	17.68	17.80	17.87

Table 113: Conducted power measurement results of LTE Band XLI(Second antenna)

After hotspot function work, Modem0 Synchronous transmission with Modem1:

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40265CH	40740CH	41215CH
5MHz	QPSK	1	0	20.50	18.60	18.67	18.84
		1	13	20.50	19.38	19.25	19.76
		1	24	20.50	18.80	18.64	18.85
		12	0	19.50	17.64	17.75	17.78
		12	6	19.50	17.82	17.97	18.06
		12	13	19.50	17.59	17.63	17.85
		25	0	19.50	17.63	17.77	17.76
	16QAM	1	0	19.50	17.71	17.81	18.15
		1	13	19.50	18.47	18.29	18.83
		1	24	19.50	18.04	17.79	18.08
		12	0	18.50	17.13	17.50	17.21
		12	6	18.50	17.40	17.64	17.39
		12	13	18.50	17.43	17.50	17.19
		25	0	18.50	17.13	17.30	17.19
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40290CH	40740CH	41190CH
10MHz	QPSK	1	0	20.50	18.63	18.85	18.66
		1	25	20.50	19.33	19.28	19.54
		1	49	20.50	18.81	18.67	18.67
		25	0	19.50	17.64	17.76	17.63
		25	13	19.50	17.62	17.71	17.67
		25	25	19.50	17.51	17.62	17.57
		50	0	19.50	17.54	17.67	17.58
	16QAM	1	0	19.50	17.61	17.83	18.10
		1	25	19.50	18.37	18.15	18.72
		1	49	19.50	17.85	17.64	18.07
		25	0	18.50	16.77	16.98	17.16
		25	13	18.50	16.96	16.94	17.19
		25	25	18.50	17.00	16.93	17.02
		50	0	18.50	16.75	16.90	17.01

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40315CH	40740CH	41165CH
15MHz	QPSK	1	0	20.50	18.69	18.99	19.00
		1	38	20.50	19.04	18.90	19.12
		1	74	20.50	18.78	18.79	18.66
		36	0	19.50	17.52	17.59	17.52
		36	18	19.50	17.53	17.52	17.53
		36	39	19.50	17.61	17.55	17.51
		75	0	19.50	17.61	17.62	17.57
	16QAM	1	0	19.50	17.92	18.27	18.23
		1	38	19.50	18.30	18.16	18.77
		1	74	19.50	17.80	17.82	17.95
		36	0	18.50	16.85	16.97	17.12
		36	18	18.50	16.95	16.95	17.07
		36	39	18.50	16.98	16.85	16.96
		75	0	18.50	16.76	16.86	16.99
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					40340CH	40740CH	41140CH
20MHz	QPSK	1	0	20.50	18.64	18.75	18.81
		1	50	20.50	18.88	18.92	19.19
		1	99	20.50	18.63	18.70	18.53
		50	0	19.50	17.54	17.60	17.66
		50	25	19.50	17.58	17.53	17.57
		50	50	19.50	17.52	17.51	17.66
		100	0	19.50	17.54	17.56	17.59
	16QAM	1	0	19.50	17.77	18.22	18.41
		1	50	19.50	18.28	18.28	18.43
		1	99	19.50	17.93	18.14	18.01
		50	0	18.50	16.61	16.79	17.28
		50	25	18.50	16.74	16.67	17.12
		50	50	18.50	16.87	16.98	16.97
		100	0	18.50	16.78	17.05	17.02

Table 114: Conducted power measurement results of LTE Band XLI(Second antenna)

### 7.2.12 Conducted power measurements of Downlink LTE CA

In this section, the following conducted power measurement results of downlink LTE carrier aggregation are provided to quantify downlink only carrier aggregation SAR test exclusion per KDB 941225 D05A v01r01.

Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

Power test equipment: a R&S Radio Communication Tester CMW500 was used.

Initial Conditions						
Test Environment as specified in TS 36.508[7] subclause 4.1				NC[, TL/VL, TL/VH, TH/VL, TH/VH]		
Test Frequencies as specified in TS36.508 [7] subclause 4.3.1 for different CA bandwidth classes.				A: Mid range for PCC and SCC		
Test CC Combination setting ( $N_{RB\_agg}$ ) as specified in subclause 5.4.2A.1 for the CA Configuration				Lowest $N_{RB\_agg}$ Highest $N_{RB\_agg}$		
Test Parameters for CA Configurations						
CA Configuration / $N_{RB\_agg}$		DL Allocation	CC MOD	UL Allocation		
PCC $N_{RB}$	SCCs $N_{RB}$	PCC & SCC RB allocation		$N_{RB\_alloc}$	PCC RB allocations ( $L_{CRB}$ @ $RB_{start}$ )	
6	25	N/A for this test	QPSK	5	P_5@0	-
15	25		QPSK	4	P_4@0	-
25	50		QPSK	8	P_8@0	-
50	75		QPSK	12	P_12@0	-
75	100		QPSK	16	P_16@0	-
100	75		QPSK	18	P_18@0	-
Note 1: CA Configuration Test CC Combination settings are checked separately for each CA Configuration, which applicable aggregated channel bandwidths are specified in Table 5.4.2A.1-1						



Table 115: Conducted power measurement setup of LTE CA per 3GPP TS 36.521-1 V10.5.0

1) The conducted power measurement results of downlink LTE CA are as below(Main antenna):

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
15M+15M	QPSK	1	0	75	0	21375CH	3375CH + 3225CH	22.35	23.5	Inactive
								22.30		Active
20M+20M	QPSK	1	50	100	0	21350CH	3350CH + 3152CH	22.08	23.5	Inactive
								22.05		Active

Table 116: Conducted power measurement results of LTE CA- Band 7(PCC) + Band 7(SCC)

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
15M+15M	QPSK	1	0	75	0	38175CH	38175CH + 38025CH	22.90	24	Inactive
								23.07		Active
20M+20M	QPSK	1	0	100	0	38150CH	38150CH + 37952CH	22.97	24	Inactive
								23.04		Active

Table 117: Conducted power measurement results of LTE CA- Band 38(PCC) + Band 38(SCC)

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
10M+20M	QPSK	1	25	50	0	41190CH	41190CH + 41046CH	22.94	24	Inactive
								22.95		Active
15M+15M	QPSK	1	38	75	0	41165CH	41165CH + 41015CH	23.10	24	Inactive
								23.12		Active
15M+20M	QPSK	1	38	75	0	41165CH	41165CH + 40994CH	23.10	24	Inactive
								23.16		Active
20M+20M	QPSK	1	50	100	0	41140CH	41140CH + 40942CH	22.76	24	Inactive
								22.77		Active

Table 118: Conducted power measurement results of LTE CA- Band 41(PCC) + Band 41(SCC)

Per KDB 941225 D05Av01r01, SAR testing for downlink LTE-CA can be excluded.

2) The conducted power measurement results of downlink LTE CA are as below(Second antenna):

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
15M+15M	QPSK	1	0	75	0	21375CH	3375CH + 3225CH	22.34	23.5	Inactive
								22.30		Active
20M+20M	QPSK	1	50	100	0	21350CH	2560CH + 3152CH	22.08	23.5	Inactive
								22.05		Active

Table 119: Conducted power measurement results of LTE CA- Band 7(PCC) + Band 7(SCC)

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
15M+15M	QPSK	1	0	75	0	38175CH	38175CH + 38025CH	22.98	23.5	Inactive
								22.92		Active
20M+20M	QPSK	1	50	100	0	38150CH	38150CH + 37952CH	22.95	23.5	Inactive
								22.94		Active

Table 120: Conducted power measurement results of LTE CA- Band 38(PCC) + Band 38(SCC)

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
10M+20M	QPSK	1	25	50	0	41190CH	41190CH + 41046CH	22.79	24	Inactive
								22.75		Active
15M+15M	QPSK	1	38	75	0	41165CH	41165CH + 41015CH	22.98	24	Inactive
								22.92		Active
15M+20M	QPSK	1	38	75	0	41165CH	41165CH + 40994CH	22.98	24	Inactive
								22.96		Active
20M+20M	QPSK	1	50	100	0	41140CH	41140CH + 40942CH	22.58	24	Inactive
								22.57		Active

Table 121: Conducted power measurement results of LTE CA- Band 41(PCC) + Band 41(SCC)

Per KDB 941225 D05Av01r01, SAR testing for downlink LTE-CA can be excluded.

### 7.2.13 Conducted power measurements of WiFi 2.4G

The output power of WiFi antenna is as following:

Wi-Fi 2450MHz	Channel	Tune- up	Average Power (dBm) for Data Rates (Mbps)							
			1	2	5.5	11	/	/	/	/
802.11b	1	16.00	15.24	15.23	15.34	15.35	/	/	/	/
	6	16.00	15.13	15.16	15.24	15.03	/	/	/	/
	11	16.00	15.78	15.75	15.68	15.47	/	/	/	/
802.11g	Channel	Tune- up	6	9	12	18	24	36	48	54
	1	15.00	14.45	14.25	14.16	14.03	13.86	13.63	13.24	13.22
	6	15.00	14.37	14.14	14.03	13.93	13.87	13.55	13.15	13.12
	11	15.00	14.81	14.53	14.42	14.39	14.28	13.97	13.54	13.45
802.11n (HT20)	Channel	Tune- up	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	1	13.00	12.35	12.14	11.92	11.82	11.55	11.2	11.12	11.04
	6	13.00	12.62	12.15	11.85	11.93	11.62	11.25	11.11	11.09
	11	13.00	12.61	12.51	12.45	12.24	11.92	11.52	11.55	11.48
802.11n (HT40)	Channel	Tune- up	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	3	13.00	12.30	12.03	11.72	11.36	10.80	10.45	10.28	10.21
	6	13.00	12.75	12.40	12.12	11.75	11.25	10.79	10.66	10.66
	9	13.00	12.40	12.52	12.21	11.85	11.34	11.92	10.73	10.30

Table 122: Conducted power measurement results of WiFi 2.4G.

Note:

- 1) The Average conducted power of WiFi is measured with RMS detector.
- 2) Per KDB248227, for WiFi 2.4GHz, highest average RF output power channel for the lowest data rate of 802.11b mode was selected for SAR evaluation. SAR test at higher data rates and higher order modulations (including 802.11g/n) were not required since the maximum average output power for each of these configurations is not more than 1/4dB higher than the tested channel for the lowest data rate of 802.11b mode.

Wi-Fi 2450MHz	Channel	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			1	2	5.5	11	/	/	/	/
802.11b	1	13.50	13.02	13.04	13.15	13.01	/	/	/	/
	6	13.50	12.92	12.96	13.01	12.85	/	/	/	/
	11	13.50	13.40	13.48	13.47	13.45	/	/	/	/
802.11g	Channel	Tune-up	6	9	12	18	24	36	48	54
	1	12.50	11.92	11.62	11.55	11.41	11.29	10.99	10.55	10.51
	6	12.50	11.89	11.66	11.48	11.31	11.23	10.9	10.51	10.49
	11	12.50	12.42	12.16	12.03	11.99	11.95	11.66	11.2	11.23
802.11n (HT20)	Channel	Tune-up	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	1	12.00	11.35	10.84	10.48	10.61	10.34	9.9	9.82	9.8
	6	12.00	11.4	10.92	10.56	10.57	10.23	9.83	9.67	9.68
	11	12.00	11.65	11.23	10.92	10.96	10.7	10.39	10.2	10.13
802.11n (HT40)	Channel	Tune-up	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	3	12.00	11.32	10.94	10.71	10.27	9.76	9.36	9.26	9.23
	6	12.00	11.72	11.38	11.04	10.69	10.17	9.69	9.56	9.50
	9	12.00	11.38	11.05	10.75	10.41	9.89	9.49	9.29	9.34

Table 123: Conducted power measurement results of WiFi 2.4G(WiFi work on, Modem0 also work on)

Note:

- 1) The Average conducted power of WiFi is measured with RMS detector.
- 2) Per KDB248227, for WiFi 2.4GHz, highest average RF output power channel for the lowest data rate of 802.11b mode was selected for SAR evaluation. SAR test at higher data rates and higher order modulations (including 802.11g/n) were not required since the maximum average output power for each of these configurations is not more than 1/4dB higher than the tested channel for the lowest data rate of 802.11b mode.

Wi-Fi 2450MHz	Channel	Tune-up	Average Power (dBm) for Data Rates (Mbps)							
			1	2	5.5	11	/	/	/	/
802.11b	1	12.00	11.51	11.41	11.27	11.01	/	/	/	/
	6	12.00	11.45	11.41	11.39	11.25	/	/	/	/
	11	12.00	11.98	11.88	11.75	11.59	/	/	/	/
802.11g	Channel	Tune-up	6	9	12	18	24	36	48	54
	1	11.00	10.40	10.26	10.17	10.02	9.86	9.61	9.24	9.28
	6	11.00	10.35	10.13	10.08	10.00	9.90	9.66	9.31	9.32
	11	11.00	10.98	10.80	10.71	10.58	10.45	10.28	9.91	9.94
802.11n (HT20)	Channel	Tune-up	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	1	11.00	10.43	10.26	10.15	9.92	9.63	9.21	9.22	9.19
	6	11.00	10.52	10.35	10.33	10.17	9.88	9.41	9.41	9.41
	11	11.00	10.75	10.59	10.51	10.33	10.03	9.62	9.58	9.54
802.11n (HT40)	Channel	Tune-up	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	3	11.00	10.38	10.55	10.23	9.88	9.44	9.99	8.76	8.39
	6	11.00	10.75	10.91	10.63	10.28	9.73	10.35	9.22	8.73
	9	11.00	10.42	10.55	10.23	9.87	9.37	9.95	8.82	8.39

Table 124: Conducted power measurement results of WiFi 2.4G(After WiFi work on, Modem0 Synchronous transmission with Modem1)

Note:

- 1) The Average conducted power of WiFi is measured with RMS detector.
- 2) Per KDB248227, for WiFi 2.4GHz, highest average RF output power channel for the lowest data rate of 802.11b mode was selected for SAR evaluation. SAR test at higher data rates and higher order modulations (including 802.11g/n) were not required since the maximum average output power for each of these configurations is not more than 1/4dB higher than the tested channel for the lowest data rate of 802.11b mode.

### 7.2.14 Conducted power measurements of BT

The output power of BT antenna is as following:

BT 2450	Tune-up	Average Conducted Power (dBm)		
		0CH	39CH	78CH
DH5	10.00	8.52	8.75	8.36
2DH5	10.00	5.84	5.45	5.13
3DH5	10.00	5.33	5.42	5.35

BT 2450	Tune-up	Average Conducted Power (dBm)		
		0CH	19CH	39CH
BT 4.1	10.00	6.35	7.82	5.75

Table 125: Conducted power measurement results of BT.

Note: The conducted power of BT is measured with RMS detector.

### 7.3 SAR measurement Results

#### General Notes:

- 1) Per KDB447498 D01v05r02, all SAR measurement results are scaled to the maximum tune-up tolerance limit to demonstrate SAR compliance.
- 2) Per KDB447498 D01v05r02, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:  $\leq 0.8\text{W/kg}$  for 1-g or  $2.0\text{W/kg}$  for 10-g respectively, when the transmission band is  $\leq 100\text{MHz}$ . When the maximum output power variation across the required test channels is  $> \frac{1}{2}$  dB, instead of the middle channel, the highest output power channel must be used.
- 3) Per KDB865664 D01v01r03, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8\text{W/Kg}$ ; if the deviation among the repeated measurement is  $\leq 20\%$ , and the measured SAR  $< 1.45\text{W/Kg}$ , only one repeated measurement is required.
- 4) Per KDB865664 D02v01r01, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is  $> 1.5\text{ W/kg}$ , or  $> 7.0\text{ W/kg}$  for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing(Refer to the blue SAR test results in the tables of Section 7.3 and appendix B for detailed SAR plots).
- 5) Per KDB941225 D06v02, the DUT Dimension is bigger than  $9\text{ cm} \times 5\text{ cm}$ , so  $10\text{mm}$  is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than  $2.5\text{cm}$ , such position does not need to be tested.
- 6) Per KDB648474 D04v01r02, SAR is evaluated without a headset connected to the device. When the standalone reported body-worn SAR is  $\leq 1.2\text{ W/kg}$ , no additional SAR evaluations using a headset are required.
- 7) For SAR test, the Main Antenna and Second Antenna are set to the MAX transmit power level respectively and test the SAR respectively in all applicable RF exposure conditions. Some AT commands are supplied to fix the operation state and choose the antenna, and some test scripts are supplied to fix the modem state so that only one TX antenna and one modem is chosen and tested at a time. All independent antennas and modems are completely covered by the appropriate SAR measurements and all simultaneous transmission possibilities are fully considered.
- 8) Additional SAR tests in simultaneous transmission fixed power reduction scenario are also tested in some frequency bands and test positions, which are used to ensure simultaneous transmission SAR test exclusion. (Refer to Section 7.4.3 for details). The standalone SAR compliance still uses the SAR results tested at the maximum output power level without any power reduction.

#### GSM Notes:

- 1) Per KDB941225 D01v03, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
- 2) The device does not support DTM function.
- 3) For head and body-worn exposure conditions, GPRS and EDGE SAR are also tested considering the simultaneous transmission conditions of main antenna and second antenna(Refer to Section 7.3 for details).

**UMTS Notes:**

1) Per KDB941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

**LTE Notes:**

1) The LTE test configurations are determined according to KDB941225 D05 SAR for LTE Devices v02r03. The general test procedures used for SAR testing can be found in Section 6.3.

2) A-MPR was disabled for all SAR test by setting NS\_01 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI)

3) The device only supports downlink Rel. 10 LTE-CA. Per KDB 941225 D05Av01r01, the conducted power measurement results of downlink LTE-CA can satisfy the SAR test exclusion requirements, so SAR testing for downlink LTE-CA can be excluded.

**WLAN Notes:**

Per KDB248227D01v01r02 and October 2012/April 2013 FCC/TCB workshop meeting notes:

1) For WiFi 2.4GHz, highest average RF output power channel for the lowest data rate of 802.11b mode was selected for SAR evaluation. SAR test at higher data rates and higher order modulations (including 802.11g/n) were not required since the maximum average output power for each of these configurations is not more than 1/4dB higher than the tested channel for the lowest data rate of 802.11b mode.

**7.3.1 SAR measurement Result of GSM850 for Modem0**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	190/836.6	GSM	0.129	0.096	0.020	32.55	33.50	0.161	21.4°C
Left Hand Tilted 15°	190/836.6	GSM	0.083	0.062	0.010	32.55	33.50	0.103	21.4°C
Right Hand Touched	251/848.8	GSM	0.210	0.159	0.050	32.80	33.50	0.247	21.4°C
Right Hand Touched	190/836.6	GSM	0.158	0.120	0.090	32.55	33.50	0.197	21.4°C
Right Hand Touched	128/824.2	GSM	0.112	0.086	0.090	32.65	33.50	0.136	21.4°C
Right Hand Tilted 15°	190/836.6	GSM	0.087	0.067	0.020	32.55	33.50	0.109	21.4°C
Left Hand Touched	190/836.6	GPRS 3TS	0.123	0.092	0.080	28.25	29.00	0.146	21.4°C
Left Hand Tilted 15°	190/836.6	GPRS 3TS	0.084	0.060	0.080	28.25	29.00	0.100	21.4°C
Right Hand Touched	190/836.6	GPRS 3TS	0.158	0.120	0.040	28.25	29.00	0.188	21.4°C
Right Hand Tilted 15°	190/836.6	GPRS 3TS	0.084	0.062	0.000	28.25	29.00	0.099	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	251/848.8	GSM	0.197	0.150	-0.010	32.80	33.50	0.231	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	251/848.8	GSM	0.165	0.125	0.060	32.80	33.50	0.194	21.4°C

Table 126: Head SAR test results of GSM850(Main antenna)



Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	251/848.8	GSM	0.727	0.373	0.020	32.86	33.00	0.751	21.4°C
Left Hand Touched	190/836.6	GSM	0.836	0.430	0.000	32.62	33.00	0.912	21.4°C
Left Hand Touched	128/824.2	GSM	0.925	0.479	-0.060	32.77	33.00	0.975	21.4°C
Left Hand Tilted 15°	251/848.8	GSM	0.678	0.334	-0.010	32.86	33.00	0.700	21.4°C
Left Hand Tilted 15°	190/836.6	GSM	0.817	0.404	-0.070	32.62	33.00	0.892	21.4°C
Left Hand Tilted 15°	128/824.2	GSM	0.895	0.445	0.030	32.77	33.00	0.944	21.4°C
Right Hand Touched	251/848.8	GSM	0.742	0.371	0.010	32.86	33.00	0.766	21.4°C
Right Hand Touched	190/836.6	GSM	0.949	0.475	-0.070	32.62	33.00	1.036	21.4°C
Right Hand Touched	128/824.2	GSM	1.180	0.593	-0.010	32.77	33.00	1.244	21.4°C
Right Hand Tilted 15°	251/848.8	GSM	0.734	0.339	-0.020	32.86	33.00	0.758	21.4°C
Right Hand Tilted 15°	190/836.6	GSM	0.936	0.431	-0.060	32.62	33.00	1.022	21.4°C
Right Hand Tilted 15°	128/824.2	GSM	1.150	0.527	0.070	32.77	33.00	1.213	21.4°C
Left Hand Touched	251/848.8	GPRS 3TS	0.775	0.397	0.050	28.45	28.50	0.784	21.4°C
Left Hand Touched	190/836.6	GPRS 3TS	0.909	0.464	-0.060	28.29	28.50	0.954	21.4°C
Left Hand Touched	128/824.2	GPRS 3TS	1.020	0.518	-0.050	28.31	28.50	1.066	21.4°C
Left Hand Tilted 15°	251/848.8	GPRS 3TS	0.717	0.350	-0.050	28.45	28.50	0.725	21.4°C
Left Hand Tilted 15°	190/836.6	GPRS 3TS	0.815	0.399	-0.050	28.29	28.50	0.855	21.4°C
Left Hand Tilted 15°	128/824.2	GPRS 3TS	0.915	0.450	0.000	28.31	28.50	0.956	21.4°C
Right Hand Touched	251/848.8	GPRS 3TS	0.785	0.401	-0.010	28.45	28.50	0.794	21.4°C
Right Hand Touched	190/836.6	GPRS 3TS	1.010	0.507	-0.060	28.29	28.50	1.060	21.4°C
Right Hand Touched	128/824.2	GPRS 3TS	1.170	0.604	-0.020	28.31	28.50	1.222	21.4°C
Right Hand Tilted 15°	251/848.8	GPRS 3TS	0.789	0.373	-0.060	28.45	28.50	0.798	21.4°C
Right Hand Tilted 15°	190/836.6	GPRS 3TS	0.987	0.465	0.050	28.29	28.50	1.036	21.4°C
Right Hand Tilted 15°	128/824.2	GPRS 3TS	1.170	0.560	-0.060	28.31	28.50	1.222	21.4°C
Tested at the worst position with SIM2									



Right Hand Touched	128/824.2	GSM	1.180	0.586	0.070	32.77	33.00	1.244	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	128/824.2	GSM	1.240	0.608	-0.030	32.77	33.00	1.307	21.4°C
Right Hand Touched-repeated*	128/824.2	GSM	1.280	0.624	0.070	32.77	33.00	1.350	21.4°C
Additional SAR test(WiFi on, Modem1 Synchronous transmission with Modem0)									
Left Hand Touched	128/824.2	GSM	0.482	0.247	-0.160	29.79	30.00	0.506	21.4°C
Left Hand Touched	128/824.2	GPRS 3TS	0.707	0.363	-0.140	25.48	25.50	0.710	21.4°C
Left Hand Tilted 15°	128/824.2	GSM	0.453	0.224	0.080	29.79	30.00	0.475	21.4°C
Left Hand Tilted 15°	128/824.2	GPRS 3TS	0.648	0.318	-0.100	25.48	25.50	0.651	21.4°C
Right Hand Touched	128/824.2	GSM	0.640	0.323	0.190	29.79	30.00	0.672	21.4°C
Right Hand Touched	128/824.2	GPRS 3TS	0.871	0.446	-0.050	25.48	25.50	0.875	21.4°C

Table 127: Head SAR test results of GSM850(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664.

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	190/836.6	GSM	0.168	0.130	-0.180	32.55	33.50	0.209	21.4°C
Back Side	190/836.6	GSM	0.226	0.175	-0.010	32.55	33.50	0.281	21.4°C
Front Side	190/836.6	GPRS 3TS	0.218	0.167	0.020	28.25	29.00	0.259	21.4°C
Back Side	190/836.6	GPRS 3TS	0.286	0.221	0.000	28.25	29.00	0.340	21.4°C
Tested at the worst position with SIM2									
Back Side	190/836.6	GPRS 3TS	0.205	0.159	-0.030	28.25	29.00	0.244	21.4°C
Tested at the worst position with battery 2#									
Back Side	190/836.6	GPRS 3TS	0.151	0.118	-0.010	28.25	29.00	0.179	21.4°C

Table 128: Body-Worn SAR test results of GSM850(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	190/836.6	GSM	0.152	0.090	-0.100	32.62	33.00	0.166	21.4°C
Back Side	190/836.6	GSM	0.177	0.136	-0.040	32.62	33.00	0.193	21.4°C
Front Side	190/836.6	GPRS 3TS	0.202	0.121	0.050	28.29	28.50	0.212	21.4°C
Back Side	190/836.6	GPRS 3TS	0.212	0.164	-0.140	28.29	28.50	0.223	21.4°C
Tested at the worst position with SIM2									
Back Side	190/836.6	GPRS 3TS	0.263	0.203	0.010	28.29	28.50	0.276	21.4°C
Tested at the worst position with battery 2#									
Back Side	190/836.6	GPRS 3TS	0.239	0.183	-0.080	28.29	28.50	0.251	21.4°C

Table 129: Body-Worn SAR test results of GSM850(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	190/836.6	GPRS 3TS	0.222	0.170	-0.070	28.25	29.00	0.264	21.4°C
Back Side	190/836.6	GPRS 3TS	0.293	0.218	-0.030	28.25	29.00	0.348	21.4°C
Left Side	190/836.6	GPRS 3TS	0.186	0.128	0.000	28.25	29.00	0.221	21.4°C
Right Side	190/836.6	GPRS 3TS	0.395	0.271	0.020	28.25	29.00	0.469	21.4°C
Bottom Side	190/836.6	GPRS 3TS	0.144	0.074	-0.080	28.25	29.00	0.171	21.4°C
Tested at the worst position with SIM2									
Right Side	190/836.6	GPRS 3TS	0.409	0.282	-0.020	28.25	29.00	0.486	21.4°C
Tested at the worst position with battery 2#									
Right Side	190/836.6	GPRS 3TS	0.308	0.212	0.030	28.25	29.00	0.366	21.4°C

Table 130: Hotspot SAR test results of GSM850(Main antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	190/836.6	GPRS 3TS	0.479	0.265	-0.020	28.29	28.50	0.503	21.4°C
Back Side	190/836.6	GPRS 3TS	0.445	0.246	-0.080	28.29	28.50	0.467	21.4°C
Left Side	190/836.6	GPRS 3TS	0.394	0.268	-0.080	28.29	28.50	0.414	21.4°C
Right Side	190/836.6	GPRS 3TS	0.138	0.093	-0.170	28.29	28.50	0.145	21.4°C
Top Side	190/836.6	GPRS 3TS	0.423	0.205	-0.040	28.29	28.50	0.444	21.4°C
Tested at the worst position with SIM2									
Front Side	190/836.6	GPRS 3TS	0.417	0.232	0.010	28.29	28.50	0.438	21.4°C
Tested at the worst position with battery 2#									
Front Side	190/836.6	GPRS 3TS	0.485	0.271	0.040	28.29	28.50	0.509	21.4°C

Table 131: Hotspot SAR test results of GSM850(Second antenna)

**7.3.2 SAR measurement Result of GSM850 for Modem1**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Left Hand Touched	190/836.6	GSM	0.110	0.082	-0.070	32.68	33.00	0.118	21.4°C
Left Hand Tilted 15°	190/836.6	GSM	0.075	0.056	0.000	32.68	33.00	0.080	21.4°C
Right Hand Touched	251/848.8	GSM	0.165	0.126	0.030	32.81	33.00	0.172	21.4°C
Right Hand Touched	190/836.6	GSM	0.141	0.106	0.020	32.68	33.00	0.152	21.4°C
Right Hand Touched	128/824.2	GSM	0.144	0.111	0.020	32.63	33.00	0.157	21.4°C
Right Hand Tilted 15°	190/836.6	GSM	0.079	0.061	-0.040	32.68	33.00	0.085	21.4°C
Left Hand Touched	190/836.6	GPRS 3TS	0.115	0.085	-0.010	28.09	28.50	0.126	21.4°C
Left Hand Tilted 15°	190/836.6	GPRS 3TS	0.080	0.058	0.180	28.09	28.50	0.088	21.4°C
Right Hand Touched	251/848.8	GPRS 3TS	0.148	0.111	0.090	28.15	28.50	0.160	21.4°C
Right Hand Touched	190/836.6	GPRS 3TS	0.140	0.106	-0.150	28.09	28.50	0.154	21.4°C
Right Hand Touched	128/824.2	GPRS 3TS	0.143	0.108	-0.030	27.90	28.50	0.164	21.4°C
Right Hand Tilted 15°	190/836.6	GPRS 3TS	0.087	0.067	0.000	28.09	28.50	0.096	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Right Hand Touched	251/848.8	GSM	0.100	0.076	0.050	32.81	33.00	0.104	21.4°C

Table 132: Head SAR test results of GSM850(Main antenna)



Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Left Hand Touched	251/848.8	GSM	0.988	0.514	-0.030	32.68	33.00	1.064	21.4°C
Left Hand Touched	190/836.6	GSM	0.985	0.514	0.150	32.73	33.00	1.048	21.4°C
Left Hand Touched	128/824.2	GSM	0.976	0.509	0.010	32.50	33.00	1.095	21.4°C
Left Hand Tilted 15°	251/848.8	GSM	0.956	0.471	-0.010	32.68	33.00	1.029	21.4°C
Left Hand Tilted 15°	190/836.6	GSM	0.973	0.480	0.070	32.73	33.00	1.035	21.4°C
Left Hand Tilted 15°	128/824.2	GSM	0.950	0.470	0.000	32.50	33.00	1.066	21.4°C
Right Hand Touched	251/848.8	GSM	1.260	0.632	-0.010	32.68	33.00	1.356	21.4°C
Right Hand Touched	190/836.6	GSM	1.300	0.651	-0.170	32.73	33.00	1.383	21.4°C
Right Hand Touched	128/824.2	GSM	1.310	0.653	-0.010	32.50	33.00	1.470	21.4°C
Right Hand Touched-repeated*	128/824.2	GSM	1.210	0.618	-0.020	32.50	33.00	1.358	21.4°C
Right Hand Tilted 15°	251/848.8	GSM	1.190	0.530	-0.030	32.68	33.00	1.281	21.4°C
Right Hand Tilted 15°	190/836.6	GSM	1.200	0.542	-0.070	32.73	33.00	1.277	21.4°C
Right Hand Tilted 15°	128/824.2	GSM	1.200	0.545	-0.050	32.50	33.00	1.346	21.4°C
Left Hand Touched	251/848.8	GPRS 3TS	0.820	0.424	-0.030	28.00	28.50	0.920	21.4°C
Left Hand Touched	190/836.6	GPRS 3TS	0.894	0.463	-0.100	27.91	28.50	1.024	21.4°C
Left Hand Touched	128/824.2	GPRS 3TS	0.905	0.470	-0.050	27.68	28.50	1.093	21.4°C
Left Hand Tilted 15°	251/848.8	GPRS 3TS	0.695	0.343	-0.010	28.00	28.50	0.780	21.4°C
Left Hand Tilted 15°	190/836.6	GPRS 3TS	0.758	0.375	-0.010	27.91	28.50	0.868	21.4°C
Left Hand Tilted 15°	128/824.2	GPRS 3TS	0.737	0.367	0.030	27.68	28.50	0.890	21.4°C
Right Hand Touched	251/848.8	GPRS 3TS	0.974	0.494	0.010	28.00	28.50	1.093	21.4°C
Right Hand Touched	190/836.6	GPRS 3TS	1.060	0.537	0.000	27.91	28.50	1.214	21.4°C
Right Hand Touched	128/824.2	GPRS 3TS	1.140	0.585	-0.040	27.68	28.50	1.377	21.4°C
Right Hand Tilted 15°	251/848.8	GPRS 3TS	0.885	0.409	0.010	28.00	28.50	0.993	21.4°C
Right Hand Tilted 15°	190/836.6	GPRS 3TS	0.761	0.449	-0.030	27.91	28.50	0.872	21.4°C

Right Hand Tilted 15°	128/824.2	GPRS 3TS	1.010	0.464	-0.040	27.68	28.50	1.220	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Right Hand Touched	128/824.2	GSM	1.150	0.543	-0.150	32.50	33.00	1.290	21.4°C
Right Hand Touched	190/836.6	GSM	1.340	0.670	-0.100	32.73	33.00	1.426	21.4°C
Right Hand Touched	251/848.8	GSM	1.190	0.595	-0.020	32.68	33.00	1.281	21.4°C
Additional SAR test(Modem1 Synchronous transmission with Modem0)									
Left Hand Touched	128/824.2	GSM	0.505	0.262	-0.120	30.30	31.00	0.593	21.4°C
Left Hand Tilted 15°	128/824.2	GSM	0.468	0.233	-0.070	30.30	31.00	0.550	21.4°C
Right Hand Touched	128/824.2	GSM	0.625	0.324	0.012	30.30	31.00	0.734	21.4°C
Right Hand Tilted 15°	128/824.2	GSM	0.572	0.266	0.090	30.30	31.00	0.672	21.4°C
Additional SAR test(WiFi on function work, Modem0 Synchronous transmission with Modem1)									
Left Hand Touched	128/824.2	GSM	0.412	0.213	0.070	29.45	30.00	0.468	21.4°C
Left Hand Tilted 15°	128/824.2	GSM	0.347	0.172	-0.170	29.45	30.00	0.394	21.4°C
Right Hand Touched	128/824.2	GSM	0.435	0.218	0.050	29.45	30.00	0.494	21.4°C
Right Hand Tilted 15°	128/824.2	GSM	0.419	0.192	0.030	29.45	30.00	0.476	21.4°C

Table 133: Head SAR test results of GSM850(Second antenna)

Note:\* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	190/836.6	GSM	0.162	0.122	0.000	32.68	33.00	0.174	21.4°C
Back Side	190/836.6	GSM	0.220	0.170	-0.050	32.68	33.00	0.237	21.4°C
Front Side	190/836.6	GPRS 3TS	0.191	0.145	-0.080	28.09	28.50	0.210	21.4°C
Back Side	190/836.6	GPRS 3TS	0.244	0.188	-0.040	28.09	28.50	0.268	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Back Side	190/836.6	GSM	0.127	0.095	-0.160	32.68	33.00	0.137	21.4°C

Table 134: Body-Worn SAR test results of GSM850(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	190/836.6	GSM	0.220	0.131	0.040	32.73	33.00	0.234	21.4°C
Back Side	190/836.6	GSM	0.251	0.188	-0.020	32.73	33.00	0.267	21.4°C
Front Side	190/836.6	GPRS 3TS	0.172	0.103	-0.130	27.91	28.50	0.197	21.4°C
Back Side	190/836.6	GPRS 3TS	0.231	0.172	-0.060	27.91	28.50	0.265	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Back Side	190/836.6	GSM	0.239	0.179	0.030	32.73	33.00	0.254	21.4°C

Table 135: Body-Worn SAR test results of GSM850(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	190/836.6	GPRS 3TS	0.238	0.178	-0.020	28.09	28.50	0.262	21.4°C
Back Side	190/836.6	GPRS 3TS	0.361	0.196	0.010	28.09	28.50	0.397	21.4°C
Left Side	190/836.6	GPRS 3TS	0.196	0.131	-0.020	28.09	28.50	0.215	21.4°C
Right Side	190/836.6	GPRS 3TS	0.421	0.285	-0.170	28.09	28.50	0.463	21.4°C
Bottom Side	190/836.6	GPRS 3TS	0.160	0.075	-0.020	28.09	28.50	0.176	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Right Side	190/836.6	GPRS 3TS	0.356	0.242	-0.030	28.09	28.50	0.391	21.4°C

Table 136: Hotspot SAR test results of GSM850(Main antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	190/836.6	GPRS 3TS	0.382	0.213	-0.030	27.91	28.50	0.438	21.4°C
Back Side	190/836.6	GPRS 3TS	0.403	0.220	0.130	27.91	28.50	0.462	21.4°C
Left Side	190/836.6	GPRS 3TS	0.356	0.242	-0.180	27.91	28.50	0.408	21.4°C
Right Side	190/836.6	GPRS 3TS	0.100	0.069	0.150	27.91	28.50	0.115	21.4°C
Top Side	190/836.6	GPRS 3TS	0.399	0.194	-0.150	27.91	28.50	0.457	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Back Side	190/836.6	GPRS 3TS	0.446	0.244	-0.120	27.91	28.50	0.511	21.4°C
Tested at the worst position(Hotspot on,Modem0 Synchronous transmission with Modem1)									
Back Side	190/836.6	GPRS 3TS	0.315	0.178	-0.090	26.02	26.50	0.352	21.4°C

Table 137: Hotspot SAR test results of GSM850(Second antenna)

**7.3.3 SAR measurement Result of GSM1900 for Modem0**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	810/1909.8	GSM	0.294	0.185	-0.120	29.64	30.50	0.358	21.4°C
Left Hand Touched	661/1880	GSM	0.360	0.229	-0.010	29.73	30.50	0.430	21.4°C
Left Hand Touched	512/1850.2	GSM	0.354	0.223	0.030	29.95	30.50	0.402	21.4°C
Left Hand Tilted 15°	661/1880	GSM	0.117	0.069	-0.030	29.73	30.50	0.140	21.4°C
Right Hand Touched	661/1880	GSM	0.153	0.099	-0.060	29.73	30.50	0.183	21.4°C
Right Hand Tilted 15°	661/1880	GSM	0.080	0.046	-0.040	29.73	30.50	0.096	21.4°C
Left Hand Touched	810/1909.8	GPRS 3TS	0.356	0.221	-0.120	25.55	26.00	0.395	21.4°C
Left Hand Touched	661/1880	GPRS 3TS	0.406	0.249	-0.100	25.52	26.00	0.453	21.4°C
Left Hand Touched	512/1850.2	GPRS 3TS	0.442	0.273	-0.120	25.64	26.00	0.480	21.4°C
Left Hand Tilted 15°	661/1880	GPRS 3TS	0.137	0.081	-0.040	25.52	26.00	0.153	21.4°C
Right Hand Touched	661/1880	GPRS 3TS	0.199	0.129	0.070	25.52	26.00	0.222	21.4°C
Right Hand Tilted 15°	661/1880	GPRS 3TS	0.100	0.059	-0.130	25.52	26.00	0.112	21.4°C
Tested at the worst position with SIM2									
Left Hand Touched	512/1850.2	GPRS 3TS	0.458	0.289	-0.150	25.64	26.00	0.498	21.4°C
Tested at the worst position with battery 2#									
Left Hand Touched	512/1850.2	GPRS 3TS	0.498	0.304	-0.080	25.64	26.00	0.541	21.4°C

Table 138: Head SAR test results of GSM1900(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	661/1880	GSM	0.279	0.174	0.080	29.53	30.50	0.349	21.4°C
Left Hand Tilted 15°	661/1880	GSM	0.271	0.153	0.010	29.53	30.50	0.339	21.4°C
Right Hand Touched	810/1909.8	GSM	0.884	0.457	-0.060	29.45	30.50	1.126	21.4°C
Right Hand Touched	661/1880	GSM	0.830	0.442	0.100	29.53	30.50	1.038	21.4°C
Right Hand Touched	512/1850.2	GSM	1.030	0.532	0.010	29.78	30.50	1.216	21.4°C
Right Hand Touched-repeated*	512/1850.2	GSM	0.920	0.483	-0.080	29.78	30.50	1.086	21.4°C
Right Hand Tilted 15°	810/1909.8	GSM	0.749	0.365	-0.030	29.45	30.50	0.954	21.4°C
Right Hand Tilted 15°	661/1880	GSM	0.744	0.362	-0.030	29.53	30.50	0.930	21.4°C
Right Hand Tilted 15°	512/1850.2	GSM	0.917	0.430	0.010	29.78	30.50	1.082	21.4°C
Left Hand Touched	661/1880	GPRS 3TS	0.267	0.171	-0.190	25.34	26.00	0.311	21.4°C
Left Hand Tilted 15°	661/1880	GPRS 3TS	0.257	0.142	-0.010	25.34	26.00	0.299	21.4°C
Right Hand Touched	810/1909.8	GPRS 3TS	0.751	0.396	0.030	25.37	26.00	0.868	21.4°C
Right Hand Touched	661/1880	GPRS 3TS	0.813	0.427	-0.080	25.34	26.00	0.946	21.4°C
Right Hand Touched	512/1850.2	GPRS 3TS	0.943	0.498	-0.100	25.49	26.00	1.061	21.4°C
Right Hand Tilted 15°	810/1909.8	GPRS 3TS	0.730	0.355	0.020	25.37	26.00	0.844	21.4°C
Right Hand Tilted 15°	661/1880	GPRS 3TS	0.722	0.353	-0.050	25.34	26.00	0.840	21.4°C
Right Hand Tilted 15°	512/1850.2	GPRS 3TS	0.897	0.436	0.030	25.49	26.00	1.009	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	512/1850.2	GSM	0.901	0.467	0.040	29.78	30.50	1.063	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	512/1850.2	GSM	0.838	0.432	0.040	29.78	30.50	0.989	21.4°C

Table 139: Head SAR test results of GSM1900(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664.

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	661/1880	GSM	0.289	0.158	0.030	29.73	30.50	0.345	21.4°C
Back Side	661/1880	GSM	0.385	0.203	0.060	29.73	30.50	0.460	21.4°C
Front Side	661/1880	GPRS 3TS	0.343	0.188	0.140	25.52	26.00	0.383	21.4°C
Back Side	661/1880	GPRS 3TS	0.436	0.230	-0.060	25.52	26.00	0.487	21.4°C
Tested at the worst position with SIM2									
Back Side	661/1880	GPRS 3TS	0.453	0.230	-0.150	25.52	26.00	0.506	21.4°C
Tested at the worst position with battery 2#									
Back Side	661/1880	GPRS 3TS	0.500	0.255	-0.160	25.52	26.00	0.558	21.4°C

Table 140: Body-Worn SAR test results of GSM1900(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	661/1880	GSM	0.062	0.039	0.030	29.53	30.50	0.078	21.4°C
Back Side	661/1880	GSM	0.061	0.037	-0.120	29.53	30.50	0.077	21.4°C
Front Side	661/1880	GPRS 3TS	0.064	0.040	-0.120	25.34	26.00	0.075	21.4°C
Back Side	661/1880	GPRS 3TS	0.064	0.040	0.070	25.34	26.00	0.074	21.4°C
Tested at the worst position with SIM2									
Back Side	661/1880	GPRS 3TS	0.067	0.042	-0.020	25.34	26.00	0.078	21.4°C
Tested at the worst position with battery 2#									
Back Side	661/1880	GPRS 3TS	0.065	0.041	0.000	25.34	26.00	0.075	21.4°C

Table 141: Body-Worn SAR test results of GSM1900(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	810/1909.8	GPRS 3TS	0.736	0.364	-0.040	25.55	26.00	0.816	21.4°C
Front Side	661/1880	GPRS 3TS	0.830	0.417	0.100	25.52	26.00	0.927	21.4°C
Front Side	512/1850.2	GPRS 3TS	0.887	0.451	0.180	25.64	26.00	0.964	21.4°C
Back Side	810/1909.8	GPRS 3TS	1.160	0.538	0.120	25.55	26.00	1.287	21.4°C
Back Side	661/1880	GPRS 3TS	1.180	0.555	-0.150	25.52	26.00	1.318	21.4°C
Back Side	512/1850.2	GPRS 3TS	1.210	0.572	-0.120	25.64	26.00	1.315	21.4°C
Left Side	661/1880	GPRS 3TS	0.357	0.200	-0.090	25.52	26.00	0.399	21.4°C
Right Side	661/1880	GPRS 3TS	0.099	0.053	-0.060	25.52	26.00	0.111	21.4°C
Bottom Side	810/1909.8	GPRS 3TS	1.070	0.519	0.100	25.55	26.00	1.187	21.4°C
Bottom Side	661/1880	GPRS 3TS	1.180	0.587	-0.030	25.52	26.00	1.318	21.4°C
Bottom Side	512/1850.2	GPRS 3TS	1.270	0.644	0.010	25.64	26.00	1.380	21.4°C
Tested at the worst position with SIM2									
Bottom Side	512/1850.2	GPRS 3TS	1.230	0.633	0.120	25.64	26.00	1.336	21.4°C
Tested at the worst position with battery 2#									
Bottom Side	512/1850.2	GPRS 3TS	1.300	0.664	-0.140	25.64	26.00	1.412	21.4°C
Bottom Side-repeated*	512/1850.2	GPRS 3TS	1.340	0.670	-0.180	25.64	26.00	1.456	21.4°C
Additional SAR test (Hotspot on, Modem0 Synchronous transmission with Modem1)									
Back Side	661/1880	GPRS 3TS	0.974	0.454	-0.060	24.63	25.00	1.061	21.4°C

Table 142: Hotspot SAR test results of GSM1900(Main antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664.

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	661/1880	GPRS 3TS	0.133	0.077	-0.110	25.34	26.00	0.155	21.4°C
Back Side	661/1880	GPRS 3TS	0.142	0.083	-0.180	25.34	26.00	0.165	21.4°C
Left Side	661/1880	GPRS 3TS	0.166	0.094	0.140	25.34	26.00	0.193	21.4°C
Right Side	661/1880	GPRS 3TS	0.018	0.010	-0.190	25.34	26.00	0.021	21.4°C
Top Side	661/1880	GPRS 3TS	0.186	0.094	0.090	25.34	26.00	0.217	21.4°C
Tested at the worst position with SIM2									
Top Side	661/1880	GPRS 3TS	0.181	0.093	0.080	25.34	26.00	0.211	21.4°C
Tested at the worst position with battery 2#									
Top Side	661/1880	GPRS 3TS	0.163	0.083	-0.040	25.34	26.00	0.190	21.4°C

Table 143: Hotspot SAR test results of GSM1900(Second antenna)

**7.3.4 SAR measurement Result of GSM1900 for Modem1**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Left Hand Touched	810/1909.8	GSM	0.367	0.219	0.160	29.44	30.50	0.468	21.4°C
Left Hand Touched	661/1880	GSM	0.369	0.224	-0.050	29.40	30.50	0.475	21.4°C
Left Hand Touched	512/1850.2	GSM	0.351	0.221	0.180	29.66	30.50	0.426	21.4°C
Left Hand Tilted 15°	661/1880	GSM	0.115	0.067	-0.100	29.40	30.50	0.148	21.4°C
Right Hand Touched	661/1880	GSM	0.168	0.105	0.080	29.40	30.50	0.216	21.4°C
Right Hand Tilted 15°	661/1880	GSM	0.087	0.050	-0.100	29.40	30.50	0.112	21.4°C
Left Hand Touched	810/1909.8	GPRS 3TS	0.340	0.208	-0.060	24.72	26.00	0.457	21.4°C
Left Hand Touched	661/1880	GPRS 3TS	0.308	0.186	0.140	24.63	26.00	0.422	21.4°C
Left Hand Touched	512/1850.2	GPRS 3TS	0.334	0.204	-0.070	24.77	26.00	0.443	21.4°C
Left Hand Tilted 15°	661/1880	GPRS 3TS	0.098	0.057	0.060	24.63	26.00	0.134	21.4°C
Right Hand Touched	661/1880	GPRS 3TS	0.144	0.089	0.090	24.63	26.00	0.197	21.4°C
Right Hand Tilted 15°	661/1880	GPRS 3TS	0.065	0.037	-0.090	24.63	26.00	0.089	21.4°C
Tested at the worst position with battery 2#									
Left Hand Touched	661/1880	GSM	0.390	0.242	0.120	29.40	30.50	0.502	21.4°C

Table 144: Head SAR test results of GSM1900(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Left Hand Touched	661/1880	GSM	0.340	0.209	-0.060	29.50	30.50	0.428	21.4°C
Left Hand Tilted 15°	661/1880	GSM	0.317	0.173	-0.040	29.50	30.50	0.399	21.4°C
Right Hand Touched	810/1909.8	GSM	1.040	0.523	-0.030	29.45	30.50	1.324	21.4°C
Right Hand Touched	661/1880	GSM	1.170	0.587	0.090	29.50	30.50	1.473	21.4°C
Right Hand Touched-Repeated	661/1880	GSM	1.100	0.566	-0.050	29.50	30.50	1.385	21.4°C
Right Hand Touched	512/1850.2	GSM	1.140	0.565	-0.060	29.67	30.50	1.380	21.4°C
Right Hand Tilted 15°	810/1909.8	GSM	0.946	0.445	-0.010	29.45	30.50	1.205	21.4°C
Right Hand Tilted 15°	661/1880	GSM	0.790	0.382	-0.010	29.50	30.50	0.995	21.4°C
Right Hand Tilted 15°	512/1850.2	GSM	0.965	0.462	-0.070	29.67	30.50	1.168	21.4°C
Left Hand Touched	661/1880	GPRS 3TS	0.272	0.168	-0.030	24.63	26.00	0.373	21.4°C
Left Hand Tilted 15°	661/1880	GPRS 3TS	0.282	0.151	-0.030	24.63	26.00	0.387	21.4°C
Right Hand Touched	810/1909.8	GPRS 3TS	0.996	0.501	0.020	24.72	26.00	1.337	21.4°C
Right Hand Touched	661/1880	GPRS 3TS	0.980	0.492	0.180	24.63	26.00	1.343	21.4°C
Right Hand Touched	512/1850.2	GPRS 3TS	1.090	0.552	-0.030	24.78	26.00	1.444	21.4°C
Right Hand Tilted 15°	810/1909.8	GPRS 3TS	0.880	0.418	0.020	24.72	26.00	1.182	21.4°C
Right Hand Tilted 15°	661/1880	GPRS 3TS	0.779	0.366	-0.020	24.63	26.00	1.068	21.4°C
Right Hand Tilted 15°	512/1850.2	GPRS 3TS	0.893	0.432	0.070	24.78	26.00	1.183	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Right Hand Touched	661/1880	GSM	0.985	0.482	-0.140	29.50	30.50	1.240	21.4°C
Additional SAR test (WiFi off,Modem1 Synchronous transmission with Modem0)									
Right Hand Touched	661/1880	GSM	0.853	0.415	-0.030	28.40	29.50	1.099	21.4°C
Right Hand Tilted 15°	810/1909.8	GSM	0.725	0.332	-0.020	28.43	29.50	0.928	21.4°C
Additional SAR test (WiFi on,Modem1 Synchronous transmission with Modem0)									
Right Hand Touched	661/1880	GSM	0.600	0.304	-0.150	27.40	28.50	0.773	21.4°C
Right Hand Tilted 15°	810/1909.8	GSM	0.614	0.313	-0.020	27.50	28.50	0.773	21.4°C

Table 145: Head SAR test results of GSM1900(Second antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	661/1880	GSM	0.313	0.168	0.130	29.40	30.50	0.403	21.4°C
Back Side	661/1880	GSM	0.398	0.208	-0.100	29.40	30.50	0.513	21.4°C
Front Side	661/1880	GPRS 3TS	0.265	0.139	0.120	24.63	26.00	0.363	21.4°C
Back Side	661/1880	GPRS 3TS	0.341	0.177	-0.190	24.63	26.00	0.467	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Back Side	661/1880	GSM	0.484	0.247	-0.140	29.40	30.50	0.624	21.4°C

Table 146: Body-Worn SAR test results of GSM1900(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	661/1880	GSM	0.071	0.046	0.120	29.50	30.50	0.090	21.4°C
Back Side	661/1880	GSM	0.075	0.469	0.050	29.50	30.50	0.094	21.4°C
Front Side	661/1880	GPRS 3TS	0.069	0.044	0.070	24.63	26.00	0.095	21.4°C
Back Side	661/1880	GPRS 3TS	0.071	0.045	0.030	24.63	26.00	0.098	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Back Side	661/1880	GPRS 3TS	0.074	0.045	-0.150	29.50	30.50	0.093	21.4°C

Table 147: Body-Worn SAR test results of GSM1900(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	661/1880	GPRS 3TS	0.570	0.292	0.160	23.65	25.00	0.778	21.4°C
Back Side	810/1909.8	GPRS 3TS	0.844	0.406	0.050	23.74	25.00	1.128	21.4°C
Back Side	661/1880	GPRS 3TS	0.755	0.366	0.000	23.65	25.00	1.030	21.4°C
Back Side	512/1850.2	GPRS 3TS	0.712	0.350	-0.090	23.81	25.00	0.936	21.4°C
Left Side	661/1880	GPRS 3TS	0.278	0.156	-0.080	23.65	25.00	0.379	21.4°C
Right Side	661/1880	GPRS 3TS	0.068	0.037	0.160	23.65	25.00	0.093	21.4°C
Bottom Side	810/1909.8	GPRS 3TS	0.710	0.346	0.050	23.74	25.00	0.949	21.4°C
Bottom Side	661/1880	GPRS 3TS	0.728	0.362	-0.010	23.65	25.00	0.993	21.4°C
Bottom Side	512/1850.2	GPRS 3TS	0.752	0.384	0.080	23.81	25.00	0.989	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Back Side	810/1909.8	GPRS 3TS	0.882	0.422	-0.010	23.74	25.00	1.179	21.4°C
Back Side-repeated*	810/1909.8	GPRS 3TS	0.862	0.409	-0.180	23.74	25.00	1.152	21.4°C
Additional SAR test (Hotspot on, Modem1 Synchronous transmission with Modem0)									
Back Side	810/1909.8	GPRS 3TS	0.587	0.281	-0.100	22.68	24.00	0.795	21.4°C

Table 148: Hotspot SAR test results of GSM1900(Main antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664.

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with SIM2 and battery 1#									
Front Side	661/1880	GPRS 3TS	0.150	0.083	0.130	24.63	26.00	0.206	21.4°C
Back Side	661/1880	GPRS 3TS	0.161	0.089	0.130	24.63	26.00	0.221	21.4°C
Left Side	661/1880	GPRS 3TS	0.208	0.113	0.050	24.63	26.00	0.285	21.4°C
Right Side	661/1880	GPRS 3TS	0.018	0.010	-0.070	24.63	26.00	0.024	21.4°C
Top Side	661/1880	GPRS 3TS	0.198	0.103	0.120	24.63	26.00	0.271	21.4°C
Tested at the worst position with SIM2 and battery 2#									
Left Side	661/1880	GPRS 3TS	0.214	0.116	0.060	24.63	26.00	0.293	21.4°C

Table 149: Hotspot SAR test results of GSM1900(Second antenna)

**7.3.5 SAR measurement Result of UMTS Band V**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	4182/836.4	RMC	0.151	0.113	0.040	24.16	24.5	0.163	21.4°C
Left Hand Tilted 15°	4182/836.4	RMC	0.101	0.076	-0.040	24.16	24.5	0.109	21.4°C
Right Hand Touched	4233/846.6	RMC	0.174	0.133	0.040	24.21	24.5	0.186	21.4°C
Right Hand Touched	4182/836.4	RMC	0.166	0.128	0.000	24.16	24.5	0.180	21.4°C
Right Hand Touched	4132/826.4	RMC	0.151	0.117	0.090	24.38	24.5	0.155	21.4°C
Right Hand Tilted 15°	4182/836.4	RMC	0.113	0.086	0.050	24.16	24.5	0.122	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	4233/846.6	RMC	0.176	0.135	-0.040	24.21	24.5	0.188	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	4233/846.6	RMC	0.201	0.152	-0.120	24.21	24.5	0.215	21.4°C

Table 150: Head SAR test results of UMTS Band V(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	4233/846.6	RMC	0.734	0.372	0.020	24.03	24.50	0.818	21.4°C
Left Hand Touched	4182/836.4	RMC	0.762	0.386	-0.110	24.01	24.50	0.853	21.4°C
Left Hand Touched	4132/826.4	RMC	0.774	0.394	0.110	24.28	24.50	0.814	21.4°C
Left Hand Tilted 15°	4182/836.4	RMC	0.691	0.337	0.020	24.01	24.50	0.774	21.4°C
Right Hand Touched	4233/846.6	RMC	0.790	0.394	-0.020	24.03	24.50	0.880	21.4°C
Right Hand Touched	4182/836.4	RMC	0.832	0.415	-0.060	24.01	24.50	0.931	21.4°C
Right Hand Touched	4132/826.4	RMC	0.867	0.434	0.000	24.28	24.50	0.912	21.4°C
Right Hand Tilted 15°	4233/846.6	RMC	0.695	0.323	0.020	24.03	24.50	0.774	21.4°C
Right Hand Tilted 15°	4182/836.4	RMC	0.719	0.333	0.040	24.01	24.50	0.805	21.4°C
Right Hand Tilted 15°	4132/826.4	RMC	0.747	0.348	-0.020	24.28	24.50	0.786	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	4132/826.4	RMC	0.867	0.432	-0.150	24.28	24.50	0.912	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	4132/826.4	RMC	0.874	0.434	-0.140	24.28	24.50	0.919	21.4°C
Right Hand Touched-repeated*	4132/826.4	RMC	0.873	0.437	-0.090	24.28	24.50	0.918	21.4°C

Table 151: Head SAR test results of UMTS Band V(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664.

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	4182/836.4	RMC	0.212	0.161	0.000	24.16	24.5	0.229	21.4°C
Back Side	4182/836.4	RMC	0.274	0.210	-0.020	24.16	24.5	0.296	21.4°C
Tested at the worst position with SIM2									
Back Side	4182/836.4	RMC	0.278	0.215	-0.150	24.16	24.5	0.301	21.4°C
Tested at the worst position with battery 2#									
Back Side	4182/836.4	RMC	0.212	0.163	-0.010	24.16	24.5	0.229	21.4°C

Table 152: Body-Worn SAR test results of UMTS Band V(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	4182/836.4	RMC	0.126	0.073	0.020	24.01	24.5	0.141	21.4°C
Back Side	4182/836.4	RMC	0.135	0.099	0.050	24.01	24.5	0.151	21.4°C
Tested at the worst position with SIM2									
Back Side	4182/836.4	RMC	0.140	0.108	-0.110	24.01	24.5	0.157	21.4°C
Tested at the worst position with battery 2#									
Back Side	4182/836.4	RMC	0.205	0.159	-0.180	24.01	24.5	0.229	21.4°C

Table 153: Body-Worn SAR test results of UMTS Band V(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	4182/836.4	RMC	0.216	0.165	-0.040	24.16	24.5	0.234	21.4°C
Back Side	4182/836.4	RMC	0.318	0.177	-0.060	24.16	24.5	0.344	21.4°C
Left Side	4182/836.4	RMC	0.177	0.122	-0.030	24.16	24.5	0.191	21.4°C
Right Side	4182/836.4	RMC	0.406	0.277	-0.010	24.16	24.5	0.439	21.4°C
Bottom Side	4182/836.4	RMC	0.144	0.078	-0.140	24.16	24.5	0.156	21.4°C
Tested at the worst position with SIM2									
Right Side	4182/836.4	RMC	0.394	0.270	-0.010	24.16	24.5	0.426	21.4°C
Tested at the worst position with battery 2#									
Right Side	4182/836.4	RMC	0.300	0.206	-0.150	24.16	24.5	0.324	21.4°C

Table 154: Hotspot SAR test results of UMTS Band V(Main antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	4182/836.4	RMC	0.425	0.232	-0.170	23.4	23.5	0.435	21.4°C
Back Side	4182/836.4	RMC	0.427	0.231	-0.070	23.4	23.5	0.437	21.4°C
Left Side	4182/836.4	RMC	0.126	0.087	0.010	23.4	23.5	0.129	21.4°C
Right Side	4182/836.4	RMC	0.294	0.201	-0.050	23.4	23.5	0.301	21.4°C
Top Side	4182/836.4	RMC	0.485	0.235	0.070	23.4	23.5	0.496	21.4°C
Tested at the worst position with SIM2									
Top Side	4182/836.4	RMC	0.486	0.235	-0.140	23.4	23.5	0.497	21.4°C
Tested at the worst position with battery 2#									
Top Side	4182/836.4	RMC	0.347	0.169	0.010	23.4	23.5	0.355	21.4°C

Table 155: Hotspot SAR test results of UMTS Band V(Second antenna)

**7.3.6 SAR measurement Result of UMTS Band IV**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	1513/1752.6	RMC	0.673	0.425	-0.100	22.73	23.50	0.804	21.4°C
Left Hand Touched	1413/1732.6	RMC	0.470	0.301	0.090	22.60	23.50	0.578	21.4°C
Left Hand Touched	1312/1712.4	RMC	0.448	0.287	0.160	22.97	23.50	0.506	21.4°C
Left Hand Tilted 15°	1413/1732.6	RMC	0.170	0.105	0.080	22.60	23.50	0.209	21.4°C
Right Hand Touched	1413/1732.6	RMC	0.240	0.159	0.100	22.60	23.50	0.295	21.4°C
Right Hand Tilted 15°	1413/1732.6	RMC	0.217	0.127	0.130	22.60	23.50	0.267	21.4°C
Tested at the worst position with SIM2									
Left Hand Touched	1513/1752.6	RMC	0.627	0.396	0.030	22.73	23.50	0.749	21.4°C
Tested at the worst position with battery 2#									
Left Hand Touched	1513/1752.6	RMC	0.760	0.479	0.110	22.73	23.50	0.907	21.4°C
Addition SAR test (WiFi on, Modem1 Synchronous transmission with Modem0)									
Left Hand Touched	1513/1752.6	RMC	0.280	0.176	-0.150	20.02	20.50	0.313	21.4°C

Table 156: Head SAR test results of UMTS Band IV(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	1413/1732.6	RMC	0.385	0.241	0.100	23.02	24.00	0.482	21.4°C
Left Hand Tilted 15°	1413/1732.6	RMC	0.360	0.193	0.000	23.02	24.00	0.451	21.4°C
Right Hand Touched	1513/1752.6	RMC	0.974	0.506	0.000	23.08	24.00	1.204	21.4°C
Right Hand Touched	1413/1732.6	RMC	0.938	0.488	0.120	23.02	24.00	1.175	21.4°C
Right Hand Touched	1312/1712.4	RMC	0.927	0.482	0.020	23.32	24.00	1.084	21.4°C
Right Hand Tilted 15°	1513/1752.6	RMC	0.831	0.398	0.020	23.08	24.00	1.027	21.4°C
Right Hand Tilted 15°	1413/1732.6	RMC	0.815	0.389	0.030	23.02	24.00	1.021	21.4°C
Right Hand Tilted 15°	1312/1712.4	RMC	0.797	0.381	0.030	23.32	24.00	0.932	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	1513/1752.6	RMC	1.070	0.553	0.060	23.08	24.00	1.322	21.4°C
Right Hand Touched-repeated*	1513/1752.6	RMC	1.040	0.530	-0.100	23.08	24.00	1.285	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	1513/1752.6	RMC	1.000	0.498	0.010	23.08	24.00	1.236	21.4°C

Table 157: Head SAR test results of UMTS Band IV(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	1413/1732.6	RMC	0.358	0.207	-0.020	22.60	23.50	0.440	21.4°C
Back Side	1413/1732.6	RMC	0.405	0.234	0.070	22.60	23.50	0.498	21.4°C
Tested at the worst position with SIM2									
Back Side	1413/1732.6	RMC	0.356	0.207	-0.170	22.60	23.50	0.438	21.4°C
Tested at the worst position with battery 2#									
Back Side	1413/1732.6	RMC	0.431	0.249	0.040	22.60	23.50	0.530	21.4°C

Table 158: Body-Worn SAR test results of UMTS Band IV(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	1413/1732.6	RMC	0.097	0.062	0.180	23.02	23.50	0.109	21.4°C
Back Side	1413/1732.6	RMC	0.121	0.074	-0.050	23.02	23.50	0.135	21.4°C
Tested at the worst position with SIM2									
Back Side	1413/1732.6	RMC	0.114	0.070	0.160	23.02	23.50	0.127	21.4°C
Tested at the worst position with battery 2#									
Back Side	1413/1732.6	RMC	0.084	0.051	0.050	23.02	23.50	0.094	21.4°C

Table 159: Body-Worn SAR test results of UMTS Band IV(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	1413/1732.6	RMC	0.519	0.284	0.120	21.94	22.50	0.590	21.4°C
Back Side	1413/1732.6	RMC	0.684	0.380	-0.110	21.94	22.50	0.778	21.4°C
Left Side	1413/1732.6	RMC	0.288	0.170	0.010	21.94	22.50	0.328	21.4°C
Right Side	1413/1732.6	RMC	0.019	0.011	-0.120	21.94	22.50	0.022	21.4°C
Bottom Side	1513/1752.6	RMC	1.150	0.608	0.130	22.04	22.50	1.278	21.4°C
Bottom Side	1413/1732.6	RMC	0.838	0.448	0.070	21.94	22.50	0.953	21.4°C
Bottom Side	1312/1712.4	RMC	0.625	0.337	0.130	22.33	22.50	0.650	21.4°C
Tested at the worst position with SIM2									
Bottom Side	1513/1752.6	RMC	1.170	0.620	0.100	22.04	22.50	1.301	21.4°C
Tested at the worst position with battery 2#									
Bottom Side	1513/1752.6	RMC	1.270	0.676	0.170	22.04	22.50	1.412	21.4°C
Bottom Side-repeated*	1513/1752.6	RMC	1.270	0.675	0.150	22.04	22.50	1.412	21.4°C

Table 160: Hotspot SAR test results of UMTS Band IV(Main antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	1413/1732.6	RMC	0.344	0.182	-0.190	20.36	21.00	0.399	21.4°C
Back Side	1413/1732.6	RMC	0.423	0.243	-0.030	20.36	21.00	0.490	21.4°C
Left Side	1413/1732.6	RMC	0.309	0.177	0.140	20.36	21.00	0.358	21.4°C
Right Side	1413/1732.6	RMC	0.039	0.022	0.140	20.36	21.00	0.045	21.4°C
Top Side	1413/1732.6	RMC	0.527	0.275	0.000	20.36	21.00	0.611	21.4°C
Tested at the worst position with SIM2									
Top Side	1413/1732.6	RMC	0.515	0.270	-0.010	20.36	21.00	0.597	21.4°C
Tested at the worst position with battery 2#									
Top Side	1413/1732.6	RMC	0.389	0.203	-0.130	20.36	21.00	0.451	21.4°C

Table 161: Hotspot SAR test results of UMTS Band IV(Second antenna)

**7.3.7 SAR measurement Result of UMTS Band II**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	9538/1907.6	RMC	0.502	0.319	0.130	22.61	23.50	0.616	21.4°C
Left Hand Touched	9400/1880	RMC	0.537	0.341	0.010	22.62	23.50	0.658	21.4°C
Left Hand Touched	9262/1852.4	RMC	0.576	0.370	-0.020	22.74	23.50	0.686	21.4°C
Left Hand Tilted 15°	9400/1880	RMC	0.178	0.108	0.050	22.62	23.50	0.218	21.4°C
Right Hand Touched	9400/1880	RMC	0.241	0.158	0.020	22.62	23.50	0.295	21.4°C
Right Hand Tilted 15°	9400/1880	RMC	0.120	0.067	0.000	22.62	23.50	0.147	21.4°C
Tested at the worst position with SIM2									
Left Hand Touched	9262/1852.4	RMC	0.621	0.398	-0.100	22.74	23.50	0.740	21.4°C
Tested at the worst position with battery 2#									
Left Hand Touched	9262/1852.4	RMC	0.606	0.389	-0.160	22.74	23.50	0.722	21.4°C

Table 162: Head SAR test results of UMTS Band II(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	9400/1880	RMC	0.200	0.127	0.170	22.58	23.50	0.247	21.4°C
Left Hand Tilted 15°	9400/1880	RMC	0.191	0.110	0.080	22.58	23.50	0.236	21.4°C
Right Hand Touched	9538/1907.6	RMC	0.761	0.388	0.080	22.56	23.50	0.945	21.4°C
Right Hand Touched	9400/1880	RMC	0.750	0.383	0.100	22.58	23.50	0.927	21.4°C
Right Hand Touched	9262/1852.4	RMC	0.861	0.440	-0.030	22.76	23.50	1.021	21.4°C
Right Hand Touched-repeated*	9262/1852.4	RMC	0.761	0.397	0.000	22.76	23.50	0.902	21.4°C
Right Hand Tilted 15°	9400/1880	RMC	0.584	0.284	0.030	22.58	23.50	0.722	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	9262/1852.4	RMC	0.790	0.413	-0.050	22.76	23.50	0.937	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	9262/1852.4	RMC	0.776	0.406	0.080	22.76	23.50	0.920	21.4°C

Table 163: Head SAR test results of UMTS Band II(Second antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	9400/1880	RMC	0.539	0.290	0.160	22.62	23.50	0.660	21.4°C
Back Side	9538/1907.6	RMC	0.788	0.399	-0.030	22.61	23.50	0.967	21.4°C
Back Side	9400/1880	RMC	0.775	0.397	-0.030	22.62	23.50	0.949	21.4°C
Back Side	9262/1852.4	RMC	0.783	0.409	-0.170	22.74	23.50	0.933	21.4°C
Tested at the worst position with SIM2									
Back Side	9538/1907.6	RMC	0.733	0.374	0.030	22.61	23.50	0.900	21.4°C
Tested at the worst position with battery 2#									
Back Side	9538/1907.6	RMC	0.675	0.346	-0.160	22.61	23.50	0.829	21.4°C

Table 164: Body-Worn SAR test results of UMTS Band II(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	9400/1880	RMC	0.050	0.031	-0.030	22.58	23.50	0.062	21.4°C
Back Side	9400/1880	RMC	0.045	0.028	0.060	22.58	23.50	0.056	21.4°C
Tested at the worst position with SIM2									
Front Side	9400/1880	RMC	0.050	0.031	-0.080	22.58	23.50	0.062	21.4°C
Tested at the worst position with battery 2#									
Front Side	9400/1880	RMC	0.040	0.025	-0.120	22.58	23.50	0.050	21.4°C

Table 165: Body-Worn SAR test results of UMTS Band II(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	9400/1880	RMC	0.505	0.255	0.130	19.66	20.50	0.613	21.4°C
Back Side	9538/1907.6	RMC	0.910	0.432	0.160	19.71	20.50	1.092	21.4°C
Back Side	9400/1880	RMC	0.859	0.412	0.040	19.66	20.50	1.042	21.4°C
Back Side	9262/1852.4	RMC	0.913	0.444	-0.030	19.72	20.50	1.093	21.4°C
Left Side	9400/1880	RMC	0.250	0.146	0.120	19.66	20.50	0.303	21.4°C
Right Side	9400/1880	RMC	0.063	0.034	0.090	19.66	20.50	0.077	21.4°C
Bottom Side	9538/1907.6	RMC	0.807	0.393	-0.080	19.71	20.50	0.968	21.4°C
Bottom Side	9400/1880	RMC	0.876	0.436	-0.170	19.66	20.50	1.063	21.4°C
Bottom Side	9262/1852.4	RMC	0.973	0.495	0.170	19.72	20.50	1.164	21.4°C
Bottom Side-repeated*	9262/1852.4	RMC	0.944	0.481	0.170	19.72	20.50	1.130	21.4°C
Tested at the worst position with SIM2									
Bottom Side	9262/1852.4	RMC	0.918	0.470	0.020	19.72	20.50	1.099	21.4°C
Tested at the worst position with battery 2#									
Bottom Side	9262/1852.4	RMC	0.941	0.472	-0.130	19.72	20.50	1.126	21.4°C
Additional SAR test (WiFi on, Modem0 Synchronous transmission with Modem1)									
Back Side	9262/1852.4	RMC	0.695	0.341	-0.140	18.90	19.50	0.798	21.4°C

Table 166: Hotspot SAR test results of UMTS Band II(Main antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR1-g (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	9400/1880	RMC	0.104	0.060	0.060	19.61	20.50	0.128	21.4°C
Back Side	9400/1880	RMC	0.130	0.076	-0.110	19.61	20.50	0.160	21.4°C
Left Side	9400/1880	RMC	0.135	0.076	0.090	19.61	20.50	0.166	21.4°C
Right Side	9400/1880	RMC	0.014	0.008	-0.100	19.61	20.50	0.017	21.4°C
Top Side	9400/1880	RMC	0.121	0.060	0.060	19.61	20.50	0.149	21.4°C
Tested at the worst position with SIM2									
Left Side	9400/1880	RMC	0.134	0.075	0.000	19.61	20.50	0.164	21.4°C
Tested at the worst position with battery 2#									
Left Side	9400/1880	RMC	0.132	0.074	0.130	19.61	20.50	0.162	21.4°C

Table 167: Hotspot SAR test results of UMTS Band II(Second antenna)

**7.3.8 SAR measurement Result of LTE Band IV**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	20300/1745	20M QPSK 1RB#50	0.595	0.382	0.150	22.81	24.00	0.783	21.4°C
Left Hand Touched	20175/1732 .5	20M QPSK 1RB#99	0.560	0.358	0.020	22.71	24.00	0.754	21.4°C
Left Hand Touched	20050/1720	20M QPSK 1RB#0	0.442	0.266	0.110	22.96	24.00	0.562	21.4°C
Left Hand Tilted 15°	20050/1720	20M QPSK 1RB#0	0.162	0.096	0.180	22.96	24.00	0.206	21.4°C
Right Hand Touched	20050/1720	20M QPSK 1RB#0	0.233	0.136	-0.190	22.96	24.00	0.296	21.4°C
Right Hand Tilted 15°	20050/1720	20M QPSK 1RB#0	0.213	0.117	0.010	22.96	24.00	0.271	21.4°C
50%RB									
Left Hand Touched	20050/1720	20M QPSK 50%#0	0.324	0.194	0.000	21.97	23.00	0.411	21.4°C
Left Hand Tilted 15°	20050/1720	20M QPSK 50%#0	0.116	0.069	0.140	21.97	23.00	0.147	21.4°C
Right Hand Touched	20050/1720	20M QPSK 50%#0	0.167	0.102	0.080	21.97	23.00	0.212	21.4°C
Right Hand Tilted 15°	20050/1720	20M QPSK 50%#0	0.170	0.093	0.030	21.97	23.00	0.216	21.4°C
Tested at the worst position with SIM2									
Left Hand Touched	20300/1745	20M QPSK 1RB#50	0.604	0.385	0.140	22.81	24.00	0.794	21.4°C
Tested at the worst position with battery 2#									
Left Hand Touched	20300/1745	20M QPSK 1RB#50	0.575	0.369	0.160	22.81	24.00	0.756	21.4°C

Table 168: Head SAR test results of LTE Band IV(Main antenna)



Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	20300/1745	20M QPSK 1RB#50	0.362	0.194	0.000	22.96	23.20	0.383	21.4°C
Left Hand Tilted 15°	20300/1745	20M QPSK 1RB#50	0.367	0.197	0.100	22.96	23.20	0.388	21.4°C
Right Hand Touched	20300/1745	20M QPSK 1RB#50	0.991	0.514	-0.070	22.96	23.20	1.047	21.4°C
Right Hand Touched	20175/1732 .5	20M QPSK 1RB#0	0.955	0.495	0.050	22.88	23.20	1.028	21.4°C
Right Hand Touched	20050/1720	20M QPSK 1RB#0	1.100	0.568	0.040	22.82	23.20	1.201	21.4°C
Right Hand Touched-repeated*	20050/1720	20M QPSK 1RB#0	1.080	0.545	-0.080	22.82	23.20	1.179	21.4°C
Right Hand Tilted 15°	20300/1745	20M QPSK 1RB#50	0.820	0.397	0.050	22.96	23.20	0.867	21.4°C
Right Hand Tilted 15°	20175/1732 .5	20M QPSK 1RB#0	0.788	0.381	0.060	22.88	23.20	0.848	21.4°C
Right Hand Tilted 15°	20050/1720	20M QPSK 1RB#0	0.868	0.421	0.050	22.82	23.20	0.947	21.4°C
50%RB									
Left Hand Touched	20050/1720	20M QPSK 50%#0	0.377	0.200	-0.190	22.14	22.20	0.382	21.4°C
Left Hand Tilted 15°	20050/1720	20M QPSK 50%#0	0.380	0.200	0.020	22.14	22.20	0.385	21.4°C
Right Hand Touched	20300/1745	20M QPSK 50%#50	0.965	0.496	0.020	22.10	22.20	0.987	21.4°C
Right Hand Touched	20175/1732 .5	20M QPSK 50%#0	0.974	0.503	0.120	21.97	22.20	1.027	21.4°C
Right Hand Touched	20050/1720	20M QPSK 50%#0	1.070	0.552	0.040	22.14	22.20	1.085	21.4°C
Right Hand Tilted 15°	20300/1745	20M QPSK 50%#50	0.803	0.374	-0.110	22.10	22.20	0.822	21.4°C
Right Hand Tilted 15°	20175/1732 .5	20M QPSK 50%#0	0.717	0.342	0.060	21.97	22.20	0.756	21.4°C
Right Hand Tilted 15°	20050/1720	20M QPSK 50%#0	0.791	0.377	0.060	22.14	22.20	0.802	21.4°C
100%RB									
Right Hand Touched	20300/1745	20M QPSK 100%#0	0.973	0.500	0.020	22.11	22.20	0.993	21.4°C
Right Hand Tilted 15°	20300/1745	20M QPSK 100%#0	0.801	0.389	0.150	22.11	22.20	0.818	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	20050/1720	20M QPSK 1RB#0	0.953	0.494	0.000	22.82	23.20	1.040	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	20050/1720	20M QPSK 1RB#0	0.716	0.363	0.000	22.82	23.20	0.781	21.4°C

Additional SAR test (WiFi on, Modem0 Synchronous transmission with Modem1)									
Right Hand Touched	20050/1720	20M QPSK 1RB#0	0.631	0.323	0.060	18.27	18.70	0.697	21.4°C

Table 169: Head SAR test results of LTE Band IV(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	20050/1720	20M QPSK 1RB#0	0.259	0.154	-0.140	22.96	24.00	0.329	21.4°C
Back Side	20050/1720	20M QPSK 1RB#0	0.347	0.203	-0.020	22.96	24.00	0.441	21.4°C
50%RB									
Front Side	20050/1720	20M QPSK 50%#0	0.201	0.118	-0.060	21.97	23.00	0.255	21.4°C
Back Side	20050/1720	20M QPSK 50%#0	0.260	0.151	0.060	21.97	23.00	0.330	21.4°C
Tested at the worst position with SIM2									
Back Side	20050/1720	20M QPSK 1RB#0	0.377	0.219	-0.180	22.96	24.00	0.479	21.4°C
Tested at the worst position with battery 2#									
Back Side	20050/1720	20M QPSK 1RB#0	0.381	0.221	0.020	22.96	24.00	0.484	21.4°C

Table 170: Body-Worn SAR test results of LTE Band IV(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	20300/1745	20M QPSK 1RB#50	0.112	0.072	-0.080	22.96	24.00	0.142	21.4°C
Back Side	20300/1745	20M QPSK 1RB#50	0.122	0.076	0.040	22.96	24.00	0.155	21.4°C
50%RB									
Front Side	20050/1720	20M QPSK 50%RB#0	0.096	0.061	0.080	22.14	23.00	0.117	21.4°C
Back Side	20050/1720	20M QPSK 50%RB#0	0.100	0.063	0.020	22.14	23.00	0.122	21.4°C
Tested at the worst position with SIM2									
Back Side	20300/1745	20M QPSK 1RB#50	0.120	0.075	0.150	22.96	24.00	0.152	21.4°C
Tested at the worst position with battery 2#									
Back Side	20300/1745	20M QPSK 1RB#50	0.117	0.073	0.110	22.96	24.00	0.149	21.4°C

Table 171: Body-Worn SAR test results of LTE Band IV(Second antenna)



Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	20300/1745	20M QPSK 1RB#50	0.569	0.306	-0.120	21.62	23.00	0.782	21.4°C
Back Side	20300/1745	20M QPSK 1RB#50	0.742	0.397	0.190	21.62	23.00	1.020	21.4°C
Back Side	20175/1732 .5	20M QPSK 1RB#99	0.639	0.347	0.000	21.55	23.00	0.892	21.4°C
Back Side	20050/1720	20M QPSK 1RB#0	0.568	0.316	0.110	21.58	23.00	0.788	21.4°C
Left Side	20300/1745	20M QPSK 1RB#50	0.311	0.183	0.130	21.62	23.00	0.427	21.4°C
Right Side	20300/1745	20M QPSK 1RB#50	0.016	0.009	0.060	21.62	23.00	0.022	21.4°C
Bottom Side	20300/1745	20M QPSK 1RB#50	0.939	0.495	0.180	21.62	23.00	1.290	21.4°C
Bottom Side-repeated*	20300/1745	20M QPSK 1RB#50	0.923	0.489	0.090	21.62	23.00	1.268	21.4°C
Bottom Side	20175/1732 .5	20M QPSK 1RB#99	0.791	0.418	0.040	21.55	23.00	1.105	21.4°C
Bottom Side	20050/1720	20M QPSK 1RB#0	0.600	0.321	0.030	21.58	23.00	0.832	21.4°C
50%RB									
Front Side	20300/1745	20M QPSK 50%#50	0.460	0.246	0.100	21.60	22.00	0.504	21.4°C
Back Side	20300/1745	20M QPSK 50%#50	0.664	0.352	0.140	21.60	23.00	0.917	21.4°C
Left Side	20300/1745	20M QPSK 50%#50	0.255	0.150	0.170	21.60	23.00	0.352	21.4°C
Right Side	20300/1745	20M QPSK 50%#50	0.017	0.010	0.080	21.60	23.00	0.023	21.4°C
Bottom Side	20300/1745	20M QPSK 50%#50	0.695	0.366	0.110	21.60	23.00	0.959	21.4°C
Bottom Side	20175/1732 .5	20M QPSK 50%#0	0.410	0.211	0.120	21.51	23.00	0.578	21.4°C
Bottom Side	20050/1720	20M QPSK 50%#0	0.426	0.227	0.140	21.45	23.00	0.609	21.4°C
100%RB									
Back Side	20050/1720	20M QPSK 100%RB#0	0.571	0.319	-0.010	21.67	22.00	0.616	21.4°C
Bottom Side	20050/1720	20M QPSK 100%#0	0.403	0.208	0.110	21.67	22.00	0.435	21.4°C
Tested at the worst position with SIM2									
Bottom Side	20300/1745	20M QPSK 1RB#50	0.774	0.414	0.050	21.62	23.00	1.064	21.4°C
Tested at the worst position with battery 2#									
Bottom Side	20300/1745	20M QPSK 1RB#50	0.878	0.465	-0.140	21.62	23.00	1.206	21.4°C

Table 172: Hotspot SAR test results of LTE Band IV(Main antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	20300/1745	20M QPSK 1RB#50	0.379	0.200	0.140	19.97	20.20	0.400	21.4°C
Back Side	20300/1745	20M QPSK 1RB#50	0.451	0.259	0.180	19.97	20.20	0.476	21.4°C
Left Side	20300/1745	20M QPSK 1RB#50	0.354	0.203	0.040	19.97	20.20	0.373	21.4°C
Right Side	20300/1745	20M QPSK 1RB#50	0.049	0.028	-0.030	19.97	20.20	0.051	21.4°C
Top Side	20300/1745	20M QPSK 1RB#50	0.533	0.279	0.020	19.97	20.20	0.562	21.4°C
50%RB									
Front Side	20050/1720	20M QPSK 50%#0	0.255	0.154	0.050	18.97	20.20	0.338	21.4°C
Back Side	20050/1720	20M QPSK 50%#0	0.309	0.175	0.070	18.97	20.20	0.410	21.4°C
Left Side	20050/1720	20M QPSK 50%#0	0.223	0.127	-0.110	18.97	20.20	0.296	21.4°C
Right Side	20050/1720	20M QPSK 50%#0	0.030	0.018	-0.070	18.97	20.20	0.040	21.4°C
Top Side	20050/1720	20M QPSK 50%#0	0.392	0.205	0.040	18.97	20.20	0.520	21.4°C
Tested at the worst position with SIM2									
Top Side	20300/1745	20M QPSK 1RB#50	0.544	0.285	-0.120	19.97	20.20	0.574	21.4°C
Tested at the worst position with battery 2#									
Top Side	20300/1745	20M QPSK 1RB#50	0.493	0.260	0.100	19.97	20.20	0.520	21.4°C

Table 173: Hotspot SAR test results of LTE Band IV(Second antenna)

**7.3.9 SAR measurement Result of LTE Band VII**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	21350/2560	20M QPSK 1RB#50	0.131	0.073	0.160	22.08	23.50	0.182	21.4°C
Left Hand Tilted 15°	21350/2560	20M QPSK 1RB#50	0.144	0.064	0.000	22.08	23.50	0.200	21.4°C
Right Hand Touched	21350/2560	20M QPSK 1RB#50	0.458	0.256	0.090	22.08	23.50	0.635	21.4°C
Right Hand Touched	21100/2535	20M QPSK 1RB#0	0.447	0.250	0.120	21.82	23.50	0.658	21.4°C
Right Hand Touched	20850/2510	20M QPSK 1RB#99	0.437	0.245	0.090	21.98	23.50	0.620	21.4°C
Right Hand Tilted 15°	21350/2560	20M QPSK 1RB#50	0.078	0.033	0.150	22.08	23.50	0.108	21.4°C
50%RB									
Left Hand Touched	21350/2560	20M QPSK 50%RB#0	0.124	0.068	0.060	21.37	23.00	0.180	21.4°C
Left Hand Tilted 15°	21350/2560	20M QPSK 50%RB#0	0.125	0.052	0.180	21.37	23.00	0.182	21.4°C
Right Hand Touched	21350/2560	20M QPSK 50%RB#0	0.416	0.235	0.150	21.37	23.00	0.605	21.4°C
Right Hand Tilted 15°	21350/2560	20M QPSK 50%RB#0	0.074	0.036	0.060	21.37	23.00	0.108	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	21350/2560	20M QPSK 1RB#50	0.413	0.234	0.110	22.08	23.50	0.573	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	21350/2560	20M QPSK 1RB#50	0.489	0.276	-0.190	22.08	23.50	0.678	21.4°C

Table 174: Head SAR test results of LTE Band VII(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	21350/2560	20M QPSK 1RB#50	0.140	0.066	0.020	22.08	23.50	0.194	21.4°C
Left Hand Tilted 15°	21350/2560	20M QPSK 1RB#50	0.166	0.071	0.140	22.08	23.50	0.230	21.4°C
Right Hand Touched	21350/2560	20M QPSK 1RB#50	0.654	0.315	-0.130	22.08	23.50	0.907	21.4°C
Right Hand Touched	21100/2535	20M QPSK 1RB#0	0.475	0.224	0.000	21.85	23.50	0.695	21.4°C
Right Hand Touched	20850/2510	20M QPSK 1RB#99	0.630	0.030	0.170	21.93	23.50	0.904	21.4°C
Right Hand Tilted 15°	21350/2560	20M QPSK 1RB#50	0.743	0.326	0.060	22.08	23.50	1.030	21.4°C
Right Hand Tilted 15°	21100/2535	20M QPSK 1RB#50	0.690	0.295	0.040	21.85	23.50	1.009	21.4°C
Right Hand Tilted 15°	20850/2510	20M QPSK 1RB#99	0.707	0.303	0.100	21.93	23.50	1.015	21.4°C
50%RB									
Left Hand Touched	21350/2560	20M QPSK 50%RB#0	0.176	0.083	0.170	21.23	23.00	0.265	21.4°C
Left Hand Tilted 15°	21350/2560	20M QPSK 50%RB#0	0.175	0.075	0.070	21.23	23.00	0.263	21.4°C
Right Hand Touched	21350/2560	20M QPSK 50%RB#0	0.704	0.337	-0.060	21.23	23.00	1.058	21.4°C
Right Hand Touched	21100/2535	20M QPSK 50%RB#0	0.499	0.235	0.090	21.23	23.00	0.750	21.4°C
Right Hand Touched	20850/2510	20M QPSK 50%RB#50	0.742	0.354	-0.090	21.18	23.00	1.128	21.4°C
Right Hand Tilted 15°	21350/2560	20M QPSK 50%RB#0	0.656	0.281	0.040	21.23	23.00	0.986	21.4°C
Right Hand Tilted 15°	21100/2535	20M QPSK 50%RB#0	0.670	0.287	0.040	21.23	23.00	1.007	21.4°C
Right Hand Tilted 15°	20850/2510	20M QPSK 50%RB#50	0.796	0.319	0.060	21.18	23.00	1.210	21.4°C
100%RB									
Right Hand Touched	21350/2560	20M QPSK 100%RB#0	0.716	0.349	0.080	21.32	23.00	1.054	21.4°C
Right Hand Tilted 15°	21350/2560	20M QPSK 100%RB#0	0.727	0.308	0.020	21.32	23.00	1.070	21.4°C
Tested at the worst position with SIM2									
Right Hand Tilted 15°	20850/2510	20M QPSK 50%RB#50	0.715	0.307	0.040	21.18	23.00	1.087	21.4°C
Tested at the worst position with battery 2#									
Right Hand Tilted 15°	20850/2510	20M QPSK 50%RB#50	0.860	0.397	-0.030	21.18	23.00	1.308	21.4°C
Right Hand Tilted 15°-repeated*	20850/2510	20M QPSK 50%RB#50	0.827	0.379	0.100	21.18	23.00	1.257	21.4°C

Table 175: Head SAR test results of LTE Band VII(Second antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	21350/2560	20M QPSK 1RB#50	0.179	0.099	-0.050	22.08	23.50	0.248	21.4°C
Back Side	21350/2560	20M QPSK 1RB#50	0.222	0.119	-0.150	22.08	23.50	0.308	21.4°C
50%RB									
Front Side	21350/2560	20M QPSK 50%RB#0	0.159	0.088	-0.030	21.37	23.00	0.231	21.4°C
Back Side	21350/2560	20M QPSK 50%RB#0	0.208	0.113	0.140	21.37	23.00	0.303	21.4°C
Tested at the worst position with SIM2									
Back Side	21350/2560	20M QPSK 1RB#50	0.240	0.128	-0.180	22.08	23.50	0.333	21.4°C
Tested at the worst position with battery 2#									
Back Side	21350/2560	20M QPSK 1RB#50	0.277	0.148	0.100	22.08	23.50	0.384	21.4°C

Table 176: Body-Worn SAR test results of LTE Band VII(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	21350/2560	20M QPSK 1RB#50	0.056	0.032	0.020	22.08	23.50	0.078	21.4°C
Back Side	21350/2560	20M QPSK 1RB#50	0.064	0.031	0.000	22.08	23.50	0.089	21.4°C
50%RB									
Front Side	21350/2560	20M QPSK 50%RB#0	0.060	0.034	0.080	21.23	23.00	0.090	21.4°C
Back Side	21350/2560	20M QPSK 50%RB#0	0.067	0.032	-0.110	21.23	23.00	0.101	21.4°C
Tested at the worst position with SIM2									
Back Side	21350/2560	20M QPSK 50%RB#0	0.058	0.028	0.000	21.23	23.00	0.088	21.4°C
Tested at the worst position with battery 2#									
Back Side	21350/2560	20M QPSK 50%RB#0	0.066	0.033	0.060	21.23	23.00	0.099	21.4°C

Table 177: Body-Worn SAR test results of LTE Band VII(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	21350/2560	20M QPSK 1RB#50	0.392	0.210	-0.190	22.08	23.50	0.544	21.4°C
Back Side	21350/2560	20M QPSK 1RB#50	0.519	0.266	0.100	22.08	23.50	0.720	21.4°C
Left Side	21350/2560	20M QPSK 1RB#50	0.037	0.013	0.180	22.08	23.50	0.052	21.4°C
Right Side	21350/2560	20M QPSK 1RB#50	0.431	0.221	-0.170	22.08	23.50	0.598	21.4°C
Bottom Side	21350/2560	20M QPSK 1RB#50	0.194	0.087	-0.160	22.08	23.50	0.269	21.4°C
50%RB									
Front Side	21350/2560	20M QPSK 50%RB#0	0.362	0.194	0.020	21.37	23.00	0.527	21.4°C
Back Side	21350/2560	20M QPSK 50%RB#0	0.412	0.221	0.080	21.37	23.00	0.600	21.4°C
Left Side	21350/2560	20M QPSK 50%RB#0	0.038	0.013	-0.170	21.37	23.00	0.056	21.4°C
Right Side	21350/2560	20M QPSK 50%RB#0	0.383	0.198	-0.170	21.37	23.00	0.557	21.4°C
Bottom Side	21350/2560	20M QPSK 50%RB#0	0.168	0.075	-0.150	21.37	23.00	0.245	21.4°C
Tested at the worst position with SIM2									
Back Side	21350/2560	20M QPSK 1RB#50	0.579	0.295	0.110	22.08	23.50	0.803	21.4°C
Tested at the worst position with battery 2#									
Back Side	21350/2560	20M QPSK 1RB#50	0.577	0.298	0.080	22.08	23.50	0.800	21.4°C

Table 178: Hotspot SAR test results of LTE Band VII(Main antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	21350/2560	20M QPSK 1RB#50	0.127	0.070	0.080	18.36	19.50	0.165	21.4°C
Back Side	21350/2560	20M QPSK 1RB#50	0.141	0.073	0.080	18.36	19.50	0.183	21.4°C
Left Side	21350/2560	20M QPSK 1RB#50	0.140	0.070	-0.170	18.36	19.50	0.182	21.4°C
Right Side	21350/2560	20M QPSK 1RB#50	0.001	0.000	-0.130	18.36	19.50	0.001	21.4°C
Top Side	21350/2560	20M QPSK 1RB#50	0.068	0.025	-0.170	18.36	19.50	0.088	21.4°C
50%RB									
Front Side	21350/2560	20M QPSK 50%RB#0	0.120	0.064	0.190	17.55	19.00	0.168	21.4°C
Back Side	21350/2560	20M QPSK 50%RB#0	0.128	0.066	-0.080	17.55	19.00	0.179	21.4°C
Left Side	21350/2560	20M QPSK 50%RB#0	0.127	0.064	-0.130	17.55	19.00	0.177	21.4°C
Right Side	21350/2560	20M QPSK 50%RB#0	0.001	0.000	-0.080	17.55	19.00	0.001	21.4°C
Top Side	21350/2560	20M QPSK 50%RB#0	0.063	0.023	-0.190	17.55	19.00	0.088	21.4°C
Tested at the worst position with SIM2									
Back Side	21350/2560	20M QPSK 1RB#50	0.131	0.067	0.050	18.36	19.50	0.170	21.4°C
Tested at the worst position with battery 2#									
Back Side	21350/2560	20M QPSK 1RB#50	0.149	0.071	-0.060	18.36	19.50	0.194	21.4°C

Table 179: Hotspot SAR test results of LTE Band VII(Second antenna)

**7.3.10 SAR measurement Result of LTE Band XXXVIII**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	38000/2595	20M QPSK 1RB#50	0.131	0.072	0.190	23.05	24.00	0.163	21.4°C
Left Hand Tilted 15°	38000/2595	20M QPSK 1RB#50	0.116	0.056	0.160	23.05	24.00	0.144	21.4°C
Right Hand Touched	38150/2610	20M QPSK 1RB#0	0.324	0.176	0.140	22.97	24.00	0.411	21.4°C
Right Hand Touched	38000/2595	20M QPSK 1RB#50	0.320	0.174	0.140	23.05	24.00	0.398	21.4°C
Right Hand Touched	37850/2580	20M QPSK 1RB#50	0.316	0.171	0.140	22.99	24.00	0.399	21.4°C
Right Hand Tilted 15°	38000/2595	20M QPSK 1RB#50	0.073	0.036	0.150	23.05	24.00	0.091	21.4°C
50%RB									
Left Hand Touched	38000/2595	20M QPSK 50%RB#50	0.076	0.042	0.110	21.09	22.00	0.094	21.4°C
Left Hand Tilted 15°	38000/2595	20M QPSK 50%RB#50	0.069	0.032	0.200	21.09	22.00	0.085	21.4°C
Right Hand Touched	38000/2595	20M QPSK 50%RB#50	0.206	0.112	-0.160	21.09	22.00	0.254	21.4°C
Right Hand Tilted 15°	38000/2595	20M QPSK 50%RB#50	0.040	0.017	0.180	21.09	22.00	0.049	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	38150/2610	20M QPSK 1RB#0	0.273	0.148	-0.002	22.97	24.00	0.346	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	38150/2610	20M QPSK 1RB#0	0.234	0.128	0.160	22.97	24.00	0.297	21.4°C

Table 180: Head SAR test results of LTE Band XXXVIII(Main antenna)



Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	38150/2610	20M QPSK 1RB#50	0.323	0.174	0.140	22.95	23.50	0.367	21.4°C
Left Hand Tilted 15°	38150/2610	20M QPSK 1RB#50	0.344	0.179	0.020	22.95	23.50	0.390	21.4°C
Right Hand Touched	38150/2610	20M QPSK 1RB#50	0.897	0.428	0.060	22.95	23.50	1.018	21.4°C
Right Hand Touched	38000/2595	20M QPSK 1RB#50	0.992	0.473	0.030	22.92	23.50	1.134	21.4°C
Right Hand Touched	37850/2580	20M QPSK 1RB#50	0.991	0.475	0.030	22.59	23.50	1.222	21.4°C
Right Hand Tilted 15°	38150/2610	20M QPSK 1RB#50	0.883	0.360	0.070	22.95	23.50	1.002	21.4°C
Right Hand Tilted 15°	38000/2595	20M QPSK 1RB#50	1.010	0.420	0.100	22.92	23.50	1.154	21.4°C
Right Hand Tilted 15°	37850/2580	20M QPSK 1RB#50	0.945	0.403	-0.050	22.59	23.50	1.165	21.4°C
50%RB									
Left Hand Touched	38000/2595	20M QPSK 50%RB#50	0.193	0.104	0.090	21.11	21.50	0.211	21.4°C
Left Hand Tilted 15°	38000/2595	20M QPSK 50%RB#50	0.220	0.115	-0.030	21.11	21.50	0.241	21.4°C
Right Hand Touched	38150/2610	20M QPSK 50%RB#0	0.731	0.338	0.090	21.10	21.50	0.802	21.4°C
Right Hand Touched	38000/2595	20M QPSK 50%RB#50	0.667	0.298	0.020	21.11	21.50	0.730	21.4°C
Right Hand Touched	37850/2580	20M QPSK 50%RB#50	0.839	0.394	0.130	20.91	21.50	0.961	21.4°C
Right Hand Tilted 15°	38150/2610	20M QPSK 50%RB#0	0.772	0.311	0.050	21.10	21.50	0.846	21.4°C
Right Hand Tilted 15°	38000/2595	20M QPSK 50%RB#50	0.786	0.327	0.070	21.11	21.50	0.860	21.4°C
Right Hand Tilted 15°	37850/2580	20M QPSK 50%RB#50	0.794	0.332	0.490	20.91	21.50	0.910	21.4°C
100%RB									
Right Hand Touched	38000/2595	20M QPSK 100%RB#0	0.784	0.401	0.060	21.12	21.50	0.856	21.4°C
Right Hand Tilted 15°	38000/2595	20M QPSK 100%RB#0	0.785	0.340	0.070	21.12	21.50	0.857	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	37850/2580	20M QPSK 1RB#50	1.030	0.462	0.030	22.59	23.50	1.270	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	37850/2580	20M QPSK 1RB#50	1.130	0.511	-0.040	22.59	23.50	1.393	21.4°C
Right Hand Touched-repeated*	37850/2580	20M QPSK 1RB#50	1.160	0.535	0.050	22.59	23.50	1.430	21.4°C

Additional SAR test (WiFi on, Modem0 Synchronous transmission with Modem1)									
Right Hand Touched	37850/2580	20M QPSK 1RB#50	1.070	0.485	-0.020	21.10	22.00	1.316	21.4°C

Table 181: Head SAR test results of LTE Band XXXVIII(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	38000/2595	20M QPSK 1RB#50	0.128	0.069	0.100	23.05	24.00	0.159	21.4°C
Back Side	38000/2595	20M QPSK 1RB#50	0.171	0.091	0.100	23.05	24.00	0.213	21.4°C
50%RB									
Front Side	38000/2595	20M QPSK 50%RB#50	0.082	0.043	0.100	21.09	22.00	0.101	21.4°C
Back Side	38000/2595	20M QPSK 50%RB#50	0.108	0.056	0.030	21.09	22.00	0.133	21.4°C
Tested at the worst position with SIM2									
Back Side	38000/2595	20M QPSK 1RB#50	0.176	0.093	0.180	23.05	24.00	0.219	21.4°C
Tested at the worst position with battery 2#									
Back Side	38000/2595	20M QPSK 1RB#50	0.189	0.100	0.090	23.05	24.00	0.235	21.4°C

Table 182: Body-Worn SAR test results of LTE Band XXXVIII(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	38150/2610	20M QPSK 1RB#50	0.031	0.010	0.160	22.95	23.50	0.035	21.4°C
Back Side	38150/2610	20M QPSK 1RB#50	0.111	0.063	0.170	22.95	23.50	0.126	21.4°C
50%RB									
Front Side	38000/2595	20M QPSK 50%RB#50	0.021	0.009	0.190	21.11	21.50	0.023	21.4°C
Back Side	38000/2595	20M QPSK 50%RB#50	0.095	0.030	-0.040	21.11	21.50	0.104	21.4°C
Tested at the worst position with SIM2									
Back Side	38150/2610	20M QPSK 1RB#50	0.089	0.049	-0.160	22.95	23.50	0.101	21.4°C
Tested at the worst position with battery 2#									
Back Side	38150/2610	20M QPSK 1RB#50	0.097	0.054	0.180	22.95	23.50	0.111	21.4°C

Table 183: Body-Worn SAR test results of LTE Band XXXVIII(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	38000/2595	20M QPSK 1RB#50	0.294	0.155	-0.010	23.05	24.00	0.366	21.4°C
Back Side	38000/2595	20M QPSK 1RB#50	0.409	0.209	0.120	23.05	24.00	0.509	21.4°C
Left Side	38000/2595	20M QPSK 1RB#50	0.001	0.000	0.020	23.05	24.00	0.001	21.4°C
Right Side	38000/2595	20M QPSK 1RB#50	0.323	0.160	-0.200	23.05	24.00	0.402	21.4°C
Bottom Side	38000/2595	20M QPSK 1RB#50	0.138	0.064	-0.110	23.05	24.00	0.172	21.4°C
50%RB									
Front Side	38000/2595	20M QPSK 50%RB#50	0.190	0.099	-0.040	21.09	22.00	0.234	21.4°C
Back Side	38000/2595	20M QPSK 50%RB#50	0.267	0.137	0.120	21.09	22.00	0.329	21.4°C
Left Side	38000/2595	20M QPSK 50%RB#50	0.001	0.000	-0.080	21.09	22.00	0.001	21.4°C
Right Side	38000/2595	20M QPSK 50%RB#50	0.209	0.103	-0.190	21.09	22.00	0.258	21.4°C
Bottom Side	38000/2595	20M QPSK 50%RB#50	0.088	0.042	-0.130	21.09	22.00	0.109	21.4°C
Tested at the worst position with SIM2									
Back Side	38000/2595	20M QPSK 1RB#50	0.362	0.186	-0.190	23.05	24.00	0.451	21.4°C
Tested at the worst position with battery 2#									
Back Side	38000/2595	20M QPSK 1RB#50	0.412	0.211	0.160	23.05	24.00	0.513	21.4°C

Table 184: Hotspot SAR test results of LTE Band XXXVIII(Main antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	38150/2610	20M QPSK 1RB#50	0.057	0.025	0.080	22.95	23.50	0.064	21.4°C
Back Side	38150/2610	20M QPSK 1RB#50	0.208	0.103	0.040	22.95	23.50	0.236	21.4°C
Left Side	38150/2610	20M QPSK 1RB#50	0.293	0.138	-0.020	22.95	23.50	0.333	21.4°C
Right Side	38150/2610	20M QPSK 1RB#50	0.002	0.000	-0.050	22.95	23.50	0.002	21.4°C
Top Side	38150/2610	20M QPSK 1RB#50	0.085	0.025	-0.180	22.95	23.50	0.096	21.4°C
50%RB									
Front Side	38000/2595	20M QPSK 50%RB#50	0.047	0.021	0.010	21.11	21.50	0.052	21.4°C
Back Side	38000/2595	20M QPSK 50%RB#50	0.181	0.093	0.090	21.11	21.50	0.198	21.4°C
Left Side	38000/2595	20M QPSK 50%RB#50	0.291	0.135	0.000	21.11	21.50	0.318	21.4°C
Right Side	38000/2595	20M QPSK 50%RB#50	0.002	0.000	0.130	21.11	21.50	0.002	21.4°C
Top Side	38000/2595	20M QPSK 50%RB#50	0.074	0.022	-0.160	21.11	21.50	0.081	21.4°C
Tested at the worst position with SIM2									
Left Side	38150/2610	20M QPSK 1RB#50	0.243	0.123	-0.070	22.95	23.50	0.276	21.4°C
Tested at the worst position with battery 2#									
Left Side	38150/2610	20M QPSK 1RB#50	0.340	0.143	-0.150	22.95	23.50	0.386	21.4°C

Table 185: Hotspot SAR test results of LTE Band XXXVIII(Second antenna)

**7.3.11 SAR measurement Result of LTE Band XLI**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	41140/2645	20M QPSK 1RB#50	0.146	0.078	-0.040	22.76	24.00	0.194	21.4°C
Left Hand Tilted 15°	41140/2645	20M QPSK 1RB#50	0.142	0.068	0.170	22.76	24.00	0.189	21.4°C
Right Hand Touched	41140/2645	20M QPSK 1RB#50	0.377	0.169	0.140	22.76	24.00	0.502	21.4°C
Right Hand Touched	40740/2605	20M QPSK 1RB#50	0.300	0.153	-0.070	22.52	24.00	0.422	21.4°C
Right Hand Touched	40340/2565	20M QPSK 1RB#50	0.303	0.156	-0.090	22.47	24.00	0.431	21.4°C
Right Hand Tilted 15°	41140/2645	20M QPSK 1RB#50	0.085	0.042	-0.040	22.76	24.00	0.112	21.4°C
50%RB									
Left Hand Touched	40740/2605	20M QPSK 50%RB#0	0.100	0.056	0.120	21.25	23.00	0.149	21.4°C
Left Hand Tilted 15°	40740/2605	20M QPSK 50%RB#0	0.101	0.048	0.190	21.25	23.00	0.151	21.4°C
Right Hand Touched	40740/2605	20M QPSK 50%RB#0	0.226	0.118	0.020	21.25	23.00	0.338	21.4°C
Right Hand Tilted 15°	40740/2605	20M QPSK 50%RB#0	0.062	0.032	0.030	21.25	23.00	0.093	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	41140/2645	20M QPSK 1RB#50	0.411	0.159	-0.130	22.76	24.00	0.547	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	41140/2645	20M QPSK 1RB#50	0.343	0.182	0.190	22.76	24.00	0.456	21.4°C

Table 186: Head SAR test results of LTE Band XLI(Main antenna)

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Left Hand Touched	41140/2645	20M QPSK 1RB#50	0.227	0.116	0.100	22.58	24.00	0.315	21.4°C
Left Hand Tilted 15°	41140/2645	20M QPSK 1RB#50	0.237	0.114	-0.040	22.58	24.00	0.329	21.4°C
Right Hand Touched	41140/2645	20M QPSK 1RB#50	0.743	0.354	-0.080	22.58	24.00	1.030	21.4°C
Right Hand Touched	40740/2605	20M QPSK 1RB#50	0.804	0.379	0.170	22.43	24.00	1.154	21.4°C
Right Hand Touched	40340/2565	20M QPSK 1RB#50	0.844	0.402	-0.060	22.49	24.00	1.195	21.4°C
Right Hand Tilted 15°	41140/2645	20M QPSK 1RB#50	0.750	0.316	0.040	22.58	24.00	1.040	21.4°C
Right Hand Tilted 15°	40740/2605	20M QPSK 1RB#50	0.734	0.313	0.020	22.43	24.00	1.054	21.4°C
Right Hand Tilted 15°	40340/2565	20M QPSK 1RB#50	0.800	0.342	0.010	22.49	24.00	1.133	21.4°C
50%RB									
Left Hand Touched	41140/2645	20M QPSK 50%RB#0	0.247	0.126	0.030	21.23	23.00	0.371	21.4°C
Left Hand Tilted 15°	41140/2645	20M QPSK 50%RB#0	0.261	0.126	0.010	21.23	23.00	0.392	21.4°C
Right Hand Touched	41140/2645	20M QPSK 50%RB#0	0.865	0.407	0.090	21.23	23.00	1.300	21.4°C
Right Hand Touched	40740/2605	20M QPSK 50%RB#0	0.820	0.386	-0.110	21.12	23.00	1.264	21.4°C
Right Hand Touched	40340/2565	20M QPSK 50%RB#50	0.907	0.425	0.150	21.22	23.00	1.366	21.4°C
Right Hand Tilted 15°	41140/2645	20M QPSK 50%RB#0	0.825	0.347	-0.150	21.23	23.00	1.240	21.4°C
Right Hand Tilted 15°	40740/2605	20M QPSK 50%RB#0	0.770	0.327	-0.010	21.12	23.00	1.187	21.4°C
Right Hand Tilted 15°	40340/2565	20M QPSK 50%RB#50	0.790	0.341	-0.020	21.22	23.00	1.190	21.4°C
100%RB									
Right Hand Touched	41140/2645	20M QPSK 100%RB#0	0.783	0.367	-0.030	21.12	23.00	1.207	21.4°C
Right Hand Tilted 15°	41140/2645	20M QPSK 100%RB#0	0.789	0.332	0.080	21.12	23.00	1.216	21.4°C
Tested at the worst position with SIM2									
Right Hand Touched	40340/2565	20M QPSK 50%RB#50	0.944	0.436	0.070	21.22	23.00	1.422	21.4°C
Right Hand Touched-repeated*	40340/2565	20M QPSK 50%RB#50	0.923	0.432	-0.040	21.22	23.00	1.391	21.4°C
Tested at the worst position with battery 2#									
Right Hand Touched	40340/2565	20M QPSK 50%RB#50	0.789	0.366	0.140	21.22	23.00	1.189	21.4°C



## Additional SAR test ( on, Modem0 Synchronous transmission with Modem1)

Right Hand Touched	40340/2565	20M QPSK 50%RB#50	0.591	0.274	0.060	17.34	18.70	0.808	21.4°C
Additional SAR test (WiFi on, Modem0 Synchronous transmission with Modem1)									
Right Hand Touched	40340/2565	20M QPSK 50%RB#50	0.473	0.219	0.020	17.07	18.50	0.657	21.4°C
Right Hand Tilted 15°	40340/2565	20M QPSK 50%RB#50	0.423	0.179	0.010	17.07	18.50	0.588	21.4°C

Table 187: Head SAR test results of LTE Band XLI(Second antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	41140/2645	20M QPSK 1RB#50	0.165	0.090	-0.150	22.76	24.00	0.220	21.4°C
Back Side	41140/2645	20M QPSK 1RB#50	0.212	0.105	0.010	22.76	24.00	0.282	21.4°C
50%RB									
Front Side	40740/2605	20M QPSK 50%RB#0	0.120	0.063	-0.150	21.25	23.00	0.180	21.4°C
Back Side	40740/2605	20M QPSK 50%RB#0	0.162	0.088	0.080	21.25	23.00	0.242	21.4°C
Tested at the worst position with SIM2									
Back Side	41140/2645	20M QPSK 1RB#50	0.185	0.088	-0.050	22.76	24.00	0.246	21.4°C
Tested at the worst position with battery 2#									
Back Side	41140/2645	20M QPSK 1RB#50	0.204	0.101	0.080	22.76	24.00	0.271	21.4°C

Table 188: Body-Worn SAR test results of LTE Band XLI(Main antenna)

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	41140/2645	20M QPSK 1RB#50	0.081	0.043	0.180	22.58	24.00	0.113	21.4°C
Back Side	41140/2645	20M QPSK 1RB#50	0.094	0.040	0.130	22.58	24.00	0.130	21.4°C
50%RB									
Front Side	41140/2645	20M QPSK 50%RB#0	0.082	0.042	0.140	21.23	23.00	0.124	21.4°C
Back Side	41140/2645	20M QPSK 50%RB#0	0.112	0.047	0.030	21.23	23.00	0.168	21.4°C
Tested at the worst position with SIM2									
Back Side	41140/2645	20M QPSK 50%RB#0	0.114	0.045	-0.020	21.23	23.00	0.171	21.4°C
Tested at the worst position with battery 2#									
Back Side	41140/2645	20M QPSK 50%RB#0	0.161	0.074	0.030	21.23	23.00	0.242	21.4°C

Table 189: Body-Worn SAR test results of LTE Band XLI(Second antenna)

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	41140/2645	20M QPSK 1RB#50	0.269	0.144	-0.130	22.76	24.00	0.358	21.4°C
Back Side	41140/2645	20M QPSK 1RB#50	0.380	0.194	0.080	22.76	24.00	0.506	21.4°C
Left Side	41140/2645	20M QPSK 1RB#50	0.001	0.000	0.120	22.76	24.00	0.002	21.4°C
Right Side	41140/2645	20M QPSK 1RB#50	0.355	0.179	-0.130	22.76	24.00	0.472	21.4°C
Bottom Side	41140/2645	20M QPSK 1RB#50	0.172	0.080	-0.170	22.76	24.00	0.229	21.4°C
50%RB									
Front Side	40740/2605	20M QPSK 50%RB#0	0.204	0.109	0.000	21.25	23.00	0.305	21.4°C
Back Side	40740/2605	20M QPSK 50%RB#0	0.266	0.145	0.110	21.25	23.00	0.398	21.4°C
Left Side	40740/2605	20M QPSK 50%RB#0	0.001	0.000	-0.150	21.25	23.00	0.002	21.4°C
Right Side	40740/2605	20M QPSK 50%RB#0	0.253	0.132	-0.120	21.25	23.00	0.379	21.4°C
Bottom Side	40740/2605	20M QPSK 50%RB#0	0.126	0.061	-0.170	21.25	23.00	0.189	21.4°C
Tested at the worst position with SIM2									
Back Side	41140/2645	20M QPSK 1RB#50	0.449	0.226	0.120	22.76	24.00	0.597	21.4°C
Tested at the worst position with battery 2#									
Back Side	41140/2645	20M QPSK 1RB#50	0.431	0.228	0.120	22.76	24.00	0.573	21.4°C

Table 190: Hotspot SAR test results of LTE Band XLI(Main antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducte d Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	41140/2645	20M QPSK 1RB#50	0.142	0.069	0.190	19.99	21.00	0.179	21.4°C
Back Side	41140/2645	20M QPSK 1RB#50	0.146	0.078	0.100	19.99	21.00	0.184	21.4°C
Left Side	41140/2645	20M QPSK 1RB#50	0.107	0.042	-0.050	19.99	21.00	0.135	21.4°C
Right Side	41140/2645	20M QPSK 1RB#50	0.001	0.000	-0.010	19.99	21.00	0.001	21.4°C
Top Side	41140/2645	20M QPSK 1RB#50	0.112	0.041	-0.170	19.99	21.00	0.141	21.4°C
50%RB									
Front Side	41140/2645	20M QPSK 50%RB#0	0.108	0.049	0.040	18.58	20.00	0.150	21.4°C
Back Side	41140/2645	20M QPSK 50%RB#0	0.124	0.062	-0.030	18.58	20.00	0.172	21.4°C
Left Side	41140/2645	20M QPSK 50%RB#0	0.077	0.029	-0.170	18.58	20.00	0.107	21.4°C
Right Side	41140/2645	20M QPSK 50%RB#0	0.001	0.000	0.150	18.58	20.00	0.001	21.4°C
Top Side	41140/2645	20M QPSK 50%RB#0	0.045	0.021	-0.120	18.58	20.00	0.062	21.4°C
Tested at the worst position with SIM2									
Back Side	41140/2645	20M QPSK 1RB#50	0.119	0.062	0.020	19.99	21.00	0.150	21.4°C
Tested at the worst position with battery 2#									
Back Side	41140/2645	20M QPSK 1RB#50	0.187	0.084	-0.060	19.99	21.00	0.236	21.4°C

Table 191: Hotspot SAR test results of LTE Band XLI(Second antenna)

Note: \* - repeated at the highest SAR measurement according to the FCC KDB 865664

**7.3.12 SAR measurement Result of WiFi 2.4G**

Test Position of Head	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Left Hand Touched	11/2462	802.11 b	0.553	0.233	0.160	15.78	16.00	0.582	21.4°C
Left Hand Tilted 15°	11/2462	802.11 b	0.619	0.239	0.010	15.78	16.00	0.651	21.4°C
Left Hand Tilted 15°	6/2437	802.11 b	0.629	0.244	0.190	15.13	16.00	0.769	21.4°C
Left Hand Tilted 15°	1/2412	802.11 b	0.688	0.276	0.190	15.24	16.00	0.820	21.4°C
Right Hand Touched	11/2462	802.11 b	0.120	0.050	-0.170	15.78	16.00	0.126	21.4°C
Right Hand Tilted 15°	11/2462	802.11 b	0.141	0.055	0.180	15.78	16.00	0.148	21.4°C
Tested at the worst position with battery 2#									
Left Hand Tilted 15°	1/2412	802.11 b	0.564	0.222	0.080	15.24	16.00	0.672	21.4°C
Additional SAR test (After WiFi work on, Modem0 also work on)									
Left Hand Touched	1/2412	802.11 b	0.263	0.103	0.060	13.02	13.50	0.294	21.4°C
Left Hand Tilted 15°	1/2412	802.11 b	0.421	0.168	0.160	13.02	13.50	0.470	21.4°C
Right Hand Touched	1/2412	802.11 b	0.056	0.026	-0.040	13.02	13.50	0.063	21.4°C
Right Hand Tilted 15°	1/2412	802.11 b	0.065	0.030	0.150	13.02	13.50	0.072	21.4°C
Additional SAR test (After WiFi work on, Modem0 Synchronous transmission with Modem1)									
Left Hand Touched	1/2412	802.11 b	0.207	0.079	0.130	11.51	12.00	0.232	21.4°C
Left Hand Tilted 15°	1/2412	802.11 b	0.295	0.111	-0.110	11.51	12.00	0.330	21.4°C
Right Hand Touched	1/2412	802.11 b	0.041	0.019	0.190	11.51	12.00	0.045	21.4°C
Right Hand Tilted 15°	1/2412	802.11 b	0.050	0.017	0.130	11.51	12.00	0.056	21.4°C

Table 192: Head SAR test results of WiFi 2450MHz

Test Position of Body-Worn with 15mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	11/2462	802.11 b	0.036	0.021	0.120	15.78	16.00	0.038	21.4°C
Back Side	11/2462	802.11 b	0.037	0.015	-0.190	15.78	16.00	0.039	21.4°C
Tested at the worst position with battery 2#									
Back Side	11/2462	802.11 b	0.057	0.023	0.170	15.78	16.00	0.060	21.4°C

Table 193: Body-Worn SAR test results of WiFi 2450MHz

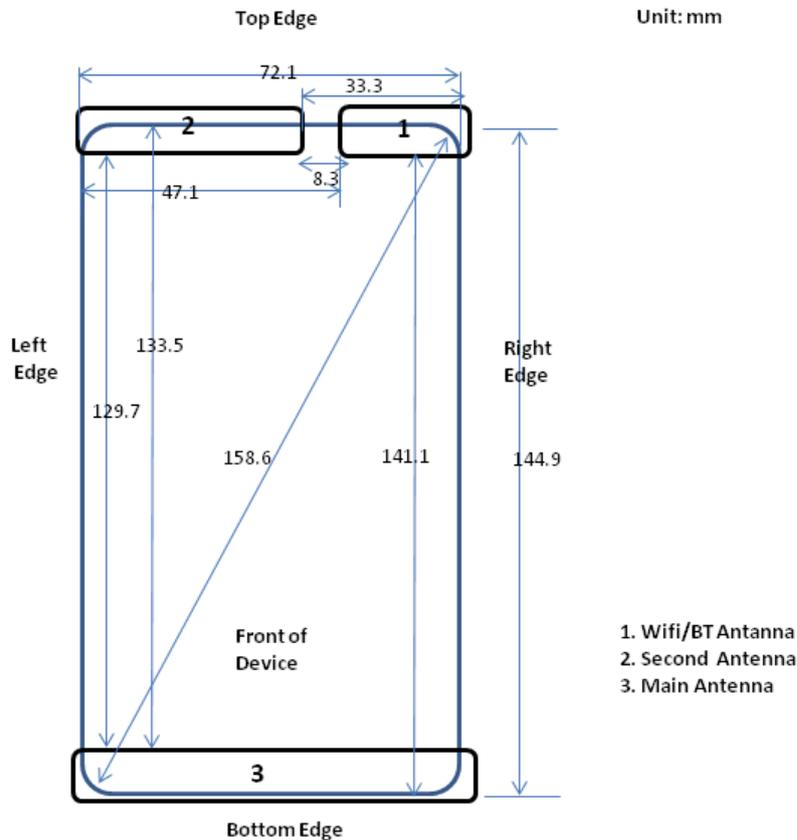


Test Position of Hotspot with 10mm	Test channel /Frequency	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR <sub>1-g</sub> (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
Front Side	11/2462	802.11 b	0.047	0.017	0.010	15.78	16.00	0.049	21.4°C
Back Side	11/2462	802.11 b	0.063	0.025	0.080	15.78	16.00	0.066	21.4°C
Left Side	11/2462	802.11 b	<0.001	<0.001	0.150	15.78	16.00	0.010	21.4°C
Right Side	11/2462	802.11 b	0.070	0.033	-0.200	15.78	16.00	0.074	21.4°C
Tested at the worst position with battery 2#									
Back Side	11/2462	802.11 b	0.160	0.070	-0.030	15.78	16.00	0.168	21.4°C
After WiFi work on, Modem0 also work on									
Back Side	11/2462	802.11 b	0.082	0.034	0.170	13.40	13.50	0.083	21.4°C
Additional SAR test (After WiFi work on, Modem0 Synchronous transmission with Modem1)									
Back Side	11/2462	802.11 b	0.048	0.014	0.140	11.98	12.00	0.048	21.4°C

Table 194: Hotspot SAR test results of WiFi 2450MHz

### 7.4 Multiple Transmitter Evaluation

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v05r02. The location of the antennas inside the device is shown as below picture:



Note:

- 1) The device supports the dynamic antenna switching function to optimize transmission efficiency for wide range frequency operations. It has two 2G/3G/4G Tx antennas (Main Antenna and Second Antenna). It can transmit from either Main Antenna or Second Antenna.
- 2) The Main Antenna and Second Antenna can also transmit simultaneously only when two SIM cards work at the same time by using different modems. Main modem can support 2G/3G/4G. Second modem only supports 2G and can only be used for SIM2.

Mode	Exposure Condition	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
Main antenna	Hotspot	Yes	Yes	Yes	Yes	No	Yes
Second antenna	Hotspot	Yes	Yes	Yes	No	Yes	No
WiFi 2.4G antenna	Hotspot	Yes	Yes	No	Yes	Yes	No

Table 195: Sides for Hotspot SAR testing

Note: Per KDB 941225 D06, particular DUT edges were not required to be evaluated for Hotspot SAR if the antenna-to-edge distance is greater than 2.5cm.

### 7.4.1 Stand-alone SAR test exclusion

Per FCC KDB 447498D01v05, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where:

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	$P_{\text{max}}$ (dBm)*	$P_{\text{max}}$ (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
BT	Body-Worn	10.00	10.00	15	2.450	1.04	3.00	Yes

Table 196: Standalone SAR test exclusion for BT

Note:

- 1)\* - maximum possible output power declared by manufacturer
- 2) Held to ear configurations are not applicable to Bluetooth for this device.

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})/x}] \text{ W/kg}$  for test separation distances  $\leq 50$  mm, where  $x = 7.5$  for 1-g SAR and  $x = 18.75$  for 10-g SAR.

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

Mode	Position	$P_{\text{max}}$ (dBm)*	$P_{\text{max}}$ (mW)	Distance (mm)	f (GHz)	X	Estimated SAR (W/Kg)*
BT	Body-worn	10.00	10.00	15	2.450	7.5	0.139

Table 197: Estimated SAR calculation for BT

Note:

- 1) \* - maximum possible output power declared by manufacturer
- 2) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.

### 7.4.2 Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	GSM Voice(Second Antenna) + UMTS Data(Main Antenna)	Yes	Yes	Yes
2	GSM Voice(Second Antenna) + UMTS Voice(Main Antenna)	Yes	Yes	N/A
3	GSM Voice (Second Antenna)+ LTE DATA(Main Antenna)	Yes*	Yes*	Yes
4	GSM DATA(Second Antenna) + LTE DATA(Main Antenna)	Yes*	Yes*	N/A
5	GSM Voice(Second Antenna) + GSM Voice(Main Antenna)	Yes	Yes	N/A
6	GSM Voice (Second Antenna) + GSM Data(Main Antenna)	Yes	Yes	Yes
7	GSM Data(Second Antenna) + UMTS Voice(Main Antenna)	Yes	Yes	Yes
8	GSM Data(Second Antenna) + GSM Voice(Main Antenna)	Yes	Yes	Yes
9	GSM Voice(Main Antenna) + UMTS Data(Second Antenna)	Yes	Yes	Yes
10	GSM Voice(Main Antenna)+ UMTS Voice(Second Antenna)	Yes	Yes	N/A
11	GSM Data(Main Antenna)+ UMTS Voice(Second Antenna)	Yes	Yes	Yes
12	GSM Voice(Main Antenna)+ LTE Data(Second Antenna)	Yes*	Yes*	Yes
13	GSM DATA(Main Antenna) + LTE Data(Second Antenna)	Yes*	Yes*	N/A
14	GSM Voice(Main Antenna) + BT	N/A	Yes	N/A
15	GSM DATA(Main Antenna) + BT	N/A	Yes	N/A
16	GSM Voice(Second Antenna) + BT	N/A	Yes	N/A
17	GSM DATA (Second Antenna)+ BT	N/A	Yes	N/A
18	GSM Voice(Main Antenna) + WiFi	Yes	Yes	N/A
19	GSM DATA(Main Antenna) + WiFi	N/A	Yes	Yes
20	GSM Voice(Second Antenna) + WiFi	Yes	Yes	N/A
21	GSM DATA(Second Antenna) + WiFi	N/A	Yes	Yes
22	UMTS Voice(Main Antenna) + BT	N/A	Yes	N/A
23	UMTS Data(Main Antenna) + BT	N/A	Yes	N/A
24	UMTS Voice(Second Antenna) + BT	N/A	Yes	N/A
25	UMTS Data(Second Antenna) + BT	N/A	Yes	N/A
26	UMTS Voice(Main Antenna) + WiFi	Yes	Yes	N/A
27	UMTS Data (Main Antenna) + WiFi	N/A	Yes	Yes
28	UMTS Voice (Second Antenna) + WiFi	Yes	Yes	N/A
29	UMTS Data (Second Antenna)+ WiFi	N/A	Yes	Yes
30	LTE Data(Main Antenna) + WiFi	Yes	Yes*	Yes
31	LTE Data(Main Antenna) + BT	N/A	Yes*	N/A
32	LTE Data(Second Antenna) + WiFi	Yes	Yes	Yes
33	LTE Data(Second Antenna) + BT	N/A	Yes*	N/A
34	GSM Voice(Second Antenna)+ UMTS Data(Main Antenna) + BT	N/A	Yes	N/A
35	GSM Voice(Second Antenna)+ UMTS Voice(Main Antenna) + BT	N/A	Yes	N/A
36	GSM Voice(Second Antenna) + LTE DATA(Main Antenna) + BT	N/A	Yes*	N/A
37	GSM Voice(Second Antenna) + GSM Voice(Main Antenna) + BT	N/A	Yes	N/A
38	GSM Voice(Second Antenna) + GSM Data(Main Antenna) + BT	N/A	Yes	N/A
39	GSM Data(Second Antenna) + WCDMA Voice(Main Antenna) + BT	N/A	Yes	N/A
40	GSM Data(Second Antenna) + GSM Voice(Main Antenna) + BT	N/A	Yes	N/A
41	GSM DATA(Second Antenna) + LTE DATA(Main Antenna) + BT	N/A	Yes*	N/A
42	GSM Voice(Main Antenna) + WCDMA Data(Second Antenna) + BT	N/A	Yes	N/A
43	GSM Voice(Main Antenna) + WCDMA Voice(Second Antenna) + BT	N/A	Yes	N/A

NO.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
44	GSM Data(Main Antenna) + WCDMA Voice(Second Antenna) + BT	N/A	Yes	N/A
45	GSM Voice(Main Antenna) + LTE Data(Second Antenna) + BT	N/A	Yes*	N/A
46	GSM DATA(Main Antenna) + LTE Data(Second Antenna) + BT	N/A	Yes*	N/A
47	GSM Voice(Second Antenna) + WCDMA Data(Main Antenna) +WiFi	Yes	Yes	Yes
48	GSM Voice(Second Antenna) + WCDMA Voice(Main Antenna) +WiFi	Yes	Yes	N/A
49	GSM Voice(Second Antenna) + LTE DATA(Main Antenna) +WiFi	Yes*	Yes*	Yes
50	GSM Voice(Second Antenna) + GSM Voice(Main Antenna) +WiFi	Yes	Yes	N/A
51	GSM Voice(Second Antenna) + GSM Data(Main Antenna) +WiFi	Yes	Yes	Yes
52	GSM Data(Second Antenna) + WCDMA Voice(Main Antenna) +WiFi	Yes	Yes	Yes
53	GSM Data (Second Antenna) + GSM Voice(Main Antenna) +WiFi	Yes	Yes	Yes
54	GSM DATA(Second Antenna) + LTE DATA(Main Antenna) +WiFi	Yes	Yes	N/A
55	GSM Voice(Main Antenna) + WCDMA Data(Second Antenna) +WiFi	Yes	Yes	Yes
56	GSM Voice(Main Antenna)+ WCDMA Voice(Second Antenna) +WiFi	Yes	Yes	N/A
57	GSM Data(Main Antenna)+ WCDMA Voice(Second Antenna) +WiFi	Yes	Yes	Yes
58	GSM Voice(Main Antenna)+ LTE Data(Second Antenna) +WiFi	Yes*	Yes*	Yes
59	GSM DATA(Main Antenna) + LTE Data(Second Antenna) + BT	N/A	Yes*	N/A

Table 198: Simultaneous Transmission Possibilities

Note:

- 1) The WiFi and Bluetooth can't transmit simultaneously, because they share the same antenna.
- 2) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.
- 3) The device does not support DTM function.
- 4) \* LTE VOIP 3rd party applications may possibly be installed and used by the user.
- 5) The Main Antenna and Second Antenna can also transmit simultaneously only when two SIM cards work at the same time by using different modems. Main modem can support GSM/UMTS/LTE. Second modem only supports GSM and can only be used for SIM2.

### 7.4.3 SAR Summation Scenario

The yellow color SAR test data in the following summed SAR tables represent that the additional SAR test results in simultaneous transmission fixed power reduction scenario are used to ensure simultaneous transmission SAR test exclusion (Also see Section 7.3). For the other SAR test data in the summed SAR tables, the more conservative SAR test results at the maximum output power level without any power reduction are used.

Test Position		Main antenna (Main Modem) SAR <sub>Max</sub>									Second antenna (Second Modem) SAR <sub>Max</sub>		WiFi/BT antenna SAR <sub>Max</sub>		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	GSM850	GSM1900	WiFi 2.4G	BT		
Head	Left Hand Touched	0.161	0.541	0.740	0.313	0.163	0.794	0.182	0.163	0.194	0.468	0.428	0.232	/	1.493	N/A
	Left Hand Tilted 15°	0.103	0.153	0.218	0.209	0.109	0.206	0.200	0.144	0.189	0.394	0.399	0.330	/	0.947	N/A
	Right Hand Touched	0.247	0.222	0.295	0.295	0.215	0.296	0.678	0.411	0.547	0.494	0.773	0.045	/	1.496	N/A
	Right Hand Tilted 15°	0.109	0.112	0.147	0.267	0.122	0.271	0.108	0.091	0.112	0.476	0.773	0.148	/	1.192	N/A
Body 15mm	Front side	0.259	0.383	0.660	0.440	0.229	0.329	0.248	0.159	0.220	0.234	0.095	0.038	0.139	1.033	N/A
	Back side	0.340	0.558	0.967	0.530	0.301	0.484	0.384	0.235	0.282	0.267	0.098	0.060	0.139	1.373	N/A
Hotspot 10mm	Front side	0.264	0.964	0.613	0.590	0.234	0.782	0.544	0.366	0.358	0.438	0.206	0.049	/	1.451	N/A
	Back side	0.348	1.061	0.798	0.778	0.344	1.020	0.803	0.513	0.597	0.352	0.221	0.168	/	1.581	N/A
	Left side	0.221	0.399	0.303	0.328	0.191	0.427	0.056	0.001	0.002	0.408	0.293	0.010	/	0.845	N/A
	Right side	0.486	0.111	0.077	0.022	0.439	0.022	0.598	0.402	0.472	0.115	0.024	0.074	/	0.786	N/A
	Top side	/	/	/	/	/	/	/	/	/	0.457	0.271	0.032	/	0.489	N/A
	Bottom side	0.171	1.456	1.164	1.412	0.156	1.290	0.269	0.172	0.229	/	/	/	/	1.456	N/A

Table 199: Simultaneous Tx Combination of Main antenna Main Modem + Second antenna Second Modem + WiFi/BT.

Test Position		Second antenna (Main Modem) SAR <sub>Max</sub>									Main antenna SAR <sub>Max</sub> (Second Modem)		WiFi/BT antenna SAR <sub>Max</sub>		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	GSM850	GSM1900	WiFi 2.4G	BT		
Head	Left Hand Touched	0.710	0.349	0.247	0.482	0.853	0.383	0.265	0.367	0.371	0.126	0.502	0.232	/	1.587	N/A
	Left Hand Tilted 15°	0.651	0.339	0.236	0.451	0.774	0.388	0.263	0.390	0.392	0.088	0.148	0.330	/	1.252	N/A
	Right Hand Touched	0.875	1.216	1.021	1.322	0.931	0.697	1.128	1.316	0.618	0.172	0.216	0.045	/	1.583	N/A
	Right Hand Tilted 15°	1.222	1.082	0.722	1.027	0.805	0.947	1.308	1.165	1.240	0.096	0.112	0.148	/	1.568	N/A
Body 15mm	Front side	0.212	0.078	0.062	0.122	0.141	0.118	0.090	0.035	0.124	0.210	0.403	0.038	0.139	0.754	N/A
	Back side	0.276	0.078	0.056	0.152	0.229	0.129	0.101	0.126	0.242	0.268	0.624	0.060	0.139	1.039	N/A
Hotspot 10mm	Front side	0.509	0.155	0.128	0.399	0.435	0.400	0.168	0.064	0.179	0.262	0.778	0.049	/	1.336	N/A
	Back side	0.467	0.165	0.160	0.490	0.437	0.476	0.194	0.236	0.397	0.795	0.168	/	1.454	N/A	
	Left side	0.414	0.193	0.166	0.358	0.129	0.373	0.182	0.386	0.135	0.215	0.379	0.010	/	0.803	N/A
	Right side	0.145	0.021	0.017	0.045	0.301	0.051	0.001	0.002	0.001	0.463	0.093	0.074	/	0.838	N/A
	Top side	0.444	0.217	0.149	0.611	0.497	0.574	0.088	0.096	0.141	0.000	0.000	0.032	/	0.642	N/A
	Bottom side	/	/	/	/	/	/	/	/	/	0.176	0.993	/	/	0.993	N/A

Table 200: Simultaneous Tx Combination of Second antenna Main Modem + Main antenna Second Modem + WiFi/BT

Test Position		Main antenna SAR <sub>Max</sub> (Main Modem)									Second antenna SAR <sub>Max</sub> (Second Modem)		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	GSM850	GSM1900		
Head	Left Hand Touched	0.161	0.541	0.740	0.907	0.163	0.794	0.182	0.163	0.194	0.593	0.428	1.500	N/A
	Left Hand Tilted 15°	0.103	0.153	0.218	0.209	0.109	0.206	0.200	0.144	0.189	0.550	0.399	0.768	N/A
	Right Hand Touched	0.247	0.222	0.295	0.295	0.215	0.296	0.678	0.411	0.547	0.734	1.099	1.777	See 7.3.4
	Right Hand Tilted 15°	0.109	0.112	0.147	0.267	0.122	0.271	0.108	0.091	0.112	0.672	0.928	1.199	N/A
Body 15mm	Front side	0.259	0.383	0.660	0.440	0.229	0.329	0.248	0.159	0.220	0.234	0.095	0.894	N/A
	Back side	0.340	0.558	0.967	0.530	0.301	0.484	0.384	0.235	0.282	0.267	0.098	1.234	N/A
Hotspot 10mm	Front side	0.264	0.964	0.613	0.590	0.234	0.782	0.544	0.366	0.358	0.438	0.206	1.402	N/A
	Back side	0.348	1.061	1.093	0.778	0.344	1.020	0.803	0.513	0.597	0.352	0.221	1.445	N/A
	Left side	0.221	0.399	0.303	0.328	0.191	0.427	0.056	0.001	0.002	0.408	0.293	0.835	N/A
	Right side	0.486	0.111	0.077	0.022	0.439	0.022	0.598	0.402	0.472	0.115	0.024	0.712	N/A
	Top side	/	/	/	/	/	/	/	/	/	0.457	0.271	0.457	N/A
	Bottom side	0.171	1.456	1.164	1.412	0.156	1.290	0.269	0.172	0.229	/	/	1.456	N/A



Test Position		Main antenna SAR <sub>Max</sub> (Main Modem)									Second antenna SAR <sub>Max</sub>		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	/	GSM1900		
Head	Right Hand Touched	0.220	/	/	/	/	/	/	/	/	/	1.099	1.319	N/A
		/	0.222	/	/	/	/	/	/	/	/	1.099	1.321	N/A
		/	/	0.295	/	/	/	/	/	/	/	1.099	1.394	N/A
		/	/	/	0.295	/	/	/	/	/	/	1.099	1.394	N/A
		/	/	/	/	0.215	/	/	/	/	/	1.099	1.314	N/A
		/	/	/	/	/	0.296	/	/	/	/	1.099	1.395	N/A
		/	/	/	/	/	/	0.678	/	/	/	1.099	1.777	0.026
		/	/	/	/	/	/	/	0.411	/	/	1.099	1.510	N/A
/	/	/	/	/	/	/	/	/	0.547	1.099	1.646	0.021		

Test Position		Main antenna SAR <sub>Max</sub> (Main Modem)									Second antenna SAR <sub>Max</sub>		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	GSM850	/		
Head	Right Hand Touched	0.220	/	/	/	/	/	/	/	/	0.734	/	0.954	N/A
		/	0.222	/	/	/	/	/	/	/	0.734	/	0.956	N/A
		/	/	0.295	/	/	/	/	/	/	0.734	/	1.029	N/A
		/	/	/	0.295	/	/	/	/	/	0.734	/	1.029	N/A
		/	/	/	/	0.215	/	/	/	/	0.734	/	0.949	N/A
		/	/	/	/	/	0.296	/	/	/	0.734	/	1.030	N/A
		/	/	/	/	/	/	0.678	/	/	0.734	/	1.412	N/A
		/	/	/	/	/	/	/	0.411	/	0.734	/	1.145	N/A
/	/	/	/	/	/	/	/	0.547	0.734	/	1.281	N/A		

Table 201: Simultaneous Tx Combination of Main antenna Main Modem + Second antenna Second Modem

Test Position		Second antenna SAR <sub>Max</sub> (Main Modem)									Main antenna SAR <sub>Max</sub> (Second Modem)		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	GSM850	GSM1900		
Head	Left Hand Touched	1.066	0.349	0.247	0.430	0.853	0.383	0.265	0.367	0.371	0.126	0.502	1.568	N/A
	Left Hand Tilted 15°	0.956	0.339	0.236	0.402	0.774	0.388	0.263	0.390	0.392	0.088	0.148	1.104	N/A
	Right Hand Touched	1.350	1.216	1.021	1.179	0.931	1.201	1.128	1.430	0.808	0.172	0.216	1.646	See 7.3.4
	Right Hand Tilted 15°	1.222	1.082	0.722	0.915	0.805	0.947	1.308	1.165	1.240	0.096	0.112	1.420	N/A
Body 15mm	Front side	0.212	0.078	0.062	0.122	0.141	0.118	0.090	0.035	0.124	0.210	0.403	0.615	N/A
	Back side	0.276	0.078	0.056	0.152	0.229	0.129	0.101	0.126	0.242	0.268	0.624	0.900	N/A
Hotspot 10mm	Front side	0.509	0.155	0.128	0.399	0.435	0.400	0.168	0.064	0.179	0.262	0.778	1.287	N/A
	Back side	0.467	0.165	0.160	0.490	0.437	0.476	0.194	0.236	0.236	0.397	0.795	1.286	N/A
	Left side	0.414	0.193	0.166	0.358	0.129	0.373	0.182	0.386	0.135	0.215	0.379	0.793	N/A
	Right side	0.145	0.021	0.017	0.045	0.301	0.051	0.001	0.002	0.001	0.463	0.093	0.764	N/A
	Top side	0.444	0.217	0.149	0.611	0.497	0.574	0.088	0.096	0.141	0.000	0.000	0.611	N/A
	Bottom side	/	/	/	/	/	/	/	/	/	0.176	0.993	0.993	N/A

Test Position		Second antenna SAR <sub>Max</sub> (Main Modem)									Main antenna SAR <sub>Max</sub> (Second Modem)		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	/	GSM1900		
Head	Right Hand Touched	1.350	/	/	/	/	/	/	/	/	/	0.216	1.566	N/A
		/	1.216	/	/	/	/	/	/	/	/	0.216	1.432	N/A
		/	/	1.021	/	/	/	/	/	/	/	0.216	1.237	N/A
		/	/	/	1.179	/	/	/	/	/	/	0.216	1.395	N/A
		/	/	/	/	0.931	/	/	/	/	/	0.216	1.147	N/A
		/	/	/	/	/	1.201	/	/	/	/	0.216	1.417	N/A
		/	/	/	/	/	/	1.128	/	/	/	0.216	1.344	N/A
		/	/	/	/	/	/	/	1.430	/	/	0.216	1.646	0.035
/	/	/	/	/	/	/	/	/	0.808	0.216	1.363	N/A		
/	/	/	/	/	/	/	/	0.808	/	0.216	1.024	N/A		

Test Position		Second antenna SAR <sub>Max</sub> (Main Modem)									Main antenna SAR <sub>Max</sub> (Second Modem)		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	GSM850	/		
Head	Right Hand Touched	1.350	/	/	/	/	/	/	/	/	0.172	/	1.522	N/A
		/	1.216	/	/	/	/	/	/	/	0.172	/	1.388	N/A
		/	/	1.021	/	/	/	/	/	/	0.172	/	1.193	N/A
		/	/	/	1.179	/	/	/	/	/	0.172	/	1.351	N/A
		/	/	/	/	0.931	/	/	/	/	0.172	/	1.103	N/A
		/	/	/	/	/	1.201	/	/	/	0.172	/	1.373	N/A
		/	/	/	/	/	/	1.128	/	/	0.172	/	1.300	N/A
		/	/	/	/	/	/	/	1.430	/	0.172	/	1.602	0.022
		/	/	/	/	/	/	/	/	/	0.172	/	1.319	N/A
		/	/	/	/	/	/	/	/	0.972	0.172	/	1.144	N/A

Table 202: Simultaneous Tx Combination of Second antenna Main Modem + Main antenna Second Modem

Test Position		Main antenna SAR <sub>Max</sub> (Main Modem)									WiFi/BT antenna SAR <sub>Max</sub>		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	WiFi 2.4G	BT		
Head	Left Hand Touched	0.161	0.541	0.740	0.907	0.163	0.794	0.182	0.163	0.194	0.582	/	1.489	N/A
	Left Hand Tilted 15°	0.103	0.153	0.218	0.209	0.109	0.206	0.200	0.144	0.189	0.820	/	1.038	N/A
	Right Hand Touched	0.247	0.222	0.295	0.295	0.215	0.296	0.678	0.411	0.547	0.126	/	0.804	N/A
	Right Hand Tilted 15°	0.109	0.112	0.147	0.267	0.122	0.271	0.108	0.091	0.112	0.148	/	0.419	N/A
Body 15mm	Front side	0.259	0.383	0.660	0.440	0.229	0.329	0.248	0.159	0.220	0.038	0.139	0.799	N/A
	Back side	0.340	0.558	0.967	0.530	0.301	0.484	0.384	0.235	0.282	0.060	0.139	1.106	N/A
Hotspot 10mm	Front side	0.264	0.964	0.613	0.590	0.234	0.782	0.544	0.366	0.358	0.049	/	1.013	N/A
	Back side	0.348	1.318	1.093	0.778	0.344	1.020	0.803	0.513	0.597	0.168	/	1.486	N/A
	Left side	0.221	0.399	0.303	0.328	0.191	0.427	0.056	0.001	0.002	0.010	/	0.437	N/A
	Right side	0.486	0.111	0.077	0.022	0.439	0.022	0.598	0.402	0.472	0.074	/	0.672	N/A
	Top side	/	/	/	/	/	/	/	/	/	0.032	/	0.032	N/A
	Bottom side	0.171	1.456	1.164	1.412	0.156	1.290	0.269	0.172	0.229	/	/	1.456	N/A

Table 203: Simultaneous Tx Combination of Main antenna Main Modem + WiFi/BT

Test Position		Second antenna SAR <sub>Max</sub> (Main Modem)									WiFi/BT antenna SAR <sub>Max</sub>		Σ1-g SAR (1.6W/kg Limit)	SPLSR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band IV	LTE Band VII	LTE Band XXXVIII	LTE Band XLI	WiFi 2.4G	BT		
Head	Left Hand Touched	1.066	0.349	0.247	0.482	0.853	0.383	0.265	0.367	0.371	0.294	/	1.359	N/A
	Left Hand Tilted 15°	0.956	0.339	0.236	0.451	0.774	0.388	0.263	0.390	0.392	0.470	/	1.426	N/A
	Right Hand Touched	1.350	1.216	1.021	1.322	0.931	1.201	1.128	1.430	1.422	0.063	/	1.493	N/A
	Right Hand Tilted 15°	1.222	1.082	0.722	1.027	0.805	0.947	1.308	1.165	1.240	0.072	/	1.380	N/A
Body 15mm	Front side	0.212	0.078	0.062	0.122	0.141	0.118	0.090	0.035	0.124	0.038	0.139	0.351	N/A
	Back side	0.276	0.078	0.056	0.152	0.229	0.129	0.101	0.126	0.242	0.060	0.139	0.415	N/A
Hotspot 10mm	Front side	0.509	0.155	0.128	0.399	0.435	0.400	0.168	0.064	0.179	0.049	/	0.558	N/A
	Back side	0.467	0.165	0.160	0.490	0.437	0.476	0.194	0.236	0.236	0.168	/	0.658	N/A
	Left side	0.414	0.193	0.166	0.358	0.129	0.373	0.182	0.386	0.135	0.010	/	0.424	N/A
	Right side	0.145	0.021	0.017	0.045	0.301	0.051	0.001	0.002	0.001	0.074	/	0.375	N/A
	Top side	0.444	0.217	0.149	0.611	0.497	0.574	0.088	0.096	0.141	0.032	/	0.642	N/A
	Bottom side	/	/	/	/	/	/	/	/	/	/	/	/	0.000

Table 204: Simultaneous Tx Combination of Second antenna Main Modem + WiFi/BT.

### 7.4.4 SPLSR Evaluation Analysis

According to KDB447498 D01v05, When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio(SPLSR).When the SAR to peak location ratio for each pair of antennas is  $\leq 1\text{-g } 0.04$  and  $10\text{-g } 0.10$ , simultaneous SAR evaluation is not required. When SAR is measured for both antennas in the pair, the peak location separation distance is computed by the following fomula:

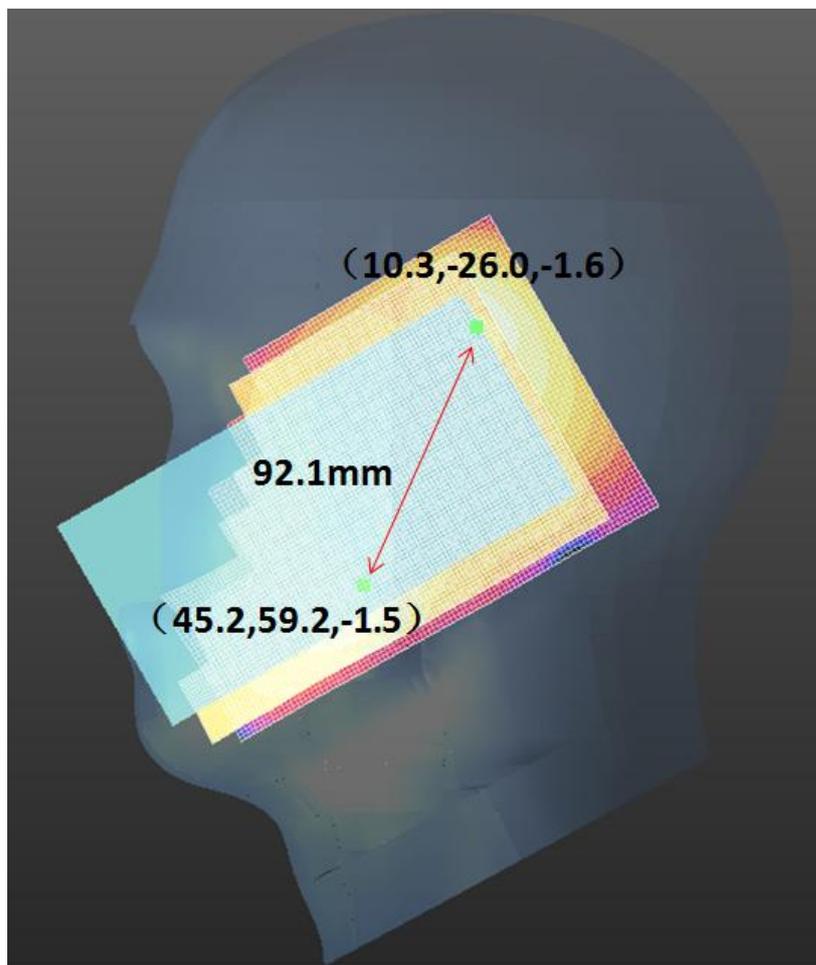
$$\text{Distance}_{\text{Tx1-Tx2}} = R_i = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

$$\text{SPLS Ratio} = (\text{SAR}_1 + \text{SAR}_2)^{1.5} / R_i$$

When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna.

- 1) The sum of aggregate 1-g SAR was above 1.6W/kg for Right Hand Touched configuration with LTE Band VII(Main modem main antenna) and GSM1900(Second modem Second antenna).

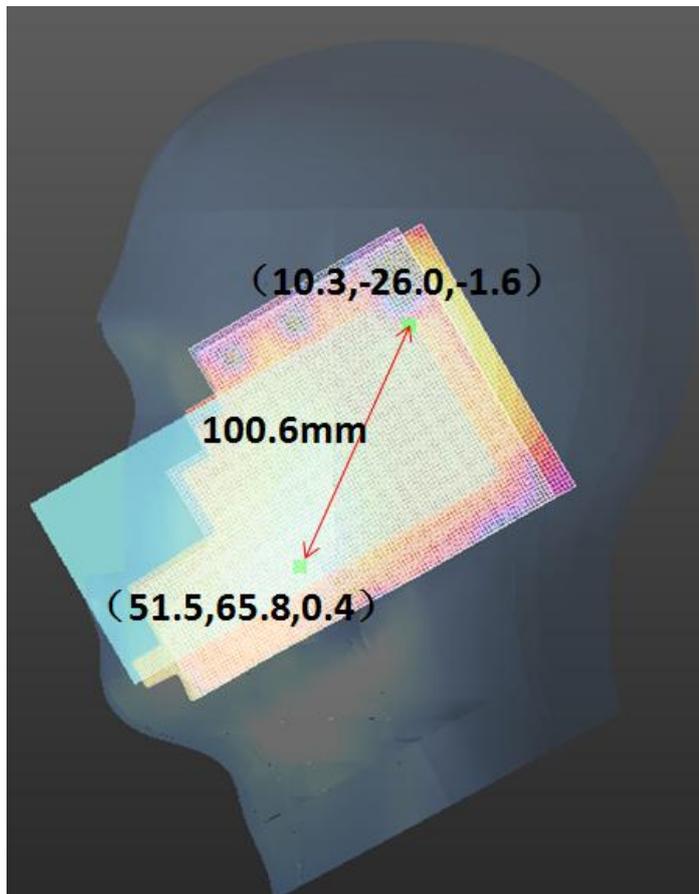
The Peak SAR location plot is as below:



The SAR to peak location ratio calculation is as below:

Test Position	LTE Band VII (W/kg)	GSM1900 (W/kg)	Ri(mm)	SPLSR	Ratio Limit	Simultaneous SAR
Right Hand Touched	0.678	1.099	92.1	0.026	0.04	Not required

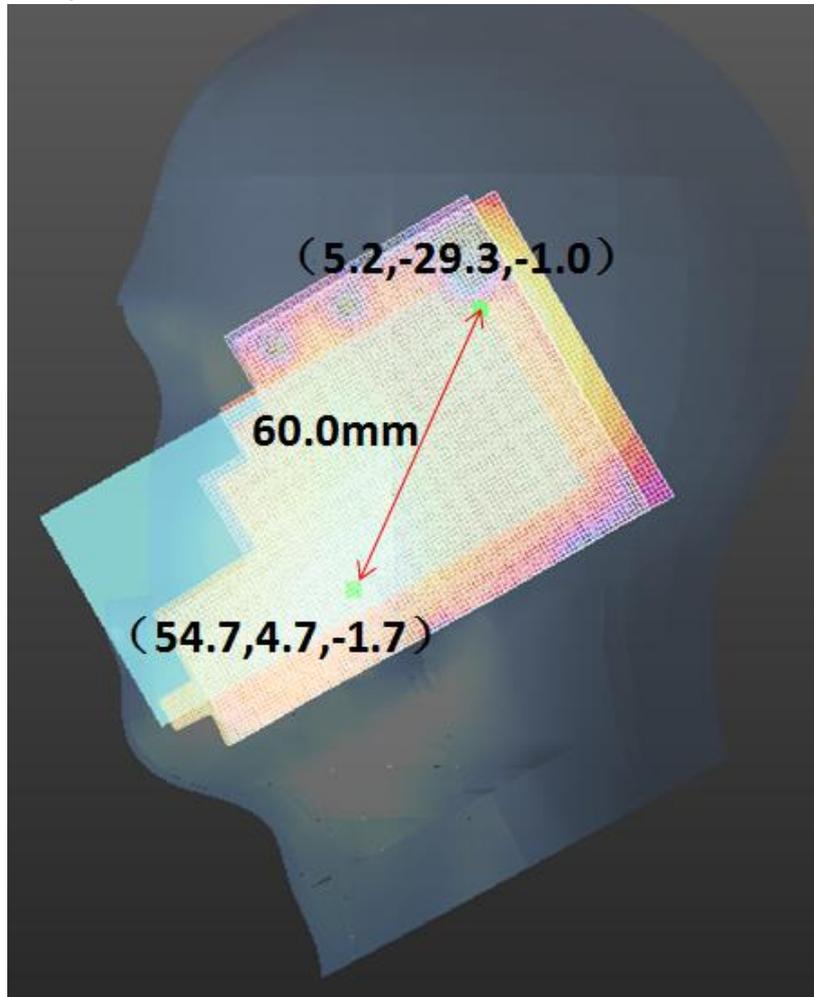
- 2) The sum of aggregate 1-g SAR was above 1.6W/kg for Right Hand Touched configuration with LTE Band XLI(Main modem main antenna) and GSM1900(Second modem Second antenna).  
The Peak SAR location plot is as below:



The SAR to peak location ratio calculation is as below:

Test Position	LTE Band XLI (W/kg)	GSM1900 (W/kg)	Ri(mm)	SPLSR	Ratio Limit	Simultaneous SAR
Right Hand Touched	0.547	1.099	100.6	0.021	0.04	Not required

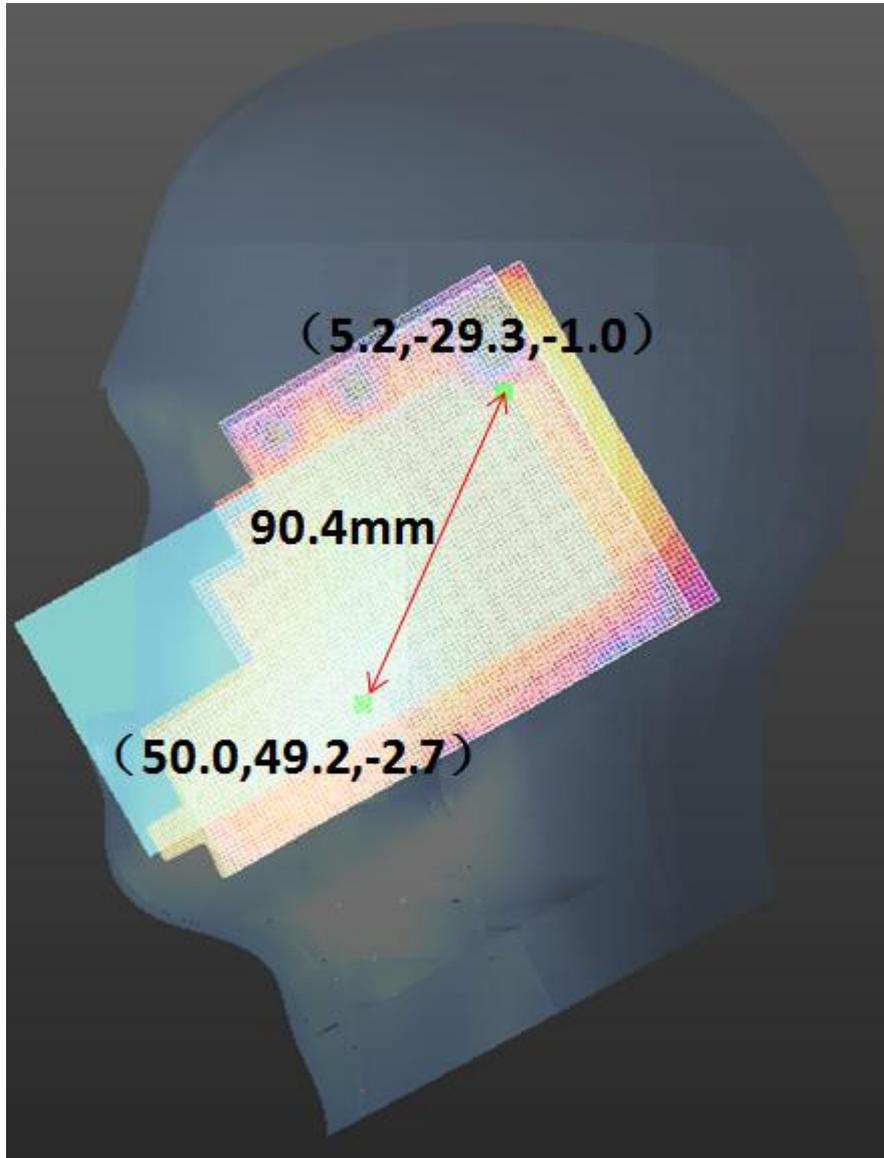
- 3) The sum of aggregate 1-g SAR was above 1.6W/kg for Right Hand Touched configuration with LTE Band XXXVIII(Main modem Second antenna) and GSM1900(Second modem Main antenna).  
The Peak SAR location plot is as below:



The SAR to peak location ratio calculation is as below:

Test Position	LTE Band XXXVIII (W/kg)	GSM1900 (W/kg)	Ri(mm)	SPLSR	Ratio Limit	Simultaneous SAR
Right Hand Touched	1.430	0.216	60.0	0.035	0.04	Not required

- 4) The sum of aggregate 1-g SAR was above 1.6W/kg for Right Hand Touched configuration with LTE Band XXXVIII(Main modem Second antenna) and GSM850(Second modem Main antenna).  
The Peak SAR location plot is as below:



The SAR to peak location ratio calculation is as below:

Test Position	LTE Band XXXVIII (W/kg)	GSM850 (W/kg)	Ri(mm)	SPLSR	Ratio Limit	Simultaneous SAR
Right Hand Touched	1.430	0.172	90.4	0.022	0.04	Not required



#### **7.4.5 Simultaneous Transmission Conclusion**

The above numeral summed SAR results and SPLSR analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore simultaneous transmission SAR with Volume Scans is not required per KDB 447498 D01v05r02



**Appendix A. System Check Plots**  
(Pls See Appendix A.)

**Appendix B. SAR Measurement Plots**  
(Pls See Appendix B.)

**Appendix C. Calibration Certificate**  
(Pls See Appendix C.)

**Appendix D. Photo documentation**  
(Pls See Appendix D.)

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**End**