FCC Maximum Permissible Exposure(MPE) Estimation Report

Product Name: LTE CPE

Model: B525s-65a

Report No.: SYBH(Z-SAR)01612017-2

FCC ID: QISB525S-65A

	APPROVED (Lab Manager)	PREPARED (Test Engineer)
BY	Wei Huanbin	Liu Tao
DATE	2017-02-09	2017-02-09

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1. The laboratory has passed the accreditation by China National Accreditation Service for Conformity Assessment (CNAS). The accreditation number is L0310.

2. The laboratory has passed the accreditation by The American Association for Laboratory Accreditation (A2LA). The accreditation number is 2174.01 & 2174.02 & 2174.03

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REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	2017-02-09	Liu Tao

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1 EUT Description

Device Information：			
Product Name :	LTE CPE		
Model :	B525s-65a		
FCC ID:	QISB525S-65A		
Device Type :	Mobile Device		
Device Phase:	Identical Prototype		
Exposure Category:	Uncontrolled environment/general population		
Hardware Version :	WL1B525I		
Software Version :	11.232.08.DM.00		
Antenna Type :	Internal Antenna/External Antenna		
Device Operating Configurations:			
Supporting Mode(s)	GSM850/1900,UMTS Band II / V, LTE band II/IV/V/VII/XXVI/XXXVIII/XLI ,WiFi 2.4G/5G		
Test Modulation	GSM(GMSK/8PSK),UMTS(QPSK),LTE(QPSK/16QAM), WiFi(DSSS/OFDM)		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM850	824-849	869-894
	GSM1900	1850-1910	1930-1990
	UMTS Band II	1850-1910	1930-1990
	UMTS Band V	824-849	869-894
	LTE Band II	1850-1910	1930-1990
	LTE Band IV	1710-1755	2110-2155
	LTE Band V	824-849	869-894
	LTE Band VII	2500-2570	2620-2690
	LTE Band XXVI	814-849	859-894
	LTE Band XXXVIII	2570-2620	2570-2620
	LTE Band XLI	2500-2690	2500-2690
	WiFi 2.4G	2432-2462	2432-2462
	WiFi 5G	5150-5250	5150-5250

Note: The device only supports downlink LTE CA. The maximum tune-up power and antenna gain with downlink carrier aggregation active is the same as LTE Release 8 when downlink carrier aggregation is inactive, so additional MPE Evaluation is not required for downlink LTE CA.

1.1 General Description

B525s-65a LTE/DC-HSPA+/WCDMA/EDGE/GPRS/GSM mutli-mode LTE CPE is subscriber equipment in the LTE/UMTS/GSM system and support WLAN 802.11a/b/g/n/ac. B525s-65a implement such functions as RF signal receiving/transmitting, LTE/DC-HSPA+/WCDMA and EDGE/GPRS/GSM protocol processing, data service etc. It provides USIM card interface, RJ45/RJ11 Ethernet interface, USB port and external antenna interfaces.

2 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)
KDB 447498 D01	General RF Exposure Guidance v06

3 Testing laboratory

Test Site	The Reliability Laboratory of Huawei Technologies Co., Ltd.
Test Location	Section G1,Huawei Base Bantian, Longgang District, Shenzhen 518129, P.R. China
Telephone	+86 755 28780808
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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 & 2174.02 & 2174.03

4 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

5 Application details

Start Date of test	2017-02-09
End Date of test	2017-02-09

6 Ambient Condition

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

7 RF Exposure Requirements

An estimation of MPE in this application for product is used to ensure if it complies to the rules of the standard in the regulation list above.

Maximum permissible exposure (MPE) refers to the RF energy that is acceptable for human exposure. It is broken down into two categories, Occupational/controlled and General population/uncontrolled.

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R= distance to the centre of radiation of the antenna

EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the

body of the user. Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm, and if it is below the limit S, then we can conclude the device complies with the rules.

7.1 FCC MPE Limits

We analysis if it comply with the limits for General population/uncontrolled exposure. The FCC MPE limits for field strength and power density are given in 47CFR 1.1310(Table below).These limits are generally based on recommended exposure guidelines published by the National Council on Radiation Protection and Measurements (NCRP), and also partly based on guidelines recommended by the American National Standards Institute (ANSI) in Section 4.1 of ANSI/IEEE C95.1.

Table: Limits For Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/controlled Exposure				
Frequency Range(MHz)	Electric Field Strength(E)(V/m)	Magnetic Field Strength(H)(A/m)	Power Density (S)(mW/cm^2)	Averaging Time (minute)$\|E\|^2$,$\|H\|^2$ or S
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f^2)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/uncontrolled Exposure				
Frequency Range(MHz)	Electric Field Strength(E)(V/m)	Magnetic Field Strength(H)(A/m)	Power Density (S)(mW/cm^2)	Averaging Time (minute)$\|E\|^2$,$\|H\|^2$ or S
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30
f=frequency in MHz			*Plane-wave equivalent power density	

8 RF Exposure Evaluation

8.1 Operation in GSM850

(uplink: 824-849MHz, downlink: 869-894MHz)

Antenna	Mode	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	GSM CS	35.00	1.50	36.5	558.35	20	0.111	0.549	**PASS**
	1TS*(1/8)	35.00	1.50	36.5	558.35	20	0.111	0.549	**PASS**
	2TS*(2/8)	35.00	1.50	36.5	1116.71	20	0.222	0.549	**PASS**
	3TS*(3/8)	33.20	1.50	34.7	1106.70	20	0.220	0.549	**PASS**
	4TS*(4/8)	32.00	1.50	33.5	1119.36	20	0.223	0.549	**PASS**
Internal Antenna 2	GSM CS	35.00	1.50	36.5	558.35	20	0.111	0.549	**PASS**
	1TS*(1/8)	35.00	1.50	36.5	558.35	20	0.111	0.549	**PASS**
	2TS*(2/8)	35.00	1.50	36.5	1116.71	20	0.222	0.549	**PASS**
	3TS*(3/8)	33.20	1.50	34.7	1106.70	20	0.220	0.549	**PASS**
	4TS*(4/8)	32.00	1.50	33.5	1119.36	20	0.223	0.549	**PASS**
External Antenna 1	GSM CS	35.00	1.00	36.0	497.63	20	0.099	0.549	**PASS**
	1TS*(1/8)	35.00	1.00	36.0	497.63	20	0.099	0.549	**PASS**
	2TS*(2/8)	35.00	1.00	36.0	995.27	20	0.198	0.549	**PASS**
	3TS*(3/8)	33.20	1.00	34.2	986.35	20	0.196	0.549	**PASS**
	4TS*(4/8)	32.00	1.00	33.0	997.63	20	0.199	0.549	**PASS**
External Antenna 2	GSM CS	35.00	3.00	38.0	788.70	20	0.157	0.549	**PASS**
	1TS*(1/8)	35.00	3.00	38.0	788.70	20	0.157	0.549	**PASS**
	2TS*(2/8)	35.00	3.00	38.0	1577.39	20	0.314	0.549	**PASS**
	3TS*(3/8)	33.20	3.00	36.2	1563.26	20	0.311	0.549	**PASS**
	4TS*(4/8)	32.00	3.00	35.0	1581.14	20	**0.315**	0.549	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.315mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.2 Operation in GSM1900

(uplink: 1850-1910MHz, downlink: 1930-1990MHz)

Antenna	Mode	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	GSM CS	32.00	2.00	34.0	313.99	20	0.062	1.000	**PASS**
	1TS*(1/8)	32.00	2.00	34.0	313.99	20	0.062	1.000	**PASS**
	2TS*(2/8)	32.00	2.00	34.0	627.97	20	0.125	1.000	**PASS**
	3TS*(3/8)	30.20	2.00	32.2	622.35	20	0.124	1.000	**PASS**
	4TS*(4/8)	29.00	2.00	31.0	629.46	20	0.125	1.000	**PASS**
Internal Antenna 2	GSM CS	32.00	2.00	34.0	313.99	20	0.062	1.000	**PASS**
	1TS*(1/8)	32.00	2.00	34.0	313.99	20	0.062	1.000	**PASS**
	2TS*(2/8)	32.00	2.00	34.0	627.97	20	0.125	1.000	**PASS**
	3TS*(3/8)	30.20	2.00	32.2	622.35	20	0.124	1.000	**PASS**
	4TS*(4/8)	29.00	2.00	31.0	629.46	20	0.125	1.000	**PASS**
External Antenna 1	GSM CS	32.00	1.00	33.0	249.41	20	0.050	1.000	**PASS**
	1TS*(1/8)	32.00	1.00	33.0	249.41	20	0.050	1.000	**PASS**
	2TS*(2/8)	32.00	1.00	33.0	498.82	20	0.099	1.000	**PASS**
	3TS*(3/8)	30.20	1.00	31.2	494.35	20	0.098	1.000	**PASS**
	4TS*(4/8)	29.00	1.00	30.0	500.00	20	0.100	1.000	**PASS**
External Antenna 2	GSM CS	32.00	3.00	35.0	395.28	20	0.079	1.000	**PASS**
	1TS*(1/8)	32.00	3.00	35.0	395.28	20	0.079	1.000	**PASS**
	2TS*(2/8)	32.00	3.00	35.0	790.57	20	0.157	1.000	**PASS**
	3TS*(3/8)	30.20	3.00	33.2	783.49	20	0.156	1.000	**PASS**
	4TS*(4/8)	29.00	3.00	32.0	792.45	20	**0.158**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.158 mW/cm^2, which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.3 Operation in UMTS Band II

(uplink: 1850-1910MHz, downlink: 1930-1990MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	1.50	27.2	524.8	20	0.104	1.000	**PASS**
Internal Antenna 2	25.70	1.50	27.2	524.8	20	0.104	1.000	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	1.000	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148 mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.4 Operation in UMTS Band V

(uplink: 824-849MHz, downlink: 869-894MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	1.50	27.2	524.8	20	0.104	0.549	**PASS**
Internal Antenna 2	25.70	1.50	27.2	524.8	20	0.104	0.549	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	0.549	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	0.549	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.5 Operation in LTE Band II

(uplink: 1850-1910MHz, downlink: 1930-1990MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	1.50	27.2	524.8	20	0.104	1.000	**PASS**
Internal Antenna 2	25.70	1.50	27.2	524.8	20	0.104	1.000	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	1.000	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148 mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.6 Operation in LTE Band IV

(uplink: 1710-1755MHz, downlink: 2110-2155MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	1.50	27.2	524.8	20	0.104	1.000	**PASS**
Internal Antenna 2	25.70	1.50	27.2	524.8	20	0.104	1.000	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	1.000	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.7 Operation in LTE Band V

(uplink: 824-849MHz, downlink: 869-894MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	1.50	27.2	524.8	20	0.104	0.549	**PASS**
Internal Antenna 2	25.70	1.50	27.2	524.8	20	0.104	0.549	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	0.549	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	0.549	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.8 Operation in LTE Band VII

(uplink: 2500-2570MHz, downlink: 2620-2690MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	2.00	27.7	588.8	20	0.117	1.000	**PASS**
Internal Antenna 2	25.70	2.00	27.7	588.8	20	0.117	1.000	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	1.000	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.9 Operation in LTE Band XXVI

(uplink: 814-849MHz, downlink: 859-894MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	1.50	27.2	524.8	20	0.104	0.543	**PASS**
Internal Antenna 2	25.70	1.50	27.2	524.8	20	0.104	0.543	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	0.543	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	0.543	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.10 Operation in LTE Band XXXVIII

(uplink: 2570-2620MHz, downlink: 2570-2620MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	2.00	27.7	588.8	20	0.117	1.000	**PASS**
Internal Antenna 2	25.70	2.00	27.7	588.8	20	0.117	1.000	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	1.000	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.11 Operation in LTE Band XLI

(uplink: 2500-2690MHz, downlink: 2500-2690MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Internal Antenna 1	25.70	2.00	27.7	588.8	20	0.117	1.000	**PASS**
Internal Antenna 2	25.70	2.00	27.7	588.8	20	0.117	1.000	**PASS**
External Antenna 1	25.70	1.00	26.7	467.7	20	0.093	1.000	**PASS**
External Antenna 2	25.70	3.00	28.7	741.3	20	**0.148**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.148mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.12 Operation in WLAN 2.4G

(uplink: 2432-2462MHz, downlink: 2432-2462MHz)

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Conclusion
Antenna 1	19.00	1.00	20.0	100.0	20	**0.020**	1.000	**PASS**
Antenna 2	19.00	1.00	20.0	100.0	20	**0.020**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.020 mW/cm², which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

8.13 Operation in WLAN 5G

(uplink: 5150-5250MHz, downlink: 5150-5250MHz)

Antenna	**Tune-up limit (dBm)**	**Gain (dBi)**	**EIRP* (dBm)**	**EIRP (mW)**	**R(cm)**	**S (mW/cm^2)**	**MPE Limit (mW/cm^2)**	**Conclusion**
Antenna 1	18.00	1.00	19.0	79.4	20	**0.016**	1.000	**PASS**
Antenna 2	18.00	1.00	19.0	79.4	20	**0.016**	1.000	**PASS**
Antenna 3	18.00	1.00	19.0	79.4	20	**0.016**	1.000	**PASS**

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, we can conclude the max power density level at 20 cm is 0.016 mW/cm^2, which is below the uncontrolled exposure limit, so we can conclude it is into compliance.

9 Exposure calculations for multiple sources(FCC)

When a number of sources at different frequencies, and/or broadband sources, contribute to the total exposure, it becomes necessary to weigh each contribution relative to the MPE in accordance with the provisions of Table(A) and Table(B). To comply with the MPE, the fraction of the MPE in terms of E^2, H^2 (or power density) incurred within each frequency interval should be determined and the sum of all such fractions should not exceed unity.

In order to ensure compliance with the MPE for a controlled environment, the sum of the ratios of the power density to the corresponding MPE should not exceed unity. That is

$$\sum_{i=1}^{n} \frac{S_i}{MPE_i} \leq 1$$

The product also has multiple transmitters The Simultaneous Transmission Possibilities are as below:

NO.	Simultaneous Tx Combination
1	WLAN 2.4G MIMO(2*2)
2	GSM/UMTS/LTE +WLAN 2.4G SISO/ MIMO(2*2)
3	WLAN 5G MIMO(2*2 or 3*3)
4	GSM/UMTS/LTE +WLAN 5G SISO/ MIMO(2*2 or 3*3)
5	WLAN 2.4G SISO/MIMO + WLAN 5G (Ant 3)
6	GSM/UMTS/LTE +WLAN 2.4G SISO (Antenna 1 or 2) + WLAN 5G(Antenna 2 or 1) + WLAN 5G(Antenna 3)
7	GSM/UMTS/LTE + WLAN 2.4G MIMO + WLAN 5G (Ant 3)

Note:

1) The device has four GSM/UMTS/LTE antennas: Internal Antenna 1, Internal Antenna 2, External Antenna1 and External Antenna 2. They can not transmit simultaneously.

2) The device has three WLAN antennas: WLAN Antenna 1 Antenna 2 and Antenna 3:

a) The WLAN Antenna 1 and Antenna 2 can support WLAN 2.4G and WLAN 5G.

b) The WLAN Antenna 3 only supports WLAN 5G.

c) The WLAN 2.4G can support 2*2 MIMO.

d) The WLAN 5G can support 2*2 MIMO or 3*3 MIMO.

f) For each WLAN Antenna (Antenna 1 or Antenna 2), it can be used for WLAN 2.4G or WLAN 5G, but WLAN 2.4G and WLAN 5G can not transmit simultaneously.

9.1 Estimation for WLAN2.4G MIMO

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
Antenna 1	16.00	1.00	17.0	50.1	20	0.010	1.000	0.020	**PASS**
Antenna 2	16.00	1.00	17.0	50.1	20	0.010	1.000		

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

9.2 Estimation for GSM850& WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	GSM850	0.315	0.549	0.594	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
2	GSM850	0.315	0.549	0.594	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.3 Estimation for GSM1900& WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	GSM1900	0.158	1.000	0.178	**PASS**
	WLAN SISO	0.020	1.000		
2	GSM1900	0.158	1.000	0.178	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.4 Estimation for UMTS Band II & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	UMTS Band II	0.148	1.000	0.168	**PASS**
	WLAN SISO	0.020	1.000		
2	UMTS Band II	0.148	1.000	0.168	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.5 Estimation for UMTS Band V & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	UMTS Band V	0.148	0.549	0.290	**PASS**
	WLAN SISO	0.020	1.000		
2	UMTS Band V	0.148	0.549	0.290	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.6 Estimation for LTE Band II & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band II	0.148	1.000	0.168	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band II	0.148	1.000	0.168	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.7 Estimation for LTE Band IV & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band IV	0.148	1.000	0.168	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band IV	0.148	1.000	0.168	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.8 Estimation for LTE Band V & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band V	0.148	0.549	0.290	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band V	0.148	0.549	0.290	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.9 Estimation for LTE Band VII & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band VII	0.148	1.000	0.168	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band VII	0.148	1.000	0.168	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.10 Estimation for LTE Band XXVI & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XXVI	0.148	0.543	0.293	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band XXVI	0.148	0.543	0.293	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.11 Estimation for LTE Band XXXVIII & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XXXVIII	0.148	1.000	0.168	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band XXXVIII	0.148	1.000	0.168	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.12 Estimation for LTE Band XLI & WLAN2.4G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XLI	0.148	1.000	0.168	**PASS**
	WLAN SISO	0.020	1.000		
2	LTE Band XLI	0.148	1.000	0.168	**PASS**
	WLAN MIMO with Antenna 1	0.010	1.000		
	WLAN MIMO with Antenna 2	0.010	1.000		

9.13 Estimation for WLAN5G MIMO

Antenna	Tune-up limit (dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R(cm)	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
Antenna 1	18.00	1.00	19.0	79.4	20	0.016	1.000	0.048	**PASS**
Antenna 2	18.00	1.00	19.0	79.4	20	0.016	1.000		
Antenna 3	18.00	1.00	19.0	79.4	20	0.016	1.000		

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

9.14 Estimation for GSM850& WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	GSM850	0.315	0.549	0.590	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	GSM850	0.315	0.549	0.606	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	GSM850	0.315	0.549	0.622	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.15 Estimation for GSM1900& WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	GSM1900	0.158	1.000	0.174	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	GSM1900	0.158	1.000	0.190	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	GSM1900	0.158	1.000	0.206	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.16 Estimation for UMTS Band II & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	UMTS Band II	0.148	1.000	0.164	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	UMTS Band II	0.148	1.000	0.180	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	UMTS Band II	0.148	1.000	0.196	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.17 Estimation for UMTS Band V & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	UMTS Band V	0.148	0.549	0.286	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	UMTS Band V	0.148	0.549	0.302	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	UMTS Band V	0.148	0.549	0.318	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.18 Estimation for LTE Band II & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band II	0.148	1.000	0.164	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band II	0.148	1.000	0.180	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band II	0.148	1.000	0.196	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.19 Estimation for LTE Band IV & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band IV	0.148	1.000	0.164	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band IV	0.148	1.000	0.180	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band IV	0.148	1.000	0.196	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.20 Estimation for LTE Band V & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band V	0.148	0.549	0.286	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band V	0.148	0.549	0.302	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band V	0.148	0.549	0.318	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.21 Estimation for LTE Band VII & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band VII	0.148	1.000	0.164	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band VII	0.148	1.000	0.180	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band VII	0.148	1.000	0.196	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.22 Estimation for LTE Band XXVI & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XXVI	0.148	0.543	0.289	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band XXVI	0.148	0.543	0.305	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band V XXVI	0.148	0.543	0.321	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.23 Estimation for LTE Band XXXVIII & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XXXVIII	0.148	1.000	0.164	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band XXXVIII	0.148	1.000	0.180	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band XXXVIII	0.148	1.000	0.196	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.24 Estimation for LTE Band XLI & WLAN5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XLI	0.148	1.000	0.164	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	LTE Band XLI	0.148	1.000	0.180	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
2	LTE Band XLI	0.148	1.000	0.196	**PASS**
	WLAN 5G MIMO with Antenna 1	0.016	1.000		
	WLAN 5G MIMO with Antenna 2	0.016	1.000		
	WLAN 5G MIMO with Antenna 3	0.016	1.000		

9.25 Estimation for WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	WLAN 2.4G SISO	0.020	1.000	0.036	**PASS**
	WLAN 5G SISO	0.016	1.000		
2	WLAN 2.4G MIMO with Ant 1	0.010	1.000	0.036	**PASS**
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000	0.052	**PASS**
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.26 Estimation for GSM850 & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	GSM850	0.315	0.549	0.610	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	GSM850	0.315	0.549	0.610	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	GSM850	0.315	0.549	0.626	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.27 Estimation for GSM1900 & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	GSM1900	0.158	1.000	0.194	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	GSM1900	0.158	1.000	0.194	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	GSM1900	0.158	1.000	0.210	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.28 Estimation for UMTS Band II & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	UMTS Band II	0.148	1.000	0.184	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	UMTS Band II	0.148	1.000	0.184	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Antenna 3)	0.016	1.000		
3	UMTS Band II	0.148	1.000	0.200	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.29 Estimation for UMTS Band V & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	UMTS Band V	0.148	0.549	0.306	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	UMTS Band V	0.148	0.549	0.306	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	UMTS Band V	0.148	0.549	0.322	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.30 Estimation for LTE Band II & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band II	0.148	1.000	0.184	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band II	0.148	1.000	0.184	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band II	0.148	1.000	0.200	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.31 Estimation for LTE Band IV & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band IV	0.148	1.000	0.184	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band IV	0.148	1.000	0.184	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band IV	0.148	1.000	0.200	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.32 Estimation for LTE Band V & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band V	0.148	0.549	0.306	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band V	0.148	0.549	0.306	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band V	0.148	0.549	0.322	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.33 Estimation for LTE Band VII & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band VII	0.148	1.000	0.184	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band VII	0.148	1.000	0.184	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band VII	0.148	1.000	0.200	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.34 Estimation for LTE Band XXVI & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XXVI	0.148	0.543	0.309	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band XXVI	0.148	0.543	0.309	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band XXVI	0.148	0.543	0.325	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.35 Estimation for LTE Band XXXVIII & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XXXVIII	0.148	1.000	0.184	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band XXXVIII	0.148	1.000	0.184	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band XXXVIII	0.148	1.000	0.200	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

9.36 Estimation for LTE Band XLI & WLAN 2.4G & WLAN 5G

No.	Mode	S (mW/cm^2)	MPE Limit (mW/cm^2)	Calculation result	Conclusion
1	LTE Band XLI	0.148	1.000	0.184	**PASS**
	WLAN 2.4G SISO	0.020	1.000		
	WLAN 5G SISO	0.016	1.000		
2	LTE Band XLI	0.148	1.000	0.184	**PASS**
	WLAN 2.4G MIMO with Ant 1	0.010	1.000		
	WLAN 2.4G MIMO with Ant 2	0.010	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		
3	LTE Band XLI	0.148	1.000	0.200	**PASS**
	WLAN 2.4G SISO (Ant 1 or 2)	0.020	1.000		
	WLAN 5G (Ant 2 or 1)	0.016	1.000		
	WLAN 5G (Ant 3)	0.016	1.000		

According to the Table above, we can conclude that the calculation results of all simultaneous transmission possibilities are less than 1, so it is into compliance.

Therefore the product also meets the requirements under multiple sources condition.

END