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Report No.: 170615002RFC-5

RF EXPOSURE EVALUATION REPORT

Product Name: WIFI+BT Module

Trade Mark: GSD

Model No.: WCT6LA2701

Report Number: 170615002RFC-5

Test Standards: FCC 47 CFR Part 1 Subpart I

RSS-102 Issue 5

FCC ID: 2AC23-WCT6LA2701

IC: 12290A-WCT6LA2701

Test Result: PASS

Date of Issue: July 11, 2017

Prepared for:

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	Billy Li		
	Technical Director		





Version

Version No.	Date	Description
V1.0	July 11, 2017	Original

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1. GENERAL INFORMATION 1.1 CLIENT INFORMATION

Applicant: Hui Zhou Gaoshengda Technology Co.,LTD	
Address of Applicant: NO.75 Zhongkai Development Area, Huizhou, Guangdong, China	
Manufacturer:	Hui Zhou Gaoshengda Technology Co.,LTD
Address of Manufacturer:	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

1.2 EUT INFORMATION

Product Name:	WIFI+BT Module				
Model No.:	WCT6LA2701				
Add. Model No.:	N/A				
Trade Mark:	GSD				
DUT Stage:	Identical Prototype				
	2.4 GHz ISM Band:	IEEE 802.11b/g/n			
-u-0	2.4 GHZ ISWI Danu.	IEEE 802.11b/g/n Bluetooth: V3.0+EDR & V4.1 LE 5 150 MHz to 5 250 MHz IEEE 802.11a/n/ac			
EUT Supports Function:	F CLI III NIII Danda.	5 150 MHz to 5 250 MHz IEEE 802.11a/n/ac			
	5 GHz U-NII Bands:	5 725 MHz to 5 850 MHz IEEE 802.11a/n/ac			

1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

For BT_LE	For BT_LE				
Frequency Range:	2400 MHz to 2483.5 MHz				
Bluetooth Version:	Bluetooth V4.1 LE				
Type of Modulation:	GFSK				
Number of Channels:	40				
Channel Separation:	2 MHz				
Antenna Type:	PIFA Antenna				
Antenna Gain:	1.72 dBi				
Maximum Peak Power:	0.5 dBm				

For BT_EDR	
Frequency Range:	2400 MHz to 2483.5 MHz
Bluetooth Version:	Bluetooth V3.0+EDR
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Type of Modulation:	GFSK, π/4DQPSK, 8DPSK
Number of Channels:	79
Channel Separation:	1 MHz
Antenna Type:	PIFA Antenna
Antenna Gain:	1.72 dBi
Maximum Peak Power:	8.07 dBm

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For 2.4 GHz ISM Band of Wi-Fi				
Frequency Range:	2400 MHz to 2483.5 MHz			
Support Standards:	IEEE 802.11b, IEE	E 802.11g, IEEE 802.11n-HT20, IEEE 802.11n-HT40		
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM(64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n-HT20: OFDM(64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n-HT40: OFDM(64-QAM, 16-QAM, QPSK, BPSK)			
Data Rate:	IEEE 802.11b: Up to 11 Mbps IEEE 802.11g: Up to 54 Mbps IEEE 802.11n-HT20: Up to MCS15 IEEE 802.11n-HT40: Up to MCS15			
Number of Channels:	IEEE 802.11b: 11 IEEE 802.11g: 11 IEEE 802.11n-HT20: 11 IEEE 802.11n-HT40: 7			
Channel Separation:	5 MHz			
Automor Tomos	Chain 0	PIFA Antenna		
Antenna Type:	Chain 1	PIFA Antenna		
	Chain 0	1.72 dBi		
Antenna Gain:	Chain 1	1.72 dBi		
Directional gain:	4.73 dBi			
	SISO_ Chain 0	IEEE 802.11b: 19.92 dBm IEEE 802.11g: 22.97 dBm IEEE 802.11n-HT20: 18.52 dBm IEEE 802.11n-HT40: 18.59 dBm		
Maximum Peak Power:	SISO_ Chain 1	IEEE 802.11b: 20.49 dBm IEEE 802.11g: 22.82 dBm IEEE 802.11n-HT20: 16.69 dBm IEEE 802.11n-HT40: 17.05 dBm		
	MIMO_ Chain 0+1 IEEE 802.11n-HT20: 20.71 dBm IEEE 802.11n-HT40: 20.90 dBm			

For 5 GHz U-NII Bands of Wi-Fi			
Fraguency Banga	5150 MHz to 5250 MHz		
Frequency Range:	5 725 MHz to 5 850 MHz		
Support Standards: IEEE 802.11a/n/ac			
TPC Function:	Not Support		
DFS Operational mode:	Slave without radar Interference detection function		
	IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK)		
Type of Modulation:	IEEE 802.11n: OFDM(64QAM, 16QAM, QPSK, BPSK)		
	IEEE 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK)		
	IEEE 802.11a/n-HT20/ac-VHT20: 20 MHz		
Channel Spacing:	IEEE 802.11n-HT40/ac-VHT40: 40 MHz		
	IEEE 802.11ac-VHT80: 80 MHz		
	IEEE 802.11a: Up to 54 Mbps		
	IEEE 802.11n-HT20: Up to MCS15		
Data Rate:	IEEE 802.11n-HT40: Up to MCS15		
Data Rate:	IEEE 802.11ac-VHT20: Up to MCS8		
	IEEE 802.11ac-VHT40: Up to MCS9		
	IEEE 802.11ac-VHT80: Up to MCS9		
Number of Channels: 5150 MHz to 5250 MHz:			



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	_			
	4 for IEEE 802.11a/n-HT20/ac-VHT20			
	2 for IEEE 802.11n-HT40)/ac-VHT40 1 for IEEE 802.11acVHT80			
	5725 MHz to 5850 MHz: 5 for IEEE 802.11a/n-HT20/ac-VHT20			
		n-HT40/ac-VHT40		
	1 for IEEE 802.11			
Antonna Type:	Chain 0	PIFA Antenna		
Antenna Type:	Chain 1	PIFA Antenna		
	Chain 0	5150 MHz to 5250 MHz:	2.57 dBi	
Antonno Colm	Chain 0	5725 MHz to 5850 MHz:	2.57 dBi	
Antenna Gain:	Oh sin 4	5150 MHz to 5250 MHz:	2.57 dBi	
	Chain 1	5725 MHz to 5850 MHz:	2.57 dBi	
Directional males	5150 MHz to 5250 MHz:	5.58 dBi		
Directional gain:	5725 MHz to 5850 MHz:	5.58 dBi		
	SISO_Chain 0	U-NII-1	U-NII-3	
	IEEE 802.11a:	14.70	14.78	
	IEEE 802.11n-HT20:	11.20	11.37	
	IEEE 802.11n-HT40:	11.06	10.84	
	IEEE 802.11ac-VHT80:	9.82	8.95	
	SISO_Chain 1	U-NII-1	U-NII-3	
Maximum Conducted	IEEE 802.11a:	14.00	14.05	
Output Power (dBm):	IEEE 802.11n-HT20:	10.37	9.34	
	IEEE 802.11n-HT40:	10.12	9.01	
	IEEE 802.11ac-VHT80:	8.15	7.24	
	MIMO_Chain 0+1	U-NII-1	U-NII-3	
	IEEE 802.11n-HT20:	13.82	13.48	
	IEEE 802.11n-HT40:	13.63	13.03	
	IEEE 802.11ac-VHT80:	12.08	11.19	
	SISO_Chain 0	U-NII-1	U-NII-3	
	IEEE 802.11a:	17.27	17.35	
	IEEE 802.11n-HT20:	13.77	13.94	
	IEEE 802.11n-HT40:	13.63	13.41	
	IEEE 802.11ac-VHT80:	12.39	11.52	
	SISO_Chain 1	U-NII-1	U-NII-3	
Maximum EIDD (dDm):	IEEE 802.11a:	16.57	16.62	
Maximum EIRP (dBm):	IEEE 802.11n-HT20:	12.94	11.91	
	IEEE 802.11n-HT40:	12.69	11.58	
	IEEE 802.11ac-VHT80:	10.72	9.81	
	MIMO_Chain 0+1	U-NII-1	U-NII-3	
	IEEE 802.11n-HT20:	19.40	19.06	
	IEEE 802.11n-HT40:	19.21	18.61	
	IEEE 802.11ac-VHT80:	17.66	16.77	

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1.4 OTHER INFORMATION

Test channels for BT_LE					
Type of Modulation	Tx/Rx Frequency	uency Test RF Channel Lists			
		Lowest(L)	Middle(M)	Highest(H)	
GFSK	2402 MHz to 2480 MHz	Channel 0	Channel 19	Channel 39	
		2402 MHz	2440 MHz	2480 MHz	

Test channels for BT_EDR					
Mode	Tx/Rx Frequency	Test RF Channel Lists			
Wode		Lowest(L)	Middle(M)	Highest(H)	
GFSK	2402 MULT to 2400 MULT	Channel 0	Channel 39	Channel 78	
(DH1, DH3, DH5)	2402 MHz to 2480 MHz	2402 MHz	2441 MHz	2480 MHz	
π/4DQPSK	0400 MHz 4- 0400 MHz	Channel 0	Channel 39	Channel 78	
(DH1, DH3, DH5)	2402 MHz to 2480 MHz	2402 MHz	2441 MHz	2480 MHz	
8DPSK	2402 MUI + +> 2400 MUI -	Channel 0	Channel 39	Channel 78	
(DH1, DH3, DH5)	2402 MHz to 2480 MHz	2402 MHz	2441 MHz	2480 MHz	

Test channels for 2.4	Test channels for 2.4 GHz ISM Band of Wi-Fi								
Mode	Ty/Dy Eroguenov	Test RF Channel Lists							
Wode	Tx/Rx Frequency	Lowest(L)	Middle(M)	Highest(H)					
IEEE 802.11b	2412 MHz to 2462 MHz	Channel 1	Channel 6	Channel 11					
IEEE 002.110	24 12 IVII 12 to 2402 IVII 12	2412 MHz	2437 MHz	2462 MHz					
IEEE 000 11 a	0440 MH= 4- 0400 MH=	Channel 1	Channel 6	Channel 11					
IEEE 802.11g	2412 MHz to 2462 MHz	2412 MHz	2437 MHz	2462 MHz					
IEEE 802.11n-HT20	2412 MHz to 2462 MHz	Channel 1	Channel 6	Channel 11					
IEEE 002.1111-H120	24 12 WITZ to 2402 WITZ	2412 MHz	2437 MHz	2462 MHz					
IEEE 000 115 HT40	2422 MHz to 2452 MHz	Channel 3	Channel 6	Channel 9					
IEEE 802.11n-HT40	2422 WITZ 10 2452 WITZ	2422 MHz	2437 MHz	2452 MHz					

Test channels for 5 GH	Iz U-NII Bands of Wi-Fi					
Mode	Ty/Dy Eroguenov	Test RF Channel Lists				
Wiode	Tx/Rx Frequency	Lowest(L)	Middle(M)	Highest(H)		
	5150 MHz to 5250 MHz	Channel 36	Channel 44	Channel 48		
IEEE 802.11a IEEE 802.11n-HT20 IEEE 802.11ac-VHT20	3 130 WII 12 to 3230 WII 12	5180 MHz	5220 MHz	5240 MHz		
	5725 MHz to 5850 MHz	Channel 149	Channel 157	Channel 161		
	37 23 IVII 12 to 3030 IVII 12	5745 MHz	5785 MHz	5805 MHz		
	5150 MHz to 5250 MHz	Channel 38	-	Channel 46		
IEEE 802.11n-HT40	3 130 IVII 12 10 3230 IVII 12	5190 MHz		5230 MHz		
IEEE 802.11ac-VHT40	5725 MHz to 5850 MHz	Channel 151		Channel 159		
	3723 WITZ 10 3630 WITZ	5755 MHz		5795 MHz		
	5150 MHz to 5250 MHz		Channel 42			
IEEE 802.11ac-HT80	3 130 WII 12 (0 3230 WITZ		5210 MHz			
IEEE 002.1180-11100	5725 MHz to 5850 MHz		Channel 155			
	3123 WITZ (0 3030 WITZ		5775 MHz			



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1.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC 47 CFR Part 1 Subpart I RSS-102 Issue 5

All test items have been performed and recorded as per the above standards

1.6 DEVIATION FROM STANDARDS

None.

1.7 ABNORMALITIES FROM STANDARD CONDITIONS

None

1.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

2. EQUIPMENT LIST

Please refer to the RF test report.

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3. MPE EVALUATION

3.1 REFERENCE DOCUMENTS FOR EVALUATION

No.	Identity	Document Title
1	FCC 47 CFR Part 1 Subpart I	PROCEDURES IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969
2	RSS-102 Issue 5	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
3	KDB 447498 D01 General RF Exposure Guidance v06	RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES

3.2 MPE COMPLIANCE REQUIREMENT

3.2.1 Limits

3.2.1.1 FCC 47 CFR Part 1 Subpart I

According to §1.1307(b)(1), system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

Limits for Occupational / Controlled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	trength (E) Strength (H) (mW/cm²)		Averaging Times E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	1	1	F/300	6
1500-100000	I	1	5	6

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/cm²)	Averaging Times E ² , H ² or S (minutes)	
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		1	F/1500	30	
1500-100000		1	1	30	

Note: f = frequency in MHz: * = Plane-wave equivalents power density.

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3.2.1.2 RSS-102 Issue 5

According to RSS-102 Issue 5, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)

Frequency range (MHz)	Electric Field (E) (V/m rms)	Magnetic Field (H) (A/m rms)	Power Density (S) (W/m²)	Reference Period H ² or S (minutes)
0.003-10 ²¹	83	90	-	Instantaneous*
0.1-10	-	0.73/ f	-	6**
1.1-10	87/ f ^{0.5}	-	-	6**
10-20	27.46	0.0728	2	6
20-48	58.07/ f ^{0.25}	0.1540/ f ^{0.25}	8.944/ f ^{0.5}	6
48-300	22.06	0.05852	1.291	6
300-6000	3.142 f ^{0.3417}	$0.008335 f^{0.3417}$	0.02619 <i>f</i> ^{0.6834}	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	616000/ f ^{1.2}
150000-300000	$0.158 f^{0.5}$	4.21 x 10 ⁻⁴ f ^{0.5}	6.67 x 10 ⁻⁵ f	616000/ f ^{1.2}

Note: *f* is frequency in MHz.

RF Field Strength Limits for Controlled Use Devices (Controlled Environment)

tti Ticia Oticiigtii Eiii	At Theid Strength Elimits for Controlled Use Devices (Controlled Elivironment)									
Frequency range (MHz)	Electric Field (E) (V/m rms)	Magnetic Field (H) (A/m rms)	Power Density (S) (W/m²)	Reference Period H ² or S (minutes)						
0.003-10 ²³	170	180	-	Instantaneous*						
1-10	-	1.6/ f	-	6**						
1.29-10	193/ f ^{0.5}	-	-	6**						
10-20	61.4	0.163	10	6						
20-48	129.8/ f ^{0.25}	$0.3444/f^{0.25}$	44.72/ f ^{0.5}	6						
48-100	49.33	0.1309	6.455	6						
100-6000	15.60 <i>f</i> ^{0.25}	$0.04138 f^{0.25}$	$0.6455f^{0.5}$	6						
6000-15000	137	0.364	50	6						
15000-150000	137	0.364	50	616000/ f ^{1.2}						
150000-300000	$0.354 f^{0.5}$	$9.40 \times 10^{-4} f^{0.5}$	3.33 x 10 ⁻⁴ f	616000/ f ^{1.2}						

Note: *f* is frequency in MHz.

3.2.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

^{*}Based on nerve stimulation (NS).

^{**} Based on specific absorption rate (SAR).

^{*}Based on nerve stimulation (NS).

^{**} Based on specific absorption rate (SAR).



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3.3 MPE CALCULATION METHOD

3.3.1 FCC 47 CFR Part 1 Subpart I

 $S = PG/4\pi R^2 = EIRP/4\pi R^2$

S = power density (in appropriate units, e.g., mw/cm2)

P = power input to the antenna (in appropriate units, e.g., mw)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor is normally numeric gain.

R = distance to the center of radiation of the antenna (in appropriate units, e.g., cm)

3.3.2 RSS-102 Issue 5

 $S = PG/4\pi R^2 = EIRP/4\pi R^2$

S = power density (in appropriate units, e.g., w/m2)

P = power input to the antenna (in appropriate units, e.g., w)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor is normally numeric gain.

R = distance to the center of radiation of the antenna (in appropriate units, e.g., m)

3.4 MPE CALCULATION RESULTS

Note: For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

3.4.1 For WLAN

For Wi-Fi function, operating at 2412MHz to 2462 MHz for IEEE802.11b/g/n and operating at 5150 MHz to 5250 MHz for IEEE802.11a/n/ac and operating at 5725 MHz to 5850 MHz for IEEE802.11a/n/ac.

3.4.1.1 Antenna Type:

Chain 0: PIFA Antenna Chain 1: PIFA Antenna 3.4.1.2 Antenna Gain:

Chain 0: 2412MHz to 2462 MHz: 1.72 dBi

5150 MHz to 5250 MHz: 2.57 dBi 5725 MHz to 5850 MHz: 2.57 dBi

Chain 1: Same as chain 0

For MIMO mode (2Tx/2Rx), there are two transmission antennas. Both Chain 0 and Chain 1 used at the same time and antenna ports have uniform output powers. The Chain 0 and Chain 1 antenna ports can be used alone. The transmit signals are correlated with each other.

For 2.4 GHz WIFI

The directional gain = G_{ANT} + 10 log(N_{ANT}) dBi = 1.72 + 10 log(2) = 4.73 dBi

For 5 GHz WIFI

The directional gain = G_{ANT} + 10 log(N_{ANT}) dBi = 2.57 + 10 log(2) = 5.58 dBi

For SISO mode (1Tx/1Rx), there are two transmission antennas. Both Chain 0 and Chain 1 used at the same time and antenna ports have uniform output powers. The Chain 0 and Chain 1 antenna ports cannot be used alone

For 2.4 GHz WIFI

The antenna gain = Chain 0 or Chain 1 = 1.72 dBi

For 5 GHz WIFI

The antenna gain = Chain 0 or Chain 1 = 2.57 dBi

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3.4.1.3 Results for FCC 47 CFR Part 1 Subpart I

For SISO (1TX/1RX) Mode

	Operating Mode		Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value
			(dBm)		(dBi)	(dBm)	(mW)	(mW	/cm²)
	IEEE 802.11b IEEE 802.11g	2412- 2462	17	2	1.72	20.72	118.0321	1	0.0235
SISO	O IEEE 802.11a	5180- 5240	14	2	2.57	18.57	71.9449	1	0.0143
		5745- 5825	14	2	2.57	18.57	71.9449	1	0.0143

For MIMO (2TX/2RX) Mode

	Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive Tolerance according manufacturer	Directional Gain (dBi)	Calculated maximum EIRP	Declared maximum EIRP (mW)	MPE Limit (mW	MPE Value /cm²)
7	JEEE 000 44 JUT00	2412-	14	2	4.73	20.73	118.3042	1	0.0235
	IEEE 802.11n-HT20	2462	14	2	4.73	20.73	118.3042	1	0.0235
	IEEE 802.11n-HT40	2422-	14	2	4.73	20.73	118.3042	1	0.0235
	ILLE 802.1111-11140	2452	14	2	4.73	20.73	118.3042	1	0.0235
	IEEE 802.11n-HT20	5180- 5240	11	2	5.58	18.58	72.1107	1	0.0143
2	TEEE 802.1111-H120	5745- 5825	11	2	5.58	18.58	72.1107	1	0.0143
MO	IEEE 802.11n-HT40	5190- 5230	10	2	5.58	17.58	57.2796	1	0.0114
MIMO (2TX/2RX)	1EEE 802.1111-H140	5755- 5795	10	2	5.58	17.58	57.2796	1	0.0114
2RX)	IEEE 802.11ac-	5180- 5240	9	2	5.58	16.58	45.4988	1	0.0091
	VHT20	5745- 5825	9	2	5.58	16.58	45.4988	1	0.0091
	IEEE 802.11ac- VHT40	5190- 5230	9	2	5.58	16.58	45.4988	1	0.0091
		5755- 5795	9	2	5.58	16.58	45.4988	1	0.0091
	IEEE 802.11ac-	5210	9	2	5.58	16.58	45.4988	1	0.0091
	VHT80	5775	9	2	5.58	16.58	45.4988	1	0.0091

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3.4.1.4 Results for RSS-102 Issue 5

For SISO (1TX/1RX) Mode

	Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value
		(MHz)	(dBm)		(dBi)	(dBm)	(W)	(W	/m²)
	IEEE 802.11b IEEE 802.11g	2412- 2462	17	2	1.72	20.72	0.118032	5.35	0.2350
SISO	IFFF 902 14 c	5180- 5240	14	2	2.57	18.57	0.071945	9.01	0.1430
	IEEE 802.11a	5745- 5825	14	2	2.57	18.57	0.071945	9.69	0.1430

For MIMO (2TX/2RX) Mode

1 0	WIIWO (ZIA/ZRA)	MOGE							
	Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive Tolerance according manufacturer	Directional Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value
		(MHz)	(d	Bm)	(dBi)	(dBm)	(W)	(W	/m²)
7	IEEE 802.11n-HT20	2412-	14	2	4.73	20.73	0.118304	5.35	0.2350
	IEEE 002.1111-H120	2462	14	2	4.73	20.73	0.118304	5.35	0.2350
/	IEEE 802.11n-HT40	2422-	14	2	4.73	20.73	0.118304	5.35	0.2350
	1EEE 002.1111-H140	2452	14	2	4.73	20.73	0.118304	5.35	0.2350
	JEEE 000 44% LITOO	5180- 5240	11	2	5.58	18.58	0.072111	9.01	0.1430
~	IEEE 802.11n-HT20	5745- 5825	11	2	5.58	18.58	0.072111	9.69	0.1430
MIMO (2TX/2RX)	IEEE 802.11n-HT40	5190- 5230	10	2	5.58	17.58	0.05728	9.01	0.1140
(2TX/	ILLE 602.1111-11140	5755- 5795	10	2	5.58	17.58	0.05728	9.69	0.1140
2RX)	IEEE 802.11ac-	5180- 5240	9	2	5.58	16.58	0.045499	9.01	0.0910
	VHT20	5745- 5825	9	2	5.58	16.58	0.045499	9.69	0.0910
	IEEE 802.11ac-	5190- 5230	9	2	5.58	16.58	0.045499	9.01	0.0910
	VHT40	5755- 5795	9	2	5.58	16.58	0.045499	9.69	0.0910
	IEEE 802.11ac-	5210	9	2	5.58	16.58	0.045499	9.01	0.0910
	VHT80	5775	9	2	5.58	16.58	0.045499	9.69	0.0910

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3.4.2 For BT

For BT_LE function, operating at 2402MHz to 2480 MHz for GFSK and For BT_EDR function, operating at 2402MHz to 2480 MHz for GFSK, $\pi/4$ DQPSK, 8DPSK

3.4.2.1 Antenna Type:

Chain 0: PIFA Antenna

3.4.2.2 Antenna Gain:

Chain 0: 2402MHz to 2480 MHz: 1.72 dBi

3.4.2.3 Results for FCC 47 CFR Part 1 Subpart I

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(mW)	(mW/cm ²)	
LE	2402- 2480	2	2	1.72	5.72	3.7325	1	0.0007
EDR	2402- 2480	10	2	1.72	13.72	23.5505	1	0.0047

3.4.2.4 Results for RSS-102 Issue 5

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(W)	(W /r	n²)
LE	2402- 2480	2	2	1.72	5.72	0.0037325	5.35	0.0070
EDR	2402- 2480	10	2	1.72	13.72	0.0235505	5.35	0.0470



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3.4.3 Simultaneous Multi-band Transmission MPE Analysis

3.4.4.1 List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Support/Not Support		
1	2.4G_SISO_WLAN + BT	Not Support		
2	2.4G_MIMO_WLAN + BT	Not Support		
3	5G_SISO_WLAN + BT	Not Support		
4	5G_MIMO_WLAN + BT	Not Support		

3.4.4.2 Results for transmit simultaneously

Not Applicable



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APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

N/A

APPENDIX 2 PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

