

EMF TEST REPORT

Test Report No. : OT-23N-RWD-005

Reception No. : 2309003183

Applicant : Samsung Electronics Co Ltd

Address : 19 Chapin Rd., Building D, Pine Brook, New Jersey, 07058, United States

Manufacturer : Samsung Electronics Co Ltd

Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Korea

Type of Equipment : Wi-Fi/BT Transceiver

FCC ID. : A3LWCD730M

Model Name : WCD730M

Multiple Model Name : N/A

Serial number : N/A

Total page of Report : 15 pages (including this page)

Date of Incoming : October 04, 2023

Date of issue : November 01, 2023

SUMMARY

The equipment complies with the regulation; **CFR §2.1093**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

This report is not correlated with the "KS Q ISO/IEC 17025 and KOLAS accreditation" of Korean Laboratory Accreditation Scheme.



Tested by
Ju-Yun, Park / Sr. Engineer
ONETECH Corp.



Reviewed by
Tae-Ho, Kim / Chief Engineer
ONETECH Corp.



Approved by
Jae-Ho, Lee / Chief Engineer
ONETECH Corp.


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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-23N-RWD-005	November 01, 2023	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : Samsung Electronics Co Ltd
 Address : 19 Chapin Rd., Building D, Pine Brook, New Jersey, 07058, United States
 Contact Person : Youngjoong, Noh / Principal Engineer
 Telephone No. : +82-31-277-0598
 FCC ID : A3LWCD730M
 Model Name : WCD730M
 Brand Name : 
 Serial Number : N/A
 Date : November 01, 2023

E.U.T. DESCRIPTION	Modular Transmitter, Wi-Fi/BT Transceiver
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	KDB 447498 D01 General RF Exposure Guidance v06
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
Modifications on the Equipment to Achieve Compliance	None

- The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The Samsung Electronics Co Ltd, Model WCD730M (referred to as the EUT in this report) is a Wi-Fi/BT Transceiver. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Wi-Fi/BT Transceiver	
Temperature Range	-20 °C ~ 50 °C	
OPERATING FREQUENCY	Bluetooth LE	2 402 MHz ~ 2 480 MHz
	Bluetooth	2 402 MHz ~ 2 480 MHz
	WLAN 2.4 GHz	2 412 MHz ~ 2 472 MHz (802.11b/g/n(HT20))
	WLAN 5 150 MHz ~ 5 250 MHz Band	5 180 MHz ~ 5 240 MHz (802.11a/n(HT20)/ac(VHT20))
		5 190 MHz ~ 5 230 MHz (802.11n(HT40)/ac(VHT40))
		5 210 MHz (802.11ac(VHT80))
	WLAN 5 250 MHz ~ 5 350 MHz Band	5 260 MHz ~ 5 320 MHz (802.11a/n(HT20)/ac(VHT20))
		5 270 MHz ~ 5 310 MHz (802.11n(HT40)/ac(VHT40))
		5 290 MHz (802.11ac(VHT80))
	WLAN 5 470 MHz ~ 5 725 MHz Band	5 500 MHz ~ 5 720 MHz (802.11a/n(HT20)/ac(VHT20))
		5 510 MHz ~ 5 710 MHz (802.11n(HT40)/ac(VHT40))
		5 530 MHz ~ 5 690 MHz (802.11ac(VHT80))
	WLAN 5 725 MHz ~ 5 850 MHz Band	5 745 MHz ~ 5 825 MHz (802.11a/n(HT20)/ac(VHT20))
5 755 MHz ~ 5 795 MHz (802.11n(HT40)/ac(VHT40))		
5 775 MHz (802.11ac(VHT80))		
MODULATION TYPE	Bluetooth LE	GFSK for 1 Mbps / 2 Mbps
	Bluetooth	GFSK for 1Mbps, $\pi/4$ -DQPSK for 2Mbps, 8-DPSK for 3Mbps
	WLAN 2.4 GHz	802.11b: DSSS Modulation(DBPSK/DQPSK/CCK)
		802.11g/n(HT20): OFDM Modulation(BPSK/QPSK/16QAM/64QAM)
WLAN 5 GHz	802.11a/n(HT20)/n(HT40)/ac(VHT80): OFDM Modulation(BPSK/QPSK/16QAM/64QAM)	

RF OUTPUT POWER	Bluetooth LE	1 Mbps	9.98 dBm
		2 Mbps	9.89 dBm
	Bluetooth	1 Mbps	10.97 dBm
		2 Mbps	10.51 dBm
		3 Mbps	10.53 dBm
	WLAN 2.4 GHz	Antenna 1	18.08 dBm(802.11b)
			15.61 dBm(802.11g)
			15.01 dBm(802.11n_HT20)
	Antenna 2	20.59 dBm(802.11b)	
		16.75 dBm(802.11g)	
		16.61 dBm(802.11n_HT20)	
	Multiple Antenna	18.77 dBm(802.11g)	
		18.72 dBm(802.11n_HT20)	
	WLAN 5 150 MHz ~ 5 250 MHz Band	Antenna 1	12.31 dBm(802.11a)
12.38 dBm(802.11n_HT20)			
14.12 dBm(802.11n_HT40)			
Antenna 2		12.73 dBm(802.11ac_VHT80)	
		12.08 dBm(802.11a)	
		12.08 dBm(802.11n_HT20)	
Multiple Antenna	14.21 dBm(802.11n_HT40)		
	13.14 dBm(802.11ac_VHT80)		
	15.16 dBm(802.11a)		
WLAN 5 250 MHz ~ 5 350 MHz Band	Antenna 1	15.24 dBm(802.11n_HT20)	
		17.08 dBm(802.11n_HT40)	
		15.95 dBm(802.11ac_VHT80)	
	Antenna 2	15.75 dBm(802.11a)	
		15.56 dBm(802.11n_HT20)	
		14.73 dBm(802.11n_HT40)	
	Multiple Antenna	12.16 dBm(802.11ac_VHT80)	
		15.75 dBm(802.11a)	
		15.55 dBm(802.11n_HT20)	
Antenna 2	14.61 dBm(802.11n_HT40)		
	12.08 dBm(802.11ac_VHT80)		
	18.76 dBm(802.11a)		
Multiple Antenna	18.57 dBm(802.11n_HT20)		
	17.60 dBm(802.11n_HT40)		
	15.13 dBm(802.11ac_VHT80)		

RF OUTPUT POWER	WLAN 5 470 MHz ~ 5 725 MHz Band	Antenna 1	14.38 dBm(802.11a) 14.81 dBm(802.11n_HT20) 14.26 dBm(802.11n_HT40) 10.22 dBm(802.11ac_VHT80)
		Antenna 1_Straddle	8.30 dBm(802.11a) 9.04 dBm(802.11n_HT20) 8.64 dBm(802.11n_HT40) 9.43 dBm(802.11ac_VHT80)
		Antenna 2	15.71 dBm(802.11a) 16.41 dBm(802.11n_HT20) 15.71 dBm(802.11n_HT40) 12.03 dBm(802.11ac_VHT80)
		Antenna 2_Straddle	10.51 dBm(802.11a) 11.10 dBm(802.11n_HT20) 10.86 dBm(802.11n_HT40) 11.96 dBm(802.11ac_VHT80)
		Multiple Antenna	18.11 dBm(802.11a) 18.69 dBm(802.11n_HT20) 17.97 dBm(802.11n_HT40) 14.23 dBm(802.11ac_VHT80)
		Multiple Antenna _Straddle	12.55 dBm(802.11a) 13.20 dBm(802.11n_HT20) 12.90 dBm(802.11n_HT40) 13.89 dBm(802.11ac_VHT80)

RF OUTPUT POWER	WLAN 5 725 MHz ~ 5 850 MHz Band	Antenna 1	11.65 dBm(802.11a) 12.51 dBm(802.11n_HT20) 12.85 dBm(802.11n_HT40) 11.75 dBm(802.11ac_VHT80)
		Antenna 1_Straddle	0.48 dBm(802.11a) 1.71 dBm(802.11n_HT20) -3.17 dBm(802.11n_HT40) -4.98 dBm(802.11ac_VHT80)
		Antenna 2	14.18 dBm(802.11a) 15.01 dBm(802.11n_HT20) 15.55 dBm(802.11n_HT40) 14.25 dBm(802.11ac_VHT80)
		Antenna 2_Straddle	2.76 dBm(802.11a) 3.73 dBm(802.11n_HT20) -1.00 dBm(802.11n_HT40) -2.61 dBm(802.11ac_VHT80)
		Multiple Antenna	16.11 dBm(802.11a) 16.95 dBm(802.11n_HT20) 17.42 dBm(802.11n_HT40) 16.19 dBm(802.11ac_VHT80)
		Multiple Antenna _Straddle	4.78 dBm(802.11a) 5.85 dBm(802.11n_HT20) 1.06 dBm(802.11n_HT40) -0.62 dBm(802.11ac_VHT80)

ANTENNA TYPE	Chip Antenna			
ANTENNA GAIN	Bluetooth LE	-1.82 dBi		
	Bluetooth	-1.82 dBi		
	WLAN 2.4 GHz	Antenna 1	0.71 dBi	
		Antenna 2	1.38 dBi	
		Multiple Antenna	4.07 dBi	
	5 150 MHz ~ 5 250 MHz Band	Antenna 1	1.39 dBi	
		Antenna 2	1.43 dBi	
		Multiple Antenna	4.42 dBi	
	5 250 MHz ~ 5 350 MHz Band	Antenna 1	1.43 dBi	
		Antenna 2	1.43 dBi	
		Multiple Antenna	4.44 dBi	
	5 470 MHz ~ 5 725 MHz Band	Antenna 1	1.40 dBi	
		Antenna 2	1.43 dBi	
		Multiple Antenna	4.43 dBi	
	5 725 MHz ~ 5 850 MHz Band	Antenna 1	1.32 dBi	
		Antenna 2	1.41 dBi	
		Multiple Antenna	4.38 dBi	
	List of each Osc. or crystal Freq.(Freq. >= 1 MHz)		40 MHz	

2.2 Alternative type(s)/model(s); also covered by this test report.

-. The following lists consist of the added model and their differences.

Model Name	Differences	Tested
WCD730M	Basic: MIC and Accelation sensor at the top side.	<input checked="" type="checkbox"/>
	Option 1: This model is identical to the basic model except for the removal MIC.	<input type="checkbox"/>
	Option 2: This model is identical to the basic model except for the removal MIC and Accelation sensor at the top side.	<input type="checkbox"/>

Note: 1. Applicant consigns only basic model to test, therefore this test report just guarantees the units, which have been tested.

2. The Applicant/manufacturer is responsible for the compliance of all variants.

3. EUT MODIFICATIONS

-. None

4. MAXIMUM PERMISSIBLE EXPOSURE

4.1 RF Exposure Calculation

According to the FCC rule 1.1310 table 1B, the limit for the maximum permissible RF exposure for an uncontrolled environment are $f/1500$ mW/cm² for the frequency range between 300 MHz and 1 500 MHz and 1.0 mW/cm² for the frequency range between 1 500 MHz and 100 000 MHz.

The electric field generated for a 1 mW/cm² exposure is calculated as follows:

$$E = \sqrt{(30 * P * G) / d}, \text{ and } S = E^2 / Z = E^2 / 377, \text{ because } 1 \text{ mW/cm}^2 = 10 \text{ W/m}^2$$

Where

S = Power density in mW/cm², Z = Impedance of free space, 377 Ω

E = Electric field strength in V/m, G = Numeric antenna gain, and d = distance in meter

Combining equations and rearranging the terms to express the distance as a function of the remaining variable

$$d = \sqrt{(30 * P * G) / (377 * 10 S)}$$

Changing to units of mW and cm, using P (mW) = P (W) / 1 000, d (cm) = 0.01 * d (m)

$$d = 0.282 * \sqrt{(P * G) / S}$$

Where

d = distance in cm, P = Power in mW, G = Numeric antenna gain, and S = Power density in mW/cm²

4.2 EUT Description

Kind of EUT	Wi-Fi/BT Transceiver
Device Category	<input type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input checked="" type="checkbox"/> Others
Exposure Evaluation Applied	<input checked="" type="checkbox"/> MPE <input type="checkbox"/> SAR <input type="checkbox"/> N/A

4.3 Calculated MPE Safe Distance for WLAN

4.3.1 DATA for Antenna 1

According to above equation, the following result was obtained.

Operating Freq. Band (MHz)	Operating Mode	Target Power W/tolerance (dBm)	Max tune up power		Antenna Gain		Safe Distance (cm)	Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
			(dBm)	(mW)	Log	Linear			
2 400 ~ 2 483.5	802.11b	18.08 ± 2.0	20.08	101.86	0.71	1.18	3.09	0.023 9	1
	802.11g	15.61 ± 2.0	17.61	57.68			2.32	0.013 5	1
	802.11n_HT20	15.01 ± 2.0	17.01	50.23			2.17	0.011 8	1
5 150 ~ 5 250	802.11a	12.31 ± 2.0	14.31	26.98	1.39	1.38	1.72	0.007 4	1
	802.11n_HT20	12.38 ± 2.0	14.38	27.42			1.73	0.007 5	1
	802.11n_HT40	14.12 ± 2.0	16.12	40.93			2.12	0.011 2	1
	802.11ac80	12.73 ± 2.0	14.73	29.72			1.80	0.008 1	1
5 250 ~ 5 350	802.11a	15.75 ± 2.0	17.75	59.57	1.43	1.39	2.57	0.016 5	1
	802.11n_HT20	15.56 ± 2.0	17.56	57.02			2.51	0.015 8	1
	802.11n_HT40	14.73 ± 2.0	16.73	47.10			2.28	0.013 0	1
	802.11ac80	12.16 ± 2.0	14.16	26.06			1.70	0.007 2	1
5 470 ~ 5 725	802.11a	14.38 ± 2.0	16.38	43.45	1.40	1.38	2.18	0.011 9	1
	802.11n_HT20	14.81 ± 2.0	16.81	47.97			2.29	0.013 2	1
	802.11n_HT40	14.26 ± 2.0	16.26	42.27			2.15	0.011 6	1
	802.11ac80	10.22 ± 2.0	12.22	16.67			1.35	0.004 6	1
5 725 ~ 5 850	802.11a	11.65 ± 2.0	13.65	23.17	1.32	1.36	1.58	0.006 2	1
	802.11n_HT20	12.51 ± 2.0	14.51	28.25			1.74	0.007 6	1
	802.11n_HT40	12.85 ± 2.0	14.85	30.55			1.81	0.008 2	1
	802.11ac80	11.75 ± 2.0	13.75	23.71			1.60	0.006 4	1

According to above table, for 2 400 ~ 2483.5 MHz Band(802.11 b), safe distance,

$$D = 0.282 * \sqrt{(101.86 * 1.18)/1.00} = 3.09 \text{ cm.}$$

For getting power density at 20 cm separation in above table, following formula was used.

$$S = P * G / (4\pi * R^2) = 101.86 * 1.18 / (4 * \pi * 20^2) = 0.023 9$$

Where:

S = Power Density,

P = Power input to the external antenna (Output power from the EUT antenna port (dBm) – cable loss (dB)),

G = Gain of Transmit Antenna (linear gain), R = Distance from Transmitting Antenna

4.3.2 DATA for Antenna 2

According to above equation, the following result was obtained.

Operating Freq. Band (MHz)	Operating Mode	Target Power W/tolerance (dBm)	Max tune up power		Antenna Gain		Safe Distance (cm)	Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
			(dBm)	(mW)	Log	Linear			
2 400 ~ 2 483.5	802.11b	20.59 ± 2.0	22.59	181.55	1.38	1.37	4.45	0.049 6	1
	802.11g	16.75 ± 2.0	18.75	74.99			2.86	0.020 5	1
	802.11n_HT20	16.61 ± 2.0	18.61	72.61			2.82	0.019 8	1
5 150 ~ 5 250	802.11a	12.08 ± 2.0	14.08	25.59	1.43	1.39	1.68	0.007 1	1
	802.11n_HT20	12.08 ± 2.0	14.08	25.59			1.68	0.007 1	1
	802.11n_HT40	14.21 ± 2.0	16.21	41.78			2.15	0.011 6	1
	802.11ac80	13.14 ± 2.0	15.14	32.66			1.90	0.009 0	1
5 250 ~ 5 350	802.11a	15.75 ± 2.0	17.75	59.57	1.43	1.39	2.57	0.016 5	1
	802.11n_HT20	15.55 ± 2.0	17.55	56.89			2.51	0.015 7	1
	802.11n_HT40	14.61 ± 2.0	16.61	45.81			2.25	0.012 7	1
	802.11ac80	12.08 ± 2.0	14.08	25.59			1.68	0.007 1	1
5 470 ~ 5 725	802.11a	15.71 ± 2.0	17.71	59.02	1.43	1.39	2.55	0.016 3	1
	802.11n_HT20	16.41 ± 2.0	18.41	69.34			2.77	0.019 2	1
	802.11n_HT40	15.71 ± 2.0	17.71	59.02			2.55	0.016 3	1
	802.11ac80	12.03 ± 2.0	14.03	25.29			1.67	0.007 0	1
5 725 ~ 5 850	802.11a	14.18 ± 2.0	16.18	41.50	1.41	1.38	2.14	0.011 4	1
	802.11n_HT20	15.01 ± 2.0	17.01	50.23			2.35	0.013 8	1
	802.11n_HT40	15.55 ± 2.0	17.55	56.89			2.50	0.015 7	1
	802.11ac80	14.25 ± 2.0	16.25	42.17			2.15	0.011 6	1

According to above table, for 2 400 ~ 2483.5 MHz Band(802.11 b), safe distance,

$$D = 0.282 * \sqrt{(181.55 * 1.37)/1.00} = 4.45 \text{ cm.}$$

For getting power density at 20 cm separation in above table, following formula was used.

$$S = P * G / (4\pi * R^2) = 181.55 * 1.37 / (4 * \pi * 20^2) = 0.049 6$$

Where:

S = Power Density,

P = Power input to the external antenna (Output power from the EUT antenna port (dBm) – cable loss (dB)),

G = Gain of Transmit Antenna (linear gain), R = Distance from Transmitting Antenna

4.3.3 DATA for Multiple Transmit

According to above equation, the following result was obtained.

According to above equation, the following result was obtained.

Operating Freq. Band (MHz)	Operating Mode	Target Power W/tolerance (dBm)	Max tune up power		Antenna Gain		Safe Distance (cm)	Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
			(dBm)	(mW)	Log	Linear			
2 400 ~ 2 483.5	802.11g	19.23 ± 2.0	21.23	132.67	4.07	2.55	5.19	0.067 4	1
	802.11n_HT20	18.89 ± 2.0	20.89	122.84			4.99	0.062 4	1
5 150 ~ 5 250	802.11a	15.21 ± 2.0	17.21	52.56	4.42	2.77	3.40	0.028 9	1
	802.11n_HT20	15.24 ± 2.0	17.24	53.00			3.42	0.029 2	1
	802.11n_HT40	17.18 ± 2.0	19.18	82.71			4.27	0.045 5	1
	802.11ac80	15.95 ± 2.0	17.95	62.38			3.70	0.034 3	1
5 250 ~ 5 350	802.11a	18.76 ± 2.0	20.76	119.13	4.44	2.78	5.13	0.065 9	1
	802.11n_HT20	18.57 ± 2.0	20.57	113.90			5.02	0.063 0	1
	802.11n_HT40	17.68 ± 2.0	19.68	92.91			4.53	0.051 4	1
	802.11ac80	15.13 ± 2.0	17.13	51.65			3.38	0.028 6	1
5 470 ~ 5 725	802.11a	18.11 ± 2.0	20.11	102.47	4.43	2.77	4.75	0.056 5	1
	802.11n_HT20	18.69 ± 2.0	20.69	117.32			5.09	0.064 7	1
	802.11n_HT40	18.06 ± 2.0	20.06	101.29			4.73	0.055 9	1
	802.11ac80	14.23 ± 2.0	16.23	41.97			3.04	0.023 2	1
5 725 ~ 5 850	802.11a	16.11 ± 2.0	18.11	64.67	4.38	2.74	3.75	0.035 3	1
	802.11n_HT20	16.95 ± 2.0	18.95	78.48			4.14	0.042 8	1
	802.11n_HT40	17.42 ± 2.0	19.42	87.43			4.37	0.047 7	1
	802.11ac80	16.19 ± 2.0	18.19	65.88			3.79	0.035 9	1

According to above table, for 2 400 ~ 2483.5 MHz Band(802.11 g), safe distance,

$$D = 0.282 * \sqrt{(132.67 * 2.55)/1.00} = 5.19 \text{ cm.}$$

For getting power density at 20 cm separation in above table, following formula was used.

$$S = P * G / (4\pi * R^2) = 132.67 * 2.55 / (4 * \pi * 20^2) = 0.067 4$$

Where:

S = Power Density,

P = Power input to the external antenna (Output power from the EUT antenna port (dBm) – cable loss (dB)),

G = Gain of Transmit Antenna (linear gain), R = Distance from Transmitting Antenna

4.4 Calculated MPE Safe Distance for Bluetooth LE

According to above equation, the following result was obtained.

Operating Freq. Band (MHz)	Operating Mode	Target Power W/tolerance (dBm)	Max tune up power		Antenna Gain		Safe Distance (cm)	Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
			(dBm)	(mW)	Log	Linear			
2 402 ~ 2 480	1 Mbps	9.98 ± 2.0	11.98	15.78	-1.82	0.66	0.91	0.002 1	1
	2 Mbps	9.89 ± 2.0	11.89	15.45			0.90	0.002 0	1

According to above table, for 2 402 ~ 2480 MHz Band(1 Mbps), safe distance,

$$D = 0.282 * \sqrt{(15.78 * 0.66)/1.00} = 0.91 \text{ cm.}$$

For getting power density at 20 cm separation in above table, following formula was used.

$$S = P * G / (4\pi * R^2) = 15.78 * 0.66 / (4 * \pi * 20^2) = 0.002 1$$

Where:

S = Power Density,

P = Power input to the external antenna (Output power from the EUT antenna port (dBm) – cable loss (dB)),

G = Gain of Transmit Antenna (linear gain), R = Distance from Transmitting Antenna

4.5 Calculated MPE Safe Distance for Bluetooth

According to above equation, the following result was obtained.

Operating Freq. Band (MHz)	Operating Mode	Target Power W/tolerance (dBm)	Max tune up power		Antenna Gain		Safe Distance (cm)	Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
			(dBm)	(mW)	Log	Linear			
2 402 ~ 2 480	1 Mbps	10.97 ± 2.0	12.97	19.82	-1.82	0.66	1.02	0.002 6	1
	2 Mbps	10.51 ± 2.0	12.51	17.82			0.97	0.002 3	1
	3 Mbps	10.53 ± 2.0	12.53	17.91			0.97	0.002 3	1

According to above table, for 2 402 ~ 2480 MHz Band(1 Mbps), safe distance,

$$D = 0.282 * \sqrt{(19.82 * 0.66)/1.00} = 1.02 \text{ cm.}$$

For getting power density at 20 cm separation in above table, following formula was used.

$$S = P * G / (4\pi * R^2) = 19.82 * 0.66 / (4 * \pi * 20^2) = 0.002 6$$

Where:

S = Power Density,

P = Power input to the external antenna (Output power from the EUT antenna port (dBm) – cable loss (dB)),

G = Gain of Transmit Antenna (linear gain), R = Distance from Transmitting Antenna

4.6 DATA for Intermodulation Transmit

According to above equation, the following result was obtained.

Operating Freq. Band (MHz)	Operating Mode	Target Power W/tolerance (dBm)	Max tune up power		Power Density (mW/cm ²) @ 20 cm Separation	Sum Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
			(dBm)	(mW)			
Bluetooth + WLAN 2 G + WLAN 5 G	Bluetooth (1 Mbps)	10.97 ± 2.0	12.97	19.82	0.002 6	0.068 7	1.00
	WLAN 2 G (802.11 b_Ant 1)	20.59 ± 2.0	22.59	181.55	0.049 6		
	WLAN 5 G (UNII 2A 802.11 a Ant 1)	15.75 ± 2.0	17.75	59.57	0.016 5		
Bluetooth LE + WLAN 2 G + WLAN 5 G	Bluetooth LE (1 Mbps)	9.98 ± 2.0	11.98	15.78	0.002 1	0.068 2	1.00
	WLAN 2 G (802.11 b_Ant 0)	20.59 ± 2.0	22.59	181.55	0.049 6		
	WLAN 5 G (UNII 3 802.11 n_HT20 Ant 1)	15.75 ± 2.0	17.75	59.57	0.016 5		