

Global United Technology Services Co., Ltd.

Report No.: GTS201706000084F01

FCC REPORT

Applicant: Dongguan DingLiXing Electronic Co. Ltd.

Address of Applicant: No. 3 Dongfeng Road, Maoshe Cun, Dali Qingxi Town,

Dongguan , Guangdong, China

Dongguan DingLiXing Electronic Co. Ltd. Manufacturer/ Factory:

Address of No. 3 Dongfeng Road, Maoshe Cun, Dali Qingxi Town,

Dongguan ,Guangdong, China **Manufacturer/ Factory:**

Equipment Under Test (EUT)

Product Name: APP Score Indicator

Model No.: AWH044 017M

Trade Mark: MD SPORTS

2AIB8-DLX001 FCC ID:

FCC CFR Title 47 Part 15 Subpart C Section 15.249:2016 **Applicable standards:**

Date of sample receipt: June 08, 2017

Date of Test: June 09-15, 2017

Date of report issued: June 16, 2017

Test Result: PASS *

In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo **Laboratory Manager**



2 Version

Version No.	Date	Description
00	June 16 2017	Original

Prepared By:	Bill. Yvan	Date:	June 16, 2017
	Project Engineer		
Check By:	Andy wa	Date:	June 16, 2017
	Reviewer		



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Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	N/A
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Pass: The EUT complies with the essential requirements in the standard.

N/A: Not applicable.

Remark: Test according to ANSI C63.10: 2013 and ANSI C63.4: 2014.

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes		
Radiated Emission	9kHz ~ 30MHz	± 4.34dB	(1)		
Radiated Emission	30MHz ~ 1000MHz	± 4.24dB	(1)		
Radiated Emission	1GHz ~ 26.5GHz ± 4.68dB		(1)		
AC Power Line Conducted Emission 0.15MHz ~ 30MHz ± 3.45dB					
Note (1): The measurement unce	ertainty is for coverage factor of k	=2 and a level of confidence of	95%.		

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5 General Information

5.1 General Description of EUT

Product Name:	APP Score Indicator
Model No.:	AWH044_017M
Operation Frequency:	2402MHz~2480MHz
Channel numbers:	40
Channel separation:	2MHz
Modulation type:	GFSK
Antenna Type:	PCB antenna
Antenna gain:	4dBi (Declared by Applicant)
Power supply:	DC 4.5V(3*1.5V "AAA")



Operation F	Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
1	2402MHz	11	2422MHz	21	2442MHz	31	2462MHz	
2	2404MHz	12	2424MHz	22	2444MHz	32	2464MHz	
			• !	• !	• !	• !	•	
9	2418MHz	19	2438MHz	29	2458MHz	39	2478MHz	
10	2420MHz	20	2440MHz	30	2460MHz	40	2480MHz	

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2402MHz
The middle channel	2440MHz
The Highest channel	2480MHz

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5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode			
Remark: During the test, New battery is used during all test.				

Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	Х	Y	Z
Field Strength(dBuV/m)	92.56	93.93	91.23

5.3 Description of Support Units

None.

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• FCC —Registration No.: 600491

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, June 22, 2016.

• Industry Canada (IC) —Registration No.: 9079A-2

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2, August 15, 2016

5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960

5.6 Other Information Requested by the Customer

None.



6 Test Instruments list

Rad	Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July 03 2015	July 02 2020	
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A	
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June 29 2016	June 28 2017	
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June 29 2016	June 28 2017	
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June 29 2016	June 28 2017	
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 29 2016	June 28 2017	
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 29 2016	June 28 2017	
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
9	Coaxial Cable	GTS	N/A	GTS213	June 29 2016	June 28 2017	
10	Coaxial Cable	GTS	N/A	GTS211	June 29 2016	June 28 2017	
11	Coaxial cable	GTS	N/A	GTS210	June 29 2016	June 28 2017	
12	Coaxial Cable	GTS	N/A	GTS212	June 29 2016	June 28 2017	
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June 29 2016	June 28 2017	
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June 29 2016	June 28 2017	
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 29 2016	June 28 2017	
16	Band filter	Amindeon	82346	GTS219	June 29 2016	June 28 2017	
17	Power Meter	Anritsu	ML2495A	GTS540	June 29 2016	June 28 2017	
18	Power Sensor	Anritsu	MA2411B	GTS541	June 29 2016	June 28 2017	

Gen	General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Barometer	ChangChun	DYM3	GTS257	June 29 2016	June 28 2017	



7 Test results and Measurement Data

7.1 Antenna requirement

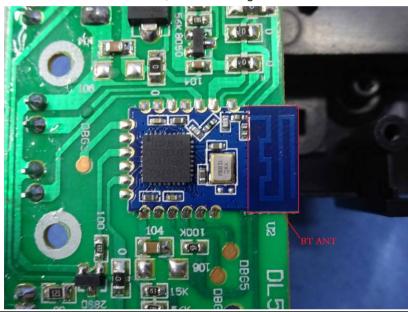
Standard requirement: FCC Part15 C Section 15.203

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is PCB antenna, the best case gain of the antenna is 4dBi



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7.2 Radiated Emission Method

etilou							
FCC Part15 C Section 15.209							
ANSI C63.10:20	013						
30MHz to 25GH	Ηz						
Measurement D	Distance: 3m						
Frequency	Detector	RBW	VBW	Remark			
30MHz- 1GHz	Quasi-pea	k 120KHz	300KHz	Quasi-peak Value			
Above 4CH-	Peak	1MHz	3MHz	Peak Value			
Above 1GHZ	Peak	1MHz	10Hz	Average Value			
Freque	ency	Limit (dBuV	/m @3m)	Remark			
2400MHz-24	2400MHz-2483.5MHz 94.00			Average Value			
Freque	ency	Limit (dBuV	/m @3m)	Remark			
				Quasi-peak Value			
				Quasi-peak Value			
				Quasi-peak Value			
960MHZ-	960WH2-TGH2			Quasi-peak Value			
Above 1	IGHz			Average Value Peak Value			
harmonics, sha fundamental or	II be attenuat to the genera	ed by at least al radiated em	50 dB belov	w the level of the			
Below 1GHz	EUT-	< 1r Turn Table	n 4m >v	fier-			
	ANSI C63.10:20 30MHz to 25GH Measurement E Frequency 30MHz- 1GHz Above 1GHz Freque 2400MHz-24 Freque 30MHz-8 88MHz-2 216MHz-9 960MHz Above 6 Emissions radia harmonics, sha fundamental or whichever is the Below 1GHz	FCC Part15 C Section 15.20 ANSI C63.10:2013 30MHz to 25GHz Measurement Distance: 3m Frequency Detector 30MHz- Quasi-pea 1GHz Above 1GHz Peak Frequency 2400MHz-2483.5MHz Frequency 30MHz-88MHz 88MHz-216MHz 216MHz-960MHz 960MHz-1GHz Above 1GHz Emissions radiated outside of harmonics, shall be attenuate fundamental or to the general whichever is the lesser atterned below 1GHz Below 1GHz	FCC Part15 C Section 15.209 ANSI C63.10:2013 30MHz to 25GHz Measurement Distance: 3m Frequency Detector RBW 30MHz-1GHz Quasi-peak 120KHz 1GHz Peak 1MHz Peak 1MHz Peak 1MHz Frequency Limit (dBuV, 2400MHz-2483.5MHz 94.0 88MHz-216MHz 43.5 216MHz-960MHz 46.0 960MHz-1GHz 54.0 Above 1GHz 54.0 Emissions radiated outside of the specified harmonics, shall be attenuated by at least fundamental or to the general radiated emistichever is the lesser attenuation. Below 1GHz Receivers	FCC Part15 C Section 15.209 ANSI C63.10:2013 30MHz to 25GHz Measurement Distance: 3m Frequency Detector RBW VBW 30MHz- Quasi-peak 120KHz 300KHz 1GHz Above 1GHz Peak 1MHz 3MHz Peak 1MHz 10Hz Frequency Limit (dBuV/m @3m) 2400MHz-2483.5MHz 94.00 Frequency Limit (dBuV/m @3m) 30MHz-88MHz 40.00 88MHz-216MHz 43.50 216MHz-960MHz 46.00 960MHz-1GHz 54.00 Above 1GHz 54.00 Above 1GHz 54.00 Temissions radiated outside of the specified frequency harmonics, shall be attenuated by at least 50 dB belof fundamental or to the general radiated emission limits whichever is the lesser attenuation. Below 1GHz Receiver Preampli			



Report No.: GTS201706000084F01 < 1m ... 4m > EUT. Turn Table <150cm; Preamplifier-Receiver+ Test Procedure: 1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Test Instruments: Refer to section 6.0 for details Test mode: Refer to section 5.2 for details

Measurement data:

Test results:

Pass



7.2.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2402.00	89.87	27.58	5.39	30.18	92.66	114.00	-21.34	Vertical
2402.00	87.66	27.58	5.39	30.18	90.45	114.00	-23.55	Horizontal
2440.00	88.39	27.55	5.43	30.06	91.31	114.00	-22.69	Vertical
2440.00	86.71	27.55	5.43	30.06	89.63	114.00	-24.37	Horizontal
2480.00	90.87	27.52	5.47	29.93	93.93	114.00	-20.07	Vertical
2480.00	88.00	27.52	5.47	29.93	91.06	114.00	-22.94	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2402.00	76.38	27.58	5.39	30.18	79.17	94.00	-14.83	Vertical
2402.00	74.65	27.58	5.39	30.18	77.44	94.00	-16.56	Horizontal
2440.00	74.95	27.55	5.43	30.06	77.87	94.00	-16.13	Vertical
2440.00	72.27	27.55	5.43	30.06	75.19	94.00	-18.81	Horizontal
2480.00	77.02	27.52	5.47	29.93	80.08	94.00	-13.92	Vertical
2480.00	74.70	27.52	5.47	29.93	77.76	94.00	-16.24	Horizontal

Note: RBW 3MHz VBW 3MHz peak detector is for PK value, RMS detector is for AV value



7.2.2 Spurious emissions

■ Below 1GHz

- DCIOW I	0112							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
33.10	24.94	11.25	0.59	30.08	6.70	40.00	-33.30	Vertical
101.29	25.26	12.10	1.20	29.69	8.87	43.50	-34.63	Vertical
223.73	25.42	10.98	1.98	29.43	8.95	46.00	-37.05	Vertical
333.69	24.50	14.15	2.54	29.81	11.38	46.00	-34.62	Vertical
501.18	24.71	17.55	3.31	29.30	16.27	46.00	-29.73	Vertical
851.04	24.57	21.75	4.66	29.15	21.83	46.00	-24.17	Vertical
38.35	25.56	12.30	0.64	30.05	8.45	40.00	-31.55	Horizontal
55.03	25.38	11.93	0.82	29.96	8.17	40.00	-31.83	Horizontal
92.46	26.49	10.98	1.13	29.73	8.87	43.50	-34.63	Horizontal
189.07	25.58	9.70	1.78	29.24	7.82	43.50	-35.68	Horizontal
406.09	24.12	15.62	2.88	29.49	13.13	46.00	-32.87	Horizontal
706.70	25.15	19.89	4.12	29.20	19.96	46.00	-26.04	Horizontal



■ Above 1GHz

Peak value:

reak value.								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4804.00	36.11	31.78	8.60	32.09	44.40	74.00	-29.60	Vertical
7206.00	31.04	36.15	11.65	32.00	46.84	74.00	-27.16	Vertical
9608.00	30.76	37.95	14.14	31.62	51.23	74.00	-22.77	Vertical
12010.00	*					74.00		Vertical
14412.00	*					74.00		Vertical
4804.00	40.15	31.78	8.60	32.09	48.44	74.00	-25.56	Horizontal
7206.00	32.69	36.15	11.65	32.00	48.49	74.00	-25.51	Horizontal
9608.00	30.07	37.95	14.14	31.62	50.54	74.00	-23.46	Horizontal
12010.00	*					74.00		Horizontal
14412.00	*					74.00		Horizontal

Average value:

Average var	uc.							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4804.00	25.15	31.78	8.60	32.09	33.44	54.00	-20.56	Vertical
7206.00	19.86	36.15	11.65	32.00	35.66	54.00	-18.34	Vertical
9608.00	19.01	37.95	14.14	31.62	39.48	54.00	-14.52	Vertical
12010.00	*					54.00		Vertical
14412.00	*					54.00		Vertical
4804.00	29.25	31.78	8.60	32.09	37.54	54.00	-16.46	Horizontal
7206.00	21.95	36.15	11.65	32.00	37.75	54.00	-16.25	Horizontal
9608.00	18.64	37.95	14.14	31.62	39.11	54.00	-14.89	Horizontal
12010.00	*					54.00		Horizontal
14412.00	*					54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test channel	nnel: Middle							
Peak value:				<u>'</u>				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	37.08	31.85	8.67	32.12	45.48	74.00	-28.52	Vertical
7320.00	31.68	36.37	11.72	31.89	47.88	74.00	-26.12	Vertical
9760.00	31.34	38.35	14.25	31.62	52.32	74.00	-21.68	Vertical
12200.00	*					74.00		Vertical
14640.00	*					74.00		Vertical
4880.00	41.32	31.85	8.67	32.12	49.72	74.00	-24.28	Horizontal
7320.00	33.42	36.37	11.72	31.89	49.62	74.00	-24.38	Horizontal
9760.00	30.74	38.35	14.25	31.62	51.72	74.00	-22.28	Horizontal
12200.00	*					74.00		Horizontal
14640.00	*					74.00		Horizontal
Average val	ue:							•
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	25.95	31.85	8.67	32.12	34.35	54.00	-19.65	Vertical
7320.00	20.40	36.37	11.72	31.89	36.60	54.00	-17.40	Vertical
9760.00	19.49	38.35	14.25	31.62	40.47	54.00	-13.53	Vertical
12200.00	*					54.00		Vertical
14640.00	*					54.00		Vertical
4880.00	30.15	31.85	8.67	32.12	38.55	54.00	-15.45	Horizontal
7320.00	22.56	36.37	11.72	31.89	38.76	54.00	-15.24	Horizontal
9760.00	19.20	38.35	14.25	31.62	40.18	54.00	-13.82	Horizontal
12200.00	*					54.00		Horizontal
1			l .	1	i e			1

Remark:

14640.00

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.

Horizontal

54.00



Test channel	:			Hig	hest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	37.10	31.93	8.73	32.16	45.60	74.00	-28.40	Vertical
7440.00	31.69	36.59	11.79	31.78	48.29	74.00	-25.71	Vertical
9920.00	31.34	38.81	14.38	31.88	52.65	74.00	-21.35	Vertical
12400.00	*					74.00		Vertical
14880.00	*					74.00		Vertical
4960.00	41.34	31.93	8.73	32.16	49.84	74.00	-24.16	Horizontal
7440.00	33.43	36.59	11.79	31.78	50.03	74.00	-23.97	Horizontal
9920.00	30.75	38.81	14.38	31.88	52.06	74.00	-21.94	Horizontal
12400.00	*					74.00		Horizontal
14880.00	*					74.00		Horizontal
Average val	ue:		•				•	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	26.03	31.93	8.73	32.16	34.53	54.00	-19.47	Vertical
7440.00	20.46	36.59	11.79	31.78	37.06	54.00	-16.94	Vertical
9920.00	19.54	38.81	14.38	31.88	40.85	54.00	-13.15	Vertical
12400.00	*					54.00		Vertical
14880.00	*					54.00		Vertical
4960.00	30.25	31.93	8.73	32.16	38.75	54.00	-15.25	Horizontal
7440.00	22.62	36.59	11.79	31.78	39.22	54.00	-14.78	Horizontal
9920.00	19.26	38.81	14.38	31.88	40.57	54.00	-13.43	Horizontal
12400.00	*					54.00		Horizontal
		1	1	1				1

Remark:

14880.00

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Horizontal

54.00



7.2.3 Bandedge emissions

All of the restriction bands were tested, and only the data of worst case was exhibited.

	<u>*</u>
Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	40.18	27.59	5.38	30.18	42.97	74.00	-31.03	Horizontal
2400.00	56.58	27.58	5.39	30.18	59.37	74.00	-14.63	Horizontal
2390.00	40.47	27.59	5.38	30.18	43.26	74.00	-30.74	Vertical
2400.00	58.33	27.58	5.39	30.18	61.12	74.00	-12.88	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	31.34	27.59	5.38	30.18	34.13	54.00	-19.87	Horizontal
2400.00	42.41	27.58	5.39	30.18	45.20	54.00	-8.80	Horizontal
2390.00	31.09	27.59	5.38	30.18	33.88	54.00	-20.12	Vertical
2400.00	43.81	27.58	5.39	30.18	46.60	54.00	-7.40	Vertical

Ī	Test channel:	Highest channel
- 1		1 3

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	41.96	27.53	5.47	29.93	45.03	74.00	-28.97	Horizontal
2500.00	41.65	27.55	5.49	29.93	44.76	74.00	-29.24	Horizontal
2483.50	42.35	27.53	5.47	29.93	45.42	74.00	-28.58	Vertical
2500.00	42.39	27.55	5.49	29.93	45.50	74.00	-28.50	Vertical

Average value:

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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	34.13	27.53	5.47	29.93	37.20	54.00	-16.80	Horizontal
2500.00	32.52	27.55	5.49	29.93	35.63	54.00	-18.37	Horizontal
2483.50	35.12	27.53	5.47	29.93	38.19	54.00	-15.81	Vertical
2500.00	32.22	27.55	5.49	29.93	35.33	54.00	-18.67	Vertical

Remark:

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor



7.3 20dB Occupy Bandwidth

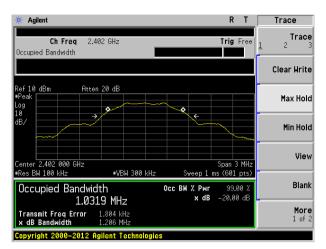
Test Requirement:	FCC Part15 C Section 15.249/15.215		
Test Method:	ANSI C63.10:2013		
Limit:	Operation Frequency range 2400MHz~2483.5MHz		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 6.0 for details		
Test mode:	Refer to section 5.2 for details		
Test results:	Pass		

Measurement Data

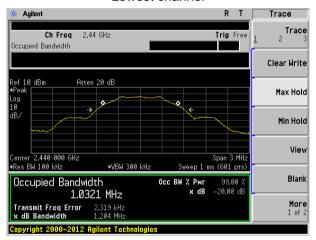
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.206	Pass
Middle	1.204	Pass
Highest	1.202	Pass

Test plot as follows:

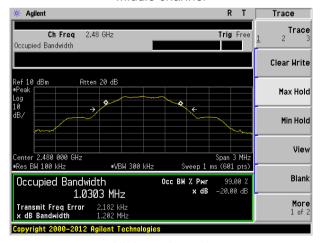




Lowest channel



Middle channel

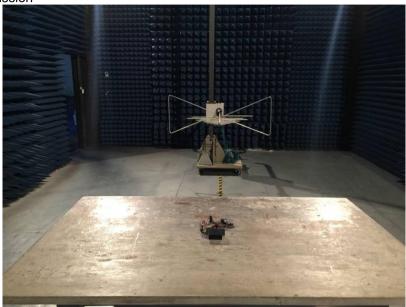


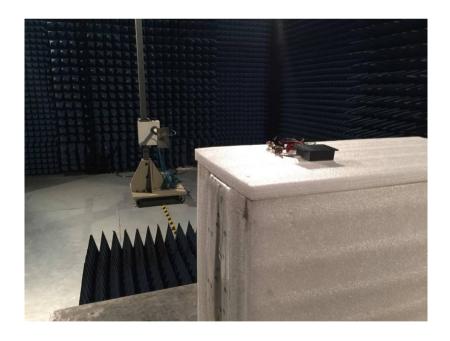
Highest channel



8 Test Setup Photo

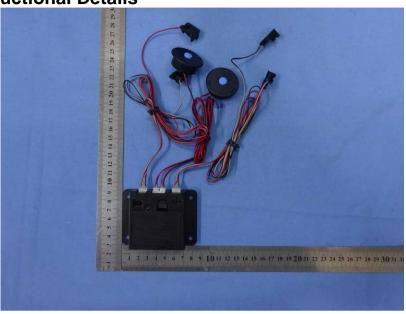
Radiated Emission

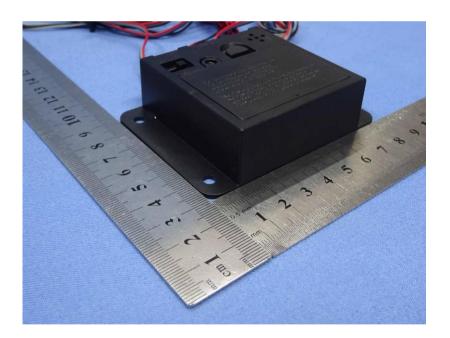




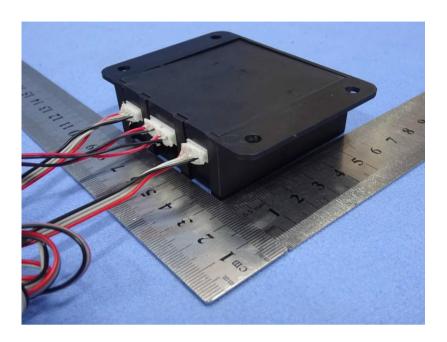


9 EUT Constructional Details









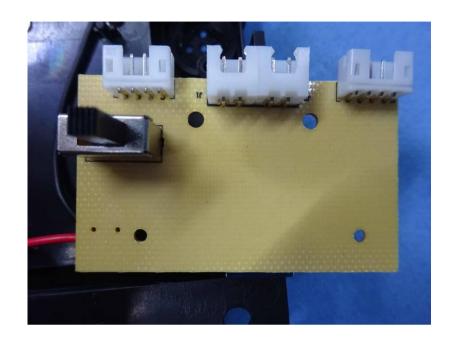


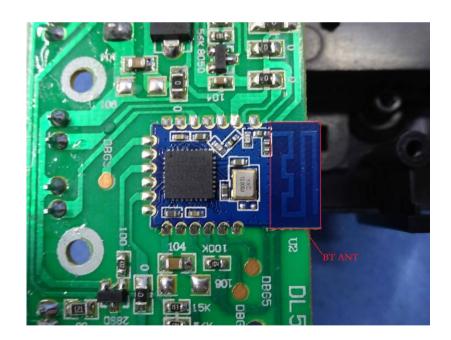












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