

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC145682

1 of 44 Page:

FCC Radio Test Report FCC ID: 2AGBA-THE-EGG

Original Grant

Report No. TB-FCC145682

Wasson Technology CO., LTD.(BVI) **Applicant**

Equipment Under Test (EUT)

EUT Name The Egg

Model No. E1

Series Model

No.

N/A

Brand Name N/A

2015-10-09 **Receipt Date**

2015-10-12 to 2015-11-05 **Test Date**

Issue Date 2015-11-06

Standards FCC Part 15: 2015, Subpart C(15.247)

ANSI C63.10: 2013 **Test Method**

Conclusions **PASS**

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

The EUT technically complies with the FCC and IC requirements

Test/Witness

Engineer

Approved&

Authorized

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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1. General Information about EUT

1.1 Client Information

Applicant: Wasson Technology CO., LTD.(BVI)

Address: 1404-2, Block B, Building 3, LongGang Tian'an Digital Park,

LongGang District, ShenZhen, GuangDong province, P.R.China

Manufacturer : Wasson Technology CO., LTD.(BVI)

Address: 1404-2, Block B, Building 3, LongGang Tian'an Digital Park,

LongGang District, ShenZhen, GuangDong province, P.R.China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	1	The Egg			
Models No.	7	E1	E1		
Model Difference		N/A			
	The state of the s	Operation Frequency: BLE: 2402MHz~2480MHz Bluetooth: 2402MHz~2480MHz ₍₂₎ WIFI: 2412~2462 MHz ₍₂₎			
Product		Number of Channel:	Bluetooth 4.0 (BLE): 40 channels see note(4)		
Description		RF Output Power:	-2.358 dBm Conducted Power		
		Antenna Gain:	1.24 dBi FPC Antenna		
		Modulation Type:	GFSK		
		Bit Rate of Transmitter:	1Mbps(GFSK)		
Power Supply	i	DC power supplied by AC/DC Adapter. DC Voltage supplied from Li-ion battery.			
Power Rating		Input: AC 100~240V 50/60Hz 0.5A Output: 5V/2A DC 3.7V from 1800mAh Li-ion battery			
Connecting I/O Port(S)		Please refer to the User's Manual			

Note:

- (1) This Test Report is FCC Part 15.247 for Bluetooth BLE, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r02.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. The EUT has also been tested and complied the FCC 15C for Bluetooth and WIFI function, and recorded in the separate test report.
- (3) Antenna information provided by the applicant.
- (4) Channel List:

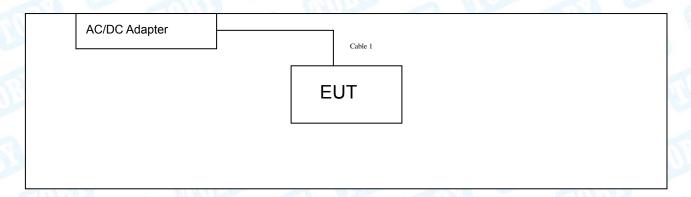


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Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	14	2430	28	2458
01	2404	15	2432	29	2460
02	2406	16	2434	30	2462
03	2408	17	2436	31	2464
04	2410	18	2438	32	2466
05	2412	19	2440	33	2468
06	2414	20	2442	34	2470
07	2416	21	2444	35	2472
08	2418	22	2446	36	2474
09	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454		
13	2428	27	2456		

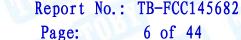
1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



1.4 Description of Support Units

Equipment Information						
Name Model S/N Mar			Manufacturer	Used "√"		
A STATE OF						
	Cable Information					
Number Shielded Type Ferrite Core Length Note						
Cable 1	NO	NO	1.0M	Accessory		





1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test				
Final Test Mode	Description			
Mode 1	AC Charging With TX Mode			

For Radiated Test				
Final Test Mode	Description			
Mode 2	AC Charging With TX Mode			
Mode 3 TX Mode (Channel 00/20/39)				

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.4 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

Bluetooth BLE Mode: GFSK Modulation Transmitting mode.

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on Z-plane as the normal use. Therefore only the test data of this Z-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

Test Software Version	MP Tool Test.exe		
Channel	CH 00	CH 20	CH 39
BLE Mode	DEF	DEF	DEF



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1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
The same of the sa	Level Accuracy:	THE PARTY OF THE
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Radiated Emission	Level Accuracy:	±4.60 dB
Radiated Ellission	9kHz to 30 MHz	±4.00 dB
Radiated Emission	Level Accuracy:	±4.40 dB
Radiated Ellission	30MHz to 1000 MHz	±4.40 UB
Radiated Emission	Level Accuracy:	±4.20 dB
Radiated Ellission	Above 1000MHz	±4.20 UB

1.8 Test Facility

The testing was performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at:

1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China.

At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.



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2. Test Summary

Standa	rd Section		ludama ant	Remark
FCC	IC	Test Item	Judgment	
15.203	1	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A
15.247(d)	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A

Note: "/" for no requirement for this test item.

N/A is an abbreviation for Not Applicable.



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3. Test Equipment

AC Main C	onducted Emis	ssion			
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	ROHDE& SCHWARZ	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016
50ΩCoaxial Switch	Anritsu	MP59B	X10321	Aug. 07, 2015	Aug. 06, 2016
L.I.S.N	Rohde & Schwarz	ENV216	101131	Aug. 07, 2015	Aug. 06, 2016
L.I.S.N	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016
Radiation Description	Spurious Emis	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 29, 2015	Date Aug. 28, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 28, 2015	Mar. 27, 2016
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	Sonoma	310N	185903	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	HP	8447B	3008A00849	Mar. 28, 2015	Mar. 27, 2016
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 28, 2015	Mar. 27, 2016
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	onducted Emis	ssion			
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 29, 2015	Aug. 28, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

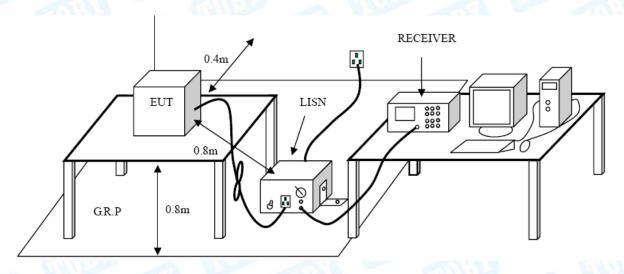
Conducted Emission Test Limit

	Maximum RF Line Voltage (dBμV)		
Frequency	Quasi-peak Level	Average Level	
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *	
500kHz~5MHz	56	46	
5MHz~30MHz	60	50	

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.



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I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Test data please refer the following pages.



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6.	276		30.6	
	M	A I		V
				7
2	5	U.	.	4

UT:	The Egg Model Name :				E1			
emperature:	25 ℃	25 ℃ Relative Humidity:				55%		
est Voltage:	AC 120V/60)Hz		CALL			A Brown	
erminal:	Line		THE STATE OF THE S		(1)	United		
est Mode:	AC Chargin	g with TX B	LE Mode		1 6	and the same		
Remark:	Only worse	case is rep	orted	11/1/28			N. Carlot	
90.0 dBuV								
						QP: AVG:		
\ <u>*</u>								
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No. Mk. Fre	Reading Level z dBuV	Correct Factor	Measure- ment	5 Limit	dB	Detector	30.000	
0.150 No. Mk. Fre	Reading Level z dBuV 00 34.93 00 16.98	Correct Factor dB	Measure- ment dBuV 45.05	5 Limit dBuV 65.99 55.99	dB -20.94	Detector	30.000	
0.150 No. Mk. Fre MH 1 * 0.15 2 0.15	Reading Level z dBuV 00 34.93 00 16.98 00 29.51	Correct Factor dB 10.12	Measure- ment dBuV 45.05 27.10	5 Limit dBuV 65.99 55.99 64.03	dB -20.94 -28.89	Detector QP AVG	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19	Reading Level z dBuV 00 34.93 00 16.98 00 29.51 00 13.44	Correct Factor dB 10.12 10.12	Measure- ment dBuV 45.05 27.10 39.63	Limit dBuV 65.99 55.99 64.03	dB -20.94 -28.89 -24.40	Detector QP AVG QP	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19	Reading Level z dBuV 00 34.93 00 16.98 00 29.51 00 13.44 79 26.76	Correct Factor dB 10.12 10.12 10.12	Measure- ment dBuV 45.05 27.10 39.63 23.56	5 Limit dBuV 65.99 55.99 64.03 54.03 60.88	dB -20.94 -28.89 -24.40 -30.47	Detector QP AVG QP AVG	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19 5 0.27	Reading Level z dBuV 00 34.93 00 16.98 00 29.51 00 13.44 79 26.76 79 11.04	Correct Factor dB 10.12 10.12 10.12 10.12 10.09	Measure- ment dBuV 45.05 27.10 39.63 23.56 36.85	5 Limit dBuV 65.99 55.99 64.03 54.03 60.88 50.88	dB -20.94 -28.89 -24.40 -30.47 -24.03	Detector QP AVG QP AVG	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19 5 0.27 6 0.27	Reading Level z dBuV 00 34.93 00 16.98 00 29.51 00 13.44 79 26.76 79 11.04 80 22.00	Correct Factor dB 10.12 10.12 10.12 10.12 10.09	Measure- ment dBuV 45.05 27.10 39.63 23.56 36.85 21.13	5 Limit dBuV 65.99 55.99 64.03 54.03 60.88 50.88	dB -20.94 -28.89 -24.40 -30.47 -24.03 -29.75	Detector QP AVG QP AVG QP AVG	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19 5 0.27 6 0.27 7 0.49	Reading Level Z dBuV 00 34.93 00 16.98 00 29.51 00 13.44 79 26.76 79 11.04 80 22.00 80 6.19	Correct Factor dB 10.12 10.12 10.12 10.12 10.09 10.09 10.02	Measure- ment dBuV 45.05 27.10 39.63 23.56 36.85 21.13 32.02	5 Limit dBuV 65.99 55.99 64.03 54.03 60.88 50.88 56.03 46.03	dB -20.94 -28.89 -24.40 -30.47 -24.03 -29.75 -24.01	Detector QP AVG QP AVG QP AVG	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19 5 0.27 6 0.27 7 0.49 8 0.49	Reading Level z dBuV 200 34.93 200 16.98 29.51 26.76 79 11.04 80 22.00 80 6.19 40 21.32	Correct Factor dB 10.12 10.12 10.12 10.09 10.09 10.02	Measurement dBuV 45.05 27.10 39.63 23.56 36.85 21.13 32.02 16.21	5 Limit dBuV 65.99 55.99 64.03 54.03 50.88 50.88 56.03 46.03	dB -20.94 -28.89 -24.40 -30.47 -24.03 -29.75 -24.01 -29.82	Detector QP AVG QP AVG QP AVG AVG	AVI	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19 5 0.27 6 0.27 7 0.49 8 0.49 9 0.67	Reading Level z dBuV 200 34.93 200 16.98 29.51 26.76 79 11.04 80 22.00 80 6.19 40 21.32 40 3.04	Correct Factor dB 10.12 10.12 10.12 10.09 10.09 10.02 10.02 10.02	Measurement dBuV 45.05 27.10 39.63 23.56 36.85 21.13 32.02 16.21 31.34	5 Limit dBuV 65.99 55.99 64.03 54.03 56.03 46.03 56.00 46.00	dB -20.94 -28.89 -24.40 -30.47 -24.03 -29.75 -24.01 -29.82 -24.66	Detector QP AVG QP AVG QP AVG QP AVG QP AVG	30.000	
No. Mk. Free MH 1 * 0.15 2 0.15 3 0.19 4 0.19 5 0.27 6 0.27 7 0.49 8 0.49 9 0.67 10 0.67	Reading Level Z dBuV 00 34.93 00 16.98 00 29.51 00 13.44 79 26.76 79 11.04 80 22.00 80 6.19 40 21.32 40 3.04 60 22.60	Correct Factor dB 10.12 10.12 10.12 10.09 10.09 10.02 10.02 10.02 10.02	Measure-ment dBuV 45.05 27.10 39.63 23.56 36.85 21.13 32.02 16.21 31.34 13.06	5 Limit dBuV 65.99 55.99 64.03 54.03 60.88 56.03 46.03 56.00 46.00	dB -20.94 -28.89 -24.40 -30.47 -24.03 -29.75 -24.01 -29.82 -24.66 -32.94	Detector QP AVG QP AVG QP AVG QP AVG QP AVG	30.000	



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UT:	The Egg		Model	Model Name :			M'	
emperature:	25 ℃	25 ℃ Relative Humidity:			lity:	55%		
est Voltage:	AC 120V/6	0Hz	Times of	(6)	THE STATE OF THE S			
erminal:	Neutral AC Charging with TX BLE Mode							
est Mode:							III DE	
Remark:	Only worse	case is rep	orted			135		
90.0 dBuV								
						QP: AVG:		
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				5	AL LONG BARRY THIS I'M	Total allowed many and a second	AVE	
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0.150 No. Mk. Fr	Reading	Correct	Measure-	5	Y-14-	Detector	AVE	
0.150 No. Mk. Fr	Reading eq. Level	Correct Factor	Measure- ment	5 Limit	Over	telkeliharingan aran bisarrah	30.000	
0.150 No. Mk. Fr	Reading Level Hz dBuV 940 27.90	Correct Factor	Measure- ment	5 Limit	Over dB -25.95	Detector	30.000	
0.150 No. Mk. Fr M 1 0.15	Reading Level Hz dBuV 940 27.90 940 12.13	Correct Factor dB	Measure- ment dBuV 37.91	5 Limit dBuV 63.86	Over dB -25.95 -31.72	Detector	30.000	
0.150 No. Mk. Fr M 1 0.19 2 0.19	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75	Correct Factor dB 10.01 10.01	Measure- ment dBuV 37.91 22.14	5 Limit dBuV 63.86	Over dB -25.95 -31.72 -19.64	Detector QP AVG	30.000	
0.150 No. Mk. Fr M 1 0.19 2 0.19 3 0.29	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16	Correct Factor dB 10.01 10.01 10.02	Measure- ment dBuV 37.91 22.14 40.77	5 Limit dBuV 63.86 53.86	Over dB -25.95 -31.72 -19.64 -24.23	Detector QP AVG	30.000	
0.150 No. Mk. Fr M 1 0.19 2 0.19 3 0.29 4 0.29	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16 500 28.14	Correct Factor dB 10.01 10.01 10.02 10.02	Measure- ment dBuV 37.91 22.14 40.77 26.18	5 Limit dBuV 63.86 53.86 60.41	Over dB -25.95 -31.72 -19.64 -24.23 -18.71	Detector QP AVG QP AVG	30.000	
No. Mk. Fr M 1 0.19 2 0.19 3 0.29 4 0.29 5 0.48	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16 500 28.14	Correct Factor dB 10.01 10.02 10.02 10.02	Measure- ment dBuV 37.91 22.14 40.77 26.18 38.16	5 Limit dBuV 63.86 53.86 60.41 50.41	Over dB -25.95 -31.72 -19.64 -24.23 -18.71 -28.06	Detector QP AVG QP AVG	30.000	
0.150 No. Mk. Fr M 1 0.19 2 0.19 3 0.29 4 0.29 5 0.49 6 0.49	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16 500 28.14 500 8.79	Correct Factor dB 10.01 10.02 10.02 10.02 10.02	Measure- ment dBuV 37.91 22.14 40.77 26.18 38.16 18.81	55 Limit dBuV 63.86 53.86 60.41 50.41 56.87 46.87	Over dB -25.95 -31.72 -19.64 -24.23 -18.71 -28.06 -17.68	Detector QP AVG QP AVG QP AVG	30.000	
No. Mk. Fr M 1 0.19 2 0.19 3 0.29 4 0.29 5 0.49 6 0.49 7 * 0.69	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16 500 28.14 500 8.79 500 28.23	Correct Factor dB 10.01 10.02 10.02 10.02 10.02 10.02 10.09	Measure- ment dBuV 37.91 22.14 40.77 26.18 38.16 18.81 38.32	5 Limit dBuV 63.86 53.86 60.41 50.41 56.87 46.87	Over dB -25.95 -31.72 -19.64 -24.23 -18.71 -28.06 -17.68 -24.52	Detector QP AVG QP AVG QP AVG	30.000	
No. Mk. Fr M 1 0.19 2 0.19 3 0.29 4 0.29 5 0.49 6 0.49 7 * 0.69 8 0.69	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16 500 28.14 500 8.79 500 28.23 500 11.39	Correct Factor dB 10.01 10.02 10.02 10.02 10.02 10.09 10.09	Measure- ment dBuV 37.91 22.14 40.77 26.18 38.16 18.81 38.32 21.48	5 Limit dBuV 63.86 53.86 60.41 50.41 56.87 46.87 46.00	Over dB -25.95 -31.72 -19.64 -24.23 -18.71 -28.06 -17.68 -24.52 -18.57	Detector QP AVG QP AVG QP AVG AVG	30.000	
No. Mk. Fr 1 0.19 2 0.19 3 0.29 4 0.29 5 0.49 6 0.49 7 * 0.69 8 0.69 9 0.77	Reading Level Hz dBuV 940 27.90 940 12.13 940 30.75 940 16.16 500 28.14 500 8.79 500 28.23 500 11.39 780 27.33	Correct Factor dB 10.01 10.02 10.02 10.02 10.02 10.09 10.09 10.10	Measure-ment dBuV 37.91 22.14 40.77 26.18 38.16 18.81 38.32 21.48 37.43	55 Limit dBuV 63.86 53.86 60.41 50.41 56.87 46.87 56.00 46.00	Over dB -25.95 -31.72 -19.64 -24.23 -18.71 -28.06 -17.68 -24.52 -18.57 -27.70	Detector QP AVG QP AVG QP AVG QP AVG QP AVG	30.000	





UT:	The Egg		Model Name	:	E1		
emperature:	25 ℃	Relative Humidity:			55%		
est Voltage:	AC 240V/60Hz						
erminal:	Line		773		MILLER		
est Mode:	AC Chargir	ng with TX B	LE Mode			THE STATE	
Remark:	Only worse	case is rep	orted		A Y	The second	
90.0 dBuV							
					QP: AVG:		
×							
40				×			
-1\/ L[\/\m	MANANTA MANANANA	ANNA AMAYAYAYAYA	PH/M-MARY-MARAPHILADAR MARAPHILADAR MARAPHARA	AND AND PARTY PARTY.			
MV M M	Oha all that	TINIII I TIVE TENET	111111111111111111111111111111111111111		Managhar Long Long Long Long Long Long Long Long		
A A A' M'	Mus Kriphana	MANA ANDREAS	the there are altered the course	water water	A MANAGERY	www.peal	
	יין איין אין איין איין איין איין איין א	, արդական գորագրերի	All the same of th	Mr. JAgrands	Wandreed	реа	
					· ·	*******AVG	
10							
0.150	0.5	(MI	Hz) 5			30.000	
						30.000	
0.150	0.5 Reading		Measure- ment Limi	t Over		30.000	
0.150	Reading eq. Level	Correct	Measure-		Detector	30.000 Commer	
0.150 No. Mk. Fro	Reading eq. Level	Correct Factor	Measure- ment Limi		Detector		
No. Mk. Fro	Reading Level dBuV 319 29.33	Correct Factor	Measurement Limi	/ dB	Detector		
No. Mk. Fro	Reading Level Hz dBuV 319 29.33 319 9.62	Correct Factor dB	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3	dB 9 -24.94	Detector QP AVG		
No. Mk. From Mr. 1 0.18	Reading Level Hz dBuV 319 29.33 319 9.62 380 24.83	Correct Factor dB 10.12 10.12	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1	dB 9 -24.94 9 -34.65	Detector QP AVG		
0.150 No. Mk. From Min 1 0.18 2 0.18 3 0.23	Reading Level dBuV 319 29.33 319 9.62 380 24.83 380 9.22	G Correct Factor dB 10.12 10.12 10.11	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1	dB 9 -24.94 9 -34.65 6 -27.22	Detector QP AVG QP AVG		
No. Mk. From MH 1 0.18 2 0.18 3 0.23 4 0.23	Reading Level Hz dBuV 319 29.33 319 9.62 380 24.83 380 9.22 380 23.82	Correct Factor dB 10.12 10.12 10.11 10.11	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83	Detector QP AVG QP AVG QP QP		
No. Mk. From MH 1 0.18 2 0.18 3 0.23 4 0.23 5 0.55	Reading Level dBuV 319 29.33 319 9.62 380 24.83 380 9.22 380 23.82 380 7.64	Correct Factor dB 10.12 10.12 10.11 10.11 10.02	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0 17.66 46.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83 0 -22.16	Detector QP AVG QP AVG QP AVG QP AVG		
No. Mk. From MH 1 0.18 2 0.18 3 0.23 4 0.23 5 0.55 6 0.55 7 * 0.91	Reading Level Hz dBuV 319 29.33 319 9.62 380 24.83 380 9.22 380 23.82 380 7.64 80 24.64	G Correct Factor dB 10.12 10.12 10.11 10.11 10.02 10.02 10.12	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0 17.66 46.0 34.76 56.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83 0 -22.16 0 -28.34 0 -21.24	Detector QP AVG QP AVG QP AVG QP AVG		
No. Mk. From MH 1 0.18 2 0.18 3 0.23 4 0.23 5 0.55 6 0.55 7 * 0.91 8 0.91	Reading Level dBuV 319 29.33 319 9.62 380 24.83 380 9.22 380 23.82 380 7.64 380 24.64 380 7.23	Correct Factor dB 10.12 10.12 10.11 10.11 10.02 10.02 10.12 10.12	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0 17.66 46.0 34.76 56.0 17.35 46.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83 0 -22.16 0 -28.34 0 -28.65	Detector QP AVG QP AVG QP AVG QP AVG AVG		
No. Mk. From Min	Reading Level dBuV 319 29.33 319 9.62 380 24.83 380 9.22 3.82 580 7.64 80 24.64 80 7.23 340 19.68	Correct Factor dB 10.12 10.12 10.11 10.02 10.02 10.02 10.12 10.12 10.18	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0 17.66 46.0 34.76 56.0 17.35 46.0 29.76 56.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83 0 -22.16 0 -28.34 0 -21.24 0 -28.65 0 -26.24	Detector QP AVG QP AVG QP AVG QP AVG QP AVG QP AVG		
No. Mk. From MH 1	Reading Level dBuV 319 29.33 319 9.62 380 24.83 380 9.22 380 7.64 80 7.64 80 7.23 340 19.68	Correct Factor dB 10.12 10.12 10.11 10.02 10.02 10.12 10.12 10.18 10.08	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0 17.66 46.0 34.76 56.0 17.35 46.0 29.76 56.0 12.81 46.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83 0 -22.16 0 -28.34 0 -21.24 0 -28.65 0 -26.24 0 -33.19	Detector QP AVG QP AVG QP AVG QP AVG QP AVG AVG		
No. Mk. From Miles 1 0.18 2 0.18 3 0.23 4 0.23 5 0.55 6 0.55 7 * 0.91 8 0.91 9 1.83	Reading Level dBuV 319 29.33 319 9.62 380 24.83 380 9.22 380 23.82 580 7.64 80 24.64 80 7.23 340 19.68 340 2.73	Correct Factor dB 10.12 10.12 10.11 10.02 10.02 10.02 10.12 10.12 10.18	Measurement Limi dBuV dBuV 39.45 64.3 19.74 54.3 34.94 62.1 19.33 52.1 33.84 56.0 17.66 46.0 34.76 56.0 17.35 46.0 29.76 56.0 12.81 46.0 32.00 60.0	dB 9 -24.94 9 -34.65 6 -27.22 6 -32.83 0 -22.16 0 -28.34 0 -21.24 0 -28.65 0 -26.24	Detector QP AVG QP AVG QP AVG QP AVG QP AVG QP AVG QP AVG		



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EUT:	The Egg	Model	Name :		E1		
emperature:	25 °C Relative Humidity:			ity:	55%		
est Voltage:	AC 240V/60		10	A STATE			
erminal:	Neutral	Neutral					
est Mode:	AC Chargin	g with TX E	BLE Mode		18		
Remark:	Only worse	case is rep	oorted	Miles			
90.0 dBuV							
40				Maring Wall Congress of the	X-MANAGE AND	QP: AVG:	Market Al
0.150	0.5	(1	MHz)	5			30.000
	Reading	Correct	Measure-				
No. Mk. Free	Reading q. Level	Correct Factor	Measure- ment	Limit	Over		
MHz	q. Level	Factor dB	ment dBuV	Limit dBuV	dB	Detector	Comme
MHz 1 * 0.562	q. Level dBuV 20 32.30	Factor dB 10.02	ment dBuV 42.32	dBuV 56.00 -	dB 13.68	QP	Comme
1 * 0.562 2 0.562	q. Level dBuV 20 32.30 20 13.11	factor dB 10.02 10.02	ment dBuV 42.32 23.13	dBuV 56.00 - 46.00 - 5	dB 13.68 22.87	QP AVG	Comme
1 * 0.562 2 0.562 3 0.890	q. Level dBuV 20 32.30 20 13.11 00 30.68	Factor dB 10.02 10.02 10.11	ment dBuV 42.32 23.13 40.79	Limit dBu∨ 56.00 - 46.00 - 56.00 -	dB 13.68 22.87 15.21	QP AVG QP	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890	q. Level dBuV 20 32.30 20 13.11 00 30.68 00 12.42	Factor dB 10.02 10.02 10.11 10.11	ment dBuV 42.32 23.13 40.79 22.53	Limit dBuV 56.00 46.00 46.00 46.00	dB 13.68 22.87 15.21 23.47	QP AVG QP AVG	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214	q. Level dBuV 20 32.30 20 13.11 00 30.68 00 12.42 40 27.11	Factor dB 10.02 10.02 10.11 10.11 10.14	ment dBuV 42.32 23.13 40.79 22.53 37.25	Limit dBuV 56.00 - 46.00 - 46.00 - 56.00 -	dB 13.68 22.87 15.21 23.47 18.75	QP AVG QP AVG QP	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214 6 1.214	q. Level 2 dBuV 20 32.30 20 13.11 20 30.68 20 12.42 27.11 20 6.65	Factor dB 10.02 10.02 10.11 10.11 10.14 10.14	ment dBuV 42.32 23.13 40.79 22.53 37.25 16.79	Limit dBuV 56.00 46.00 56.00 46.00 46.00 46.00	dB 13.68 22.87 15.21 23.47 18.75 29.21	QP AVG QP AVG QP AVG	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214 6 1.214 7 1.694	q. Level dBuV 20 32.30 20 13.11 00 30.68 00 12.42 40 27.11 40 6.65 40 30.21	Factor dB 10.02 10.02 10.11 10.11 10.14 10.14 10.09	ment dBuV 42.32 23.13 40.79 22.53 37.25 16.79 40.30	Limit dBuV 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 56.00 -	dB 13.68 22.87 15.21 23.47 18.75 29.21 15.70	QP AVG QP AVG QP AVG QP	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214 6 1.214 7 1.694 8 1.694	q. Level dBuV 20 32.30 20 13.11 00 30.68 00 12.42 00 27.11 00 6.65 00 30.21 00 10.76	Factor dB 10.02 10.02 10.11 10.11 10.14 10.14	ment dBuV 42.32 23.13 40.79 22.53 37.25 16.79 40.30 20.85	Limit dBuV 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 46.00 - 46.00 - 46.00 -	dB 13.68 22.87 15.21 23.47 18.75 29.21 15.70 25.15	QP AVG QP AVG QP AVG	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214 6 1.214 7 1.694 8 1.694 9 2.706	q. Level dBuV 20 32.30 20 13.11 00 30.68 00 12.42 00 27.11 00 6.65 00 30.21 00 10.76 00 21.91	Factor dB 10.02 10.02 10.11 10.11 10.14 10.09 10.09 10.09	ment dBuV 42.32 23.13 40.79 22.53 37.25 16.79 40.30 20.85 31.97	Limit dBuV 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 56.00 -	dB 13.68 22.87 15.21 23.47 18.75 29.21 15.70 25.15 24.03	QP AVG QP AVG QP AVG QP AVG	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214 6 1.214 7 1.694 8 1.694	q. Level dBuV 20 32.30 20 13.11 00 30.68 00 12.42 00 27.11 00 6.65 00 30.21 00 10.76 00 21.91	Factor dB 10.02 10.02 10.11 10.11 10.14 10.09 10.09	ment dBuV 42.32 23.13 40.79 22.53 37.25 16.79 40.30 20.85	Limit dBuV 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 46.00 - 46.00 - 46.00 -	dB 13.68 22.87 15.21 23.47 18.75 29.21 15.70 25.15 24.03	QP AVG QP AVG QP AVG QP AVG	Comme
MHz 1 * 0.562 2 0.562 3 0.890 4 0.890 5 1.214 6 1.214 7 1.694 8 1.694 9 2.706	q. Level 2 dBuV 20 32.30 20 13.11 20 30.68 20 12.42 27.11 20 6.65 20 30.21 20 10.76 20 3.75	Factor dB 10.02 10.02 10.11 10.11 10.14 10.09 10.09 10.09	ment dBuV 42.32 23.13 40.79 22.53 37.25 16.79 40.30 20.85 31.97	Limit dBuV 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 46.00 - 56.00 - 56.00 -	dB 13.68 22.87 15.21 23.47 18.75 29.21 15.70 25.15 24.03 32.19	QP AVG QP AVG QP AVG QP AVG	Comme



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)	
0.009~0.490	2400/F(KHz)	300	
0.490~1.705	24000/F(KHz)	30	
1.705~30.0	30	30	
30~88	100	3	
88~216	150	3	
216~960	200	3	
Above 960	500	3	

Radiated Emission Limit (Above 1000MHz)

Frequency	Class A (dBu\	//m)(at 3 M)	Class B (dBuV/m)(at 3 M)		
(MHz)	Peak	Average	Peak	Average	
Above 1000	80	60	74	54	

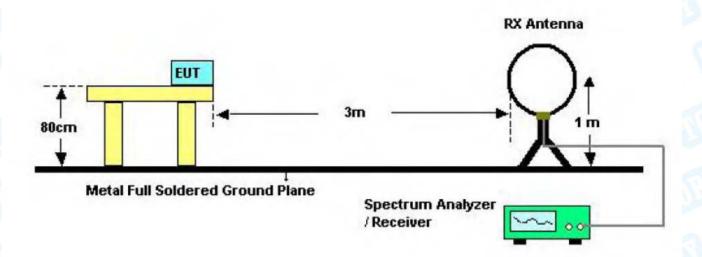
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

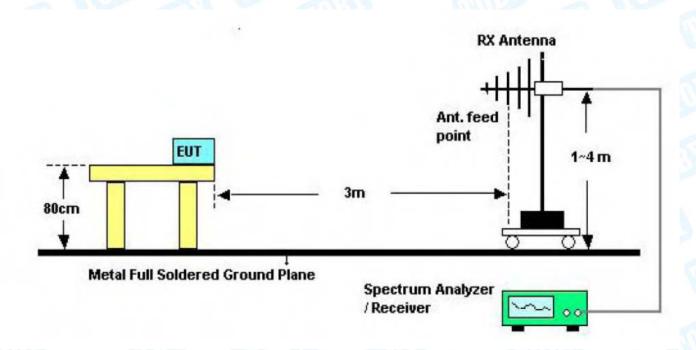


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5.2 Test Setup



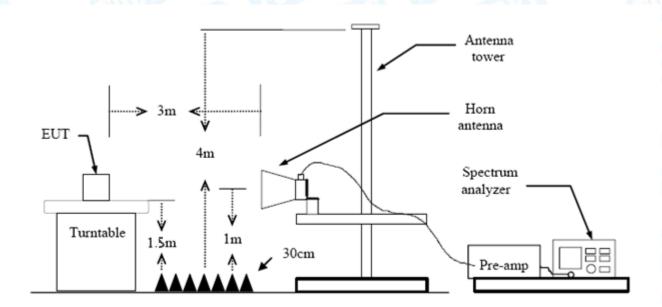
Below 30MHz Test Setup



Below 1000MHz Test Setup



TOBY



Above 1GHz Test Setup

5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.



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5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

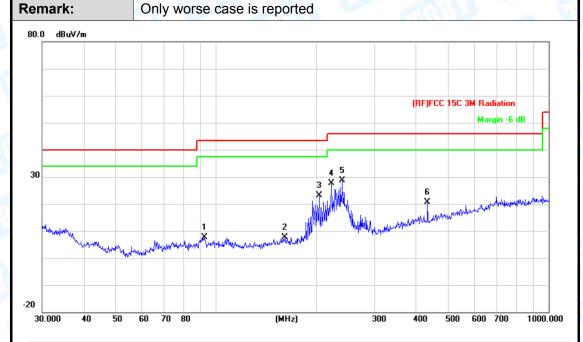
5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 kHz with Peak Detector for Average Values.

Test data please refer the following pages.



EUT:	The Egg	Model:	E1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	BLE TX 2402 Mode		
_			

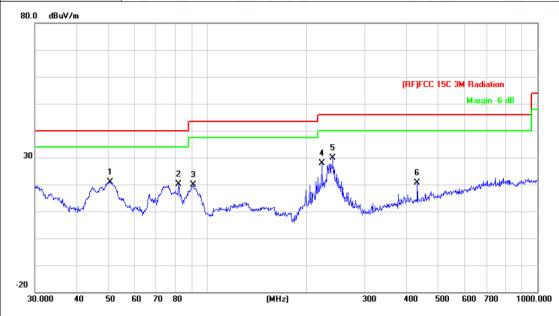


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		92.1388	30.12	-22.50	7.62	43.50	-35.88	peak
2		160.9088	28.08	-20.57	7.51	43.50	-35.99	peak
3		204.2375	43.36	-20.20	23.16	43.50	-20.34	peak
4		222.1698	46.97	-19.43	27.54	46.00	-18.46	peak
5	*	239.9874	47.29	-18.59	28.70	46.00	-17.30	peak
6		432.5457	33.41	-12.78	20.63	46.00	-25.37	peak

^{*:}Maximum data x:Over limit !:over margin



EUT:	The Egg	Model:	E1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz	131	THE
Ant. Pol.	Vertical		
Test Mode:	BLE TX 2402 Mode		
Remark:	Only worse case is repor	ted	1:33



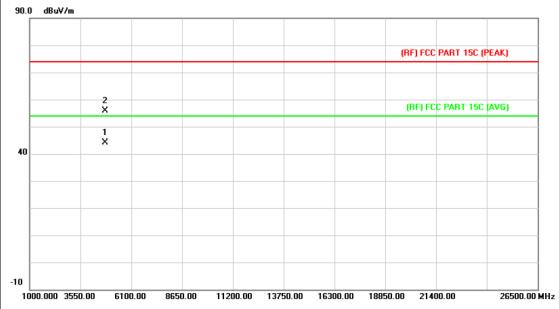
No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		50.7637	45.37	-24.41	20.96	40.00	-19.04	peak
2		81.7831	43.41	-23.18	20.23	40.00	-19.77	peak
3		90.5374	42.46	-22.65	19.81	43.50	-23.69	peak
4		222.1698	47.27	-19.43	27.84	46.00	-18.16	peak
5	*	239.9874	48.44	-18.59	29.85	46.00	-16.15	peak
6		432.5457	33.37	-12.78	20.59	46.00	-25.41	peak

^{*:}Maximum data x:Over limit !:over margin



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EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	TIME THE				
Ant. Pol.	Horizontal	Horizontal				
Test Mode:	BLE Mode TX 2402 MHz	WILD ST	Jan Hilliam			
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					

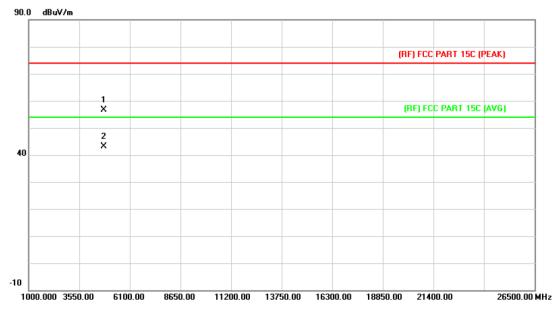


No	o. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4804.365	30.66	13.44	44.10	54.00	-9.90	AVG
2		4804.541	42.42	13.44	55.86	74.00	-18.14	peak



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EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Ant. Pol.	Vertical					
Test Mode:	BLE Mode TX 2402 MHz					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.	20 m 13				

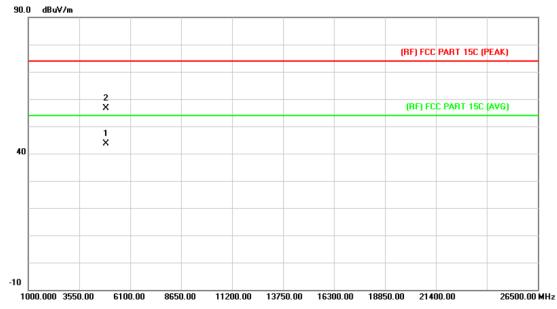


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4804.087	43.24	13.44	56.68	74.00	-17.32	peak
2	*	4804.393	29.61	13.44	43.05	54.00	-10.95	AVG



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EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Ant. Pol.	Horizontal	Horizontal				
Test Mode:	BLE Mode TX 2442 MHz					
Remark:	No report for the emission	No report for the emission which more than 10 dB below the				
	prescribed limit.	13 m				

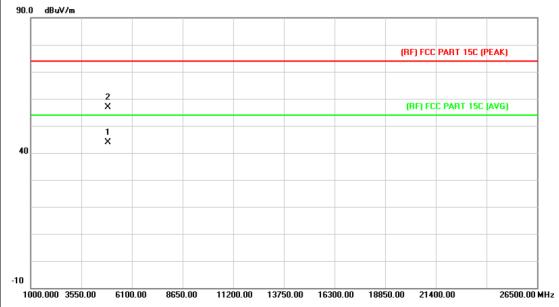


No	. Mk	. Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4883.325	29.73	13.91	43.64	54.00	-10.36	AVG
2		4884.457	42.75	13.92	56.67	74.00	-17.33	peak



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EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Ant. Pol.	Vertical					
Test Mode:	BLE Mode TX 2442 MHz					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					
i de la companya de						

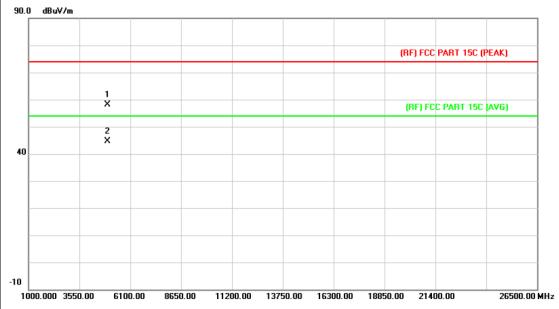


No	. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4883.147	29.91	13.91	43.82	54.00	-10.18	AVG
2		4884.371	42.87	13.92	56.79	74.00	-17.21	peak



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EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Ant. Pol.	Horizontal	Horizontal				
Test Mode:	BLE Mode TX 2480 MHz					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					

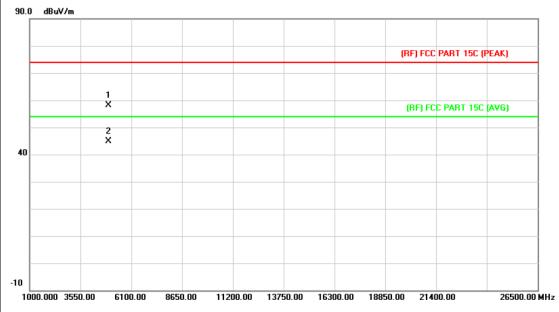


No	. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4959.321	43.76	14.36	58.12	74.00	-15.88	peak
2	*	4959.657	30.22	14.36	44.58	54.00	-9.42	AVG



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EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
Ant. Pol.	Vertical	Vertical				
Test Mode:	BLE Mode TX 2480 MHz					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.	13 m				



No	. Mk	. Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4960.647	43.87	14.36	58.23	74.00	-15.77	peak
2	*	4960.710	30.43	14.36	44.79	54.00	-9.21	AVG



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6. Restricted Bands Requirement

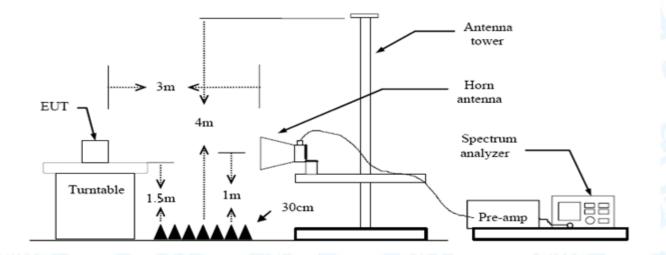
6.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Class B (dBuV/m)(at 3 M)			
Band (MHz)	Peak	Average		
2310 ~2390	74	54		
2483.5 ~2500	74	54		

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked



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and then Quasi Peak detector mode re-measured.

- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 KHz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

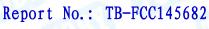
6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 kHz with Peak Detector for Average Values.

Test data please refer the following pages.

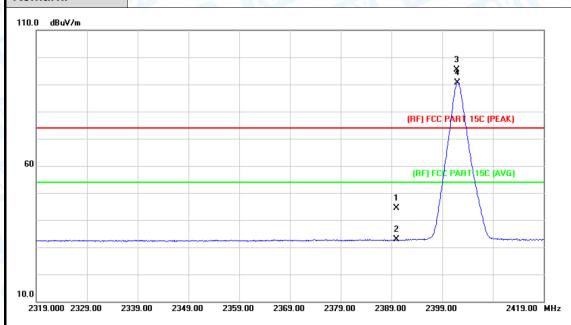




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(1) Radiation Test

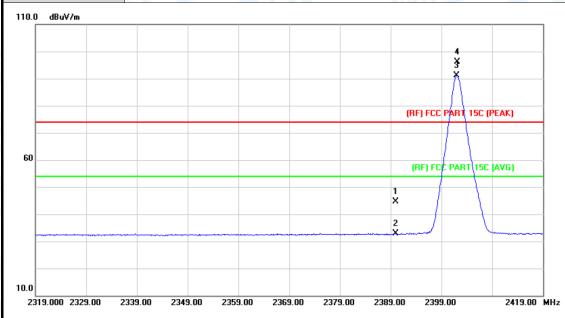
EUT:	The Egg	Model:	E1				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3V	DC 3V					
Ant. Pol.	Horizontal	CHIEF -	MAG				
Test Mode:	BLE Mode TX 2402 MHz						
Remark:	N/A	- 13th					



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.54	0.77	44.31	74.00	-29.69	peak
2		2390.000	32.09	0.77	32.86	54.00	-21.14	AVG
3	Χ	2401.800	94.55	0.82	95.37	Fundamental	Frequency	peak
4	*	2402.000	89.81	0.82	90.63	Fundamental I	Frequency	AVG



EUT:	The Egg	Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3V					
Ant. Pol.	Vertical					
Test Mode:	BLE Mode TX 2402 MHz		HILL			
Remark:	N/A	(M)				



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.76	0.77	44.53	74.00	-29.47	peak
2		2390.000	32.14	0.77	32.91	54.00	-21.09	AVG
3	*	2402.000	90.38	0.82	91.20	- Fundamental	Frequency	AVG
4	Χ	2402.200	95.30	0.82	96.12	Fundamental	Frequency	peak



10	TOTAL	7
11	КV	
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	0	'OBY

EUT:			The I	∃gg		a 1	Mod	el:		E1			
Tem	peratu	re:	25 °C		TI	13	Rela	tive H	umidity:	559	%	M.	
Test	Voltag	je:	DC 3	V	No.	1	1	1		TIE	133		
Ant.	Pol.		Horiz	ontal		A.A.	A STATE OF					M	3
Test	Mode:		BLE	Mode T	X 248	80 MHz		MI	080		1 111	Mess	
Rem	ark:		N/A	AB			3	Car		111	9		M
110.0) dBuV/n	1											
			_										
			2 X										
			ř										
			\perp						(DE) FCC D4	DT 150 (051)		ļ
		+++	+						(RF	J FCC PF	ART 15C (PEAK	()	
			3										
60			×						(R	F) FCC F	PART 15C (AVC	i)	
			*										
		+	+										
				~									
10.0													
24	163.000 24	173.00	2483.00	2493.00	2503	3.00 251	3.00	2523.00	2533.00	2543.0	0 2	2563.00	MHz
				Read	ing	Correc	et M	leasu					
N	o. Mk	. Fr	eq.	Leve	el	Facto	r	ment	Lim	it	Over		
		M	Ηz	dBu\	V	dB/m		dBuV/r	m dBu	V/m	dB	Detec	tor
1	*	2480	.000	89.9	7	1.15		91.12	2 Fundan	nental l	Frequency	ΑV	G
2	Х	2480	.100	95.3	9	1.15		96.54	4 Fundam	ental F	requency	pea	ak
3		2483	.500	57.4	4	1.17		58.6	1 74.	00	-15.39	pea	ak

Emission Level= Read Level+ Correct Factor

48.60

1.17

49.77

2483.500

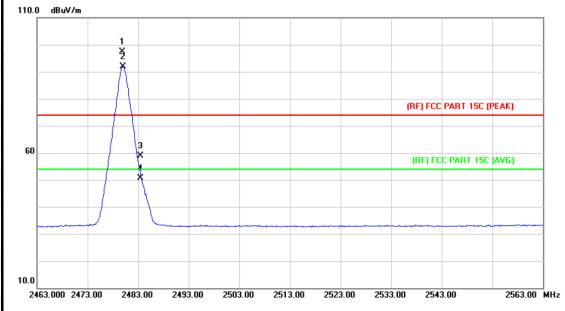
-4.23

54.00

AVG



EUT:	The Egg	Model:	E1				
Temperature:	25 °C Relative Humidity: 55%						
Test Voltage:	DC 3V						
Ant. Pol.	Vertical						
Test Mode:	BLE Mode TX 2480 MHz						
Remark:	N/A						

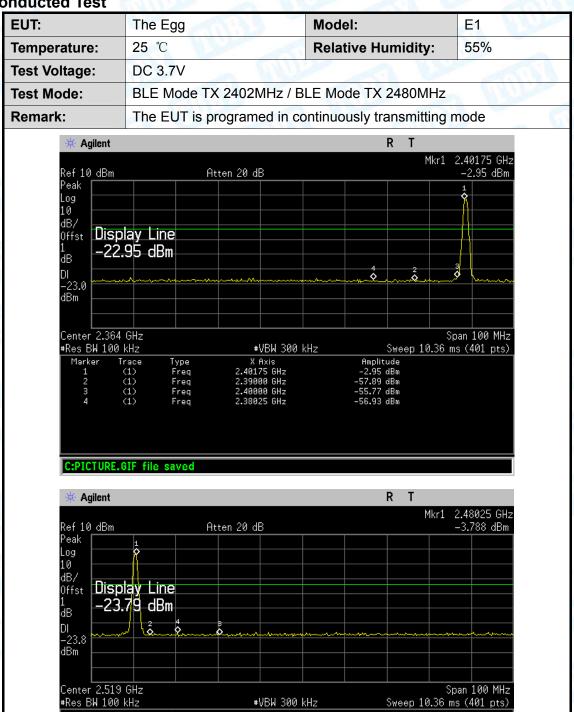


1	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		X	2479.900	96.16	1.15	97.31	Fundamental	Frequency	peak
2	1	*	2480.000	90.72	1.15	91.87	Fundamental	Frequency	AVG
3			2483.500	57.81	1.17	58.98	74.00	-15.02	peak
4			2483.500	49.52	1.17	50.69	54.00	-3.31	AVG





(2) Conducted Test



#VBW 300 kHz

Amplitude -3.788 dBm -58.15 dBm

X Axis 2.48025 GHz 2.48350 GHz 2.50000 GHz 2.49000 GHz

Type Freq Freq

Marker

C:PICTURE.GIF file saved



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7. Bandwidth Test

7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(2)

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210							
Test Item	Limit	Frequency Range(MHz)					
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5					

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.



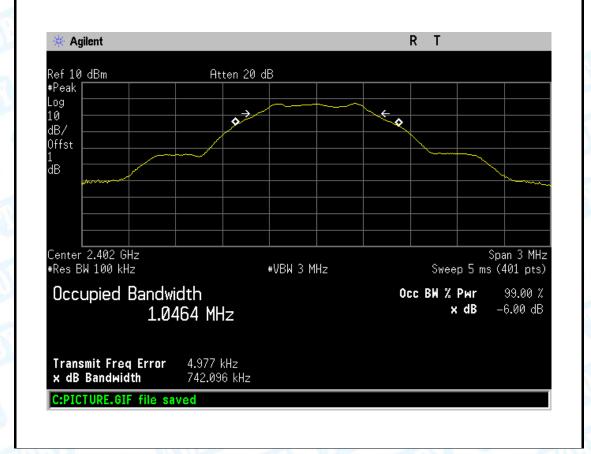
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7.5 Test Data

EUT: The Egg		Model:	E1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Test Mode: BLE TX Mode						
Channel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit			
(MHz)	(kHz)	(kHz)	(kHz)			
2402	742.096	1046.40				
2442	739.143	1042.20	>=500			
2480	734.449	1037.70				
	DI E	Mada	1			

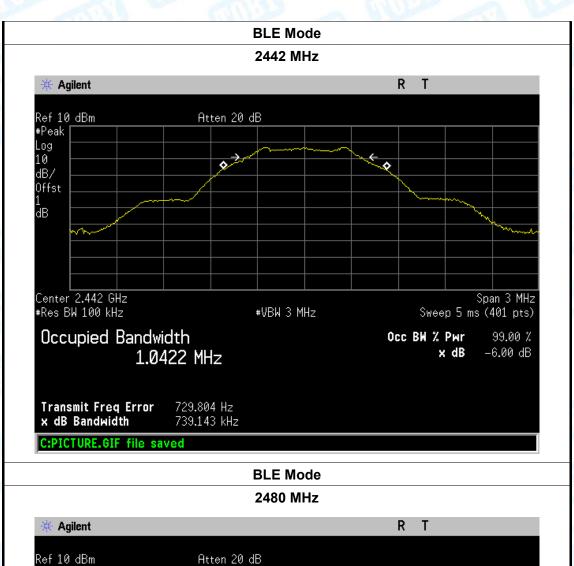
BLE Mode

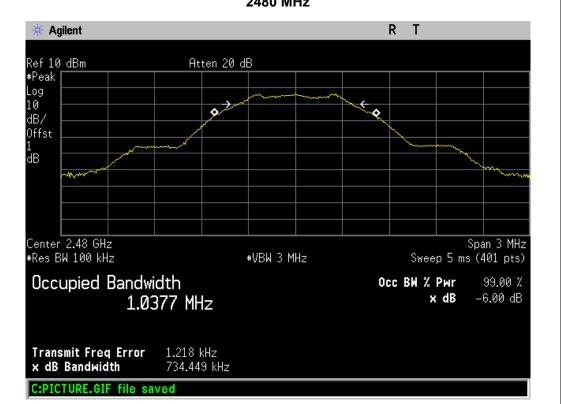
2402 MHz





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8. Peak Output Power Test

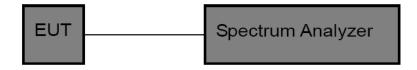
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210						
Test Item	Limit	Frequency Range(MHz)				
Peak Output Power	1 Watt or 30 dBm	2400~2483.5				

8.2 Test Setup



8.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to section 9.1.1 of KDB 558074 D01 DTS Meas Guidance v03r02.

- (1) Set the RBW≥DTS Bandwidth
- (2) Set VBW≥3*RBW
- (3) Set Span≥3*RBW
- (4) Sweep time=auto
- (5) Detector= peak
- (6) Trace mode= maxhold.
- (7) Allow trace to fully stabilize, and then use peak marker function to determine the peak amplitude level.

8.4 EUT Operating Condition

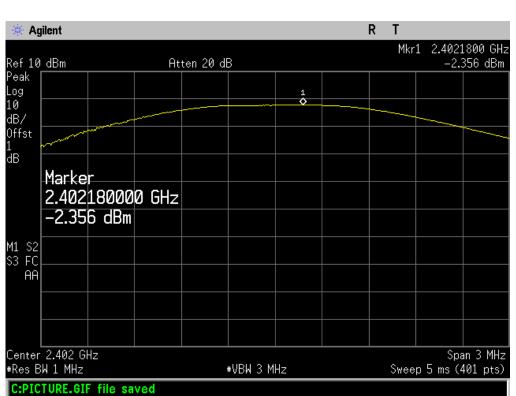
The EUT was set to continuously transmitting in the max power during the test.



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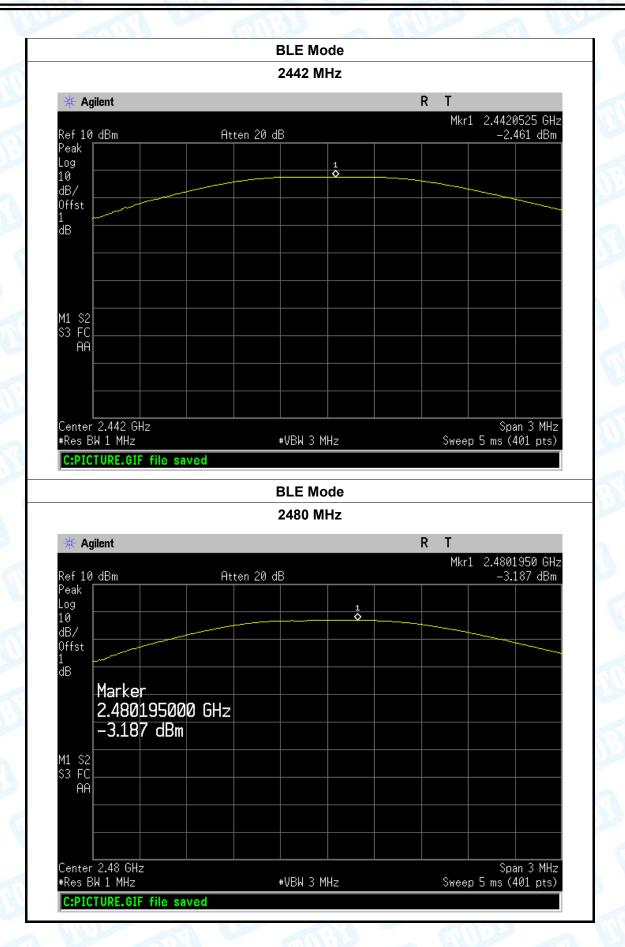
8.5 Test Data

EUT:	The Egg	1	Model:	E1
Temperature:	25 ℃	S AR	Relative Humidity:	55%
Test Voltage:	DC 3.7V	W. S.	THE PARTY OF THE P	
Test Mode:	BLE TX M	lode		100
Channel frequency (MHz)		Test Result (dBm)		Limit (dBm)
2402		-2.35	66	
2442		-2.46	61	30
2480		-3.18	37	
		BLE M	ode	
		2402 N	ЛНz	











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9. Power Spectral Density Test

9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (e)

9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)						
Test Item	Limit	Frequency Range(MHz)				
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5				

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r02.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz(5) Set the VBW to: 10 kHz
- (6) Detector: peak(7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Midle and high channel for the test.

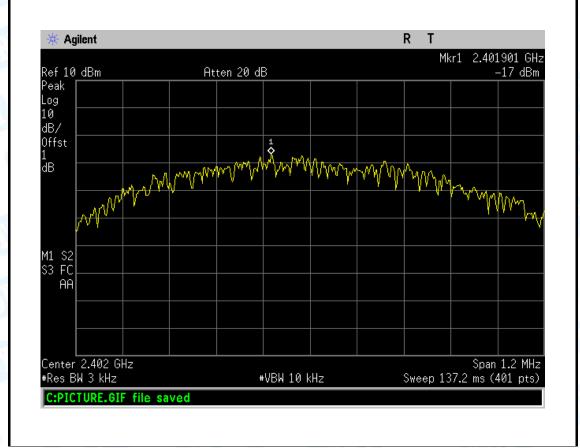


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8.5 Test Data

EUT:	The Egg	4000	Model:	E1	
Temperature:	25 ℃		Relative Humidity	: 55%	
Test Voltage:	DC 3.7V				
Test Mode:	BLE TX Mode				
Channel Frequency		Power Density		Limit	
(MHz)		(3 kHz/dBm)		(dBm)	
2402		-17	.00		
2442		-17	.17	8	
2480		-17	.88		
		BI F	Mode		

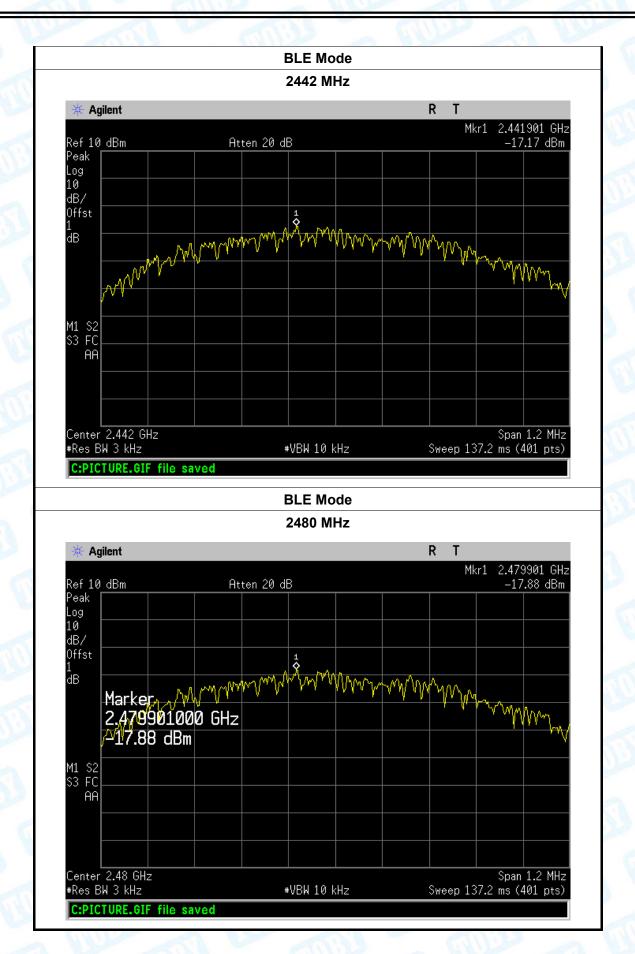
2402 MHz







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10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard FCC Part 15.203

10.1.2 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 shall be considered sufficient to comply with the provisions of this Section. 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.

10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 1.24 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

10.3 Result

The EUT antenna is a FPC Antenna. It complies with the standard requirement.

Antenna Type	
☐ Permanent attached antenna	
✓ Unique connector antenna	
☐ Professional installation antenna	O(3)