

# Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC155686

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# **FCC Radio Test Report** FCC ID: 2AL64-806W

# **Original Grant**

Report No. TB-FCC155686

Shenzhen qiuyu Electronic Co.,Ltd **Applicant** 

**Equipment Under Test (EUT)** 

**EUT Name Tablet PC** 

Model No. QM806

Westgate Owner Tablet, 186 Serial Model No.

Westgate Owner / Maxtalent **Brand Name** 

**Receipt Date** 2017-06-22

2017-06-23 to 2017-07-01 **Test Date** 

**Issue Date** 2017-07-02

FCC Part 15: 2016, Subpart C(15.247) **Standards** 

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

**Conclusions PASS** 

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

**Test/Witness** 

Engineer

Approved&

**Authorized** 

the report.

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

TB-RF-074-1.0

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# 1. General Information about EUT

#### 1.1 Client Information

Applicant : Shenzhen qiuyu Electronic Co.,Ltd

Address 3F, E Building, Hongzhuyongqi Industrial Park, Lezhujiao village,

xixiang town, Bao'an District, Shenzhen, China

Manufacturer : Shenzhen qiuyu Electronic Co.,Ltd

Address : 3F, E Building, Hongzhuyongqi Industrial Park, Lezhujiao village,

xixiang town, Bao'an District, Shenzhen, China

### 1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Tablet PC				
Models No.		QM806, Westgate Owne	QM806, Westgate Owner Tablet, I86			
Model Difference	<b>S</b> .	All these models are identical in the same PCB layout and electrical circuit, the only difference name.				
		Operation Frequency:	Bluetooth 4.0(BLE): 2402MHz~2480MHz			
		Number of Channel: Bluetooth 4.0(BLE): 40 channels see				
Product		RF Output Power:	-3.705dBm Conducted Power			
Description		Antenna Gain:	-0.12dBi FPC Antenna			
		Modulation Type:	GFSK			
		Bit Rate of Transmitter:	1Mbps(GFSK)			
Power Supply			DC Voltage supplied by USB cable DC Voltage supplied by Li-ion battery			
Power Rating	:	DC 5V by USB Cable DC 3.7V by 3500mAh Li-ion battery				
Connecting I/O Port(S)		Please refer to the User's Manual				

#### Note:

This Test Report is FCC Part 15.247 for Bluetooth BLE, the test procedure follows the FCC KDB 558074 D01 DTS Means Guidance v04.

- (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (2) Antenna information provided by the applicant.
- (3) Channel List:

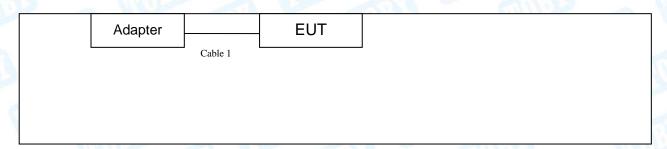


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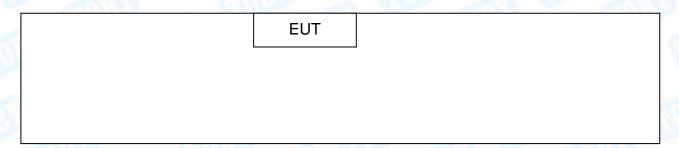
	Frequency		Frequency	11011	Frequency
Channel	(MHz)	Channel	(MHz)	Channel	(MHz)
00	2402	14	2430	28	2458
01	2404	15	2432	29	2460
02	2406	16	2434	30	2462
03	2408	17	2436	31	2464
04	2410	18	2438	32	2466
05	2412	19	2440	33	2468
06	2414	20	2442	34	2470
07	2416	21	2444	35	2472
08	2418	22	2446	36	2474
09	2420	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

# **Charging + TX Mode**



# **TX Mode**





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# 1.4 Description of Support Units

Equipment Information						
Name	Model	FCC ID/VOC	Manufacturer	Used "√"		
AC/DC Adapter A16-502000 AOHAI √				<b>√</b>		
AC/DC Adapter In	AC/DC Adapter Input:AC100-240V 50/60Hz 0.5A Output:5V/2A					
Cable Information						
Number	Shielded Type	Ferrite Core	Length	Note		
Cable 1	YES	NO	0.4M			

### 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	Charging + TX Mode	

For Radiated Test					
Final Test Mode	Description				
Mode 2	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 C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

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; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



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# 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		N/A	
Frequency	2402 MHz	2442MHz	2480 MHz
BLE GFSK	DEF	DEF	DEF

# 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 <sub>Lab</sub> )
	Level Accuracy:	
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Padiated Emission	Level Accuracy:	±4.60 dB
Radiated Emission	9kHz to 30 MHz	±4.60 db
Padiated Emission	Level Accuracy:	±4.40 dB
Radiated Emission	30MHz to 1000 MHz	±4.40 db
Radiated Emission	Level Accuracy:	.4.20 dB
Radiated Emission	Above 1000MHz	±4.20 dB



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# 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.



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# 2. Test Summary

Standard Section		Took Itams	Share and	Damari	
FCC	IC	Test Item	Judgment	Remark	
15.203		Antenna Requirement	PASS	N/A	
15.207(a)	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A	
15.205&15.247(d)	RSS-GEN 7.2.2	Band-Edge & Unwanted Emissions into Restricted Frequency	PASS	N/A	
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A	
15.247(b)(3)	RSS 247 5.4 (4)	Conducted Max Output Power	PASS	N/A	
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A	
15.205, 15.209&15.247(d)	RSS 247 5.5	Transmitter Radiated Spurious &Unwanted Emissions into Restricted Frequency	PASS	N/A	

Note: N/A is an abbreviation for Not Applicable.



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# 3. Test Equipment

Conducted Emission Test						
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date	
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 22, 2016	Jul. 21, 2017	
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 22, 2016	Jul. 21, 2017	
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 22, 2016	Jul. 21, 2017	
LISN	Rohde & Schwarz	ENV216	101131	Jul. 22, 2016	Jul. 21, 2017	
Radiation	Emission Tes	t				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date	
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 22, 2016	Jul. 21, 2017	
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 22, 2016	Jul. 21, 2017	
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.25, 2017	Mar. 24, 2018	
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar.25, 2017	Mar. 24, 2018	
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.24, 2017	Mar. 23, 2018	
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar.24, 2017	Mar. 23, 2018	
Loop Antenna	Laplace instrument	RF300	0701	Mar.24, 2017	Mar. 23, 2018	
Pre-amplifier	Sonoma	310N	185903	Mar.24, 2017	Mar. 23, 2018	
Pre-amplifier	HP	8449B	3008A00849	Mar.25, 2017	Mar. 24, 2018	
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.24, 2017	Mar. 23, 2018	
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A	
Antenna C	onducted Em	ission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date	
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 22, 2016	Jul. 21, 2017	
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 22, 2016	Jul. 21, 2017	
Power Meter	Anritsu	ML2495A	25406005	Jul. 22, 2016	Jul. 21, 2017	
Power Sensor	Anritsu	ML2411B	25406005	Jul. 22, 2016	Jul. 21, 2017	



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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

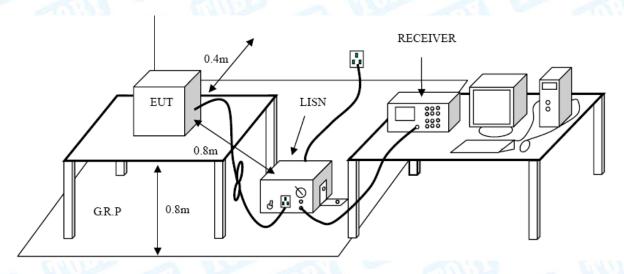
#### **Conducted Emission Test Limit**

THE PROPERTY OF THE PARTY OF TH	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 9 kHz, 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 Da5ta

Test data please refer the following pages.



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UT:	Tab	olet PC		QM806					
emperatur	<b>e:</b> 25°	C	R	elative Humi	dity:	55%			
est Voltage	e: AC	AC 120V/60 Hz							
Terminal:	Lin	Line							
Test Mode:	TX	GFSK Mode 2	2402 MHz	MILE		0 N			
Remark:	On	ly worse case	is reported	600		133			
90.0 dBuV					to sub-ephospila de la companya de l	QP: AVG:	pea		
	4441		177771717						
-10 0.150	4441	0.5	(MHz)	Measure-			30.000		
	Freq.	0.5  Reading Level	(MHz)  Correct Factor	Measure- ment	Limit	Over	30.000		
0.150	Freq.	Reading	Correct	Measure-	Limit	Over dB			
0.150		Reading Level dBuV	Correct Factor	Measure- ment	dBuV				
0.150 No. Mk.	MHz	Reading Level dBuV	Correct Factor	Measure- ment dBuV	dBuV 65.99	dB	Detecto		
0.150 No. Mk.	MHz 0.1500	Reading Level dBuV 41.23	Correct Factor dB 9.64	Measure- ment dBuV 50.87	dBuV 65.99 55.99	dB -15.12	Detecto		
0.150 No. Mk.	MHz 0.1500 0.1500	Reading Level dBuV 41.23 25.00	Correct Factor dB 9.64 9.64	Measure- ment dBuV 50.87 34.64	dBuV 65.99 55.99	dB -15.12 -21.35 -16.61	Detecto QP AVC		
0.150 No. Mk.	MHz 0.1500 0.1500 0.4140	Reading Level dBuV 41.23 25.00 31.38 28.62	Correct Factor dB 9.64 9.64 9.58	Measure- ment dBuV 50.87 34.64 40.96	dBuV 65.99 55.99 57.57	dB -15.12 -21.35 -16.61 -9.37	Detecto QP AV0		
0.150  No. Mk.  1 2 3 4 *	MHz 0.1500 0.1500 0.4140 0.4140	Reading Level dBuV 41.23 25.00 31.38 28.62 31.50	Correct Factor dB 9.64 9.64 9.58 9.58	Measure- ment dBuV 50.87 34.64 40.96 38.20	dBuV 65.99 55.99 57.57 47.57 61.75	dB -15.12 -21.35 -16.61 -9.37	Detecto QP AVC QP AVC		
0.150  No. Mk.  1 2 3 4 * 5	MHz 0.1500 0.1500 0.4140 0.4140 0.2500	Reading Level dBuV 41.23 25.00 31.38 28.62 31.50	Correct Factor dB 9.64 9.64 9.58 9.58 9.61	Measure- ment dBuV 50.87 34.64 40.96 38.20 41.11	dBuV 65.99 55.99 57.57 47.57 61.75	dB -15.12 -21.35 -16.61 -9.37 -20.64	Detecto QP AVC QP AVC		
0.150  No. Mk.  1 2 3 4 * 5 6	MHz 0.1500 0.1500 0.4140 0.4140 0.2500 0.2500	Reading Level dBuV 41.23 25.00 31.38 28.62 31.50 17.30	Correct Factor dB 9.64 9.64 9.58 9.58 9.61 9.61	Measure- ment dBuV 50.87 34.64 40.96 38.20 41.11 26.91	dBuV 65.99 55.99 57.57 47.57 61.75 51.75	dB -15.12 -21.35 -16.61 -9.37 -20.64 -24.84	Detecto QP AVC QP AVC QP		
0.150  No. Mk.  1 2 3 4 * 5 6 7	MHz 0.1500 0.1500 0.4140 0.4140 0.2500 0.2500 0.1900	Reading Level dBuV 41.23 25.00 31.38 28.62 31.50 17.30 10.55	Correct Factor dB 9.64 9.64 9.58 9.58 9.61 9.61 9.65	Measure- ment dBuV 50.87 34.64 40.96 38.20 41.11 26.91 20.20	dBuV 65.99 55.99 57.57 47.57 61.75 51.75	dB -15.12 -21.35 -16.61 -9.37 -20.64 -24.84 -43.83 -42.84	Detecto QP AVC QP AVC QP		
0.150  No. Mk.  1 2 3 4 * 5 6 7 8	MHz 0.1500 0.1500 0.4140 0.4140 0.2500 0.2500 0.1900 0.1900	Reading Level dBuV 41.23 25.00 31.38 28.62 31.50 17.30 10.55 1.54 -0.33	Correct Factor dB 9.64 9.64 9.58 9.58 9.61 9.61 9.65	Measure- ment dBuV 50.87 34.64 40.96 38.20 41.11 26.91 20.20 11.19	dBuV 65.99 55.99 57.57 47.57 61.75 51.75 64.03	dB -15.12 -21.35 -16.61 -9.37 -20.64 -24.84 -43.83 -42.84 -46.75	QP AVC QP AVC QP AVC QP		
0.150  No. Mk.  1 2 3 4 * 5 6 7 8	MHz 0.1500 0.1500 0.4140 0.4140 0.2500 0.2500 0.1900 0.1900 0.5299	Reading Level dBuV 41.23 25.00 31.38 28.62 31.50 17.30 10.55 1.54 -0.33 -4.88	Correct Factor dB 9.64 9.64 9.58 9.58 9.61 9.65 9.65 9.65	Measure- ment dBuV 50.87 34.64 40.96 38.20 41.11 26.91 20.20 11.19 9.25	dBuV 65.99 55.99 57.57 47.57 61.75 64.03 54.03 56.00 46.00	dB -15.12 -21.35 -16.61 -9.37 -20.64 -24.84 -43.83 -42.84 -46.75	QP AVG QP AVG QP AVG		



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KY.
0

EUT:	Tablet PC	Мо	del:	QM806					
Temperature:	25℃	55%							
Test Voltage:	25℃ Relative Humidity: 55% AC 120V/60 Hz								
Terminal:	Neutral								
Test Mode:	TX GFSK Mode	e 2402 MHz			THE STATE OF				
Remark:	Only worse cas	se is reported	Will be	A V	N. C.				
90.0 dBuV									
				QP: AVG:					
*									
<b>X</b> .	*								
40	*	il	4 1						
N A A HALL	ſ <mark>ŗ<mark>ŀŶŀ</mark>ĸĸſſĹŀŔŀĸĸĸĸĸĸĸĸĸĸĸ</mark>		1 May	makey the real played purchase the little of	peak				
				A 1 6 . d . 1 . 1 . 1 . 1 . 1					
	A LUMANIAM A MATANAMANIA	<b>Y</b> PPIDE TO		VAAAAAAAAAIIIIIIIIIIIIIIIIIIIIIIIIIIII	AVG				
~ W (3 N V	1,4,4,4,0,0,4,4,0,0,0,0,0,0,0,0,0,0,0,0,	MACCO ON THE MACCO AND THE STREET	Lillin I in I in I						
-10									
0.150	0.5	(MHz)	5		30.000				
	Reading	Correct	Measure-						
No. Mk. Fre	eq. Level	Factor	ment Lim	it Over					
MI	Hz dBuV	dB	dBuV dBu	V dB	Detector				
1 0.15	500 42.20	9.64	51.84 65.9	9 -14.15	QP				
2 0.15	500 26.00	9.64	35.64 55.9	9 -20.35	AVG				
3 0.41	140 30.71	9.58	40.29 57.5	7 -17.28	QP				
4 * 0.41	140 27.10	9.58	36.68 47.5	7 -10.89	AVG				
5 0.20	)20 34.66	9.65	44.31 63.5	2 -19.21	QP				
6 0.20	)20 18.61	9.65	28.26 53.5	2 -25.26	AVG				
7 0.24	160 27.23	9.61	36.84 61.8	9 -25.05	QP				
8 0.24	160 15.24	9.61	24.85 51.8	9 -27.04	AVG				
9 0.40	)20 26.17	9.58	35.75 57.8	31 -22.06	QP				
10 0.40	)20 12.32	9.58	21.90 47.8	31 -25.91	AVG				
11 0.55	500 24.42	9.58	34.00 56.0	0 -22.00	QP				
12 0.55	500 11.63	9.58	21.21 46.0	0 -24.79	AVG				
Emission Level=	Read Level+ Co	rrect Factor							



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4	N		DIT
Contract			K V
		V.	
1			The same of

UT:		Tablet					QM806			
empei	rature:	<b>25</b> ℃	CITY'	33	Relative Hur	midity:	55%			
est Vo	ltage:	AC 24	0V/60 Hz		or and					
ermin	al:	Line	ne							
est Mo	ode:	TX GF	SK Mode 2	402 MHz	MILE		0	N. Land		
emarl	k:	Only v	vorse case i	s reported			100			
90.0 dBu	uV						QP:			
40		*	**************************************			wherterference and and a	Afar Andrewal Down	Mark Mark		
0.150	W W W	0.5		(MHz)	5		gether have by John sources	30.000		
	M		Reading	Correct	Measure-		Over			
No. I		req.	Level	Factor	ment	Limit	Over	Detector		
No. <b>N</b>	N	req. 1Hz	_				Over dB -52.57	Detecto		
	0.1	1Hz	Level	Factor dB	ment dBuV	dBuV 63.86	dB	QP		
1 2	0.1 0.1	940 940	dBuV 1.71 -3.63	9.58 9.58	ment dBuV 11.29 5.95	dBuV 63.86 53.86	dB -52.57 -47.91	QP AVC		
1 2 3	0.1 0.1 0.2	940 940 380	dBuV 1.71 -3.63 18.45	9.58 9.58 9.58	ment dBuV 11.29 5.95 28.03	dBuV 63.86 53.86 62.16	dB -52.57 -47.91 -34.13	QP AV0 QP		
1 2 3 4	0.1 0.1 0.2 0.2	940 940 380 380	Level dBuV 1.71 -3.63 18.45 -1.40	9.58 9.58 9.58 9.58	ment dBuV 11.29 5.95 28.03 8.18	dBuV 63.86 53.86 62.16 52.16	dB -52.57 -47.91 -34.13 -43.98	QP AVO QP		
1 2 3 4 5	0.1 0.1 0.2 0.2	940 940 380 380 740	Level dBuV 1.71 -3.63 18.45 -1.40 1.95	9.58 9.58 9.58 9.58 9.58 9.59	ment dBuV 11.29 5.95 28.03 8.18 11.54	Limit dBuV 63.86 53.86 62.16 52.16 60.99	dB -52.57 -47.91 -34.13 -43.98 -49.45	QP AVO QP AVO		
1 2 3 4 5	0.1 0.1 0.2 0.2 0.2	940 940 380 380 740	Level dBuV 1.71 -3.63 18.45 -1.40 1.95 -4.26	9.58 9.58 9.58 9.58 9.58 9.59	ment dBuV 11.29 5.95 28.03 8.18 11.54 5.33	Limit dBuV 63.86 53.86 62.16 52.16 60.99 50.99	dB -52.57 -47.91 -34.13 -43.98 -49.45 -45.66	QP AVO QP AVO QP		
1 2 3 4 5 6 7	0.1 0.1 0.2 0.2 0.2 0.2 0.3	940 940 380 380 740 740	Level dBuV 1.71 -3.63 18.45 -1.40 1.95 -4.26 0.58	9.58 9.58 9.58 9.58 9.59 9.59	ment dBuV 11.29 5.95 28.03 8.18 11.54 5.33 10.17	Limit dBuV 63.86 53.86 62.16 52.16 60.99 50.99	dB -52.57 -47.91 -34.13 -43.98 -49.45 -45.66 -49.48	QP AVG QP AVG QP		
1 2 3 4 5 6 7	0.1 0.1 0.2 0.2 0.2 0.2 0.3	940 940 380 380 740 740 220	Level dBuV 1.71 -3.63 18.45 -1.40 1.95 -4.26 0.58 -4.55	Factor dB 9.58 9.58 9.58 9.59 9.59 9.59 9.59	ment dBuV 11.29 5.95 28.03 8.18 11.54 5.33 10.17 5.04	Limit dBuV 63.86 53.86 62.16 52.16 60.99 50.99 59.65 49.65	dB -52.57 -47.91 -34.13 -43.98 -49.45 -45.66 -49.48 -44.61	QP AVG QP AVG QP AVG		
1 2 3 4 5 6 7 8	0.1 0.1 0.2 0.2 0.2 0.2 0.3 0.3	940 940 380 380 740 740 220 220	Level dBuV 1.71 -3.63 18.45 -1.40 1.95 -4.26 0.58 -4.55 30.37	Factor dB 9.58 9.58 9.58 9.59 9.59 9.59 9.59 9.60	ment dBuV 11.29 5.95 28.03 8.18 11.54 5.33 10.17 5.04 39.97	Limit dBuV 63.86 53.86 62.16 52.16 60.99 50.99 59.65 49.65 57.49	dB -52.57 -47.91 -34.13 -43.98 -49.45 -45.66 -49.48 -44.61 -17.52	QP AVG QP AVG QP AVG		
1 2 3 4 5 6 7 8 9	0.1 0.1 0.2 0.2 0.2 0.3 0.3 0.4 * 0.4	940 940 380 380 740 740 220 220 180	Level dBuV 1.71 -3.63 18.45 -1.40 1.95 -4.26 0.58 -4.55 30.37 26.39	9.58 9.58 9.58 9.58 9.59 9.59 9.59 9.60 9.60	ment dBuV 11.29 5.95 28.03 8.18 11.54 5.33 10.17 5.04 39.97 35.99	Limit dBuV 63.86 53.86 62.16 52.16 60.99 50.99 59.65 49.65 57.49 47.49	dB -52.57 -47.91 -34.13 -43.98 -49.45 -45.66 -49.48 -44.61 -17.52 -11.50	QP AVG QP AVG QP AVG		
1 2 3 4 5 6 7 8	0.1 0.1 0.2 0.2 0.2 0.3 0.3 0.4 * 0.4	940 940 380 380 740 740 220 220	Level dBuV 1.71 -3.63 18.45 -1.40 1.95 -4.26 0.58 -4.55 30.37	Factor dB 9.58 9.58 9.58 9.59 9.59 9.59 9.59 9.60	ment dBuV 11.29 5.95 28.03 8.18 11.54 5.33 10.17 5.04 39.97	Limit dBuV 63.86 53.86 62.16 52.16 60.99 50.99 59.65 49.65 57.49 47.49 56.00	dB -52.57 -47.91 -34.13 -43.98 -49.45 -45.66 -49.48 -44.61 -17.52	AVG QP AVG QP AVG		



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EUT:	I	ablet PC		3					
Temperatur	re: 2	25℃	(A)	umidity:	<b>ty</b> : 55%				
Test Voltage	<b>e</b> :	AC 240V/60 Hz							
Terminal:	N	Veutral	2 William						
Test Mode:	Т	X GFSK Mod	e 2402 MHz	MILE		0 N	A Labor		
Remark:	(	Only worse cas	se is reported	6		33			
90.0 dBuV		××			A francisco de la companio del companio del companio de la companio del companio del companio de la companio del companio de la companio del compani	QP: AVG:	pe		
JWL				Marian Jackie de Le	TO THE TOTAL PROPERTY.	**************************************			
0.150	Freq		(MHz)  Correct Factor	Measure- ment	Limit	Over	30.000		
0.150	MHz	Reading Level	Correct Factor	Measure- ment dBuV	Limit dBuV	dB			
0.150 No. Mk.		Reading Level	Correct Factor	Measure- ment	Limit	dB -20.08			
0.150 No. Mk.	MHz	Reading Level dBuV 34.48	Correct Factor	Measure- ment dBuV	Limit dBuV	dB	Detector QP		
0.150 No. Mk.	MHz 0.1860	Reading Level dBuV 34.48	Correct Factor dB 9.65	Measure- ment dBuV 44.13	dBuV 64.21 54.21	dB -20.08	Detector QP		
0.150 No. Mk.	0.1860 0.1860	Reading Level dBuV 34.48 16.79 31.65	Correct Factor dB 9.65 9.65	Measure- ment dBuV 44.13 26.44	dBuV 64.21 54.21 62.30	dB -20.08 -27.77	Detector QP AVG		
0.150 No. Mk.	0.1860 0.1860 0.2340	Reading Level dBuV 34.48 16.79 31.65 15.90	Correct Factor dB 9.65 9.65 9.62	Measure- ment dBuV 44.13 26.44 41.27	Limit dBuV 64.21 54.21 62.30 52.30	dB -20.08 -27.77 -21.03	Detector QP AVG		
0.150  No. Mk.  1 2 3 4	0.1860 0.1860 0.2340 0.2340	Reading Level dBuV 34.48 16.79 31.65 15.90 32.41	Correct Factor dB 9.65 9.65 9.62 9.62	Measure- ment dBuV 44.13 26.44 41.27 25.52	Limit dBuV 64.21 54.21 62.30 52.30	dB -20.08 -27.77 -21.03 -26.78	QP AVG QP AVG		
0.150  No. Mk.  1 2 3 4 5	0.1860 0.1860 0.2340 0.2340 0.4140	Reading Level dBuV 34.48 0 16.79 0 31.65 0 15.90 0 32.41 0 28.34	Correct Factor dB 9.65 9.65 9.62 9.62 9.58	Measure- ment dBuV 44.13 26.44 41.27 25.52 41.99	Limit dBuV 64.21 54.21 62.30 52.30 57.57 47.57	dB -20.08 -27.77 -21.03 -26.78 -15.58	QP AVG QP AVG		
0.150  No. Mk.  1 2 3 4 5 6 *	0.1860 0.1860 0.2340 0.2340 0.4140 0.4140	Reading Level dBuV 34.48 0 16.79 0 31.65 0 15.90 0 32.41 0 28.34 0 25.31	Correct Factor dB 9.65 9.65 9.62 9.62 9.58	Measure- ment dBuV 44.13 26.44 41.27 25.52 41.99 37.92	Limit dBuV 64.21 54.21 62.30 52.30 57.57 47.57 56.00	dB -20.08 -27.77 -21.03 -26.78 -15.58 -9.65	Detector QP AVG QP AVG QP AVG		
0.150  No. Mk.  1 2 3 4 5 6 * 7	0.1860 0.1860 0.2340 0.2340 0.4140 0.4140	Reading Level dBuV 34.48 0 16.79 0 31.65 0 15.90 0 32.41 0 28.34 0 25.31 0 15.34	Correct Factor dB 9.65 9.65 9.62 9.62 9.58 9.58	Measure- ment dBuV 44.13 26.44 41.27 25.52 41.99 37.92 34.90	Limit dBuV 64.21 54.21 62.30 52.30 57.57 47.57 56.00 46.00	dB -20.08 -27.77 -21.03 -26.78 -15.58 -9.65 -21.10	Detector QP AVG QP AVG QP AVG		
0.150  No. Mk.  1 2 3 4 5 6 * 7 8	0.1860 0.1860 0.2340 0.2340 0.4140 0.6060 0.6060	Reading Level dBuV 34.48 16.79 31.65 15.90 32.41 28.34 25.31 15.34 23.67	Correct Factor dB 9.65 9.65 9.62 9.62 9.58 9.58 9.59	Measure- ment dBuV 44.13 26.44 41.27 25.52 41.99 37.92 34.90 24.93	Limit dBuV 64.21 54.21 62.30 52.30 57.57 47.57 56.00 46.00	dB -20.08 -27.77 -21.03 -26.78 -15.58 -9.65 -21.10 -21.07	QP AVG QP AVG QP AVG QP AVG		
No. Mk.  1 2 3 4 5 6 * 7 8	0.1860 0.1860 0.2340 0.2340 0.4140 0.6060 0.6060 0.6540	Reading Level dBuV 34.48 16.79 31.65 15.90 32.41 28.34 25.31 15.34 23.67 12.52	Correct Factor dB 9.65 9.65 9.62 9.62 9.58 9.58 9.59 9.59	Measure- ment dBuV 44.13 26.44 41.27 25.52 41.99 37.92 34.90 24.93 33.26	Limit dBuV 64.21 54.21 62.30 52.30 57.57 47.57 56.00 46.00 56.00	dB -20.08 -27.77 -21.03 -26.78 -15.58 -9.65 -21.10 -21.07	QP AVG QP AVG QP AVG		



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# 5. Radiated Emission Test

## 5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.247(d)

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	Distance Meters(at 3m)				
(MHz)	Peak (dBuV/m)	Average (dBuV/m)			
Above 1000	74	54			

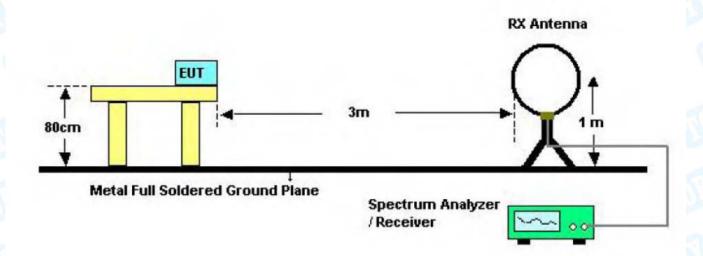
#### Note:

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

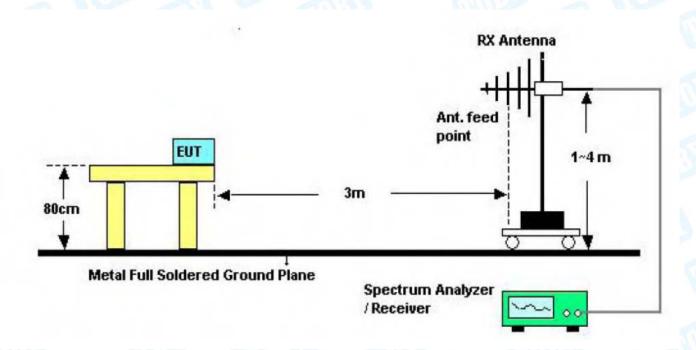


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# 5.2 Test Setup



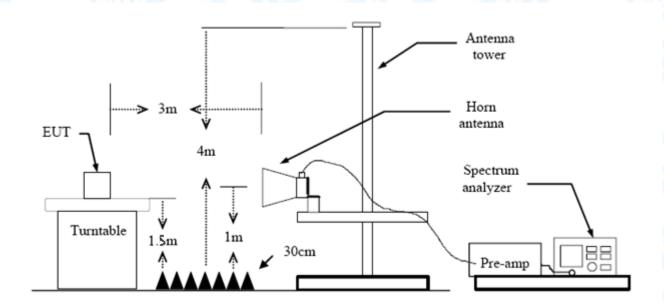
Below 30MHz Test Setup



Below 1000MHz Test Setup



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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 Hz with Peak Detector for Average Values.

Test data please refer the following pages.



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## 9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB

below the permissible value has no need to be reported.

#### 30MHz~1GHz

EUT:	Tablet PC	9	Model:		QM806			
Temperature:	25℃		Relative Hun	nidity:	55%			
Test Voltage:	AC 120V/60Hz	CHILIT		130				
Ant. Pol.	Horizontal				ARTO			
Test Mode:	BLE TX 2402 M	ode	Carried St	A PA		01		
Remark:	Only worse case	e is reported	1	N. Carrie	THE STATE OF			
80.0 dBuV/m								
				(RF)FCC 1	5C 3M Radiation Margin -6			
1		5 X				Muranha		
1 × 2	3 4 X	√ \		Nakayarila 1946 Arbailah	phoening the hope with his of	Topologia in t		
The state of the s	The state of the s	V "W" W	Marker of the second					
	when they problement the second							
-20								
30.000 40 5	60 60 70 80	(MHz)	300	400 5	00 600 700	1000.00		
	Reading	Correct	Measure-					
No. Mk. F	req. Level	Factor	ment	Limit	Over			
N	MHz dBuV	dB/m	dBuV/m	dBuV/m	dB	Detecto		
1 31.	6202 37.45	-14.77	22.68	40.00	-17.32	QP		
2 44.	1202 38.95	-21.61	17.34	40.00	-22.66	QP		
3 79.	2426 38.62	-22.96	15.66	40.00	-24.34	QP		
	.6470 37.73	-21.41	16.32	43.50	-27.18	QP		
	.8351 47.78	-21.47	26.31	43.50	-17.19	QP		
	.6516 38.43	-20.29	18.14	43.50	-25.36	QP		
0 175	.0010 00.40	20.20	10.14	40.00	20.00	\\		
***************************************	O	<u></u>						
*:Maximum data	x:Over limit !:over marg	lin						
Emission Level	I= Read Level+ Co	orrect Factor	r					



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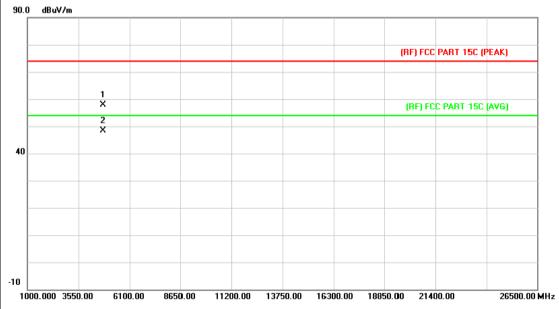
EUT:			Tal	olet	et PC Model:					QM806				
Temp	eratu	ıre:	25	$\mathbb{C}$		e III	F	Relative Hu	umidity: 55%					
Test '	Voltaç	ge:	AC	; 12	0V/6	0Hz		38		COUNTY OF THE PARTY OF THE PART				A
Ant. l	Pol.		Ve	rtica	al				3	63				
Test	Mode	:	BL	ΕT	X 24	02 M	ode		10		1	All		
Rema	ark:		On	ly w	orse	e case	is reported							
80.0	dBuV/r	n												_
-20 -20	K <sub>V</sub> VM	40 !	50 66	0 7:	3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 -X <sub>1</sub> ,,	4 ************************************	hy P <sub>lan</sub> eng <sub>to</sub> probably a strong <sup>now</sup> de Lanen	6	Lange to year	Africa Carl	Margin -6	dB	\\\r\-
30.0	000	40 !	50 6	0 7						400	500 (	500 700	100	10.00
No.	Mk.	F	req.			ading evel	Correct Factor	Measure ment		mit	C	)ver		
		N	ИHz		dE	BuV	dB/m	dBuV/m	dl	3uV/m		dB	Det	ecto
1		31.	3992	)	43	3.04	-14.64	28.40	4	0.00		11.60	(	QΡ
2		46.8	8303	3	47	7.17	-22.74	24.43	4	40.00		15.57	(	QΡ
3	*	80.9	9275	;	52	2.25	-22.87	29.38	4	0.00		10.62		QΡ
4			445			).24	-21.89	28.35		3.50		15.15		QΡ
5			4402			.46	-21.97	29.49		3.50		14.01		QΡ
6			.518			3.00	-14.87	18.13		6.00		27.87		QP
	imum d		c:Over			er marg		10.13		0.00		21.01		×1



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## **Above 1GHz**

EUT:	Tablet PC	Model:	QM806
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		The same of the sa
Ant. Pol.	Horizontal		
Test Mode:	BLE Mode TX 2402 MHz	W.	
Remark:	No report for the emission v prescribed limit.	which more than 10 dB	below the

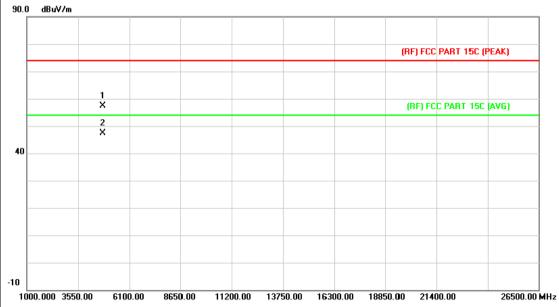


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.114	44.38	13.44	57.82	74.00	-16.18	peak
2	*	4803.468	34.87	13.44	48.31	54.00	-5.69	AVG



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EUT:	Tablet PC	Model:	QM806				
Temperature:	25℃	Relative Humidity:	55%				
Test Voltage:	DC 3.7V	OC 3.7V					
Ant. Pol.	Vertical						
Test Mode:	BLE Mode TX 2402 MHz	MILLOS	A THURSDAY				
Remark:	No report for the emission	which more than 10 de	B below the				
	prescribed limit.						

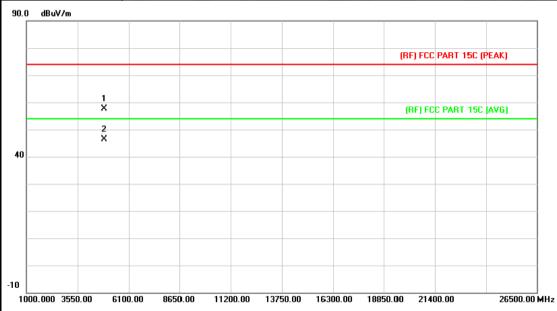


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.145	44.05	13.44	57.49	74.00	-16.51	peak
2	*	4803.438	33.87	13.44	47.31	54.00	-6.69	AVG



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EUT:	Tablet PC	Model:	QM806
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	50	133
Ant. Pol.	Horizontal	O	
Test Mode:	BLE Mode TX 2442 MHz	WILD S	Jan Jan
Remark:	No report for the emission v prescribed limit.	which more than 10 dB	below the
00 0 ID 1/1			

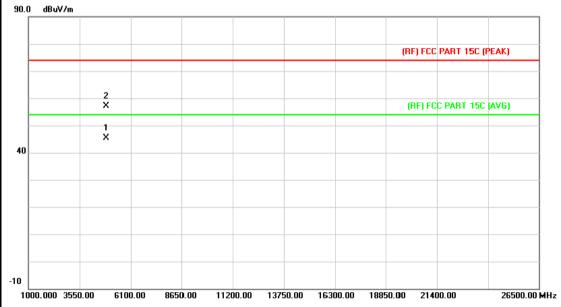


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4883.169	43.71	13.90	57.61	74.00	-16.39	peak
2	*	4883.354	32.39	13.90	46.29	54.00	-7.71	AVG



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EUT:	Tablet PC	Model:	QM806
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	11	
Ant. Pol.	Vertical		
Test Mode:	BLE Mode TX 2442 MHz	WILD S	A VIII
Remark:	No report for the emission v prescribed limit.	which more than 10 dB	below the

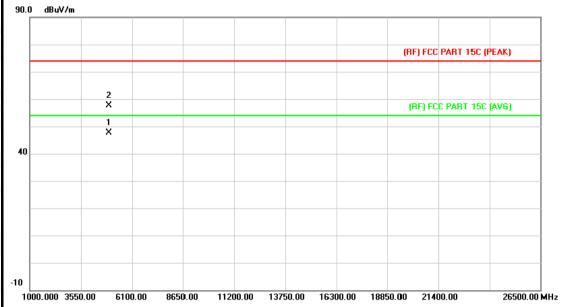


No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4883.364	31.46	13.90	45.36	54.00	-8.64	AVG
2		4883.985	43.29	13.90	57.19	74.00	-16.81	peak



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EUT:	Tablet PC	Model:	QM806
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		1133
Ant. Pol.	Horizontal	10	
Test Mode:	BLE Mode TX 2480 MHz		2
Remark:	No report for the emission v prescribed limit.	which more than 10 dB	below the
00.0 dp.4//			

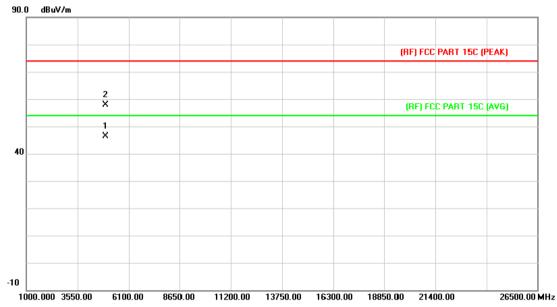


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4960.322	33.28	14.36	47.64	54.00	-6.36	AVG
2		4960.353	43.30	14.36	57.66	74.00	-16.34	peak



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EUT:	Tablet PC	Model:	QM806				
Temperature:	25℃	Relative Humidity:	55%				
Test Voltage:	DC 3.7V	OC 3.7V					
Ant. Pol.	Vertical	U					
Test Mode:	BLE Mode TX 2480 MHz	WIII DE	a live				
Remark:	No report for the emission verscribed limit.	which more than 10 dB	below the				



No.	M	k. Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4959.241	32.07	14.36	46.43	54.00	-7.57	AVG
2		4959.334	43.62	14.36	57.98	74.00	-16.02	peak



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# 6. Restricted Bands Requirement

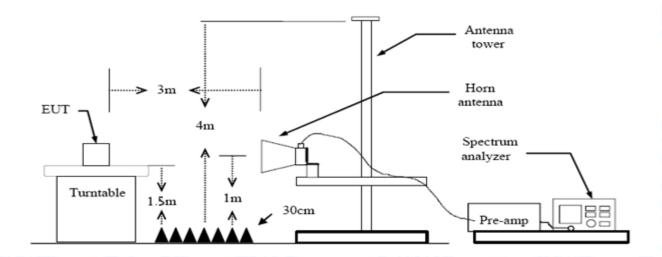
#### 6.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.247(d) FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Distance Me	eters(at 3m)
Band (MHz)	Peak (dBuV/m)	Average (dBuV/m)
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



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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.

### 6.4 EUT Operating Condition

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

#### 6.5 Test Data

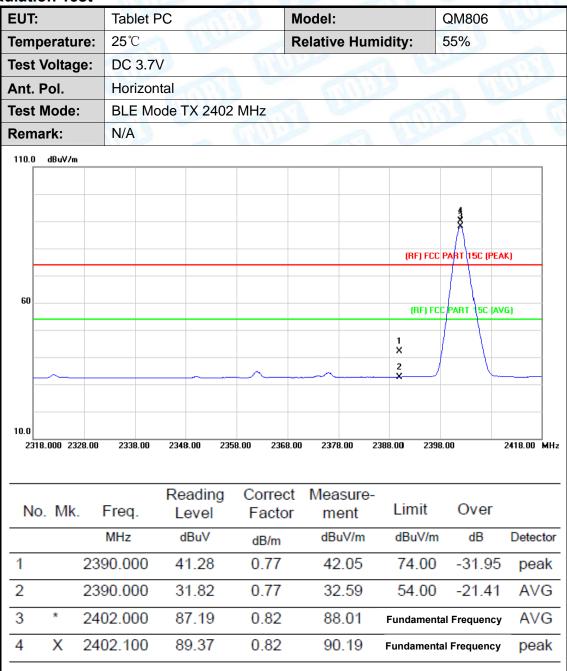
Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.



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# (1) Radiation Test





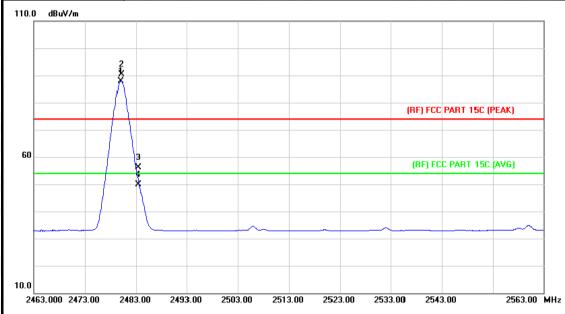
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EUT: Tabl		Table	Tablet PC N			el:		QM806		
Tem	perati	ıre:	25℃		Child	Rela	tive Hu	midity:	55%	
Test	t Volta	ge:	DC 3	.7V	No.			GI	DIST.	
۹nt.	Pol.		Vertic	cal	-	Hilliam				
Test	Mode	):	BLE	Mode T	〈 2402 MH	lz			A HILL	
Ren	nark:		N/A	M			6		10	
110.0	) dBuV/r	n								
									3	
									*	
								(BF) FC(	PART 15C (PEA	AK)
								(447)		
60										
,								(RF) FO	CC PART 15C (A)	/G)
								1 ×		
							_	2		
10.0										
23	18.000 2	520.00	2338.00	2348.00	2358.00	2368.00	2378.00	2388.00 239	<b>18.00</b>	2418.00 MF
		_		Readi	_		easure		Over	
N	o. Mk		eq.	Leve			ment	Limit	Over	
		М	Hz	dBu\	/ dB/	/m	dBuV/m	dBuV/m	n dB	Detecto
		2390	.000	41.0	2 0.7	7	41.79	74.00	-32.21	peak
1								54.00	04.50	AVG
1		2390	0.000	31.6	4 0.7	77	32.41	54.00	-21.59	7110
2	X	2390		31.6 89.1			32.41 89.94		-21.59 Ital Frequency	



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EUT:	Tablet PC	Model:	QM806			
Temperature:	25℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	BLE Mode TX 2480 MHz		a Albu			
Remark:	N/A		13 _ (1)			
110.0 dBuV/m						



No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2480.000	86.83	1.15	87.98	Fundamental	Frequency	AVG
2	Χ	2480.200	89.20	1.15	90.35	Fundamental	Freauencv	peak
3		2483.500	55.02	1.17	56.19	74.00	-17.81	peak
4		2483.500	48.81	1.17	49.98	54.00	-4.02	AVG



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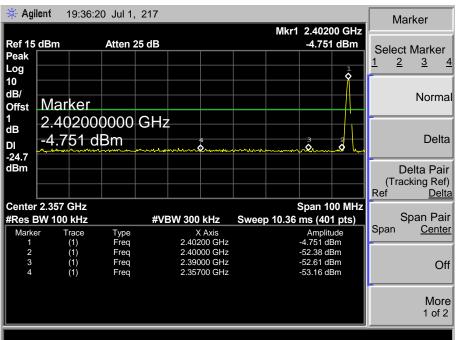
EUT	:	: Tablet PC			Model:		QM806		
Tem	perature:	25℃		130	Relative Hur	nidity:	55%		
Гest	Voltage:	DC 3	.7V		218	63	11/20		
۹nt.	Pol.	Vertic	cal	e all		8/ 1/2			
Test	Mode:	BLE	Mode TX 24	80 MHz			THE REAL PROPERTY.		
Rem	nark:	N/A	Allow		1 6-		33		
110.0	dBuV/m								
60		33 ×					C PART 15C (PEA		
			2493.00 25	503.00 <b>25</b> 13.0	00 2523.00 ;	2533.00 254	3.00	2563.00 MI	
	63.000 2473.00	2483.00							
246		2483.00 Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
246	o. Mk. I		_					Detector	
NC.	o. Mk. I	Freq.	Level	Factor	ment	Limit dBuV/m		A) (O	
No	o. Mk.   * 248	Freq. MHz	Level dBuV	Factor dB/m	ment dBuV/m	Limit dBuV/m Fundament	dB	AVG	
	). Mk.   * 248 X 248	Freq. MHz 80.000	Level dBuV 86.74	Factor dB/m 1.15	ment dBuV/m 87.89	Limit dBuV/m Fundament	dB tal Frequency	AVG	

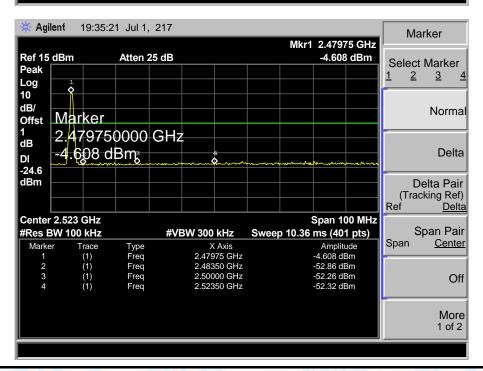


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### (2) Conducted Test









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# 7. Bandwidth Test

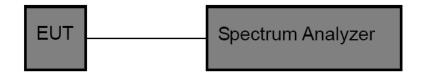
#### 7.1 Test Standard and Limit

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

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-247						
Test Item	Test Item Limit Frequency Range(MH					
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.



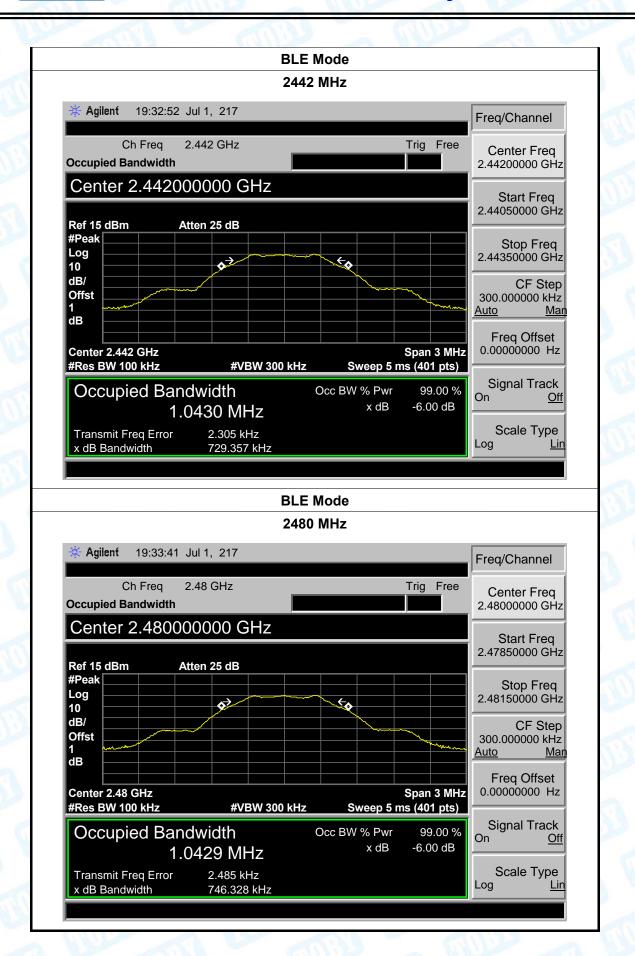
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## 7.5 Test Data

EUT:	Tablet PC	Model:	QM806	
Temperature:	25℃	Relative Humidity:	55%	
Test Voltage:	DC 3.7V		THE RESERVE	
Test Mode:	BLE TX Mode		133	
Channel freque	ency 6dB Band	vidth 99% Bandwidth	Limit	
(MHz)	(kHz)	(kHz)	(kHz)	
2402	734.55	7 1040.2		
2442	729.35	7 1043.0	>=500	
2480	746.32	8 1042.9		
	1	BLE Mode	•	
		2402 MHz		
* Agilent 1	9:32:19 Jul 1, 217		Freq/Channel	
Ch Occupied Ban	Freq 2.402 GHz dwidth	Trig Free	Center Freq 2.40200000 GHz	
Center 2	402000000 GHz		Start Freq	



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# 8. Peak Output Power Test

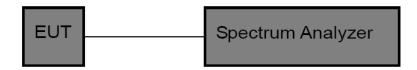
#### 8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)(3)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-247					
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 v04.

- (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.



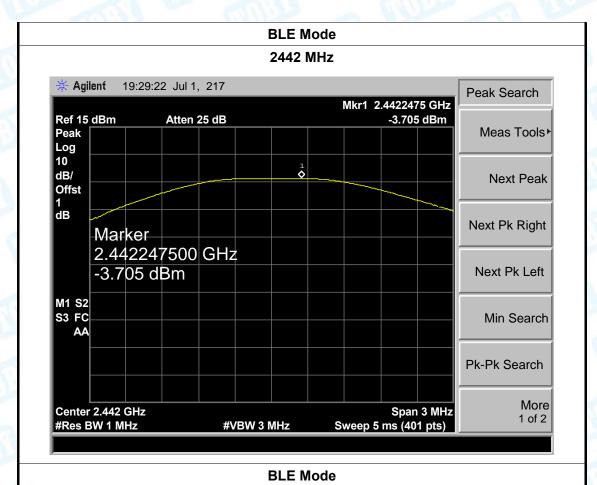
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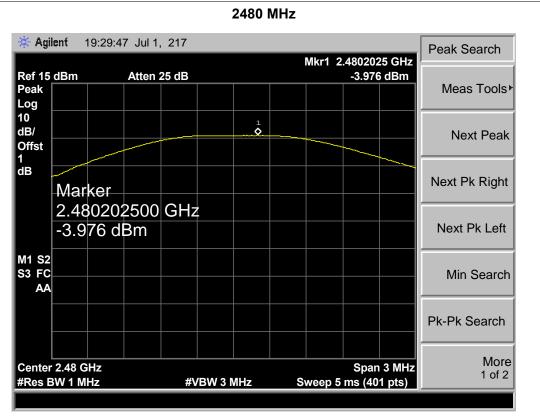
# 8.5 Test Data

JT:		Tablet PC		Model:		QM806
mperat	ure:	25℃		Relative Hu	umidity:	55%
st Volta	ge:	DC 3.7V	0117			THE REAL PROPERTY.
st Mode	<b>)</b> :	BLE TX N	/lode	1111	(TITE)	333
hannel	frequen	ncy (MHz)	Test R	esult (dBm)		Limit (dBm)
	2402		-	-4.219		
	2442		-	-3.705		30
	2480		-	-3.976		
			BL	.E Mode		
			24	02 MHz		
Ref 15 Peak Log 10	dBm	Atten 25	5 dB		.4021650 GHz -4.219 dBm	Meas Tools <b></b> ►
dB/ Offst 1 dB	Marke	er		1 0		Next Peak  Next Pk Right
dB/ Offst 1		er 2165000 ( 9 dBm	GHz	1		
dB/ Offst 1	2.402	2165000	GHz	1		Next Pk Right
dB/ Offst 1 dB M1 S2 S3 FC	2.402	2165000	GHz	1		Next Pk Right  Next Pk Left



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# 9. Power Spectral Density Test

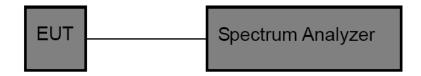
#### 9.1 Test Standard and Limit

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(MH					
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 v04.

- (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 frequenyc.
- (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.



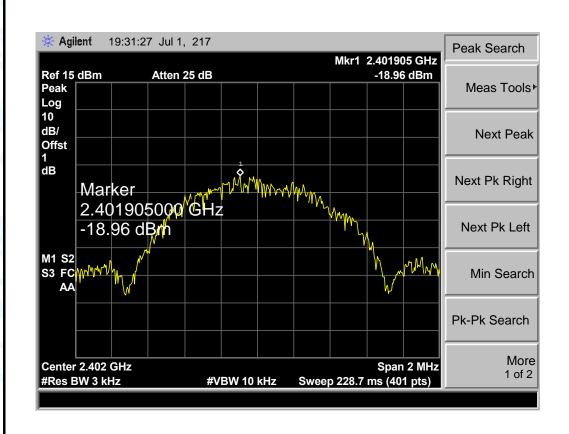
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## 9.5 Test Data

EUT:	Tablet PC		Model:		QM806	
Temperature:	<b>25</b> ℃		Relative H	umidity:	55%	
Test Voltage:	DC 3.7V				6	M:N
Test Mode:	BLE TX Mode					
Channel Frequency		Power Density		Limi	t	Result
(MHz)		(dBm)		(dBm	1)	Result
2402		-18	3.96			
2442 2480		-18.55 -18.76		8		PASS
		DIE	Mada	*		

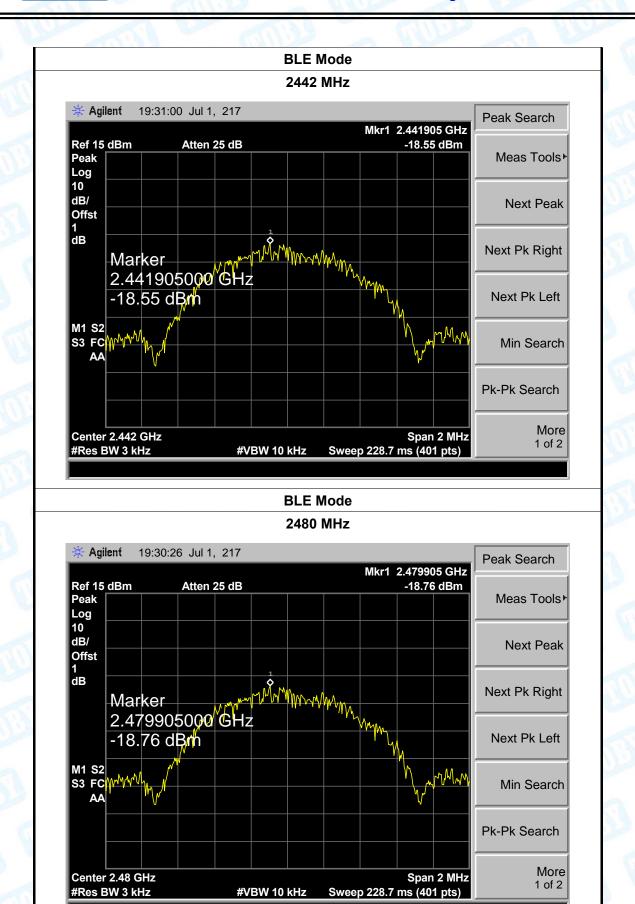
#### **BLE Mode**

#### 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 -0.12dBi, 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

----END OF REPORT-----