

APPLICATION CERTIFICATION  
On Behalf of  
Shenzhen Waikin Electronic Co., Ltd.

Car Radio Bluetooth  
Model No.: 87752824

FCC ID: YJ6-87752824

Prepared for : Shenzhen Waikin Electronic Co., Ltd.  
Address : Wu Tong Shan Village, Shenzhen, China

Prepared by : ACCURATE TECHNOLOGY CO. LTD  
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Report Number : ATE20101270-1  
Date of Test : June 21-26, 2010  
Date of Report : June 30, 2010

## TABLE OF CONTENTS

Description	Page
<b>Test Report Certification</b>	
<b>1. GENERAL INFORMATION</b> .....	<b>5</b>
1.1. Description of Device (EUT).....	5
1.2. Description of Test Facility .....	6
1.3. Measurement Uncertainty.....	6
<b>2. MEASURING DEVICE AND TEST EQUIPMENT</b> .....	<b>7</b>
<b>3. OPERATION OF EUT DURING TESTING</b> .....	<b>8</b>
3.1. Operating Mode .....	8
3.2. Configuration and peripherals .....	8
<b>4. TEST PROCEDURES AND RESULTS</b> .....	<b>9</b>
<b>5. 20DB BANDWIDTH TEST</b> .....	<b>10</b>
5.1. Block Diagram of Test Setup.....	10
5.2. The Requirement For Section 15.247(a)(1).....	10
5.3. EUT Configuration on Measurement .....	10
5.4. Operating Condition of EUT .....	10
5.5. Test Procedure .....	11
5.6. Test Result .....	11
<b>6. CARRIER FREQUENCY SEPARATION TEST</b> .....	<b>15</b>
6.1. Block Diagram of Test Setup.....	15
6.2. The Requirement For Section 15.247(a)(1).....	15
6.3. EUT Configuration on Measurement .....	15
6.4. Operating Condition of EUT .....	15
6.5. Test Procedure .....	16
6.6. Test Result .....	16
<b>7. NUMBER OF HOPPING FREQUENCY TEST</b> .....	<b>20</b>
7.1. Block Diagram of Test Setup.....	20
7.2. The Requirement For Section 15.247(a)(1)(iii).....	20
7.3. EUT Configuration on Measurement .....	20
7.4. Operating Condition of EUT .....	20
7.5. Test Procedure .....	21
7.6. Test Result .....	21
<b>8. DWELL TIME TEST</b> .....	<b>25</b>
8.1. Block Diagram of Test Setup.....	25
8.2. The Requirement For Section 15.247(a)(1)(iii).....	25
8.3. EUT Configuration on Measurement .....	25
8.4. Operating Condition of EUT .....	25
8.5. Test Procedure .....	26
8.6. Test Result .....	26
<b>9. MAXIMUM PEAK OUTPUT POWER TEST</b> .....	<b>30</b>
9.1. Block Diagram of Test Setup.....	30
9.2. The Requirement For Section 15.247(b)(1).....	30
9.3. EUT Configuration on Measurement .....	30
9.4. Operating Condition of EUT .....	30
9.5. Test Procedure .....	31

9.6. Test Result .....	31
<b>10. BAND EDGE COMPLIANCE TEST .....</b>	<b>35</b>
10.1. Block Diagram of Test Setup.....	35
10.2. The Requirement For Section 15.247(d) .....	35
10.3. EUT Configuration on Measurement .....	35
10.4. Operating Condition of EUT .....	36
10.5. Test Procedure .....	36
10.6. Test Result .....	37
<b>11. RADIATED SPURIOUS EMISSION TEST .....</b>	<b>42</b>
11.1. Block Diagram of Test Setup.....	42
11.2. The Limit For Section 15.247(d) .....	43
11.3. Restricted bands of operation .....	43
11.4. Configuration of EUT on Measurement .....	44
11.5. Operating Condition of EUT .....	44
11.6. Test Procedure .....	44
11.7. The Field Strength of Radiation Emission Measurement Results .....	45
<b>12. ANTENNA REQUIREMENT.....</b>	<b>66</b>
12.1. The Requirement .....	66
12.2. Antenna Construction .....	66

## Test Report Certification

Applicant : Shenzhen Waikin Electronic Co., Ltd.

Manufacturer : Shenzhen Waikin Electronic Co., Ltd.

EUT Description : Car Radio Bluetooth

(A) MODEL NO.: 87752824

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: DC 12V

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.247**  
**ANSI C63.4: 2003**

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

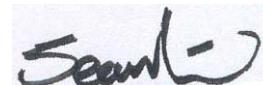
Date of Test :

June 21-26, 2010

Prepared by :

  
 \_\_\_\_\_  
 (Engineer)

Approved & Authorized Signer :

  
 \_\_\_\_\_  
 (Manager)

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

EUT : Car Radio Bluetooth  
Model Number : 87752824  
Frequency Band : 2402MHz-2480MHz  
Number of Channels : 79  
Antenna Gain : 0dBi  
Power Supply : DC 12V  
Applicant : Shenzhen Waikin Electronic Co., Ltd.  
Address : Wu Tong Shan Village, Shenzhen, China  
Manufacturer : Shenzhen Waikin Electronic Co., Ltd.  
Address : Wu Tong Shan Village, Shenzhen, China  
Date of sample received : June 9, 2010  
Date of Test : June 21-26, 2010

## 1.2.Description of Test Facility

EMC Lab	: Accredited by TUV Rheinland Shenzhen
	Listed by FCC The Registration Number is 752051
	Listed by Industry Canada The Registration Number is 5077A-2
	Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	: ACCURATE TECHNOLOGY CO. LTD
Site Location	: F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

## 1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2  
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2  
(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2  
(Above 1GHz)

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 9, 2011
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 9, 2011
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 9, 2011
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 9, 2011
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 9, 2011
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 9, 2011
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 9, 2011
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 9, 2011

### 3. OPERATION OF EUT DURING TESTING

#### 3.1. Operating Mode

The mode is used: Transmitting mode

Low Channel: 2402MHz

Middle Channel: 2441MHz

High Channel: 2480MHz

Hopping

#### 3.2. Configuration and peripherals



Setup: Transmitting mode

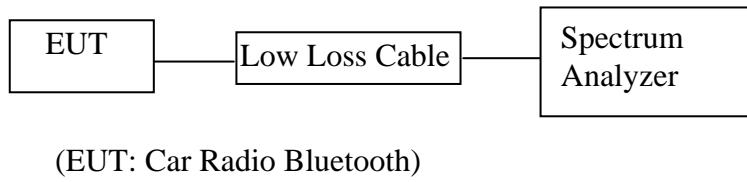
(EUT: Car Radio Bluetooth)

## 4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(1)	20dB Bandwidth Test	Compliant
Section 15.247(a)(1)	Carrier Frequency Separation Test	Compliant
Section 15.247(a)(1)(iii)	Number Of Hopping Frequency Test	Compliant
Section 15.247(a)(1)(iii)	Dwell Time Test	Compliant
Section 15.247(b)(1)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

## 5. 20DB BANDWIDTH TEST

### 5.1. Block Diagram of Test Setup



### 5.2. The Requirement For Section 15.247(a)(1)

Section 15.247(a)(1): Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

### 5.3. EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 5.3.1. Car Radio Bluetooth (EUT)

Model Number : 87752824  
 Serial Number : N/A  
 Manufacturer : Shenzhen Waikin Electronic Co., Ltd.

### 5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in TX(Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

## 5.5. Test Procedure

5.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

5.5.2. Set RBW of spectrum analyzer to 30kHz and VBW to 100kHz.

5.5.3. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

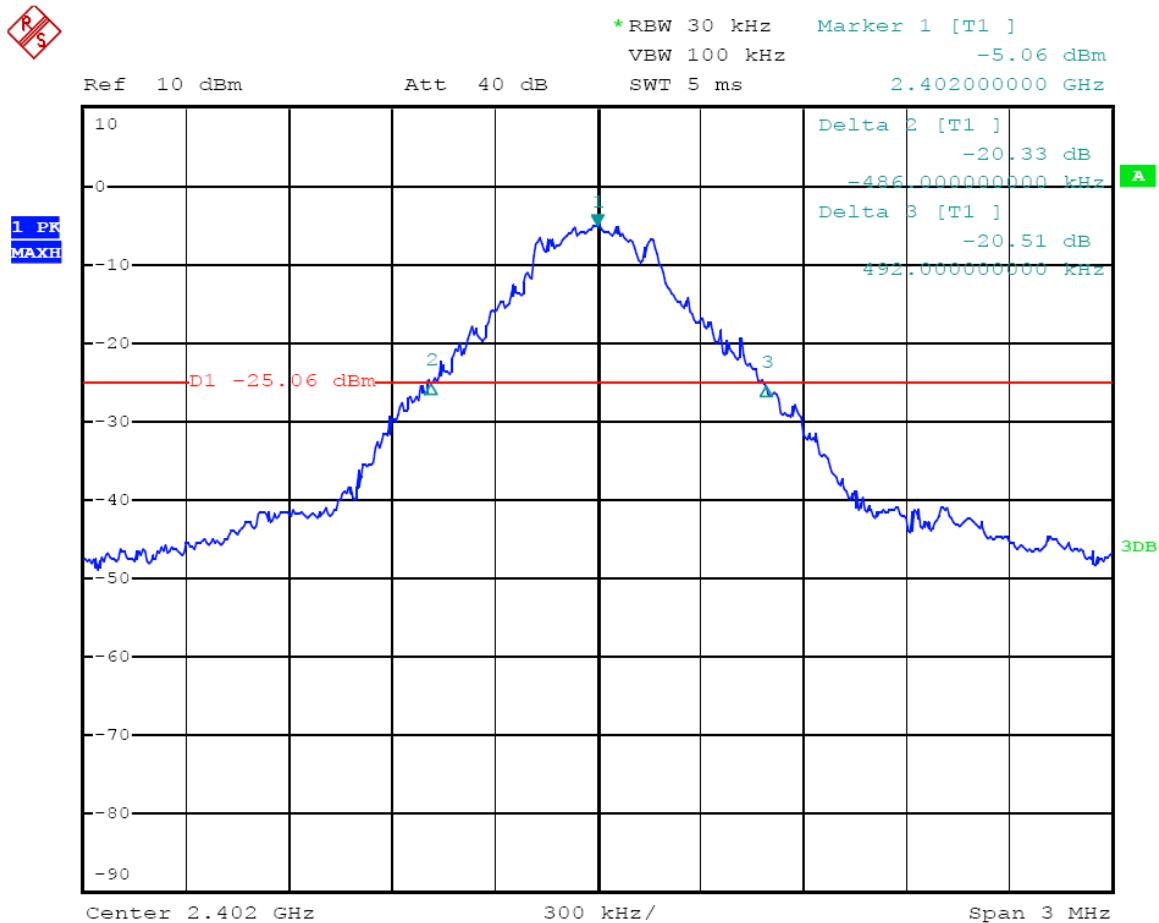
## 5.6. Test Result

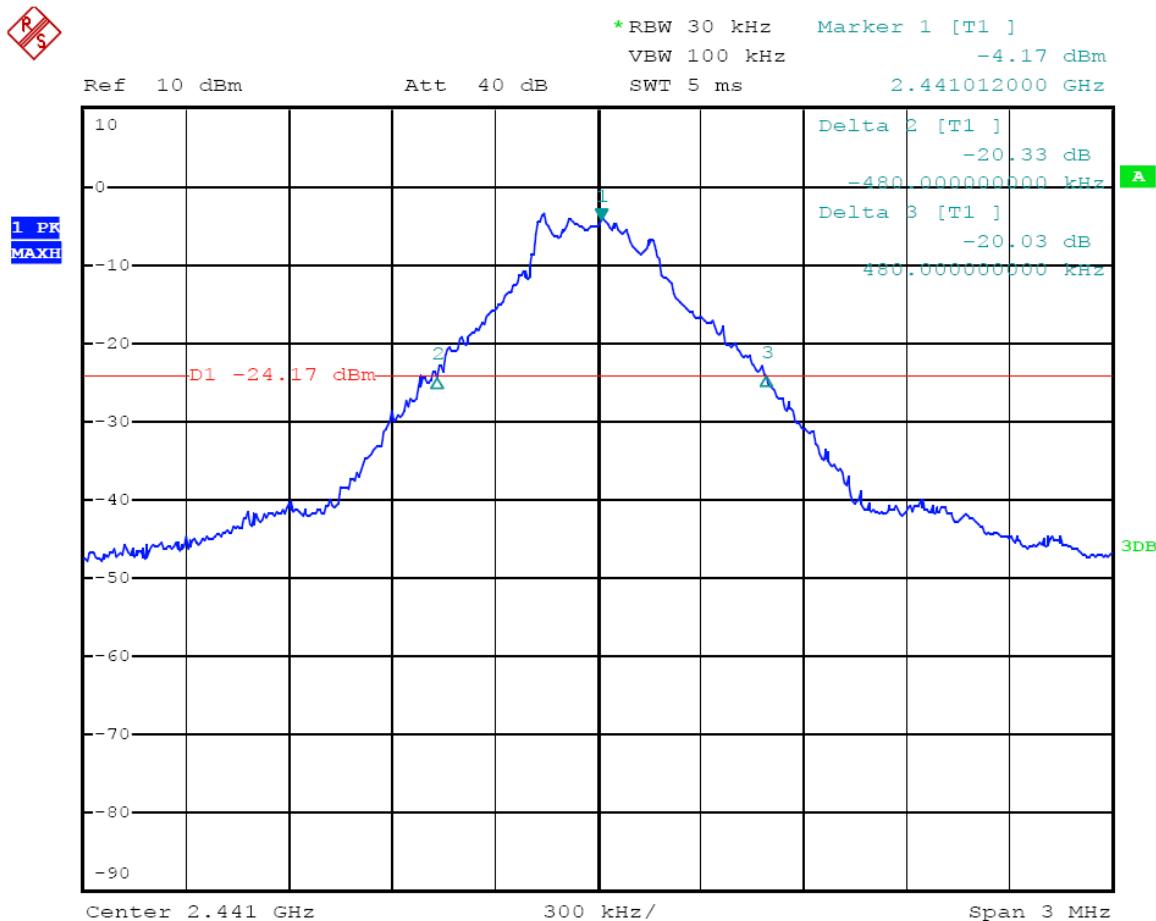
**PASS.**

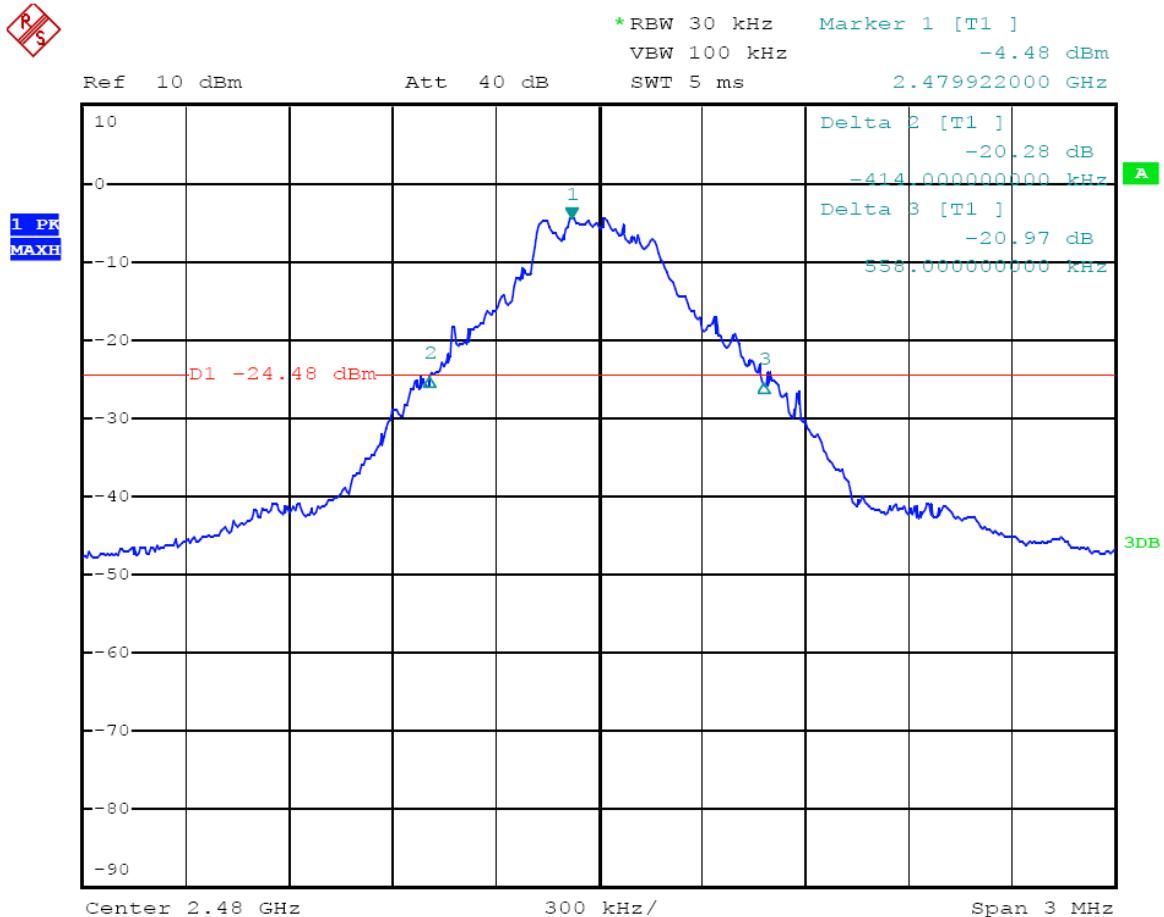
Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	TX	Test Engineer:	Joe

Channel	Frequency (MHz)	20dB Bandwidth (MHz)	Limit (MHz)
Low	2402	0.978	---
Middle	2441	0.960	---
High	2480	0.972	---

The spectrum analyzer plots are attached as below.

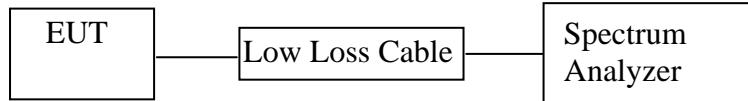






## 6. CARRIER FREQUENCY SEPARATION TEST

### 6.1. Block Diagram of Test Setup



(EUT: Car Radio Bluetooth)

### 6.2. The Requirement For Section 15.247(a)(1)

Section 15.247(a)(1): Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudorandomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

### 6.3. EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 6.3.1. Car Radio Bluetooth (EUT)

Model Number : 87752824  
 Serial Number : N/A  
 Manufacturer : Shenzhen Waikin Electronic Co., Ltd.

### 6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

## 6.5. Test Procedure

- 6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 6.5.2. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz. Adjust Span to 3 MHz.
- 6.5.3. Set the adjacent channel of the EUT maxhold another trace.
- 6.5.4. Measurement the channel separation

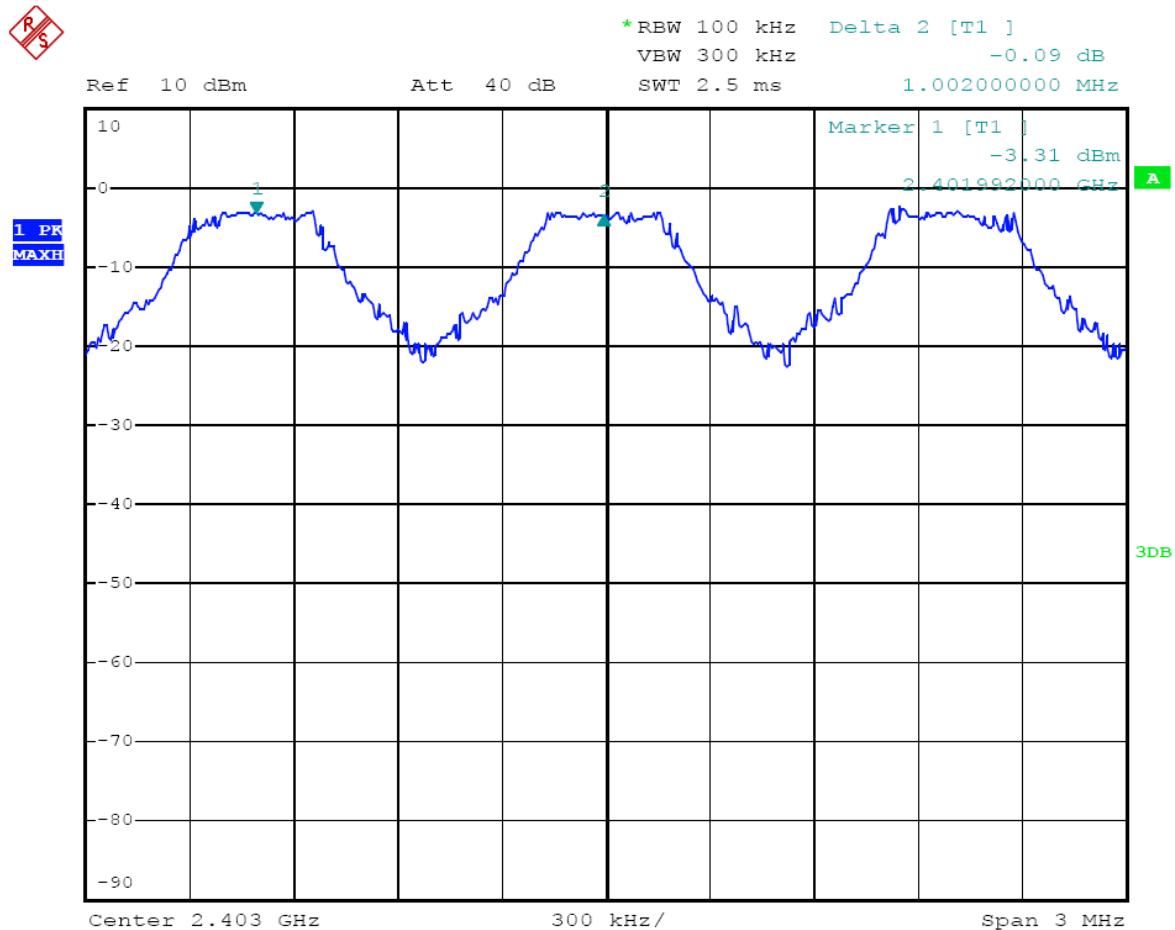
## 6.6. Test Result

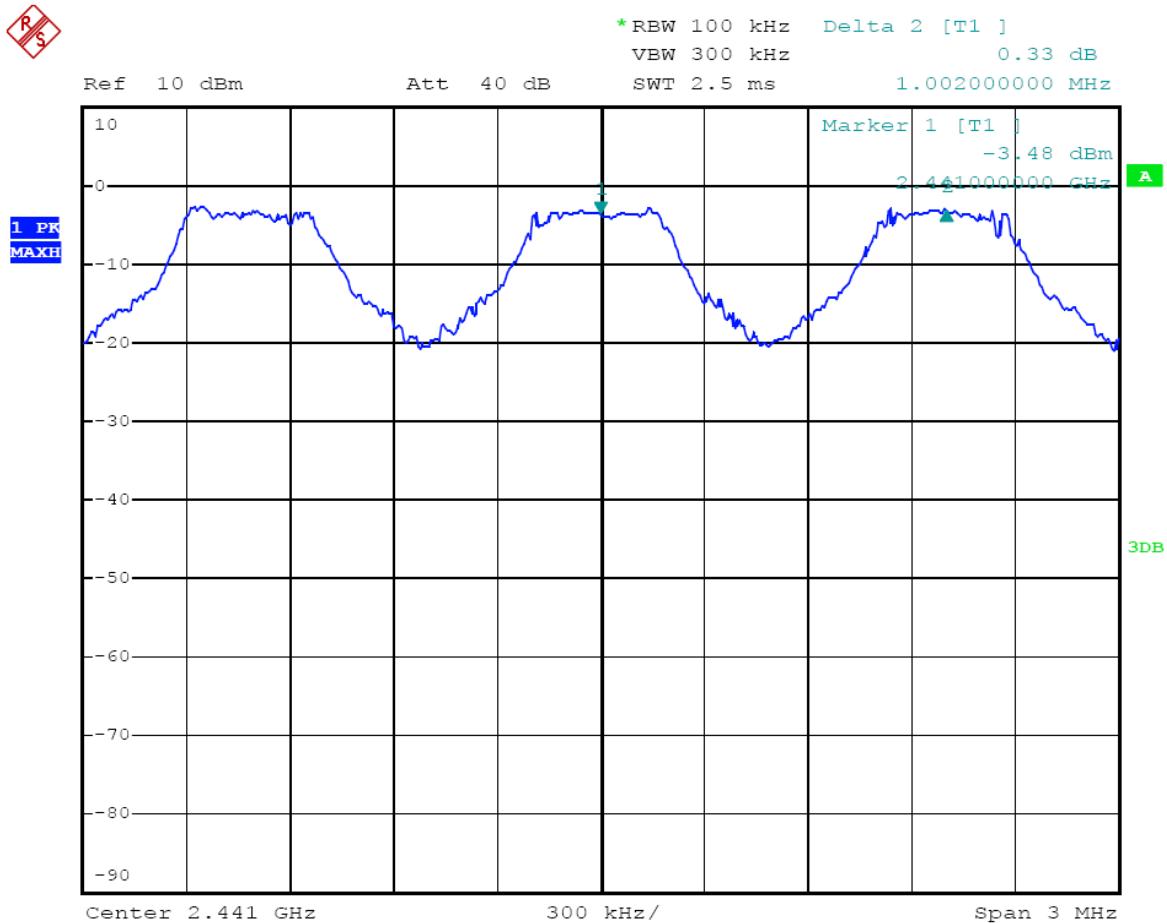
**PASS.**

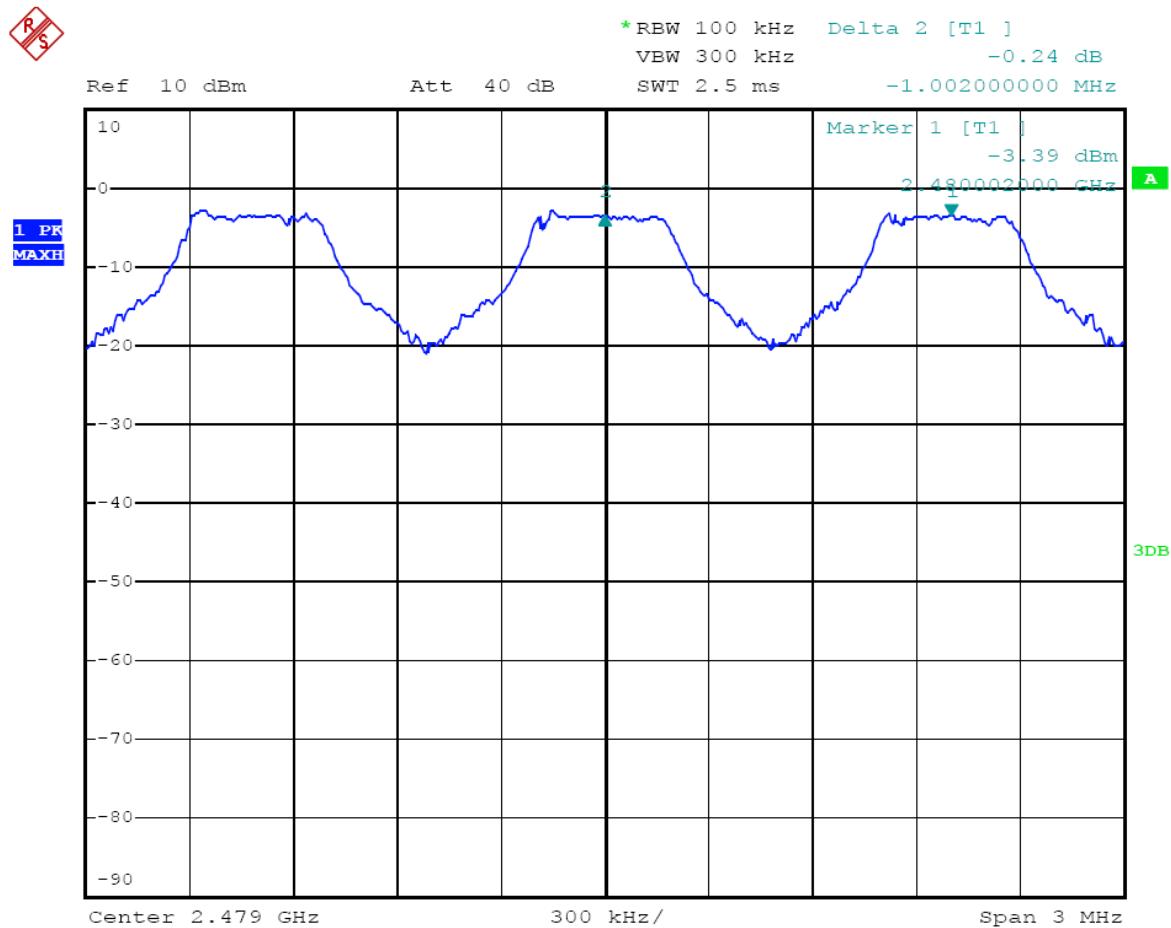
Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	Hopping	Test Engineer:	Joe

Channel	Channel Frequency (MHz)	Channel separation (MHz)	Limit
Low	2402	1.002	> the 20dB Bandwidth or 25kHz (whichever is greater)
Middle	2441	1.002	> the 20dB Bandwidth or 25kHz (whichever is greater)
High	2480	1.002	> the 20dB Bandwidth or 25kHz (whichever is greater)

The spectrum analyzer plots are attached as below.

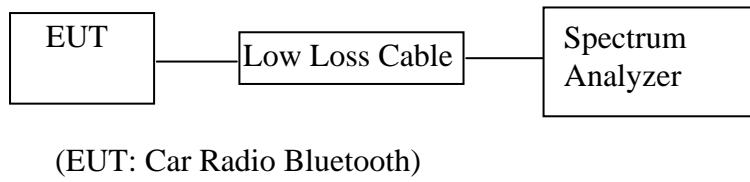






## 7. NUMBER OF HOPPING FREQUENCY TEST

### 7.1. Block Diagram of Test Setup



### 7.2. The Requirement For Section 15.247(a)(1)(iii)

Section 15.247(a)(1)(iii): Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

### 7.3. EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 7.3.1. Car Radio Bluetooth (EUT)

Model Number	:	87752824
Serial Number	:	N/A
Manufacturer	:	Shenzhen Waikin Electronic Co., Ltd.

### 7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in TX (Hopping on) modes measure it.

## 7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2. Set the spectrum analyzer as Span=30MHz, RBW=300kHz, VBW=300kHz.

7.5.3. Max hold, view and count how many channel in the band.

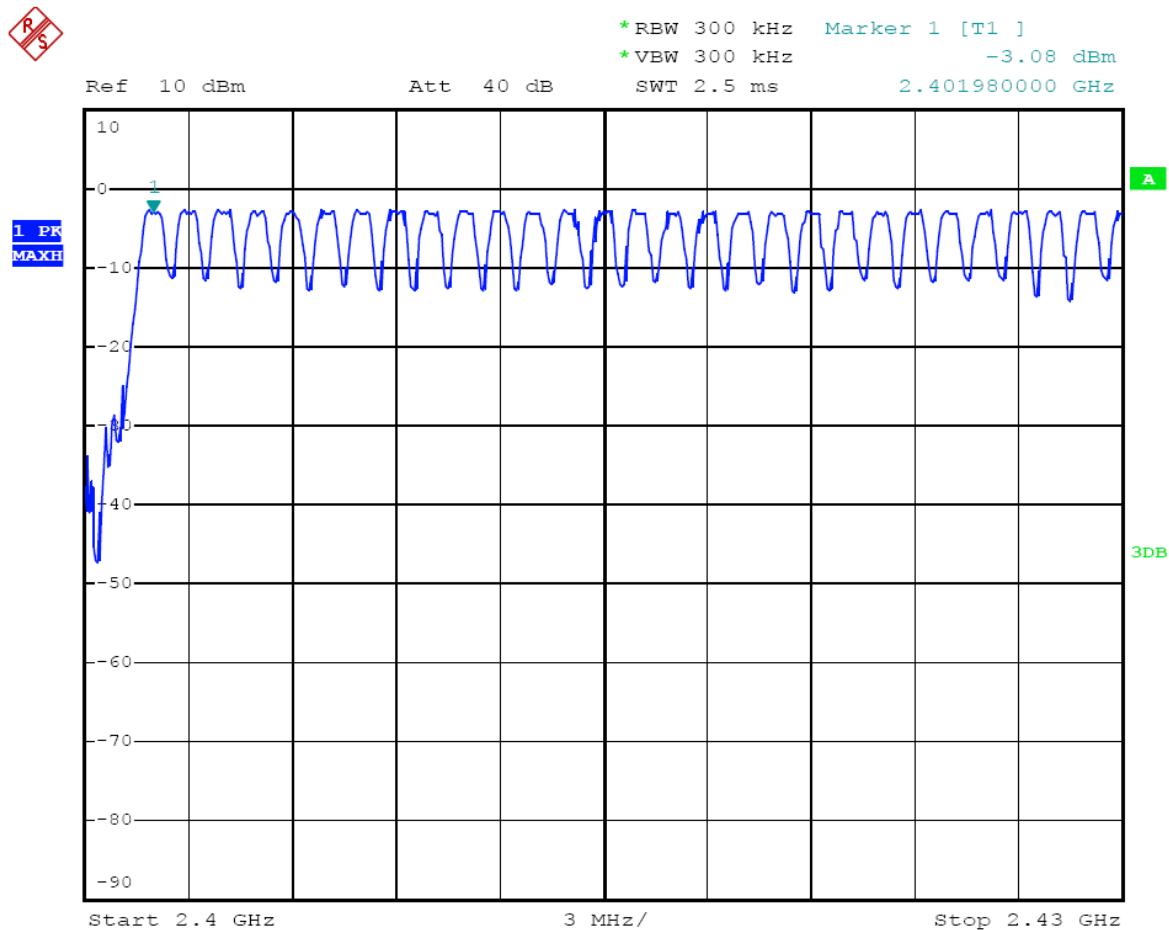
## 7.6. Test Result

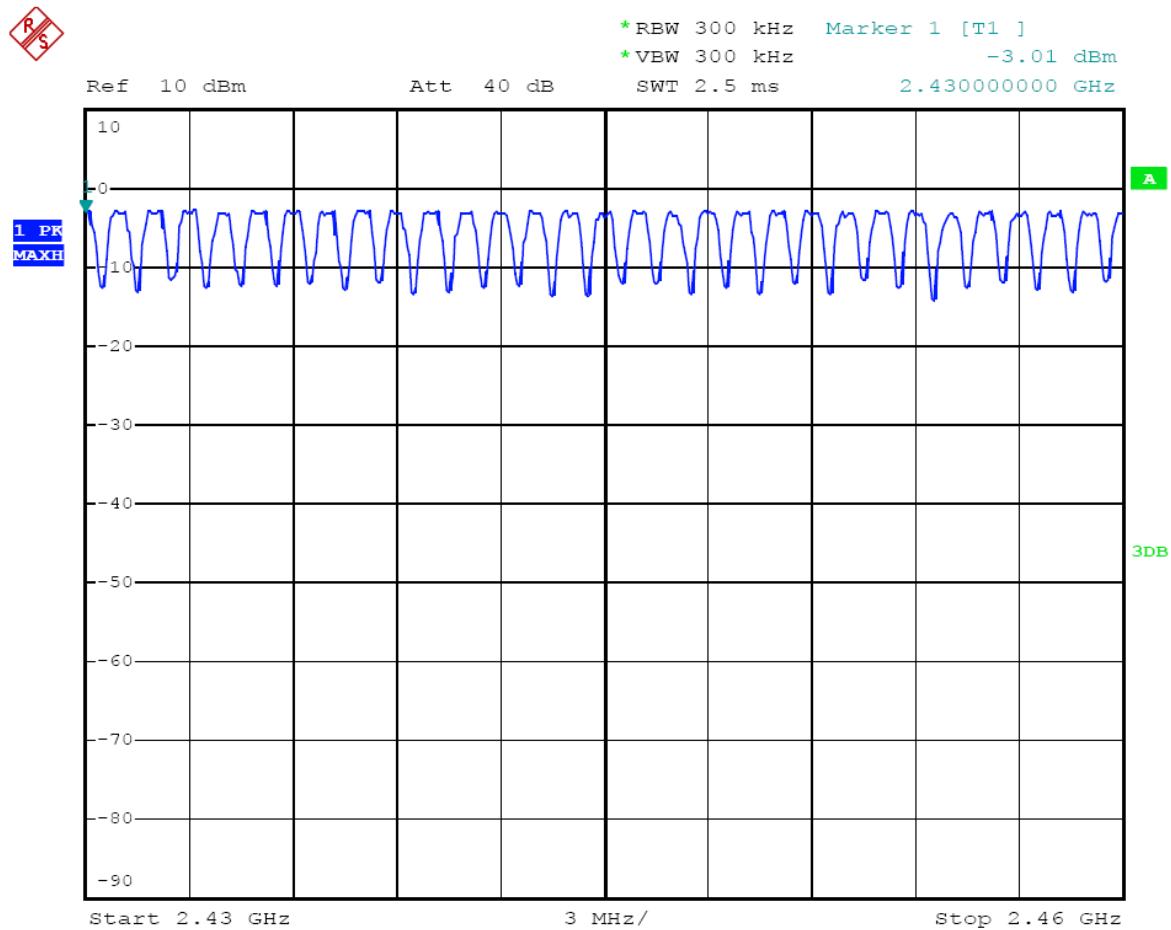
**PASS.**

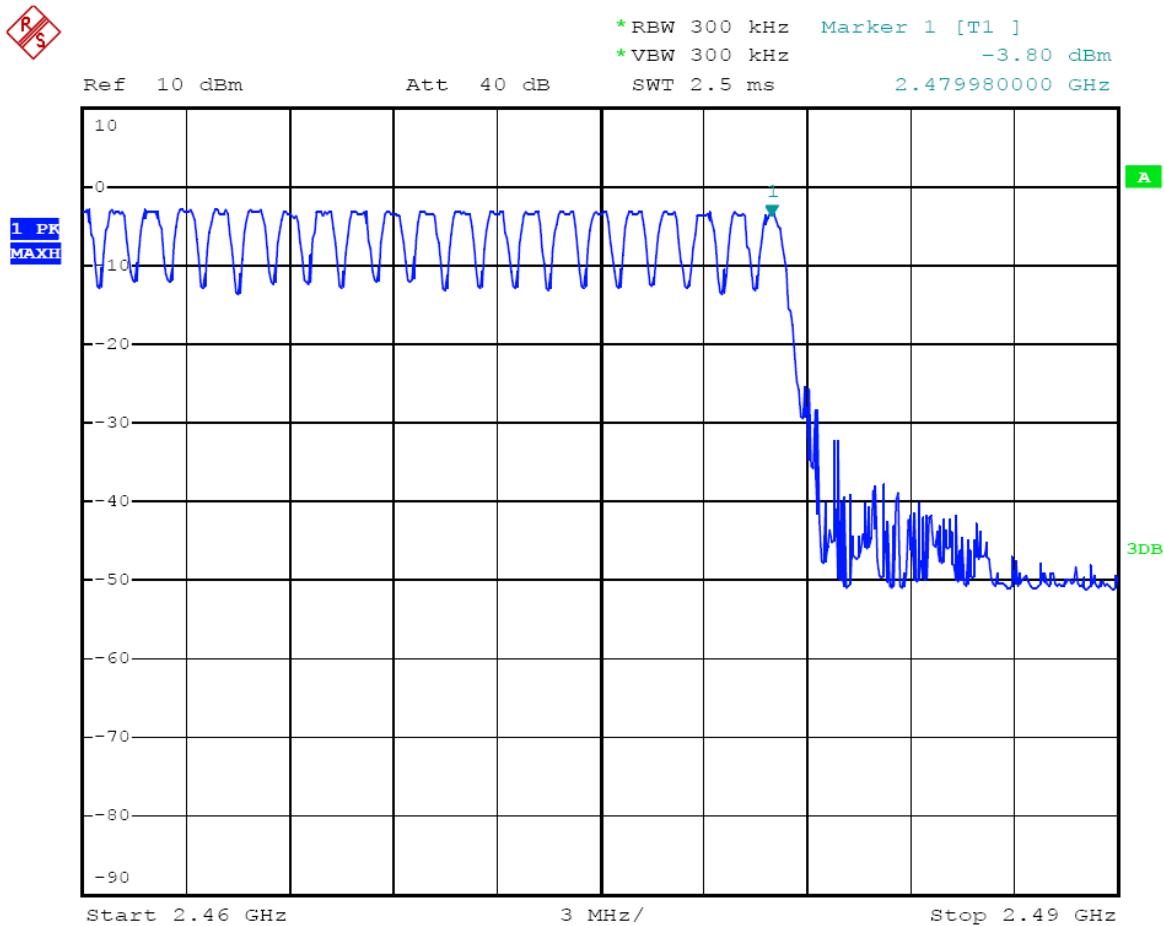
Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	Hopping	Test Engineer:	Joe

Total number of hopping channel	Measurement result (CH)	Limit (CH)
	79	>15

The spectrum analyzer plots are attached as below.

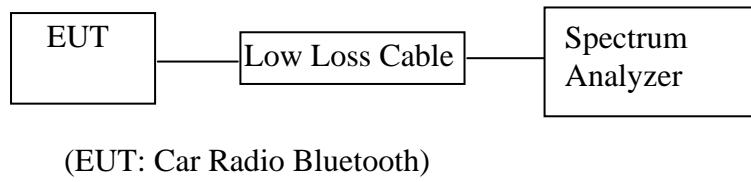






## 8. DWELL TIME TEST

### 8.1. Block Diagram of Test Setup



### 8.2. The Requirement For Section 15.247(a)(1)(iii)

Section 15.247(a)(1)(iii): Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

### 8.3. EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 8.3.1. Car Radio Bluetooth (EUT)

Model Number : 87752824  
 Serial Number : N/A  
 Manufacturer : Shenzhen Waikin Electronic Co., Ltd.

### 8.4. Operating Condition of EUT

#### 8.4.1. Setup the EUT and simulator as shown as Section 8.1.

#### 8.4.2. Turn on the power of all equipment.

#### 8.4.3. Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

## 8.5. Test Procedure

- 8.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 8.5.2. Set center frequency of spectrum analyzer = operating frequency.
- 8.5.3. Set the spectrum analyzer as RBW=100kHz, VBW=300kHz, Span=0Hz, Adjust Sweep=1s. Get the burst (in 1 sec.).
- 8.5.4. Set the spectrum analyzer as RBW=1MHz, VBW=3MHz, Span=0Hz, Adjust Sweep=2ms. Get the pulse time.
- 8.5.5. Repeat above procedures until all frequency measured were complete.

## 8.6. Test Result

**PASS.**

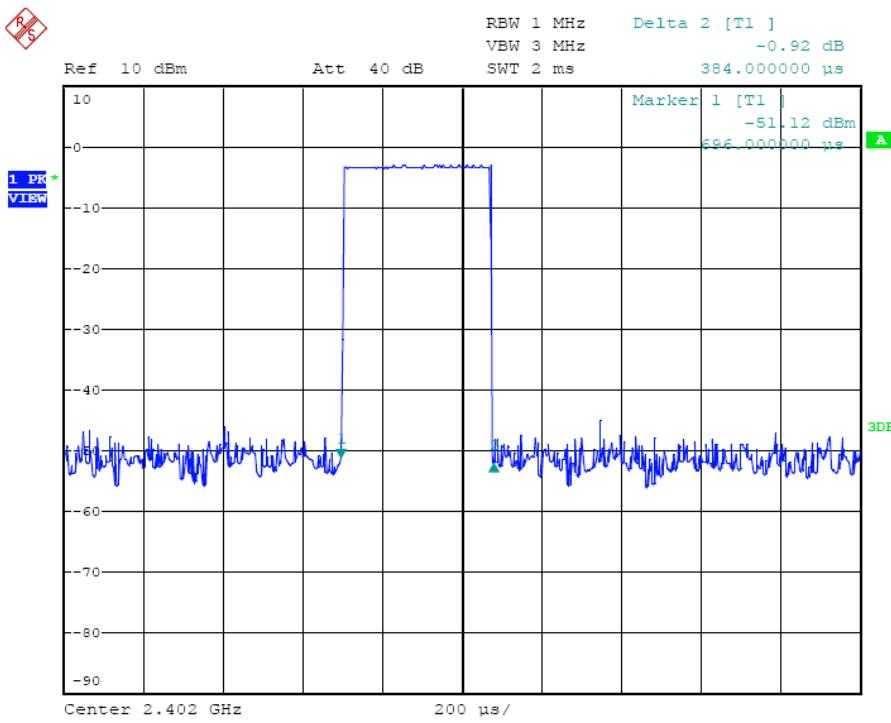
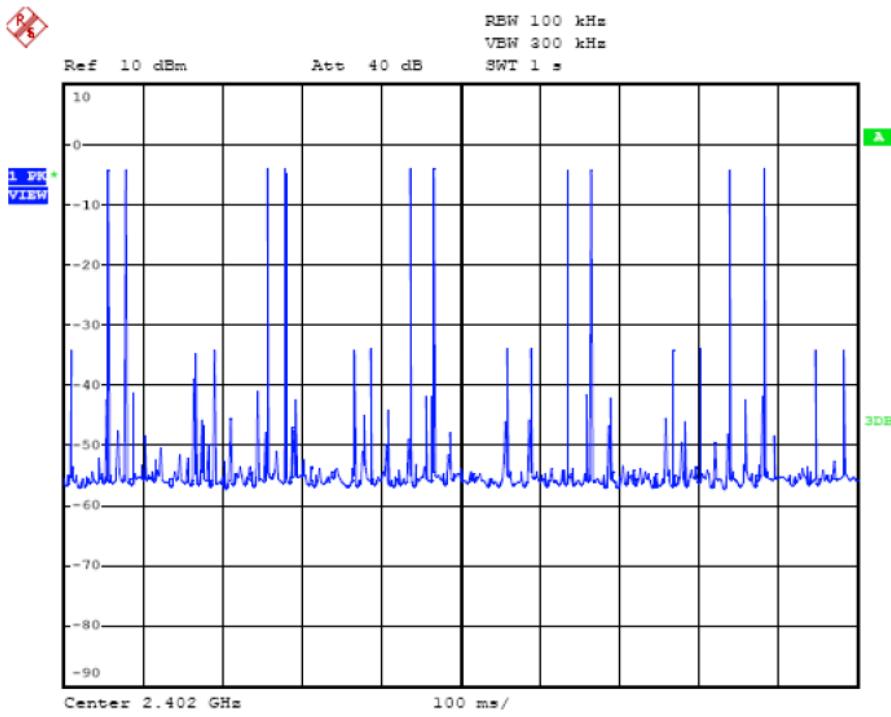
Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	Hopping	Test Engineer:	Joe

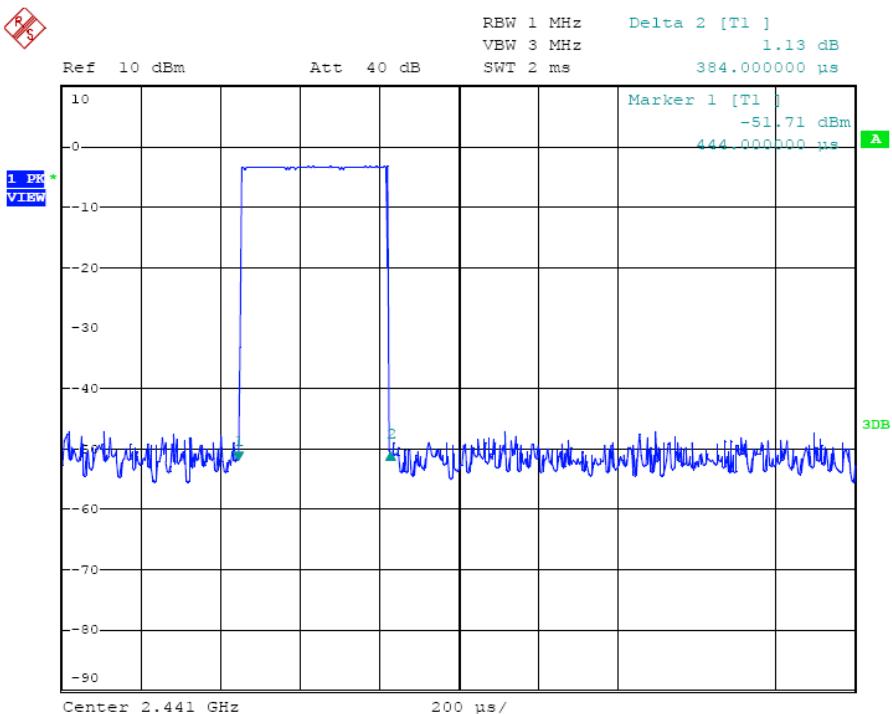
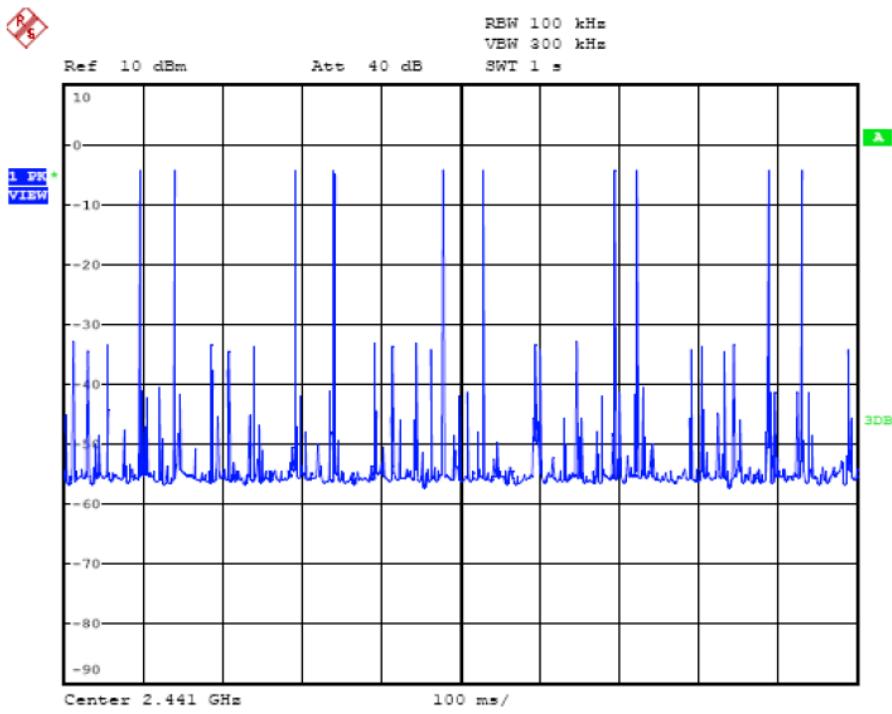
A period transmit time =  $0.4 \times 79 = 31.6$

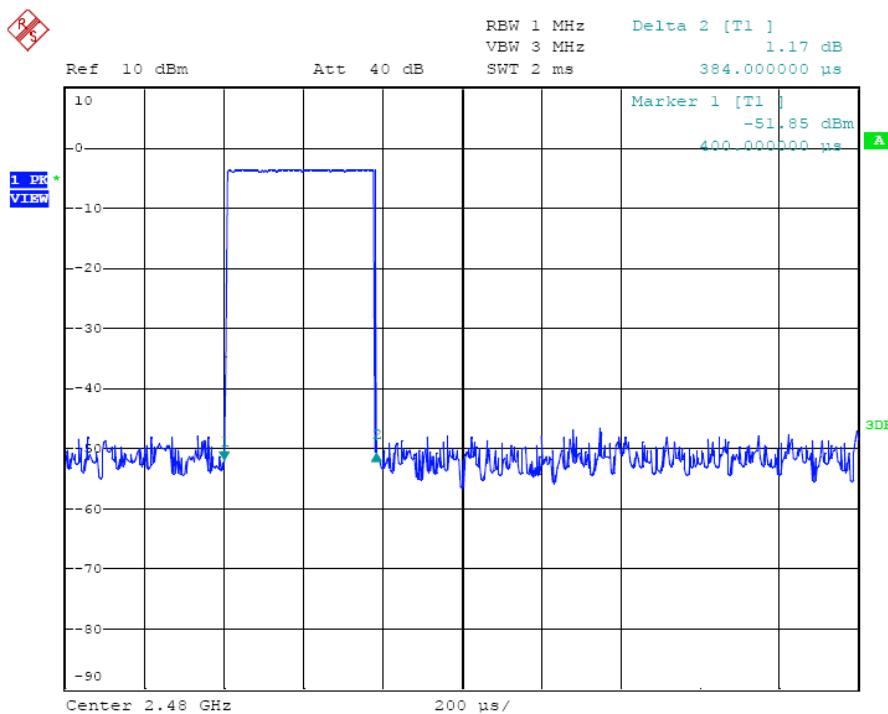
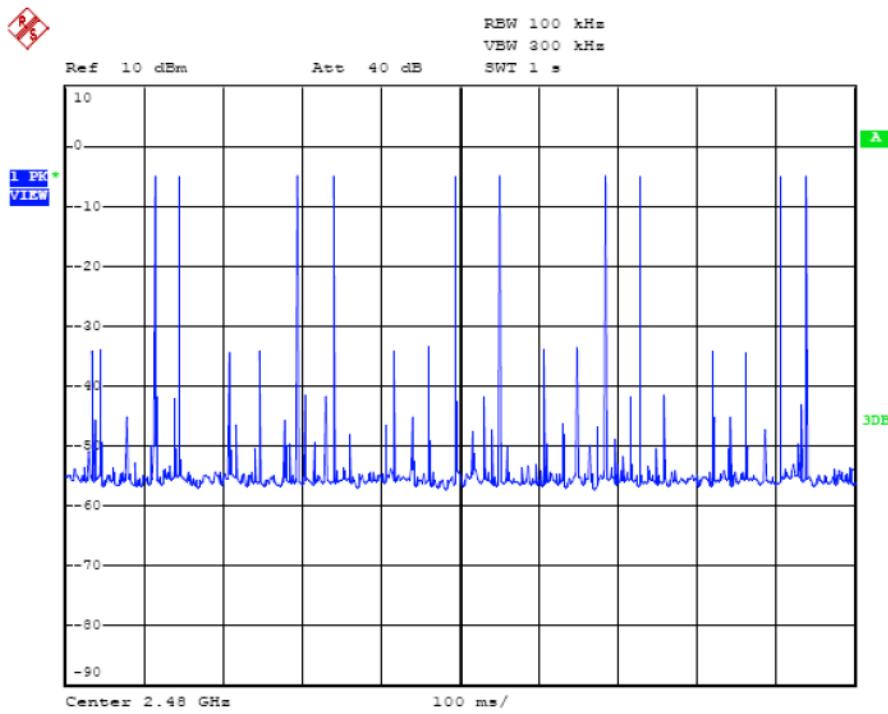
Dwell time = pulse time  $\times$  burst (in 1 sec.)  $\times$  31.6

Channel	Channel Frequency (MHz)	Pulse Time (ms)	Burst (in 1 sec.)	Dwell Time (ms)	Limit (ms)
Low	2402	0.384	10	121.3	400
Middle	2441	0.384	10	121.3	400
High	2480	0.384	10	121.3	400

The spectrum analyzer plots are attached as below.

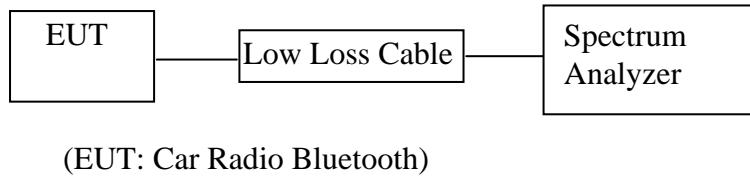






## 9. MAXIMUM PEAK OUTPUT POWER TEST

### 9.1. Block Diagram of Test Setup



### 9.2. The Requirement For Section 15.247(b)(1)

Section 15.247(b)(1): For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

### 9.3. EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 9.3.1. Car Radio Bluetooth (EUT)

Model Number : 87752824  
 Serial Number : N/A  
 Manufacturer : Shenzhen Waikin Electronic Co., Ltd.

### 9.4. Operating Condition of EUT

#### 9.4.1. Setup the EUT and simulator as shown as Section 9.1.

#### 9.4.2. Turn on the power of all equipment.

#### 9.4.3. Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

## 9.5. Test Procedure

9.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

9.5.2. Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.

9.5.3. Measurement the maximum peak output power.

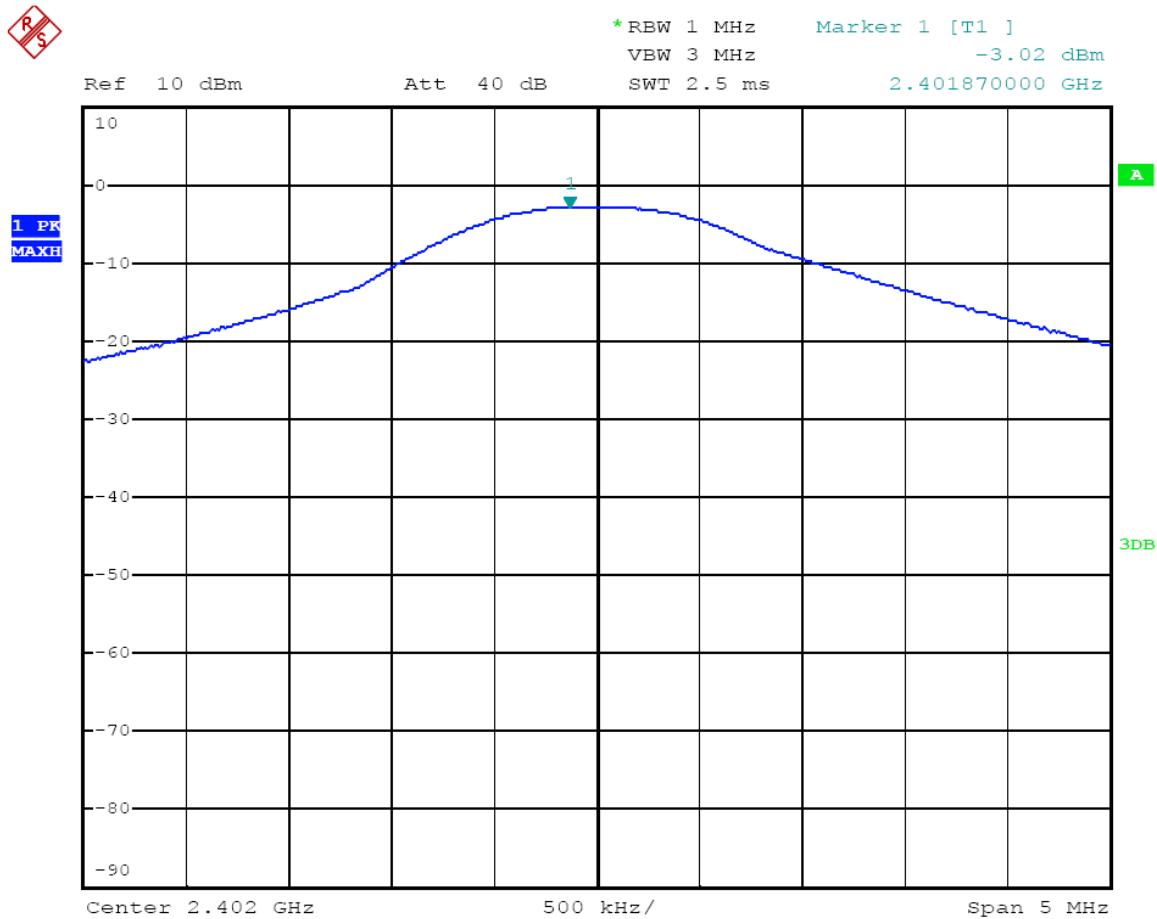
## 9.6. Test Result

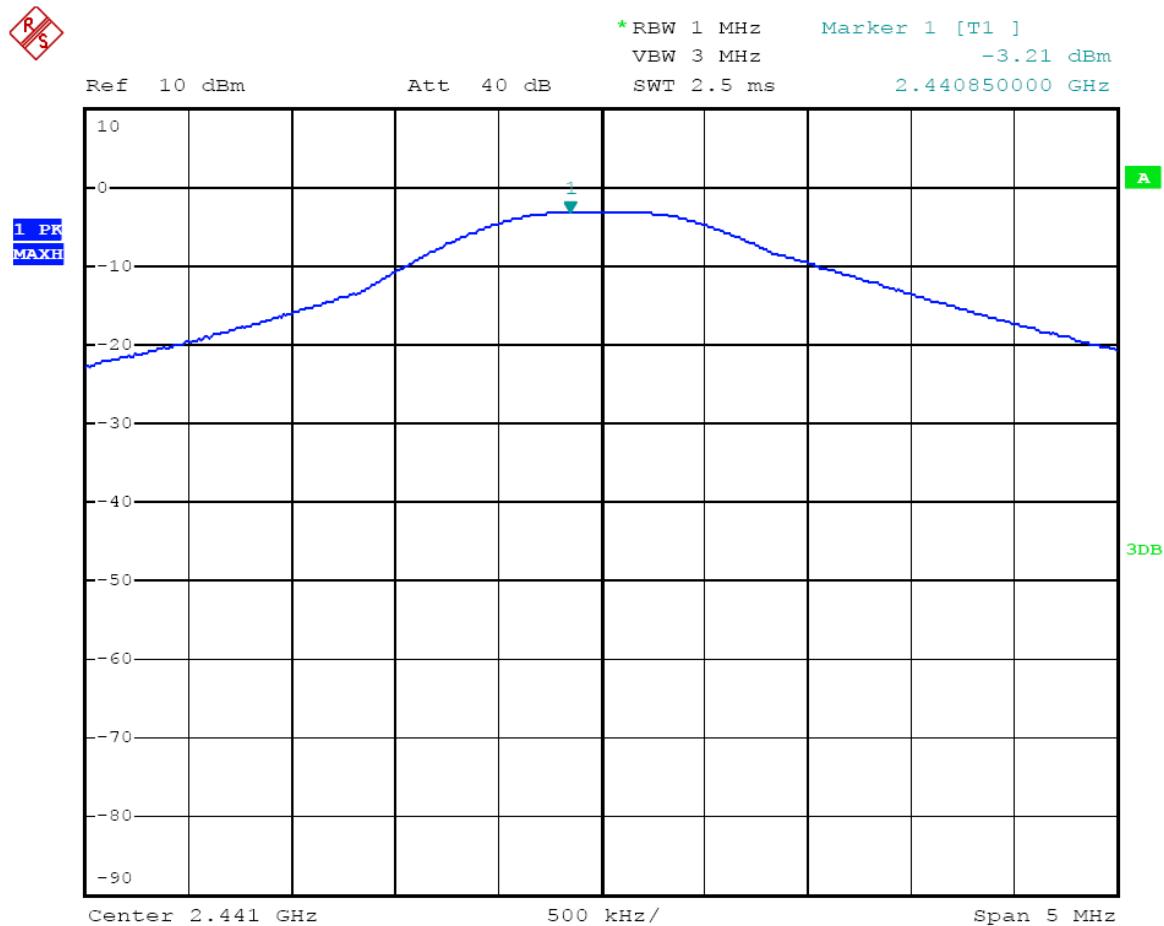
**PASS.**

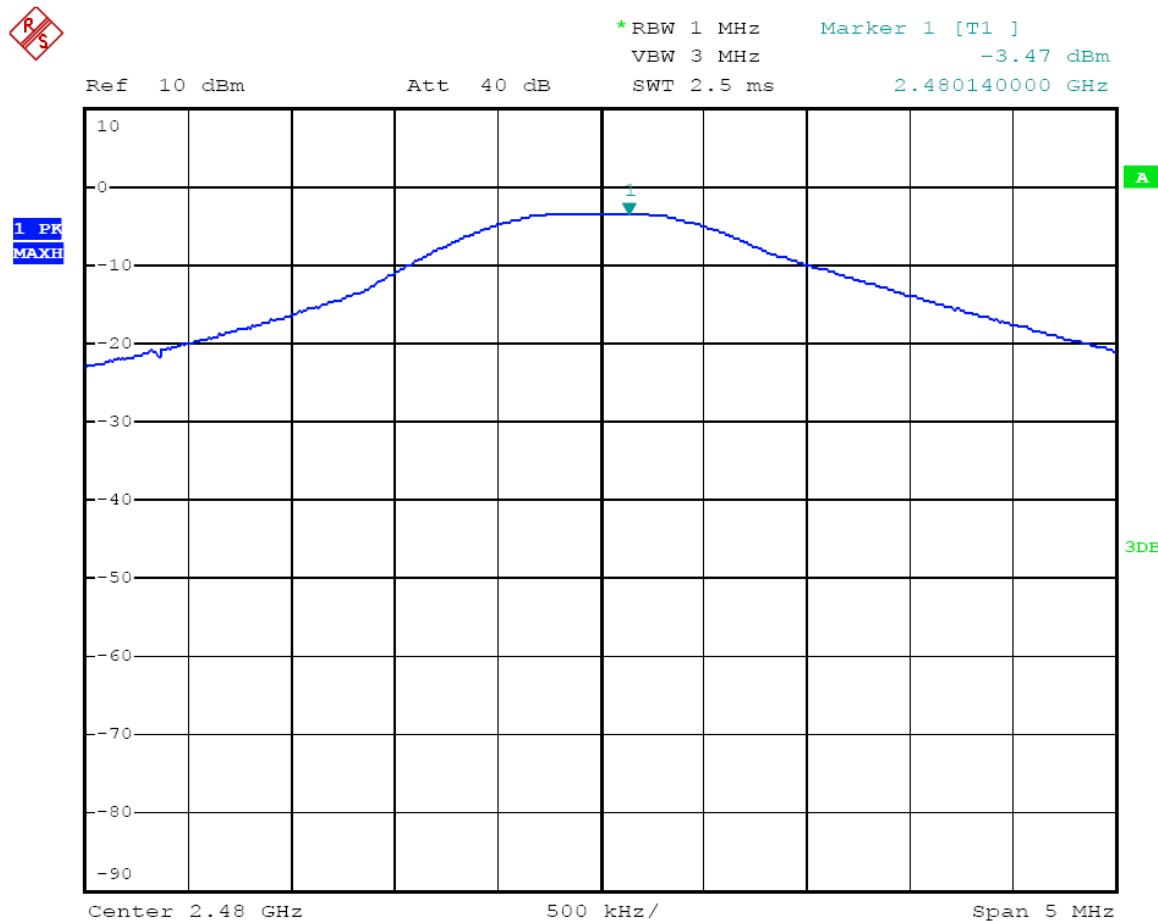
Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	TX	Test Engineer:	Joe

Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2402	-3.02	0.499	30 dBm / 1 W
Middle	2441	-3.21	0.478	30 dBm / 1 W
High	2480	-3.47	0.450	30 dBm / 1 W

The spectrum analyzer plots are attached as below.

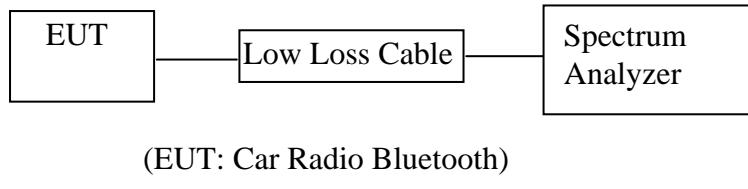






## 10. BAND EDGE COMPLIANCE TEST

### 10.1. Block Diagram of Test Setup



### 10.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 10.3. EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 10.3.1. Car Radio Bluetooth (EUT)

Model Number	:	87752824
Serial Number	:	N/A
Manufacturer	:	Shenzhen Waikin Electronic Co., Ltd.

## 10.4.Operating Condition of EUT

10.4.1.Setup the EUT and simulator as shown as Section 10.1.

10.4.2.Turn on the power of all equipment.

10.4.3.Let the EUT work in TX (Hopping off, Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

## 10.5.Test Procedure

10.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

10.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

10.5.3.The band edges was measured and recorded.

## 10.6. Test Result

**Pass**

Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	TX (Hopping off)	Test Engineer:	Joe

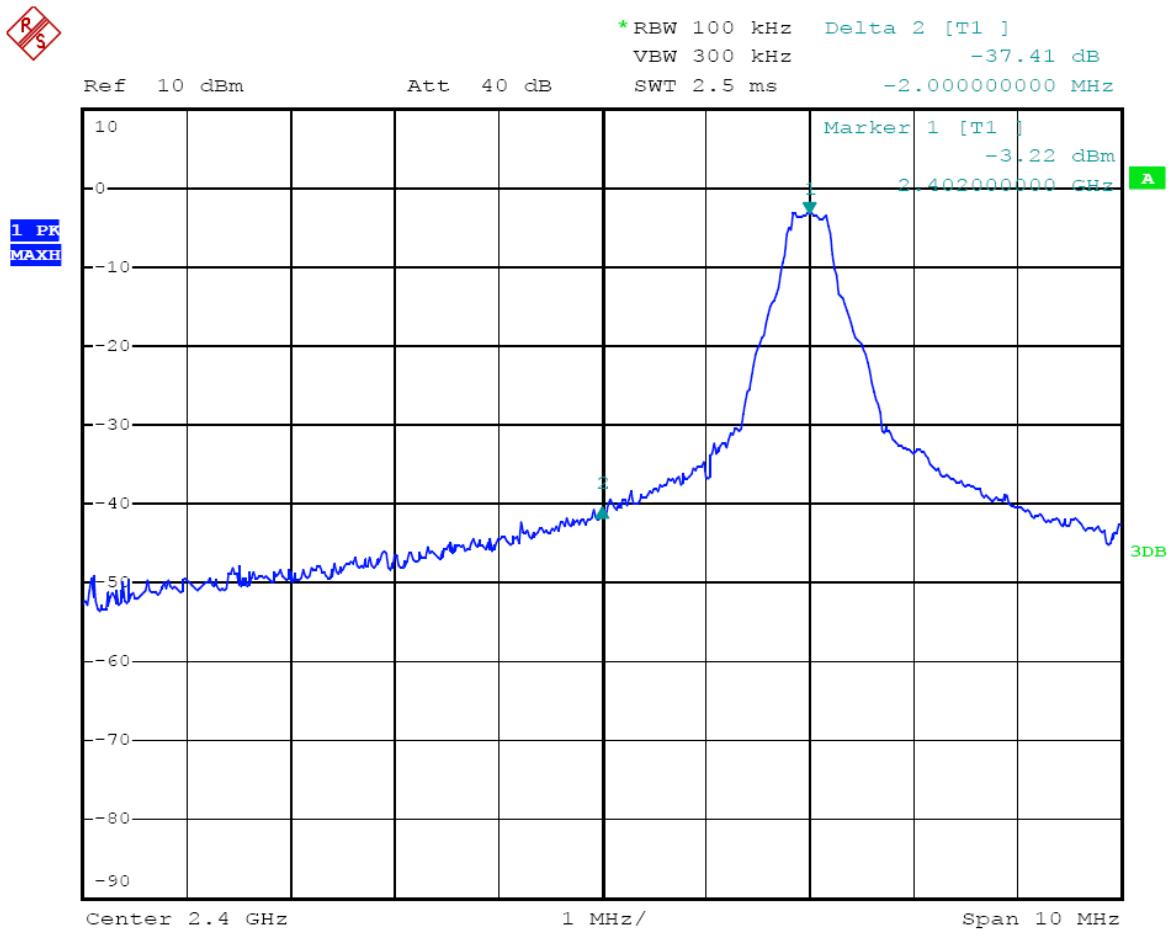
Conducted test

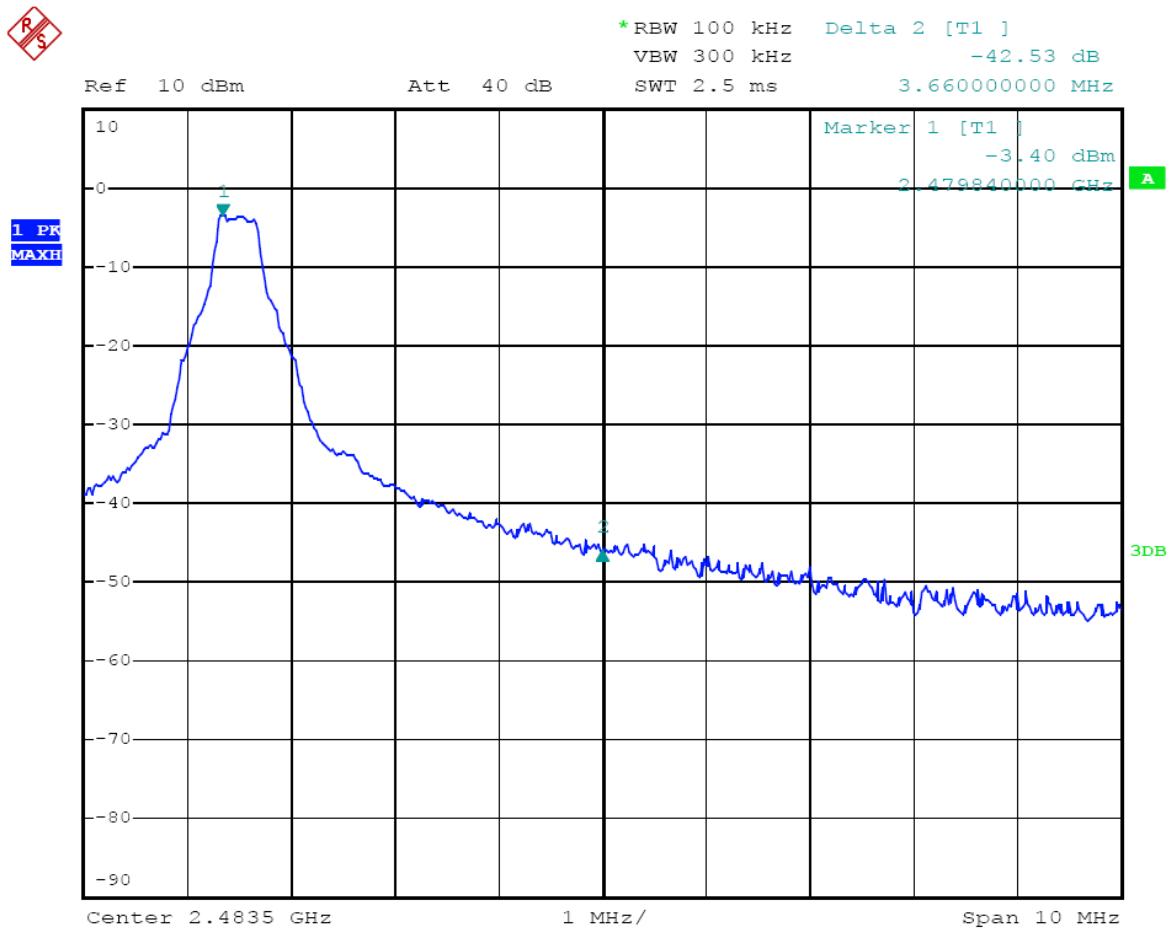
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2402	37.41	> 20dBc
2480	42.53	> 20dBc

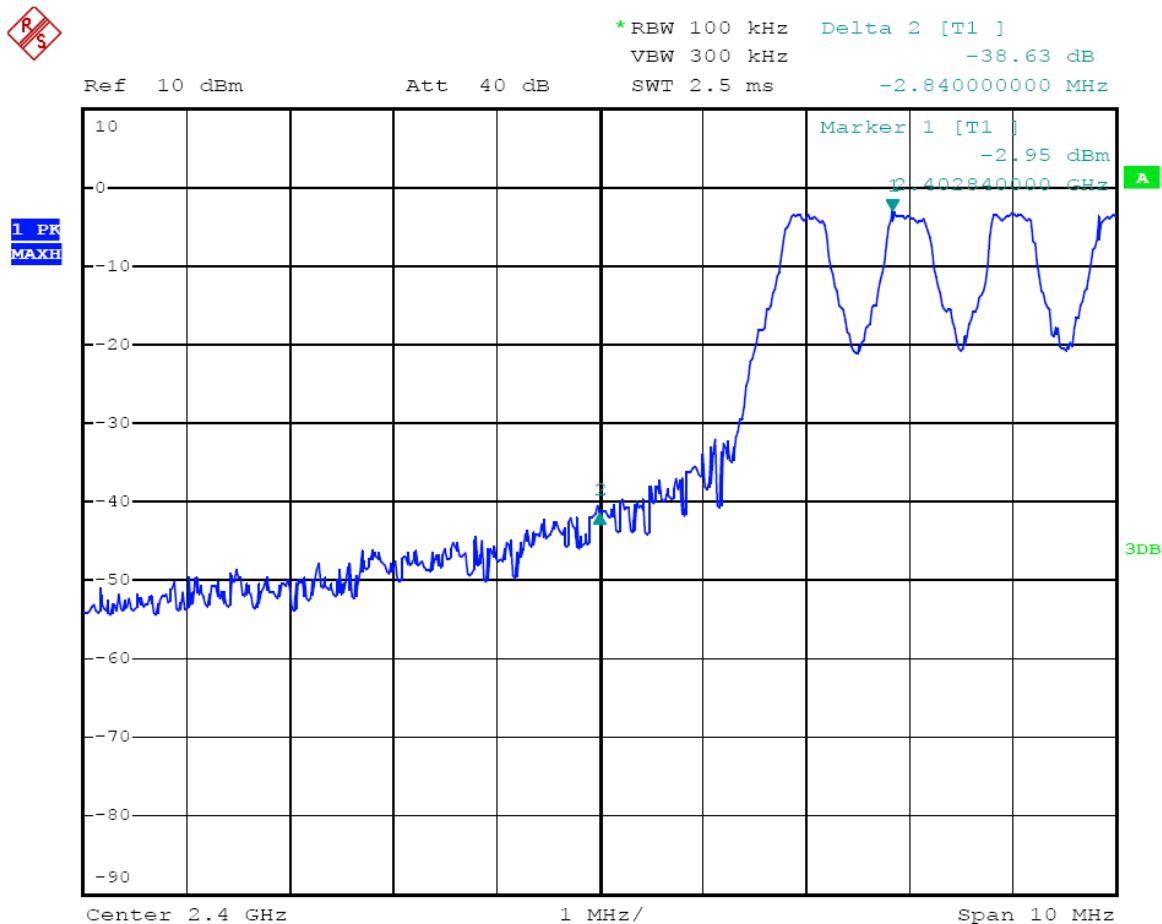
Date of Test:	June 23, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	TX (Hopping on)	Test Engineer:	Joe

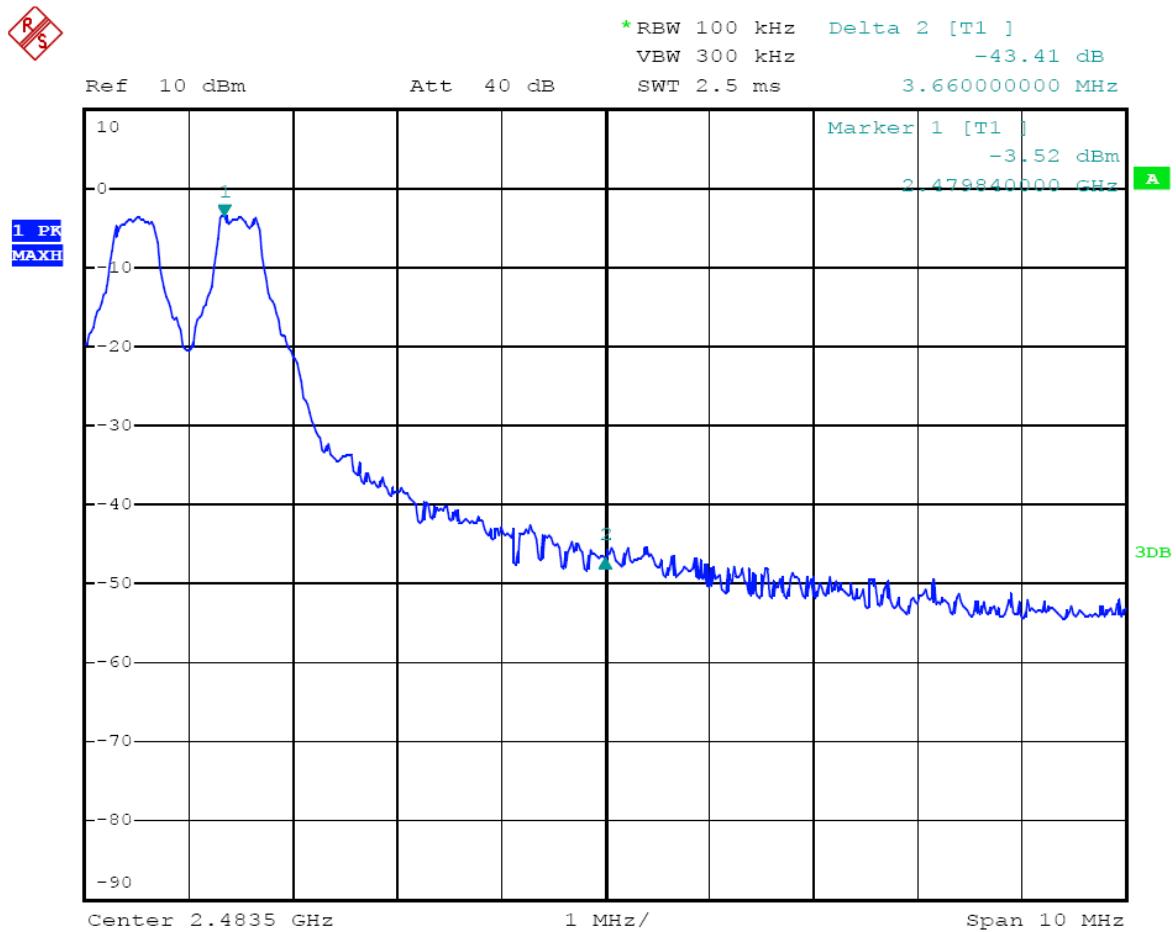
Conducted test

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2402	38.63	> 20dBc
2480	43.41	> 20dBc





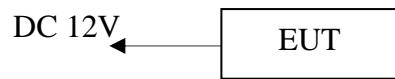




## 11. RADIATED SPURIOUS EMISSION TEST

### 11.1. Block Diagram of Test Setup

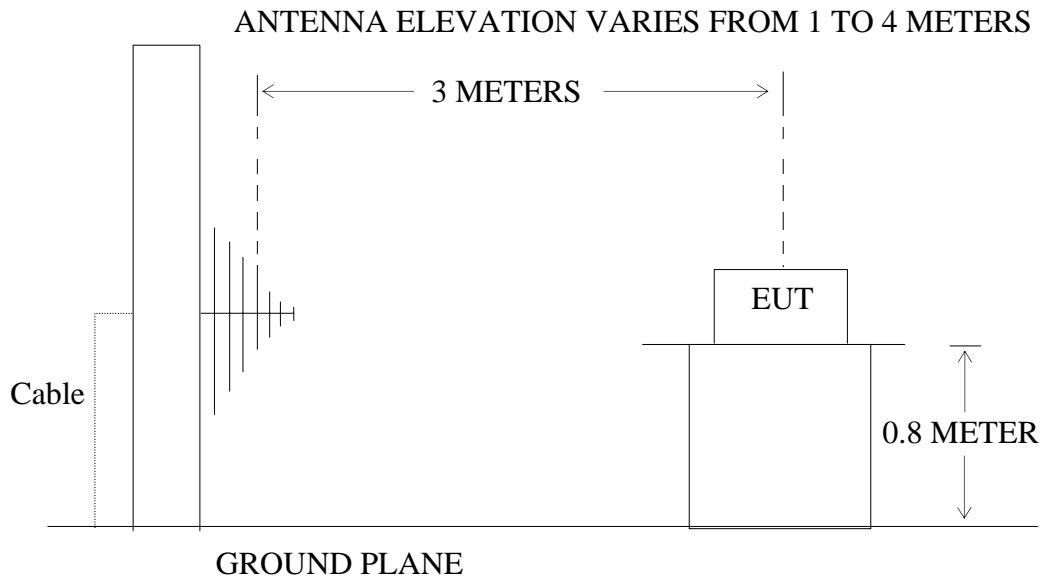
11.1.1. Block diagram of connection between the EUT and simulators



Setup: Transmitting mode

(EUT: Car Radio Bluetooth)

### 11.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: Car Radio Bluetooth)

## 11.2.The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

## 11.3.Restricted bands of operation

### 11.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510

<sup>2</sup>Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

## 11.4. Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 11.4.1. Car Radio Bluetooth (EUT)

Model Number : 87752824  
 Serial Number : N/A  
 Manufacturer : Shenzhen Waikin Electronic Co., Ltd.

## 11.5. Operating Condition of EUT

11.5.1. Setup the EUT and simulator as shown as Section 11.1.

11.5.2. Turn on the power of all equipment.

11.5.3. Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

## 11.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver (R&S ESI26) is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

11.7.The Field Strength of Radiation Emission Measurement Results  
**PASS.**

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	Car Radio Bluetooth	Humidity:	50%
Model No.:	87752824	Power Supply:	DC 12V
Test Mode:	TX (2402MHz)	Test Engineer:	Joe

**For 30MHz-1000MHz**

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dB $\mu$ V/m)	Factor Corr. (dB)	Result	Limit	Margin	Polarization
			QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

**For 1GHz-25GHz**

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dB $\mu$ V/m)		Factor Corr. (dB)	Result(dB $\mu$ V/m)		Limit(dB $\mu$ V/m)		Margin(dB $\mu$ V/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2400.00	37.83	43.87	-7.46	30.37	36.41	54	74	-23.63	-37.59	Vertical
2402.010	102.37	108.40	-7.45	94.92	100.95	-	-	-	-	Vertical
*4804.016	49.12	55.15	-0.30	48.82	54.85	54	74	-5.18	-19.15	Vertical
2400.00	38.76	44.81	-7.46	31.30	37.35	54	74	-22.70	-36.65	Horizontal
2402.010	102.91	108.95	-7.45	95.46	101.50	-	-	-	-	Horizontal
*4804.016	49.64	55.65	-0.30	49.34	55.35	54	74	-4.66	-18.65	Horizontal

**Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.**

**2. \*: Denotes restricted band of operation.**

Date of Test: June 21, 2010  
 EUT: Car Radio Bluetooth  
 Model No.: 87752824  
 Test Mode: TX (2441MHz)

Temperature: 25°C  
 Humidity: 50%  
 Power Supply: DC 12V  
 Test Engineer: Joe

### For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dB $\mu$ V/m)	Factor Corr.	Result (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)	Margin (dB)	Polarization
			QP	QP			
	QP	(dB)	QP	QP	QP	QP	
-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	Horizontal

### For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dB $\mu$ V/m)		Factor Corr. (dB)	Result(dB $\mu$ V/m)		Limit(dB $\mu$ V/m)		Margin(dB $\mu$ V/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2441.010	102.47	108.51	-7.35	95.12	101.16	-	-	-	-	Vertical
*4882.018	48.38	54.40	0.14	48.52	54.54	54	74	-5.48	-19.46	Vertical
2441.010	102.75	108.79	-7.35	95.40	101.44	-	-	-	-	Horizontal
*4882.018	49.04	55.08	0.14	49.18	55.22	54	74	-4.82	-18.78	Horizontal

**Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.**

**2. \*: Denotes restricted band of operation.**

Date of Test: June 21, 2010  
 EUT: Car Radio Bluetooth  
 Model No.: 87752824  
 Test Mode: TX (2480MHz)

Temperature: 25°C  
 Humidity: 50%  
 Power Supply: DC 12V  
 Test Engineer: Joe

### For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dB $\mu$ V/m)	Factor Corr.	Result		Limit (dB $\mu$ V/m)	Margin (dB)	Polarization
			QP	QP			
	QP	(dB)	QP	QP	QP	QP	
-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	Horizontal

### For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dB $\mu$ V/m)		Factor Corr. (dB)	Result(dB $\mu$ V/m)		Limit(dB $\mu$ V/m)		Margin(dB $\mu$ V/m)		Polarizati on
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2480.009	103.02	109.08	-7.37	95.65	101.71	-	-	-	-	Vertical
2483.500	37.79	43.82	-7.37	30.42	36.45	54	74	-23.58	-37.55	Vertical
4960.015	48.28	54.32	0.52	48.80	54.84	54	74	-5.20	-19.16	Vertical
2480.009	103.50	109.56	-7.37	96.13	102.19	-	-	-	-	Horizontal
2483.500	38.20	44.22	-7.37	30.83	36.85	54	74	-23.17	-37.15	Horizontal
4960.015	49.10	55.13	0.52	49.62	55.65	54	74	-4.38	-18.35	Horizontal

**Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.**

**2. \*: Denotes restricted band of operation.**


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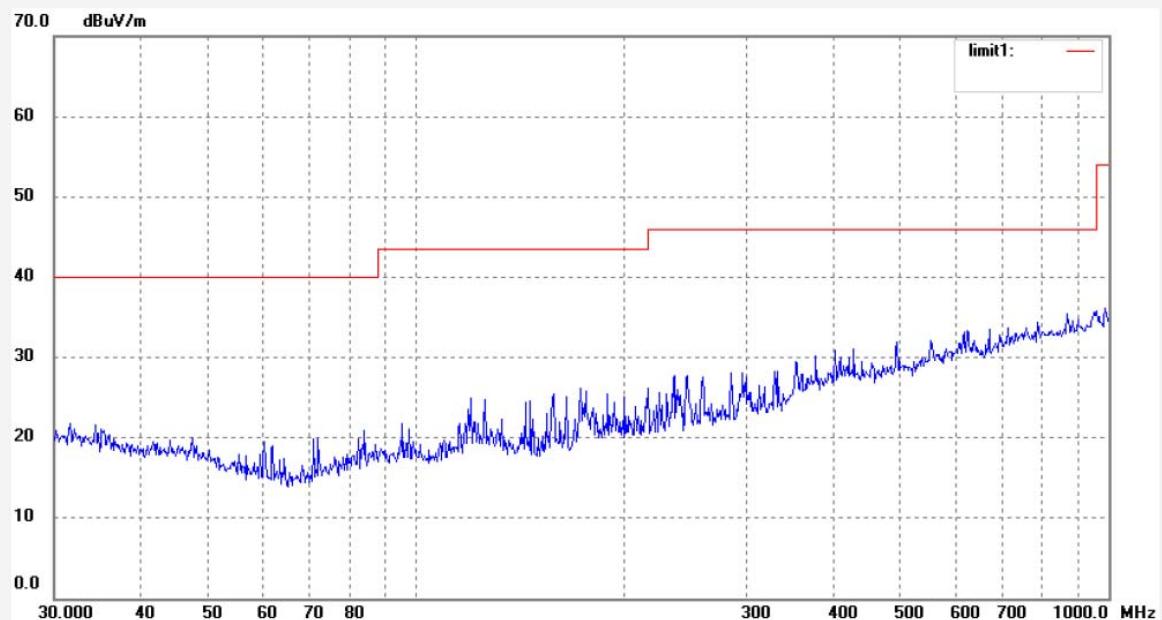
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 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5206	Polarization:	Horizontal
Standard:	FCC Class B 3M Radiated	Power Source:	DC 12V
Test item:	Radiation Test	Date:	2010/06/21
Temp.( C)/Hum.(%)	25 C / 50 %	Time:	9:06:19
EUT:	Car Radio Bluetooth	Engineer Signature:	Joe
Mode:	TX 2402MHz	Distance:	3m
Model:	87752824		
Manufacturer:	Shenzhen Waikin Electronic Co., Ltd.		
Note:	Sample No.:101459 Report No.:ATE20101270		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark


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Site: 966 chamber

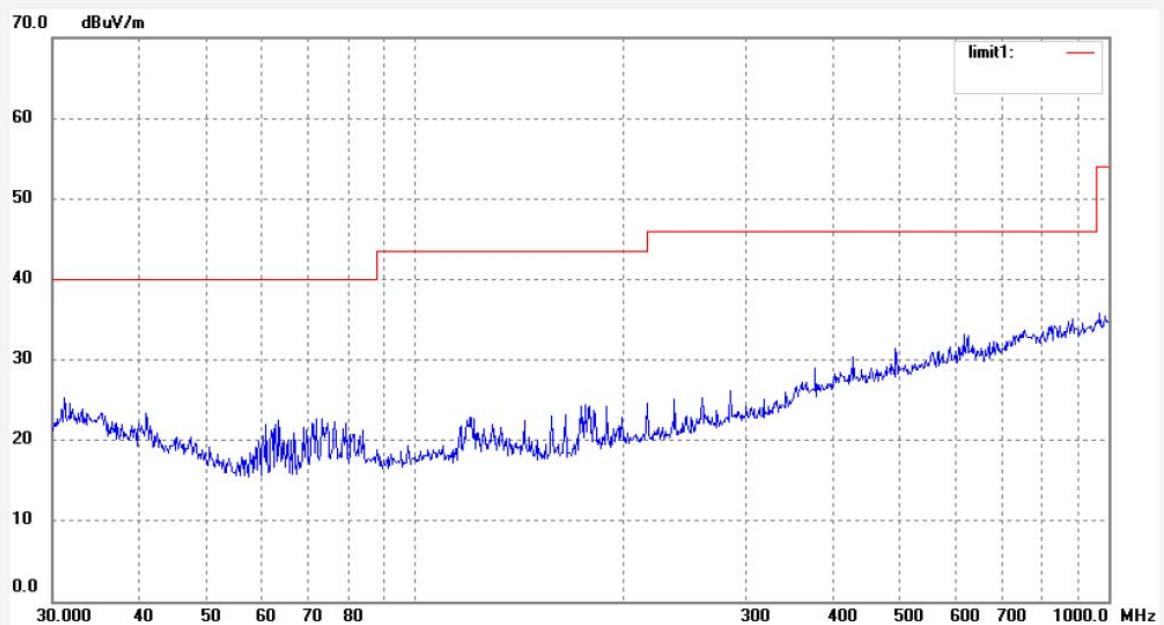
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5207  
 Standard: FCC Class B 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 50 %  
 EUT: Car Radio Bluetooth  
 Mode: TX 2402MHz  
 Model: 87752824  
 Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Polarization: Vertical  
 Power Source: DC 12V  
 Date: 2010/06/21  
 Time: 9:09:52  
 Engineer Signature: Joe  
 Distance: 3m

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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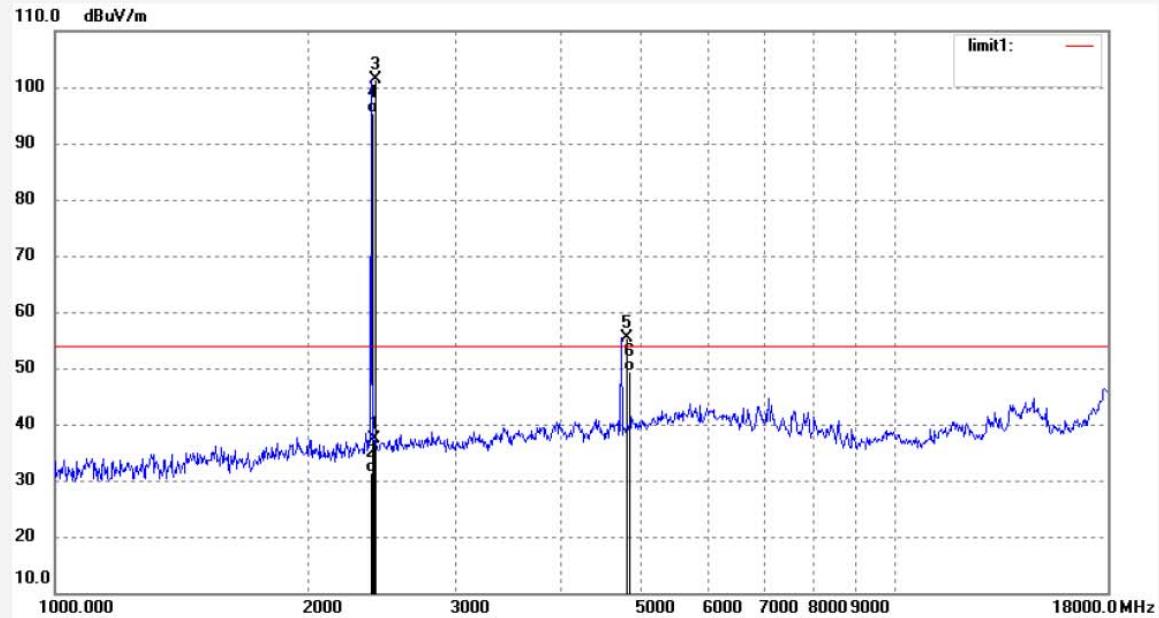
 Site: 966 chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

Job No.: RTTE #5214  
 Standard: FCC Class B 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 50 %  
 EUT: Car Radio Bluetooth  
 Mode: TX 2402MHz  
 Model: 87752824

Polarization: Horizontal  
 Power Source: DC 12V  
 Date: 2010/06/21  
 Time: 9:37:25  
 Engineer Signature: Joe  
 Distance: 3m

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	44.81	-7.46	37.35	74.00	-36.65	peak			
2	2400.000	38.76	-7.46	31.30	54.00	-22.70	AVG			
3	2402.010	108.95	-7.45	101.50	-	-	peak			
4	2402.010	102.91	-7.45	95.46	-	-	AVG			
5	4804.016	55.65	-0.30	55.35	74.00	-18.65	peak			
6	4804.016	49.64	-0.30	49.34	54.00	-4.66	AVG			


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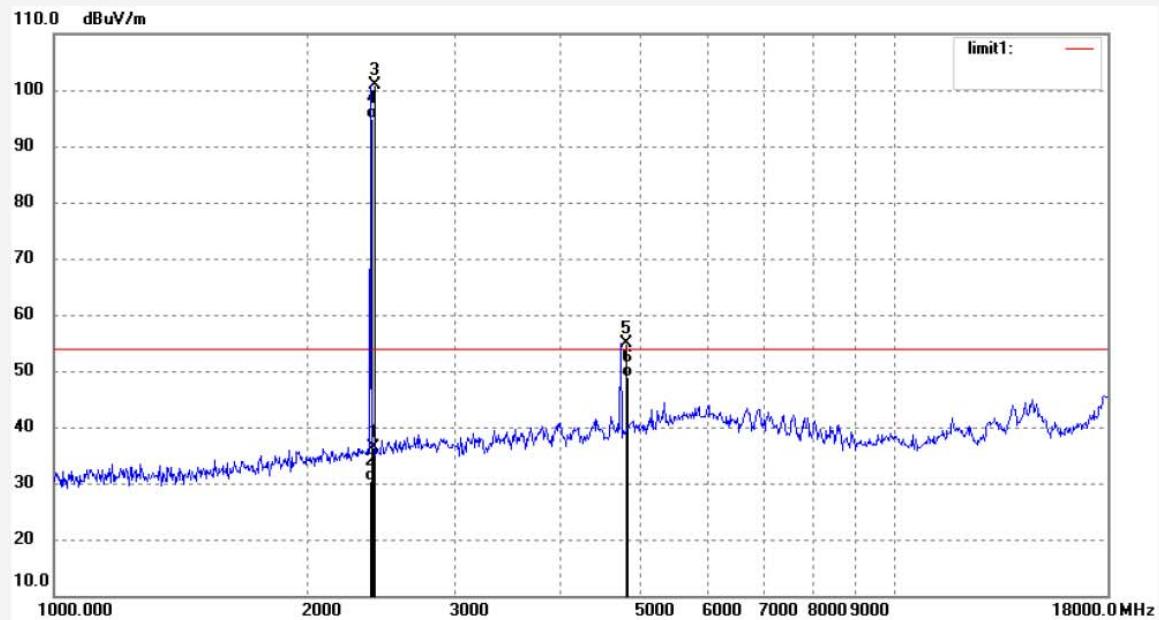
 Site: 966 chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

 Job No.: RTTE #5215  
 Standard: FCC Class B 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 50 %  
 EUT: Car Radio Bluetooth  
 Mode: TX 2402MHz  
 Model: 87752824

 Polarization: Vertical  
 Power Source: DC 12V  
 Date: 2010/06/21  
 Time: 9:41:36  
 Engineer Signature: Joe  
 Distance: 3m

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	43.87	-7.46	36.41	74.00	-37.59	peak			
2	2400.000	37.83	-7.46	30.37	54.00	-23.63	AVG			
3	2402.010	108.40	-7.45	100.95	-	-	peak			
4	2402.010	102.37	-7.45	94.92	-	-	AVG			
5	4804.016	55.15	-0.30	54.85	74.00	-19.15	peak			
6	4804.016	49.12	-0.30	48.82	54.00	-5.18	AVG			


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Job No.: RTTE #5220

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 12V

Test item: Radiation Test

Date: 2010/06/21

Temp.( C)/Hum.(%) 25 C / 50 %

Time: 10:06:38

EUT: Car Radio Bluetooth

Engineer Signature: Joe

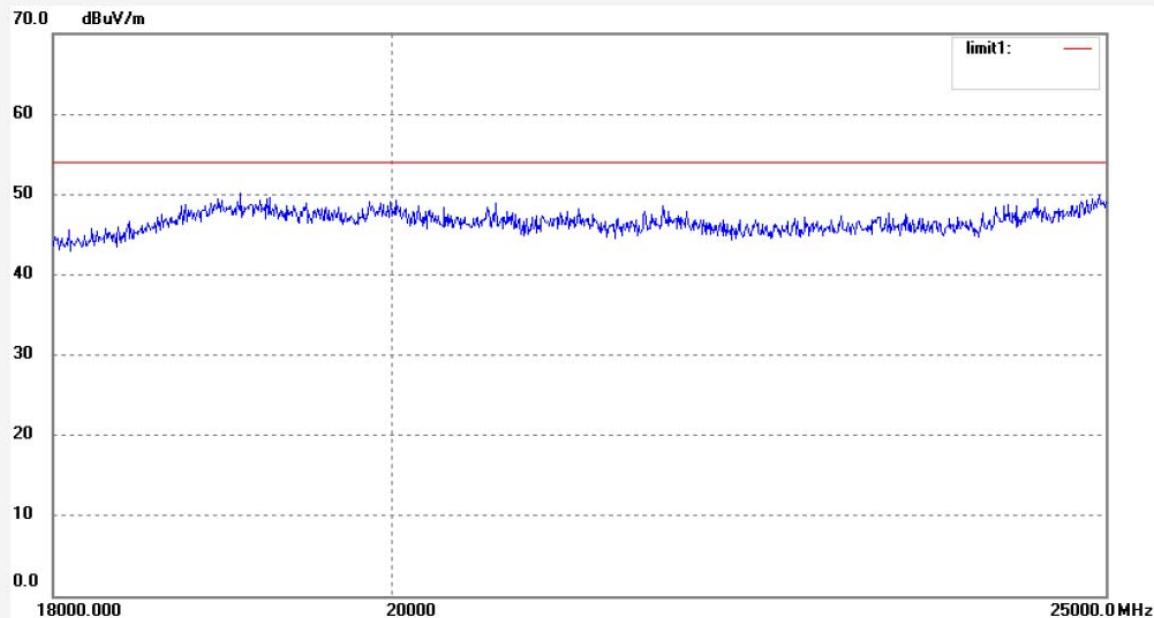
Mode: TX 2402MHz

Distance: 3m

Model: 87752824

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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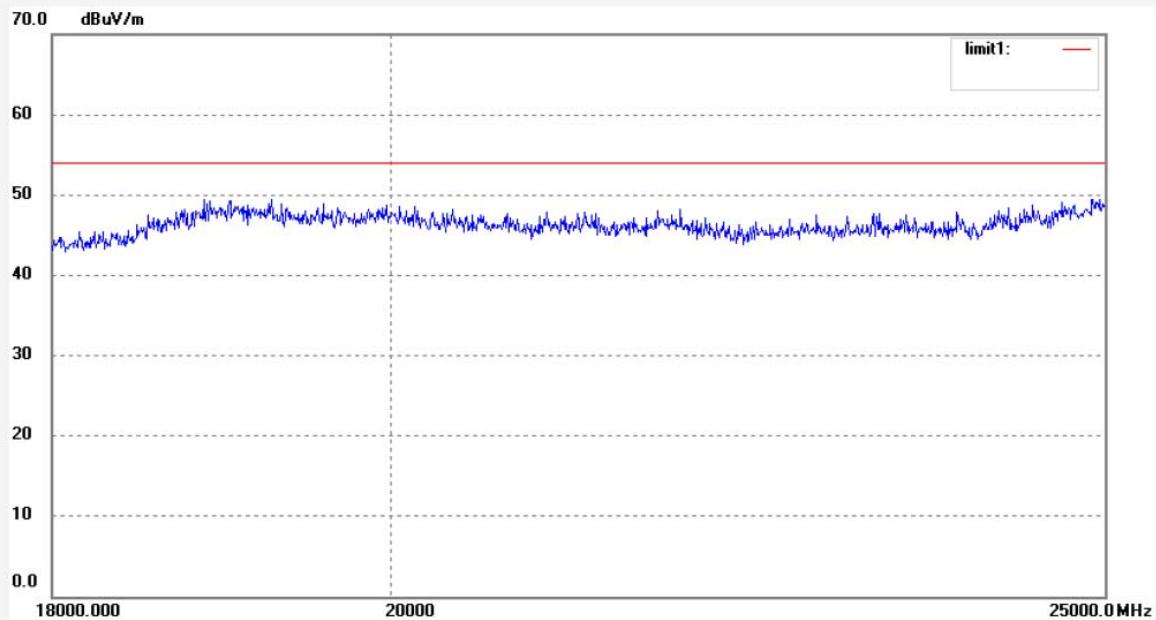
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5221	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2010/06/21
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 10:10:42
EUT: Car Radio Bluetooth	Engineer Signature: Joe
Mode: TX 2402MHz	Distance: 3m
Model: 87752824	
Manufacturer: Shenzhen Waikin Electronic Co., Ltd.	

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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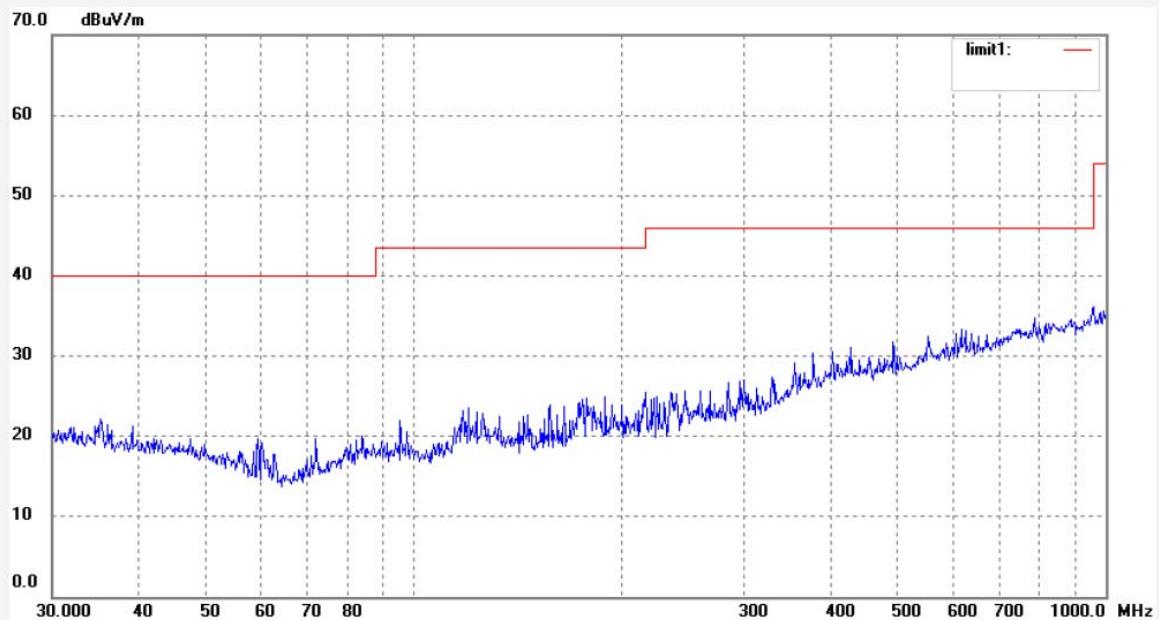
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 Science & Industry Park,Nanshan Shenzhen,P.R.China

 Site: 966 chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

Job No.: RTTE #5209  
 Standard: FCC Class B 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 50 %  
 EUT: Car Radio Bluetooth  
 Mode: TX 2441MHz  
 Model: 87752824  
 Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Polarization: Horizontal  
 Power Source: DC 12V  
 Date: 2010/06/21  
 Time: 9:17:59  
 Engineer Signature: Joe  
 Distance: 3m

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5208

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 12V

Test item: Radiation Test

Date: 2010/06/21

Temp.( C)/Hum.(%) 25 C / 50 %

Time: 9:14:26

EUT: Car Radio Bluetooth

Engineer Signature: Joe

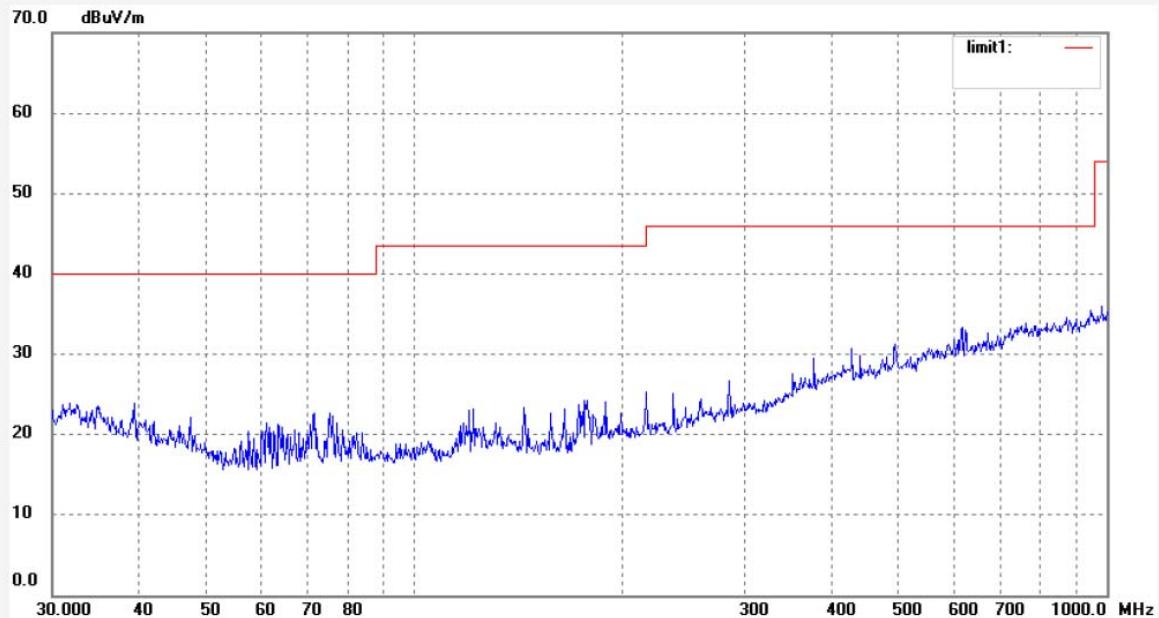
Mode: TX 2441MHz

Distance: 3m

Model: 87752824

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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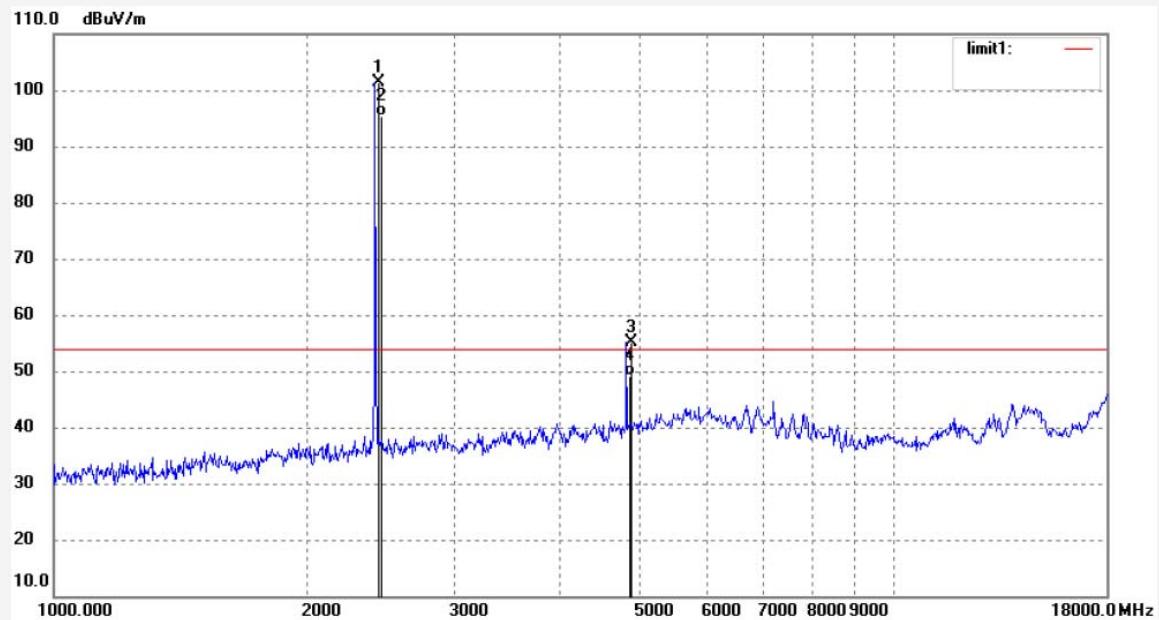
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5217	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2010/06/21
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 9:50:20
EUT: Car Radio Bluetooth	Engineer Signature: Joe
Mode: TX 2441MHz	Distance: 3m
Model: 87752824	
Manufacturer: Shenzhen Waikin Electronic Co., Ltd.	

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.010	108.79	-7.35	101.44	-	-	peak			
2	2441.010	102.75	-7.35	95.40	-	-	AVG			
3	4882.018	55.08	0.14	55.22	74.00	-18.78	peak			
4	4882.018	49.04	0.14	49.18	54.00	-4.82	AVG			


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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5216

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 12V

Test item: Radiation Test

Date: 2010/06/21

Temp.( C)/Hum.(%) 25 C / 50 %

Time: 9:46:11

EUT: Car Radio Bluetooth

Engineer Signature: Joe

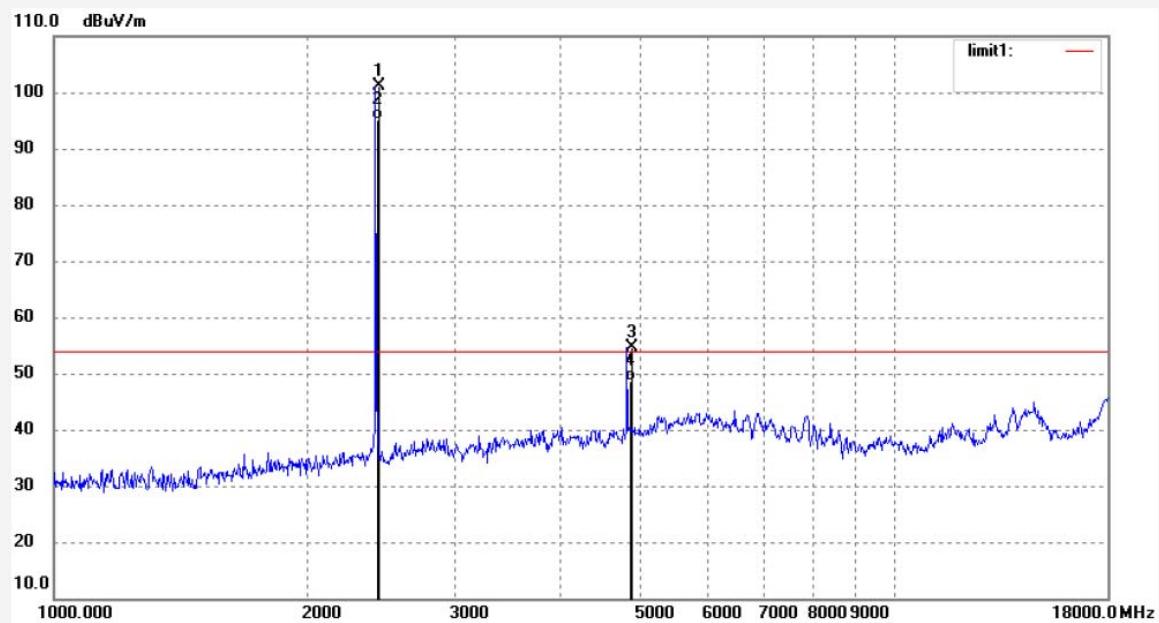
Mode: TX 2441MHz

Distance: 3m

Model: 87752824

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.010	108.51	-7.35	101.16	-	-	peak			
2	2441.010	102.47	-7.35	95.12	-	-	AVG			
3	4882.018	54.40	0.14	54.54	74.00	-19.46	peak			
4	4882.018	48.38	0.14	48.52	54.00	-5.48	AVG			

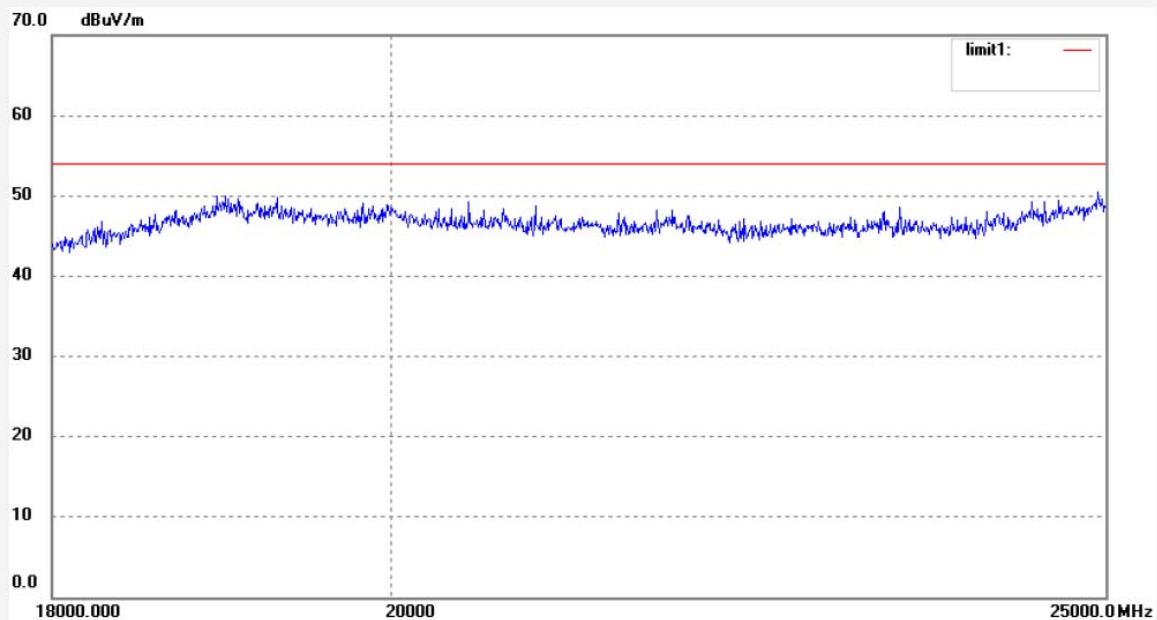

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 Site: 966 chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

Job No.:	RTTE #5223	Polarization:	Horizontal
Standard:	FCC Class B 3M Radiated	Power Source:	DC 12V
Test item:	Radiation Test	Date:	2010/06/21
Temp.( C)/Hum.(%)	25 C / 50 %	Time:	10:19:33
EUT:	Car Radio Bluetooth	Engineer Signature:	Joe
Mode:	TX 2441MHz	Distance:	3m
Model:	87752824	Manufacturer: Shenzhen Waikin Electronic Co., Ltd.	

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5222

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 12V

Test item: Radiation Test

Date: 2010/06/21

Temp.( C)/Hum.(%) 25 C / 50 %

Time: 10:15:30

EUT: Car Radio Bluetooth

Engineer Signature: Joe

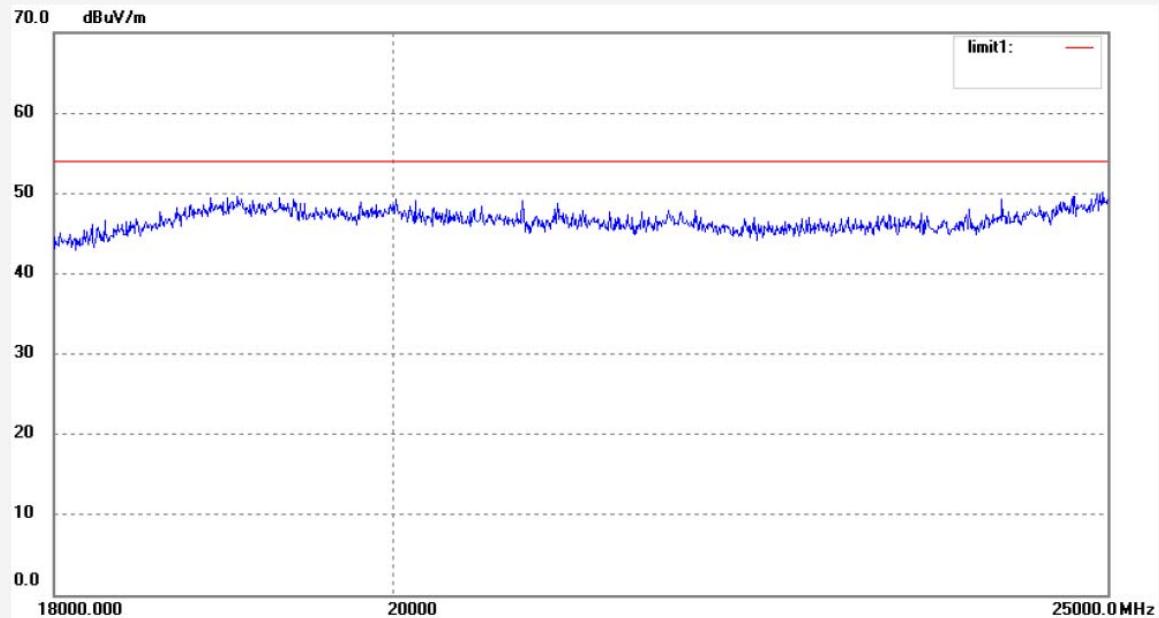
Mode: TX 2441MHz

Distance: 3m

Model: 87752824

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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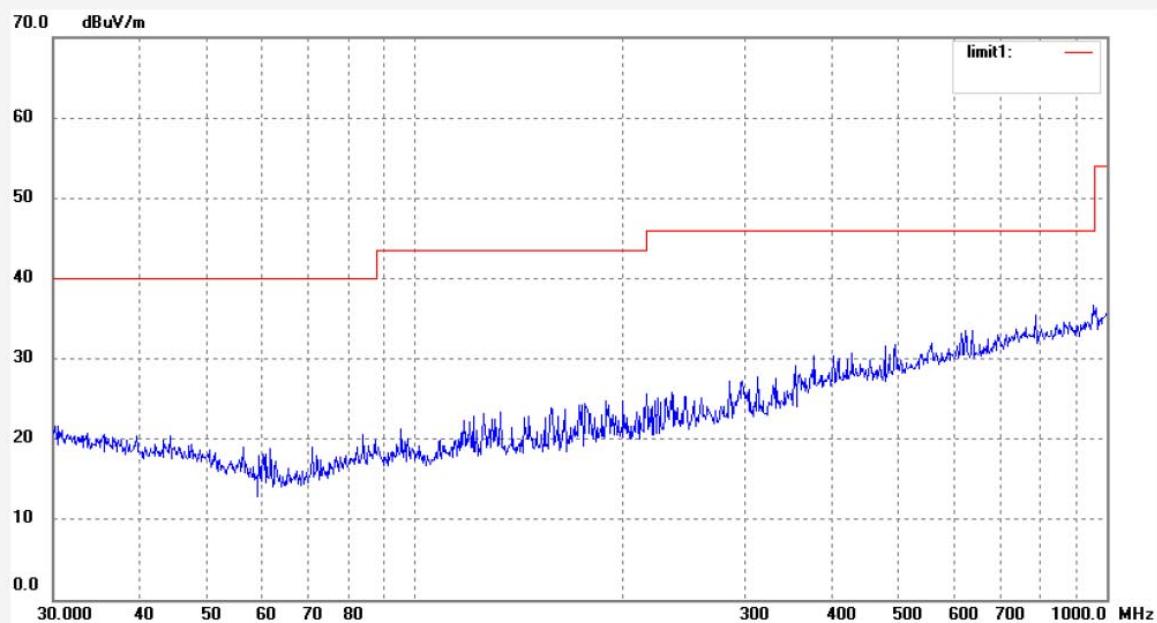
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
 Science & Industry Park,Nanshan Shenzhen,P.R.China

 Site: 966 chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

Job No.: RTTE #5210  
 Standard: FCC Class B 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 50 %  
 EUT: Car Radio Bluetooth  
 Mode: TX 2480MHz  
 Model: 87752824  
 Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Polarization: Horizontal  
 Power Source: DC 12V  
 Date: 2010/06/21  
 Time: 9:22:30  
 Engineer Signature: Joe  
 Distance: 3m

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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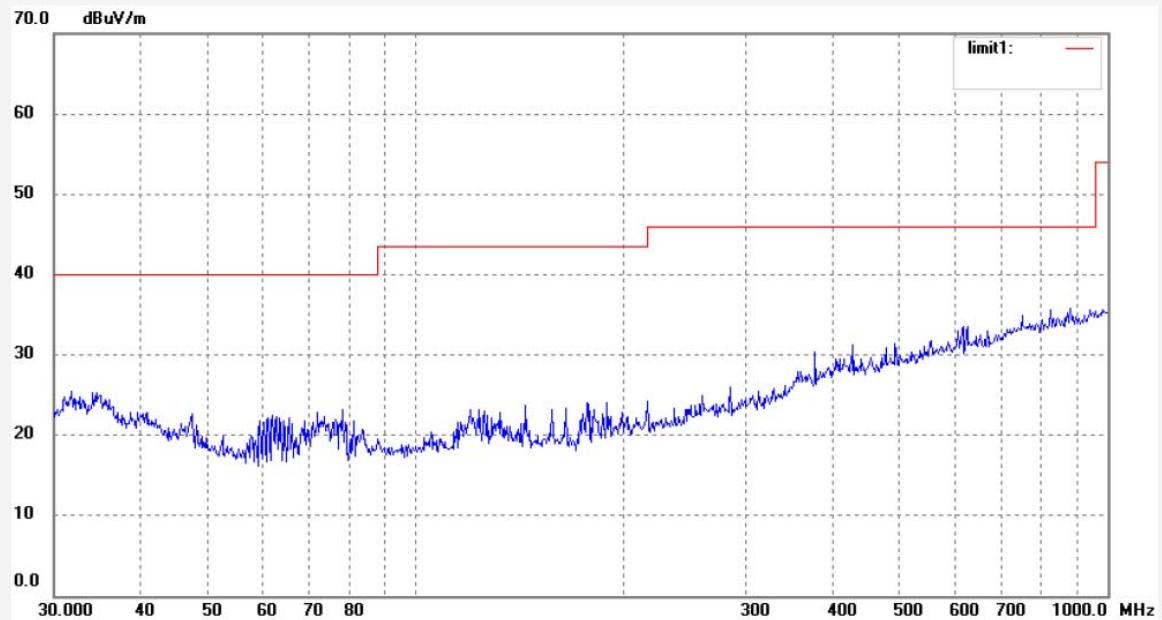
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5211  
 Standard: FCC Class B 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 50 %  
 EUT: Car Radio Bluetooth  
 Mode: TX 2480MHz  
 Model: 87752824  
 Manufacturer: Shenzhen Waikin Electronic Co., Ltd.  
 Note: Sample No.:101459 Report No.:ATE20101270

Polarization: Vertical  
 Power Source: DC 12V  
 Date: 2010/06/21  
 Time: 9:26:04  
 Engineer Signature: Joe  
 Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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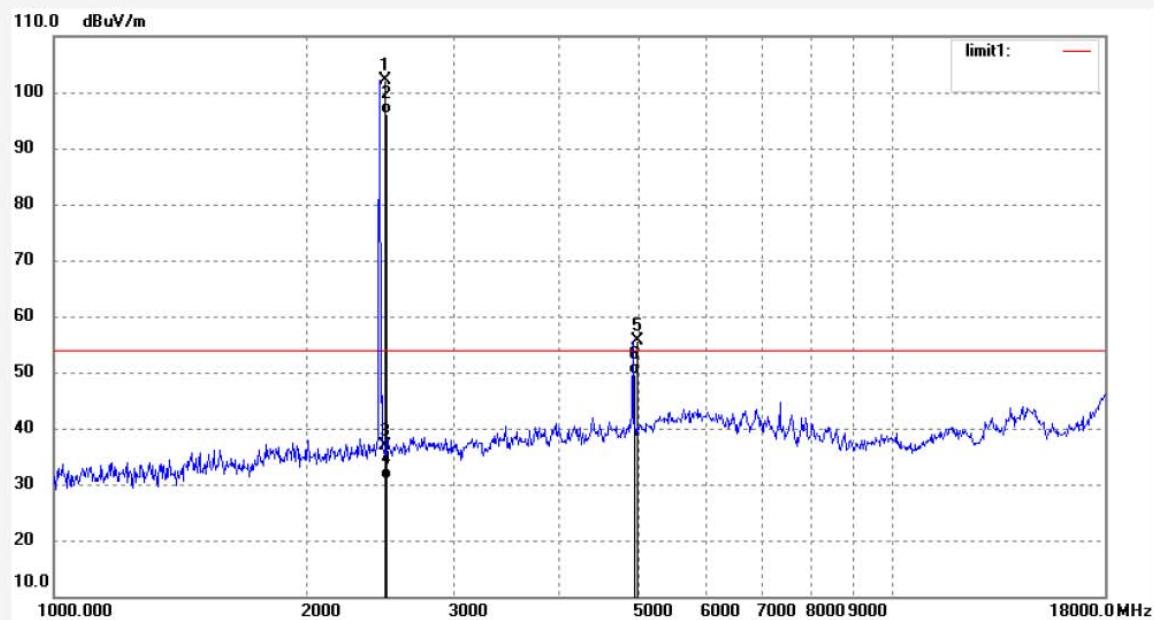
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5218	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2010/06/21
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 9:54:58
EUT: Car Radio Bluetooth	Engineer Signature: Joe
Mode: TX 2480MHz	Distance: 3m
Model: 87752824	
Manufacturer: Shenzhen Waikin Electronic Co., Ltd.	

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.009	109.56	-7.37	102.19	-	-	peak			
2	2480.009	103.50	-7.37	96.13	-	-	AVG			
3	2483.500	44.22	-7.37	36.85	74.00	-37.15	peak			
4	2483.500	38.20	-7.37	30.83	54.00	-23.17	AVG			
5	4960.015	55.13	0.52	55.65	74.00	-18.35	peak			
6	4960.015	49.10	0.52	49.62	54.00	-4.38	AVG			

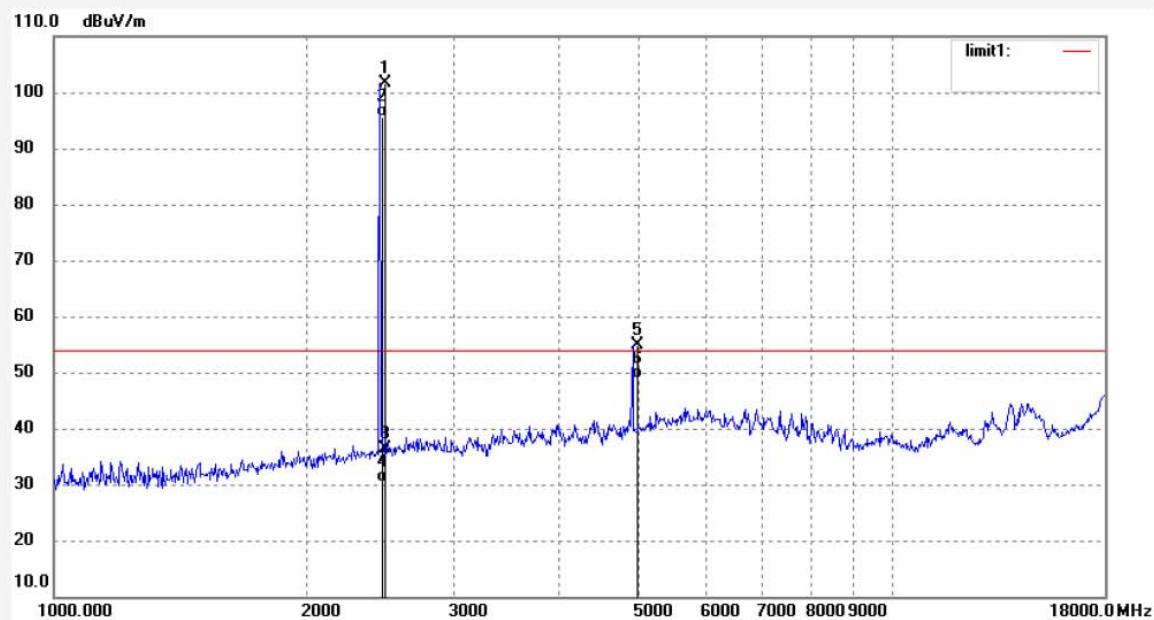

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 Site: 966 chamber  
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Job No.: RTTE #5219	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2010/06/21
Temp.( C)/Hum.(%) 25 C / 50 %	Time: 9:59:07
EUT: Car Radio Bluetooth	Engineer Signature: Joe
Mode: TX 2480MHz	Distance: 3m
Model: 87752824	
Manufacturer: Shenzhen Waikin Electronic Co., Ltd.	

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.009	109.08	-7.37	101.71	-	-	peak			
2	2480.009	103.02	-7.37	95.65	-	-	AVG			
3	2483.500	43.82	-7.37	36.45	74.00	-37.55	peak			
4	2483.500	37.79	-7.37	30.42	54.00	-23.58	AVG			
5	4960.015	54.32	0.52	54.84	74.00	-19.16	peak			
6	4960.015	48.28	0.52	48.80	54.00	-5.20	AVG			


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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5224

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 12V

Test item: Radiation Test

Date: 2010/06/21

Temp.( C)/Hum.(%) 25 C / 50 %

Time: 10:24:19

EUT: Car Radio Bluetooth

Engineer Signature: Joe

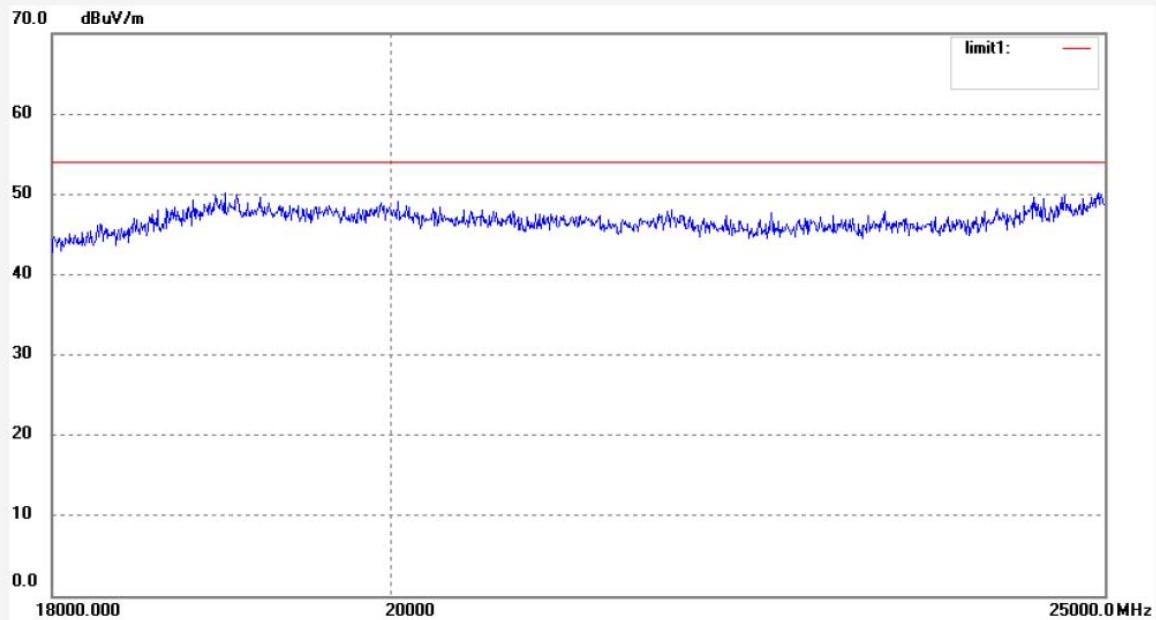
Mode: TX 2480MHz

Distance: 3m

Model: 87752824

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5225

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 12V

Test item: Radiation Test

Date: 2010/06/21

Temp.( C)/Hum.(%) 25 C / 50 %

Time: 10:28:25

EUT: Car Radio Bluetooth

Engineer Signature: Joe

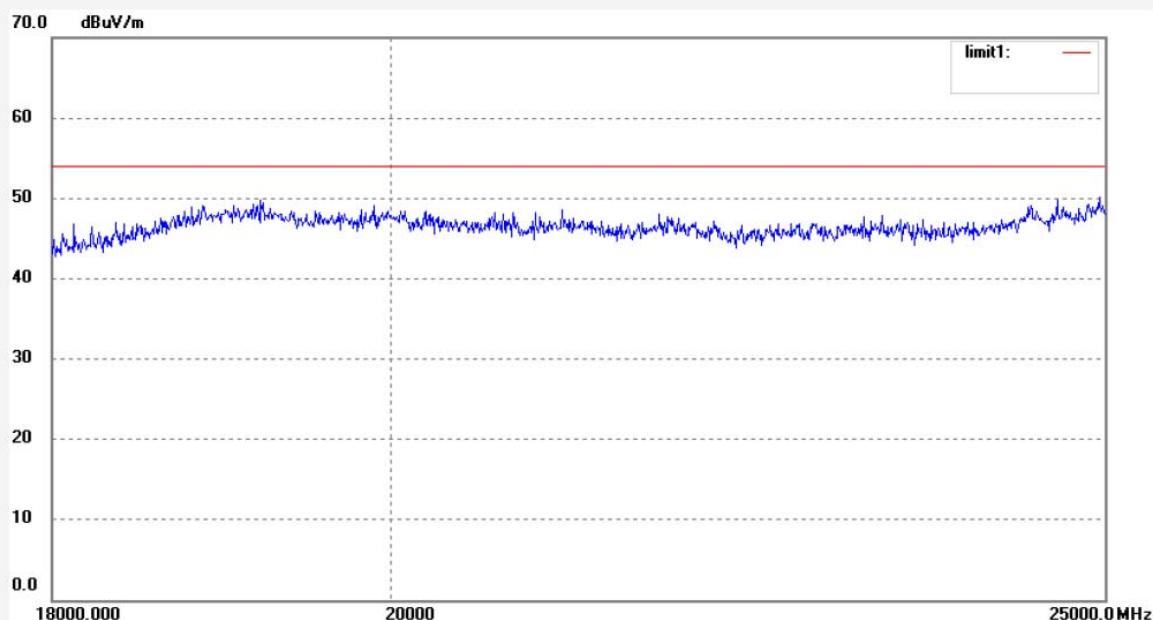
Mode: TX 2480MHz

Distance: 3m

Model: 87752824

Manufacturer: Shenzhen Waikin Electronic Co., Ltd.

Note: Sample No.:101459 Report No.:ATE20101270



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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## 12. ANTENNA REQUIREMENT

### 12.1. The Requirement

According to Section 15.203, 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.

### 12.2. Antenna Construction

Device is equipped with unique antenna connector. Therefore, the equipment complies with the antenna requirement of Section 15.203.

