

FCC CERTIFICATION  
On Behalf of  
HYGINEX

BEACON  
Model No.: BEC-000-01

FCC ID: SEOHY-BEC001

Prepared for : HYGINEX  
Address : 18 shenkar St., First Floor, P.O. Box 12317, HERZLIYA

Prepared by : ACCURATE TECHNOLOGY CO. LTD  
Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.  
Science & Industry Park, Nanshan, Shenzhen, Guangdong  
P.R. China

Tel: (0755) 26503290  
Fax: (0755) 26503396

Report Number : ATE20122104  
Date of Test : Feb 15, 2013  
Date of Report : Feb 16 , 2013

# TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. GENERAL INFORMATION .....	4
1.1. Description of Device (EUT).....	4
1.2. Description of Test Facility .....	4
1.3. Measurement Uncertainty .....	5
2. MEASURING DEVICE AND TEST EQUIPMENT .....	6
3. SUMMARY OF TEST RESULTS.....	7
4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A) .....	8
4.1. Block Diagram of Test Setup.....	8
4.2. The Emission Limit .....	9
4.3. Configuration of EUT on Measurement .....	9
4.4. Operating Condition of EUT .....	9
4.5. Test Procedure .....	10
4.6. The Field Strength of Radiation Emission Measurement Results .....	11
5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D) .....	14
5.1. Block Diagram of Test Setup.....	14
5.2. The Emission Limit For Section 15.249(d) .....	15
5.3. EUT Configuration on Measurement .....	15
5.4. Operating Condition of EUT .....	15
5.5. Test Procedure .....	16
5.6. The Emission Measurement Result .....	17
6. BAND EDGES .....	20
6.1. The Requirement .....	20
6.2. EUT Configuration on Measurement .....	20
6.3. Operating Condition of EUT .....	20
6.4. Test Procedure .....	20
6.5. The Measurement Result .....	21
7. 20DB BANDWIDTH.....	23
7.1. Block Diagram of Test Setup.....	23
7.2. EUT Configuration on Measurement .....	23
7.3. Operating Condition of EUT .....	23
7.4. Test Procedure .....	24
7.5. Test Result .....	24
8. ANTENNA REQUIREMENT.....	25
8.1. The Requirement .....	25
8.2. Antenna Construction .....	25

APPENDIX I ( TEST CURVES) (28 pages)

## Test Report Certification

Applicant : HYGINEX  
Manufacturer : Exploit Innovation Limited  
EUT Description : BEACON  
(A) MODEL NO.: BEC-000-01  
(B) Trade Name.: N/A  
(C) POWER SUPPLY: DC 4.5V

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.249**  
**ANSI C63.4: 2009**

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 15.249 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 : Feb 15 , 2013

Prepared by :



(Engineer)

Approved & Authorized Signer :



(Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

EUT	:	BEACON
Model Number	:	BEC-000-01
Power Supply	:	DC 4.5V
Modulation type	:	GFSK
Operate Frequency	:	2412-2480 MHz
Applicant	:	HYGINEX
Address	:	18 shenkar St., First Floor, P.O. Box 12317, HERZLIYA
Manufacturer	:	Exploit Innovation Limited
Address	:	RM2901, Wen Jin South Road, Zhong Shang Da Sha, Luo Hu, Shenzhen, China
Date of sample received	:	Jan 30, 2013
Date of Test	:	Feb 15, 2013

## 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. 12, 2014
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 12, 2014
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 12, 2014
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 12, 2014
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Feb. 06, 2014
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Feb. 06, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Feb. 06, 2014
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Oct. 30, 2013
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 12, 2014
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 12, 2014

### 3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	N/A
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: “N/A” means “Not applicable”.

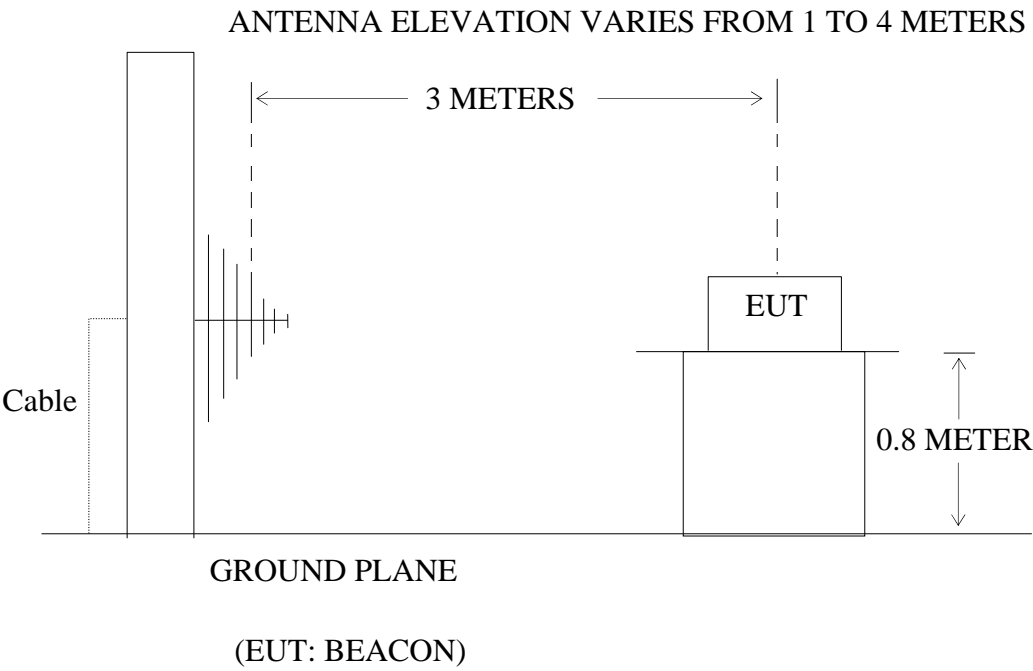
# 4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

## 4.1. Block Diagram of Test Setup

### 4.1.1. Block diagram of connection between the EUT and simulators



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





## 4.2.The Emission Limit

4.2.1.For intentional radiators, According to section 15.249(a), Operation within the frequency band of 2.4 to 2.4835GHz, The fundamental field strength shall not exceed 94 dBμV/m and the harmonics shall not exceed 54 dBμV/m.

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of harmonics (microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

## 4.3.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.

### 4.3.1. BEACON (EUT)

Model Number : BEC-000-01  
 Serial Number : N/A  
 Manufacturer : Exploit Innovation Limited

## 4.4.Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 4.1.

4.4.2.Turn on the power of all equipment.

4.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412 - 2480 MHz. We are select 2412 MHz, 2446MHz, and 2480 MHz TX frequency to transmit.

#### 4.5. 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 bi-log 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: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120 kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

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

#### 4.6.The Field Strength of Radiation Emission Measurement Results

**PASS.**

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2412MHz	Test Engineer:	Allen

##### Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2412.000	91.45	94.72	-7.49	83.96	87.23	94	114	-10.04	-26.77	Vertical
2412.000	87.68	90.55	-7.49	80.19	83.06	94	114	-13.81	-30.96	Horizontal

##### Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4824.000	47.63	52.27	-0.55	47.08	51.72	54	74	-6.92	-22.28	Vertical
4824.000	47.25	51.71	-0.55	46.70	51.15	54	74	-7.30	-22.84	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss (if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2446MHz	Test Engineer:	Allen

### Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2446.000	84.68	90.55	-7.40	80.28	83.15	94	114	-30.85	-13.72	Vertical
2446.000	90.01	92.09	-7.40	82.61	84.69	94	114	-11.39	-29.31	Horizontal

### Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4892.000	46.12	50.67	-0.15	45.97	50.52	54	74	-8.03	-23.48	Vertical
4892.000	47.65	52.29	-0.15	47.50	52.14	54	74	-6.50	-21.86	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2480MHz	Test Engineer:	Allen

### Fundamental Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2480.000	88.36	90.98	-7.33	81.03	83.65	94	114	-12.97	-30.35	Vertical
2480.000	87.36	90.30	-7.33	80.03	82.97	94	114	-13.97	-31.03	Horizontal

### Harmonics Radiated Emissions

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4960.000	46.03	50.23	0.30	46.33	50.53	54	74	-7.67	-23.47	Vertical
4960.000	43.04	47.04	0.30	43.34	47.34	54	74	-10.66	-26.66	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss (if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

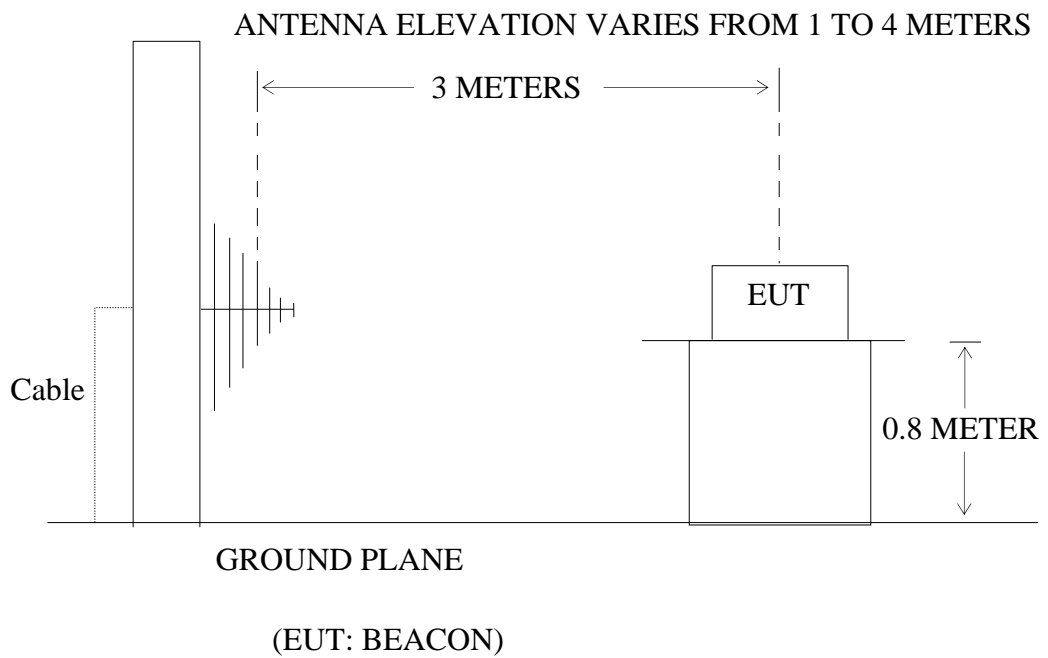
## 5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

### 5.1. Block Diagram of Test Setup

#### 5.1.1. Block diagram of connection between the EUT and simulators



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



## 5.2.The Emission Limit For Section 15.249(d)

5.2.1.Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

### Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit		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.
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dBμV/m)	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	

## 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. BEACON (EUT)

Model Number : BEC-000-01  
 Serial Number : N/A  
 Manufacturer : Exploit Innovation Limited

## 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 modes measure it. The transmit frequency are 2412 - 2480 MHz. We are select 2412MHz, 2446MHz, and 2480MHz TX frequency to transmit.

## 5.5. 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: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120 kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

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

The final measurement in band 9-90 kHz, 110-490 kHz 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.



## 5.6.The Emission Measurement Result

**PASS.**

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2412MHz	Test Engineer:	Allen

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2446MHz	Test Engineer:	Allen

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Horizontal

## Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2480MHz	Test Engineer:	Allen

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss (if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:  

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

## 6. BAND EDGES

### 6.1.The Requirement

6.1.1.Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

### 6.2.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.

#### 6.2.1. BEACON (EUT)

Model Number : BEC-000-01  
Serial Number : N/A  
Manufacturer : Exploit Innovation Limited

### 6.3.Operating Condition of EUT

6.3.1.Setup the EUT and simulator as shown as Section 4.1.

6.3.2.Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2480 MHz. We are select 2412MHz, 2480MHz TX frequency to transmit.

### 6.4.Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:  
RBW=1MHz, VBW=1MHz

## 6.5.The Measurement Result

**Pass.**

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2412MHz	Test Engineer:	Allen

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2396.850	42.01	51.83	-7.48	34.53	44.35	54	74	-19.47	-29.65	Vertical
2400.000	39.36	42.98	-7.46	31.90	35.52	54	74	-22.10	-38.48	Vertical
2398.405	45.21	52.51	-7.47	37.74	45.04	54	74	-16.26	-28.96	Horizontal
2400.000	45.36	50.66	-7.46	37.90	43.20	54	74	-16.10	-30.80	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	Feb 15, 2013	Temperature:	25°C
EUT:	BEACON	Humidity:	50%
Model No.:	BEC-000-01	Power Supply:	DC 4.5V
Test Mode:	TX 2480 MHz	Test Engineer:	Allen

Frequency (MHz)	Reading(dBμV/m)		Factor(dB) Corr.	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	46.31	52.41	-7.37	38.94	45.04	54	74	-15.06	-28.96	Vertical
2485.456	50.32	57.58	-7.38	42.94	50.20	54	74	-11.06	-23.80	Vertical
2483.500	46.10	51.20	-7.37	38.73	43.83	54	74	-15.27	-30.17	Horizontal
2484.533	50.01	59.63	-7.38	42.63	52.25	54	74	-11.37	-21.75	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

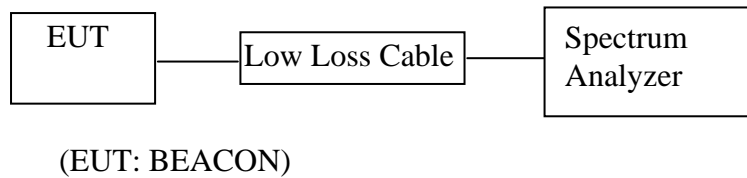
$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

## 7. 20DB BANDWIDTH

### 7.1. Block Diagram of Test Setup



### 7.2. 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.

#### 7.2.1. BEACON (EUT)

Model Number : BEC-000-01  
 Serial Number : N/A  
 Manufacturer : Exploit Innovation Limited

### 7.3. Operating Condition of EUT

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

7.3.2. Turn on the power of all equipment.

7.3.3. Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2412-2480MHz. We select 2412MHz, 2446MHz, and 2480MHz TX frequency to transmit.

## 7.4. Test Procedure

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

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

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

## 7.5. Test Result

**PASS.**

Date of Test:	<u>April 17, 2013</u>	Temperature:	<u>25°C</u>
EUT:	<u>BEACON</u>	Humidity:	<u>50%</u>
Model No.:	<u>BEC-000-01</u>	Power Supply:	<u>DC 4.5V</u>
Test Mode:	<u>TX</u>	Test Engineer:	<u>Alen</u>

Channel	Frequency (MHz)	20dB Bandwidth (MHz)	Limit (MHz)
Low	2412	1.164	---
Middle	2446	1.164	---
High	2480	1.164	---

The spectrum analyzer plots are attached as below.



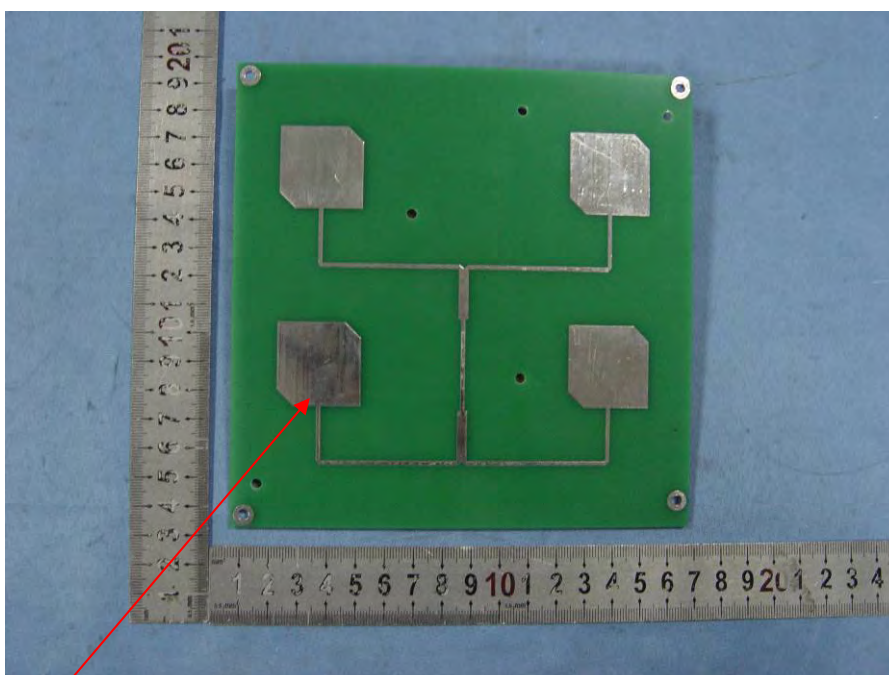
## 8. ANTENNA REQUIREMENT

### 8.1.The Requirement

8.1.1. 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.

### 8.2.Antenna Construction

The antenna is PCB Layout antenna, no consideration of replacement.



Antenna

# APPENDIX I (Test Curves)


**ACCURATE TECHNOLOGY CO., LTD.**

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #872

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

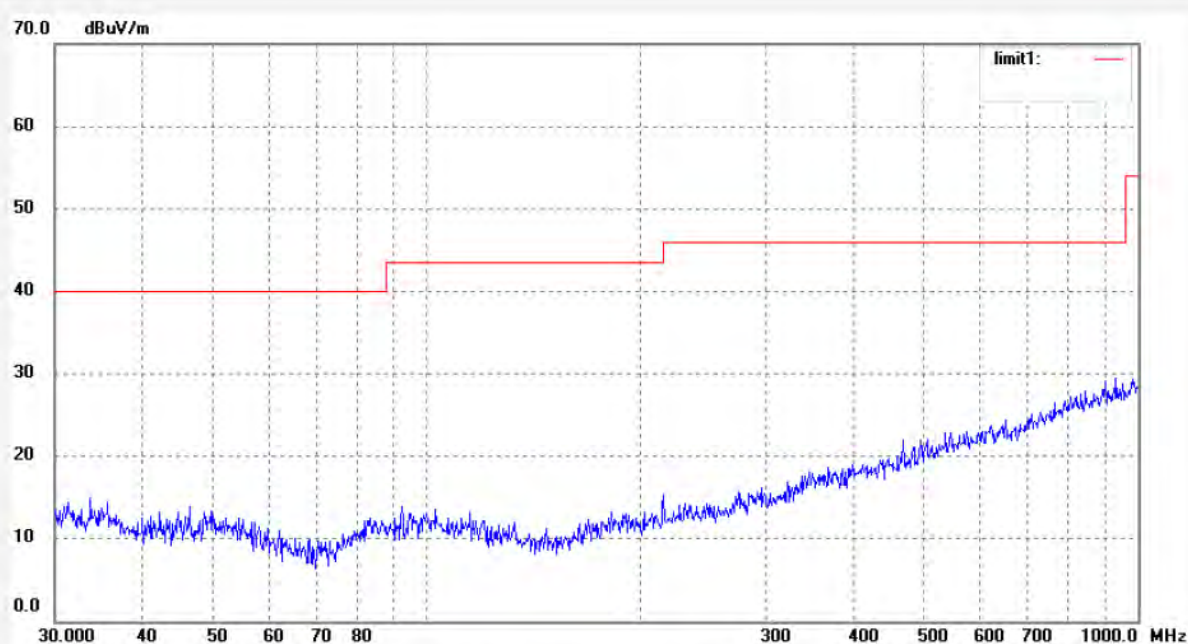
Date: 13/02/15/

Time: 10/52/31

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



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



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #873

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

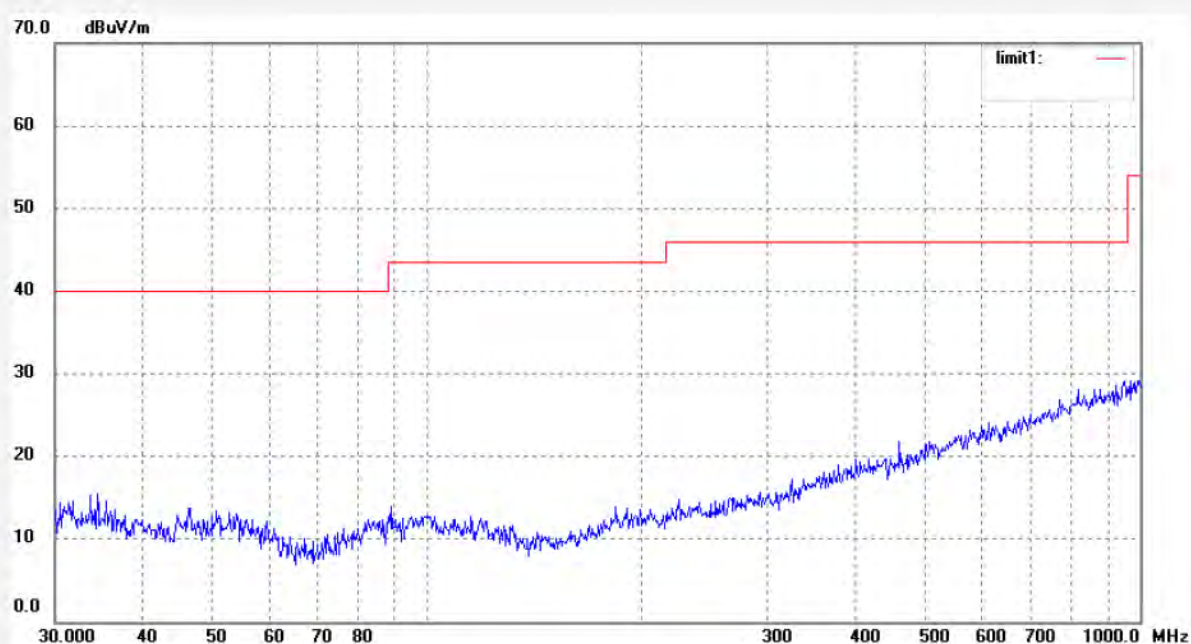
Date: 13/02/15/

Time: 10/53/14

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



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





# **ACCURATE TECHNOLOGY CO., LTD.**

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #874

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2446MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

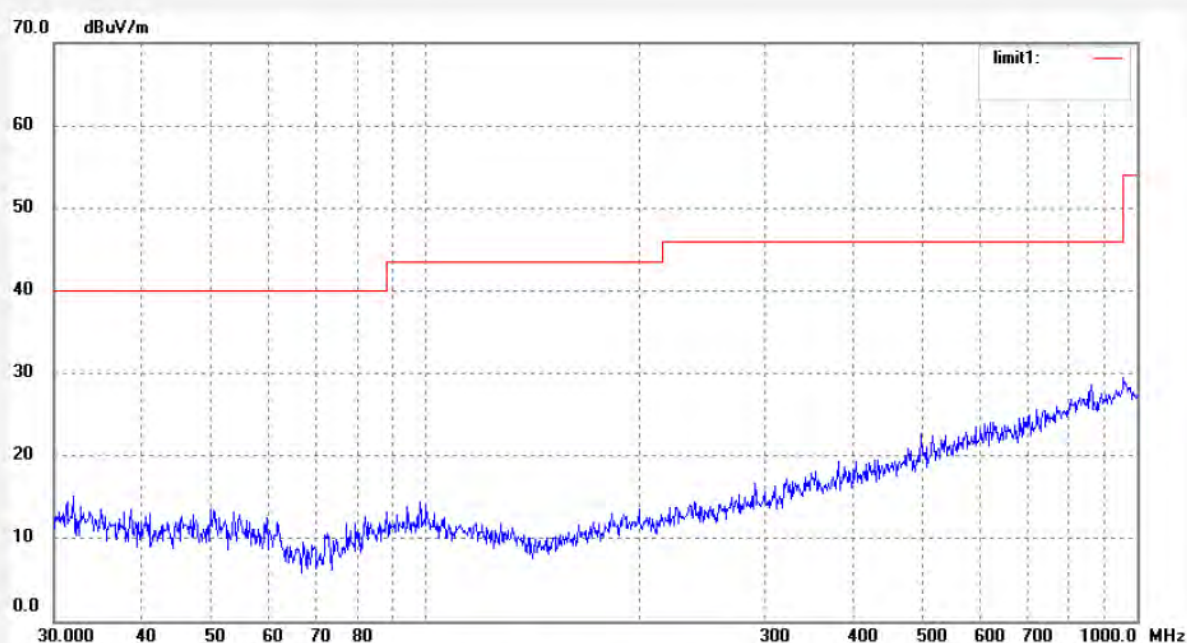
Date: 13/02/15/

Time: 10/53/31

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



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



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #875

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2446MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

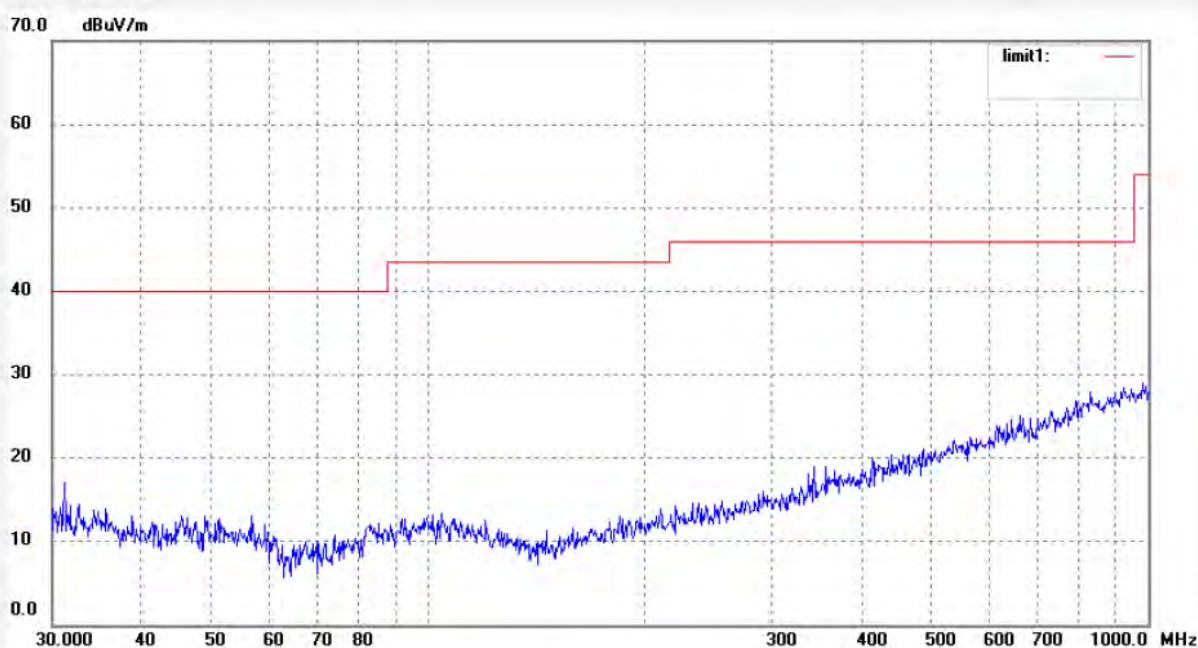
Date: 13/02/15/

Time: 10/54/02

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



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



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #876

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2412MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

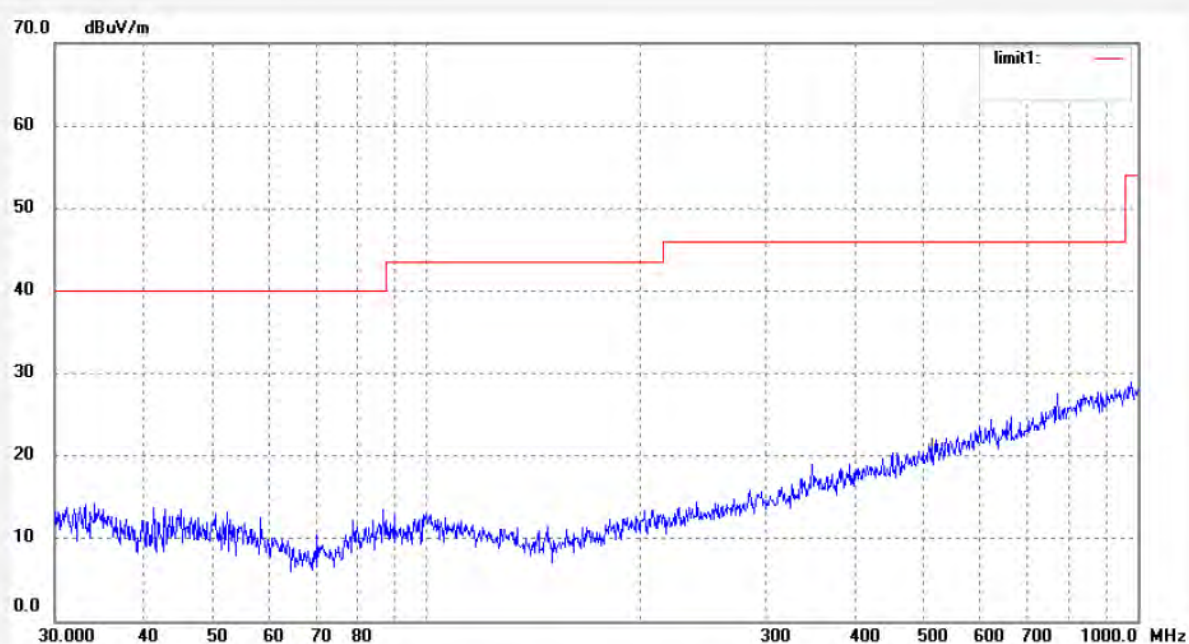
Date: 13/02/15/

Time: 10/54/15

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



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





# **ACCURATE TECHNOLOGY CO., LTD.**

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #877

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2412MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

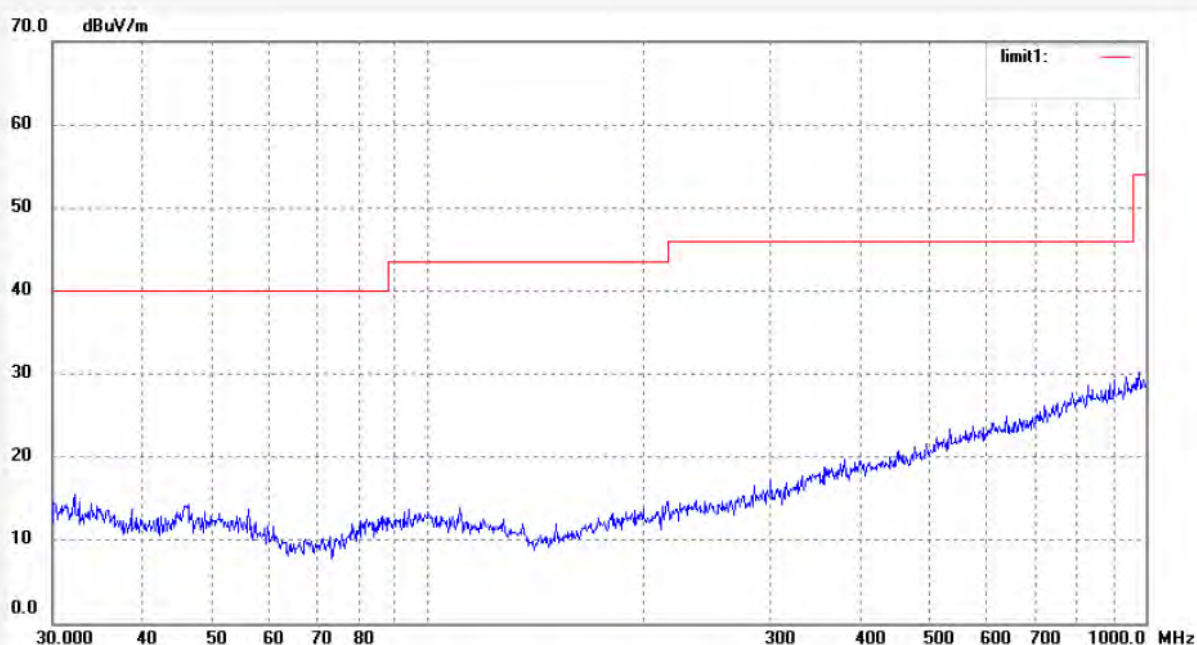
Date: 13/02/15/

Time: 10/55/32

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



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





# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #862

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

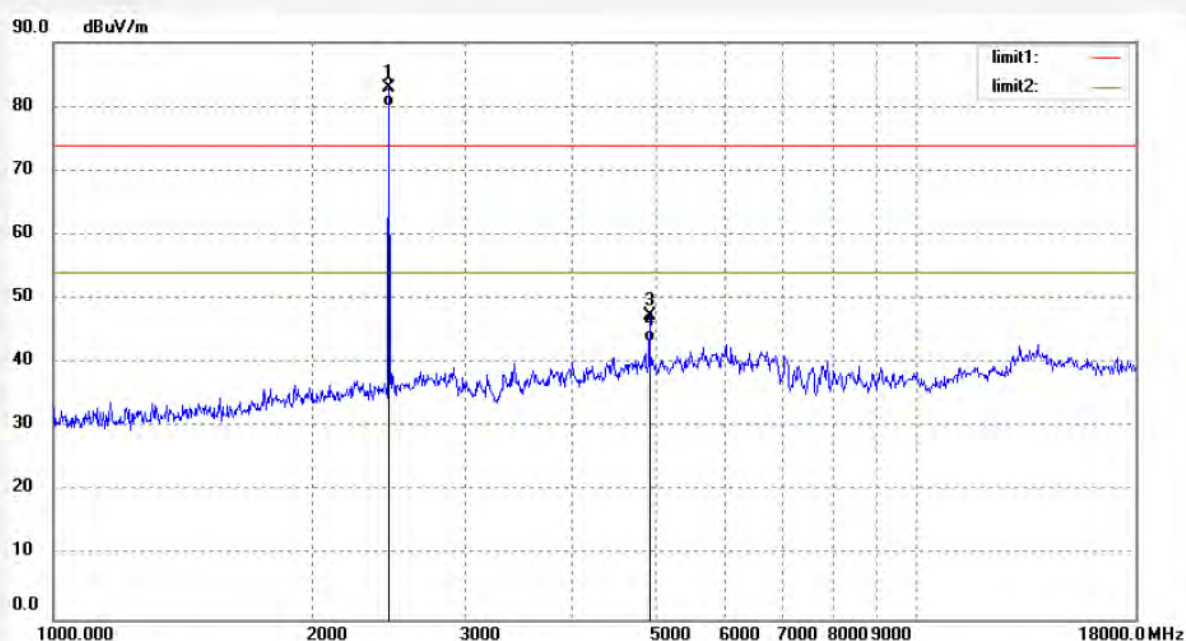
Date: 13/02/15/

Time: 10/34/48

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	90.30	-7.33	82.97	114.00	-31.03	peak			
2	2480.000	87.36	-7.33	80.03	94.00	-13.97	AVG			
3	4960.000	47.04	0.30	47.34	74.00	-26.66	peak			
4	4960.000	43.04	0.30	43.34	54.00	-10.66	AVG			



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #863

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

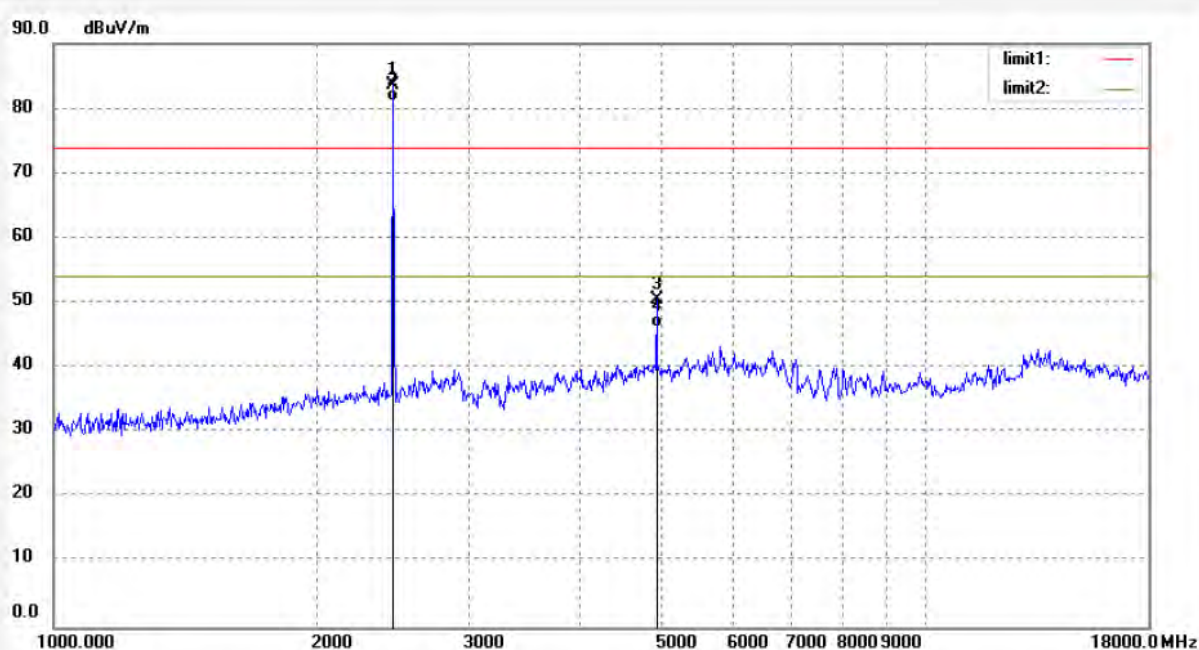
Date: 13/02/15/

Time: 10/35/37

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	90.98	-7.33	83.65	114.00	-30.35	peak			
2	2480.000	88.36	-7.33	81.03	94.00	-12.97	AVG			
3	4960.000	50.23	0.30	50.53	74.00	-23.47	peak			
4	4960.000	46.03	0.30	46.33	54.00	-7.67	AVG			



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #864

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2446MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

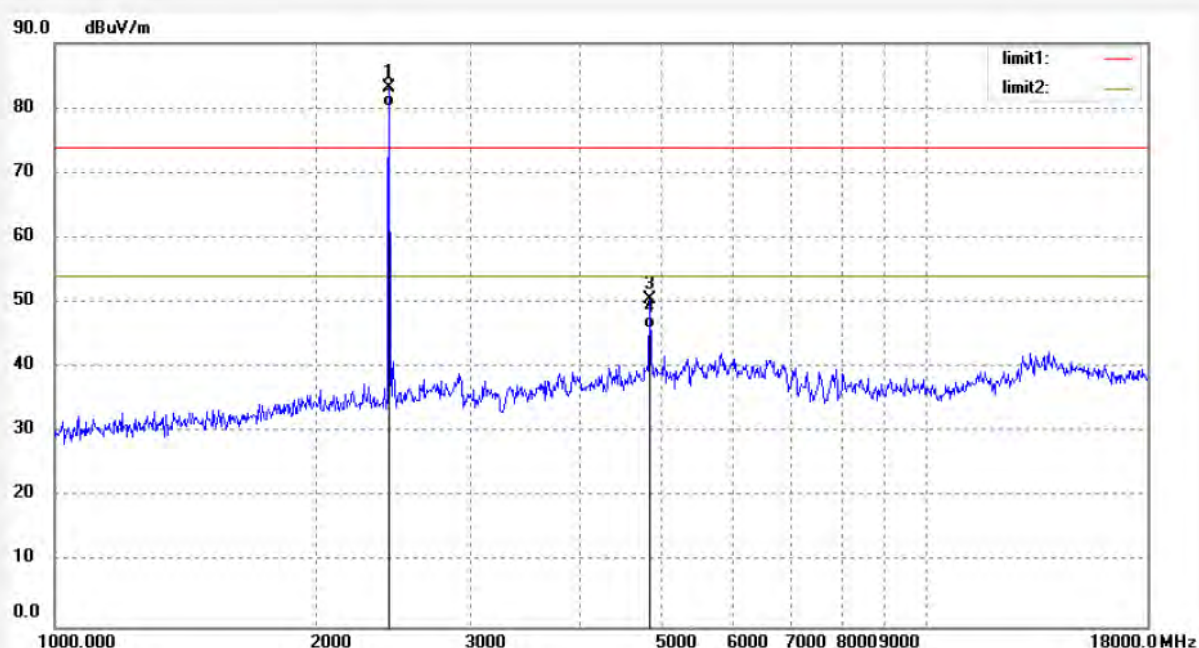
Date: 13/02/15/

Time: 10/37/16

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2446.000	90.55	-7.40	83.15	114.00	-30.85	peak			
2	2446.000	87.68	-7.40	80.28	94.00	-13.72	AVG			
3	4892.000	50.67	-0.15	50.52	74.00	-23.48	peak			
4	4892.000	46.12	-0.15	45.97	54.00	-8.03	AVG			





# **ACCURATE TECHNOLOGY CO., LTD.**

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #865

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2446MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

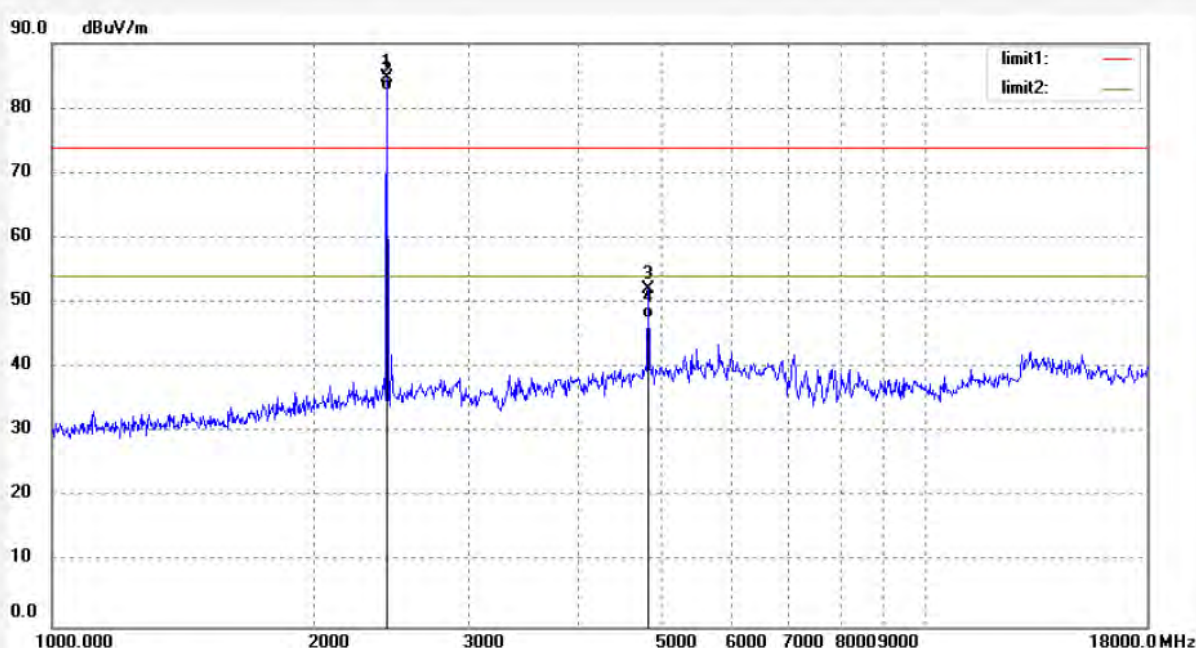
Date: 13/02/15/

Time: 10/37/41

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2446.000	92.09	-7.40	84.69	114.00	-29.31	peak			
2	2446.000	90.01	-7.40	82.61	94.00	-11.39	AVG			
3	4892.000	52.29	-0.15	52.14	74.00	-21.86	peak			
4	4892.000	47.65	-0.15	47.50	54.00	-6.50	AVG			



# **ACCURATE TECHNOLOGY CO., LTD.**

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #866

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2412MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

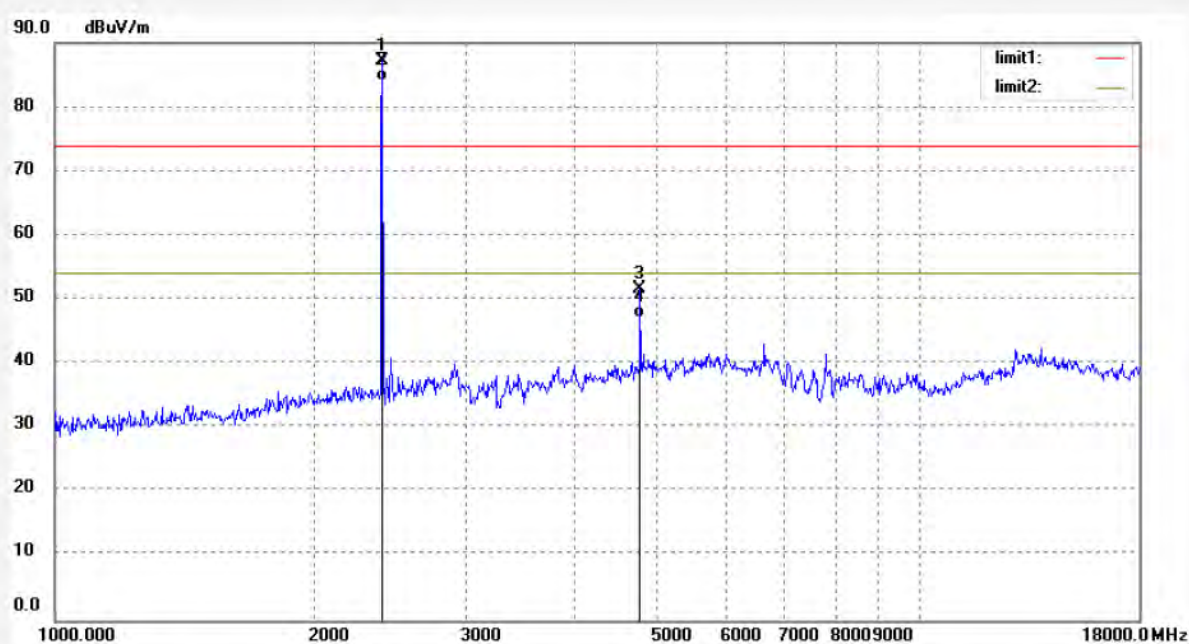
Date: 13/02/15/

Time: 10/39/11

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2412.000	94.72	-7.49	87.23	114.00	-26.77	peak			
2	2412.000	91.45	-7.49	83.96	94.00	-10.04	AVG			
3	4824.000	52.27	-0.55	51.72	74.00	-22.28	peak			
4	4824.000	47.63	-0.55	47.08	54.00	-6.92	AVG			



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #867

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2412MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

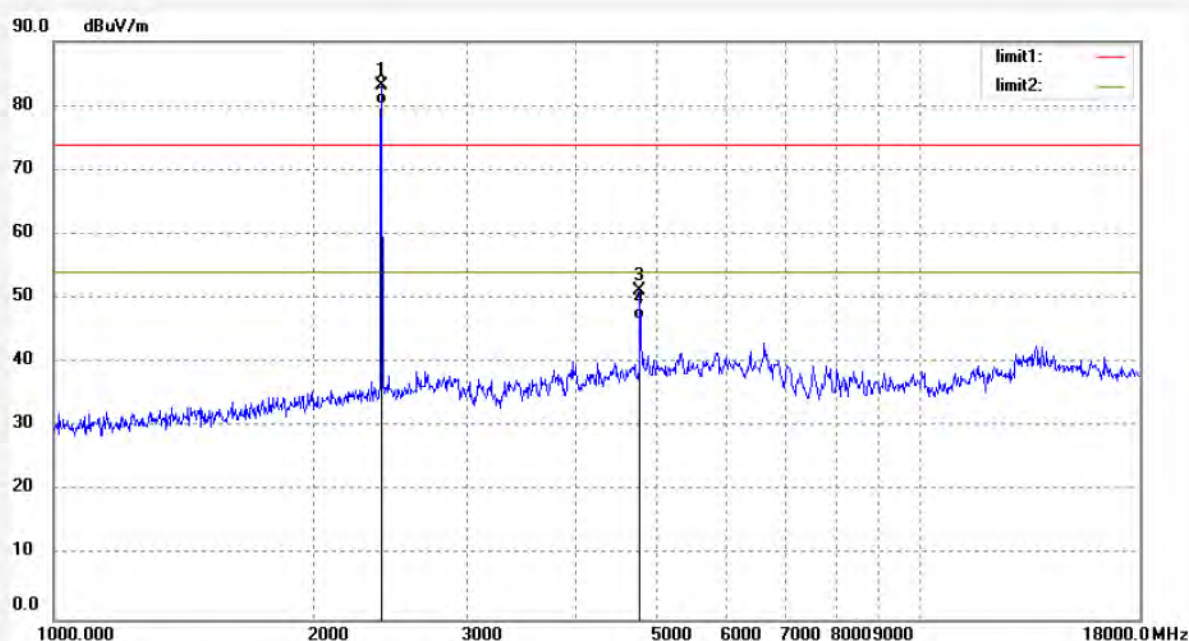
Date: 13/02/15/

Time: 10/39/31

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2412.000	90.55	-7.49	83.06	114.00	-30.96	peak			
2	2412.000	87.68	-7.49	80.19	94.00	-13.81	AVG			
3	4824.000	51.71	-0.55	51.16	74.00	-22.84	peak			
4	4824.000	47.25	-0.55	46.70	54.00	-7.30	AVG			




**ACCURATE TECHNOLOGY CO., LTD.**

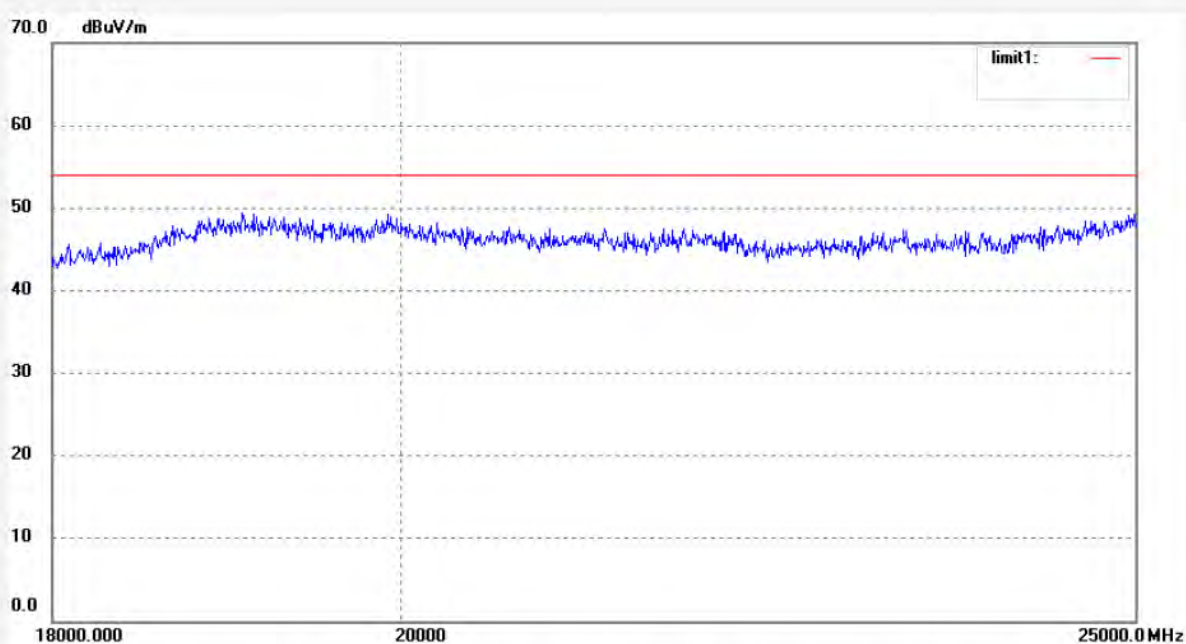
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: ALEN #770  
Standard: FCC 15C  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 50 %  
EUT: BEACON  
Mode: TX 2412MHz  
Model: BEC-000-01  
Manufacturer: Exploit

Polarization: Horizontal  
Power Source: DC 4.5V  
Date: 13/02/15/  
Time: 14:17:15  
Engineer Signature:  
Distance: 3m

Note:



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


**ACCURATE TECHNOLOGY CO., LTD.**

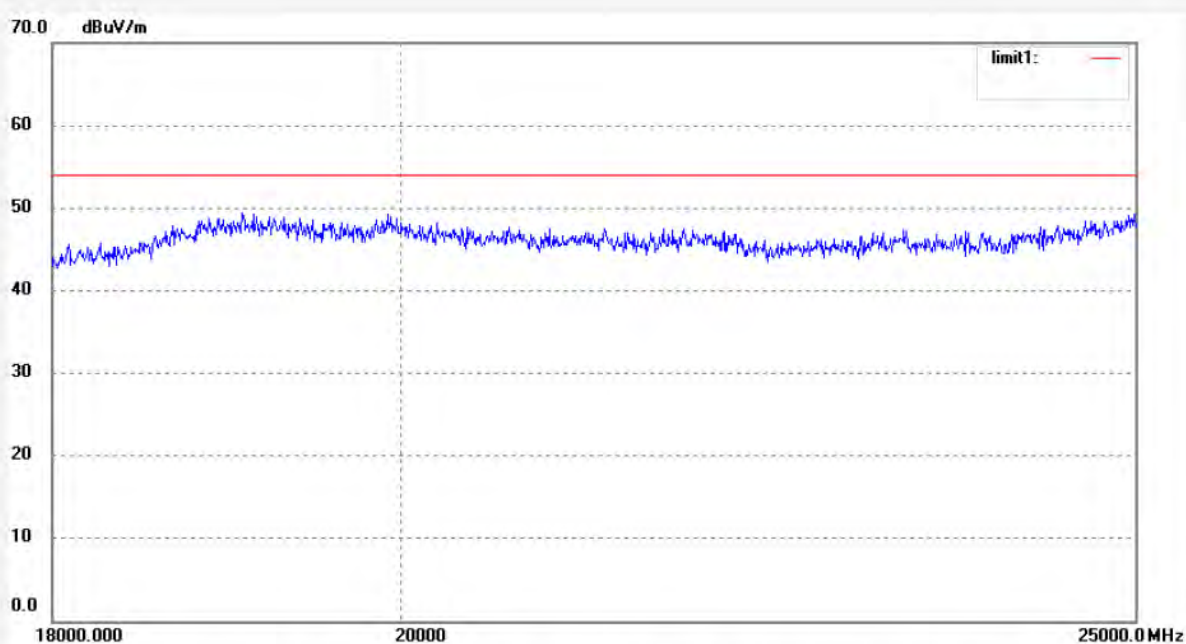
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

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

Job No.: ALEN #770  
Standard: FCC 15C  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 50 %  
EUT: BEACON  
Mode: TX 2412MHz  
Model: BEC-000-01  
Manufacturer: Exploit

Polarization: Horizontal  
Power Source: DC 4.5V  
Date: 13/02/15/  
Time: 14:17:15  
Engineer Signature:  
Distance: 3m

Note:



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





# **ACCURATE TECHNOLOGY CO., LTD.**

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.: ALEN #771

Standard: FCC 15C

Test item: Radiation Test

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

EUT: BEACON

Mode: TX 2412MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

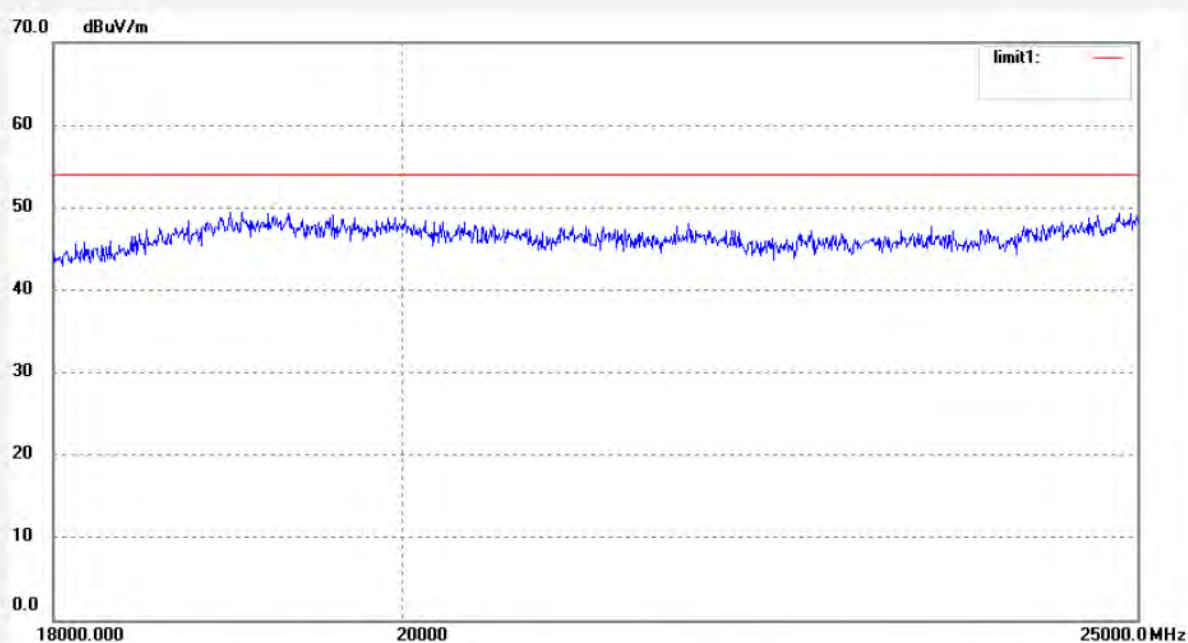
Date: 13/02/15/

Time: 14:19:22

Engineer Signature:

Distance: 3m

Note:



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


**ACCURATE TECHNOLOGY CO., LTD.**

 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.: ALEN #772

Standard: FCC 15C

Test item: Radiation Test

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

EUT: BEACON

Mode: TX 2446MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

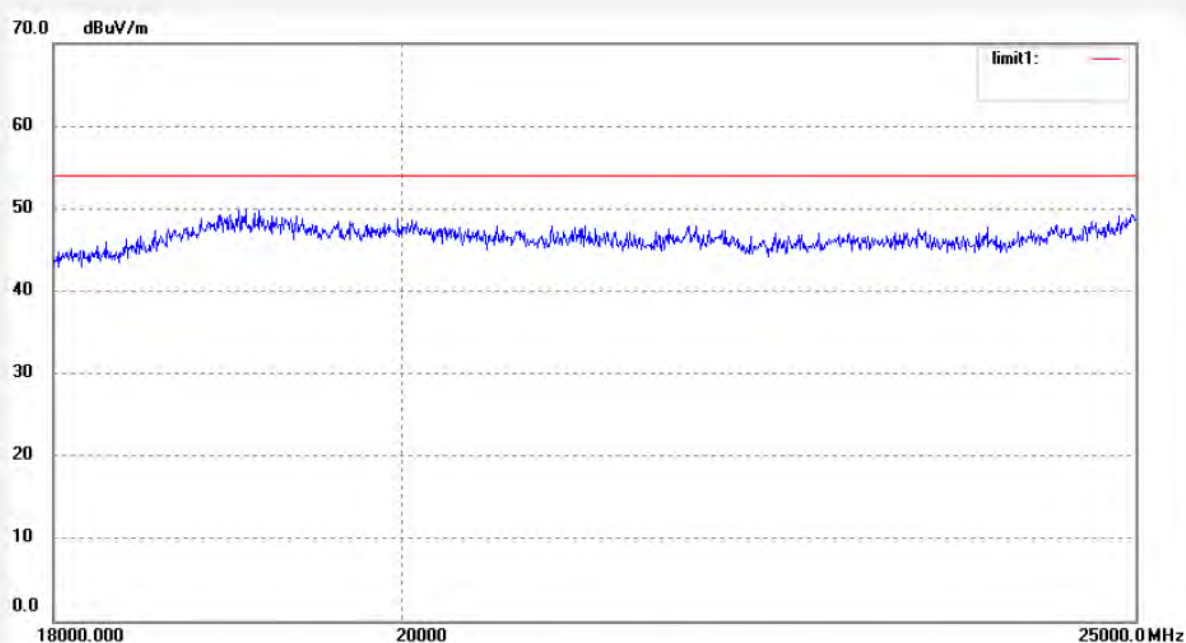
Date: 13/02/15/

Time: 14:24:45

Engineer Signature:

Distance: 3m

Note:



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



# **ACCURATE TECHNOLOGY CO., LTD.**

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.: ALEN #773

Standard: FCC 15C

Test item: Radiation Test

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

EUT: BEACON

Mode: TX 2446MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

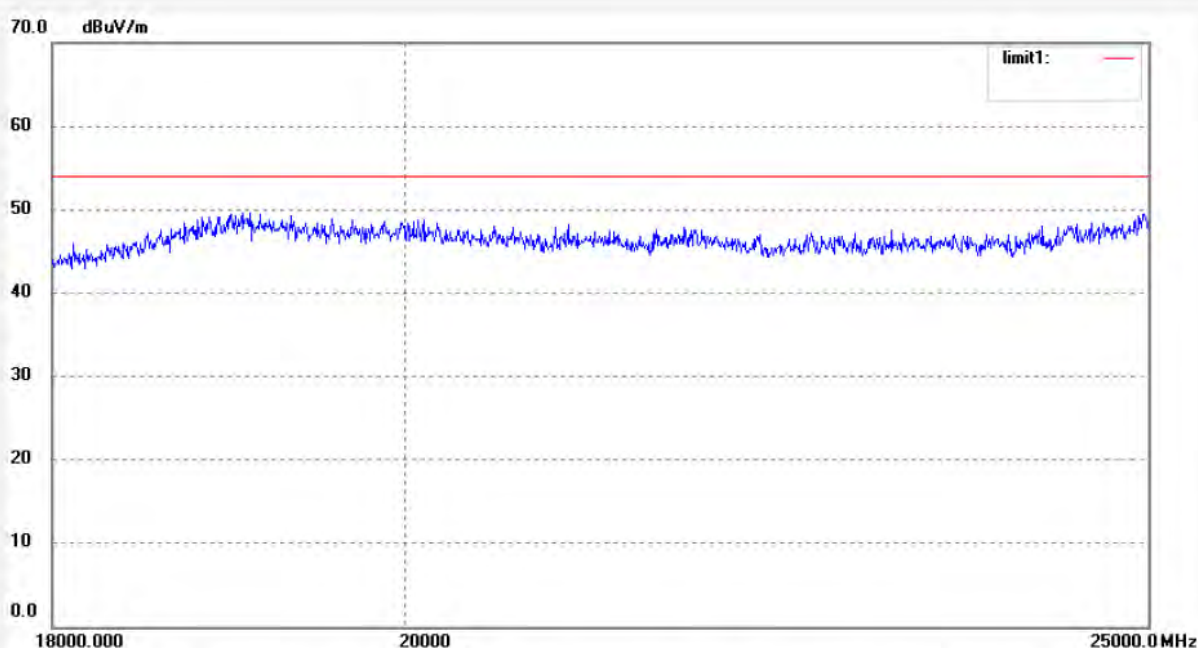
Date: 13/02/15/

Time: 14:28:36

Engineer Signature:

Distance: 3m

Note:



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


**ACCURATE TECHNOLOGY CO., LTD.**

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.: ALEN #774

Standard: FCC 15C

Test item: Radiation Test

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

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

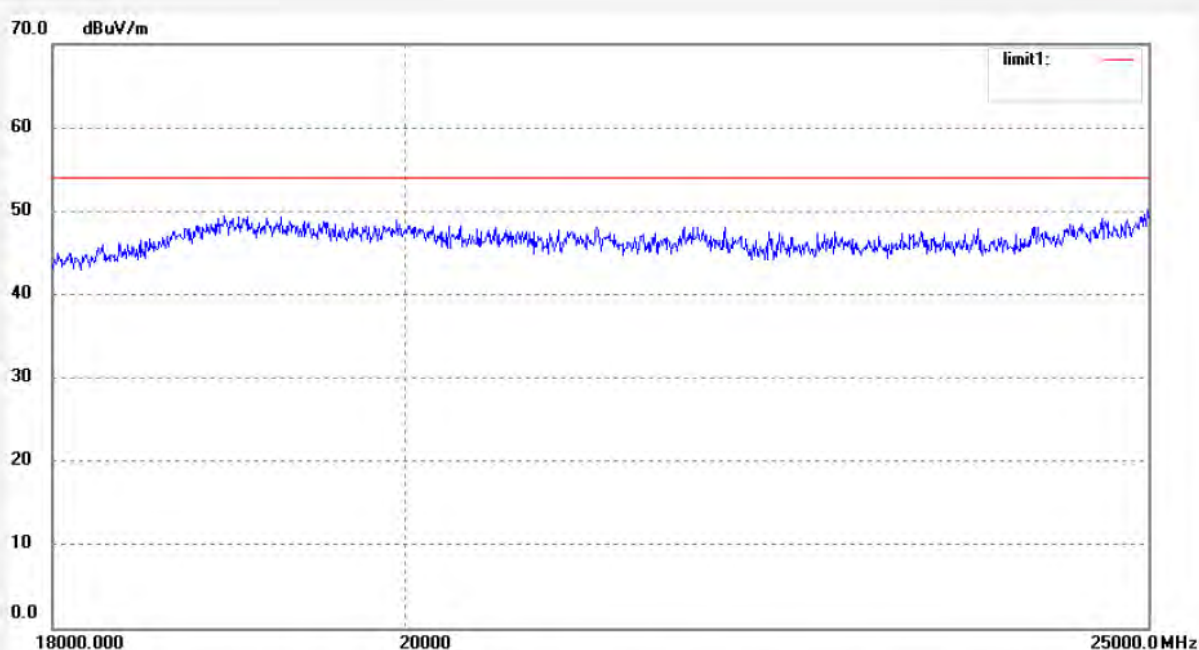
Date: 13/02/15/

Time: 14:30:55

Engineer Signature:

Distance: 3m

Note:



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





# ACCURATE TECHNOLOGY CO., LTD.

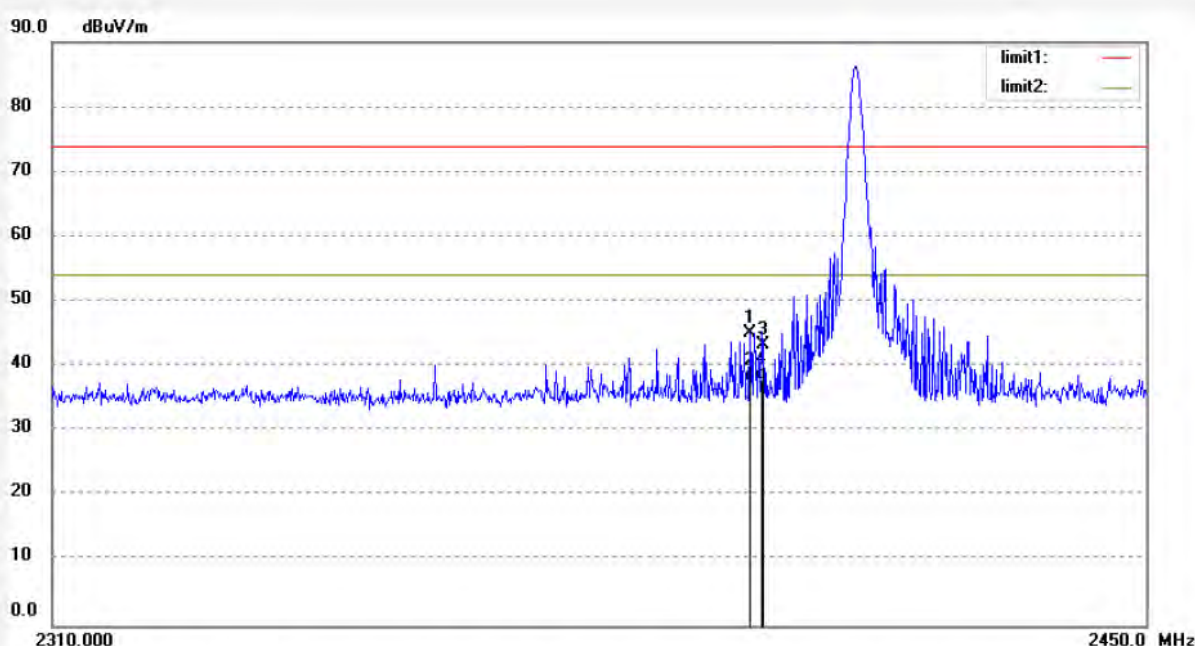
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: ALEN #868  
Standard: FCC PK  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 26 C / 55 %  
EUT: BEACON  
Mode: TX 2412MHz  
Model: BEC-000-01  
Manufacturer: Exploit

Polarization: Horizontal  
Power Source: DC 4.5V  
Date: 13/02/15/  
Time: 10/40/44  
Engineer Signature:  
Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2398.405	52.51	-7.47	45.04	74.00	-28.96	peak			
2	2398.405	45.21	-7.47	37.74	54.00	-16.26	AVG			
3	2400.000	50.66	-7.46	43.20	74.00	-30.80	peak			
4	2400.000	45.36	-7.46	37.90	54.00	-16.10	AVG			



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #869

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2412MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Vertical

Power Source: DC 4.5V

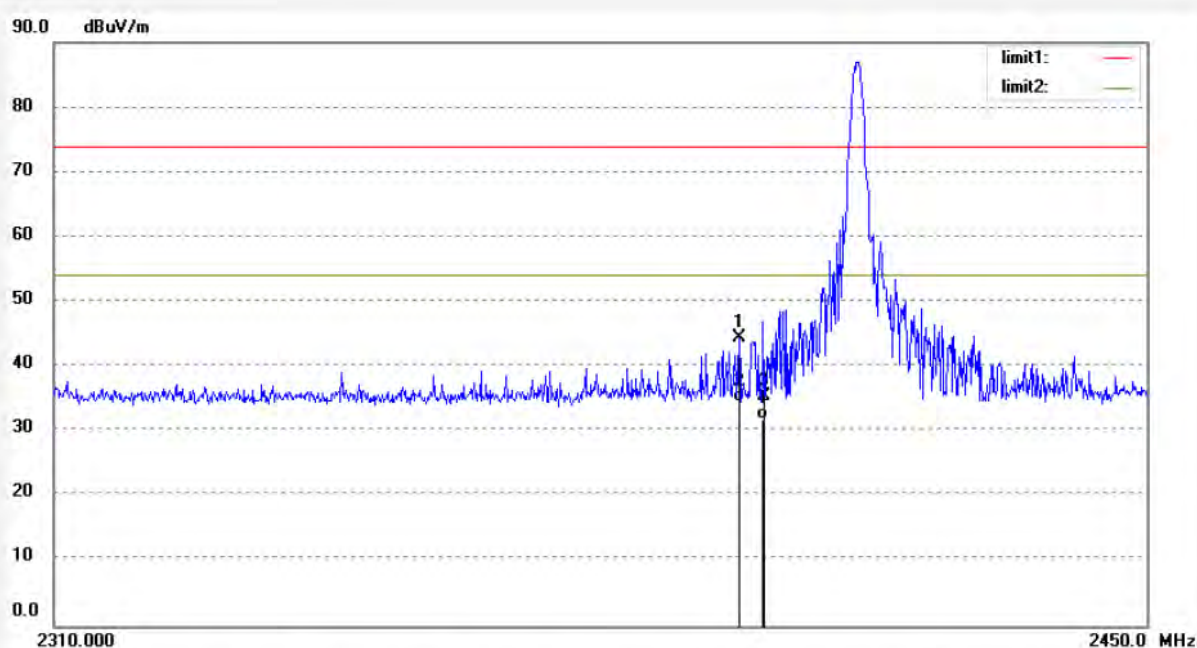
Date: 13/02/15/

Time: 10/41/58

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2396.850	51.83	-7.48	44.35	74.00	-29.65	peak			
2	2396.850	42.01	-7.48	34.53	54.00	-19.47	AVG			
3	2400.000	42.98	-7.46	35.52	74.00	-38.48	peak			
4	2400.000	39.36	-7.46	31.90	54.00	-22.10	AVG			



# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #870

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

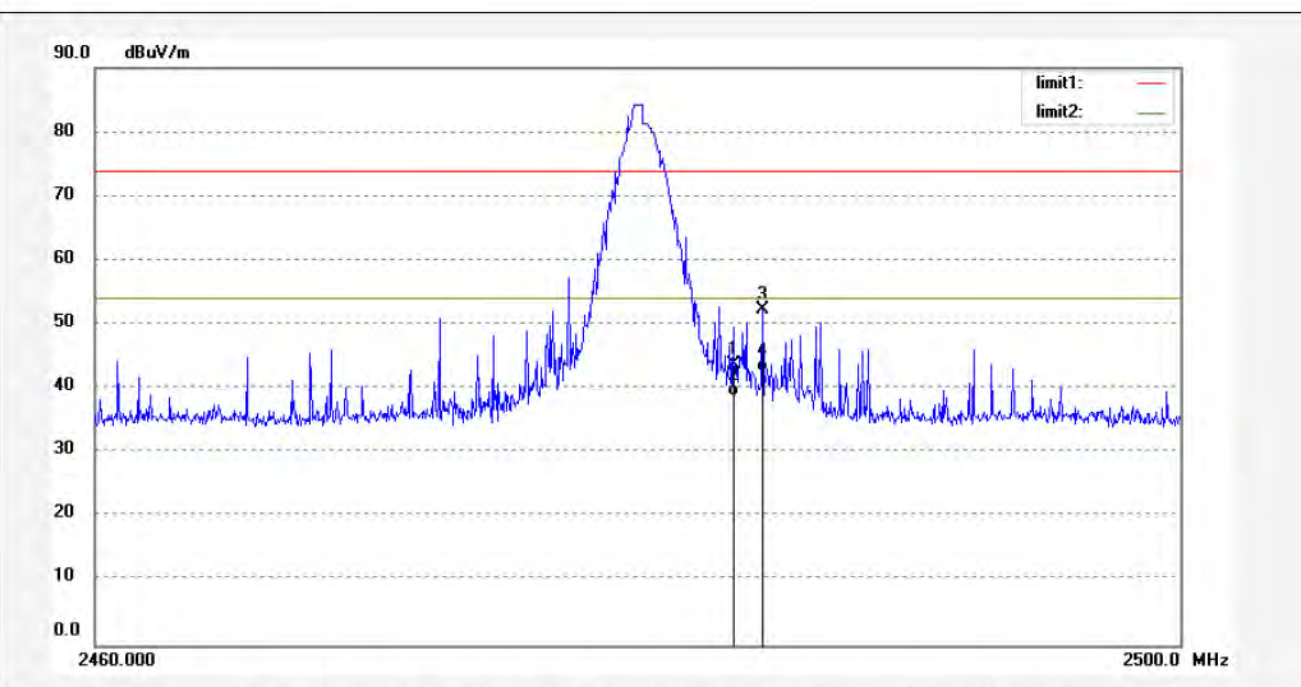
Date: 13/02/15/

Time: 10/44/23

Engineer Signature:

Distance: 3m

Note: Report No:ATE20122104



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	51.20	-7.37	43.83	74.00	-30.17	peak			
2	2483.500	46.10	-7.37	38.73	54.00	-15.27	AVG			
3	2484.533	59.63	-7.38	52.25	74.00	-21.75	peak			
4	2484.533	50.01	-7.38	42.63	54.00	-11.37	AVG			





# ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: ALEN #871

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: BEACON

Mode: TX 2480MHz

Model: BEC-000-01

Manufacturer: Exploit

Polarization: Horizontal

Power Source: DC 4.5V

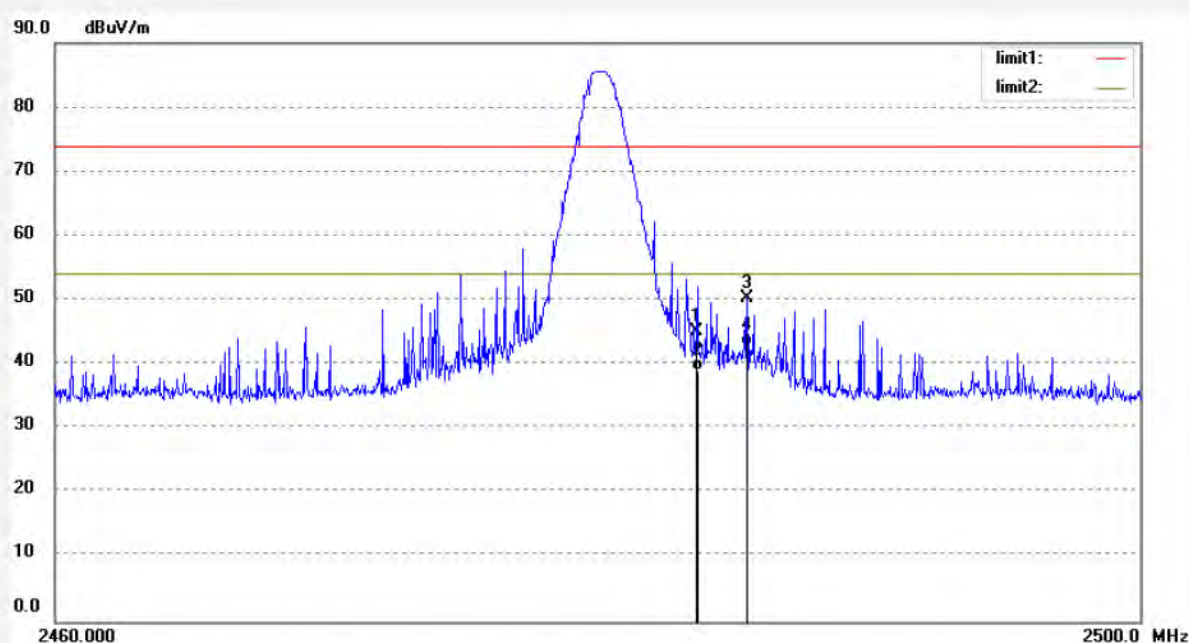
Date: 13/02/15/

Time: 10/45/20

Engineer Signature:

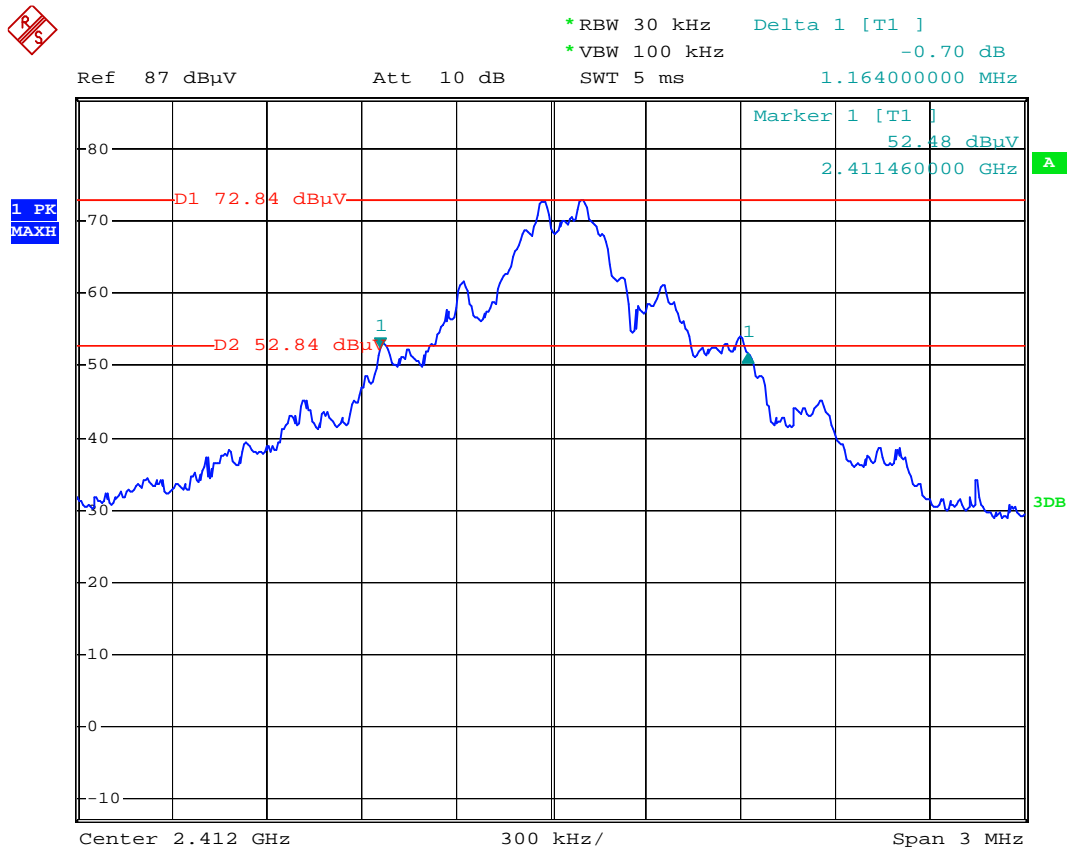
Distance: 3m

Note: Report No:ATE20122104

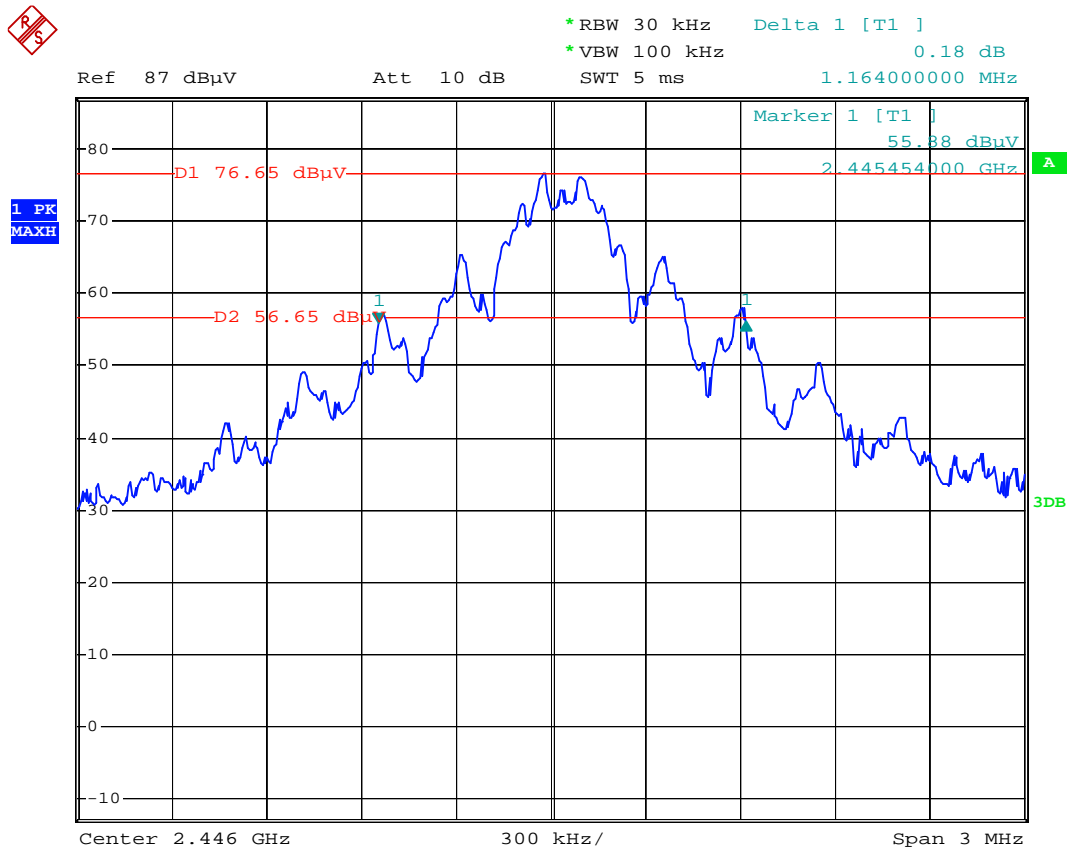


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	52.41	-7.37	45.04	74.00	-28.96	peak			
2	2483.500	46.31	-7.37	38.94	54.00	-15.06	AVG			
3	2485.456	57.58	-7.38	50.20	74.00	-23.80	peak			
4	2485.456	50.32	-7.38	42.94	54.00	-11.06	AVG			

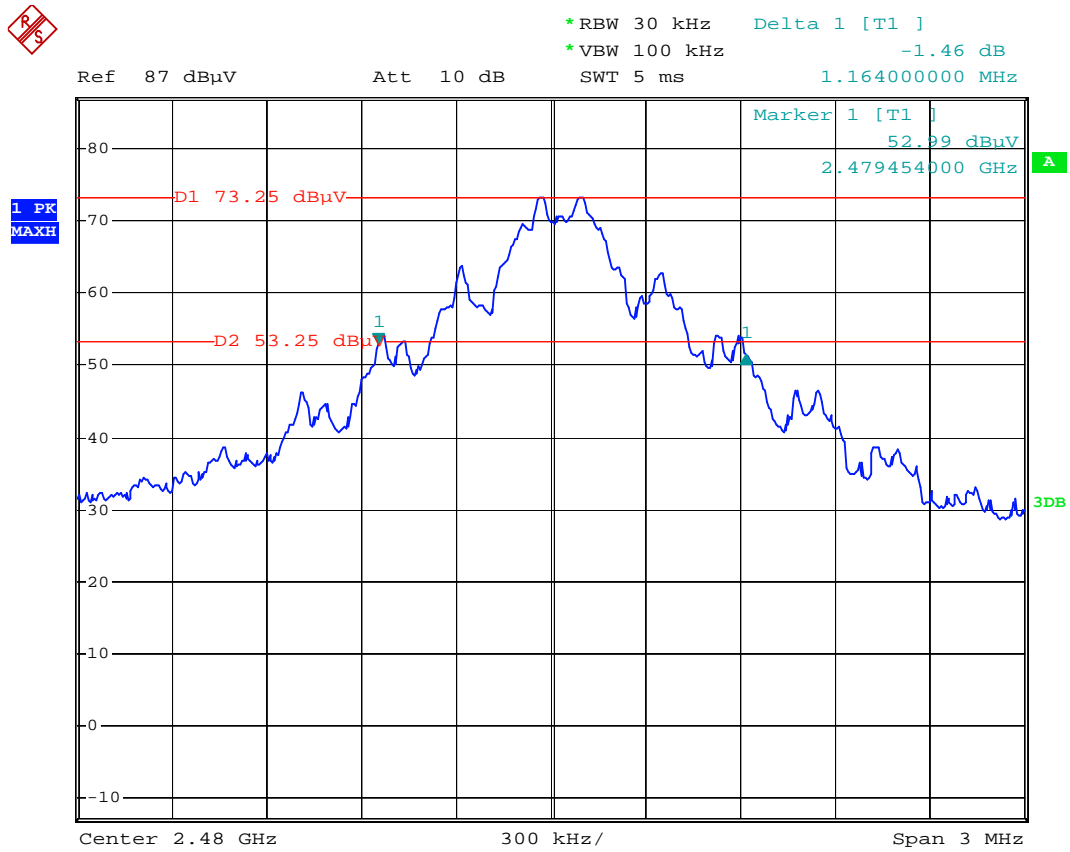




Date: 17.APR.2013 11:15:10



Date: 17.APR.2013 11:16:54



Date: 17.APR.2013 11:20:44