

Prüfbericht-Nr.: <i>Test report No.:</i>	50133710 001	Auftrags-Nr.: <i>Order No.:</i>	174083320	Seite 1 von 25 <i>Page 1 of 25</i>	
Kunden-Referenz-Nr.: <i>Client reference No.:</i>	N/A	Auftragsdatum: <i>Order date.:</i>	10.05.2018		
Auftraggeber: <i>Client:</i>	INNOVATIVE TECHNOLOGY ELECTRONICS LLC 1 CHANNEL DRIVE, PORT WASHINGTON, NY 11050, USA				
Prüfgegenstand: <i>Test item:</i>	5-IN-1 TURNTABLE				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	VTA-60 XXXXX (XXXXX can be 1-9 or A to Z or blank and means unit color or pattern)				
Auftrags-Inhalt: <i>Order content:</i>	FCC and IC approval				
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 2: Section 2.1091	RSS-247 Issue 2 February 2017 RSS-Gen Issue 4 November 2014 RSS-102 Issue 5 March 2015			
Wareneingangsdatum: <i>Date of receipt:</i>	10.05.2018	Please refer to photo documents			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000752029-001				
Prüfzeitraum: <i>Testing period:</i>	Refer to test report				
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Guangdong) Ltd.				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Guangdong) Ltd.				
Prüfergebnis*: <i>Test result*:</i>	Pass				
geprüft von / tested by:	kontrolliert von / reviewed by:				
19.06.2018	Amy Wang		19.06.2018	Storm Shu	
Amy Wang / Project Manager			Storm Shu / Technical Certifier		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
<b>Sonstiges / Other:</b>					
FCC ID: 2AFHW-VTA-60 IC: 9577A-VTA60      HVIN: VTA-60					
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>			Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende: 1 = sehr gut      2 = gut      3 = befriedigend      4 = ausreichend      5 = mangelhaft P(pass) = entspricht o.g. Prüfgrundlage(n)      F(fail) = entspricht nicht o.g. Prüfgrundlage(n) Legend: 1 = very good      2 = good      3 = satisfactory      4 = sufficient      5 = poor P(pass) = passed a.m. test specifications(s)      F(fail) = failed a.m. test specifications(s) N/A = nicht anwendbar      N/T = nicht getestet N/A = not applicable      N/T = not tested					
<b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b> <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

Seite 2 von 25  
Page 2 of 25

## ***Test Summary***

**5.1.1 ANTENNA REQUIREMENT**  
*RESULT:* Pass

**5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER**  
*RESULT:* Pass

**5.1.3 99% BANDWIDTH**  
*RESULT:* Pass

**5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH**  
*RESULT:* Pass

**5.1.5 RADIATED SPURIOUS EMISSION**  
*RESULT:* Pass

**5.1.6 20dB BANDWIDTH**  
*RESULT:* Pass

**5.1.7 CARRIER FREQUENCY SEPARATION**  
*RESULT:* Pass

**5.1.8 NUMBER OF HOPPING FREQUENCY**  
*RESULT:* Pass

**5.1.9 TIME OF OCCUPANCY**  
*RESULT:* Pass

**5.1.10 CONDUCTED EMISSION ON AC MAINS**  
*RESULT:* Pass

**6.1.1 ELECTROMAGNETIC FIELDS**  
*RESULT:* Pass

**Prüfbericht - Nr.: 50133710 001**

Test Report No.

Seite 3 von 25  
Page 3 of 25**Contents**

<b>1</b>	<b>GENERAL REMARKS .....</b>	<b>5</b>
<b>1.1</b>	<b>COMPLEMENTARY MATERIALS .....</b>	<b>5</b>
<b>2</b>	<b>TEST SITES .....</b>	<b>5</b>
<b>2.1</b>	<b>TEST FACILITIES .....</b>	<b>5</b>
<b>2.2</b>	<b>LIST OF TEST AND MEASUREMENT INSTRUMENTS.....</b>	<b>6</b>
<b>2.3</b>	<b>TRACEABILITY .....</b>	<b>6</b>
<b>2.4</b>	<b>CALIBRATION .....</b>	<b>6</b>
<b>2.5</b>	<b>MEASUREMENT UNCERTAINTY.....</b>	<b>6</b>
<b>2.6</b>	<b>LOCATION OF ORIGINAL DATA.....</b>	<b>6</b>
<b>2.7</b>	<b>STATUS OF FACILITY USED FOR TESTING.....</b>	<b>7</b>
<b>3</b>	<b>GENERAL PRODUCT INFORMATION .....</b>	<b>8</b>
<b>3.1</b>	<b>PRODUCT FUNCTION AND INTENDED USE.....</b>	<b>8</b>
<b>3.2</b>	<b>RATINGS AND SYSTEM DETAILS .....</b>	<b>8</b>
<b>3.3</b>	<b>INDEPENDENT OPERATION MODES .....</b>	<b>10</b>
<b>3.4</b>	<b>NOISE GENERATING AND NOISE SUPPRESSING PARTS.....</b>	<b>10</b>
<b>3.5</b>	<b>SUBMITTED DOCUMENTS.....</b>	<b>10</b>
<b>4</b>	<b>TEST SET-UP AND OPERATION MODES .....</b>	<b>11</b>
<b>4.1</b>	<b>PRINCIPLE OF CONFIGURATION SELECTION .....</b>	<b>11</b>
<b>4.2</b>	<b>TEST OPERATION AND TEST SOFTWARE.....</b>	<b>11</b>
<b>4.3</b>	<b>SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT .....</b>	<b>11</b>
<b>4.4</b>	<b>COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE .....</b>	<b>11</b>
<b>4.5</b>	<b>TEST SETUP DIAGRAM .....</b>	<b>12</b>
<b>5</b>	<b>TEST RESULTS .....</b>	<b>14</b>
<b>5.1</b>	<b>TRANSMITTER REQUIREMENT &amp; TEST SUITES .....</b>	<b>14</b>
<b>5.1.1</b>	<b>Antenna Requirement .....</b>	<b>14</b>
<b>5.1.2</b>	<b>Maximum Peak Conducted Output Power.....</b>	<b>15</b>
<b>5.1.3</b>	<b>99% Bandwidth .....</b>	<b>16</b>
<b>5.1.4</b>	<b>Conducted Spurious Emissions Measured in 100 kHz Bandwidth.....</b>	<b>17</b>
<b>5.1.5</b>	<b>Radiated Spurious Emission .....</b>	<b>18</b>
<b>5.1.6</b>	<b>20dB Bandwidth .....</b>	<b>19</b>
<b>5.1.7</b>	<b>Carrier Frequency Separation.....</b>	<b>20</b>
<b>5.1.8</b>	<b>Number of Hopping Frequency .....</b>	<b>21</b>
<b>5.1.9</b>	<b>Time of Occupancy .....</b>	<b>22</b>
<b>5.1.10</b>	<b>Conducted Emission on AC Mains .....</b>	<b>23</b>
<b>6</b>	<b>SAFETY HUMAN EXPOSURE .....</b>	<b>24</b>
<b>6.1</b>	<b>RADIO FREQUENCY EXPOSURE COMPLIANCE .....</b>	<b>24</b>
<b>6.1.1</b>	<b>Electromagnetic Fields.....</b>	<b>24</b>
<b>7</b>	<b>PHOTOGRAPHS OF THE TEST SET-UP .....</b>	<b>25</b>

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

Seite 4 von 25  
Page 4 of 25

8	LIST OF TABLES.....	25
---	---------------------	----

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

Seite 5 von 25  
Page 5 of 25

## 1 General Remarks

### 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results

## 2 Test Sites

### 2.1 Test Facilities

**TÜV Rheinland (Guangdong) Ltd.**

No.102, 1F of Southwest and No.205, 2F No.767 Tianyuan Road, Tianhe District, Guangzhou 510663,  
Guangdong Province P.R. China

FCC Accreditation Designation No.: CN1207

Test site Industry Canada No.: 2932C-1

## 2.2 List of Test and Measurement Instruments

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

For the measurement Equipment list, refer to the appendix B.

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Item	Extended Uncertainty
Conducted Emission	± 2.68 dB
Radiated Emission (30-1000MHz)	Field strength (dB $\mu$ V/m) ± 5.16 dB
Radiated Emission (above 1000MHz)	Field strength (dB $\mu$ V/m) ± 2.22 dB
Radio Spectrum	± 4.51 dB

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) Ltd. file for certification follow-up purposes.

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

Seite 7 von 25  
Page 7 of 25

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Guangdong) Ltd. Test facility located at No.102, 1F of Southwest and No.205, 2F No.767 Tianyuan Road, Tianhe District, Guangzhou 510663, Guangdong Province P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

## 3 General Product Information

### 3.1 Product Function and Intended Use

The EUT is 5-IN-1 TURNTABLE for indoor use. The unit supports BT4.1 wireless technologies.

Model difference:

The models VTA-60 XXXXX are identical to each other except for model name and unit color or pattern.

According to the above information, all applicable tests have been performed on VTA-60.

For details refer to the User Manual, Technical Description and Circuit Diagram.

### 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT**

General Information of EUT		Value
Kind of Equipment	5-IN-1 TURNTABLE	
Type Designation	VTA-60 XXXXX	
FCC ID	2AFHW-VTA-60	
IC	9577A-VTA60	
HVIN	VTA-60	
Operating Voltage	DC 12V, 2A (powered by external adaptor)	
Testing Voltage	AC 120V, 60Hz	
Adaptor	Model: BI30-120200-I Input: AC100-240V, 50/60Hz Output: DC 12V, 2A	
Technical Specification of Bluetooth 4.1 (Single mode)		
Operating Frequency	2402 - 2480 MHz	
Type of Modulation	GFSK, 8DPSK, π/4DQPSK	
Channel Number	79 channels	
Channel Separation	1 MHz	
Antenna Type	Integral Antenna	
Gain	0 dBi	

**Table 3: RF Channel and Frequency of General 2.4GHz**

RF Channel	Frequency (MHz)						
0	2402.00	20	2422.00	40	2442.00	60	2462.00
1	2403.00	21	2423.00	41	2443.00	61	2463.00
2	2404.00	22	2424.00	42	2444.00	62	2464.00
3	2405.00	23	2425.00	43	2445.00	63	2465.00
4	2406.00	24	2426.00	44	2446.00	64	2466.00

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

 Seite 9 von 25  
 Page 9 of 25

5	2407.00	25	2427.00	45	2447.00	65	2467.00
6	2408.00	26	2428.00	46	2448.00	66	2468.00
7	2409.00	27	2429.00	47	2449.00	67	2469.00
8	2410.00	28	2430.00	48	2450.00	68	2470.00
9	2411.00	29	2431.00	49	2451.00	69	2471.00
10	2412.00	30	2432.00	50	2452.00	70	2472.00
11	2413.00	31	2433.00	51	2453.00	71	2473.00
12	2414.00	32	2434.00	52	2454.00	72	2474.00
13	2415.00	33	2435.00	53	2455.00	73	2475.00
14	2416.00	34	2436.00	54	2456.00	74	2476.00
15	2417.00	35	2437.00	55	2457.00	75	2477.00
16	2418.00	36	2438.00	56	2458.00	76	2478.00
17	2419.00	37	2439.00	57	2459.00	77	2479.00
18	2420.00	38	2440.00	58	2460.00	<b>78</b>	<b>2480.00</b>
19	2421.00	<b>39</b>	<b>2441.00</b>	59	2461.00	/	/

Test frequencies are lowest channel: 2402 MHz, middle channel: 2441 MHz and highest channel: 2480 MHz.

**Table 4: Frequency Hopping Information**

Technical Specification	Description
Hopping Range	Hereby we declare that the frequency range of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V4.0 (single mode) for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).
Hopping Sequence	Example of a 79 hopping sequence in data mode:  33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73, 07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56, 69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43, 15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,
Receiver input bandwidth	The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master.  Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.  Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case.  That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

### **3.3 Independent Operation Modes**

The basic operation modes are:

- A. On, Traditional Bluetooth
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. On, Traditional Bluetooth on Hopping channel
- C. On, Normal operation mode
- D. Off

### **3.4 Noise Generating and Noise Suppressing Parts**

Refer to Circuit Diagram for further details.

### **3.5 Submitted Documents**

- Application Form
- Block Diagram
- FCC/IC Label and Location Info
- Operation Description
- Photo Document
- Schematics
- User Manual

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model VTA-60 in this report.

### 4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Notebook	Lenovo	E46A	EB24320428	N/A
iPhone	Apple	A1586	/	N/A

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

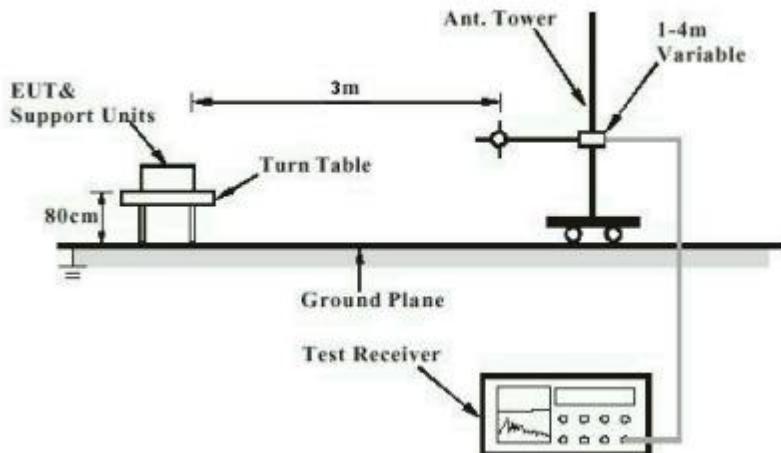
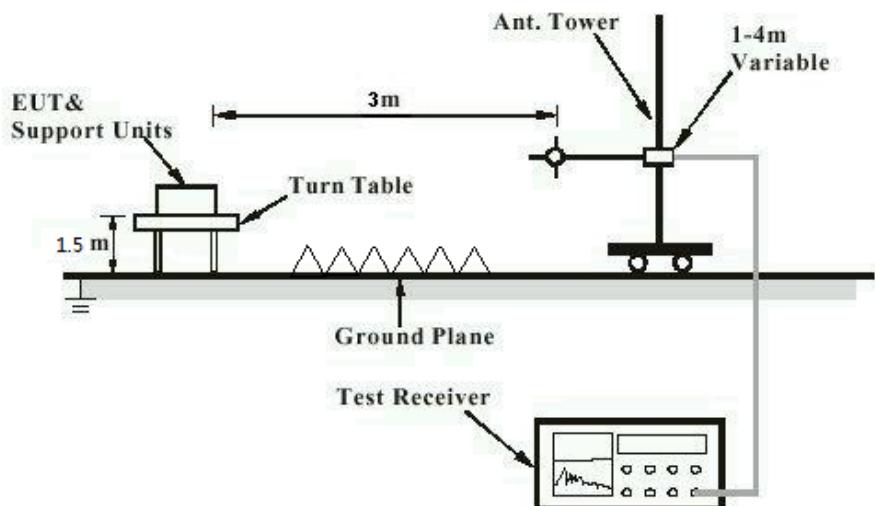
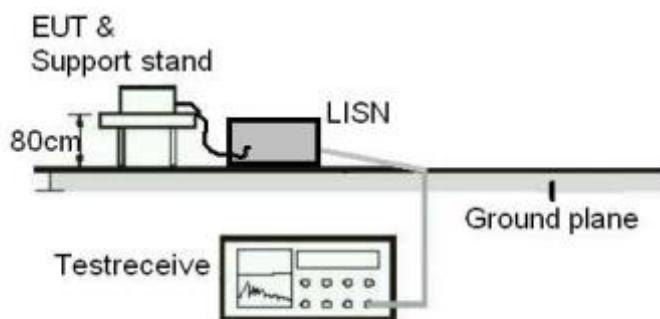
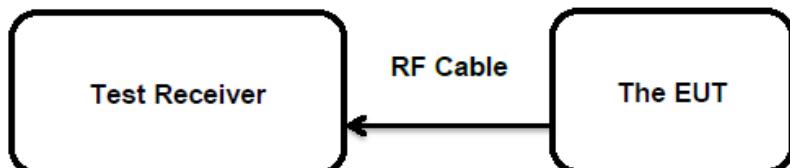


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



**Prüfbericht - Nr.: 50133710 001**  
Test Report No.Seite 13 von 25  
Page 13 of 25**Diagram of Measurement Configuration for Mains Conduction Measurement****Diagram of Measurement Configuration for Conducted Transmitter Measurement**

## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

**RESULT:** **Pass**

##### **Test Specification**

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has one internal antenna, the directional gain of antenna is 0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

**Prüfbericht - Nr.: 50133710 001**  
Test Report No.

Seite 15 von 25  
Page 15 of 25

## 5.1.2 Maximum Peak Conducted Output Power

**RESULT:**

**Pass**

### Test Specification

Test standard	:	FCC Part 15.247(b)(1)&(3) RSS-247 Clause 5.4(b)&(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	FHSS < 0.125 Watts
Kind of test site	:	Shielded Room

### Test Setup

Date of testing	:	16.06.2018
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 6: Test Result of Maximum Peak Conducted Output Power**

Test Mode	Test Channel (MHz)	Measured Peak Power		Limit (W)
		(dBm)	(W)	
BDR	2402	-6.12	0.0002	< 0.125
	2441	-6.45	0.0002	
	2480	-6.73	0.0002	
<b>Maximum Measured Value</b>		-6.12	0.0002	

Test Mode	Test Channel (MHz)	Measured Peak Power		Limit (W)
		(dBm)	(W)	
EDR	2402	-9.67	0.0001	< 0.125
	2441	-10.25	0.0001	
	2480	-10.46	0.0001	
<b>Maximum Measured Value</b>		-9.67	0.0001	

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G) of FHSS: 0dBi,  
The Maximum peak conducted output power (e.i.r.p.)= $P_{(Peak\ power)}+ G$ , which is far below the 4 W

**Prüfbericht - Nr.: 50133710 001**  
Test Report No.

Seite 16 von 25  
Page 16 of 25

### 5.1.3 99% Bandwidth

**RESULT:**

**Pass**

**Test Specification**

Test standard	:	RSS-Gen Clause 6.6
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	16.06.2018
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 7: Test Result of 99% Bandwidth, General 2.4GHz**

Test Mode	Test Channel (MHz)	99% Bandwidth (MHz)	Limit
BDR	2402	0.96	/
	2441	0.96	
	2480	0.95	
	<b>Maximum Measured Value</b>	<b>0.96</b>	

Test Mode	Test Channel (MHz)	99% Bandwidth (MHz)	Limit
EDR	2402	1.23	/
	2441	1.23	
	2480	1.23	
	<b>Maximum Measured Value</b>	<b>1.23</b>	

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*Seite 17 von 25  
Page 17 of 25**5.1.4 Conducted Spurious Emissions Measured in 100 kHz Bandwidth****RESULT:****Pass****Test Specification**

Test standard	:	FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)

Kind of test site : Shielded Room

**Test Setup**

Date of testing	:	Refer to test result
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix B.

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*Seite 18 von 25  
Page 18 of 25**5.1.5 Radiated Spurious Emission****RESULT:****Pass****Test Specification**

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Issue 4 Table 4

**Test Setup**

Date of testing	:	Refer to test result
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	22 °C
Relative humidity	:	53 %
Atmospheric pressure	:	101 kPa

**Remark:**

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix B.

**Prüfbericht - Nr.: 50133710 001**  
Test Report No.

Seite 19 von 25  
Page 19 of 25

## 5.1.6 20dB Bandwidth

**RESULT:**

**Pass**

**Test Specification**

Test standard	:	FCC Part 15.247(a)(1) RSS-247 Clause 5.1(a)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	16.06.2018
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 8: Test Result of 20dB Bandwidth, General 2.4GHz**

Test Mode	Test Channel (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
BDR	2402	981.00	654.000	/
	2441	956.00	637.333	
	2480	984.00	656.000	
<b>Maximum Measured Value</b>		984.00	656.000	

Test Mode	Test Channel (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
EDR	2402	1234.00	822.667	/
	2441	1229.30	819.533	
	2480	1231.50	821.000	
<b>Maximum Measured Value</b>		1234.00	822.667	

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

 Seite 20 von 25  
 Page 20 of 25

### 5.1.7 Carrier Frequency Separation

**RESULT:**
**Pass**
**Test Specification**

Test standard	:	FCC Part 15.247(a)(1) RSS-247 Clause 5.1(b)
Basic standard	:	ANSI C63.10: 2013
Limits	:	$\geq 25\text{kHz}$ or 2/3 of 20dB bandwidth, whichever is greater
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	16.06.2018
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Test channel	:	Low / Middle / High
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 9: Test Result of Carrier Frequency Separation, General 2.4GHz**

Test Mode	Test Channel	Test Channel (MHz)	Measured Channel Separation (KHz)	Limit (kHz)	
FHSS	Low Channel	2402	1002.0	$\geq 25\text{kHz}$ or 2/3 of 20dB bandwidth	
	Adjacency Channel	2403			
	Middle Channel	2441	1002.0		
	Adjacency Channel	2442			
	High Channel	2480	1004.0		
	Adjacency Channel	2479			

Note: The limit is maximum 2/3 of the 20 dB bandwidth: 656.000 KHz.

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*Seite 21 von 25  
Page 21 of 25**5.1.8 Number of Hopping Frequency****RESULT:****Pass****Test Specification**

Test standard	:	FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	≥ 15 non-overlapping channels
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	16.06.2018
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 10: Test Result of Number of Hopping Frequency, General 2.4GHz**

Test Mode	Frequency Range	Measured Quantity of Hopping Channel	Limit
FHSS	2402 - 2480 MHz	79	≥15

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

 Seite 22 von 25  
 Page 22 of 25

## 5.1.9 Time of Occupancy

**RESULT:**
**Pass**
**Test Specification**

Test standard	:	FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 0.4s
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	16.06.2018
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	24 °C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 11: Test Result of Time of Occupancy (Worst case)**

Test Mode	Test Channel (MHz)	Pulse Width(ms)	Number of Channels	Measured Dwell Time(s)	Limit (s)
BDR (DH5)	2402	2.880	110	0.317	0.4s
	2441	2.880	110	0.317	
	2480	2.880	110	0.317	

Test Mode	Test Channel (MHz)	Pulse Width(ms)	Number of Channels	Measured Dwell Time(s)	Limit (s)
EDR (3DH5)	2402	2.890	110	0.318	0.4s
	2441	2.890	110	0.318	
	2480	2.890	110	0.318	

Note:

Dwell time = Pulse width x Number of channels in Period

Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*Seite 23 von 25  
Page 23 of 25**5.1.10 Conducted Emission on AC Mains****RESULT:****Pass****Test Specification**

Test standard	:	FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	:	ANSI C63.10: 2013
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a) RSS-Gen Table 3
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	Refer to test result
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Earthing	:	Not connected
Ambient temperature	:	25 °C
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

**Prüfbericht - Nr.: 50133710 001**  
*Test Report No.*

Seite 24 von 25  
Page 24 of 25

## 6 Safety Human Exposure

### 6.1 Radio Frequency Exposure Compliance

#### 6.1.1 Electromagnetic Fields

**RESULT:**

**Pass**

##### **Test Specification**

Test standard

: CFR47 FCC Part 2: Section 2.1091  
CFR47 FCC Part 1: Section 1.1310  
FCC KDB Publication 447498 D01 v06  
RSS-102 Issue 5 March 2015

The minimum distance for the EUT is less than 5mm.

Since maximum peak output power of the transmitter is 0.24 mW <10 mW.

Hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01 General RF Exposure Guidance v06.

The maximum peak output power of the transmitter is -6.12 dBm (0.24 mW), which is far below the SAR exclusion threshold level 4 mW ≈ 6.02 dBm.

Hence the EUT is exempted from routine evaluation limits (SAR Evaluation) according to clause 2.5.1 of RSS-102 Issue 5.

## 7 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

## 8 List of Tables

Table 1: List of Test and Measurement Equipment.....	6
Table 2: Technical Specification of EUT .....	8
Table 3: RF Channel and Frequency of General 2.4GHz .....	8
Table 4: Frequency Hopping Information.....	9
Table 5: List of Accessories and Auxiliary Equipment.....	11
Table 6: Test Result of Maximum Peak Conducted Output Power.....	15
Table 7: Test Result of 99% Bandwidth, General 2.4GHz .....	16
Table 8: Test Result of 20dB Bandwidth, General 2.4GHz .....	19
Table 9: Test Result of Carrier Frequency Separation, General 2.4GHz.....	20
Table 10: Test Result of Number of Hopping Frequency, General 2.4GHz.....	21
Table 11: Test Result of Time of Occupancy .....	22

## Appendix B: Test Results

<b>APPENDIX B: TEST RESULTS .....</b>	<b>1</b>
<b>APPENDIX B.1: MEASUREMENT EQUIPMENT LIST.....</b>	<b>2</b>
<b>APPENDIX B.2: CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH.....</b>	<b>3</b>
<i>Low Channel of BDR mode.....</i>	<i>3</i>
<i>Middle Channel of BDR mode.....</i>	<i>3</i>
<i>High Channel of BDR mode.....</i>	<i>4</i>
<i>Low Channel of EDR mode.....</i>	<i>4</i>
<i>Middle Channel of EDR mode .....</i>	<i>5</i>
<i>Band Edge, Low Channel of BDR mode.....</i>	<i>5</i>
<i>Band Edge, Low Channel of BDR hopping mode.....</i>	<i>7</i>
<i>Band Edge, Low Channel of EDR mode.....</i>	<i>8</i>
<i>Band Edge, Low Channel of EDR hopping mode.....</i>	<i>9</i>
<b>APPENDIX B.3: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS .....</b>	<b>10</b>
<i>30MHz - 1GHz .....</i>	<i>10</i>
<i>1GHz - 18GHz .....</i>	<i>22</i>
<b>APPENDIX B.4: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS.....</b>	<b>34</b>
<i>Low channel.....</i>	<i>34</i>
<i>High channel.....</i>	<i>38</i>
<b>APPENDIX B.5: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS.....</b>	<b>42</b>

## Appendix B.1: Measurement Equipment List

### Measurement Equipment List

Testing Start Date	14.06.2018
Testing end date	16.06.2018
Project Manager	Elaine He
Cost Center	144
Test Report Number	50133710 001
Order Item Number	0174083320A00080
Customer	INNOVATIVE TECHNOLOGY
Product Name	5-IN-1 TURNTABLE
Comment	

Page 1 of 1

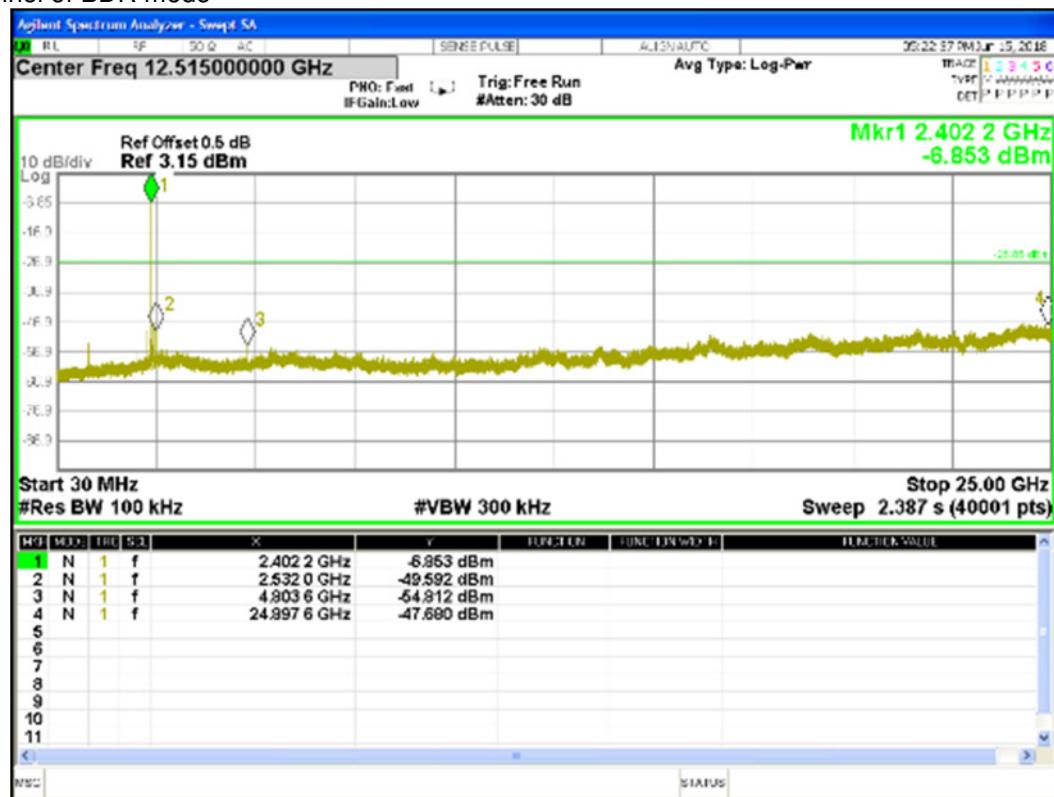
Old ID	Equip.	Description	Model	Manufacturer	Inte. (mon)	Due Date
1.887	1813944	EMI Test Receiver	ESCI	Rohde & Schwarz	12	16.03.2019
1.886	1813943	Two-Line V-Network	ENV216	Rohde & Schwarz	12	07.05.2019
1.807	1813832	EMI Test Receiver	ESCI	Rohde & Schwarz	12	18.09.2018
1.805	1813829	FSP30 Spectrum Analyzer	FSP30	Rohde & Schwarz	12	16.03.2019
1.921B	1814142	Trilog Broadband Antenna	VULB9168(6dB)	SCHWARZBECK	24	20.09.2018
1.822	1813850	Loop Antenna	HFH2-Z2	Rohde & Schwarz	24	14.03.2019
1.889C	1814199	Double-Ridged Horn Antenna	HF907(3s)	Rohde & Schwarz	24	27.10.2018
1.808	1813833	Horn Antenna	3160-09	EMCO	60	29.07.2019
1.819C	1814068	Pre-Amplifier	A44-00101800-25-10P-	MITEQ	12	16.03.2019
1.819A	1813846	Band Reject Filter	BRM50702	Micro-Tronics	24	07.07.2018
1.808A	1813834	Pre-Amplifier	A33-18002650-30-8P-4	MITEQ	24	20.07.2019
1.666	1813697	SAC	N/A	Albatross Project	36	04.08.2020
1.913	1814012	Shielding Room	9x4x3.4	Changzhou Yuanping	60	06.12.2020

\* No entry for devices that are not subject to regular gauging or calibration

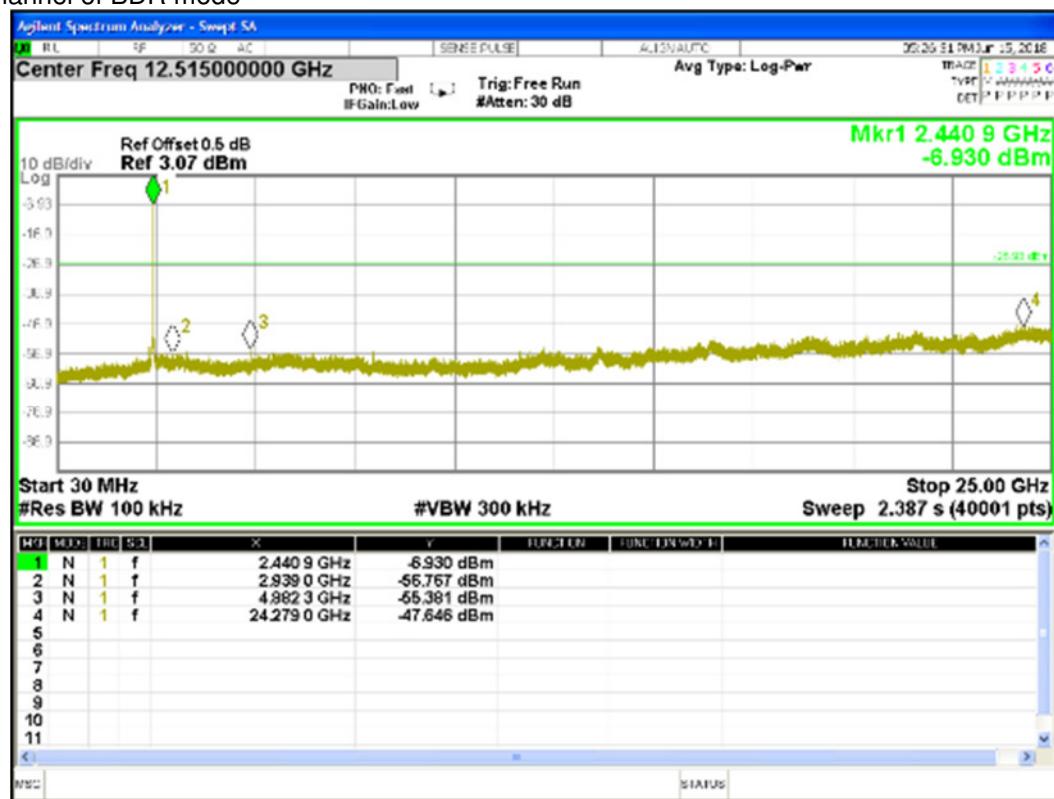
Signature: 

## Appendix B.2: Conducted Spurious Emissions Measured in 100 kHz Bandwidth

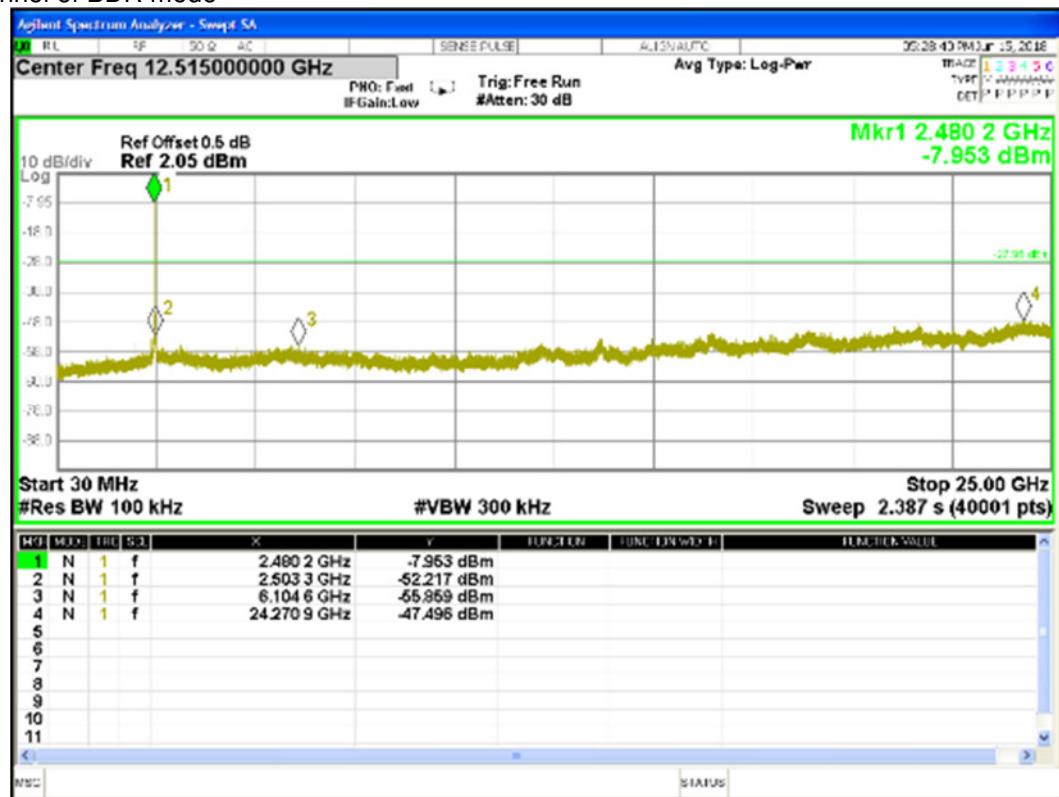
## Low Channel of BDR mode



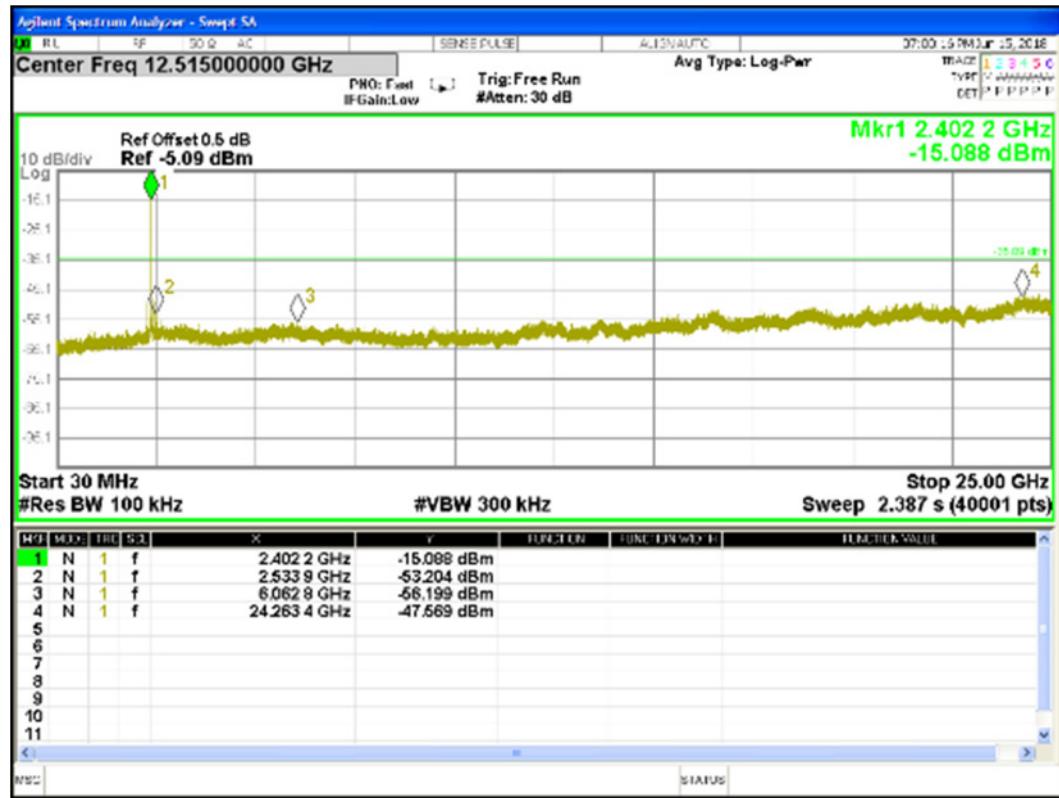
### Middle Channel of BDR mode



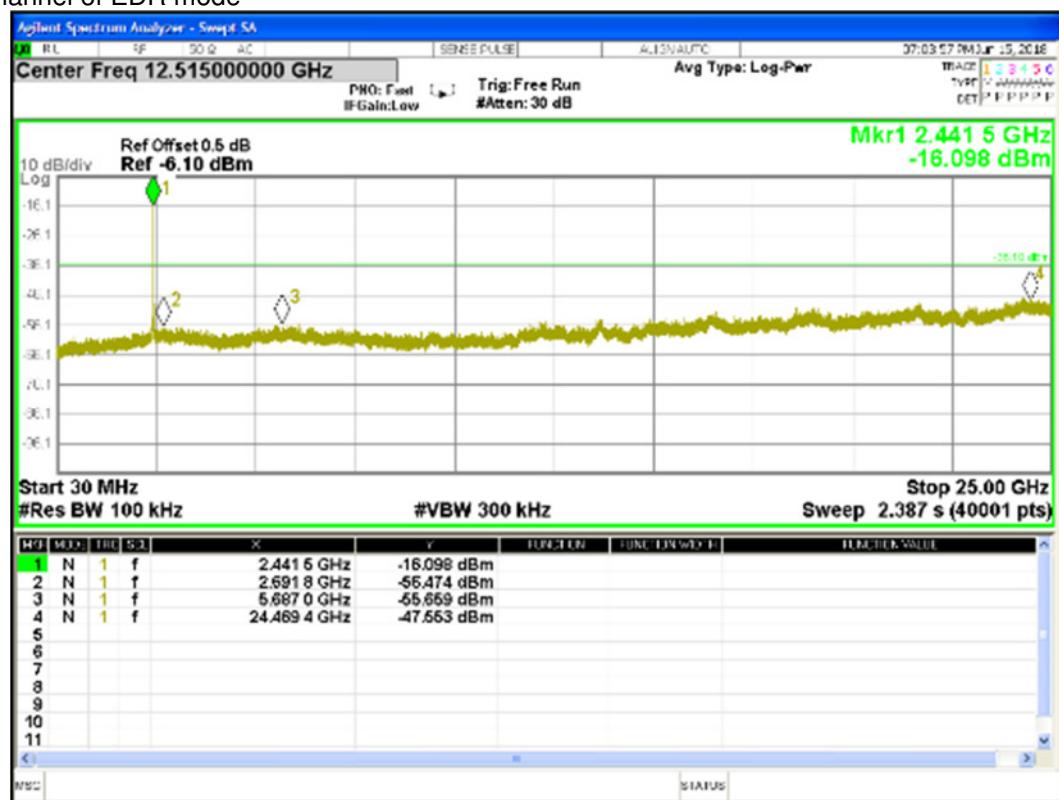
### High Channel of BDR mode



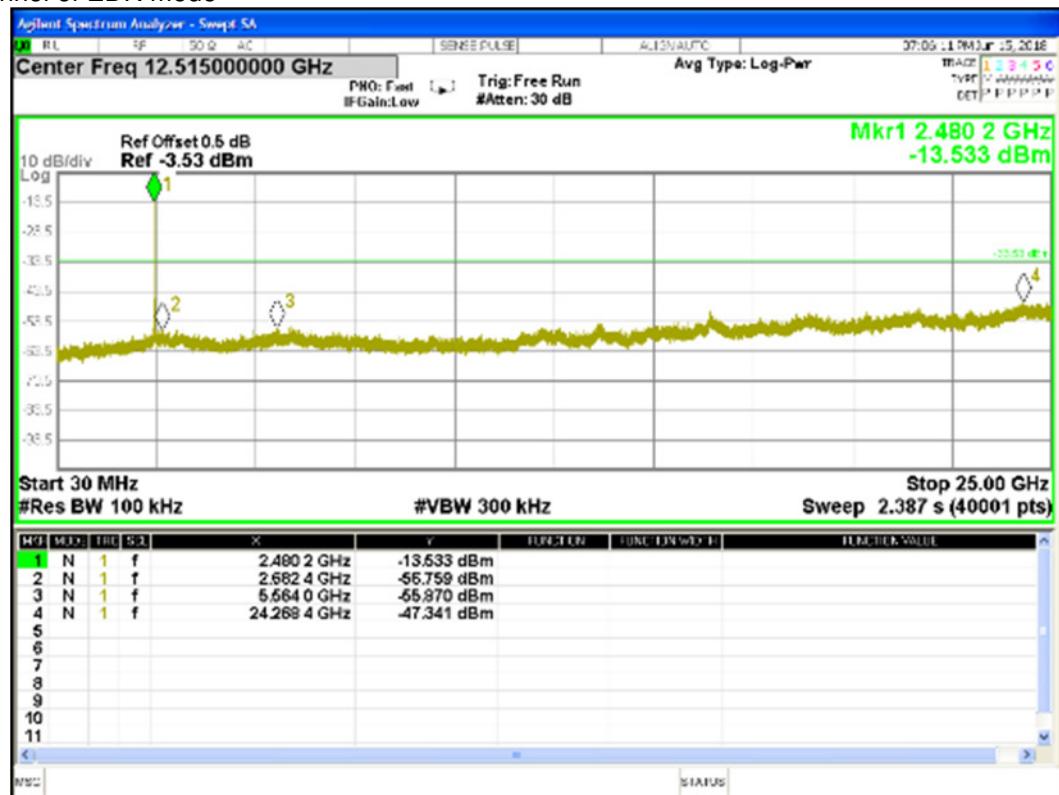
### Low Channel of EDR mode

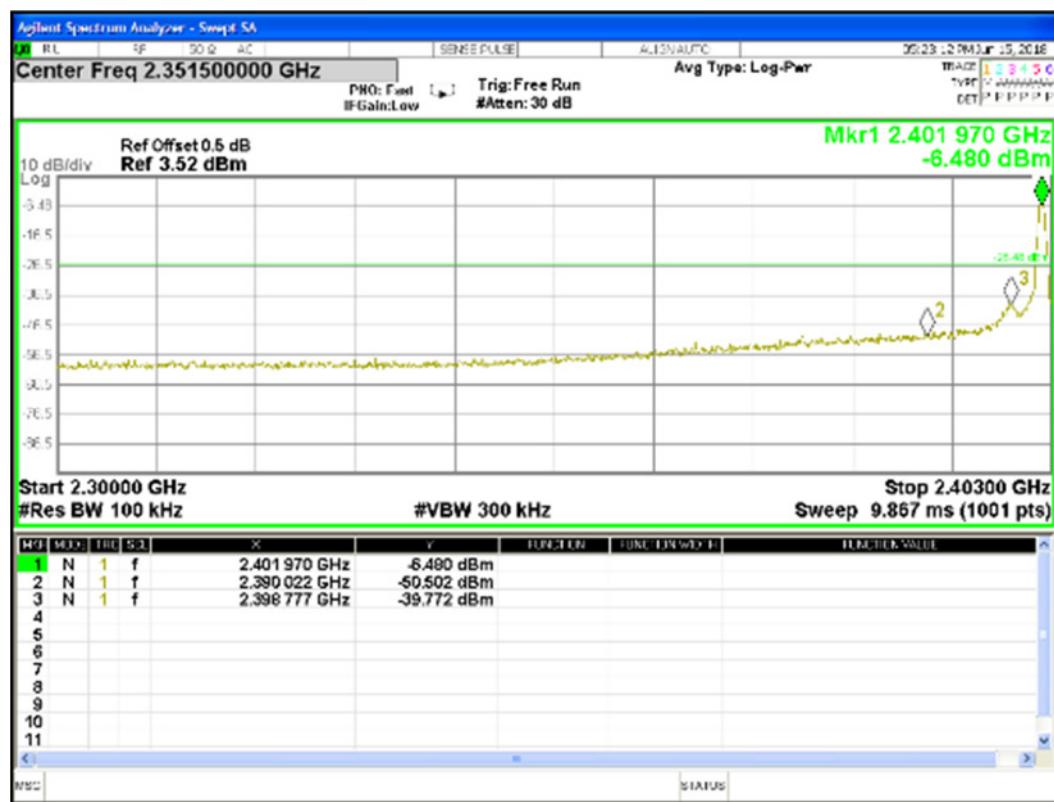


Middle Channel of EDR mode

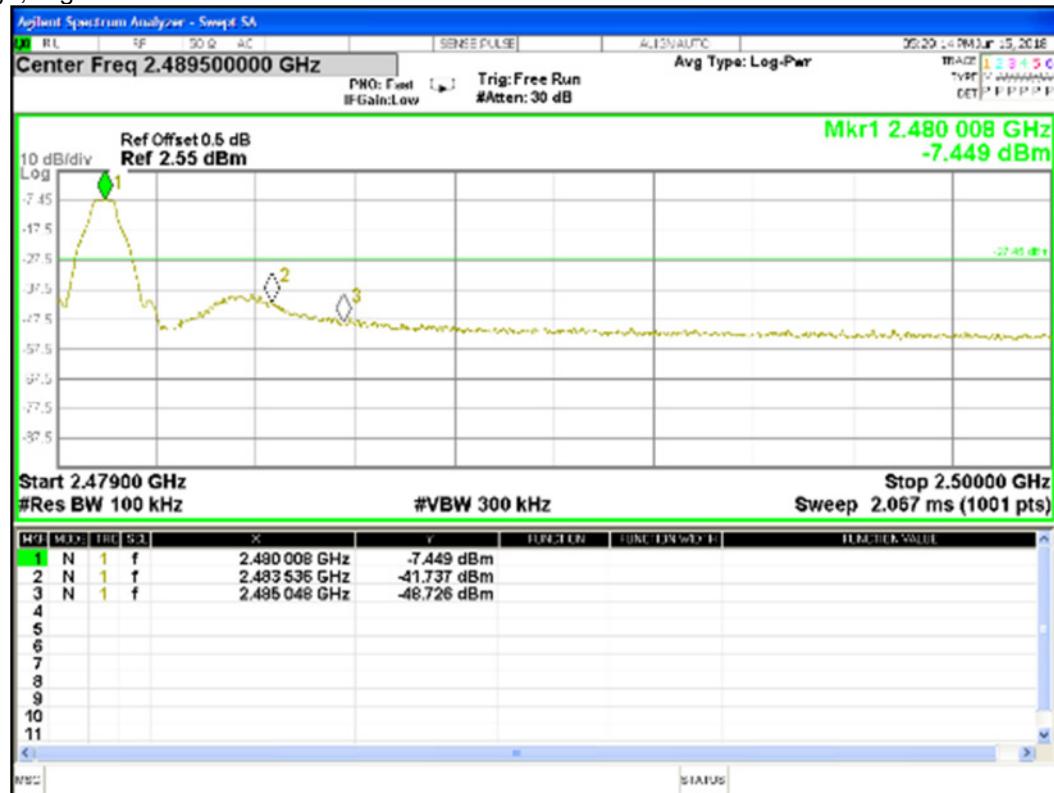


High Channel of EDR mode

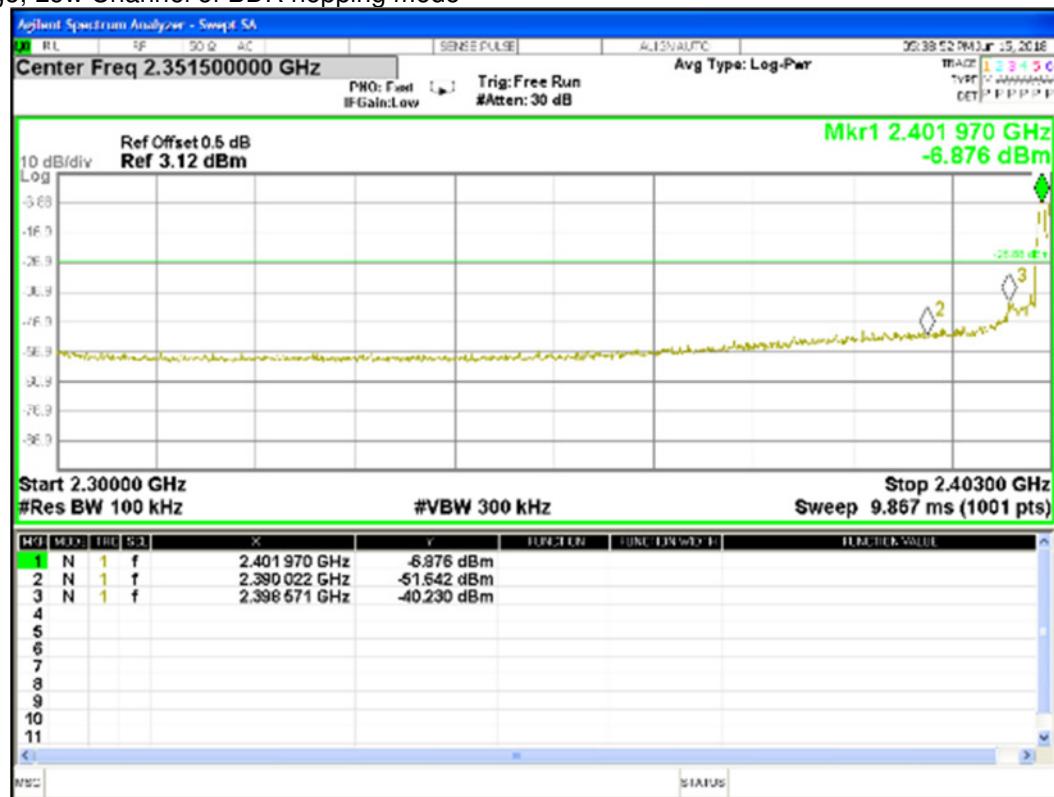




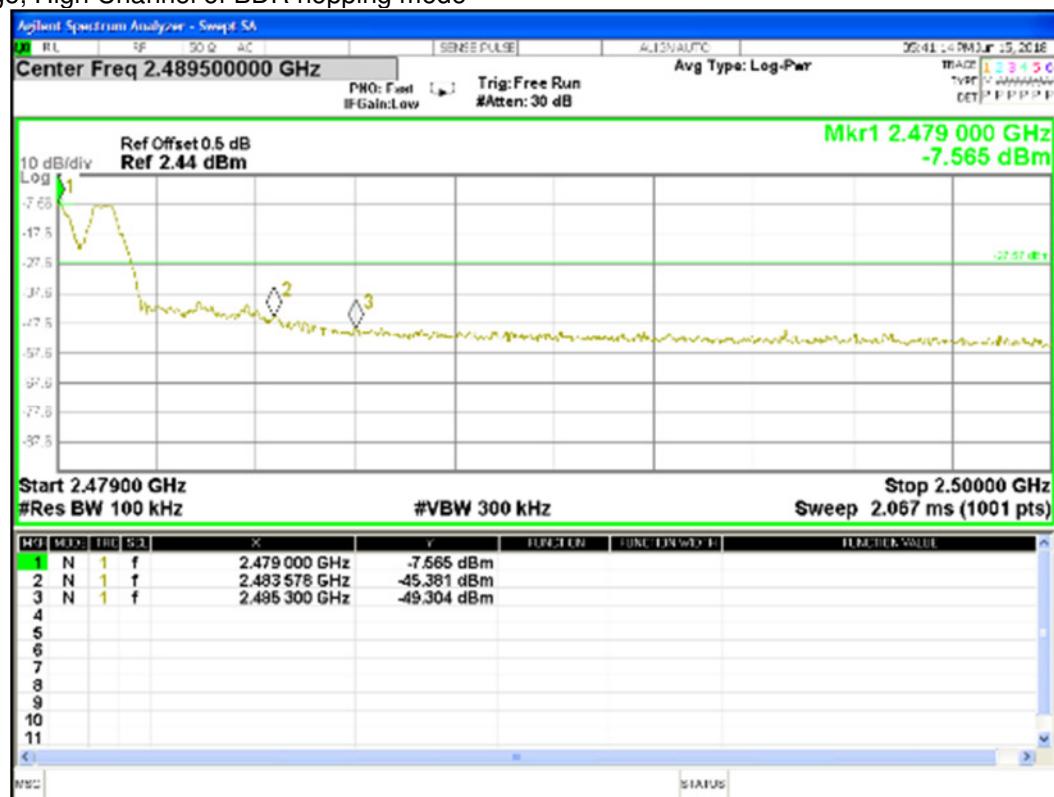
Band Edge, High Channel of BDR mode



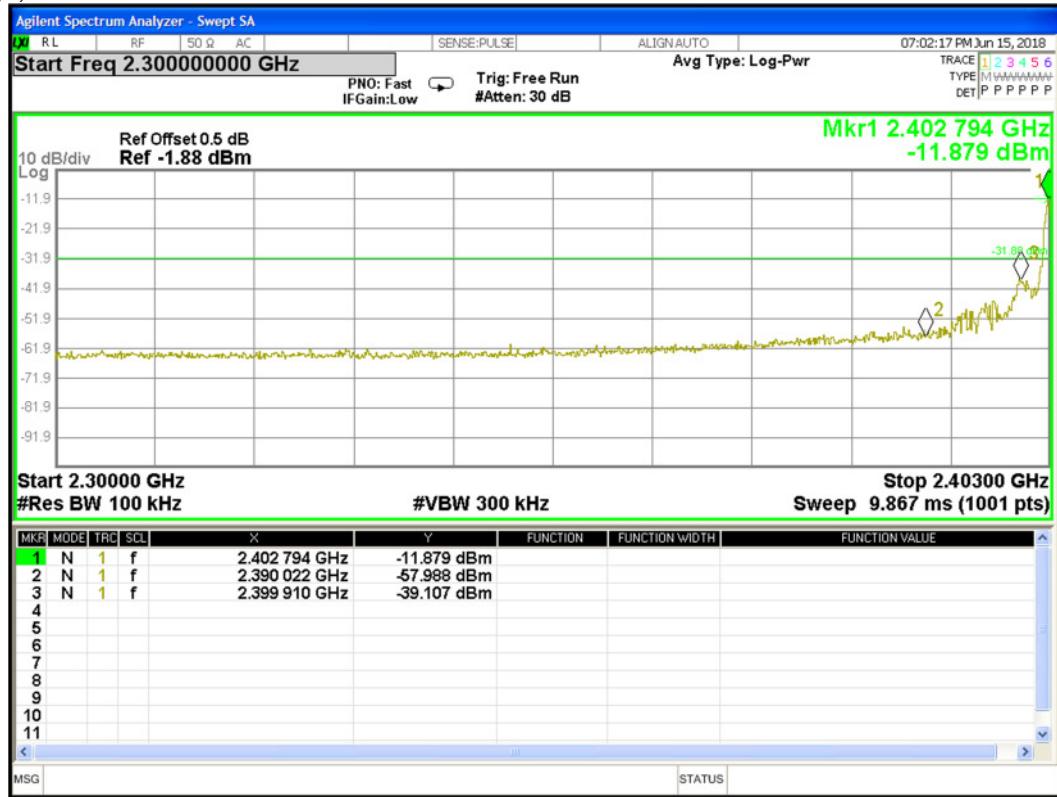
Band Edge, Low Channel of BDR hopping mode



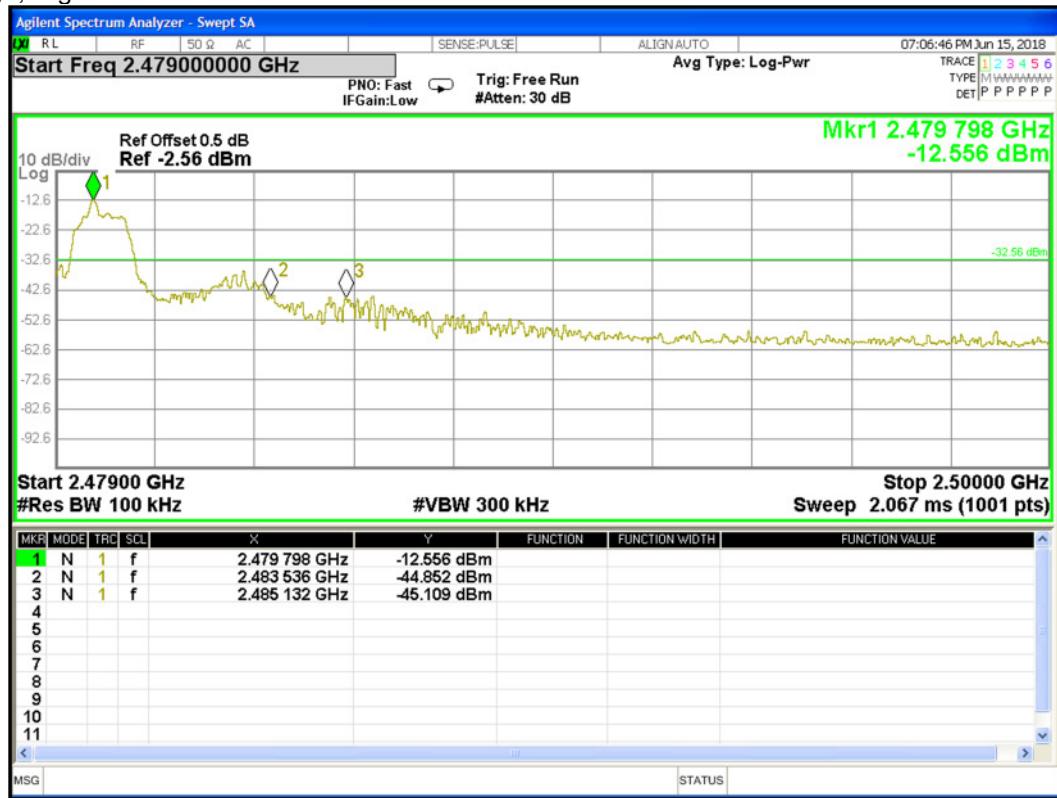
Band Edge, High Channel of BDR hopping mode



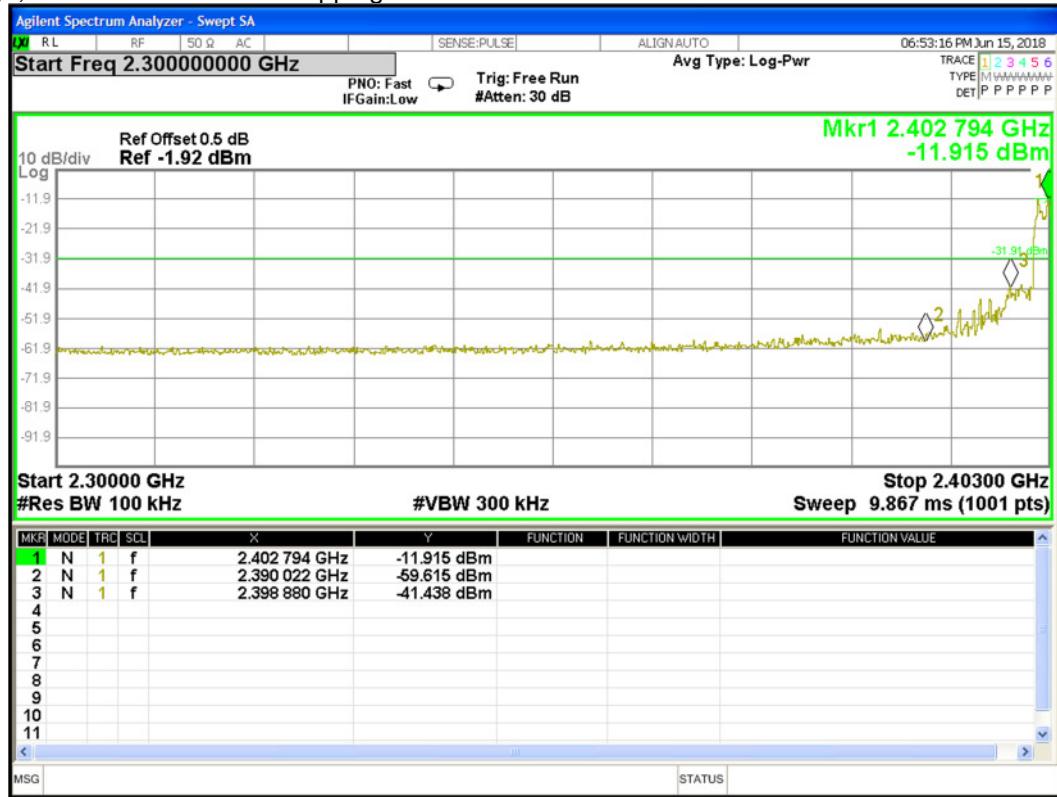
## Band Edge, Low Channel of EDR mode



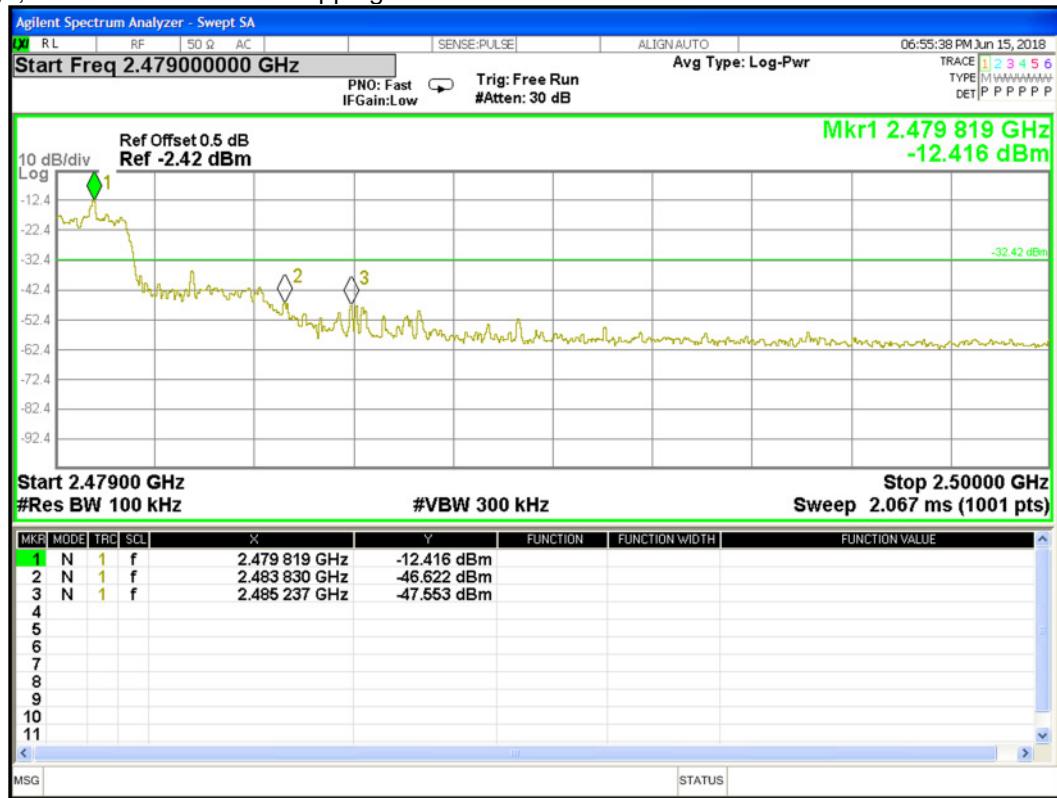
## Band Edge, High Channel of EDR mode



## Band Edge, Low Channel of EDR hopping mode



## Band Edge, Low Channel of EDR hopping mode

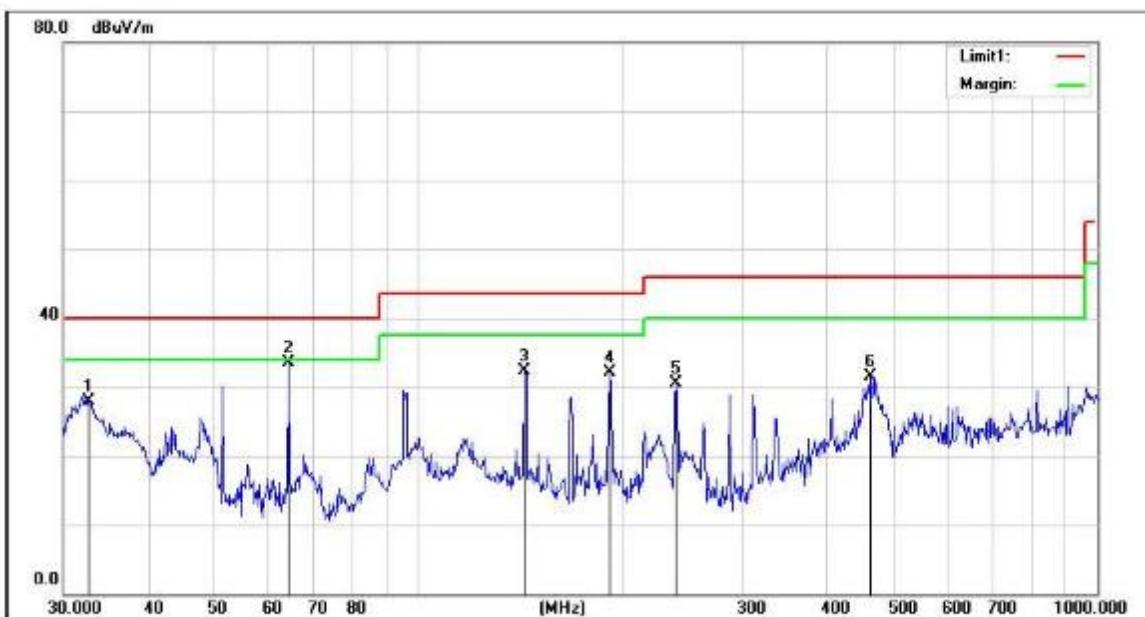


Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz -26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

### Appendix B.3: Test Results of Radiated Spurious Emissions

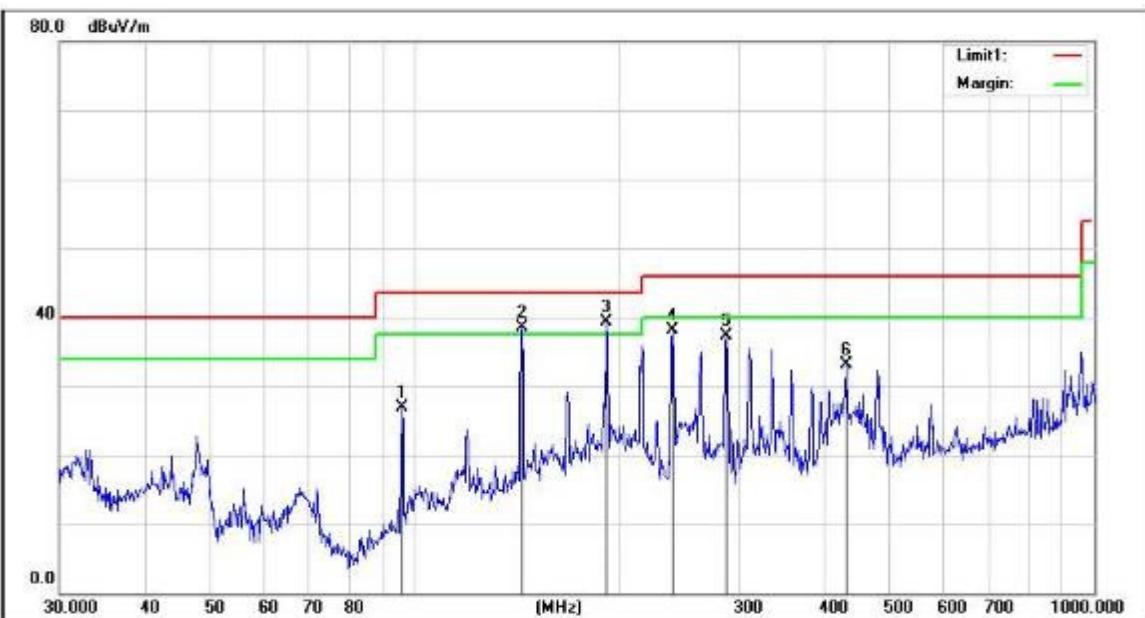
30MHz - 1GHz

Job No.:		Ant.Polar.:	Vertical
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16
Test item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	BR-L	Test By:	
Description:			



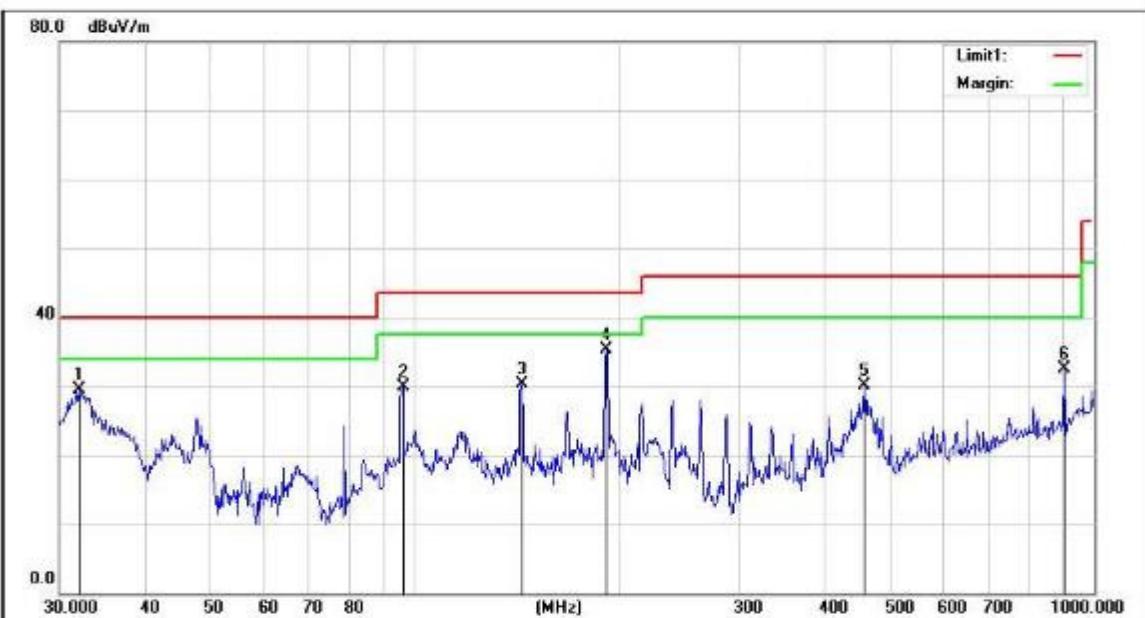
No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	32.7486	40.47	-12.60	27.87	40.00	-12.13			QP
2	64.4330	57.71	-24.24	33.47	40.00	-6.53			QP
3	143.3260	50.01	-17.67	32.34	43.50	-11.16			QP
4	191.0738	52.44	-20.24	32.20	43.50	-11.30			QP
5	239.1473	48.36	-17.82	30.54	46.00	-15.46			QP
6	462.3455	41.52	-10.05	31.47	46.00	-14.53			QP

Job No.:		Ant.Polar.:	Horizontal
Standard:	FCC_PART15_B_03m_QP	Date:2018/6/16	Time:17:39:23
Test item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	BR-L	Test By:	
Description:			



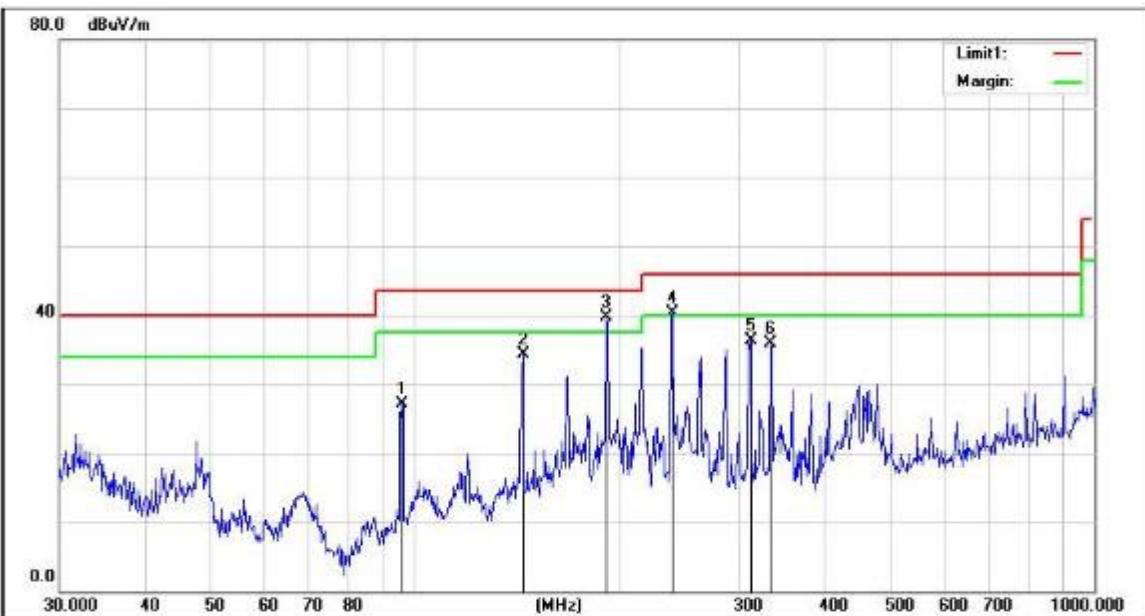
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	95.7622	46.56	-19.61	26.95	43.50	-16.55			QP
2	143.8294	56.18	-17.69	38.49	43.50	-5.01			QP
3	191.7450	59.47	-20.24	39.23	43.50	-4.27			QP
4	239.1473	55.92	-17.82	38.10	46.00	-7.90			QP
5	286.9823	52.87	-15.53	37.34	46.00	-8.66			QP
6	432.5457	43.96	-10.89	33.07	46.00	-12.93			QP

Job No.:		Ant.Polar.:	Vertical
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16 17:39:54
Test item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	BR-M	Test By:	
Description:			



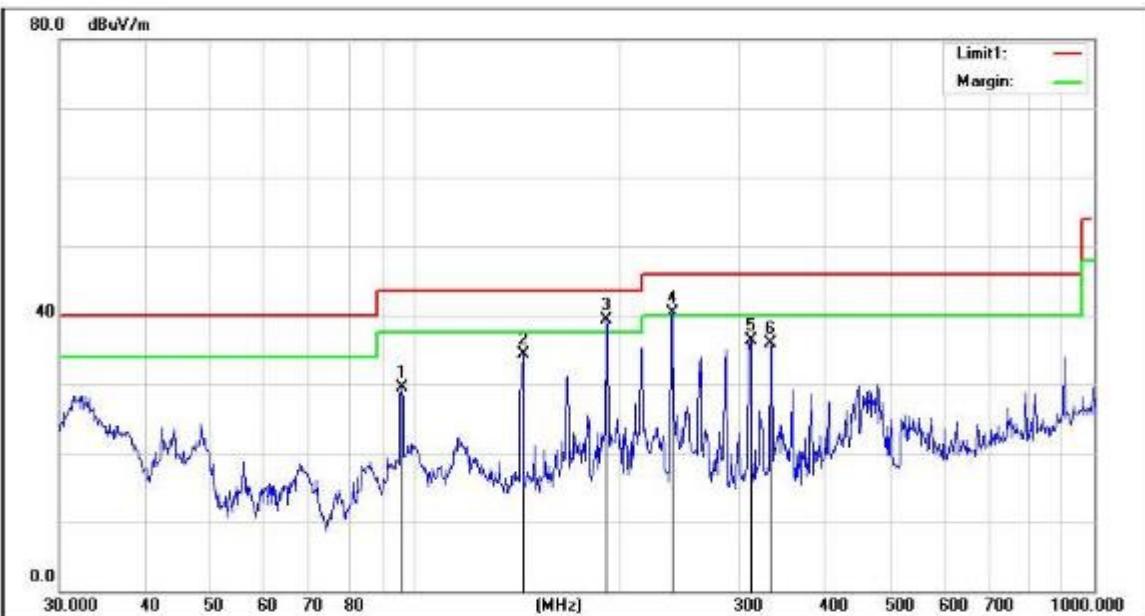
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	32.0667	41.68	-12.25	29.43	40.00	-10.57			QP
2	96.0986	49.47	-19.58	29.89	43.50	-13.61			QP
3	143.8294	48.00	-17.69	30.31	43.50	-13.19			QP
4	191.0738	55.52	-20.24	35.28	43.50	-8.22			QP
5	459.1143	40.33	-10.17	30.16	46.00	-15.84			QP
6	903.3093	34.66	-2.14	32.52	46.00	-13.48			QP

Job No.:		Ant.Polar.:	Horizontal
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16
Test item:	Radiated Emission	Time:	17:40:07
Company:		Distance:	3m
Model:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Mode:	BR-M	Power:	AC 120V/60Hz
Description:		Test By:	



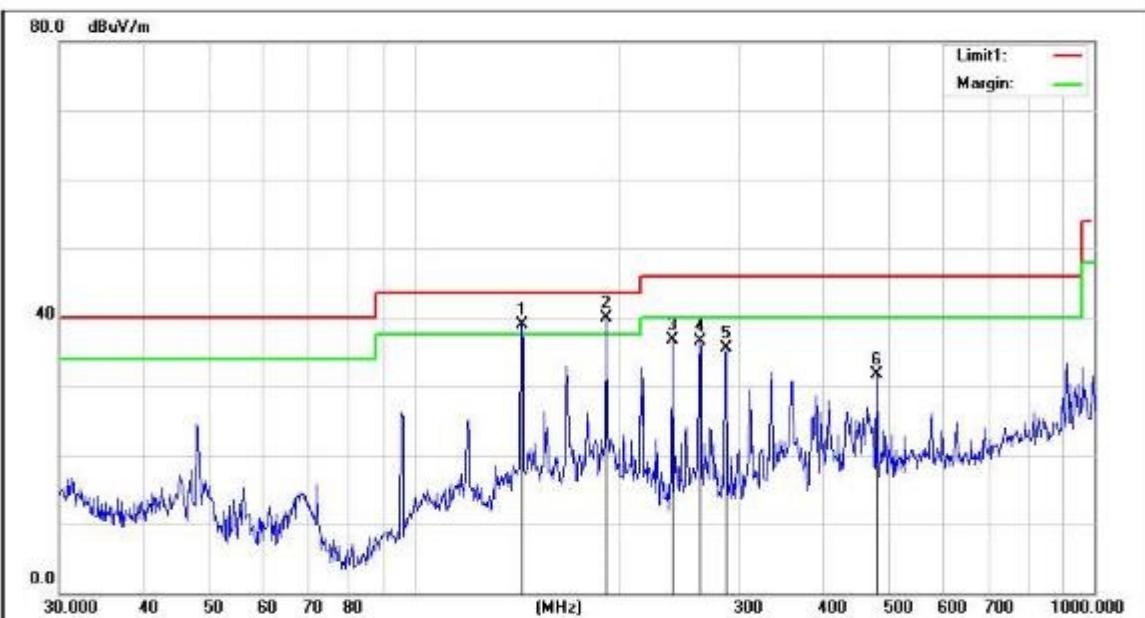
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	95.7622	46.68	-19.61	27.07	43.50	-16.43			QP
2	144.3348	51.95	-17.72	34.23	43.50	-9.27			QP
3	191.7450	60.02	-20.24	39.78	43.50	-3.72			QP
4	239.1473	58.14	-17.82	40.32	46.00	-5.68			QP
5	312.1792	50.74	-14.42	36.32	46.00	-9.68			QP
6	333.6865	49.97	-14.06	35.91	46.00	-10.09			QP

Job No.:		Ant.Polar.:	Vertical
Standard:	FCC_PART15_B_03m_Q	Date:	2018/6/16 17:40:29
Test item:	P Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	BR-H	Test By:	
Description:			



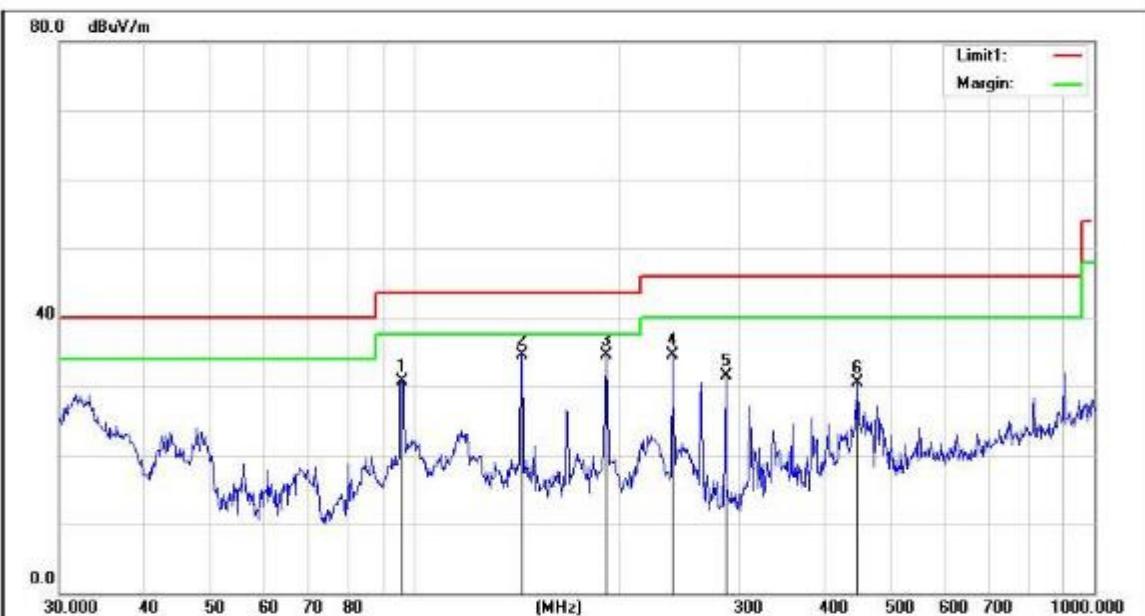
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	95.7622	49.17	-19.61	29.56	43.50	-13.94			QP
2	144.3348	51.95	-17.72	34.23	43.50	-9.27			QP
3	191.7450	59.52	-20.24	39.28	43.50	-4.22			QP
4	239.1473	58.14	-17.82	40.32	46.00	-5.68			QP
5	312.1792	50.74	-14.42	36.32	46.00	-9.68			QP
6	333.6865	49.97	-14.06	35.91	46.00	-10.09			QP

Job No.:	STS1806143	Ant.Polar.:	Horizontal
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16
Test item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	BR-H	Test By:	
Description:			



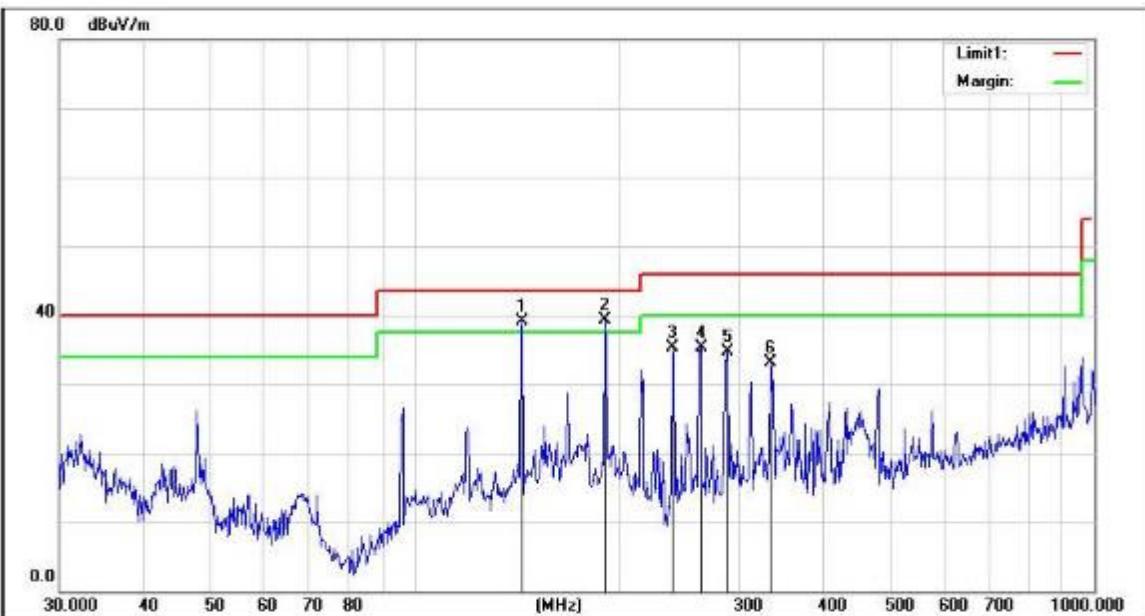
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	143.8294	56.55	-17.69	38.86	43.50	-4.64			QP
2	191.0738	60.15	-20.24	39.91	43.50	-3.59			QP
3	239.9873	54.51	-17.76	36.75	46.00	-9.25			QP
4	262.8955	51.60	-15.17	36.43	46.00	-9.57			QP
5	287.9904	50.98	-15.49	35.49	46.00	-10.51			QP
6	478.8455	41.09	-9.47	31.62	46.00	-14.38			QP

Job No.:		Ant.Polar.:	Vertical
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16
Test item:	Radiated Emission	Time:	17:41:11
Company:		Distance:	3m
Model:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Mode:	EBR-L	Power:	AC 120V/60Hz
Description:		Test By:	



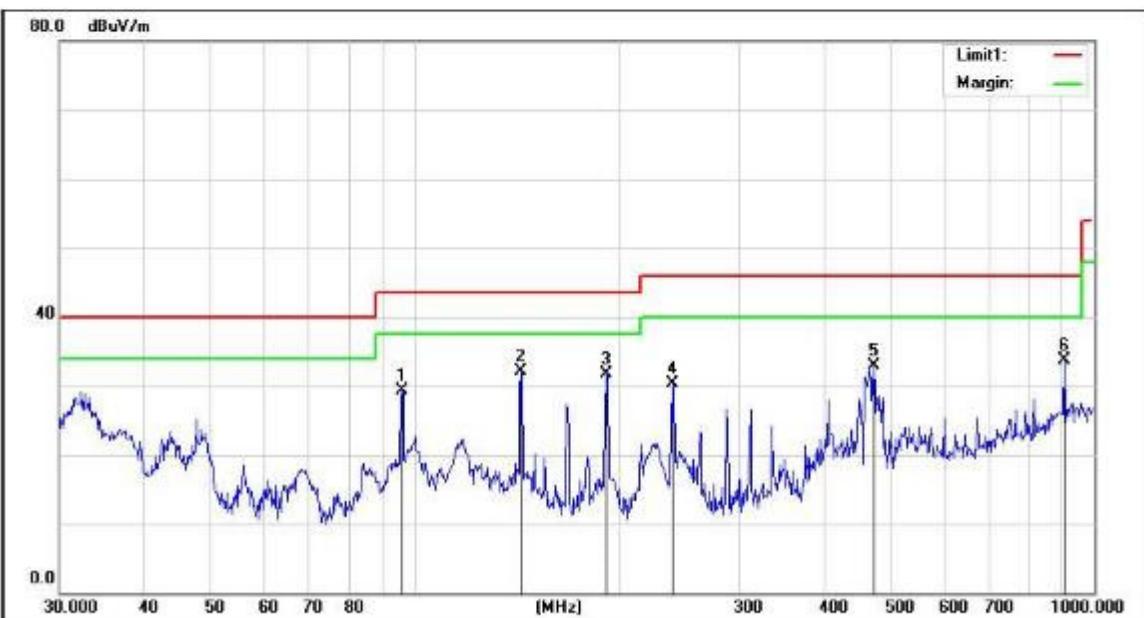
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	95.7622	50.22	-19.61	30.61	43.50	-12.89			QP
2	143.8294	52.15	-17.69	34.46	43.50	-9.04			QP
3	191.0738	54.80	-20.24	34.56	43.50	-8.94			QP
4	239.1473	52.24	-17.82	34.42	46.00	-11.58			QP
5	286.9823	47.07	-15.53	31.54	46.00	-14.46			QP
6	447.9821	41.01	-10.59	30.42	46.00	-15.58			QP

Job No.:		Ant.Polar.:	Horizontal
Standard:	FCC_PART15_B_03m_QP	Date:2018/6/16	Time:17:41:22
Test item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	EBR-L	Test By:	
Description:			



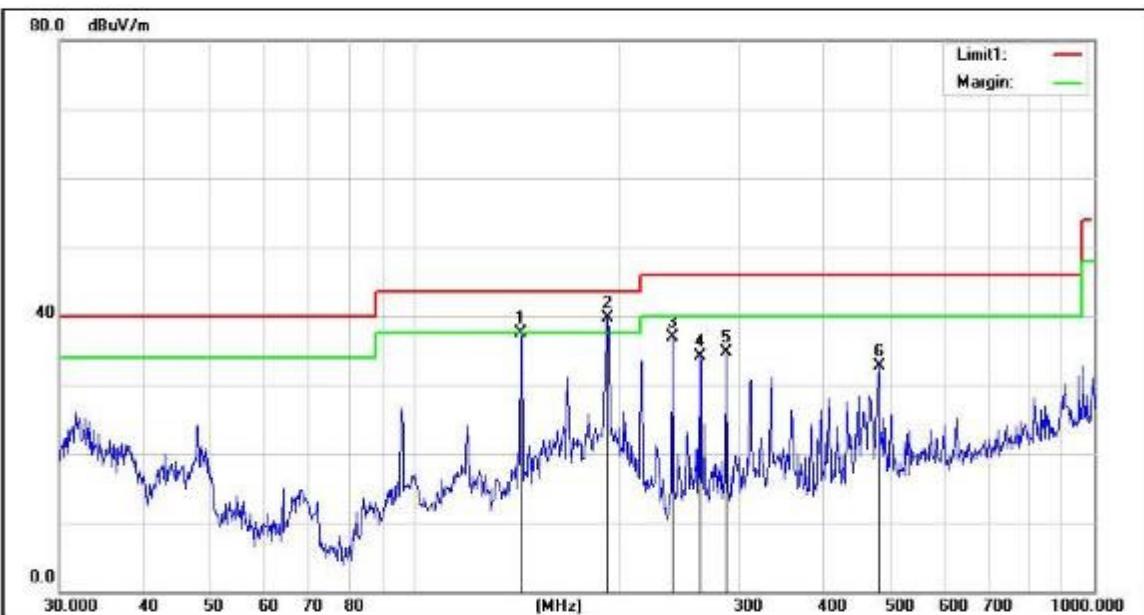
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	143.8294	56.76	-17.69	39.07	43.50	-4.43			QP
2	190.4050	59.48	-20.25	39.23	43.50	-4.27			QP
3	239.1473	53.12	-17.82	35.30	46.00	-10.70			QP
4	263.8190	50.62	-15.22	35.40	46.00	-10.60			QP
5	289.0020	50.22	-15.45	34.77	46.00	-11.23			QP
6	333.6865	47.20	-14.06	33.14	46.00	-12.86			QP

Job No.:		Ant.Polar.:	Vertical
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16 17:41:50
Test Item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	EBR-M	Test By:	
Description:			



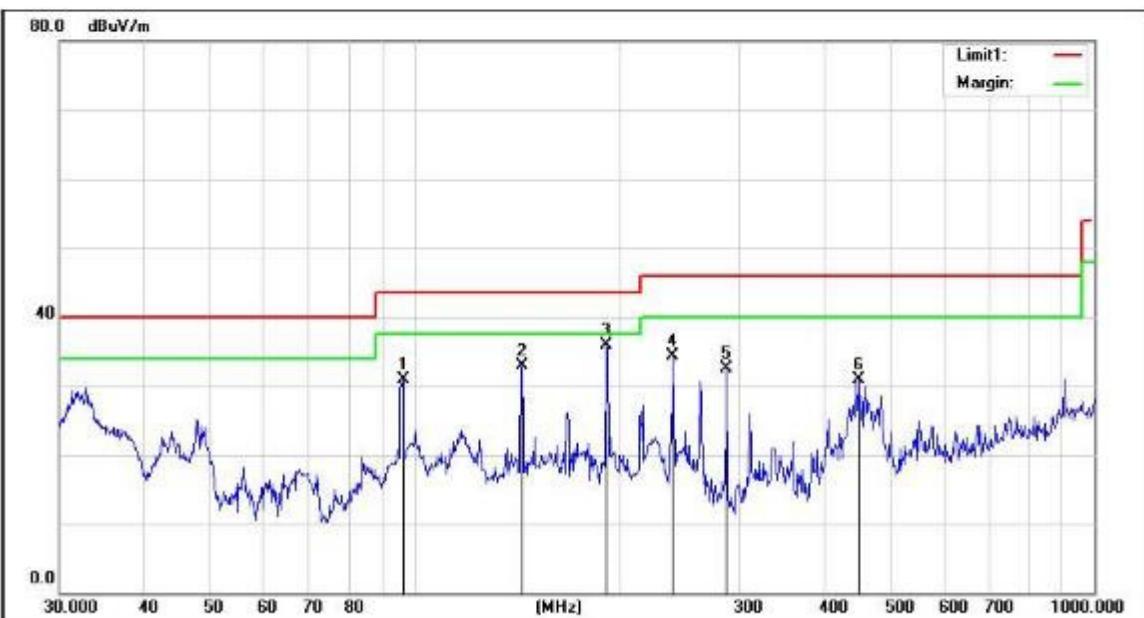
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	95.7622	48.86	-19.61	29.25	43.50	-14.25			QP
2	143.3260	49.85	-17.67	32.18	43.50	-11.32			QP
3	191.7450	51.96	-20.24	31.72	43.50	-11.78			QP
4	239.1473	48.06	-17.82	30.24	46.00	-15.76			QP
5	473.8346	42.57	-9.62	32.95	46.00	-13.05			QP
6	903.3093	35.90	-2.14	33.76	46.00	-12.24			QP

Job No.:		Ant.Polar.:	Horizontal
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16
Test item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	EBR-M	Test By:	
Description:			



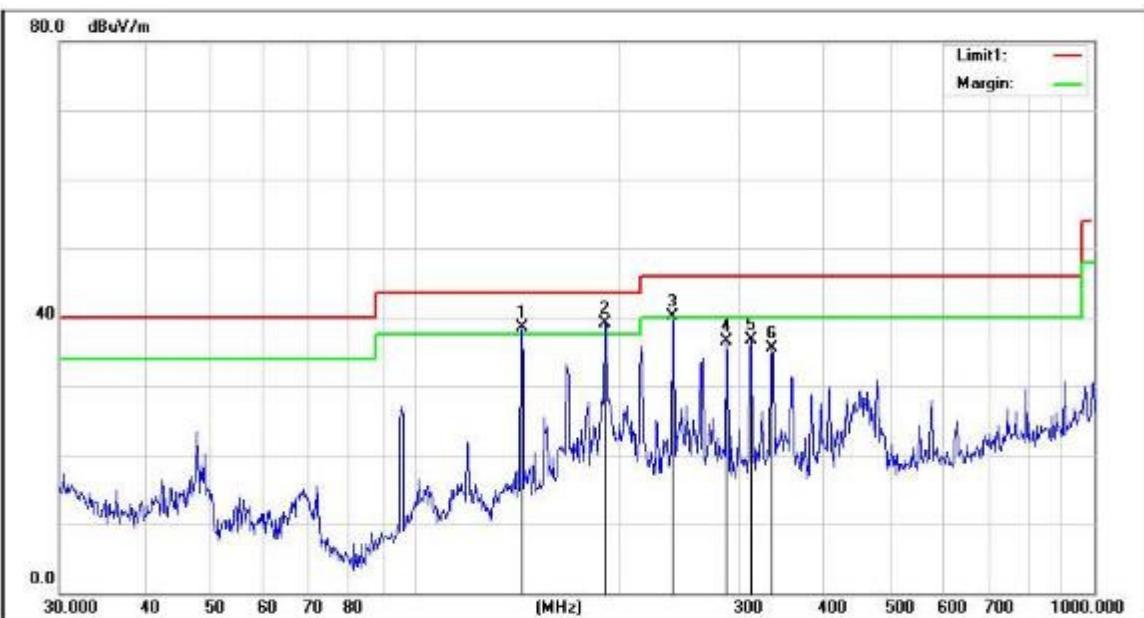
No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	143.3260	55.08	-17.67	37.41	43.50	-6.09			QP
2	192.4185	59.85	-20.24	39.61	43.50	-3.89			QP
3	239.1473	54.69	-17.82	36.87	46.00	-9.13			QP
4	262.8955	49.36	-15.17	34.19	46.00	-11.81			QP
5	286.9823	50.30	-15.53	34.77	46.00	-11.23			QP
6	482.2155	42.15	-9.35	32.80	46.00	-13.20			QP

Job No.:		Ant.Polar.:	Vertical
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16 17:42:30
Test Item:	Radiated Emission	Distance:	3m
Company:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Model:		Power:	AC 120V/60Hz
Mode:	EBR-H	Test By:	
Description:			



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	96.0986	50.50	-19.58	30.92	43.50	-12.58			QP
2	143.8294	50.58	-17.69	32.89	43.50	-10.61			QP
3	191.7450	56.10	-20.24	35.86	43.50	-7.64			QP
4	239.9873	52.00	-17.76	34.24	46.00	-11.76			QP
5	287.9904	47.91	-15.49	32.42	46.00	-13.58			QP
6	449.5557	41.52	-10.52	31.00	46.00	-15.00			QP

Job No.:		Ant.Polar.:	Horizontal
Standard:	FCC_PART15_B_03m_QP	Date:	2018/6/16
Test item:	Radiated Emission	Time:	17:42:48
Company:		Distance:	3m
Model:		Temp.(C)/Hum.(%RH):	25.5(C)/62%RH
Mode:	EBR-H	Power:	AC 120V/60Hz
Description:		Test By:	



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	143.8294	56.13	-17.69	38.44	43.50	-5.06			QP
2	190.4050	59.45	-20.25	39.20	43.50	-4.30			QP
3	239.1473	57.93	-17.82	40.11	46.00	-5.89			QP
4	286.9823	52.02	-15.53	36.49	46.00	-9.51			QP
5	312.1792	51.05	-14.42	36.63	46.00	-9.37			QP
6	336.0351	49.49	-14.05	35.44	46.00	-10.56			QP

1GHz - 18GHz

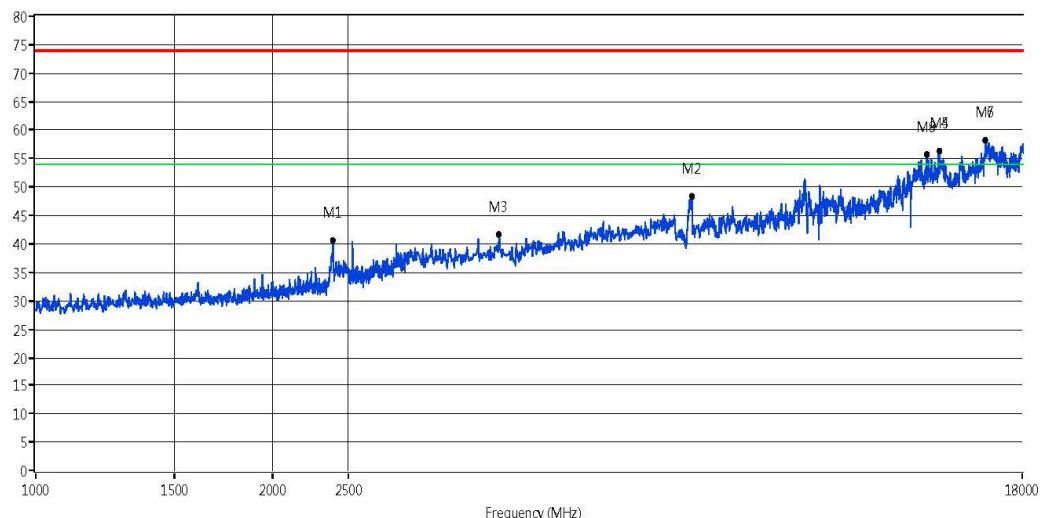
## Test result

Project Number: 1

Test Time: 2018-06-16\_15.25.41

EUT Name		Test Engineer	Li Peng
Manufacturer	N.A	Test Standard	FCC Part 15B
Model	BDR-L	Work Addition	Normal
Temp.(oC)	25	Polarizer	Auto
Hum.	65%	Remark	N.A

RE\_FCC Test Case\_FCC 15B 1GHz-25GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	ANT	Verdict
1	2390.609	40.57	-14.15	74.00	-33.43	Peak	Horizontal	Pass
2	6836.164	48.40	-4.18	74.00	-25.60	Peak	Horizontal	Pass
3	3889.111	41.71	-11.60	74.00	-32.29	Peak	Horizontal	Pass
4	14114.885	56.33	3.96	74.00	-17.67	Peak	Horizontal	Pass
5	14114.885	45.36	3.96	54.00	-8.64	Average	Horizontal	Pass
6	16164.835	58.16	6.07	74.00	-15.84	Peak	Horizontal	Pass
7	16164.835	46.22	6.07	54.00	-7.78	Average	Horizontal	Pass
8	13623.377	55.81	2.32	74.00	-18.19	Peak	Horizontal	Pass
9	13623.377	44.38	2.32	54.00	-9.62	Average	Horizontal	Pass

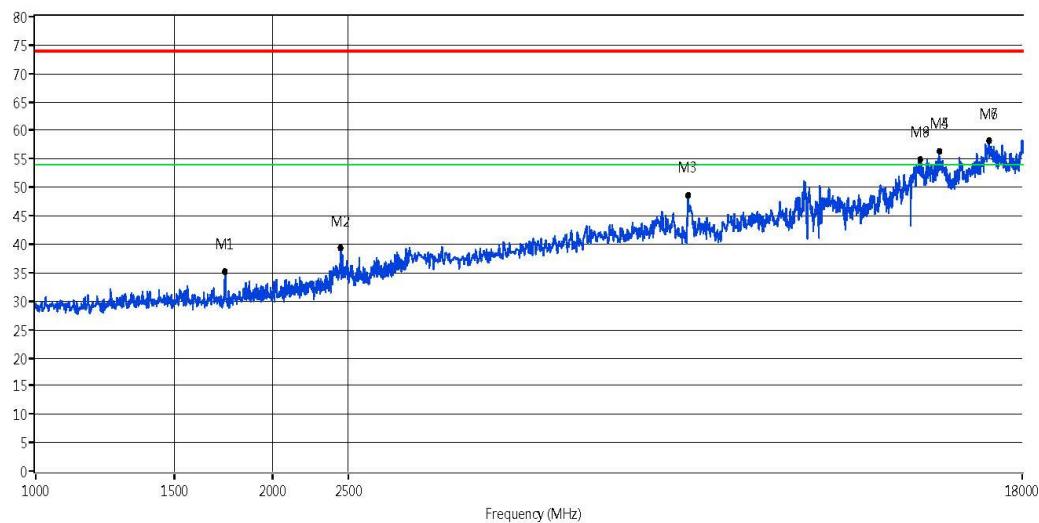
## Test result

Project Number: 1

Test Time: 2018-06-16\_15.27.23

EUT Name		Test Engineer	Li Peng
Manufacturer	N.A	Test Standard	FCC Part 15B
Model	BDR-L	Work Addition	Normal
Temp.(oC)	25	Polarizer	Auto
Hum.	65%	Remark	N.A

RE\_FCC Test Case\_FCC 15B 1GHz-25GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	ANT	Verdict
1	1741.259	45.24	-18.89	74.00	-28.76	Peak	Vertical	Pass
2	2446.553	39.28	-13.80	74.00	-34.72	Peak	Vertical	Pass
3	6766.234	48.53	-4.22	74.00	-25.47	Peak	Vertical	Pass
4	14114.885	56.43	3.96	74.00	-17.57	Peak	Vertical	Pass
5	14114.885	43.58	3.96	54.00	-10.42	Average	Vertical	Pass
6	16344.655	58.13	5.70	74.00	-15.87	Peak	Vertical	Pass
7	16344.655	46.19	5.70	54.00	-7.81	Average	Vertical	Pass
8	13335.664	54.94	1.64	74.00	-19.06	Peak	Vertical	Pass
9	13335.664	45.53	1.64	54.00	-8.47	Average	Vertical	Pass

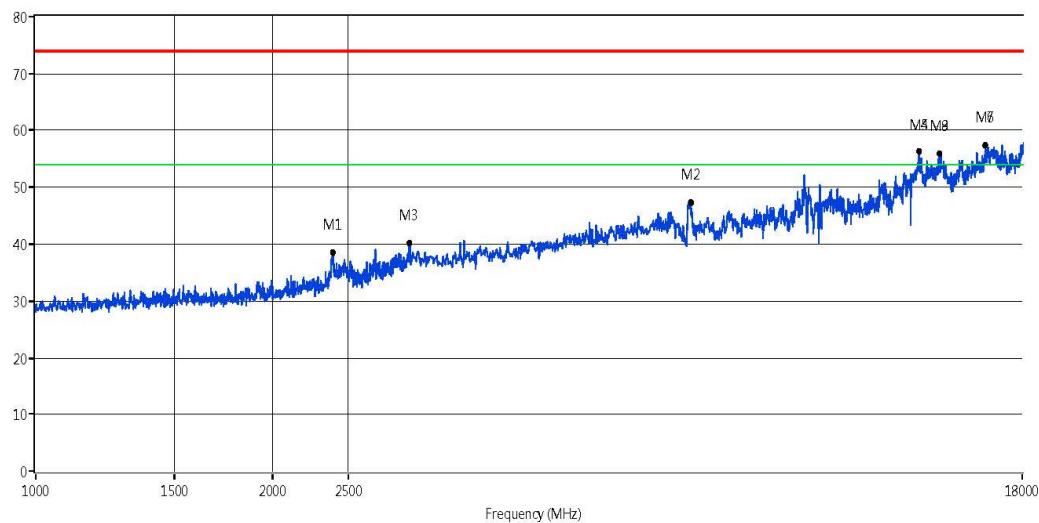
## Test result

Project Number: 1

Test Time: 2018-06-16\_15.30.16

EUT Name		Test Engineer	Li Peng
Manufacturer	N.A	Test Standard	FCC Part 15B
Model	BDR-M	Work Addition	Normal
Temp.(oC)	25	Polarizer	Auto
Hum.	65%	Remark	N.A

RE\_FCC Test Case\_FCC 15B 1GHz-25GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	ANT	Verdict
1	2390.609	38.60	-14.15	74.00	-35.40	Peak	Horizontal	Pass
2	6816.184	47.41	-3.86	74.00	-26.59	Peak	Horizontal	Pass
3	2992.008	40.28	-11.69	74.00	-33.72	Peak	Horizontal	Pass
4	13299.700	56.24	2.15	74.00	-17.76	Peak	Horizontal	Pass
5	13299.700	44.72	2.15	54.00	-9.28	Average	Horizontal	Pass
6	16164.835	57.33	6.07	74.00	-16.67	Peak	Horizontal	Pass
7	16164.835	46.01	6.07	54.00	-7.99	Average	Horizontal	Pass
8	14114.885	55.85	3.96	74.00	-18.15	Peak	Horizontal	Pass
9	14114.885	44.28	3.96	54.00	-9.72	Average	Horizontal	Pass

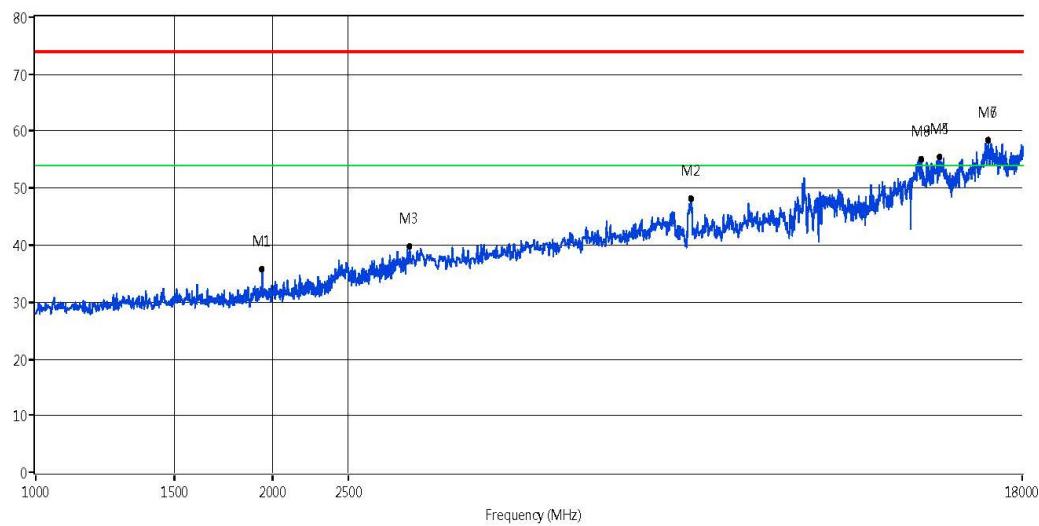
## Test result

Project Number: 1

Test Time: 2018-06-16\_15.28.55

EUT Name		Test Engineer	Li Peng
Manufacturer	N.A	Test Standard	FCC Part 15B
Model	BDR-M	Work Addition	Normal
Temp.(oC)	25	Polarizer	Auto
Hum.	65%	Remark	N.A

RE\_FCC Test Case\_FCC 15B 1GHz-25GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	ANT	Verdict
1	1943.057	42.86	-17.52	74.00	-31.14	Peak	Vertical	Pass
2	6826.174	48.10	-3.95	74.00	-25.90	Peak	Vertical	Pass
3	2990.010	39.75	-11.87	74.00	-34.25	Peak	Vertical	Pass
4	14114.885	55.53	3.96	74.00	-18.47	Peak	Vertical	Pass
5	14114.885	43.08	3.96	54.00	-10.92	Average	Vertical	Pass
6	16296.703	58.40	6.58	74.00	-15.60	Peak	Vertical	Pass
7	16296.703	46.82	6.58	54.00	-7.18	Average	Vertical	Pass
8	13407.592	55.02	2.03	74.00	-18.98	Peak	Vertical	Pass
9	13407.592	46.97	2.03	54.00	-7.03	Average	Vertical	Pass

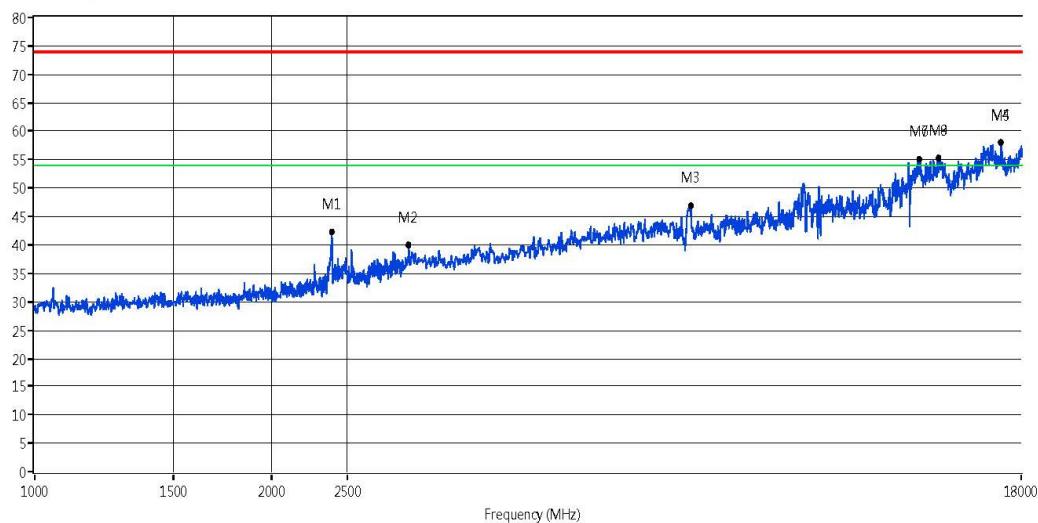
## Test result

Project Number: 1

Test Time: 2018-06-16\_15.23.57

EUT Name		Test Engineer	Li Peng
Manufacturer	N.A	Test Standard	FCC Part 15B
Model	BDR-H	Work Addition	Normal
Temp.(oC)	25	Polarizer	Auto
Hum.	65%	Remark	N.A

RE\_FCC Test Case\_FCC 15B 1GHz-25GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	ANT	Verdict
1	2388.611	42.28	-14.69	74.00	-31.72	Peak	Horizontal	Pass
2	2990.010	39.93	-11.87	74.00	-34.07	Peak	Horizontal	Pass
3	6836.164	46.96	-4.18	74.00	-27.04	Peak	Horizontal	Pass
4	16980.020	57.92	7.09	74.00	-16.08	Peak	Horizontal	Pass
5	16980.020	45.23	7.09	54.00	-8.77	Average	Horizontal	Pass
6	13335.664	55.05	1.64	74.00	-18.95	Peak	Horizontal	Pass
7	13335.664	43.69	1.64	54.00	-10.31	Average	Horizontal	Pass
8	14114.885	55.28	3.96	74.00	-18.72	Peak	Horizontal	Pass
9	14114.885	45.07	3.96	54.00	-8.93	Average	Horizontal	Pass

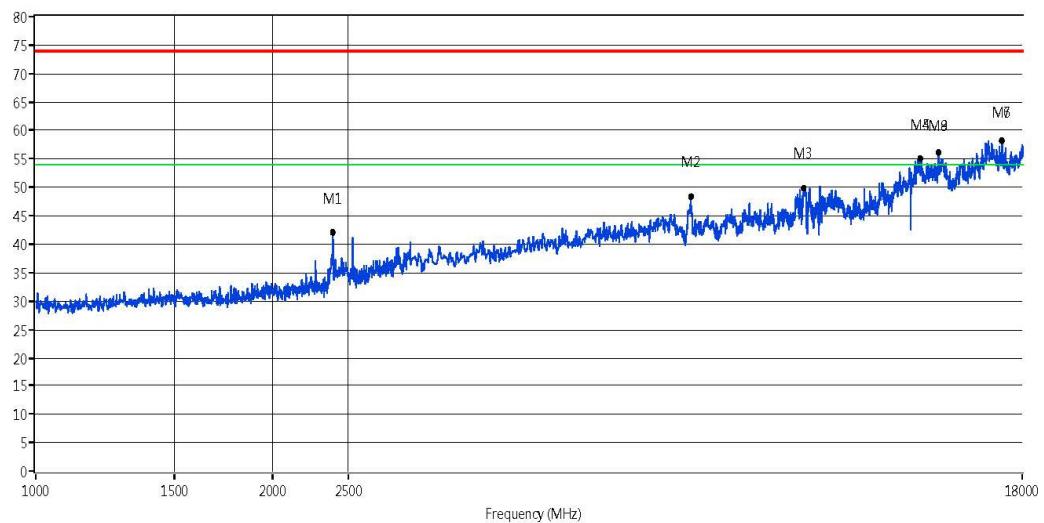
## Test result

Project Number: 1

Test Time: 2018-06-16\_15.18.24

EUT Name		Test Engineer	Li Peng
Manufacturer	N.A	Test Standard	FCC Part 15B
Model	BDR-H	Work Addition	Normal
Temp.(oC)	25	Polarizer	Auto
Hum.	65%	Remark	N.A

RE\_FCC Test Case\_FCC 15B 1GHz-25GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	ANT	Verdict
1	2388.611	42.04	-14.69	74.00	-31.96	Peak	Vertical	Pass
2	6816.184	48.40	-3.86	74.00	-25.60	Peak	Vertical	Pass
3	9493.506	49.80	1.16	74.00	-24.20	Peak	Vertical	Pass
4	13335.664	54.99	1.64	74.00	-19.01	Peak	Vertical	Pass
5	13335.664	43.64	1.64	54.00	-10.36	Average	Vertical	Pass
6	16980.020	58.16	7.09	74.00	-15.84	Peak	Vertical	Pass
7	16980.020	46.27	7.09	54.00	-7.73	Average	Vertical	Pass
8	14090.909	56.03	3.41	74.00	-17.97	Peak	Vertical	Pass
9	14090.909	45.03	3.41	54.00	-8.97	Average	Vertical	Pass