



<b>Prüfbericht-Nr.:</b> <i>Test report No.:</i>	<b>50069503 001</b>	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	<b>164082333</b>	<b>Seite 1 von 28</b> <i>Page 1 of 28</i>
<b>Kunden-Referenz-Nr.:</b> <i>Client reference No.:</i>	<b>N/A</b>	<b>Auftragsdatum:</b> <i>Order date.:</i>	<b>20.12.2016</b>	
<b>Auftraggeber:</b> <i>Client:</i>	<b>PST Eletronica LTDA</b> Av. Alan Turing, 385 Cidade Universitaria, Campinas, Brazil			
<b>Prüfgegenstand:</b> <i>Test item:</i>	<b>EZ-ELD</b>			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	<b>ELD1.0</b>			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	<b>FCC and IC approval</b>			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	<b>CFR47 FCC Part 15.247</b>	<b>RSS-247 Issue 1</b>		
	<b>CFR47 FCC Part 15.209</b>	<b>RSS-Gen Issue 4</b>		
	<b>CFR47 FCC Part 2.1093</b>	<b>RSS-102 Issue 5</b>		
<b>Wareneingangsdatum:</b> <i>Date of receipt:</i>	<b>05.01.2017</b>	<b>Please refer to photo documents</b>		
<b>Prüfmuster-Nr.:</b> <i>Test sample No.:</i>	<b>A000474280-001</b> <b>A000474280-003</b> <b>A000474280-005</b>			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	<b>12.01.2017 - 16.01.2017</b>			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	<b>Accurate Technology Co., Ltd.</b>			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	<b>TÜV Rheinland (Shenzhen) Co., Ltd.</b>			
<b>Prüfergebnis*:</b> <i>Test result*:</i>	<b>Pass</b>			
<b>geprüft von / tested by:</b>	<b>kontrolliert von / reviewed by:</b>			
				
<b>25.01.2017</b>	<b>Andy Yan / Project Manager</b>	<b>25.01.2017</b>	<b>Sam Lin / Technical Certifier</b>	
<b>Datum</b> <i>Date</i>	<b>Name/Stellung</b> <i>Name/Position</i>	<b>Unterschrift</b> <i>Signature</i>	<b>Datum</b> <i>Date</i>	<b>Name/Stellung</b> <i>Name/Position</i>
				<b>Unterschrift</b> <i>Signature</i>
<b>Sonstiges / Other:</b>				
FCC ID: 2AKA8-ELD100A0				
IC: 22098-ELD100A0      HVIN: ELD1.0				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		<b>Prüfmuster vollständig und unbeschädigt</b> <i>Test item complete and undamaged:</i>		
* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend
	5 = mangelhaft			
	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient
	5 = poor			
	P(ass) = passed a.m. test specifications(s)	F(ail) = failed a.m. test specifications(s)	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>				

## Test Summary

**5.1.1 ANTENNA REQUIREMENT***RESULT: Pass***5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER***RESULT: Pass***5.1.3 CONDUCTED POWER SPECTRAL DENSITY***RESULT: Pass***5.1.4 6dB BANDWIDTH***RESULT: Pass***5.1.5 99% BANDWIDTH***RESULT: Pass***5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH***RESULT: Pass***5.1.7 RADIATED SPURIOUS EMISSION***RESULT: Pass***5.1.8 20dB BANDWIDTH***RESULT: Pass***5.1.9 CARRIER FREQUENCY SEPARATION***RESULT: Pass***5.1.10 NUMBER OF HOPPING FREQUENCY***RESULT: Pass***5.1.11 TIME OF OCCUPANCY***RESULT: Pass***5.1.12 CONDUCTED EMISSION ON AC MAINS***RESULT: Not Applicable***6.1.1 ELECTROMAGNETIC FIELDS***RESULT: Pass*

## Contents

<b>1</b>	<b>GENERAL REMARKS .....</b>	<b>4</b>
<b>1.1</b>	<b>COMPLEMENTARY MATERIALS .....</b>	<b>4</b>
<b>2</b>	<b>TEST SITES .....</b>	<b>4</b>
<b>2.1</b>	<b>TEST FACILITIES .....</b>	<b>4</b>
<b>2.2</b>	<b>LIST OF TEST AND MEASUREMENT INSTRUMENTS.....</b>	<b>5</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>6</b>
<b>3</b>	<b>GENERAL PRODUCT INFORMATION .....</b>	<b>7</b>
<b>3.1</b>	<b>PRODUCT FUNCTION AND INTENDED USE.....</b>	<b>7</b>
<b>3.2</b>	<b>RATINGS AND SYSTEM DETAILS .....</b>	<b>7</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>13</b>
<b>5.1</b>	<b>TRANSMITTER REQUIREMENT &amp; TEST SUITES .....</b>	<b>13</b>
5.1.1	<i>Antenna Requirement .....</i>	<i>13</i>
5.1.2	<i>Maximum Peak Conducted Output Power.....</i>	<i>14</i>
5.1.3	<i>Conducted Power Spectral Density .....</i>	<i>15</i>
5.1.4	<i>6dB Bandwidth .....</i>	<i>16</i>
5.1.5	<i>99% Bandwidth .....</i>	<i>17</i>
5.1.6	<i>Conducted Spurious Emissions Measured in 100 kHz Bandwidth .....</i>	<i>18</i>
5.1.7	<i>Radiated Spurious Emission .....</i>	<i>19</i>
5.1.8	<i>20dB Bandwidth .....</i>	<i>20</i>
5.1.9	<i>Carrier Frequency Separation.....</i>	<i>21</i>
5.1.10	<i>Number of Hopping Frequency.....</i>	<i>22</i>
5.1.11	<i>Time of Occupancy.....</i>	<i>23</i>
5.1.12	<i>Conducted Emission on AC Mains .....</i>	<i>25</i>
<b>6</b>	<b>SAFETY HUMAN EXPOSURE .....</b>	<b>26</b>
<b>6.1</b>	<b>RADIO FREQUENCY EXPOSURE COMPLIANCE .....</b>	<b>26</b>
6.1.1	<i>Electromagnetic Fields.....</i>	<i>26</i>
<b>7</b>	<b>PHOTOGRAPHS OF THE TEST SET-UP .....</b>	<b>27</b>
<b>8</b>	<b>LIST OF TABLES.....</b>	<b>28</b>
<b>9</b>	<b>LIST OF PHOTOGRAPHS .....</b>	<b>28</b>

## 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: Test Results of Bluetooth 4.2 (Dual mode) of Conducted Testing

Appendix B: Test Results of Bluetooth 4.2 (Dual mode) of Radiated Emission

## 2 Test Sites

### 2.1 Test Facilities

**Accurate Technology Co., Ltd.**

F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

## 2.2 List of Test and Measurement Instruments

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

Accurate Technology Co., Ltd.

<b>Radio Spectrum Test</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Spectrum Analyzer	R&S	ESPI3	100396/003	07.01.2018
<b>Spurious Emission</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Spectrum Analyzer	R&S	FSV40	101495	07.01.2018
Test Receiver	R&S	ESCS30	100307	07.01.2018
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	10.01.2018
Loop Antenna	Schwarzbeck	FMZB1516	1516131	10.01.2018
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	10.01.2018
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	10.01.2018
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	07.01.2018
Pre-Amplifier	R&S	CBLU11835 40-01	3791	07.01.2018
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	07.01.2018
RF Coaxial Cable	SUHNER	N-3m	No.8	07.01.2018
RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	07.01.2018
RF Coaxial Cable	SUHNER	N-6m	No.10	07.01.2018
RF Coaxial Cable	RESENBERGER	N-12m	No.11	07.01.2018
50_ Coaxial Switch	Anritsu Corp	MP59B	6200283933	07.01.2018

## 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
Radiated Emission	$U=\pm 6\text{dB}$ , $k=2$ , $\sigma=95\%$
Occupied Channel Bandwidth	$\pm 5.0\%$
RF Output Power, Conducted	$\pm 1.5\text{ dB}$
Power Spectral Density, Conducted	$\pm 3.0\text{ dB}$
Unwanted Emission, Conducted	$\pm 3.0\text{ dB}$
Duty Cycle	$\pm 5.0\%$

## 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 (Shenzhen) file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The Accurate Technology Co., Ltd. Test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, 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 EZ-ELD supports Bluetooth 4.2 (dual mode) and it is a device for capturing vehicle information from the Diagnostic Port and send it through a Bluetooth connection to a Tablet / Cellphone. This report is for Bluetooth function of DTS and DSS.

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

#### 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT**

Technical Specification	Value
Kind of Equipment	EZ-ELD
Type Designation	ELD1.0
FCC ID	2AKA8-ELD100A0
IC	22098-ELD100A0
HVIN	ELD1.0
Operating Frequency	2402 - 2480 MHz
Typical Operating Voltage	DC 12V
Testing Voltage	DC 12V
Type of Modulation	GFSK, $\pi/4$ DQPSK, 8DPSK
Channel Number	BDR & EDR mode:79 channels; Low Energy mode:40 channels
Channel Separation	BDR & EDR mode:1MHz; Low Energy mode:2MHz
Wireless Technology	Bluetooth 4.2 (Dual mode)
Antenna Type	Integral Antenna
Max. Antenna Gain	0.00 dBi

**Table 3: RF Channel and Frequency of Bluetooth**

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	2402.00	20	2422.00	40	2442.00	60	2462.00
01	2403.00	21	2423.00	41	2443.00	61	2463.00
02	2404.00	22	2424.00	42	2444.00	62	2464.00
03	2405.00	23	2425.00	43	2445.00	63	2465.00
04	2406.00	24	2426.00	44	2446.00	64	2466.00
05	2407.00	25	2427.00	45	2447.00	65	2467.00
06	2408.00	26	2428.00	46	2448.00	66	2468.00
07	2409.00	27	2429.00	47	2449.00	67	2469.00
08	2410.00	28	2430.00	48	2450.00	68	2470.00
09	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	--	--

**Table 4: RF Channel and Frequency of Bluetooth Low Energy**

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	2402.00	10	2422.00	20	2442.00	30	2462.00
01	2404.00	11	2424.00	21	2444.00	31	2464.00
02	2406.00	12	2426.00	22	2446.00	32	2466.00
03	2408.00	13	2428.00	23	2448.00	33	2468.00
04	2410.00	14	2430.00	24	2450.00	34	2470.00
05	2412.00	15	2432.00	25	2452.00	35	2472.00
06	2414.00	16	2434.00	26	2454.00	36	2474.00
07	2416.00	17	2436.00	27	2456.00	37	2476.00
08	2418.00	18	2438.00	28	2458.00	38	2478.00
09	2420.00	<b>19</b>	<b>2440.00</b>	29	2460.00	<b>39</b>	<b>2480.00</b>

**Table 5: 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 V2.1 + EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests.
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	<p>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.</p> <p>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.</p> <p>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.</p> <p>That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.</p>

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On
  - 1. Bluetooth transmitting mode (BDR & EDR mode)
    - a) Low Channel
    - b) Middle Channel
    - c) High Channel
  - 2. Bluetooth transmitting mode (Low Energy mode)
    - a) Low Channel
    - b) Middle Channel
    - c) High Channel
- B. On, Transmitting on Hopping channel
- C. On, Bluetooth connecting mode

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Application Form
- Block Diagram
- Schematics
- Technical Description
- FCC/IC Label and Location Info
- Photo Document
- 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 testing were performed according to the procedures in ANSI C63.10: 2013.

### 4.3 Special Accessories and Auxiliary Equipment

Table 6: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Galaxy J1 mini	SAMSUNG	SM-J105M	RQ8H80CJ7EL	--
Power Supply Harness	PST Eletronica LTDA	--	--	--
Load Box	PST Eletronica LTDA	--	--	--
DC Power Battery	--	--	--	DC 12V

### 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)

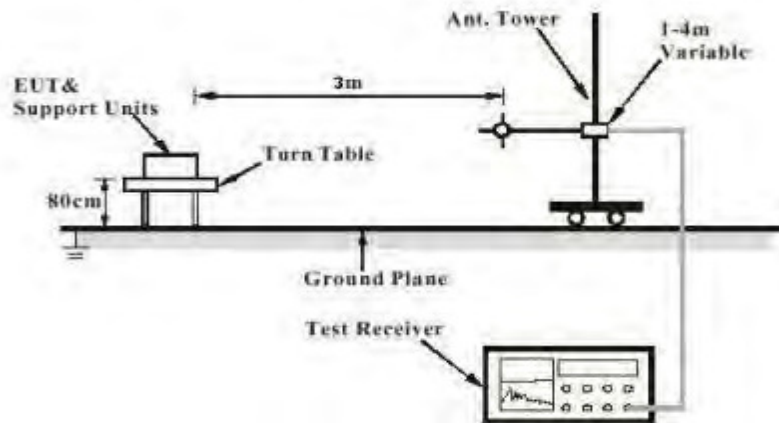


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

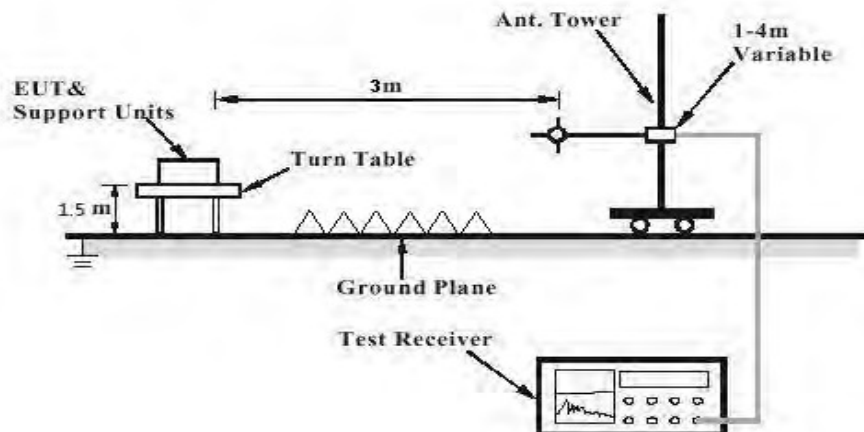
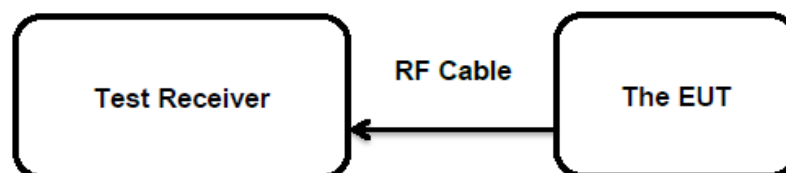


Diagram of Measurement Configuration for Conducted Transmitter Measurement



## 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  
RSS-Gen Clause 8.3

According to the manufacturer declared, the EUT has an integral 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.

### 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(2)&(4)  
 Basic standard : ANSI C63.10: 2013  
 Limits : FHSS < 0.125 Watts, DSSS < 1.0 Watts  
 Kind of test site : Shielded Room

**Test Setup**

Date of testing : 16.01.2017  
 Input voltage : DC 12 V  
 Operation mode : A.1, A.2  
 Test channel : Low / Middle / High  
 Ambient temperature : 25 °C  
 Relative humidity : 56 %  
 Atmospheric pressure : 101 kPa

**Table 7: Test Result of Maximum Peak Conducted Output Power**

Test Mode	Channel Frequency (MHz)	Measured Peak Output Power		Limit (W)
		(dBm)	(W)	
BDR	2402	0.54	0.0011	< 0.125
	2441	1.17	0.0013	
	2480	1.20	0.0013	
EDR	2402	0.65	0.0012	< 0.125
	2441	1.07	0.0013	
	2480	1.19	0.0013	
Low Energy	2402	0.16	0.0010	< 1.0
	2440	0.52	0.0011	
	2480	0.88	0.0012	
<b>Maximum Measured Value</b>		1.20	0.0013	/

Note: The cable loss 0.5 dB is taken into account in results.

This testing was carried out on all operation modes, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.





### 5.1.5 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 : 16.01.2017  
 Input voltage : DC 12 V  
 Operation mode : A.1, A.2  
 Test channel : Low / Middle / High  
 Ambient temperature : 25 °C  
 Relative humidity : 56 %  
 Atmospheric pressure : 101 kPa

**Table 10: Test Result of 99% Bandwidth**

Test Mode	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)
BDR	2402	981.2	/
	2441	976.8	
	2480	976.8	
EDR	2402	1185.2	/
	2441	1185.2	
	2480	1176.6	
Low Energy	2402	1081.0	/
	2440	1085.4	
	2480	1081.0	
<b>Maximum Measured Value</b>		1185.2	/

For the measurement records, refer to the appendix A.

### 5.1.6 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);
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	16.01.2017
Input voltage	:	DC 12 V
Operation mode	:	A.1, A.2
Test channel	:	Low / Middle / High
Ambient temperature	:	25 °C
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

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

For the measurement records, refer to the appendix A.

### 5.1.7 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 Table 4 & Table 5
Kind of test site	: 3m Semi-anechoic Chamber

**Test Setup**

Date of testing	: 12.01.2017
Input voltage	: DC 12 V
Operation mode	: A.1, A.2
Test channel	: Low / Middle / High
Ambient temperature	: 23 °C
Relative humidity	: 48 %
Atmospheric pressure	: 101 kPa

**Remark:**

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test set-up photos.

Pre-test the EUT in continuous transmitting with different data packet. Compliance test in continuous transmitting mode with BDR and BLE mode as the worst case was found.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For the measurement records, refer to the appendix B.





**5.1.10 Number of Hopping Frequency****RESULT:** **Pass****Test Specification**

Test standard : FCC part 15.247(a)(1)(iii)  
RSS-247 Clause 5.1(4)

Basic standard : ANSI C63.10: 2013

Limits :  $\geq 15$  non-overlapping channels

Kind of test site : Shielded Room

**Test Setup**

Date of testing : 16.01.2017

Input voltage : DC 12 V

Operation mode : B

Ambient temperature : 25 °C

Relative humidity : 56 %

Atmospheric pressure : 101 kPa

**Table 13: Test Result of Number of Hopping Frequency**

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2402 to 2480 MHz	79	$\geq 15$	Pass

For the measurement records, refer to the appendix A.

**5.1.11 Time of Occupancy****RESULT:****Pass****Test Specification**

Test standard : FCC part 15.247(a)(1)(iii)  
RSS-247 Clause 5.1(4)  
Basic standard : ANSI C63.10: 2013  
Limits : < 0.4s  
Kind of test site : Shielded Room

**Test Setup**

Date of testing : 16.01.2017  
Input voltage : DC 12 V  
Operation mode : B  
Test channel : Low / Middle / High  
Ambient temperature : 25 °C  
Relative humidity : 56 %  
Atmospheric pressure : 101 kPa

**Table 14: Test Result of Time of Occupancy**

Test Mode	Test Channel	Data Packet	Pulse width (ms)	Measured Dwell time(s)	Limit (s)
BDR mode	2402	DH1	0.420	0.134	< 0.4s
		DH3	1.681	0.269	
		DH5	2.957	0.316	
	2441	DH1	0.413	0.132	
		DH3	1.681	0.269	
		DH5	2.957	0.316	
	2480	DH1	0.413	0.132	
		DH3	1.681	0.269	
		DH5	2.957	0.316	
EDR mode	2402	3DH1	0.420	0.134	
		3DH3	1.696	0.271	
		3DH5	2.957	0.316	
	2441	3DH1	0.428	0.137	
		3DH3	1.696	0.271	
		3DH5	2.957	0.316	
	2480	3DH1	0.435	0.139	
		3DH3	1.696	0.271	
		3DH5	2.978	0.318	
<b>Maximum Measured Value</b>			<b>2.978</b>	<b>0.318</b>	

**Note:**

Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

Period = 0.4 x 79 (channel) = 31.6 seconds

This testing was carried out on all operation modes, but only the worst case was presented in this report.

For the measurement records, refer to the appendix A.

**5.1.12 Conducted Emission on AC Mains****RESULT:****Not Applicable****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

Note: This equipment will be installed in the vehicle environment and does not connect to AC Main Source, hence it is exempted from AC Main conducted emission.

## 6 Safety Human Exposure

### 6.1 Radio Frequency Exposure Compliance

#### 6.1.1 Electromagnetic Fields

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

Test standard	:	CFR47 FCC Part 2.1093 RSS 102 Issue 5
Limit	:	FCC KDB Publication 447498 v06 RSS 102 Issue 5, Clause 2.5.1

**Measurement Record:**

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

The maximum tested e.i.r.p.: 1.2dBm = 1.3mW

The maximum specified e.i.r.p.: 2.0dBm = 1.6mW

Antenna Gain: 0dBi

For FCC, according to KDB 447498 D01 v06 4.3.1 a):

The maximum specified output power of the transmitter is 2.0dBm (1.6mW), which is below the SAR exclusion threshold level in Bluetooth Band 9.5mW, hence the EUT is exempted from routine evaluation.

For IC, according to RSS 102 Issue 5, Clause 2.5.1:

The maximum specified peak output power & e.i.r.p. of the transmitter is 2.0dBm (1.6mW), which is below the SAR exclusion threshold level in Bluetooth band 4mW  $\approx$  6.02dBm, hence the EUT is exempted from routine evaluation.

## **7 Photographs of the Test Set-Up**

### **Photograph 1: Set-up for Radiated Spurious Emission up to 1GHz**

Please refer to the attached setup photos.

### **Photograph 2: Set-up for Radiated Spurious Emission above 1GHz**

Please refer to the attached setup photos.

## 8 List of Tables

Table 1: List of Test and Measurement Equipment.....	5
Table 2: Technical Specification of EUT .....	7
Table 3: RF Channel and Frequency of Bluetooth .....	8
Table 4: RF Channel and Frequency of Bluetooth Low Energy .....	8
Table 5: Frequency Hopping Information.....	9
Table 6: List of Accessories and Auxiliary Equipment.....	11
Table 7: Test Result of Maximum Peak Conducted Output Power.....	14
Table 8: Test Result of Power Spectral Density, Low Energy .....	15
Table 9: Test Result of 6dB Bandwidth, Low Energy .....	16
Table 10: Test Result of 99% Bandwidth .....	17
Table 11: Test Result of 20dB Bandwidth.....	20
Table 12: Test Result of Carrier Frequency Separation .....	21
Table 13: Test Result of Number of Hopping Frequency .....	22
Table 14: Test Result of Time of Occupancy .....	24

## 9 List of Photographs

Photograph 1: Set-up for Radiated Spurious Emission up to 1GHz .....	27
Photograph 2: Set-up for Radiated Spurious Emission above 1GHz .....	27

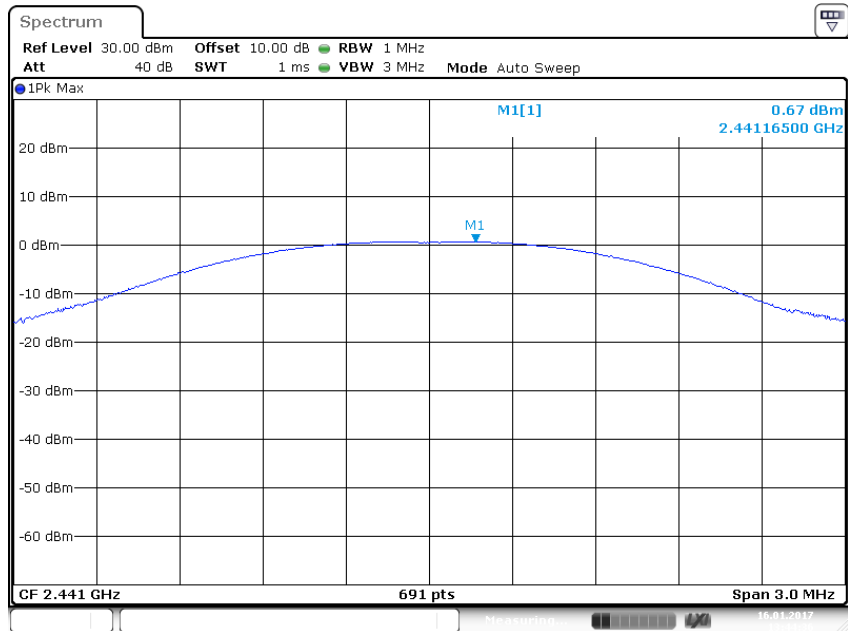
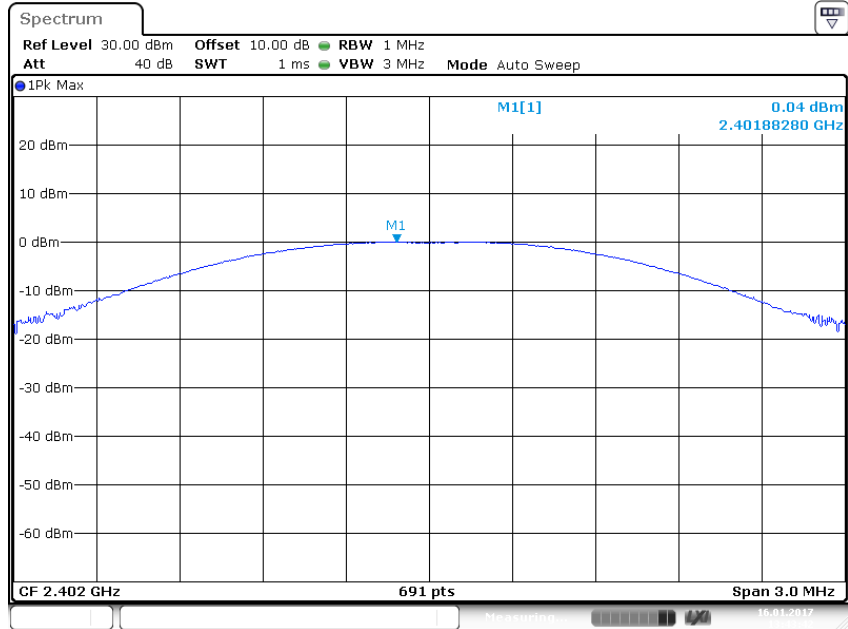
# Appendix A

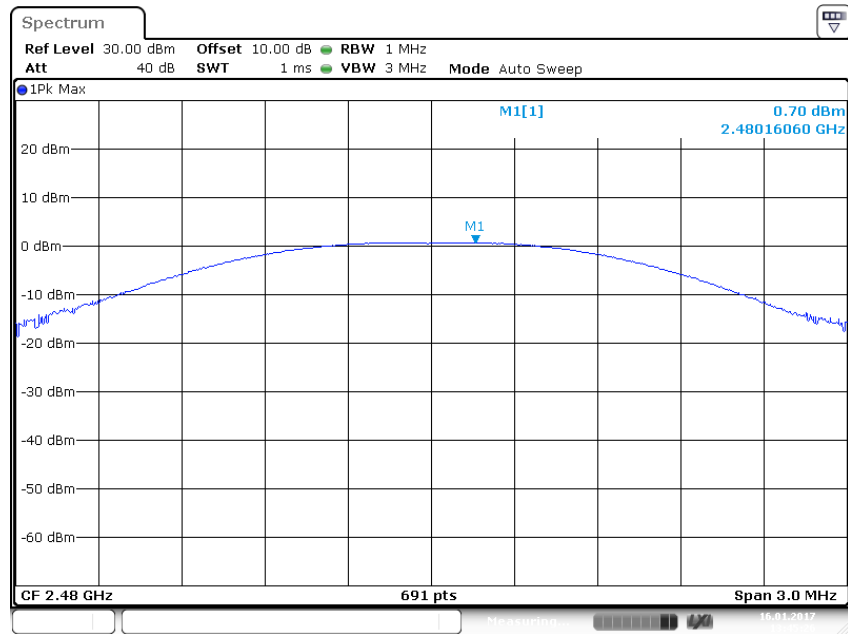
## Test Results of Bluetooth 4.2 (Dual mode) of Conducted Testing

APPENDIX A .....	1
APPENDIX A.1: TEST PLOTS OF MAXIMUM PEAK CONDUCTED OUTPUT POWER .....	2
<i>BDR Mode, DH1</i> .....	2
<i>EDR Mode, 3DH1</i> .....	3
<i>Low Energy Mode</i> .....	5
APPENDIX A.2: TEST PLOTS OF CONDUCTED POWER SPECTRAL DENSITY .....	7
<i>Low Energy Mode</i> .....	7
APPENDIX A.3: TEST PLOTS OF 6DB BANDWIDTH .....	9
<i>Low Energy Mode</i> .....	9
APPENDIX A.4: TEST PLOTS OF 99% BANDWIDTH .....	11
<i>BDR Mode, DH1</i> .....	11
<i>EDR Mode, 3DH1</i> .....	12
<i>Low Energy Mode</i> .....	14
APPENDIX A.5: TEST PLOTS OF 20dB BANDWIDTH .....	16
<i>BDR Mode, DH1</i> .....	16
<i>EDR Mode, 3DH1</i> .....	17
APPENDIX A.6: TEST PLOTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH .....	19
<i>BDR Mode, DH1</i> .....	19
<i>EDR Mode, 3DH1</i> .....	20
<i>Low Energy Mode</i> .....	22
<i>BDR Mode, Band Edge</i> .....	23
<i>EDR Mode, Band Edge</i> .....	24
<i>Low Energy Mode, Band Edge</i> .....	25
APPENDIX A.7: TEST PLOTS OF CARRIER FREQUENCY SEPARATION .....	27
<i>Hopping Mode</i> .....	27
APPENDIX A.8: TEST PLOTS OF NUMBER OF HOPPING FREQUENCY .....	29
<i>Hopping Mode</i> .....	29
APPENDIX A.9: TEST PLOTS OF TIME OF OCCUPANCY .....	30
<i>BDR Mode, DH1</i> .....	30
<i>BDR Mode, DH3</i> .....	31
<i>BDR Mode, DH5</i> .....	33
<i>EDR Mode, 3DH1</i> .....	34
<i>EDR Mode, 3DH3</i> .....	36
<i>EDR Mode, 3DH5</i> .....	37

### Appendix A.1: Test Plots of Maximum Peak Conducted Output Power

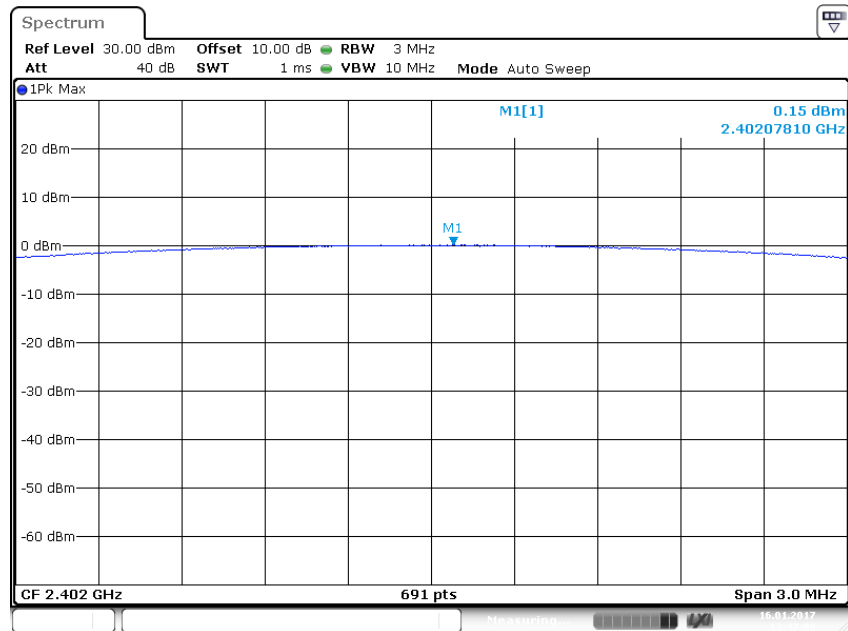
#### BDR Mode, DH1



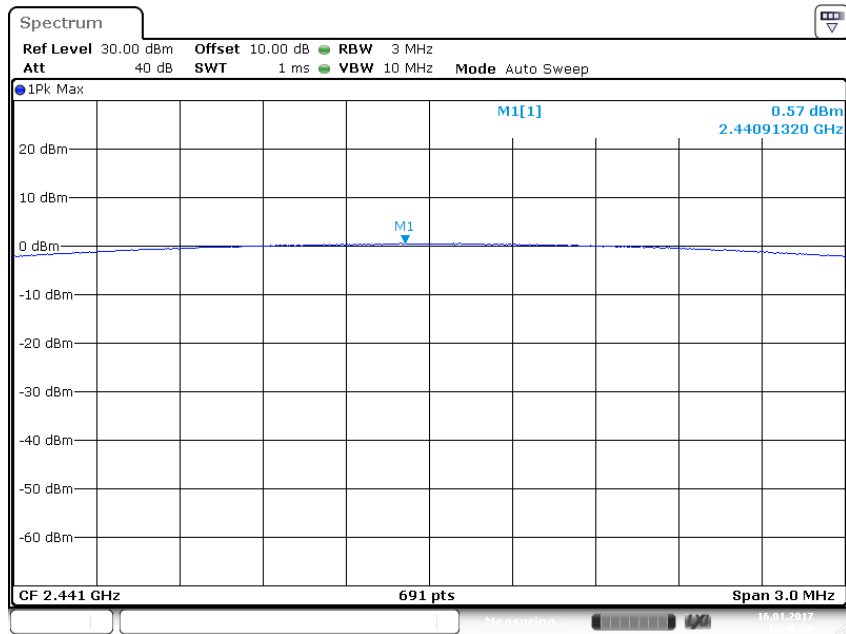


Date: 16.JAN.2017 13:45:26

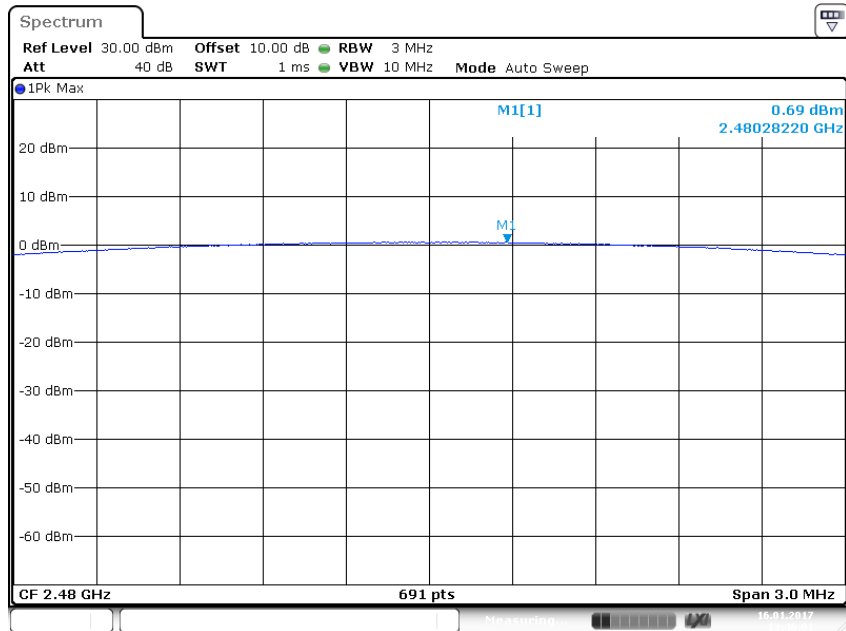
### EDR Mode, 3DH1



Date: 16.JAN.2017 13:47:09

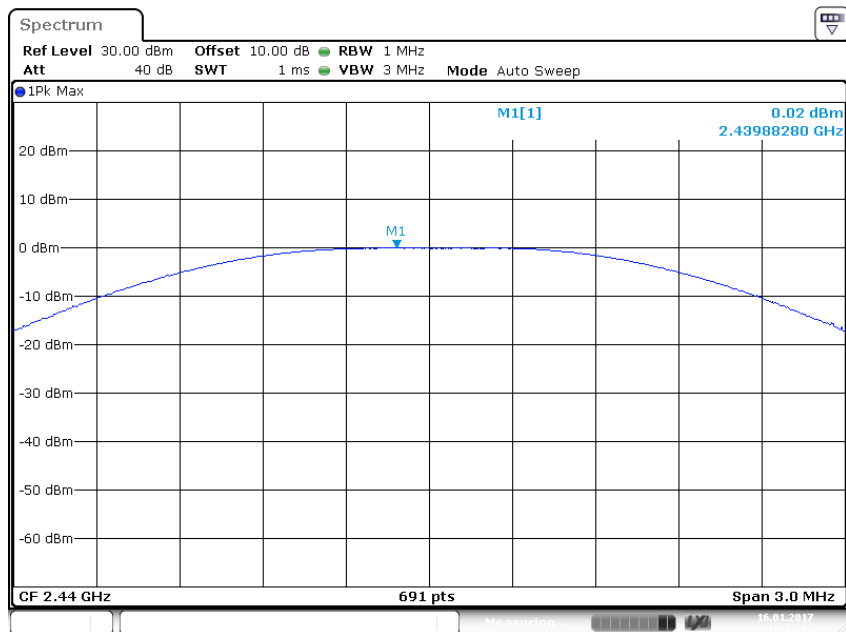
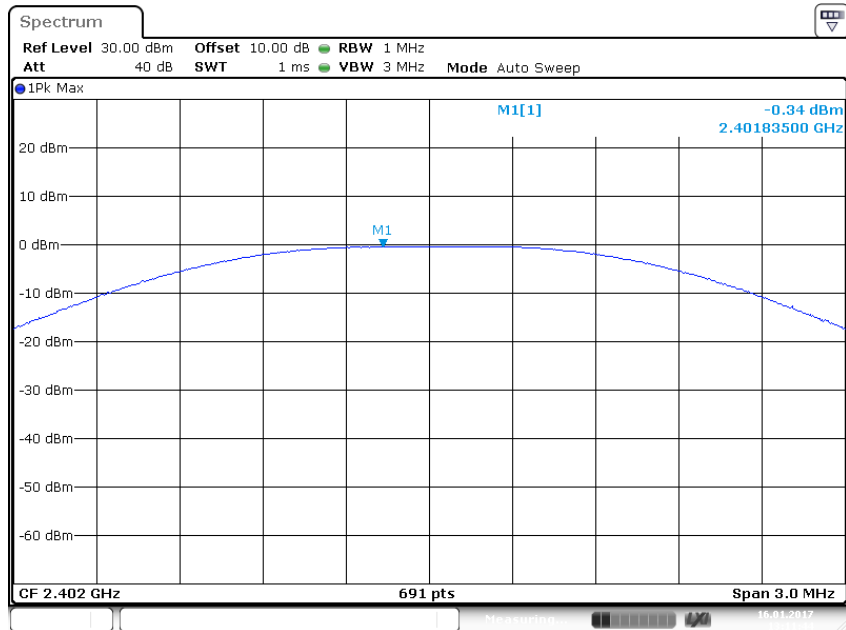


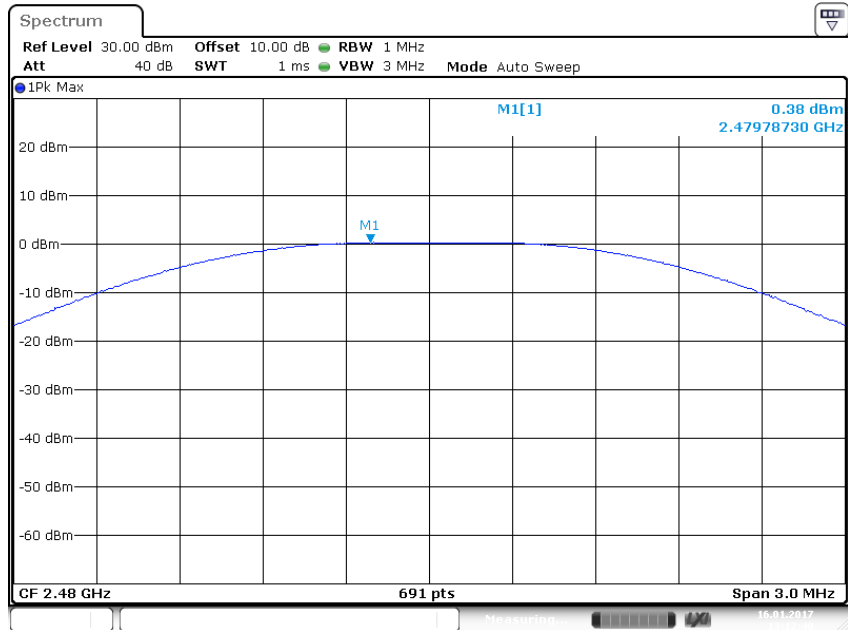
Date: 16.JAN.2017 13:46:36



Date: 16.JAN.2017 13:46:01

### Low Energy Mode

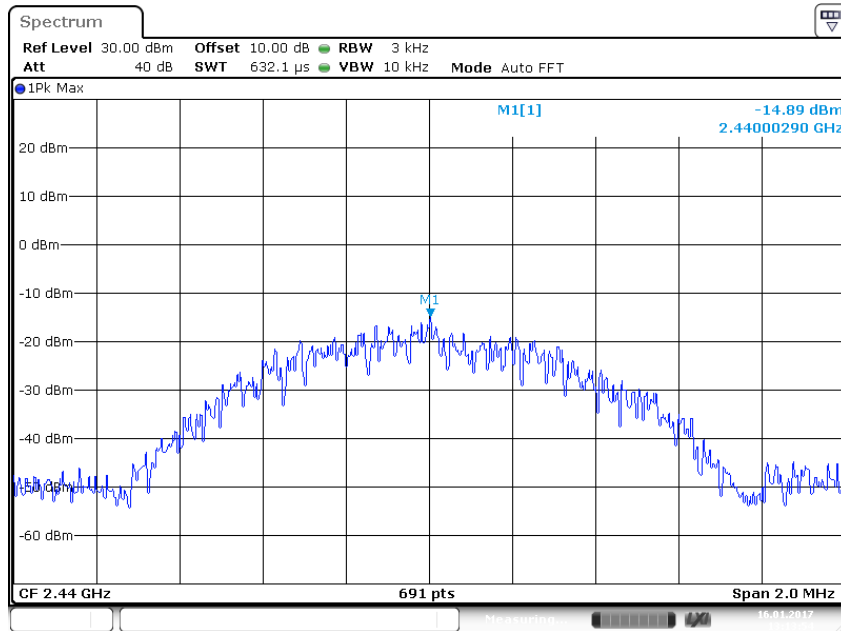
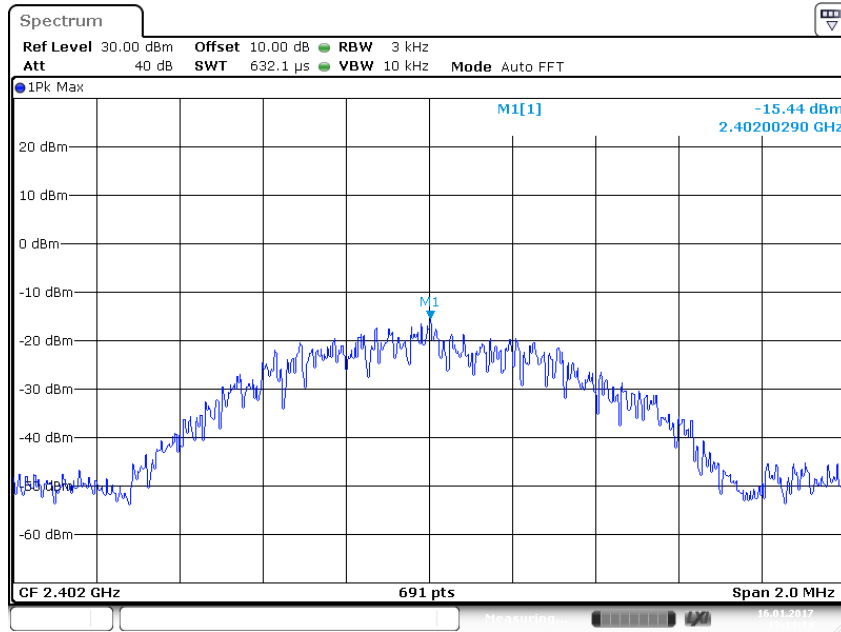


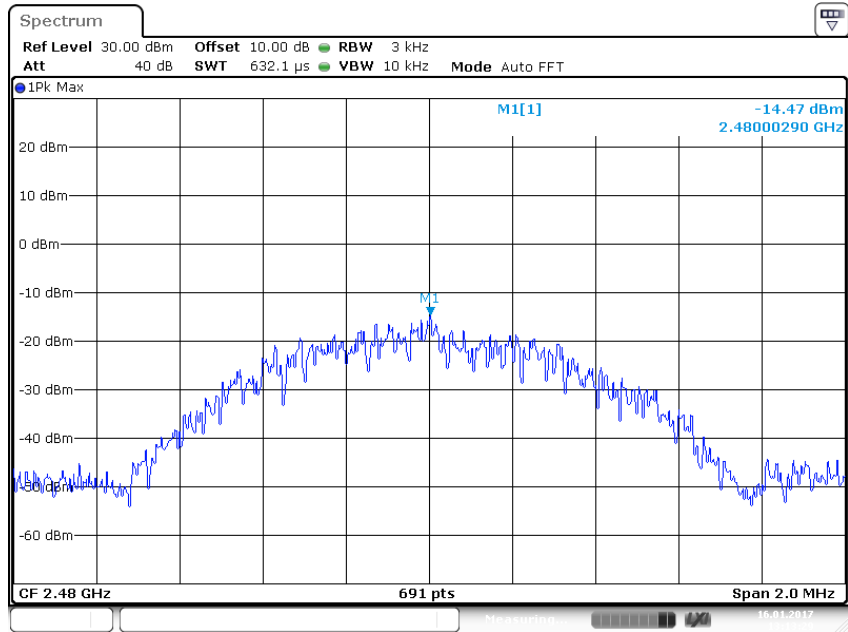


Date: 16.JAN.2017 13:12:40

## Appendix A.2: Test Plots of Conducted Power Spectral Density

### Low Energy Mode

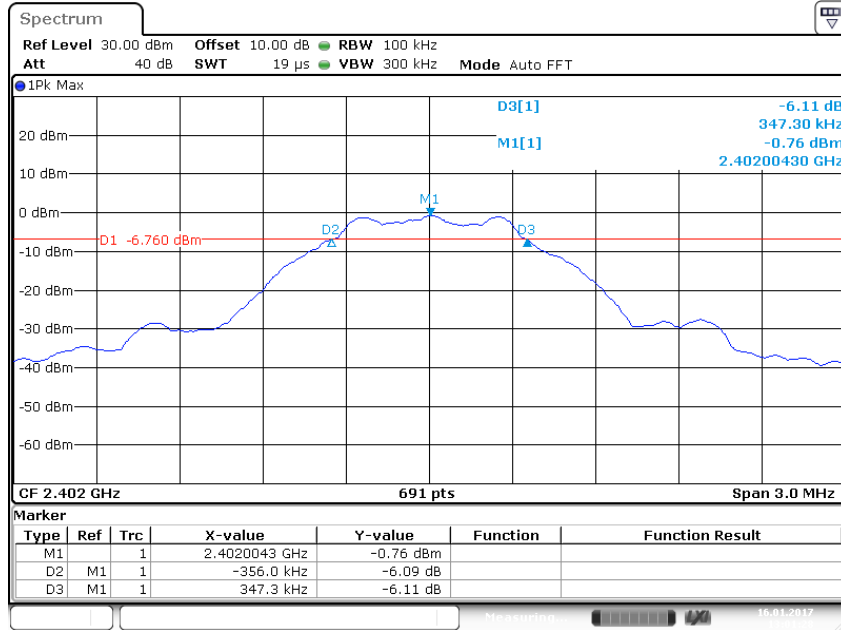




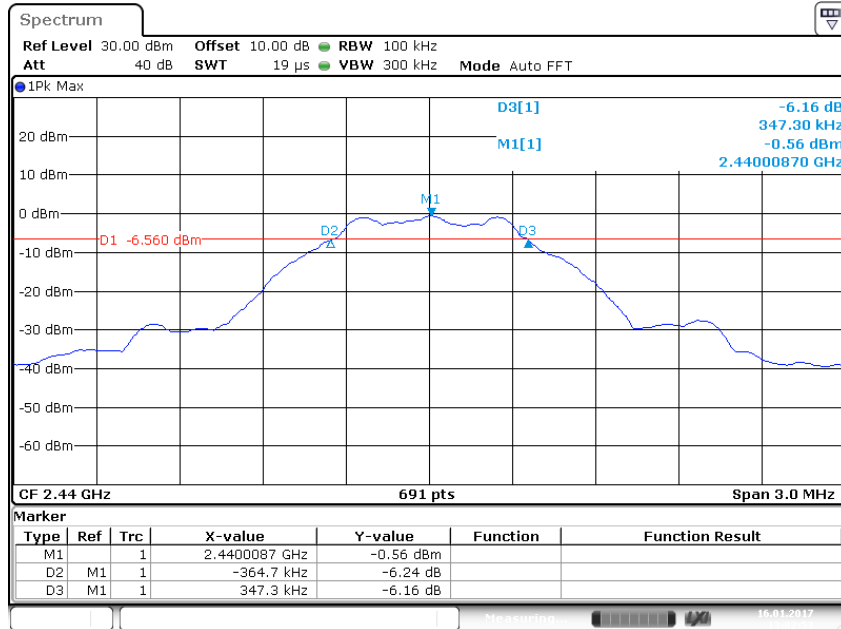
Date: 16.JAN.2017 13:13:29

### Appendix A.3: Test Plots of 6dB Bandwidth

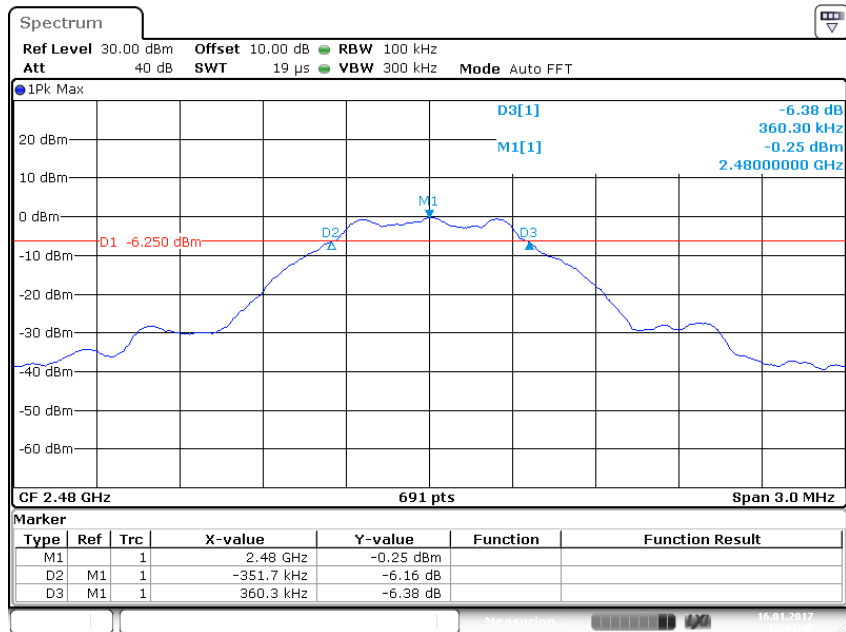
#### Low Energy Mode



Date: 16.JAN.2017 13:01:28



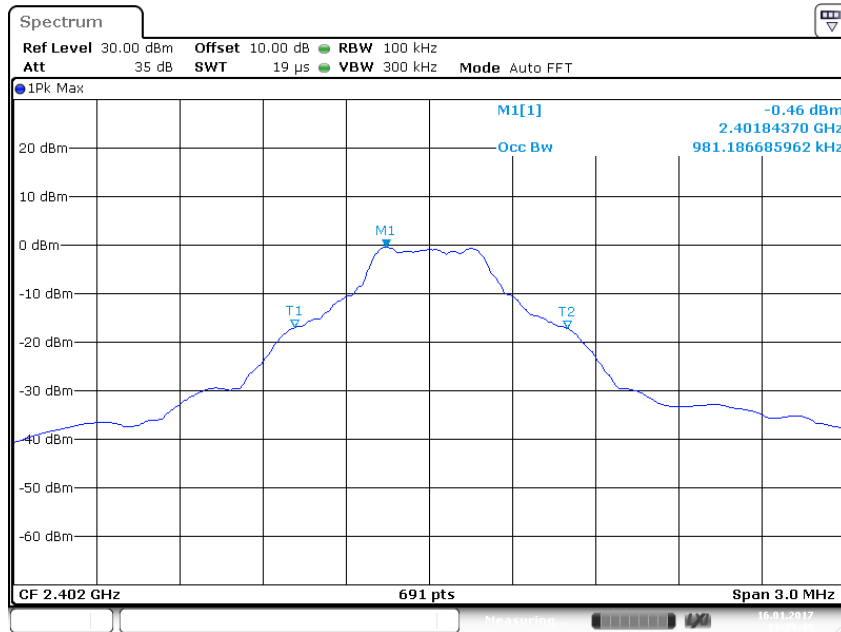
Date: 16.JAN.2017 13:02:53



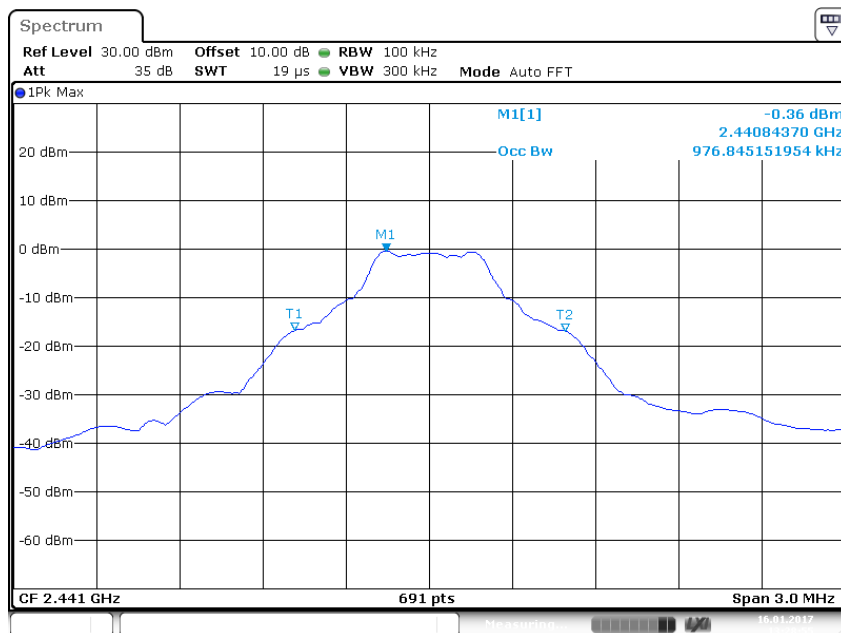
Date: 16.JAN.2017 13:03:48

### Appendix A.4: Test Plots of 99% Bandwidth

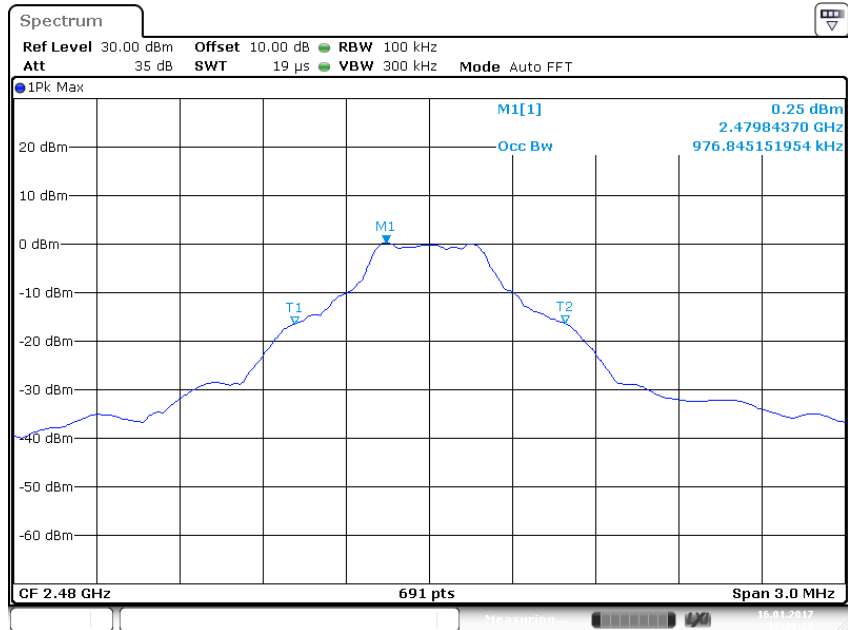
BDR Mode, DH1



Date: 16.JAN.2017 13:29:48

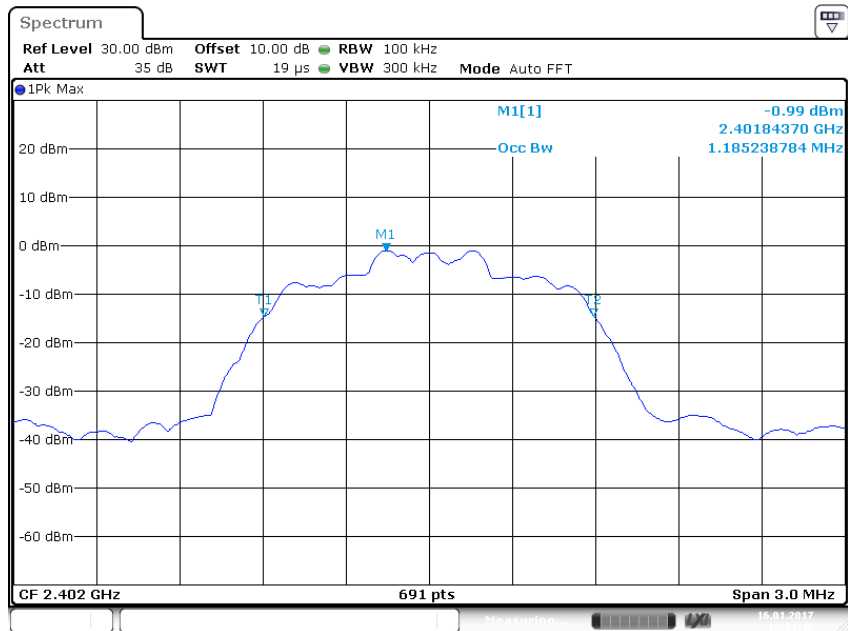


Date: 16.JAN.2017 13:28:55

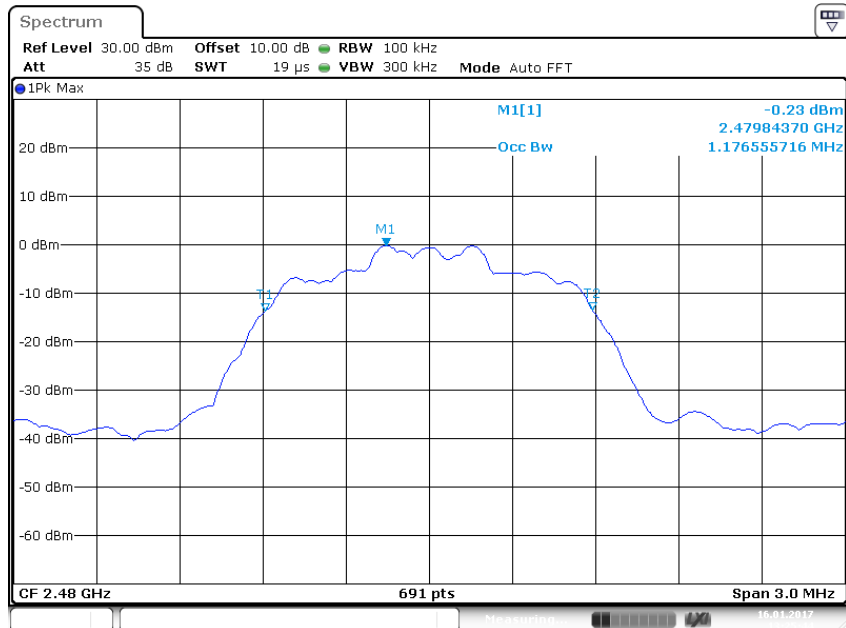
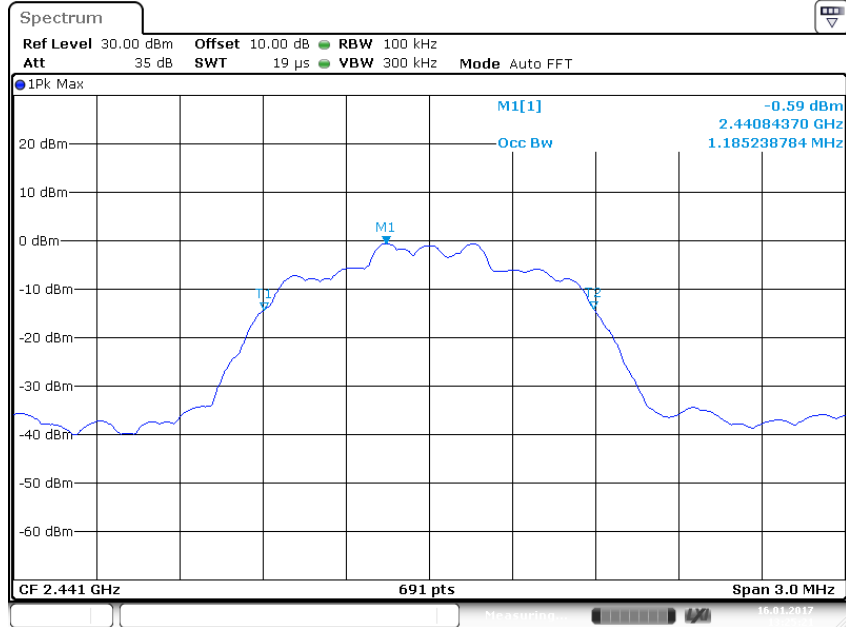


Date: 16.JAN.2017 13:28:20

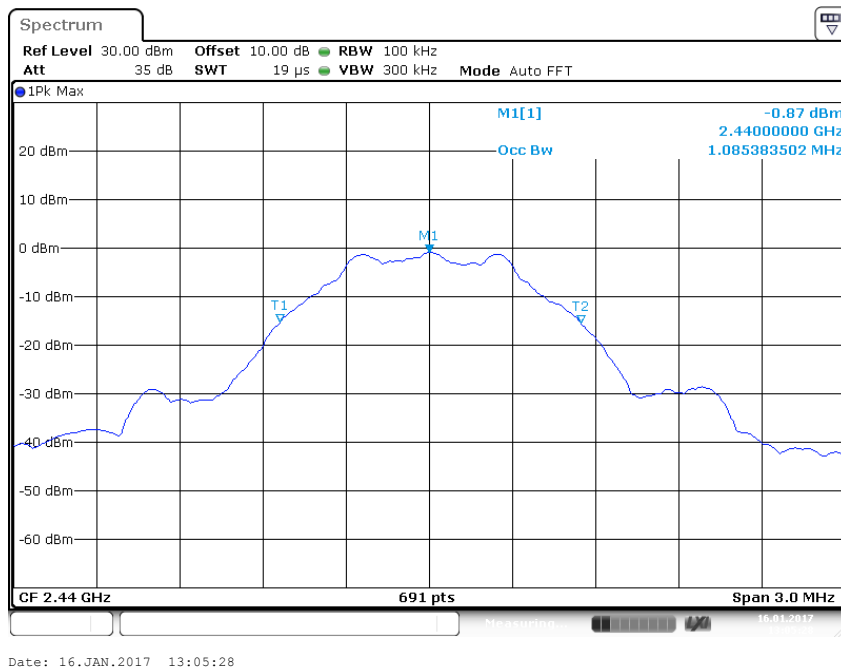
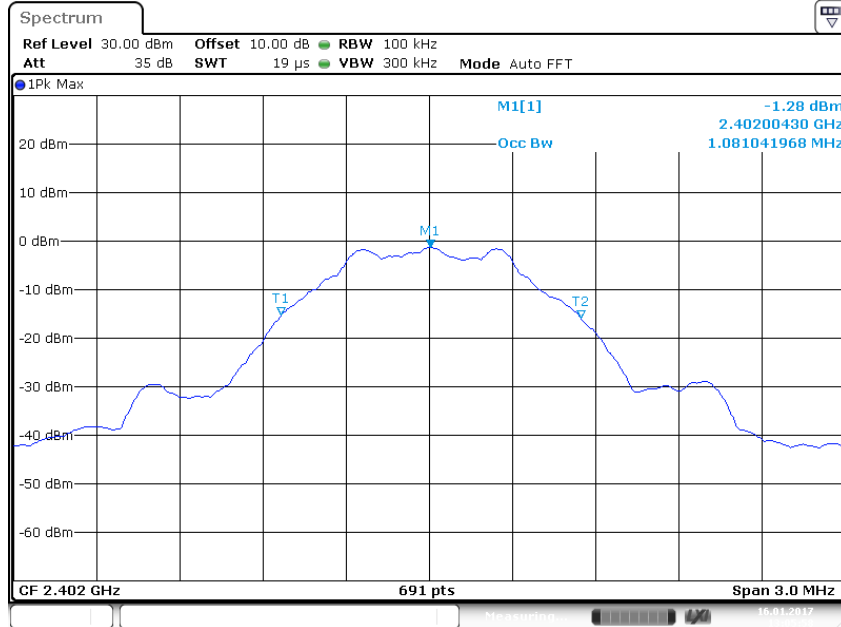
### EDR Mode, 3DH1

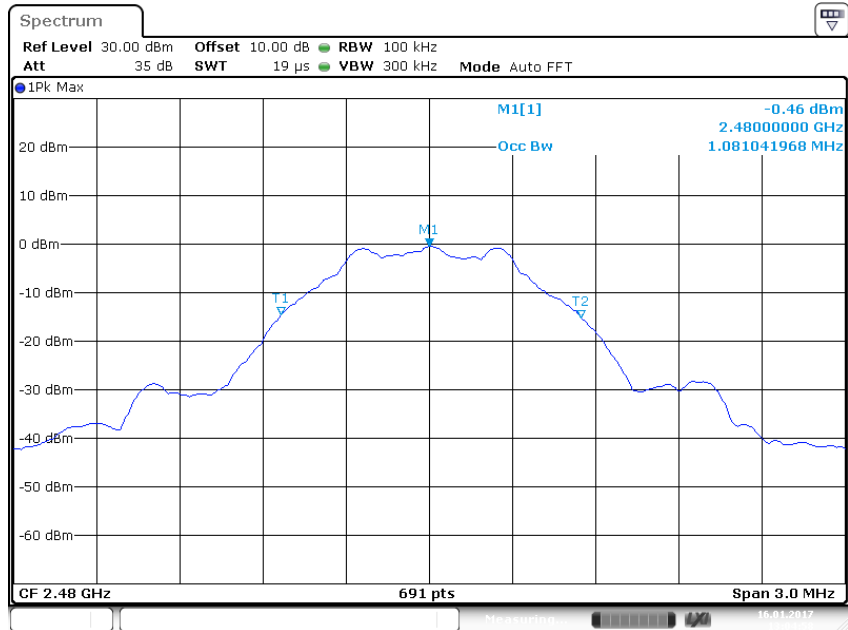


Date: 16.JAN.2017 13:24:40



### Low Energy Mode

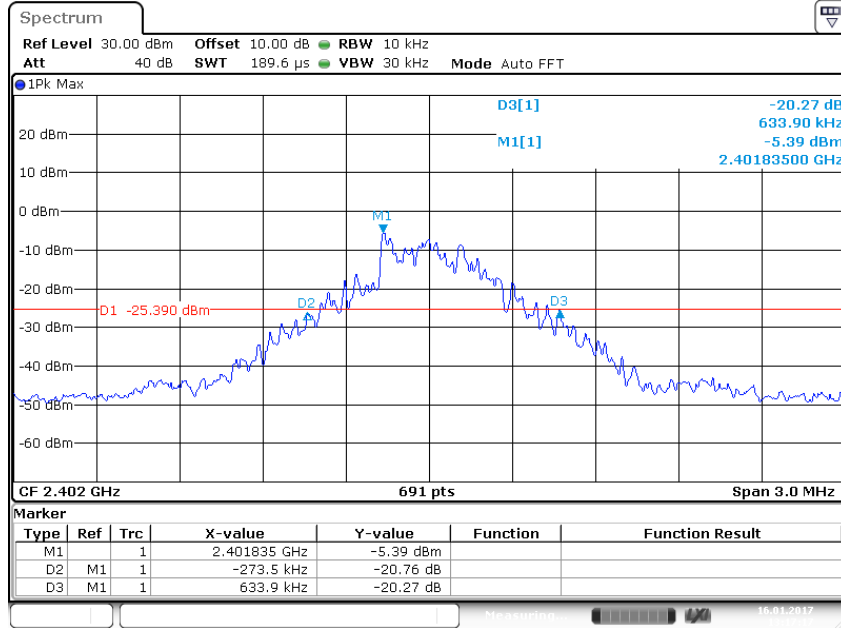




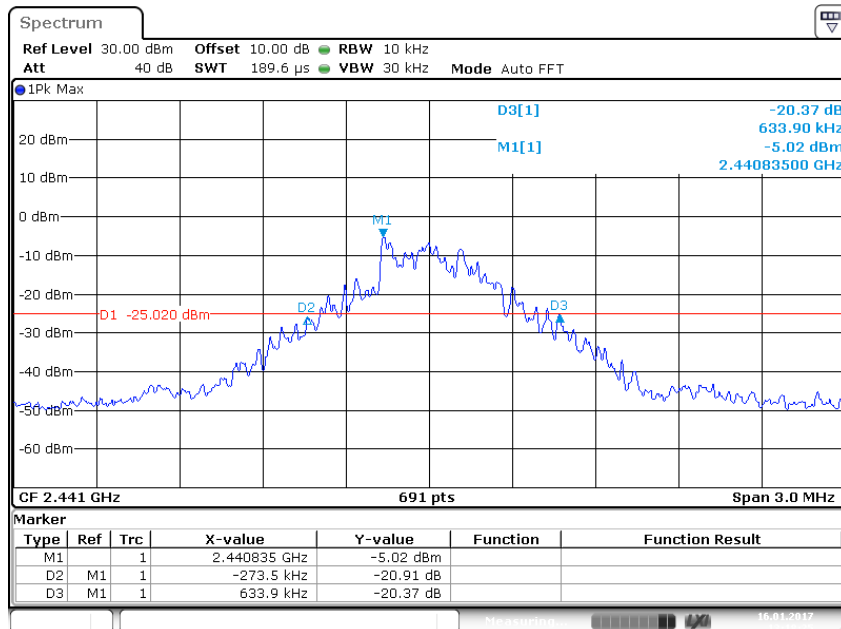
Date: 16.JAN.2017 13:04:58

## Appendix A.5: Test Plots of 20dB Bandwidth

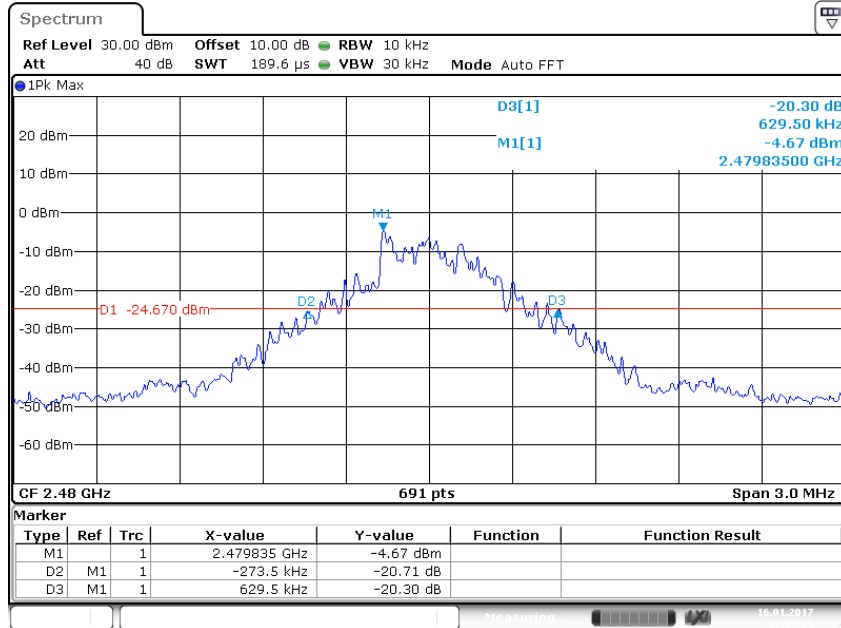
BDR Mode, DH1



Date: 16.JAN.2017 13:17:17

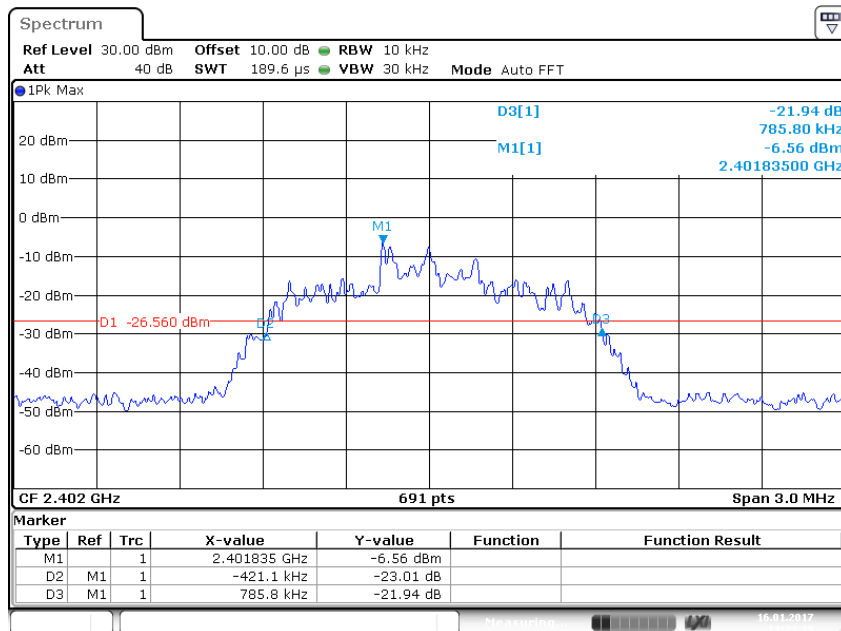


Date: 16.JAN.2017 13:18:25

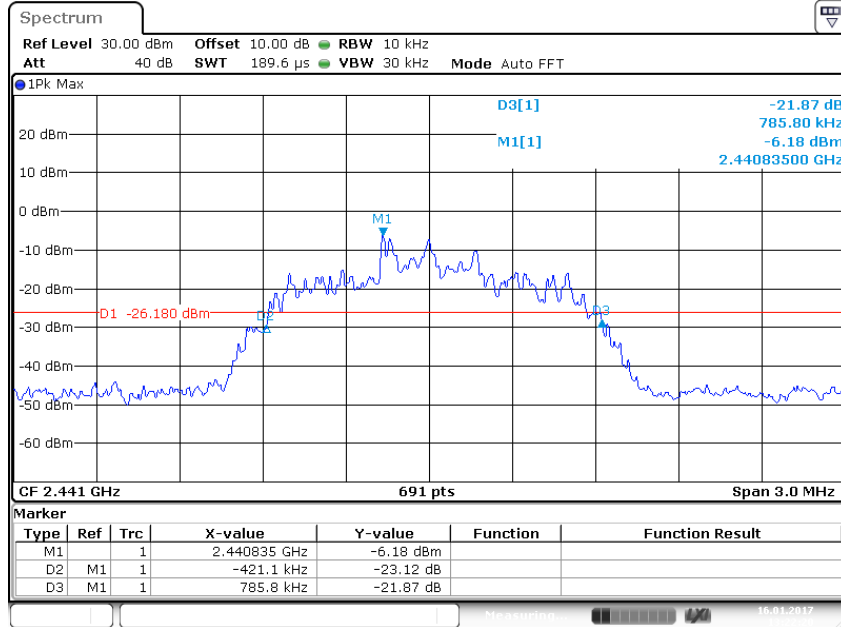


Date: 16.JAN.2017 13:19:35

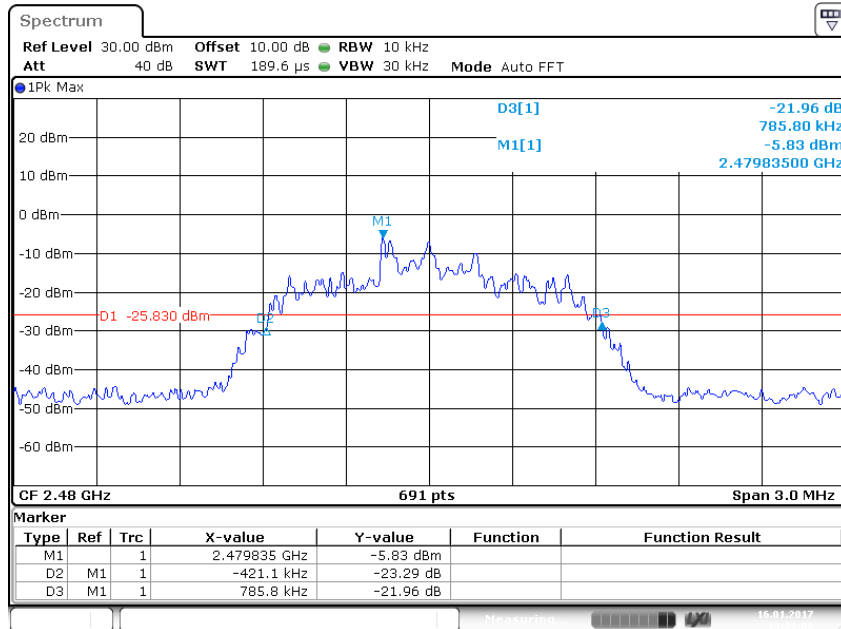
### EDR Mode, 3DH1



Date: 16.JAN.2017 13:23:19



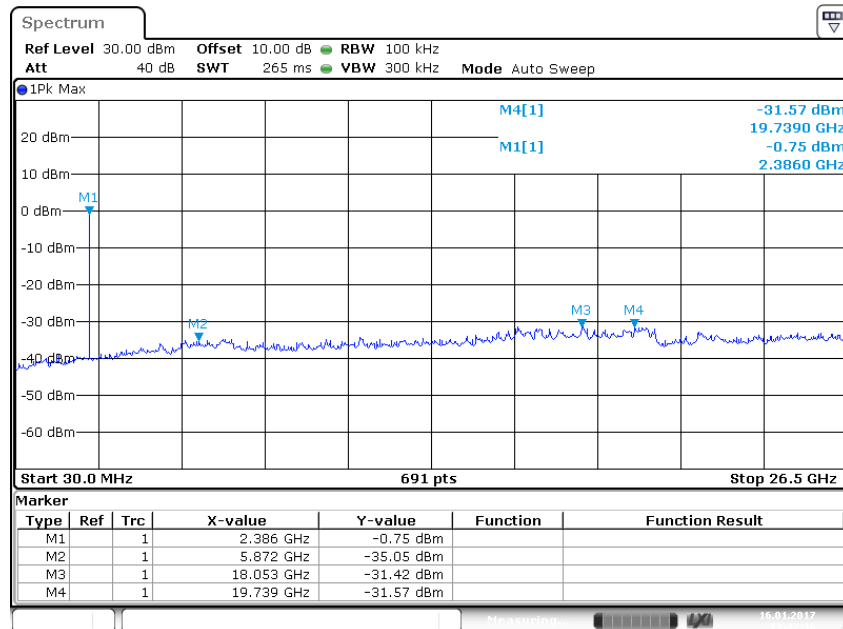
Date: 16.JAN.2017 13:22:20



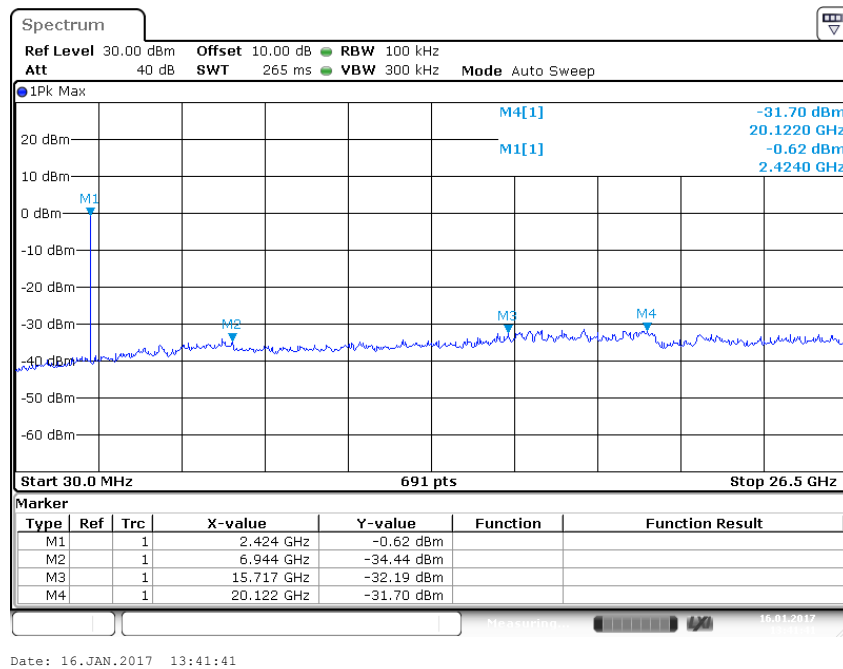
Date: 16.JAN.2017 13:21:08

## Appendix A.6: Test Plots of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

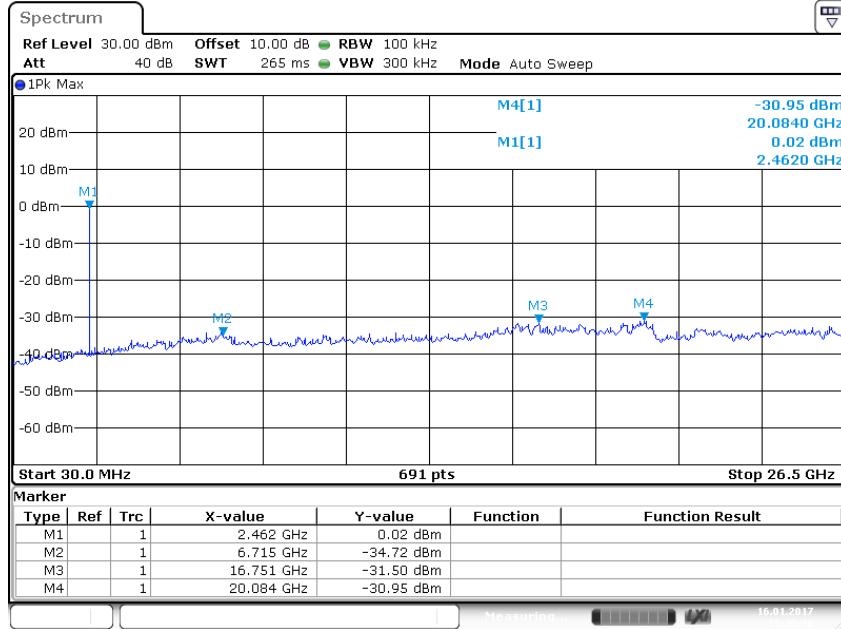
BDR Mode, DH1  
Low Channel



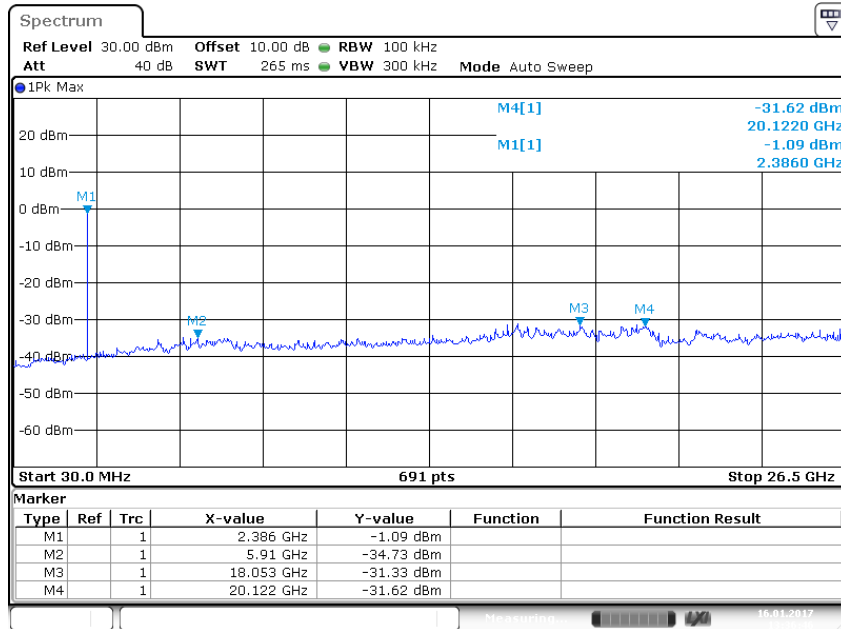
Middle Channel



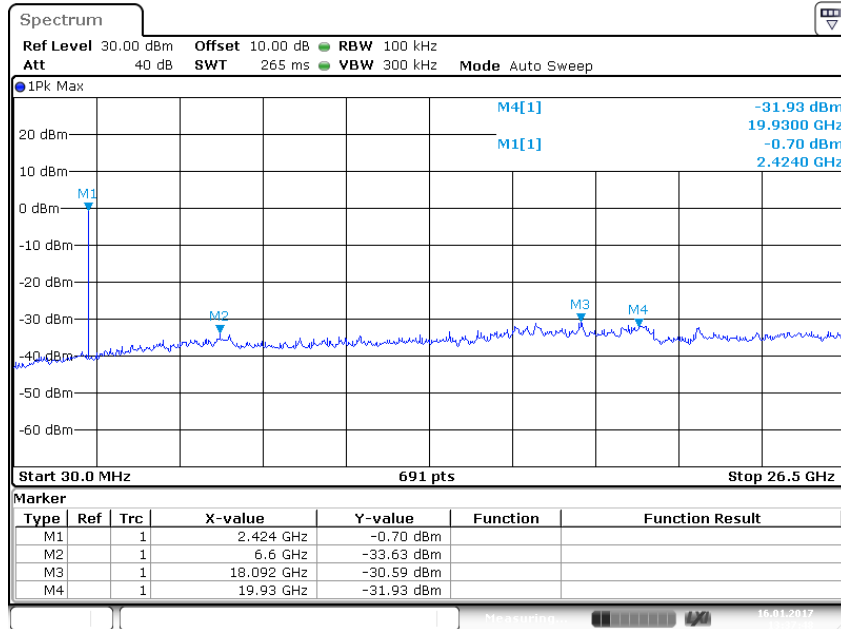
High Channel



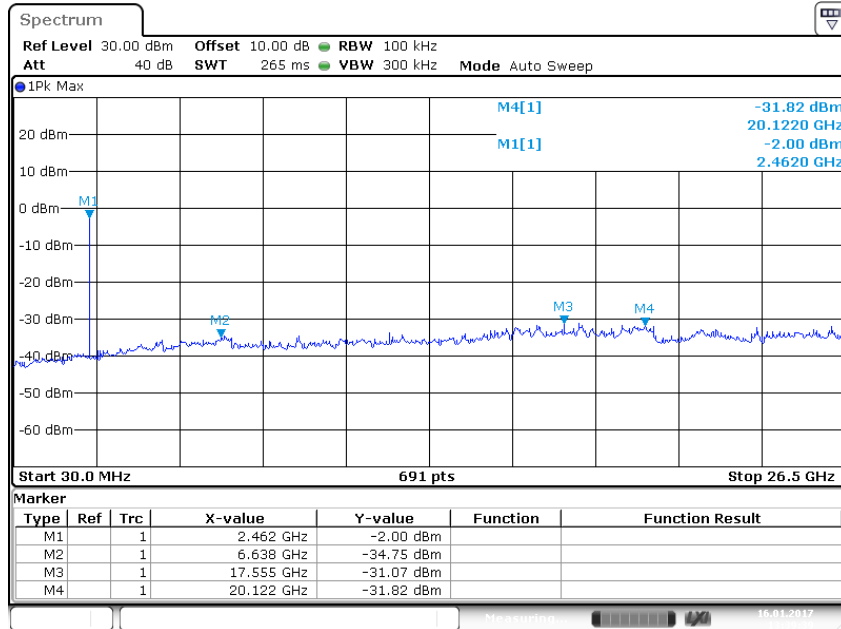
EDR Mode, 3DH1  
Low Channel



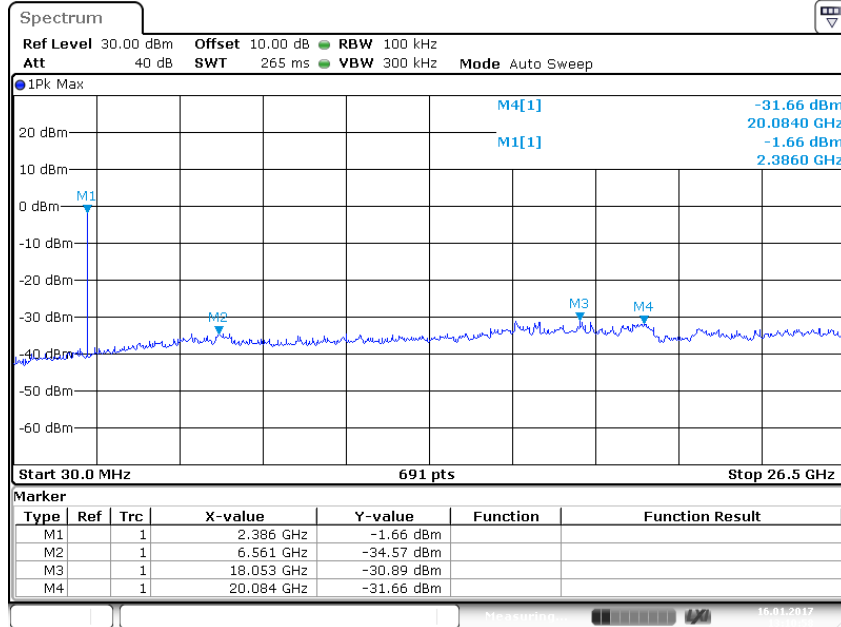
Middle Channel



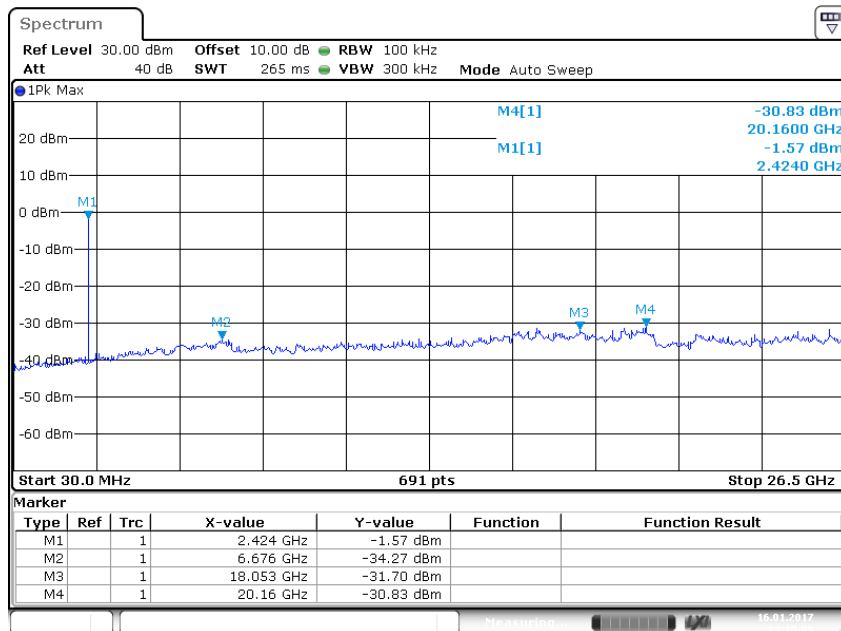
High Channel



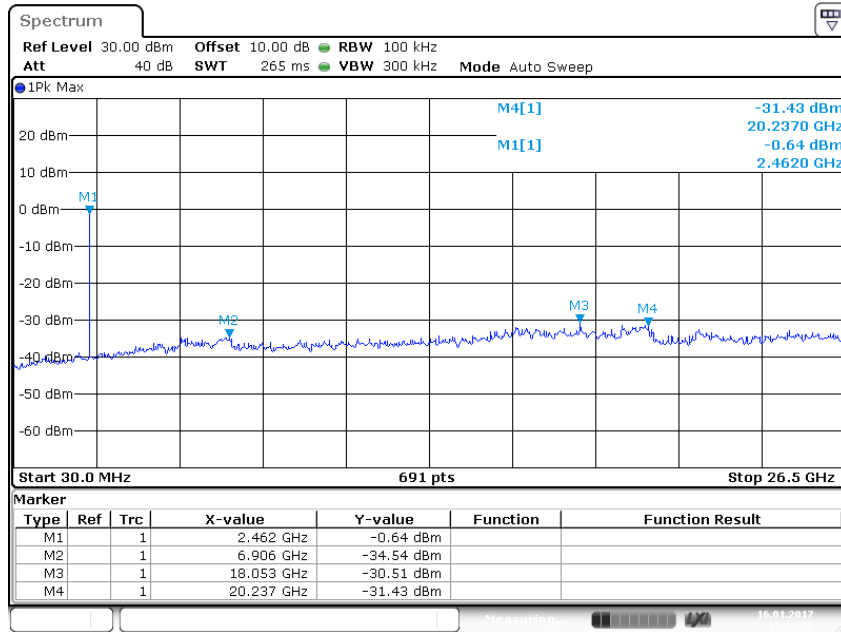
Low Energy Mode  
Low Channel



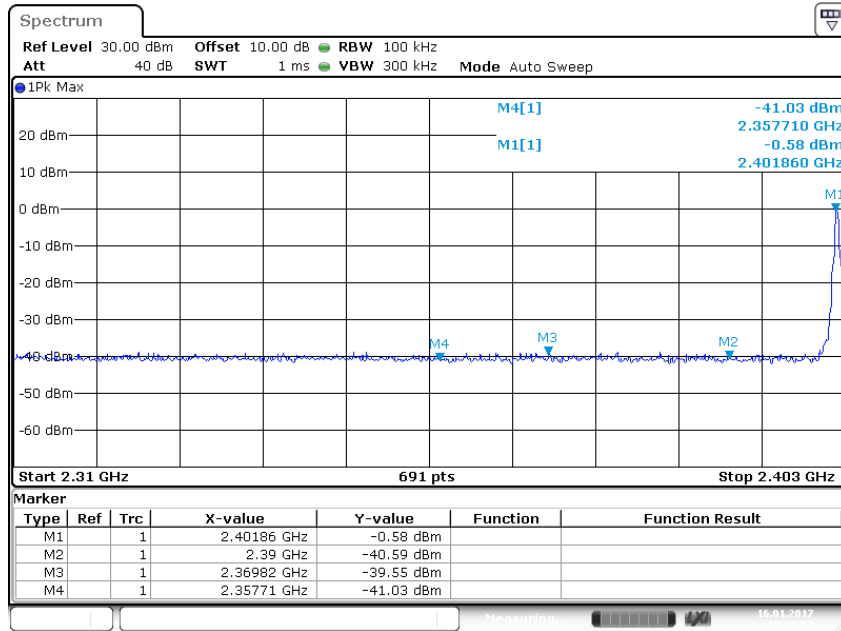
Middle Channel

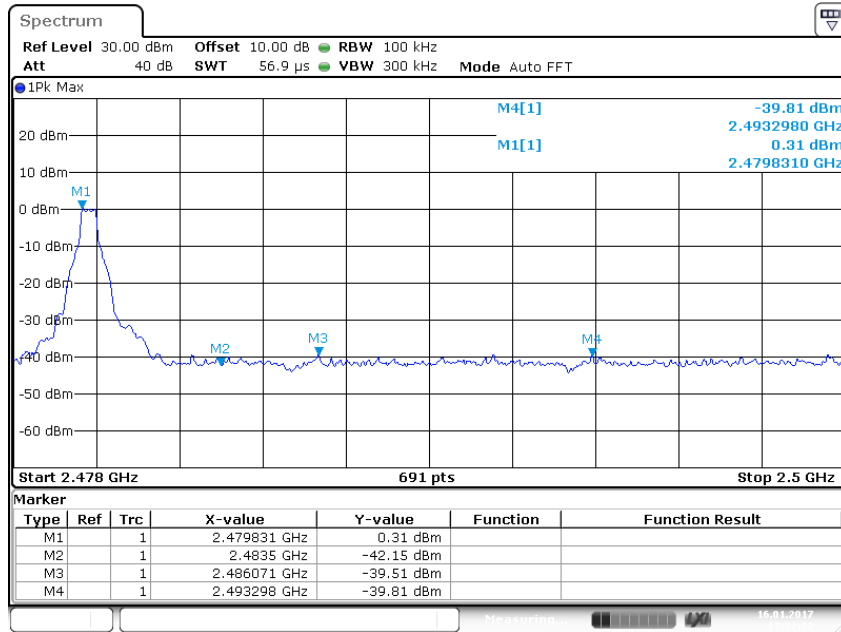


High Channel



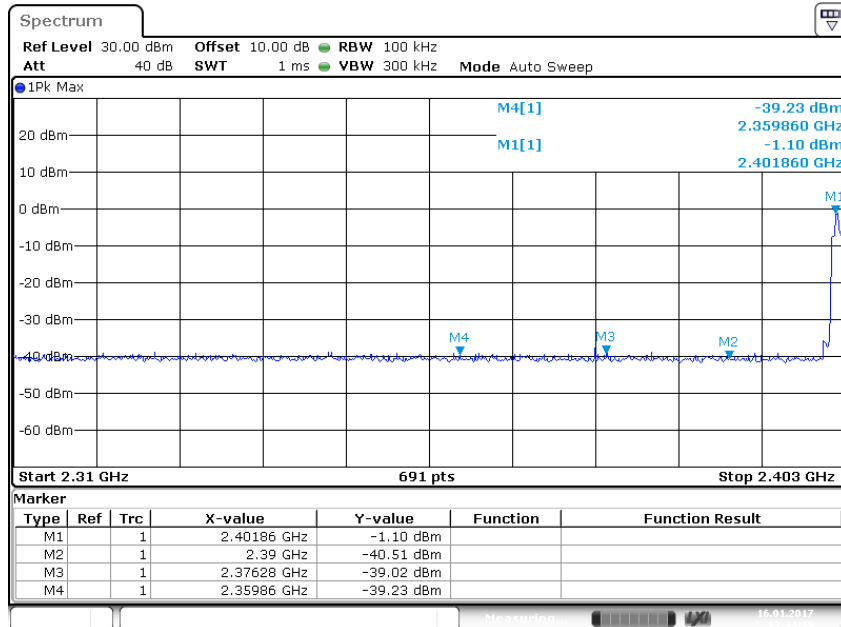
BDR Mode, Band Edge



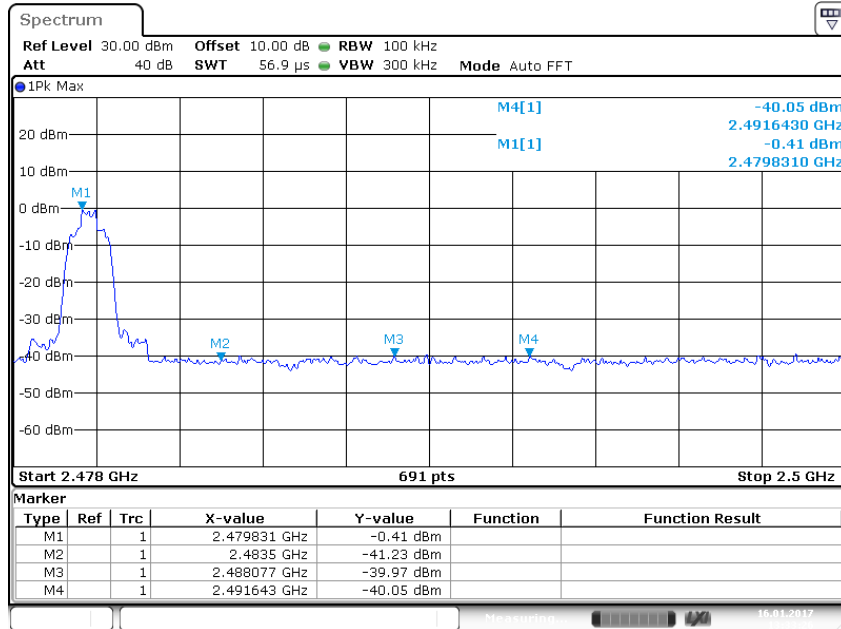


Date: 16.JAN.2017 13:32:22

### EDR Mode, Band Edge

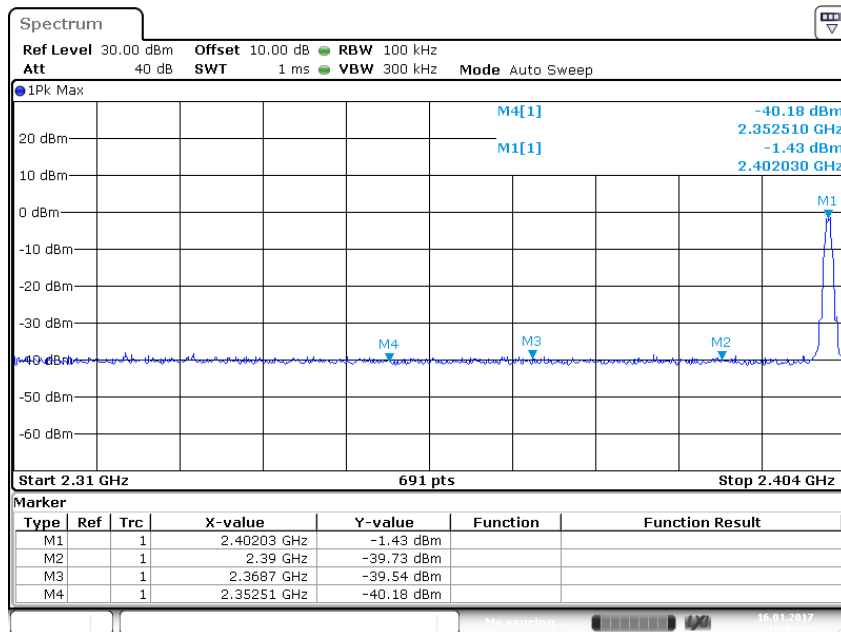


Date: 16.JAN.2017 13:34:39

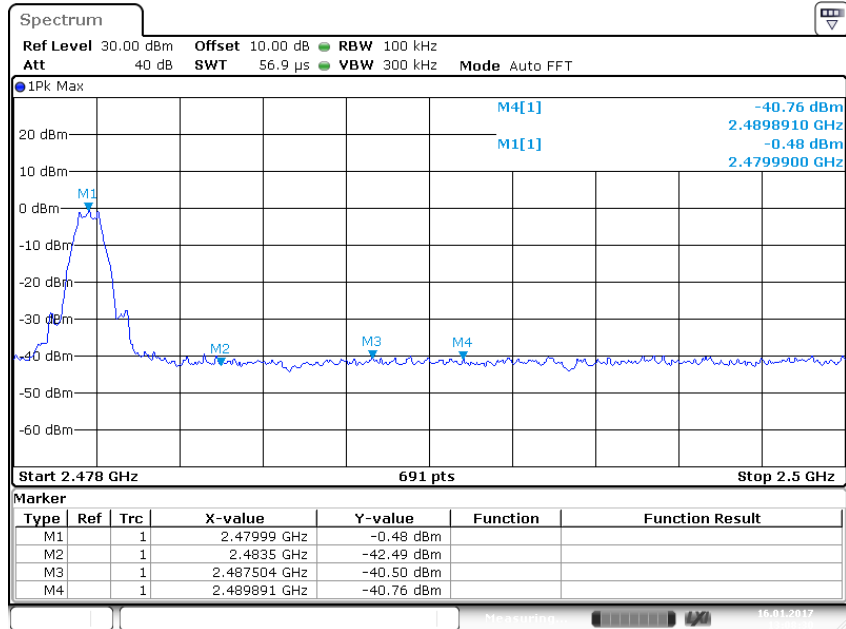


Date: 16.JAN.2017 13:33:26

### Low Energy Mode, Band Edge



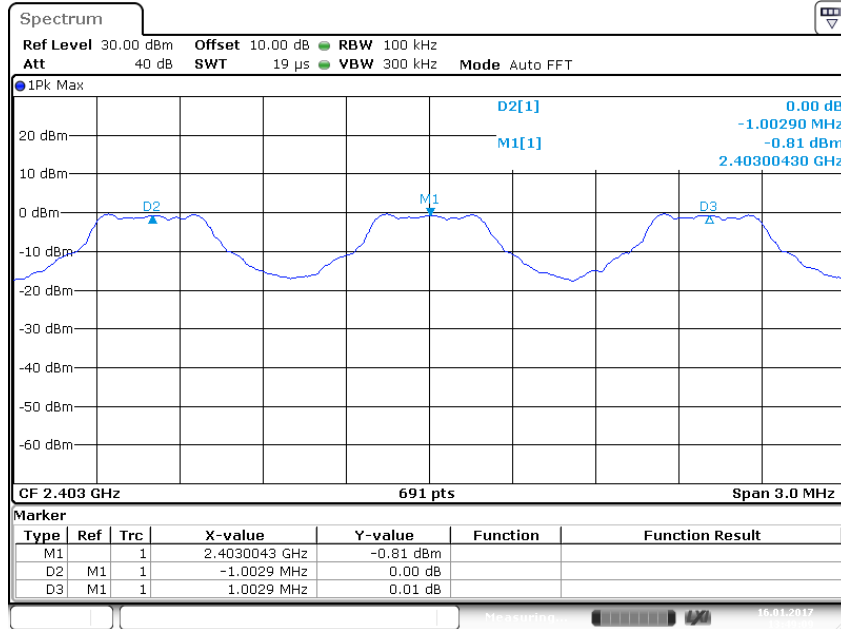
Date: 16.JAN.2017 13:07:32



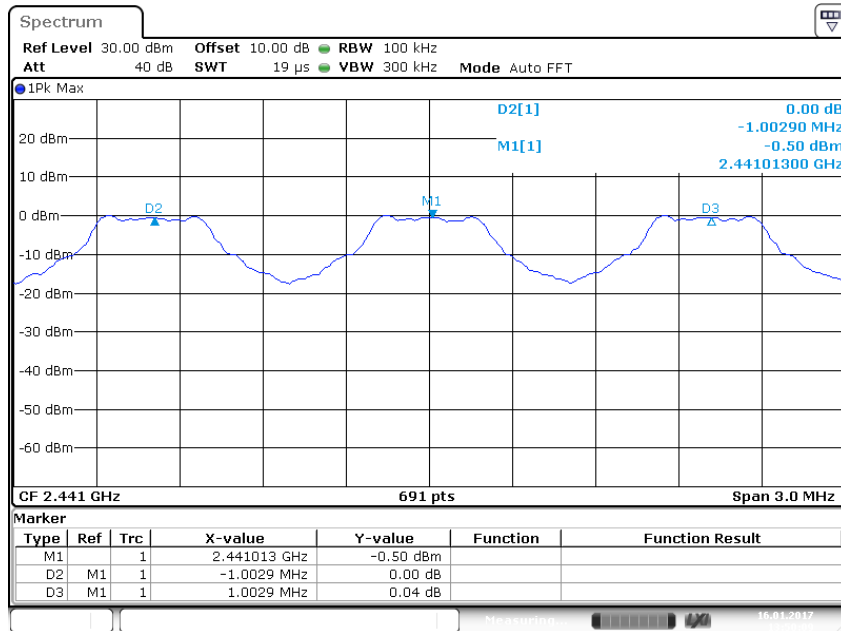
Date: 16.JAN.2017 13:08:30

## Appendix A.7: Test Plots of Carrier Frequency Separation

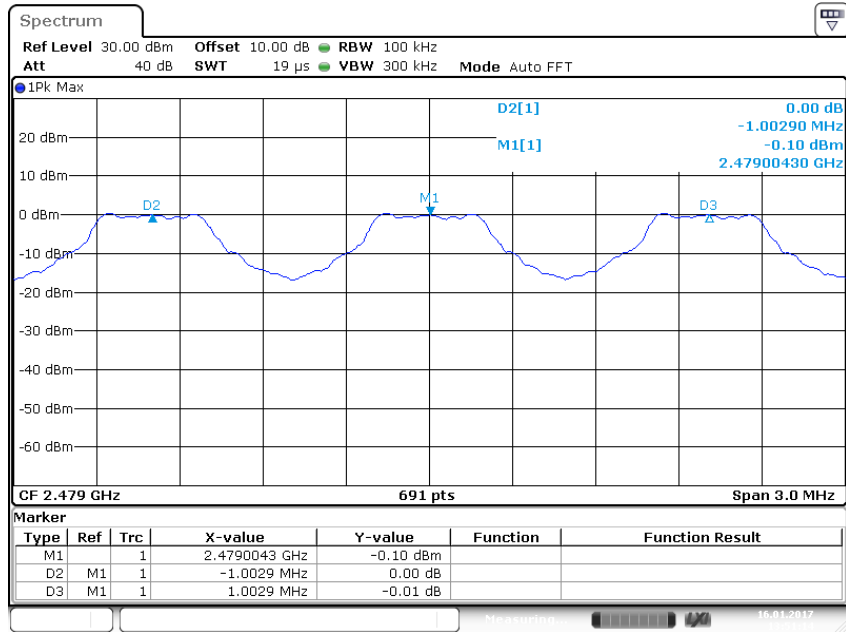
### Hopping Mode



Date: 16.JAN.2017 13:49:09



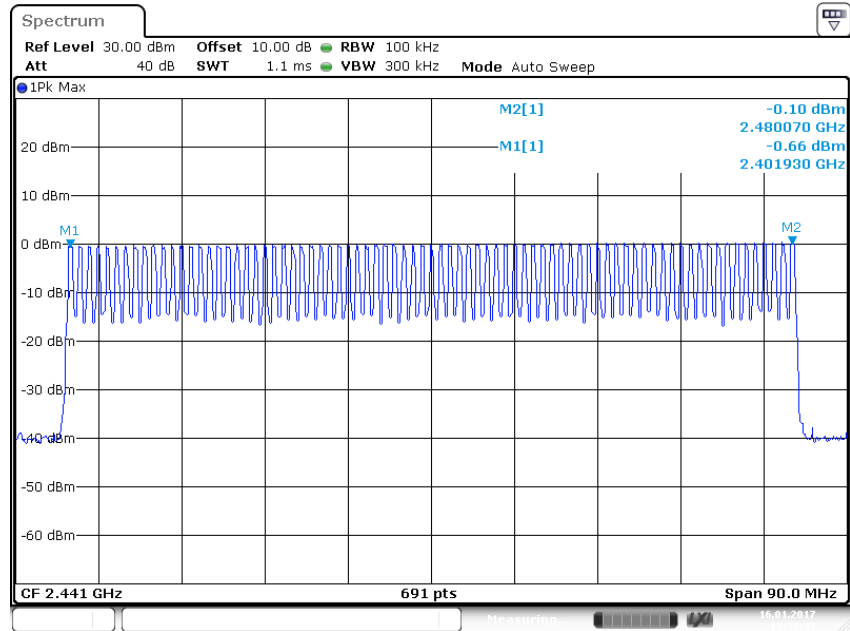
Date: 16.JAN.2017 13:50:09



Date: 16.JAN.2017 13:51:14

## Appendix A.8: Test Plots of Number of Hopping Frequency

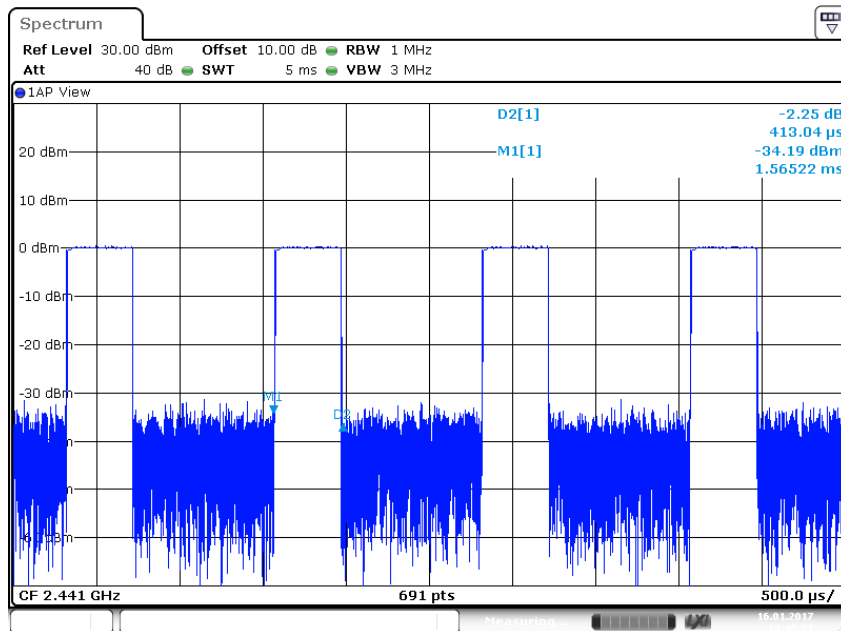
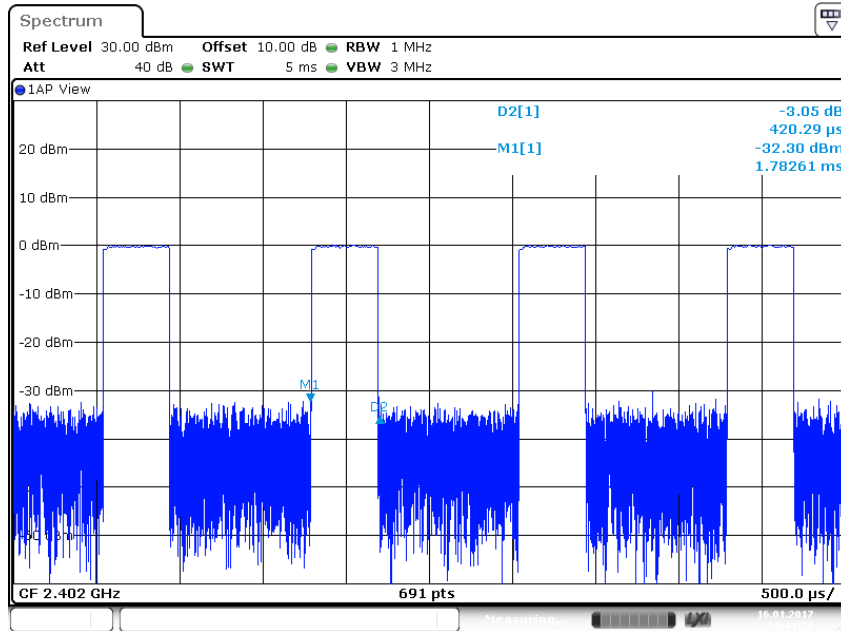
### Hopping Mode

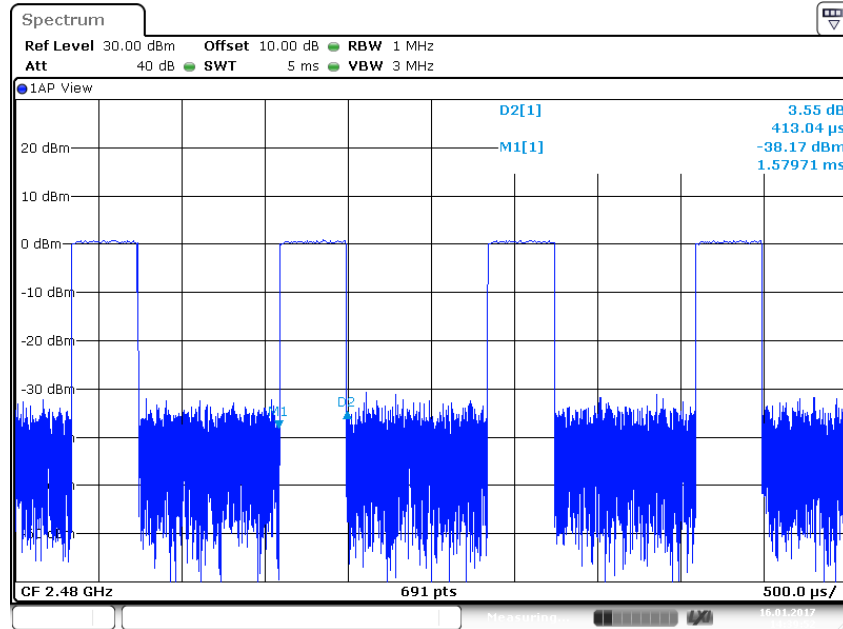


Date: 16.JAN.2017 13:52:45

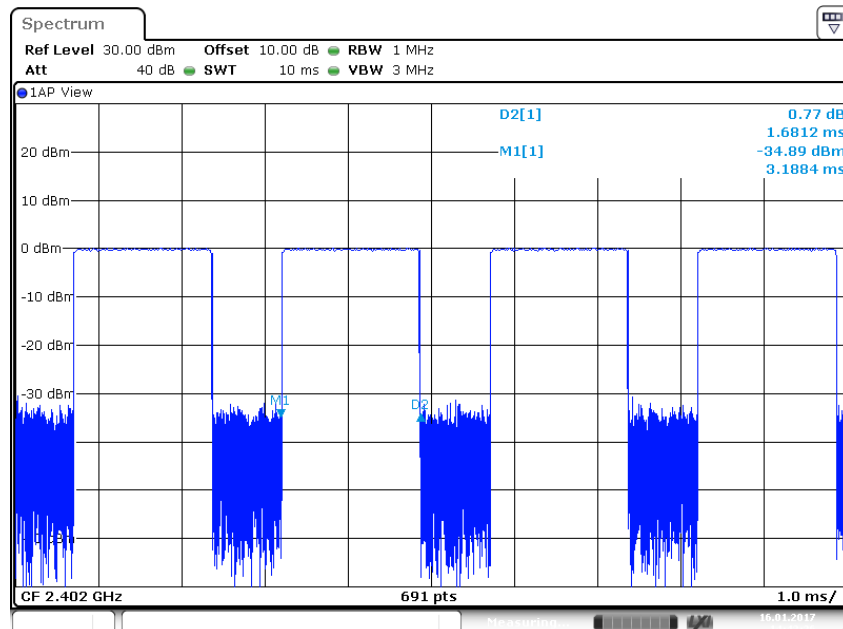
### Appendix A.9: Test Plots of Time of Occupancy

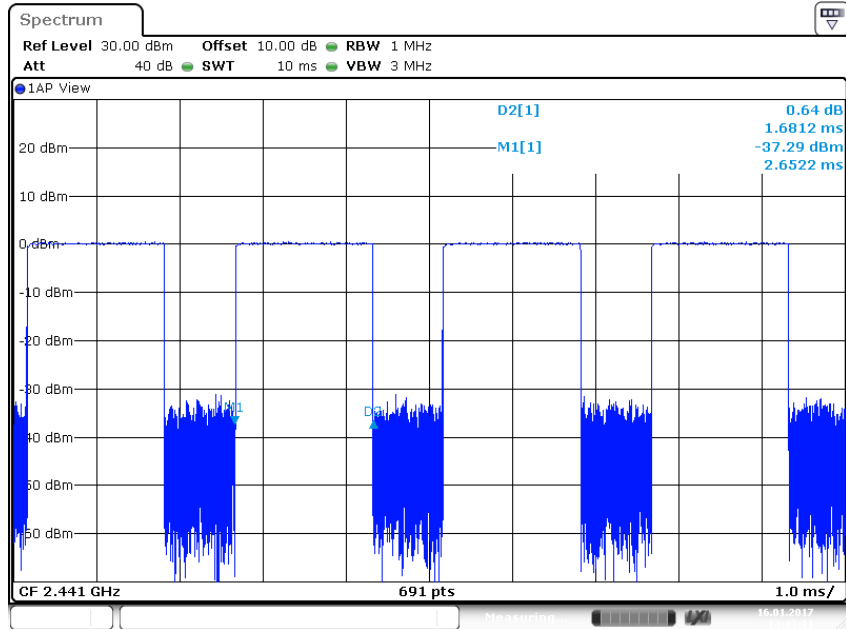
BDR Mode, DH1



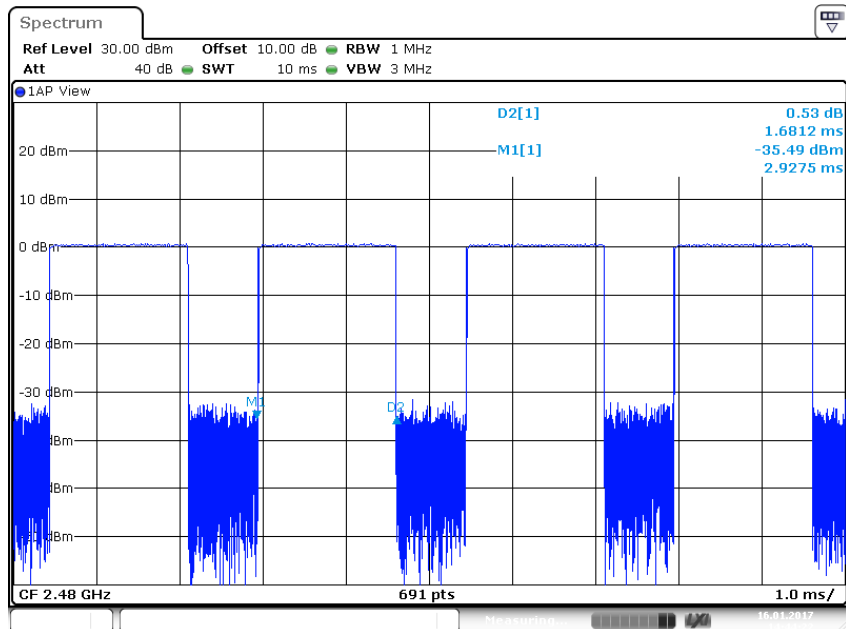


### BDR Mode, DH3



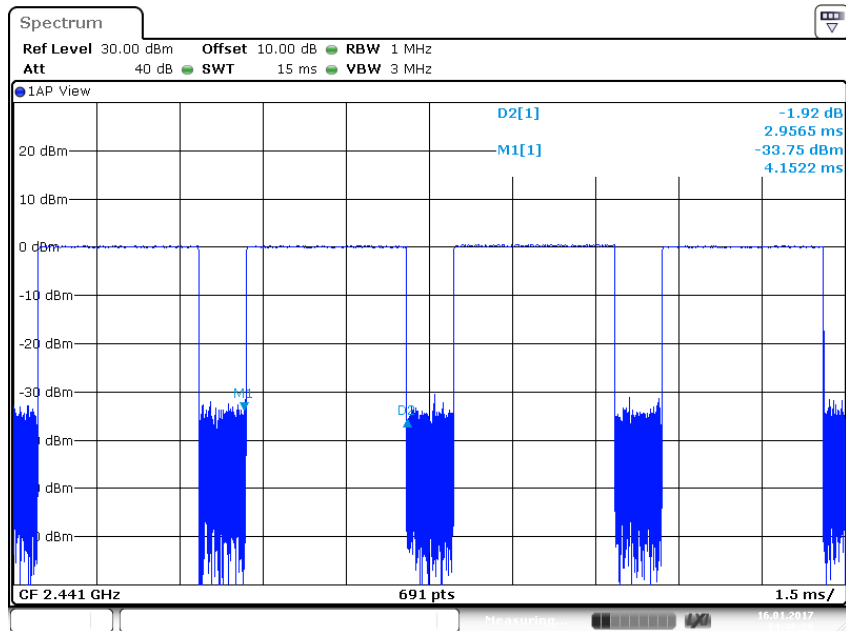
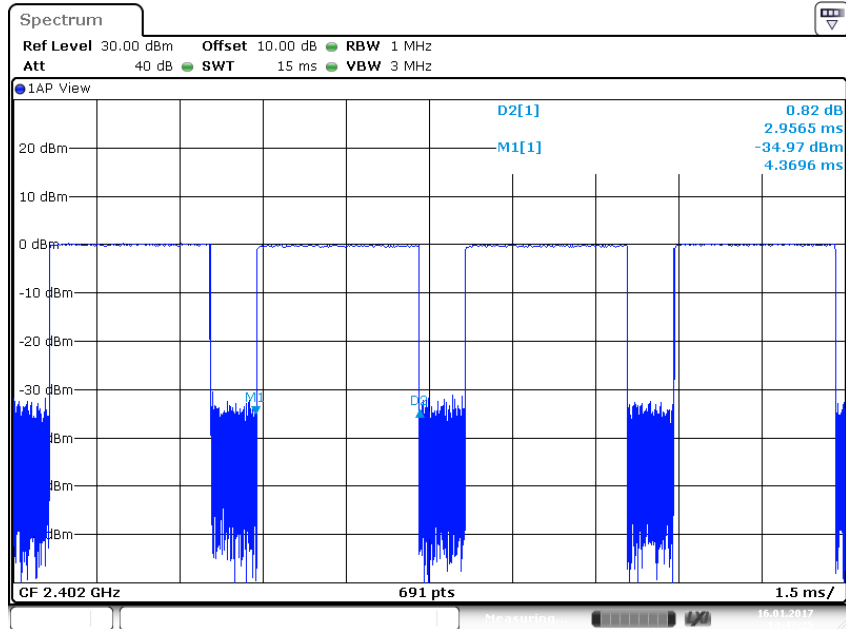


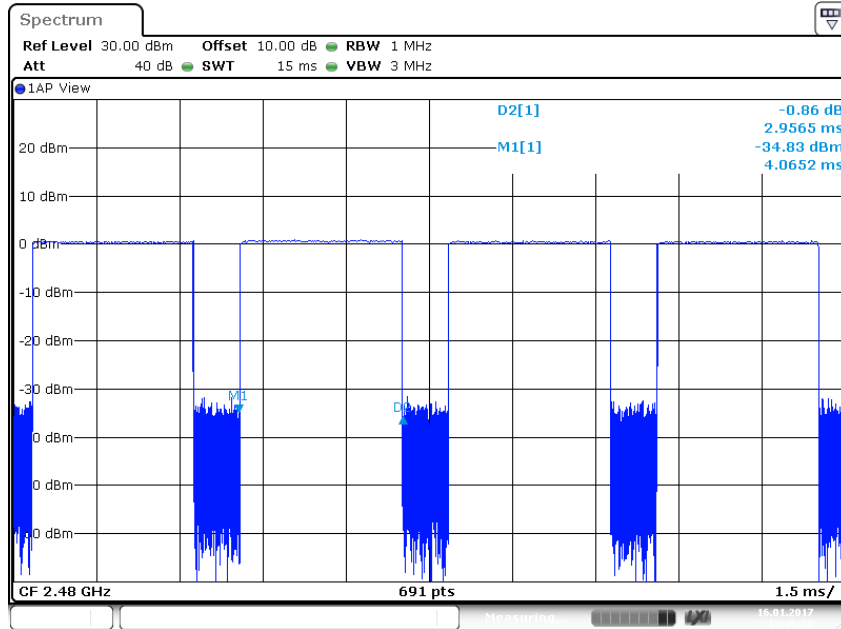
Date: 16.JAN.2017 14:43:11



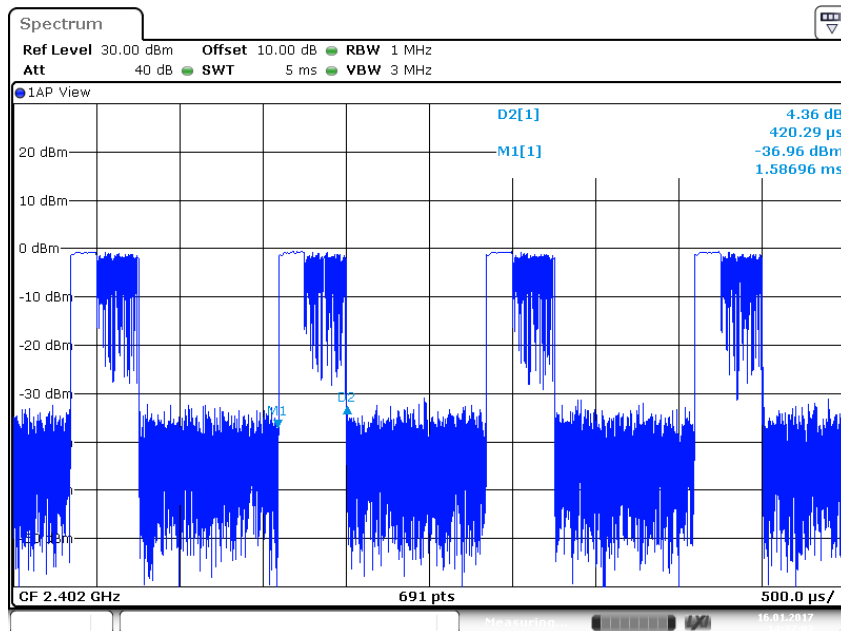
Date: 16.JAN.2017 14:44:22

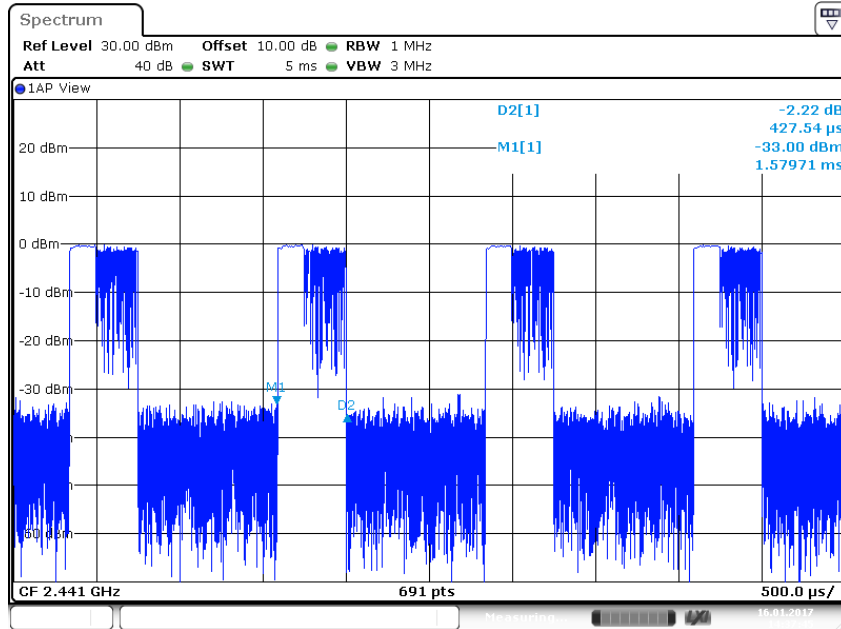
BDR Mode, DH5



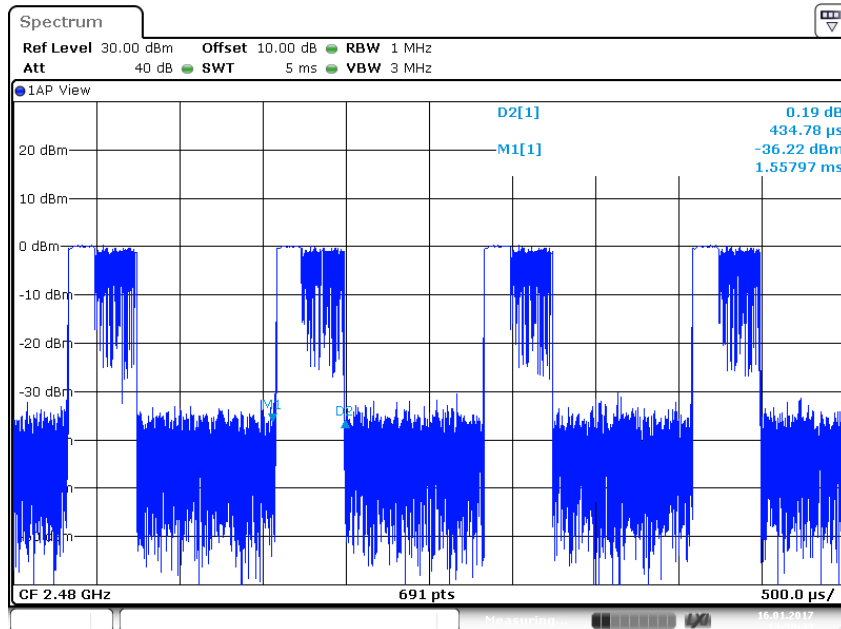


EDR Mode, 3DH1



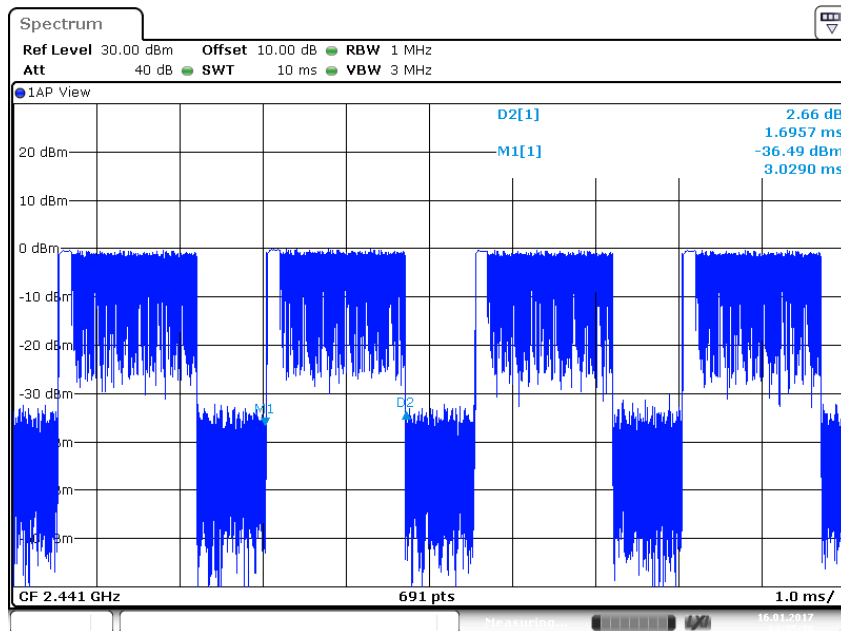
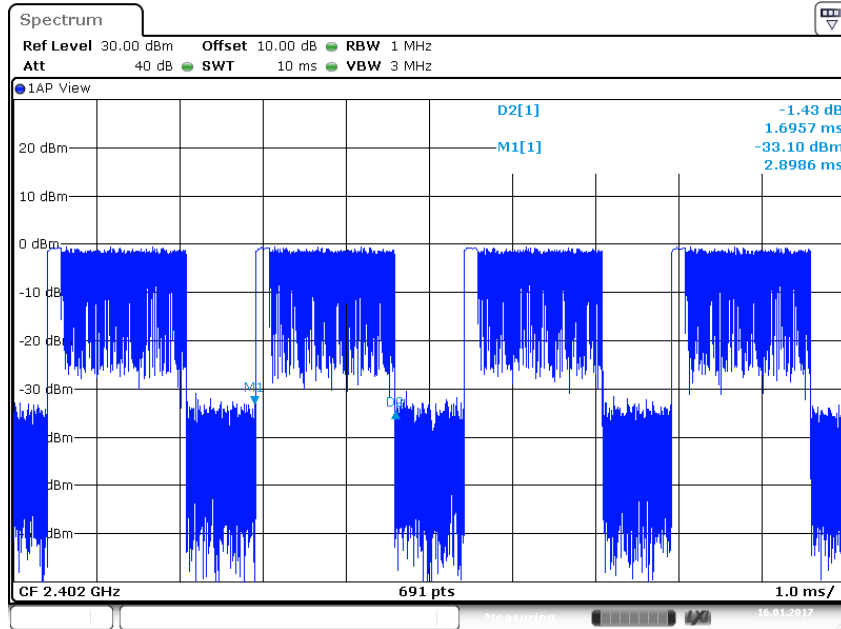


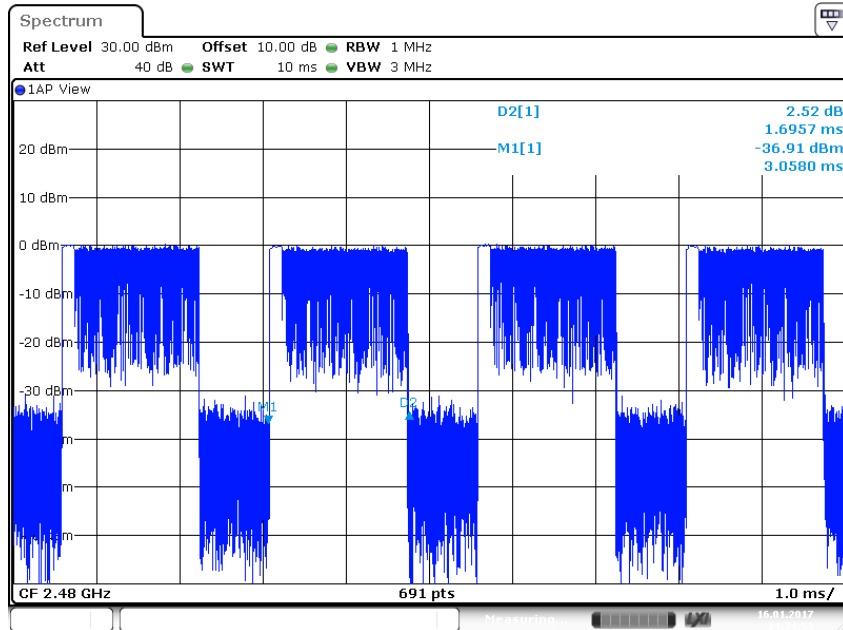
Date: 16.JAN.2017 14:37:45



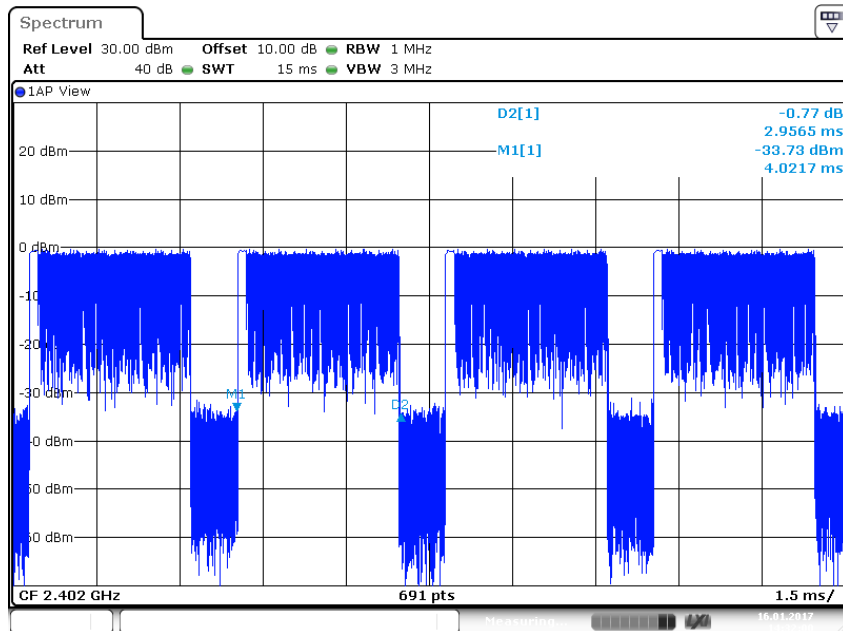
Date: 16.JAN.2017 14:38:43

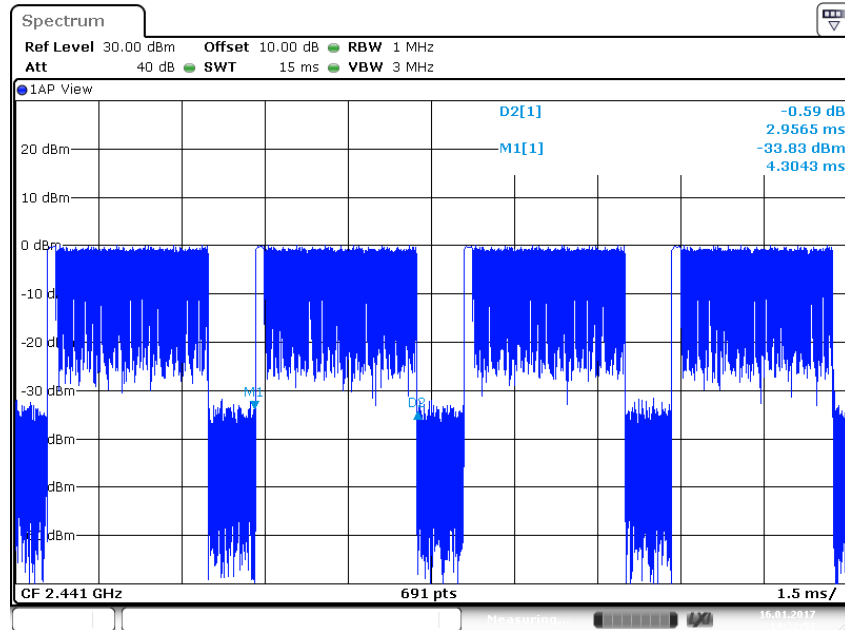
EDR Mode, 3DH3



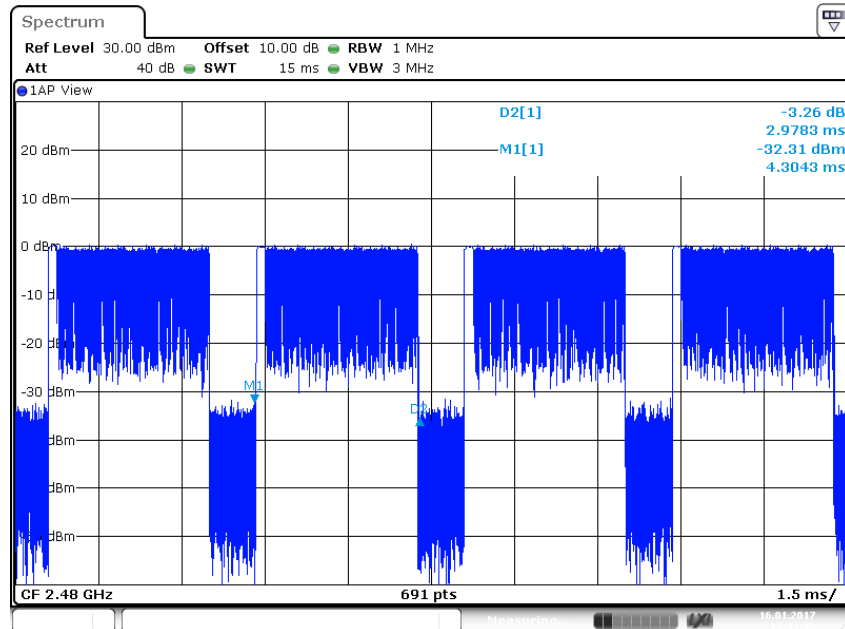


EDR Mode, 3DH5





Date: 16.JAN.2017 14:32:51



Date: 16.JAN.2017 14:33:45

## Appendix B

# Test Results of Bluetooth 4.2 (Dual mode) of Radiated Emission

APPENDIX B .....	1
APPENDIX B.1: TEST PLOTS OF RADIATED SPURIOUS EMISSION .....	2
<i>BDR mode, 30MHz - 1GHz</i> .....	2
<i>BDR mode, 1GHz - 18GHz</i> .....	8
<i>Low Energy mode, 30MHz - 1GHz</i> .....	14
<i>Low Energy mode, 1GHz - 18GHz</i> .....	20
APPENDIX B.2: TEST PLOTS OF BAND EDGE (RADIATED) .....	26
<i>BDR mode, Low Channel</i> .....	26
<i>BDR mode, High Channel</i> .....	28
<i>Low Energy mode, Low Channel</i> .....	30
<i>Low Energy mode, High Channel</i> .....	32

Note: The radiated spurious emission were measured from 9KHz to 26.5GHz, the spurious emissions from 9KHz-30MHz and 18GHz-26.5GHz were greater than 20dB below the limit, so the radiated Spurious Emissions (9kHz – 30MHz and 18GHz-26.5GHz) tests were recorded but not showed in the appendix B.

### Appendix B.1: Test Plots of Radiated Spurious Emission

BDR mode, 30MHz - 1GHz



**ACCURATE TECHNOLOGY CO., LTD.**

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

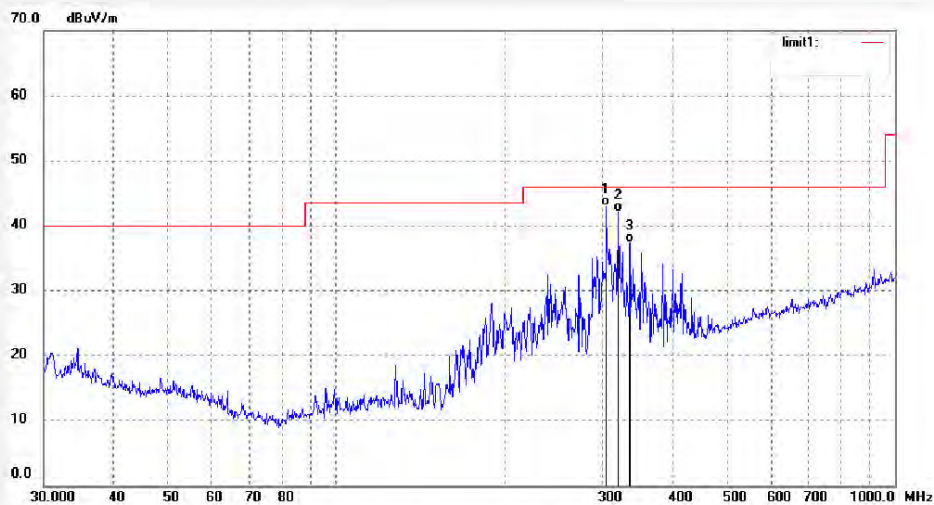
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #928	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	51.88	-8.93	42.95	46.00	-3.05	QP			
2	319.9370	50.55	-8.45	42.10	46.00	-3.90	QP			
3	336.0350	45.19	-7.91	37.28	46.00	-8.72	QP			



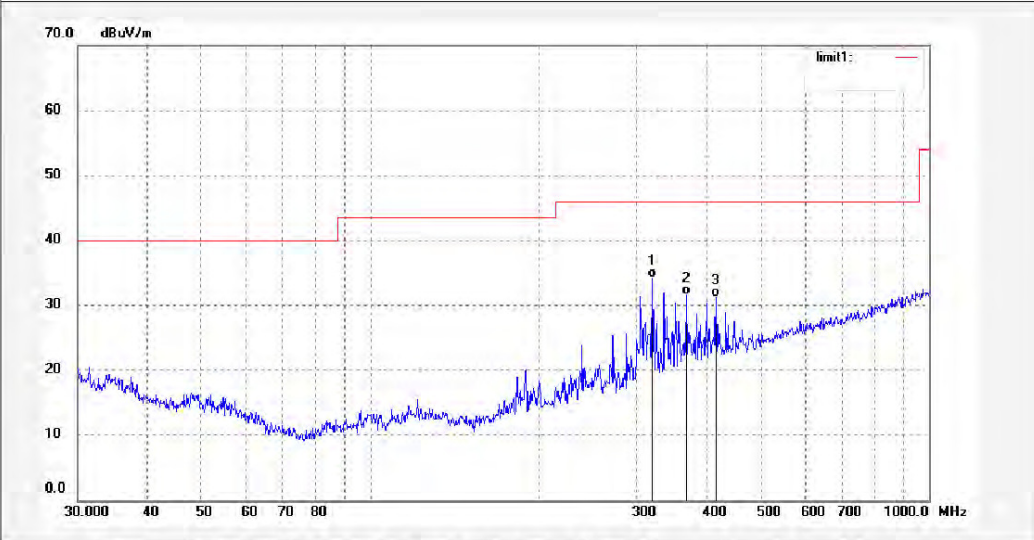
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #929	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	319.9370	42.68	-8.45	34.23	46.00	-11.77	QP			
2	368.1116	38.70	-7.17	31.53	46.00	-14.47	QP			
3	416.1791	37.20	-5.95	31.25	46.00	-14.75	QP			



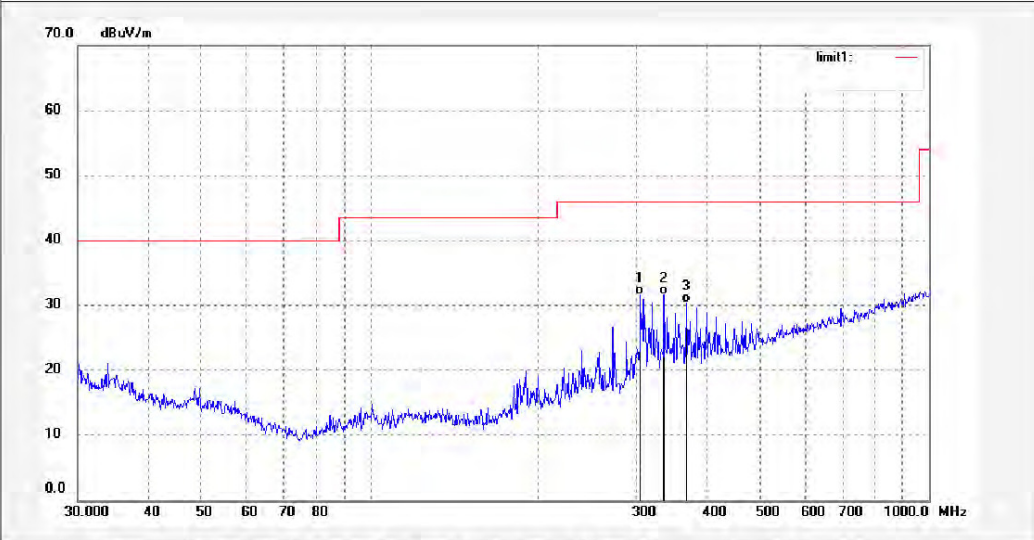
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #930	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2441MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	40.53	-8.93	31.60	46.00	-14.40	QP			
2	336.0351	39.52	-7.91	31.61	46.00	-14.39	QP			
3	368.1116	37.59	-7.17	30.42	46.00	-15.58	QP			



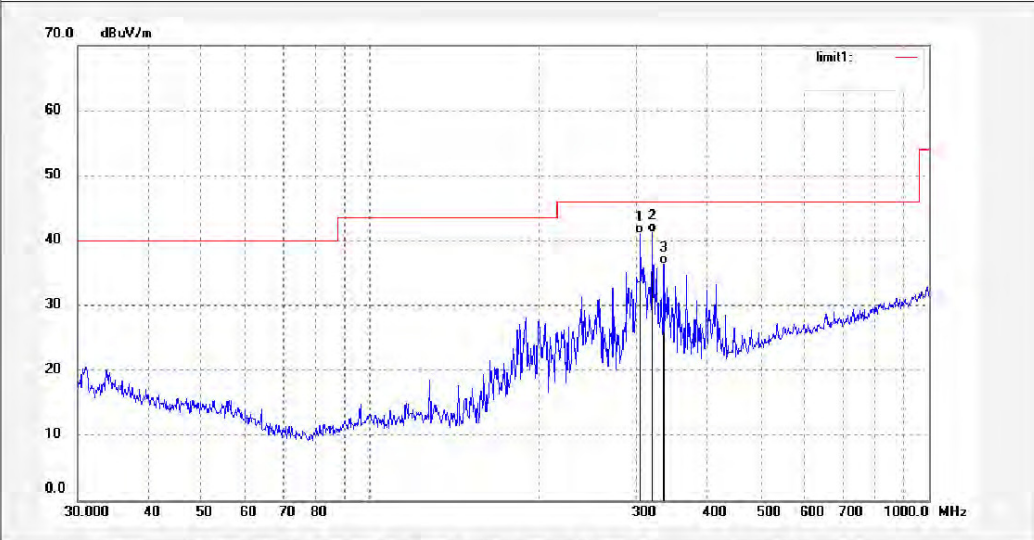
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #931	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2441MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	49.94	-8.93	41.01	46.00	-4.99	QP			
2	319.9370	49.69	-8.45	41.24	46.00	-4.76	QP			
3	336.0351	44.21	-7.91	36.30	46.00	-9.70	QP			

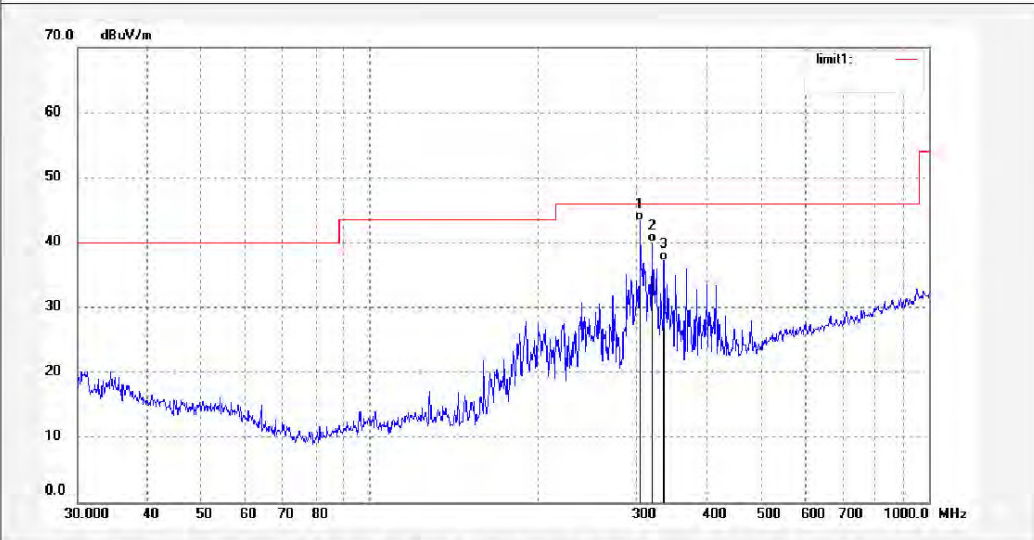


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #932	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	52.27	-8.93	43.34	46.00	-2.66	QP			
2	319.9370	48.50	-8.45	40.05	46.00	-5.95	QP			
3	336.0351	45.07	-7.91	37.16	46.00	-8.84	QP			



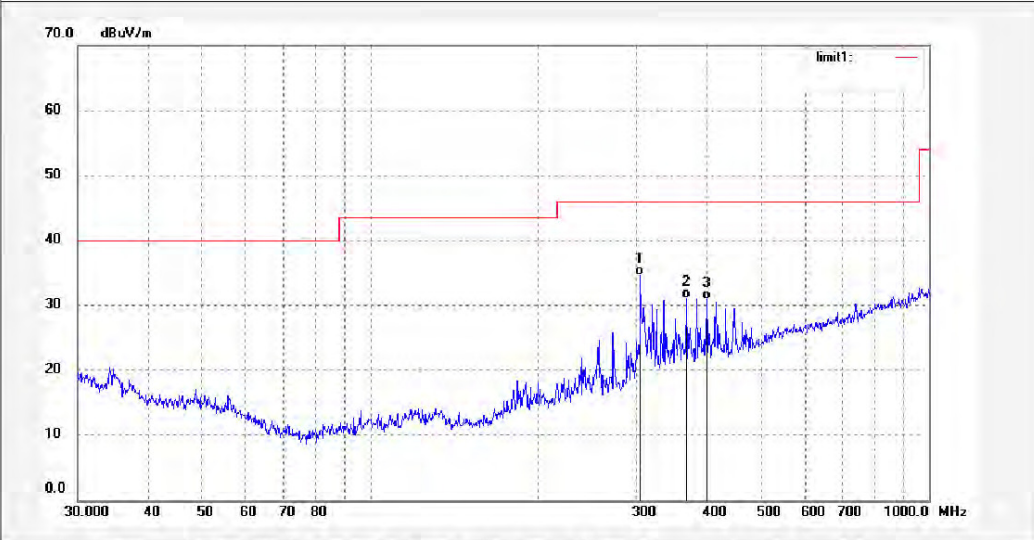
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #933	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	43.46	-8.93	34.53	46.00	-11.47	QP			
2	368.1116	38.29	-7.17	31.12	46.00	-14.88	QP			
3	400.4318	37.24	-6.43	30.81	46.00	-15.19	QP			

**BDR mode, 1GHz - 18GHz**



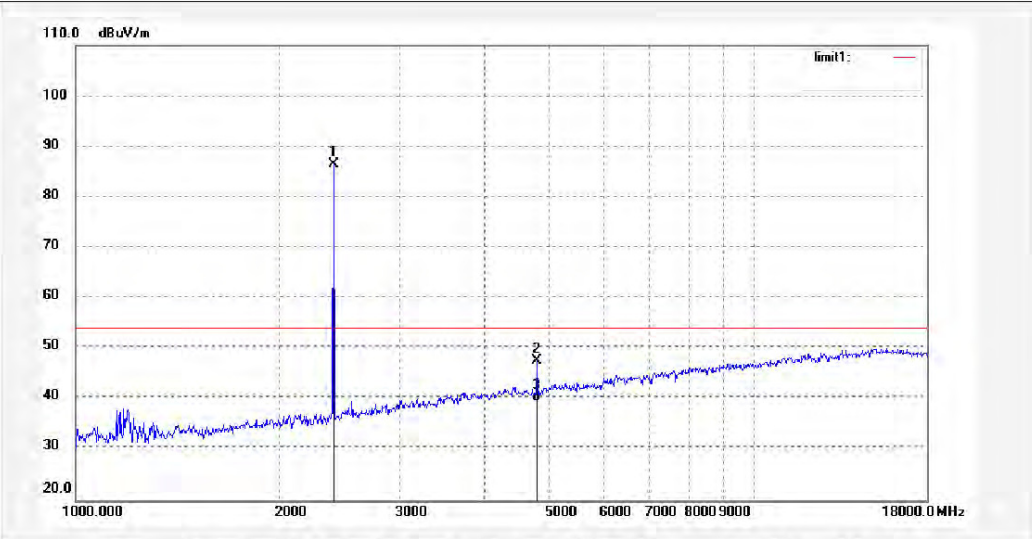
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #909	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	88.15	-1.61	86.54	/	/	peak			
2	4804.029	42.68	4.90	47.58	74.00	-26.42	peak			
3	4804.029	34.51	4.90	39.41	54.00	-14.59	AVG			

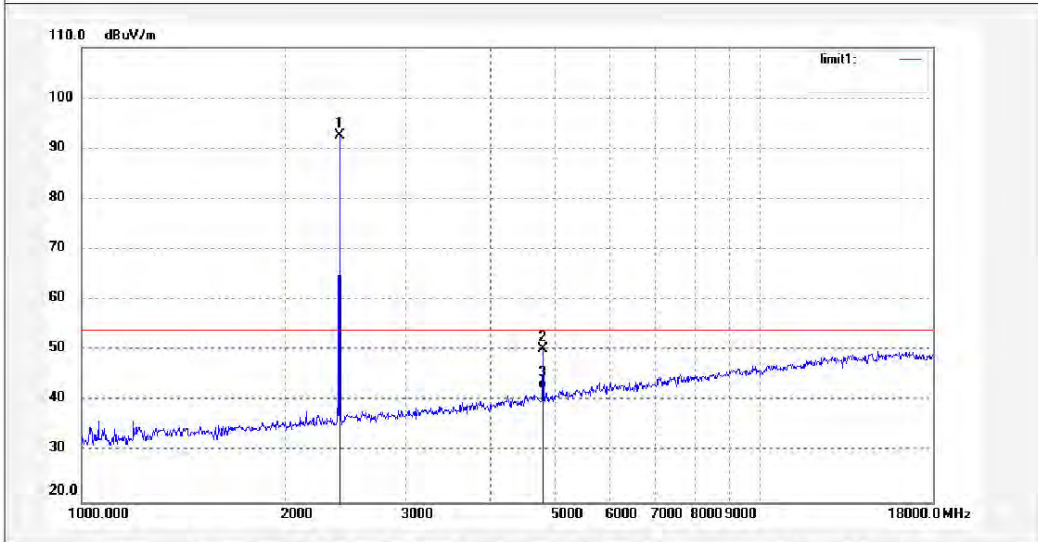


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #910	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	94.15	-1.61	92.54	/	/	peak			
2	4804.028	45.33	4.90	50.23	74.00	-23.77	peak			
3	4804.028	37.46	4.90	42.36	54.00	-11.64	AVG			



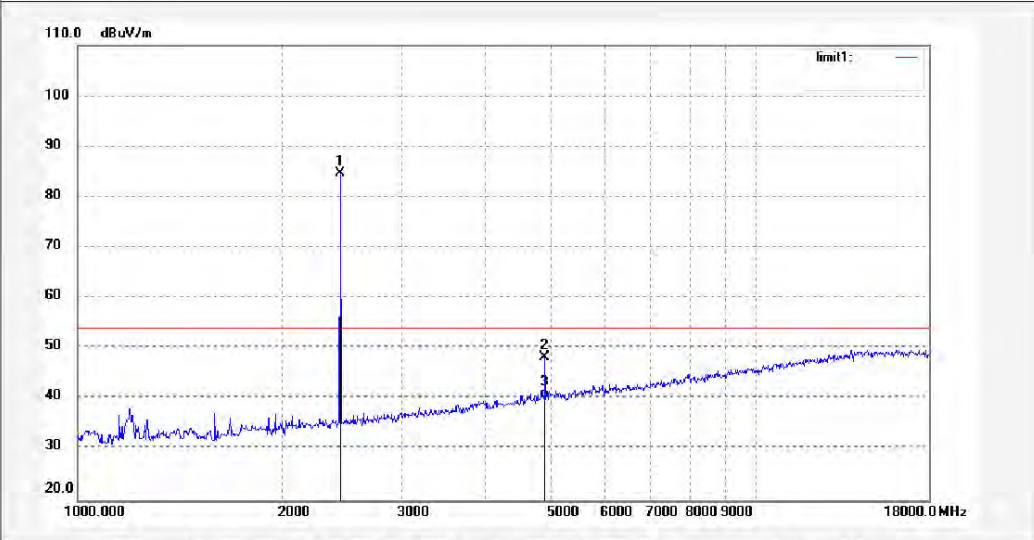
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #913	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2441MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	86.16	-1.44	84.72	/	/	peak			
2	4882.027	42.63	5.61	48.24	74.00	-25.76	peak			
3	4882.027	34.60	5.61	40.21	54.00	-13.79	AVG			

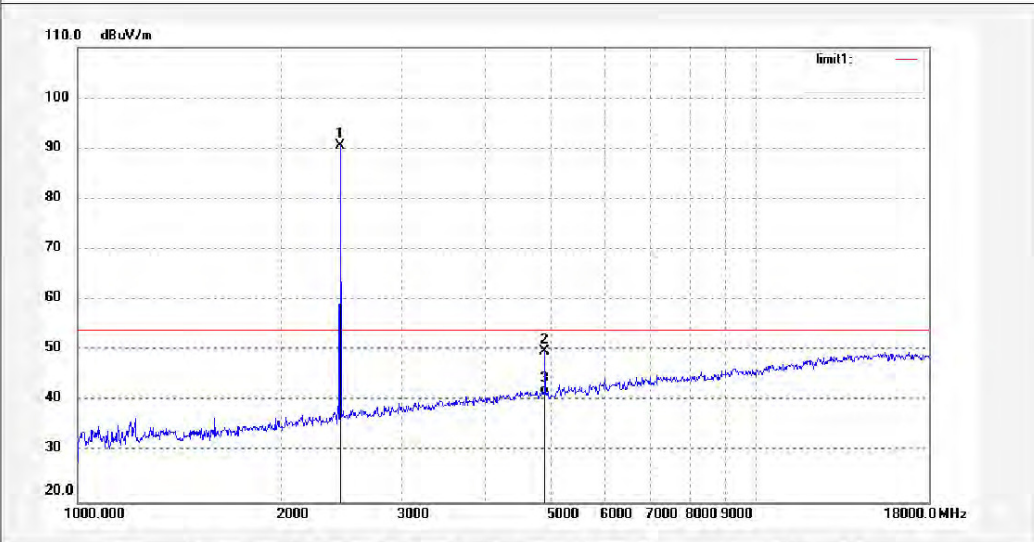


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #914	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2441MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	92.08	-1.44	90.64	/	/	peak			
2	4882.025	44.20	5.61	49.81	74.00	-24.19	peak			
3	4882.025	35.76	5.61	41.37	54.00	-12.63	AVG			

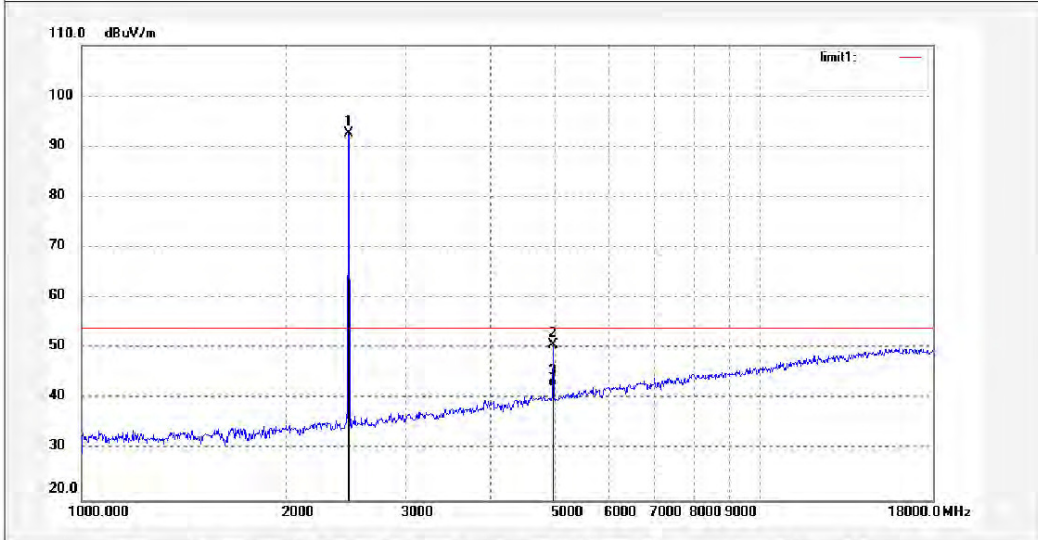


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #915	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth	



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	93.96	-1.40	92.56	/	/	peak			
2	4960.026	44.62	6.10	50.72	74.00	-23.28	peak			
3	4960.026	36.24	6.10	42.34	54.00	-11.66	AVG			

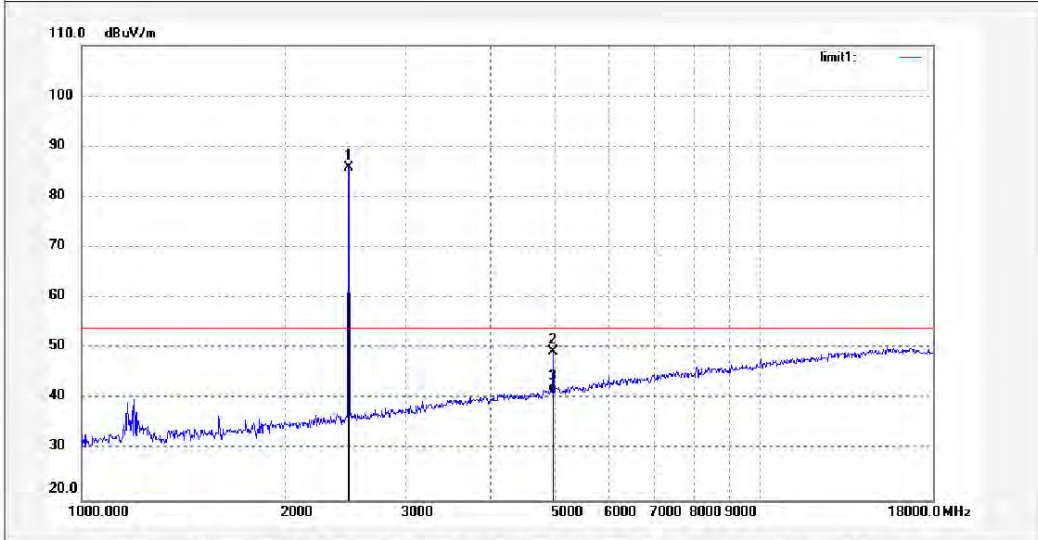


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #916	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth	



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	87.18	-1.40	85.78	/	/	peak			
2	4960.028	43.24	6.10	49.34	74.00	-24.66	peak			
3	4960.028	35.26	6.10	41.36	54.00	-12.64	AVG			

Low Energy mode, 30MHz - 1GHz



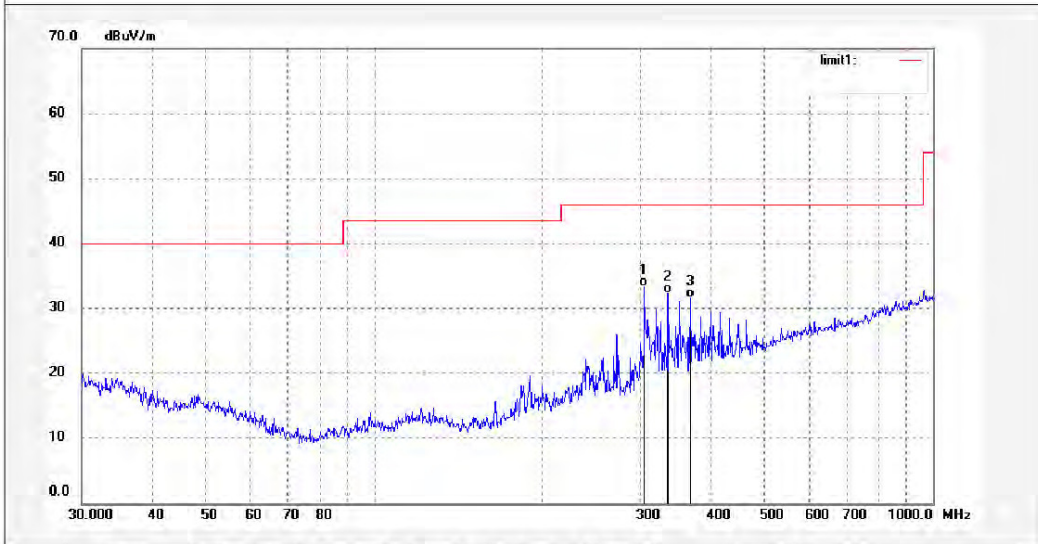
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #934	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	42.30	-8.93	33.37	46.00	-12.63	QP			
2	336.0350	40.23	-7.91	32.32	46.00	-13.68	QP			
3	368.1116	38.73	-7.17	31.56	46.00	-14.44	QP			

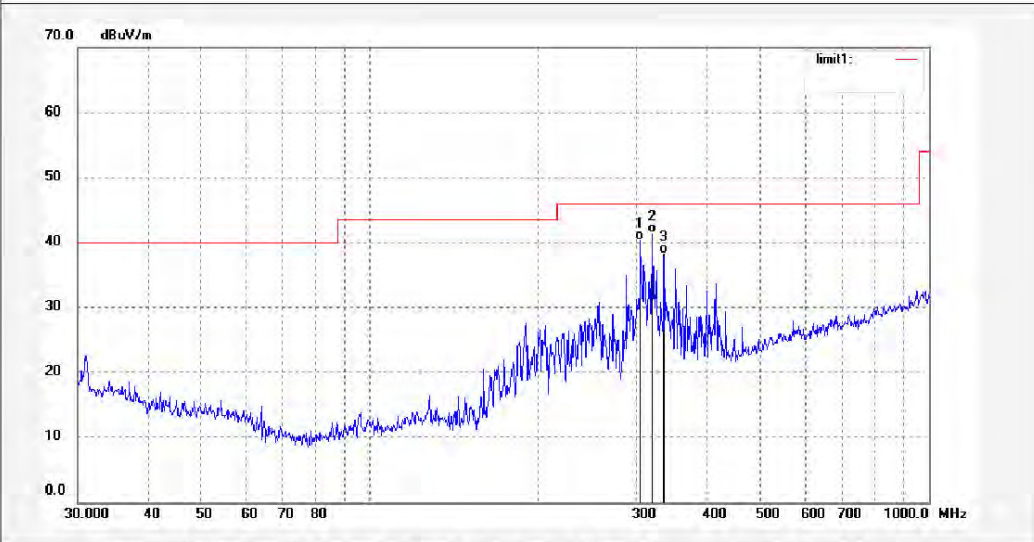


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #935	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	49.34	-8.93	40.41	46.00	-5.59	QP			
2	319.9370	49.76	-8.45	41.31	46.00	-4.69	QP			
3	336.0351	46.23	-7.91	38.32	46.00	-7.68	QP			

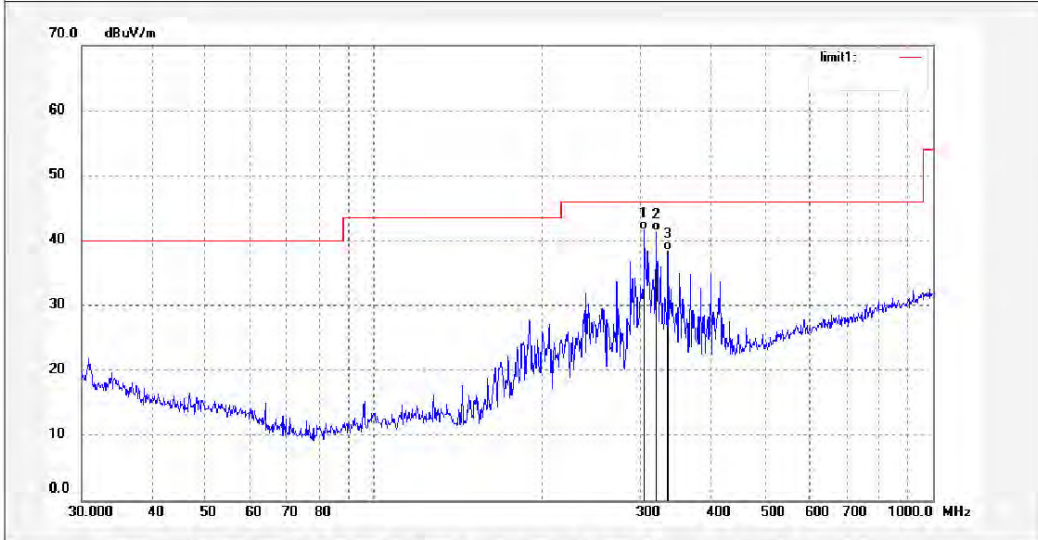


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #936	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	50.49	-8.93	41.56	46.00	-4.44	QP			
2	319.9370	49.88	-8.45	41.43	46.00	-4.57	QP			
3	336.0351	46.30	-7.91	38.39	46.00	-7.61	QP			

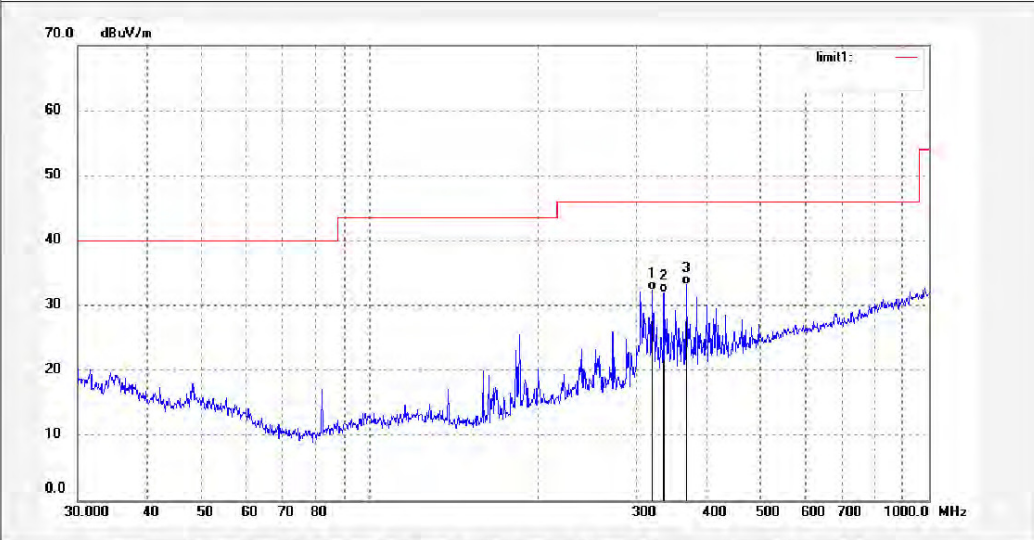


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #937	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	319.9370	40.66	-8.45	32.21	46.00	-13.79	QP			
2	336.0350	39.77	-7.91	31.86	46.00	-14.14	QP			
3	368.1116	40.33	-7.17	33.16	46.00	-12.84	QP			

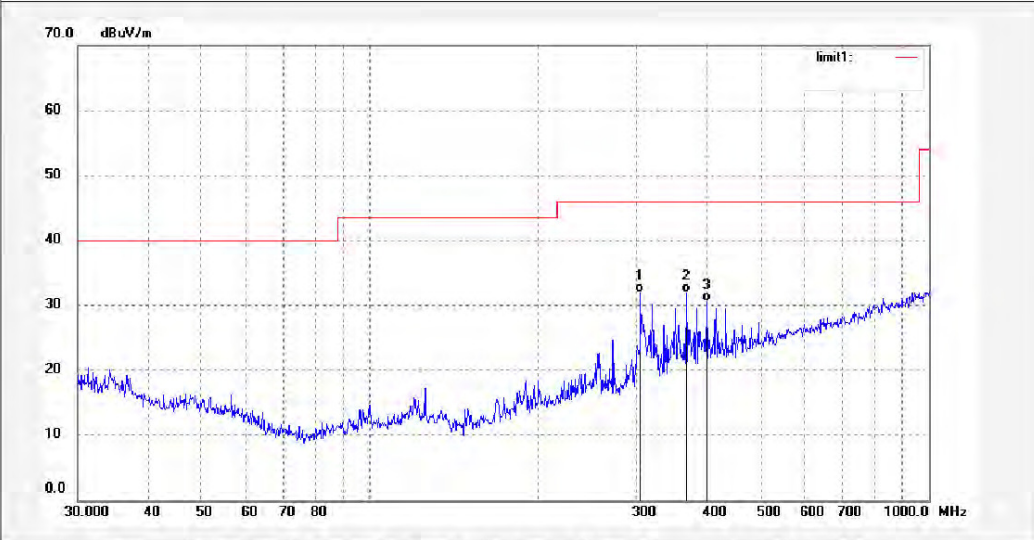


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #938	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	40.93	-8.93	32.00	46.00	-14.00	QP			
2	368.1116	39.19	-7.17	32.02	46.00	-13.98	QP			
3	400.4318	36.97	-6.43	30.54	46.00	-15.46	QP			

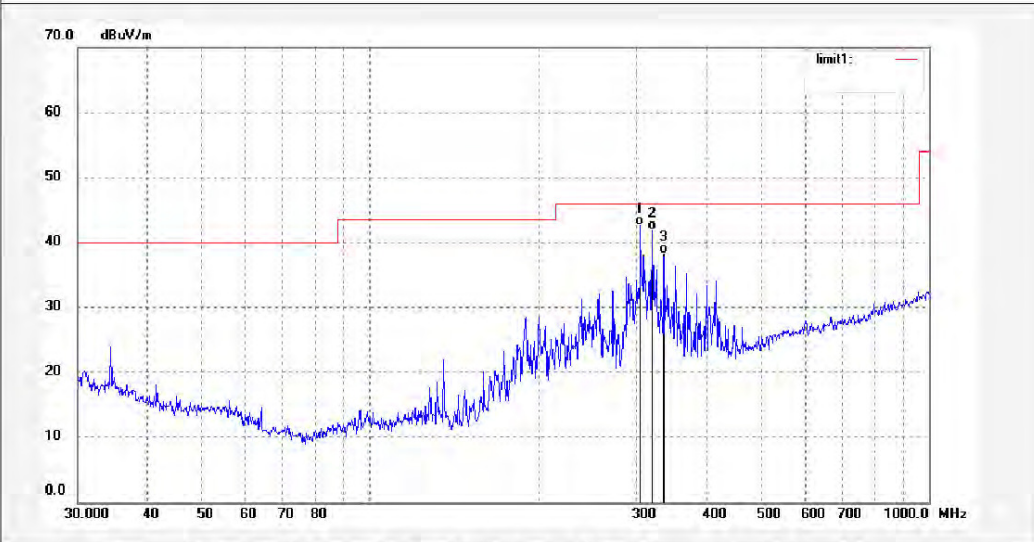


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #939	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	304.6099	51.48	-8.93	42.55	46.00	-3.45	QP			
2	319.9370	50.41	-8.45	41.96	46.00	-4.04	QP			
3	336.0351	46.14	-7.91	38.23	46.00	-7.77	QP			

Low Energy mode, 1GHz - 18GHz



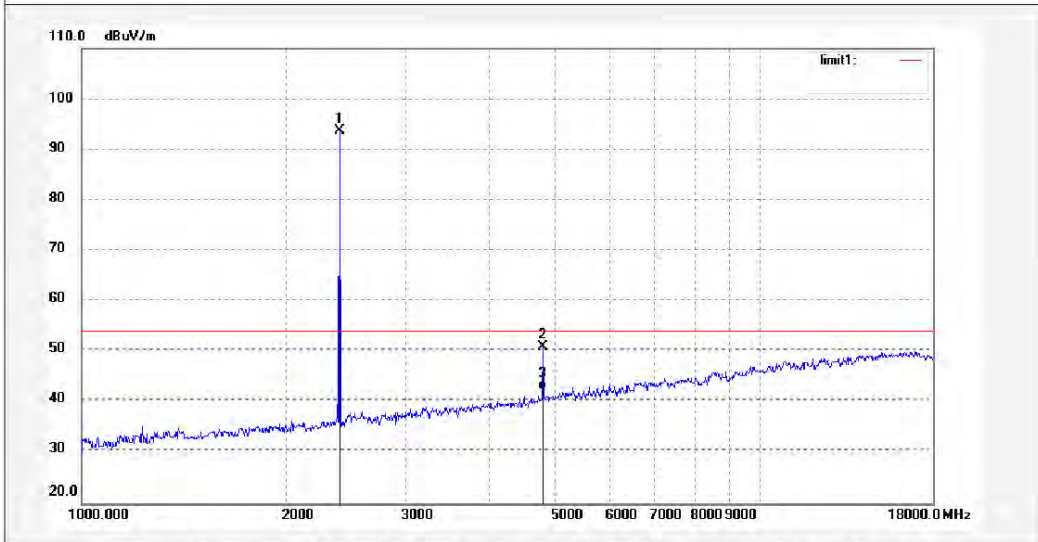
ACCURATE TECHNOLOGY CO., LTD.

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.: LGW2017 #919	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	95.22	-1.61	93.61	/	/	peak			
2	4804.026	46.02	4.90	50.92	74.00	-23.08	peak			
3	4804.026	37.44	4.90	42.34	54.00	-11.66	AVG			

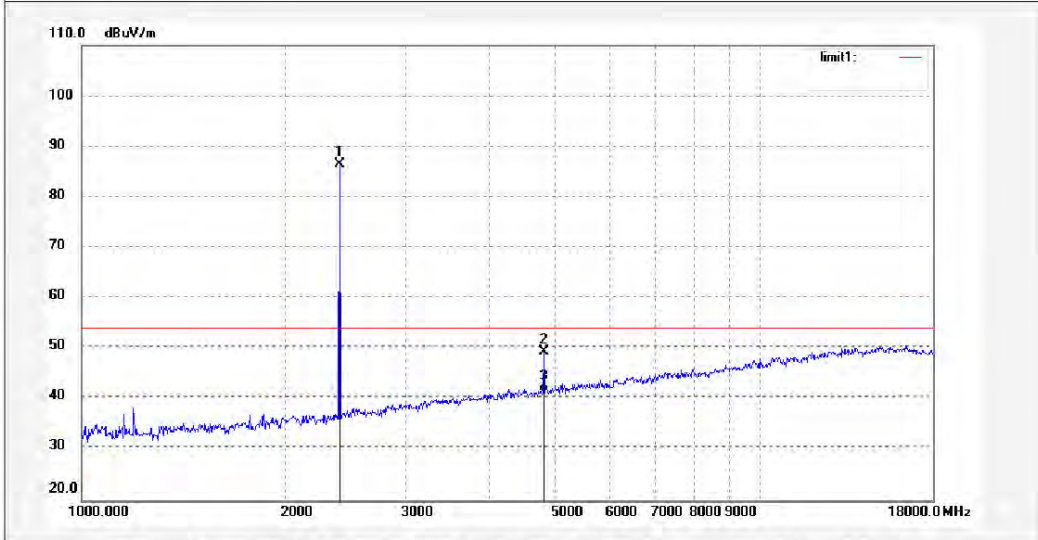


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #920	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	88.06	-1.61	86.45	/	/	peak			
2	4804.028	44.43	4.90	49.33	74.00	-24.67	peak			
3	4804.028	36.44	4.90	41.34	54.00	-12.66	AVG			

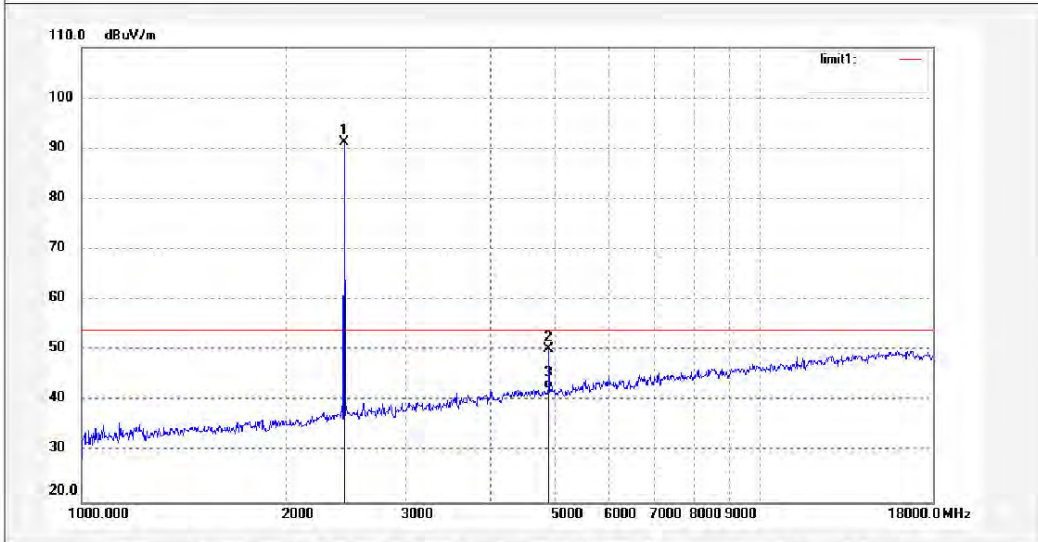


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #923	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	92.61	-1.46	91.15	/	/	peak			
2	4880.029	44.68	5.60	50.28	74.00	-23.72	peak			
3	4880.029	36.75	5.60	42.35	54.00	-11.65	AVG			

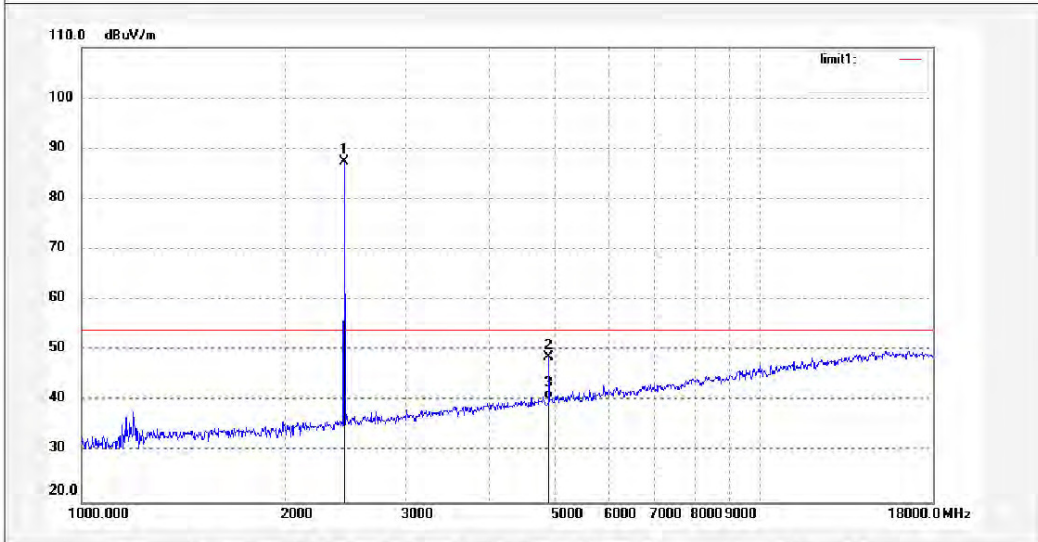


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #924	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	88.74	-1.46	87.28	/	/	peak			
2	4880.025	43.03	5.60	48.63	74.00	-25.37	peak			
3	4880.025	34.74	5.60	40.34	54.00	-13.66	AVG			

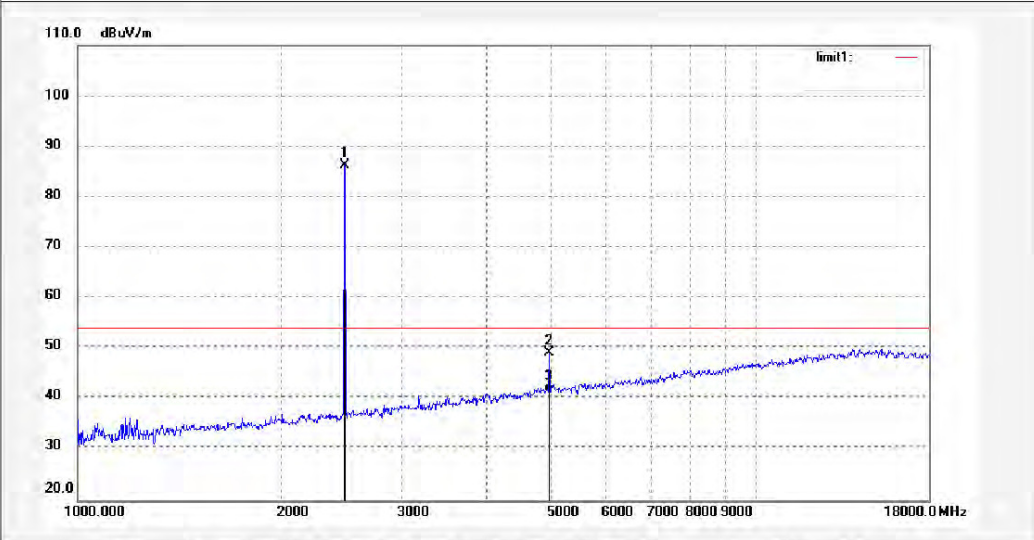


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #925	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



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	87.61	-1.40	86.21	/	/	peak			
2	4960.027	43.07	6.10	49.17	74.00	-24.83	peak			
3	4960.027	35.24	6.10	41.34	54.00	-12.66	AVG			

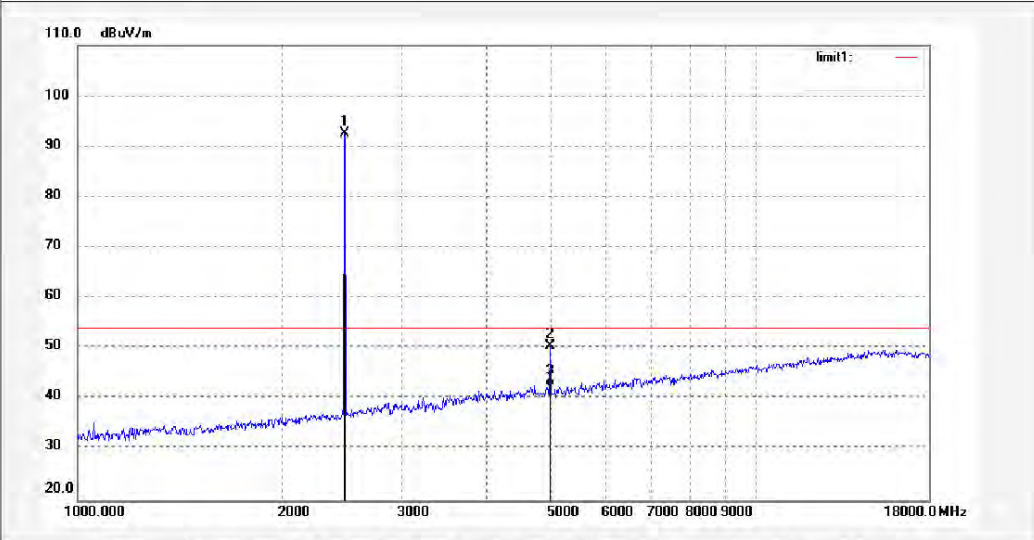


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #926	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



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	94.06	-1.40	92.66	/	/	peak			
2	4960.028	44.38	6.10	50.48	74.00	-23.52	peak			
3	4960.028	36.24	6.10	42.34	54.00	-11.66	AVG			

## Appendix B.2: Test Plots of Band Edge (Radiated)

BDR mode, Low Channel



**ACCURATE TECHNOLOGY CO., LTD.**

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

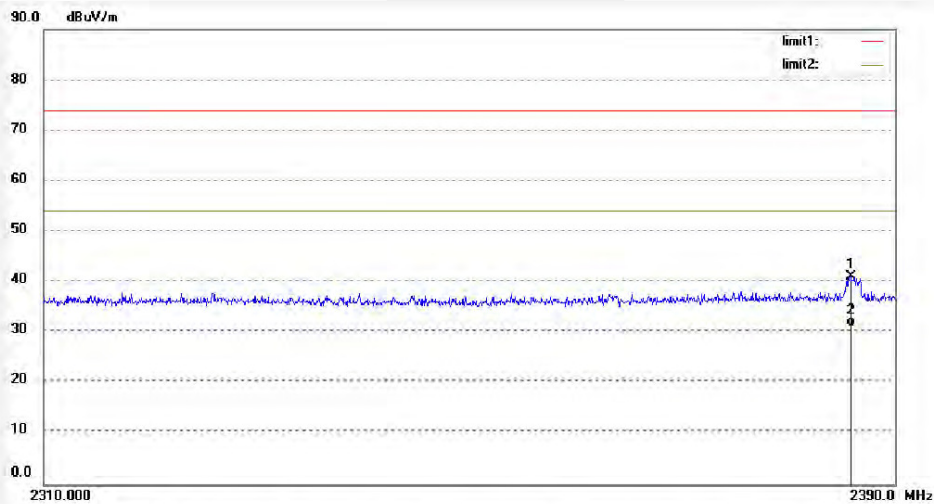
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #911	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2385.840	42.90	-1.74	41.16	74.00	-32.84	peak			
2	2385.840	32.98	-1.74	31.24	54.00	-22.76	AVG			



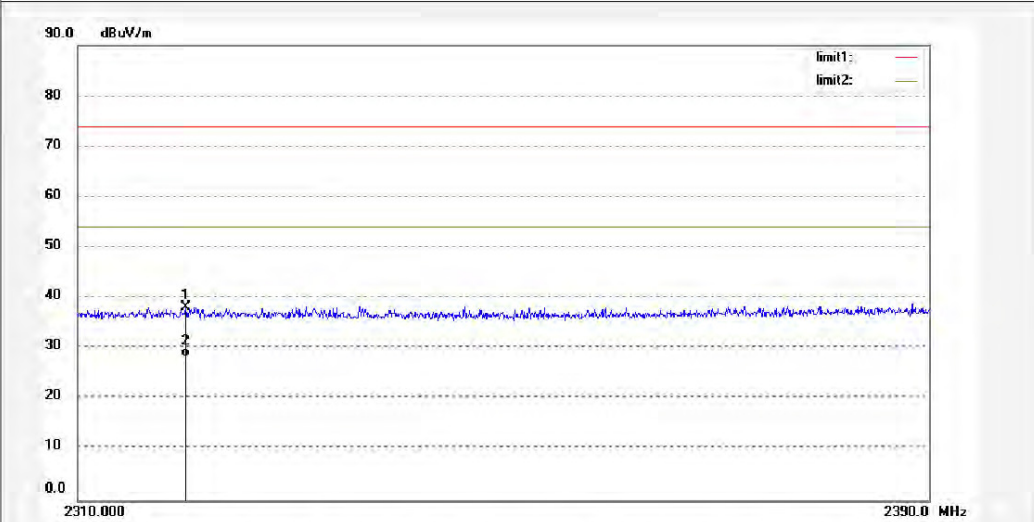
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #912	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2320.080	40.26	-2.04	38.22	74.00	-35.78	peak			
2	2320.080	30.38	-2.04	28.34	54.00	-25.66	AVG			

**BDR mode, High Channel**



**ACCURATE TECHNOLOGY CO., LTD.**

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

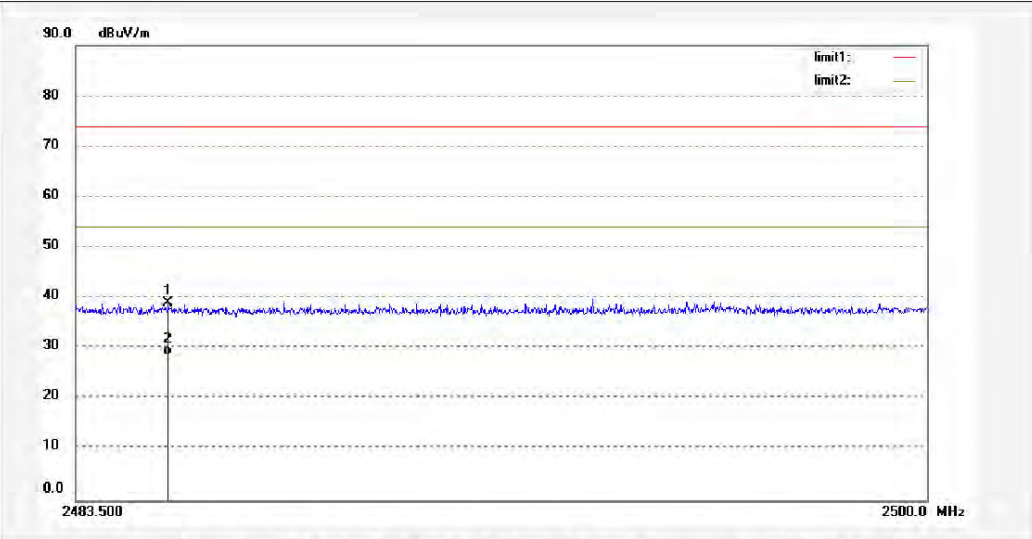
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #917	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2485.298	40.33	-1.40	38.93	74.00	-35.07	peak			
2	2485.298	30.04	-1.40	28.64	54.00	-25.36	AVG			



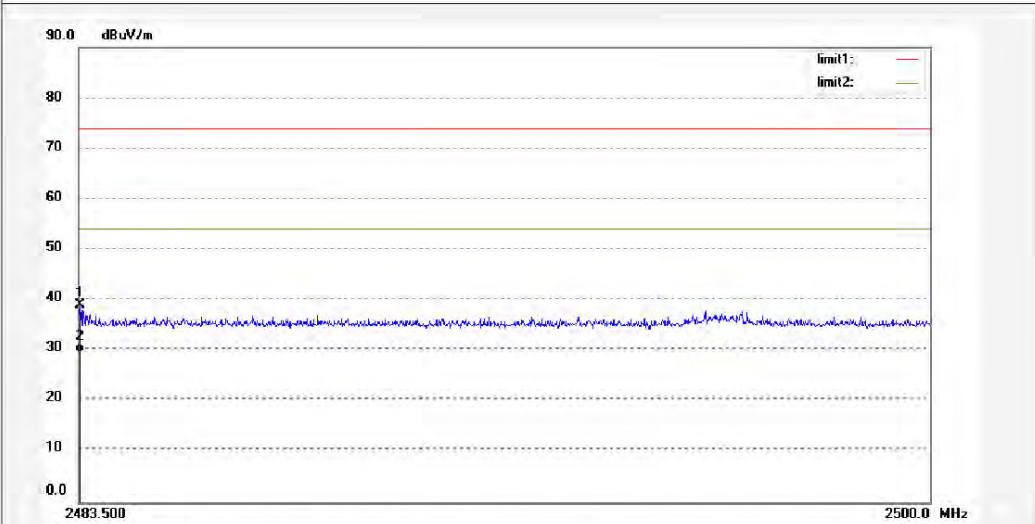
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #918	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.533	40.50	-1.40	39.10	74.00	-34.90	peak			
2	2483.533	31.05	-1.40	29.65	54.00	-24.35	AVG			

Low Energy mode, Low Channel



**ACCURATE TECHNOLOGY CO., LTD.**

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

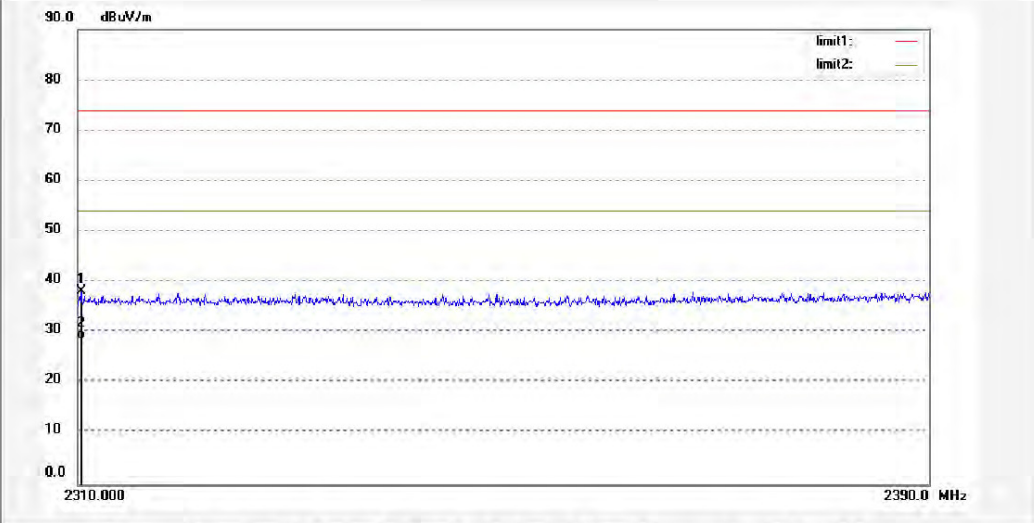
Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #921	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.320	40.28	-2.03	38.25	74.00	-35.75	peak			
2	2310.320	30.68	-2.03	28.65	54.00	-25.35	AVG			



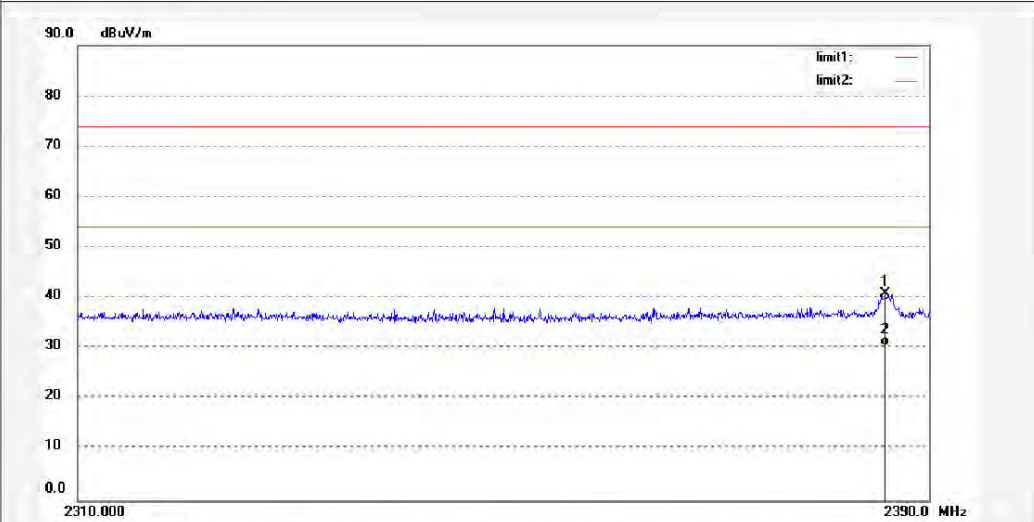
**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #922	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2385.920	42.54	-1.74	40.80	74.00	-33.20	peak			
2	2385.920	32.31	-1.74	30.57	54.00	-23.43	AVG			

Low Energy mode, High Channel



**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.: LGW2017 #927	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2486.090	39.64	-1.40	38.24	74.00	-35.76	peak			
2	2486.090	30.04	-1.40	28.64	54.00	-25.36	AVG			

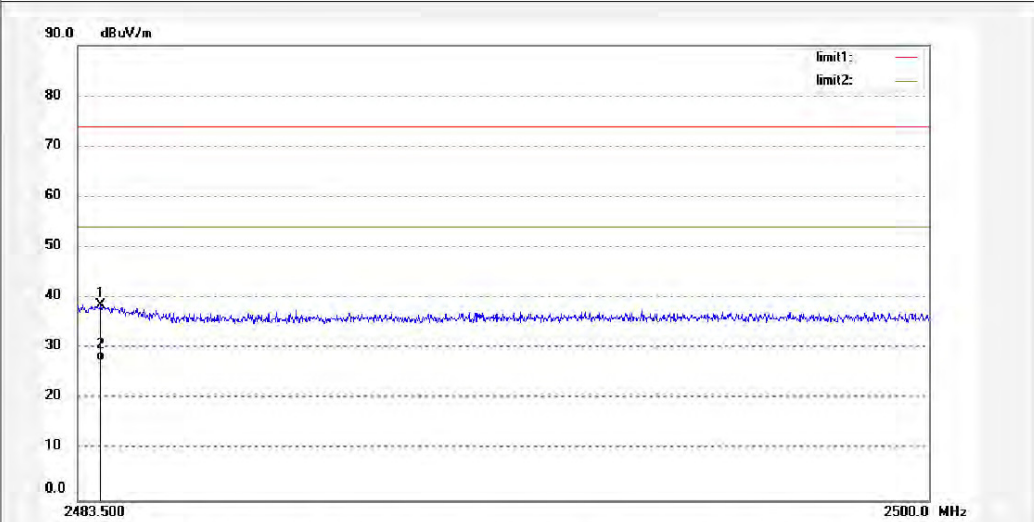


**ACCURATE TECHNOLOGY CO., LTD.**

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.: LGW2017 #940	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: DC 12V
Test item: Radiation Test	Date: 2017/01/12
Temp.( C)/Hum.(%) 23 C / 48 %	Time:
EUT: ELD 1.0	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: ELD 1.0	
Manufacturer: PST Eletronica LTDA	
Note: Bluetooth 4.0	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.945	45.86	-7.38	38.48	74.00	-35.52	peak			
2	2483.945	34.94	-7.38	27.56	54.00	-26.44	AVG			