

<b>Prüfbericht-Nr.:</b> <i>Test Report No.:</i>	<b>50090484 001</b>	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	<b>154238236</b>	<b>Seite 1 von 62</b> <i>Page 1 of 62</i>
<b>Kunden-Referenz-Nr.:</b> <i>Client Reference No.:</i>	<b>52184186</b>	<b>Auftragsdatum:</b> <i>Order date:</i>	<b>06.04.2017</b>	
<b>Auftraggeber:</b> <i>Client:</i>	<b>Delphi Electronics &amp; Safety</b> 2151 E.Lincoln Road M/S C2E, Kokomo, Indiana, United States			
<b>Prüfgegenstand:</b> <i>Test item:</i>	<b>SGM 318 Integrated</b>			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	<b>S318</b> <b>FCC ID: L2C0070TR</b>			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	<b>Complete test</b>			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	<b>FCC CFR47 Part 15, Subpart C Section 15.247</b> <b>ANSI C63.10: 2013</b> <b>Public Notice DA 00-705 March 30, 2000</b>			
<b>Wareneingangsdatum:</b> <i>Date of receipt:</i>	<b>20.05.2017</b>	Refer to the External Photos		
<b>Prüfmuster-Nr.:</b> <i>Test sample No.:</i>	<b>A000516297-001</b>			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	<b>Refer to the test report</b>			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	<b>MRT Technology(Suzhou) Co., Ltd.</b>			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	<b>TÜV Rheinland (Shanghai) 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>		
12.07.2017	Elliot Zhang / Assistant Project Manager	12.07.2017	Shi Li / Department Manager	
<i>Datum</i>	<i>Name / Stellung</i>	<i>Unterschrift</i>	<i>Datum</i>	<i>Name / Stellung</i>
<i>Date</i>	<i>Name / Position</i>	<i>Signature</i>	<i>Date</i>	<i>Name / Position</i>
<b>Sonstiges / Other</b>				
<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			
Legend:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
	1 = very good	2 = good	3 = satisfactory	4 = sufficient
	5 = poor			
	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(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 PEAK OUTPUT POWER***RESULT: Pass***5.1.3 20dB BANDWIDTH***RESULT: Pass***5.1.4 CONDUCTED SPURIOUS EMISSIONS***RESULT: Pass***5.1.5 FREQUENCY SEPARATION***RESULT: Pass***5.1.6 NUMBER OF HOPPING FREQUENCY***RESULT: Pass***5.1.7 TIME OF OCCUPANCY***RESULT: Pass***5.2.1 CONDUCTED EMISSION***RESULT: N/A***5.3.1 RADIATED SPURIOUS EMISSION***RESULT: Pass*

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## 1. General Remarks

### 1.1 Complementary Materials

Null.

## 2. Test Sites

### 2.1 Test Facilities

MRT Technology (Suzhou) Co., Ltd.

D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China

The used test equipment is in accordance with CISPR 16 for measurement of radio interference.

The Federal Communications Commission has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance with the requirements of section 2.948 of the FCC rules. The description of the test facility is listed under FCC registration number 809388.

The Industry Canada has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance. The description of the test facility is listed under chambers filing number 11384A.

## 2.2 List of Test and Measurement Instruments

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

Instrument	Manufacturer	Type No.	Asset No.	Cali. Due Date
Spectrum Analyzer	Agilent	E4447A	MY45300136	08.12.2017
EMI Test Receiver	R&S	ESR7	101209	03.11.2017
Preamplifier	Schwarzbeck	BBV 9721	9721-008	16.04.2018
Preamplifier	Agilent	83017A	MY53270040	29.03.2018
Loop Antenna	Schwarzbeck	FMZB1519	1519-041	14.12.2017
TRILOG Antenna	Schwarzbeck	VULB9162	9162-047	07.11.2017
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1167	07.11.2017
Broadband Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170549	04.01.2018
Digital Thermometer & Hygrometer	Minggao	N/A	N/A	30.11.2017

**Conducted Test Equipments**

Instrument	Manufacturer	Type No.	Asset No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MY52090106	08.05.2018
USB Wideband Power Sensor	Boonton	55006	8911	08.05.2018
Temperature/Humidity Meter	Yuhuaze	N/A	N/A	20.12.2017

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, 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

**Table 2: Measurement Uncertainty**

Measurement Type	Frequency	Uncertainty
Antenna Port Conducted Emission	< 1GHz	±0.39dB
	> 1GHz	±0.68dB
Radiated Emission	30MHz - 1GHz	±5.34dB
	> 1GHz	±5.40dB

### 3. General Product Information

#### 3.1 Product Function and Intended Use

The EUT (Equipment Under Test) is a Bluetooth car radio.

The aim of this report is to evaluate the RF characteristic of the product.

For details refer to the User Manual and Circuit Diagram.

#### 3.2 Ratings and System Details

**Table 3: Technical Specification of EUT**

General Description of EUT	
Product Name:	SGM 318 Integrated
Model No.:	S318
Rated Voltage:	DC 12V
Bluetooth Classical	
Frequency Range:	2402 – 2480MHz
Modulation Type:	BR: GFSK EDR: $\pi/4$ -DQPSK; 8DPSK
Antenna Type:	PCB Antenna
Antenna Gain:	2dBi

### 3.3 Independent Operation Modes

Test Mode	Data Rate	Channel
TM1	1-DH5	00
TM2	1-DH5	39
TM3	1-DH5	78
TM4	2-DH5	00
TM5	2-DH5	39
TM6	2-DH5	78
TM7	3-DH5	00
TM8	3-DH5	39
TM9	3-DH5	78
TM10	1-DH5	Hopping
TM11	2-DH5	Hopping
TM12	3-DH5	Hopping
TM13	3-DH3	Hopping
TM14	3-DH1	Hopping

Note: The EUT was set into continuous transmitting in the Test Mode from TM1 to TM9.

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

### 3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label



## 4. Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power 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

Null.

### 4.4 Countermeasures to achieve EMC Compliance

Null.

## 5. Test Results

### 5.1 Conducted Testing at Antenna Port

#### 5.1.1 Antenna Requirement

**RESULT:** **Pass**

**Table 4: Antenna Requirement**

FCC 15.203 – Antenna Requirement 1	
Requirement:	No antenna other than that furnished by the responsible party shall be used with the device
Results:	Antenna type: PCB antenna
Verdict:	PASS

FCC 15.204 – Antenna Requirement 2	
Requirement:	An intentional radiator may be operated only with the antenna with which it is authorized. If an antenna is marketed with the intentional radiator, it shall be of a type which is authorized with the intentional radiator.
Results:	Only one integral antenna can be used
Verdict:	PASS

## 5.1.2 Peak Output Power

**RESULT:****Pass**

Date of testing : 21.06.2017  
Test standard : FCC Part 15.247(b)(1)  
Test procedure : ANSI C63.10: 2013  
Public Notice DA 00-705 March 30, 2000  
Limit : FCC Part 15.247(b)(1)  
Kind of test site : Shielded room

**Test setup**

Test Channel : Low/ Middle/ High  
Operation Mode : TM1 to TM9  
Ambient temperature : 25°C  
Relative humidity : 52%  
Atmospheric pressure : 101kPa

**Table 5: Peak Output Power, TM1 to TM9**

Mode	CH.	Freq. [MHz]	Maximum Peak Conducted Output Power [dBm]	Peak Conducted Output Power Limit [dBm]
TM1	00	2402	-3.934	30
TM2	39	2441	-2.718	30
<b>TM3</b>	<b>78</b>	<b>2480</b>	<b>-0.902</b>	<b>30</b>
TM4	00	2402	-4.092	30
TM5	39	2441	-2.387	30
TM6	78	2480	-0.929	30
TM7	00	2402	-3.622	30
TM8	39	2441	-2.528	30
TM9	78	2480	-1.218	30

**5.1.3 20dB Bandwidth****RESULT:****Pass**

Date of testing : 21.06.2017  
Test standard : FCC Part 15.247(a)(1)  
Test procedure : ANSI C63.10: 2013  
Public Notice DA 00-705 March 30, 2000  
Kind of test site : Shielded room

**Test setup**

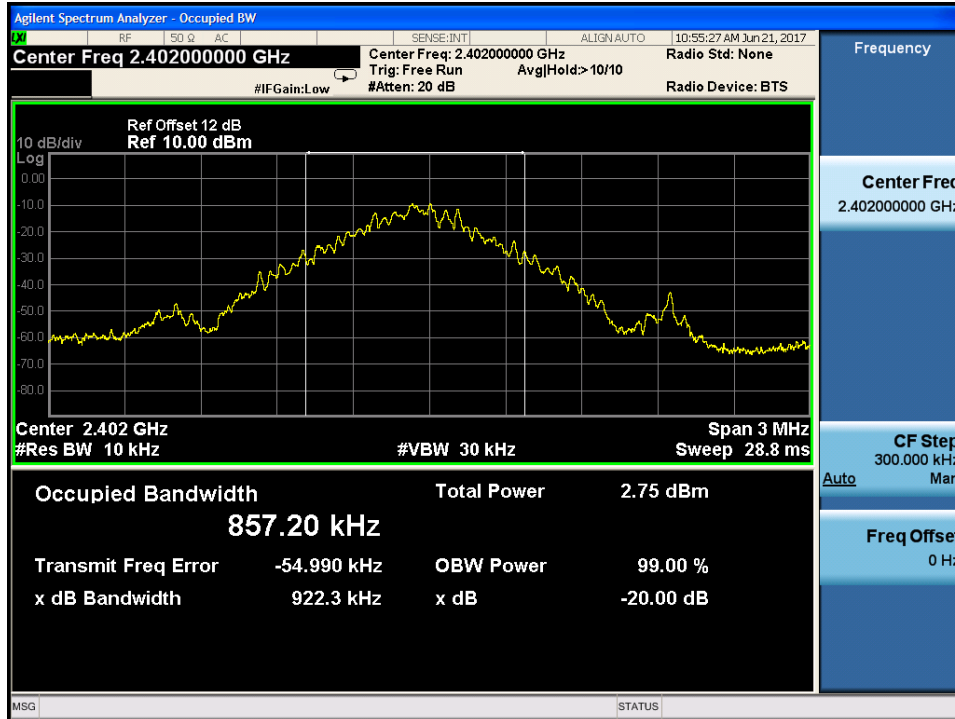
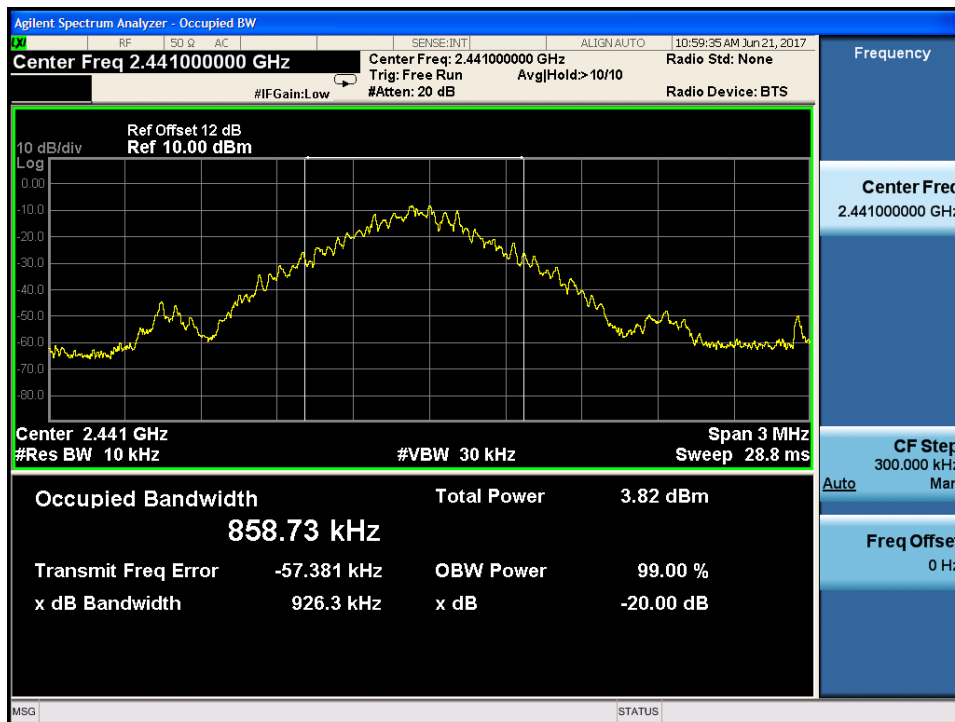
Test Channel : Low/ Middle/ High  
Operation Mode : TM1 to TM9  
Ambient temperature : 25°C  
Relative humidity : 52%  
Atmospheric pressure : 101kPa

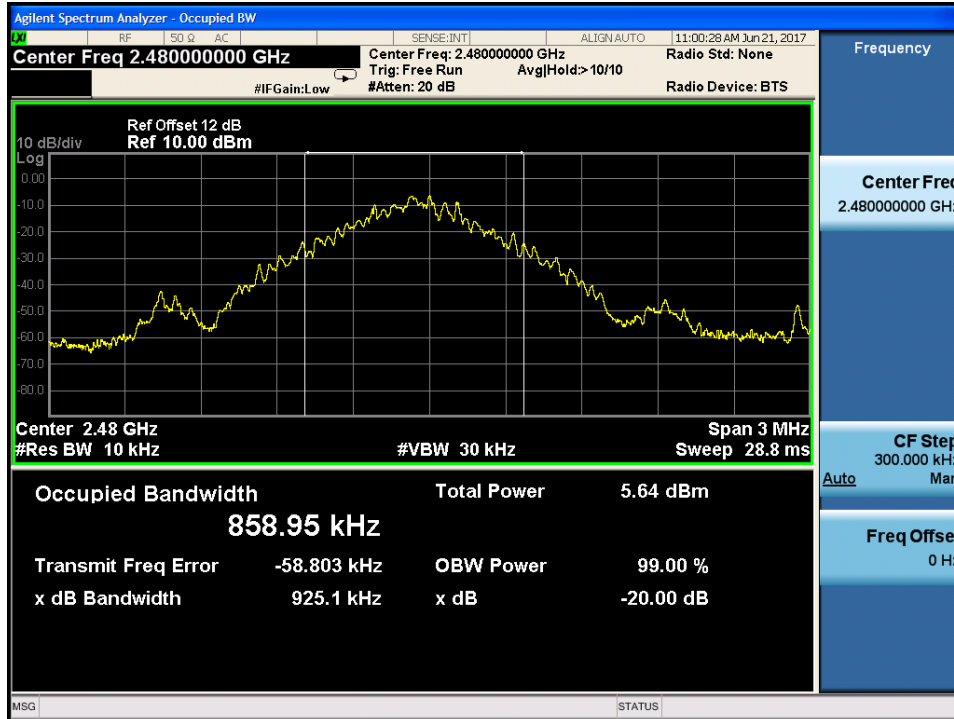
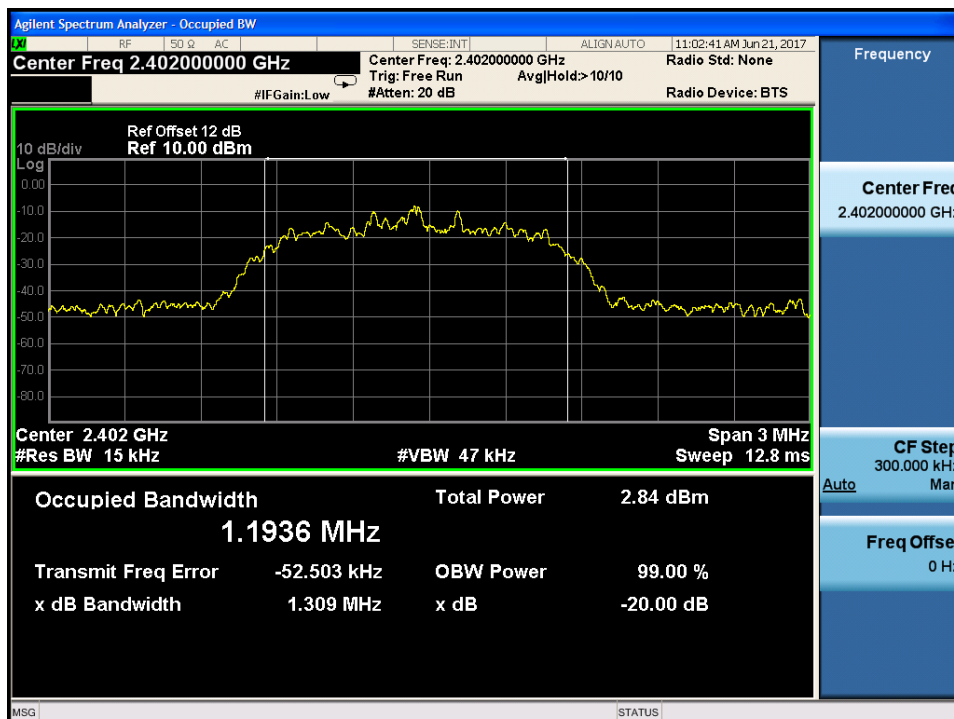
**Table 6: 20dB Bandwidth, TM1 to TM9**

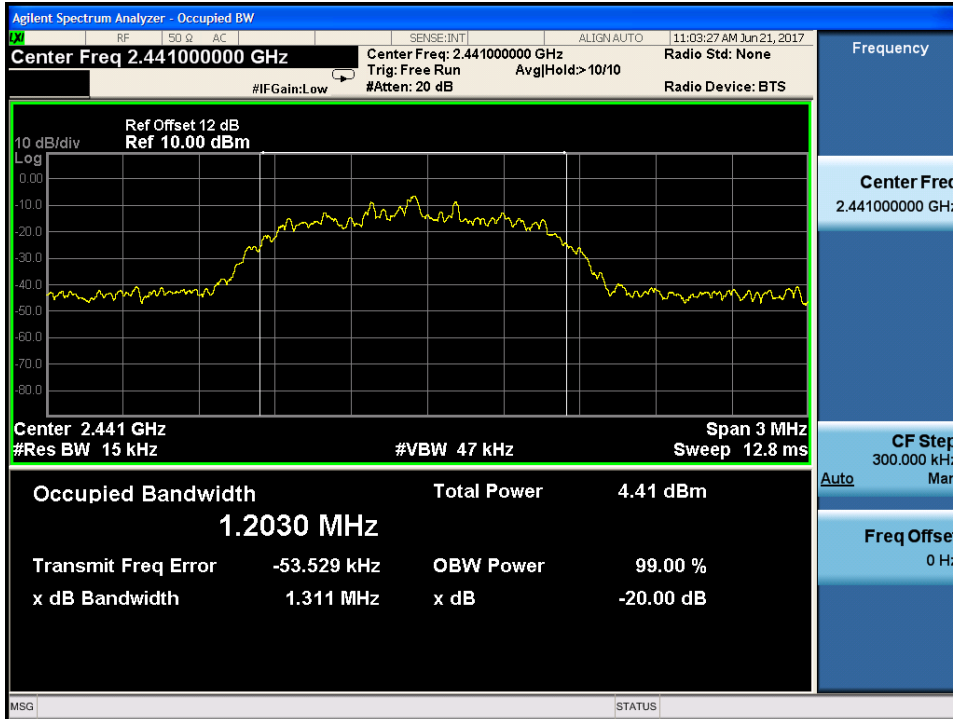
Mode	Frequency [MHz]	20dB Bandwidth [kHz]	99% Bandwidth [kHz]
TM1	2402	922.3	857.20
TM2	2441	926.3	858.73
TM3	2480	925.1	858.95
TM4	2402	1309	1193.6
TM5	2441	1311	1203.0
TM6	2480	1307	1203.2
TM7	2402	1263	1208.7
TM8	2441	1265	1217.8
TM9	2480	1256	1210.7

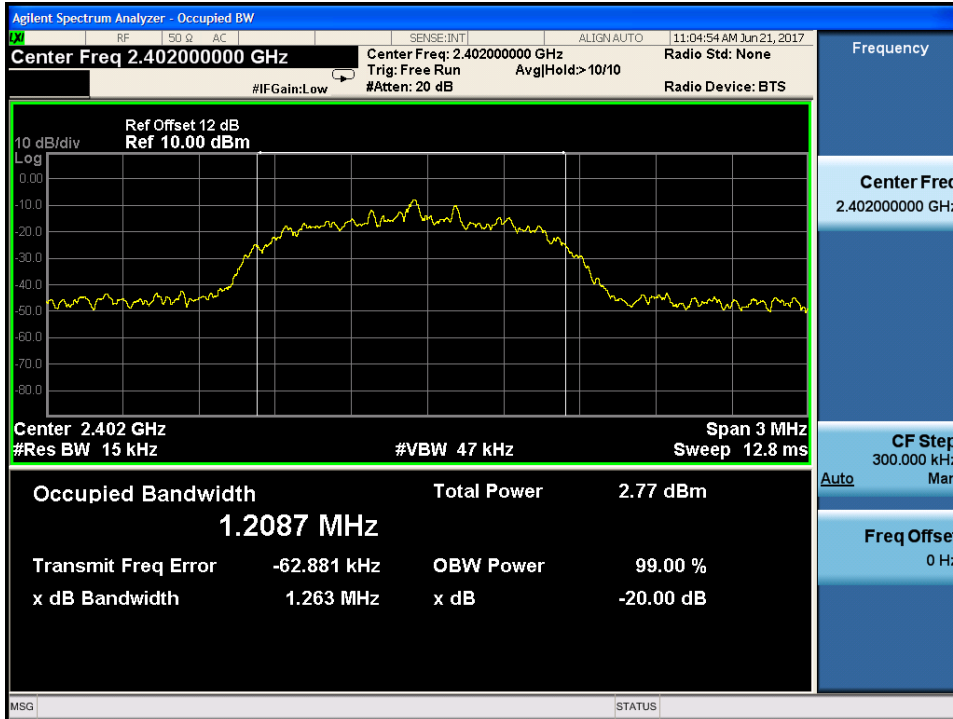
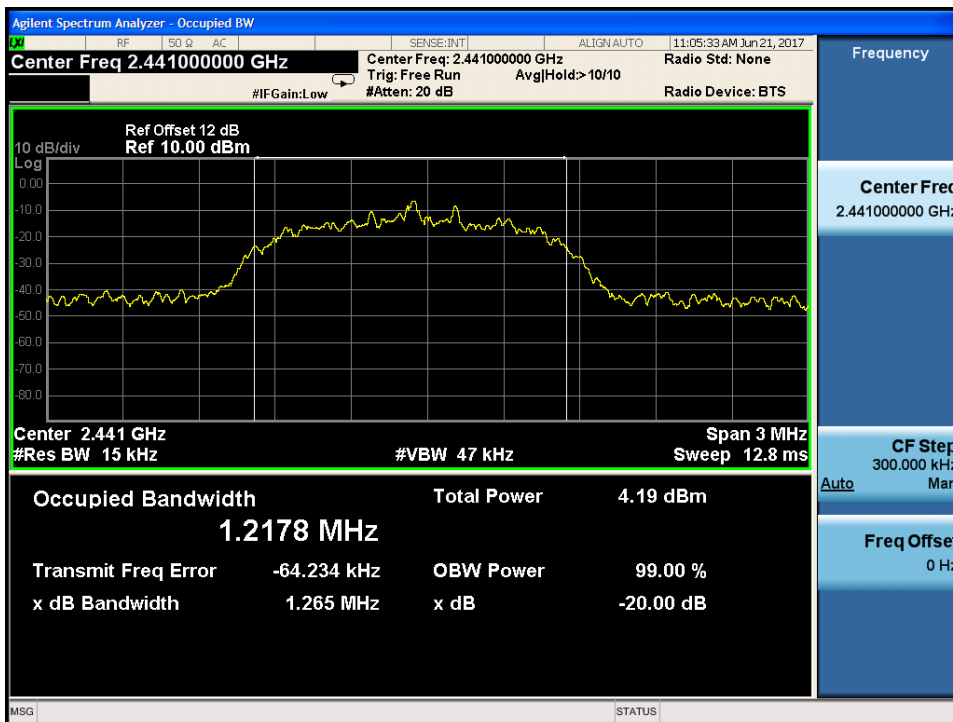
**Note:**

For frequency hopping systems operating in the 2400 – 2483.5MHz band, no bandwidth limit is specified. The test data is provide for reference.  
And according to FCC, when the occupied bandwidth limit is not stated in the applicable FCC or reference measurement method, the transmitted signal band width shall be reported as the 99% emission bandwidth.

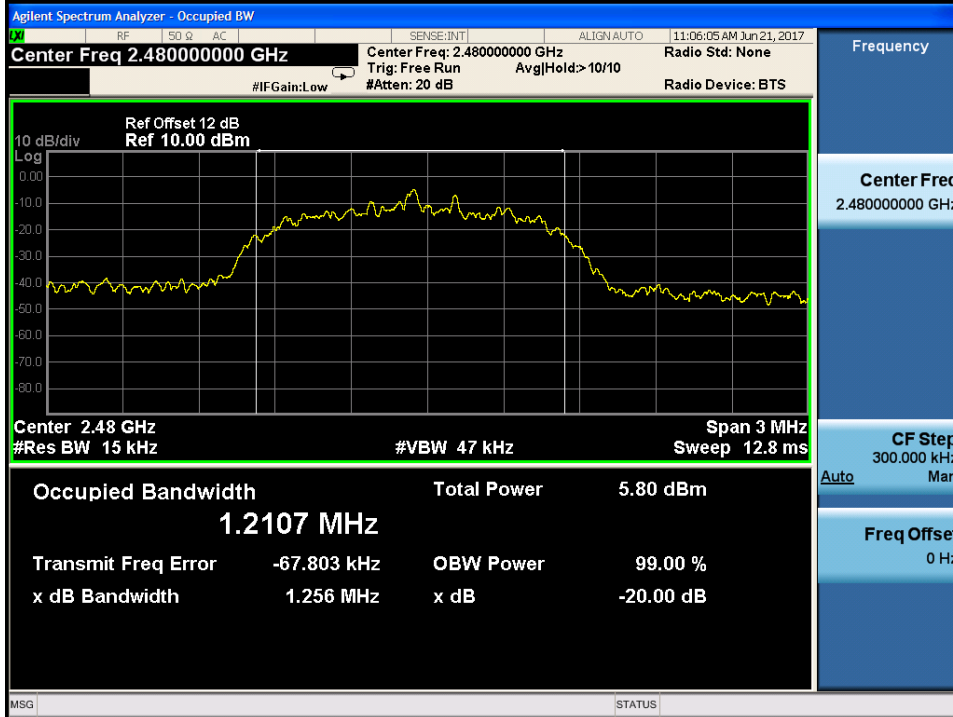
**Figure 1: 20dB Bandwidth, TM1**

**Figure 2: 20dB Bandwidth, TM2**


**Figure 3: 20dB Bandwidth, TM3**

**Figure 4: 20dB Bandwidth, TM4**


**Figure 5: 20dB Bandwidth, TM5**

**Figure 6: 20dB Bandwidth, TM6**


**Figure 7: 20dB Bandwidth, TM7**

**Figure 8: 20dB Bandwidth, TM8**




**Figure 9: 20dB Bandwidth, TM9**


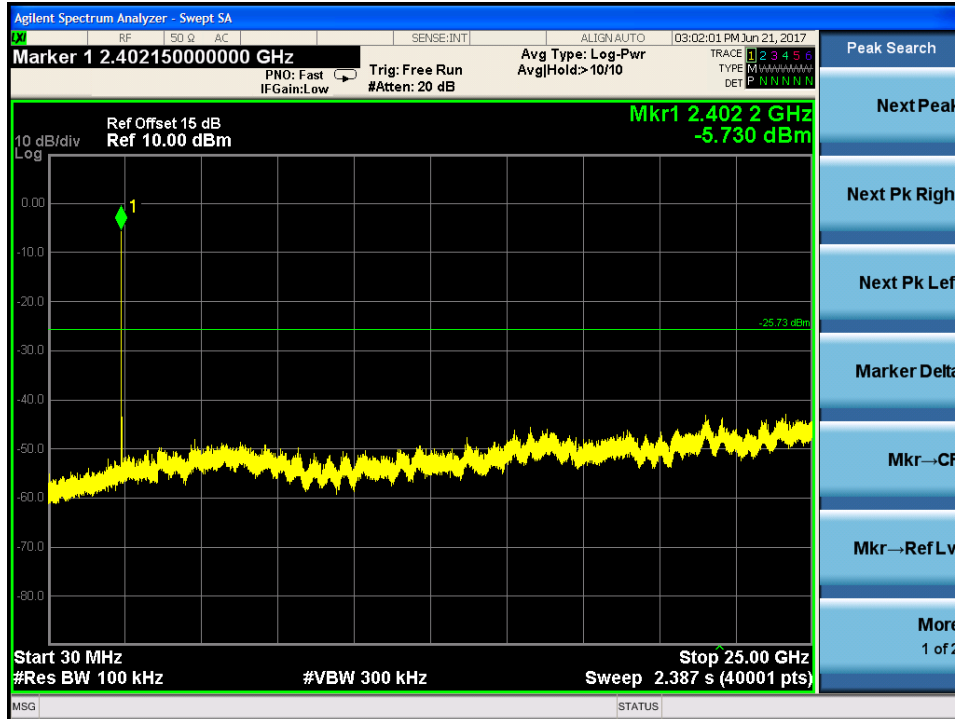
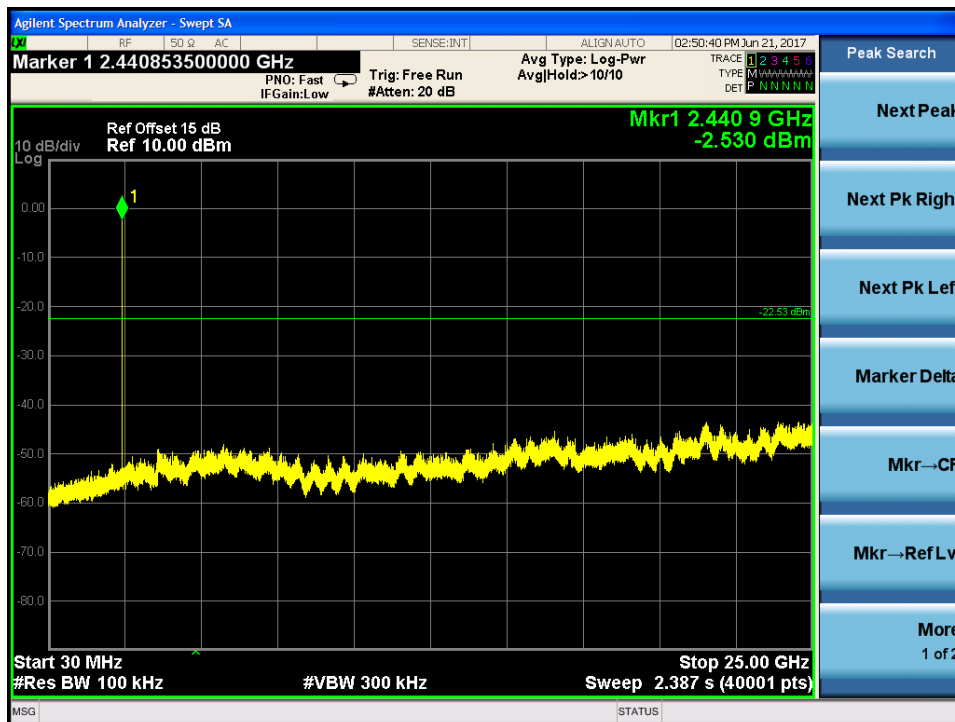
### 5.1.4 Conducted Spurious Emissions

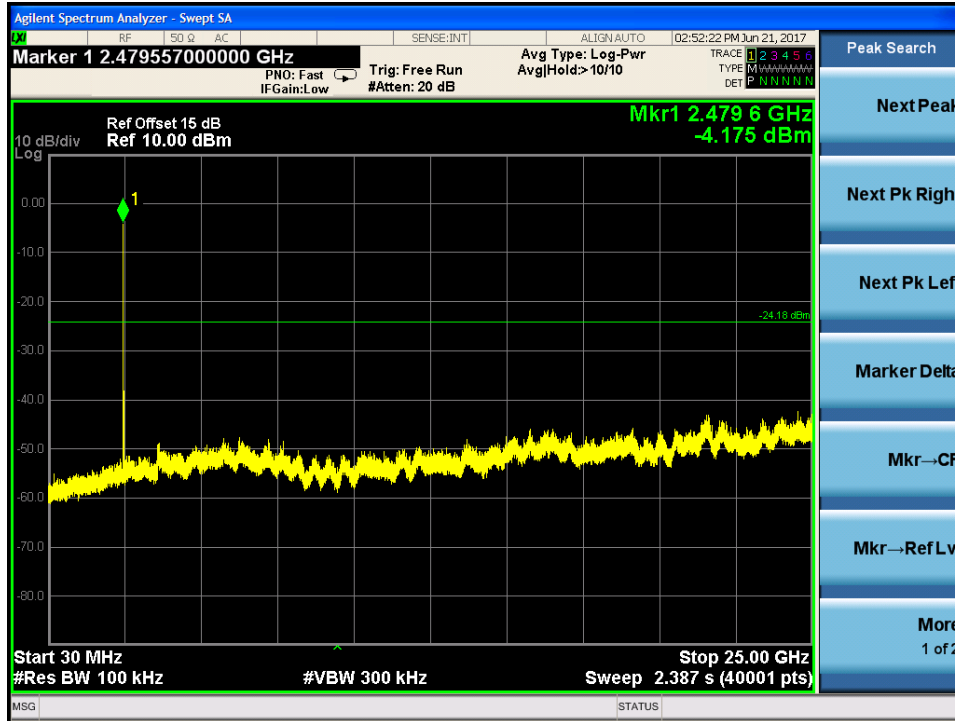
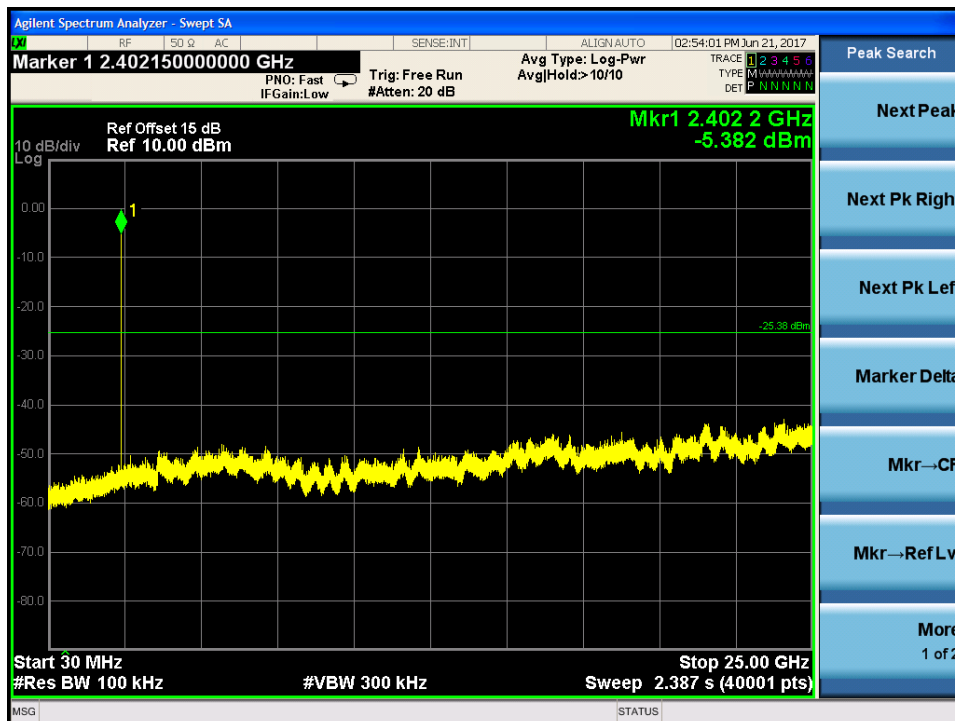
**RESULT:****Pass**

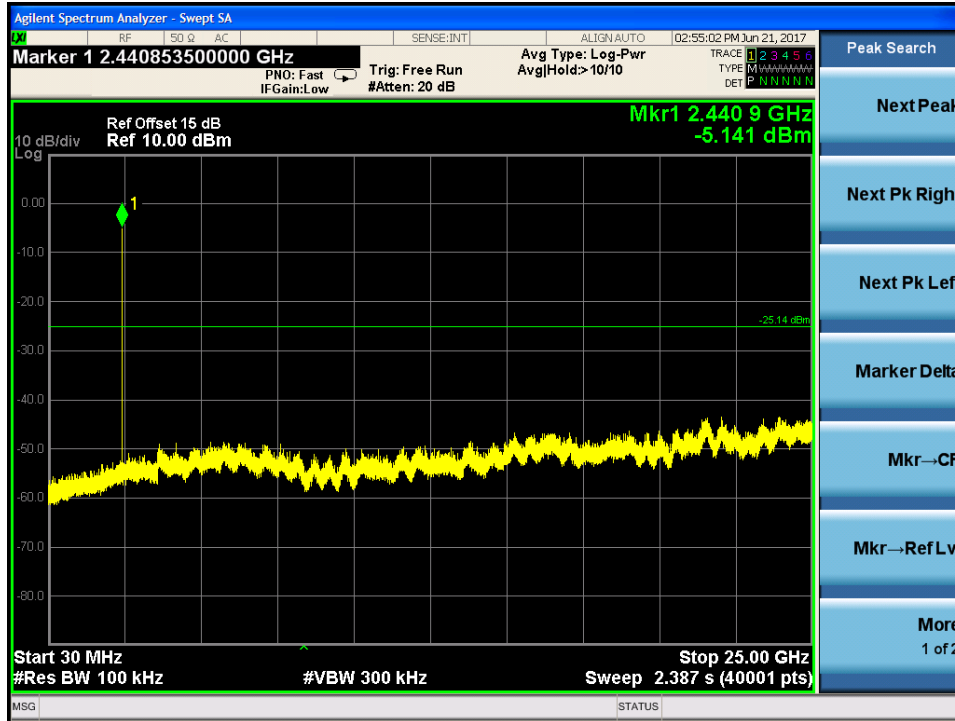
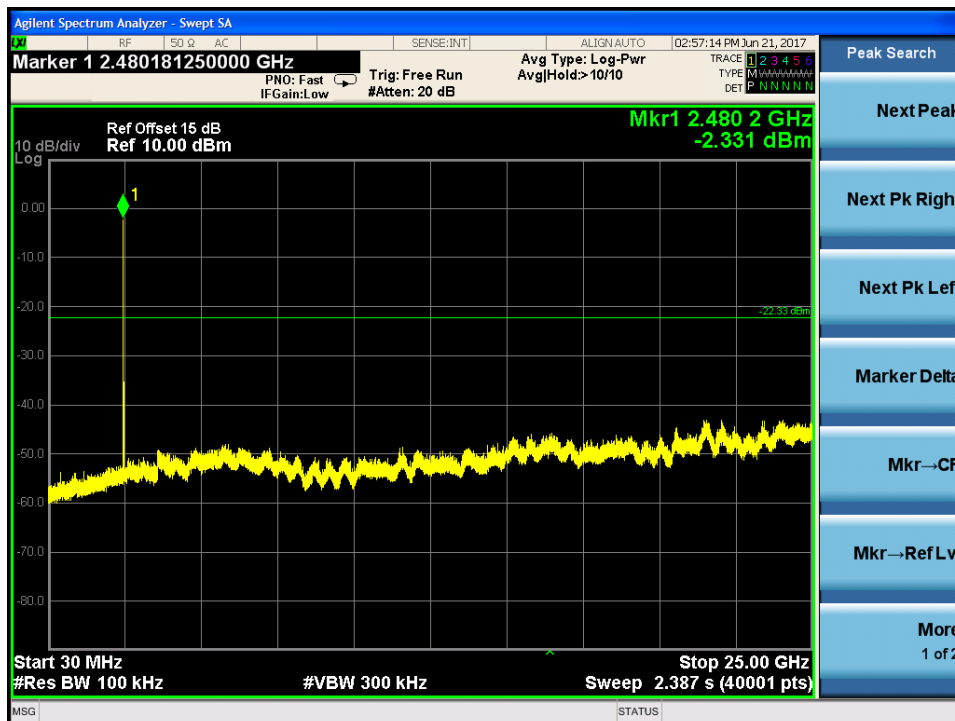
Date of testing : 21.06.2017  
Test standard : FCC Part 15.247(d)  
Test procedure : ANSI C63.10: 2013  
Public Notice DA 00-705 March 30, 2000  
Limit : FCC Part 15.247(d)  
Kind of test site : Shielded room

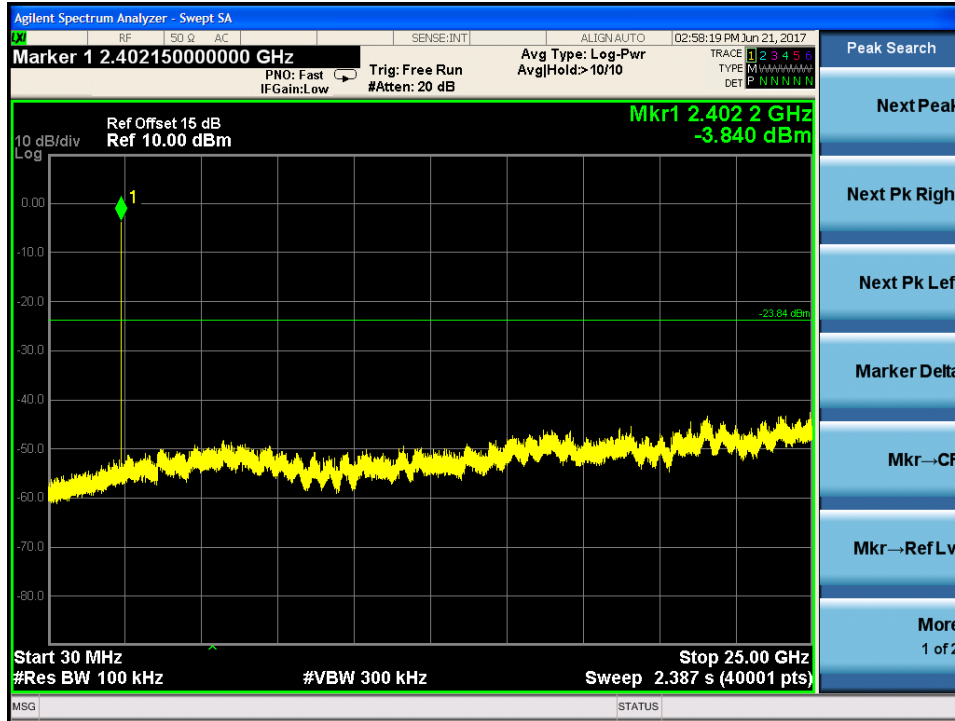
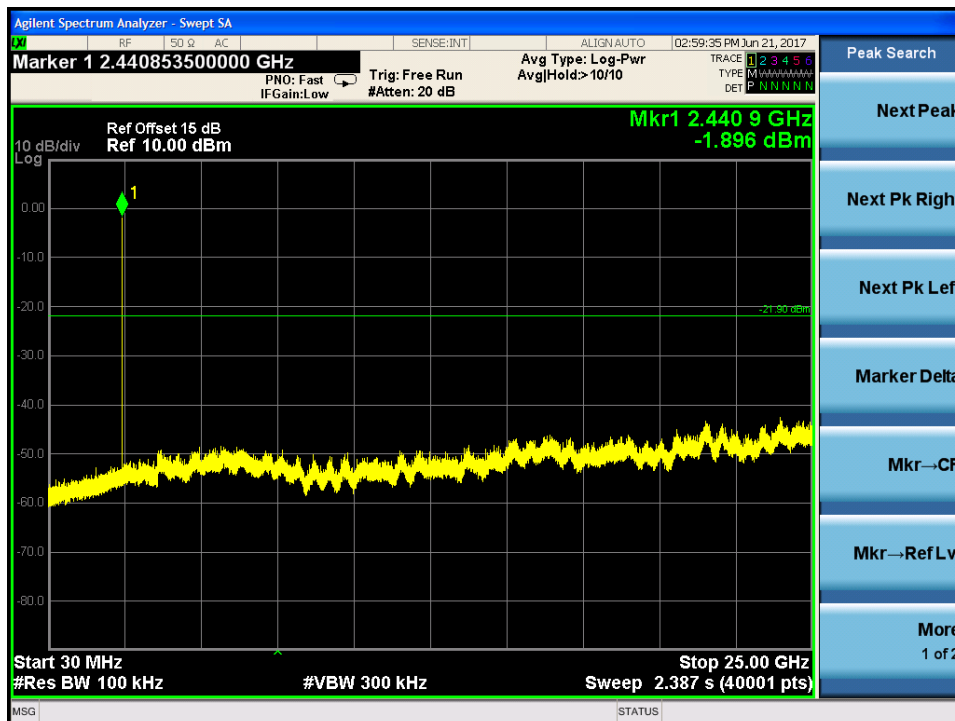
**Test setup**

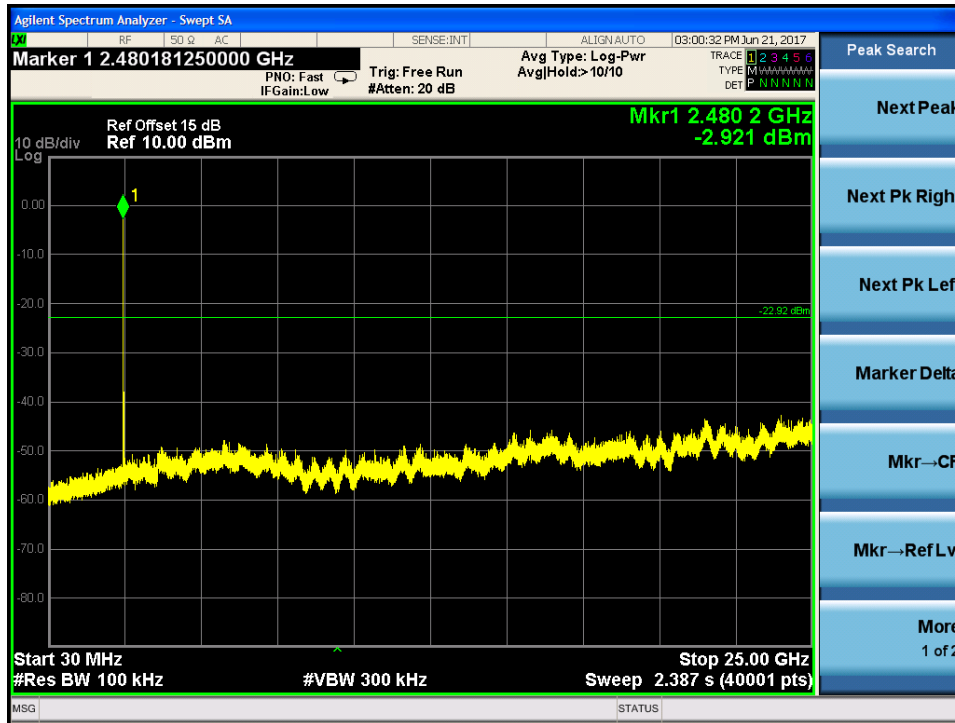
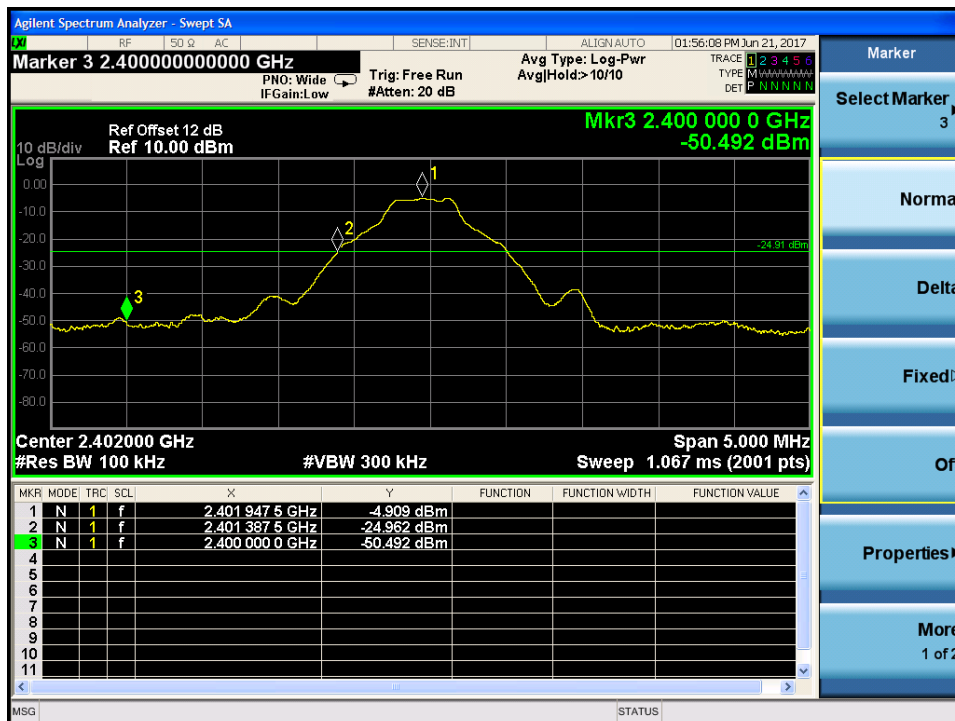
Test Channel : Low/ Middle/ High  
Operation Mode : TM1 to TM9  
Ambient temperature : 25°C  
Relative humidity : 52%  
Atmospheric pressure : 101kPa

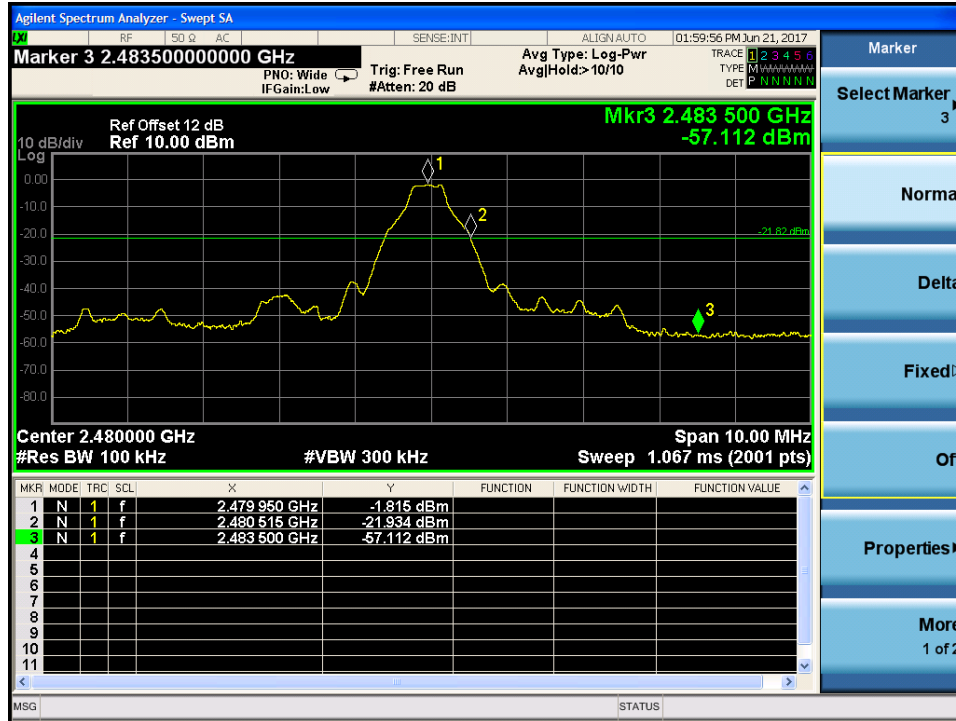
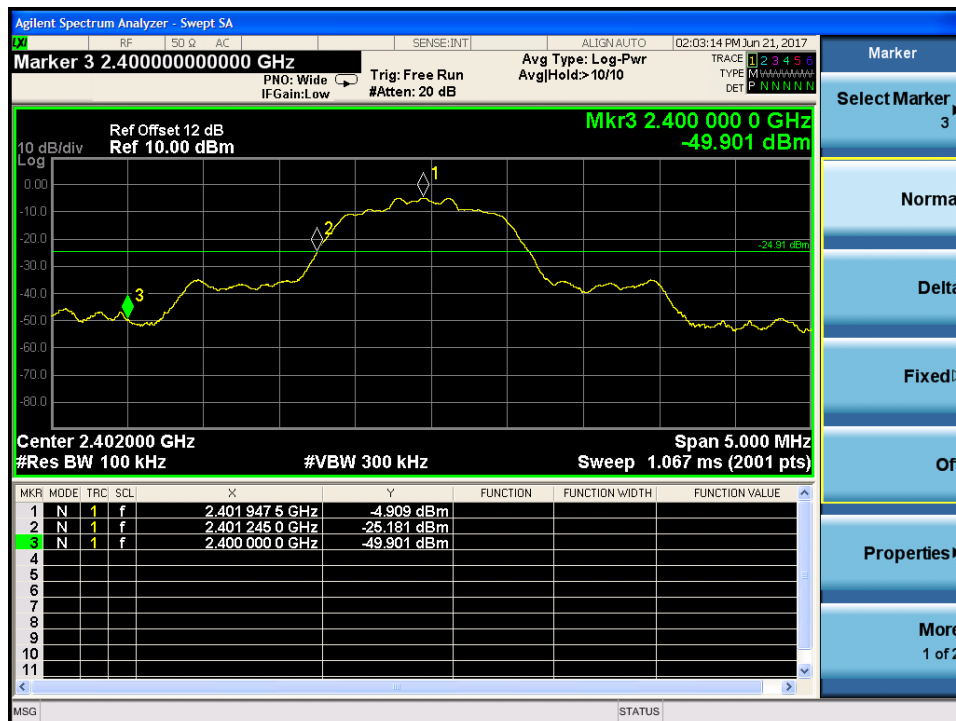
**Figure 10: Conducted Spurious Emission, TM1**

**Figure 11: Conducted Spurious Emission, TM2**


**Figure 12: Conducted Spurious Emission, TM3**

**Figure 13: Conducted Spurious Emission, TM4**


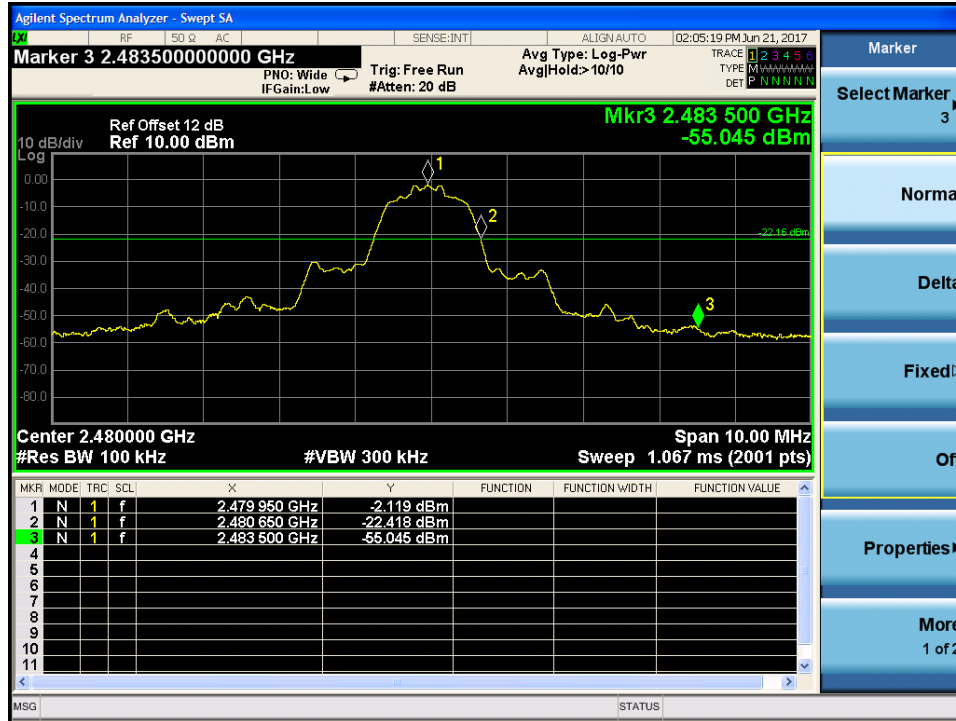
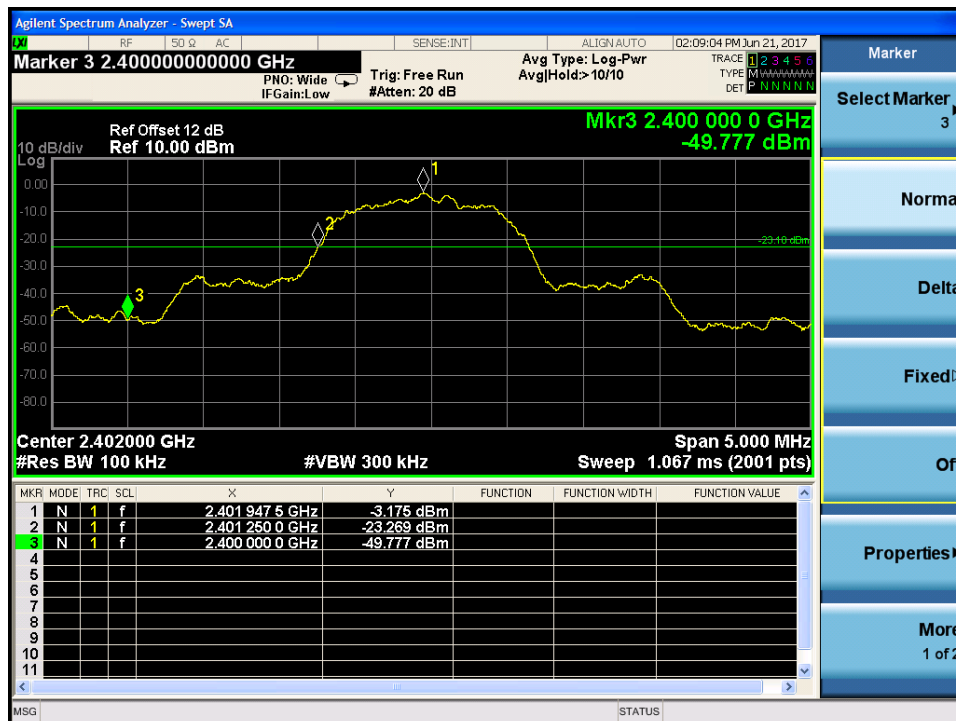
**Figure 14: Conducted Spurious Emission, TM5**

**Figure 15: Conducted Spurious Emission, TM6**


**Figure 16: Conducted Spurious Emission, TM7**

**Figure 17: Conducted Spurious Emission, TM8**


**Figure 18: Conducted Spurious Emission, TM9**

**Figure 19: Band Edge, TM1**


**Figure 20: Band Edge, TM3**

**Figure 21: Band Edge, TM4**




**Figure 22: Band Edge, TM6**

**Figure 23: Band Edge, TM7**




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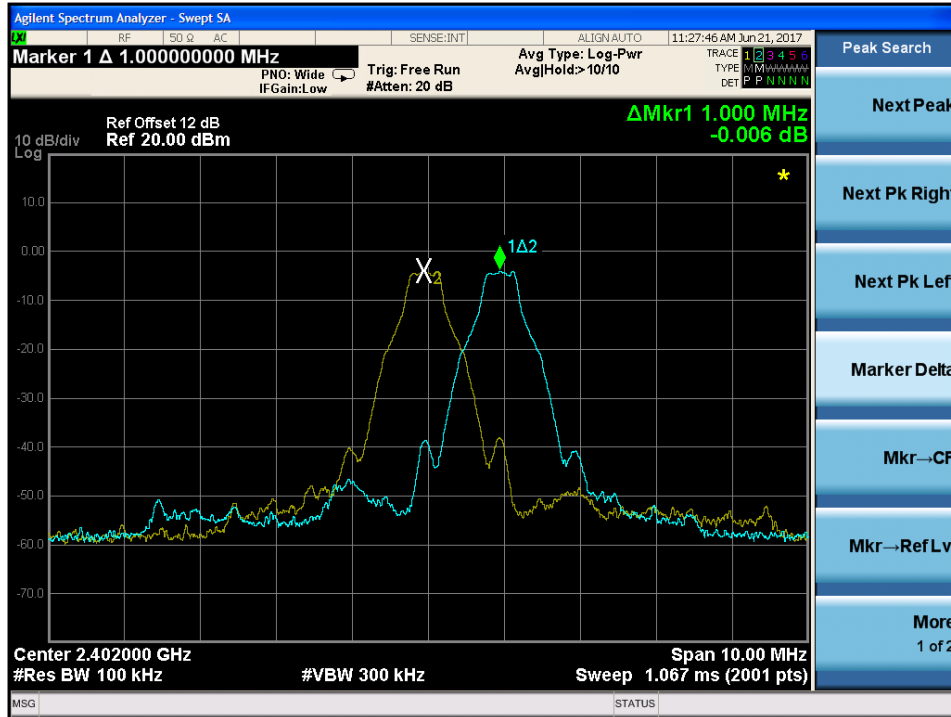
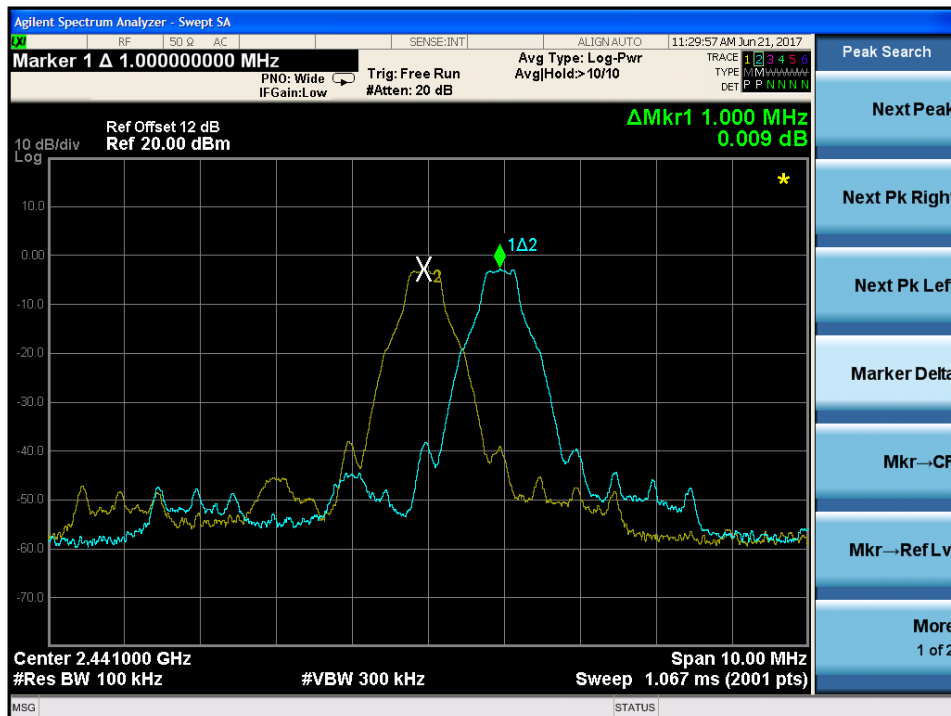
### 5.1.5 Frequency Separation

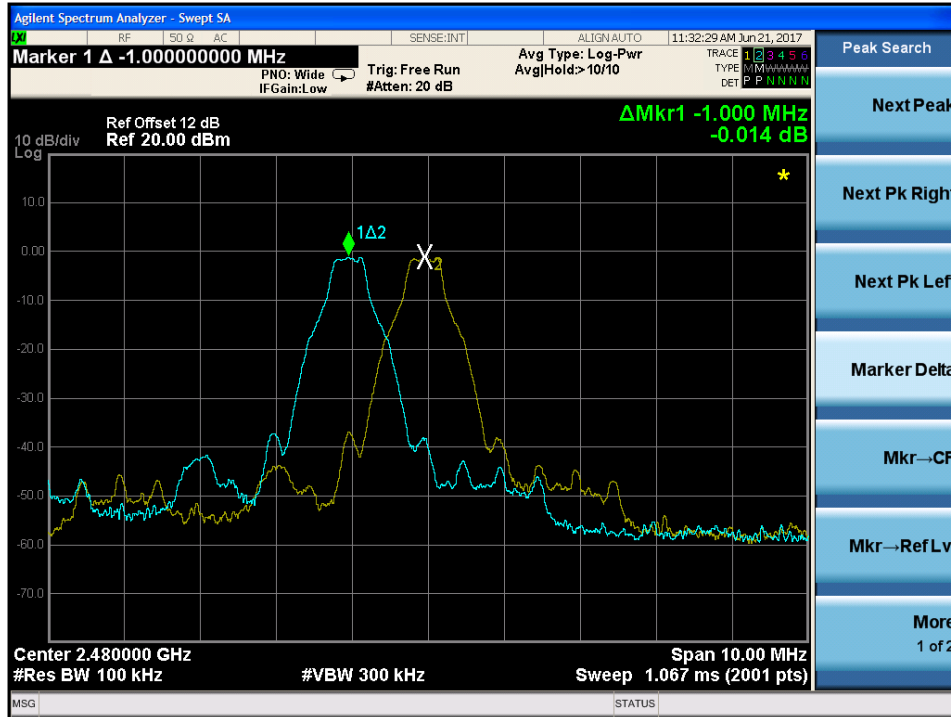
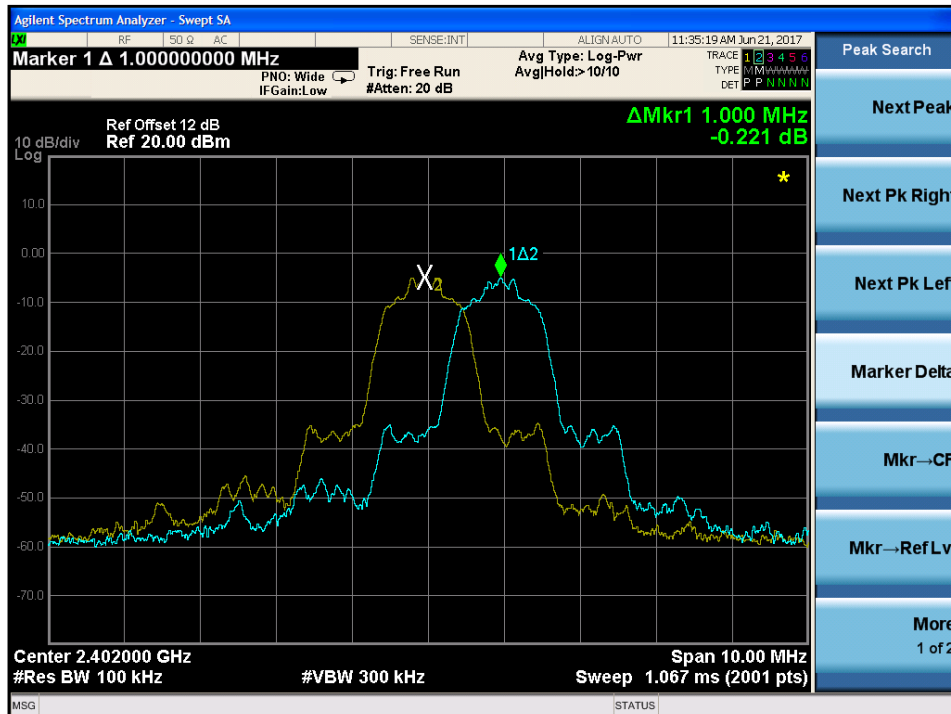
**RESULT:****Pass**

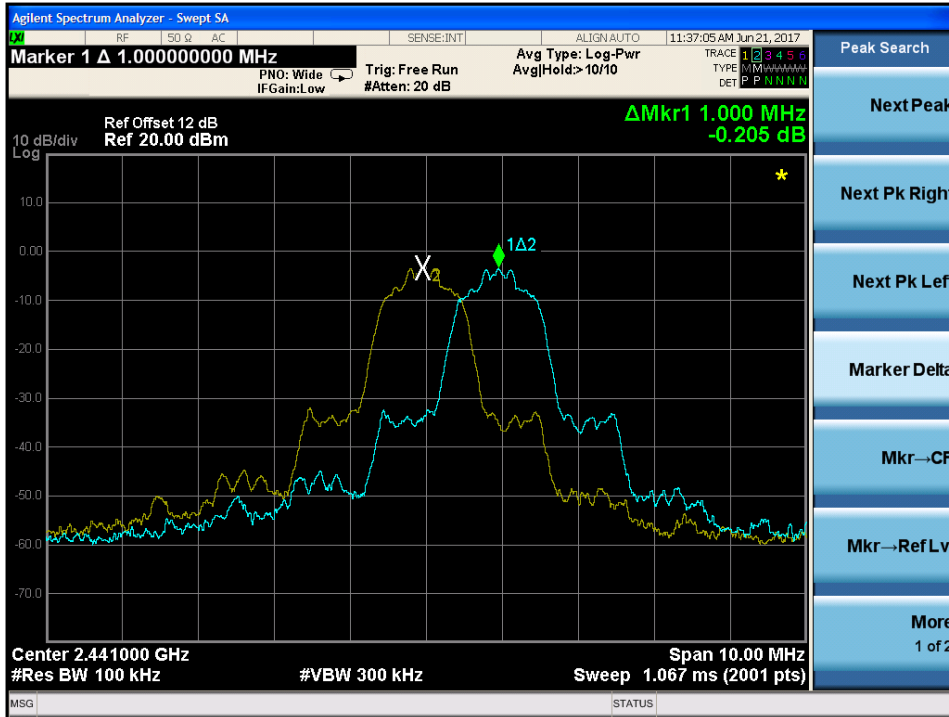
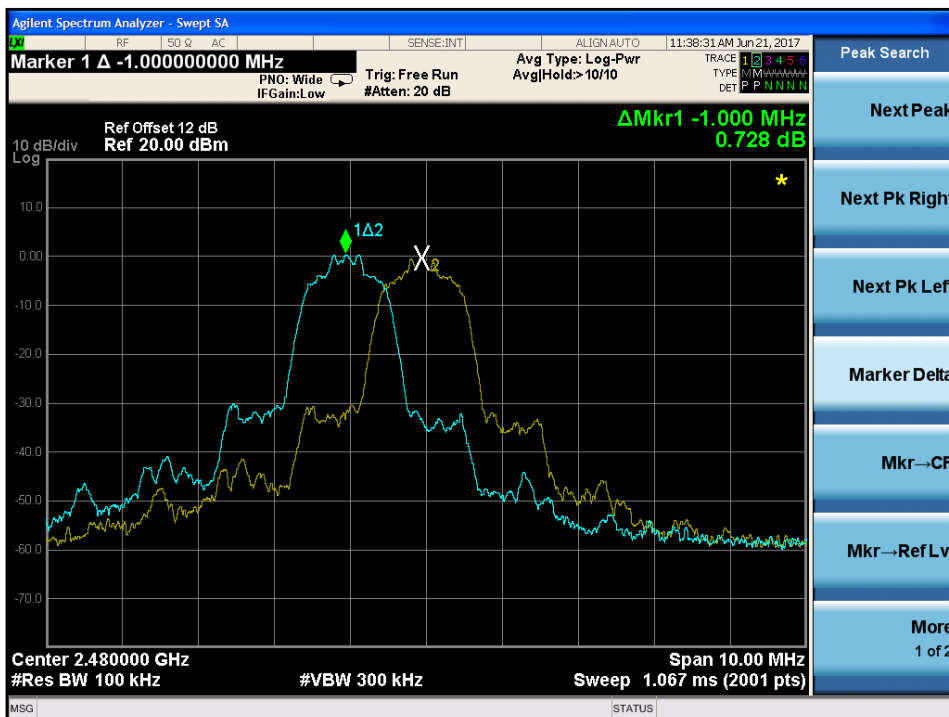
Date of testing : 21.06.2017  
Test standard : FCC Part 15.247(a)(1)  
Test procedure : ANSI C63.10: 2013  
Public Notice DA 00-705 March 30, 2000  
Limit : FCC Part 15.247(a)(1)  
Kind of test site : Shielded room

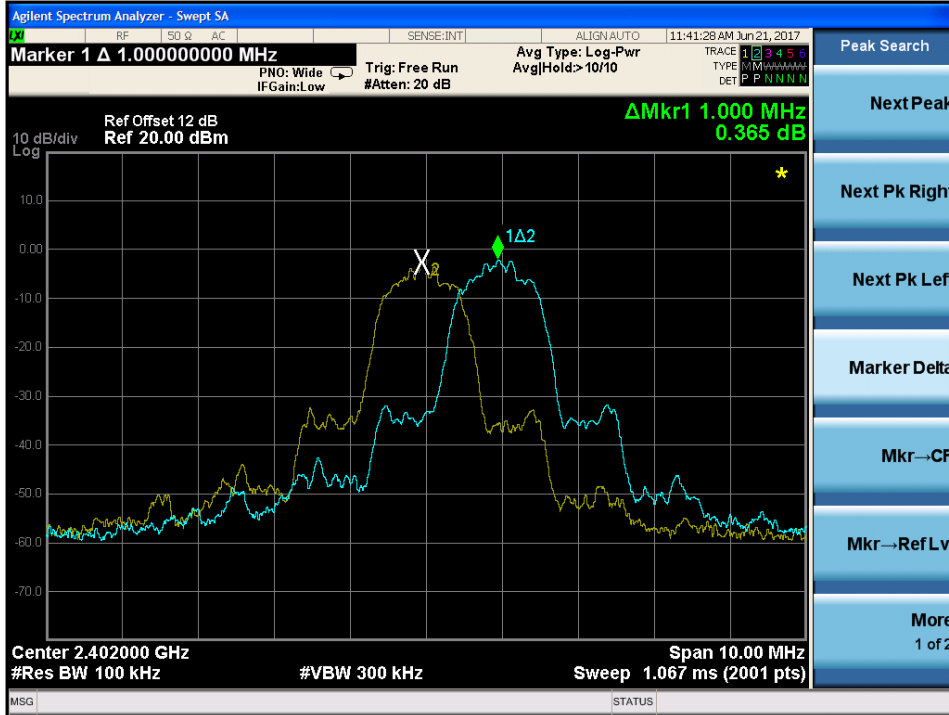
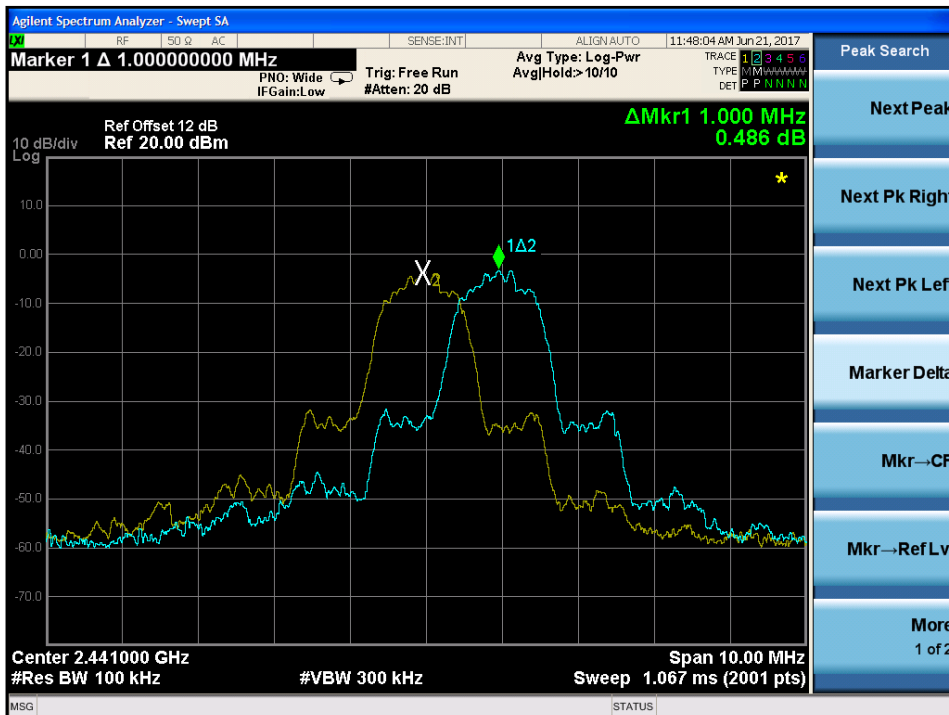
**Test setup**

Test Channel : Low/ Middle/ High  
Operation Mode : TM10 to TM12  
Ambient temperature : 25°C  
Relative humidity : 52%  
Atmospheric pressure : 101kPa

**Figure 25: Frequency Separation, TM10, observation Frequency 2402MHz**

**Figure 26: Frequency Separation, TM10, observation Frequency 2441MHz**


**Figure 27: Frequency Separation, TM10, observation Frequency 2480MHz**

**Figure 28: Frequency Separation, TM11, observation Frequency 2402MHz**


**Figure 29: Frequency Separation, TM11, observation Frequency 2441MHz**

**Figure 30: Frequency Separation, TM11, observation Frequency 2480MHz**


**Figure 31: Frequency Separation, TM12, observation Frequency 2402MHz**

**Figure 32: Frequency Separation, TM12, observation Frequency 2441MHz**


**Figure 33: Frequency Separation, TM12, observation Frequency 2480MHz**




### 5.1.6 Number of Hopping Frequency

**RESULT:****Pass**

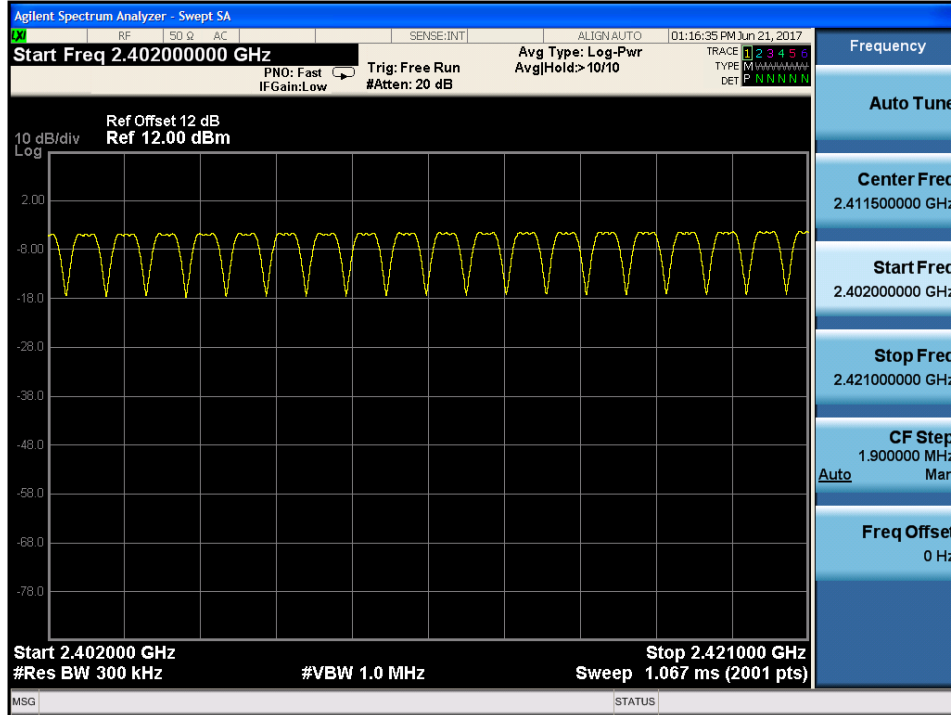
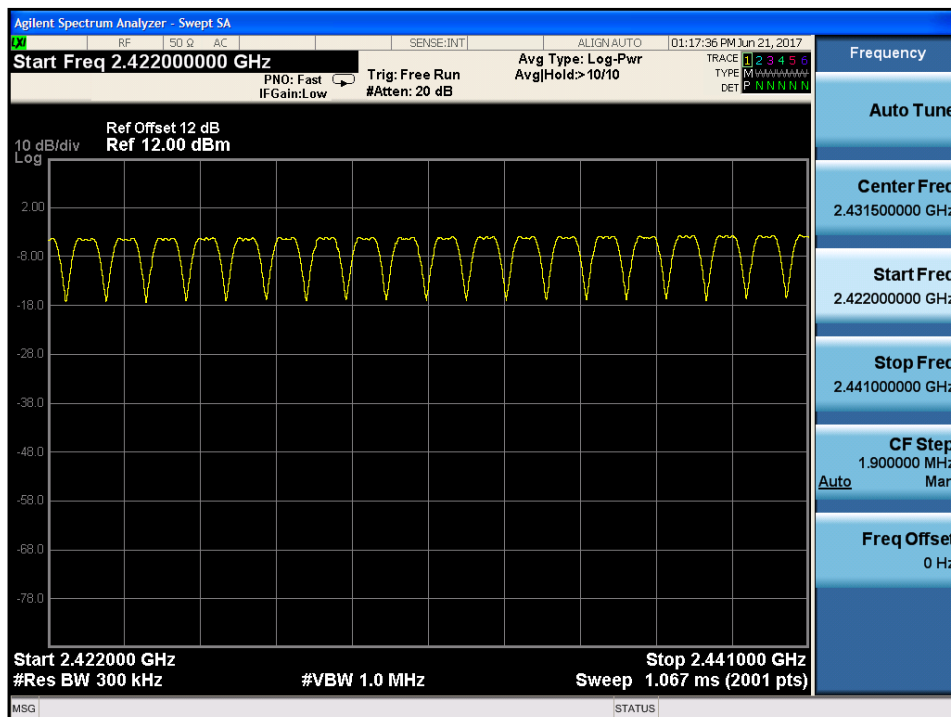
Date of testing : 21.06.2017  
Test standard : FCC 15.247(a)(1)(iii)  
Test procedure : ANSI C63.10: 2013  
Public Notice DA 00-705 March 30, 2000  
Limit : FCC 15.247(a)(1)(iii)  
Kind of test site : Shielded room

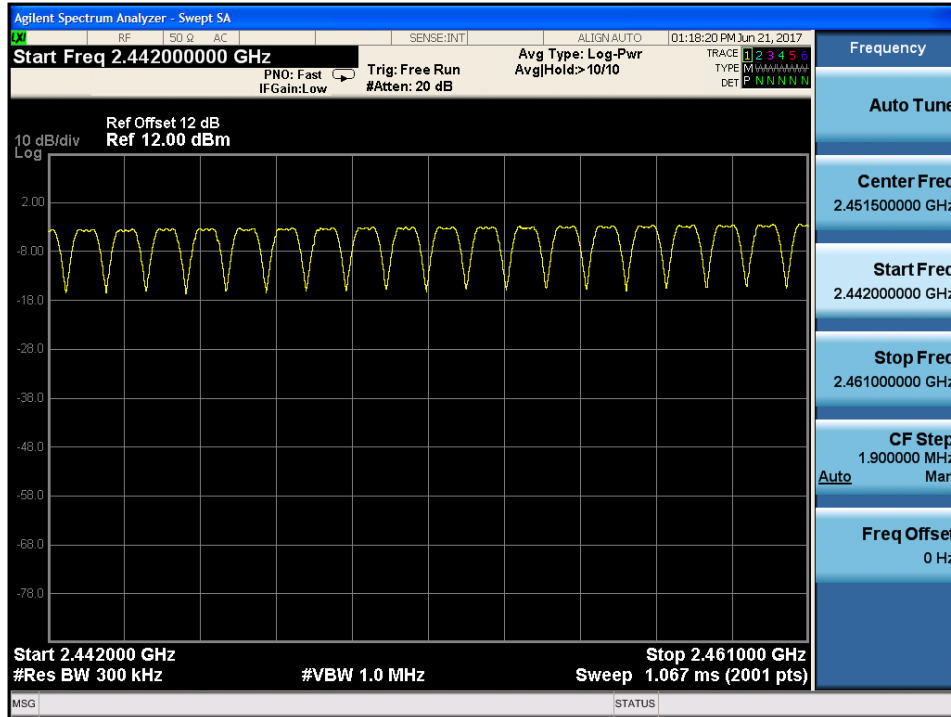
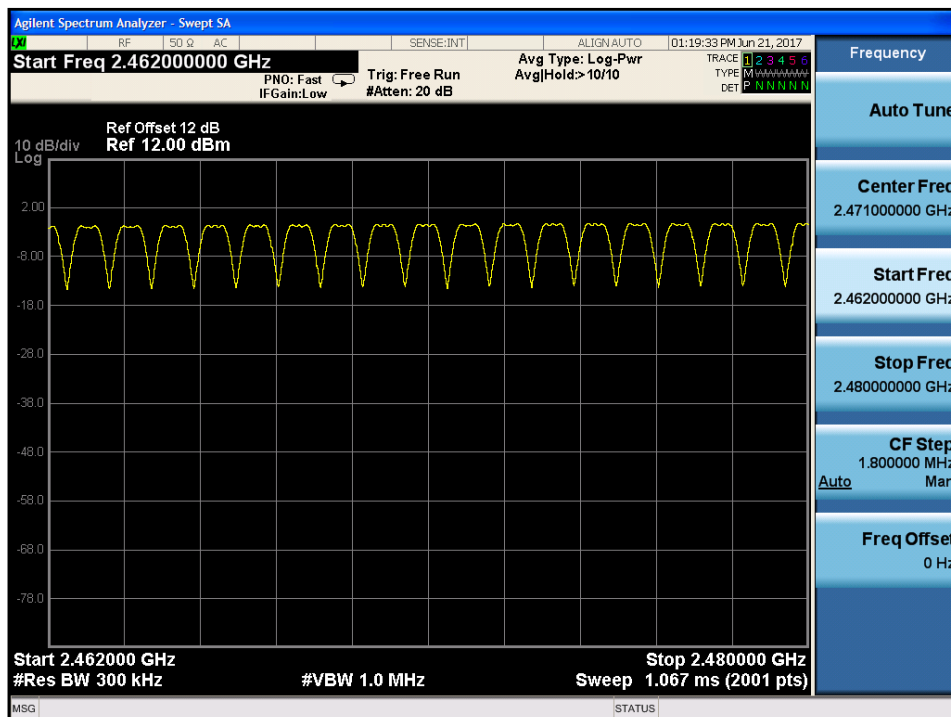
**Test setup**

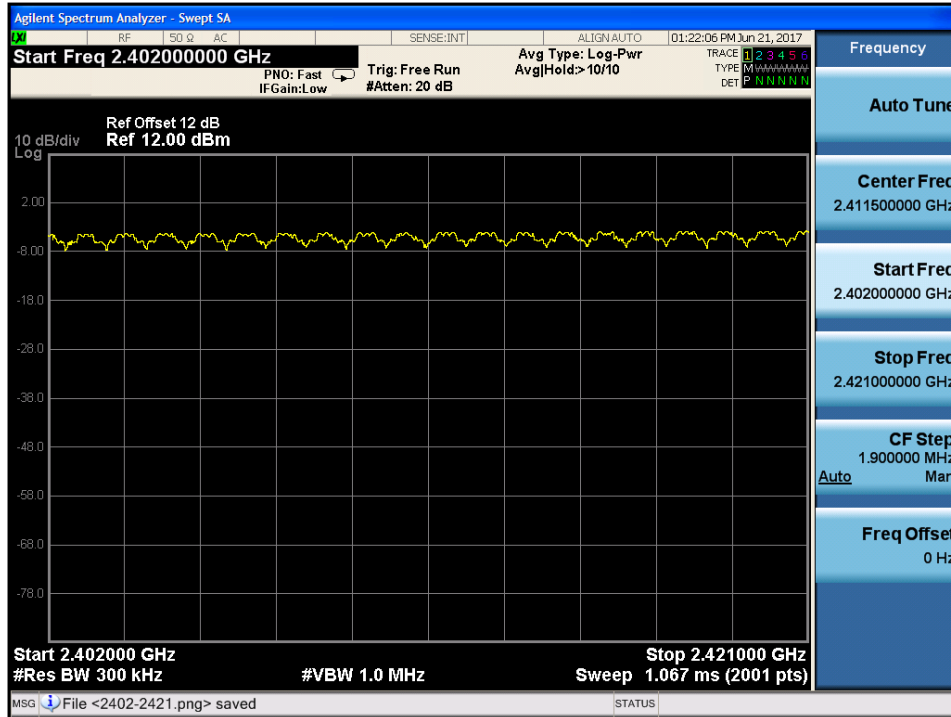
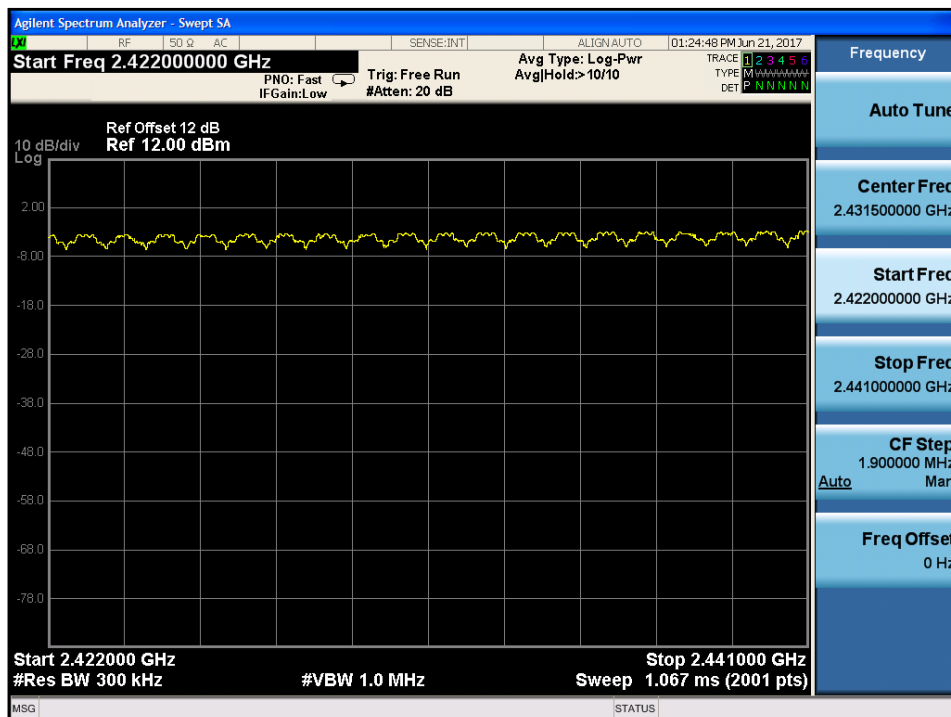
Operation Mode : TM10 to TM12  
Ambient temperature : 25°C  
Relative humidity : 52%  
Atmospheric pressure : 101kPa

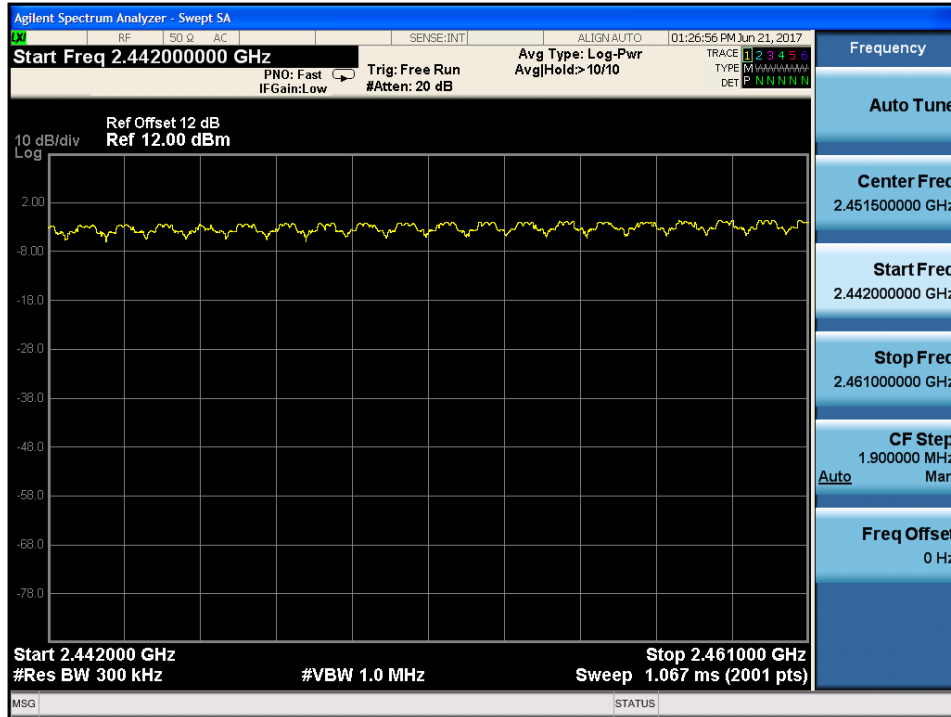
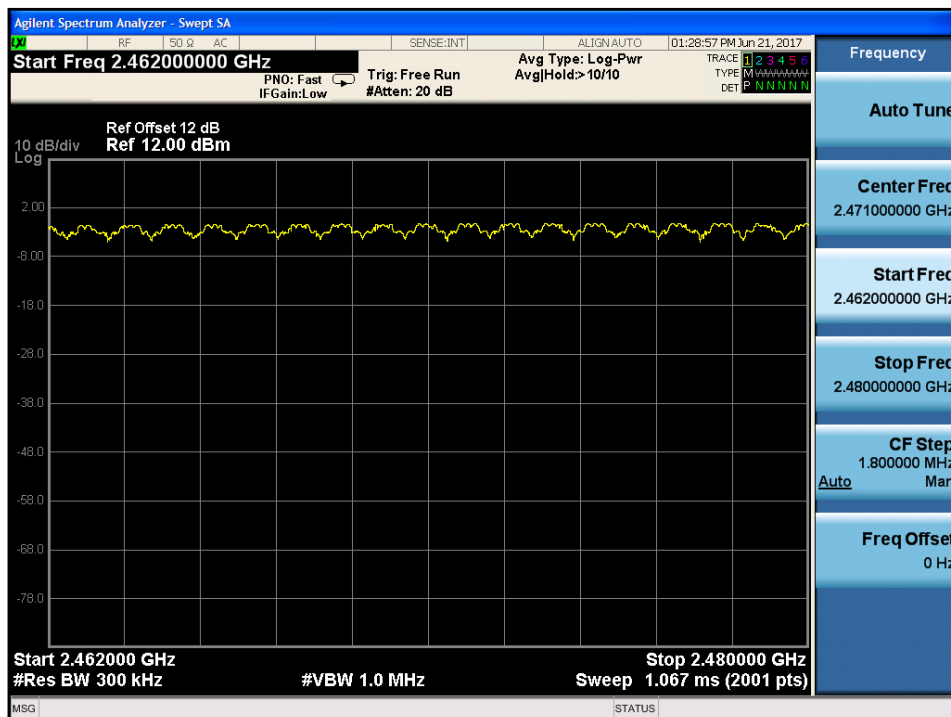
**Table 7: Number of Hopping Frequency**

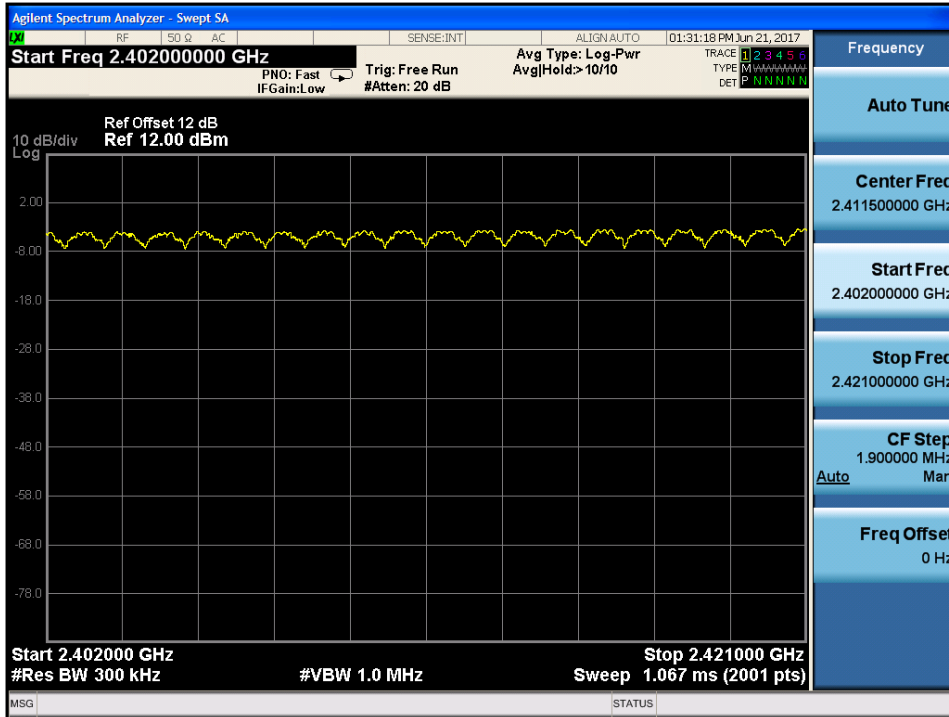
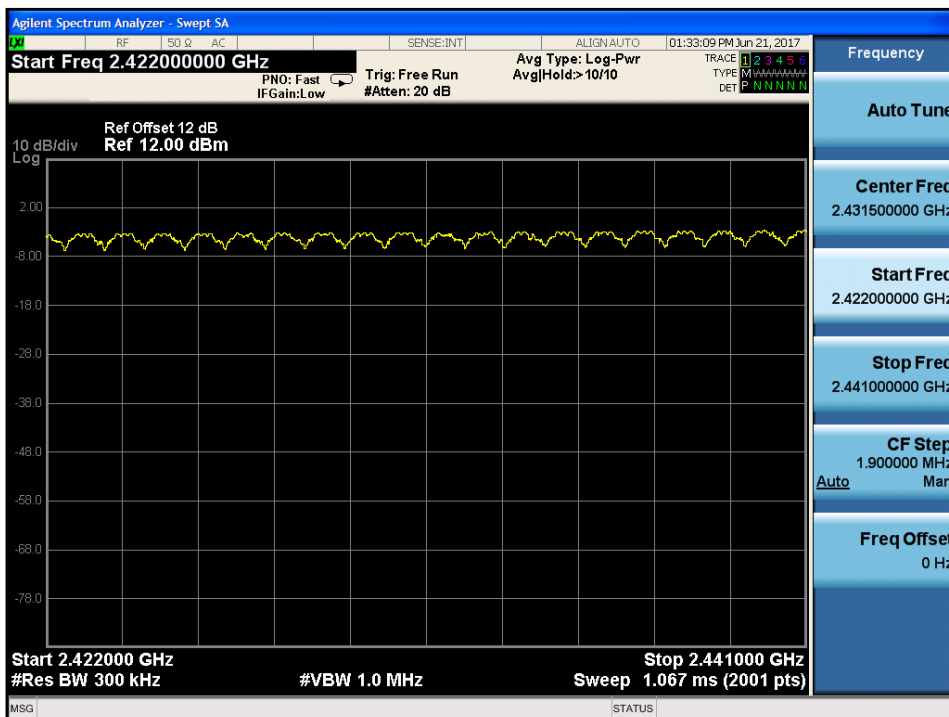
Frequency Range	Measured Quantity of Hopping Channel	Limit
2402 to 2480	79	≥15

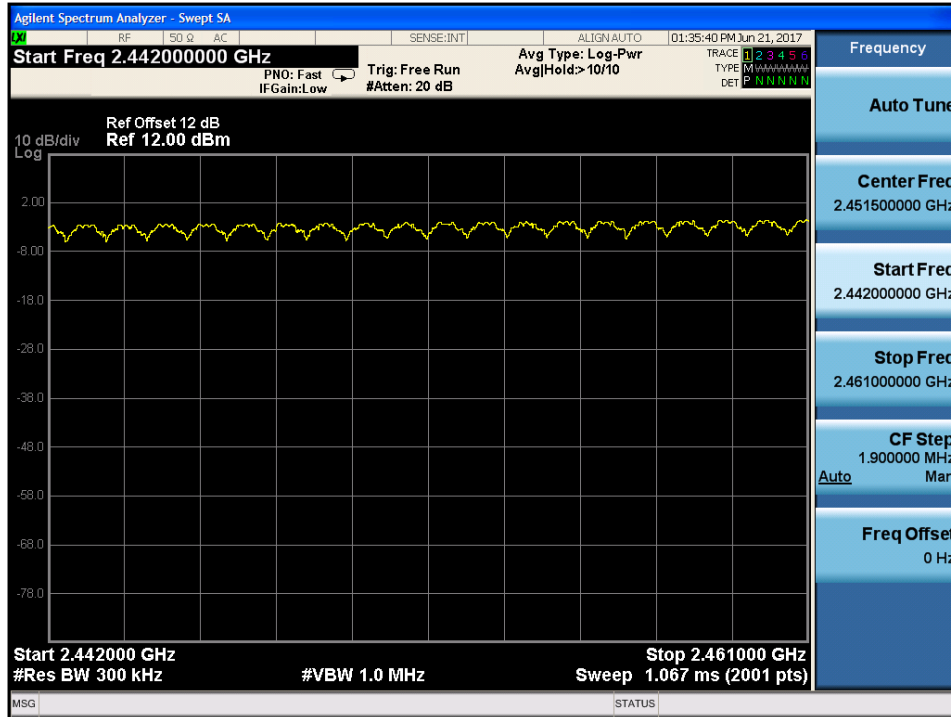
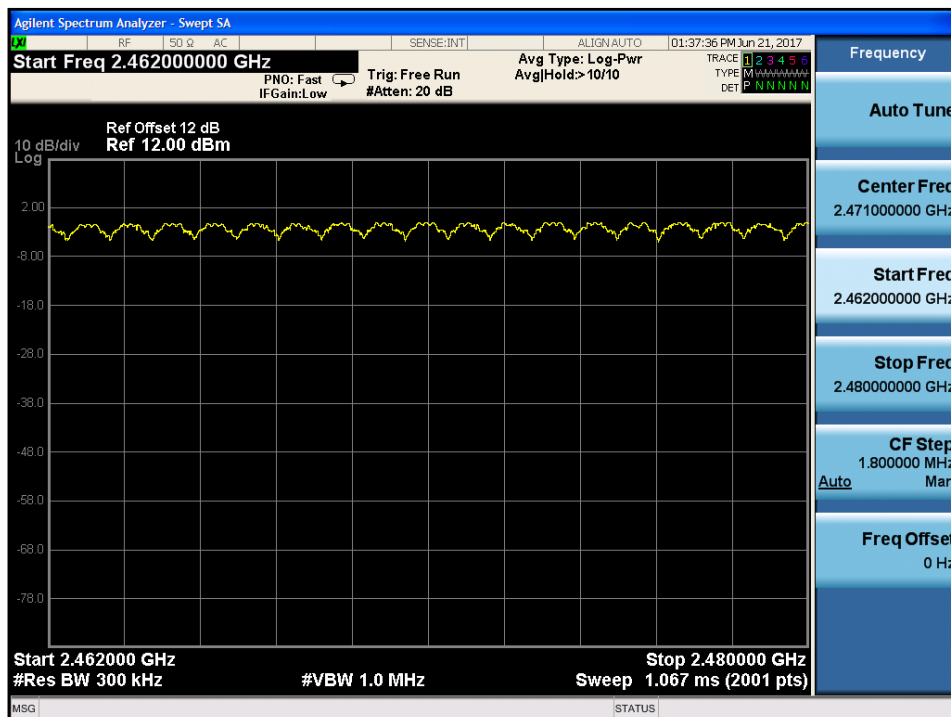
**Figure 34: Number of Hopping Frequency, TM10, part 1**

**Figure 35: Number of Hopping Frequency, TM10, part 2**


**Figure 36: Number of Hopping Frequency, TM10, part 3**

**Figure 37: Number of Hopping Frequency, TM10, part 4**


**Figure 38: Number of Hopping Frequency, TM11, part 1**

**Figure 39: Number of Hopping Frequency, TM11, part 2**


**Figure 40: Number of Hopping Frequency, TM11, part 3**

**Figure 41: Number of Hopping Frequency, TM11, part 4**


**Figure 42: Number of Hopping Frequency, TM12, part 1**

**Figure 43: Number of Hopping Frequency, TM12, part 2**


**Figure 44: Number of Hopping Frequency, TM12, part 3**

**Figure 45: Number of Hopping Frequency, TM12, part 4**


### 5.1.7 Time of Occupancy

**RESULT:****Pass**

Date of testing : 21.06.2017  
Test standard : FCC 15.247(a)(1)(iii)  
Test procedure : ANSI C63.10: 2013  
Public Notice DA 00-705 March 30, 2000  
Limit : FCC 15.247(a)(1)(iii)  
Kind of test site : Shielded room

**Test setup**

Operation Mode : TM12 to TM14  
Ambient temperature : 25°C  
Relative humidity : 52%  
Atmospheric pressure : 101kPa

**Table 8: Time of Occupancy, TM12 to TM14**

Mode	Frequency [MHz]	Packet Duration [ms]	Maximum Number of Hopping Channels	Average Time of Occupancy [ms]	Limit [ms]
TM14	2441	0.405	320	129.60	400
TM13	2441	1.660	160	265.60	400
TM12	2441	2.910	107	311.37	400

## Note:

Average time of occupancy = [(Packet duration \* Number of hops per channel in a 31.6s period).

The spectrum analyzer center frequency was set to one of the known hopping channel. The SWEEP TIME was set to 10ms, the SPAN was set to ZERO SPAN, and the TRIGGER was set to VIDEO. The time duration of the transmissions so captured was measured with the MARKER DELTA function.

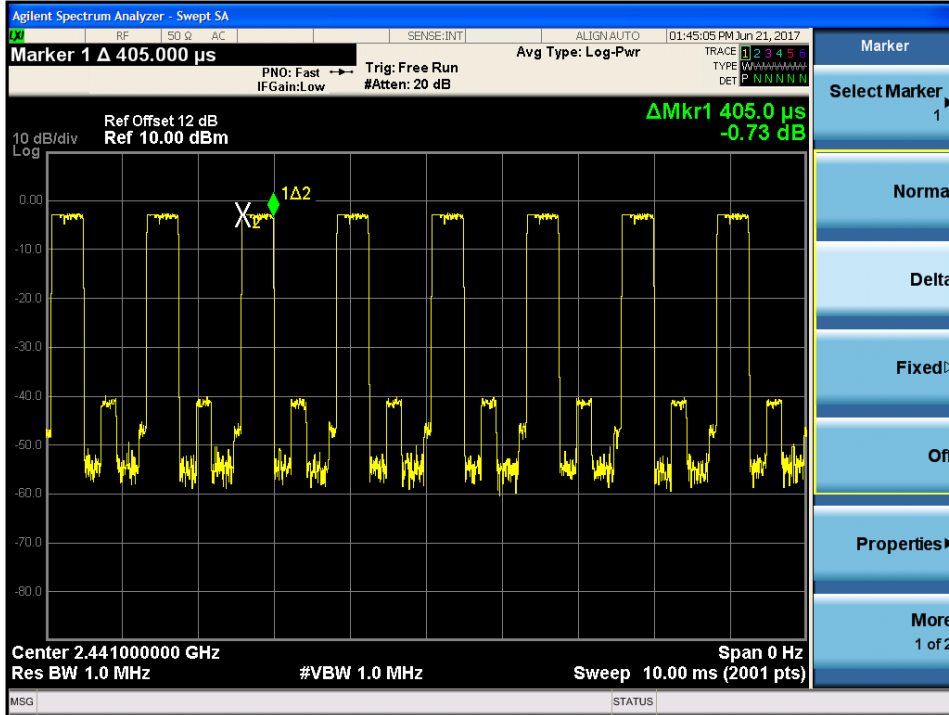
According the BLUETOOTH STANDARD SPECIFICATION, the nominal hop rate is 1600 hops/s. All Bluetooth units participating in the piconet are time and hop synchronized to the channel.

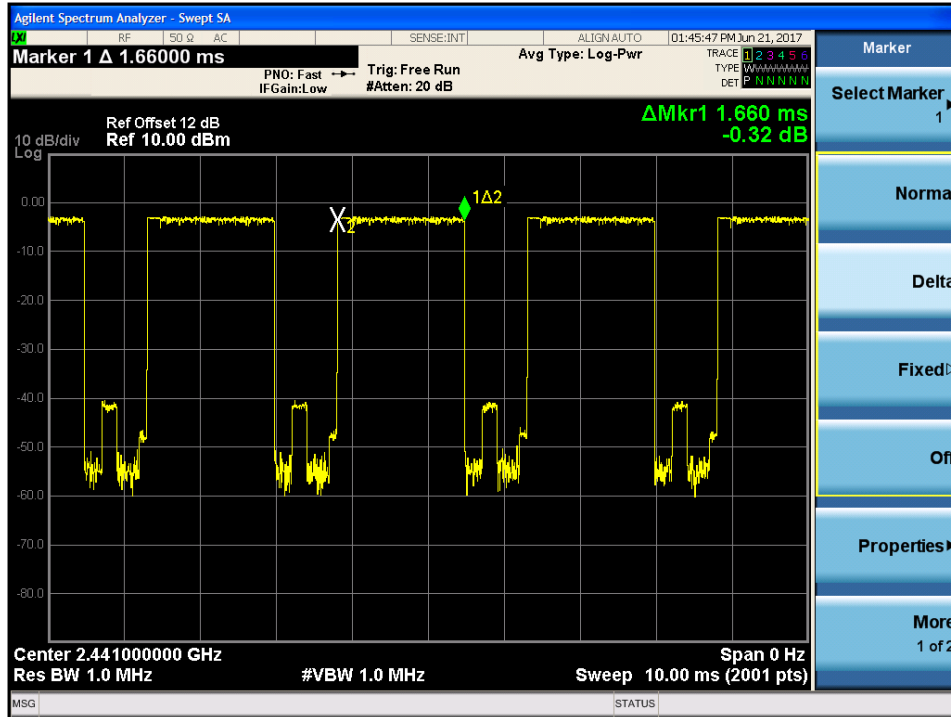
The maximum number of hopping channels in 31.6s for 3DH1 =  $1600 / 2 / 79 * 31.6 = 320$

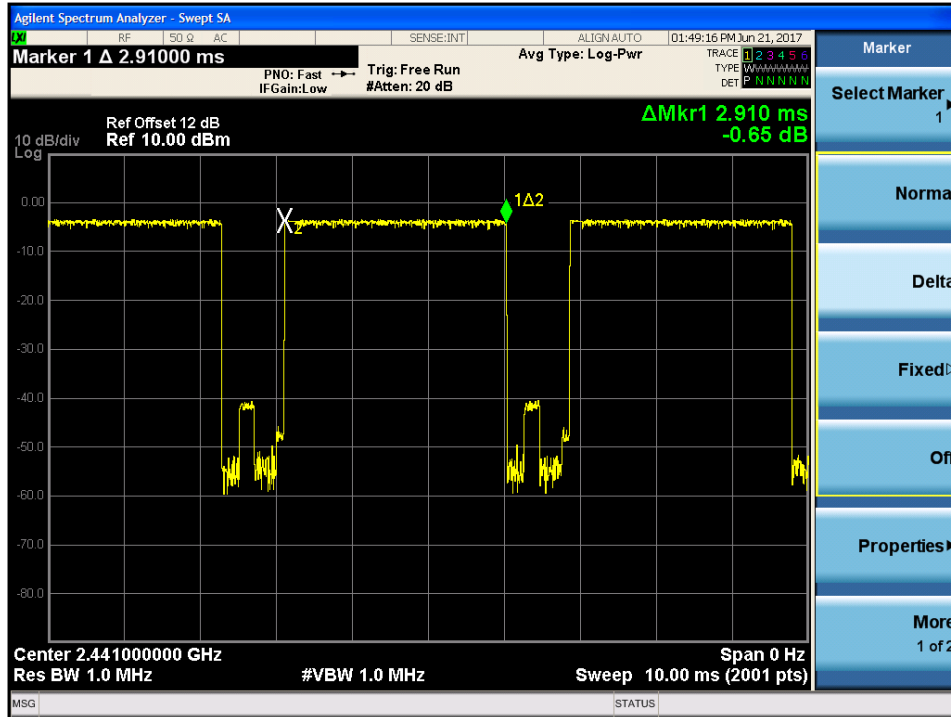
The maximum number of hopping channels in 31.6s for 3DH3 =  $1600 / 4 / 79 * 31.6 = 160$

The maximum number of hopping channels in 31.6s for 3DH5 =  $1600 / 6 / 79 * 31.6 = 107$



**Figure 46: Time of Occupancy, TM14, observation Frequency 2441MHz**


**Figure 47: Time of Occupancy, TM13, observation Frequency 2441MHz**


**Figure 48: Time of Occupancy, TM12, observation Frequency 2441MHz**


## 5.2 Emission in the Frequency Range up to 30MHz

### 5.2.1 Conducted Emission

**RESULT:****N/A**

Date of testing : N/A  
Test standard : FCC Part 15.207 (a)  
Test procedure : ANSI C63.10: 2013  
Limit : FCC Part 15.207 (a)  
Kind of test site : Shielded room

**Note:**

The EUT is a car kit which power by the car, so this test is not required.

## 5.3 Emission in the Frequency Range above 30MHz

### 5.3.1 Radiated Spurious Emission

**RESULT:**
**Pass**

Date of testing : 13.06.2017 - 01.07.2017  
 Test standard : FCC 15.247(d)  
 Test procedure : ANSI C63.10: 2013  
 Public Notice DA 00-705 March 30, 2000  
 Limit : FCC 15.247(d)  
 FCC 15.209(a)  
 Test frequency range : 9kHz to the tenth harmonic of the highest fundamental frequency  
 Kind of test site : 3m Semi-Anechoic Chamber

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : TM1 to TM9  
 Ambient temperature : 25°C  
 Relative humidity : 52%  
 Atmospheric pressure : 101kPa

**Table 9: Radiated Spurious Emission, below 1GHz, TM3**

Mode	Freq. [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [Db]	Limit [dBuV/m]	Factor [dB]	Type	Ant. Pol.
TM3	44.065	20.078	5.834	-19.922	40.000	14.244	QP	H
	153.675	20.124	4.937	-23.376	43.500	15.187	QP	
	337.490	25.444	10.238	-20.556	46.000	15.206	QP	
	637.705	27.609	6.412	-18.391	46.000	21.196	QP	
	832.675	34.012	10.503	-11.988	46.000	23.509	QP	
	850.135	42.864	19.204	-3.136	46.000	23.660	QP	V
	30.485	20.954	7.325	-19.046	40.000	13.629	QP	
	44.065	24.490	10.246	-15.510	40.000	14.244	QP	
	144.460	20.735	5.937	-22.765	43.500	14.798	QP	
	325.850	20.851	5.834	-25.149	46.000	15.017	QP	
697.360	33.512	11.534	-12.488	46.000	21.978	QP		
850.135	41.298	17.638	-4.702	46.000	23.660	QP		

**Note:**

All the modes were performed, only the worst case was listed in the table above.  
 The emission below 30MHz was very low, so the results were not shown in the above table.

**Table 10: Radiated Spurious Emission, above 1GHz, TM1 to TM3**

Mode	Freq. [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [Db]	Limit [dBuV/m]	Factor [dB]	Type	Ant. Pol.
TM1	4255.500	36.704	35.709	-37.296	74.000	0.996	PK	H
	4808.000	43.878	41.184	-30.122	74.000	2.694	PK	
	6414.500	39.890	34.369	-34.110	74.000	5.521	PK	
	9483.000	46.409	35.846	-27.591	74.000	10.563	PK	
	4417.000	37.456	36.024	-36.544	74.000	1.432	PK	V
	4808.000	41.480	38.786	-32.520	74.000	2.694	PK	
	6482.500	41.183	35.323	-32.817	74.000	5.859	PK	
TM2	11038.500	48.403	35.476	-25.597	74.000	12.927	PK	H
	4408.500	35.305	33.901	-38.695	74.000	1.404	PK	
	4884.500	46.396	43.711	-27.604	74.000	2.684	PK	
	6822.500	41.530	35.360	-32.470	74.000	6.171	PK	
	10851.500	48.014	35.238	-25.986	74.000	12.775	PK	V
	4425.500	36.698	35.248	-37.302	74.000	1.451	PK	
	4884.500	42.516	39.831	-31.484	74.000	2.684	PK	
TM3	6312.500	39.720	34.773	-34.280	74.000	4.947	PK	H
	11123.500	47.869	35.166	-26.131	74.000	12.703	PK	
	4450.000	35.316	33.810	-38.684	74.000	1.506	PK	
	4876.000	48.119	45.444	-25.881	74.000	2.675	PK	
	6763.000	40.365	34.576	-33.635	74.000	5.789	PK	V
	10970.500	47.110	34.059	-26.890	74.000	13.051	PK	
	4476.500	37.630	36.049	-36.370	74.000	1.581	PK	
TM3	4808.000	42.335	39.641	-31.665	74.000	2.694	PK	V
	6669.500	41.012	35.098	-32.988	74.000	5.914	PK	
	10987.500	48.247	35.238	-25.753	74.000	13.010	PK	

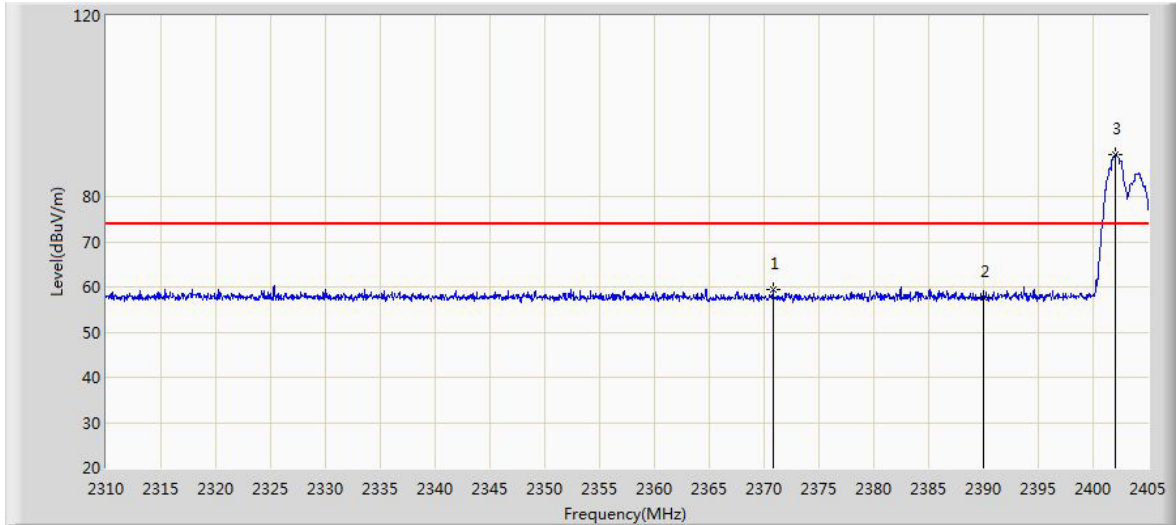
**Table 11: Radiated Spurious Emission, above 1GHz, TM4 to TM6**

Mode	Freq. [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type	Ant. Pol.
TM4	4417.000	36.574	35.142	-37.426	74.000	1.432	PK	H
	4808.000	41.791	39.097	-32.209	74.000	2.694	PK	
	6865.000	41.163	34.800	-32.837	74.000	6.363	PK	
	11038.500	48.008	35.081	-25.992	74.000	12.927	PK	
	4459.500	35.402	33.866	-38.598	74.000	1.536	PK	V
	4910.000	45.760	43.021	-28.240	74.000	2.739	PK	
	7188.000	43.554	35.740	-30.446	74.000	7.814	PK	
	10809.000	47.035	34.383	-26.965	74.000	12.652	PK	
TM5	4459.500	35.402	33.866	-38.598	74.000	1.536	PK	H
	4884.500	46.381	43.696	-27.619	74.000	2.684	PK	
	6771.500	40.879	35.031	-33.121	74.000	5.848	PK	
	10622.000	46.876	34.446	-27.124	74.000	12.430	PK	
	4480.000	34.870	33.282	-39.130	74.000	1.587	PK	V
	4816.500	39.592	36.895	-34.408	74.000	2.697	PK	
	6848.000	41.644	35.305	-32.356	74.000	6.339	PK	
	11064.000	48.526	35.684	-25.474	74.000	12.842	PK	
TM6	4465.000	35.453	33.899	-38.547	74.000	1.554	PK	H
	4910.000	46.458	43.719	-27.542	74.000	2.739	PK	
	6516.500	41.222	35.268	-32.778	74.000	5.954	PK	
	11038.500	48.074	35.147	-25.926	74.000	12.927	PK	
	4425.500	35.856	34.406	-38.144	74.000	1.451	PK	V
	5343.500	38.603	35.566	-35.397	74.000	3.036	PK	
	6788.500	41.619	35.665	-32.381	74.000	5.954	PK	
	11055.500	47.974	35.110	-26.026	74.000	12.864	PK	

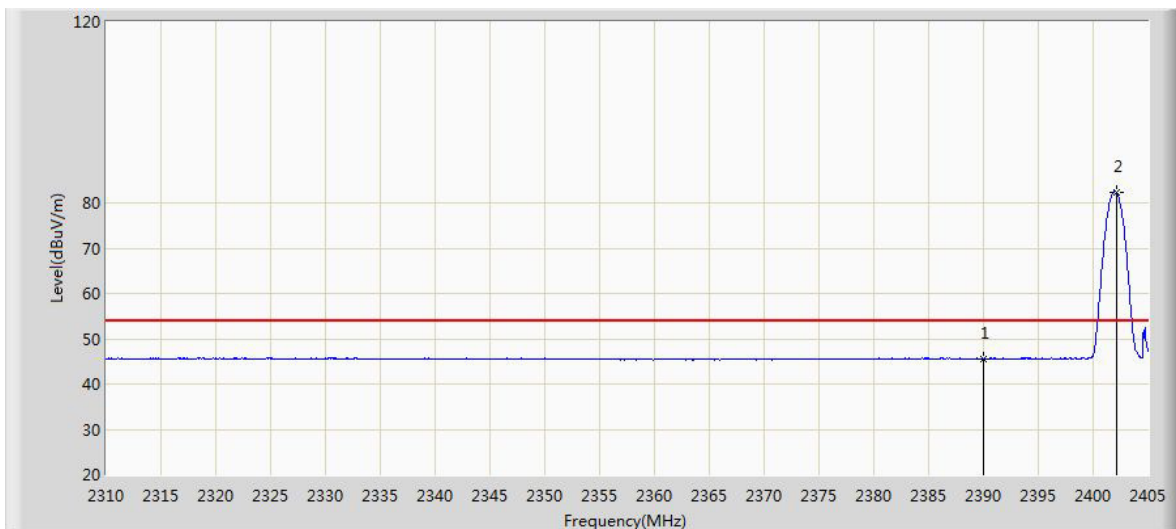
**Table 12: Radiated Spurious Emission, above 1GHz, TM7 to TM9**

Mode	Freq. [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type	Ant. Pol.
TM7	4459.500	35.224	33.688	-38.776	74.000	1.536	PK	H
	4799.500	39.911	37.213	-34.089	74.000	2.698	PK	
	6865.000	40.899	34.536	-33.101	74.000	6.363	PK	
	10970.500	46.445	33.394	-27.555	74.000	13.051	PK	
	4434.000	36.482	35.015	-37.518	74.000	1.467	PK	V
	4808.000	45.400	42.706	-28.600	74.000	2.694	PK	
	7043.500	41.016	33.983	-32.984	74.000	7.033	PK	
	10809.000	47.009	34.357	-26.991	74.000	12.652	PK	
TM8	4408.500	35.860	34.456	-38.140	74.000	1.404	PK	H
	4842.000	45.916	43.219	-28.084	74.000	2.697	PK	
	6958.500	42.540	35.841	-31.460	74.000	6.698	PK	
	10860.000	47.558	34.752	-26.442	74.000	12.806	PK	
	4465.000	35.305	33.751	-38.695	74.000	1.554	PK	V
	4884.500	39.263	36.578	-34.737	74.000	2.684	PK	
	6372.000	40.016	34.751	-33.984	74.000	5.265	PK	
	11030.000	47.878	34.911	-26.122	74.000	12.967	PK	
TM9	4425.500	36.639	35.189	-37.361	74.000	1.451	PK	H
	5445.500	38.189	34.781	-35.811	74.000	3.408	PK	
	6788.500	41.545	35.591	-32.455	74.000	5.954	PK	
	10843.000	47.527	34.783	-26.473	74.000	12.744	PK	
	4459.500	37.066	35.530	-36.934	74.000	1.536	PK	V
	5420.000	37.227	33.934	-36.773	74.000	3.293	PK	
	6780.000	40.500	34.593	-33.500	74.000	5.907	PK	
	10673.000	46.809	34.460	-27.191	74.000	12.349	PK	

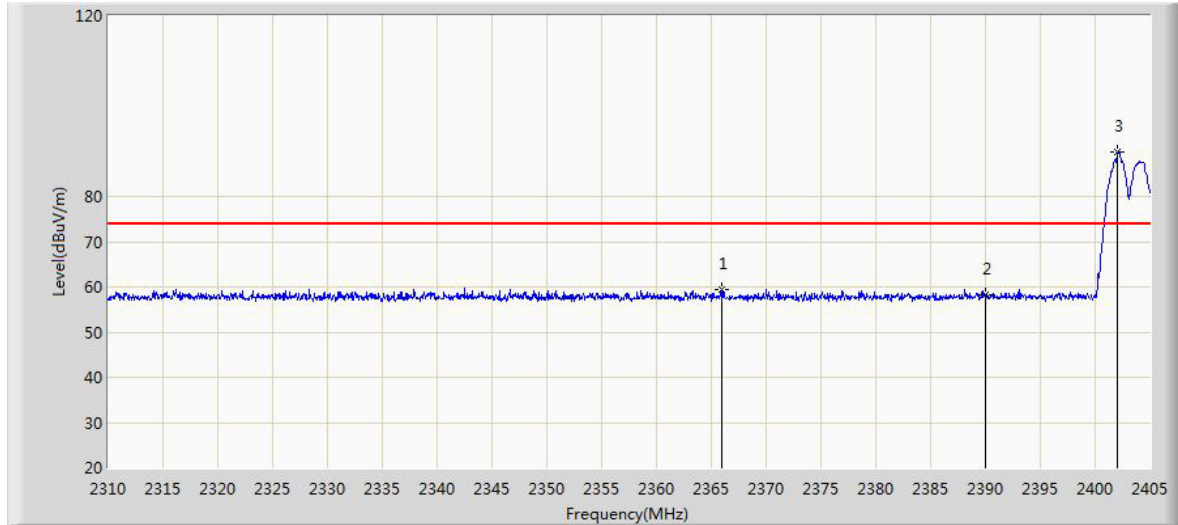


**Figure 49: Band Edge, TM1, Horizontal, PK**


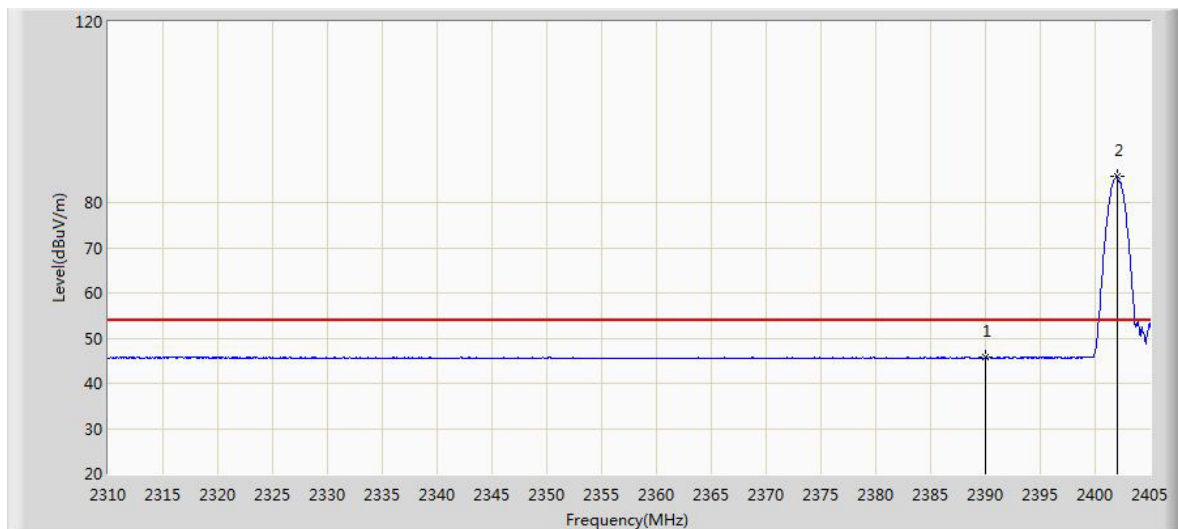
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2370.800	59.428	28.190	-14.572	74.000	31.239	PK
2390.000	57.721	26.518	-16.279	74.000	31.203	PK
2402.008	89.165	57.981	N/A	N/A	31.184	PK

**Figure 50: Band Edge, TM1, Horizontal, AV**


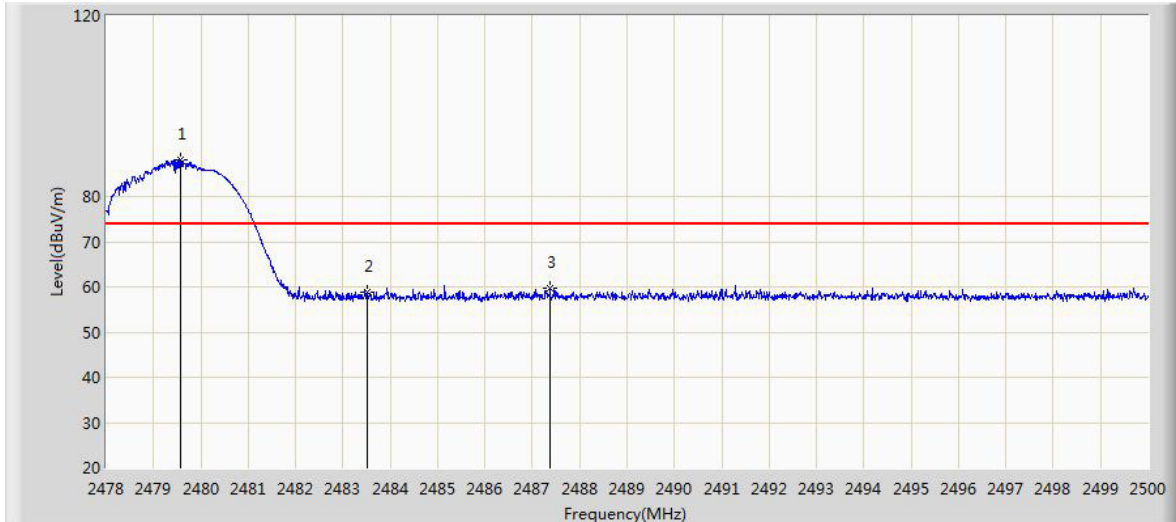
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2390.000	45.535	14.332	-8.465	54.000	31.203	AV
2402.150	82.267	51.083	N/A	N/A	31.184	AV

**Figure 51: Band Edge, TM1, Vertical, PK**


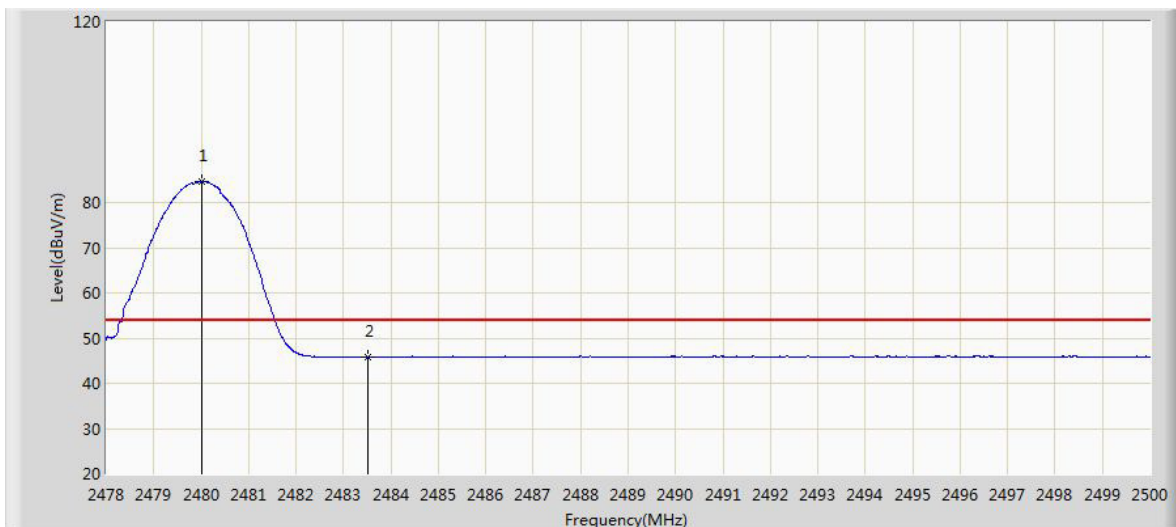
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2366.002	59.487	28.240	-14.513	74.000	31.247	PK
2390.000	58.159	26.956	-15.841	74.000	31.203	PK
2402.055	89.768	58.584	N/A	N/A	31.184	PK

**Figure 52: Band Edge, TM1, Vertical, AV**


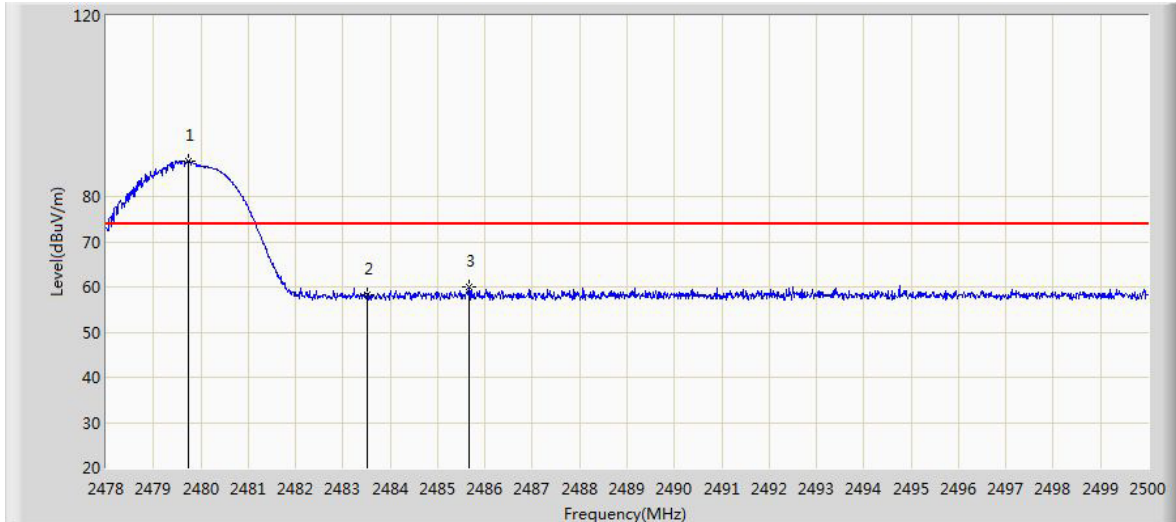
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2390.000	45.676	14.473	-8.324	54.000	31.203	AV
2402.008	85.665	54.481	N/A	N/A	31.184	AV

**Figure 53: Band Edge, TM3, Horizontal, PK**


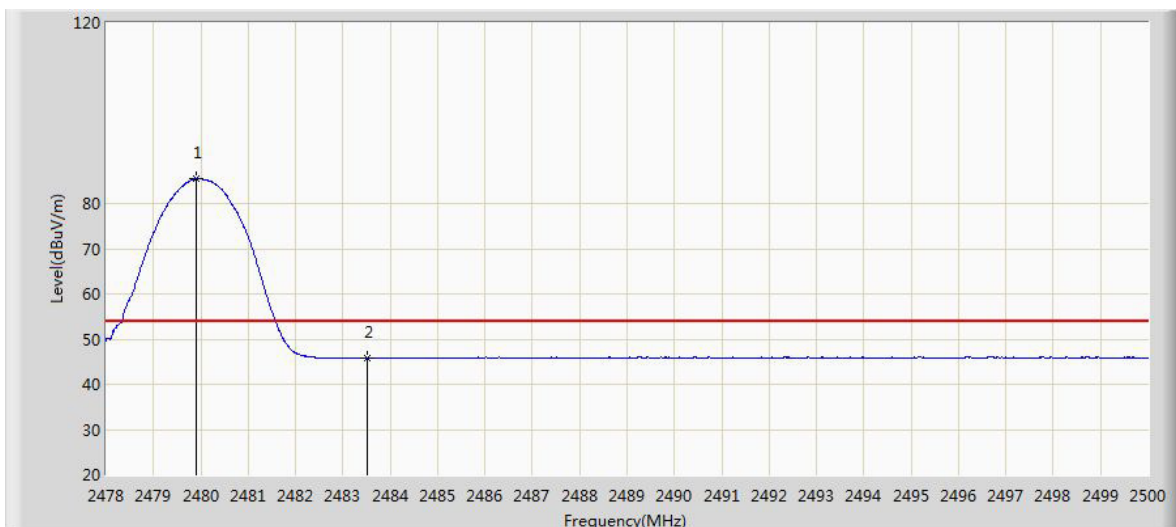
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.573	88.191	57.008	N/A	N/A	31.183	PK
2483.500	58.811	27.618	-15.189	74.000	31.194	PK
2487.372	59.696	28.492	-14.304	74.000	31.204	PK

**Figure 54: Band Edge, TM3, Horizontal, AV**


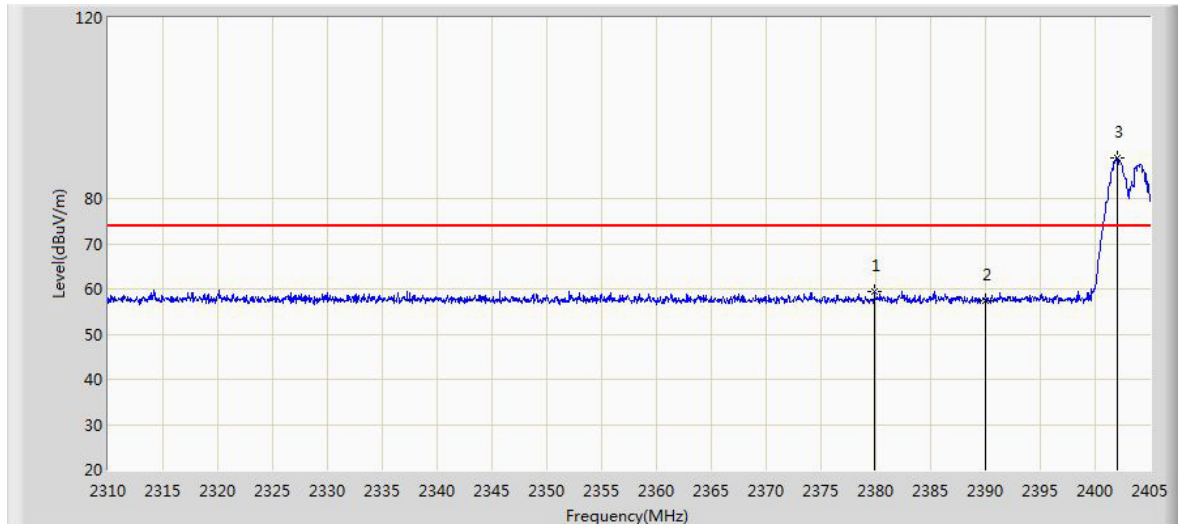
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2480.002	84.595	53.411	N/A	N/A	31.184	AV
2483.500	45.847	14.654	-8.153	54.000	31.194	AV

**Figure 55: Band Edge, TM3, Vertical, PK**


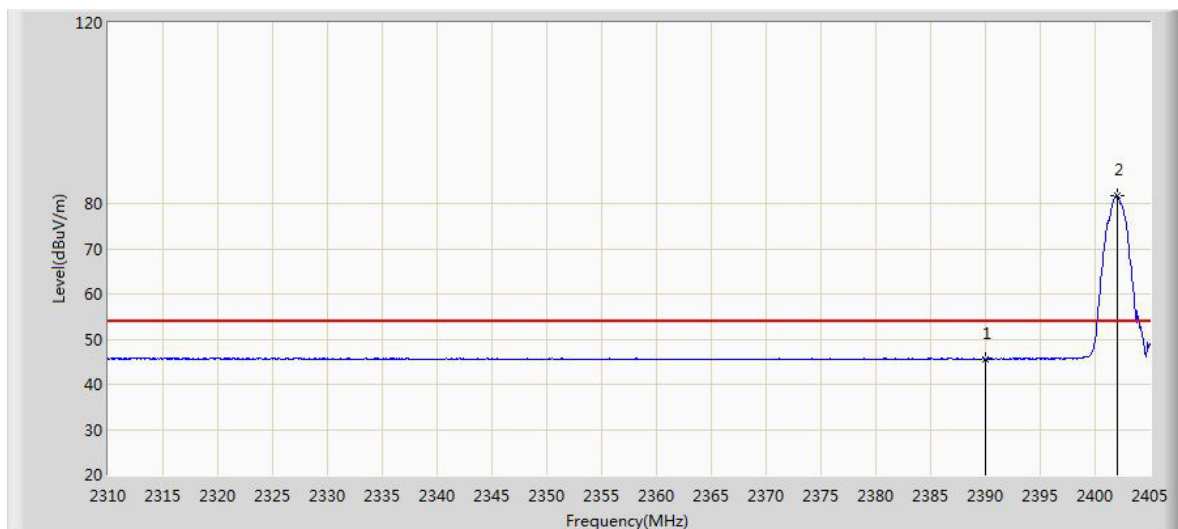
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.749	87.865	56.682	N/A	N/A	31.184	PK
2483.500	58.307	27.114	-15.693	74.000	31.194	PK
2485.667	59.916	28.717	-14.084	74.000	31.199	PK

**Figure 56: Band Edge, TM3, Vertical, AV**


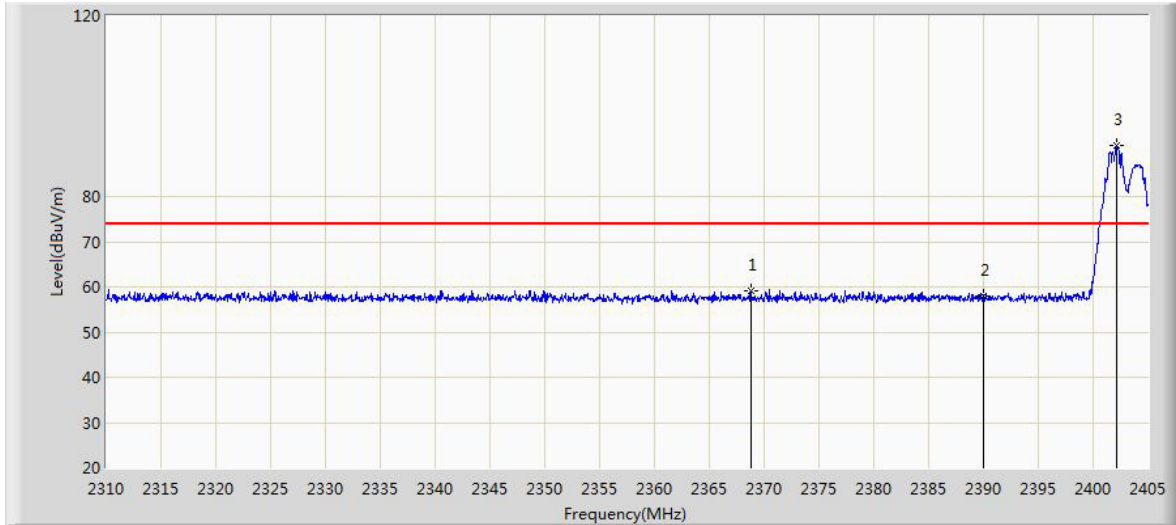
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.903	85.478	54.294	N/A	N/A	31.184	AV
2483.500	45.785	14.592	-8.215	54.000	31.194	AV

**Figure 57: Band Edge, TM4, Horizontal, PK**


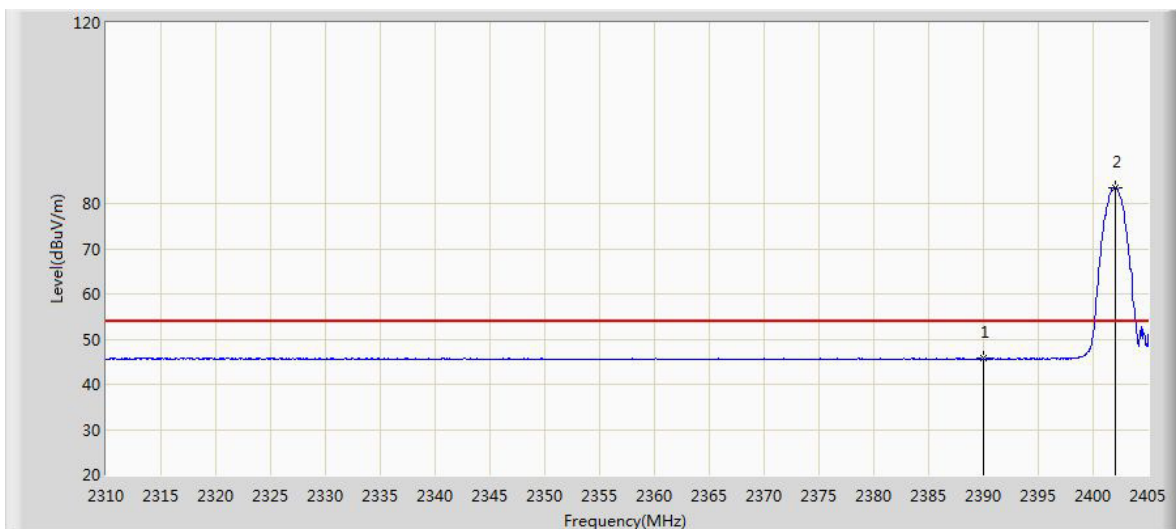
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2379.873	59.486	28.265	-14.514	74.000	31.221	PK
2390.000	57.408	26.205	-16.592	74.000	31.203	PK
2402.008	88.861	57.677	N/A	N/A	31.184	PK

**Figure 58: Band Edge, TM4, Horizontal, AV**


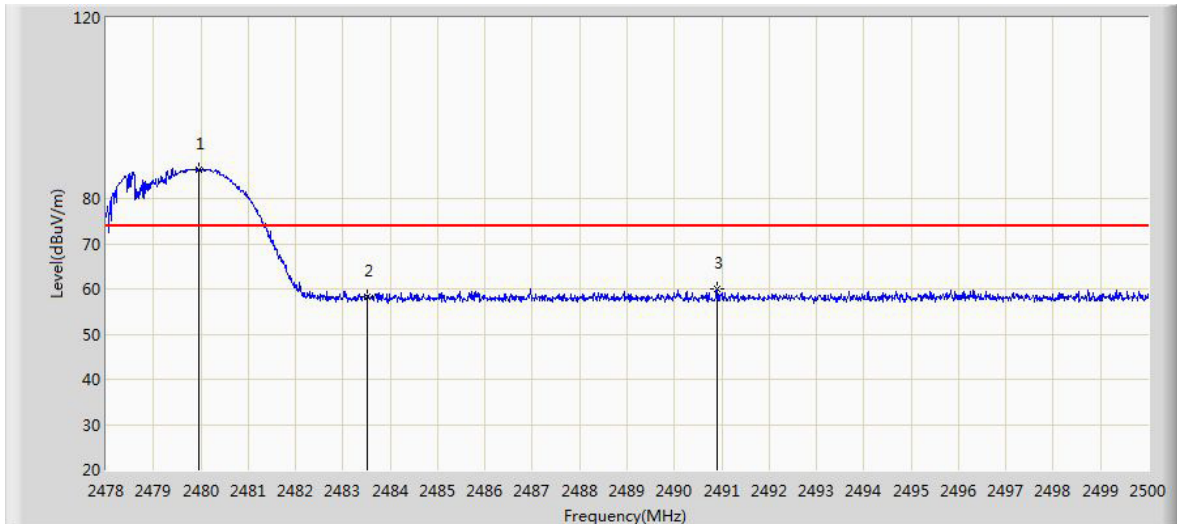
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2390.000	45.623	14.420	-8.377	54.000	31.203	AV
2402.008	81.648	50.464	N/A	N/A	31.184	AV

**Figure 59: Band Edge, TM4, Vertical, PK**


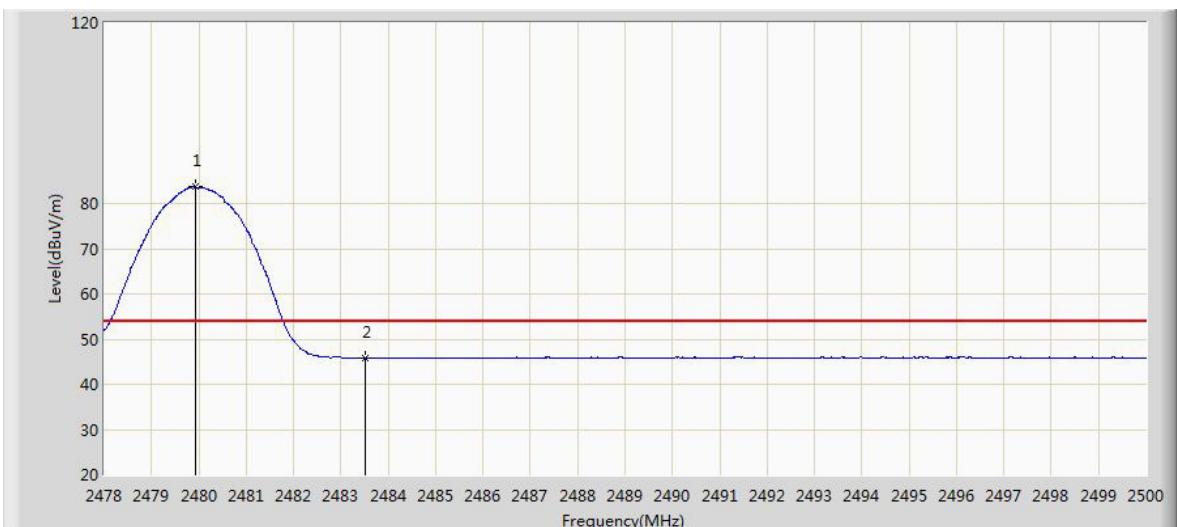
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2368.758	59.142	27.900	-14.858	74.000	31.242	PK
2390.000	58.019	26.816	-15.981	74.000	31.203	PK
2402.103	91.422	60.238	N/A	N/A	31.184	PK

**Figure 60: Band Edge, TM4, Vertical, AV**


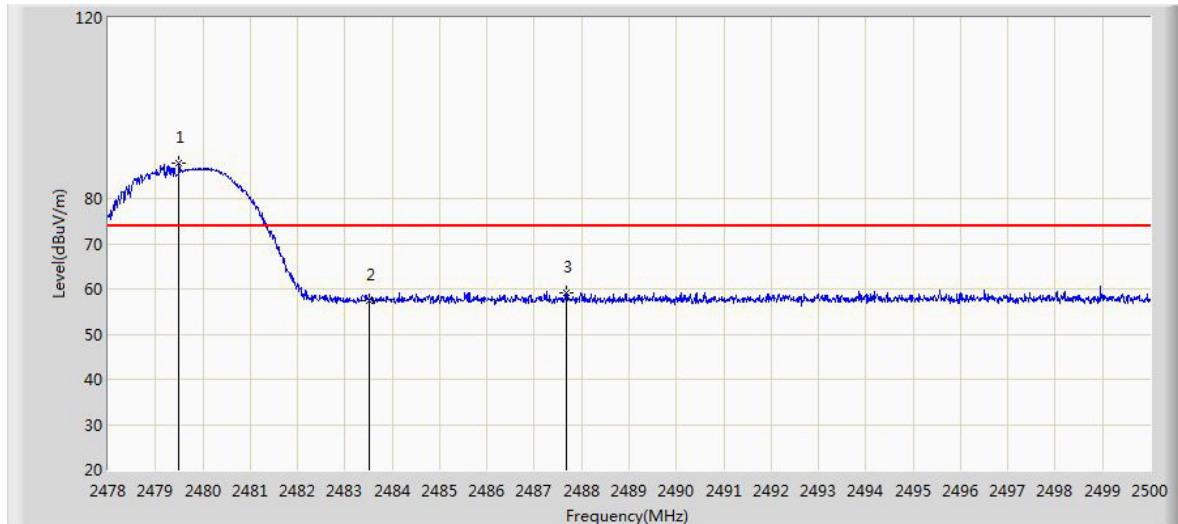
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2390.000	45.682	14.479	-8.318	54.000	31.203	AV
2402.008	83.591	52.407	N/A	N/A	31.184	AV

**Figure 61: Band Edge, TM6, Horizontal, PK**


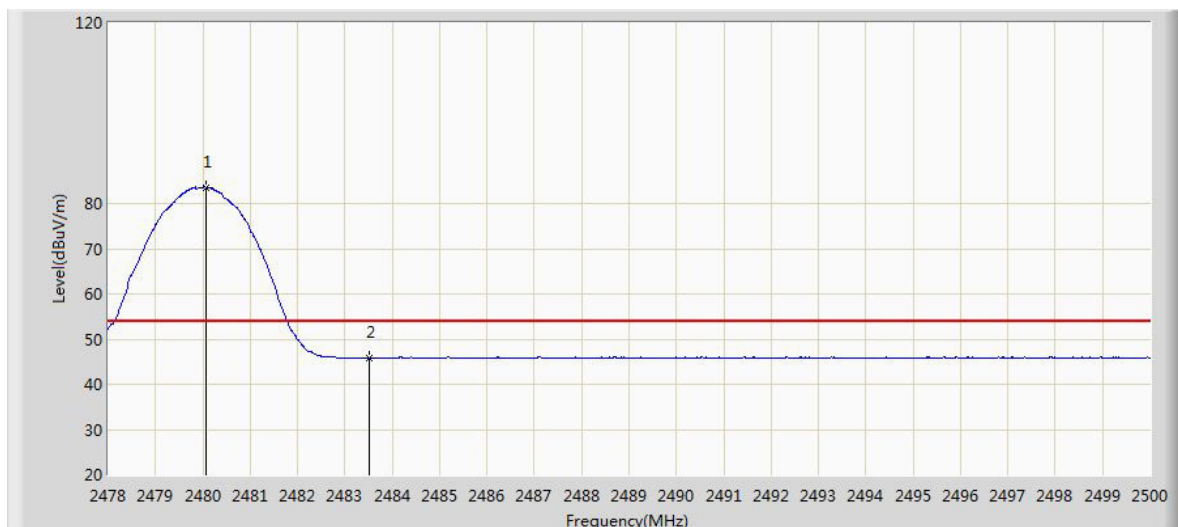
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.969	86.466	55.282	N/A	N/A	31.184	PK
2483.500	58.226	27.033	-15.774	74.000	31.194	PK
2490.892	60.119	28.906	-13.881	74.000	31.213	PK

**Figure 62: Band Edge, TM6, Horizontal, AV**


Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.925	83.841	52.657	N/A	N/A	31.184	AV
2483.500	45.860	14.667	-8.140	54.000	31.194	AV

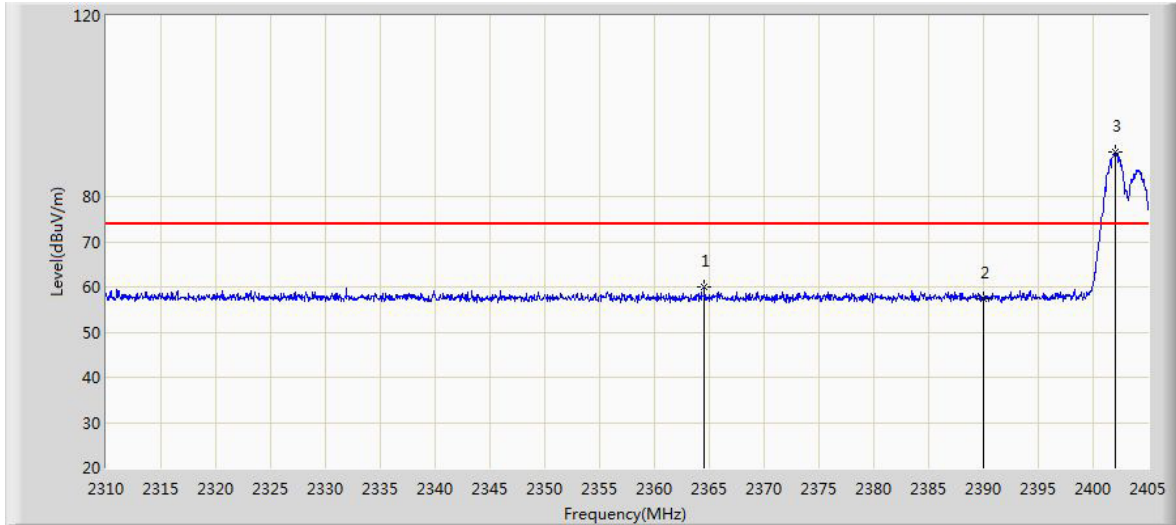
**Figure 63: Band Edge, TM6, Vertical, PK**


Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.496	87.718	56.535	N/A	N/A	31.182	PK
2483.500	57.494	26.301	-16.506	74.000	31.194	PK
2487.669	59.249	28.045	-14.751	74.000	31.204	PK

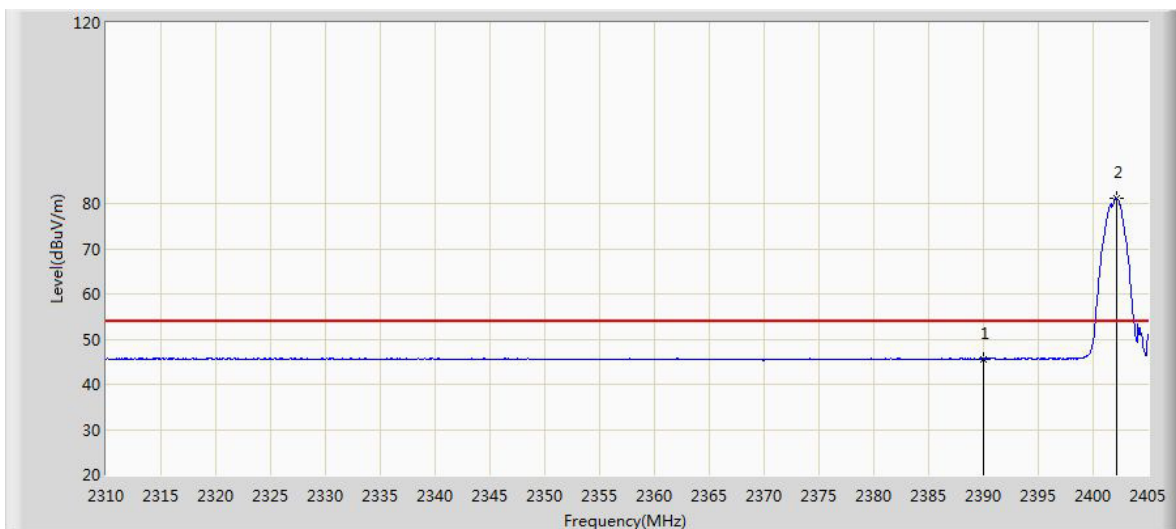
**Figure 64: Band Edge, TM6, Vertical, AV**


Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2480.079	83.555	52.371	N/A	N/A	31.184	AV
2483.500	45.820	14.627	-8.180	54.000	31.194	AV

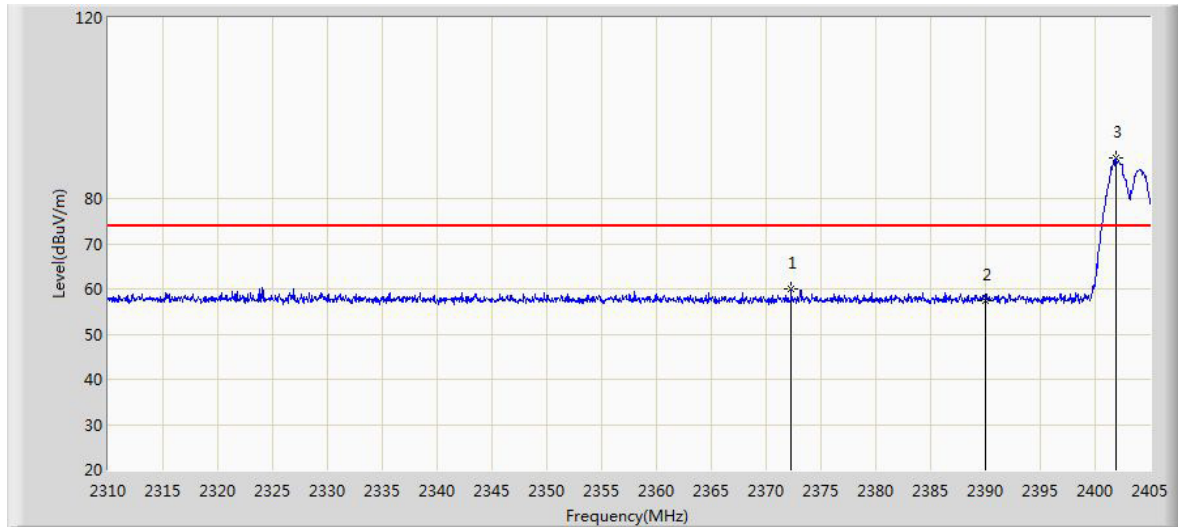


**Figure 65: Band Edge, TM7, Horizontal, PK**


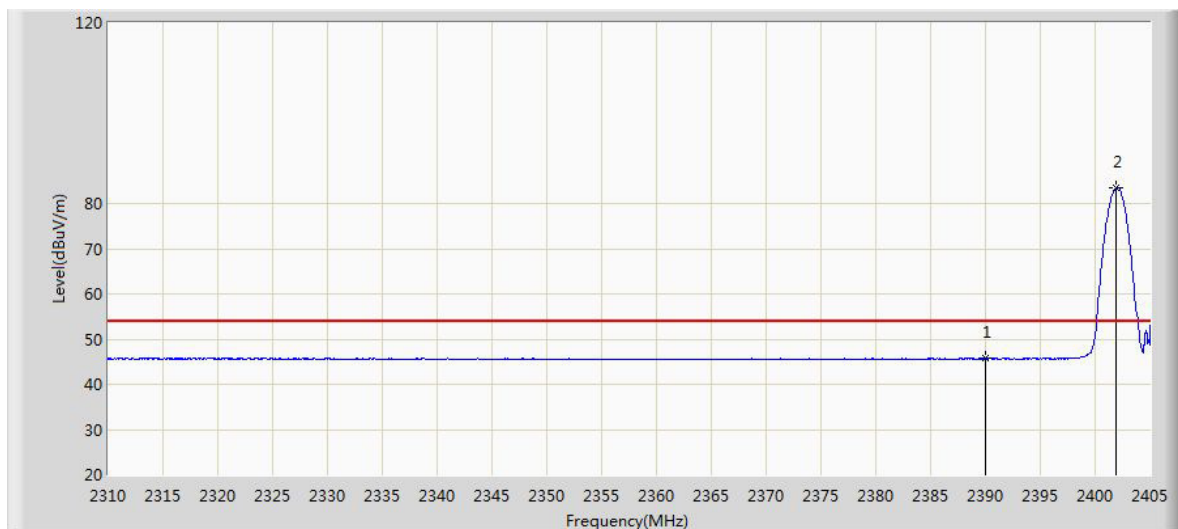
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2364.530	60.106	28.856	-13.894	74.000	31.250	PK
2390.000	57.457	26.254	-16.543	74.000	31.203	PK
2402.008	89.768	58.584	N/A	N/A	31.184	PK

**Figure 66: Band Edge, TM7, Horizontal, AV**


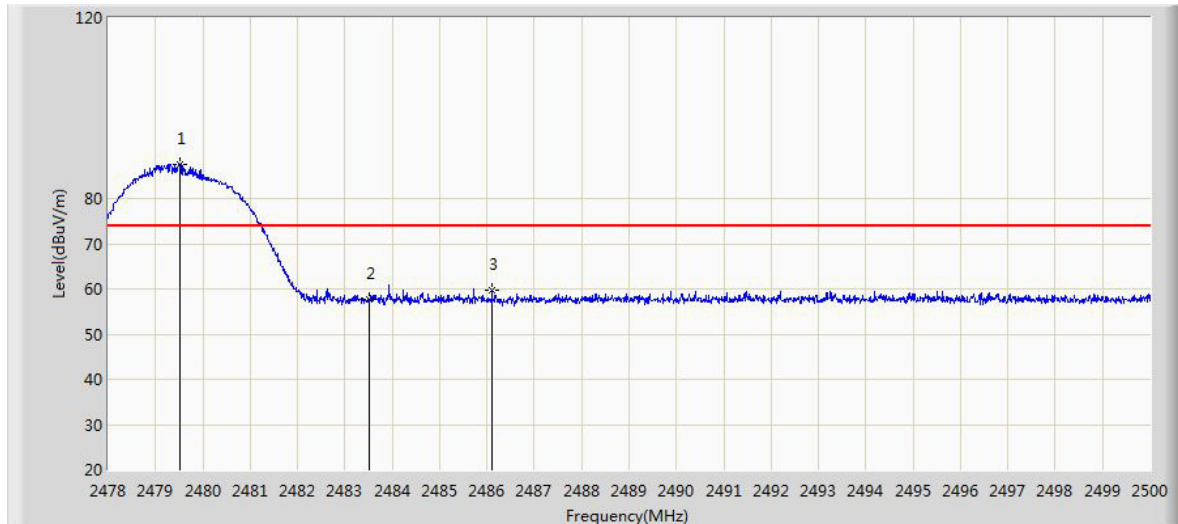
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2390.000	45.639	14.436	-8.361	54.000	31.203	AV
2402.150	81.030	49.846	N/A	N/A	31.184	AV

**Figure 67: Band Edge, TM7, Vertical, PK**


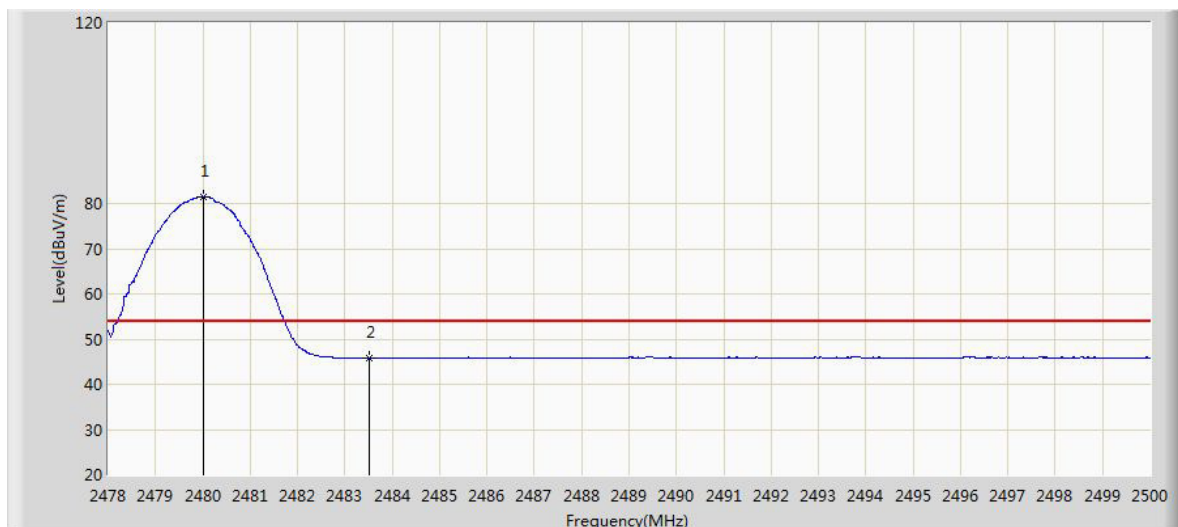
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2372.272	60.122	28.886	-13.878	74.000	31.236	PK
2390.000	57.407	26.204	-16.593	74.000	31.203	PK
2401.865	89.076	57.892	N/A	N/A	31.184	PK

**Figure 68: Band Edge, TM7, Vertical, AV**


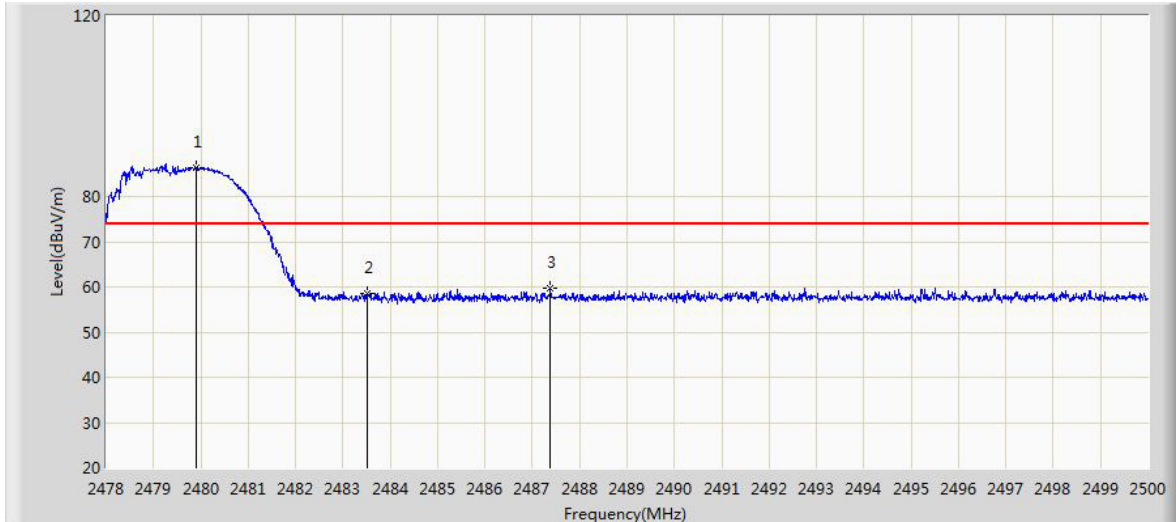
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2390.000	45.703	14.500	-8.297	54.000	31.203	AV
2401.960	83.616	52.432	N/A	N/A	31.184	AV

**Figure 69: Band Edge, TM9, Horizontal, PK**


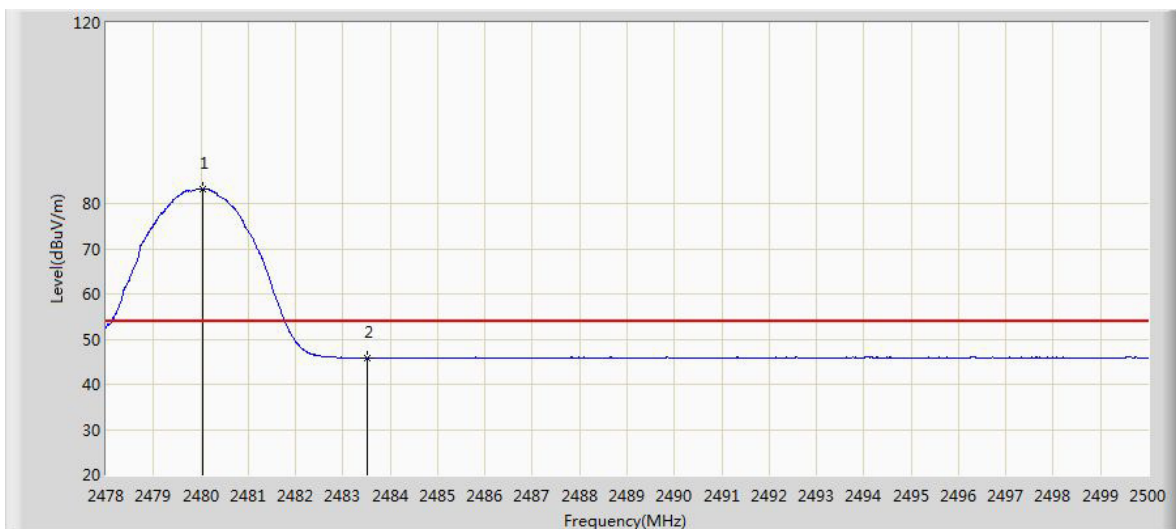
Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.529	87.681	56.498	N/A	N/A	31.182	PK
2483.500	57.657	26.464	-16.343	74.000	31.194	PK
2486.107	59.727	28.527	-14.273	74.000	31.200	PK

**Figure 70: Band Edge, TM9, Horizontal, AV**


Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2480.002	81.499	50.315	N/A	N/A	31.184	AV
2483.500	45.782	14.589	-8.218	54.000	31.194	AV

**Figure 71: Band Edge, TM9, Vertical, PK**


Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2479.892	86.316	55.132	N/A	N/A	31.184	PK
2483.500	58.589	27.396	-15.411	74.000	31.194	PK
2487.372	59.599	28.395	-14.401	74.000	31.204	PK

**Figure 72: Band Edge, TM9, Vertical, AV**


Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBuV]	Over Limit [dB]	Limit [dBuV/m]	Factor [dB]	Type
2480.046	83.247	52.063	N/A	N/A	31.184	AV
2483.500	45.867	14.674	-8.133	54.000	31.194	AV

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