SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Telephone: +86 (0) 21 6191 5666

Fax: +86 (0) 21 6191 5678

ee.shanghai@sgs.com

1 Cover Page

RF TEST REPORT

Application No.:	SHEM1806004632CR
Applicant:	Qualcomm Atheros, Inc.
FCC ID:	PPD-QCNFA435
IC:	4104A-QCNFA435
Equipment Under Test (EUT): **NOTE:** The following sample(s) was/were submitted and identified by the client as	
Product Name:	Notebook Computer
Model No.(EUT):	Lenovo ideapad 130S-11IGM;81KT
Standards:	FCC PART 15 Subpart C: 2017 Canada RSS-247 Issue 2 Canada RSS-Gen Issue 5
Date of Receipt:	May 21, 2018
Date of Test:	May 25, 2018~ May 30, 2018
Date of Issue:	May 31, 2018
Test Result:	**Refer to test Summary***

*In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Parlam Zhan
E&E Section Manager

2 Version

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
00	/	2018-5-31	/	Original

Authorized for issue by:				
Engineer		Vincent Zhu **Vincent Zhu /Project Engineer**		2018-5-31 **Date**
Reviewer		Eddy Zong **Eddy Zong /Reviewer**		2018-5-31 **Date**

3 Test Summary

Test Item	Test Requirement	Test method	Result
Conducted Output Power	FCC Part 15, Subpart C Section 15.247 (b)(3) Canada RSS-247 Issue 2 Canada RSS-Gen Issue 5	ANSI C63.10 (2013) Section 11.9.1.2	PASS
Radiated Spurious Emissions and Band-edge	FCC Part 15, Subpart C Section 15.209&15.205 Canada RSS-247 Issue 2 Canada RSS-Gen Issue 5	ANSI C63.10 (2013) Section 6.4&6.5&6.6&6.10	PASS

4 Contents

Page

1 COVER PAGE 1

2 VERSION 2

3 TEST SUMMARY 3

4 CONTENTS 4

5 GENERAL INFORMATION 5

5.1 CLIENT INFORMATION 5
5.2 GENERAL DESCRIPTION OF E.U.T. 5
5.3 TECHNICAL SPECIFICATIONS 5
5.4 TEST MODE 6
5.5 TEST CHANNEL 6
5.6 DESCRIPTION OF SUPPORT UNITS 6
5.7 TEST LOCATION 6
5.8 TEST FACILITY 7
5.9 MEASUREMENT UNCERTAINTY 7

6 EQUIPMENTS USED DURING TEST 8

7 TEST RESULTS 9

7.1 E.U.T. TEST CONDITIONS 9
7.2 CONDUCTED OUTPUT POWER 10
7.3 RADIATED SPURIOUS EMISSIONS AND BAND-EDGE 13
7.3.1 Radiated Spurious Emissions 16
7.3.2 Radiated Band edge 39

5 General Information

5.1 Client Information

Applicant: Qualcomm Atheros, Inc.
Address of Applicant: 1700 Technology Drive, San Jose, CA 95110
Manufacturer: Qualcomm Atheros, Inc.
Address of Manufacturer: 1700 Technology Drive, San Jose, CA 95110
Factory:N/A
Address of Factory:N/A

5.2 General Description of E.U.T.

Product Description:	802.11 a/b/g/n/ac+Bluetooth 1T/1R	
Brand Name:	Lenovo	
Power Adapter Power Rating :	Adapter 1 Brand Name: Lenovo Model : ADP-45DW B Input: 100-240V~1A 50-60Hz Output: 20V ⎓2.25A	Adapter 2 Brand Name: Lenovo Model : PA-1450-55LL Input: 100-240V~1.7A 50-60Hz Output: 20V ⎓2.25A
	Adapter 3 Brand Name: Lenovo Model : ADL45WCC Input: 100-240V~1.5A 50-60Hz Output: 20V ⎓2.25A	
Test Voltage:	AC 120V,60Hz	

5.3 Technical Specifications

Operation Frequency:	802.11 b/g/n(HT20): 2412MHz~2462MHz 802.11 n(HT40): 2422MHz~2452MHz Bluetooth:2402~2480MHz		
Modulation Technique:	802.11 b: DSSS(CCK, DQPSK, DBPSK) 802.11 g/n(HT20/n(HT40): OFDM(64QAM, 16QAM, QPSK, BPSK) Bluetooth 2.1+EDR:GFSK for 1Mbps;π/4-DQPSK for 2Mbps; 8DPSK for 3Mbps Bluetooth 4.1:GFSK		
Number of Channel:	802.11 b/g/n(HT20): 11 802.11 n(HT40): 7 Bluetooth 2.1+EDR :79Channels Bluetooth 4.1 :40Channels		
Antenna Type:	PIFA		
Antenna Gain:	Brand	Gain(dBi)	
		2.4G	
		TX1	TX2
	South Star	2.36	0.86
	INPAQ	2.25	1.93

5.4 Test Mode

Test Mode	Description of Test Mode
Engineering mode	Using test software to control EUT working in continuous transmitting in max power level

5.5 Test Channel

	802.11 b/g/n20(HT20)					802.11 n40(HT40)		
	Channel	Frequency	Data rate			Channel	Frequency	Data rate
			b	g	n(HT20)			
lowest channel	CH01	2412MHz	1Mbps	6Mbps	MCS0	CH03	2422MHz	MCS0
Middle channel	CH06	2437MHz	1Mbps	6Mbps	MCS0	CH06	2437MHz	MCS0
Highest channel	CH11	2462MHz	1Mbps	6Mbps	MCS0	CH09	2452MHz	MCS0

	Bluetooth 2.1+EDR				Bluetooth 4.1		
	Channel	Frequency	Data rate		Channel	Frequency	Data rate
			1Mbps	3Mbps			
lowest channel	CH00	2402MHz	GFSK	8DPSK	CH00	2402MHz	GFSK
Middle channel	CH39	2441MHz	GFSK	8DPSK	CH19	2440MHz	GFSK
Highest channel	CH78	2480MHz	GFSK	8DPSK	CH39	2480MHz	GFSK

Remark:1. Preliminary tests were performed in all tests in different data rata and antenna configurations at lowest channel, the data rates of worse case as above were chosen for final test.
2. After the preliminary san the EUT with Adapter 1 was the worst mode, which mode data was recorded.

5.6 Description of Support Units

The EUT has been tested with support equipments as below.

Description	Manufacturer	Model No.	Supplied By
-	-	-	-

Software name	Manufacturer	Version	Supplied By
QRCT-CONN30160	Qualcomm	-	Client

5.7 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

5.8 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• CNAS (No. CNAS L0599)

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• NVLAP (Certificate No. 201034-0)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the National Voluntary Laboratory Accreditation Program(NVLAP). Certificate No. 201034-0.

• FCC –Designation Number: CN5033

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

Designation Number: CN5033. Test Firm Registration Number: 479755.

• Industry Canada (IC) – IC Assigned Code: 8617A

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1.

• VCCI (Member No.: 3061)

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868,C-4336,T-12221,G-10830 respectively.

5.9 Measurement Uncertainty

No.	Parameter	Measurement Uncertainty
1	Radio Frequency	< ±1 x 10^{-5}
2	Total RF power, conducted	< ±1.5 dB
3	RF power density, conducted	< ±3 dB
4	Spurious emissions, conducted	< ±3 dB
5	All emissions, radiated	< ±6 dB (Below 1GHz) < ±6 dB (Above 1GHz)
6	Temperature	< ±1°C
7	Humidity	< ±5 %
8	DC and low frequency voltages	< ±3 %

6 Equipments Used during Test

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Conducted Emission at AC Power Line					
EMI test receiver	R&S	ESR7	SHEM162-1	2017-12-20	2018-12-19
LISN	Schwarzbeck	NSLK8127	SHEM061-1	2017-12-20	2018-12-19
LISN	EMCO	3816/2	SHEM019-1	2017-12-20	2018-12-19
Pulse limiter	R&S	ESH3-Z2	SHEM029-1	2017-12-20	2018-12-19
CE test Cable	/	CE01	/	2017-12-26	2018-12-25
Conducted Test					
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2017-12-20	2018-12-19
Spectrum Analyzer	Agilent	N9020A	SHEM181-1	2017-09-26	2018-09-25
Power meter	R&S	NRP	SHEM057-1	2017-12-26	2018-12-25
Power Sensor	R&S	NRP-Z22	SHEM136-1	2017-07-22	2018-07-21
Power Sensor	R&S	NRP-Z91	SHEM057-2	2017-12-26	2018-12-25
Signal Generator	R&S	SMR40	SHEM058-1	2017-07-03	2018-07-02
Signal Generator	Agilent	N5182A	SHEM182-1	2017-09-26	2018-09-25
Communication Tester	R&S	CMW500	SHEM183-1	2017-10-22	2018-10-21
Switcher	Tonscend	JS0806	SHEM184-1	2017-09-26	2018-09-25
Splitter	Anritsu	MA1612A	SHEM185-1	/	/
Coupler	e-meca	803-S-1	SHEM186-1	/	/
High-low Temp Cabinet	Suzhou Zhihe	TL-40	SHEM087-1	2017-09-26	2018-09-25
AC Power Stabilizer	WOCEN	6100	SHEM045-1	2017-12-26	2018-12-25
DC Power Supply	QJE	QJ30003SII	SHEM046-1	2017-12-26	2018-12-25
Conducted test cable	/	RF 01,RF 02	/	2017-12-26	2018-12-25
Radiated Test					
EMI test receiver	R&S	ESU40	SHEM051-1	2017-12-20	2018-12-19
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2017-12-20	2018-12-19
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2017-04-10	2020-04-09
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Antenna (25MHz-3GHz)	Schwarzbeck	HL562	SHEM010-1	2017-02-28	2020-02-27
Horn Antenna (1-8GHz)	Schwarzbeck	HF906	SHEM009-1	2016-10-24	2020-10-23
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2017-01-14	2020-01-13
Horn Antenna (14-40GHz)	Schwarzbeck	BBHA 9170	SHEM049-1	2017-12-03	2020-12-02
Pre-amplifier (9KHz-2GHz)	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2017-08-22	2018-08-21
Pre-amplifier (1-26.5GHz)	CLAVIIO	BDLNA-0118-352810	SHEM050-2	2017-08-22	2018-08-21
High-amplifier(14-40GHz)	Schwarzbeck	10001	SHEM049-2	2017-12-20	2018-12-19
Band filter	LORCH	9BRX-875/X150-SR	SHEM156-1	/	/
Band filter	LORCH	13BRX-1950/X500-SR	SHEM083-2	/	/
Band filter	LORCH	5BRX-2400/X200-SR	SHEM155-1	/	/
Band filter	LORCH	5BRX-5500/X1000-SR	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G-100SS	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700-3SS	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2018-07-21
RE test Cable	/	RE01, RE02, RE06	/	2017-12-26	2018-12-25

7 Test Results

7.1 E.U.T. test conditions

Requirements: 15.31(e) For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

Operating Environment:

Temperature:	20.0 -25.0 °C
Humidity:	35-75 % RH
Atmospheric Pressure:	99.2 -102 kPa

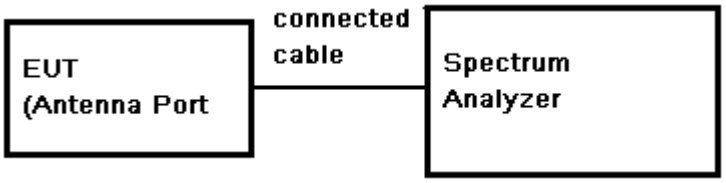
Test frequencies: According to the 15.31(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and. if required. reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table:

Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top. 1 near middle and 1 near bottom

Pursuant to Part 15.31(c) For swept frequency equipment, measurements shall be made with the frequency sweep stopped at those frequencies chosen for the measurements to be reported.

7.2 Conducted Output Power

Test Configuration:



Test Procedure:

1. The testing follows ANSI63.10-2013 clause 12.3.3.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter, Adjust the measurement in dBm by adding [10 log (1 / D)], where D is the duty cycle {e.g.,[10 log (1 / 0.25)], if the duty cycle is 25%}. and record the results in the test report.

Band	Duty Cycle(%)	Duty factor
IEEE 802.11b	99	0.04
IEEE 802.11g	95	0.22
IEEE 802.11n HT20	94	0.27
IEEE 802.11n HT40	89	0.51
BT (GFSK+8DPSK)	77	1.14
BT4.1	67	1.74

Test Limit: 30dBm

Test Result: Pass

Test Data:

WLAN 2.4G Chain0

Mode	Channel	Frequency (MHZ)	Chain0 Target power(dBm)	Turn-up tolerance (dBm)	Maximum Turn-up power (dBm)	Average power (dBm)
802.11 b	1	2412	15.5	±1.5	17	16.80
	6	2437	15.5	±1.5	17	16.66
	11	2462	15.5	±1.5	17	16.77
802.11 g	1	2412	15.5	±1.5	17	16.38
	6	2437	15.5	±1.5	17	16.65
	11	2462	15.5	±1.5	17	16.26
802.11 n 20MHz	1	2412	15.5	±1.5	17	16.35
	6	2437	15.5	±1.5	17	16.38
	11	2462	15.5	±1.5	17	16.48
802.11 n 40MHz	3	2422	15	±1.5	16.5	16.41
	6	2437	15.5	±1.5	17	16.50
	9	2452	13.5	±1.5	15	14.89

WLAN 2.4G Chain1

Mode	Channel	Frequency (MHZ)	Chain1 Target power(dBm)	Turn-up tolerance (dBm)	Maximum Turn-up power (dBm)	Average power (dBm)
802.11 b	1	2412	15.5	±1.5	17	16.75
	6	2437	15.5	±1.5	17	16.39
	11	2462	15.5	±1.5	17	16.69
802.11 g	1	2412	15.5	±1.5	17	16.34
	6	2437	15.5	±1.5	17	16.52
	11	2462	15.5	±1.5	17	16.19
802.11 n 20MHz	1	2412	15.5	±1.5	17	16.23
	6	2437	15.5	±1.5	17	16.40
	11	2462	15.5	±1.5	17	16.49
802.11 n 40MHz	3	2422	15	±1.5	16.5	16.42
	6	2437	15.5	±1.5	17	16.53

	9	**2452**	13.5	±1.5	15	14.56

Bluetooth

Band	Mode	Channel	Frequency	Averaged Power (dBm)
2.4 GHz	Bluetooth BR (GFSK)	0	2402	3.74
		39	2441	3.89
		78	2480	3.68
	Bluetooth EDR2 (π/4-DQPSK)	0	2402	0.38
		39	2441	0.59
		78	2480	0.49
	Bluetooth EDR3 (8-DPSK)	0	2402	0.32
		39	2441	0.61
		78	2480	0.55
	Bluetooth 4.1	0	2402	-0.18
		19	2440	-0.02
		39	2480	-0.05

Note: Duty factor has been offset with cable loss.

7.3 Radiated Spurious Emissions and Band-edge

Frequency Range: 9KHz to 25GHz

Test site/setup: Measurement Distance: 3m

Test instrumentation set-up:

Frequency Range	Detector	RBW	VBW
0.009MHz-0.090MHz	Peak	10kHz	30kHz
0.009MHz-0.090MHz	Average	10kHz	30kHz
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz
0.110MHz-0.490MHz	Peak	10kHz	30kHz
0.110MHz-0.490MHz	Average	10kHz	30kHz
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz
30MHz-1GHz	Peak	100kHz	300kHz
	Quasi-peak	100kHz	300kHz
Above 1GHz:	Peak	1MHz	VBW≥RBW
	Average	RBW=1MHz	See Remark

Sweep=Auto

Remark:

Above 1GHz:

AVERAGE: RBW=1MHz / Sweep=AUTO

VBW=10Hz,when duty cycle is no less than 98 percent.

VBW≧1/T, when duty cycle is less than 98 percent, where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
IEEE 802.11b	99	-	-	10Hz
IEEE 802.11g	95	2.08	0.48	0.5kHz
IEEE 802.11n HT20	94	1.93	0.52	1kHz
IEEE 802.11n HT40	89	0.95	1.05	2kHz
BT (GFSK+8DPSK)	77	2.88	0.35	0.5kHz
BT4.1	67	0.42	2.38	3kHz

15.209 Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)
0.009MHz-0.490MHz	2400/F(KHz)	128.5 ~ 93.8
0.490MHz-1.705MHz	24000/F(KHz)	73.8 ~63.0
1.705MHz-30MHz	30	69.5
30MHz-88MHz	100	40.0
88MHz-216MHz	150	43.5
216MHz-960MHz	200	46.0
960MHz-1GHz	500	54.0
Above 1GHz	500	54.0

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test Configuration:

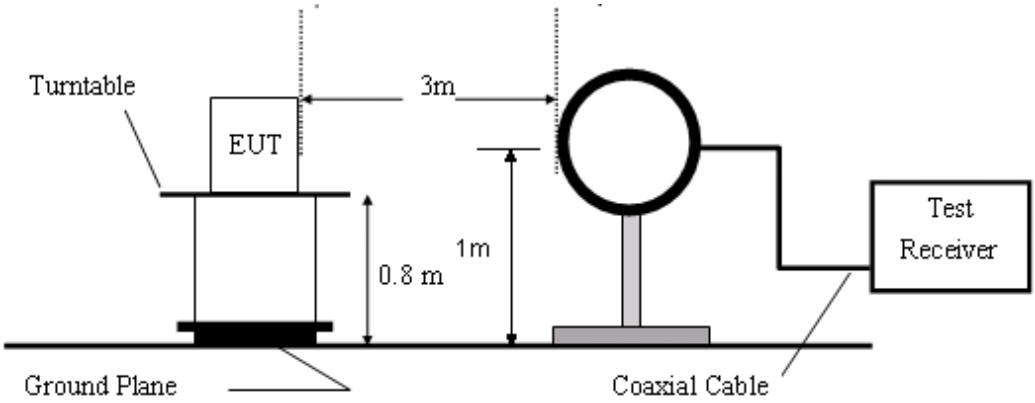


Figure1. Below 30MHz radiated emissions test configuration

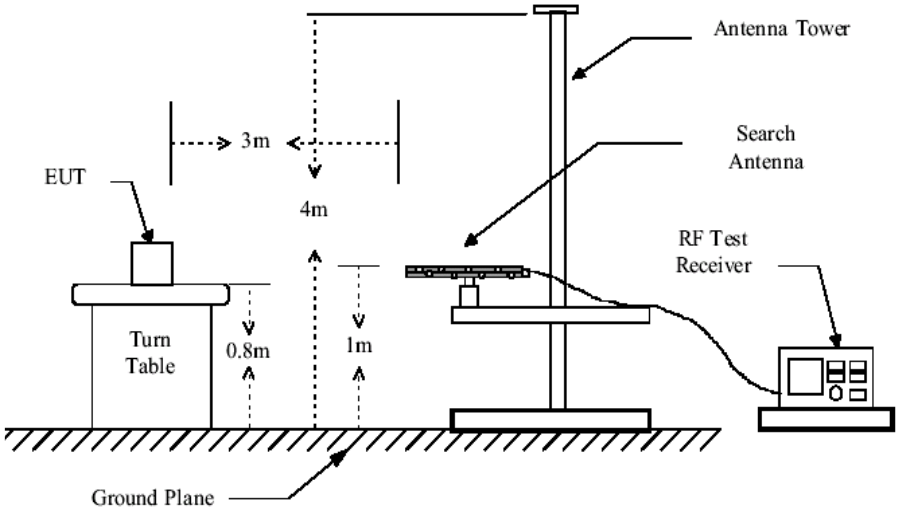


Figure2. 30MHz to 1GHz radiated emissions test configuration

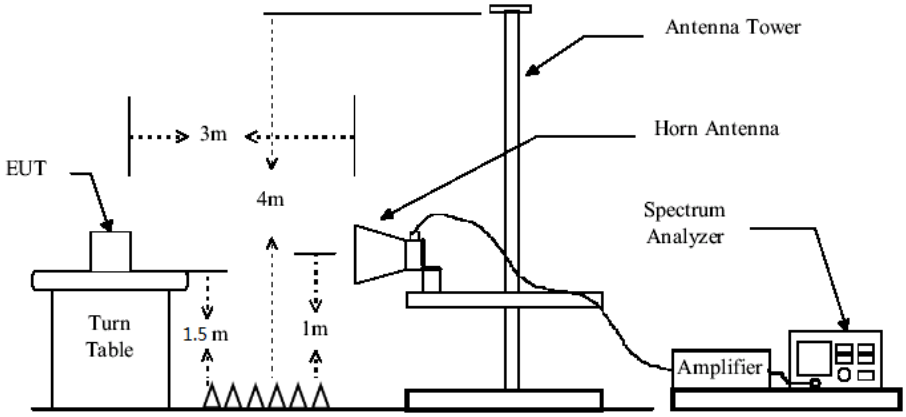


Figure3. Above 1GHz radiated emissions test configuration

Test Procedure:

1) The procedure used was ANSI Standard C63.10. The receiver was scanned from 9 KHz to 25GHz.When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.
2) Low noise amplifier was used below 1GHz, High pass Filter was used above 3GHz. We did not use any amplifier or filter between 1G and 3GHz.
3) Test were performed for their spatial orthogonal(X, Y, Z), the worst test data (X orthogonal) was submitted.
   a) For this intentional radiator operates below 25 GHz. the spectrum shall be investigated to the tenth harmonic of the highest fundamental frequency. And above the third harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to 5rd harmonic.
   b) As shown in Section, for frequencies above 1000MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.
4) Pretest under all modes below 1GHz; choose the worst case mode (802.11b) record on the report.
5) No spurious emissions were detected within 20dB of limit below 30MHz.

Test Result: Pass

7.3.1 Radiated Spurious Emissions

30MHz-1GHz:

Item	Freq.	Read Level	Correct	Result	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	Factor(dB/m)	(dBμV/m)	(dBμV/m)	(dB)		
1	32.9100	5.90	23.00	28.90	40.00	-11.10	peak	Horizontal
2	100.8100	14.93	13.64	28.57	43.50	-14.93	peak	Horizontal
3	235.6400	10.95	15.28	26.23	46.00	-19.77	peak	Horizontal
4	332.6400	7.93	17.99	25.92	46.00	-20.08	peak	Horizontal
5	519.8500	6.32	22.19	28.51	46.00	-17.49	peak	Horizontal
6	607.1500	5.81	25.02	30.83	46.00	-15.17	peak	Horizontal
1	30.0000	5.43	23.96	29.39	40.00	-10.61	peak	Vertical
2	62.0100	11.76	11.48	23.24	40.00	-16.76	peak	Vertical
3	228.8500	7.56	15.16	22.72	46.00	-23.28	peak	Vertical
4	386.9600	5.84	20.87	26.71	46.00	-19.29	peak	Vertical
5	651.7700	6.05	25.39	31.44	46.00	-14.56	peak	Vertical
6	976.7200	5.62	27.36	32.98	54.00	-21.02	peak	Vertical

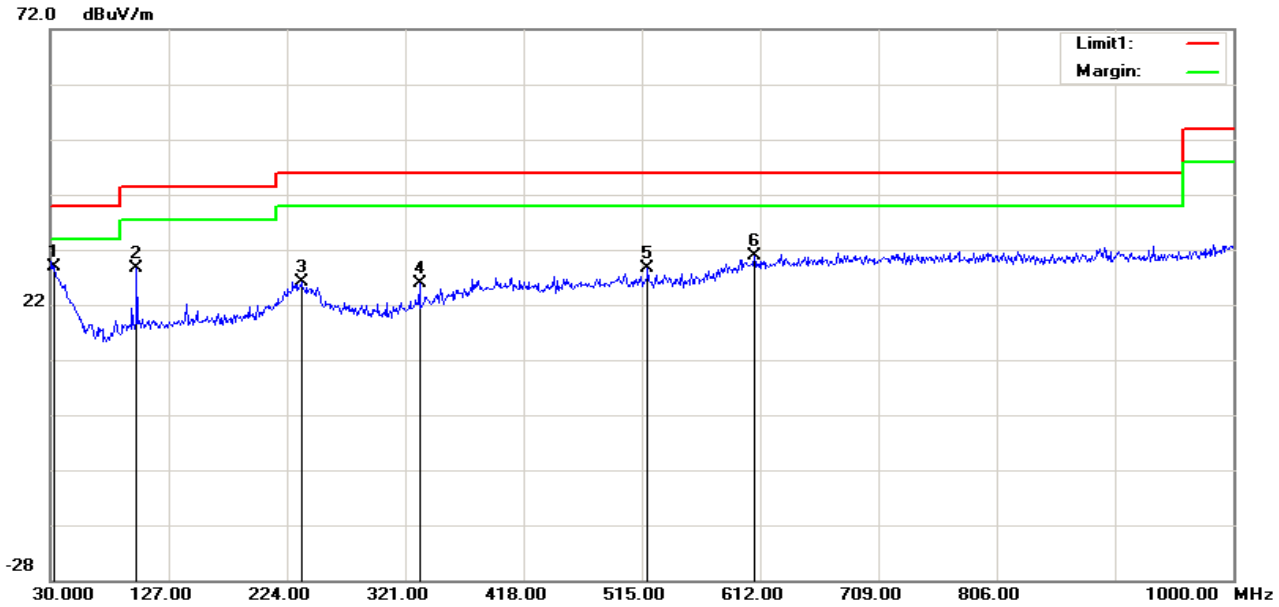
Remark:

1. *Measuring frequencies from 30 MHz to the 1GHz (No emission found between lowest internal used/generated frequency to 30 MHz).*
2. *Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Over Limit (dB) = Result (dBuV/m) –Limit Line (dBuV/m).*

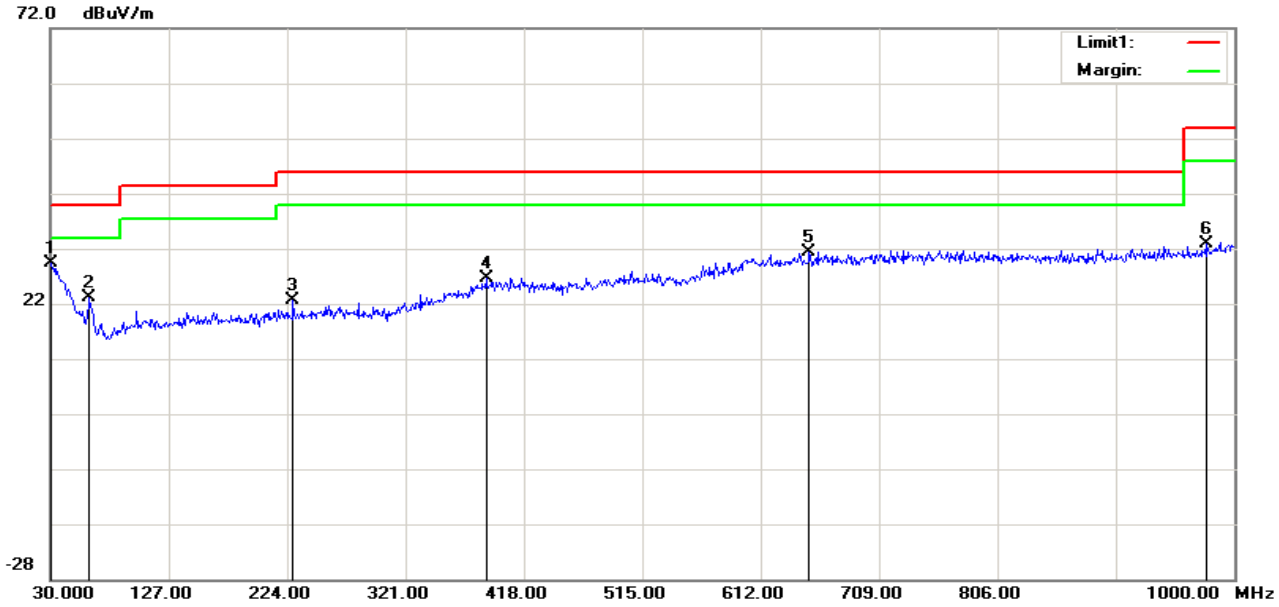
Note: Below 30MHz and above 18GHz. The measured value had enough margin over 20dB than the limit, therefore they are not reported.

Test plot as below:

Horizontal:



Vertical:

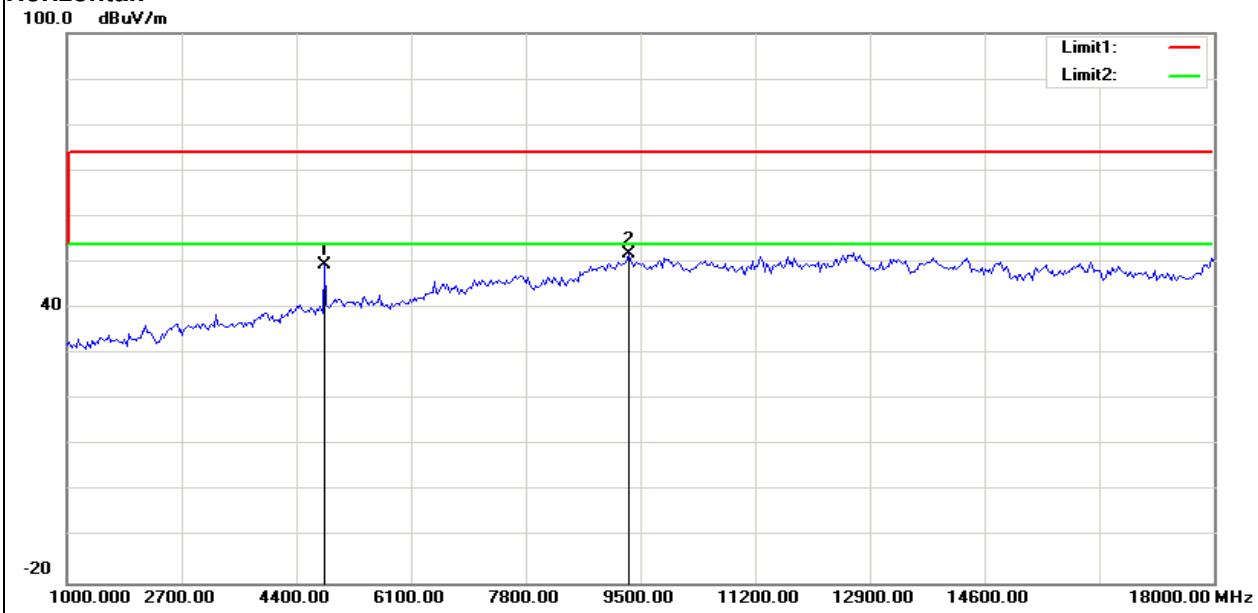


Above 1GHz:

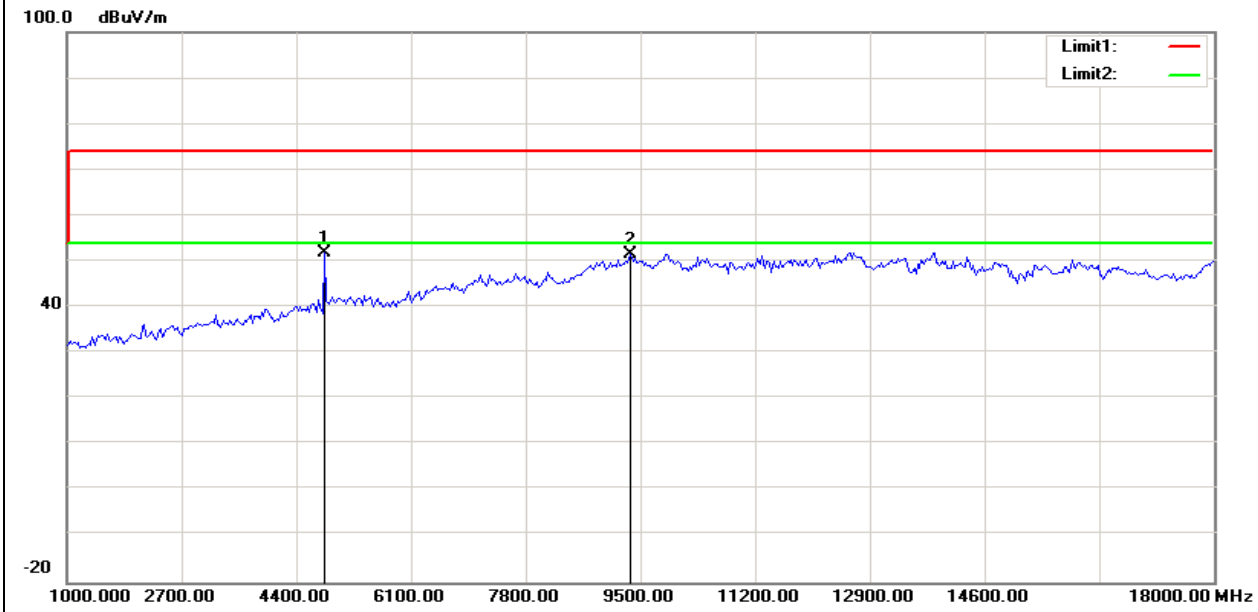
Test mode: 802.11b **Channel: 2412**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4814.103	49.83	-0.33	49.50	74.00	-24.50	peak	Horizontal
2	9336.539	41.05	10.92	51.97	74.00	-22.03	peak	Horizontal
3	4814.103	52.09	-0.33	51.76	74.00	-22.24	peak	Vertical
4	9363.782	40.54	10.98	51.52	74.00	-22.48	peak	Vertical

Horizontal:



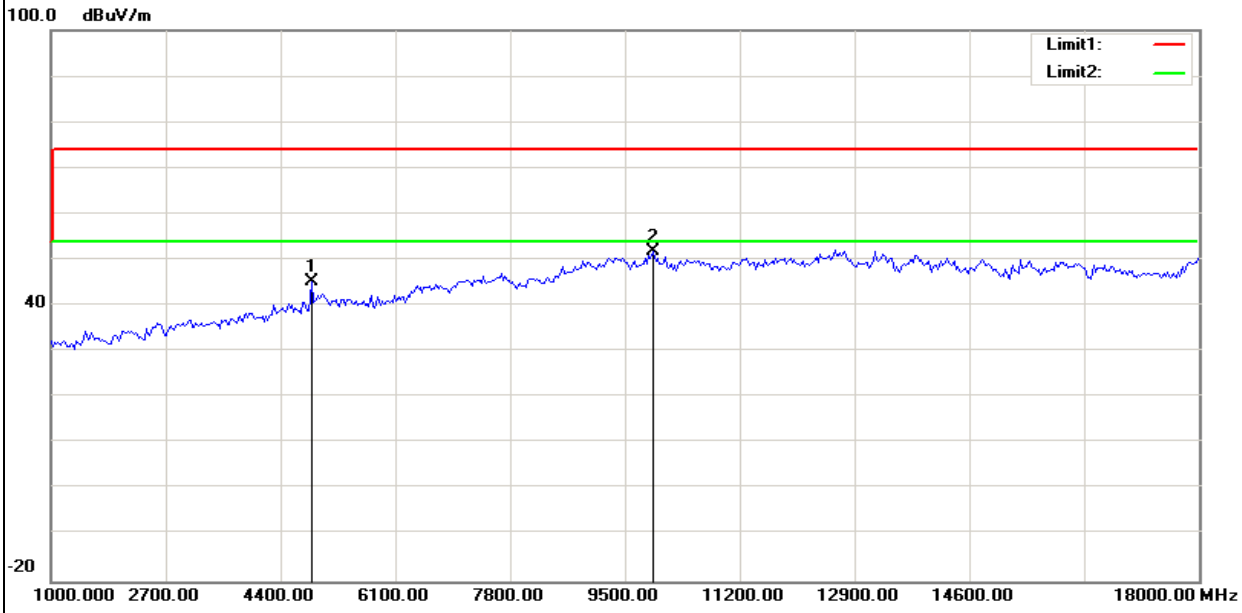
Vertical:



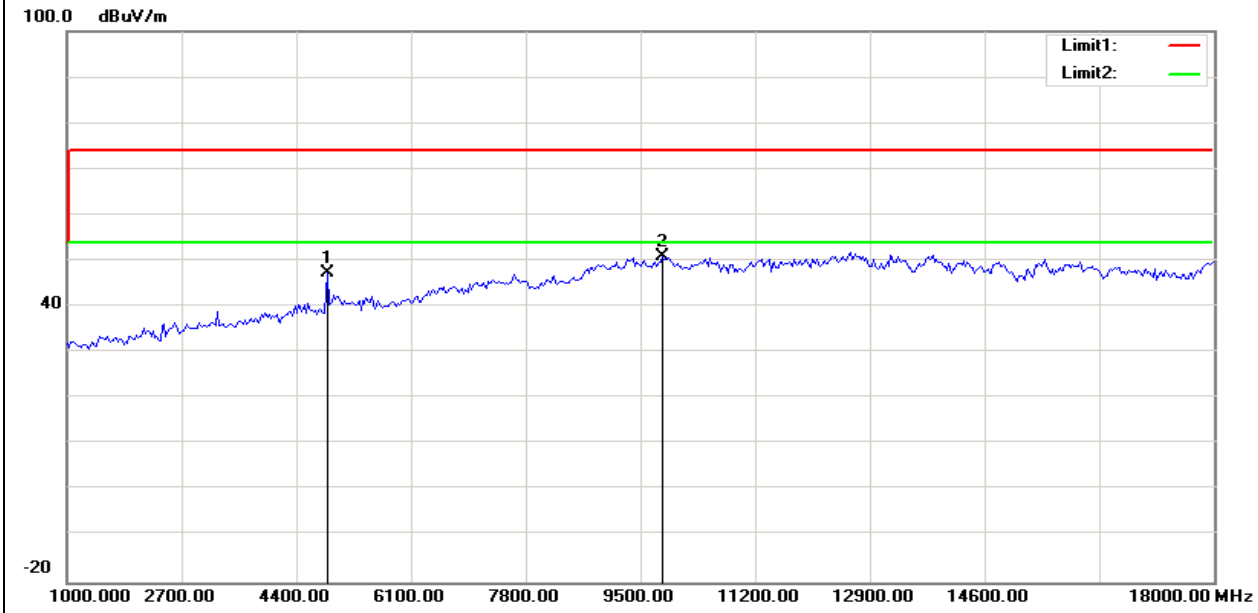
Test mode: 802.11b **Channel: 2437**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4868.590	45.49	-0.12	45.37	74.00	-28.63	peak	Horizontal
2	9908.654	40.55	11.36	51.91	74.00	-22.09	peak	Horizontal
3	4868.590	47.48	-0.12	47.36	74.00	-26.64	peak	Vertical
4	9826.923	39.51	11.34	50.85	74.00	-23.15	peak	Vertical

Horizontal:



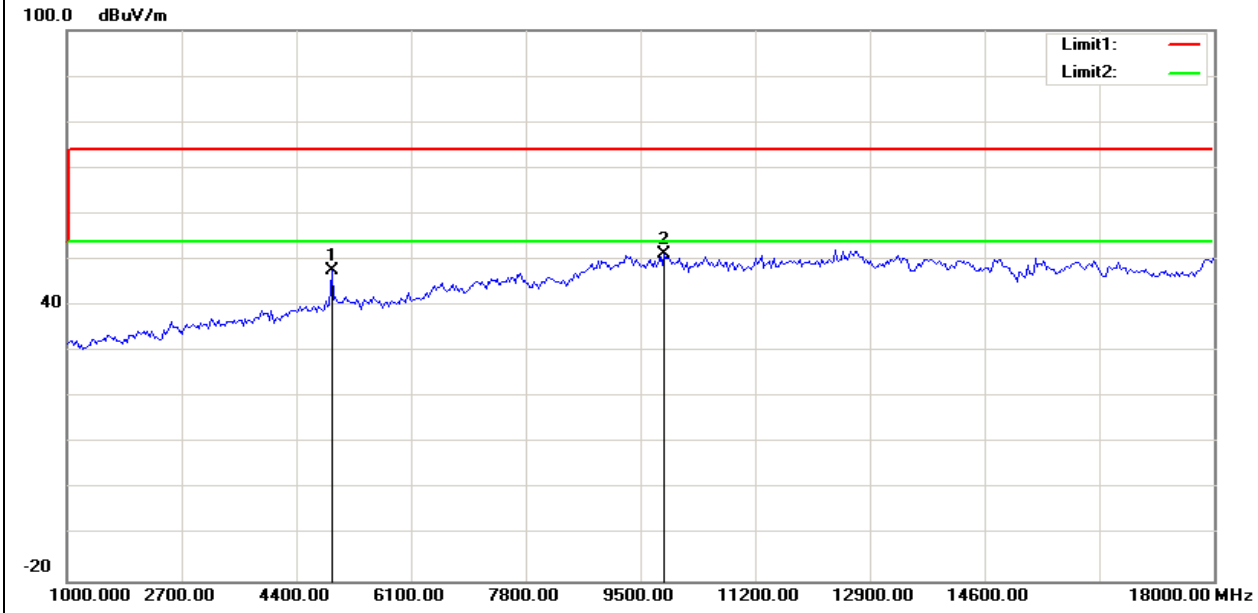
Vertical:



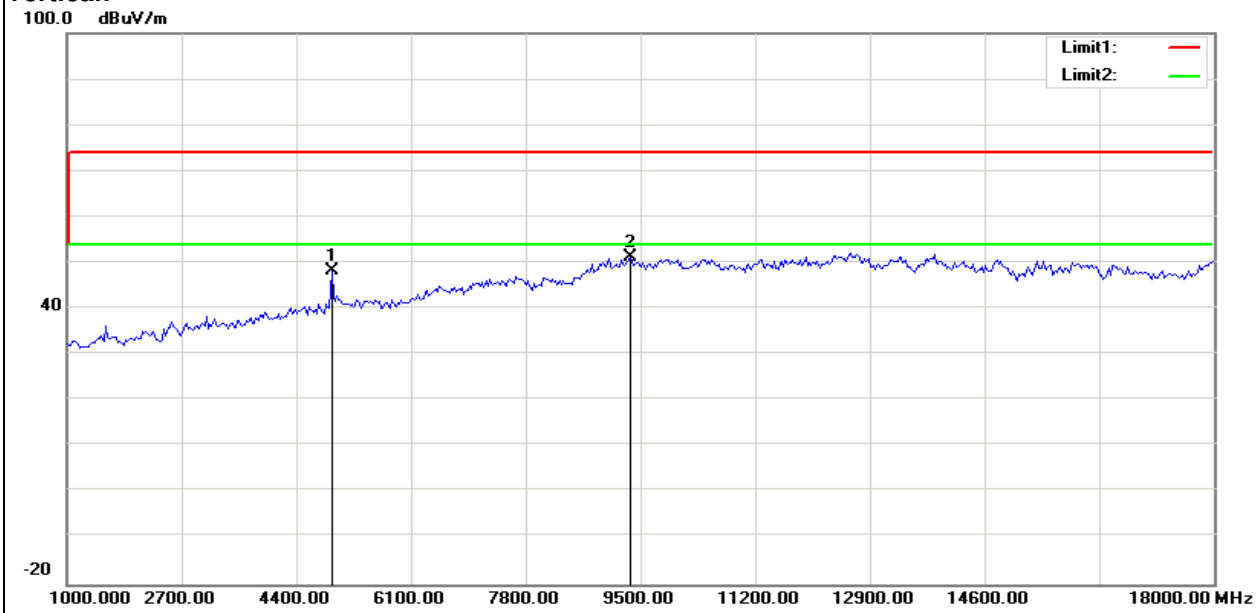
Test mode: 802.11b **Channel: 2462**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4923.077	47.55	0.08	47.63	74.00	-26.37	peak	Horizontal
2	9854.167	39.92	11.35	51.27	74.00	-22.73	peak	Horizontal
3	4923.077	48.31	0.08	48.39	74.00	-25.61	peak	Vertical
4	9363.782	40.25	10.98	51.23	74.00	-22.77	peak	Vertical

Horizontal:



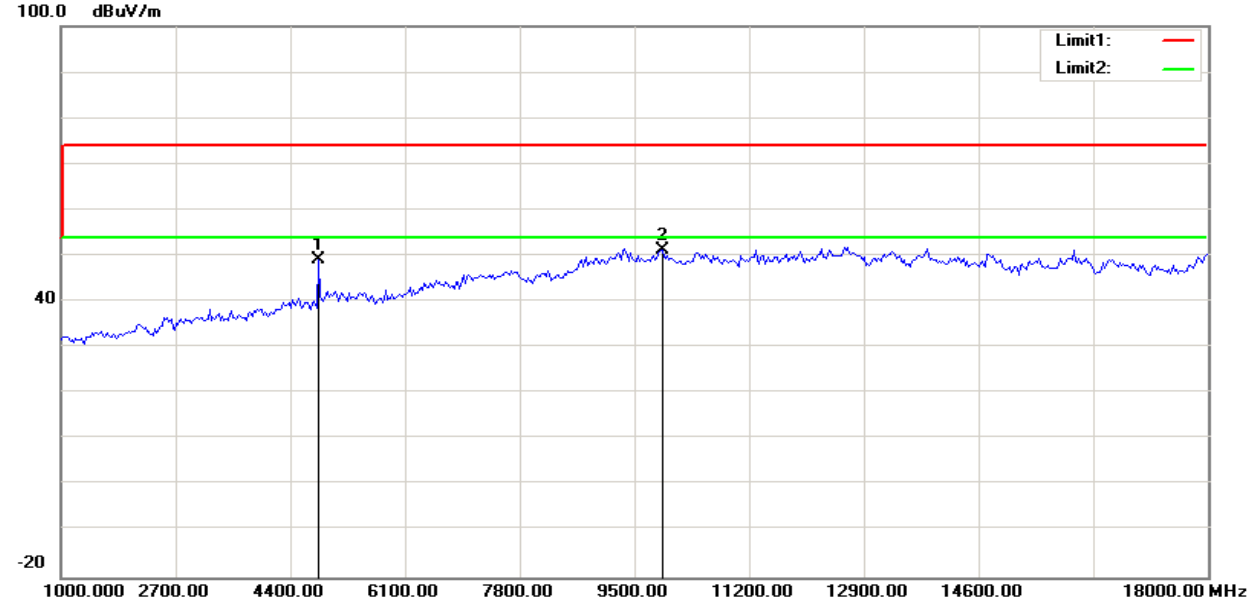
Vertical:



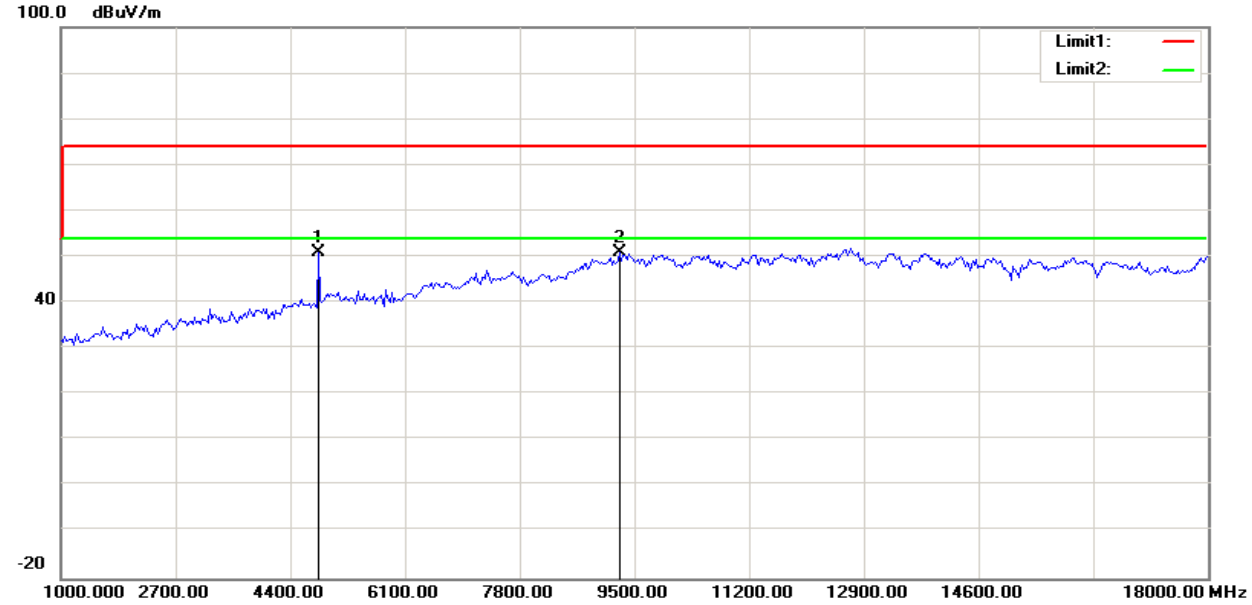
Test mode: 802.11g **Channel: 2412**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4814.103	49.43	-0.33	49.10	74.00	-24.90	peak	Horizontal
2	9908.654	39.99	11.36	51.35	74.00	-22.65	peak	Horizontal
3	4814.103	51.35	-0.33	51.02	74.00	-22.98	peak	Vertical
4	9282.051	40.02	10.80	50.82	74.00	-23.18	peak	Vertical

Horizontal:



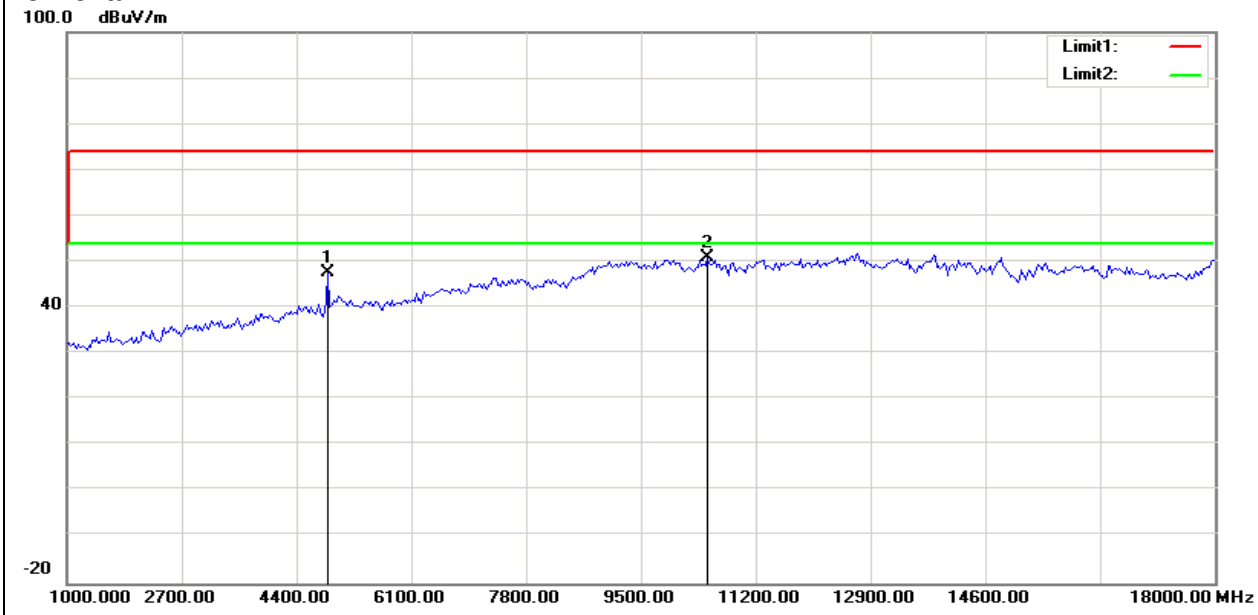
Vertical:



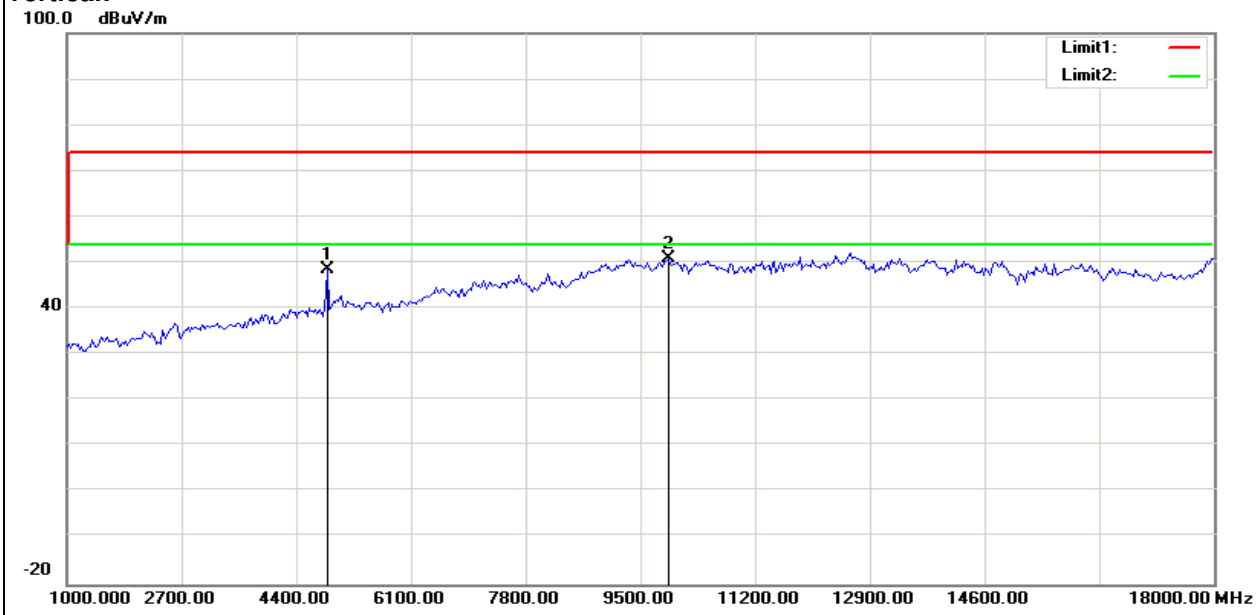
Test mode: 802.11g **Channel: 2437**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4868.590	47.77	-0.12	47.65	74.00	-26.35	peak	Horizontal
2	10480.769	39.04	11.88	50.92	74.00	-23.08	peak	Horizontal
3	4868.590	48.65	-0.12	48.53	74.00	-25.47	peak	Vertical
4	9908.654	39.62	11.36	50.98	74.00	-23.02	peak	Vertical

Horizontal:



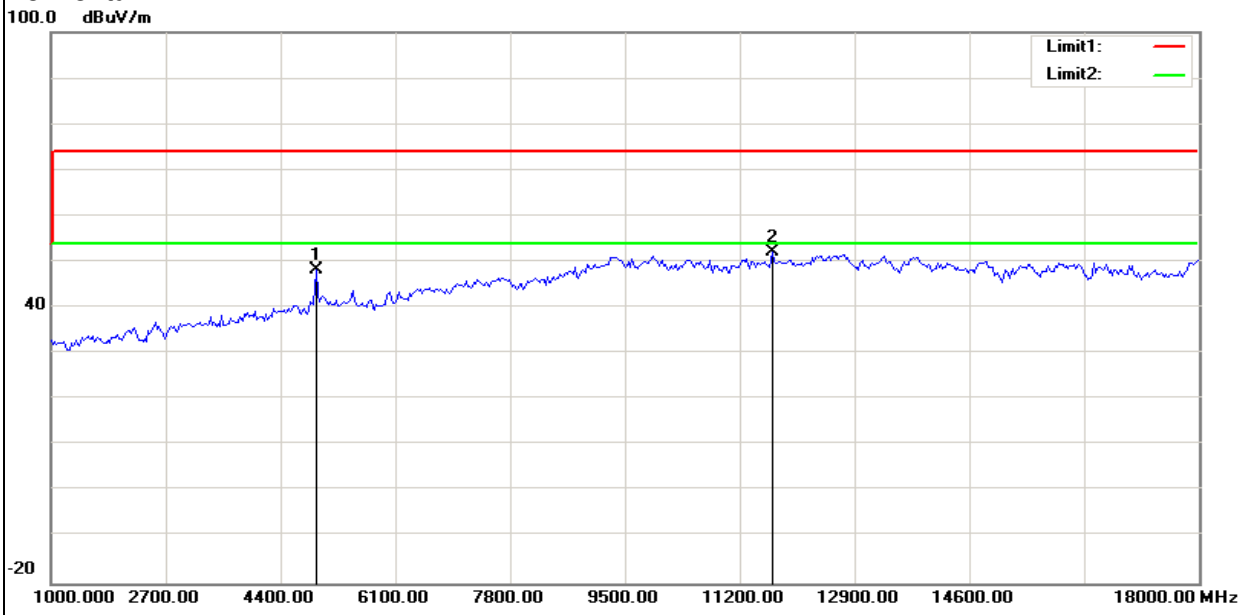
Vertical:



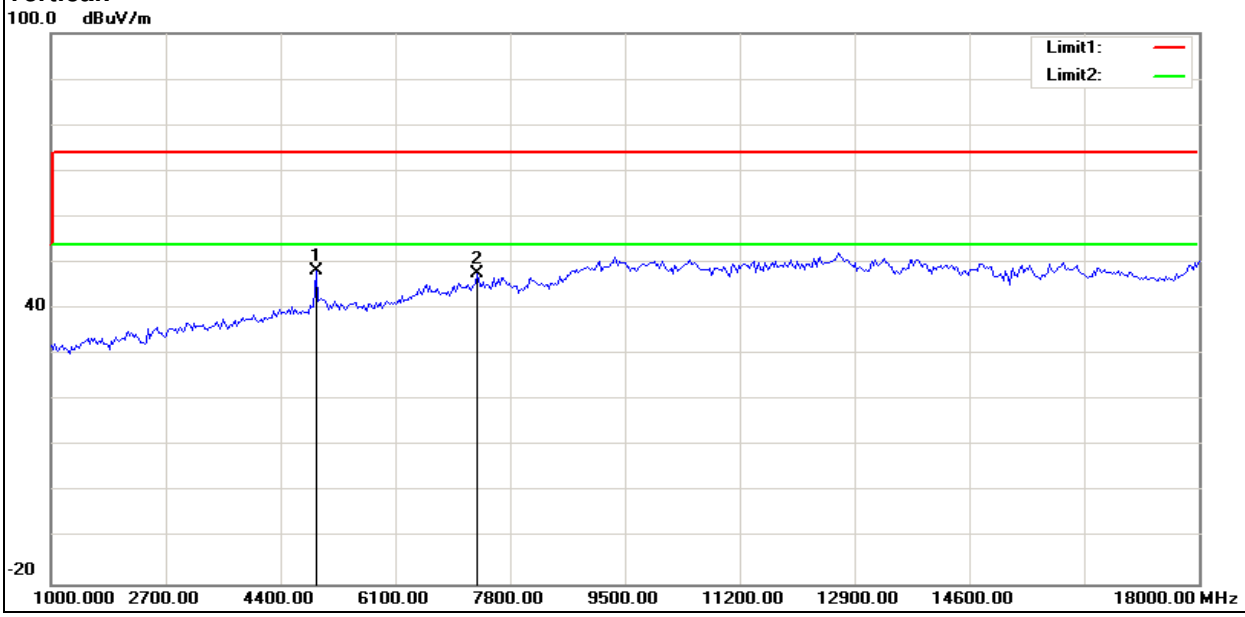
Test mode: 802.11g **Channel: 2462**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4923.077	48.20	0.08	48.28	74.00	-25.72	peak	Horizontal
2	11679.487	38.48	13.55	52.03	74.00	-21.97	peak	Horizontal
3	4923.077	48.20	0.08	48.28	74.00	-25.72	peak	Vertical
4	7320.513	42.33	5.45	47.78	74.00	-26.22	peak	Vertical

Horizontal:



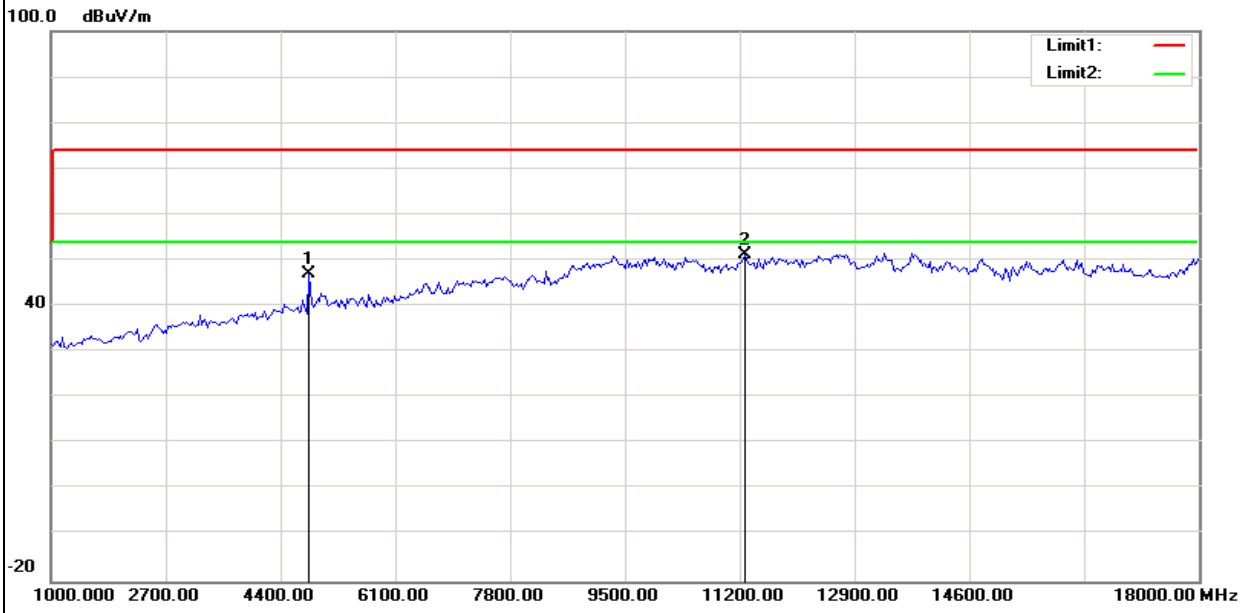
Vertical:



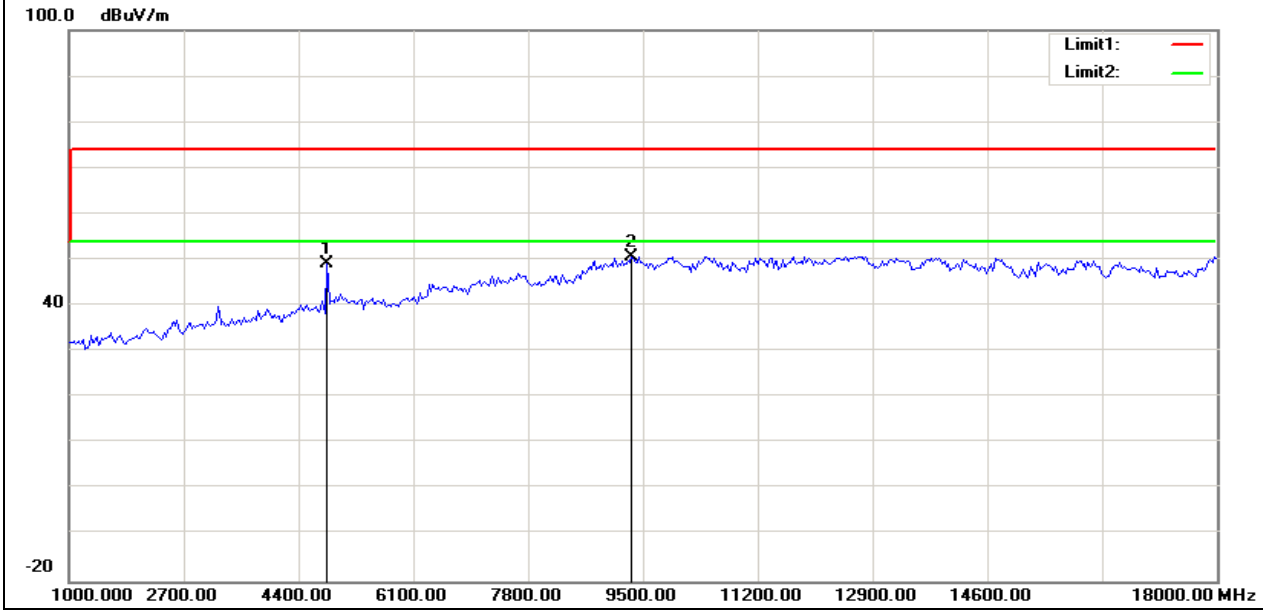
Test mode: 802.11 n(HT20) **Channel: 2412**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4814.103	47.39	-0.33	47.06	74.00	-26.94	peak	Horizontal
2	11270.833	38.48	12.78	51.26	74.00	-22.74	peak	Horizontal
3	4814.103	49.49	-0.33	49.16	74.00	-24.84	peak	Vertical
4	9336.539	39.65	10.92	50.57	74.00	-23.43	peak	Vertical

Horizontal:



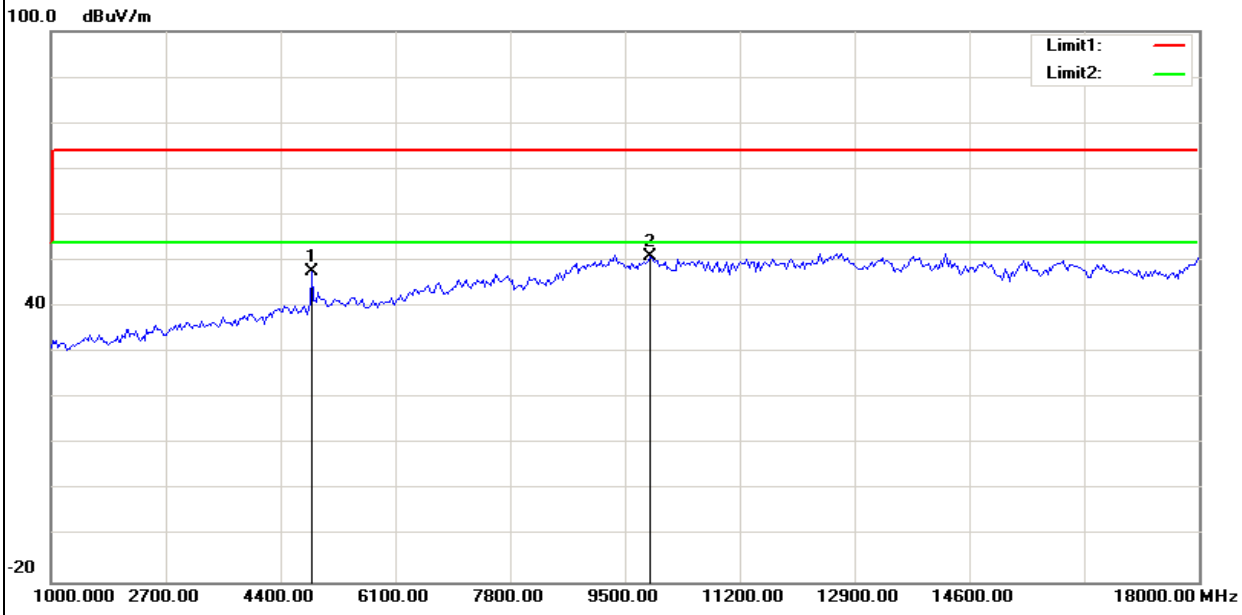
Vertical:



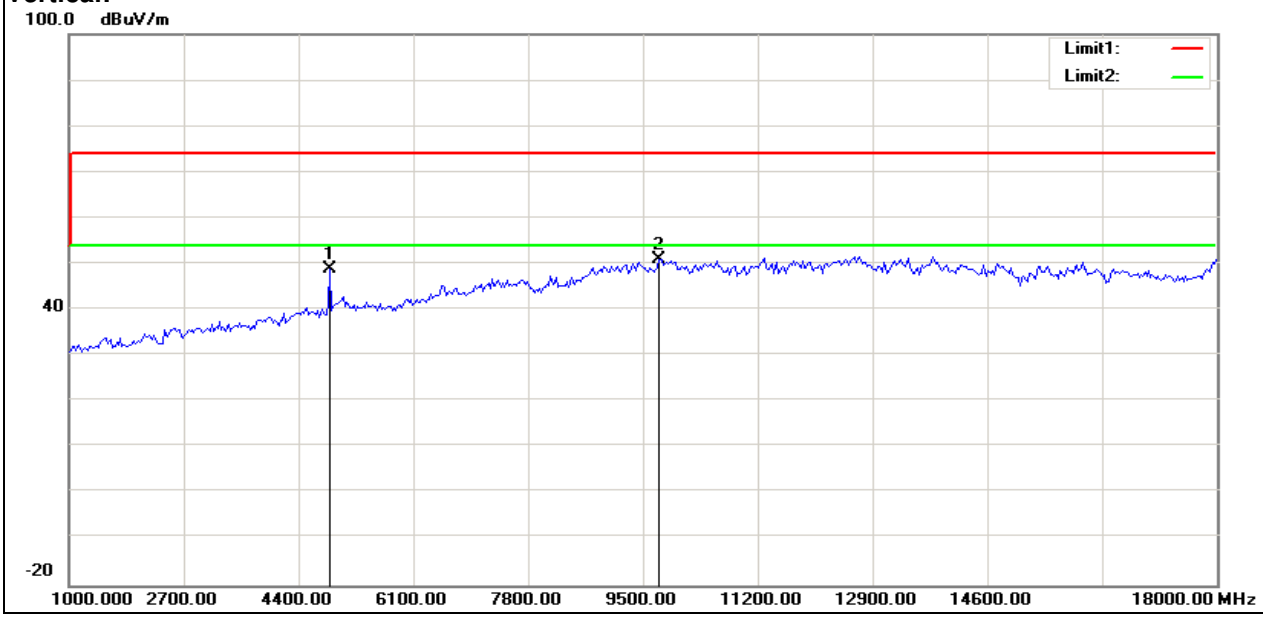
Test mode: 802.11 n(HT20) **Channel: 2437**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4868.590	47.89	-0.12	47.77	74.00	-26.23	peak	Horizontal
2	9881.410	39.54	11.35	50.89	74.00	-23.11	peak	Horizontal
3	4868.590	49.05	-0.12	48.93	74.00	-25.07	peak	Vertical
4	9745.192	39.57	11.32	50.89	74.00	-23.11	peak	Vertical

Horizontal:



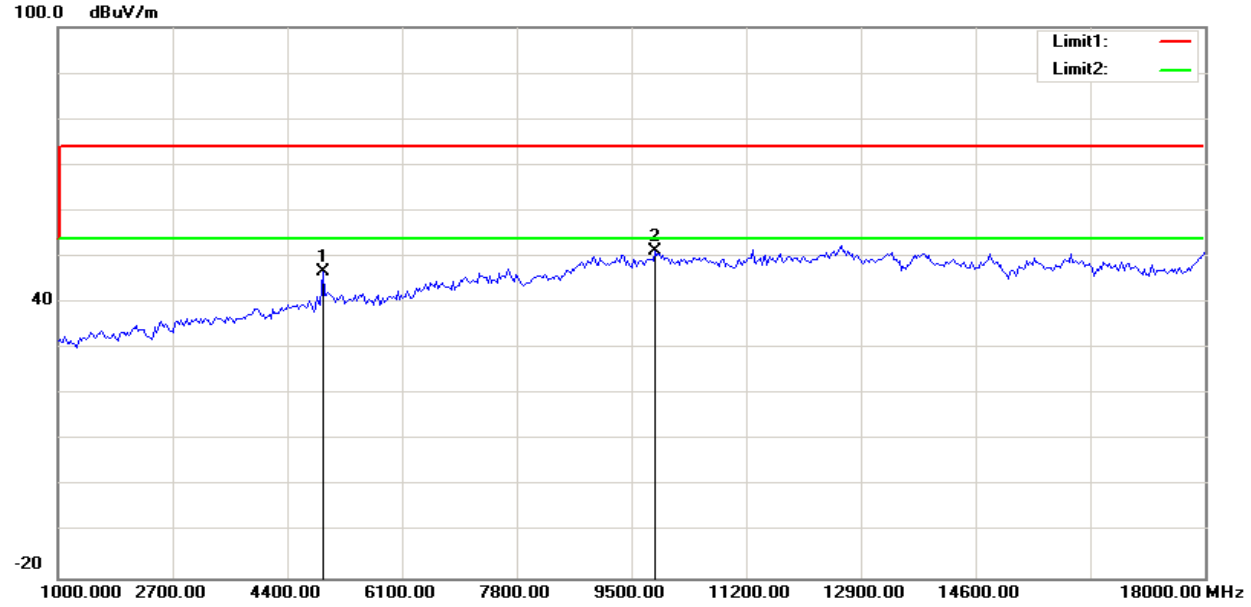
Vertical:



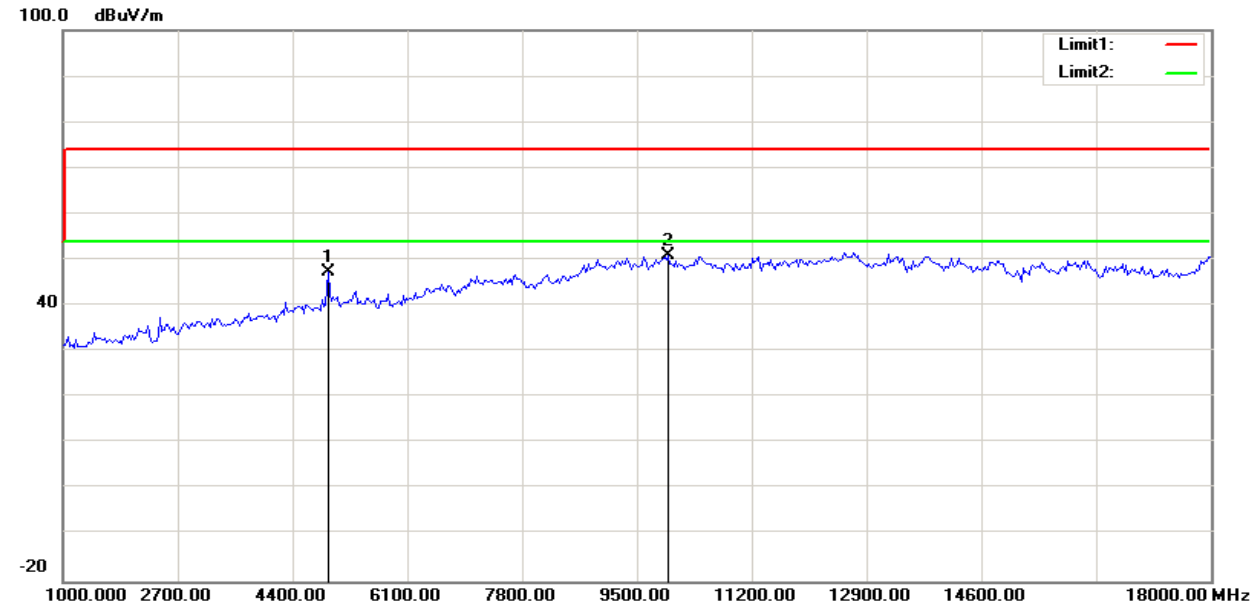
Test mode: 802.11 n(HT20) **Channel: 2462**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4923.077	46.73	0.08	46.81	74.00	-27.19	peak	Horizontal
2	9854.167	39.80	11.35	51.15	74.00	-22.85	peak	Horizontal
3	4923.077	47.31	0.08	47.39	74.00	-26.61	peak	Vertical
4	9963.141	39.44	11.37	50.81	74.00	-23.19	peak	Vertical

Horizontal:



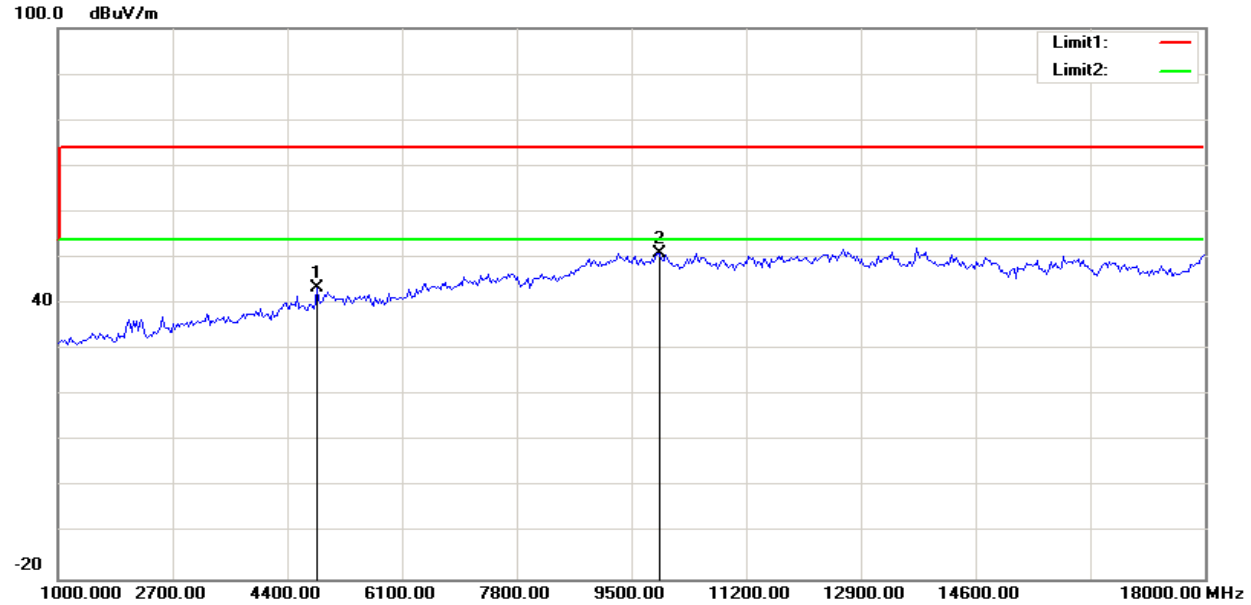
Vertical:



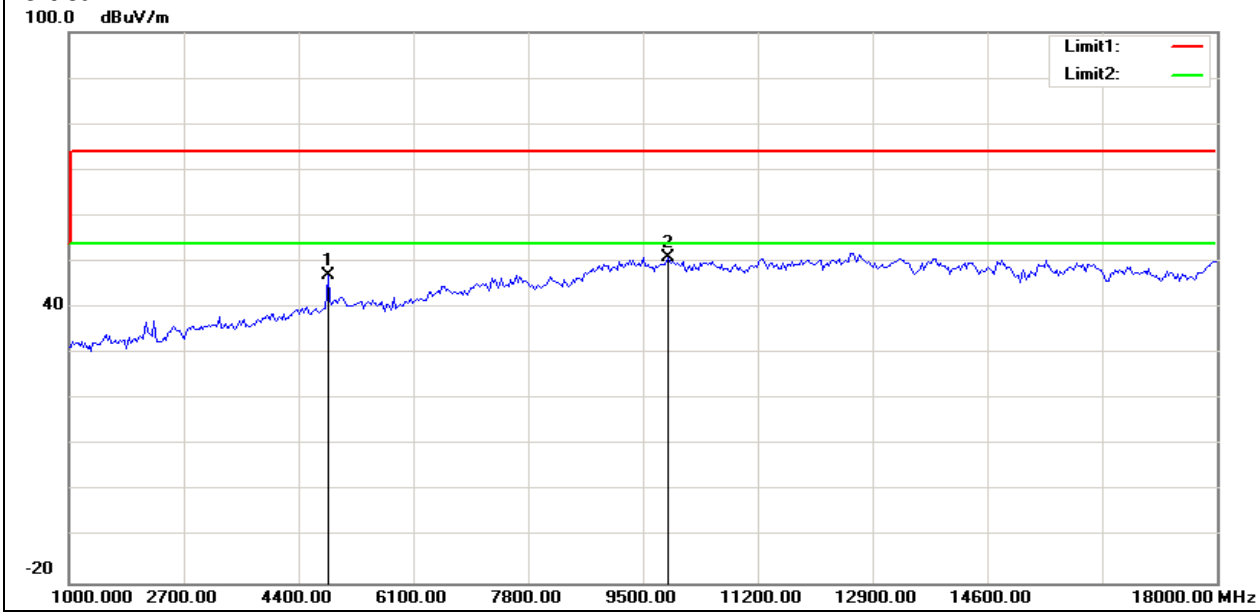
Test mode: 802.11 n(HT40) **Channel: 2422**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4841.346	43.79	-0.22	43.57	74.00	-30.43	peak	Horizontal
2	9908.654	39.63	11.36	50.99	74.00	-23.01	peak	Horizontal
3	4841.346	47.21	-0.22	46.99	74.00	-27.01	peak	Vertical
4	9881.410	39.60	11.35	50.95	74.00	-23.05	peak	Vertical

Horizontal:



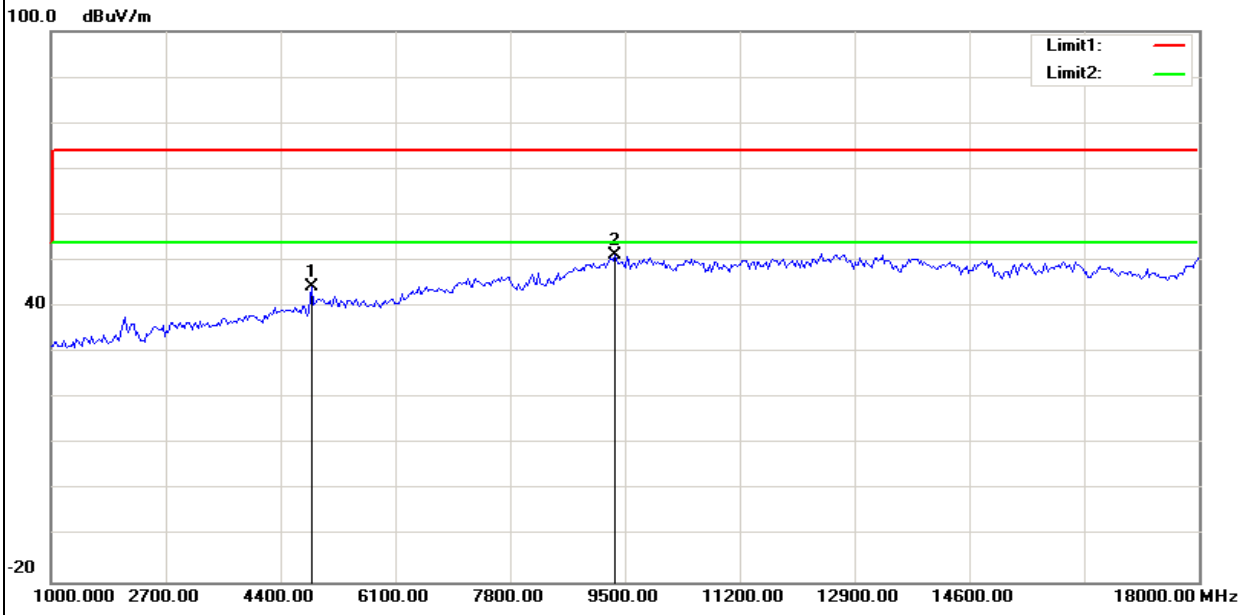
Vertical:



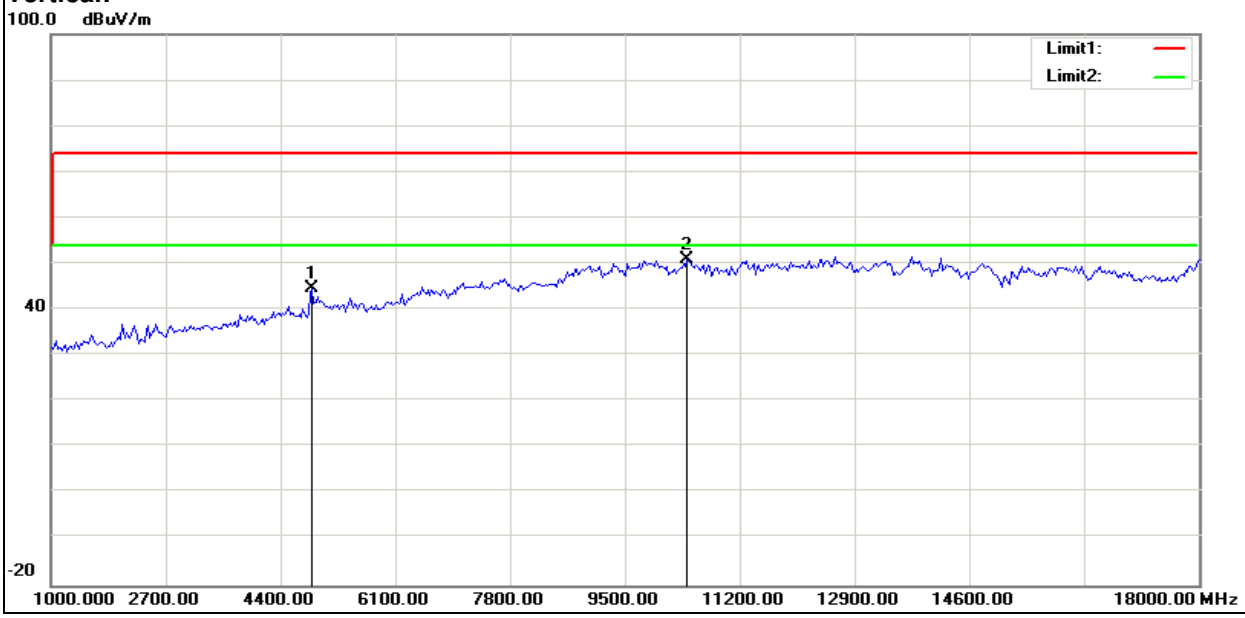
Test mode: 802.11 n(HT40) **Channel: 2437**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4868.590	44.49	-0.12	44.37	74.00	-29.63	peak	Horizontal
2	9363.782	40.17	10.98	51.15	74.00	-22.85	peak	Horizontal
3	4868.590	44.80	-0.12	44.68	74.00	-29.32	peak	Vertical
4	10426.282	39.15	11.82	50.97	74.00	-23.03	peak	Vertical

Horizontal:



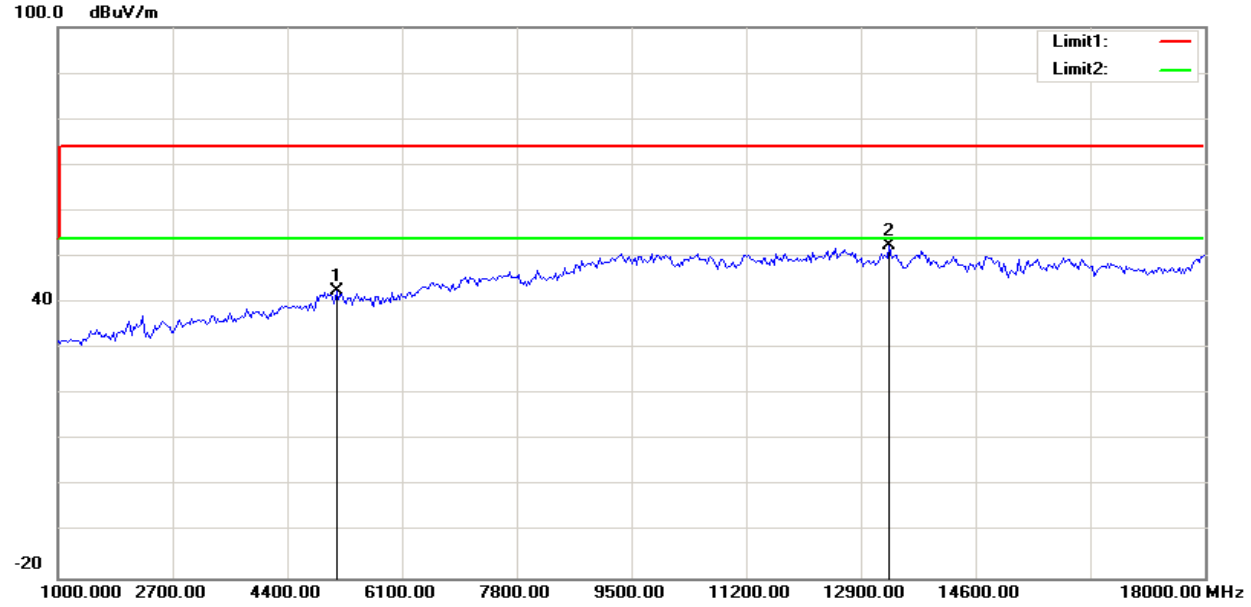
Vertical:



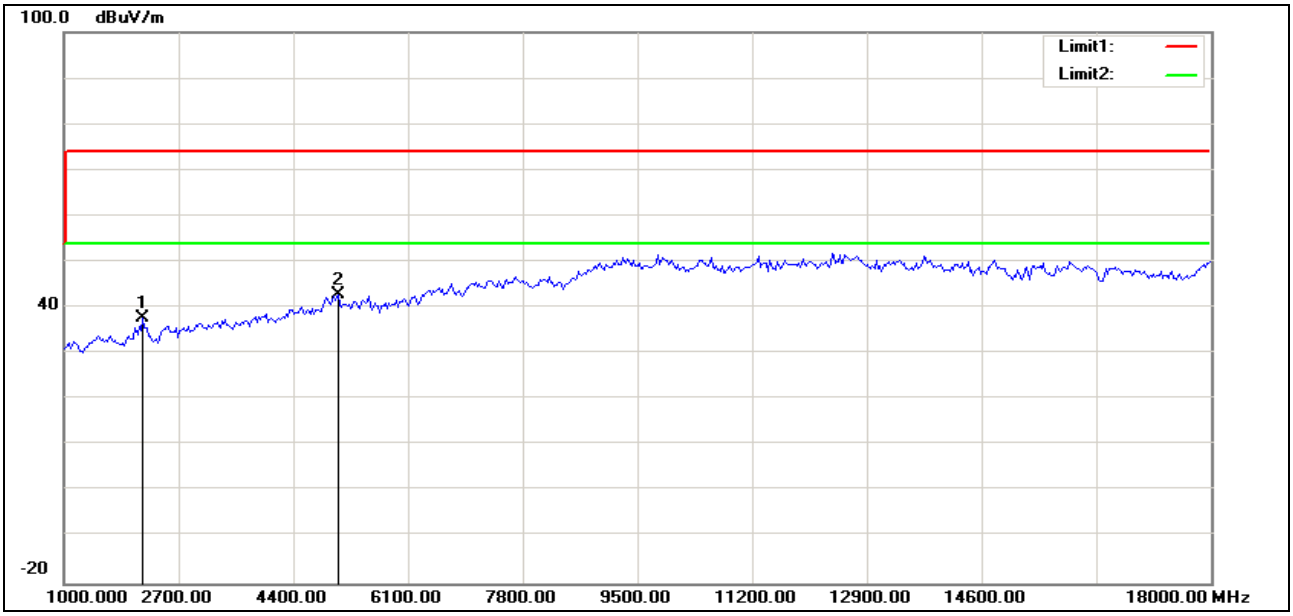
Test mode: 802.11 n(HT40) **Channel: 2452**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5141.026	42.18	0.32	42.50	74.00	-31.50	peak	Horizontal
2	13314.103	37.48	14.83	52.31	74.00	-21.69	peak	Horizontal
3	2171.474	46.13	-8.29	37.84	74.00	-36.16	peak	Vertical
4	5059.295	42.44	0.35	42.79	74.00	-31.21	peak	Vertical

Horizontal:



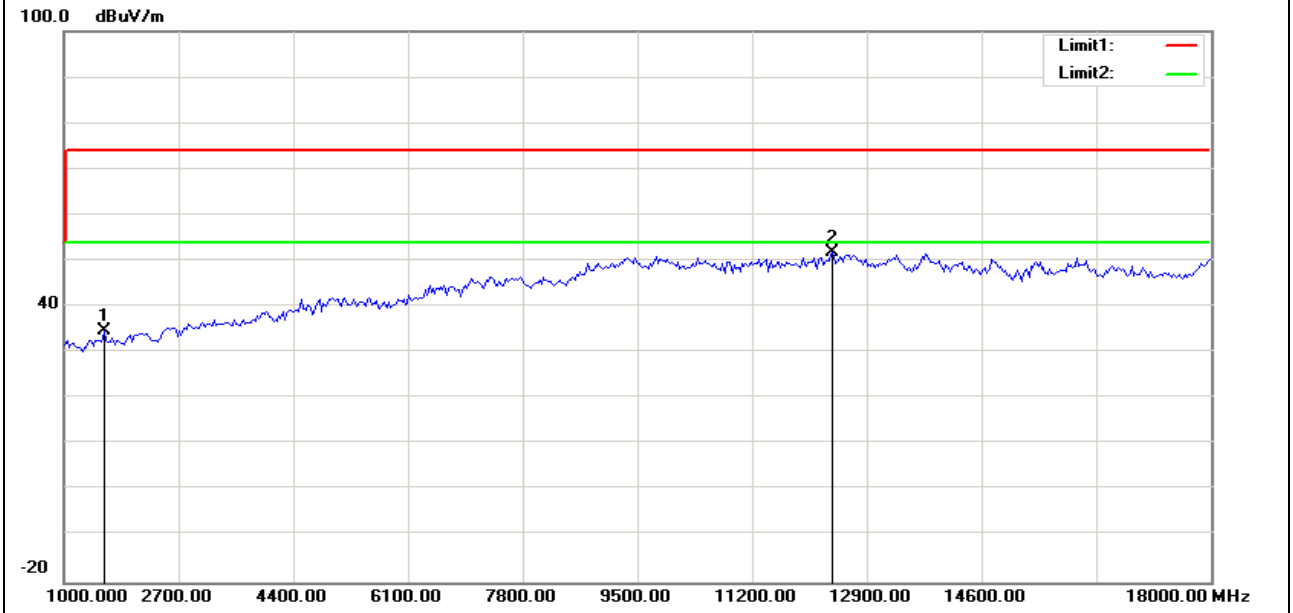
Vertical:



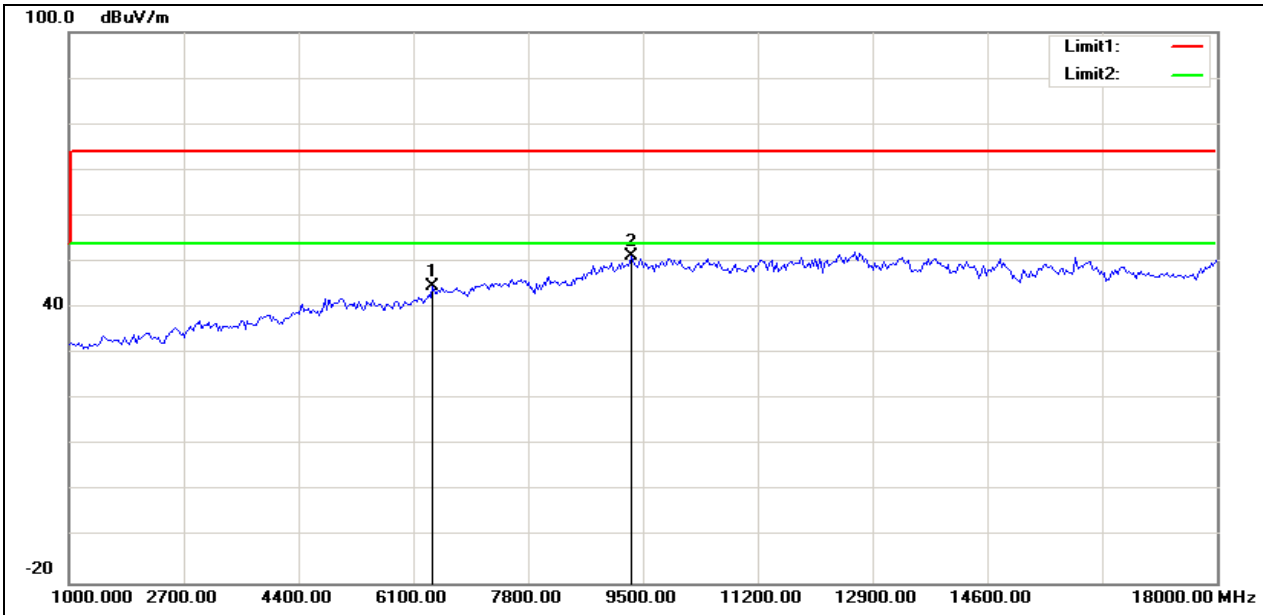
BT For GFSK **Channel: 2402**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	1599.359	44.50	-9.79	34.71	74.00	-39.29	peak	Horizontal
2	12387.820	36.65	15.21	51.86	74.00	-22.14	peak	Horizontal
3	6394.231	42.14	2.53	44.67	74.00	-29.33	peak	Vertical
4	9336.539	40.36	10.92	51.28	74.00	-22.72	peak	Vertical

Horizontal:



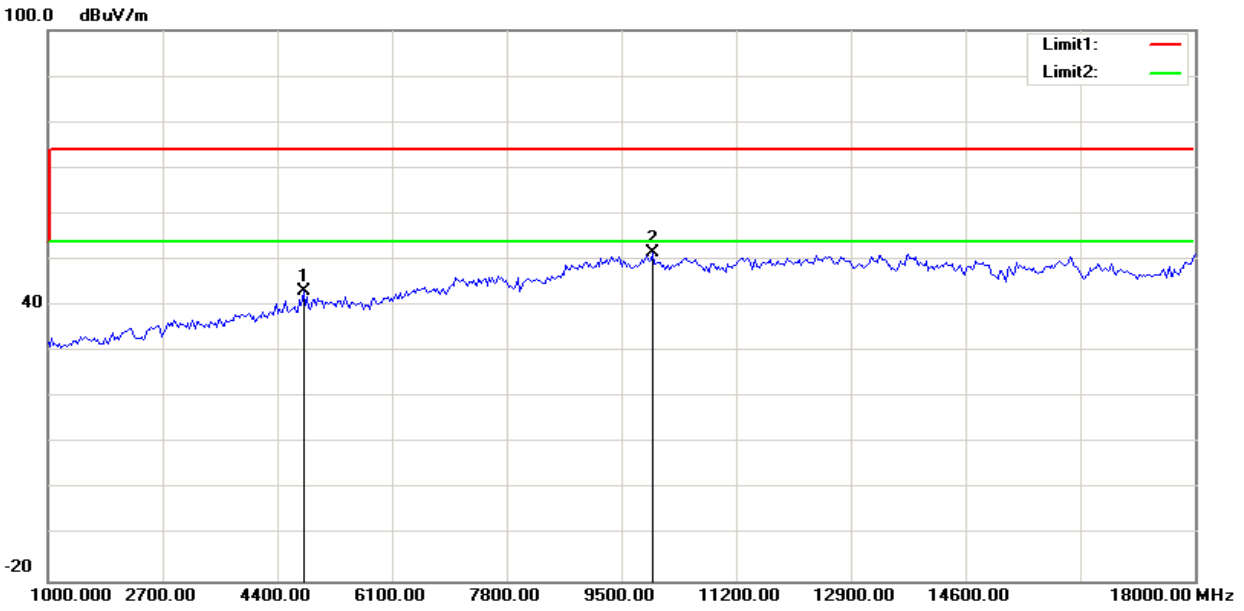
Vertical:



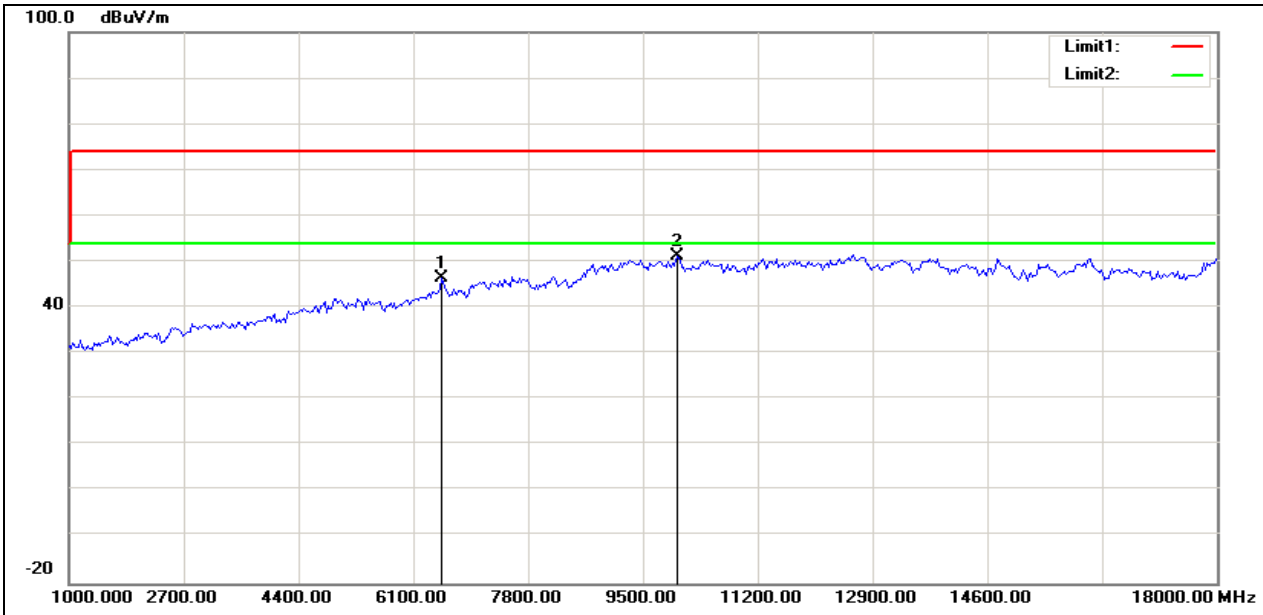
BT For GFSK **Channel: 2441**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	43.63	-0.43	43.20	74.00	-30.80	peak	Horizontal
2	9963.141	40.11	11.37	51.48	74.00	-22.52	peak	Horizontal
3	6530.449	43.21	3.19	46.40	74.00	-27.60	peak	Vertical
4	10017.628	40.00	11.40	51.40	74.00	-22.60	peak	Vertical

Horizontal:



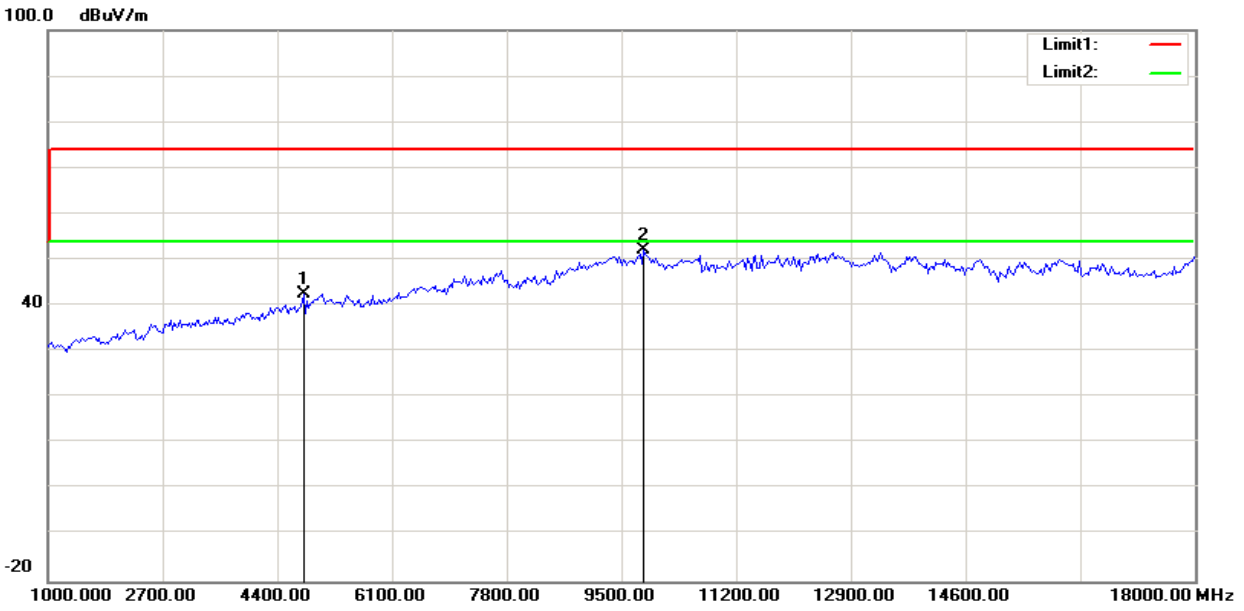
Vertical:



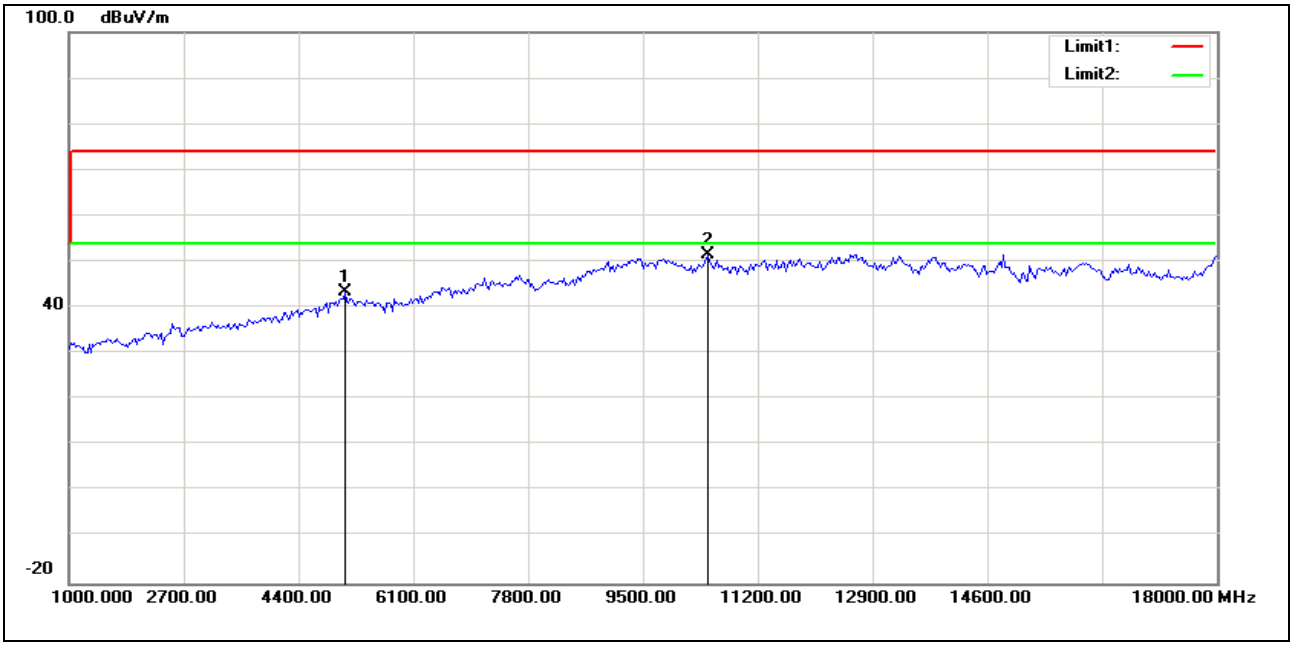
BT For GFSK **Channel: 2480**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	42.97	-0.43	42.54	74.00	-31.46	peak	Horizontal
2	9826.923	40.79	11.34	52.13	74.00	-21.87	peak	Horizontal
3	5086.538	43.24	0.34	43.58	74.00	-30.42	peak	Vertical
4	10453.526	39.84	11.85	51.69	74.00	-22.31	peak	Vertical

Horizontal:



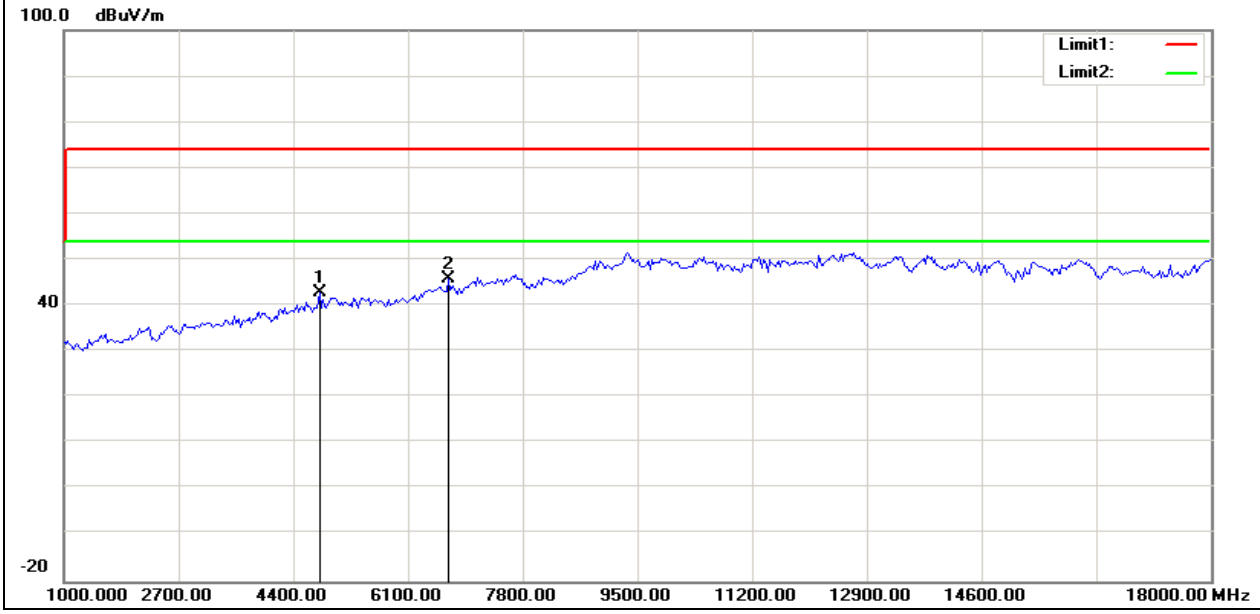
Vertical:



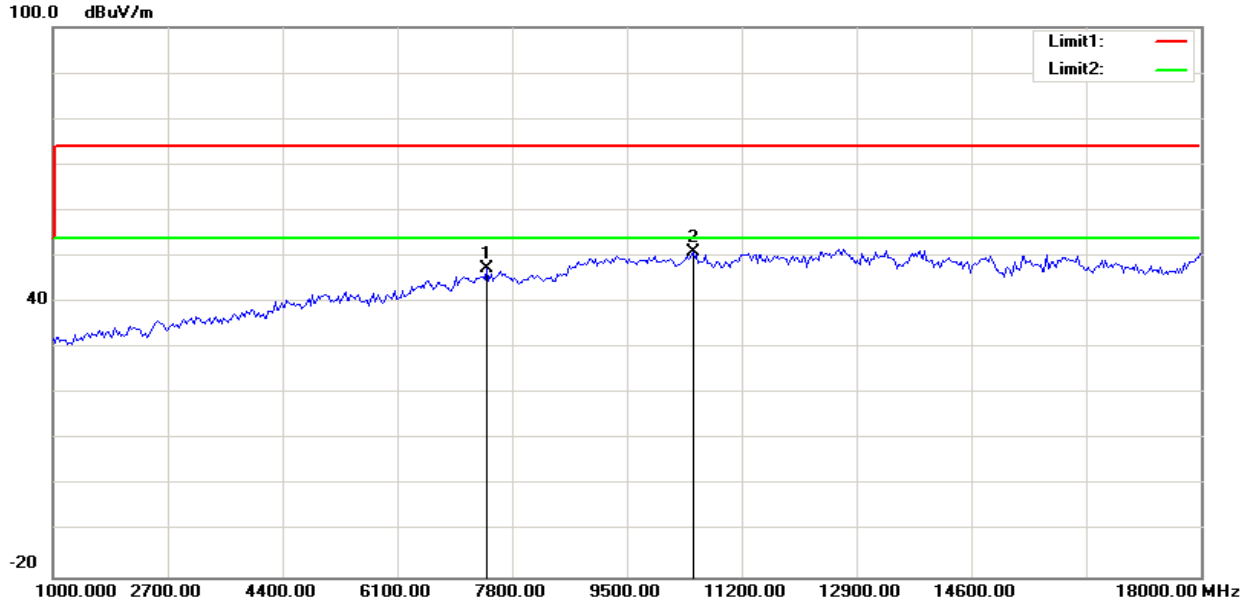
BT For 8DPSK **Channel: 2402**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	43.21	-0.43	42.78	74.00	-31.22	peak	Horizontal
2	6693.910	42.29	3.58	45.87	74.00	-28.13	peak	Horizontal
3	7429.487	41.57	5.84	47.41	74.00	-26.59	peak	Vertical
4	10480.769	39.13	11.88	51.01	74.00	-22.99	peak	Vertical

Horizontal:



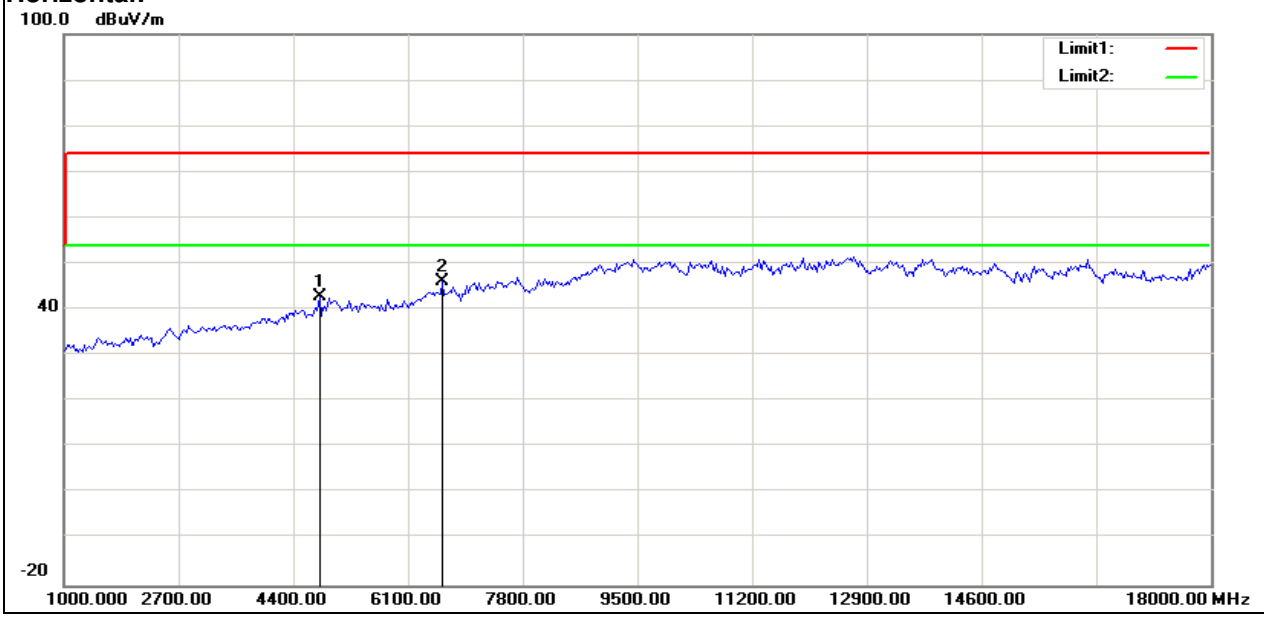
Vertical:



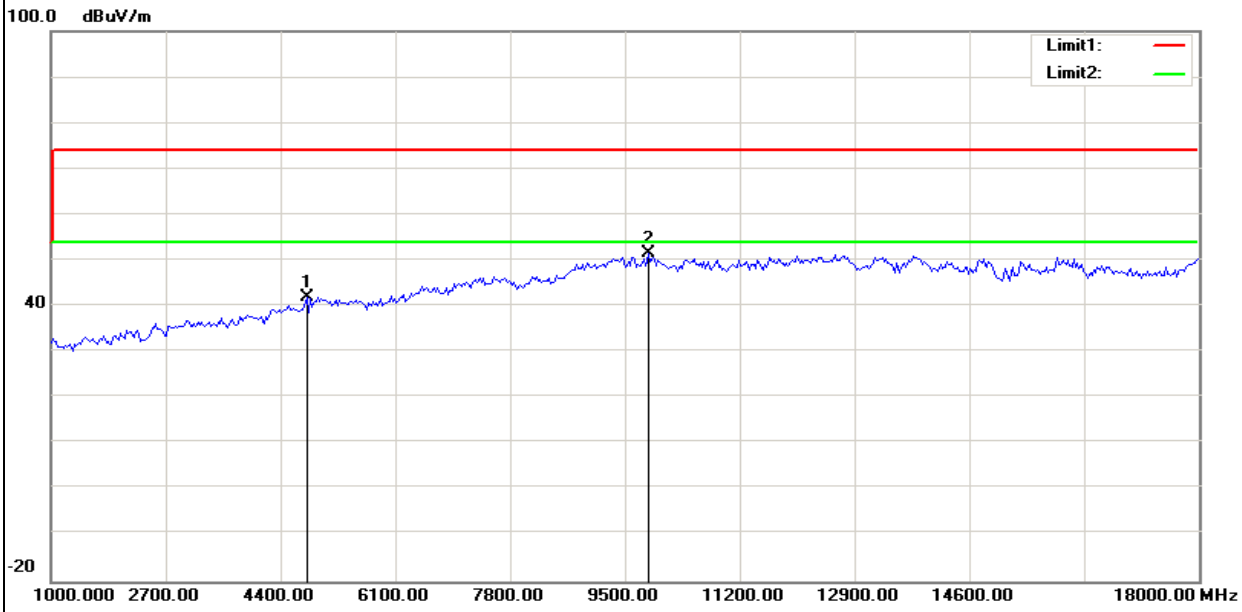
BT For 8DPSK **Channel: 2441**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	43.34	-0.43	42.91	74.00	-31.09	peak	Horizontal
2	6612.180	42.66	3.39	46.05	74.00	-27.95	peak	Horizontal
3	4786.859	42.45	-0.43	42.02	74.00	-31.98	peak	Vertical
4	9854.167	40.14	11.35	51.49	74.00	-22.51	peak	Vertical

Horizontal:



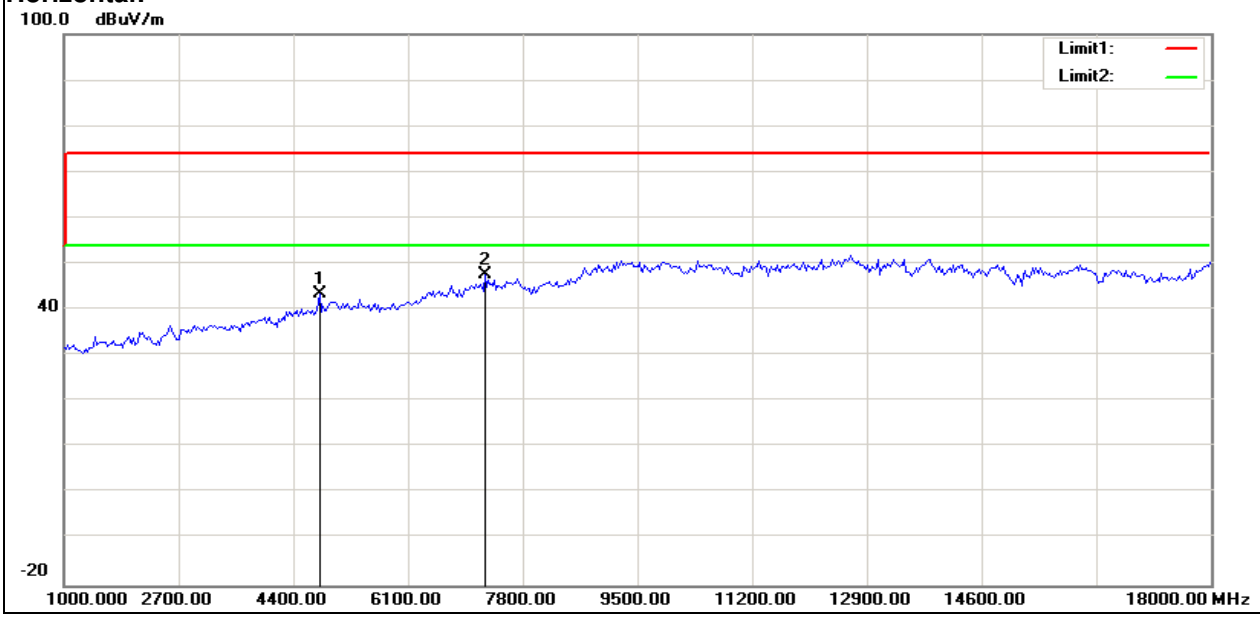
Vertical:



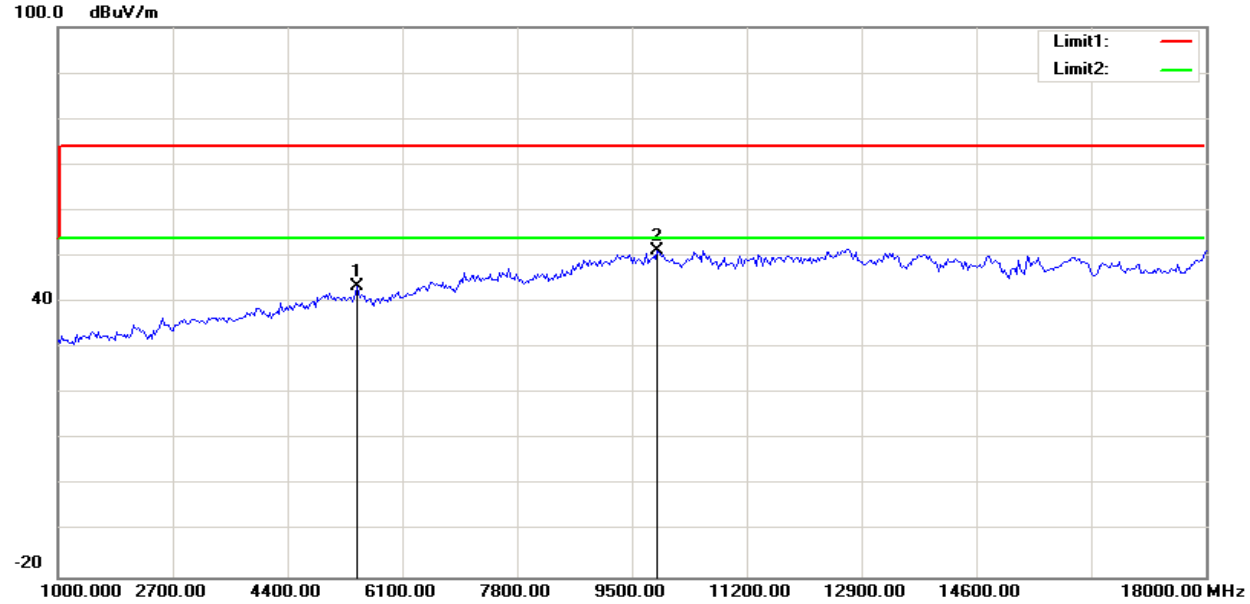
BT For 8DPSK **Channel: 2480**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	44.01	-0.43	43.58	74.00	-30.42	peak	Horizontal
2	7238.782	42.39	5.16	47.55	74.00	-26.45	peak	Horizontal
3	5440.705	43.34	0.23	43.57	74.00	-30.43	peak	Vertical
4	9881.410	39.77	11.35	51.12	74.00	-22.88	peak	Vertical

Horizontal:



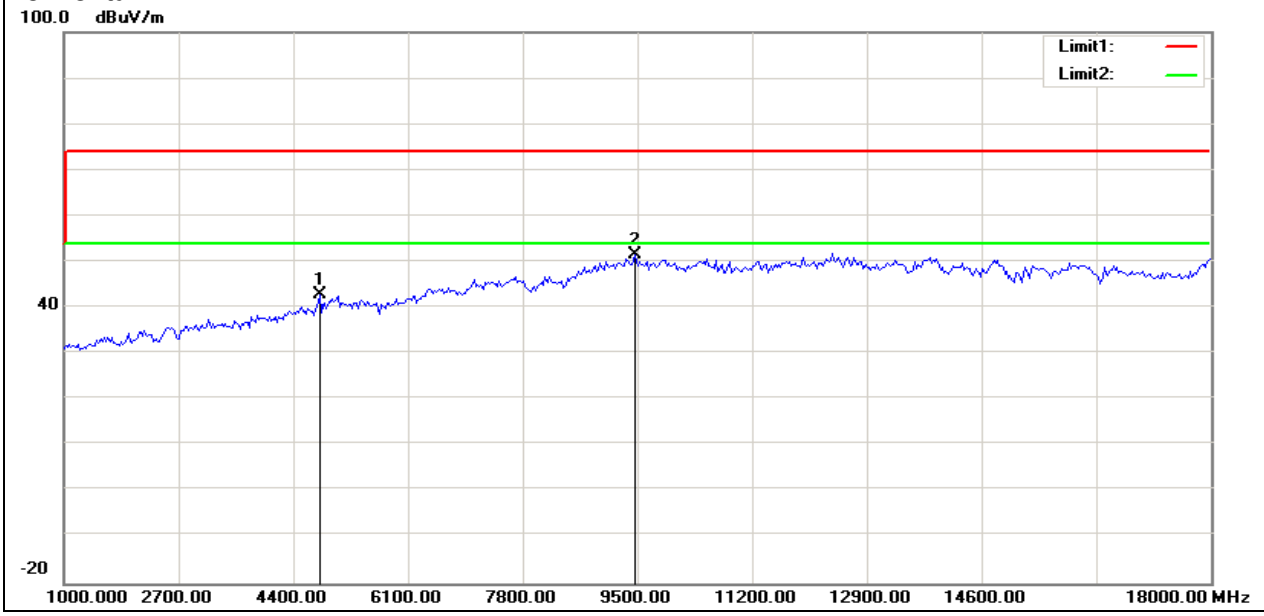
Vertical:



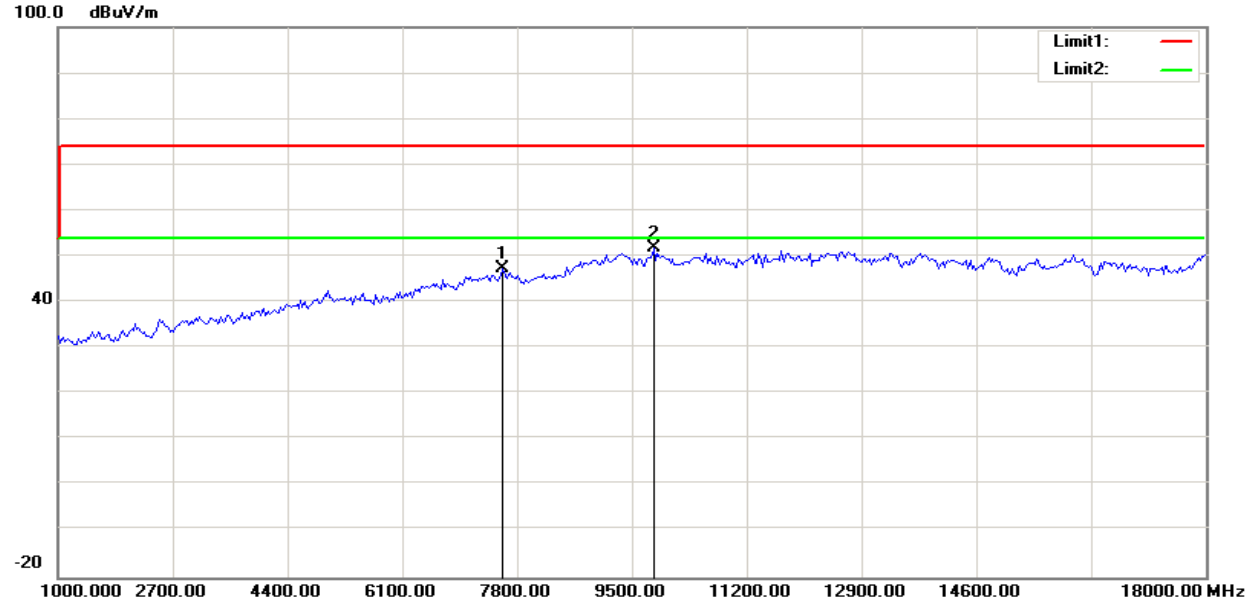
BT For 4.1 **Channel: 2402**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	43.22	-0.43	42.79	74.00	-31.21	peak	Horizontal
2	9472.756	40.42	11.21	51.63	74.00	-22.37	peak	Horizontal
3	7592.949	41.21	6.03	47.24	74.00	-26.76	peak	Vertical
4	9826.923	40.45	11.34	51.79	74.00	-22.21	peak	Vertical

Horizontal:



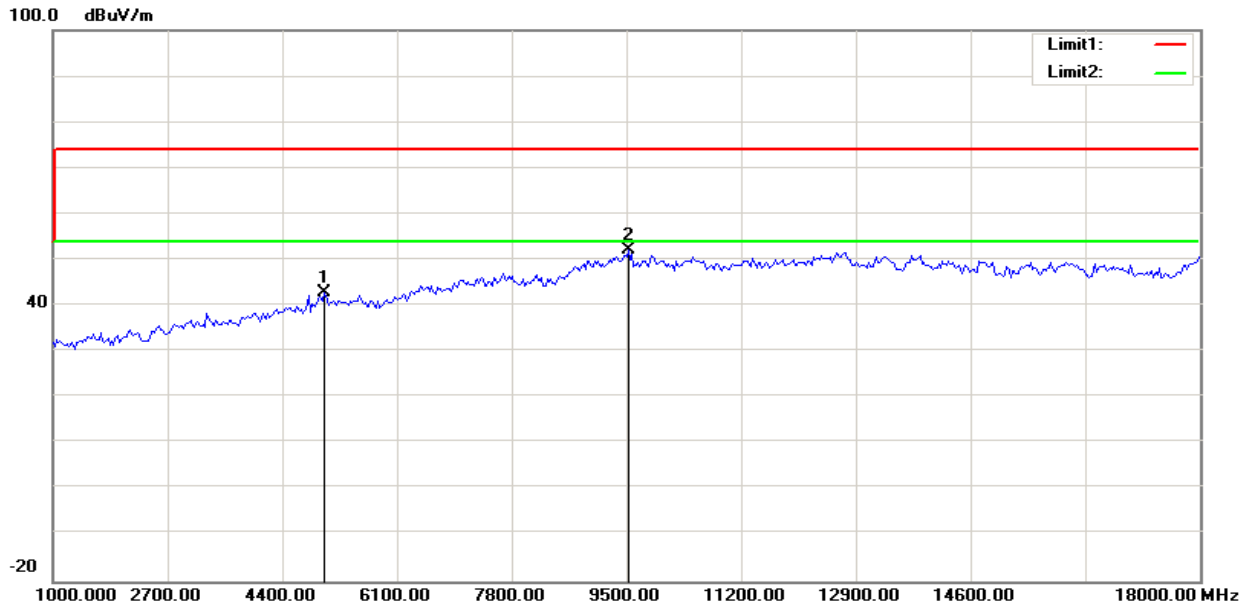
Vertical:



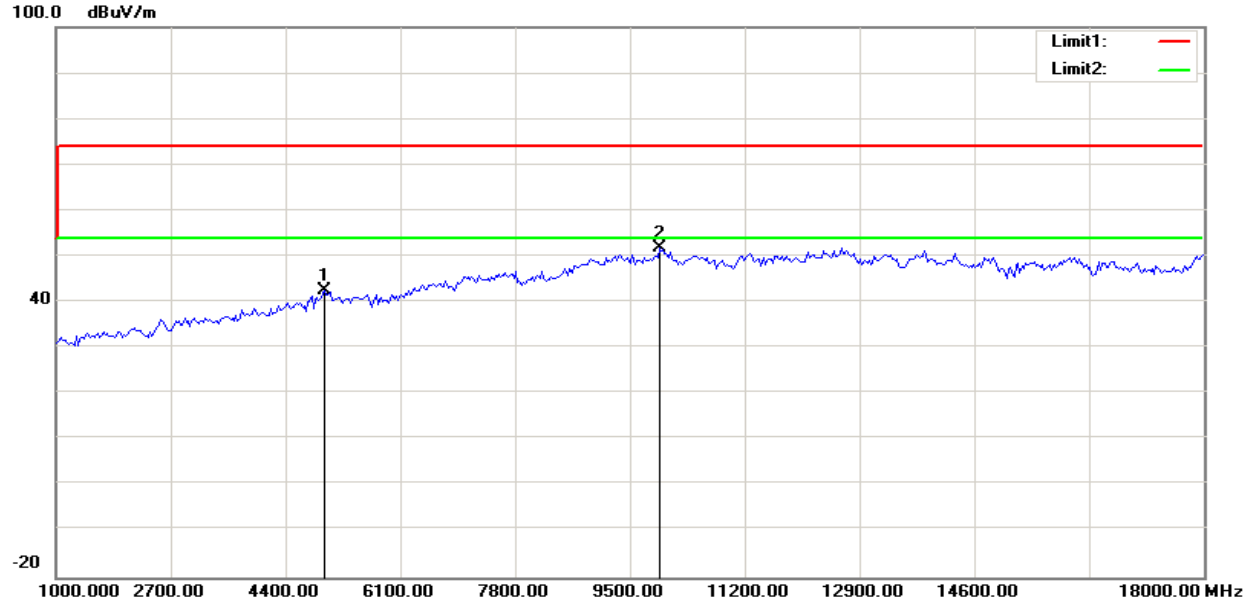
BT For 4.1 **Channel: 2440**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5032.051	42.49	0.36	42.85	74.00	-31.15	peak	Horizontal
2	9527.244	40.96	11.28	52.24	74.00	-21.76	peak	Horizontal
3	4977.564	42.29	0.29	42.58	74.00	-31.42	peak	Vertical
4	9935.897	40.37	11.37	51.74	74.00	-22.26	peak	Vertical

Horizontal:



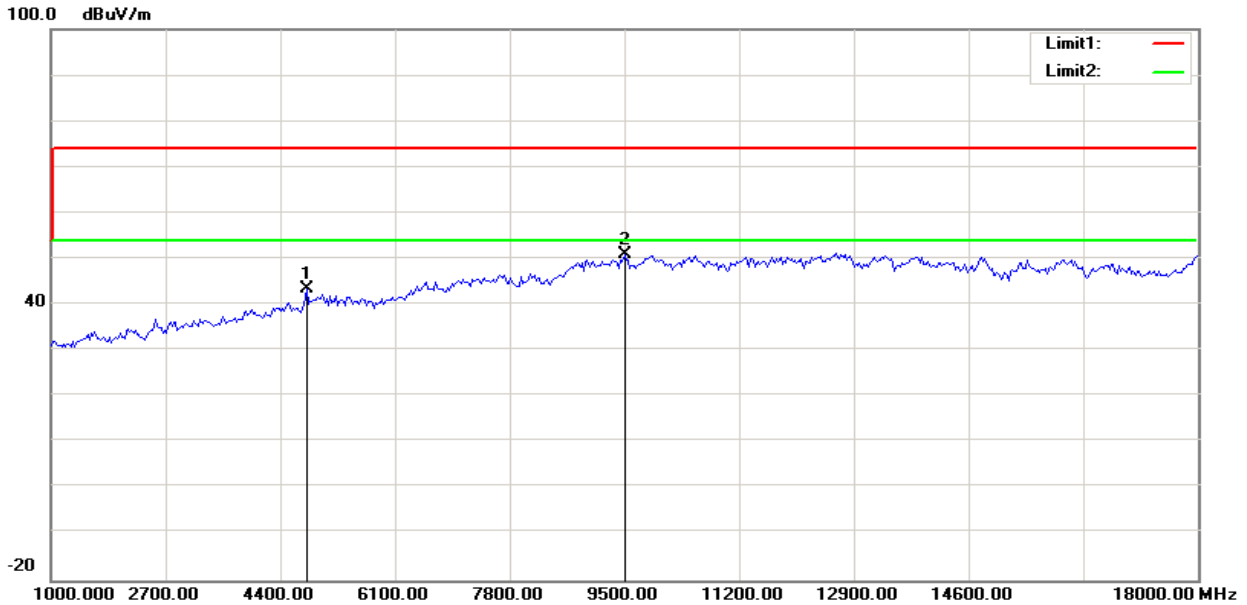
Vertical:



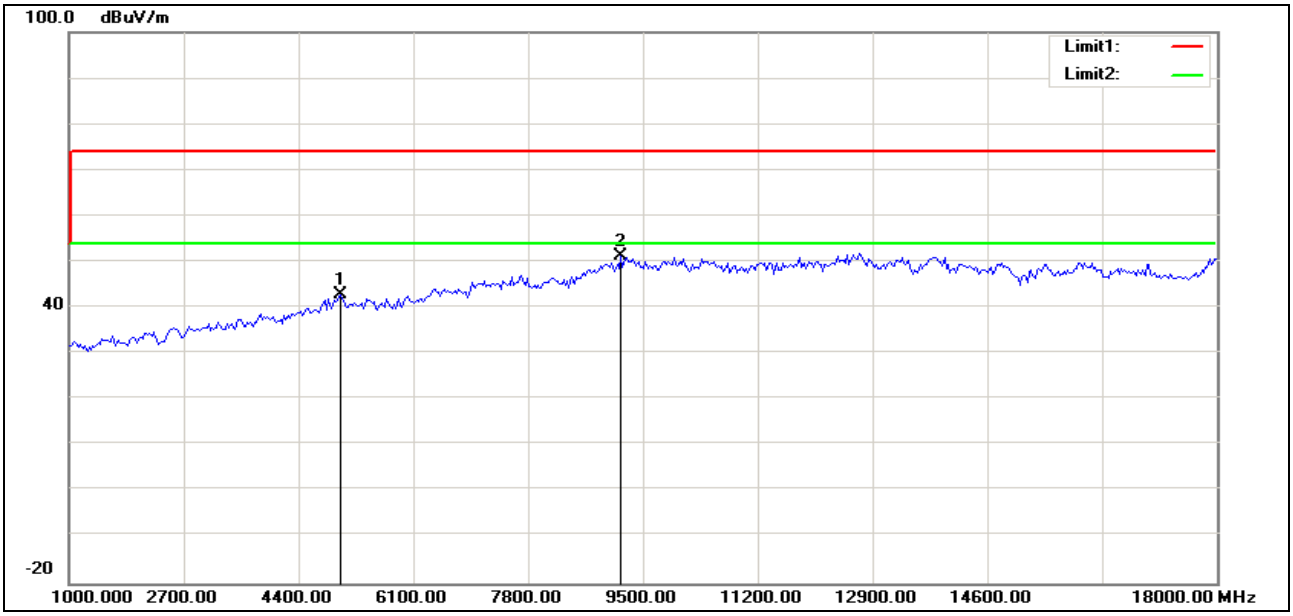
BT For 4.1 **Channel: 2480**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4786.859	43.90	-0.43	43.47	74.00	-30.53	peak	Horizontal
2	9500.000	39.77	11.27	51.04	74.00	-22.96	peak	Horizontal
3	5032.051	42.54	0.36	42.90	74.00	-31.10	peak	Vertical
4	9173.077	40.54	10.57	51.11	74.00	-22.89	peak	Vertical

Horizontal:



Vertical:



Remark: 1) Emission = Receiver Reading + Factor

2) Factor = Antenna Factor + Cable Loss - Pre-amplifier Factor.

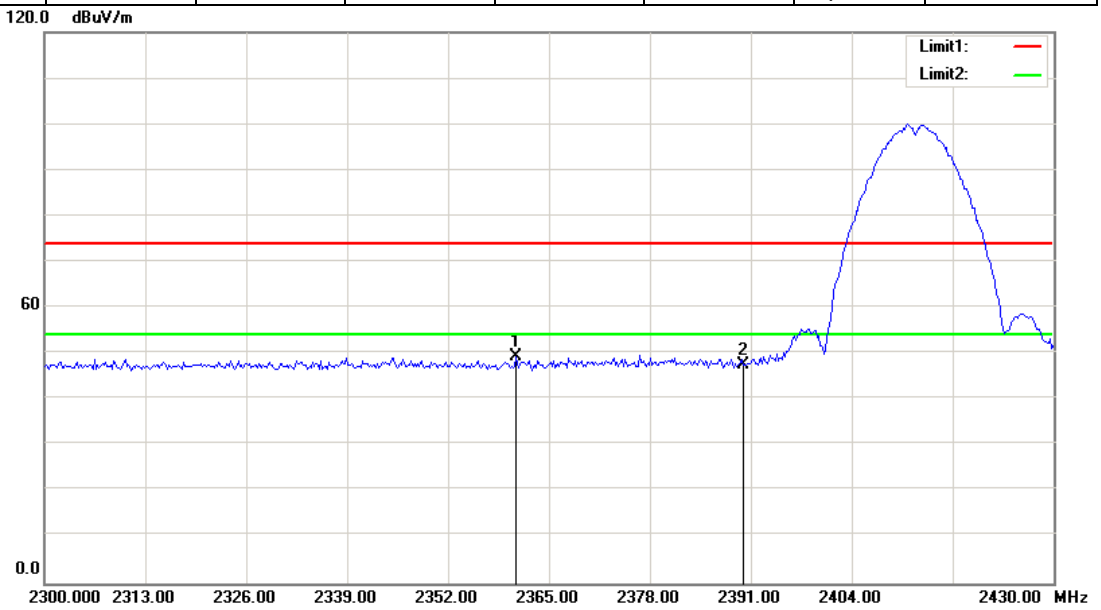
3) If the Peak value below the AV Limit, the AV test doesn't perform for this submission.

7.3.2 Radiated Band edge

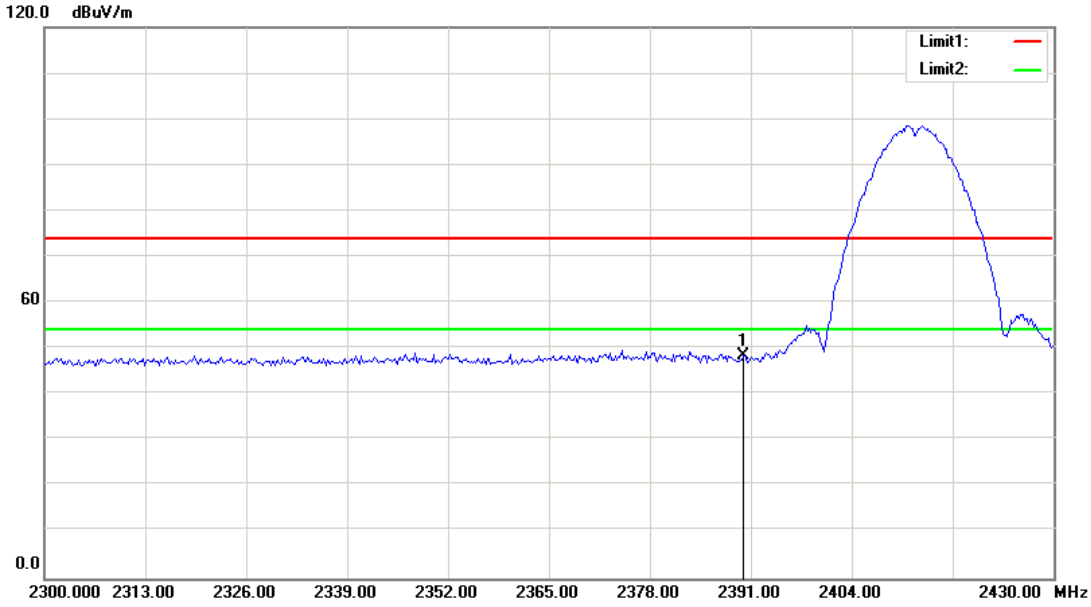
Test Mode: 802.11b **Channel: 2412**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2360.833	56.95	-7.67	49.28	74.00	-24.72	peak	Horizontal
2	2390.000	55.21	-7.57	47.64	74.00	-26.36	peak	Horizontal
1	2390.000	55.99	-7.57	48.42	74.00	-25.58	peak	Vertical

Horizontal



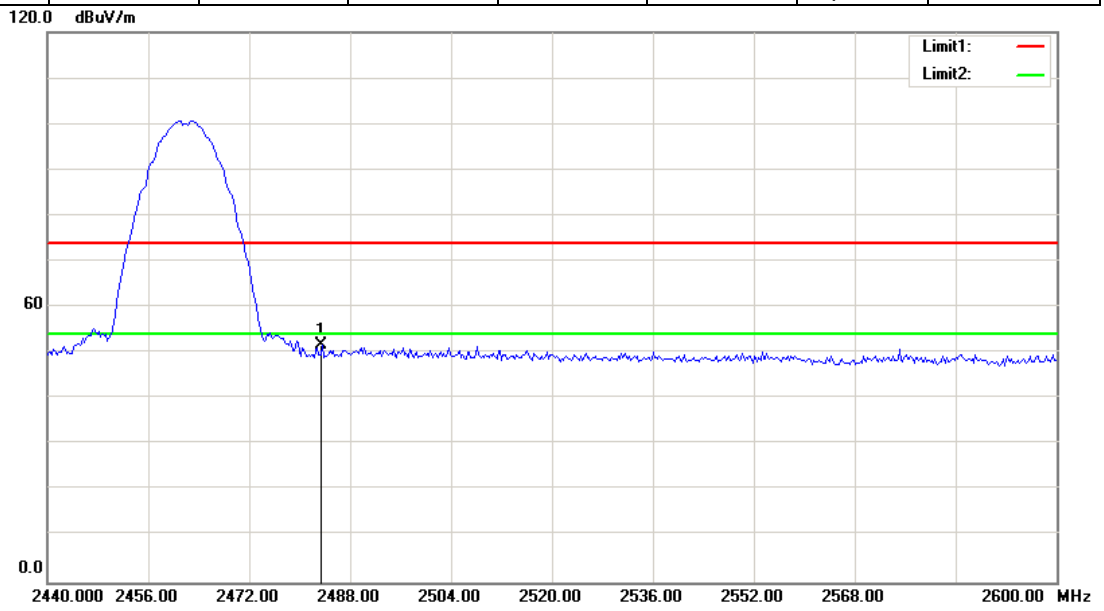
Vertical



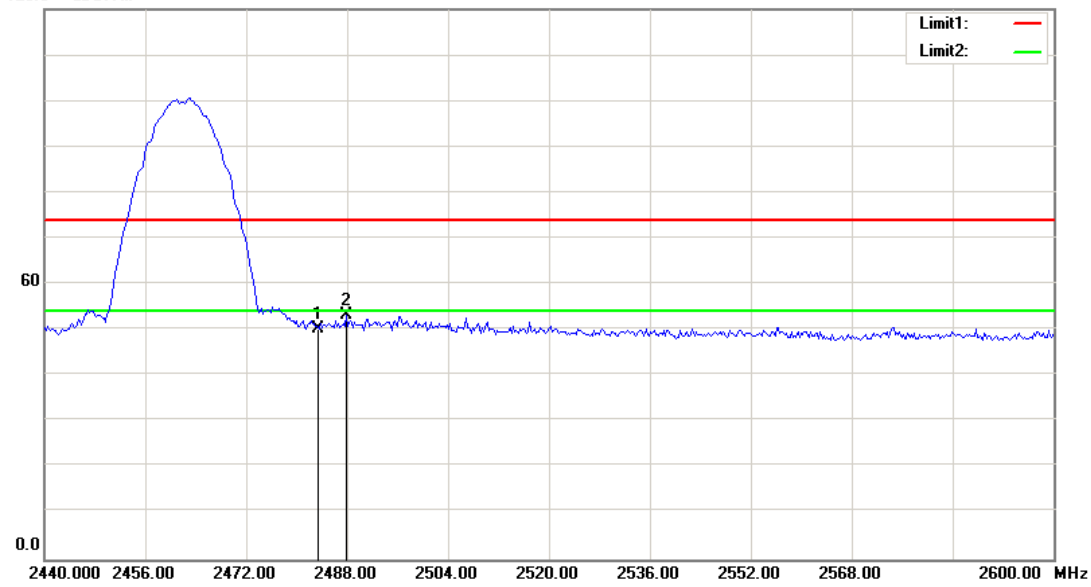
Test Mode: 802.11b **Channel: 2462**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	58.99	-7.26	51.73	74.00	-22.27	peak	Horizontal
1	2483.500	57.40	-7.26	50.14	74.00	-23.86	peak	Vertical
2	2487.949	60.41	-7.25	53.16	74.00	-20.84	peak	Vertical

Horizontal



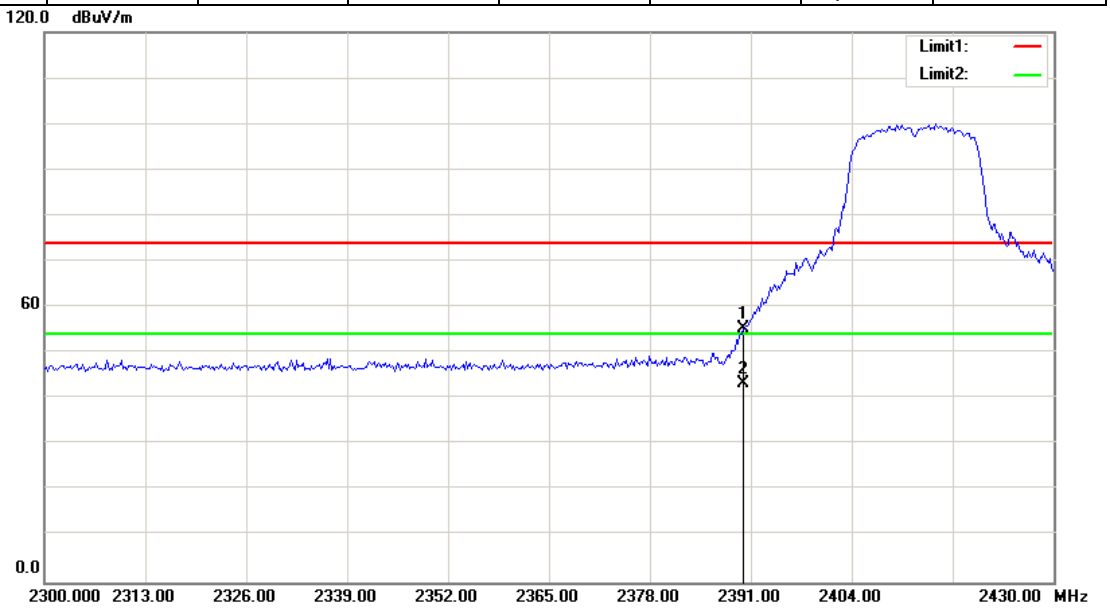
Vertical



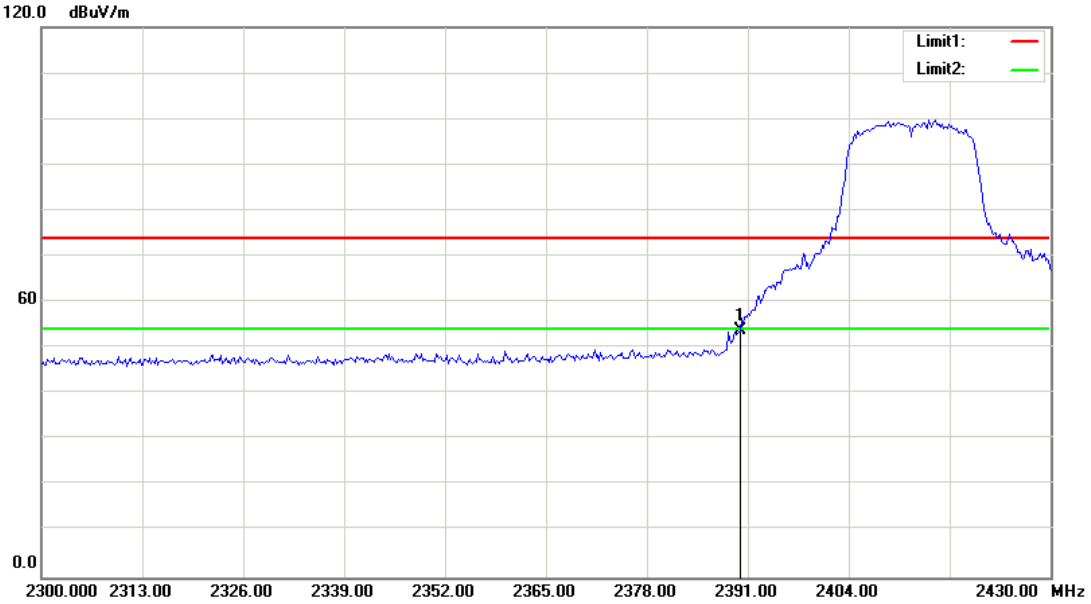
Test Mode: 802.11g **Channel: 2412**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2390.000	62.88	-7.57	55.31	74.00	-18.69	peak	Horizontal
2	2390.000	50.83	-7.57	43.26	54.00	-10.74	AVG	Horizontal
1	2390.000	61.44	-7.57	53.87	74.00	-20.13	peak	Vertical

Horizontal



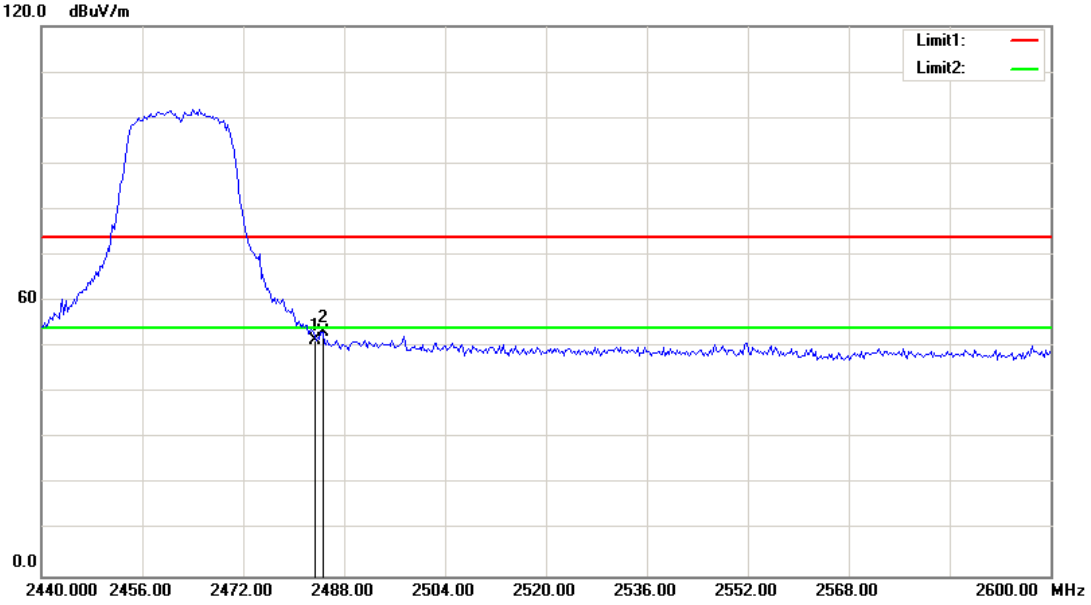
Vertical



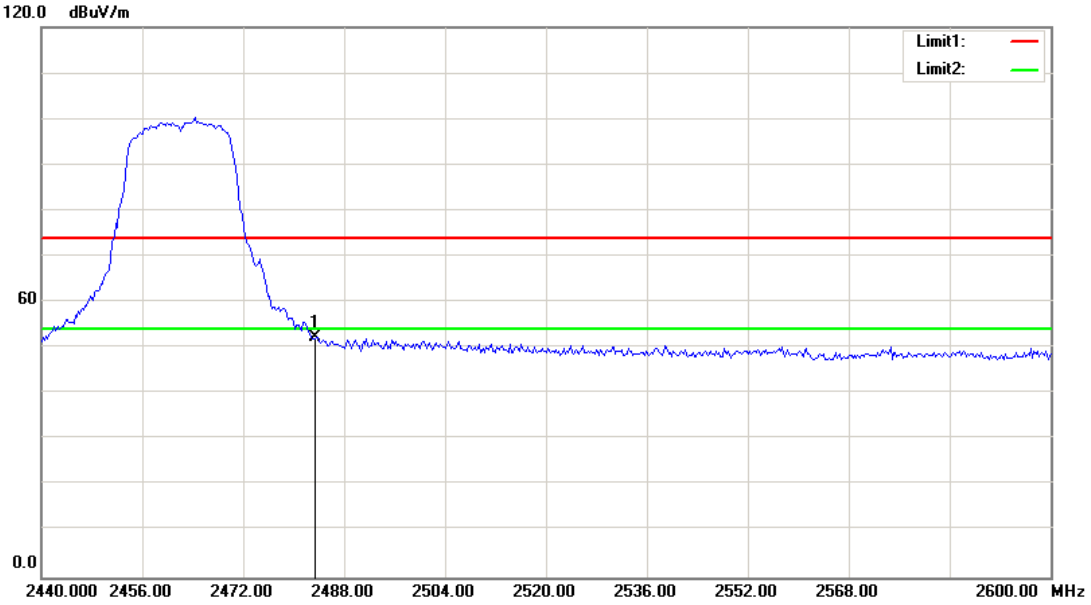
Test Mode: 802.11g **Channel: 2462**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	58.80	-7.26	51.54	74.00	-22.46	peak	Horizontal
2	2484.615	60.58	-7.26	53.32	74.00	-20.68	peak	Horizontal
1	2483.500	59.50	-7.26	52.24	74.00	-21.76	peak	Vertical

Horizontal



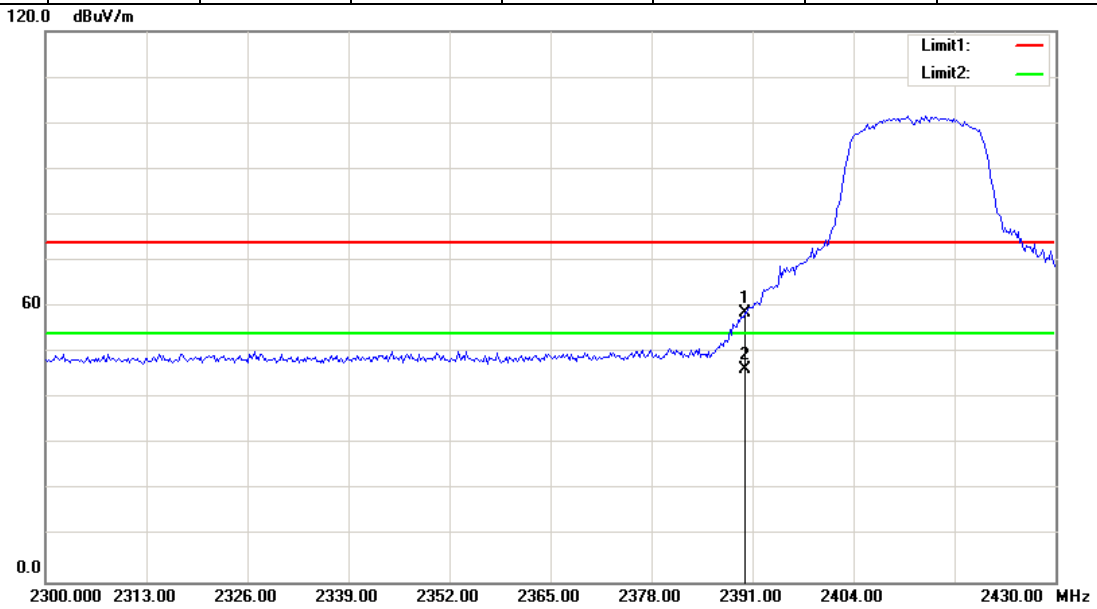
Vertical



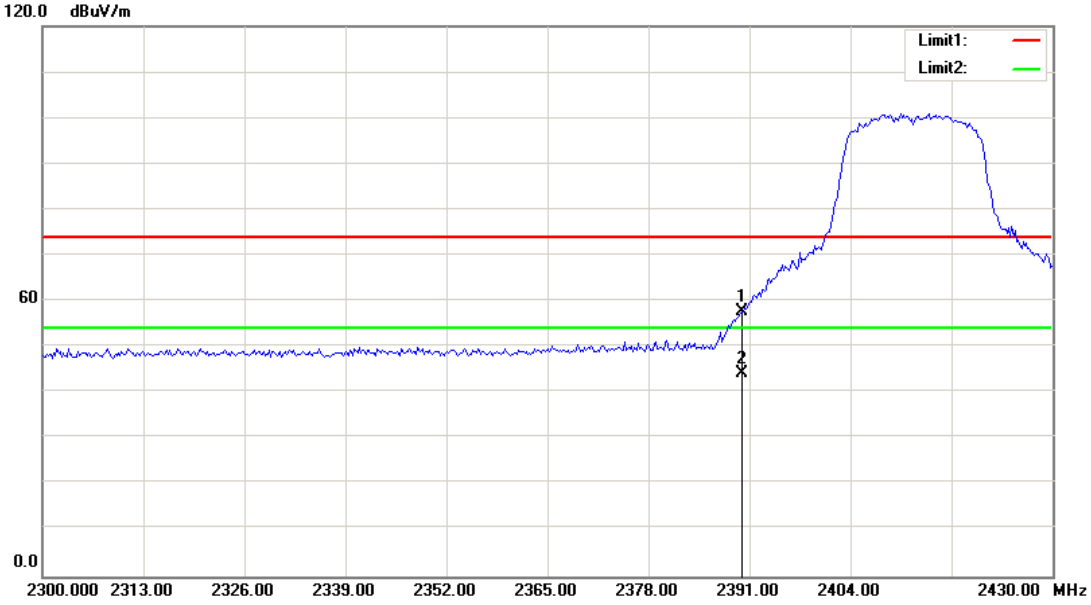
Test Mode: 802.11 n(HT20) **Channel: 2412**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2390.000	66.14	-7.57	58.57	74.00	-15.43	peak	Horizontal
2	2390.000	53.89	-7.57	46.32	54.00	-7.68	AVG	Horizontal
1	2390.000	65.18	-7.57	57.61	74.00	-16.39	peak	Vertical
2	2390.000	51.74	-7.57	44.17	54.00	-9.83	AVG	Vertical

Horizontal



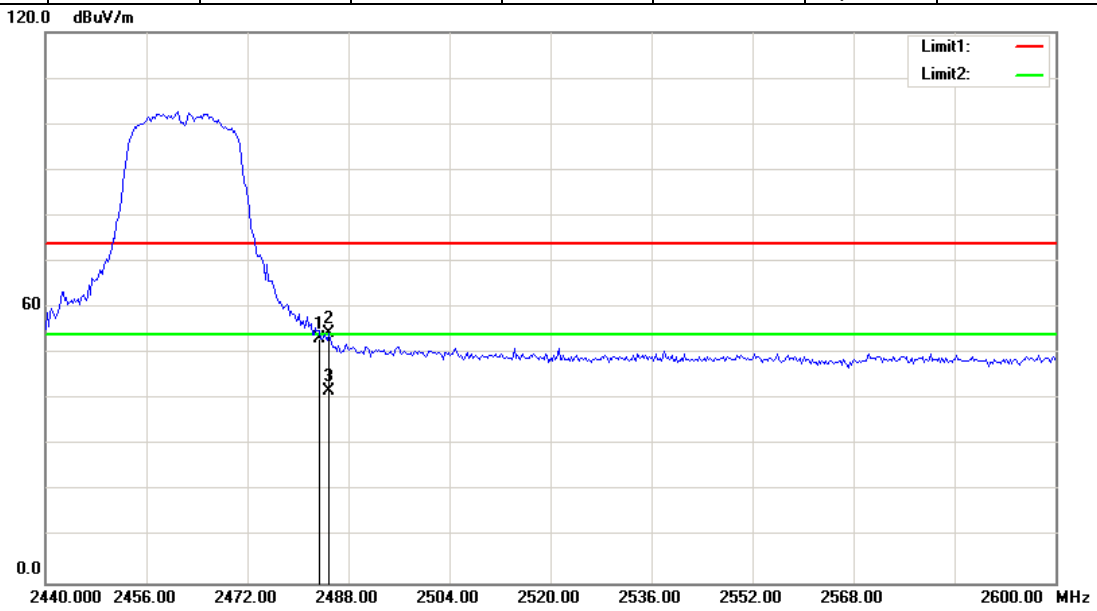
Vertical



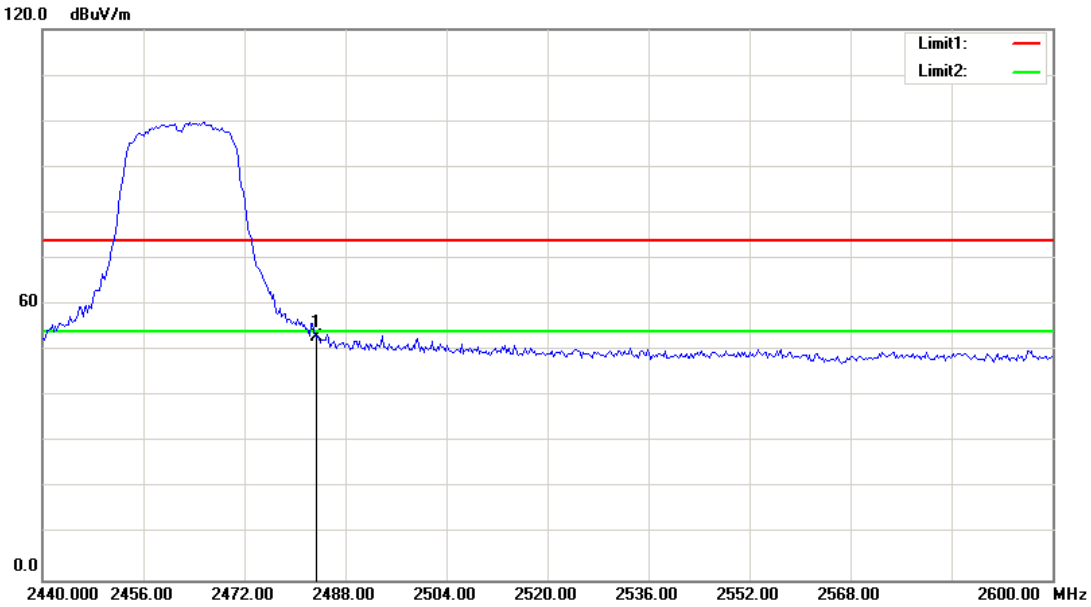
Test Mode: 802.11 n(HT20) **Channel: 2462**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	60.61	-7.26	53.35	74.00	-20.65	peak	Horizontal
2	2484.872	61.66	-7.26	54.40	74.00	-19.60	peak	Horizontal
3	2484.872	49.14	-7.26	41.88	54.00	-12.12	AVG	Horizontal
1	2483.500	60.15	-7.26	52.89	74.00	-21.11	peak	Vertical

Horizontal



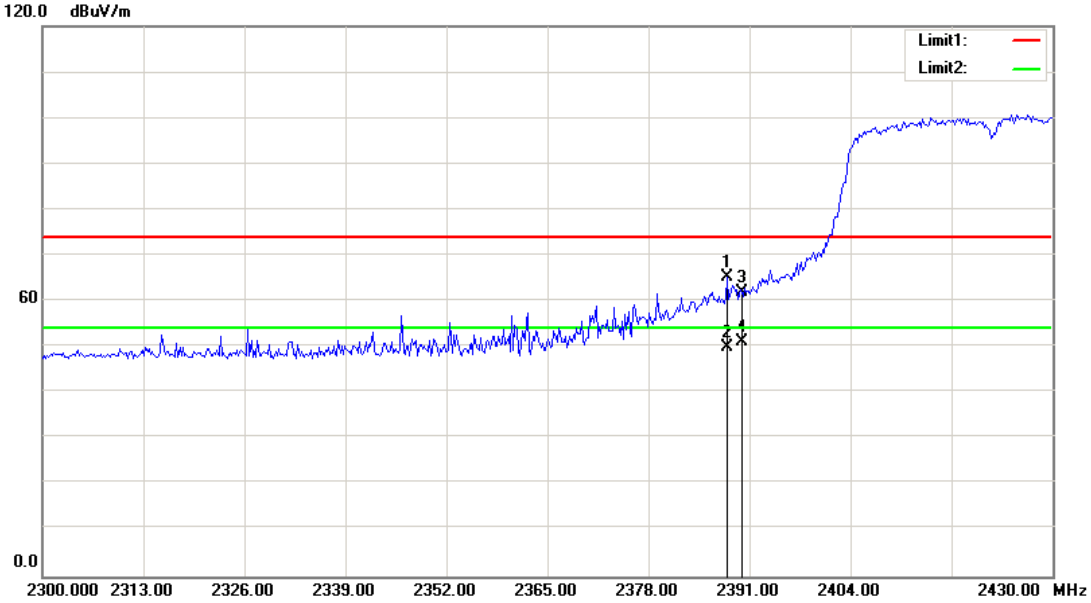
Vertical



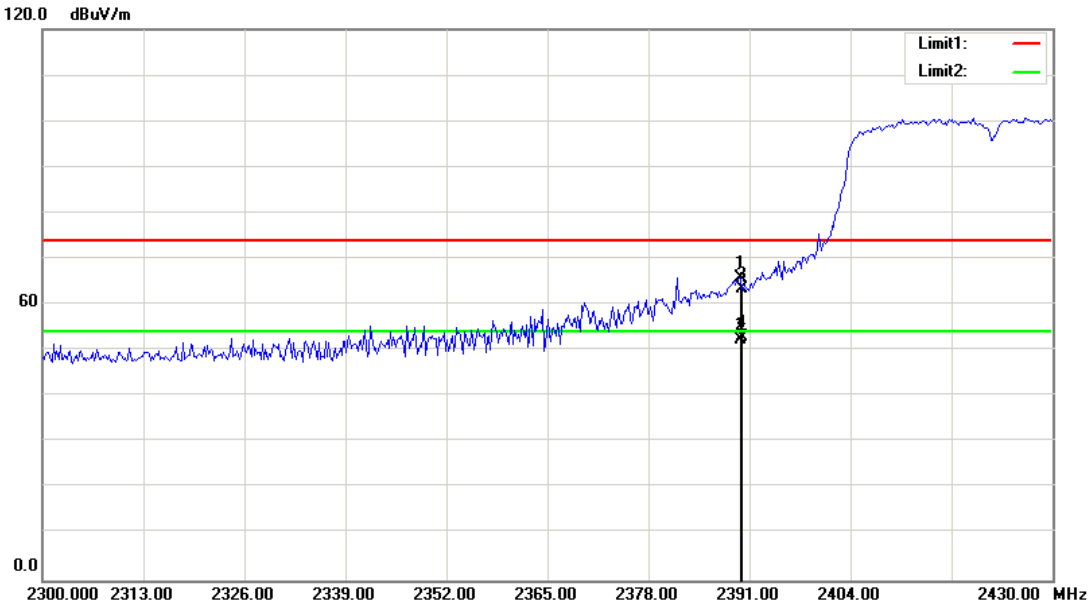
Test Mode: 802.11 n(HT40) **Channel: 2422**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2388.125	72.71	-7.58	65.13	74.00	-8.87	peak	Horizontal
2	2388.125	57.40	-7.58	49.82	54.00	-4.18	AVG	Horizontal
3	2390.000	69.61	-7.57	62.04	74.00	-11.96	peak	Horizontal
4	2390.000	58.82	-7.57	51.25	54.00	-2.75	AVG	Horizontal
1	2389.792	73.45	-7.57	65.88	74.00	-8.12	peak	Vertical
2	2389.792	60.00	-7.57	52.43	54.00	-1.57	AVG	Vertical
3	2390.000	71.05	-7.57	63.48	74.00	-10.52	peak	Vertical
4	2390.000	60.43	-7.57	52.86	54.00	-1.14	AVG	Vertical

Horizontal



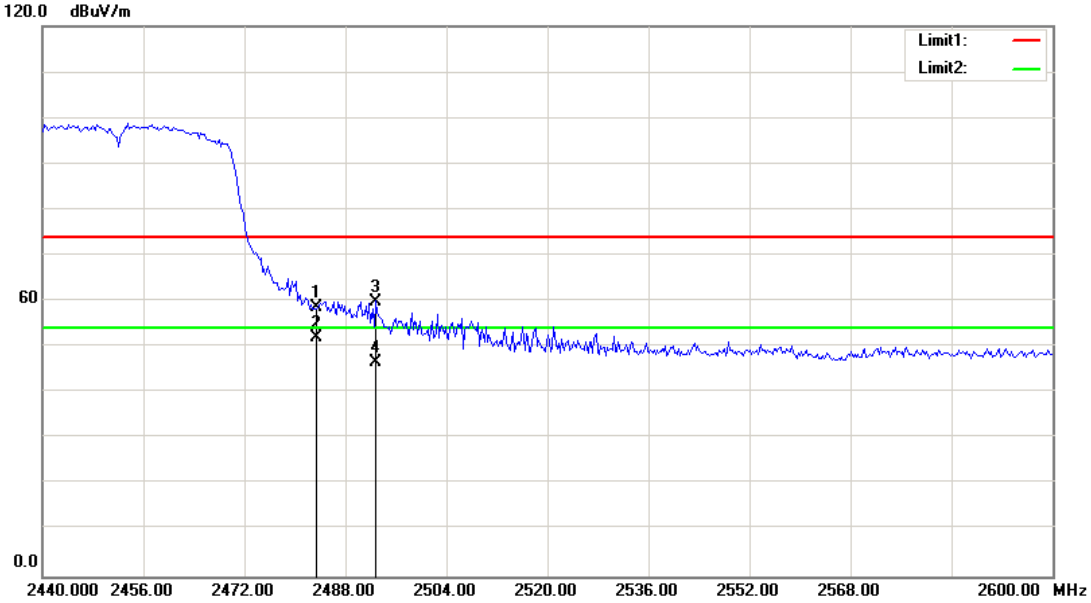
Vertical



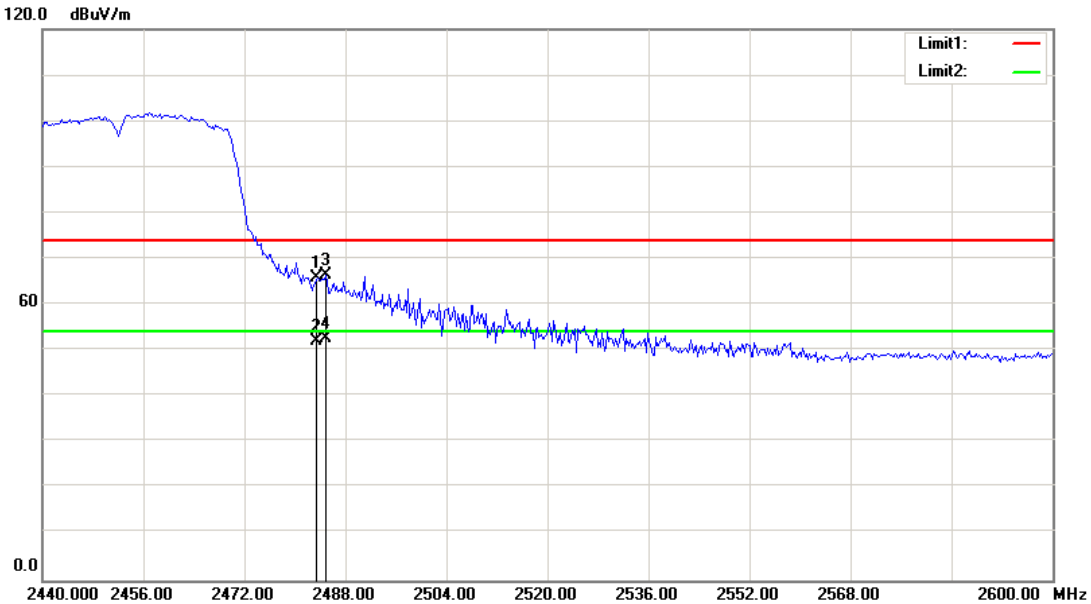
Test Mode: 802.11 n(HT40) **Channel: 2452**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	65.91	-7.26	58.65	74.00	-15.35	peak	Horizontal
2	2483.500	59.35	-7.26	52.09	54.00	-1.91	AVG	Horizontal
3	2492.820	67.23	-7.23	60.00	74.00	-14.00	peak	Horizontal
4	2492.820	53.76	-7.23	46.53	54.00	-7.47	AVG	Horizontal
1	2483.500	72.99	-7.26	65.73	74.00	-8.27	peak	Vertical
2	2483.500	59.33	-7.26	52.07	54.00	-1.93	AVG	Vertical
3	2484.872	73.65	-7.26	66.39	74.00	-7.61	peak	Vertical
4	2484.872	59.77	-7.26	52.51	54.00	-1.49	AVG	Vertical

Horizontal



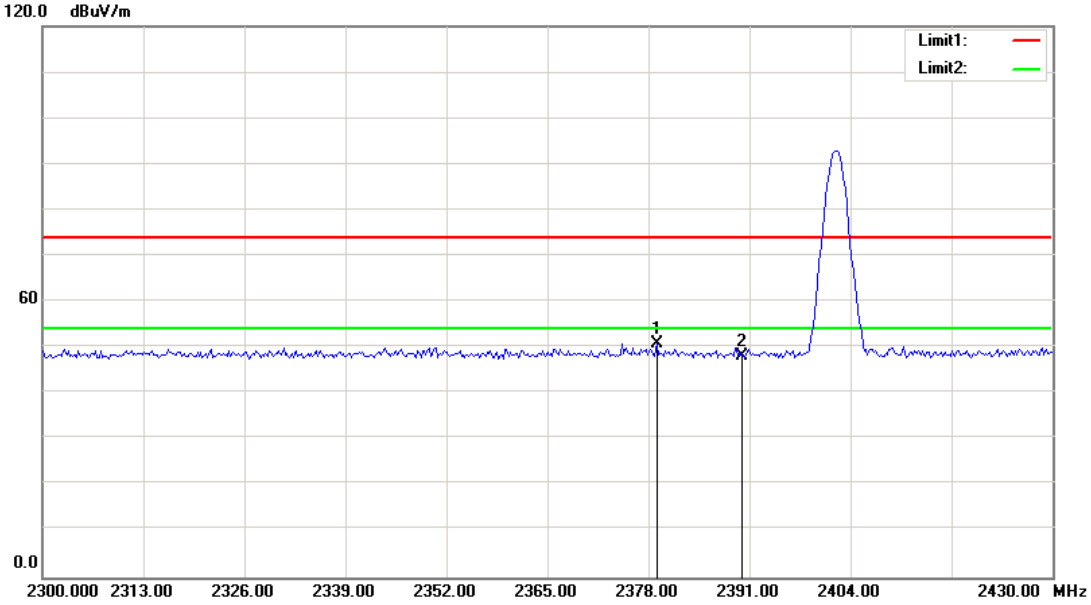
Vertical



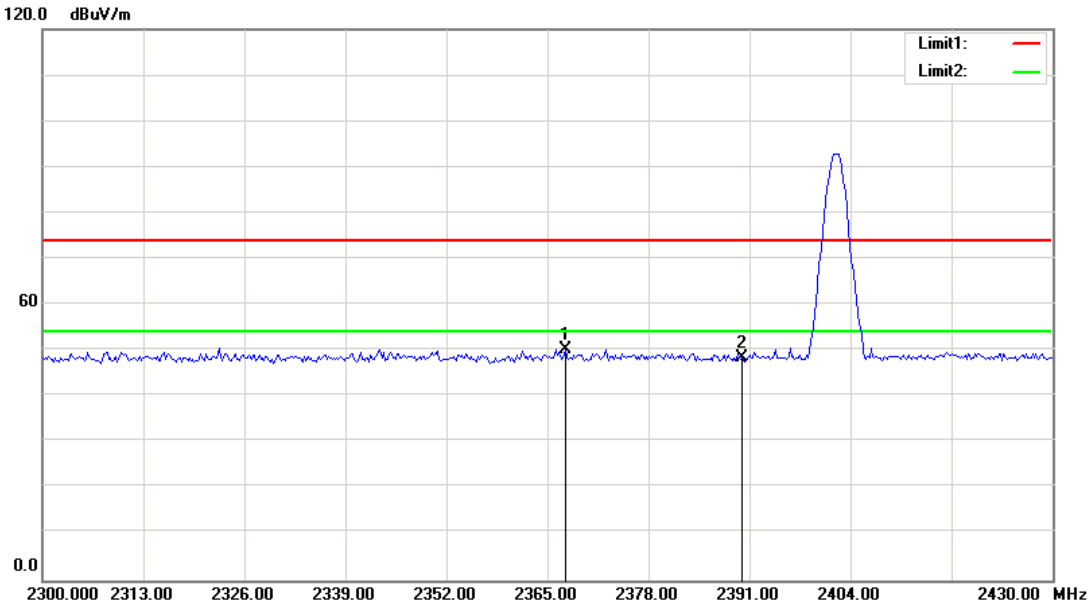
Test Mode: 1Mbps **Channel: 2402**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2379.167	58.50	-7.61	50.89	74.00	-23.11	peak	Horizontal
2	2390.000	55.64	-7.57	48.07	74.00	-25.93	peak	Horizontal
1	2367.292	57.98	-7.65	50.33	74.00	-23.67	peak	Vertical
2	2390.000	56.16	-7.57	48.59	74.00	-25.41	peak	Vertical

Horizontal



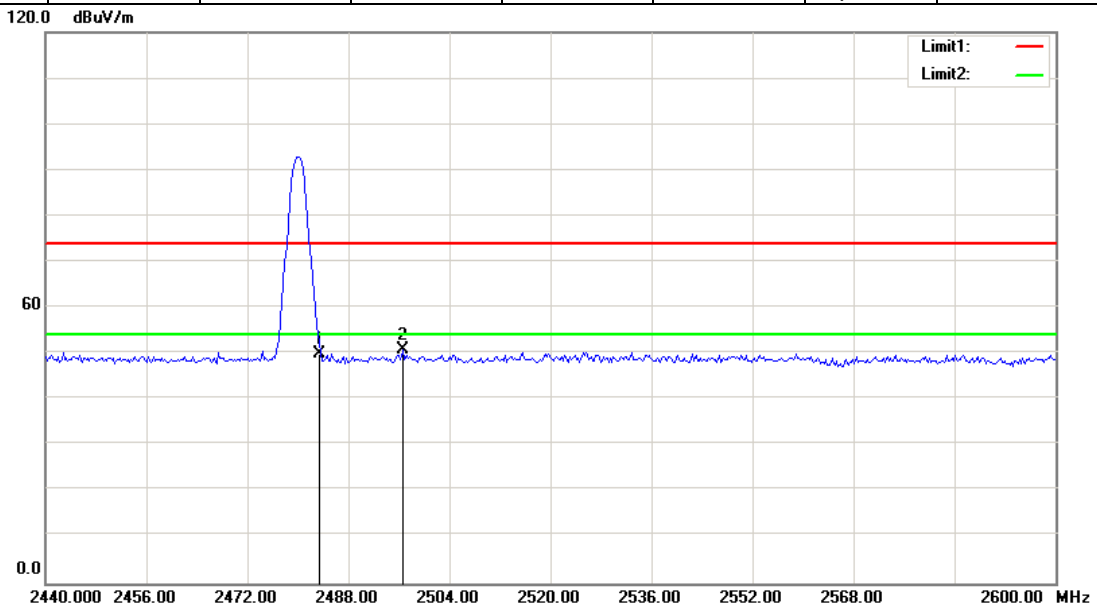
Vertical



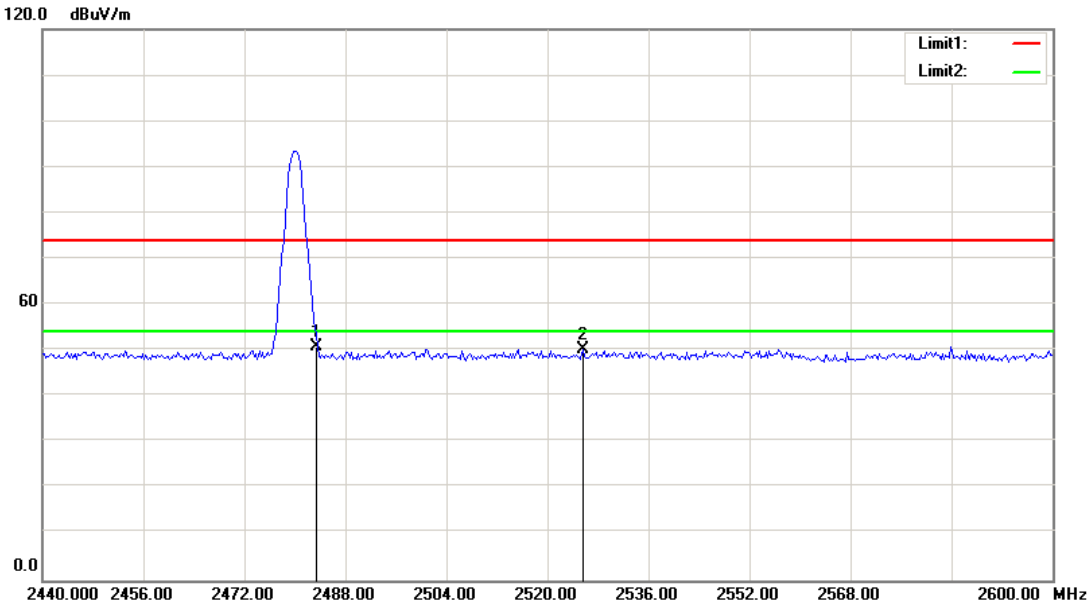
Test Mode: 1Mbps **Channel: 2480**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	57.26	-7.26	50.00	74.00	-24.00	peak	Horizontal
2	2496.667	58.02	-7.22	50.80	74.00	-23.20	peak	Horizontal
1	2483.500	58.24	-7.26	50.98	74.00	-23.02	peak	Vertical
2	2525.641	57.41	-7.14	50.27	74.00	-23.73	peak	Vertical

Horizontal



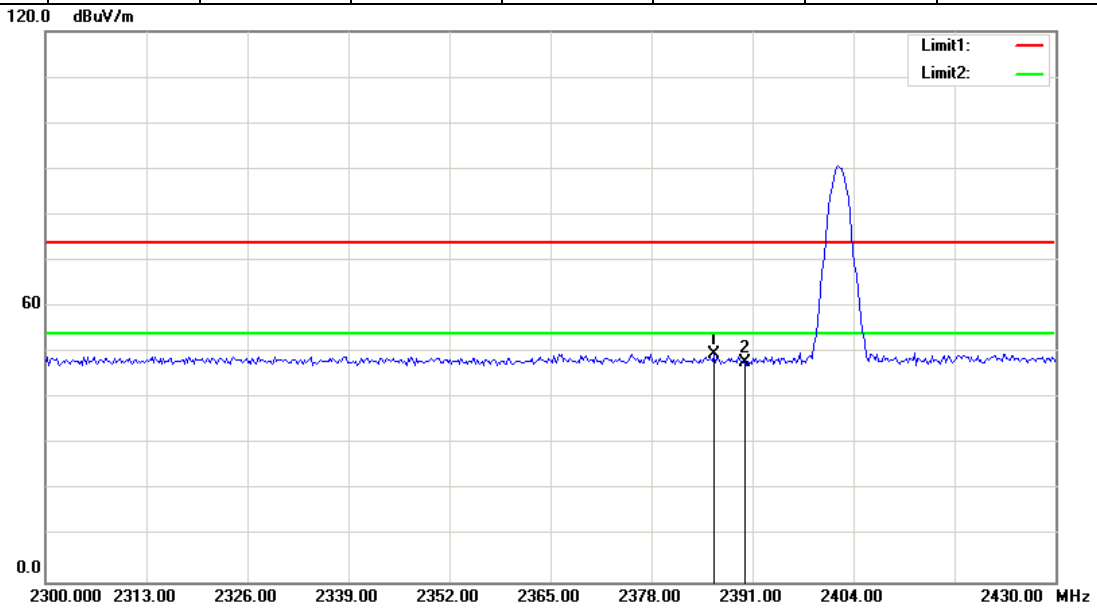
Vertical



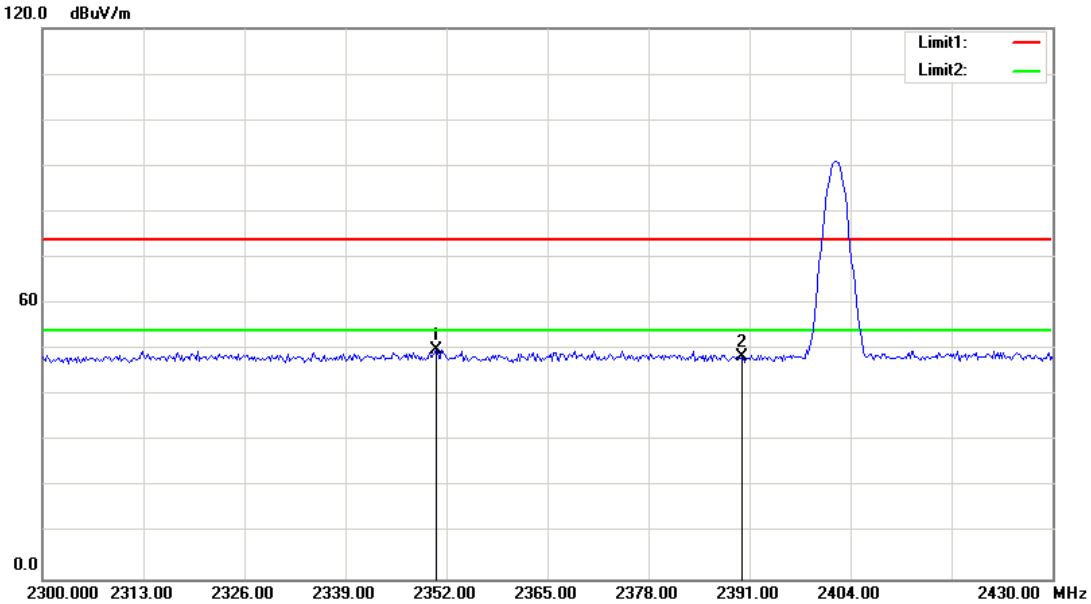
Test Mode: 3Mbps **Channel: 2402**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2386.042	57.29	-7.59	49.70	74.00	-24.30	peak	Horizontal
2	2390.000	55.55	-7.57	47.98	74.00	-26.02	peak	Horizontal
1	2350.625	57.67	-7.70	49.97	74.00	-24.03	peak	Vertical
2	2390.000	56.08	-7.57	48.51	74.00	-25.49	peak	Vertical

Horizontal



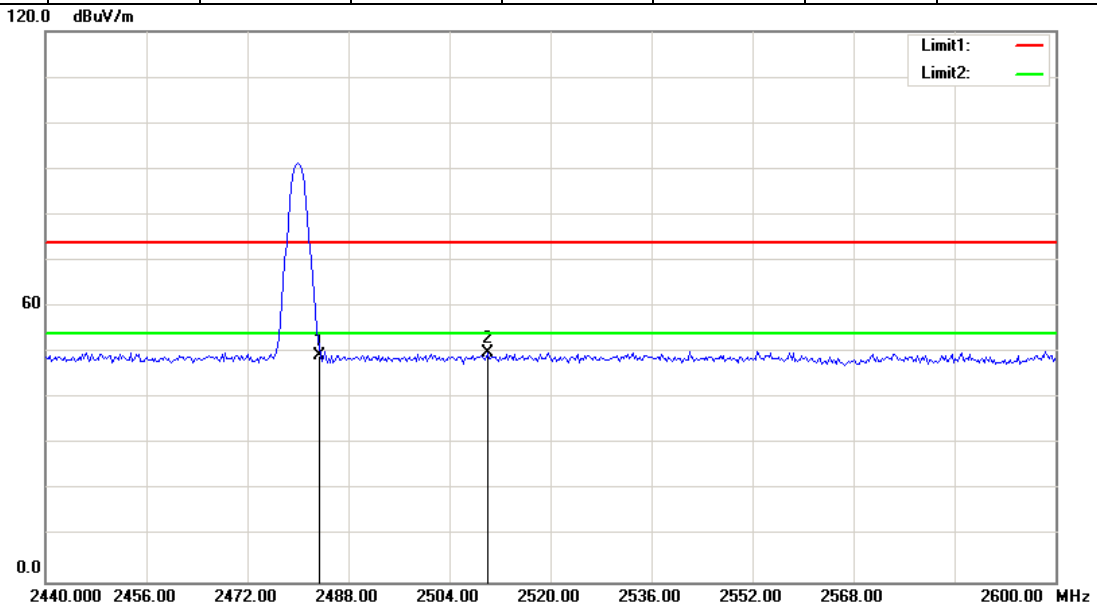
Vertical



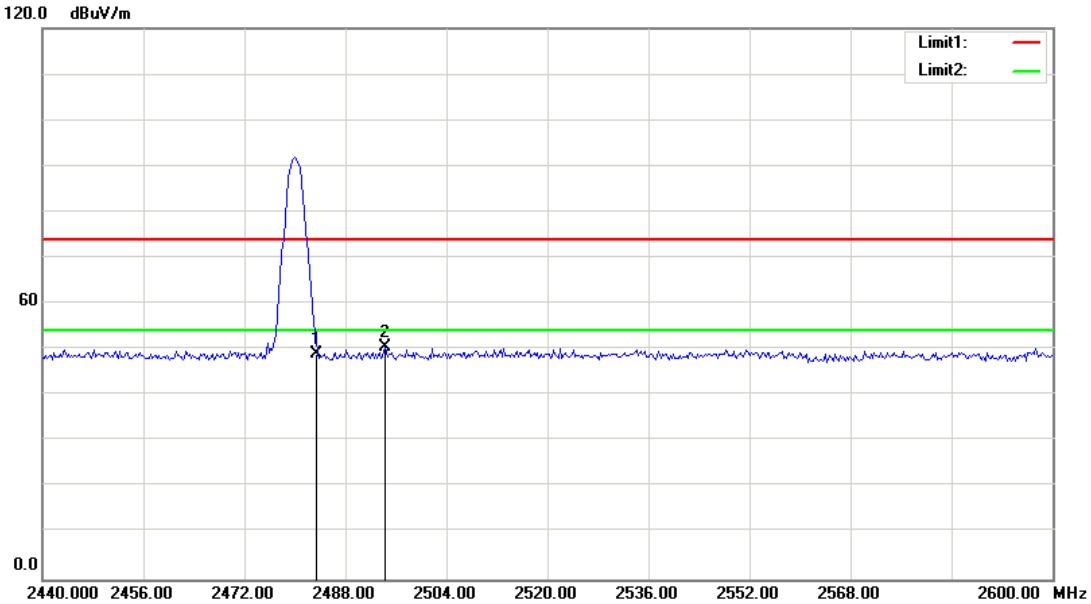
Test Mode: 3Mbps **Channel: 2480**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	56.54	-7.26	49.28	74.00	-24.72	peak	Horizontal
2	2510.000	57.22	-7.18	50.04	74.00	-23.96	peak	Horizontal
1	2483.500	56.45	-7.26	49.19	74.00	-24.81	peak	Vertical
2	2494.359	57.75	-7.23	50.52	74.00	-23.48	peak	Vertical

Horizontal



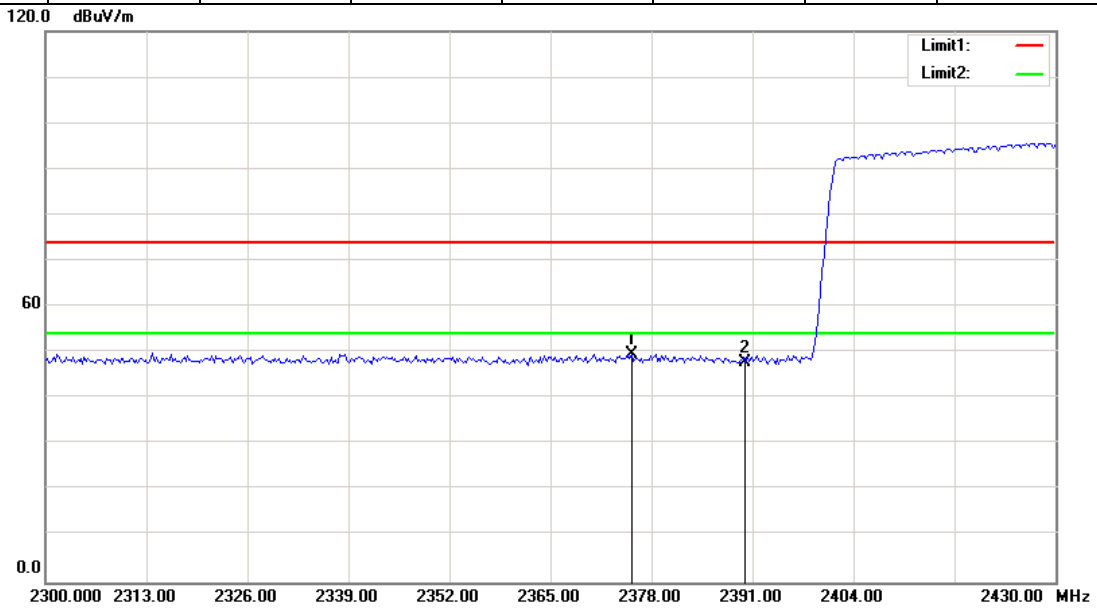
Vertical



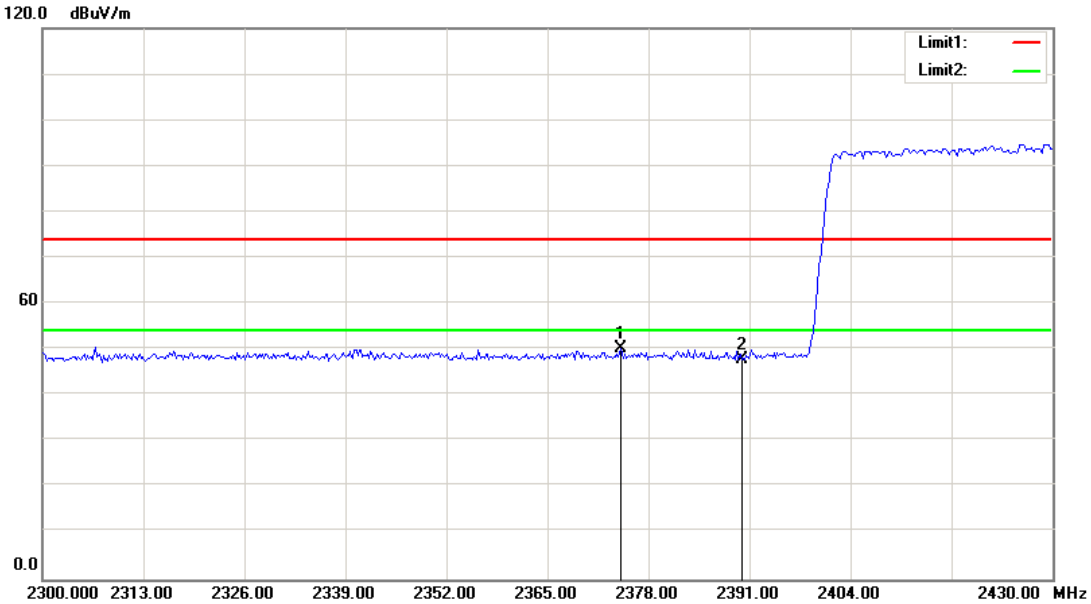
Test Mode: 1Mbps-hopping **Channel: 2402**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2375.417	57.28	-7.62	49.66	74.00	-24.34	peak	Horizontal
2	2390.000	55.57	-7.57	48.00	74.00	-26.00	peak	Horizontal
1	2374.375	57.86	-7.62	50.24	74.00	-23.76	peak	Vertical
2	2390.000	55.48	-7.57	47.91	74.00	-26.09	peak	Vertical

Horizontal



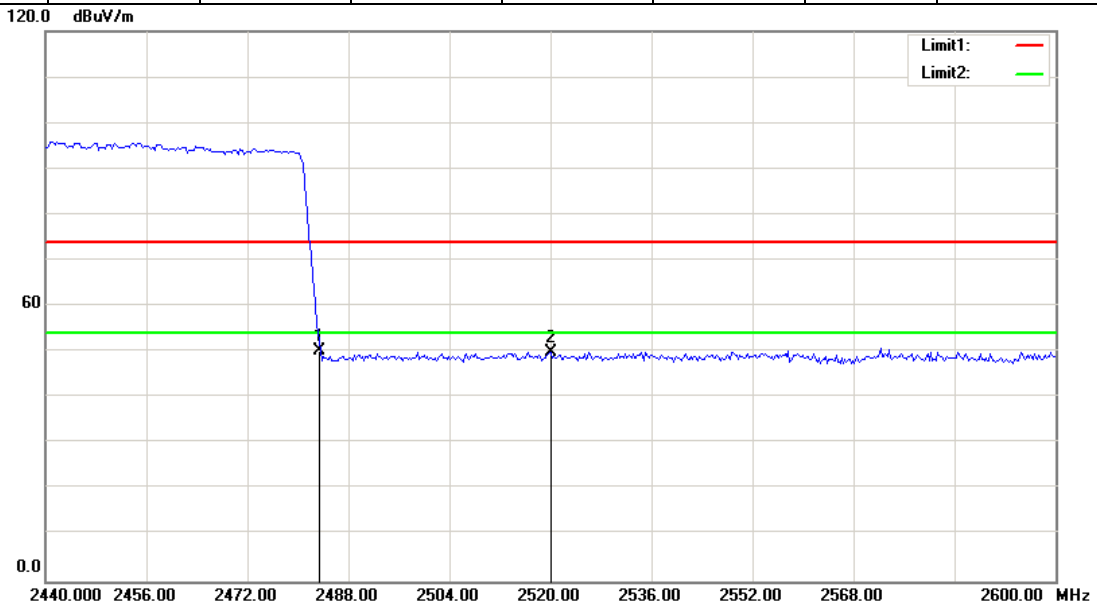
Vertical



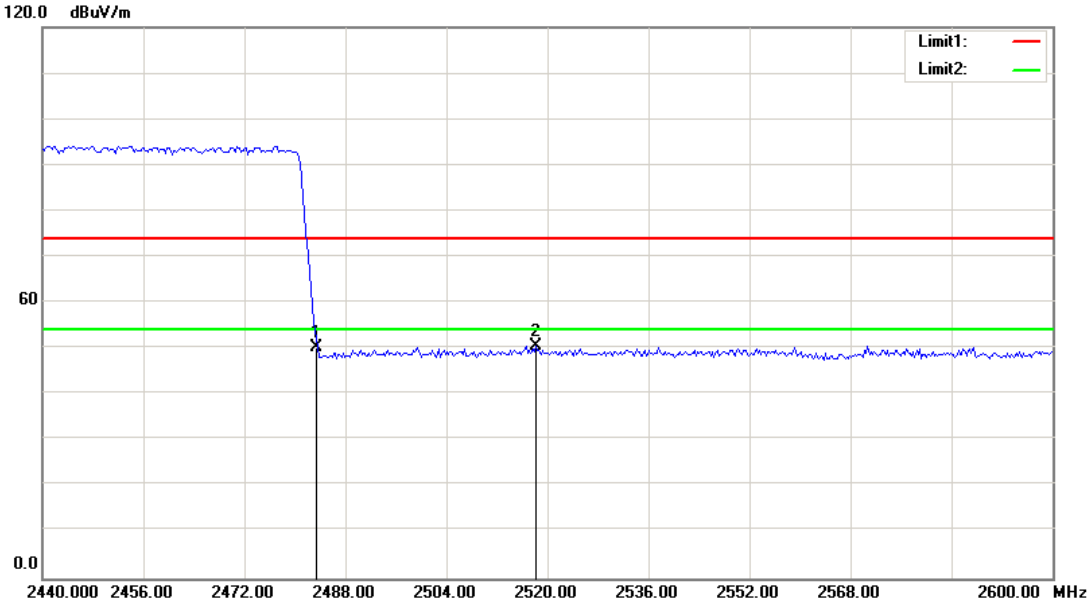
Test Mode: 1Mbps-hopping **Channel: 2480**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	57.43	-7.26	50.17	74.00	-23.83	peak	Horizontal
2	2520.000	57.23	-7.16	50.07	74.00	-23.93	peak	Horizontal
1	2483.500	57.40	-7.26	50.14	74.00	-23.86	peak	Vertical
2	2518.205	57.79	-7.16	50.63	74.00	-23.37	peak	Vertical

Horizontal



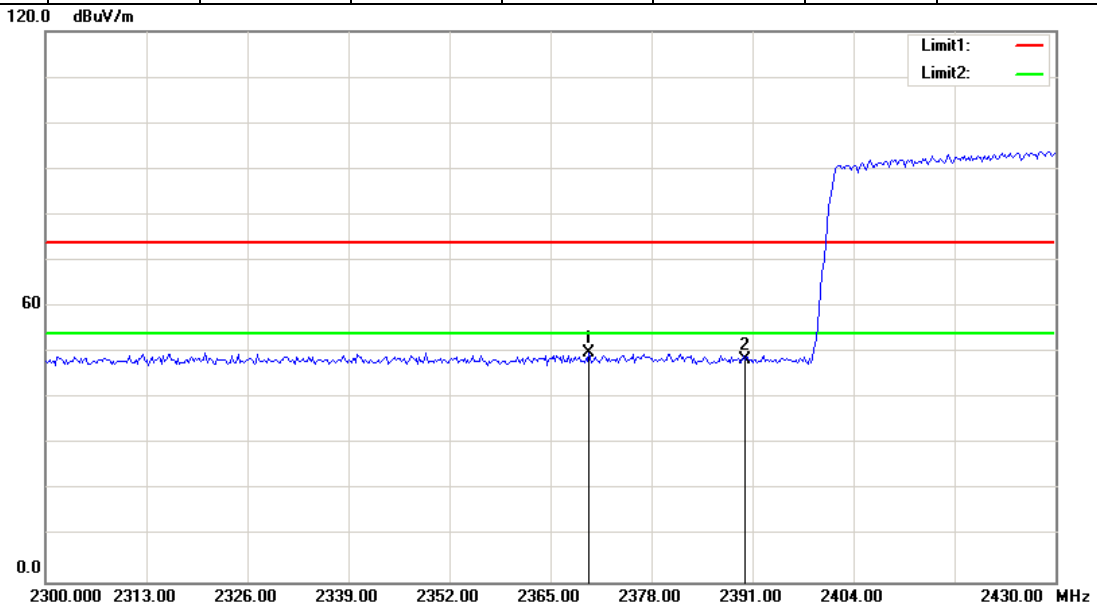
Vertical



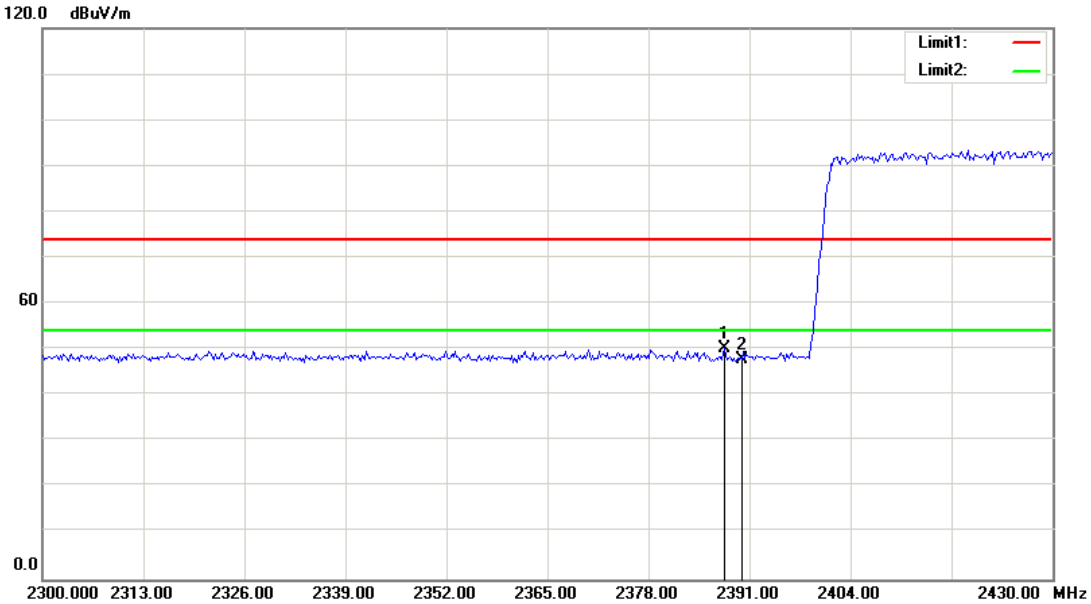
Test Mode: 3Mbps-hopping **Channel: 2402**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2370.000	57.58	-7.64	49.94	74.00	-24.06	peak	Horizontal
2	2390.000	56.12	-7.57	48.55	74.00	-25.45	peak	Horizontal
1	2387.708	57.90	-7.58	50.32	74.00	-23.68	peak	Vertical
2	2390.000	55.45	-7.57	47.88	74.00	-26.12	peak	Vertical

Horizontal



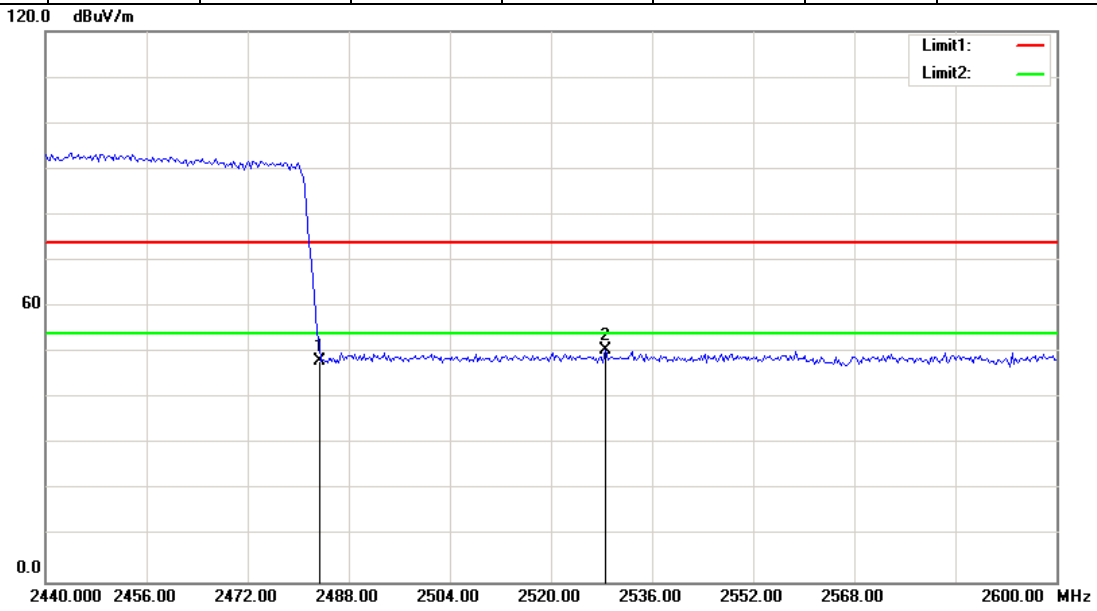
Vertical



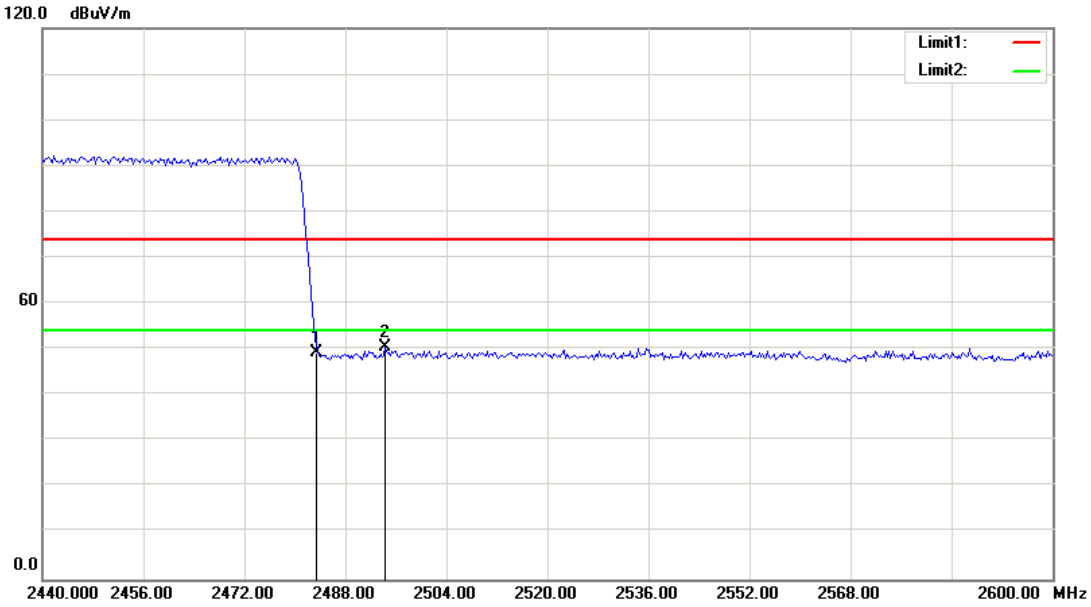
Test Mode: 3Mbps-hopping **Channel: 2480**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	55.44	-7.26	48.18	74.00	-25.82	peak	Horizontal
2	2528.718	57.70	-7.13	50.57	74.00	-23.43	peak	Horizontal
1	2483.500	56.50	-7.26	49.24	74.00	-24.76	peak	Vertical
2	2494.359	57.91	-7.23	50.68	74.00	-23.32	peak	Vertical

Horizontal



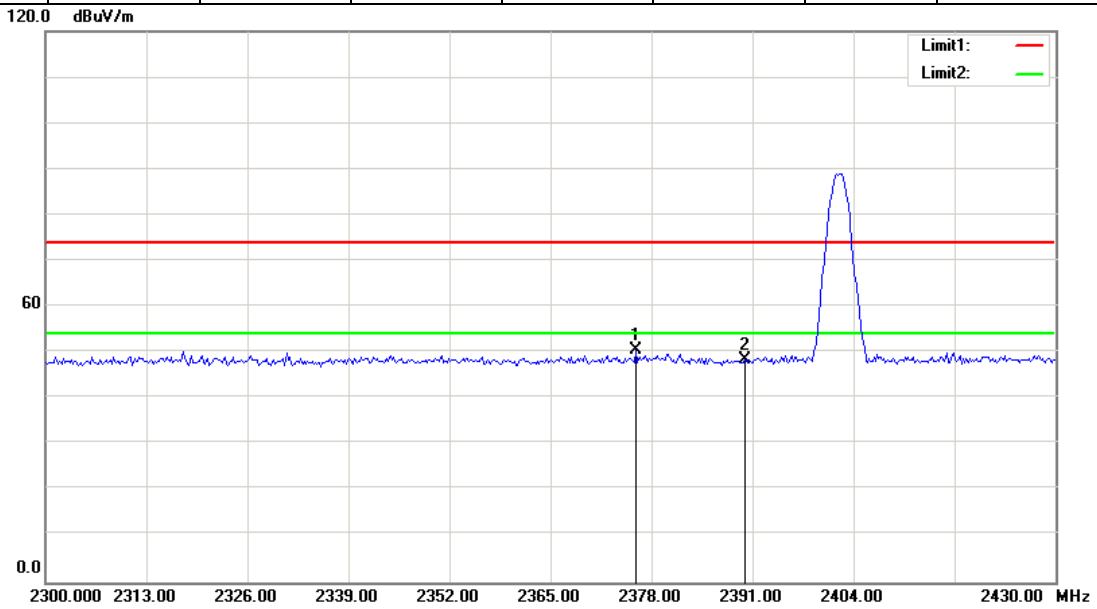
Vertical



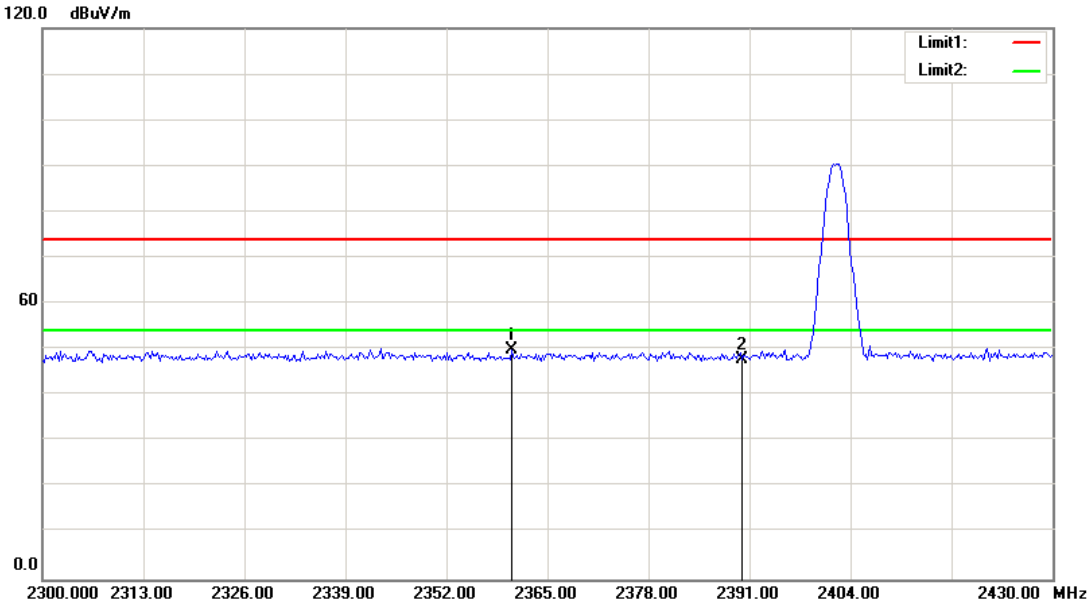
Test Mode: BLE 4.1 **Channel: 2402**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2376.042	58.08	-7.62	50.46	74.00	-23.54	peak	Horizontal
2	2390.000	56.15	-7.57	48.58	74.00	-25.42	peak	Horizontal
1	2360.417	57.50	-7.67	49.83	74.00	-24.17	peak	Vertical
2	2390.000	55.54	-7.57	47.97	74.00	-26.03	peak	Vertical

Horizontal



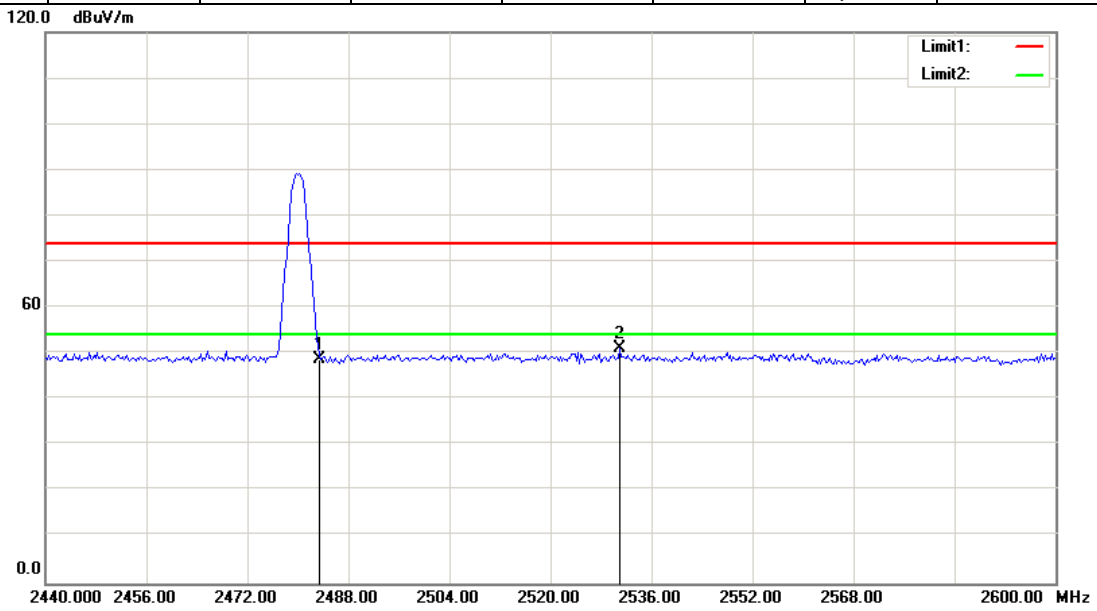
Vertical



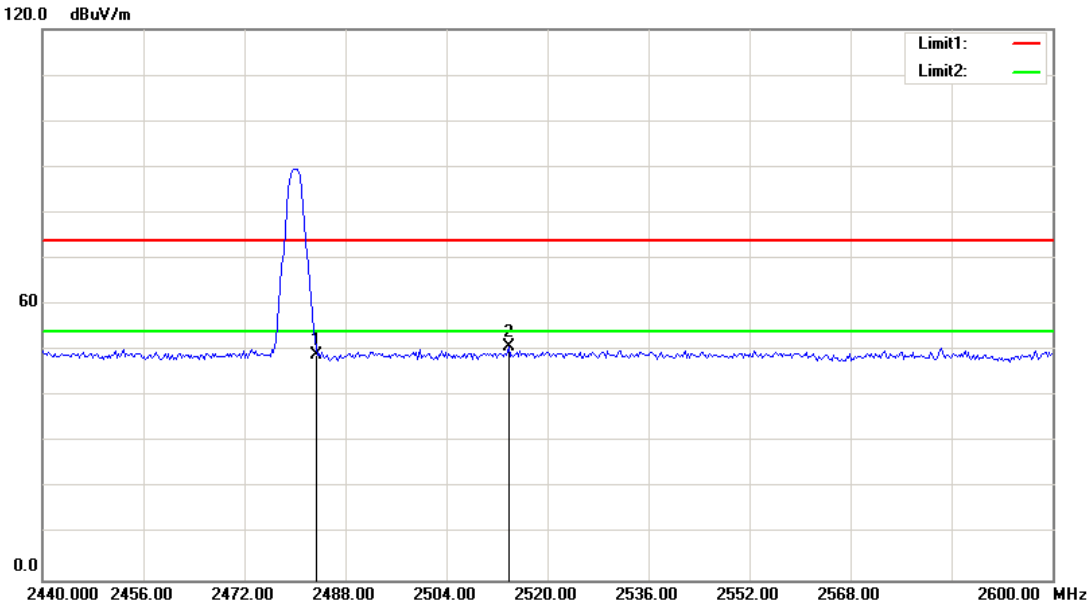
Test Mode: BLE 4.1 **Channel: 2480**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	55.93	-7.26	48.67	74.00	-25.33	peak	Horizontal
2	2531.026	58.39	-7.12	51.27	74.00	-22.73	peak	Horizontal
1	2483.500	56.41	-7.26	49.15	74.00	-24.85	peak	Vertical
2	2513.846	57.98	-7.17	50.81	74.00	-23.19	peak	Vertical

Horizontal



Vertical



Remark: 1). Test Level = Receiver Reading + Antenna Factor + Cable Loss- Preamplifier Factor

2). If the Peak value below the AV Limit, the AV test doesn't perform for this submission.

All frequencies within the “Restricted bands” have been evaluated to compliance. Except as shown in paragraph of this section, only spurious emissions are permitted in any of the frequency bands listed below:

a. FCC Part 15, Subpart C Section 15.205 Restricted bands of operation.

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.5 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	
13.36 - 13.41			

b. RSS-Gen section 7.2.2 Restricted bands of operation

MHz	MHz	GHz
0.090-0.110	240-285	9.0-9.2
2.1735-2.1905	322-335.4	9.3-9.5
3.020-3.026	399.9-410	10.6-12.7
4.125-4.128	608-614	13.25-13.4
4.17725-4.17775	960-1427	14.47-14.5
4.20725-4.20775	1435-1626.5	15.35-16.2
5.677-5.683	1645.5-1646.5	17.7-21.4
6.215-6.218	1660-1710	22.01-23.12
6.26775-6.26825	1718.8-1722.2	23.6-24.0
6.31175-6.31225	2200-2300	31.2-31.8
8.291-8.294	2310-2390	36.43-36.5
8.362-8.366	2655-2900	Above 38.6
8.37625-8.38675	3260-3267	
8.41425-8.41475	3332-3339	
12.29-12.293	3345.8-3358	
12.51975-12.52025	3500-4400	
12.57675-12.57725	4500-5150	
13.36-13.41	5350-5460	
16.42-16.423	7250-7750	
16.69475-16.69525	8025-8500	
16.80425-16.80475		
25.5-25.67		
37.5-38.25		
73-74.6		
74.8-75.2		
108-138		
156.52475-156.52525		
156.7-156.9		

--End of the Report--