

# FCC Radio Test Report

## FCC ID: NDD9574781603

This report concerns (check one): ☒Original Grant ☐Class II Change

**Project No.** : 1604061  
**Equipment** : AC1200 Dual-Band Wi-Fi Extender  
**Test Model** : EW-7478AC  
**Serial Model** : EW-7478WAP, RE11S, RG21, RE11, RE10  
**Applicant** : EDIMAX TECHNOLOGY CO., LTD.  
**Address** : No.3, Wu-Chuan 3rd Road, Wu-Gu, New Taipei City  
24891, Taiwan

**Date of Receipt** : Apr. 19, 2016  
**Date of Test** : Apr. 19, 2016 ~ Jun. 21, 2016  
**Issued Date** : Jun. 21, 2016  
**Tested by** : BTL Inc.

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### REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1604061	Original Issue.	Jun. 21, 2016

## 1. CERTIFICATION

Equipment : AC1200 Dual-Band Wi-Fi Extender  
Brand Name : EDIMAX  
Model Name : EW-7478AC, RE11S, RG21, RE11, RE10  
Applicant : EDIMAX TECHNOLOGY CO., LTD.  
Manufacturer : EDIMAX TECHNOLOGY CO., LTD.  
Address : No.3, Wu-Chuan 3rd Road, Wu-Gu, New Taipei City 24891, Taiwan  
Date of Test : Apr. 19, 2016 ~ Jun. 21, 2016  
Test Sample : Production Sample  
Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1604061) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E			
Standard(s) Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.407(a)	26dB Spectrum Bandwidth	PASS	
15.407(a)	Maximum Conducted Output Power	PASS	
15.407(a)	Power Spectral Density	PASS	
15.407(a)	Radiated Emissions	PASS	
15.407(b)	Band Edge Emissions	PASS	
15.407(g)	Frequency Stability	PASS	
15.203	Antenna Requirements	PASS	

### NOTE:

(1)" N/A" denotes test is not applicable in this test report.

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report:

### **Conducted emission Test:**

**C05:** (VCCI RN: C-4742; FCC RN:965108; FCC DN:TW1082)

No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

### **Radiated emission Test (Below 1 GHz):**

**CB11:** (VCCI RN: R-4260; FCC RN:949005; FCC DN:TW1082; IC Assigned Code:20088-2)

No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

### **Radiated emission Test (Above 1 GHz):**

**CB11:** (VCCI RN: G-868; FCC RN:949005; FCC DN:TW1082; IC Assigned Code:20088-2)

No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan



## 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{\text{CISPR}}$  requirement.

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

### A. Conducted emission test:

Test Site	Method	Measurement Frequency Range	U, (dB)
C05	CISPR	150 kHz~30MHz	2.04

### B. Radiated emission test:

Test Site	Method	Measurement Frequency Range	U,(dB)
CB11 (3m)	CISPR	9kHz ~ 150kHz	4.00
		150kHz ~ 30MHz	4.00

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
CB11 (3m)	CISPR	30MHz ~ 200MHz	V	3.06
		30MHz ~ 200MHz	H	2.58
		200MHz ~ 1,000MHz	V	3.50
		200MHz ~ 1,000MHz	H	3.10

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
CB11 (3m)	CISPR	1GHz ~ 6GHz	V	4.14
		1GHz ~ 6GHz	H	4.14

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
CB11 (1m)	CISPR	6GHz ~ 18GHz	V	5.34
		6GHz ~ 18GHz	H	5.34

Test Site	Method	Measurement Frequency Range	U, (dB)
CB08 (1m)	CISPR	18 ~ 26.5 GHz	4.66
		26.5 ~ 40 GHz	4.74

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our  $U_{\text{lab}}$  values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called  $U_{\text{CISPR}}$ , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

It can be seen that our  $U_{\text{lab}}$  values are smaller than  $U_{\text{CISPR}}$ .

Note: unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	AC1200 Dual-Band Wi-Fi Extender	
Brand Name	EDIMAX	
Test Model	EW-7478AC	
Serial Model	EW-7478WAP, RE11S, RG21, RE11, RE10	
Model Difference	Marketing Purpose	
EUT Power Rating	I/P: AC 100-240V 50-60Hz	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	866Mbps
Output Power	Output Power (Max.)for UNII-1	802.11A: 18.42 dBm 802.11N (20M): 18.99 dBm 802.11N (40M): 18.47 dBm 802.11AC (VHT80MHz): 17.20 dBm
	Output Power (Max.)for UNII-3	802.11A: 17.21 dBm 802.11N (20M): 17.82 dBm 802.11N (40M): 17.58 dBm 802.11AC (VHT80MHz): 18.25 dBm



Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- Channel List:

802.11a 802.11n 20MHz 802.11ac 20MHz		802.11n 40MHz 802.11ac 40MHz		802.11ac 80MHz	
UNII-1		UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

802.11a 802.11n 20MHz 802.11ac 20MHz		802.11n 40MHz 802.11ac 40MHz		802.11ac 80MHz	
UNII-3		UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

### 3. Antenna Specification:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1		98272PRSX000	Dipole	SMA	3.55
2		98272PRSX000	Dipole	SMA	3.55

Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R).
- (2) Directional gain =  $G_{ANT} + 10 \log(N)$  dBi =  $3.55 + 10 \log(2) = 6.56$  dBi.  
Reduced value =  $6.56 - 6 = 0.56$  dB

4.

Operating Mode	2TX
TX Mode	
802.11A	V (ANT 1+ANT 2)
802.11N (20MHz)	V (ANT 1+ANT 2)
802.11N (40MHz)	V (ANT 1+ANT 2)
802.11AC (VHT80MHz)	V (ANT 1+ANT 2)

### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC(VHT80) Mode / CH42 (UNII-1)
Mode 5	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 6	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 7	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 8	TX AC(VHT80) Mode / CH155 (UNII-3)
Mode 9	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 9	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC(VHT80) Mode / CH42 (UNII-1)
Mode 5	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 6	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 7	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 8	TX AC(VHT80) Mode / CH155 (UNII-3)

Note:

(1) For radiated below 1GHz test, the 802.11A mode is found to be the worst case and recorded.

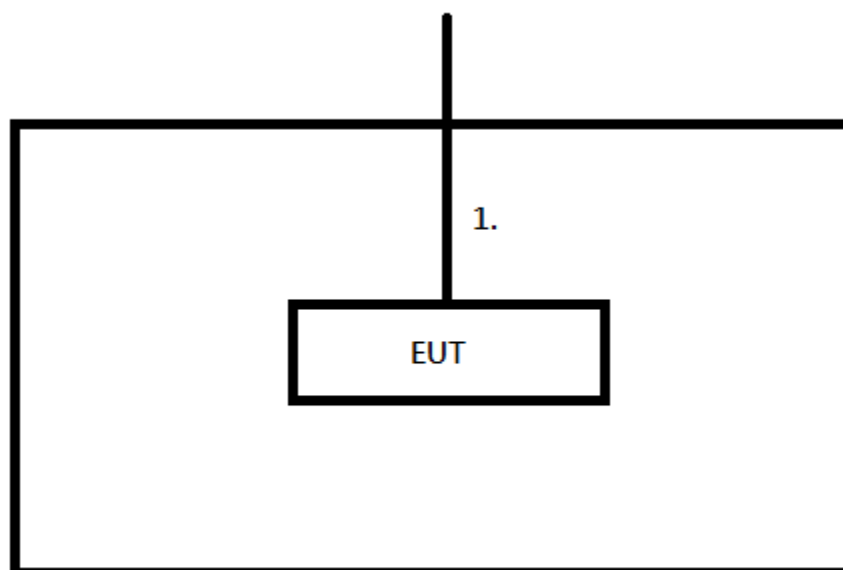
### 3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product

UNII-1			
Test Software Version	QA_v1.0.3.11 (5G MT7612E)		
Frequency (MHz)	5180	5200	5240
A Mode	17/17	17/17	17/17
N20 Mode	17/17	17/17	17/17
Frequency (MHz)	5190	5230	
N40 Mode	10/10	17/17	
AC(VHT80) Mode	8/8		

UNII-3			
Test Software Version	QA_v1.0.3.11 (5G MT7612E)		
Frequency (MHz)	5745	5785	5825
A Mode	13/13	13/13	13/13
N20 Mode	13/13	13/13	13/13
Frequency (MHz)	5755	5795	
N40 Mode	13/13	13/13	
AC(VHT80) Mode	13/13		

### 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



### 3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	10m	RJ45

## 4. EMC EMISSION TEST

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

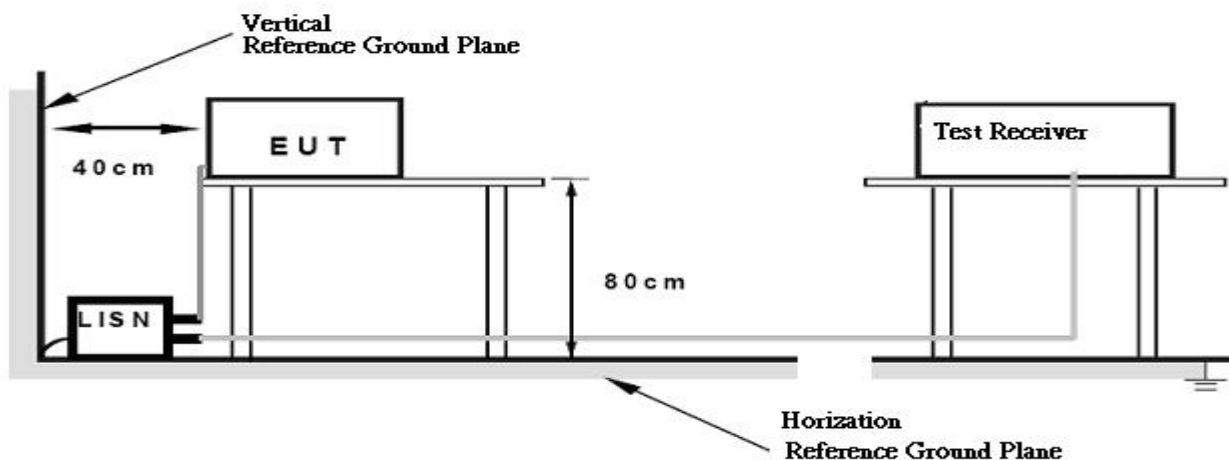
#### 4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

#### 4.1.4 TEST SETUP



#### 4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

The EUT was programmed to be in continuously transmitting/TX Mode mode.

#### 4.1.6 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: AC 120V/60Hz

#### 4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “\*” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150kHz to 30MHz.



## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 RADIATED EMISSION LIMITS

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.

#### LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
5470-5725	-27	68.3
5725-5850	-27(Note 2)	68.3
	10 (Note 2)	105.3
	15.6 (Note 2)	110.9
	27 (Note 2)	122.3

Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field

strength:  $E = \frac{1000000 \sqrt{30P}}{3}$  μV/m, where P is the eirp (Watts)

2. According to FCC 16-24, All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

#### 4.2.2 TEST PROCEDURE

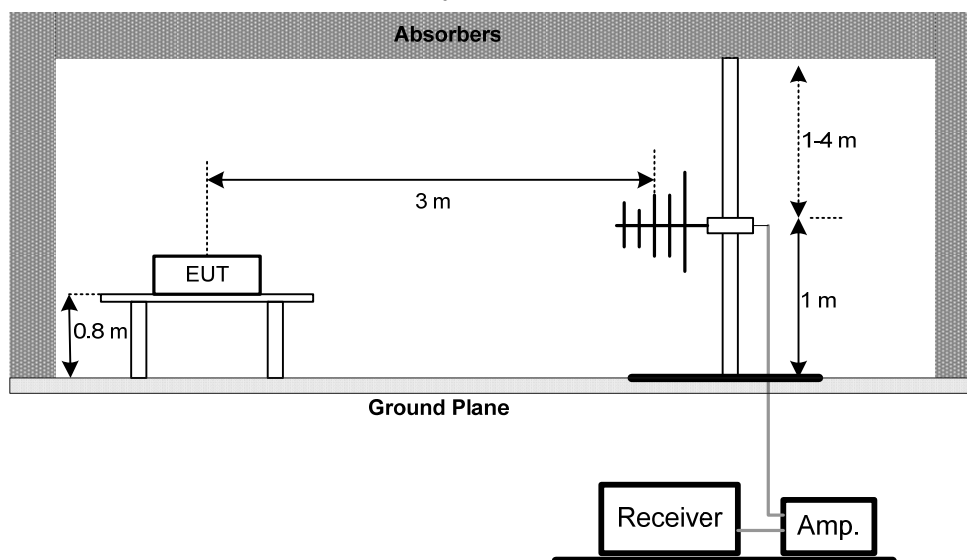
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

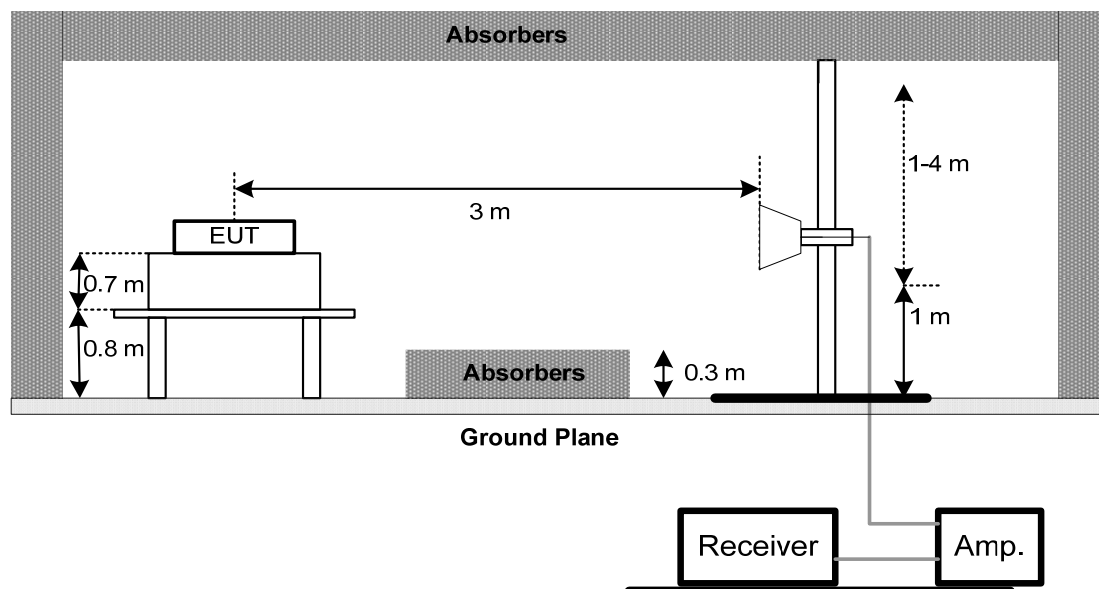
No deviation

#### 4.2.4 TEST SETUP

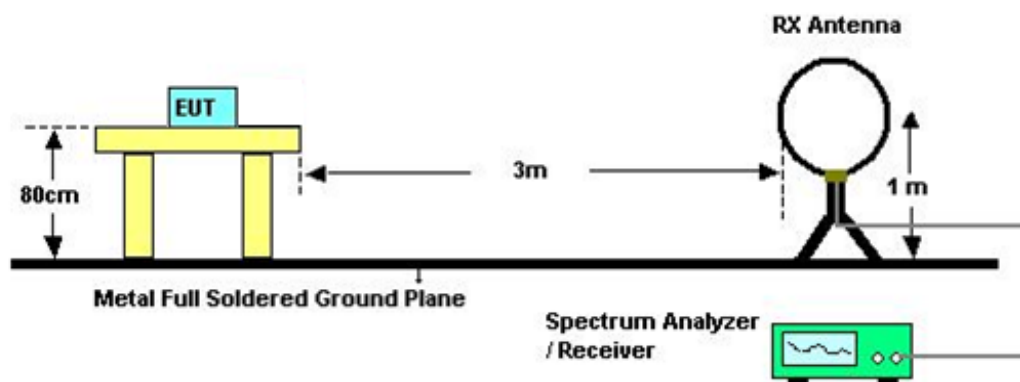
(A)Radiated Emission Test Set-Up Frequency Below 1GHz



## (B) Radiated Emission Test Set-Up Frequency Above 1 GHz



## (C) Radiated emissions below 30MHz



### 4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 4.2.6 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 65%    Test Voltage: AC 120V/60Hz

#### 4.2.7 TEST RESULTS (9K TO 30MHz)

Please refer to the Attachment B

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor =  $40 \log (\text{specific distance} / \text{test distance})$  (dB);
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

#### 4.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHz)

Please refer to the Attachment C.

Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120kHz ; SPA setting in RBW=120kHz, VBW =120kHz, Swp. Time = 0.3 sec./MHz ◦
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ◦
- (3) Measuring frequency range from 30MHz to 1000MHz ◦
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦

#### 4.2.9 TEST RESULTS (ABOVE 1000 MHz)

Please refer to the Attachment D.

Remark:

- (1) Spectrum Setting: 30MHz – 1000MHz , RBW= 100kHz, VBW=100kHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』 . Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) Data of measurement within this frequency range shown “ \* ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axes:  
“X” - denotes Laid on Table ; “Y” - denotes Vertical Stand ; “Z” - denotes Side Stand
- (7) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.
- (8) No limit: This is fundamental signal, the judgment is not applicable.  
For fundamental signal judgment was referred to Peak output test.

## 5. 26dB SPECTRUM BANDWIDTH

### 5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Bandwidth	26 dB Bandwidth	5150-5250	PASS
	Minimum 500kHz 6dB Bandwidth	5725-5850	PASS

#### 5.1.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	300 kHz
VBW	1000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26dB below carrier

#### 5.1.2 DEVIATION FROM STANDARD

No deviation.

#### 5.1.3 TEST SETUP



#### 5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

**5.1.5 EUT TEST CONDITIONS**

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: AC 120V/60Hz

**5.1.6 TEST RESULTS**

Please refer to the Attachment E.

## 6. MAXIMUM CONDUCTED OUTPUT POWER

### 6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Conducted Output Power	Fixed:1 Watt (30dBm) Mobile and portable: 250mW (24dBm)	5150-5250	PASS
	1 Watt (30dBm)	5725-5850	PASS
Note: The maximum e.i.r.p at anyelevation angle above 30 degrees as measured from the horizon must not exceed 125mW(21dBm)			

#### 6.1.1 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- 

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	$\geq$ 3MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

- Test was performed in accordance with method of KDB 789033 D02.

### 6.1.2 DEVIATION FROM STANDARD

No deviation.

### 6.1.3 TEST SETUP



### 6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 6.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: AC 120V/60Hz

### 6.1.6 TEST RESULTS

Please refer to the Attachment F.



## 7. POWER SPECTRAL DENSITY TEST

### 7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	Other then Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250	PASS
	30dBm/500kHz	5725-5850	PASS

### 8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	≥ 3MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

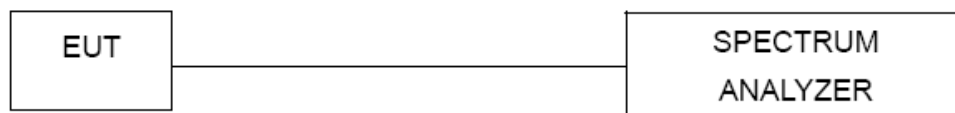
Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
- The value measured with RBW=1MHz is to be added with  $10\log(500\text{kHz}/1\text{MHz})$  which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.

### **7.1.1 DEVIATION FROM STANDARD**

No deviation.

### **7.1.2 TEST SETUP**



### **7.1.3 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

### **7.1.4 EUT TEST CONDITIONS**

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: AC 120V/60Hz

### **7.1.5 TEST RESULTS**

**Please refer to the Attachment G.**

## 8. FREQUENCY STABILITY MEASUREMENT

### 8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Frequency Stability	Specified in the user's manual	5150-5250	PASS
		5725-5850	PASS

#### 8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

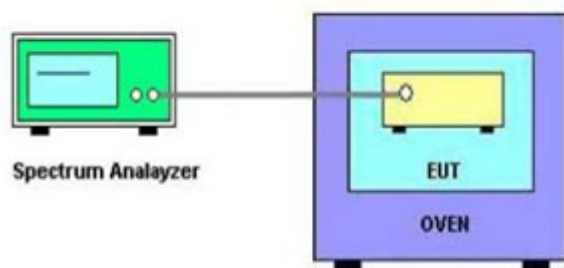
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- d. User manual temperature is 0°C~50°C.

#### 8.1.2 DEVIATION FROM STANDARD

No deviation.

### 8.1.3 TEST SETUP



### 8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 8.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: AC 120V/60Hz

### 8.1.6 TEST RESULTS

Please refer to the Attachment H.

## 9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	May 31, 2017
2	Test Cable	TIMES	CFD300-NL	C03	Mar. 03, 2017
3	EMI Test Receiver	R&S	ESR3	101854	Dec. 08, 2016
4	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9038A	MY51210215	Jun. 06, 2017
2	Horn Antenna	Schwarzbeck	BBHA 9120	D 546	Nov. 04, 2016
3	Microwave Pre_amplifier	HP	8447D	2944A08891	Mar. 07, 2017
4	Test Cable	EMCI	EMC104-SM-S M-5000	150302	Mar. 07, 2017
5	Test Cable	EMCI	EMC104-SM-S M-800	150305	Mar. 07, 2017
6	Test Cable	EMCI	EMC104-SM-S M-2500	150306	Mar. 07, 2017
7	Test Cable	EMCI	EMC8D-NM-NM -8000	150301	Mar. 07, 2017
8	Test Cable	EMCI	EMC8D-NM-NM -2500	150303	Mar. 07, 2017
9	Test Cable	EMCI	EMC8D-NM-NM -1000	150304	Mar. 07, 2017
10	Pre-Amplifier	Agilent	8449B	3008A02331	Jan. 23, 2017
11	Trilog-Broadband Antenna	Schwarzbeck	VULB9168	9168-364	Feb. 03, 2017
12	Loop Antenna	EMCO	6502	00042960	Nov. 15. 2016

Spectrum Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 17, 2017

Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	May 18, 2017
2	Power Meter Sensor	Anritsu	MA2491A	034138	May 17, 2017

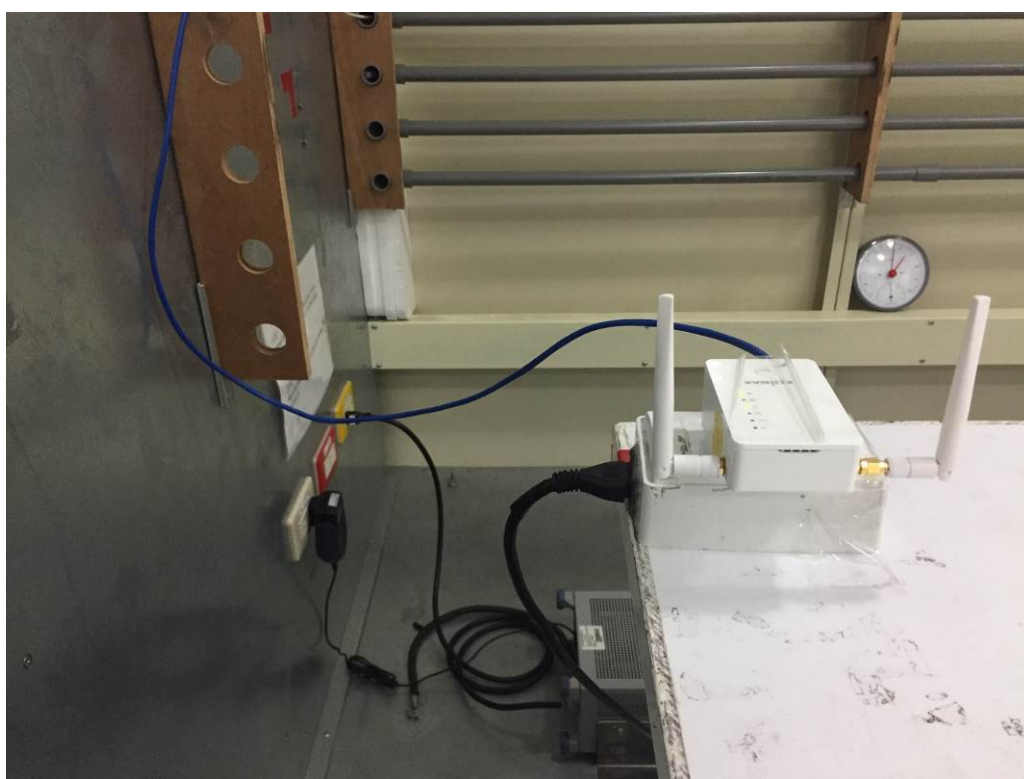
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 17, 2017

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 17, 2017
2	Thermal Chamber	HOLINK	CHOLINK/H-T-1F-D	BA03101701	Jun. 07, 2017

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of equipment list is one year.

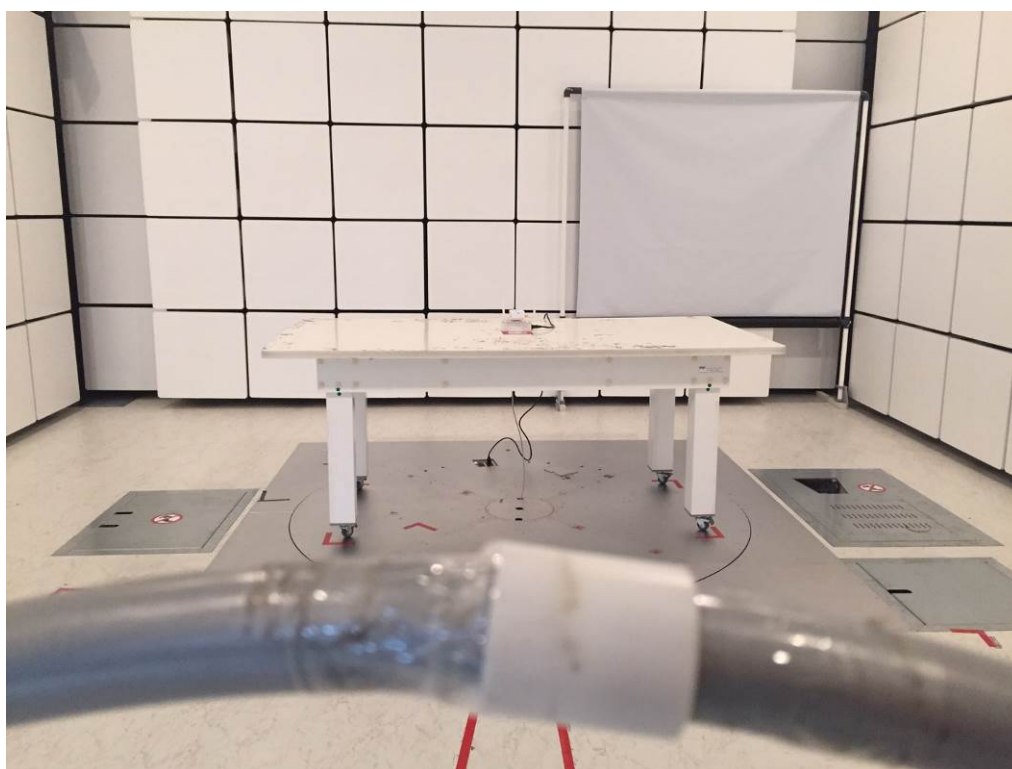
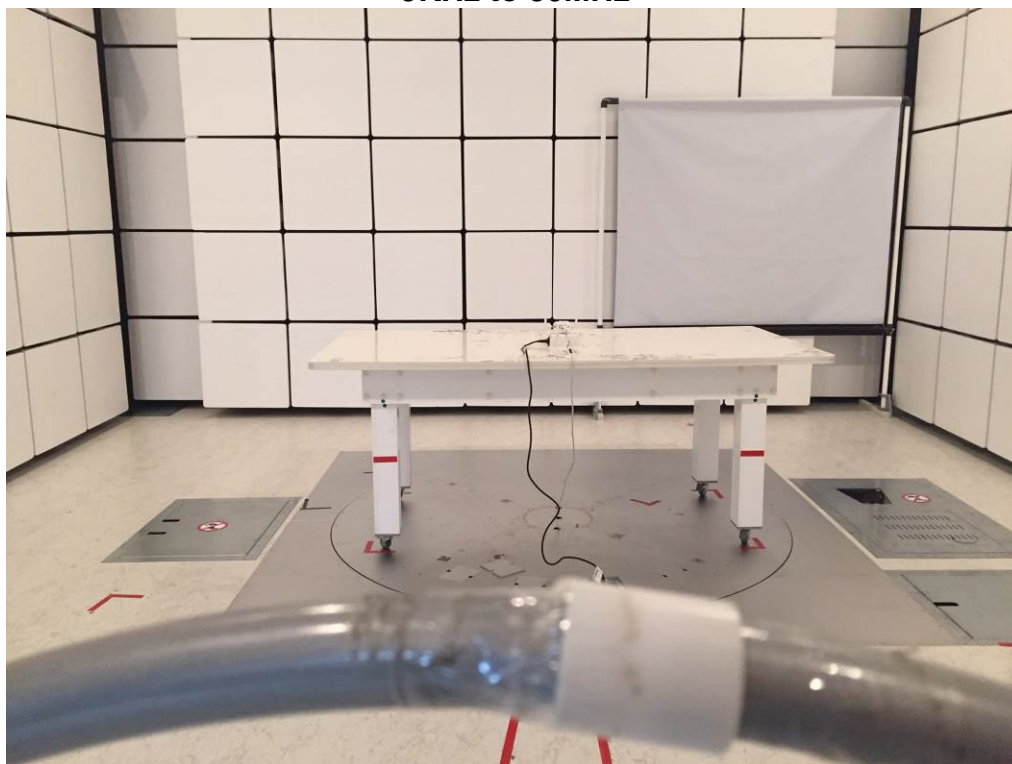
## 10. EUT TEST PHOTOS

### Conducted Measurement Photos



## Radiated Measurement Photos

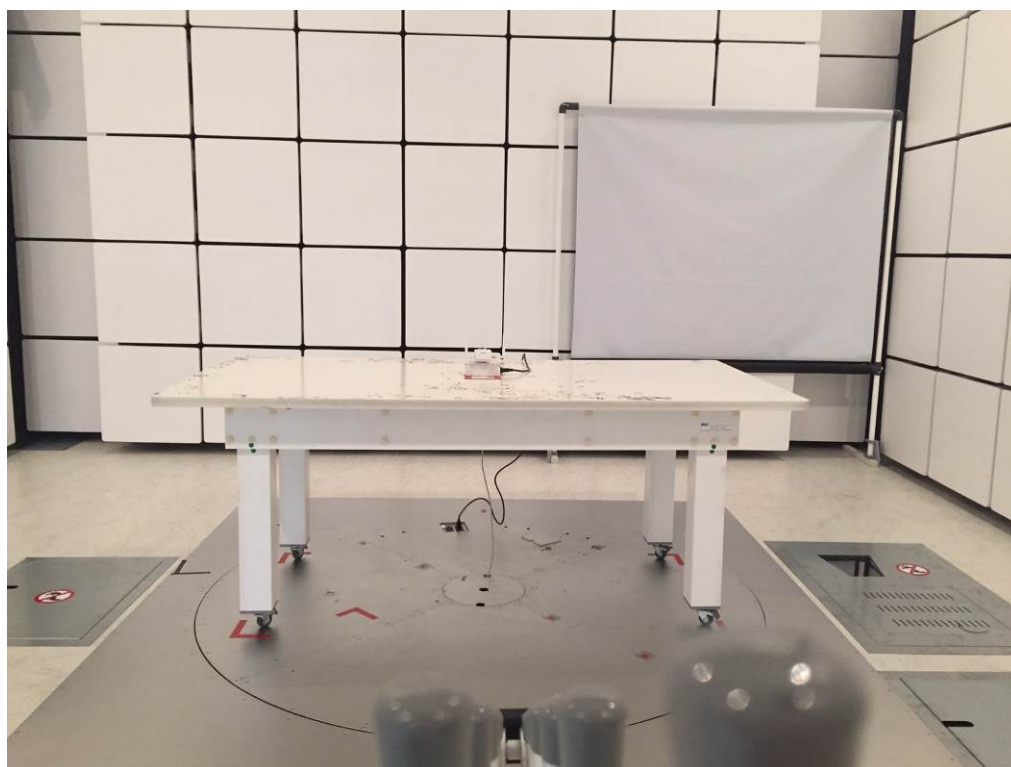
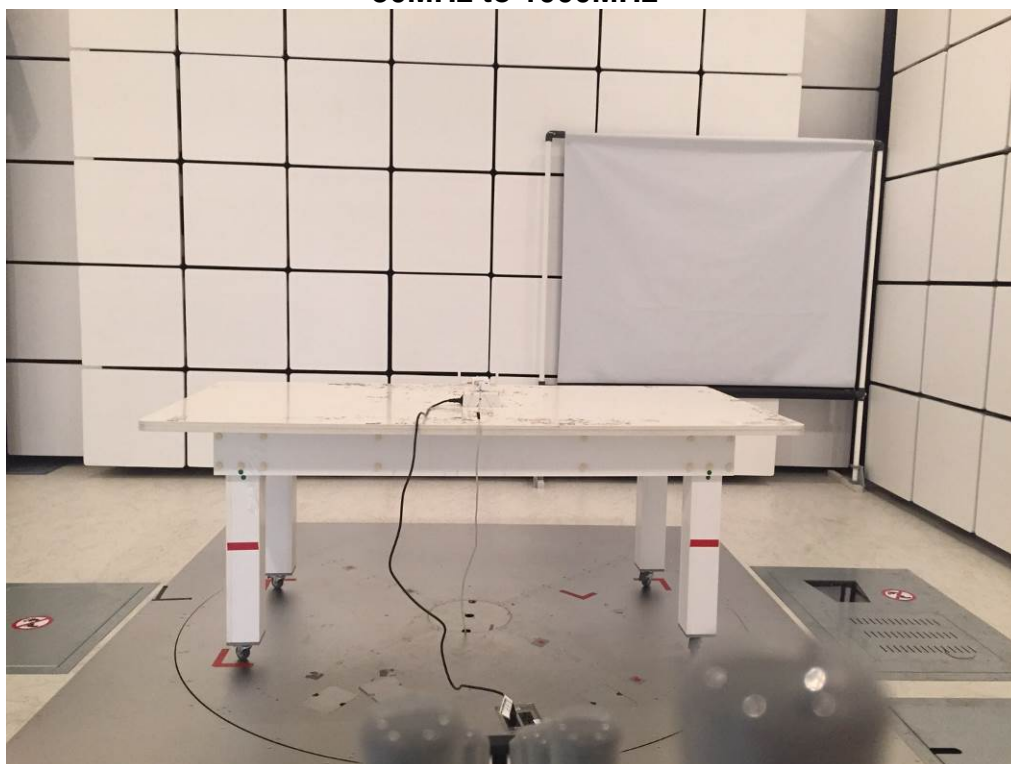
9KHz to 30MHz





## Radiated Measurement Photos

30MHz to 1000MHz



## Radiated Measurement Photos

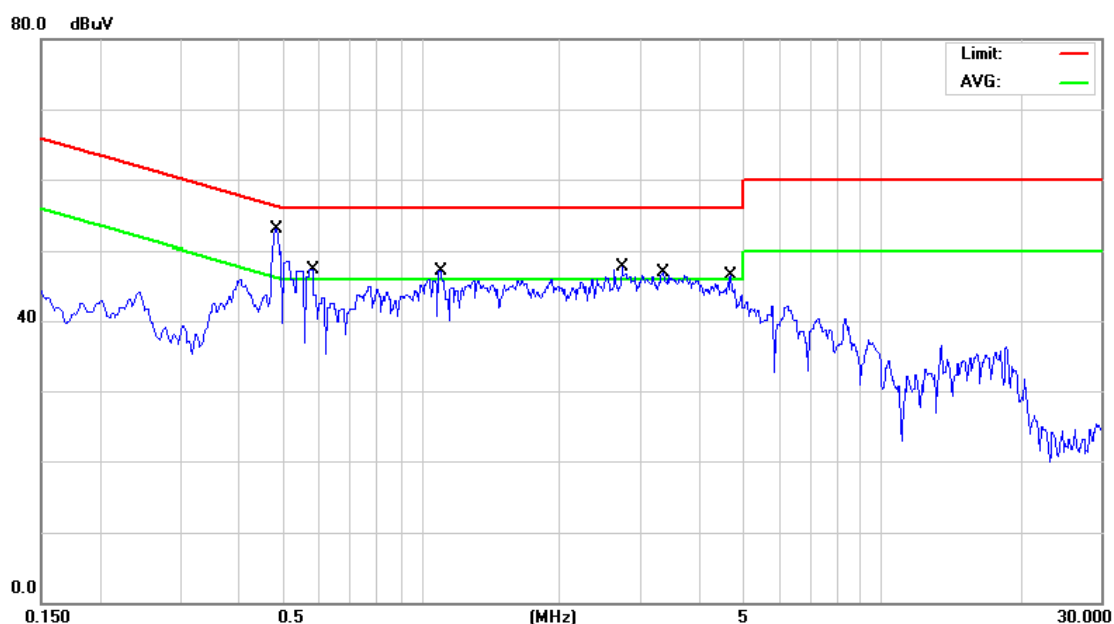
Above 1000MHz



## **ATTACHMENT A - CONDUCTED EMISSION**

Test Mode: TX MODE\_UNII-1

### Line

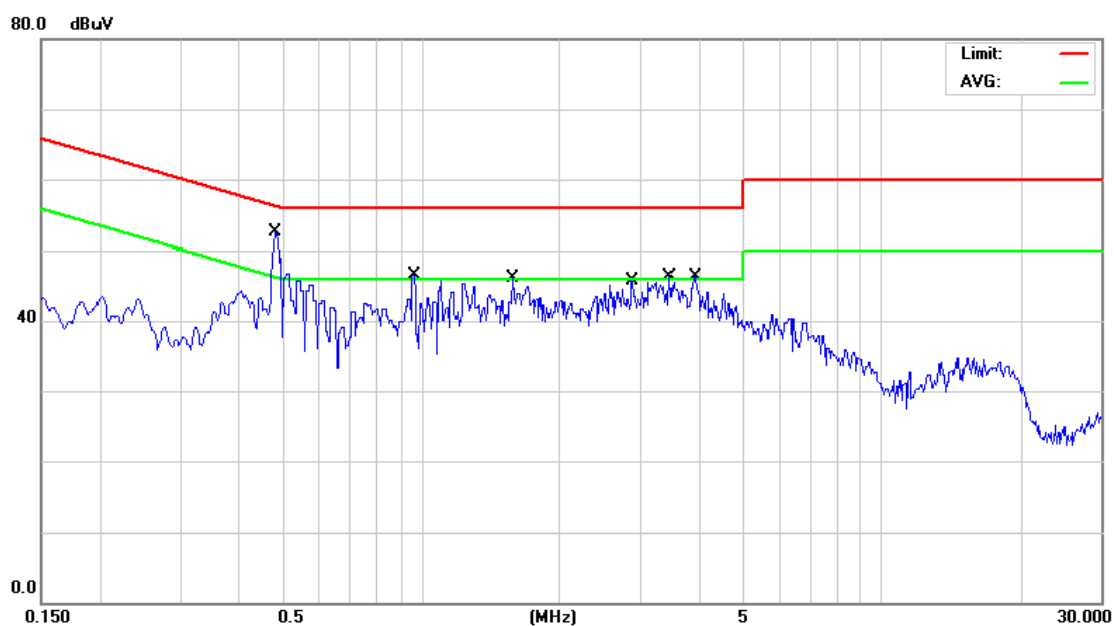


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.4839	35.70	9.69	45.39	56.27	-10.88	QP	
2		0.4839	25.90	9.69	35.59	46.27	-10.68	AVG	
3		0.5810	31.60	9.69	41.29	56.00	-14.71	QP	
4		0.5810	11.90	9.69	21.59	46.00	-24.41	AVG	
5	*	1.0940	36.10	9.71	45.81	56.00	-10.19	QP	
6		1.0940	24.60	9.71	34.31	46.00	-11.69	AVG	
7		2.7320	30.90	9.80	40.70	56.00	-15.30	QP	
8		2.7320	20.50	9.80	30.30	46.00	-15.70	AVG	
9		3.3620	32.00	9.83	41.83	56.00	-14.17	QP	
10		3.3620	16.30	9.83	26.13	46.00	-19.87	AVG	
11		4.6850	28.40	9.88	38.28	56.00	-17.72	QP	
12		4.6850	17.60	9.88	27.48	46.00	-18.52	AVG	

Note : The test result has included the cable loss.

Test Mode: TX MODE\_UNII-1

### Neutral

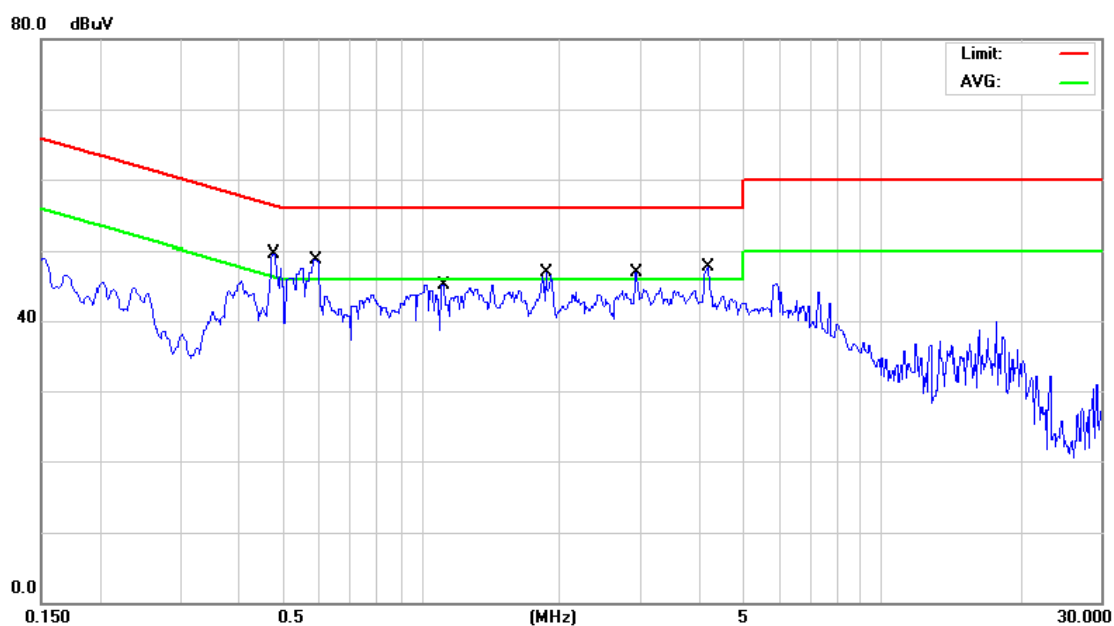


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.4832	36.60	9.69	46.29	56.28	-9.99	QP	
2		0.4832	23.00	9.69	32.69	46.28	-13.59	AVG	
3		0.9590	30.40	9.71	40.11	56.00	-15.89	QP	
4		0.9590	17.70	9.71	27.41	46.00	-18.59	AVG	
5		1.5800	25.00	9.75	34.75	56.00	-21.25	QP	
6		1.5800	11.80	9.75	21.55	46.00	-24.45	AVG	
7		2.8760	30.40	9.81	40.21	56.00	-15.79	QP	
8		2.8760	19.00	9.81	28.81	46.00	-17.19	AVG	
9		3.4610	29.90	9.83	39.73	56.00	-16.27	QP	
10		3.4610	18.00	9.83	27.83	46.00	-18.17	AVG	
11		3.9020	28.10	9.85	37.95	56.00	-18.05	QP	
12		3.9020	16.40	9.85	26.25	46.00	-19.75	AVG	

Note : The test result has included the cable loss.

Test Mode: TX MODE\_UNII-3

### Line

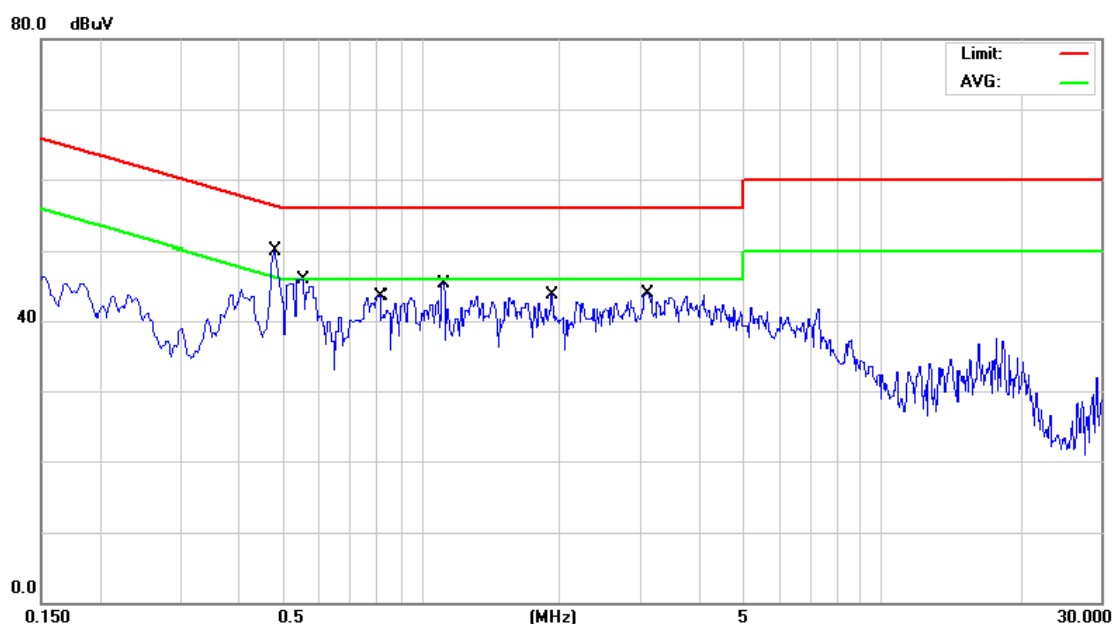


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.4782	33.30	9.69	42.99	56.37	-13.38	QP	
2	*	0.4782	25.70	9.69	35.39	46.37	-10.98	AVG	
3		0.5899	32.60	9.69	42.29	56.00	-13.71	QP	
4		0.5899	9.80	9.69	19.49	46.00	-26.51	AVG	
5		1.1119	31.60	9.72	41.32	56.00	-14.68	QP	
6		1.1119	17.10	9.72	26.82	46.00	-19.18	AVG	
7		1.8679	30.00	9.76	39.76	56.00	-16.24	QP	
8		1.8679	19.60	9.76	29.36	46.00	-16.64	AVG	
9		2.9389	29.20	9.81	39.01	56.00	-16.99	QP	
10		2.9389	15.50	9.81	25.31	46.00	-20.69	AVG	
11		4.1809	29.50	9.86	39.36	56.00	-16.64	QP	
12		4.1809	19.40	9.86	29.26	46.00	-16.74	AVG	

Note : The test result has included the cable loss.

Test Mode: TX MODE\_UNII-3

### Neutral



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1		0.4797	33.40	9.69	43.09	56.34	-13.25	QP	
2		0.4797	17.80	9.69	27.49	46.34	-18.85	AVG	
3		0.5540	33.60	9.69	43.29	56.00	-12.71	QP	
4	*	0.5540	25.90	9.69	35.59	46.00	-10.41	AVG	
5		0.8150	26.10	9.71	35.81	56.00	-20.19	QP	
6		0.8150	14.80	9.71	24.51	46.00	-21.49	AVG	
7		1.1119	29.50	9.73	39.23	56.00	-16.77	QP	
8		1.1119	12.80	9.73	22.53	46.00	-23.47	AVG	
9		1.9220	26.10	9.78	35.88	56.00	-20.12	QP	
10		1.9220	14.40	9.78	24.18	46.00	-21.82	AVG	
11		3.1190	25.80	9.83	35.63	56.00	-20.37	QP	
12		3.1190	15.90	9.83	25.73	46.00	-20.27	AVG	

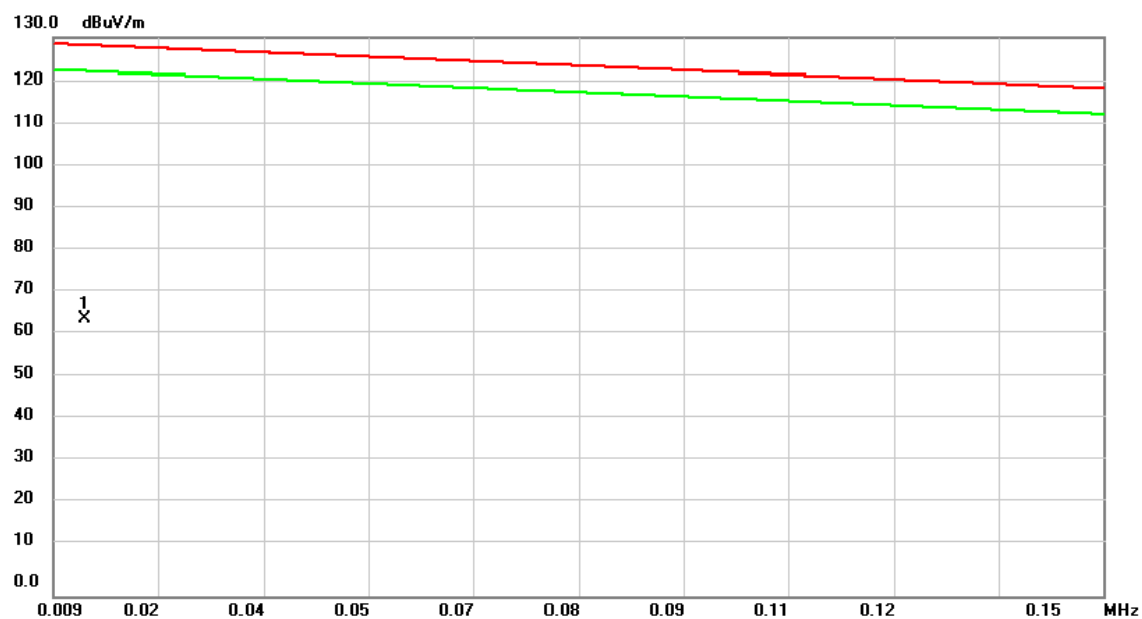
Note : The test result has included the cable loss.

## **ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)**



Test Mode: TX\_UNII-1

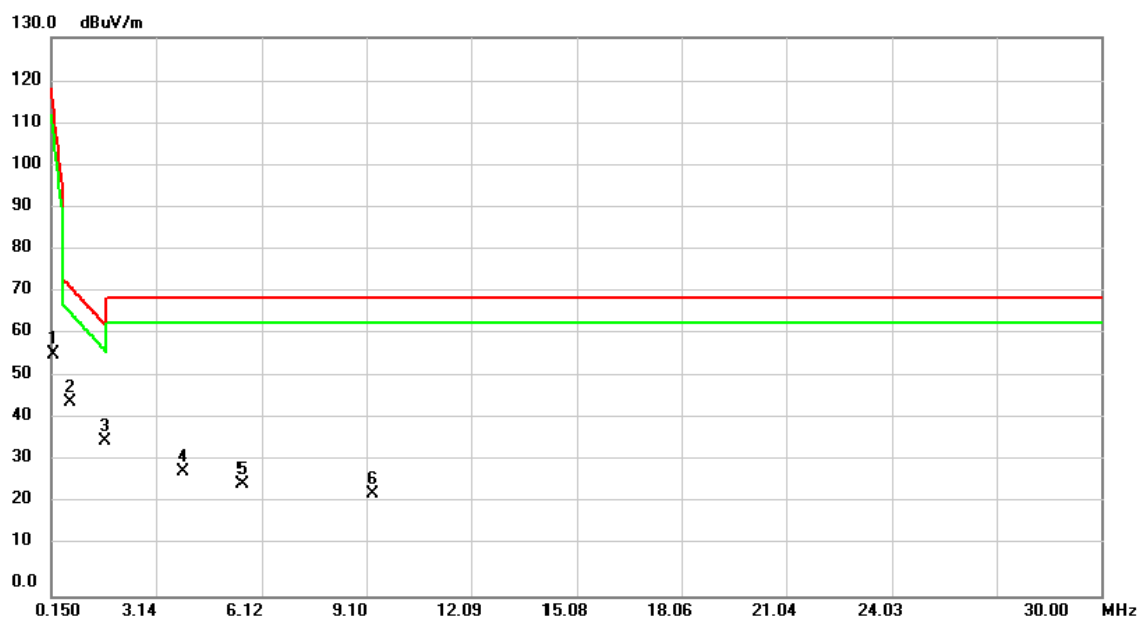
### OPEN



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	0.0133	44.79	19.59	64.38	128.21	-63.83	peak	

Test Mode:	TX_UNII-1
------------	-----------

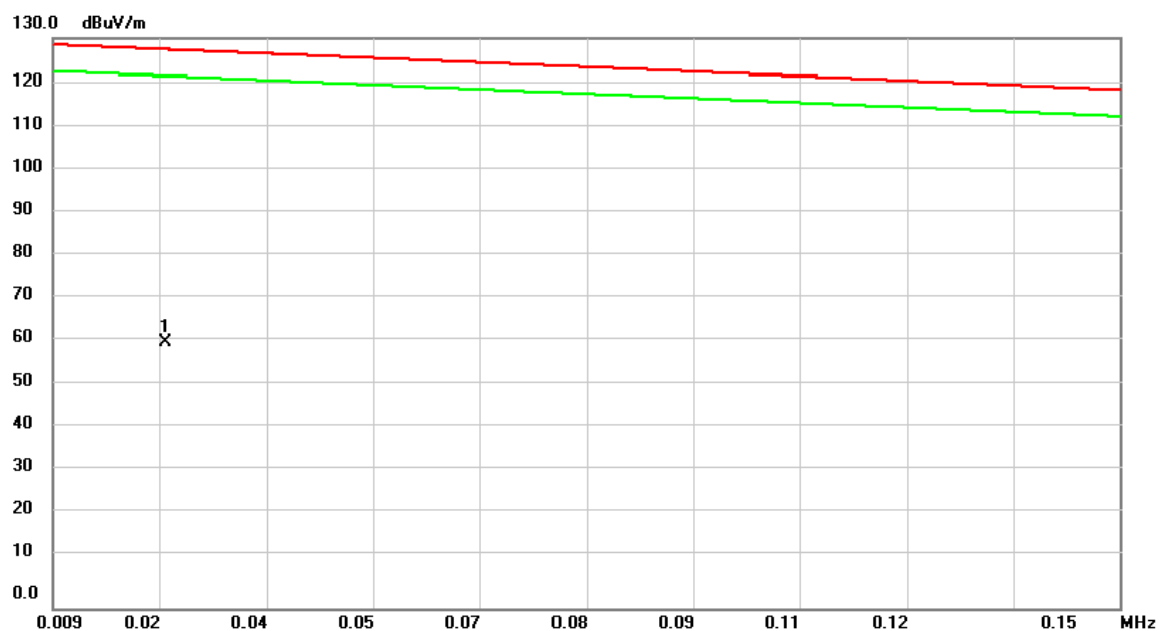
### OPEN



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1898	44.57	11.97	56.54	115.47	-58.93	peak	
2		0.6674	33.36	11.87	45.23	72.22	-26.99	peak	
3	*	1.6624	24.67	11.70	36.37	63.35	-26.98	peak	
4		3.8912	17.70	11.23	28.93	69.54	-40.61	peak	
5		5.5628	14.73	11.39	26.12	69.54	-43.42	peak	
6		9.2642	12.45	11.31	23.76	69.54	-45.78	peak	

Test Mode: TX\_UNII-1

### CLOSE



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0240	43.95	16.65	60.60	127.44	-66.84	peak	

Test Mode: TX\_UNII-1

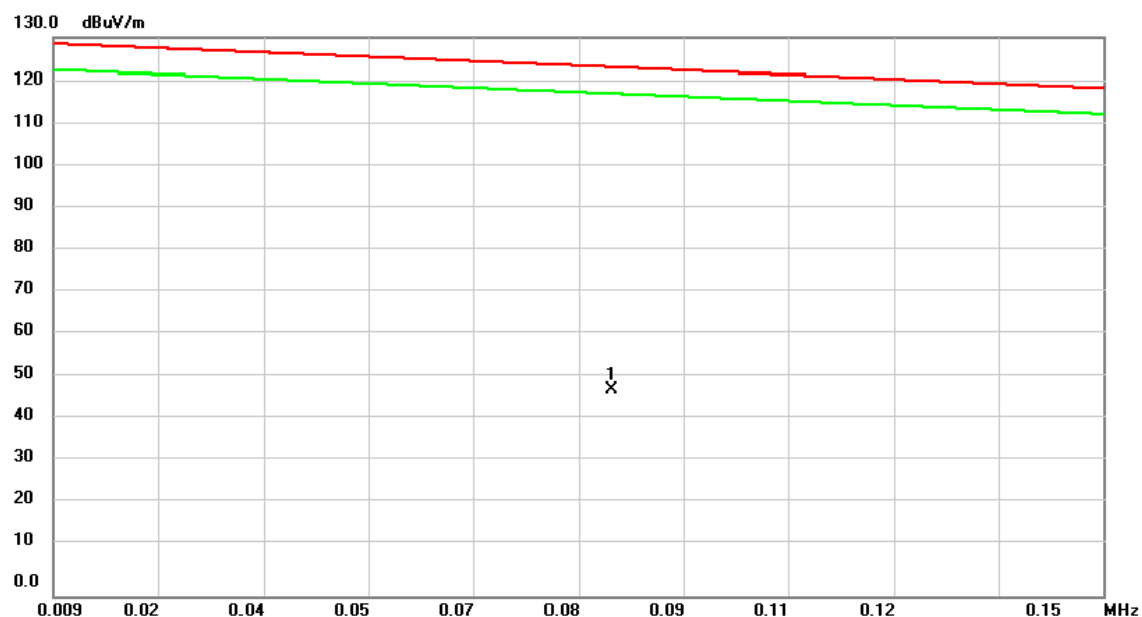
# CLOSE



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.2694	42.03	11.85	53.88	109.72	-55.84	peak	
2		0.4684	36.41	11.80	48.21	95.36	-47.15	peak	
3	*	0.6674	33.71	11.87	45.58	72.22	-26.64	peak	
4		1.1052	29.35	11.95	41.30	68.32	-27.02	peak	
5		1.7420	23.52	11.67	35.19	69.54	-34.35	peak	
6		2.5778	20.46	11.29	31.75	69.54	-37.79	peak	

Test Mode: TX\_UNII-3

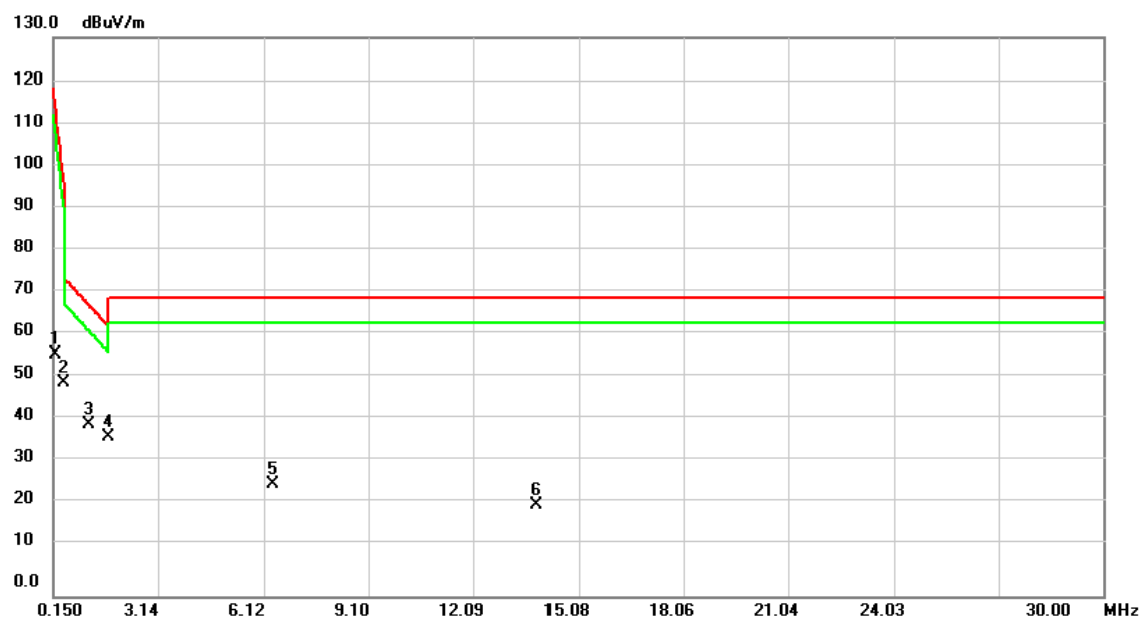
# OPEN



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	0.0840	36.03	12.39	48.42	123.11	-74.69	peak	

Test Mode: TX\_UNII-3

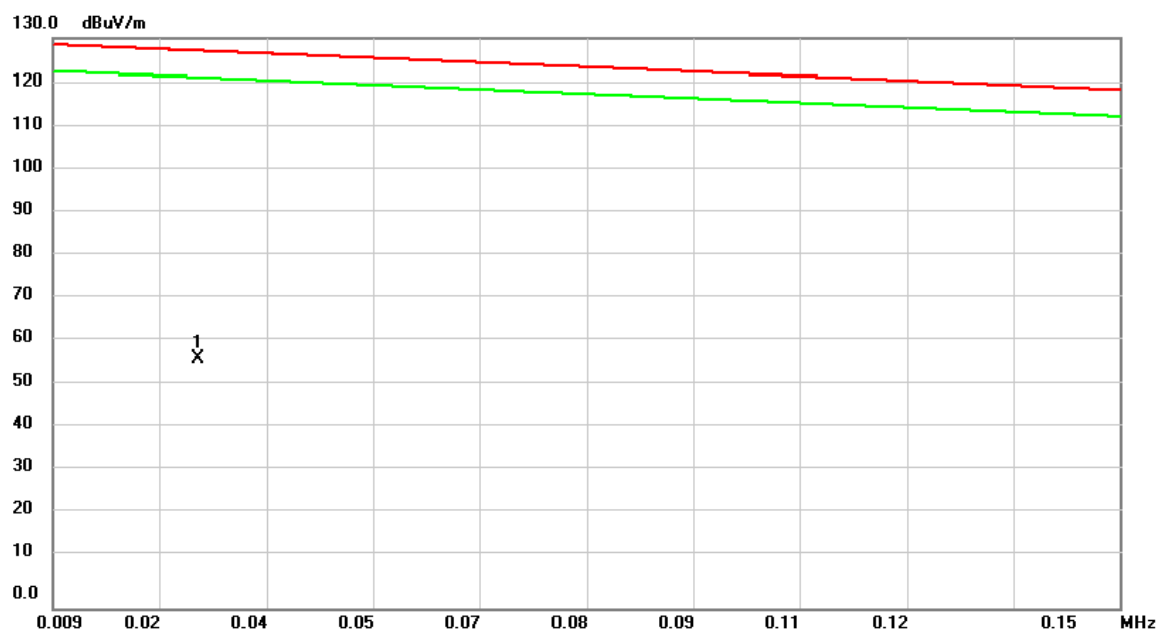
OPEN



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1898	44.57	11.97	56.54	115.47	-58.93	peak	
2		0.4286	38.11	11.80	49.91	98.23	-48.32	peak	
3		1.1450	28.36	11.93	40.29	67.96	-27.67	peak	
4	*	1.7022	25.40	11.68	37.08	62.99	-25.91	peak	
5		6.3588	14.70	11.37	26.07	69.54	-43.47	peak	
6		13.8810	10.14	11.18	21.32	69.54	-48.22	peak	

Test Mode: TX\_UNII-3

### CLOSE



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0282	41.47	15.49	56.96	127.13	-70.17	peak	

Test Mode: TX\_UNII-3

# CLOSE



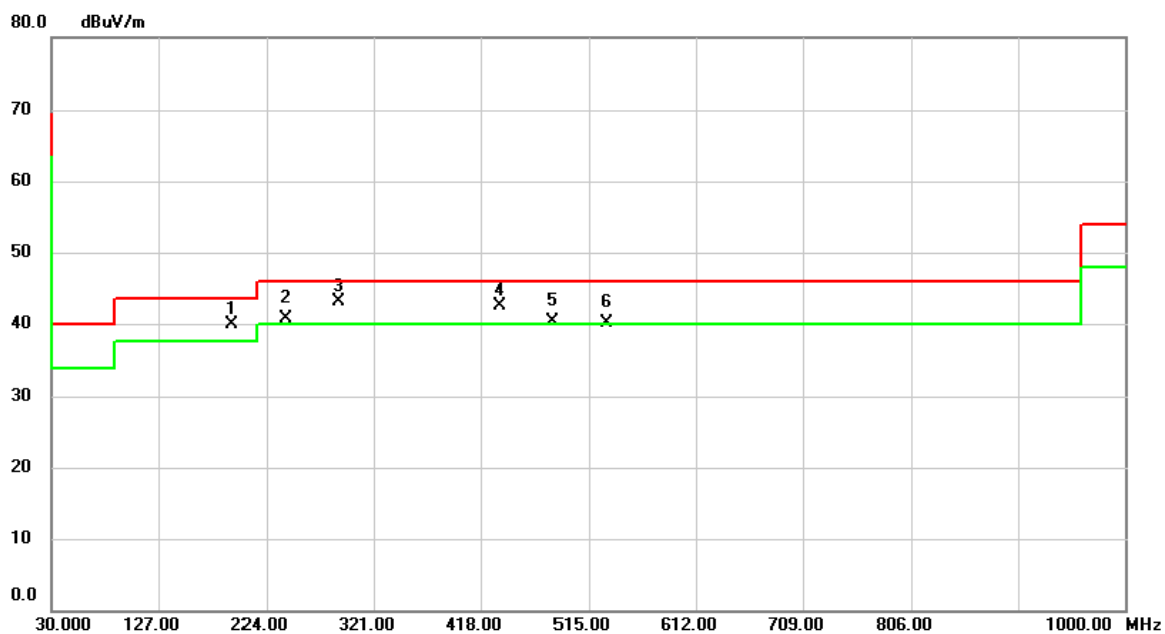
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.3490	40.02	11.80	51.82	103.98	-52.16	peak	
2	*	0.5878	35.34	11.84	47.18	72.93	-25.75	peak	
3		1.0256	29.13	11.99	41.12	69.03	-27.91	peak	
4		1.7818	23.67	11.65	35.32	69.54	-34.22	peak	
5		4.2096	16.56	11.28	27.84	69.54	-41.70	peak	
6		7.1150	13.83	11.36	25.19	69.54	-44.35	peak	



## **ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)**

Test Mode: UNII-1/TX A Mode

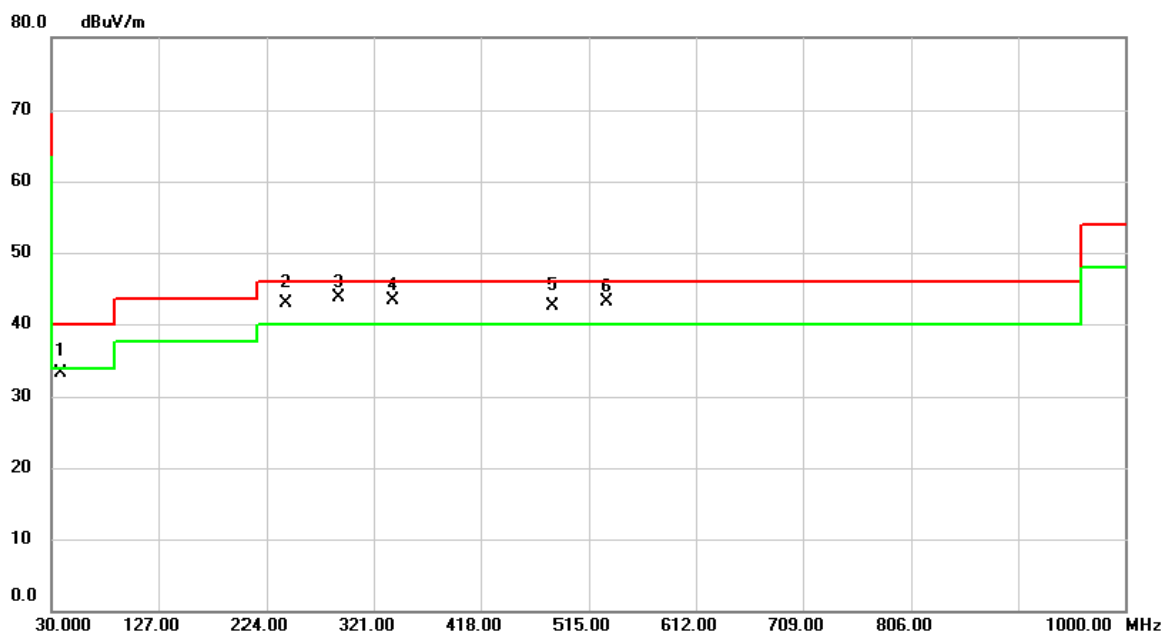
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	I	192.9600	50.60	-10.66	39.94	43.50	-3.56	peak	
2	I	241.4600	50.12	-9.40	40.72	46.00	-5.28	QP	
3	*	289.9600	50.82	-7.62	43.20	46.00	-2.80	peak	
4	I	435.4600	46.39	-3.91	42.48	46.00	-3.52	peak	
5	I	482.9900	43.21	-2.93	40.28	46.00	-5.72	QP	
6	I	531.4900	42.11	-1.95	40.16	46.00	-5.84	QP	

Test Mode: UNII-1/TX A Mode

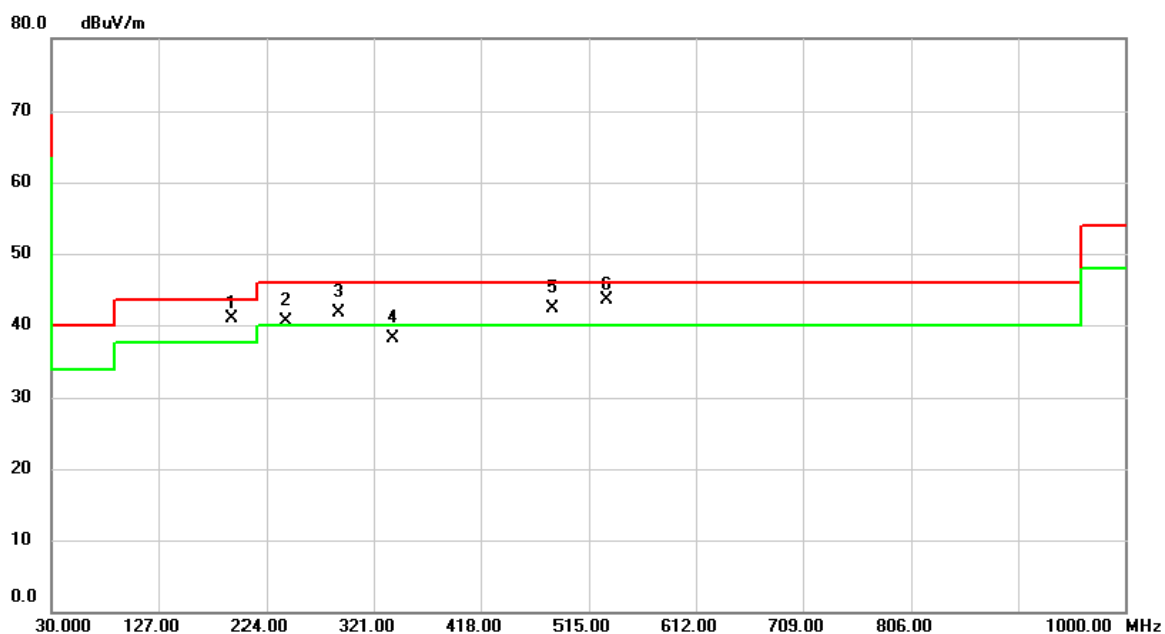
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		37.7600	42.13	-8.81	33.32	40.00	-6.68	QP	
2	!	241.4600	52.34	-9.40	42.94	46.00	-3.06	QP	
3	*	289.9600	51.24	-7.62	43.62	46.00	-2.38	peak	
4	!	338.4600	49.57	-6.34	43.23	46.00	-2.77	peak	
5	!	482.9900	45.53	-2.93	42.60	46.00	-3.40	QP	
6	!	531.4900	45.09	-1.95	43.14	46.00	-2.86	peak	

Test Mode: UNII-3/TX A Mode

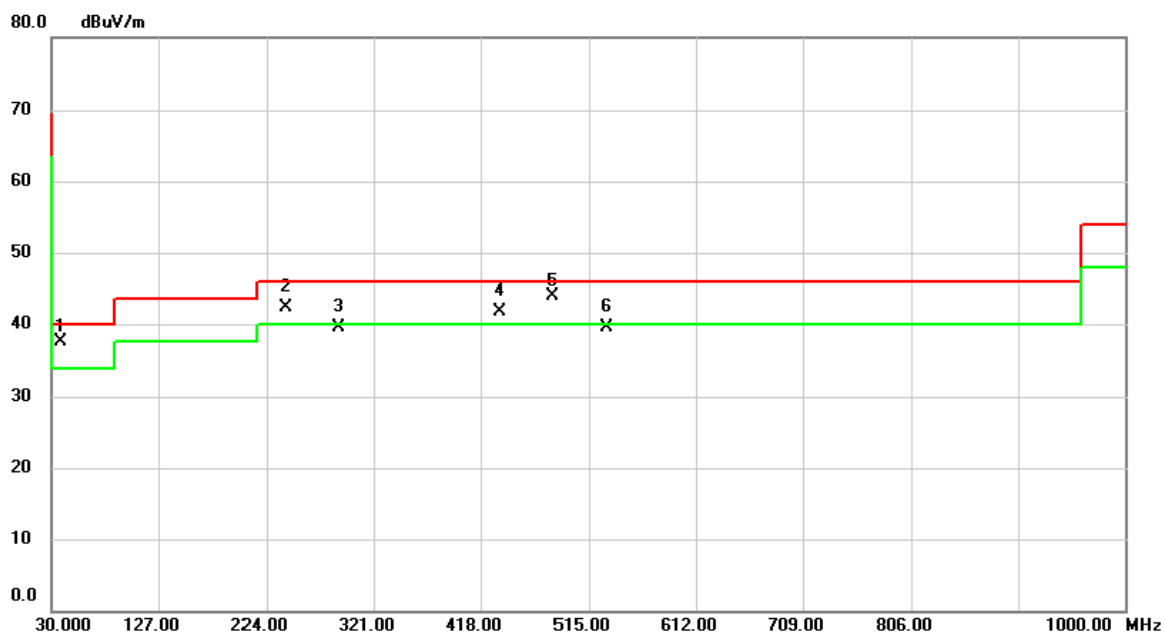
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	!	192.9600	51.65	-10.66	40.99	43.50	-2.51	peak	
2	!	241.4600	49.83	-9.40	40.43	46.00	-5.57	QP	
3	!	289.9600	49.27	-7.62	41.65	46.00	-4.35	QP	
4		338.4600	44.39	-6.34	38.05	46.00	-7.95	QP	
5	!	482.9900	45.29	-2.93	42.36	46.00	-3.64	QP	
6	*	531.4900	45.52	-1.95	43.57	46.00	-2.43	peak	

Test Mode: UNII-3/TX A Mode

### Horizontal

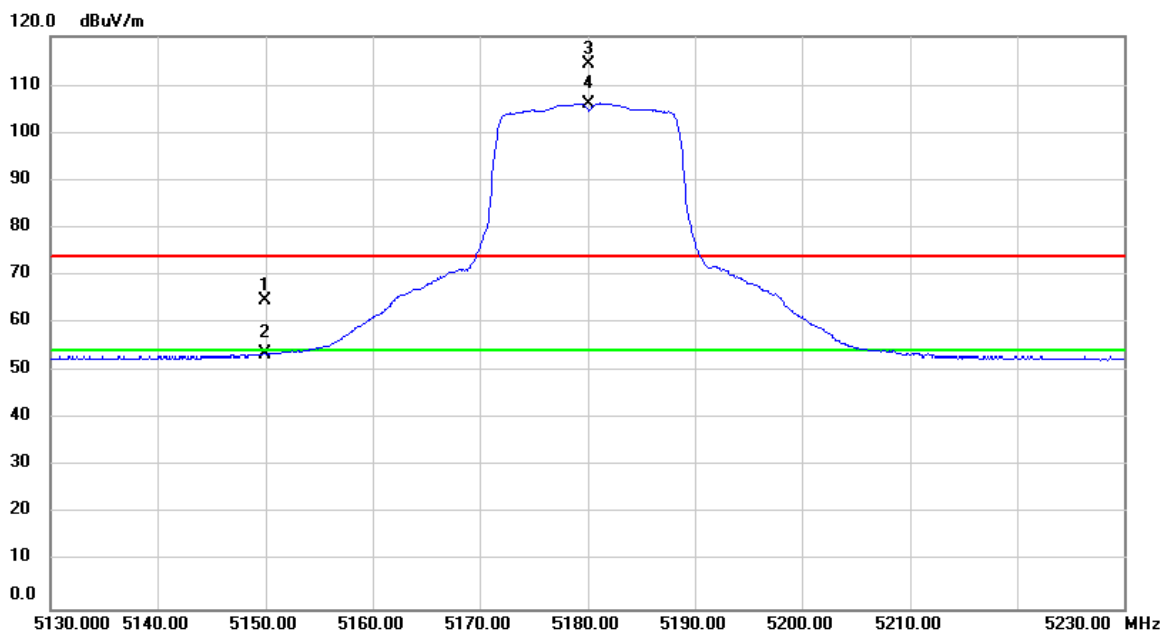


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	!	37.7600	46.38	-8.81	37.57	40.00	-2.43	peak	
2	!	241.4600	51.68	-9.40	42.28	46.00	-3.72	QP	
3		289.9600	47.10	-7.62	39.48	46.00	-6.52	QP	
4	!	435.4600	45.62	-3.91	41.71	46.00	-4.29	QP	
5	*	482.9900	46.82	-2.93	43.89	46.00	-2.11	peak	
6		531.4900	41.52	-1.95	39.57	46.00	-6.43	QP	

## **ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)**

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

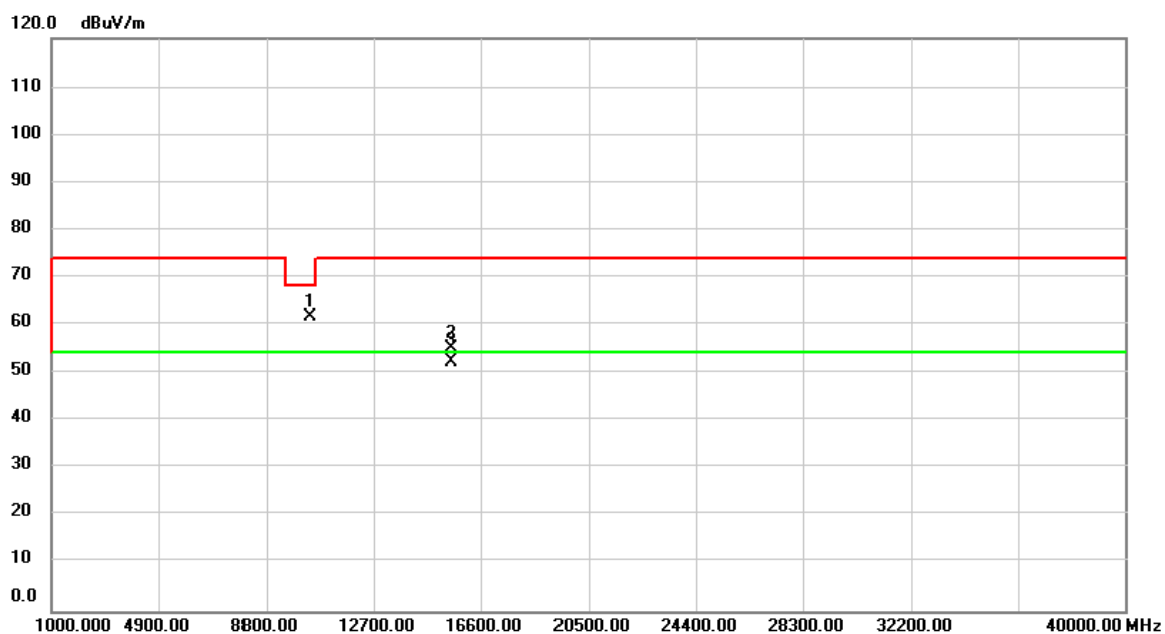
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5149.900	26.28	38.45	64.73	74.00	-9.27	peak	
2		5149.900	14.99	38.45	53.44	54.00	-0.56	AVG	
3	X	5180.000	75.65	38.48	114.13	74.00	40.13	peak	No Limit
4	*	5180.000	67.72	38.48	106.20	54.00	52.20	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

### Vertical

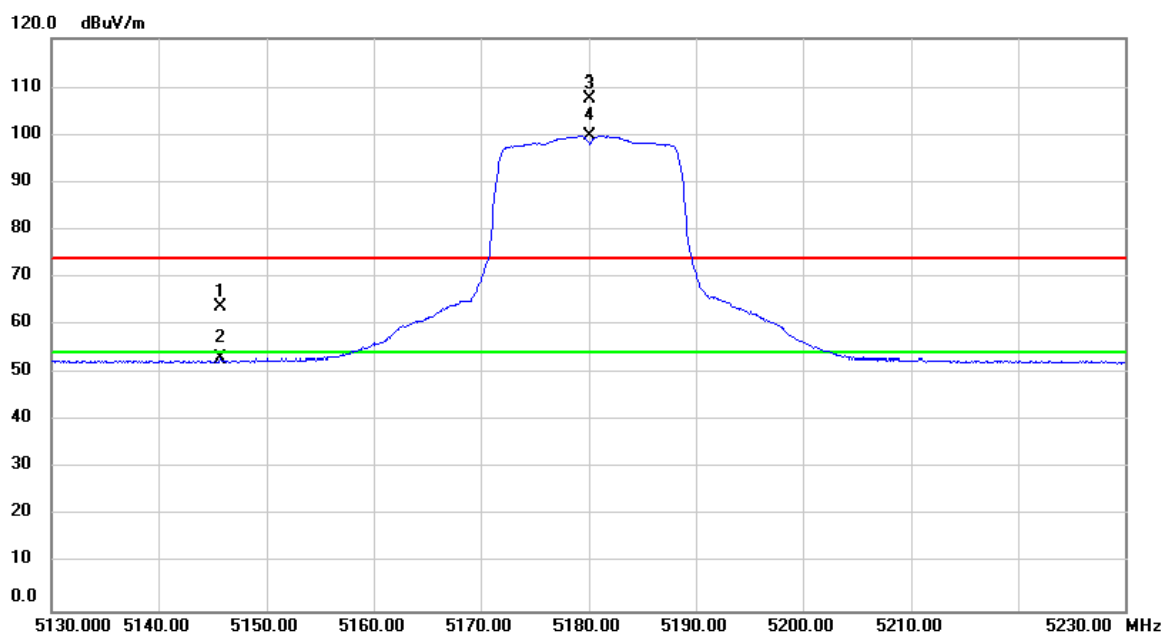


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10360.00	58.54	3.21	61.75	68.20	-6.45	peak	
2		15540.00	48.27	6.91	55.18	74.00	-18.82	peak	
3	*	15540.00	45.53	6.91	52.44	54.00	-1.56	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

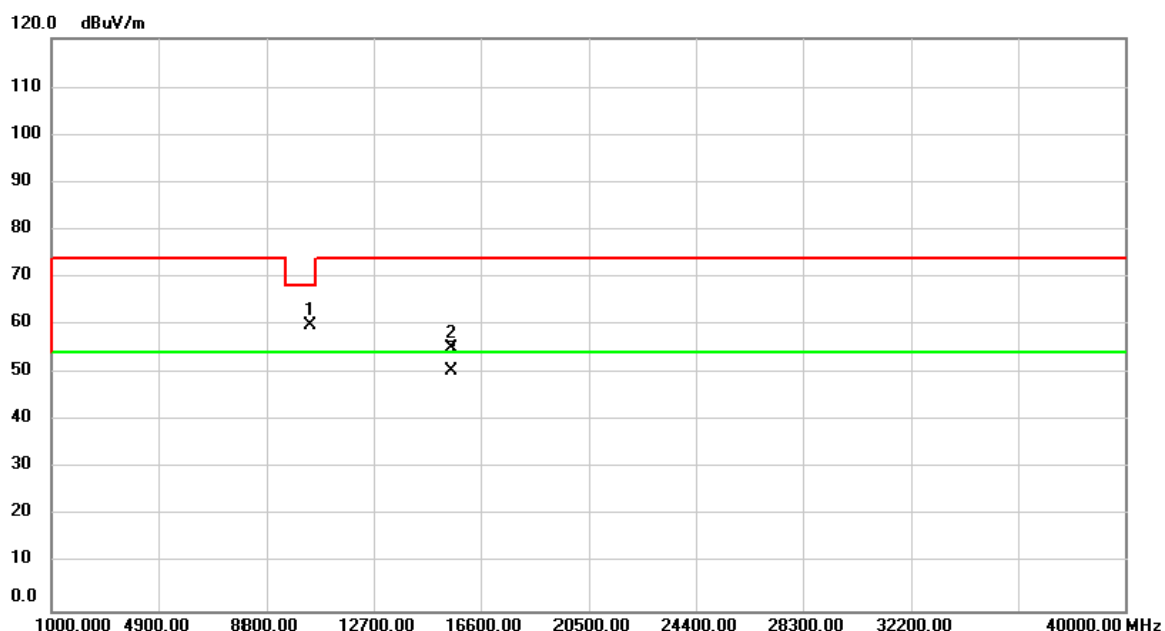
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5145.800	25.29	38.45	63.74	74.00	-10.26	peak	
2		5145.800	14.39	38.45	52.84	54.00	-1.16	AVG	
3	X	5180.000	69.02	38.48	107.50	74.00	33.50	peak	No Limit
4	*	5180.000	61.31	38.48	99.79	54.00	45.79	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

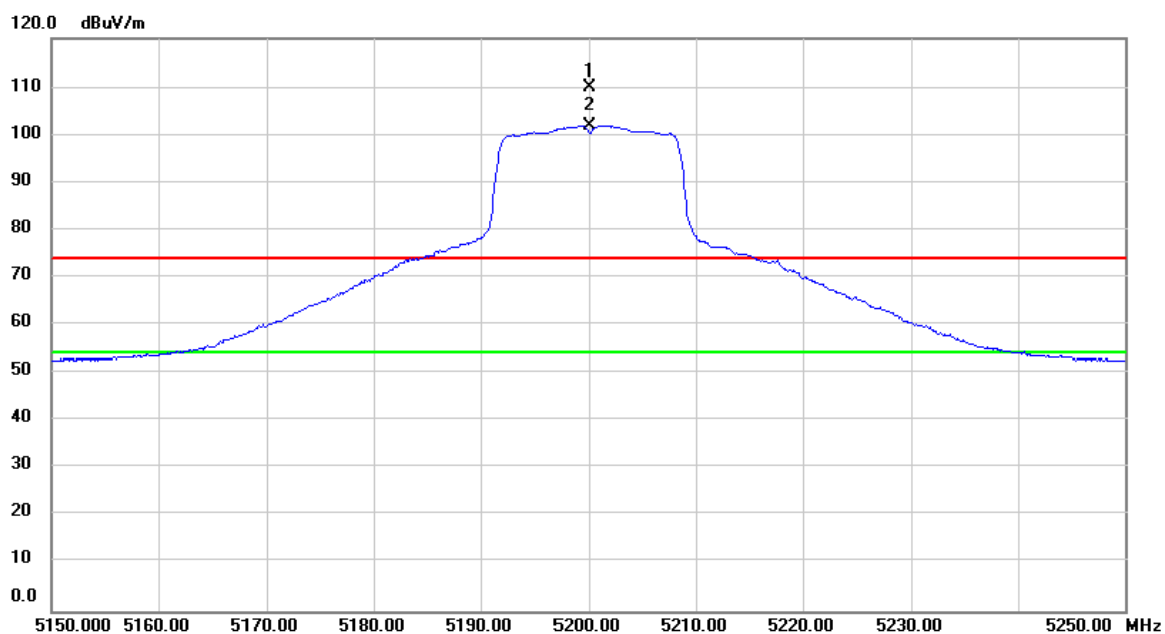
### Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
1		10365.76	56.52	3.22	59.74	68.20	-8.46	peak	
2		15540.00	48.11	6.91	55.02	74.00	-18.98	peak	
3	*	15540.00	43.78	6.91	50.69	54.00	-3.31	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

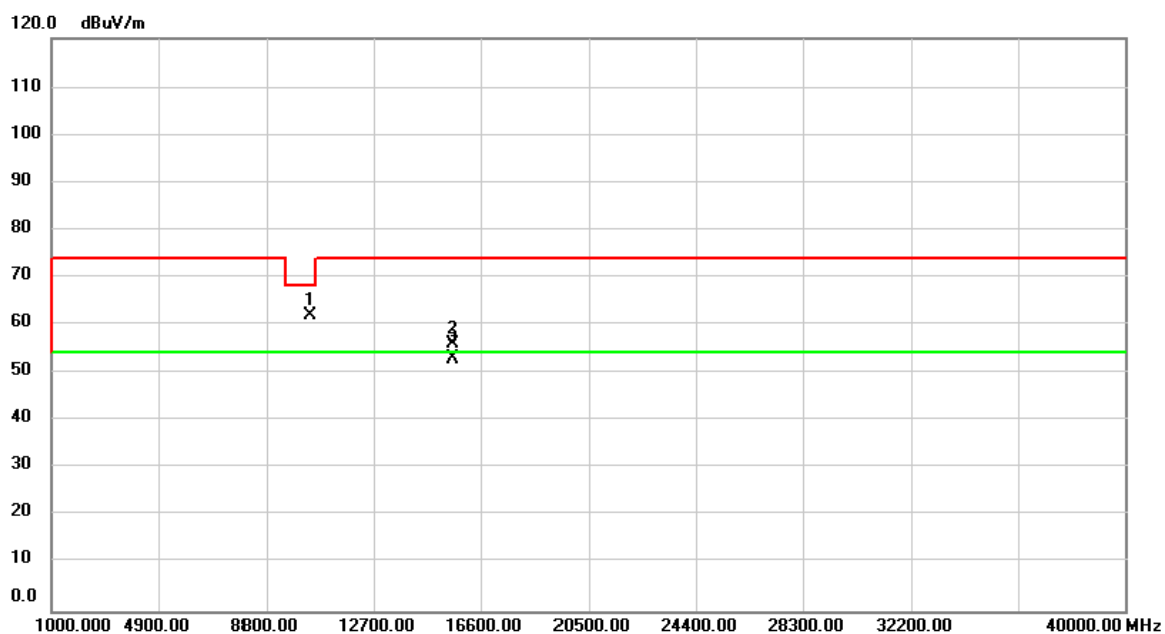
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5200.000	71.33	38.51	109.84	74.00	35.84	peak	No Limit
2	*	5200.000	63.40	38.51	101.91	54.00	47.91	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

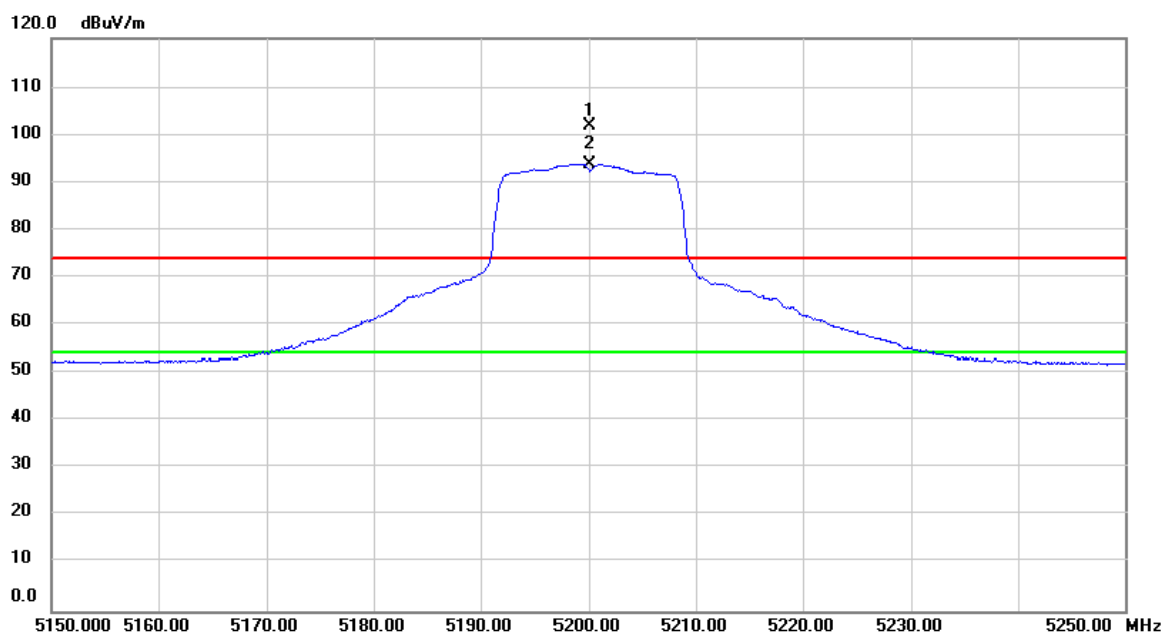
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10400.00	58.85	3.22	62.07	68.20	-6.13	peak	
2		15600.00	49.13	6.86	55.99	74.00	-18.01	peak	
3	*	15600.00	46.01	6.86	52.87	54.00	-1.13	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

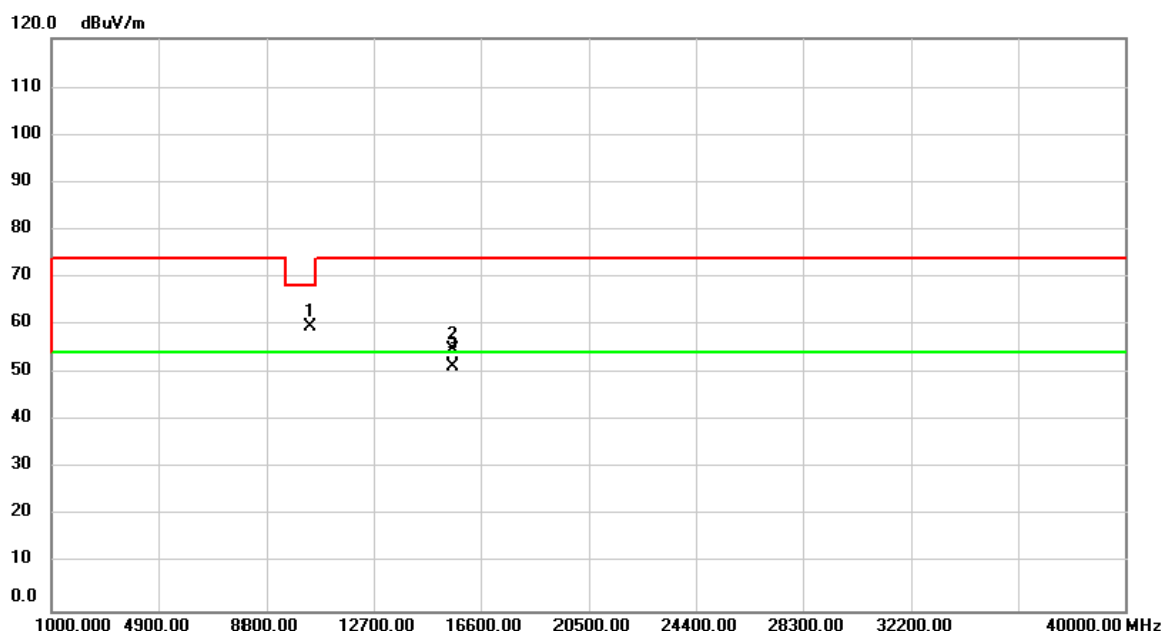
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5200.000	63.31	38.51	101.82	74.00	27.82	peak	No Limit
2	*	5200.000	55.37	38.51	93.88	54.00	39.88	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

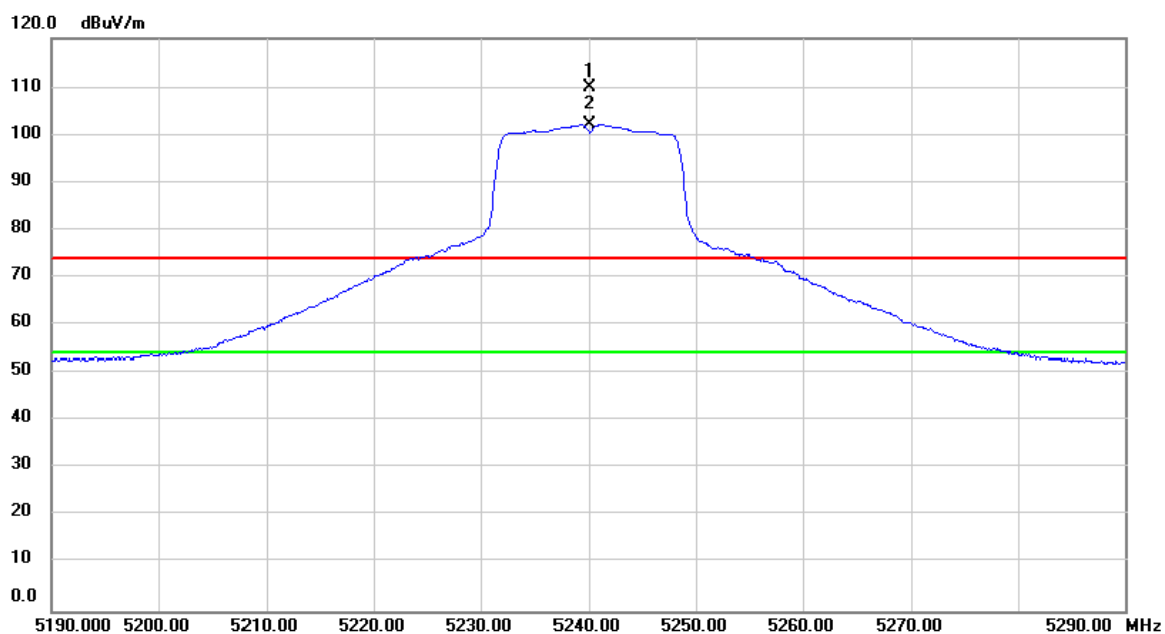
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10400.00	56.38	3.22	59.60	68.20	-8.60	peak	
2		15600.00	47.80	6.86	54.66	74.00	-19.34	peak	
3	*	15600.00	44.74	6.86	51.60	54.00	-2.40	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

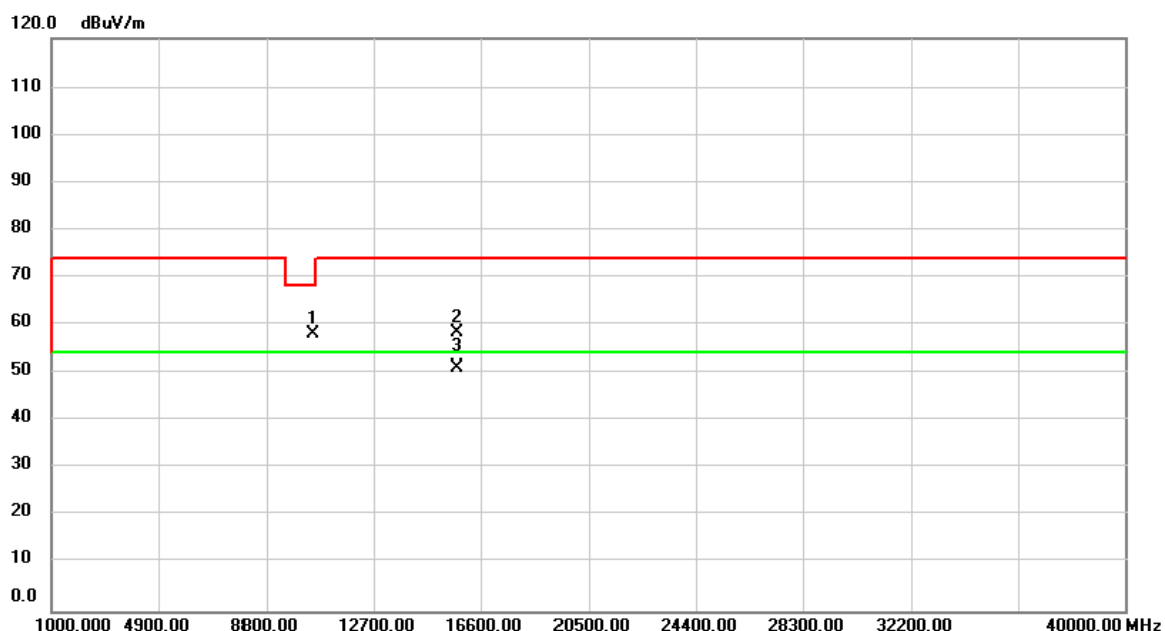
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	71.44	38.56	110.00	74.00	36.00	peak	No Limit
2	*	5240.000	63.56	38.56	102.12	54.00	48.12	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

### Vertical

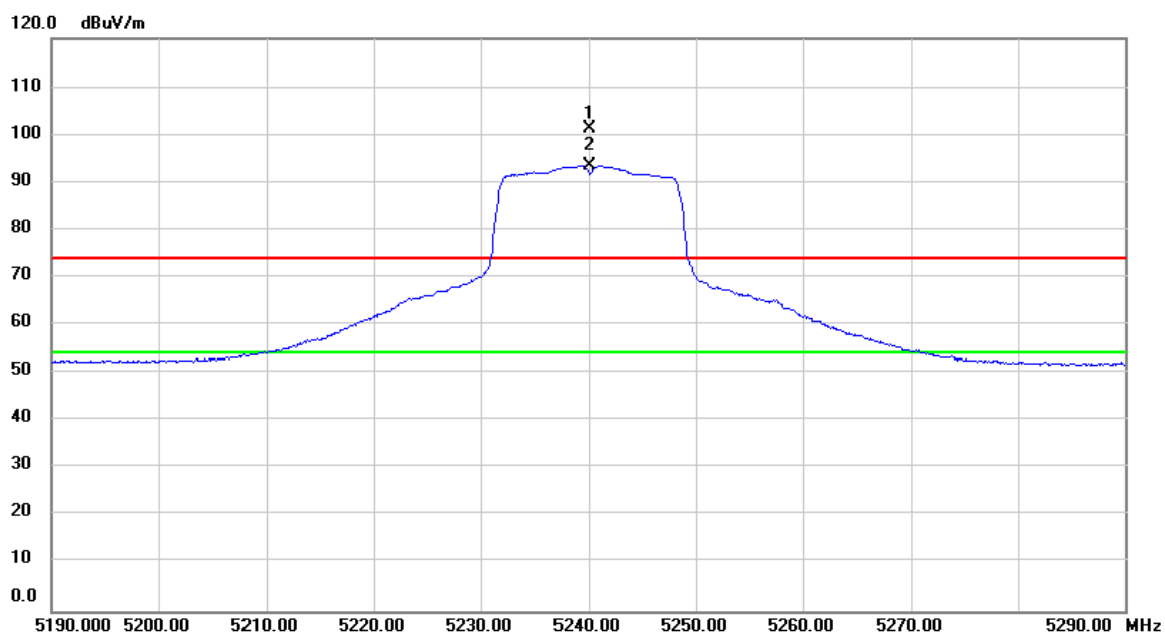


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		10478.08	54.82	3.20	58.02	68.20	-10.18	peak	
2		15720.00	51.66	6.73	58.39	74.00	-15.61	peak	
3	*	15720.00	44.39	6.73	51.12	54.00	-2.88	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

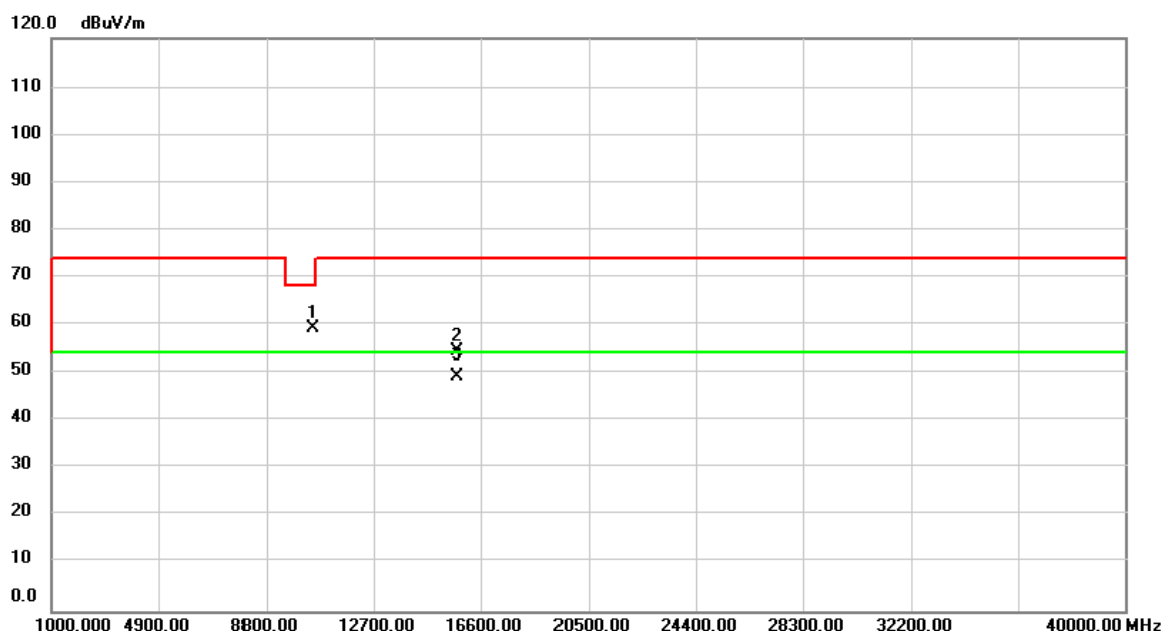
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	62.81	38.56	101.37	74.00	27.37	peak	No Limit
2	*	5240.000	54.88	38.56	93.44	54.00	39.44	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

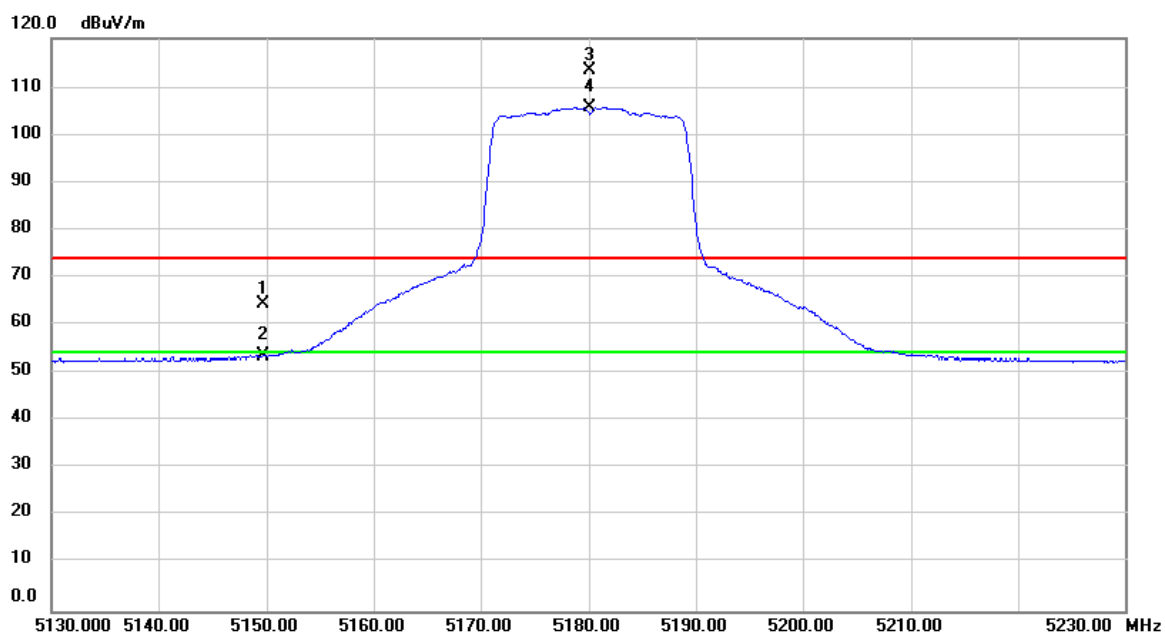
### Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		10480.00	56.05	3.21	59.26	68.20	-8.94	peak	
2		15720.00	47.66	6.73	54.39	74.00	-19.61	peak	
3	*	15720.00	42.69	6.73	49.42	54.00	-4.58	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

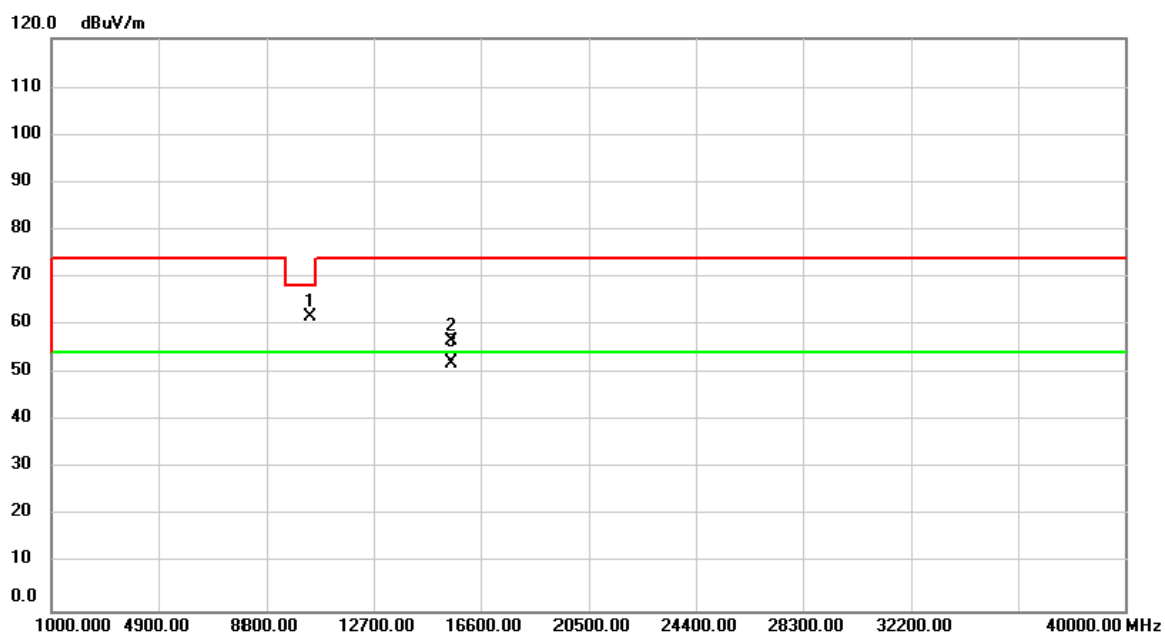
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5149.600	26.02	38.45	64.47	74.00	-9.53	peak	
2		5149.600	15.15	38.45	53.60	54.00	-0.40	AVG	
3	X	5180.000	74.85	38.48	113.33	74.00	39.33	peak	No Limit
4	*	5180.000	67.21	38.48	105.69	54.00	51.69	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

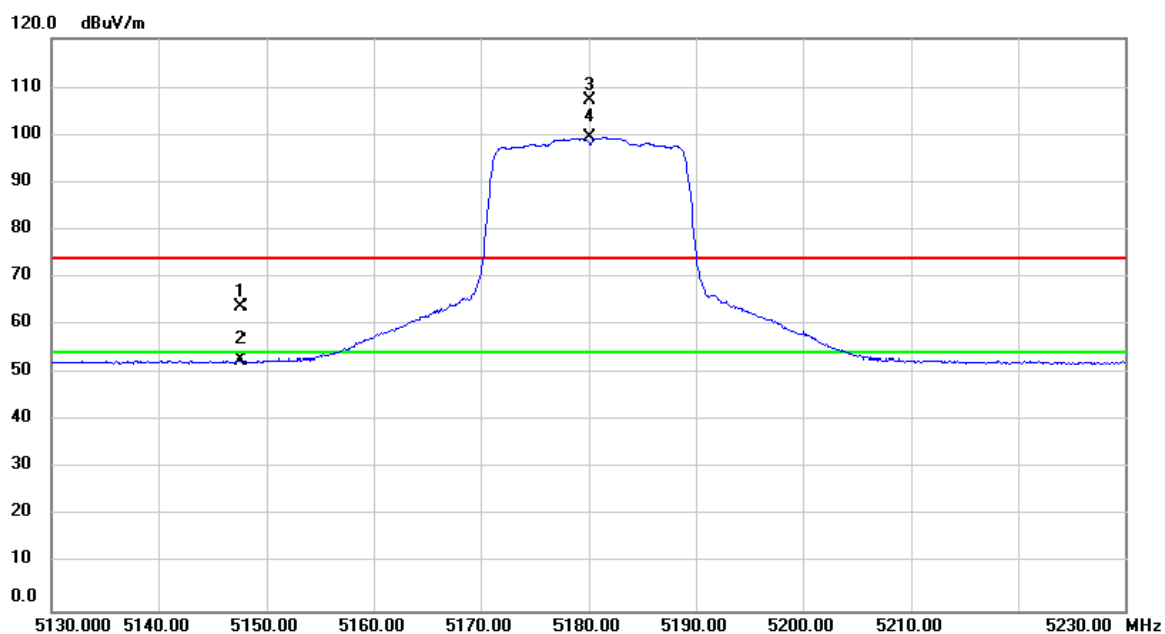
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10360.00	58.41	3.21	61.62	68.20	-6.58	peak	
2		15540.00	49.76	6.91	56.67	74.00	-17.33	peak	
3	*	15540.00	45.23	6.91	52.14	54.00	-1.86	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

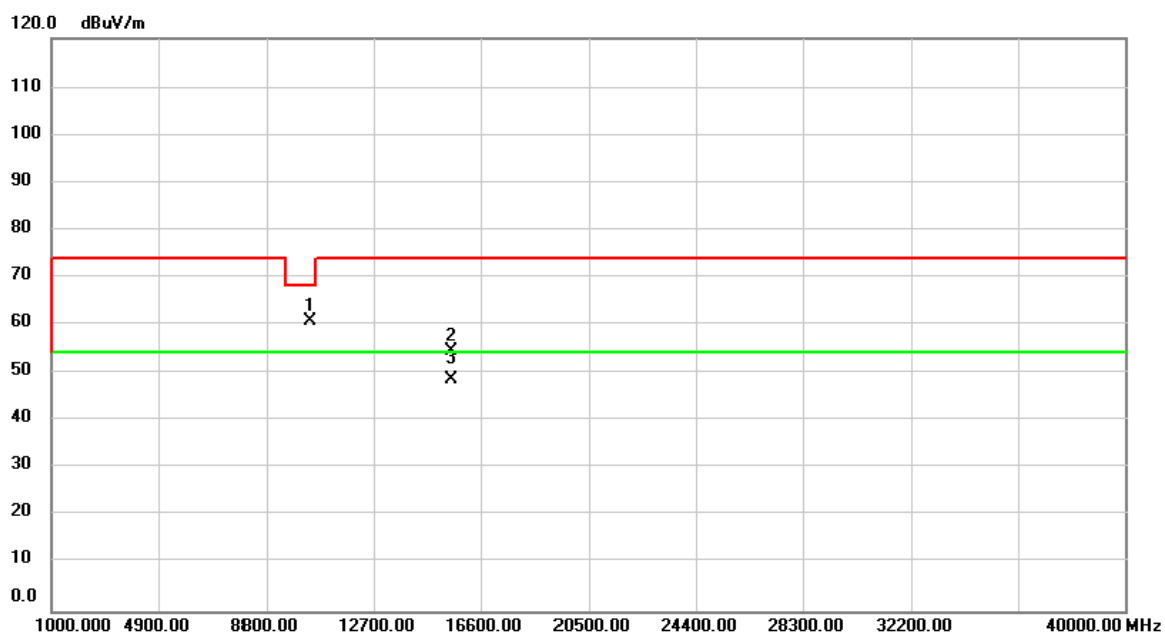
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5147.600	25.28	38.45	63.73	74.00	-10.27	peak	
2		5147.600	14.26	38.45	52.71	54.00	-1.29	AVG	
3	X	5180.000	68.79	38.48	107.27	74.00	33.27	peak	No Limit
4	*	5180.000	60.92	38.48	99.40	54.00	45.40	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

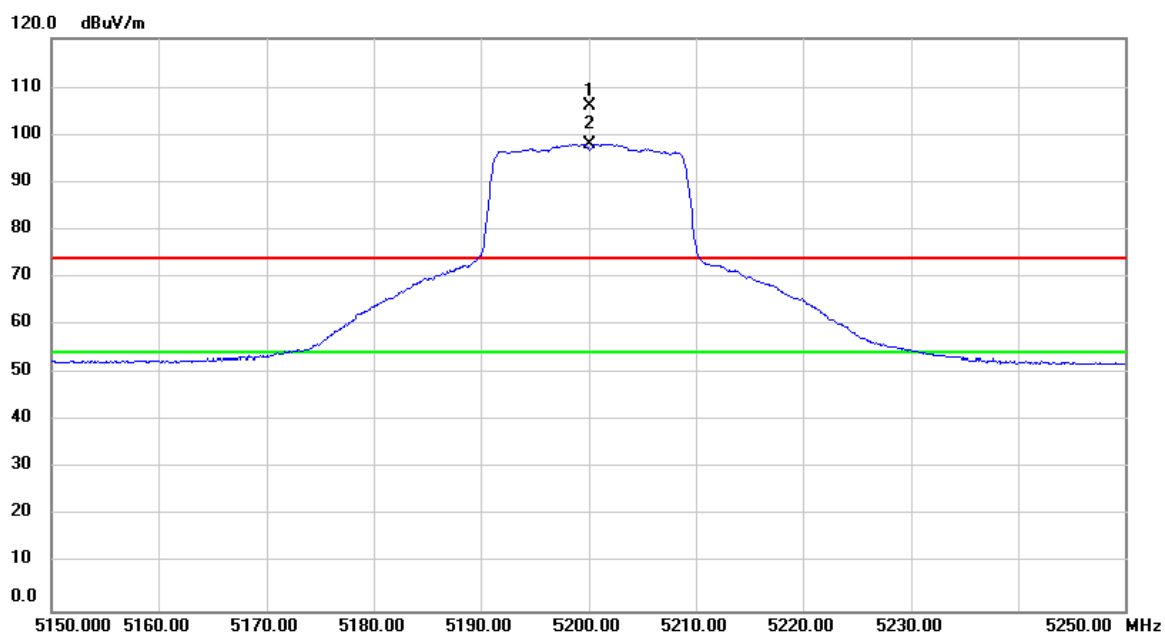
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10360.96	57.65	3.21	60.86	68.20	-7.34	peak	
2		15540.00	47.65	6.91	54.56	74.00	-19.44	peak	
3	*	15540.00	41.99	6.91	48.90	54.00	-5.10	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

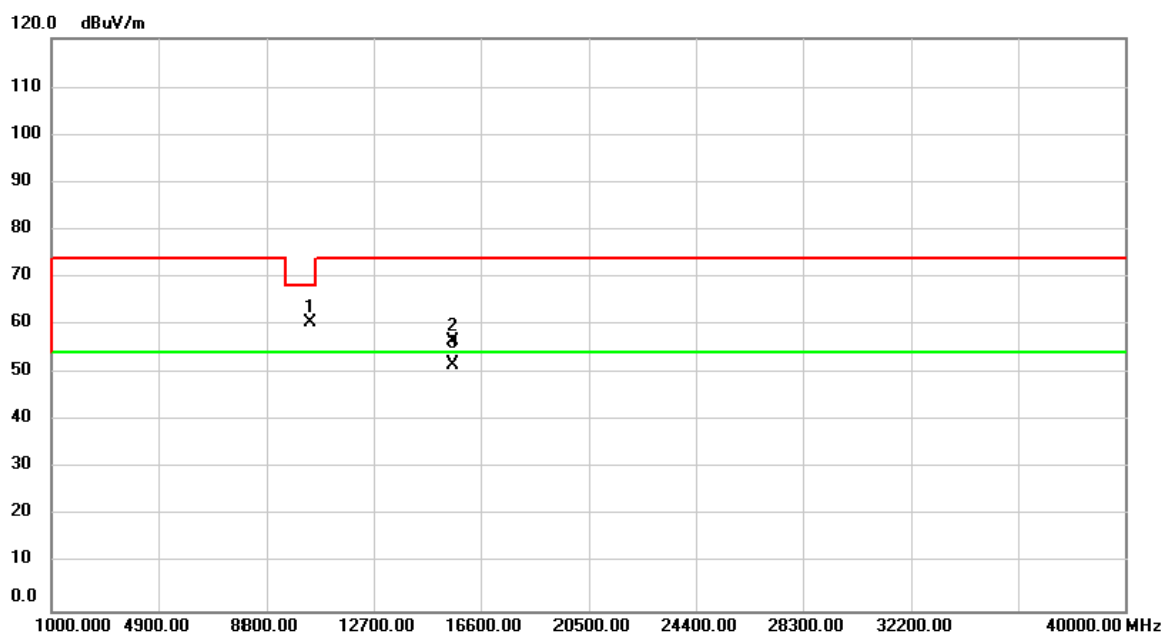
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5200.000	67.55	38.51	106.06	74.00	32.06	peak	No Limit
2	*	5200.000	59.54	38.51	98.05	54.00	44.05	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

### Vertical

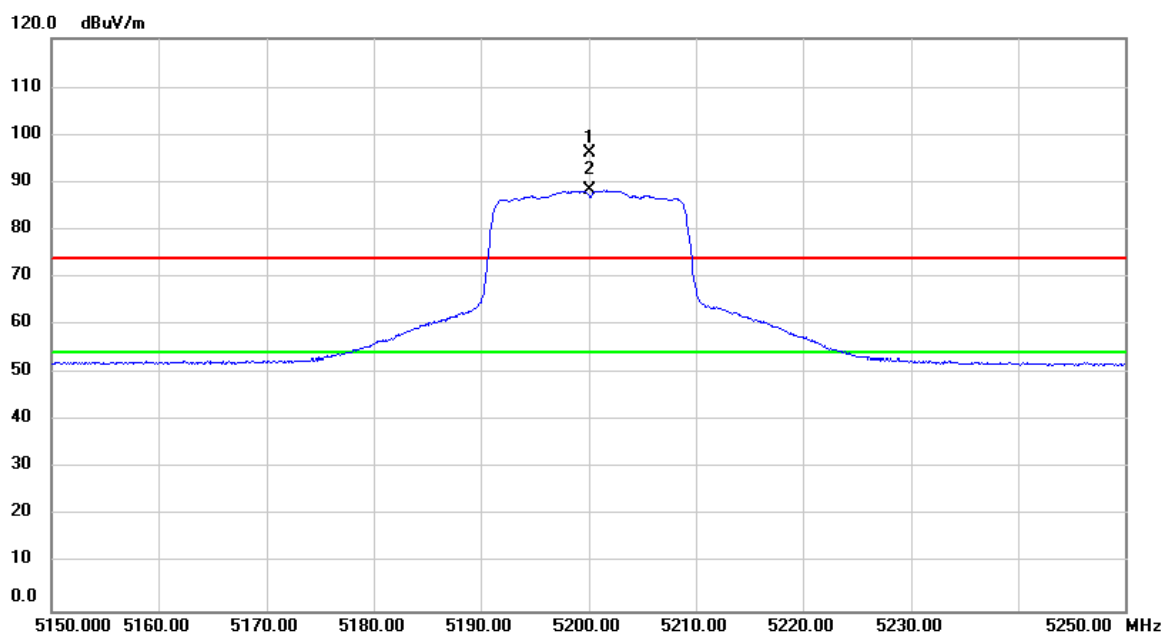


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10400.00	57.23	3.22	60.45	68.20	-7.75	peak	
2		15600.00	49.69	6.86	56.55	74.00	-17.45	peak	
3	*	15600.00	44.91	6.86	51.77	54.00	-2.23	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

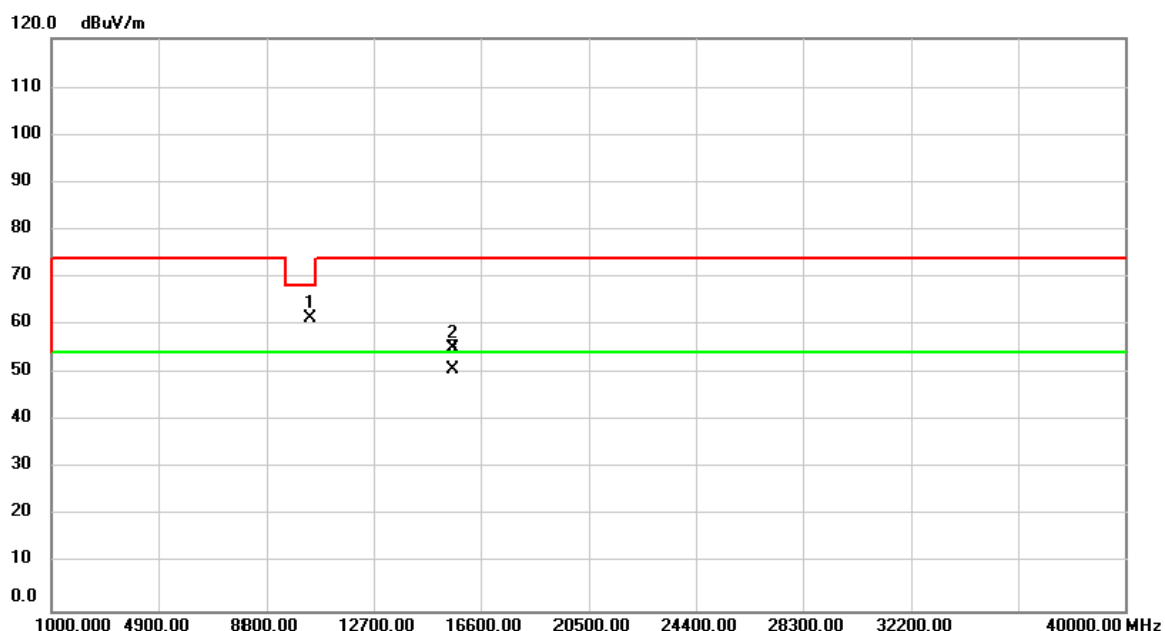
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5200.000	57.76	38.51	96.27	74.00	22.27	peak	No Limit
2	*	5200.000	49.75	38.51	88.26	54.00	34.26	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

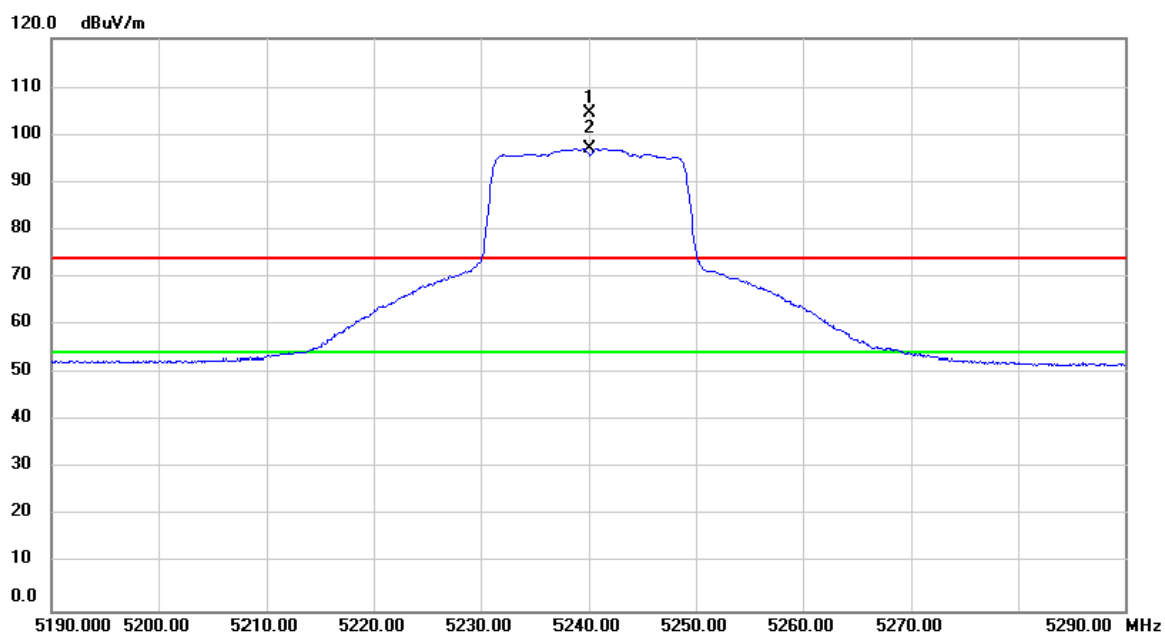
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10400.00	58.09	3.22	61.31	68.20	-6.89	peak	
2		15600.00	48.11	6.86	54.97	74.00	-19.03	peak	
3	*	15600.00	43.93	6.86	50.79	54.00	-3.21	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

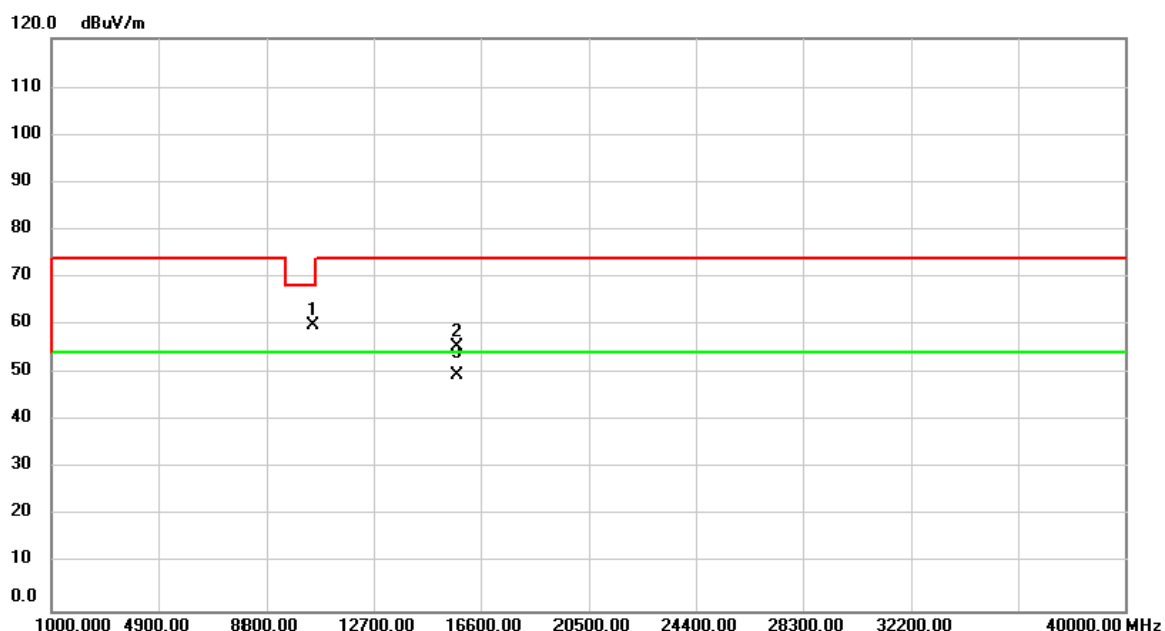
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	66.14	38.56	104.70	74.00	30.70	peak	No Limit
2	*	5240.000	58.51	38.56	97.07	54.00	43.07	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

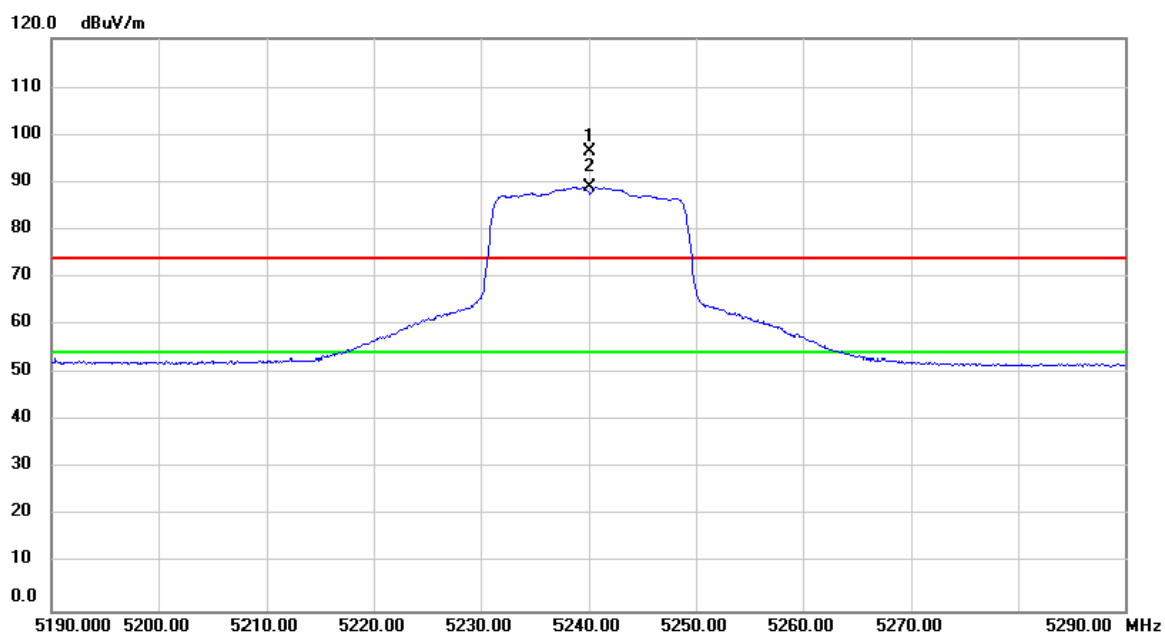
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10480.00	56.51	3.21	59.72	68.20	-8.48	peak	
2		15720.00	48.72	6.73	55.45	74.00	-18.55	peak	
3	*	15720.00	42.92	6.73	49.65	54.00	-4.35	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

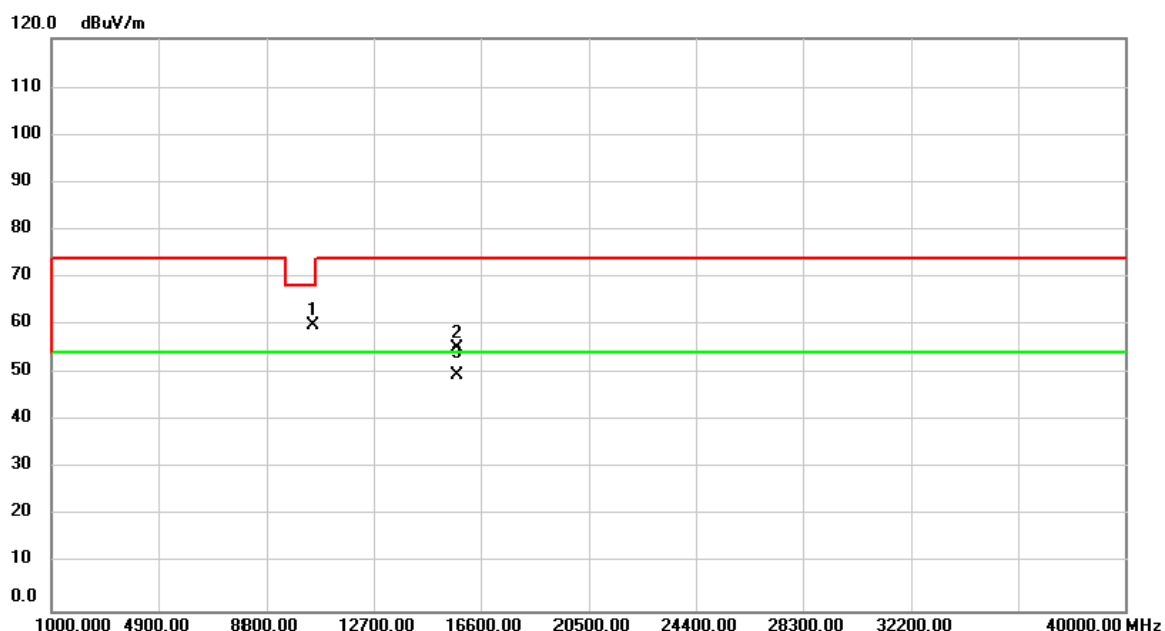
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	57.78	38.56	96.34	74.00	22.34	peak	No Limit
2	*	5240.000	50.33	38.56	88.89	54.00	34.89	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

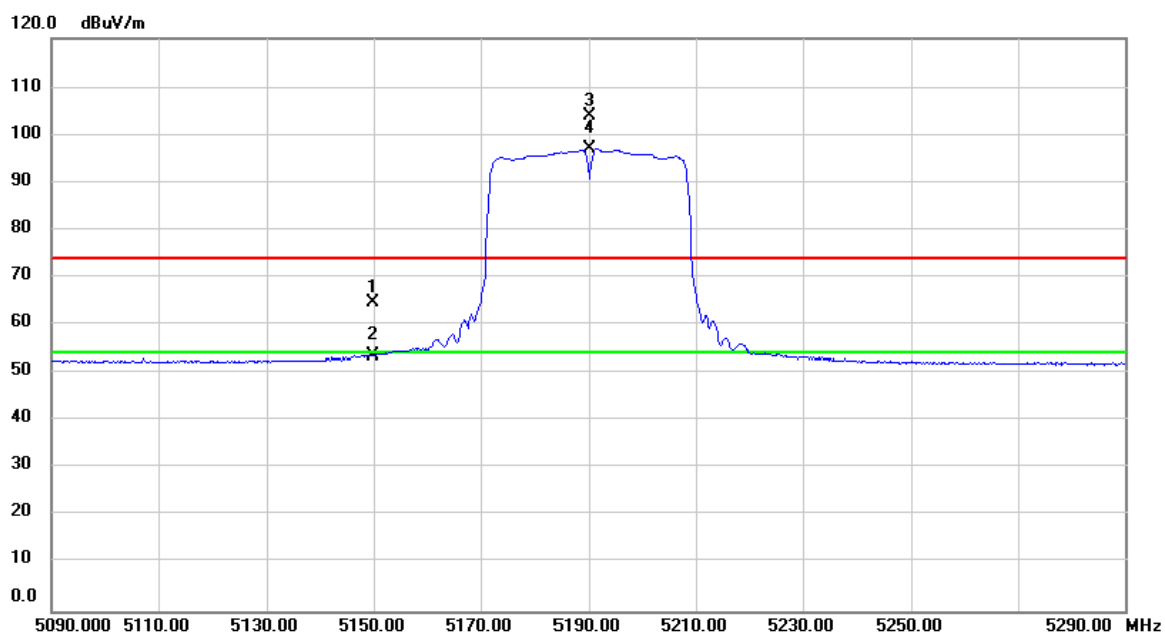
### Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		10480.00	56.67	3.21	59.88	68.20	-8.32	peak	
2		15720.00	48.33	6.73	55.06	74.00	-18.94	peak	
3	*	15720.00	42.96	6.73	49.69	54.00	-4.31	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

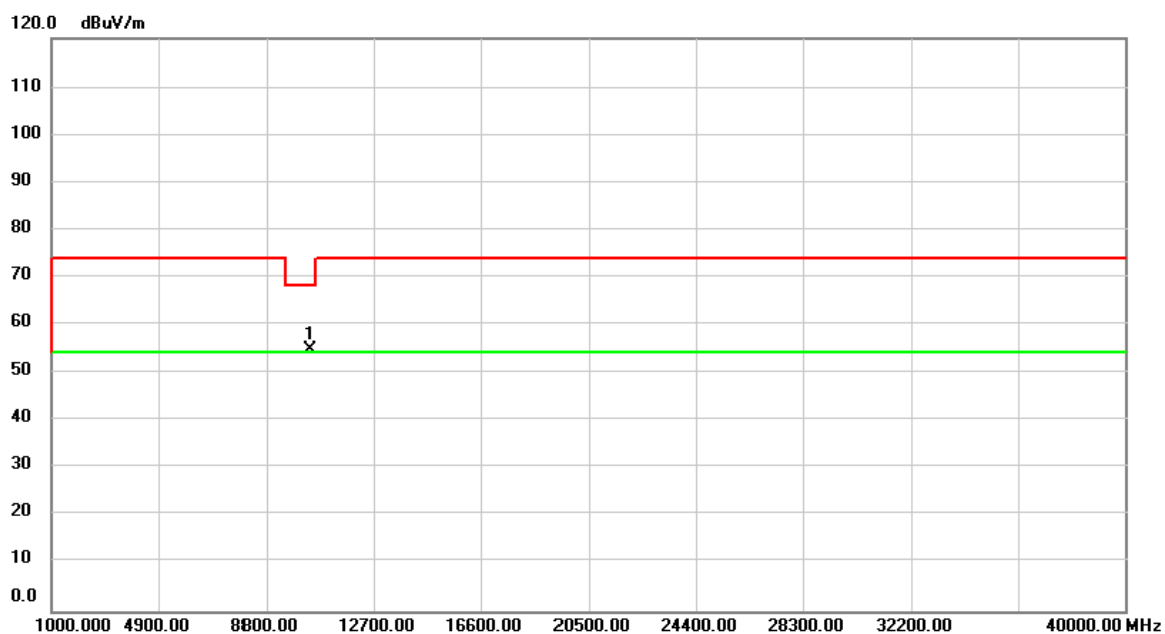
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5149.800	26.34	38.45	64.79	74.00	-9.21	peak	
2		5149.800	15.22	38.45	53.67	54.00	-0.33	AVG	
3	X	5190.000	65.52	38.50	104.02	74.00	30.02	peak	No Limit
4	*	5190.000	58.55	38.50	97.05	54.00	43.05	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

### Vertical

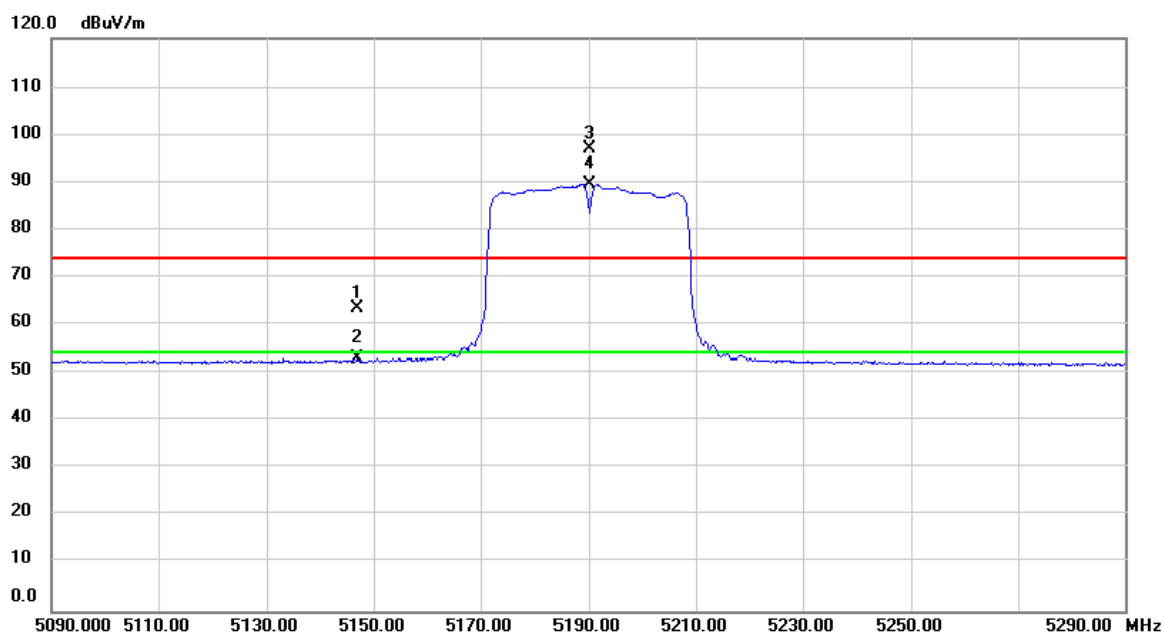


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	51.52	3.22	54.74	68.20	-13.46	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

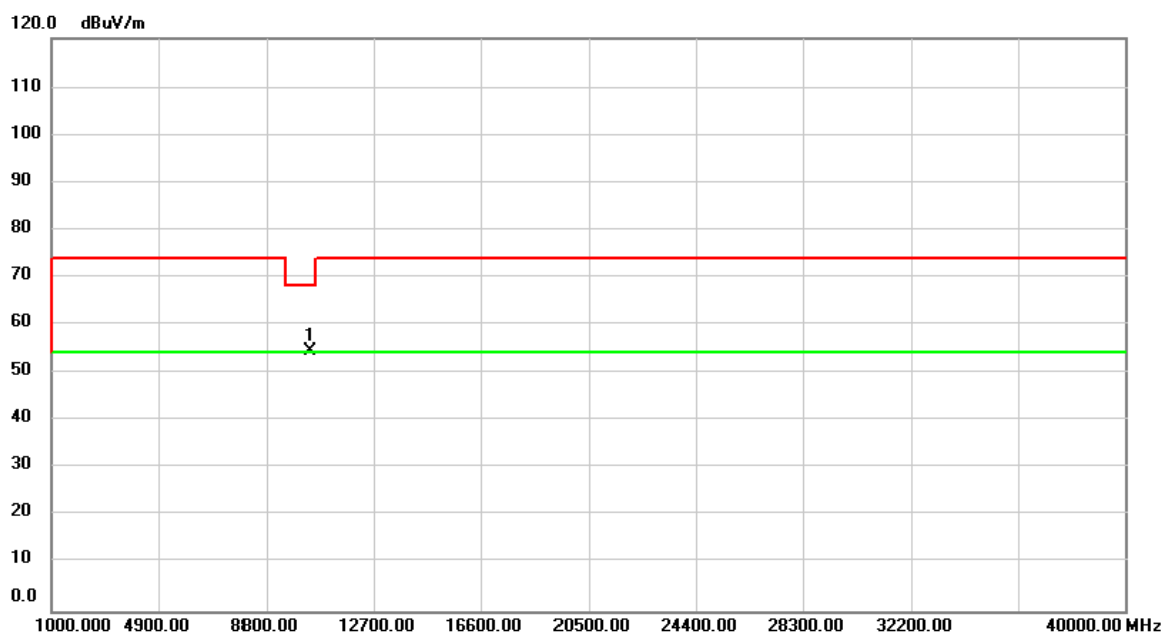
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5146.800	24.98	38.45	63.43	74.00	-10.57	peak	
2		5146.800	14.52	38.45	52.97	54.00	-1.03	AVG	
3	X	5190.000	58.47	38.50	96.97	74.00	22.97	peak	No Limit
4	*	5190.000	51.03	38.50	89.53	54.00	35.53	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

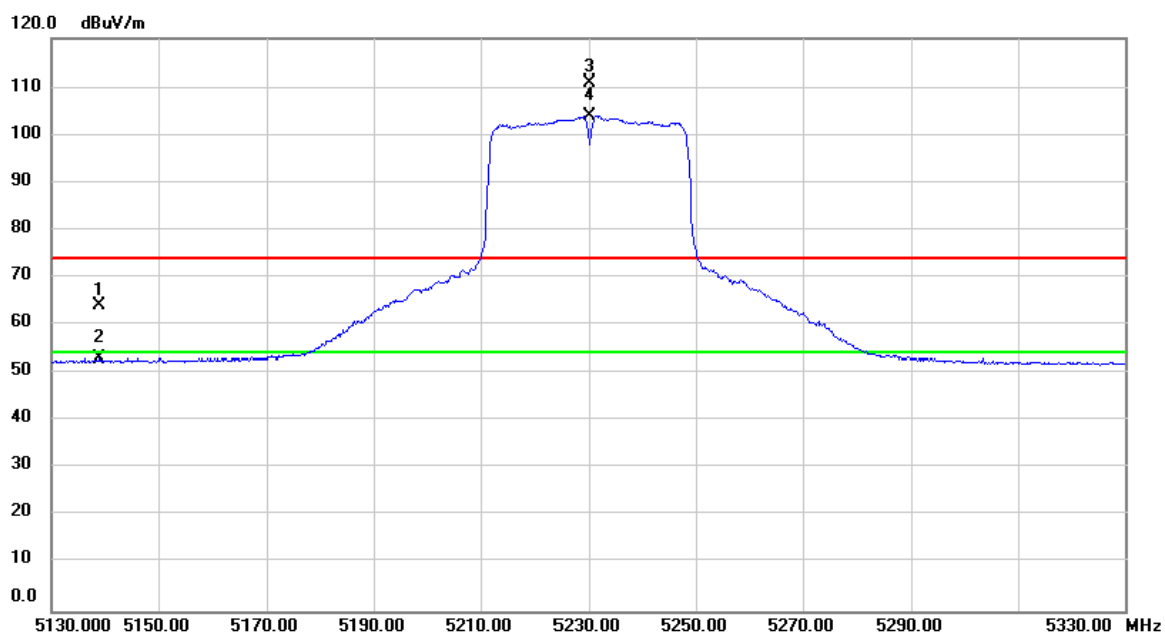
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	51.31	3.22	54.53	68.20	-13.67	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

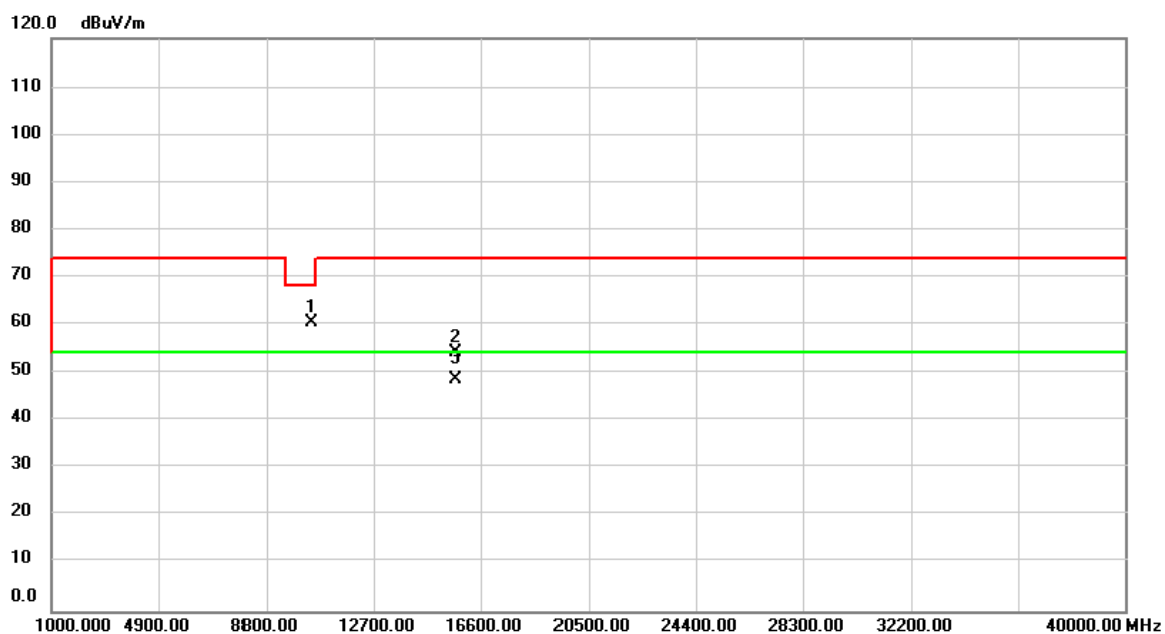
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5139.000	25.63	38.44	64.07	74.00	-9.93	peak	
2		5139.000	14.53	38.44	52.97	54.00	-1.03	AVG	
3	X	5230.000	72.40	38.54	110.94	74.00	36.94	peak	No Limit
4	*	5230.000	65.39	38.54	103.93	54.00	49.93	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

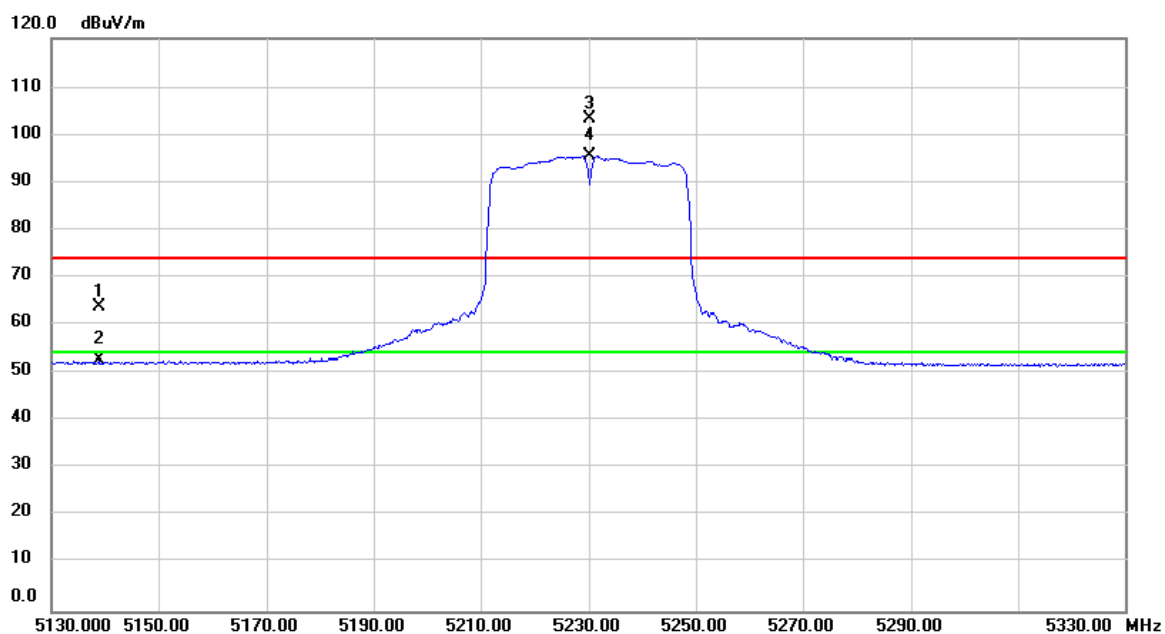
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10460.00	57.25	3.21	60.46	68.20	-7.74	peak	
2		15690.00	47.46	6.76	54.22	74.00	-19.78	peak	
3	*	15690.00	41.97	6.76	48.73	54.00	-5.27	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

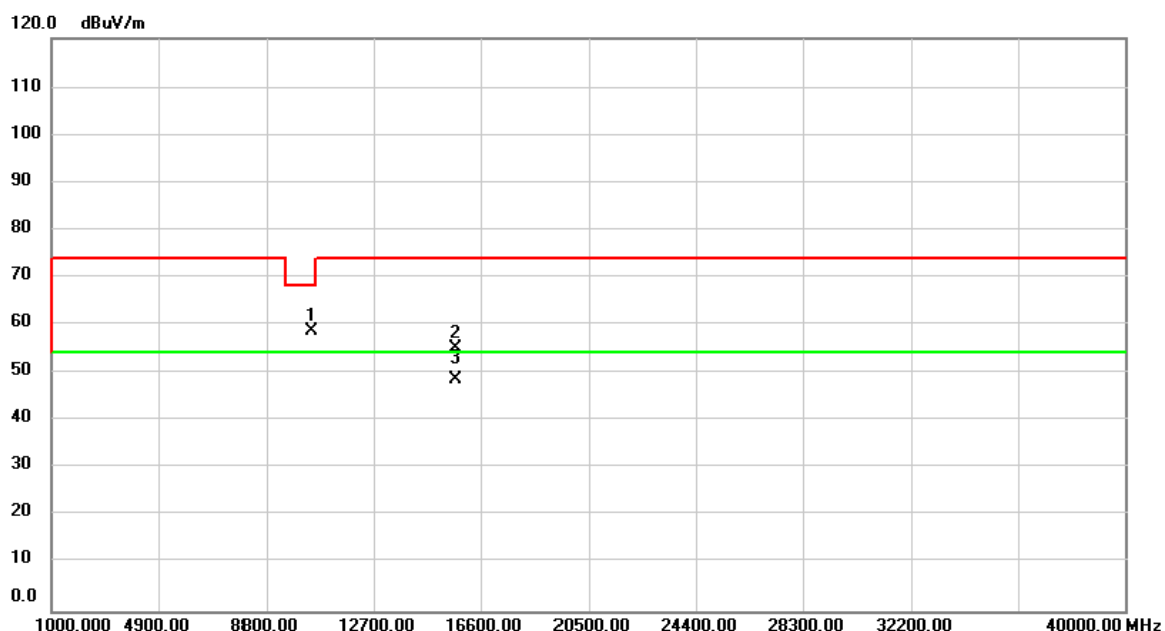
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5138.800	25.26	38.44	63.70	74.00	-10.30	peak	
2		5138.800	14.17	38.44	52.61	54.00	-1.39	AVG	
3	X	5230.000	64.75	38.54	103.29	74.00	29.29	peak	No Limit
4	*	5230.000	56.98	38.54	95.52	54.00	41.52	AVG	No Limit

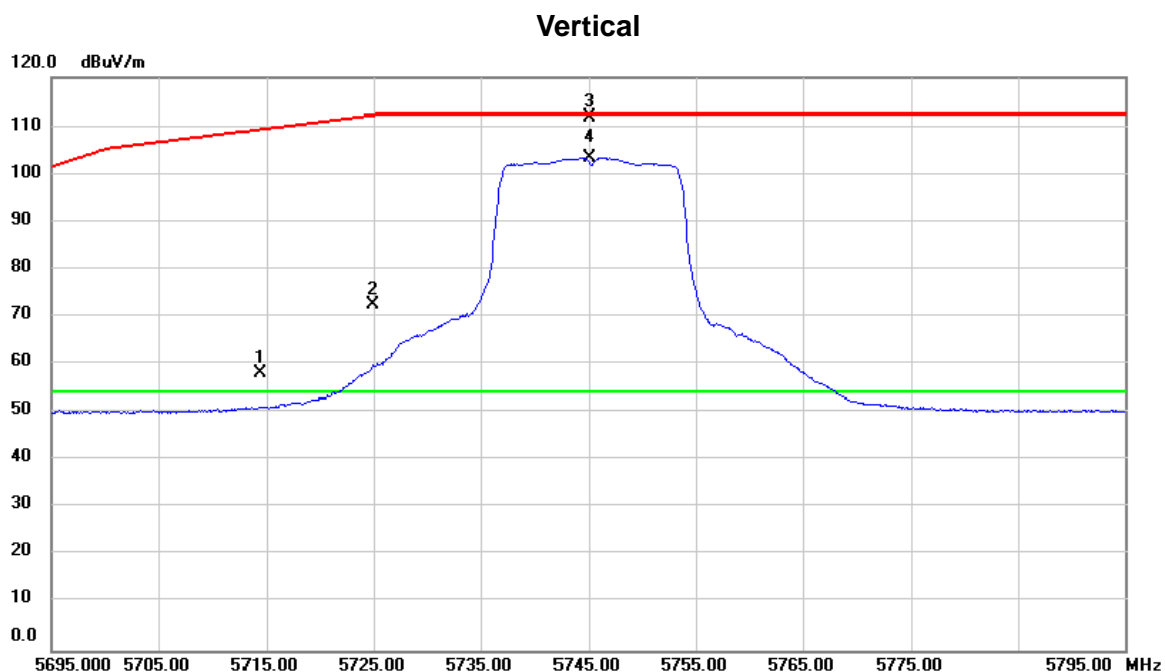
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10460.00	55.33	3.21	58.54	68.20	-9.66	peak	
2		15690.00	48.22	6.76	54.98	74.00	-19.02	peak	
3	*	15690.00	42.10	6.76	48.86	54.00	-5.14	AVG	

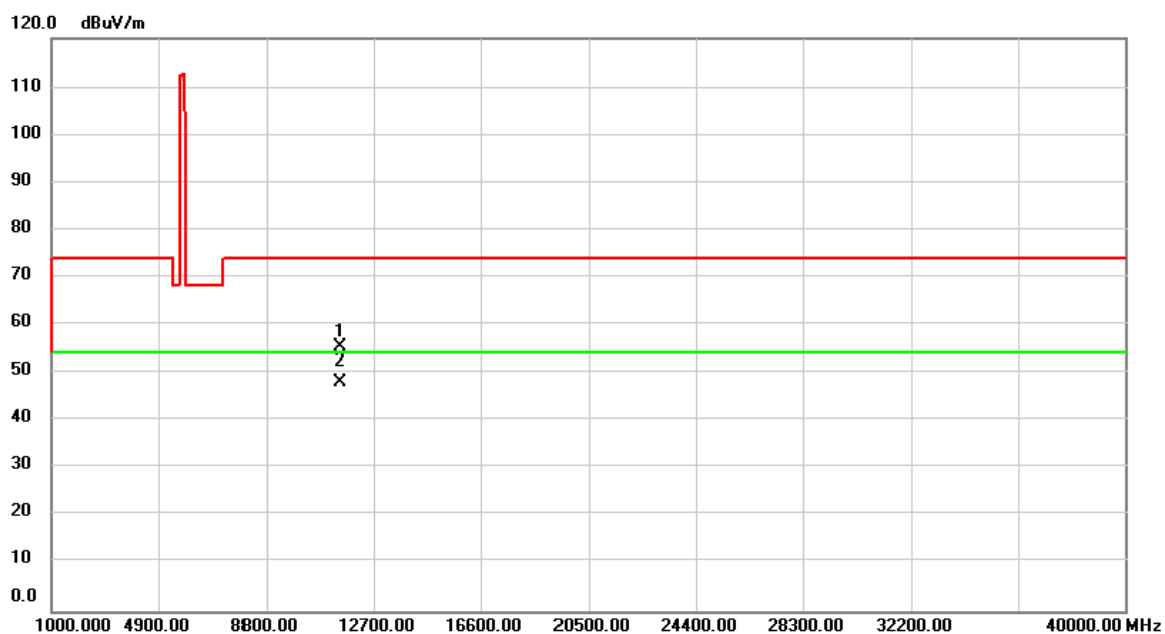
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		5714.340	18.63	39.49	58.12	109.22	-51.10	peak	
2		5724.920	33.06	39.52	72.58	112.18	-39.60	peak	
3		5745.000	72.16	39.58	111.74	112.20	-0.46	peak	No Limit
4	*	5745.000	63.83	39.58	103.41	54.00	49.41	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

### Vertical

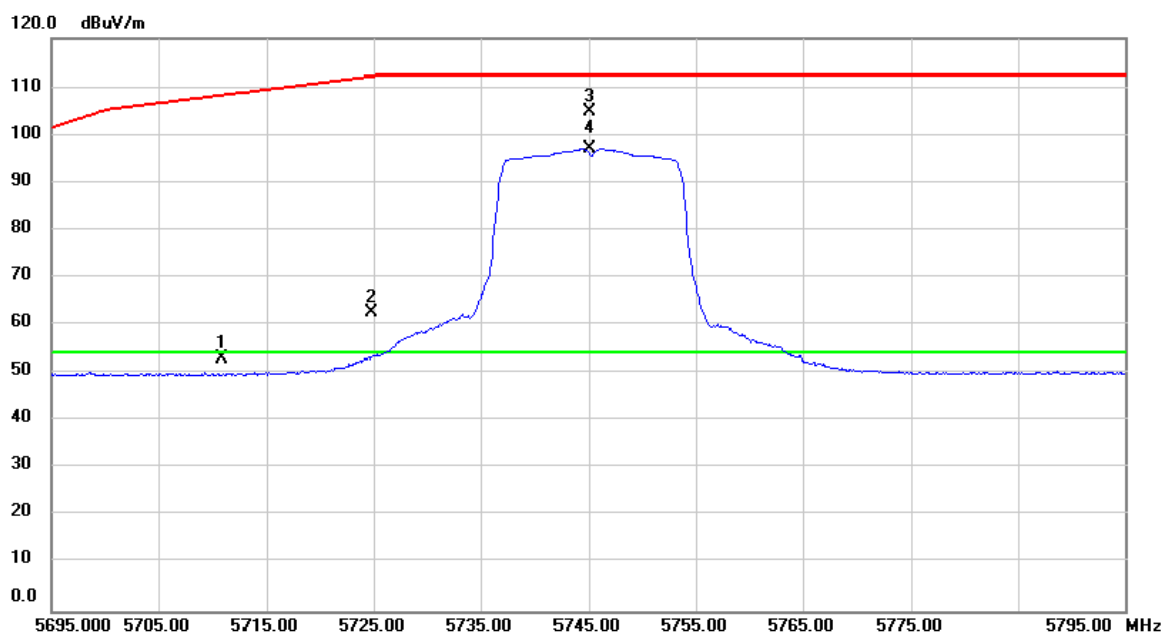


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		11490.00	50.23	5.23	55.46	74.00	-18.54	peak	
2	*	11490.00	43.03	5.23	48.26	54.00	-5.74	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

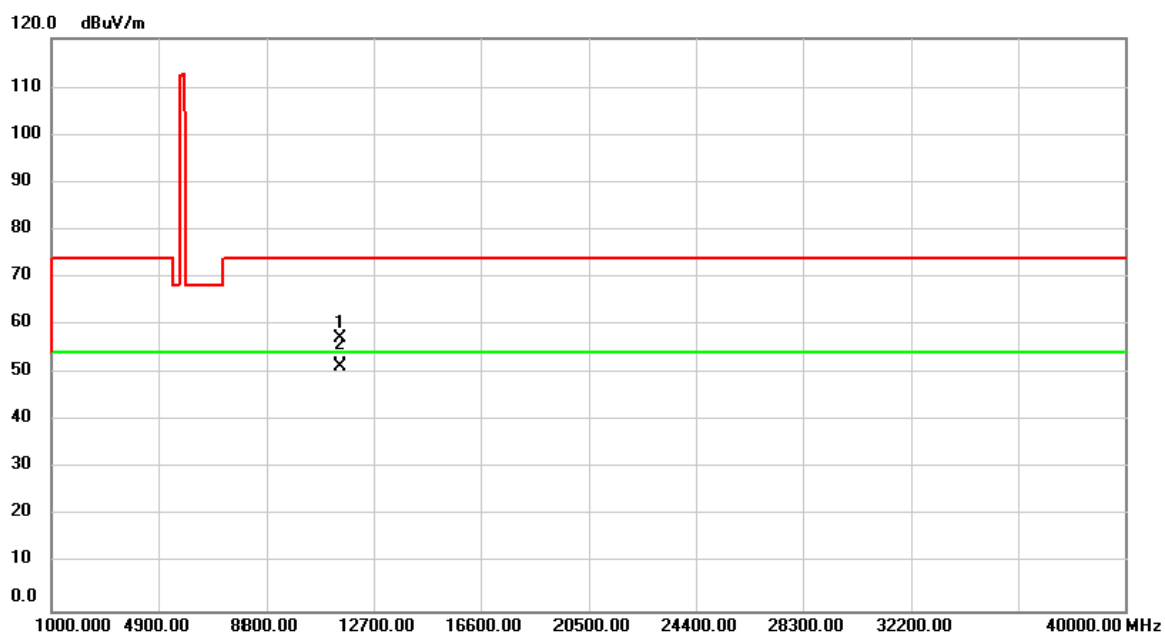
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5710.880	13.50	39.49	52.99	108.25	-55.26	peak	
2		5724.850	23.17	39.52	62.69	112.16	-49.47	peak	
3		5745.000	65.16	39.58	104.74	112.20	-7.46	peak	No Limit
4	*	5745.000	57.46	39.58	97.04	54.00	43.04	AVG	No Limit

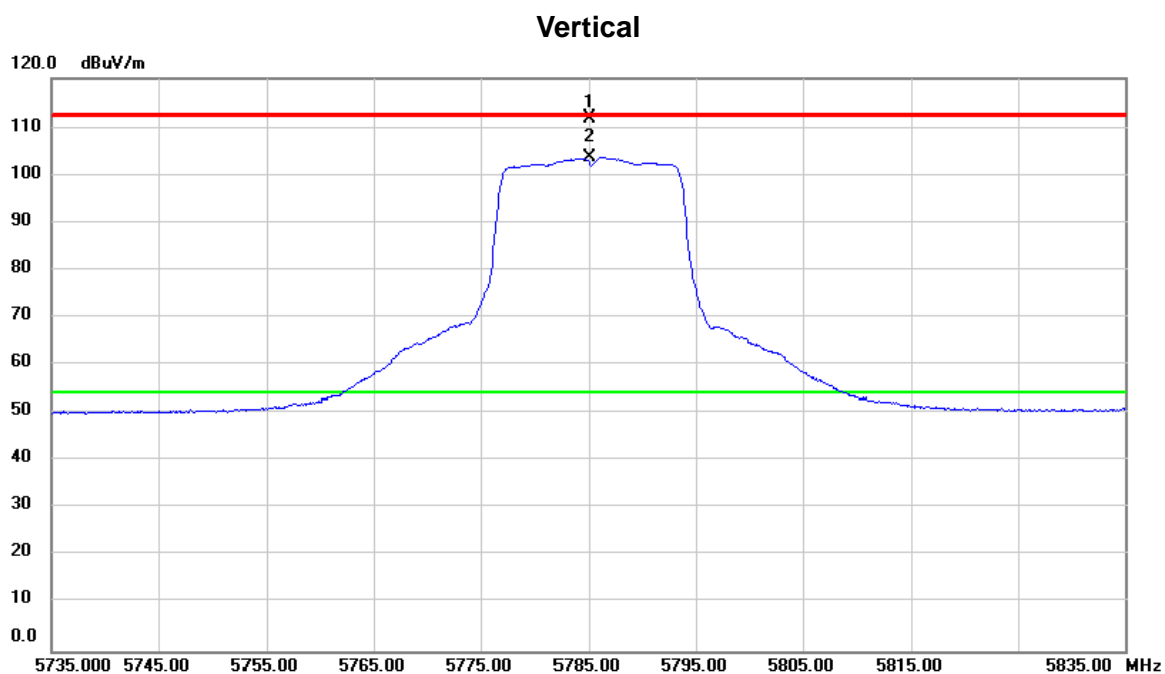
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

### Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		11490.00	51.95	5.23	57.18	74.00	-16.82	peak	
2	*	11490.00	46.27	5.23	51.50	54.00	-2.50	AVG	

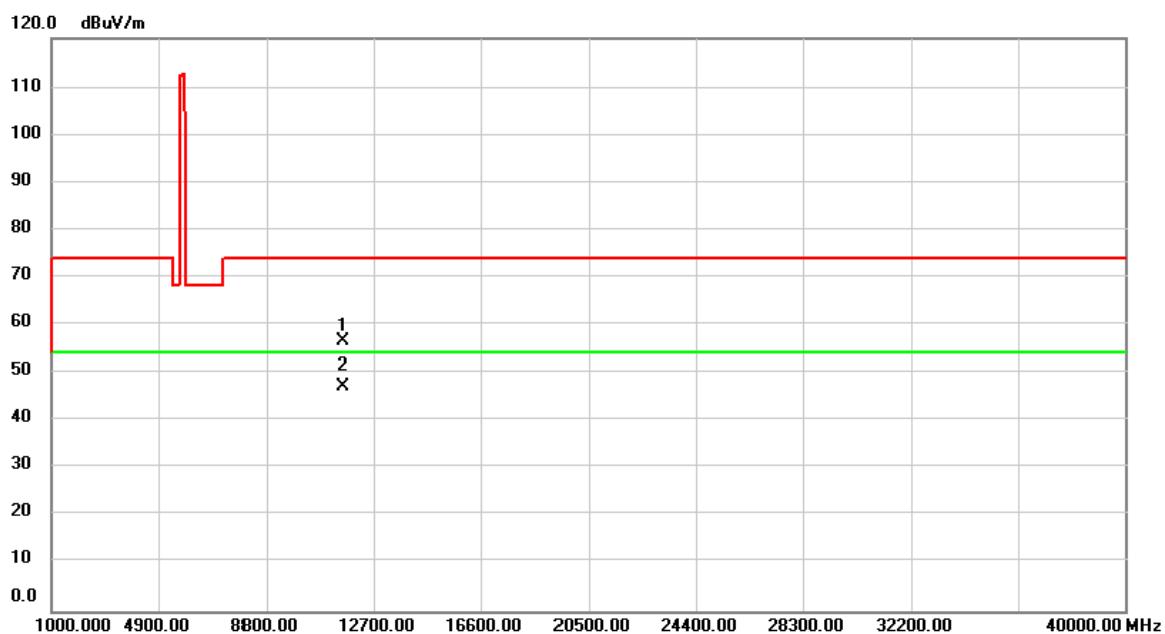
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5785.000	72.01	39.70	111.71	112.20	-0.49	peak	No Limit
2	*	5785.000	63.89	39.70	103.59	54.00	49.59	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

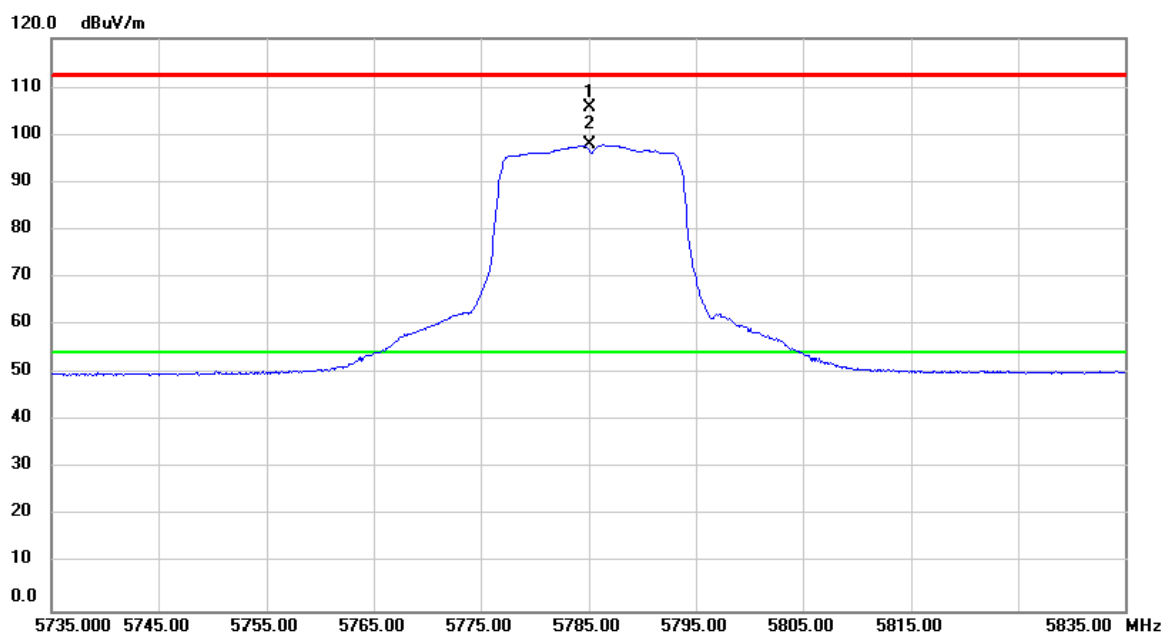
### Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		11570.00	51.44	5.13	56.57	74.00	-17.43	peak	
2	*	11570.00	42.26	5.13	47.39	54.00	-6.61	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

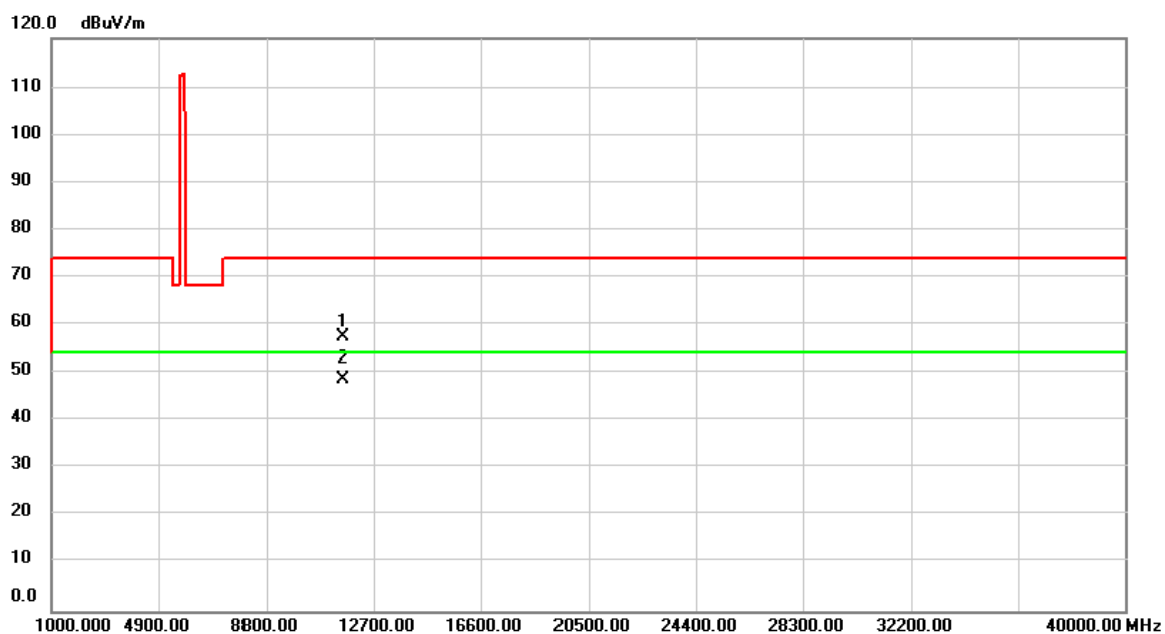
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5785.000	65.96	39.70	105.66	112.20	-6.54	peak	No Limit
2	*	5785.000	58.13	39.70	97.83	54.00	43.83	AVG	No Limit

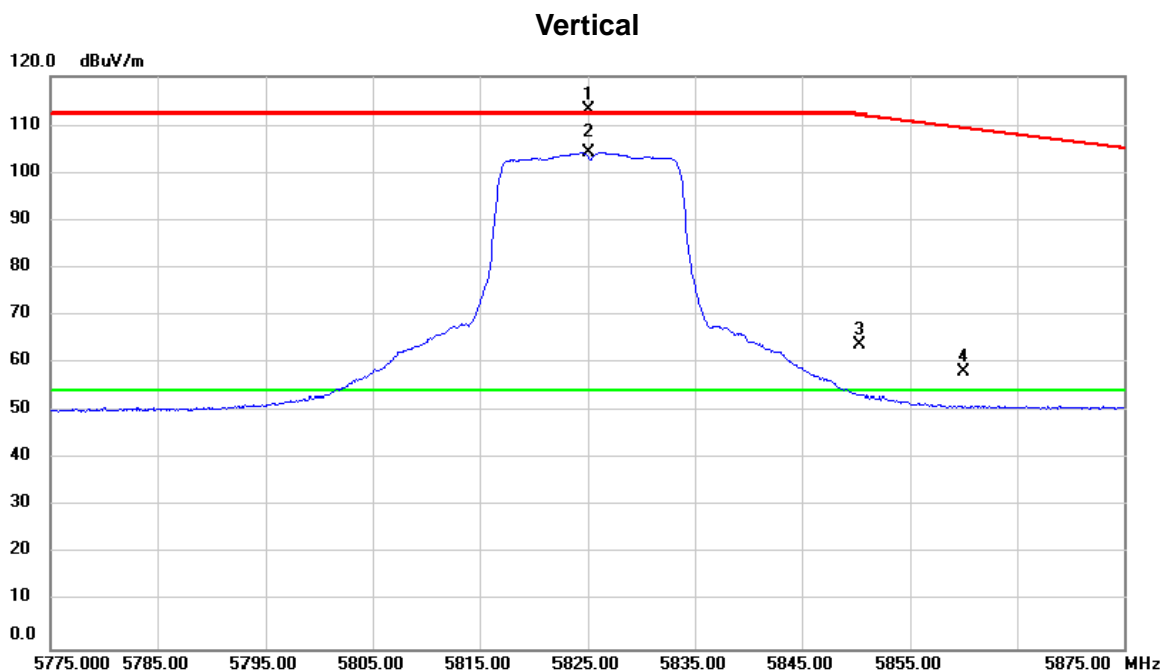
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11570.00	52.44	5.13	57.57	74.00	-16.43	peak	
2	*	11570.00	43.70	5.13	48.83	54.00	-5.17	AVG	

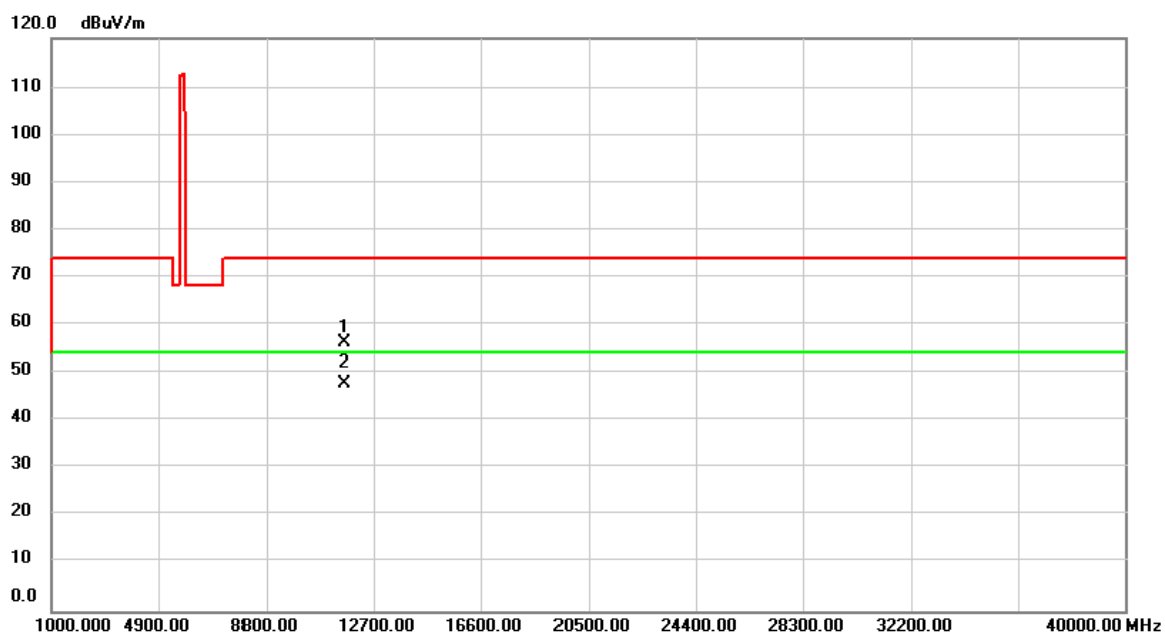
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5825.000	73.11	39.82	112.93	112.20	0.73	peak	No Limit
2	*	5825.000	64.46	39.82	104.28	54.00	50.28	AVG	No Limit
3		5850.450	23.83	39.89	63.72	112.07	-48.35	peak	
4		5860.000	18.14	39.91	58.05	109.40	-51.35	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

### Vertical

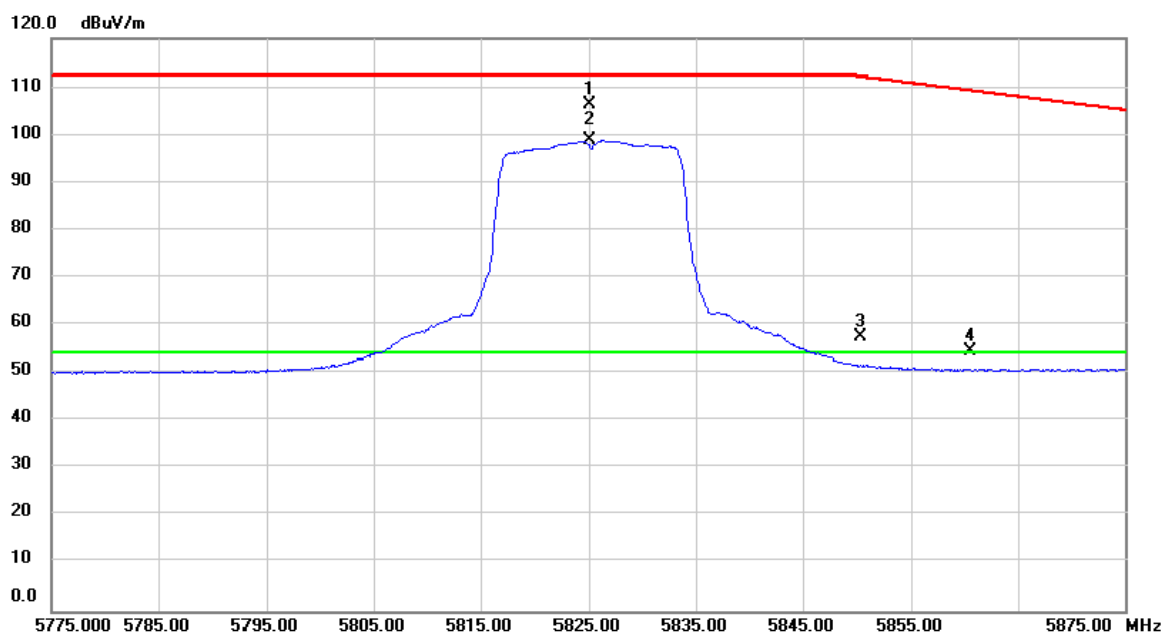


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11650.00	51.29	4.99	56.28	74.00	-17.72	peak	
2	*	11650.00	42.97	4.99	47.96	54.00	-6.04	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

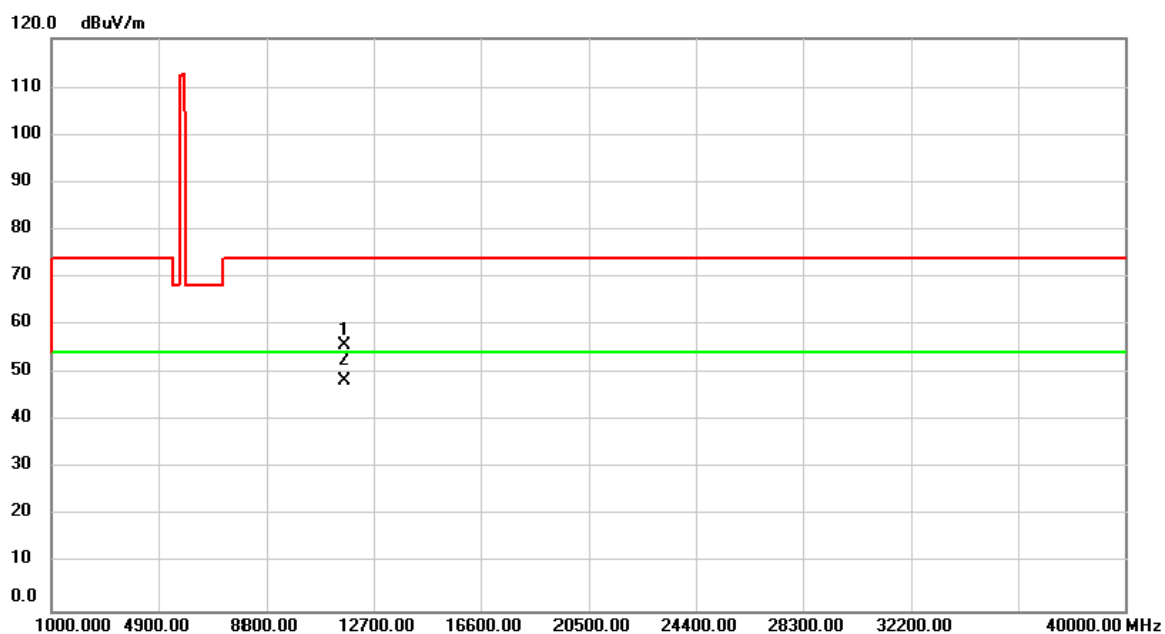
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5825.000	66.47	39.82	106.29	112.20	-5.91	peak	No Limit
2	*	5825.000	58.95	39.82	98.77	54.00	44.77	AVG	No Limit
3		5850.450	17.63	39.89	57.52	112.07	-54.55	peak	
4		5860.525	14.60	39.91	54.51	109.25	-54.74	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

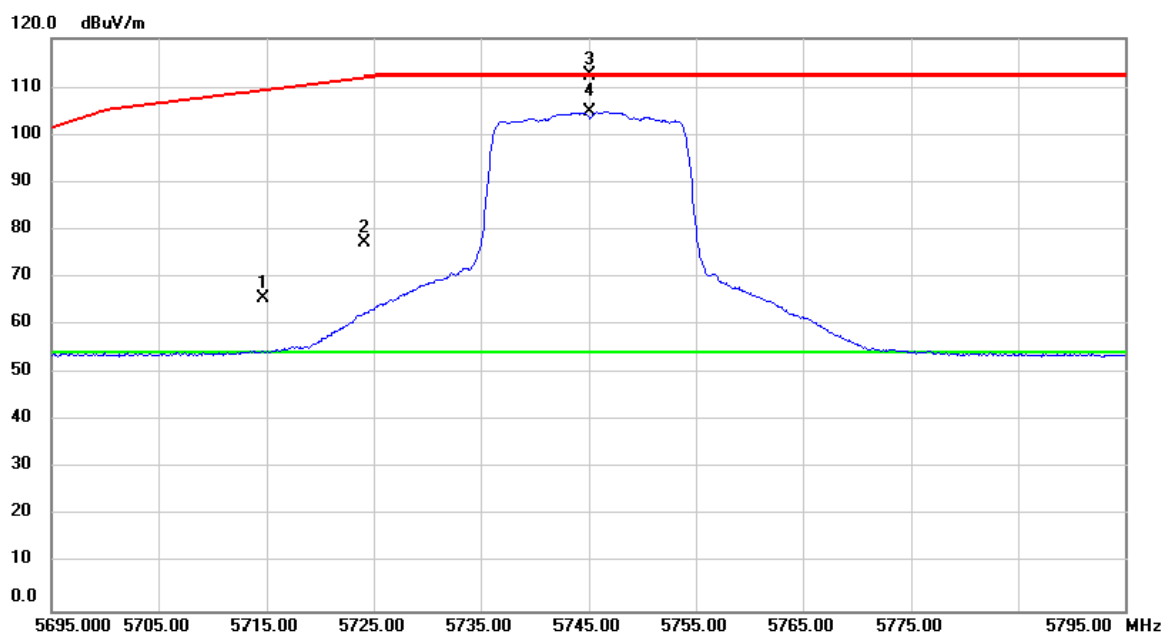
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	50.71	4.99	55.70	74.00	-18.30	peak	
2	*	11650.00	43.47	4.99	48.46	54.00	-5.54	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

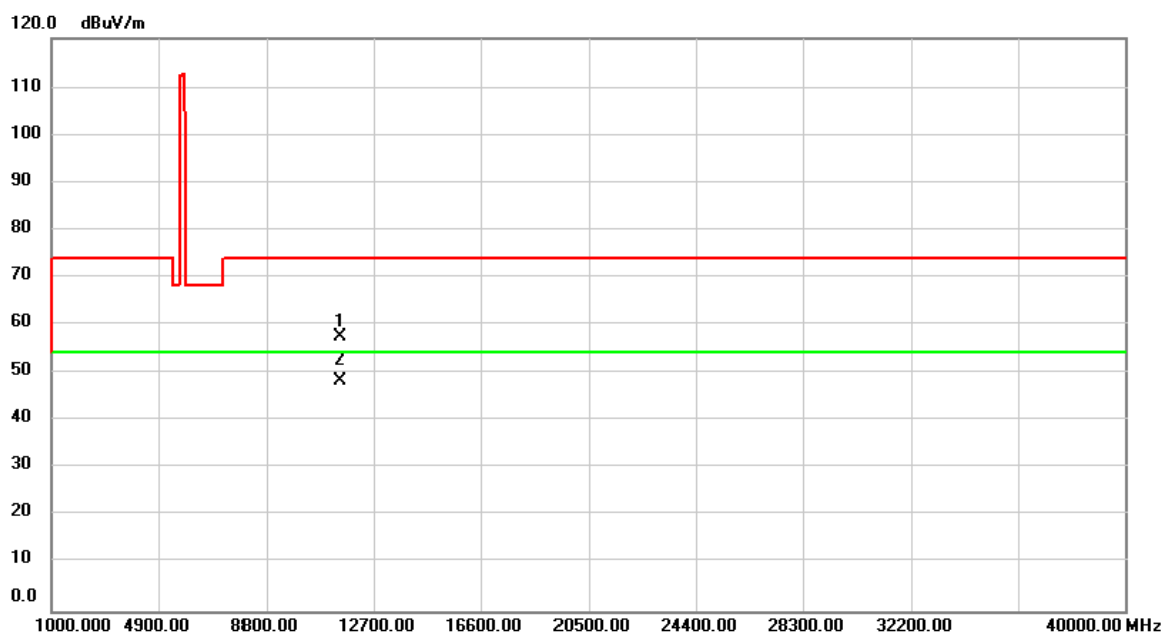
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5714.720	25.92	39.49	65.41	109.32	-43.91	peak	
2		5724.130	37.69	39.52	77.21	111.96	-34.75	peak	
3	X	5745.000	72.68	39.58	112.26	112.20	0.06	peak	No Limit
4	*	5745.000	65.26	39.58	104.84	54.00	50.84	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

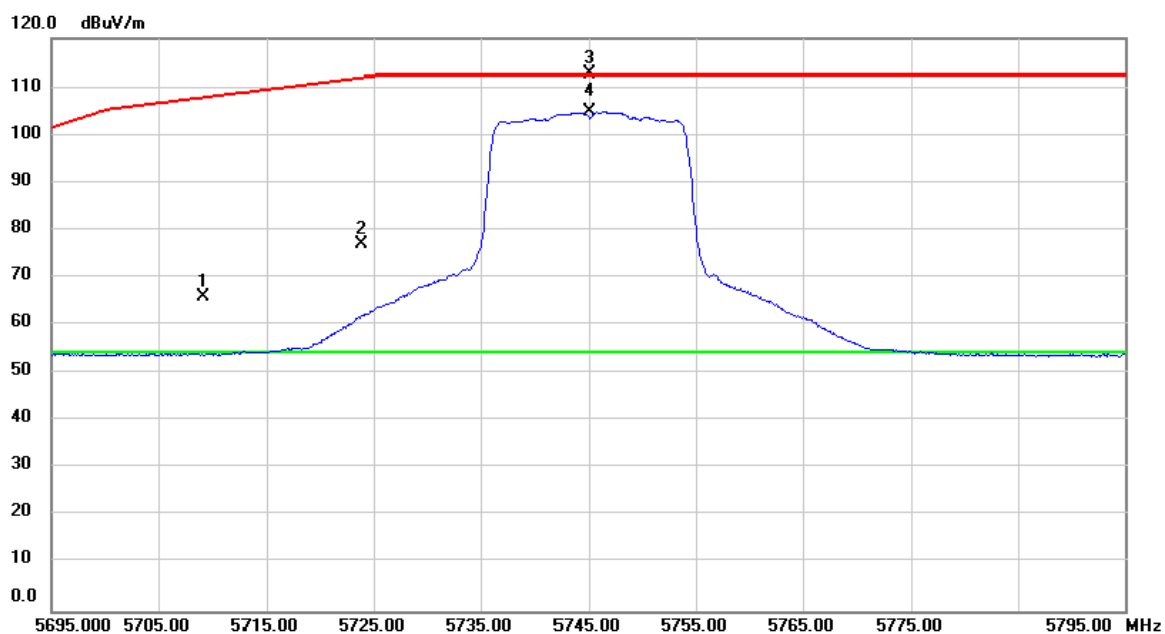
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11490.00	52.36	5.23	57.59	74.00	-16.41	peak	
2	*	11490.00	43.26	5.23	48.49	54.00	-5.51	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

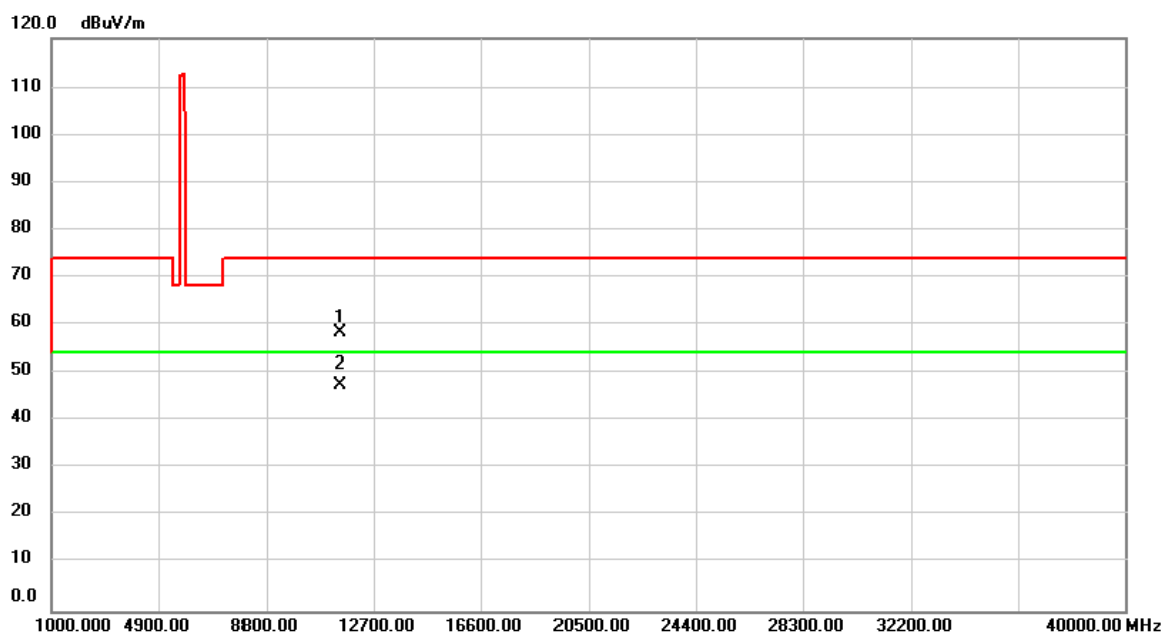
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5709.200	26.35	39.47	65.82	107.78	-41.96	peak	
2		5723.820	37.40	39.52	76.92	111.87	-34.95	peak	
3	X	5745.000	72.96	39.58	112.54	112.20	0.34	peak	No Limit
4	*	5745.000	65.19	39.58	104.77	54.00	50.77	AVG	No Limit

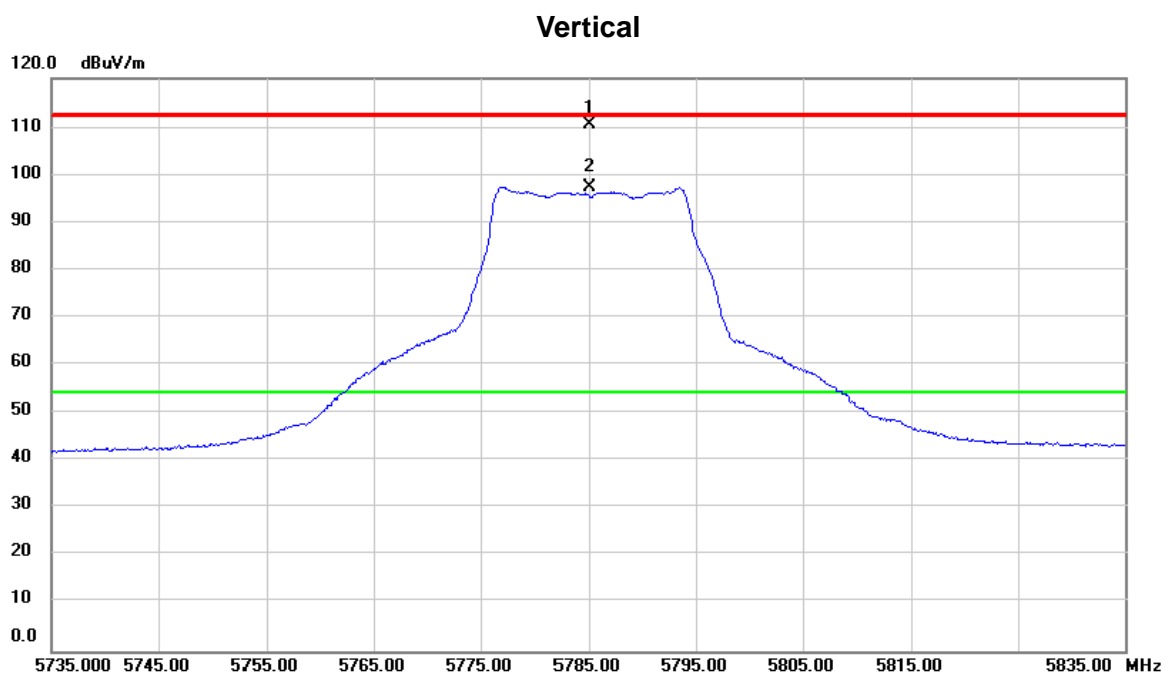
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

### Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		11490.00	53.12	5.23	58.35	74.00	-15.65	peak	
2	*	11490.00	42.36	5.23	47.59	54.00	-6.41	AVG	

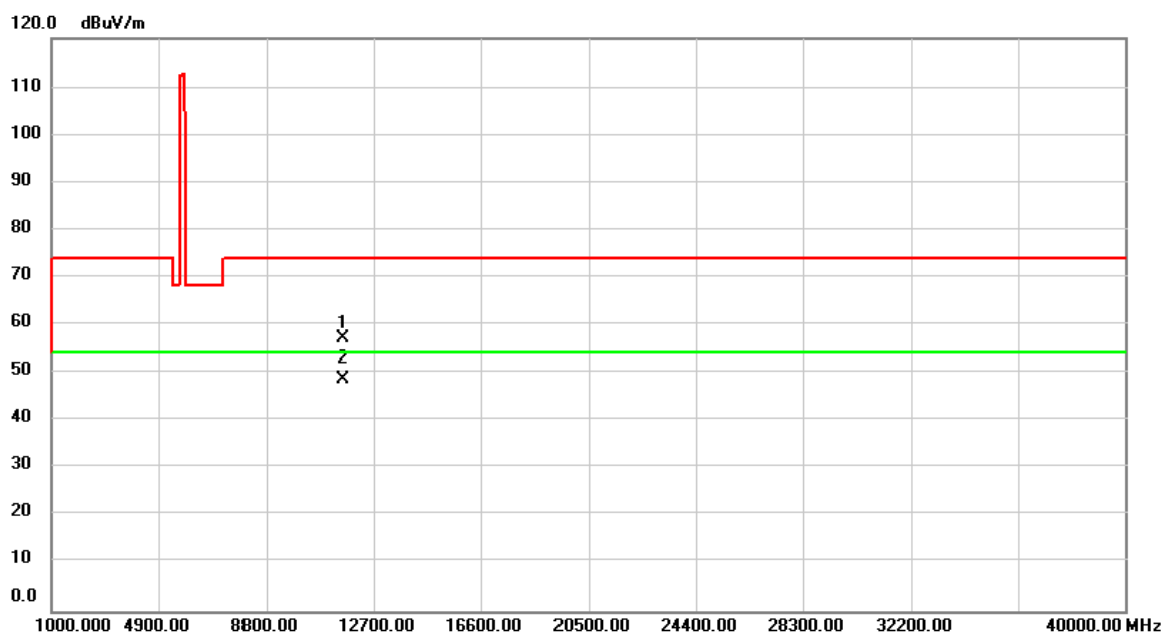
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5785.000	70.89	39.70	110.59	112.20	-1.61	peak	No Limit
2	*	5785.000	57.68	39.70	97.38	54.00	43.38	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

### Vertical

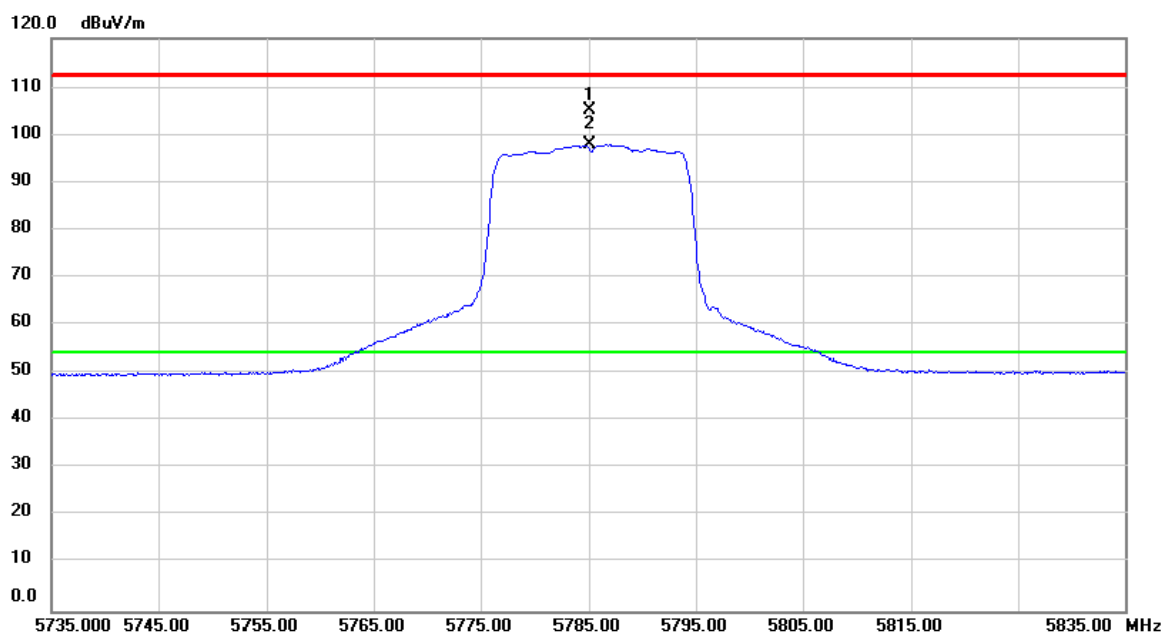


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11570.00	52.13	5.13	57.26	74.00	-16.74	peak	
2	*	11570.00	43.61	5.13	48.74	54.00	-5.26	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

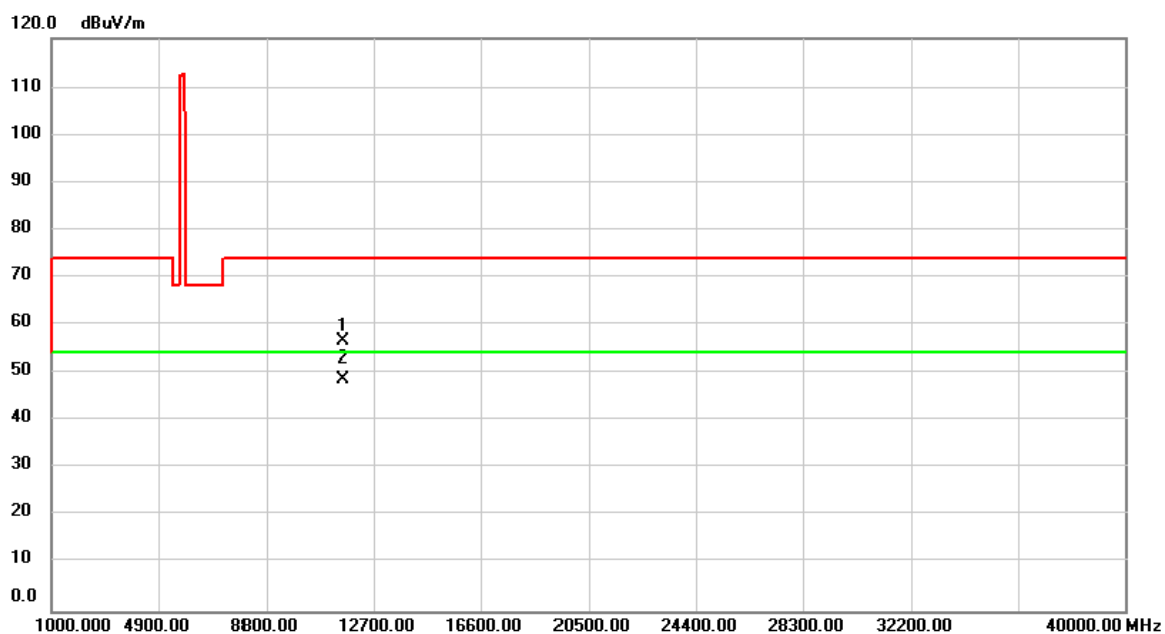
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5785.000	65.55	39.70	105.25	112.20	-6.95	peak	No Limit
2	*	5785.000	58.18	39.70	97.88	54.00	43.88	AVG	No Limit

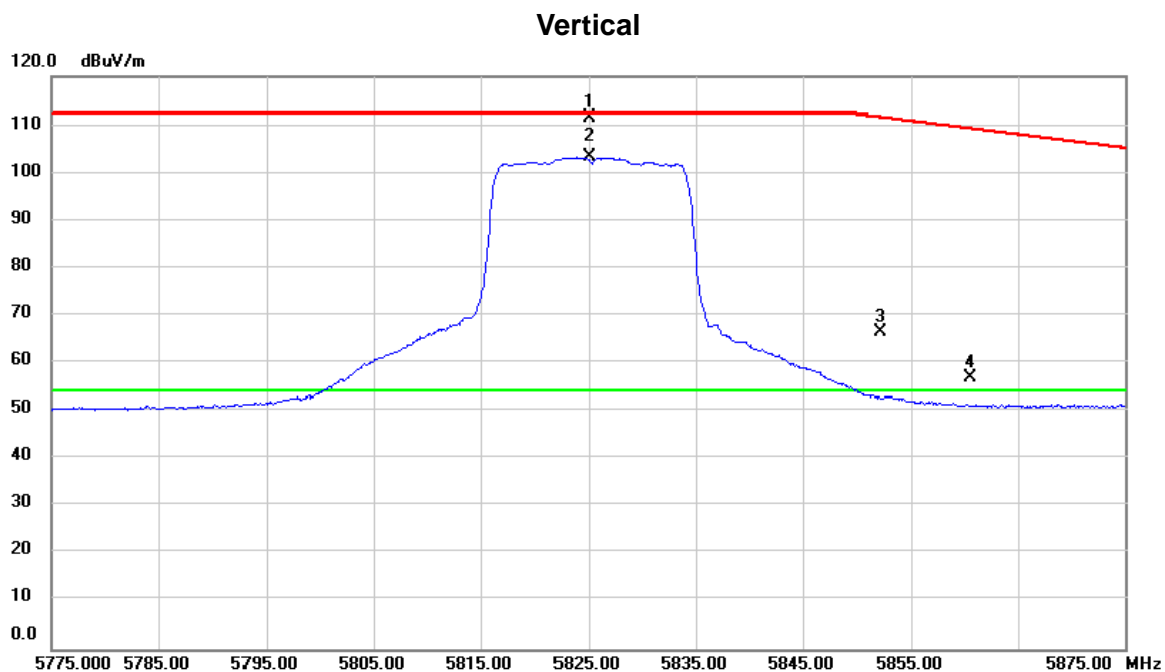
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11570.00	51.37	5.13	56.50	74.00	-17.50	peak	
2	*	11570.00	43.55	5.13	48.68	54.00	-5.32	AVG	

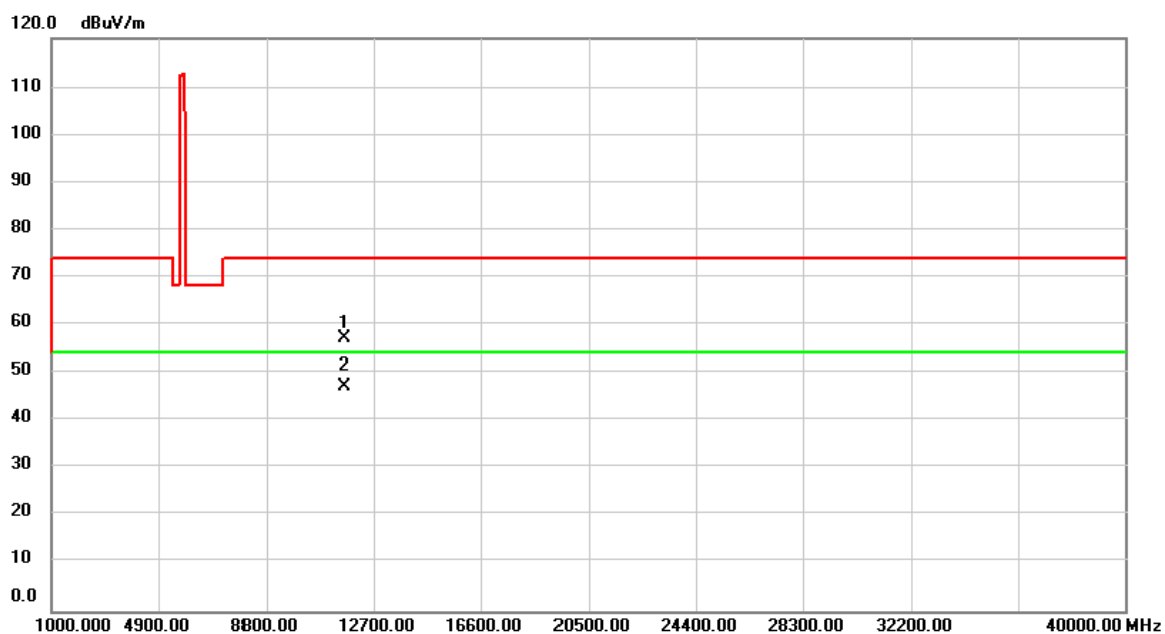
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5825.000	71.62	39.82	111.44	112.20	-0.76	peak	No Limit
2	*	5825.000	63.40	39.82	103.22	54.00	49.22	AVG	No Limit
3		5852.075	26.70	39.89	66.59	111.62	-45.03	peak	
4		5860.555	16.79	39.91	56.70	109.24	-52.54	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

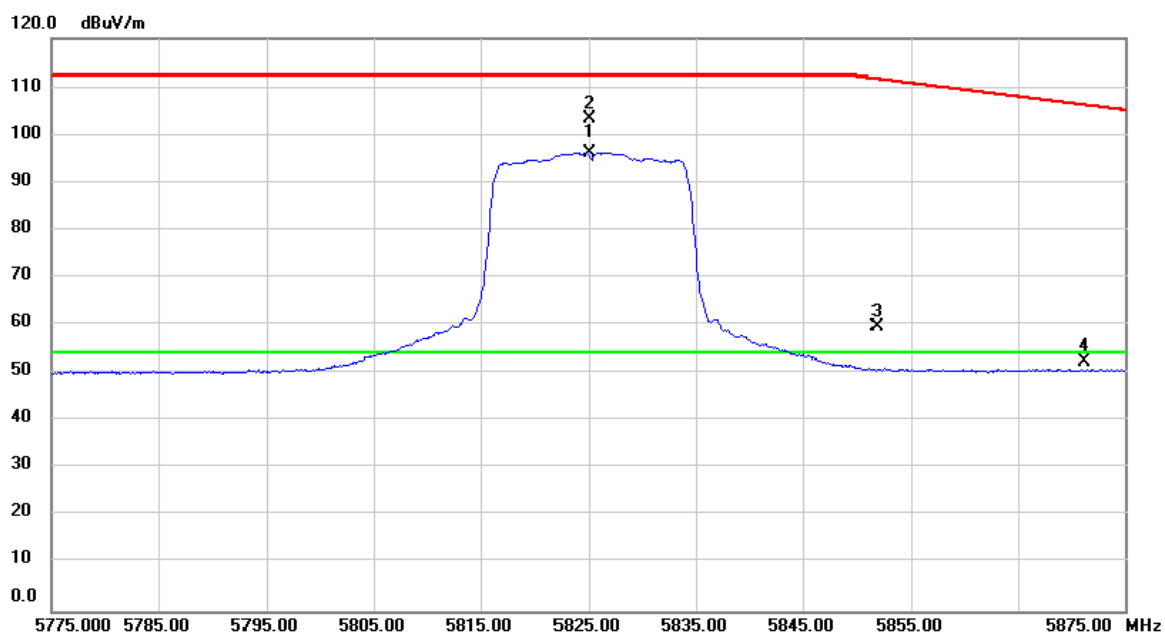
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	52.12	4.99	57.11	74.00	-16.89	peak	
2	*	11650.00	42.35	4.99	47.34	54.00	-6.66	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

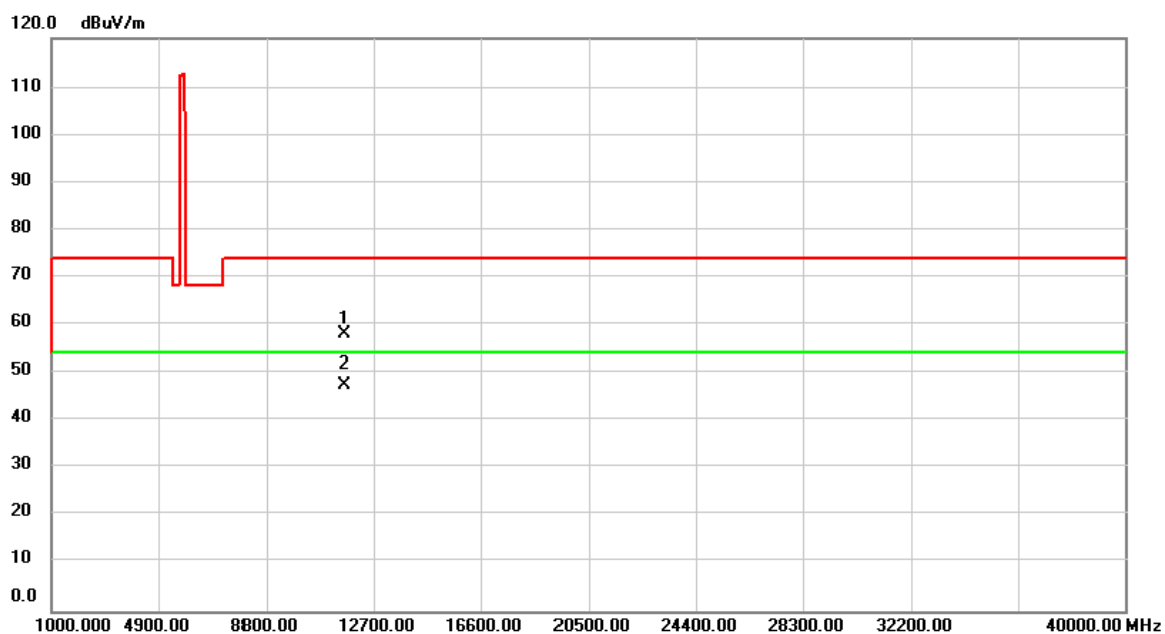
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	5825.000	56.38	39.82	96.20	54.00	42.20	AVG	No Limit
2		5825.000	63.53	39.82	103.35	112.20	-8.85	peak	No Limit
3		5851.875	19.73	39.89	59.62	111.67	-52.05	peak	
4		5871.175	12.49	39.95	52.44	106.27	-53.83	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

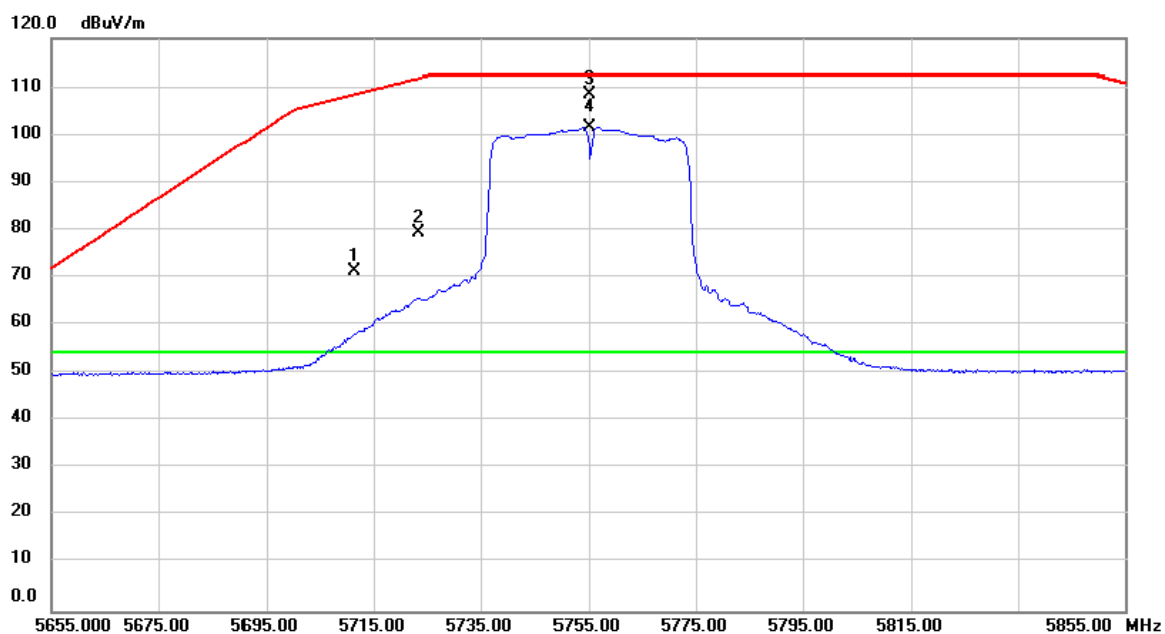
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	53.12	4.99	58.11	74.00	-15.89	peak	
2	*	11650.00	42.55	4.99	47.54	54.00	-6.46	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

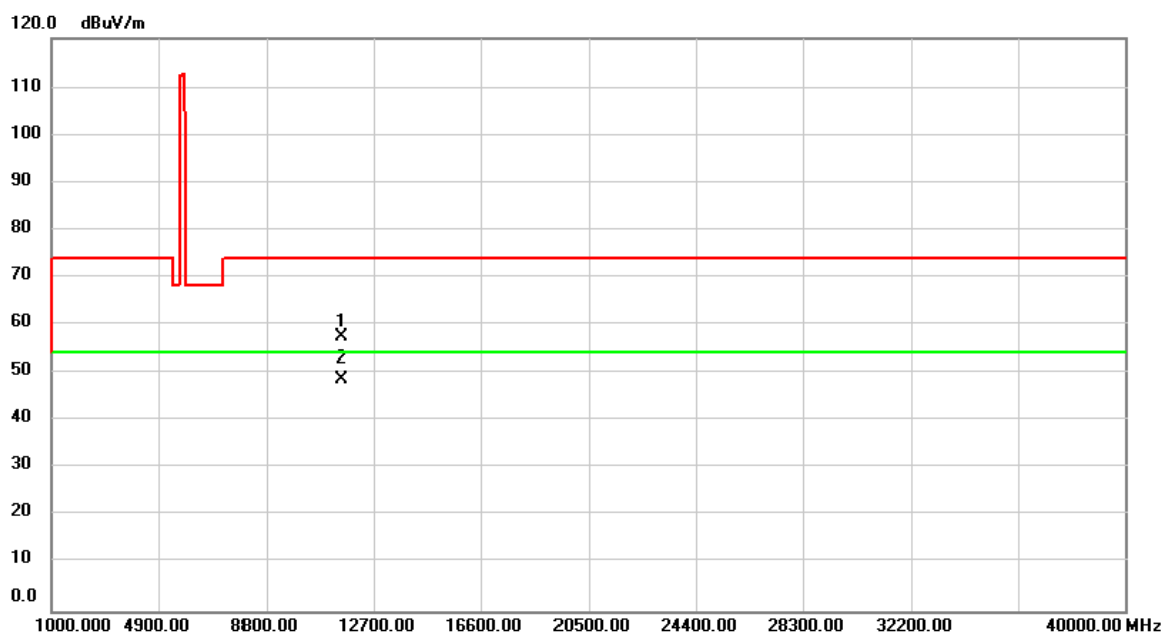
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5711.280	31.87	39.49	71.36	108.36	-37.00	peak	
2		5723.320	39.70	39.51	79.21	111.73	-32.52	peak	
3		5755.000	68.83	39.61	108.44	112.20	-3.76	peak	No Limit
4	*	5755.000	62.00	39.61	101.61	54.00	47.61	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

### Vertical

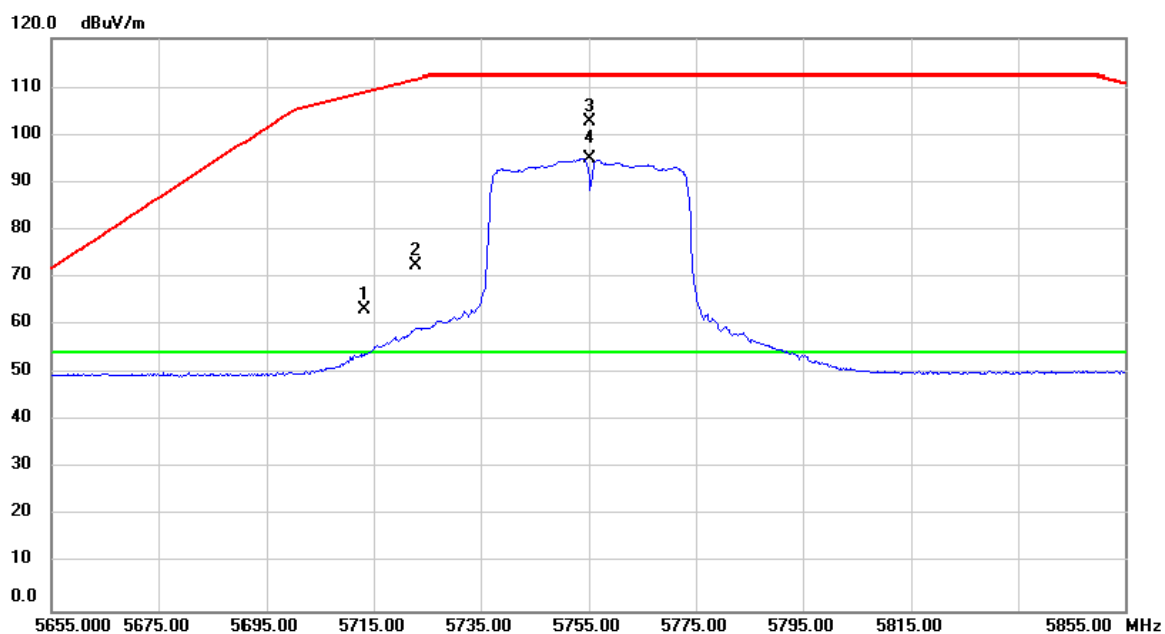


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11510.00	52.22	5.23	57.45	74.00	-16.55	peak	
2	*	11510.00	43.54	5.23	48.77	54.00	-5.23	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

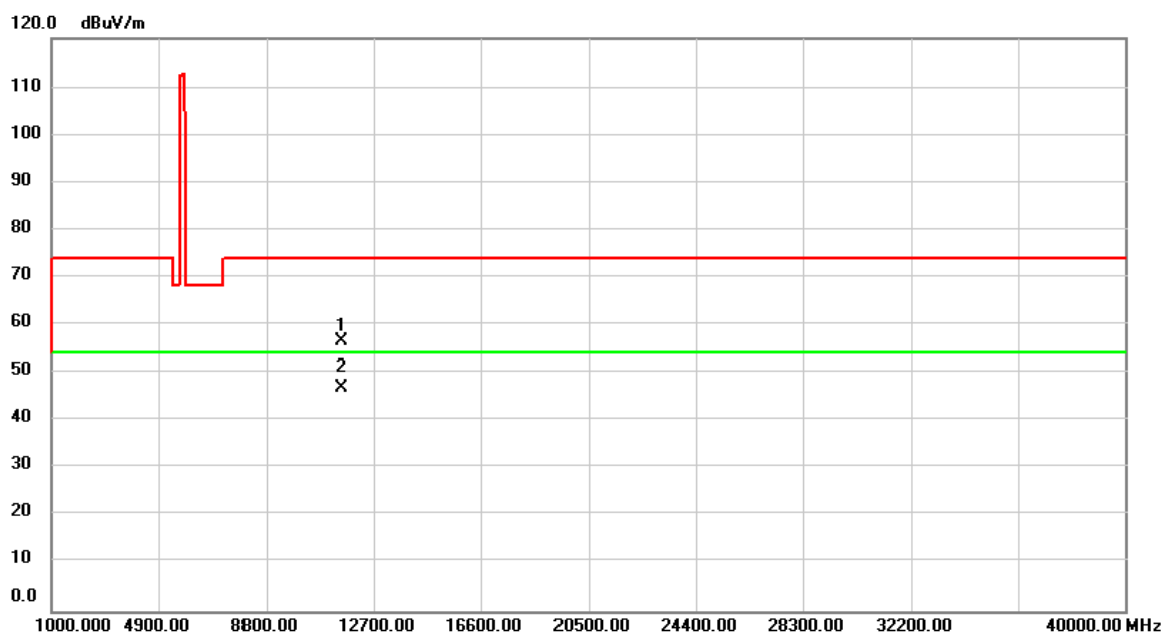
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5713.260	23.80	39.49	63.29	108.91	-45.62	peak	
2		5722.830	32.82	39.51	72.33	111.59	-39.26	peak	
3		5755.000	63.23	39.61	102.84	112.20	-9.36	peak	No Limit
4	*	5755.000	55.36	39.61	94.97	54.00	40.97	AVG	No Limit

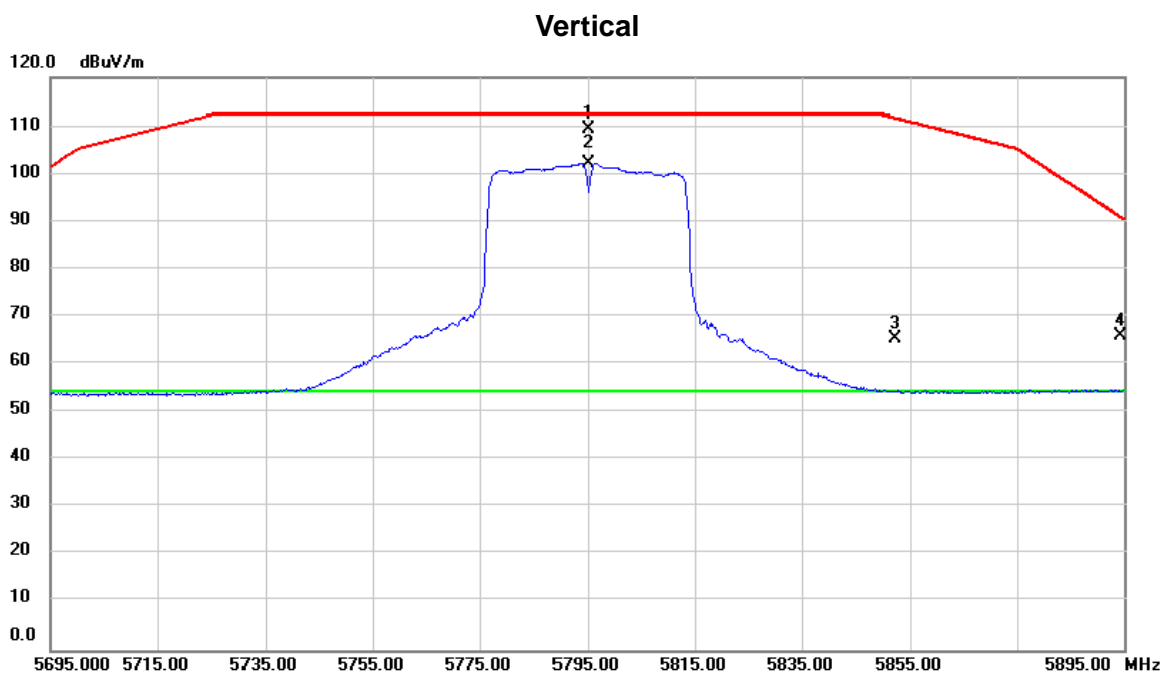
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	51.35	5.23	56.58	74.00	-17.42	peak	
2	*	11510.00	41.68	5.23	46.91	54.00	-7.09	AVG	

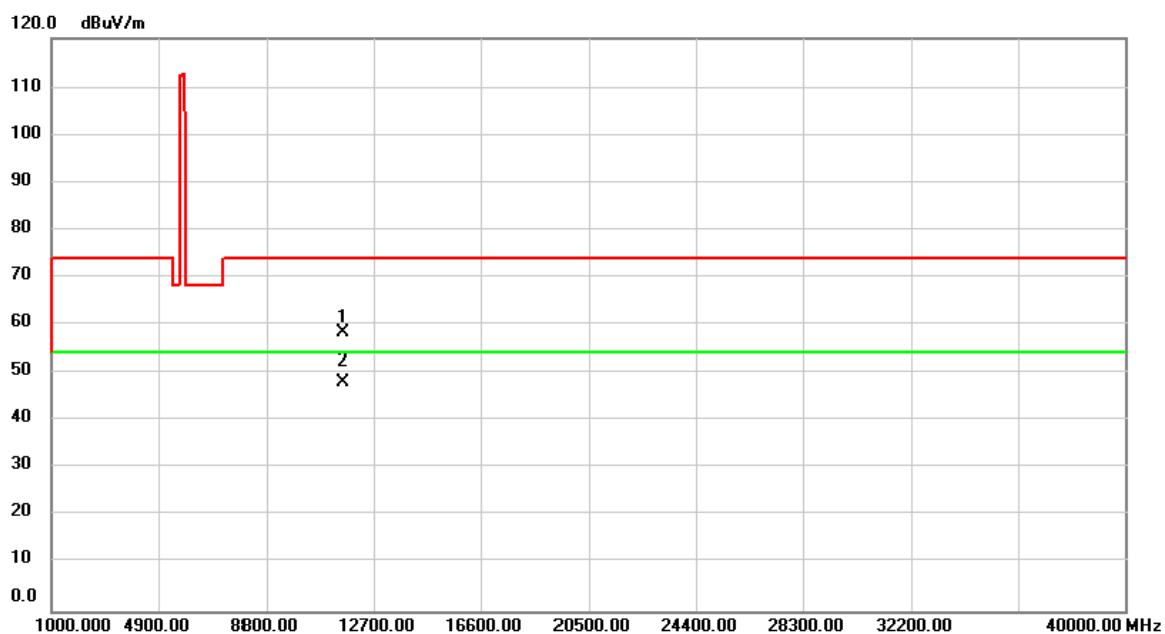
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5795.000	69.49	39.72	109.21	112.20	-2.99	peak	No Limit
2	*	5795.000	62.46	39.72	102.18	54.00	48.18	AVG	No Limit
3		5852.080	25.48	39.89	65.37	111.62	-46.25	peak	
4		5894.265	25.89	40.01	65.90	90.94	-25.04	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

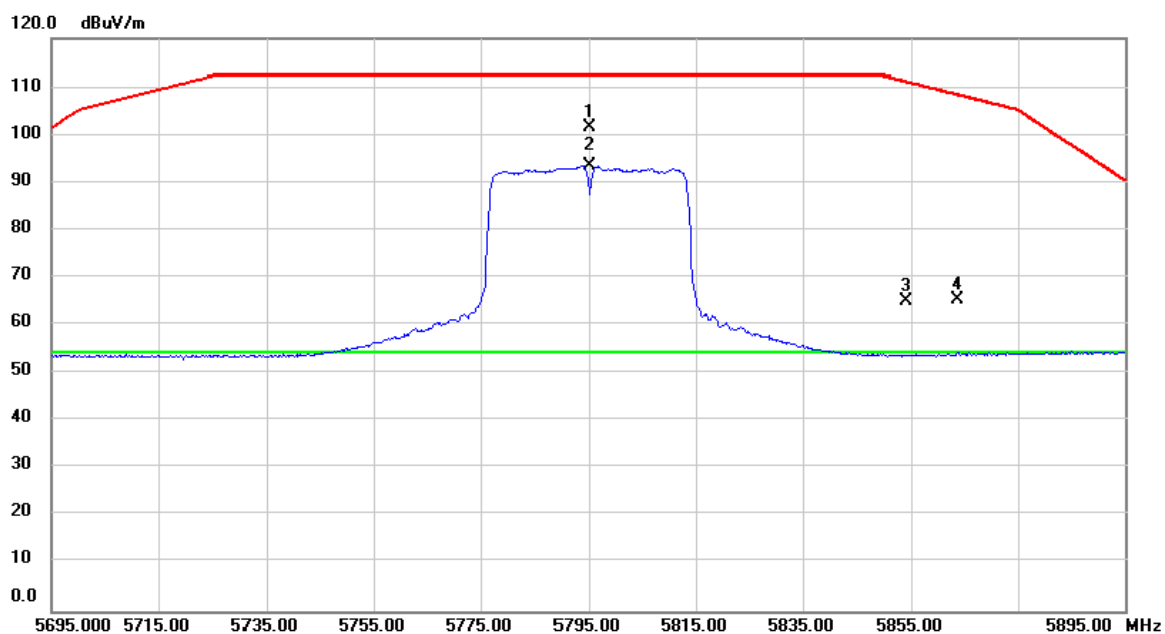
### Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		11590.00	53.21	5.10	58.31	74.00	-15.69	peak	
2	*	11590.00	43.12	5.10	48.22	54.00	-5.78	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

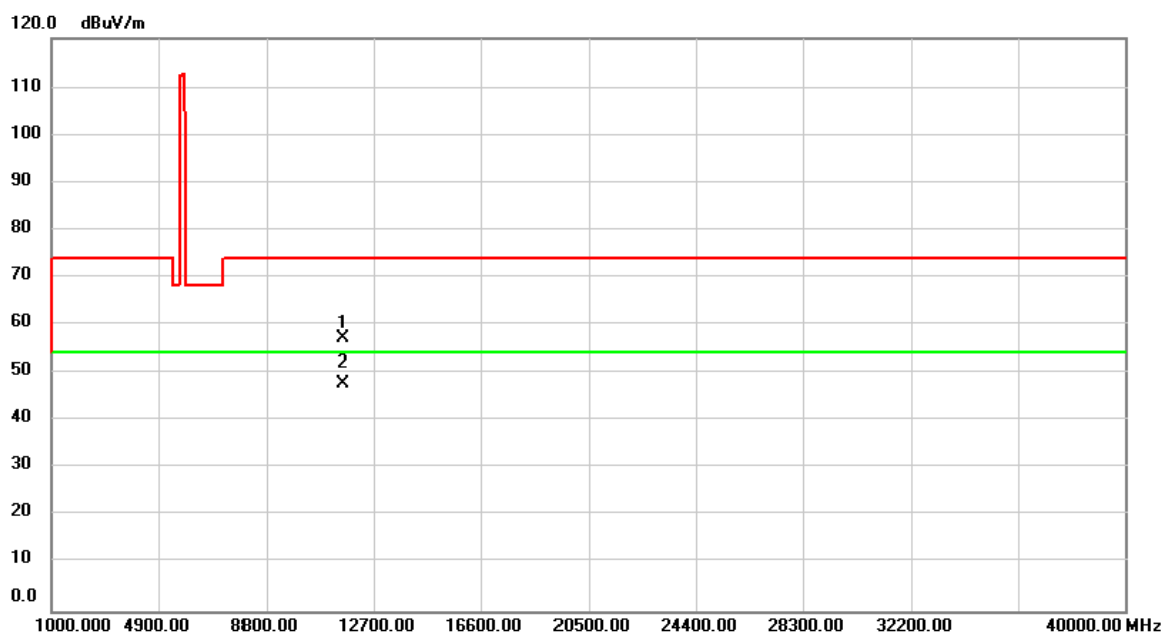
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5795.000	61.72	39.72	101.44	112.20	-10.76	peak	No Limit
2	*	5795.000	53.73	39.72	93.45	54.00	39.45	AVG	No Limit
3		5854.070	25.07	39.90	64.97	111.06	-46.09	peak	
4		5863.570	25.23	39.93	65.16	108.40	-43.24	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

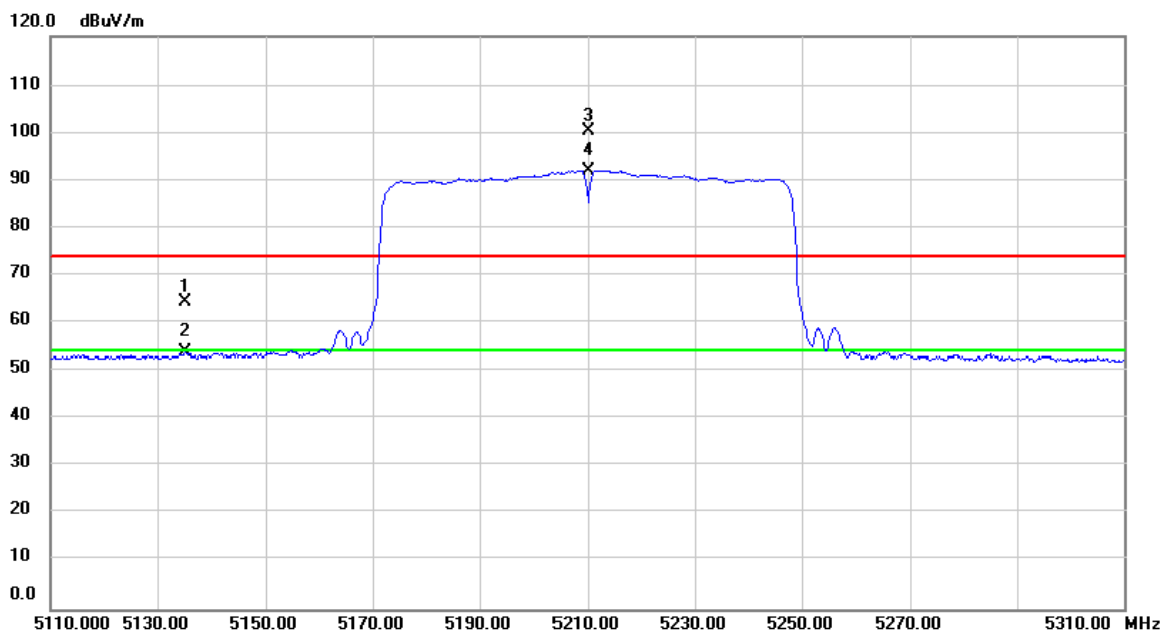
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11590.00	52.20	5.10	57.30	74.00	-16.70	peak	
2	*	11590.00	42.75	5.10	47.85	54.00	-6.15	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC(VHT80) Mode 5210MHz

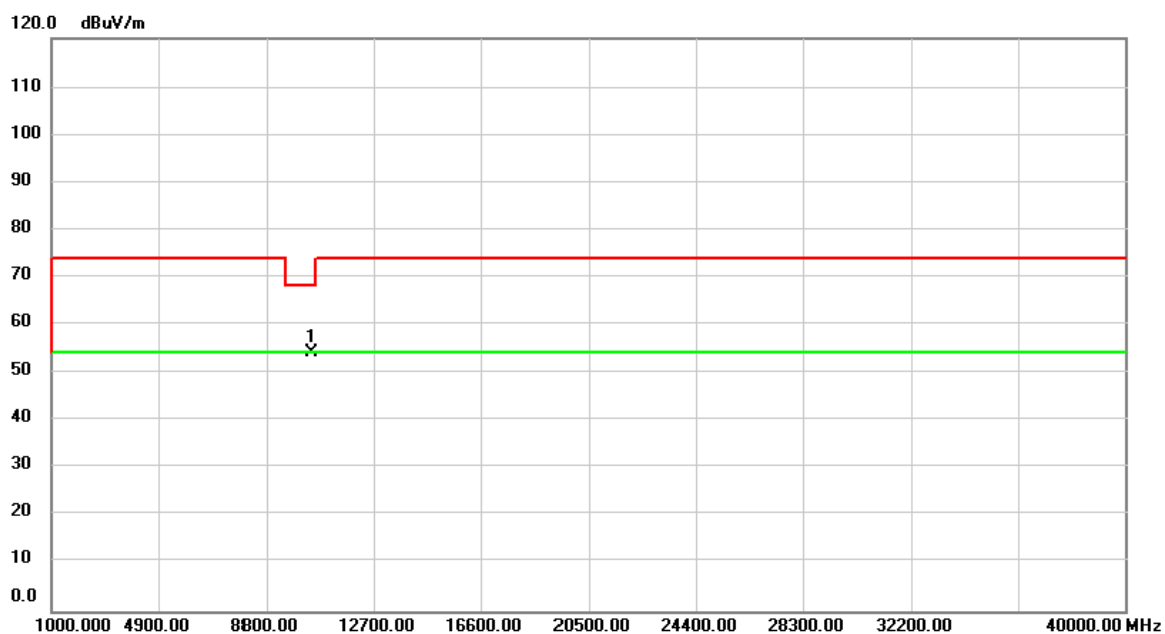
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5135.200	25.93	38.43	64.36	74.00	-9.64	peak	
2		5135.200	15.41	38.43	53.84	54.00	-0.16	AVG	
3	X	5210.000	61.95	38.52	100.47	74.00	26.47	peak	No Limit
4	*	5210.000	53.56	38.52	92.08	54.00	38.08	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC(VHT80) Mode 5210MHz

### Vertical

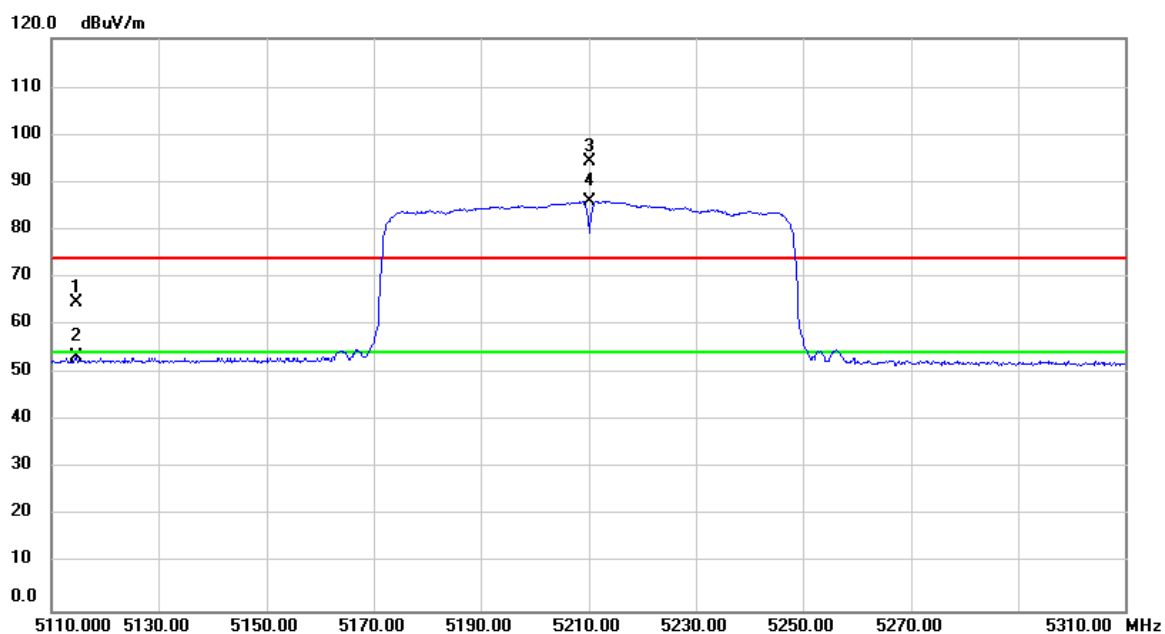


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	10420.00	50.96	3.21	54.17	68.20	-14.03	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC(VHT80) Mode 5210MHz

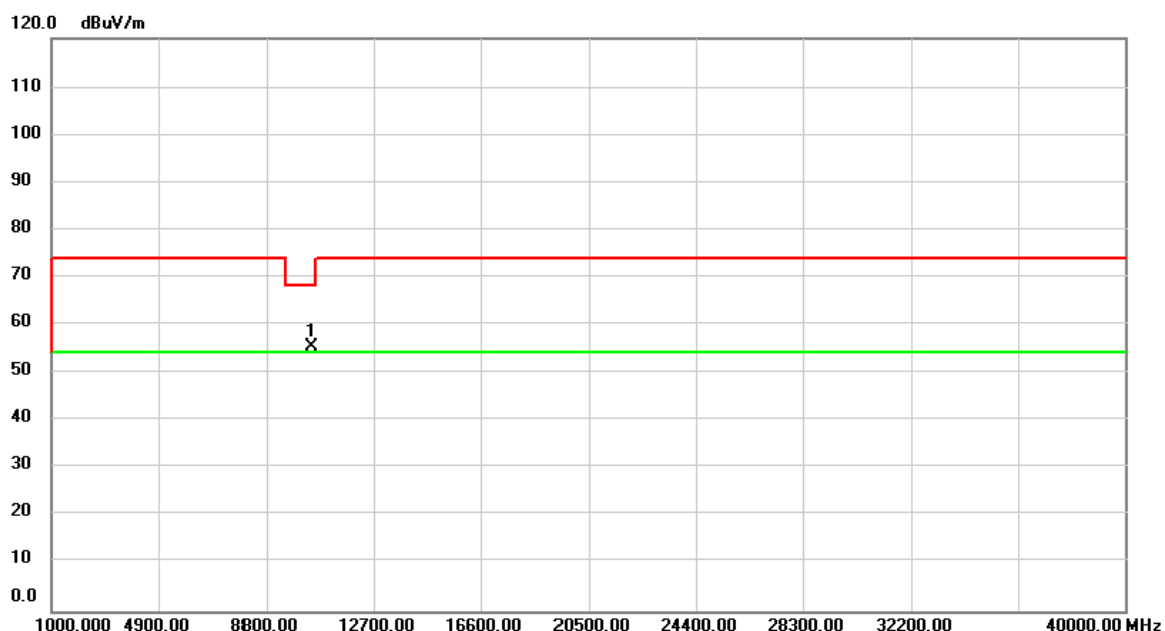
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5114.600	26.15	38.41	64.56	74.00	-9.44	peak	
2		5114.600	14.76	38.41	53.17	54.00	-0.83	AVG	
3	X	5210.000	55.86	38.52	94.38	74.00	20.38	peak	No Limit
4	*	5210.000	47.53	38.52	86.05	54.00	32.05	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC(VHT80) Mode 5210MHz

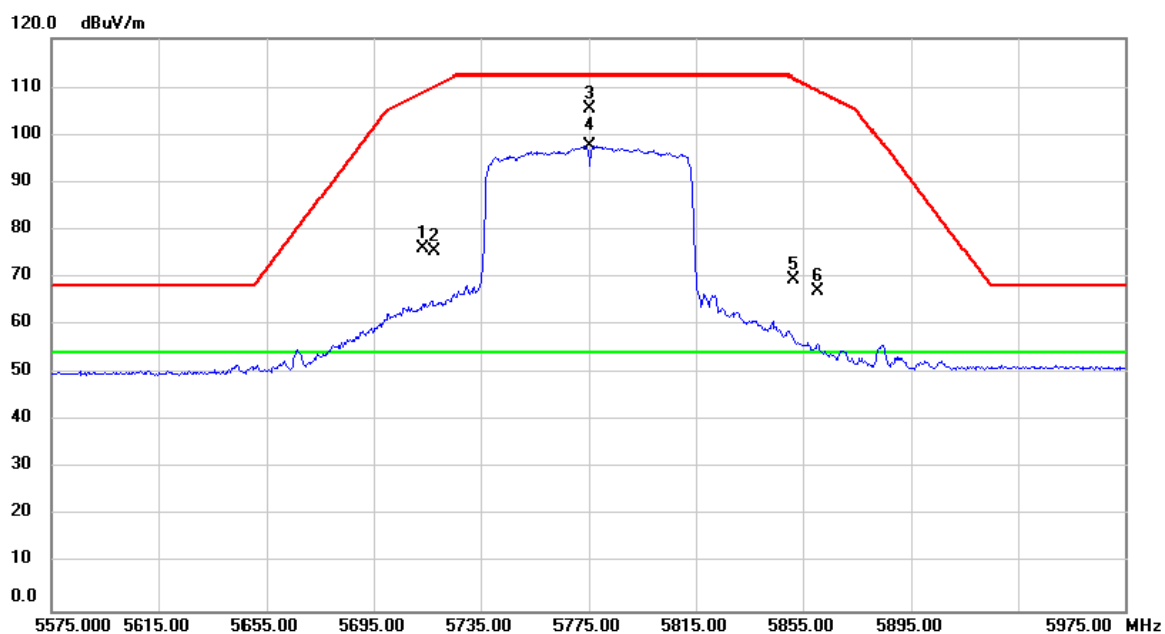
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.00	51.99	3.21	55.20	68.20	-13.00	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC(VHT80) Mode 5775MHz

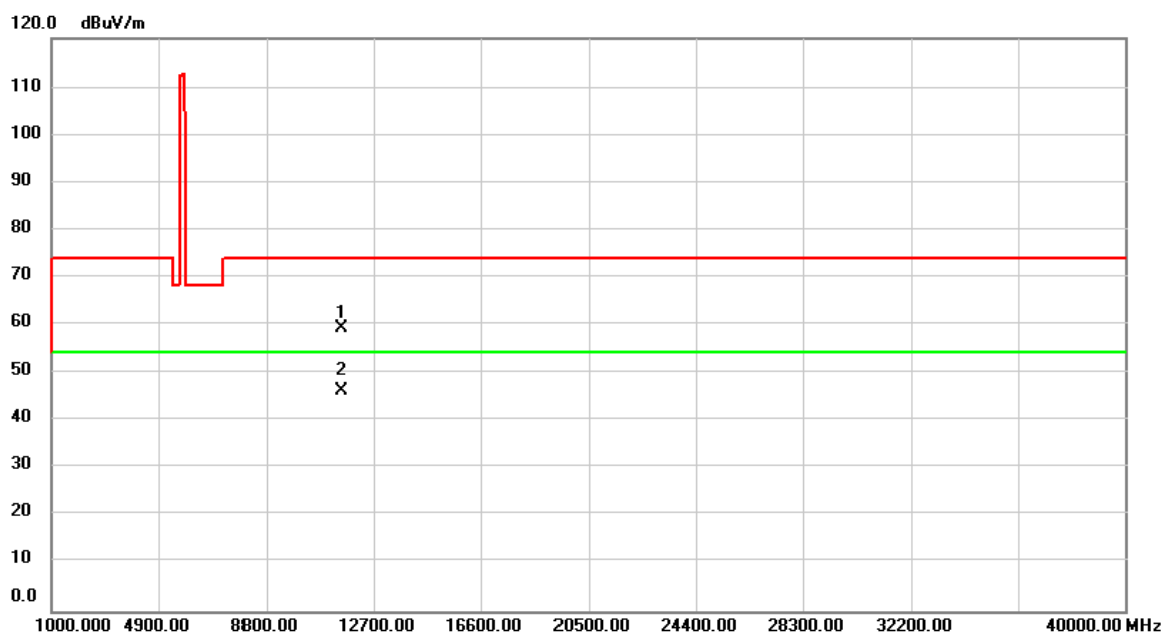
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5713.180	36.46	39.49	75.95	108.89	-32.94	peak	
2		5717.500	35.92	39.50	75.42	110.10	-34.68	peak	
3		5775.000	65.67	39.67	105.34	112.20	-6.86	peak	No Limit
4	*	5775.000	57.96	39.67	97.63	54.00	43.63	AVG	No Limit
5		5851.790	29.59	39.89	69.48	111.70	-42.22	peak	
6		5860.575	27.04	39.91	66.95	109.24	-42.29	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC(VHT80) Mode 5775MHz

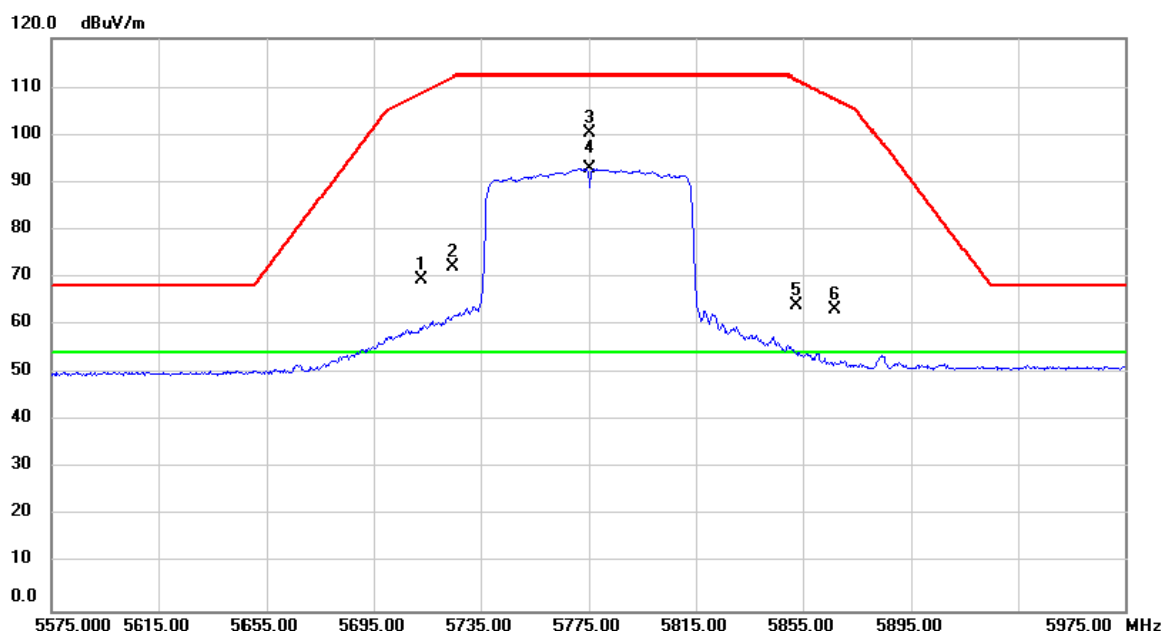
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	54.11	5.16	59.27	74.00	-14.73	peak	
2	*	11550.00	41.26	5.16	46.42	54.00	-7.58	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC(VHT80) Mode 5775MHz

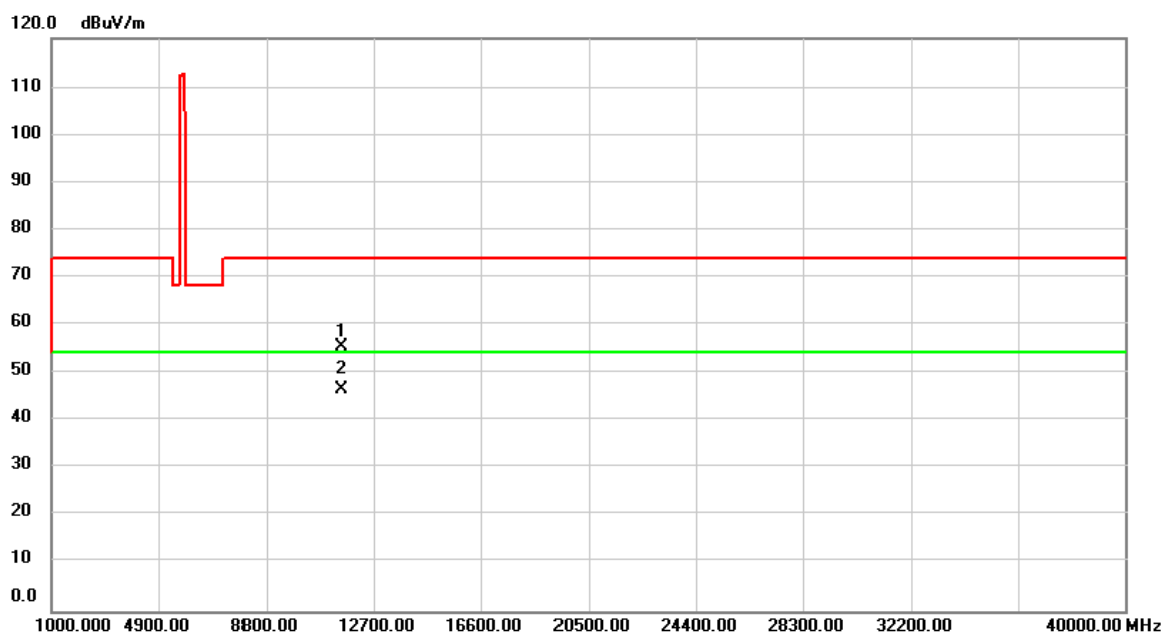
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5712.620	29.92	39.49	69.41	108.73	-39.32	peak	
2		5724.850	32.61	39.52	72.13	112.16	-40.03	peak	
3		5775.000	60.54	39.67	100.21	112.20	-11.99	peak	No Limit
4	*	5775.000	53.20	39.67	92.87	54.00	38.87	AVG	No Limit
5		5852.375	24.27	39.89	64.16	111.53	-47.37	peak	
6		5866.785	23.29	39.93	63.22	107.50	-44.28	peak	

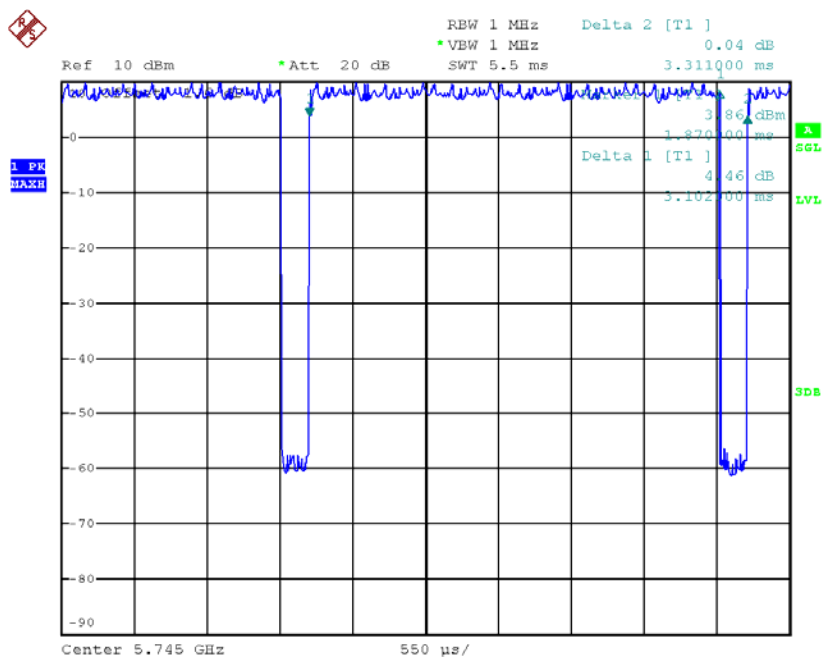
Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC(VHT80) Mode 5775MHz

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11550.00	50.21	5.16	55.37	74.00	-18.63	peak	
2	*	11550.00	41.40	5.16	46.56	54.00	-7.44	AVG	

# TX A Mode\_DUTY CYCLE



Date: 19.JUN.2016 15:09:56

Duty cycle: TX DUTYMHz

Duty cycle =  $T_{ON} / T_{Total}$

$T_{ON}$ : 3.10 msec

$T_{Total}$ : 3.31 msec

Duty cycle: 93.66 %

Duty Factor =  $10 \log(1/\text{Duty cycle})$

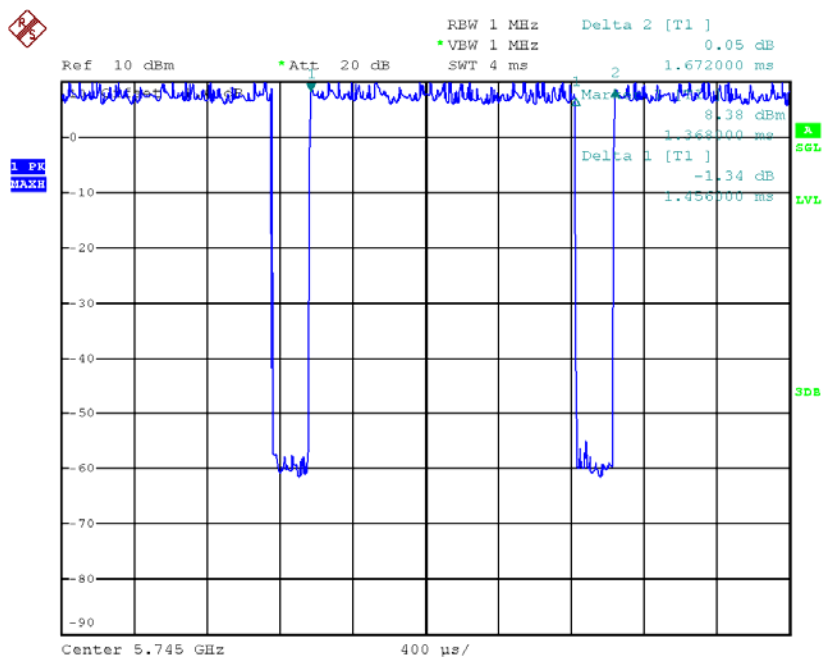
Duty Factor = 0.28

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is less than 98 %, so, the output power and power density should be caculated as

Output Power = Measured power + Ducus factor

Power Spectral Density = Measured density + Duty factor

# TX N20 Mode\_DUTY CYCLE



Date: 19.JUN.2016 15:39:32

Duty cycle: TX DUTYMHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

$T_{\text{ON}}$ : 1.46 msec

$T_{\text{Total}}$ : 1.67 msec

Duty cycle: 87.43 %

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0.58

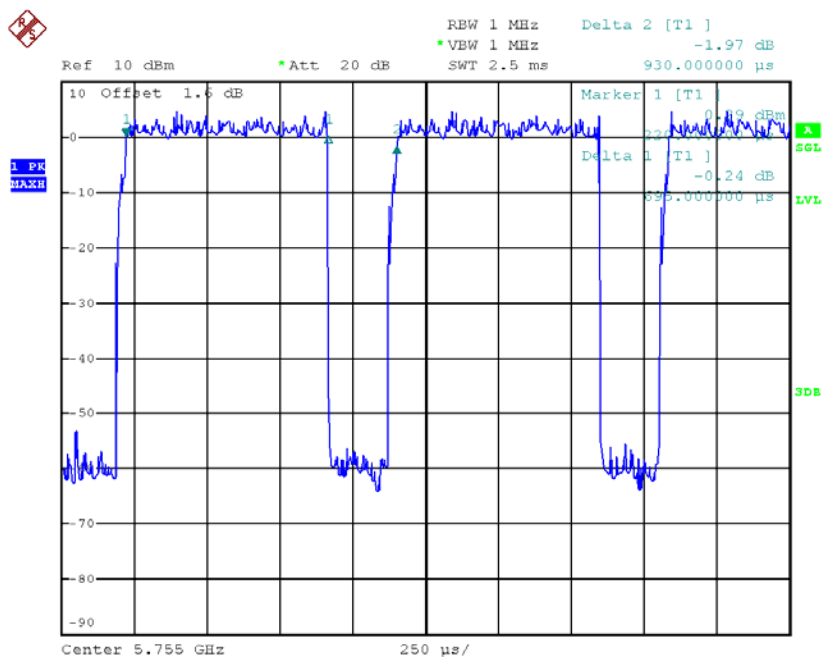
Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is less than 98 %, so, the output power and power density should be caculated as

$$\text{Output Power} = \text{Measured power} + \text{Ducy factor}$$

$$\text{Power Spectral Density} = \text{Measured density} + \text{Duty factor}$$



# TX N40 Mode\_DUTY CYCLE



Date: 19.JUN.2016 16:04:35

Duty cycle: TX DUTYMHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

$T_{\text{ON}}$ : 0.70 msec

$T_{\text{Total}}$ : 0.93 msec

Duty cycle: 75.27 %

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

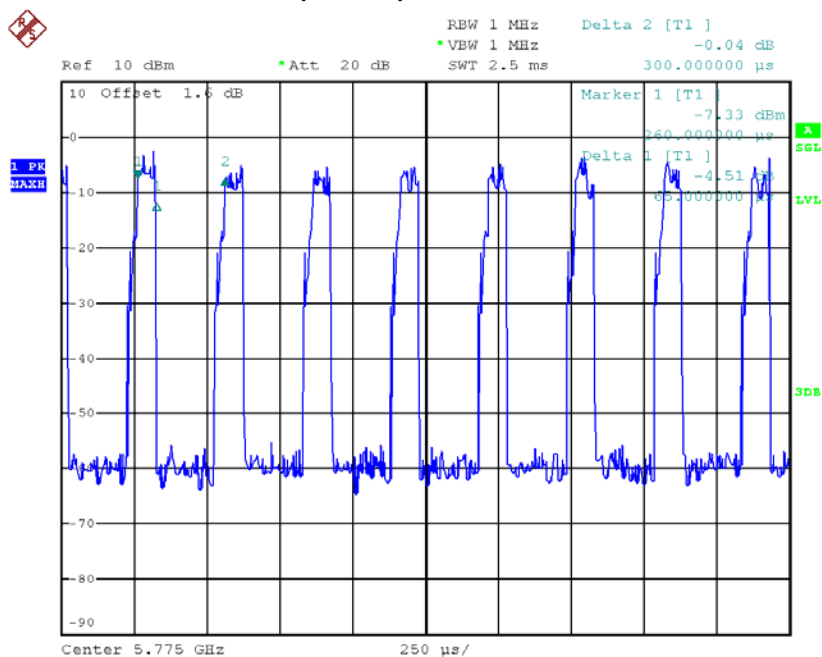
Duty Factor = 1.23

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is less than 98 %, so, the output power and power density should be caculated as

Output Power = Measured power + Ducus factor

Power Spectral Density = Measured density + Duty factor

# TX AC(VHT80) Mode\_DUTY CYCLE



Date: 19.JUN.2016 16:22:35

Duty cycle: TX DUTYMHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

$T_{\text{ON}}$ : 0.07 msec

$T_{\text{Total}}$ : 0.30 msec

Duty cycle: 23.33 %

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 6.32

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is less than 98 %, so, the output power and power density should be caculated as

Output Power = Measured power + Ducus factor

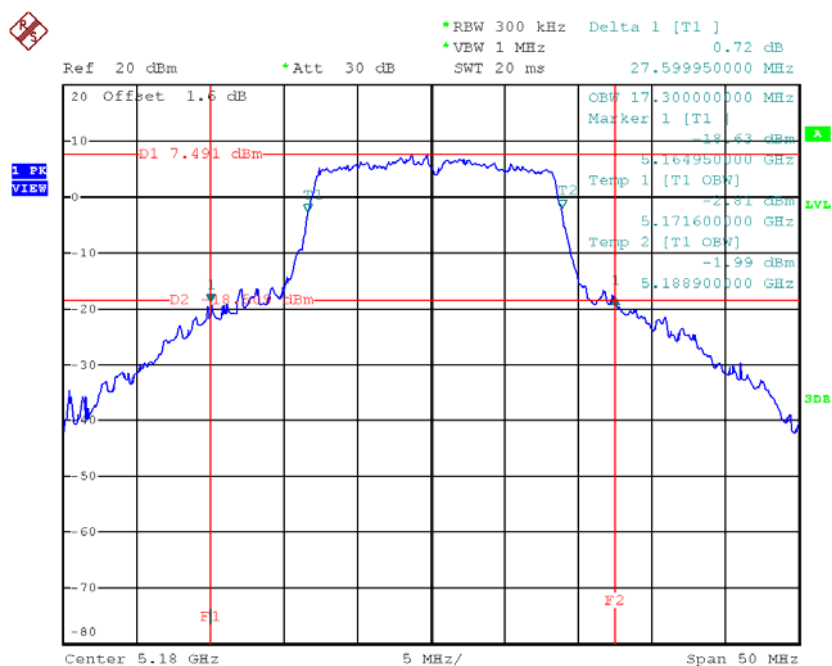
Power Spectral Density = Measured density + Duty factor

## **ATTACHMENT E - BANDWIDTH**

Test Mode: UNII-1/TX A Mode\_CH36/CH40/CH48

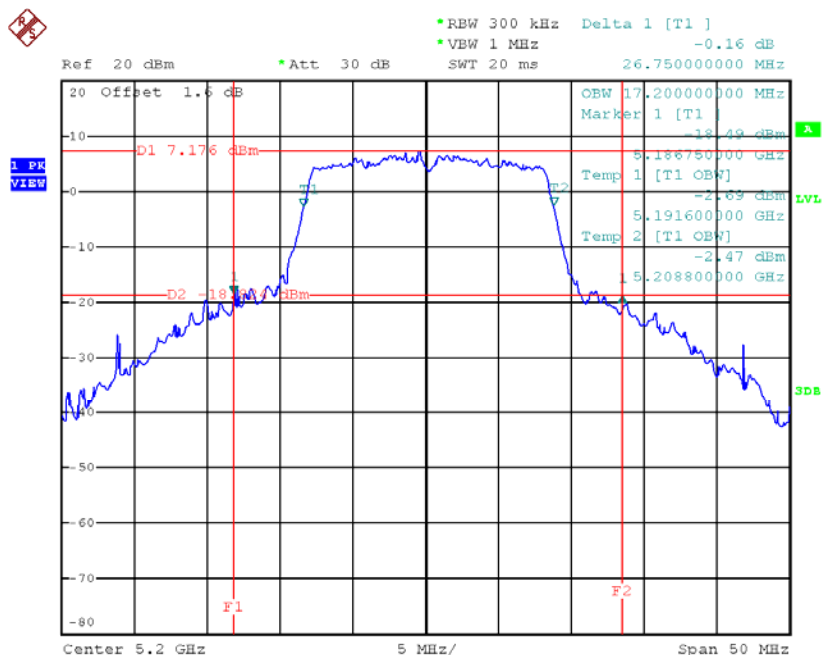
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	27.60	17.30
CH40	5200	26.75	17.20
CH48	5240	25.45	17.20

TX CH36



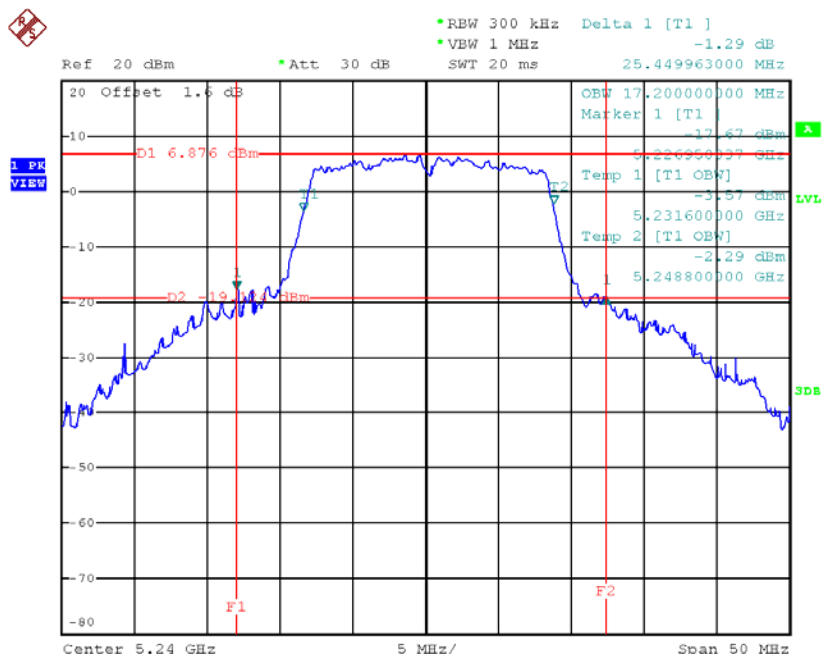
Date: 19.JUN.2016 14:47:02

# TX CH40



Date: 19.JUN.2016 14:50:47

# TX CH48

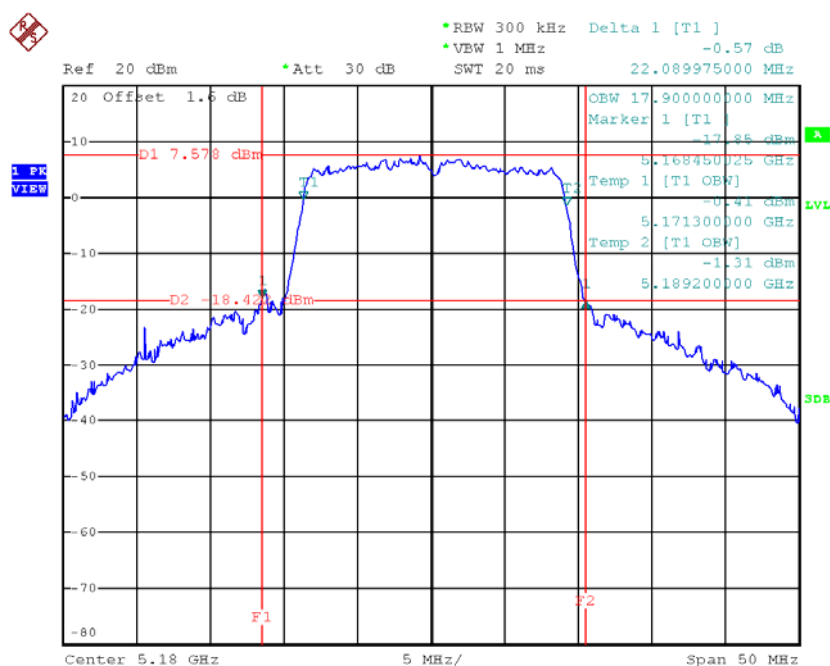


Date: 19.JUN.2016 14:52:01

**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48**

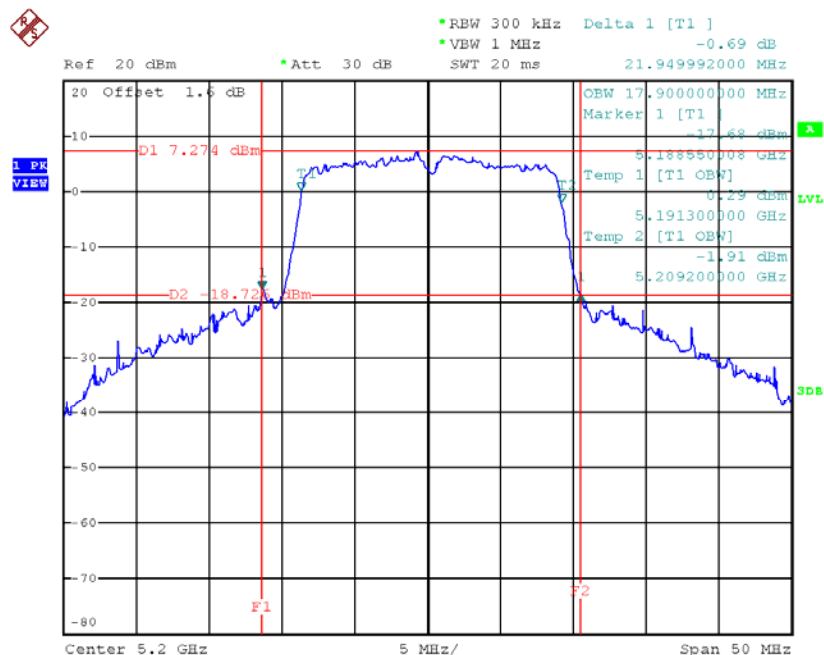
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	22.09	17.90
CH40	5200	21.95	17.90
CH48	5240	22.45	17.80

**TX CH36**



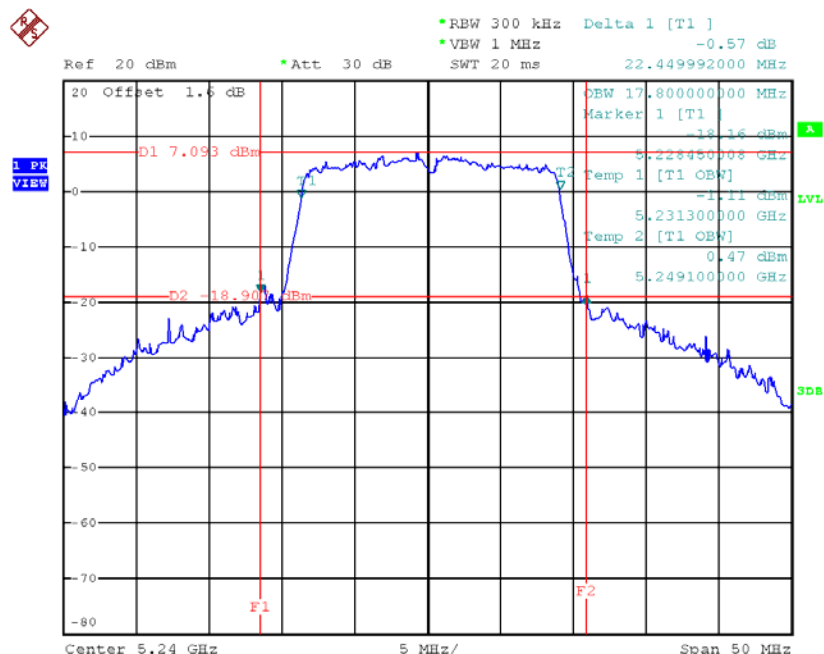
Date: 19.JUN.2016 15:17:47

# TX CH40



Date: 19.JUN.2016 15:20:04

# TX CH48



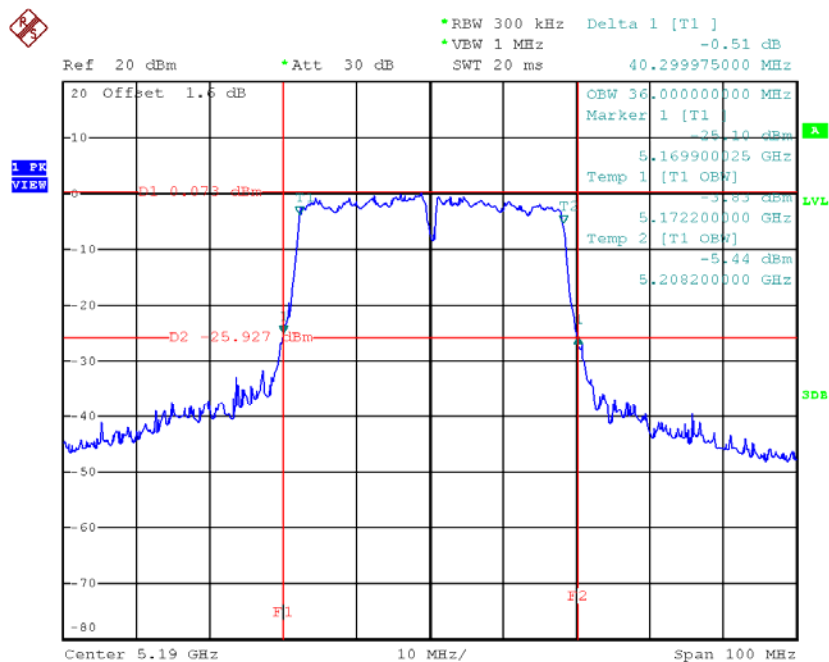
Date: 19.JUN.2016 15:21:25

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	40.30	36.00
CH46	5230	41.40	36.20

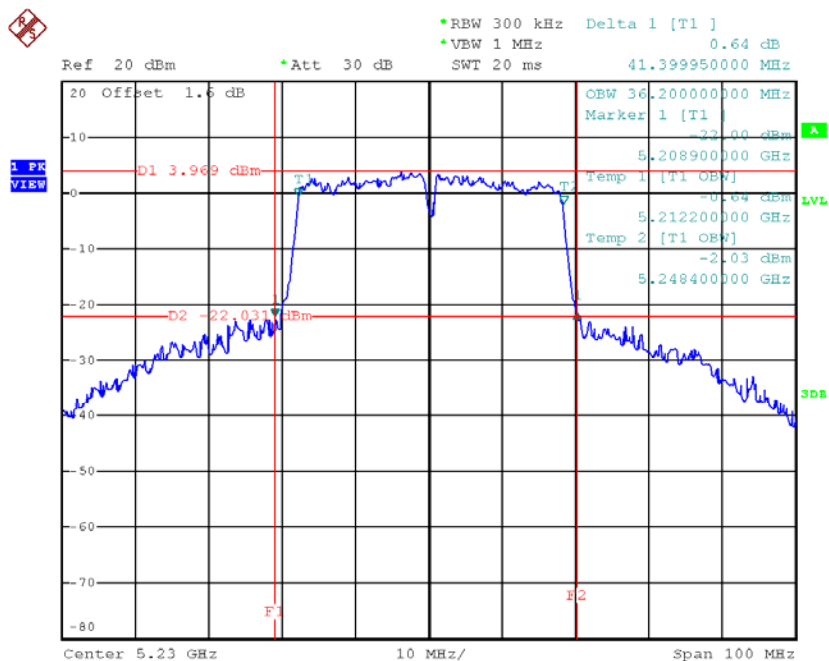


# TX CH38



Date: 19.JUN.2016 15:49:04

# TX CH46

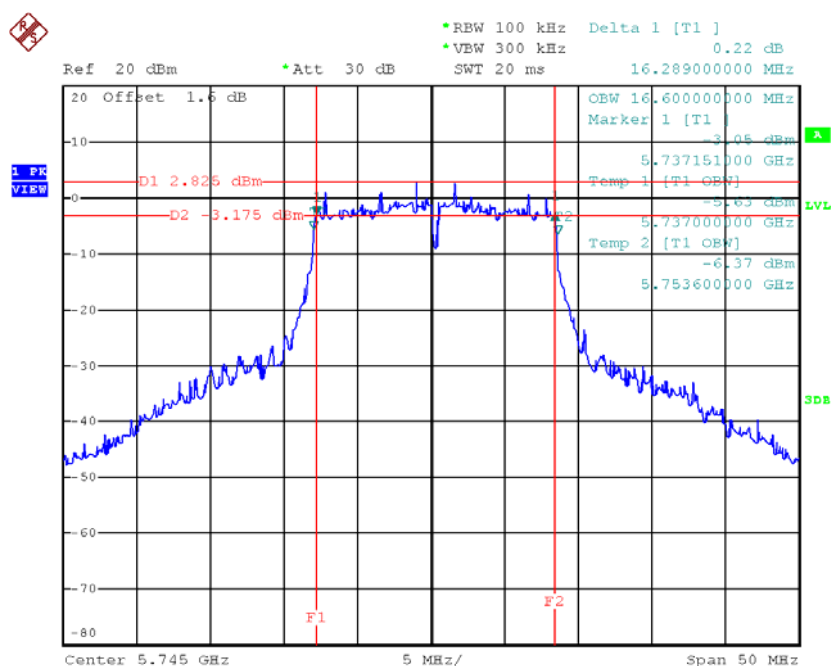


Date: 19.JUN.2016 15:51:30

**Test Mode: UNII-3/ TX A Mode\_CH149/CH157/CH165**

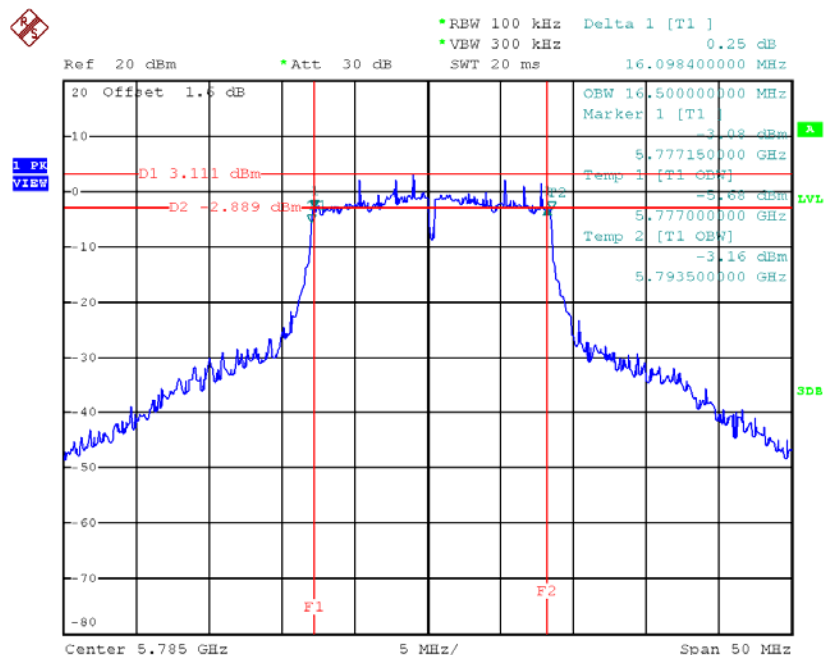
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH149	5745	16.29	16.60	>=500
CH157	5785	16.09	16.50	>=500
CH165	5825	16.35	16.60	>=500

**TX CH 149**



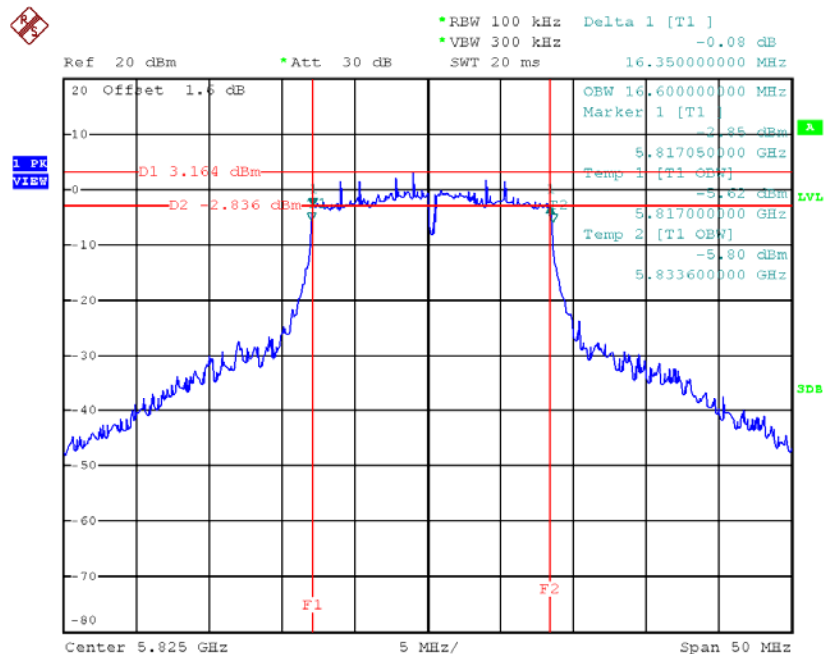
Date: 19.JUN.2016 14:53:33

# TX CH 157



Date: 19.JUN.2016 14:54:58

# TX CH 165

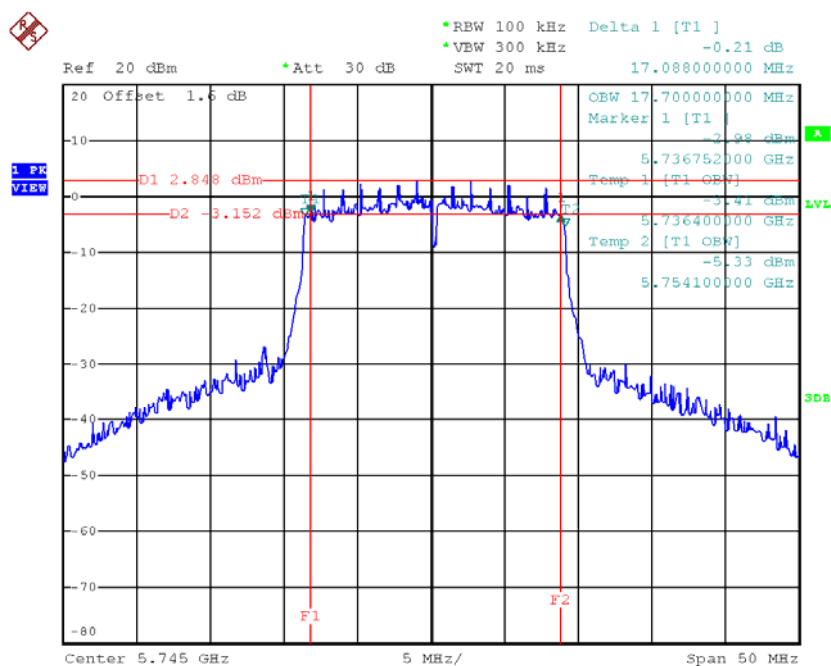


Date: 19.JUN.2016 14:56:31

**Test Mode: UNII-3/ TX N20 Mode\_CH149/CH157/CH165**

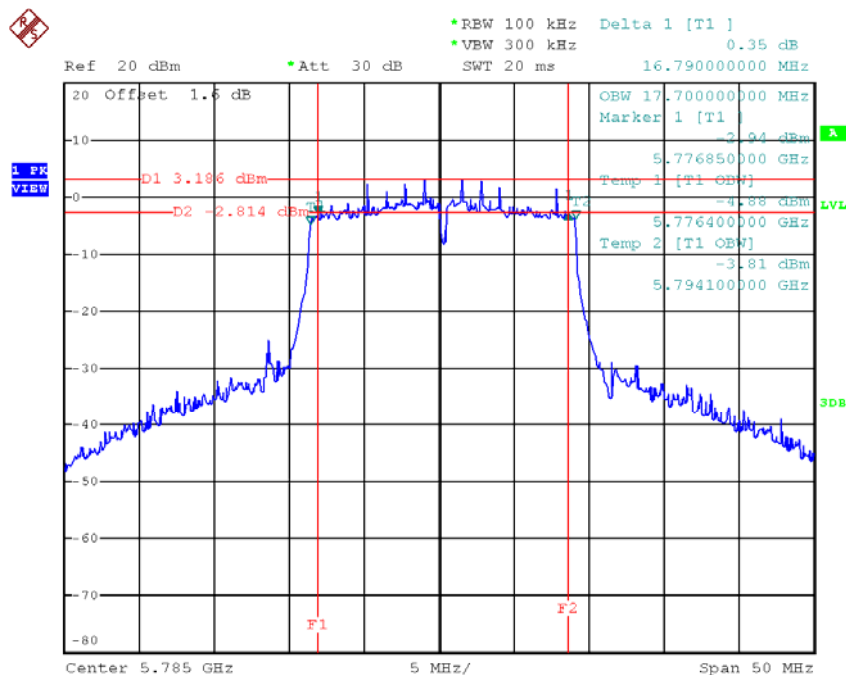
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH149	5745	17.09	17.70	>=500
CH157	5785	16.79	17.70	>=500
CH165	5825	16.69	17.70	>=500

**TX CH 149**



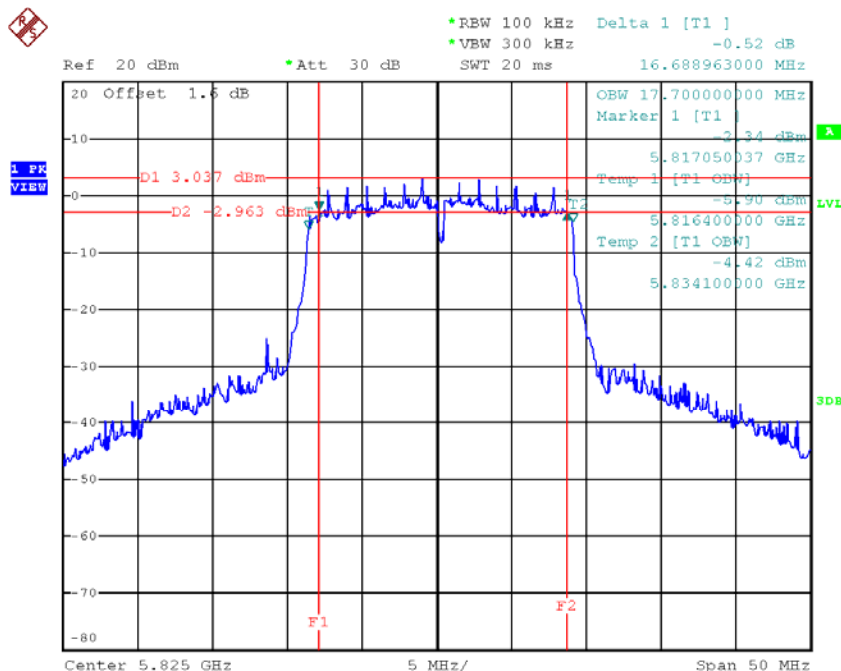
Date: 19.JUN.2016 15:26:05

# TX CH 157



Date: 19.JUN.2016 15:28:46

# TX CH 165

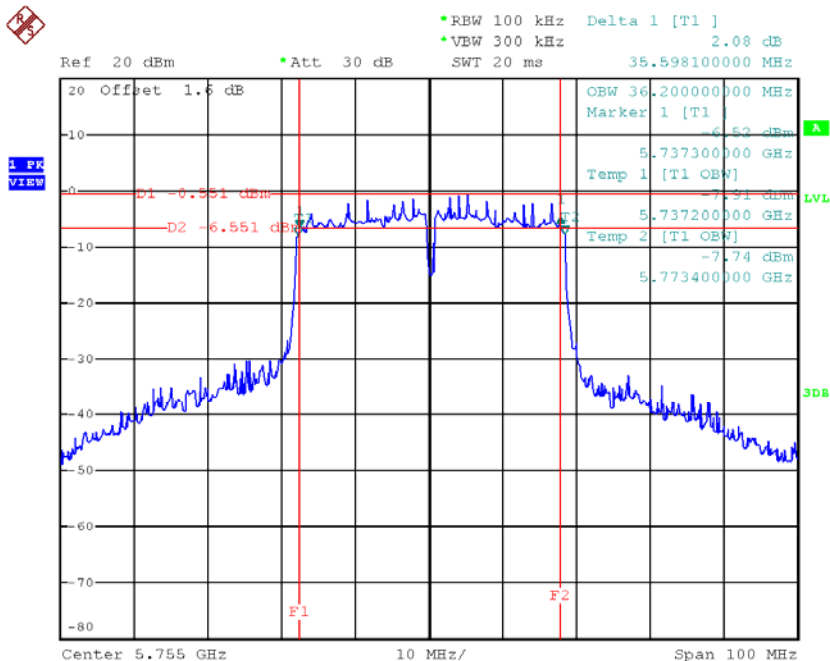


Date: 19.JUN.2016 15:29:53

**Test Mode: UNII-3/ TX N40 Mode\_CH151/CH159**

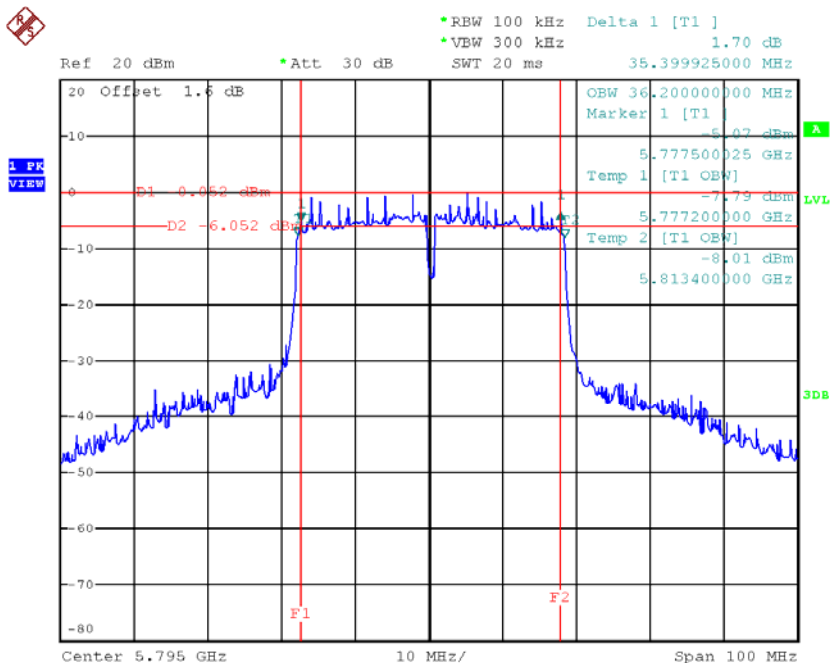
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH151	5755	35.60	36.20	>=500
CH159	5795	35.40	36.20	>=500

# TX CH 151



Date: 19.JUN.2016 15:53:41

# TX CH 159

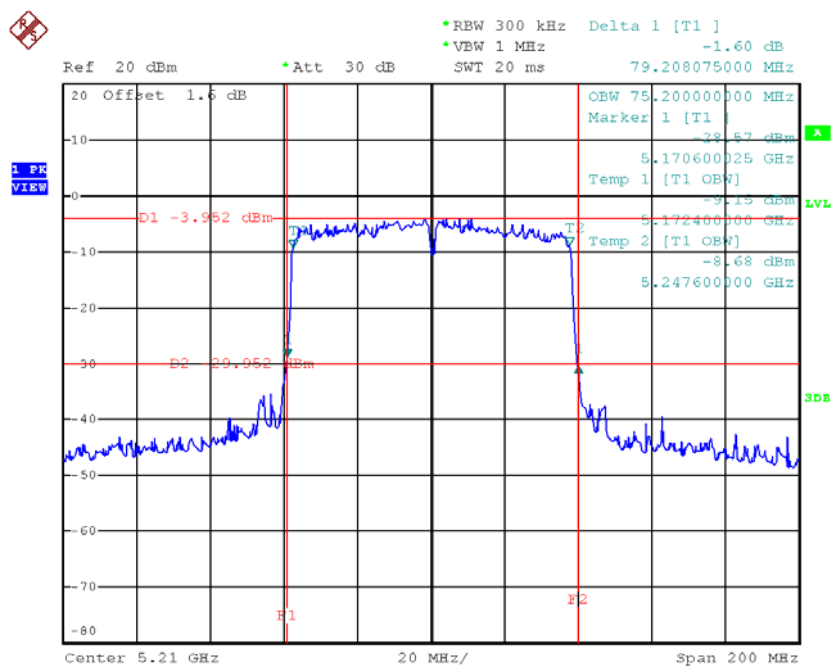


Date: 19.JUN.2016 15:55:41

**Test Mode: UNII-1/TX AC(VHT80) Mode\_CH42**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH42	5210	79.21	75.20

**TX CH42**



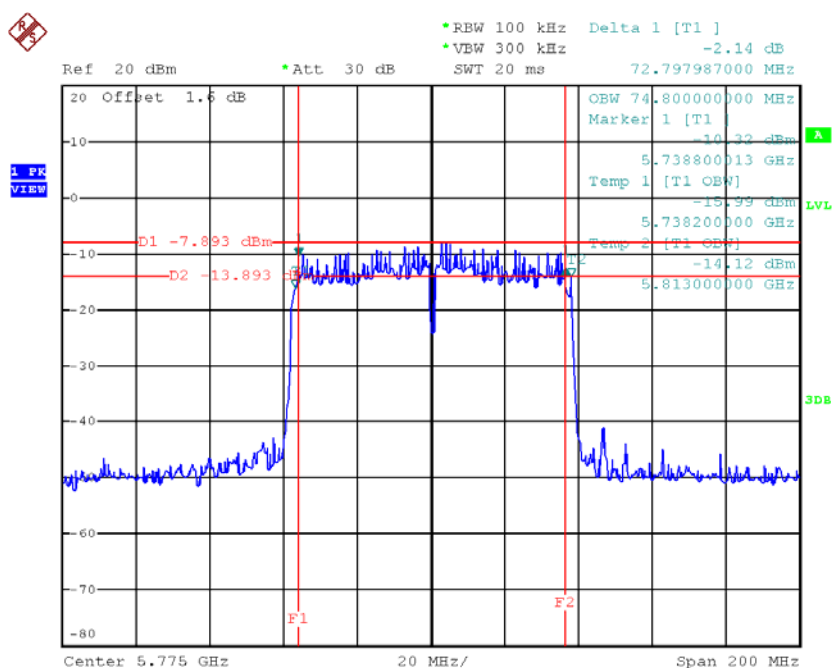
Date: 19.JUN.2016 16:11:59



Test Mode: UNII-3/ TX AC(VHT80) Mode\_CH155

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH155	5775	72.80	74.80	>=500

TX CH 155



Date: 19.JUN.2016 16:14:18

## **ATTACHMENT F - MAXIMUM OUTPUT POWER**

**Test Mode: UNII-1/TX A Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	14.99	0.22	15.21	23.44	0.22
CH40	5200	14.89	0.22	15.11	23.44	0.22
CH48	5240	14.77	0.22	14.99	23.44	0.22

**Test Mode: UNII-1/TX A Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	15.39	0.22	15.61	23.44	0.22
CH40	5200	15.28	0.22	15.50	23.44	0.22
CH48	5240	15.24	0.22	15.46	23.44	0.22

**Test Mode: UNII-1/TX A Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	18.42	23.44	0.22
CH40	5200	18.32	23.44	0.22
CH48	5240	18.24	23.44	0.22

**Test Mode: UNII-1/TX N20 Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	14.67	0.91	15.58	23.44	0.22
CH40	5200	14.77	0.91	15.68	23.44	0.22
CH48	5240	14.79	0.91	15.70	23.44	0.22

**Test Mode: UNII-1/TX N20 Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	15.34	0.91	16.25	23.44	0.22
CH40	5200	15.36	0.91	16.27	23.44	0.22
CH48	5240	15.27	0.91	16.18	23.44	0.22

**Test Mode: UNII-1/TX N20 Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	18.94	23.44	0.22
CH40	5200	18.99	23.44	0.22
CH48	5240	18.95	23.44	0.22

**Test Mode: UNII-1/TX N40 Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	11.99	0.51	12.50	23.44	0.22
CH46	5230	14.64	0.51	15.15	23.44	0.22

**Test Mode: UNII-1/TX N40 Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	13.03	0.51	13.54	23.44	0.22
CH46	5230	15.23	0.51	15.74	23.44	0.22

**Test Mode: UNII-1/TX N40 Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	16.07	23.44	0.22
CH46	5230	18.47	23.44	0.22

**Test Mode: UNII-3/ TX A Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	13.64	0.22	13.86	29.44	0.88
CH157	5785	13.59	0.22	13.81	29.44	0.88
CH165	5825	13.28	0.22	13.50	29.44	0.88

**Test Mode: UNII-3/ TX A Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	14.24	0.22	14.46	29.44	0.88
CH157	5785	14.35	0.22	14.57	29.44	0.88
CH165	5825	14.33	0.22	14.55	29.44	0.88

**Test Mode: UNII-3/ TX A Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	17.18	29.44	0.88
CH157	5785	17.21	29.44	0.88
CH165	5825	17.06	29.44	0.88

**Test Mode: UNII-3/TX N20 Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	13.40	0.91	14.31	29.44	0.88
CH157	5785	13.25	0.91	14.16	29.44	0.88
CH165	5825	13.20	0.91	14.11	29.44	0.88

**Test Mode: UNII-3/TX N20 Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	14.35	0.91	15.26	29.44	0.88
CH157	5785	14.46	0.91	15.37	29.44	0.88
CH165	5825	14.41	0.91	15.32	29.44	0.88

**Test Mode: UNII-3/TX N20 Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	17.82	29.44	0.88
CH157	5785	17.81	29.44	0.88
CH165	5825	17.76	29.44	0.88

**Test Mode: UNII-3/ TX N40 Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	13.45	0.51	13.96	29.44	0.88
CH159	5795	13.51	0.51	14.02	29.44	0.88

**Test Mode: UNII-3/ TX N40 Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	14.58	0.51	15.09	29.44	0.88
CH159	5795	14.44	0.51	14.95	29.44	0.88

**Test Mode: UNII-3/ TX N40 Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	17.58	29.44	0.88
CH159	5795	17.53	29.44	0.88



**Test Mode: UNII-1/TX AC(VHT80) Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH42	5210	12.63	1.06	13.69	23.44	0.22

**Test Mode: UNII-1/TX AC(VHT80) Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH42	5210	13.58	1.06	14.64	23.44	0.22

**Test Mode: UNII-1/TX AC(VHT80) Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH42	5210	17.20	23.44	0.22

**Test Mode: UNII-3/TX AC(VHT80) Mode\_ANT 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH155	5775	13.58	1.06	14.64	29.44	0.88

**Test Mode: UNII-3/TX AC(VHT80) Mode\_ANT 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH155	5775	14.71	1.06	15.77	29.44	0.88

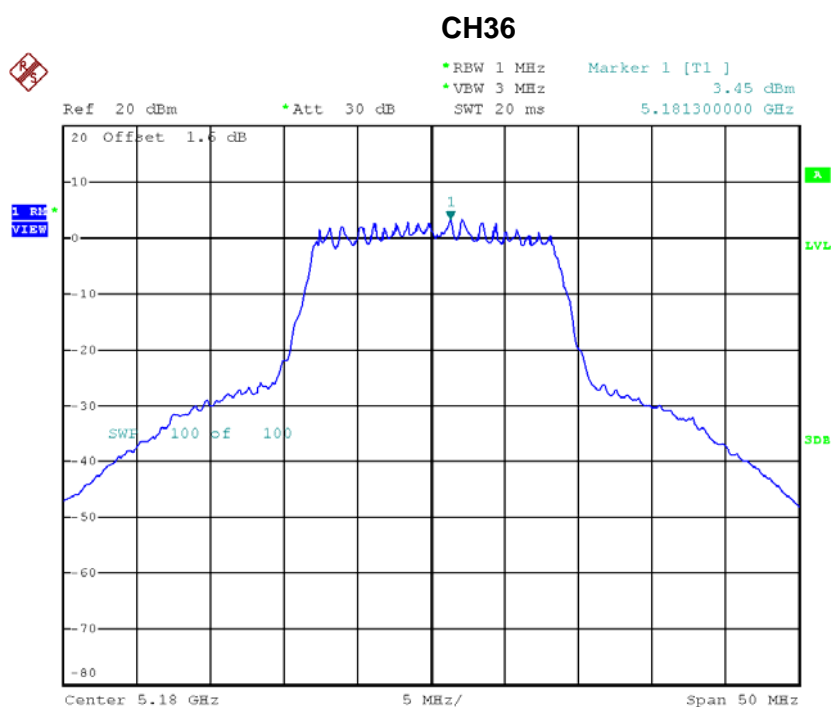
**Test Mode: UNII-3/TX AC(VHT80) Mode\_Total**

Channel	Frequency (MHz)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH155	5775	18.25	29.44	0.88

## **ATTACHMENT G - POWER SPECTRAL DENSITY**

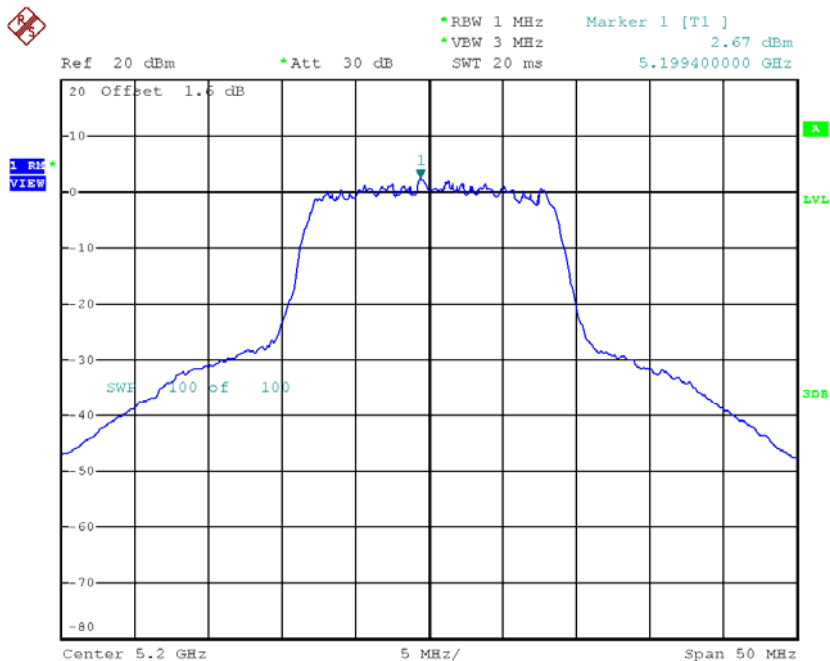
**Test Mode: UNII-1/ TX A Mode\_CH36/CH40/CH48\_ANT 1**

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	3.45	0.22	3.67	10.44
CH40	5200	2.67	0.22	2.89	10.44
CH48	5240	2.71	0.22	2.93	10.44



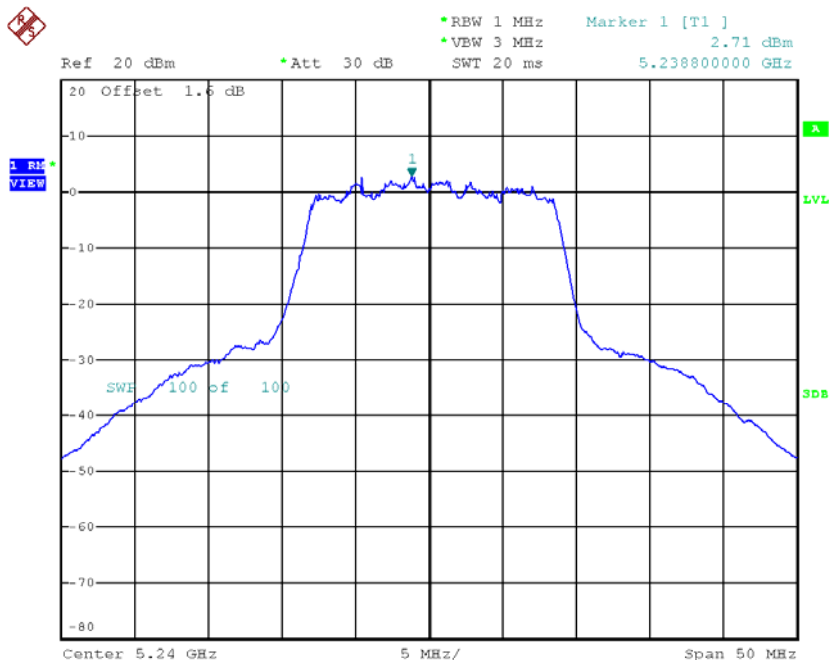
Date: 19.JUN.2016 14:47:11

# CH40



Date: 19.JUN.2016 14:50:56

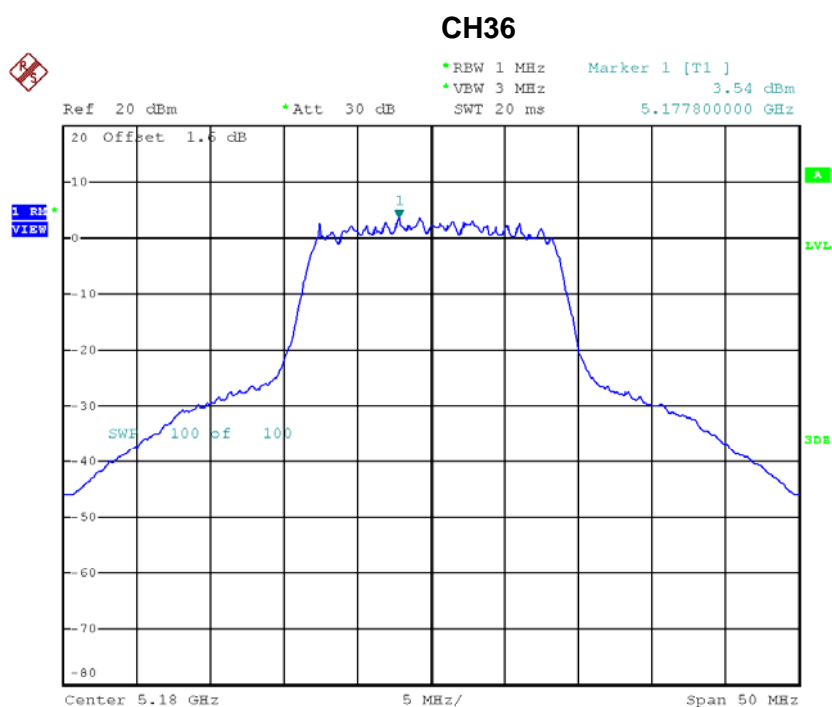
# CH48



Date: 19.JUN.2016 14:52:09

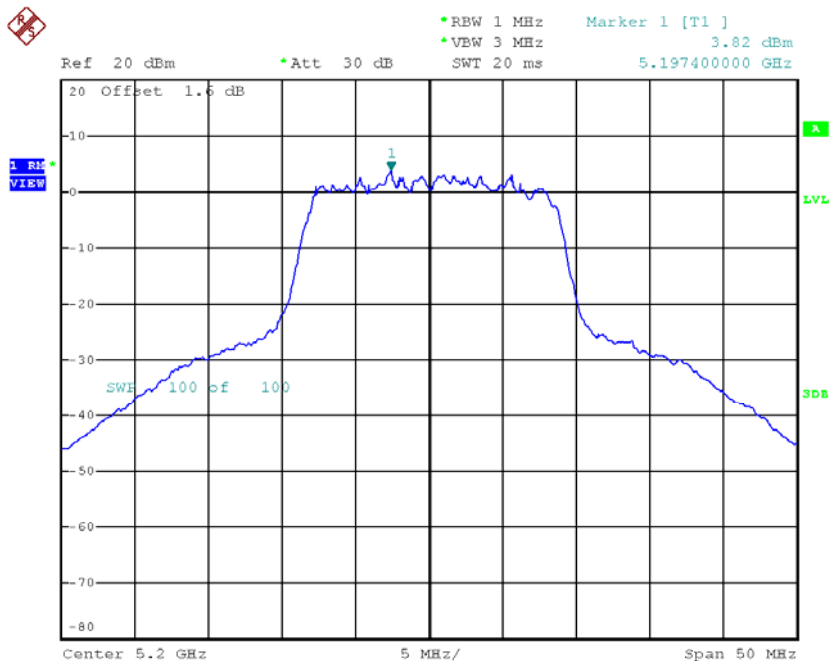
**Test Mode: UNII-1/ TX A Mode\_CH36/CH40/CH48\_ANT 2**

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	3.54	0.22	3.76	10.44
CH40	5200	3.82	0.22	4.04	10.44
CH48	5240	3.20	0.22	3.42	10.44



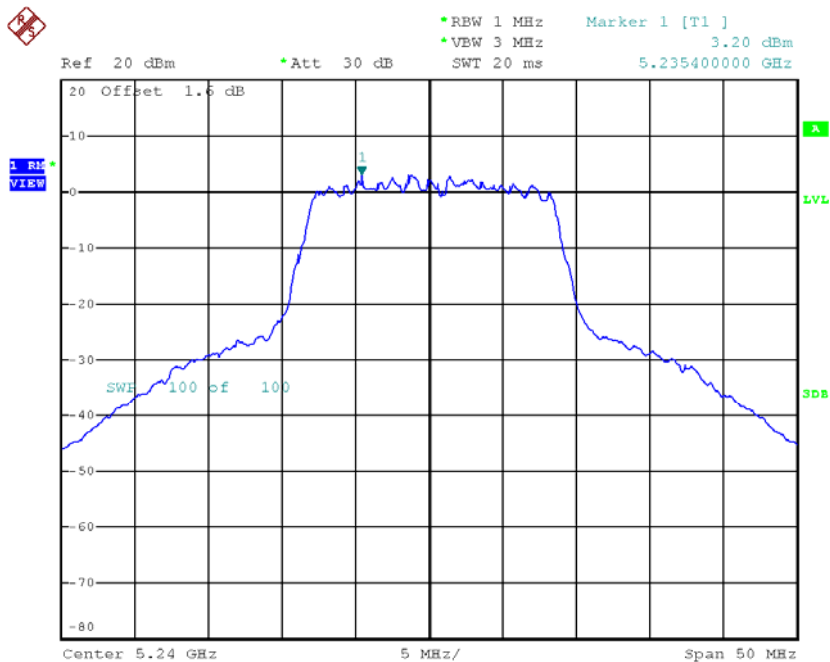
Date: 19.JUN.2016 15:05:52

# CH40



Date: 19.JUN.2016 15:07:14

# CH48



Date: 19.JUN.2016 15:08:25

**Test Mode: UNII-1/ TX A Mode\_CH36/CH40/CH48\_Total**

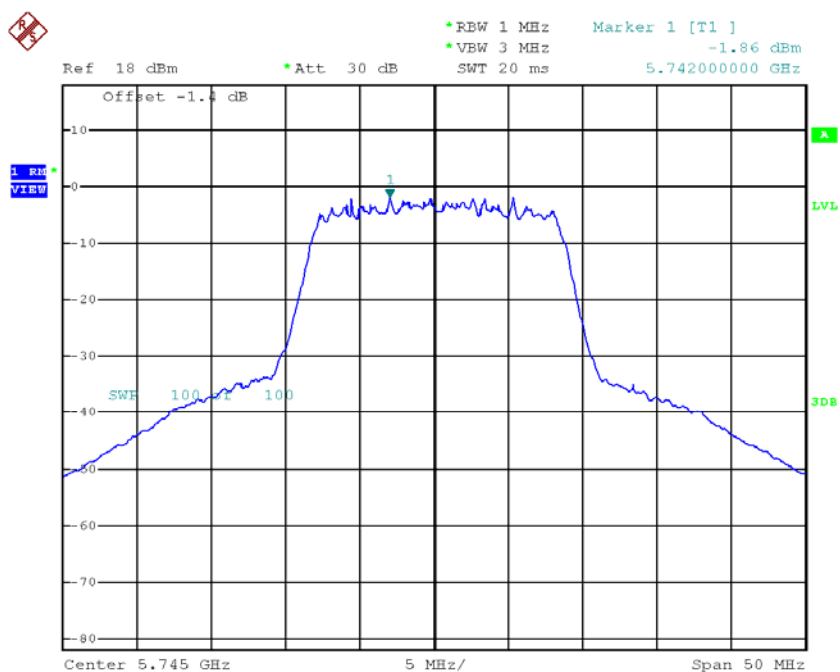
Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	6.61	10.44
CH40	5200	6.39	10.44
CH48	5240	6.08	10.44



**Test Mode: UNII-3/TX A Mode\_CH149/CH157/CH165\_ANT 1**

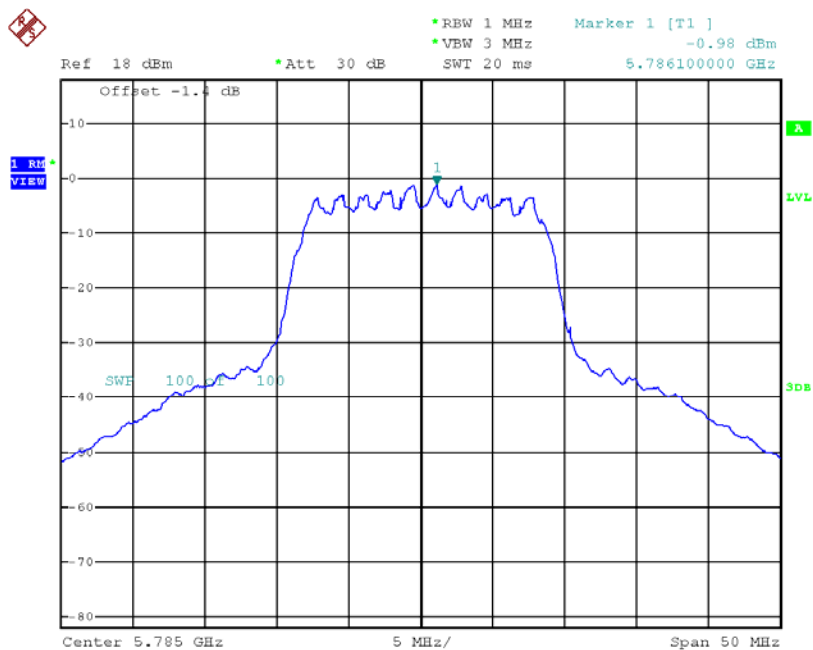
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	-1.86	0.22	-1.64	29.44
CH157	5785	-0.98	0.22	-0.76	29.44
CH165	5825	-1.79	0.22	-1.57	29.44

**TX CH149**



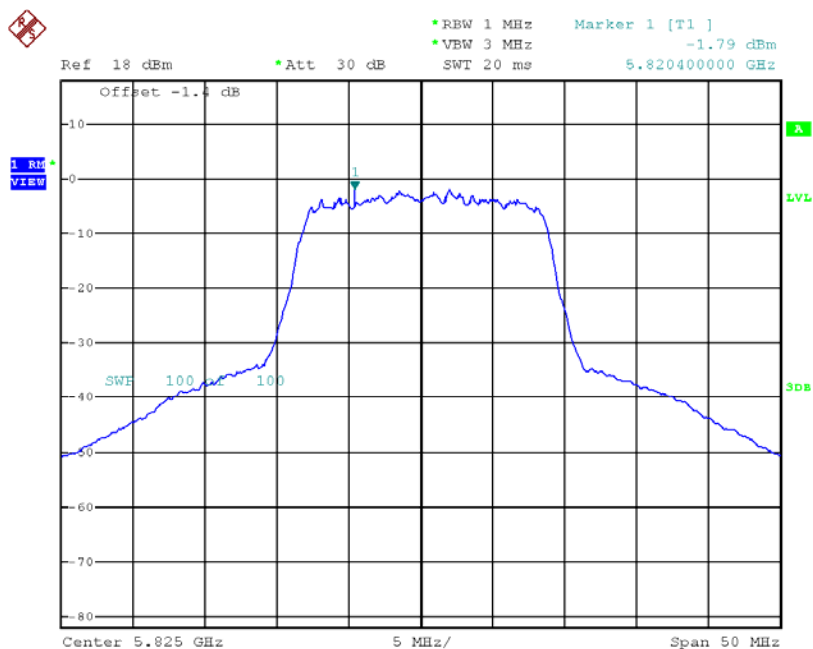
Date: 19.JUN.2016 14:52:56

# TX CH157



Date: 19.JUN.2016 14:55:07

# TX CH165

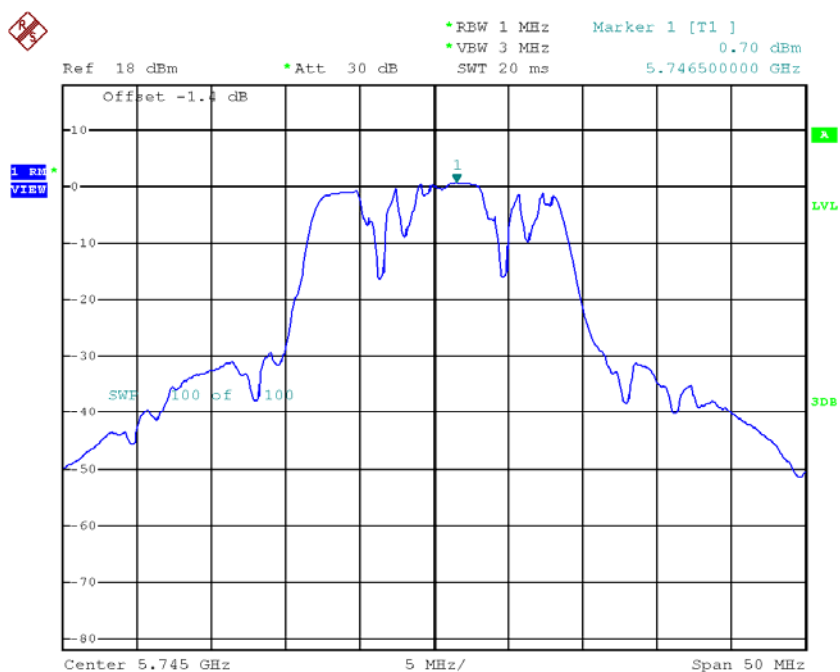


Date: 19.JUN.2016 14:56:40

**Test Mode: UNII-3/TX A Mode\_CH149/CH157/CH165\_ANT 2**

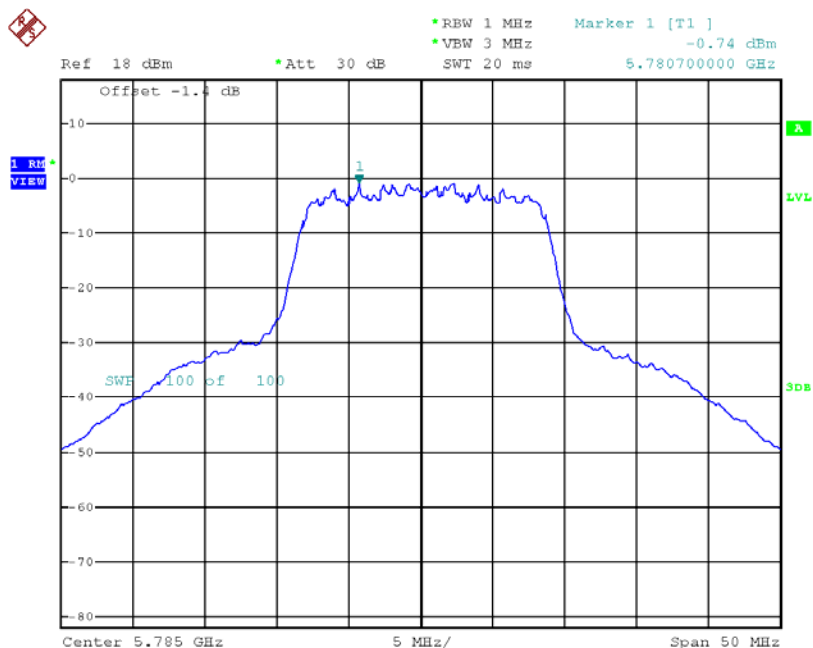
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	0.70	0.22	0.92	29.44
CH157	5785	-0.74	0.22	-0.52	29.44
CH165	5825	-0.55	0.22	-0.33	29.44

**TX CH149**



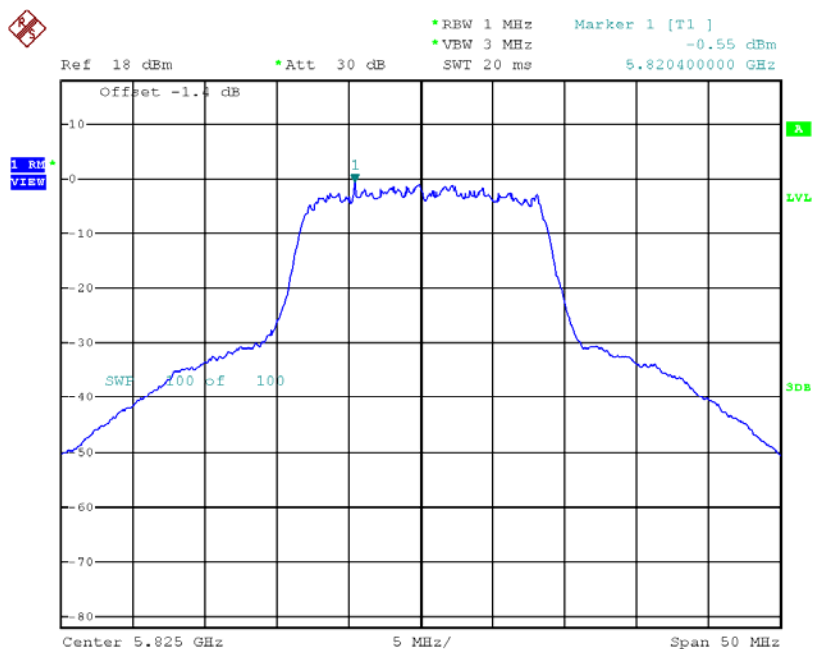
Date: 19.JUN.2016 15:09:06

# TX CH157



Date: 19.JUN.2016 15:11:06

# TX CH165



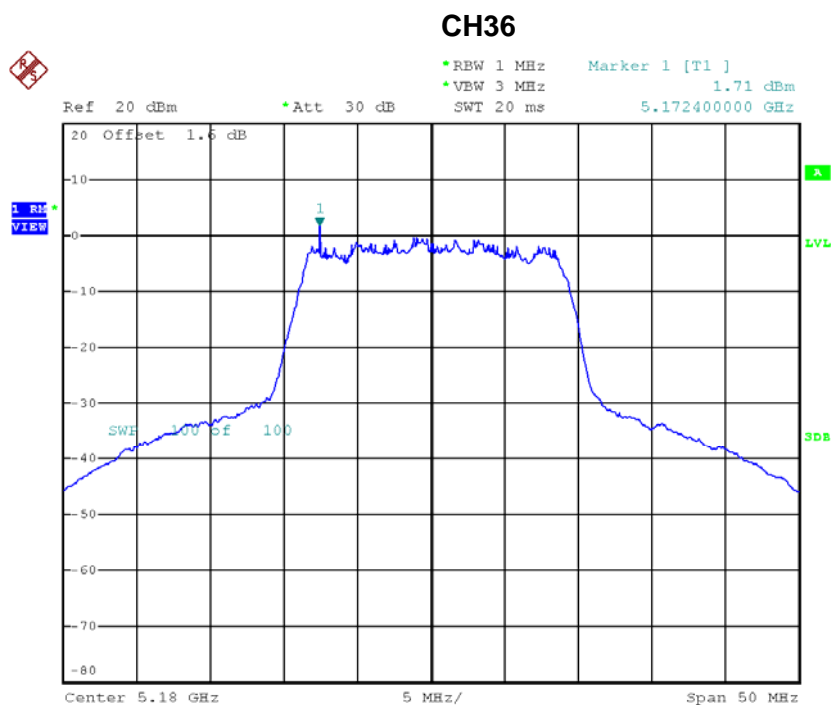
Date: 19.JUN.2016 15:12:05

**Test Mode: UNII-3/TX A Mode\_CH149/CH157/CH165\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	2.83	29.44
CH157	5785	2.37	29.44
CH165	5825	2.10	29.44

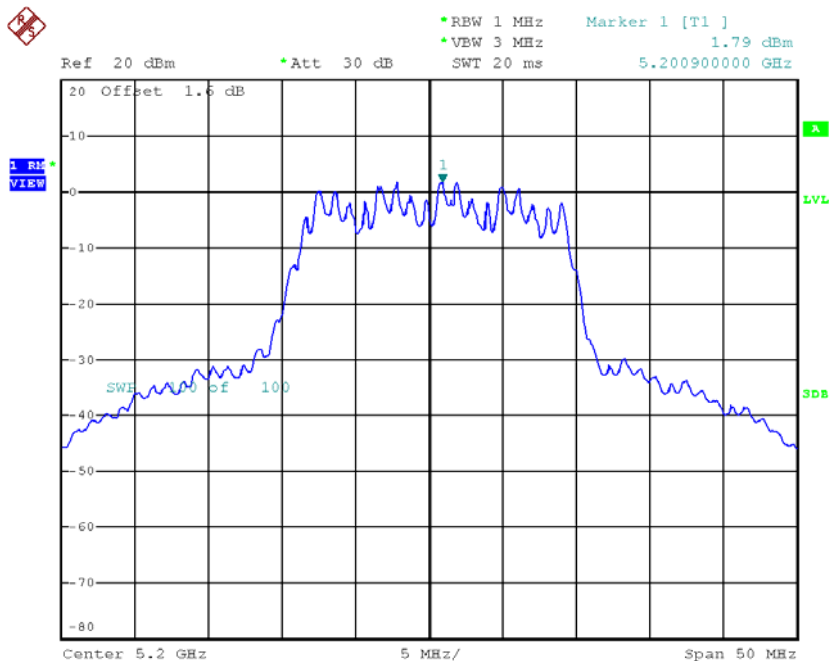
**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48\_ANT 1**

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	1.71	0.91	2.62	10.44
CH40	5200	1.79	0.91	2.70	10.44
CH48	5240	1.83	0.91	2.74	10.44



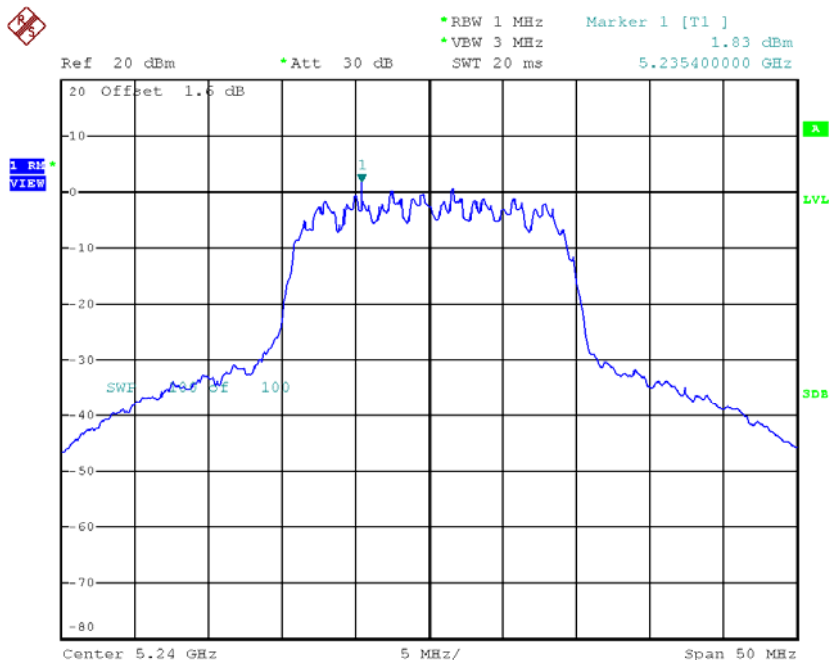
Date: 19.JUN.2016 15:17:56

# CH40



Date: 19.JUN.2016 15:20:13

# CH48

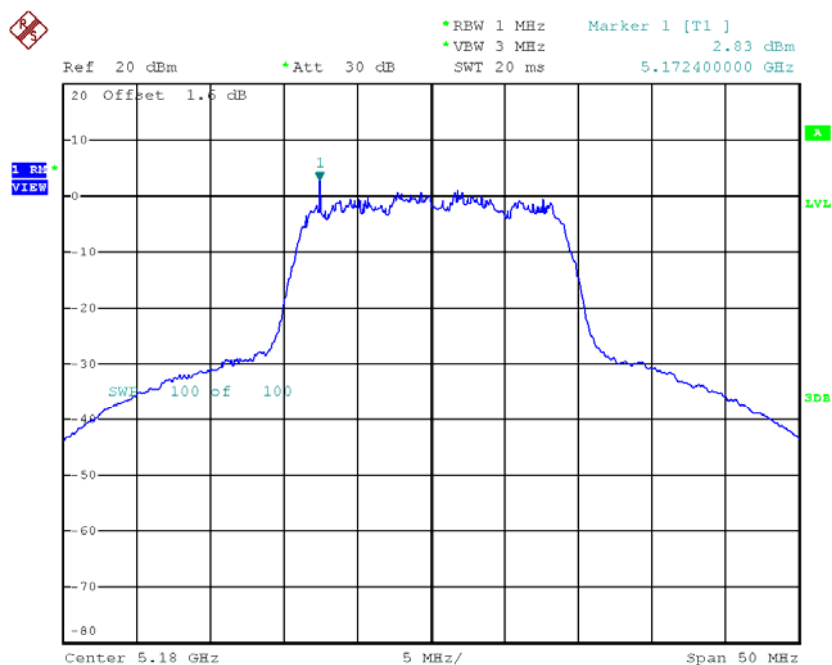


Date: 19.JUN.2016 15:21:34

**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48\_ANT 2**

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	2.83	0.91	3.74	10.44
CH40	5200	0.85	0.91	1.76	10.44
CH48	5240	2.91	0.91	3.82	10.44

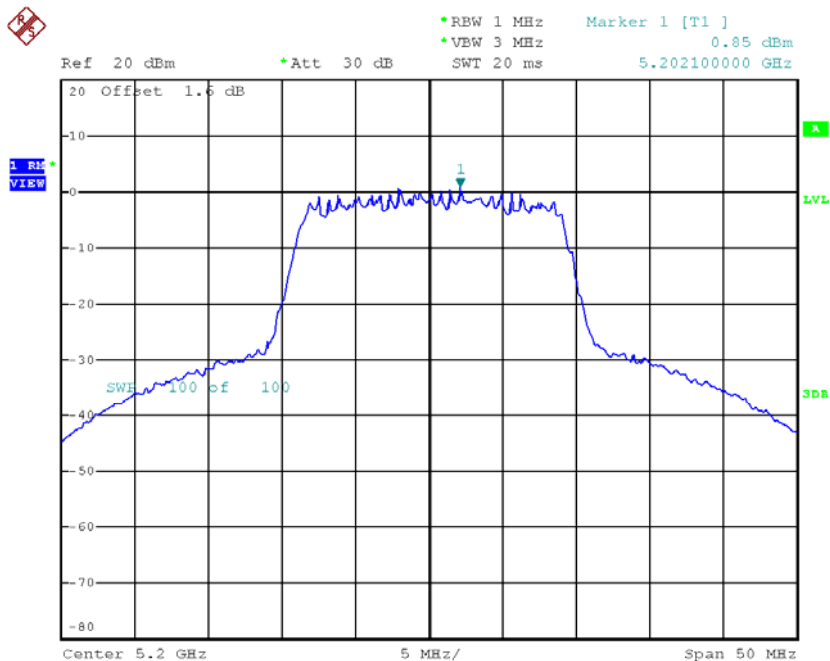
**CH36**



Date: 19.JUN.2016 15:33:24

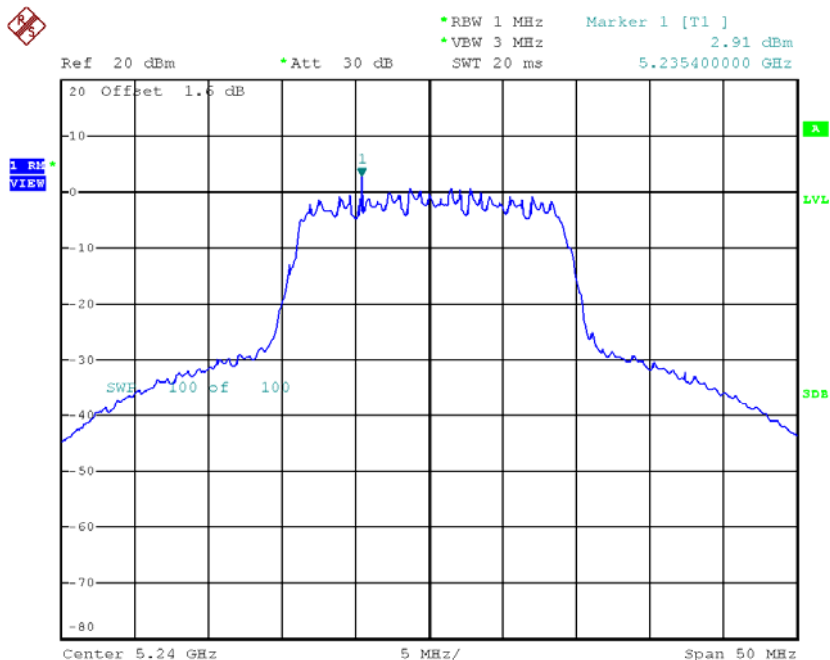


# CH40



Date: 19.JUN.2016 15:35:50

# CH48



Date: 19.JUN.2016 15:37:11

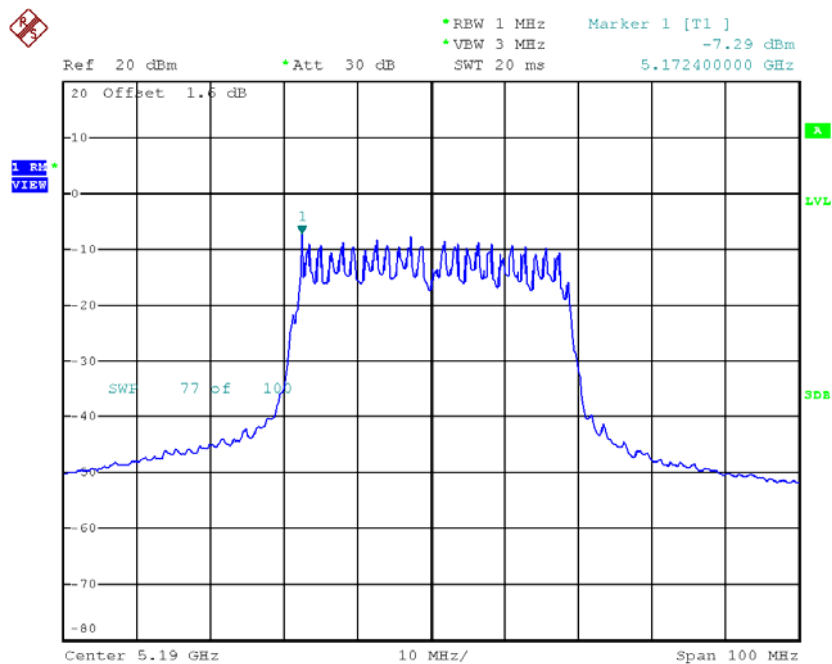
**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/MHz)
CH36	5180	6.22	10.44
CH40	5200	5.26	10.44
CH48	5240	6.32	10.44

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_ANT 1**

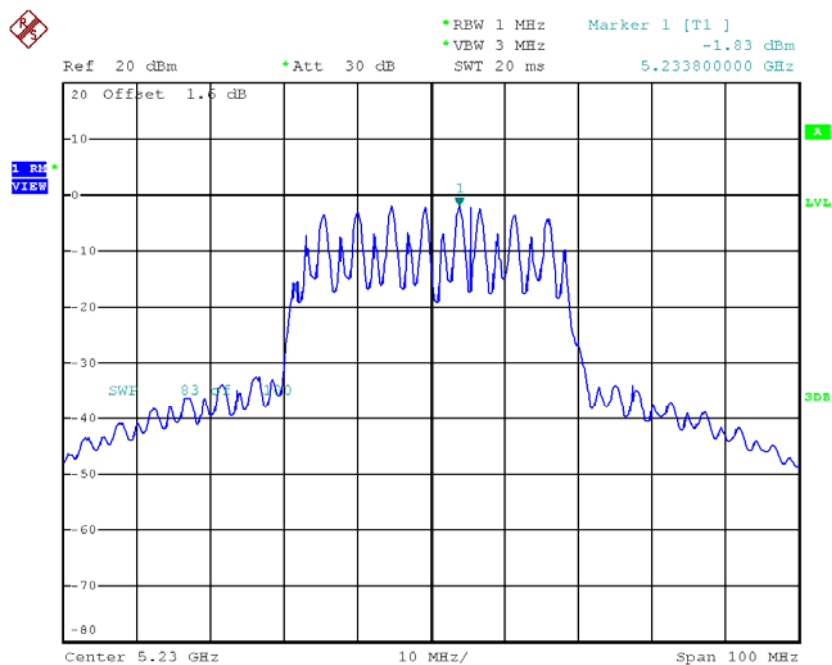
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH38	5190	-7.29	0.51	-6.78	10.44
CH46	5230	-1.83	0.51	-1.32	10.44

### CH38



Date: 19.JUN.2016 15:49:13

### CH46

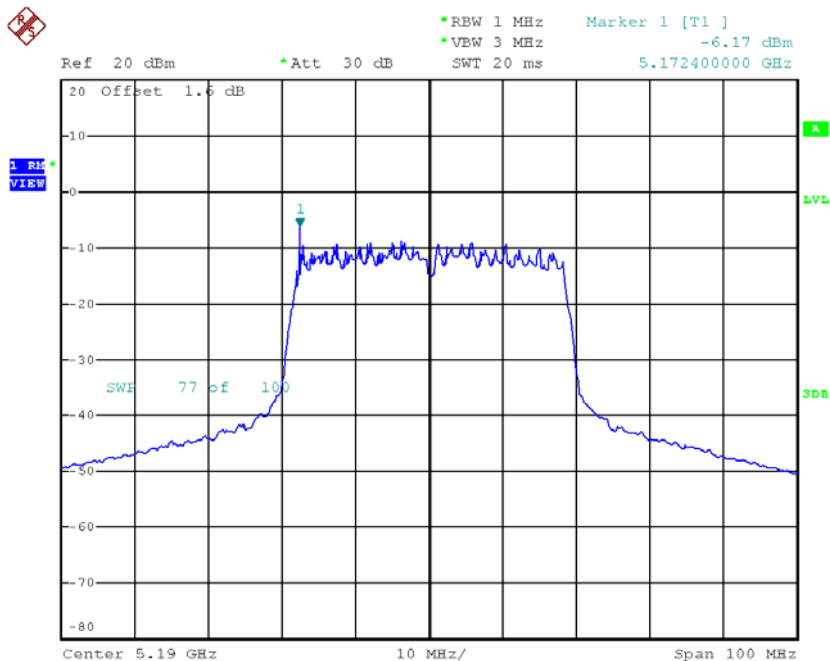


Date: 19.JUN.2016 15:51:39

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_ANT 2**

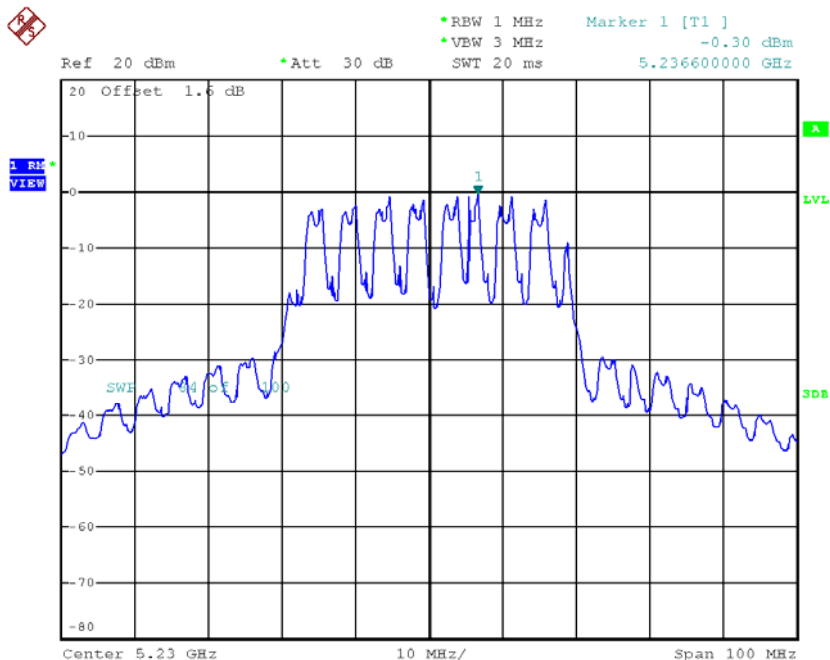
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH38	5190	-6.17	0.51	-5.66	10.44
CH46	5230	-0.30	0.51	0.21	10.44

# CH38



Date: 19.JUN.2016 15:59:31

# CH46



Date: 19.JUN.2016 16:02:29

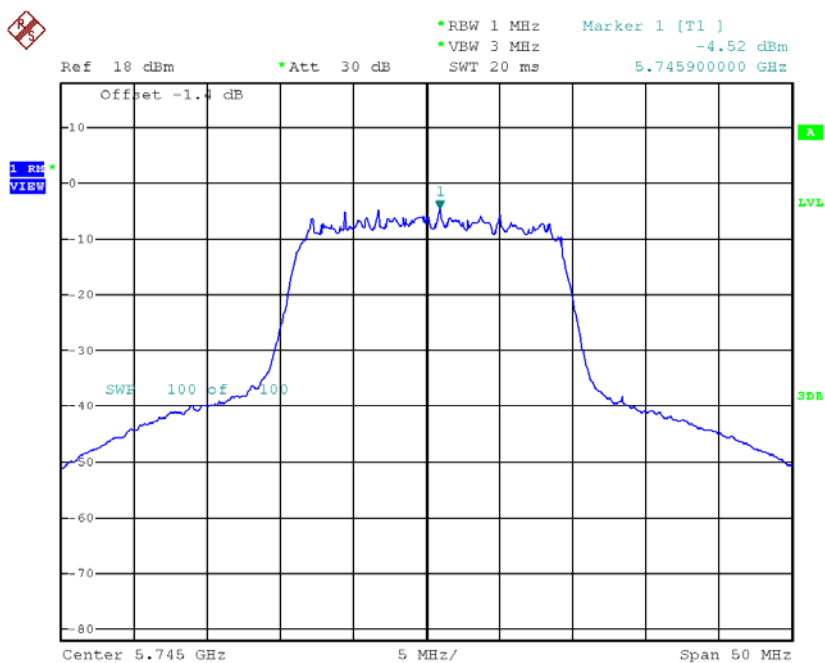
**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/MHz)
CH38	5190	-3.17	10.44
CH46	5230	2.53	10.44

**Test Mode: UNII-3/ TX N20 Mode\_CH149/CH157/CH165\_ANT 1**

Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	-4.52	0.91	-3.61	29.44
CH157	5785	-3.71	0.91	-2.80	29.44
CH165	5825	-1.93	0.91	-1.02	29.44

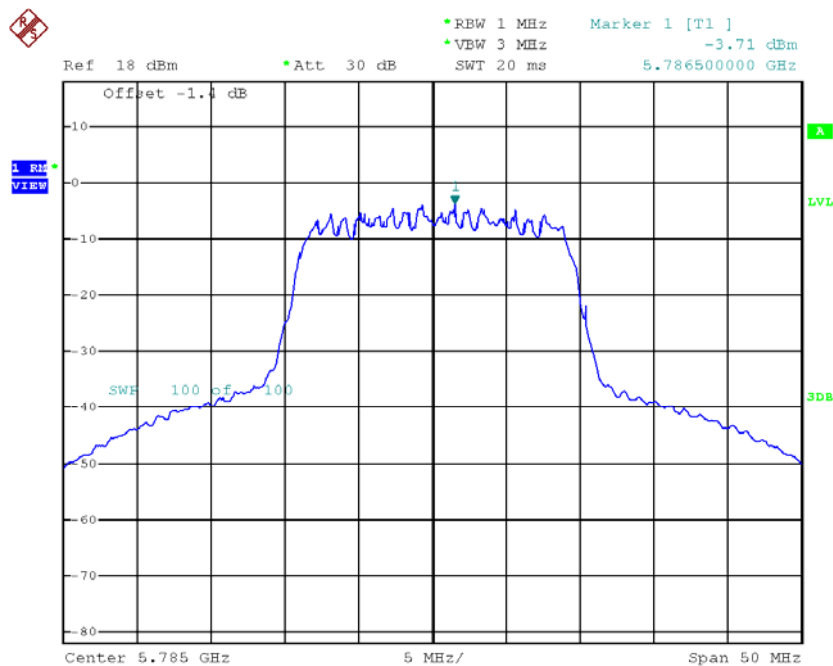
**TX CH149**



Date: 19.JUN.2016 15:26:14

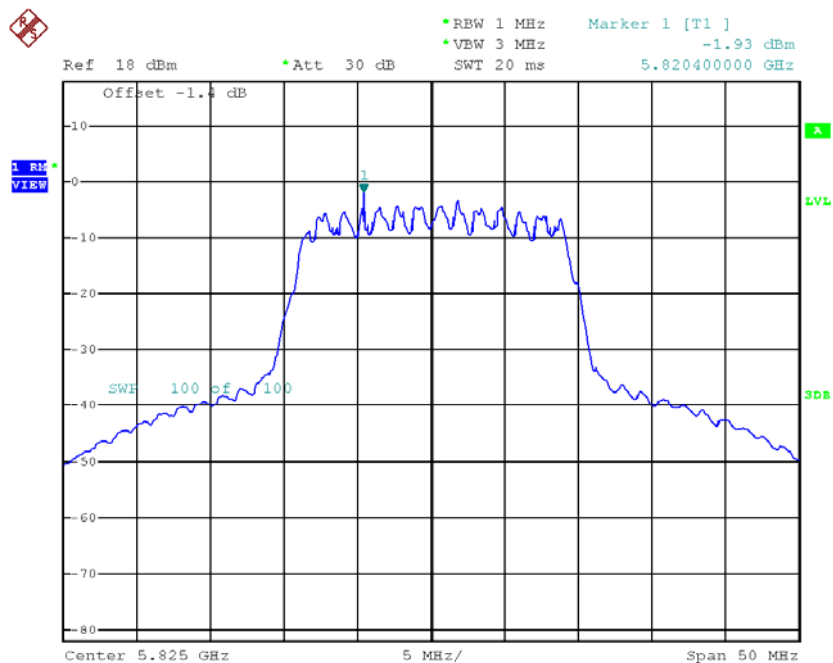


# TX CH157



Date: 19.JUN.2016 15:28:55

# TX CH165

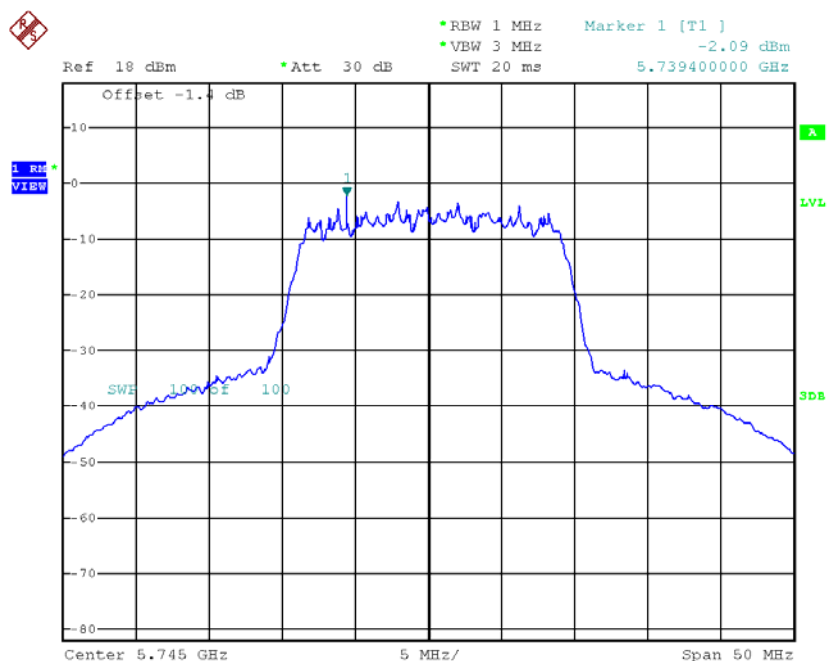


Date: 19.JUN.2016 15:30:02

**Test Mode: UNII-3/ TX N20 Mode\_CH149/CH157/CH165\_ANT 2**

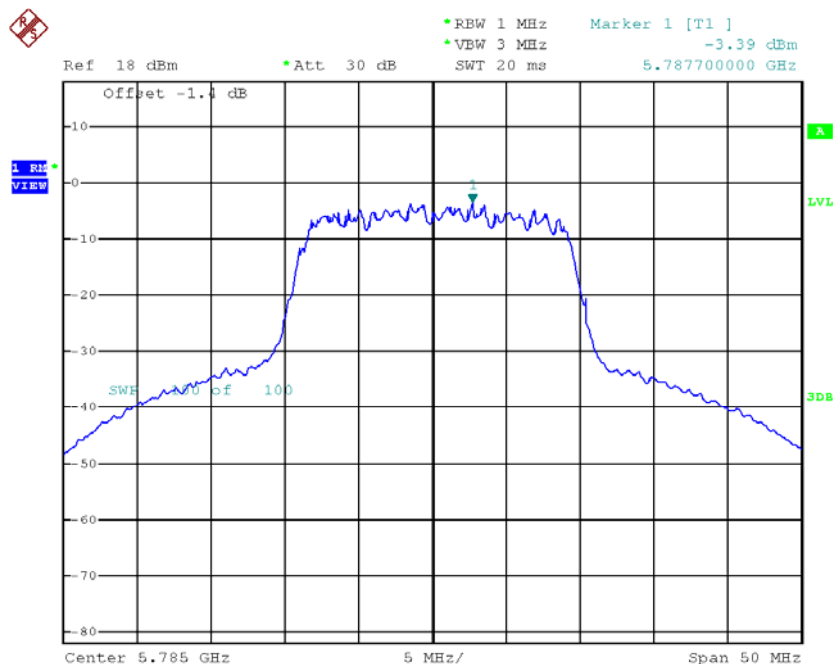
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	-2.09	0.91	-1.18	29.44
CH157	5785	-3.39	0.91	-2.48	29.44
CH165	5825	-1.18	0.91	-0.27	29.44

**TX CH149**



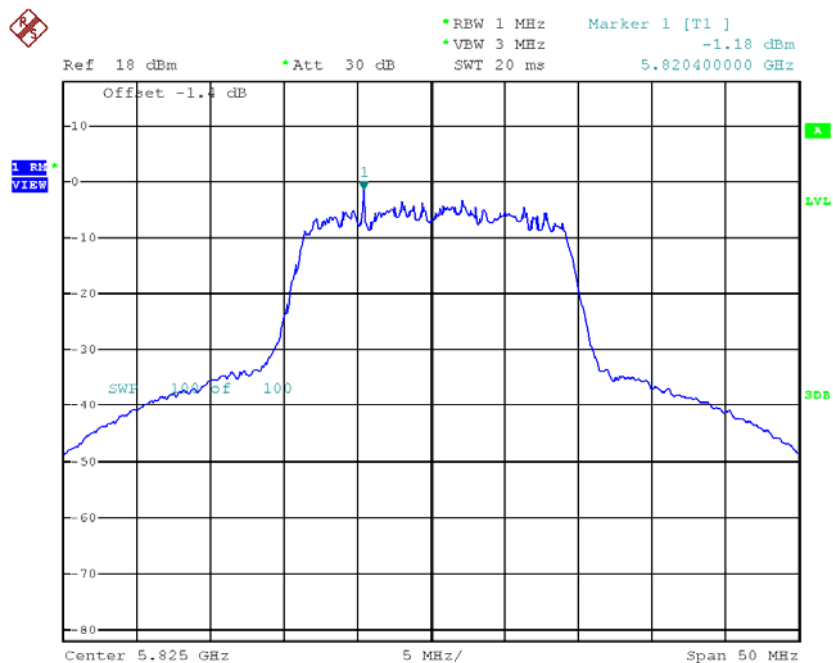
Date: 19.JUN.2016 15:39:27

# TX CH157



Date: 19.JUN.2016 15:41:12

# TX CH165



Date: 19.JUN.2016 15:42:24

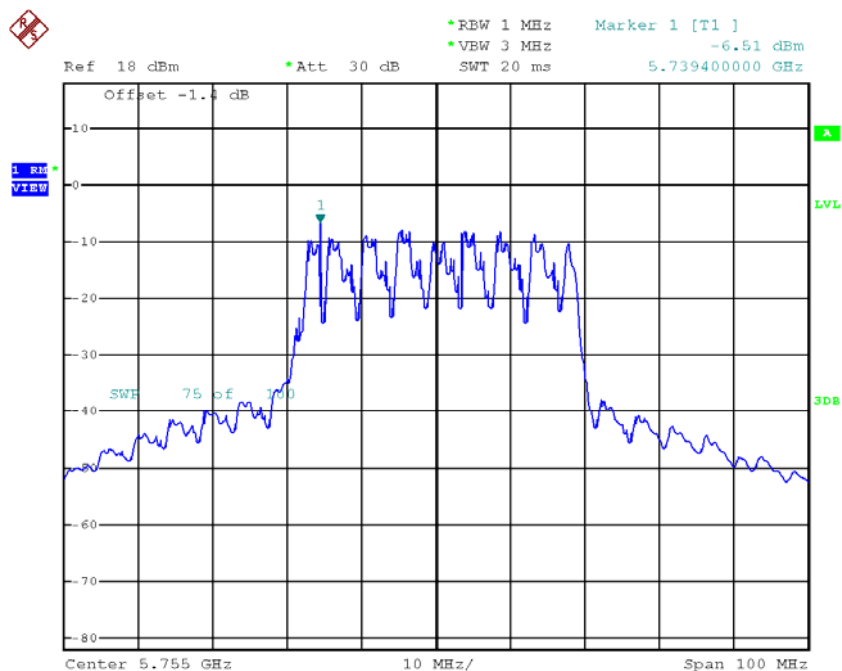
**Test Mode: UNII-3/ TX N20 Mode\_CH149/CH157/CH165\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	0.78	29.44
CH157	5785	0.37	29.44
CH165	5825	2.38	29.44

**Test Mode: UNII-3/ TX N40 Mode\_CH151/CH159\_ANT 1**

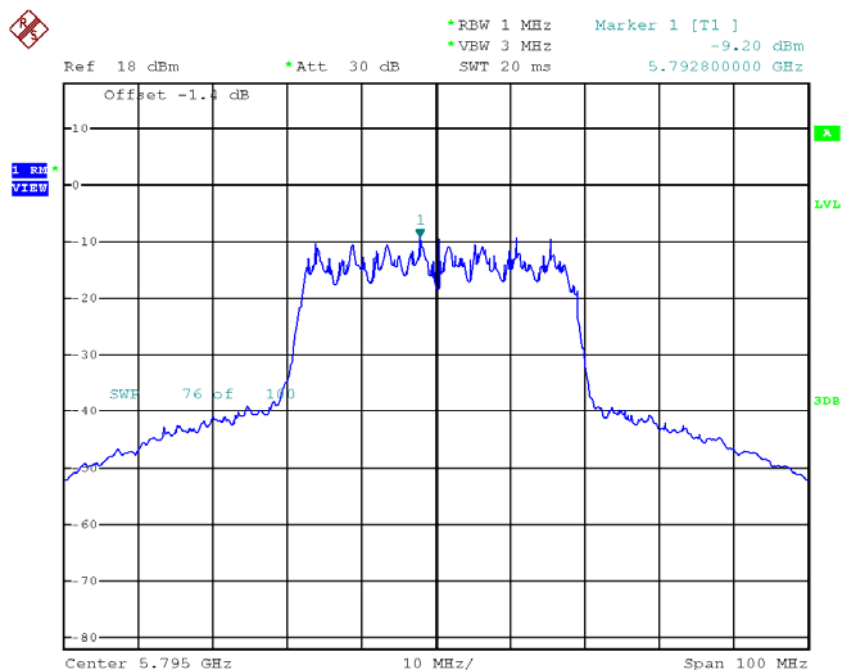
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-6.51	0.51	-6.00	29.44
CH159	5795	-9.20	0.51	-8.69	29.44

# TX CH151



Date: 19.JUN.2016 15:53:50

# TX CH159

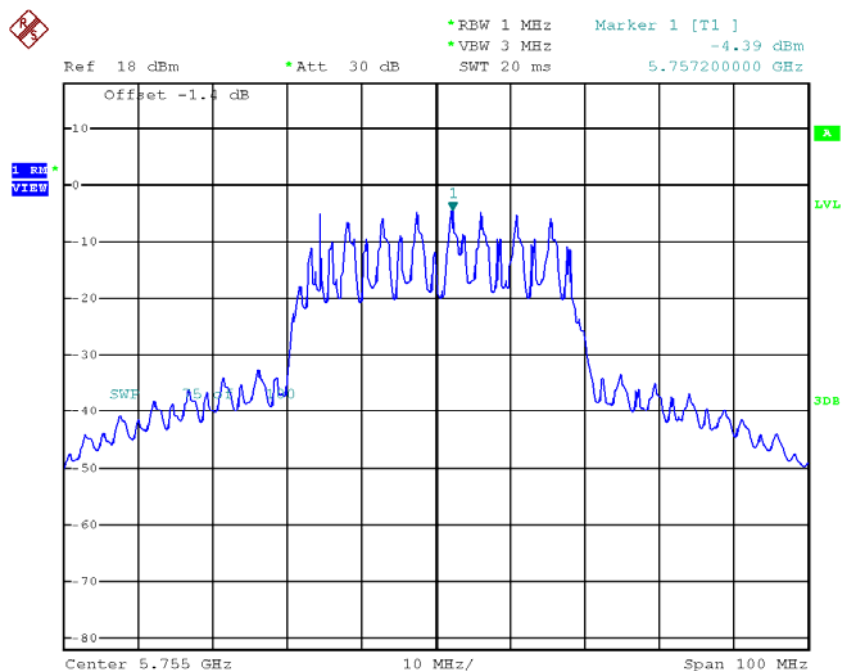


Date: 19.JUN.2016 15:55:50

**Test Mode: UNII-3/ TX N40 Mode\_CH151/CH159\_ANT 2**

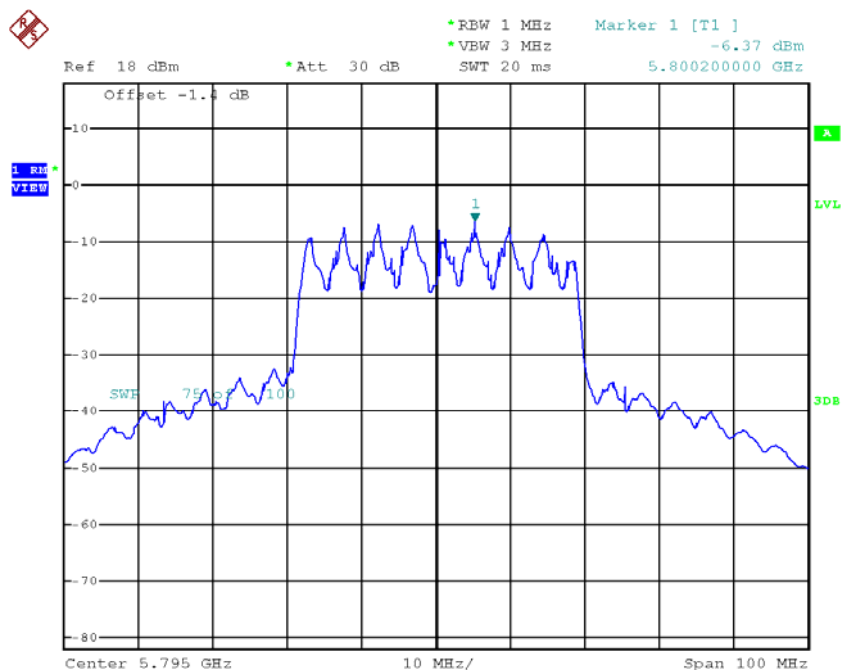
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-4.39	0.51	-3.88	29.44
CH159	5795	-6.37	0.51	-5.86	29.44

# TX CH151



Date: 19.JUN.2016 16:04:24

# TX CH159



Date: 19.JUN.2016 16:06:12

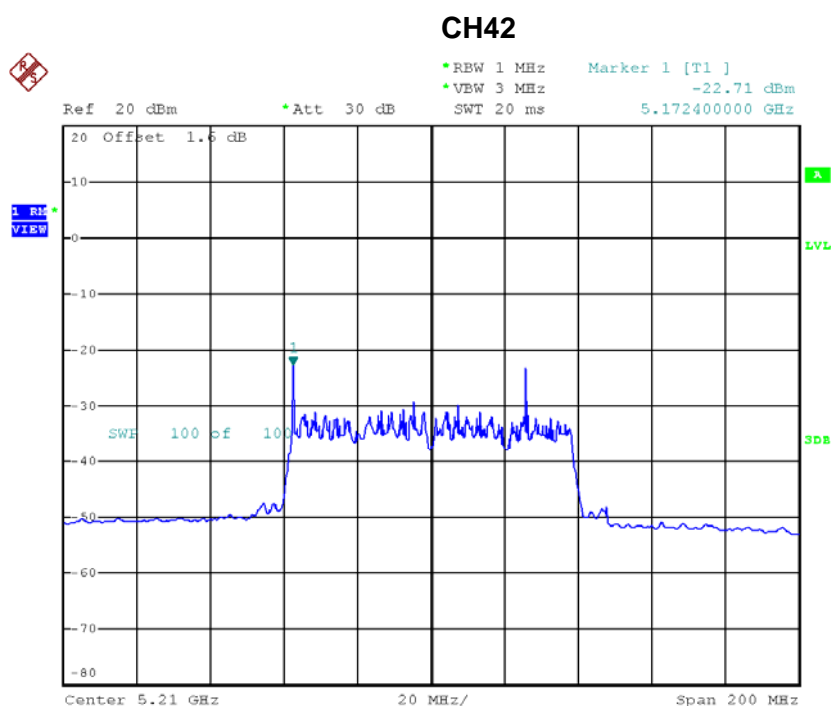


**Test Mode: UNII-3/ TX N40 Mode\_CH151/CH159\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-1.80	29.44
CH159	5795	-4.03	29.44

**Test Mode: UNII-1/TX AC(VHT80) Mode\_CH42\_ANT 1**

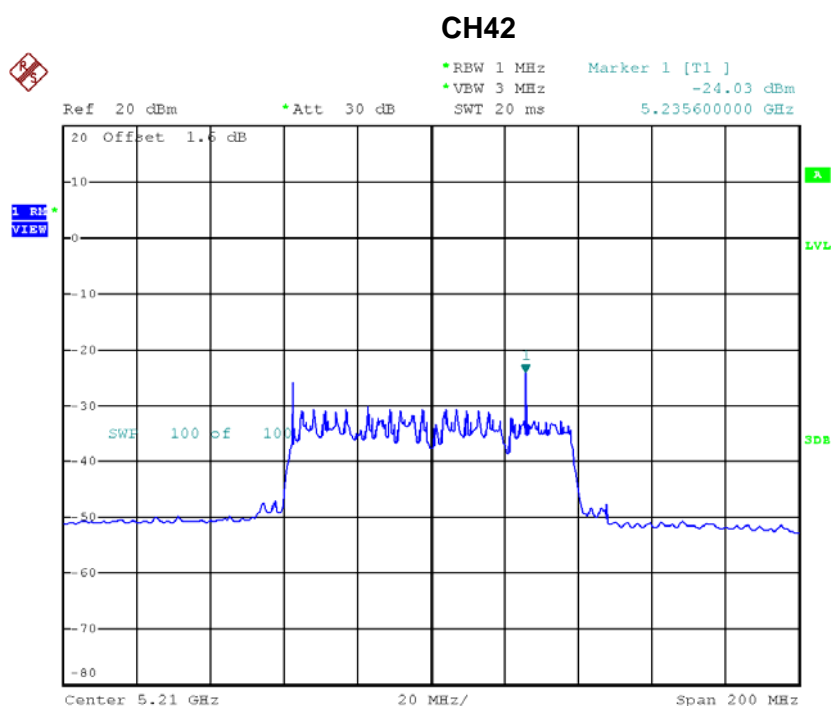
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH42	5210	-22.71	1.06	-21.65	10.44



Date: 19.JUN.2016 16:12:11

**Test Mode: UNII-1/TX AC(VHT80) Mode\_CH42\_ANT 2**

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH42	5210	-24.03	1.06	-22.97	10.44



Date: 19.JUN.2016 16:19:51

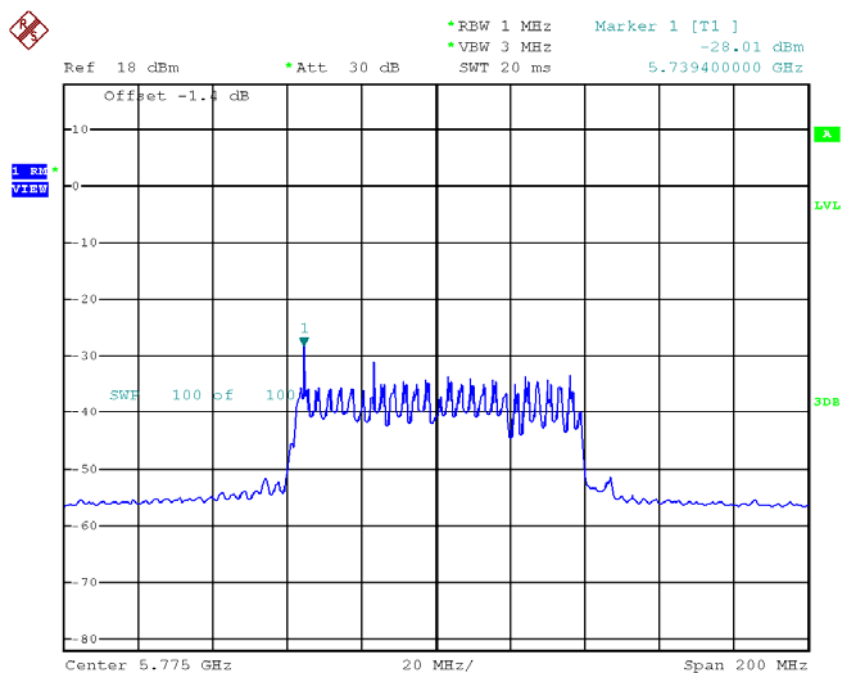
**Test Mode: UNII-1/TX AC(VHT80) Mode\_CH42\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH42	5210	-19.25	10.44

**Test Mode: UNII-3/ TX AC(VHT80) Mode\_CH155\_ANT 1**

Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH155	5775	-28.01	1.06	-26.95	29.44

**TX CH155**

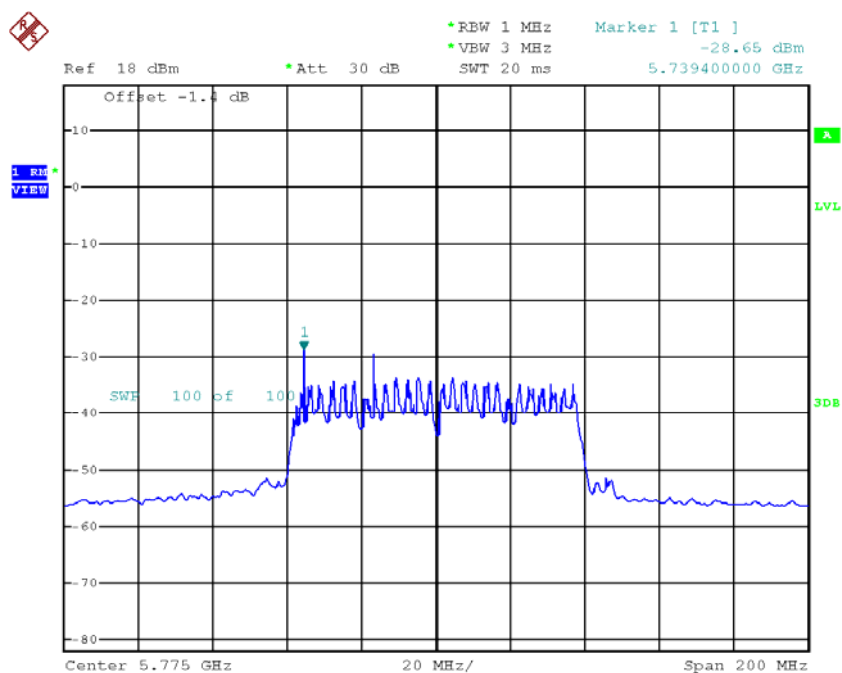


Date: 19.JUN.2016 16:14:30

**Test Mode: UNII-3/ TX AC(VHT80) Mode\_CH155\_ANT 2**

Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH155	5775	-28.65	1.06	-27.59	29.44

**TX CH155**



Date: 19.JUN.2016 16:22:17

**Test Mode: UNII-3/ TX AC(VHT80) Mode\_CH155\_Total**

Channel	Frequency (MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/500kHz)
CH155	5775	-24.25	29.44

## **ATTACHMENT H - FREQUENCY STABILITY**



<b>Test Mode:</b>	<b>UNII-1</b>
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### Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5180.0000
132	5180.1950
120	5180.0000
108	5180.0000
Max. Deviation (MHz)	0.1950
Max. Deviation (ppm)	37.6448

### Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5180.0000
0	5180.0000
5	5180.0000
15	5180.0000
25	5180.0000
35	5180.0000
40	5180.0000
Max. Deviation (MHz)	0.0000
Max. Deviation (ppm)	0.0000

<b>Test Mode:</b>	<b>UNII-3</b>
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### Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5745.0000
132	5745.0000
120	5745.0000
108	5745.0000
Max. Deviation (MHz)	0.0000
Max. Deviation (ppm)	0.0000

### Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5745.0000
0	5745.0000
5	5745.0000
15	5745.0000
25	5745.0000
35	5745.0000
40	5745.0000
Max. Deviation (MHz)	0.0000
Max. Deviation (ppm)	0.0000