

# FCC Radio Test Report

## FCC ID: YJYK3

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

**Project No.** : 1710C304  
**Equipment** : AC3150 Dual-band Gigabit Wireless Router  
**Model Name** : K3  
**Applicant** : Phicomm (Shanghai) Co., Ltd.  
**Address** : No.3666, Sixian Rd., Songjiang District, Shanghai, China

**Date of Receipt** : Oct. 30, 2017  
**Date of Test** : Oct. 30, 2017~ Dec. 22, 2017  
**Issued Date** : Dec. 25, 2017  
**Tested by** : BTL Inc.

**Testing Engineer** : Shawn Xiao  
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TESTING  
NVLAP LAB CODE 200788-0

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Table of Contents	Page
<b>1 . CERTIFICATION</b>	<b>6</b>
<b>2 . SUMMARY OF TEST RESULTS</b>	<b>7</b>
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
<b>3 . GENERAL INFORMATION</b>	<b>9</b>
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	12
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	14
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	16
3.5 DESCRIPTION OF SUPPORT UNITS	16
<b>4 . EMC EMISSION TEST</b>	<b>17</b>
4.1 CONDUCTED EMISSION MEASUREMENT	17
4.1.1 POWER LINE CONDUCTED EMISSION	17
4.1.2 TEST PROCEDURE	17
4.1.3 DEVIATION FROM TEST STANDARD	17
4.1.4 TEST SETUP	18
4.1.5 EUT OPERATING CONDITIONS	18
4.1.6 EUT TEST CONDITIONS	18
4.1.7 TEST RESULTS	18
4.2 RADIATED EMISSION MEASUREMENT	19
4.2.1 RADIATED EMISSION LIMITS	19
4.2.2 TEST PROCEDURE	20
4.2.3 DEVIATION FROM TEST STANDARD	20
4.2.4 TEST SETUP	20
4.2.5 EUT OPERATING CONDITIONS	21
4.2.6 EUT TEST CONDITIONS	21
4.2.7 TEST RESULTS (9K TO 30MHz)	22
4.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHz)	22
4.2.9 TEST RESULTS (ABOVE 1000 MHz)	22
<b>5 . 26dB SPECTRUM BANDWIDTH</b>	<b>23</b>
5.1 APPLIED PROCEDURES / LIMIT	23
5.1.1 TEST PROCEDURE	23
5.1.2 DEVIATION FROM STANDARD	23
5.1.3 TEST SETUP	23
5.1.4 EUT OPERATION CONDITIONS	23
5.1.5 EUT TEST CONDITIONS	24
5.1.6 TEST RESULTS	24
<b>6 . MAXIMUM CONDUCTED OUTPUT POWER</b>	<b>25</b>

<b>Table of Contents</b>	<b>Page</b>
<b>6.1 APPLIED PROCEDURES / LIMIT</b>	<b>25</b>
6.1.1 TEST PROCEDURE	25
6.1.2 DEVIATION FROM STANDARD	26
6.1.3 TEST SETUP	26
6.1.4 EUT OPERATION CONDITIONS	26
6.1.5 EUT TEST CONDITIONS	26
6.1.6 TEST RESULTS	26
<b>7 . POWER SPECTRAL DENSITY TEST</b>	<b>27</b>
7.1 APPLIED PROCEDURES / LIMIT	27
8.1.1 TEST PROCEDURE	27
7.1.1 DEVIATION FROM STANDARD	28
7.1.2 TEST SETUP	28
7.1.3 EUT OPERATION CONDITIONS	28
7.1.4 EUT TEST CONDITIONS	28
7.1.5 TEST RESULTS	28
<b>8 . FREQUENCY STABILITY MEASUREMENT</b>	<b>29</b>
8.1 APPLIED PROCEDURES / LIMIT	29
8.1.1 TEST PROCEDURE	29
8.1.2 DEVIATION FROM STANDARD	29
8.1.3 TEST SETUP	30
8.1.4 EUT OPERATION CONDITIONS	30
8.1.5 EUT TEST CONDITIONS	30
8.1.6 TEST RESULTS	30
<b>9 . MEASUREMENT INSTRUMENTS LIST</b>	<b>31</b>
<b>10 . EUT TEST PHOTOS</b>	<b>33</b>
<b>APPENDIX A - CONDUCTED EMISSION</b>	<b>37</b>
<b>APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)</b>	<b>40</b>
<b>APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)</b>	<b>45</b>
<b>APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)</b>	<b>58</b>
<b>APPENDIX E - BANDWIDTH</b>	<b>177</b>
<b>APPENDIX F - MAXIMUM OUTPUT POWER</b>	<b>218</b>
<b>APPENDIX G - POWER SPECTRAL DENSITY</b>	<b>259</b>
<b>APPENDIX H - FREQUENCY STABILITY</b>	<b>442</b>

## REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1710C304	Original Issue.	Dec. 25, 2017

## 1. CERTIFICATION

Equipment : AC3150 Dual-band Gigabit Wireless Router  
Brand Name : PHICOMM  
Model Name : K3  
Applicant : Phicomm (Shanghai) Co., Ltd.  
Manufacturer : Phicomm (Shanghai) Co., Ltd.  
Address : No.3666, Sixian Rd., Songjiang District, Shanghai, China  
Date of Test : Oct. 30, 2017~ Dec. 22, 2017  
Test Sample : Engineering 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-2-1710C304) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP 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(15.407)			
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 is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's test firm number for FCC: 319330

BTL's designation number for FCC: CN5020

## 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 Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 KHz ~ 30MHz	1.94

### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz~30MHz	V	3.79
		9kHz~30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.60
		200MHz ~ 1,000MHz	V	3.86
		200MHz ~ 1,000MHz	H	3.94
		1GHz~18GHz	V	3.12
		1GHz~18GHz	H	3.68
		18GHz~40GHz	V	4.15
		18GHz~40GHz	H	4.14

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	AC3150 Dual-band Gigabit Wireless Router	
Brand Name	PHICOMM	
Model Name	K3	
Mode Different	N/A	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	2167Mbps
	Output Power (Max.)for UNII-1 Non-Beamforming	802.11a: 27.01dBm 802.11n (20M): 28.06dBm 802.11n (40M): 24.10dBm 802.11ac (20M): 26.93dBm 802.11ac (40M): 22.68dBm 802.11ac (80M): 23.09dBm
	Output Power (Max.)for UNII-3 Non-Beamforming	802.11a: 23.29dBm 802.11n (20M): 23.62dBm 802.11n (40M): 22.88dBm 802.11ac (20M): 23.55dBm 802.11ac (40M): 21.06dBm 802.11ac (80M): 24.27dBm
	Output Power (Max.)for UNII-1 Beamforming	802.11n (20M): 21.80dBm 802.11n (40M): 17.85dBm 802.11ac (20M): 21.05dBm 802.11ac (40M): 16.49dBm 802.11ac (80M): 16.76dBm
	Output Power (Max.)for UNII-3 Beamforming	802.11n (20M): 17.44dBm 802.11n (40M): 17.28dBm 802.11ac (20M): 17.36dBm 802.11ac (40M): 15.89dBm 802.11ac (80M): 18.40dBm
Power Source	DC voltage supplied from AC/DC adapter. Brand / Model: PHICOMM/ MSA-C4000IC12.0-60P-US	
Power Rating	I/P: 100-240VAC 50/60Hz 1.5A MAX O/P: 12V $\overline{\text{---}}$ 4A	

**Note:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

**2. Channel List:**

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				

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	N/A	N/A	PCB	N/A	2
2	N/A	N/A	PCB	N/A	2
3	N/A	N/A	PCB	N/A	2
4	N/A	N/A	PCB	N/A	2

Note:

Antenna Gain=2 dBi. This EUT supports MIMO 4X4.

1. Beamforming function , any transmit signals are correlated with each other, so Directional gain =  $G_{ANT} + 10\log(N)$  dBi, that is Directional gain =  $2 + 10\log(4)$  dBi=8.02; So, the UNII-1, UNII-3 output power limit is  $30 - 8.02 + 6 = 27.98$ . The UNII-1 power density limit is  $17 - 8.02 + 6 = 14.98$ , the UNII-3 power density limit is  $30 - 8.02 + 6 = 27.98$
2. Non Beamforming function, any transmit signals are uncorrelated with each other, so Directional gain= $G_{ant}$ , that is Directional gain =  $2 < 6$ .

4. Operating Mode	
	TX Mode
	4TX
802.11a	V (ANT+1 ANT 2+ANT 3+ ANT 4)
802.11n (20MHz)	V (ANT+1 ANT 2+ANT 3+ ANT 4)
802.11n (40MHz)	V (ANT+1 ANT 2+ANT 3+ ANT 4)
802.11ac (20MHz)	V (ANT+1 ANT 2+ANT 3+ ANT 4)
802.11ac (40MHz)	V (ANT+1 ANT 2+ANT 3+ ANT 4)
802.11ac (80MHz)	V (ANT+1 ANT 2+ANT 3+ ANT 4)

### 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 AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC80 Mode / CH155 (UNII-3)
Mode 13	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 13	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 AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC80 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

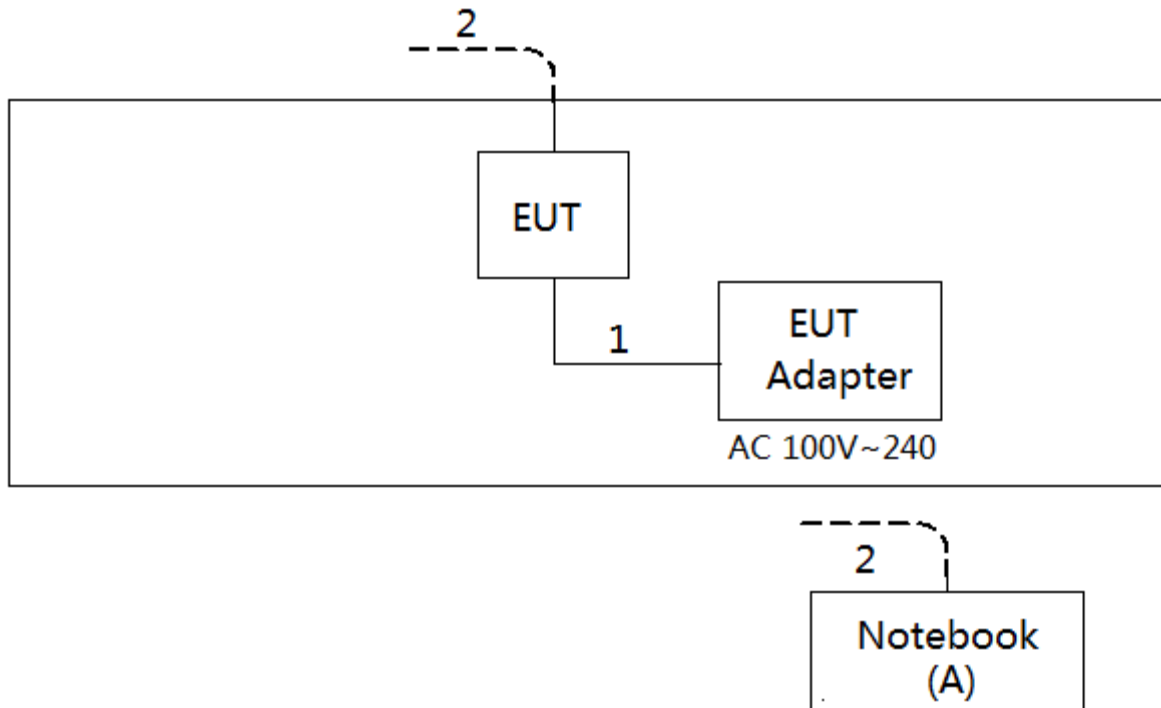
UNII-1 - Non-Beamforming			
Test Software Version	accessMTool_REL_3_0_0_2		
Frequency (MHz)	5180	5200	5240
A Mode	67	76	80
Frequency (MHz)	5180	5200	5240
N20 Mode	66	77	85
Frequency (MHz)	5190	5230	
N40 Mode	59	68	
Frequency (MHz)	5180	5200	5240
AC20 Mode	65	76	81
Frequency (MHz)	5190	5230	
AC40 Mode	58	62	
Frequency (MHz)	5210		
AC80 Mode	61		

UNII-3 - Non-Beamforming			
Test Software Version	accessMTool_REL_3_0_0_2		
Frequency (MHz)	5745	5785	5825
A Mode	70	68	66
Frequency (MHz)	5745	5785	5825
N20 Mode	71	71	74
Frequency (MHz)	5755	5795	
N40 Mode	69	65	
Frequency (MHz)	5745	5785	5825
AC20 Mode	71	71	69
Frequency (MHz)	5755	5795	
AC40 Mode	63	60	
Frequency (MHz)	5775		
AC80 Mode	70		

UNII-1- Beamforming			
Test Software Version	accessMTool_REL_3_0_0_2		
Frequency (MHz)	5180	5200	5240
N20 Mode	42	53	61
Frequency (MHz)	5190	5230	
N40 Mode	35	44	
Frequency (MHz)	5180	5200	5240
AC20 Mode	41	52	57
Frequency (MHz)	5190	5230	
AC40 Mode	34	38	
Frequency (MHz)	5210		
AC80 Mode	37		

UNII-3- Beamforming			
Test Software Version	accessMTool_REL_3_0_0_2		
Frequency (MHz)	5745	5785	5825
N20 Mode	47	47	50
Frequency (MHz)	5755	5795	
N40 Mode	45	41	
Frequency (MHz)	5745	5785	5825
AC20 Mode	47	47	45
Frequency (MHz)	5755	5795	
AC40 Mode	39	36	
Frequency (MHz)	5775		
AC80 Mode	46		

### 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.
A	Notebook	Dell	DCSM	DOC	G7K832X

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.8m	DC Cable
2	NO	NO	10m	RJ45 Cable



## 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.

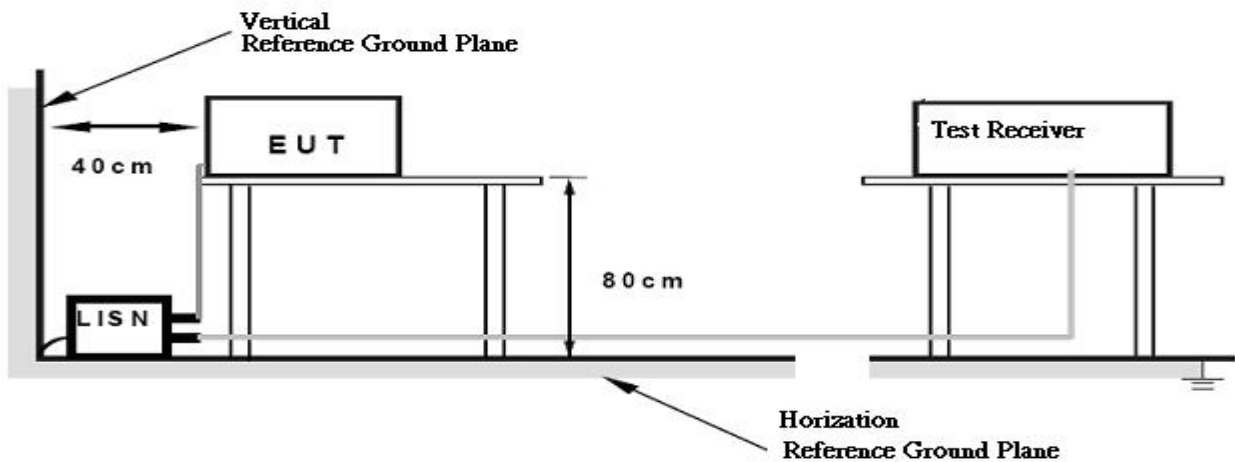
#### 4.1.2 TEST PROCEDURE

- 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: 53%    Test Voltage: AC 120V/60Hz

#### 4.1.7 TEST RESULTS

Please refer to the Appendix 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 (micorvolts/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

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

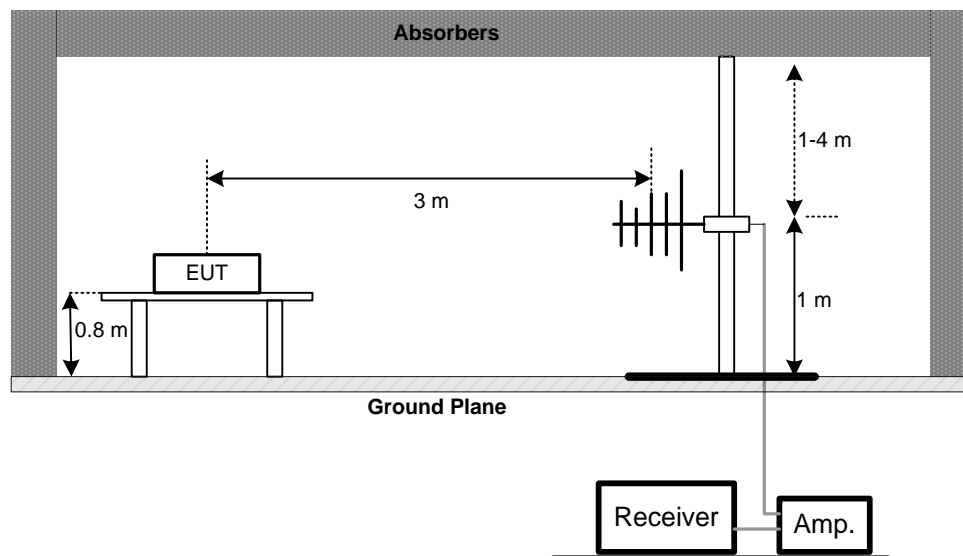
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 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 0.8m 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.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- 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

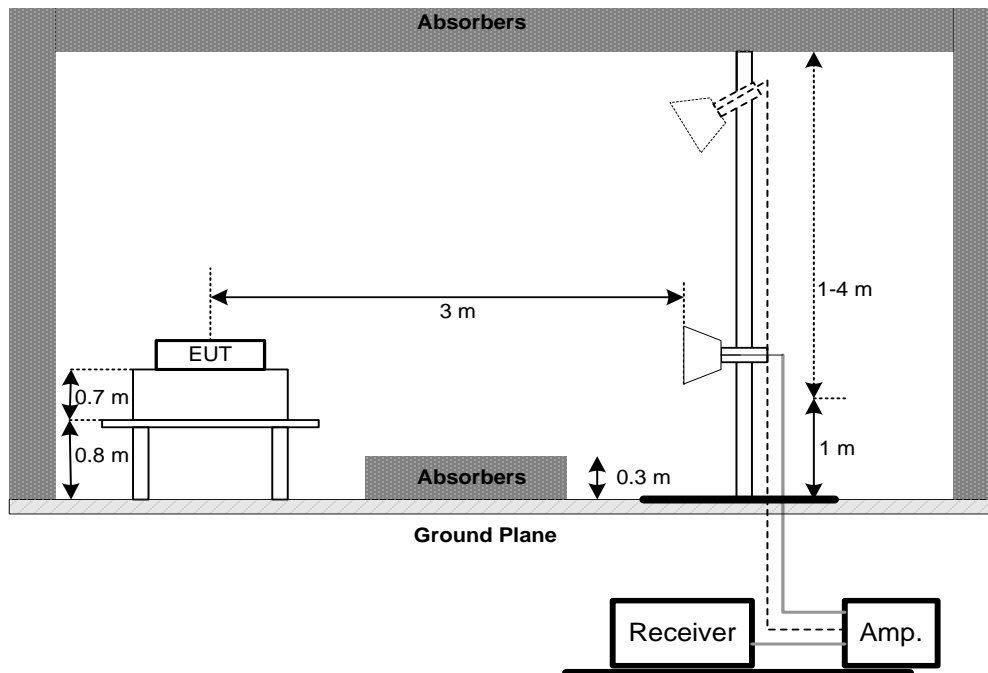
No deviation

#### 4.2.4 TEST SETUP

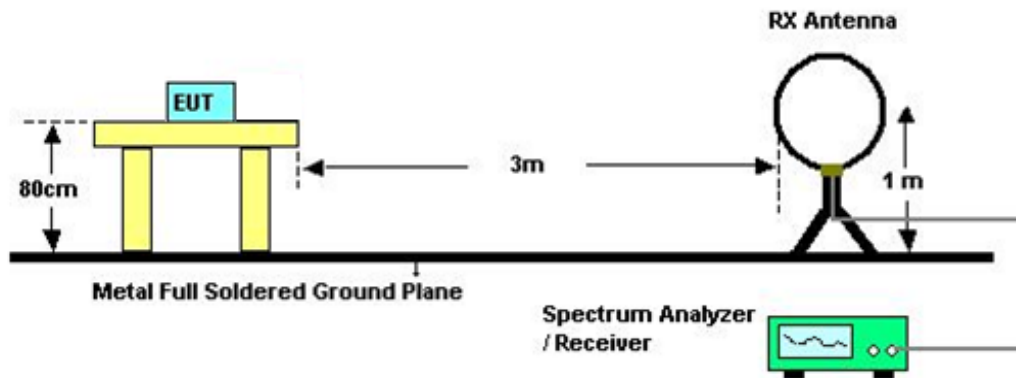
(A)Radiated Emission Test Set-Up Frequency Below 1GHz



(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: 45%    Test Voltage: AC 120V/60Hz

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

Please refer to the Appendix 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 Appendix C.

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

Please refer to the Appendix D.

Remark:

- (1) 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(Bandwidth 20MHz) 1MHz(Bandwidth 40MHz and 80MHz)
VBW	1MHz(Bandwidth 20MHz) 3MHz(Bandwidth 40MHz and 80MHz)
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: 45%    Test Voltage: AC 120V/60Hz

### 5.1.6 TEST RESULTS

Please refer to the Appendix 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 any elevation 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: 45%    Test Voltage: AC 120V/60Hz

#### 6.1.6 TEST RESULTS

Please refer to the Appendix 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

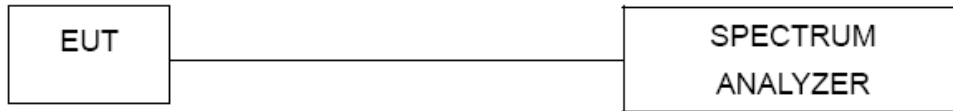
Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01r02, 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: 45%    Test Voltage: AC 120V/60Hz

#### 7.1.5 TEST RESULTS

Please refer to the Appendix H.

## 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~40°C.

#### 8.1.2 DEVIATION FROM STANDARD

No deviation.

The diagram illustrates the setup for measuring the temperature coefficient of a device. A Spectrum Analyzer is connected via a cable to a yellow box labeled 'EUT' (Equipment Under Test). This EUT is placed inside a blue box labeled 'OVEN', which is used to vary the temperature of the device.

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.

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

**Please refer to the Appendix I.**

## 9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2018
2	LISN	EMCO	3816/2	52765	Mar. 26, 2018
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 26, 2018
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 26, 2018
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Oct. 19, 2018

Radiated Emission Below 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 26, 2018
2	Amplifier	HP	8447D	2944A09673	Oct. 19, 2018
3	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	Jun. 26, 2018
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	Antenna	EM	EM-6876-1	230	Mar. 06, 2018

Radiated Emission Above 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 26, 2018
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 08, 2018
3	Amplifier	Agilent	8449B	3008A02274	May. 16, 2018
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
5	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
6	Antenna	EM	EM-6876-1	230	Mar. 06, 2018
7	Controller	CT	SC100	N/A	N/A
8	Controller	MF	MF-7802	MF780208416	N/A
9	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018
10	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Spectrum Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	ANRITSU	ML2495A	1128009	Mar. 26, 2018
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 26, 2018

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018
2	Precision Oven Tester	Bell	BTH-50C	20170306001	Mar. 26, 2018

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

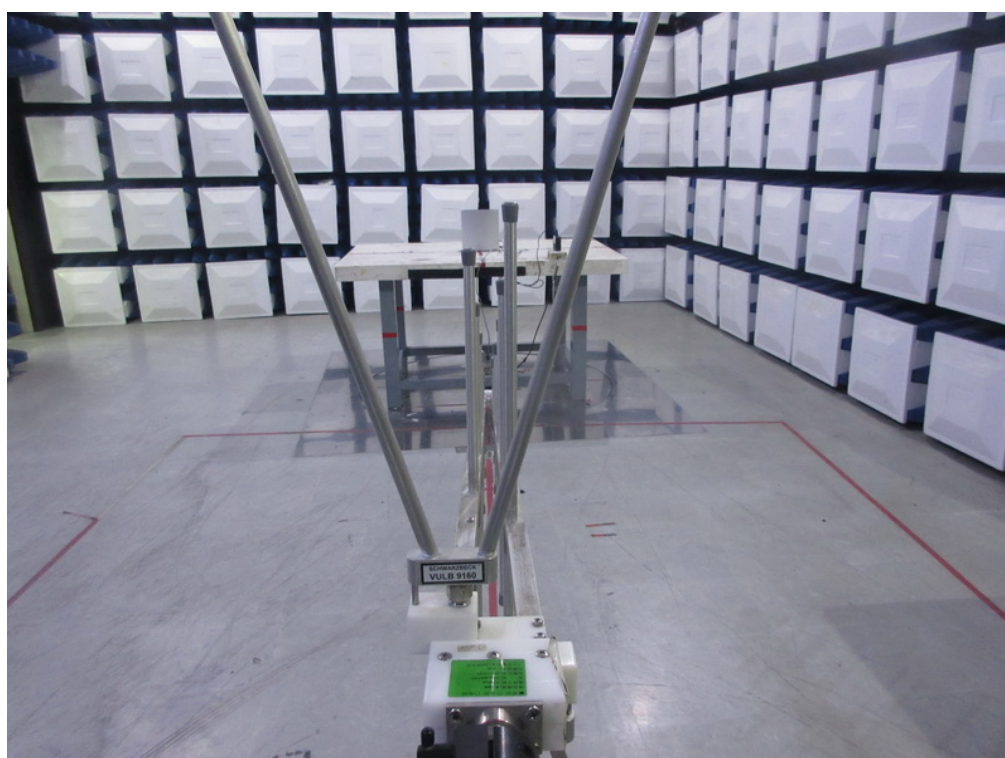
9kHz to 30MHz





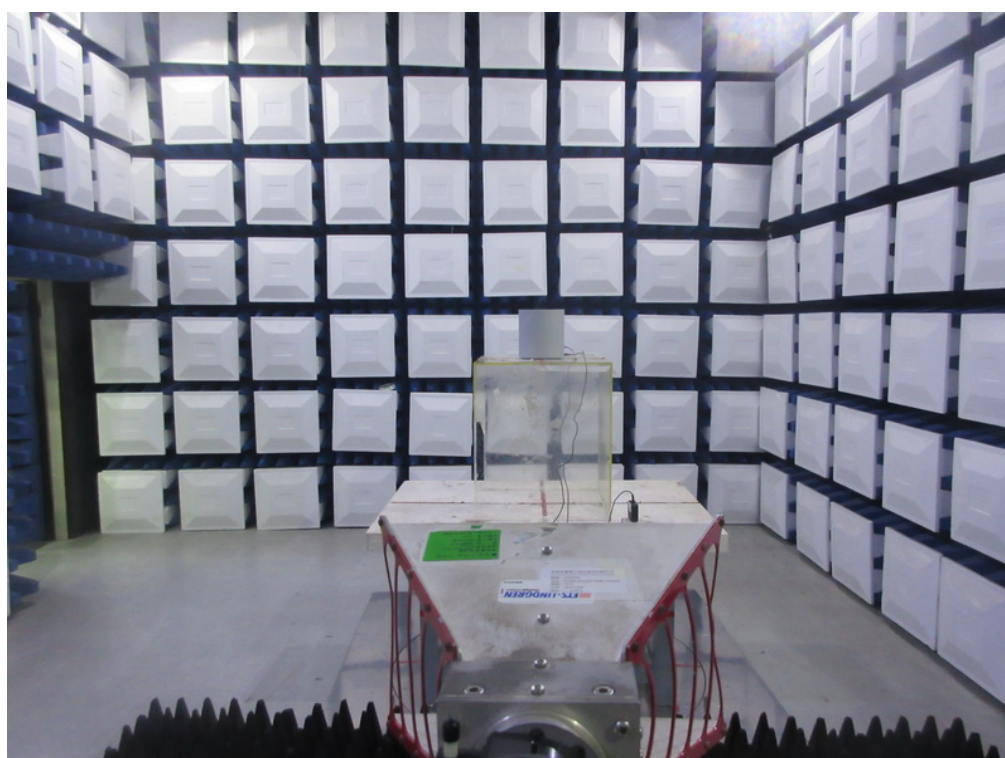
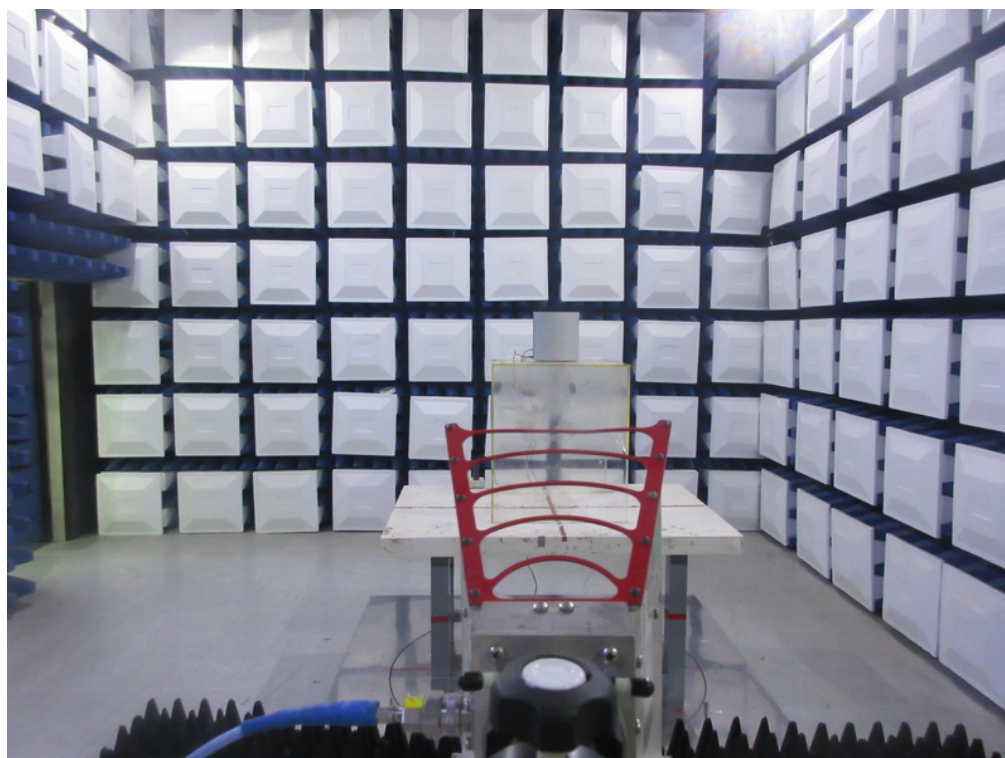
## Radiated Measurement Photos

30MHz to 1000MHz



## Radiated Measurement Photos

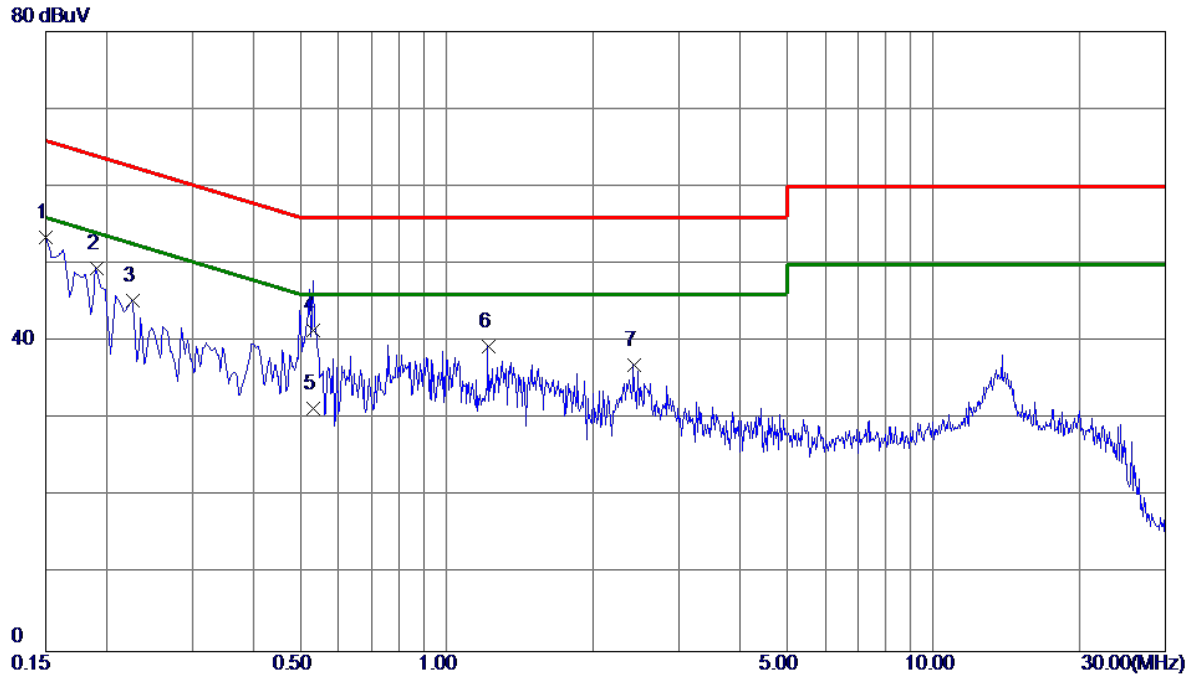
Above 1000MHz



## APPENDIX A - CONDUCTED EMISSION

Test Mode: TX MODE

### Line

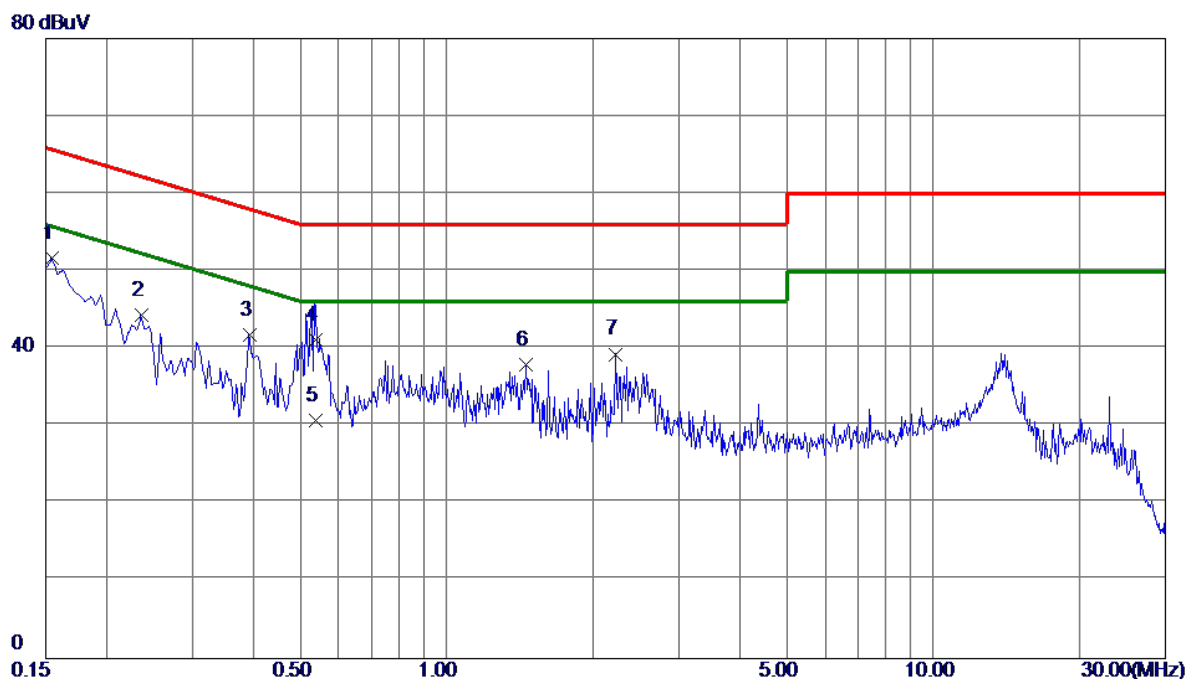


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1500	43.82	9.68	53.50	66.00	-12.50	Peak	
2	0.1905	39.77	9.69	49.46	64.01	-14.55	Peak	
3	0.2265	35.56	9.68	45.24	62.58	-17.34	Peak	
4	0.5325	31.75	9.70	41.45	56.00	-14.55	QP	
5	0.5325	21.64	9.70	31.34	46.00	-14.66	AVG	
6	1.2164	29.56	9.76	39.32	56.00	-16.68	Peak	
7	2.4270	27.06	9.86	36.92	56.00	-19.08	Peak	

Note : The test result has included the cable loss.

Test Mode: TX MODE

# Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1545	42.04	9.68	51.72	65.75	-14.03	Peak	
2	0.2355	34.63	9.68	44.31	62.25	-17.94	Peak	
3	0.3930	32.06	9.69	41.75	58.00	-16.25	Peak	
4	0.5370	31.49	9.70	41.19	56.00	-14.81	QP	
5	0.5370	21.09	9.70	30.79	46.00	-15.21	AVG	
6	1.4595	28.21	9.78	37.99	56.00	-18.01	Peak	
7	2.2290	29.42	9.86	39.28	56.00	-16.72	Peak	

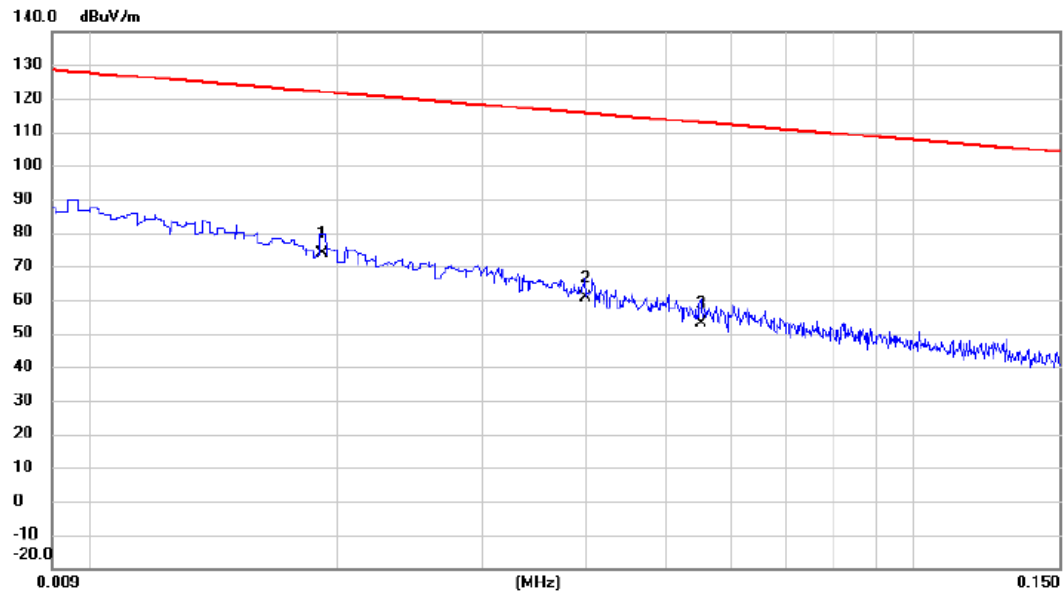
Note : The test result has included the cable loss.

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



Test Mode:	TX MODE
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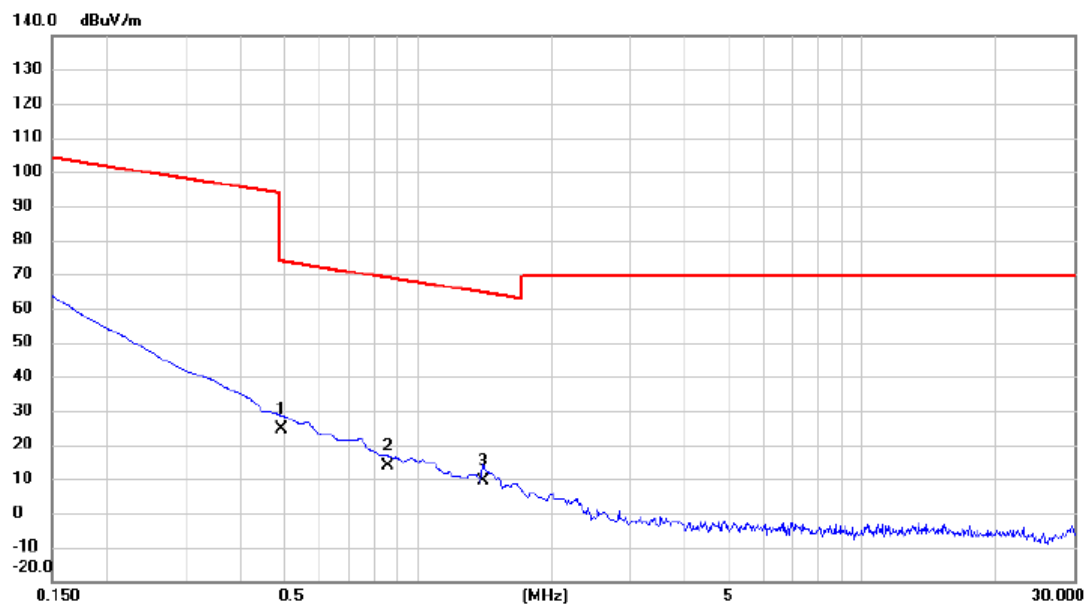
**Ant 0°**



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0192	54.23	19.72	73.95	121.94	-47.99	AVG	
2		0.0400	41.51	19.02	60.53	115.56	-55.03	AVG	
3		0.0552	34.53	18.63	53.16	112.77	-59.61	AVG	

Test Mode: TX MODE

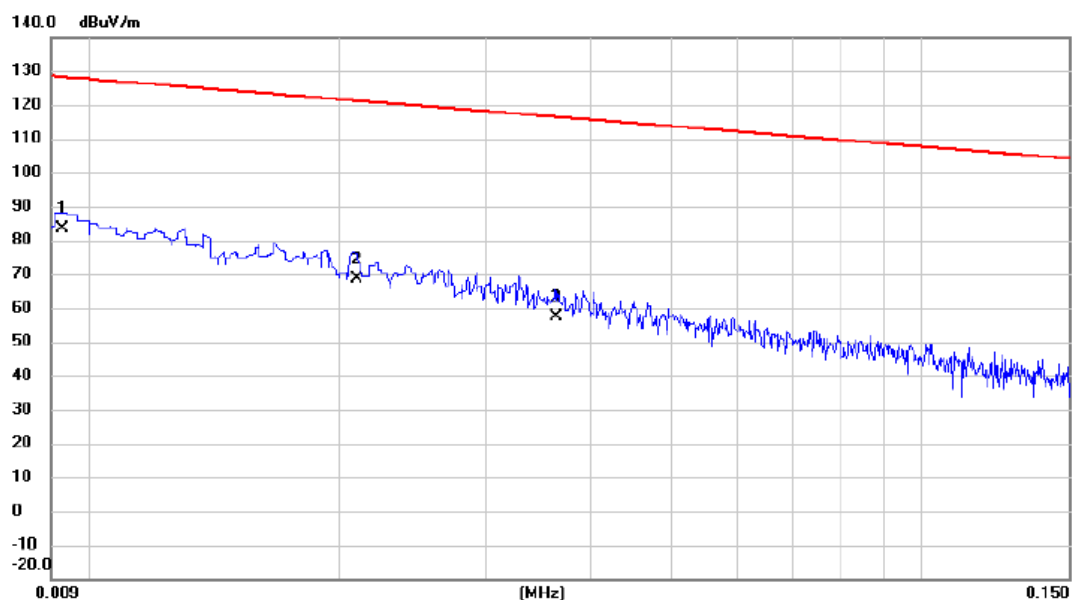
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.4941	8.21	16.47	24.68	73.73	-49.05	QP	
2		0.8573	-2.29	16.05	13.76	68.94	-55.18	QP	
3		1.4037	-6.42	15.74	9.32	64.66	-55.34	QP	

Test Mode: TX MODE

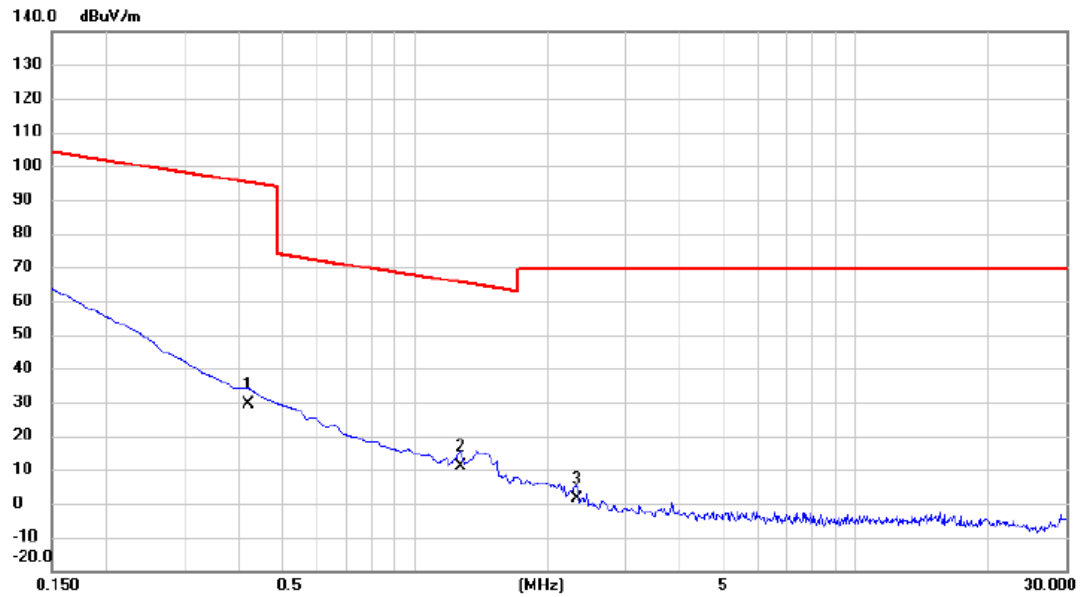
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0093	62.19	21.06	83.25	128.24	-44.99	AVG	
2		0.0210	49.03	19.59	68.62	121.16	-52.54	AVG	
3		0.0364	38.14	19.13	57.27	116.38	-59.11	AVG	

Test Mode: TX MODE

Ant 90°



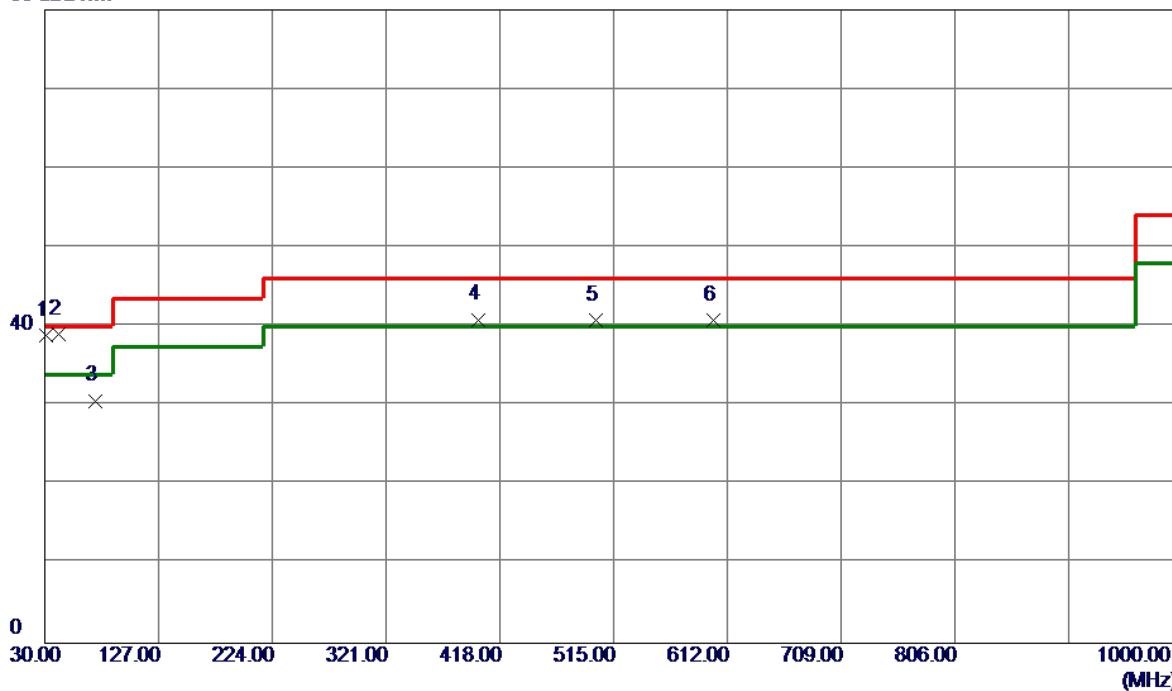
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4187	12.82	16.54	29.36	95.17	-65.81	AVG	
2	*	1.2694	-4.91	15.79	10.88	65.53	-54.65	QP	
3		2.3291	-14.02	15.42	1.40	69.54	-68.14	QP	

## APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode: UNII-1/TX A Mode 5180MHz

Vertical

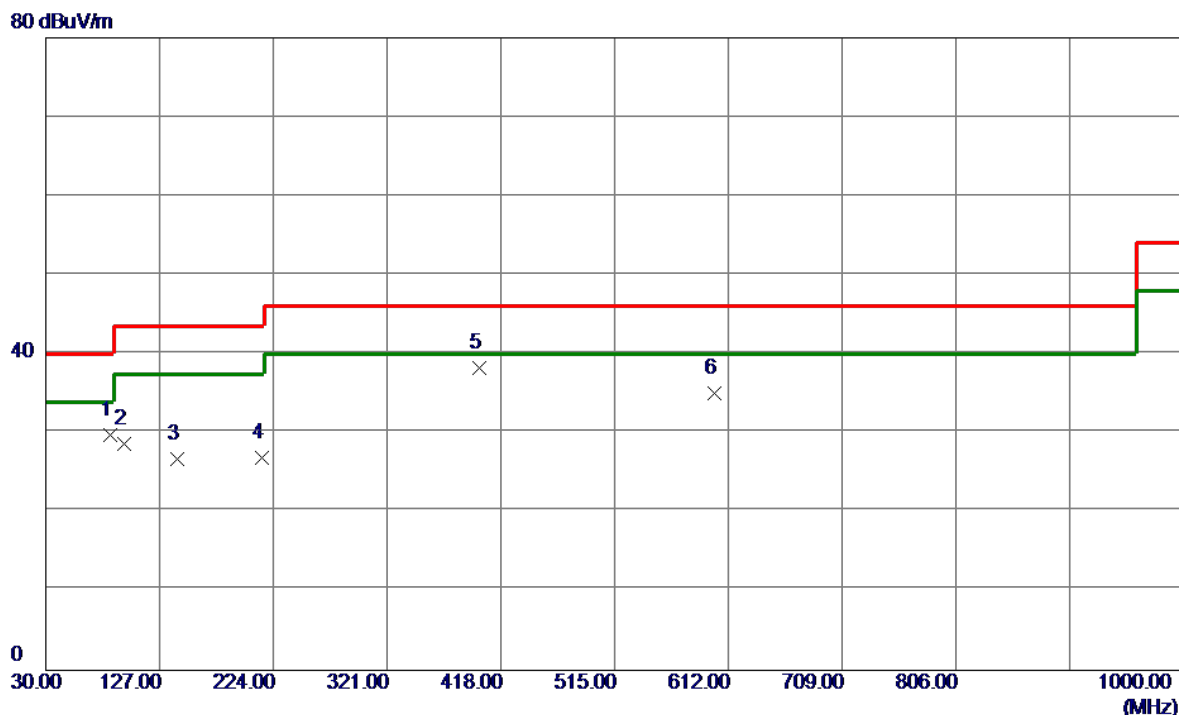
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	30.9700	54.00	-15.14	38.86	40.00	-1.14	QP	
2 *	41.6400	52.67	-13.70	38.97	40.00	-1.03	QP	
3	73.1650	47.52	-16.88	30.64	40.00	-9.36	QP	
4	400.0550	52.24	-11.36	40.88	46.00	-5.12	QP	
5	499.9650	49.50	-8.72	40.78	46.00	-5.22	QP	
6	599.8750	47.24	-6.42	40.82	46.00	-5.18	QP	

Test Mode: UNII-1/TX A Mode 5180MHz

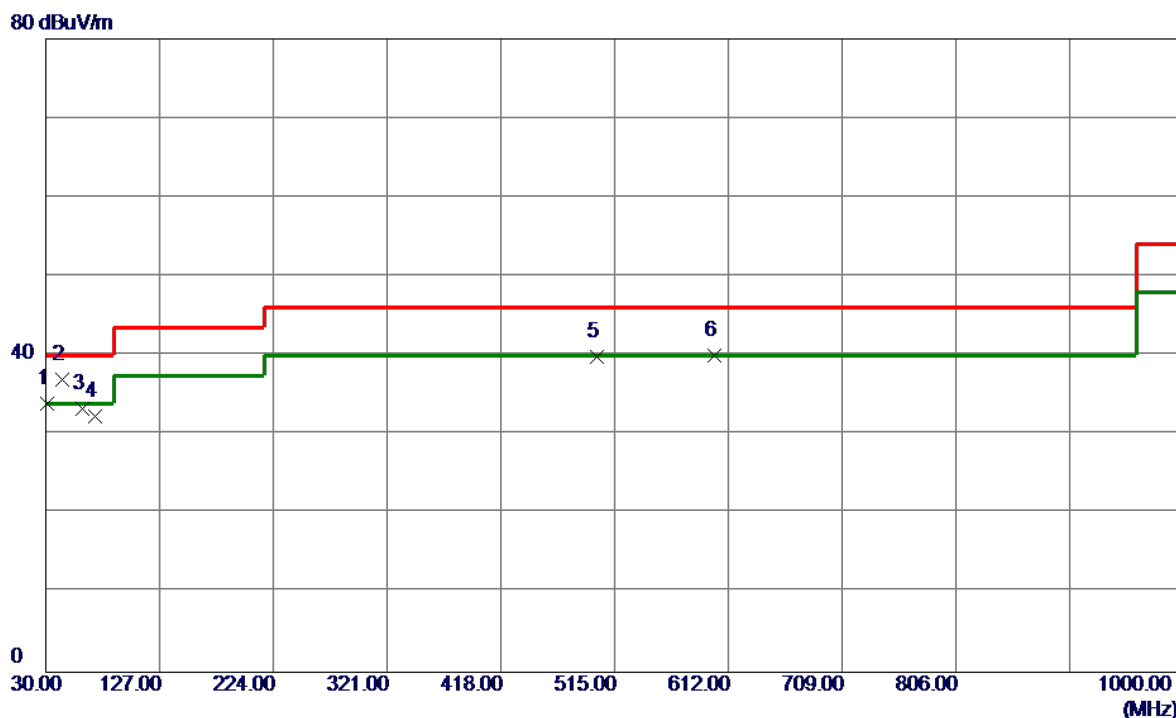
# Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	85.2900	48.11	-18.41	29.70	40.00	-10.30	QP	
2	96.9300	46.88	-18.30	28.58	43.50	-14.92	QP	
3	142.5200	40.77	-14.04	26.73	43.50	-16.77	QP	
4	213.8150	40.89	-13.95	26.94	43.50	-16.56	QP	
5 *	400.0550	49.55	-11.36	38.19	46.00	-7.81	QP	
6	599.8750	41.51	-6.42	35.09	46.00	-10.91	QP	

Test Mode: UNII-1/TX A Mode 5200MHz

# Vertical

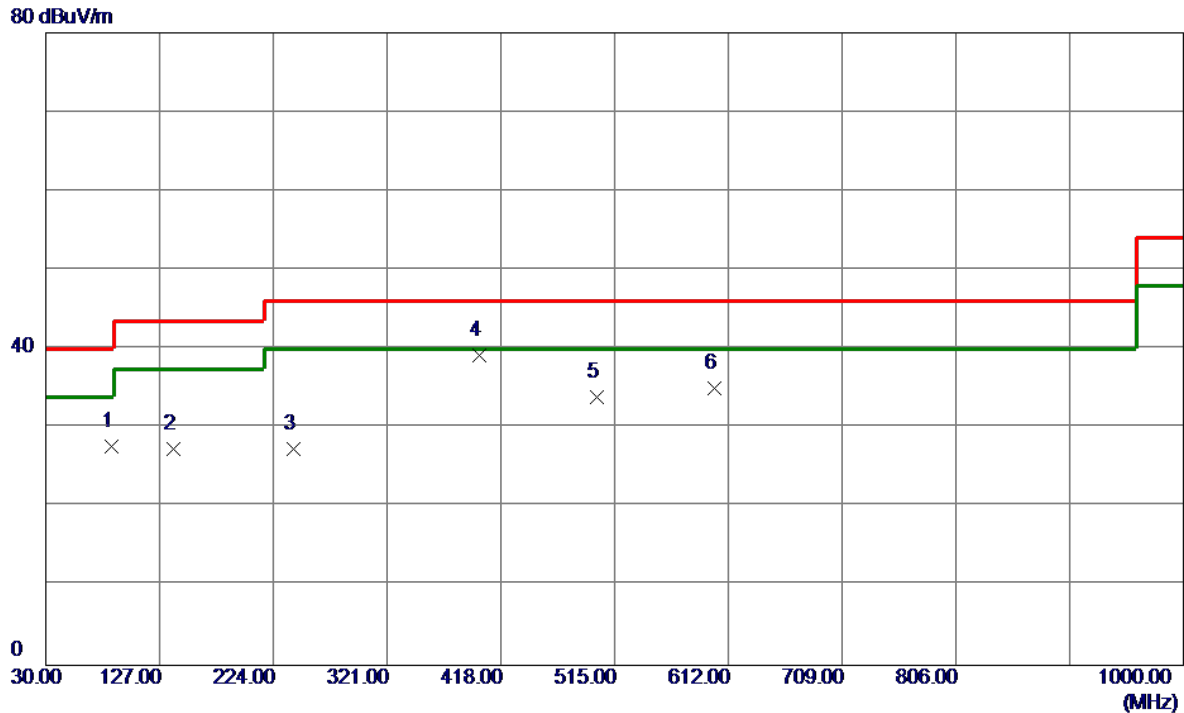


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	30.9700	49.13	-15.14	33.99	40.00	-6.01	QP	
2 *	43.5800	50.55	-13.55	37.00	40.00	-3.00	QP	
3	61.0400	47.80	-14.48	33.32	40.00	-6.68	QP	
4	72.1950	49.15	-16.77	32.38	40.00	-7.62	QP	
5	499.9650	48.53	-8.72	39.81	46.00	-6.19	QP	
6	599.8750	46.45	-6.42	40.03	46.00	-5.97	QP	



Test Mode: UNII-1/TX A Mode 5200MHz

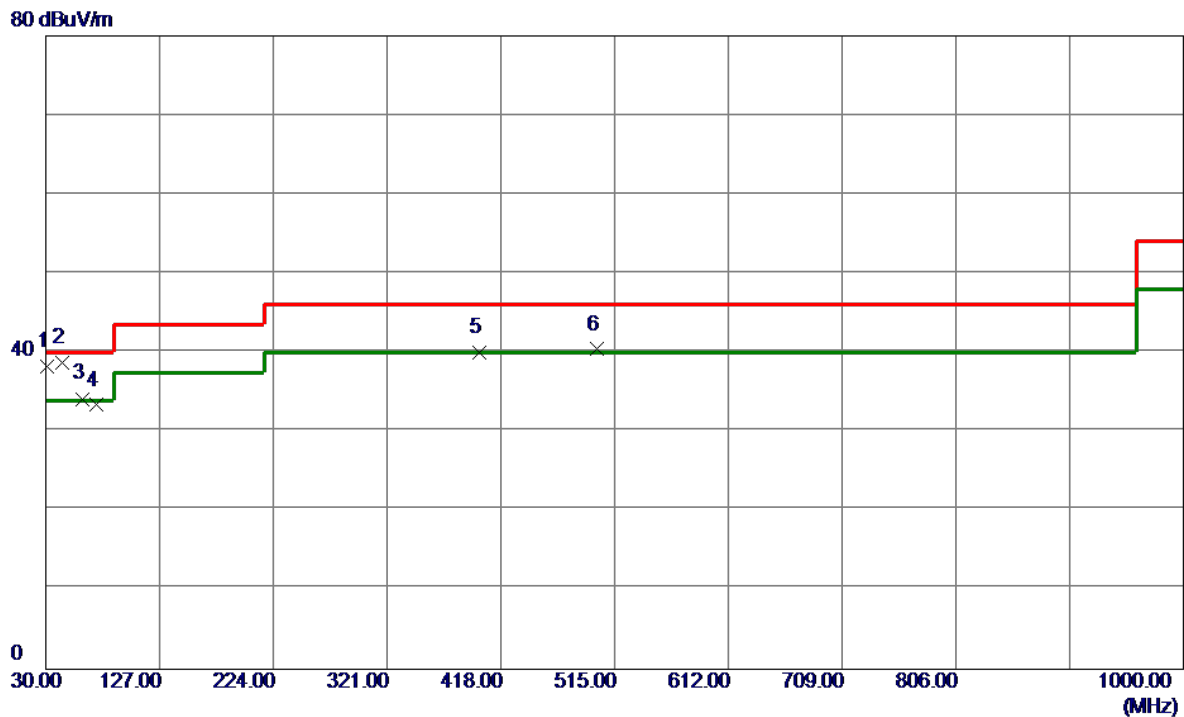
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	85.7750	46.15	-18.44	27.71	40.00	-12.29	QP	
2	139.1250	41.65	-14.26	27.39	43.50	-16.11	QP	
3	240.9750	41.77	-14.41	27.36	46.00	-18.64	QP	
4 *	400.0550	50.58	-11.36	39.22	46.00	-6.78	QP	
5	499.9650	42.58	-8.72	33.86	46.00	-12.14	QP	
6	599.8750	41.52	-6.42	35.10	46.00	-10.90	QP	

Test Mode: UNII-1/TX A Mode 5240MHz

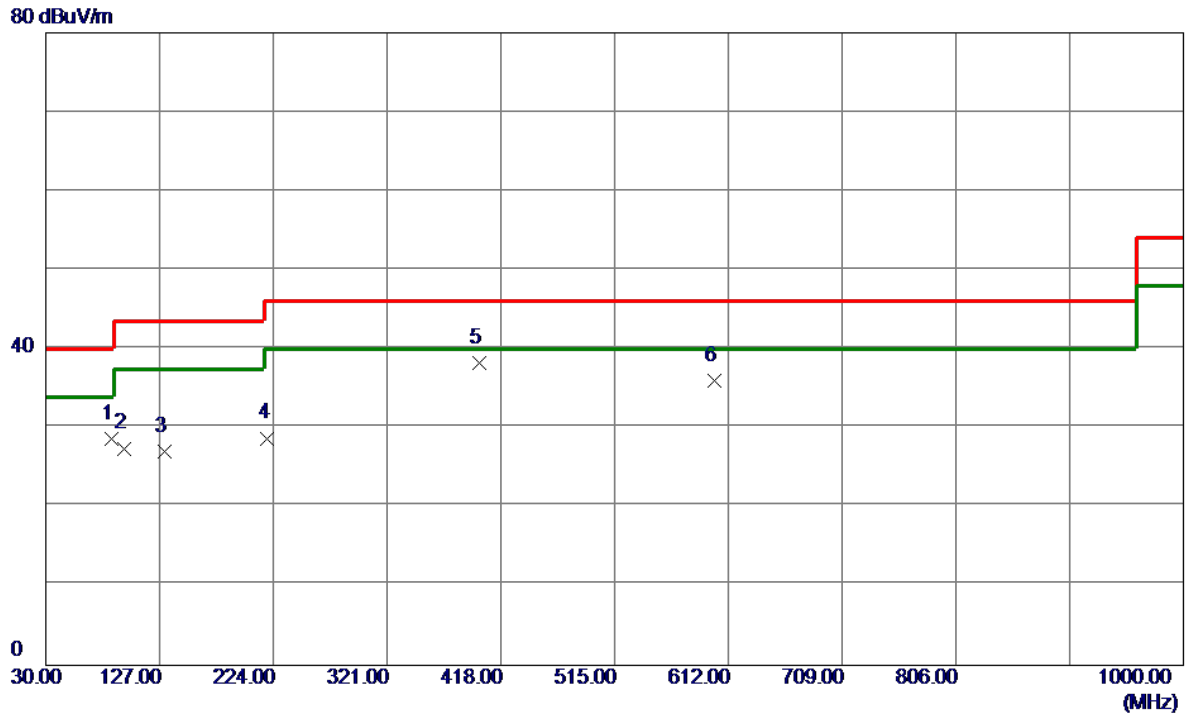
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.4550	53.36	-15.09	38.27	40.00	-1.73	QP	
2 *	43.5800	52.25	-13.55	38.70	40.00	-1.30	QP	
3	61.0400	48.64	-14.48	34.16	40.00	-5.84	QP	
4	73.1650	50.24	-16.88	33.36	40.00	-6.64	QP	
5	400.0550	51.31	-11.36	39.95	46.00	-6.05	QP	
6	499.9650	49.12	-8.72	40.40	46.00	-5.60	QP	

Test Mode: UNII-1/TX A Mode 5240MHz

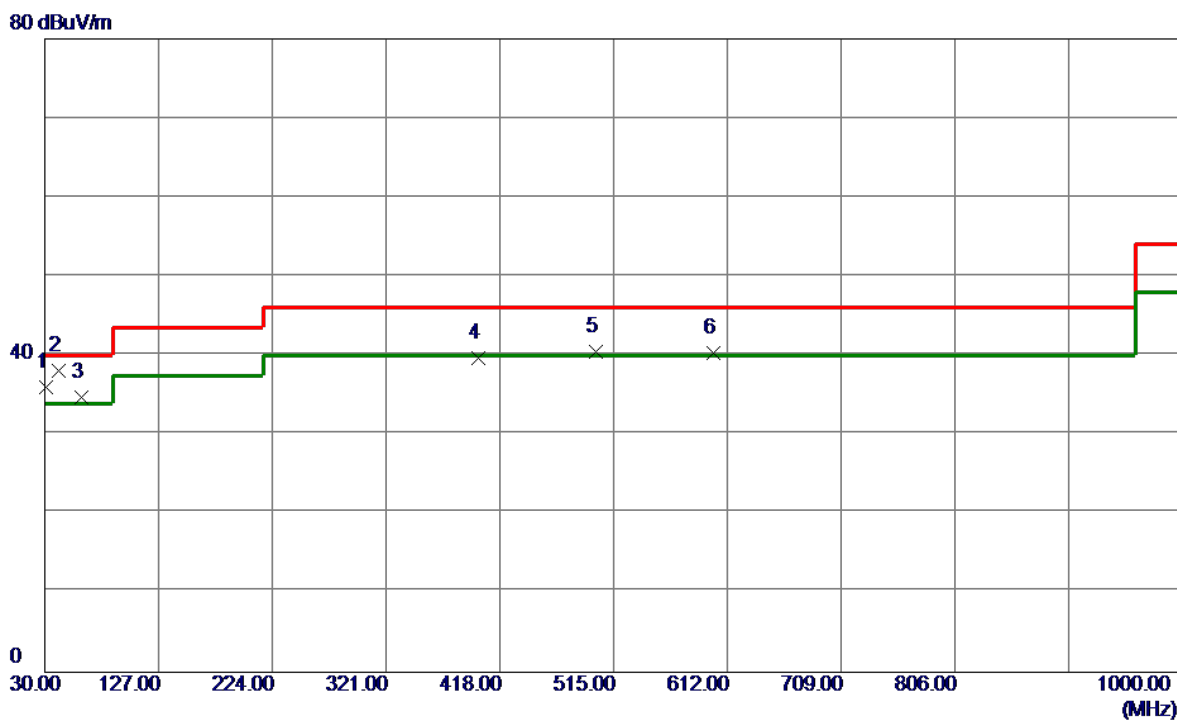
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	85.7750	47.13	-18.44	28.69	40.00	-11.31	QP	
2	96.9300	45.74	-18.30	27.44	43.50	-16.06	QP	
3	130.8800	41.65	-14.66	26.99	43.50	-16.51	QP	
4	219.1500	42.63	-13.91	28.72	46.00	-17.28	QP	
5 *	400.0550	49.64	-11.36	38.28	46.00	-7.72	QP	
6	599.8750	42.36	-6.42	35.94	46.00	-10.06	QP	

Test Mode: UNII-3/TX A Mode 5745MHz

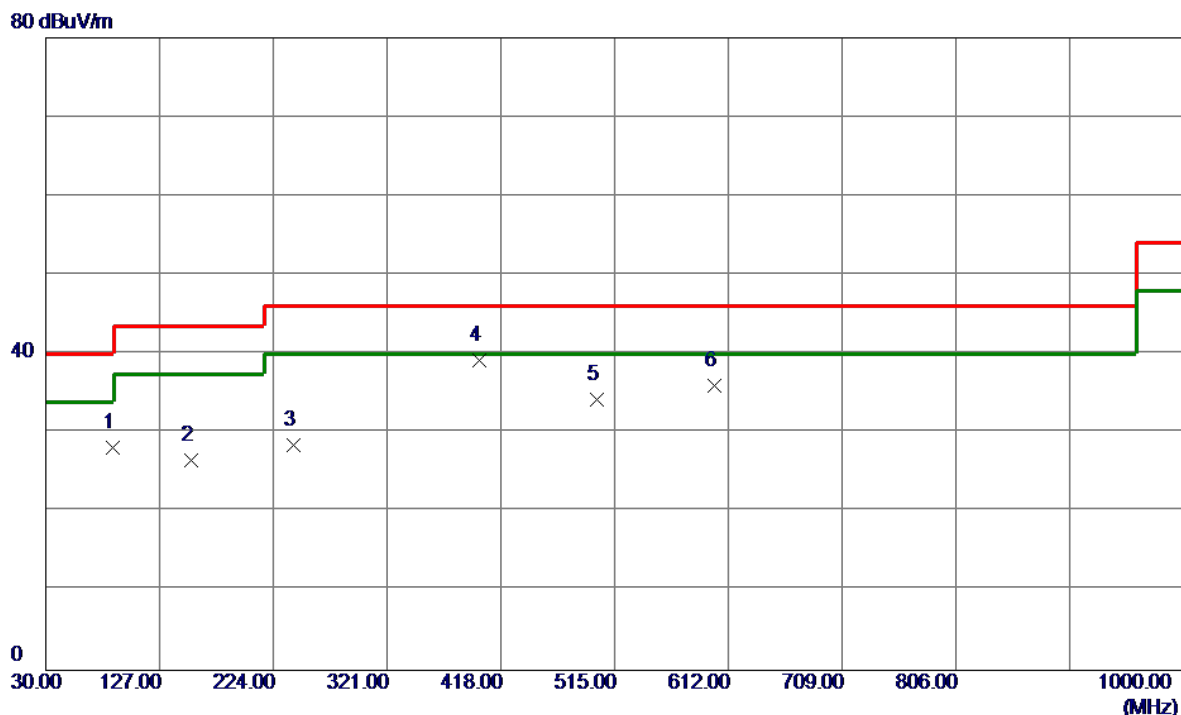
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.4550	51.07	-15.09	35.98	40.00	-4.02	QP	
2 *	41.6400	51.81	-13.70	38.11	40.00	-1.89	QP	
3	61.0400	49.22	-14.48	34.74	40.00	-5.26	QP	
4	400.0550	51.12	-11.36	39.76	46.00	-6.24	QP	
5	499.9650	49.25	-8.72	40.53	46.00	-5.47	QP	
6	599.8750	46.75	-6.42	40.33	46.00	-5.67	QP	

Test Mode: UNII-3/TX A Mode 5745MHz

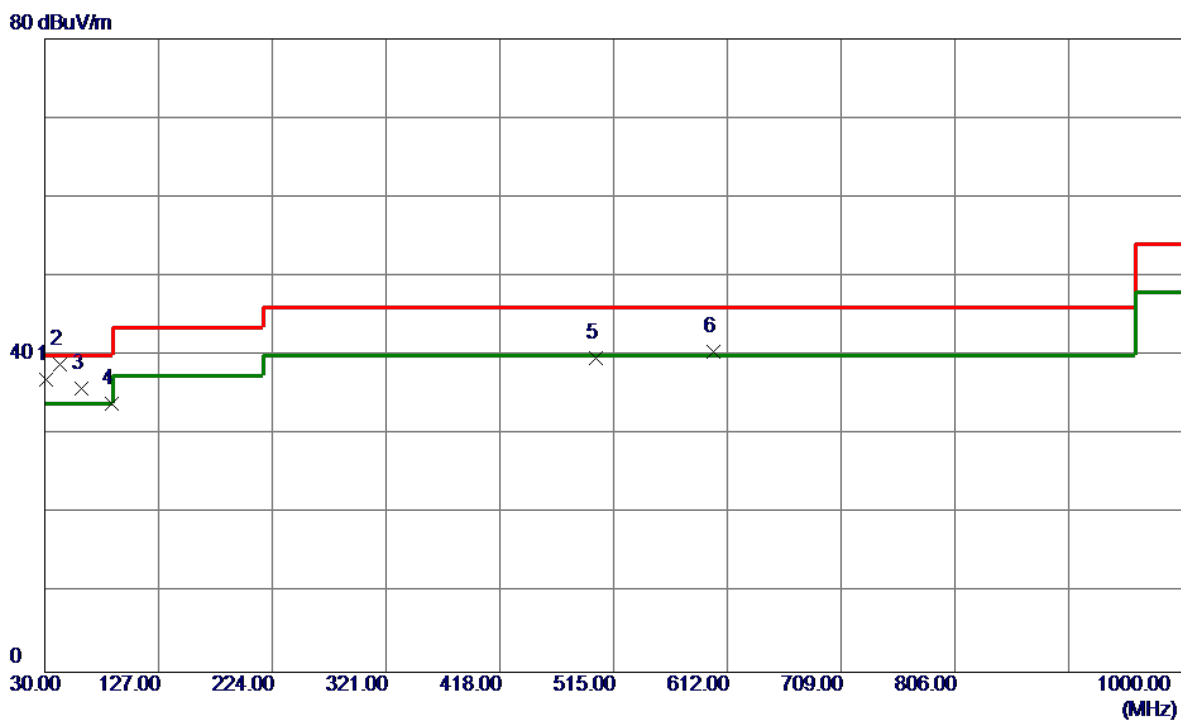
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	86.7450	46.66	-18.49	28.17	40.00	-11.83	QP	
2	154.1600	39.79	-13.28	26.51	43.50	-16.99	QP	
3	240.9750	42.85	-14.41	28.44	46.00	-17.56	QP	
4 *	400.0550	50.53	-11.36	39.17	46.00	-6.83	QP	
5	499.9650	42.92	-8.72	34.20	46.00	-11.80	QP	
6	599.8750	42.42	-6.42	36.00	46.00	-10.00	QP	

Test Mode: UNII-3/TX A Mode 5785MHz

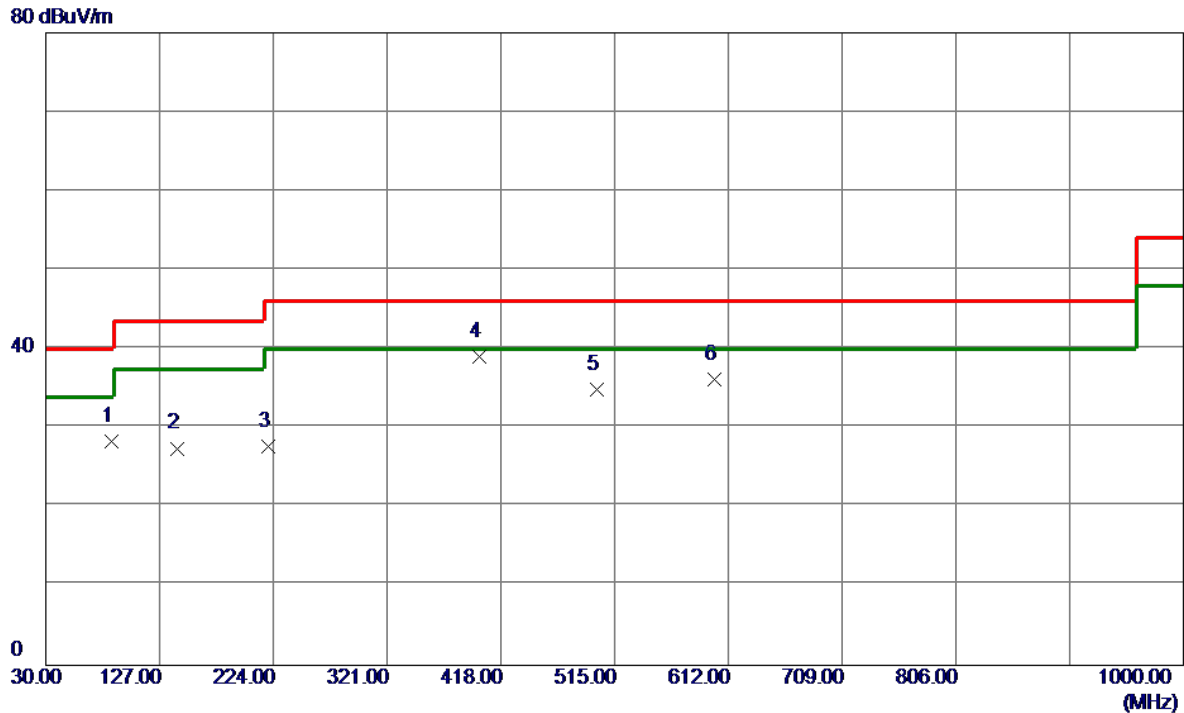
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.4550	52.09	-15.09	37.00	40.00	-3.00	QP	
2 *	43.0950	52.50	-13.58	38.92	40.00	-1.08	QP	
3	61.0400	50.31	-14.48	35.83	40.00	-4.17	QP	
4	86.7450	52.38	-18.49	33.89	40.00	-6.11	QP	
5	499.9650	48.43	-8.72	39.71	46.00	-6.29	QP	
6	599.8750	46.93	-6.42	40.51	46.00	-5.49	QP	

Test Mode: UNII-3/TX A Mode 5785MHz

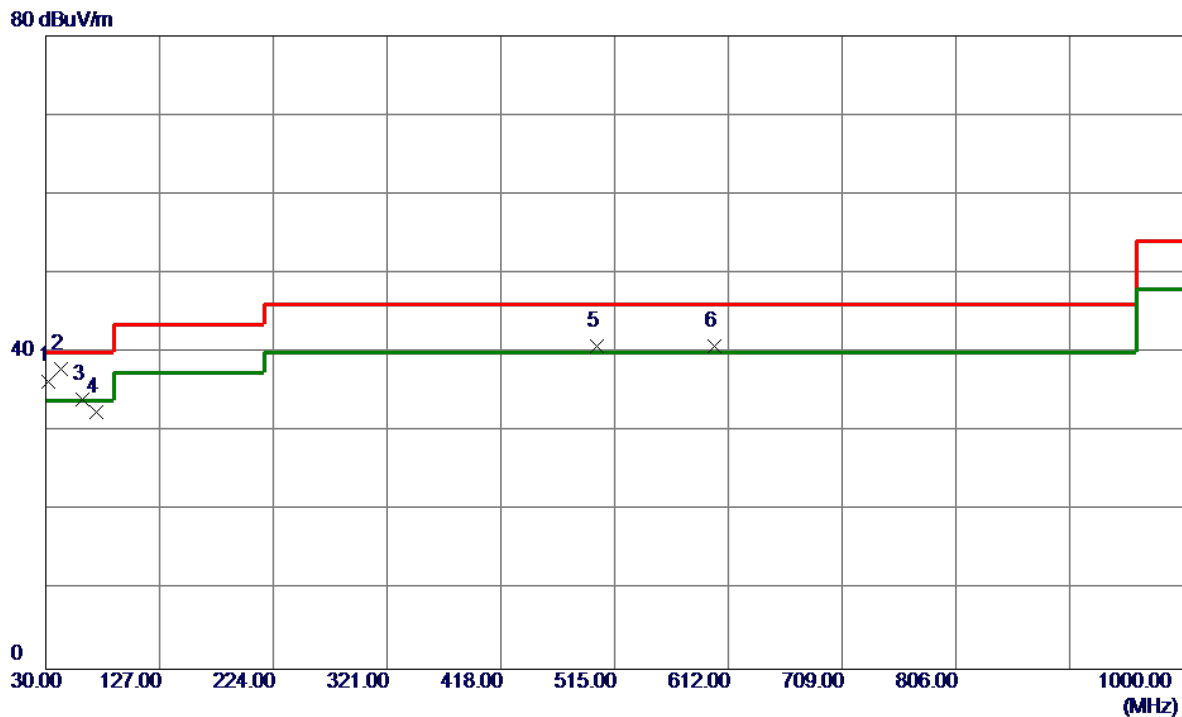
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	86.2600	46.85	-18.46	28.39	40.00	-11.61	QP	
2	142.5200	41.48	-14.04	27.44	43.50	-16.06	QP	
3	220.1200	41.57	-13.91	27.66	46.00	-18.34	QP	
4 *	400.0550	50.35	-11.36	38.99	46.00	-7.01	QP	
5	499.9650	43.54	-8.72	34.82	46.00	-11.18	QP	
6	599.8750	42.51	-6.42	36.09	46.00	-9.91	QP	

Test Mode: UNII-3/TX A Mode 5825MHz

Vertical

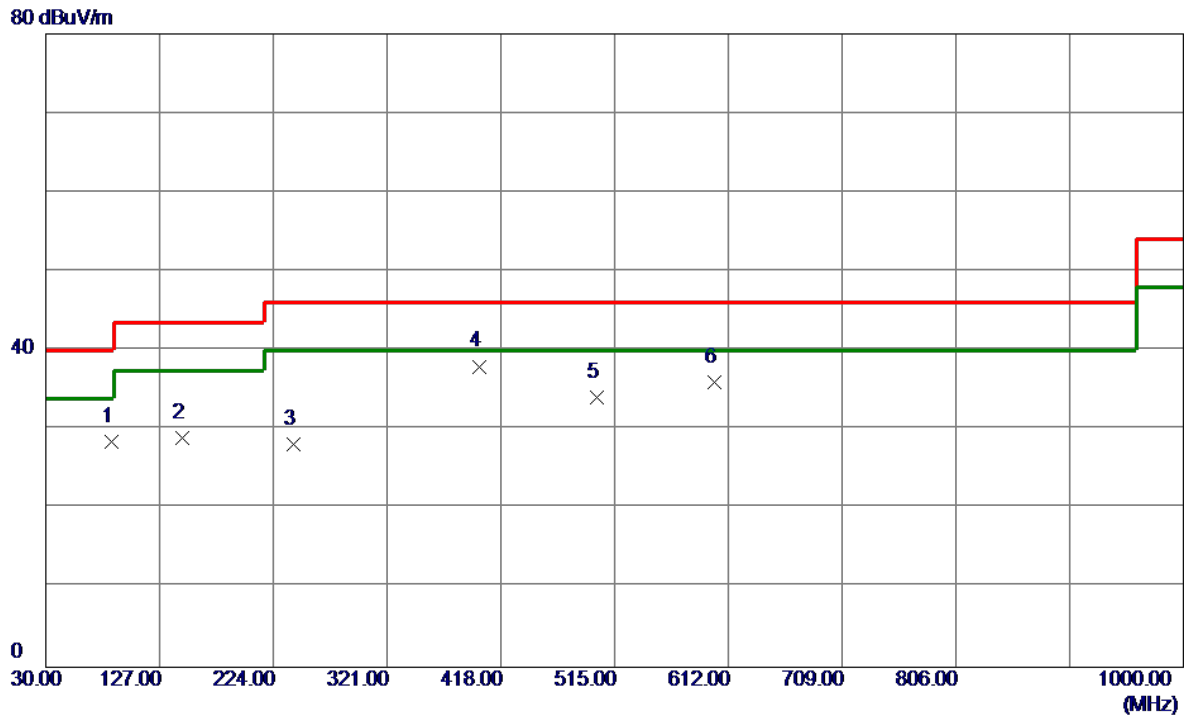


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	32.4250	51.36	-14.96	36.40	40.00	-3.60	QP	
2 *	42.6100	51.57	-13.60	37.97	40.00	-2.03	QP	
3	61.5250	48.62	-14.57	34.05	40.00	-5.95	QP	
4	73.1650	49.42	-16.88	32.54	40.00	-7.46	QP	
5	499.9650	49.46	-8.72	40.74	46.00	-5.26	QP	
6	599.8750	47.21	-6.42	40.79	46.00	-5.21	QP	



Test Mode: UNII-3/TX A Mode 5825MHz

### Horizontal



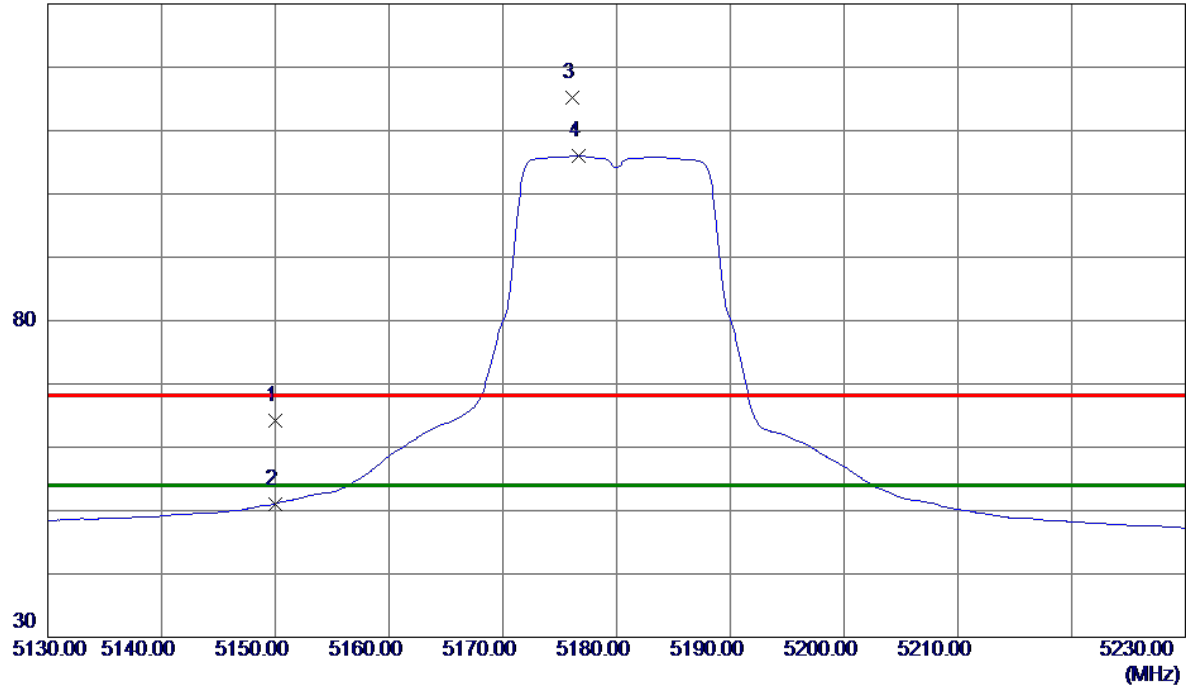
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	85.7750	46.99	-18.44	28.55	40.00	-11.45	QP	
2	146.8850	42.73	-13.74	28.99	43.50	-14.51	QP	
3	240.9750	42.50	-14.41	28.09	46.00	-17.91	QP	
4 *	400.0550	49.36	-11.36	38.00	46.00	-8.00	QP	
5	499.9650	42.86	-8.72	34.14	46.00	-11.86	QP	
6	599.8750	42.49	-6.42	36.07	46.00	-9.93	QP	

## APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

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

### Vertical

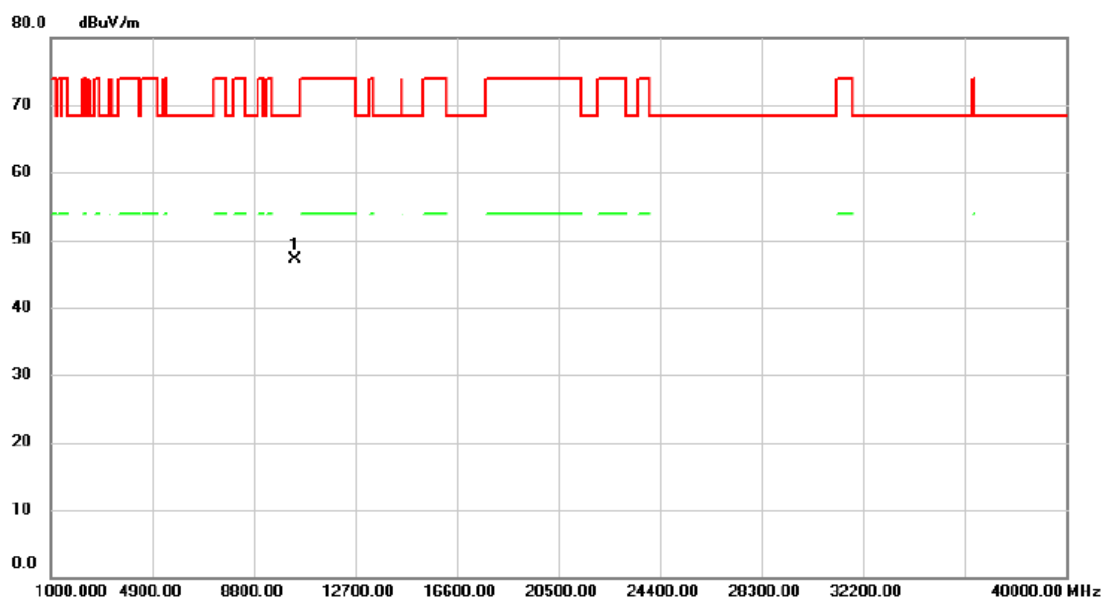
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	23.18	41.10	64.28	68.30	-4.02	Peak	
2	5150.0000	9.87	41.10	50.97	54.00	-3.03	AVG	
3	5176.1000	74.04	41.23	115.27	68.30	46.97	Peak	No Limit
4 *	5176.6500	64.72	41.24	105.96	54.00	51.96	AVG	No Limit

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

# Vertical

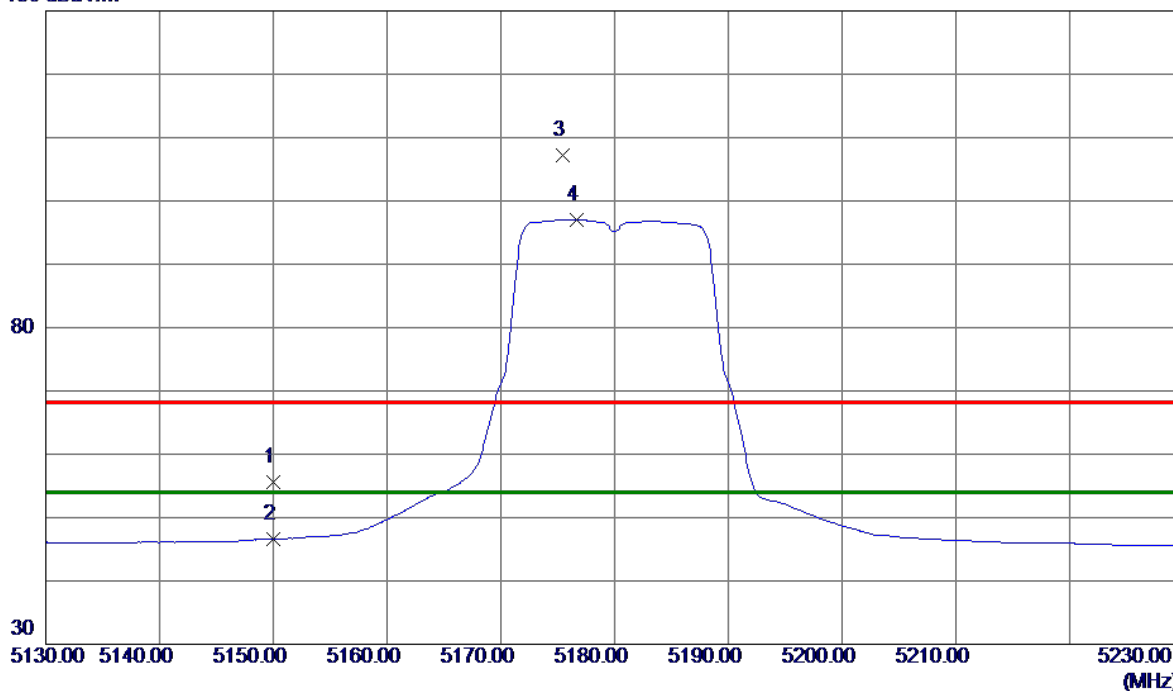


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10360.95	30.04	17.11	47.15	68.30	-21.15	peak	

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

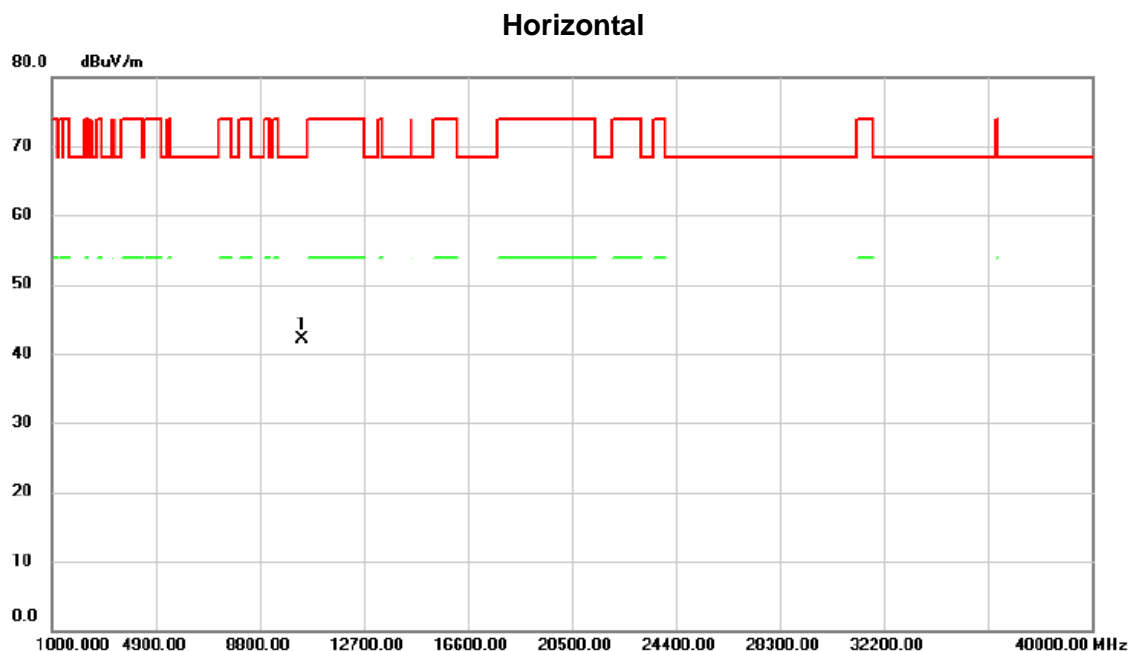
### Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	14.46	41.10	55.56	68.30	-12.74	Peak	
2	5150.0000	5.48	41.10	46.58	54.00	-7.42	AVG	
3	5175.4500	66.03	41.23	107.26	68.30	38.96	Peak	No Limit
4 *	5176.6500	55.78	41.24	97.02	54.00	43.02	AVG	No Limit

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

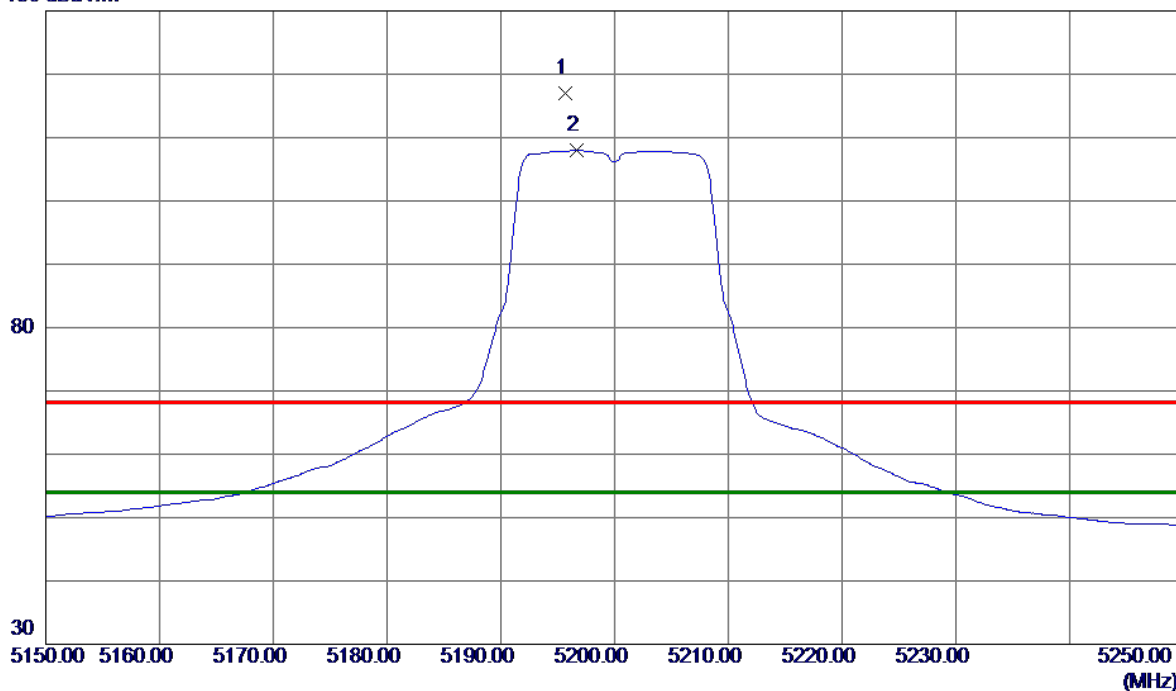


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10361.88	25.02	17.11	42.13	68.30	-26.17	peak	

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

### Vertical

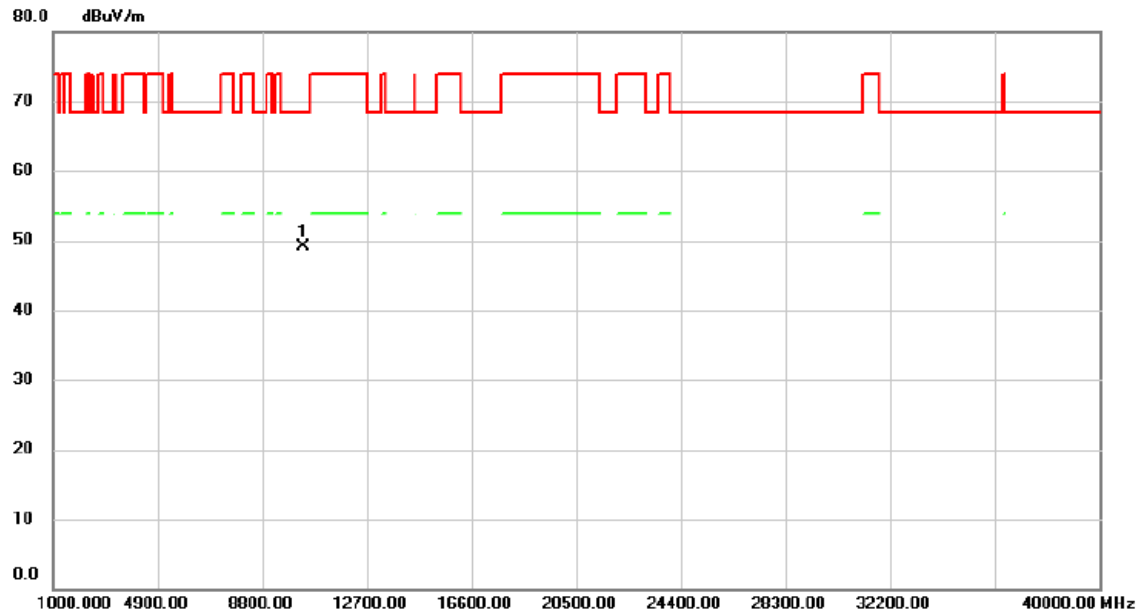
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5195.7000	75.74	41.33	117.07	68.30	48.77	Peak	No Limit
2 *	5196.6500	66.61	41.34	107.95	54.00	53.95	AVG	No Limit

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

### Vertical

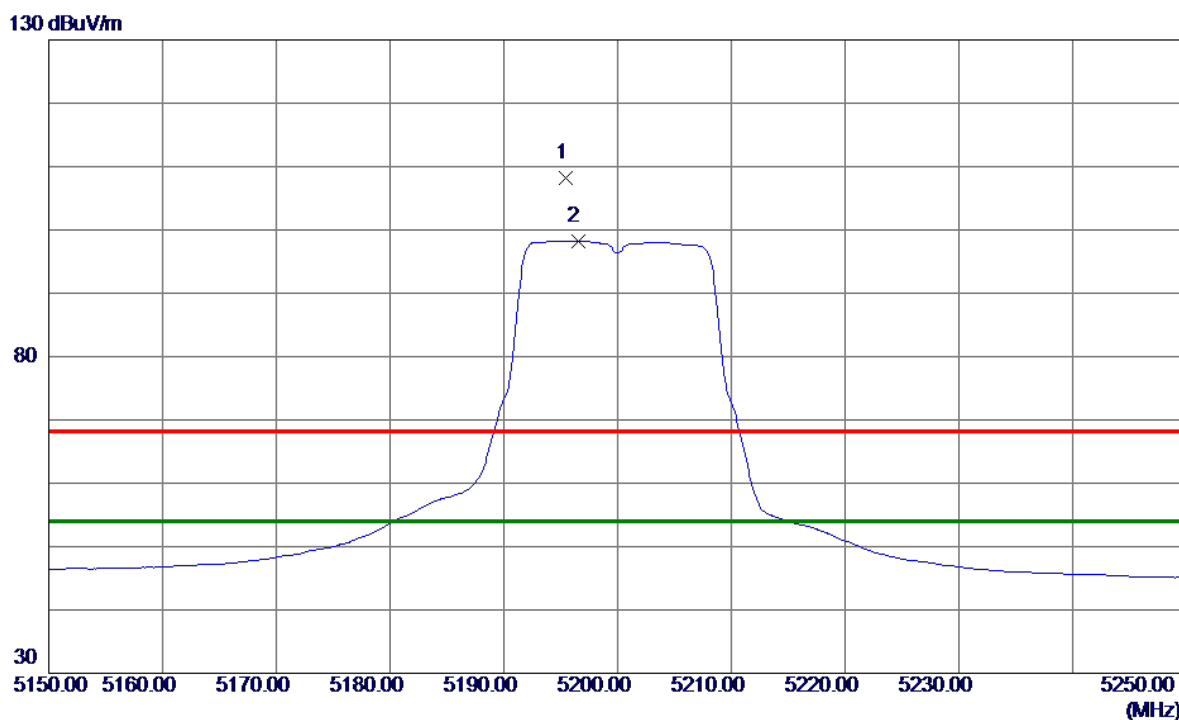


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10339.89	32.12	17.05	49.17	68.30	-19.13	peak	



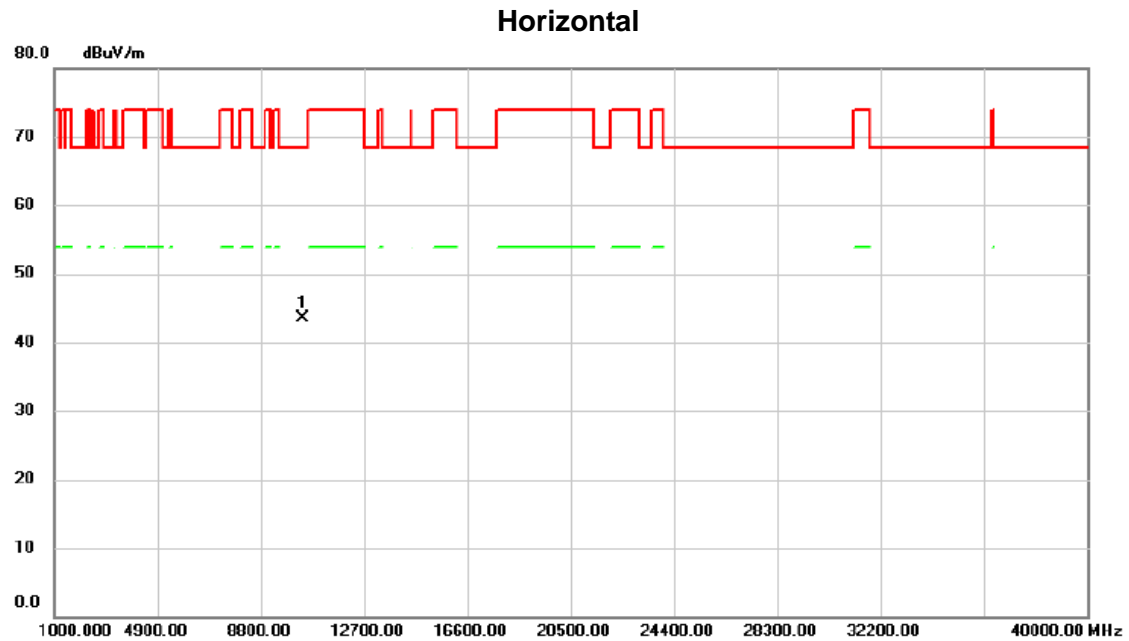
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5195.4500	66.91	41.33	108.24	68.30	39.94	Peak	No Limit
2 *	5196.5000	56.94	41.34	98.28	54.00	44.28	AVG	No Limit

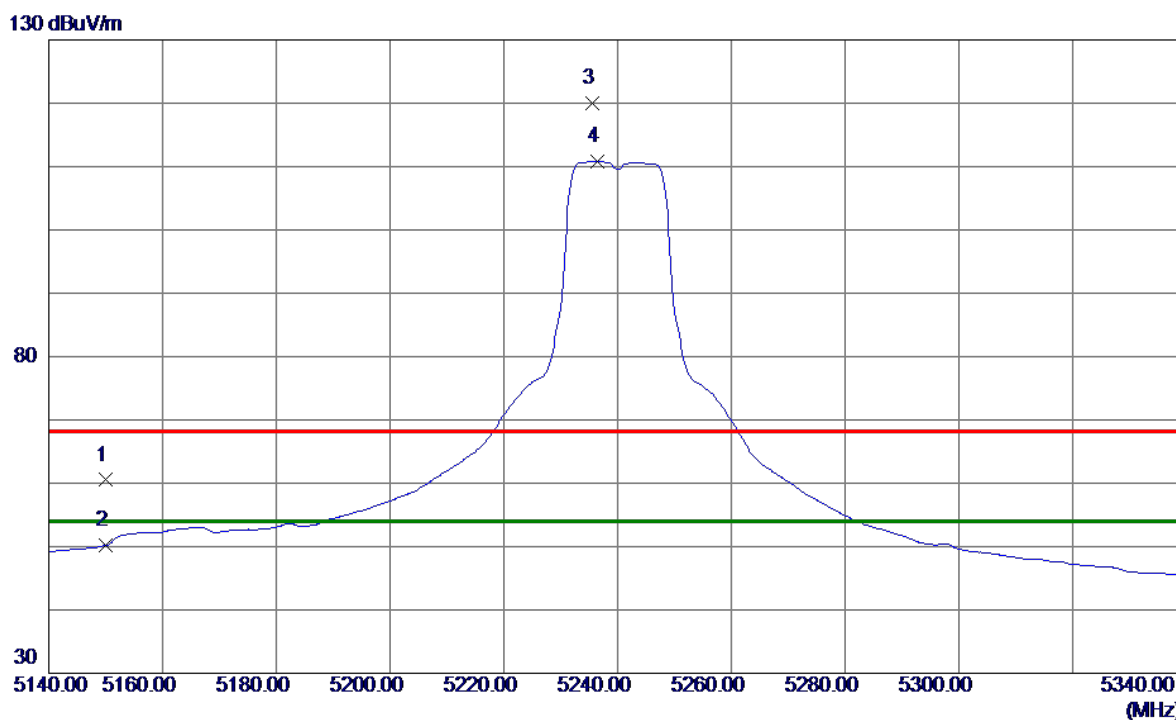
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10399.67	26.33	17.22	43.55	68.30	-24.75	peak	

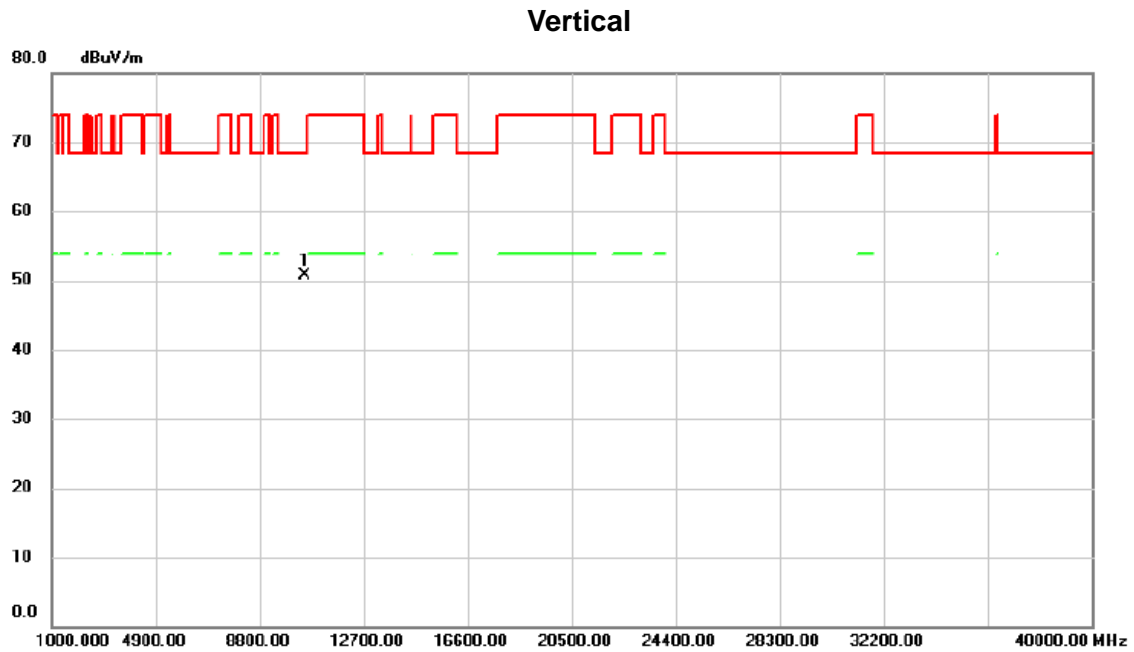
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.40	41.10	60.50	68.30	-7.80	Peak	
2	5150.0000	9.08	41.10	50.18	54.00	-3.82	AVG	
3	5235.5000	78.52	41.54	120.06	68.30	51.76	Peak	No Limit
4 *	5236.5000	69.28	41.54	110.82	54.00	56.82	AVG	No Limit

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

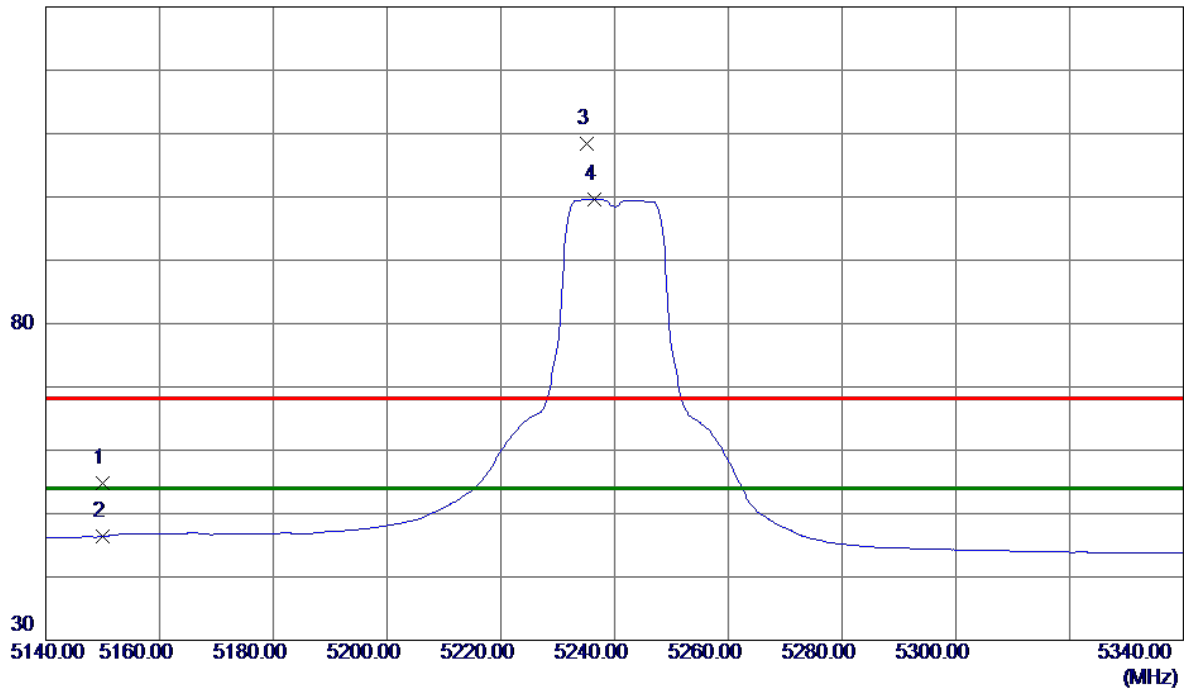


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.37	33.21	17.44	50.65	68.30	-17.65	peak	

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

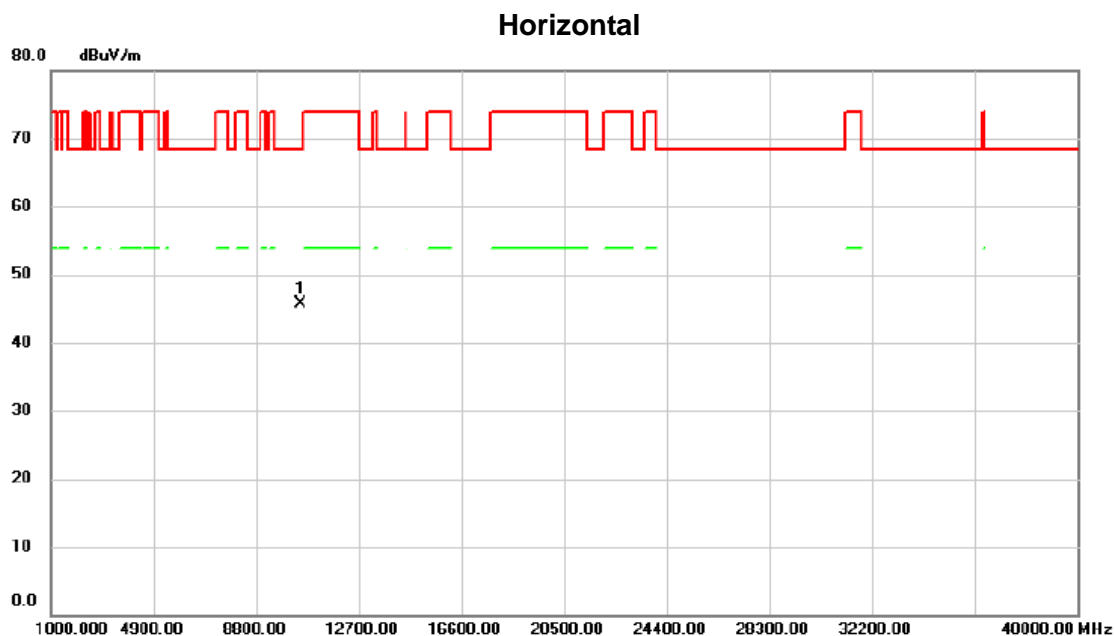
### Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	13.61	41.10	54.71	68.30	-13.59	Peak	
2	5150.0000	5.28	41.10	46.38	54.00	-7.62	AVG	
3	5235.1000	66.91	41.53	108.44	68.30	40.14	Peak	No Limit
4 *	5236.5000	58.14	41.54	99.68	54.00	45.68	AVG	No Limit

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

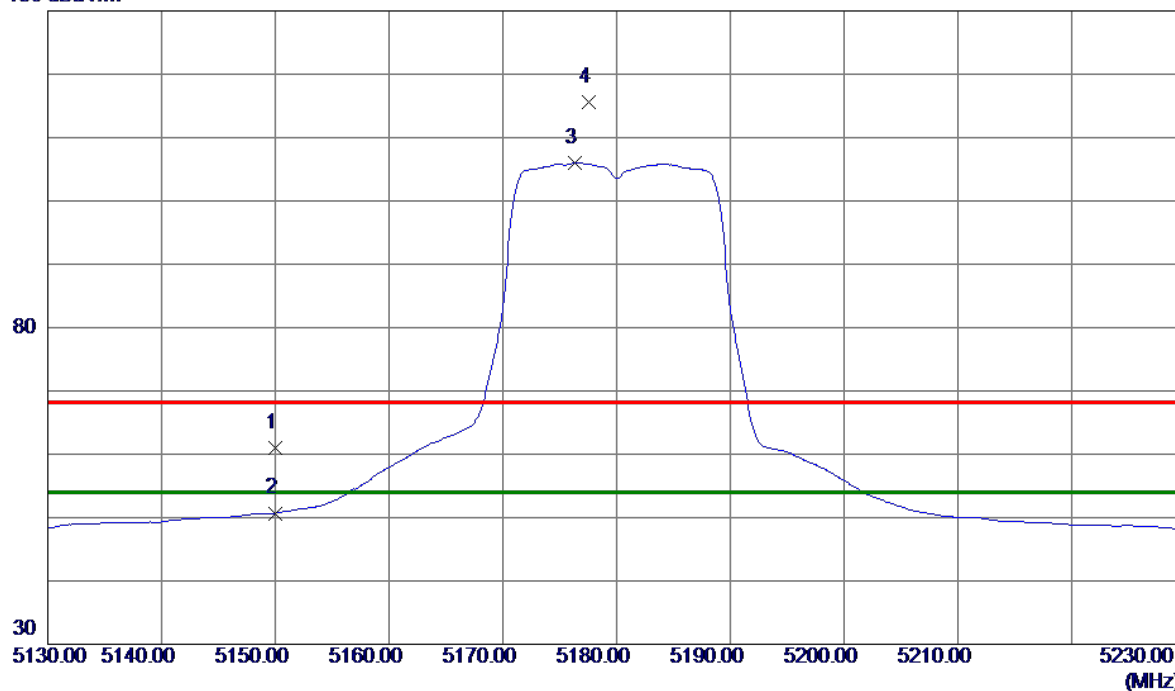


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10479.99	28.28	17.44	45.72	68.30	-22.58	peak	

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

### Vertical

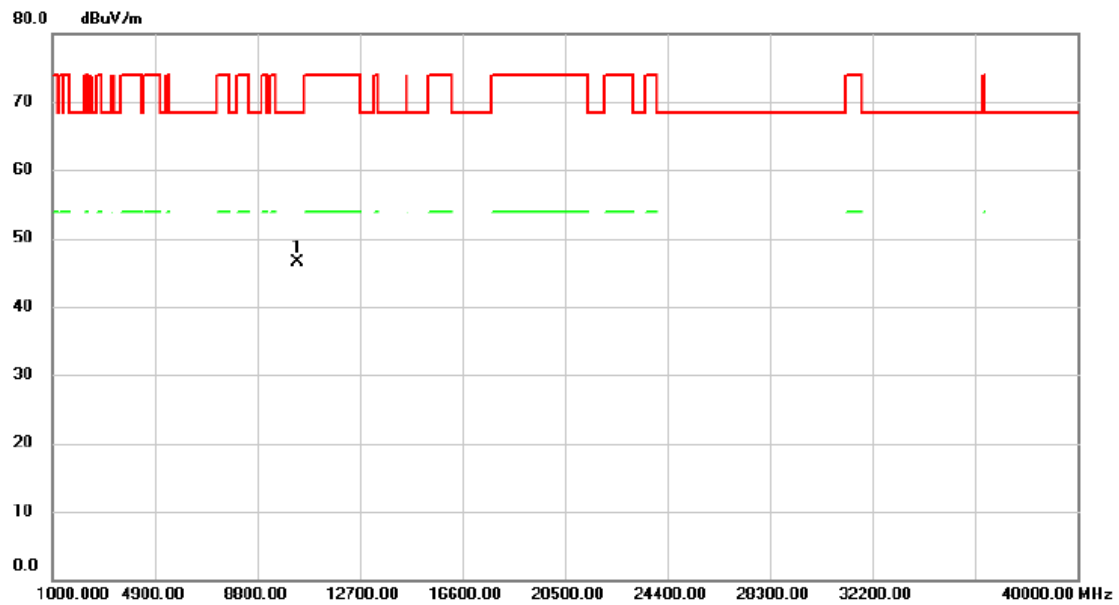
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.91	41.10	61.01	68.30	-7.29	Peak	
2	5150.0000	9.60	41.10	50.70	54.00	-3.30	AVG	
3 *	5176.3500	64.70	41.24	105.94	54.00	51.94	AVG	No Limit
4	5177.6000	74.41	41.24	115.65	68.30	47.35	Peak	No Limit

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

### Vertical

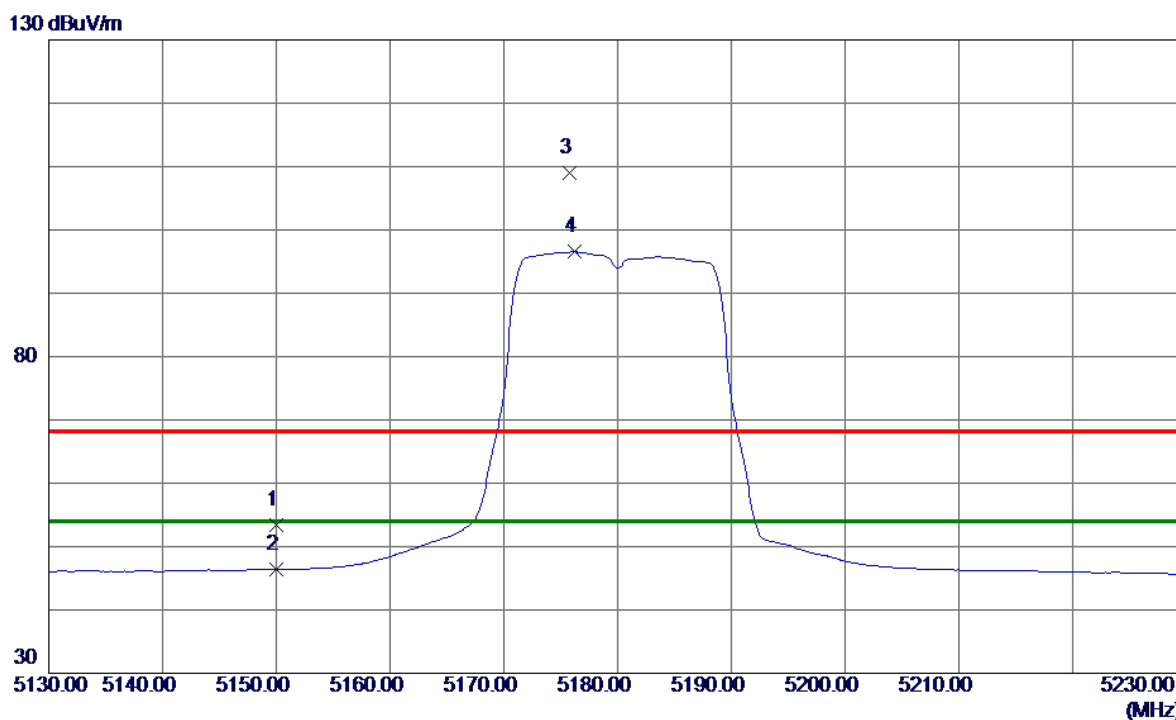


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10359.59	29.49	17.10	46.59	68.30	-21.71	peak	



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

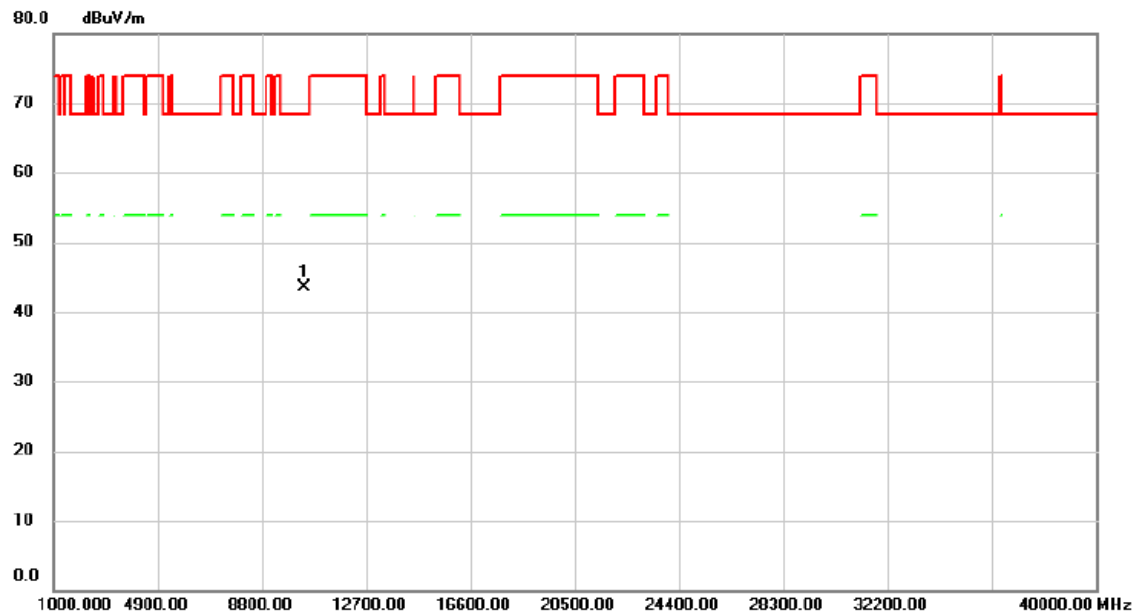
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	12.38	41.10	53.48	68.30	-14.82	Peak	
2	5150.0000	5.32	41.10	46.42	54.00	-7.58	AVG	
3	5175.7500	67.86	41.23	109.09	68.30	40.79	Peak	No Limit
4 *	5176.2000	55.33	41.23	96.56	54.00	42.56	AVG	No Limit

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

### Horizontal

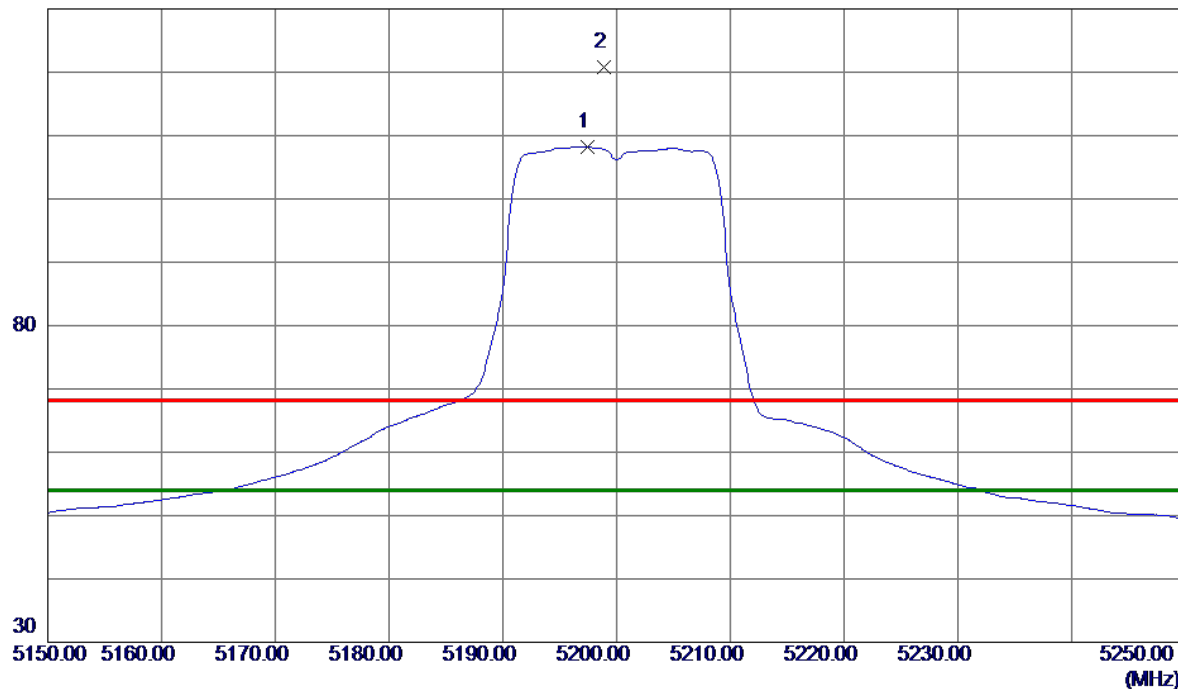


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10361.83	26.34	17.11	43.45	68.30	-24.85	peak	

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

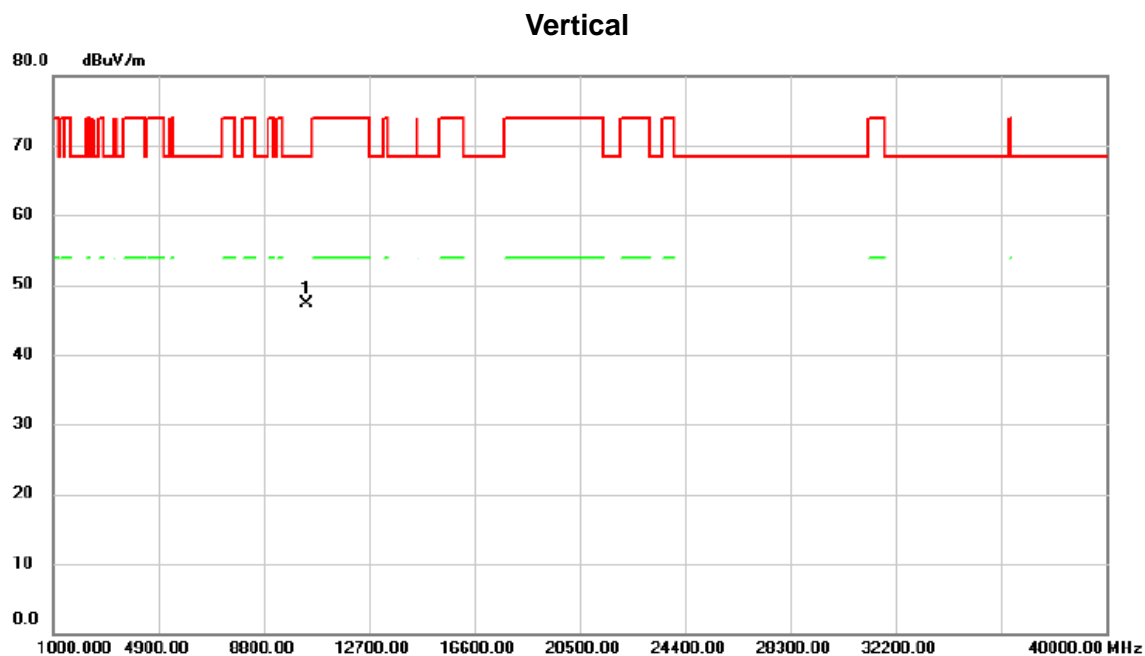
### Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5197.4000	66.86	41.34	108.20	54.00	54.20	AVG	No Limit
2	5198.8500	79.40	41.35	120.75	68.30	52.45	Peak	No Limit

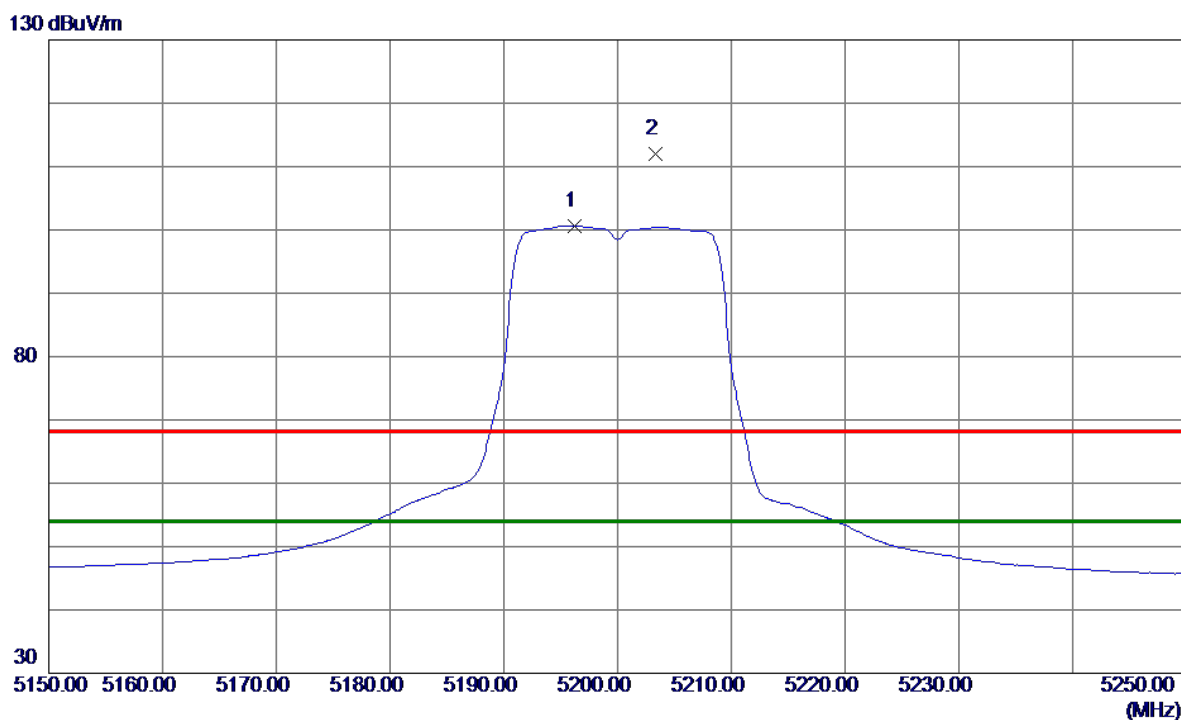
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10398.91	30.04	17.22	47.26	68.30	-21.04	peak	

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

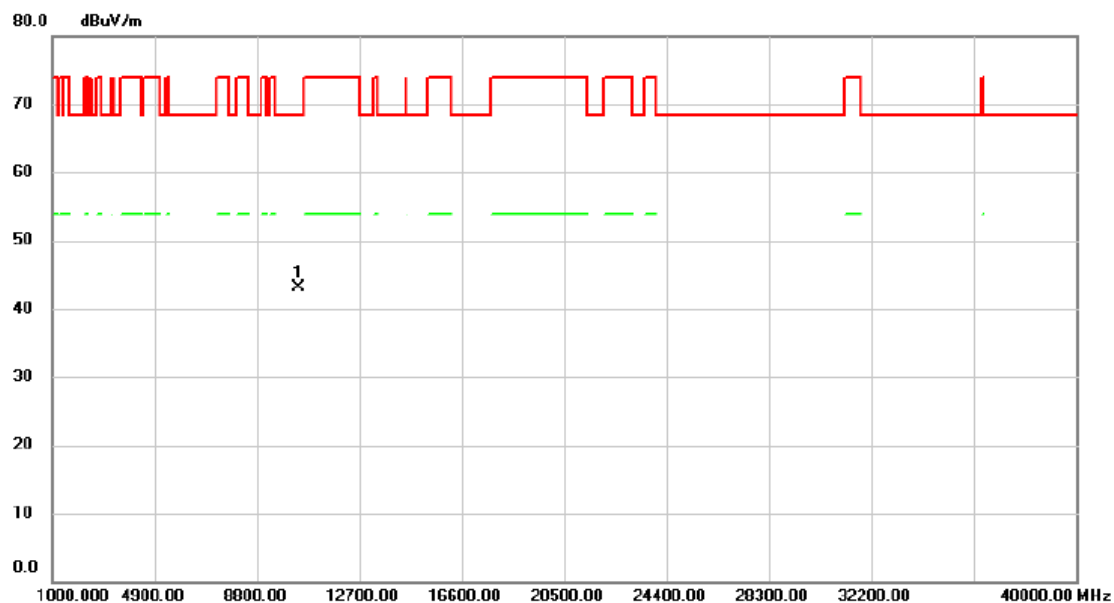
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5196.2500	59.33	41.34	100.67	54.00	46.67	AVG	No Limit
2	5203.3500	70.66	41.37	112.03	68.30	43.73	Peak	No Limit

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

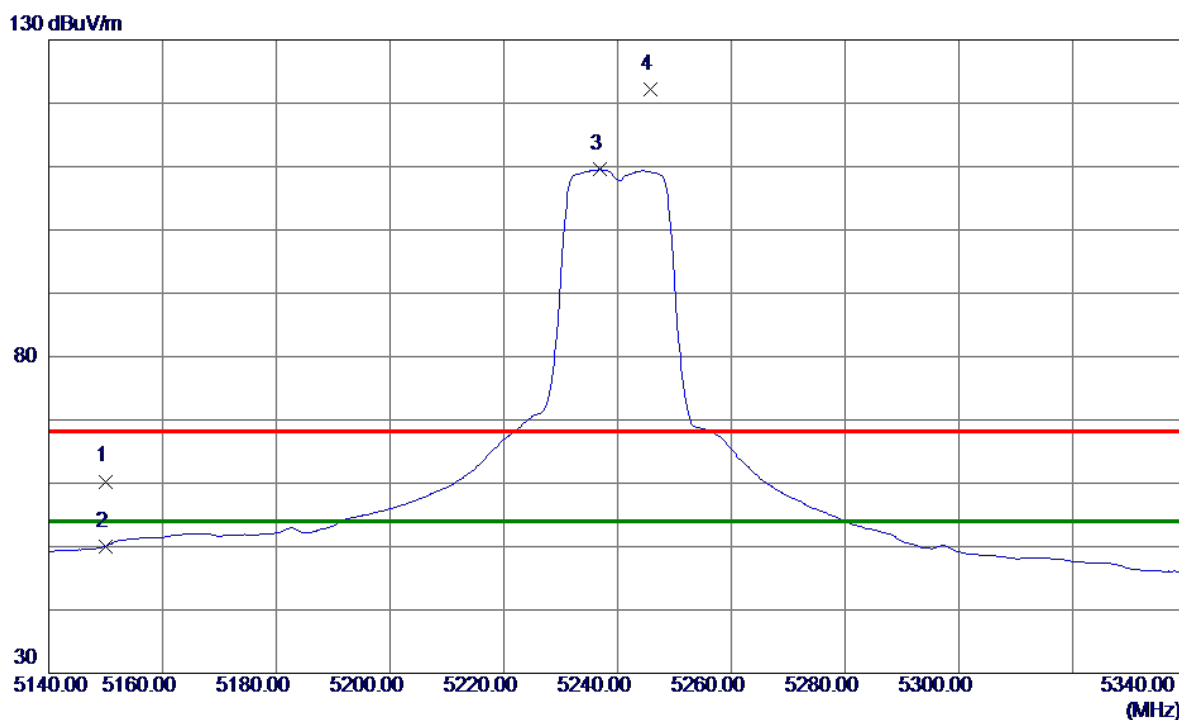
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10402.36	25.95	17.22	43.17	68.30	-25.13	peak	

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

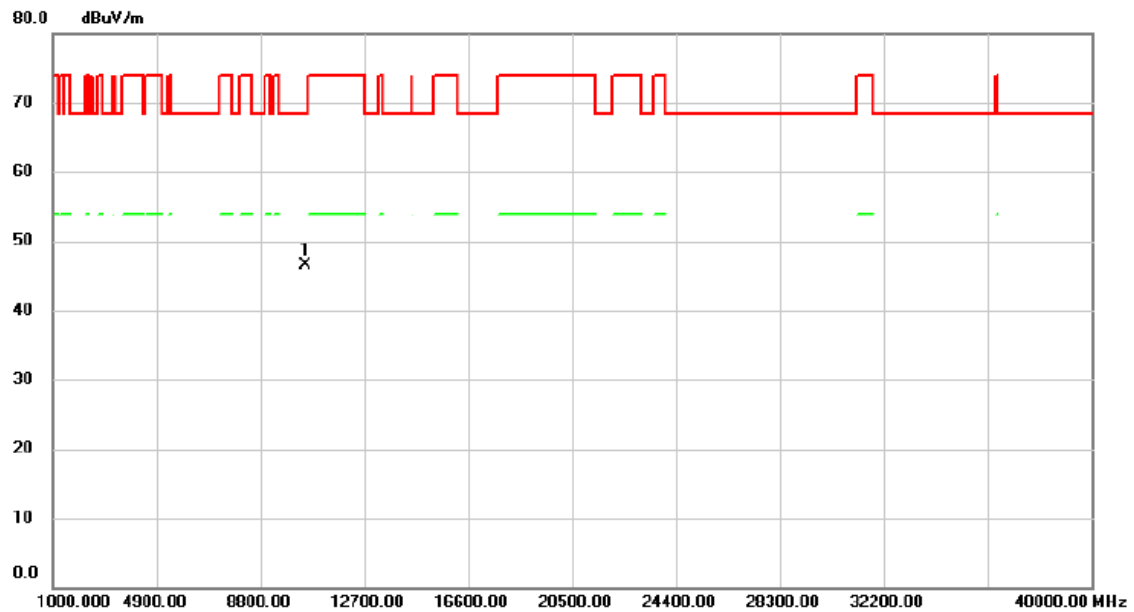
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.20	41.10	60.30	68.30	-8.00	Peak	
2	5150.0000	8.91	41.10	50.01	54.00	-3.99	AVG	
3 *	5236.9000	68.00	41.54	109.54	54.00	55.54	AVG	No Limit
4	5245.8000	80.54	41.59	122.13	68.30	53.83	Peak	No Limit

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

### Vertical

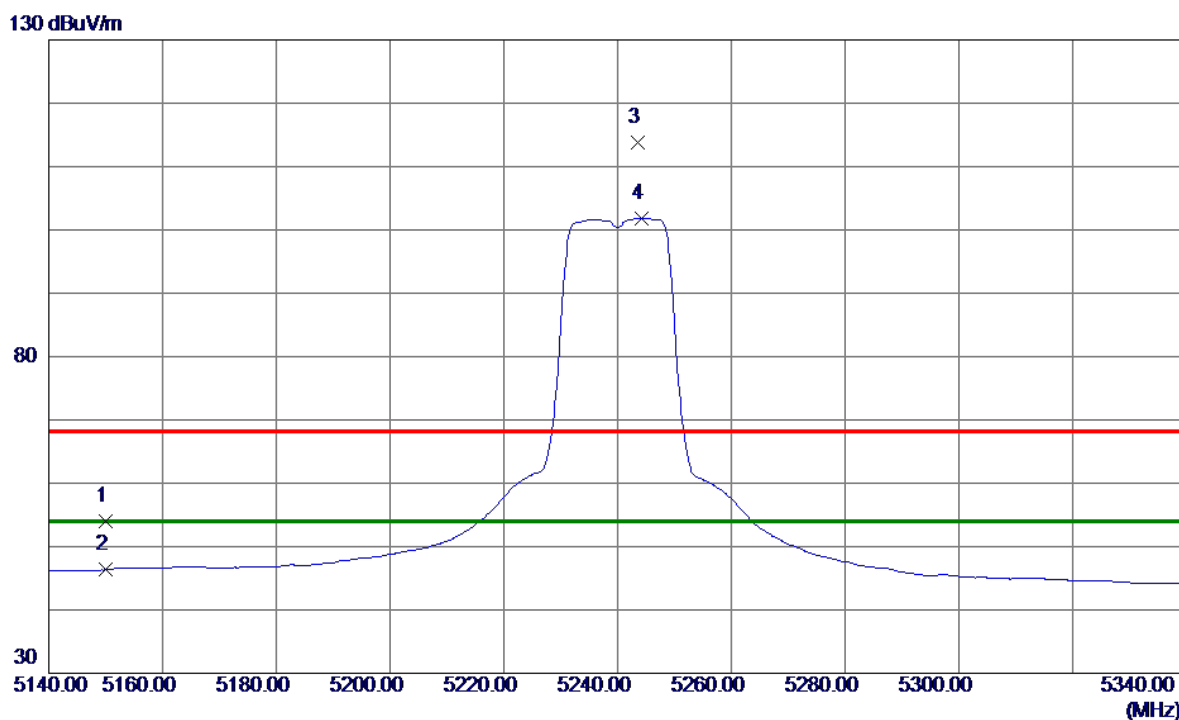


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10479.65	29.15	17.44	46.59	68.30	-21.71	peak	



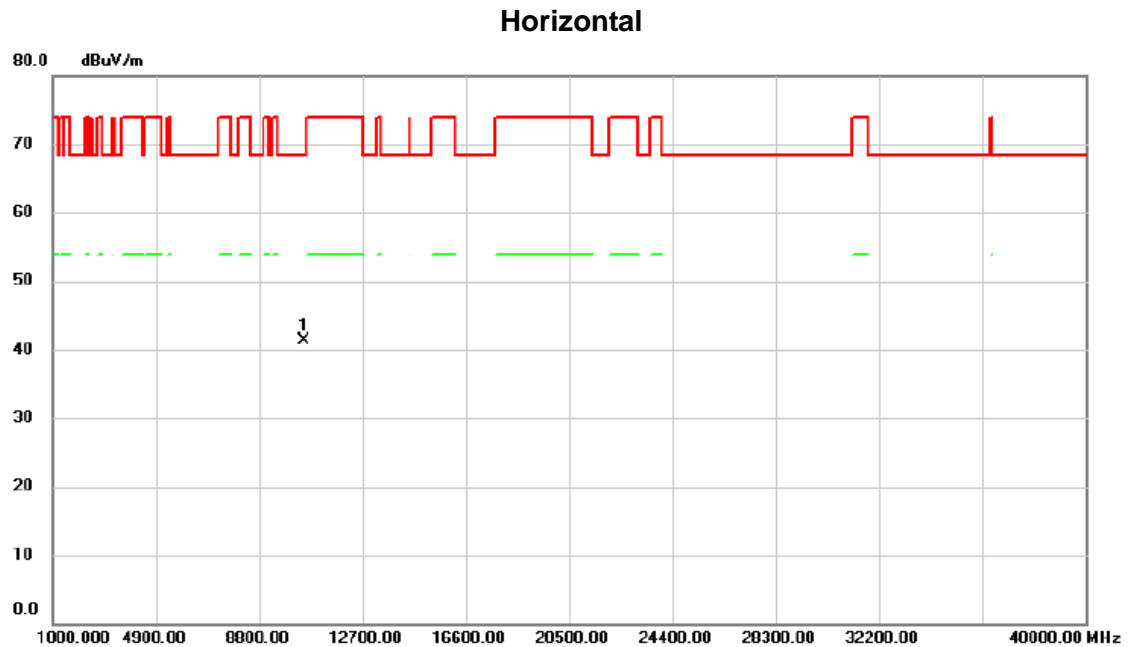
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	12.91	41.10	54.01	68.30	-14.29	Peak	
2	5150.0000	5.23	41.10	46.33	54.00	-7.67	AVG	
3	5243.5000	72.19	41.58	113.77	68.30	45.47	Peak	No Limit
4 *	5244.3000	60.30	41.58	101.88	54.00	47.88	AVG	No Limit

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

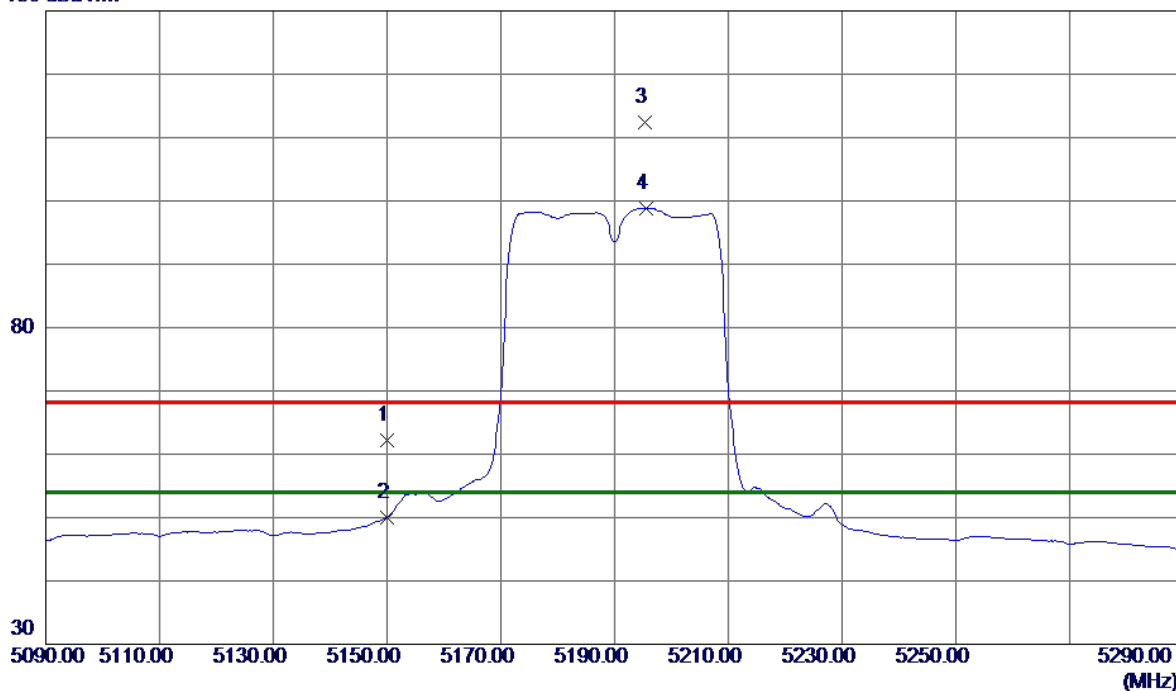


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10478.36	23.97	17.43	41.40	68.30	-26.90	peak	

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

### Vertical

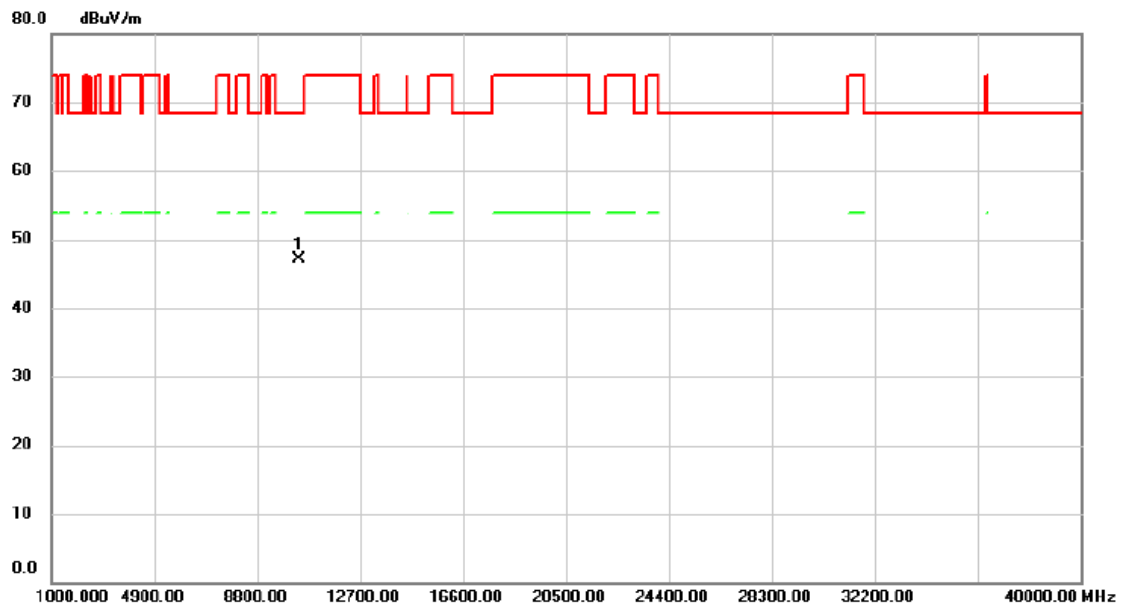
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.14	41.10	62.24	68.30	-6.06	Peak	
2	5150.0000	8.89	41.10	49.99	54.00	-4.01	AVG	
3	5195.4000	71.13	41.33	112.46	68.30	44.16	Peak	No Limit
4 *	5195.6000	57.48	41.33	98.81	54.00	44.81	AVG	No Limit

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

### Vertical

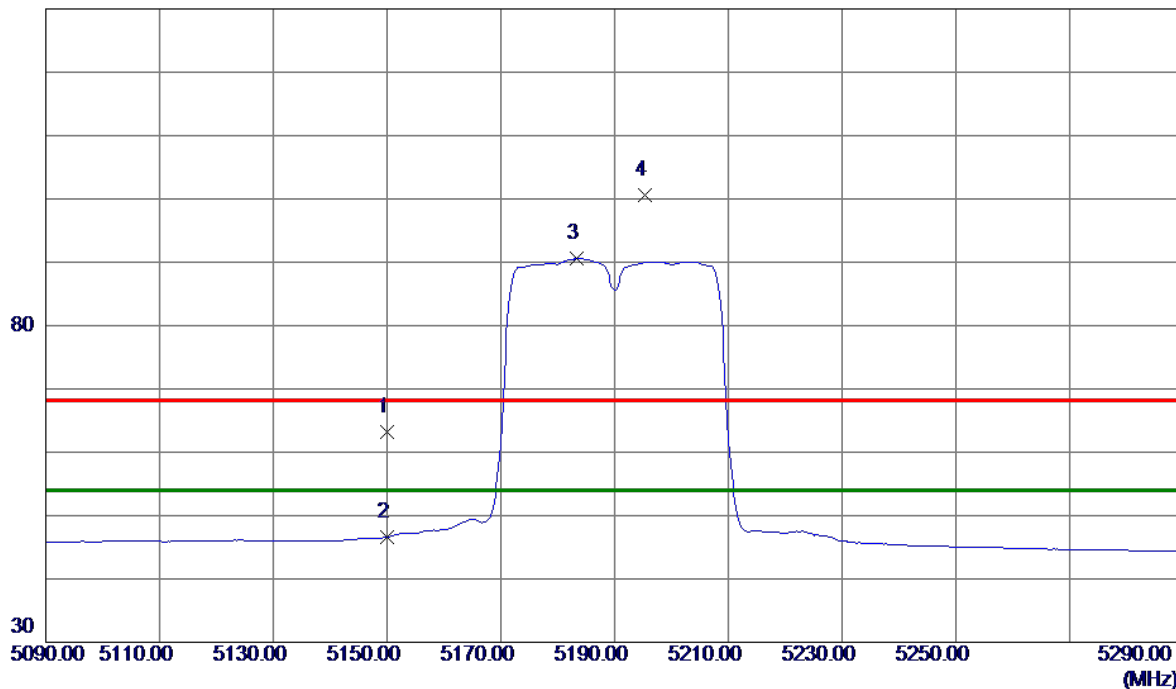


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10379.27	30.01	17.16	47.17	68.30	-21.13	peak	

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

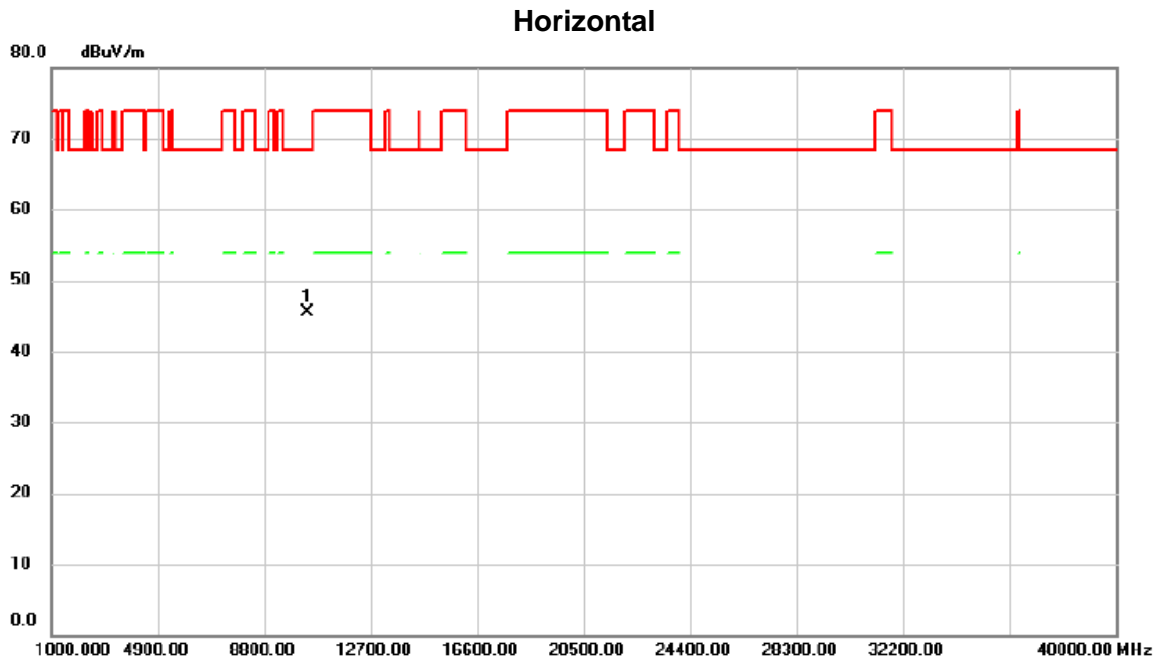
### Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.16	41.10	63.26	68.30	-5.04	Peak	
2	5150.0000	5.49	41.10	46.59	54.00	-7.41	AVG	
3 *	5183.4000	49.28	41.27	90.55	54.00	36.55	AVG	No Limit
4	5195.4000	59.22	41.33	100.55	68.30	32.25	Peak	No Limit

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

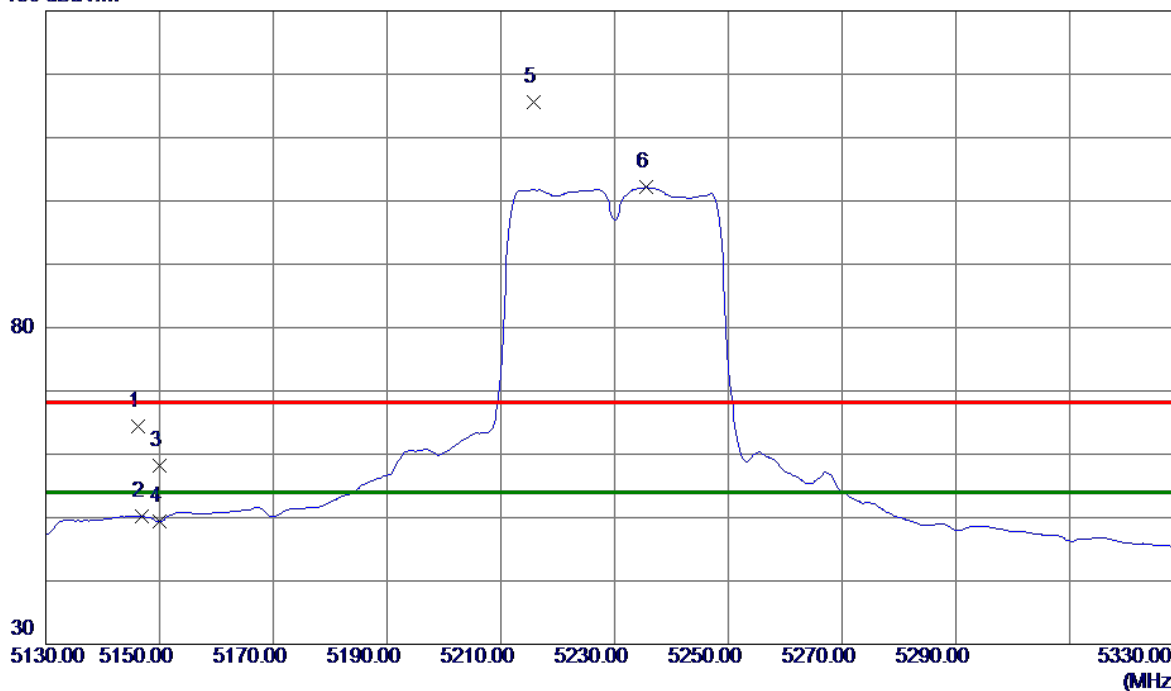


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.76	28.35	17.16	45.51	68.30	-22.79	peak	

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

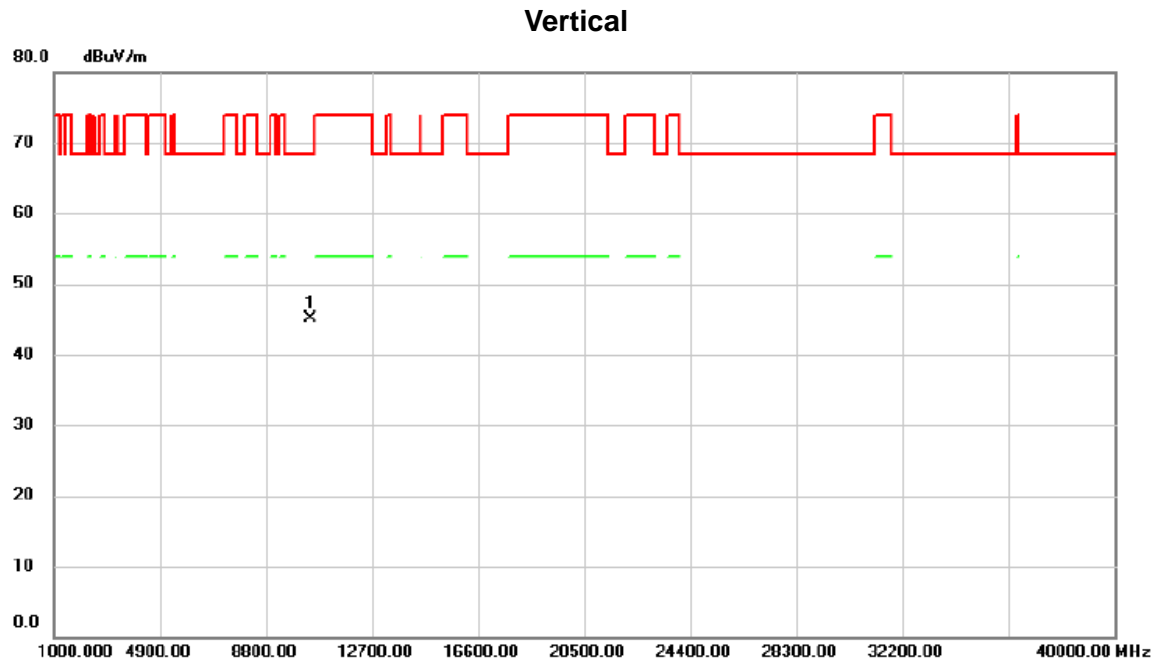
# Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5146.3000	23.34	41.08	64.42	68.30	-3.88	Peak	
2	5146.9000	9.08	41.09	50.17	54.00	-3.83	AVG	
3	5150.0000	17.11	41.10	58.21	68.30	-10.09	Peak	
4	5150.0000	8.23	41.10	49.33	54.00	-4.67	AVG	
5	5215.8000	74.24	41.44	115.68	68.30	47.38	Peak	No Limit
6 *	5235.6000	60.60	41.54	102.14	54.00	48.14	AVG	No Limit

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



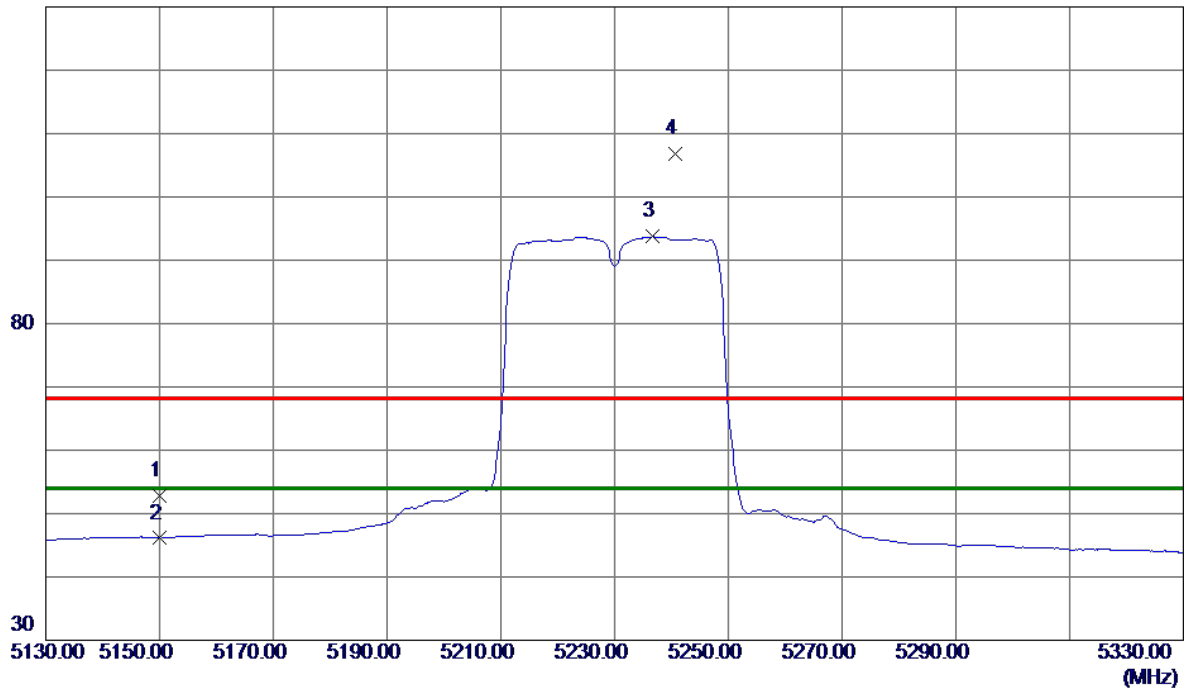
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10458.58	27.78	17.39	45.17	68.30	-23.13	peak	



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

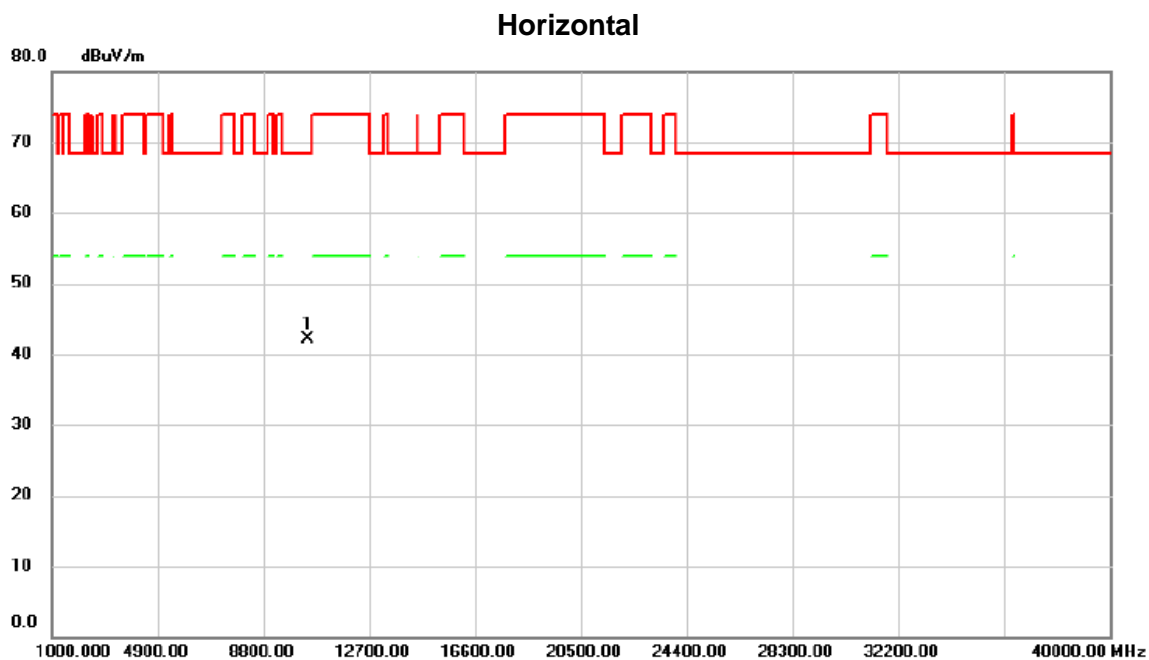
### Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	11.68	41.10	52.78	68.30	-15.52	Peak	
2	5150.0000	5.00	41.10	46.10	54.00	-7.90	AVG	
3 *	5236.7000	52.17	41.54	93.71	54.00	39.71	AVG	No Limit
4	5240.7000	65.27	41.56	106.83	68.30	38.53	Peak	No Limit

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

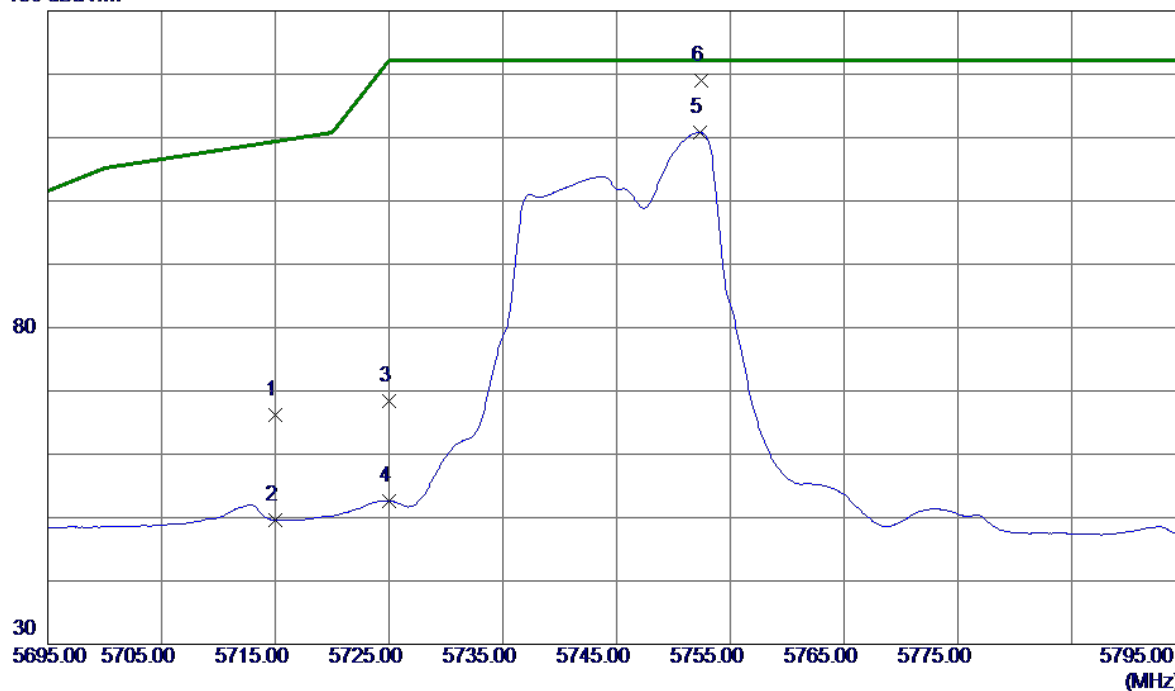


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10462.30	24.72	17.39	42.11	68.30	-26.19	peak	

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

### Vertical

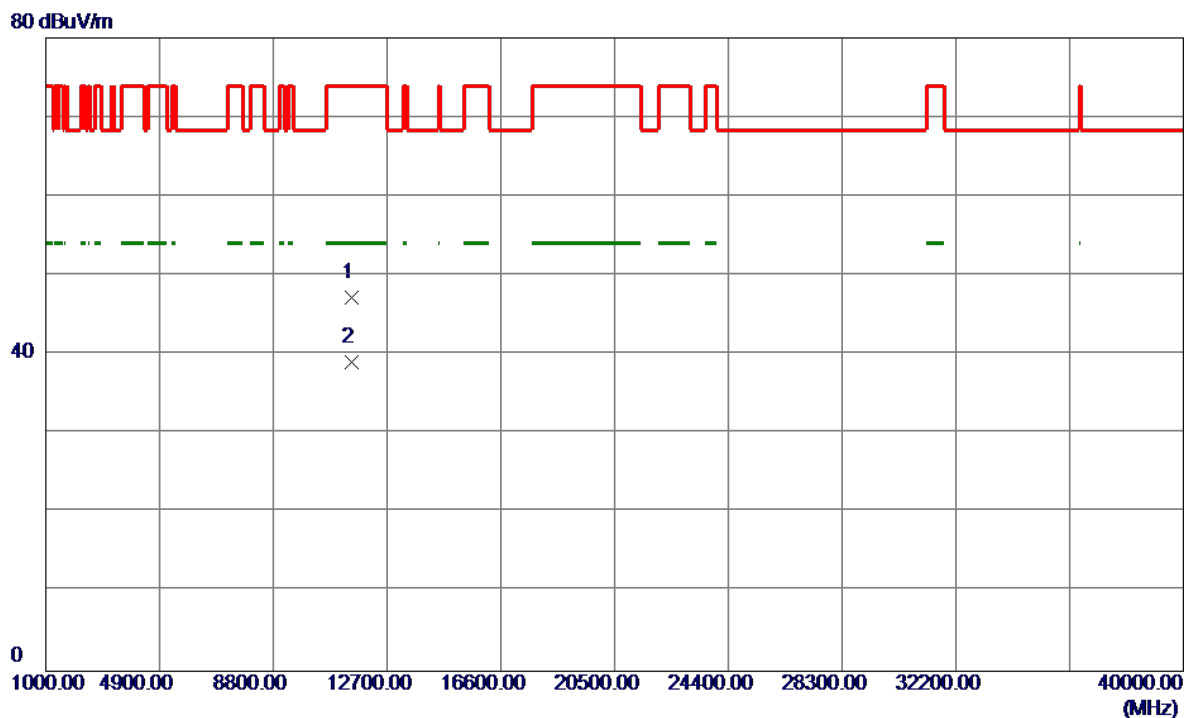
130 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	22.72	43.53	66.25	109.40	-43.15	Peak	
2	5715.0000	6.10	43.53	49.63	109.40	-59.77	AVG	
3	5725.0000	24.77	43.56	68.33	122.20	-53.87	Peak	
4	5725.0000	9.05	43.56	52.61	122.20	-69.59	AVG	
5	5752.3500	67.14	43.64	110.78	122.20	-11.42	AVG	
6 *	5752.4500	75.37	43.64	119.01	122.20	-3.19	Peak	

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

### Vertical

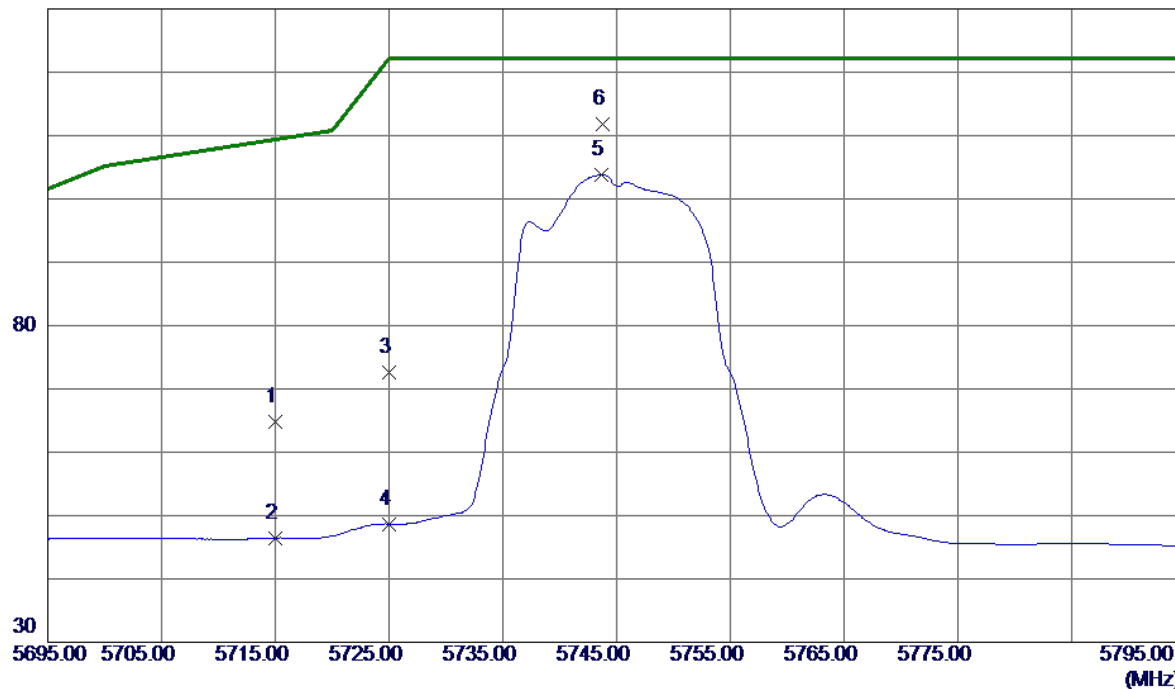


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	11488.6529	29.03	18.19	47.22	74.00	-26.78	Peak	
2 *	11491.5000	20.81	18.20	39.01	54.00	-14.99	AVG	

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

### Horizontal

130 dBuV/m

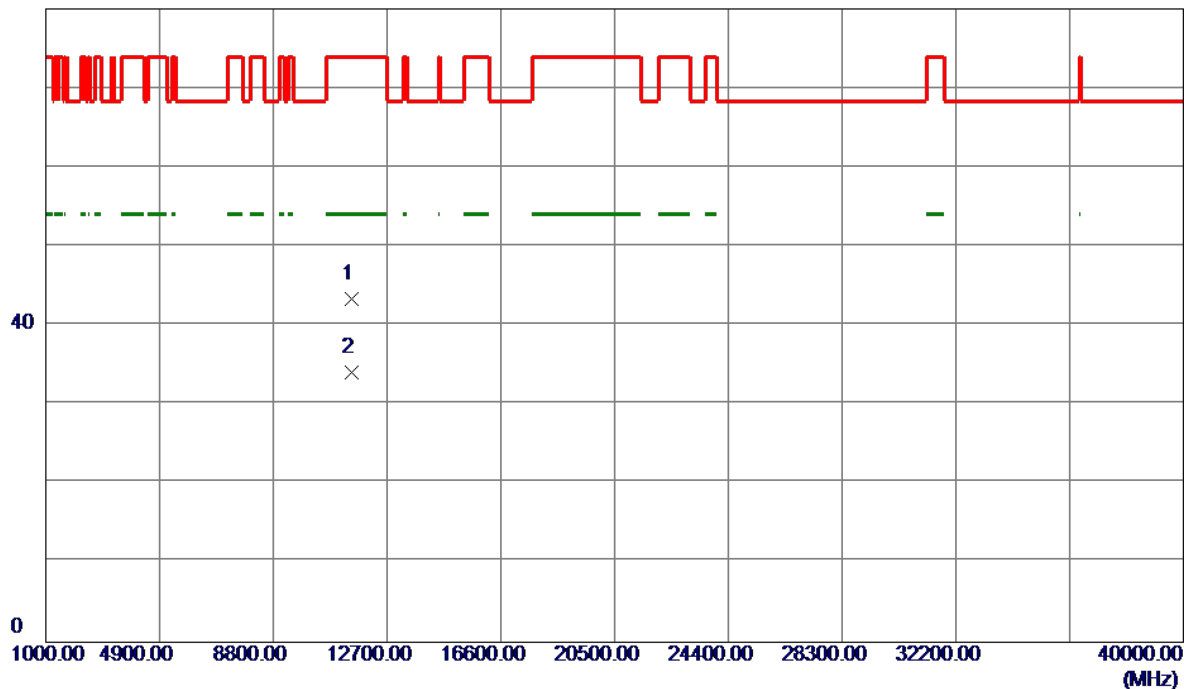


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	21.25	43.53	64.78	109.40	-44.62	Peak	
2	5715.0000	2.94	43.53	46.47	109.40	-62.93	AVG	
3	5725.0000	28.96	43.56	72.52	122.20	-49.68	Peak	
4	5725.0000	5.13	43.56	48.69	122.20	-73.51	AVG	
5	5743.7000	60.16	43.62	103.78	122.20	-18.42	AVG	
6 *	5743.8000	68.20	43.62	111.82	122.20	-10.38	Peak	

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

### Horizontal

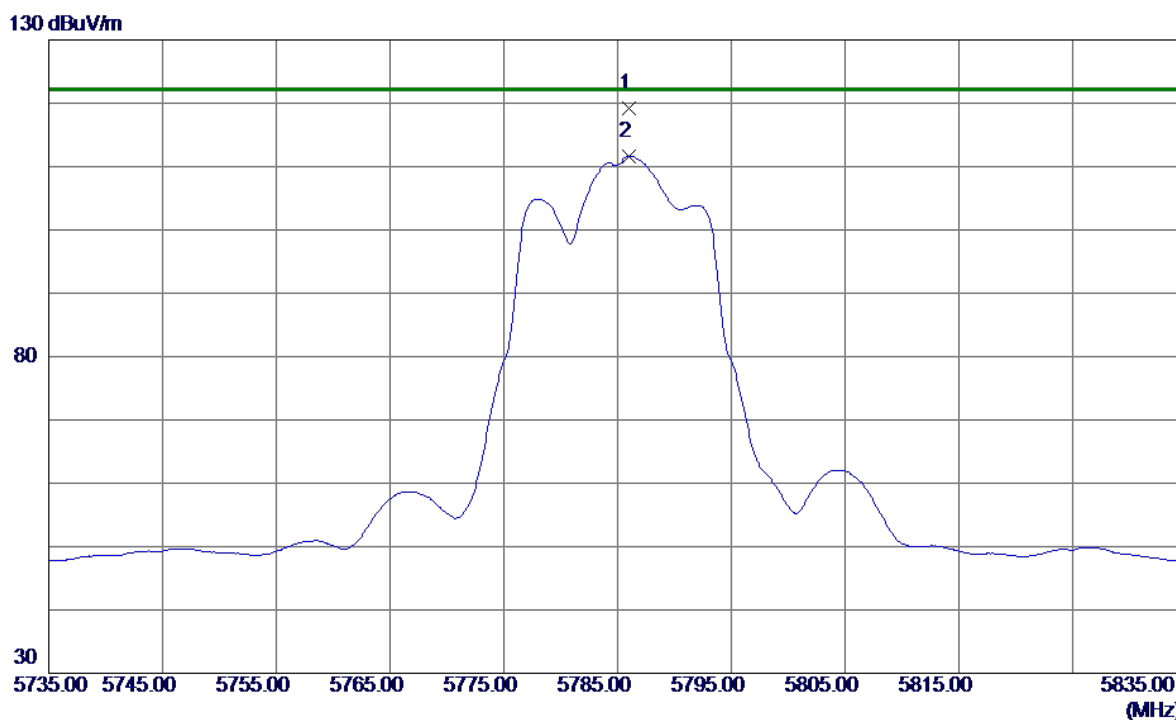
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11491.1289	25.21	18.20	43.41	74.00	-30.59	Peak	
2 *	11491.2089	15.87	18.20	34.07	54.00	-19.93	AVG	

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

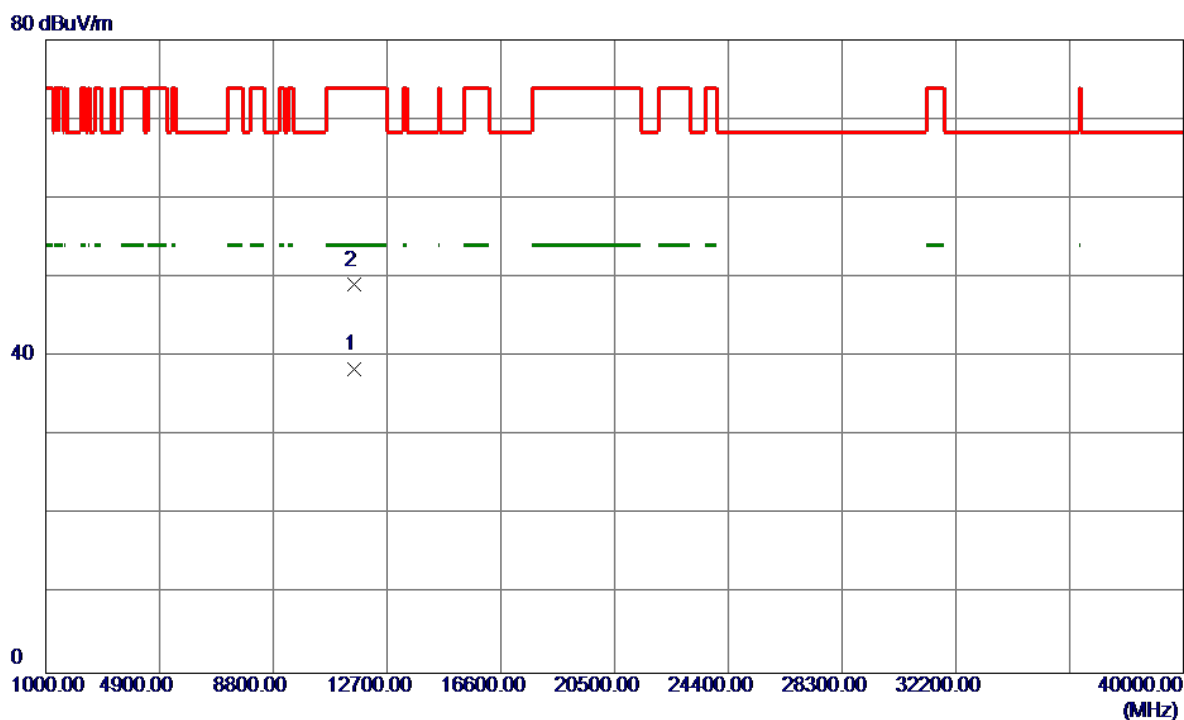
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5785.9500	75.41	43.74	119.15	122.20	-3.05	Peak	
2	5786.0500	67.90	43.74	111.64	122.20	-10.56	AVG	

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

### Vertical



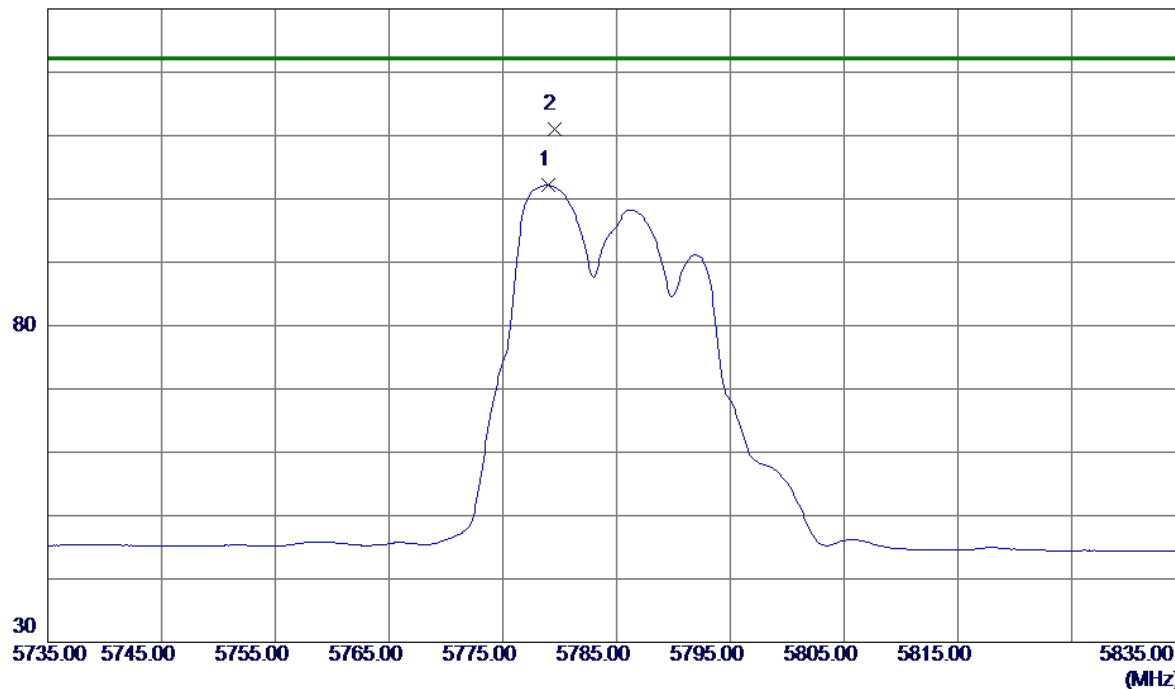
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11569.5490	20.19	18.20	38.39	54.00	-15.61	AVG	
2	11570.7370	30.84	18.20	49.04	74.00	-24.96	Peak	



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

### Horizontal

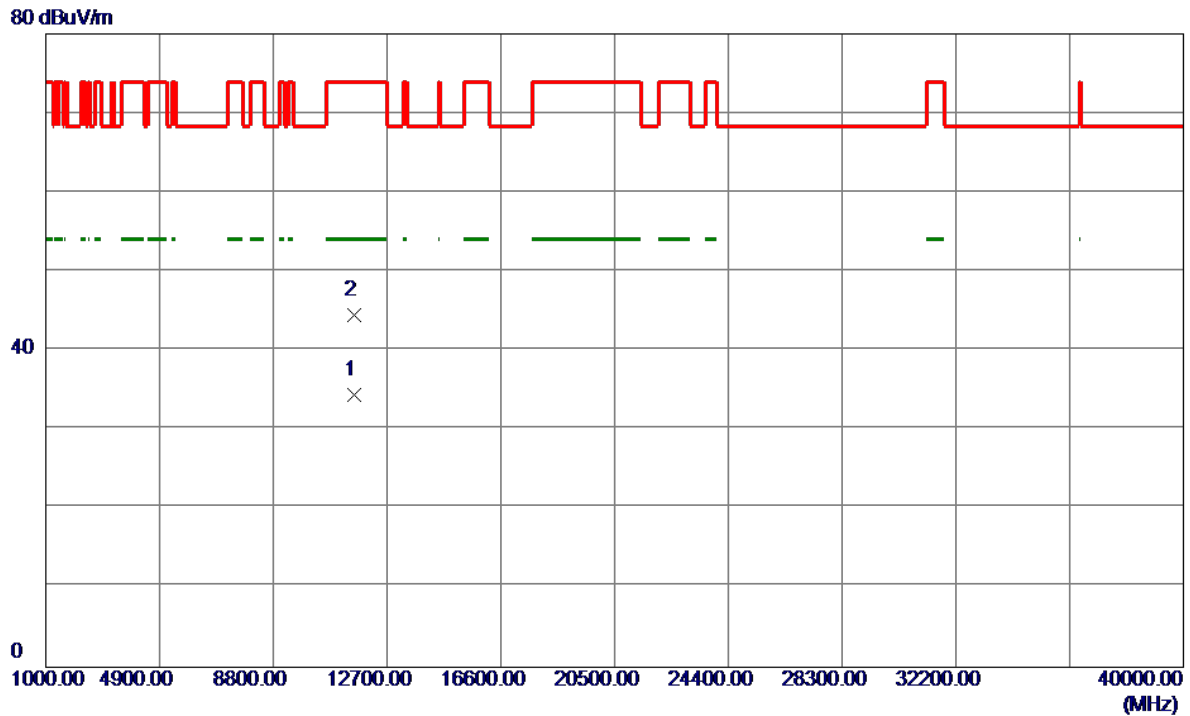
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5778.9500	58.41	43.72	102.13	122.20	-20.07	AVG	
2 *	5779.5000	67.31	43.72	111.03	122.20	-11.17	Peak	

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

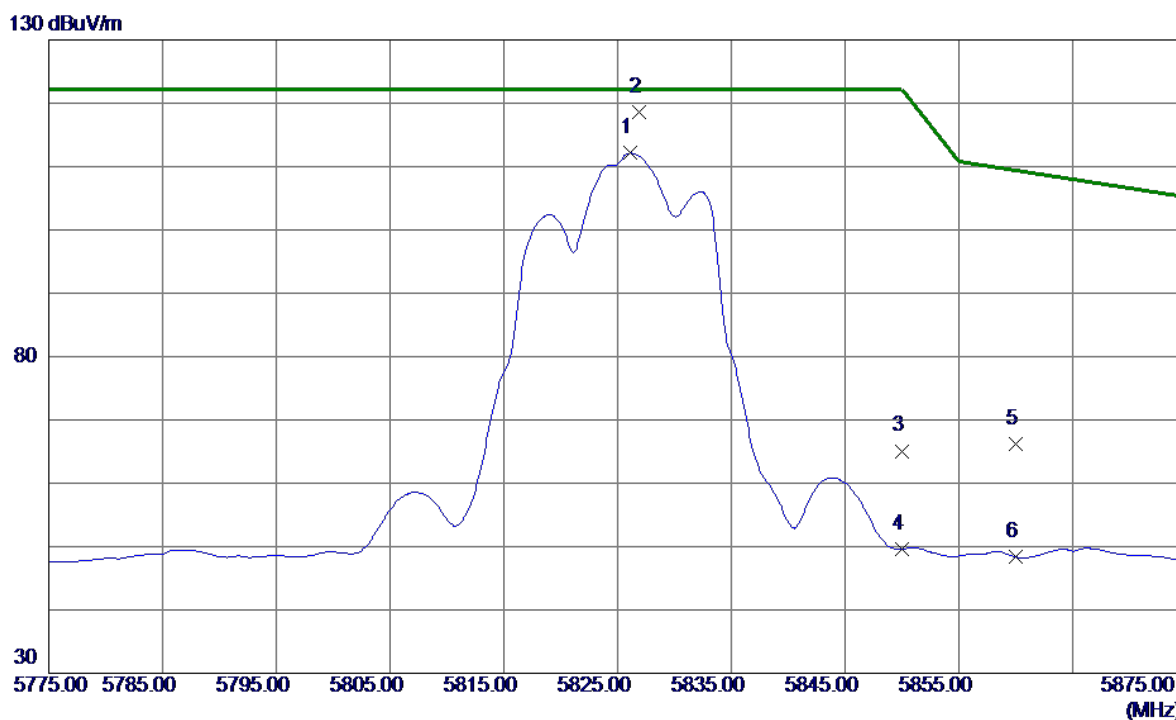
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11568.6470	16.20	18.20	34.40	54.00	-19.60	AVG	
2	11571.2060	26.22	18.20	44.42	74.00	-29.58	Peak	

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

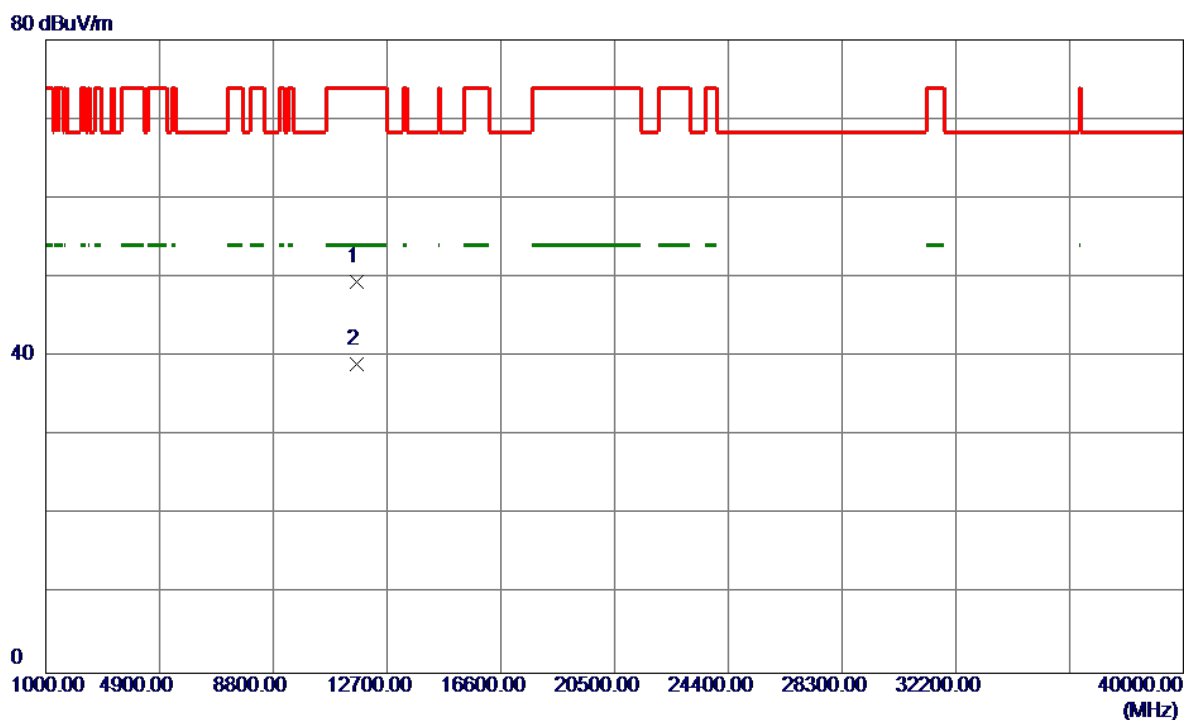
# Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5826.1500	68.25	43.86	112.11	122.20	-10.09	AVG	
2 *	5826.8500	74.69	43.87	118.56	122.20	-3.64	Peak	
3	5850.0000	21.16	43.94	65.10	122.20	-57.10	Peak	
4	5850.0000	5.68	43.94	49.62	122.20	-72.58	AVG	
5	5860.0000	22.22	43.97	66.19	109.40	-43.21	Peak	
6	5860.0000	4.42	43.97	48.39	109.40	-61.01	AVG	

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

### Vertical

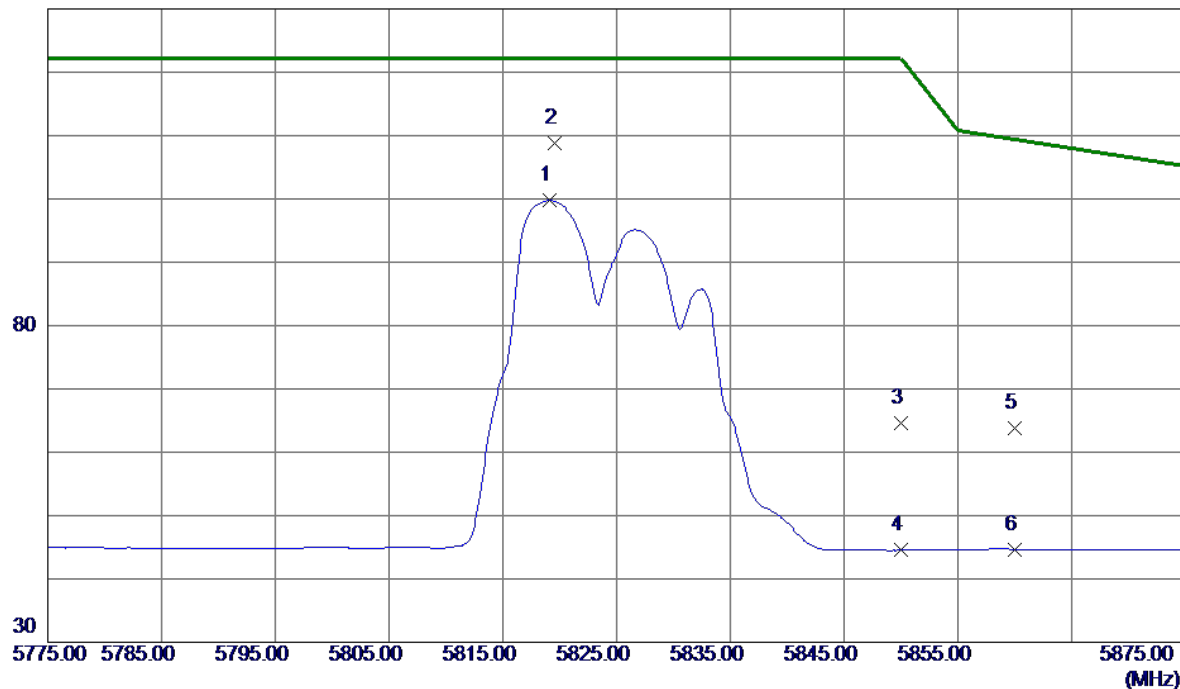


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11649.8760	31.26	18.17	49.43	74.00	-24.57	Peak	
2 *	11651.3400	20.90	18.17	39.07	54.00	-14.93	AVG	

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

### Horizontal

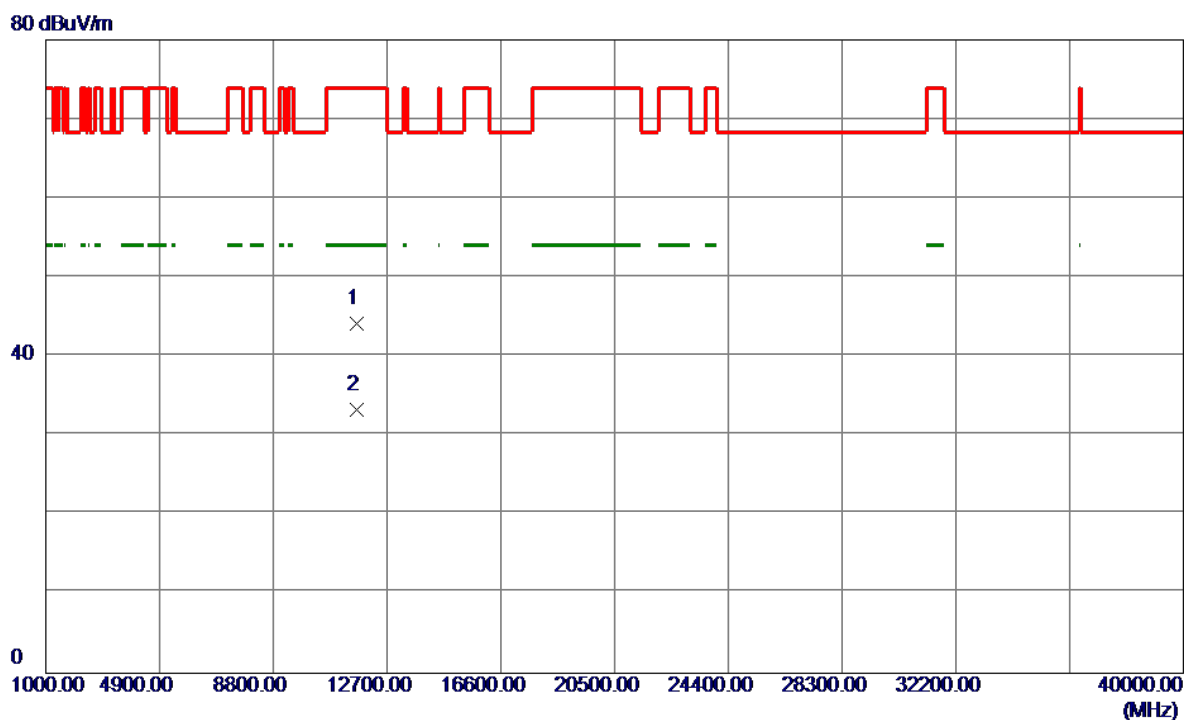
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5819.1000	55.89	43.84	99.73	122.20	-22.47	AVG	
2 *	5819.6000	65.02	43.85	108.87	122.20	-13.33	Peak	
3	5850.0000	20.65	43.94	64.59	122.20	-57.61	Peak	
4	5850.0000	0.57	43.94	44.51	122.20	-77.69	AVG	
5	5860.0000	19.89	43.97	63.86	109.40	-45.54	Peak	
6	5860.0000	0.70	43.97	44.67	109.40	-64.73	AVG	

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

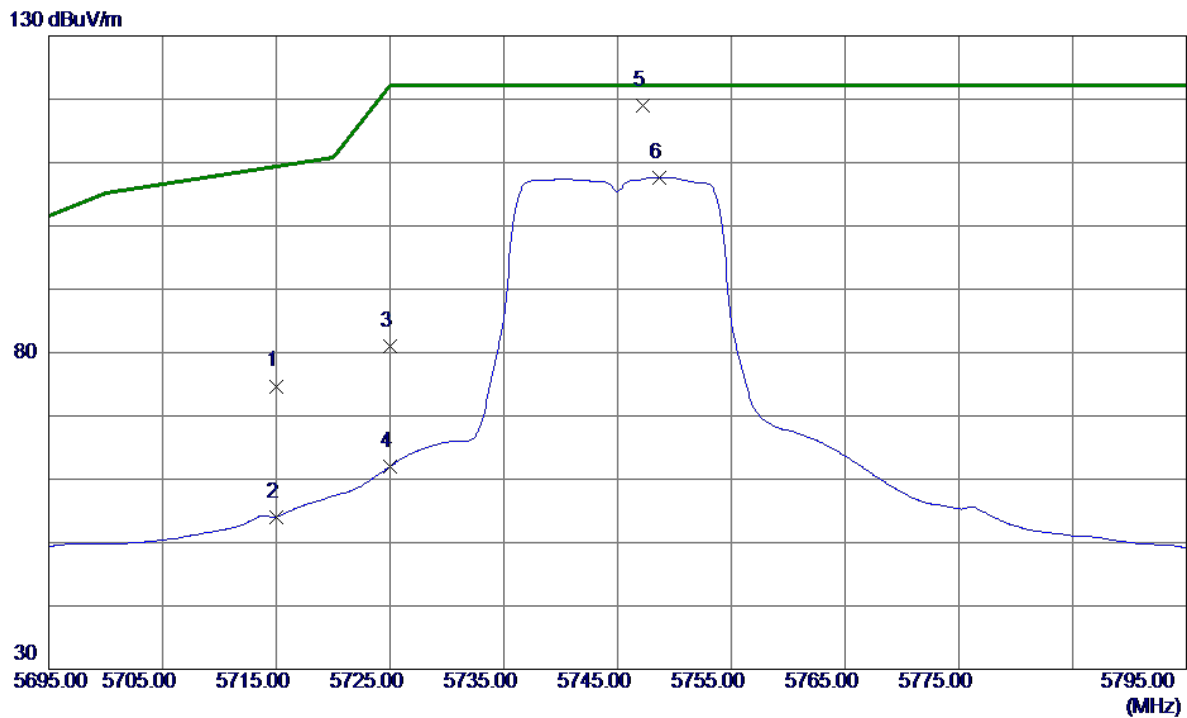
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11650.4380	26.01	18.17	44.18	74.00	-29.82	Peak	
2 *	11651.3320	15.17	18.17	33.34	54.00	-20.66	AVG	

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

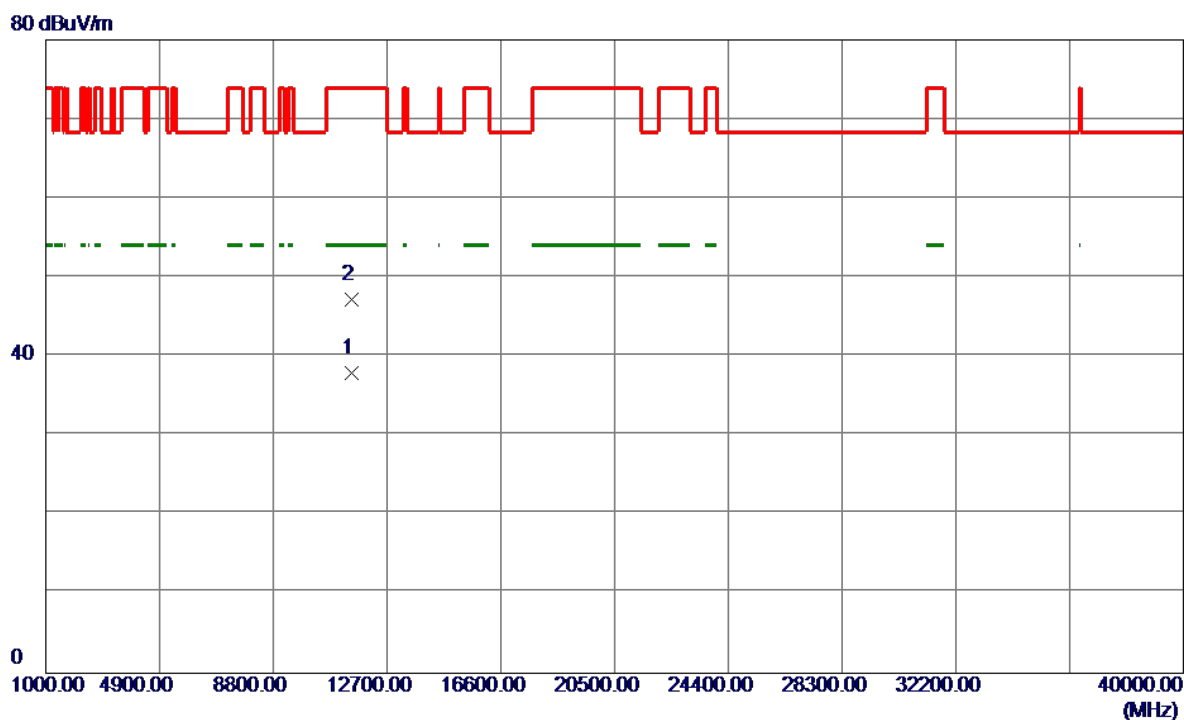
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	31.17	43.53	74.70	109.40	-34.70	Peak	
2	5715.0000	10.54	43.53	54.07	109.40	-55.33	AVG	
3	5725.0000	37.44	43.56	81.00	122.20	-41.20	Peak	
4	5725.0000	18.45	43.56	62.01	122.20	-60.19	AVG	
5 *	5747.2500	75.34	43.63	118.97	122.20	-3.23	Peak	
6	5748.7000	63.96	43.63	107.59	122.20	-14.61	AVG	

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

### Vertical



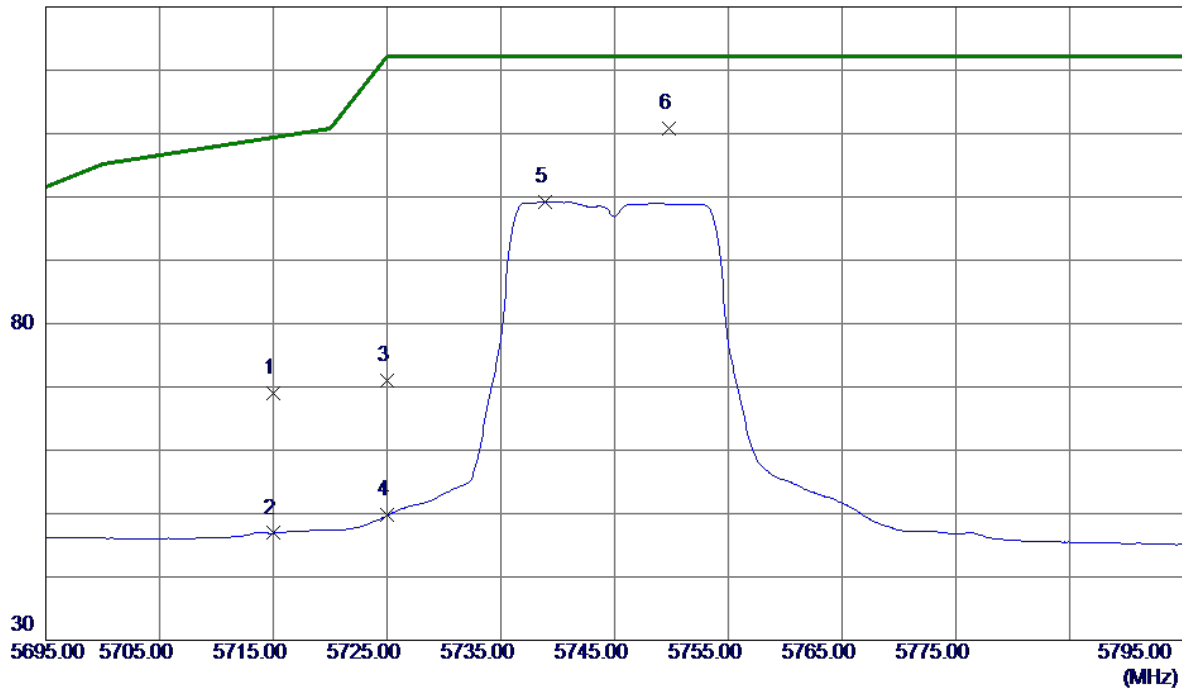
No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	11489.9850	19.69	18.20	37.89	54.00	-16.11	AVG	
2	11490.3400	29.03	18.20	47.23	74.00	-26.77	Peak	



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

### Horizontal

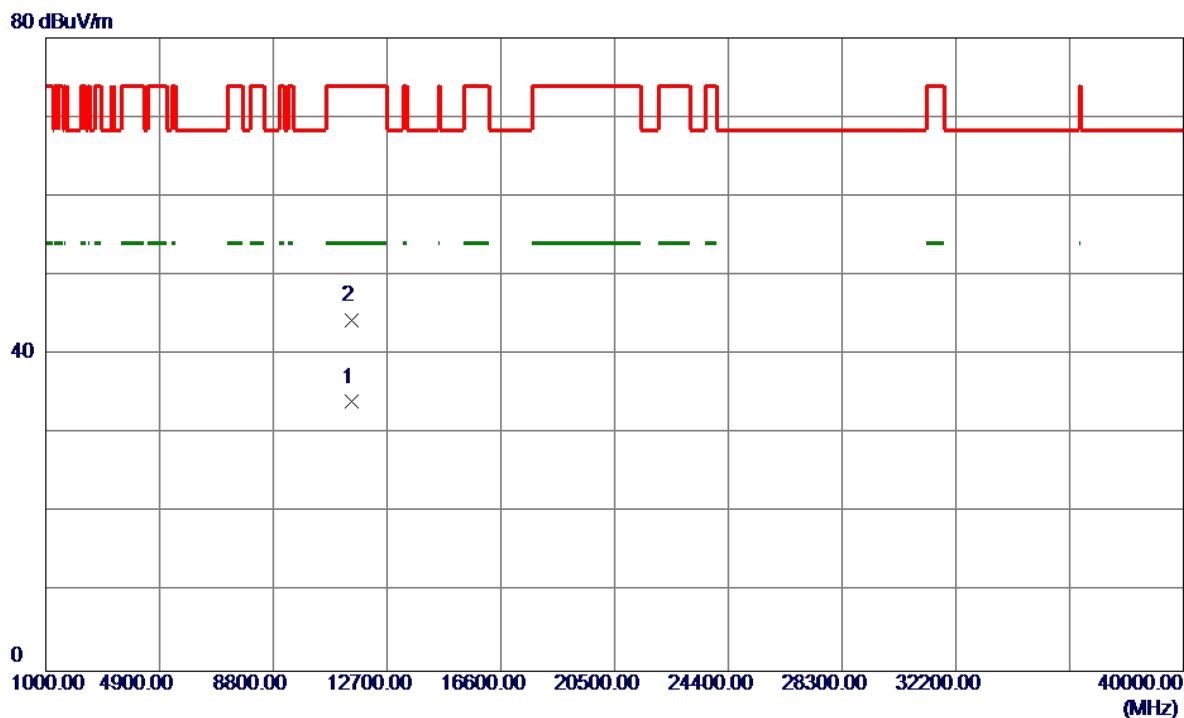
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	25.38	43.53	68.91	109.40	-40.49	Peak	
2	5715.0000	3.37	43.53	46.90	109.40	-62.50	AVG	
3	5725.0000	27.36	43.56	70.92	122.20	-51.28	Peak	
4	5725.0000	6.15	43.56	49.71	122.20	-72.49	AVG	
5	5738.8500	55.64	43.60	99.24	122.20	-22.96	AVG	
6 *	5749.7500	67.10	43.63	110.73	122.20	-11.47	Peak	

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

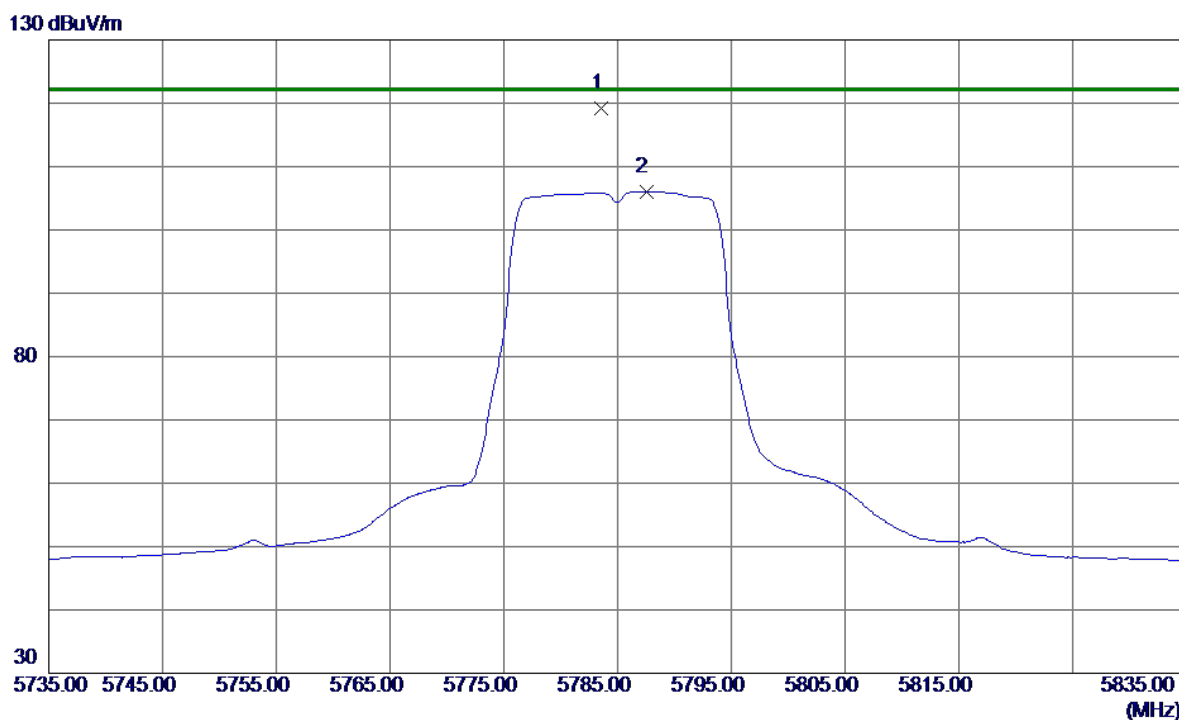
### Horizontal



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	11487.5170	15.81	18.19	34.00	54.00	-20.00	AVG	
2	11490.6730	26.05	18.20	44.25	74.00	-29.75	Peak	

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

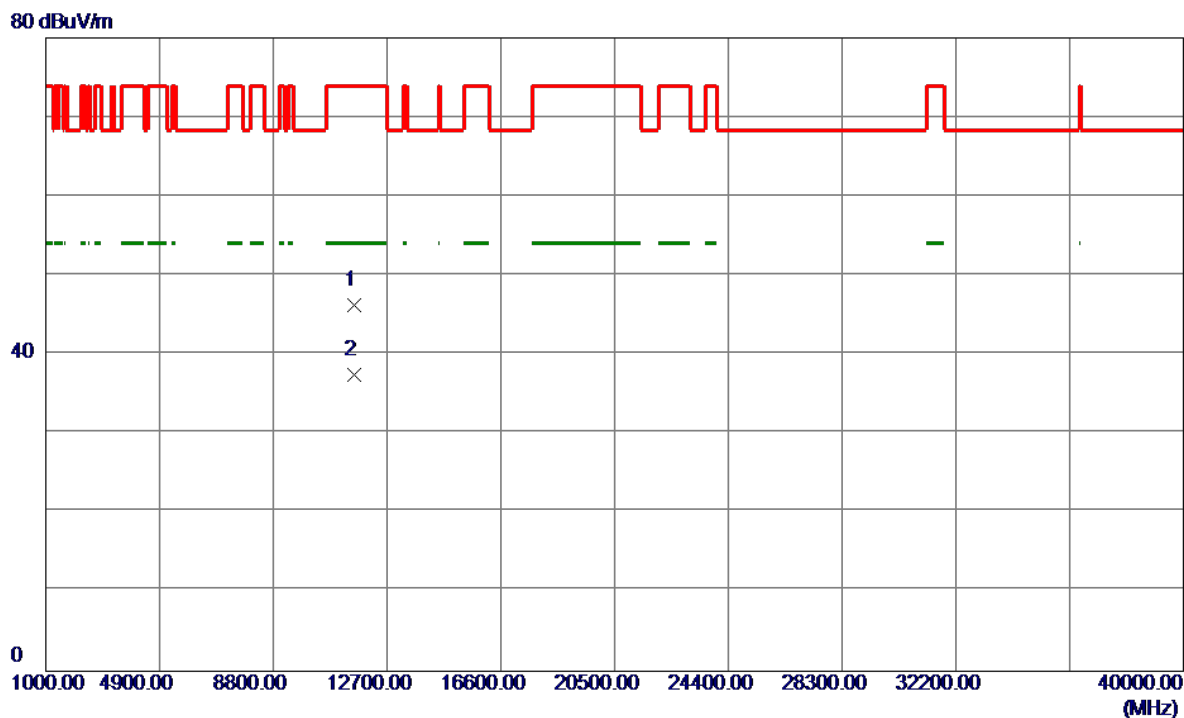
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5783.6000	75.41	43.74	119.15	122.20	-3.05	Peak	
2	5787.5000	62.30	43.75	106.05	122.20	-16.15	AVG	

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

### Vertical

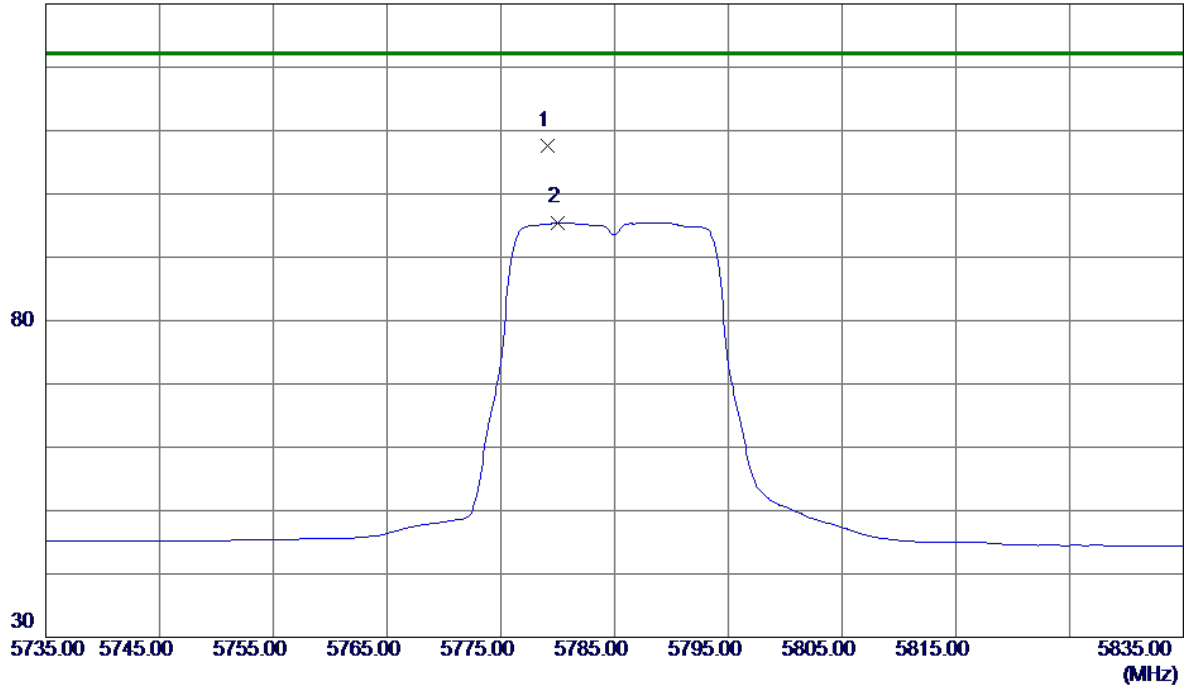


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11569.7150	28.07	18.20	46.27	74.00	-27.73	Peak	
2 *	11570.5730	19.31	18.20	37.51	54.00	-16.49	AVG	

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

### Horizontal

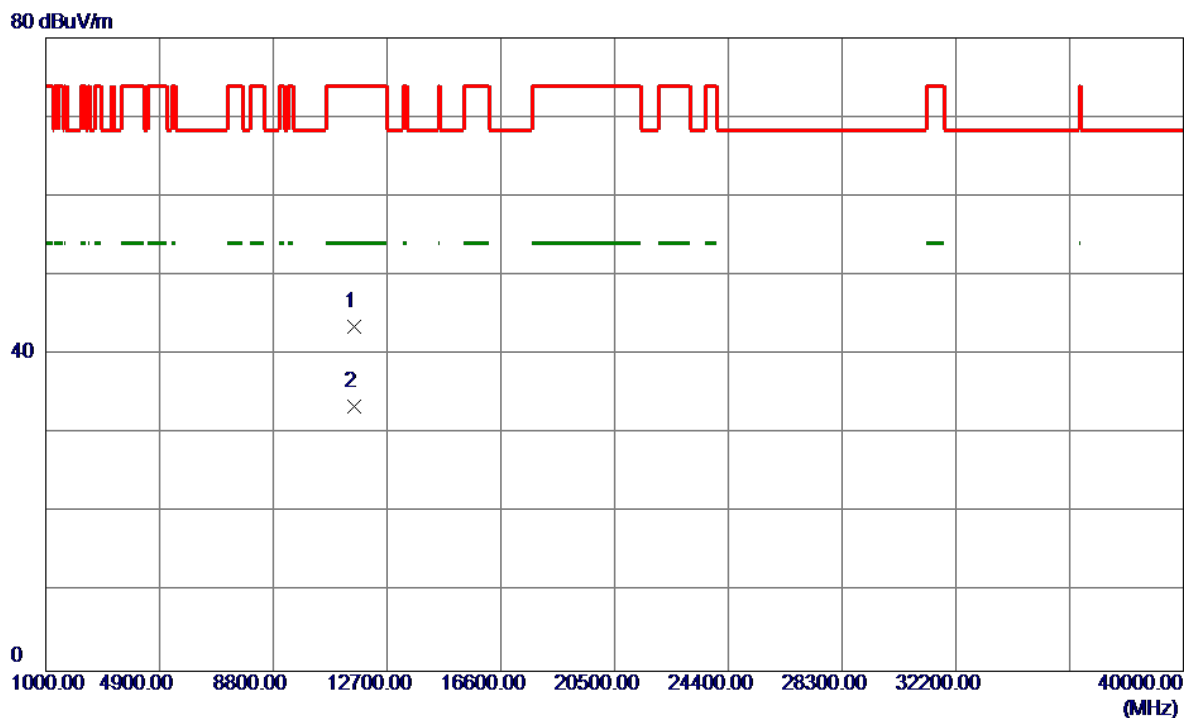
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5779.1000	63.84	43.72	107.56	122.20	-14.64	Peak	
2	5780.0500	51.77	43.73	95.50	122.20	-26.70	AVG	

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

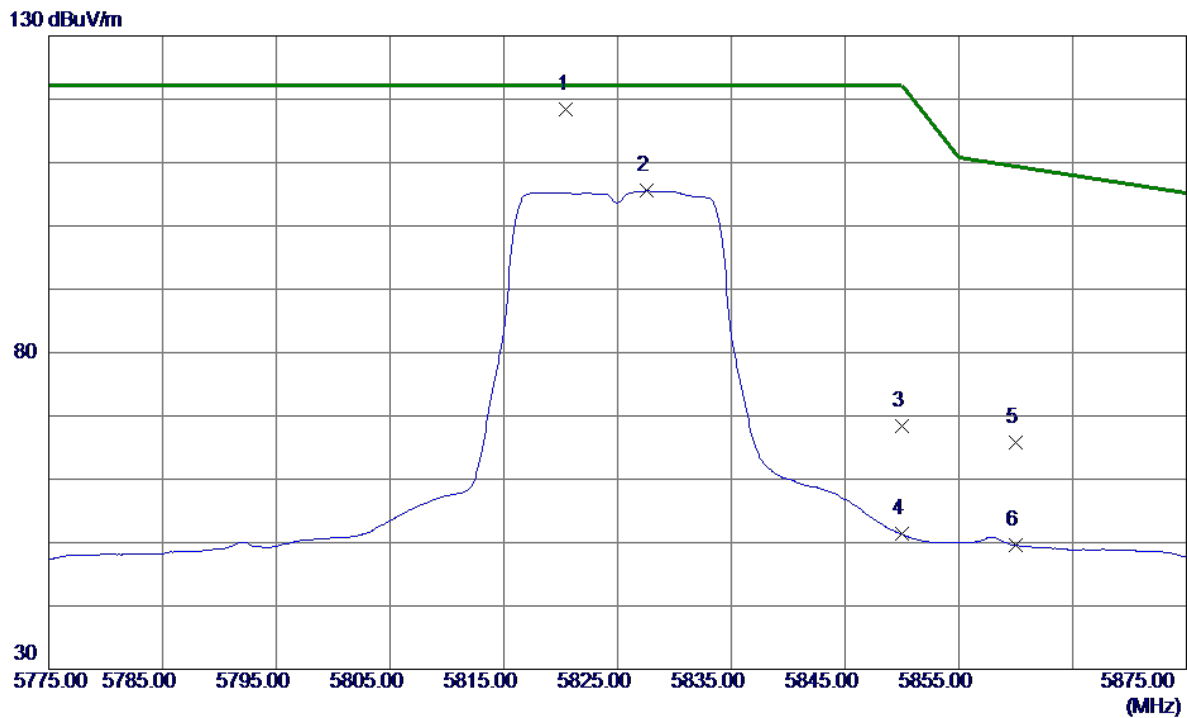
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11568.5519	25.37	18.20	43.57	74.00	-30.43	Peak	
2 *	11569.3400	15.24	18.20	33.44	54.00	-20.56	AVG	

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

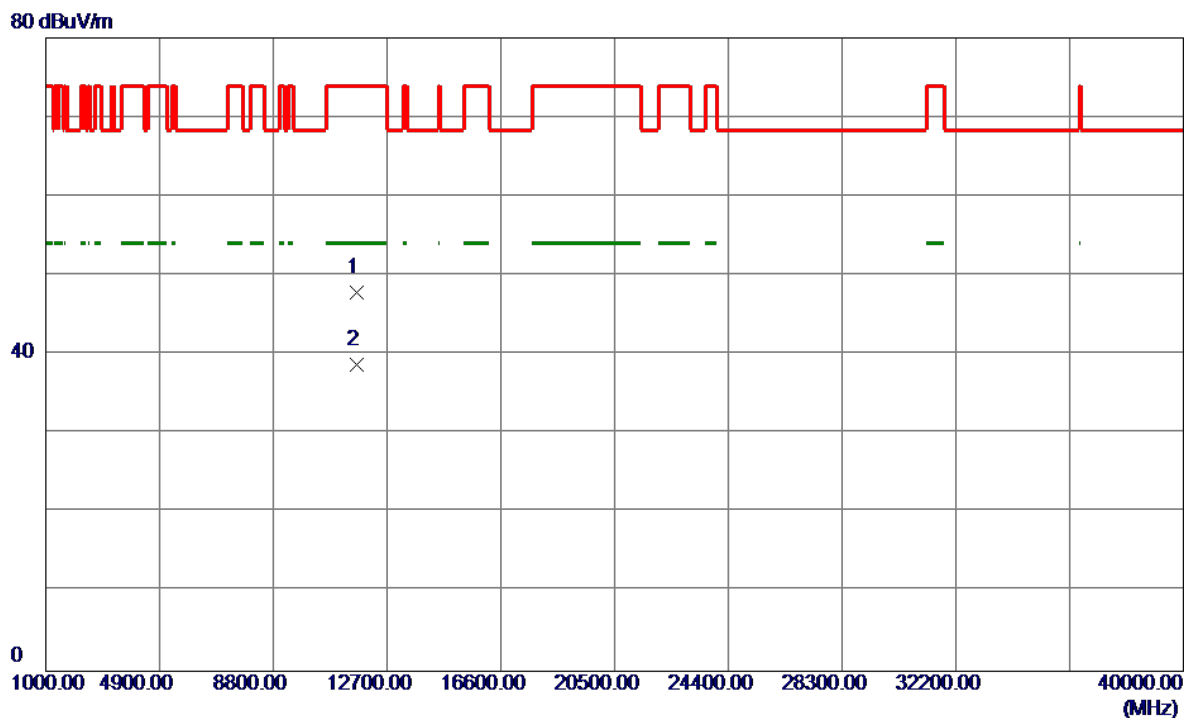
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5820.5000	74.50	43.85	118.35	122.20	-3.85	Peak	
2	5827.5500	61.64	43.87	105.51	122.20	-16.69	AVG	
3	5850.0000	24.55	43.94	68.49	122.20	-53.71	Peak	
4	5850.0000	7.39	43.94	51.33	122.20	-70.87	AVG	
5	5860.0000	21.91	43.97	65.88	109.40	-43.52	Peak	
6	5860.0000	5.56	43.97	49.53	109.40	-59.87	AVG	

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

### Vertical

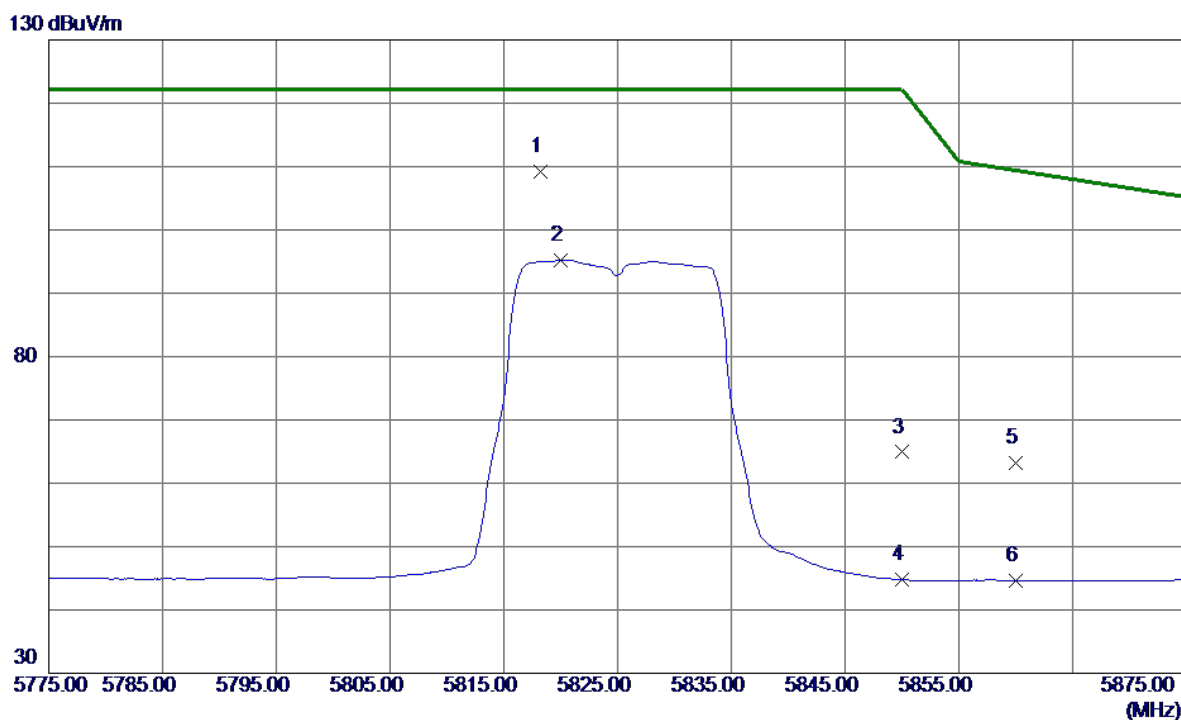


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11649.6449	29.60	18.17	47.77	74.00	-26.23	Peak	
2 *	11651.2670	20.62	18.17	38.79	54.00	-15.21	AVG	



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

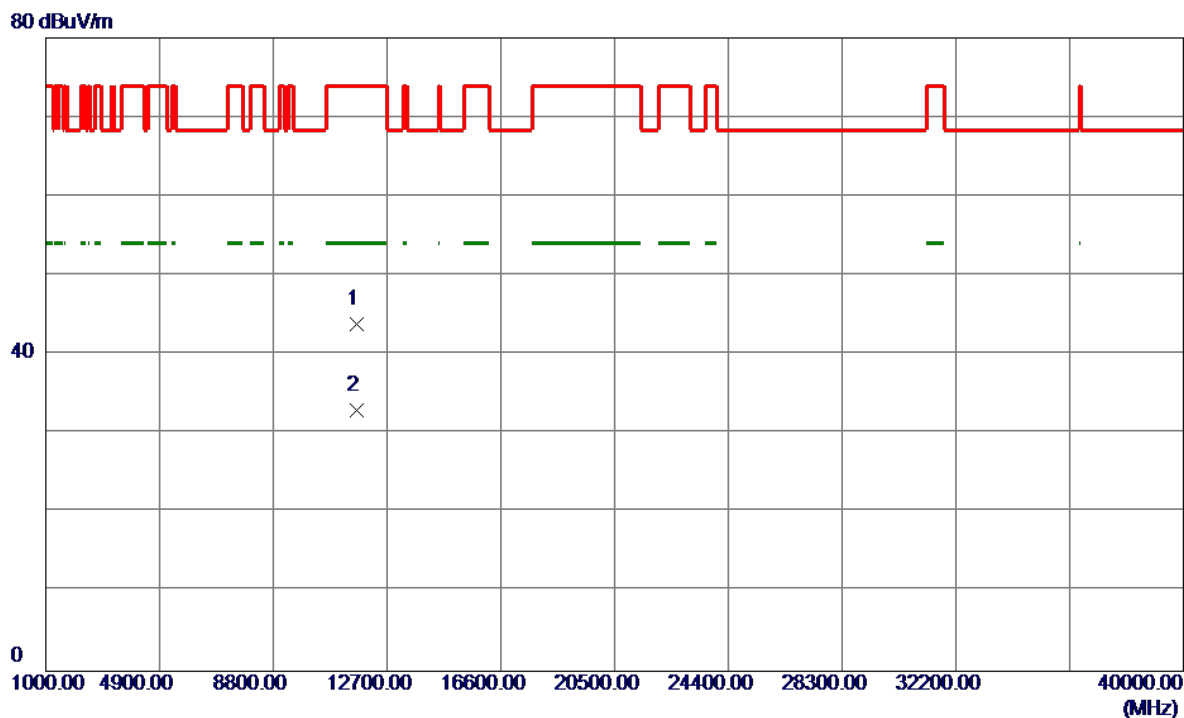
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5818.2000	65.31	43.84	109.15	122.20	-13.05	Peak	
2	5820.0500	51.36	43.85	95.21	122.20	-26.99	AVG	
3	5850.0000	20.96	43.94	64.90	122.20	-57.30	Peak	
4	5850.0000	0.84	43.94	44.78	122.20	-77.42	AVG	
5	5860.0000	19.32	43.97	63.29	109.40	-46.11	Peak	
6	5860.0000	0.62	43.97	44.59	109.40	-64.81	AVG	

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

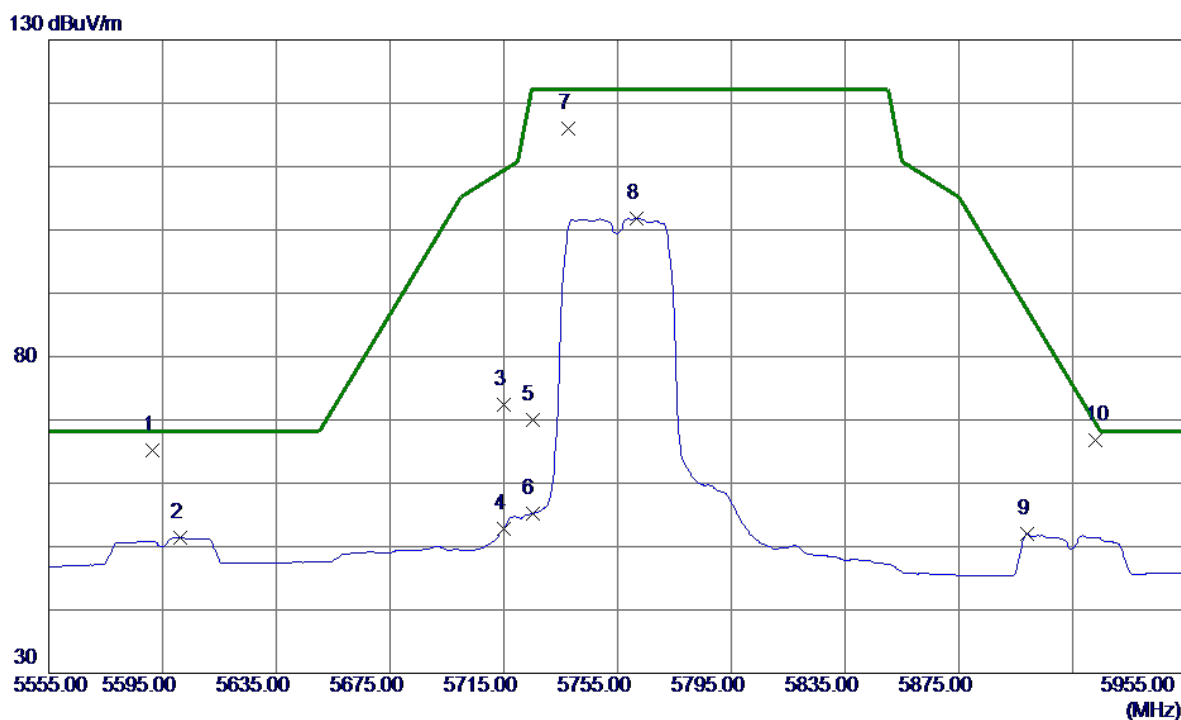
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11650.4400	25.75	18.17	43.92	74.00	-30.08	Peak	
2 *	11652.2670	14.74	18.17	32.91	54.00	-21.09	AVG	

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

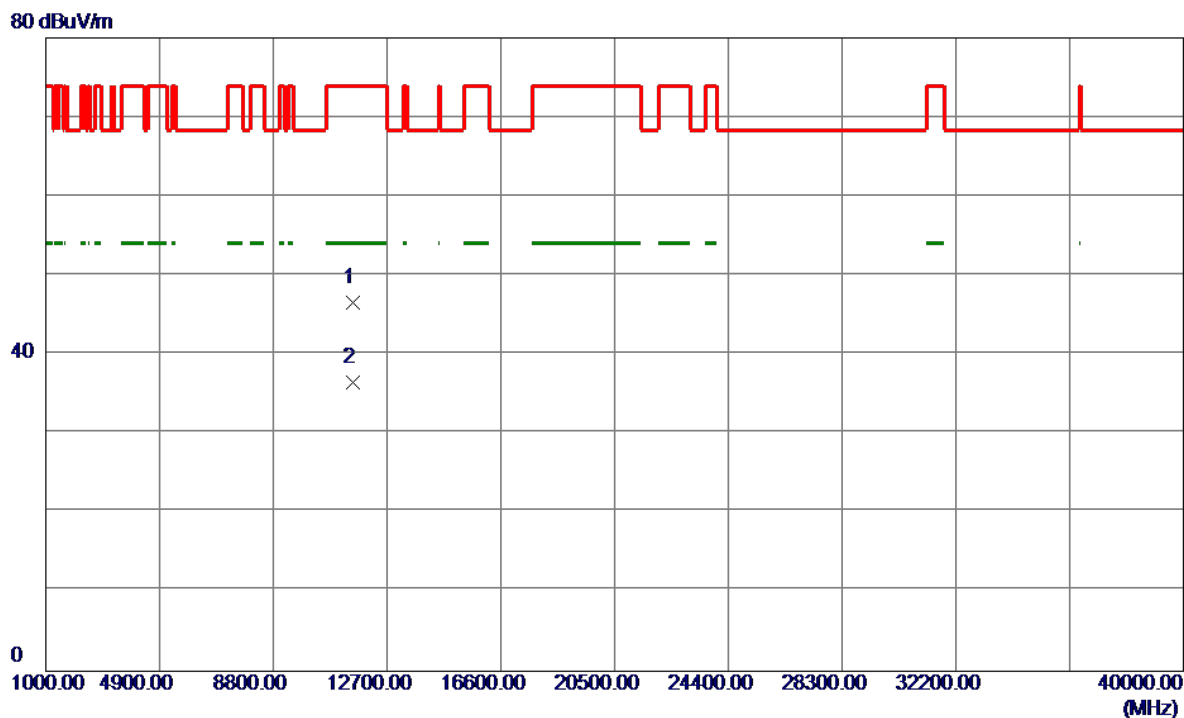
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5591.4000	22.12	43.16	65.28	68.20	-2.92	Peak	
2	5601.4000	8.23	43.19	51.42	68.20	-16.78	AVG	
3	5715.0000	28.79	43.53	72.32	109.40	-37.08	Peak	
4	5715.0000	9.36	43.53	52.89	109.40	-56.51	AVG	
5	5725.0000	26.35	43.56	69.91	122.20	-52.29	Peak	
6	5725.0000	11.66	43.56	55.22	122.20	-66.98	AVG	
7	5737.8000	72.35	43.60	115.95	122.20	-6.25	Peak	
8	5761.6000	58.11	43.67	101.78	122.20	-20.42	AVG	
9	5899.0000	7.91	44.08	51.99	87.44	-35.45	AVG	
10	5922.8000	22.63	44.16	66.79	69.83	-3.04	Peak	

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

### Vertical

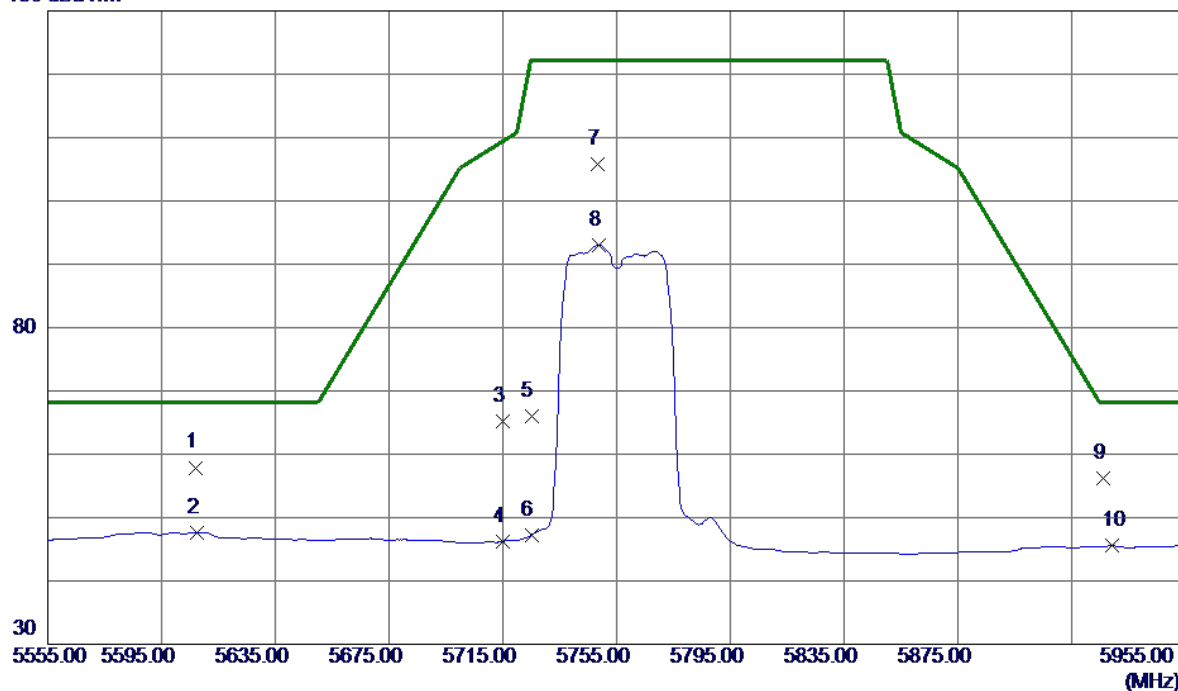


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11510.2980	28.30	18.22	46.52	74.00	-27.48	Peak	
2 *	11511.6769	18.31	18.22	36.53	54.00	-17.47	AVG	

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

### Horizontal

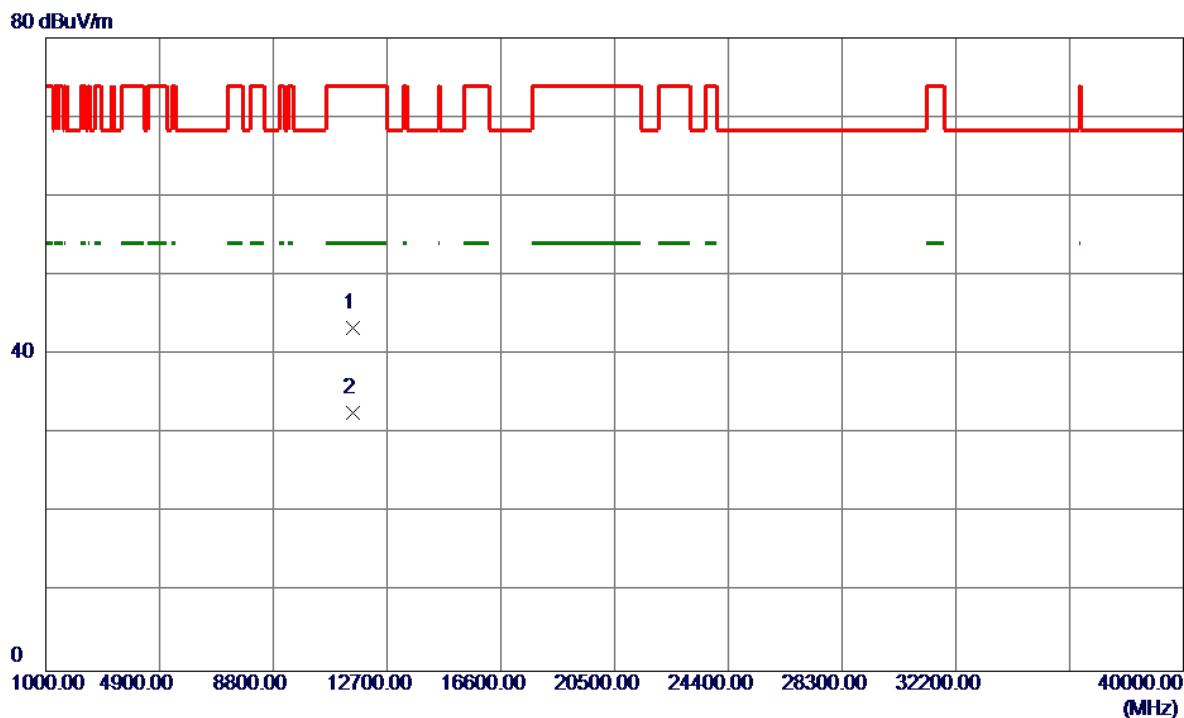
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5607.0000	14.70	43.20	57.90	68.20	-10.30	Peak	
2	5607.4000	4.48	43.20	47.68	68.20	-20.52	AVG	
3	5715.0000	21.68	43.53	65.21	109.40	-44.19	Peak	
4	5715.0000	2.68	43.53	46.21	109.40	-63.19	AVG	
5	5725.0000	22.42	43.56	65.98	122.20	-56.22	Peak	
6	5725.0000	3.65	43.56	47.21	122.20	-74.99	AVG	
7	5748.4000	62.15	43.63	105.78	122.20	-16.42	Peak	
8	5748.8000	49.44	43.63	93.07	122.20	-29.13	AVG	
9	5926.2000	12.06	44.17	56.23	68.20	-11.97	Peak	
10	5929.2000	1.36	44.18	45.54	68.20	-22.66	AVG	

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

### Horizontal

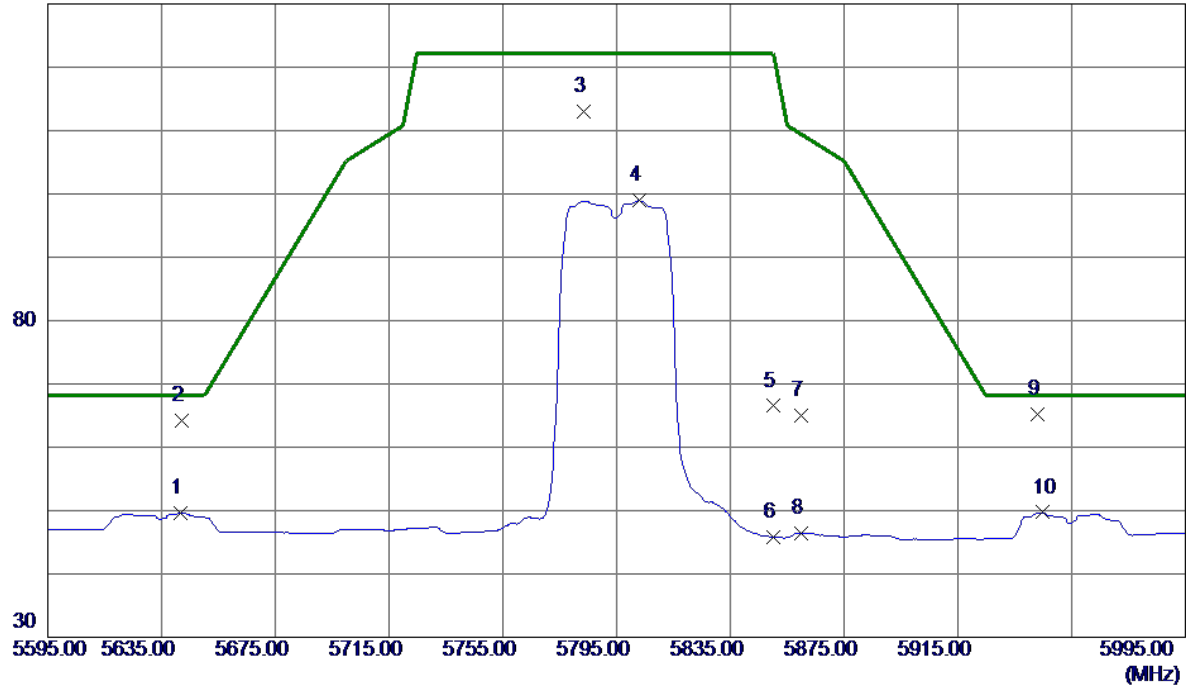


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11509.2430	25.21	18.22	43.43	74.00	-30.57	Peak	
2 *	11511.1220	14.35	18.22	32.57	54.00	-21.43	AVG	

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

### Vertical

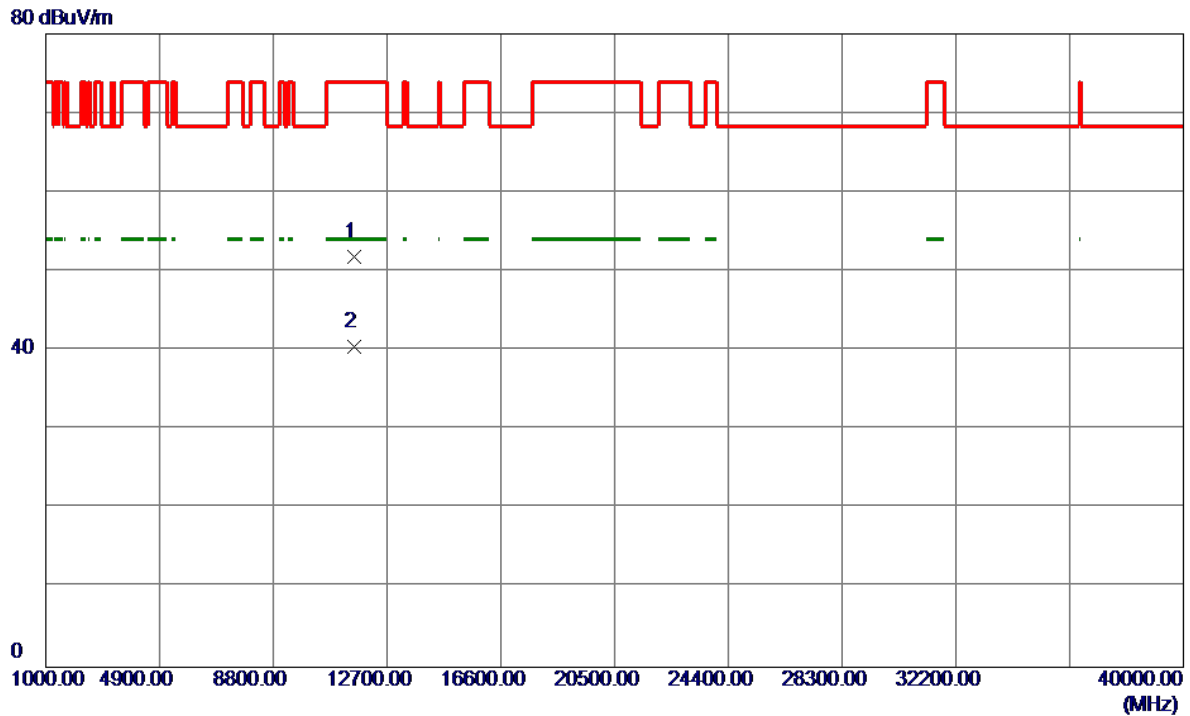
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5641.8000	6.26	43.31	49.57	68.20	-18.63	AVG	
2	5642.0000	20.89	43.31	64.20	68.20	-4.00	Peak	
3	5783.4000	69.35	43.74	113.09	122.20	-9.11	Peak	
4	5802.8000	55.13	43.79	98.92	122.20	-23.28	AVG	
5	5850.0000	22.56	43.94	66.50	122.20	-55.70	Peak	
6	5850.0000	1.86	43.94	45.80	122.20	-76.40	AVG	
7	5860.0000	20.95	43.97	64.92	109.40	-44.48	Peak	
8	5860.0000	2.49	43.97	46.46	109.40	-62.94	AVG	
9 *	5943.2000	20.94	44.22	65.16	68.20	-3.04	Peak	
10	5944.8000	5.48	44.22	49.70	68.20	-18.50	AVG	

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

### Vertical



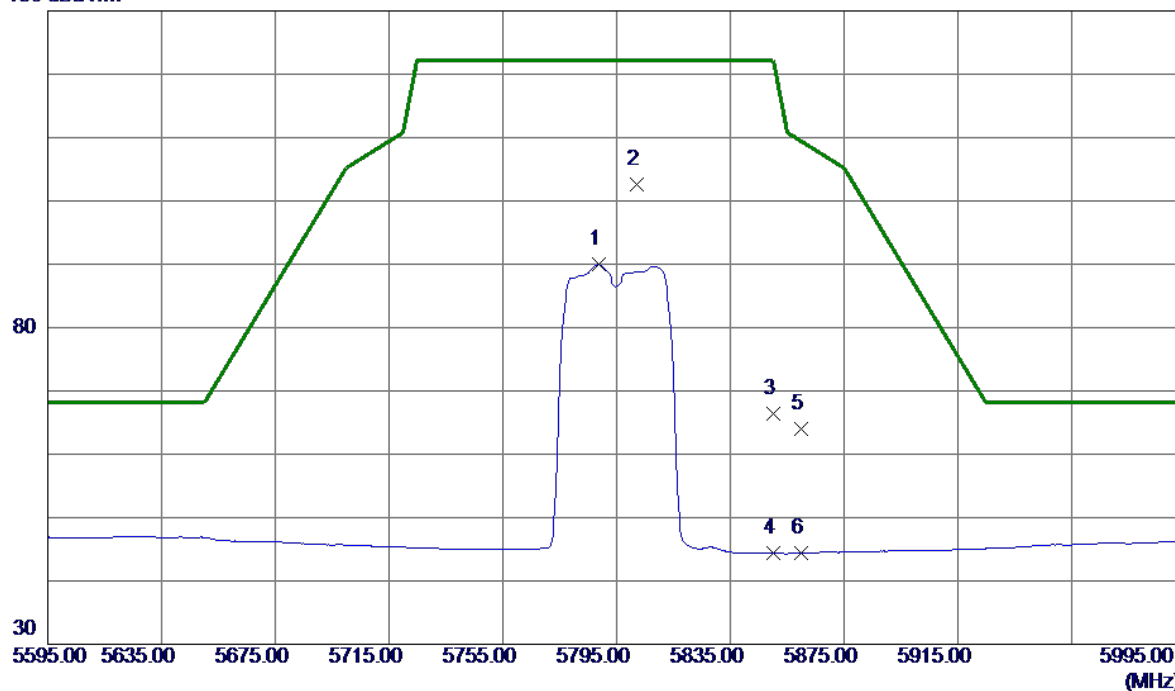
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11591.0100	33.58	18.19	51.77	74.00	-22.23	Peak	
2 *	11592.3920	22.32	18.19	40.51	54.00	-13.49	AVG	



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

### Horizontal

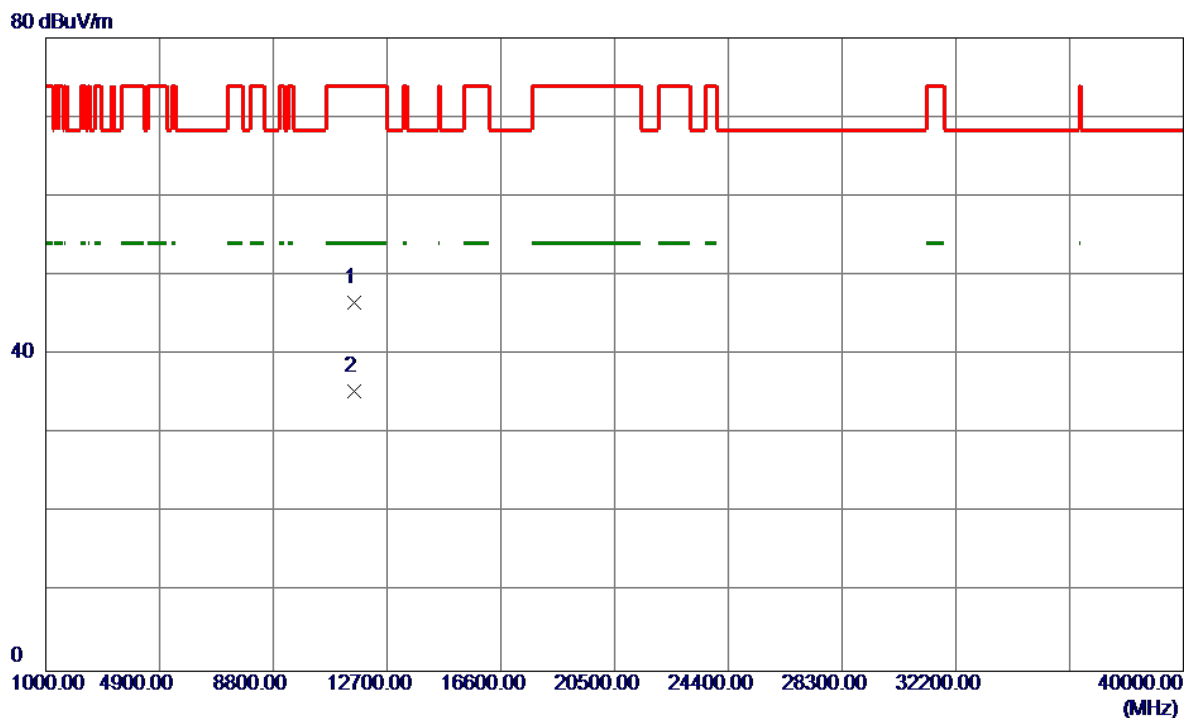
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5788.8000	46.17	43.75	89.92	122.20	-32.28	AVG	
2 *	5802.0000	58.78	43.79	102.57	122.20	-19.63	Peak	
3	5850.0000	22.52	43.94	66.46	122.20	-55.74	Peak	
4	5850.0000	0.39	43.94	44.33	122.20	-77.87	AVG	
5	5860.0000	20.01	43.97	63.98	109.40	-45.42	Peak	
6	5860.0000	0.44	43.97	44.41	109.40	-64.99	AVG	

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

### Horizontal

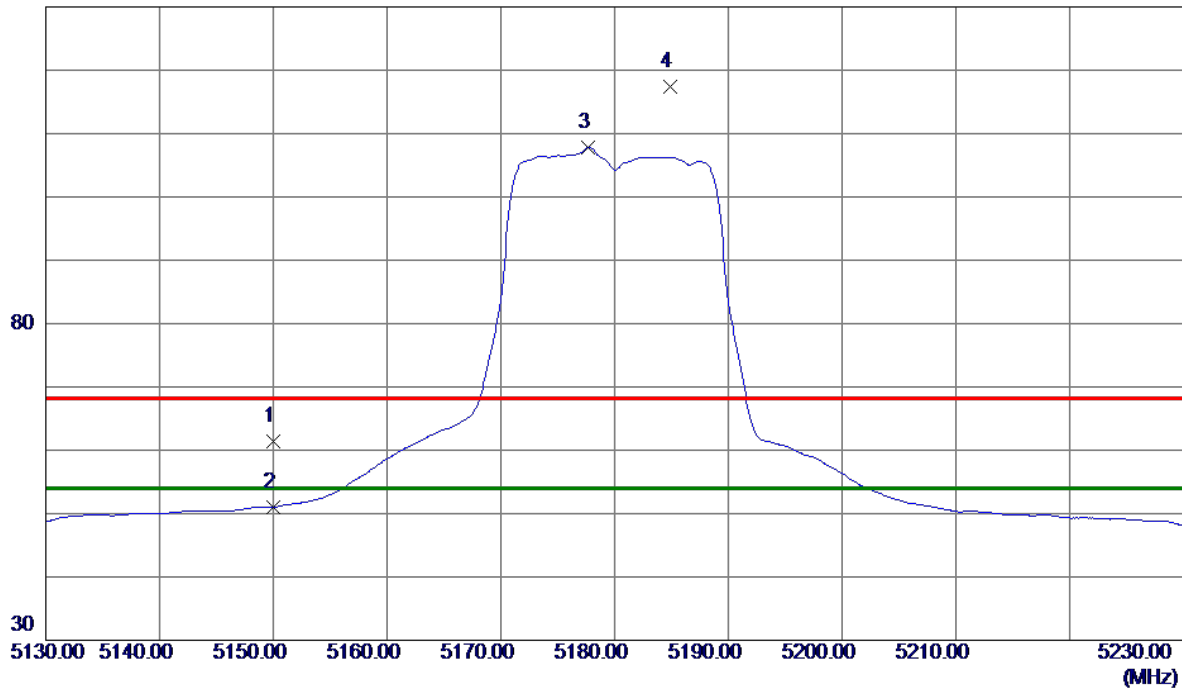


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11590.2880	28.42	18.19	46.61	74.00	-27.39	Peak	
2 *	11592.1980	17.10	18.19	35.29	54.00	-18.71	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

### Vertical

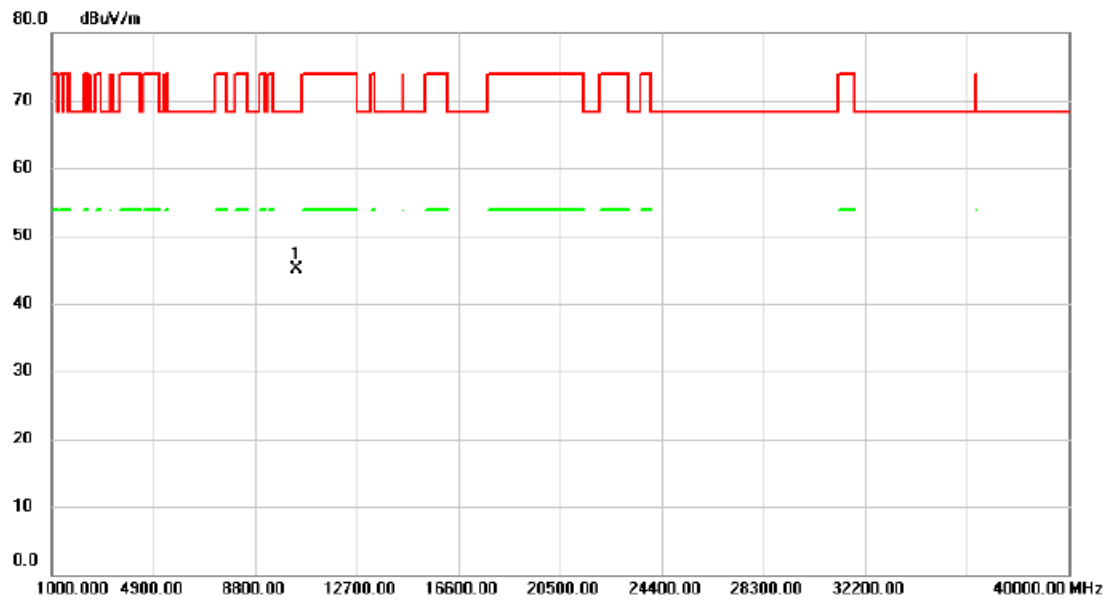
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.24	41.10	61.34	68.30	-6.96	Peak	
2	5150.0000	9.89	41.10	50.99	54.00	-3.01	AVG	
3 *	5177.7000	66.62	41.24	107.86	54.00	53.86	AVG	No Limit
4	5184.8500	76.18	41.28	117.46	68.30	49.16	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

### Vertical

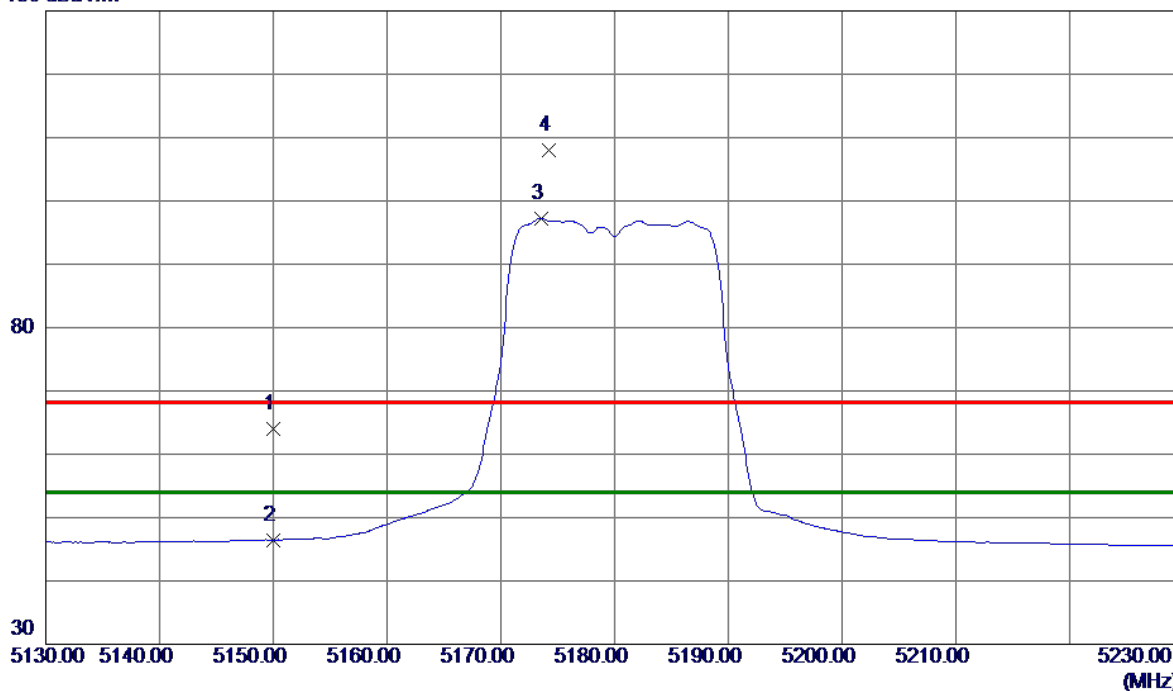


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10361.17	27.96	17.11	45.07	68.30	-23.23	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

### Horizontal

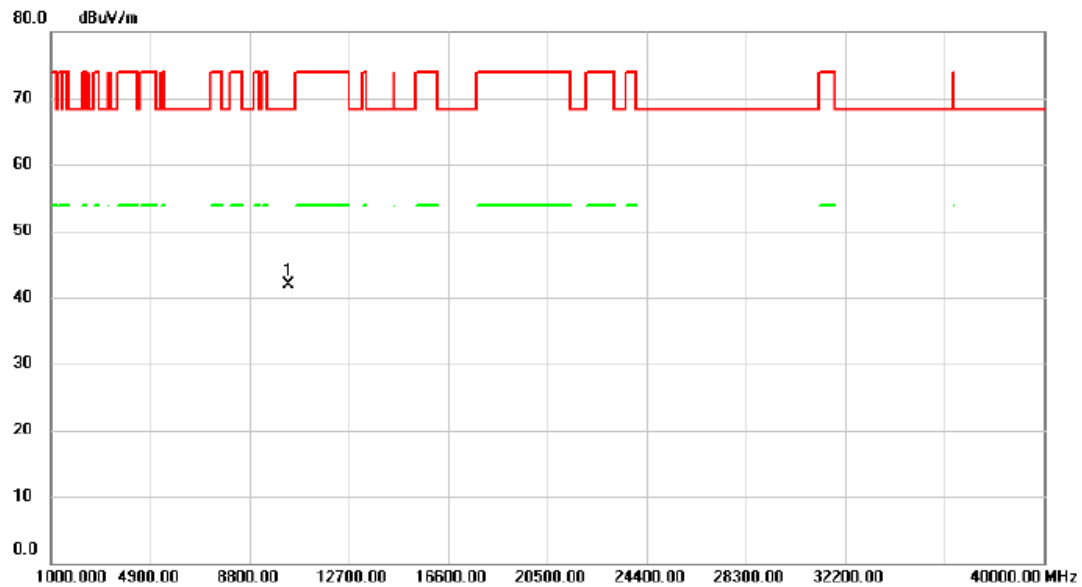
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.89	41.10	63.99	68.30	-4.31	Peak	
2	5150.0000	5.37	41.10	46.47	54.00	-7.53	AVG	
3 *	5173.5500	56.07	41.22	97.29	54.00	43.29	AVG	No Limit
4	5174.2000	66.75	41.22	107.97	68.30	39.67	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

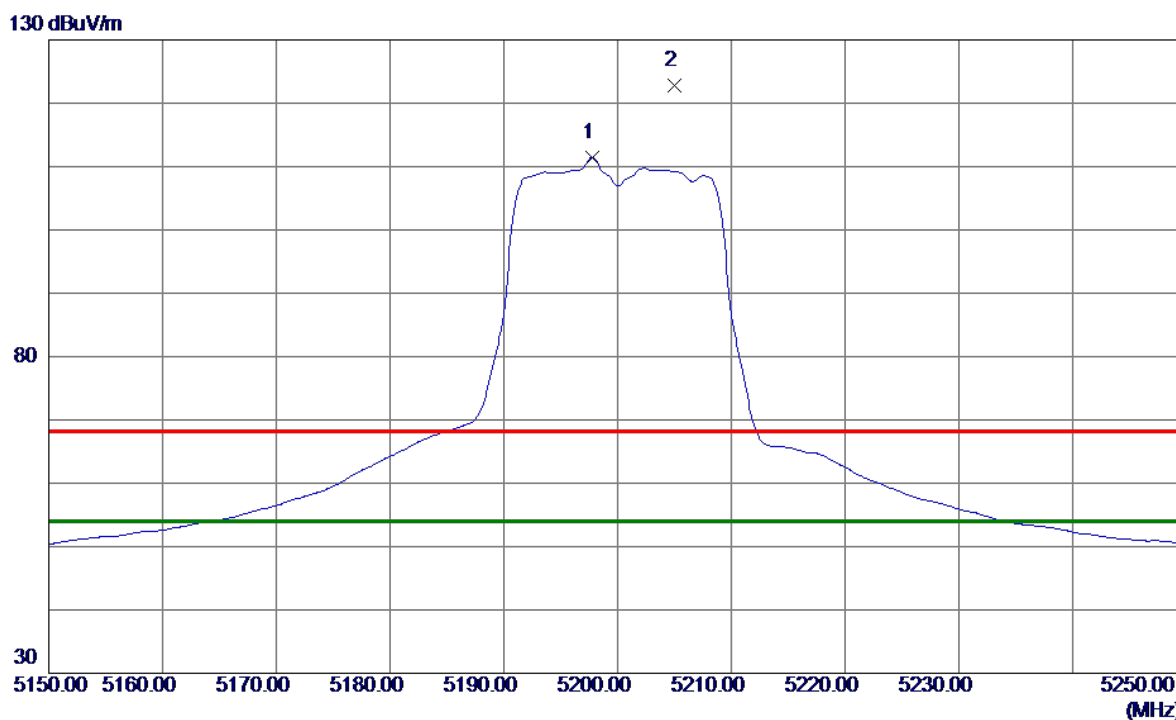
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10359.06	24.79	17.10	41.89	68.30	-26.41	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

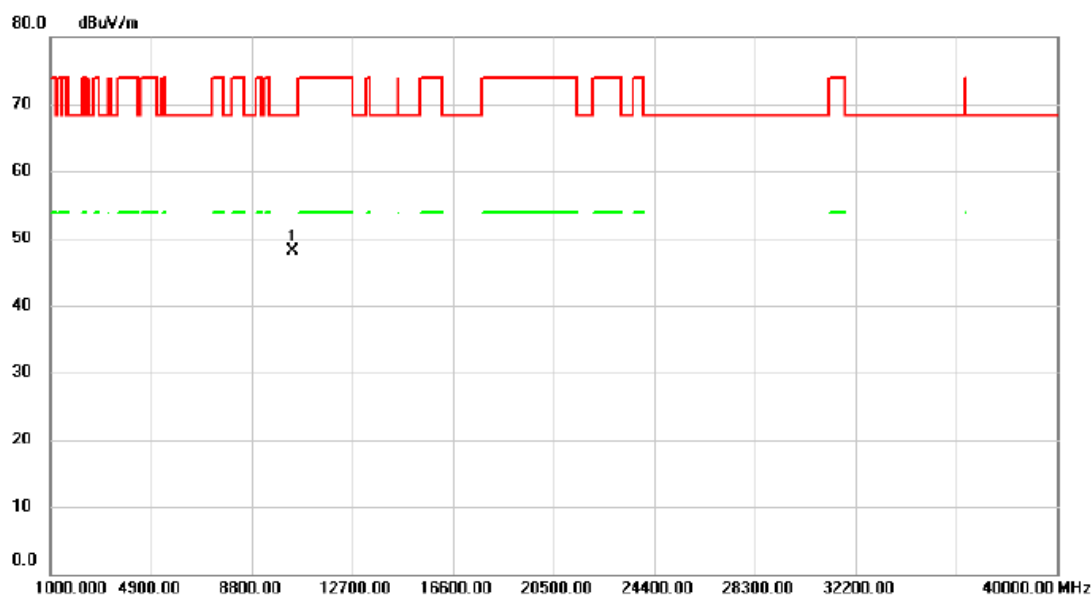
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5197.7500	70.06	41.34	111.40	54.00	57.40	AVG	No Limit
2	5205.0000	81.49	41.38	122.87	68.30	54.57	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

### Vertical

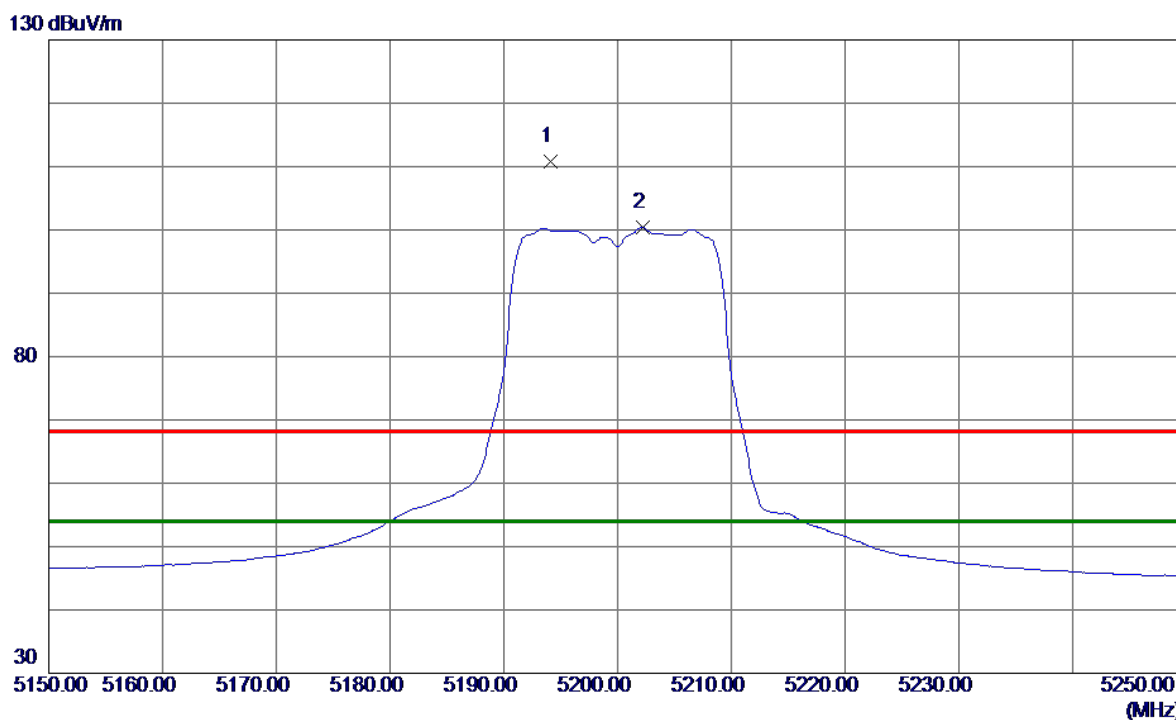


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	10400.92	30.92	17.22	48.14	68.30	-20.16	peak	



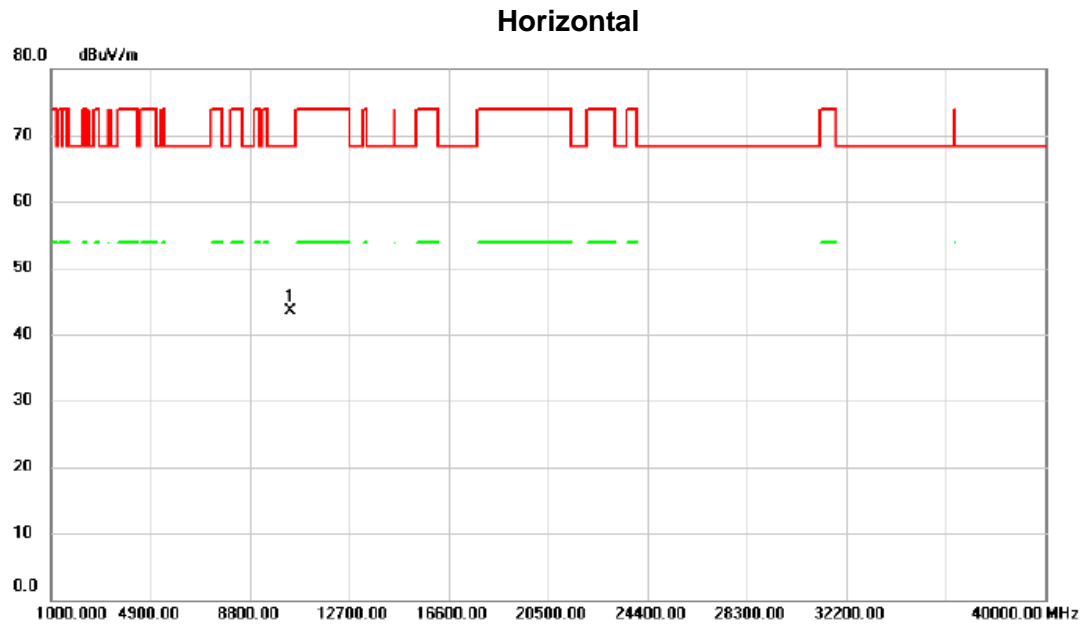
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5194.1500	69.55	41.33	110.88	68.30	42.58	Peak	No Limit
2 *	5202.2000	58.98	41.37	100.35	54.00	46.35	AVG	No Limit

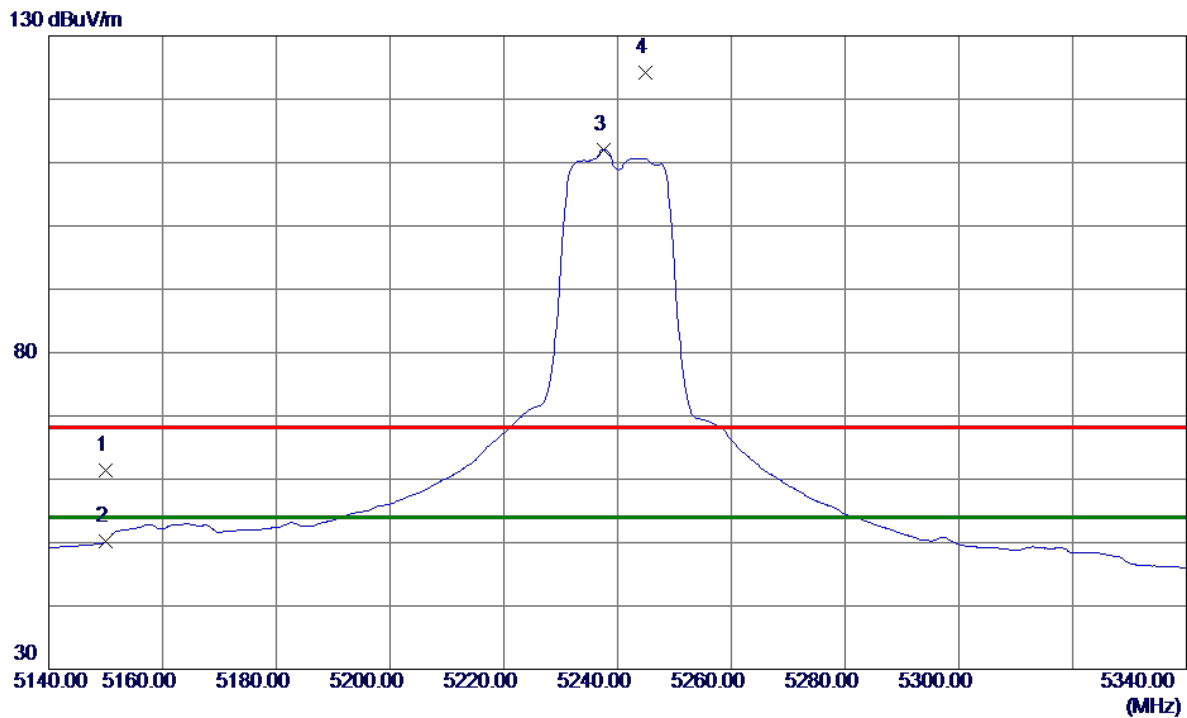
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.47	26.30	17.22	43.52	68.30	-24.78	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

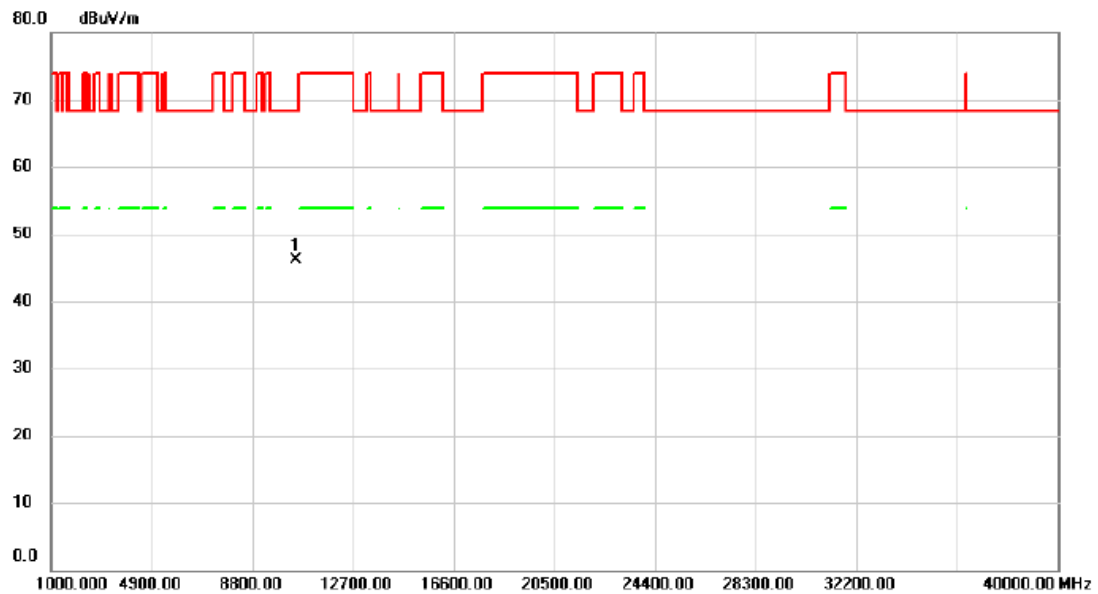
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.31	41.10	61.41	68.30	-6.89	Peak	
2	5150.0000	9.08	41.10	50.18	54.00	-3.82	AVG	
3 *	5237.6000	70.44	41.55	111.99	54.00	57.99	AVG	No Limit
4	5244.8000	82.69	41.58	124.27	68.30	55.97	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

### Vertical

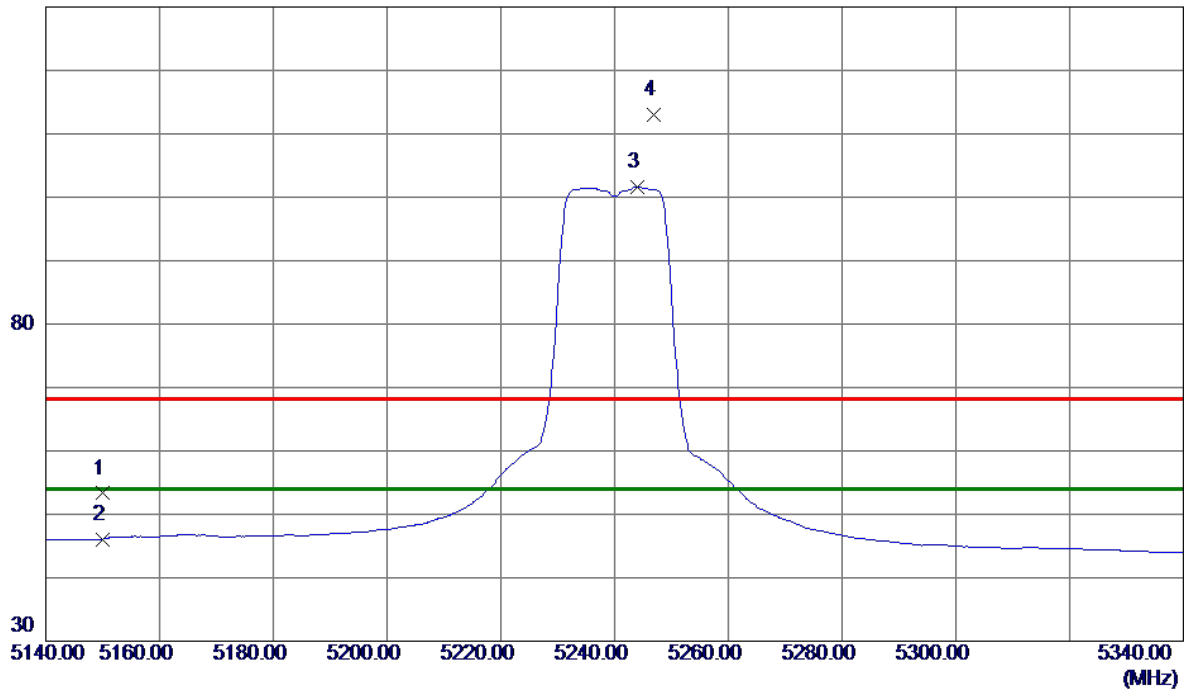


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10478.15	28.75	17.43	46.18	68.30	-22.12	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

### Horizontal

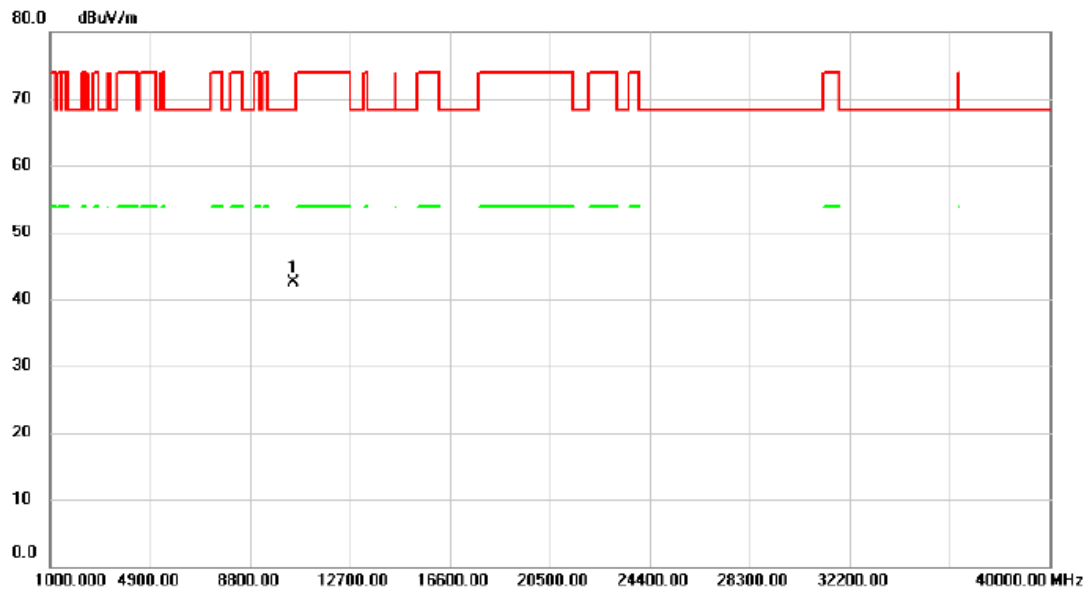
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	12.20	41.10	53.30	68.30	-15.00	Peak	
2	5150.0000	4.99	41.10	46.09	54.00	-7.91	AVG	
3 *	5244.1000	59.97	41.58	101.55	54.00	47.55	AVG	No Limit
4	5246.9000	71.35	41.59	112.94	68.30	44.64	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

### Horizontal

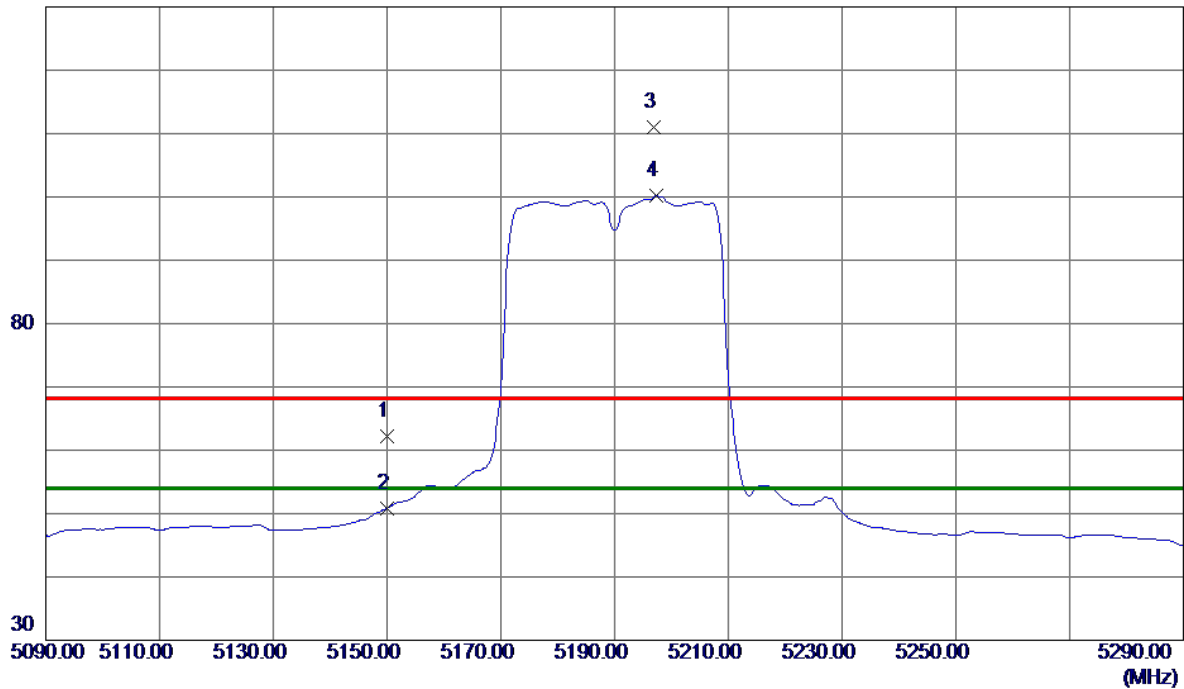


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10482.27	24.96	17.46	42.42	68.30	-25.88	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

### Vertical

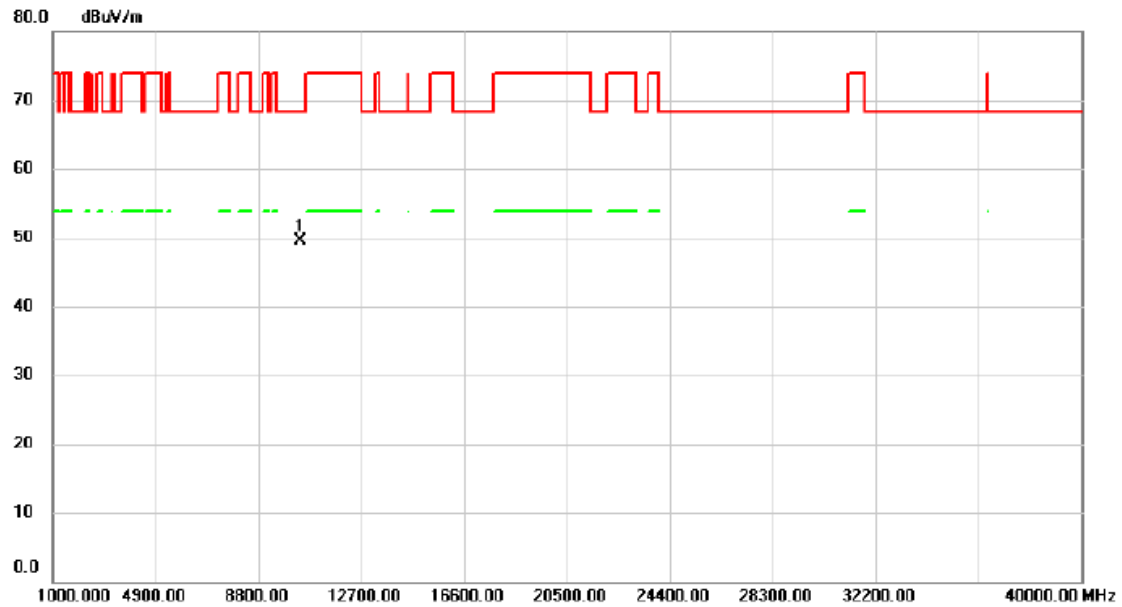
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.10	41.10	62.20	68.30	-6.10	Peak	
2	5150.0000	9.75	41.10	50.85	54.00	-3.15	AVG	
3	5196.9000	69.65	41.34	110.99	68.30	42.69	Peak	No Limit
4 *	5197.4000	58.78	41.34	100.12	54.00	46.12	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

# Vertical



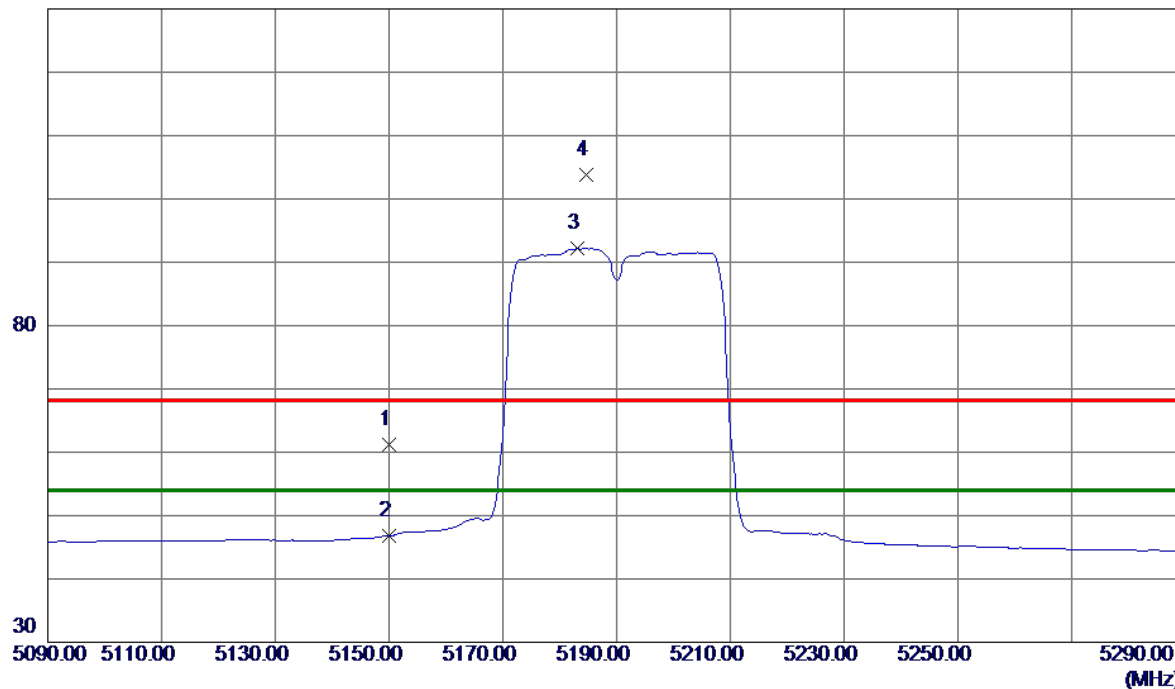
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10381.00	32.31	17.16	49.47	68.30	-18.83	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

### Horizontal

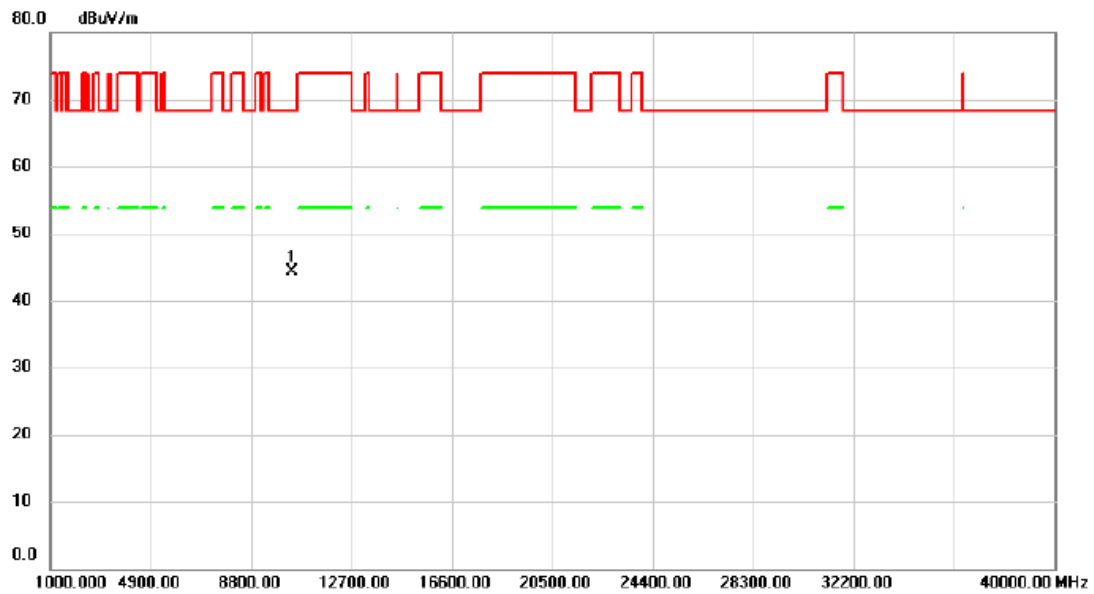
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.15	41.10	61.25	68.30	-7.05	Peak	
2	5150.0000	5.71	41.10	46.81	54.00	-7.19	AVG	
3 *	5183.1000	50.87	41.27	92.14	54.00	38.14	AVG	No Limit
4	5184.6000	62.45	41.28	103.73	68.30	35.43	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

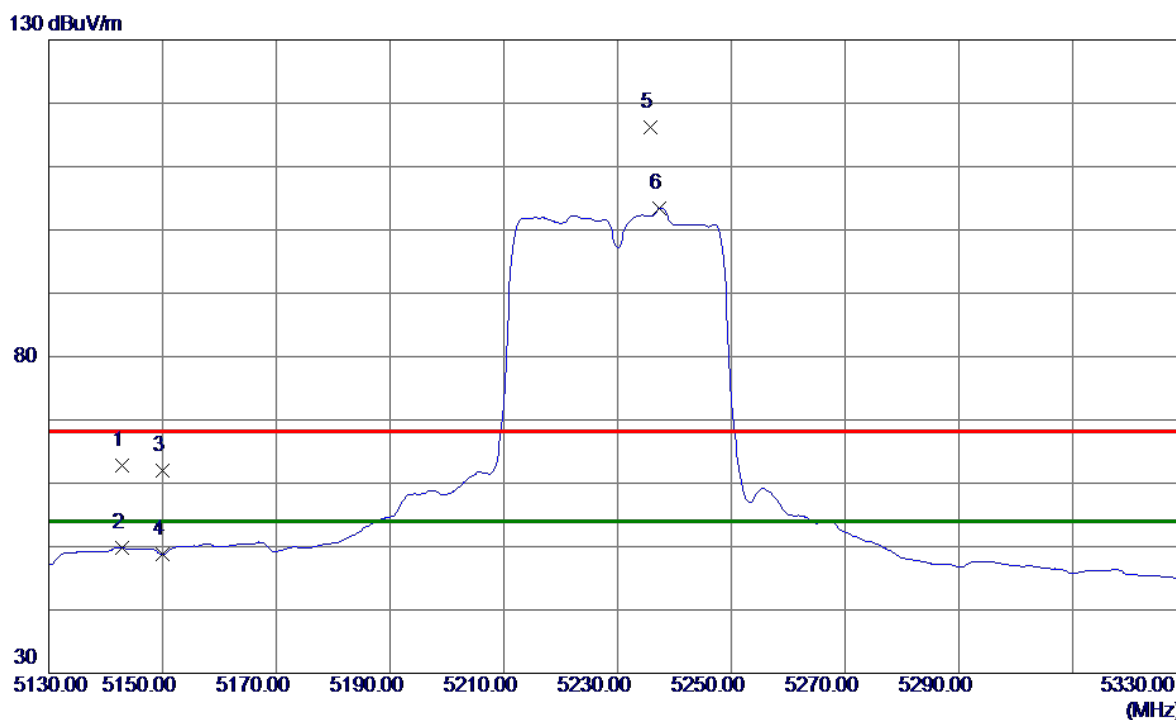
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10381.34	27.07	17.17	44.24	68.30	-24.06	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

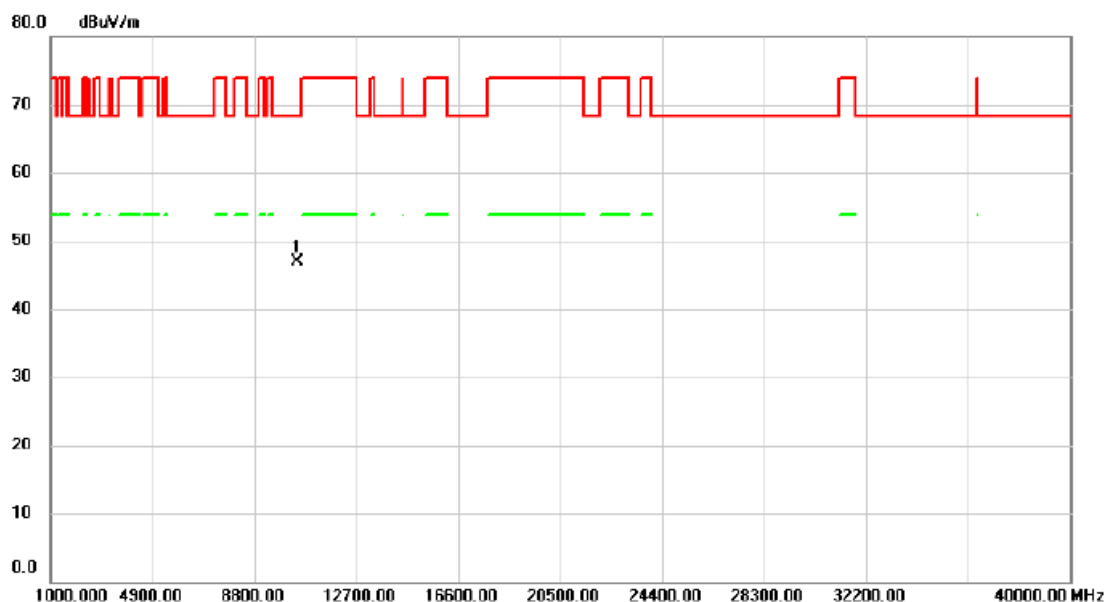
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5142.8000	21.81	41.07	62.88	68.30	-5.42	Peak	
2	5142.8000	8.81	41.07	49.88	54.00	-4.12	AVG	
3	5150.0000	20.95	41.10	62.05	68.30	-6.25	Peak	
4	5150.0000	7.67	41.10	48.77	54.00	-5.23	AVG	
5	5235.7000	74.65	41.54	116.19	68.30	47.89	Peak	No Limit
6 *	5237.4000	61.88	41.55	103.43	54.00	49.43	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10460.63	29.60	17.39	46.99	68.30	-21.31	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

### Horizontal

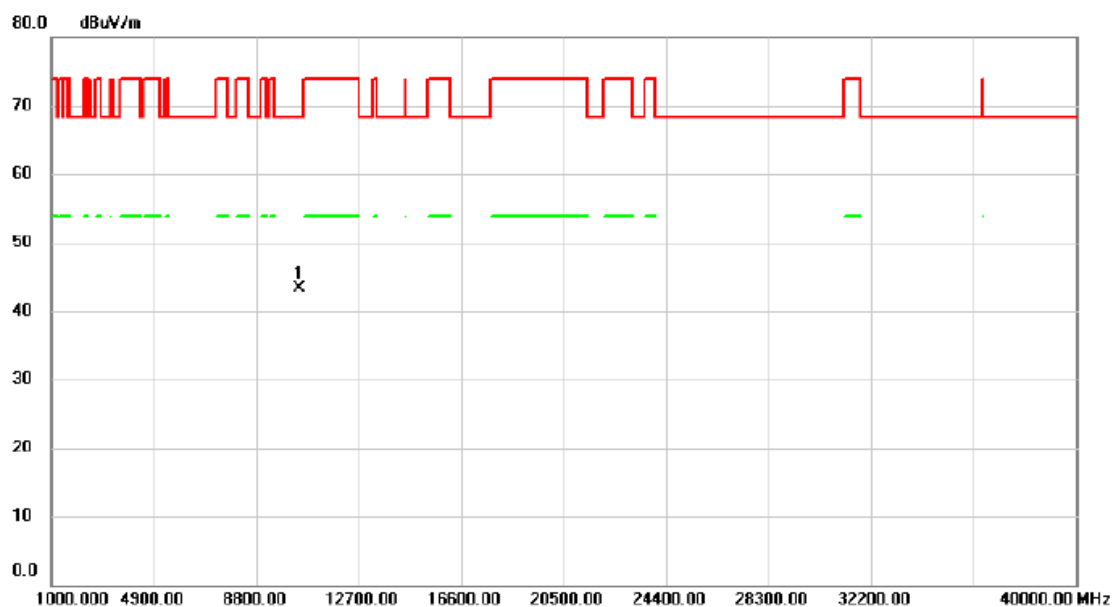
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.79	41.10	60.89	68.30	-7.41	Peak	
2	5150.0000	4.95	41.10	46.05	54.00	-7.95	AVG	
3	5224.3000	62.77	41.48	104.25	68.30	35.95	Peak	No Limit
4 *	5225.8000	51.59	41.49	93.08	54.00	39.08	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

### Horizontal

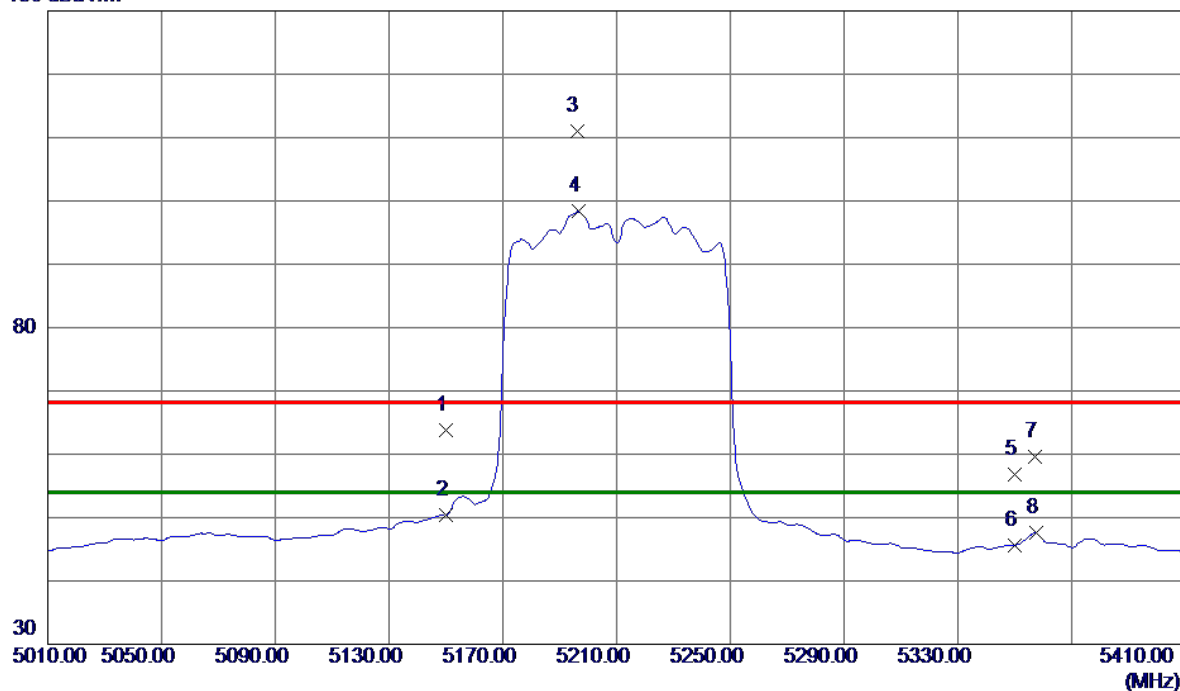


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	10458.74	26.01	17.39	43.40	68.30	-24.90	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

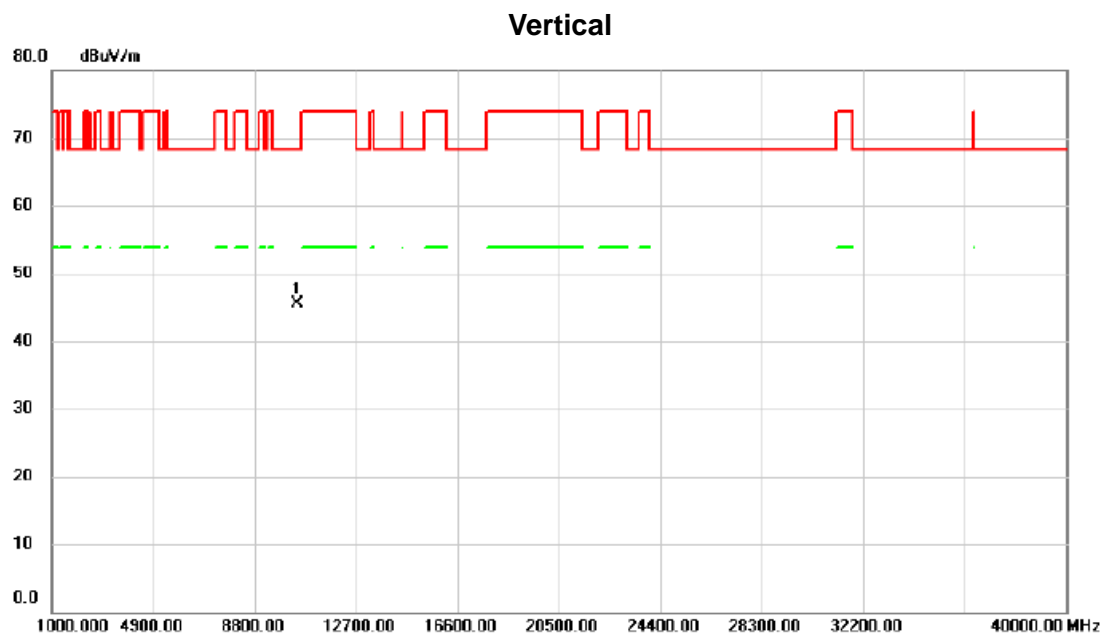
### Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.73	41.10	63.83	68.30	-4.47	Peak	
2	5150.0000	9.22	41.10	50.32	54.00	-3.68	AVG	
3	5196.0000	69.73	41.34	111.07	68.30	42.77	Peak	No Limit
4 *	5196.6000	56.98	41.34	98.32	54.00	44.32	AVG	No Limit
5	5350.0000	14.63	42.12	56.75	68.30	-11.55	Peak	
6	5350.0000	3.55	42.12	45.67	54.00	-8.33	AVG	
7	5357.0000	17.49	42.15	59.64	68.30	-8.66	Peak	
8	5357.4000	5.38	42.16	47.54	54.00	-6.46	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz



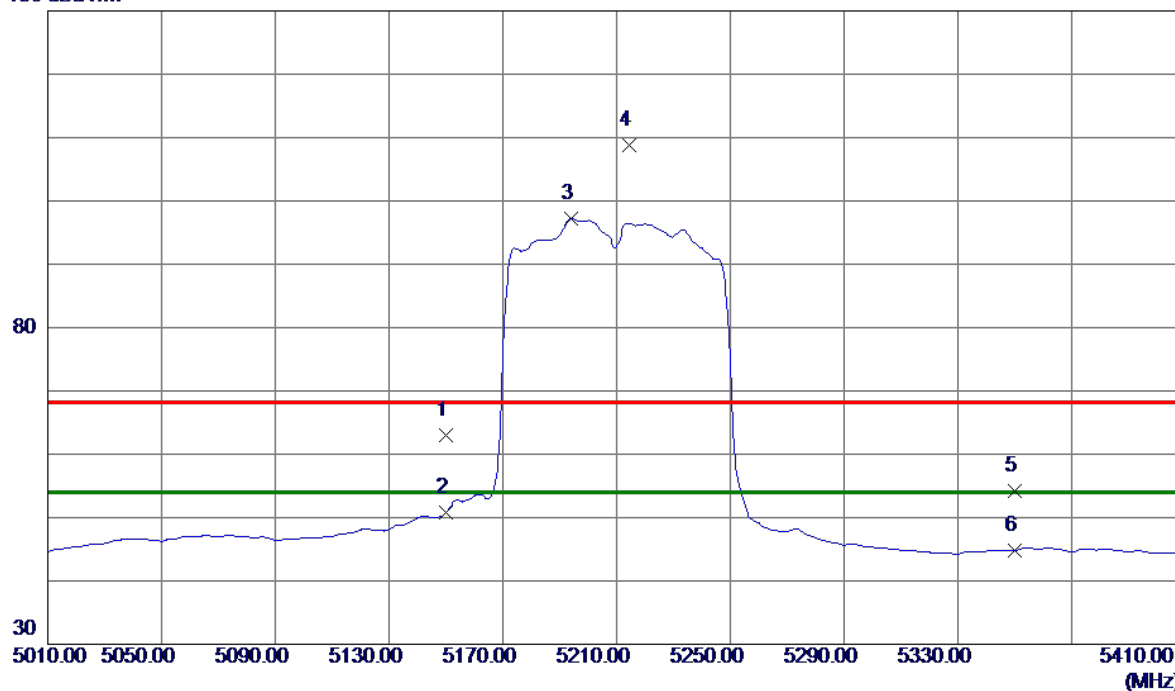
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10419.06	28.28	17.27	45.55	68.30	-22.75	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

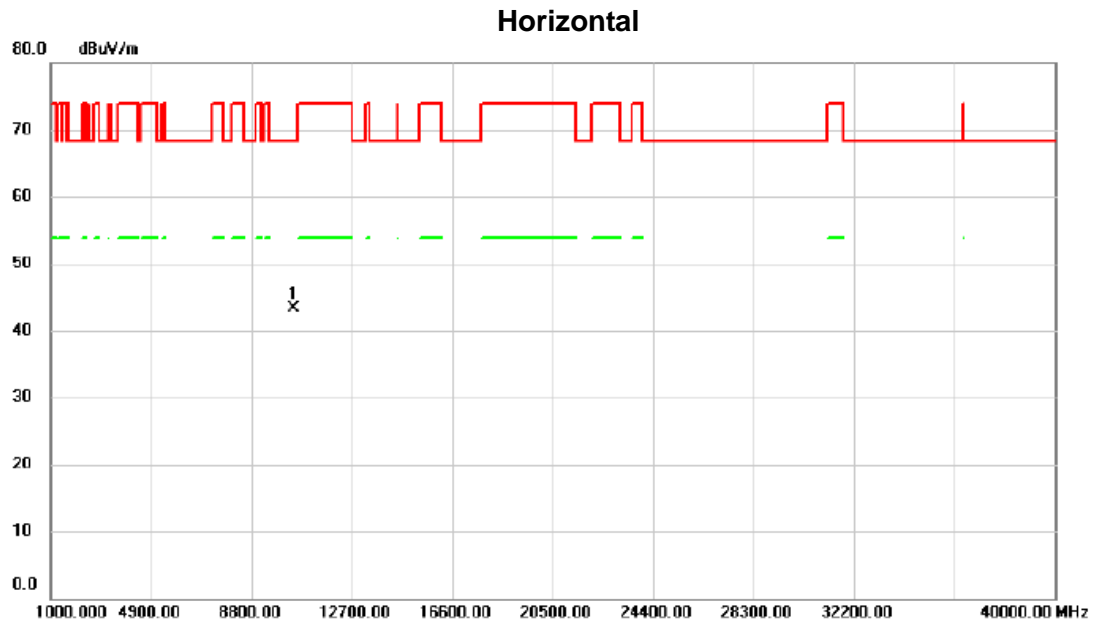
### Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.90	41.10	63.00	68.30	-5.30	Peak	
2	5150.0000	9.61	41.10	50.71	54.00	-3.29	AVG	
3 *	5193.8000	55.82	41.32	97.14	54.00	43.14	AVG	No Limit
4	5214.6000	67.41	41.43	108.84	68.30	40.54	Peak	No Limit
5	5350.0000	12.17	42.12	54.29	68.30	-14.01	Peak	
6	5350.0000	2.66	42.12	44.78	54.00	-9.22	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

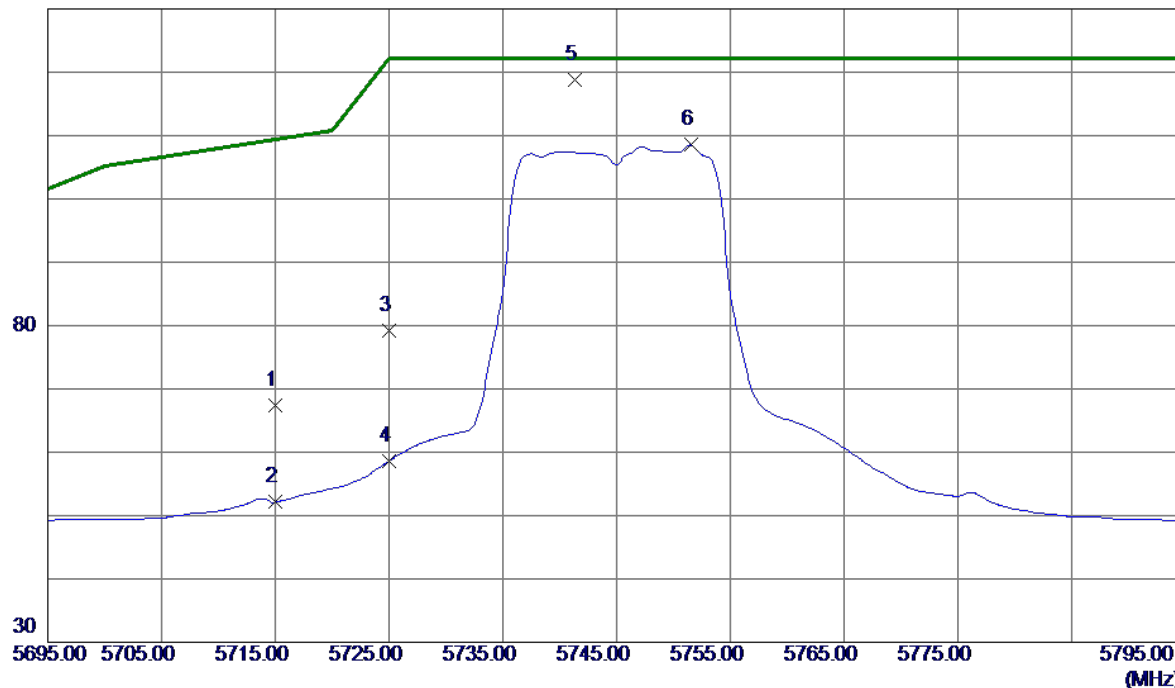


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10418.35	26.01	17.26	43.27	68.30	-25.03	peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5745MHz

### Vertical

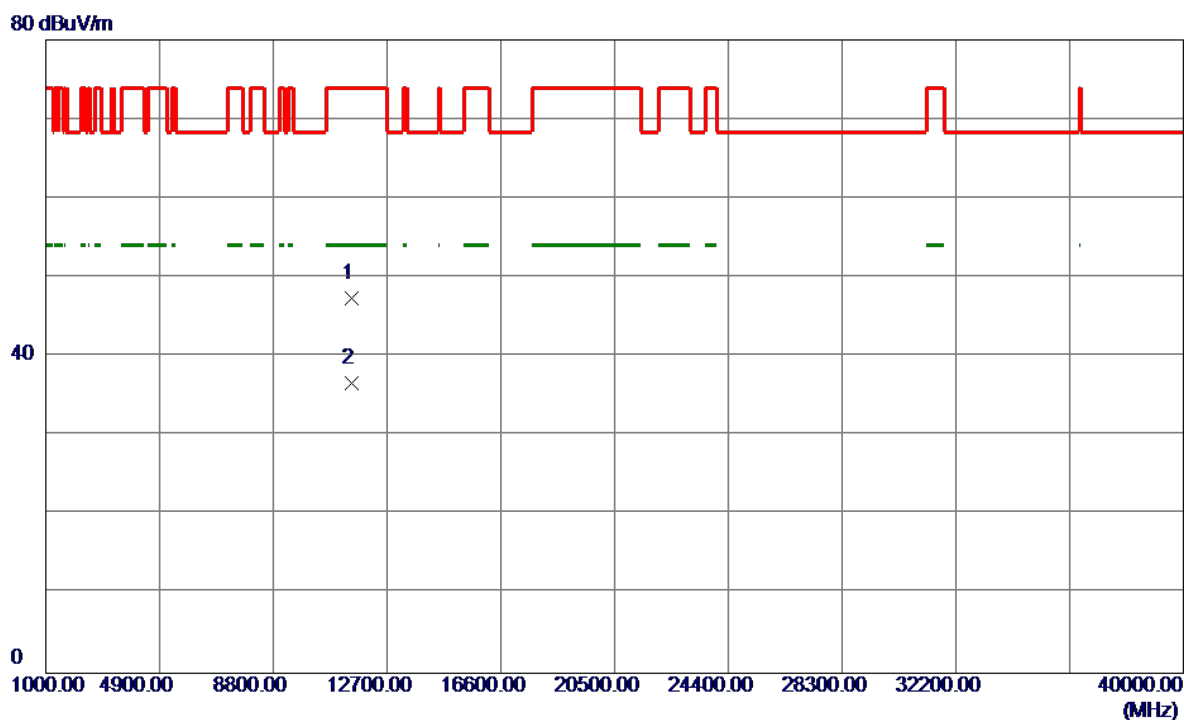
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	23.81	43.53	67.34	109.40	-42.06	Peak	
2	5715.0000	8.58	43.53	52.11	109.40	-57.29	AVG	
3	5725.0000	35.70	43.56	79.26	122.20	-42.94	Peak	
4	5725.0000	15.03	43.56	58.59	122.20	-63.61	AVG	
5 *	5741.3000	75.22	43.61	118.83	122.20	-3.37	Peak	
6	5751.5500	64.87	43.64	108.51	122.20	-13.69	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5745MHz

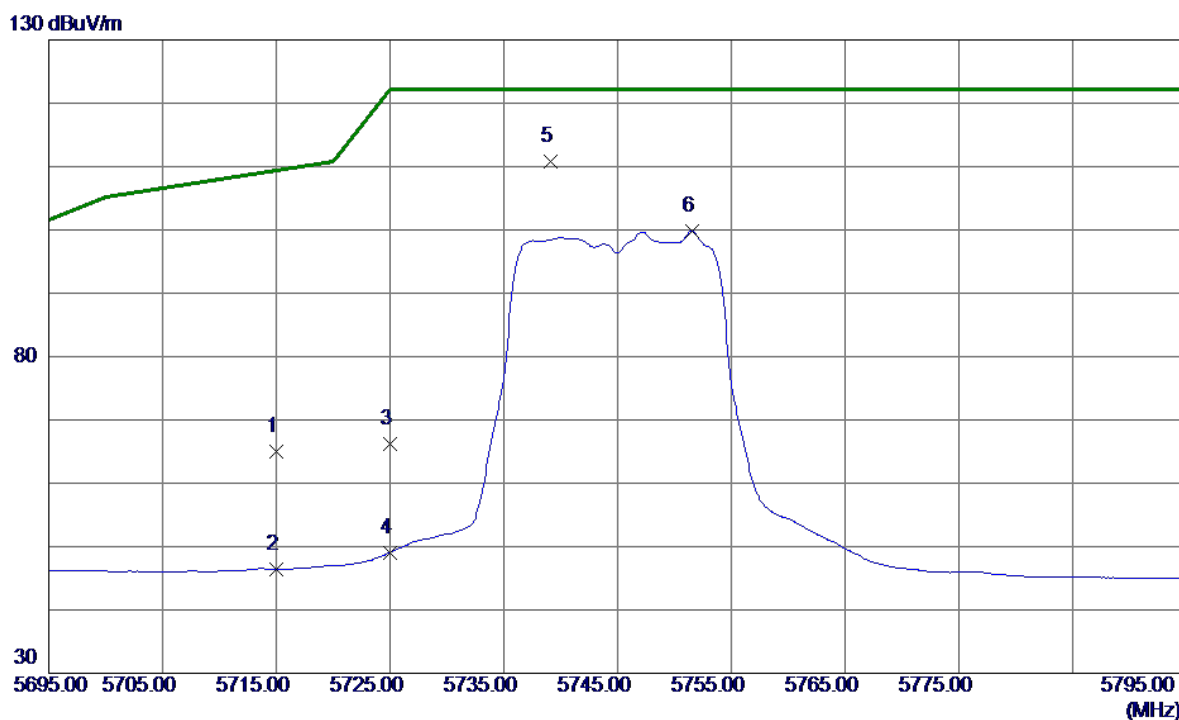
### Vertical



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11489.6570	29.22	18.20	47.42	74.00	-26.58	Peak	
2 *	11492.0279	18.49	18.20	36.69	54.00	-17.31	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5745MHz

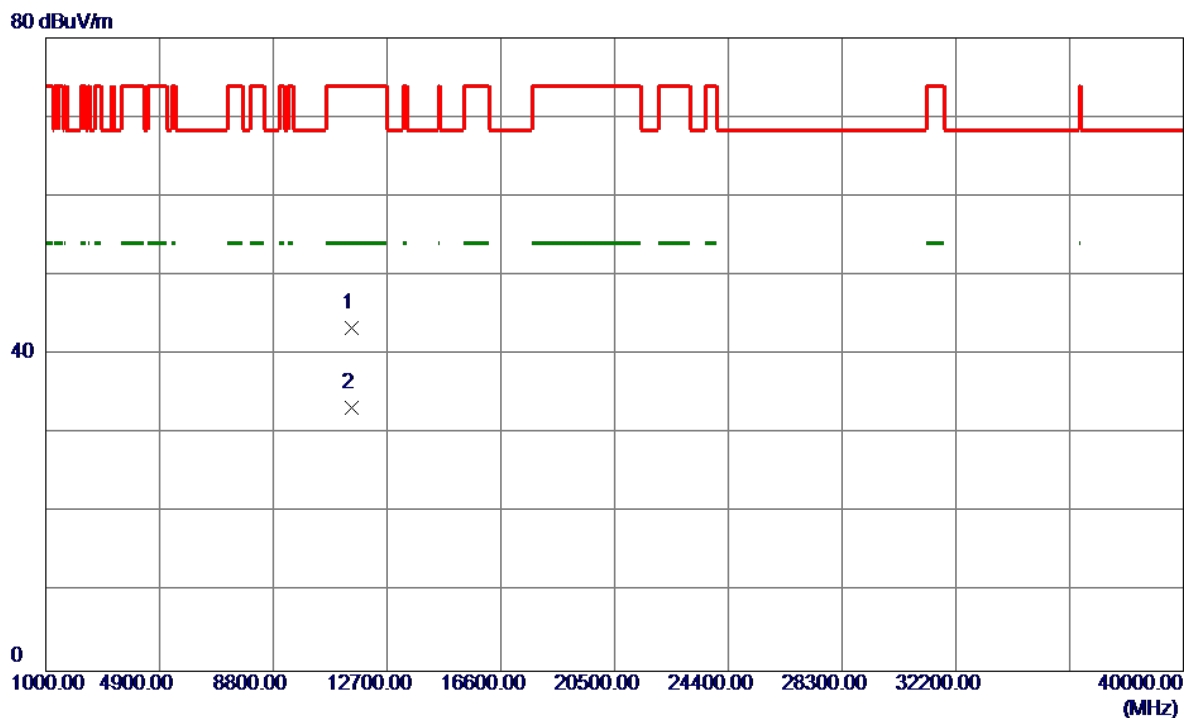
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	21.44	43.53	64.97	109.40	-44.43	Peak	
2	5715.0000	2.83	43.53	46.36	109.40	-63.04	AVG	
3	5725.0000	22.69	43.56	66.25	122.20	-55.95	Peak	
4	5725.0000	5.50	43.56	49.06	122.20	-73.14	AVG	
5 *	5739.1500	67.26	43.60	110.86	122.20	-11.34	Peak	
6	5751.5500	56.20	43.64	99.84	122.20	-22.36	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5745MHz

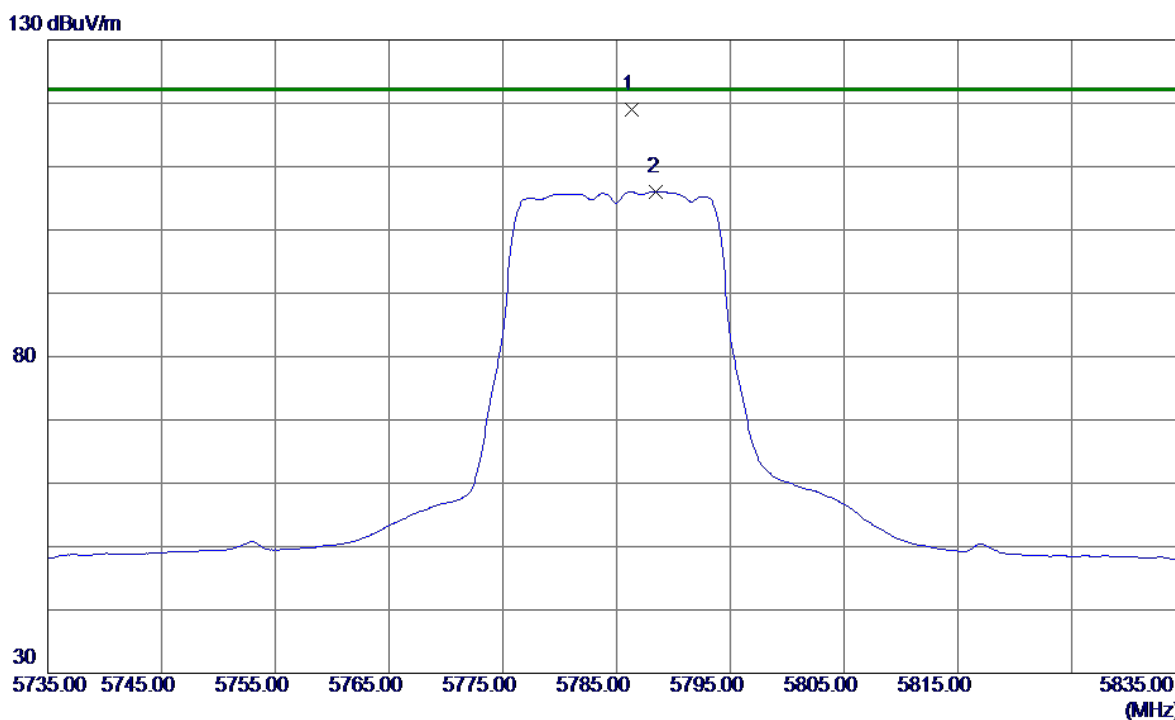
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11487.6529	25.14	18.19	43.33	74.00	-30.67	Peak	
2 *	11488.0300	15.03	18.19	33.22	54.00	-20.78	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5785MHz

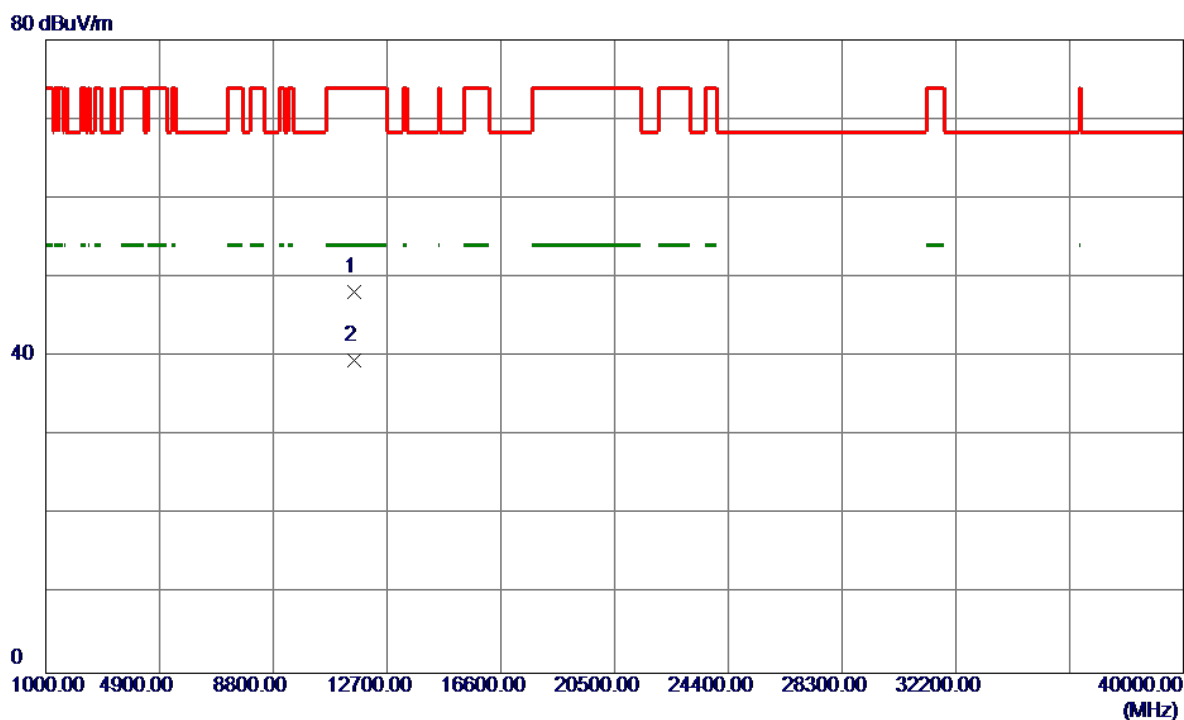
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5786.3000	75.16	43.74	118.90	122.20	-3.30	Peak	
2	5788.5000	62.29	43.75	106.04	122.20	-16.16	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5785MHz

### Vertical



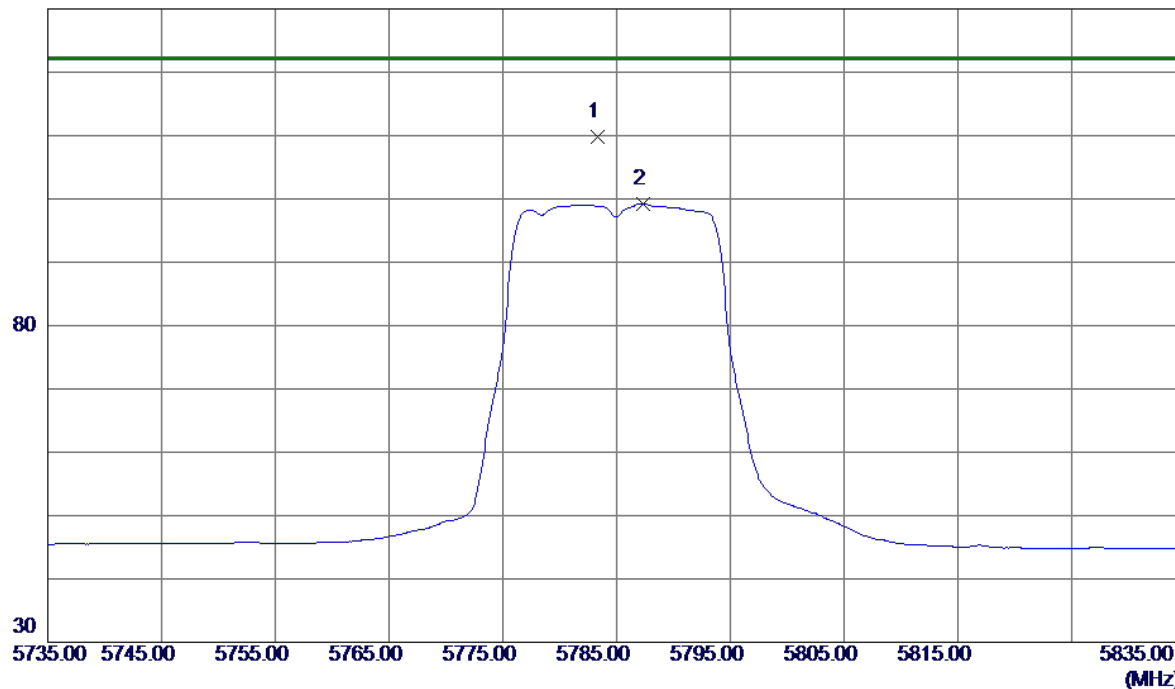
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11569.5750	29.93	18.20	48.13	74.00	-25.87	Peak	
2 *	11569.8250	21.35	18.20	39.55	54.00	-14.45	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5785MHz

### Horizontal

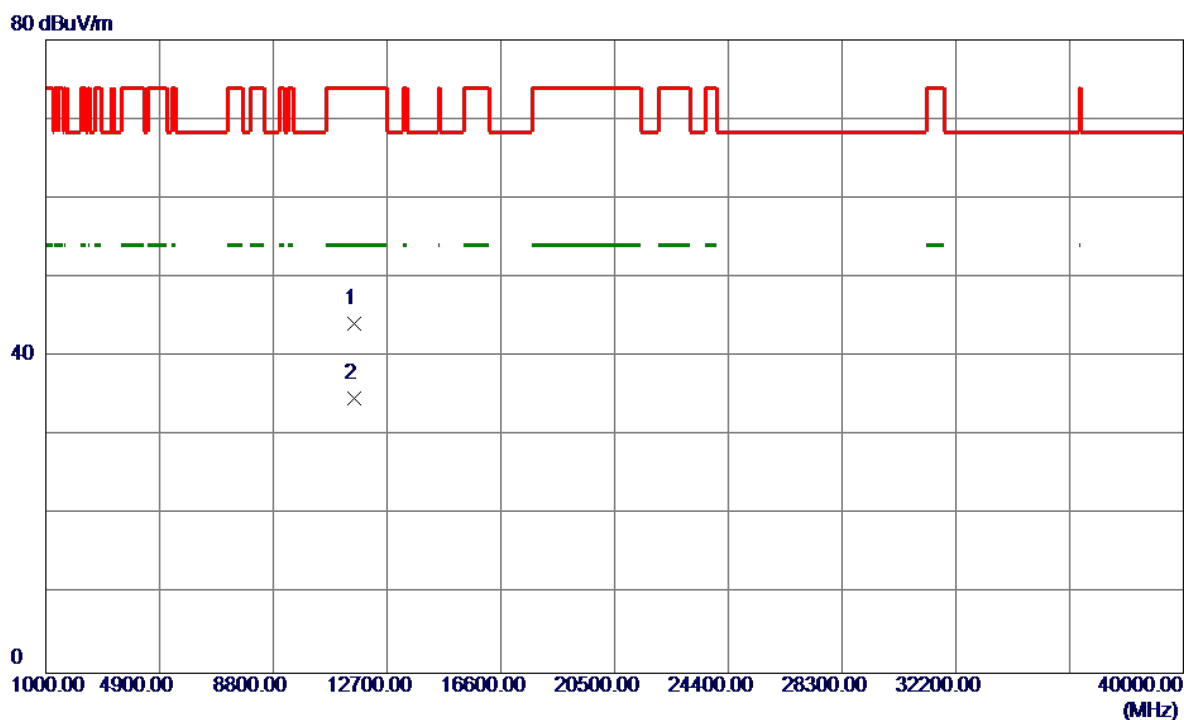
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5783.3000	66.09	43.74	109.83	122.20	-12.37	Peak	
2	5787.3500	55.52	43.75	99.27	122.20	-22.93	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5785MHz

### Horizontal

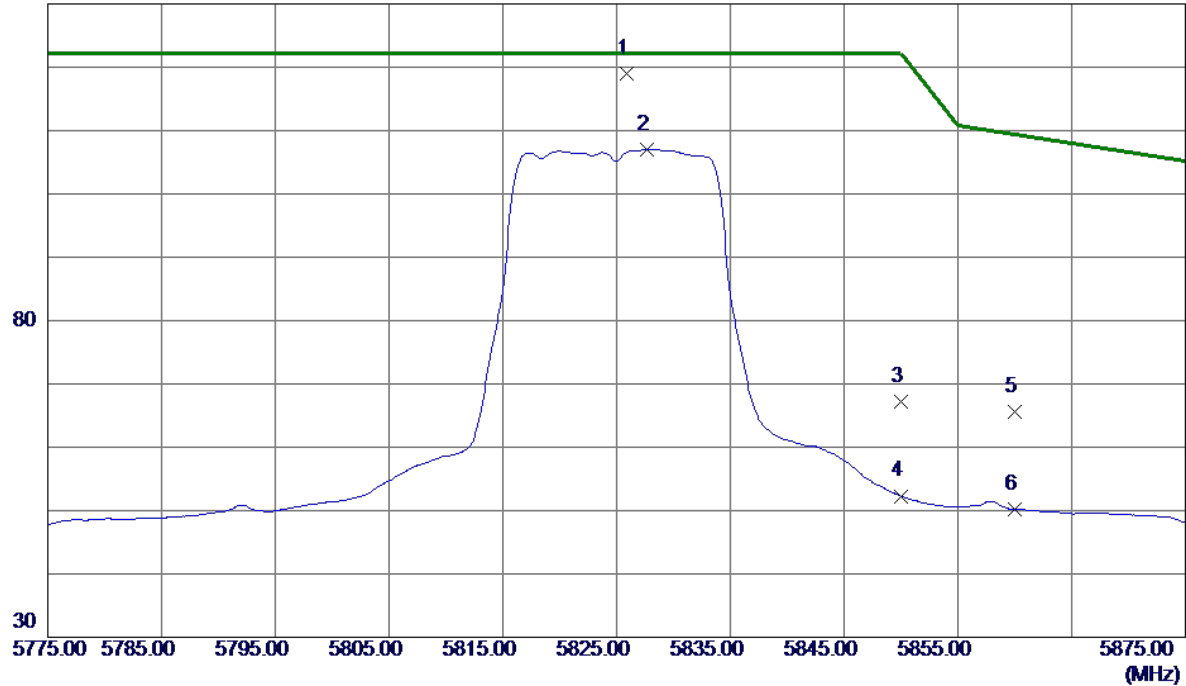


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11570.3500	26.02	18.20	44.22	74.00	-29.78	Peak	
2 *	11571.6080	16.45	18.20	34.65	54.00	-19.35	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5825MHz

### Vertical

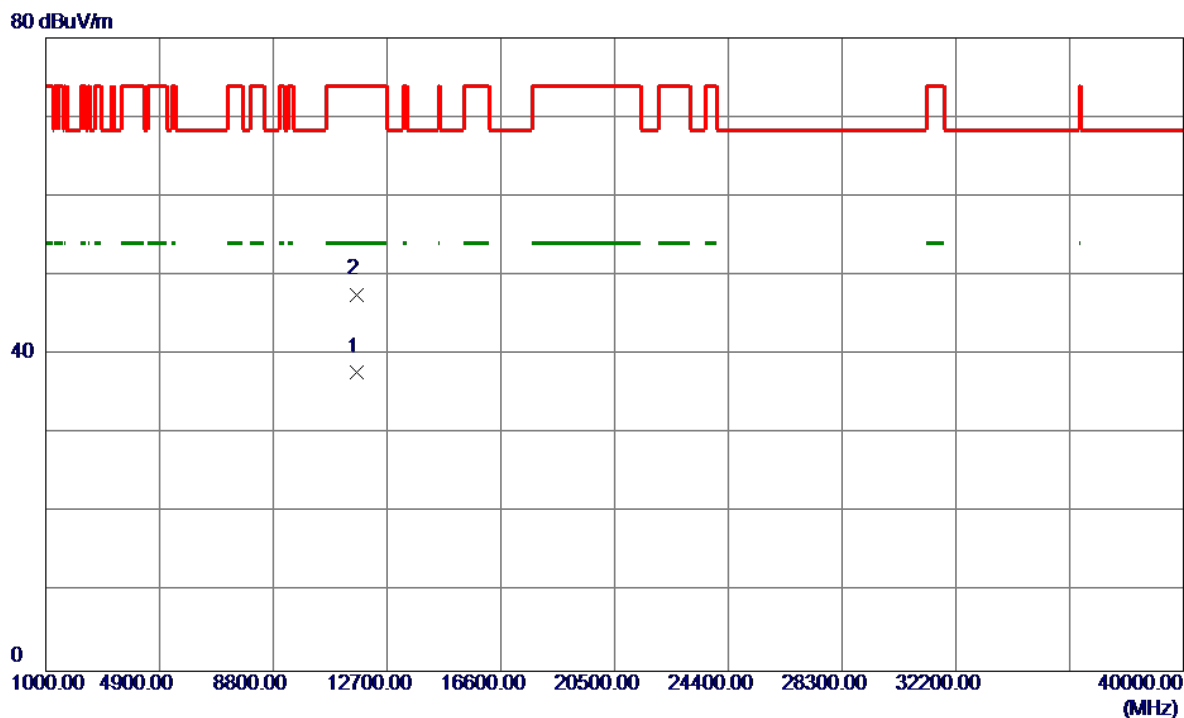
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5825.8500	75.21	43.86	119.07	122.20	-3.13	Peak	
2	5827.7000	63.08	43.87	106.95	122.20	-15.25	AVG	
3	5850.0000	23.31	43.94	67.25	122.20	-54.95	Peak	
4	5850.0000	8.36	43.94	52.30	122.20	-69.90	AVG	
5	5860.0000	21.58	43.97	65.55	109.40	-43.85	Peak	
6	5860.0000	6.26	43.97	50.23	109.40	-59.17	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5825MHz

### Vertical

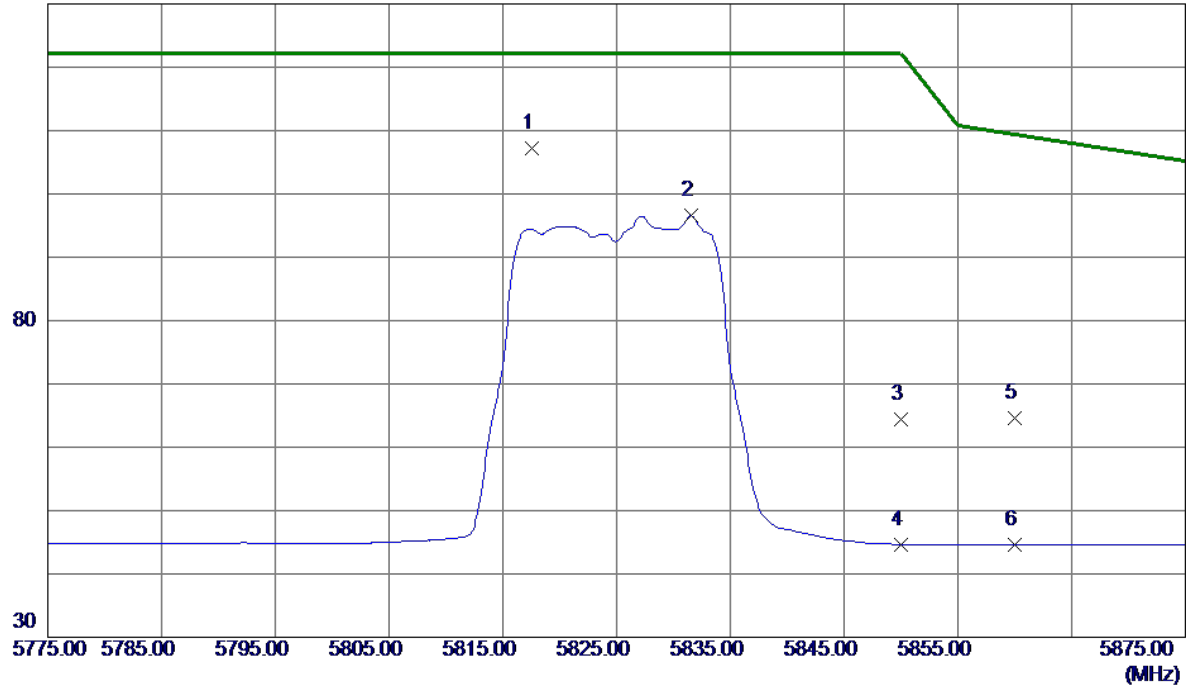


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	11647.8230	19.66	18.17	37.83	54.00	-16.17	AVG	
2	11650.0730	29.43	18.17	47.60	74.00	-26.40	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5825MHz

### Horizontal

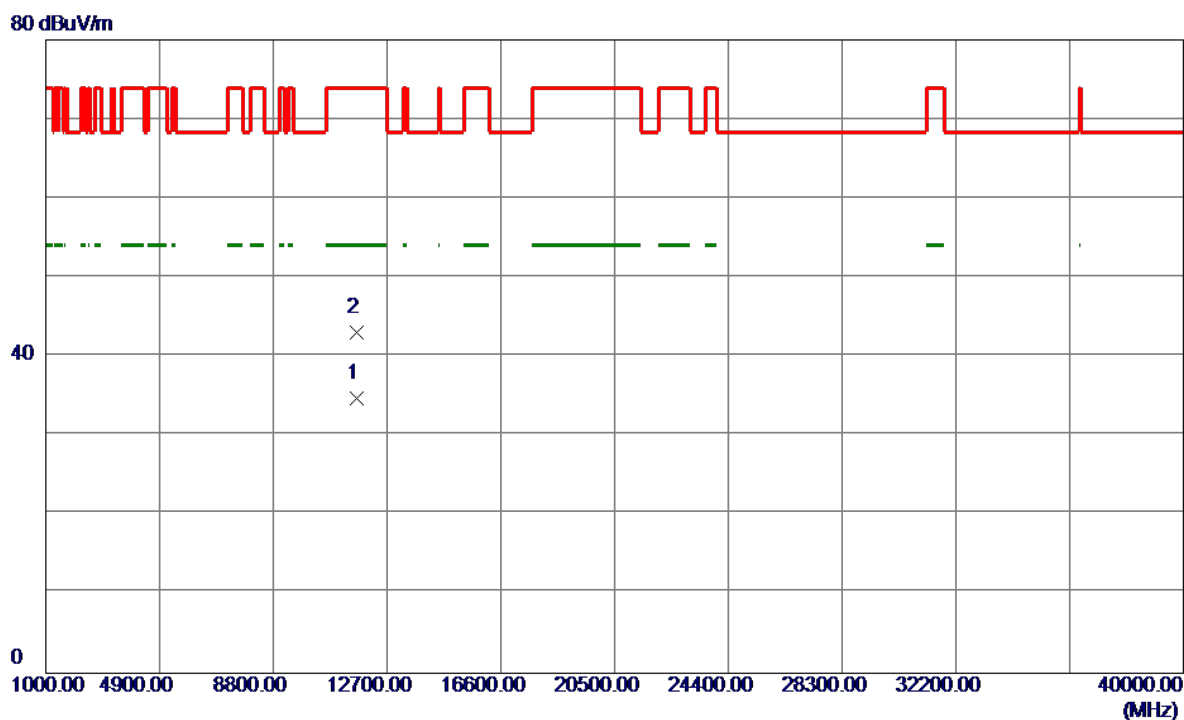
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5817.5500	63.34	43.84	107.18	122.20	-15.02	Peak	
2	5831.5500	52.68	43.88	96.56	122.20	-25.64	AVG	
3	5850.0000	20.41	43.94	64.35	122.20	-57.85	Peak	
4	5850.0000	0.68	43.94	44.62	122.20	-77.58	AVG	
5	5860.0000	20.66	43.97	64.63	109.40	-44.77	Peak	
6	5860.0000	0.57	43.97	44.54	109.40	-64.86	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC20 Mode 5825MHz

### Horizontal

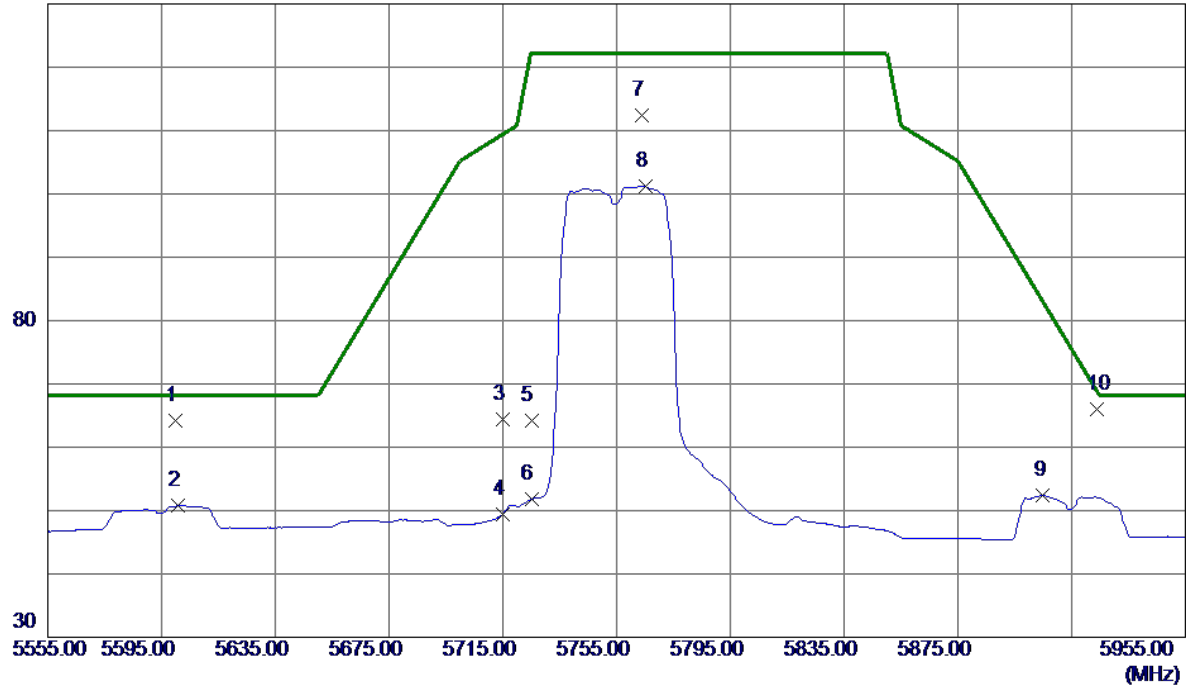


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11651.5279	16.53	18.17	34.70	54.00	-19.30	AVG	
2	11652.4720	24.89	18.17	43.06	74.00	-30.94	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5755MHz

### Vertical

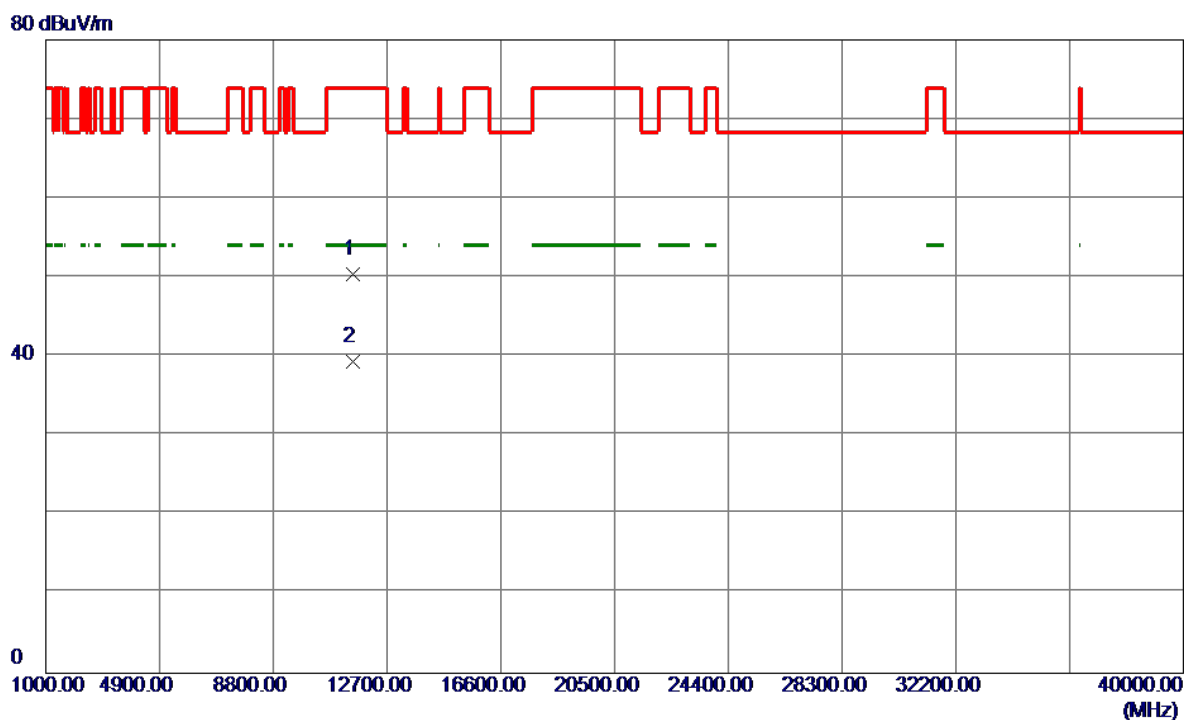
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5600.0000	21.09	43.18	64.27	68.20	-3.93	Peak	
2	5600.6000	7.58	43.18	50.76	68.20	-17.44	AVG	
3	5715.0000	20.92	43.53	64.45	109.40	-44.95	Peak	
4	5715.0000	5.94	43.53	49.47	109.40	-59.93	AVG	
5	5725.0000	20.73	43.56	64.29	122.20	-57.91	Peak	
6	5725.0000	8.26	43.56	51.82	122.20	-70.38	AVG	
7	5763.8000	68.80	43.68	112.48	122.20	-9.72	Peak	
8	5765.2000	57.52	43.68	101.20	122.20	-21.00	AVG	
9	5905.0000	8.36	44.10	52.46	83.00	-30.54	AVG	
10 *	5923.8000	21.85	44.16	66.01	69.09	-3.08	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5755MHz

# Vertical

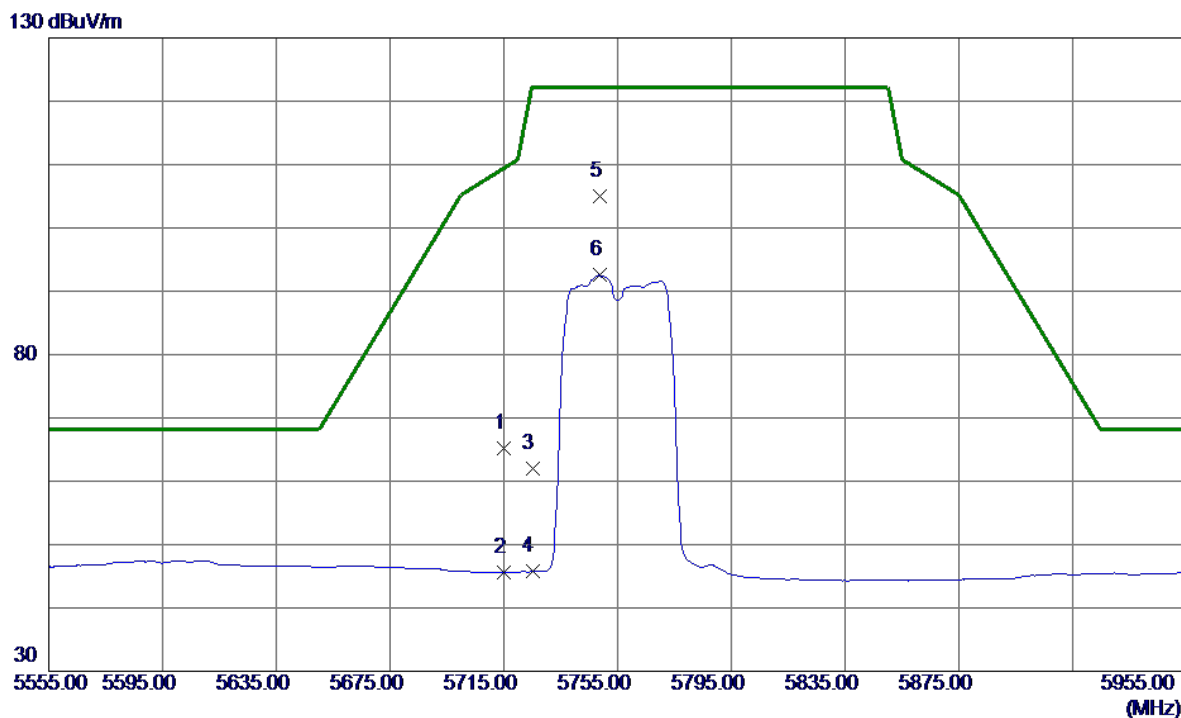


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11509.9150	32.14	18.22	50.36	74.00	-23.64	Peak	
2 *	11510.6400	21.20	18.22	39.42	54.00	-14.58	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5755MHz

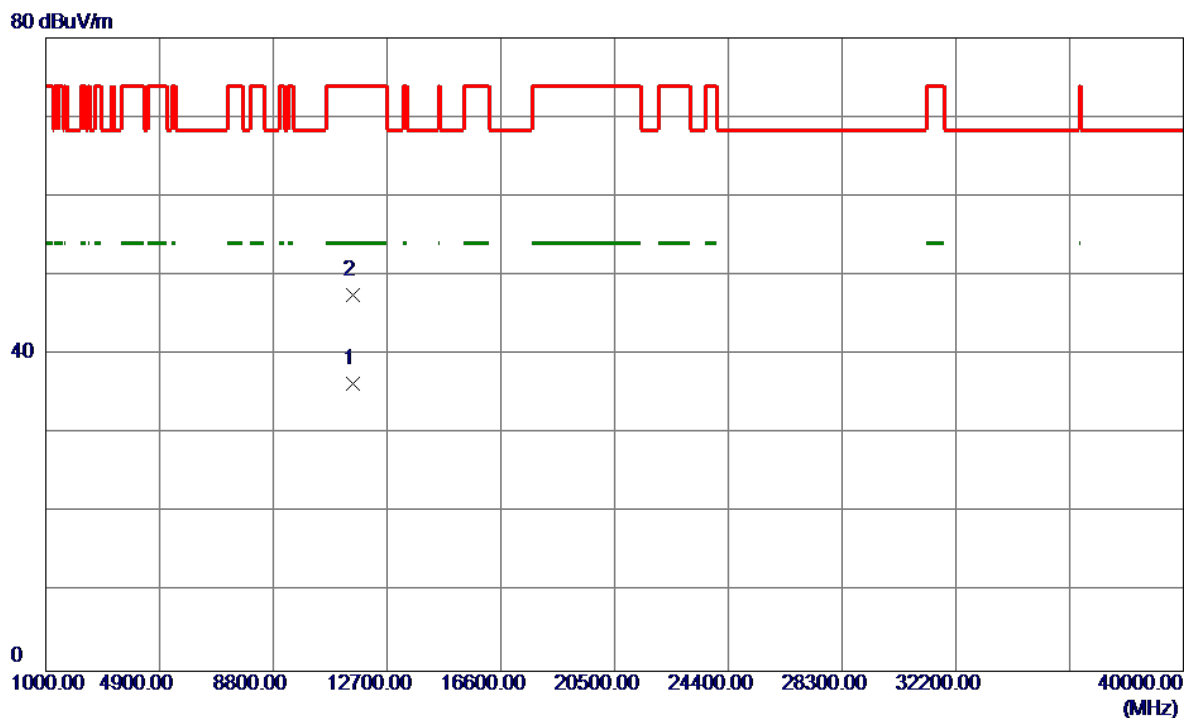
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	21.61	43.53	65.14	109.40	-44.26	Peak	
2	5715.0000	2.01	43.53	45.54	109.40	-63.86	AVG	
3	5725.0000	18.37	43.56	61.93	122.20	-60.27	Peak	
4	5725.0000	2.16	43.56	45.72	122.20	-76.48	AVG	
5 *	5748.8000	61.33	43.63	104.96	122.20	-17.24	Peak	
6	5748.8000	48.93	43.63	92.56	122.20	-29.64	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5755MHz

### Horizontal

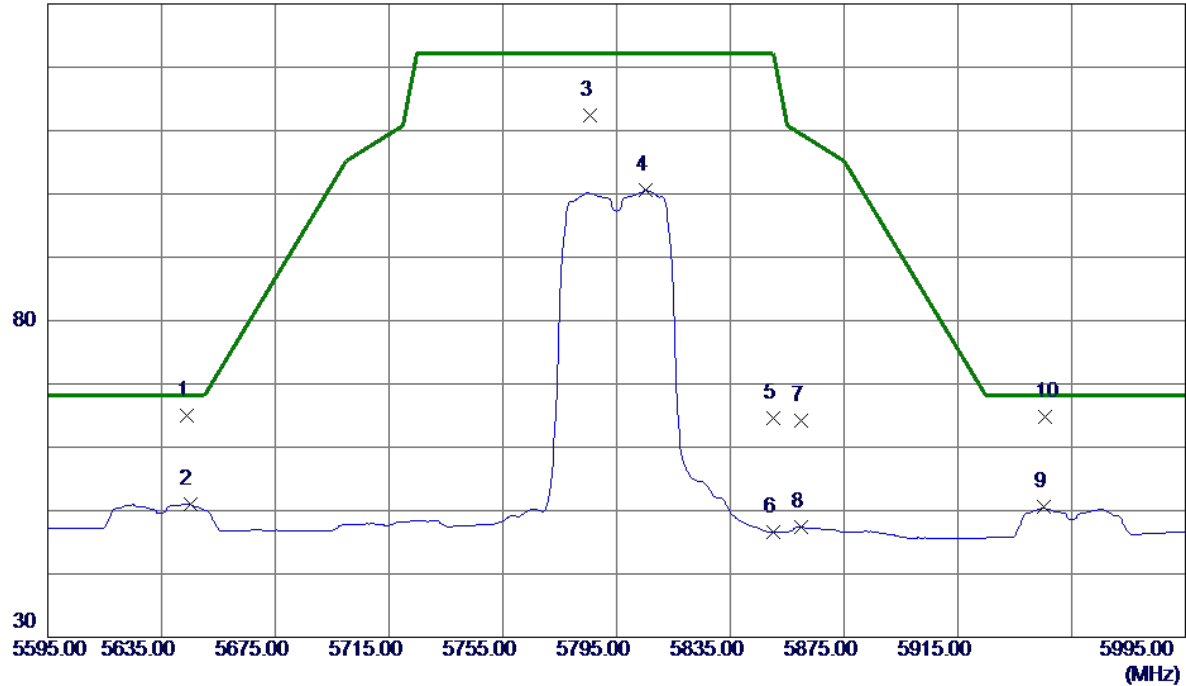


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	11511.7500	18.12	18.22	36.34	54.00	-17.66	AVG	
2	11512.0519	29.26	18.22	47.48	74.00	-26.52	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5795MHz

### Vertical

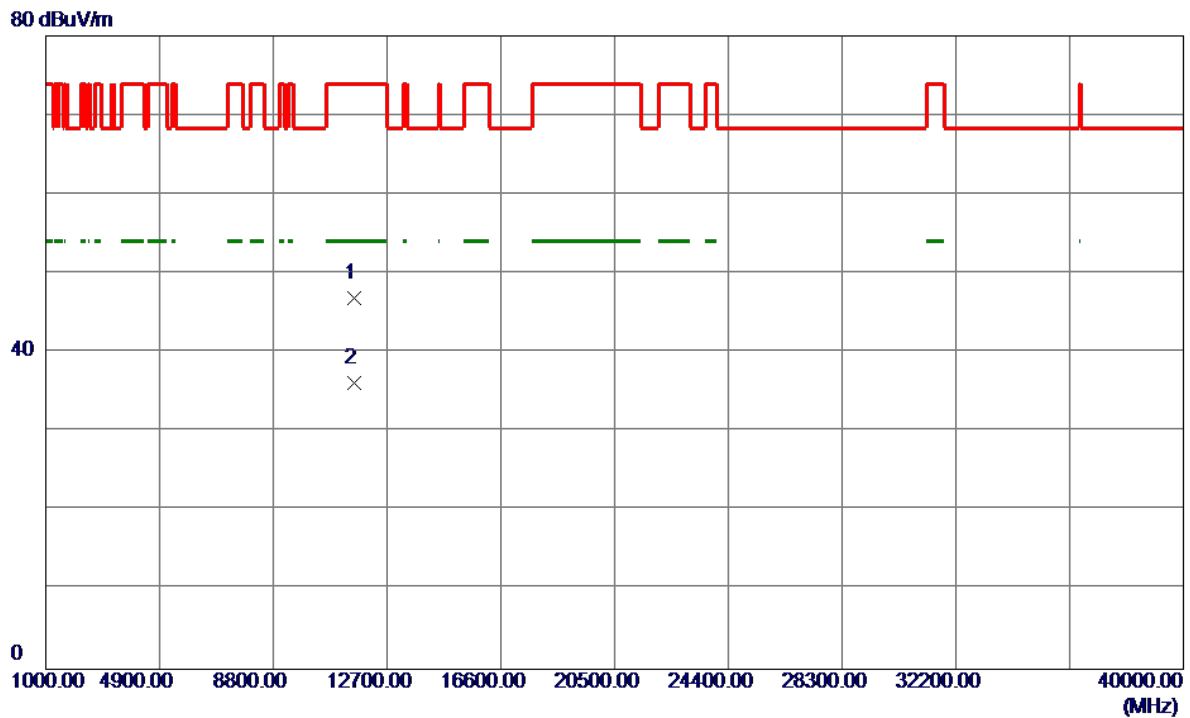
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5644.0000	21.74	43.31	65.05	68.20	-3.15	Peak	
2	5645.0000	7.71	43.32	51.03	68.20	-17.17	AVG	
3	5785.8000	68.61	43.74	112.35	122.20	-9.85	Peak	
4	5805.2000	56.80	43.80	100.60	122.20	-21.60	AVG	
5	5850.0000	20.74	43.94	64.68	122.20	-57.52	Peak	
6	5850.0000	2.69	43.94	46.63	122.20	-75.57	AVG	
7	5860.0000	20.30	43.97	64.27	109.40	-45.13	Peak	
8	5860.0000	3.45	43.97	47.42	109.40	-61.98	AVG	
9	5945.2000	6.30	44.22	50.52	68.20	-17.68	AVG	
10	5945.6000	20.63	44.23	64.86	68.20	-3.34	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5795MHz

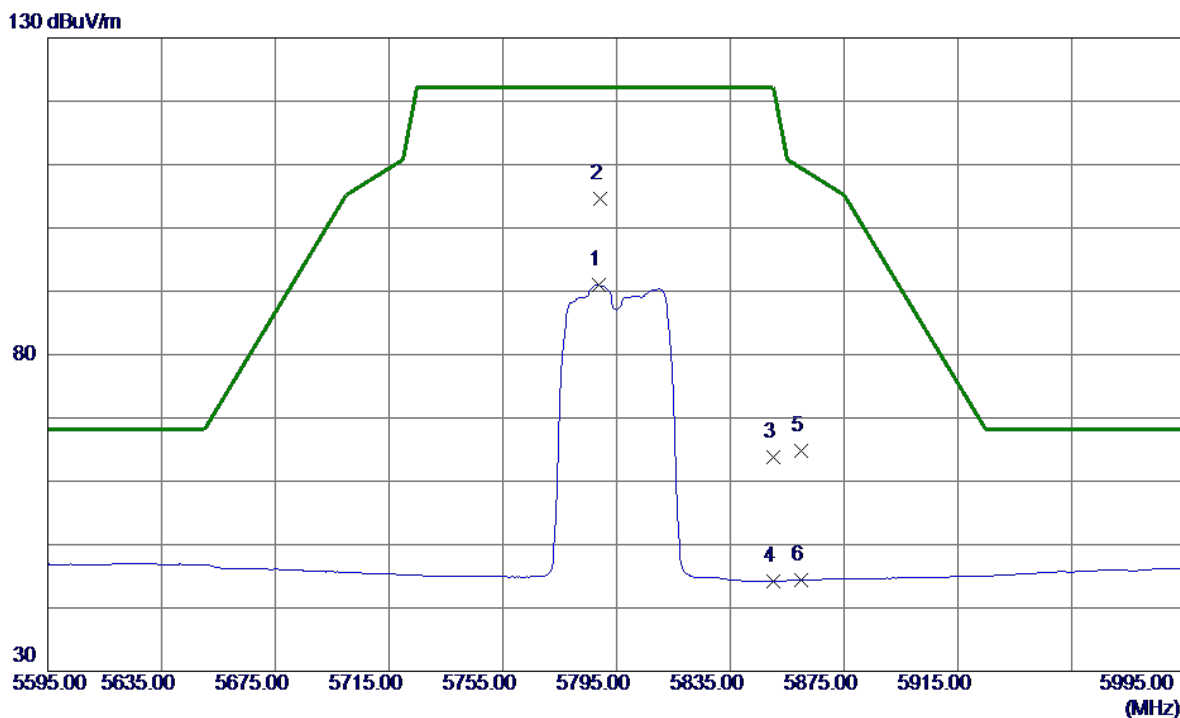
### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11589.7180	28.65	18.19	46.84	74.00	-27.16	Peak	
2 *	11591.2350	18.02	18.19	36.21	54.00	-17.79	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5795MHz

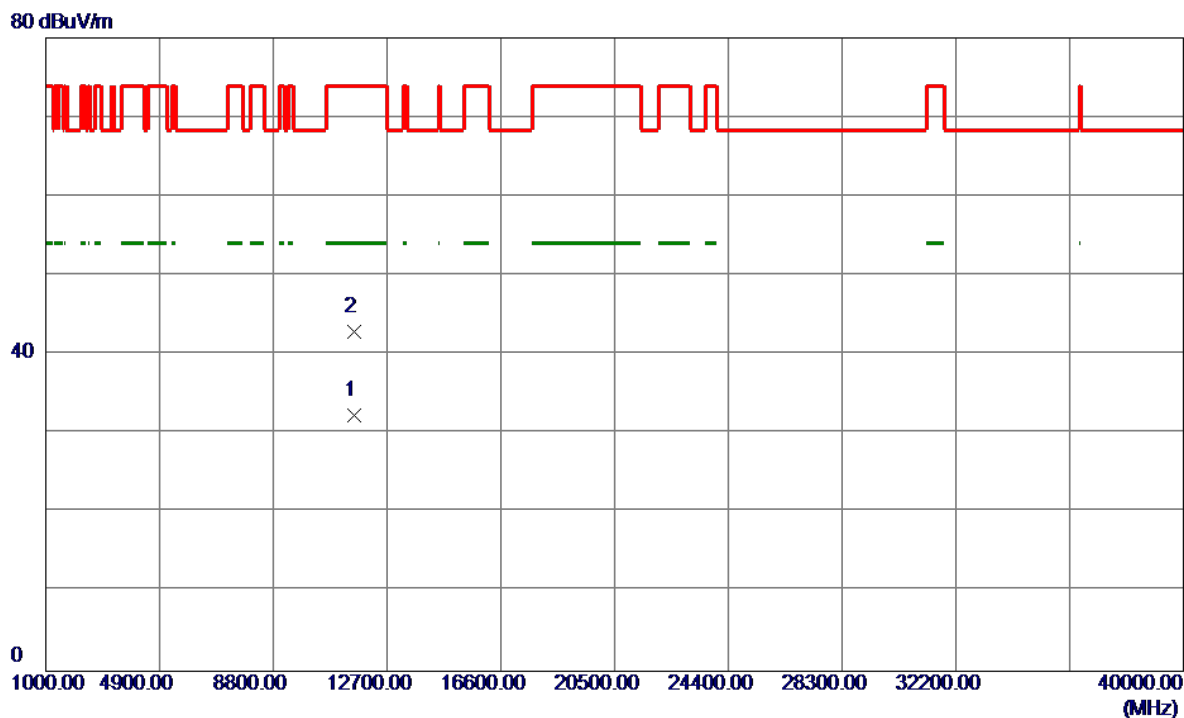
### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5788.6000	47.26	43.75	91.01	122.20	-31.19	AVG	
2 *	5789.2000	60.77	43.75	104.52	122.20	-17.68	Peak	
3	5850.0000	19.83	43.94	63.77	122.20	-58.43	Peak	
4	5850.0000	0.34	43.94	44.28	122.20	-77.92	AVG	
5	5860.0000	20.82	43.97	64.79	109.40	-44.61	Peak	
6	5860.0000	0.46	43.97	44.43	109.40	-64.97	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC40 Mode 5795MHz

### Horizontal

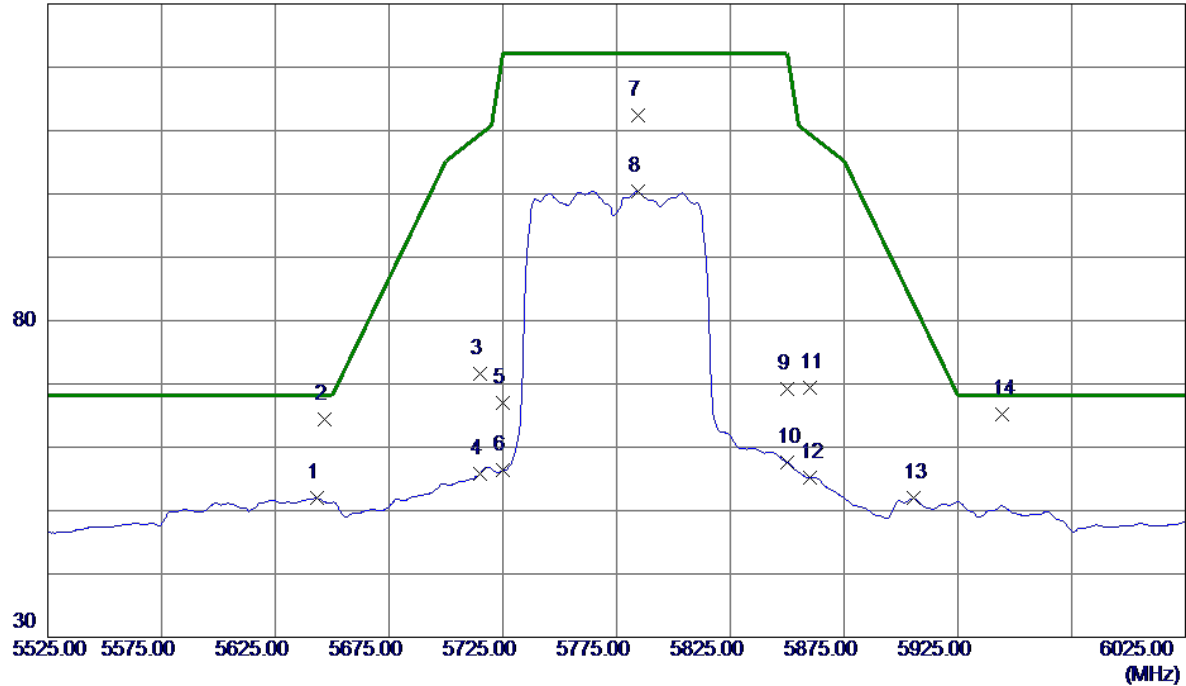


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11591.9480	14.14	18.19	32.33	54.00	-21.67	AVG	
2	11592.0250	24.76	18.19	42.95	74.00	-31.05	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC80 Mode 5775MHz

### Vertical

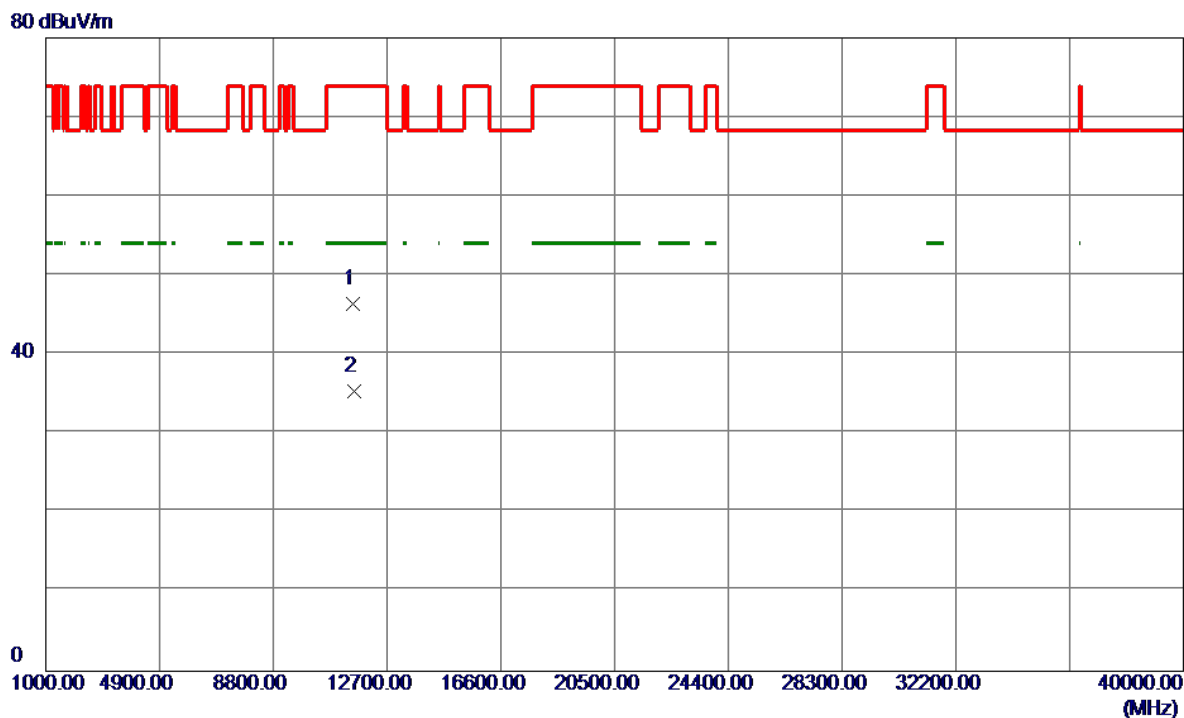
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5643.2500	8.66	43.31	51.97	68.20	-16.23	AVG	
2	5646.5000	21.15	43.32	64.47	68.20	-3.73	Peak	
3	5715.0000	27.99	43.53	71.52	109.40	-37.88	Peak	
4	5715.0000	12.31	43.53	55.84	109.40	-53.56	AVG	
5	5725.0000	23.47	43.56	67.03	122.20	-55.17	Peak	
6	5725.0000	12.77	43.56	56.33	122.20	-65.87	AVG	
7	5784.2500	68.69	43.74	112.43	122.20	-9.77	Peak	
8	5784.5000	56.67	43.74	100.41	122.20	-21.79	AVG	
9	5850.0000	25.29	43.94	69.23	122.20	-52.97	Peak	
10	5850.0000	13.64	43.94	57.58	122.20	-64.62	AVG	
11	5860.0000	25.44	43.97	69.41	109.40	-39.99	Peak	
12	5860.0000	11.24	43.97	55.21	109.40	-54.19	AVG	
13	5905.5000	7.82	44.10	51.92	82.63	-30.71	AVG	
14 *	5944.2500	20.99	44.22	65.21	68.20	-2.99	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC80 Mode 5775MHz

### Vertical



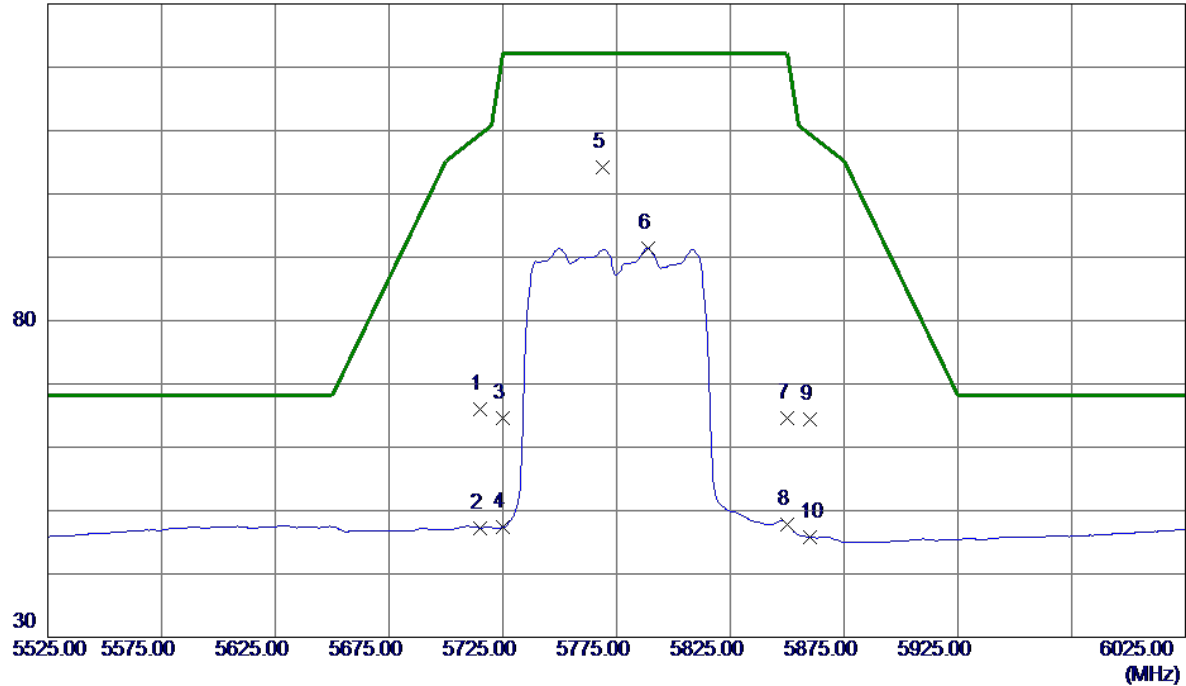
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11551.3350	28.20	18.21	46.41	74.00	-27.59	Peak	
2 *	11552.4700	17.20	18.21	35.41	54.00	-18.59	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC80 Mode 5775MHz

### Horizontal

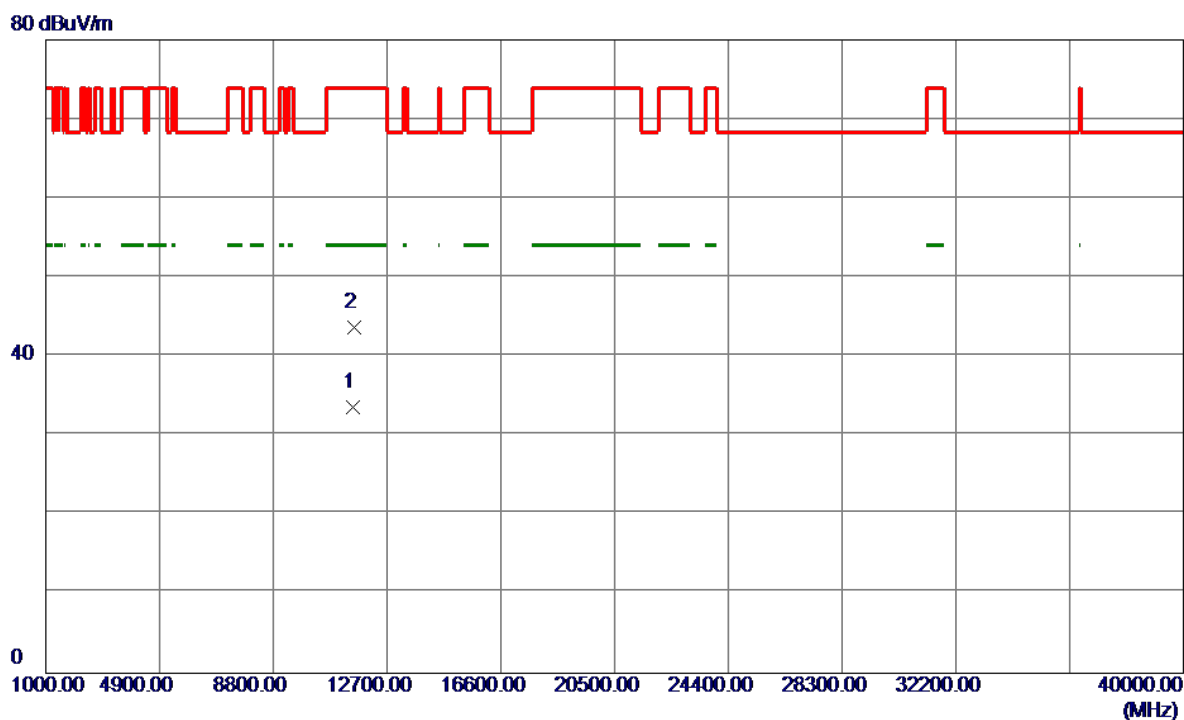
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	22.49	43.53	66.02	109.40	-43.38	Peak	
2	5715.0000	3.74	43.53	47.27	109.40	-62.13	AVG	
3	5725.0000	21.00	43.56	64.56	122.20	-57.64	Peak	
4	5725.0000	3.82	43.56	47.38	122.20	-74.82	AVG	
5 *	5768.7500	60.60	43.69	104.29	122.20	-17.91	Peak	
6	5788.7500	47.72	43.75	91.47	122.20	-30.73	AVG	
7	5850.0000	20.69	43.94	64.63	122.20	-57.57	Peak	
8	5850.0000	3.92	43.94	47.86	122.20	-74.34	AVG	
9	5860.0000	20.52	43.97	64.49	109.40	-44.91	Peak	
10	5860.0000	1.87	43.97	45.84	109.40	-63.56	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX AC80 Mode 5775MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11548.0870	15.33	18.21	33.54	54.00	-20.46	AVG	
2	11551.6750	25.50	18.21	43.71	74.00	-30.29	Peak	

### TX A Mode\_DUTY CYCLE

Duty cycle: TX DUTYMHz

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

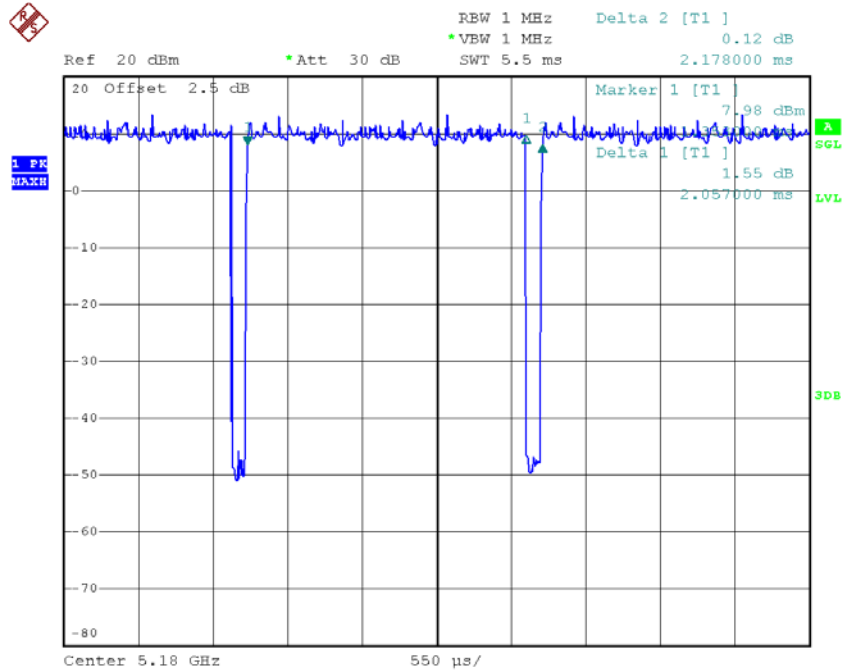
$T_{ON}$ : 2.06 msec

$T_{Total}$ : 2.18 msec

Duty cycle: 94.50%

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

Duty Factor = 0.25



Date: 4.DEC.2017 20:45:40

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be cacluated as Output Power = Measured power + Ducus factor  
Power Spectral Density = Measured density + Duty factor

### TX N20 Mode\_DUTY CYCLE

Duty cycle: TX DUTYMHZ

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

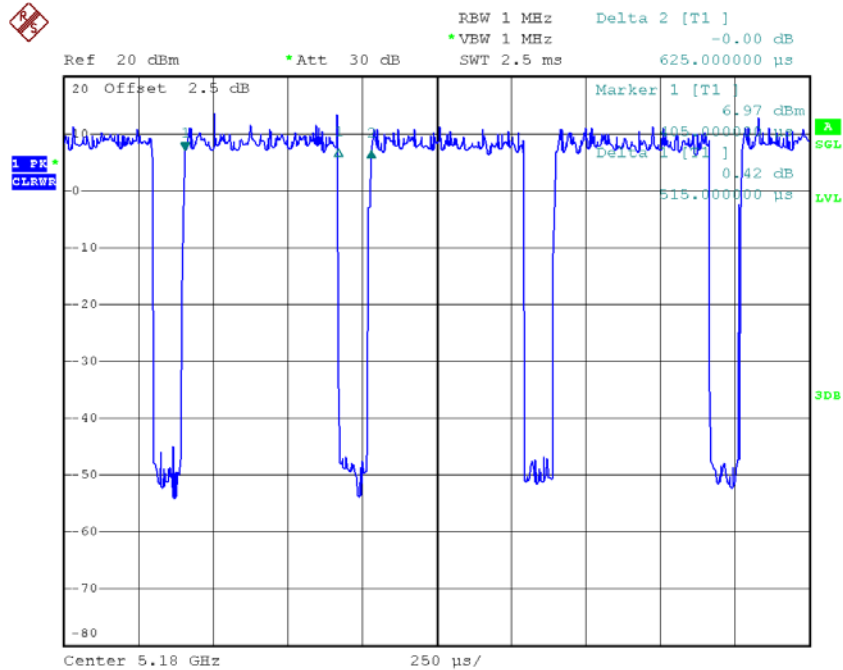
$T_{ON}$ : 0.52 msec

$T_{Total}$ : 0.62 msec

Duty cycle: 83.87%

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

Duty Factor = 0.76



Date: 4.DEC.2017 20:47:39

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is not 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 N40 Mode\_DUTY CYCLE

Duty cycle: TX DUTYMHz

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

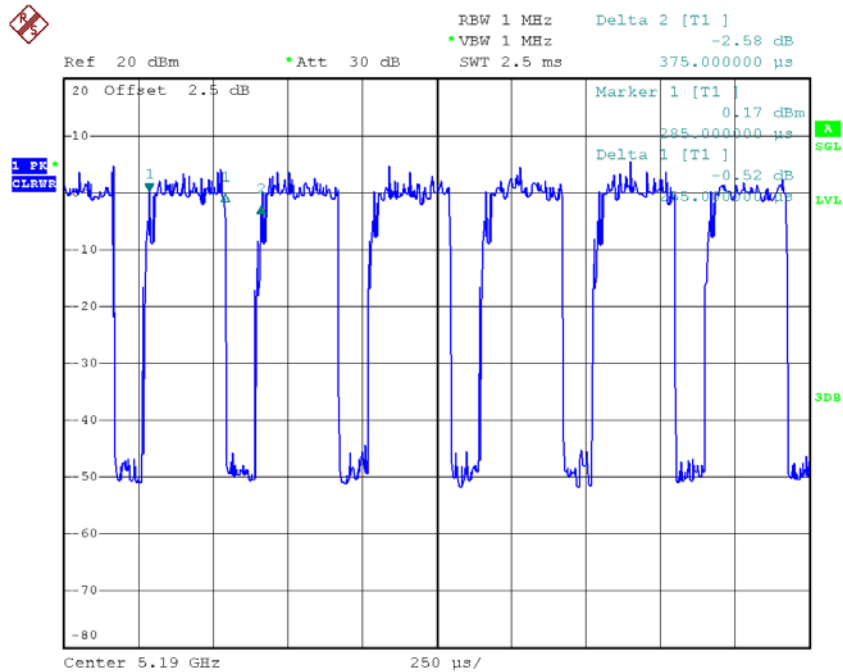
$T_{ON}$ : 0.26 msec

$T_{Total}$ : 0.38 msec

Duty cycle: 68.42%

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

Duty Factor = 1.65



Date: 4.DEC.2017 21:10:50

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### TX AC20 Mode\_DUTY CYCLE

Duty cycle: TX DUTYMHz

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

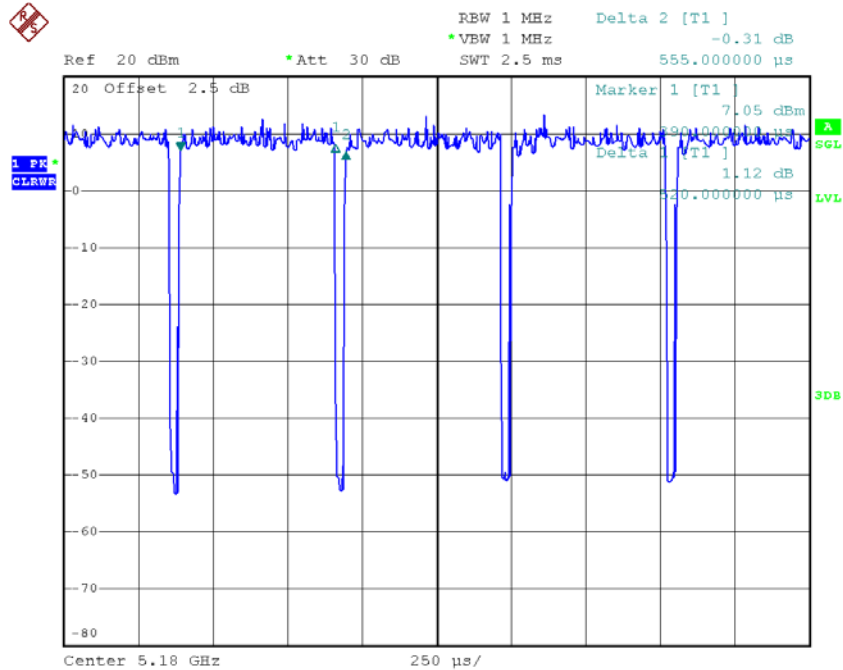
$T_{ON}$ : 0.52 msec

$T_{Total}$ : 0.56 msec

Duty cycle: 92.86%

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

Duty Factor = 0.32



Date: 4.DEC.2017 20:49:47

Note: The EUT was programmed to be in countinuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be cacluated as Output Power = Measured power + Ducus factor  
Power Spectral Density = Measured density + Duty factor

### TX AC40 Mode\_DUTY CYCLE

Duty cycle: TX DUTYMHZ

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

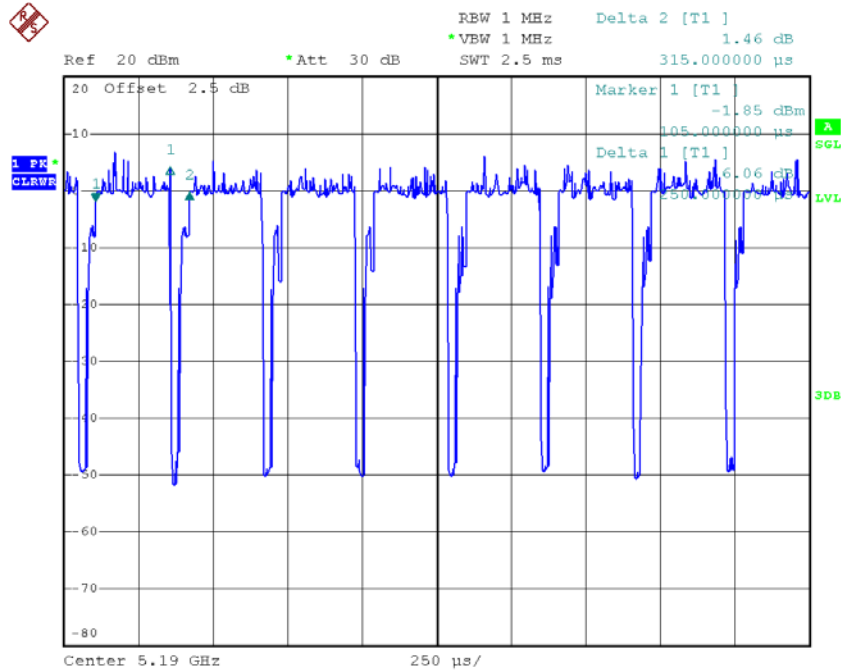
$T_{\text{ON}}$ : 0.25 msec

$T_{\text{Total}}$ : 0.32 msec

Duty cycle: 78.12%

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

$$\text{Duty Factor} = 1.07$$



Date: 4.DEC.2017 20:55:59

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be cacluated as Output Power = Measured power + Ducus factor  
Power Spectral Density = Measured density + Duty factor

### TX AC80 Mode\_DUTY CYCLE

Duty cycle: TX DUTYMHZ

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

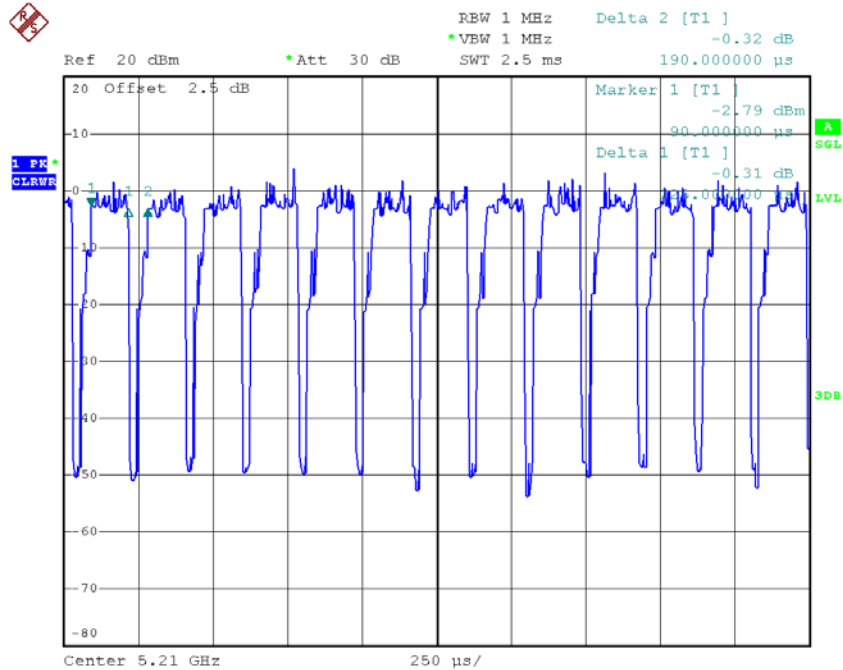
$T_{ON}$ : 0.12 msec

$T_{Total}$ : 0.19 msec

Duty cycle: 63.16%

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

Duty Factor = 2.00



Date: 4.DEC.2017 20:58:22

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be cacluated as Output Power = Measured power + Ducus factor  
 Power Spectral Density = Measured density + Duty factor



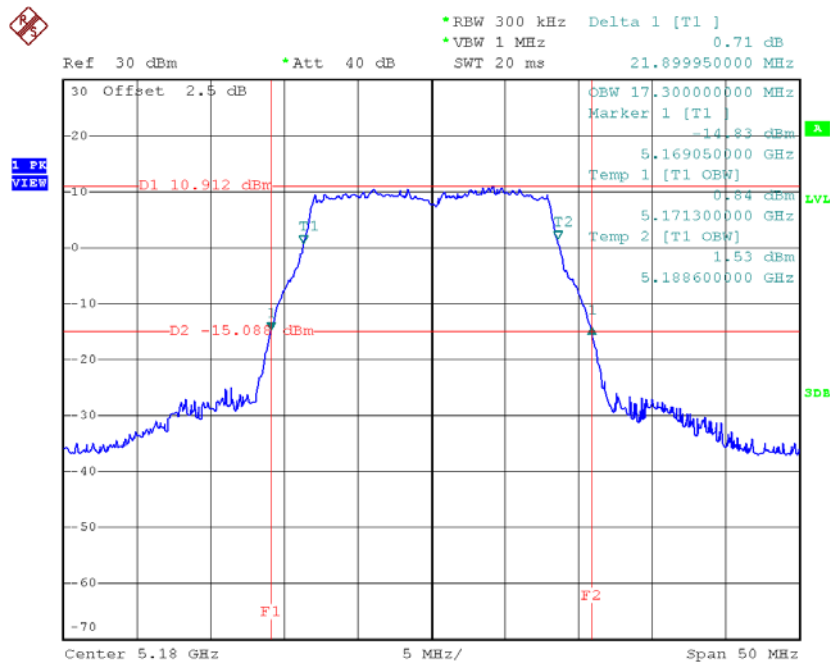
## APPENDIX E - BANDWIDTH

# Non-Beamforming

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

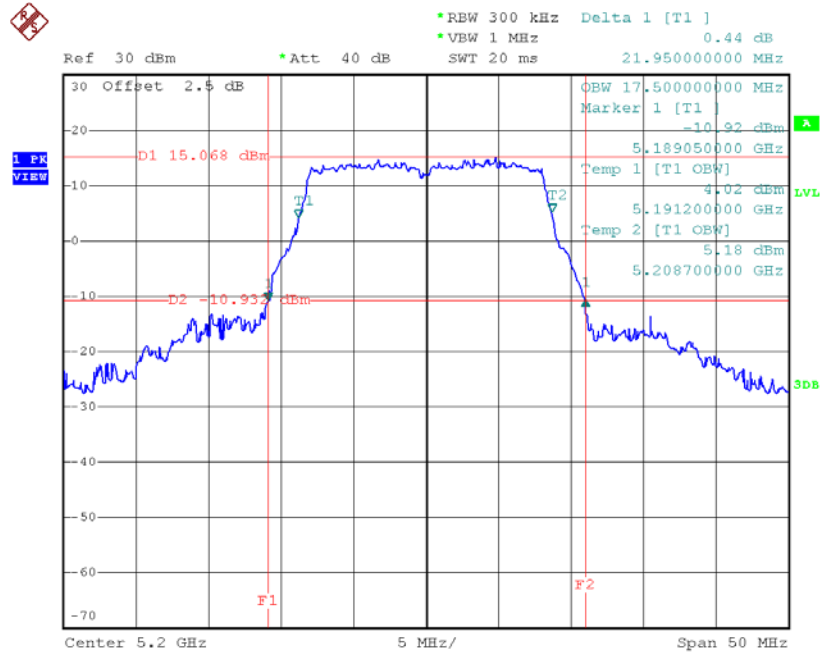
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	21.90	17.30
CH40	5200	21.95	17.50
CH48	5240	22.00	17.50

## TX CH36



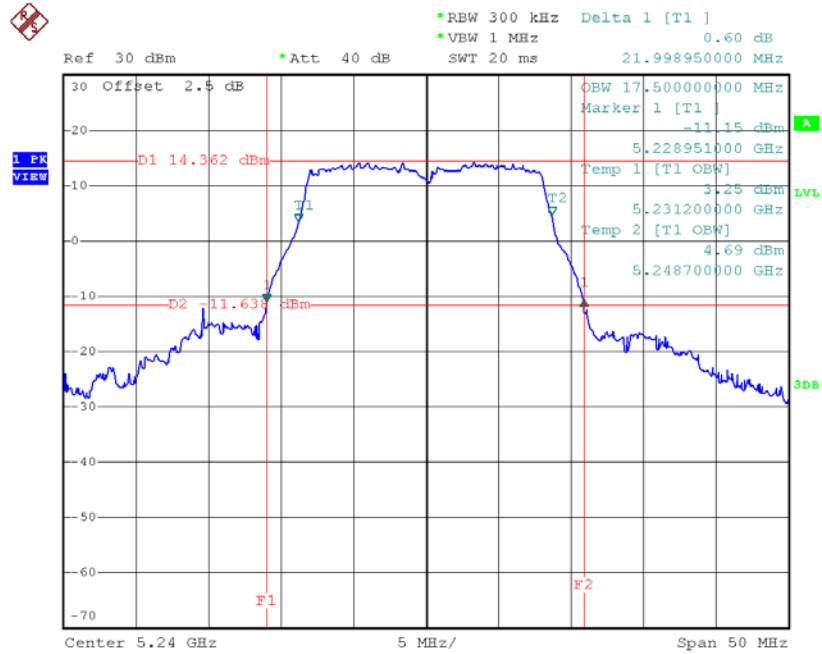
Date: 5.DEC.2017 10:55:56

### TX CH40



Date: 5.DEC.2017 11:07:57

### TX CH48

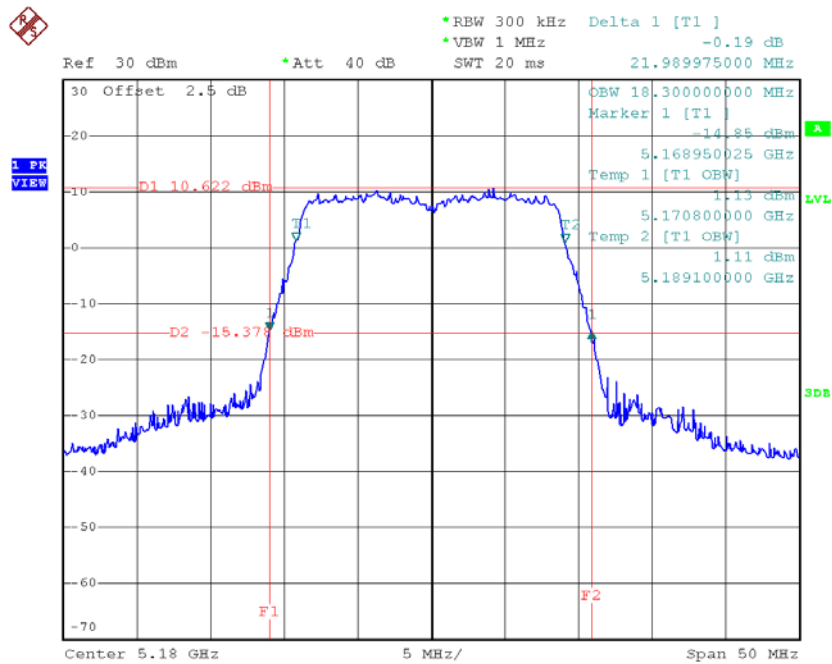


Date: 5.DEC.2017 11:23:37

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

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	21.99	18.30
CH40	5200	22.15	18.40
CH48	5240	22.00	18.50

**TX CH36**



Date: 5.DEC.2017 13:19:18