

FCC Radio Test Report

FCC ID: 2AF5PMGMT77

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

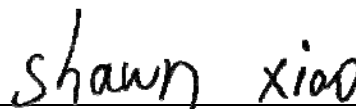
Project No. : 1711C015
Equipment : 1) 24x8 Cable Modem plus AC1900 Router with Voice
2) 24x8 Cable Modem plus AC1900 Router
Test Model : 1) MT7711XY (where X can be A, B, C, D or blank, and Y can be A, B, C, D, or blank) The optional suffixes X and Y for identical hardware models for marketing purposes only)
Series Model : 2) MG7700XY (where X can be A, B, C, D or blank, and Y can be A, B, C, D, or blank) The optional suffixes X and Y for identical hardware models for marketing purposes only)
Applicant : MTRLC LLC
Address : PO Box 121147 Boston, MA 02112-1147, United States.

Date of Receipt : Nov. 02, 2017
Date of Test : Nov. 02, 2017 ~ Dec. 20, 2017
Issued Date : Dec. 21, 2017
Tested by : BTL Inc.

Testing Engineer :


(Jivey Jiang)

Technical Manager :


(Shawn Xiao)

Authorized Signatory :


(David Mao)

B T L I N C .

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan,
Guangdong, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000



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For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1711C015	Original Issue.	Dec. 21, 2017

1. CERTIFICATION

Equipment : 1) 24x8 Cable Modem plus AC1900 Router with Voice
2) 24x8 Cable Modem plus AC1900 Router

Brand Name : Motorola

Test Model : 1) MT7711XY (where X can be A, B, C, D or blank, and Y can be A, B, C, D, or blank) The optional suffixes X and Y for identical hardware models for marketing purposes only)

Series Model : 2) MG7700XY (where X can be A, B, C, D or blank, and Y can be A, B, C, D, or blank) The optional suffixes X and Y for identical hardware models for marketing purposes only)

Applicant : MTRLC LLC

Manufacturer : MTRLC LLC

Address : PO Box 121147 Boston, MA 02112-1147, United States.

Date of Test : Nov. 02, 2017 ~ Dec. 20, 2017

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-2-1711C015) 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).

Test results included in this report is only for RLAN 5GHz part.

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: 854385

BTL's designation number for FCC: CN5020

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) $k=1.96$ or $k=2$ (which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %, $U=2 \times U_c(y)$.

The BTL measurement uncertainty as below table:

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	1) 24x8 Cable Modem plus AC1900 Router with Voice 2) 24x8 Cable Modem plus AC1900 Router	
Brand Name	Motorola	
Test Model	1) MT7711XY (where X can be A, B, C, D or blank, and Y can be A, B, C, D, or blank) The optional suffixes X and Y for identical hardware models for marketing purposes only)	
Series Model	2) MG7700XY (where X can be A, B, C, D or blank, and Y can be A, B, C, D, or blank) The optional suffixes X and Y for identical hardware models for marketing purposes only)	
Model Difference	MG7700 has the same PCB design as MT7711, but deletes the FXS phone function and battery, and uses different enclosure and power supply.	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz
	Modulation Technology	OFDM
	Bit Rate of Transmitter	960Mbps
Power Source	DC voltage supplied from AC/DC adapter. 1# Manufacturer / Model: Shenzhen SOY Technology Co.,Ltd / SOY-1200400-3014-II (MT7711XY) 2# Manufacturer / Model: Shenzhen Gongjin Electronics Co.,Ltd / S36B52-120A250-04 (MG7700XY)	
Power Rating	1# I/P: 100-240Vac 50/60Hz 1.2A Max O/P: 12Vdc 4A(MT7711XY) 2# I/P: 100-240Vac 50/60Hz 1.0A Max O/P: 12Vdc 2.5A(MG7700XY)	
Output Power	Output Power (Max.)for UNII-1 Non-Beamforming	802.11a: 14.79dBm 802.11n (20M): 20.99dBm 802.11n (40M): 22.10dBm 802.11ac (20M): 20.58dBm 802.11ac (40M): 21.14dBm 802.11ac (80M): 22.07dBm
	Output Power (Max.)for UNII-3 Non-Beamforming	802.11a: 22.55dBm 802.11n (20M): 24.63dBm 802.11n (40M): 27.52dBm 802.11ac (20M): 24.63dBm 802.11ac (40M): 26.46dBm 802.11ac (80M): 27.54dBm
	Output Power (Max.)for UNII-1 Beamforming	802.11n (20M): 21.04dBm 802.11n (40M): 22.15dBm 802.11ac (20M): 20.63dBm 802.11ac (40M): 21.19dBm 802.11ac (80M): 22.12dBm
	Output Power (Max.)for UNII-3 Beamforming	802.11n (20M): 24.60dBm 802.11n (40M): 27.57dBm 802.11ac (20M): 24.60dBm 802.11ac (40M): 26.51dBm 802.11ac (80M): 27.51dBm

Note:

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

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

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

3. Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	u.fl	3
2	N/A	N/A	PCB	u.fl	3
3	N/A	N/A	PCB	u.fl	3

Note:

- The EUT supports the antenna with TX and RX diversity functions.

For 802.11a mode, Ant.1, Ant.2 and Ant.3 support transmit and receive functions, but only one of them will be used at one time.

We tested all three Antennas and recorded worst case at Antenna 1. For IEEE 802.11n20/n40/ac20/ac40/ac80 mode (3TX/3RX):

Ant. 1, Ant. 2 and Ant. 3 can be used as transmitting/receiving antenna.

Ant. 1, Ant. 2 and Ant. 3 could transmit/receive simultaneously.

- Antenna Gain=3 dBi. This EUT supports MIMO 3X3, any transmit signals are correlated with each other, so Directional gain = $G_{ANT} + 10\log(N)$ dBi, that is Directional gain = $3 + 10\log(3)$ dBi = 7.77; So, the UNII-1, UNII-3 output power limit is $30 - 7.77 + 6 = 28.23$. The UNII-1 power density limit is $17 - 7.77 + 6 = 15.23$, the UNII-3 power density limit is $30 - 7.77 + 6 = 28.23$.

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:

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

Non-Beamforming

UNII-1			
Test Software Version	MTool_2.0.1.1		
Frequency (MHz)	5180	5200	5240
A Mode	45	51	55
N20 Mode	56	57	63
AC20 Mode	55	56	60
Frequency (MHz)	5190	5230	
N40 Mode	63	63	
AC40 Mode	60	60	
Frequency (MHz)	5210		
AC80 Mode	61		

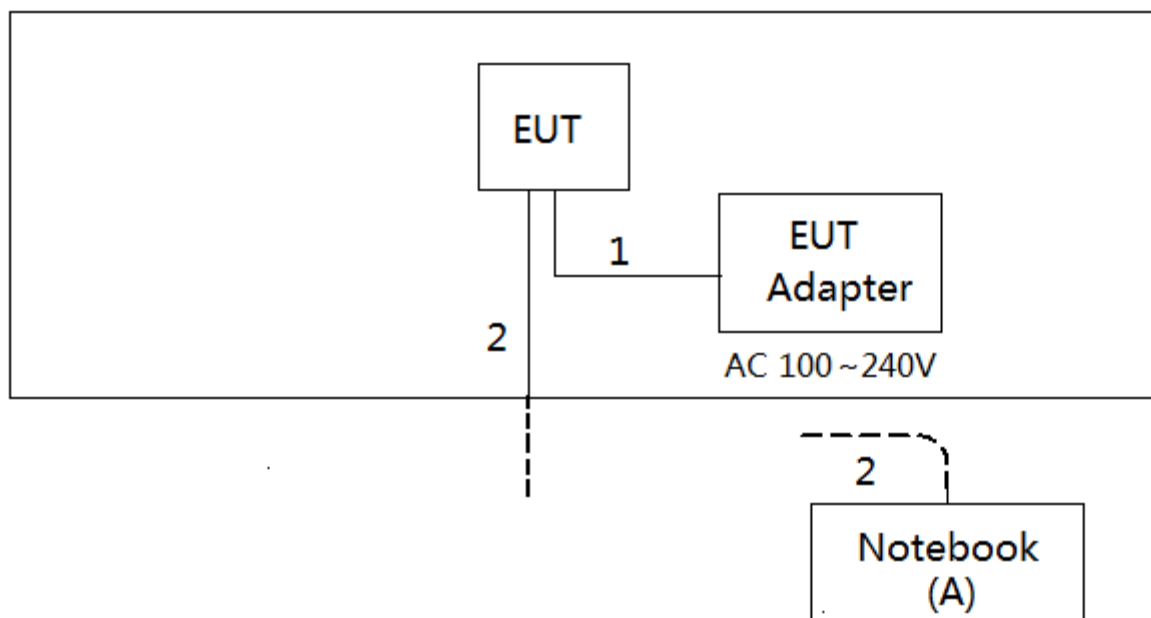
UNII-3			
Test Software Version	MTool_2.0.1.1		
Frequency (MHz)	5745	5785	5825
A Mode	87	87	87
N20 Mode	78	78	80
AC20 Mode	77	76	76
Frequency (MHz)	5755	5795	
N40 Mode	86	86	
Frequency (MHz)	5755	5795	
AC40 Mode	82	82	
Frequency (MHz)	5775		
AC80 Mode	84		

Beamforming

UNII-1			
Test Software Version	MTool_2.0.1.1		
Frequency (MHz)	5180	5200	5240
N20 Mode	56	57	63
AC20 Mode	55	56	60
Frequency (MHz)	5190	5230	
N40 Mode	63	63	
AC40 Mode	60	60	
Frequency (MHz)	5210		
AC80 Mode	61		

UNII-3			
Test Software Version	MTool_2.0.1.1		
Frequency (MHz)	5745	5785	5825
N20 Mode	78	78	80
AC20 Mode	77	76	76
Frequency (MHz)	5755	5795	
N40 Mode	86	86	
Frequency (MHz)	5755	5795	
AC40 Mode	82	82	
Frequency (MHz)	5775		
AC80 Mode	84		

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	HP	HP NB 331	DOC	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.5m	DC Cable
2	NO	NO	10m	RJ45

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

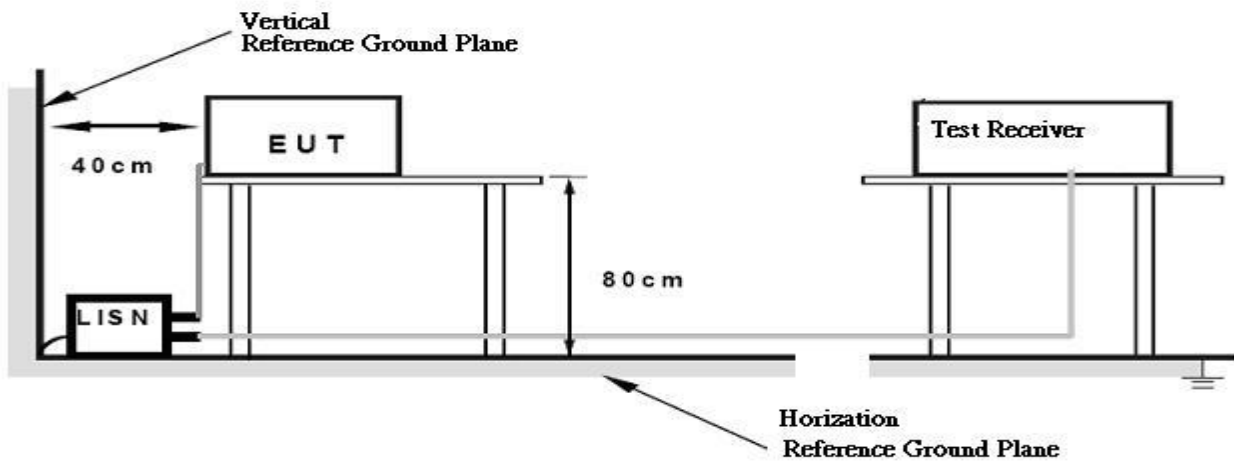
4.1.2 TEST PROCEDURE

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

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



4.1.5 EUT OPERATING CONDITIONS

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

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

4.1.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 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: $E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m}$, 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

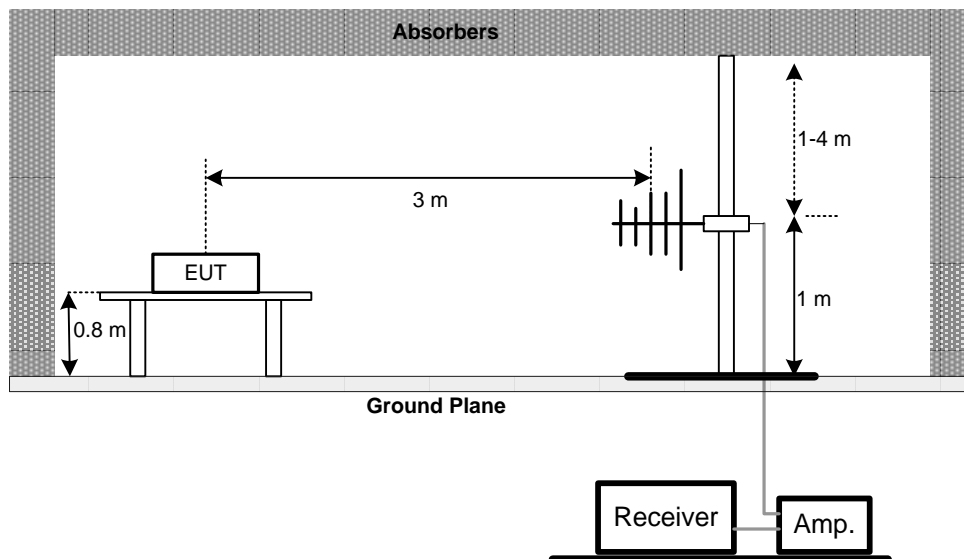
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (below 1GHz)
- The measuring distance 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

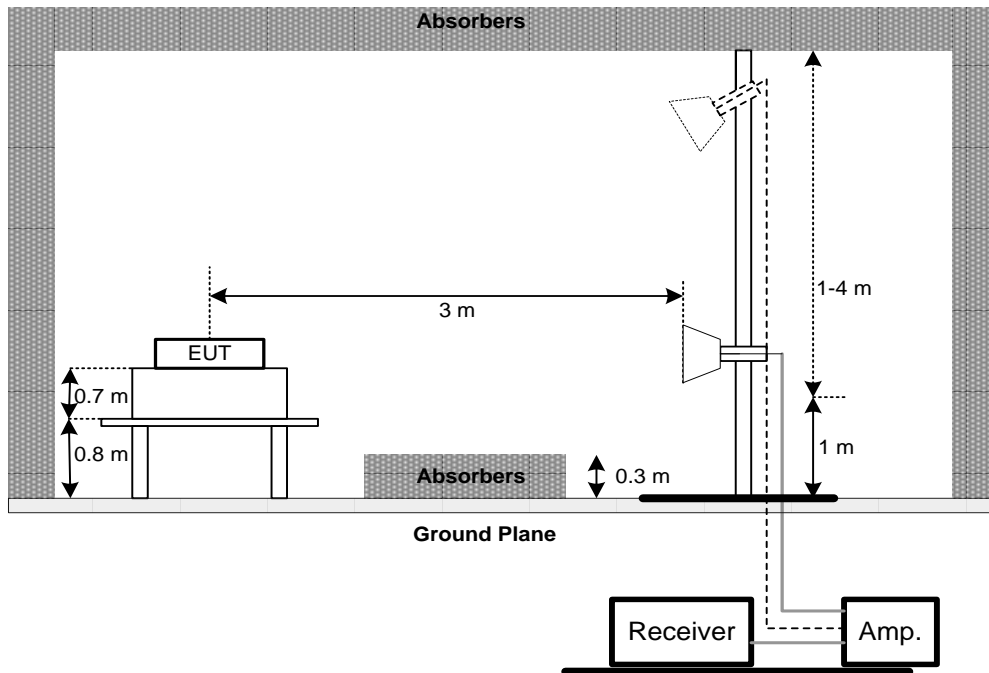
No deviation

4.2.4 TEST SETUP

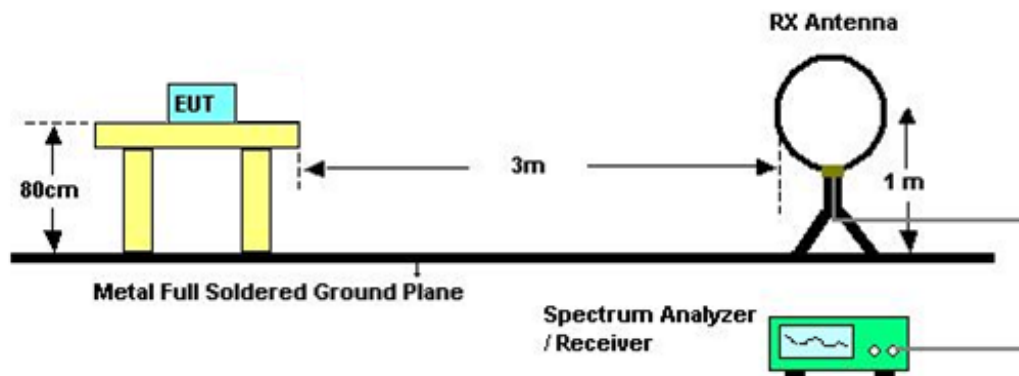
(A) Radiated Emission Test Set-Up Frequency Below 1GHz



(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: 60% Test Voltage: AC 120V/60Hz

4.2.7 TEST RESULTS (9KHz 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 (30MHz 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.

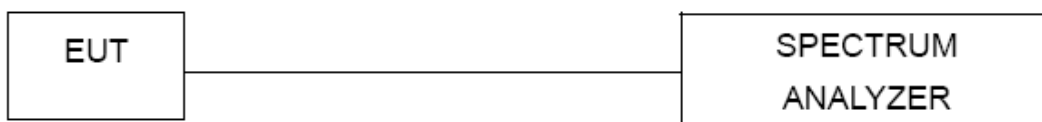
Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	300 kHz(Bandwidth 20MHz) 1MHz(Bandwidth 40MHz and 80MHz)
VBW	1MHz(Bandwidth 20MHz) 3MHz(Bandwidth 40MHz and 80MHz)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

- 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: 60% 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,
-

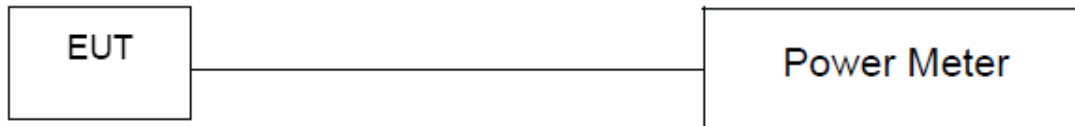
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	\geq 3MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

- 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: 60% 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: 60% 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

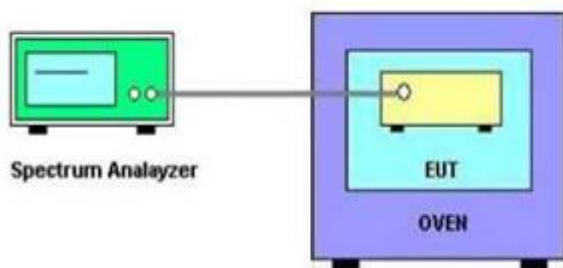
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. User manual temperature is 0°C~40°C.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

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

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Appendix I.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
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	Cable	N/A	RG223	12m	Aug. 20, 2018
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement - 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	Aug. 20, 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	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Aug. 20, 2018

Radiated Emission Measurement - 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	Jul. 07, 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	HOLINK	H-T-1F-D	BA03101701	May 22, 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

Model (MT7711XY) with adapter (SOY-1200400-3014-II)
Conducted Measurement Photos



**Radiated Measurement Photos
9KHz to 30MHz**



Radiated Measurement Photos 30MHz to 1000MHz



Radiated Measurement Photos Above 1000MHz



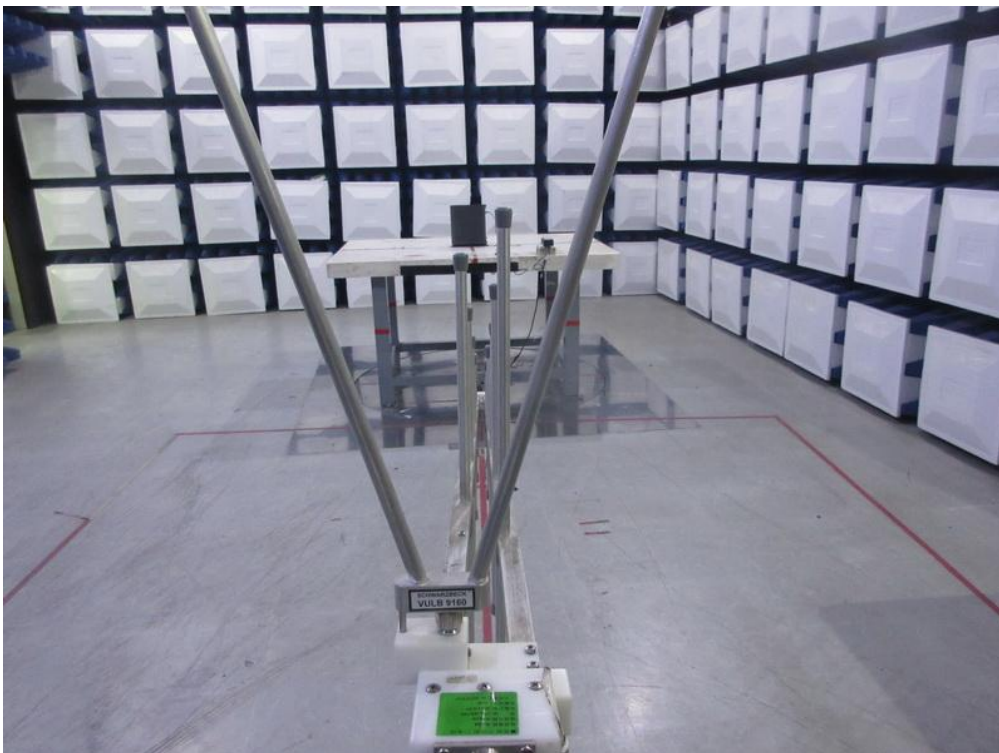
**Model (MG7700XY) with adapter (S36B52-120A250-04)
Conducted Measurement Photos**



**Radiated Measurement Photos
9KHz to 30MHz**



Radiated Measurement Photos 30MHz to 1000MHz



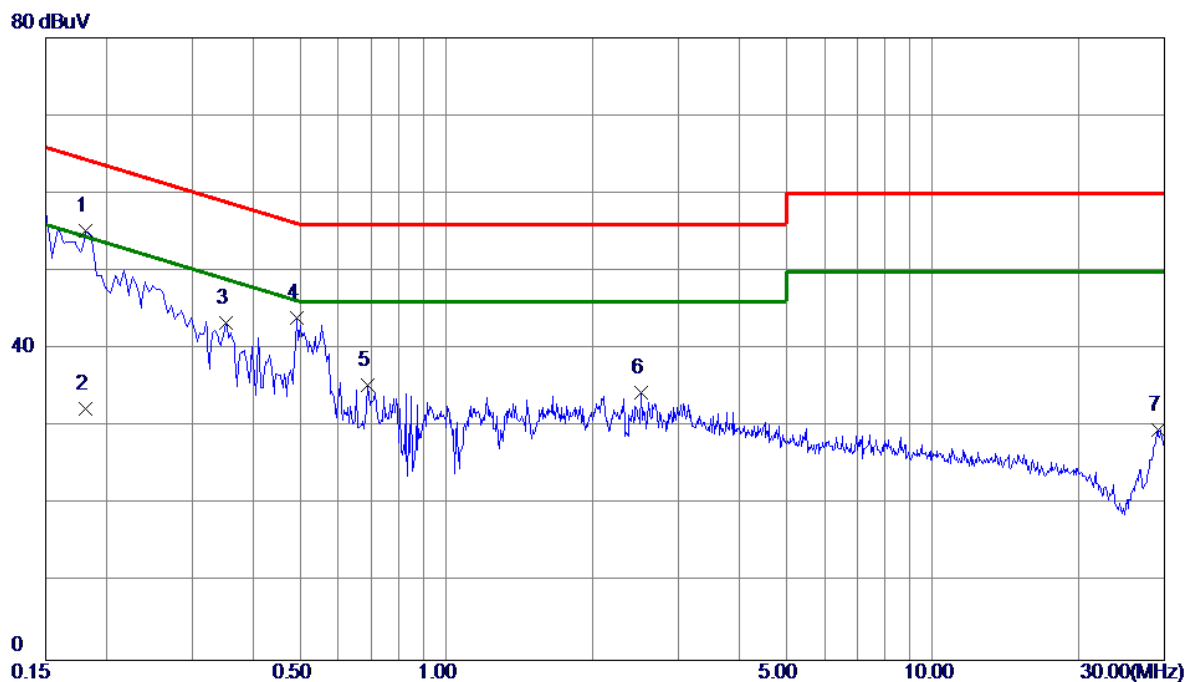
**Radiated Measurement Photos
Above 1000MHz**



APPENDIX A - CONDUCTED EMISSION

Test Mode: TX MODE (Adapter: SOY-1200400-3014-II)

Line

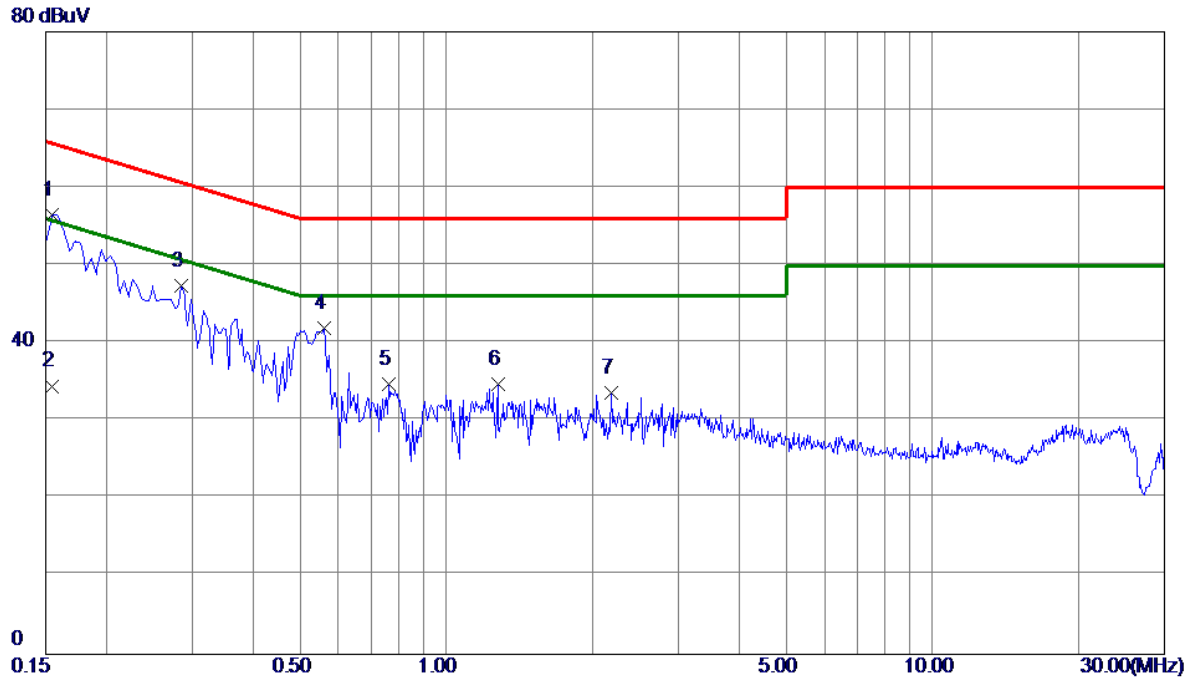


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1815	45.48	9.77	55.25	64.42	-9.17	Peak	
2	0.1815	22.50	9.77	32.27	54.42	-22.15	AVG	
3	0.3525	33.62	9.79	43.41	58.90	-15.49	Peak	
4	0.4920	34.14	9.80	43.94	56.13	-12.19	Peak	
5	0.6900	25.57	9.82	35.39	56.00	-20.61	Peak	
6	2.5170	24.39	9.97	34.36	56.00	-21.64	Peak	
7	29.0580	18.69	10.90	29.59	60.00	-30.41	Peak	

Note: The test result has included the cable loss.

Test Mode: TX MODE (Adapter: SOY-1200400-3014-II)

Neutral

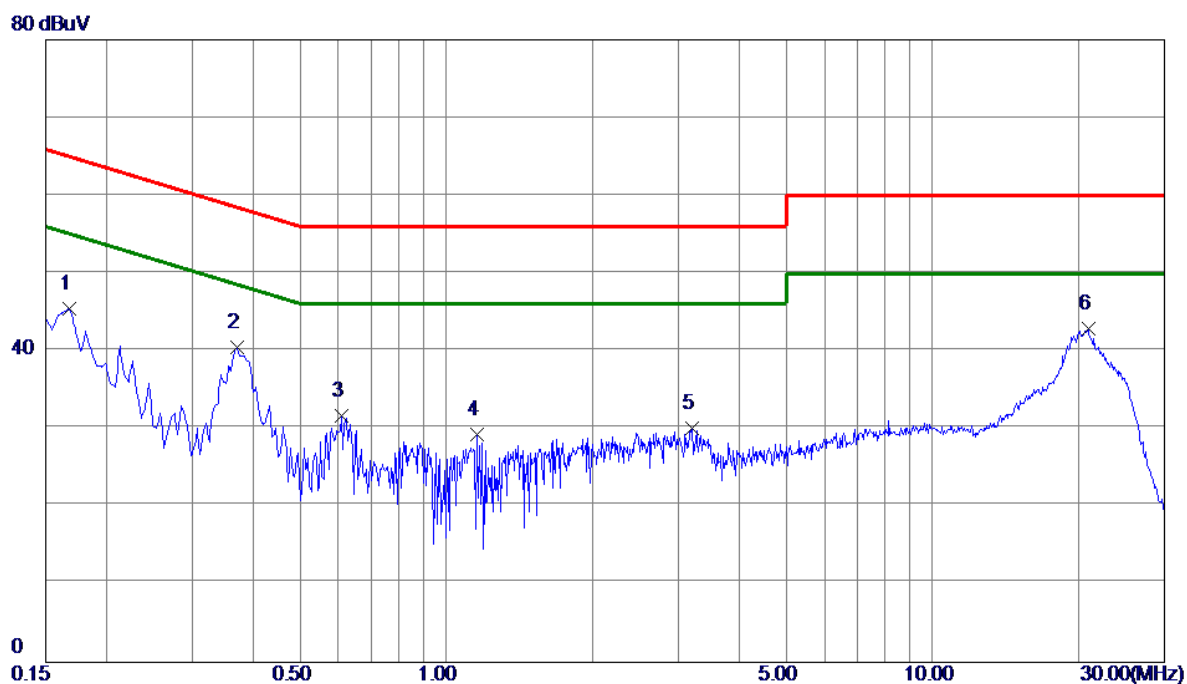


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1545	46.75	9.68	56.43	65.75	-9.32	Peak	
2	0.1545	24.80	9.68	34.48	55.75	-21.27	AVG	
3	0.2850	37.63	9.68	47.31	60.67	-13.36	Peak	
4	0.5595	32.15	9.71	41.86	56.00	-14.14	Peak	
5	0.7620	25.05	9.72	34.77	56.00	-21.23	Peak	
6	1.2750	24.98	9.76	34.74	56.00	-21.26	Peak	
7	2.1840	23.69	9.86	33.55	56.00	-22.45	Peak	

Note: The test result has included the cable loss.

Test Mode: TX MODE (Adapter: S36B52-120A250-04)

Line

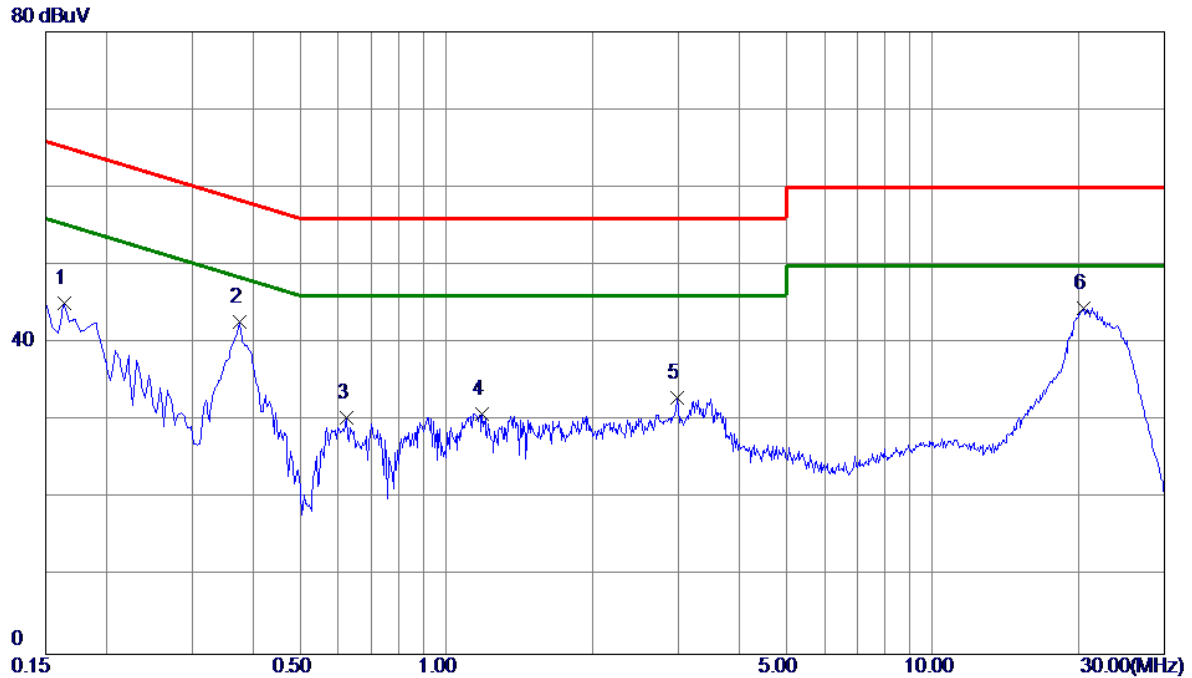


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1680	35.70	9.78	45.48	65.06	-19.58	Peak	
2	0.3704	30.71	9.79	40.50	58.49	-17.99	Peak	
3	0.6090	21.93	9.81	31.74	56.00	-24.26	Peak	
4	1.1580	19.35	9.87	29.22	56.00	-26.78	Peak	
5	3.2100	20.11	10.00	30.11	56.00	-25.89	Peak	
6 *	20.8950	32.13	10.68	42.81	60.00	-17.19	Peak	

Note: The test result has included the cable loss.

Test Mode: TX MODE (Adapter: S36B52-120A250-04)

Neutral



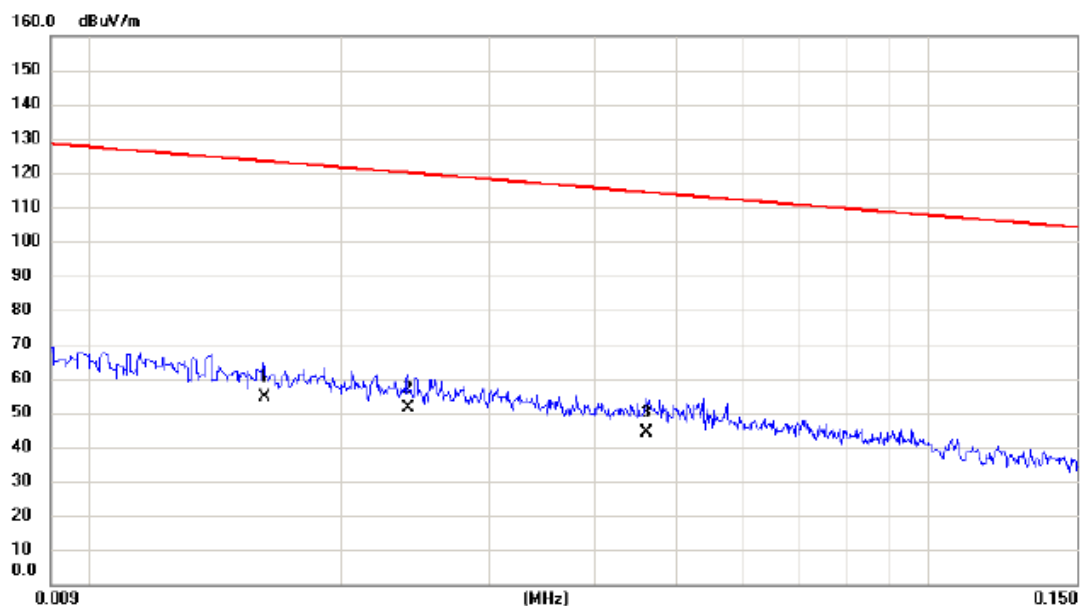
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1635	35.46	9.68	45.14	65.28	-20.14	Peak	
2	0.3750	32.97	9.69	42.66	58.39	-15.73	Peak	
3	0.6225	20.66	9.71	30.37	56.00	-25.63	Peak	
4	1.1849	21.16	9.75	30.91	56.00	-25.09	Peak	
5	2.9805	23.05	9.90	32.95	56.00	-23.05	Peak	
6 *	20.4675	33.76	10.77	44.53	60.00	-15.47	Peak	

Note: The test result has included the cable loss.

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

Test Mode: TX MODE (Adapter: SOY-1200400-3014-II)

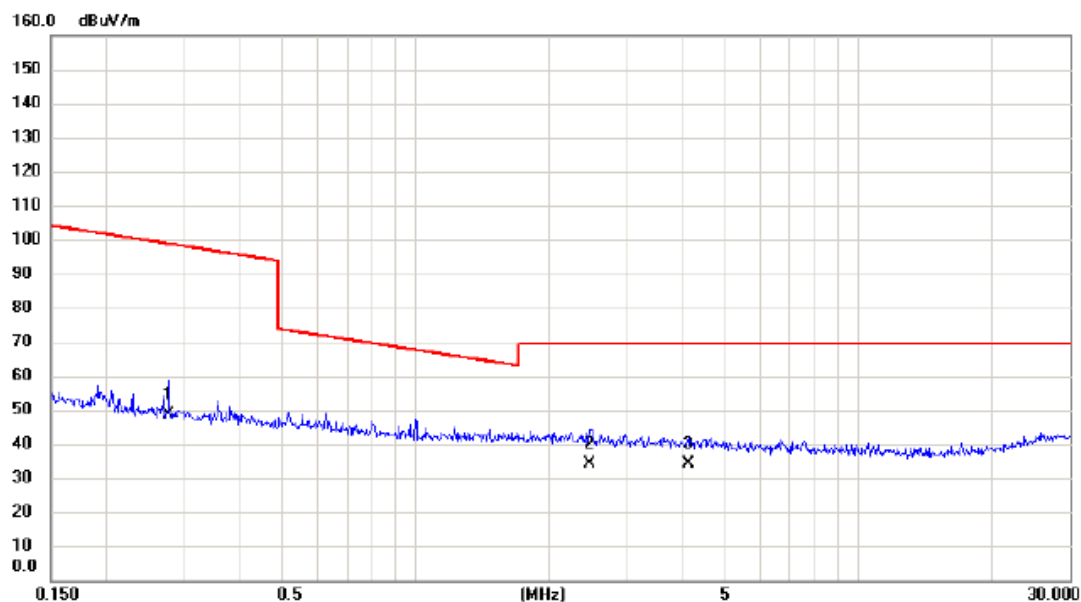
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0162	34.48	20.11	54.59	123.41	-68.82	AVG	
2	*	0.0240	32.07	19.50	51.57	120.00	-68.43	AVG	
3		0.0461	25.44	18.84	44.28	114.33	-70.05	AVG	

Test Mode: TX MODE (Adapter: SOY-1200400-3014-II)

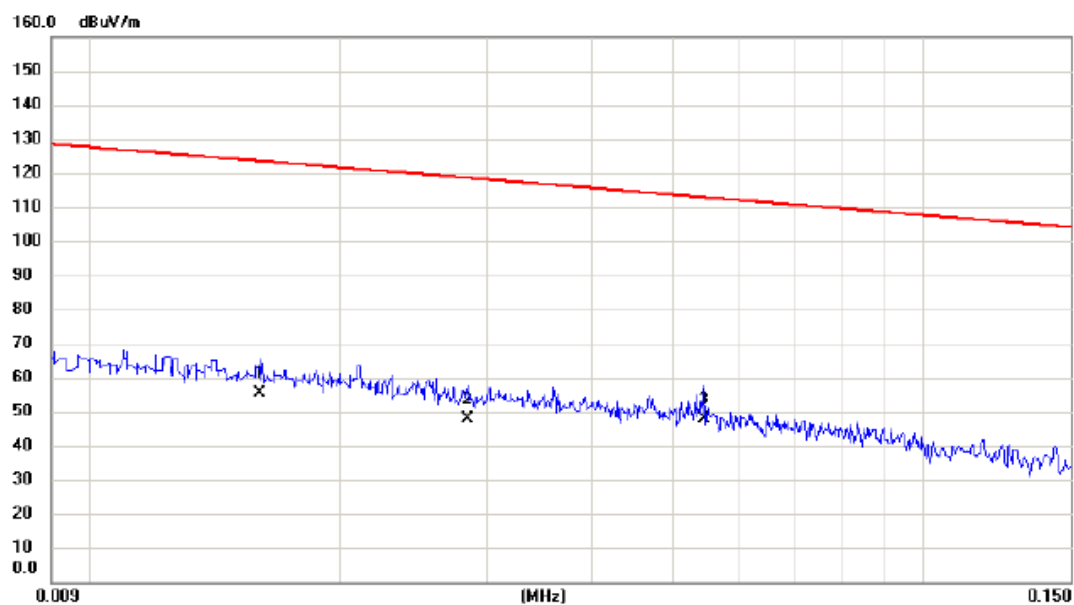
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2760	31.91	16.64	48.55	98.79	-50.24	AVG	
2	*	2.4736	18.78	15.38	34.16	69.54	-35.38	QP	
3		4.1356	19.28	14.87	34.15	69.54	-35.39	QP	

Test Mode: TX MODE (Adapter: SOY-1200400-3014-II)

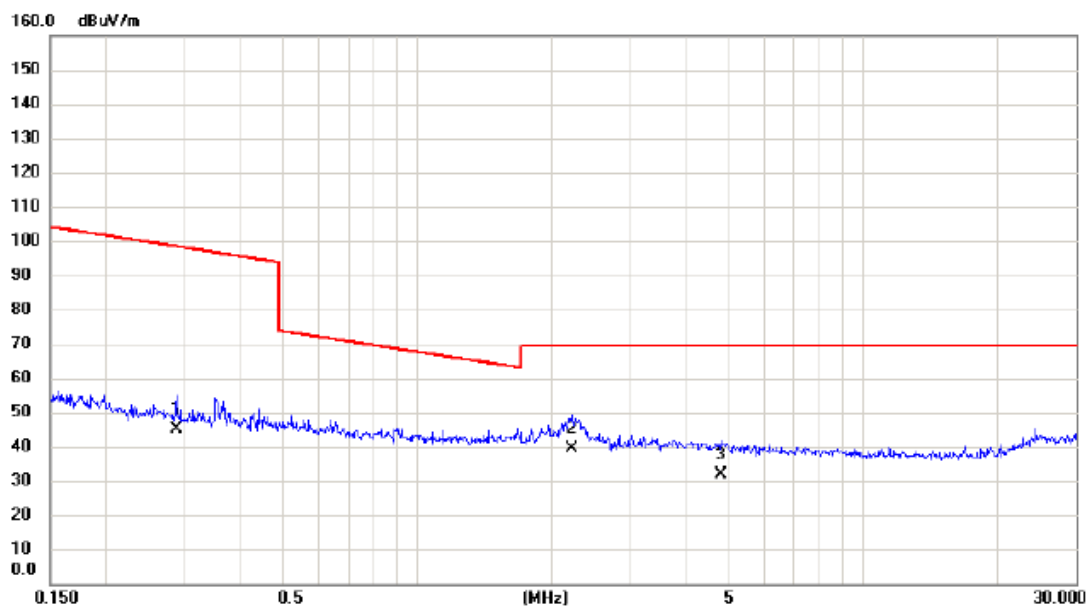
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0160	35.23	20.14	55.37	123.52	-68.15	AVG	
2		0.0284	28.27	19.37	47.64	118.54	-70.90	AVG	
3	*	0.0546	28.98	18.64	47.62	112.86	-65.24	AVG	

Test Mode: TX MODE (Adapter: SOY-1200400-3014-II)

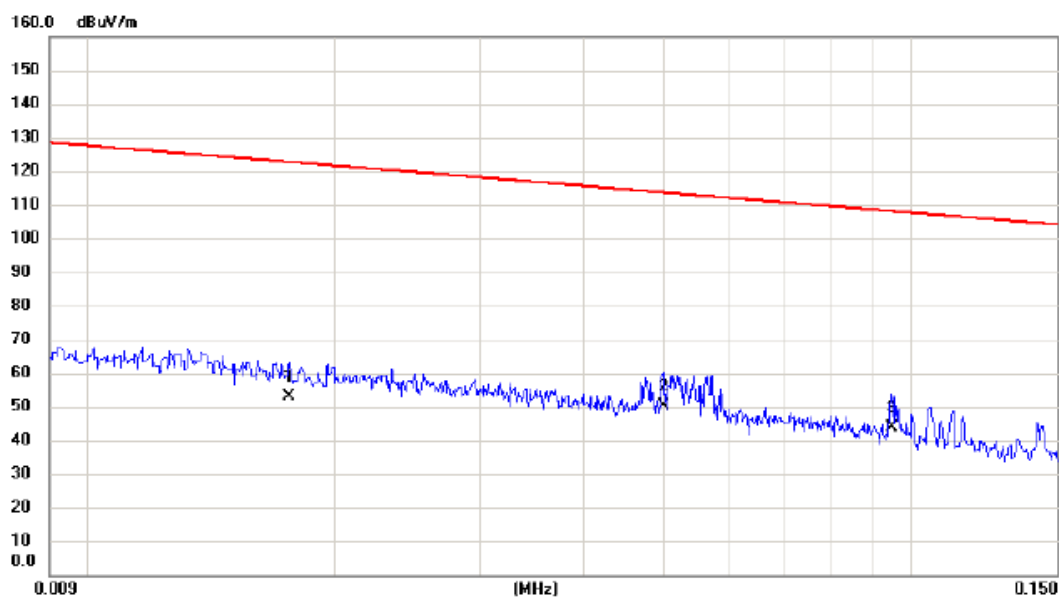
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2878	28.48	16.63	45.11	98.42	-53.31	AVG	
2	*	2.2250	23.91	15.44	39.35	69.54	-30.19	QP	
3		4.7970	17.19	14.49	31.68	69.54	-37.86	QP	

Test Mode: TX MODE (Adapter: S36B52-120A250-04)

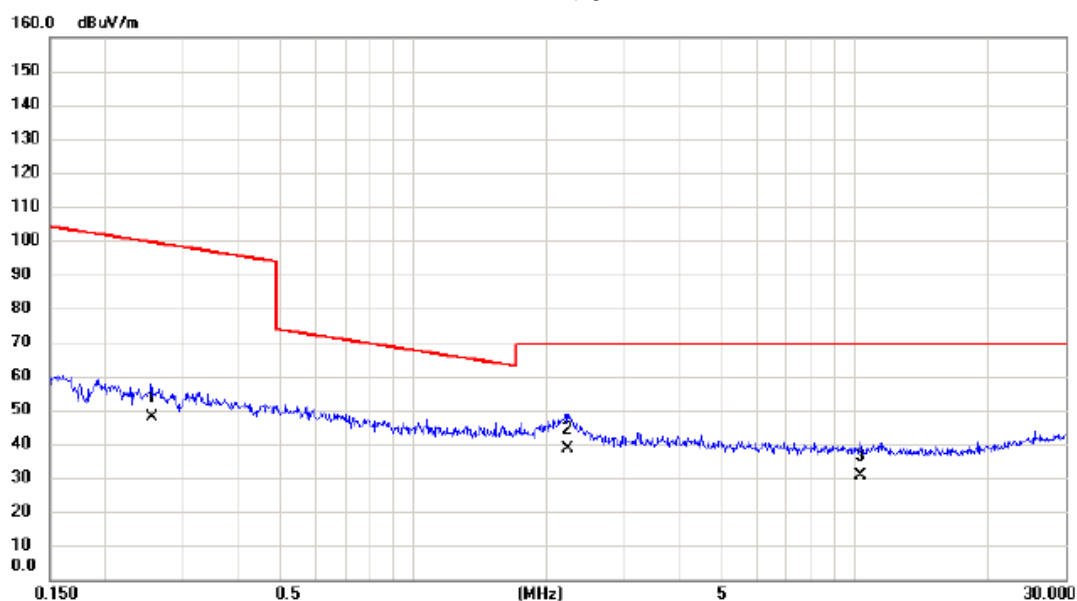
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0176	33.18	19.93	53.11	122.69	-69.58	AVG	
2	*	0.0500	31.67	18.72	50.39	113.63	-63.24	AVG	
3		0.0946	25.94	17.76	43.70	108.09	-64.39	AVG	

Test Mode: TX MODE (Adapter: S36B52-120A250-04)

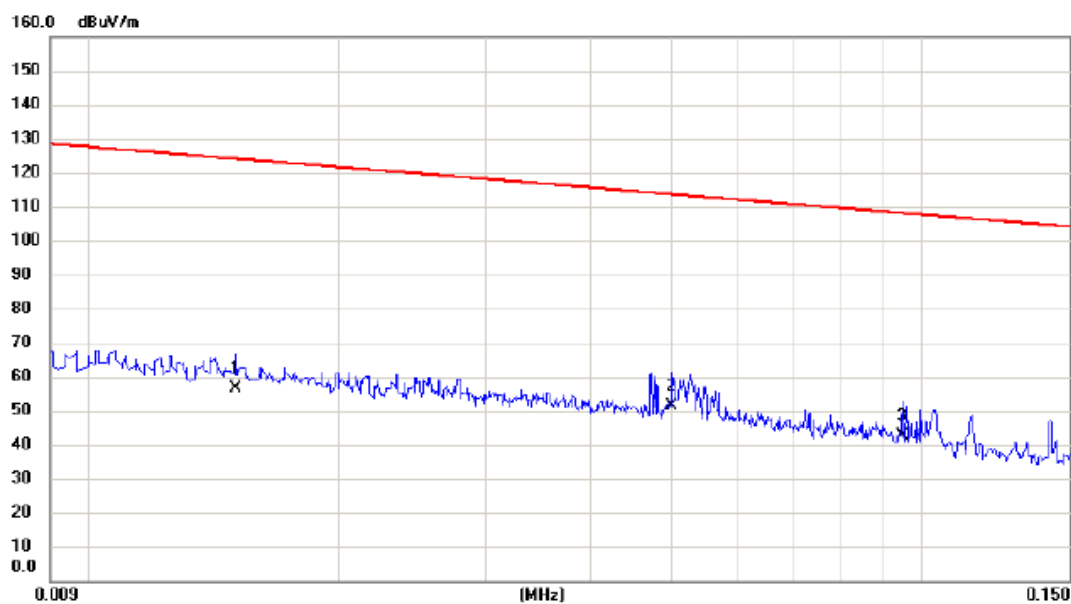
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2548	31.34	16.66	48.00	99.48	-51.48	AVG	
2	*	2.2367	23.22	15.44	38.66	69.54	-30.88	QP	
3		10.2876	16.73	13.77	30.50	69.54	-39.04	QP	

Test Mode: TX MODE (Adapter: S36B52-120A250-04)

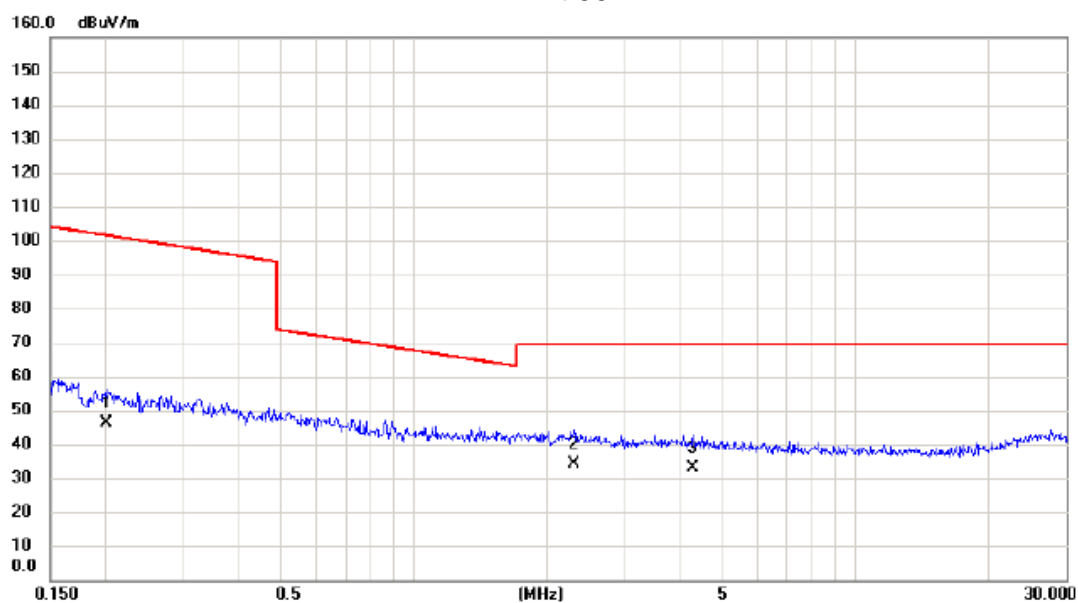
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0150	36.19	20.27	56.46	124.08	-67.62	AVG	
2	*	0.0501	32.59	18.72	51.31	113.61	-62.30	AVG	
3		0.0946	24.90	17.76	42.66	108.09	-65.43	AVG	

Test Mode: TX MODE (Adapter: S36B52-120A250-04)

Ant 90°



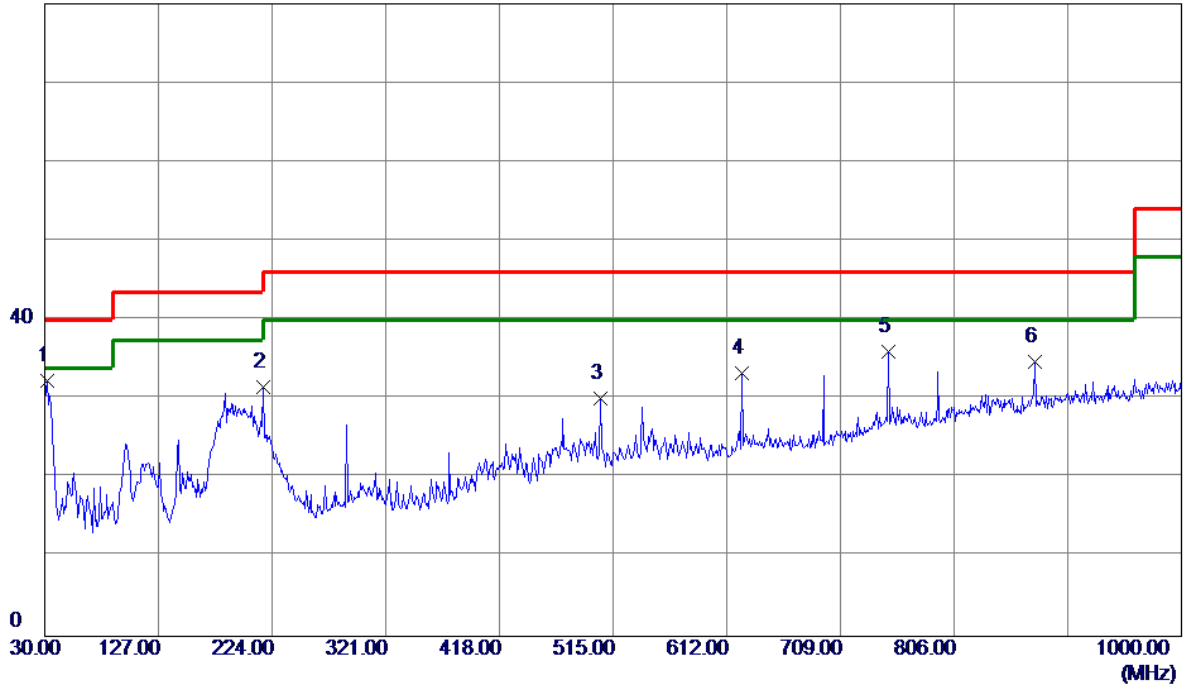
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2007	29.50	16.80	46.30	101.56	-55.26	AVG	
2	*	2.2968	18.58	15.43	34.01	69.54	-35.53	QP	
3		4.2918	18.13	14.78	32.91	69.54	-36.63	QP	

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

Test Mode: UNII-1/TX A Mode 5180MHz (Adapter: SOY-1200400-3014-II)

Vertical

80 dBuV/m

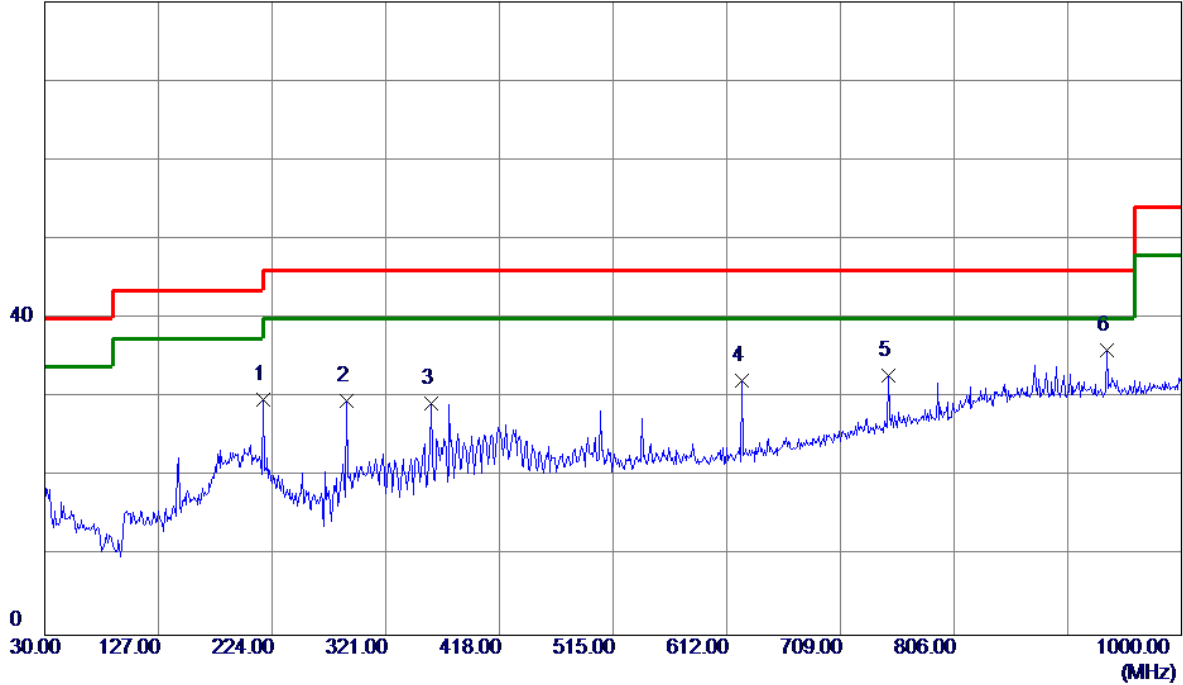


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	31.9400	47.36	-15.04	32.32	40.00	-7.68	Peak	
2	216.2400	45.41	-13.93	31.48	46.00	-14.52	Peak	
3	504.3300	38.68	-8.63	30.05	46.00	-15.95	Peak	
4	624.6100	39.28	-5.95	33.33	46.00	-12.67	Peak	
5	749.7400	38.44	-2.45	35.99	46.00	-10.01	Peak	
6	874.8700	34.24	0.51	34.75	46.00	-11.25	Peak	

Test Mode: UNII-1/TX A Mode 5180MHz (Adapter: SOY-1200400-3014-II)

Horizontal

80 dBuV/m

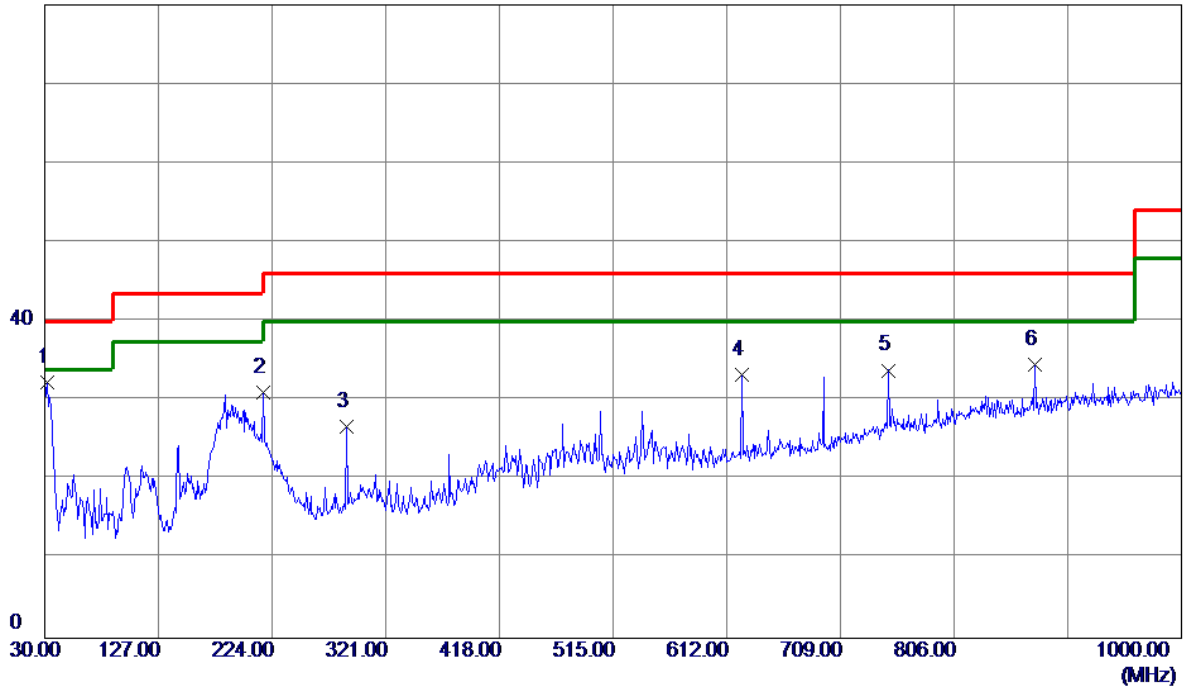


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	43.71	-13.93	29.78	46.00	-16.22	Peak	
2	288.0200	43.91	-14.31	29.60	46.00	-16.40	Peak	
3	359.8000	41.10	-11.84	29.26	46.00	-16.74	Peak	
4	624.6100	38.05	-5.95	32.10	46.00	-13.90	Peak	
5	749.7400	35.25	-2.45	32.80	46.00	-13.20	Peak	
6 *	935.9800	34.24	1.72	35.96	46.00	-10.04	Peak	

Test Mode: UNII-1/TX A Mode 5200MHz (Adapter: SOY-1200400-3014-II)

Vertical

80 dBuV/m

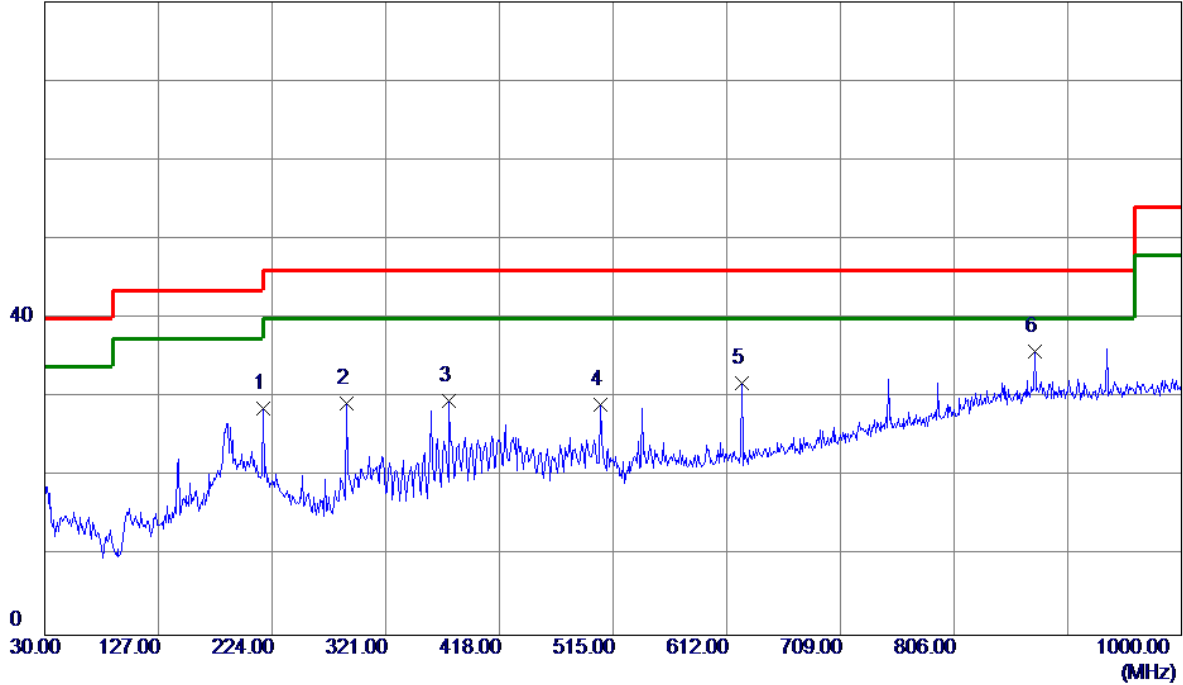


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	31.9400	47.36	-15.04	32.32	40.00	-7.68	Peak	
2	216.2400	44.91	-13.93	30.98	46.00	-15.02	Peak	
3	288.0200	41.03	-14.31	26.72	46.00	-19.28	Peak	
4	624.6100	39.28	-5.95	33.33	46.00	-12.67	Peak	
5	749.7400	36.29	-2.45	33.84	46.00	-12.16	Peak	
6	874.8700	34.02	0.51	34.53	46.00	-11.47	Peak	

Test Mode: UNII-1/TX A Mode 5200MHz (Adapter: SOY-1200400-3014-II)

Horizontal

80 dBuV/m

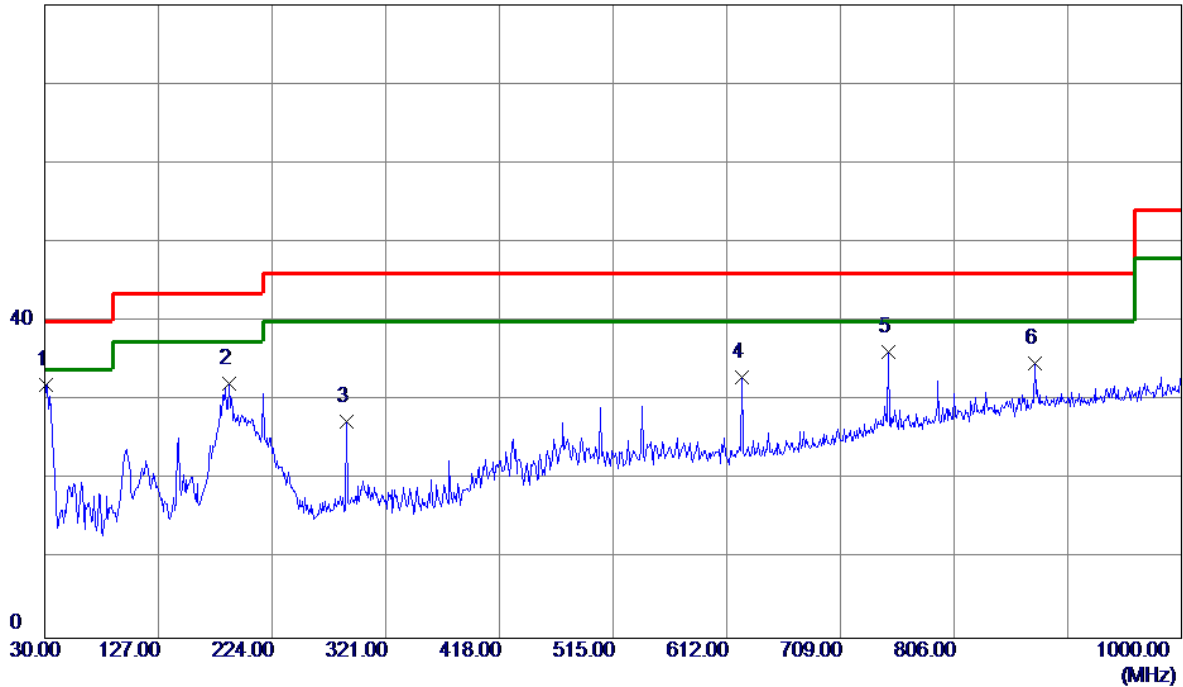


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	42.50	-13.93	28.57	46.00	-17.43	Peak	
2	288.0200	43.53	-14.31	29.22	46.00	-16.78	Peak	
3	375.3200	41.31	-11.65	29.66	46.00	-16.34	Peak	
4	504.3300	37.71	-8.63	29.08	46.00	-16.92	Peak	
5	624.6100	37.74	-5.95	31.79	46.00	-14.21	Peak	
6 *	874.8700	35.28	0.51	35.79	46.00	-10.21	Peak	

Test Mode: UNII-1/TX A Mode 5240MHz (Adapter: SOY-1200400-3014-II)

Vertical

80 dBuV/m

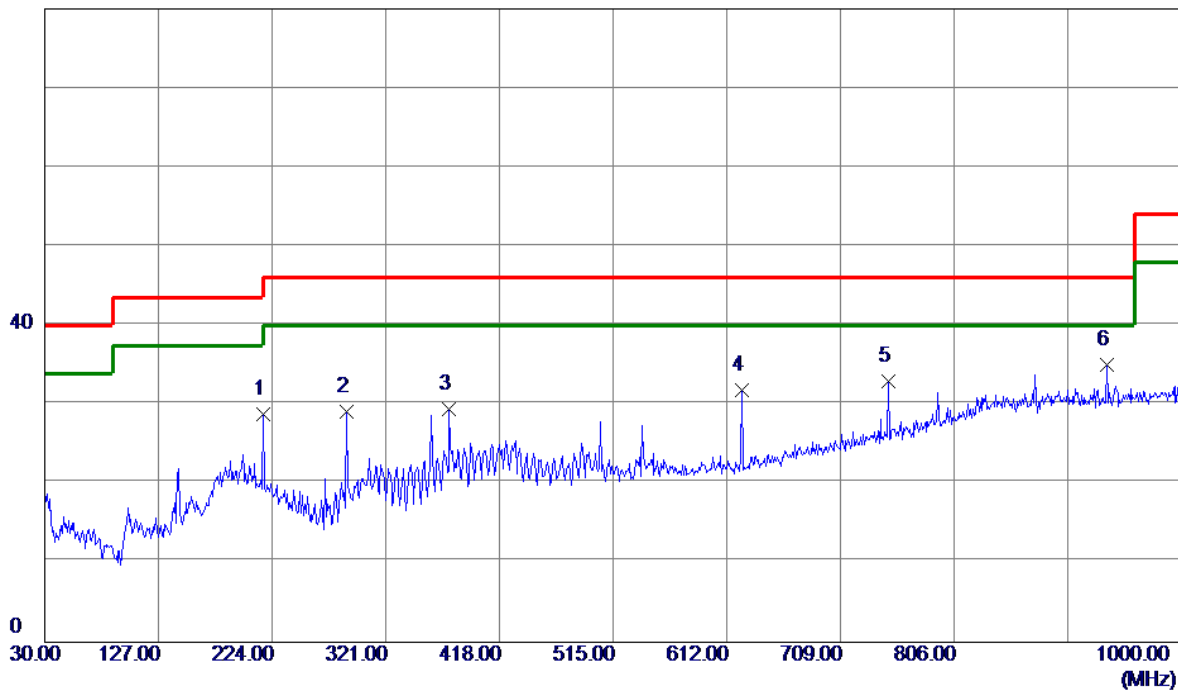


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	30.9700	47.16	-15.14	32.02	40.00	-7.98	Peak	
2	187.1400	44.72	-12.61	32.11	43.50	-11.39	Peak	
3	288.0200	41.68	-14.31	27.37	46.00	-18.63	Peak	
4	624.6100	38.89	-5.95	32.94	46.00	-13.06	Peak	
5	749.7400	38.68	-2.45	36.23	46.00	-9.77	Peak	
6	874.8700	34.18	0.51	34.69	46.00	-11.31	Peak	

Test Mode: UNII-1/TX A Mode 5240MHz (Adapter: SOY-1200400-3014-II)

Horizontal

80 dBuV/m

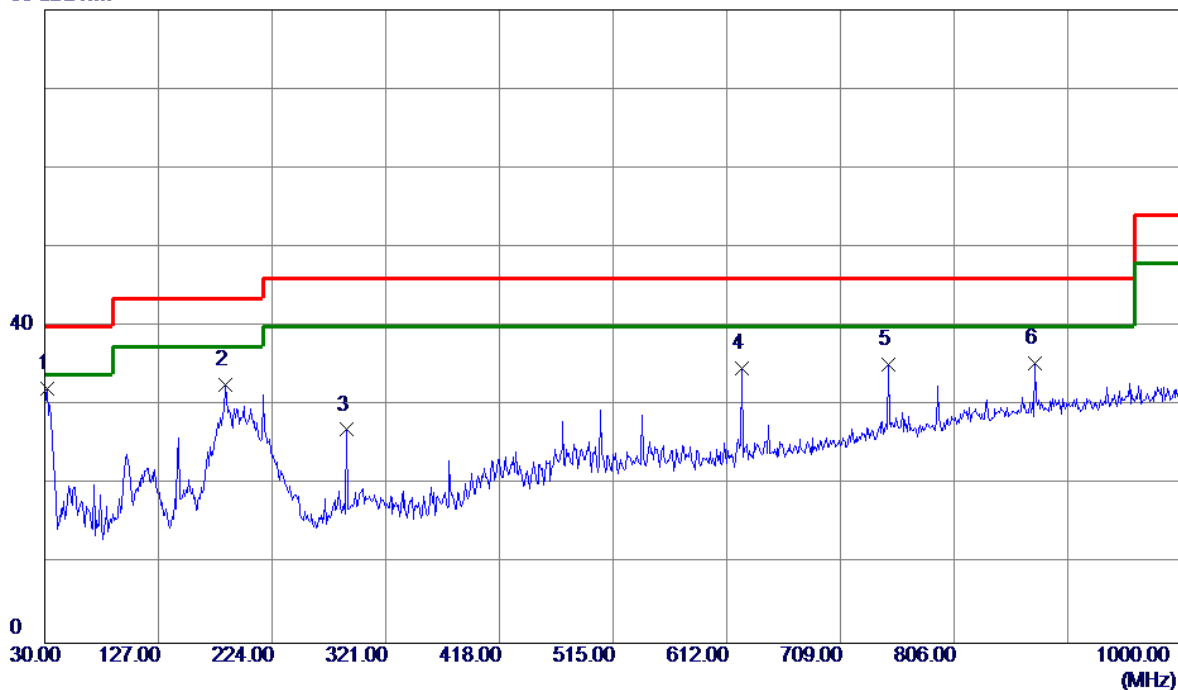


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	42.73	-13.93	28.80	46.00	-17.20	Peak	
2	288.0200	43.40	-14.31	29.09	46.00	-16.91	Peak	
3	375.3200	41.05	-11.65	29.40	46.00	-16.60	Peak	
4	624.6100	37.77	-5.95	31.82	46.00	-14.18	Peak	
5	749.7400	35.44	-2.45	32.99	46.00	-13.01	Peak	
6 *	935.9800	33.38	1.72	35.10	46.00	-10.90	Peak	

Test Mode: UNII-3/TX A Mode 5745MHz (Adapter: SOY-1200400-3014-II)

Vertical

80 dBuV/m

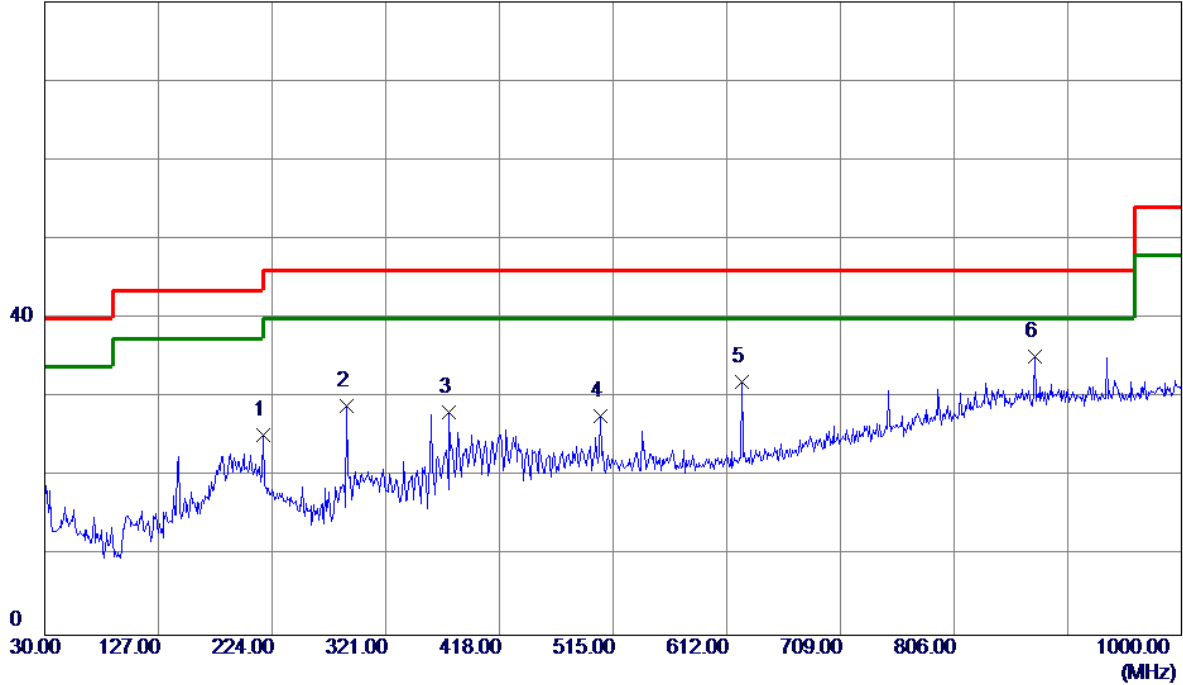


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	31.9400	47.16	-15.04	32.12	40.00	-7.88	Peak	
2	184.2300	45.02	-12.38	32.64	43.50	-10.86	Peak	
3	288.0200	41.27	-14.31	26.96	46.00	-19.04	Peak	
4	624.6100	40.66	-5.95	34.71	46.00	-11.29	Peak	
5	749.7400	37.61	-2.45	35.16	46.00	-10.84	Peak	
6	874.8700	34.86	0.51	35.37	46.00	-10.63	Peak	

Test Mode: UNII-3/TX A Mode 5745MHz (Adapter: SOY-1200400-3014-II)

Horizontal

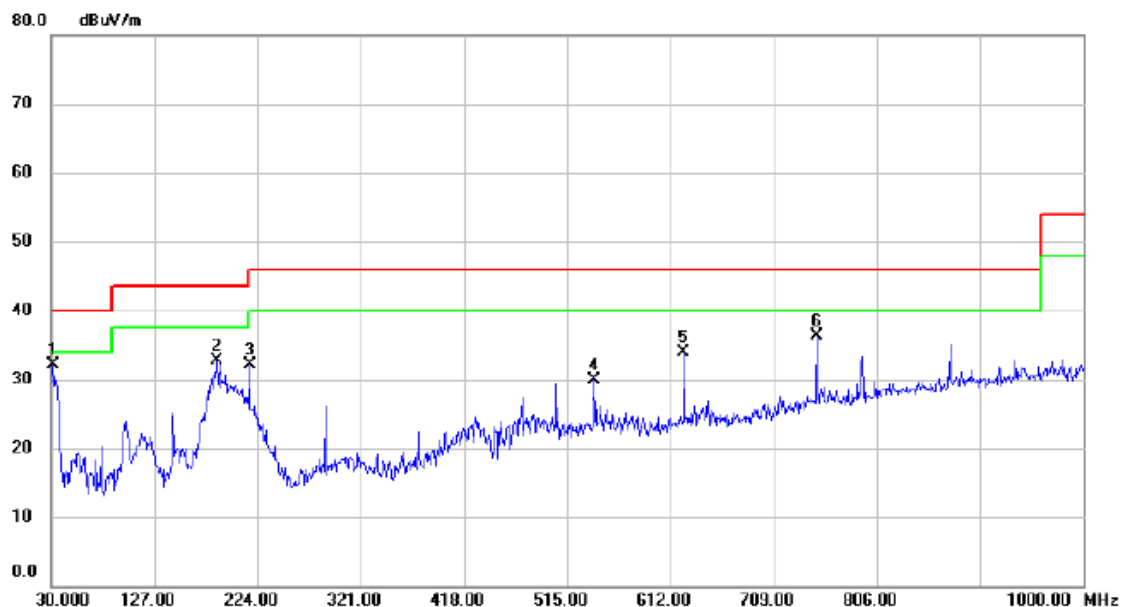
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	39.27	-13.93	25.34	46.00	-20.66	Peak	
2	288.0200	43.20	-14.31	28.89	46.00	-17.11	Peak	
3	375.3200	39.87	-11.65	28.22	46.00	-17.78	Peak	
4	504.3300	36.25	-8.63	27.62	46.00	-18.38	Peak	
5	624.6100	37.94	-5.95	31.99	46.00	-14.01	Peak	
6 *	874.8700	34.68	0.51	35.19	46.00	-10.81	Peak	

Test Mode: UNII-3/TX A Mode 5785MHz (Adapter: SOY-1200400-3014-II)

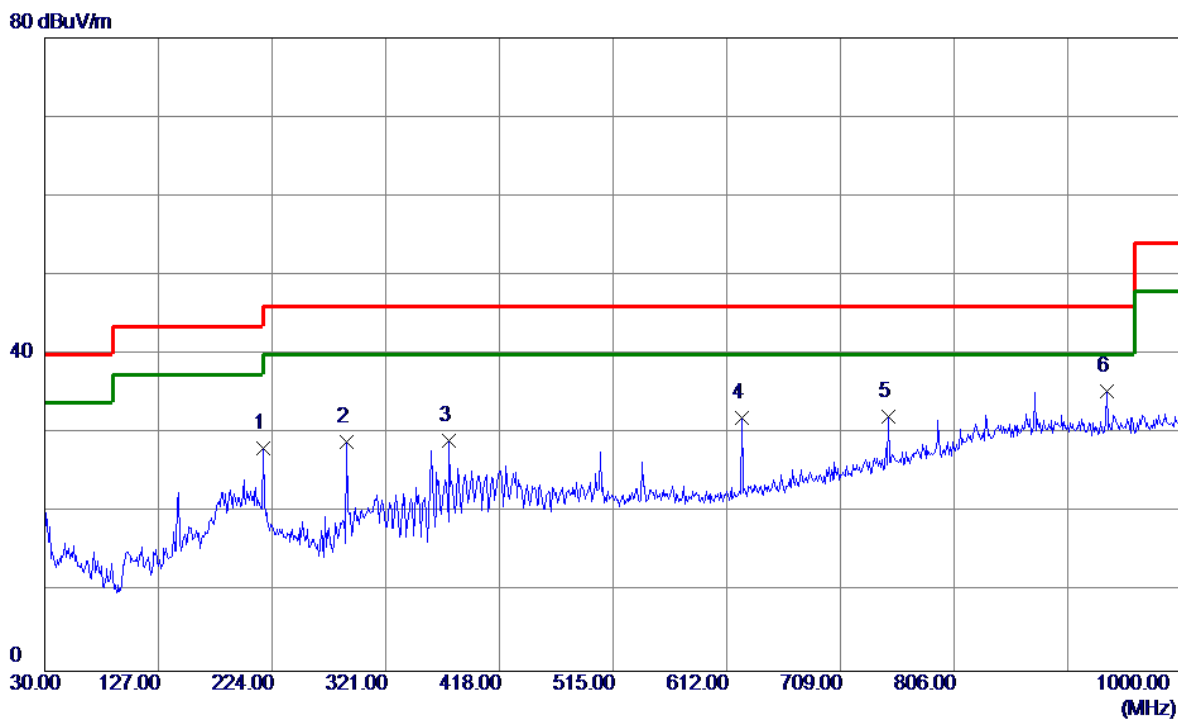
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	31.9400	47.23	-15.04	32.19	40.00	-7.81	peak	
2		186.1700	45.34	-12.54	32.80	43.50	-10.70	peak	
3		216.2400	45.95	-13.93	32.02	46.00	-13.98	peak	
4		540.2200	37.91	-7.91	30.00	46.00	-16.00	peak	
5		624.6100	39.77	-5.96	33.81	46.00	-12.19	peak	
6		749.7400	38.80	-2.46	36.34	46.00	-9.66	peak	

Test Mode: UNII-3/TX A Mode 5785MHz (Adapter: SOY-1200400-3014-II)

Horizontal

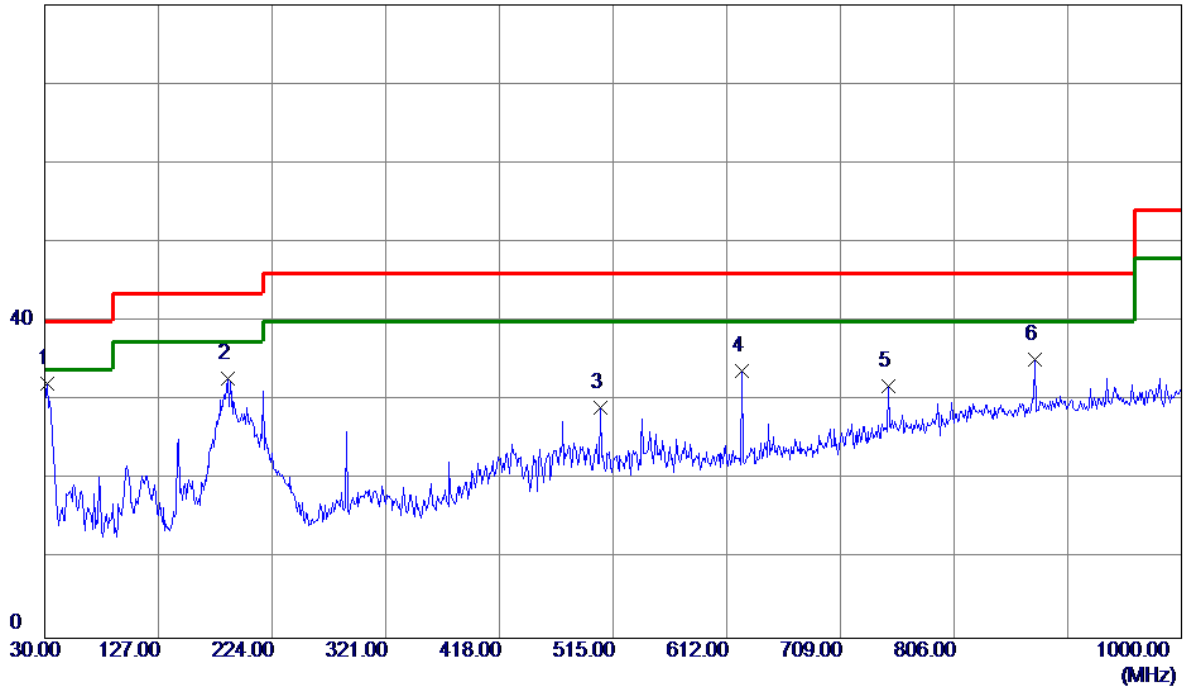


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	42.08	-13.93	28.15	46.00	-17.85	Peak	
2	288.0200	43.20	-14.31	28.89	46.00	-17.11	Peak	
3	375.3200	40.71	-11.65	29.06	46.00	-16.94	Peak	
4	624.6100	37.94	-5.95	31.99	46.00	-14.01	Peak	
5	749.7400	34.54	-2.45	32.09	46.00	-13.91	Peak	
6 *	935.9800	33.64	1.72	35.36	46.00	-10.64	Peak	

Test Mode: UNII-3/TX A Mode 5825MHz (Adapter: SOY-1200400-3014-II)

Vertical

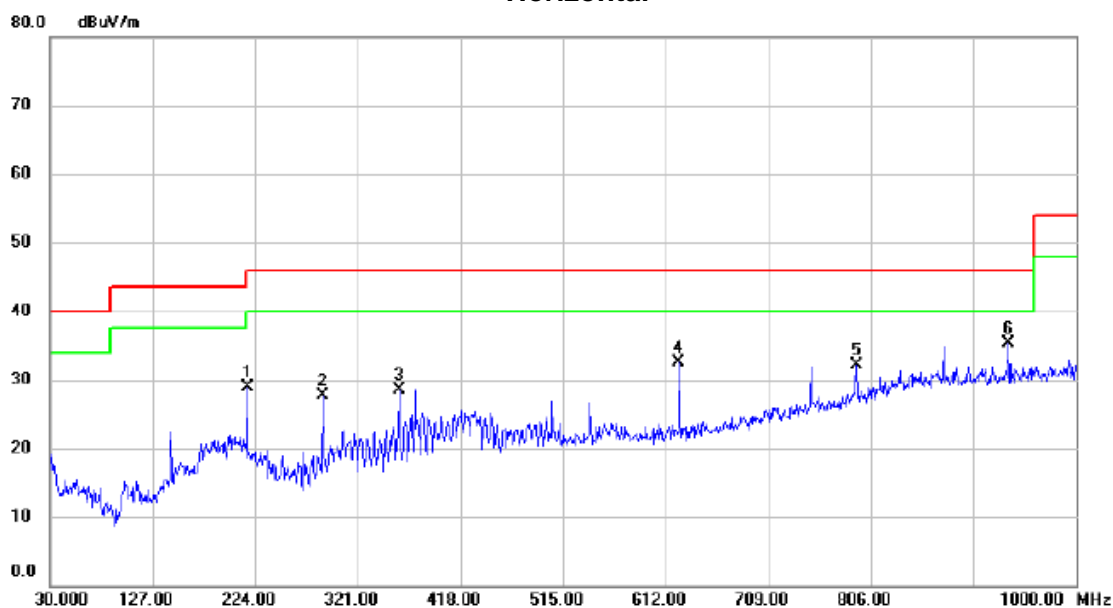
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	31.9400	47.23	-15.04	32.19	40.00	-7.81	Peak	
2	186.1700	45.34	-12.54	32.80	43.50	-10.70	Peak	
3	504.3300	37.70	-8.63	29.07	46.00	-16.93	Peak	
4	624.6100	39.76	-5.95	33.81	46.00	-12.19	Peak	
5	749.7400	34.31	-2.45	31.86	46.00	-14.14	Peak	
6	874.8700	34.66	0.51	35.17	46.00	-10.83	Peak	

Test Mode: UNII-3/TX A Mode 5825MHz (Adapter: SOY-1200400-3014-II)

Horizontal

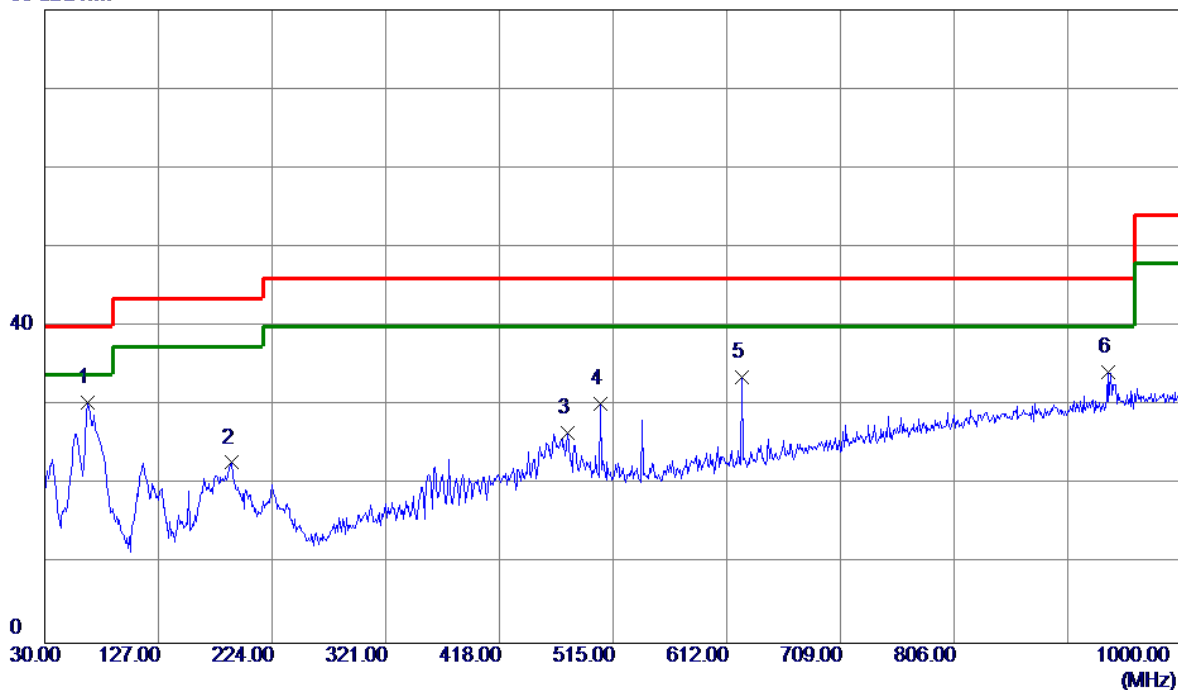


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		216.2400	42.82	-13.93	28.89	46.00	-17.11	peak	
2		288.0200	42.00	-14.31	27.69	46.00	-18.31	peak	
3		359.8000	40.44	-11.84	28.60	46.00	-17.40	peak	
4		624.6100	38.41	-5.96	32.45	46.00	-13.55	peak	
5		792.4200	33.59	-1.52	32.07	46.00	-13.93	peak	
6	*	935.9800	33.61	1.72	35.33	46.00	-10.67	peak	

Test Mode: UNII-1/TX A Mode 5180MHz (Adapter: S36B52-120A250-04)

Vertical

80 dBuV/m

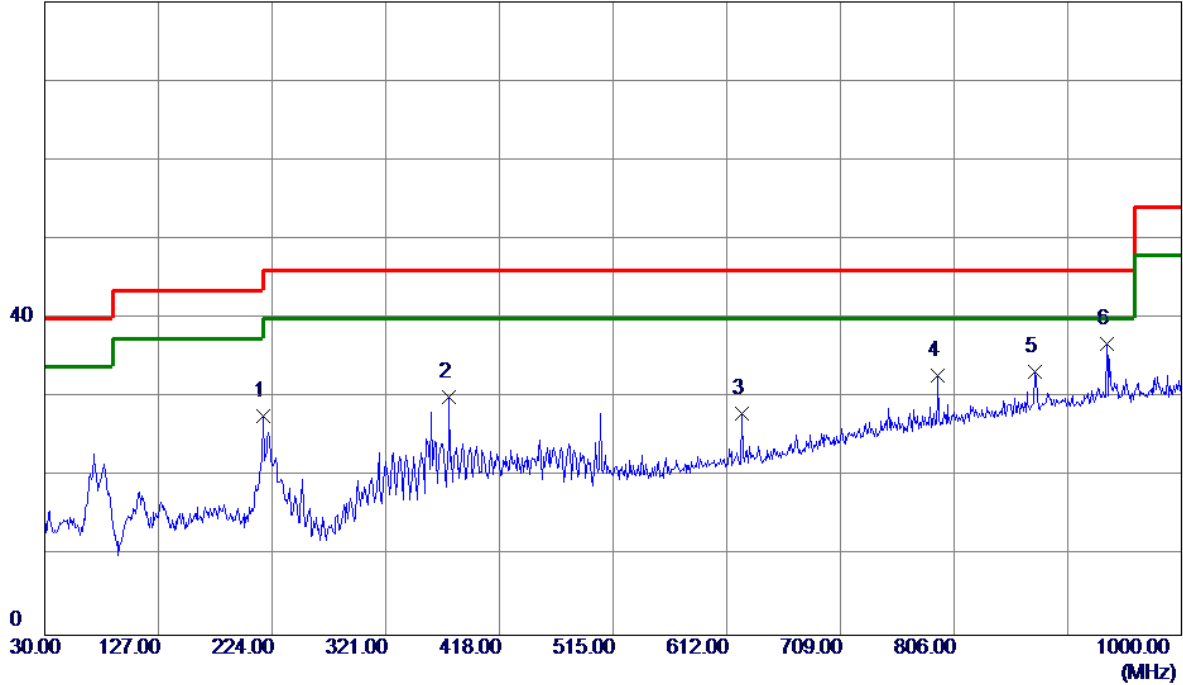


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	66.8600	46.06	-15.67	30.39	40.00	-9.61	Peak	
2	189.0800	35.57	-12.77	22.80	43.50	-20.70	Peak	
3	476.2000	35.84	-9.30	26.54	46.00	-19.46	Peak	
4	504.3300	38.80	-8.63	30.17	46.00	-15.83	Peak	
5	624.6100	39.62	-5.95	33.67	46.00	-12.33	Peak	
6	936.9500	32.43	1.74	34.17	46.00	-11.83	Peak	

Test Mode: UNII-1/TX A Mode 5180MHz (Adapter: S36B52-120A250-04)

Horizontal

80 dBuV/m

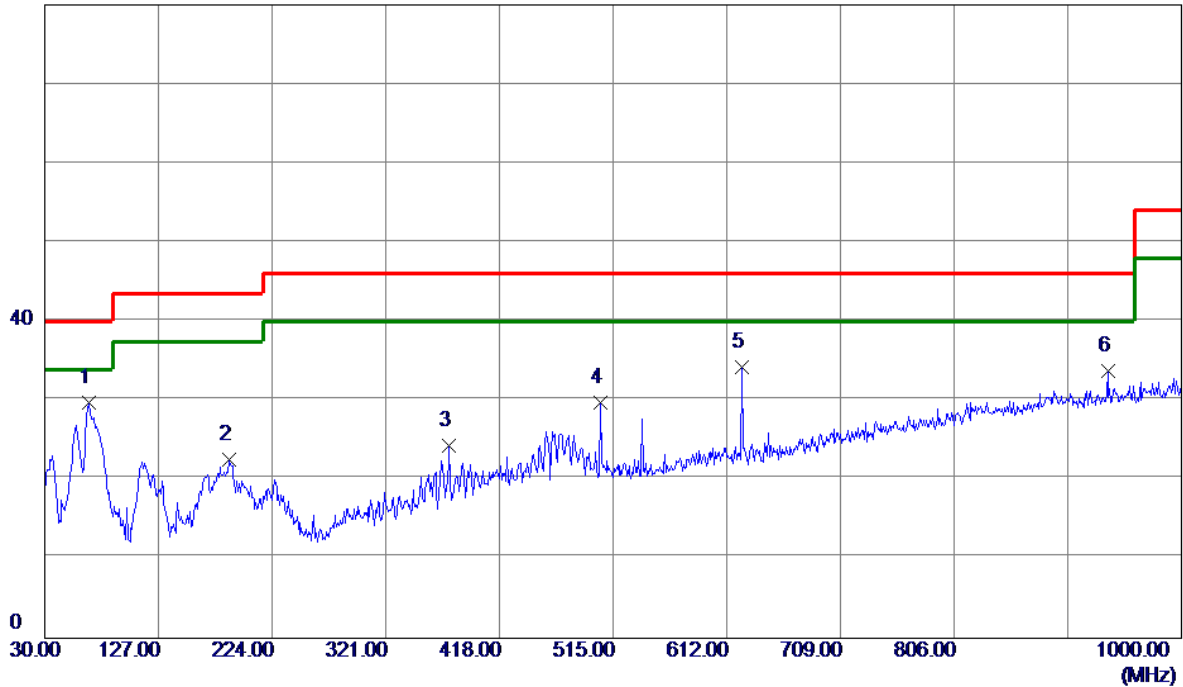


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	41.54	-13.93	27.61	46.00	-18.39	Peak	
2	375.3200	41.66	-11.65	30.01	46.00	-15.99	Peak	
3	624.6100	33.93	-5.95	27.98	46.00	-18.02	Peak	
4	792.4200	34.39	-1.52	32.87	46.00	-13.13	Peak	
5	874.8700	32.79	0.51	33.30	46.00	-12.70	Peak	
6 *	935.9800	35.05	1.72	36.77	46.00	-9.23	Peak	

Test Mode: UNII-1/TX A Mode 5200MHz (Adapter: S36B52-120A250-04)

Vertical

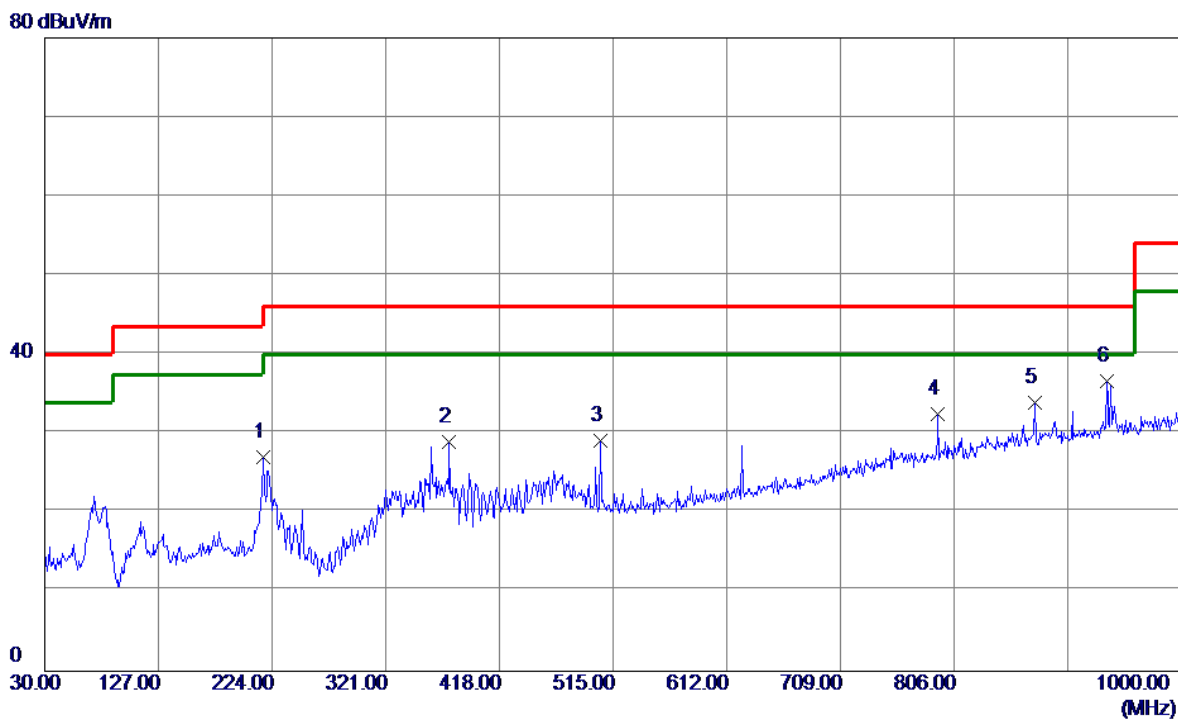
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	67.8300	45.65	-15.93	29.72	40.00	-10.28	Peak	
2	187.1400	35.24	-12.61	22.63	43.50	-20.87	Peak	
3	375.3200	35.98	-11.65	24.33	46.00	-21.67	Peak	
4	504.3300	38.36	-8.63	29.73	46.00	-16.27	Peak	
5	624.6100	40.14	-5.95	34.19	46.00	-11.81	Peak	
6	936.9500	32.03	1.74	33.77	46.00	-12.23	Peak	

Test Mode: UNII-1/TX A Mode 5200MHz (Adapter: S36B52-120A250-04)

Horizontal

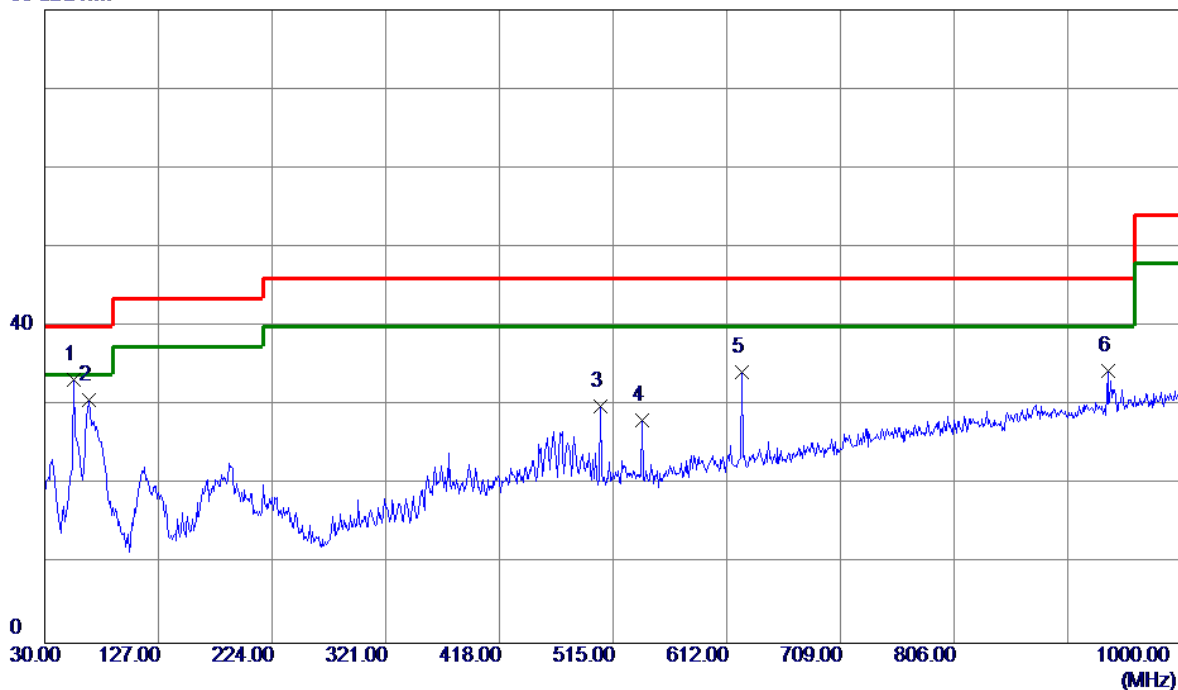


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	41.04	-13.93	27.11	46.00	-18.89	Peak	
2	375.3200	40.65	-11.65	29.00	46.00	-17.00	Peak	
3	504.3300	37.77	-8.63	29.14	46.00	-16.86	Peak	
4	792.4200	33.96	-1.52	32.44	46.00	-13.56	Peak	
5	874.8700	33.37	0.51	33.88	46.00	-12.12	Peak	
6 *	935.9800	34.88	1.72	36.60	46.00	-9.40	Peak	

Test Mode: UNII-1/TX A Mode 5240MHz (Adapter: S36B52-120A250-04)

Vertical

80 dBuV/m

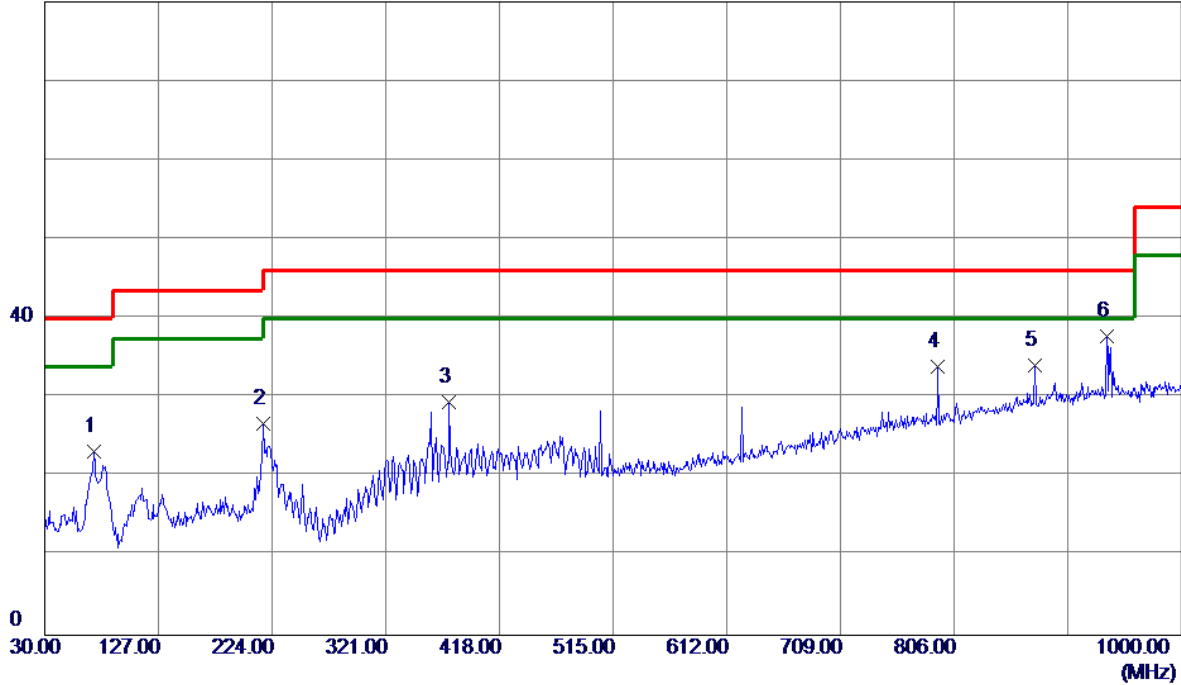


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	55.2200	47.18	-13.94	33.24	40.00	-6.76	Peak	
2	67.8300	46.61	-15.93	30.68	40.00	-9.32	Peak	
3	504.3300	38.49	-8.63	29.86	46.00	-16.14	Peak	
4	540.2199	36.06	-7.91	28.15	46.00	-17.85	Peak	
5	624.6100	40.15	-5.95	34.20	46.00	-11.80	Peak	
6	936.9500	32.66	1.74	34.40	46.00	-11.60	Peak	

Test Mode: UNII-1/TX A Mode 5240MHz (Adapter: S36B52-120A250-04)

Horizontal

80 dBuV/m

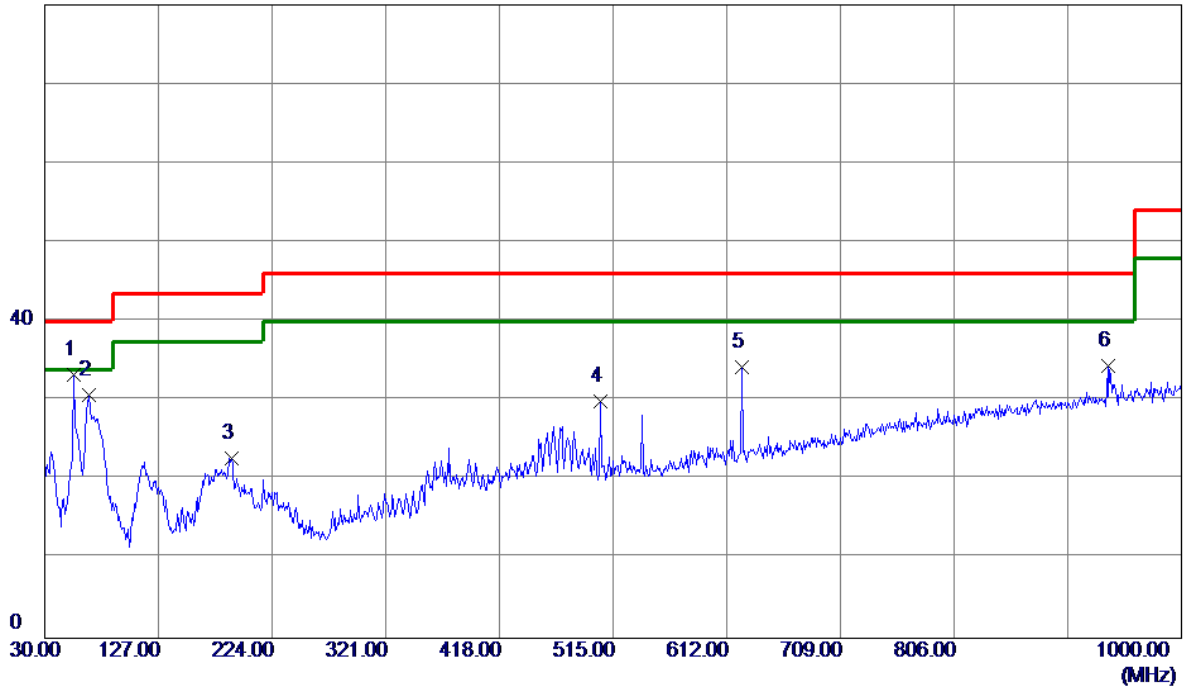


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	71.7100	39.94	-16.71	23.23	40.00	-16.77	Peak	
2	216.2400	40.68	-13.93	26.75	46.00	-19.25	Peak	
3	375.3200	41.02	-11.65	29.37	46.00	-16.63	Peak	
4	792.4200	35.50	-1.52	33.98	46.00	-12.02	Peak	
5	874.8700	33.61	0.51	34.12	46.00	-11.88	Peak	
6 *	935.9800	36.05	1.72	37.77	46.00	-8.23	Peak	

Test Mode: UNII-3/TX A Mode 5745MHz (Adapter: S36B52-120A250-04)

Vertical

80 dBuV/m

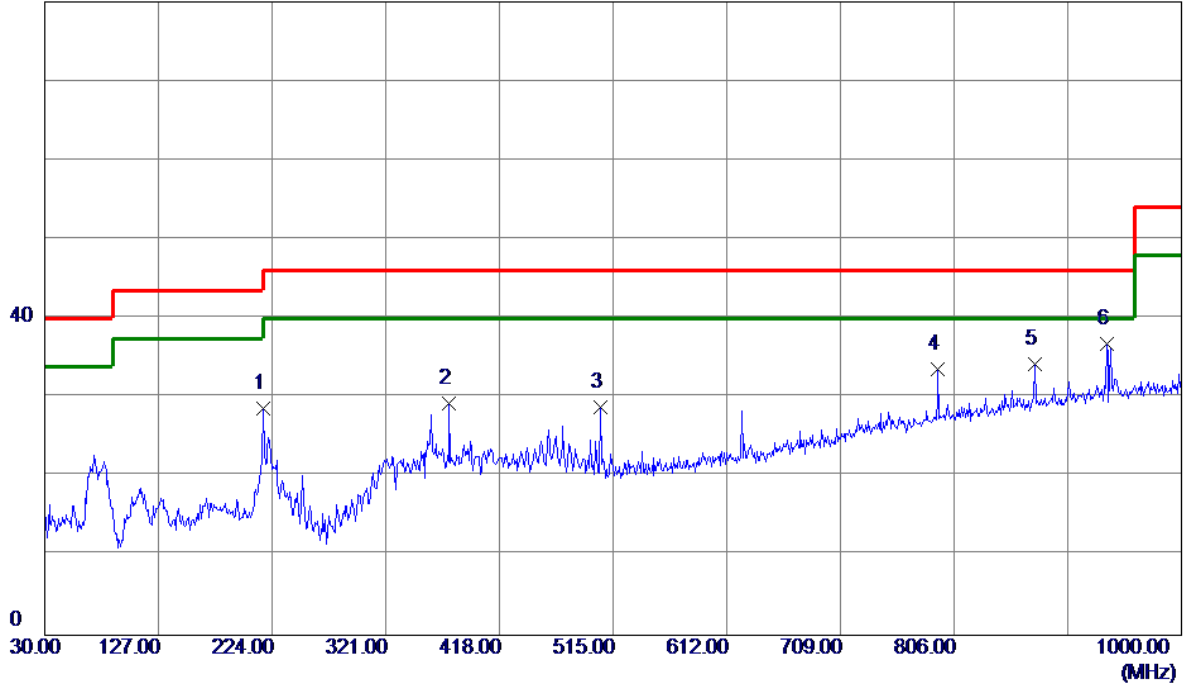


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	55.2200	47.18	-13.94	33.24	40.00	-6.76	Peak	
2	67.8300	46.61	-15.93	30.68	40.00	-9.32	Peak	
3	189.0800	35.48	-12.77	22.71	43.50	-20.79	Peak	
4	504.3300	38.49	-8.63	29.86	46.00	-16.14	Peak	
5	624.6100	40.15	-5.95	34.20	46.00	-11.80	Peak	
6	936.9500	32.66	1.74	34.40	46.00	-11.60	Peak	

Test Mode: UNII-3/TX A Mode 5745MHz (Adapter: S36B52-120A250-04)

Horizontal

80 dBuV/m

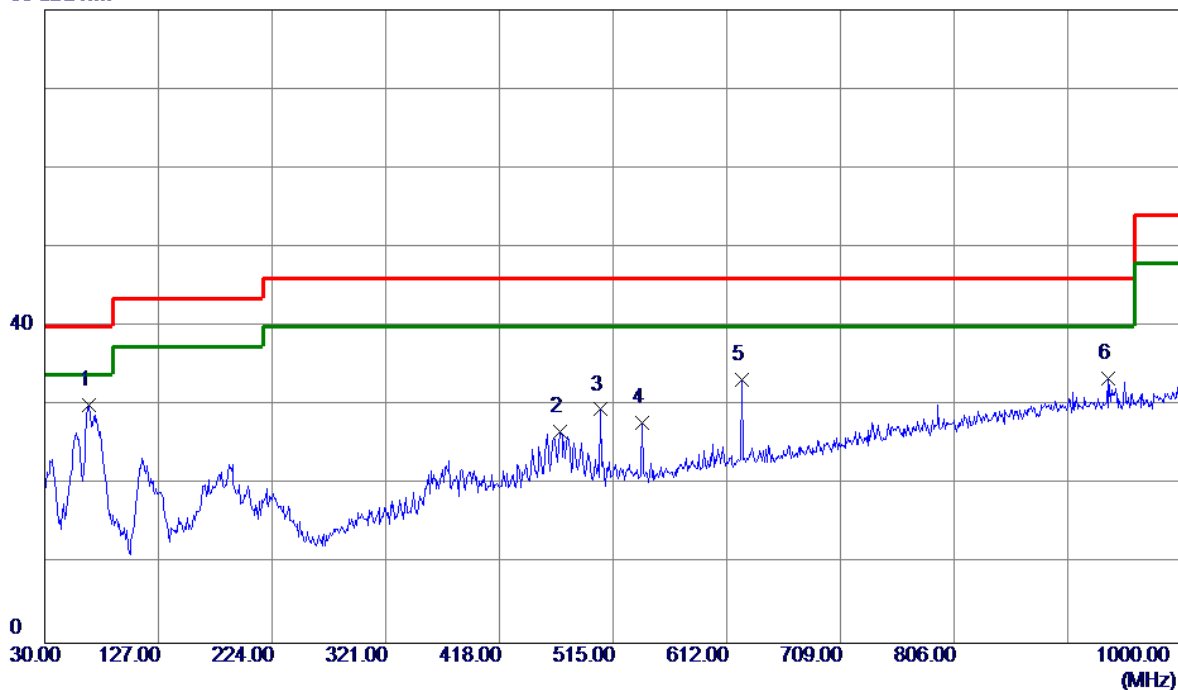


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	42.60	-13.93	28.67	46.00	-17.33	Peak	
2	375.3200	40.97	-11.65	29.32	46.00	-16.68	Peak	
3	504.3300	37.42	-8.63	28.79	46.00	-17.21	Peak	
4	792.4200	35.12	-1.52	33.60	46.00	-12.40	Peak	
5	874.8700	33.78	0.51	34.29	46.00	-11.71	Peak	
6 *	935.9800	35.11	1.72	36.83	46.00	-9.17	Peak	

Test Mode: UNII-3/TX A Mode 5785MHz (Adapter: S36B52-120A250-04)

Vertical

80 dBuV/m

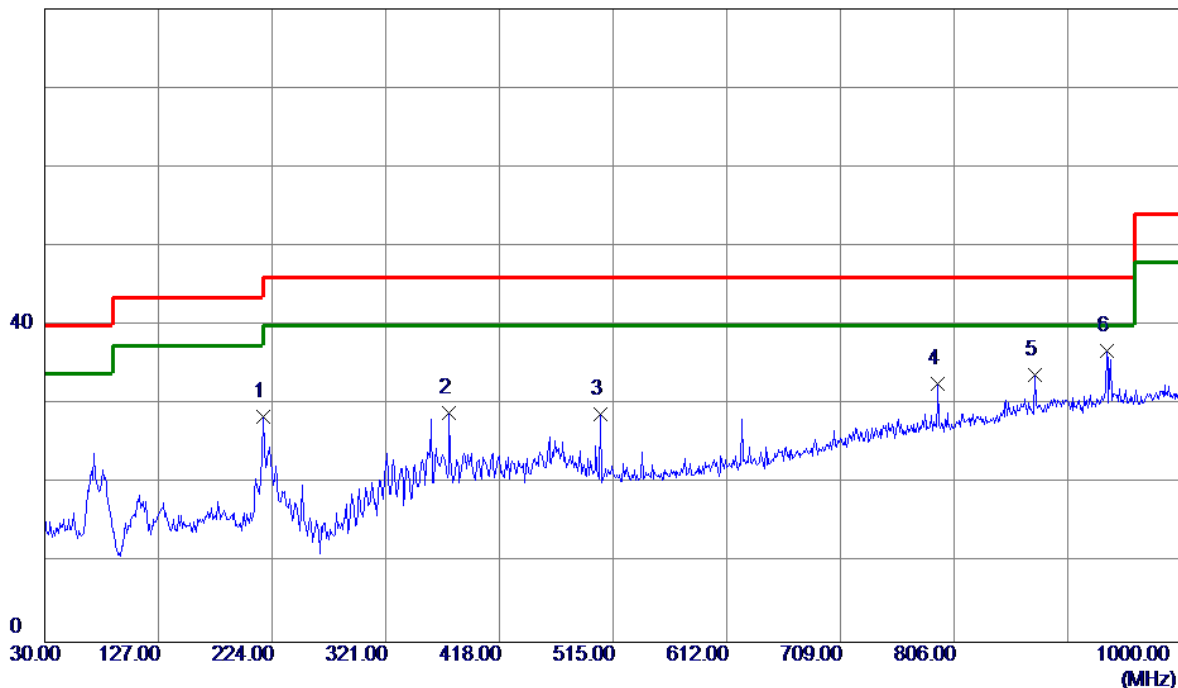


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	67.8300	45.98	-15.93	30.05	40.00	-9.95	Peak	
2	469.4100	36.19	-9.47	26.72	46.00	-19.28	Peak	
3	504.3300	38.15	-8.63	29.52	46.00	-16.48	Peak	
4	540.2199	35.79	-7.91	27.88	46.00	-18.12	Peak	
5	624.6100	39.24	-5.95	33.29	46.00	-12.71	Peak	
6	936.9500	31.76	1.74	33.50	46.00	-12.50	Peak	

Test Mode: UNII-3/TX A Mode 5785MHz (Adapter: S36B52-120A250-04)

Horizontal

80 dBuV/m

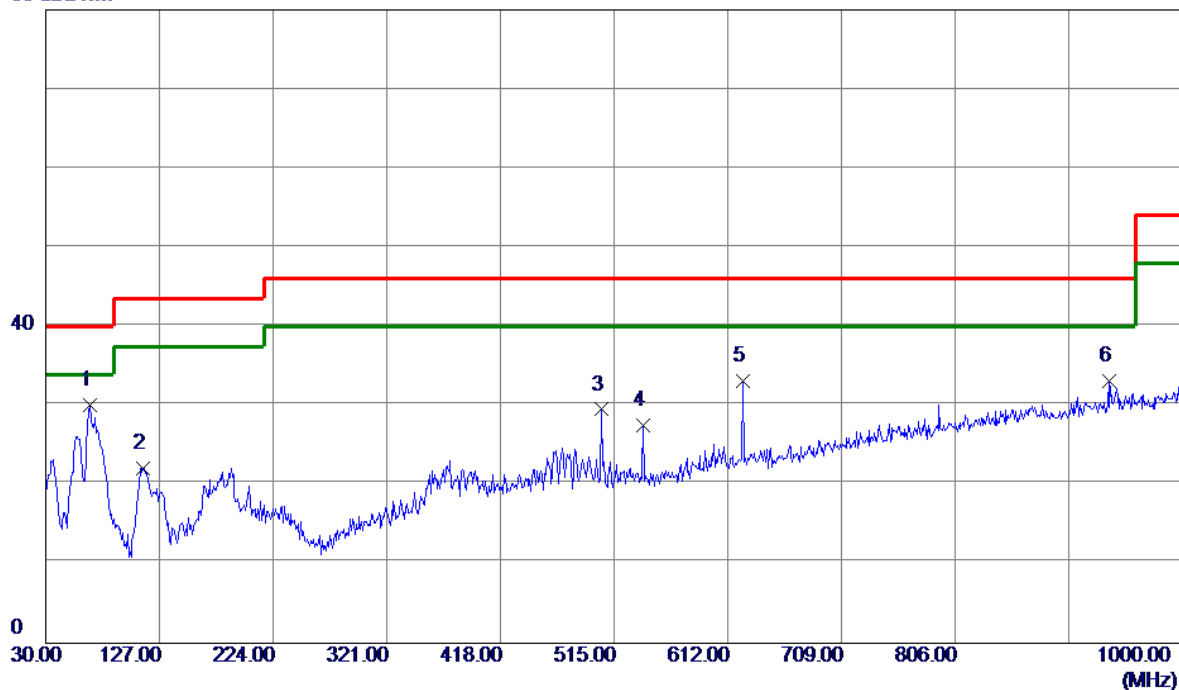


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	216.2400	42.38	-13.93	28.45	46.00	-17.55	Peak	
2	375.3200	40.66	-11.65	29.01	46.00	-16.99	Peak	
3	504.3300	37.46	-8.63	28.83	46.00	-17.17	Peak	
4	792.4200	34.11	-1.52	32.59	46.00	-13.41	Peak	
5	874.8700	33.31	0.51	33.82	46.00	-12.18	Peak	
6 *	935.9800	35.11	1.72	36.83	46.00	-9.17	Peak	

Test Mode: UNII-3/TX A Mode 5825MHz (Adapter: S36B52-120A250-04)

Vertical

80 dBuV/m

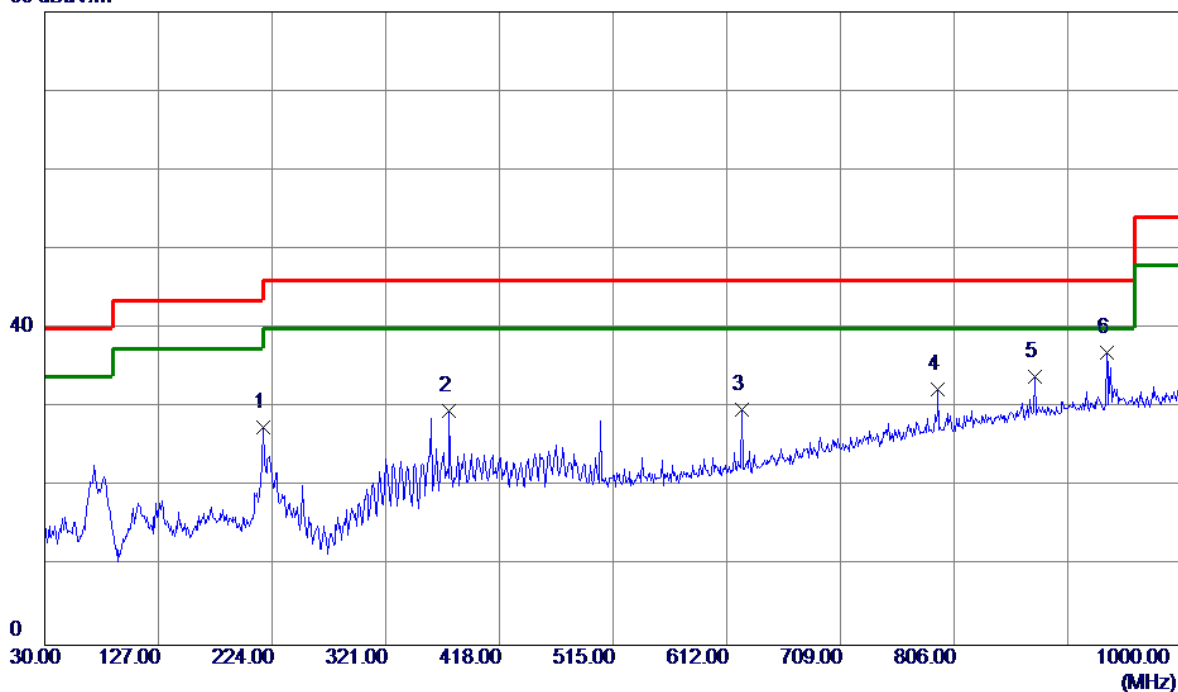


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	67.8300	45.98	-15.93	30.05	40.00	-9.95	Peak	
2	113.4200	38.04	-15.92	22.12	43.50	-21.38	Peak	
3	504.3300	38.15	-8.63	29.52	46.00	-16.48	Peak	
4	540.2199	35.42	-7.91	27.51	46.00	-18.49	Peak	
5	624.6100	39.05	-5.95	33.10	46.00	-12.90	Peak	
6	936.9500	31.35	1.74	33.09	46.00	-12.91	Peak	

Test Mode: UNII-3/TX A Mode 5825MHz (Adapter: S36B52-120A250-04)

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	216.2400	41.38	-13.93	27.45	46.00	-18.55	Peak	
2	375.3200	41.30	-11.65	29.65	46.00	-16.35	Peak	
3	624.6100	35.77	-5.95	29.82	46.00	-16.18	Peak	
4	792.4200	33.81	-1.52	32.29	46.00	-13.71	Peak	
5	874.8700	33.37	0.51	33.88	46.00	-12.12	Peak	
6 *	935.9800	35.23	1.72	36.95	46.00	-9.05	Peak	

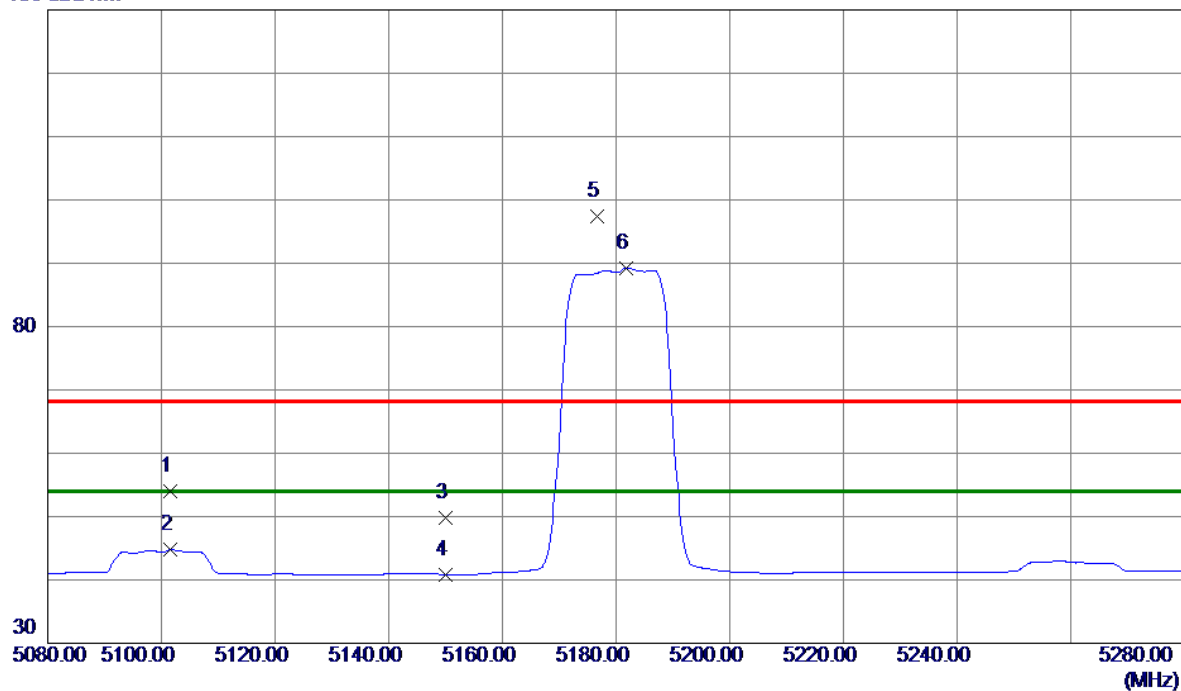
APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

For Model: MT7711XY with adapter: SOY-1200400-3014-II)

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

Vertical

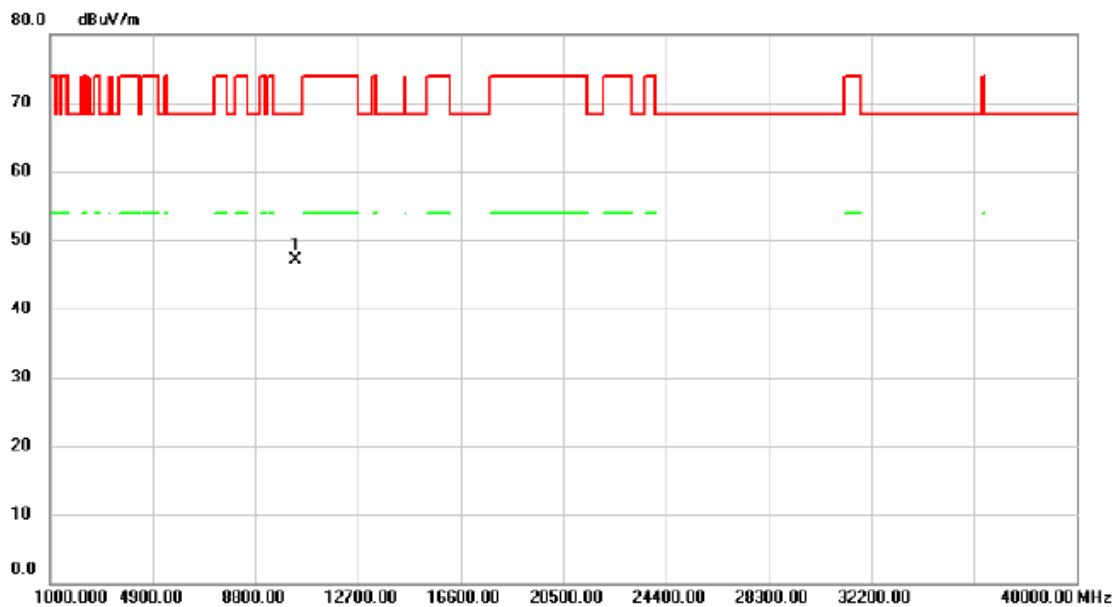
130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5101.6000	13.23	40.86	54.09	68.30	-14.21	Peak	
2	5101.6000	3.90	40.86	44.76	54.00	-9.24	AVG	
3	5150.0000	8.70	41.10	49.80	68.30	-18.50	Peak	
4	5150.0000	-0.24	41.10	40.86	54.00	-13.14	AVG	
5	5176.6000	56.13	41.24	97.37	68.30	29.07	Peak	No Limit
6 *	5181.8000	47.95	41.26	89.21	54.00	35.21	AVG	No Limit

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

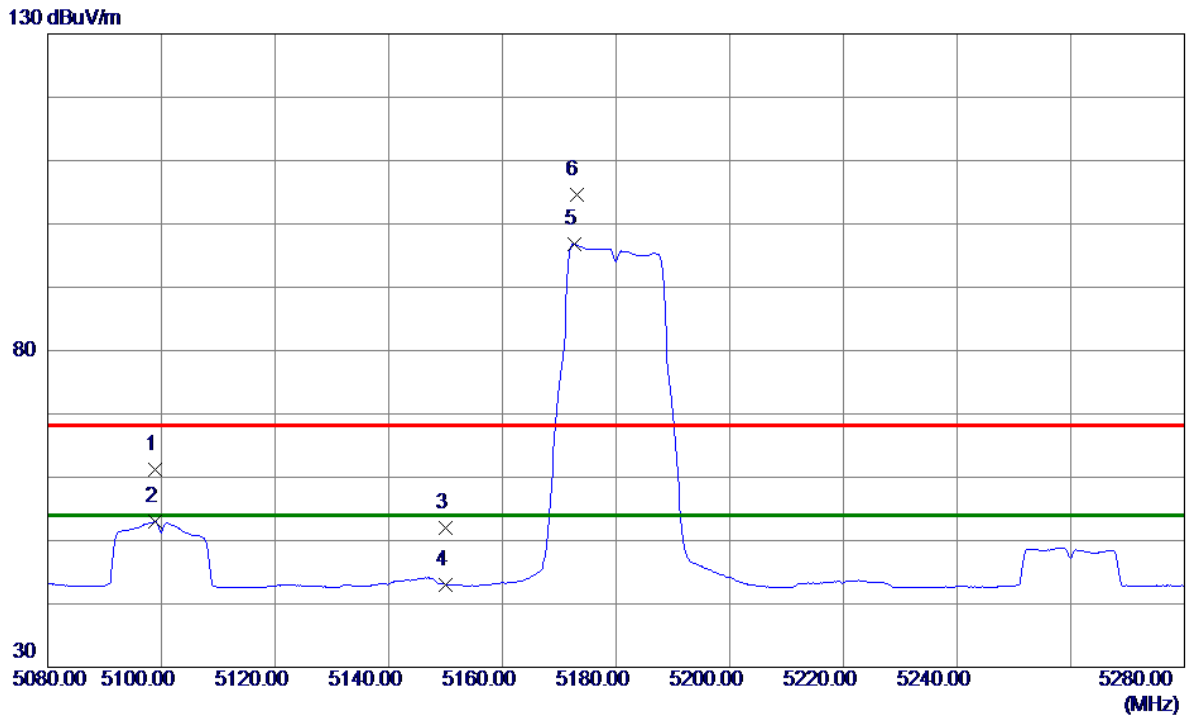
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10359.365	30.75	16.33	47.08	68.30	-21.22	peak	

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

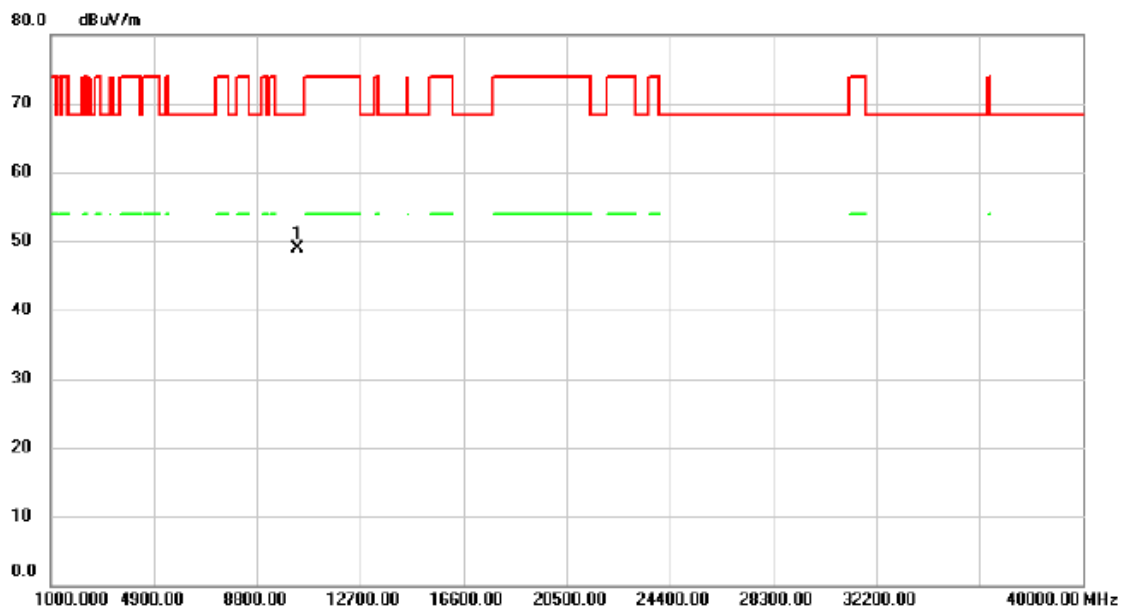
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5098.8000	20.38	40.84	61.22	68.30	-7.08	Peak	
2	5098.8000	12.10	40.84	52.94	54.00	-1.06	AVG	
3	5150.0000	10.95	41.10	52.05	68.30	-16.25	Peak	
4	5150.0000	1.99	41.10	43.09	54.00	-10.91	AVG	
5 *	5172.6000	55.59	41.22	96.81	54.00	42.81	AVG	No Limit
6	5173.0000	63.40	41.22	104.62	68.30	36.32	Peak	No Limit

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

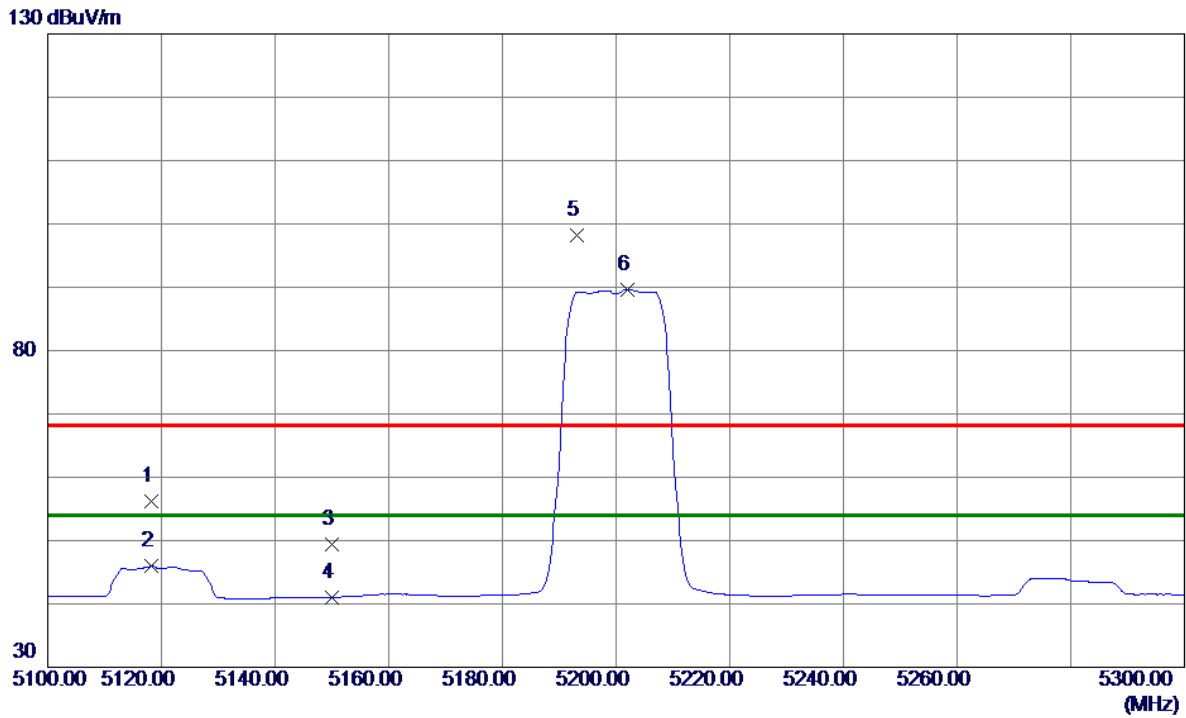
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10359.815	32.64	16.33	48.97	68.30	-19.33	peak	

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

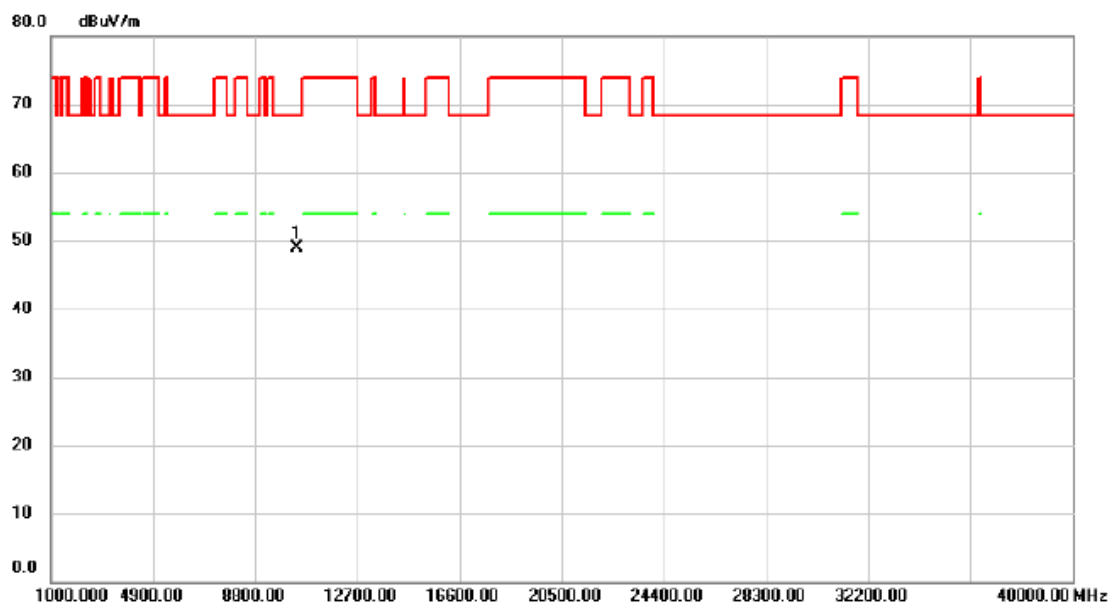
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5118.2000	15.23	40.94	56.17	68.30	-12.13	Peak	
2	5118.2000	4.98	40.94	45.92	54.00	-8.08	AVG	
3	5150.0000	8.24	41.10	49.34	68.30	-18.96	Peak	
4	5150.0000	-0.11	41.10	40.99	54.00	-13.01	AVG	
5	5193.2000	56.86	41.32	98.18	68.30	29.88	Peak	No Limit
6 *	5202.0000	48.27	41.37	89.64	54.00	35.64	AVG	No Limit

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

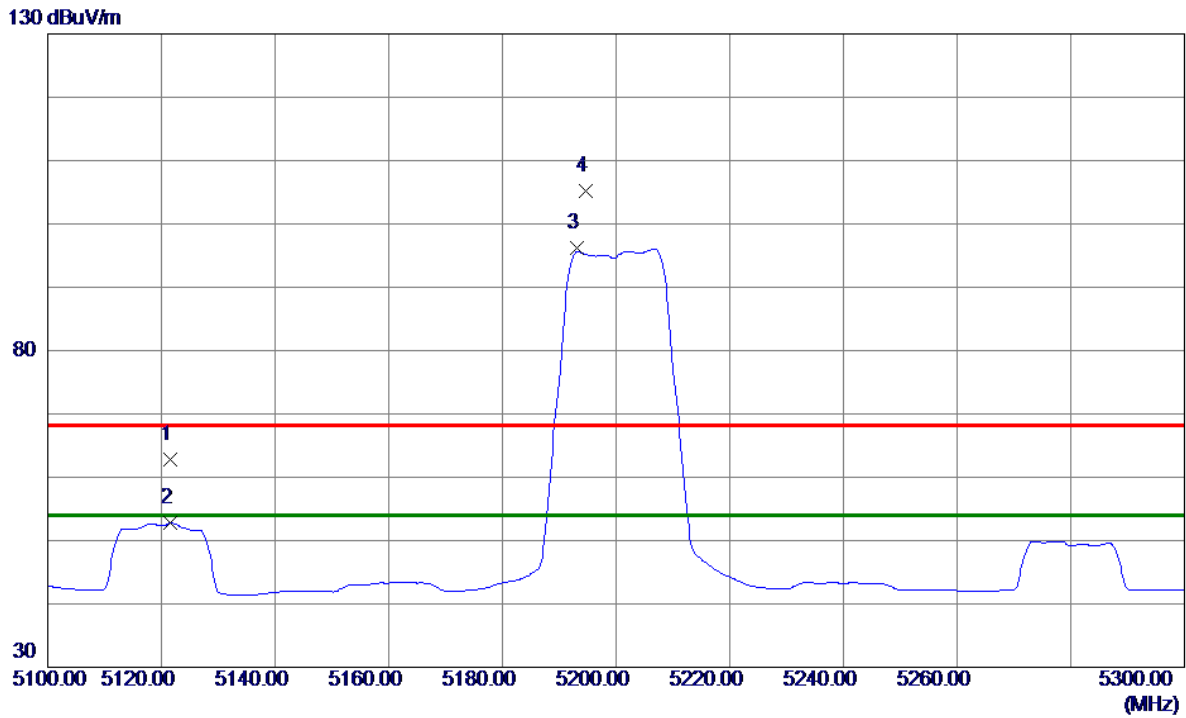
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10399.815	32.54	16.44	48.98	68.30	-19.32	peak	

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

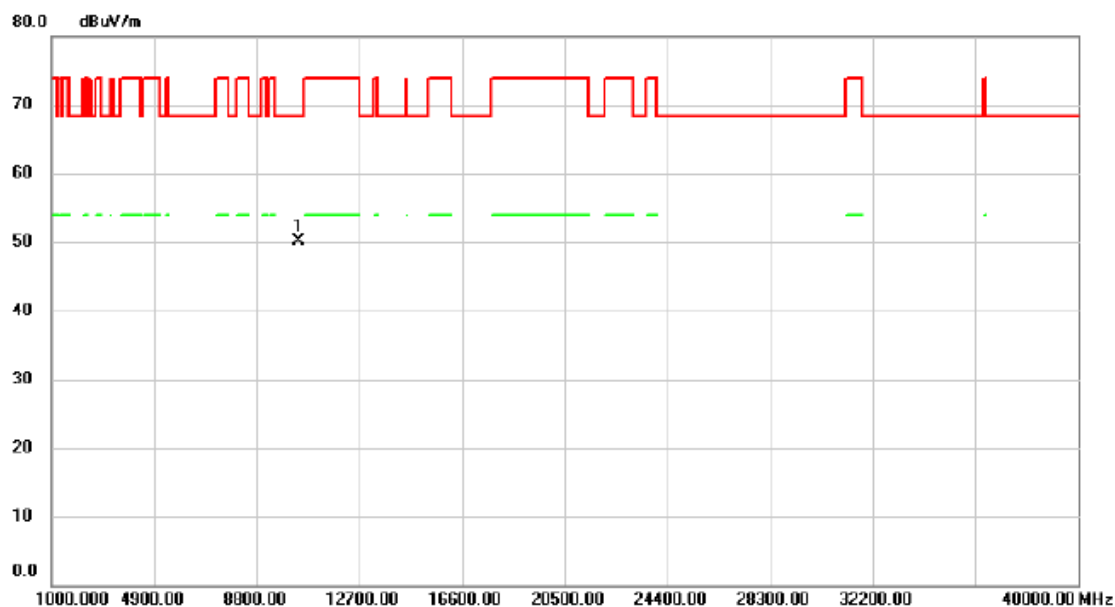
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5121.6000	21.92	40.96	62.88	68.30	-5.42	Peak	
2	5121.6000	11.78	40.96	52.74	54.00	-1.26	AVG	
3 *	5193.2000	54.83	41.32	96.15	54.00	42.15	AVG	No Limit
4	5194.6000	63.83	41.33	105.16	68.30	36.86	Peak	No Limit

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

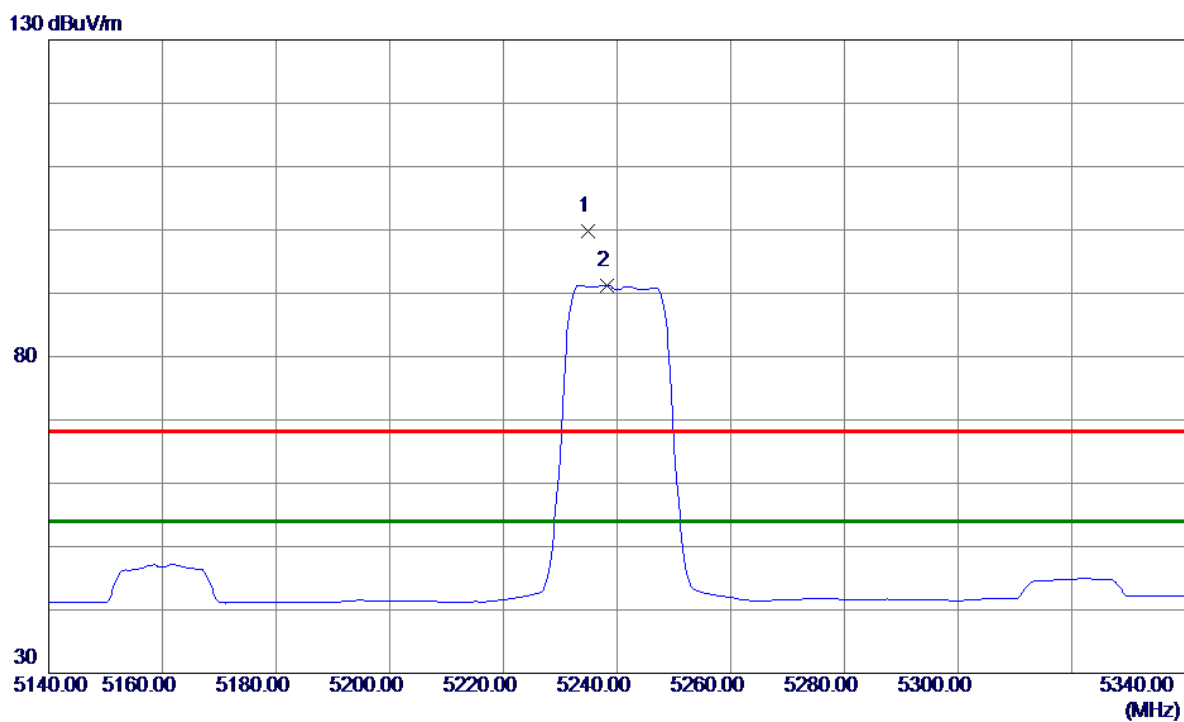
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10399.860	33.69	16.44	50.13	68.30	-18.17	peak	

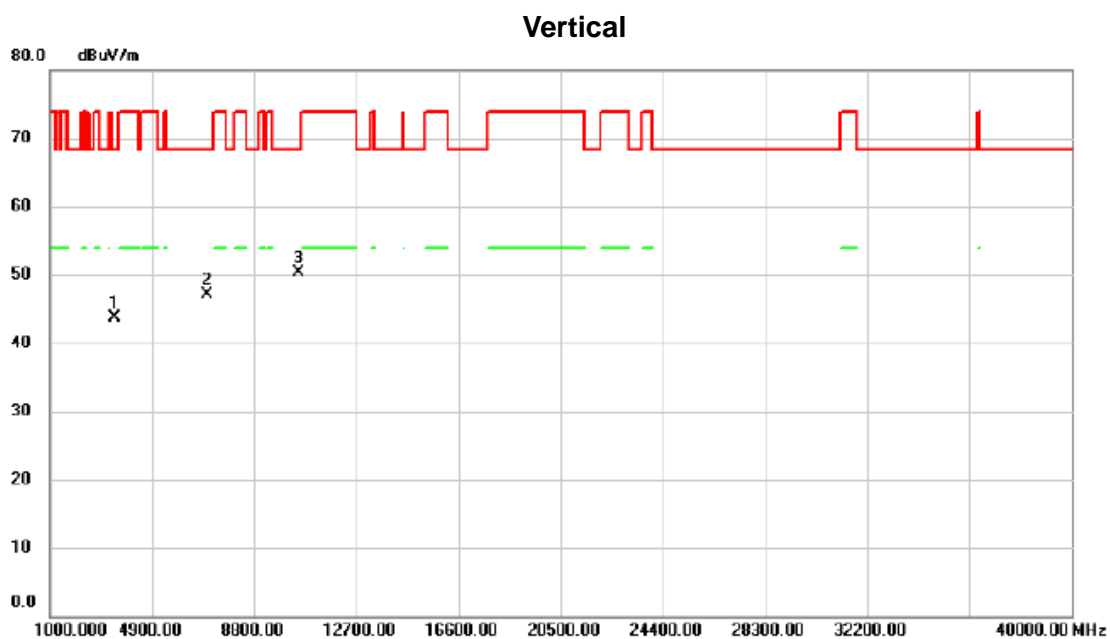
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5234.8000	58.24	41.53	99.77	68.30	31.47	Peak	No Limit
2 *	5238.2000	49.71	41.55	91.26	54.00	37.26	AVG	No Limit

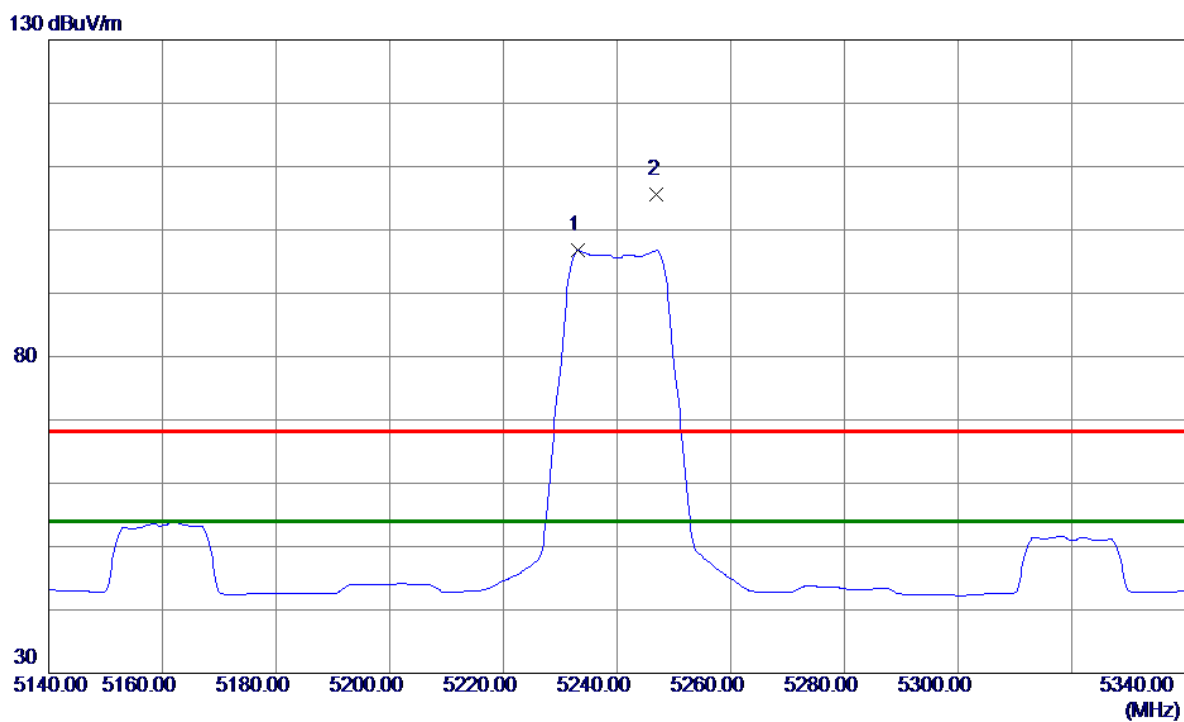
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3493.322	40.96	2.71	43.67	68.30	-24.63	peak	
2		6987.016	34.10	12.98	47.08	68.30	-21.22	peak	
3 *		10479.735	33.74	16.64	50.38	68.30	-17.92	peak	

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

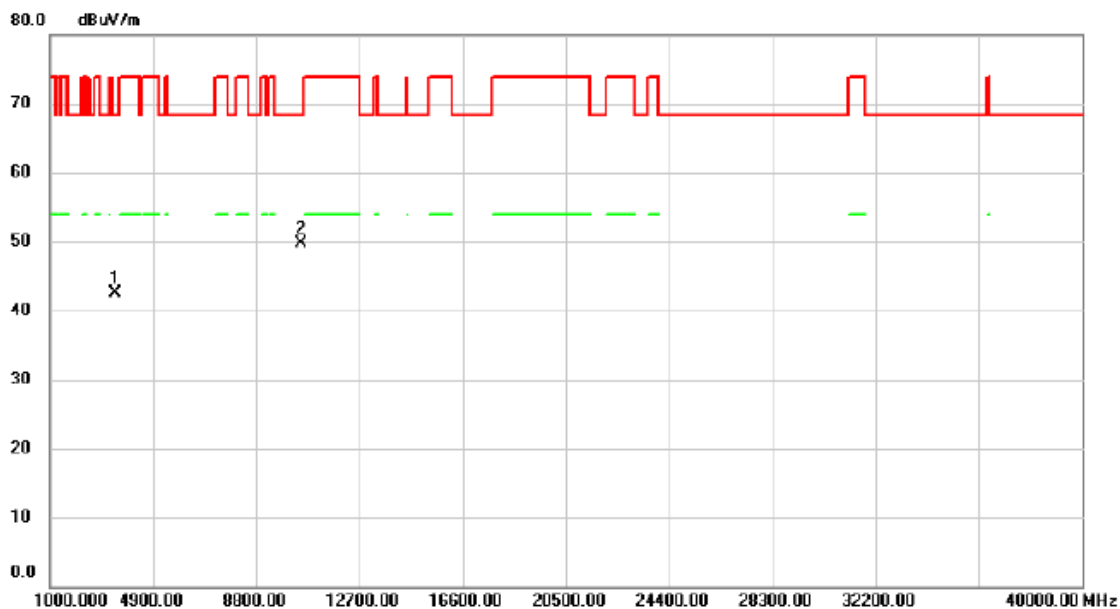
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5233.2000	55.26	41.52	96.78	54.00	42.78	AVG	No Limit
2	5247.0000	63.95	41.59	105.54	68.30	37.24	Peak	No Limit

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

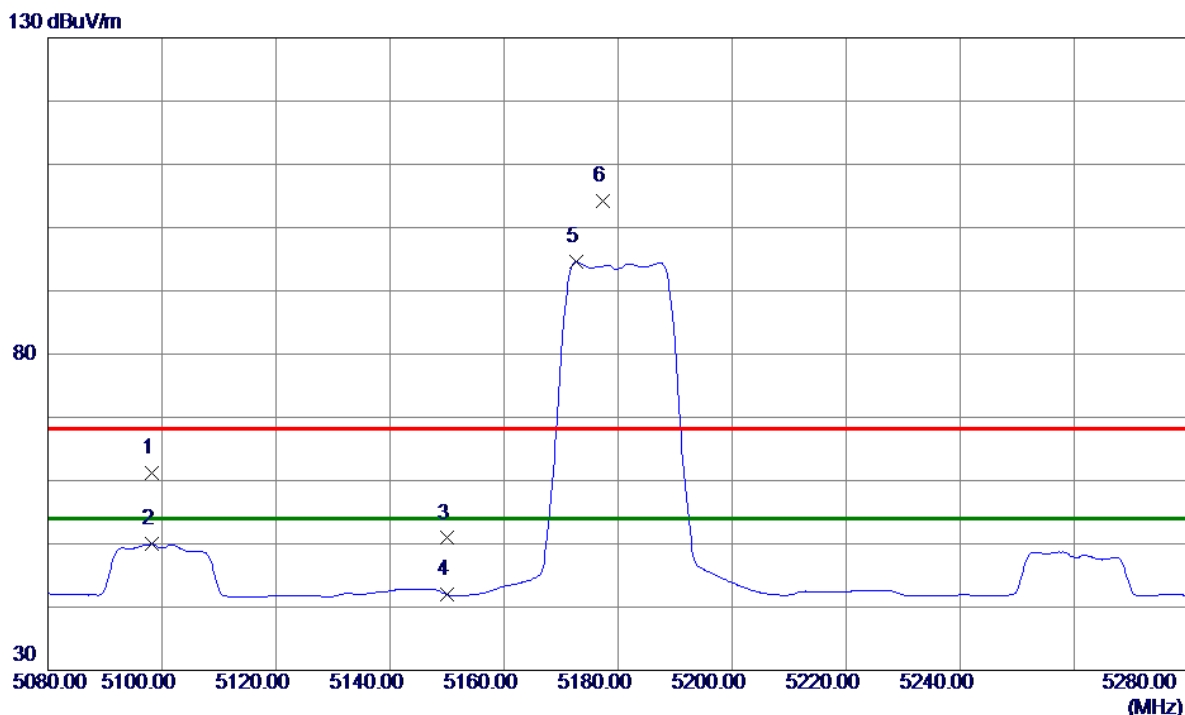
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3493.475	39.78	2.71	42.49	68.30	-25.81	peak	
2	*	10479.915	33.10	16.64	49.74	68.30	-18.56	peak	

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

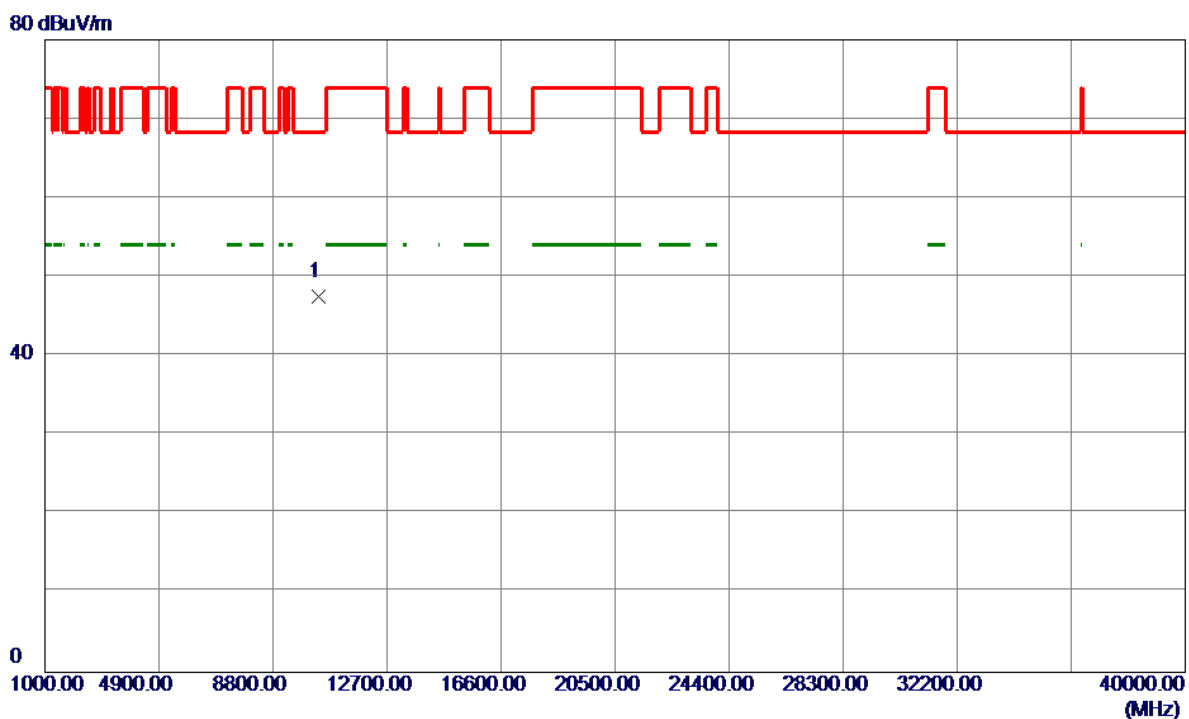
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5098.2000	20.40	40.84	61.24	68.30	-7.06	Peak	
2	5098.2000	9.08	40.84	49.92	54.00	-4.08	AVG	
3	5150.0000	9.80	41.10	50.90	68.30	-17.40	Peak	
4	5150.0000	0.88	41.10	41.98	54.00	-12.02	AVG	
5 *	5172.6000	53.34	41.22	94.56	54.00	40.56	AVG	No Limit
6	5177.4000	63.04	41.24	104.28	68.30	35.98	Peak	No Limit

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

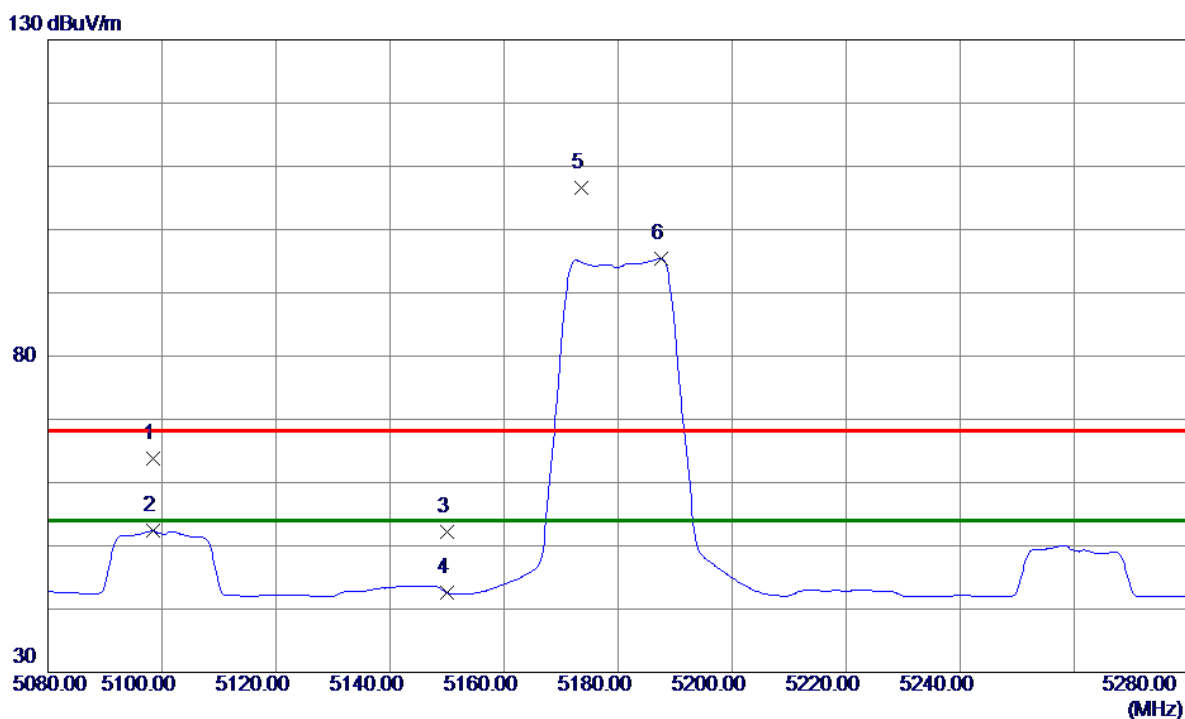
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10360.0700	31.18	16.33	47.51	68.30	-20.79	Peak	

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

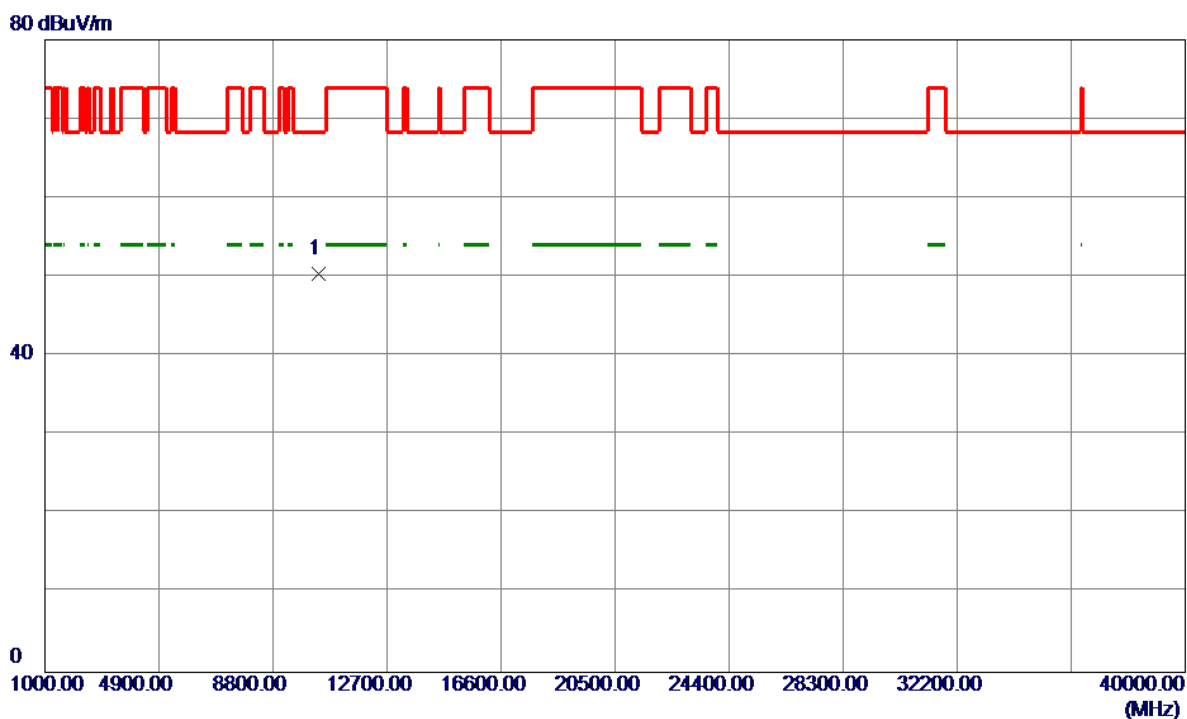
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5098.4000	22.98	40.84	63.82	68.30	-4.48	Peak	
2	5098.4000	11.50	40.84	52.34	54.00	-1.66	AVG	
3	5150.0000	11.15	41.10	52.25	68.30	-16.05	Peak	
4	5150.0000	1.49	41.10	42.59	54.00	-11.41	AVG	
5	5173.6000	65.40	41.22	106.62	68.30	38.32	Peak	No Limit
6 *	5187.6000	54.18	41.29	95.47	54.00	41.47	AVG	No Limit

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

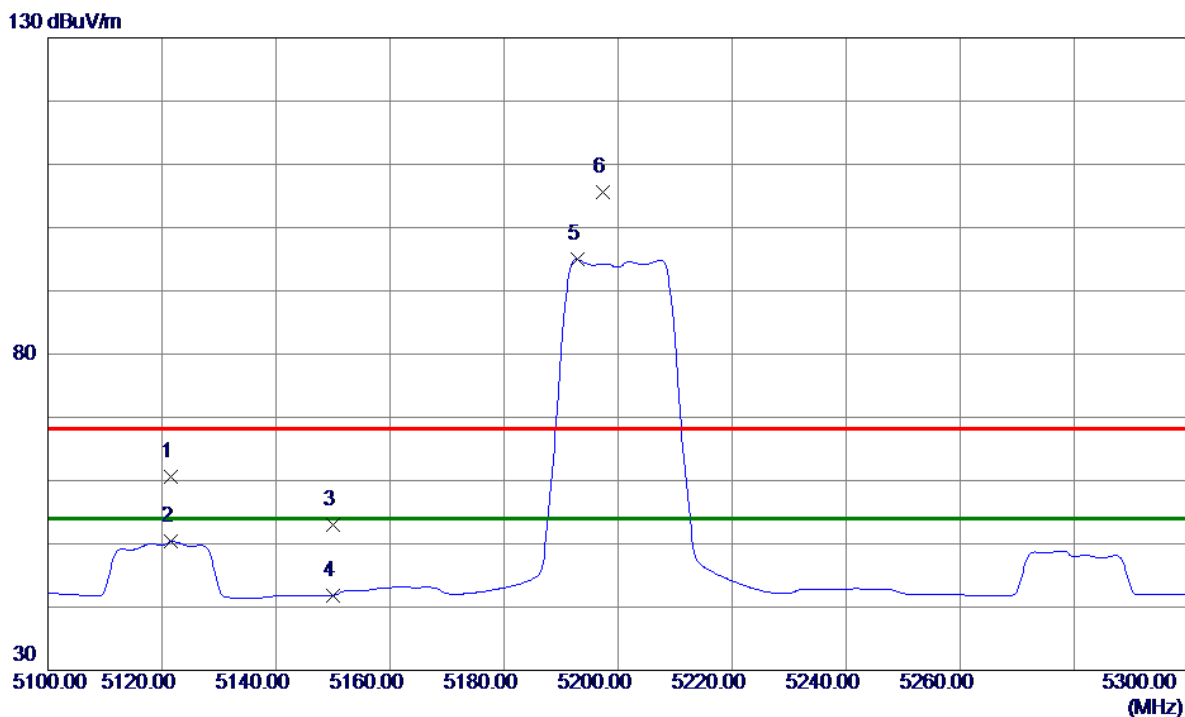
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10359.7800	34.15	16.33	50.48	68.30	-17.82	Peak	

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

Vertical

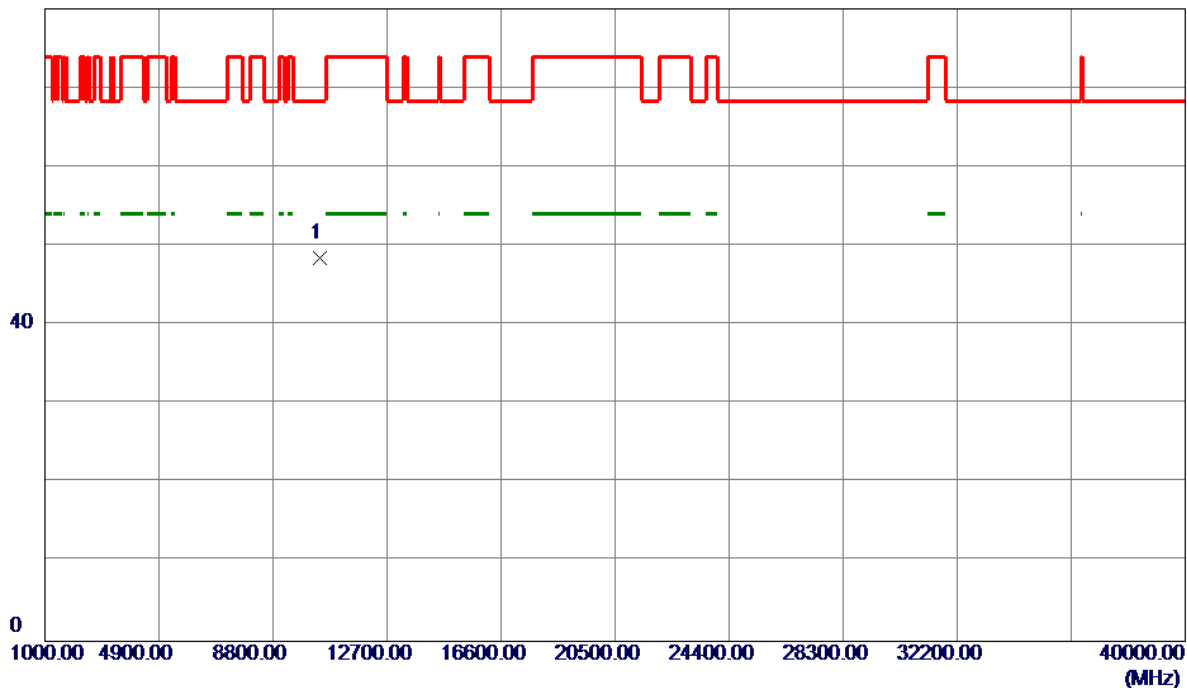


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5121.6000	19.69	40.96	60.65	68.30	-7.65	Peak	
2	5121.6000	9.44	40.96	50.40	54.00	-3.60	AVG	
3	5150.0000	11.86	41.10	52.96	68.30	-15.34	Peak	
4	5150.0000	0.75	41.10	41.85	54.00	-12.15	AVG	
5 *	5192.8000	53.64	41.32	94.96	54.00	40.96	AVG	No Limit
6	5197.4000	64.32	41.34	105.66	68.30	37.36	Peak	No Limit

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

Vertical

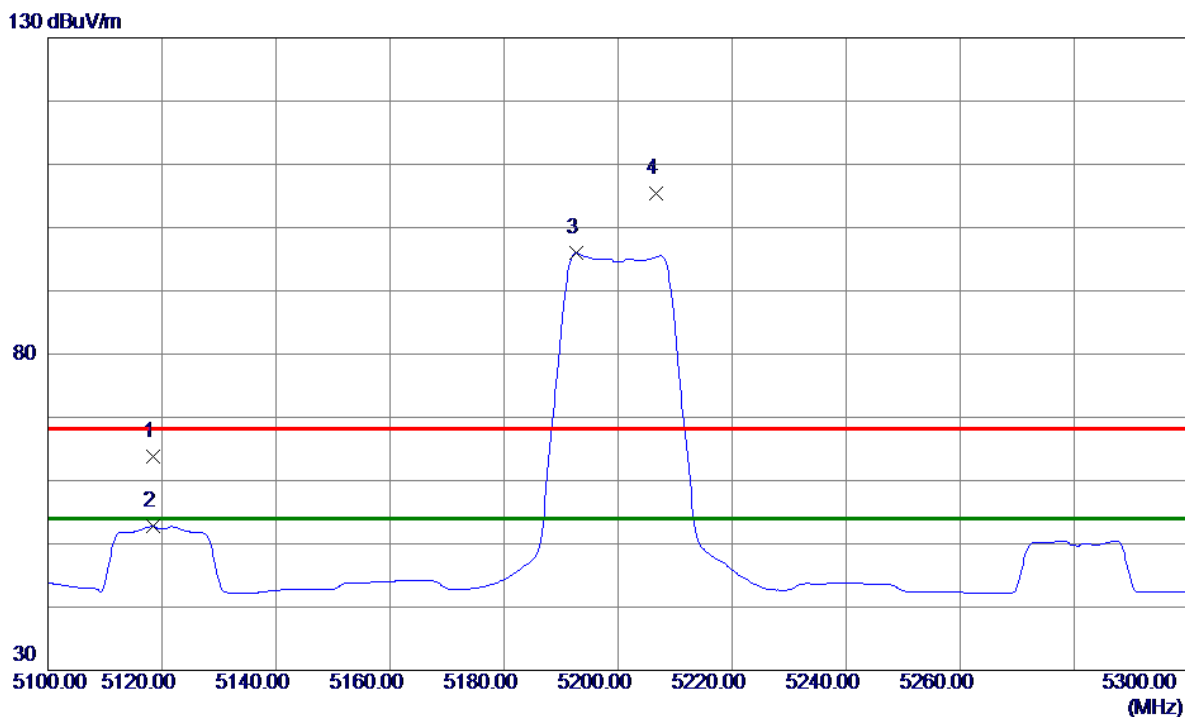
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10399.8200	31.99	16.44	48.43	68.30	-19.87	Peak	

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

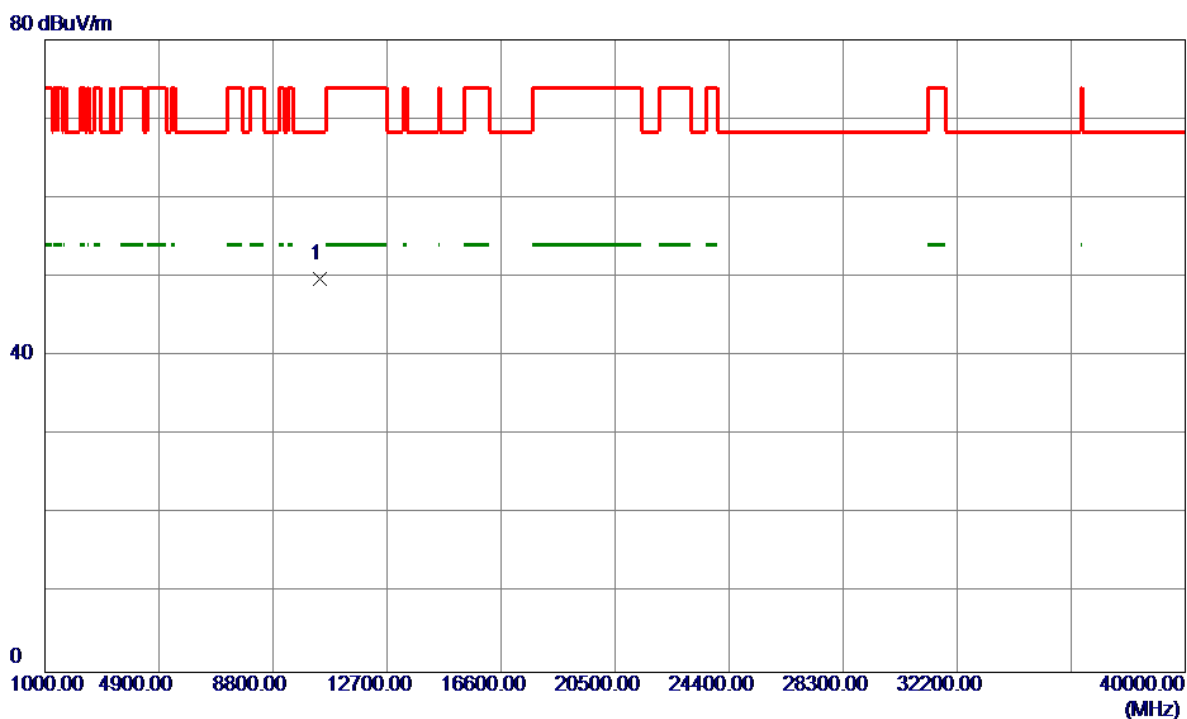
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5118.4000	22.78	40.94	63.72	68.30	-4.58	Peak	
2	5118.4000	11.83	40.94	52.77	54.00	-1.23	AVG	
3 *	5192.6000	54.63	41.32	95.95	54.00	41.95	AVG	No Limit
4	5206.6000	64.08	41.39	105.47	68.30	37.17	Peak	No Limit

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

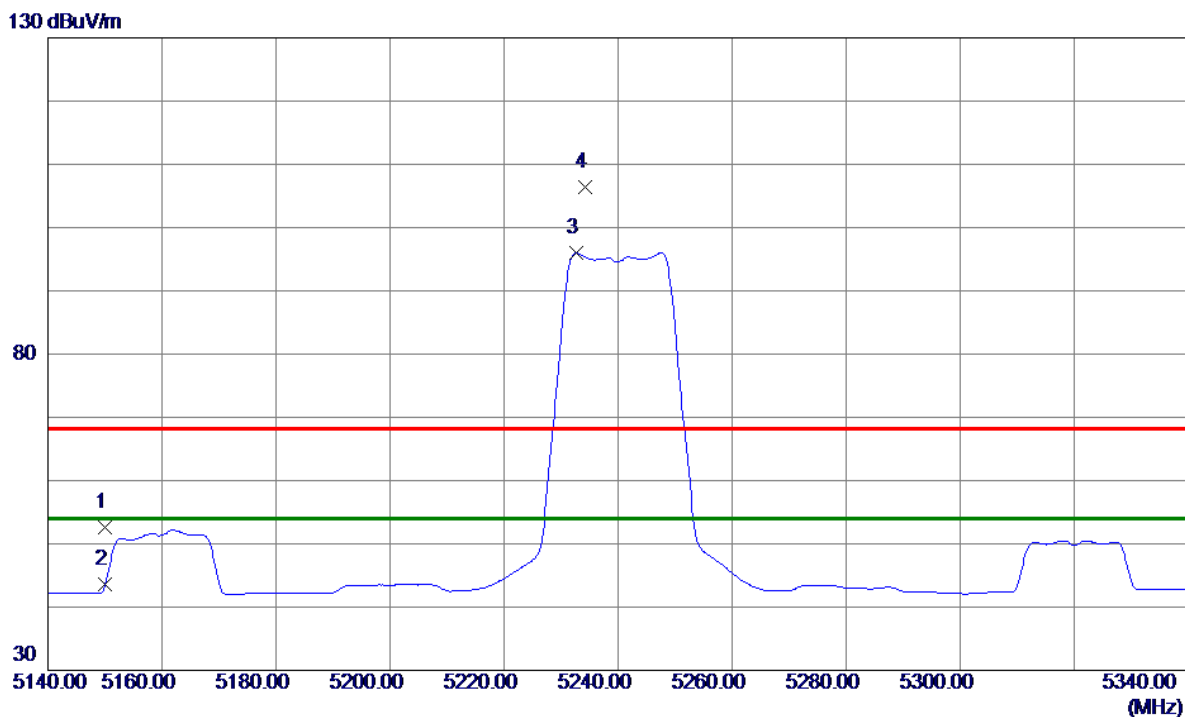
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10399.6000	33.30	16.44	49.74	68.30	-18.56	Peak	

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

Vertical

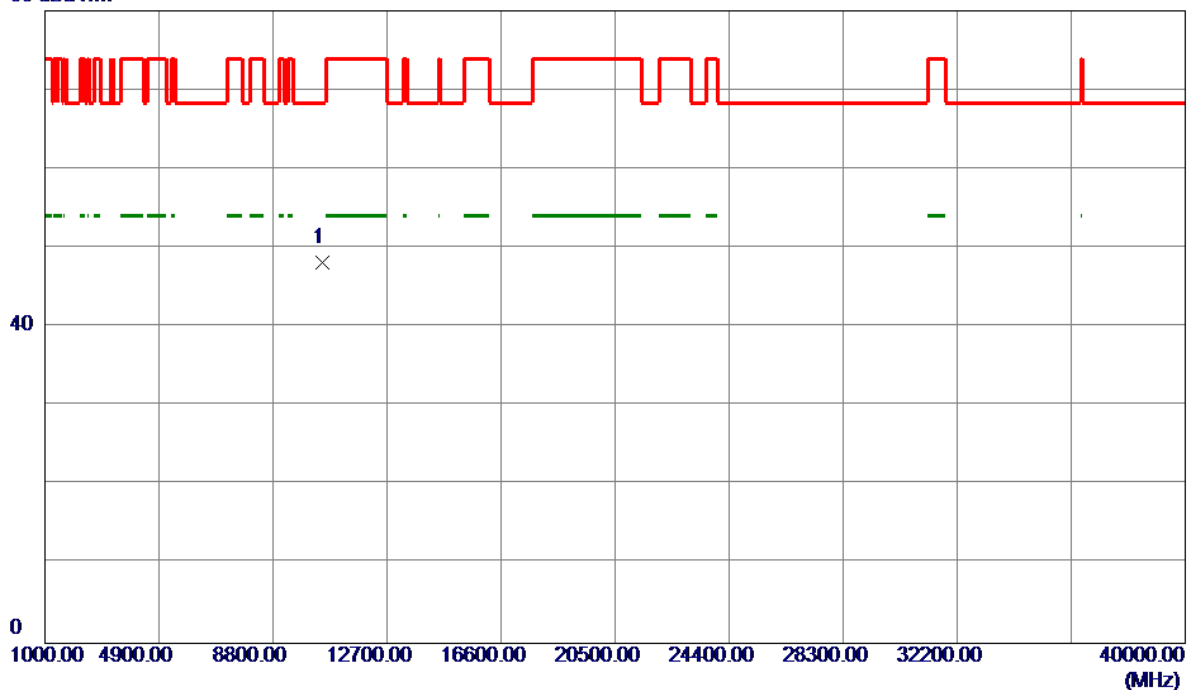


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	11.46	41.10	52.56	68.30	-15.74	Peak	
2	5150.0000	2.46	41.10	43.56	54.00	-10.44	AVG	
3 *	5232.6000	54.51	41.52	96.03	54.00	42.03	AVG	No Limit
4	5234.2000	64.95	41.53	106.48	68.30	38.18	Peak	No Limit

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

Vertical

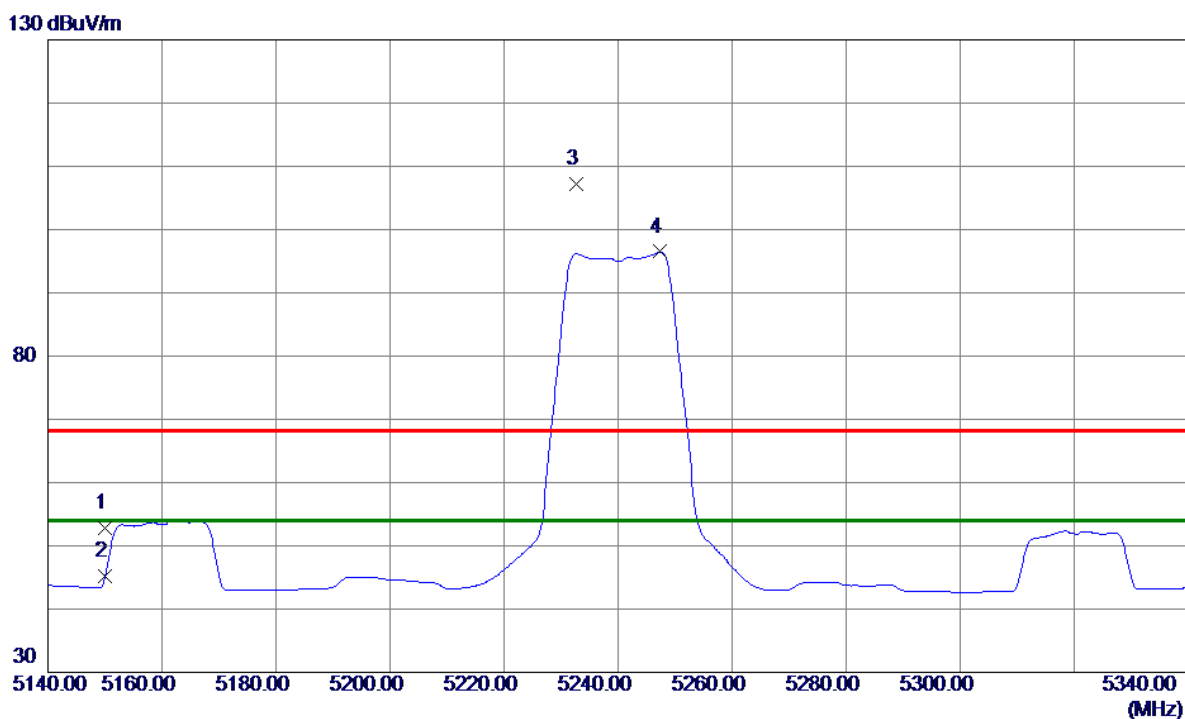
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10478.3949	31.57	16.65	48.22	68.30	-20.08	Peak	

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

Horizontal

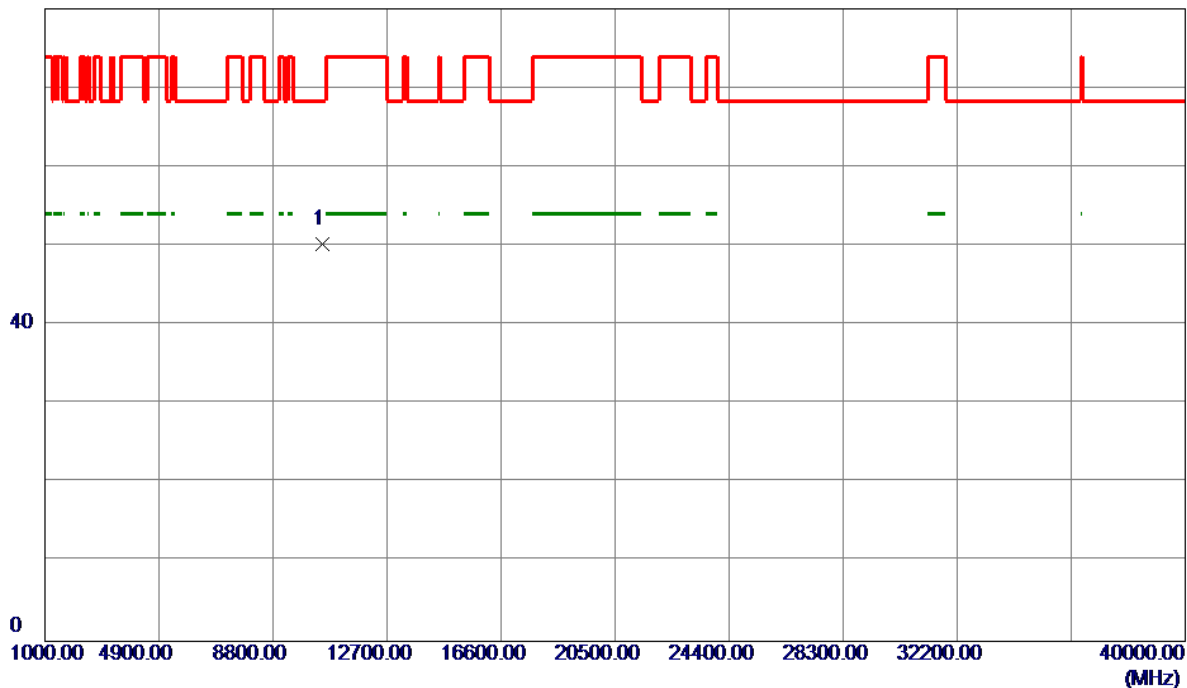


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	11.70	41.10	52.80	68.30	-15.50	Peak	
2	5150.0000	4.12	41.10	45.22	54.00	-8.78	AVG	
3	5232.6000	65.75	41.52	107.27	68.30	38.97	Peak	No Limit
4 *	5247.4000	54.90	41.60	96.50	54.00	42.50	AVG	No Limit

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

Horizontal

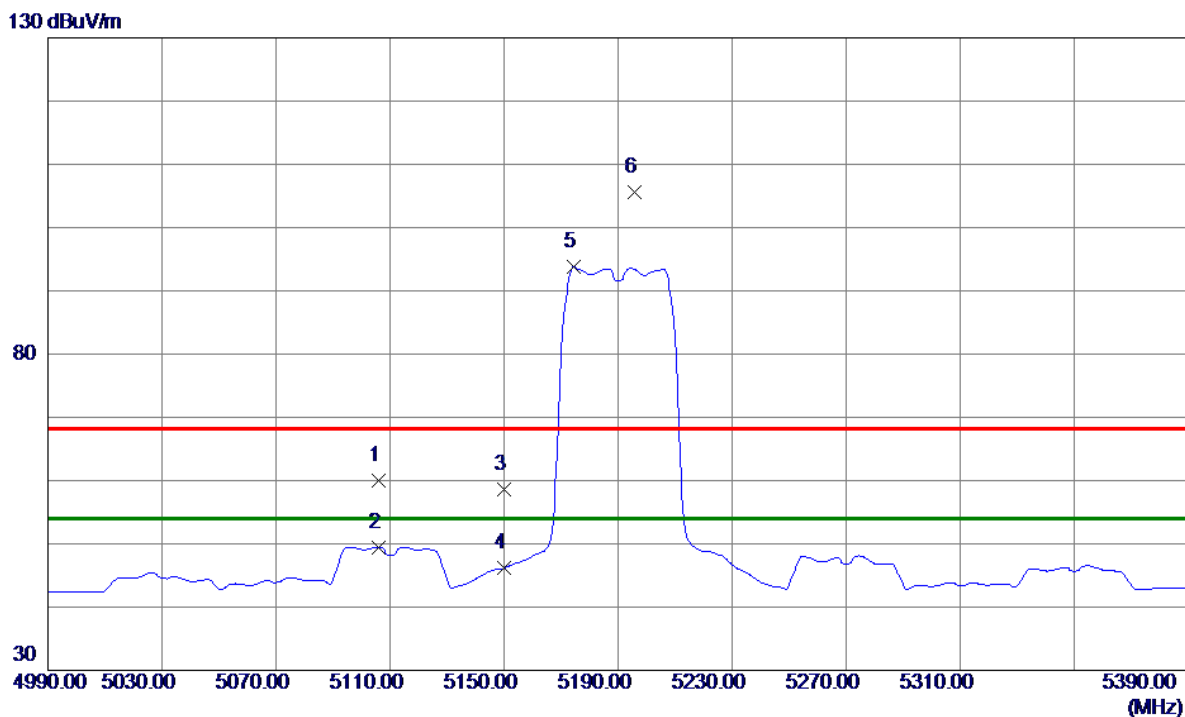
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10479.8700	33.52	16.65	50.17	68.30	-18.13	Peak	

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

Vertical

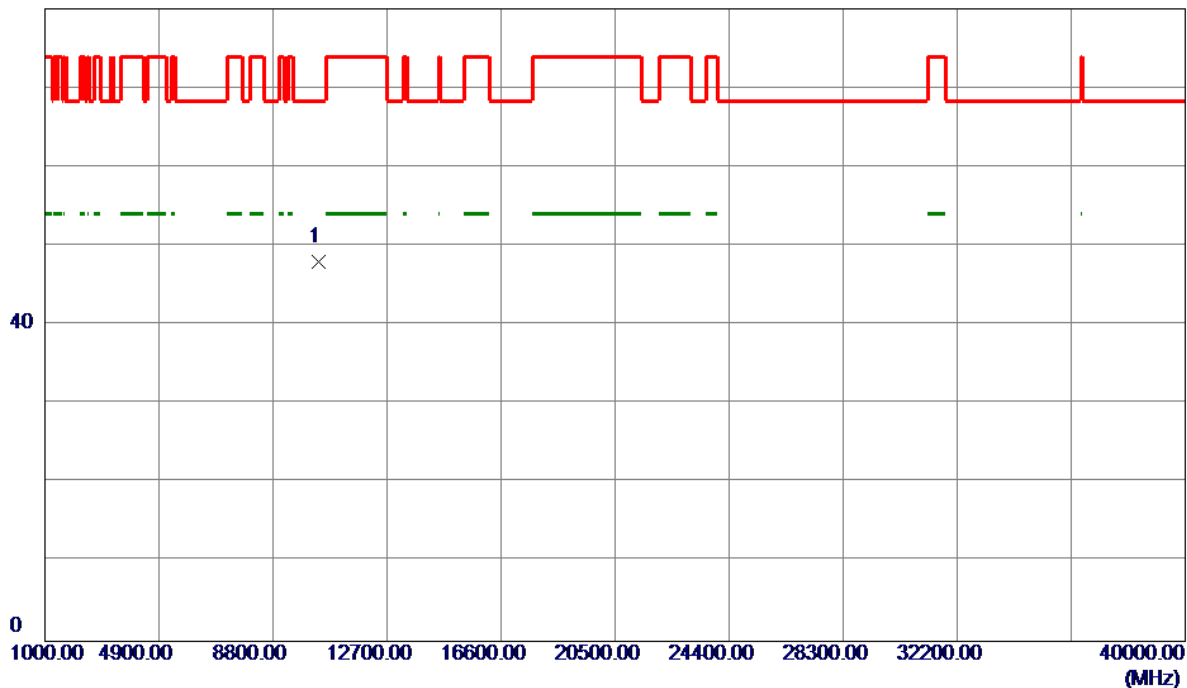


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5106.0000	19.08	40.88	59.96	68.30	-8.34	Peak	
2	5106.0000	8.59	40.88	49.47	54.00	-4.53	AVG	
3	5150.0000	17.46	41.10	58.56	68.30	-9.74	Peak	
4	5150.0000	5.04	41.10	46.14	54.00	-7.86	AVG	
5 *	5174.4000	52.52	41.23	93.75	54.00	39.75	AVG	No Limit
6	5195.6000	64.34	41.33	105.67	68.30	37.37	Peak	No Limit

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

Vertical

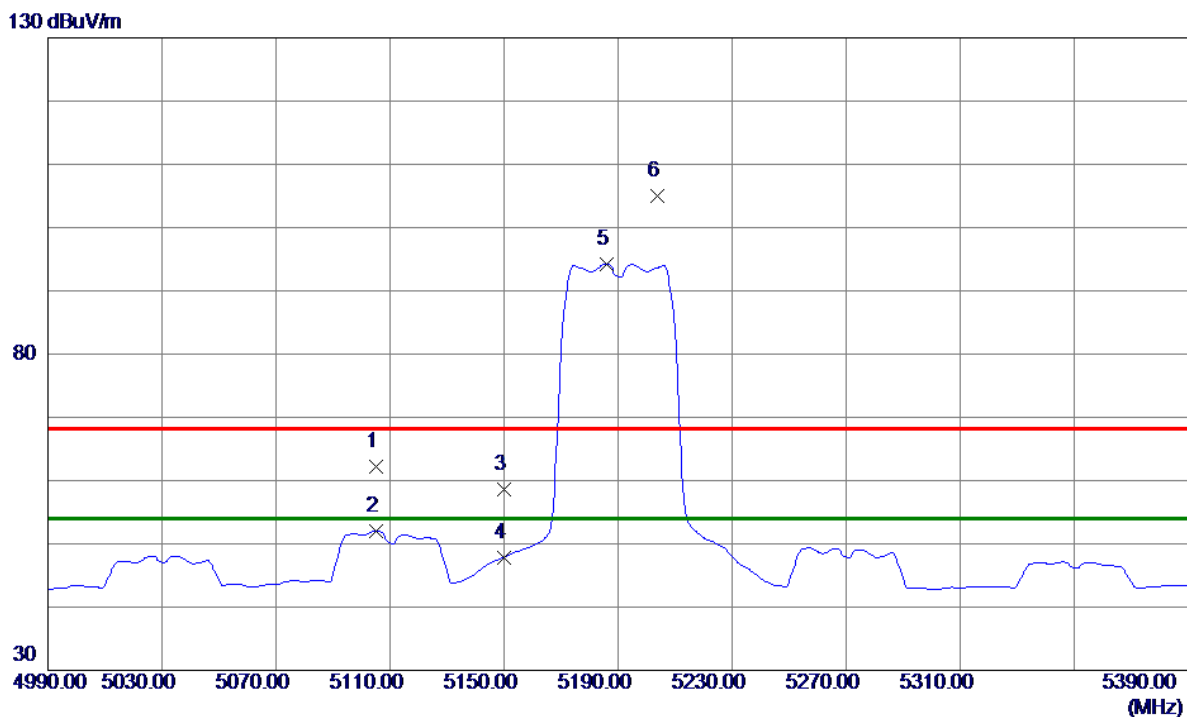
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10378.3600	31.64	16.38	48.02	68.30	-20.28	Peak	

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

Horizontal

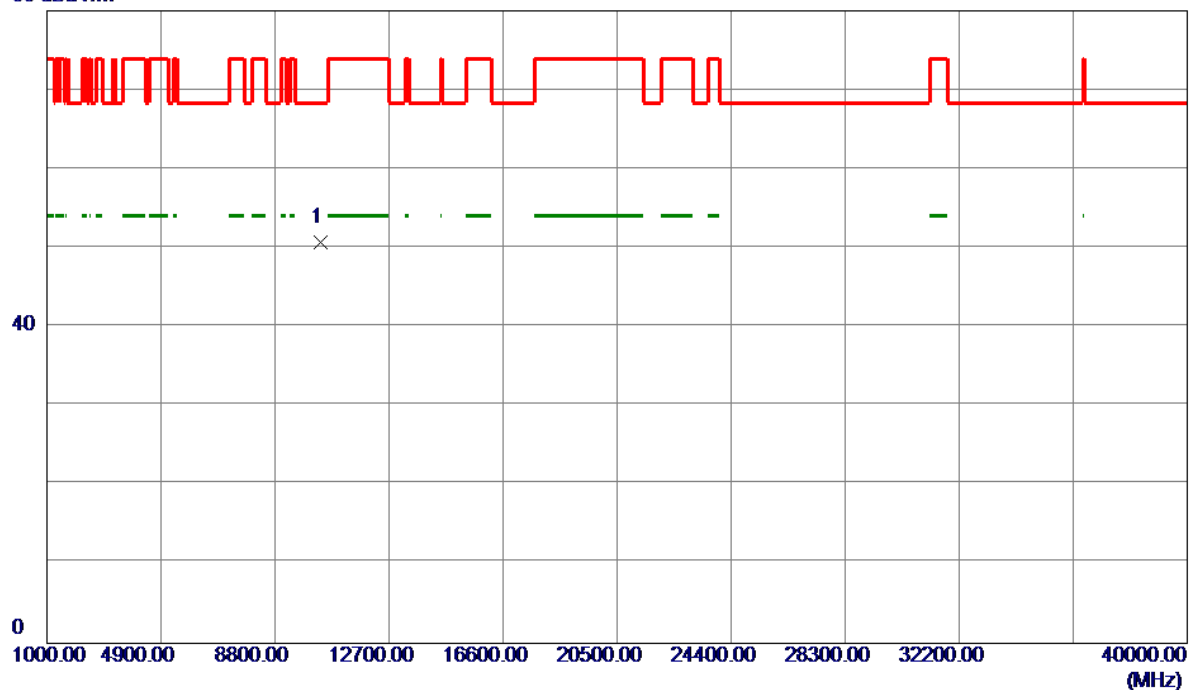


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5105.2000	21.32	40.87	62.19	68.30	-6.11	Peak	
2	5105.2000	11.19	40.87	52.06	54.00	-1.94	AVG	
3	5150.0000	17.52	41.10	58.62	68.30	-9.68	Peak	
4	5150.0000	6.77	41.10	47.87	54.00	-6.13	AVG	
5 *	5186.0000	52.98	41.28	94.26	54.00	40.26	AVG	No Limit
6	5203.6000	63.70	41.37	105.07	68.30	36.77	Peak	No Limit

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

Horizontal

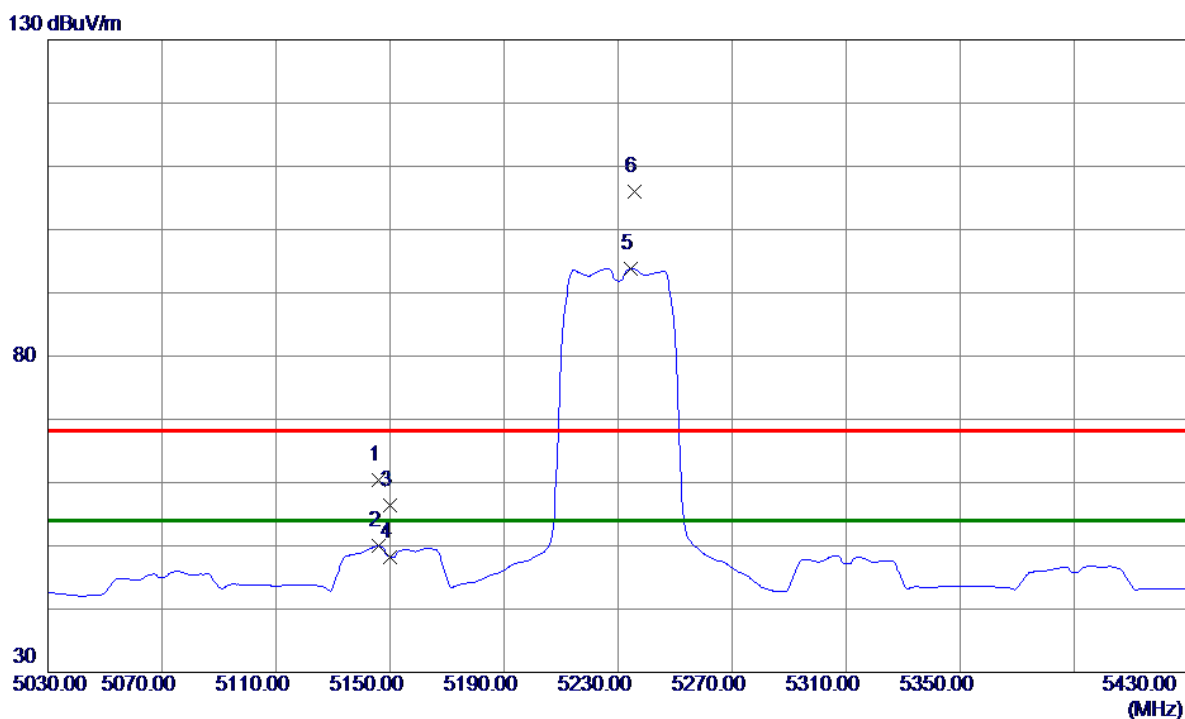
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10378.2900	34.28	16.38	50.66	68.30	-17.64	Peak	

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

Vertical

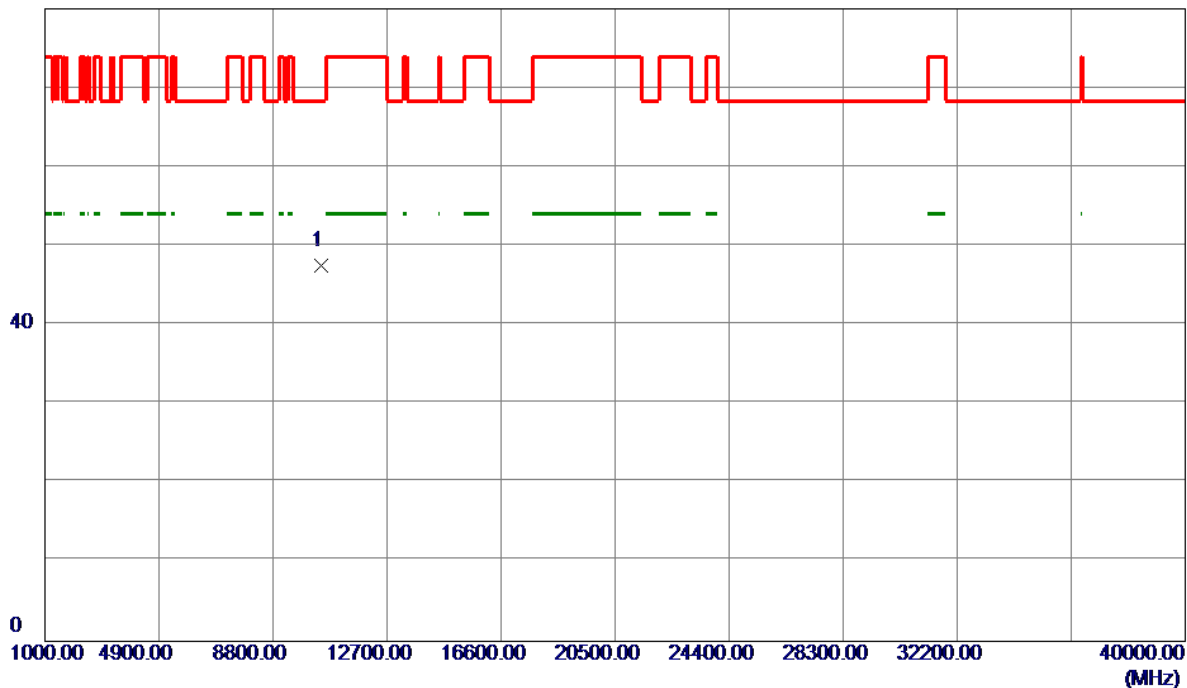


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5146.0000	19.37	41.08	60.45	68.30	-7.85	Peak	
2	5146.0000	8.86	41.08	49.94	54.00	-4.06	AVG	
3	5150.0000	15.27	41.10	56.37	68.30	-11.93	Peak	
4	5150.0000	7.17	41.10	48.27	54.00	-5.73	AVG	
5 *	5234.4000	52.30	41.53	93.83	54.00	39.83	AVG	No Limit
6	5235.6000	64.50	41.54	106.04	68.30	37.74	Peak	No Limit

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

Vertical

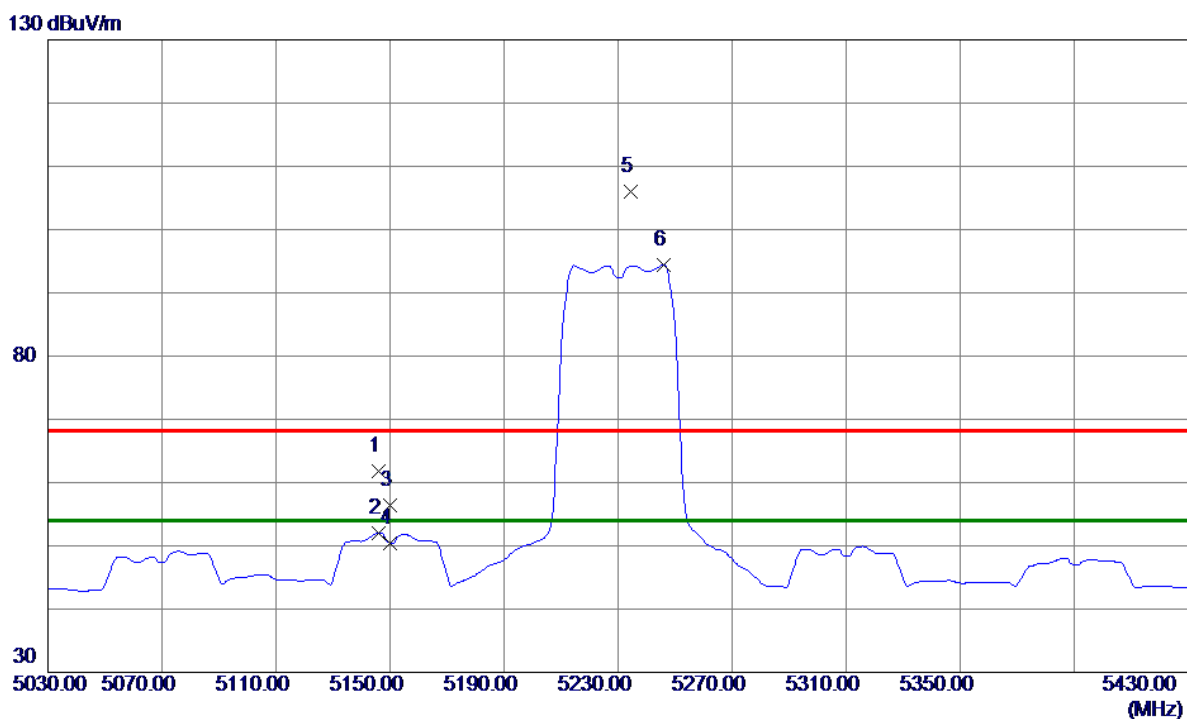
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10458.8250	30.95	16.59	47.54	68.30	-20.76	Peak	

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

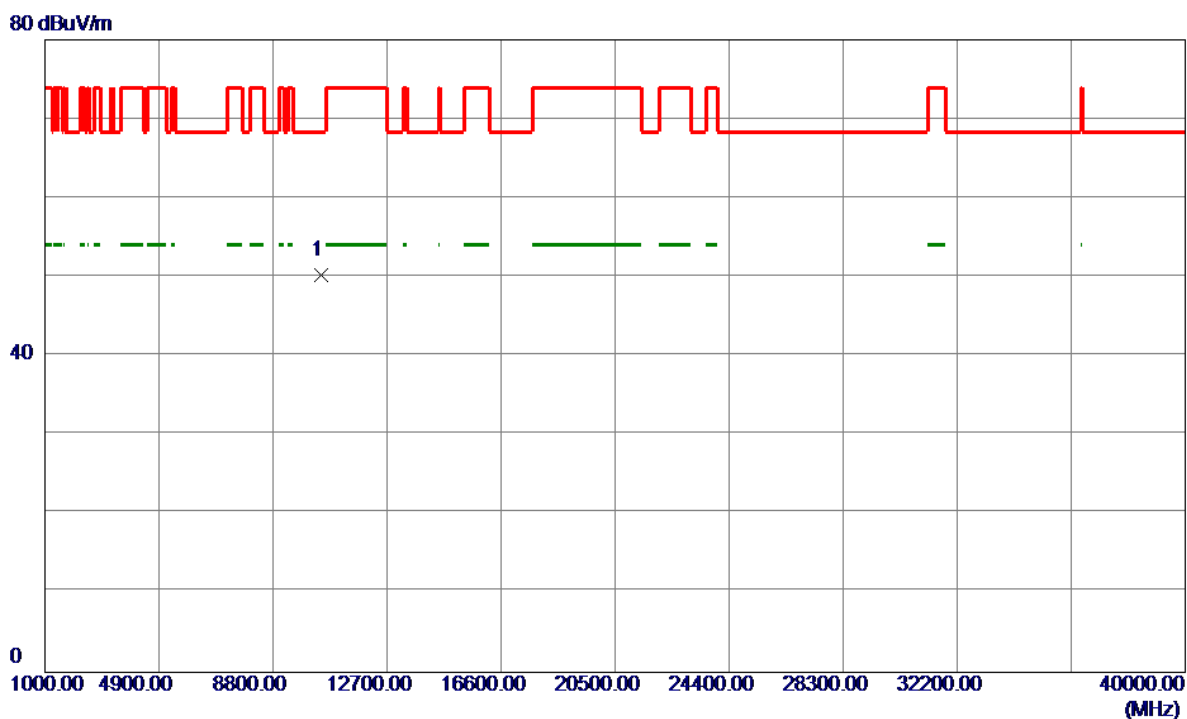
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5146.0000	20.70	41.08	61.78	68.30	-6.52	Peak	
2	5146.0000	10.92	41.08	52.00	54.00	-2.00	AVG	
3	5150.0000	15.21	41.10	56.31	68.30	-11.99	Peak	
4	5150.0000	9.38	41.10	50.48	54.00	-3.52	AVG	
5	5234.4000	64.56	41.53	106.09	68.30	37.79	Peak	No Limit
6 *	5246.0000	52.90	41.59	94.49	54.00	40.49	AVG	No Limit

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

Horizontal

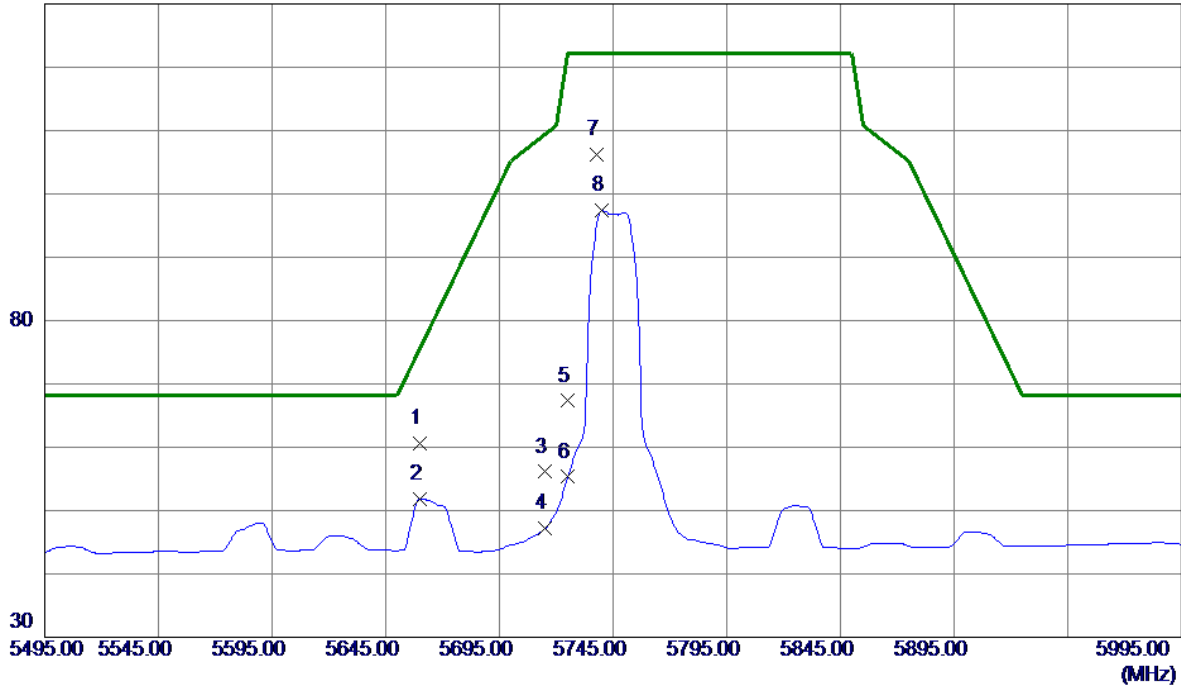


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10458.6350	33.70	16.59	50.29	68.30	-18.01	Peak	

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

Vertical

130 dBuV/m

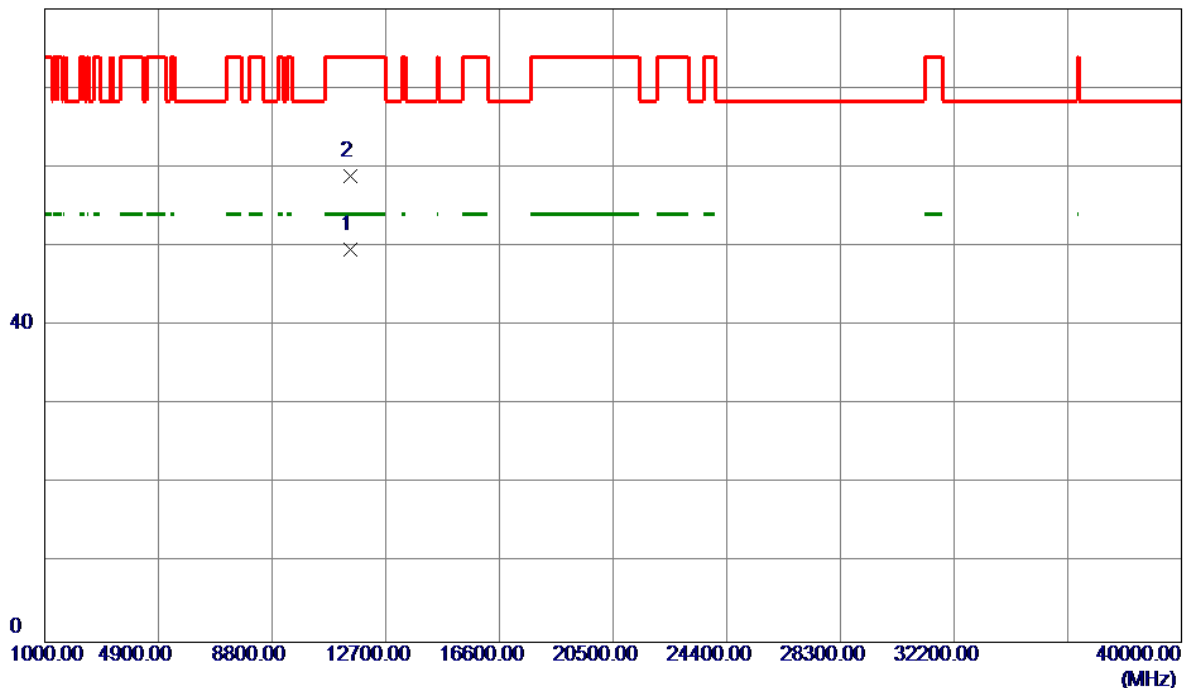


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5660.0000	17.15	43.36	60.51	75.60	-15.09	Peak	
2	5660.0000	8.53	43.36	51.89	75.60	-23.71	AVG	
3	5715.0000	12.57	43.53	56.10	109.40	-53.30	Peak	
4	5715.0000	3.62	43.53	47.15	109.40	-62.25	AVG	
5	5725.0000	23.74	43.56	67.30	122.20	-54.90	Peak	
6	5725.0000	11.74	43.56	55.30	122.20	-66.90	AVG	
7	5738.0000	62.63	43.60	106.23	122.20	-15.97	Peak	
8	5740.0000	53.74	43.60	97.34	122.20	-24.86	AVG	

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

Vertical

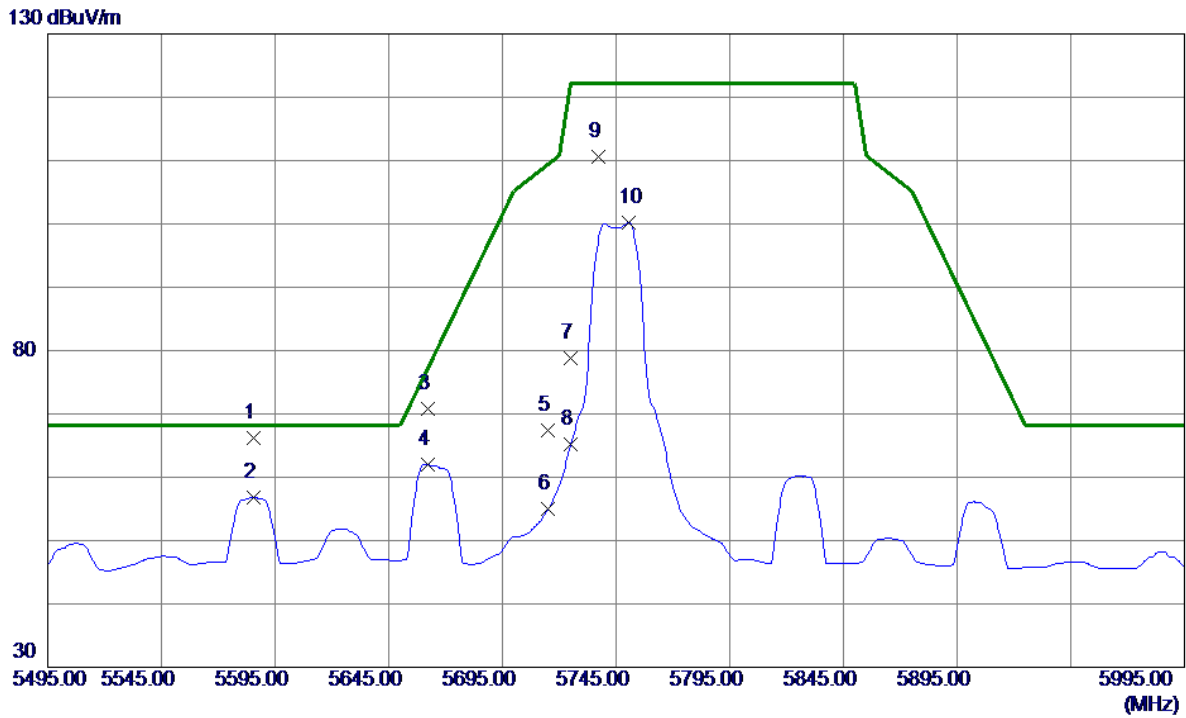
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11486.2500	31.87	17.74	49.61	54.00	-4.39	AVG	
2	11489.2000	41.11	17.75	58.86	74.00	-15.14	Peak	

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

Horizontal

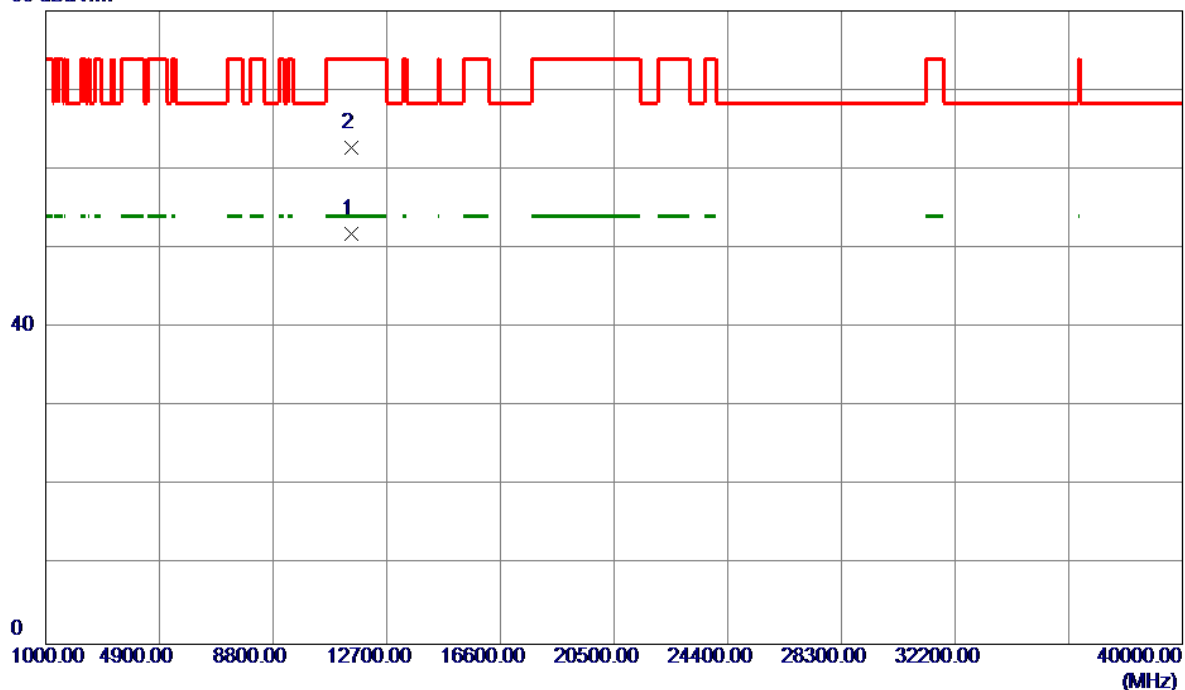


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5585.5000	23.10	43.14	66.24	68.20	-1.96	Peak	
2	5585.5000	13.67	43.14	56.81	68.20	-11.39	AVG	
3	5662.0000	27.52	43.37	70.89	77.08	-6.19	Peak	
4	5662.0000	18.65	43.37	62.02	77.08	-15.06	AVG	
5	5715.0000	23.78	43.53	67.31	109.40	-42.09	Peak	
6	5715.0000	11.38	43.53	54.91	109.40	-54.49	AVG	
7	5725.0000	35.24	43.56	78.80	122.20	-43.40	Peak	
8	5725.0000	21.68	43.56	65.24	122.20	-56.96	AVG	
9	5737.0000	66.96	43.60	110.56	122.20	-11.64	Peak	
10	5750.5000	56.53	43.64	100.17	122.20	-22.03	AVG	

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

Horizontal

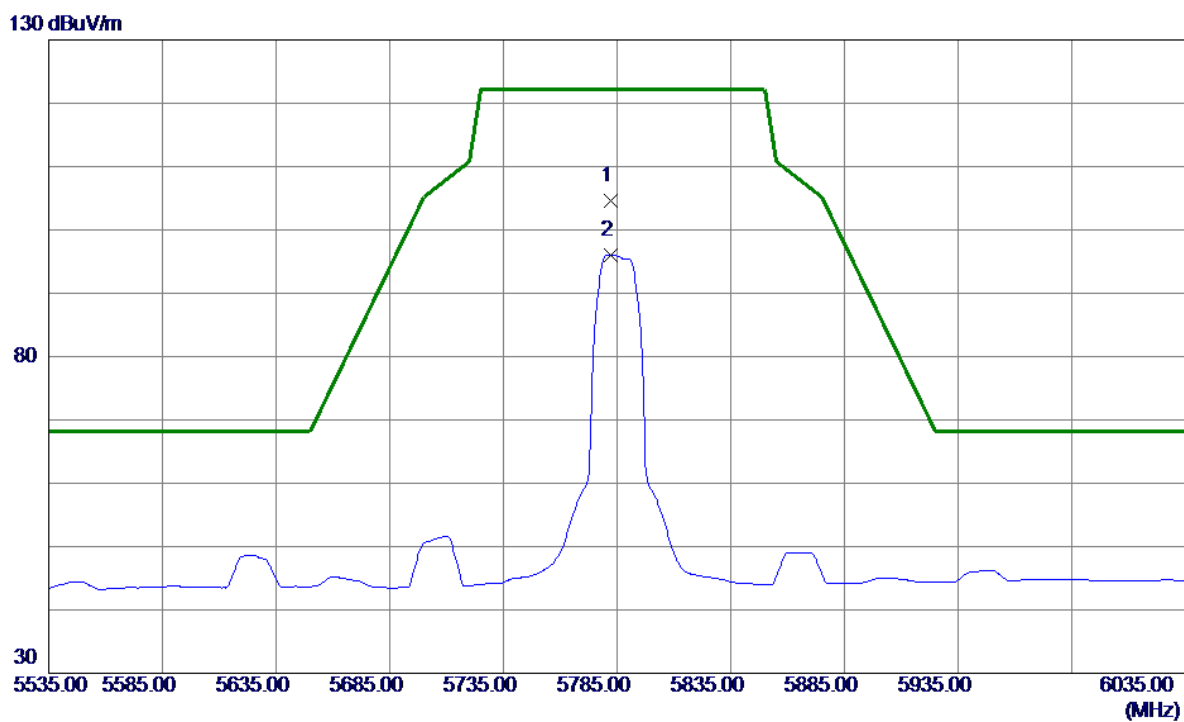
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11488.1000	34.18	17.74	51.92	54.00	-2.08	AVG	
2	11489.0500	45.03	17.75	62.78	74.00	-11.22	Peak	

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

Vertical

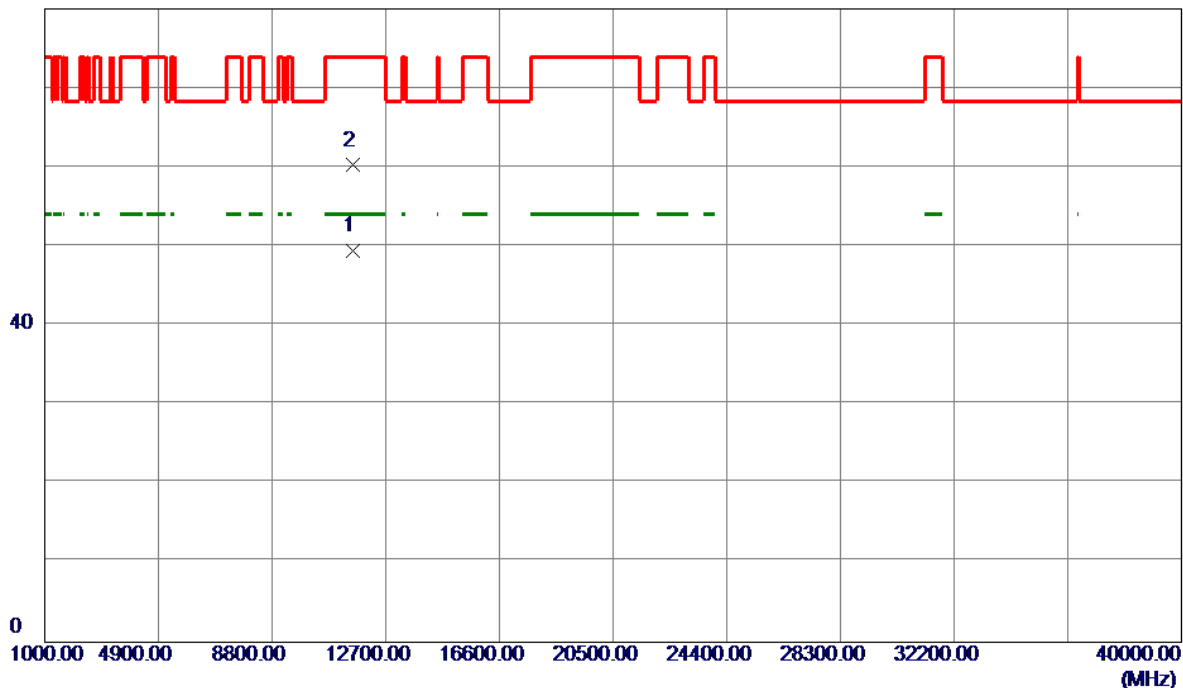


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5782.0000	60.82	43.73	104.55	122.20	-17.65	Peak	
2	5782.0000	52.30	43.73	96.03	122.20	-26.17	AVG	

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

Vertical

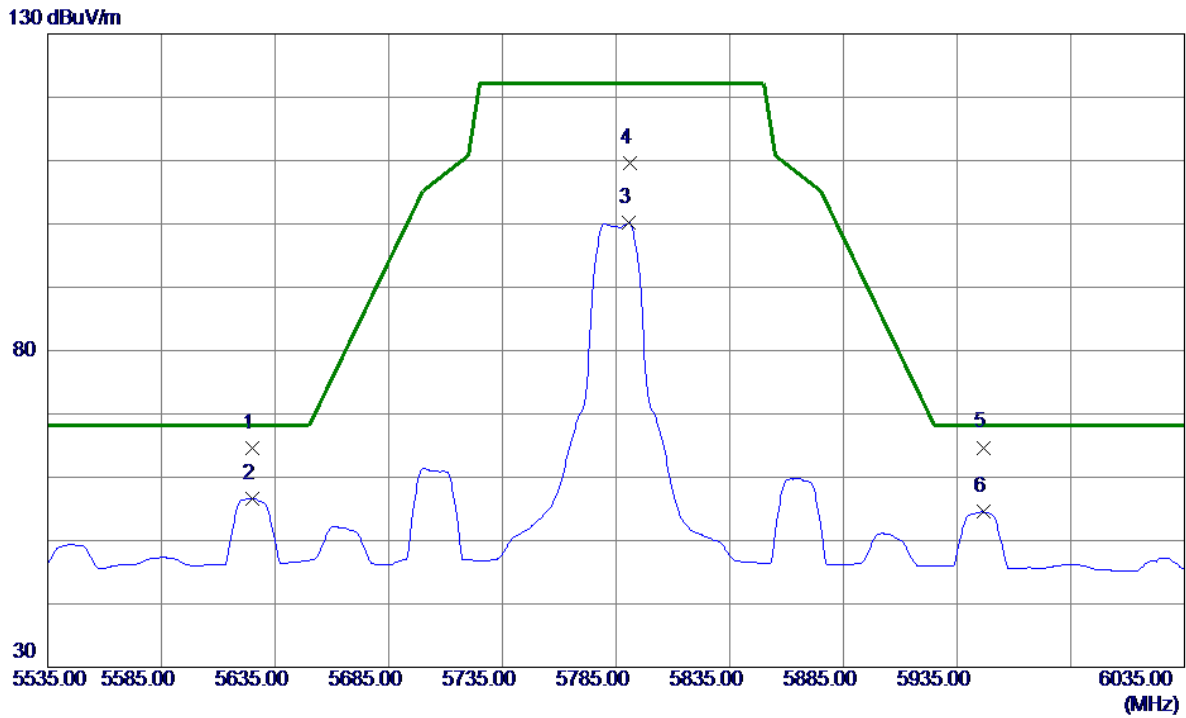
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11569.9000	31.57	17.82	49.39	54.00	-4.61	AVG	
2	11570.0000	42.42	17.82	60.24	74.00	-13.76	Peak	

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

Horizontal

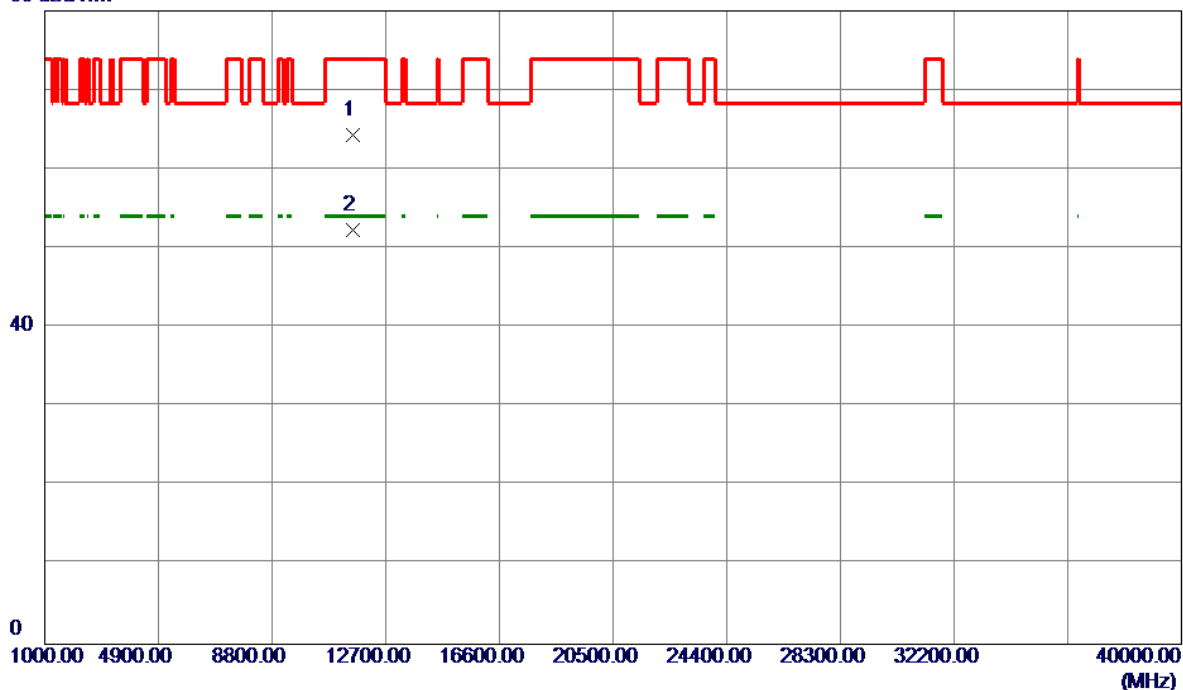


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5625.0000	21.40	43.26	64.66	68.20	-3.54	Peak	
2	5625.0000	13.39	43.26	56.65	68.20	-11.55	AVG	
3	5790.5000	56.37	43.76	100.13	122.20	-22.07	AVG	
4	5791.0000	65.79	43.76	109.55	122.20	-12.65	Peak	
5 *	5946.5000	20.47	44.23	64.70	68.20	-3.50	Peak	
6	5946.5000	10.28	44.23	54.51	68.20	-13.69	AVG	

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

Horizontal

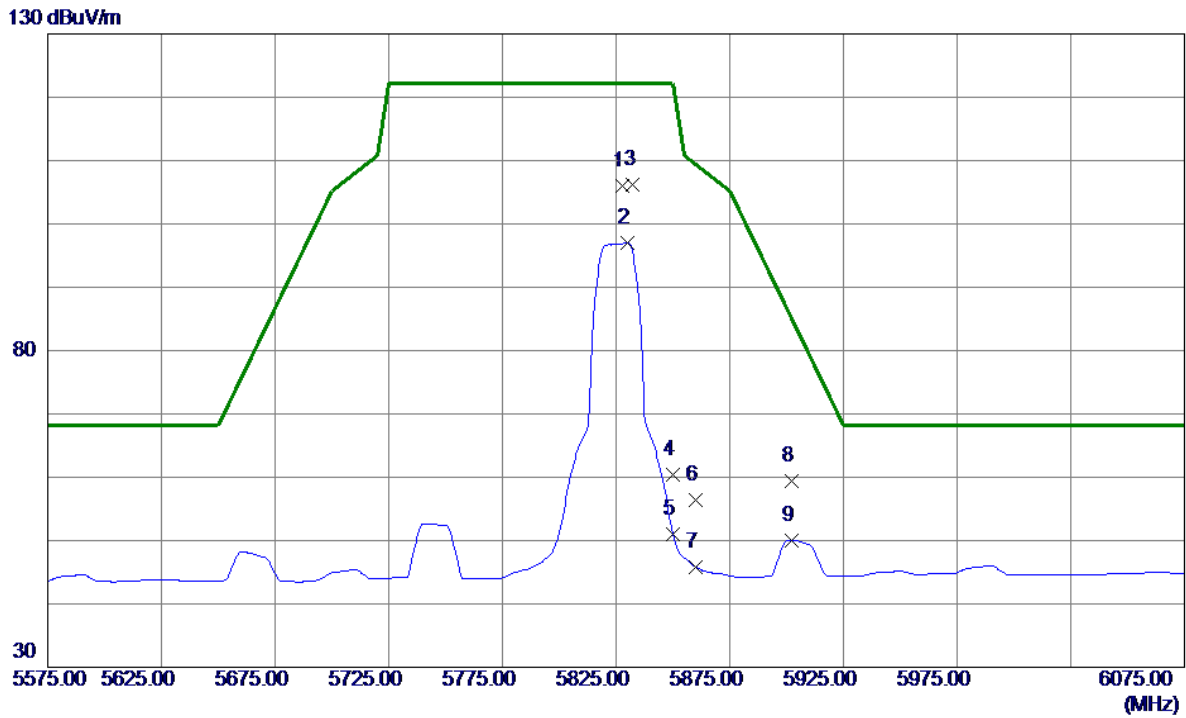
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11570.3000	46.47	17.82	64.29	74.00	-9.71	Peak	
2 *	11572.5500	34.56	17.82	52.38	54.00	-1.62	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	5828.0000	62.12	43.87	105.99	122.20	-16.21	Peak	
2	5830.0000	53.12	43.88	97.00	122.20	-25.20	AVG	
3 *	5832.5000	62.36	43.88	106.24	122.20	-15.96	Peak	
4	5850.0000	16.52	43.94	60.46	122.20	-61.74	Peak	
5	5850.0000	7.09	43.94	51.03	122.20	-71.17	AVG	
6	5860.0000	12.39	43.97	56.36	109.40	-53.04	Peak	
7	5860.0000	1.91	43.97	45.88	109.40	-63.52	AVG	
8	5902.0000	15.26	44.09	59.35	85.22	-25.87	Peak	
9	5902.0000	5.94	44.09	50.03	85.22	-35.19	AVG	