FCC Radio Test Report

FCC ID: M82-ARK1123

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

Project No.	:	1604060
Equipment	:	Computer
Test Model	:	ARK-1123H
Series Model	:	ARK-1123H-U0A1E, ARK1123XXXXXXXXXXXXXXX (where "X" may be any alphanumeric character, "-" or blank)
Applicant	:	Advantech Co., Ltd.
Address	:	No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan, R.O.C.

Date of Receipt	:	Apr. 19, 2016
Date of Test	:	Apr. 19, 2016 ~ Jun. 23, 2016
Issued Date	:	Jun. 28, 2016
Tested by	:	BTL Inc.

Testing Engineer : Rush Kao
(Rush Kao)

Technical Manager : Jeff Yang
(Jeff Yang)

Authorized Signatory : Andy Chiu
(Andy Chiu)

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

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Limitation

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-4-1604060	Original Issue.	Jun. 28, 2016

1. CERTIFICATION

Equipment	:	Computer
Brand Name	:	ADVANTECH
Test Model	:	ARK-1123H
Series Model	:	ARK-1123H-U0A1E, ARK1123XXXXXXXXXXXXXXXX (where “X” may be any alphanumeric character, “-” or blank)
Applicant	:	Advantech Co., Ltd.
Manufacturer	:	Advantech Co., Ltd.
Address	:	No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan, R.O.C.
Date of Test	:	Apr. 19, 2016 ~ Jun. 23, 2016
Test Sample	:	Production Unit
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-4-1604060) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

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

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

NOTE:

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

2.1 TEST FACILITY

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

Conducted emission Test:

C05: (VCCI RN: C-4742; FCC RN:965108; FCC DN:TW1082)
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

Radiated emission Test (Below 1 GHz):

CB11: (VCCI RN: R-4260; FCC RN:949005; FCC DN:TW1082; IC Assigned Code:20088-2)
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

Radiated emission Test (Above 1 GHz):

CB11: (VCCI RN: G-868; FCC RN:949005; FCC DN:TW1082; IC Assigned Code:20088-2)
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.
The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.
The reported uncertainty of measurement y ± U, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

A. Conducted emission test:

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

B. Radiated emission test:

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

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

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

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

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

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.
Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR}, as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB
Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Computer		
Brand Name	ADVANTECH		
Test Model	ARK-1123H		
Series Model	ARK-1123H-U0A1E, ARK1123XXXXXXXXXXXXXXX (where "X" may be any alphanumeric character, "-" or blank)		
Model Difference	FOR MARKETING NAME		
EUT Power Rating	I/P: DC 12V		
Power Adapter Manufacturer	FSP	Model	FSP036-RBBN2
Power Adapter Power Rating	I/P: AC 100-240V 1.2A 50-60Hz O/P: DC 12V 3.0A		
Product Description	Operation Frequency		UNII-1: 5150-5250MHz UNII-2A: 5250-5350MHz UNII-3: 5725-5850MHz
	Modulation Type		OFDM
	Bit Rate of Transmitter		300Mbps
	Output Power (Max.)for UNII-1		802.11a: 13.57dBm 802.11n (20M): 11.69dBm 802.11n (40M): 11.84dBm
	Output Power (Max.)for UNII-2A		802.11a: 13.97dBm 802.11n (20M): 11.44dBm 802.11n (40M): 11.92dBm
	Output Power (Max.)for UNII-3		802.11a: 13.77dBm 802.11n (20M): 11.62dBm 802.11n (40M): 11.85dBm
CPU Manufacturer	Intel	Model	Celeron™ J1900 Quad Core 2.0 GHz
Main Board Manufacturer	ADVANTECH	Model	MIO-2263
I/O Board Manufacturer	ADVANTECH	Model	AMO-M010
Memory Manufacturer	ADVANTECH	Model	AQD-SD3L8GN16-SG, 8 GB
SSD Manufacturer	ADVANTECH	Spec.	32 GB
PCIE 802.11a/B/G/N 2.4GZ/5GHZ + USB BT 4.0 CARD Manufacturer	ADVANTECH	Model	AR5B22

Note:

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

2. Channel List:

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

802.11a 802.11n 20MHz		802.11n 40MHz	
UNII-2A		UNII-2A	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270
56	5280	62	5310
60	5300		
64	5320		

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

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Invax	R-AN2450-5701RS	Dipole	SMA Male Reverse	5.21
2	Invax	R-AN2450-5701RS	Dipole	SMA Male Reverse	5.21

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R).

(2) Directional gain = G_{ANT} + 10 log(N) dBi = 5.21 + 10 log (2) = 8.22 dBi.

Reduced value = 8.22 - 6 = 2.22 dB

4.

Operating Mode / TX Mode	2TX
802.11a	V (ANT 1 + ANT 2)
802.11n (20MHz)	V (ANT 1 + ANT 2)
802.11n (40MHz)	V (ANT 1 + ANT 2)

3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX N20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 6	TX N40 Mode / CH54, CH62 (UNII-2A)
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 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 10	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 A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX N20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 6	TX N40 Mode / CH54, CH62 (UNII-2A)
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)

Note:
(1) For radiated below 1GHz test, the TX A Mode is found to be the worst case and recorded.

3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

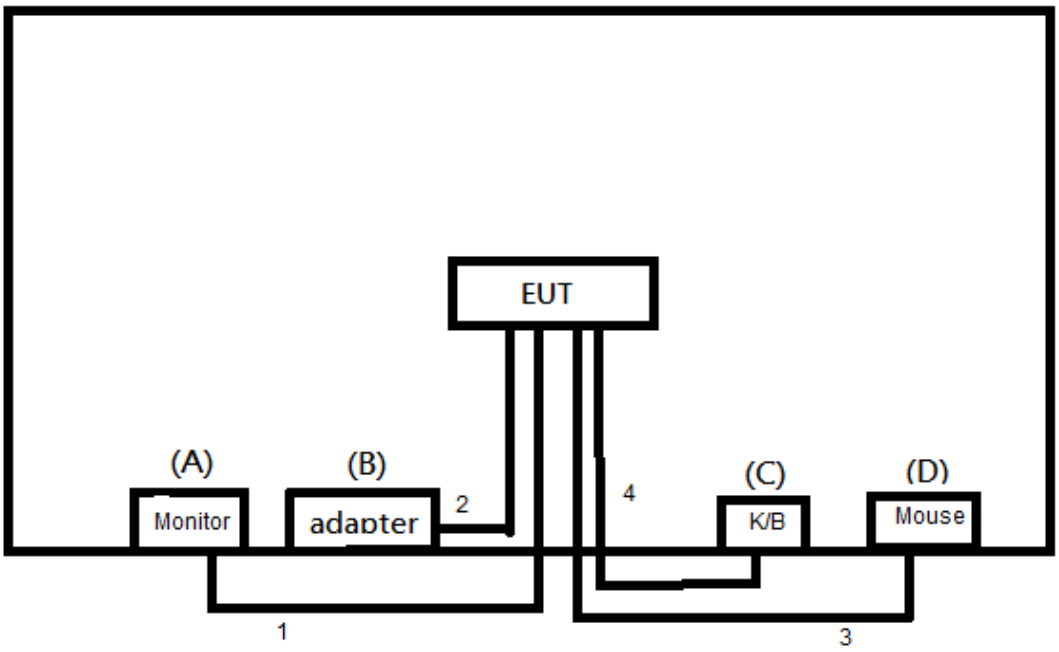
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

UNII-1			
Test Software Version	ART2_GuI		
Frequency (MHz)	5180	5200	5240
A Mode	12/12	12.5/12.5	12.5/12.5
N20 Mode	10.5/10.5	11/11	11/11
Frequency (MHz)	5190	5230	
N40 Mode	9.5/9.5	10.5/10.5	

UNII-2A			
Test Software Version	ART2_GuI		
Frequency (MHz)	5260	5300	5320
A Mode	13/13	13.5/13.5	13.5/13.5
N20 Mode	11/11	11.5/11.5	11.5/11.5
Frequency (MHz)	5270	5310	
N40 Mode	11/11	11.5/11.5	

UNII-3			
Test Software Version	ART2_GuI		
Frequency (MHz)	5745	5785	5825
A Mode	12/12	12.5/12.5	12/12
N20 Mode	10/10	11/11	9.5/9.5
Frequency (MHz)	5755	5795	
N40 Mode	11.5/11.5	11/11	

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 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	30" LCD Monitor	DELL	3008WFPt	DOC	CN-0G501H74445-95K-0
B	Adapter	FSP GROUP	FSP036-RBBN2	N/A	H5341000328
C	USB K/B	Logitech	Y-BL49	DOC	STW43302534
D	PS/2 Mouse	Logitech	M-SBF69	DOC	HCA44601156

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.5m	HDMI
2	NO	NO	1.5m	Power Core
3	NO	NO	1.5m	USB Cable
4	NO	NO	1.5m	USB Cable

Note:

(1) For detachable type I/O cable should be specified the length in m in 『Length』 column.

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.

(2) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
Margin Level = Measurement Value - Limit Value

4.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

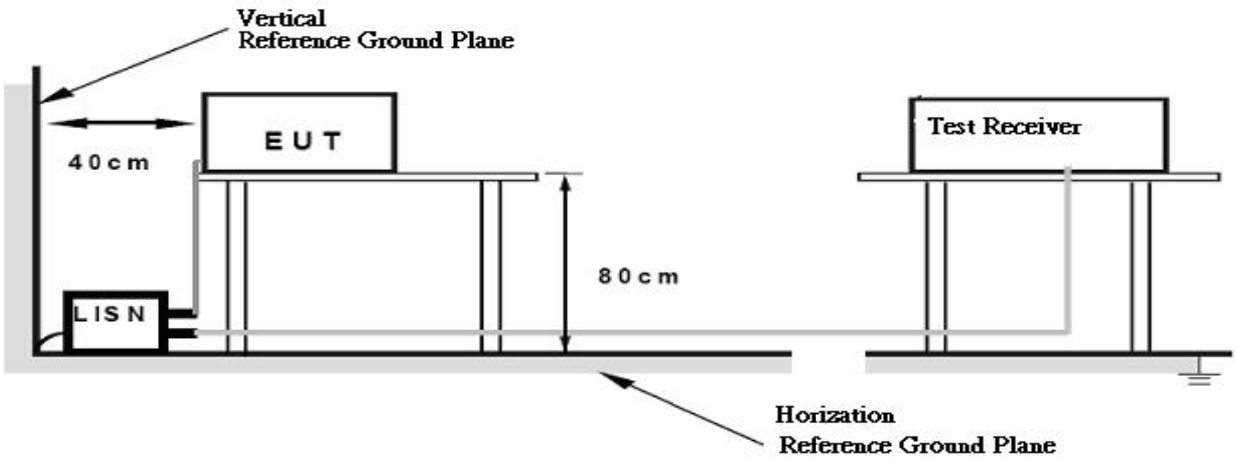
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150kHz to 30MHz。

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

Frequencies (MHz)	Field Strength (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

Note:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
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

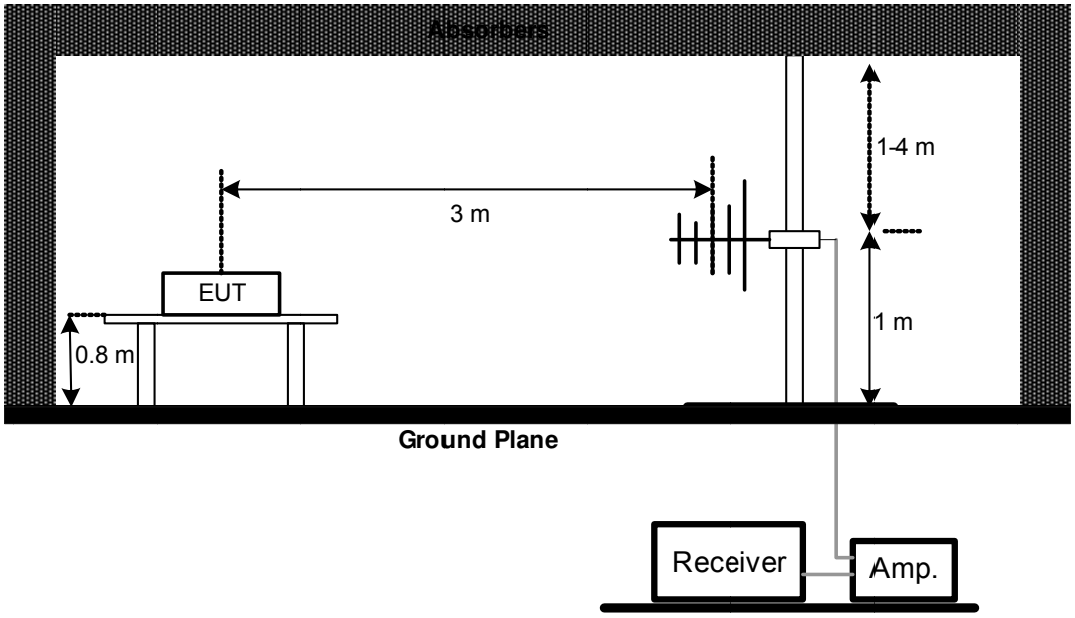
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance 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)
c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, 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.
d. 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).
e. 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.
f. 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.
g. 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)
h. 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)
i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

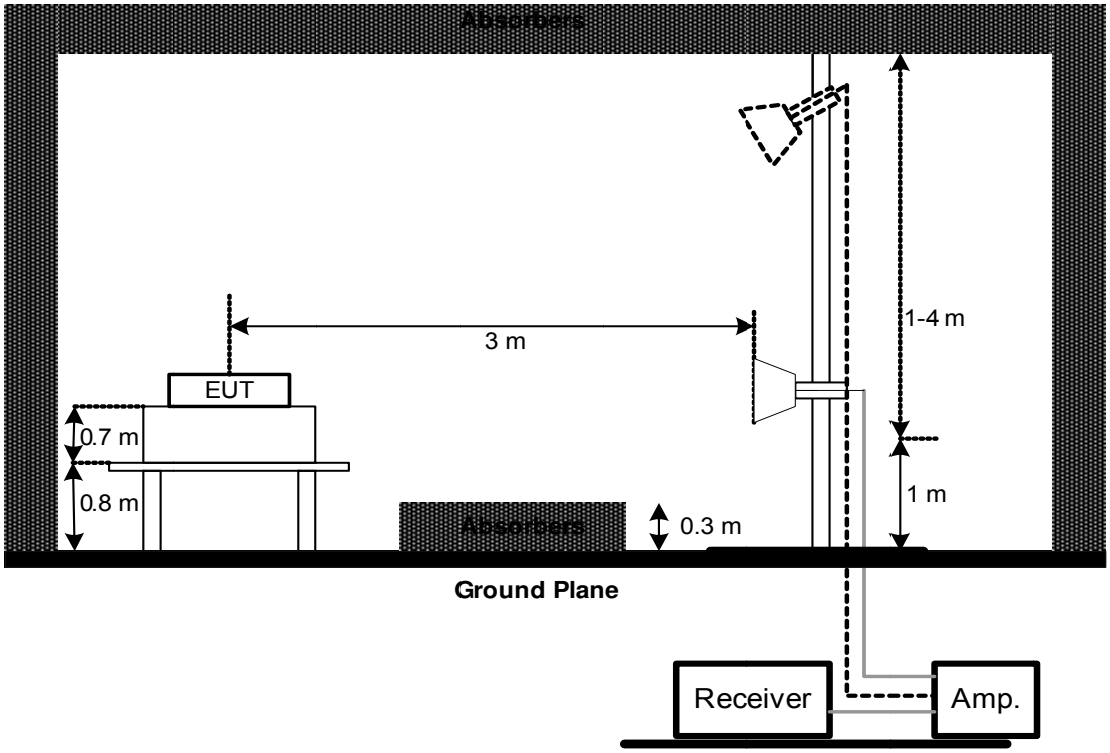
No deviation

4.1 TEST SETUP

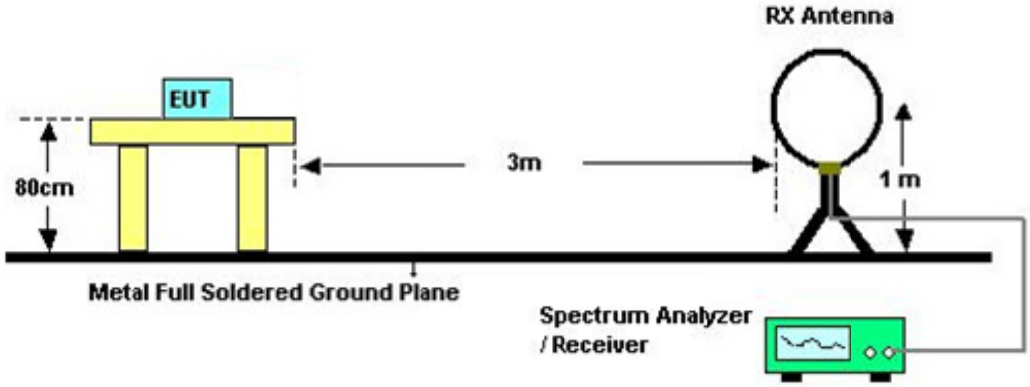
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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 Attachment B

Remark:

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

4.2.8 TEST RESULTS (30 TO 1000 MHz)

Please refer to the Attachment C.

Remark:

(1) Measuring frequency range from 30MHz to 1000MHz ◦
(2) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦

4.2.9 TEST RESULTS (ABOVE 1000 MHz)

Please refer to the Attachment D.

Remark:

(1) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
(2) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(3) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
(4) EUT Orthogonal Axes:
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
(5) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.
(6) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5. 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
	26 dB Bandwidth	5250-5350	PASS
	Minimum 500kHz 6dB Bandwidth	5725-5850	PASS

5.1.1 TEST PROCEDURE

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

b.

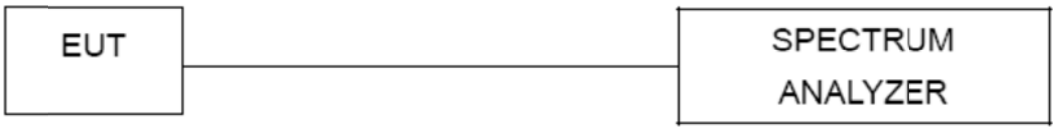
Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	300 kHz
VBW	1000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

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

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Attachment E.

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Conducted Output Power	Fixed:1 Watt (30dBm) Mobile and portable: 250mW (24dBm)	5150-5250	PASS
	250mW (24dBm)	5250-5350	PASS
	1 Watt (30dBm)	5725-5850	PASS
Note: The maximum e.i.r.p at anyelevation angle above 30 degrees as measured from the horizon must not exceed 125mW(21dBm)			

6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the power meter 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	Max Hold
Sweep Time	auto

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

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

6.1.4 EUT OPERATION CONDITIONS

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

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Antenna conducted Spurious Emission	-27dBm/MHz	5150-5250	PASS
	-27dBm/MHz	5250-5350	PASS
	Below -17dBm/MHz within 10MHz of band edge, below -27dBm/MHz beyond 10MHz of the band edge	5725-5850	PASS

7.1.1 TEST PROCEDURE

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

b.

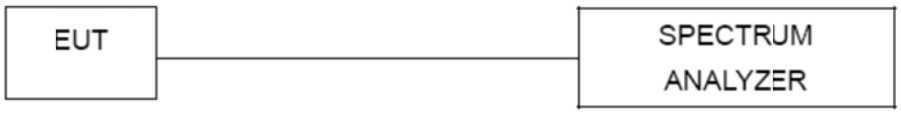
Spectrum Parameter	Setting
Attenuation	Auto
RBW	1000kHz
VBW	1000kHz
Trace	Max Hold
Sweep Time	Auto

c. Offset=antenna gain+cable loss

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 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.

7.1.5 EUT TEST CONDITIONS

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

7.1.6 TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 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
	11dBm/MHz	5250-5350	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

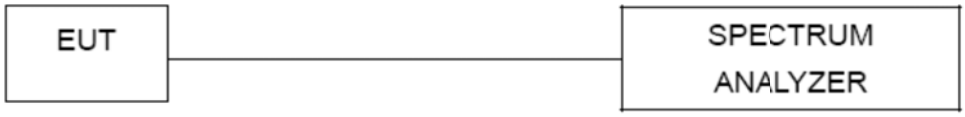
Note:

1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
2. The value measured with RBW=1MHz is to be added with 10log(500kHz/1MHz) 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.

8.1.1 DEVIATION FROM STANDARD

No deviation.

8.1.2 TEST SETUP



8.1.3 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.

8.1.4 EUT TEST CONDITIONS

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

8.1.5 TEST RESULTS

Please refer to the Attachment H.

9. FREQUENCY STABILITY MEASUREMENT

9.1 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
		5250-5350	PASS
		5725-5850	PASS

9.1.1 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

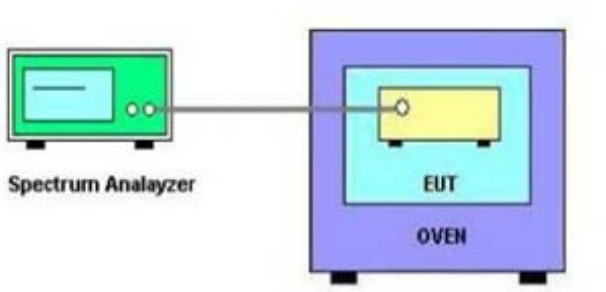
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. User manual temperature is -5°C~50°C.

9.1.2 DEVIATION FROM STANDARD

No deviation.

9.1.3 TEST SETUP



9.1.4 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.

9.1.5 EUT TEST CONDITIONS

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

9.1.6 TEST RESULTS

Please refer to the Attachment I.

10. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	Jan. 26, 2017
2	Test Cable	TIMES	CFD300-NL	C02	Jun. 14, 2016
3	EMI Test Receiver	R&S	ESR7	101433	Dec. 09, 2016
4	Power Dividers	HP	11636A	8103	May 03, 2017
5	Measurement Software	EZ	EZ_EMC (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9038A	MY51210215	Jun. 06, 2017
2	Horn Antenna	Schwarzbeck	BBHA 9120	D 546	Nov. 04, 2016
3	Microwave Pre_amplifier	HP	8447D	2944A08891	Mar. 07, 2017
4	Test Cable	EMCI	EMC104-SM-SM-5000	150302	Mar. 07, 2017
5	Test Cable	EMCI	EMC104-SM-SM-800	150305	Mar. 07, 2017
6	Test Cable	EMCI	EMC104-SM-SM-2500	150306	Mar. 07, 2017
7	Test Cable	EMCI	EMC8D-NM-NM-8000	150301	Mar. 07, 2017
8	Test Cable	EMCI	EMC8D-NM-NM-2500	150303	Mar. 07, 2017
9	Test Cable	EMCI	EMC8D-NM-NM-1000	150304	Mar. 07, 2017
10	Pre-Amplifier	Agilent	8449B	3008A02331	Jan. 23, 2017
11	Trilog-Broadband Antenna	Schwarzbeck	VULB9168	9168-364	Feb. 03, 2017
12	Preamplifier With Adaptor	EMC	EMC2654045	980030	Feb. 14, 2017
13	Loop Antenna	EMCO	6502	00042960	Nov. 15. 2016

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

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

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

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

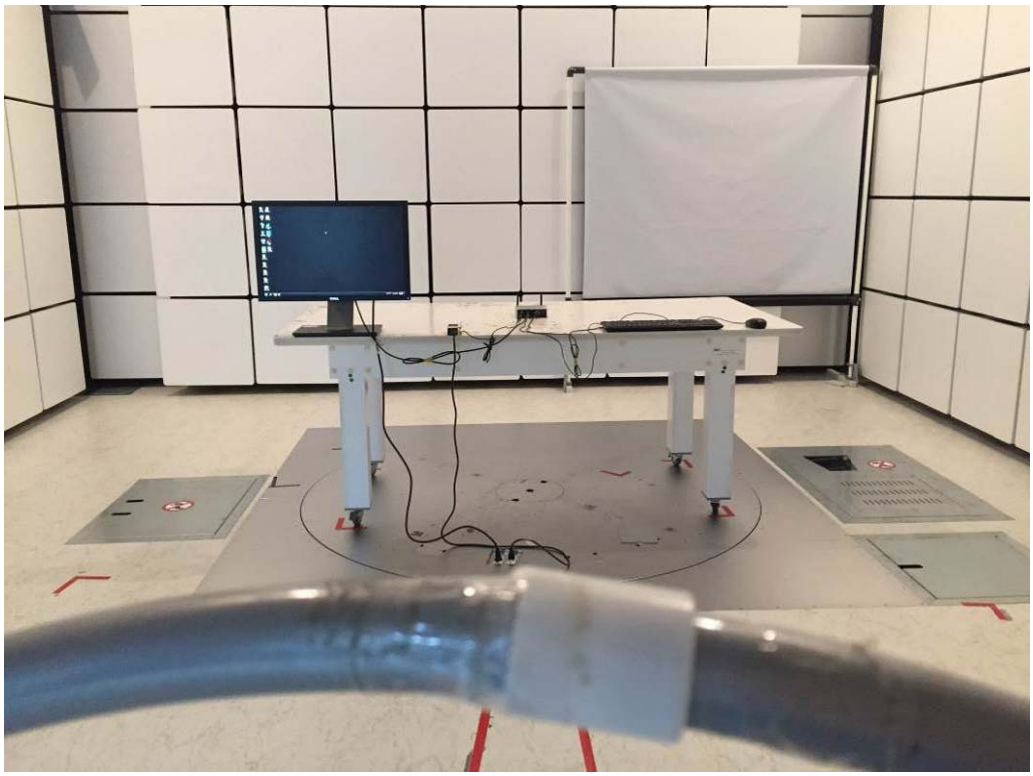
Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 17, 2017
2	Thermal Chamber	HOLINK	CHOLINK/H-T-1F-D	BA03101701	Jun. 07, 2017

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

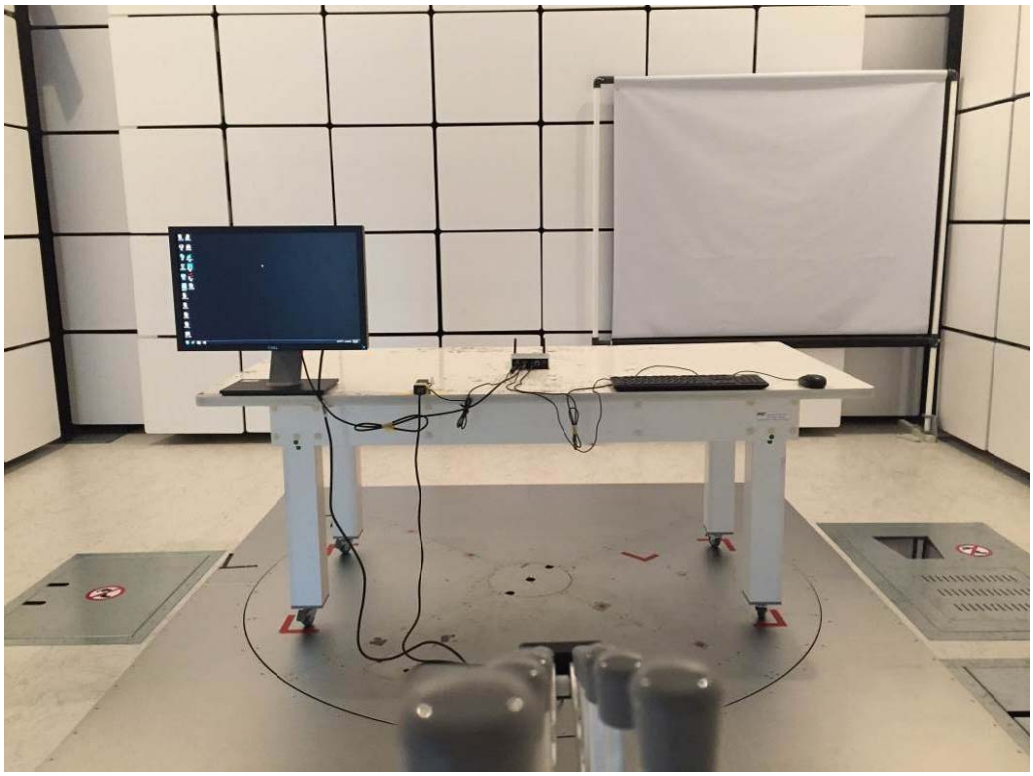
11. EUT TEST PHOTO

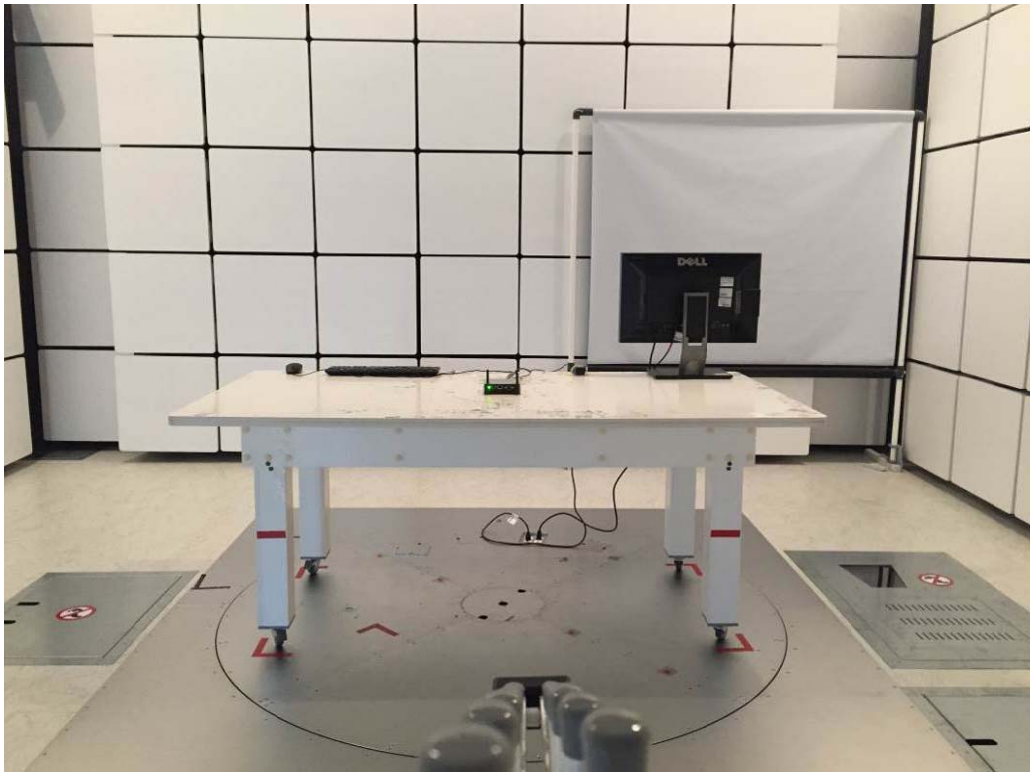
Conducted Measurement Photos

Radiated Measurement Photos
9KHz to 30MHz



Radiated Measurement Photos
30MHz to 1000MHz



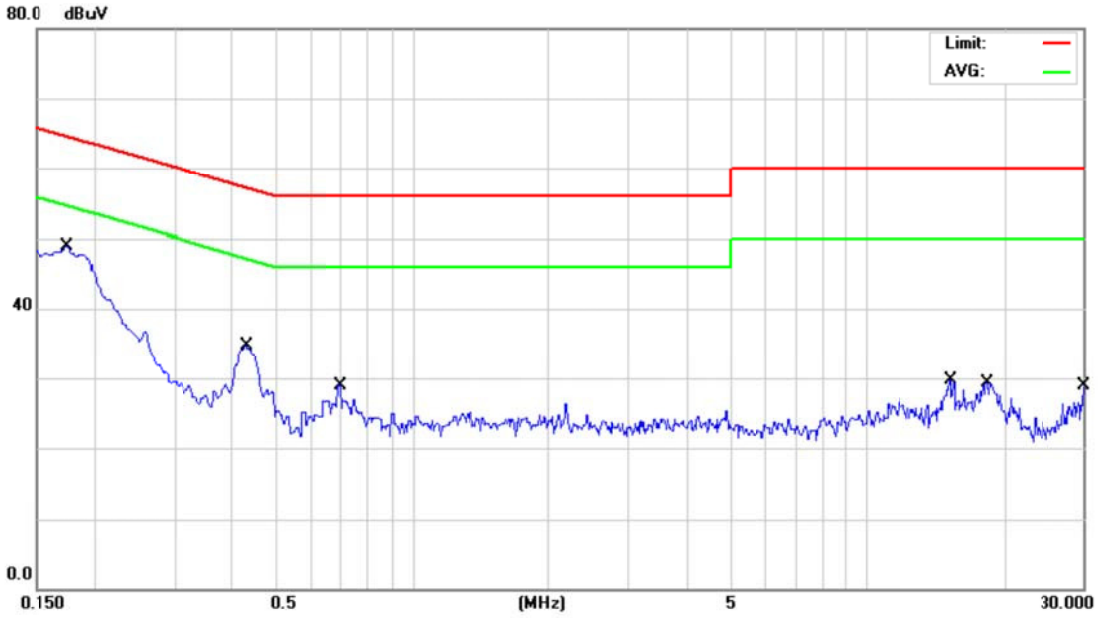


Radiated Measurement Photos
Above 1000MHz

ATTACHMENT A - CONDUCTED EMISSION

Test Mode:	UNII-1/TX Mode

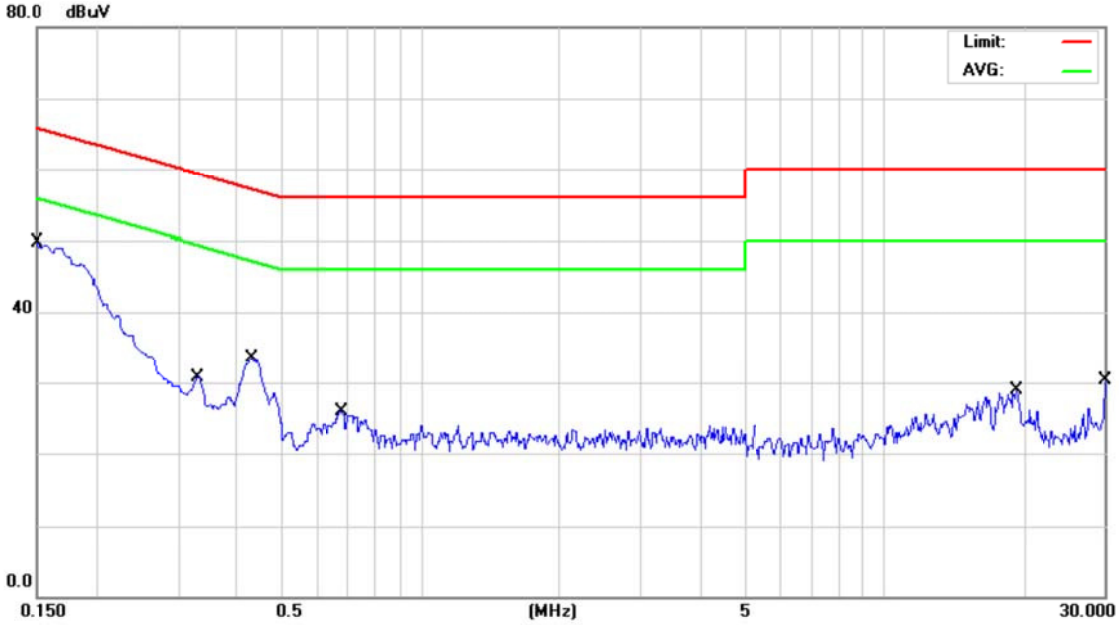
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1751	33.70	9.68	43.38	64.71	-21.33	QP	
2	*	0.1751	24.40	9.68	34.08	54.71	-20.63	AVG	
3		0.4307	19.90	9.69	29.59	57.24	-27.65	QP	
4		0.4307	14.00	9.69	23.69	47.24	-23.55	AVG	
5		0.6980	11.40	9.70	21.10	56.00	-34.90	QP	
6		0.6980	6.80	9.70	16.50	46.00	-29.50	AVG	
7		15.1500	12.20	9.87	22.07	60.00	-37.93	QP	
8		15.1500	5.70	9.87	15.57	50.00	-34.43	AVG	
9		18.2500	12.70	9.91	22.61	60.00	-37.39	QP	
10		18.2500	5.70	9.91	15.61	50.00	-34.39	AVG	
11		30.0000	8.70	9.93	18.63	60.00	-41.37	QP	
12		30.0000	1.50	9.93	11.43	50.00	-38.57	AVG	

Test Mode:	UNII-1/TX Mode

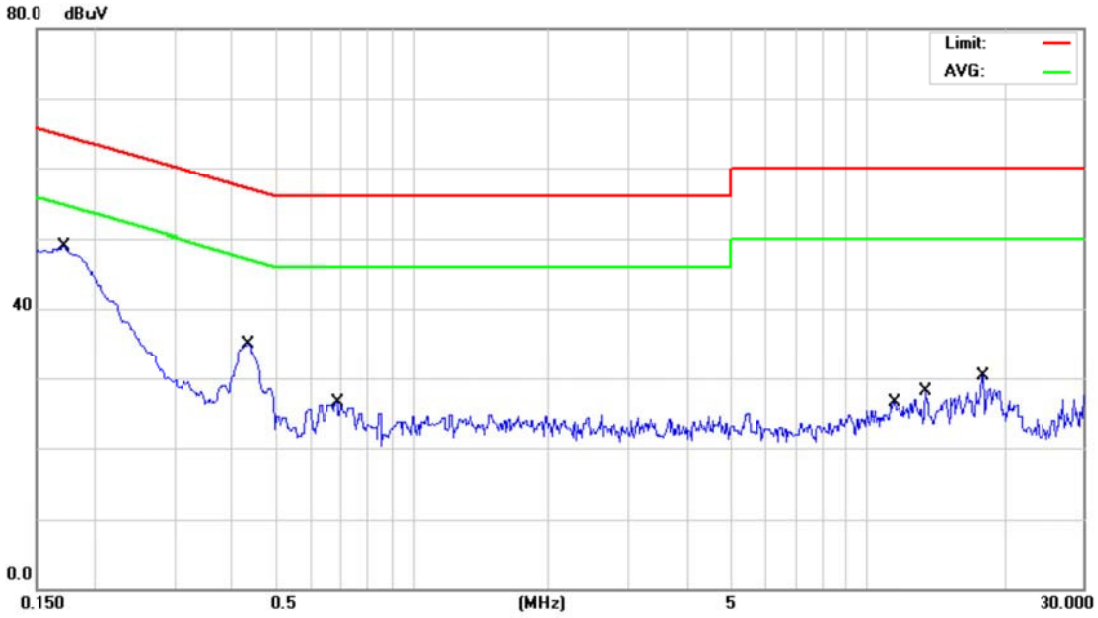
Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	34.10	9.69	43.79	65.99	-22.20	QP	
2		0.1500	19.00	9.69	28.69	55.99	-27.30	AVG	
3		0.3320	9.20	9.68	18.88	59.40	-40.52	QP	
4		0.3320	1.50	9.68	11.18	49.40	-38.22	AVG	
5		0.4328	17.60	9.69	27.29	57.20	-29.91	QP	
6		0.4328	11.90	9.69	21.59	47.20	-25.61	AVG	
7		0.6800	6.00	9.70	15.70	56.00	-40.30	QP	
8		0.6800	1.80	9.70	11.50	46.00	-34.50	AVG	
9		19.2500	13.30	9.92	23.22	60.00	-36.78	QP	
10		19.2500	6.60	9.92	16.52	50.00	-33.48	AVG	
11		30.0000	8.60	9.96	18.56	60.00	-41.44	QP	
12		30.0000	1.20	9.96	11.16	50.00	-38.84	AVG	

Test Mode:	UNII-2A/TX Mode

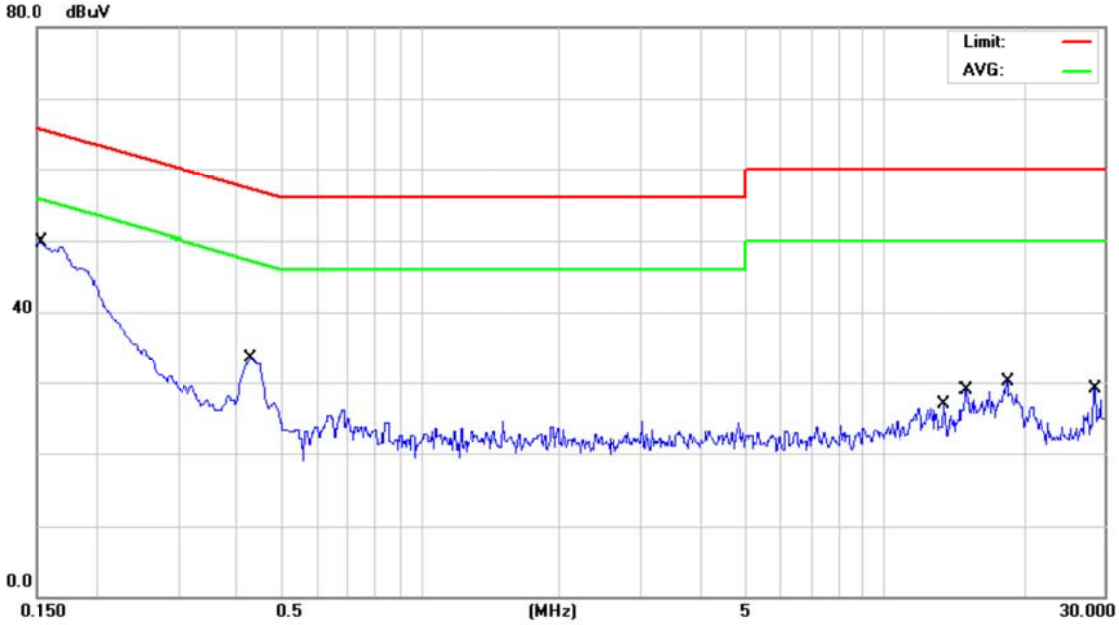
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1724	33.00	9.68	42.68	64.84	-22.16	QP	
2		0.1724	20.30	9.68	29.98	54.84	-24.86	AVG	
3		0.4370	19.80	9.69	29.49	57.12	-27.63	QP	
4		0.4370	14.00	9.69	23.69	47.12	-23.43	AVG	
5		0.6889	10.30	9.70	20.00	56.00	-36.00	QP	
6		0.6889	5.60	9.70	15.30	46.00	-30.70	AVG	
7		11.4500	8.00	9.94	17.94	60.00	-42.06	QP	
8		11.4500	3.60	9.94	13.54	50.00	-36.46	AVG	
9		13.5500	12.60	9.89	22.49	60.00	-37.51	QP	
10		13.5500	8.70	9.89	18.59	50.00	-31.41	AVG	
11		17.8500	13.40	9.91	23.31	60.00	-36.69	QP	
12		17.8500	6.60	9.91	16.51	50.00	-33.49	AVG	

Test Mode:	UNII-2A/TX Mode

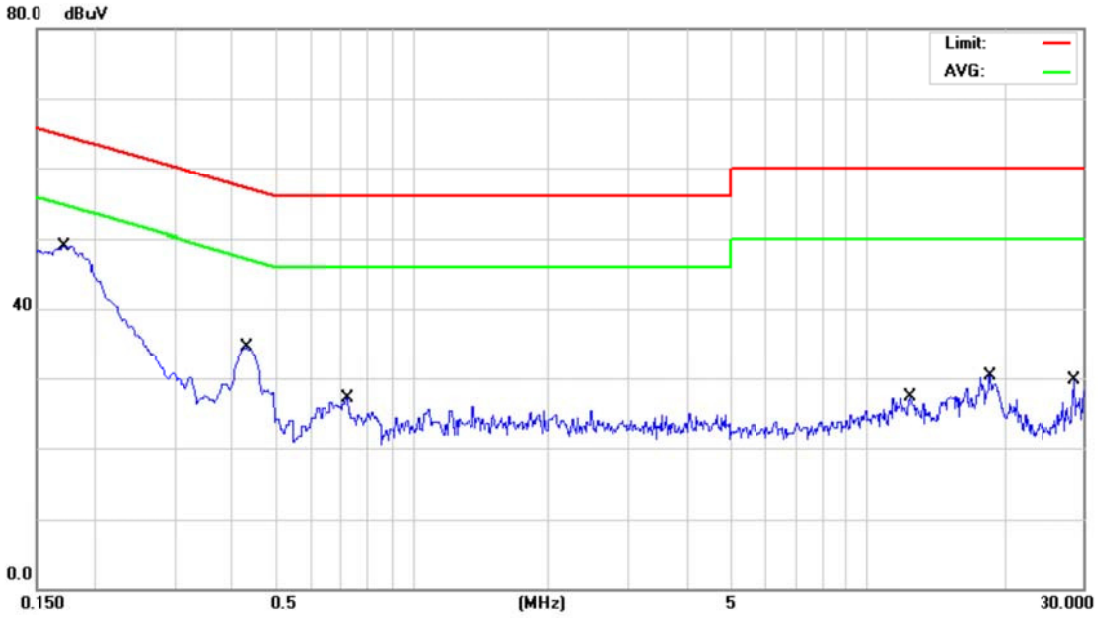
Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1528	34.10	9.69	43.79	65.84	-22.05	QP	
2		0.1528	19.20	9.69	28.89	55.84	-26.95	AVG	
3		0.4300	17.60	9.69	27.29	57.25	-29.96	QP	
4		0.4300	11.80	9.69	21.49	47.25	-25.76	AVG	
5		13.5500	10.10	9.89	19.99	60.00	-40.01	QP	
6		13.5500	6.50	9.89	16.39	50.00	-33.61	AVG	
7		15.0000	11.60	9.87	21.47	60.00	-38.53	QP	
8		15.0000	5.40	9.87	15.27	50.00	-34.73	AVG	
9		18.3500	13.20	9.90	23.10	60.00	-36.90	QP	
10		18.3500	7.30	9.90	17.20	50.00	-32.80	AVG	
11		28.5000	10.00	9.96	19.96	60.00	-40.04	QP	
12		28.5000	1.60	9.96	11.56	50.00	-38.44	AVG	

Test Mode:	UNII-3/TX Mode

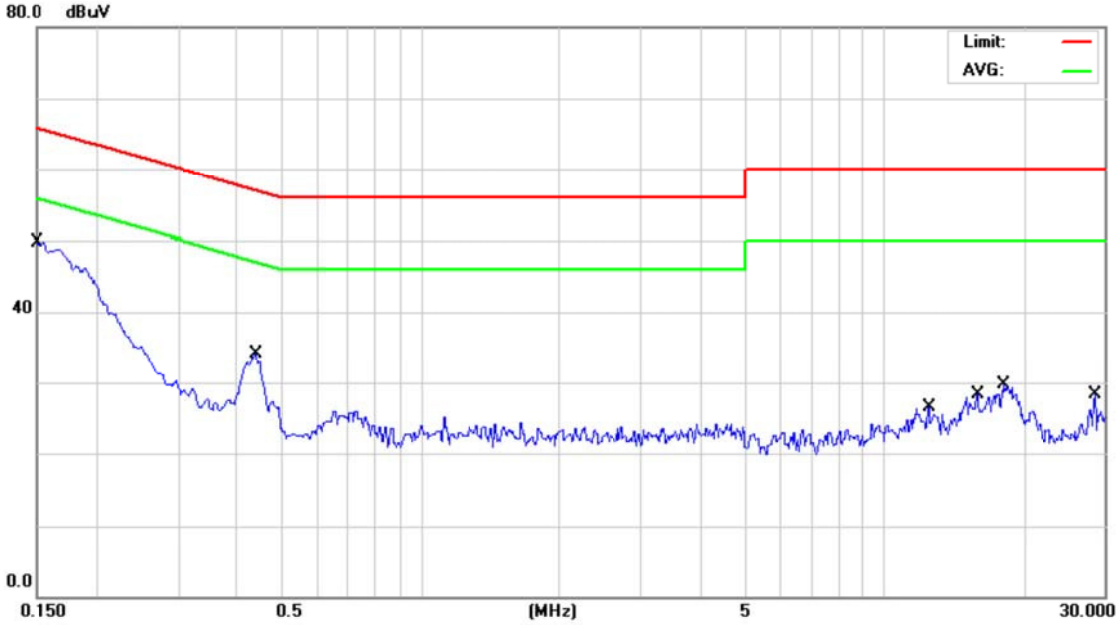
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1731	33.90	9.68	43.58	64.81	-21.23	QP	
2	*	0.1731	24.50	9.68	34.18	54.81	-20.63	AVG	
3		0.4328	19.80	9.69	29.49	57.20	-27.71	QP	
4		0.4328	14.30	9.69	23.99	47.20	-23.21	AVG	
5		0.7250	7.90	9.70	17.60	56.00	-38.40	QP	
6		0.7250	2.30	9.70	12.00	46.00	-34.00	AVG	
7		12.5000	8.60	9.91	18.51	60.00	-41.49	QP	
8		12.5000	4.10	9.91	14.01	50.00	-35.99	AVG	
9		18.5500	13.80	9.91	23.71	60.00	-36.29	QP	
10		18.5500	6.70	9.91	16.61	50.00	-33.39	AVG	
11		28.5500	7.30	9.94	17.24	60.00	-42.76	QP	
12		28.5500	1.50	9.94	11.44	50.00	-38.56	AVG	

Test Mode:	UNII-3/TX Mode

Neutral

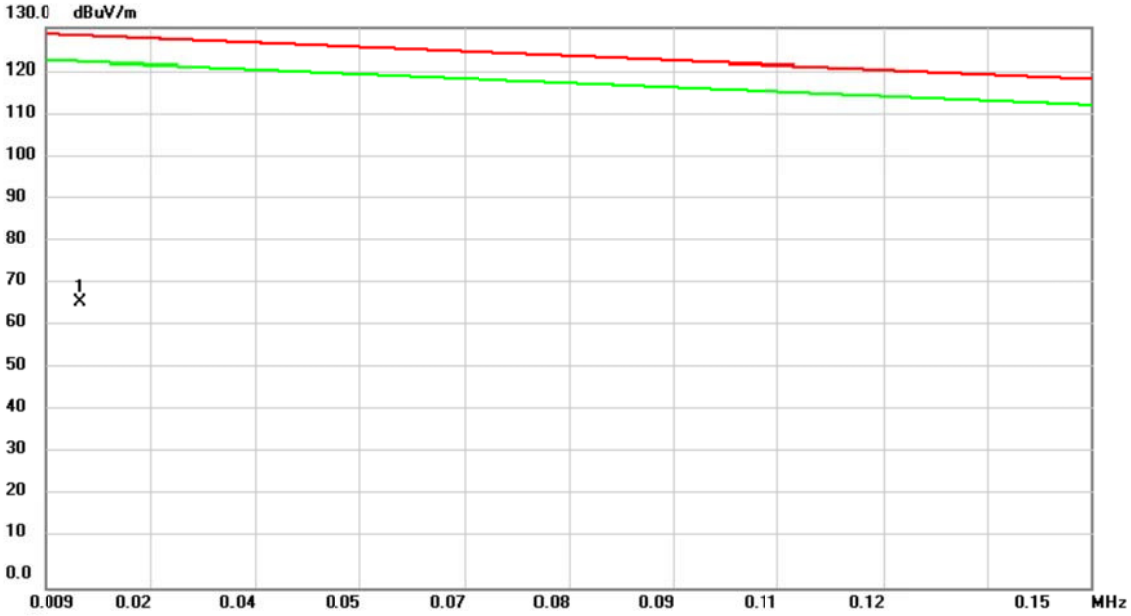


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	34.00	9.69	43.69	65.99	-22.30	QP	
2		0.1500	19.00	9.69	28.69	55.99	-27.30	AVG	
3		0.4405	17.80	9.69	27.49	57.05	-29.56	QP	
4		0.4405	12.30	9.69	21.99	47.05	-25.06	AVG	
5		12.5500	8.40	9.92	18.32	60.00	-41.68	QP	
6		12.5500	3.60	9.92	13.52	50.00	-36.48	AVG	
7		15.8500	9.30	9.88	19.18	60.00	-40.82	QP	
8		15.8500	3.90	9.88	13.78	50.00	-36.22	AVG	
9		18.1000	12.60	9.90	22.50	60.00	-37.50	QP	
10		18.1000	5.60	9.90	15.50	50.00	-34.50	AVG	
11		28.5500	7.50	9.96	17.46	60.00	-42.54	QP	
12		28.5500	1.30	9.96	11.26	50.00	-38.74	AVG	

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

Test Mode:	UNII-1/TX Mode

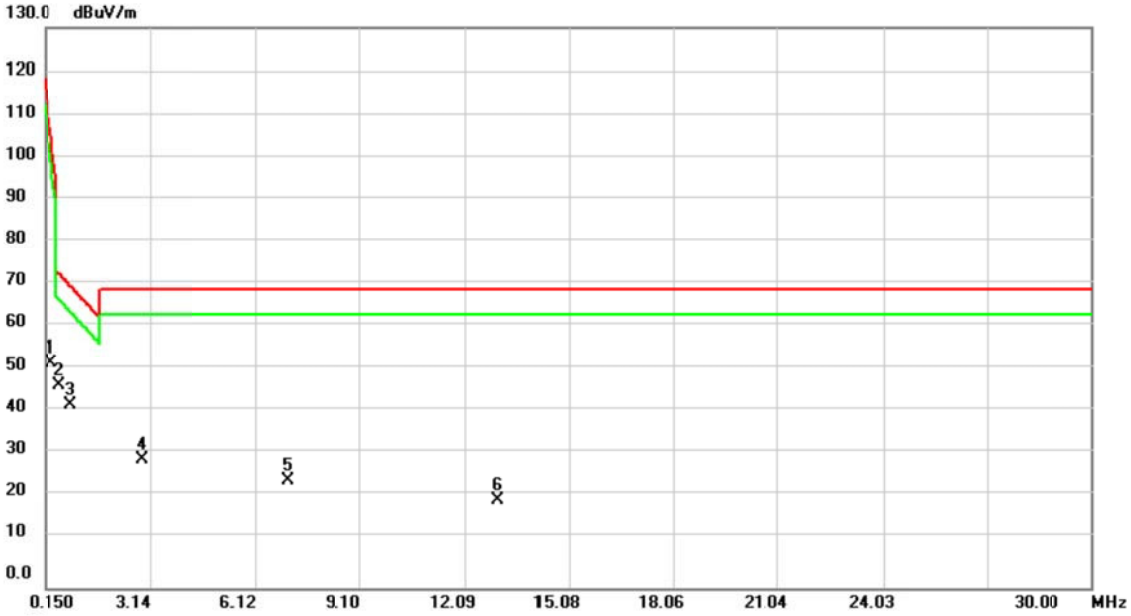
Open



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0137	47.07	19.48	66.55	128.18	-61.63	peak	

Test Mode:	UNII-1/TX Mode

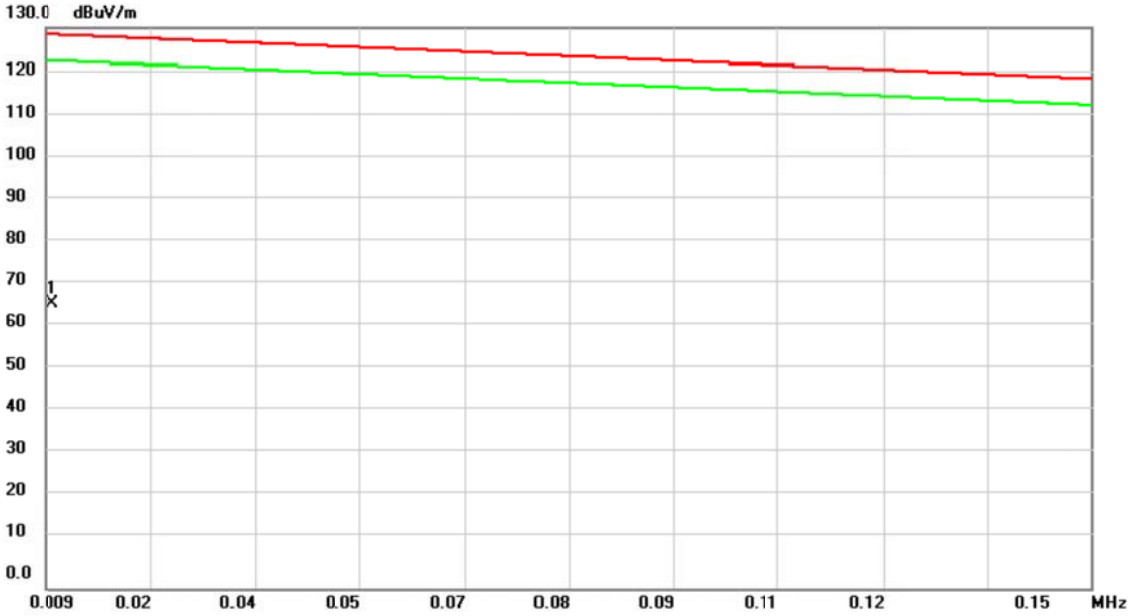
Open



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.3092	40.72	11.80	52.52	106.85	-54.33	peak	
2	*	0.5480	35.35	11.82	47.17	73.28	-26.11	peak	
3		0.8664	30.84	11.95	42.79	70.44	-27.65	peak	
4		2.8962	18.89	11.15	30.04	69.54	-39.50	peak	
5		7.0354	13.67	11.36	25.03	69.54	-44.51	peak	
6		13.0850	9.33	11.21	20.54	69.54	-49.00	peak	

Test Mode:	UNII-1/TX Mode

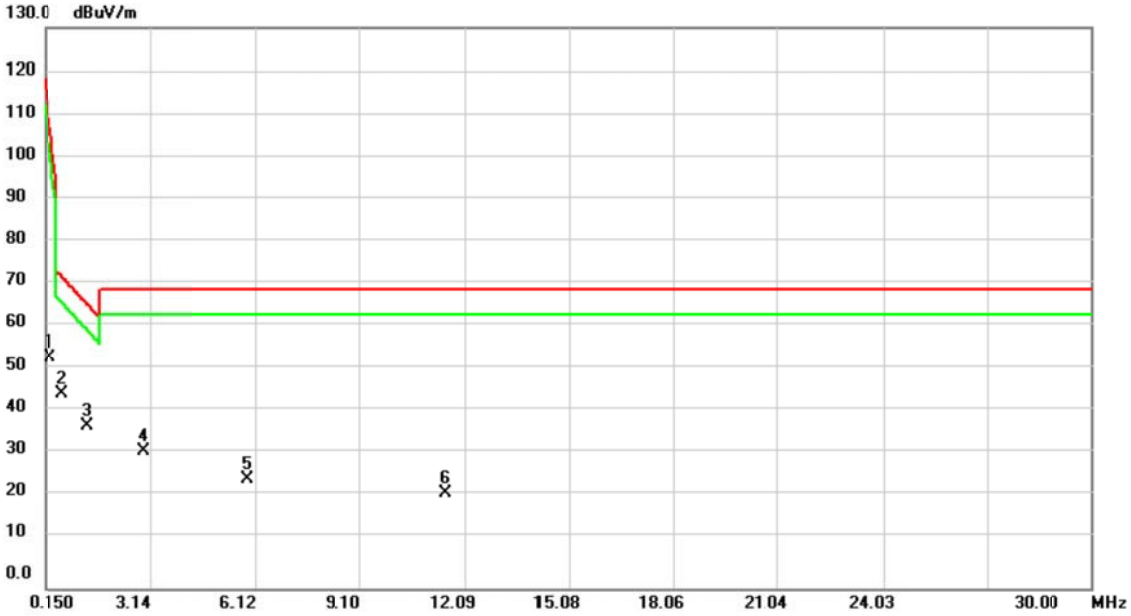
Close



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0100	45.72	20.50	66.22	128.45	-62.23	peak	

Test Mode:	UNII-1/TX Mode

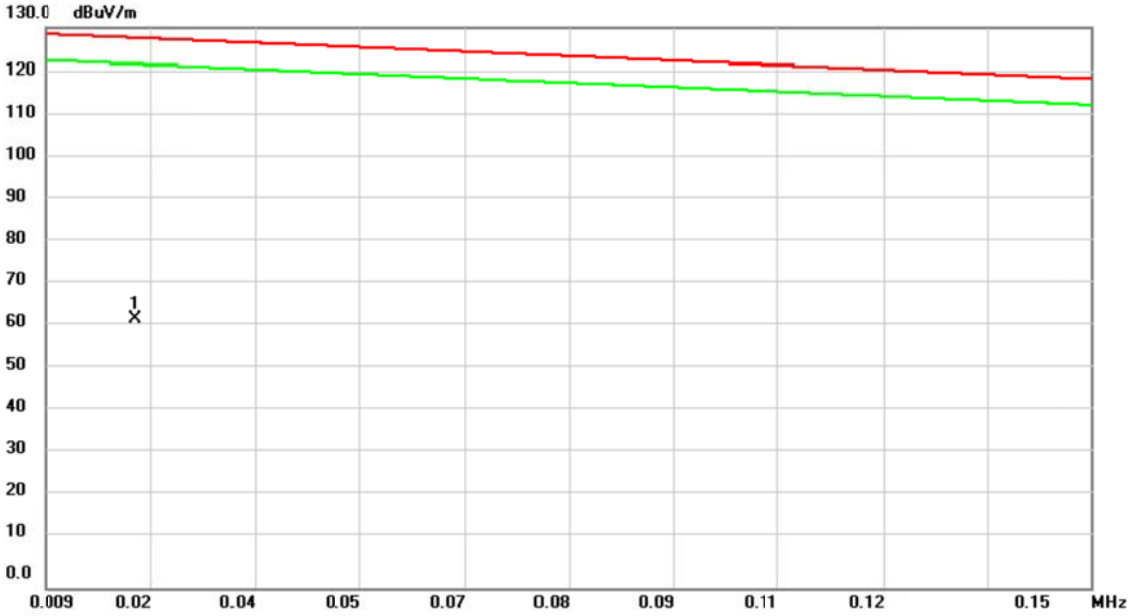
Close



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.2694	42.03	11.85	53.88	109.72	-55.84	peak	
2	*	0.6276	33.40	11.85	45.25	72.57	-27.32	peak	
3		1.3440	26.16	11.85	38.01	66.19	-28.18	peak	
4		2.9360	20.81	11.13	31.94	69.54	-37.60	peak	
5		5.8812	14.26	11.38	25.64	69.54	-43.90	peak	
6		11.5725	10.86	11.25	22.11	69.54	-47.43	peak	

Test Mode:	UNII-2A/TX Mode

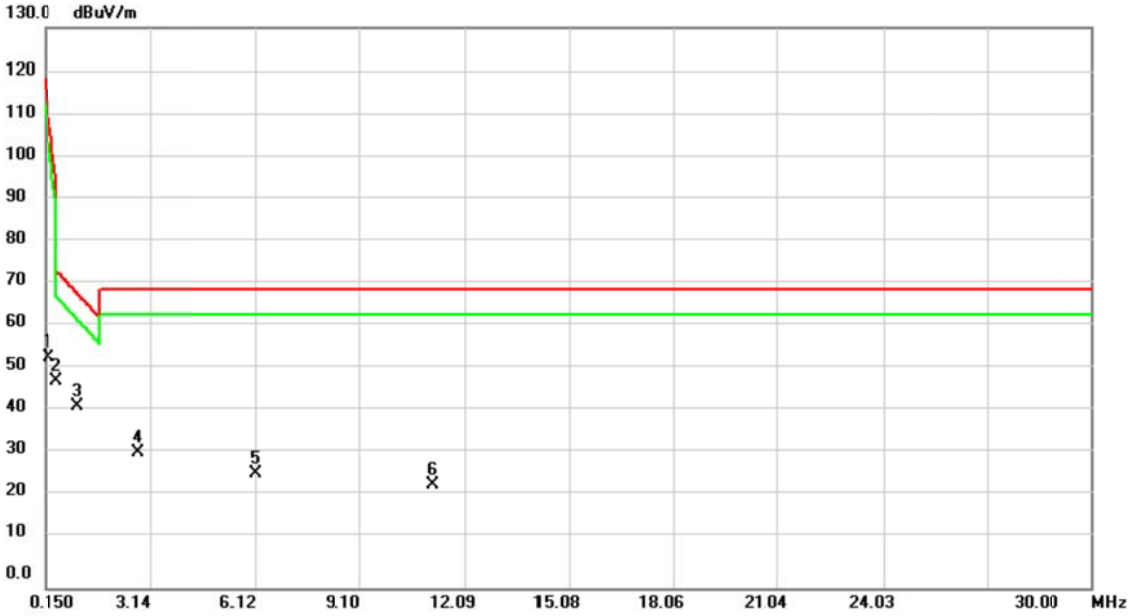
Open



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0212	45.16	17.42	62.58	127.64	-65.06	peak	

Test Mode:	UNII-2A/TX Mode

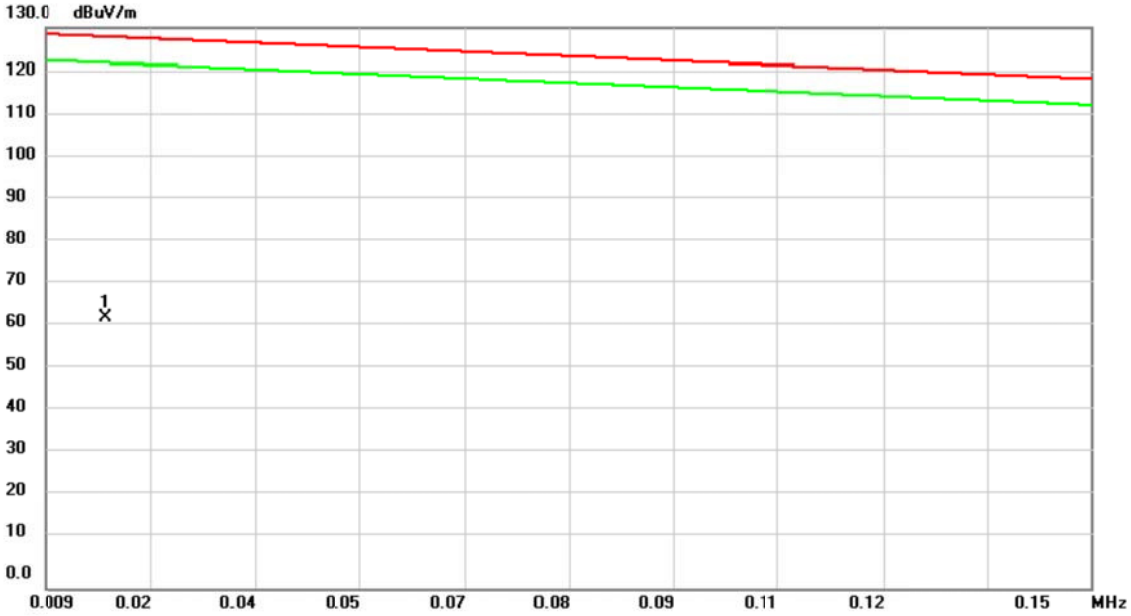
Open



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.2691	41.84	11.85	53.69	109.75	-56.06	peak	
2	*	0.5080	36.55	11.80	48.35	73.64	-25.29	peak	
3		1.0750	30.36	11.97	42.33	68.59	-26.26	peak	
4		2.8065	20.46	11.19	31.65	69.54	-37.89	peak	
5		6.1497	15.55	11.38	26.93	69.54	-42.61	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

Test Mode:	UNII-2A/TX Mode

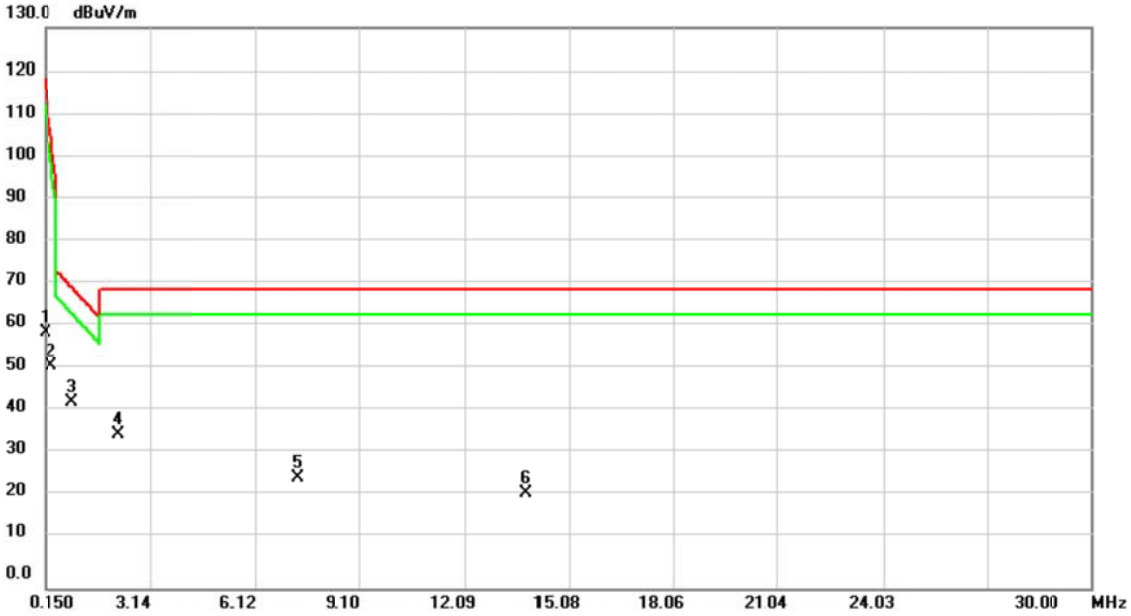
Close



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0171	44.48	18.55	63.03	127.94	-64.91	peak	

Test Mode:	UNII-2A/TX Mode

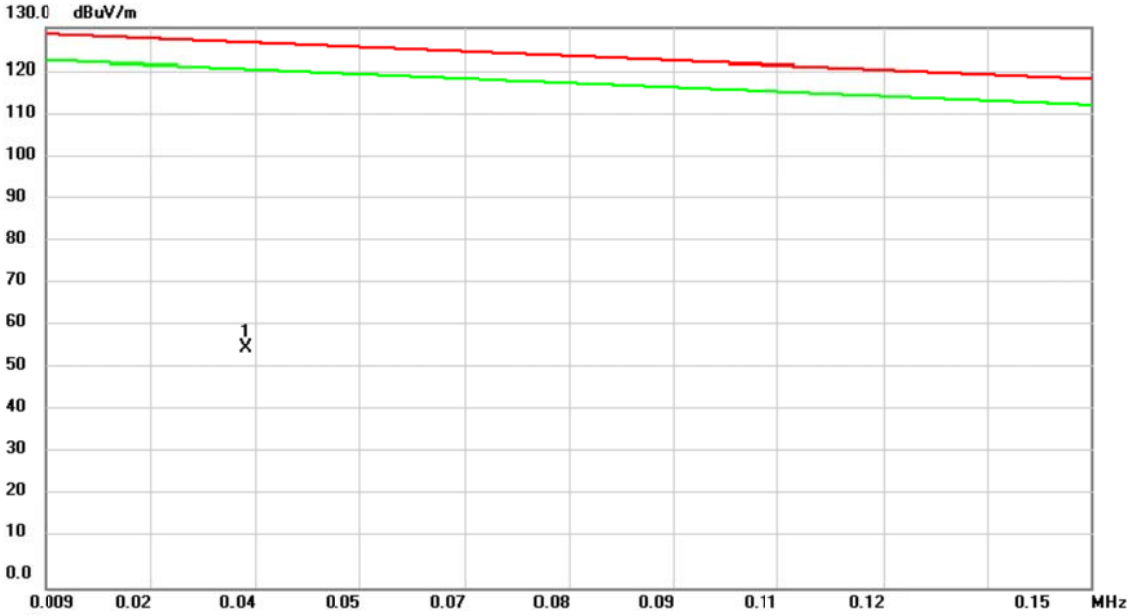
Close



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1500	47.16	12.03	59.19	118.34	-59.15	peak	
2		0.3291	40.16	11.80	51.96	105.41	-53.45	peak	
3	*	0.9261	31.48	11.97	43.45	69.91	-26.46	peak	
4		2.2395	24.62	11.44	36.06	69.54	-33.48	peak	
5		7.3437	14.47	11.35	25.82	69.54	-43.72	peak	
6		13.9108	11.23	11.18	22.41	69.54	-47.13	peak	

Test Mode:	UNII-3/TX Mode

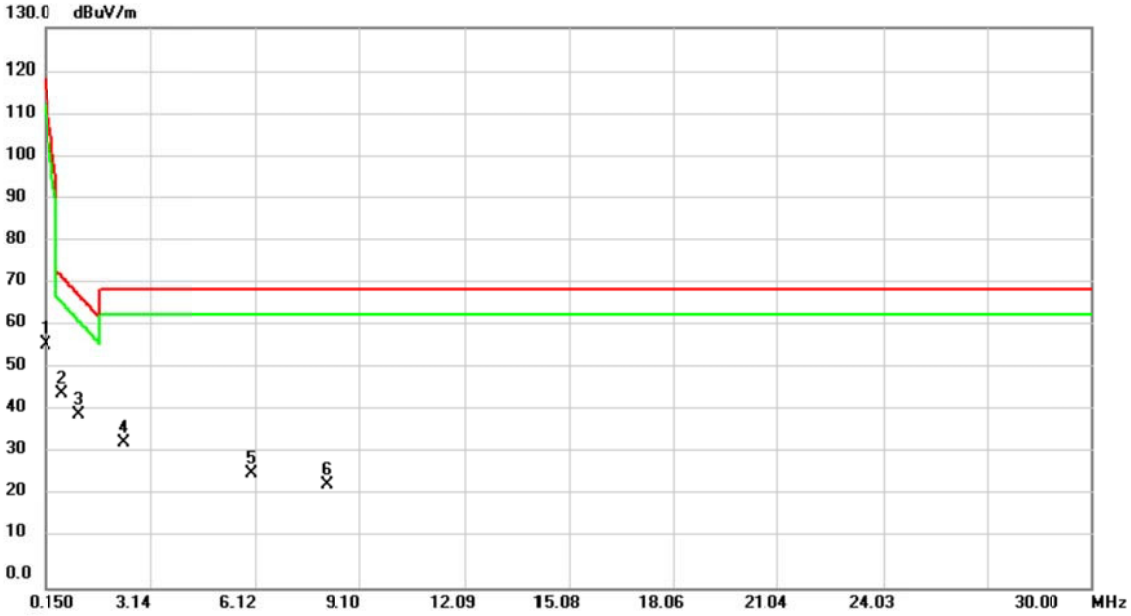
Open



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0360	41.75	14.40	56.15	126.57	-70.42	peak	

Test Mode:	UNII-3/TX Mode

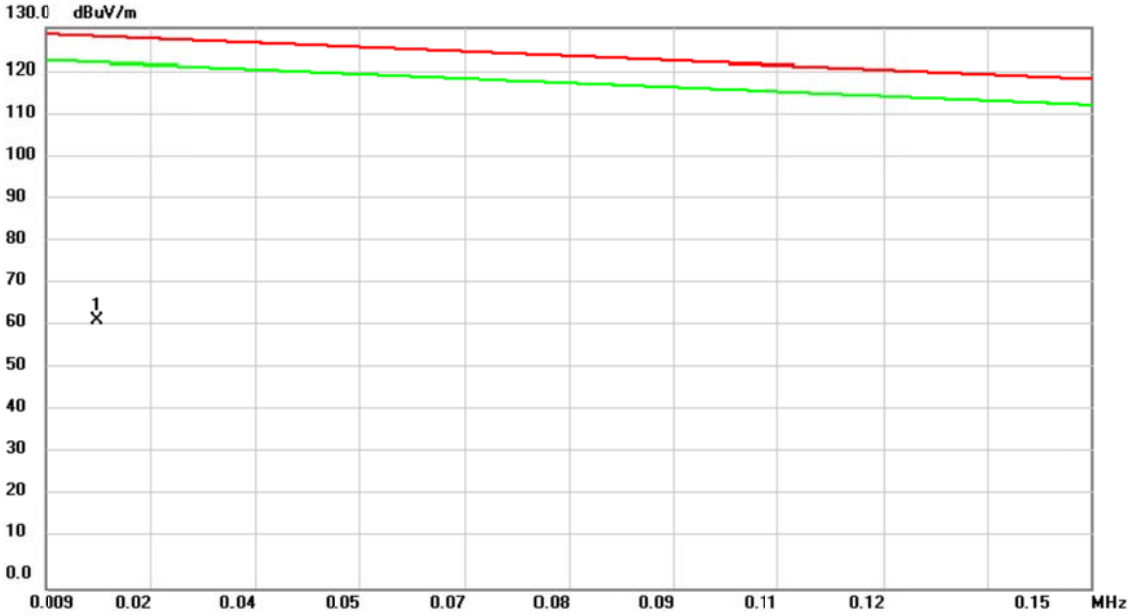
Open



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1800	44.87	11.98	56.85	116.18	-59.33	peak	
2	*	0.6276	33.55	11.85	45.40	72.57	-27.17	peak	
3		1.1350	28.52	11.94	40.46	68.05	-27.59	peak	
4		2.3887	22.56	11.38	33.94	69.54	-35.60	peak	
5		6.0006	15.38	11.38	26.76	69.54	-42.78	peak	
6		8.1797	12.99	11.34	24.33	69.54	-45.21	peak	

Test Mode:	UNII-3/TX Mode

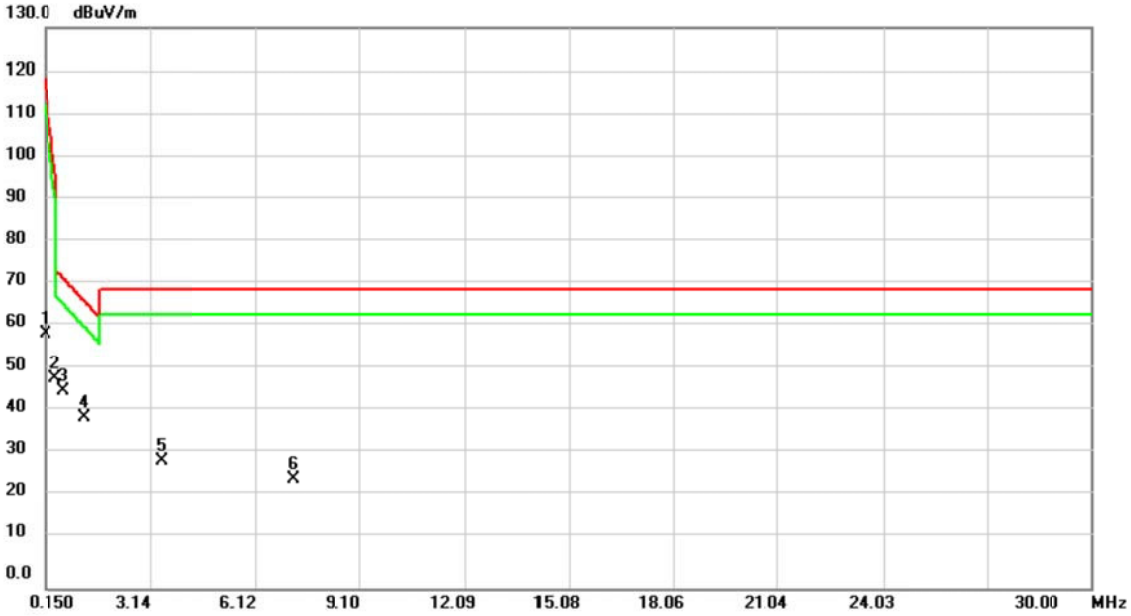
Close



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0160	43.46	18.85	62.31	128.01	-65.70	peak	

Test Mode:	UNII-3/TX Mode

Close

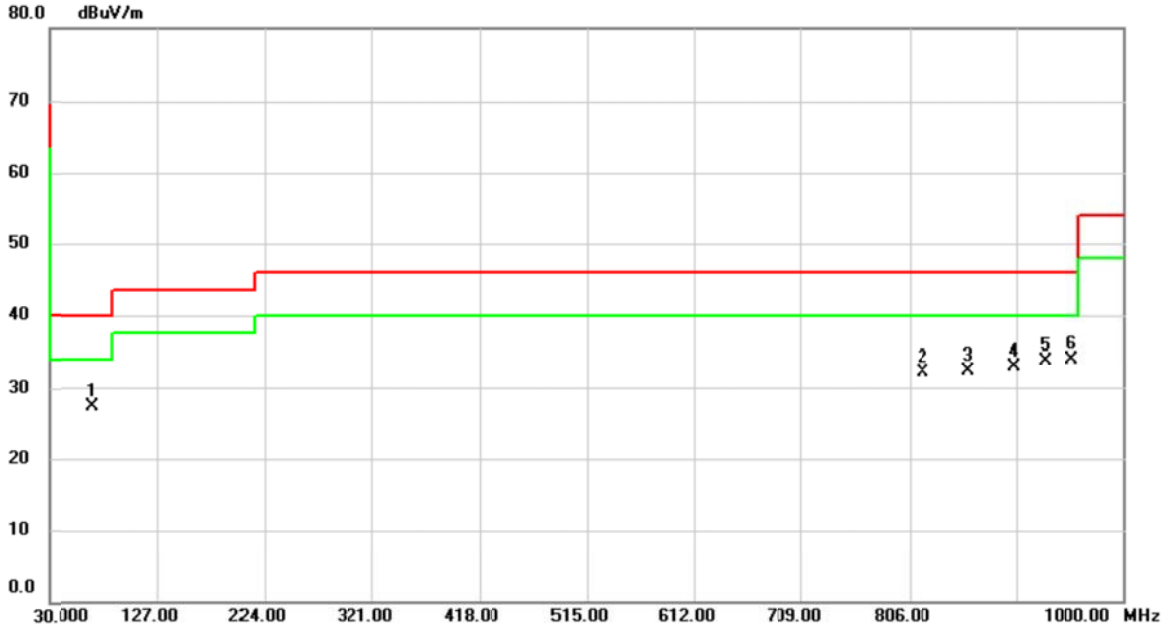


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1800	46.94	11.98	58.92	116.18	-57.26	peak	
2		0.4485	37.06	11.80	48.86	96.80	-47.94	peak	
3	*	0.6873	34.17	11.87	46.04	72.04	-26.00	peak	
4		1.2842	27.98	11.87	39.85	66.72	-26.87	peak	
5		3.4931	18.73	11.17	29.90	69.54	-39.64	peak	
6		7.1946	14.02	11.36	25.38	69.54	-44.16	peak	

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

Test Mode:	UNII-1/TX A Mode

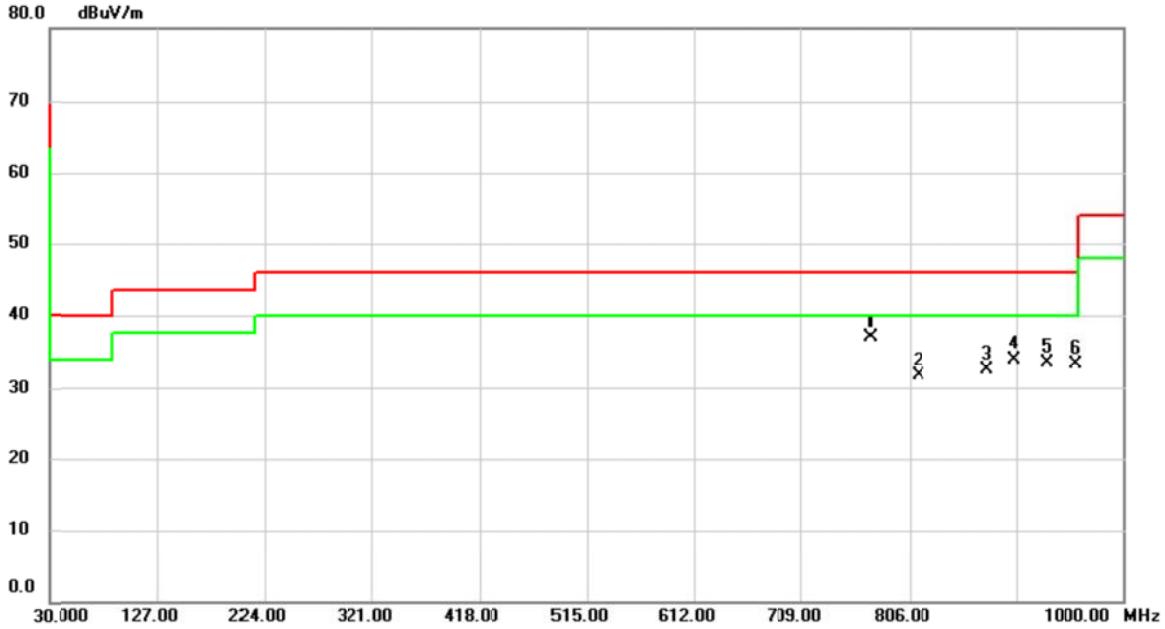
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		69.7700	37.83	-10.46	27.37	40.00	-12.63	peak	
2		817.6400	29.02	3.14	32.16	46.00	-13.84	peak	
3		859.3500	28.43	3.78	32.21	46.00	-13.79	peak	
4		901.0600	28.22	4.62	32.84	46.00	-13.16	peak	
5		929.1900	28.60	5.13	33.73	46.00	-12.27	peak	
6	*	954.4100	28.27	5.55	33.82	46.00	-12.18	peak	

Test Mode:	UNII-1/TX A Mode

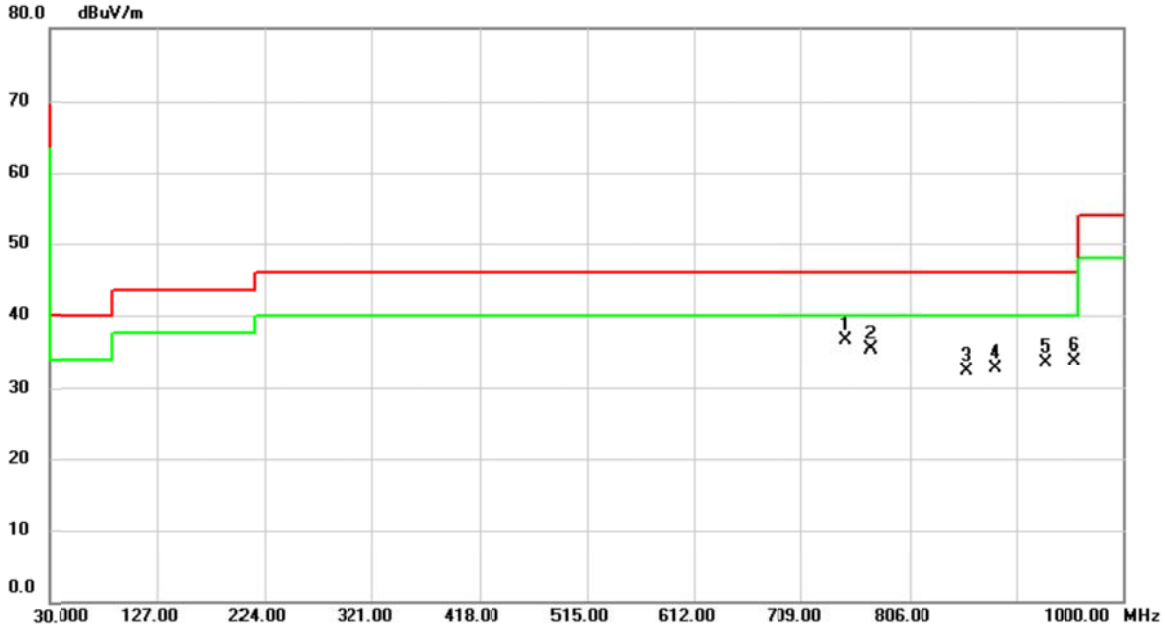
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	771.0800	34.43	2.57	37.00	46.00	-9.00	peak	
2		814.7300	28.51	3.10	31.61	46.00	-14.39	peak	
3		875.8400	28.43	4.12	32.55	46.00	-13.45	peak	
4		901.0600	29.20	4.62	33.82	46.00	-12.18	peak	
5		930.1600	28.36	5.14	33.50	46.00	-12.50	peak	
6		958.2900	27.78	5.60	33.38	46.00	-12.62	peak	

Test Mode:	UNII-2A/TX A Mode

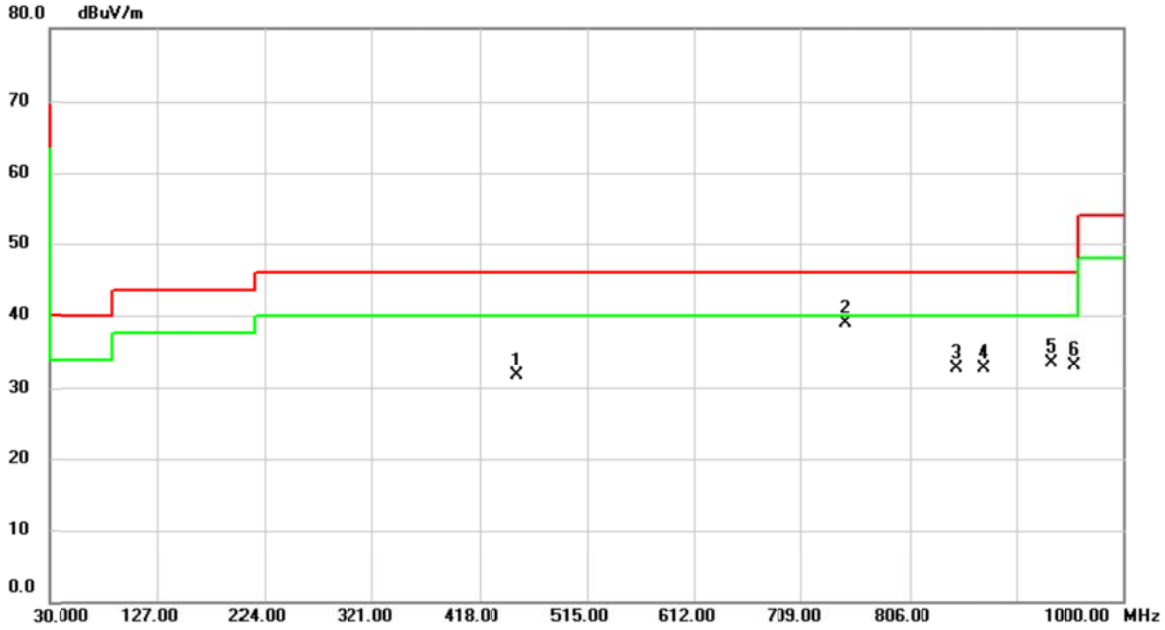
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	749.7400	34.18	2.33	36.51	46.00	-9.49	peak	
2		771.0800	32.80	2.57	35.37	46.00	-10.63	peak	
3		858.3800	28.56	3.76	32.32	46.00	-13.68	peak	
4		883.6000	28.39	4.28	32.67	46.00	-13.33	peak	
5		929.1900	28.47	5.13	33.60	46.00	-12.40	peak	
6		956.3500	28.11	5.57	33.68	46.00	-12.32	peak	

Test Mode:	UNII-2A/TX A Mode

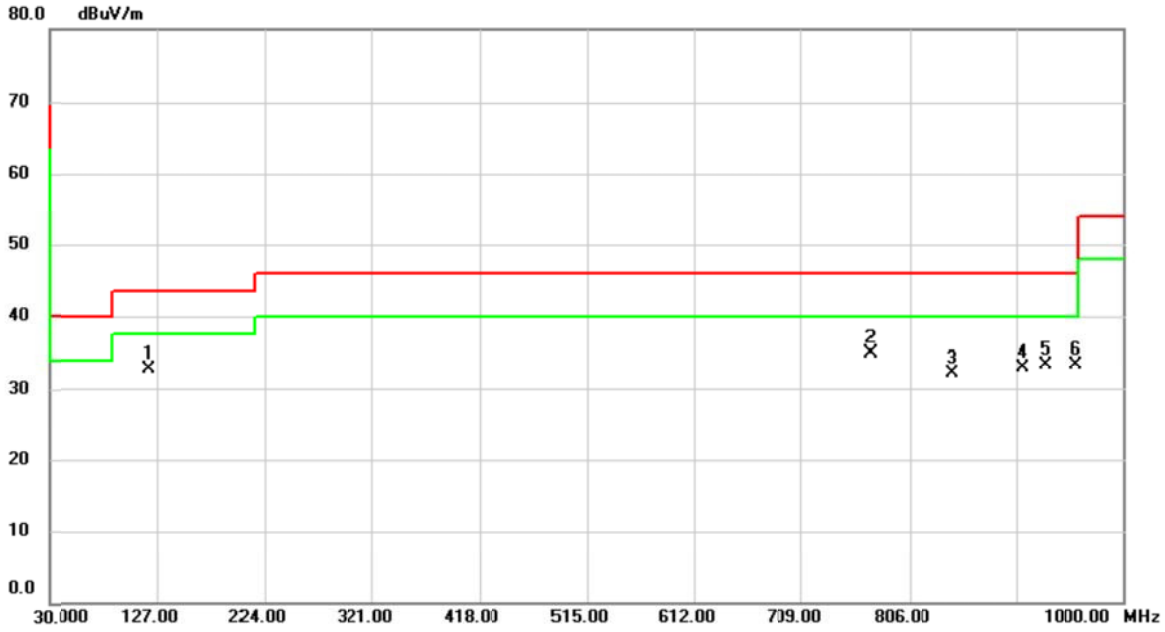
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		453.8900	35.16	-3.44	31.72	46.00	-14.28	peak	
2	*	749.7400	36.55	2.33	38.88	46.00	-7.12	peak	
3		849.6500	29.21	3.59	32.80	46.00	-13.20	peak	
4		873.9000	28.55	4.08	32.63	46.00	-13.37	peak	
5		934.0400	28.39	5.20	33.59	46.00	-12.41	peak	
6		956.3500	27.49	5.57	33.06	46.00	-12.94	peak	

Test Mode:	UNII-3/TX A Mode

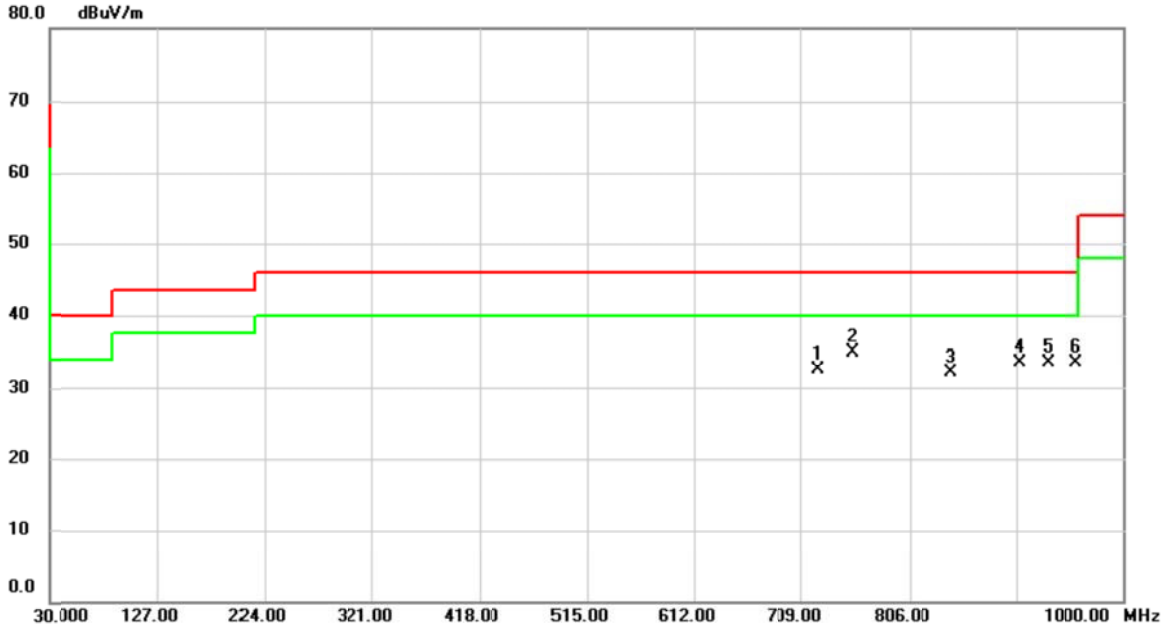
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	120.2100	43.21	-10.45	32.76	43.50	-10.74	peak	
2		771.0800	32.28	2.57	34.85	46.00	-11.15	peak	
3		845.7700	28.56	3.54	32.10	46.00	-13.90	peak	
4		908.8200	28.22	4.77	32.99	46.00	-13.01	peak	
5		929.1900	28.13	5.13	33.26	46.00	-12.74	peak	
6		958.2900	27.70	5.60	33.30	46.00	-12.70	peak	

Test Mode:	UNII-3/TX A Mode

Horizontal

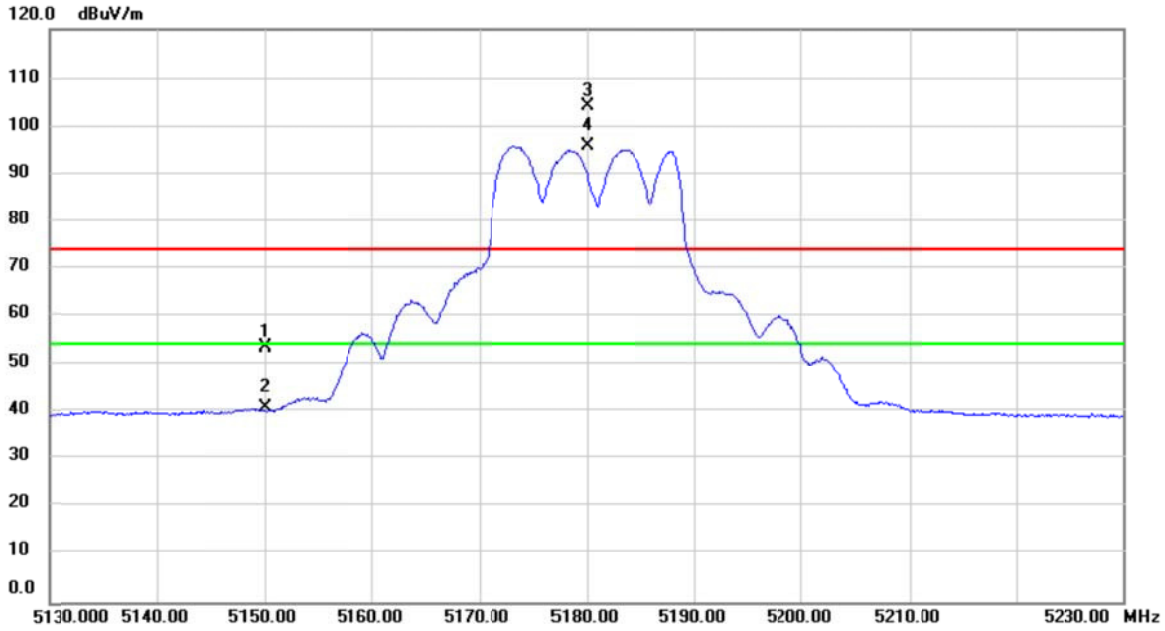


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		725.4900	30.72	1.82	32.54	46.00	-13.46	peak	
2	*	756.5300	32.43	2.40	34.83	46.00	-11.17	peak	
3		843.8300	28.59	3.50	32.09	46.00	-13.91	peak	
4		905.9100	28.73	4.71	33.44	46.00	-12.56	peak	
5		932.1000	28.26	5.18	33.44	46.00	-12.56	peak	
6		958.2900	27.88	5.60	33.48	46.00	-12.52	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

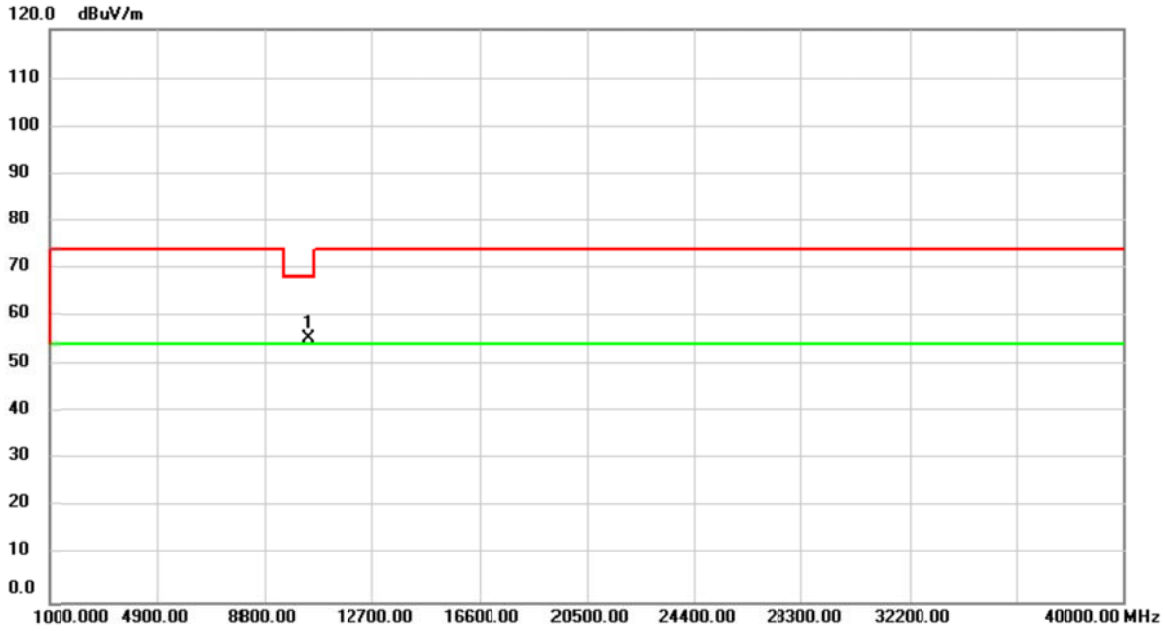
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	15.24	38.45	53.69	74.00	-20.31	peak	
2		5150.000	2.43	38.45	40.88	54.00	-13.12	AVG	
3	X	5180.000	65.80	38.48	104.28	74.00	30.28	peak	No Limit
4	*	5180.000	57.31	38.48	95.79	54.00	41.79	AVG	No Limit

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

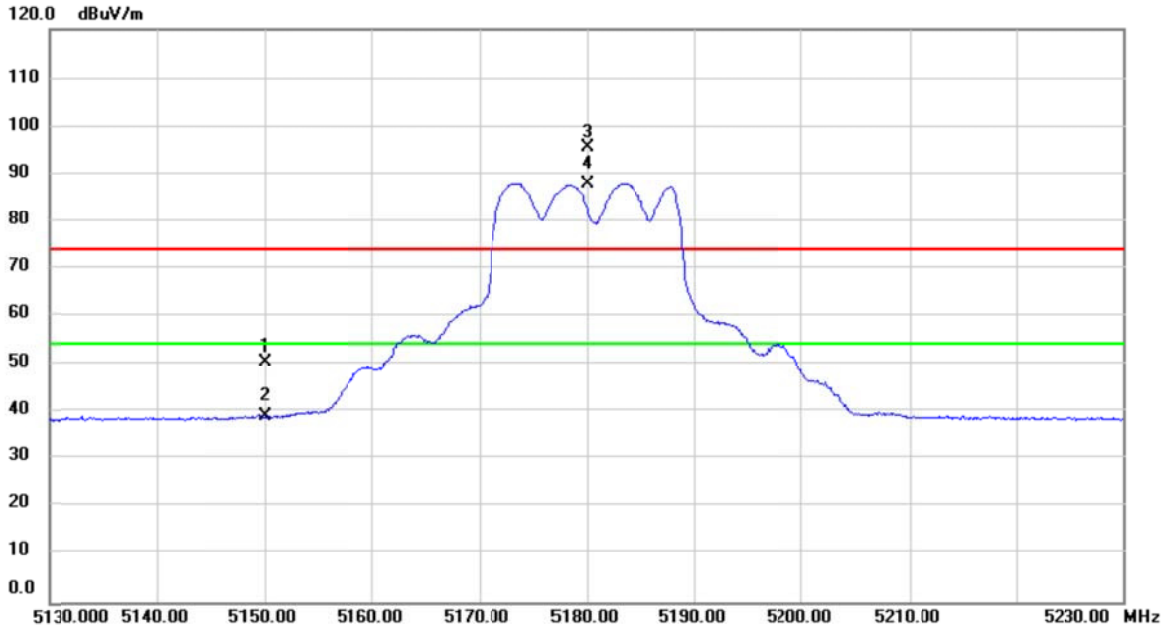
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	52.18	3.21	55.39	68.20	-12.81	peak	

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

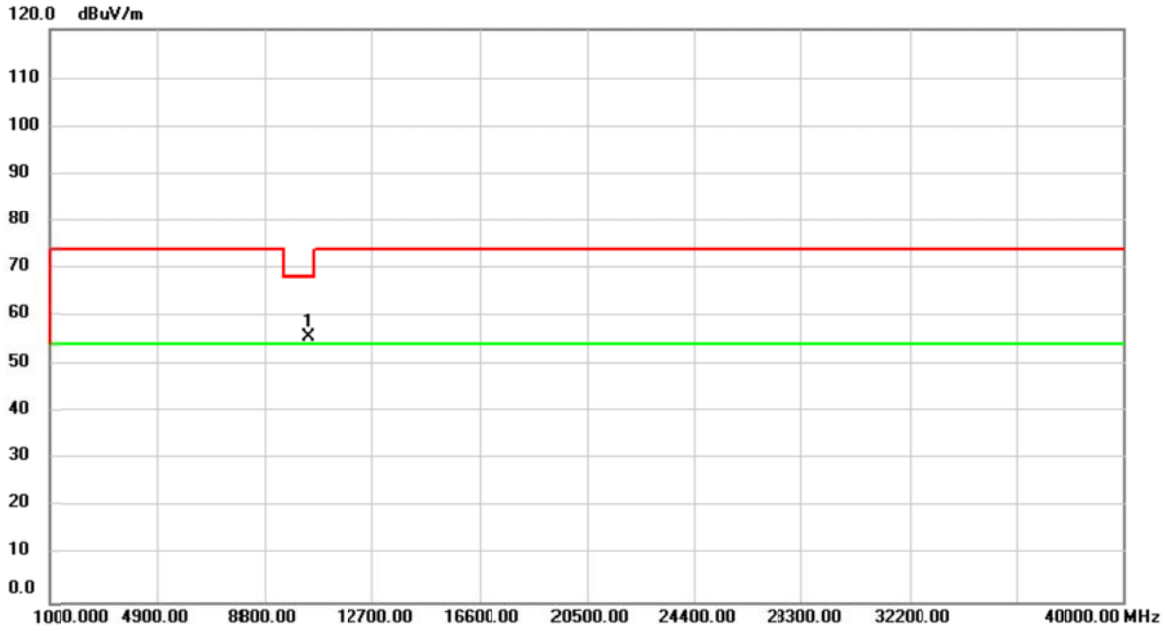
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	12.02	38.45	50.47	74.00	-23.53	peak	
2		5150.000	0.72	38.45	39.17	54.00	-14.83	AVG	
3	X	5180.000	56.98	38.48	95.46	74.00	21.46	peak	No Limit
4	*	5180.000	49.36	38.48	87.84	54.00	33.84	AVG	No Limit

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

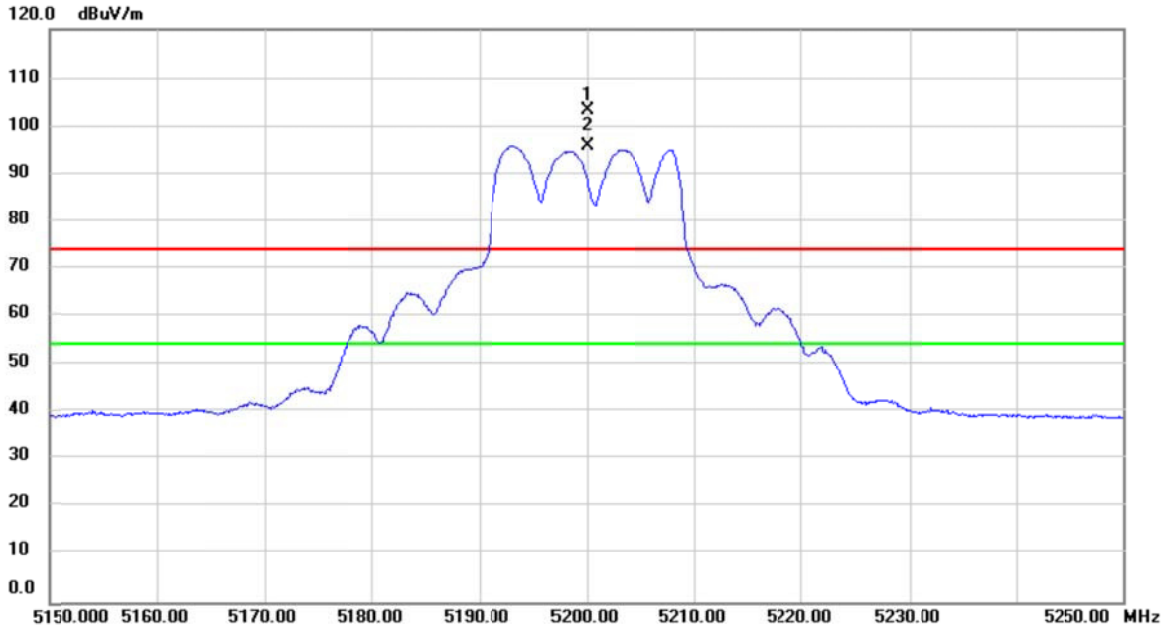
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	52.52	3.21	55.73	68.20	-12.47	peak	

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

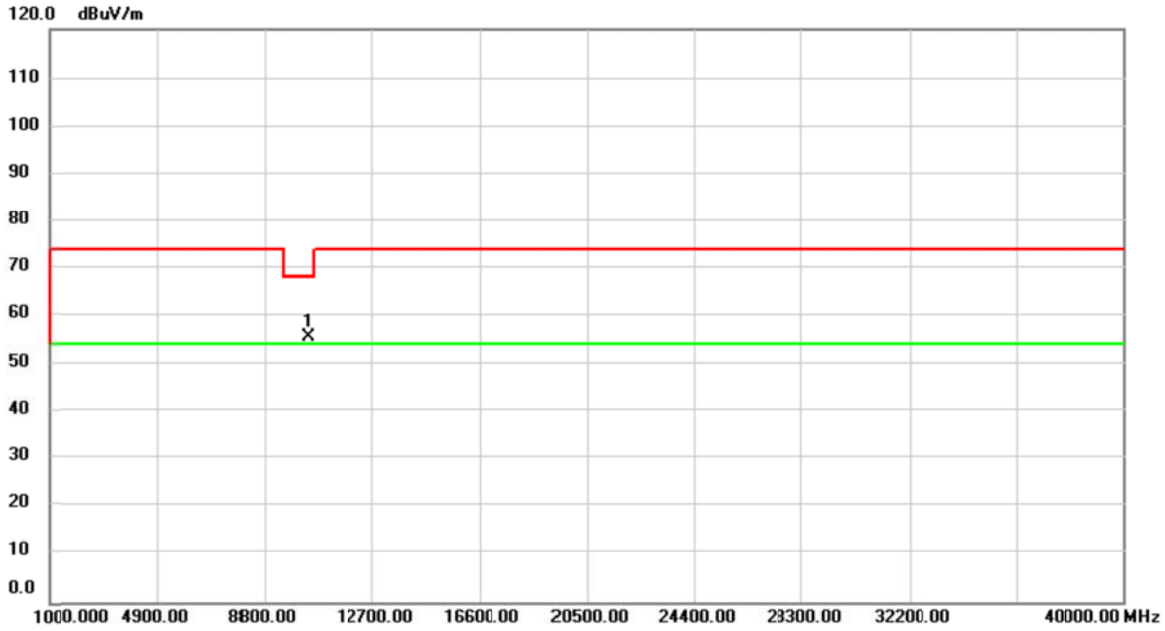
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5200.000	64.84	38.51	103.35	74.00	29.35	peak	No Limit
2	*	5200.000	57.46	38.51	95.97	54.00	41.97	AVG	No Limit

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

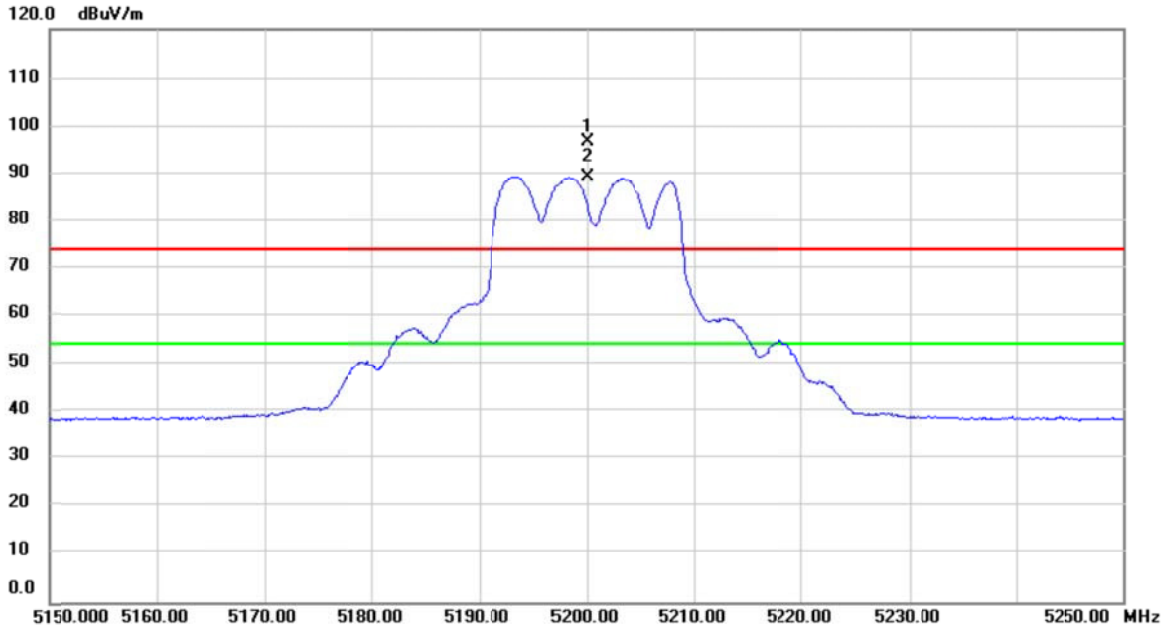
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	52.36	3.22	55.58	68.20	-12.62	peak	

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

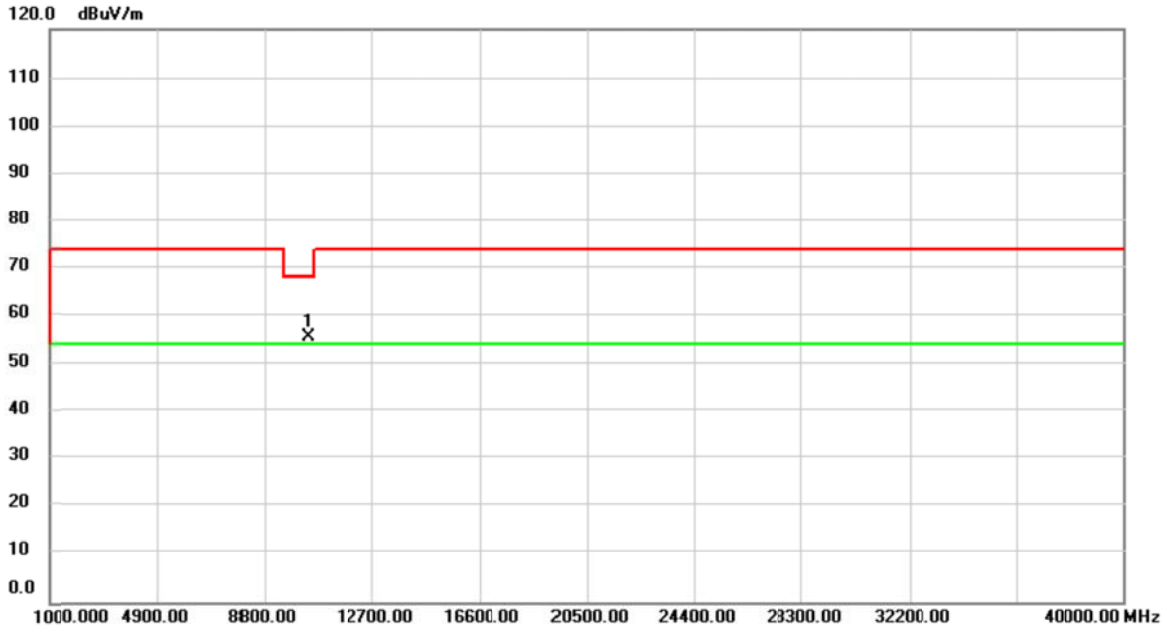
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5200.000	58.36	38.51	96.87	74.00	22.87	peak	No Limit
2	*	5200.000	50.83	38.51	89.34	54.00	35.34	AVG	No Limit

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

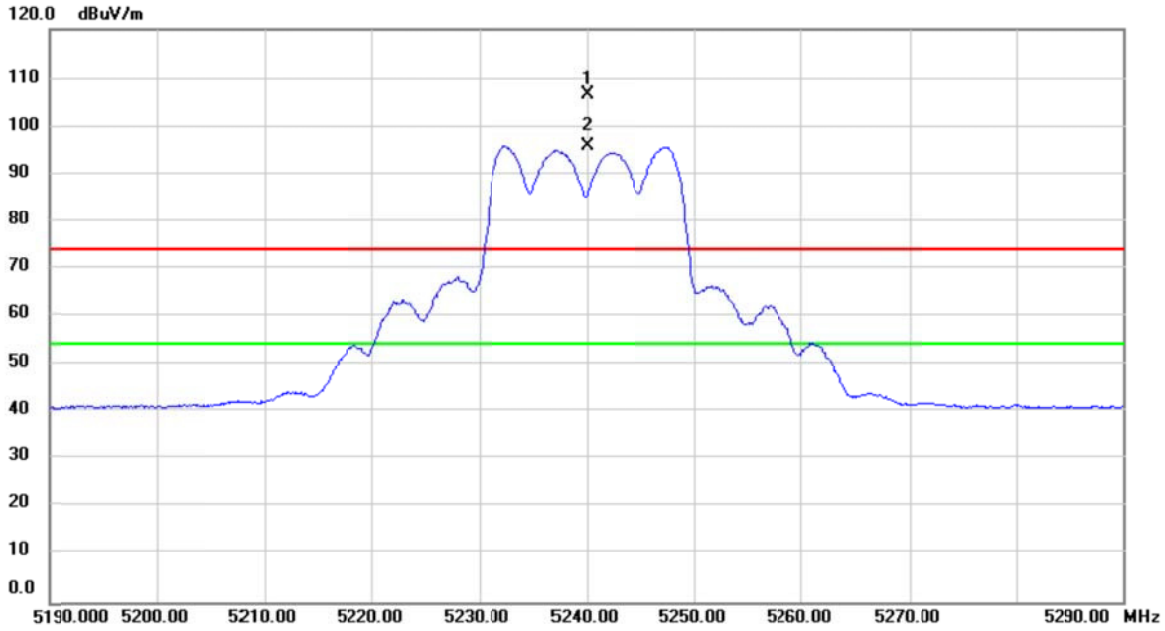
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	52.56	3.22	55.78	68.20	-12.42	peak	

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

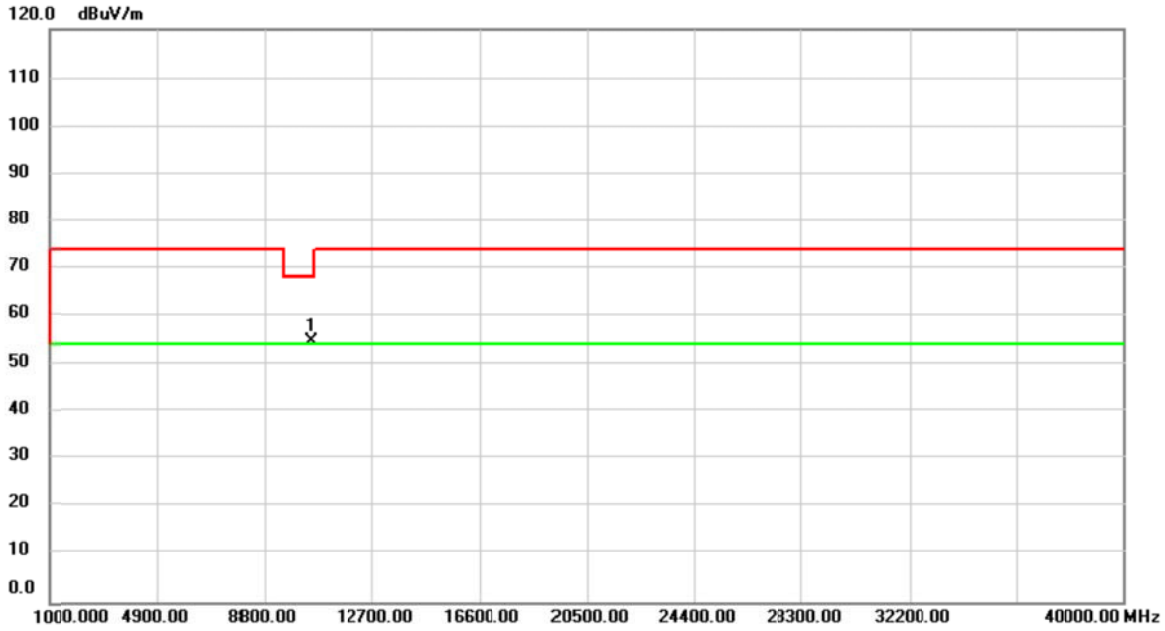
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5240.000	67.96	38.56	106.52	74.00	32.52	peak	No Limit
2	*	5240.000	57.25	38.56	95.81	54.00	41.81	AVG	No Limit

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

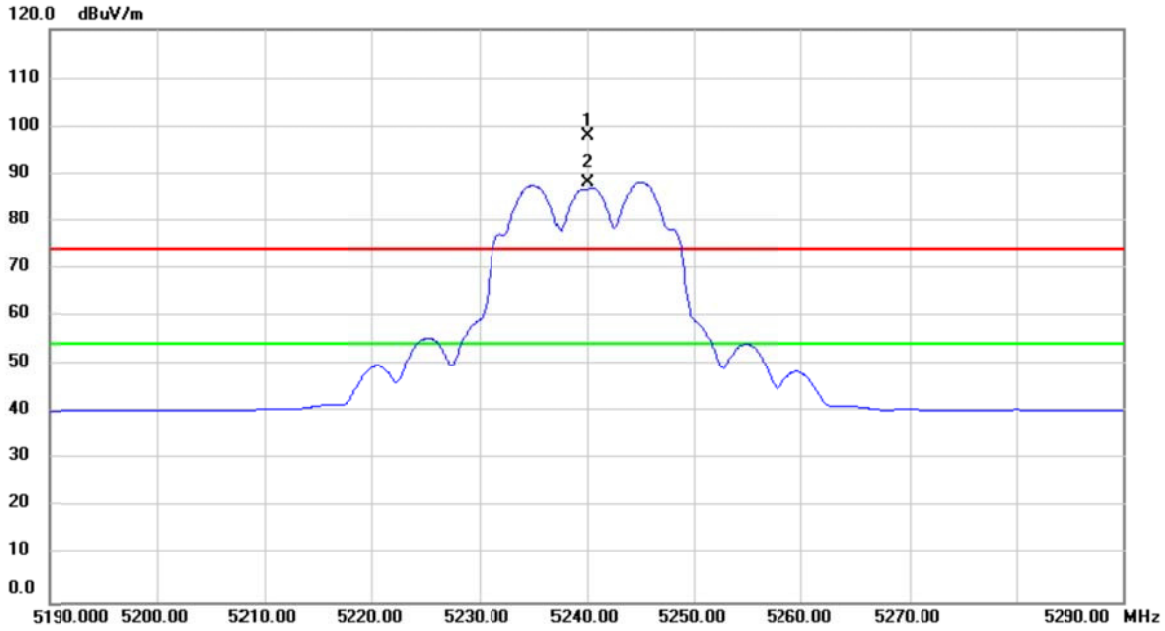
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	51.47	3.21	54.68	68.20	-13.52	peak	

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

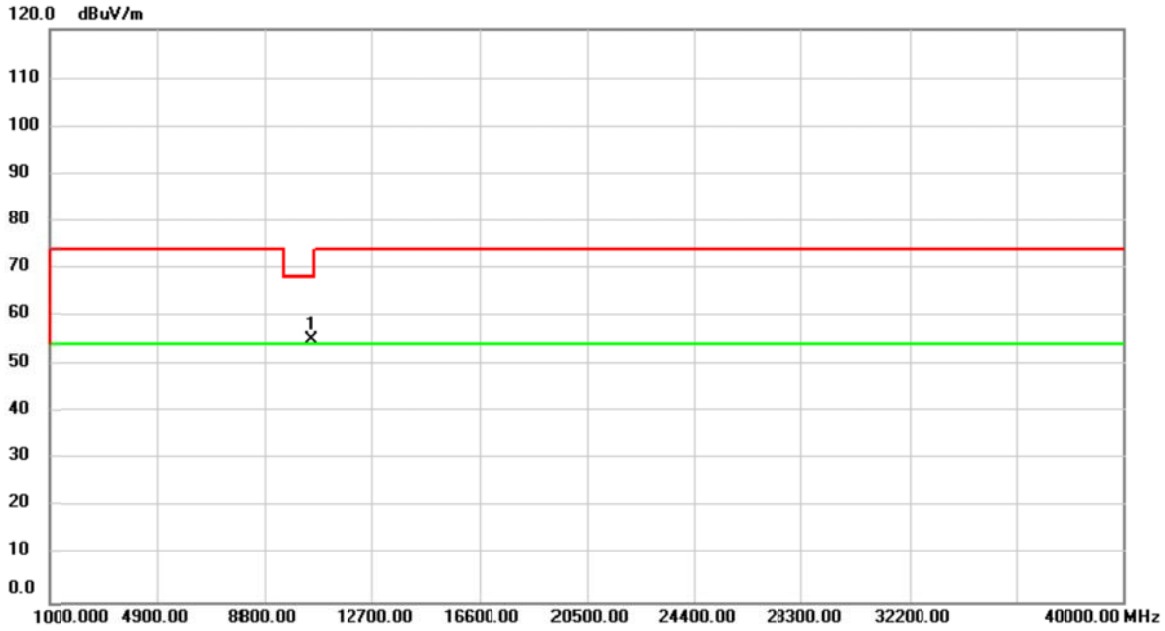
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5240.000	59.39	38.56	97.95	74.00	23.95	peak	No Limit
2	*	5240.000	49.55	38.56	88.11	54.00	34.11	AVG	No Limit

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

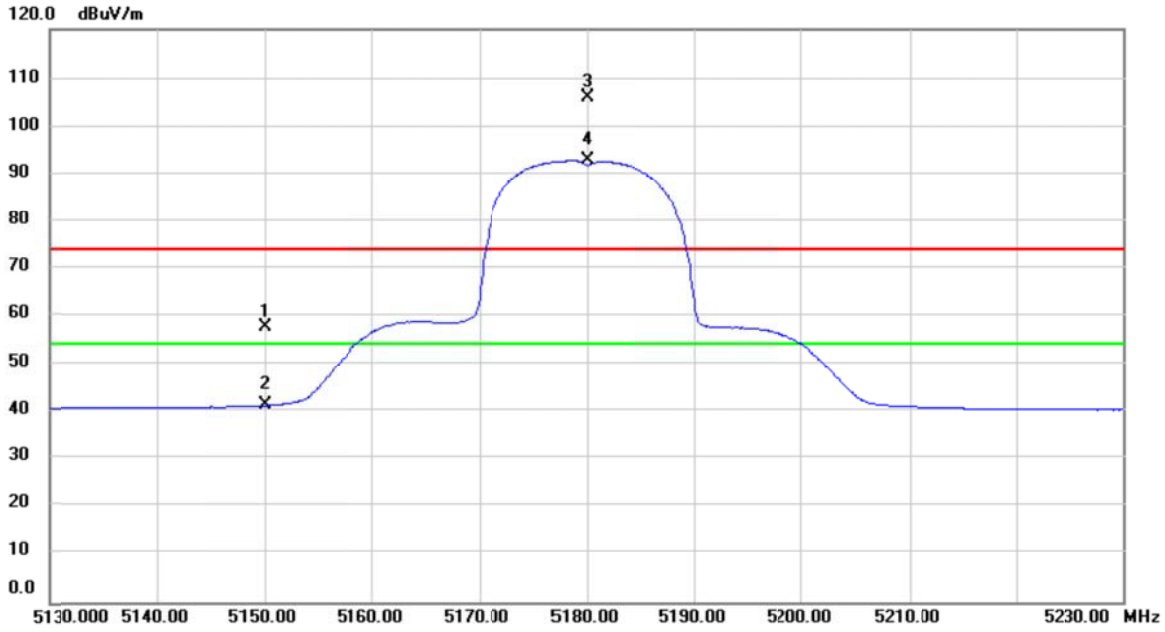
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	51.76	3.21	54.97	68.20	-13.23	peak	

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

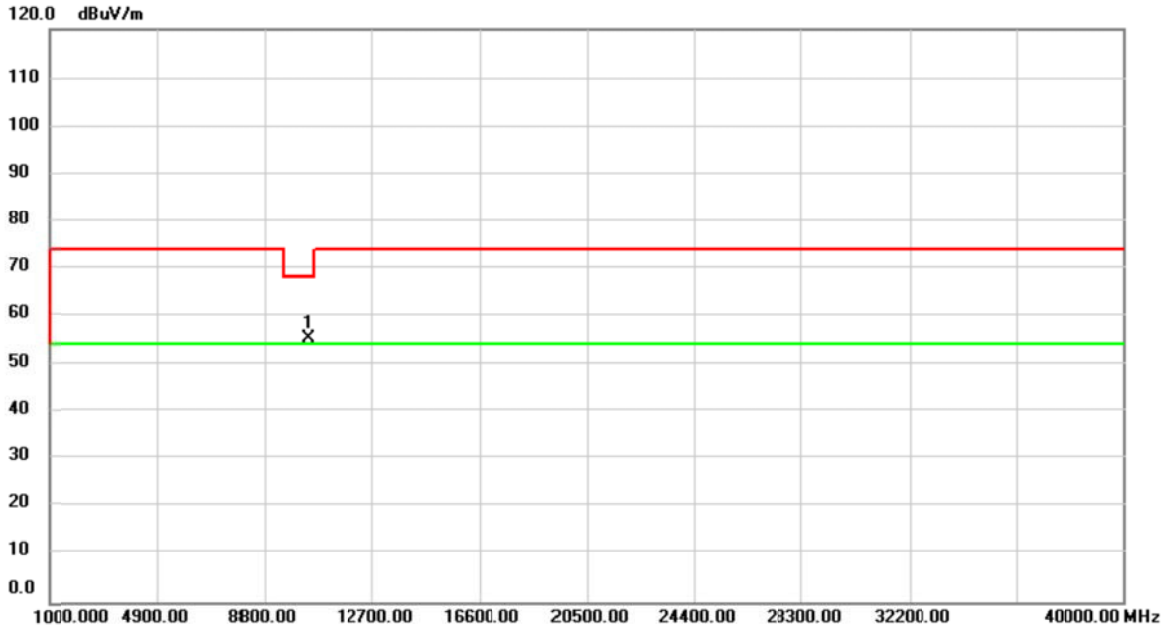
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	19.17	38.45	57.62	74.00	-16.38	peak	
2		5150.000	3.17	38.45	41.62	54.00	-12.38	AVG	
3	X	5180.000	67.45	38.48	105.93	74.00	31.93	peak	No Limit
4	*	5180.000	54.33	38.48	92.81	54.00	38.81	AVG	No Limit

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

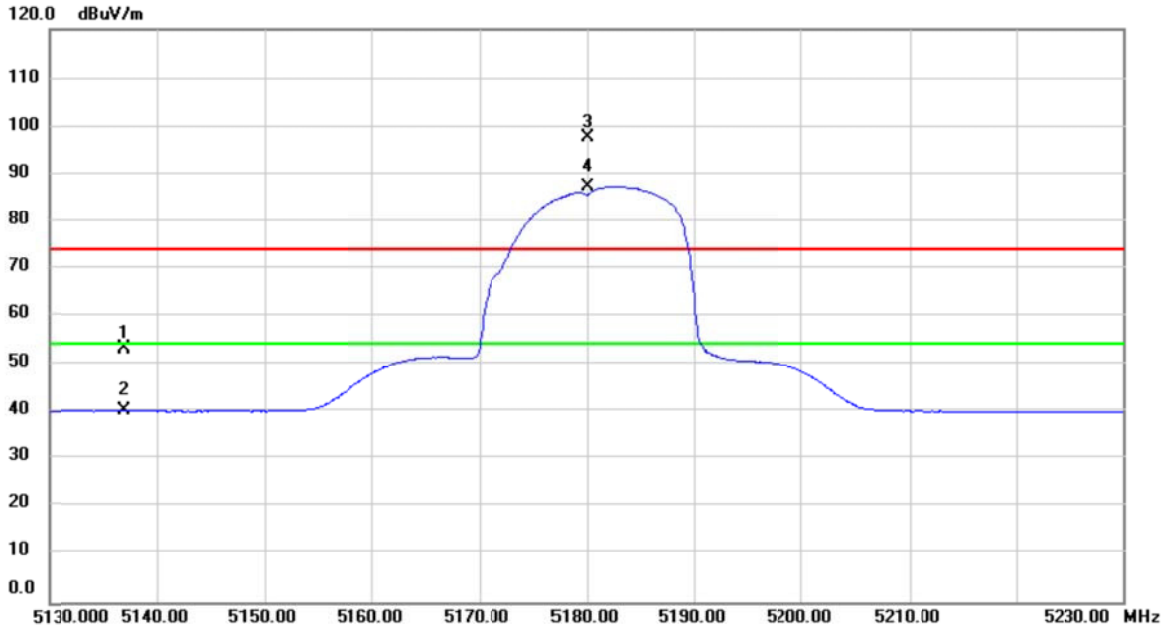
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	52.08	3.21	55.29	68.20	-12.91	peak	

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

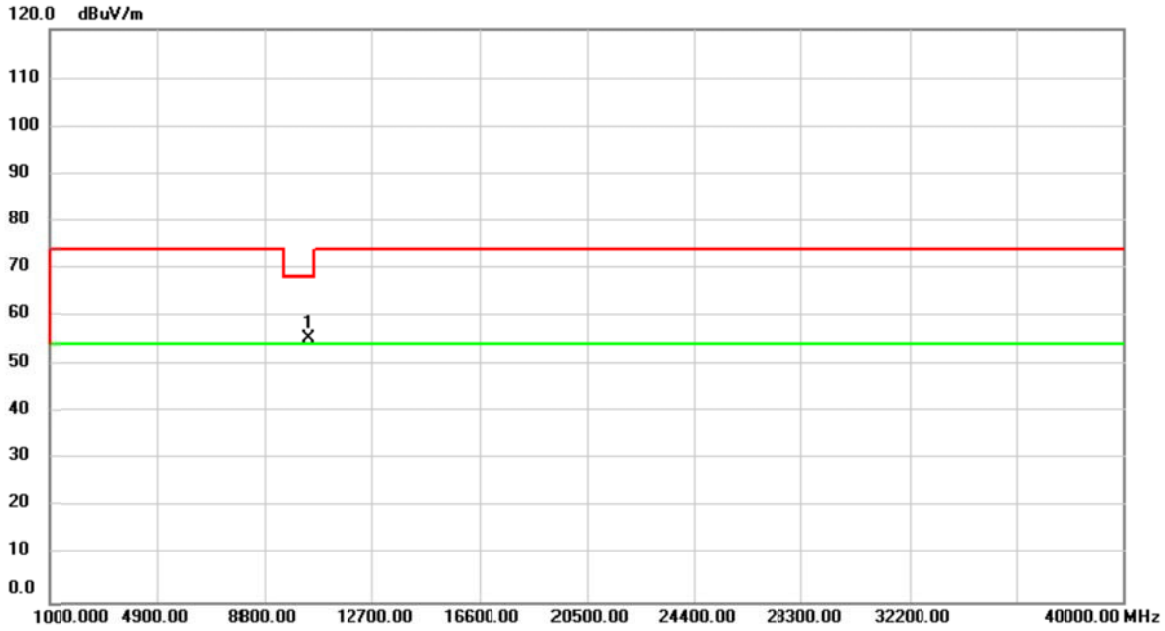
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5137.000	14.96	38.43	53.39	74.00	-20.61	peak	
2		5137.000	1.87	38.43	40.30	54.00	-13.70	AVG	
3	X	5180.000	59.13	38.48	97.61	74.00	23.61	peak	No Limit
4	*	5180.000	48.60	38.48	87.08	54.00	33.08	AVG	No Limit

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

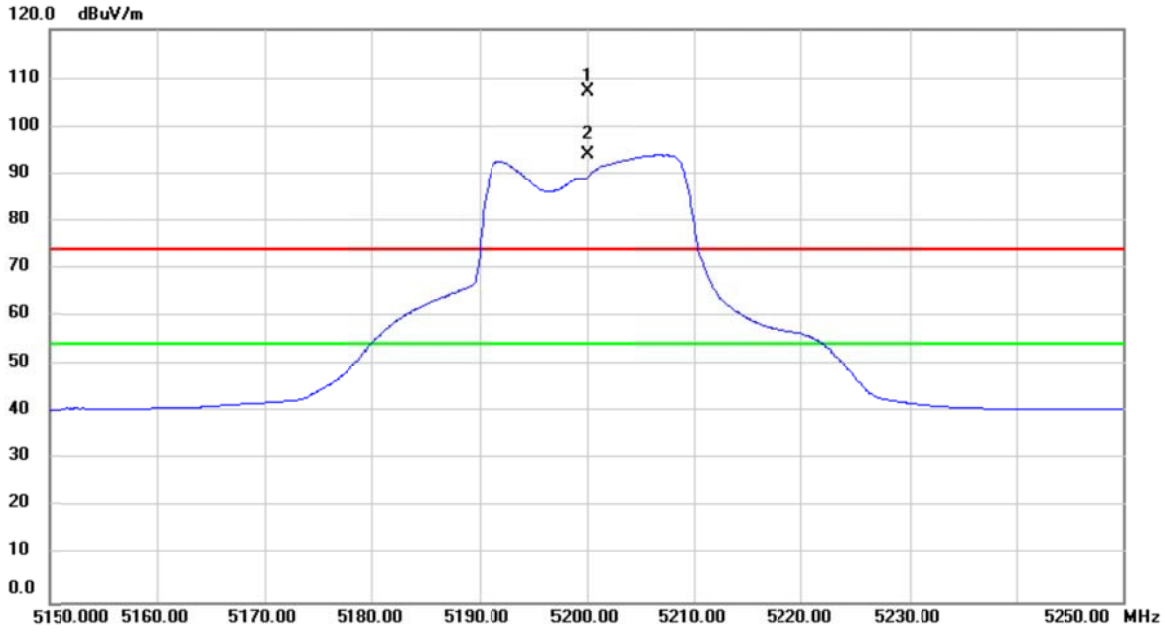
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	52.24	3.21	55.45	68.20	-12.75	peak	

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

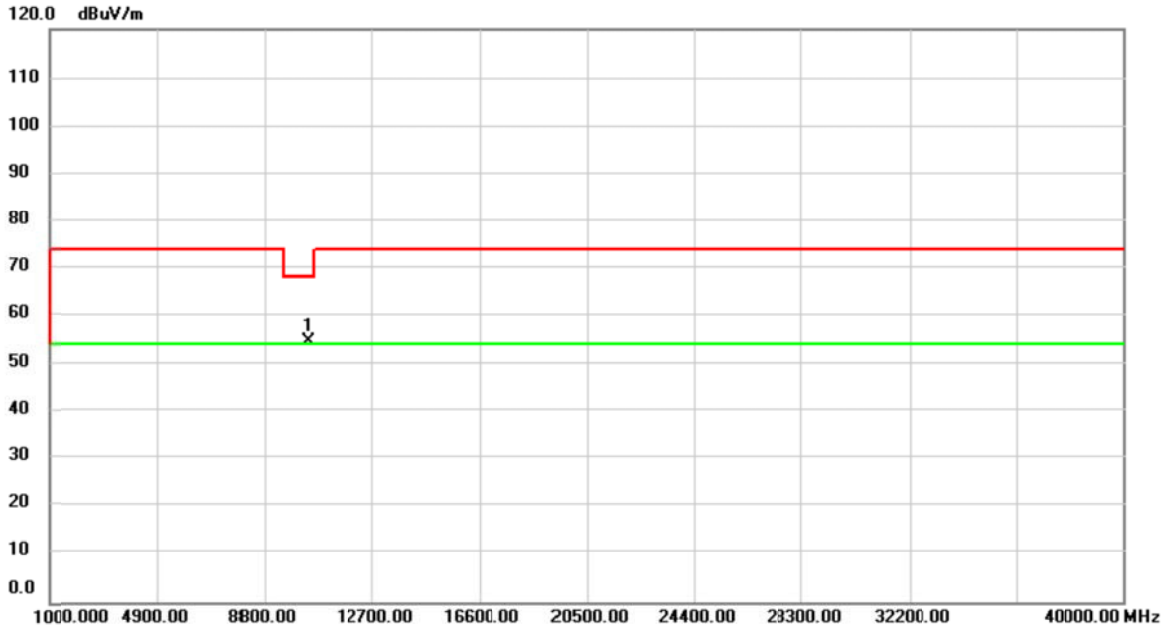
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5200.000	68.83	38.51	107.34	74.00	33.34	peak	No Limit
2	*	5200.000	55.43	38.51	93.94	54.00	39.94	AVG	No Limit

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

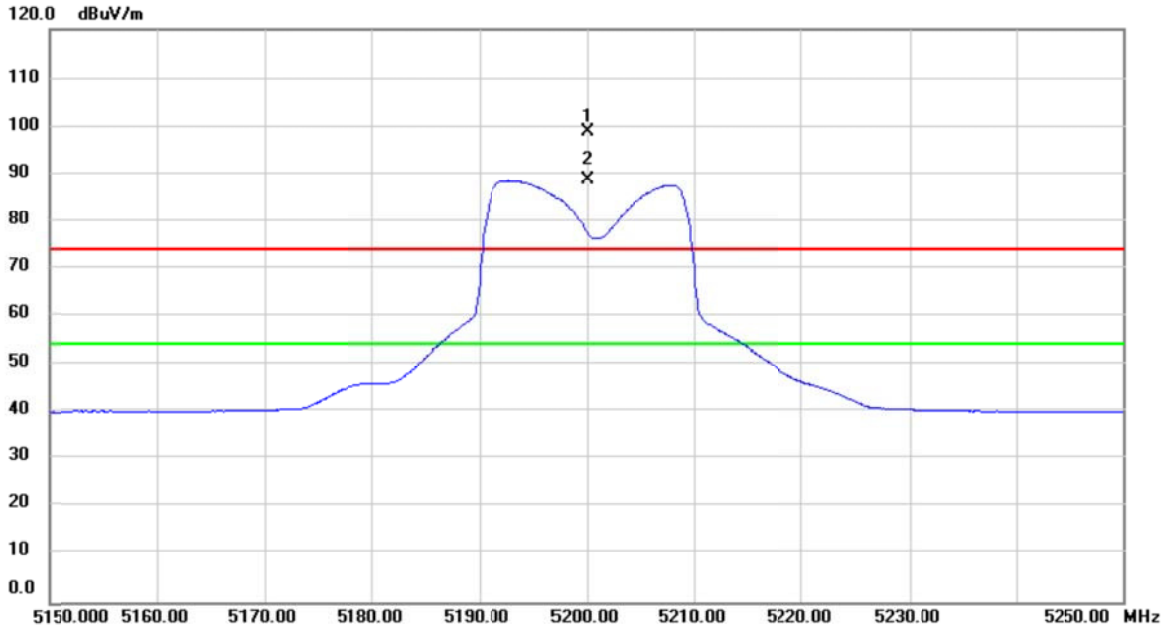
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	51.54	3.22	54.76	68.20	-13.44	peak	

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

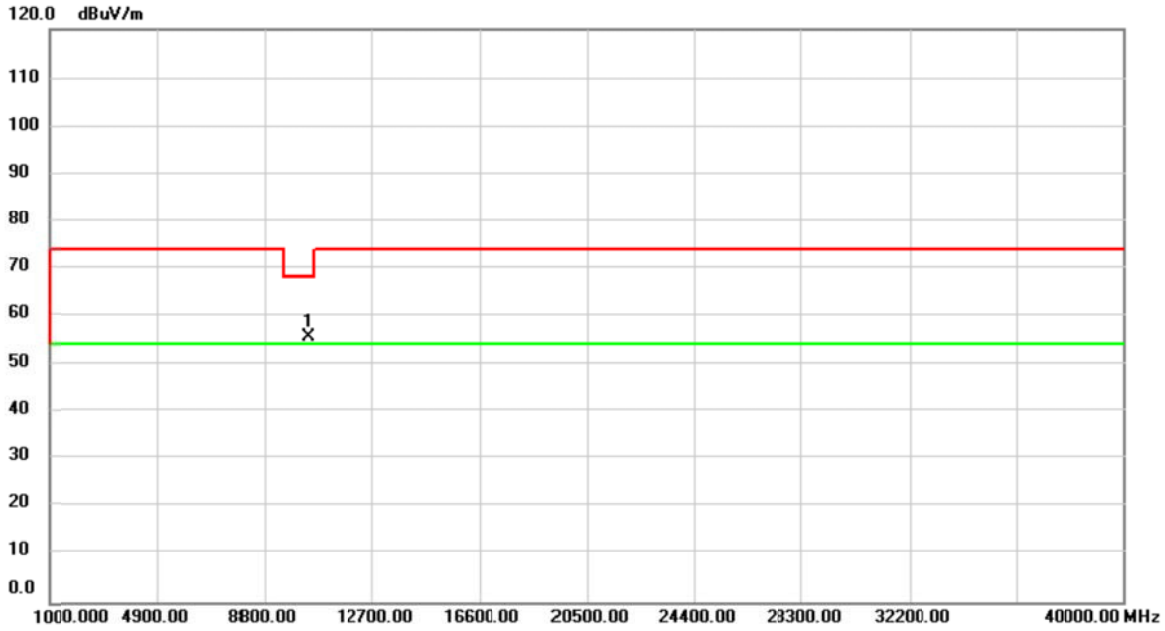
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5200.000	60.48	38.51	98.99	74.00	24.99	peak	No Limit
2	*	5200.000	50.02	38.51	88.53	54.00	34.53	AVG	No Limit

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

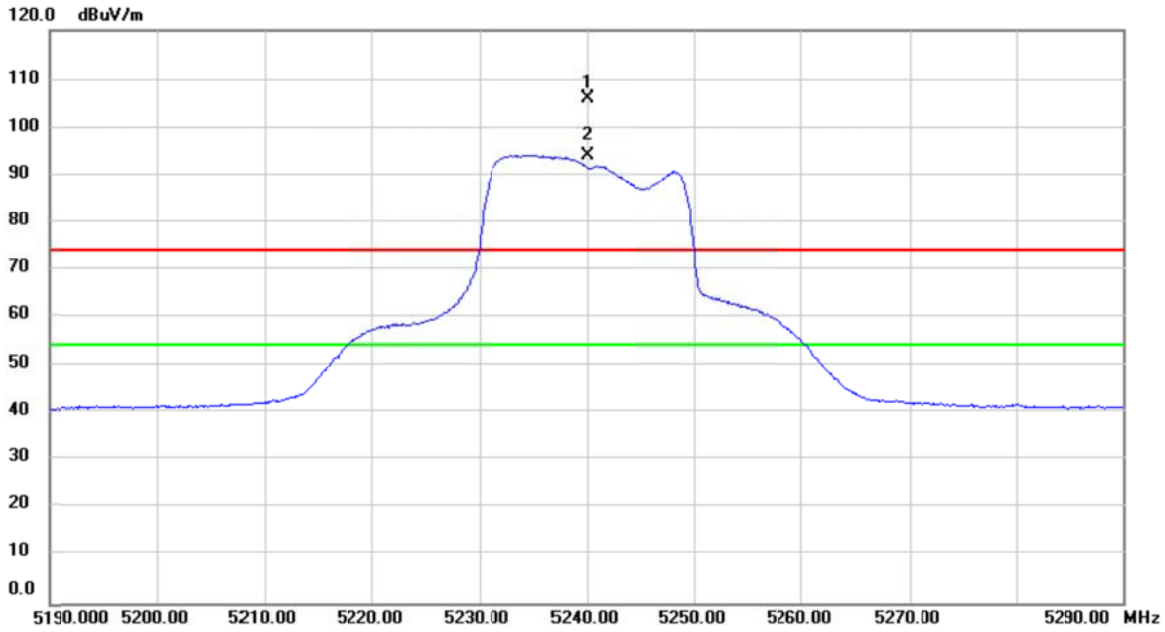
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	52.30	3.22	55.52	68.20	-12.68	peak	

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

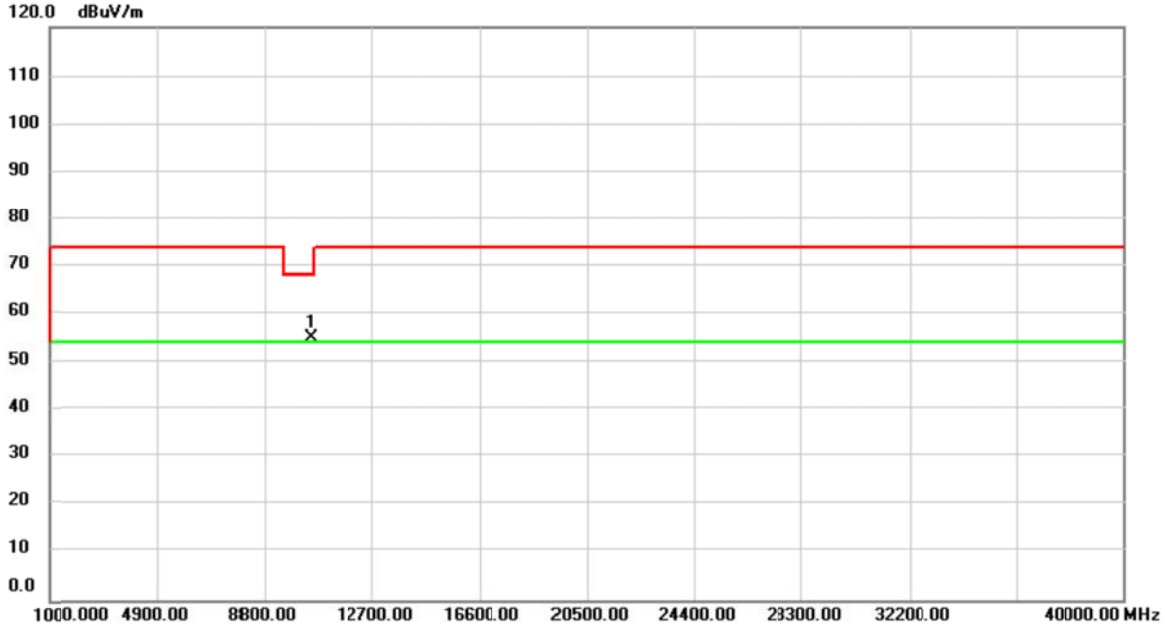
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5240.000	67.46	38.56	106.02	74.00	32.02	peak	No Limit
2	*	5240.000	55.61	38.56	94.17	54.00	40.17	AVG	No Limit

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

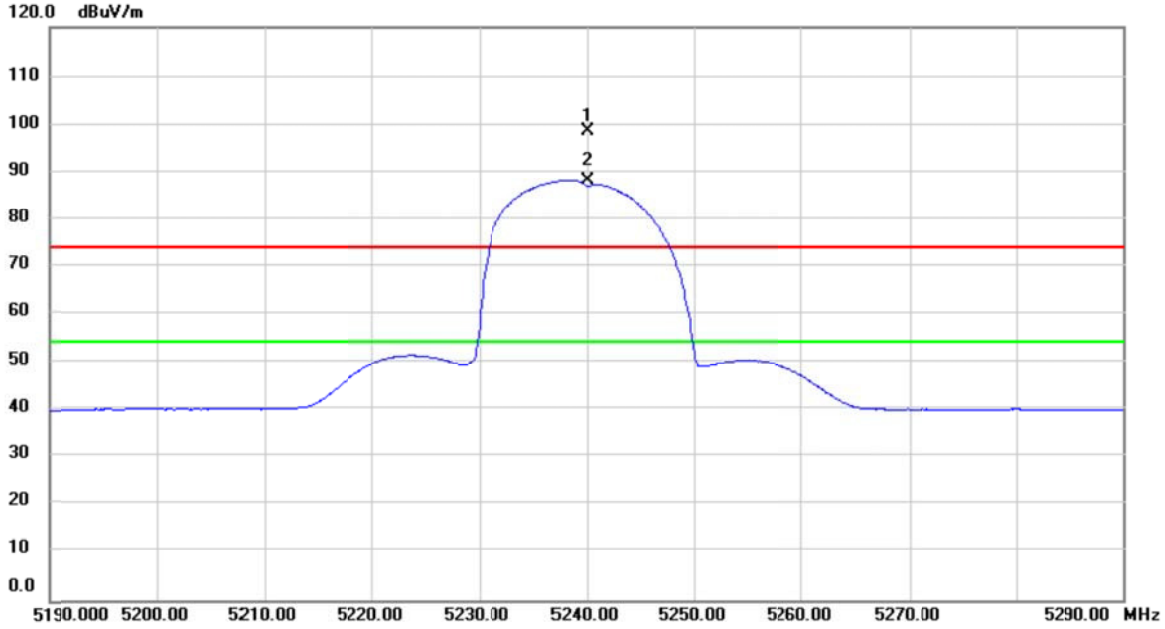
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	51.83	3.21	55.04	68.20	-13.16	peak	

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

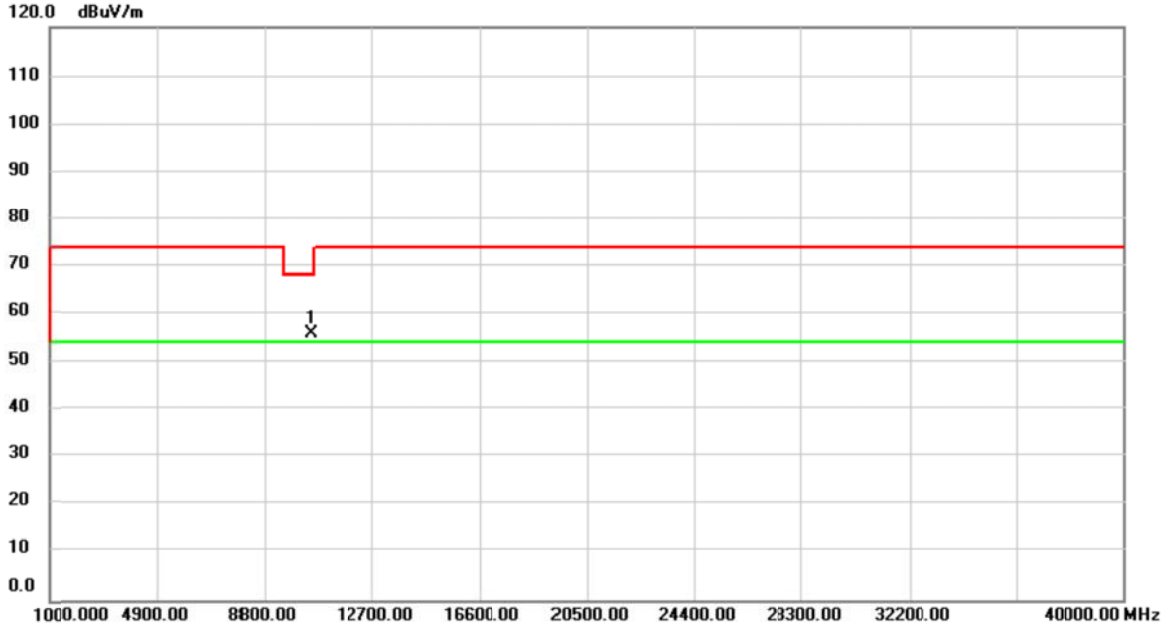
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5240.000	59.92	38.56	98.48	74.00	24.48	peak	No Limit
2	*	5240.000	49.57	38.56	88.13	54.00	34.13	AVG	No Limit

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

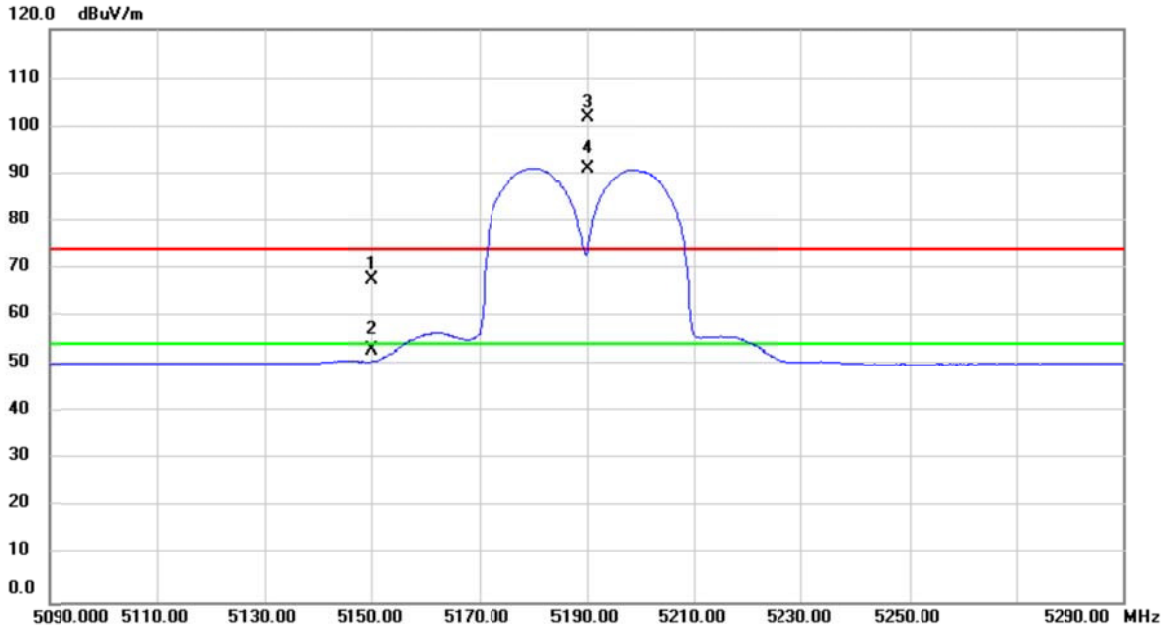
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	52.81	3.21	56.02	68.20	-12.18	peak	

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

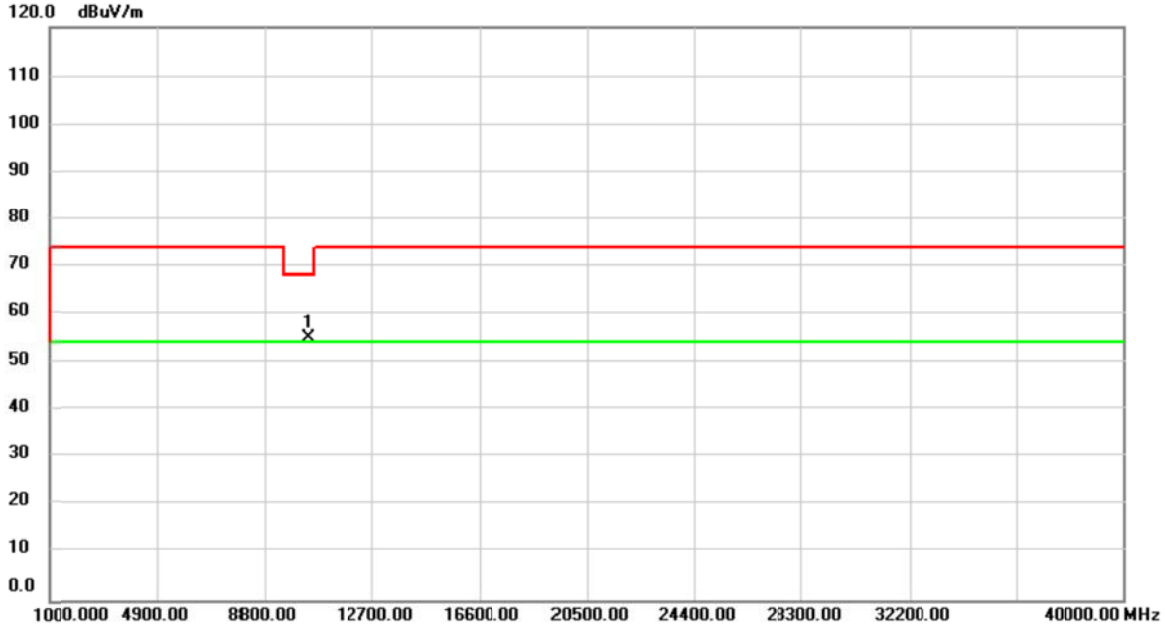
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	29.19	38.45	67.64	74.00	-6.36	peak	
2		5150.000	14.54	38.45	52.99	54.00	-1.01	AVG	
3	X	5190.000	63.37	38.50	101.87	74.00	27.87	peak	No Limit
4	*	5190.000	52.60	38.50	91.10	54.00	37.10	AVG	No Limit

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

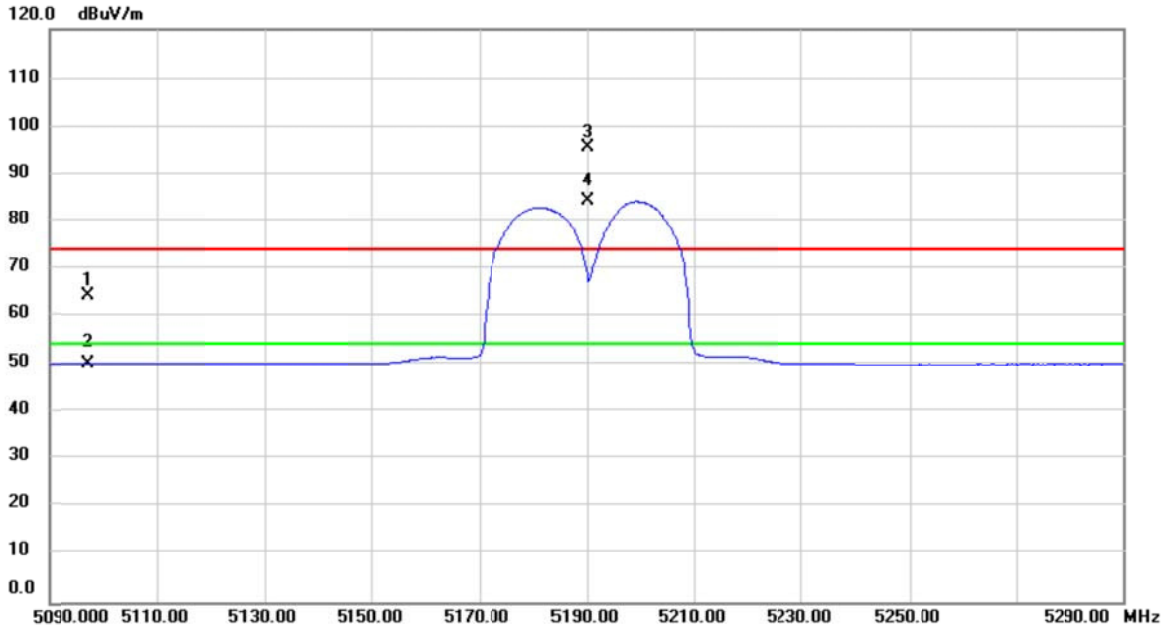
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	51.95	3.22	55.17	68.20	-13.03	peak	

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

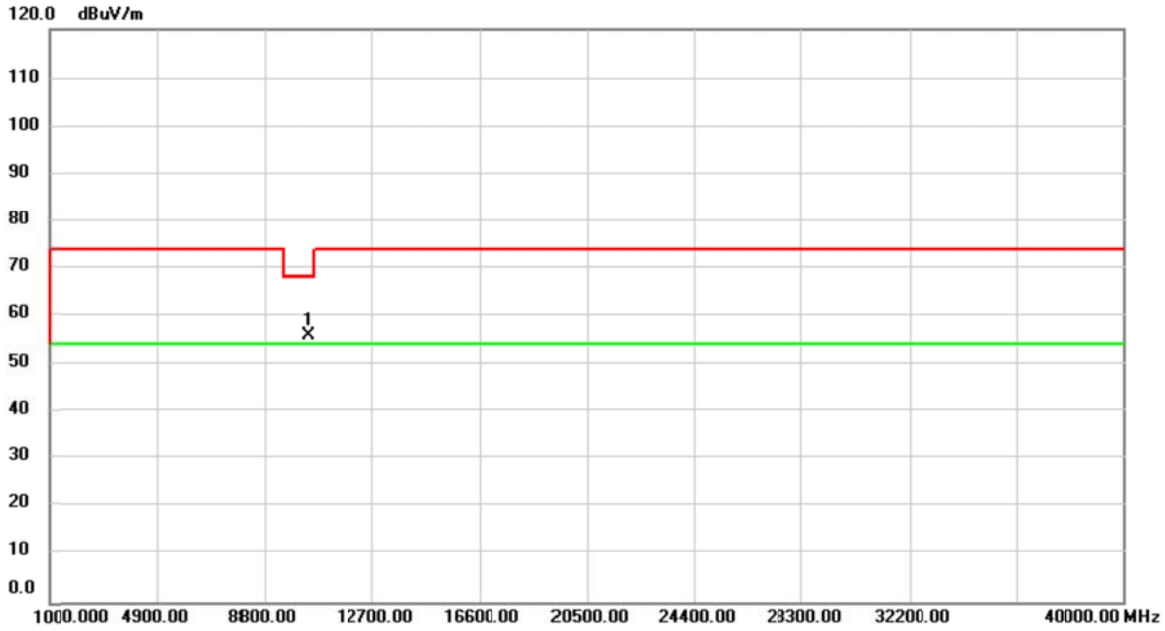
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5097.400	26.11	38.39	64.50	74.00	-9.50	peak	
2		5097.400	11.99	38.39	50.38	54.00	-3.62	AVG	
3	X	5190.000	56.99	38.50	95.49	74.00	21.49	peak	No Limit
4	*	5190.000	45.55	38.50	84.05	54.00	30.05	AVG	No Limit

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

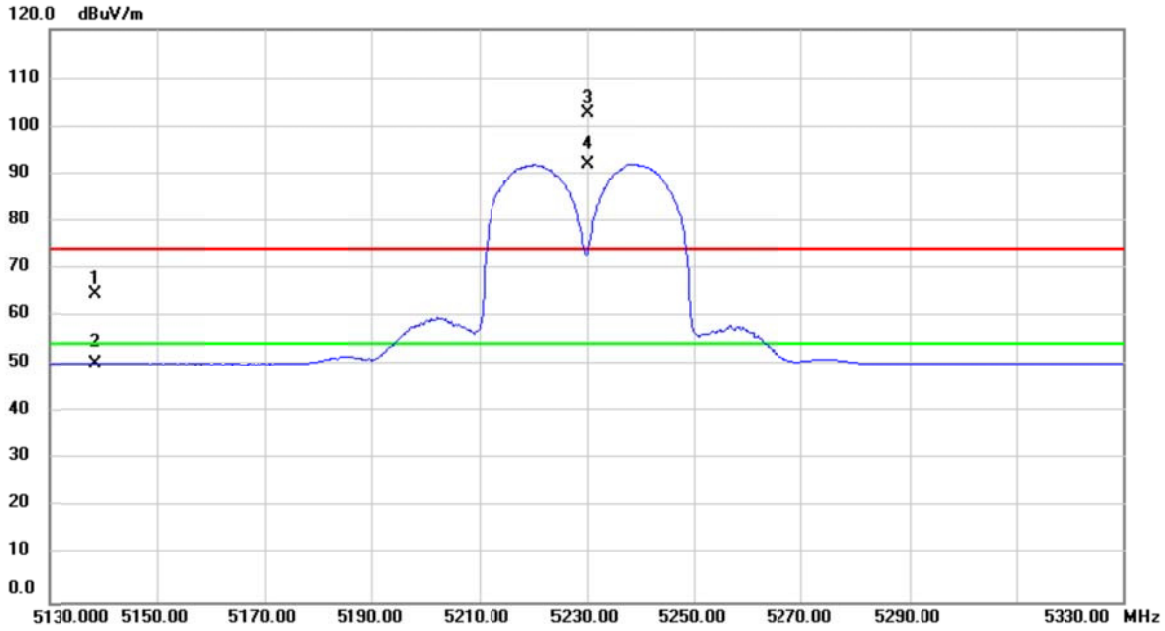
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	52.76	3.22	55.98	68.20	-12.22	peak	

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

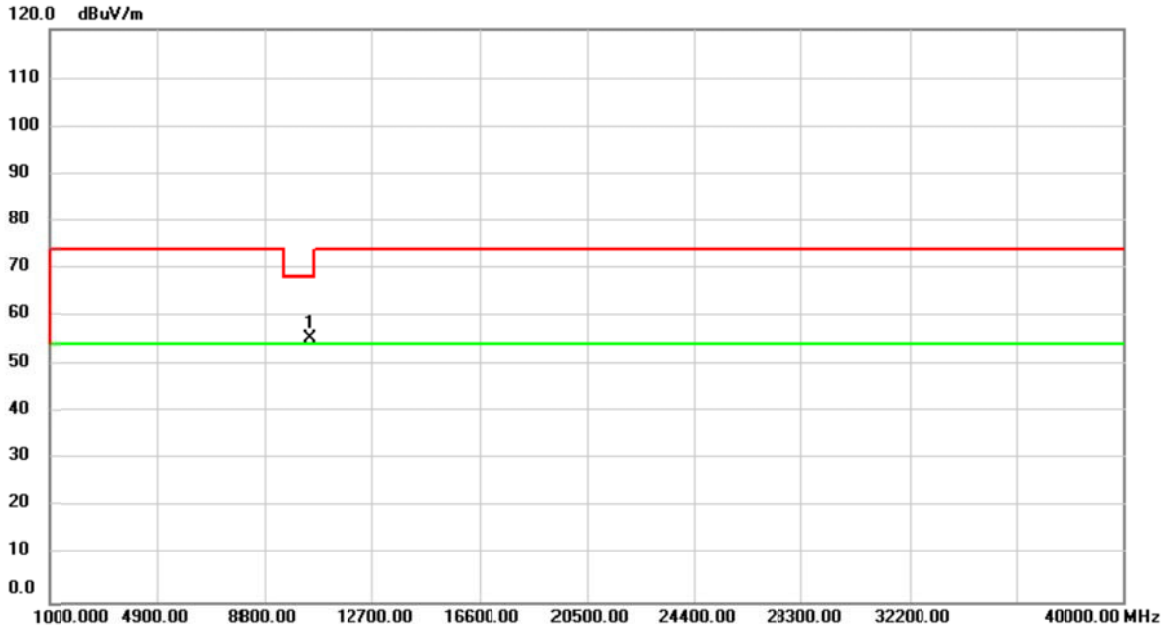
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5138.600	26.08	38.44	64.52	74.00	-9.48	peak	
2		5138.600	11.88	38.44	50.32	54.00	-3.68	AVG	
3	X	5230.000	64.15	38.54	102.69	74.00	28.69	peak	No Limit
4	*	5230.000	53.50	38.54	92.04	54.00	38.04	AVG	No Limit

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

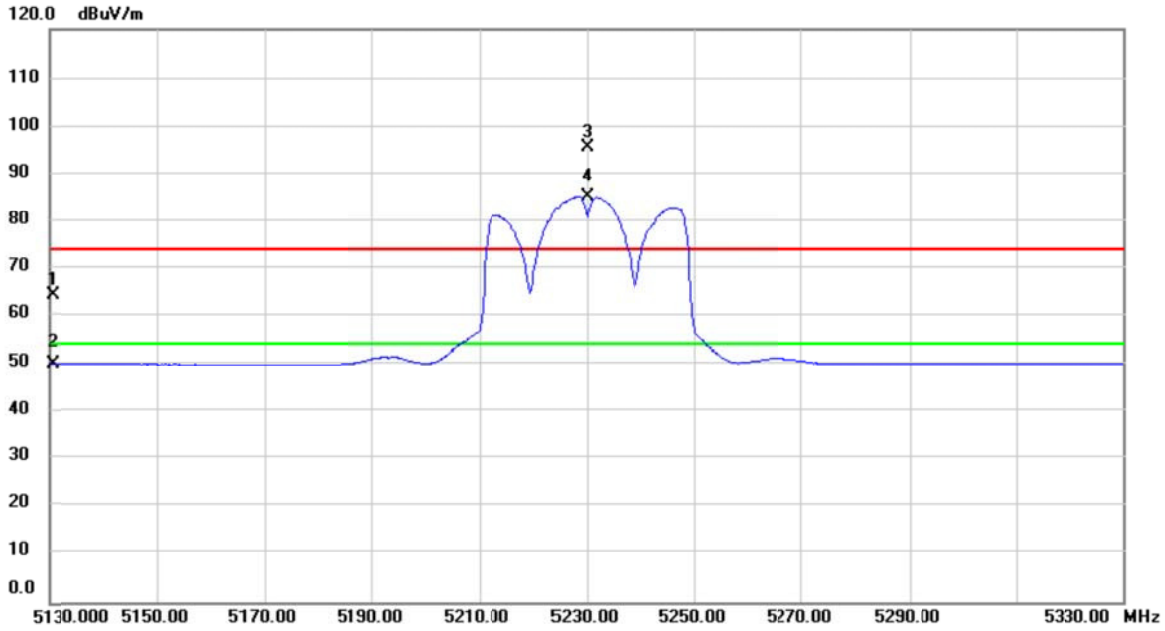
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	52.15	3.21	55.36	68.20	-12.84	peak	

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

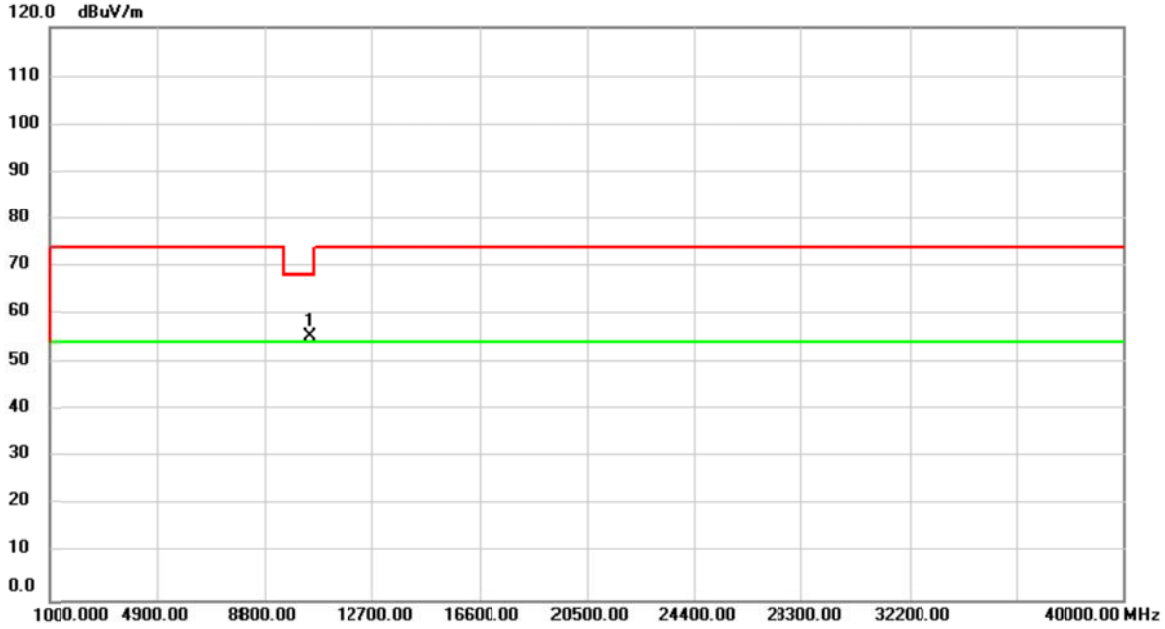
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5130.600	25.78	38.42	64.20	74.00	-9.80	peak	
2		5130.600	11.87	38.42	50.29	54.00	-3.71	AVG	
3	X	5230.000	57.04	38.54	95.58	74.00	21.58	peak	No Limit
4	*	5230.000	46.50	38.54	85.04	54.00	31.04	AVG	No Limit

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

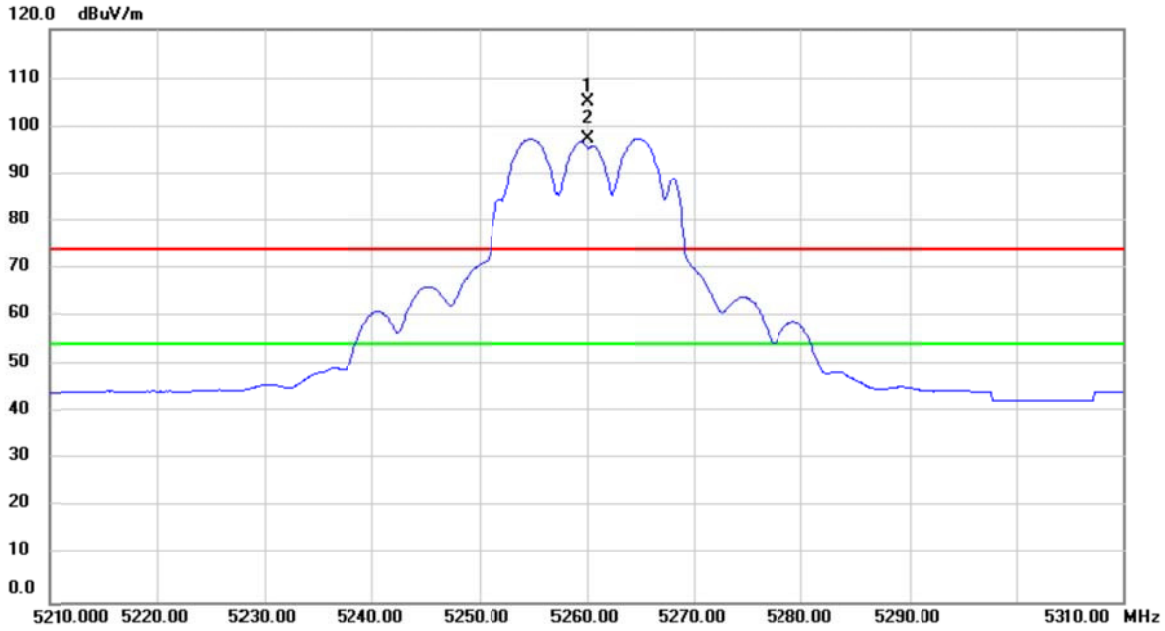
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	52.24	3.21	55.45	68.20	-12.75	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

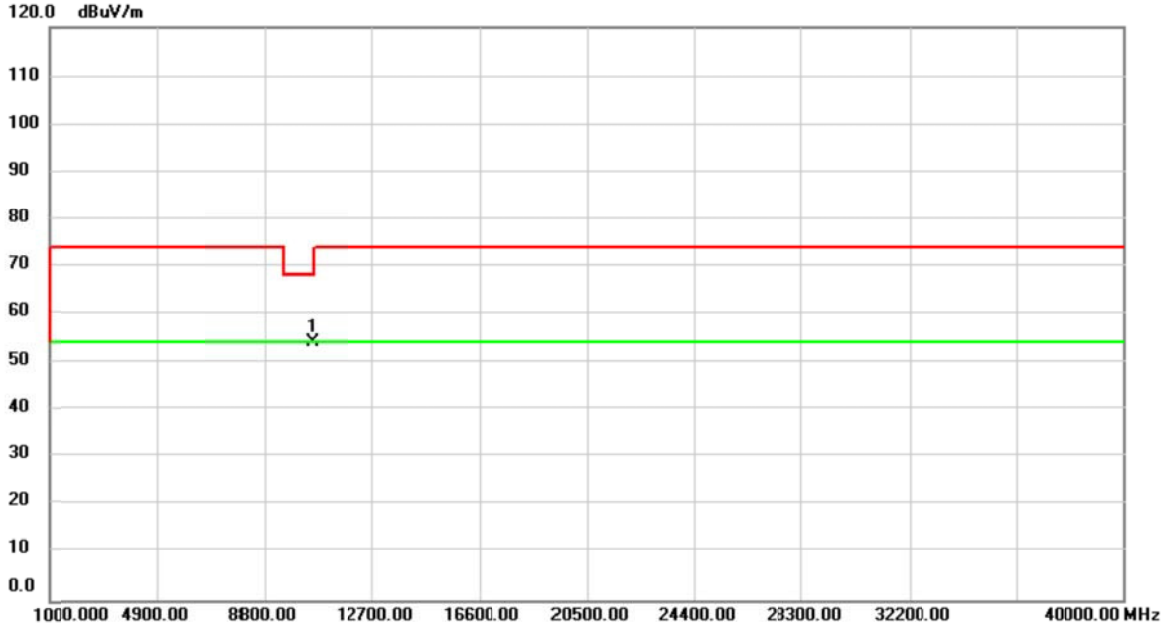
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5260.000	66.70	38.58	105.28	74.00	31.28	peak	No Limit
2	*	5260.000	58.90	38.58	97.48	54.00	43.48	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

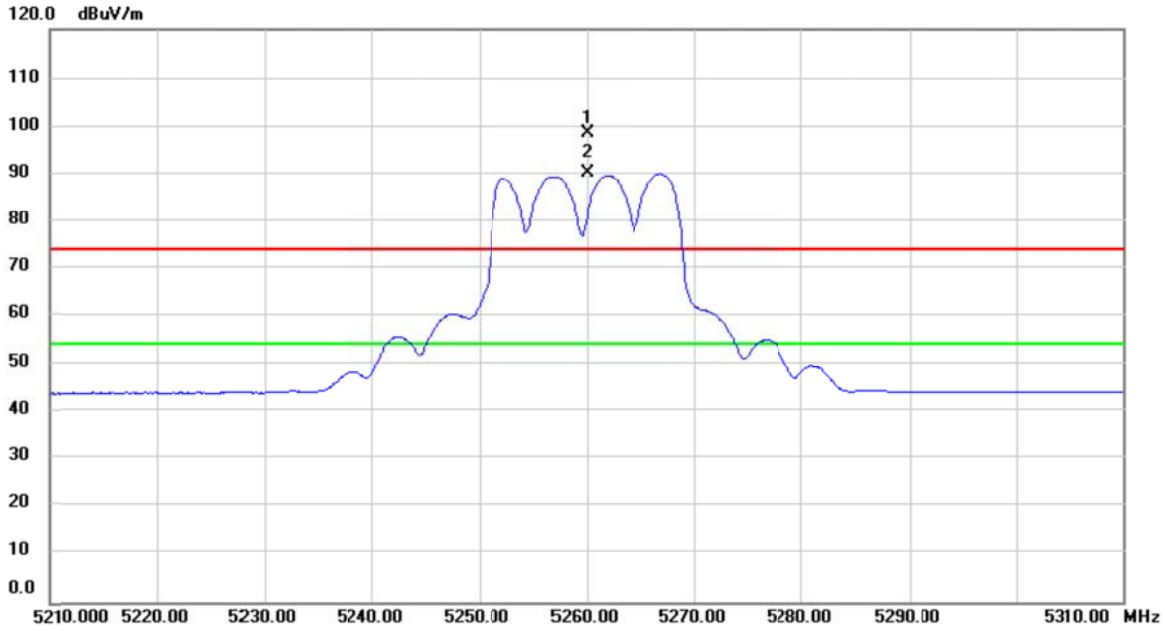
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10520.00	50.82	3.25	54.07	68.20	-14.13	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

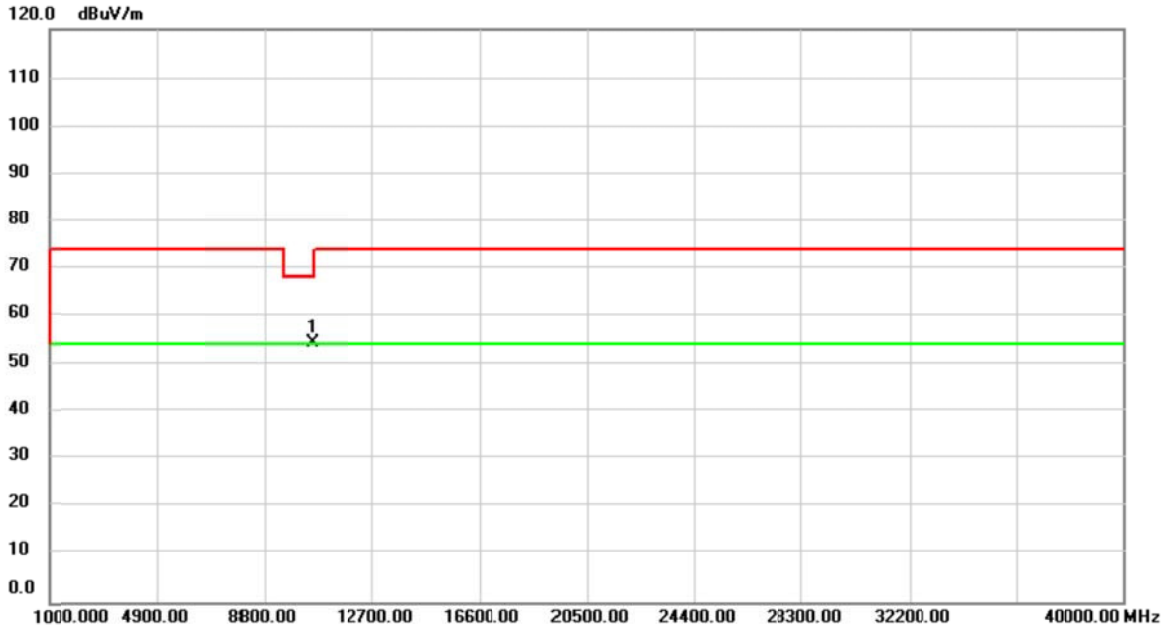
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5260.000	59.89	38.58	98.47	74.00	24.47	peak	No Limit
2	*	5260.000	51.43	38.58	90.01	54.00	36.01	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

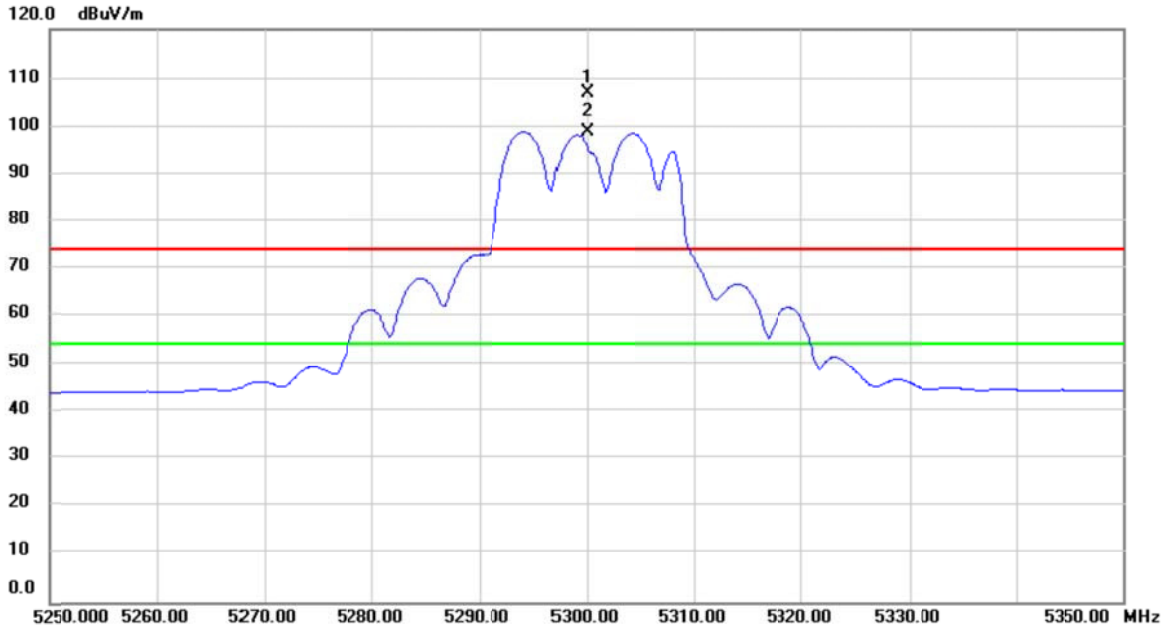
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10520.00	51.24	3.25	54.49	68.20	-13.71	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

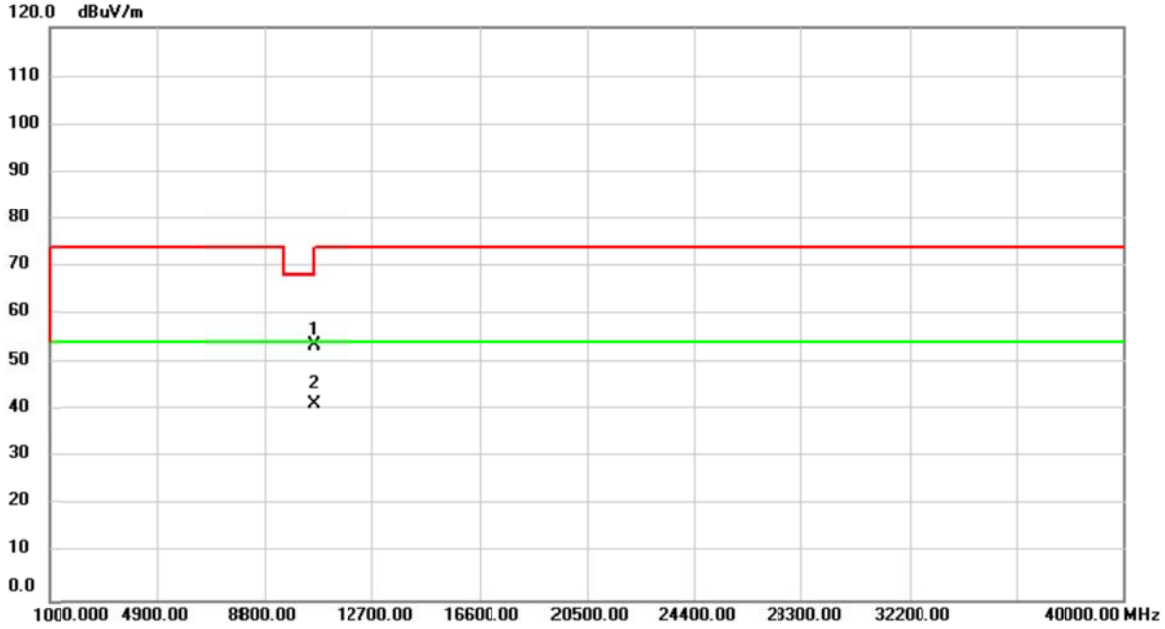
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5300.000	68.29	38.63	106.92	74.00	32.92	peak	No Limit
2	*	5300.000	60.17	38.63	98.80	54.00	44.80	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

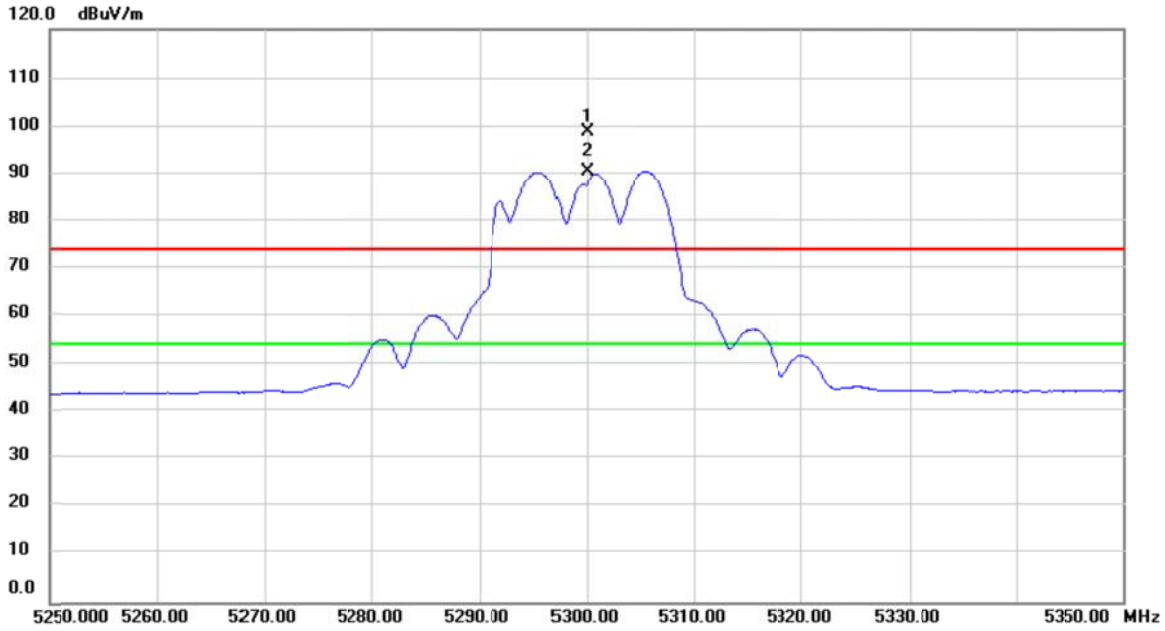
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10600.10	50.27	3.42	53.69	74.00	-20.31	peak	
2	*	10600.10	37.74	3.42	41.16	54.00	-12.84	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

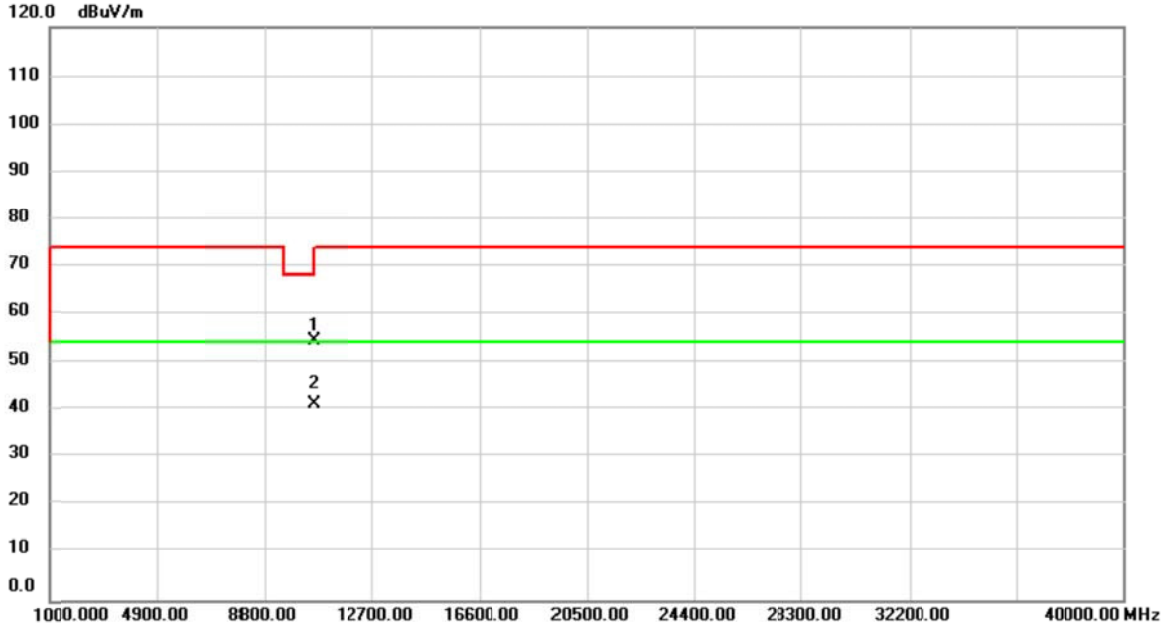
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5300.000	60.14	38.63	98.77	74.00	24.77	peak	No Limit
2	*	5300.000	51.79	38.63	90.42	54.00	36.42	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

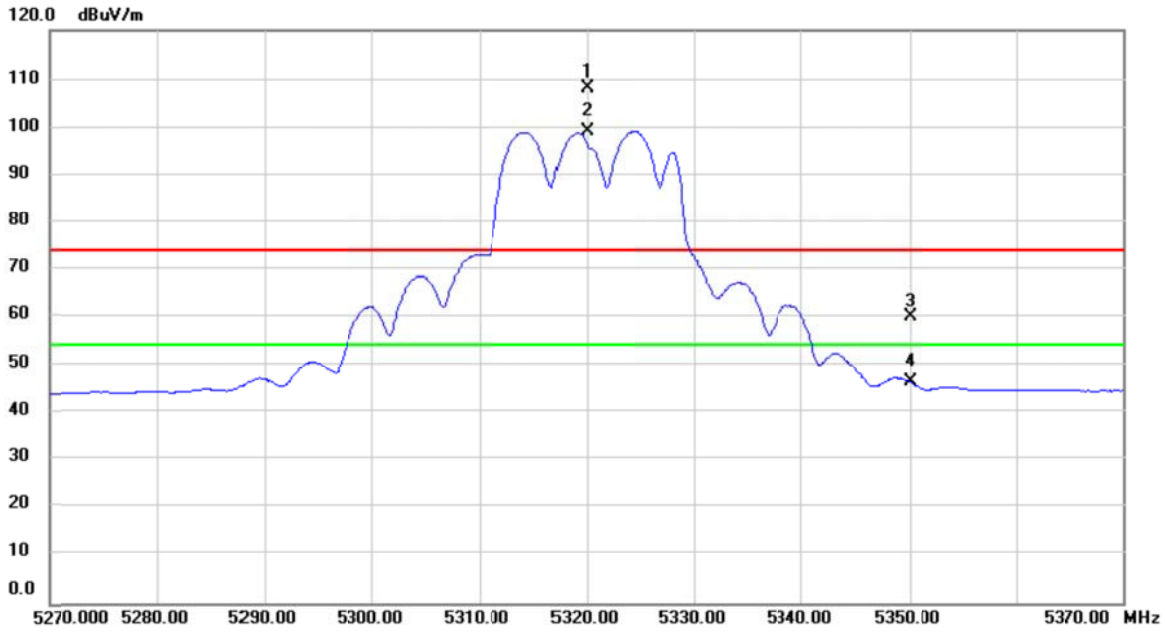
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10600.10	50.91	3.42	54.33	74.00	-19.67	peak	
2	*	10600.10	37.70	3.42	41.12	54.00	-12.88	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

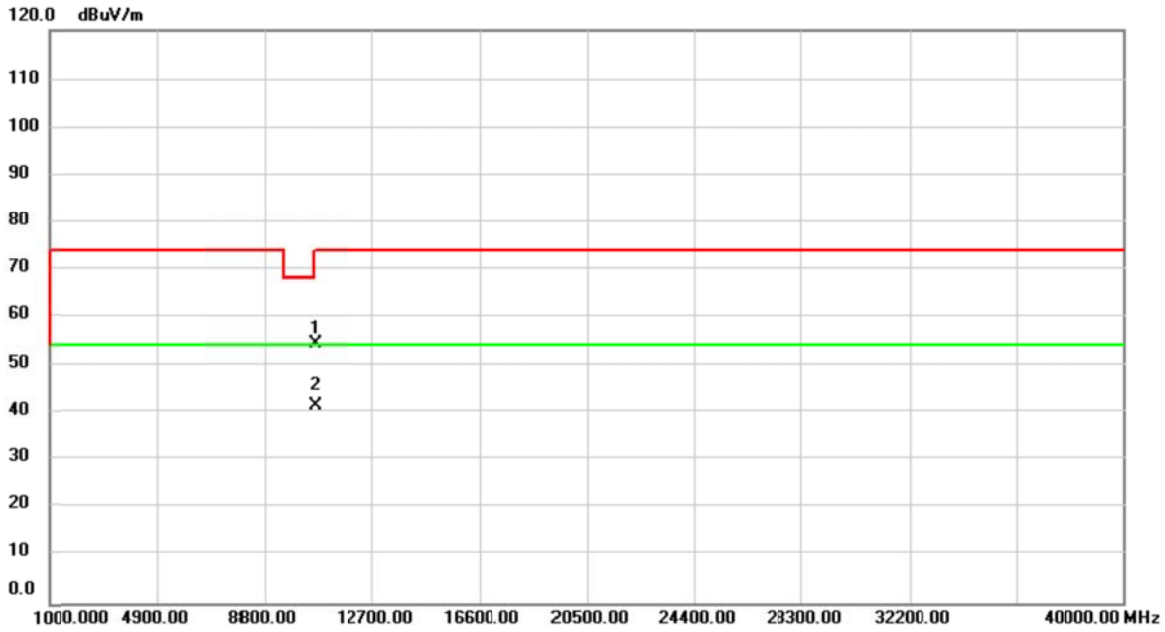
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5320.000	69.40	38.66	108.06	74.00	34.06	peak	No Limit
2	*	5320.000	60.56	38.66	99.22	54.00	45.22	AVG	No Limit
3		5350.000	21.56	38.69	60.25	74.00	-13.75	peak	
4		5350.000	7.97	38.69	46.66	54.00	-7.34	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

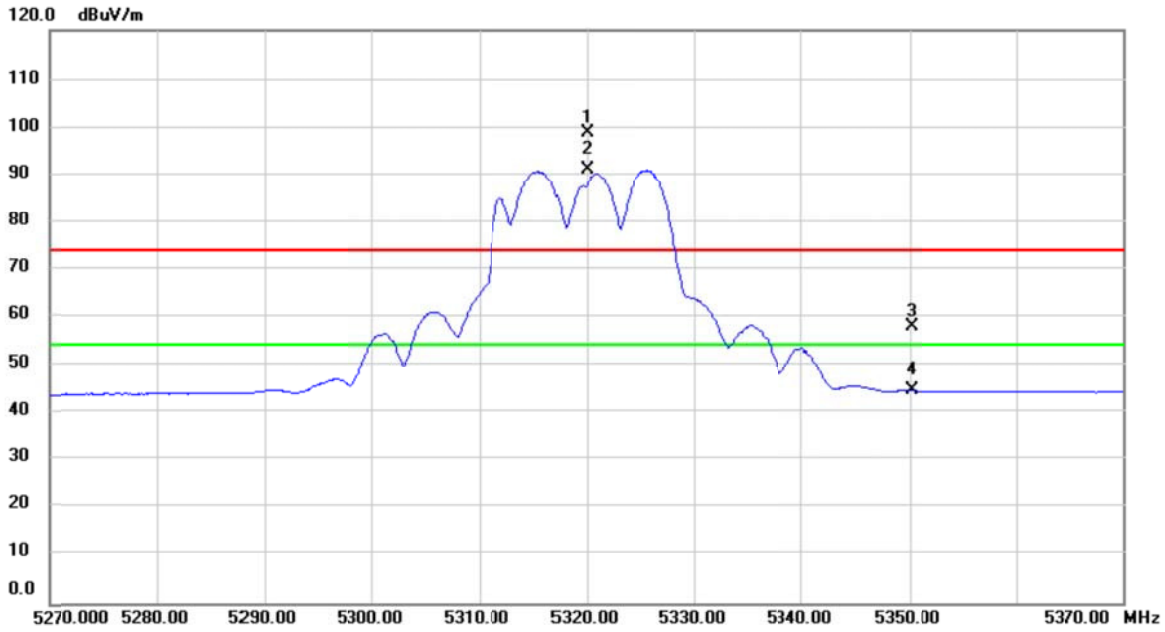
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10640.00	51.02	3.51	54.53	74.00	-19.47	peak	
2	*	10640.00	38.08	3.51	41.59	54.00	-12.41	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

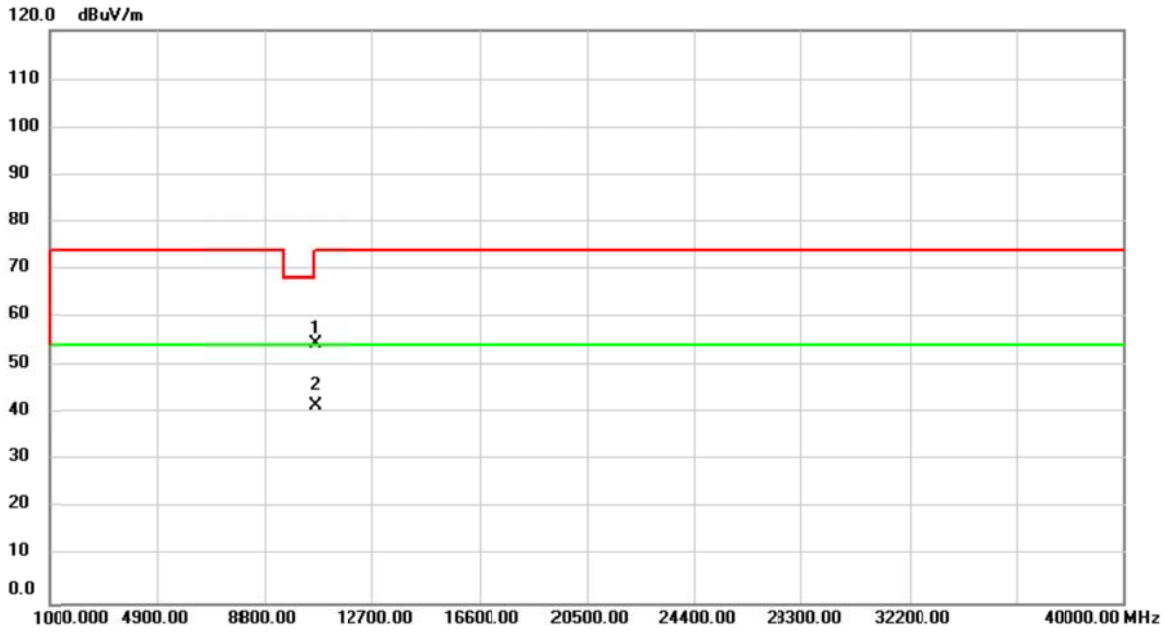
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5320.000	60.07	38.66	98.73	74.00	24.73	peak	No Limit
2	*	5320.000	52.25	38.66	90.91	54.00	36.91	AVG	No Limit
3		5350.200	19.38	38.69	58.07	74.00	-15.93	peak	
4		5350.200	6.16	38.69	44.85	54.00	-9.15	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

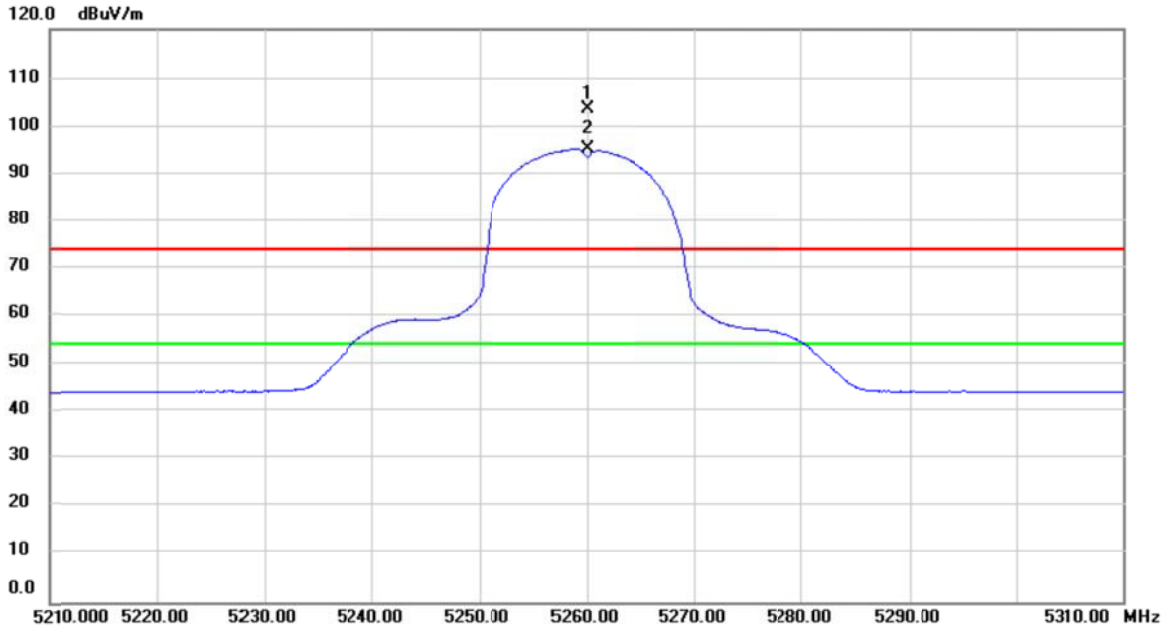
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10640.00	51.02	3.51	54.53	74.00	-19.47	peak	
2	*	10640.00	38.07	3.51	41.58	54.00	-12.42	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

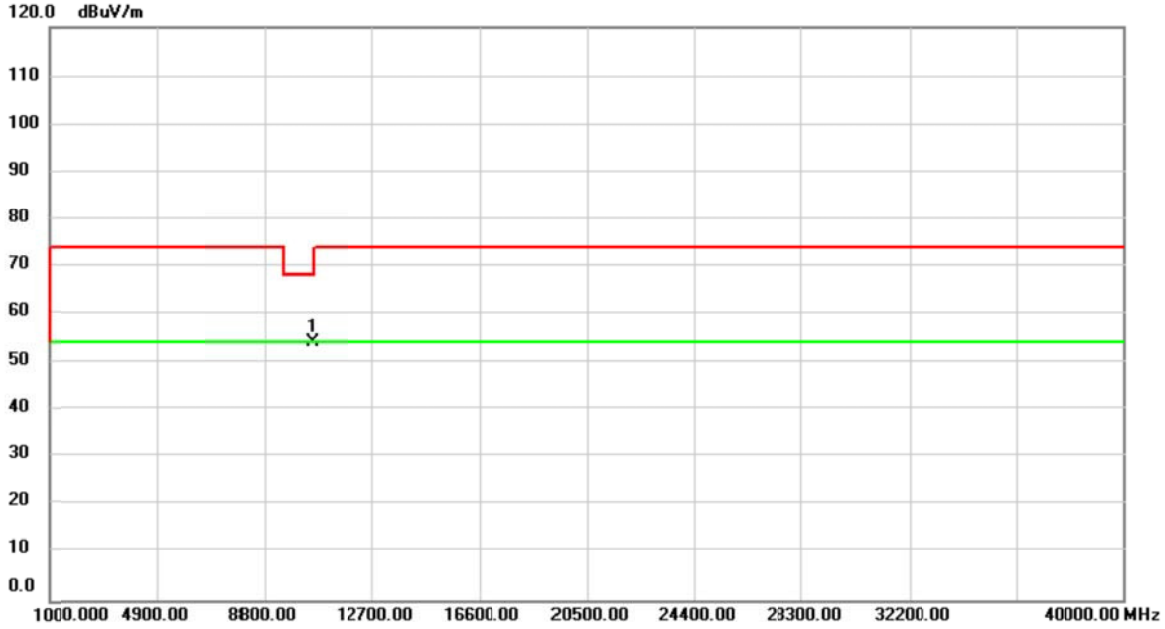
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5260.000	65.17	38.58	103.75	74.00	29.75	peak	No Limit
2	*	5260.000	56.61	38.58	95.19	54.00	41.19	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

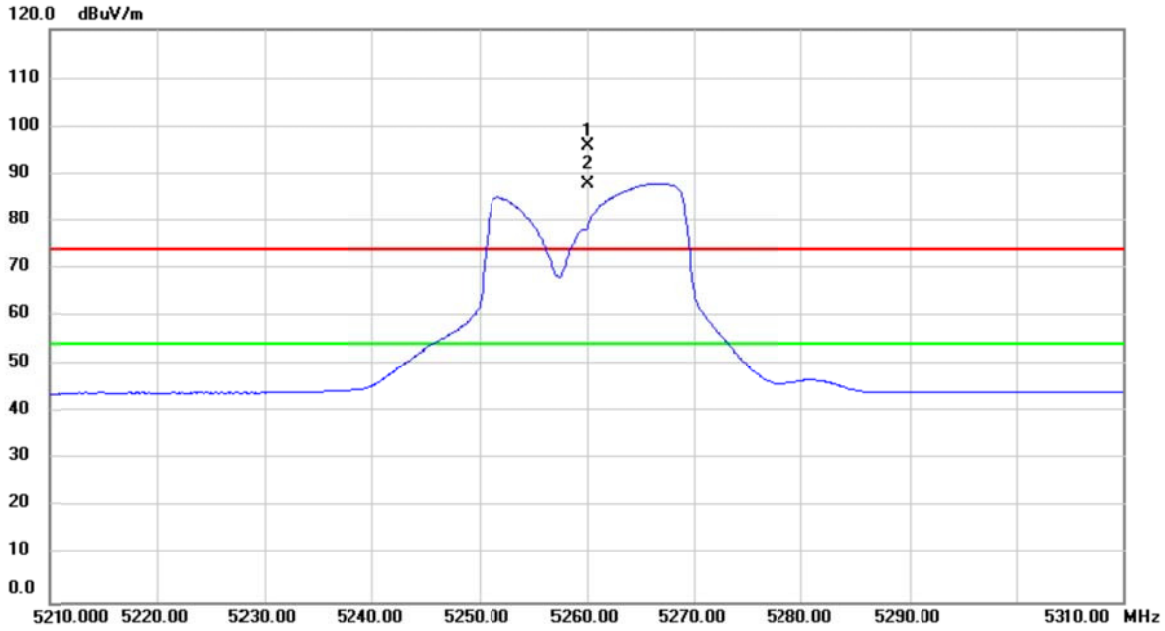
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10520.00	50.77	3.25	54.02	68.20	-14.18	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

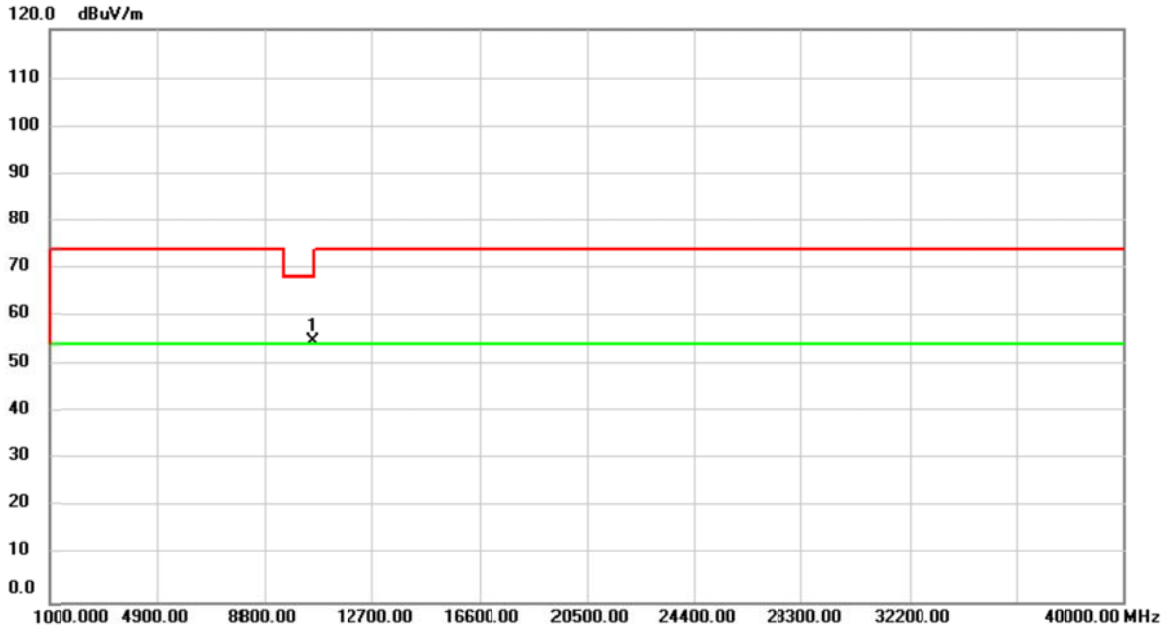
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5260.000	57.30	38.58	95.88	74.00	21.88	peak	No Limit
2	*	5260.000	49.25	38.58	87.83	54.00	33.83	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

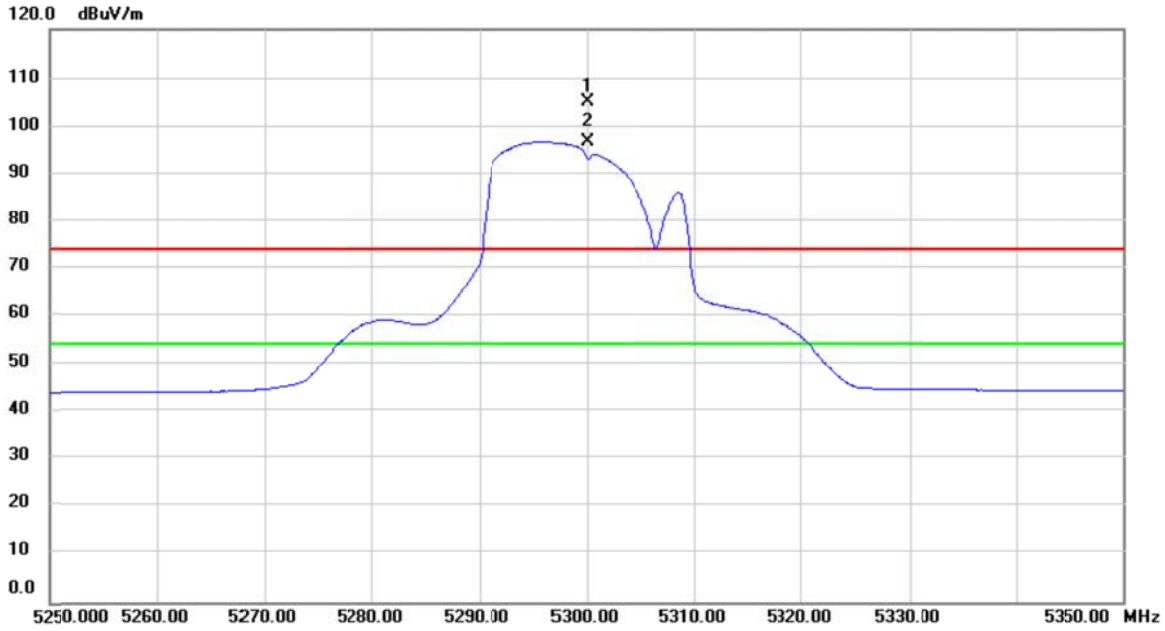
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10520.00	51.43	3.25	54.68	68.20	-13.52	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

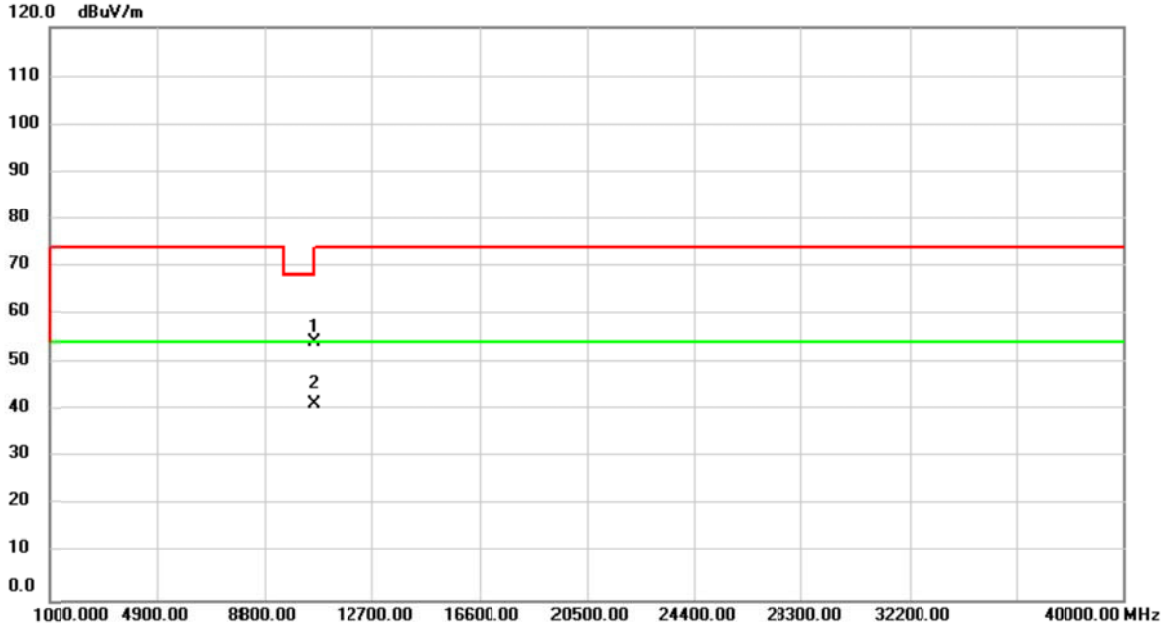
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5300.000	66.52	38.63	105.15	74.00	31.15	peak	No Limit
2	*	5300.000	58.08	38.63	96.71	54.00	42.71	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

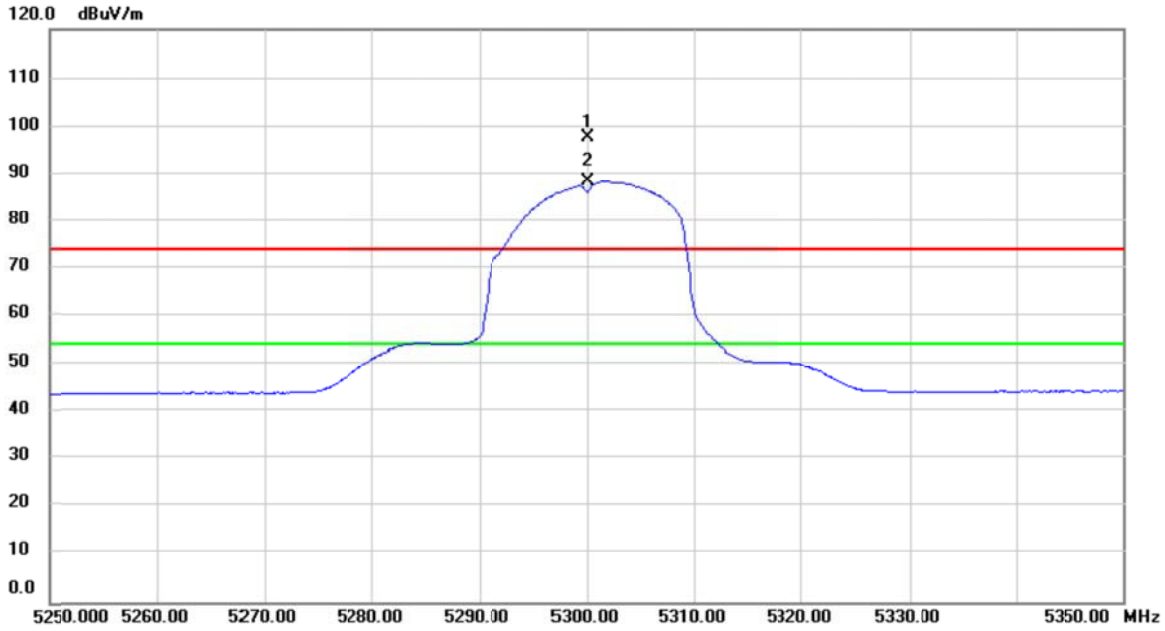
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10600.10	50.71	3.42	54.13	74.00	-19.87	peak	
2	*	10600.10	37.74	3.42	41.16	54.00	-12.84	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

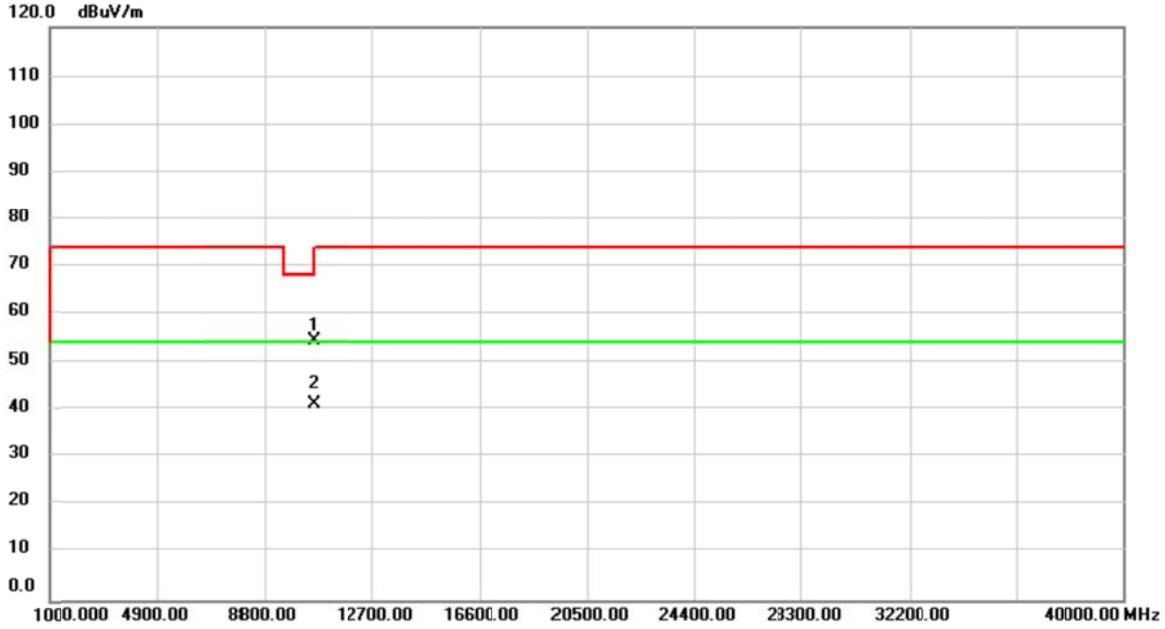
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5300.000	58.98	38.63	97.61	74.00	23.61	peak	No Limit
2	*	5300.000	49.63	38.63	88.26	54.00	34.26	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

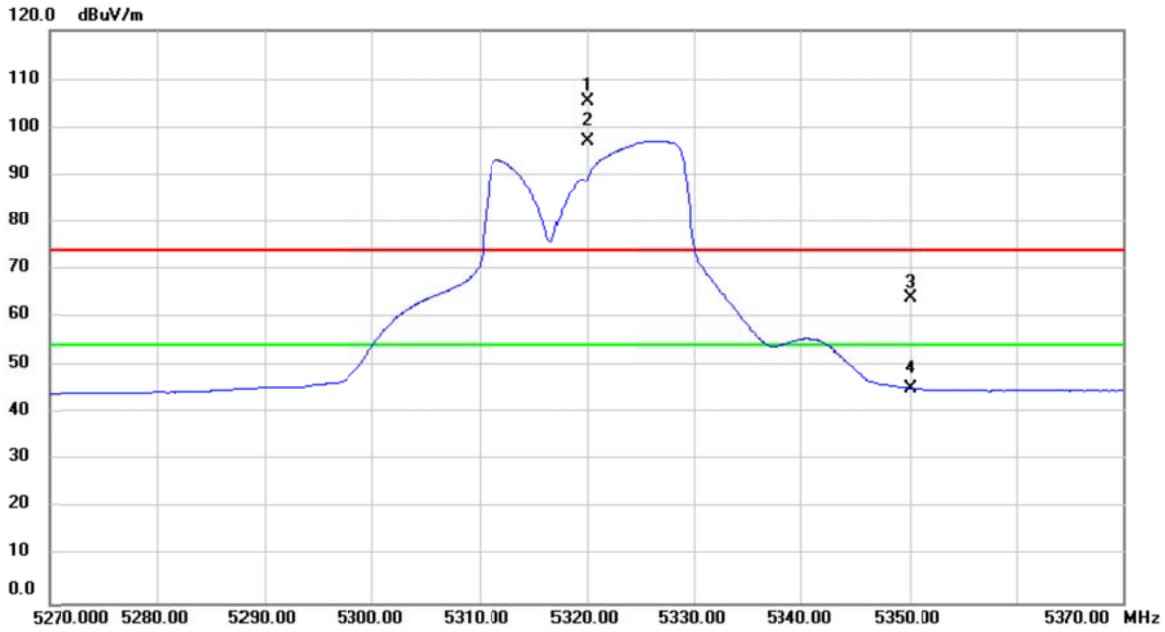
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10600.10	51.02	3.42	54.44	74.00	-19.56	peak	
2	*	10600.10	37.72	3.42	41.14	54.00	-12.86	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

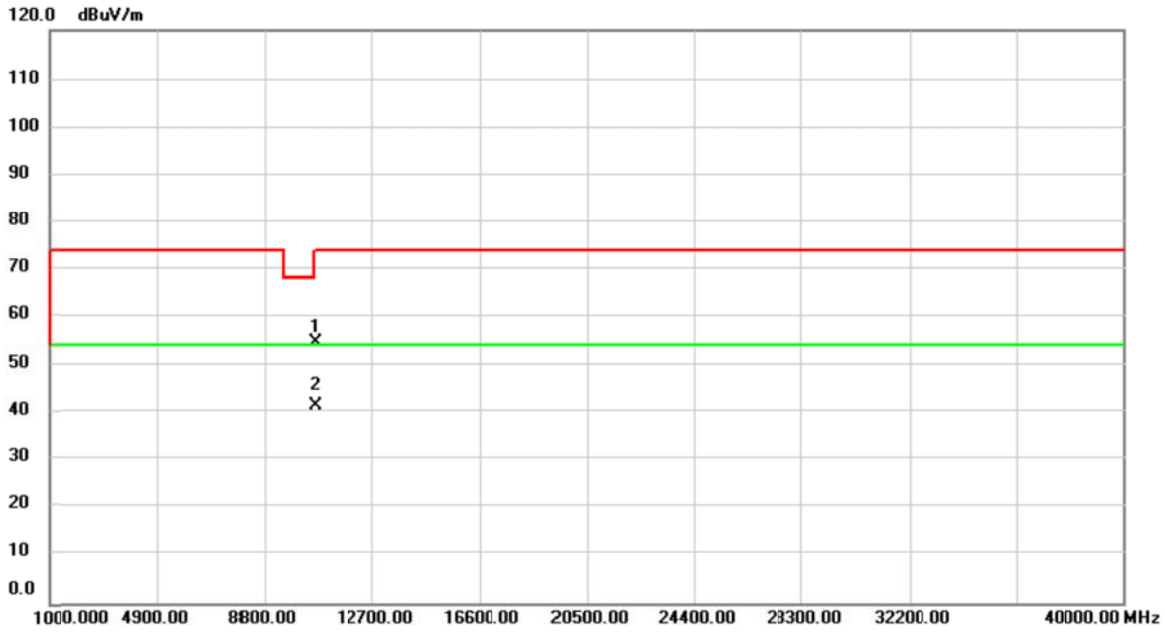
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5320.000	66.71	38.66	105.37	74.00	31.37	peak	No Limit
2	*	5320.000	58.44	38.66	97.10	54.00	43.10	AVG	No Limit
3		5350.000	25.37	38.69	64.06	74.00	-9.94	peak	
4		5350.100	6.55	38.69	45.24	54.00	-8.76	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

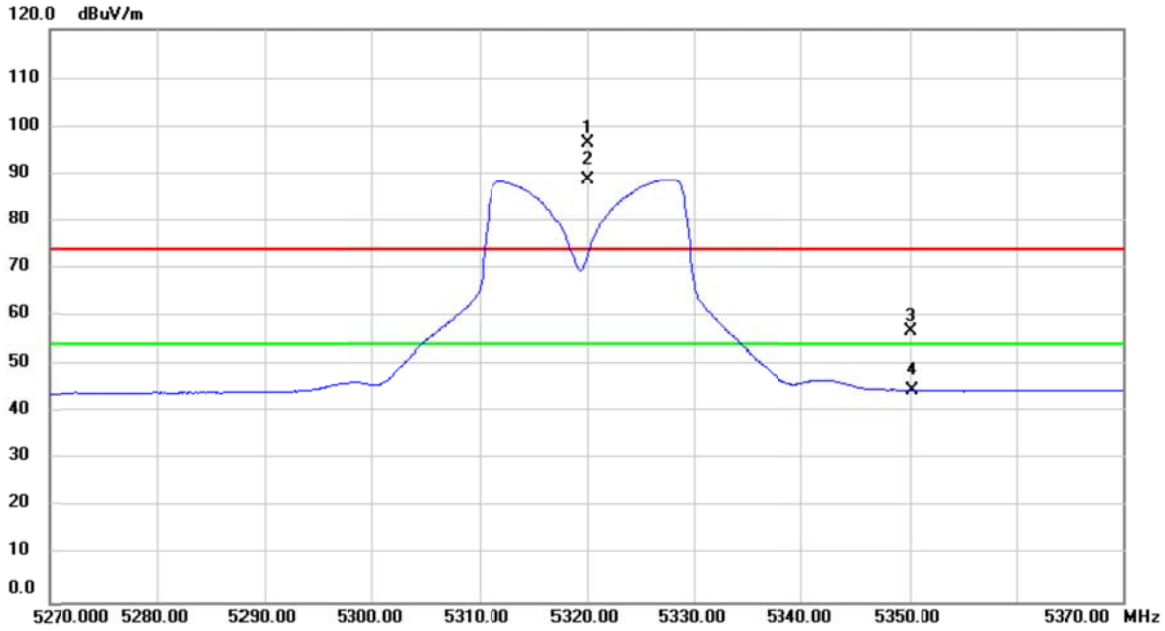
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10640.00	51.36	3.51	54.87	74.00	-19.13	peak	
2	*	10640.00	38.14	3.51	41.65	54.00	-12.35	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

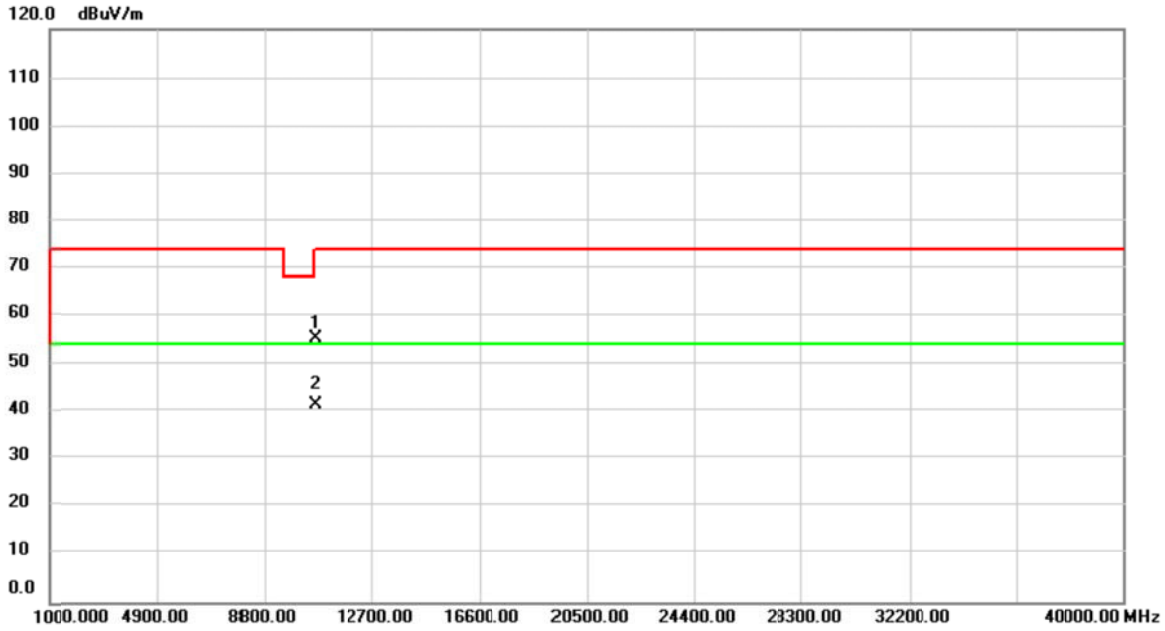
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5320.000	57.76	38.66	96.42	74.00	22.42	peak	No Limit
2	*	5320.000	50.08	38.66	88.74	54.00	34.74	AVG	No Limit
3		5350.000	18.29	38.69	56.98	74.00	-17.02	peak	
4		5350.200	5.92	38.69	44.61	54.00	-9.39	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

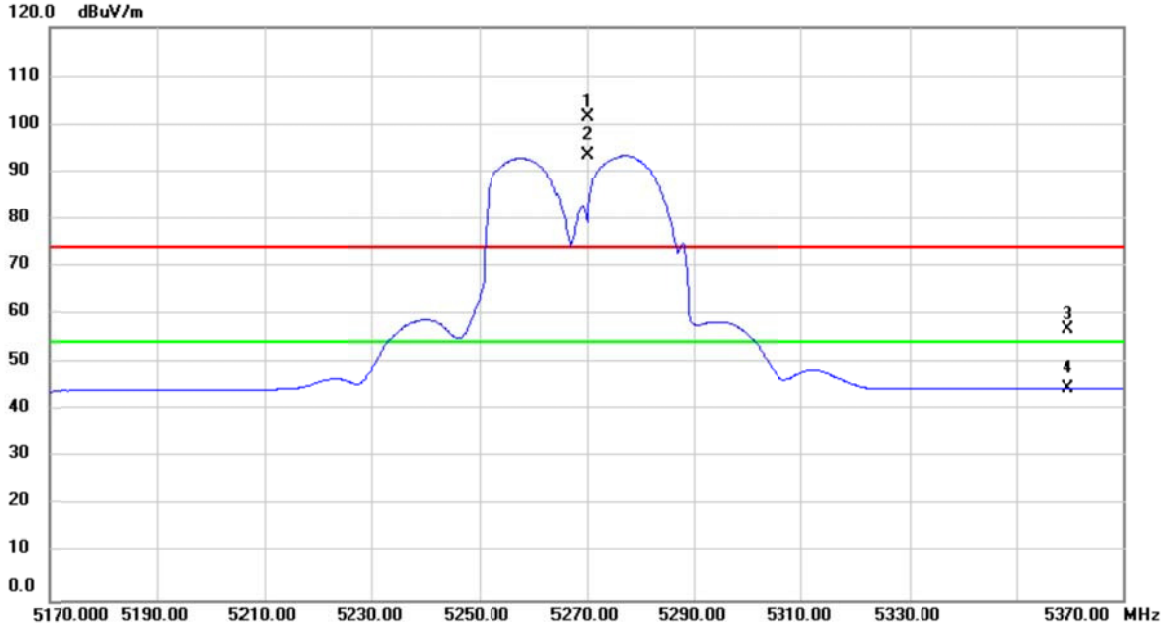
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10640.00	51.76	3.51	55.27	74.00	-18.73	peak	
2	*	10640.00	38.12	3.51	41.63	54.00	-12.37	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

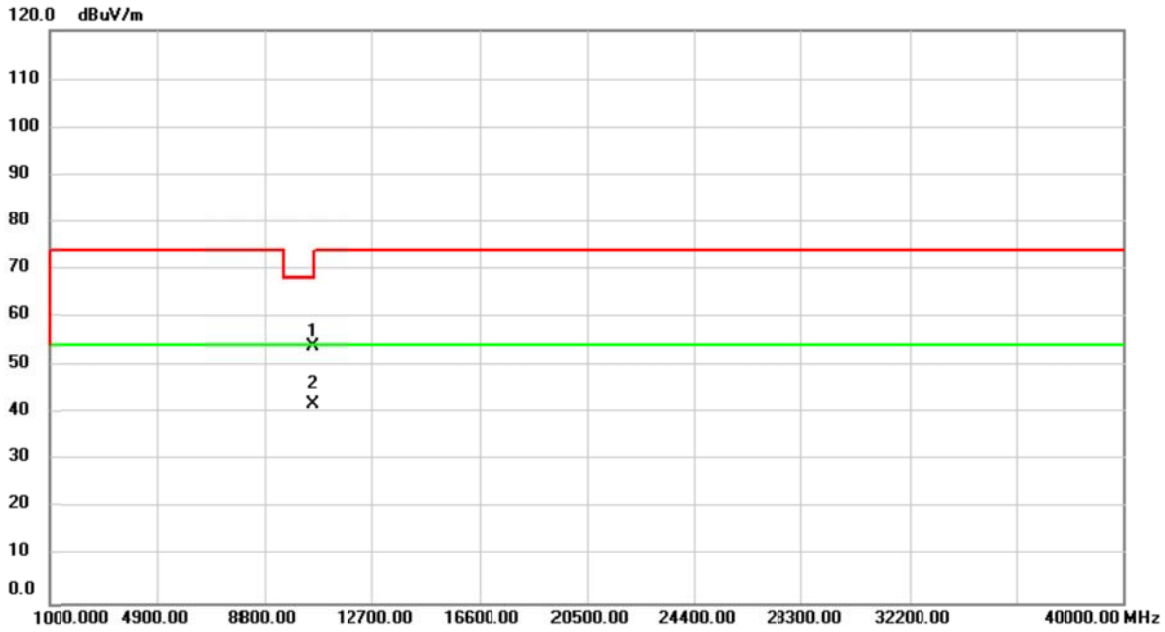
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5270.000	63.06	38.60	101.66	74.00	27.66	peak	No Limit
2	*	5270.000	54.77	38.60	93.37	54.00	39.37	AVG	No Limit
3		5359.800	18.01	38.70	56.71	74.00	-17.29	peak	
4		5359.800	5.94	38.70	44.64	54.00	-9.36	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

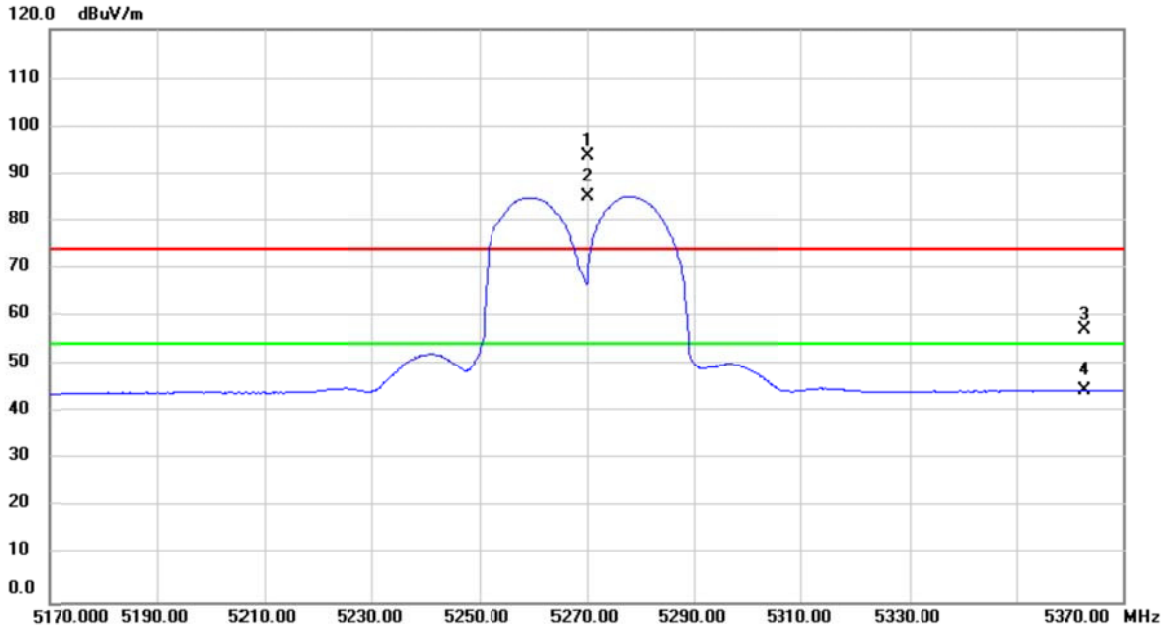
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10540.00	50.52	3.29	53.81	68.20	-14.39	peak	
2	*	10540.00	38.54	3.29	41.83	54.00	-12.17	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

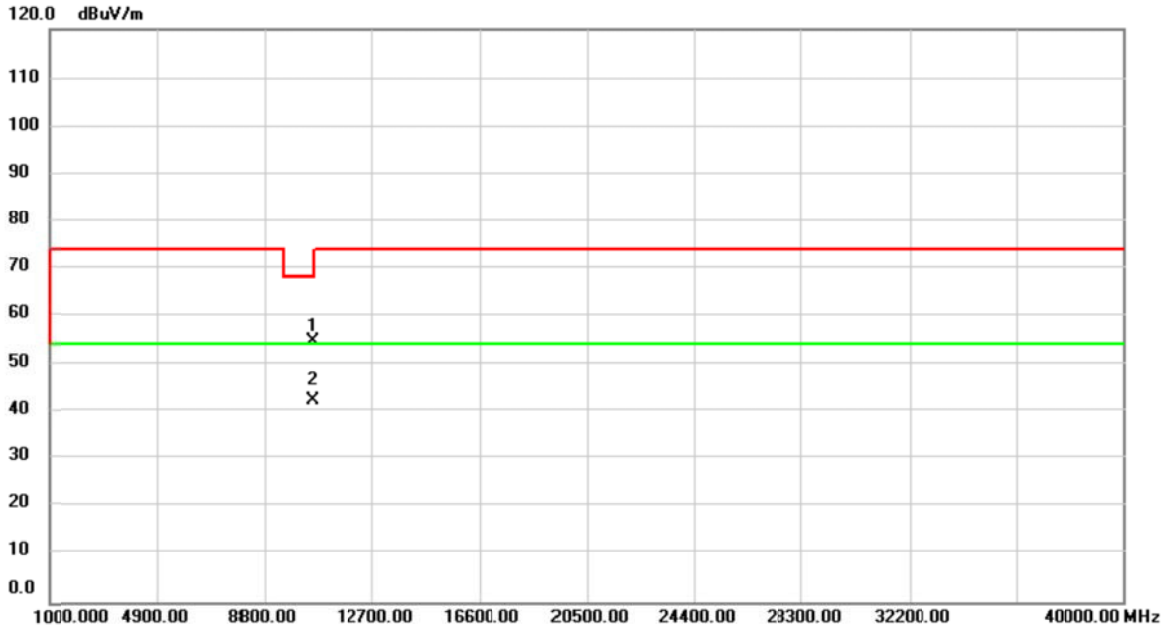
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5270.000	55.11	38.60	93.71	74.00	19.71	peak	No Limit
2	*	5270.000	46.57	38.60	85.17	54.00	31.17	AVG	No Limit
3		5363.000	18.55	38.71	57.26	74.00	-16.74	peak	
4		5363.000	5.81	38.71	44.52	54.00	-9.48	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

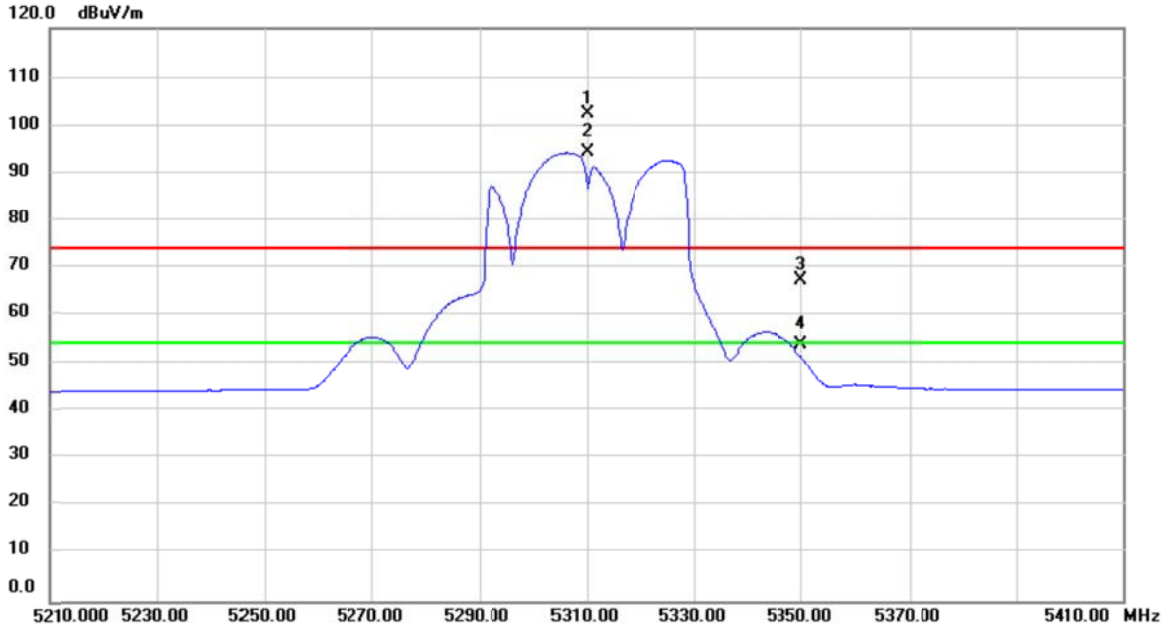
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10540.00	51.37	3.29	54.66	68.20	-13.54	peak	
2	*	10540.00	39.03	3.29	42.32	54.00	-11.68	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

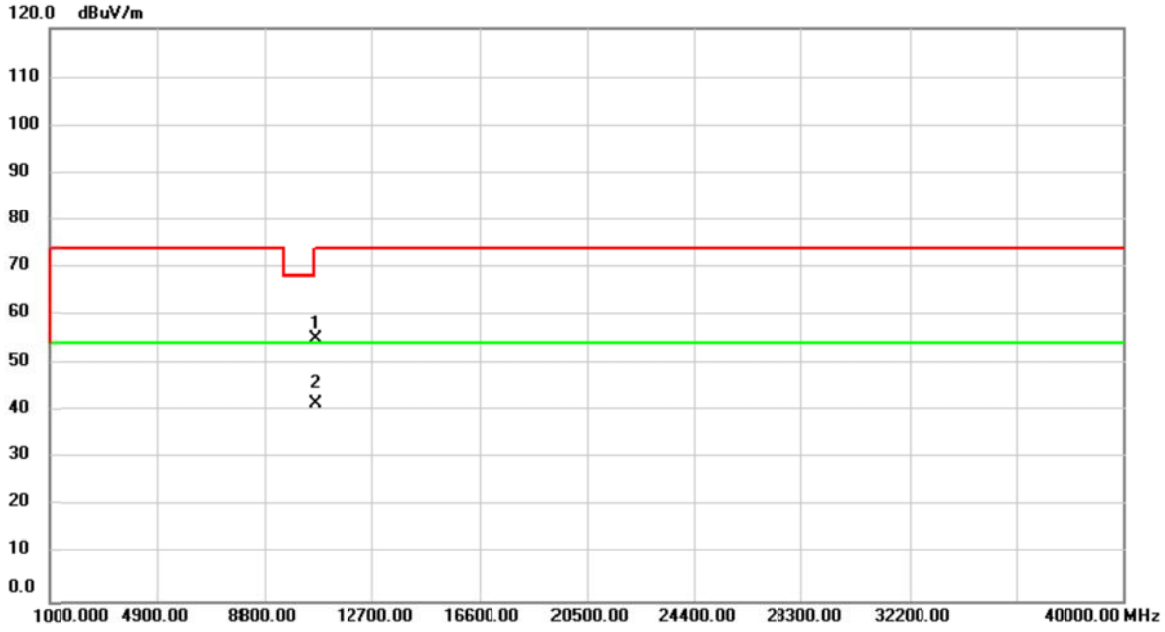
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5310.000	63.91	38.64	102.55	74.00	28.55	peak	No Limit
2	*	5310.000	55.57	38.64	94.21	54.00	40.21	AVG	No Limit
3		5350.000	28.53	38.69	67.22	74.00	-6.78	peak	
4		5350.000	15.23	38.69	53.92	54.00	-0.08	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

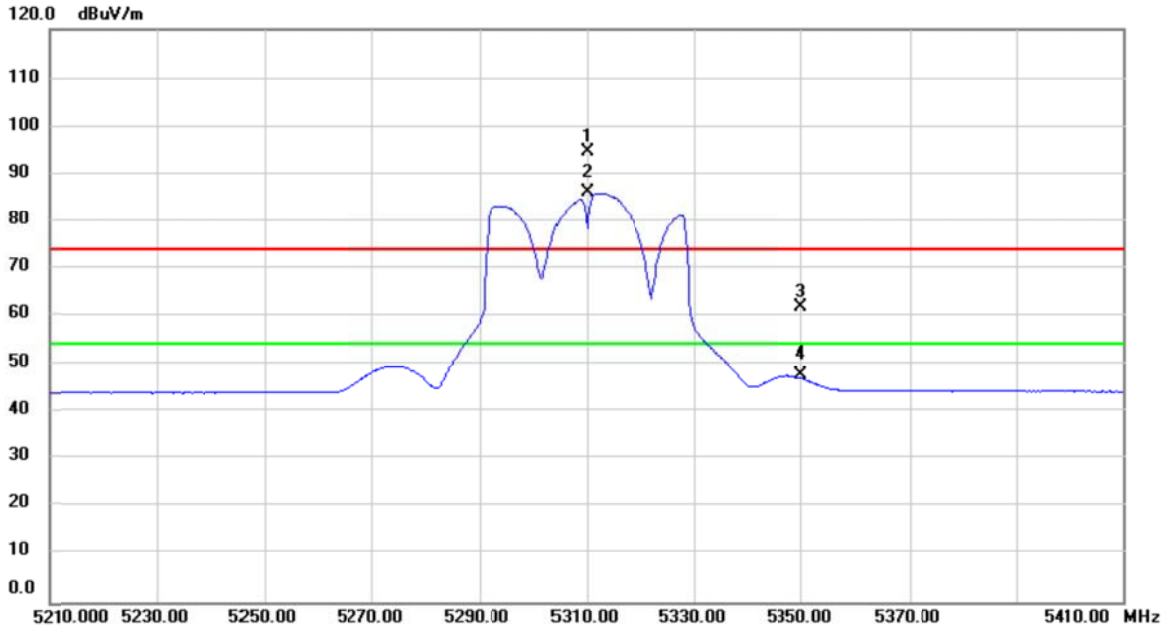
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10620.00	51.51	3.45	54.96	74.00	-19.04	peak	
2	*	10620.00	38.07	3.45	41.52	54.00	-12.48	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5310.000	55.96	38.64	94.60	74.00	20.60	peak	No Limit
2	*	5310.000	47.20	38.64	85.84	54.00	31.84	AVG	No Limit
3		5350.000	23.17	38.69	61.86	74.00	-12.14	peak	
4		5350.000	9.01	38.69	47.70	54.00	-6.30	AVG	