

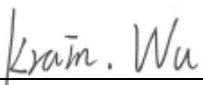
# FCC Radio Test Report

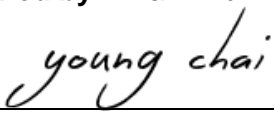
## FCC ID: VSFMS3A

This report concerns: **Original Grant**

**Project No.** : 1907H013  
**Equipment** : Tablet  
**Brand Name** : Juniper Systems  
**Test Model** : MS3A  
**Series Model** : N/A  
**Applicant** : Juniper Systems  
**Address** : 1132 W 1700 N Logan, UT 84321  
**Manufacturer** : Juniper Systems  
**Address** : 1132 W 1700 N Logan, UT 84321  
**Date of Receipt** : Jul. 16, 2019  
**Date of Test** : Jul. 18, 2019~Nov. 03, 2019  
**Issued Date** : Nov. 07, 2019  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: SH2019091645/SH2019091646/  
SH2019091641-5 /SH2019091641-6  
**Standard(s)** : FCC Part15, Subpart E(15.407)  
ANSI C63.10-2013  
FCC KDB 789033 D02 General UNII Test Procedures New Rules  
v02r01  
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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

  
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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).

**BTL's** reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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**BTL's** laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

**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.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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**REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue.	Nov. 07, 2019

### 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)				
Standard(s) Section	Test Item	Test Result	Judgement	Remark
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	N/A	-----
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS	-----
15.407(a)	Maximum Output Power	APPENDIX F	PASS	-----
15.407(a)	Power Spectral Density	APPENDIX G	PASS	-----
15.407(g)	Frequency Stability	APPENDIX H	PASS	-----
15.203	Antenna Requirements	-----	PASS	-----
15.407(c)	Automatically Discontinue Transmission	-----	PASS	NOTE (2)

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (3) For UNII-1 this device was functioned as a  
 Access point device     Client device

### 1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210, China

BTL's Test Firm Registration Number for FCC: 476765

BTL's Designation Number for FCC: CN1241

### 1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
SH-C01	CISPR	150 kHz ~ 30 MHz	± 2.26

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
SH-CB01	CISPR	9 KHz~30 MHz	V	3.79
		9 KHz~30 MHz	H	3.57
		30 MHz~200 MHz	V	4.04
		30 MHz~200 MHz	H	3.76
		200 MHz~1,000 MHz	V	4.24
		200 MHz~1,000 MHz	H	3.84
		1 GHz~18 GHz	V	4.46
		1 GHz~18 GHz	H	4.40
		18 GHz~40 GHz	V	3.95
		18 GHz~40 GHz	H	3.95

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

### 1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	24°C	61%	AC 120V	Summer Xu
Radiated Emissions-9K-30MHz	23°C	55%	AC 120V	Summer Xu
Radiated Emissions-30 MHz to 1GHz	23°C	55%	AC 120V	Summer Xu
Radiated Emissions-Above 1000 MHz	23°C	55%	AC 120V	Summer Xu
Spectrum Bandwidth	24°C	61%	AC 120V	Summer Xu
Maximum Output Power	24°C	61%	AC 120V	Summer Xu
Power Spectral Density	24°C	61%	AC 120V	Summer Xu
Frequency Stability	24°C	61%	AC 120V	Summer Xu



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Tablet
Brand Name	Juniper Systems
Test Model	MS3A
Series Model	N/A
Model Difference(s)	N/A
Software Version	MS3A-userdebug 9.1.0.1-20190619 eng.mirror.20190619.093211 test-keys
Hardware Version	DVT1
Power Source	#1 DC voltage supplied from AC/DC adapter. Model: PSAA30R-120 #2 Supplied from Li-ion battery pack.
Power Rating	#1 I/P: 100~240V 0.8A 50~60Hz O/P: 12V --- 2.5A #2 7.2V, 6.0A, 43.2W
Operation Frequency	UNII-1: 5150 MHz~5250 MHz UNII-2A: 5250 MHz~5350 MHz UNII-2C: 5470 MHz~5725 MHz UNII-3: 5725 MHz~5850 MHz
Modulation Type	OFDM
Bit Rate of Transmitter	Up to 876Mbps
Maximum Conducted Output Power for UNII-1 (2TX) Non-Beamforming	IEEE 802.11a: 17.15 dBm (0.0519 W) IEEE 802.11n (HT20): 15.05 dBm (0.0320 W) IEEE 802.11n (HT40): 13.84 dBm (0.0242 W) IEEE 802.11ac (VHT20): 14.98 dBm (0.0315 W) IEEE 802.11ac (VHT40): 13.70 dBm (0.0234 W) IEEE 802.11ac (VHT80): 10.81 dBm (0.0121 W)
Maximum Conducted Output Power for UNII-2A (2TX) Non-Beamforming	IEEE 802.11a: 17.00 dBm (0.0501 W) IEEE 802.11n (HT20): 14.90 dBm (0.0309 W) IEEE 802.11n (HT40): 13.54 dBm (0.0226 W) IEEE 802.11ac (VHT20): 14.91 dBm (0.0310 W) IEEE 802.11ac (VHT40): 13.44 dBm (0.0221 W) IEEE 802.11ac (VHT80): 11.44 dBm (0.0139 W)
Maximum Conducted Output Power for UNII-2C (2TX) Non-Beamforming	IEEE 802.11a: 15.61 dBm (0.0364 W) IEEE 802.11n (HT20): 14.54 dBm (0.0284 W) IEEE 802.11n (HT40): 14.31 dBm (0.0270 W) IEEE 802.11ac (VHT20): 14.54 dBm (0.0284 W) IEEE 802.11ac (VHT40): 14.22 dBm (0.0264 W) IEEE 802.11ac (VHT80): 10.93 dBm (0.0124 W)
Maximum Conducted Output Power for UNII-3 (2TX) Non-Beamforming	IEEE 802.11a: 16.08 dBm (0.0406 W) IEEE 802.11n (HT20): 14.91 dBm (0.0310 W) IEEE 802.11n (HT40): 13.81 dBm (0.0240 W) IEEE 802.11ac (VHT20): 14.98 dBm (0.0315 W) IEEE 802.11ac (VHT40): 13.68 dBm (0.0233 W) IEEE 802.11ac (VHT80): 10.57 dBm (0.0114 W)

## Note:

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

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
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				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-2A		UNII-2A		UNII-2A	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-2C		UNII-2C		UNII-2C	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590		
112	5560	126	5630		
116	5580	134	5670		
120	5600				
124	5620				
128	5640				
132	5660				
136	5680				
140	5700				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-3		UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

## 3. Antenna Specification:

## For UNII-1 &amp; UNII-2A

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	PIFA	N/A	1.3	N/A
2	N/A	N/A	PCB	N/A	0	N/A

## For UNII-2C

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	PIFA	N/A	2.1	N/A
2	N/A	N/A	PCB	N/A	0	N/A

## For UNII-3

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	PIFA	N/A	1.0	N/A
2	N/A	N/A	PCB	N/A	0	N/A

## Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides four completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain =  $G_{ANT}$ , that is Directional gain for UNII-1 & UNII-2A=1.3; for UNII-2C=2.1; for UNII-3=1.0.

## 4. Table for Antenna Configuration:

Operating Mode	TX Mode	2TX
IEEE 802.11a		V (Ant. 1 + Ant. 2)
IEEE 802.11n (HT20)		V (Ant. 1 + Ant. 2)
IEEE 802.11n (HT40)		V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT20)		V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT40)		V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT80)		V (Ant. 1 + Ant. 2)

## 2.2 TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 18	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 25	TX Mode

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

<b>AC power line conducted emissions test</b>	
Final Test Mode	Description
Mode 25	TX Mode

Radiated emissions test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 18	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)

Conducted test	
Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 18	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)

Note :

- (1) For radiated emission below 1 GHz test, the IEEE 802.11a is found to be the worst case and recorded.
- (2) For radiated emission above 1 GHz test, 1GHz~26.5GHz and 26.5GHz~40GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.

### 2.3 PARAMETERS OF TEST SOFTWARE

#### Non-Beamforming

UNII-1 - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	16	15	15
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11n (HT20)	14	13	13
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	12	11	

UNII-2A - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	15	17	17
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11n (HT20)	13	15	15
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	12	13	

UNII-2C - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11a	15	15	15
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11n (HT20)	14	14	15
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	12	13	13

UNII-3 - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	17	15	14
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11n (HT20)	16	15	14
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	14	13	

UNII-1 - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11ac (VHT20)	14	13	13
Test Frequency (MHz)	5190	5230	
IEEE 802.11ac (VHT40)	12	11	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	9		

UNII-2A - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11ac (VHT20)	13	15	15
Test Frequency (MHz)	5270	5310	
IEEE 802.11ac (VHT40)	12	13	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	11		

UNII-2C - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11ac (VHT20)	14	14	14
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11ac (VHT40)	12	13	13
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	10	10	

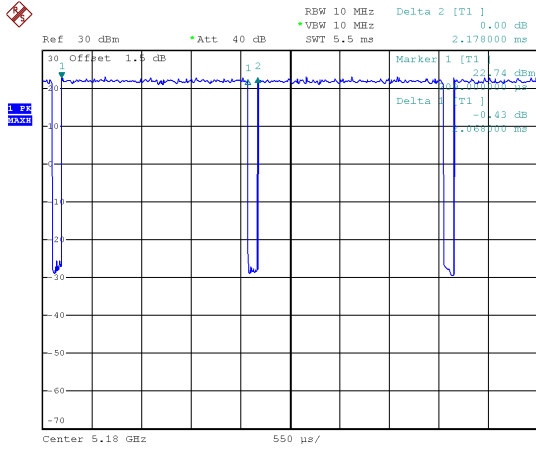
UNII-3 - 2TX			
Test Software	QRCT		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11ac (VHT20)	16	15	14
Test Frequency (MHz)	5755	5795	
IEEE 802.11ac (VHT40)	14	13	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	11		



## 2.4 DUTY CYCLE

If duty cycle is  $\geq 98\%$ , duty factor is not required.  
 If duty cycle is  $< 98\%$ , duty factor shall be considered.

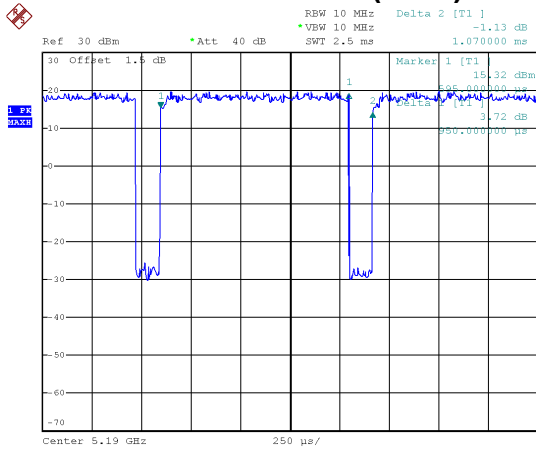
### IEEE 802.11a



Date: 22.AUG.2019 10:42:28

Duty cycle =  $2.068 \text{ ms} / 2.178 \text{ ms} = 94.95\%$   
 Duty Factor =  $10 * \log(1 / 94.95\%) = 0.23 \text{ dB}$

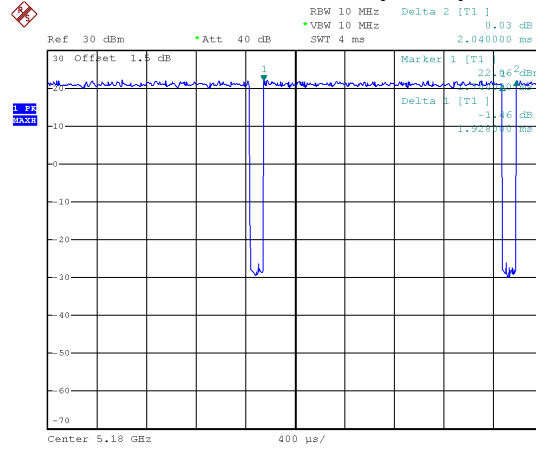
### IEEE 802.11n (HT40)



Date: 22.AUG.2019 11:06:16

Duty cycle =  $0.950 \text{ ms} / 1.070 \text{ ms} = 88.79\%$   
 Duty Factor =  $10 * \log(1 / 88.79\%) = 0.52 \text{ dB}$

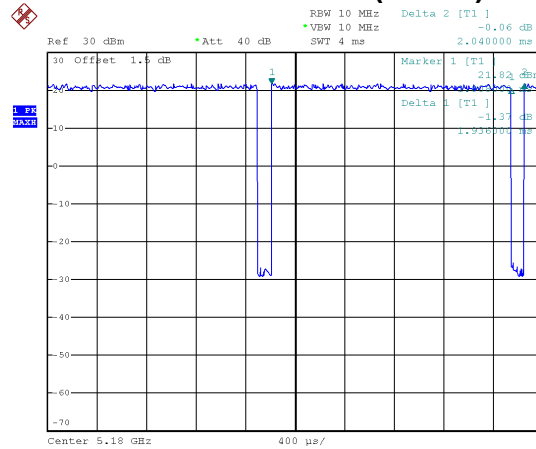
### IEEE 802.11n (HT20)



Date: 22.AUG.2019 11:02:12

Duty cycle =  $1.928 \text{ ms} / 2.040 \text{ ms} = 94.51\%$   
 Duty Factor =  $10 * \log(1 / 94.51\%) = 0.25 \text{ dB}$

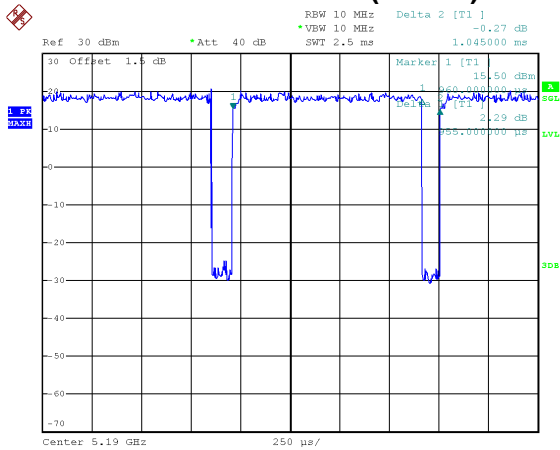
### IEEE 802.11ac (VHT20)



Date: 22.AUG.2019 11:15:05

Duty cycle =  $1.936 \text{ ms} / 2.040 \text{ ms} = 94.90\%$   
 Duty Factor =  $10 * \log(1 / 94.90\%) = 0.23 \text{ dB}$

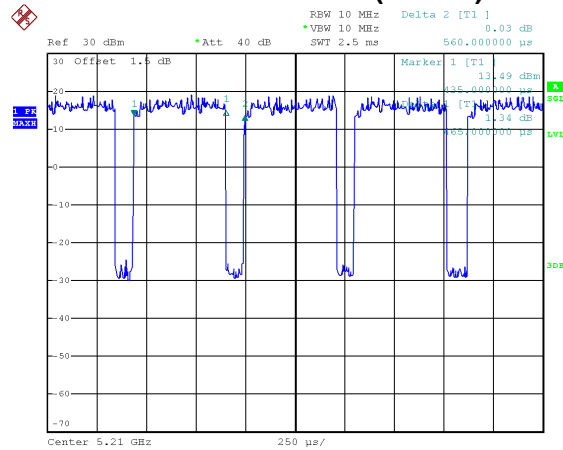
## IEEE 802.11ac (VHT40)



Date: 22.AUG.2019 11:08:06

Duty cycle = 0.955 ms / 1.045 ms = 91.39%  
 Duty Factor = 10 \* log(1 / 91.39%) = 0.39 dB

## IEEE 802.11ac (VHT80)



Date: 22.AUG.2019 11:10:47

Duty cycle = 0.465 ms / 0.560 ms = 83.04%  
 Duty Factor = 10 \* log(1 / 83.04%) = 0.81 dB

### NOTE:

For IEEE 802.11a, IEEE 802.11n (HT20) and IEEE 802.11ac (VHT20):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

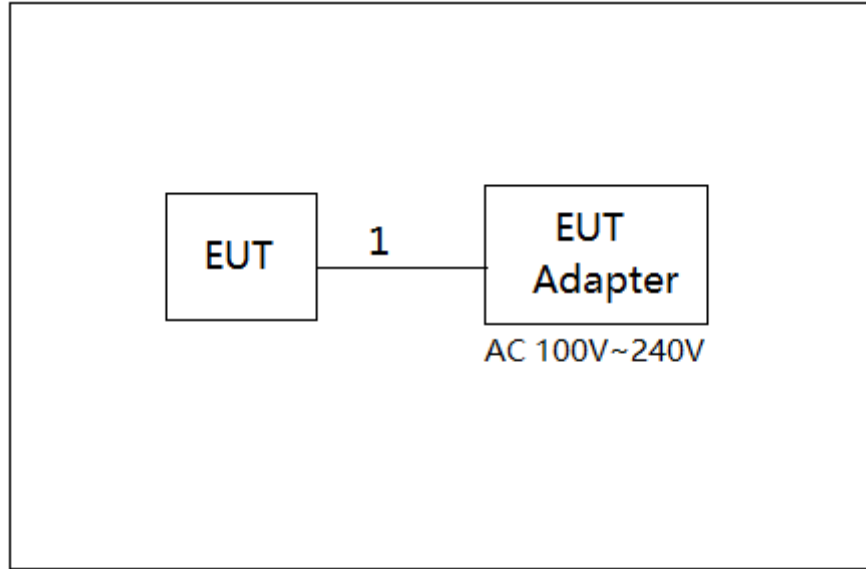
For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

For IEEE 802.11ac (VHT80):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 kHz (Duty cycle < 98%).

**2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**



**2.6 SUPPORT UNITS**

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

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	N/A	N/A	1.5m

### 3. AC POWER LINE CONDUCTED EMISSIONS TEST

#### 3.1 LIMIT

Frequency (MHz)	Limit (dBµV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 - 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

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.

The following table is the setting of the receiver

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

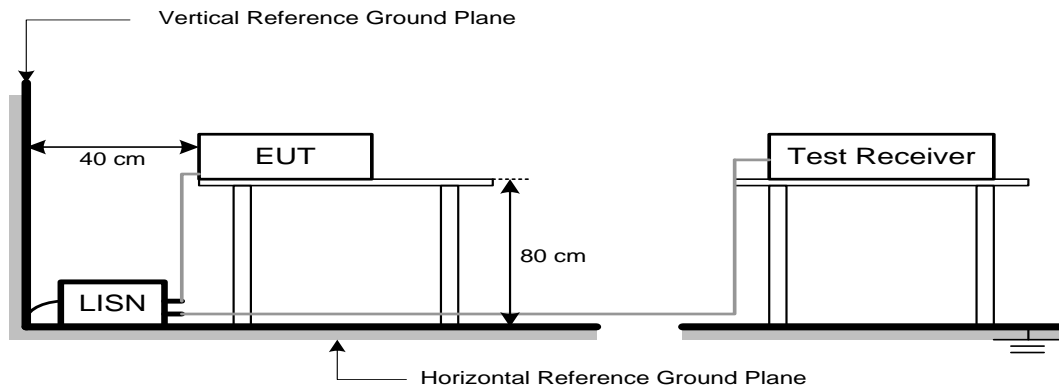
#### 3.2 TEST PROCEDURE

- 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 equipment 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.

#### 3.3 DEVIATION FROM TEST STANDARD

No deviation

### 3.4 TEST SETUP



### 3.5 EUT OPERATION 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.

### 3.6 TEST RESULTS

Please refer to the APPENDIX A.

## 4. RADIATED EMISSIONS TEST

### 4.1 LIMIT

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.

#### LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

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

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

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

#### NOTE:

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

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

(2) According to 15.407(b)(4)(i), 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 25 MHz 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 27 dBm/MHz at the band edge.

## 4.2 TEST PROCEDURE

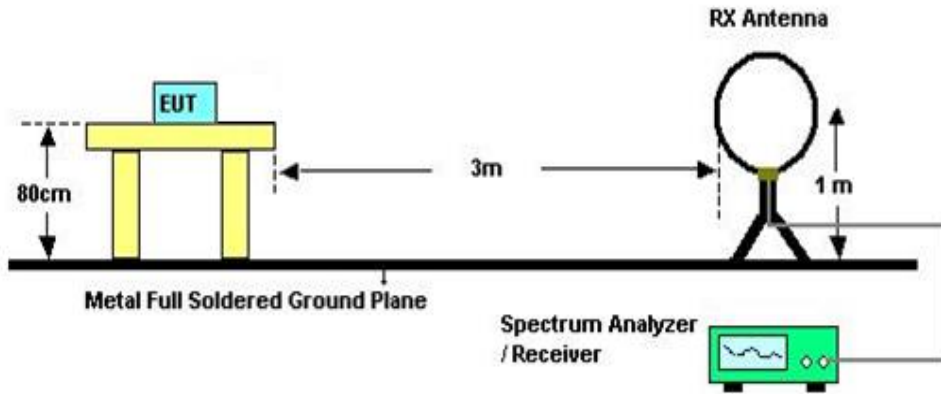
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance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

## 4.3 DEVIATION FROM TEST STANDARD

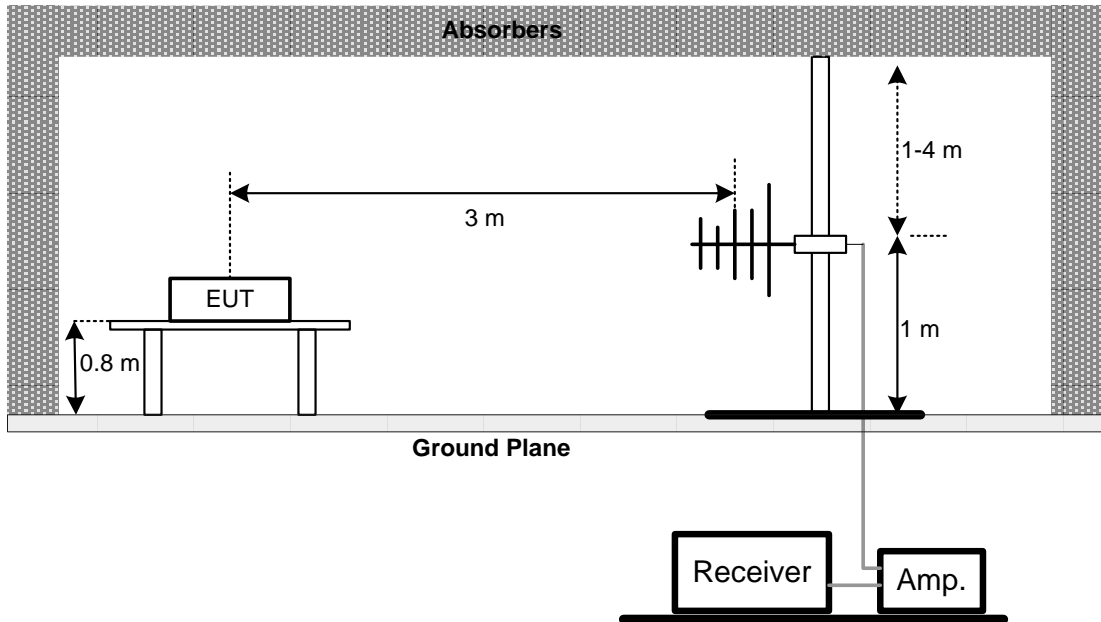
No deviation

**4.4 TEST SETUP**

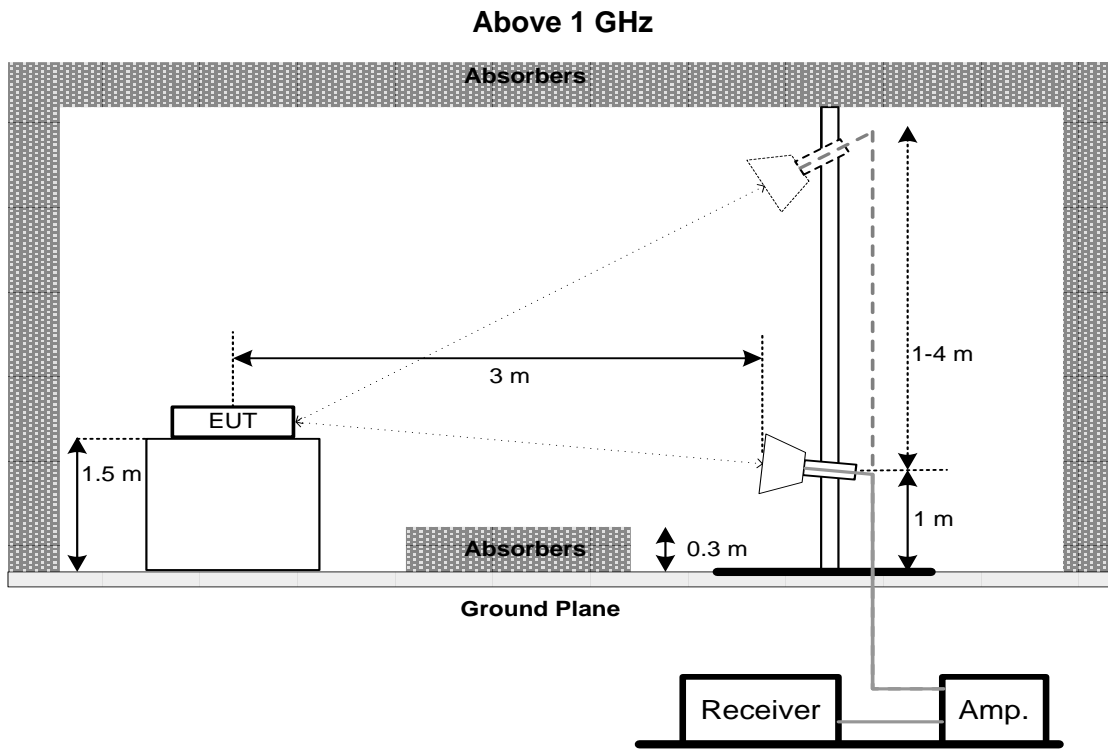
**9 kHz to 30 MHz**



**30 MHz to 1 GHz**







#### 4.5 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.

#### 4.6 TEST RESULTS - 9 KHZ to 30 MHZ

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.

#### 4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

#### 4.8 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. BANDWIDTH TEST

### 5.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a) 15.407(e)	26 dB Bandwidth	-	5150-5250
	26 dB Bandwidth	-	5250-5350
	26 dB Bandwidth	-	5470-5725
	6 dB Bandwidth	Minimum 500 kHz	5725-5850

### 5.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below
- b. a. Spectrum Setting:  
For UNII-1, UNII-2A, UNII-2C:

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

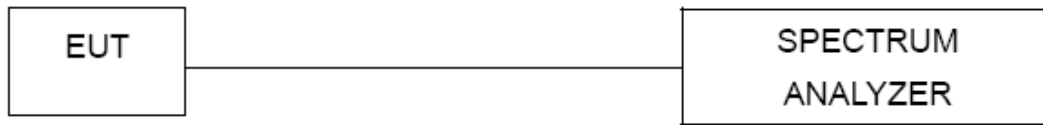
For UNII-3:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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

### 5.3 TEST PROCEDURE

No deviation.

**5.4 TEST SETUP****5.5 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

**5.6 TEST RESULTS**

Please refer to the APPENDIX E.

## 6. MAXIMUM OUTPUT POWER TEST

### 6.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Conducted Output Power	AP device: 1 Watt (30 dBm) Client device: 250 mW (24 dBm)	5150-5250
		250 mW (24 dBm)	5250-5350
		250 mW (24 dBm)	5470-5725
		1 Watt (30dBm)	5725-5850

Note:

- a. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- b. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

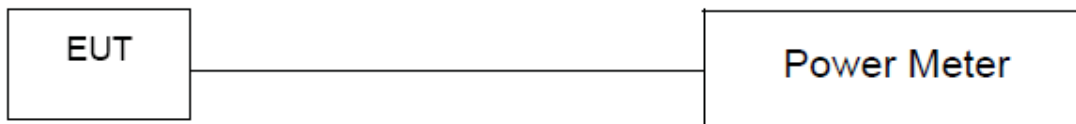
### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. Test test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

### 6.3 DEVIATION FROM STANDARD

No deviation.

### 6.4 TEST SETUP



### 6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 6.6 TEST RESULTS

Please refer to the APPENDIX F.

## 7. POWER SPECTRAL DENSITY TEST

### 7.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	AP device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250
		11 dBm/MHz	5250-5350
		11 dBm/MHz	5470-5725
		30 dBm/500 kHz	5725-5850

### 7.2 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 Setting

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz.
VBW	≥ 3 MHz.
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 v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.
2. The value measured with RBW=1 MHz is to be added with  $10\log(500 \text{ kHz}/1 \text{ MHz})$  which is -3 dB. For example, if the measured value is +10dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7dBm/500kHz.

### 7.3 DEVIATION FROM STANDARD

No deviation.

**7.4 TEST SETUP****7.5 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

**7.6 TEST RESULTS**

Please refer to the APPENDIX H.

## 8. FREQUENCY STABILITY MEASUREMENT

### 8.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(g)	Frequency Stability	An emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.	5150-5250
			5250-5350
			5470-5725
			5725-5850

### 8.2 TEST PROCEDURE

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

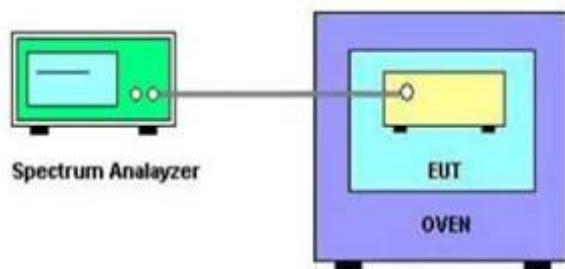
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- User manual temperature is -20°C~50°C.

### 8.3 DEVIATION FROM STANDARD

No deviation.

### 8.4 TEST SETUP



### 8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 8.6 TEST RESULTS

Please refer to the APPENDIX I.

## 9. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Line Impedance Stabilisation Network	Schwarzbeck	NNLK 8121	8121-822	Mar. 29, 2020
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Nov. 20, 2019
3	Test Cable	emci	EMCRG400-BM-NM-10000	170628	Apr. 17, 2020
4	EMI Test Receiver	R&S	ESCI	100082	Mar. 29, 2020
5	50Ω Terminator	SHX	TF2-1G-A	17051602	Mar. 29, 2020
6	50Ω coaxial switch	Anritsu	MP59B	6201750902	Mar. 29, 2020
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EMCI	EMCI LPA600	275	Mar. 29, 2020
2	EMI Test Receiver	R&S	ESCI	100082	Mar. 29, 2020
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	719	Mar. 29, 2020
2	Pre-Amplifier	emci	EMC9135	980400	Mar. 29, 2020
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 29, 2020
4	Test Cable	emci	EMC104-SM-SM-7000	170330	Apr. 17, 2020
5	Test Cable	emci	EMC104-SM-SM-1000	170331	Apr. 17, 2020
6	Test Cable	emci	EMC104-SM-NM-3500	170621	Apr. 17, 2020
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A



Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	9120D	00206960	Mar. 29, 2020
2	Pre-Amplifier	emci	EMC012645SE	980421	Mar. 29, 2020
3	EXA Spectrum Analyzer	Keysight	N9010A	MY56480545	Mar. 29, 2020
4	Test Cable	emci	EMC104-SM-SM-7000	170330	Apr. 17, 2020
5	Test Cable	emci	EMC104-SM-SM-1000	170331	Apr. 17, 2020
6	Test Cable	emci	EMC104-SM-NM-3500	170621	Apr. 17, 2020
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 29, 2020

Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020

Conducted Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020

Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020

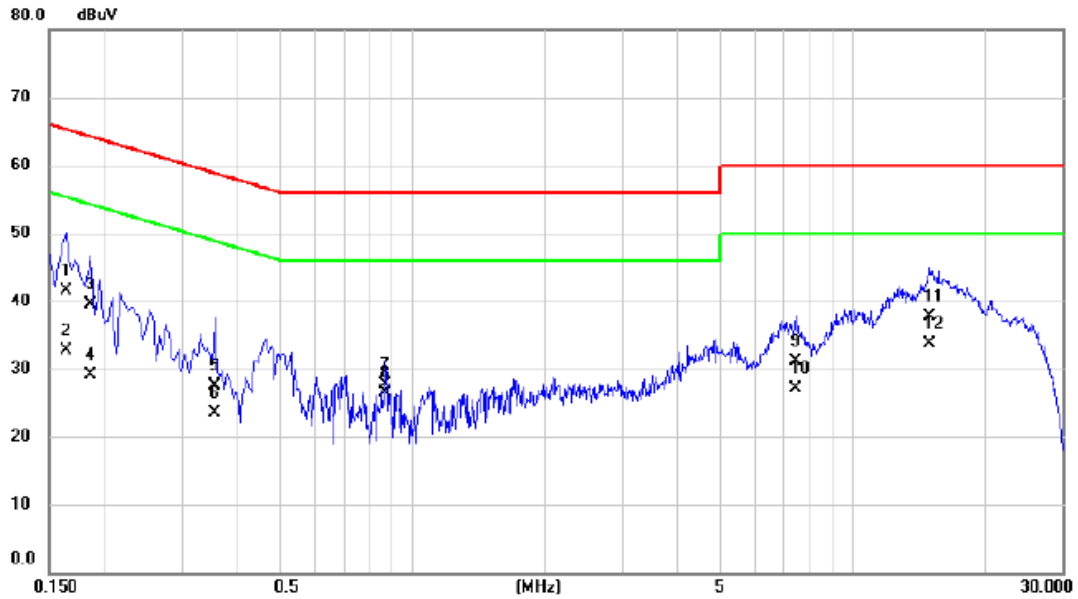
Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020
2	Temperature And Humidity Box	Blue pand	BPHS-120B	170616454	Nov. 10, 2019

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

## **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**

Test Mode: TX Mode

### Line



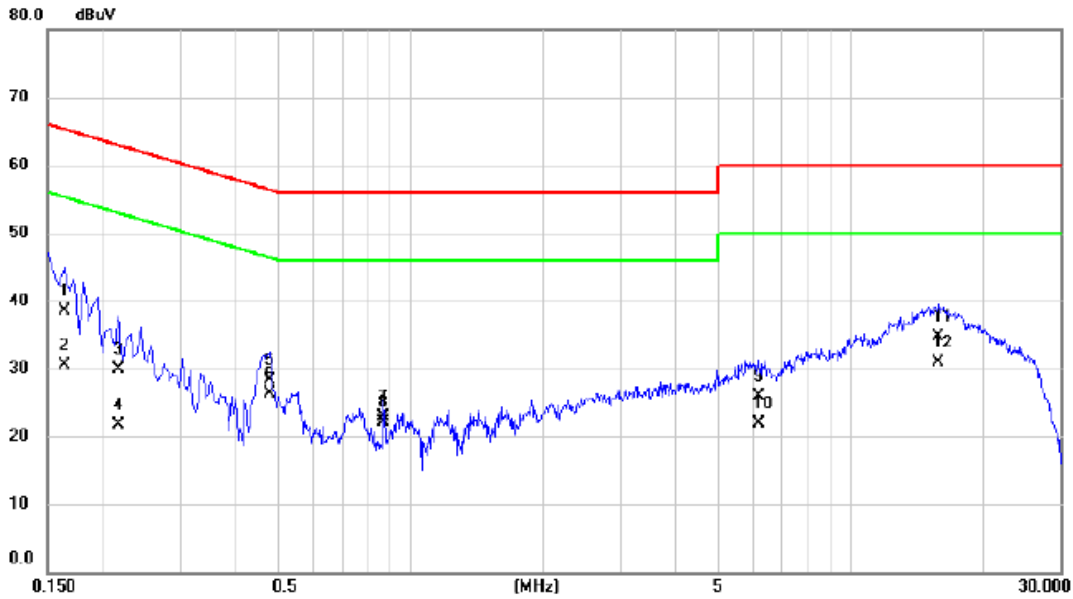
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1635	31.80	9.78	41.58	65.28	-23.70	QP	
2		0.1635	22.90	9.78	32.68	55.28	-22.60	AVG	
3		0.1860	29.60	9.81	39.41	64.21	-24.80	QP	
4		0.1860	19.20	9.81	29.01	54.21	-25.20	AVG	
5		0.3570	17.60	9.87	27.47	58.80	-31.33	QP	
6		0.3570	13.70	9.87	23.57	48.80	-25.23	AVG	
7		0.8700	17.80	9.82	27.62	56.00	-28.38	QP	
8		0.8700	16.60	9.82	26.42	46.00	-19.58	AVG	
9		7.4355	20.90	10.14	31.04	60.00	-28.96	QP	
10		7.4355	16.90	10.14	27.04	50.00	-22.96	AVG	
11		14.9820	27.60	10.07	37.67	60.00	-22.33	QP	
12	*	14.9820	23.70	10.07	33.77	50.00	-16.23	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode

### Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1635	29.00	9.59	38.59	65.28	-26.69	QP	
2		0.1635	21.00	9.59	30.59	55.28	-24.69	AVG	
3		0.2175	20.20	9.68	29.88	62.91	-33.03	QP	
4		0.2175	12.00	9.68	21.68	52.91	-31.23	AVG	
5		0.4785	18.50	9.81	28.31	56.37	-28.06	QP	
6		0.4785	16.40	9.81	26.21	46.37	-20.16	AVG	
7		0.8700	13.20	9.75	22.95	56.00	-33.05	QP	
8		0.8700	12.30	9.75	22.05	46.00	-23.95	AVG	
9		6.1845	15.90	10.10	26.00	60.00	-34.00	QP	
10		6.1845	11.90	10.10	22.00	50.00	-28.00	AVG	
11		15.8145	24.50	10.11	34.61	60.00	-25.39	QP	
12	*	15.8145	20.70	10.11	30.81	50.00	-19.19	AVG	

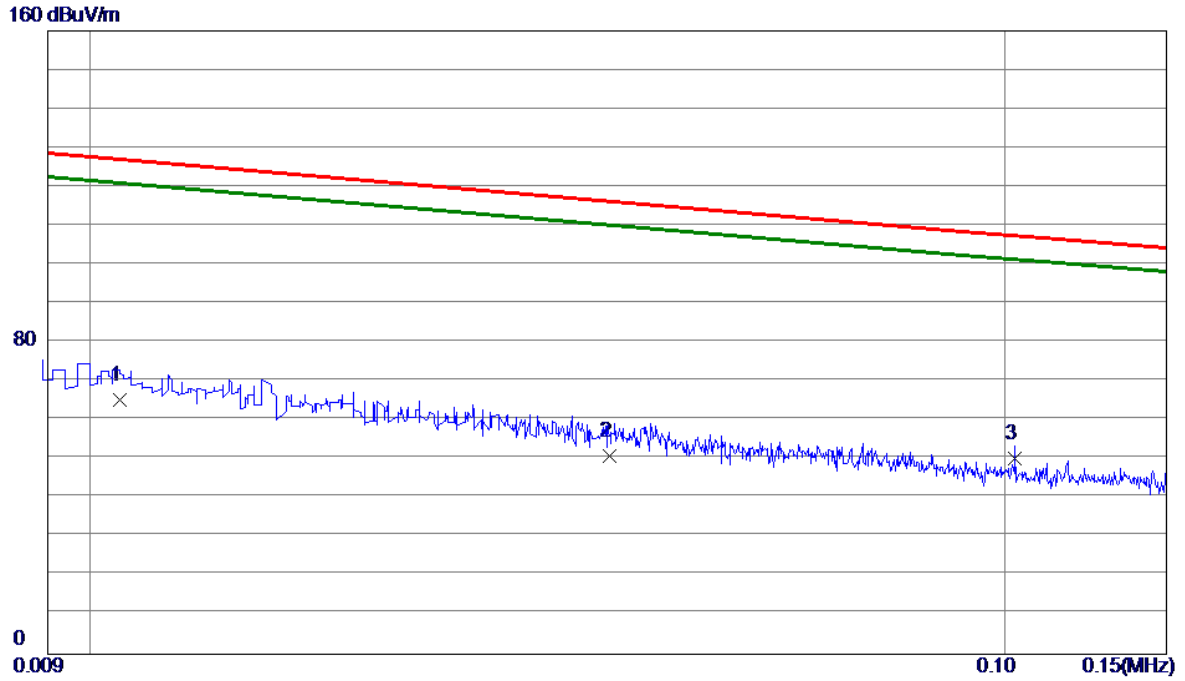
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## **APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ**

Test Mode: TX Mode

Ant 0°



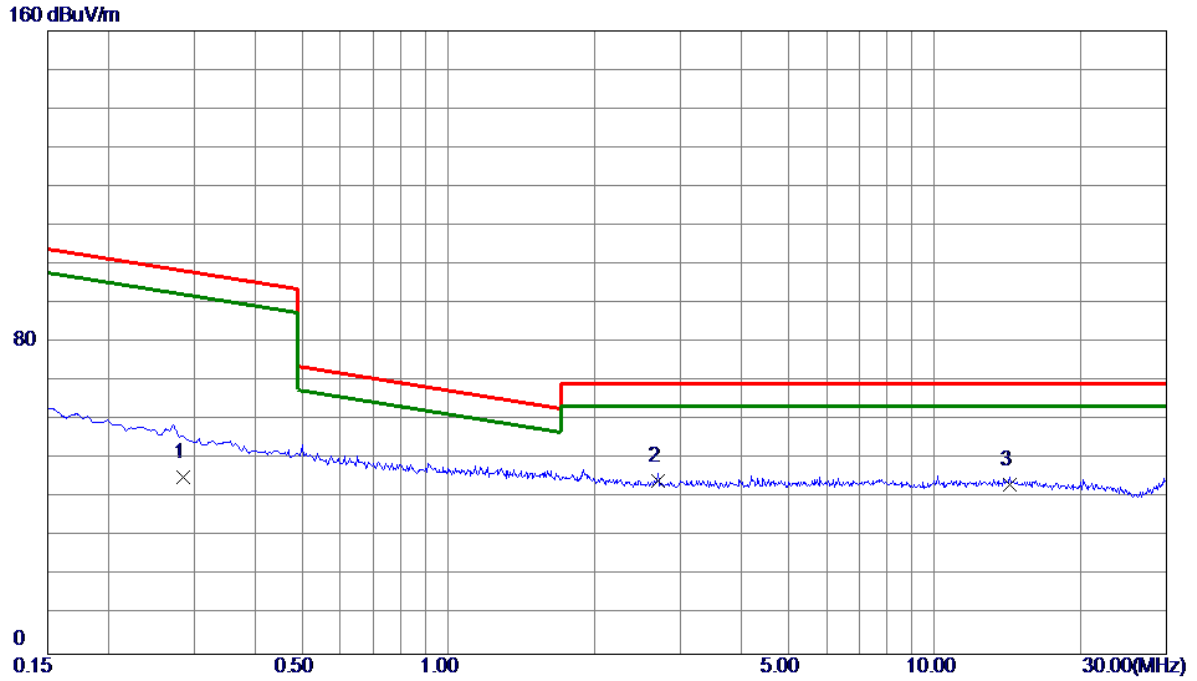
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.0108	-12.70	77.91	65.21	128.05	-62.84	AVG	
2	0.0370	-16.66	67.59	50.93	121.58	-70.65	AVG	
3 *	0.1025	-7.56	57.85	50.29	107.43	-57.14	QP	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode

Ant 0°



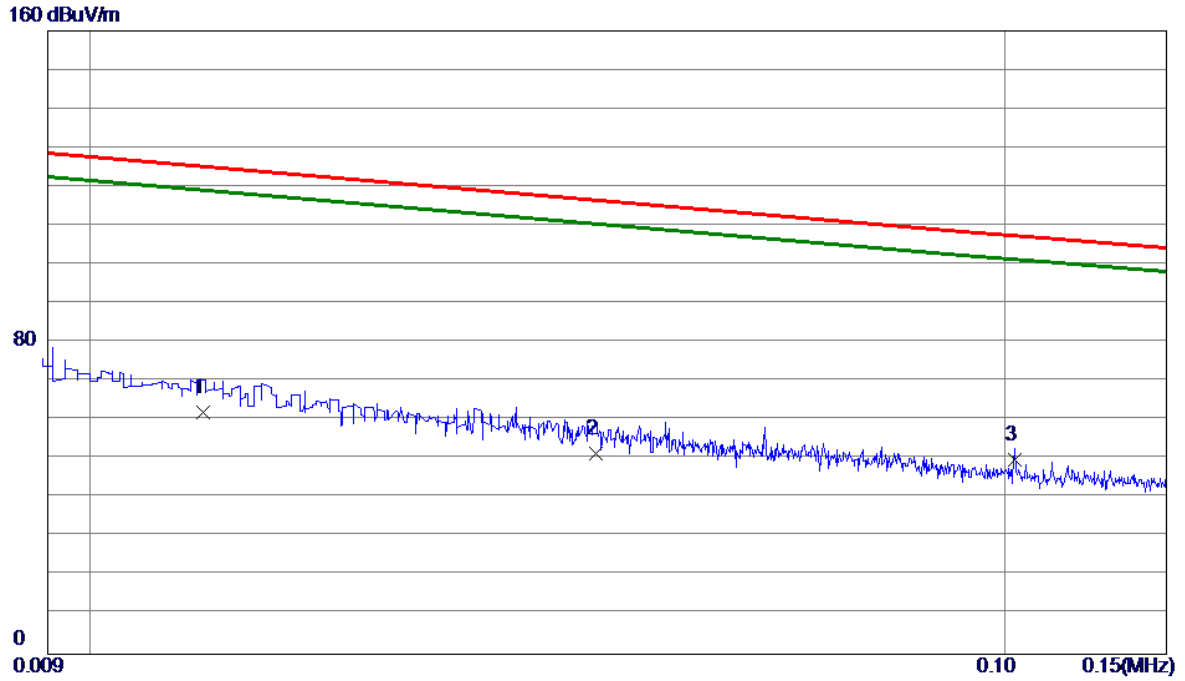
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.2850	-3.90	49.21	45.31	100.80	-55.49	AVG	
2 *	2.7015	6.23	38.24	44.47	69.54	-25.07	QP	
3	14.2980	5.35	38.14	43.49	69.54	-26.05	QP	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode

Ant 90°



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.0133	-14.30	76.39	62.09	127.43	-65.34	AVG	
2	0.0357	-16.39	67.98	51.59	121.90	-70.31	AVG	
3 *	0.1025	-7.90	57.85	49.95	107.43	-57.48	QP	

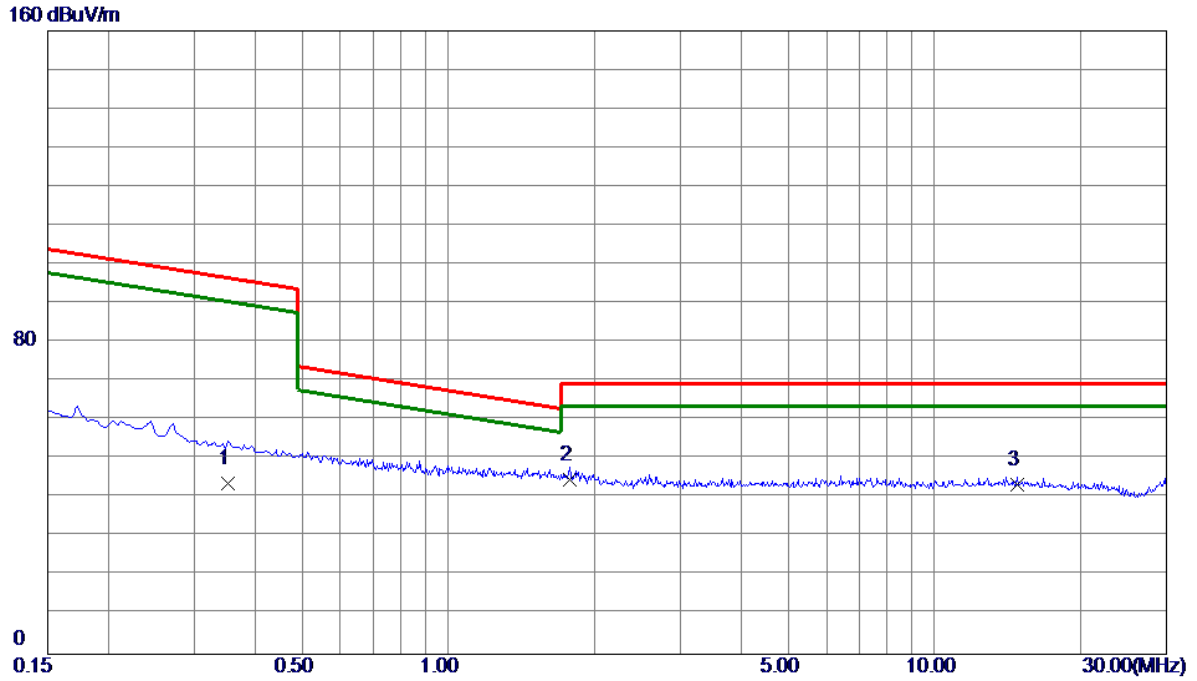
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Test Mode: TX Mode

Ant 90°



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.3525	-3.79	47.54	43.75	98.49	-54.74	AVG	
2 *	1.7790	5.54	39.33	44.87	69.54	-24.67	QP	
3	14.7930	5.42	38.06	43.48	69.54	-26.06	QP	

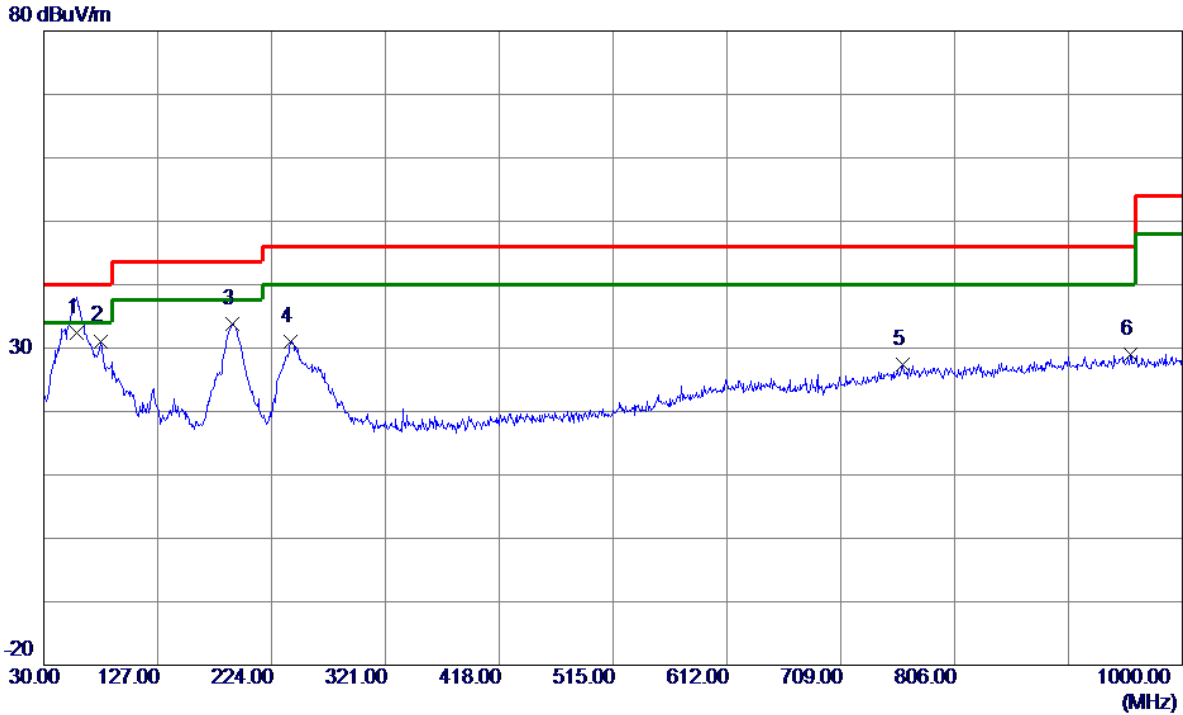
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## **APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ**

Test Mode: TX Mode

### Vertical



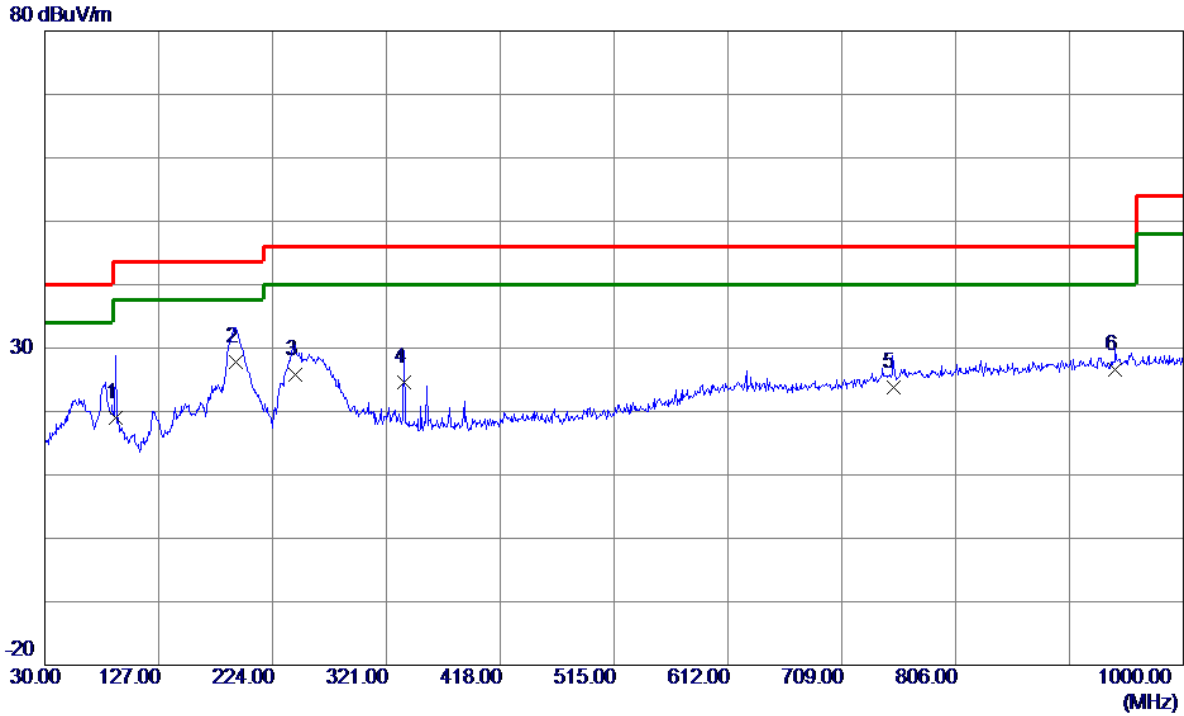
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	57.6450	49.85	-17.45	32.40	40.00	-7.60	QP	
2	78.5000	51.40	-20.30	31.10	40.00	-8.90	Peak	
3	190.5350	52.15	-18.27	33.88	43.50	-9.62	Peak	
4	240.4900	47.92	-16.91	31.01	46.00	-14.99	Peak	
5	761.3800	33.97	-6.62	27.35	46.00	-18.65	Peak	
6	955.8650	34.06	-5.11	28.95	46.00	-17.05	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	90.1400	39.47	-20.47	19.00	43.50	-24.50	Peak	
2 *	192.9600	46.15	-18.44	27.71	43.50	-15.79	Peak	
3	242.9150	42.73	-16.90	25.83	46.00	-20.17	Peak	
4	336.0350	38.41	-13.82	24.59	46.00	-21.41	Peak	
5	752.6500	30.46	-6.65	23.81	46.00	-22.19	Peak	
6	941.8000	31.82	-5.19	26.63	46.00	-19.37	Peak	

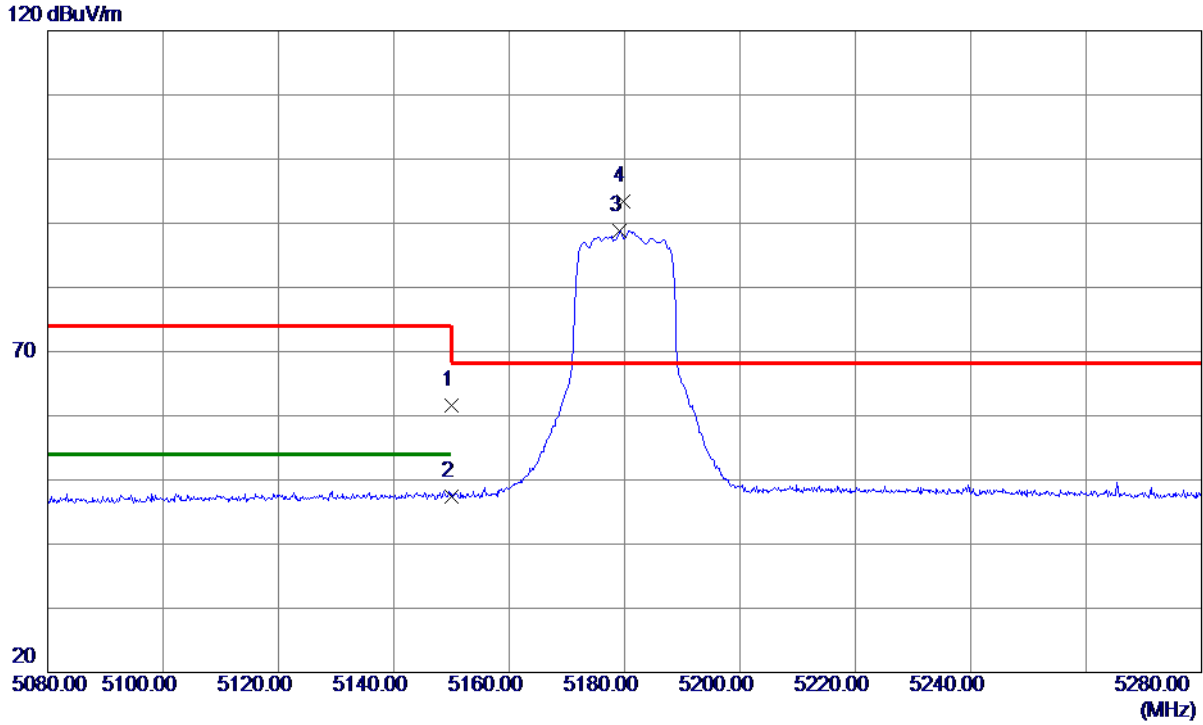
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## **APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ**

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz

### Vertical



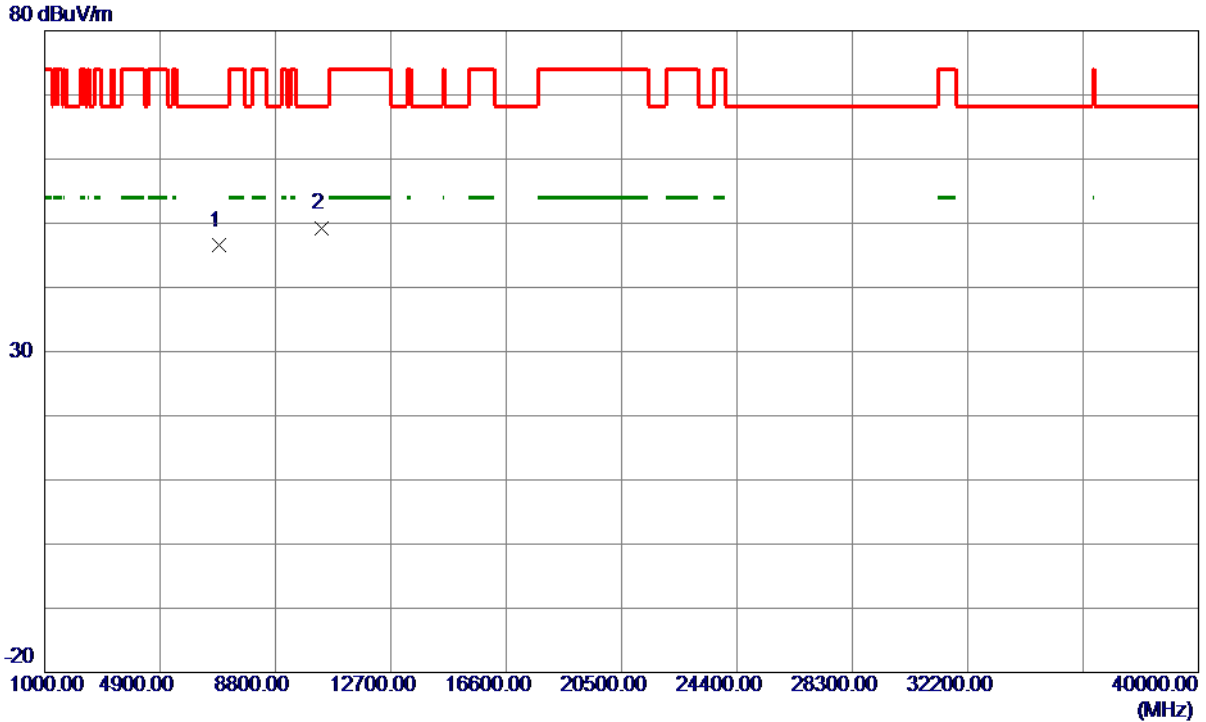
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.45	39.07	61.52	74.00	-12.48	Peak	
2	5150.0000	8.33	39.07	47.40	54.00	-6.60	AVG	
3	5179.2000	49.73	39.11	88.84	999.00	-910.16	AVG	NO limit
4 *	5179.7000	54.28	39.11	93.39	68.30	25.09	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz

### Vertical



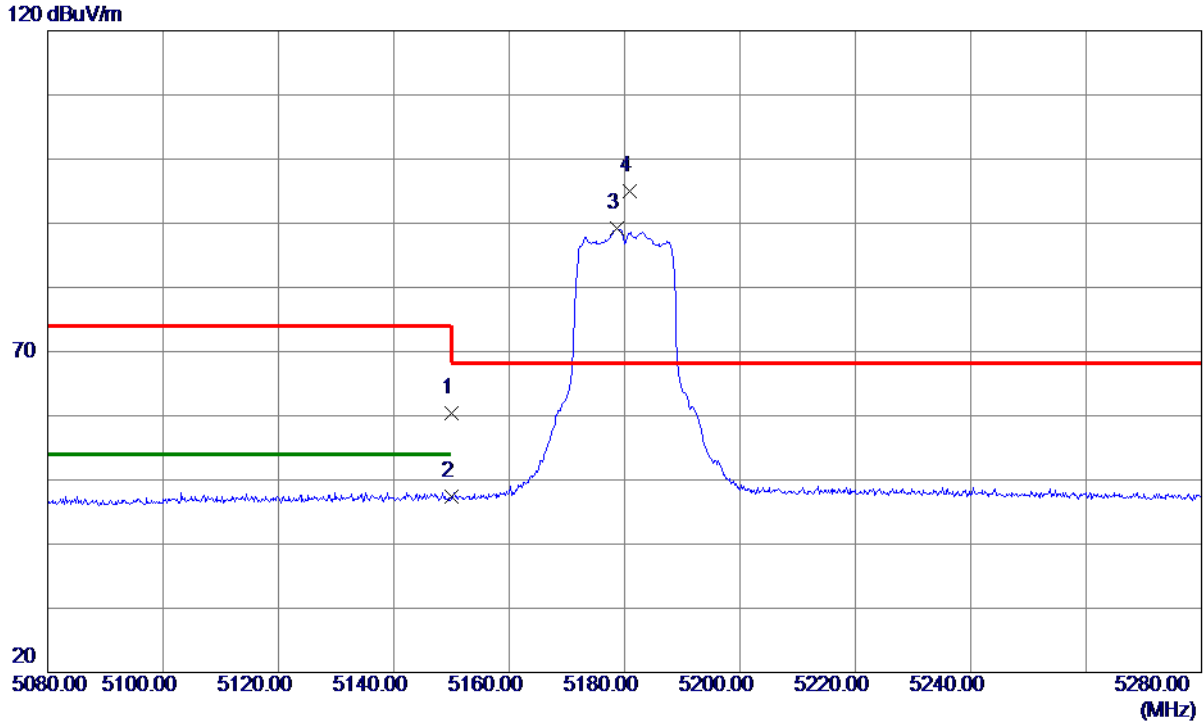
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6906.7620	50.13	-3.63	46.50	68.30	-21.80	Peak	
2 *	10360.9650	46.99	2.13	49.12	68.30	-19.18	Peak	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz

### 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	21.26	39.07	60.33	74.00	-13.67	Peak	
2	5150.0000	8.31	39.07	47.38	54.00	-6.62	AVG	
3	5178.7000	50.01	39.11	89.12	999.00	-909.88	AVG	NO limit
4 *	5180.9000	55.94	39.11	95.05	68.30	26.75	Peak	NO limit

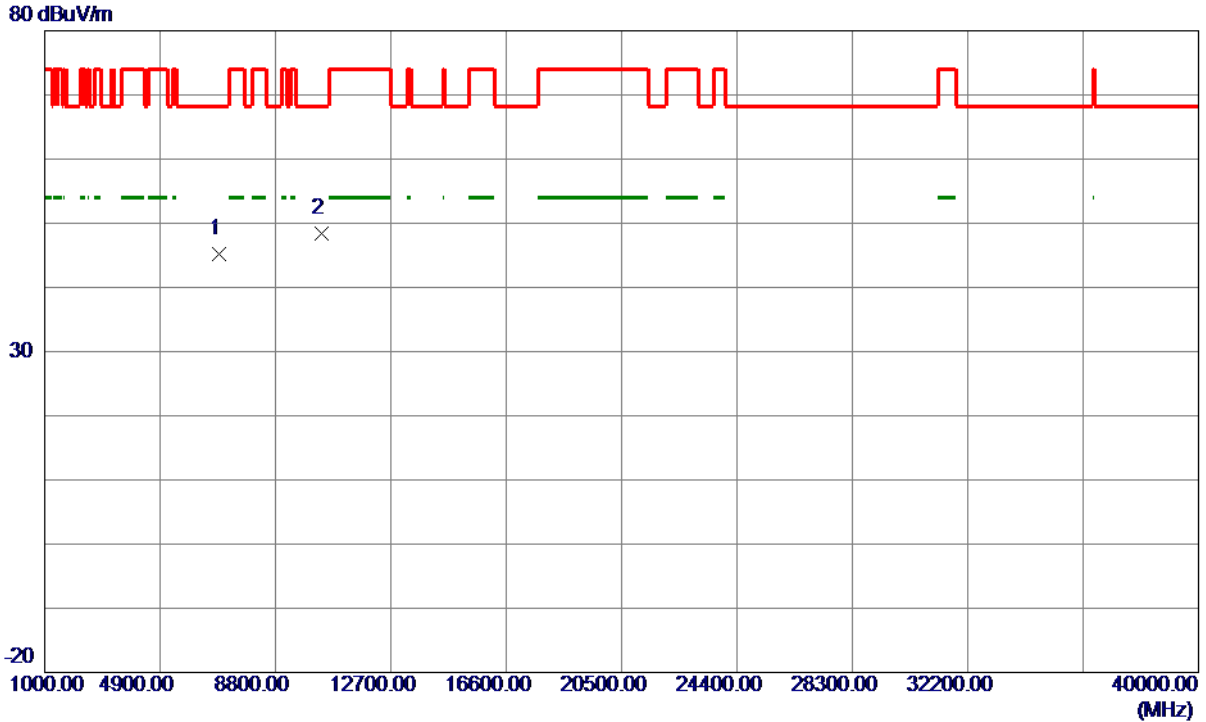
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz

### Horizontal



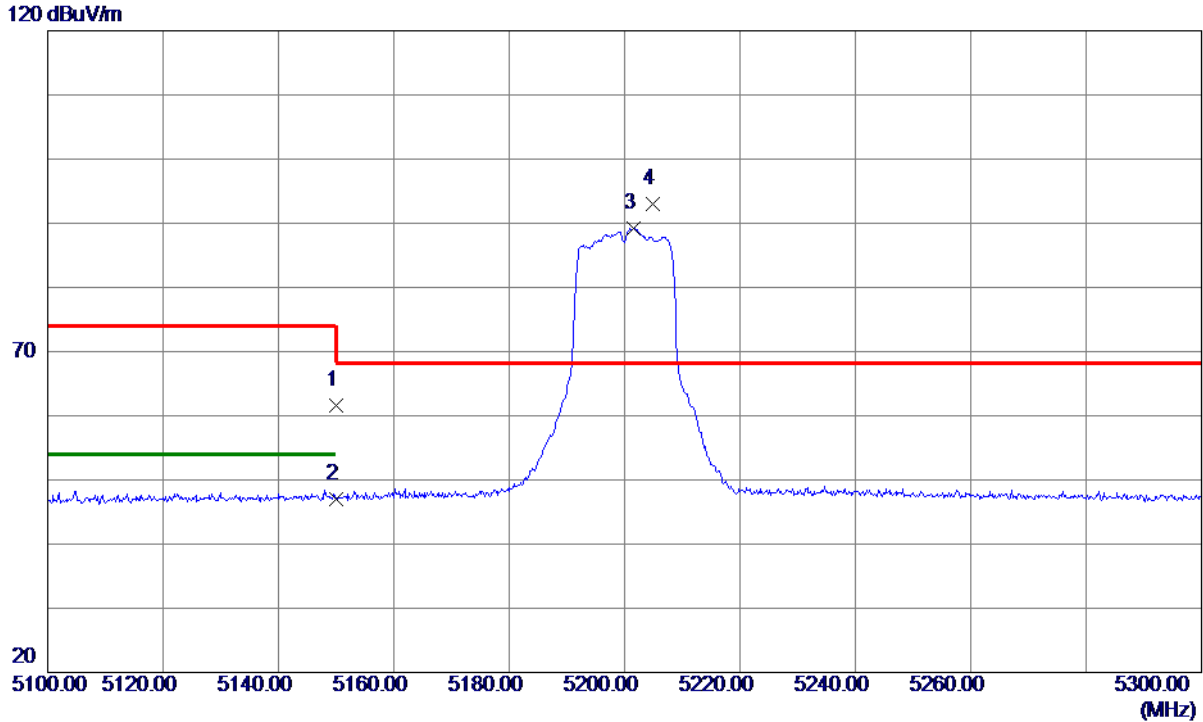
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6908.8070	48.84	-3.62	45.22	68.30	-23.08	Peak	
2 *	10360.5300	46.36	2.13	48.49	68.30	-19.81	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 MHz

### Vertical



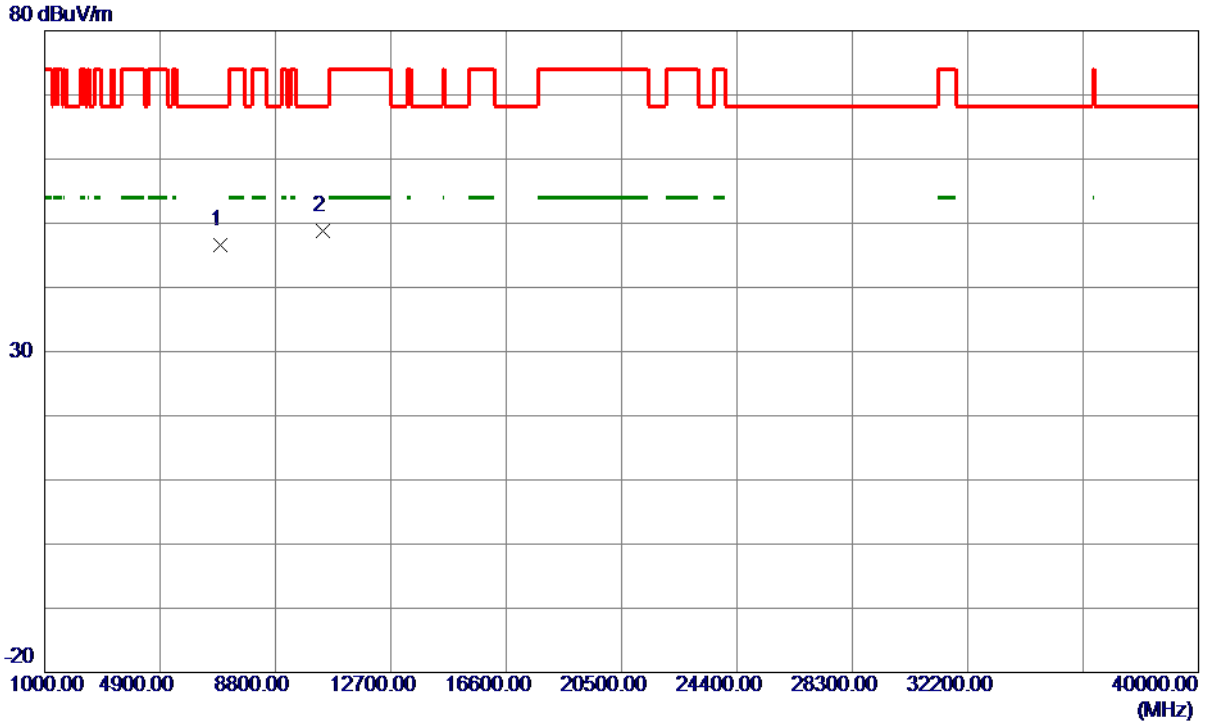
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.47	39.07	61.54	74.00	-12.46	Peak	
2	5150.0000	7.88	39.07	46.95	54.00	-7.05	AVG	
3	5201.6000	50.12	39.13	89.25	999.00	-909.75	AVG	NO limit
4 *	5204.9000	53.79	39.14	92.93	68.30	24.63	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 MHz

### Vertical



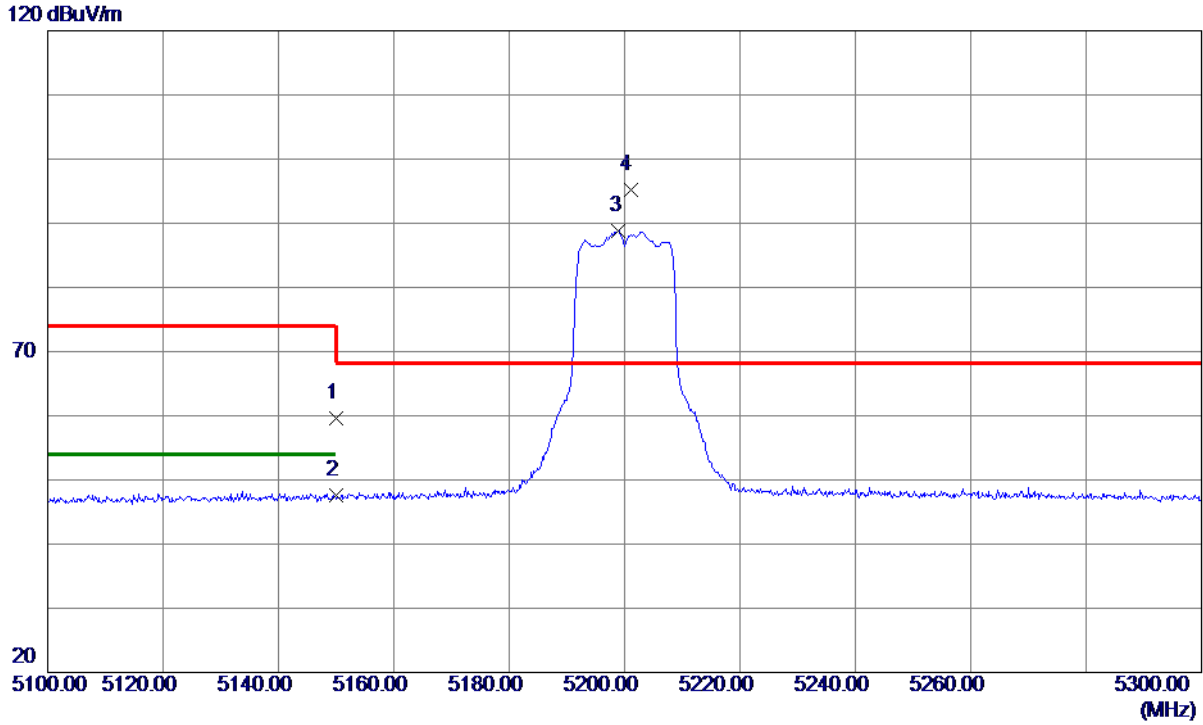
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6933.5830	50.08	-3.53	46.55	68.30	-21.75	Peak	
2 *	10400.9600	46.64	2.14	48.78	68.30	-19.52	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 MHz

### Horizontal



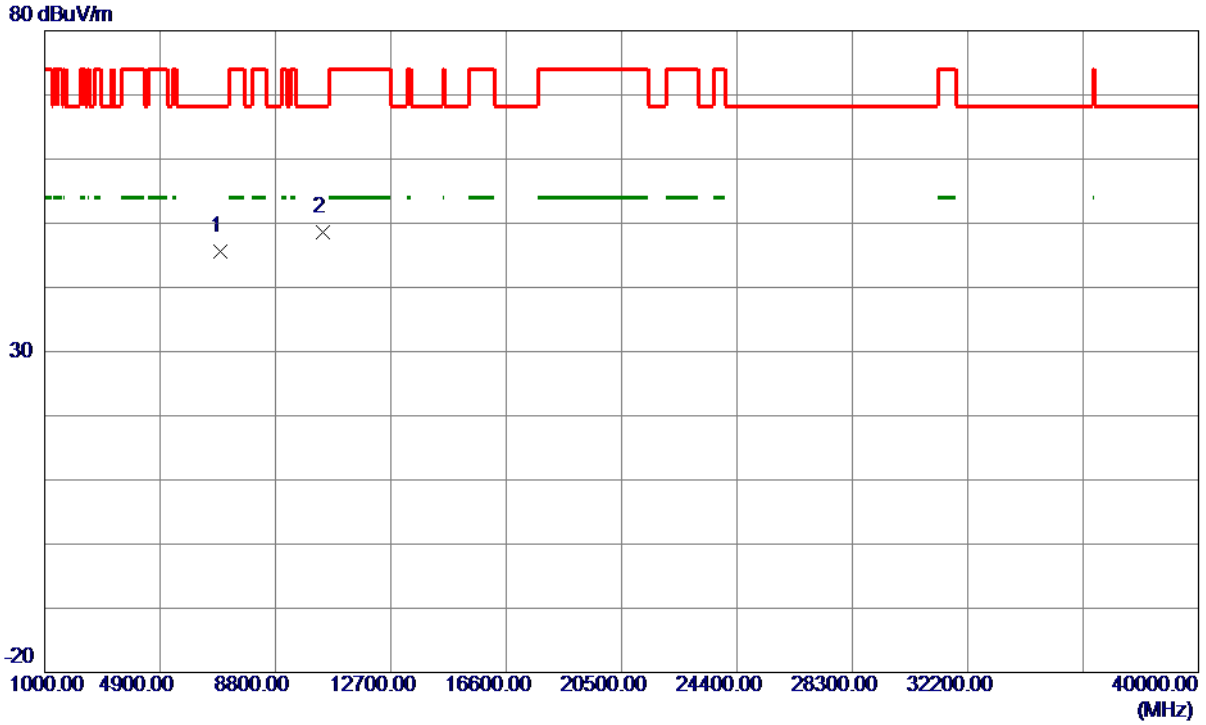
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.48	39.07	59.55	74.00	-14.45	Peak	
2	5150.0000	8.47	39.07	47.54	54.00	-6.46	AVG	
3	5199.0000	49.60	39.13	88.73	999.00	-910.27	AVG	NO limit
4 *	5201.0000	56.01	39.13	95.14	68.30	26.84	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 MHz

### Horizontal



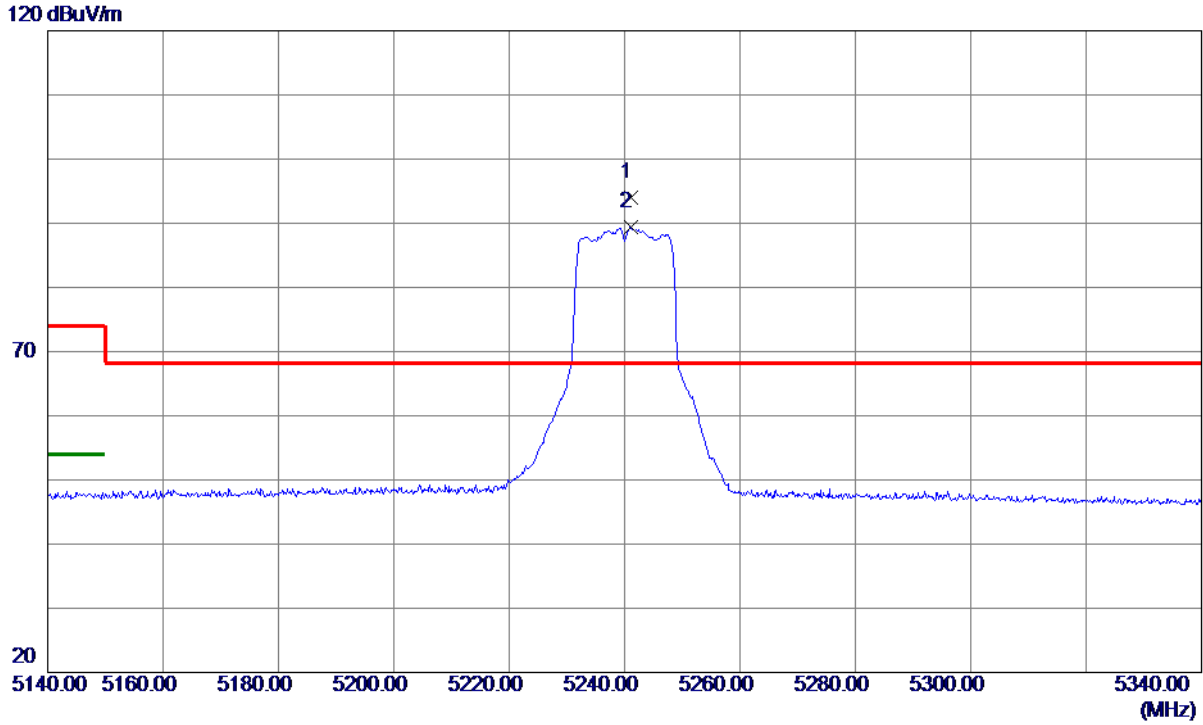
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6932.8600	49.23	-3.54	45.69	68.30	-22.61	Peak	
2 *	10400.7550	46.51	2.14	48.65	68.30	-19.65	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

### Vertical



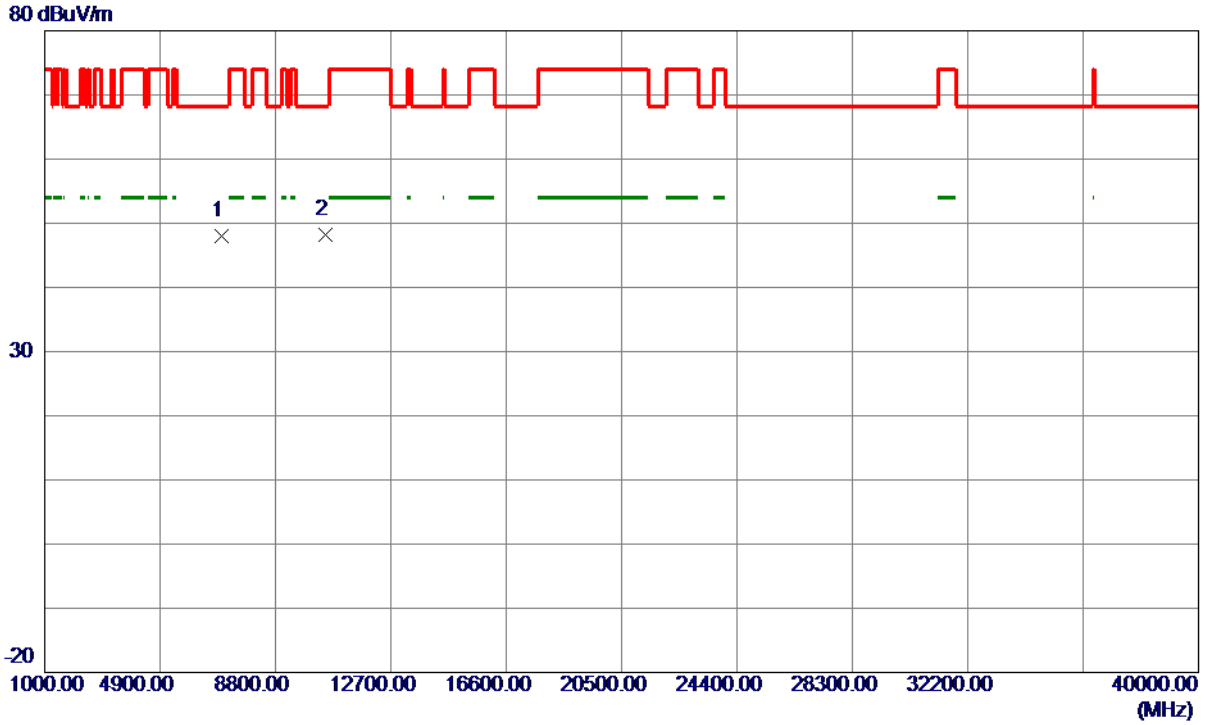
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5241.0000	54.84	39.18	94.02	68.30	25.72	Peak	NO limit
2	5241.0000	50.15	39.18	89.33	999.00	-909.67	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

### Vertical



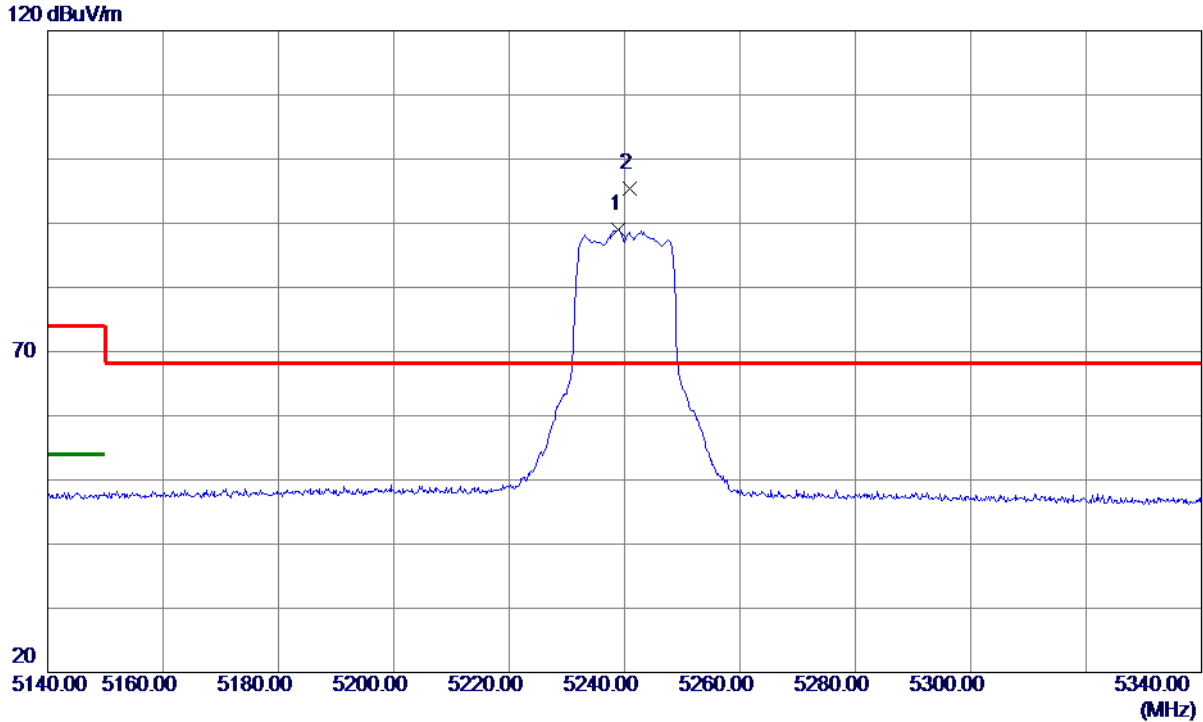
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6986.3300	51.41	-3.34	48.07	68.30	-20.23	Peak	
2 *	10482.3850	46.08	2.15	48.23	68.30	-20.07	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5239.0000	49.88	39.18	89.06	999.00	-909.94	AVG	NO limit
2 *	5240.8000	56.30	39.18	95.48	68.30	27.18	Peak	NO limit

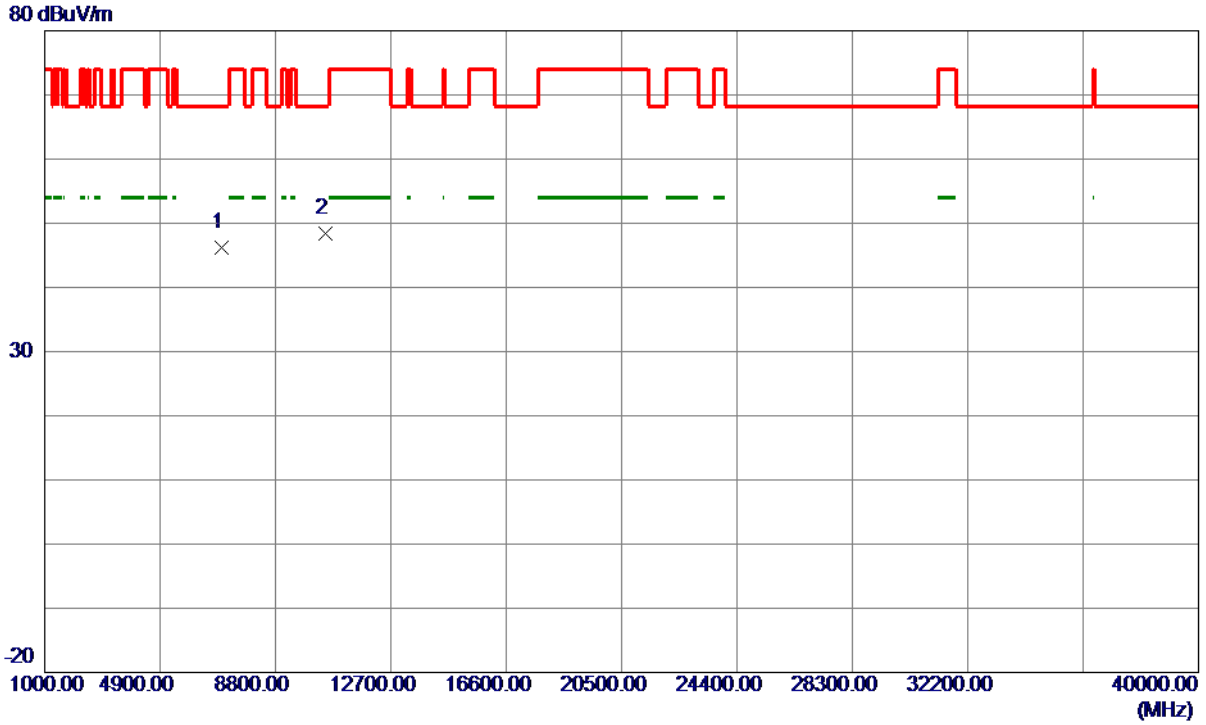
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

### Horizontal



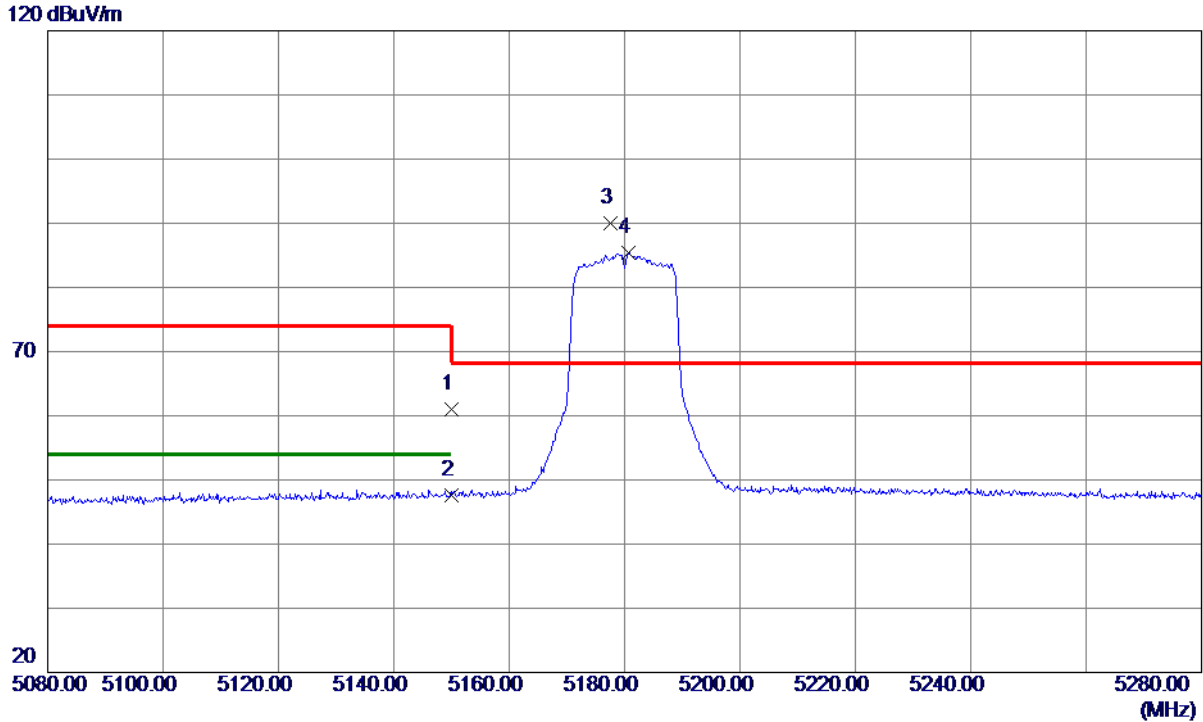
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6986.0700	49.54	-3.34	46.20	68.30	-22.10	Peak	
2 *	10478.9750	46.27	2.15	48.42	68.30	-19.88	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz

### Vertical



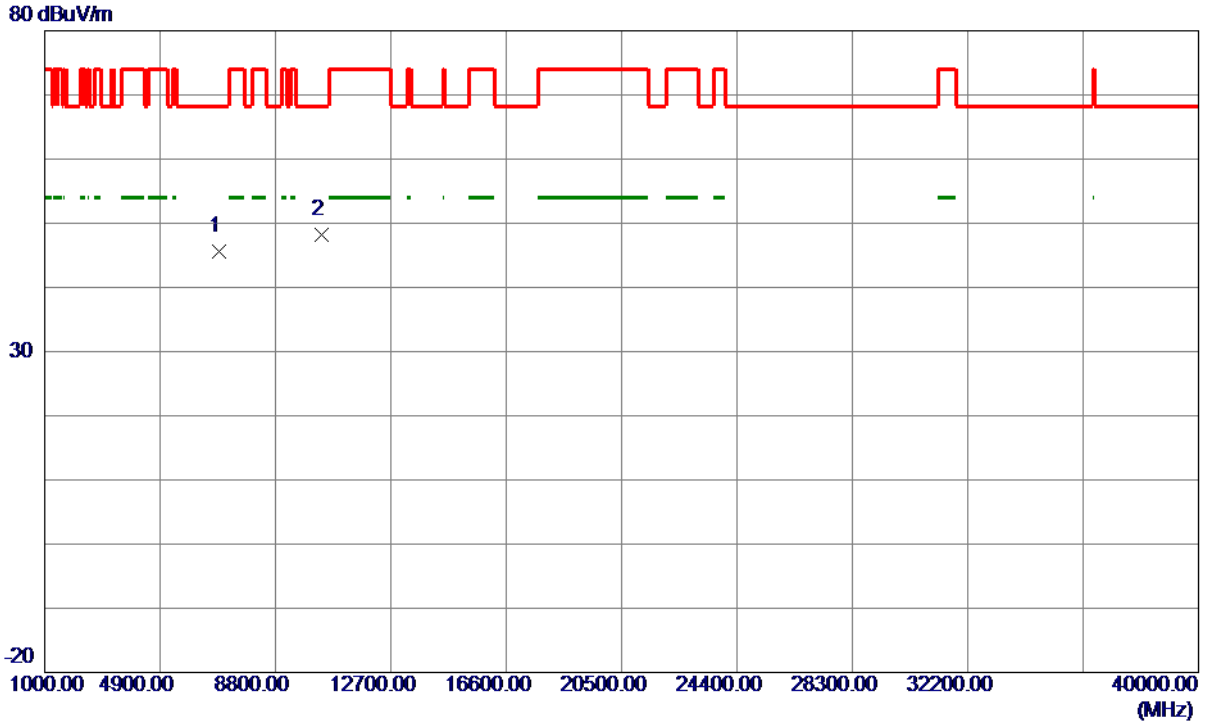
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.88	39.07	60.95	74.00	-13.05	Peak	
2	5150.0000	8.60	39.07	47.67	54.00	-6.33	AVG	
3 *	5177.5000	50.88	39.10	89.98	68.30	21.68	Peak	NO limit
4	5180.7000	46.30	39.11	85.41	999.00	-913.59	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz

### Vertical



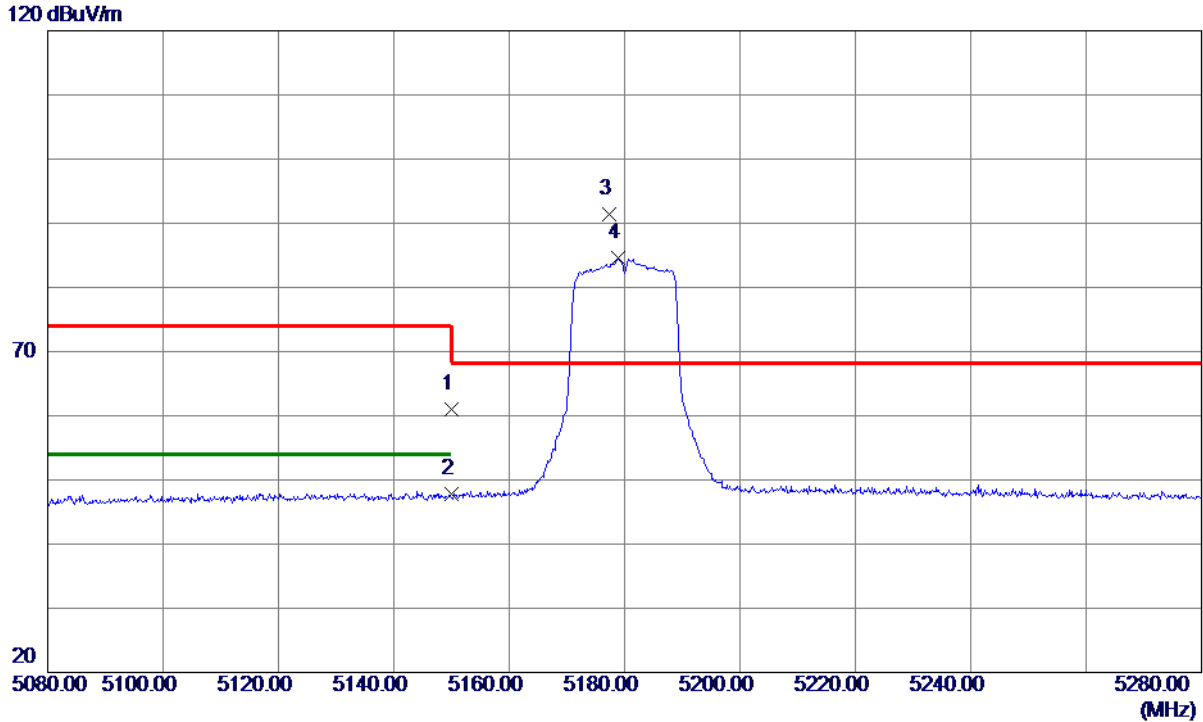
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6906.9670	49.14	-3.63	45.51	68.30	-22.79	Peak	
2 *	10360.6050	46.12	2.13	48.25	68.30	-20.05	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz

### Horizontal



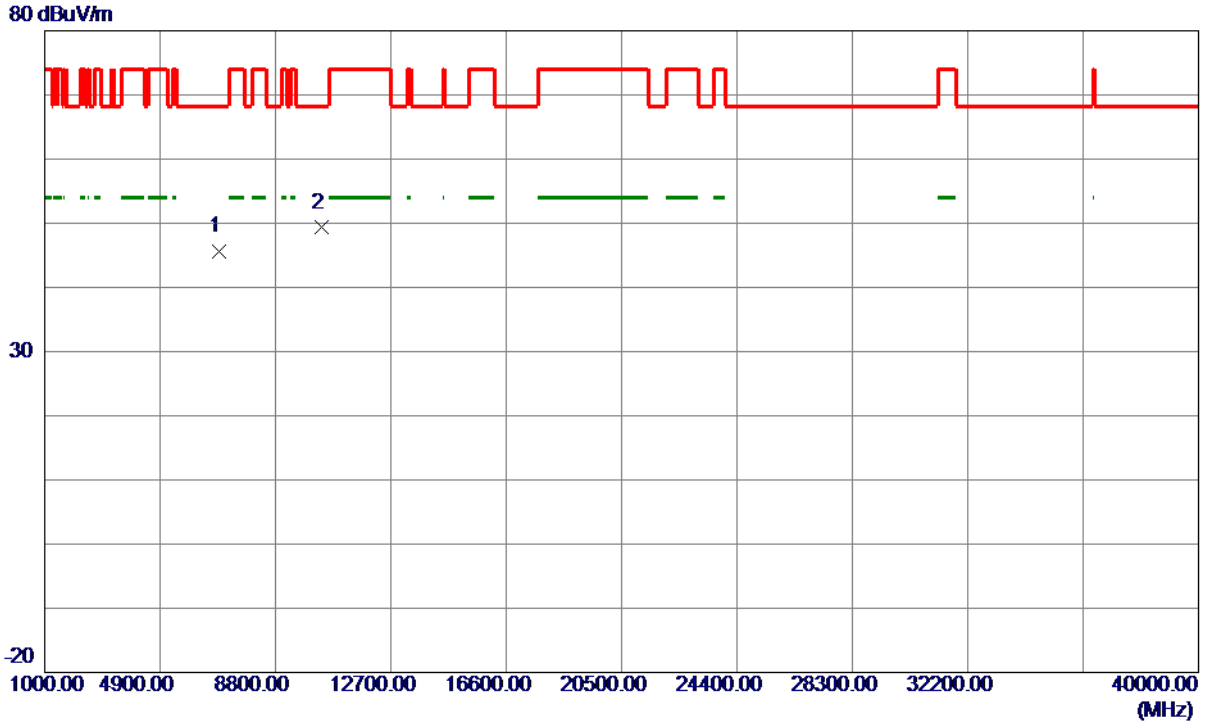
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.91	39.07	60.98	74.00	-13.02	Peak	
2	5150.0000	8.69	39.07	47.76	54.00	-6.24	AVG	
3 *	5177.4000	52.21	39.10	91.31	68.30	23.01	Peak	NO limit
4	5178.9000	45.40	39.11	84.51	999.00	-914.49	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz

### Horizontal



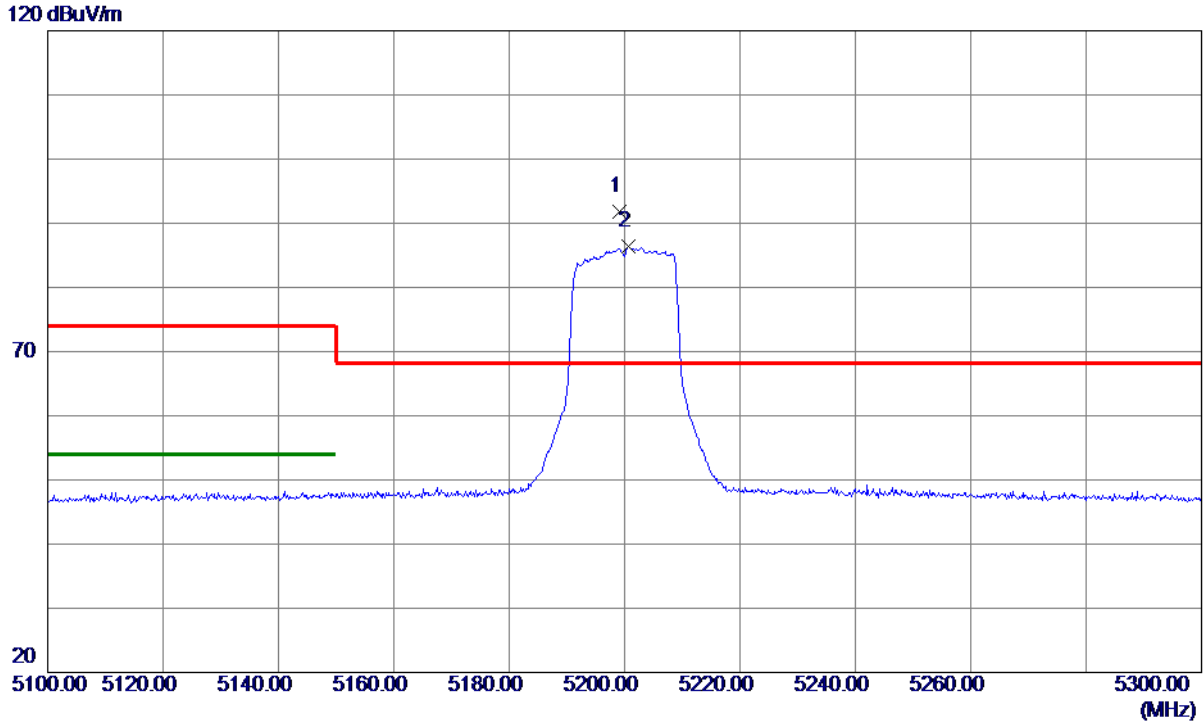
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6906.4470	49.25	-3.63	45.62	68.30	-22.68	Peak	
2 *	10361.3650	47.17	2.13	49.30	68.30	-19.00	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5200 MHz

### Vertical



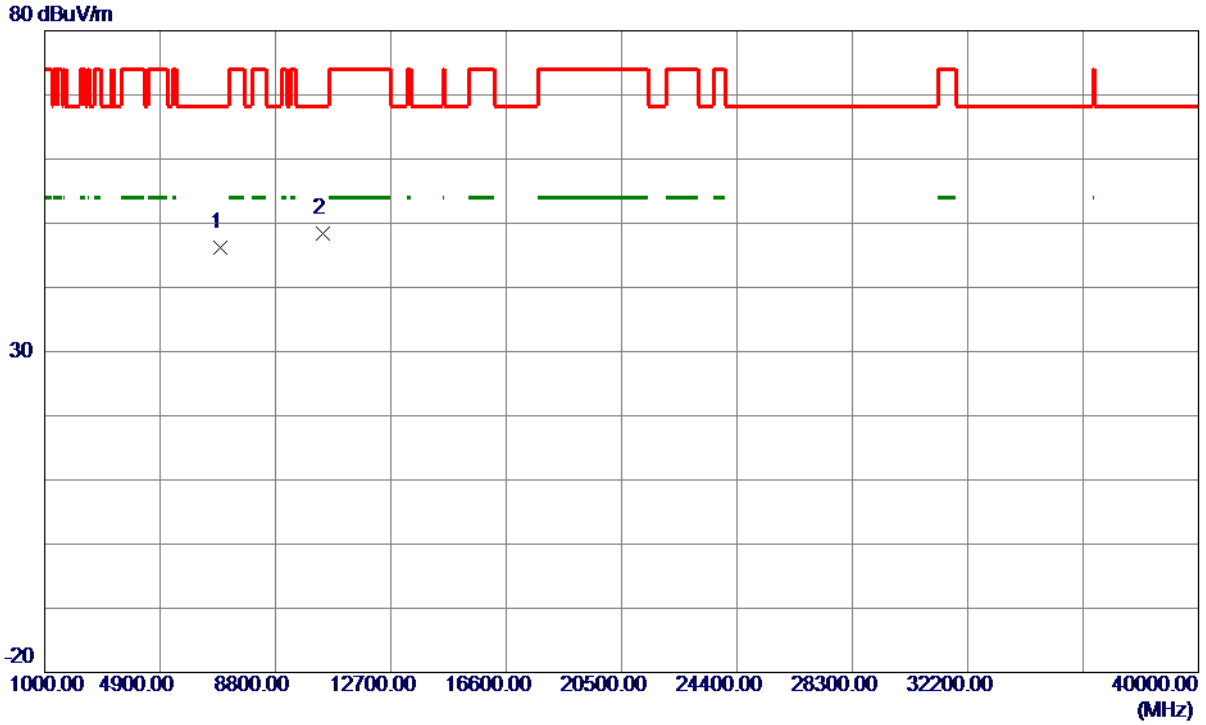
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5199.1000	52.75	39.13	91.88	68.30	23.58	Peak	NO limit
2	5200.7000	47.32	39.13	86.45	999.00	-912.55	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5200 MHz

### Vertical



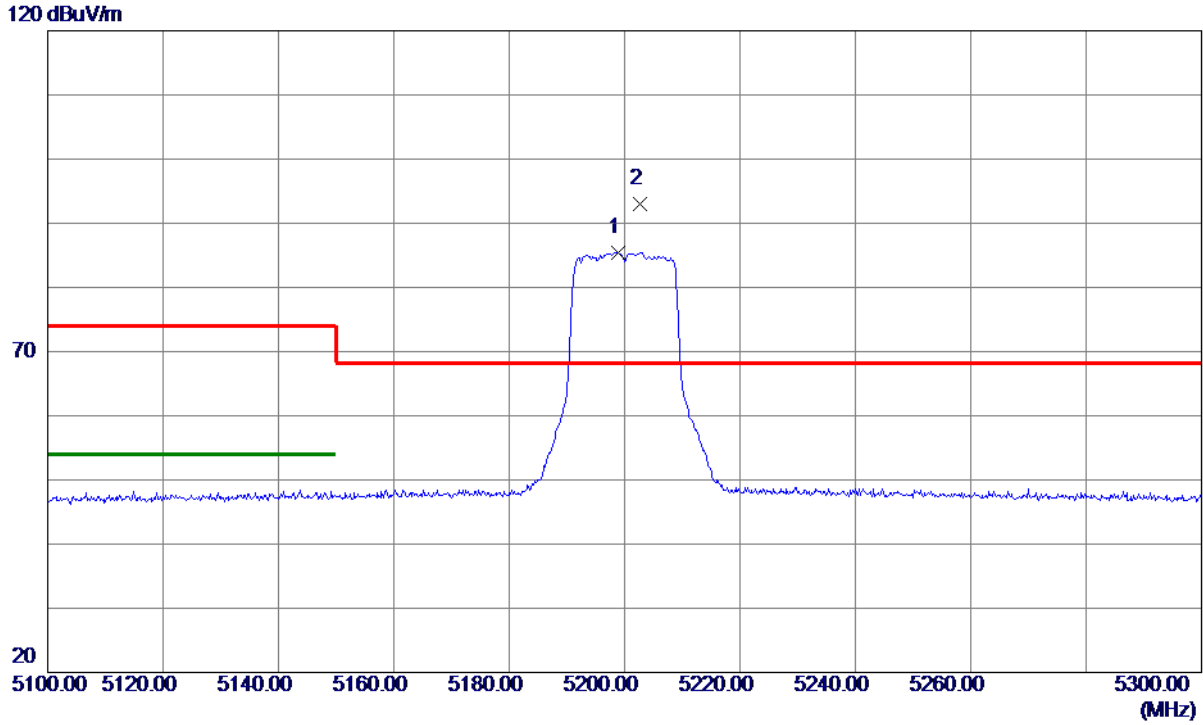
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6933.5330	49.72	-3.53	46.19	68.30	-22.11	Peak	
2 *	10401.4700	46.19	2.14	48.33	68.30	-19.97	Peak	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5200 MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5198.9000	46.32	39.13	85.45	999.00	-913.55	AVG	NO limit
2 *	5202.6000	53.83	39.14	92.97	68.30	24.67	Peak	NO limit

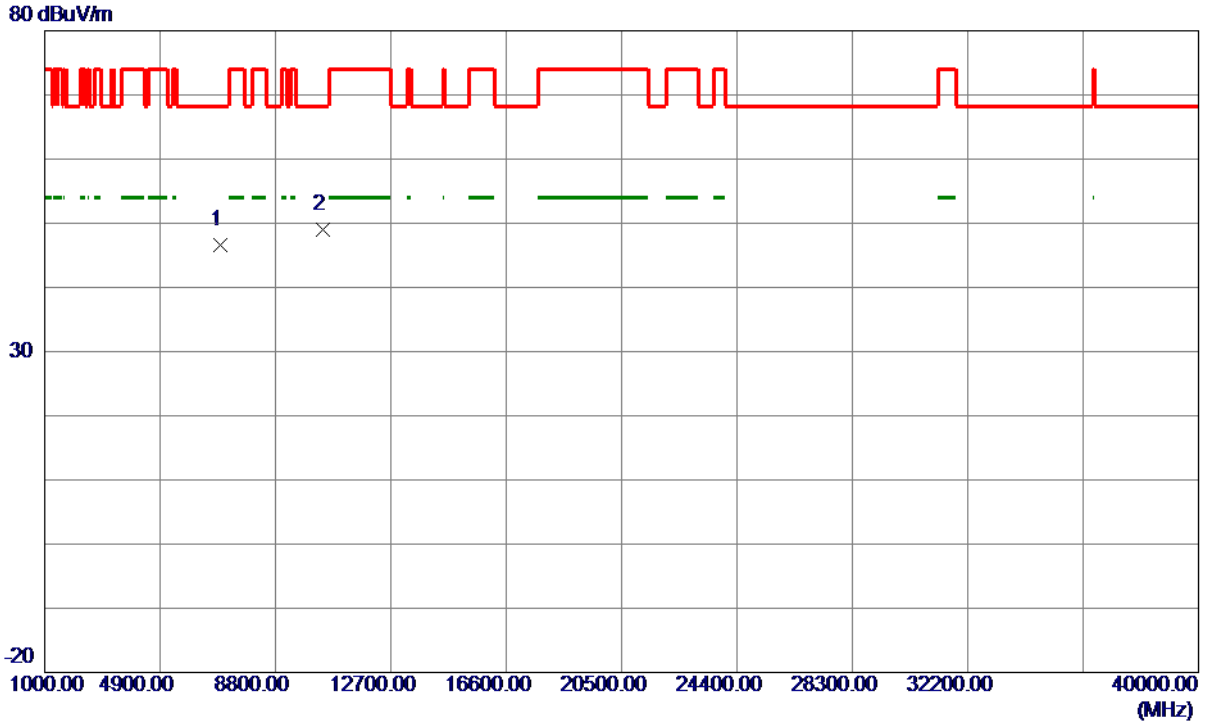
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5200 MHz

### Horizontal



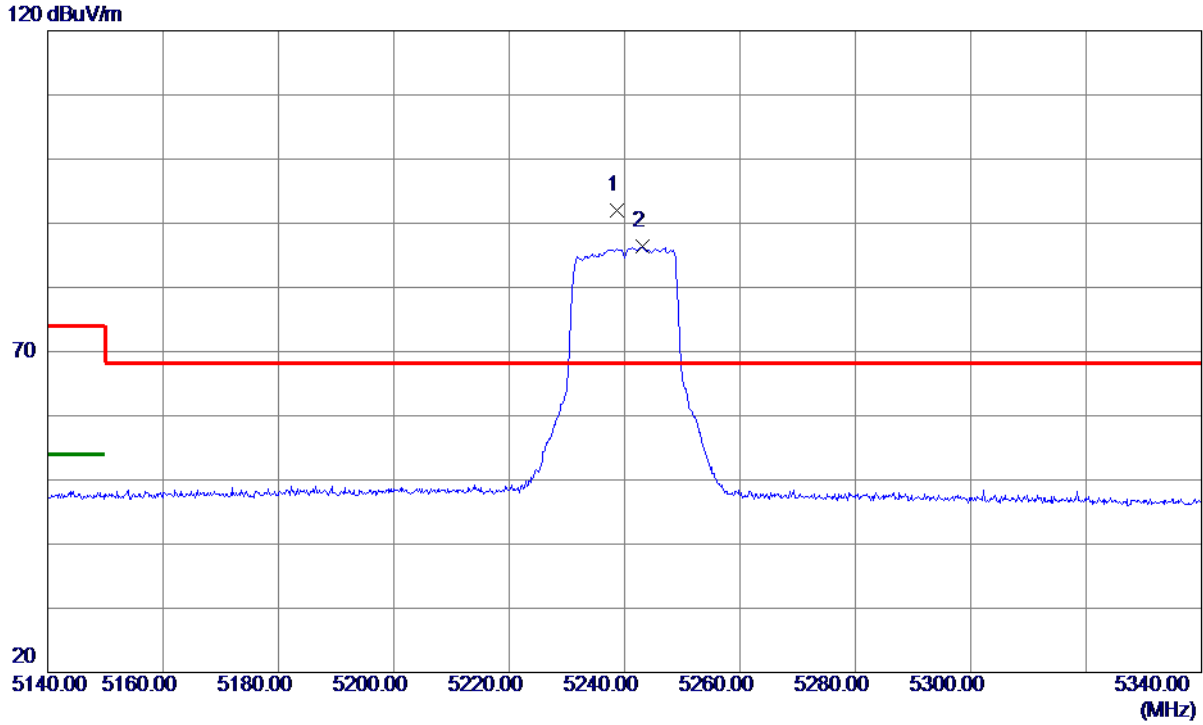
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6932.6280	50.15	-3.54	46.61	68.30	-21.69	Peak	
2 *	10401.0150	46.78	2.14	48.92	68.30	-19.38	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

### Vertical



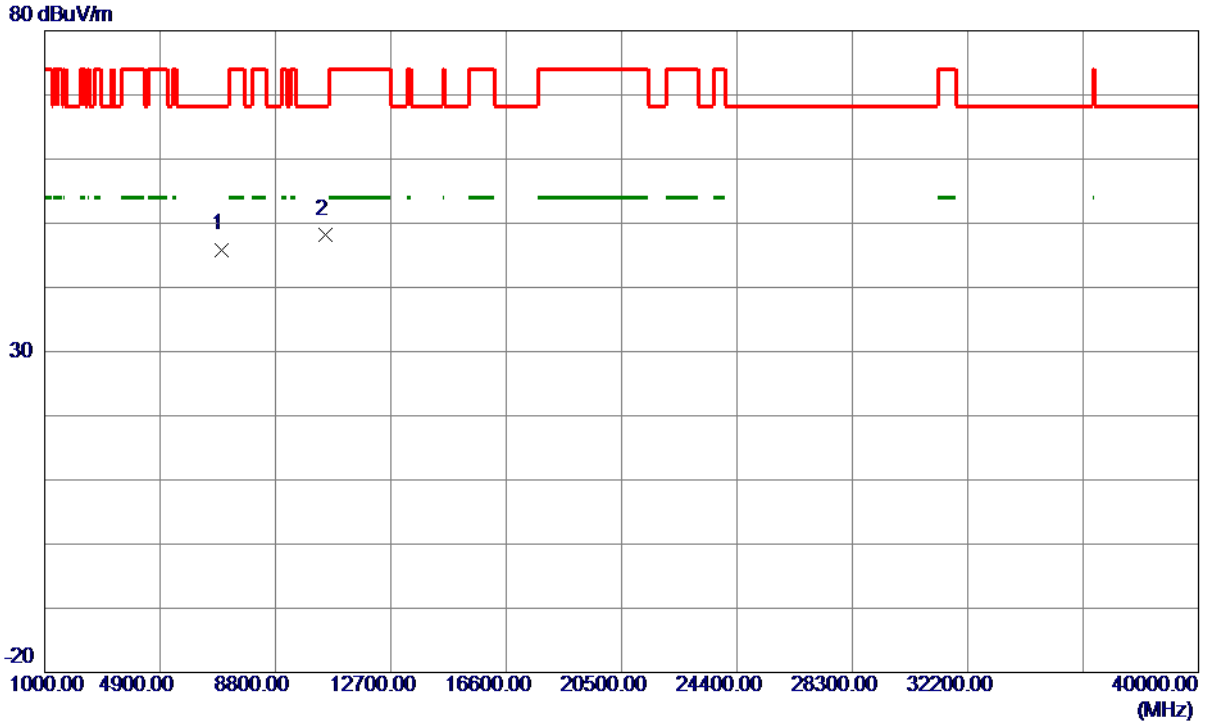
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5238.6000	52.76	39.18	91.94	68.30	23.64	Peak	NO limit
2	5243.2000	47.29	39.19	86.48	999.00	-912.52	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

### Vertical



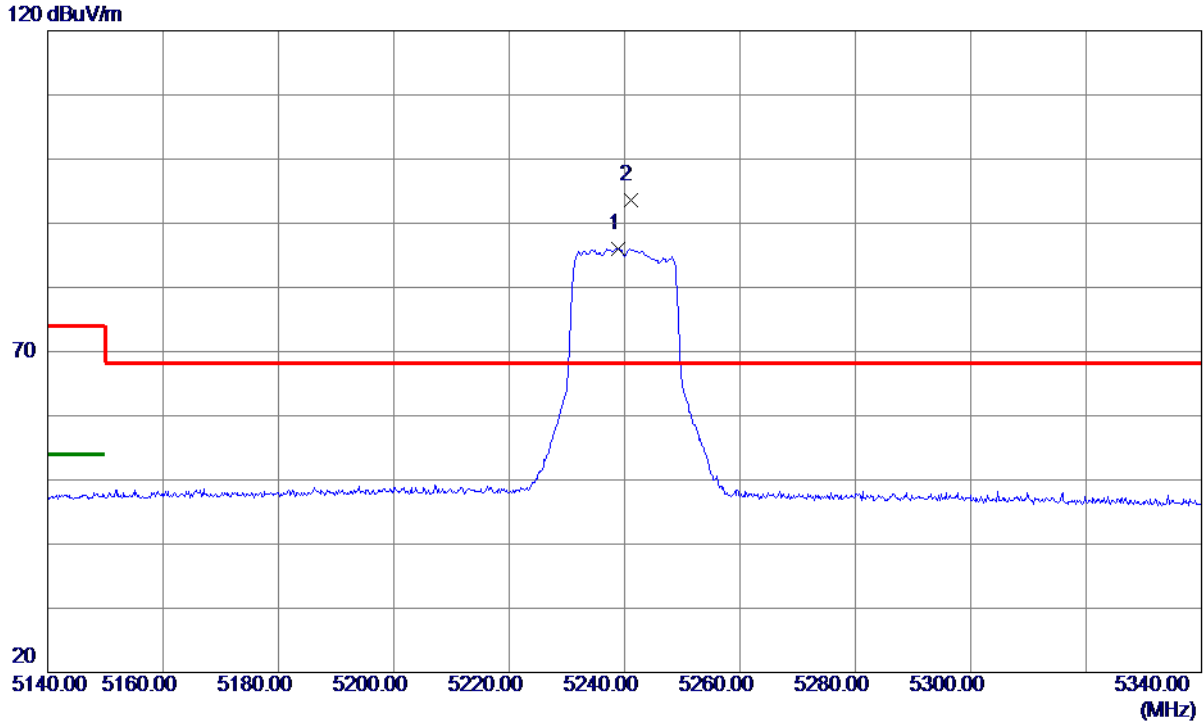
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6989.0300	49.23	-3.33	45.90	68.30	-22.40	Peak	
2 *	10480.8250	46.01	2.15	48.16	68.30	-20.14	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

### Horizontal



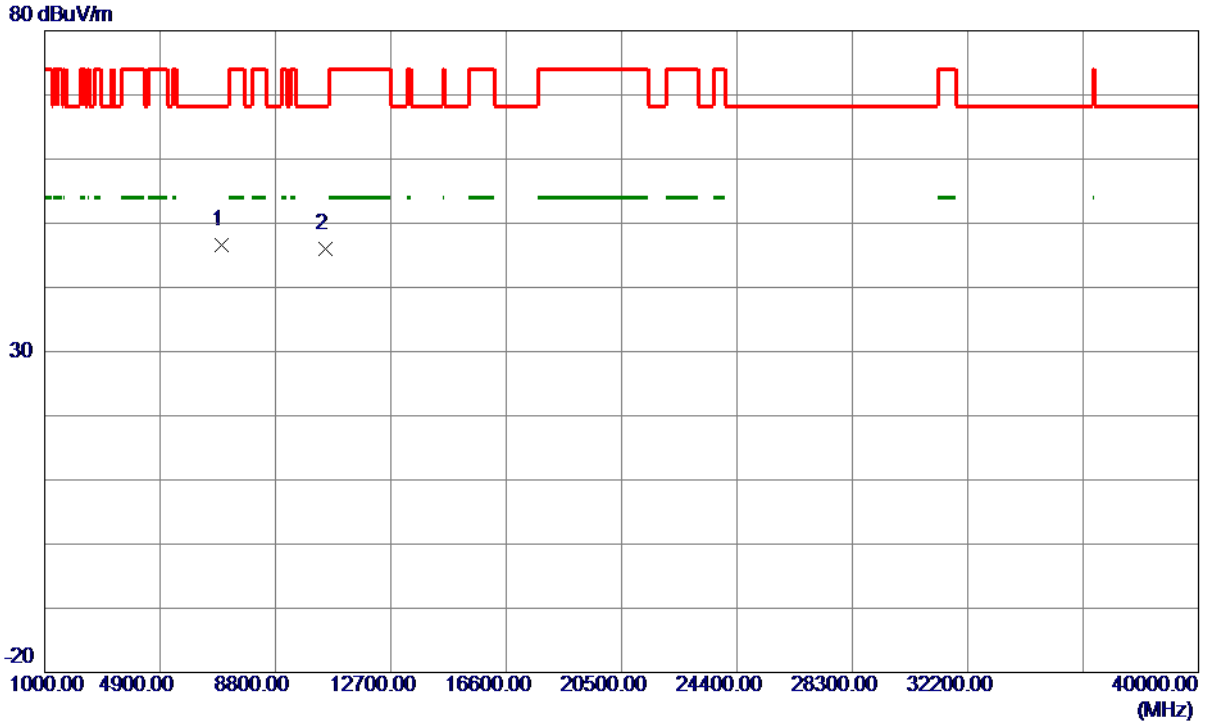
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5238.8000	46.90	39.18	86.08	999.00	-912.92	AVG	NO limit
2 *	5241.0000	54.41	39.18	93.59	68.30	25.29	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

### Horizontal



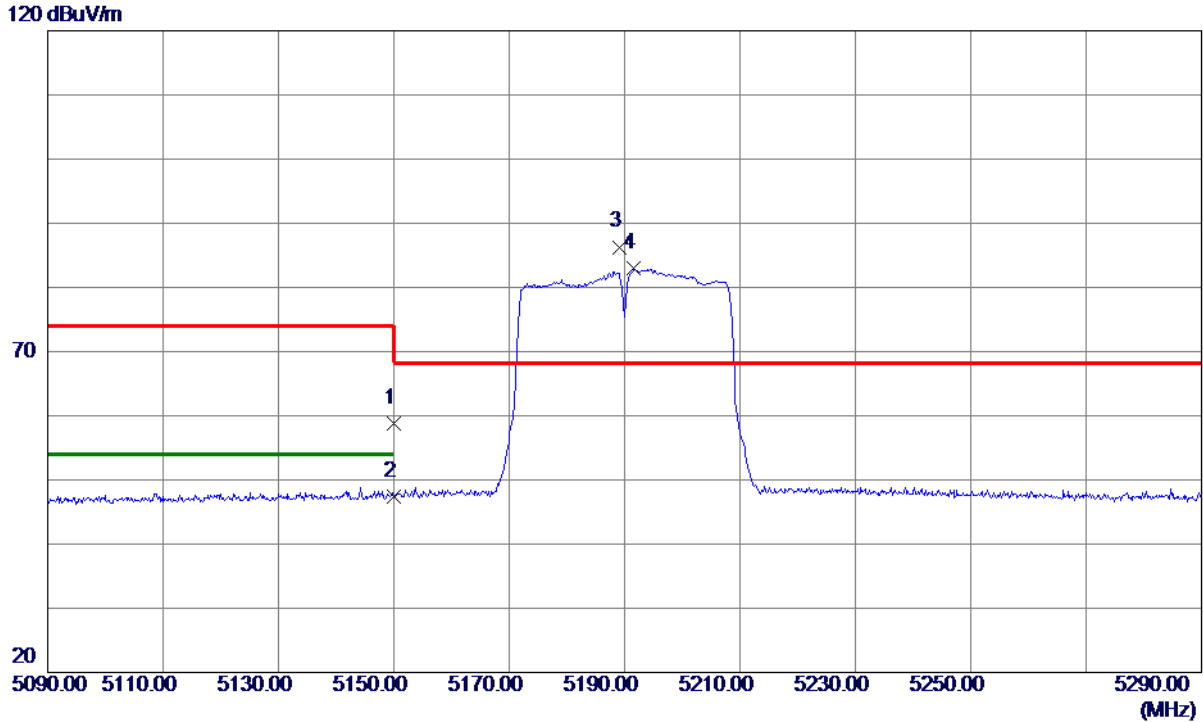
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	6986.4550	49.96	-3.34	46.62	68.30	-21.68	Peak	
2	10478.8949	43.82	2.15	45.97	68.30	-22.33	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz

### Vertical



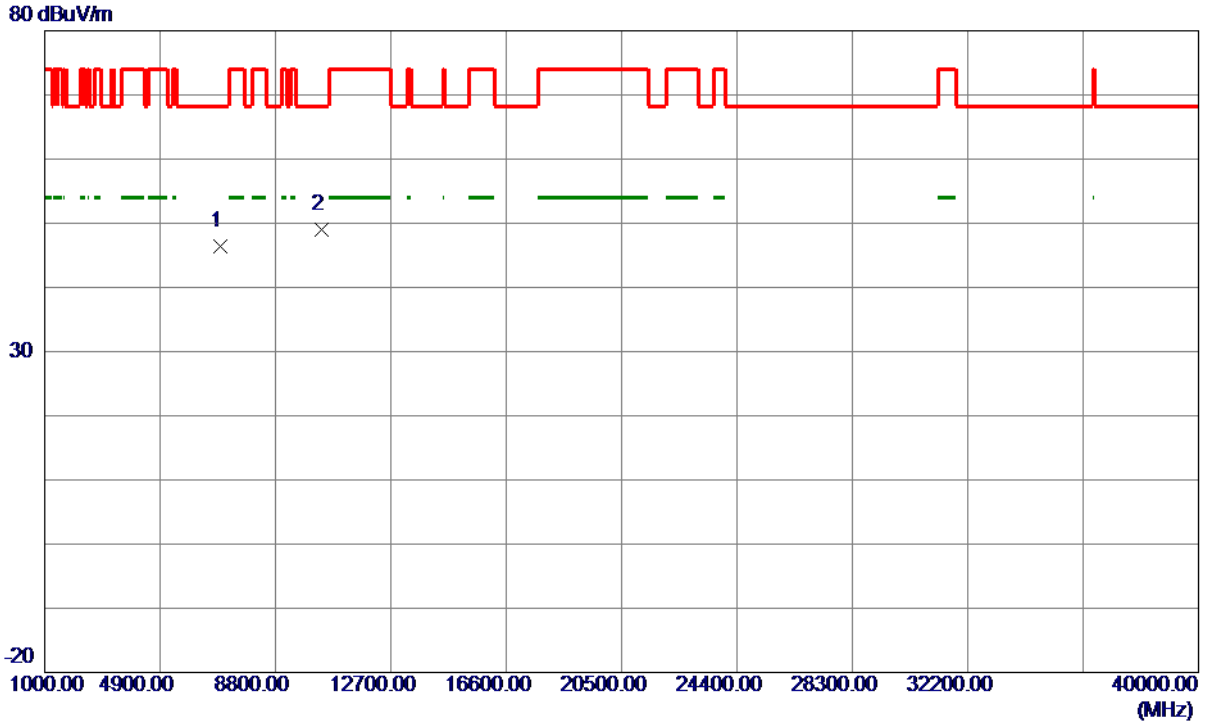
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.70	39.07	58.77	74.00	-15.23	Peak	
2	5150.0000	8.41	39.07	47.48	54.00	-6.52	AVG	
3 *	5189.1000	47.18	39.12	86.30	68.30	18.00	Peak	NO limit
4	5191.6000	43.79	39.12	82.91	999.00	-916.09	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz

### Vertical



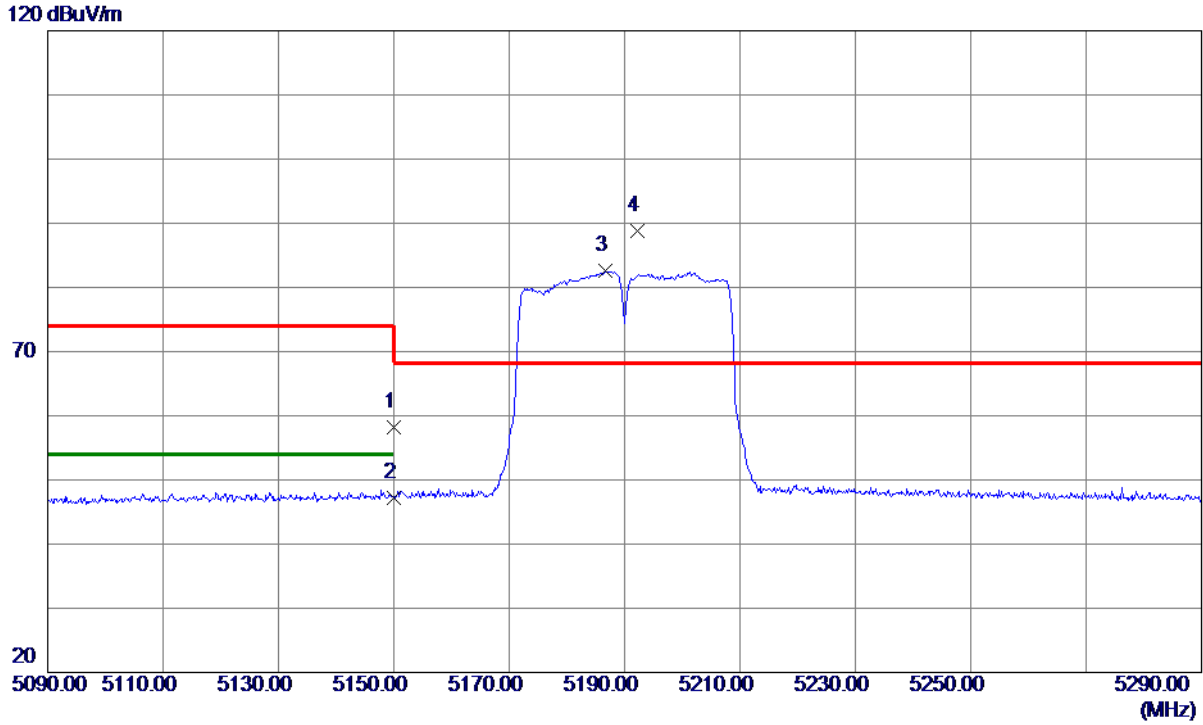
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6920.4550	49.92	-3.58	46.34	68.30	-21.96	Peak	
2 *	10378.0950	46.85	2.13	48.98	68.30	-19.32	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz

### 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	19.09	39.07	58.16	74.00	-15.84	Peak	
2	5150.0000	8.09	39.07	47.16	54.00	-6.84	AVG	
3	5186.7000	43.40	39.12	82.52	999.00	-916.48	AVG	NO limit
4 *	5192.2000	49.76	39.12	88.88	68.30	20.58	Peak	NO limit

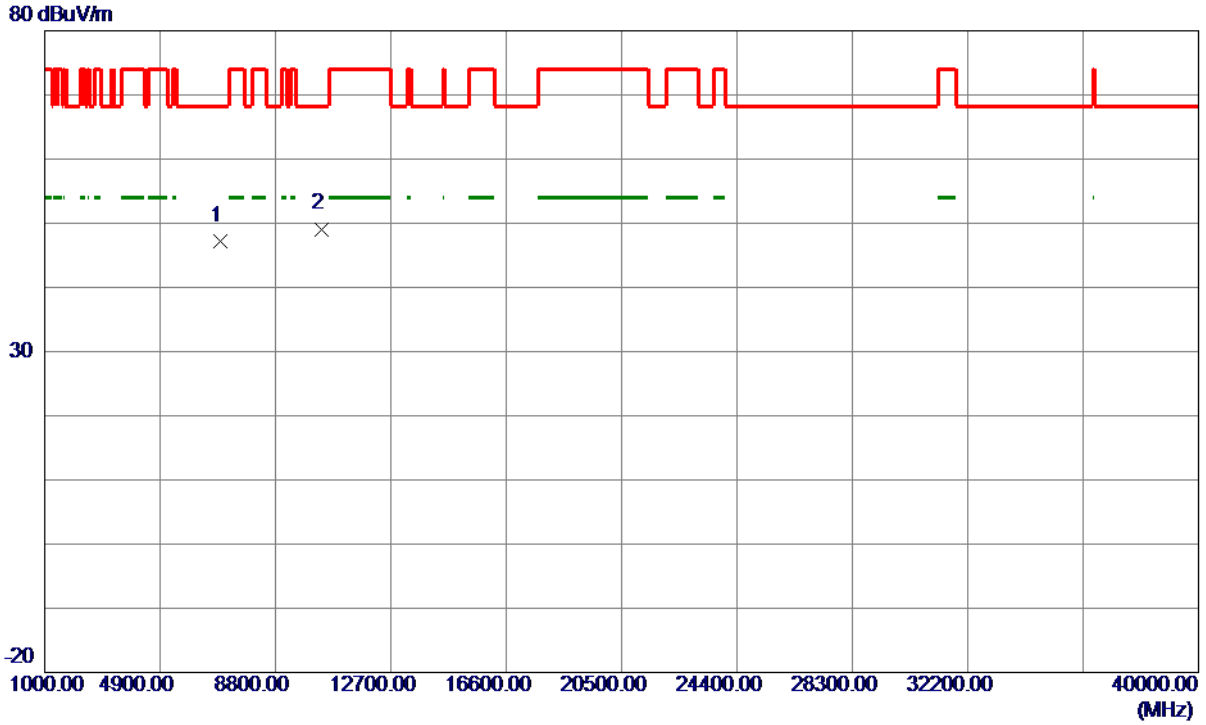
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz

### Horizontal



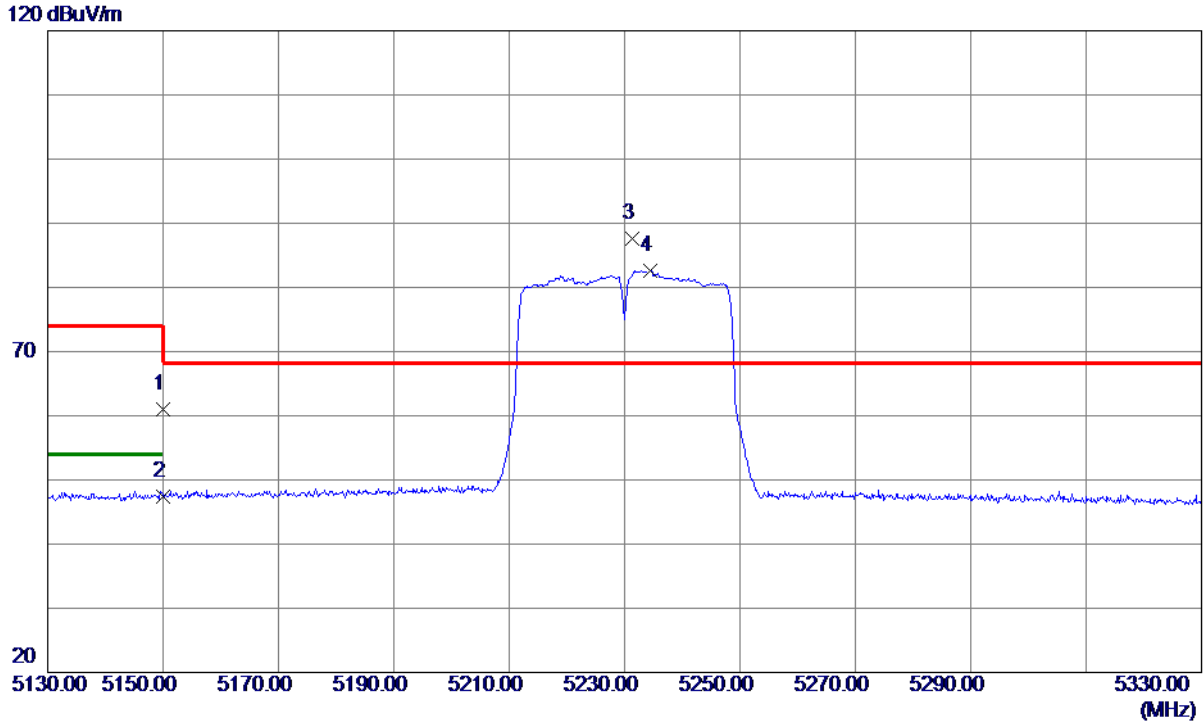
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6919.2750	50.72	-3.58	47.14	68.30	-21.16	Peak	
2 *	10381.0500	46.97	2.13	49.10	68.30	-19.20	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

### Vertical



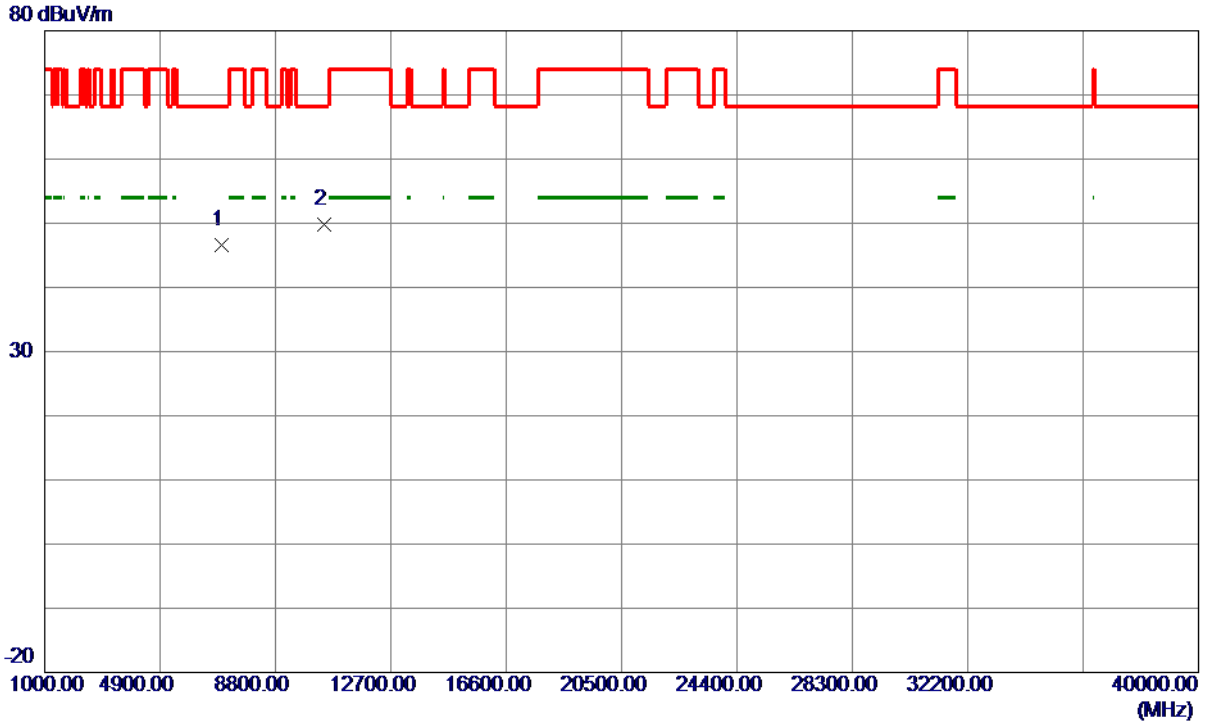
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.88	39.07	60.95	74.00	-13.05	Peak	
2	5150.0000	8.42	39.07	47.49	54.00	-6.51	AVG	
3 *	5231.3000	48.38	39.17	87.55	68.30	19.25	Peak	NO limit
4	5234.4000	43.42	39.18	82.60	999.00	-916.40	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

### Vertical



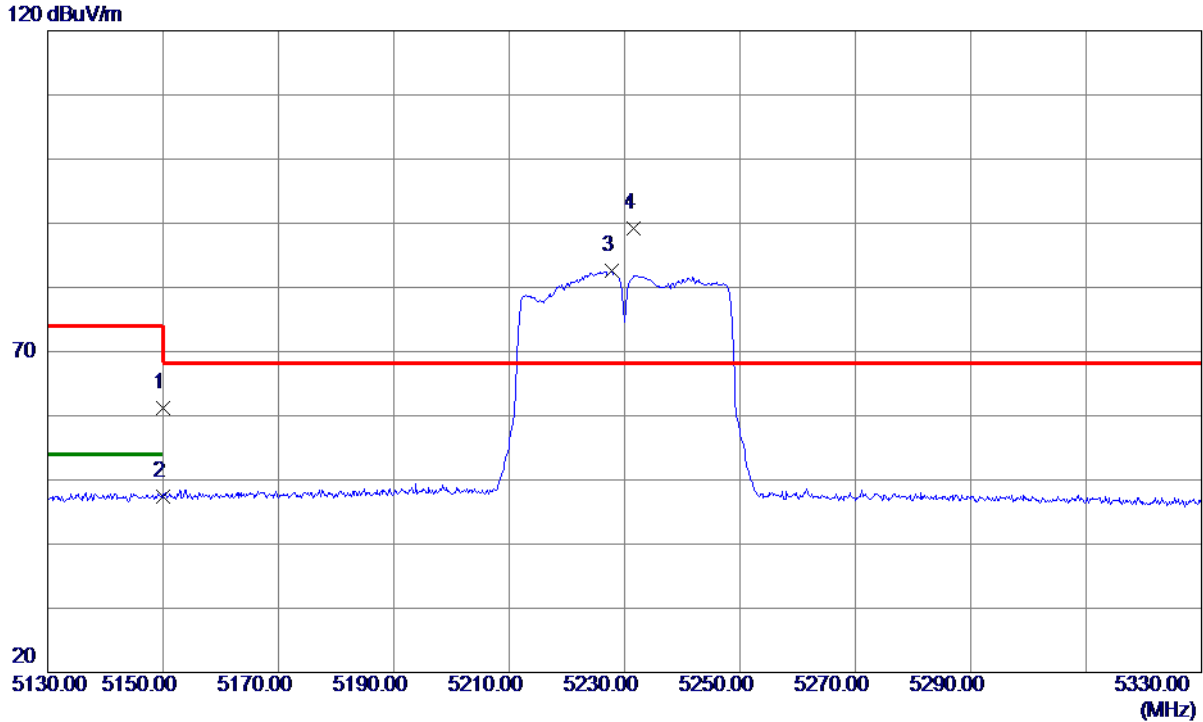
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6973.2080	49.95	-3.39	46.56	68.30	-21.74	Peak	
2 *	10461.2900	47.64	2.14	49.78	68.30	-18.52	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

### Horizontal



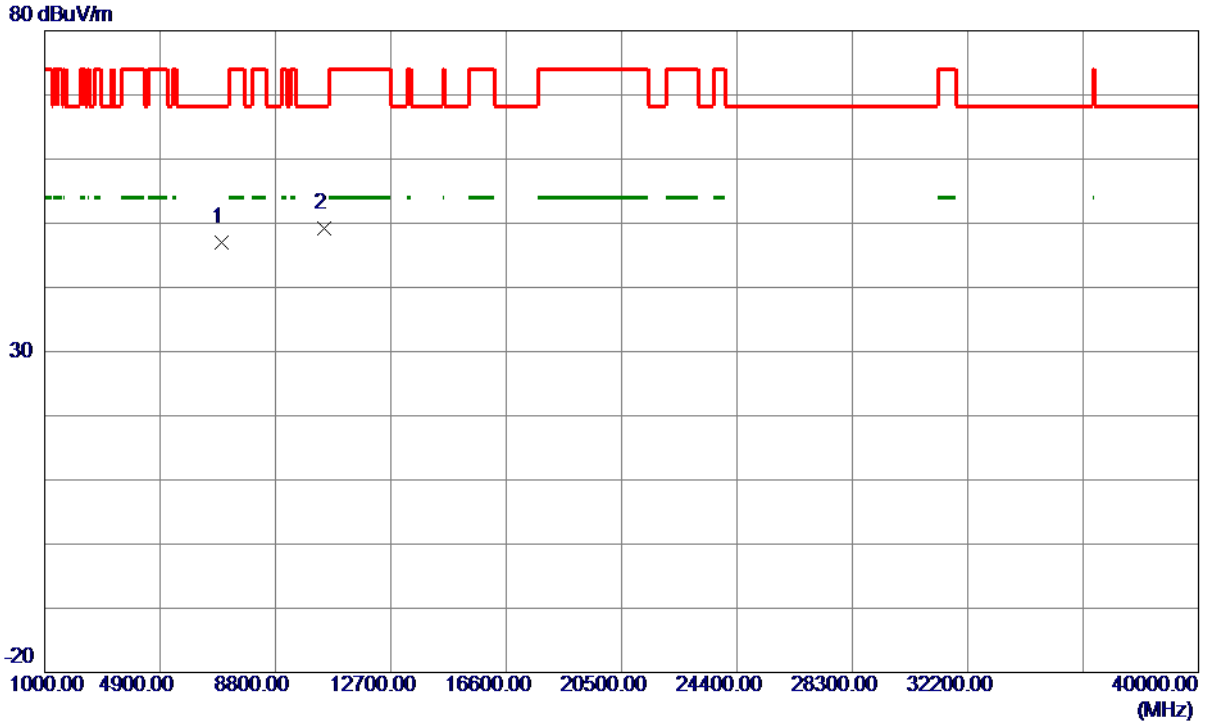
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.10	39.07	61.17	74.00	-12.83	Peak	
2	5150.0000	8.39	39.07	47.46	54.00	-6.54	AVG	
3	5227.7000	43.36	39.17	82.53	999.00	-916.47	AVG	NO limit
4 *	5231.6000	50.01	39.17	89.18	68.30	20.88	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

### Horizontal



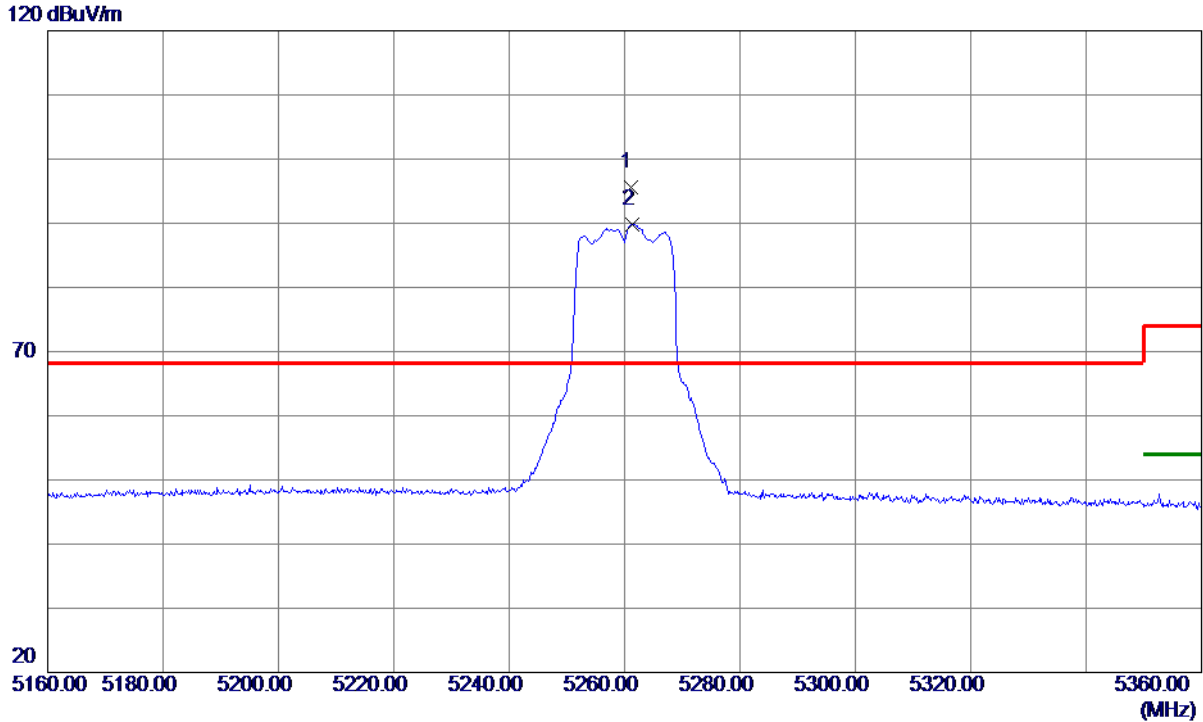
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	6971.9630	50.32	-3.39	46.93	68.30	-21.37	Peak	
2 *	10460.1000	47.13	2.14	49.27	68.30	-19.03	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz

### Vertical



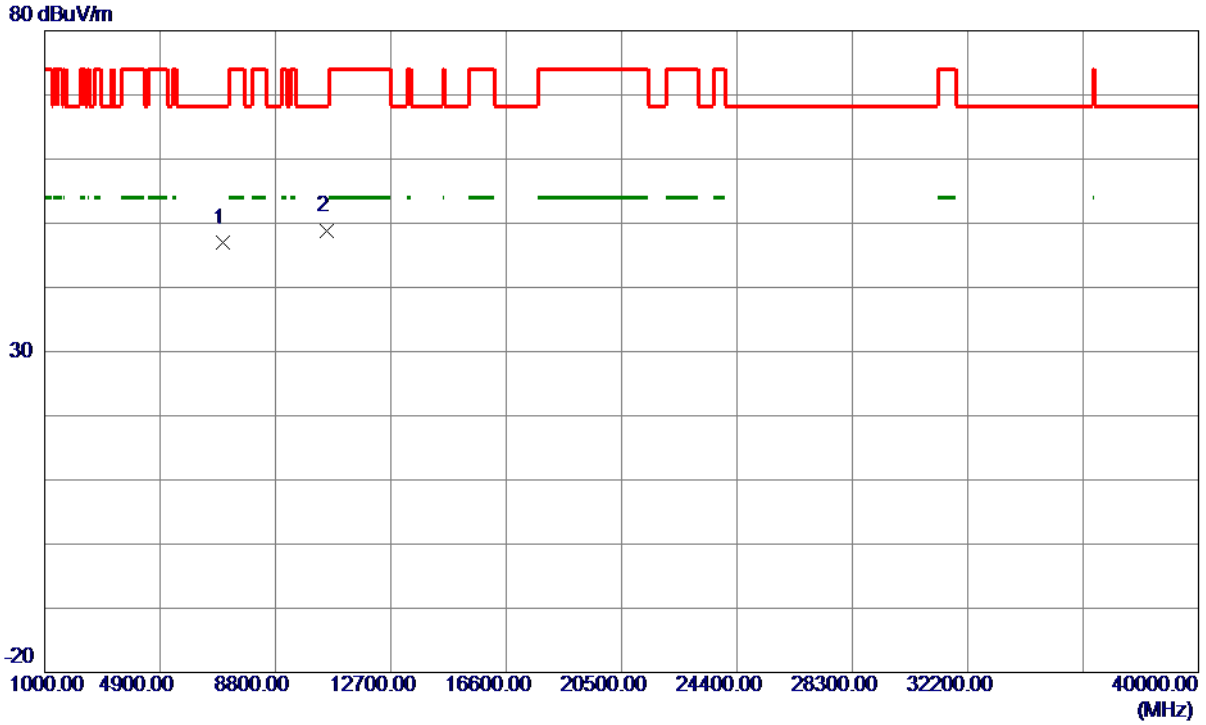
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5261.0000	56.33	39.21	95.54	68.30	27.24	Peak	NO limit
2	5261.3000	50.68	39.21	89.89	999.00	-909.11	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz

### Vertical



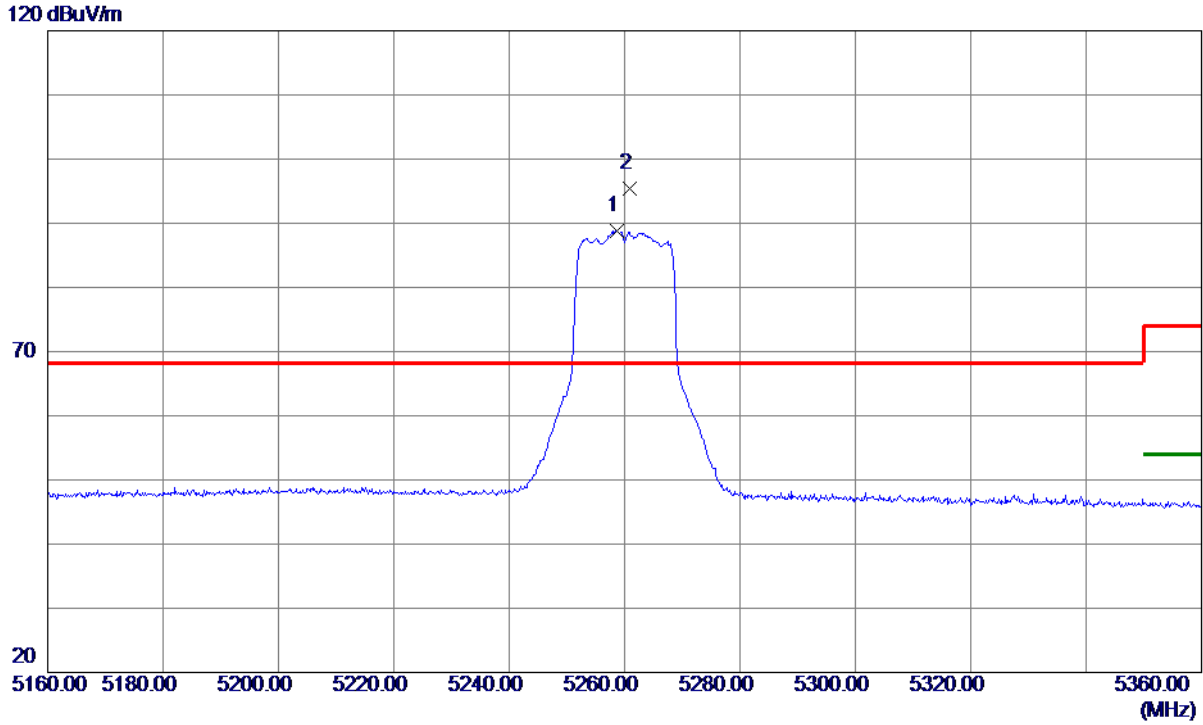
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7014.6700	50.17	-3.27	46.90	68.30	-21.40	Peak	
2 *	10516.3600	46.54	2.22	48.76	68.30	-19.54	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5258.6000	49.59	39.21	88.80	999.00	-910.20	AVG	NO limit
2 *	5260.9000	56.13	39.21	95.34	68.30	27.04	Peak	NO limit

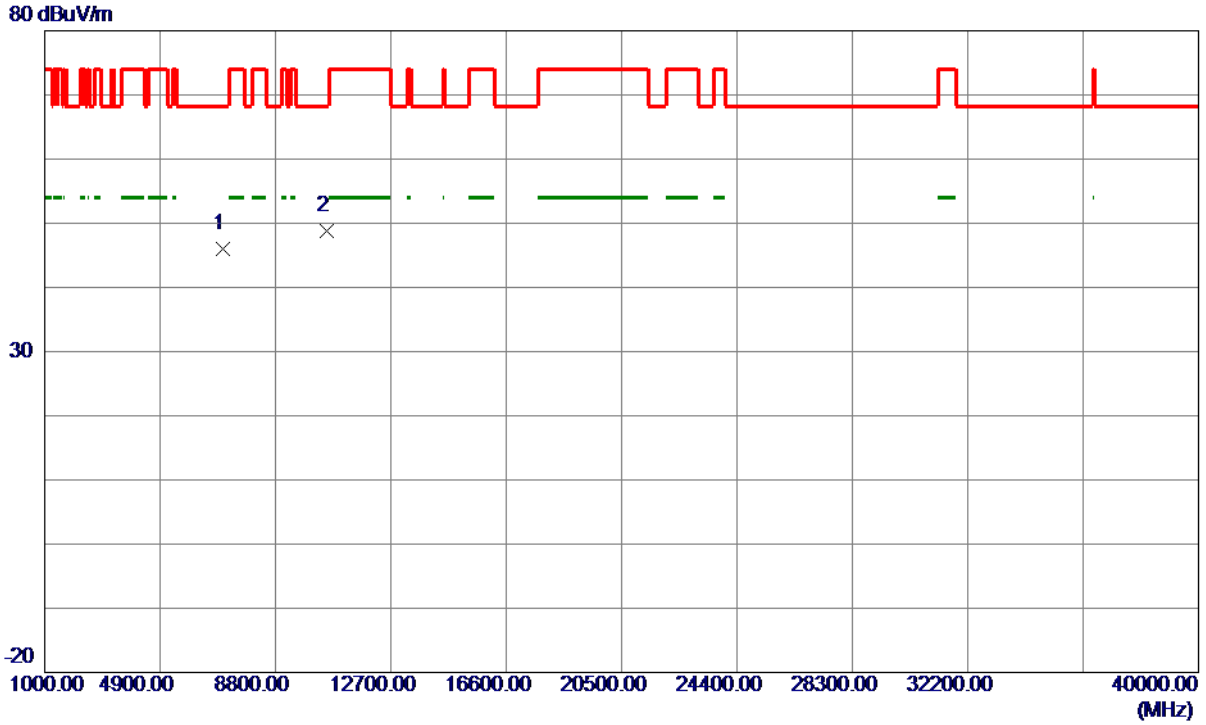
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz

### Horizontal



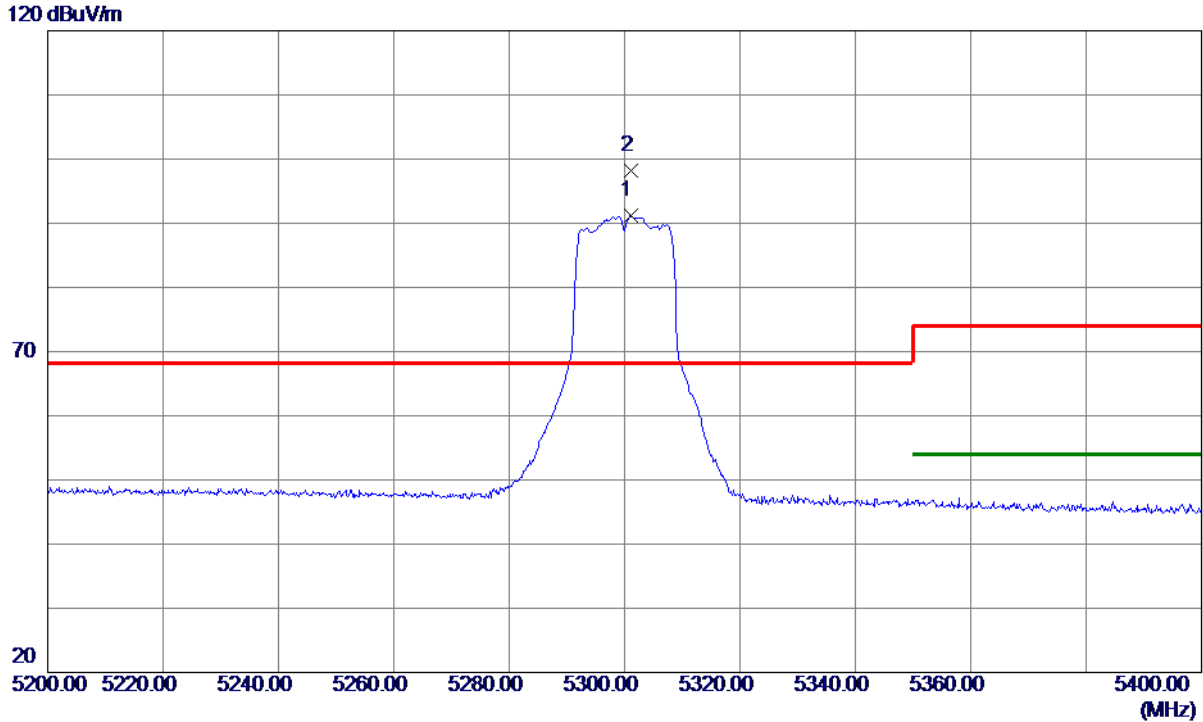
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7010.2400	49.34	-3.27	46.07	68.30	-22.23	Peak	
2 *	10520.7250	46.58	2.24	48.82	68.30	-19.48	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz

### Vertical



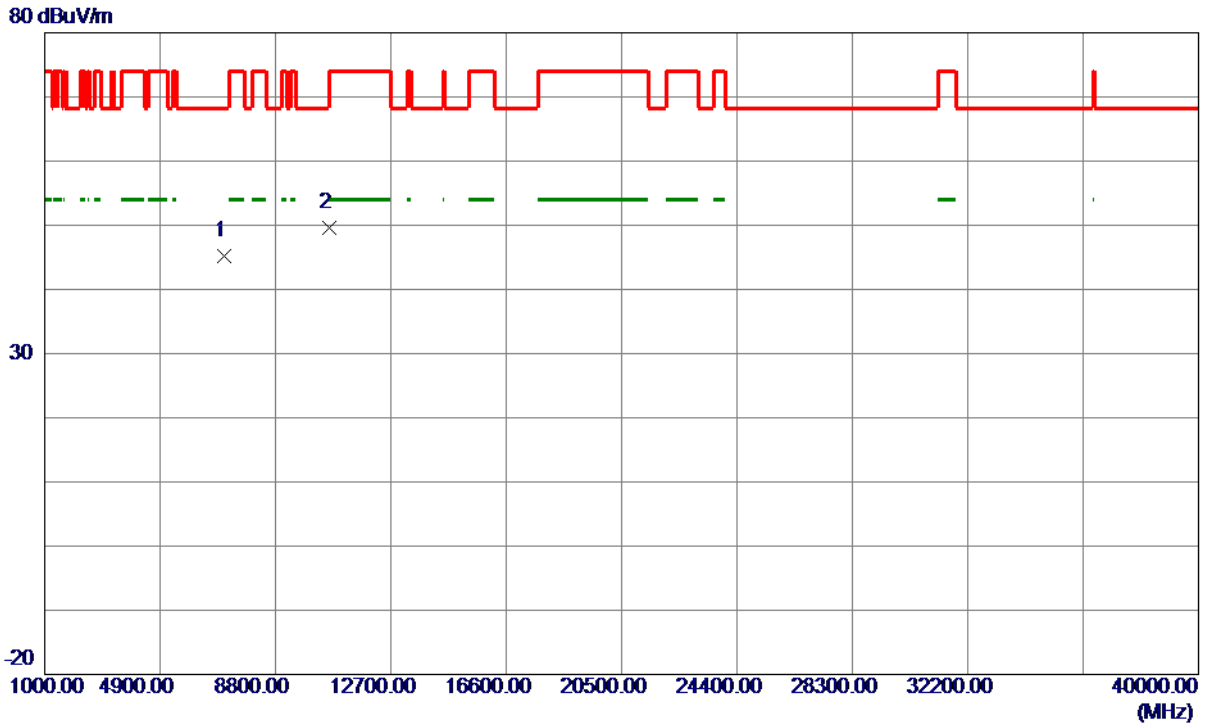
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5301.0000	51.85	39.26	91.11	999.00	-907.89	AVG	NO limit
2 *	5301.1000	58.95	39.26	98.21	68.30	29.91	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz

### Vertical



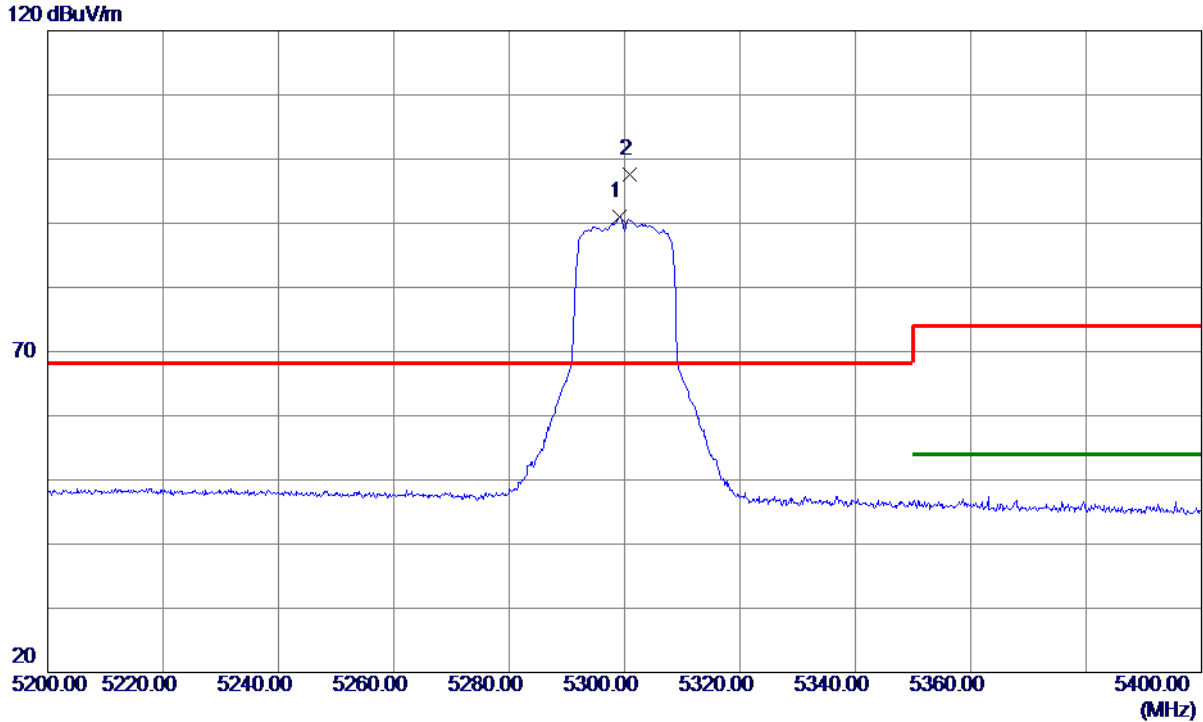
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7067.5800	48.41	-3.17	45.24	68.30	-23.06	Peak	
2	10601.8700	47.06	2.61	49.67	74.00	-24.33	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz

### Horizontal



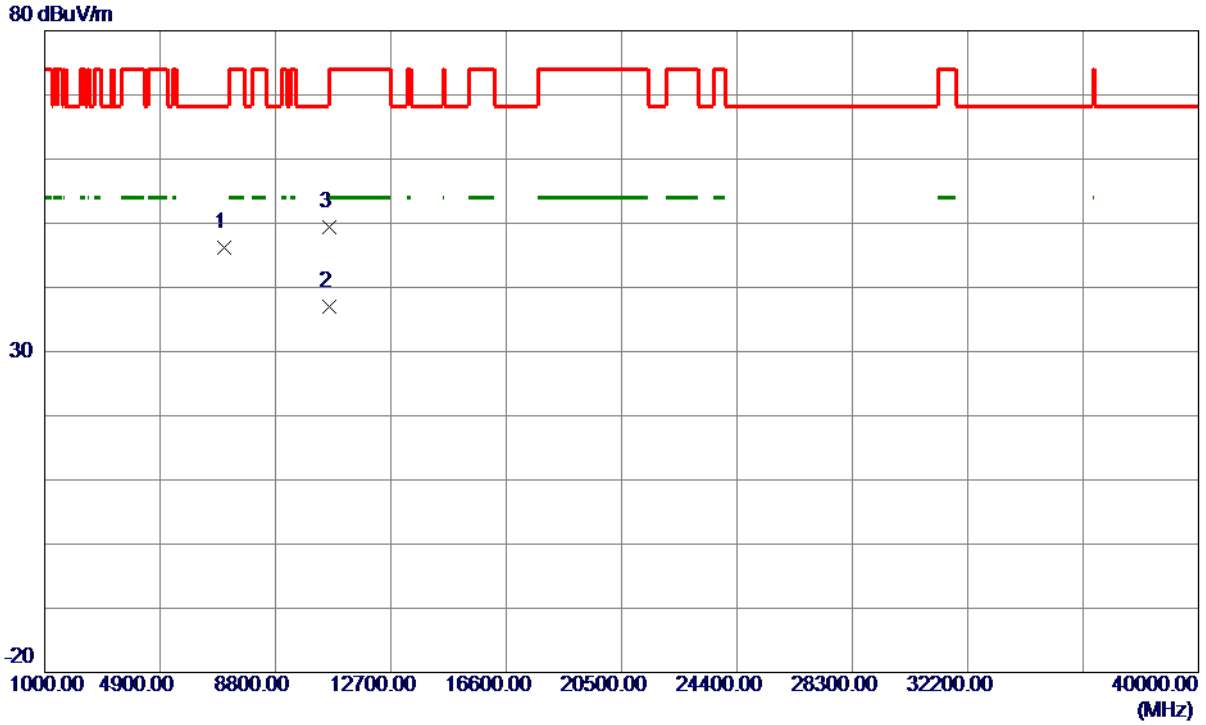
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5299.1000	51.81	39.26	91.07	999.00	-907.93	AVG	NO limit
2 *	5300.9000	58.38	39.26	97.64	68.30	29.34	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz

### Horizontal



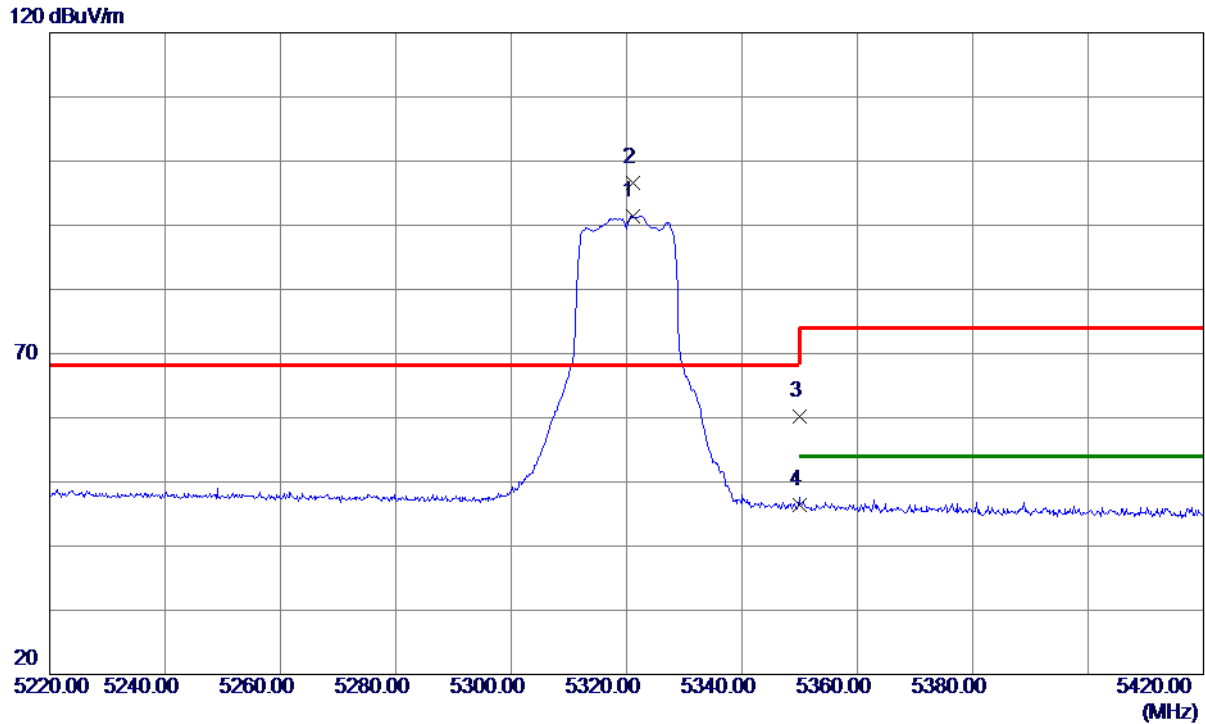
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7063.9000	49.42	-3.18	46.24	68.30	-22.06	Peak	
2 *	10600.3550	34.46	2.60	37.06	54.00	-16.94	AVG	
3	10601.4650	46.77	2.61	49.38	74.00	-24.62	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

### Vertical



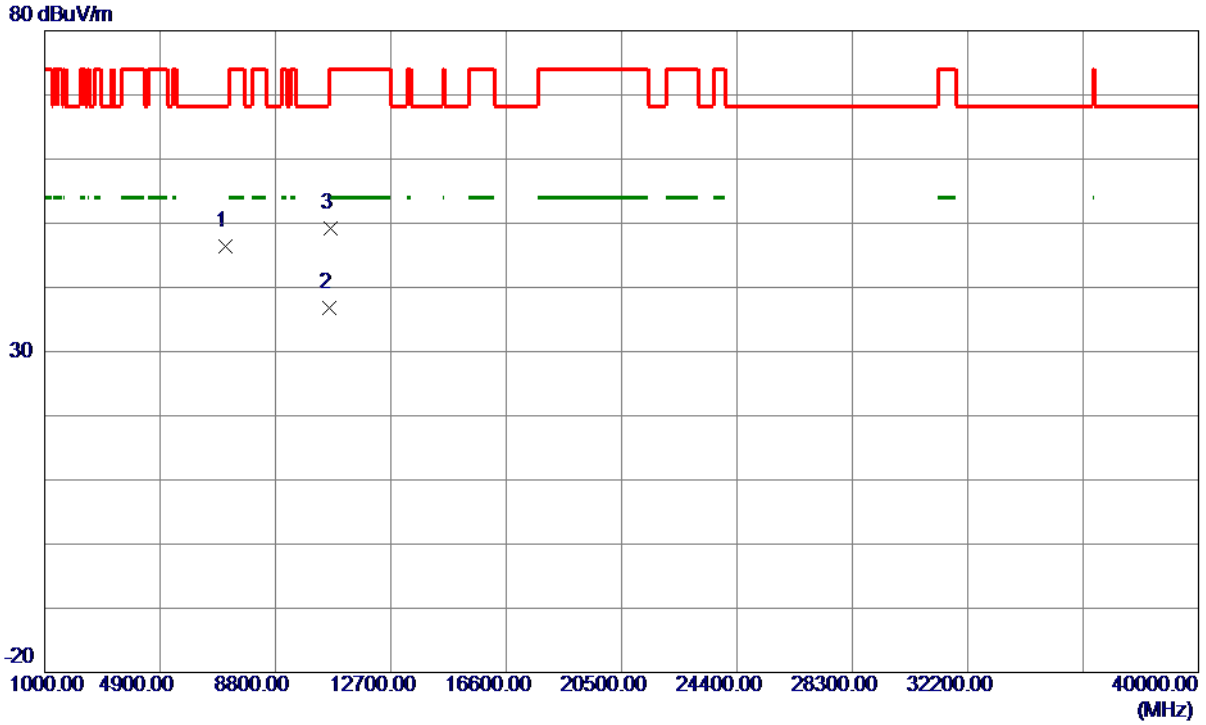
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5321.0000	52.06	39.28	91.34	999.00	-907.66	AVG	NO limit
2 *	5321.2000	57.35	39.28	96.63	68.30	28.33	Peak	NO limit
3	5350.0000	20.89	39.32	60.21	74.00	-13.79	Peak	
4	5350.0000	7.02	39.32	46.34	54.00	-7.66	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

### Vertical



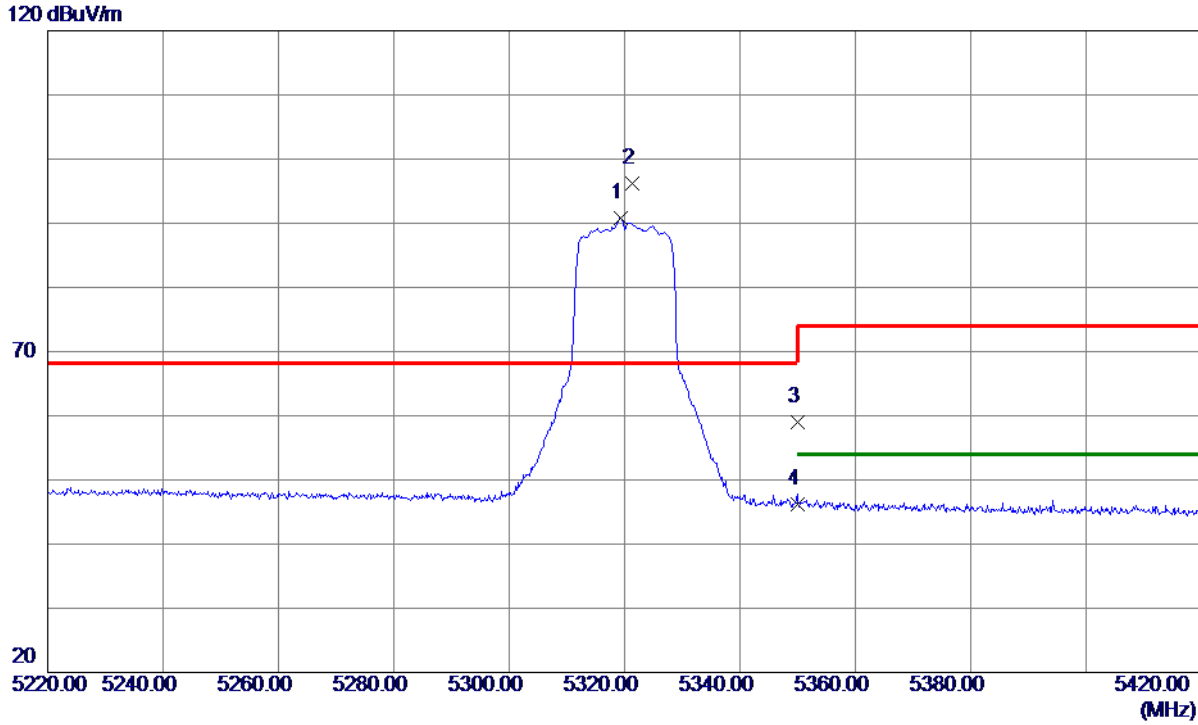
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7094.4380	49.50	-3.12	46.38	68.30	-21.92	Peak	
2 *	10639.2350	34.10	2.78	36.88	54.00	-17.12	AVG	
3	10642.3800	46.42	2.79	49.21	74.00	-24.79	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5319.4000	51.56	39.28	90.84	999.00	-908.16	AVG	NO limit
2 *	5321.4000	56.83	39.28	96.11	68.30	27.81	Peak	NO limit
3	5350.0000	19.71	39.32	59.03	74.00	-14.97	Peak	
4	5350.0000	6.79	39.32	46.11	54.00	-7.89	AVG	

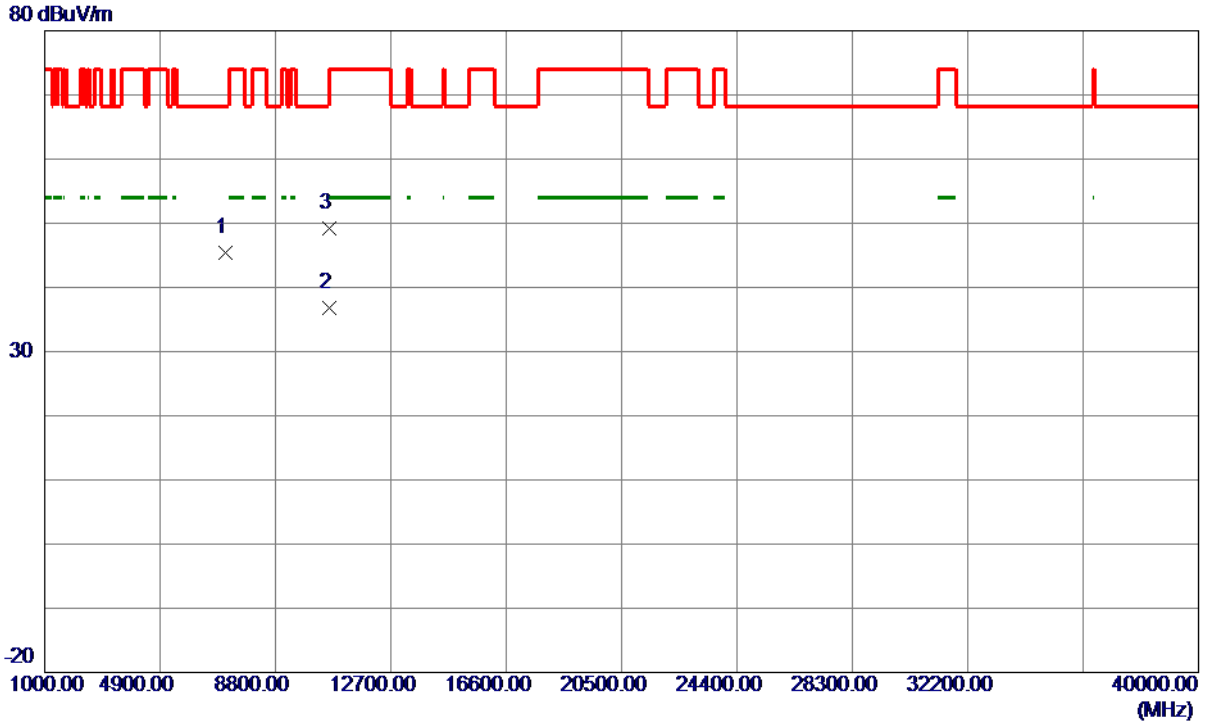
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

### Horizontal



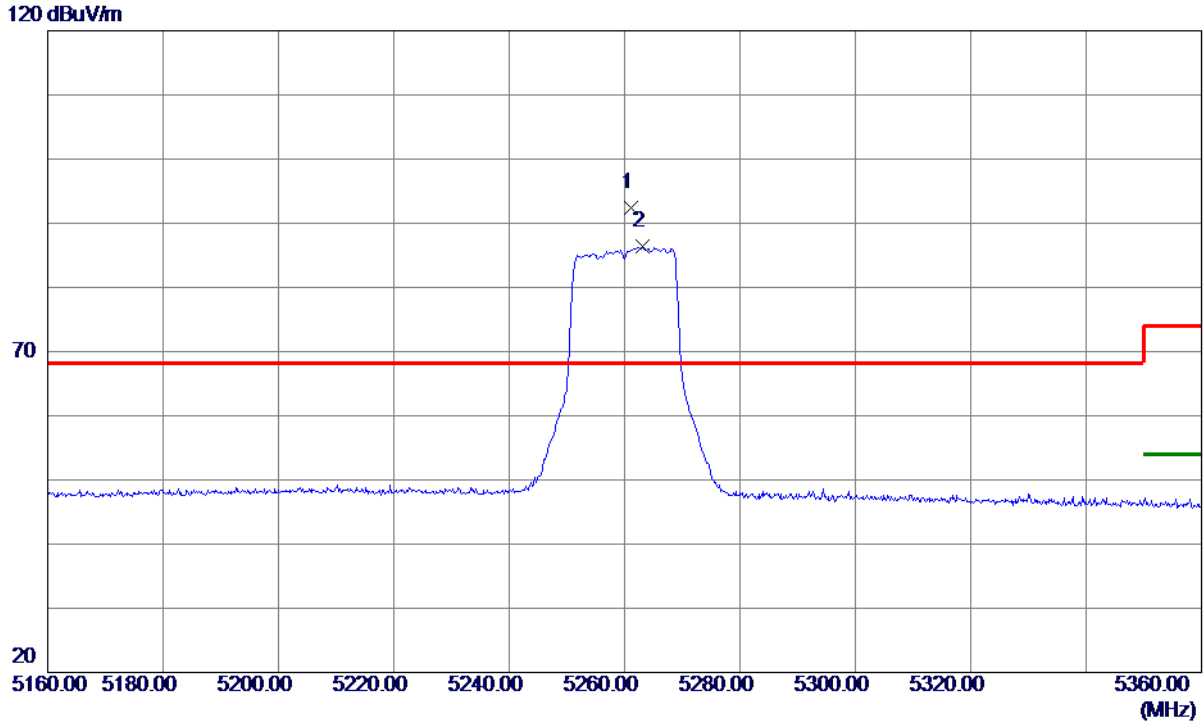
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7092.6930	48.53	-3.13	45.40	68.30	-22.90	Peak	
2 *	10637.8200	34.10	2.77	36.87	54.00	-17.13	AVG	
3	10641.3949	46.45	2.79	49.24	74.00	-24.76	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz

### Vertical



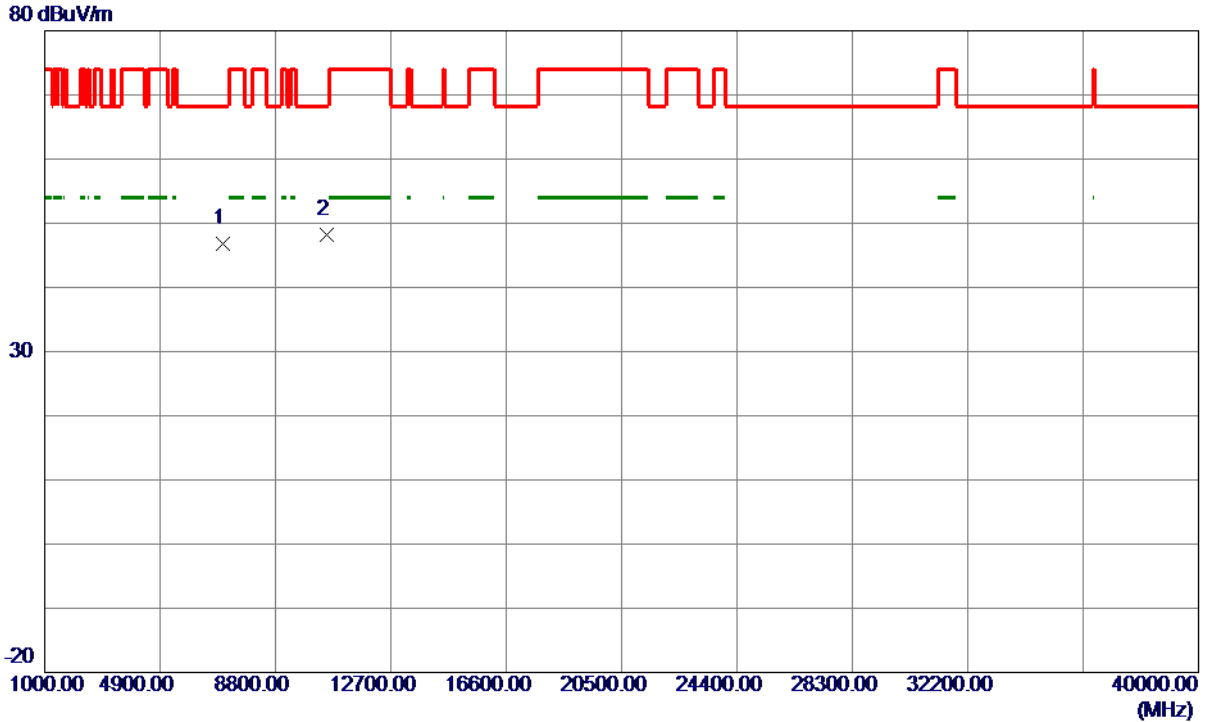
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5261.1000	53.15	39.21	92.36	68.30	24.06	Peak	NO limit
2	5263.1000	47.14	39.21	86.35	999.00	-912.65	AVG	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz

### Vertical



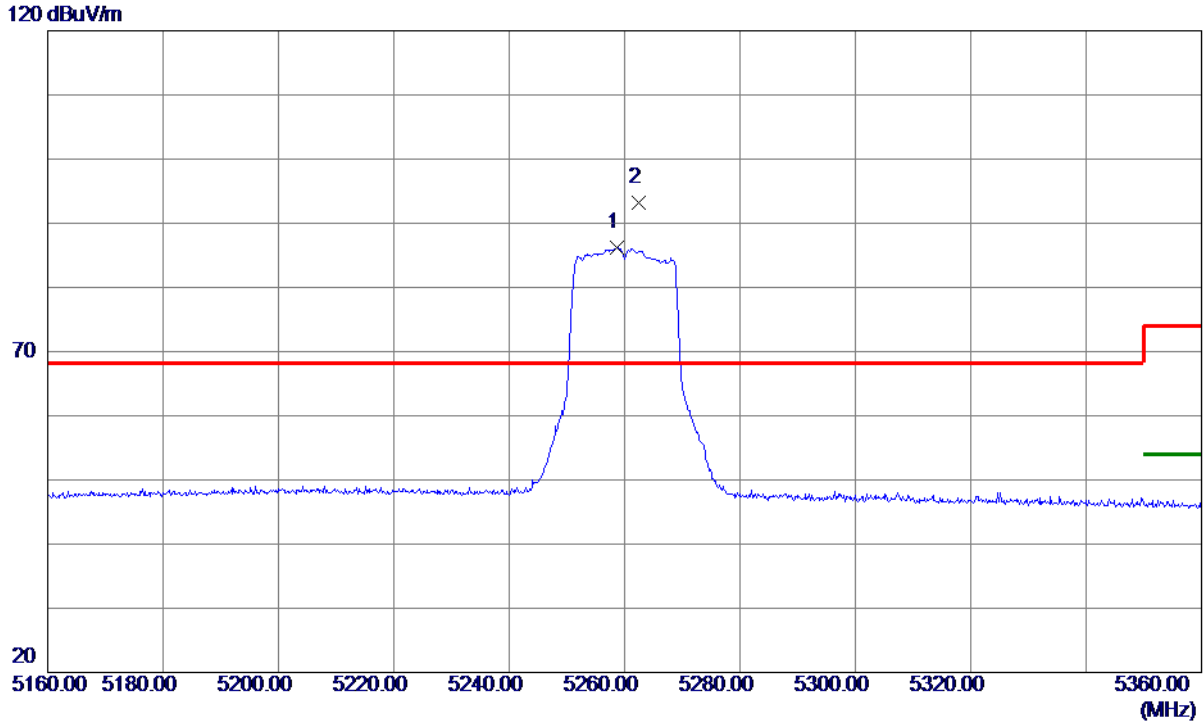
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7011.3500	50.00	-3.27	46.73	68.30	-21.57	Peak	
2 *	10521.0150	45.97	2.24	48.21	68.30	-20.09	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz

### Horizontal



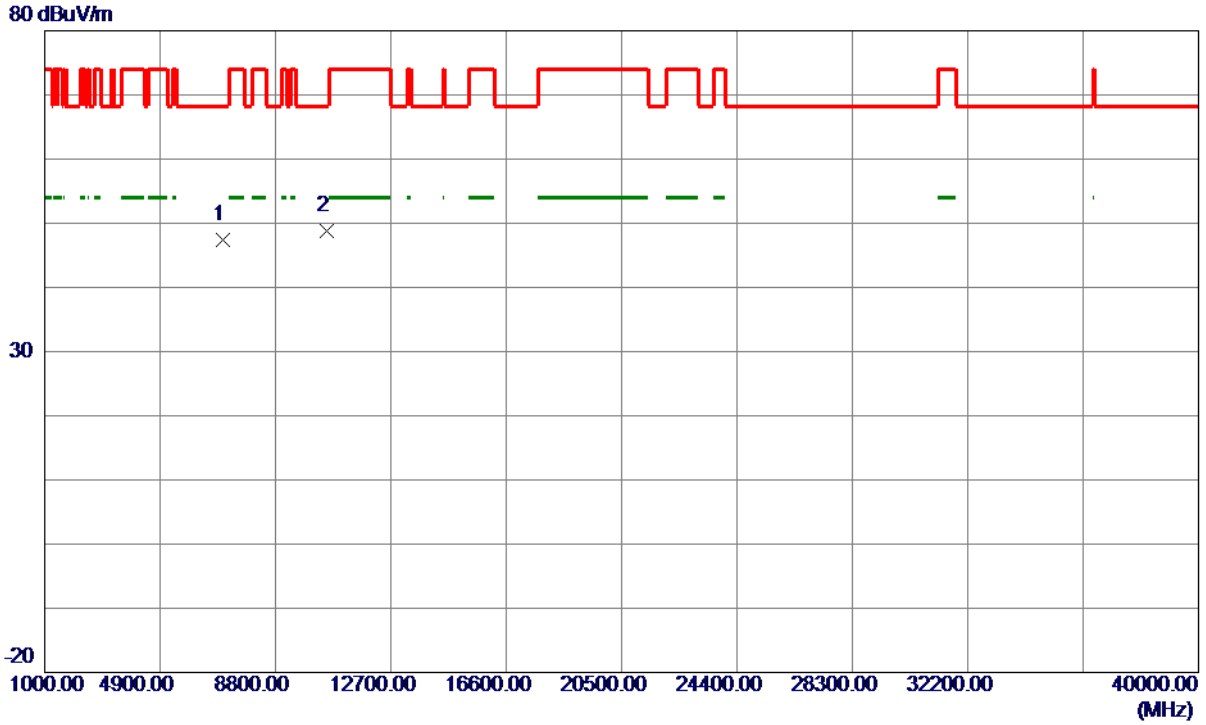
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5258.6000	46.95	39.21	86.16	999.00	-912.84	AVG	NO limit
2 *	5262.5000	54.07	39.21	93.28	68.30	24.98	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz

### Horizontal



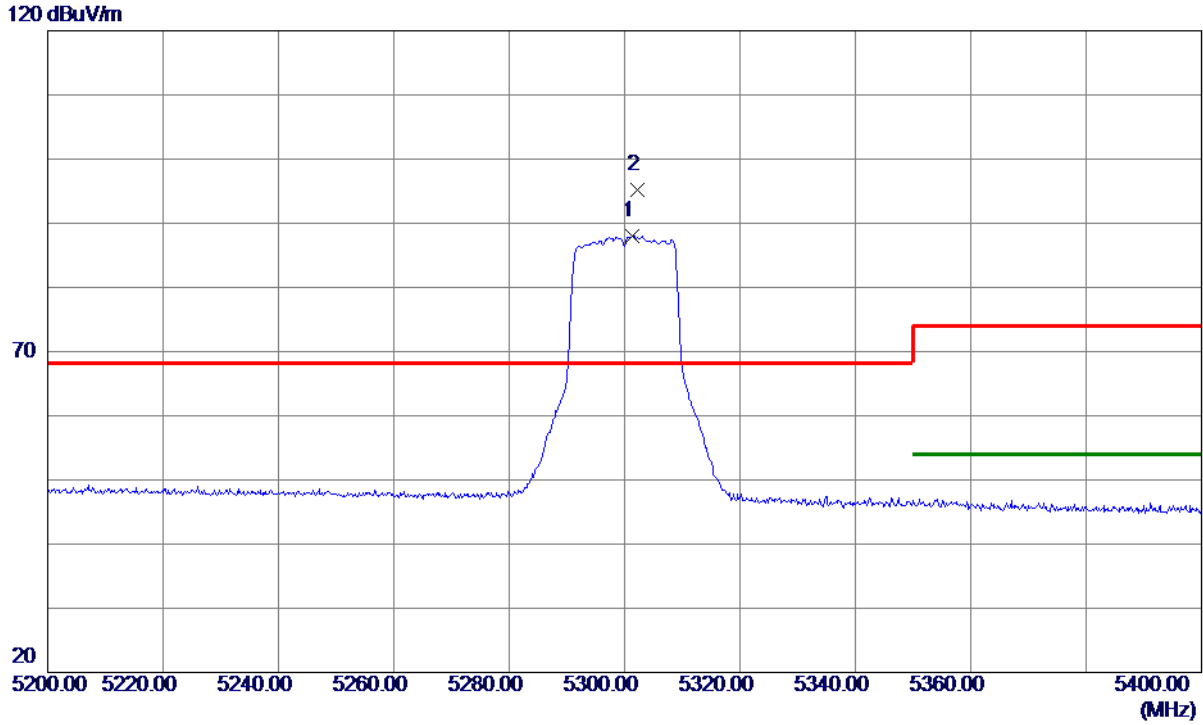
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7013.6700	50.70	-3.27	47.43	68.30	-20.87	Peak	
2 *	10517.7650	46.65	2.23	48.88	68.30	-19.42	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz

### Vertical



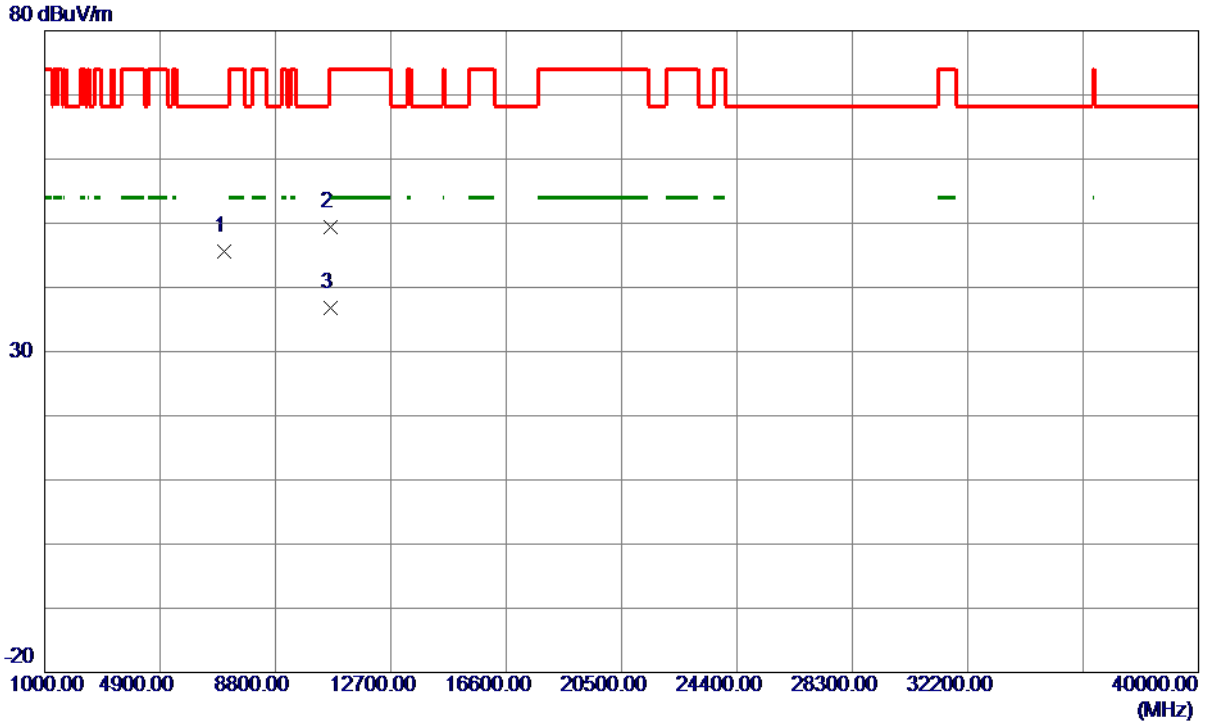
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5301.3000	48.70	39.26	87.96	999.00	-911.04	AVG	NO limit
2 *	5302.3000	55.93	39.26	95.19	68.30	26.89	Peak	NO limit

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz

### Vertical



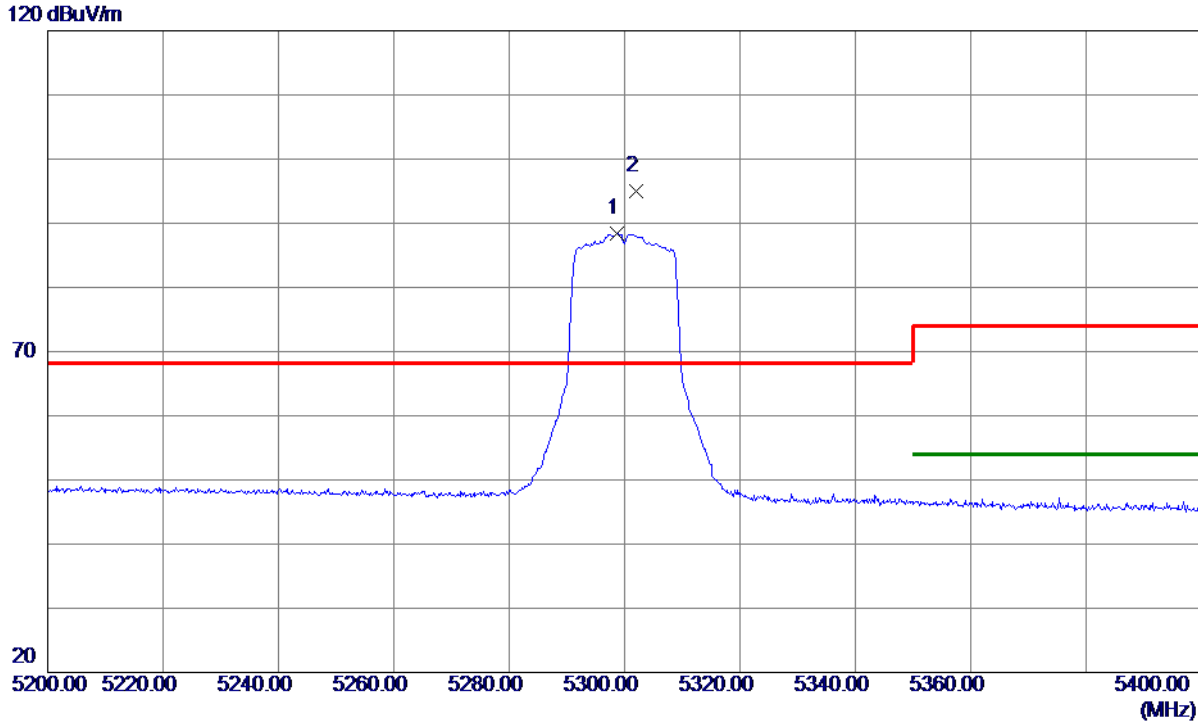
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7067.2400	48.71	-3.17	45.54	68.30	-22.76	Peak	
2	10661.2950	46.53	2.88	49.41	74.00	-24.59	Peak	
3 *	10662.3550	33.90	2.88	36.78	54.00	-17.22	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5298.6000	49.08	39.26	88.34	999.00	-910.66	AVG	NO limit
2 *	5302.1000	55.74	39.26	95.00	68.30	26.70	Peak	NO limit

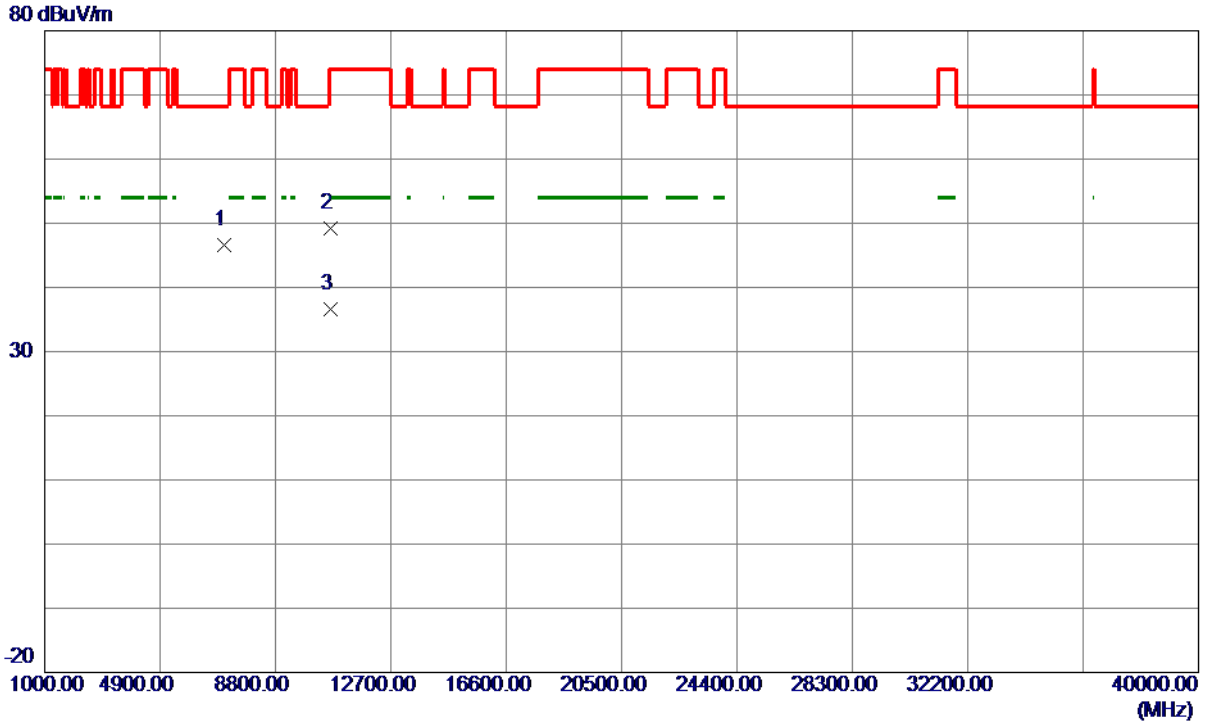
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz

### Horizontal



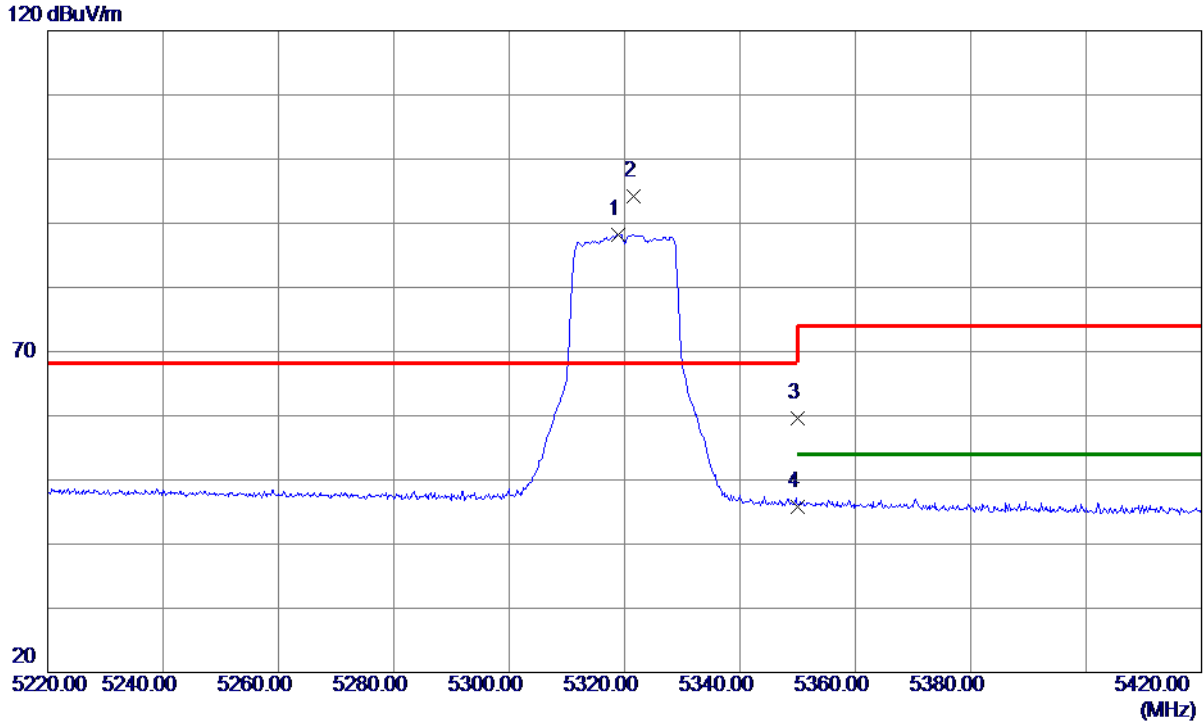
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7064.9100	49.86	-3.18	46.68	68.30	-21.62	Peak	
2	10659.9750	46.25	2.87	49.12	74.00	-24.88	Peak	
3 *	10661.0199	33.78	2.87	36.65	54.00	-17.35	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

### Vertical



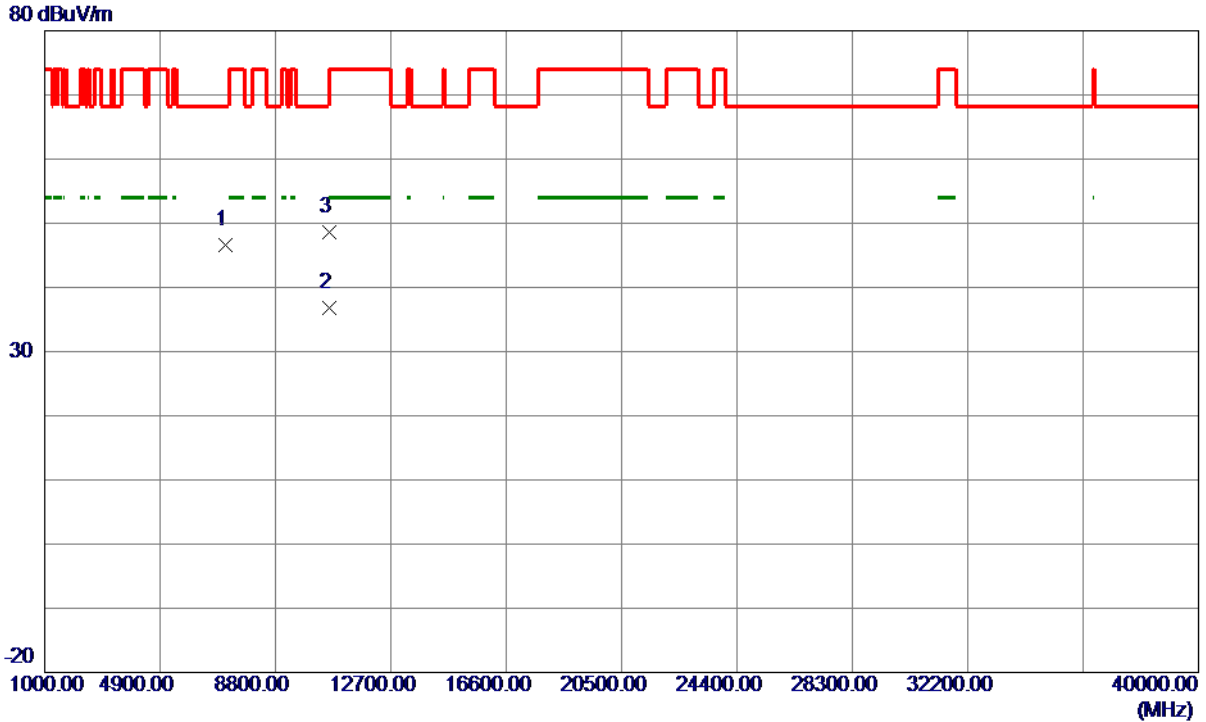
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5318.8000	48.94	39.28	88.22	999.00	-910.78	AVG	NO limit
2 *	5321.5000	54.94	39.28	94.22	68.30	25.92	Peak	NO limit
3	5350.0000	20.36	39.32	59.68	74.00	-14.32	Peak	
4	5350.0000	6.55	39.32	45.87	54.00	-8.13	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

### Vertical



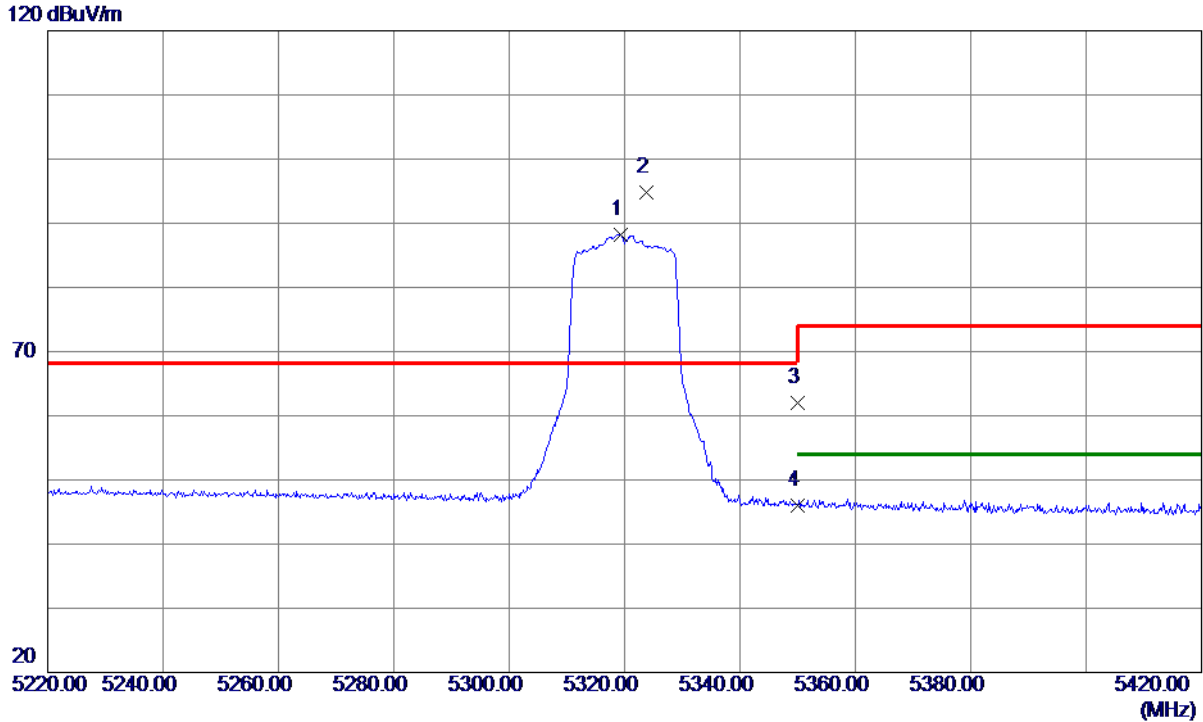
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7097.6330	49.81	-3.12	46.69	68.30	-21.61	Peak	
2 *	10631.8550	34.04	2.74	36.78	54.00	-17.22	AVG	
3	10636.6950	45.84	2.77	48.61	74.00	-25.39	Peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5319.4000	48.93	39.28	88.21	999.00	-910.79	AVG	NO limit
2 *	5323.8000	55.50	39.29	94.79	68.30	26.49	Peak	NO limit
3	5350.0000	22.66	39.32	61.98	74.00	-12.02	Peak	
4	5350.0000	6.72	39.32	46.04	54.00	-7.96	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.