

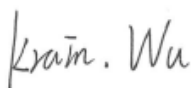
FCC Radio Test Report

FCC ID: Q78-ZXHNF680V9

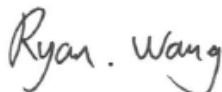
This report concerns: Original Grant

Project No. : 2001H021
Equipment : GPON ONT
Brand Name : ZTE
Test Model : ZXHN F680
Series Model : ZXHN F689
Applicant : ZTE Corporation
Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Manufacturer : ZTE Corporation
Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Date of Receipt : Jan. 17, 2020
Date of Test : Apr. 23, 2020 ~ Apr. 27, 2020
Issued Date : Jun. 05, 2020
Report Version : R00
Test Sample : Engineering Sample No.: SH2020030642, SH2020030642-1
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.



Prepared by : Krain Wu



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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 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.	Jun. 05, 2020

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	PASS	-----
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	NOTE (3)
15.407(c)	Automatically Discontinue Transmission	-----	PASS	NOTE (3)

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.
- (3) 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.
- (4) 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	9 kHz ~ 150 MHz	2.92

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	22°C	51%	AC 120V	Bill Dong
Radiated Emissions-9K-30MHz	22°C	51%	AC 120V	Bill Dong
Radiated Emissions-30 MHz to 1GHz	20°C	45%	AC 120V	Forest Li
Radiated Emissions-Above 1000 MHz	20°C	45%	AC 120V	Forest Li
Spectrum Bandwidth	22°C	51%	AC 120V	Bill Dong
Maximum Output Power	22°C	51%	AC 120V	Bill Dong
Power Spectral Density	22°C	51%	AC 120V	Bill Dong
Frequency Stability	Normal & Extreme	51%	Normal & Extreme	Bill Dong

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	GPON ONT
Brand Name	ZTE
Test Model	ZXHN F680
Series Model	ZXHN F689
Model Difference(s)	Only different in outer covering color.
Software Version	N/A
Hardware Version	N/A
Power Source	DC voltage supplied from AC/DC adapter.
Power Rating	I/P: 100-240V ~ 50/60Hz 1.5A MAX O/P: 12V --- 2.5A
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 1733.2Mbps

Maximum Conducted Output Power for UNII-1 (4TX) Non-Beamforming	IEEE 802.11a: 26.07 dBm (0.4046 W) IEEE 802.11n (HT20): 25.83 dBm (0.3828 W) IEEE 802.11n (HT40): 23.99 dBm (0.2506 W) IEEE 802.11ac (VHT20): 26.77 dBm (0.4753 W) IEEE 802.11ac (VHT40): 24.03 dBm (0.2529 W) IEEE 802.11ac (VHT80): 21.50 dBm (0.1413 W)
Maximum Conducted Output Power for UNII-2A (4TX) Non-Beamforming	IEEE 802.11a: 20.93 dBm (0.1239 W) IEEE 802.11n (HT20): 20.62 dBm (0.1153 W) IEEE 802.11n (HT40): 20.35 dBm (0.1084 W) IEEE 802.11ac (VHT20): 20.80 dBm (0.1202 W) IEEE 802.11ac (VHT40): 20.39 dBm (0.1094 W) IEEE 802.11ac (VHT80): 20.45 dBm (0.1109 W)
Maximum Conducted Output Power for UNII-2C (4TX) Non-Beamforming	IEEE 802.11a: 20.65 dBm (0.1161 W) IEEE 802.11n (HT20): 19.89 dBm (0.0975 W) IEEE 802.11n (HT40): 20.69 dBm (0.1172 W) IEEE 802.11ac (VHT20): 20.78 dBm (0.1197 W) IEEE 802.11ac (VHT40): 20.72 dBm (0.1180 W) IEEE 802.11ac (VHT80): 20.79 dBm (0.1199 W)
Maximum Conducted Output Power for UNII-3 (4TX) Non-Beamforming	IEEE 802.11a: 22.89 dBm (0.1945 W) IEEE 802.11n (HT20): 26.70 dBm (0.4677 W) IEEE 802.11n (HT40): 26.52 dBm (0.4487 W) IEEE 802.11ac (VHT20): 26.80 dBm (0.4786 W) IEEE 802.11ac (VHT40): 26.66 dBm (0.4634 W) IEEE 802.11ac (VHT80): 26.80 dBm (0.4786 W)

Maximum Conducted Output Power for UNII-1 (4TX) Beamforming	IEEE 802.11n (HT20): 25.73 dBm (0.3741 W) IEEE 802.11n (HT40): 23.75 dBm (0.2371 W) IEEE 802.11ac (VHT20): 26.59 dBm (0.4560 W) IEEE 802.11ac (VHT40): 23.84 dBm (0.2421 W) IEEE 802.11ac (VHT80): 21.32 dBm (0.1355 W)
Maximum Conducted Output Power for UNII-2A (4TX) Beamforming	IEEE 802.11n (HT20): 20.53 dBm (0.1130 W) IEEE 802.11n (HT40): 20.20 dBm (0.1047 W) IEEE 802.11ac (VHT20): 20.70 dBm (0.1175 W) IEEE 802.11ac (VHT40): 20.24 dBm (0.1057 W) IEEE 802.11ac (VHT80): 20.28 dBm (0.1067 W)
Maximum Conducted Output Power for UNII-2C (4TX) Beamforming	IEEE 802.11n (HT20): 19.57 dBm (0.0906 W) IEEE 802.11n (HT40): 20.48 dBm (0.1117 W) IEEE 802.11ac (VHT20): 20.60 dBm (0.1148 W) IEEE 802.11ac (VHT40): 20.65 dBm (0.1161 W) IEEE 802.11ac (VHT80): 20.60 dBm (0.1148 W)
Maximum Conducted Output Power for UNII-3 (4TX) Beamforming	IEEE 802.11n (HT20): 26.43 dBm (0.4395 W) IEEE 802.11n (HT40): 26.39 dBm (0.4355 W) IEEE 802.11ac (VHT20): 26.69 dBm (0.4667 W) IEEE 802.11ac (VHT40): 26.53 dBm (0.4498 W) IEEE 802.11ac (VHT80): 26.54 dBm (0.4508 W)

Note:

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

2. 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:

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

Note:

For Beamforming:

- (1) Antenna Gain=3 dBi. This EUT supports MIMO 4X4, any transmit signals are correlated with each other, so Directional gain = $G_{Ant.} 10\log(N)$ dBi, that is Directional gain=3+10log(4)dBi =9.02; So,the UNII-2A,UNII-2C output power limit is 24-9.02+6=20.98, the UNII-1,UNII-3 output power limit is 30-9.02+6=26.98. The UNII-1 power spectral density limit is 17-9.02+6=13.98, the UNII-2A,UNII-2C power spectral density limit is 11-9.02+6=7.98, the UNII-3 power spectral density limit is 30-9.02+6=26.98.

For Non-Beamforming:

- (2) This EUT supports CDD, and all antennas have the same gain, Directional gain= $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows:
For power spectral density measurements, $N_{ANT} = 3$, $N_{SS} = 1$. So Directional gain = $G_{ANT} + \text{Array Gain} = G_{ANT} + 10 \log (N_{ANT}/ N_{SS})$ dB =3+10log(4/1)dBi=9.02. Then, the UNII-1 power spectral density limit is 17-9.02+6=13.98, the UNII-2A,UNII-2C power spectral density limit is 11-9.02+6=7.98, the UNII-3 power spectral density limit is 30-9.02+6=26.98.
For power measurements, Array Gain = 0 dB ($N_{ANT} \leq 4$), so the Directional gain=3.

4. Table for Antenna Configuration:

Operating Mode TX Mode	1TX	2TX	3TX	4TX
IEEE 802.11a	V (Ant. 1)	V (Ant. 1 + Ant. 2)	V (Ant. 1 + Ant. 2 + Ant. 3)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11n (HT20)	V (Ant. 1)	V (Ant. 1 + Ant. 2)	V (Ant. 1 + Ant. 2 + Ant. 3)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11n (HT40)	V (Ant. 1)	V (Ant. 1 + Ant. 2)	V (Ant. 1 + Ant. 2 + Ant. 3)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11ac (VHT20)	V (Ant. 1)	V (Ant. 1 + Ant. 2)	V (Ant. 1 + Ant. 2 + Ant. 3)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11ac (VHT40)	V (Ant. 1)	V (Ant. 1 + Ant. 2)	V (Ant. 1 + Ant. 2 + Ant. 3)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11ac (VHT80)	V (Ant. 1)	V (Ant. 1 + Ant. 2)	V (Ant. 1 + Ant. 2 + Ant. 3)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)

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 AC(VHT20) Mode / CH149 (UNII-3)

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 25	TX AC(VHT20) Mode / CH149 (UNII-3)

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

Conducted test	
Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (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 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 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 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 802.11ac20 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 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	10	0E	11
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11n (HT20)	0F	0F	0F
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	0C	0F	

UNII-2A - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	4	4	4
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11n (HT20)	3	3	3
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	3	3	

UNII-2C - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11a	2	6	1
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11n (HT20)	2	4	1
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	3	5	5

UNII-3 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	9	9	9
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11n (HT20)	9	0D	0C
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	0F	0E	

UNII-1 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11ac (VHT20)	0F	0F	0F
Test Frequency (MHz)	5190	5230	
IEEE 802.11ac (VHT40)	0C	0F	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	9		

UNII-2A - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11ac (VHT20)	3	3	3
Test Frequency (MHz)	5270	5310	
IEEE 802.11ac (VHT40)	3	3	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	3		

UNII-2C - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11ac (VHT20)	2	4	1
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11ac (VHT40)	3	5	5
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	4	5	

UNII-3 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11ac (VHT20)	9	0D	0C
Test Frequency (MHz)	5755	5795	
IEEE 802.11ac (VHT40)	0F	0E	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	0F		

Beamforming

UNII-1 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11n (HT20)	0F	0F	0F
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	0C	0F	

UNII-2A - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11n (HT20)	3	3	3
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	3	3	

UNII-2C - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11n (HT20)	2	4	1
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	3	5	5

UNII-3 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11n (HT20)	9	0D	0C
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	0F	0E	

UNII-1 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11ac (VHT20)	0F	0F	0F
Test Frequency (MHz)	5190	5230	
IEEE 802.11ac (VHT40)	0C	0F	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	9		

UNII-2A - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11ac (VHT20)	3	3	3
Test Frequency (MHz)	5270	5310	
IEEE 802.11ac (VHT40)	3	3	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	3		

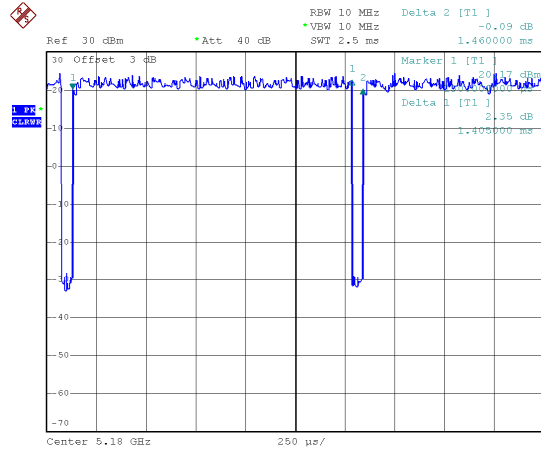
UNII-2C - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11ac (VHT20)	2	4	1
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11ac (VHT40)	3	5	5
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	4	5	

UNII-3 - 4TX			
Test Software	QATool		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11ac (VHT20)	9	0D	0C
Test Frequency (MHz)	5755	5795	
IEEE 802.11ac (VHT40)	0F	0E	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	0F		

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.
 The output power = measured power + duty factor.

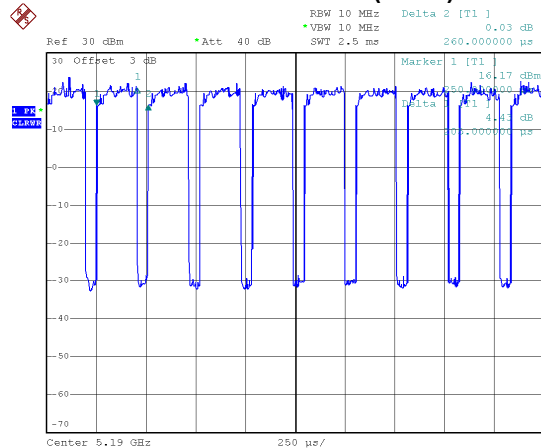
IEEE 802.11a



Date: 13.FEB.2020 09:25:26

Duty cycle = $1.405 \text{ ms} / 1.460 \text{ ms} = 96.23\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.17 \text{ dB}$

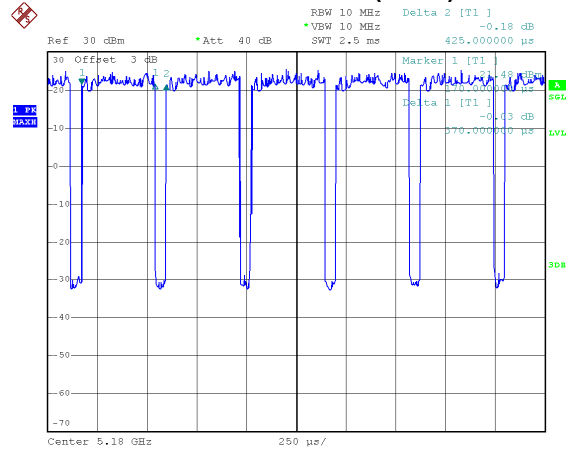
IEEE 802.11n (HT40)



Date: 13.FEB.2020 09:39:32

Duty cycle = $0.205 \text{ ms} / 0.260 \text{ ms} = 78.85\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 1.03 \text{ dB}$

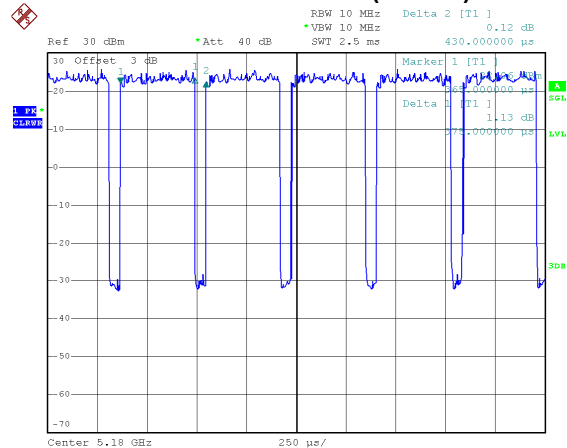
IEEE 802.11n (HT20)



Date: 13.FEB.2020 09:34:13

Duty cycle = $0.370 \text{ ms} / 0.425 \text{ ms} = 87.06\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.60 \text{ dB}$

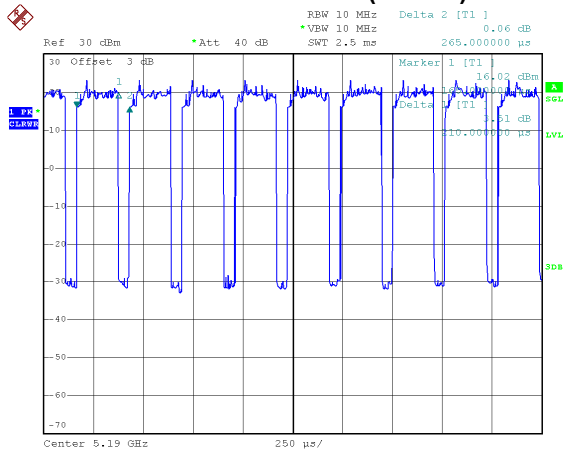
IEEE 802.11ac (VHT20)



Date: 13.FEB.2020 09:37:36

Duty cycle = $0.375 \text{ ms} / 0.430 \text{ ms} = 87.21\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.59 \text{ dB}$

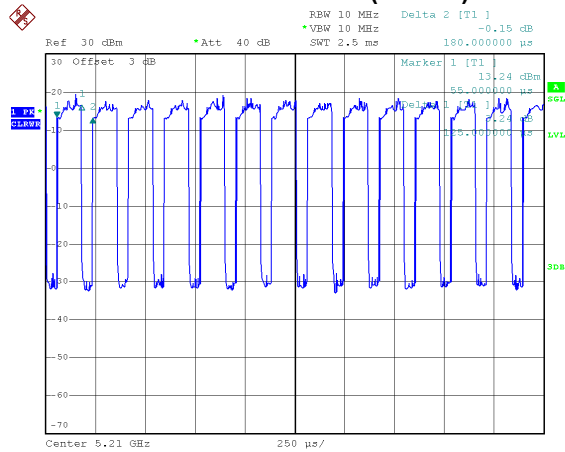
IEEE 802.11ac (VHT40)



Date: 13.FEB.2020 09:38:31

Duty cycle = 0.210 ms / 0.265 ms = 79.25%
 Duty Factor = $10 \cdot \log(1 / \text{Duty cycle}) = 1.01 \text{ dB}$

IEEE 802.11ac (VHT80)



Date: 13.FEB.2020 09:38:49

Duty cycle = 0.125 ms / 0.180 ms = 69.44%
 Duty Factor = $10 \cdot \log(1 / \text{Duty cycle}) = 1.58 \text{ dB}$

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 2.67 kHz (Duty cycle < 98%).

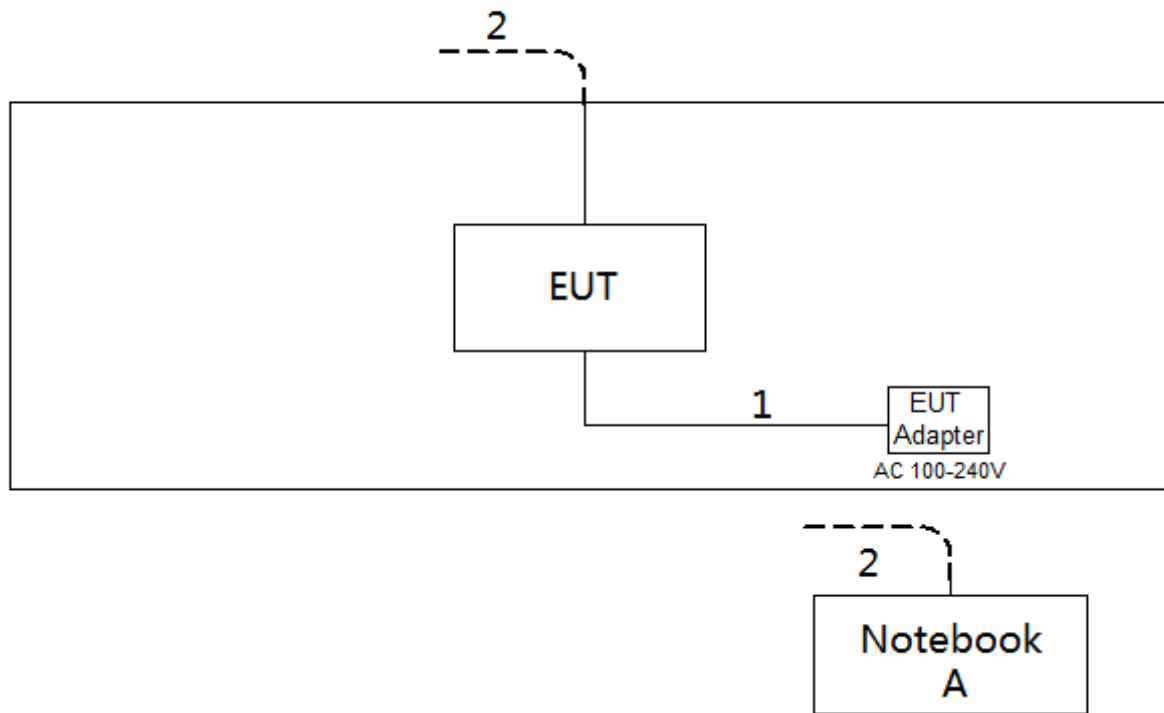
For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 4.88 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 8 kHz (Duty cycle < 98%).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Lenovo	#P152014	N/A

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

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 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

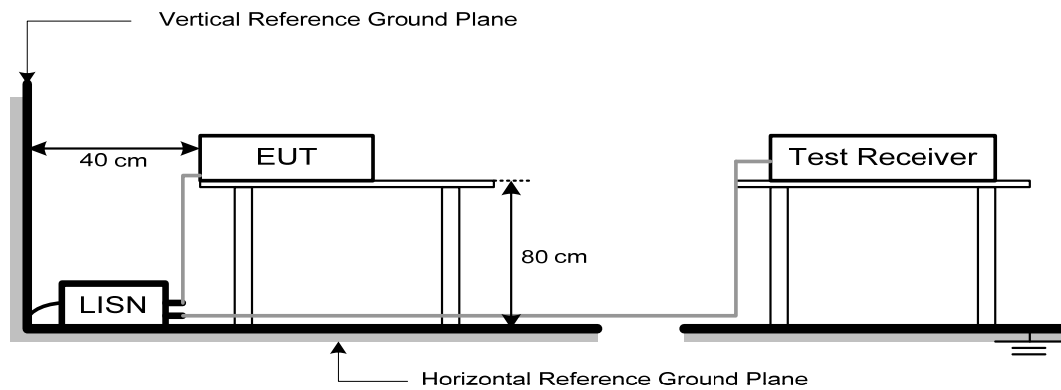
3.2 TEST PROCEDURE

- 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:

$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

(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

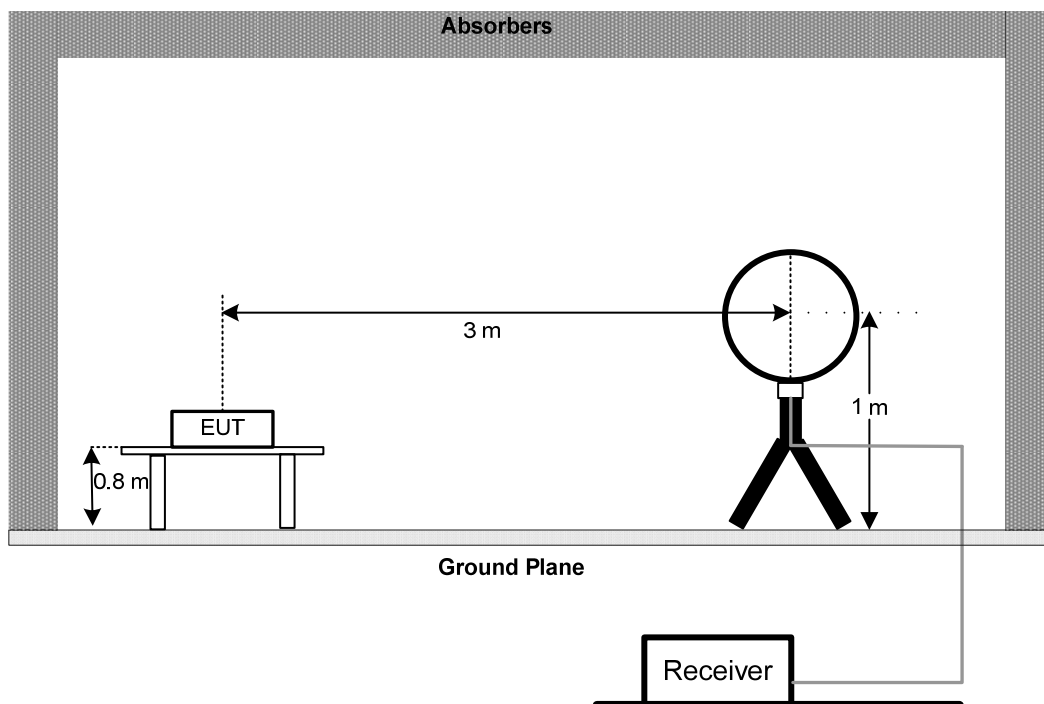
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance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

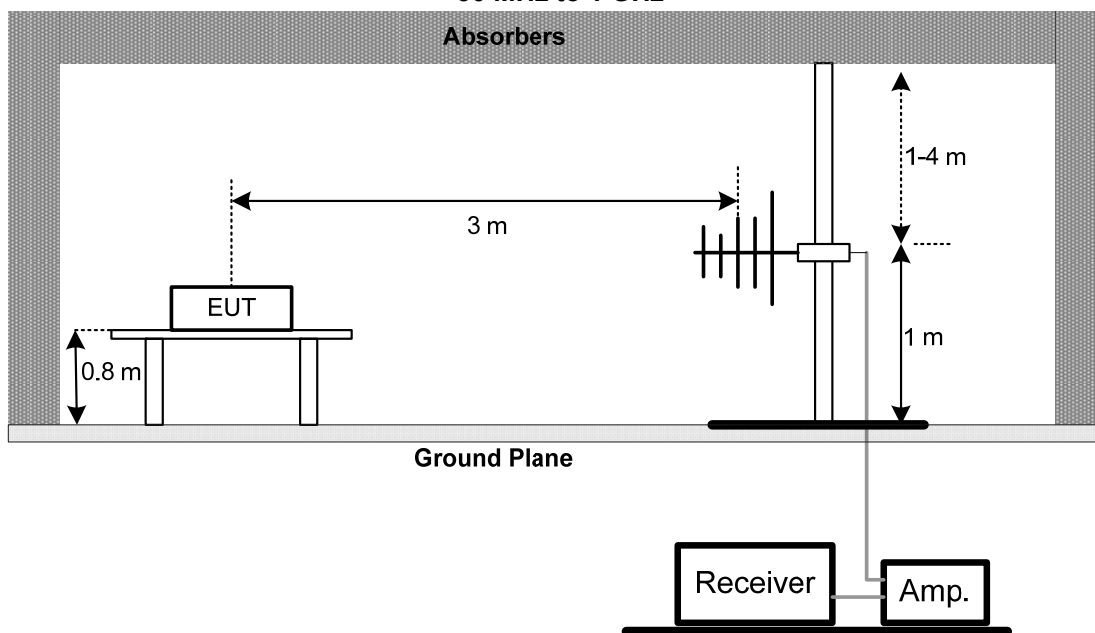
No deviation

4.4 TEST SETUP

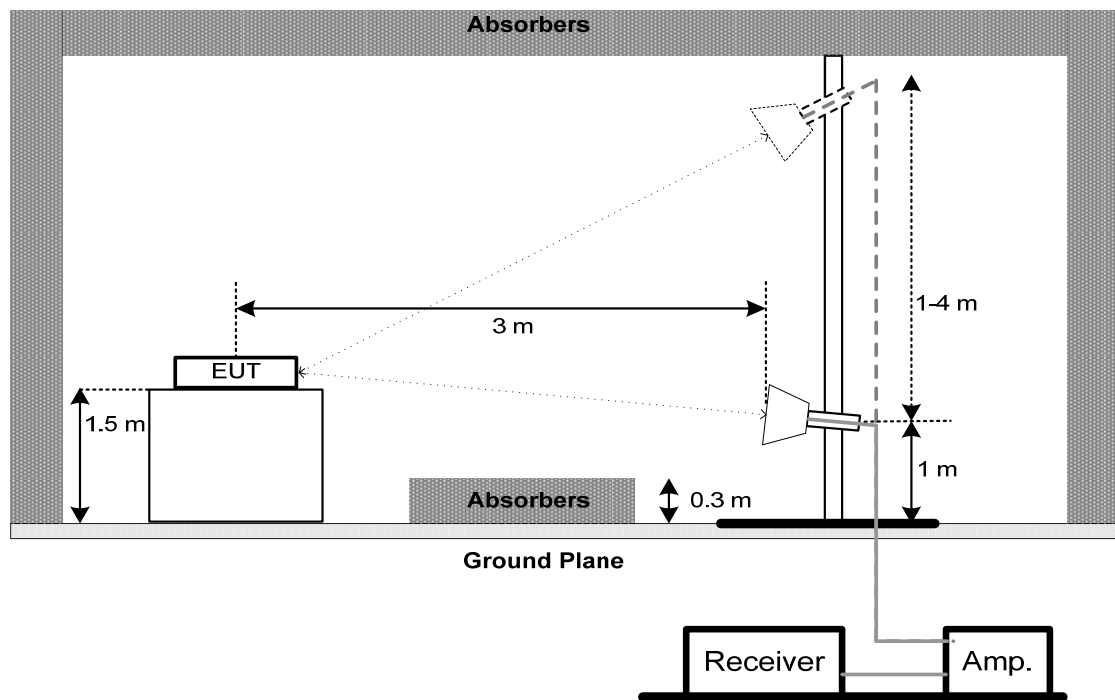
9 kHz to 30 MHz



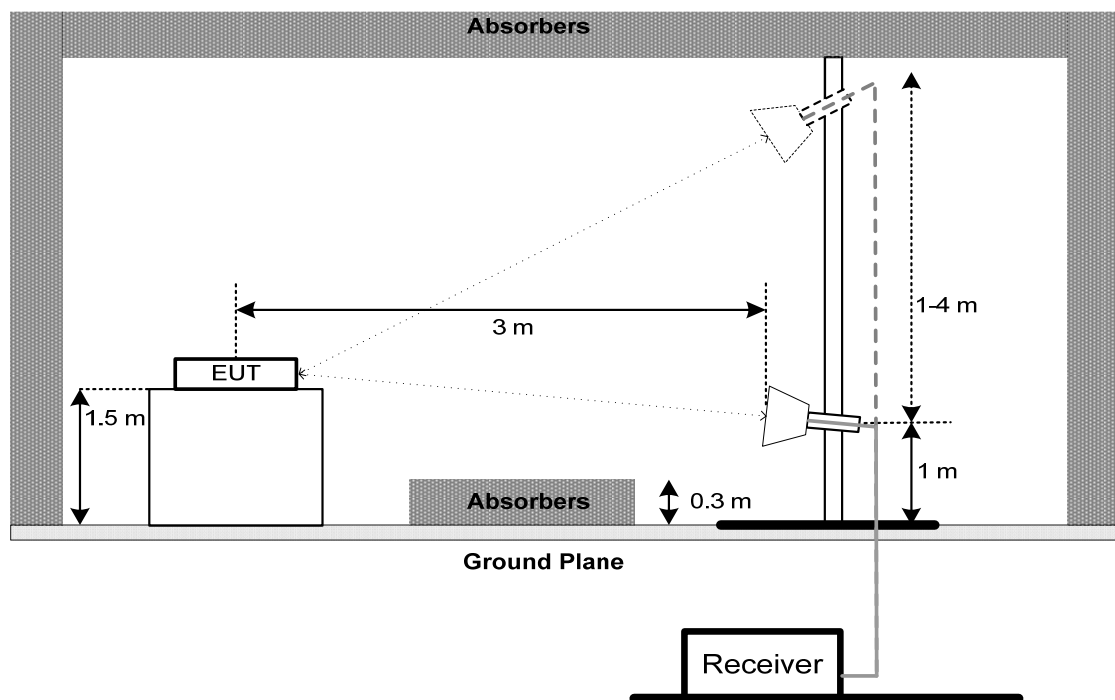
30 MHz to 1 GHz



Above 1 GHz



Above 1 GHz Band edge



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 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:

- For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- 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

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

- 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	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:

- 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.
- 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 G.

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:

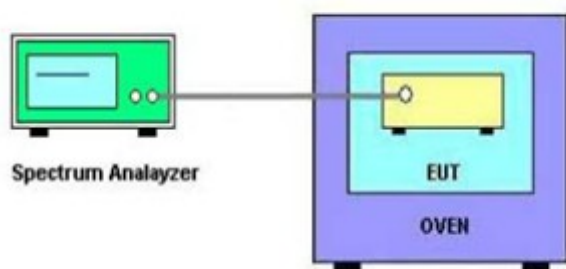
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- User manual temperature is 0°C~60°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 H.

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. 21, 2021
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Sep. 01, 2020
3	Test Cable	emci	EMCRG400-BM-NM-10000	170628	Jul. 15, 2020
4	EMI Test Receiver	R&S	ESCI	100082	Mar. 28, 2021
5	50Ω Terminator	SHX	TF2-1G-A	17051602	Mar. 21, 2021
6	50Ω coaxial switch	Anritsu	MP59B	6201750902	Mar. 21, 2021
7	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. 28, 2021
2	Pre-Amplifier	emci	EMC9135	980400	Mar. 21, 2021
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 21, 2021
4	Test Cable	emci	EMC104-SM-SM-7000	170330	Apr. 16, 2021
5	Test Cable	emci	EMC104-SM-SM-1000	170331	Apr. 16, 2021
6	Test Cable	emci	EMC104-SM-NM-3500	170621	Apr. 16, 2021
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. 28, 2021
2	Pre-Amplifier	emci	EMC012645SE	980421	Mar. 28, 2021
3	EXA Spectrum Analyzer	Keysight	N9010A	MY56480545	Mar. 21, 2021
4	Test Cable	emci	EMC104-SM-SM-7000	170330	Apr. 16, 2021
5	Test Cable	emci	EMC104-SM-SM-1000	170331	Apr. 16, 2021
6	Test Cable	emci	EMC104-SM-NM-3500	170621	Apr. 16, 2021
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 28, 2021

Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 21, 2021

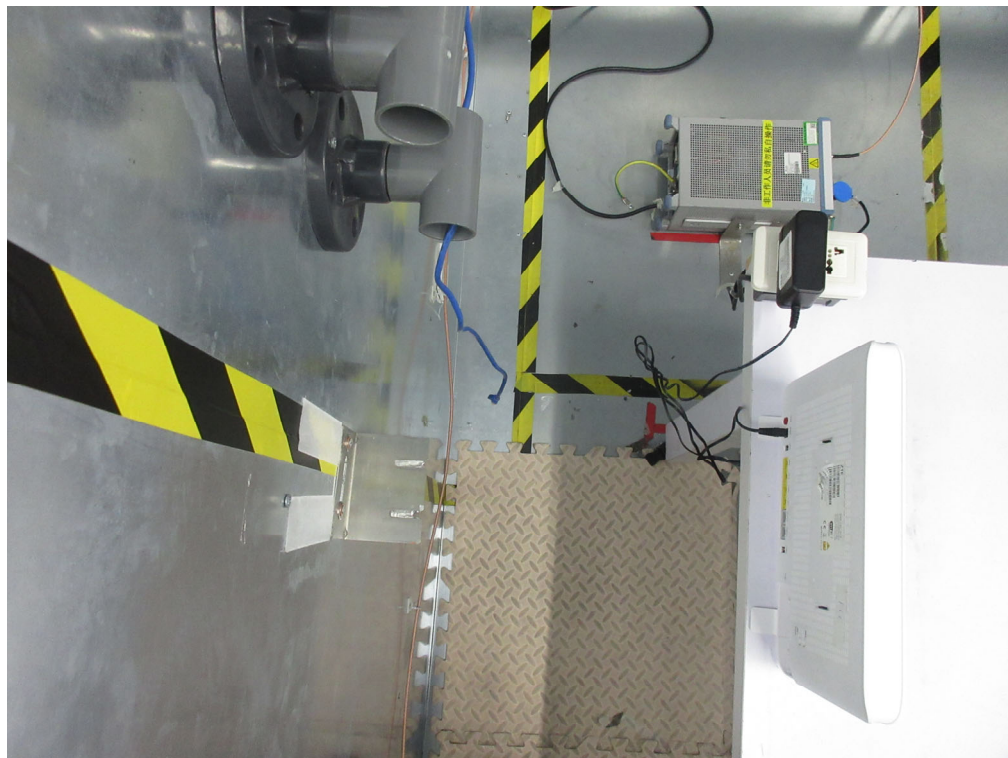
Conducted Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 21, 2021

Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 21, 2021

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 21, 2021
2	Temperature And Humidity Box	Blue pand	BPHS-120B	170616454	Mar. 21, 2021

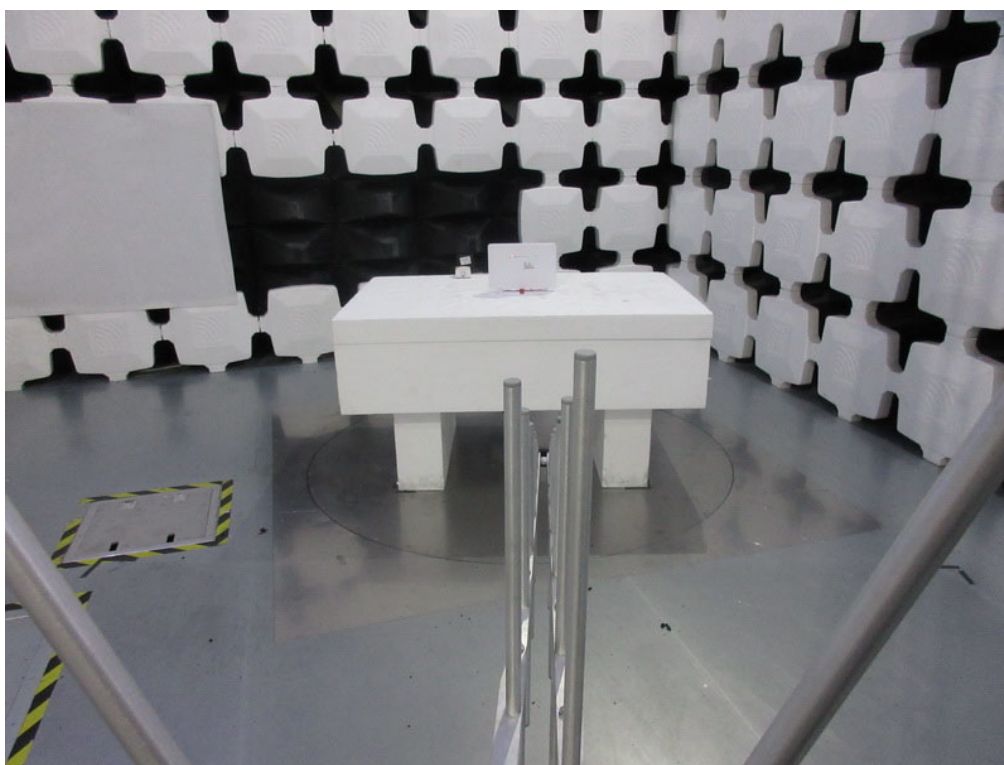
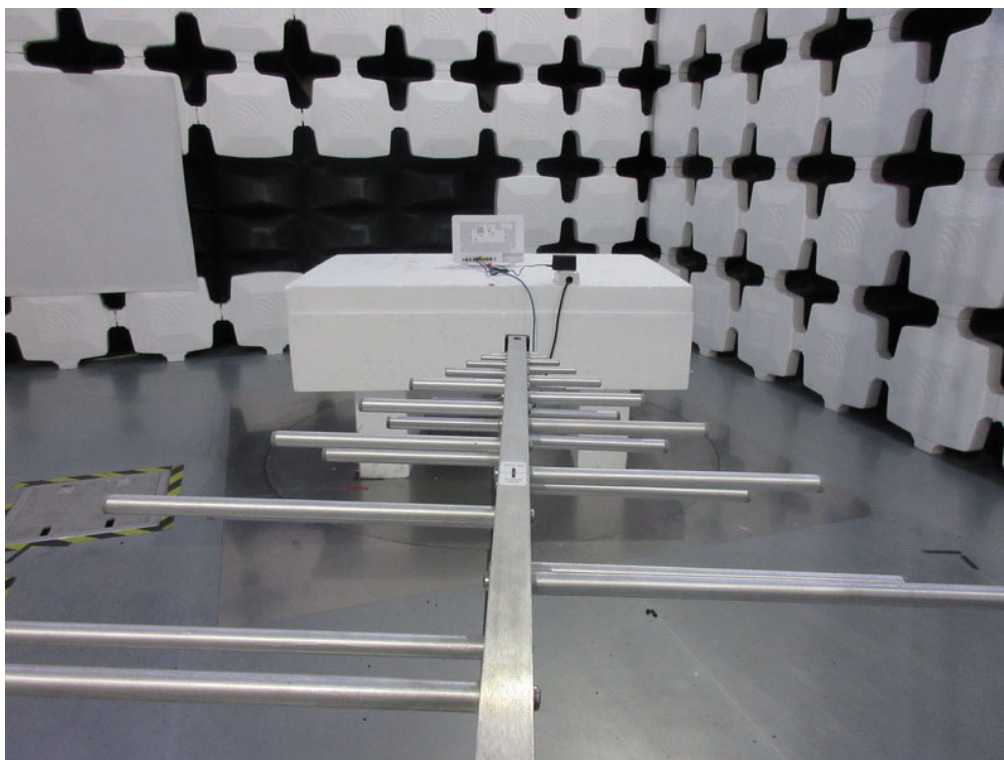
Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

10. EUT TEST PHOTOS**Conducted Emissions Test Photos**

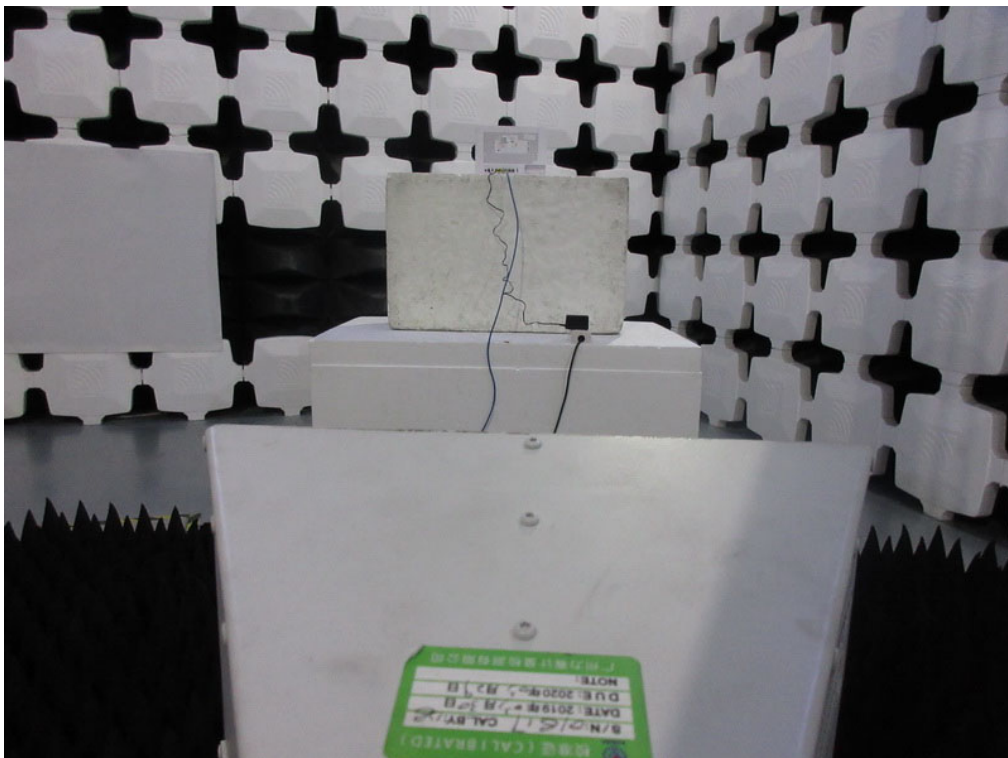
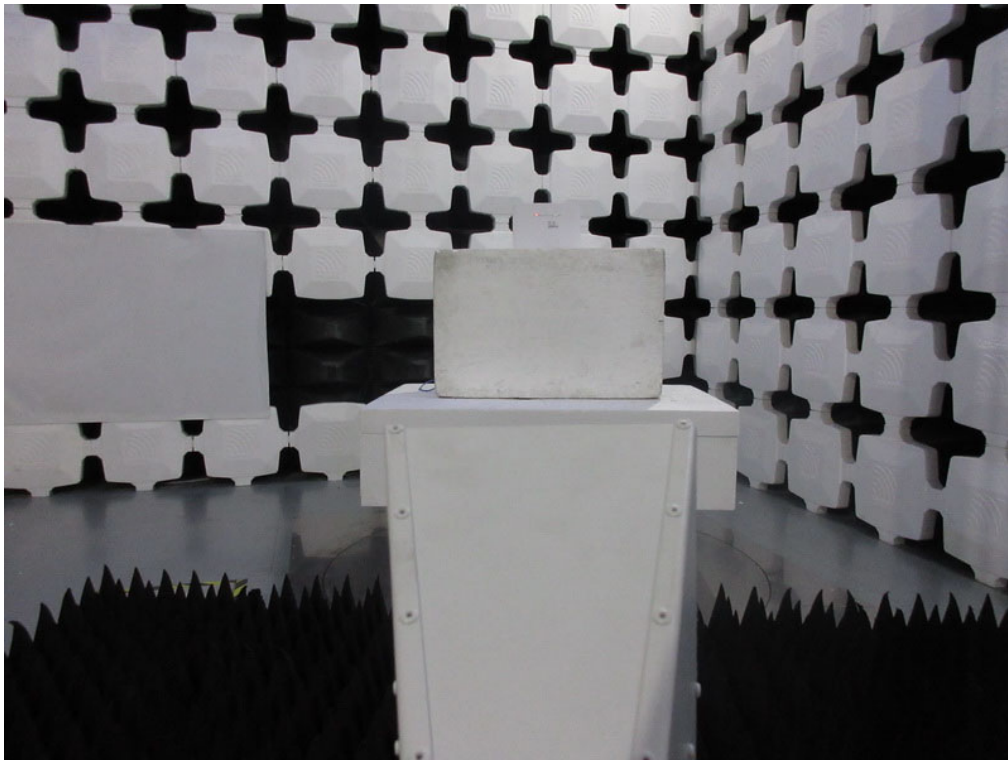
Radiated Emissions Test Photos

30 MHz to 1 GHz



Radiated Emissions Test Photos

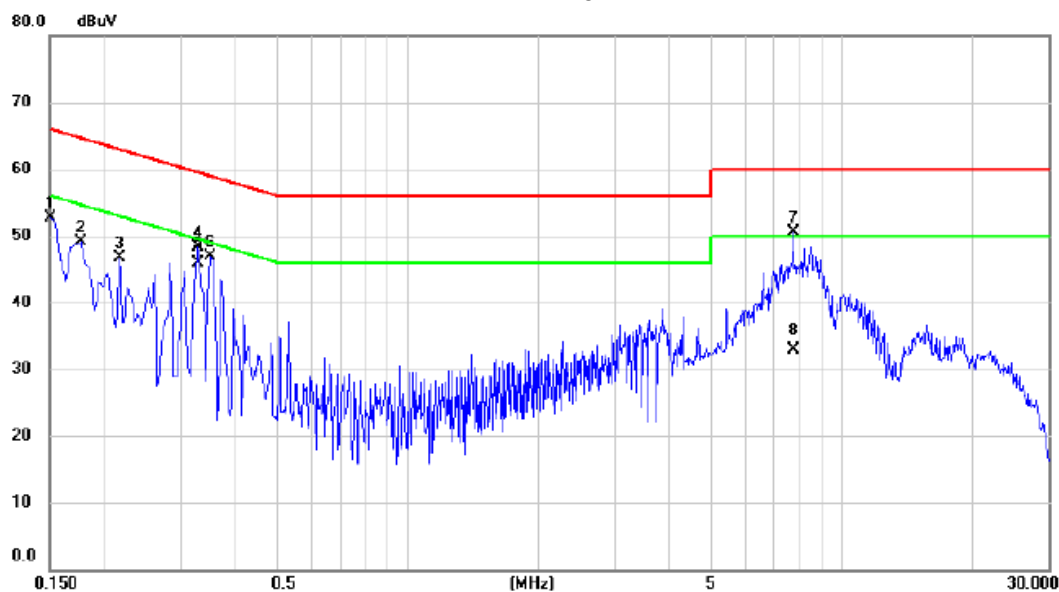
Above 1 GHz



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		0.1500	42.93	9.73	52.66	66.00	-13.34	peak	
2		0.1770	39.26	9.76	49.02	64.63	-15.61	peak	
3		0.2175	37.00	9.79	46.79	62.91	-16.12	peak	
4		0.3300	38.42	9.83	48.25	59.45	-11.20	peak	
5	*	0.3300	36.08	9.83	45.91	49.45	-3.54	AVG	
6		0.3525	37.04	9.85	46.89	58.90	-12.01	peak	
7		7.7280	40.30	10.11	50.41	60.00	-9.59	peak	
8		7.7280	22.85	10.11	32.96	50.00	-17.04	AVG	

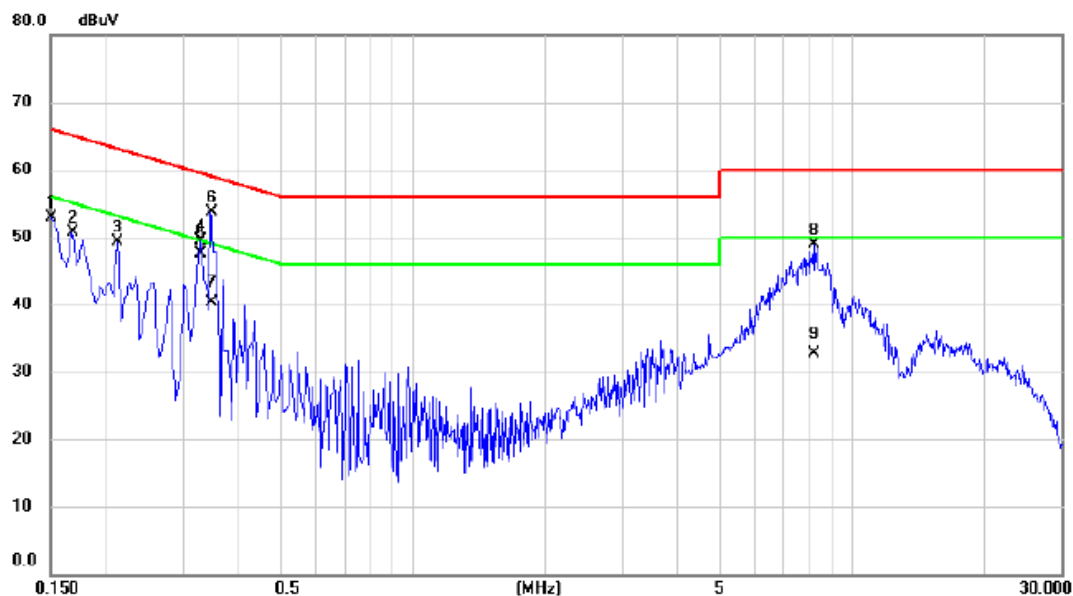
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	43.24	9.73	52.97	66.00	-13.03	peak	
2		0.1680	41.05	9.74	50.79	65.06	-14.27	peak	
3		0.2130	39.45	9.78	49.23	63.09	-13.86	peak	
4		0.3300	39.73	9.83	49.56	59.45	-9.89	peak	
5	*	0.3300	37.61	9.83	47.44	49.45	-2.01	AVG	
6		0.3480	43.79	9.83	53.62	59.01	-5.39	peak	
7		0.3480	30.52	9.83	40.35	49.01	-8.66	AVG	
8		8.2320	38.75	10.13	48.88	60.00	-11.12	peak	
9		8.2320	22.61	10.13	32.74	50.00	-17.26	AVG	

REMARKS:

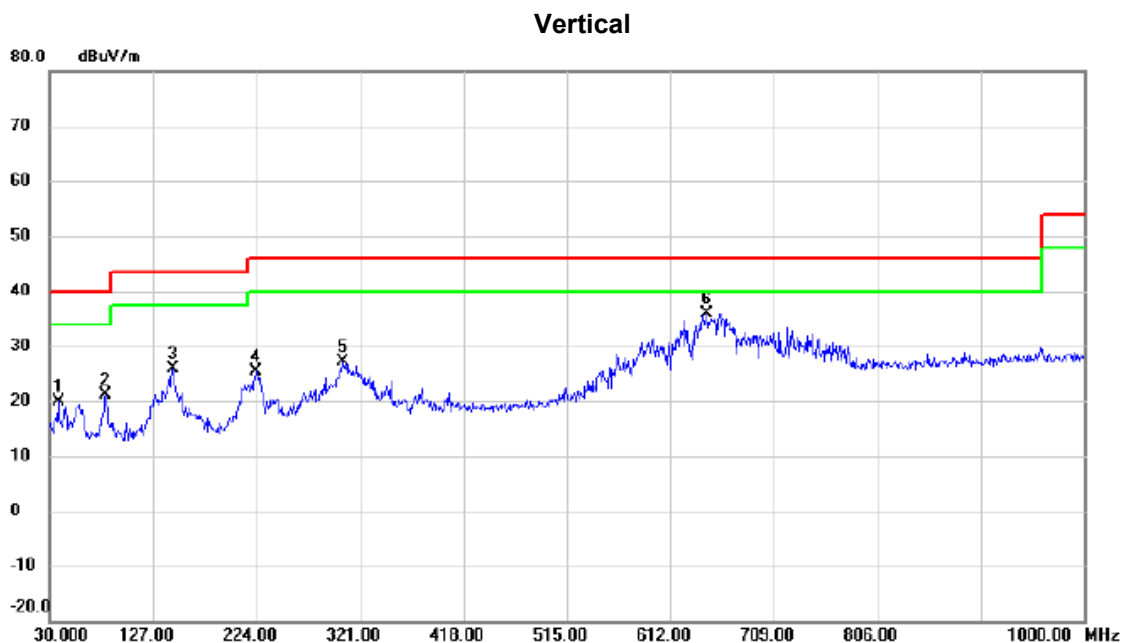
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Note: Below 30MHz, The measured value have enough margin over 20dB than the limit,
therefore they are not reported

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ

Test Mode: TX Mode

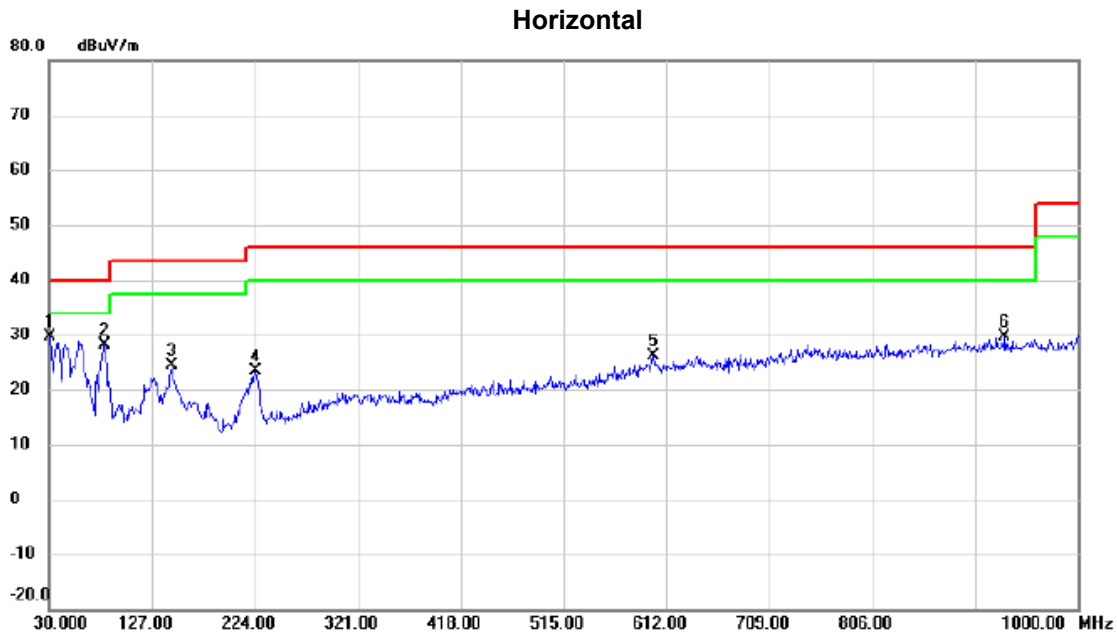


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		37.7600	36.47	-16.66	19.81	40.00	-20.19	peak	
2		82.3800	41.58	-20.34	21.24	40.00	-18.76	peak	
3		145.4300	41.11	-15.21	25.90	43.50	-17.60	peak	
4		223.0300	43.11	-17.79	25.32	46.00	-20.68	peak	
5		304.5100	41.38	-14.25	27.13	46.00	-18.87	peak	
6	*	646.9200	44.46	-8.52	35.94	46.00	-10.06	peak	

REMARKS:

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

Test Mode: TX Mode



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	30.0000	46.85	-17.34	29.51	40.00	-10.49	peak	
2		82.3800	48.45	-20.34	28.11	40.00	-11.89	peak	
3		145.4300	39.52	-15.21	24.31	43.50	-19.19	peak	
4		224.0000	41.14	-17.73	23.41	46.00	-22.59	peak	
5		599.3900	34.93	-8.68	26.25	46.00	-19.75	peak	
6		931.1300	34.76	-5.25	29.51	46.00	-16.49	peak	

REMARKS:

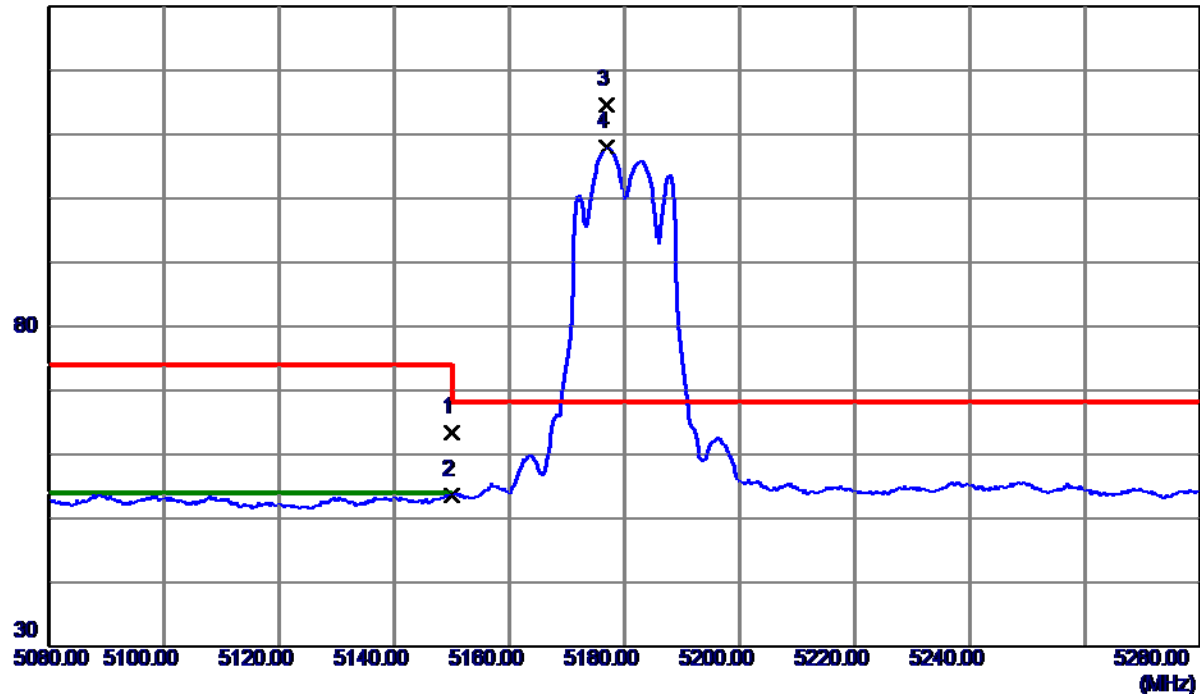
- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

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

Vertical

130 dBuV/m

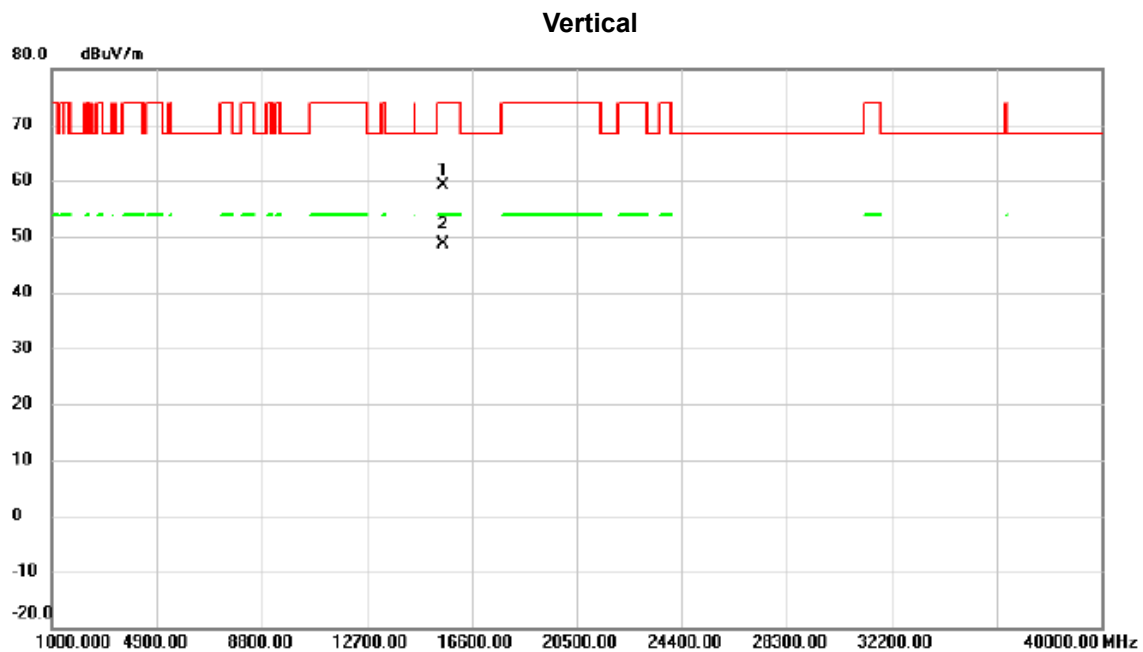


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	24.24	39.07	63.31	74.00	-10.69	Peak	
2	5150.0000	14.61	39.07	53.68	54.00	-0.32	AVG	
3 *	5176.8000	75.52	39.10	114.62	68.30	46.32	Peak	No Limit
4	5176.8000	68.81	39.10	107.91	999.00	-891.09	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 A Mode 5180 MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		15534.30	55.92	3.13	59.05	74.00	-14.95	peak	
2	*	15534.92	45.57	3.13	48.70	54.00	-5.30	AVG	

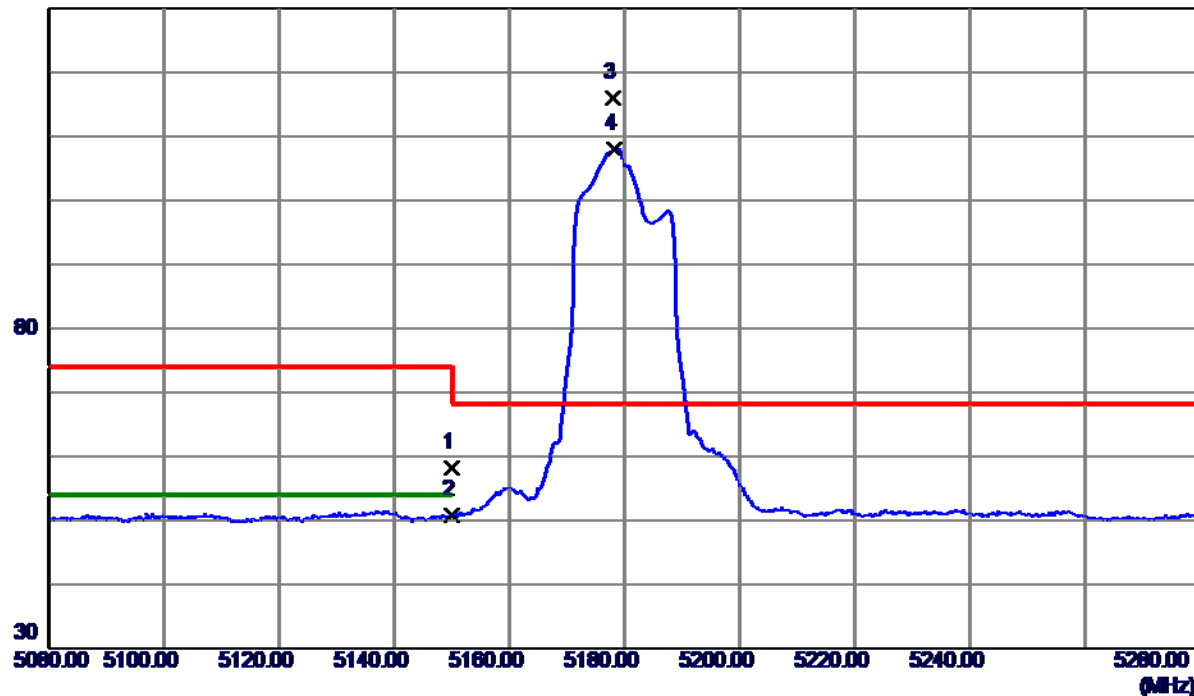
REMARKS:

- (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

130 dBuV/m



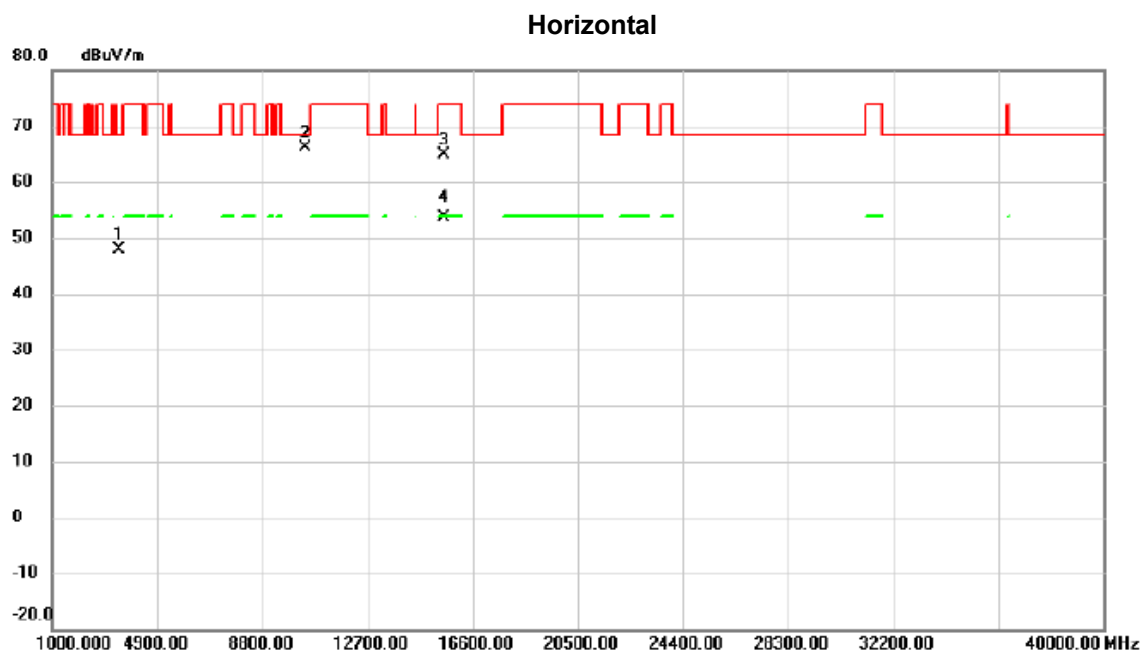
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.19	39.07	58.26	74.00	-15.74	Peak	
2	5150.0000	11.82	39.07	50.89	54.00	-3.11	AVG	
3 *	5178.0000	76.97	39.10	116.07	68.30	47.77	Peak	No Limit
4	5178.2000	68.85	39.10	107.95	999.00	-891.05	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 5180 MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3453.450	65.45	-17.69	47.76	68.30	-20.54	peak	
2		10365.56	67.82	-1.64	66.18	68.30	-2.12	peak	
3		15535.48	61.66	3.13	64.79	74.00	-9.21	peak	
4	*	15535.74	50.41	3.12	53.53	54.00	-0.47	AVG	

REMARKS:

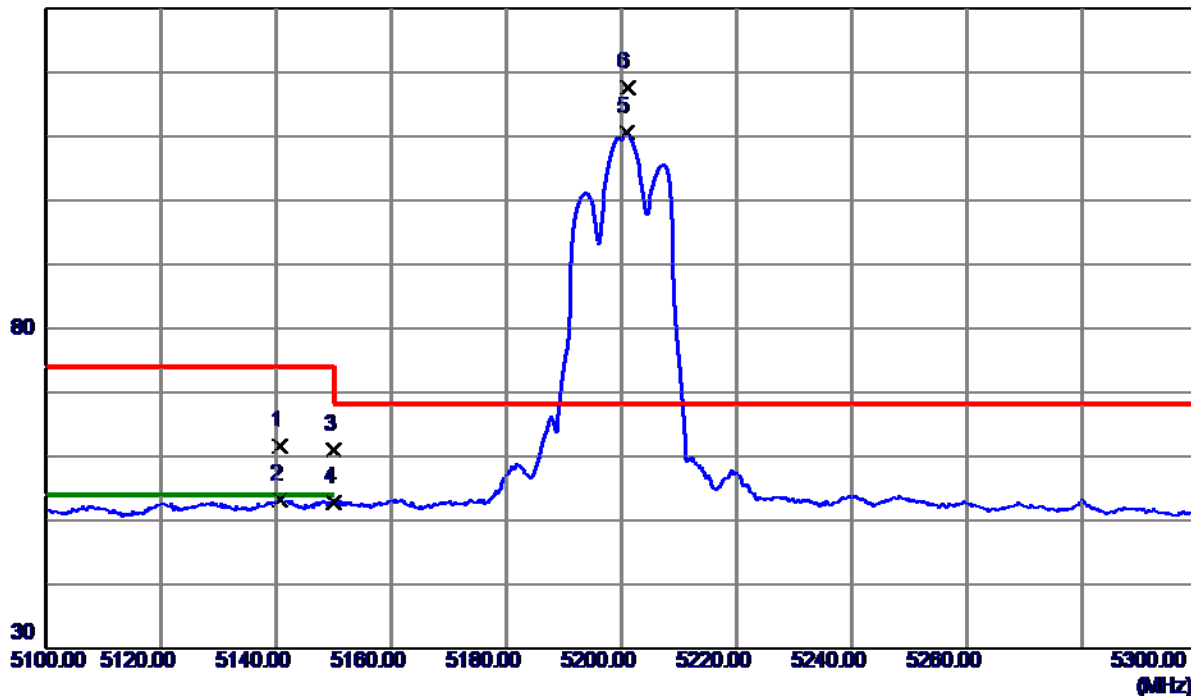
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5140.6000	22.61	39.06	61.67	74.00	-12.33	Peak	
2	5140.6000	14.14	39.06	53.20	54.00	-0.80	AVG	
3	5150.0000	21.99	39.07	61.06	74.00	-12.94	Peak	
4	5150.0000	13.80	39.07	52.87	54.00	-1.13	AVG	
5	5200.8000	71.49	39.13	110.62	999.00	-888.38	AVG	No Limit
6 *	5201.0000	78.42	39.13	117.55	68.30	49.25	Peak	No Limit

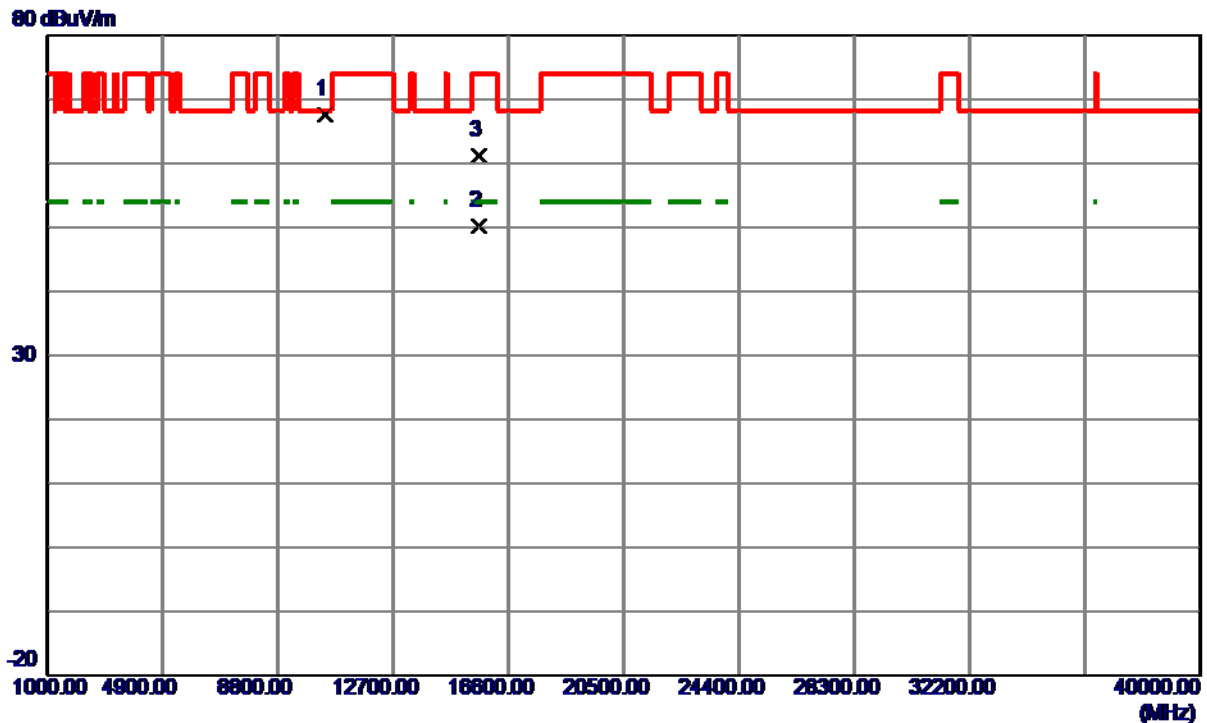
REMARKS:

(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 *	10398.7000	69.27	-1.61	67.66	68.30	-0.64	Peak	
2	15597.6000	47.20	2.95	50.15	54.00	-3.85	AVG	
3	15597.6600	58.34	2.95	61.29	74.00	-12.71	Peak	

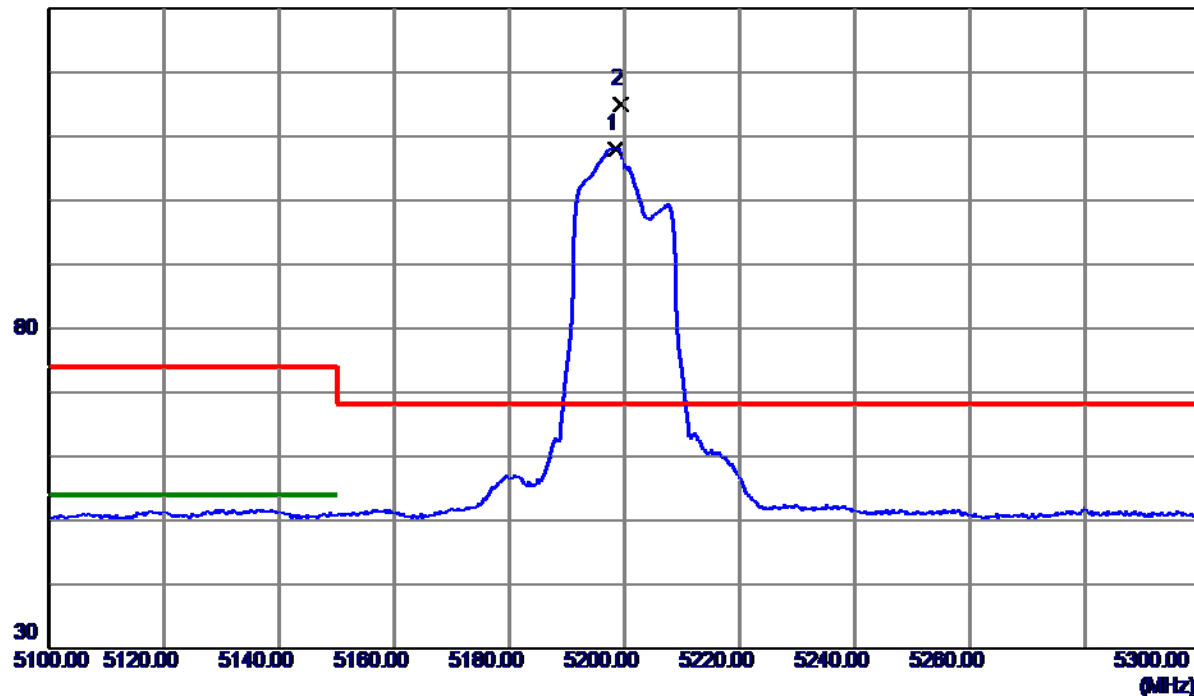
REMARKS:

- (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

130 dBuV/m



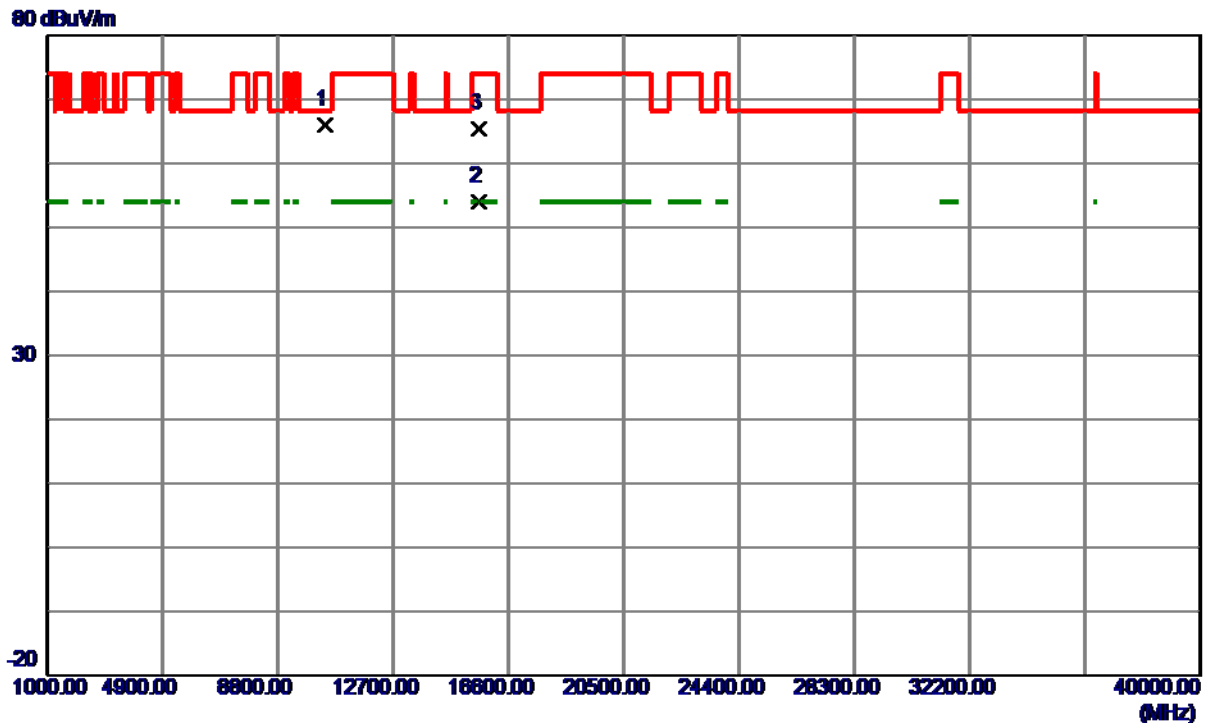
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5198.4000	68.95	39.13	108.08	999.00	-890.92	AVG	No Limit
2 *	5199.4000	75.85	39.13	114.98	68.30	46.68	Peak	No Limit

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	10401.6400	67.58	-1.60	65.98	68.30	-2.32	Peak	
2 *	15595.6200	50.98	2.96	53.94	54.00	-0.06	AVG	
3	15596.5200	62.54	2.95	65.49	74.00	-8.51	Peak	

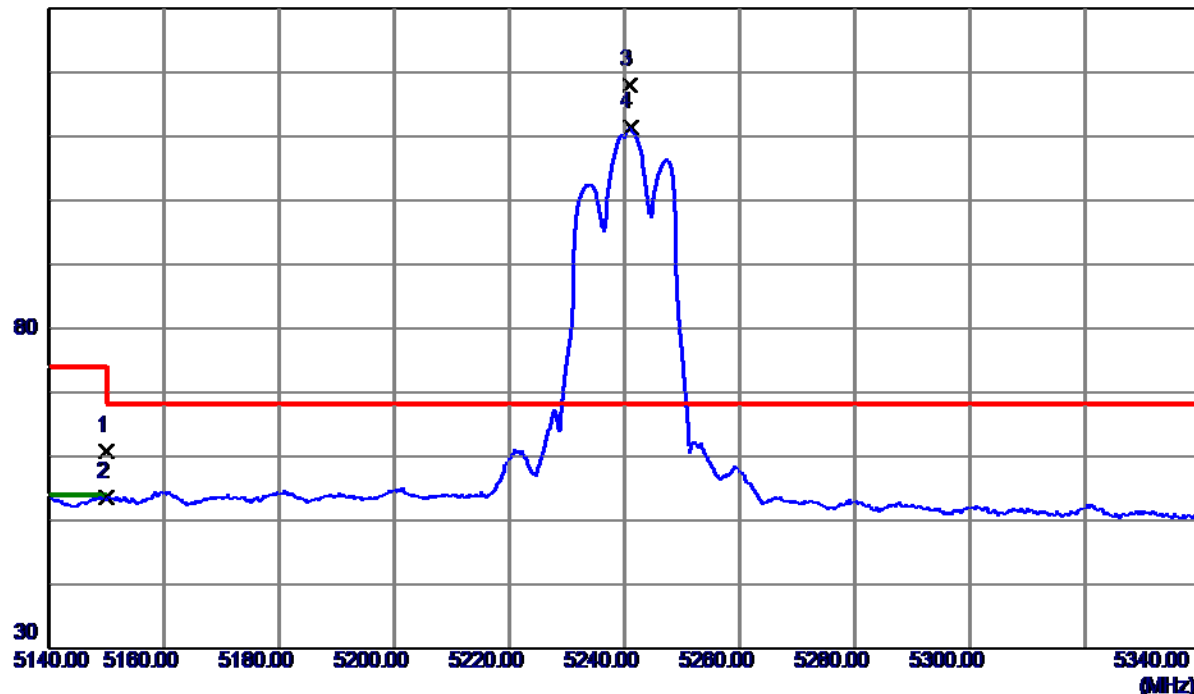
REMARKS:

- (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

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.80	39.07	60.87	74.00	-13.13	Peak	
2	5150.0000	14.46	39.07	53.53	54.00	-0.47	AVG	
3 *	5240.8000	78.76	39.18	117.94	68.30	49.64	Peak	No Limit
4	5241.0000	72.23	39.18	111.41	999.00	-887.59	AVG	No Limit

REMARKS:

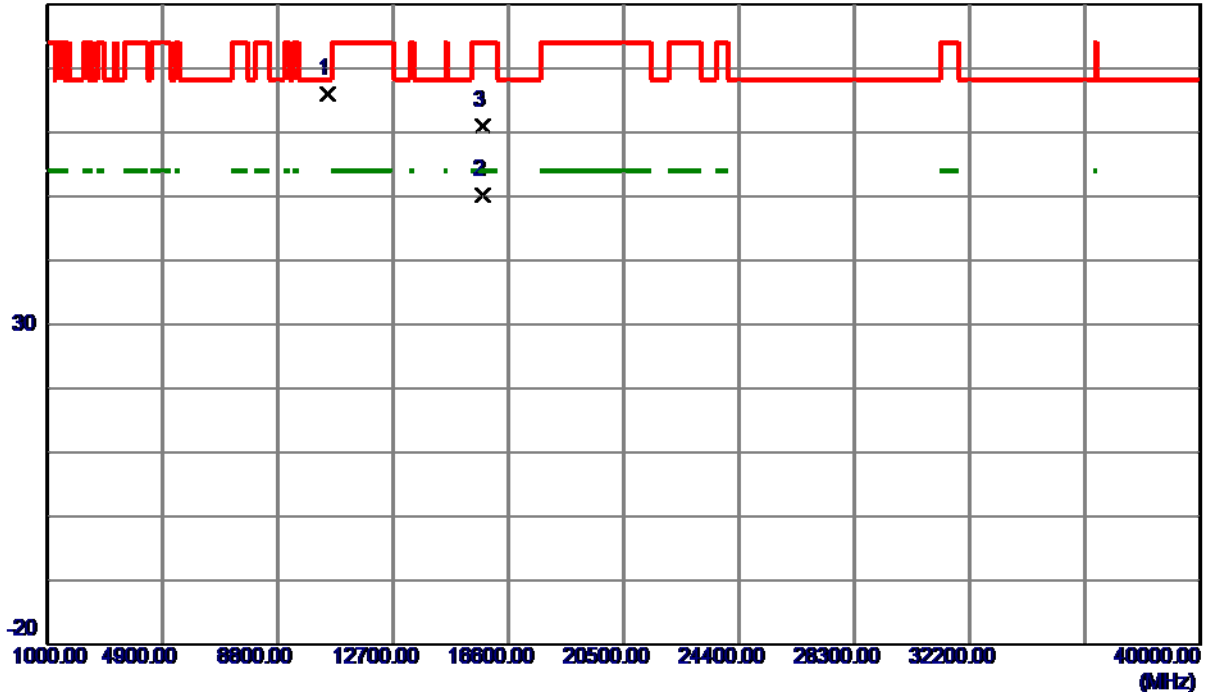
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

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

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10478.7650	67.53	-1.53	66.00	68.30	-2.30	Peak	
2	15718.1200	47.56	2.61	50.17	54.00	-3.83	AVG	
3	15718.5800	58.47	2.60	61.07	74.00	-12.93	Peak	

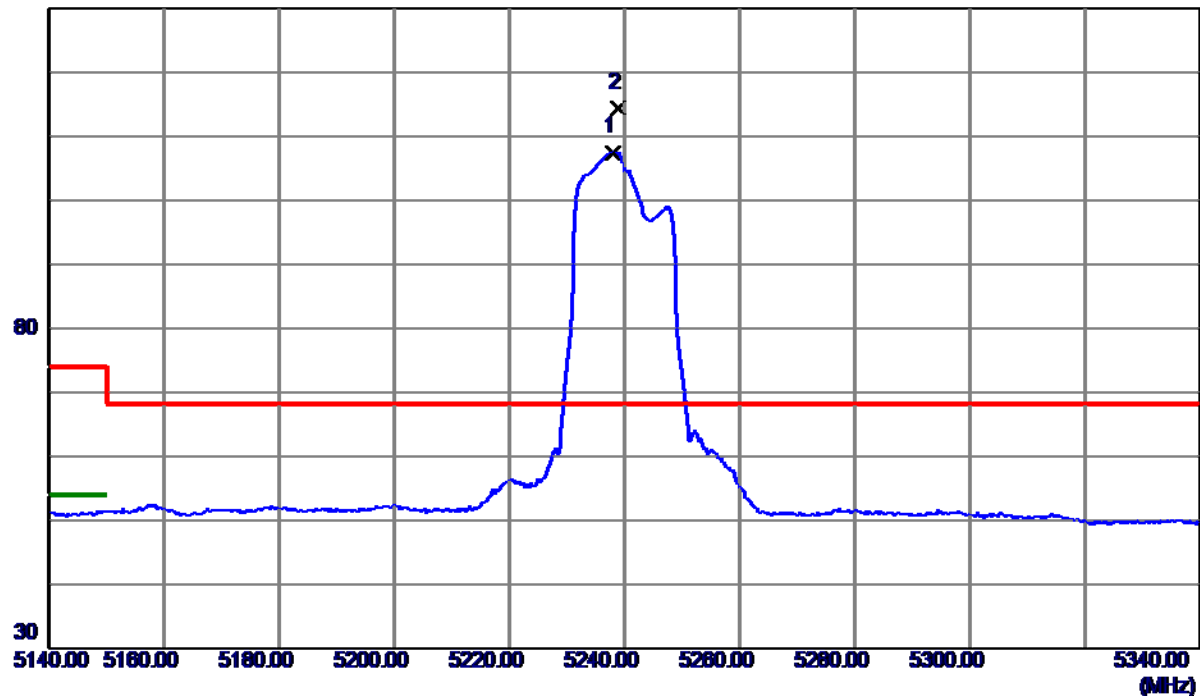
REMARKS:

- (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

130 dBuV/m



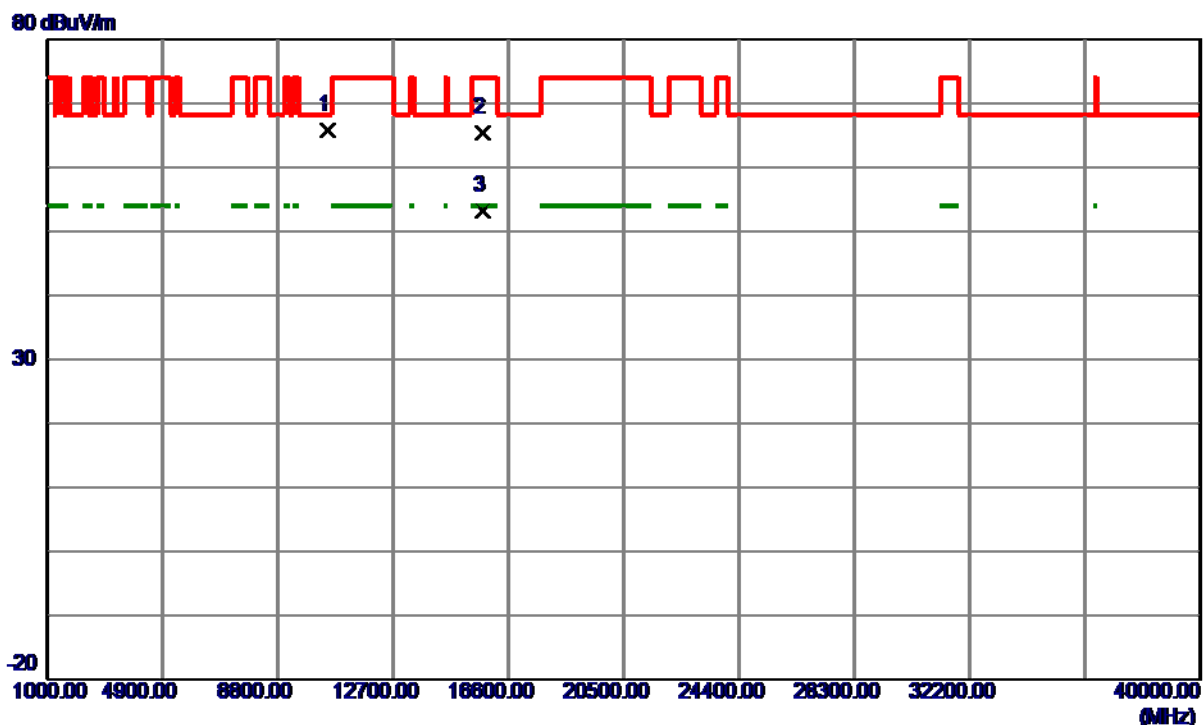
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5238.0000	68.32	39.18	107.50	999.00	-891.50	AVG	No Limit
2 *	5238.8000	75.31	39.18	114.49	68.30	46.19	Peak	No Limit

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



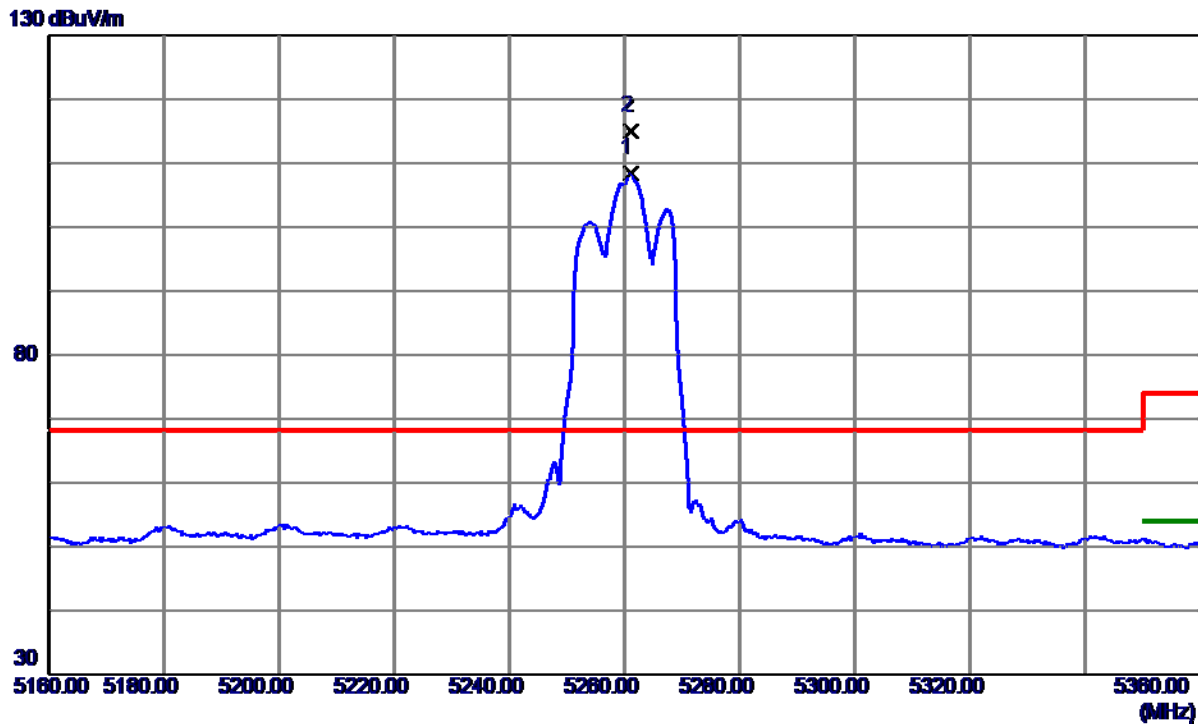
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10481.7650	67.40	-1.53	65.87	68.30	-2.43	Peak	
2	15716.4200	62.83	2.61	65.44	74.00	-8.56	Peak	
3 *	15716.7400	50.67	2.61	53.28	54.00	-0.72	AVG	

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 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	69.13	39.21	108.34	999.00	-890.66	AVG	No Limit
2 *	5261.2000	75.78	39.21	114.99	68.30	46.69	Peak	No Limit

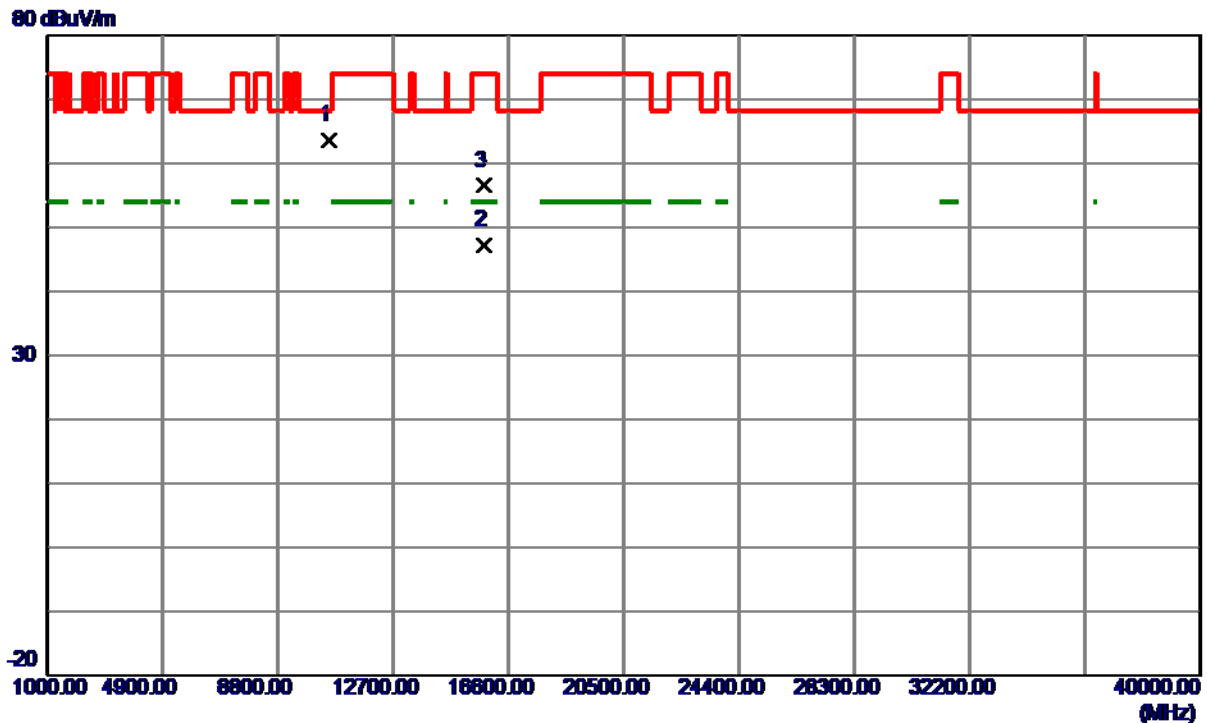
REMARKS:

(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

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10518.7000	65.13	-1.44	63.69	68.30	-4.61	Peak	
2	15778.1200	44.85	2.43	47.28	74.00	-26.72	Peak	
3	15778.8800	54.07	2.43	56.50	74.00	-17.50	Peak	

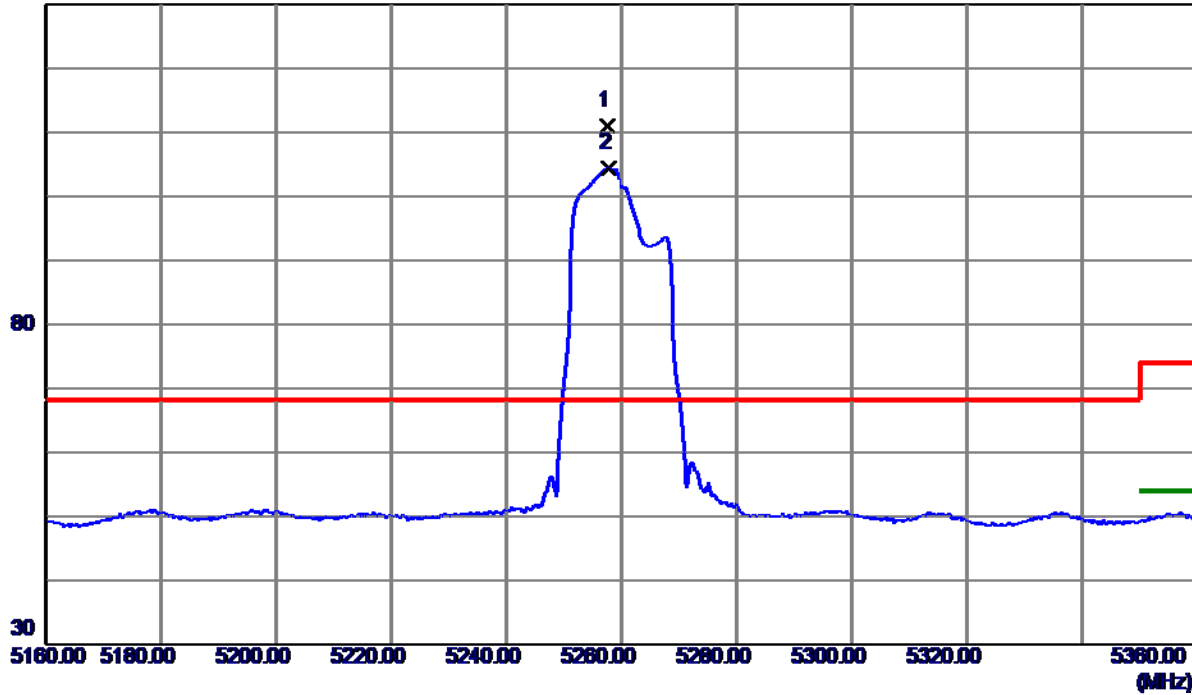
REMARKS:

- (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

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5257.6000	71.85	39.20	111.05	68.30	42.75	Peak	No Limit
2	5257.8000	65.26	39.20	104.46	999.00	-894.54	AVG	No Limit

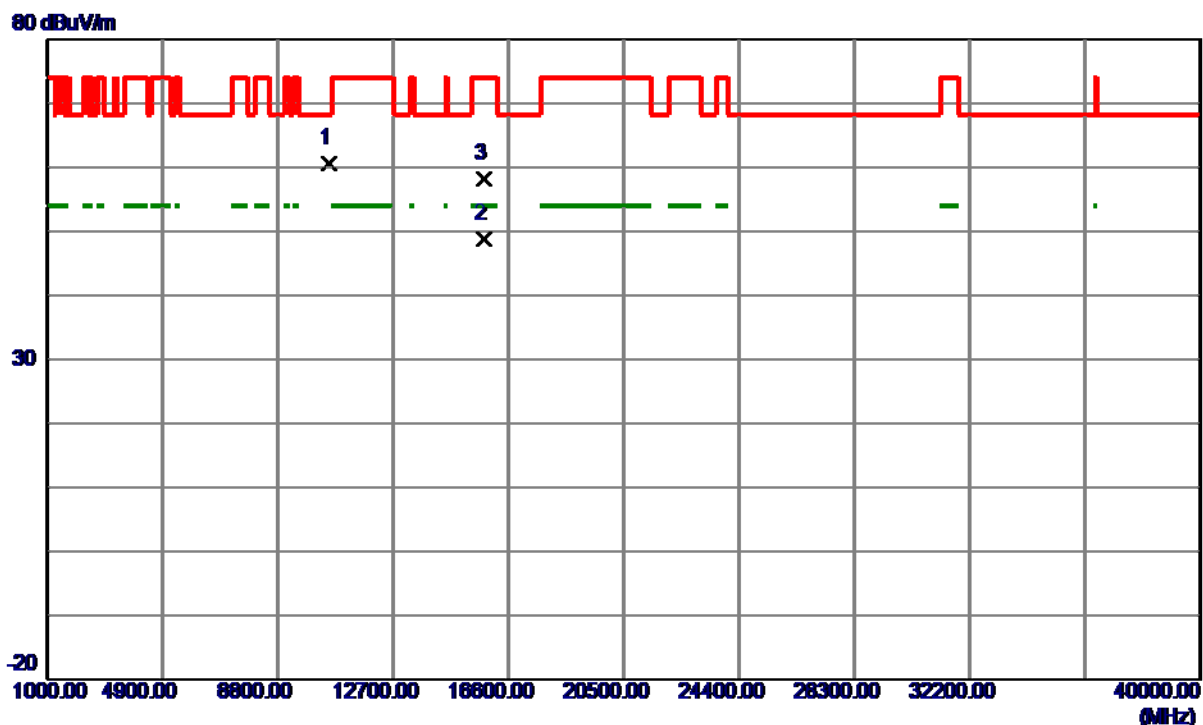
REMARKS:

(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

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10521.6200	62.03	-1.43	60.60	68.30	-7.70	Peak	
2 *	15776.2800	46.36	2.44	48.80	54.00	-5.20	AVG	
3	15776.4800	55.73	2.44	58.17	74.00	-15.83	Peak	

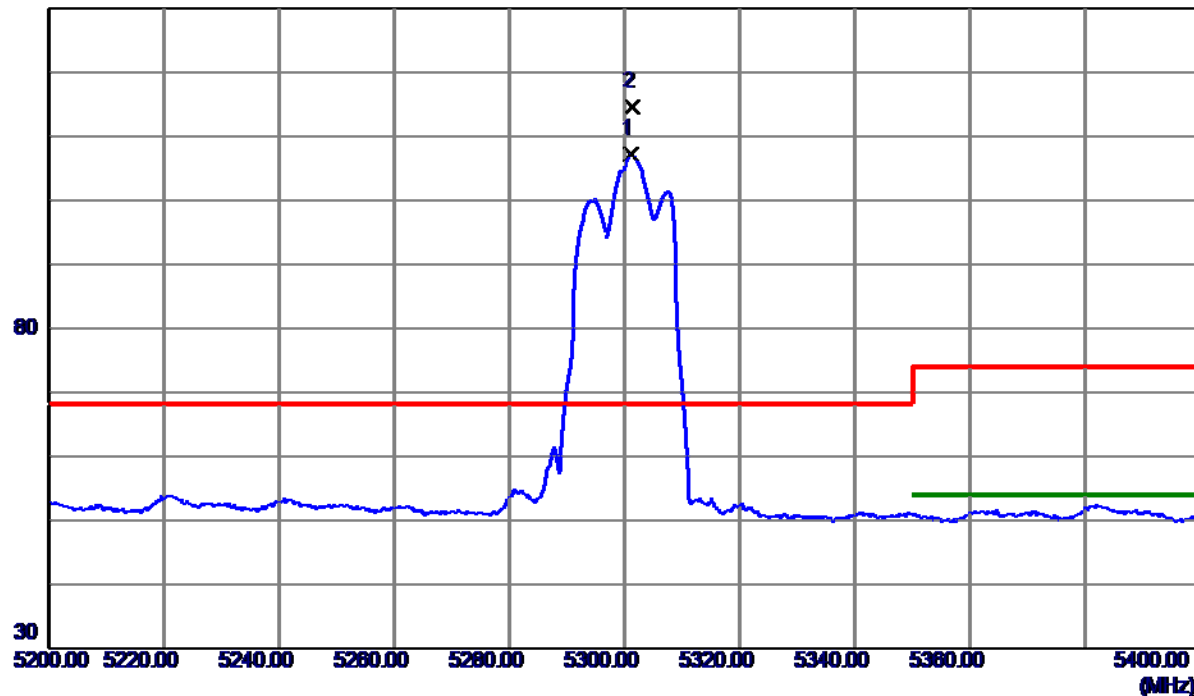
REMARKS:

- (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

130 dBuV/m



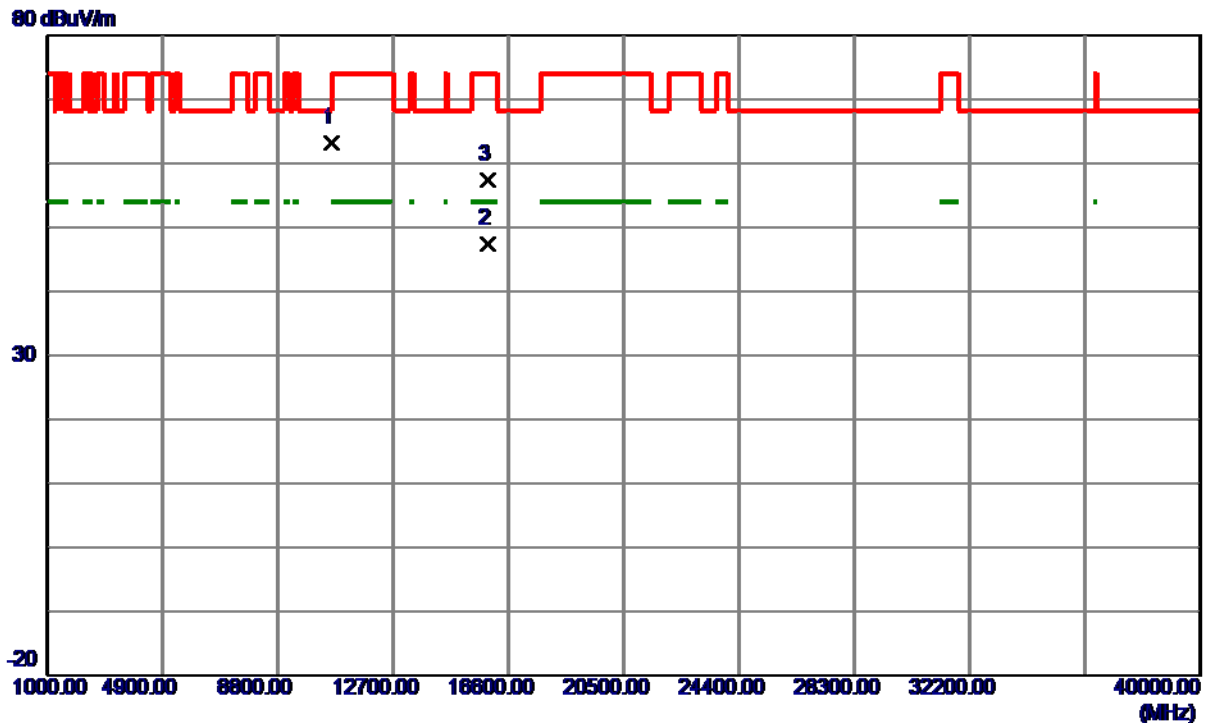
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5301.2000	67.87	39.26	107.13	999.00	-891.87	AVG	No Limit
2 *	5301.4000	75.29	39.26	114.55	68.30	46.25	Peak	No Limit

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 *	10598.5599	64.44	-1.16	63.28	68.30	-5.02	Peak	
2	15897.8200	45.26	2.09	47.35	54.00	-6.65	AVG	
3	15898.5800	55.39	2.09	57.48	74.00	-16.52	Peak	

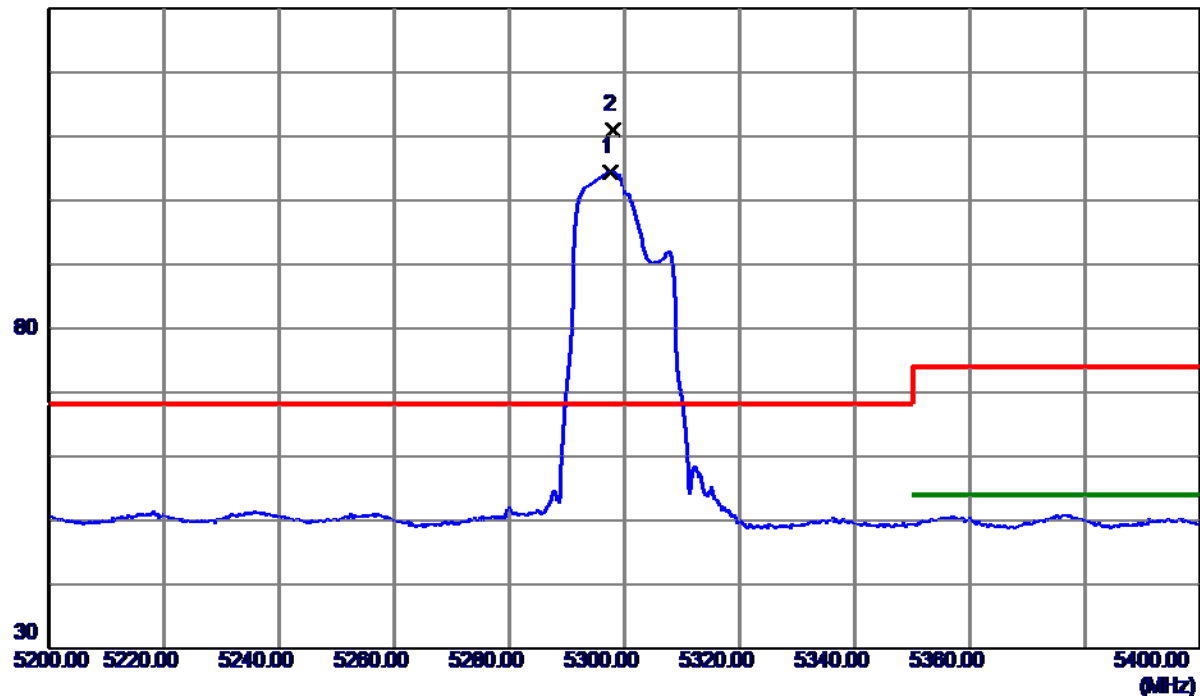
REMARKS:

- (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

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5297.6000	65.24	39.25	104.49	999.00	-894.51	AVG	No Limit
2 *	5298.0000	71.81	39.26	111.07	68.30	42.77	Peak	No Limit

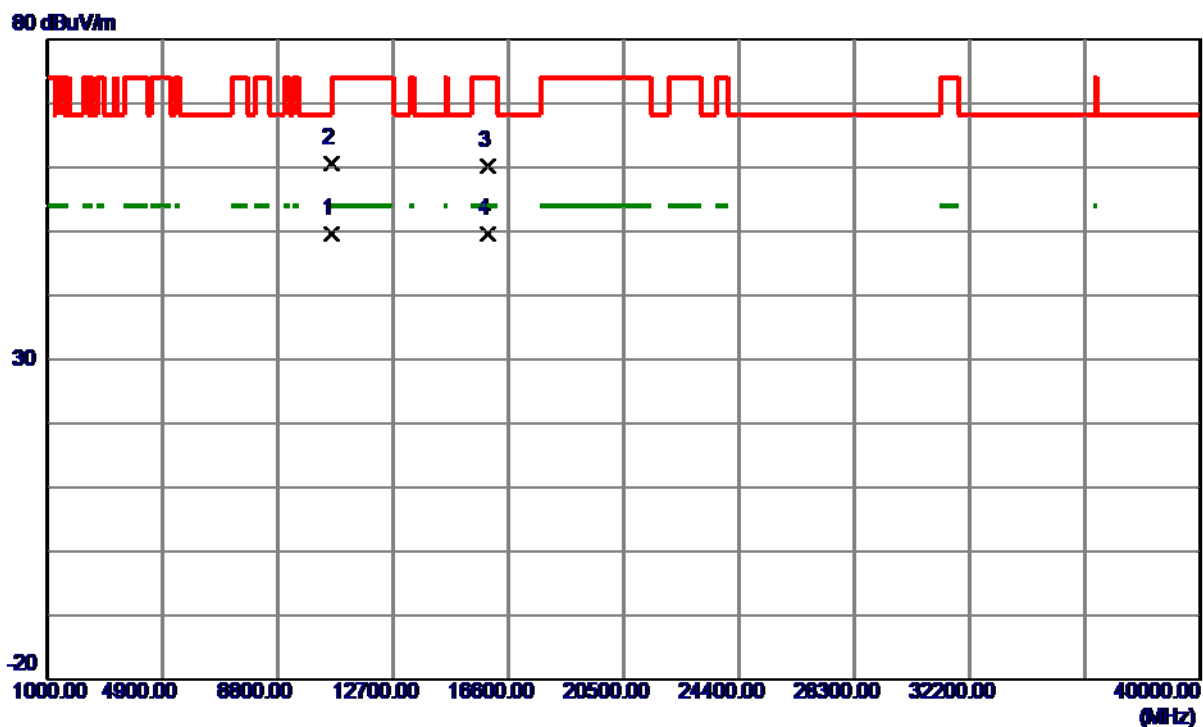
REMARKS:

(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 *	10601.8650	50.73	-1.15	49.58	54.00	-4.42	AVG	
2	10602.0800	61.82	-1.14	60.68	74.00	-13.32	Peak	
3	15894.5600	58.16	2.10	60.26	74.00	-13.74	Peak	
4	15895.2200	47.43	2.10	49.53	54.00	-4.47	AVG	

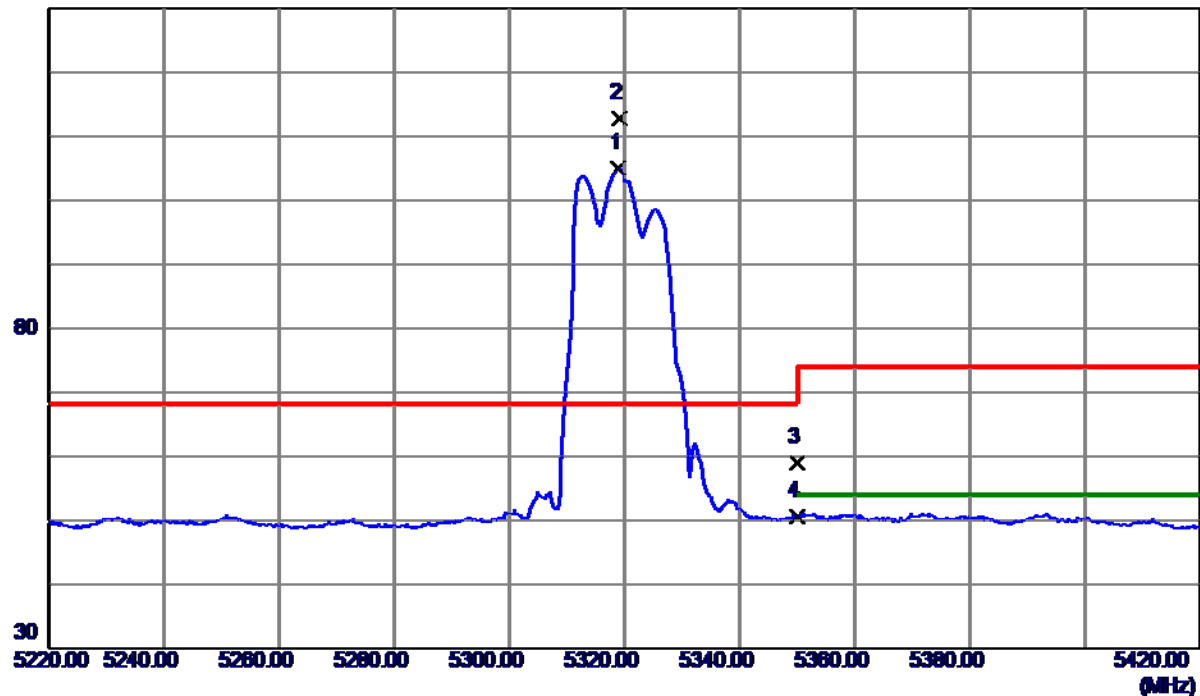
REMARKS:

- (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

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5319.0000	65.76	39.28	105.04	999.00	-893.96	AVG	No Limit
2 *	5319.2000	73.61	39.28	112.89	68.30	44.59	Peak	No Limit
3	5350.0000	19.72	39.32	59.04	74.00	-14.96	Peak	
4	5350.0000	11.34	39.32	50.66	54.00	-3.34	AVG	

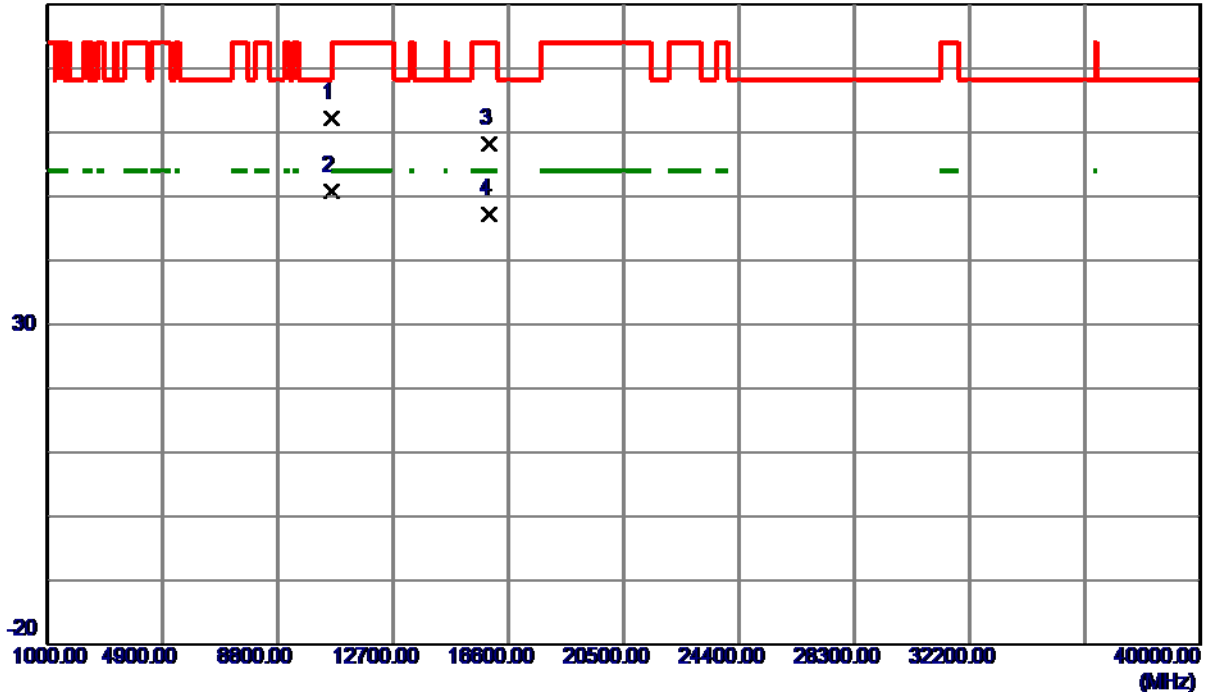
REMARKS:

- (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

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10637.7500	63.24	-1.02	62.22	74.00	-11.78	Peak	
2 *	10637.8900	51.90	-1.02	50.88	54.00	-3.12	AVG	
3	15952.2600	56.34	1.94	58.28	74.00	-15.72	Peak	
4	15958.6000	45.27	1.92	47.19	54.00	-6.81	AVG	

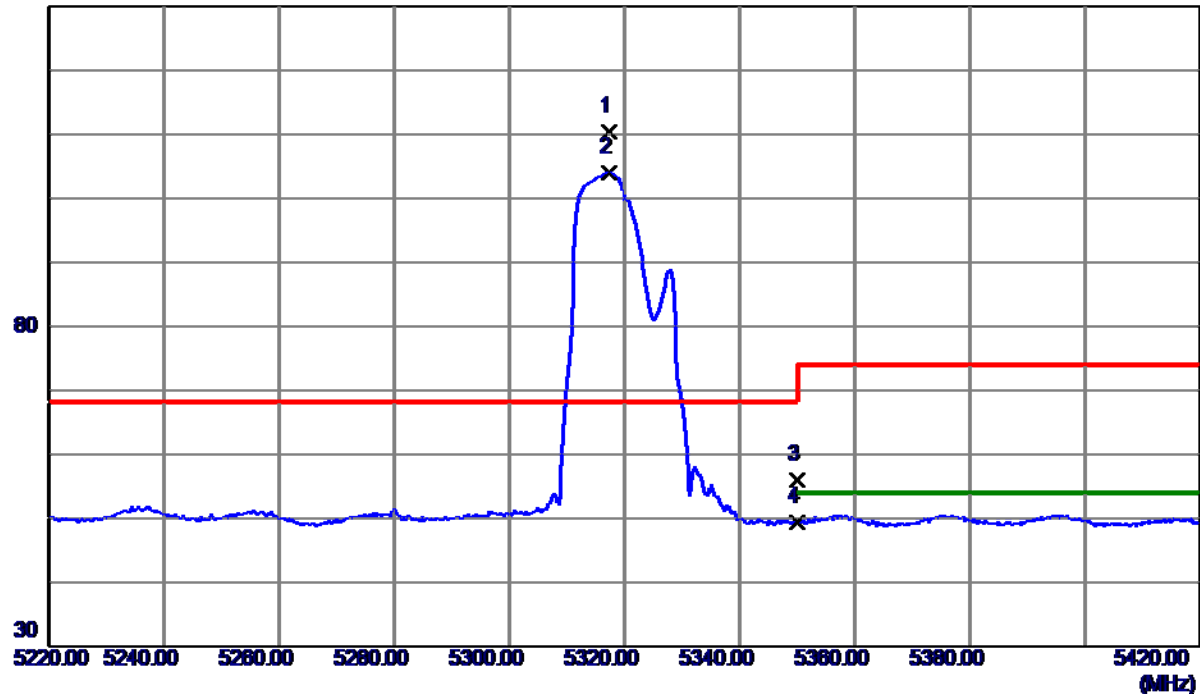
REMARKS:

- (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

130 dBuV/m



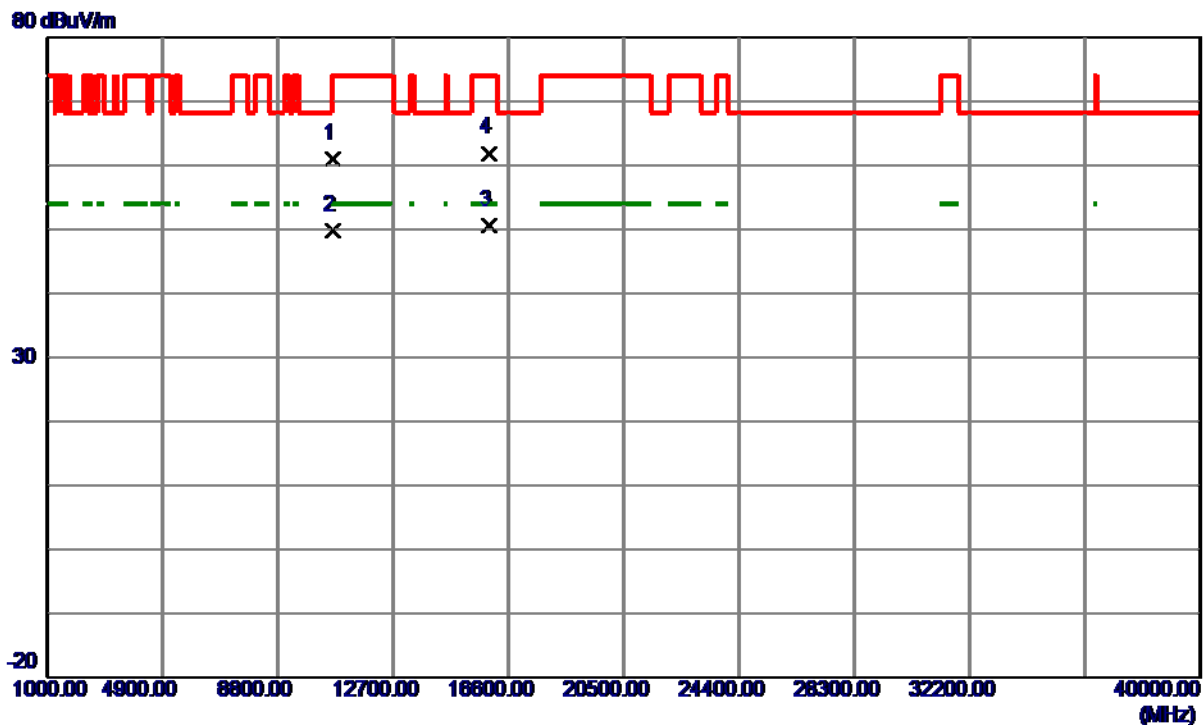
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5317.4000	71.05	39.28	110.33	68.30	42.03	Peak	No Limit
2	5317.4000	64.67	39.28	103.95	999.00	-895.05	AVG	No Limit
3	5350.0000	16.73	39.32	56.05	74.00	-17.95	Peak	
4	5350.0000	10.02	39.32	49.34	54.00	-4.66	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

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10641.8800	62.02	-1.00	61.02	74.00	-12.98	Peak	
2	10641.9200	50.75	-1.00	49.75	54.00	-4.25	AVG	
3 *	15955.3400	48.63	1.93	50.56	54.00	-3.44	AVG	
4	15956.3600	59.98	1.92	61.90	74.00	-12.10	Peak	

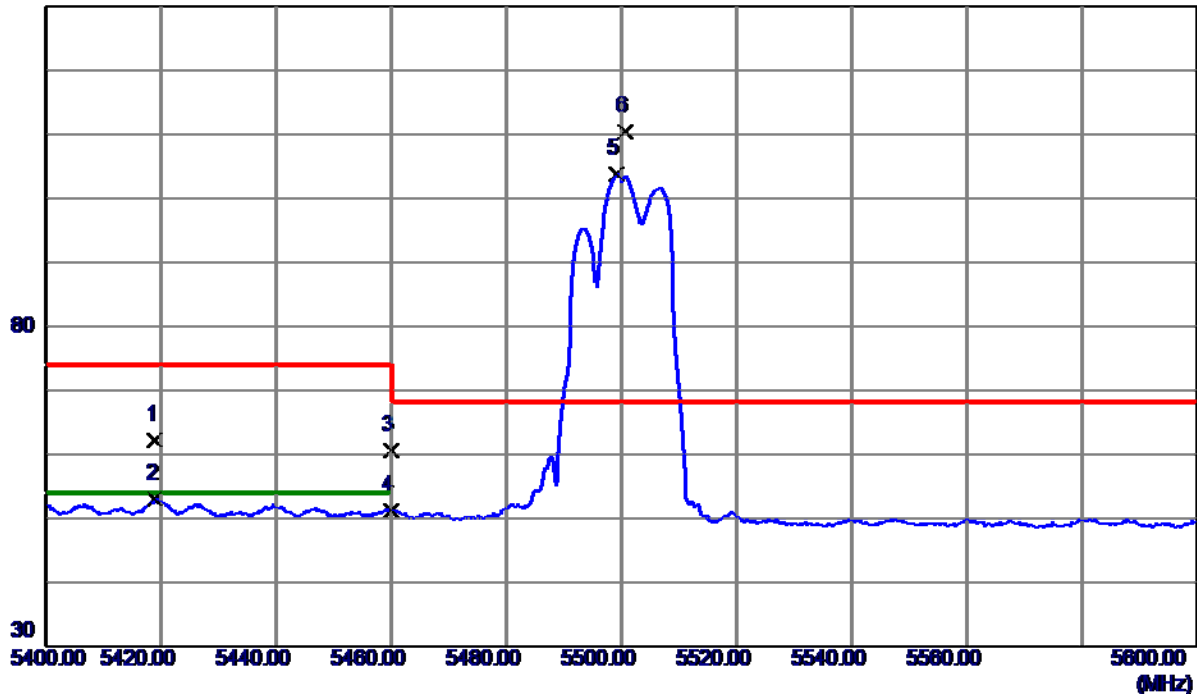
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5419.0000	22.87	39.41	62.28	74.00	-11.72	Peak	
2	5419.0000	13.52	39.41	52.93	54.00	-1.07	AVG	
3	5460.0000	21.09	39.46	60.55	74.00	-13.45	Peak	
4	5460.0000	11.77	39.46	51.23	54.00	-2.77	AVG	
5	5499.2000	64.37	39.51	103.88	999.00	-895.12	AVG	No Limit
6 *	5500.6000	70.80	39.51	110.31	68.30	42.01	Peak	No Limit

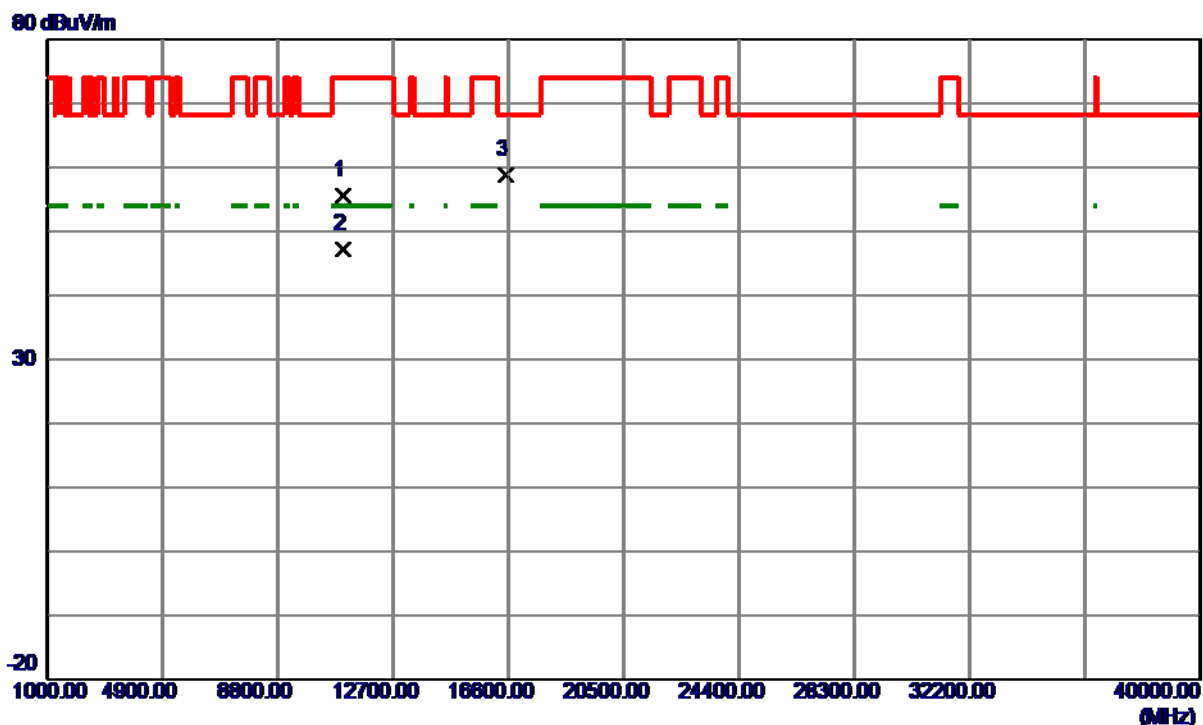
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10999.9550	55.33	0.28	55.61	74.00	-18.39	Peak	
2 *	10999.9850	46.88	0.28	47.16	54.00	-6.84	AVG	
3	16497.6600	55.76	3.00	58.76	68.30	-9.54	Peak	

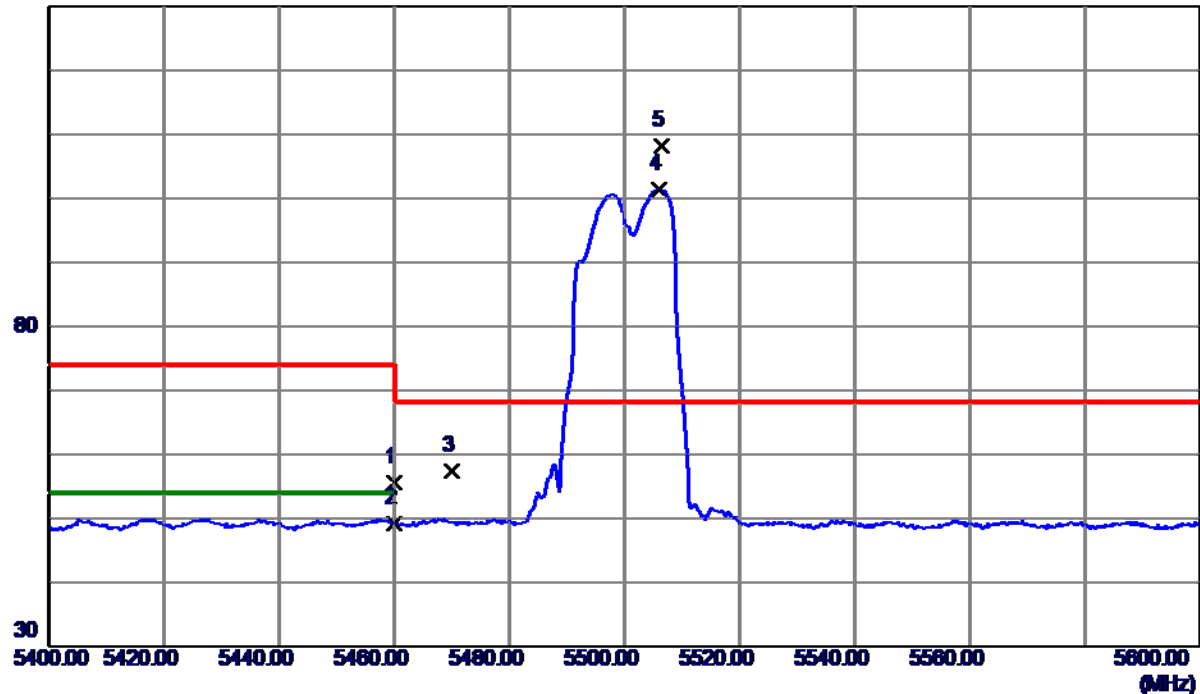
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5460.0000	16.15	39.46	55.61	74.00	-18.39	Peak	
2	5460.0000	9.80	39.46	49.26	54.00	-4.74	AVG	
3	5470.0000	17.97	39.47	57.44	68.30	-10.86	Peak	
4	5506.0000	61.85	39.52	101.37	999.00	-897.63	AVG	No Limit
5 *	5506.4000	68.74	39.53	108.27	68.30	39.97	Peak	No Limit

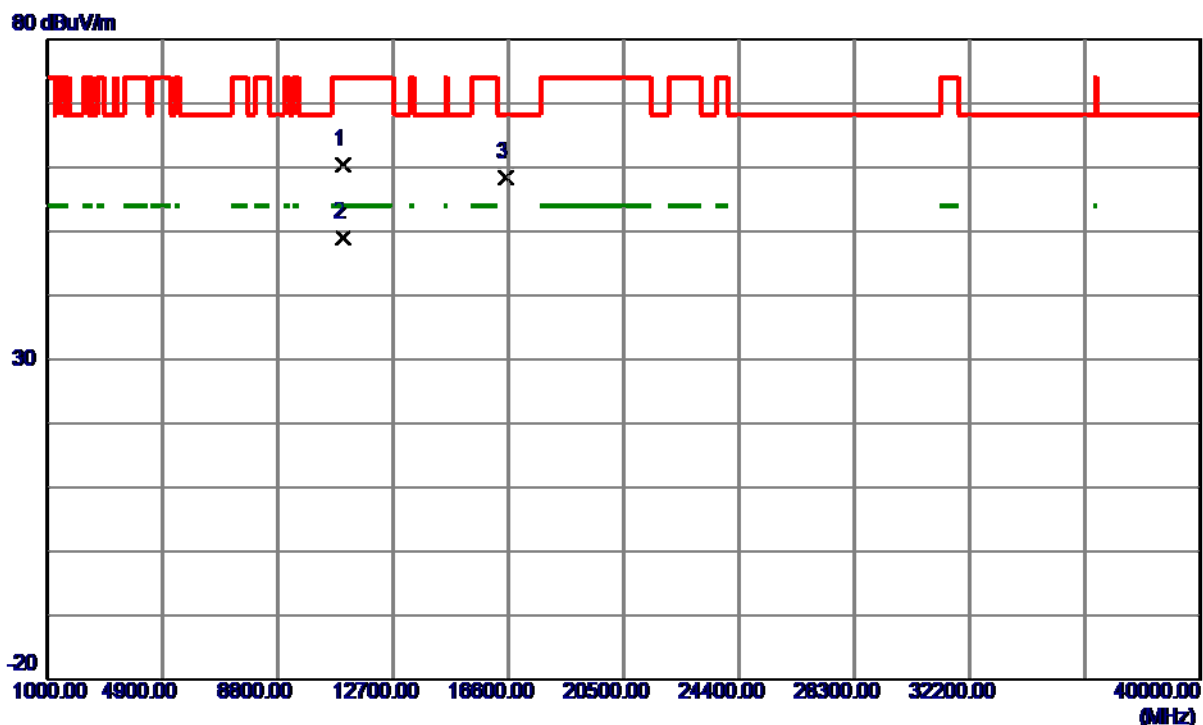
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11001.7500	60.11	0.28	60.39	74.00	-13.61	Peak	
2 *	11002.3150	48.69	0.28	48.97	54.00	-5.03	AVG	
3	16496.5800	55.42	3.00	58.42	68.30	-9.88	Peak	

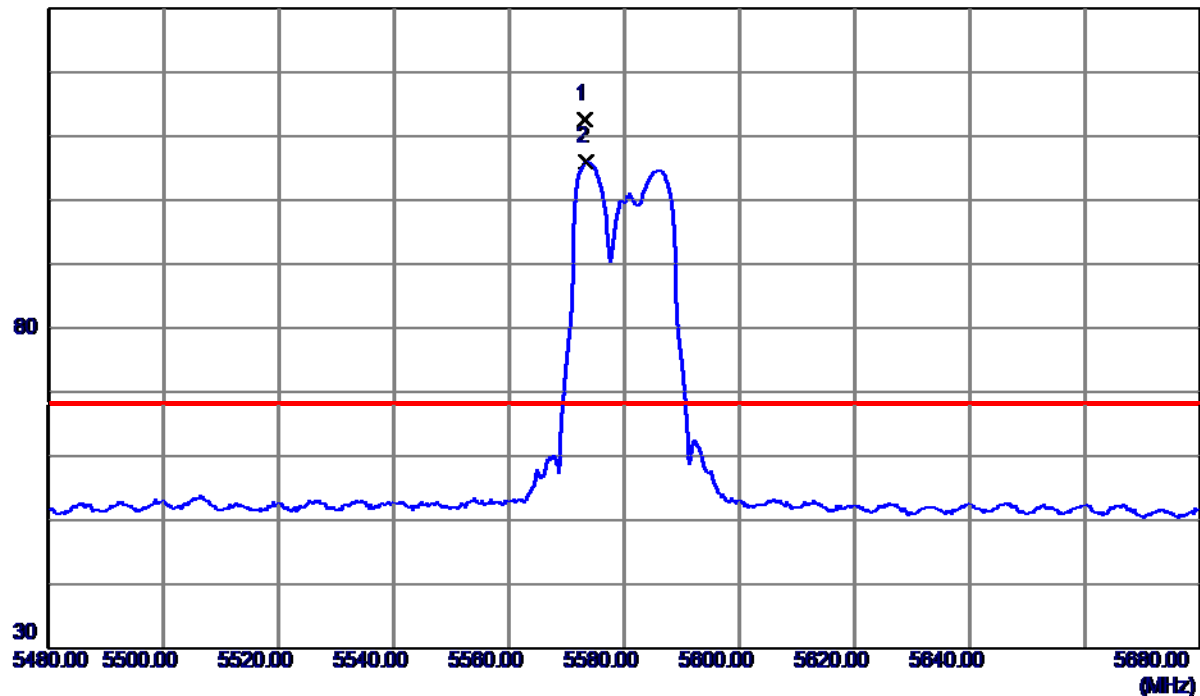
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Vertical

130 dBuV/m



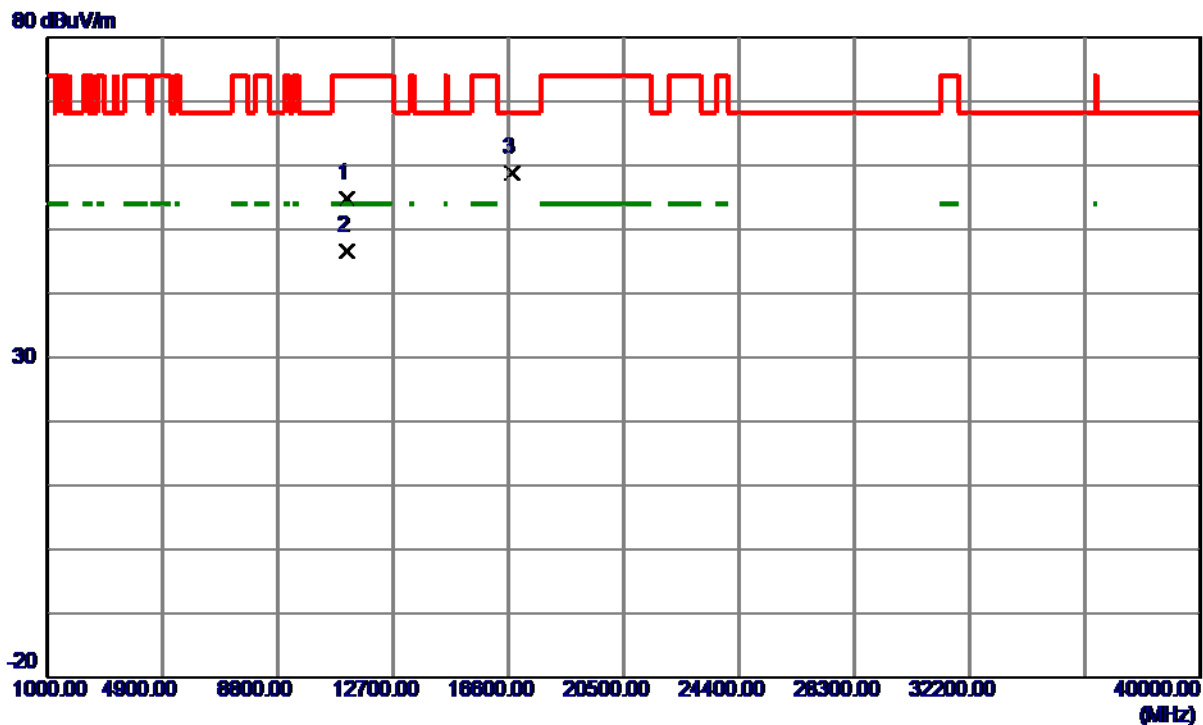
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5573.2000	72.96	39.68	112.64	68.30	44.34	Peak	No Limit
2	5573.4000	66.35	39.68	106.03	999.00	-892.97	AVG	No Limit

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11159.9000	54.77	0.07	54.84	74.00	-19.16	Peak	
2 *	11159.9500	46.44	0.07	46.51	54.00	-7.49	AVG	
3	16748.5000	54.63	4.13	58.76	68.30	-9.54	Peak	

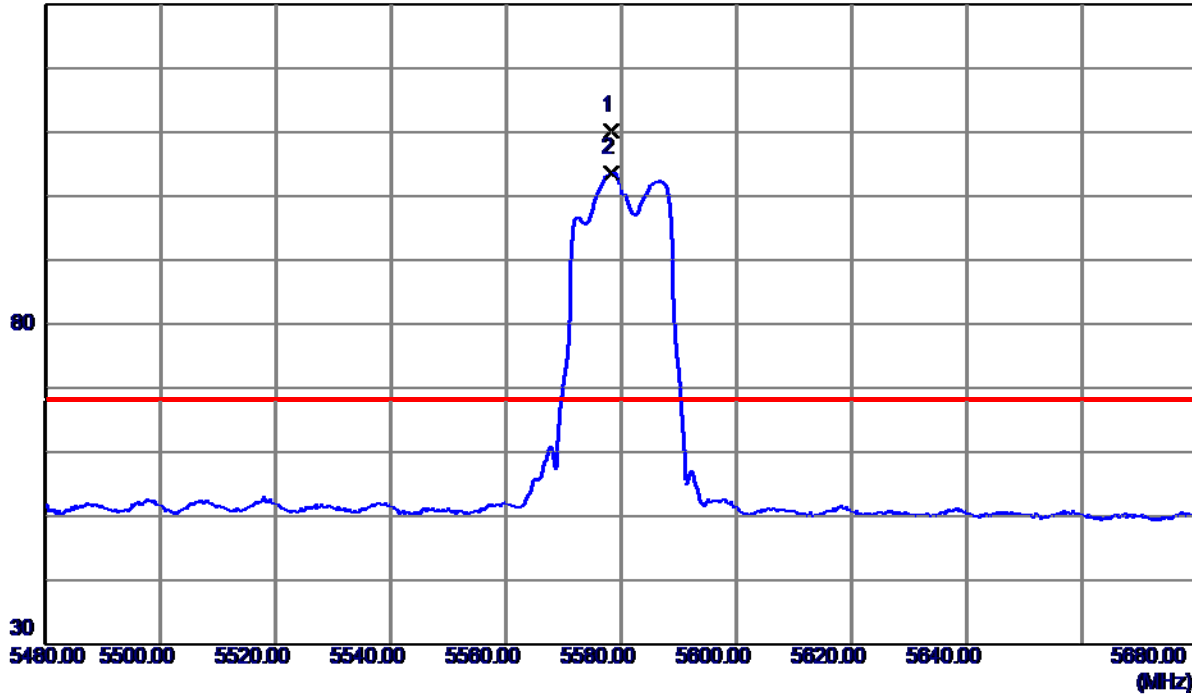
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5578.2000	70.48	39.70	110.18	68.30	41.88	Peak	No Limit
2	5578.2000	63.85	39.70	103.55	999.00	-895.45	AVG	No Limit

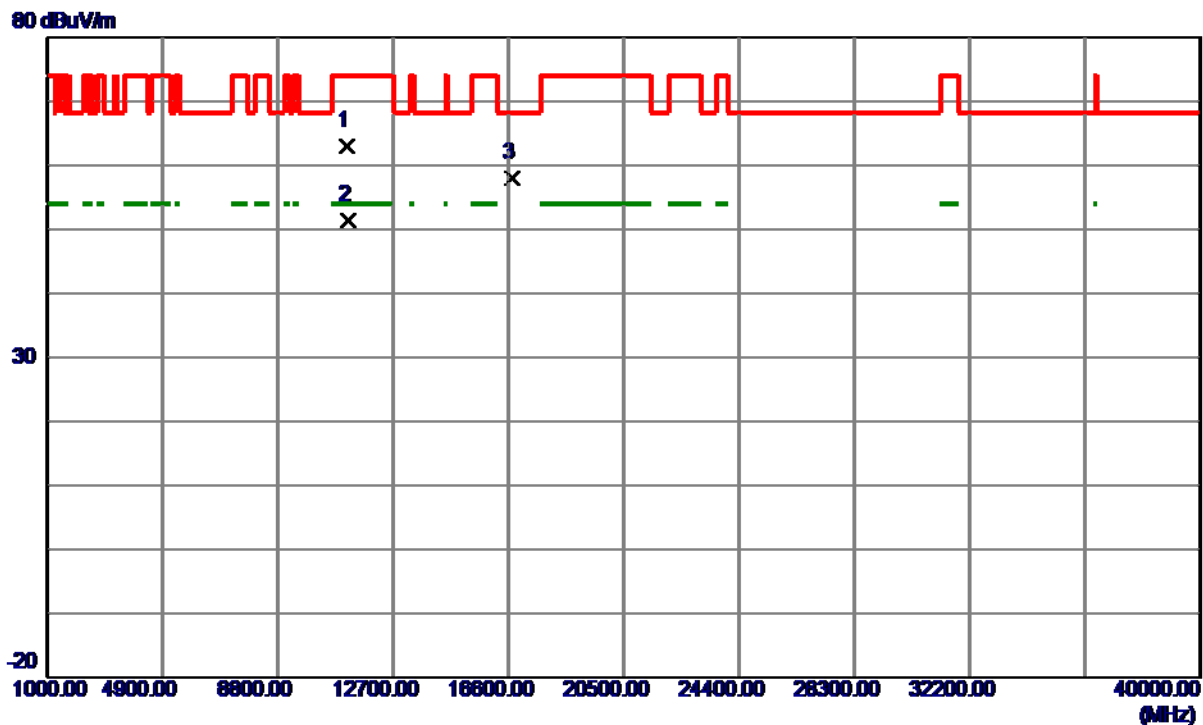
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11161.6400	63.01	0.07	63.08	74.00	-10.92	Peak	
2 *	11161.9550	51.29	0.07	51.36	54.00	-2.64	AVG	
3	16733.1800	53.96	4.06	58.02	68.30	-10.28	Peak	

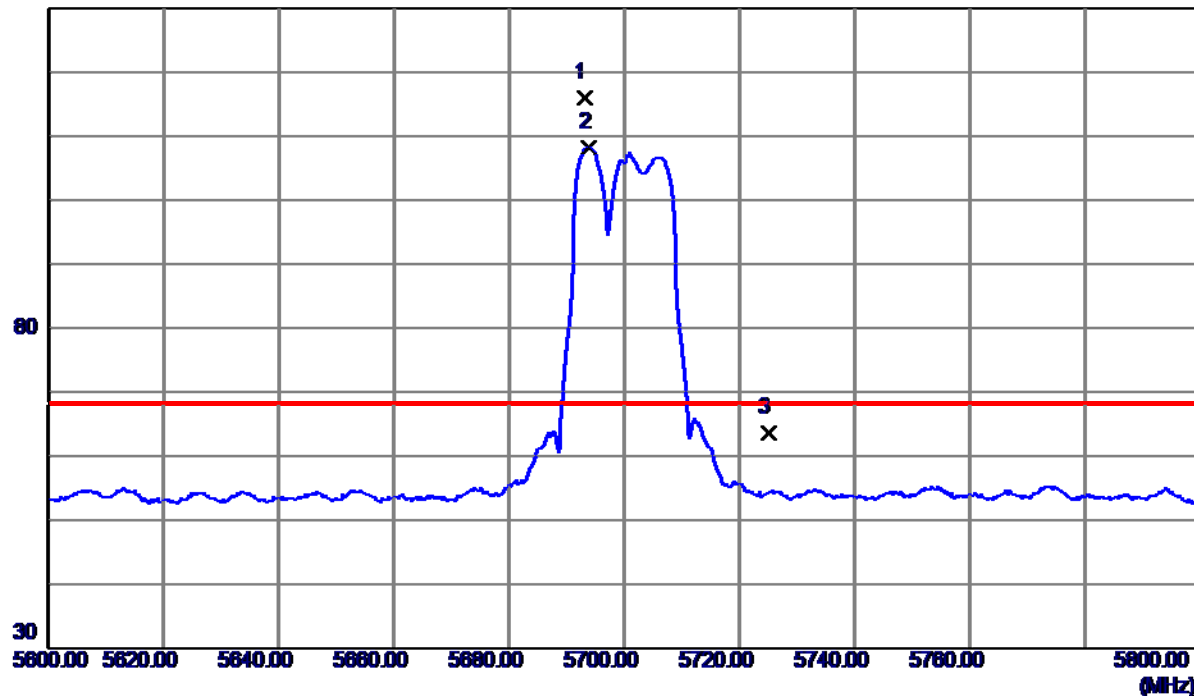
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Vertical

130 dBuV/m



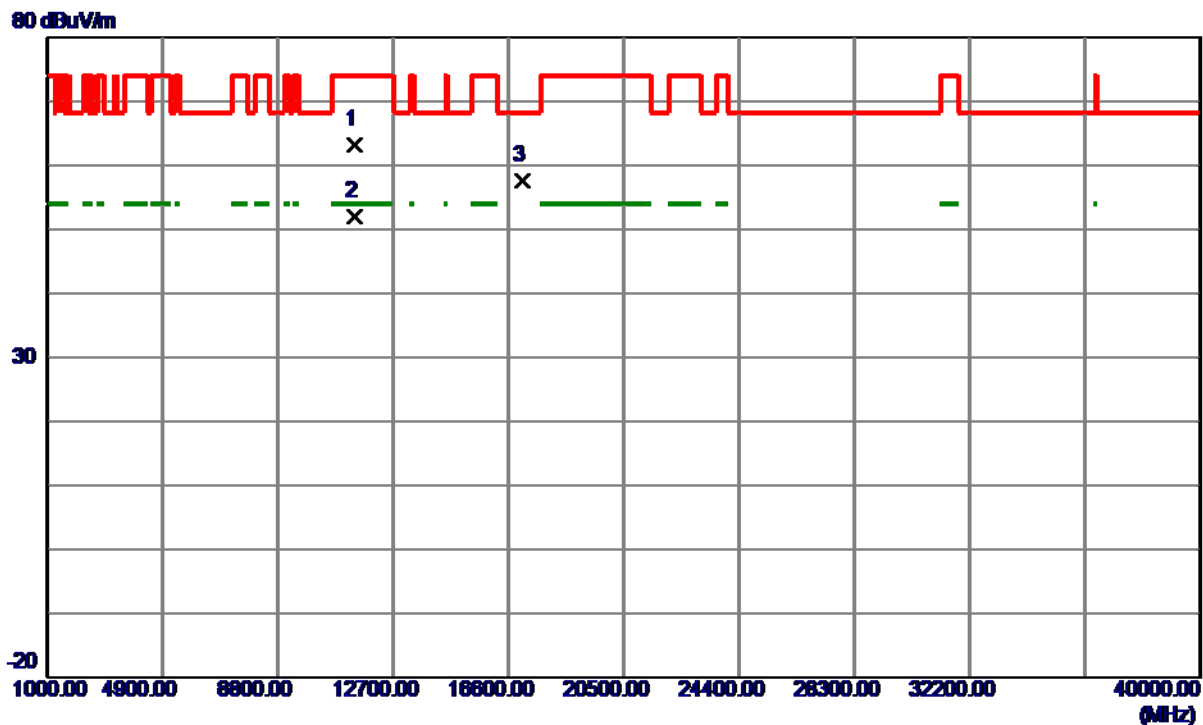
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5693.0000	75.93	39.97	115.90	68.30	47.60	Peak	No Limit
2	5693.8000	68.29	39.97	108.26	999.00	-890.74	AVG	No Limit
3	5725.0000	23.54	40.05	63.59	68.30	-4.71	Peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11399.7400	63.48	-0.25	63.23	74.00	-10.77	Peak	
2 *	11401.1550	52.18	-0.25	51.93	54.00	-2.07	AVG	
3	17093.2000	52.27	5.40	57.67	68.30	-10.63	Peak	

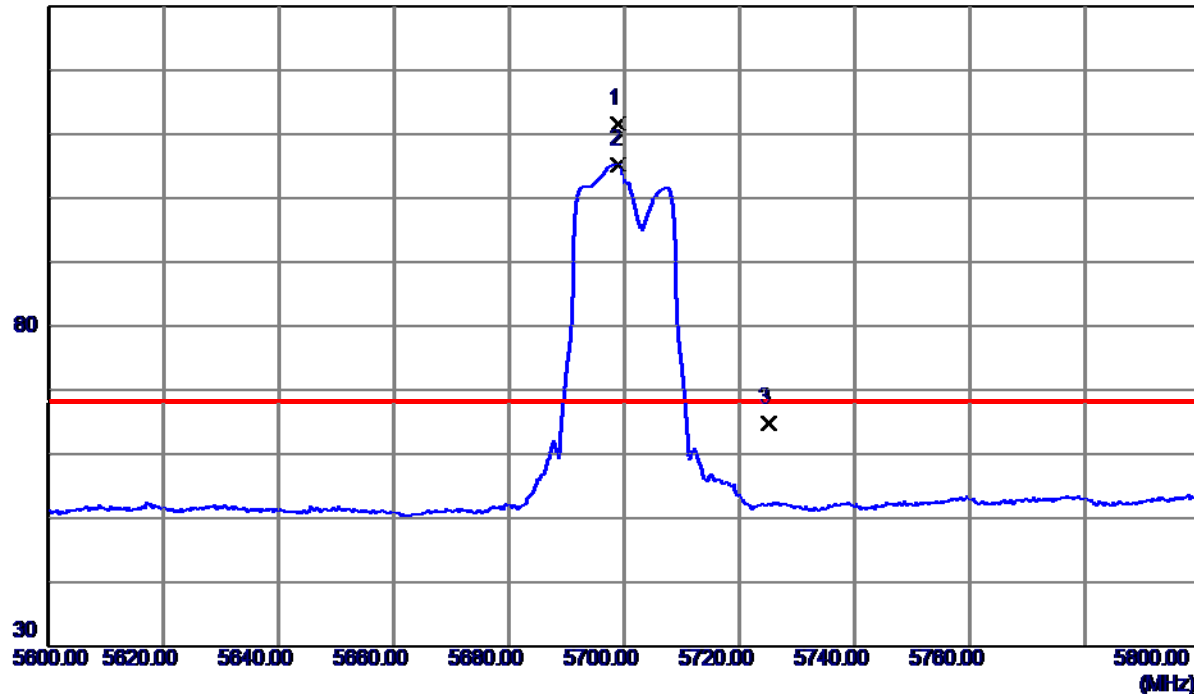
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5698.8000	71.65	39.98	111.63	68.30	43.33	Peak	No Limit
2	5699.0000	65.22	39.98	105.20	999.00	-893.80	AVG	No Limit
3	5725.0000	24.72	40.05	64.77	68.30	-3.53	Peak	

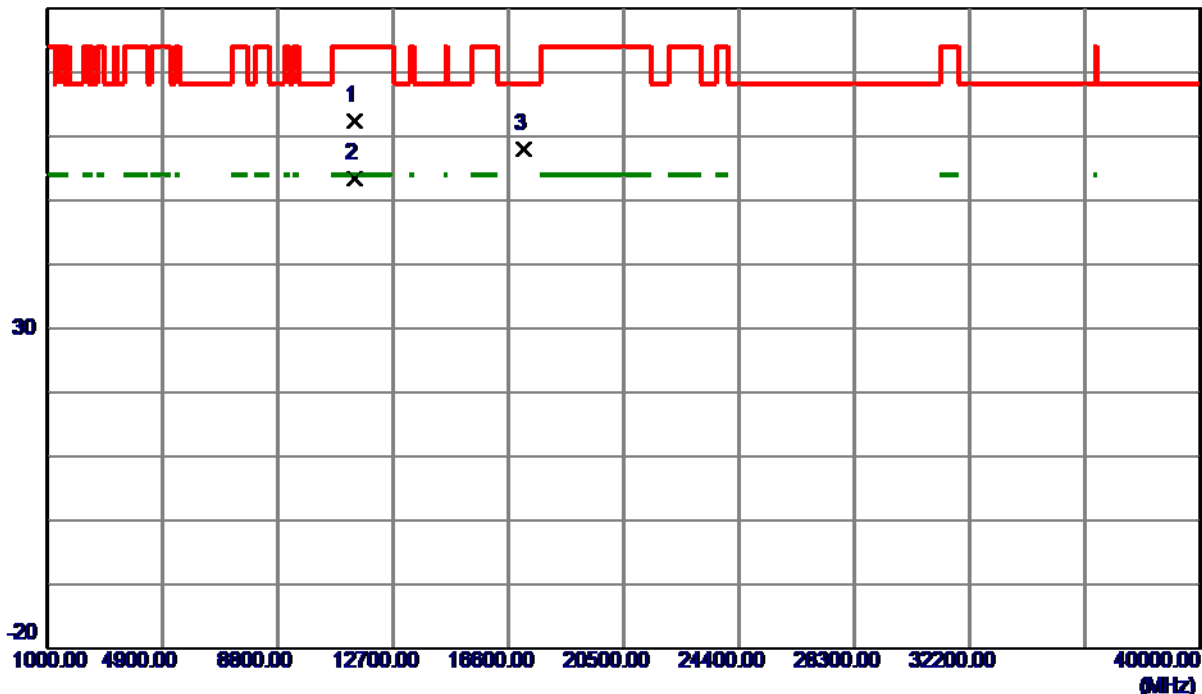
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11401.1200	62.66	-0.25	62.41	74.00	-11.59	Peak	
2 *	11401.7150	53.69	-0.25	53.44	54.00	-0.56	AVG	
3	17099.7000	52.58	5.41	57.99	68.30	-10.31	Peak	

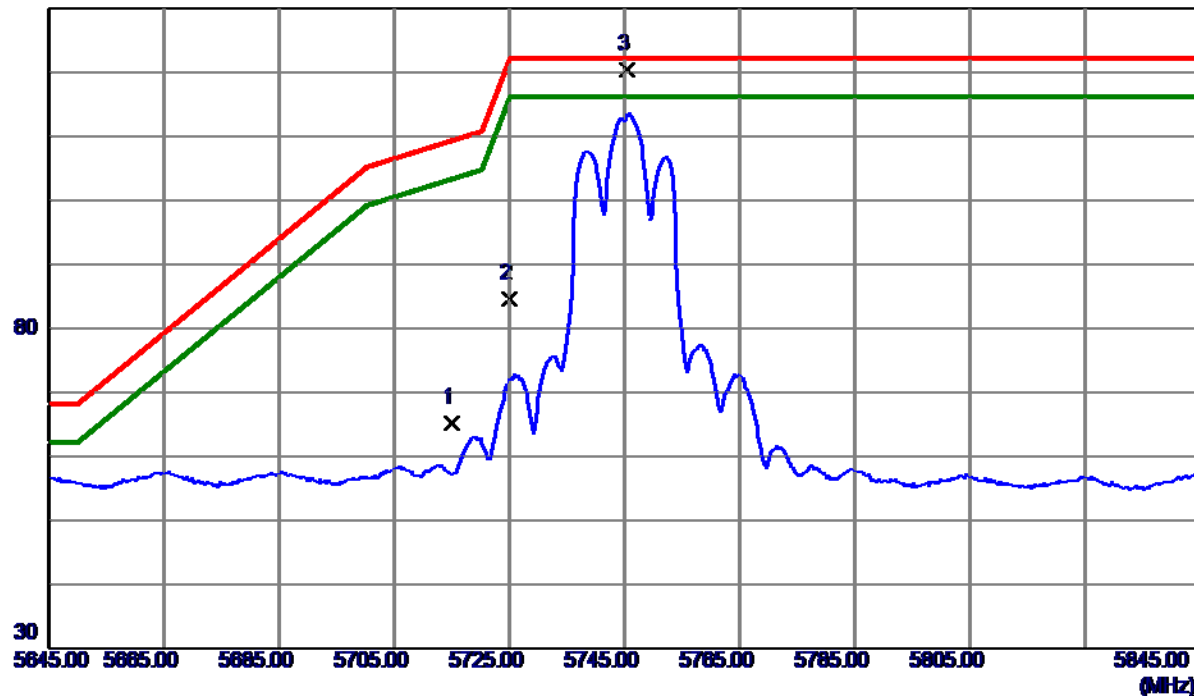
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Vertical

130 dBuV/m



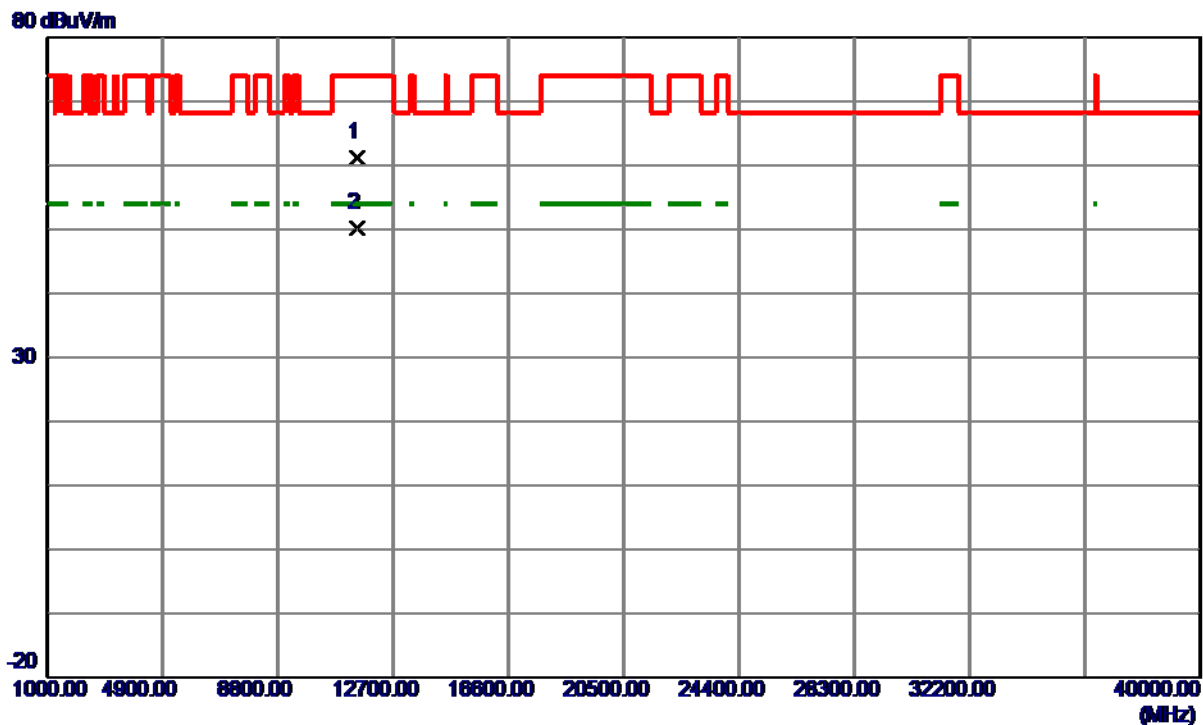
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	25.18	40.02	65.20	109.40	-44.20	Peak	
2	5725.0000	44.58	40.05	84.63	122.20	-37.57	Peak	
3 *	5745.4000	80.22	40.09	120.31	122.20	-1.89	Peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11489.6550	61.62	-0.37	61.25	74.00	-12.75	Peak	
2 *	11490.0350	50.64	-0.37	50.27	54.00	-3.73	AVG	

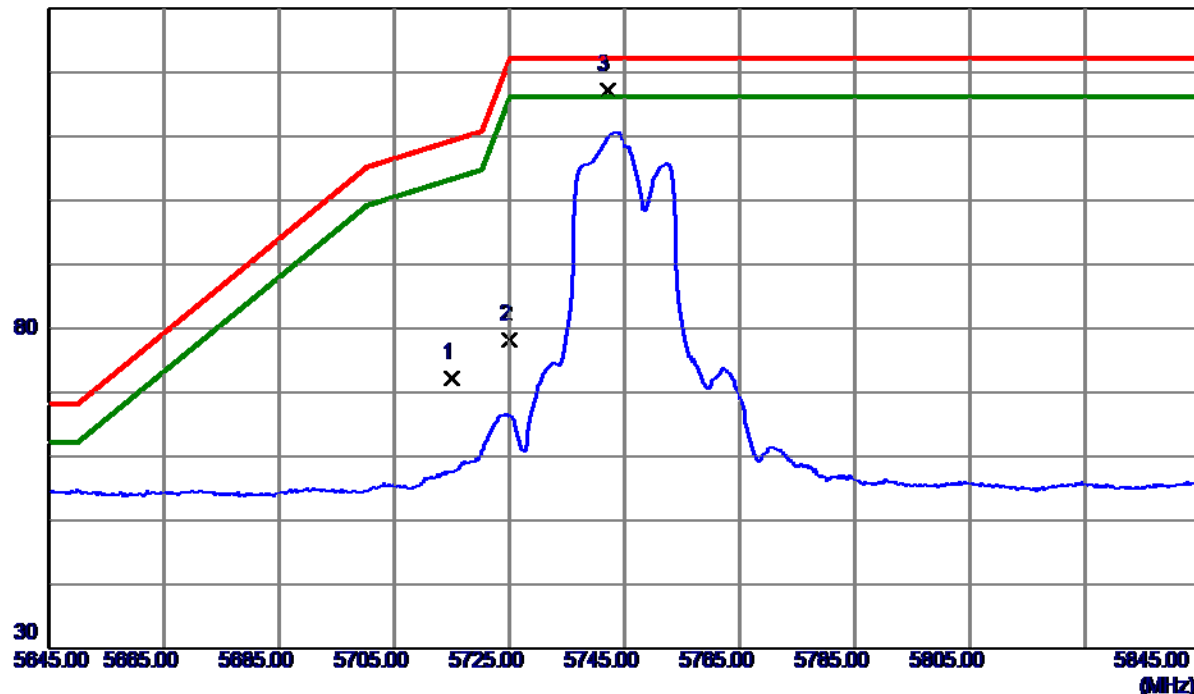
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	32.11	40.02	72.13	109.40	-37.27	Peak	
2	5725.0000	38.24	40.05	78.29	122.20	-43.91	Peak	
3 *	5742.0000	77.15	40.09	117.24	122.20	-4.96	Peak	

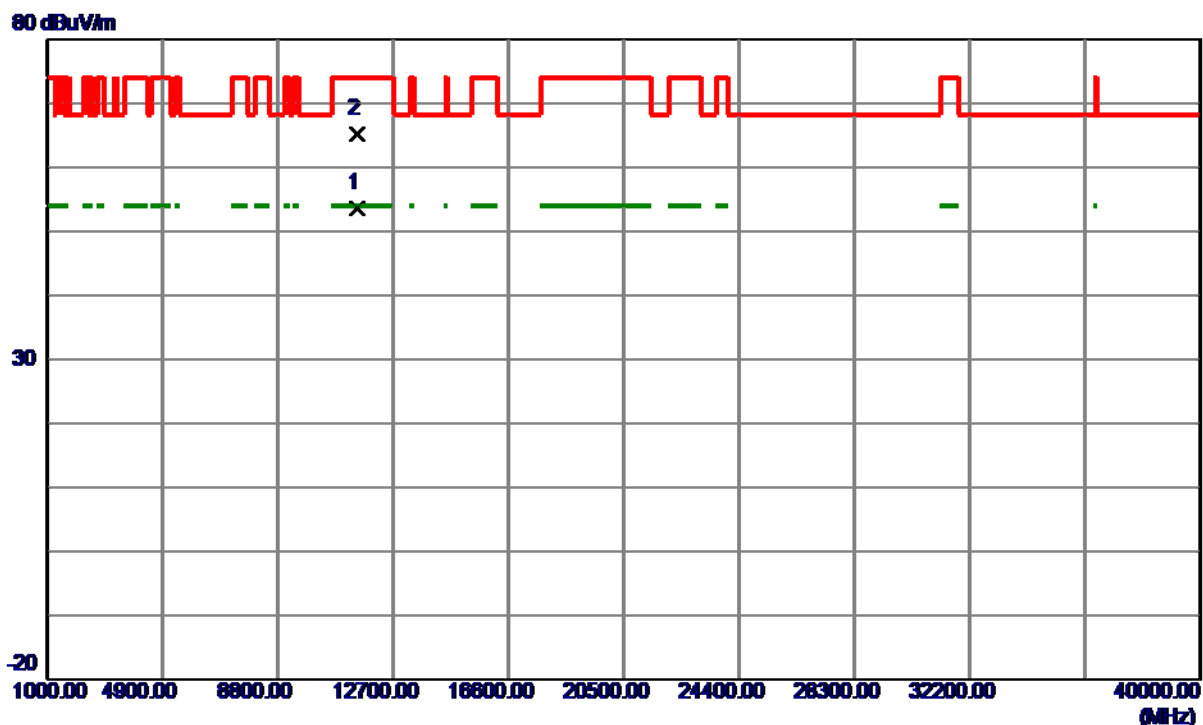
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11488.0400	53.94	-0.36	53.58	54.00	-0.42	AVG	
2	11488.5950	65.64	-0.37	65.27	74.00	-8.73	Peak	

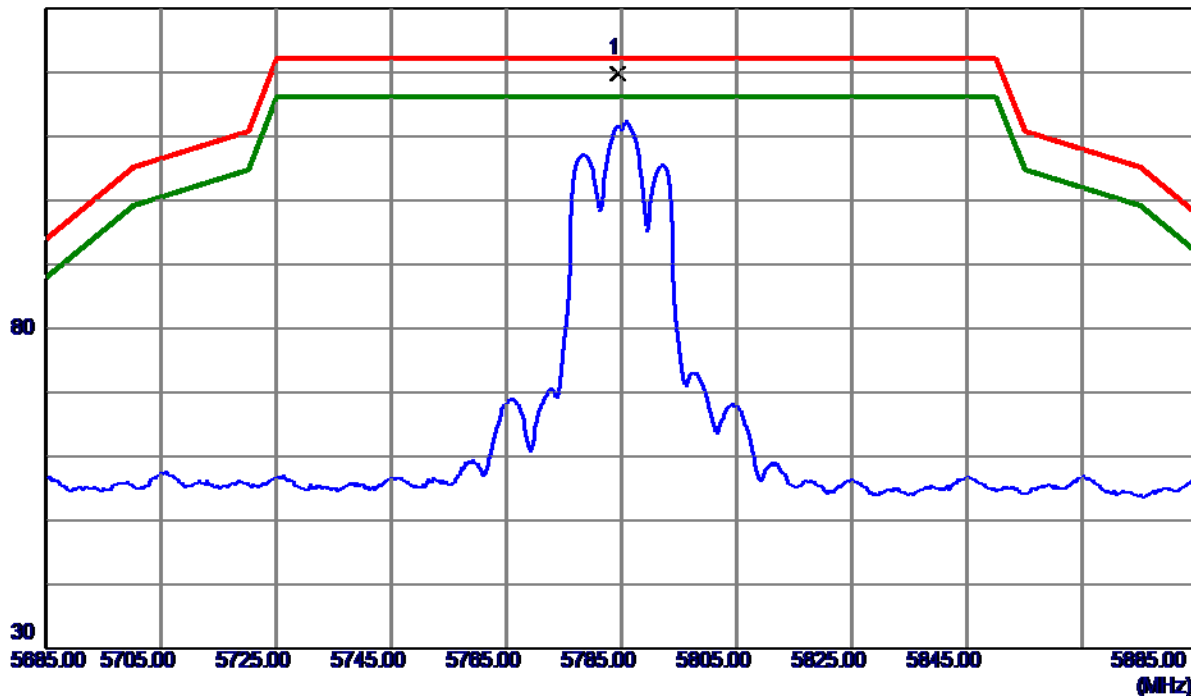
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Vertical

130 dBuV/m



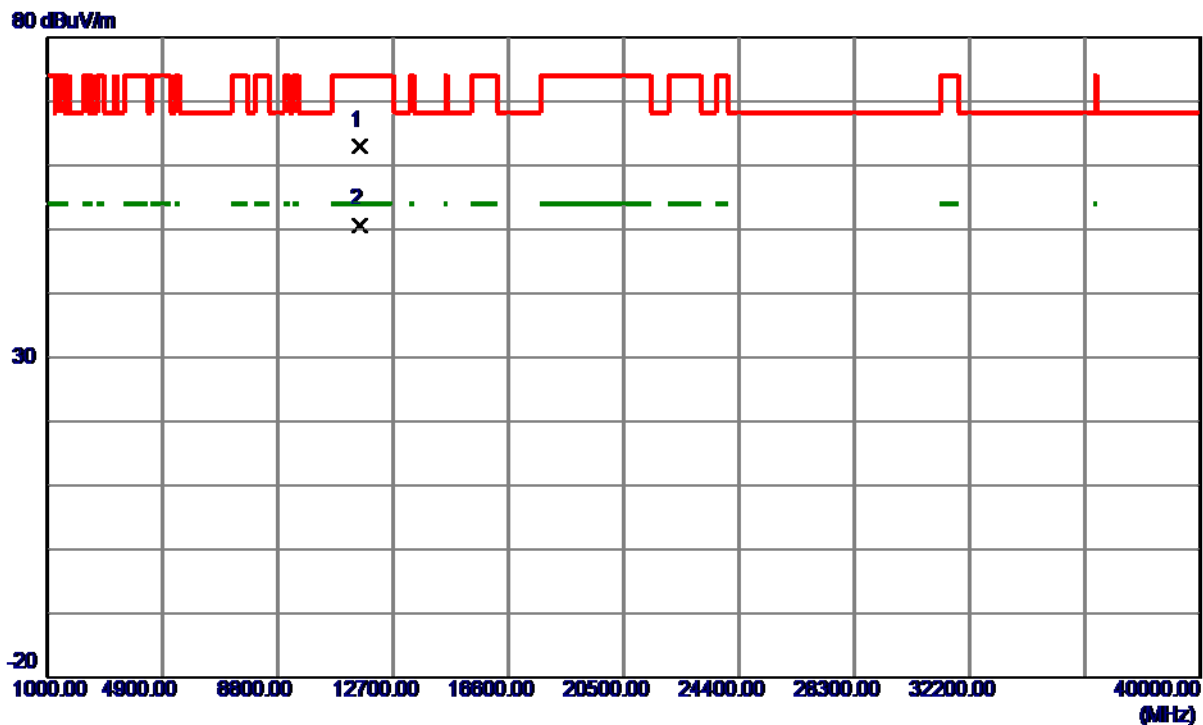
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5784.4000	79.66	40.19	119.85	122.20	-2.35	Peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11570.0050	63.42	-0.34	63.08	74.00	-10.92	Peak	
2 *	11570.2000	51.04	-0.34	50.70	54.00	-3.30	AVG	

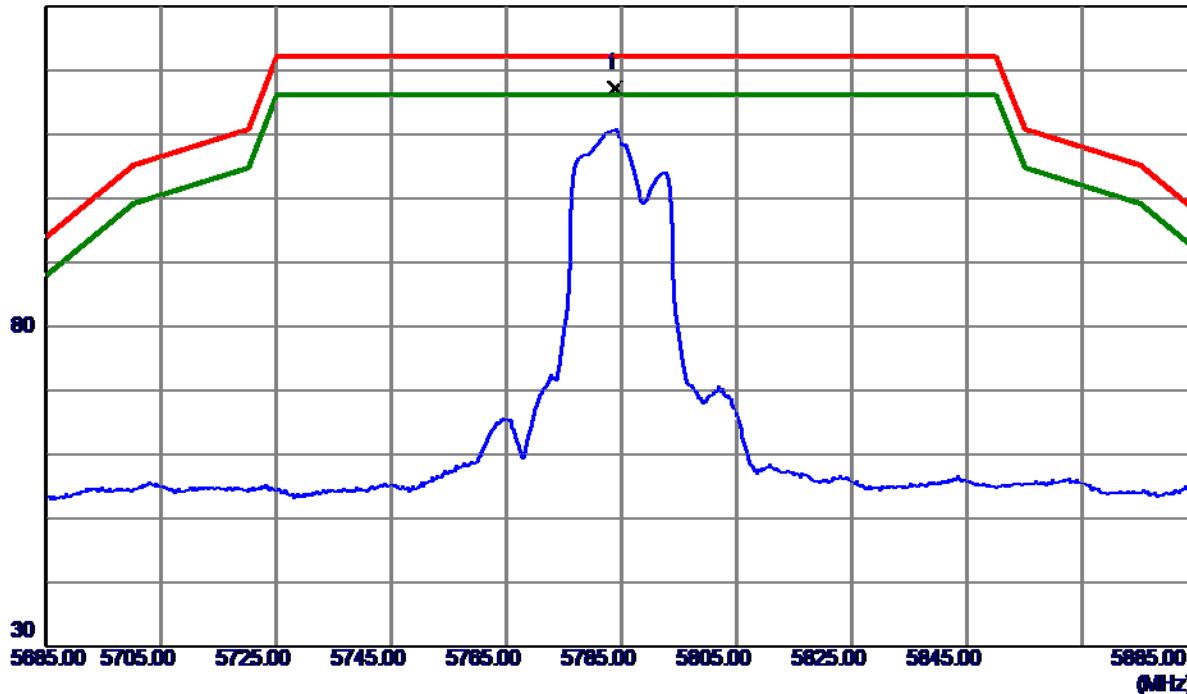
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Horizontal

130 dBuV/m



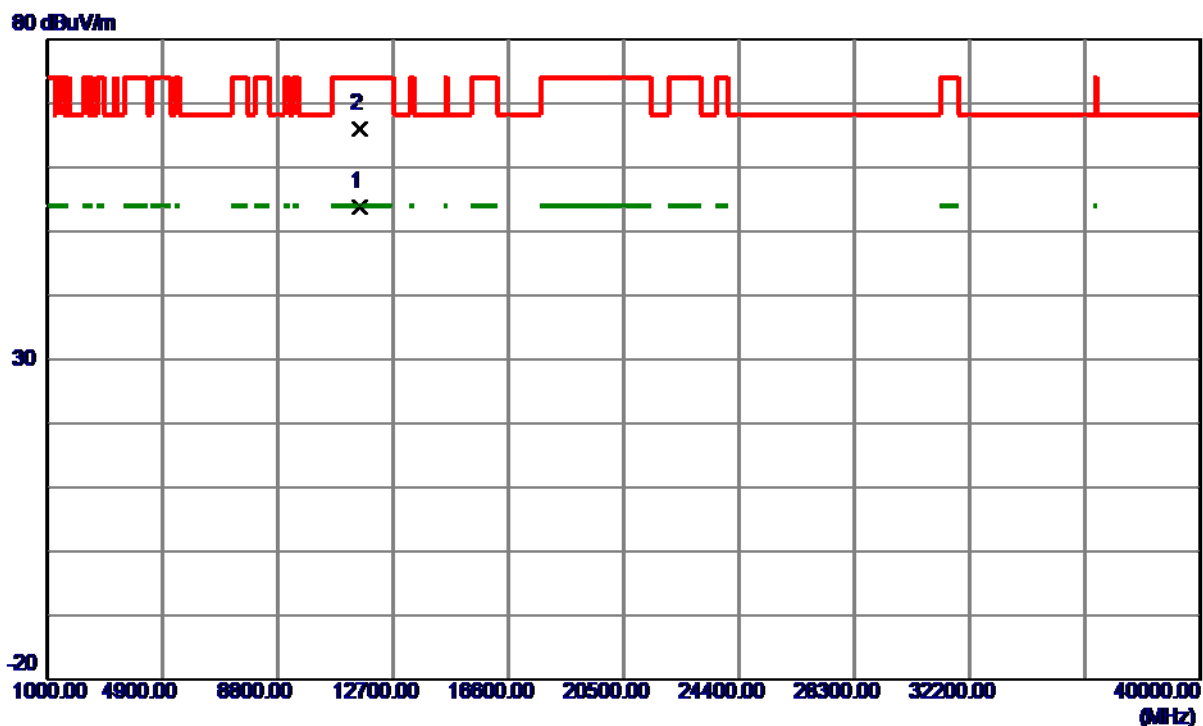
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5783.8000	76.99	40.19	117.18	122.20	-5.02	Peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11568.3750	54.05	-0.34	53.71	54.00	-0.29	AVG	
2	11569.7100	66.40	-0.34	66.06	74.00	-7.94	Peak	

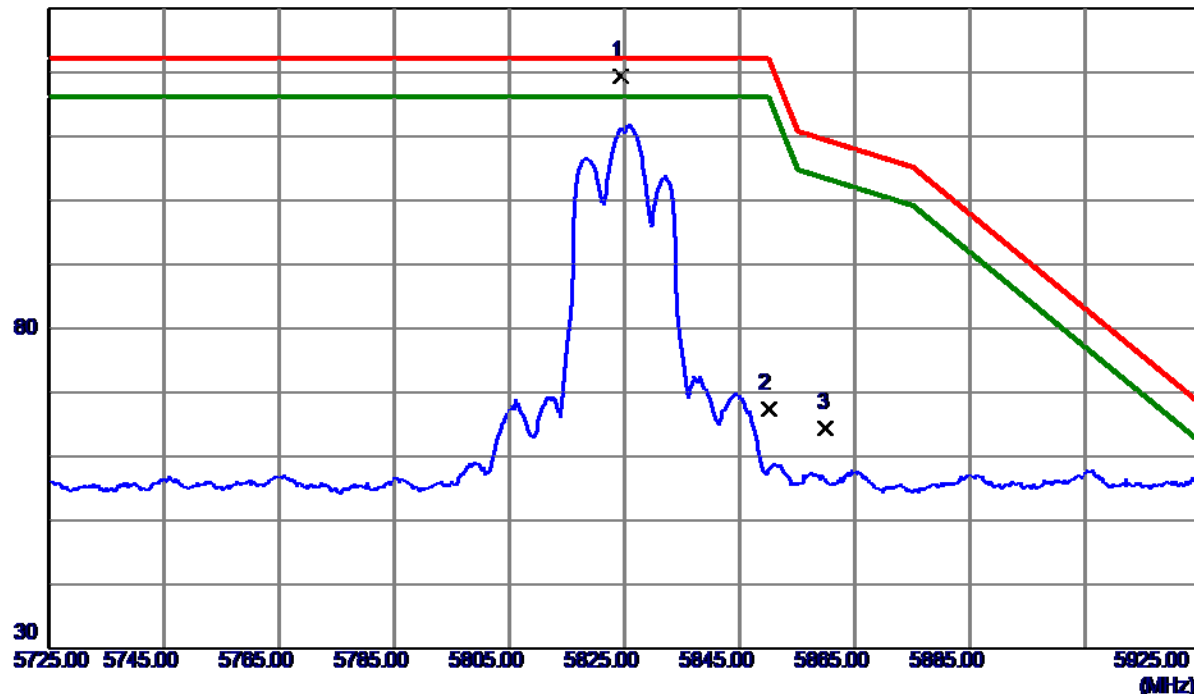
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5824.4000	79.19	40.28	119.47	122.20	-2.73	Peak	
2	5850.0000	27.01	40.34	67.35	122.20	-54.85	Peak	
3	5860.0000	24.02	40.37	64.39	109.40	-45.01	Peak	

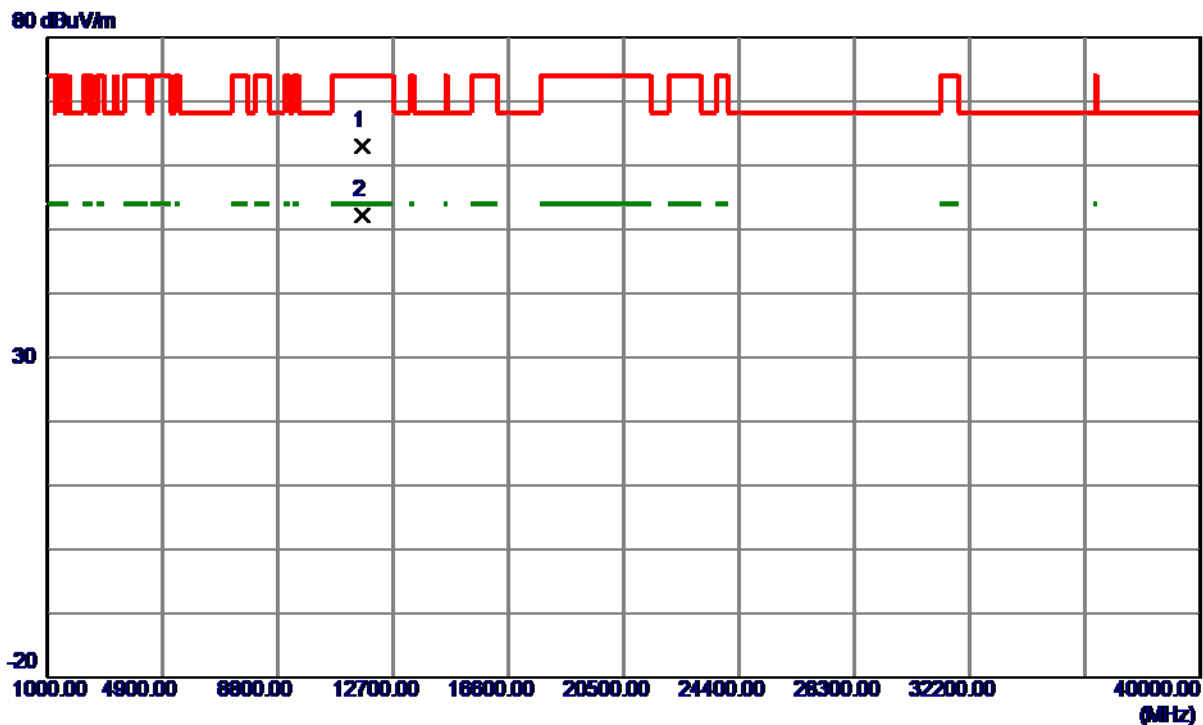
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11649.8350	63.21	-0.30	62.91	74.00	-11.09	Peak	
2 *	11649.9550	52.46	-0.30	52.16	54.00	-1.84	AVG	

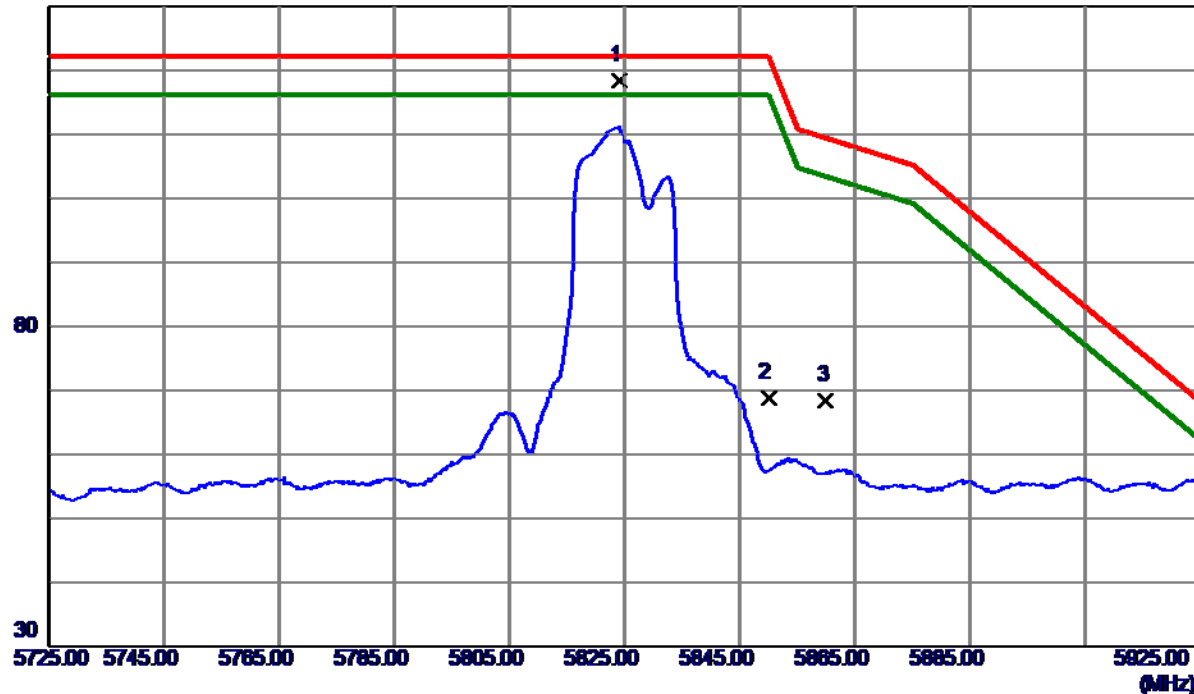
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5824.2000	78.20	40.28	118.48	122.20	-3.72	Peak	
2	5850.0000	28.48	40.34	68.82	122.20	-53.38	Peak	
3	5860.0000	28.08	40.37	68.45	109.40	-40.95	Peak	

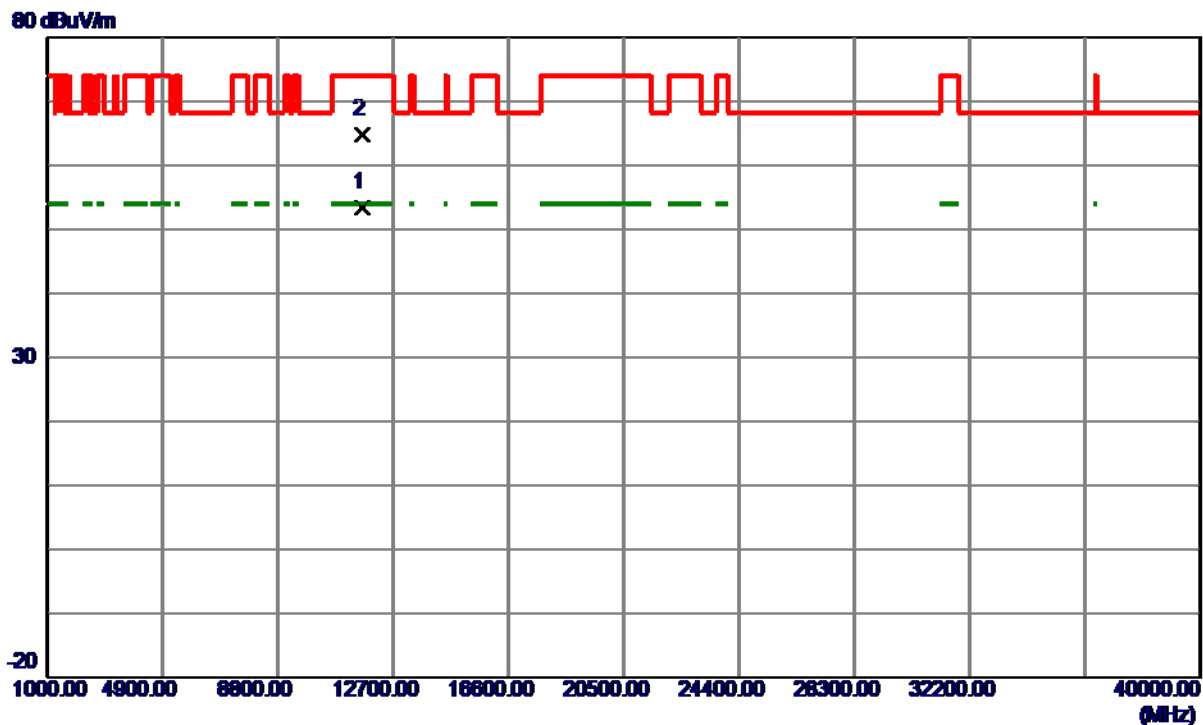
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11648.2450	53.76	-0.30	53.46	54.00	-0.54	AVG	
2	11648.7200	65.14	-0.30	64.84	74.00	-9.16	Peak	

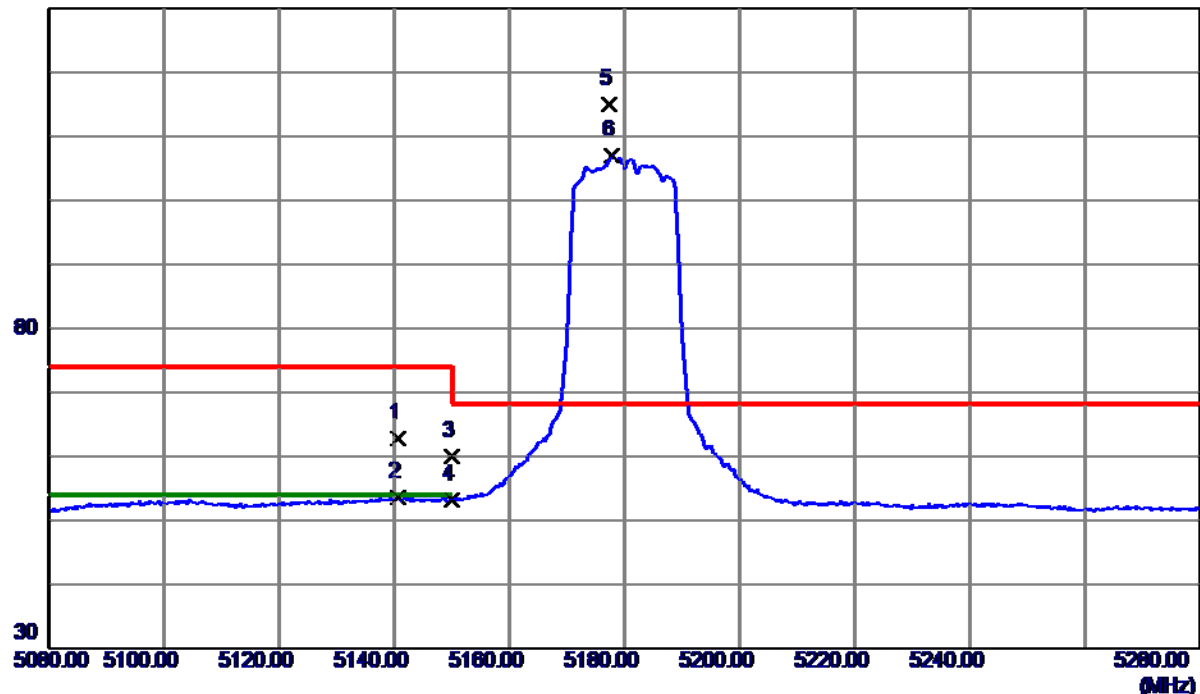
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5140.6000	23.65	39.06	62.71	74.00	-11.29	Peak	
2	5140.6000	14.51	39.06	53.57	54.00	-0.43	AVG	
3	5150.0000	20.93	39.07	60.00	74.00	-14.00	Peak	
4	5150.0000	14.06	39.07	53.13	54.00	-0.87	AVG	
5 *	5177.4000	75.80	39.10	114.90	68.30	46.60	Peak	No Limit
6	5177.8000	67.93	39.10	107.03	999.00	-891.97	AVG	No Limit

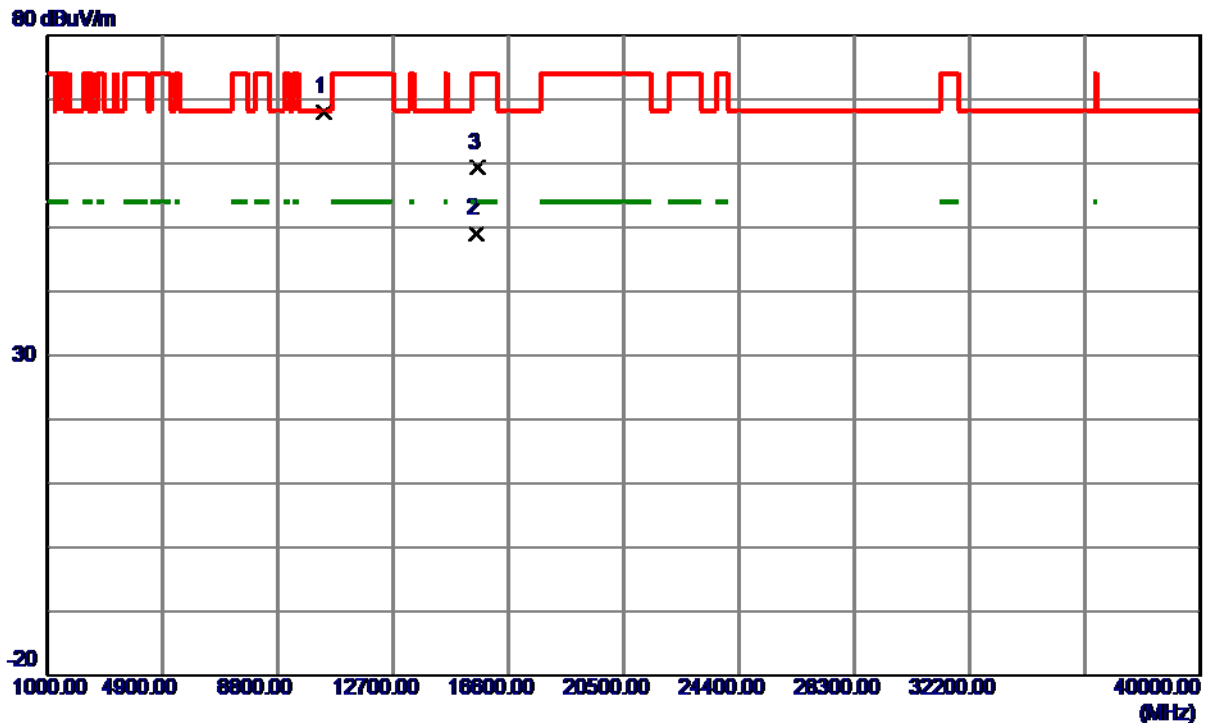
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) 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 *	10358.3099	69.60	-1.65	67.95	68.30	-0.35	Peak	
2	15537.0400	45.94	3.12	49.06	54.00	-4.94	AVG	
3	15538.8600	56.18	3.12	59.30	74.00	-14.70	Peak	

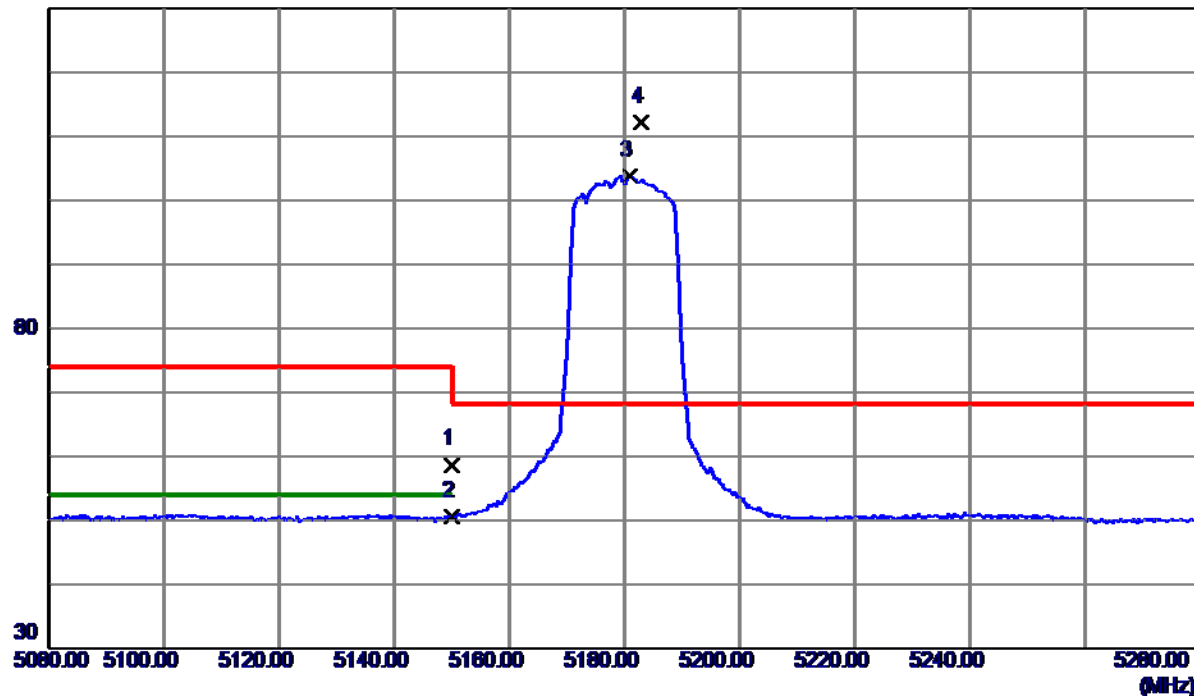
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

Horizontal

130 dBuV/m



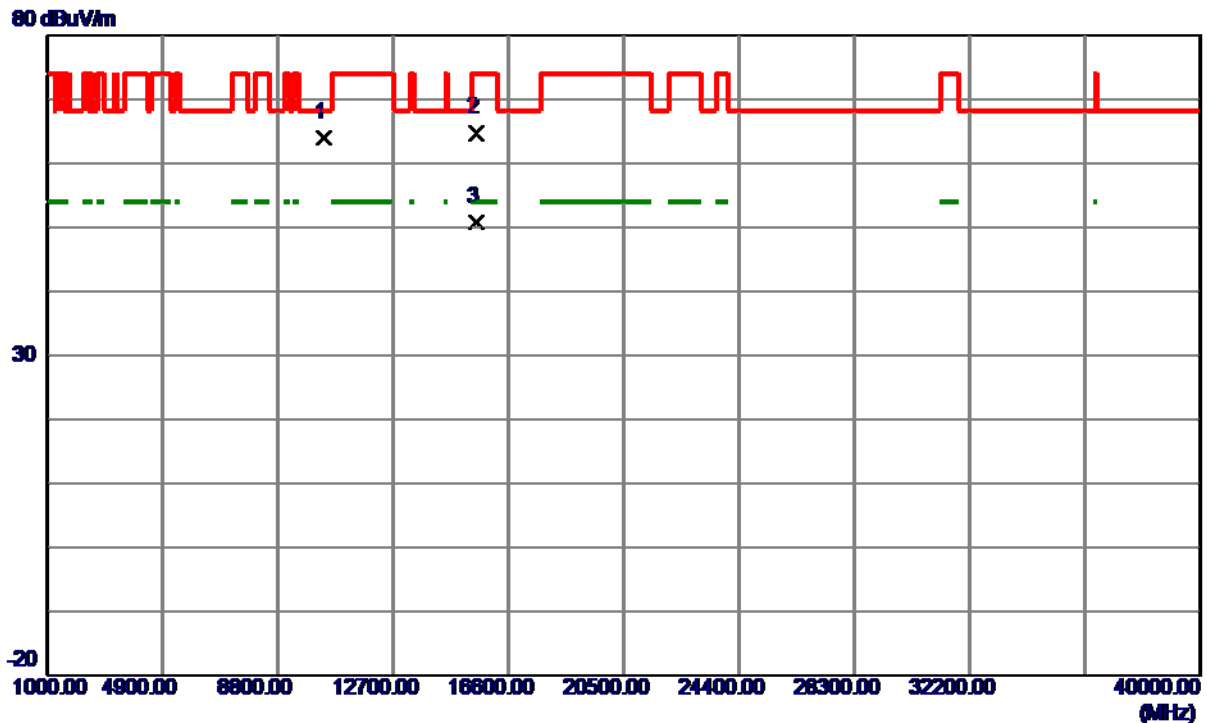
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.63	39.07	58.70	74.00	-15.30	Peak	
2	5150.0000	11.46	39.07	50.53	54.00	-3.47	AVG	
3	5180.8000	64.63	39.11	103.74	999.00	-895.26	AVG	No Limit
4 *	5182.8000	73.07	39.11	112.18	68.30	43.88	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 AC (VHT20) 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	10362.2050	65.66	-1.64	64.02	68.30	-4.28	Peak	
2	15534.2000	61.57	3.13	64.70	74.00	-9.30	Peak	
3 *	15537.6800	47.66	3.12	50.78	54.00	-3.22	AVG	

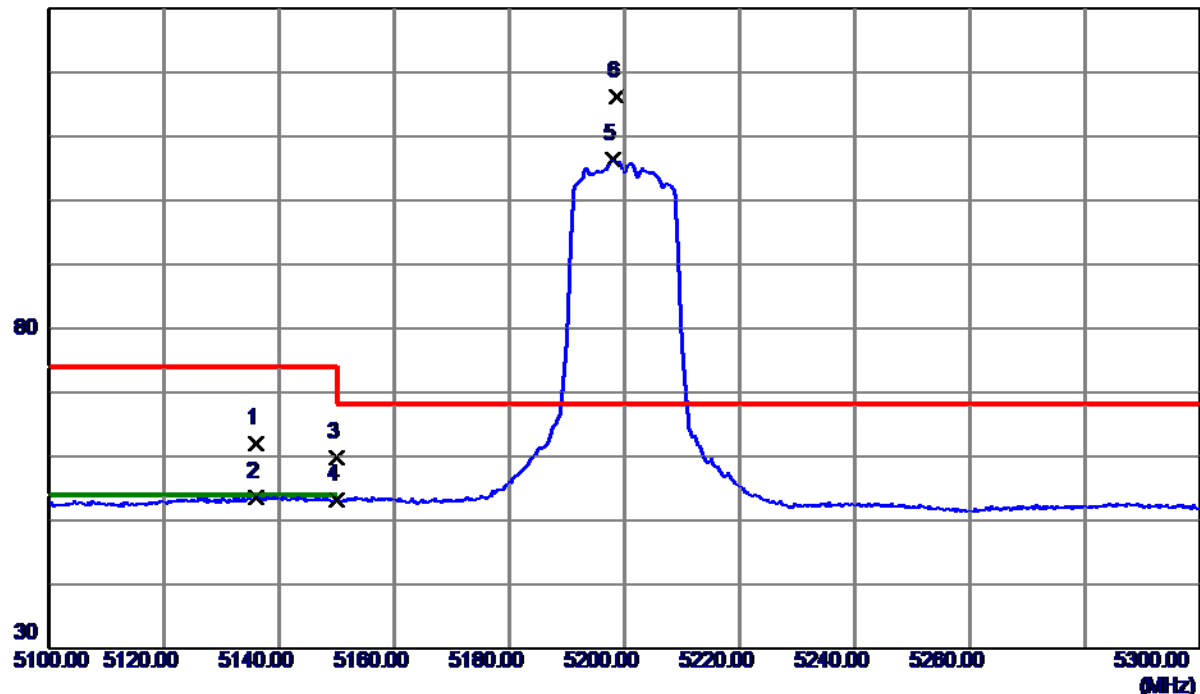
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5200 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5136.0000	22.86	39.05	61.91	74.00	-12.09	Peak	
2	5136.0000	14.56	39.05	53.61	54.00	-0.39	AVG	
3	5150.0000	20.77	39.07	59.84	74.00	-14.16	Peak	
4	5150.0000	14.04	39.07	53.11	54.00	-0.89	AVG	
5	5198.0000	67.32	39.13	106.45	999.00	-892.55	AVG	No Limit
6 *	5198.6000	77.12	39.13	116.25	68.30	47.95	Peak	No Limit

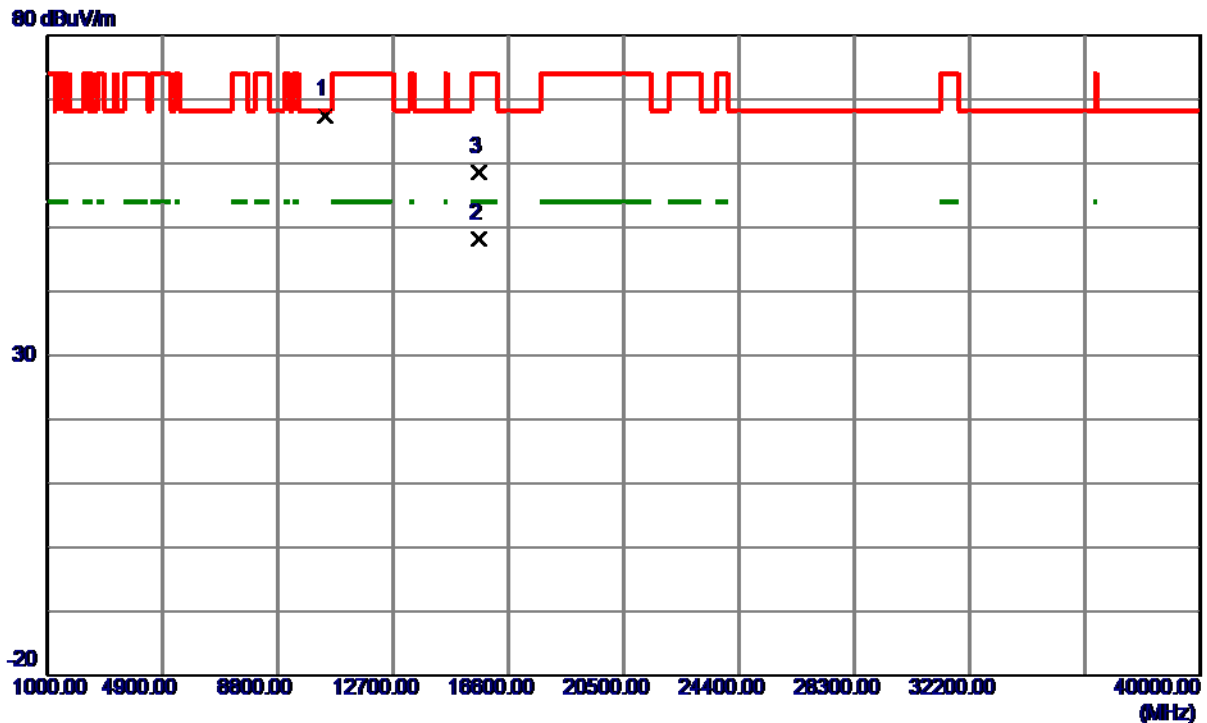
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) 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 *	10398.3949	69.11	-1.61	67.50	68.30	-0.80	Peak	
2	15599.1400	45.31	2.95	48.26	54.00	-5.74	AVG	
3	15602.9200	55.57	2.94	58.51	74.00	-15.49	Peak	

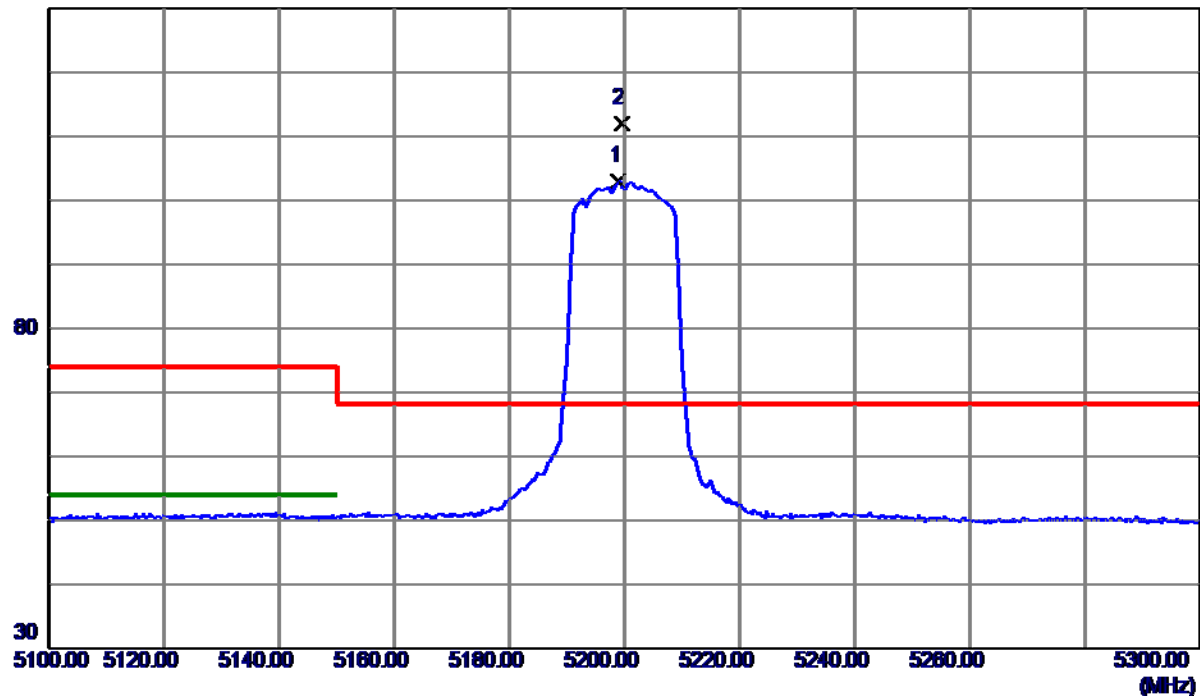
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5200 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5199.0000	63.77	39.13	102.90	999.00	-896.10	AVG	No Limit
2 *	5199.6000	72.79	39.13	111.92	68.30	43.62	Peak	No Limit

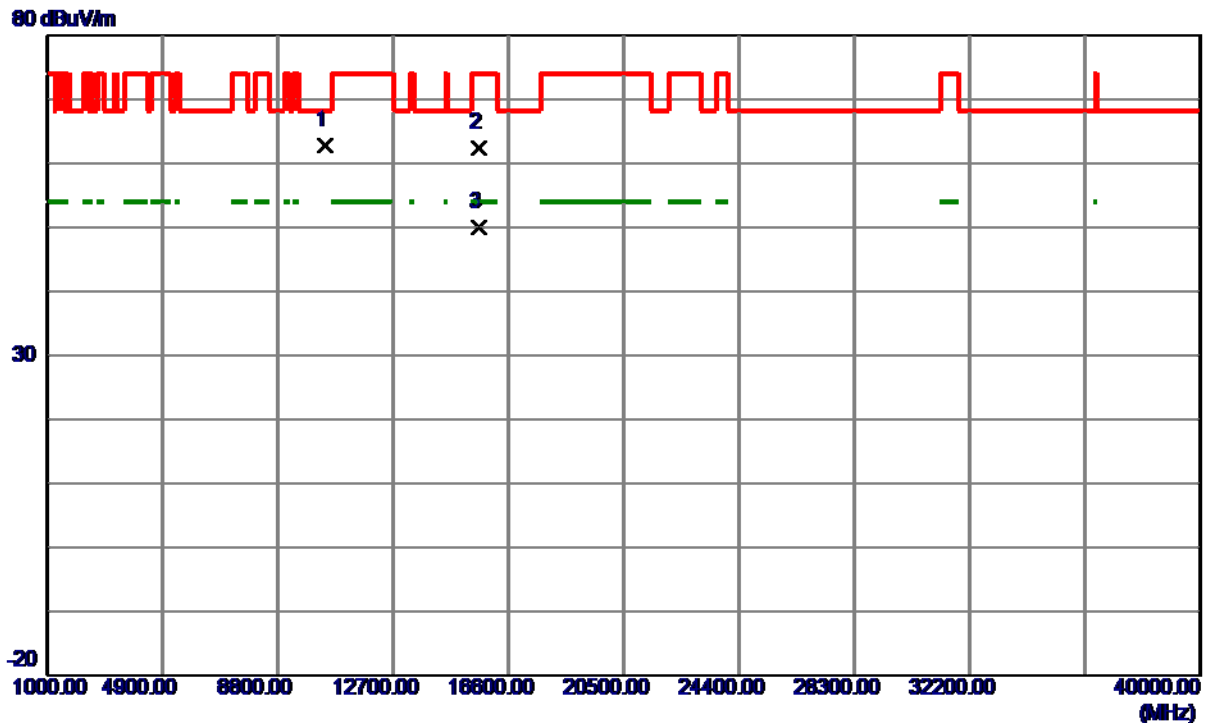
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) 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	10401.8750	64.44	-1.60	62.84	68.30	-5.46	Peak	
2	15596.8800	59.49	2.95	62.44	74.00	-11.56	Peak	
3 *	15597.8000	47.13	2.95	50.08	54.00	-3.92	AVG	

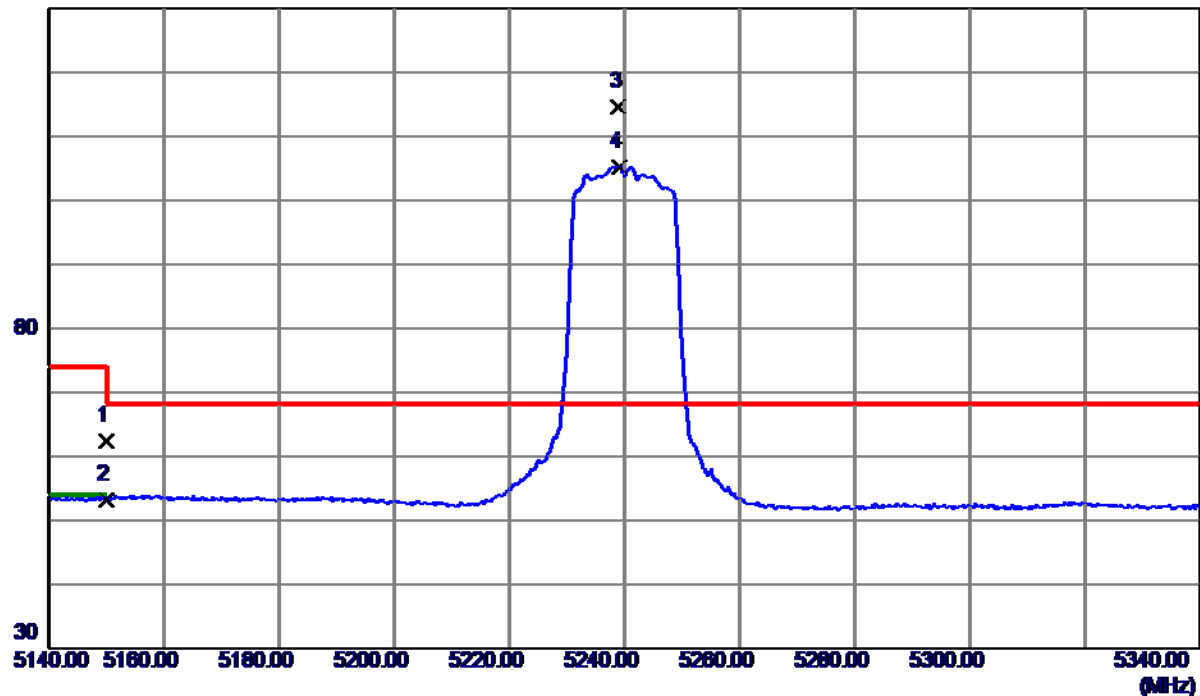
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	23.33	39.07	62.40	74.00	-11.60	Peak	
2	5150.0000	14.20	39.07	53.27	54.00	-0.73	AVG	
3 *	5239.0000	75.44	39.18	114.62	68.30	46.32	Peak	No Limit
4	5239.2000	66.11	39.18	105.29	999.00	-893.71	AVG	No Limit

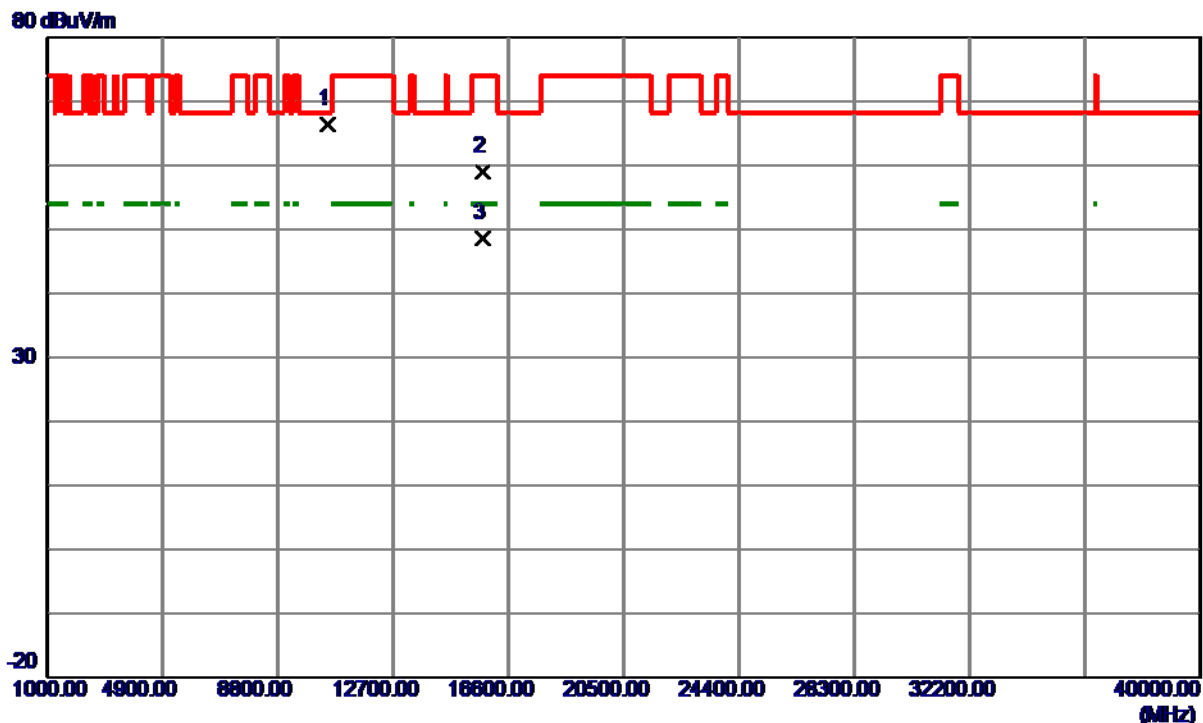
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) 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 *	10478.4000	67.99	-1.53	66.46	68.30	-1.84	Peak	
2	15716.1400	56.30	2.61	58.91	74.00	-15.09	Peak	
3	15719.8000	45.98	2.60	48.58	54.00	-5.42	AVG	

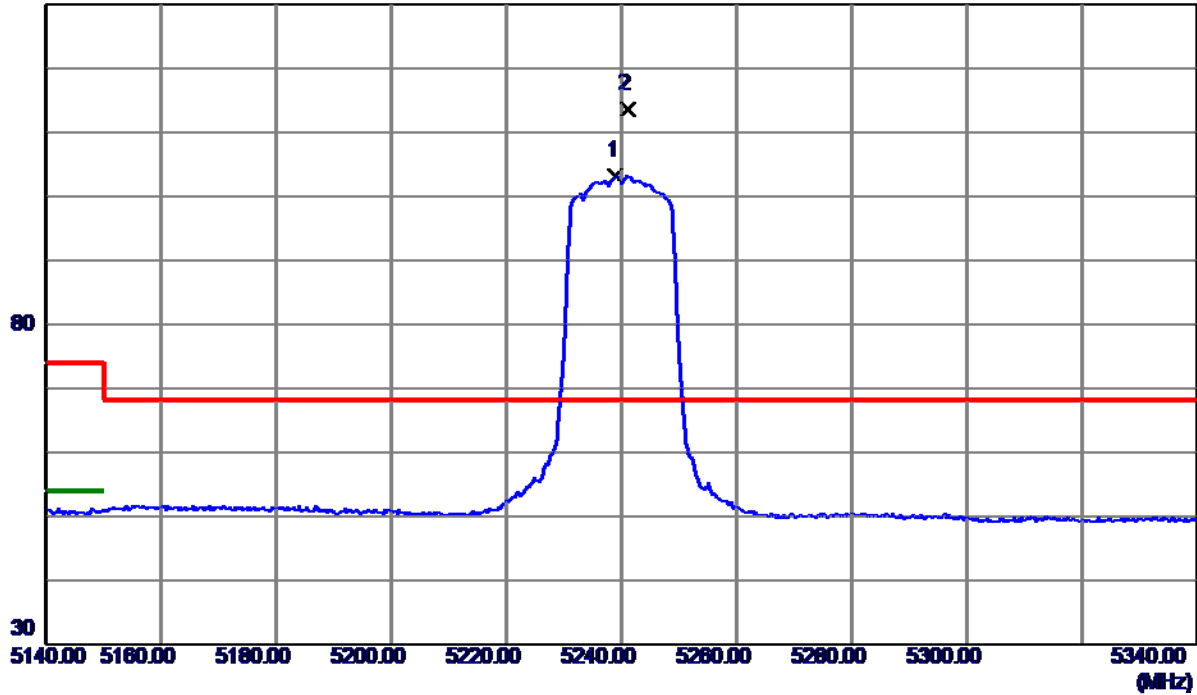
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5239.0000	64.04	39.18	103.22	999.00	-895.78	AVG	No Limit
2 *	5241.2000	74.46	39.18	113.64	68.30	45.34	Peak	No Limit

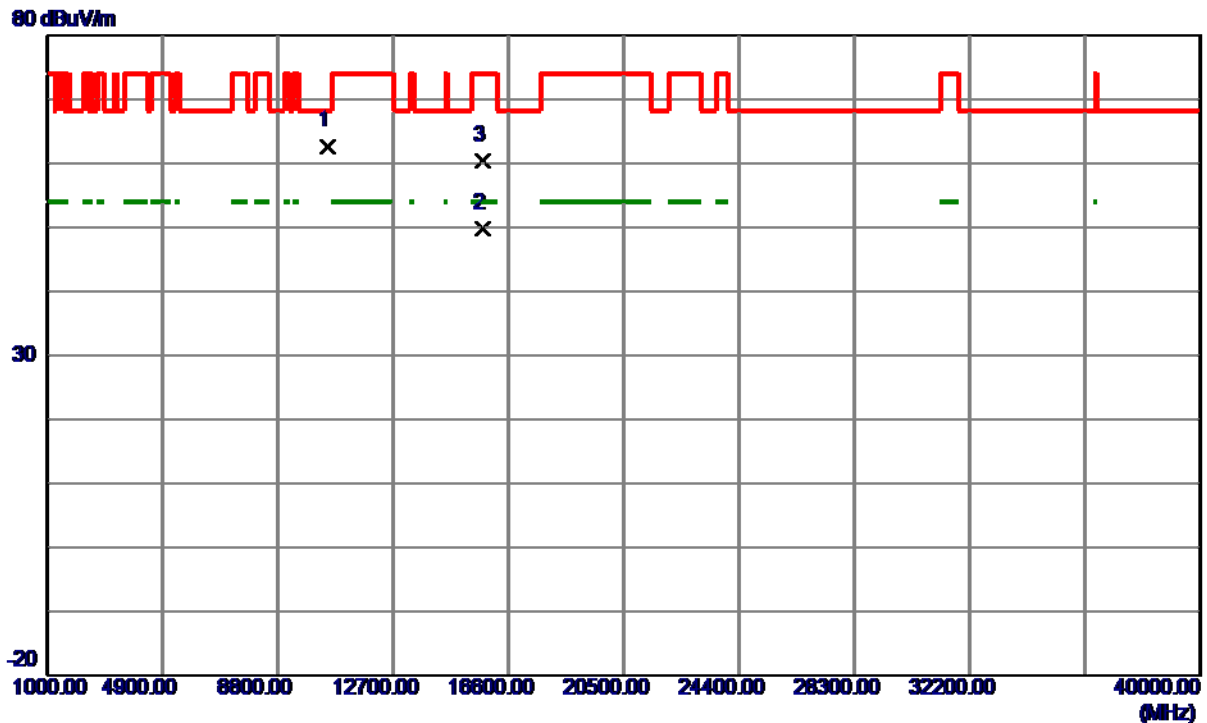
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) 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	10482.1050	64.23	-1.53	62.70	68.30	-5.60	Peak	
2 *	15717.3000	47.21	2.61	49.82	54.00	-4.18	AVG	
3	15723.2000	57.79	2.59	60.38	74.00	-13.62	Peak	

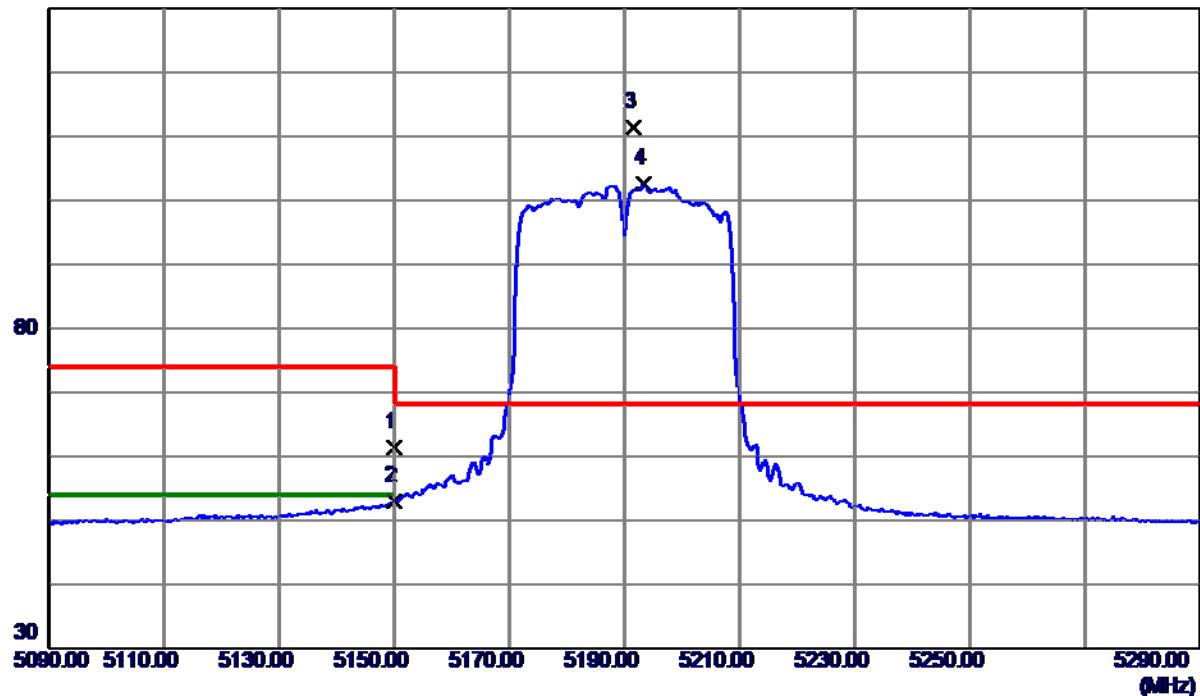
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

Vertical

130 dBuV/m



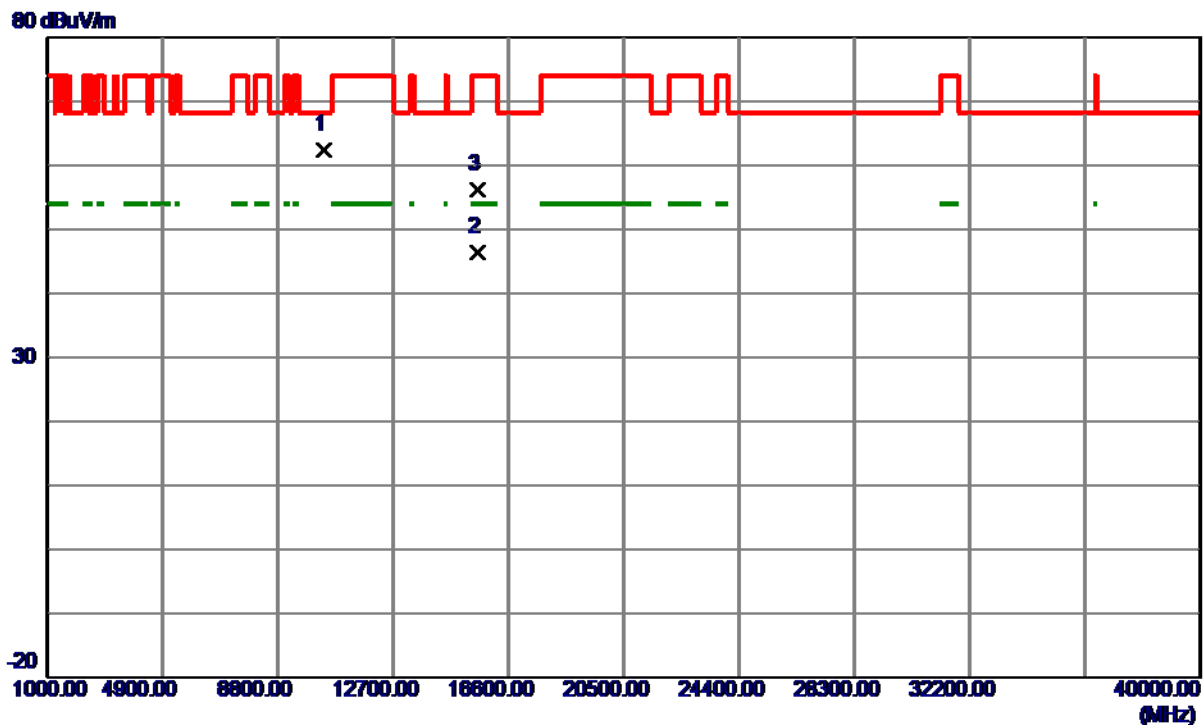
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.41	39.07	61.48	74.00	-12.52	Peak	
2	5150.0000	13.94	39.07	53.01	54.00	-0.99	AVG	
3 *	5191.6000	72.32	39.12	111.44	68.30	43.14	Peak	No Limit
4	5193.4000	63.54	39.12	102.66	999.00	-896.34	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 AC (VHT40) 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 *	10378.3949	64.07	-1.63	62.44	68.30	-5.86	Peak	
2	15564.1400	43.27	3.05	46.32	54.00	-7.68	AVG	
3	15573.4200	53.18	3.02	56.20	74.00	-17.80	Peak	

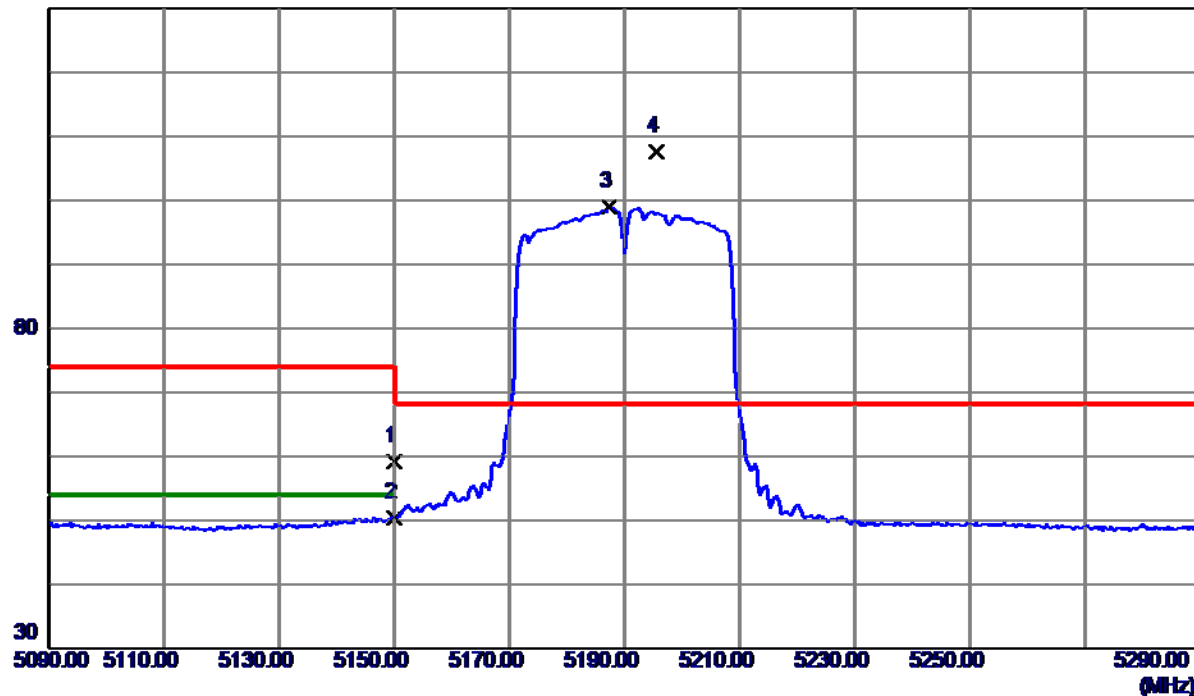
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

Horizontal

130 dBuV/m



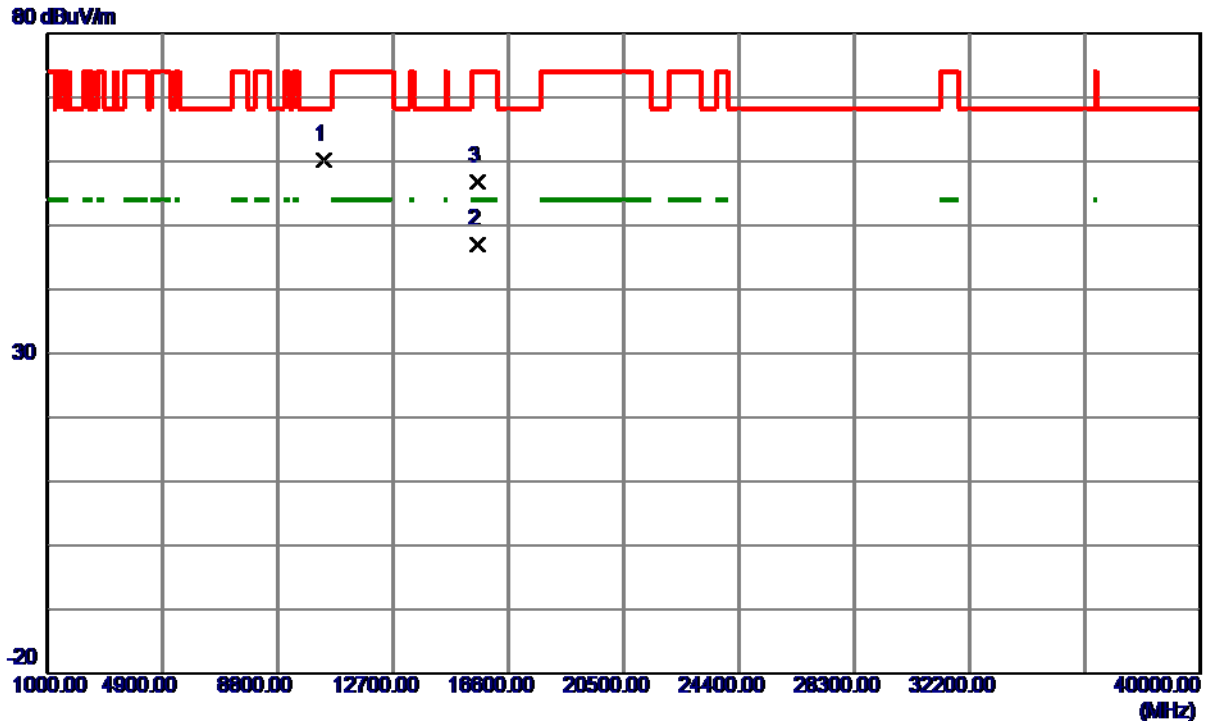
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.08	39.07	59.15	74.00	-14.85	Peak	
2	5150.0000	11.33	39.07	50.40	54.00	-3.60	AVG	
3	5187.4000	59.82	39.12	98.94	999.00	-900.06	AVG	No Limit
4 *	5195.6000	68.51	39.13	107.64	68.30	39.34	Peak	No Limit

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) 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	10381.2000	61.74	-1.62	60.12	68.30	-8.18	Peak	
2 *	15563.5000	44.02	3.05	47.07	54.00	-6.93	AVG	
3	15567.4600	53.71	3.04	56.75	74.00	-17.25	Peak	

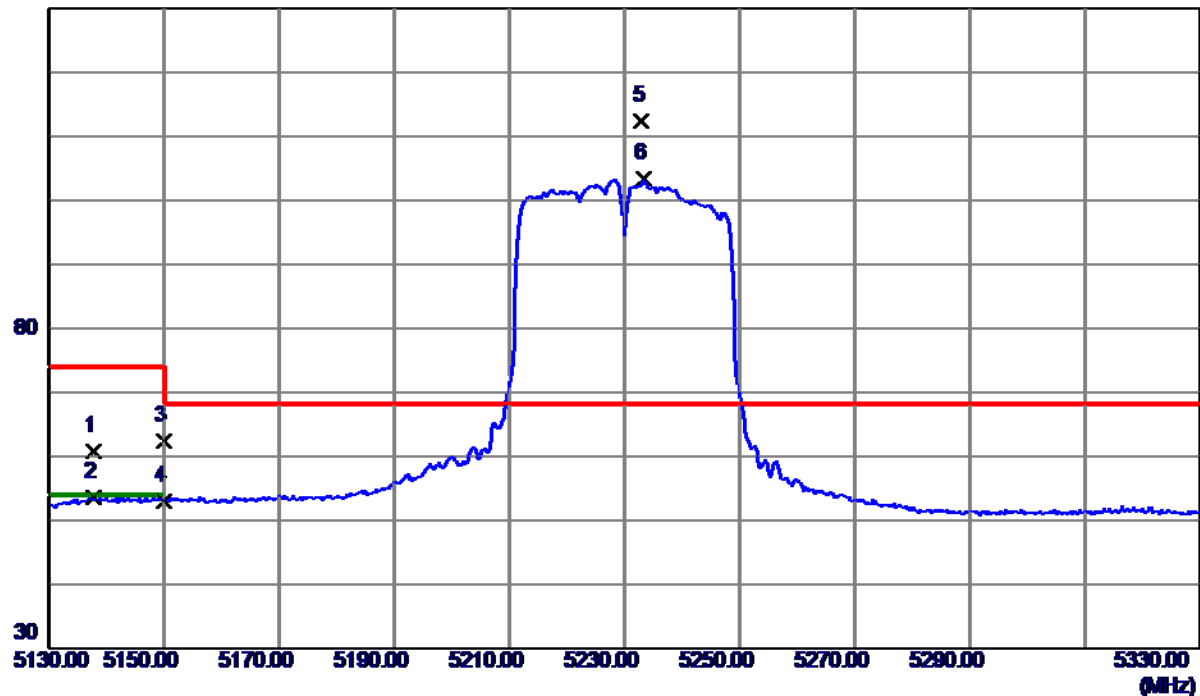
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

Vertical

130 dBuV/m



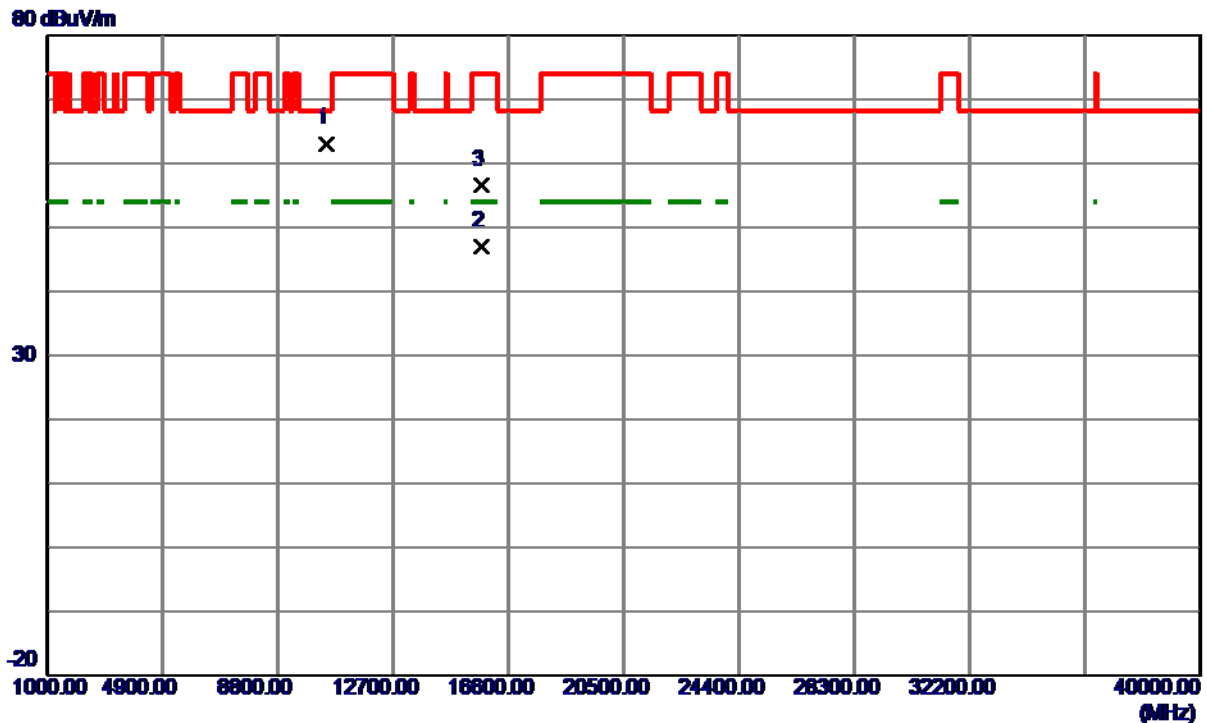
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5137.8000	21.66	39.05	60.71	74.00	-13.29	Peak	
2	5137.8000	14.53	39.05	53.58	54.00	-0.42	AVG	
3	5150.0000	23.29	39.07	62.36	74.00	-11.64	Peak	
4	5150.0000	14.02	39.07	53.09	54.00	-0.91	AVG	
5 *	5233.0000	73.27	39.17	112.44	68.30	44.14	Peak	No Limit
6	5233.4000	64.27	39.17	103.44	999.00	-895.56	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 AC (VHT40) 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 *	10458.3000	64.65	-1.55	63.10	68.30	-5.20	Peak	
2	15683.6200	44.21	2.70	46.91	54.00	-7.09	AVG	
3	15695.7000	53.89	2.67	56.56	74.00	-17.44	Peak	

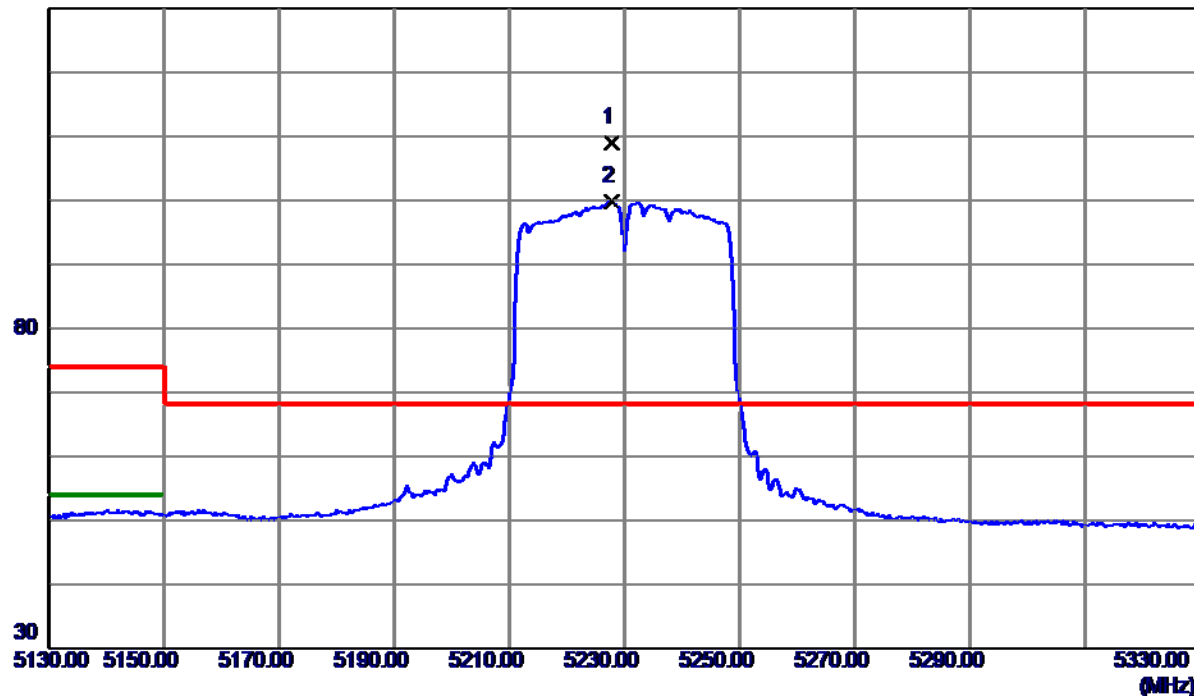
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5227.8000	69.73	39.17	108.90	68.30	40.60	Peak	No Limit
2	5227.8000	60.60	39.17	99.77	999.00	-899.23	AVG	No Limit

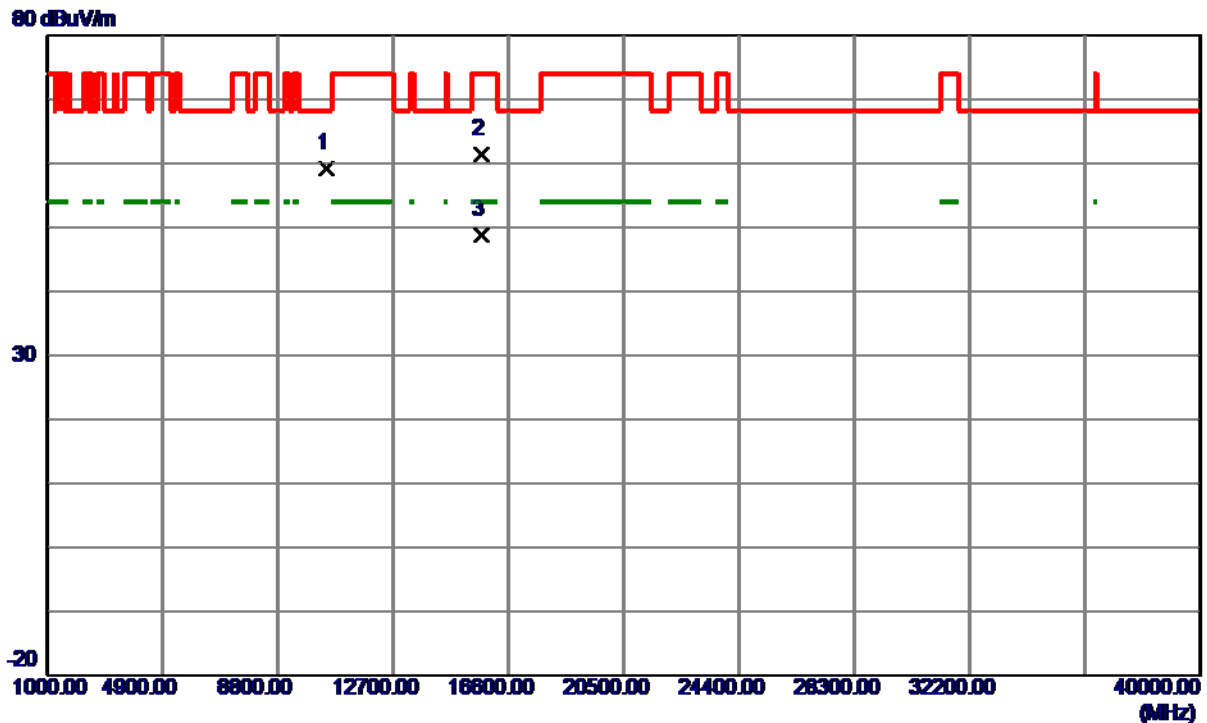
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) 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	10461.1000	60.83	-1.55	59.28	68.30	-9.02	Peak	
2	15684.2000	58.67	2.70	61.37	74.00	-12.63	Peak	
3 *	15686.4000	46.04	2.70	48.74	54.00	-5.26	AVG	

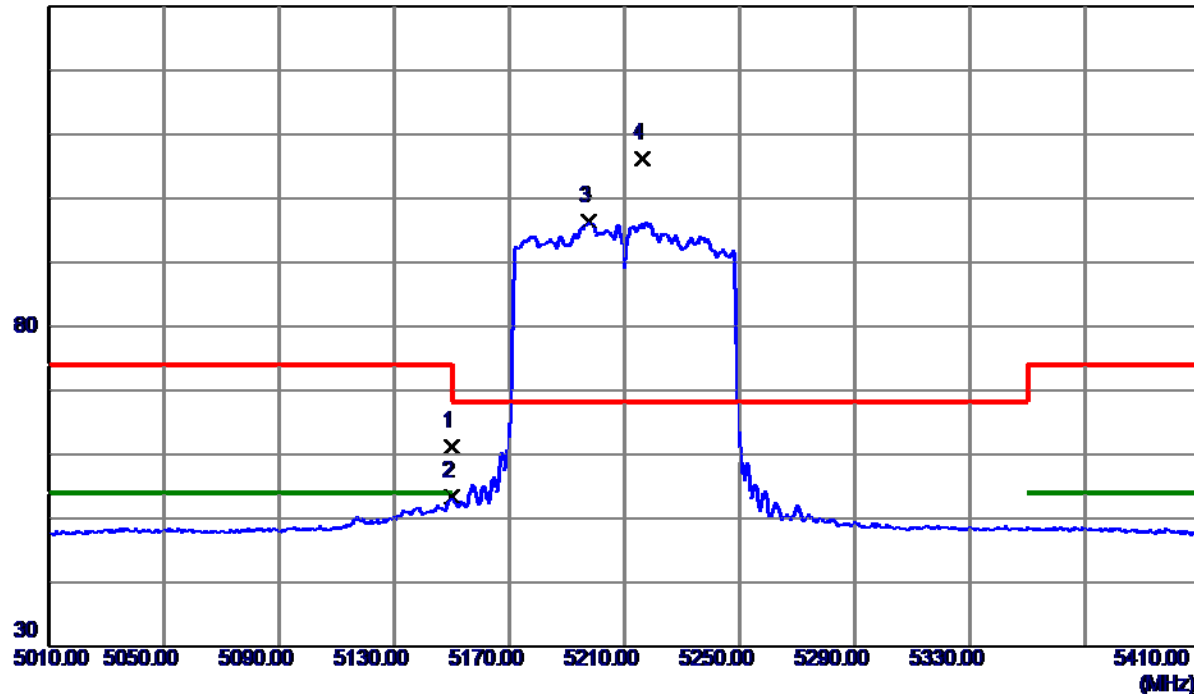
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

Vertical

130 dBuV/m



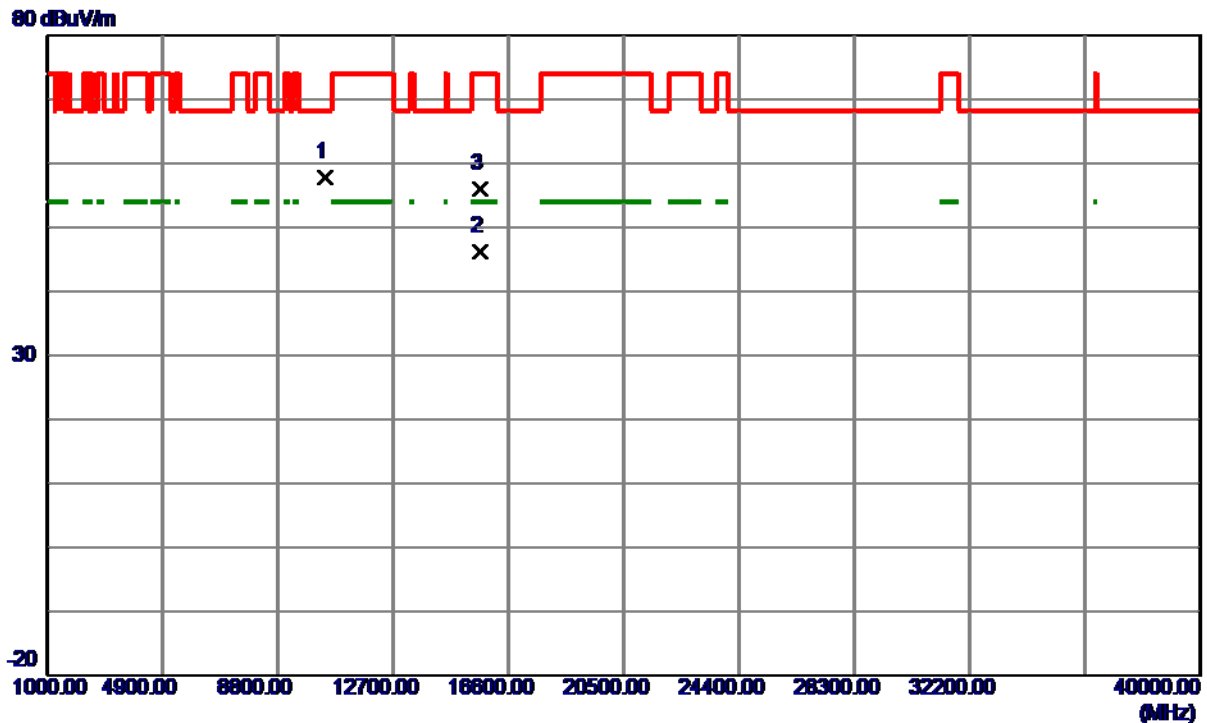
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	22.05	39.07	61.12	74.00	-12.88	Peak	
2	5150.0000	14.35	39.07	53.42	54.00	-0.58	AVG	
3	5197.6000	57.36	39.13	96.49	999.00	-902.51	AVG	No Limit
4 *	5216.4000	67.12	39.15	106.27	68.30	37.97	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 AC (VHT80) Mode 5210 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10420.6950	59.33	-1.59	57.74	68.30	-10.56	Peak	
2 *	15625.8000	43.41	2.87	46.28	54.00	-7.72	AVG	
3	15627.8600	53.20	2.86	56.06	74.00	-17.94	Peak	

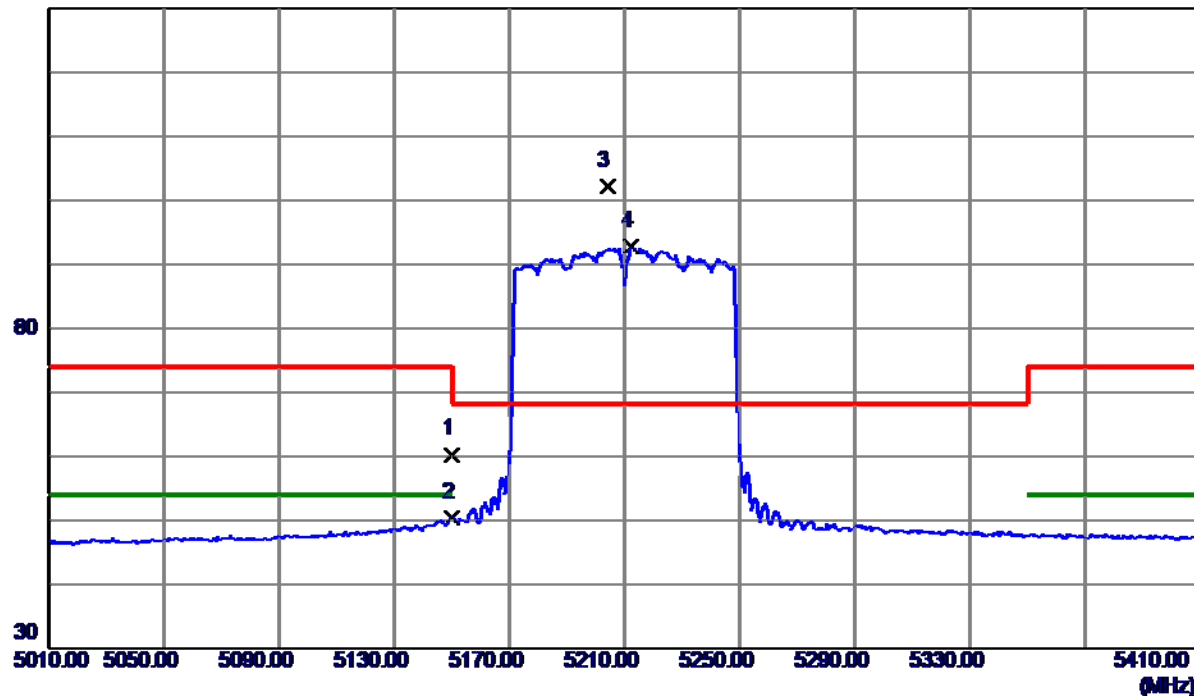
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

Horizontal

130 dBuV/m



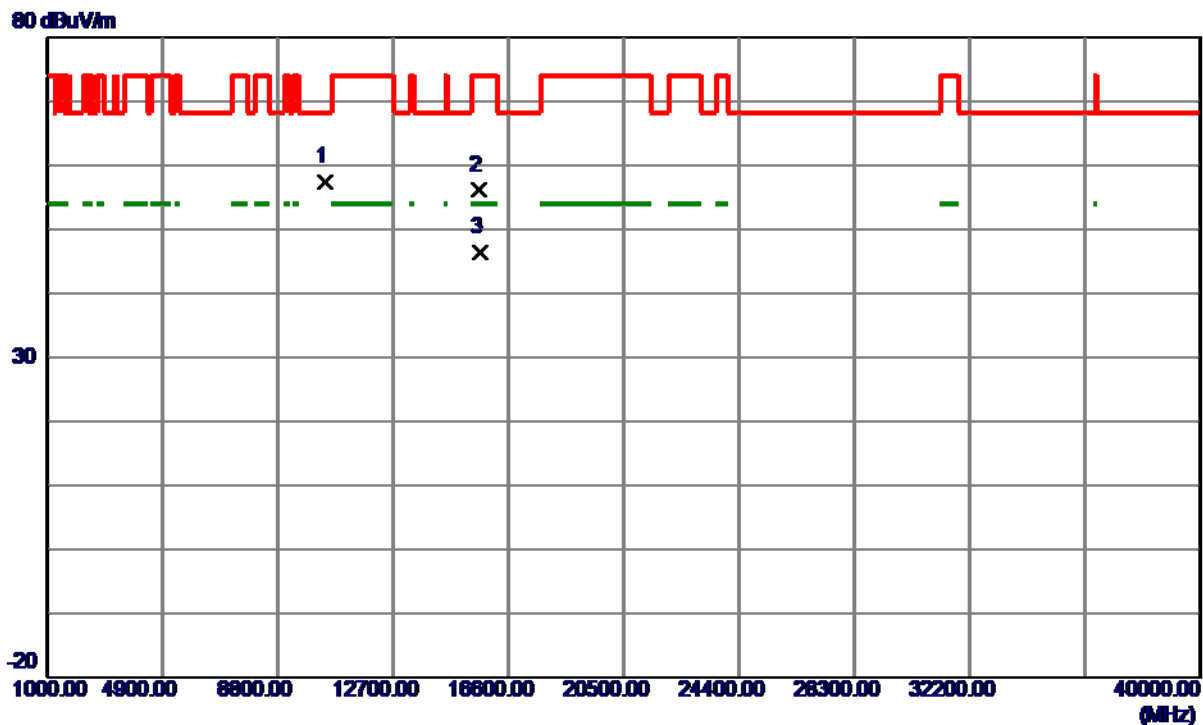
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	21.23	39.07	60.30	74.00	-13.70	Peak	
2	5150.0000	11.42	39.07	50.49	54.00	-3.51	AVG	
3 *	5204.0000	63.02	39.14	102.16	68.30	33.86	Peak	No Limit
4	5212.4000	53.57	39.15	92.72	999.00	-906.28	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 AC (VHT80) Mode 5210 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10417.9050	58.91	-1.59	57.32	68.30	-10.98	Peak	
2	15621.9600	53.22	2.88	56.10	74.00	-17.90	Peak	
3 *	15636.7200	43.64	2.84	46.48	54.00	-7.52	AVG	

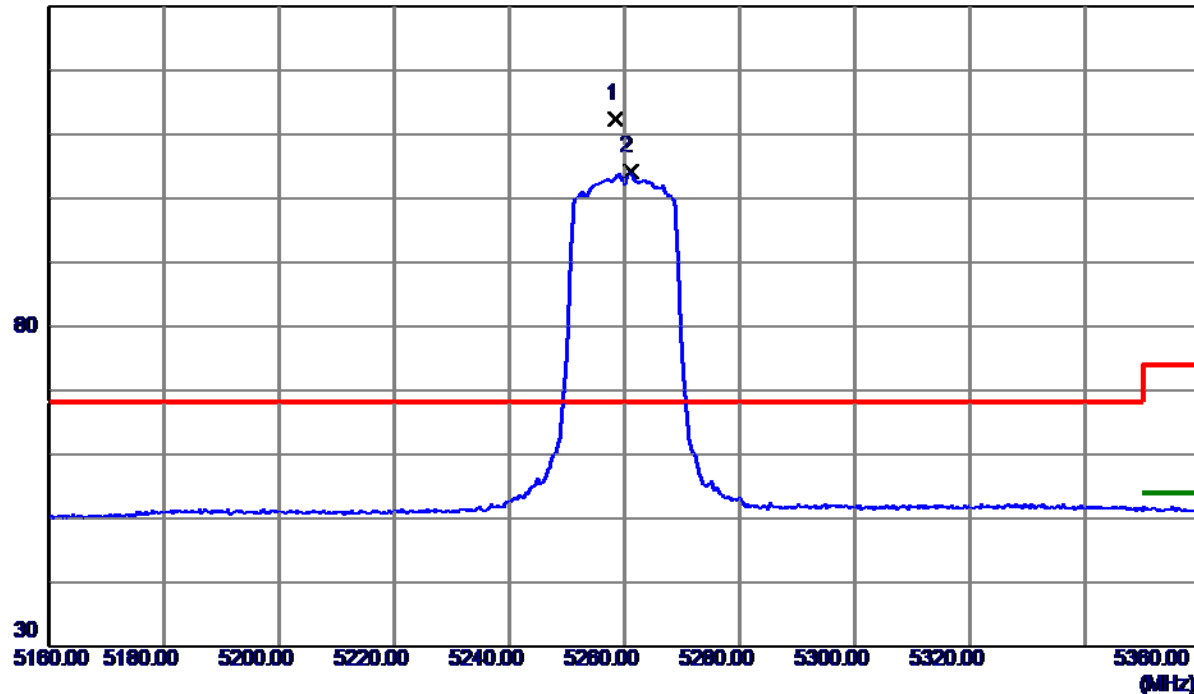
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5258.4000	73.28	39.21	112.49	68.30	44.19	Peak	No Limit
2	5261.0000	64.94	39.21	104.15	999.00	-894.85	AVG	No Limit

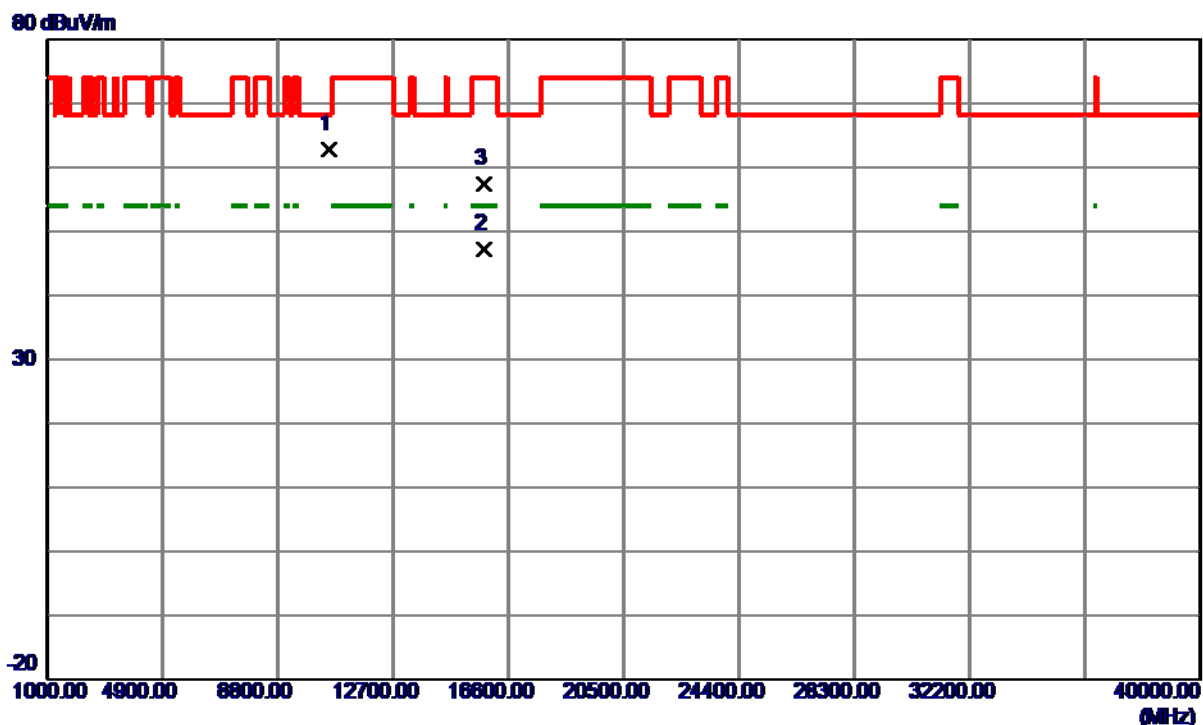
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) 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 *	10519.6150	64.19	-1.44	62.75	68.30	-5.55	Peak	
2	15777.5800	44.76	2.44	47.20	54.00	-6.80	AVG	
3	15789.4000	54.95	2.40	57.35	74.00	-16.65	Peak	

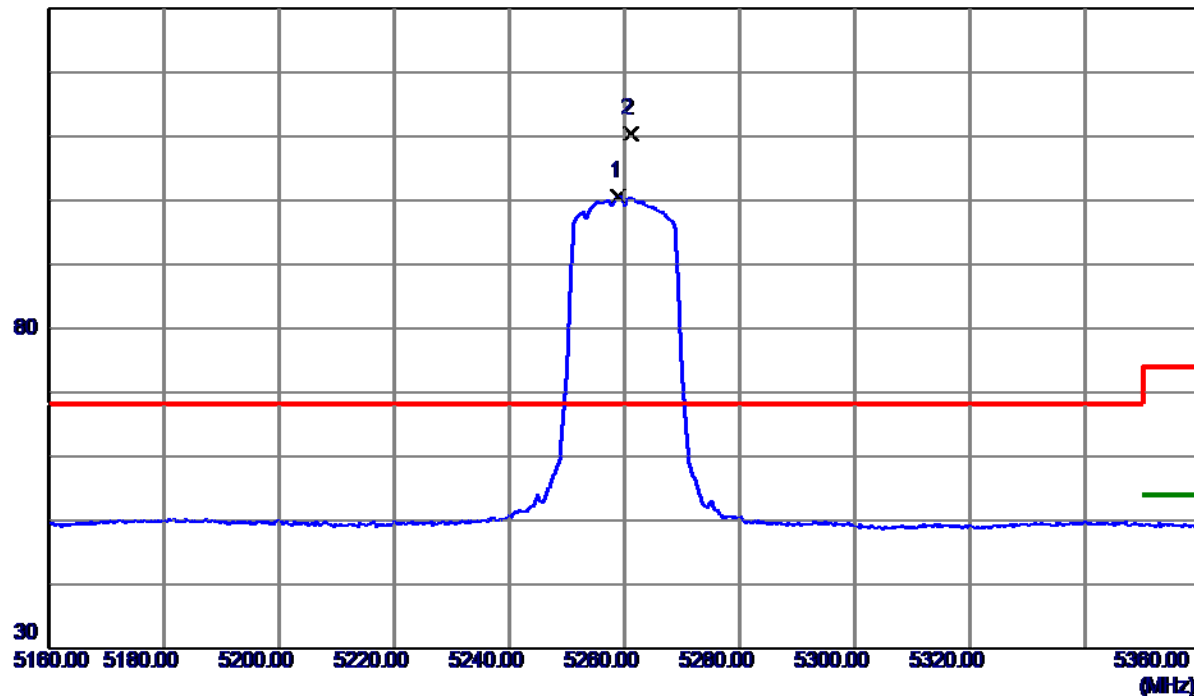
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5259.0000	61.44	39.21	100.65	999.00	-898.35	AVG	No Limit
2 *	5261.2000	71.13	39.21	110.34	68.30	42.04	Peak	No Limit

REMARKS:

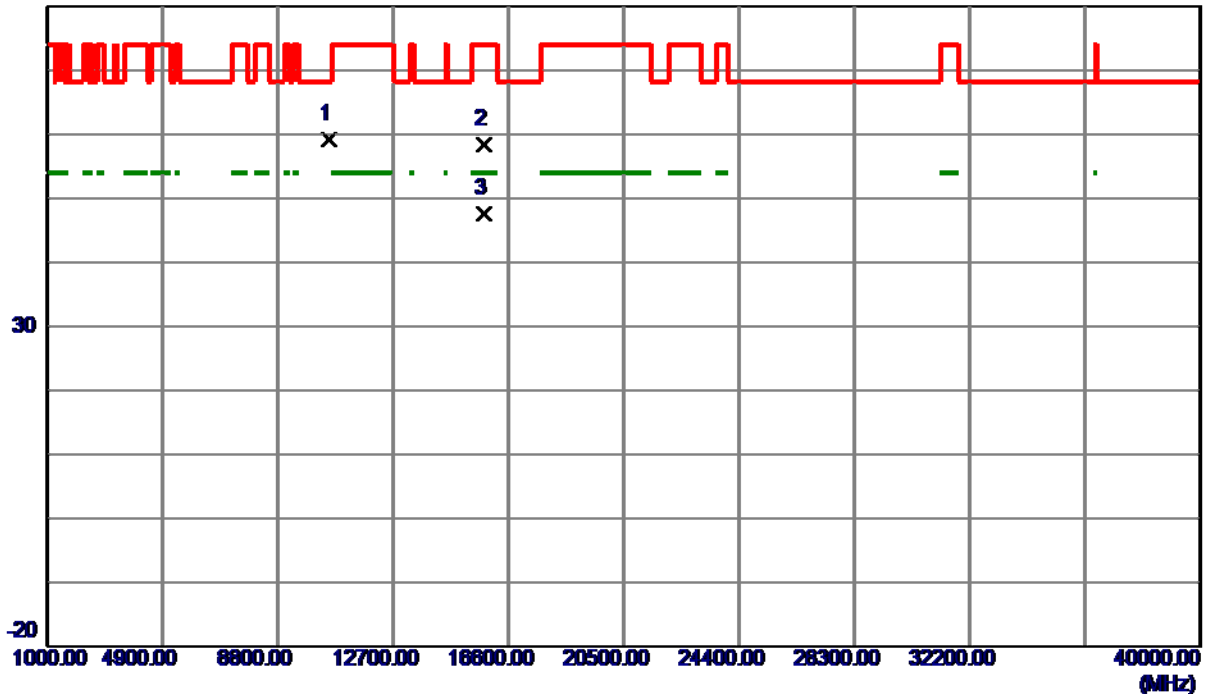
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10519.5650	60.70	-1.44	59.26	68.30	-9.04	Peak	
2	15775.4200	55.95	2.44	58.39	74.00	-15.61	Peak	
3 *	15778.2200	45.16	2.43	47.59	54.00	-6.41	AVG	

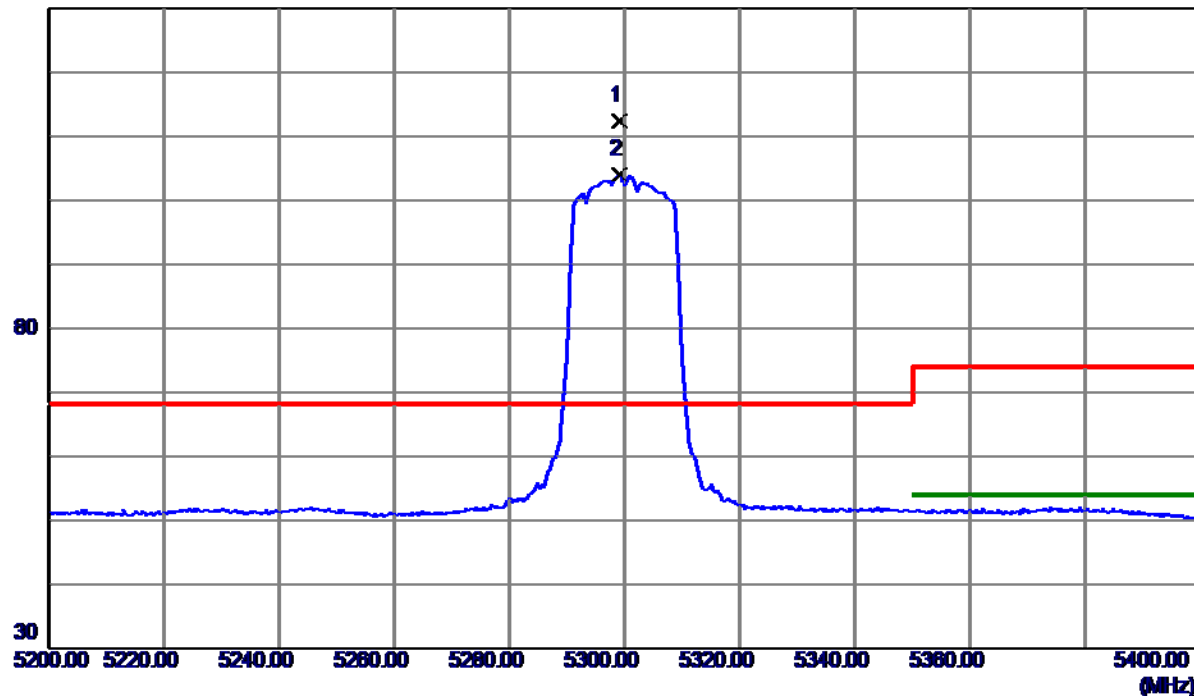
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5300 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5299.2000	73.13	39.26	112.39	68.30	44.09	Peak	No Limit
2	5299.2000	64.70	39.26	103.96	999.00	-895.04	AVG	No Limit

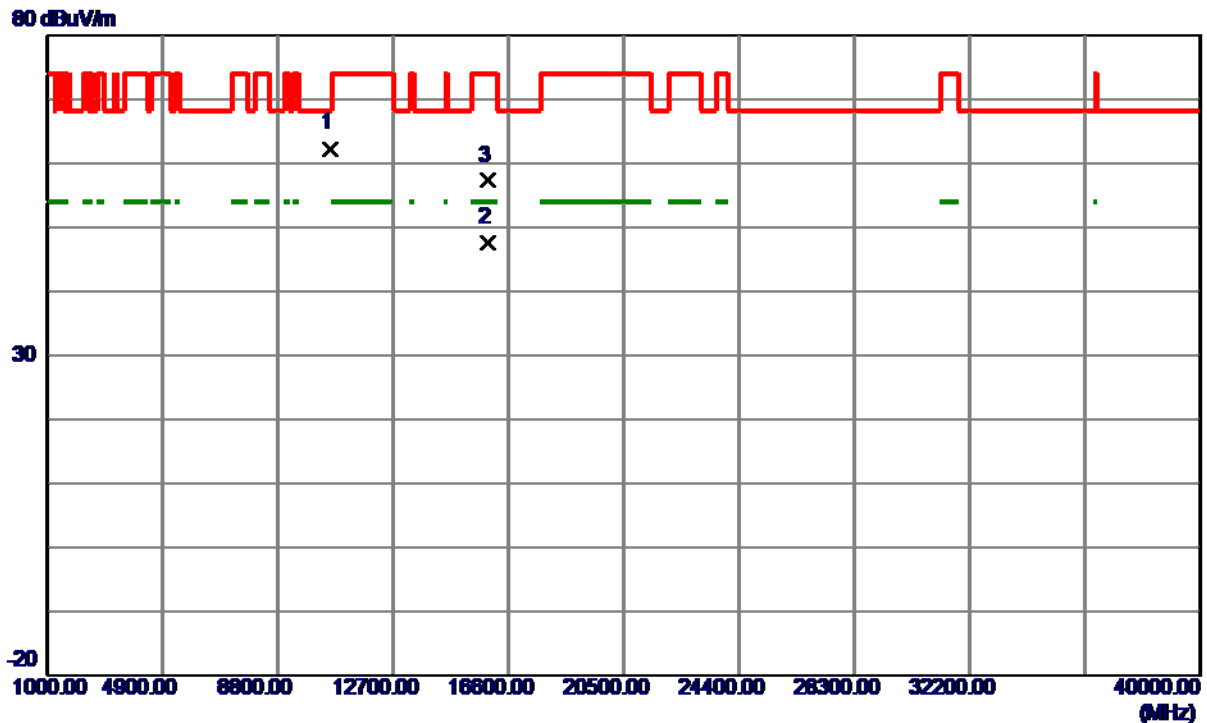
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) 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 *	10598.3150	63.46	-1.16	62.30	68.30	-6.00	Peak	
2	15897.2800	45.46	2.09	47.55	54.00	-6.45	AVG	
3	15907.3000	55.23	2.07	57.30	74.00	-16.70	Peak	

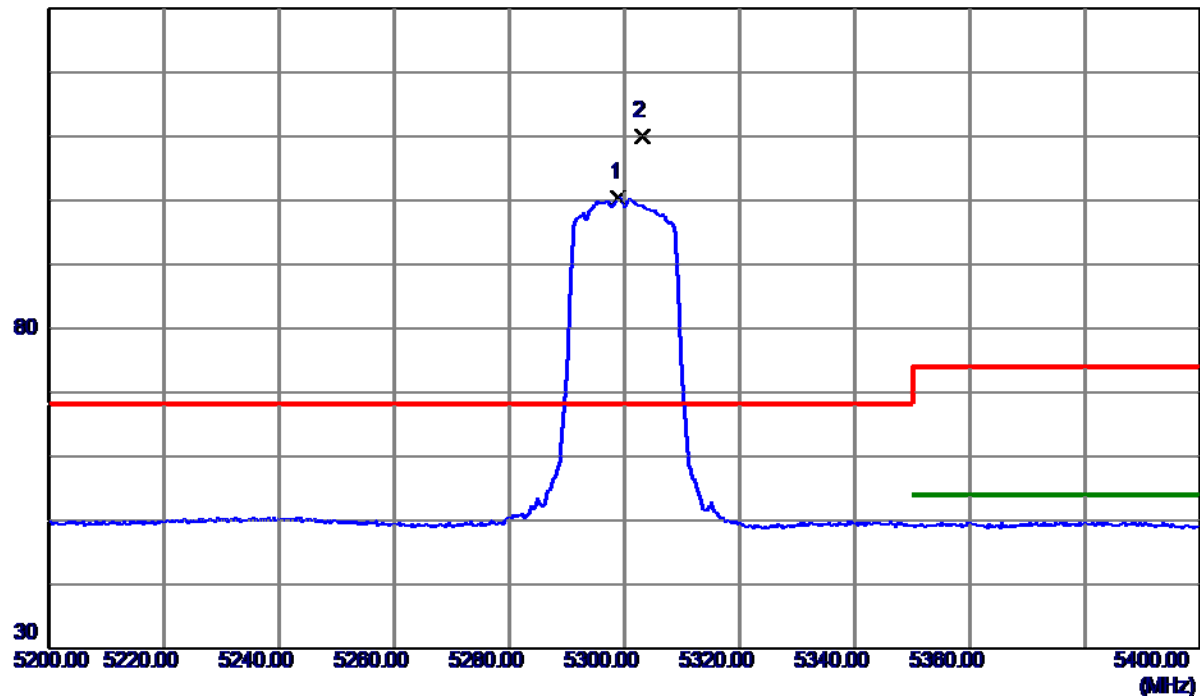
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5300 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5299.0000	61.15	39.26	100.41	999.00	-898.59	AVG	No Limit
2 *	5303.2000	70.79	39.26	110.05	68.30	41.75	Peak	No Limit

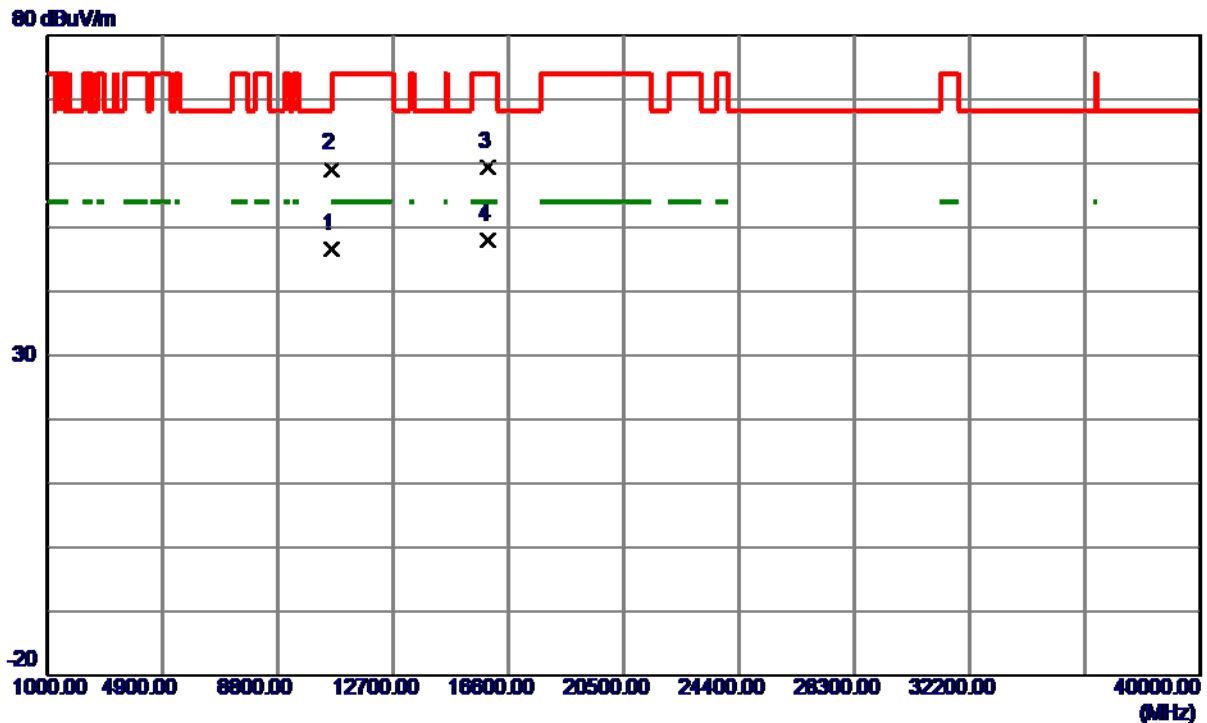
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) 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	10600.5350	47.73	-1.15	46.58	54.00	-7.42	AVG	
2	10602.0350	60.24	-1.14	59.10	74.00	-14.90	Peak	
3	15894.1000	57.27	2.10	59.37	74.00	-14.63	Peak	
4 *	15899.7600	45.94	2.09	48.03	54.00	-5.97	AVG	

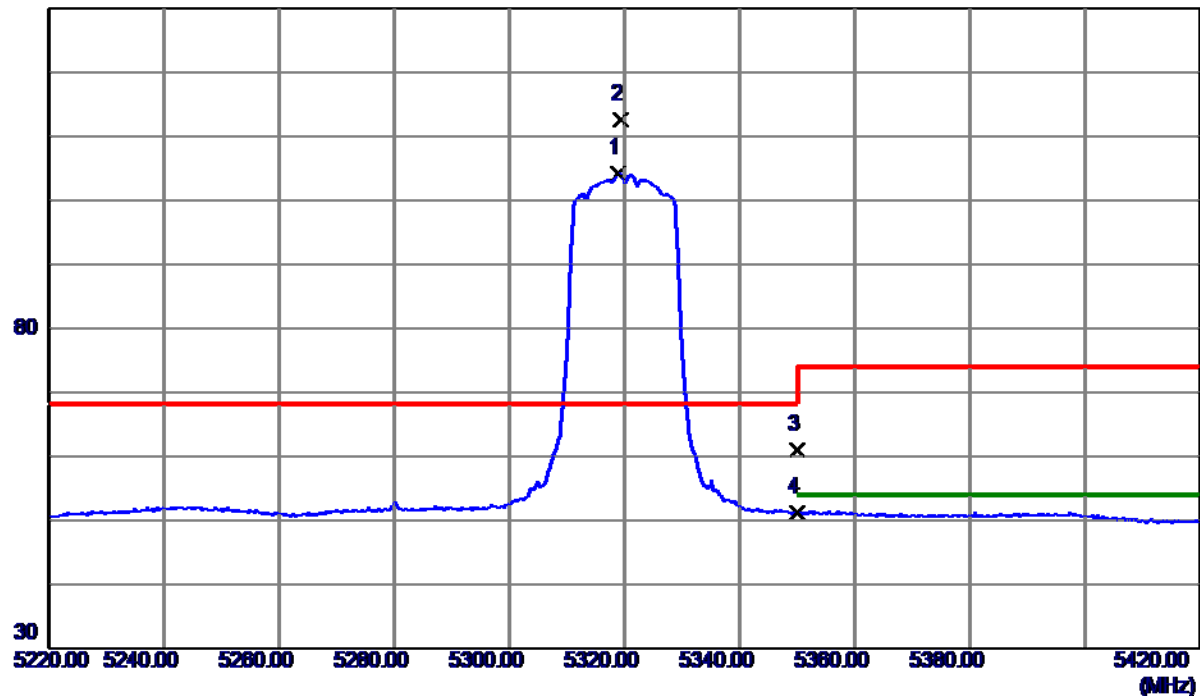
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5318.8000	64.84	39.28	104.12	999.00	-894.88	AVG	No Limit
2 *	5319.4000	73.32	39.28	112.60	68.30	44.30	Peak	No Limit
3	5350.0000	21.73	39.32	61.05	74.00	-12.95	Peak	
4	5350.0000	11.79	39.32	51.11	54.00	-2.89	AVG	

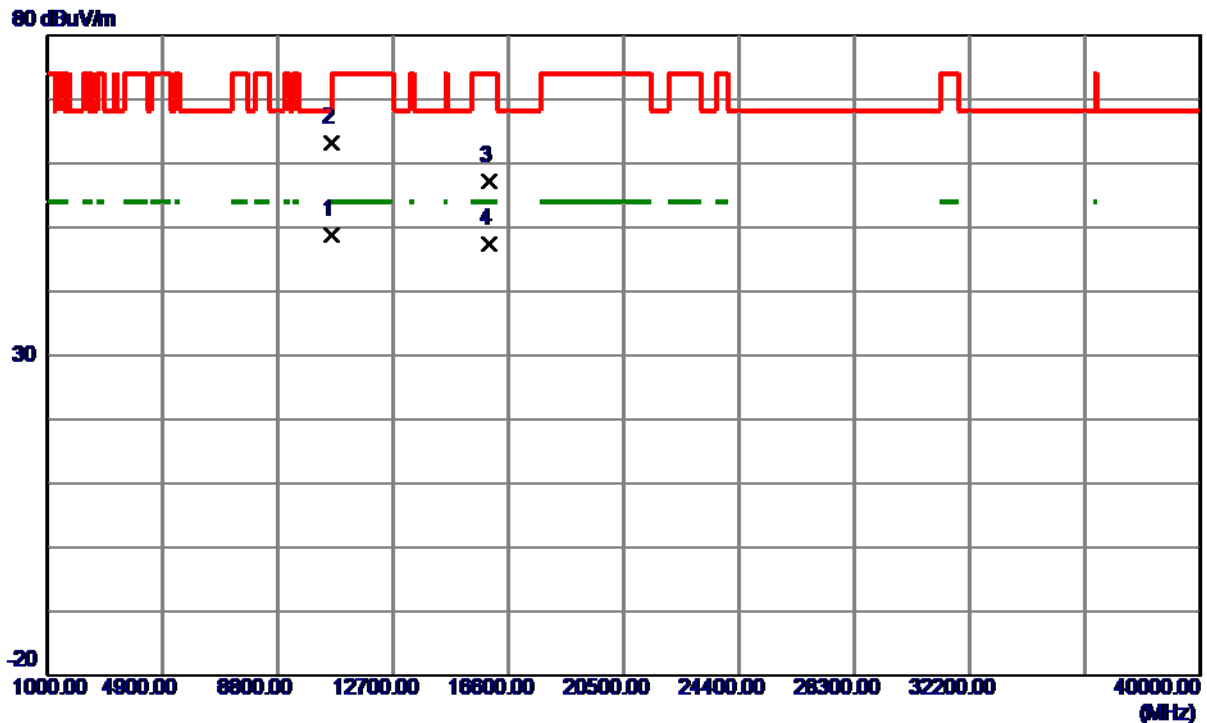
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) 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 *	10638.5650	49.78	-1.01	48.77	54.00	-5.23	AVG	
2	10639.4100	64.21	-1.01	63.20	74.00	-10.80	Peak	
3	15955.3800	55.34	1.93	57.27	74.00	-16.73	Peak	
4	15956.5200	45.40	1.92	47.32	54.00	-6.68	AVG	

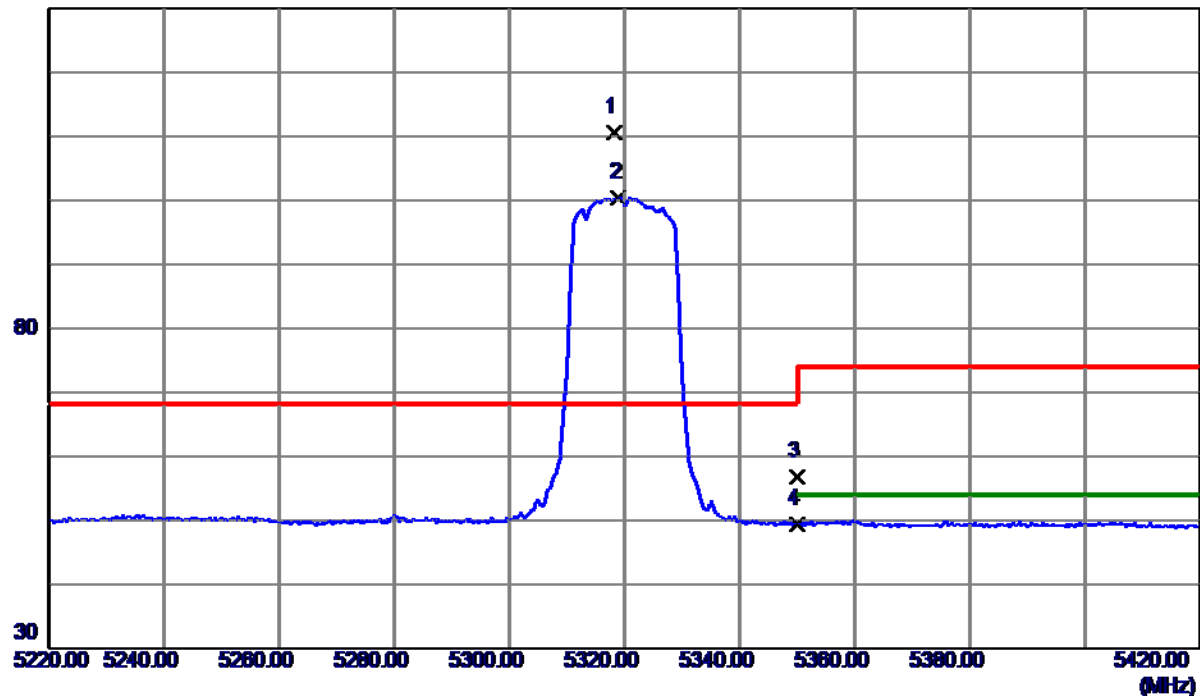
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5318.2000	71.34	39.28	110.62	68.30	42.32	Peak	No Limit
2	5319.0000	61.14	39.28	100.42	999.00	-898.58	AVG	No Limit
3	5350.0000	17.47	39.32	56.79	74.00	-17.21	Peak	
4	5350.0000	10.10	39.32	49.42	54.00	-4.58	AVG	

REMARKS:

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