

FCC Radio Test Report

FCC ID: Q78-ZXHNH196AV9

This report concerns: Original Grant

Project No. : 2006H021
Equipment : WiFi Router
Brand Name : ZTE
Test Model : ZXHN H196A
Series Model : N/A
Applicant : ZTE Corporation
Address : ZTE Plaza, Keji Road South, Hi-Tech Industrial Park Nanshan District, Shenzhen, Guangdong, P.R. China
Manufacturer : ZTE Corporation
Address : ZTE Plaza, Keji Road South, Hi-Tech Industrial Park Nanshan District, Shenzhen, Guangdong, P.R. China
Factory : ZTE Corporation
Address : ZTE Plaza, Keji Road South, Hi-Tech Industrial Park Nanshan District, Shenzhen, Guangdong, P.R. China
Date of Receipt : Aug. 17, 2020
Date of Test : Aug. 17, 2020~Sep. 14, 2020
Issued Date : Sep. 30, 2020
Report Version : R00
Test Sample : Engineering Sample No.: SH2020071627-4 for conducted;
SH2020071627-5 for radiated.
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.

Allen Wei

Prepared by : Allen Wei

Ryan. Wang

Approved by : Ryan Wang



Certificate # 5123. 03

Add: No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China

TEL: +86-021-61765666

Web: www.newbtl.com

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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

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

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

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

Limitation

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

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

Table of Contents	Page
REPORT ISSUED HISTORY	5
1 . SUMMARY OF TEST RESULTS	6
1.1 TEST FACILITY	7
1.2 MEASUREMENT UNCERTAINTY	7
1.3 TEST ENVIRONMENT CONDITIONS	7
2 . GENERAL INFORMATION	8
2.1 GENERAL DESCRIPTION OF EUT	8
2.2 TEST MODES	11
2.3 PARAMETERS OF TEST SOFTWARE	14
2.4 DUTY CYCLE	16
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	18
2.6 SUPPORT UNITS	18
3 . AC POWER LINE CONDUCTED EMISSIONS TEST	19
3.1 LIMIT	19
3.2 TEST PROCEDURE	19
3.3 DEVIATION FROM TEST STANDARD	19
3.4 TEST SETUP	20
3.5 EUT OPERATION CONDITIONS	20
3.6 TEST RESULTS	20
4 . RADIATED EMISSIONS TEST	21
4.1 LIMIT	21
4.2 TEST PROCEDURE	22
4.3 DEVIATION FROM TEST STANDARD	22
4.4 TEST SETUP	23
4.5 EUT OPERATION CONDITIONS	25
4.6 TEST RESULTS - 9 KHZ to 30 MHZ	25
4.7 TEST RESULTS - 30 MHz TO 1000 MHz	25
4.8 TEST RESULTS - ABOVE 1000 MHz	25
5 . BANDWIDTH TEST	26
5.1 LIMIT	26
5.2 TEST PROCEDURE	26
5.3 TEST PROCEDURE	26
5.4 TEST SETUP	26

Table of Contents	Page
5.5 EUT OPERATION CONDITIONS	26
5.6 TEST RESULTS	26
6 . MAXIMUM OUTPUT POWER TEST	27
6.1 LIMIT	27
6.2 TEST PROCEDURE	28
6.3 DEVIATION FROM STANDARD	28
6.4 TEST SETUP	28
6.5 EUT OPERATION CONDITIONS	28
6.6 TEST RESULTS	28
7 . POWER SPECTRAL DENSITY TEST	29
7.1 LIMIT	29
7.2 TEST PROCEDURE	29
7.3 DEVIATION FROM STANDARD	29
7.4 TEST SETUP	29
7.5 EUT OPERATION CONDITIONS	29
7.6 TEST RESULTS	29
8 . FREQUENCY STABILITY MEASUREMENT	30
8.1 LIMIT	30
8.2 TEST PROCEDURE	30
8.3 DEVIATION FROM STANDARD	30
8.4 TEST SETUP	30
8.5 EUT OPERATION CONDITIONS	30
8.6 TEST RESULTS	30
9 . MEASUREMENT INSTRUMENTS LIST	31
10 . EUT TEST PHOTOS	33
APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS	36
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ	39
APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ	40
APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ	43
APPENDIX E - BANDWIDTH	196
APPENDIX F - CONDUCTED OUTPUT POWER	206
APPENDIX G - POWER SPECTRAL DENSITY	231

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Sep. 30, 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	N/A	-----
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS	-----
15.407(a)	Maximum Output Power	APPENDIX F	PASS	-----
15.407(a)	Power Spectral Density	APPENDIX G	PASS	-----
15.407(g)	Frequency Stability	APPENDIX H	PASS	-----
15.203	Antenna Requirements	-----	PASS	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. 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	26°C	60%	AC 120V/60Hz	Forest Li
Radiated Emissions-30 MHz to 1GHz	23°C	52%	AC 120V/60Hz	Forest Li
Radiated Emissions-Above 1000 MHz	24°C	58%	AC 120V/60Hz	Forest Li
Spectrum Bandwidth	25.7°C	59%	AC 120V/60Hz	Forest Li
Maximum Output Power	25.7°C	59%	AC 120V/60Hz	Forest Li
Power Spectral Density	25.7°C	59%	AC 120V/60Hz	Forest Li

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	WiFi Router
Brand Name	ZTE
Test Model	ZXHN H196A
Series Model	N/A
Model Difference(s)	N/A
Software Version	T2
Hardware Version	V9
Power Source	DC voltage supplied from AC/DC adapter. 1# Brand/Model: MN012E-L120100 2# Brand/Model: Ruide/RD1201000-C55-35MGD
Power Rating	1# I/P: 100-240V~50/60Hz 0.3A max O/P:12.0V $\overline{\text{---}}$ 1.0A 1# I/P: 100-240V~50/60Hz 0.6A max O/P:12V $\overline{\text{---}}$ 1.0A
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 866 Mbps
Maximum Conducted Output Power for UNII-1 CDD	IEEE 802.11a: 22.13 dBm (0.1633 W) IEEE 802.11n (HT20): 26.59 dBm (0.4560 W) IEEE 802.11n (HT40): 24.47 dBm (0.2799 W) IEEE 802.11ac (VHT20): 26.72 dBm (0.4699 W) IEEE 802.11ac (VHT40): 24.69 dBm (0.2944 W) IEEE 802.11ac (VHT80): 18.00 dBm (0.0631 W)
Maximum Conducted Output Power for UNII-2A CDD	IEEE 802.11a: 22.27 dBm (0.1687 W) IEEE 802.11n (HT20): 23.30 dBm (0.2138 W) IEEE 802.11n (HT40): 23.57 dBm (0.2275 W) IEEE 802.11ac (VHT20): 23.42 dBm (0.2198 W) IEEE 802.11ac (VHT40): 23.79 dBm (0.2393 W) IEEE 802.11ac (VHT80): 19.39 dBm (0.0869 W)
Maximum Conducted Output Power for UNII-2C CDD	IEEE 802.11a: 23.02 dBm (0.2004 W) IEEE 802.11n (HT20): 22.78 dBm (0.1897 W) IEEE 802.11n (HT40): 23.68 dBm (0.2333 W) IEEE 802.11ac (VHT20): 22.89 dBm (0.1945 W) IEEE 802.11ac (VHT40): 23.89 dBm (0.2449 W) IEEE 802.11ac (VHT80): 23.39 dBm (0.2183 W)
Maximum Conducted Output Power for UNII-3 CDD	IEEE 802.11a: 20.59 dBm (0.1146 W) IEEE 802.11n (HT20): 22.16 dBm (0.1644 W) IEEE 802.11n (HT40): 24.56 dBm (0.2858 W) IEEE 802.11ac (VHT20): 22.28 dBm (0.1690 W) IEEE 802.11ac (VHT40): 24.80 dBm (0.3020 W) IEEE 802.11ac (VHT80): 22.64 dBm (0.1837 W)

Note:

- 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
	N/A	N/A	PCB	N/A	2.8	N/A
	N/A	N/A	PCB	N/A	2.8	N/A

Note:

This EUT supports CDD, and all antennas have the same gain, so Directional gain= $G_{ANT} + \text{Array Gain}$,

For power spectral density measurements, Array Gain= $10\log(N_{ANT}/N_{SS})$ dB,

Directional gain= $2.8 + 10\log(2/1) = 5.81$.

4. Table for Antenna Configuration:

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

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 / CH48 (UNII-1)

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 / CH48 (UNII-1)

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

CDD

UNII-1 - 2TX			
Test Software	QATool_Dbg		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	1E	20	1E
IEEE 802.11n (HT20)	21	23	2C
IEEE 802.11ac (VHT20)	21	23	2C
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	1D	26	
IEEE 802.11ac (VHT40)	1D	26	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	18		

UNII-2A - 2TX			
Test Software	QATool_Dbg		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	20	1F	20
IEEE 802.11n (HT20)	24	23	22
IEEE 802.11ac (VHT20)	24	23	22
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	24	1D	
IEEE 802.11ac (VHT40)	24	1D	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	1B		

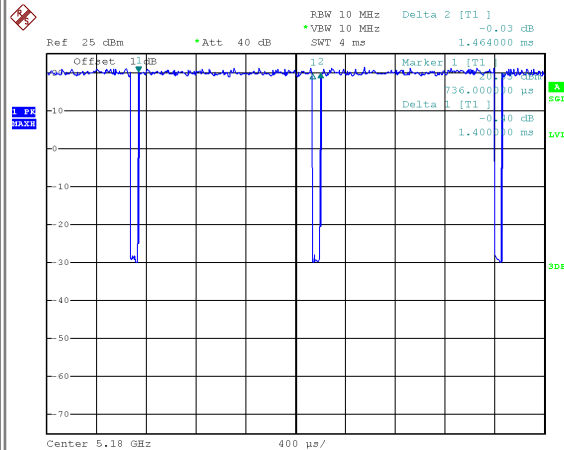
UNII-2C - 2TX			
Test Software	QATool_Dbg		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11a	22	1E	1C
IEEE 802.11n (HT20)	23	21	1F
IEEE 802.11ac (VHT20)	23	21	1F
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	1D	24	24
IEEE 802.11ac (VHT40)	1D	24	24
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	1A	24	

UNII-3 - 2TX			
Test Software	QATool_Dbg		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	1B	1C	1D
IEEE 802.11n (HT20)	21	1F	21
IEEE 802.11ac (VHT20)	21	1F	21
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	25	26	
IEEE 802.11ac (VHT40)	25	26	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	24		

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.

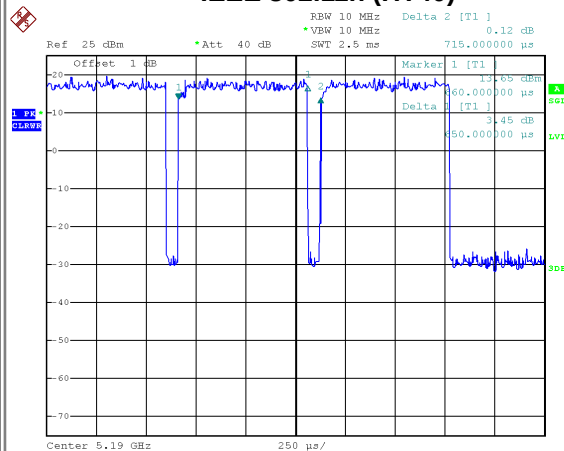
IEEE 802.11a



Date: 8.AUG.2020 11:53:47

Duty cycle = $1.400 \text{ ms} / 1.464 \text{ ms} = 95.63\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.19 \text{ dB}$

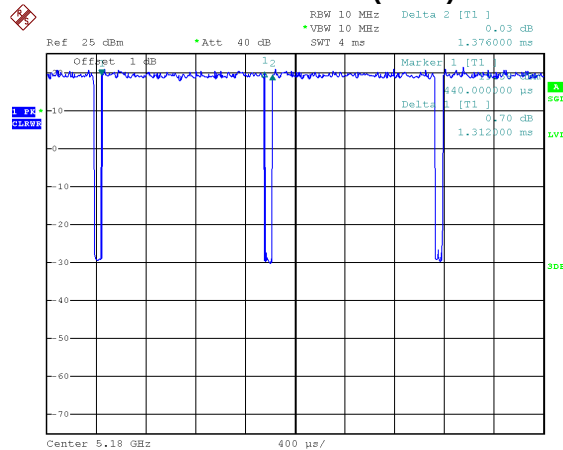
IEEE 802.11n (HT40)



Date: 8.AUG.2020 12:00:55

Duty cycle = $0.650 \text{ ms} / 0.715 \text{ ms} = 90.91\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.41 \text{ dB}$

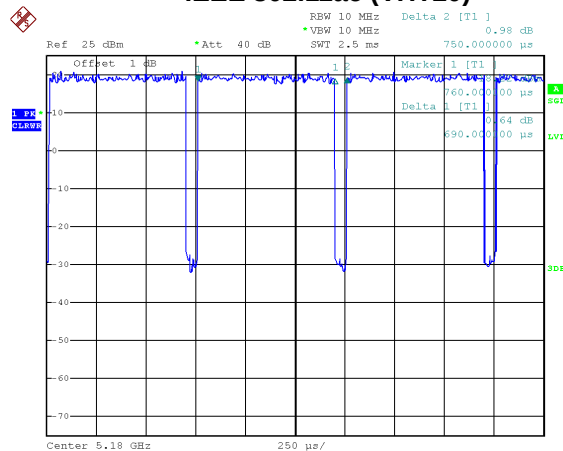
IEEE 802.11n (HT20)



Date: 8.AUG.2020 11:54:58

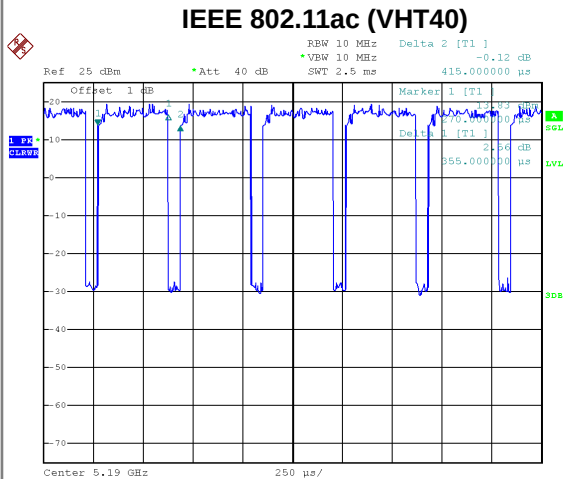
Duty cycle = $1.312 \text{ ms} / 1.376 \text{ ms} = 95.35\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.21 \text{ dB}$

IEEE 802.11ac (VHT20)



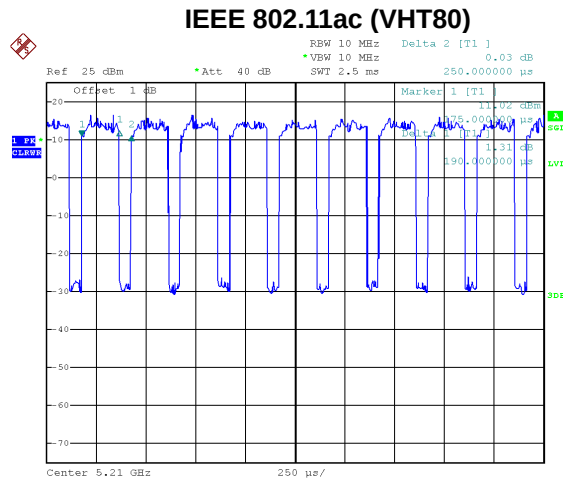
Date: 8.AUG.2020 12:00:07

Duty cycle = $0.690 \text{ ms} / 0.750 \text{ ms} = 92.00\%$
 Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.36 \text{ dB}$



Date: 8.AUG.2020 12:02:55

Duty cycle = 0.355 ms / 0.415 ms = 85.54%
Duty Factor = 10 * log(1 / Duty cycle) = 0.68 dB



Date: 8.AUG.2020 12:05:22

Duty cycle = 0.190 ms / 0.250 ms = 76.00%
Duty Factor = 10 * log(1 / Duty cycle) = 1.19 dB

NOTE:

For IEEE 802.11a, IEEE 802.11n (HT20):

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

For IEEE 802.11ac (VHT20), IEEE 802.11n (HT40):

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

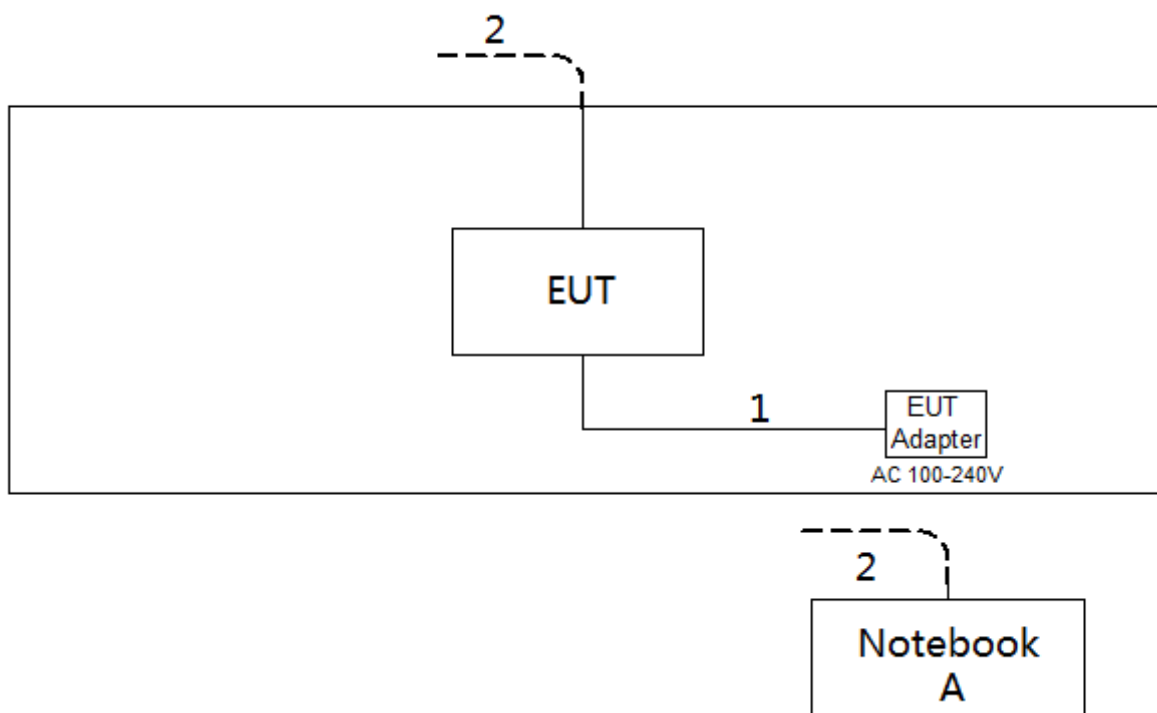
For IEEE 802.11ac (VHT40):

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

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 6 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	Dell	Inspiron 15-7559	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.6m
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

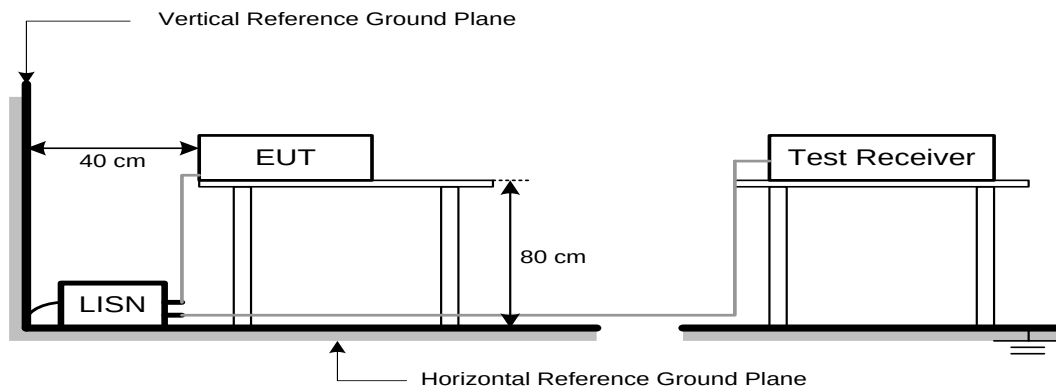
3.2 TEST PROCEDURE

- 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

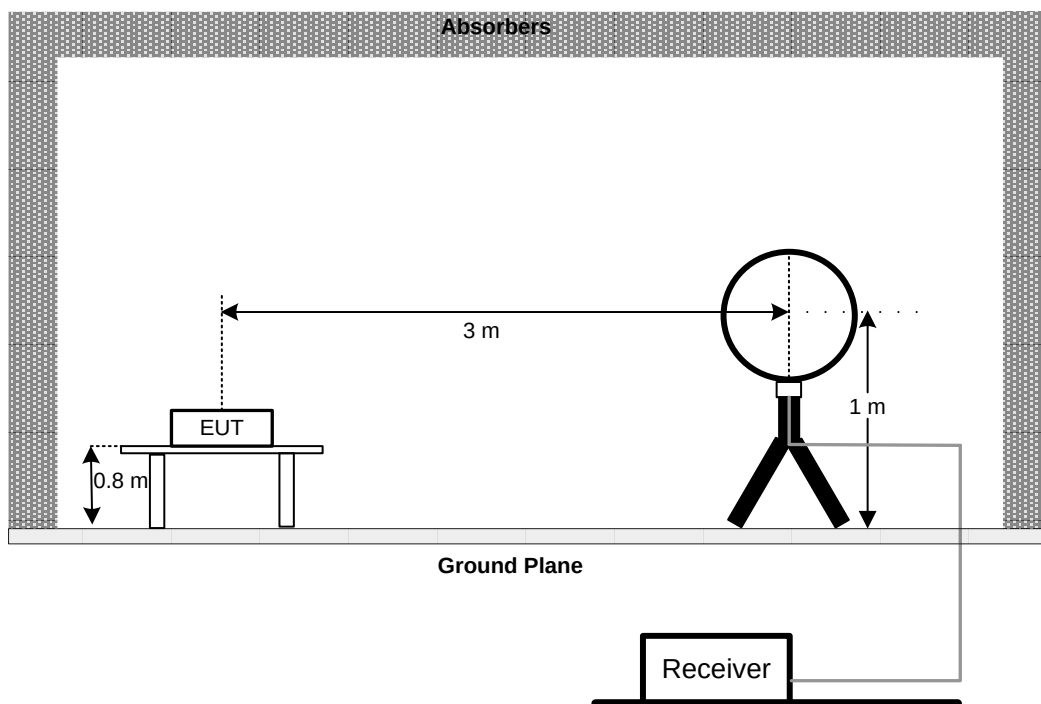
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance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

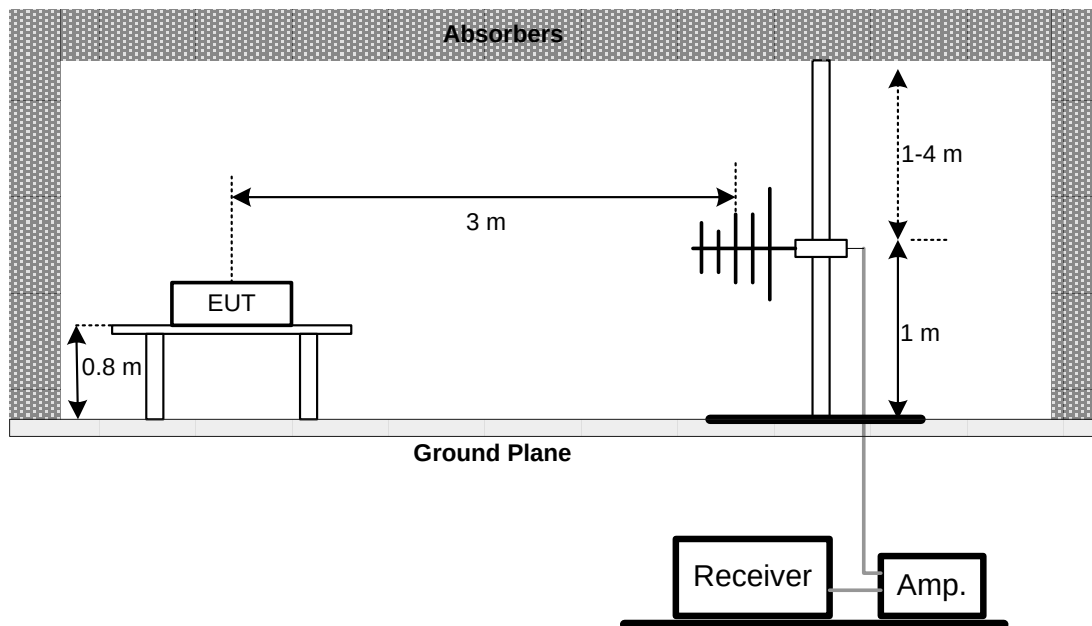
No deviation

4.4 TEST SETUP

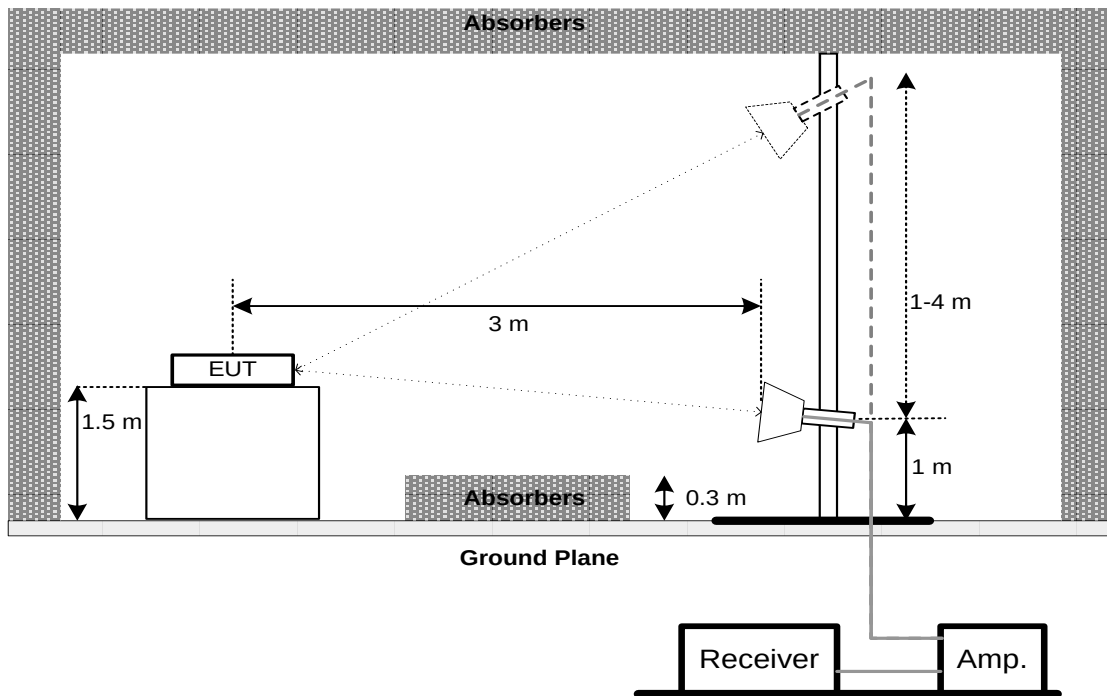
9 kHz to 30 MHz



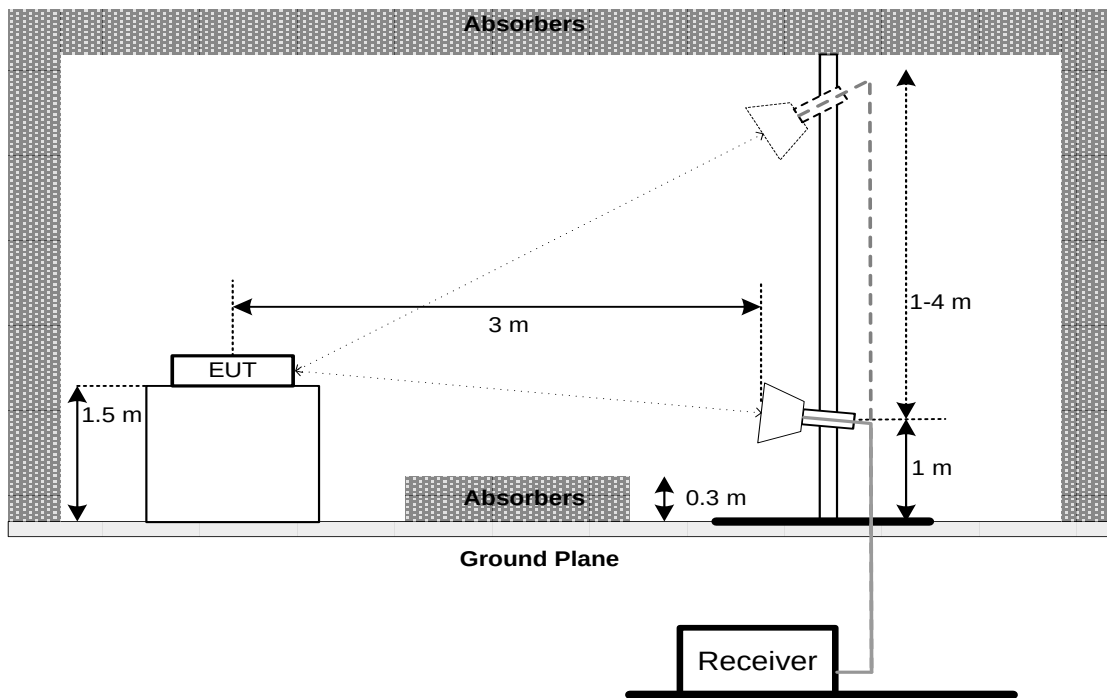
30 MHz to 1 GHz



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:

- a. 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 an indoor 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.
For fixed point-to-point access points 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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (Slave Client)
- b. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

6.2 TEST PROCEDURE

- 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

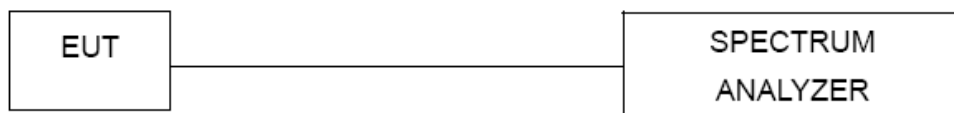
Note:

- 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:

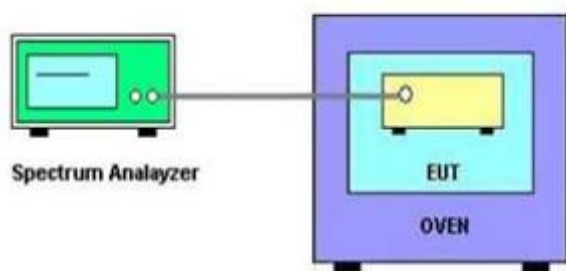
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- 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~45°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	Aug. 23, 2021
3	EMI Test Receiver	R&S	ESCI	100082	Mar. 28, 2021
4	50Ω coaxial switch	Anritsu	MP59B	6201750902	Mar. 21, 2021
5	Cable	10m	EMCRG400-BM-NM-10000	170628	Mar. 21, 2021
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EMCI	EMCI LPA600	275	Mar. 28, 2021
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 28, 2021
4	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	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	Attenuator	emci	EMCI-N-6-06	AT-N0644	Mar. 21, 2021
5	Cable	7m	EMC104-SM-SM-7000	170330	Apr. 16, 2021
6	Cable	1m	EMC104-SM-SM-1000	170331	Apr. 16, 2021
7	Cable	3.5m	EMC104-SM-NM-3500	170621	Apr. 16, 2021
8	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	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
9	Antenna	Schwarzbeck	BBHA9170	9170-651	Apr. 02, 2021
10	Pre-Amplifier	EMC INSTRUMENT	EMC184045B	980265	Mar. 21, 2021
11	EXA Spectrum Analyzer	Keysight	N9010A	MY56480579	Mar. 21, 2021
12	Test Cable	emci	EMC102-SM-SM-800	170335	Apr. 13, 2021
13	Test Cable	emci	EMC102-KM-KM-2500	170627	Apr. 13, 2021

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

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyze	Keysight	8990B	MY51000507	Mar. 21, 2021
2	Wideband Power Sensor	Keysight	N9123A	MY58310003	Mar. 21, 2021

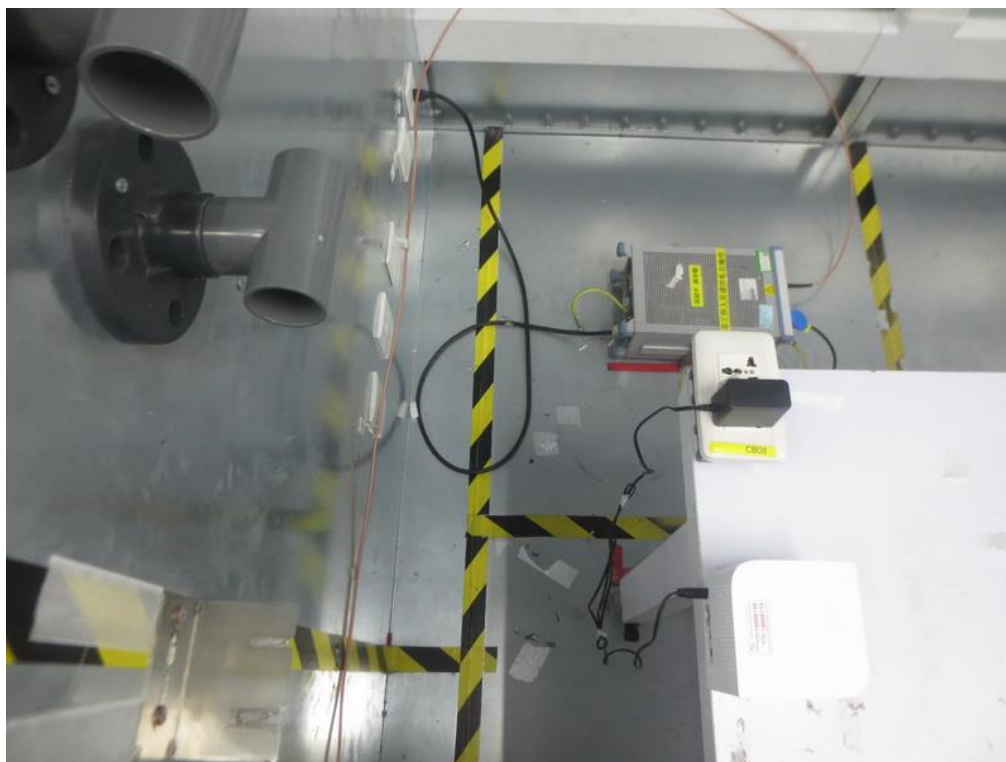
Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 21, 2021

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

All calibration period of equipment list is one year.

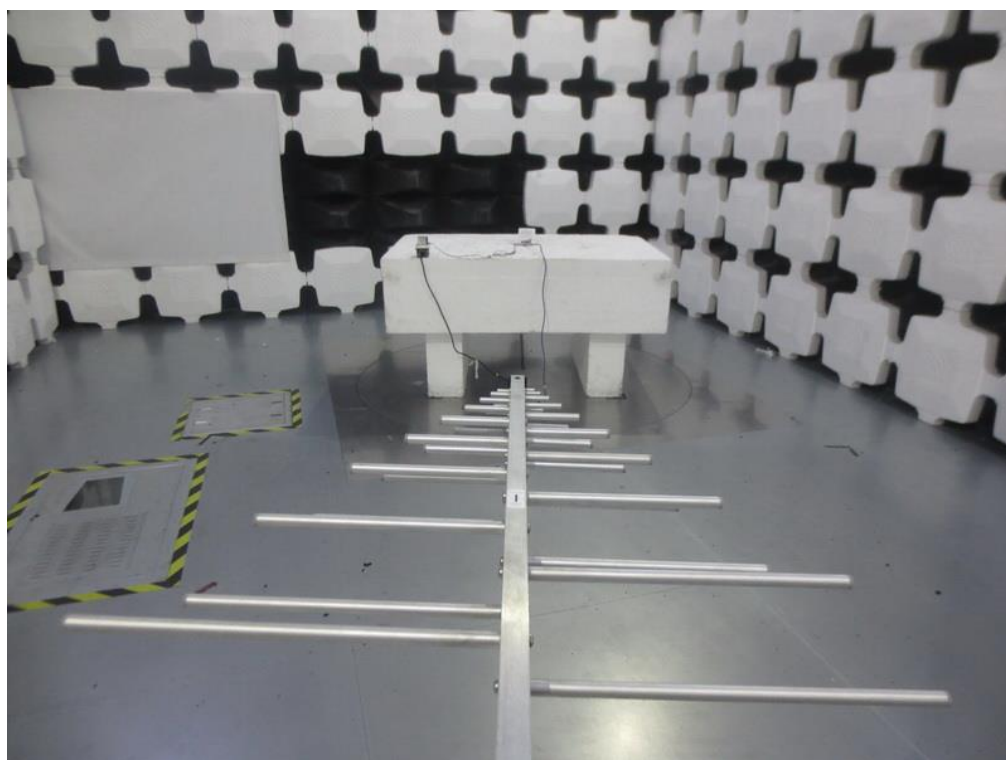
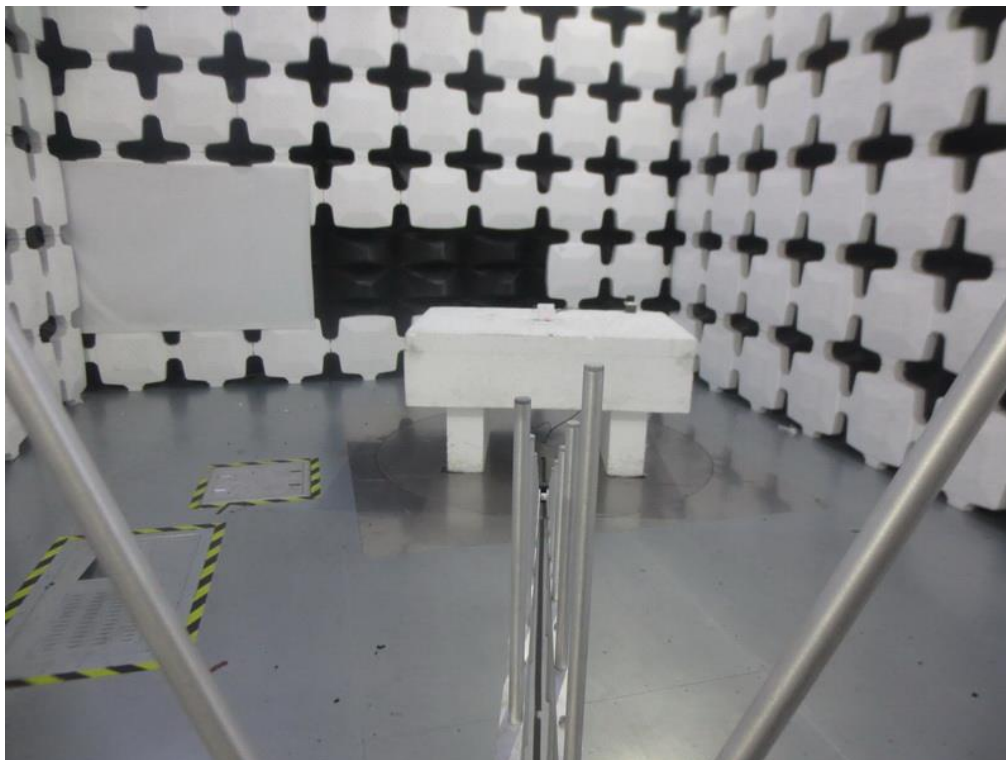
10. EUT TEST PHOTOS

Conducted Emissions Test Photos



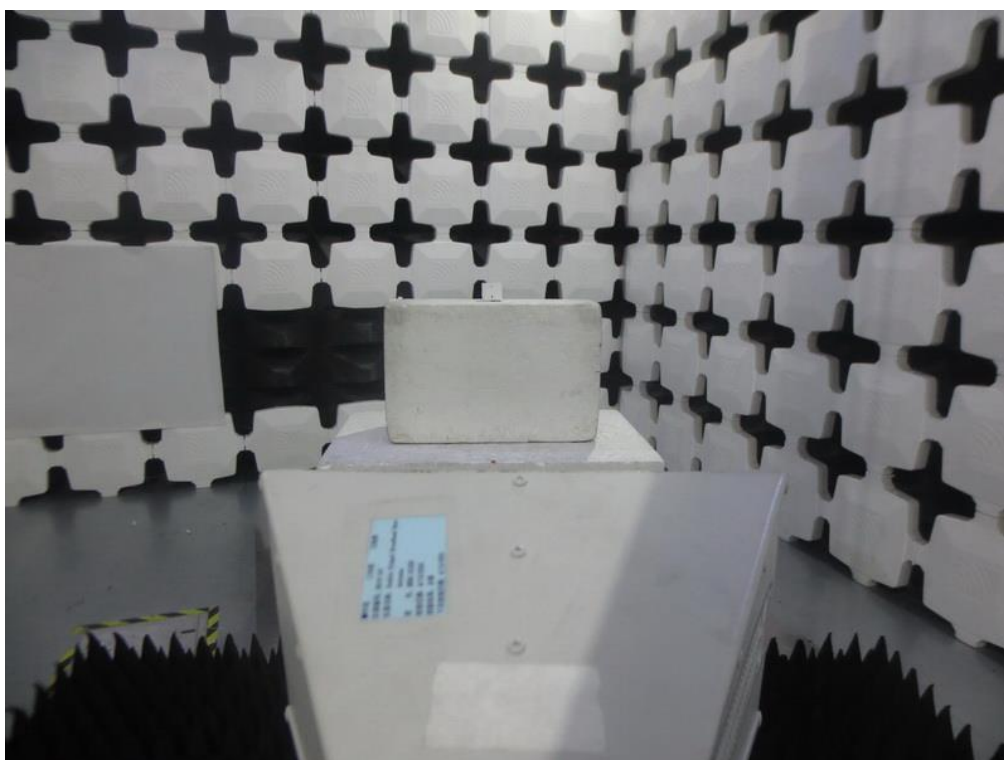
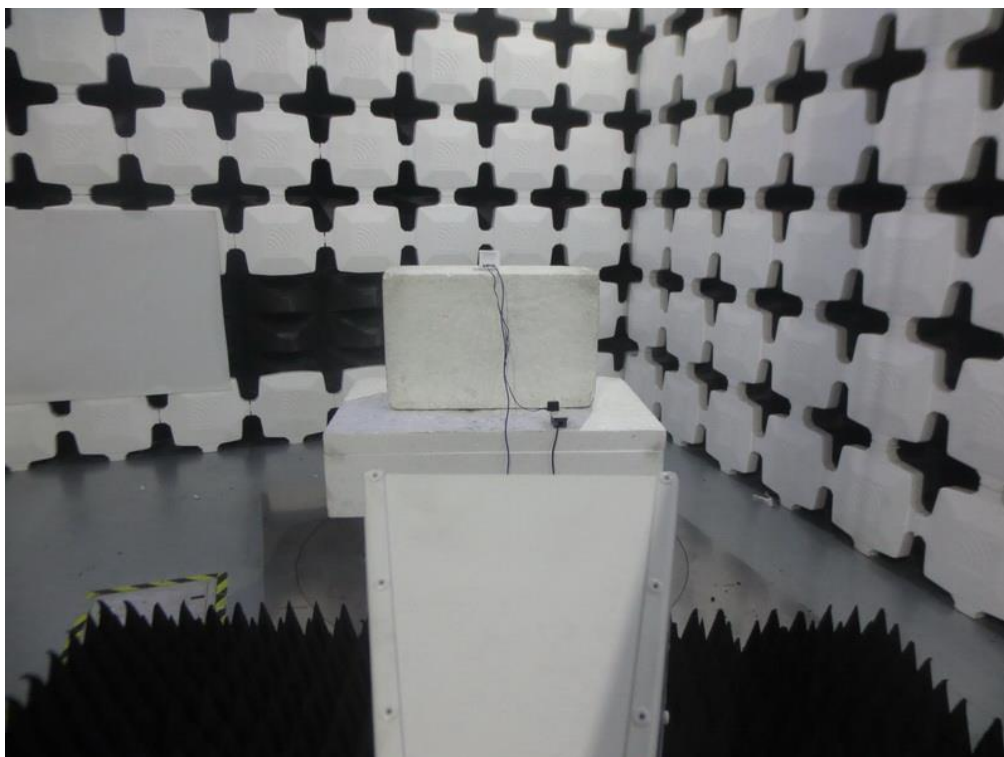
Radiated Emissions Test Photos

30 MHz to 1 GHz



Radiated Emissions Test Photos

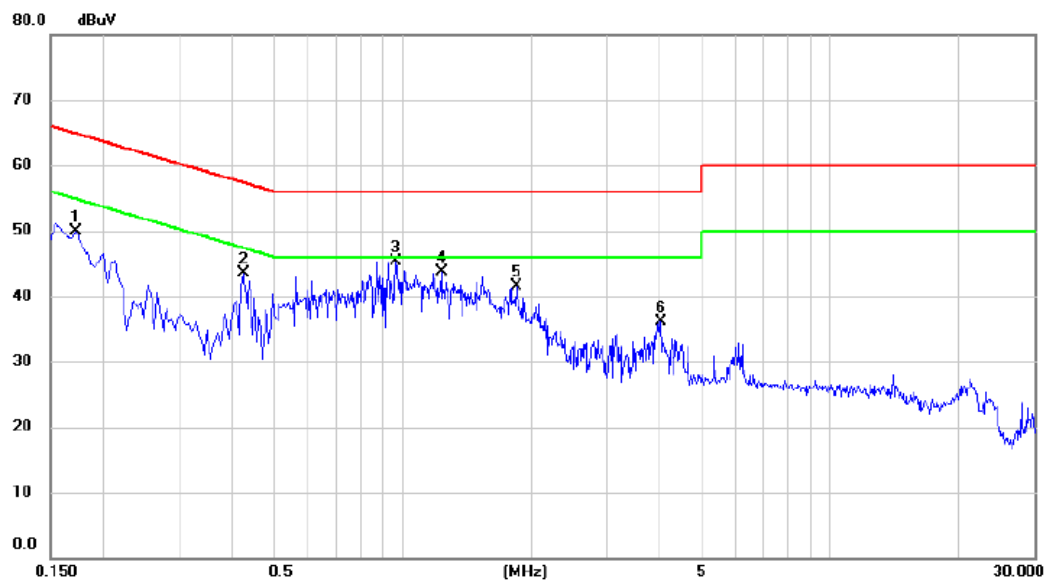
Above 1 GHz



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX Mode

Line



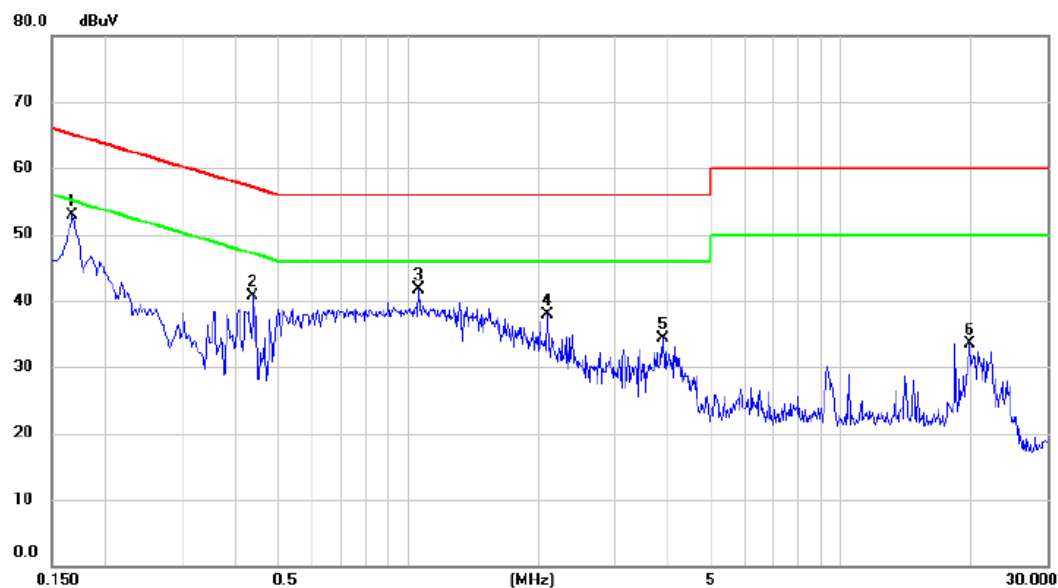
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1723	40.07	9.75	49.82	64.85	-15.03	peak	
2		0.4243	33.66	9.87	43.53	57.36	-13.83	peak	
3	*	0.9644	35.46	9.75	45.21	56.00	-10.79	peak	
4		1.2342	33.98	9.75	43.73	56.00	-12.27	peak	
5		1.8464	31.62	9.79	41.41	56.00	-14.59	peak	
6		4.0335	26.26	9.92	36.18	56.00	-19.82	peak	

REMARKS:

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

Test Mode: TX Mode

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1677	43.27	9.57	52.84	65.07	-12.23	peak	
2		0.4384	31.04	9.62	40.66	57.09	-16.43	peak	
3		1.0582	32.09	9.64	41.73	56.00	-14.27	peak	
4		2.0990	28.33	9.67	38.00	56.00	-18.00	peak	
5		3.8855	24.50	9.72	34.22	56.00	-21.78	peak	
6		19.8280	23.56	9.97	33.53	60.00	-26.47	peak	

REMARKS:

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

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

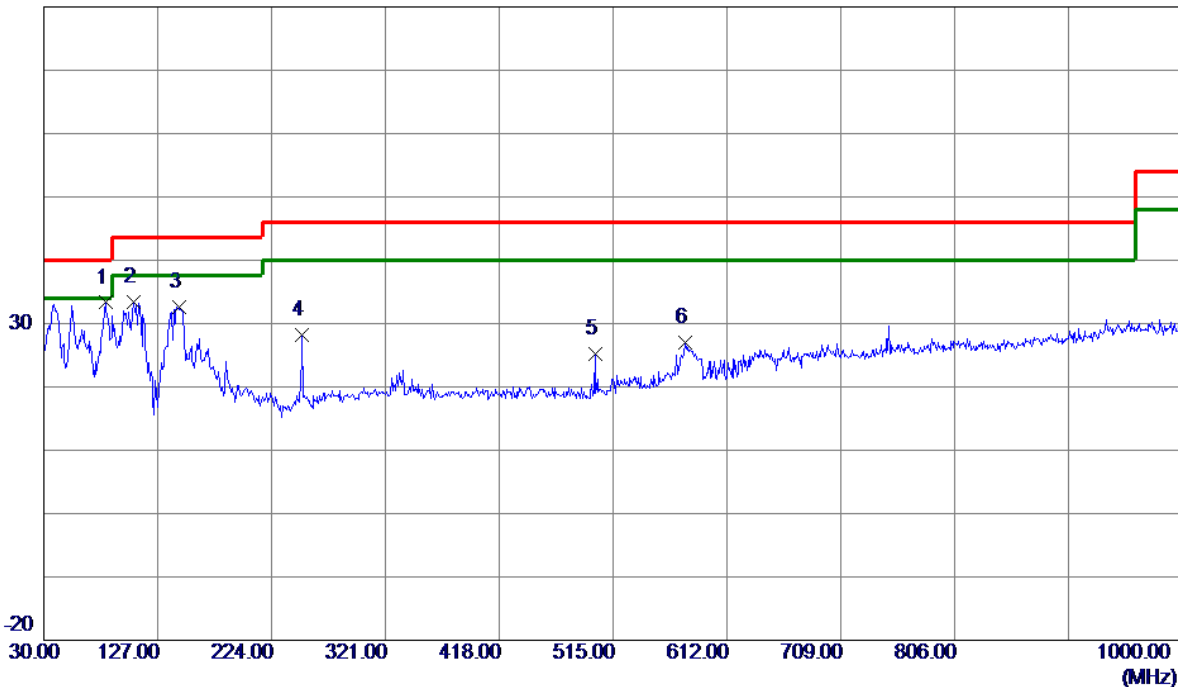
Note: Below 30MHz, The measured value have enough margin over 20dB than the limit,
therefore they are not reported

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ

Test Mode: TX AC20 MODE CHANNEL 48

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 *	82.8650	54.36	-21.06	33.30	40.00	-6.70	Peak	
2	106.6300	53.22	-19.74	33.48	43.50	-10.02	Peak	
3	145.4299	48.63	-16.01	32.62	43.50	-10.88	Peak	
4	250.1900	44.94	-16.66	28.28	46.00	-17.72	Peak	
5	499.9650	35.59	-10.32	25.27	46.00	-20.73	Peak	
6	576.5949	35.83	-8.77	27.06	46.00	-18.94	Peak	

REMARKS:

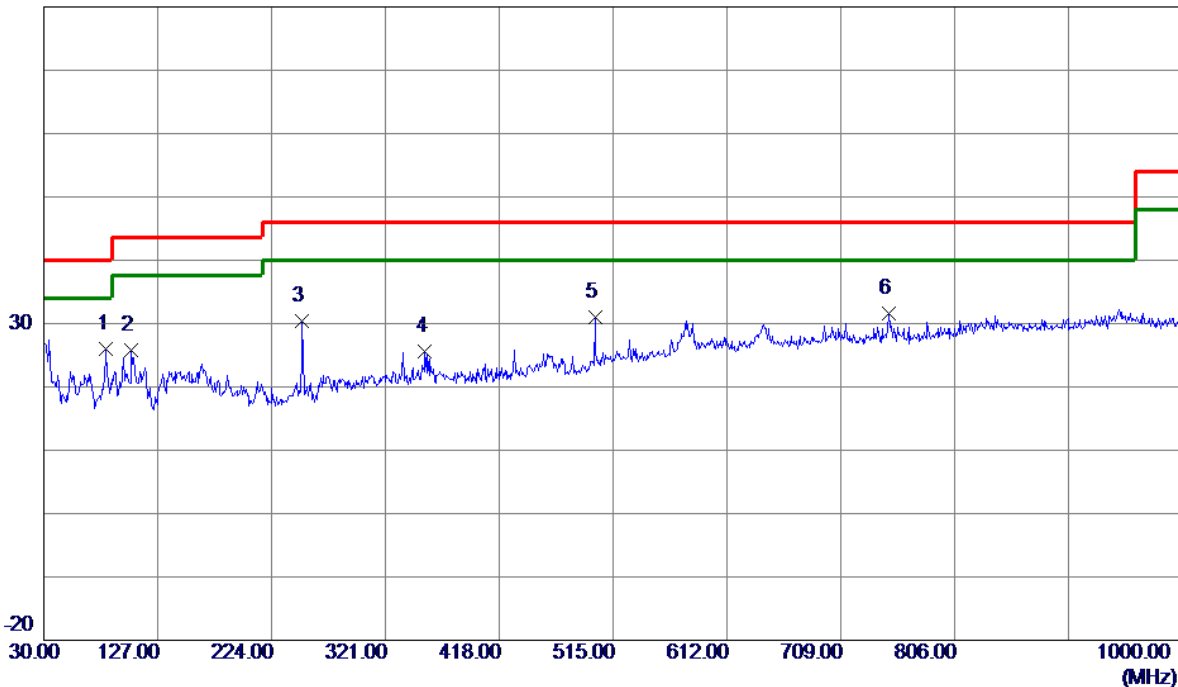
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX AC20 MODE CHANNEL 48

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 *	83.3500	47.23	-21.15	26.08	40.00	-13.92	Peak	
2	104.6900	45.84	-20.03	25.81	43.50	-17.69	Peak	
3	250.1900	47.00	-16.66	30.34	46.00	-15.66	Peak	
4	354.9500	39.26	-13.66	25.60	46.00	-20.40	Peak	
5	499.9650	41.38	-10.32	31.06	46.00	-14.94	Peak	
6	750.2250	37.51	-5.82	31.69	46.00	-14.31	Peak	

REMARKS:

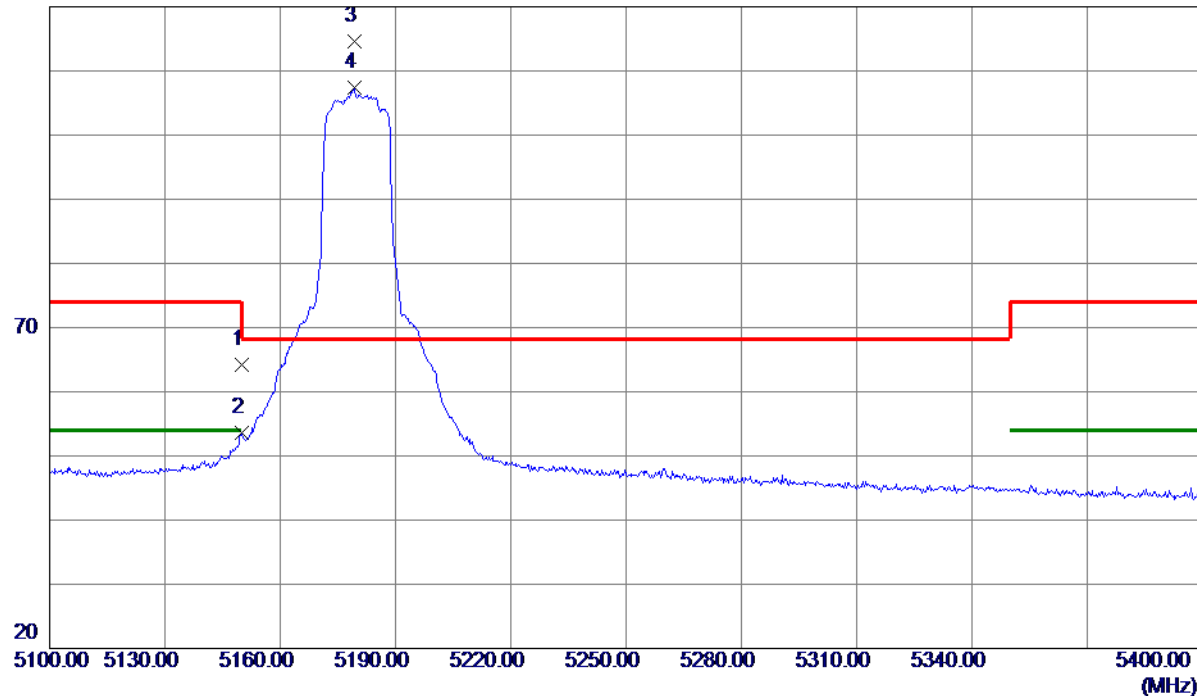
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

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

Vertical

120 dBuV/m



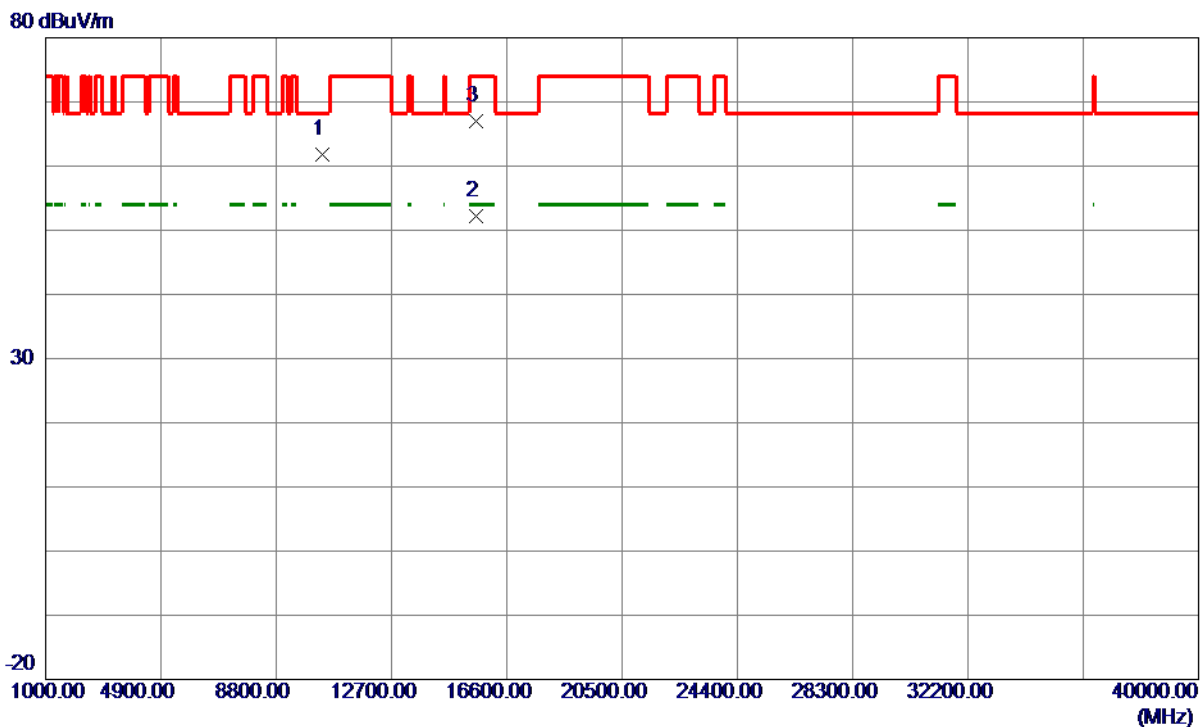
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	26.27	37.88	64.15	74.00	-9.85	Peak	
2	5150.0000	15.66	37.88	53.54	54.00	-0.46	AVG	
3 *	5179.2000	76.75	37.76	114.51	68.30	46.21	Peak	No limit
4	5179.2000	69.56	37.76	107.32	999.00	-891.68	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

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10354.4620	60.11	1.64	61.75	68.30	-6.55	Peak	
2 *	15538.6480	49.22	3.02	52.24	54.00	-1.76	AVG	
3	15543.4320	63.95	3.01	66.96	74.00	-7.04	Peak	

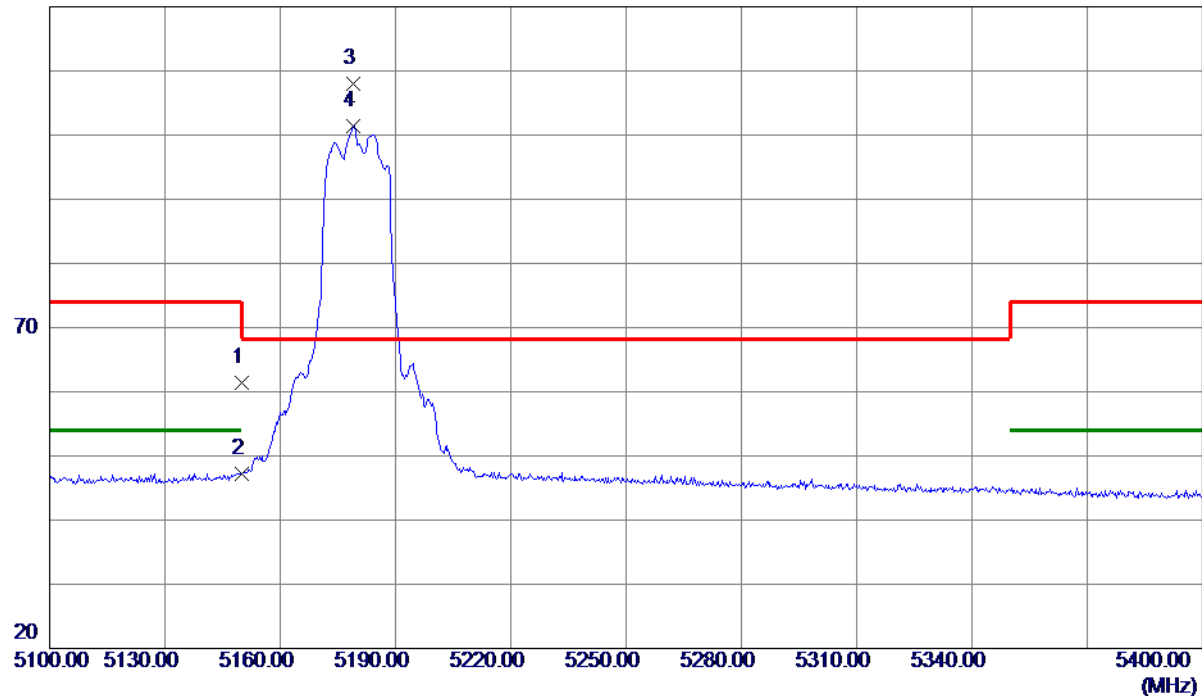
REMARKS:

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

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

Horizontal

120 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	23.55	37.88	61.43	74.00	-12.57	Peak	
2	5150.0000	9.39	37.88	47.27	54.00	-6.73	AVG	
3 *	5178.9000	70.16	37.76	107.92	68.30	39.62	Peak	No limit
4	5178.9000	63.61	37.76	101.37	999.00	-897.63	AVG	No limit

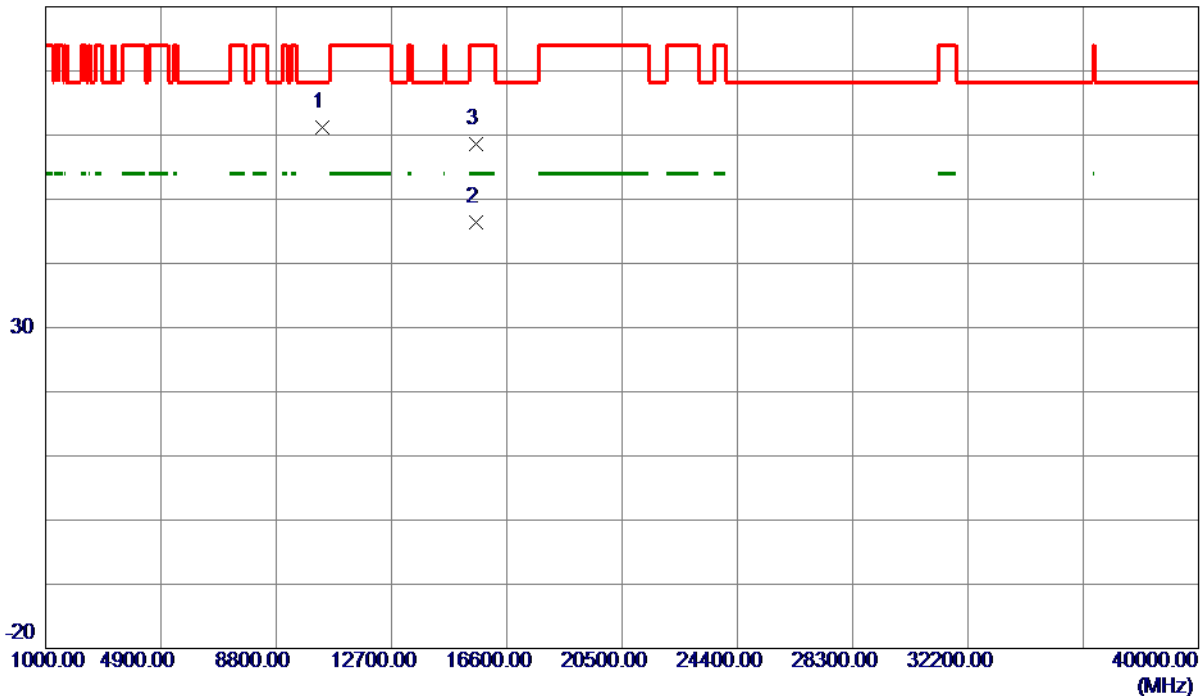
REMARKS:

- (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

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 *	10359.3220	59.47	1.65	61.12	68.30	-7.18	Peak	
2	15541.4660	43.43	3.01	46.44	54.00	-7.56	AVG	
3	15541.7940	55.65	3.01	58.66	74.00	-15.34	Peak	

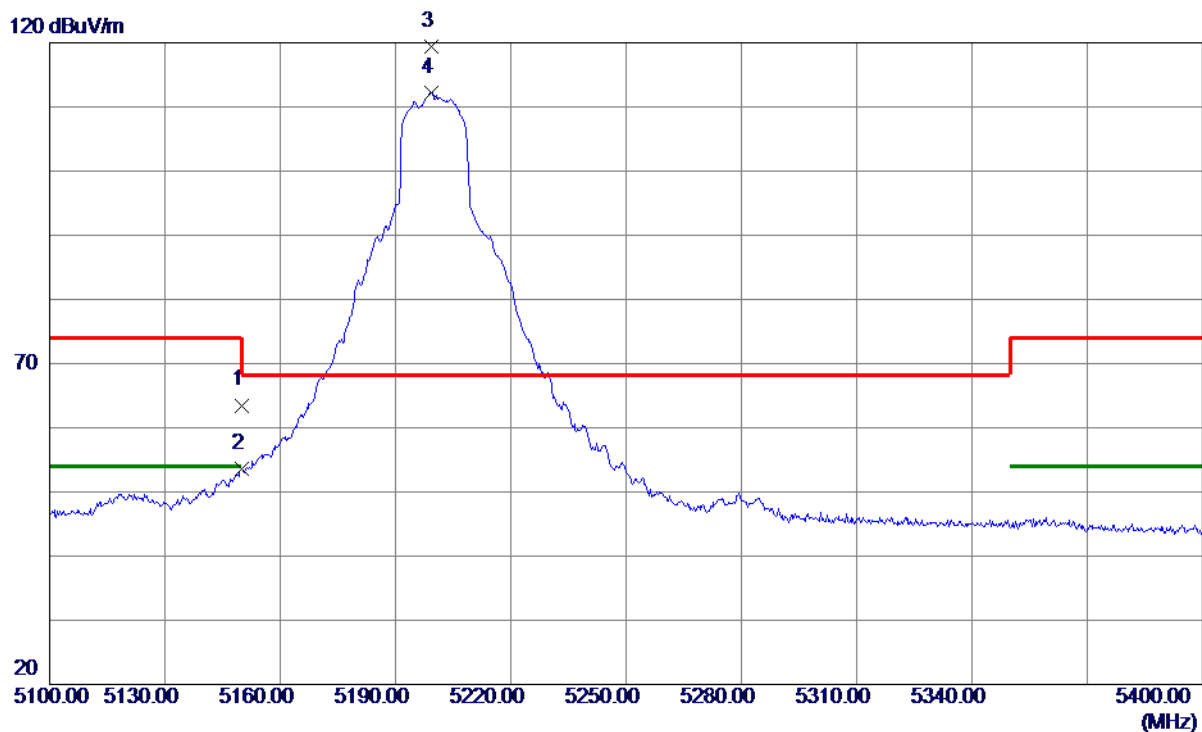
REMARKS:

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

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

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

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	25.62	37.88	63.50	74.00	-10.50	Peak	
2	5150.0000	15.67	37.88	53.55	54.00	-0.45	AVG	
3 *	5199.3000	81.79	37.68	119.47	68.30	51.17	Peak	No limit
4	5199.3000	74.59	37.68	112.27	999.00	-886.73	AVG	No limit

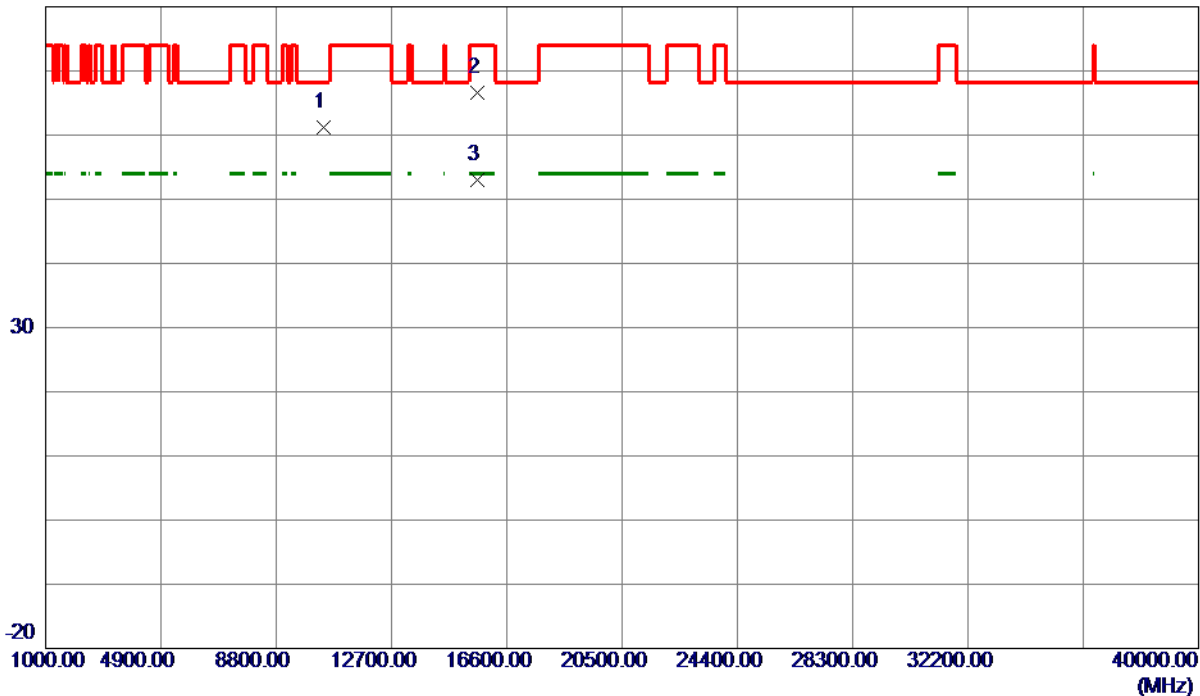
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 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	10398.3500	59.40	1.72	61.12	68.30	-7.18	Peak	
2	15590.5680	63.74	2.89	66.63	74.00	-7.37	Peak	
3 *	15601.1680	50.14	2.87	53.01	54.00	-0.99	AVG	

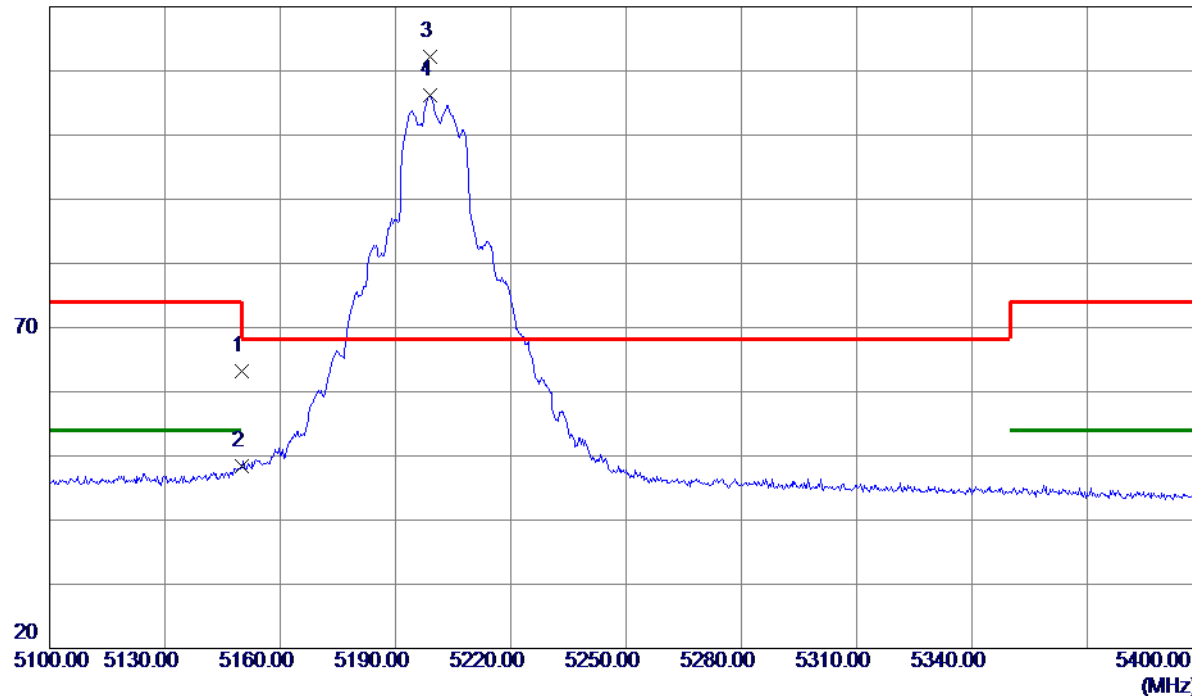
REMARKS:

- (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

Horizontal

120 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	25.25	37.88	63.13	74.00	-10.87	Peak	
2	5150.0000	10.54	37.88	48.42	54.00	-5.58	AVG	
3 *	5199.0000	74.43	37.68	112.11	68.30	43.81	Peak	No limit
4	5199.0000	68.58	37.68	106.26	999.00	-892.74	AVG	No limit

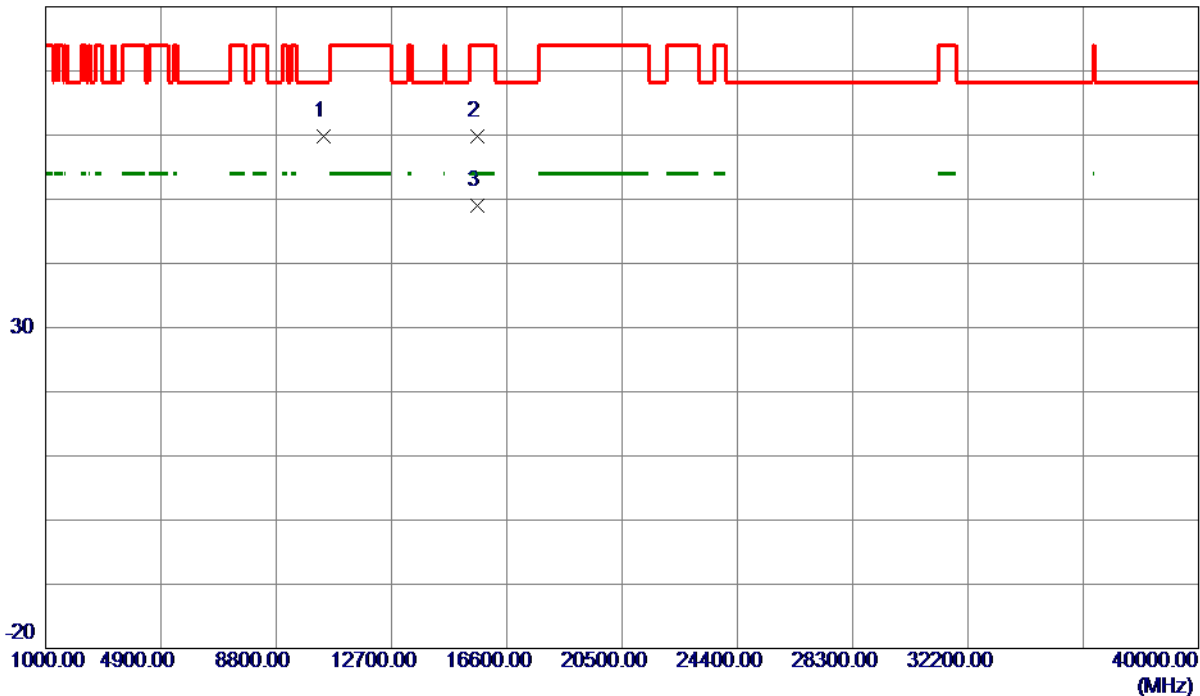
REMARKS:

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

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

Horizontal

80 dBuV/m



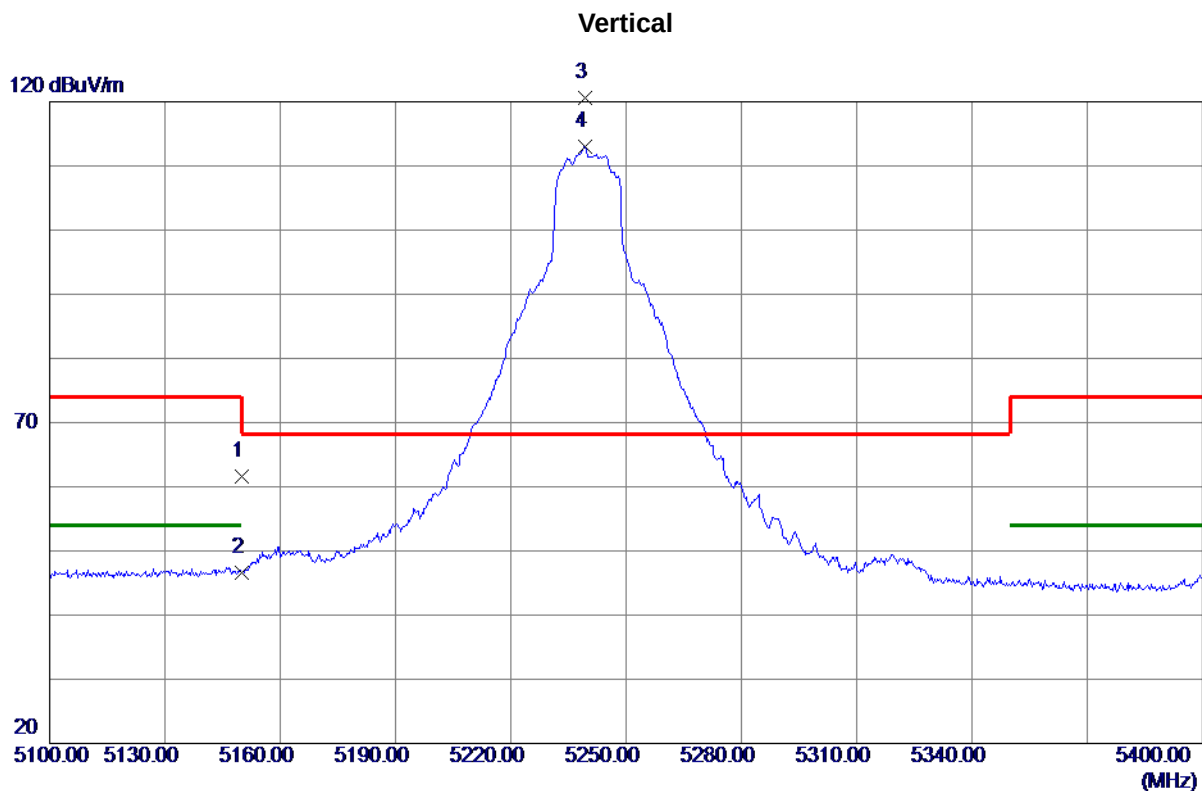
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10399.6840	58.05	1.72	59.77	68.30	-8.53	Peak	
2	15601.1280	56.93	2.87	59.80	74.00	-14.20	Peak	
3 *	15604.5580	46.05	2.87	48.92	54.00	-5.08	AVG	

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 5240 MHz



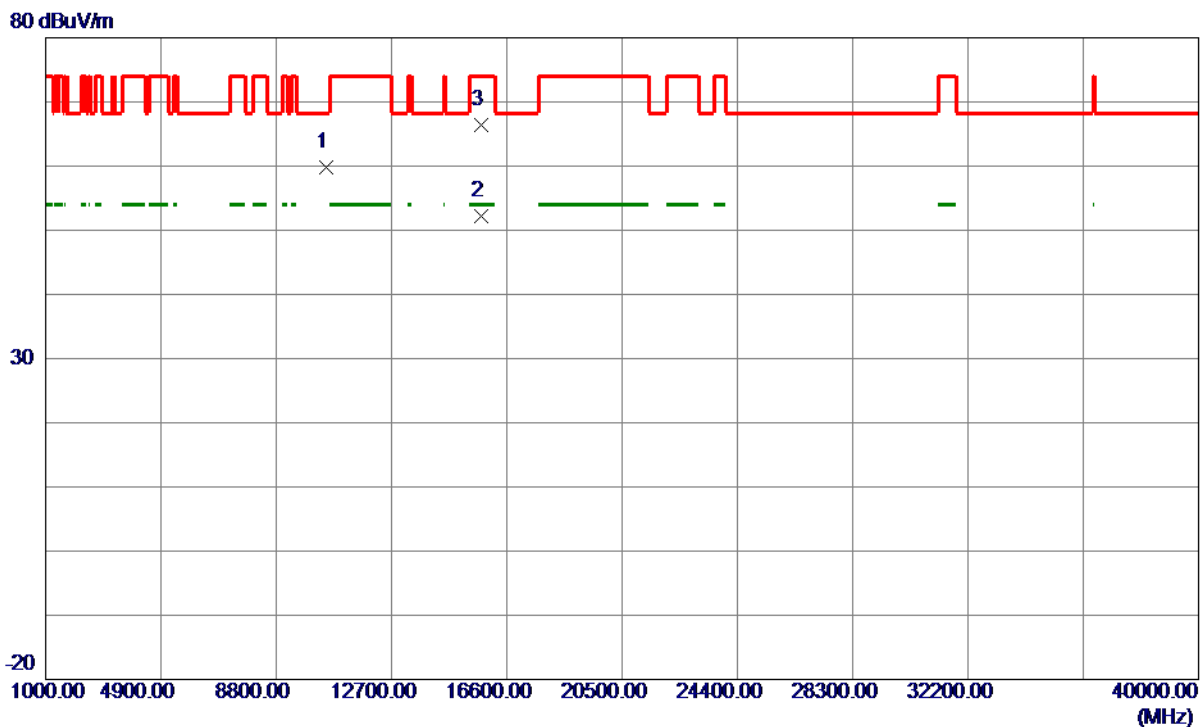
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	23.77	37.88	61.65	74.00	-12.35	Peak	
2	5150.0000	8.74	37.88	46.62	54.00	-7.38	AVG	
3 *	5239.2000	82.96	37.62	120.58	68.30	52.28	Peak	No limit
4	5239.2000	75.47	37.62	113.09	999.00	-885.91	AVG	No limit

REMARKS:

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

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

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10483.7800	57.96	1.80	59.76	68.30	-8.54	Peak	
2 *	15722.9660	49.39	2.74	52.13	54.00	-1.87	AVG	
3	15727.2560	63.57	2.74	66.31	74.00	-7.69	Peak	

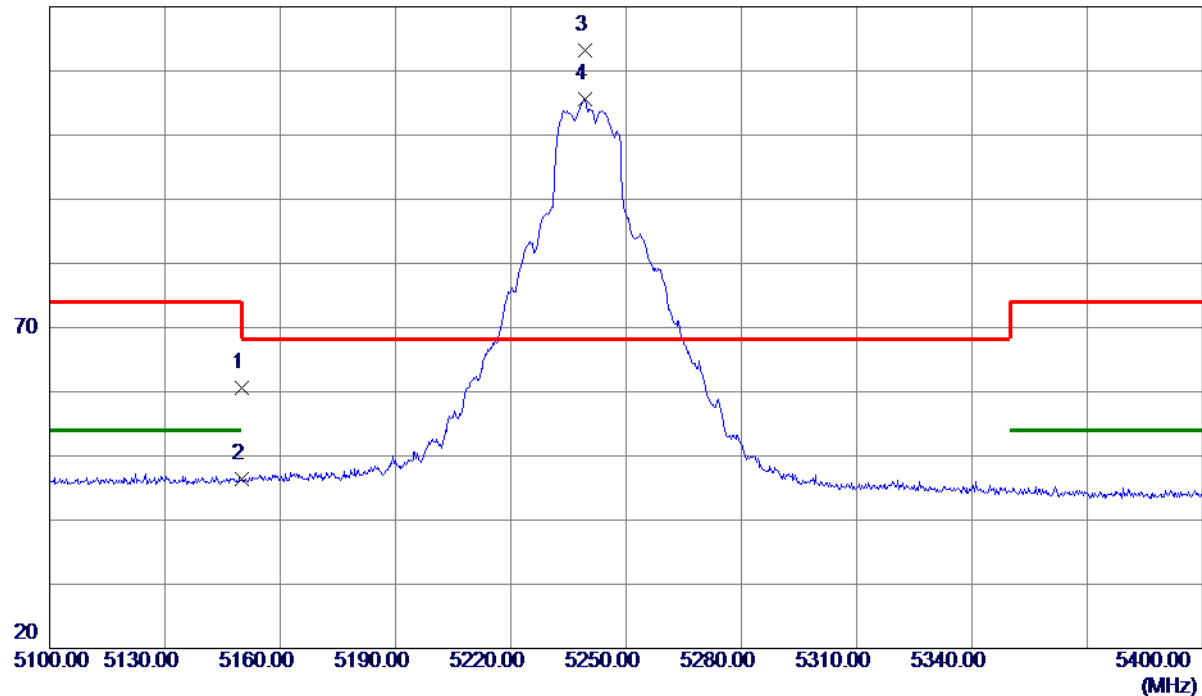
REMARKS:

- (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

120 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	22.69	37.88	60.57	74.00	-13.43	Peak	
2	5150.0000	8.52	37.88	46.40	54.00	-7.60	AVG	
3 *	5239.2000	75.66	37.62	113.28	68.30	44.98	Peak	No limit
4	5239.2000	68.04	37.62	105.66	999.00	-893.34	AVG	No limit

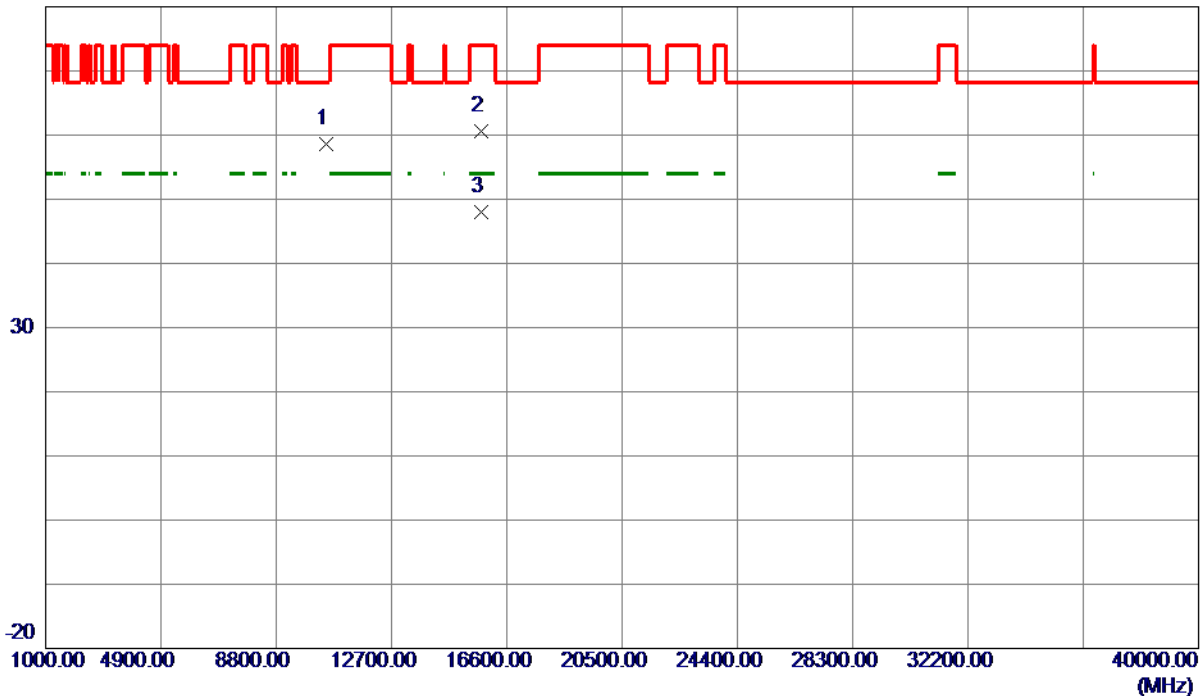
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 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	10483.5660	56.82	1.80	58.62	68.30	-9.68	Peak	
2	15721.1960	57.77	2.75	60.52	74.00	-13.48	Peak	
3 *	15722.7840	45.17	2.75	47.92	54.00	-6.08	AVG	

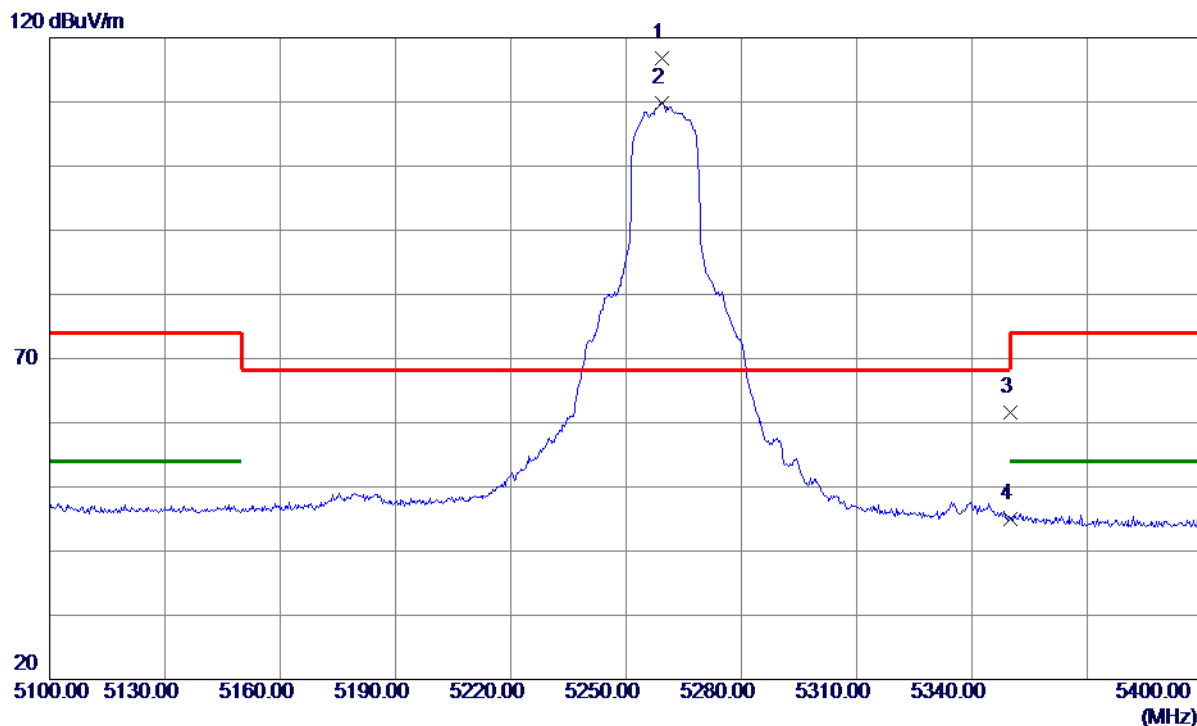
REMARKS:

(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 *	5259.3000	79.16	37.59	116.75	68.30	48.45	Peak	No limit
2	5259.3000	72.27	37.59	109.86	999.00	-889.14	AVG	No limit
3	5350.0000	23.91	37.74	61.65	74.00	-12.35	Peak	
4	5350.0000	7.24	37.74	44.98	54.00	-9.02	AVG	

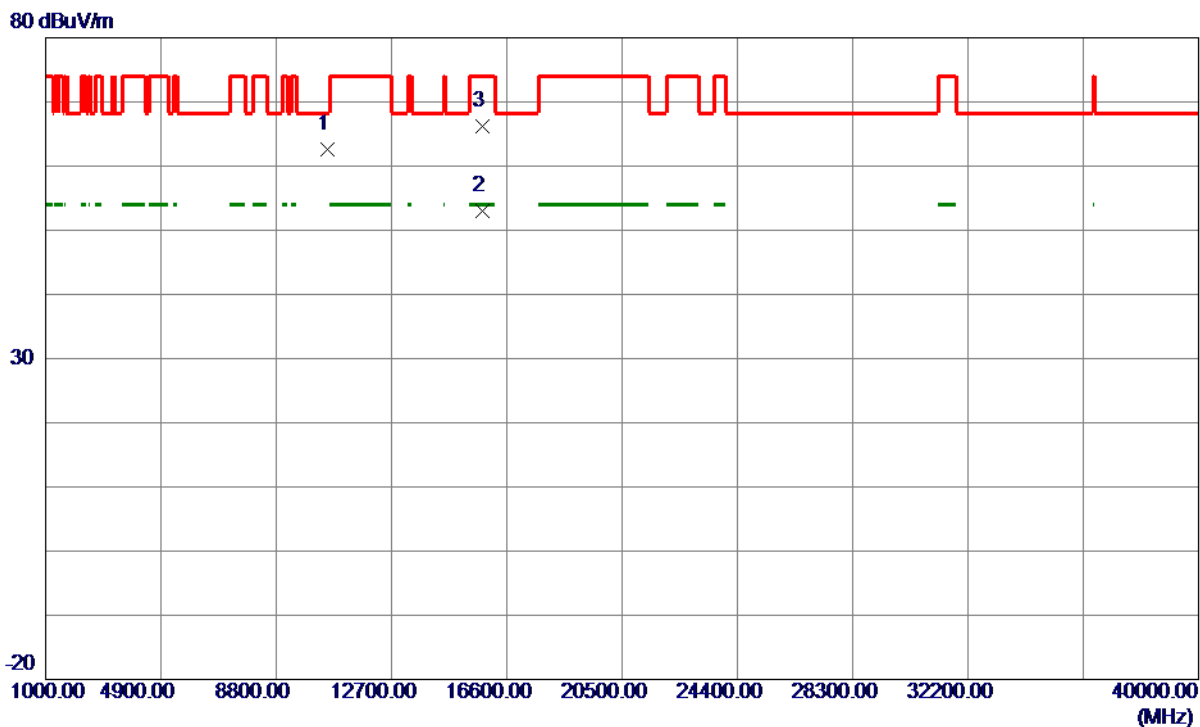
REMARKS:

(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	10514.1840	60.73	1.83	62.56	68.30	-5.74	Peak	
2 *	15781.1180	50.31	2.69	53.00	54.00	-1.00	AVG	
3	15786.3780	63.43	2.68	66.11	74.00	-7.89	Peak	

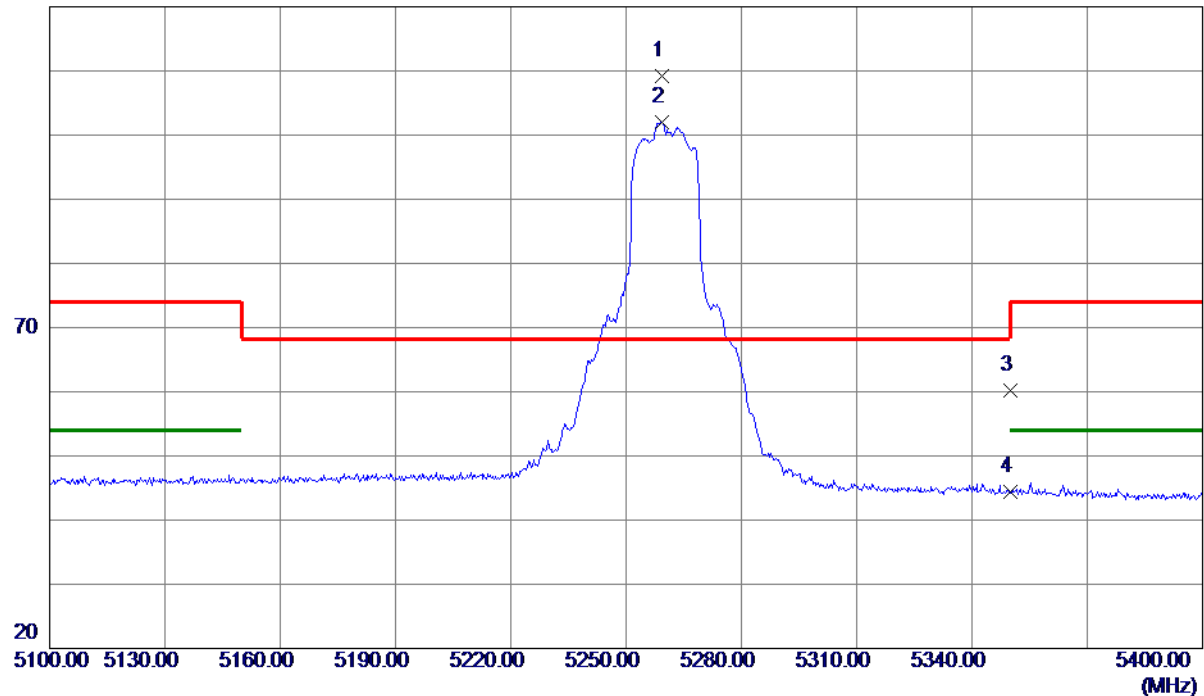
REMARKS:

- (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

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5259.3000	71.69	37.59	109.28	68.30	40.98	Peak	No limit
2	5259.3000	64.43	37.59	102.02	999.00	-896.98	AVG	No limit
3	5350.0000	22.39	37.74	60.13	74.00	-13.87	Peak	
4	5350.0000	6.57	37.74	44.31	54.00	-9.69	AVG	

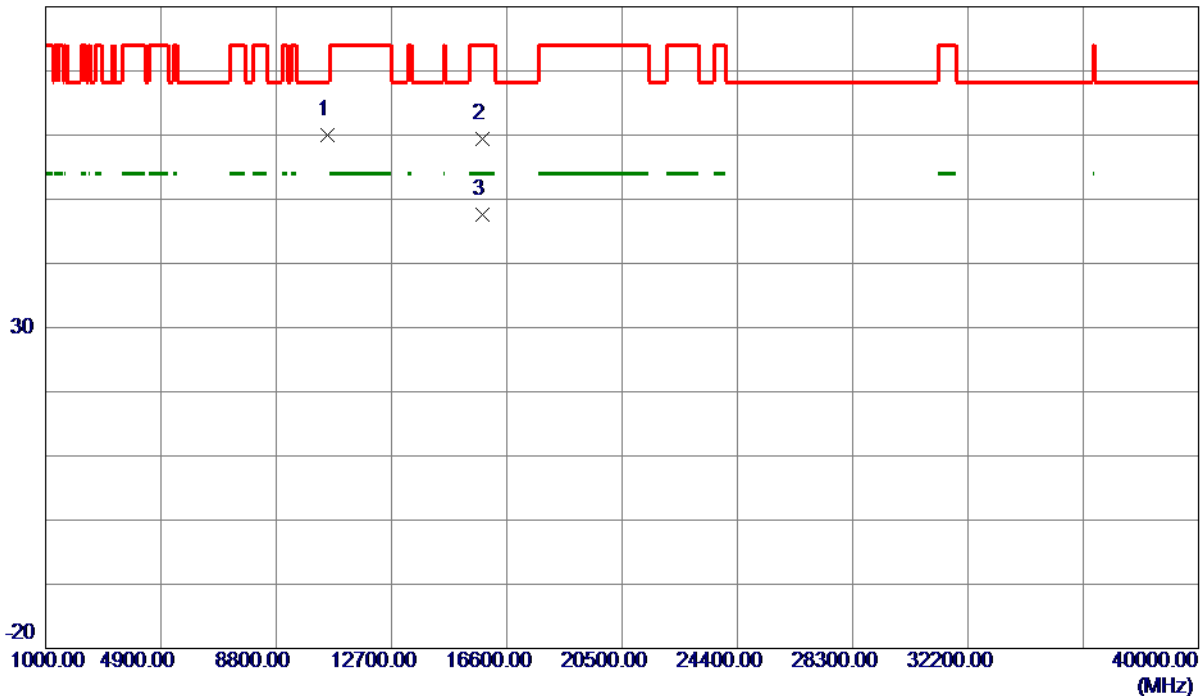
REMARKS:

- (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

Horizontal

80 dBuV/m



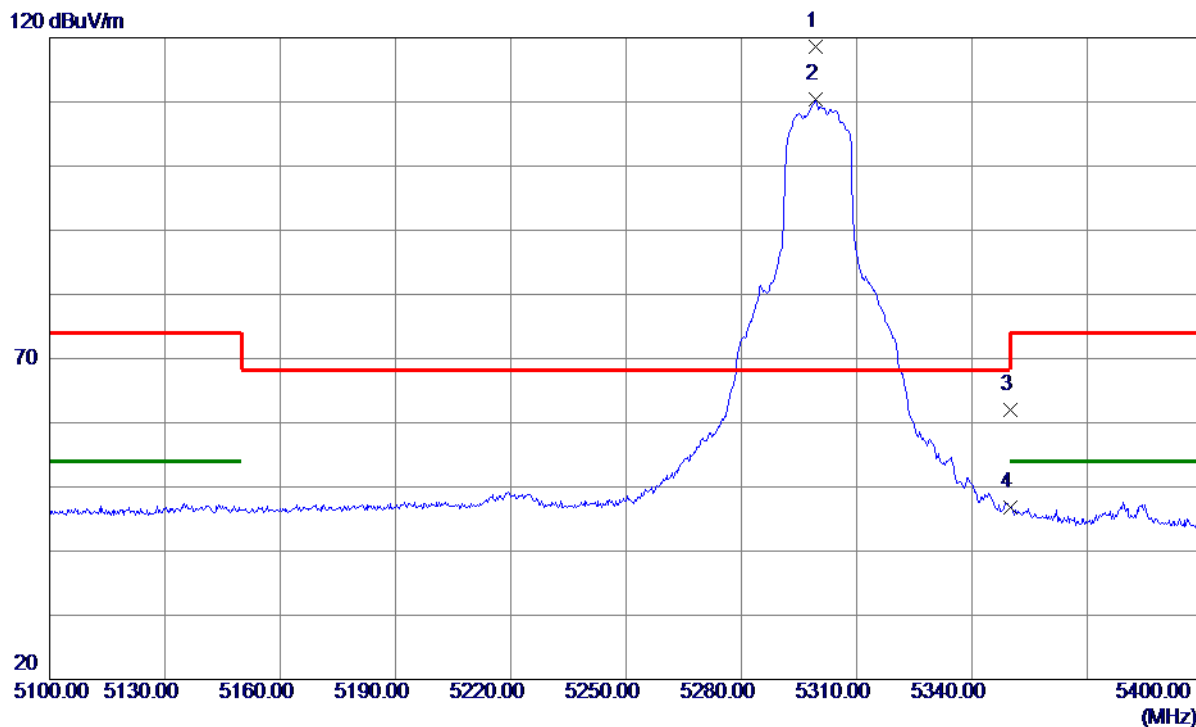
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10519.3420	58.08	1.84	59.92	68.30	-8.38	Peak	
2	15779.6220	56.69	2.69	59.38	74.00	-14.62	Peak	
3 *	15780.0400	44.88	2.69	47.57	54.00	-6.43	AVG	

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 5300 MHz

Vertical



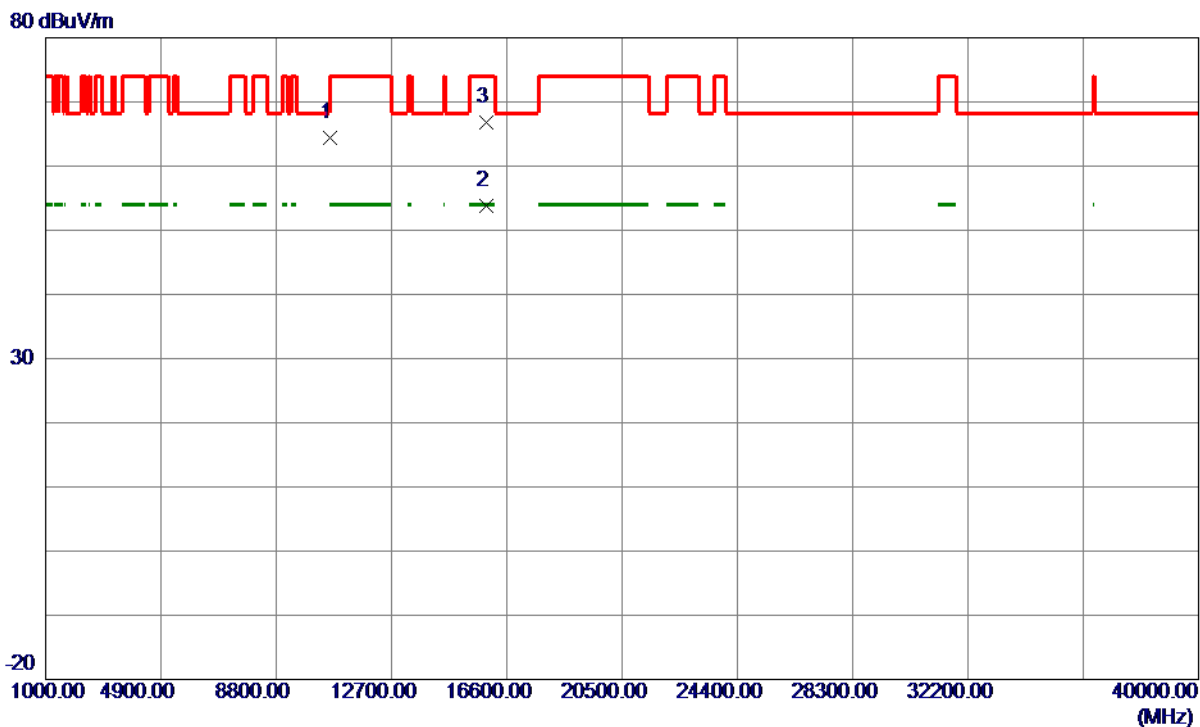
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5299.2000	81.05	37.54	118.59	68.30	50.29	Peak	No limit
2	5299.2000	72.77	37.54	110.31	999.00	-888.69	AVG	No limit
3	5350.0000	24.27	37.74	62.01	74.00	-11.99	Peak	
4	5350.0000	9.02	37.74	46.76	54.00	-7.24	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 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	10598.7270	62.52	1.92	64.44	68.30	-3.86	Peak	
2 *	15898.5860	51.16	2.61	53.77	54.00	-0.23	AVG	
3	15908.6080	64.17	2.60	66.77	74.00	-7.23	Peak	

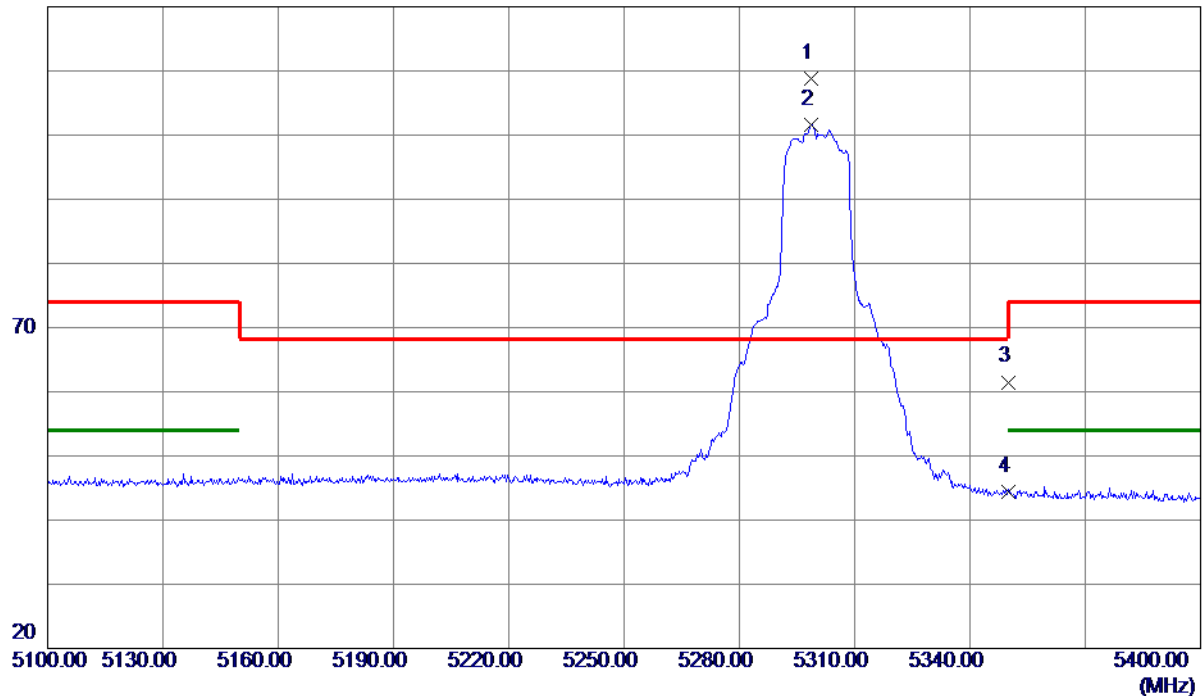
REMARKS:

- (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

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5298.6000	71.34	37.54	108.88	68.30	40.58	Peak	No limit
2	5298.6000	64.09	37.54	101.63	999.00	-897.37	AVG	No limit
3	5350.0000	23.76	37.74	61.50	74.00	-12.50	Peak	
4	5350.0000	6.62	37.74	44.36	54.00	-9.64	AVG	

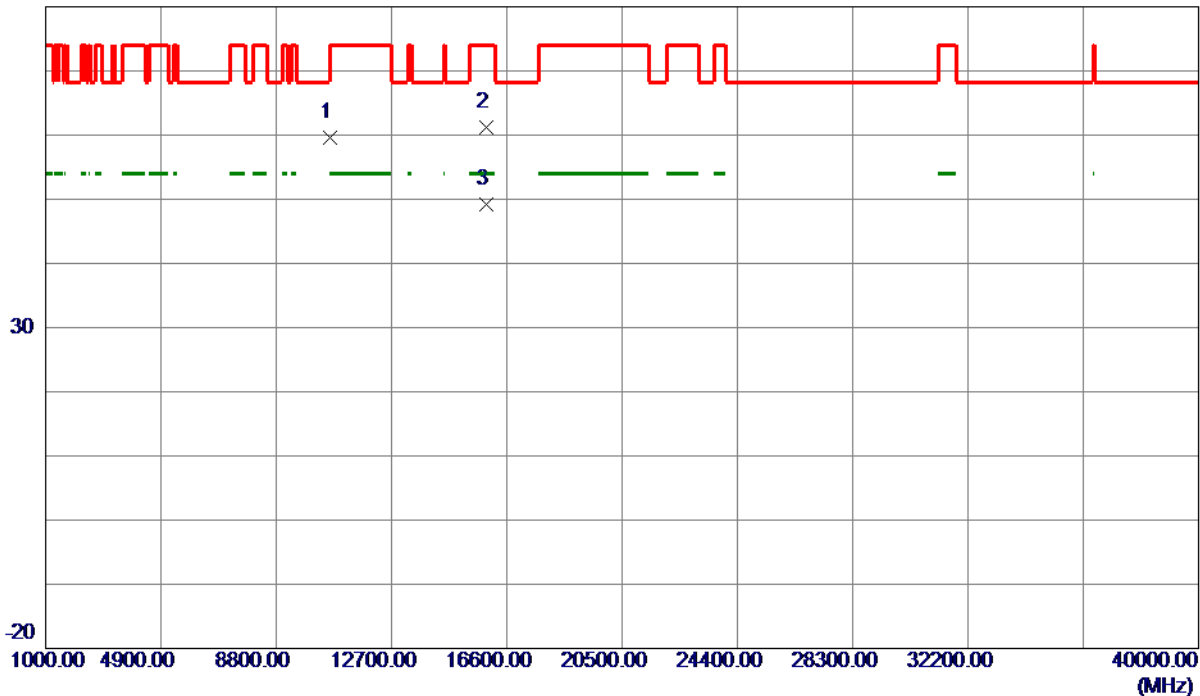
REMARKS:

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

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

Horizontal

80 dBuV/m



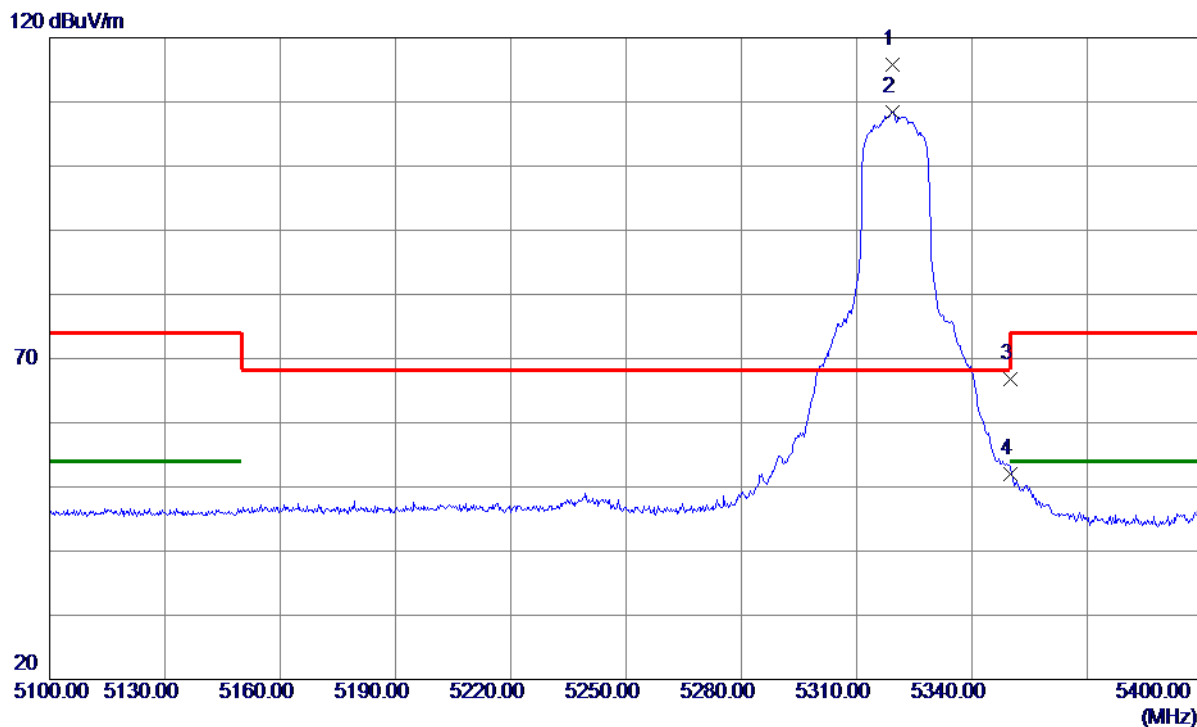
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10598.7370	57.66	1.92	59.58	68.30	-8.72	Peak	
2	15902.3880	58.68	2.60	61.28	74.00	-12.72	Peak	
3 *	15902.9300	46.60	2.60	49.20	54.00	-4.80	AVG	

REMARKS:

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

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

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5319.3000	78.21	37.61	115.82	68.30	47.52	Peak	No limit
2	5319.3000	70.83	37.61	108.44	999.00	-890.56	AVG	No limit
3	5350.0000	29.01	37.74	66.75	74.00	-7.25	Peak	
4	5350.0000	14.26	37.74	52.00	54.00	-2.00	AVG	

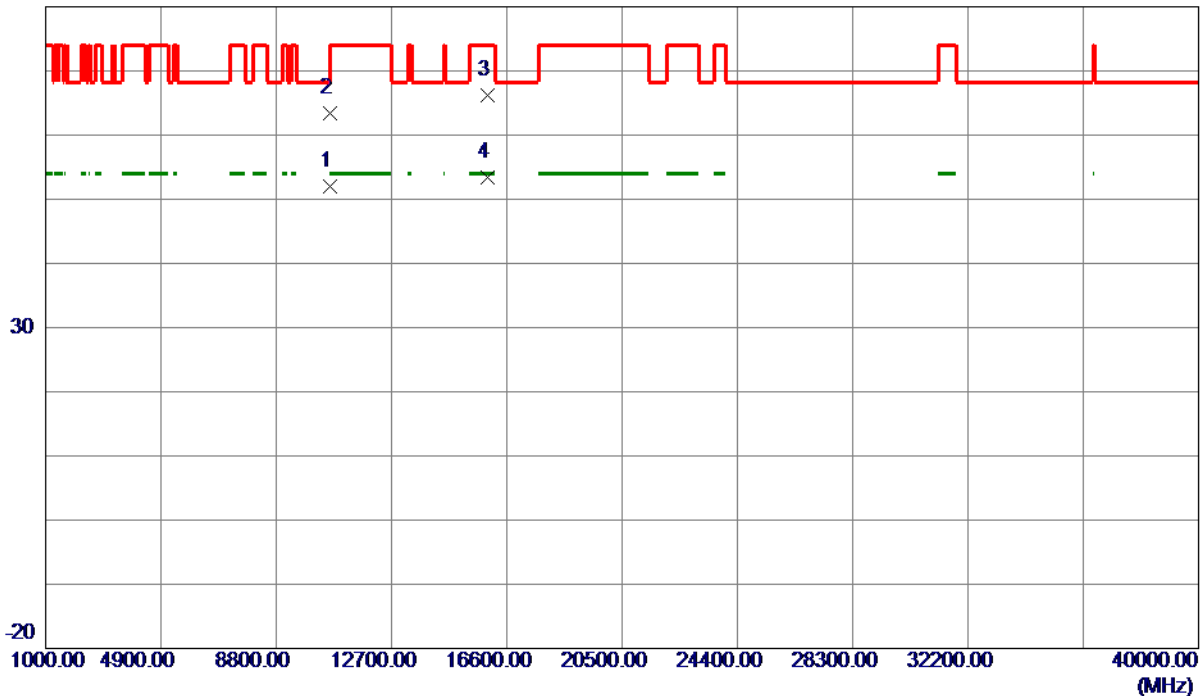
REMARKS:

- (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	10638.9200	50.04	1.94	51.98	54.00	-2.02	AVG	
2	10639.2240	61.44	1.94	63.38	74.00	-10.62	Peak	
3	15958.3860	63.65	2.57	66.22	74.00	-7.78	Peak	
4 *	15958.5980	50.79	2.57	53.36	54.00	-0.64	AVG	

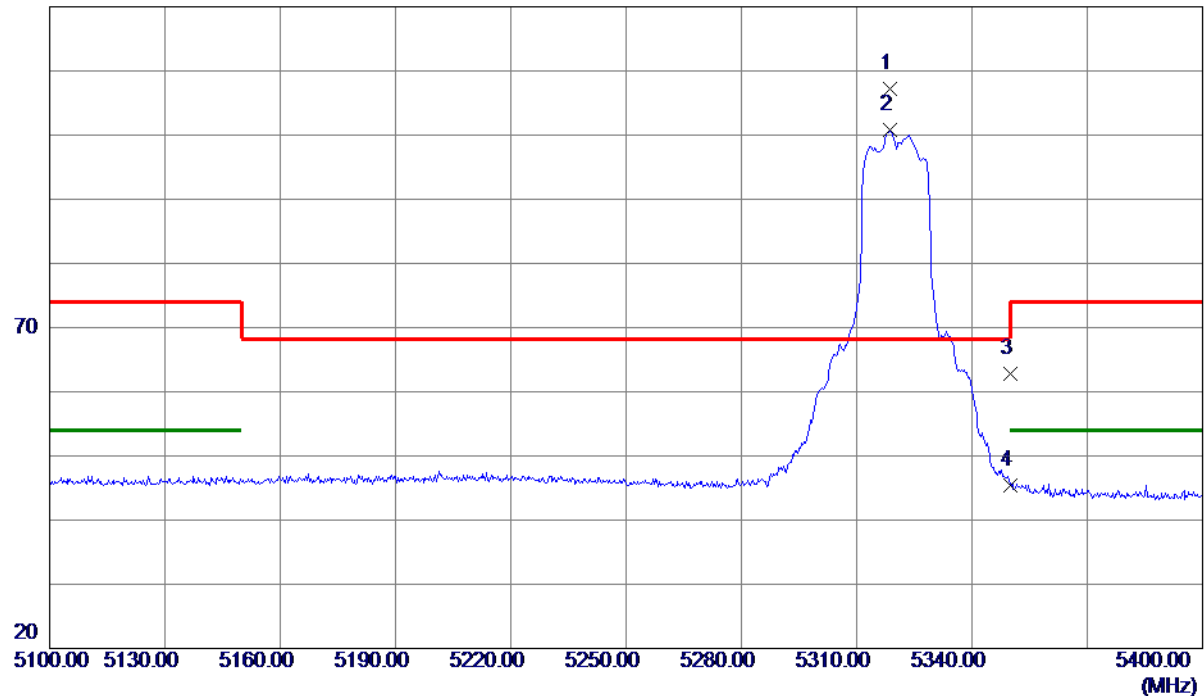
REMARKS:

- (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

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5318.7000	69.50	37.61	107.11	68.30	38.81	Peak	No limit
2	5318.7000	63.14	37.61	100.75	999.00	-898.25	AVG	No limit
3	5350.0000	25.11	37.74	62.85	74.00	-11.15	Peak	
4	5350.0000	7.68	37.74	45.42	54.00	-8.58	AVG	

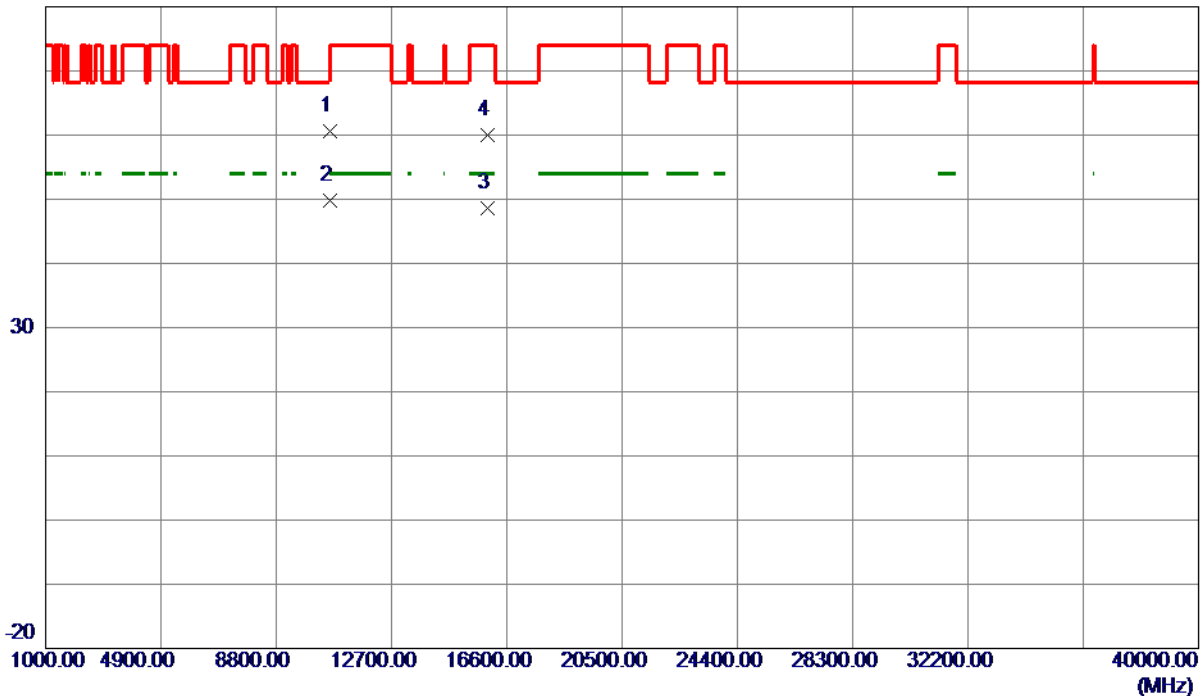
REMARKS:

- (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

80 dBuV/m



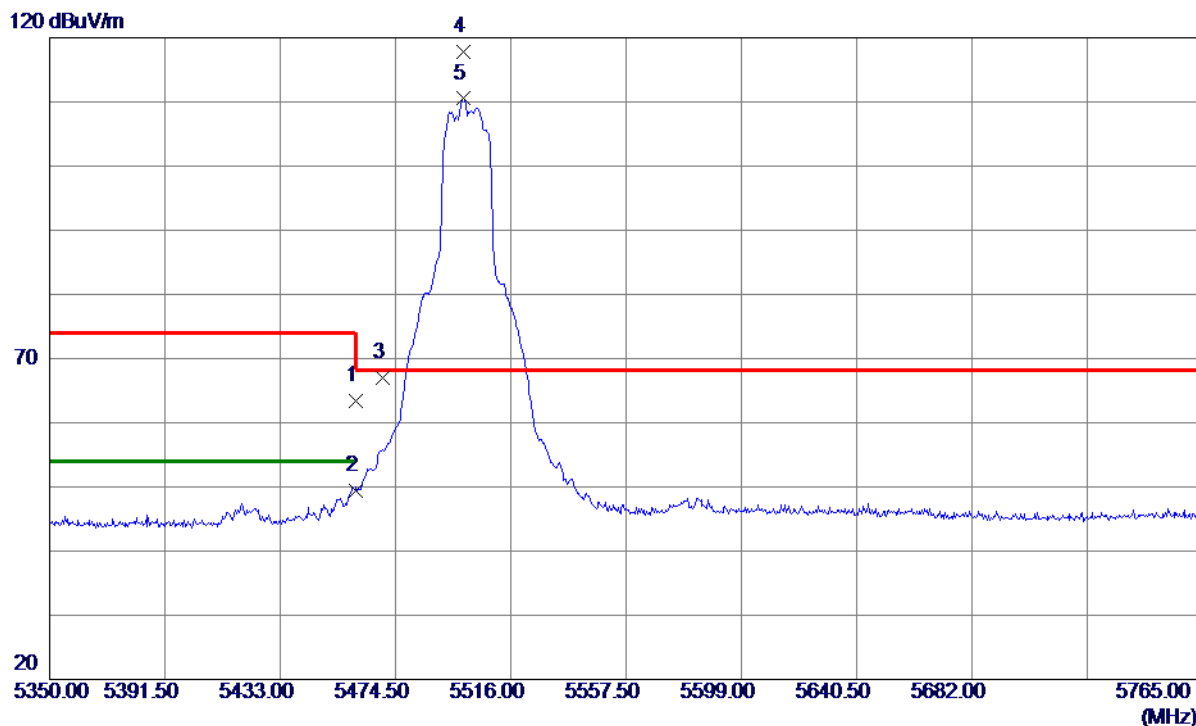
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10634.2240	58.70	1.93	60.63	74.00	-13.37	Peak	
2 *	10639.2779	47.87	1.94	49.81	54.00	-4.19	AVG	
3	15957.2940	46.06	2.57	48.63	54.00	-5.37	AVG	
4	15957.5240	57.44	2.57	60.01	74.00	-13.99	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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5460.0000	25.27	38.12	63.39	74.00	-10.61	Peak	
2	5460.0000	11.30	38.12	49.42	54.00	-4.58	AVG	
3	5470.0000	28.88	38.15	67.03	68.30	-1.27	Peak	
4 *	5498.9850	79.60	38.24	117.84	68.30	49.54	Peak	No limit
5	5498.9850	72.26	38.24	110.50	999.00	-888.50	AVG	No limit

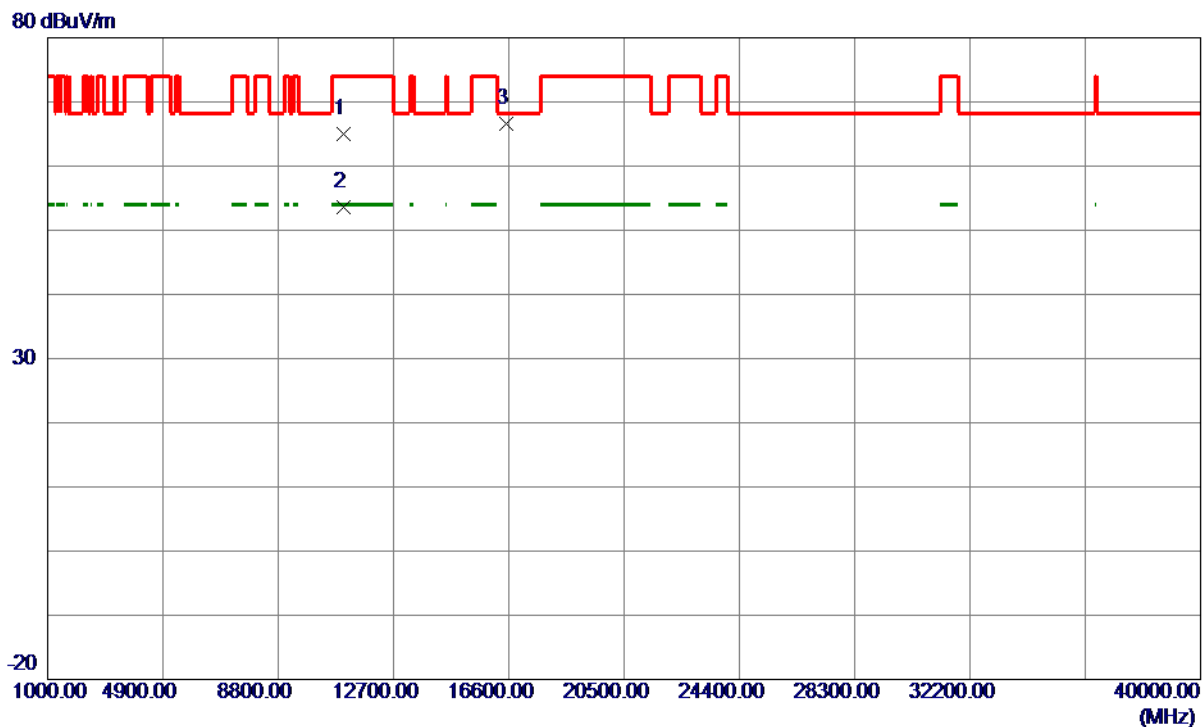
REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 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	10998.6120	62.59	2.34	64.93	74.00	-9.07	Peak	
2 *	11003.1200	51.33	2.33	53.66	54.00	-0.34	AVG	
3	16495.3160	62.70	3.98	66.68	68.30	-1.62	Peak	

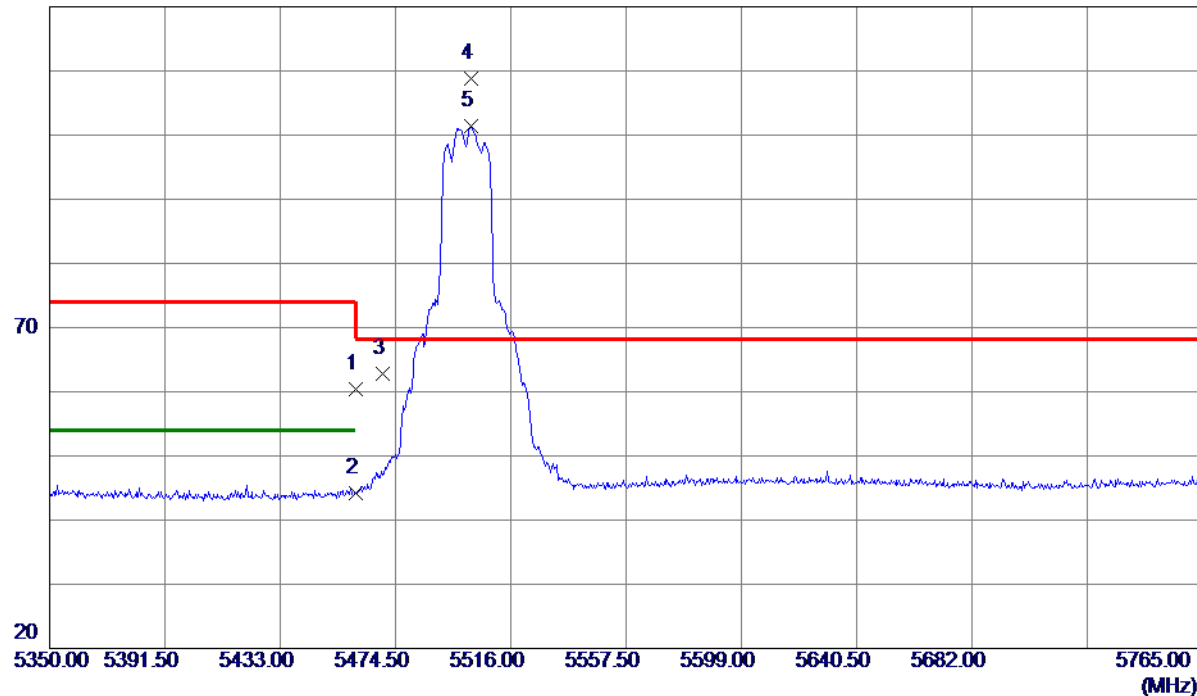
REMARKS:

- (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

120 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	22.36	38.12	60.48	74.00	-13.52	Peak	
2	5460.0000	6.16	38.12	44.28	54.00	-9.72	AVG	
3	5470.0000	24.72	38.15	62.87	68.30	-5.43	Peak	
4 *	5501.4750	70.50	38.24	108.74	68.30	40.44	Peak	No limit
5	5501.4750	63.10	38.24	101.34	999.00	-897.66	AVG	No limit

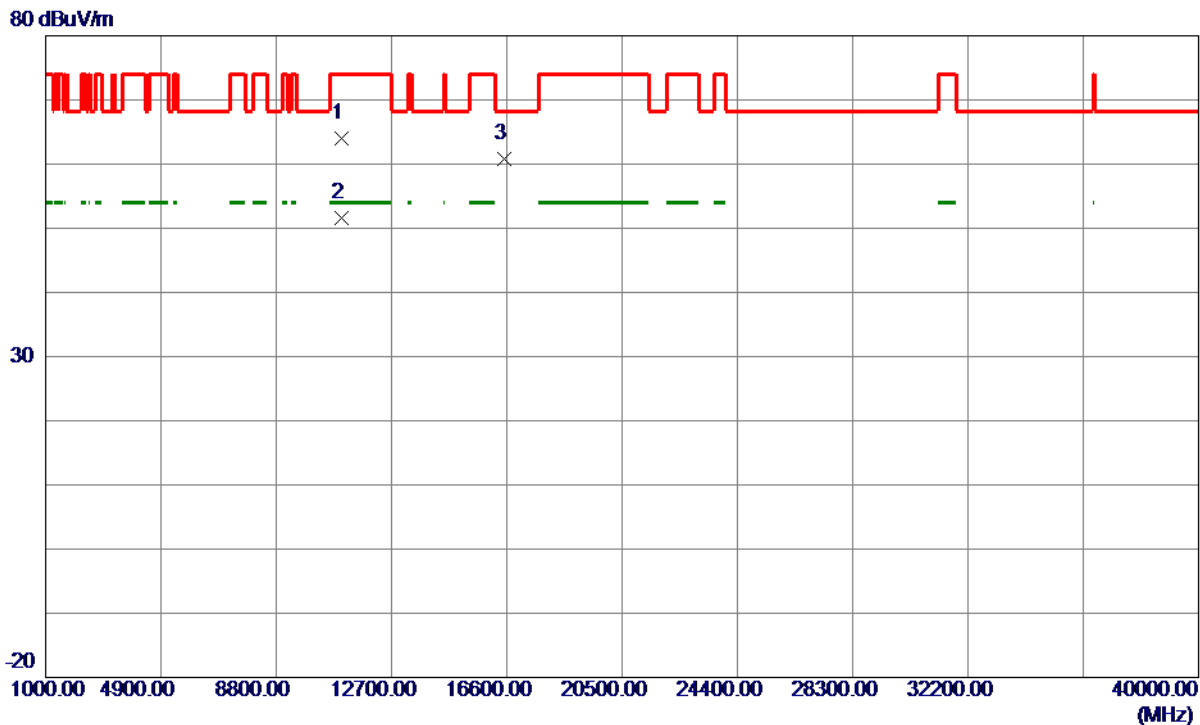
REMARKS:

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

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

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

Horizontal



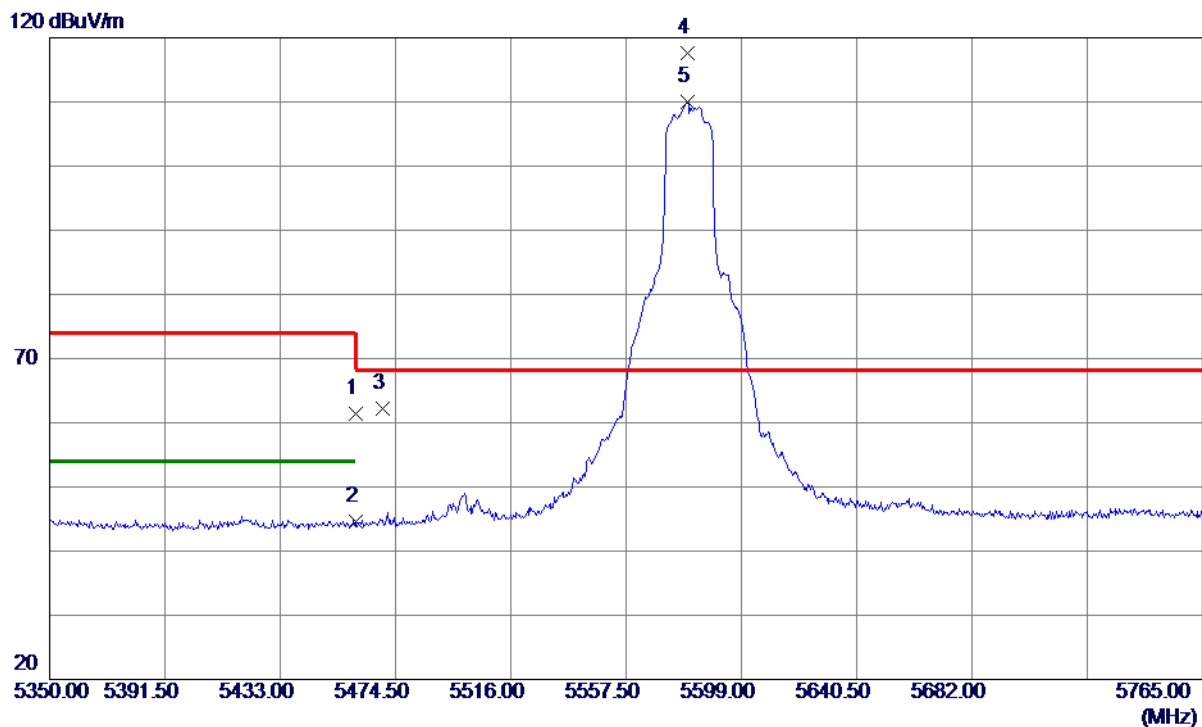
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10998.8179	61.61	2.34	63.95	74.00	-10.05	Peak	
2 *	11003.7100	49.34	2.33	51.67	54.00	-2.33	AVG	
3	16494.1880	56.84	3.98	60.82	68.30	-7.48	Peak	

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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5460.0000	23.33	38.12	61.45	74.00	-12.55	Peak	
2	5460.0000	6.57	38.12	44.69	54.00	-9.31	AVG	
3	5470.0000	24.11	38.15	62.26	68.30	-6.04	Peak	
4 *	5579.4950	79.30	38.32	117.62	68.30	49.32	Peak	No limit
5	5579.4950	71.67	38.32	109.99	999.00	-889.01	AVG	No limit

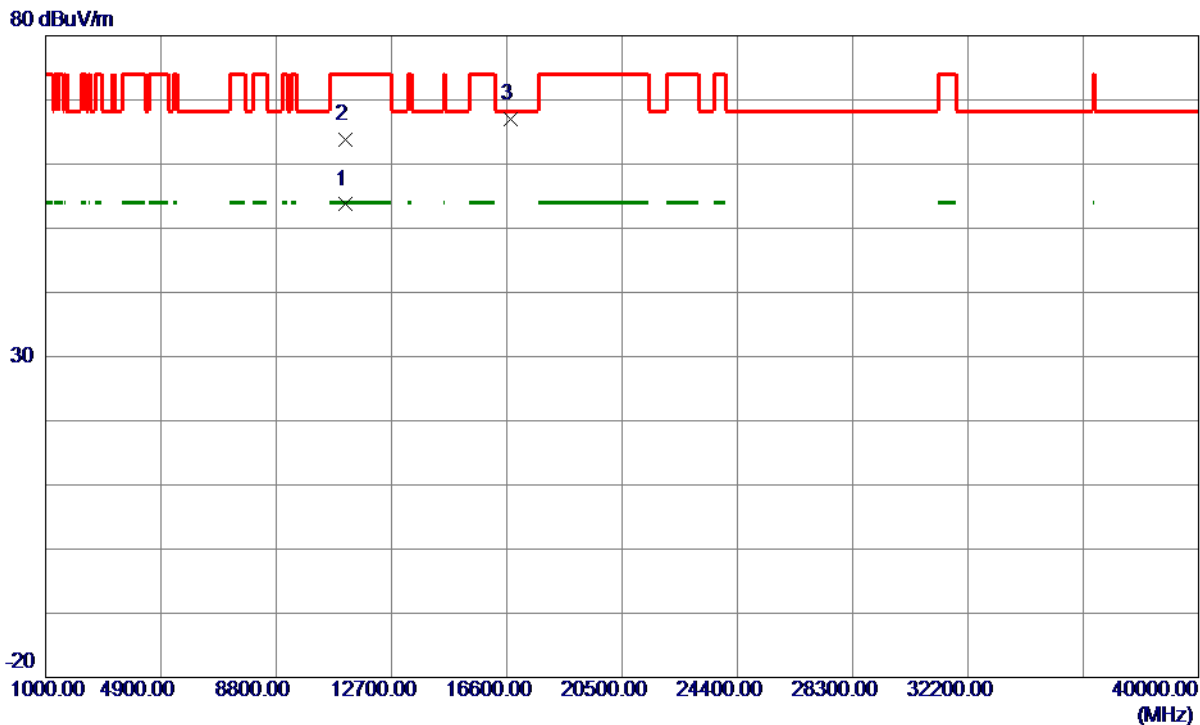
REMARKS:

(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 *	11158.7400	51.66	2.04	53.70	54.00	-0.30	AVG	
2	11158.8120	61.75	2.04	63.79	74.00	-10.21	Peak	
3	16741.5500	62.32	4.76	67.08	68.30	-1.22	Peak	

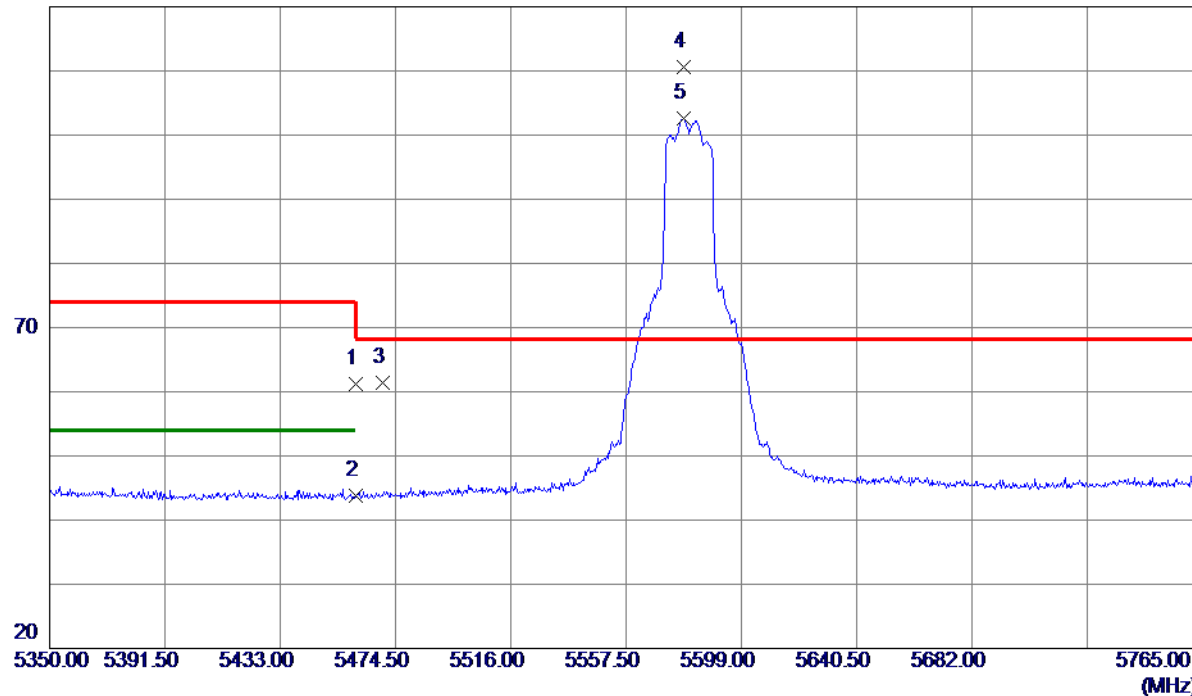
REMARKS:

- (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

120 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	23.01	38.12	61.13	74.00	-12.87	Peak	
2	5460.0000	5.61	38.12	43.73	54.00	-10.27	AVG	
3	5470.0000	23.17	38.15	61.32	68.30	-6.98	Peak	
4 *	5578.2500	72.36	38.32	110.68	68.30	42.38	Peak	No limit
5	5578.2500	64.26	38.32	102.58	999.00	-896.42	AVG	No limit

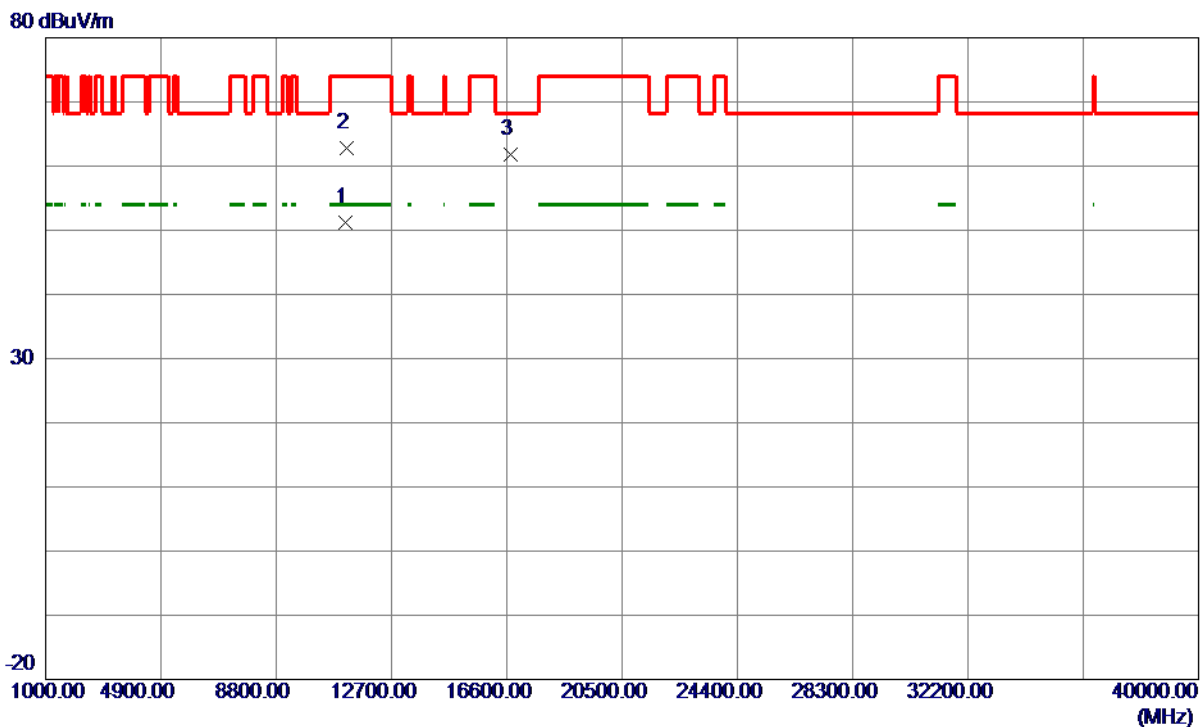
REMARKS:

(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



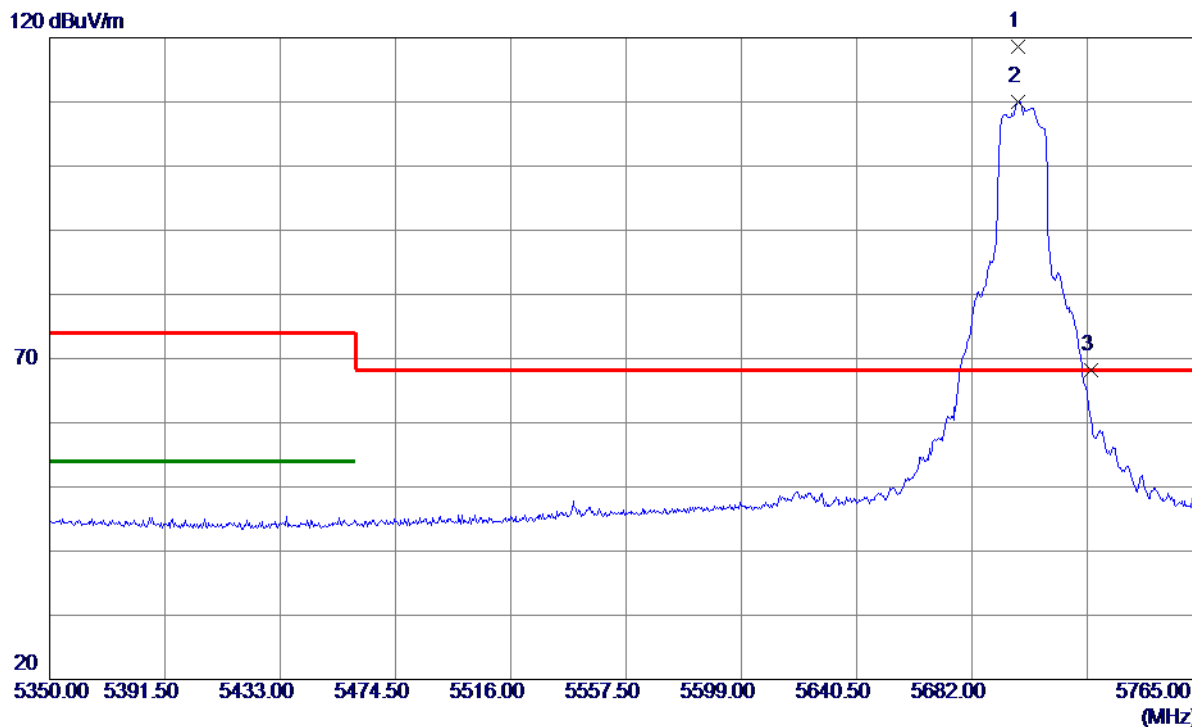
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11158.4820	49.20	2.04	51.24	54.00	-2.76	AVG	
2	11162.6760	60.69	2.03	62.72	74.00	-11.28	Peak	
3	16734.9860	56.97	4.74	61.71	68.30	-6.59	Peak	

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



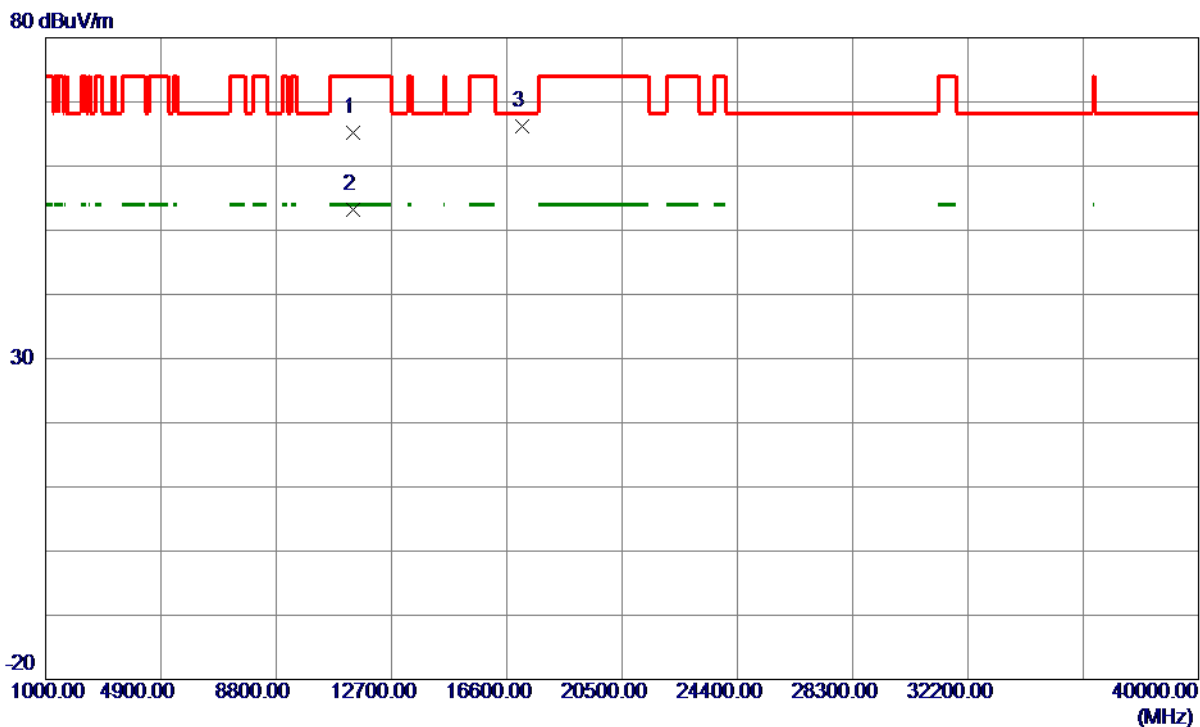
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5698.6000	80.21	38.40	118.61	68.30	50.31	Peak	No limit
2	5698.6000	71.64	38.40	110.04	999.00	-888.96	AVG	No limit
3	5725.0000	29.62	38.50	68.12	68.30	-0.18	Peak	

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	11400.5980	63.06	2.13	65.19	74.00	-8.81	Peak	
2 *	11401.4360	51.06	2.13	53.19	54.00	-0.81	AVG	
3	17101.5600	60.24	5.94	66.18	68.30	-2.12	Peak	

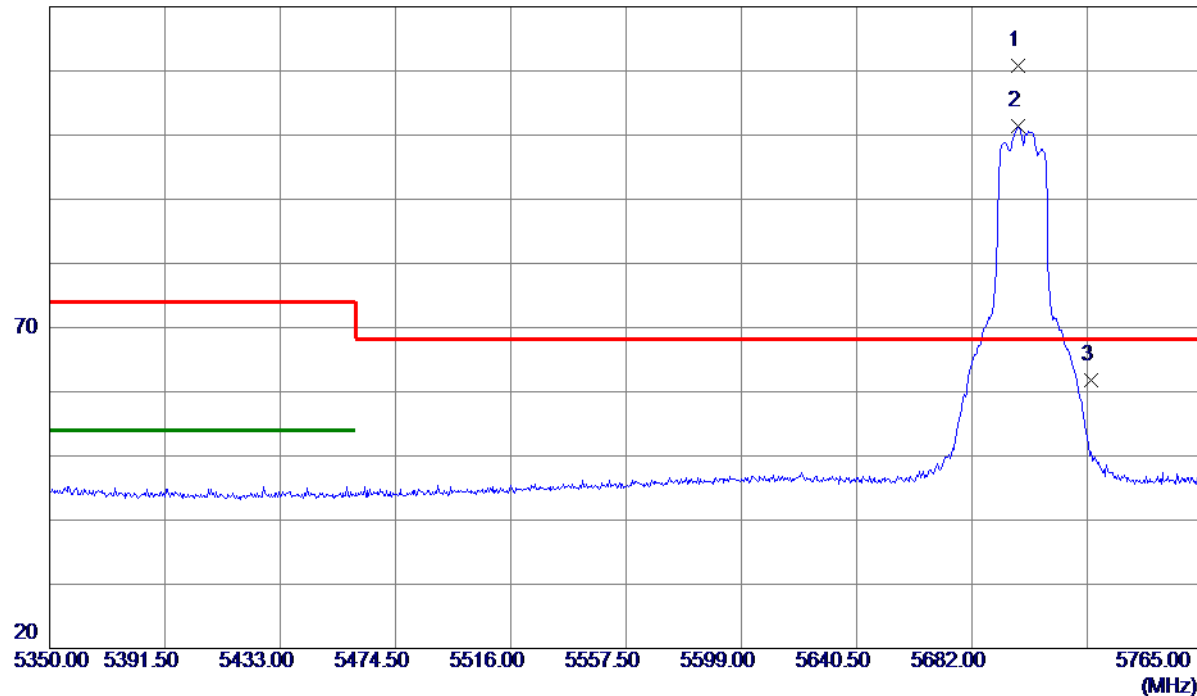
REMARKS:

- (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

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5698.6000	72.31	38.40	110.71	68.30	42.41	Peak	No limit
2	5698.6000	62.92	38.40	101.32	999.00	-897.68	AVG	No limit
3	5725.0000	23.24	38.50	61.74	68.30	-6.56	Peak	

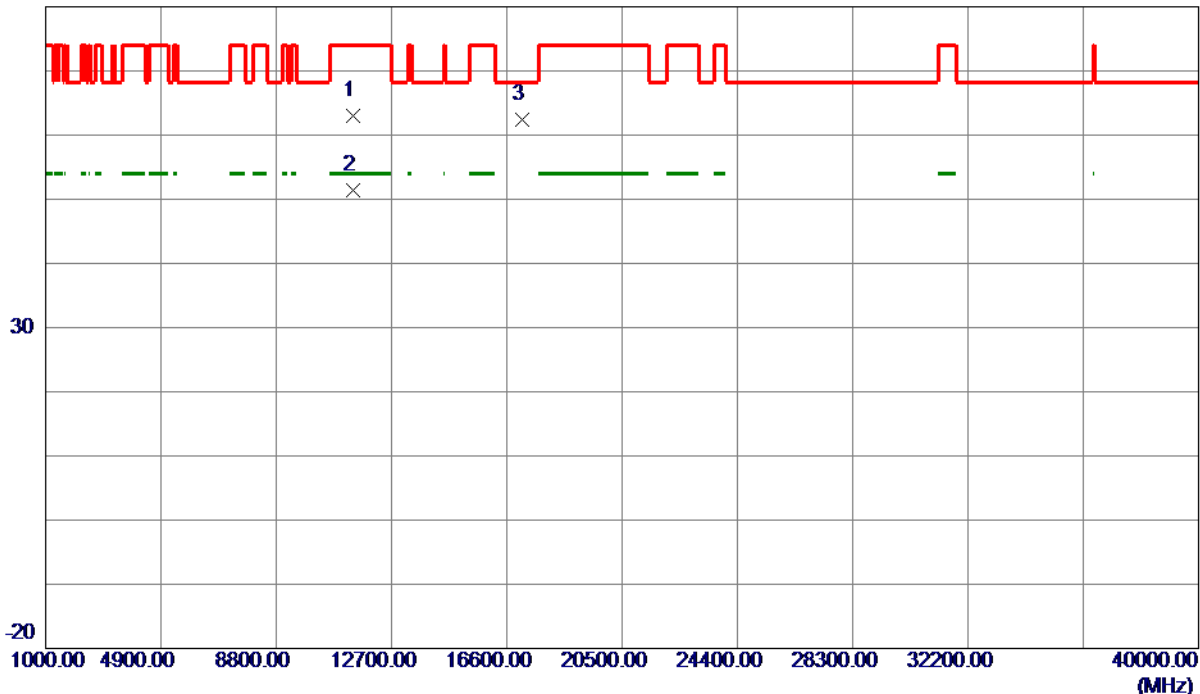
REMARKS:

- (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	11401.9580	60.87	2.13	63.00	74.00	-11.00	Peak	
2 *	11402.2740	49.21	2.13	51.34	54.00	-2.66	AVG	
3	17106.5940	56.48	5.97	62.45	68.30	-5.85	Peak	

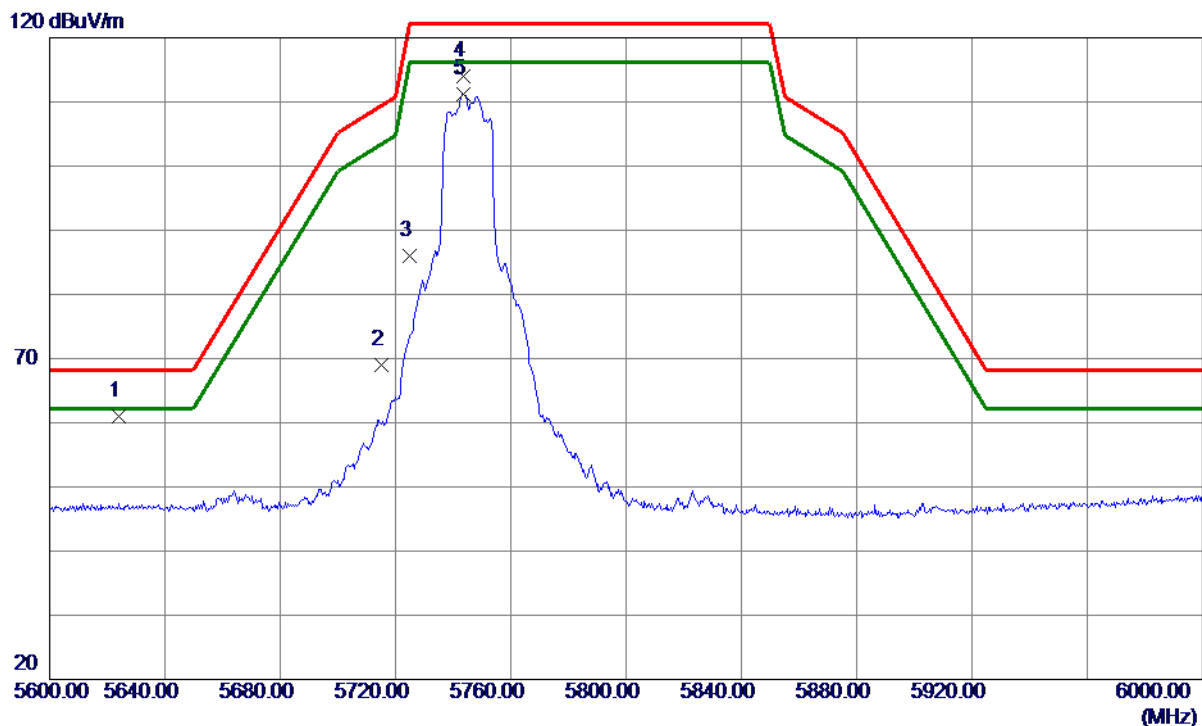
REMARKS:

(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 *	5624.0000	22.63	38.36	60.99	68.20	-7.21	Peak	
2	5715.0000	30.61	38.46	69.07	109.40	-40.33	Peak	
3	5725.0000	47.53	38.50	86.03	122.20	-36.17	Peak	
4	5743.6000	75.33	38.57	113.90	122.20	-8.30	Peak	
5	5743.6000	72.59	38.57	111.16	122.20	-11.04	AVG	

REMARKS:

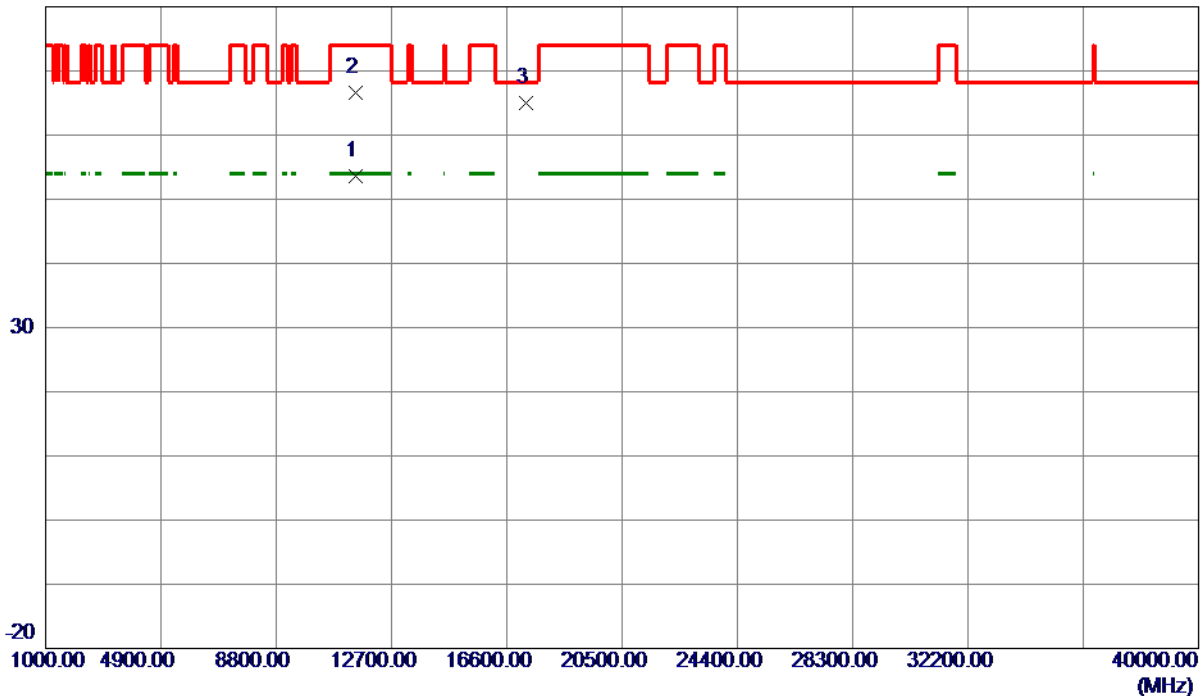
(1) Measurement Value = Reading Level + Correct Factor.

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

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

Vertical

80 dBuV/m



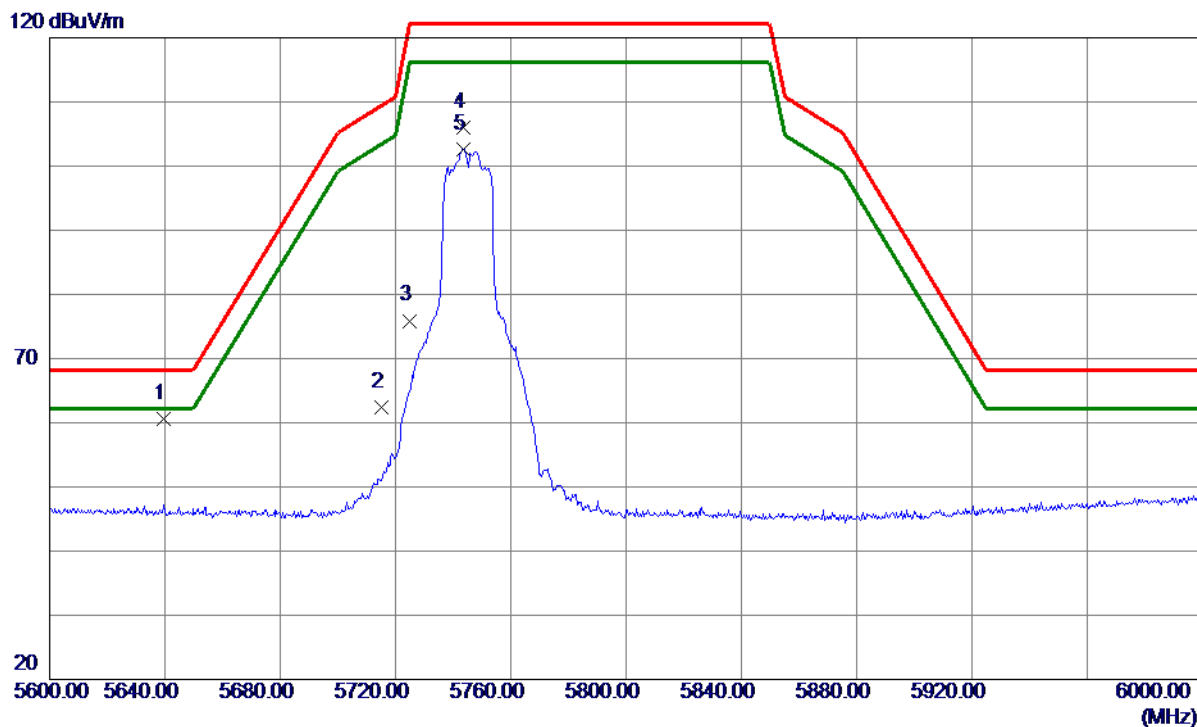
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	11491.2440	51.47	2.21	53.68	54.00	-0.32	AVG	
2	11491.6800	64.34	2.21	66.55	74.00	-7.45	Peak	
3	17242.7980	58.42	6.68	65.10	68.30	-3.20	Peak	

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 *	5639.6000	22.31	38.37	60.68	68.20	-7.52	Peak	
2	5715.0000	23.90	38.46	62.36	109.40	-47.04	Peak	
3	5725.0000	37.40	38.50	75.90	122.20	-46.30	Peak	
4	5743.6000	67.42	38.57	105.99	122.20	-16.21	Peak	
5	5743.6000	64.11	38.57	102.68	122.20	-19.52	AVG	

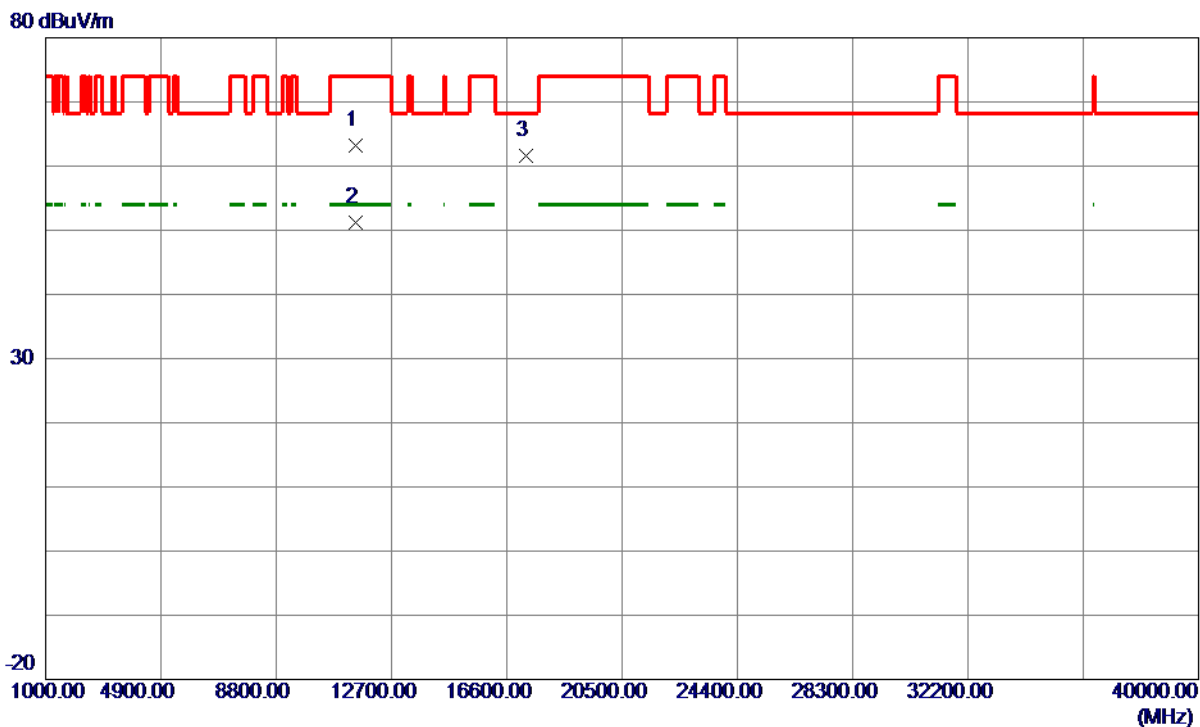
REMARKS:

(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

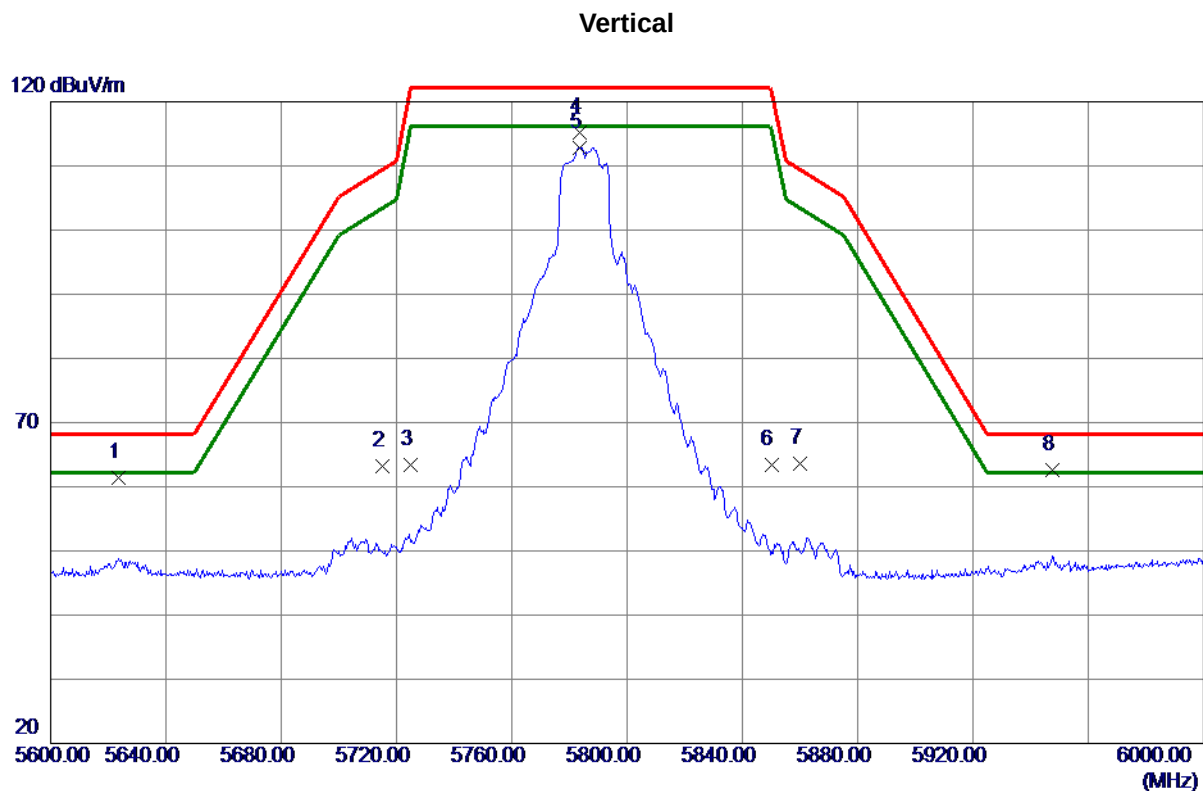


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11485.9860	60.92	2.20	63.12	74.00	-10.88	Peak	
2 *	11491.6780	49.06	2.21	51.27	54.00	-2.73	AVG	
3	17241.1140	54.91	6.67	61.58	68.30	-6.72	Peak	

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



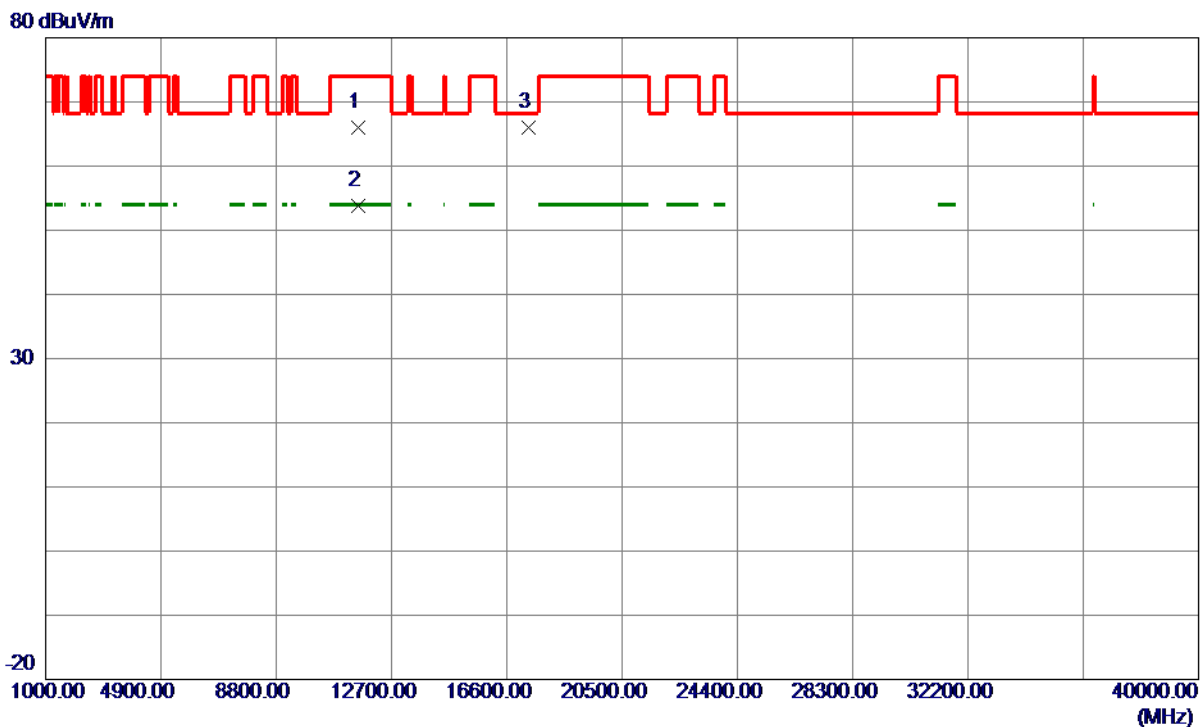
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5623.6000	23.12	38.36	61.48	68.20	-6.72	Peak	
2	5715.0000	24.74	38.46	63.20	109.40	-46.20	Peak	
3	5725.0000	24.89	38.50	63.39	122.20	-58.81	Peak	
4	5783.6000	76.42	38.72	115.14	122.20	-7.06	Peak	
5	5783.6000	74.12	38.72	112.84	122.20	-9.36	AVG	
6	5850.0000	24.57	38.91	63.48	122.20	-58.72	Peak	
7	5860.0000	24.75	38.94	63.69	109.40	-45.71	Peak	
8 *	5947.6000	23.45	39.15	62.60	68.20	-5.60	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



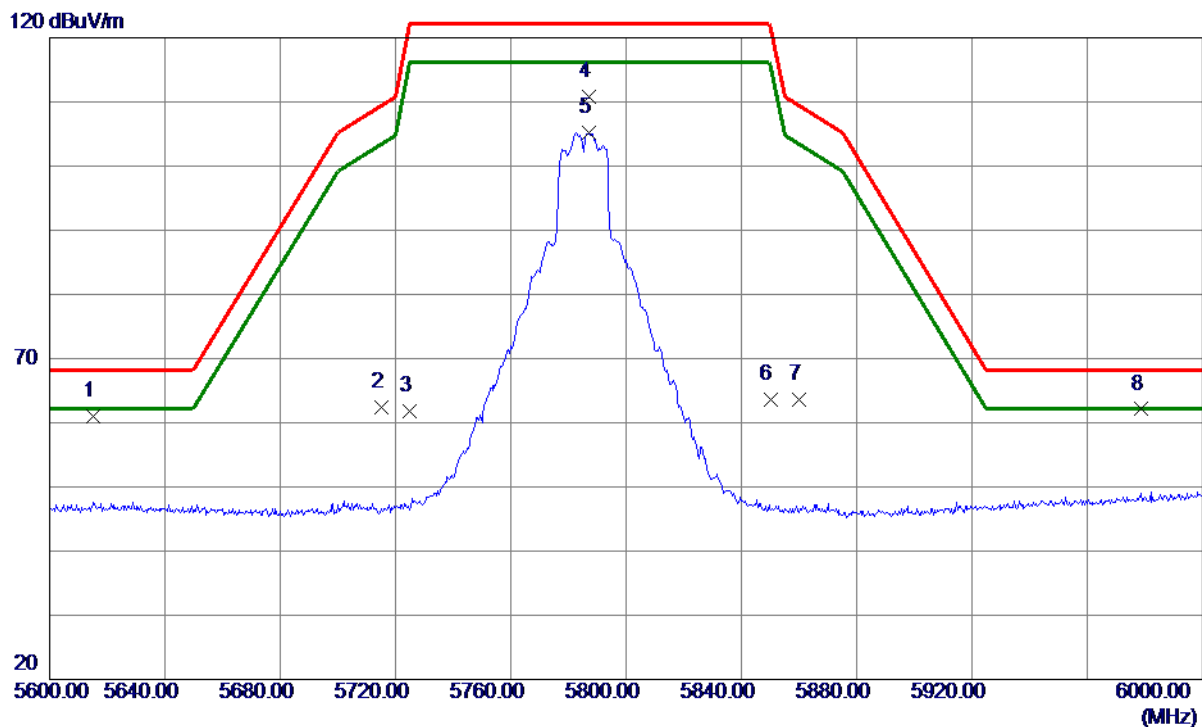
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11571.8339	63.70	2.28	65.98	74.00	-8.02	Peak	
2 *	11572.1760	51.45	2.28	53.73	54.00	-0.27	AVG	
3	17350.3460	58.59	7.35	65.94	68.30	-2.36	Peak	

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	5615.2000	22.56	38.35	60.91	68.20	-7.29	Peak	
2	5715.0000	23.94	38.46	62.40	109.40	-47.00	Peak	
3	5725.0000	23.25	38.50	61.75	122.20	-60.45	Peak	
4	5787.2000	72.14	38.73	110.87	122.20	-11.33	Peak	
5	5787.2000	66.49	38.73	105.22	122.20	-16.98	AVG	
6	5850.0000	24.77	38.91	63.68	122.20	-58.52	Peak	
7	5860.0000	24.73	38.94	63.67	109.40	-45.73	Peak	
8 *	5978.8000	22.89	39.21	62.10	68.20	-6.10	Peak	

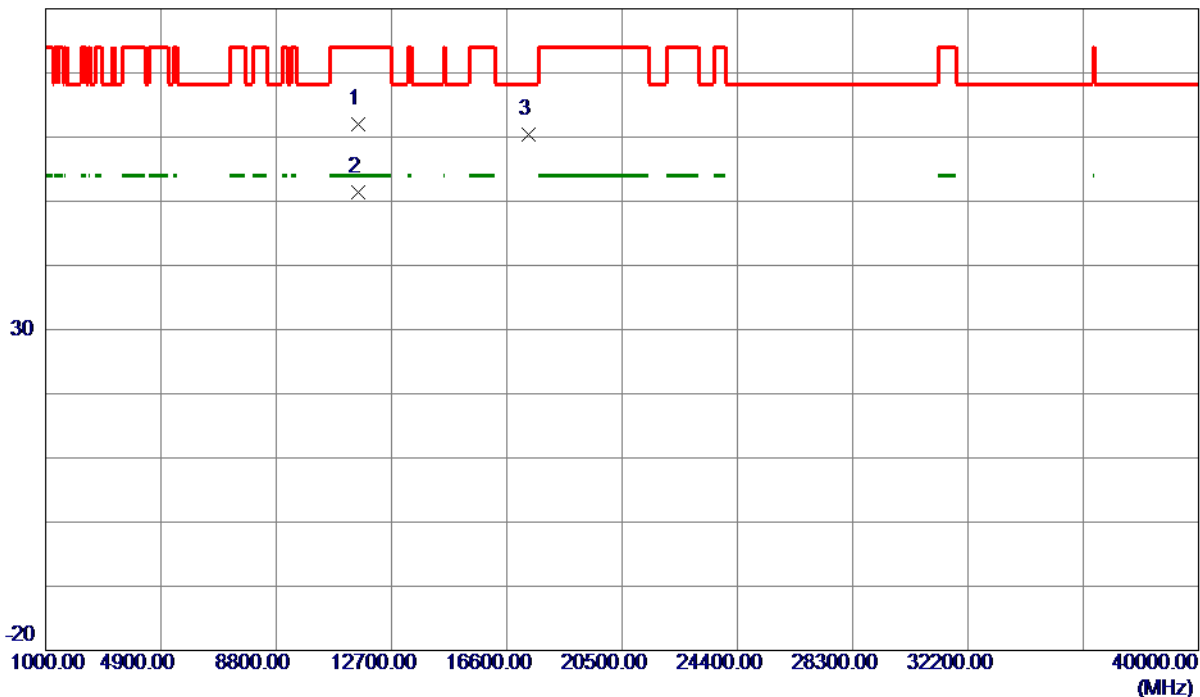
REMARKS:

- (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

80 dBuV/m



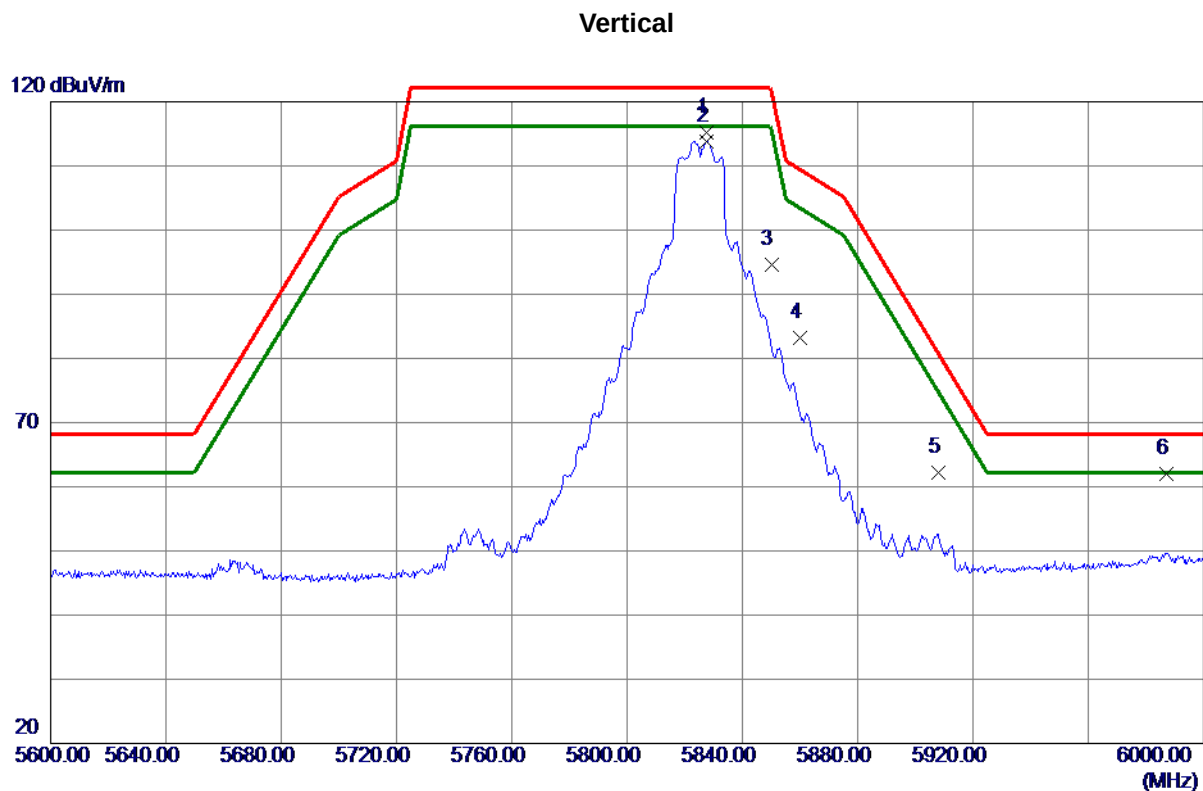
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11565.9480	59.73	2.27	62.00	74.00	-12.00	Peak	
2 *	11570.1800	49.08	2.27	51.35	54.00	-2.65	AVG	
3	17355.0440	53.01	7.38	60.39	68.30	-7.91	Peak	

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



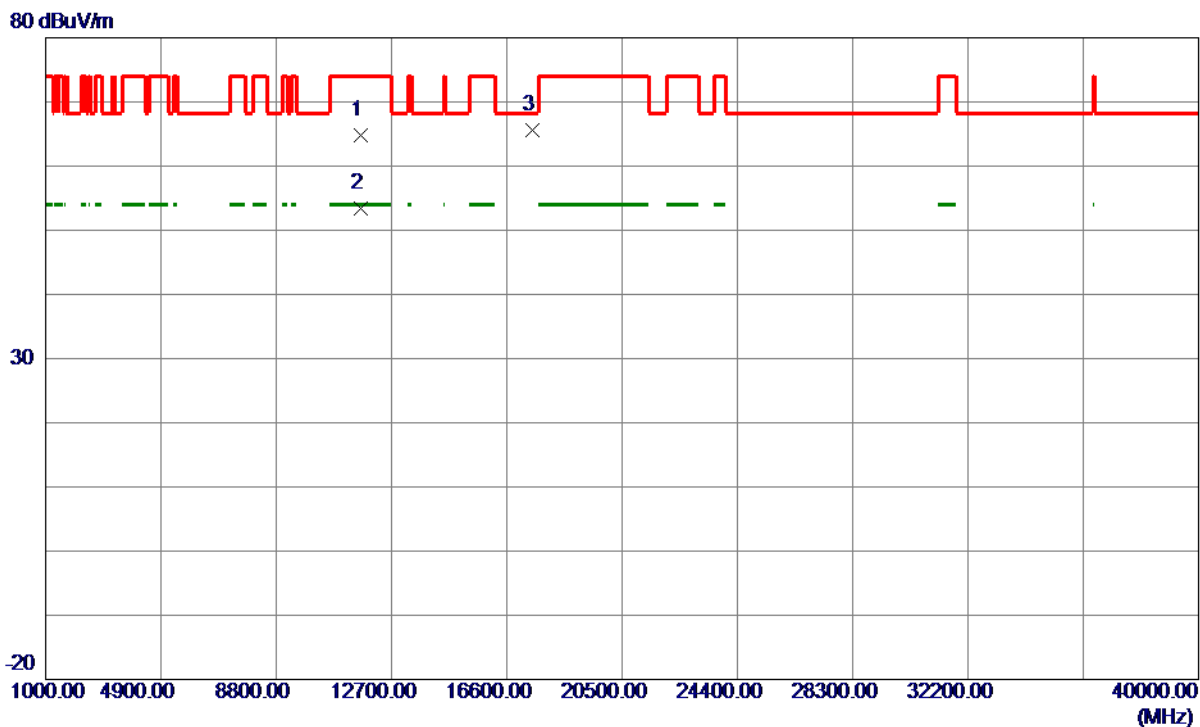
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5827.6000	76.44	38.85	115.29	122.20	-6.91	Peak	
2	5827.6000	74.97	38.85	113.82	122.20	-8.38	AVG	
3	5850.0000	55.76	38.91	94.67	122.20	-27.53	Peak	
4	5860.0000	44.29	38.94	83.23	109.40	-26.17	Peak	
5	5908.0000	23.22	39.07	62.29	80.78	-18.49	Peak	
6 *	5987.2000	22.80	39.22	62.02	68.20	-6.18	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



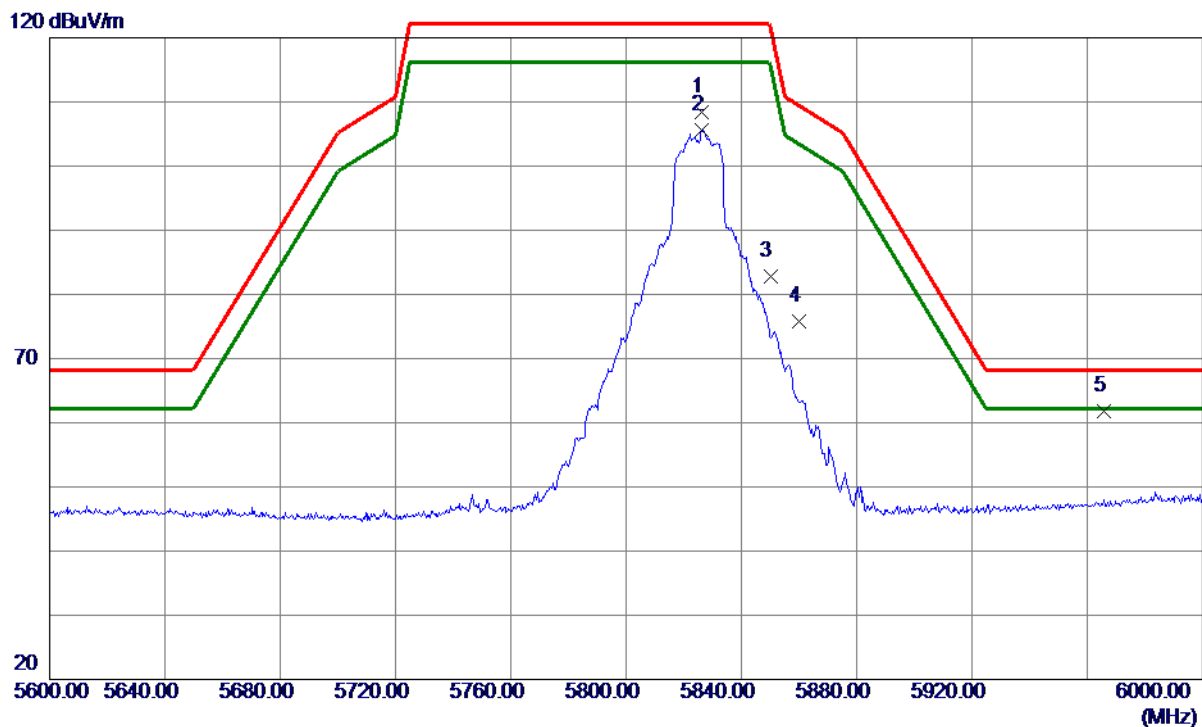
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11646.4460	62.69	2.12	64.81	74.00	-9.19	Peak	
2 *	11647.0080	51.25	2.12	53.37	54.00	-0.63	AVG	
3	17475.5820	57.54	8.03	65.57	68.30	-2.73	Peak	

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 5825 MHz

Horizontal



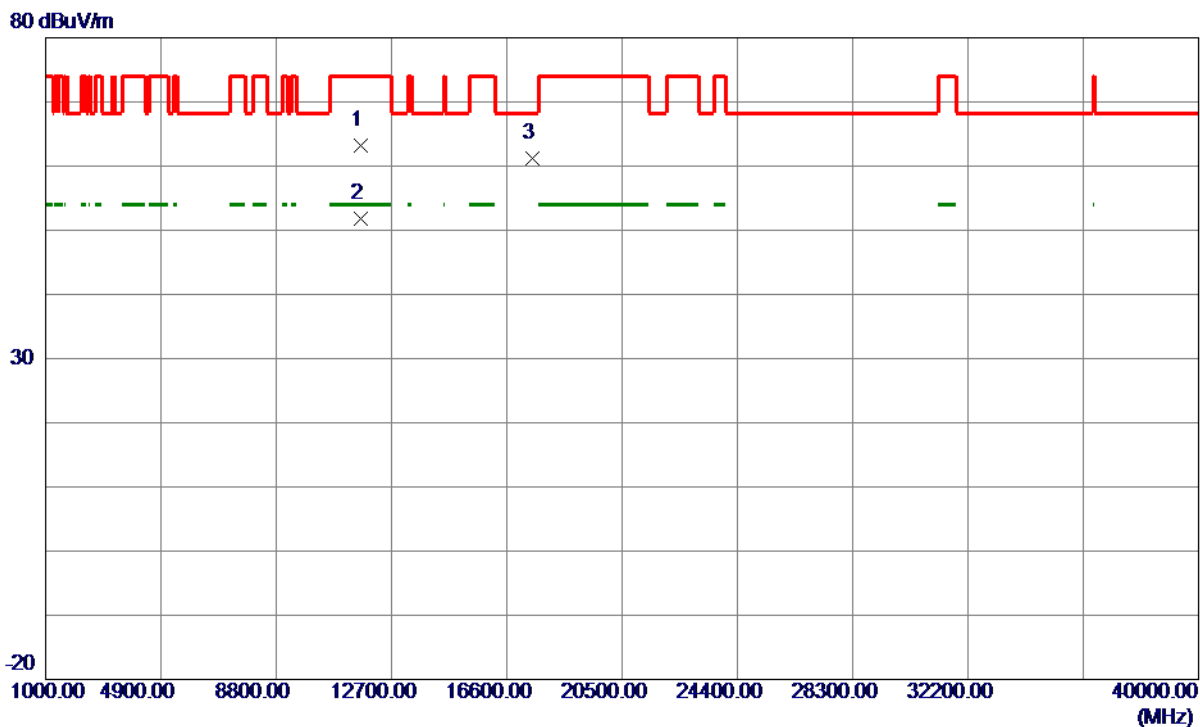
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5826.4000	69.54	38.85	108.39	122.20	-13.81	Peak	
2	5826.4000	66.74	38.85	105.59	122.20	-16.61	AVG	
3	5850.0000	43.93	38.91	82.84	122.20	-39.36	Peak	
4	5860.0000	36.83	38.94	75.77	109.40	-33.63	Peak	
5 *	5965.6000	22.71	39.18	61.89	68.20	-6.31	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 5825 MHz

Horizontal



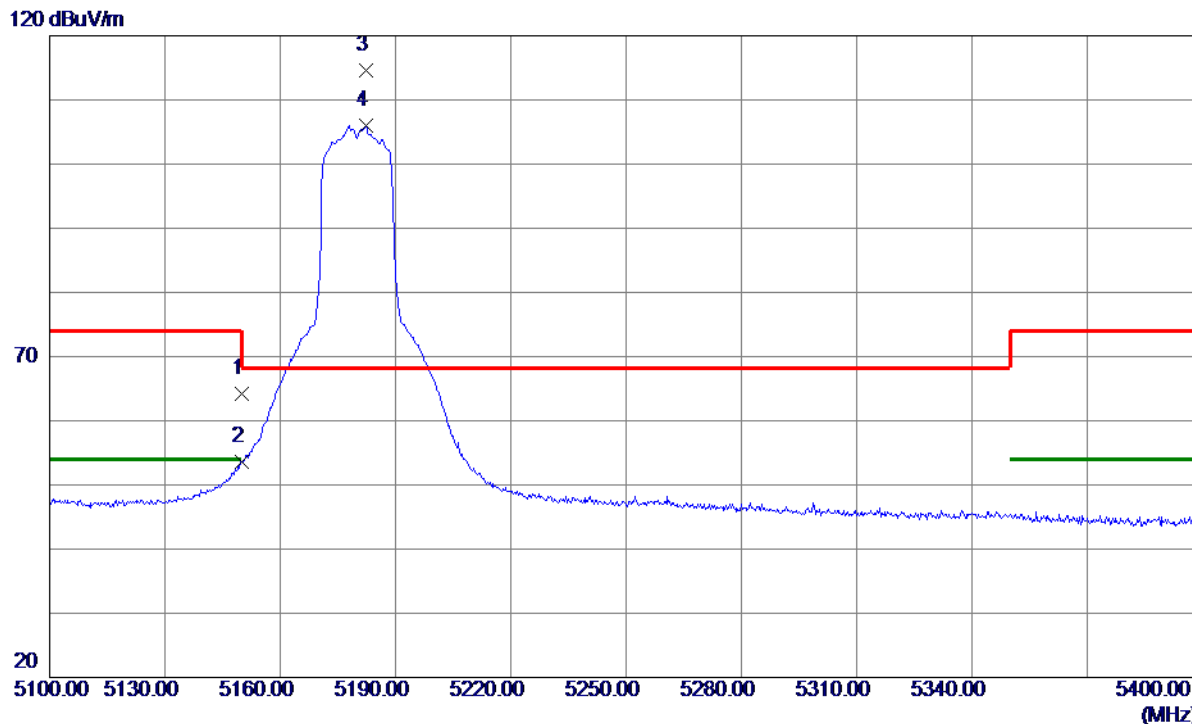
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11650.0279	61.01	2.10	63.11	74.00	-10.89	Peak	
2 *	11650.7960	49.70	2.10	51.80	54.00	-2.20	AVG	
3	17475.5260	53.24	8.03	61.27	68.30	-7.03	Peak	

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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	26.36	37.88	64.24	74.00	-9.76	Peak	
2	5150.0000	15.76	37.88	53.64	54.00	-0.36	AVG	
3 *	5182.2000	76.87	37.75	114.62	68.30	46.32	Peak	No limit
4	5182.2000	68.33	37.75	106.08	999.00	-892.92	AVG	No limit

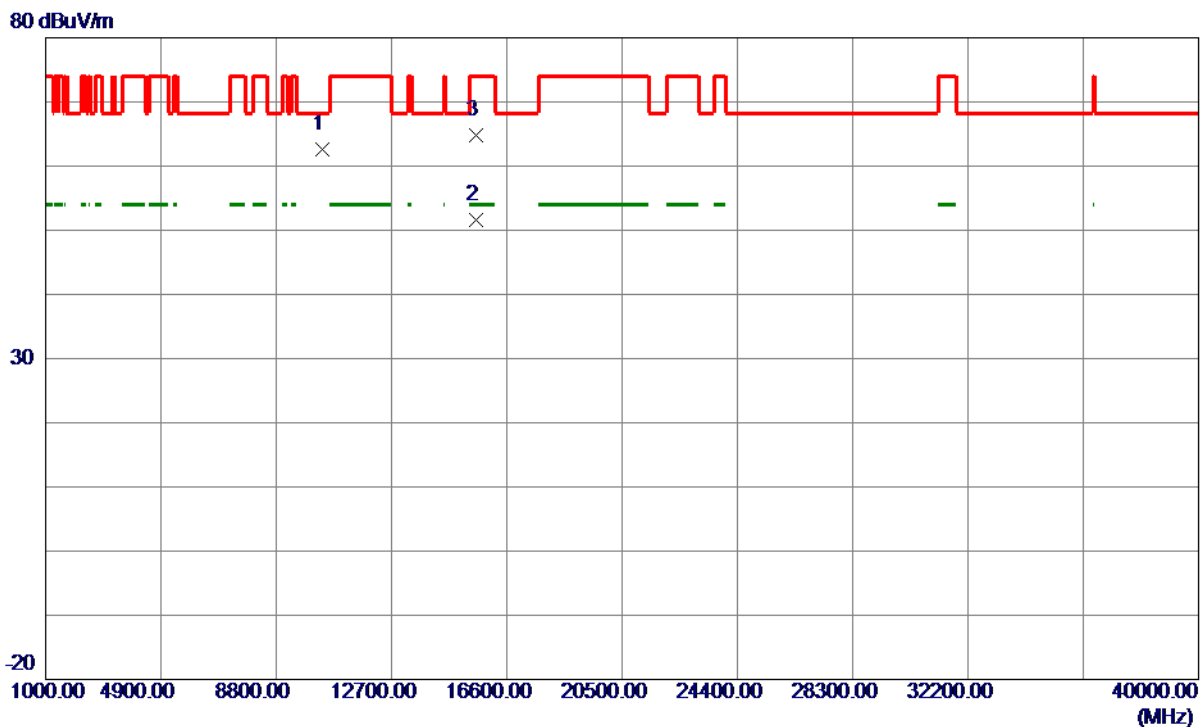
REMARKS:

(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	10357.4700	60.96	1.64	62.60	68.30	-5.70	Peak	
2 *	15538.5480	48.54	3.02	51.56	54.00	-2.44	AVG	
3	15538.9580	61.75	3.02	64.77	74.00	-9.23	Peak	

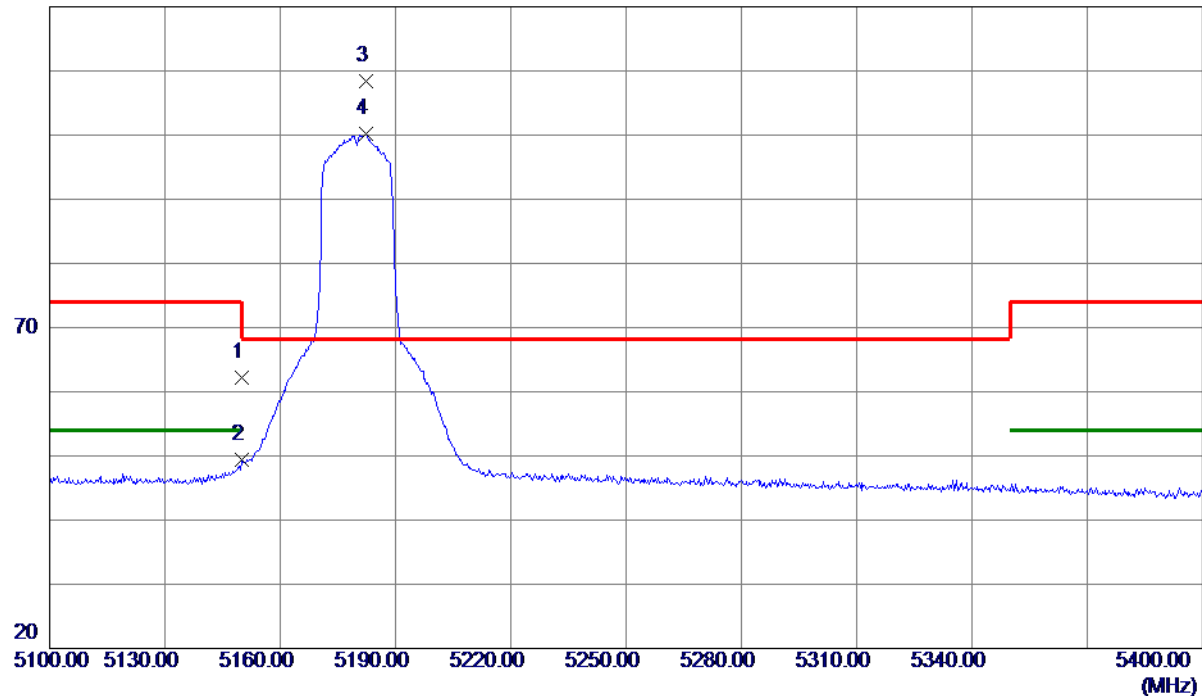
REMARKS:

- (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

120 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	24.39	37.88	62.27	74.00	-11.73	Peak	
2	5150.0000	11.44	37.88	49.32	54.00	-4.68	AVG	
3 *	5182.2000	70.70	37.75	108.45	68.30	40.15	Peak	No limit
4	5182.2000	62.43	37.75	100.18	999.00	-898.82	AVG	No limit

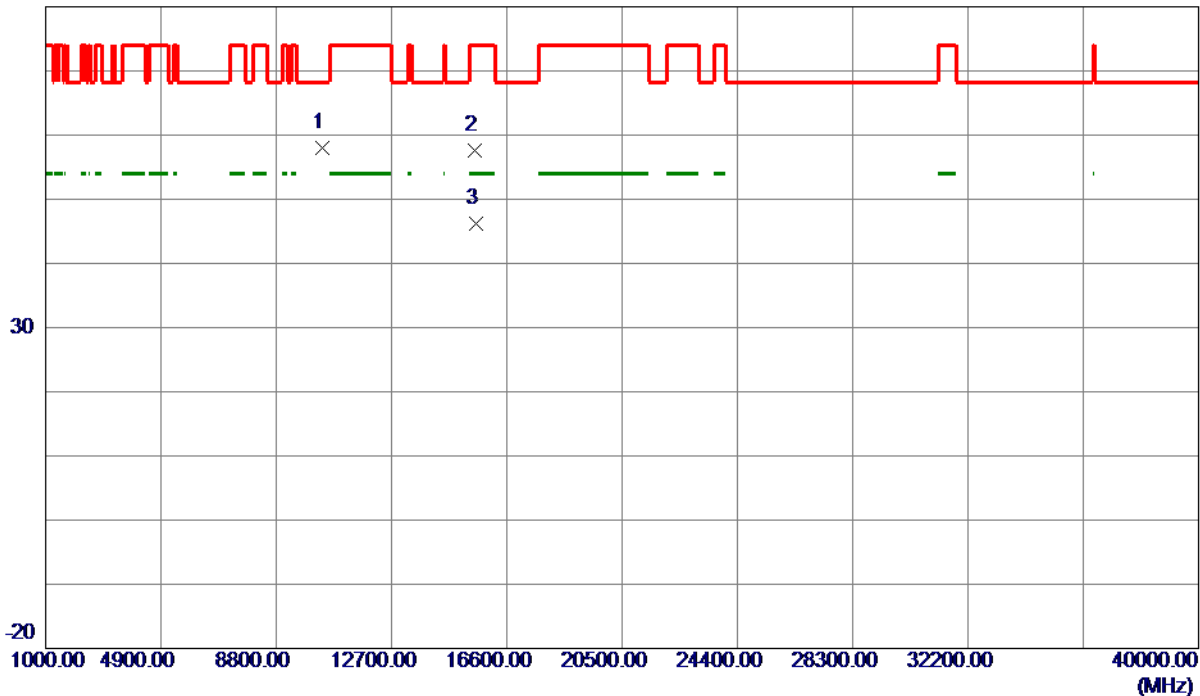
REMARKS:

- (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

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	10359.5039	56.26	1.65	57.91	68.30	-10.39	Peak	
2	15538.1620	54.57	3.02	57.59	74.00	-16.41	Peak	
3 *	15539.3980	43.21	3.02	46.23	54.00	-7.77	AVG	

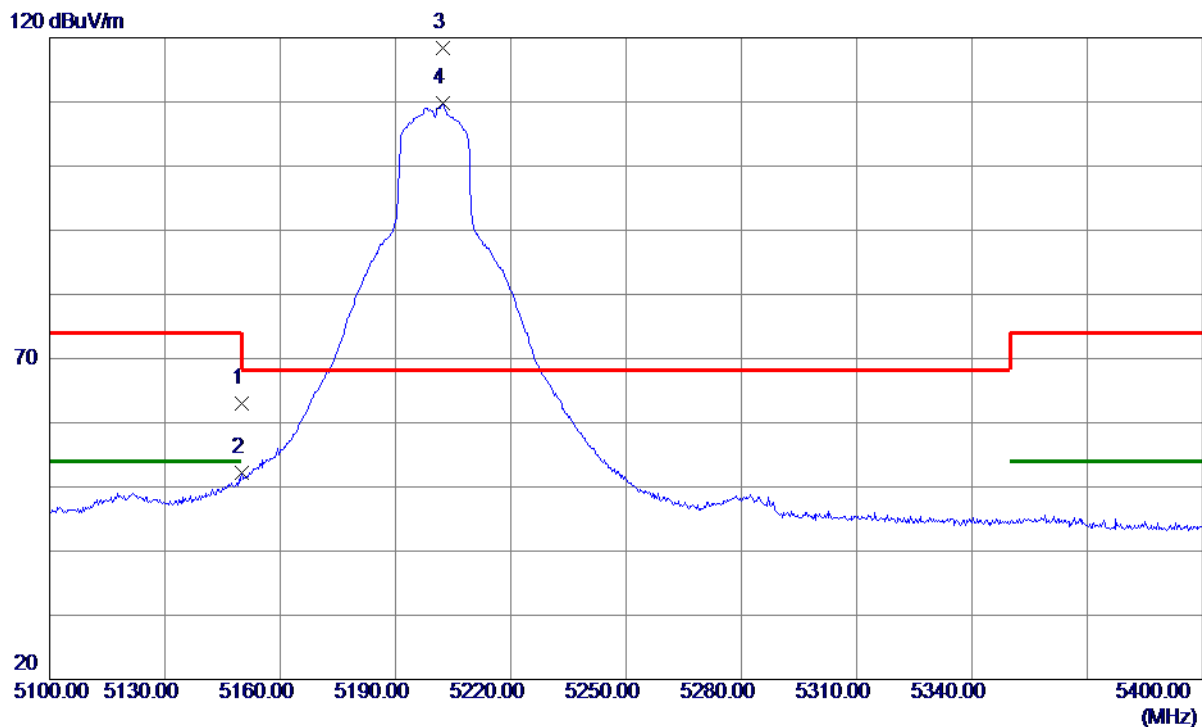
REMARKS:

(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



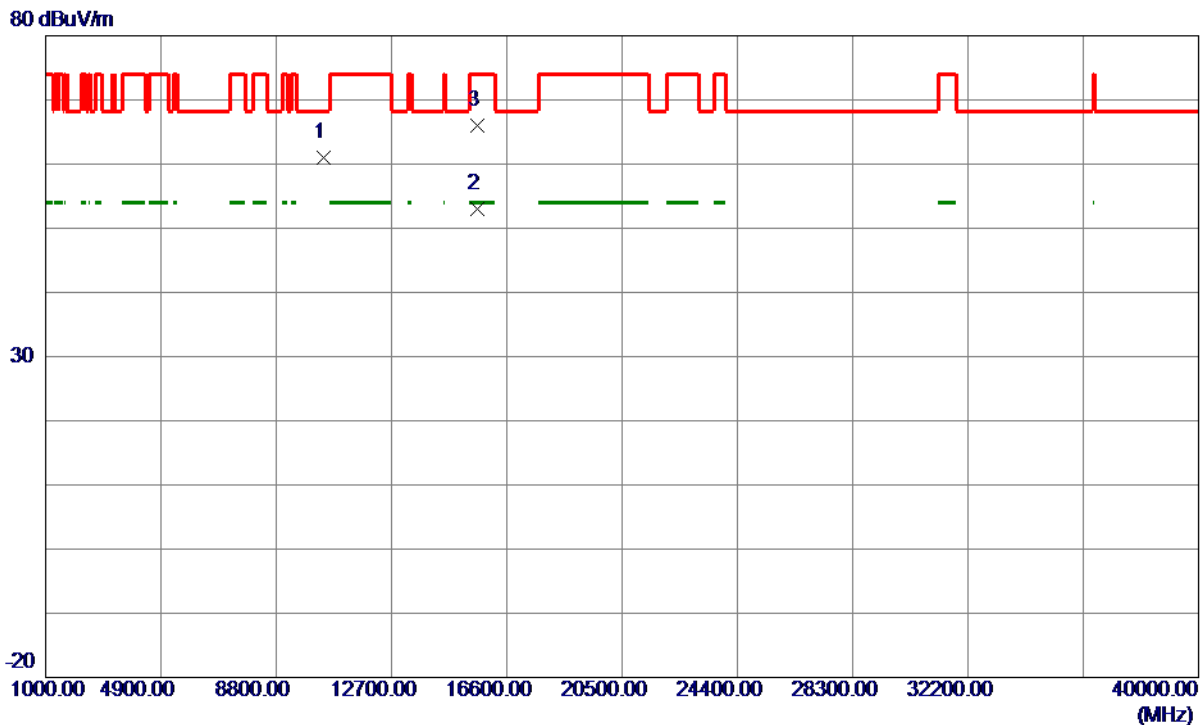
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	25.14	37.88	63.02	74.00	-10.98	Peak	
2	5150.0000	14.35	37.88	52.23	54.00	-1.77	AVG	
3 *	5202.3000	80.73	37.68	118.41	68.30	50.11	Peak	No limit
4	5202.3000	72.12	37.68	109.80	999.00	-889.20	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 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	10399.3640	59.27	1.72	60.99	68.30	-7.31	Peak	
2 *	15599.1080	50.05	2.87	52.92	54.00	-1.08	AVG	
3	15603.3880	63.03	2.87	65.90	74.00	-8.10	Peak	

REMARKS:

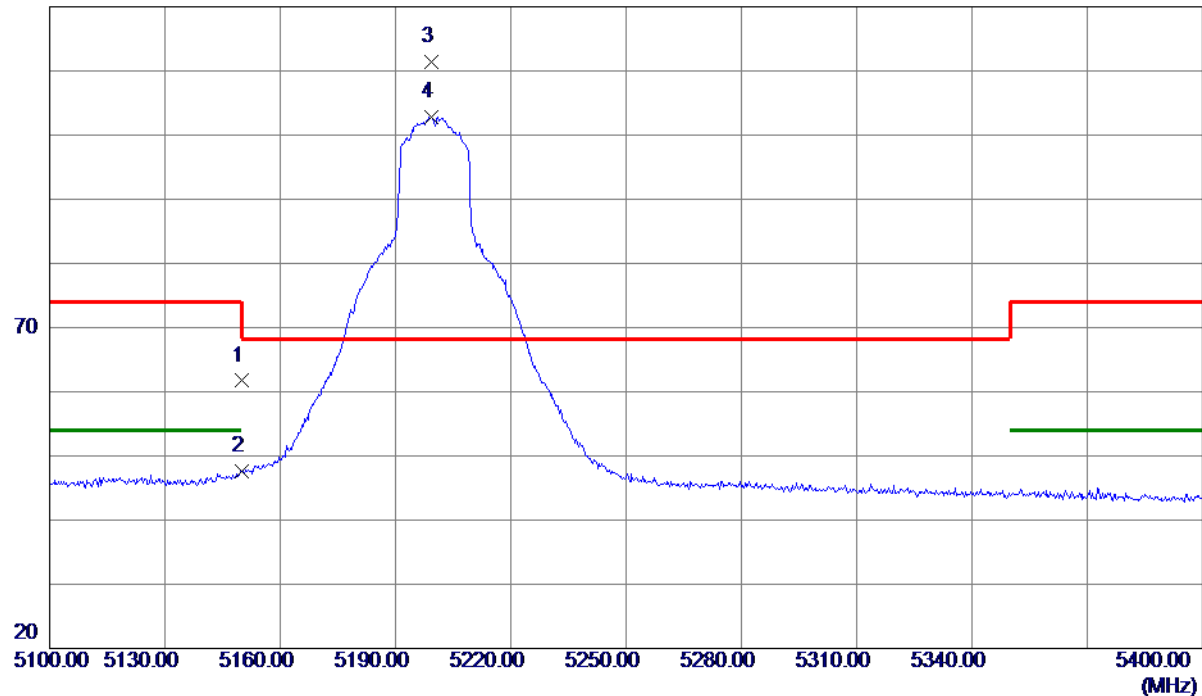
(1) Measurement Value = Reading Level + Correct Factor.

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

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

Horizontal

120 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	23.82	37.88	61.70	74.00	-12.30	Peak	
2	5150.0000	9.77	37.88	47.65	54.00	-6.35	AVG	
3 *	5199.3000	73.77	37.68	111.45	68.30	43.15	Peak	No limit
4	5199.3000	65.18	37.68	102.86	999.00	-896.14	AVG	No limit

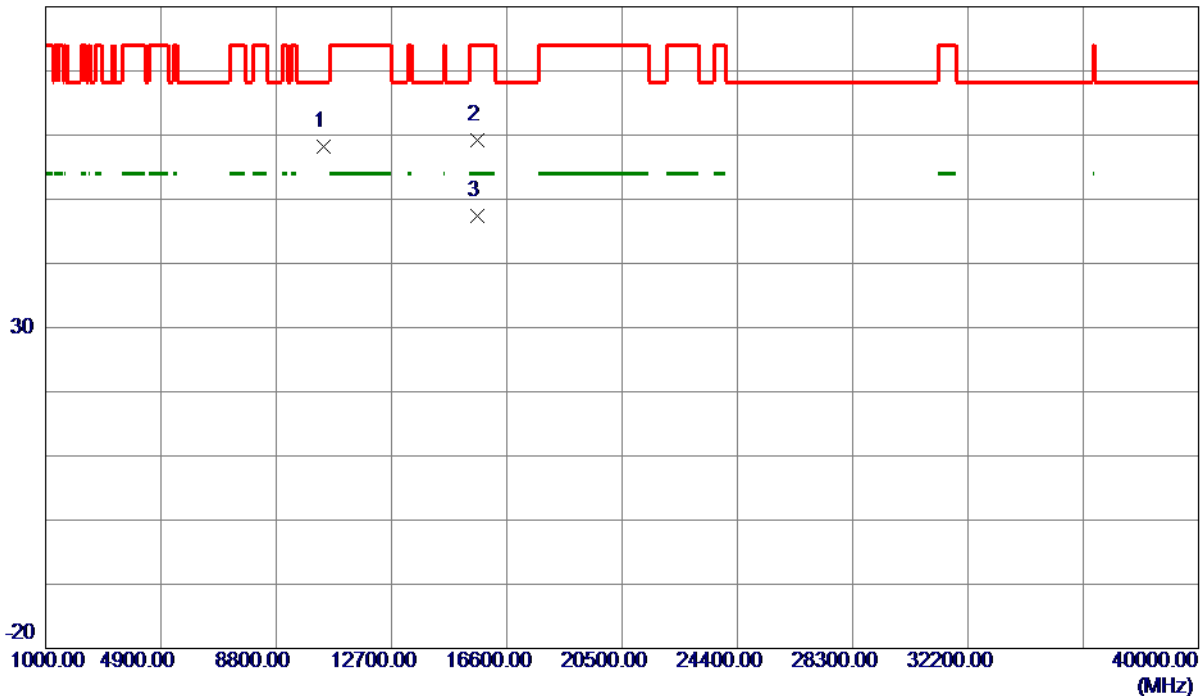
REMARKS:

- (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 5200 MHz

Horizontal

80 dBuV/m



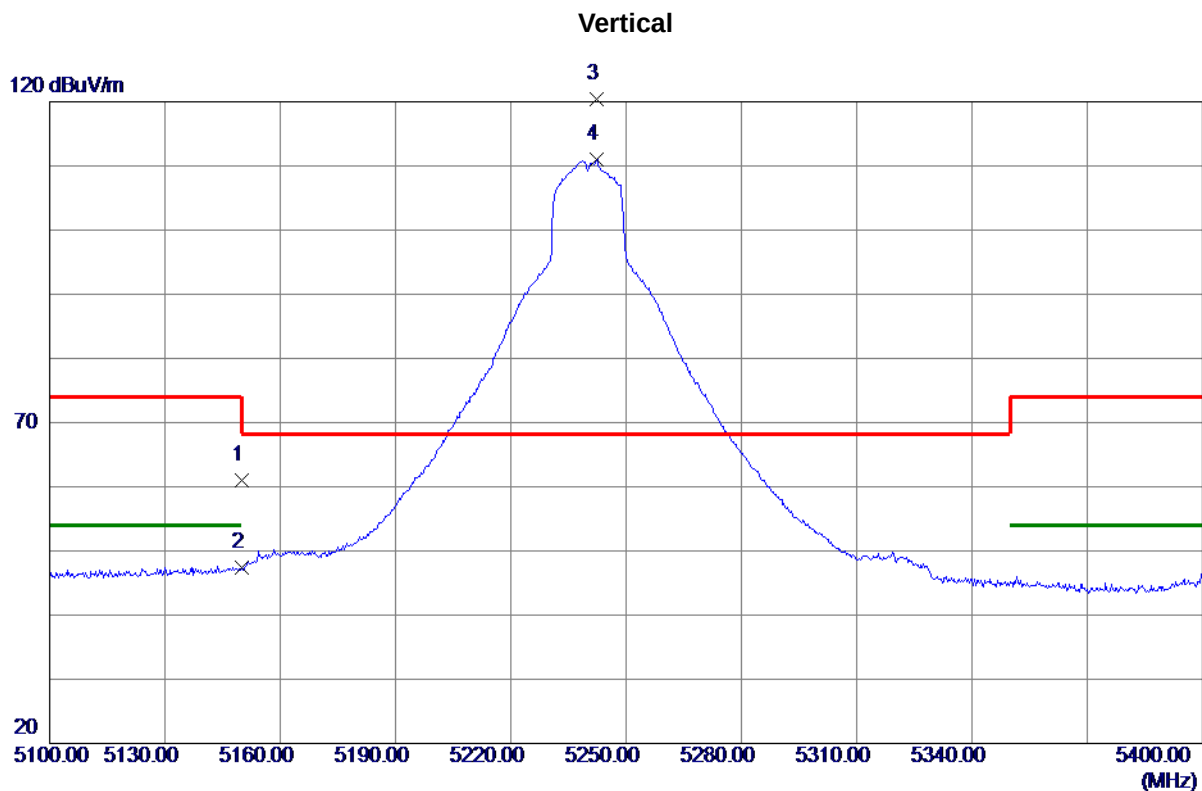
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10394.4400	56.53	1.71	58.24	68.30	-10.06	Peak	
2	15592.2080	56.22	2.89	59.11	74.00	-14.89	Peak	
3 *	15601.2840	44.52	2.87	47.39	54.00	-6.61	AVG	

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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	23.09	37.88	60.97	74.00	-13.03	Peak	
2	5150.0000	9.57	37.88	47.45	54.00	-6.55	AVG	
3 *	5242.2000	82.80	37.62	120.42	68.30	52.12	Peak	No limit
4	5242.2000	73.38	37.62	111.00	999.00	-888.00	AVG	No limit

REMARKS:

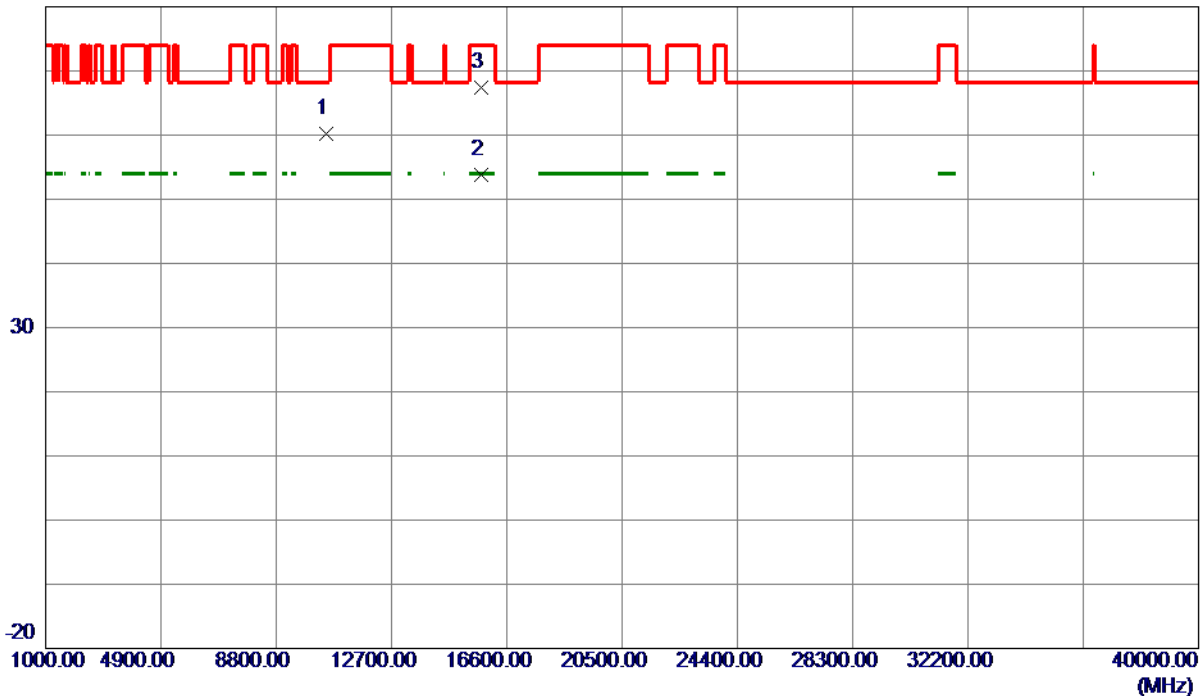
(1) Measurement Value = Reading Level + Correct Factor.

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

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

Vertical

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	10481.7539	58.48	1.80	60.28	68.30	-8.02	Peak	
2 *	15723.4480	51.05	2.74	53.79	54.00	-0.21	AVG	
3	15727.0300	64.58	2.74	67.32	74.00	-6.68	Peak	

REMARKS:

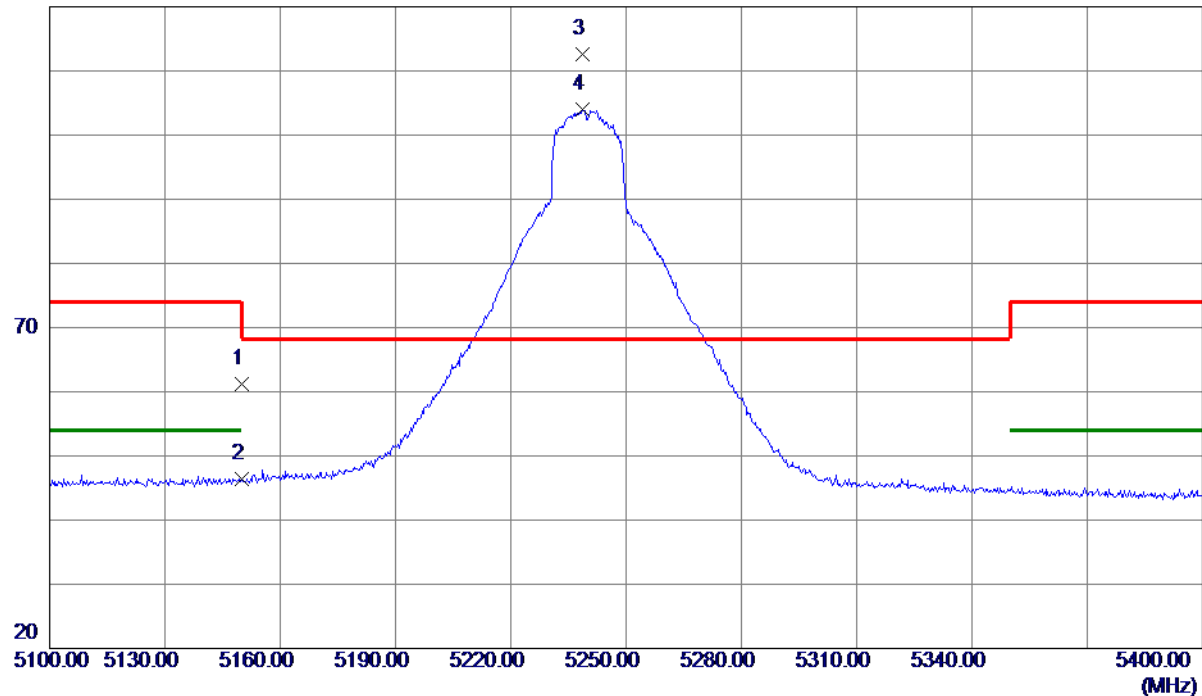
(1) Measurement Value = Reading Level + Correct Factor.

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

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

Horizontal

120 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	23.39	37.88	61.27	74.00	-12.73	Peak	
2	5150.0000	8.60	37.88	46.48	54.00	-7.52	AVG	
3 *	5238.6000	74.94	37.62	112.56	68.30	44.26	Peak	No limit
4	5238.6000	66.34	37.62	103.96	999.00	-895.04	AVG	No limit

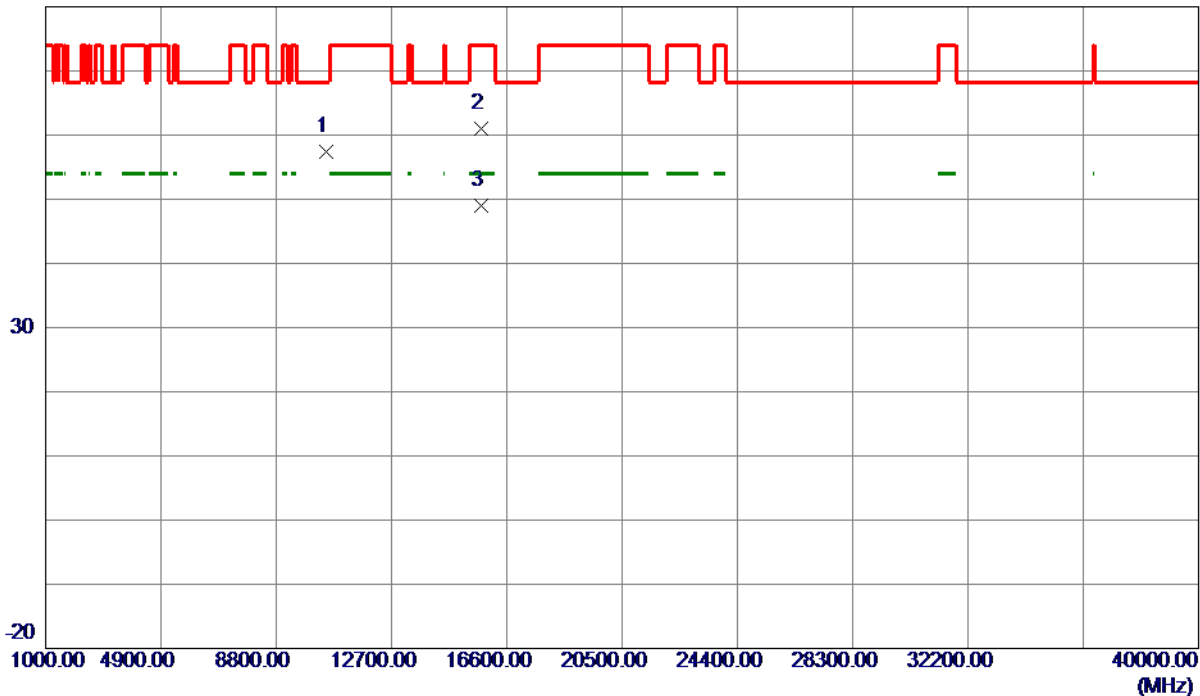
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 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	10479.1660	55.65	1.80	57.45	68.30	-10.85	Peak	
2	15720.1460	58.20	2.75	60.95	74.00	-13.05	Peak	
3 *	15721.2440	46.24	2.75	48.99	54.00	-5.01	AVG	

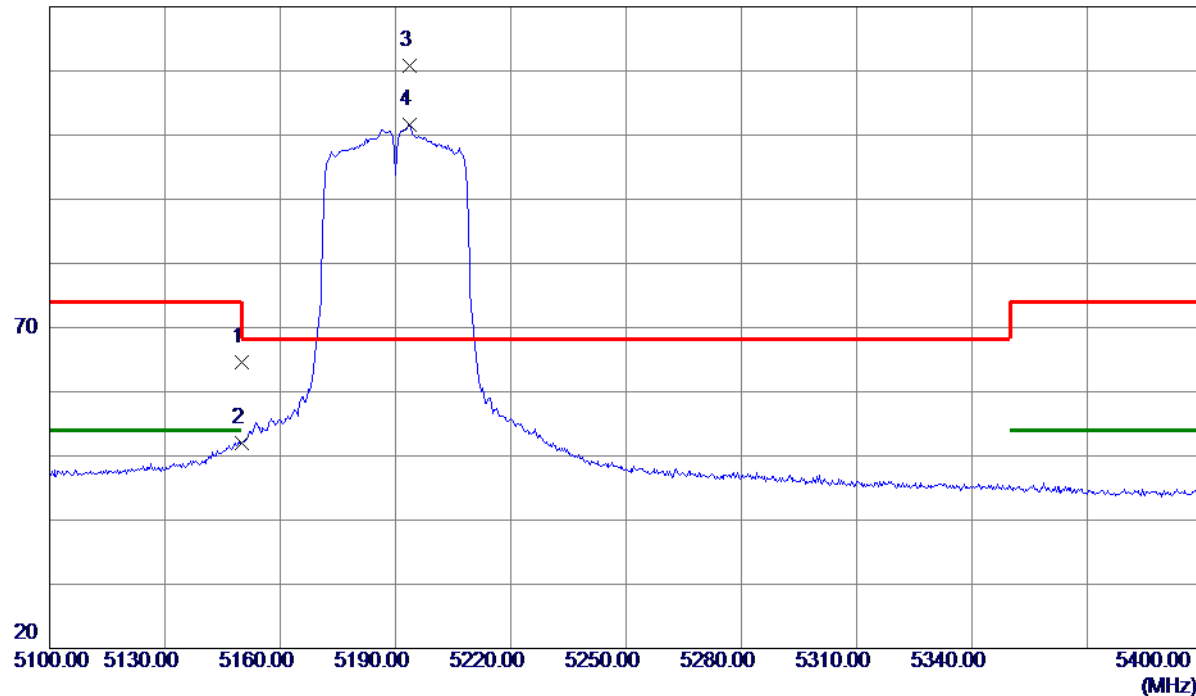
REMARKS:

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

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

Vertical

120 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	26.69	37.88	64.57	74.00	-9.43	Peak	
2	5150.0000	14.03	37.88	51.91	54.00	-2.09	AVG	
3 *	5193.6000	73.01	37.70	110.71	68.30	42.41	Peak	No limit
4	5193.6000	63.88	37.70	101.58	999.00	-897.42	AVG	No limit

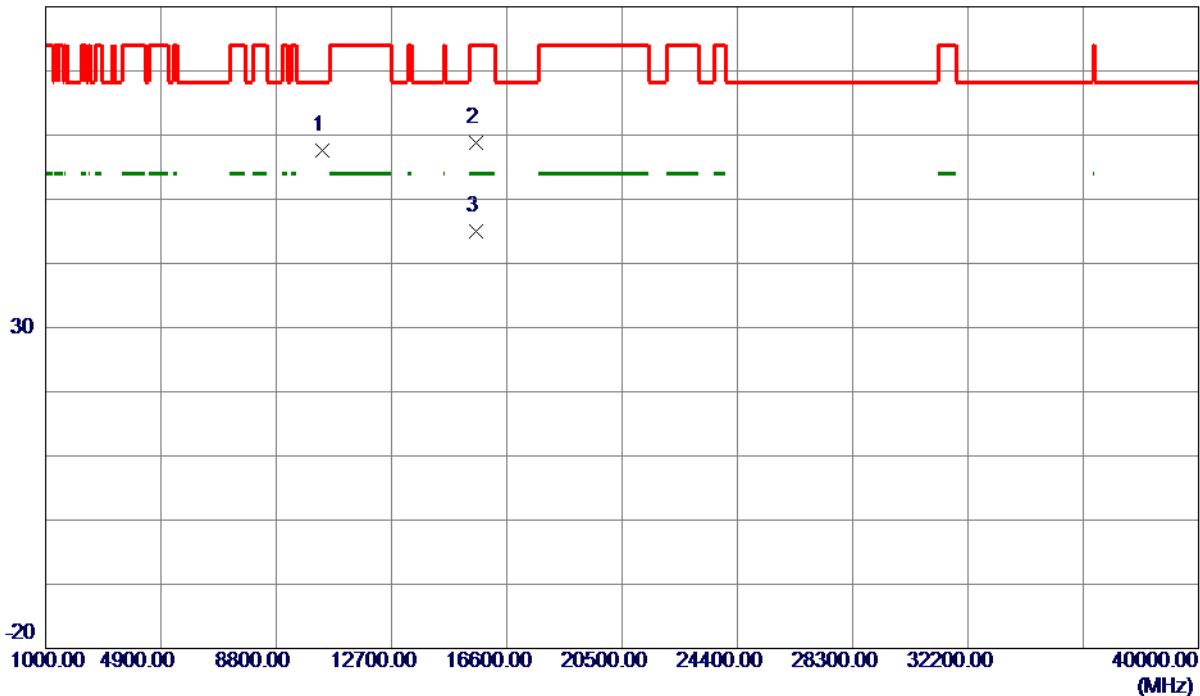
REMARKS:

- (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

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	10379.2520	55.88	1.68	57.56	68.30	-10.74	Peak	
2	15566.5640	55.92	2.95	58.87	74.00	-15.13	Peak	
3 *	15571.3480	42.00	2.94	44.94	54.00	-9.06	AVG	

REMARKS:

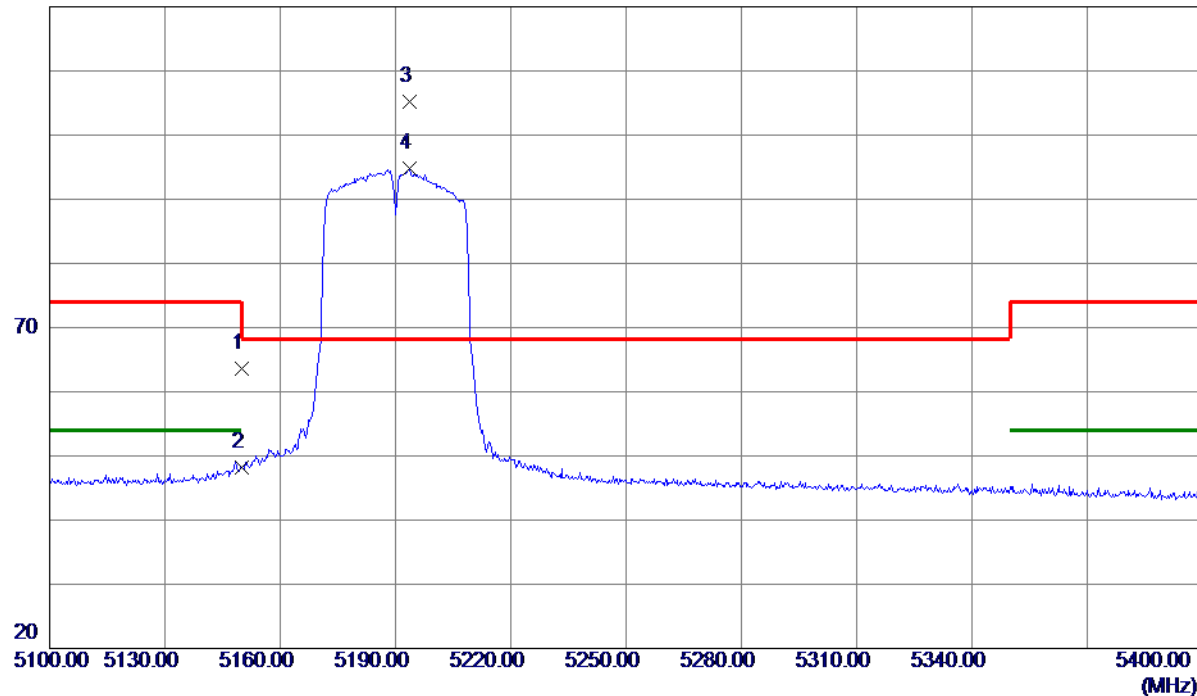
(1) Measurement Value = Reading Level + Correct Factor.

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

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

Horizontal

120 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	25.73	37.88	63.61	74.00	-10.39	Peak	
2	5150.0000	10.34	37.88	48.22	54.00	-5.78	AVG	
3 *	5193.6000	67.46	37.70	105.16	68.30	36.86	Peak	No limit
4	5193.6000	57.07	37.70	94.77	999.00	-904.23	AVG	No limit

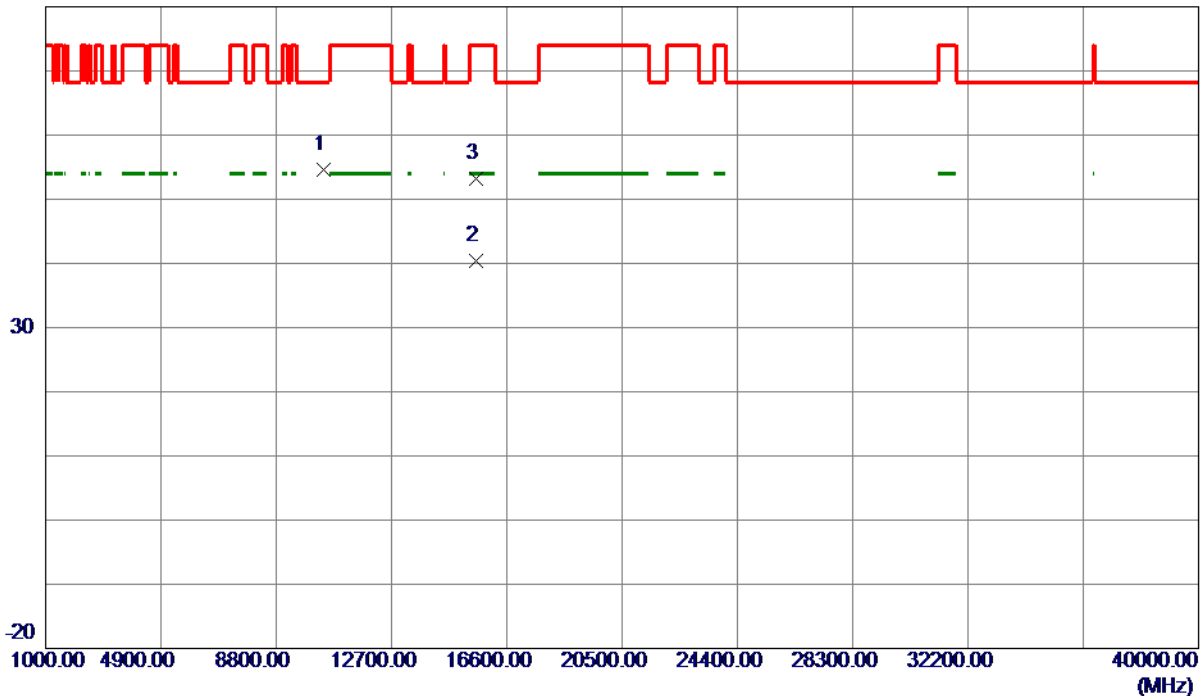
REMARKS:

- (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 5190 MHz

Horizontal

80 dBuV/m



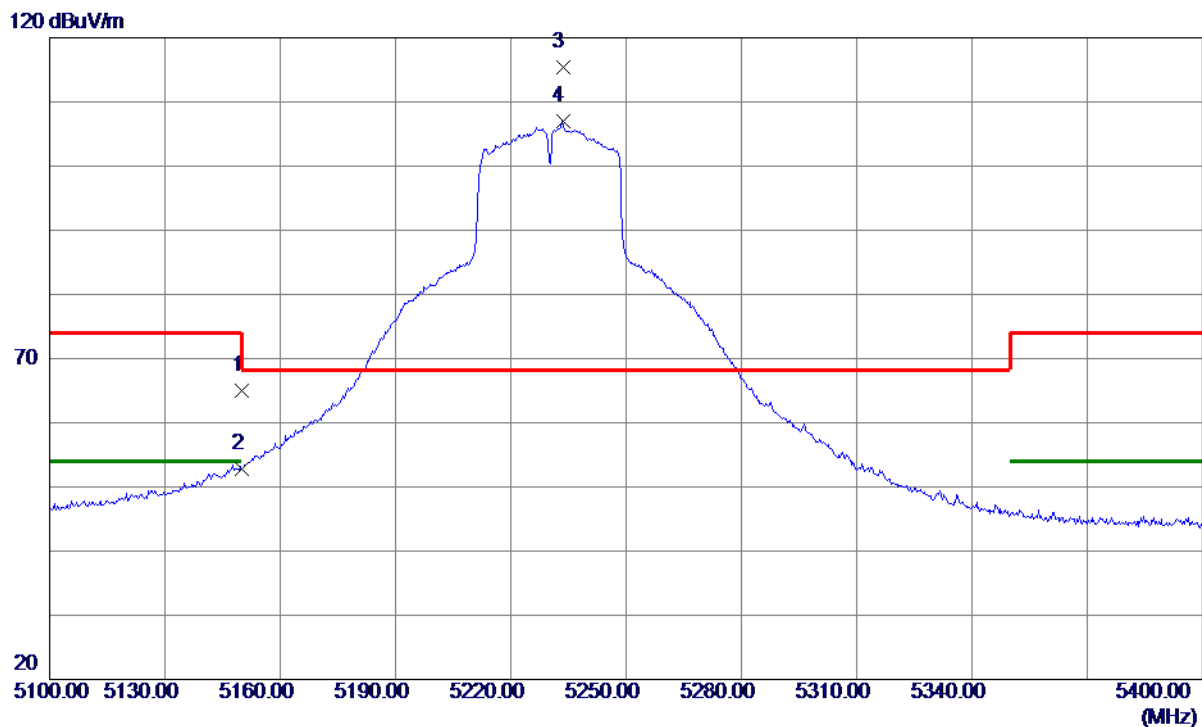
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10383.9480	52.90	1.69	54.59	68.30	-13.71	Peak	
2 *	15561.1960	37.48	2.97	40.45	54.00	-13.55	AVG	
3	15566.4160	50.21	2.95	53.16	74.00	-20.84	Peak	

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



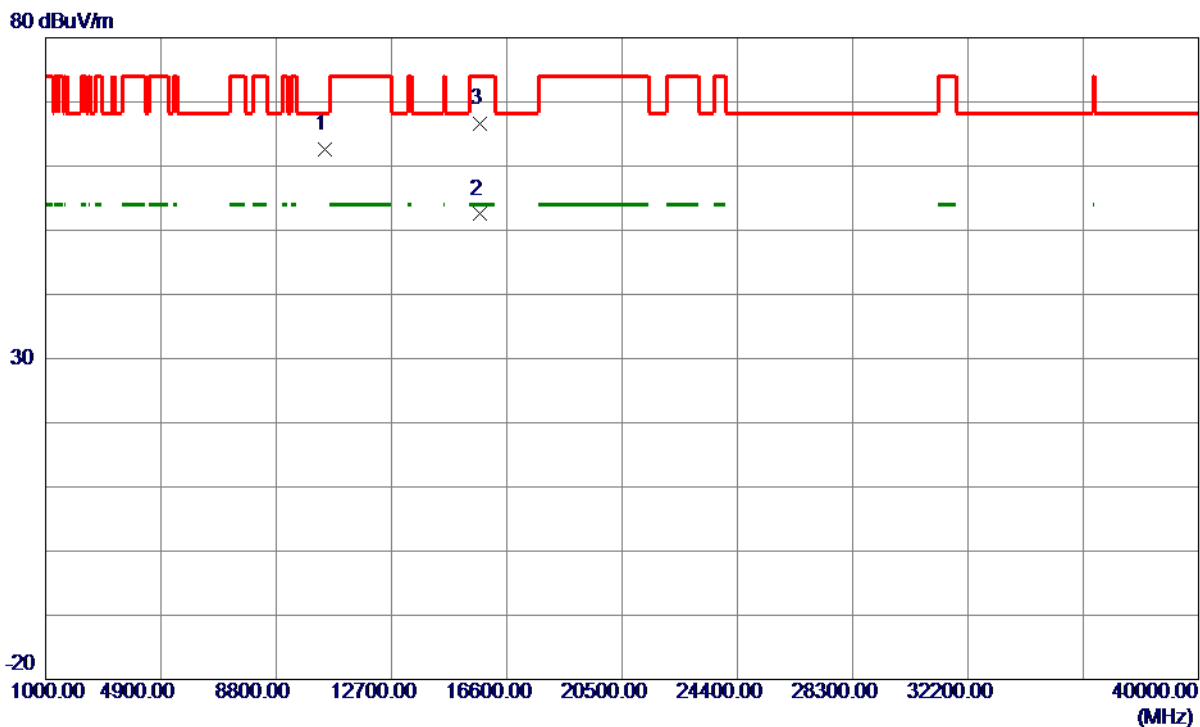
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	27.18	37.88	65.06	74.00	-8.94	Peak	
2	5150.0000	14.98	37.88	52.86	54.00	-1.14	AVG	
3 *	5233.5000	77.86	37.63	115.49	68.30	47.19	Peak	No limit
4	5233.5000	69.27	37.63	106.90	999.00	-892.10	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	10459.0320	60.74	1.78	62.52	68.30	-5.78	Peak	
2 *	15687.2880	49.72	2.78	52.50	54.00	-1.50	AVG	
3	15700.6000	63.86	2.77	66.63	74.00	-7.37	Peak	

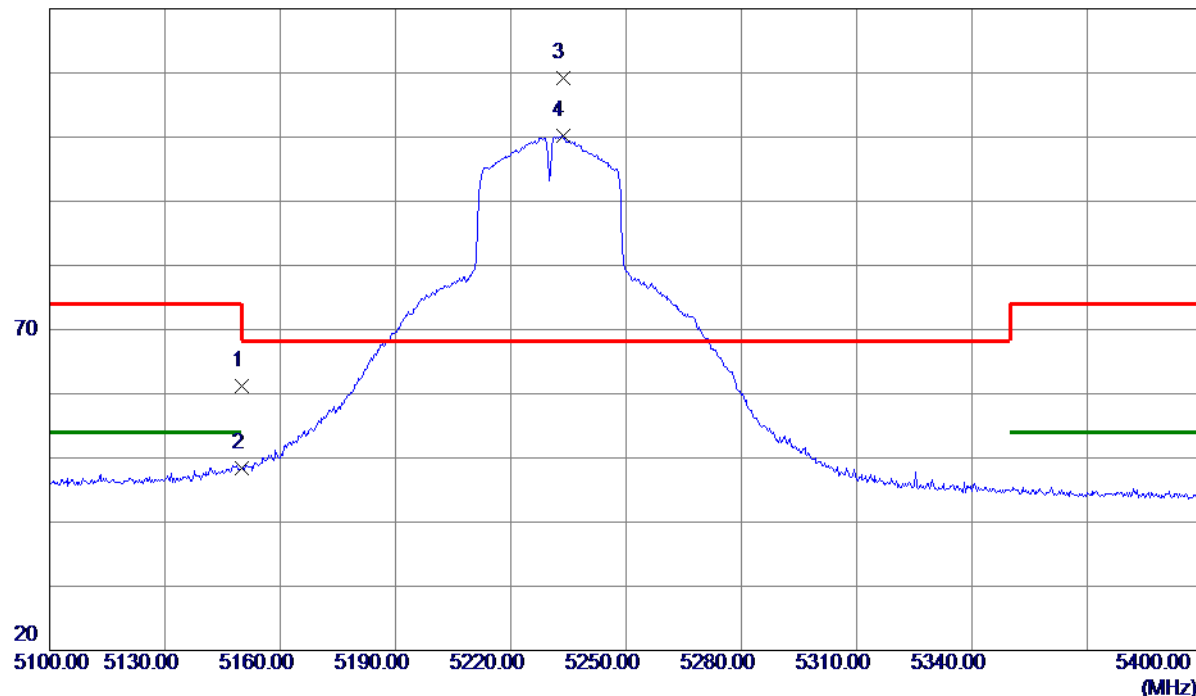
REMARKS:

- (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

120 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	23.32	37.88	61.20	74.00	-12.80	Peak	
2	5150.0000	10.44	37.88	48.32	54.00	-5.68	AVG	
3 *	5233.5000	71.56	37.63	109.19	68.30	40.89	Peak	No limit
4	5233.5000	62.66	37.63	100.29	999.00	-898.71	AVG	No limit

REMARKS:

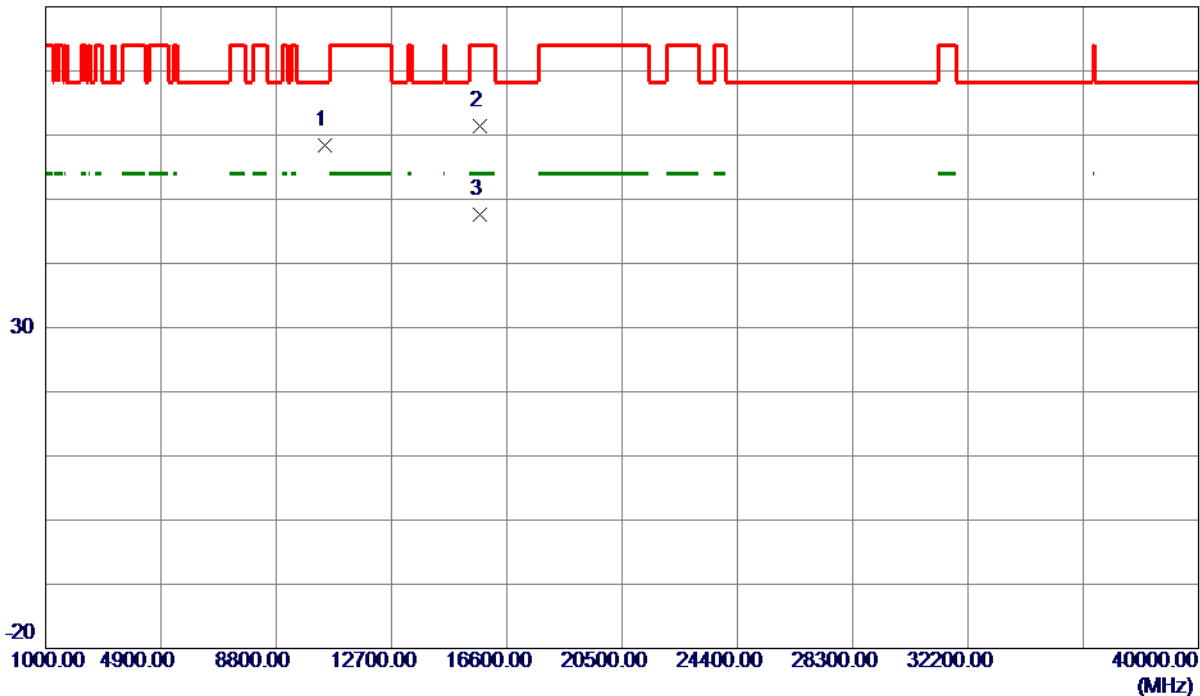
(1) Measurement Value = Reading Level + Correct Factor.

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 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	10454.0199	56.70	1.77	58.47	68.30	-9.83	Peak	
2	15680.6640	58.54	2.79	61.33	74.00	-12.67	Peak	
3 *	15691.3760	44.82	2.78	47.60	54.00	-6.40	AVG	

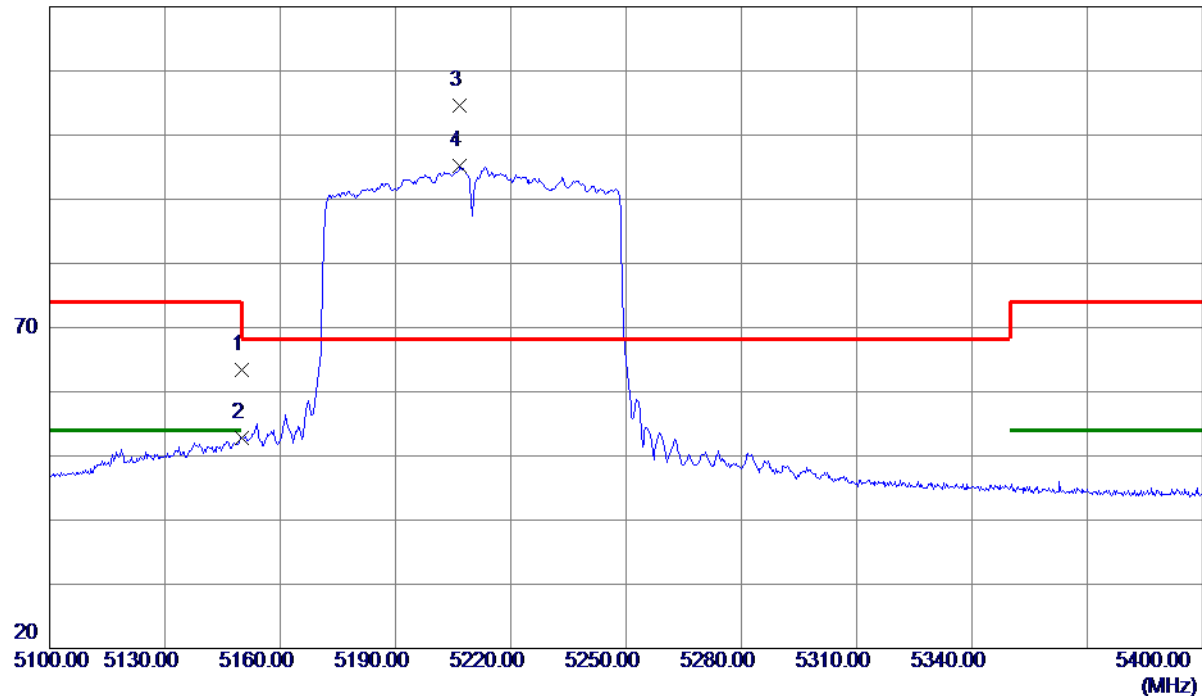
REMARKS:

- (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

120 dBuV/m



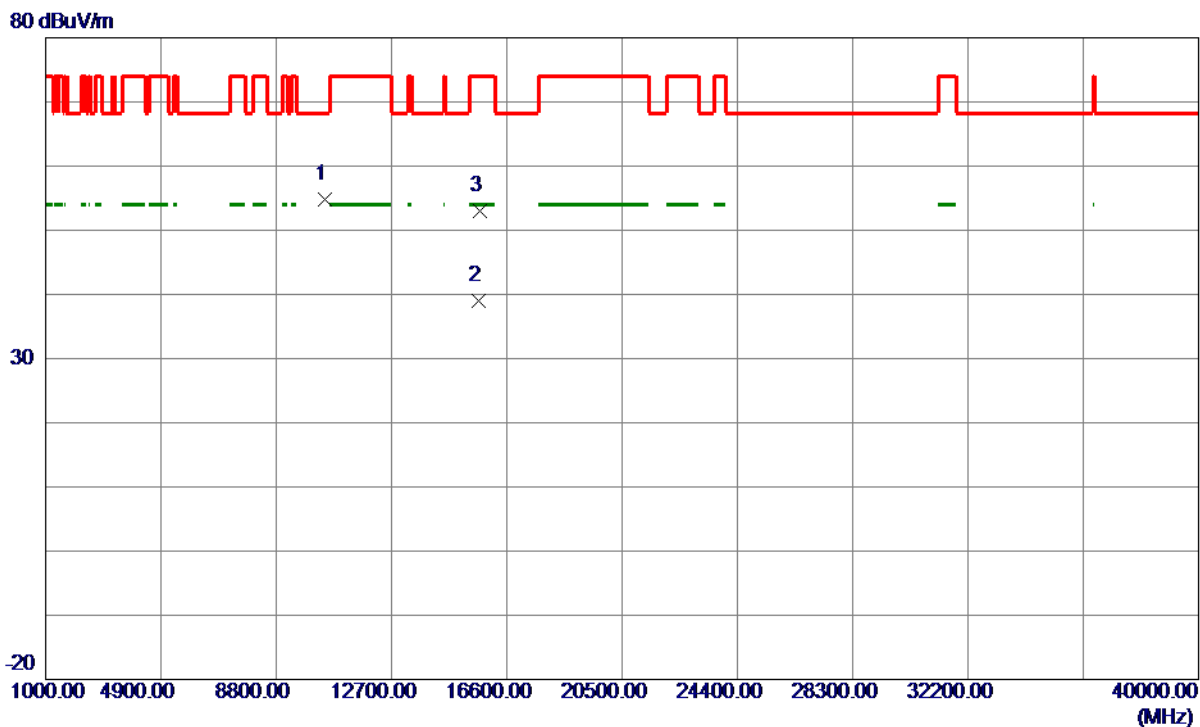
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	25.49	37.88	63.37	74.00	-10.63	Peak	
2	5150.0000	15.00	37.88	52.88	54.00	-1.12	AVG	
3 *	5206.8000	66.95	37.67	104.62	68.30	36.32	Peak	No limit
4	5206.8000	57.50	37.67	95.17	999.00	-903.83	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

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10444.6900	53.04	1.76	54.80	68.30	-13.50	Peak	
2	15643.0200	36.19	2.83	39.02	54.00	-14.98	AVG	
3	15669.8250	50.27	2.80	53.07	74.00	-20.93	Peak	

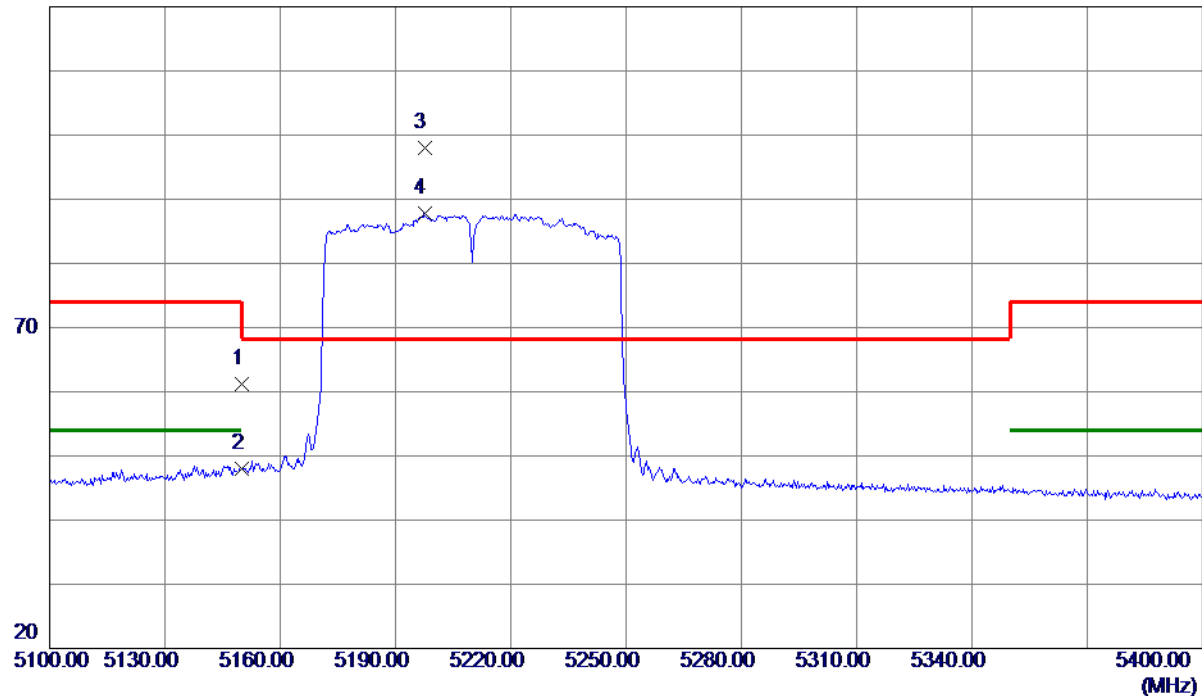
REMARKS:

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

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

Horizontal

120 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	37.88	61.21	74.00	-12.79	Peak	
2	5150.0000	10.08	37.88	47.96	54.00	-6.04	AVG	
3 *	5197.5000	60.32	37.69	98.01	68.30	29.71	Peak	No limit
4	5197.5000	50.09	37.69	87.78	999.00	-911.22	AVG	No limit

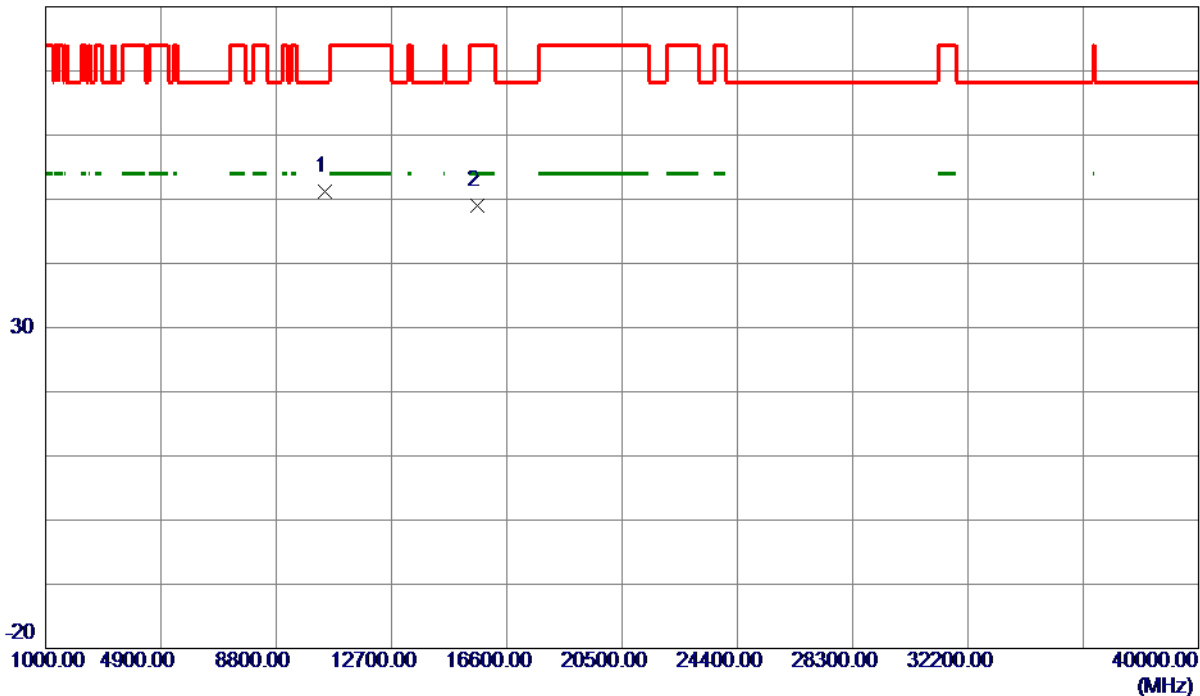
REMARKS:

- (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

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 *	10444.8700	49.49	1.76	51.25	68.30	-17.05	Peak	
2	15615.6450	46.13	2.85	48.98	74.00	-25.02	Peak	

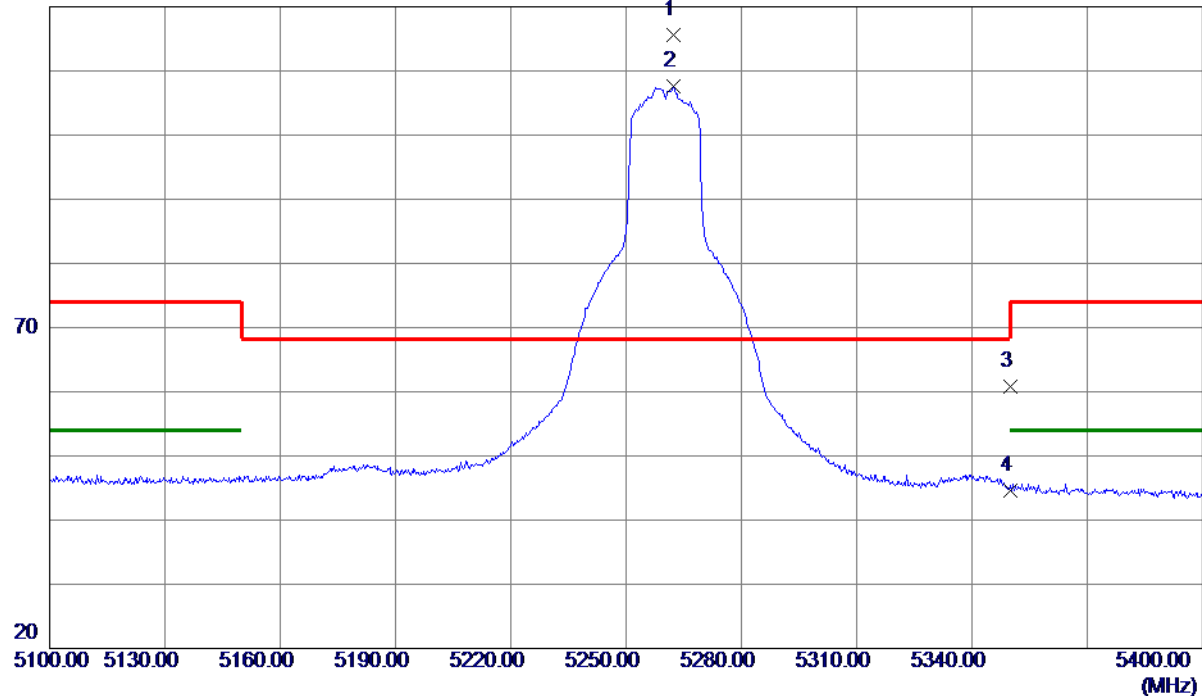
REMARKS:

- (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

Vertical

120 dBuV/m



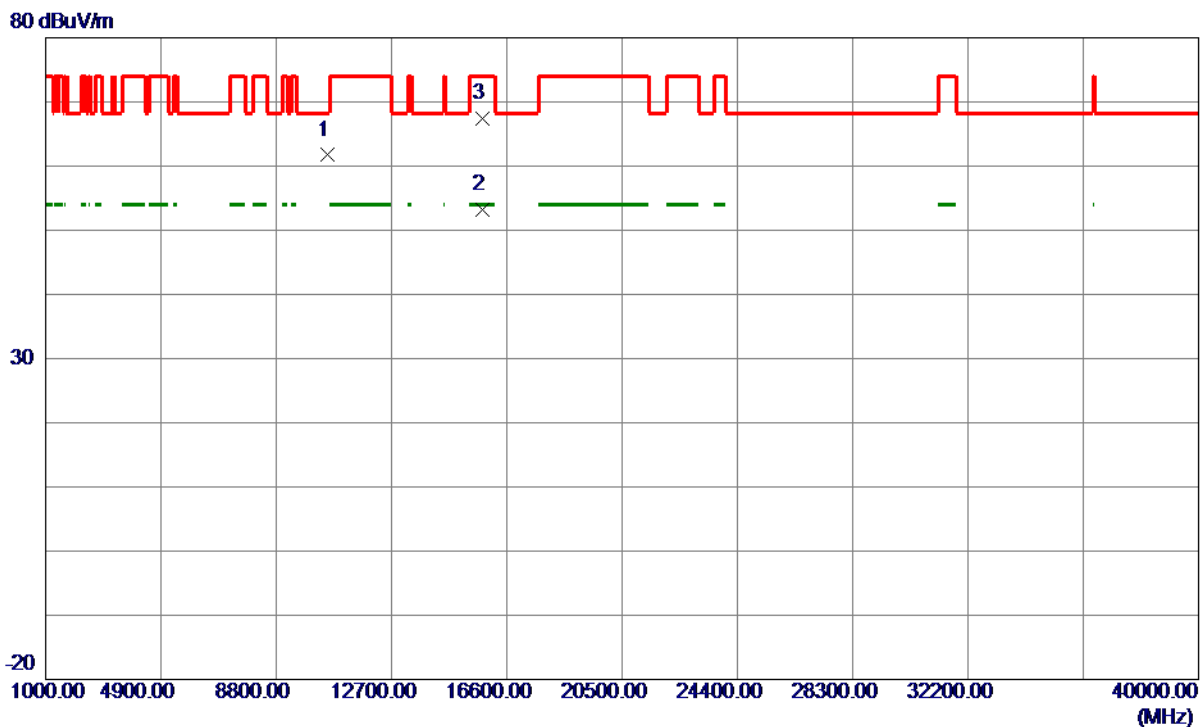
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5262.3000	77.95	37.59	115.54	68.30	47.24	Peak	No limit
2	5262.3000	70.05	37.59	107.64	999.00	-891.36	AVG	No limit
3	5350.0000	23.03	37.74	60.77	74.00	-13.23	Peak	
4	5350.0000	6.94	37.74	44.68	54.00	-9.32	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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10516.6400	59.86	1.84	61.70	68.30	-6.60	Peak	
2 *	15775.8480	50.56	2.69	53.25	54.00	-0.75	AVG	
3	15784.2720	64.73	2.68	67.41	74.00	-6.59	Peak	

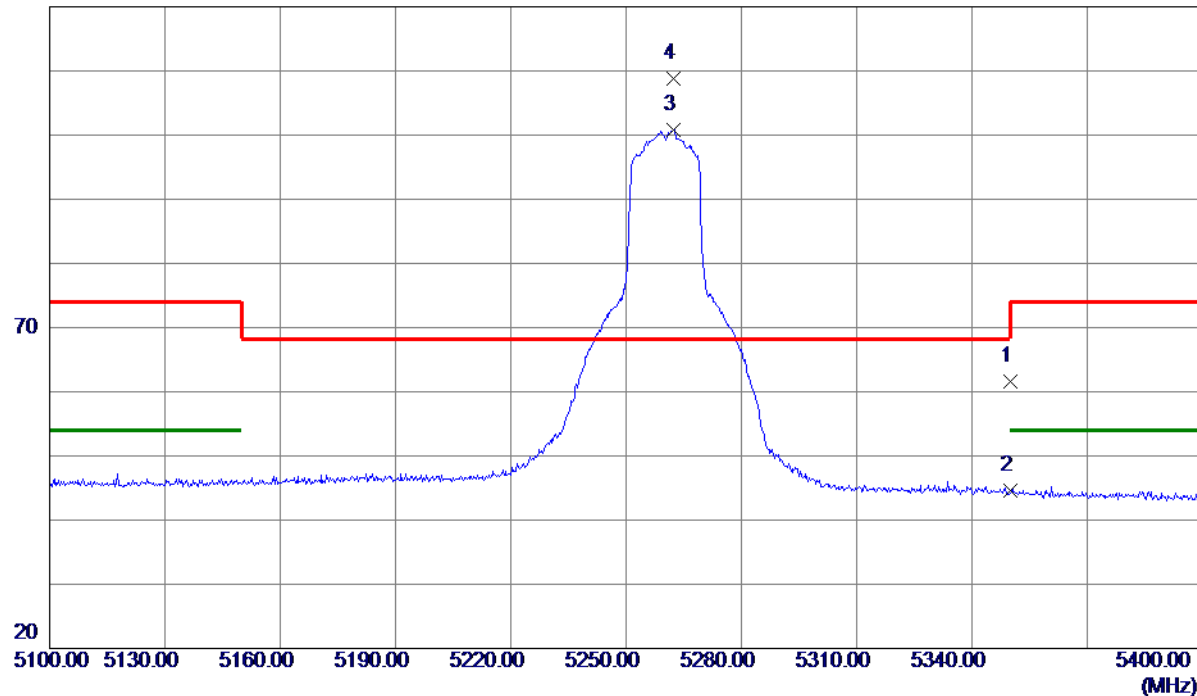
REMARKS:

- (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

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5350.0000	23.83	37.74	61.57	74.00	-12.43	Peak	
2	5350.0000	6.81	37.74	44.55	54.00	-9.45	AVG	
3	5262.3000	63.29	37.59	100.88	999.00	-898.12	AVG	No limit
4 *	5262.3000	71.18	37.59	108.77	68.30	40.47	Peak	No limit

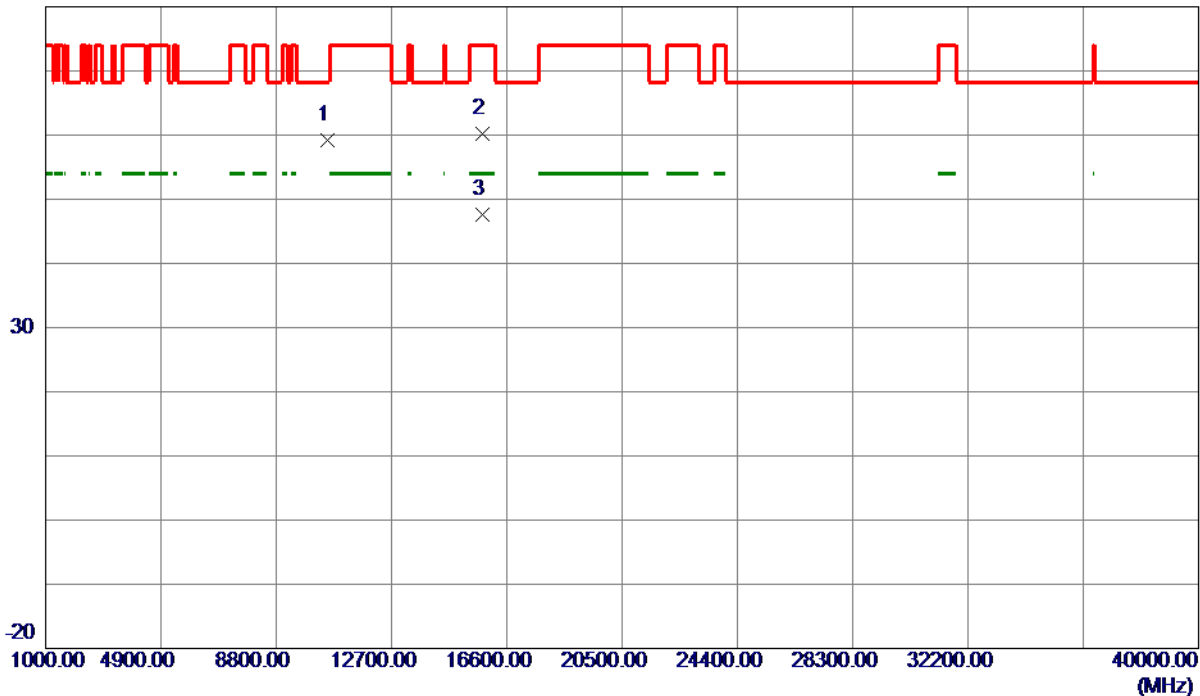
REMARKS:

- (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	10520.9620	57.36	1.84	59.20	68.30	-9.10	Peak	
2	15775.0660	57.56	2.69	60.25	74.00	-13.75	Peak	
3 *	15778.2940	44.94	2.69	47.63	54.00	-6.37	AVG	

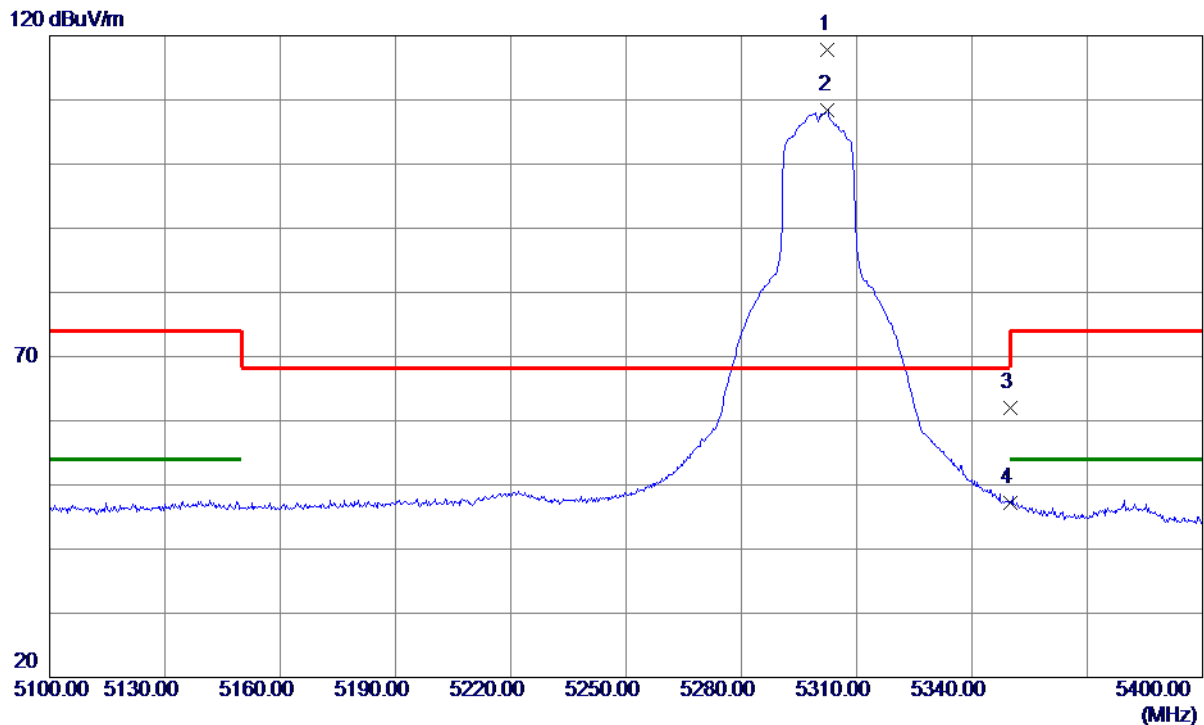
REMARKS:

(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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5302.5000	80.23	37.55	117.78	68.30	49.48	Peak	No limit
2	5302.5000	70.88	37.55	108.43	999.00	-890.57	AVG	No limit
3	5350.0000	24.23	37.74	61.97	74.00	-12.03	Peak	
4	5350.0000	9.45	37.74	47.19	54.00	-6.81	AVG	

REMARKS:

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