

FCC Radio Test Report

FCC ID: 2AF5PMG8702

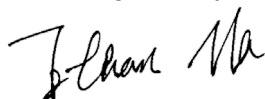
This report concerns: Original Grant

Project No. : 1908C159
Equipment : DOCSIS 3.1 Cable Modem plus AC3200 Router
Brand Name : motorola
Test Model : MG8702XY
Series Model : N/A
Applicant : MTRLC LLC
Address : 225 Franklin St. 26th Floor, Boston, MA 02110
Manufacturer : MTRLC LLC
Address : 225 Franklin St. 26th Floor, Boston, MA 02110
Date of Receipt : Aug. 20, 2019
Date of Test : Aug. 26, 2019 ~ Oct. 24, 2019
Issued Date : Jan. 21, 2020
Report Version : R00
Test Sample : Engineering Sample No.: DG19082034 for conducted,
DG19082033 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.



Prepared by : Welly Zhou



Approved by : Ethan Ma



Certificate #5123.02

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

Tel: +86-769-8318-3000

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	6
1 . SUMMARY OF TEST RESULTS	7
1.1 TEST FACILITY	8
1.2 MEASUREMENT UNCERTAINTY	8
1.3 TEST ENVIRONMENT CONDITIONS	8
2 . GENERAL INFORMATION	9
2.1 GENERAL DESCRIPTION OF EUT	9
2.2 TEST MODES	12
2.3 PARAMETERS OF TEST SOFTWARE	15
2.4 DUTY CYCLE	17
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	19
2.6 SUPPORT UNITS	19
3 . AC POWER LINE CONDUCTED EMISSIONS TEST	20
3.1 LIMIT	20
3.2 TEST PROCEDURE	20
3.3 DEVIATION FROM TEST STANDARD	20
3.4 TEST SETUP	21
3.5 EUT OPERATION CONDITIONS	21
3.6 TEST RESULTS	21
4 . RADIATED EMISSIONS TEST	22
4.1 LIMIT	22
4.2 TEST PROCEDURE	23
4.3 DEVIATION FROM TEST STANDARD	23
4.4 TEST SETUP	24
4.5 EUT OPERATION CONDITIONS	26
4.6 TEST RESULTS - 9 KHZ to 30 MHZ	26
4.7 TEST RESULTS - 30 MHz TO 1000 MHz	26
4.8 TEST RESULTS - ABOVE 1000 MHz	26
5 . BANDWIDTH TEST	27
5.1 LIMIT	27
5.2 TEST PROCEDURE	27

Table of Contents	Page
5.3 TEST PROCEDURE	27
5.4 TEST SETUP	28
5.5 EUT OPERATION CONDITIONS	28
5.6 TEST RESULTS	28
6 . MAXIMUM OUTPUT POWER TEST	29
6.1 LIMIT	29
6.2 TEST PROCEDURE	29
6.3 DEVIATION FROM STANDARD	29
6.4 TEST SETUP	29
6.5 EUT OPERATION CONDITIONS	29
6.6 TEST RESULTS	29
7 . POWER SPECTRAL DENSITY TEST	30
7.1 LIMIT	30
7.2 TEST PROCEDURE	30
7.3 DEVIATION FROM STANDARD	30
7.4 TEST SETUP	30
7.5 EUT OPERATION CONDITIONS	30
7.6 TEST RESULTS	30
8 . FREQUENCY STABILITY MEASUREMENT	31
8.1 LIMIT	31
8.2 TEST PROCEDURE	31
8.3 DEVIATION FROM STANDARD	31
8.4 TEST SETUP	31
8.5 EUT OPERATION CONDITIONS	31
8.6 TEST RESULTS	31
9 . MEASUREMENT INSTRUMENTS LIST	32
10 . EUT TEST PHOTOS	34
APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS	38
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ	41
APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ	46
APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ	49

Table of Contents	Page
APPENDIX E - BANDWIDTH	122
APPENDIX F - MAXIMUM OUTPUT POWER	130
APPENDIX G - POWER SPECTRAL DENSITY	152
APPENDIX H - FREQUENCY STABILITY	168

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Jan. 21, 2020

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)				
Standard(s) Section	Test Item	Test Result	Judgement	Remark
15.207 15.407(b)	AC Power Line Conducted Emissions	Appendix A	Pass	-----
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	Appendix B Appendix C Appendix D	Pass	-----
15.407(a) 15.407(e)	Spectrum Bandwidth	Appendix E	Pass	-----
15.407(a)	Maximum Output Power	Appendix F	Pass	-----
15.407(a)	Power Spectral Density	Appendix G	Pass	-----
15.407(g)	Frequency Stability	Appendix H	Pass	-----
15.203	Antenna Requirements	-----	PASS	Note(4)
15.407(c)	Automatically Discontinue Transmission	-----	PASS	Note(2)

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (3) For UNII-1 this device was functioned as a
☒ Access point device ☐ Client device
- (4) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

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

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 kHz ~ 30 MHz	2.32

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	4.88
		30MHz ~ 200MHz	H	4.14
		200MHz ~ 1,000MHz	V	4.62
		200MHz ~ 1,000MHz	H	4.80
		1GHz ~ 6GHz	-	4.58
		6GHz ~ 18GHz	-	5.18
		18GHz ~ 26.5GHz	-	3.80
		26.5GHz ~ 40GHz	-	4.30

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	25°C	53%	AC 120V/60Hz	Robing Zhuang
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Robing Zhuang
Radiated Emissions-30 MHz to 1GHz	24°C	68%	AC 120V/60Hz	Sheldon Ou
Radiated Emissions-Above 1000 MHz	24°C	68%	AC 120V/60Hz	Sheldon Ou
Spectrum Bandwidth	27°C	56%	AC 120V/60Hz	Jonas Chen
Maximum Output Power	27°C	56%	AC 120V/60Hz	Jonas Chen
Power Spectral Density	27°C	56%	AC 120V/60Hz	Jonas Chen
Frequency Stability	27°C	56%	AC 120V/60Hz	Jonas Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	DOCSIS 3.1 Cable Modem plus AC3200 Router
Brand Name	motorola
Test Model	MG8702XY
Series Model	N/A
Model Difference(s)	Where X can be A, B, C, D or blank, and Y can be A, B, C, D or blank. The optional suffixes X and Y are to be used for identical hardware models that differ for marketing/sales purposes only.
Power Source	DC Voltage supplied from AC/DC adapter. Model: S042-1A120350VU
Power Rating	I/P:100-240V~, 50/60Hz, 1.0A O/P:12.0V --- 3.5A
Operation Frequency	UNII-1: 5150 MHz ~ 5250 MHz UNII-3: 5725 MHz ~ 5850 MHz
Modulation Type	OFDM
Bit Rate of Transmitter	Up to 1733.2 Mbps Mbps
Maximum Conducted Output Power for UNII-1 Non-Beamforming	IEEE 802.11a: 26.79 dBm (0.4775 W) IEEE 802.11n (HT20): 24.27 dBm (0.2673 W) IEEE 802.11n (HT40): 26.40 dBm (0.4365 W) IEEE 802.11ac (VHT20): 24.52 dBm (0.2831 W) IEEE 802.11ac (VHT40): 26.44 dBm (0.4406 W) IEEE 802.11ac (VHT80): 23.64 dBm (0.2312 W)
Maximum Conducted Output Power for UNII-3 Non Beamforming	IEEE 802.11a: 28.46 dBm (0.7015 W) IEEE 802.11n (HT20): 28.48 dBm (0.7047 W) IEEE 802.11n (HT40): 28.50 dBm (0.7079 W) IEEE 802.11ac (VHT20): 28.64 dBm (0.7311 W) IEEE 802.11ac (VHT40): 28.57 dBm (0.7194 W) IEEE 802.11ac (VHT80): 28.73 dBm (0.7464 W)
Maximum Conducted Output Power for UNII-1 Beamforming	IEEE 802.11n (HT20): 23.38 dBm (0.2178 W) IEEE 802.11n (HT40): 25.94 dBm (0.3926 W) IEEE 802.11ac (VHT20): 23.45 dBm (0.2213 W) IEEE 802.11ac (VHT40): 26.01 dBm (0.3990 W) IEEE 802.11ac (VHT80): 22.96 dBm (0.1977 W)
Maximum Conducted Output Power for UNII-3 Beamforming	IEEE 802.11n (HT20): 26.43 dBm (0.4395 W) IEEE 802.11n (HT40): 26.66 dBm (0.4634 W) IEEE 802.11ac (VHT20): 26.50 dBm (0.4467 W) IEEE 802.11ac (VHT40): 26.77 dBm (0.4753 W) IEEE 802.11ac (VHT80): 26.53 dBm (0.4498 W)

Note:

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

2. Channel List:

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-1		UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-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)
1	N/A	N/A	Internal	N/A	3.00
2	N/A	N/A	Internal	N/A	3.00
3	N/A	N/A	Internal	N/A	3.00
4	N/A	N/A	Internal	N/A	3.00

Note:

(1) For Non Beamforming function:

This EUT supports CDD, and all antennas have the same gain,

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

For power spectral density measurements, $N_{ANT} = 4$, $N_{SS} = 1$.

So Directional gain = $G_{ANT} + \text{Array Gain} = 10 \log (N_{ANT} / N_{SS}) \text{ dB} = 3.00 + 10 \log (2/1) \text{ dBi} = 9.02$. Then, the UNII-1 power spectral density limit is $17 - 9.02 + 6 = 13.98$.

the UNII-3 power spectral density limit is $30 - 9.02 + 6 = 26.98$.

For power measurements, Array Gain = 0 dB ($N_{ANT} \leq 4$), so the Directional gain = 3.00.

(2) For Beamforming function, Beamforming Gain: 6.00 dB.

So Directional gain = $6.00 + 3.00 = 9.00$. Then, UNII-1 and UNII-3 output power limit is $30 - 9.00 + 6 = 27.00$.

4. Table for Antenna Configuration:

For Non Beamforming:

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

For Beamforming:

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

2.2 TEST MODES

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

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 13	TX AC(VHT80) Mode / CH155 (UNII-3)

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 13	TX AC(VHT80) Mode / CH155 (UNII-3)

Radiated emissions test	
Final 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 / CH149,CH157,CH165 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)

Output Power test for Non Beamforming	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)

Output Power test for With Beamforming	
Final Test Mode	Description
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 8	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)

Others 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 / CH149,CH157,CH165 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)

Note :

- (1) For radiated emission below 1 GHz test, the IEEE 802.11ac 80 channel 155 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.
- (3) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (4) The measurements for Power were tested, the non Beamforming and beamforming are recorded in the report. The worst cases were Non Beamforming, and only the worst cases were documented for other test items.

2.3 PARAMETERS OF TEST SOFTWARE

Non-Beamforming

UNII-1			
Test Software	accessMTool_REL_3_0_0_4		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	90	109	111
IEEE 802.11n (HT20)	68	68	68
IEEE 802.11ac (VHT20)	68	68	68
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	73	80	
IEEE 802.11ac (VHT40)	73	80	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	71		

UNII-3			
Test Software	accessMTool_REL_3_0_0_4		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	117	117	117
IEEE 802.11n (HT20)	88	88	88
IEEE 802.11ac (VHT20)	88	88	88
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	90	90	
IEEE 802.11ac (VHT40)	90	90	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	90		

Beamforming

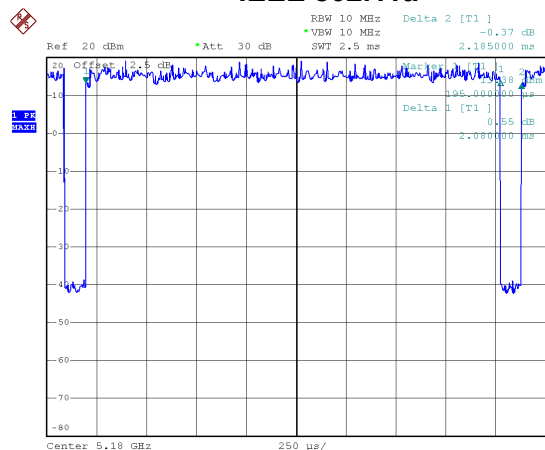
UNII-1			
Test Software	accessMTool_REL_3_0_0_4		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11n (HT20)	66	66	66
IEEE 802.11ac (VHT20)	66	66	66
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	71	78	
IEEE 802.11ac (VHT40)	71	78	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	69		

UNII-3			
Test Software	accessMTool_REL_3_0_0_4		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11n (HT20)	78	78	78
IEEE 802.11ac (VHT20)	78	78	78
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	80	80	
IEEE 802.11ac (VHT40)	80	80	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	82		

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.

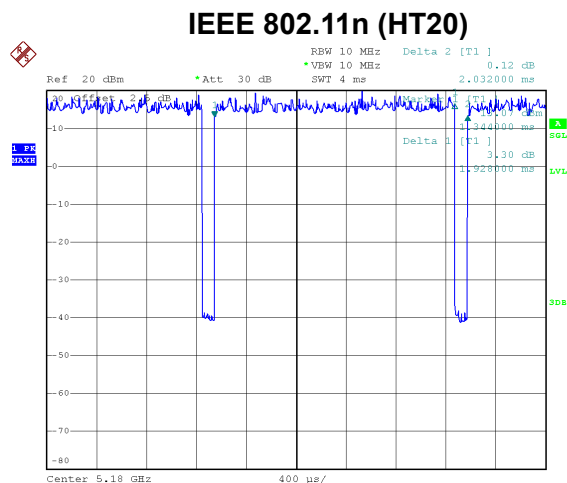
IEEE 802.11a



Date: 31.AUG.2019 10:37:30

Duty cycle = $2.080 \text{ ms} / 2.185 \text{ ms} = 95.19\%$
 Duty Factor = $10 * \log(1 / 95.19\%) = 0.21$

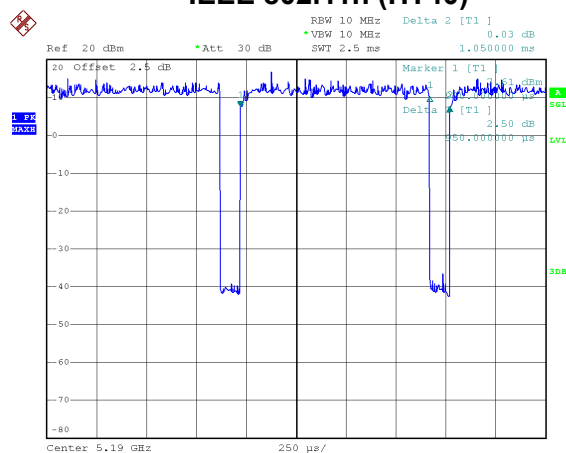
IEEE 802.11n (HT20)



Date: 31.AUG.2019 10:37:58

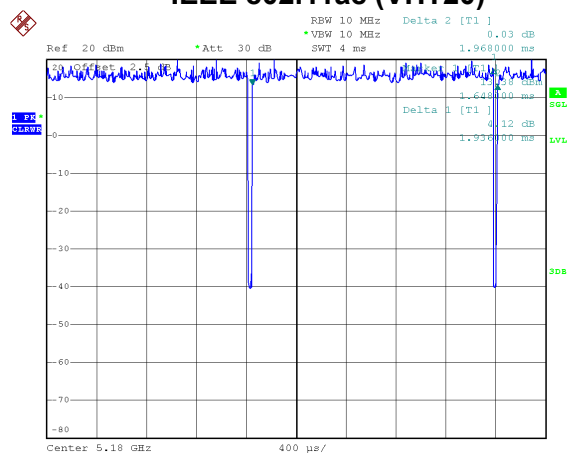
Duty cycle = $1.928 \text{ ms} / 2.032 \text{ ms} = 94.88\%$
 Duty Factor = $10 * \log(1 / 94.88\%) = 0.23 \text{ dB}$

IEEE 802.11ac (VHT20)



Date: 31.AUG.2019 10:45:08

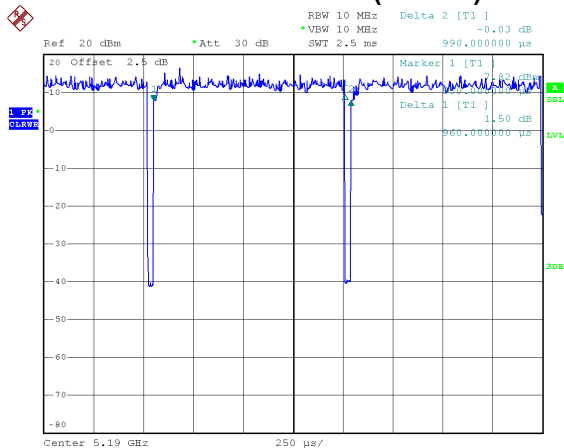
Duty cycle = $0.950 \text{ ms} / 1.050 \text{ ms} = 90.48\%$
 Duty Factor = $10 * \log(1 / 90.48\%) = 0.43$



Date: 31.AUG.2019 10:38:26

Duty cycle = $1.936 \text{ ms} / 1.968 \text{ ms} = 98.37\%$
 Duty Factor = $10 * \log(1 / 98.37\%) = 0.00 \text{ dB}$

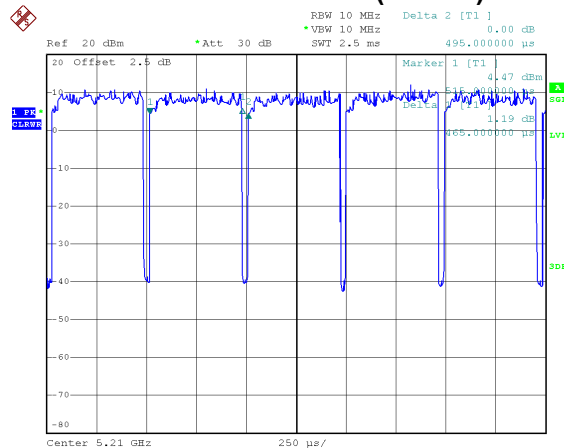
IEEE 802.11ac (VHT40)



Date: 31.AUG.2019 10:45:34

Duty cycle = 0.960 ms / 0.990 ms = 96.97%
Duty Factor = $10 \cdot \log(1 / 96.97\%) = 0.13$

IEEE 802.11ac (VHT80)



Date: 31.AUG.2019 10:46:02

Duty cycle = 0.465 ms / 0.495 ms = 93.94%
Duty Factor = $10 \cdot \log(1 / 93.94\%) = 0.27$ dB

NOTE:

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

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

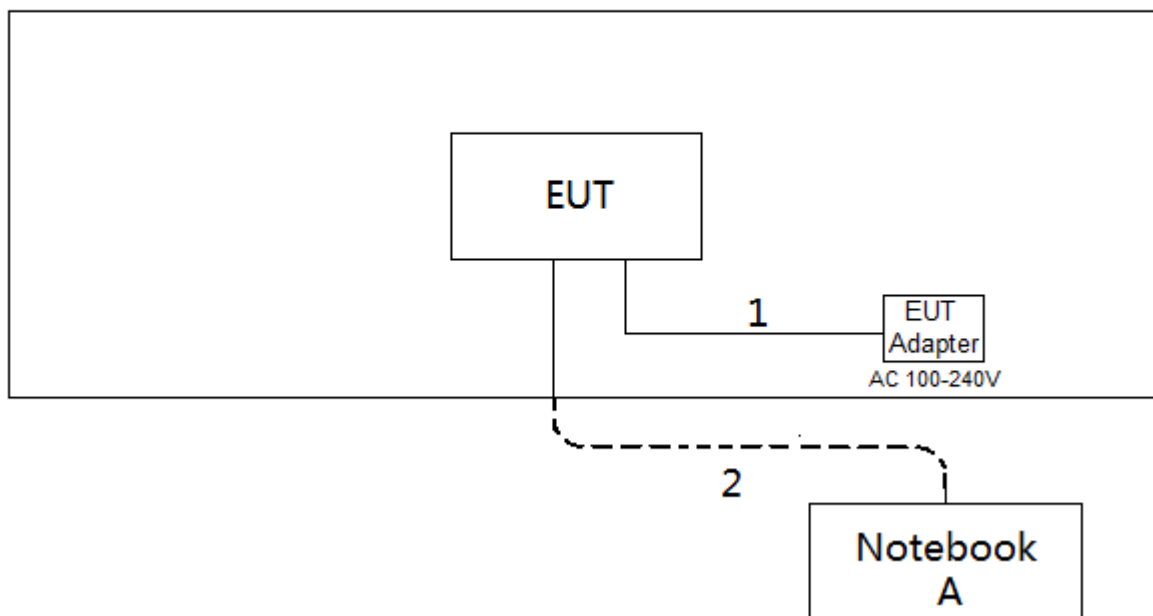
For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):

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

For IEEE 802.11ac (VHT80):

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

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Equipment	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	1.5m
2	RJ45 Cable	NO	NO	10m

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.50 - 5.	56	46
5.0 - 30.0	60	50

NOTE:

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

The following table is the setting of the receiver

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

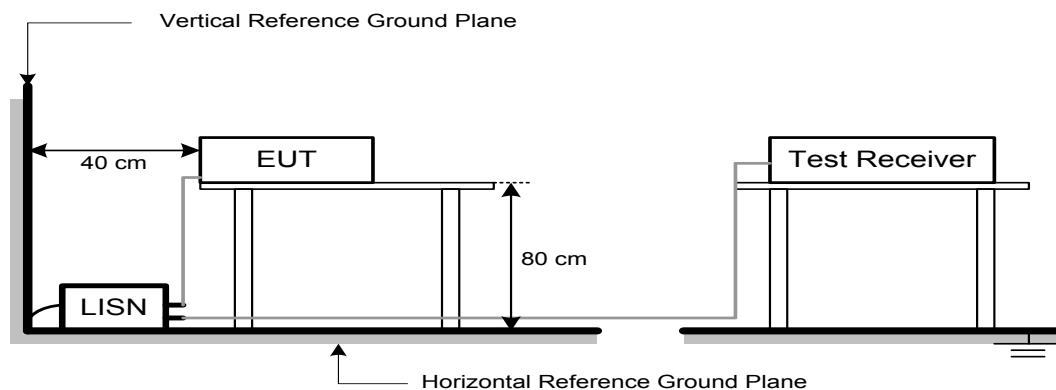
3.2 TEST PROCEDURE

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

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

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

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

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

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

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

NOTE:

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

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

(2) According to 15.407(b)(4)(i), all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

4.2 TEST PROCEDURE

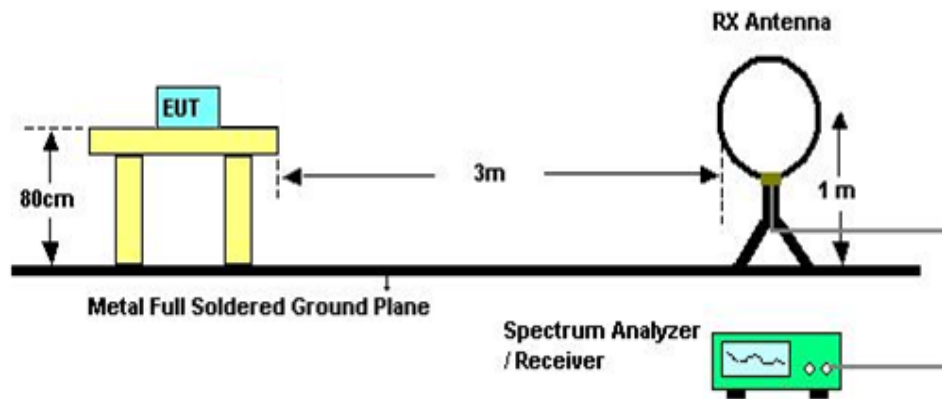
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.3 DEVIATION FROM TEST STANDARD

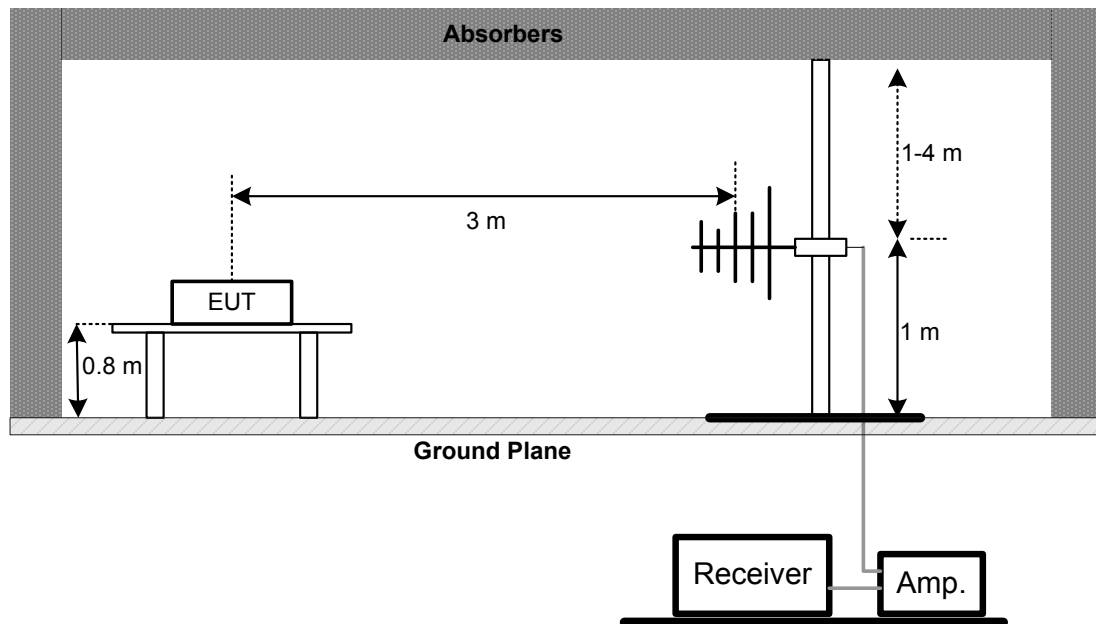
No deviation

4.4 TEST SETUP

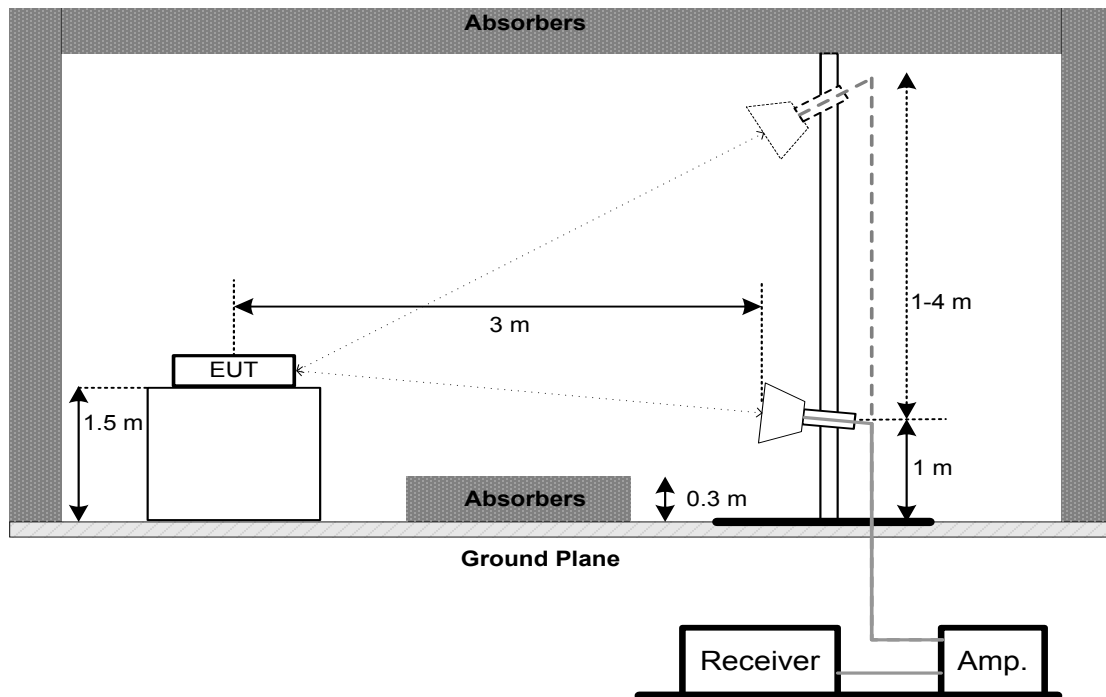
9 kHz to 30 MHz



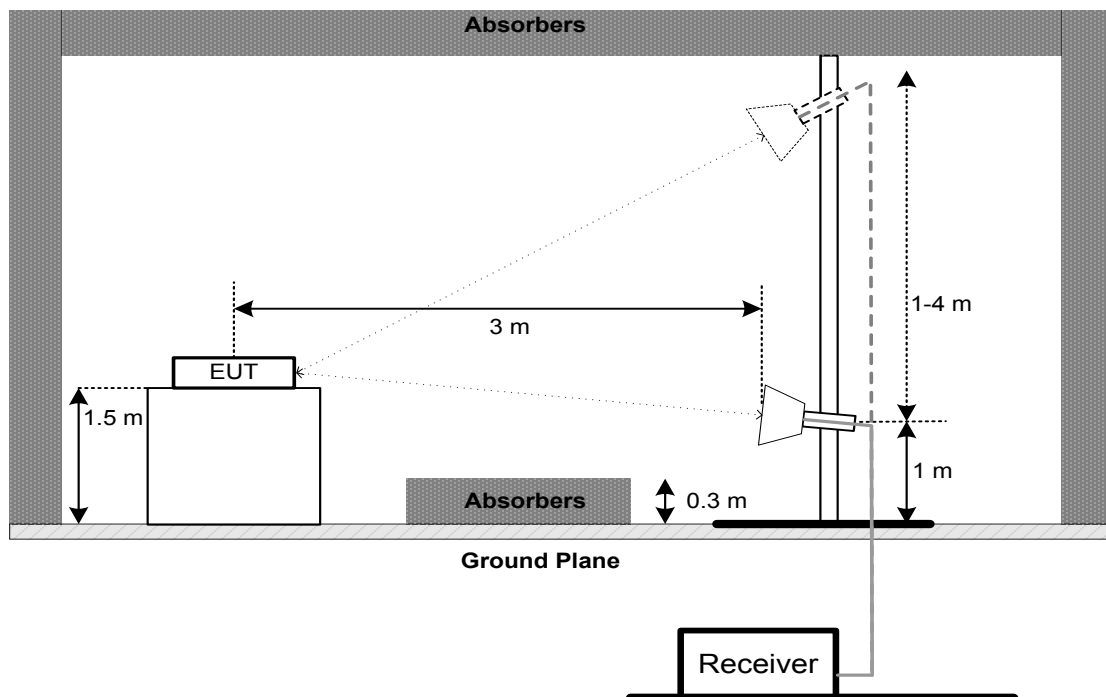
30 MHz to 1 GHz



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)	26 dB Bandwidth	-	5150-5250
15.407(e)	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:

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)	Maximum Output Power	AP device: 1 Watt (30 dBm) Client device: 250 mW (24 dBm)	5150-5250
		1 Watt (30dBm)	5725-5850

Note:

- 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.

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
		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 H.

8. FREQUENCY STABILITY MEASUREMENT

8.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(g)	Frequency Stability	Specified in the user's manual	5150-5250
			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:

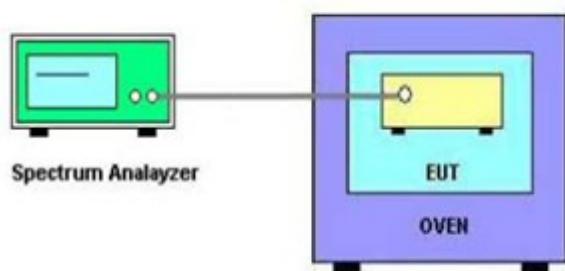
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- 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~55°C.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX I.

9. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 10, 2020
2	LISN	EMCO	3816/2	52765	Mar. 10, 2020
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	May. 19, 2020
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 10, 2020
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 12, 2020

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Jan. 15, 2020
2	Cable	N/A	RG 213/U	C-102	May 31, 2020
3	EMI Test Receiver	R&S	ESCI	100895	Mar. 10, 2020
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2020
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	May 24, 2020
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 09, 2020
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02333	Mar. 10, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 10, 2020
5	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	B10-01-01-12M	18072744	Jun. 29, 2020
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth & Maximum Output Power & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 03, 2020

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 03, 2020
2	Precision Oven Tester	Bell	BTH-50C	20170306001	Mar. 10, 2020

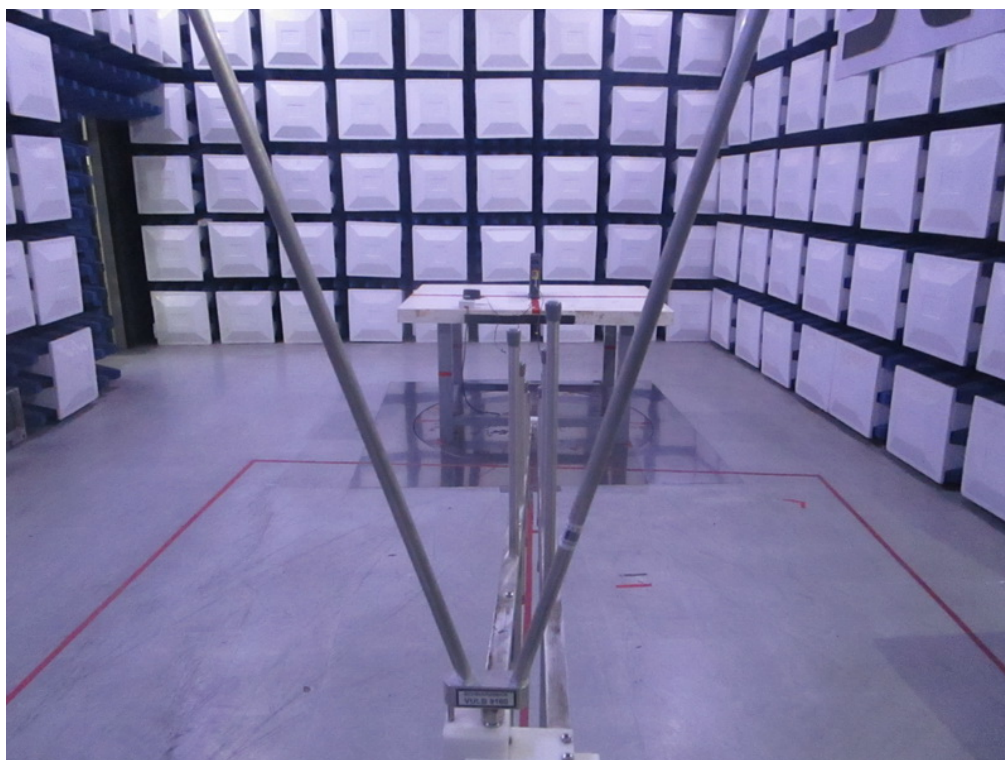
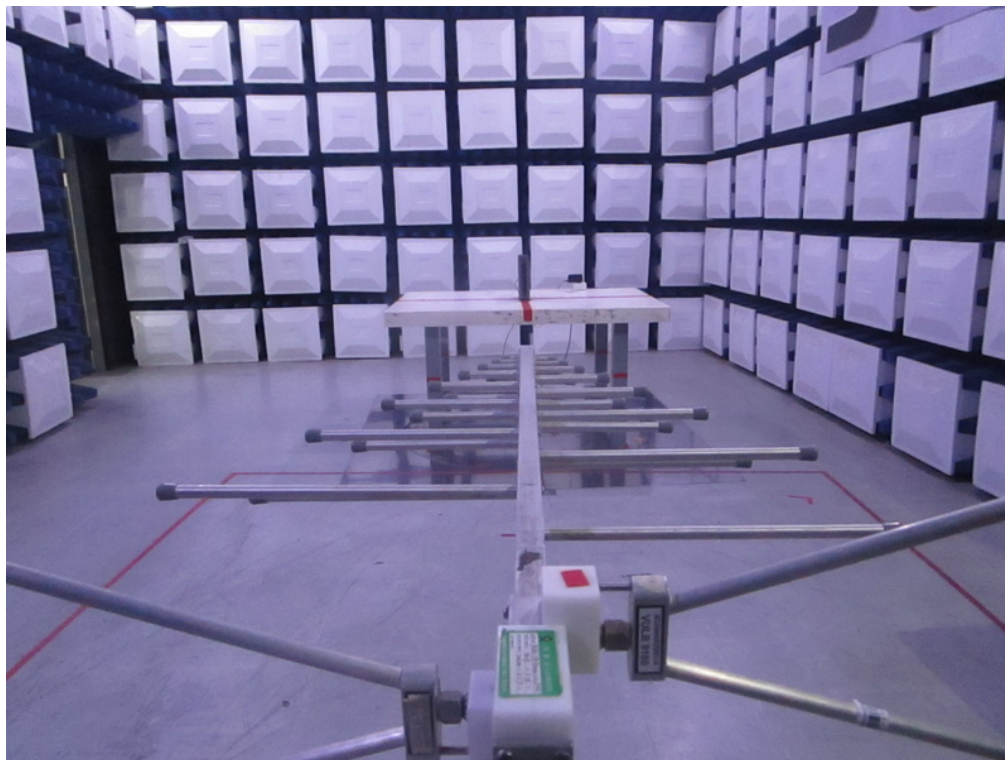
Remark: "N/A" denotes no model name, serial no. or calibration specified.

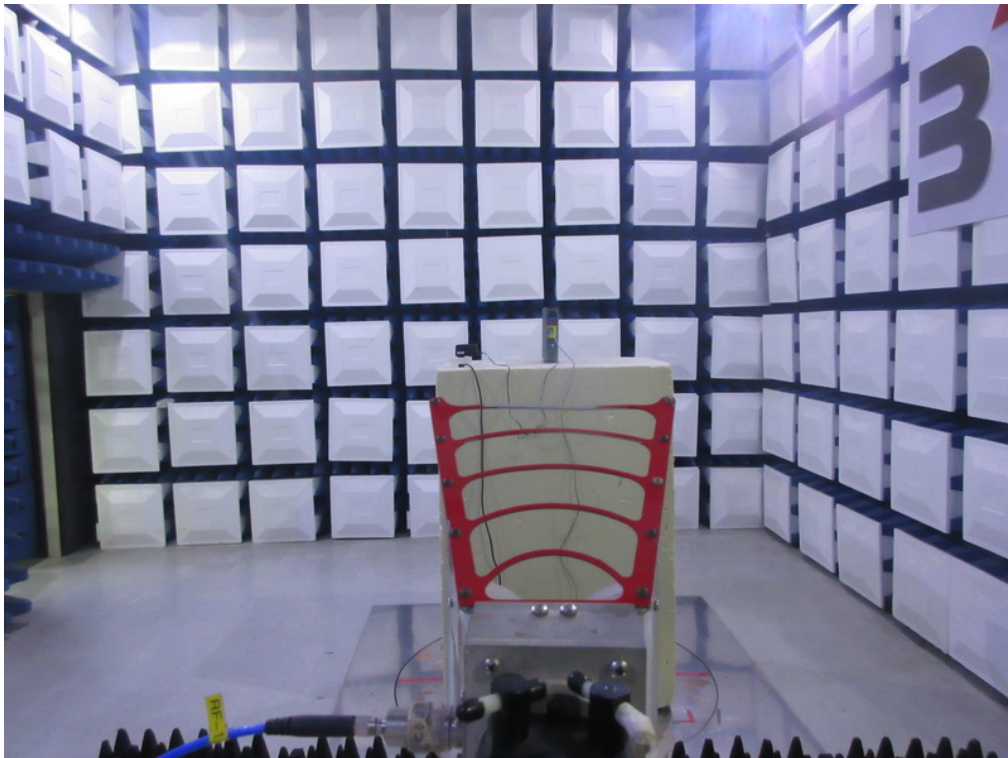
"*" calibration period of equipment list is three year.

Except * item, all calibration period of equipment list is one year.

10. EUT TEST PHOTOS**AC Power Line Conducted Emissions Test Photos**

Radiated Emissions Test Photos**9 kHz to 30 MHz**

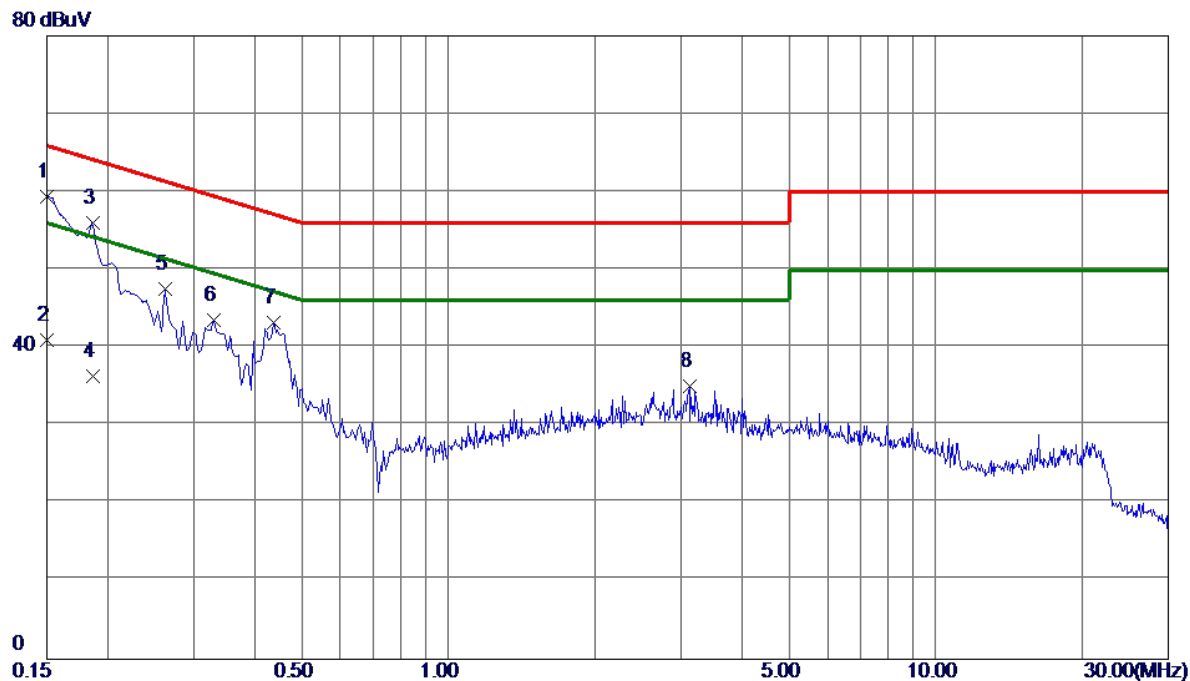
Radiated Emissions Test Photos**30 MHz to 1 GHz**

Radiated Emissions Test Photos**Above 1 GHz**

APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX AC80 MODE CHANNEL 155

Line



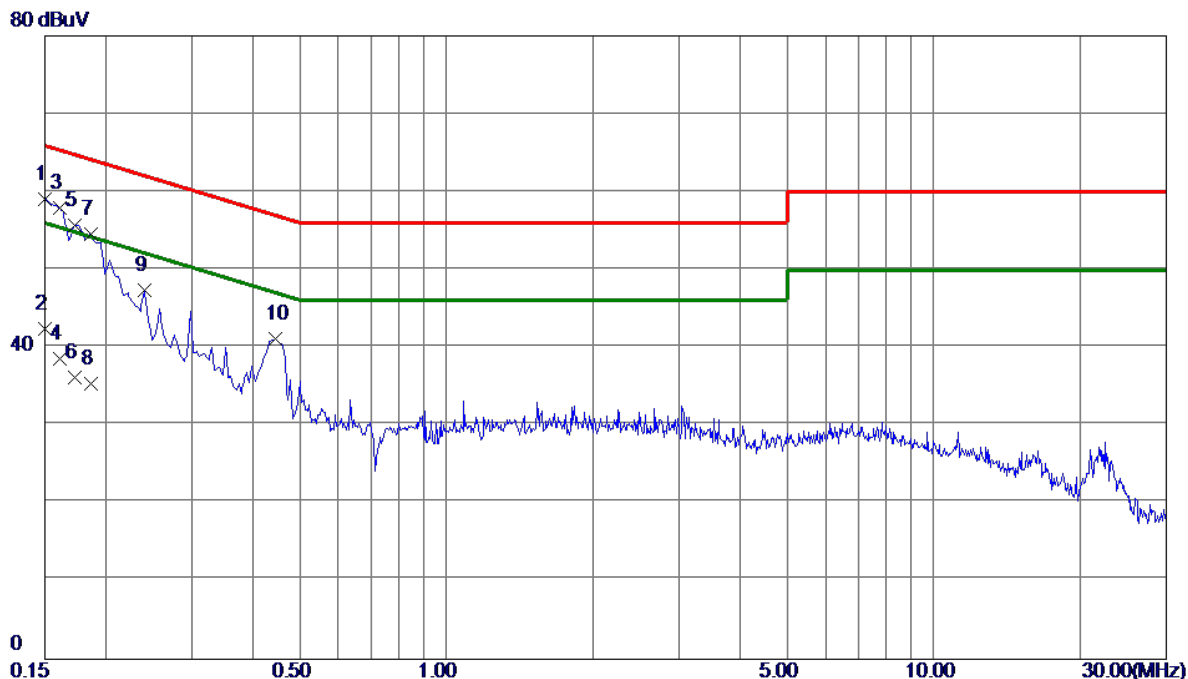
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1500	49.55	9.82	59.37	66.00	-6.63	Peak	
2	0.1500	31.20	9.82	41.02	56.00	-14.98	AVG	
3	0.1860	46.23	9.81	56.04	64.21	-8.17	Peak	
4	0.1860	26.50	9.81	36.31	54.21	-17.90	AVG	
5	0.2625	37.71	9.83	47.54	61.35	-13.81	Peak	
6	0.3300	33.70	9.85	43.55	59.45	-15.90	Peak	
7	0.4380	33.32	9.87	43.19	57.10	-13.91	Peak	
8	3.1199	25.00	10.07	35.07	56.00	-20.93	Peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.
- (3) The test result has included the cable loss.

Test Mode: TX AC80 MODE CHANNEL 155

Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1500	49.17	9.91	59.08	66.00	-6.92	Peak	
2	0.1500	32.50	9.91	42.41	56.00	-13.59	AVG	
3	0.1607	47.97	9.91	57.88	65.43	-7.55	Peak	
4	0.1607	28.70	9.91	38.61	55.43	-16.82	AVG	
5	0.1725	45.84	9.91	55.75	64.84	-9.09	Peak	
6	0.1725	26.30	9.91	36.21	54.84	-18.63	AVG	
7	0.1860	44.60	9.90	54.50	64.21	-9.71	Peak	
8	0.1860	25.50	9.90	35.40	54.21	-18.81	AVG	
9	0.2400	37.45	9.92	47.37	62.10	-14.73	Peak	
10	0.4470	31.05	10.02	41.07	56.93	-15.86	Peak	

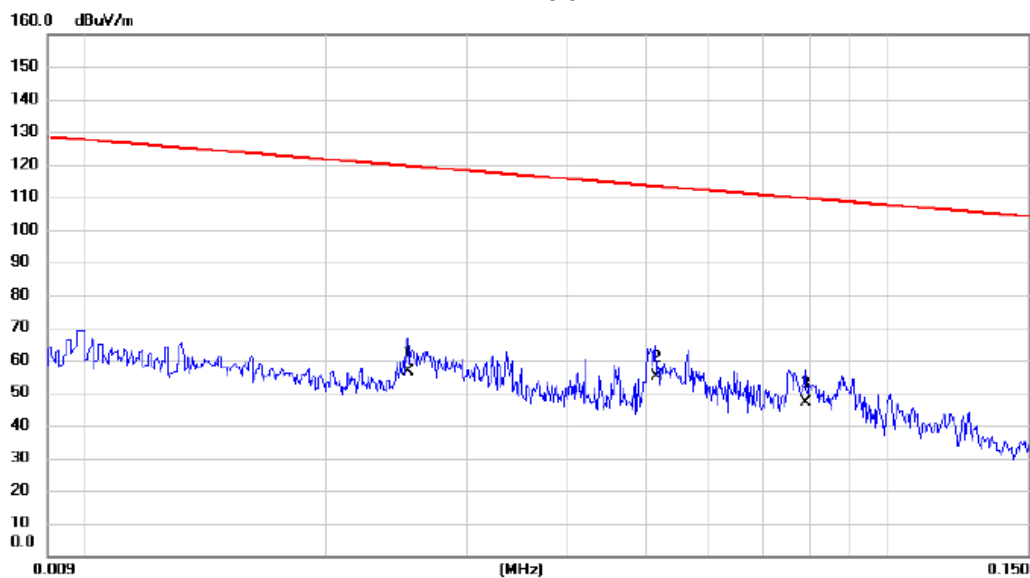
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.
- (3) The test result has included the cable loss.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode:	TX AC80 MODE CHANNEL 155
------------	--------------------------

Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0253	42.87	13.84	56.71	119.54	-62.83	AVG	
2	*	0.0515	41.18	13.91	55.09	113.37	-58.28	AVG	
3		0.0790	33.64	13.54	47.18	109.65	-62.47	AVG	

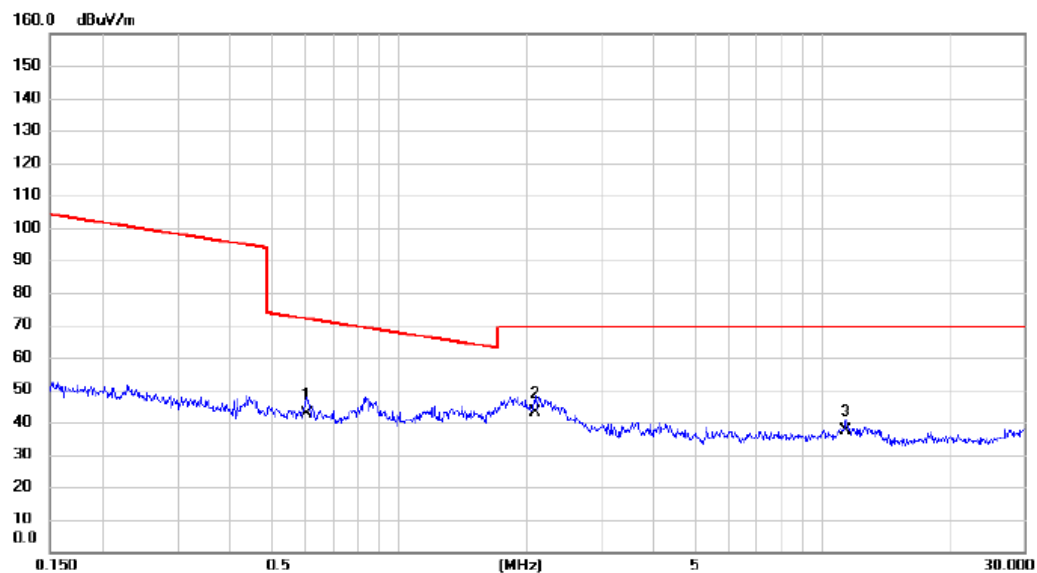
REMARKS:

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

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

Test Mode: TX AC80 MODE CHANNEL 155

Ant 0°



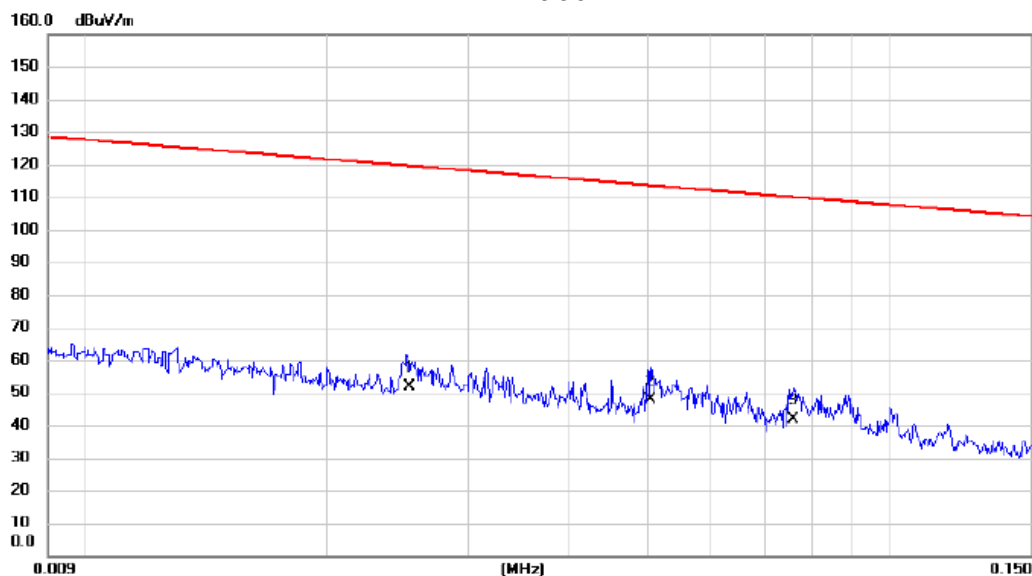
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.6075	29.89	12.86	42.75	71.93	-29.18	QP	
2	*	2.0990	31.27	11.76	43.03	69.54	-26.51	QP	
3		11.3771	25.64	11.61	37.25	69.54	-32.29	QP	

REMARKS:

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

Test Mode: TX AC80 MODE CHANNEL 155

Ant 90°



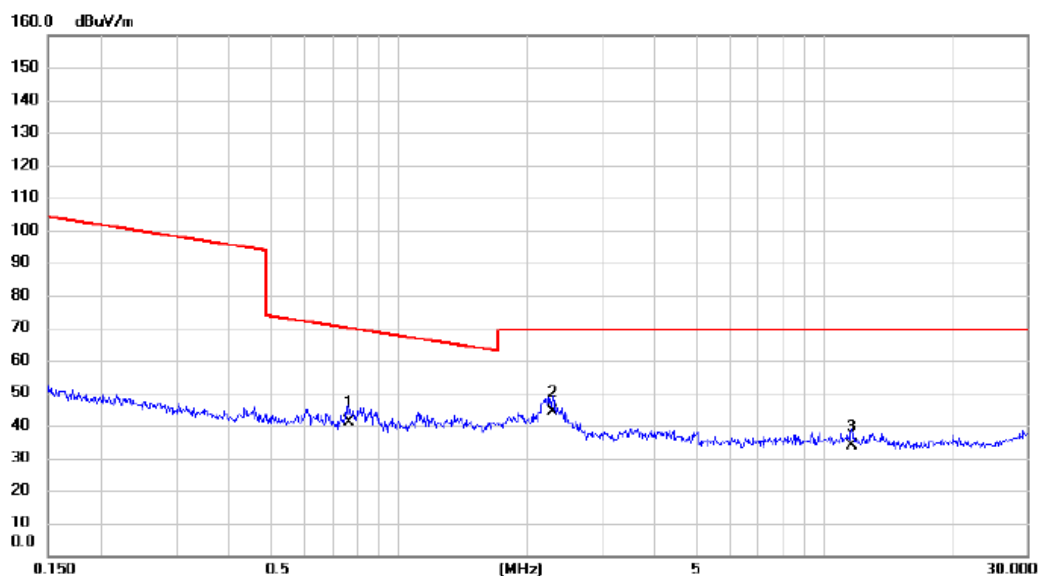
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0253	37.94	13.84	51.78	119.54	-67.76	AVG	
2	*	0.0505	33.79	13.92	47.71	113.54	-65.83	AVG	
3		0.0760	28.14	13.53	41.67	109.99	-68.32	AVG	

REMARKS:

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

Test Mode: TX AC80 MODE CHANNEL 155

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.7670	28.61	12.57	41.18	69.91	-28.73	QP	
2	*	2.2968	32.57	11.64	44.21	69.54	-25.33	QP	
3		11.6208	22.27	11.61	33.88	69.54	-35.66	QP	

REMARKS:

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

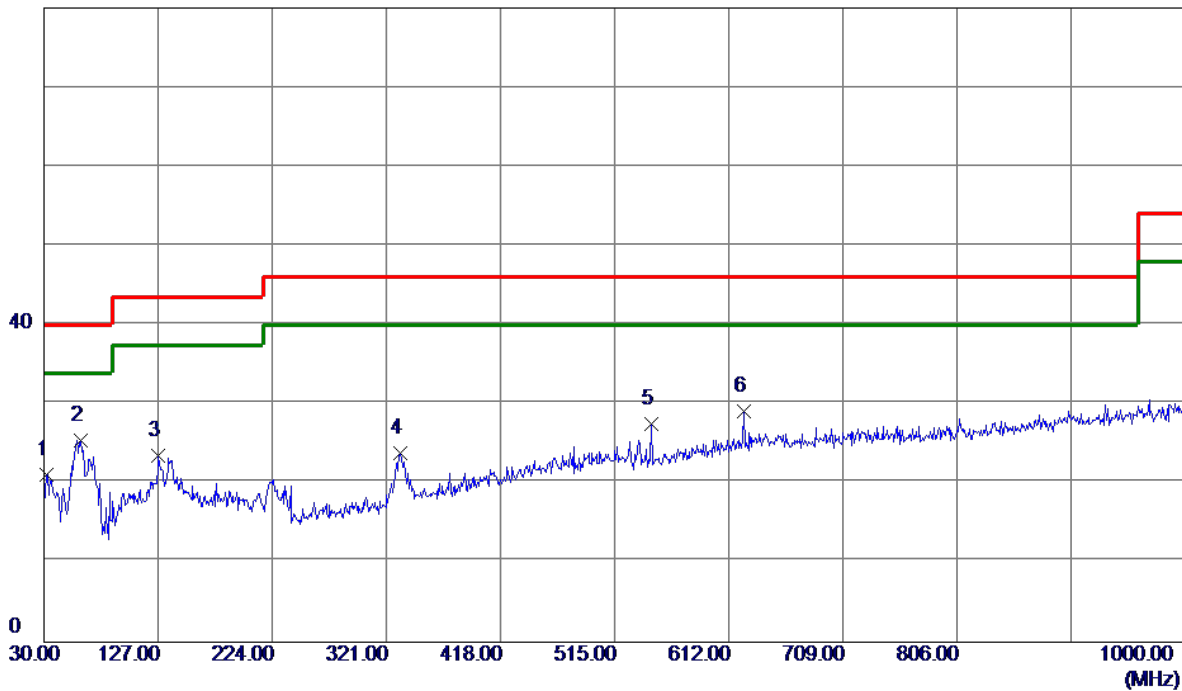
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ

Test Mode: TX AC80 MODE CHANNEL 155

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.9400	35.97	-14.78	21.19	40.00	-18.81	Peak	
2 *	61.0400	40.35	-14.90	25.45	40.00	-14.55	Peak	
3	127.0000	36.49	-13.04	23.45	43.50	-20.05	Peak	
4	333.1250	34.85	-10.94	23.91	46.00	-22.09	Peak	
5	546.0400	34.82	-7.24	27.58	46.00	-18.42	Peak	
6	625.0949	34.28	-5.21	29.07	46.00	-16.93	Peak	

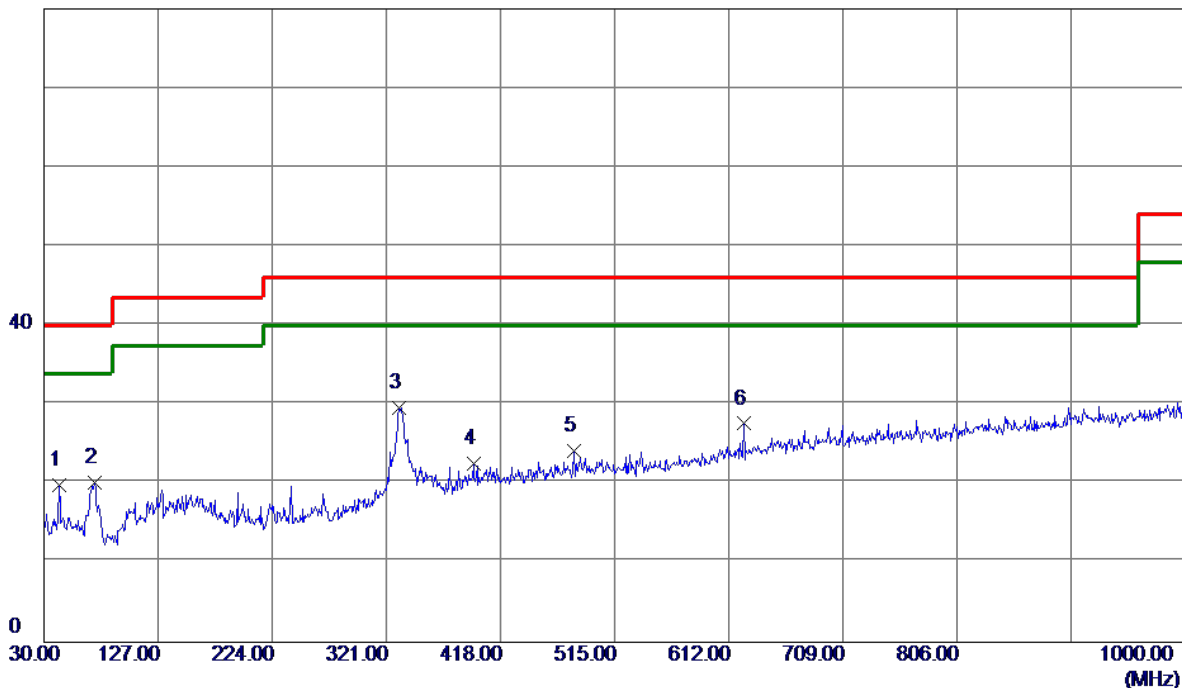
REMARKS:

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

Test Mode: TX AC80 MODE CHANNEL 155

Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	42. 6100	34. 26	-14. 49	19. 77	40. 00	-20. 23	Peak	
2	72. 6800	36. 89	-16. 72	20. 17	40. 00	-19. 83	Peak	
3 *	331. 6700	40. 56	-10. 97	29. 59	46. 00	-16. 41	Peak	
4	395. 2049	32. 17	-9. 58	22. 59	46. 00	-23. 41	Peak	
5	480. 0800	31. 97	-7. 84	24. 13	46. 00	-21. 87	Peak	
6	625. 0949	32. 81	-5. 21	27. 60	46. 00	-18. 40	Peak	

REMARKS:

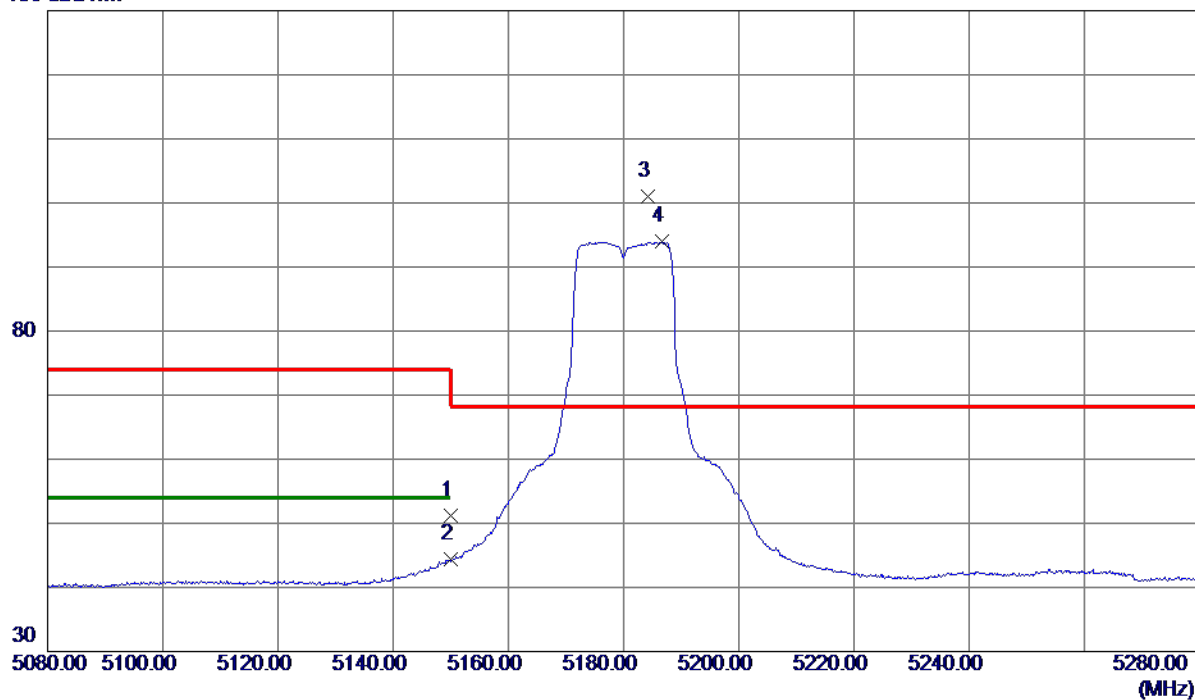
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	37.76	13.45	51.21	74.00	-22.79	Peak	
2	5150.0000	31.00	13.45	44.45	54.00	-9.55	AVG	
3 *	5184.3000	87.44	13.53	100.97	68.30	32.67	Peak	No Limit
4	5186.6000	80.37	13.54	93.91	999.00	-905.09	AVG	No Limit

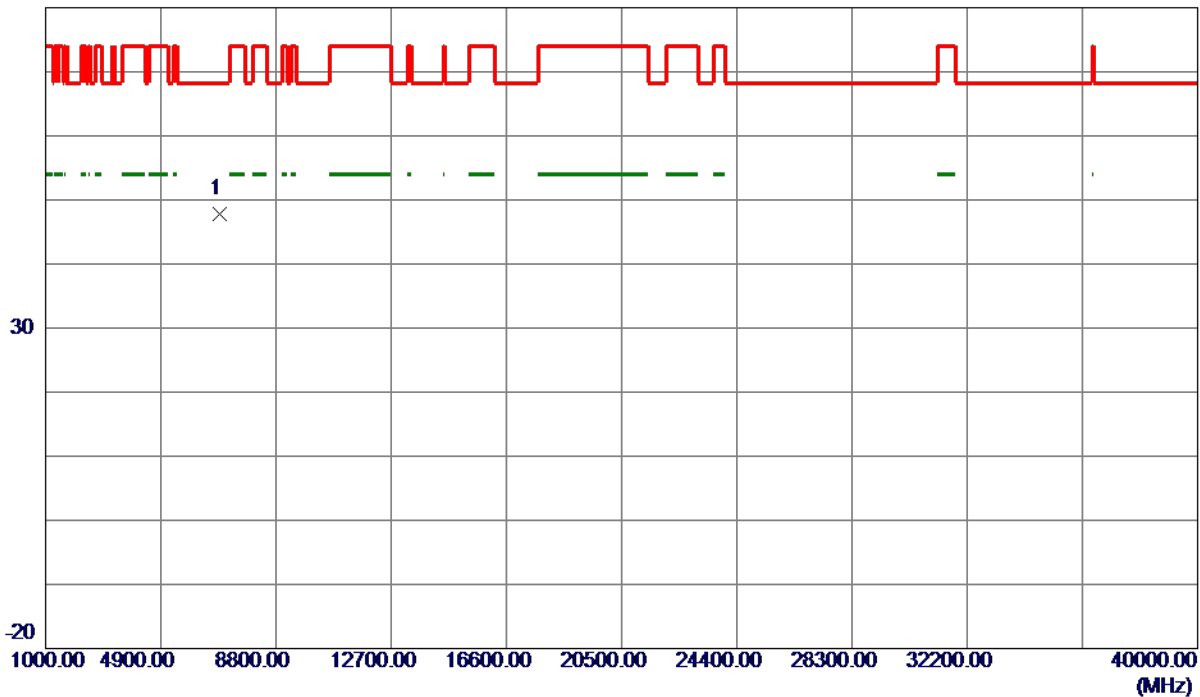
REMARKS:

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

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

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 *	6906.6400	39.96	7.82	47.78	68.30	-20.52	Peak	

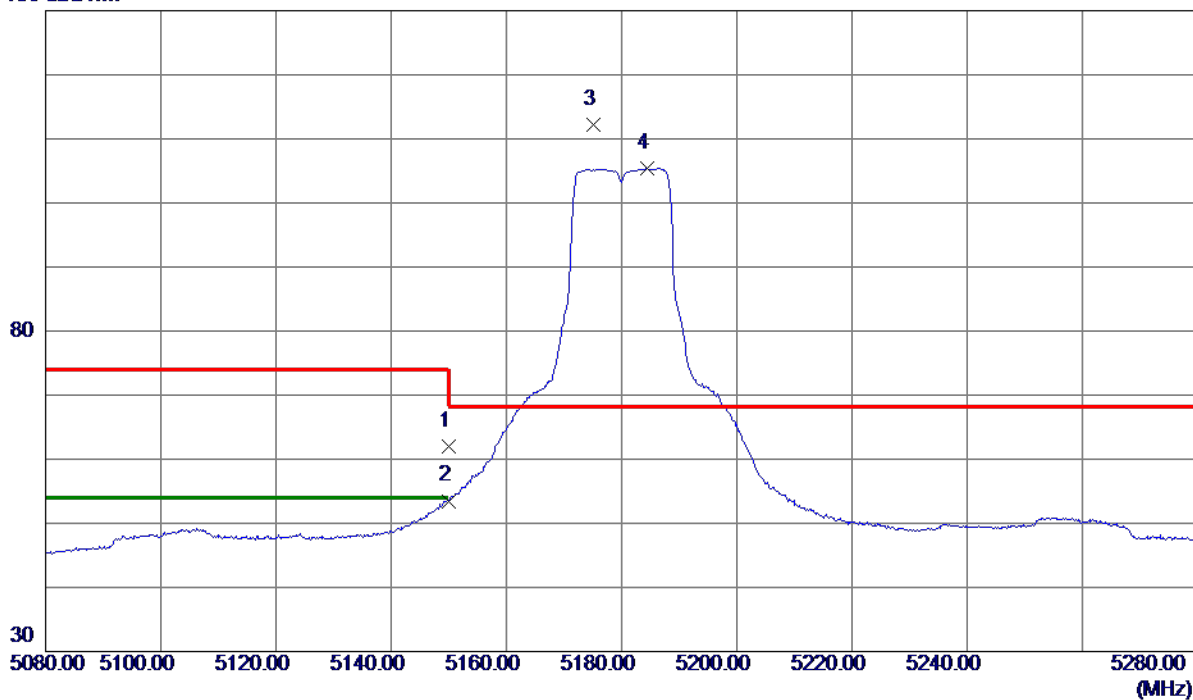
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	48.49	13.45	61.94	74.00	-12.06	Peak	
2	5150.0000	40.05	13.45	53.50	54.00	-0.50	AVG	
3 *	5175.2000	98.75	13.51	112.26	68.30	43.96	Peak	No Limit
4	5184.4000	91.86	13.53	105.39	999.00	-893.61	AVG	No Limit

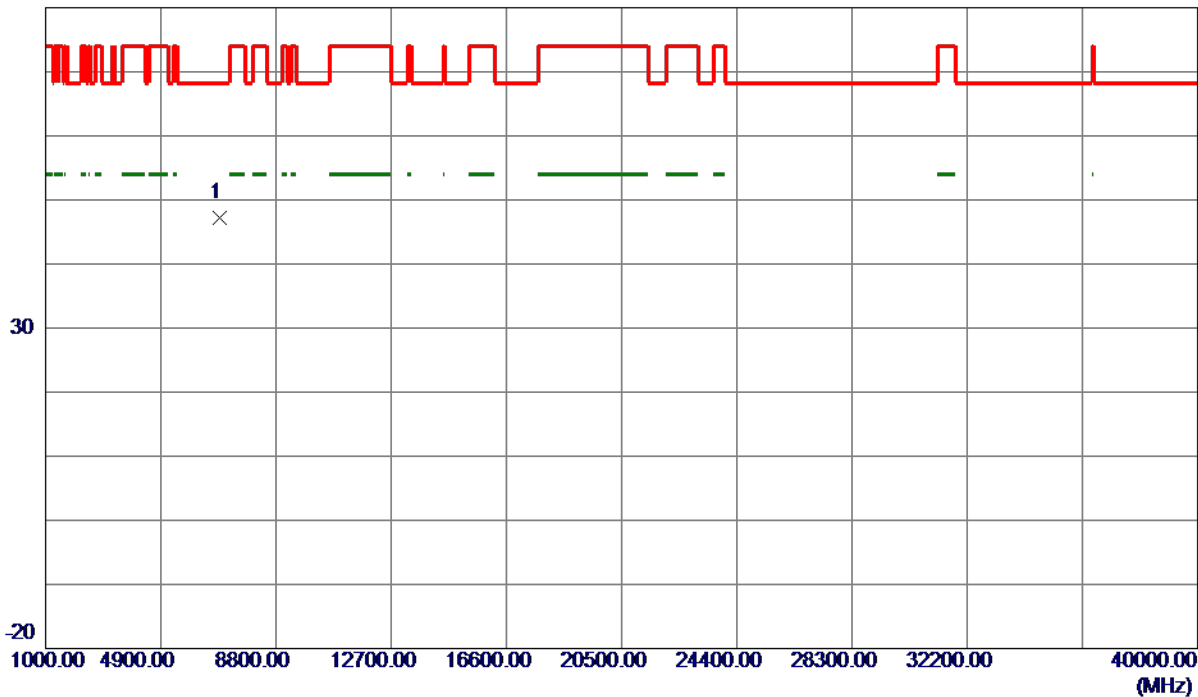
REMARKS:

- (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 *	6906.6200	39.38	7.82	47.20	68.30	-21.10	Peak	

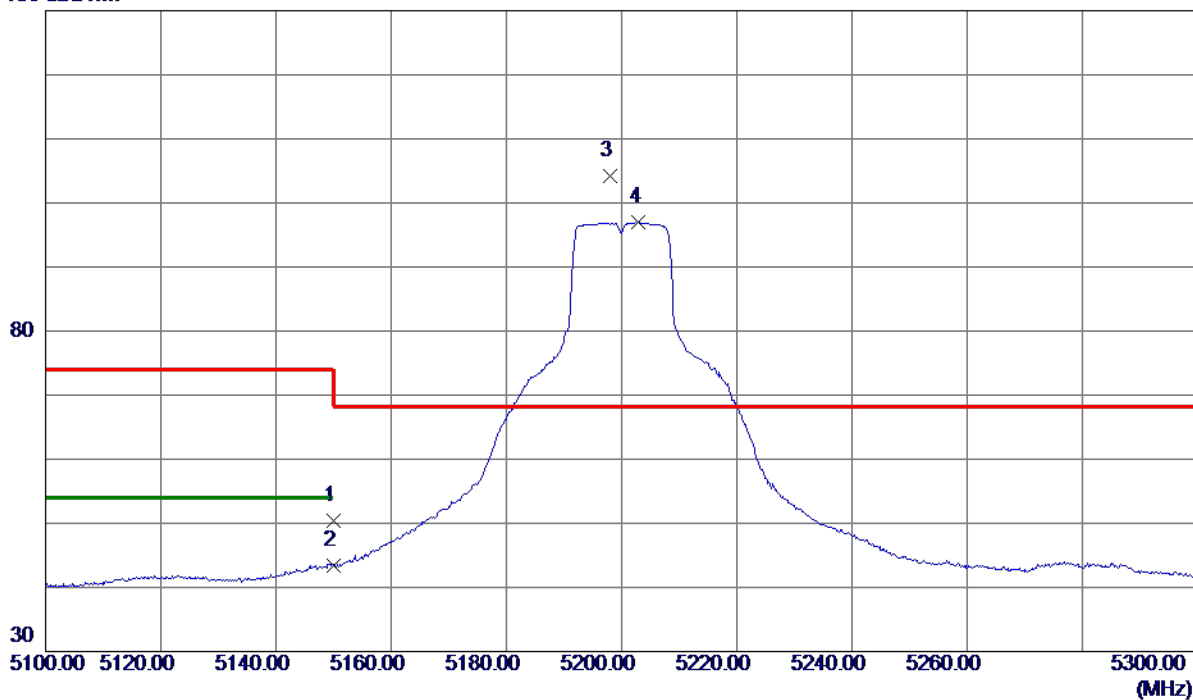
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	36.96	13.45	50.41	74.00	-23.59	Peak	
2	5150.0000	29.89	13.45	43.34	54.00	-10.66	AVG	
3 *	5197.9000	90.54	13.57	104.11	68.30	35.81	Peak	No Limit
4	5203.0000	83.36	13.58	96.94	999.00	-902.06	AVG	No Limit

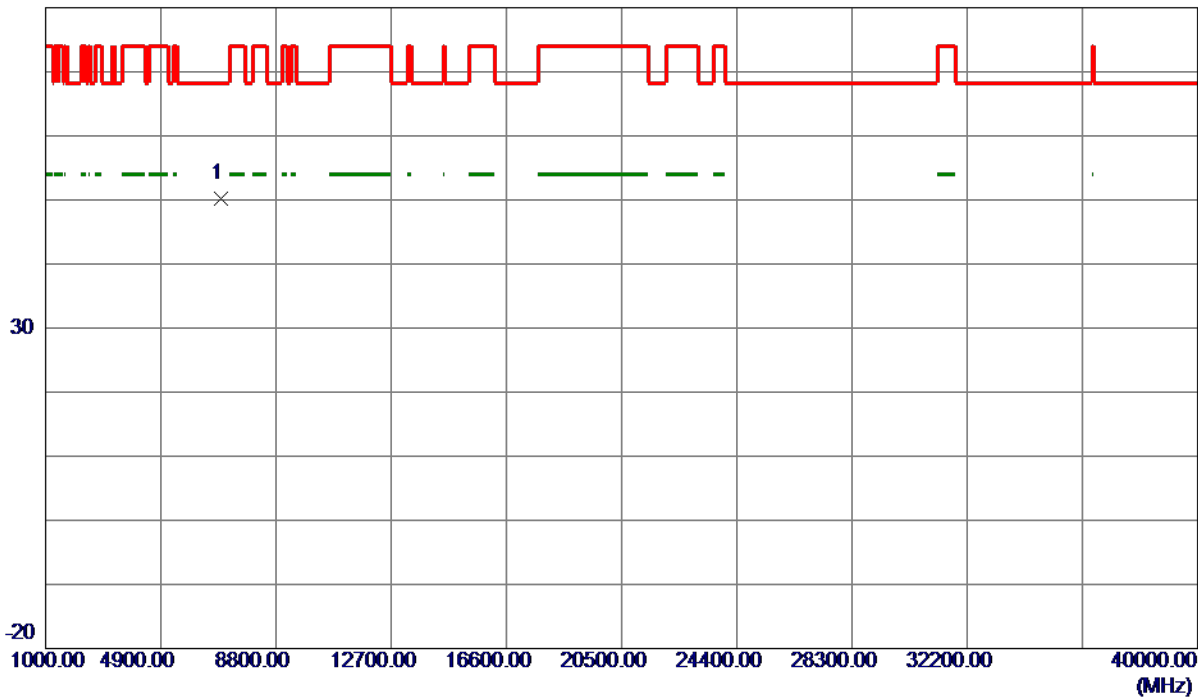
REMARKS:

- (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 *	6933.3700	42.23	7.88	50.11	68.30	-18.19	Peak	

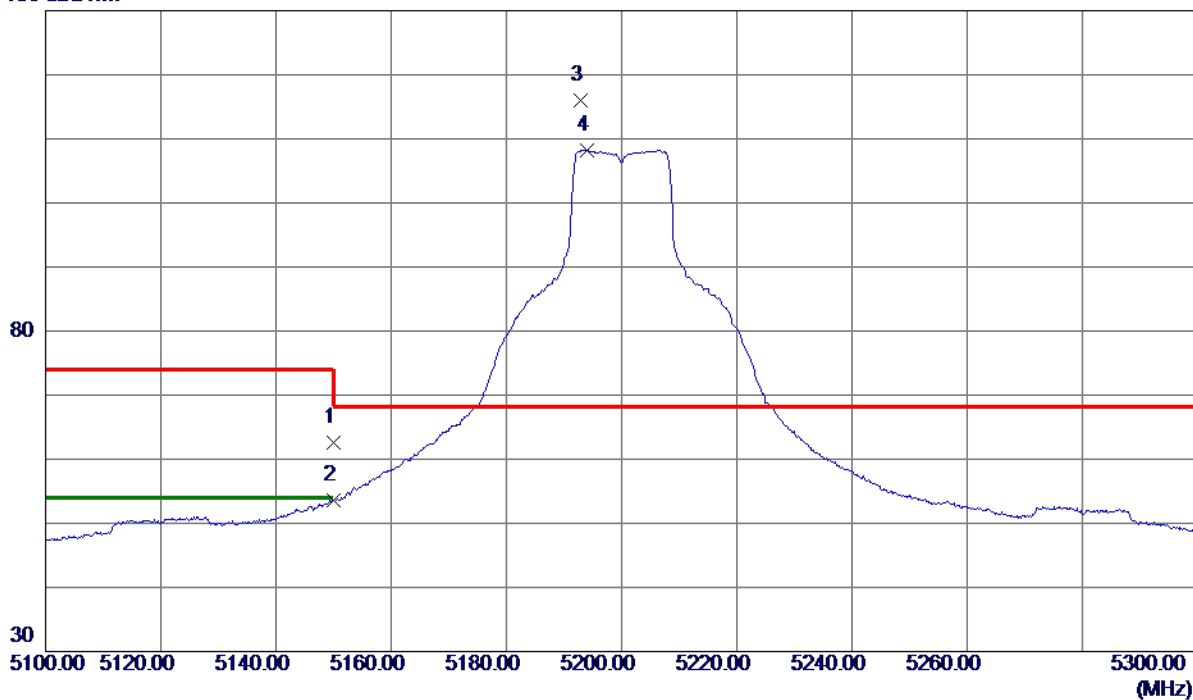
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	49.20	13.45	62.65	74.00	-11.35	Peak	
2	5150.0000	40.18	13.45	53.63	54.00	-0.37	AVG	
3 *	5192.9000	102.53	13.56	116.09	68.30	47.79	Peak	No Limit
4	5193.9000	94.63	13.56	108.19	999.00	-890.81	AVG	No Limit

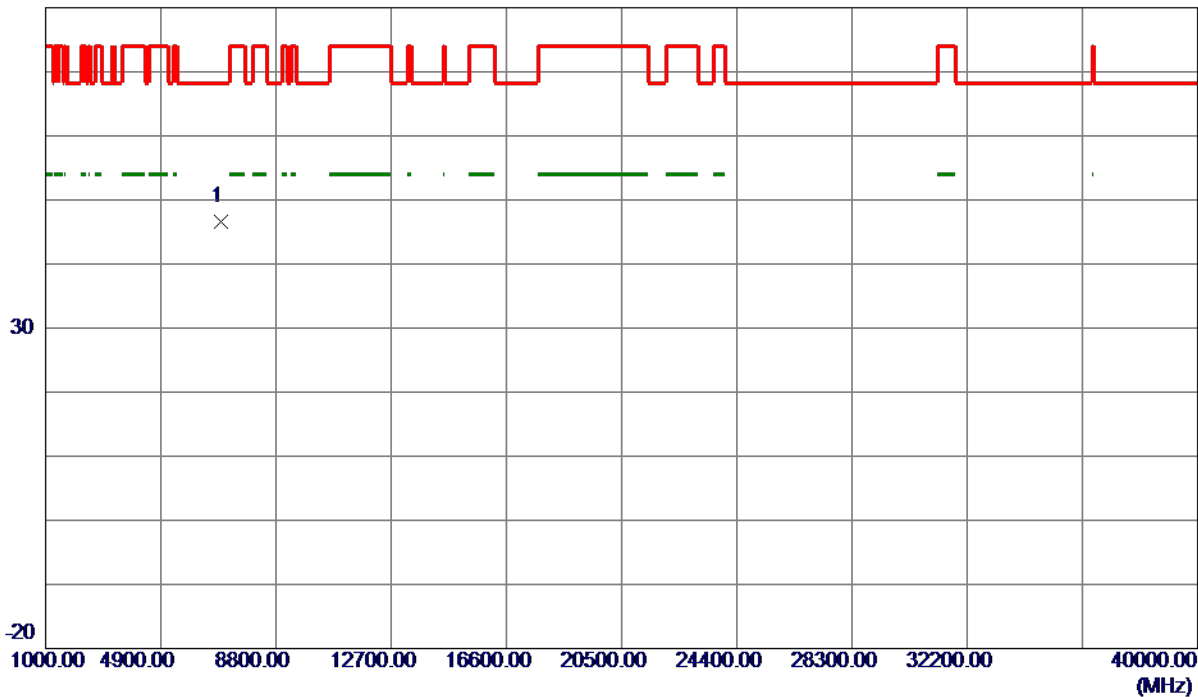
REMARKS:

- (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 *	6933.2900	38.81	7.88	46.69	68.30	-21.61	Peak	

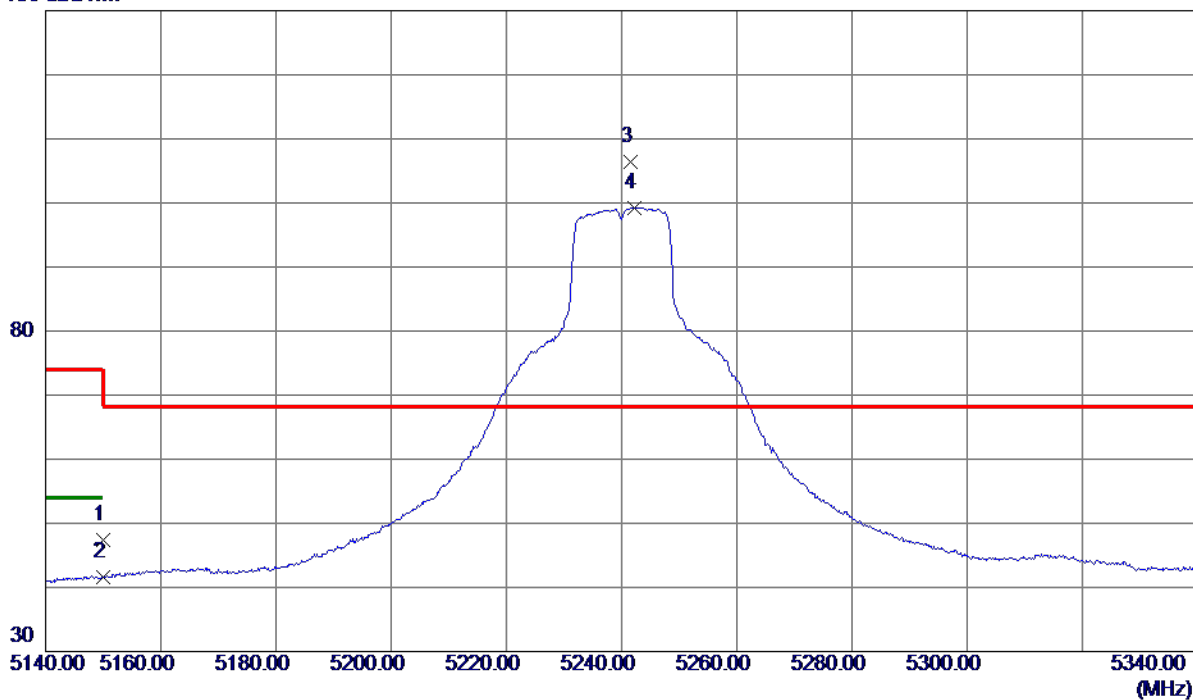
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	33.90	13.45	47.35	74.00	-26.65	Peak	
2	5150.0000	28.22	13.45	41.67	54.00	-12.33	AVG	
3 *	5241.5000	92.69	13.68	106.37	68.30	38.07	Peak	No Limit
4	5242.3000	85.53	13.68	99.21	999.00	-899.79	AVG	No Limit

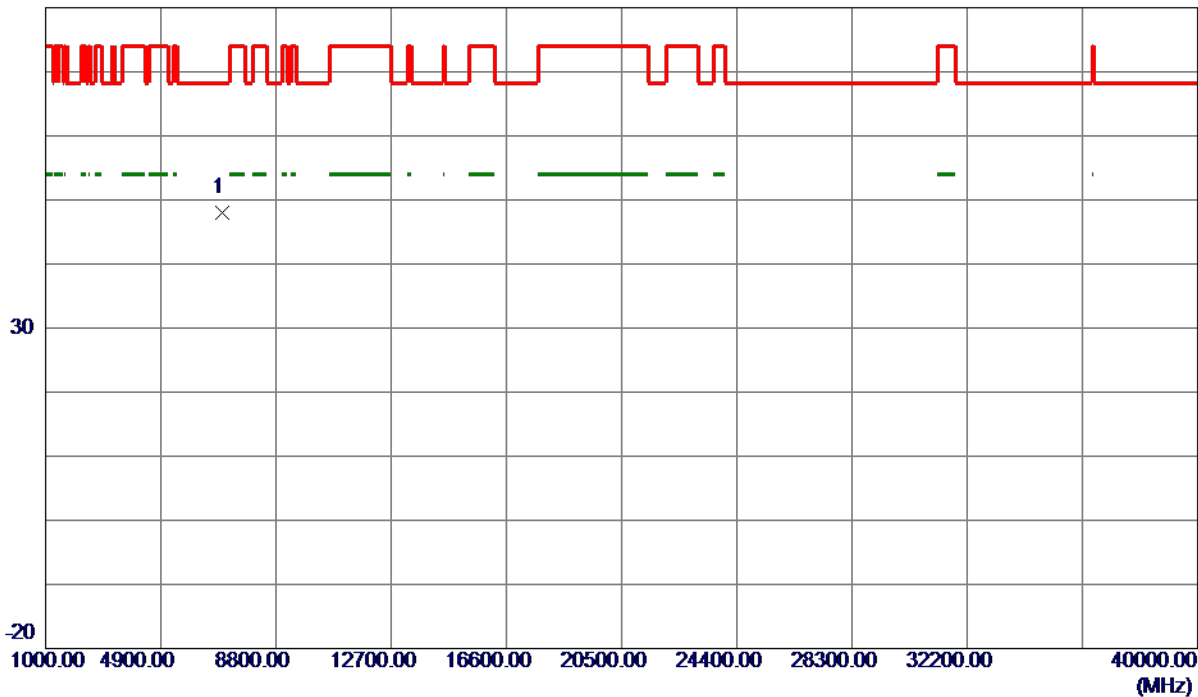
REMARKS:

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

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

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	6986.6350	39.99	7.99	47.98	68.30	-20.32	Peak	

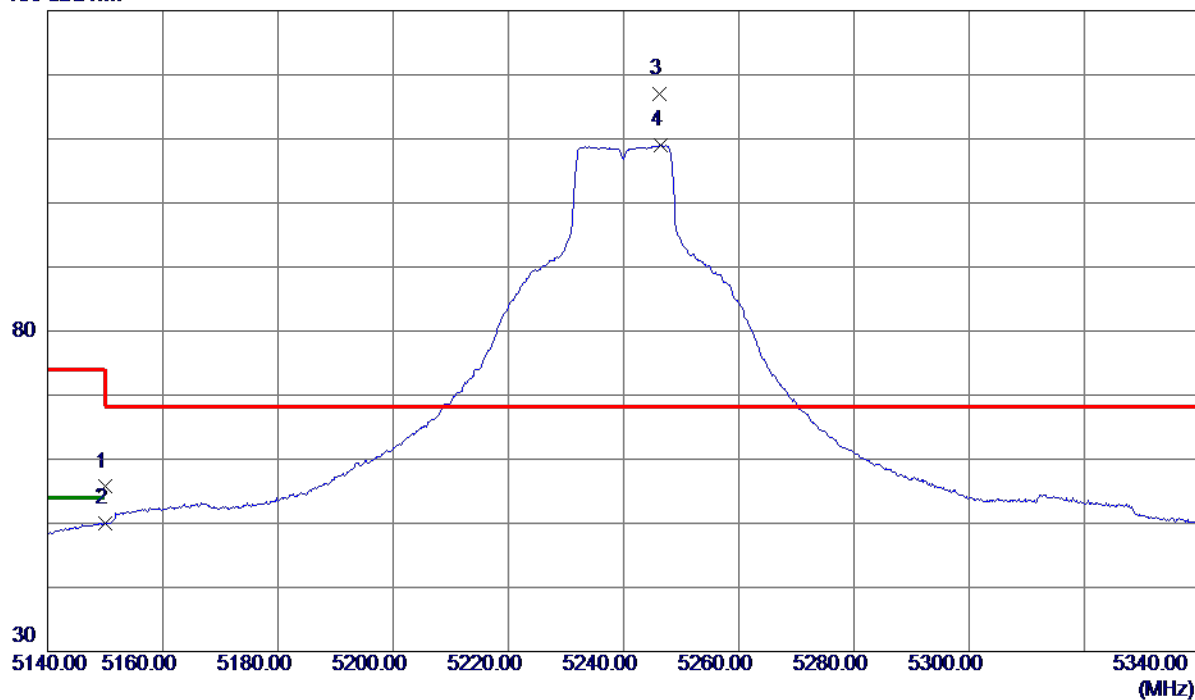
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	42.25	13.45	55.70	74.00	-18.30	Peak	
2	5150.0000	36.53	13.45	49.98	54.00	-4.02	AVG	
3 *	5246.3000	103.28	13.69	116.97	68.30	48.67	Peak	No Limit
4	5246.4000	95.31	13.69	109.00	999.00	-890.00	AVG	No Limit

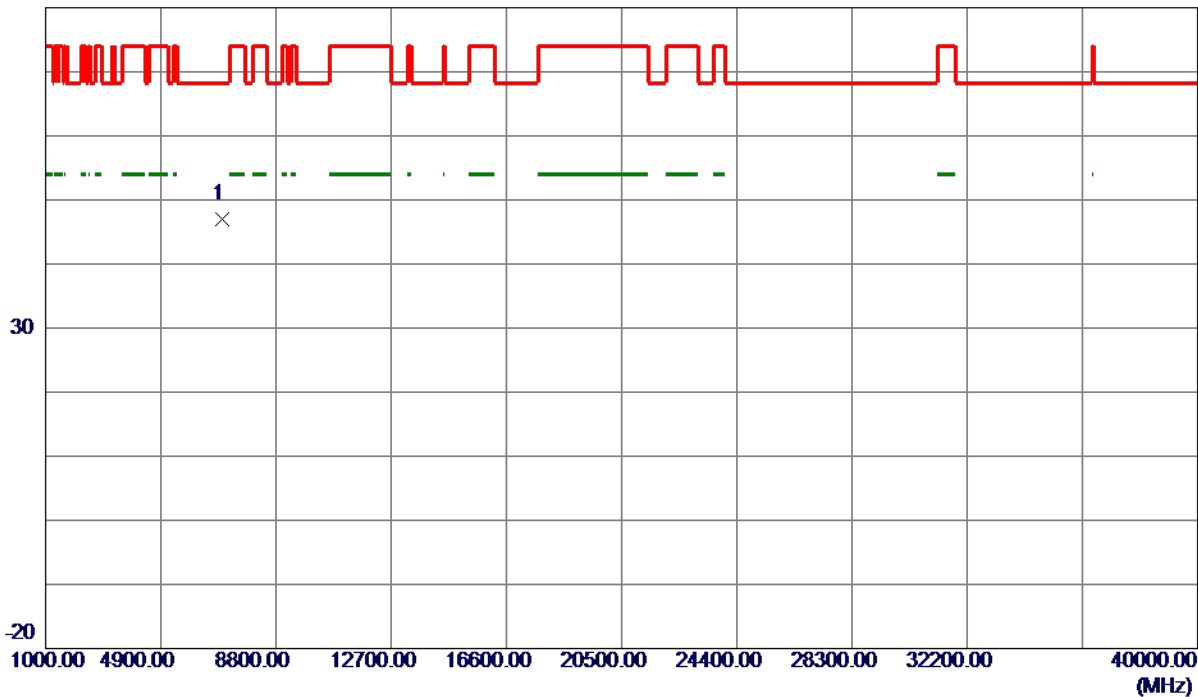
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX 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 *	6986.7050	38.92	7.99	46.91	68.30	-21.39	Peak	

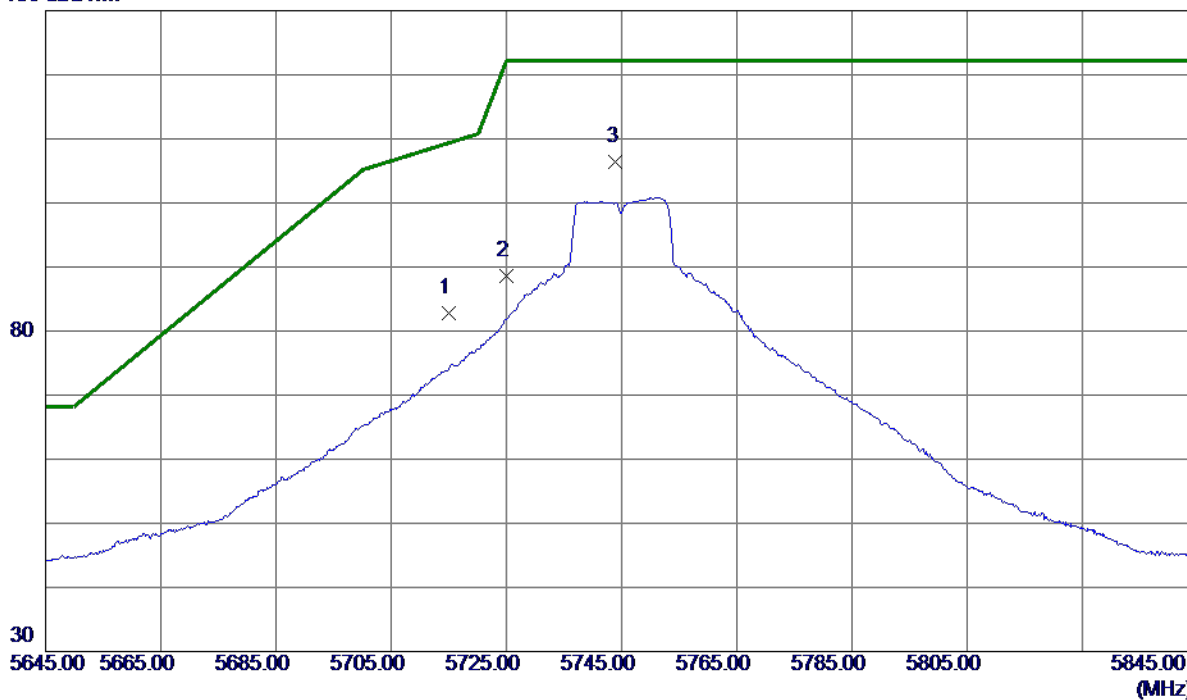
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	67.87	14.90	82.77	109.40	-26.63	Peak	
2	5725.0000	73.61	14.92	88.53	122.20	-33.67	Peak	
3 *	5744.0000	91.49	14.97	106.46	122.20	-15.74	Peak	No Limit

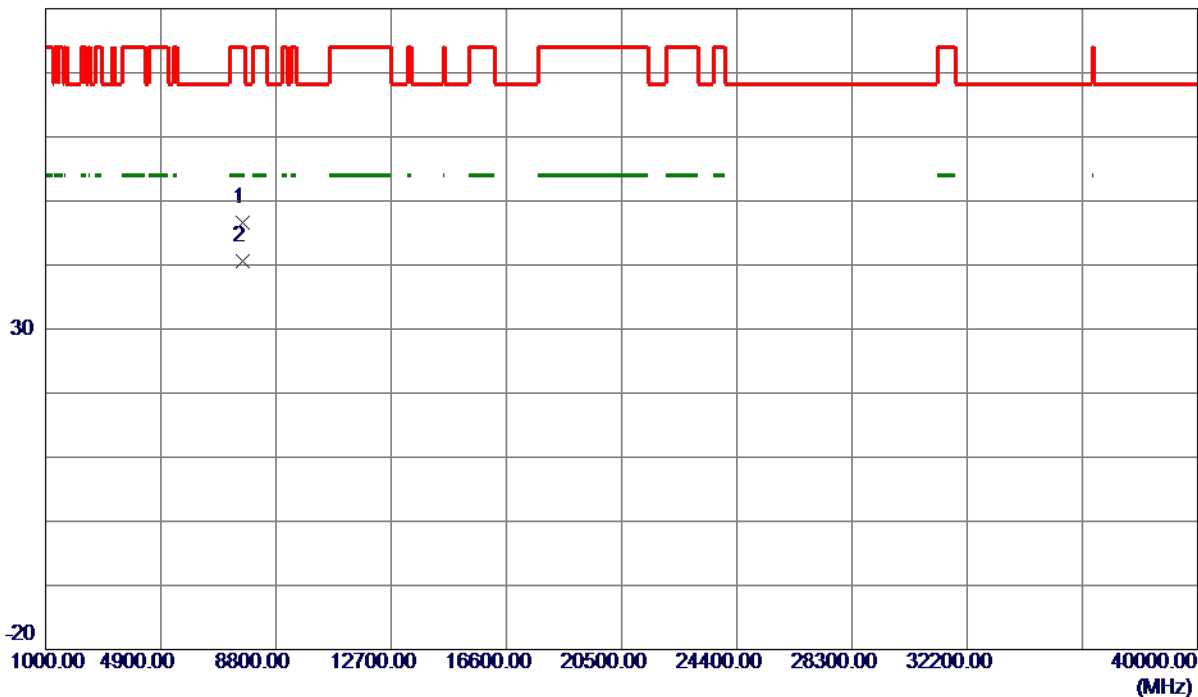
REMARKS:

- (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	7659.8900	37.94	8.65	46.59	74.00	-27.41	Peak	
2 *	7660.0100	31.91	8.65	40.56	54.00	-13.44	AVG	

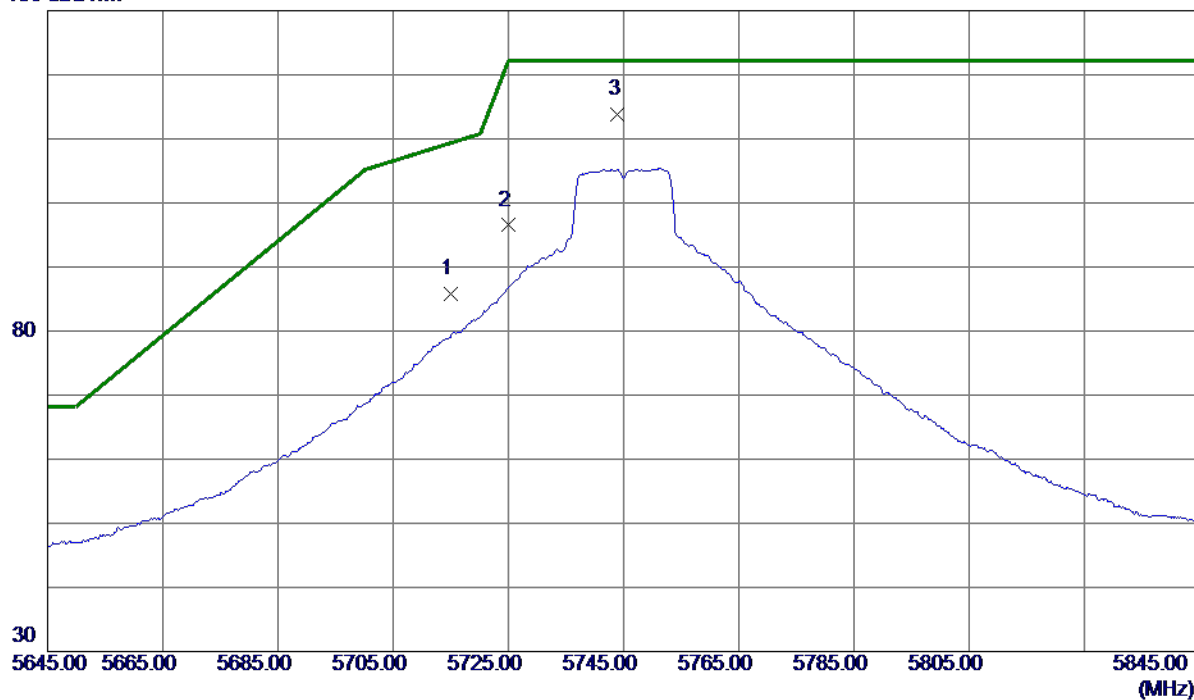
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	70.91	14.90	85.81	109.40	-23.59	Peak	
2	5725.0000	81.58	14.92	96.50	122.20	-25.70	Peak	
3 *	5744.0000	98.92	14.97	113.89	122.20	-8.31	Peak	No Limit

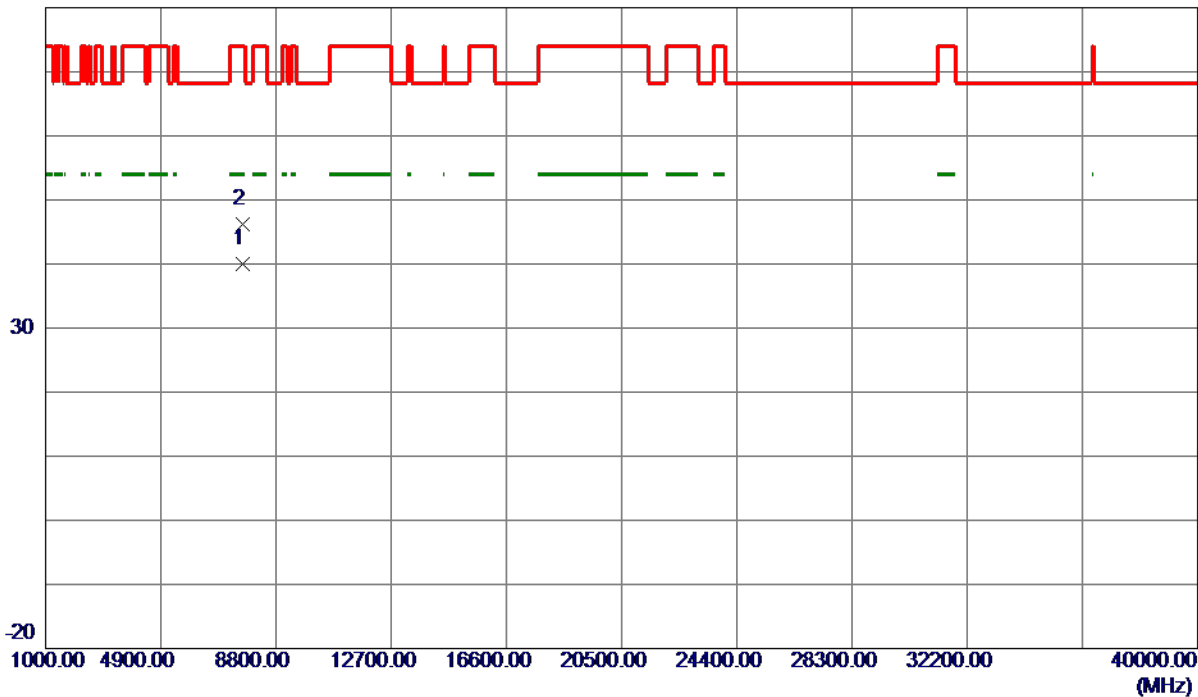
REMARKS:

- (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

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 *	7659.9500	31.33	8.65	39.98	54.00	-14.02	AVG	
2	7659.9550	37.58	8.65	46.23	74.00	-27.77	Peak	

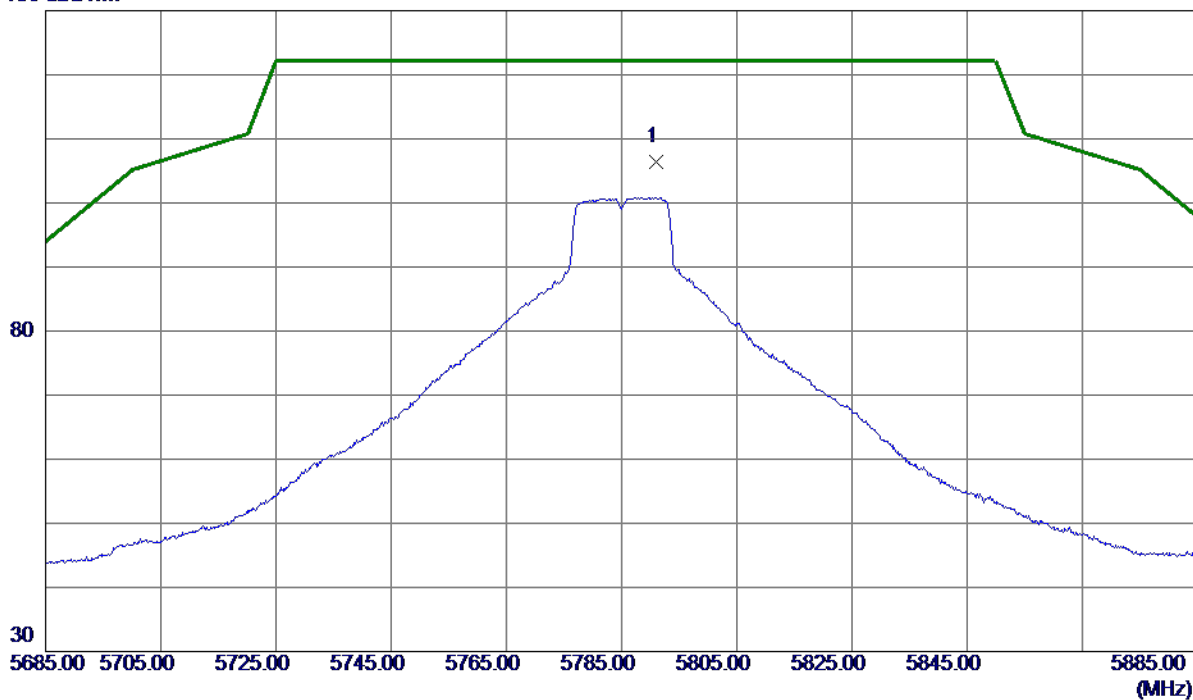
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5791.1000	91.35	15.09	106.44	122.20	-15.76	Peak	No Limit

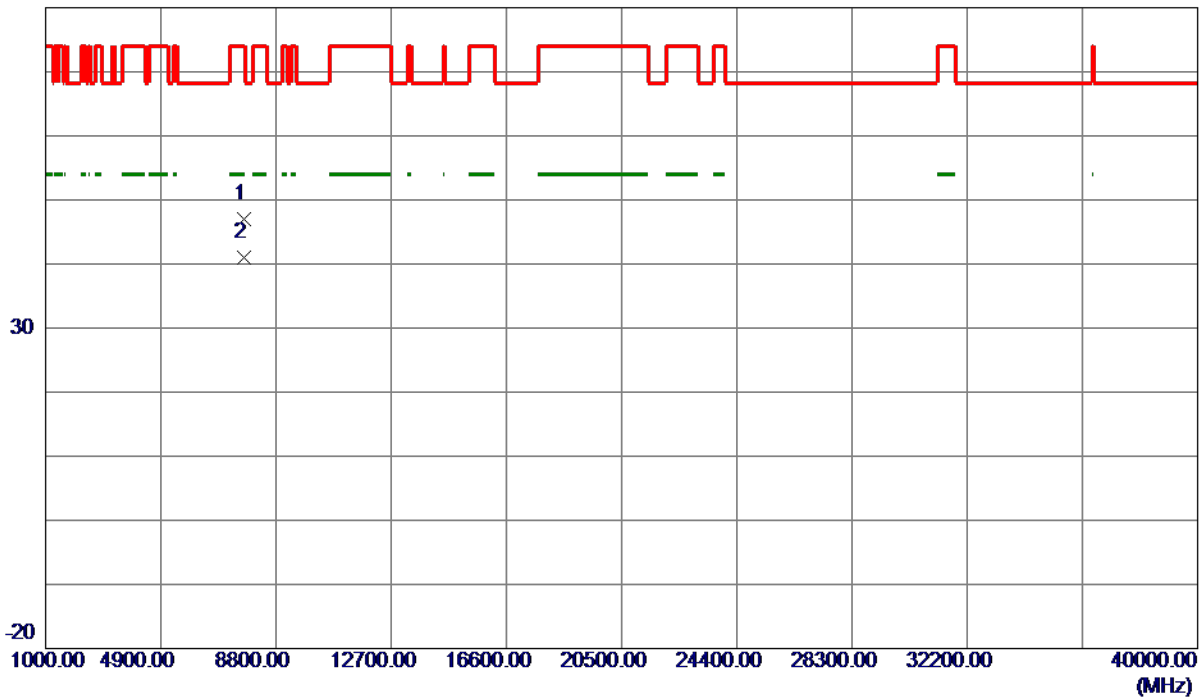
REMARKS:

- (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

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	7713.1350	38.32	8.62	46.94	74.00	-27.06	Peak	
2 *	7713.3150	32.33	8.62	40.95	54.00	-13.05	AVG	

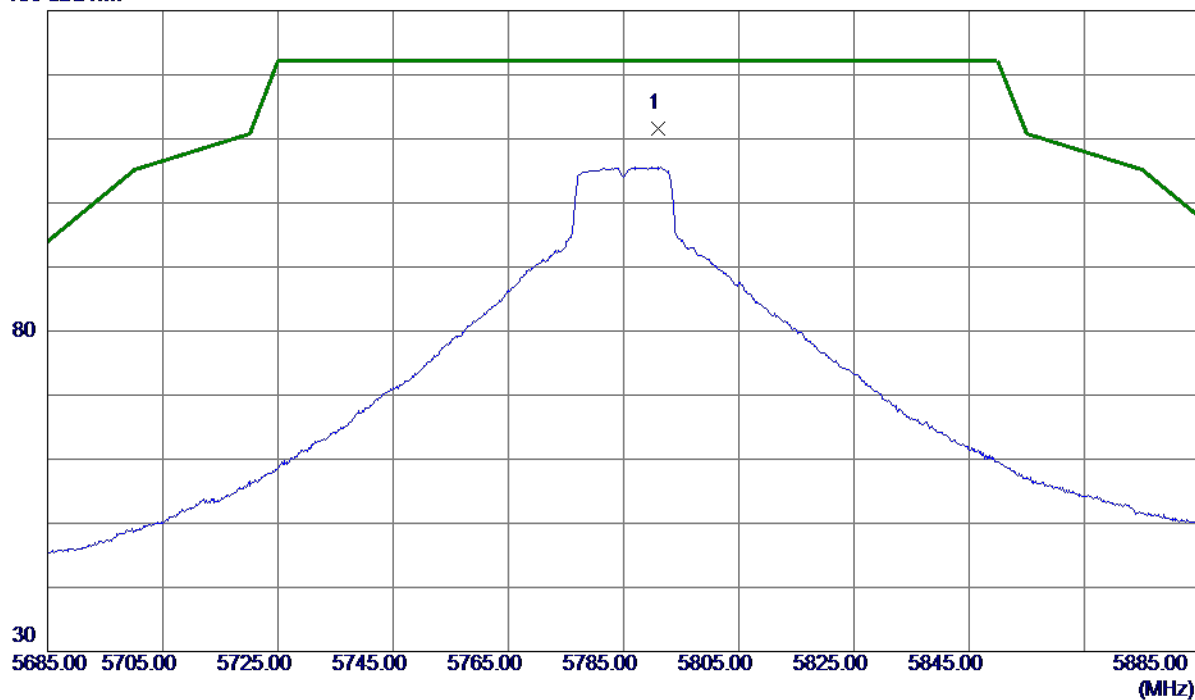
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5791.1000	96.60	15.09	111.69	122.20	-10.51	Peak	No Limit

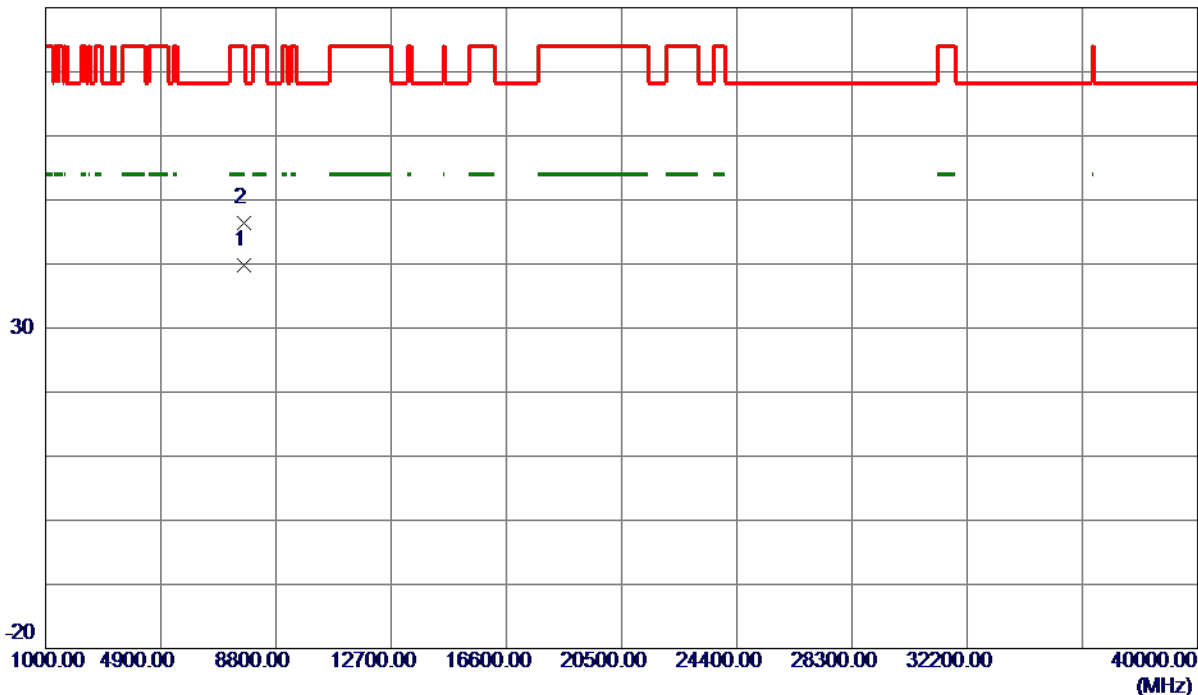
REMARKS:

- (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 *	7713.3450	31.19	8.62	39.81	54.00	-14.19	AVG	
2	7713.4200	37.79	8.62	46.41	74.00	-27.59	Peak	

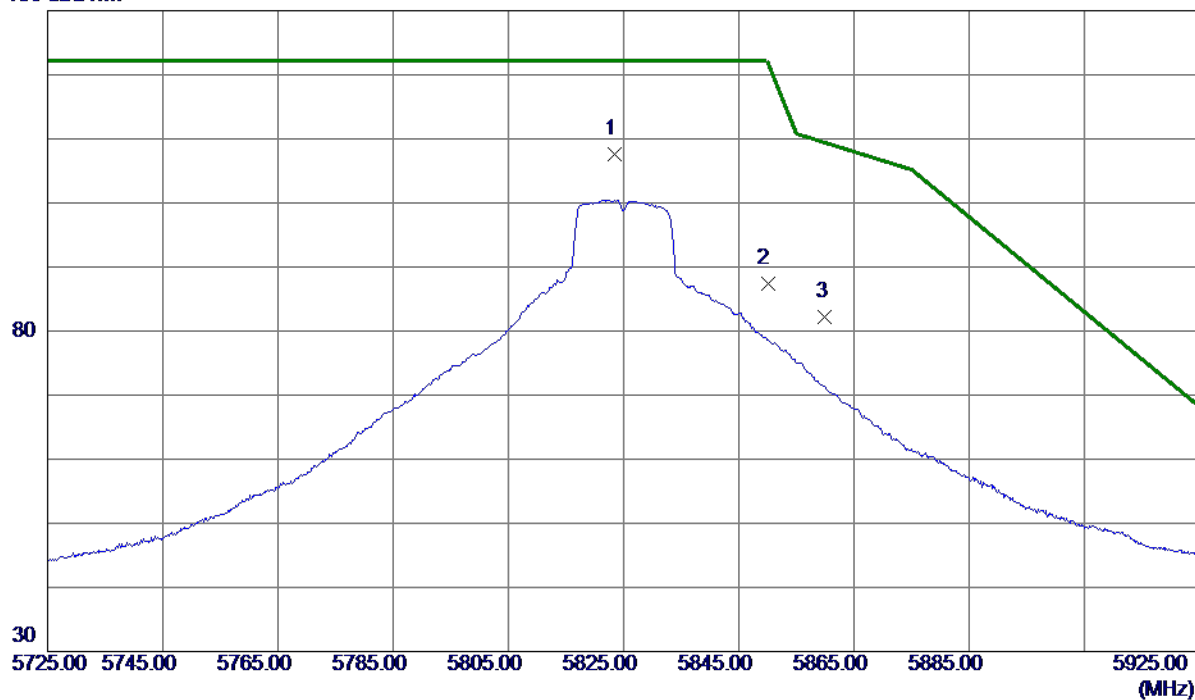
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5823.5000	92.48	15.18	107.66	122.20	-14.54	Peak	No Limit
2	5850.0000	72.15	15.24	87.39	122.20	-34.81	Peak	
3	5860.0000	66.93	15.27	82.20	109.40	-27.20	Peak	

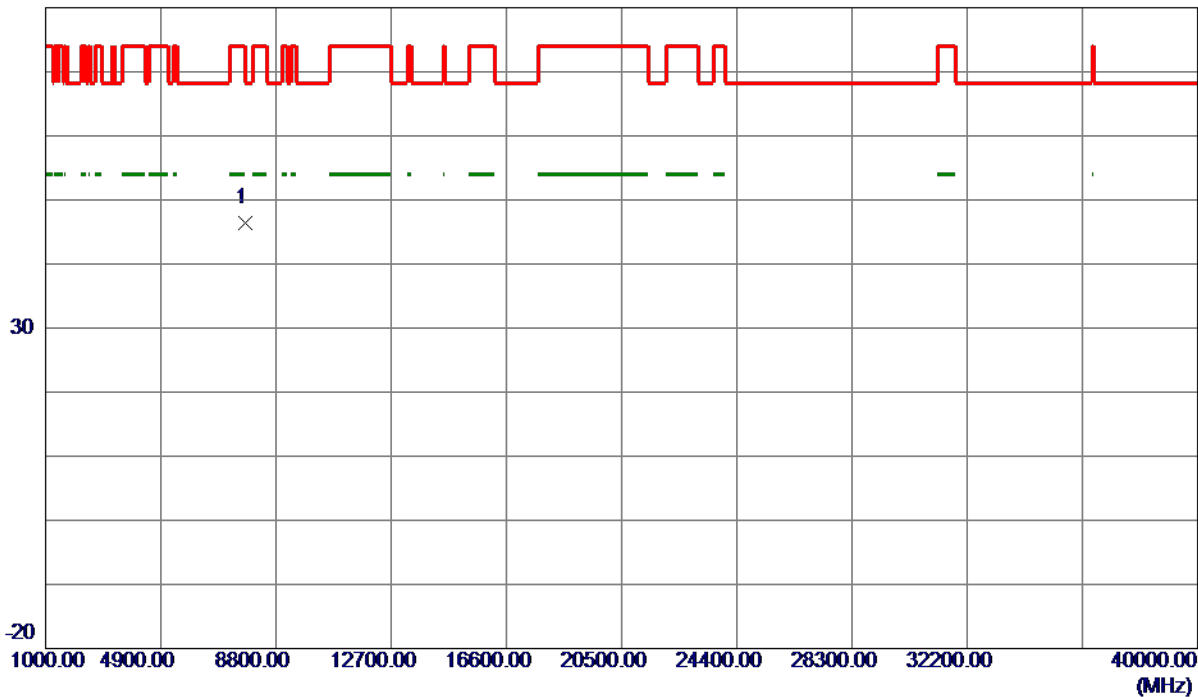
REMARKS:

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

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

Vertical

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7766.5750	37.90	8.59	46.49	68.30	-21.81	Peak	

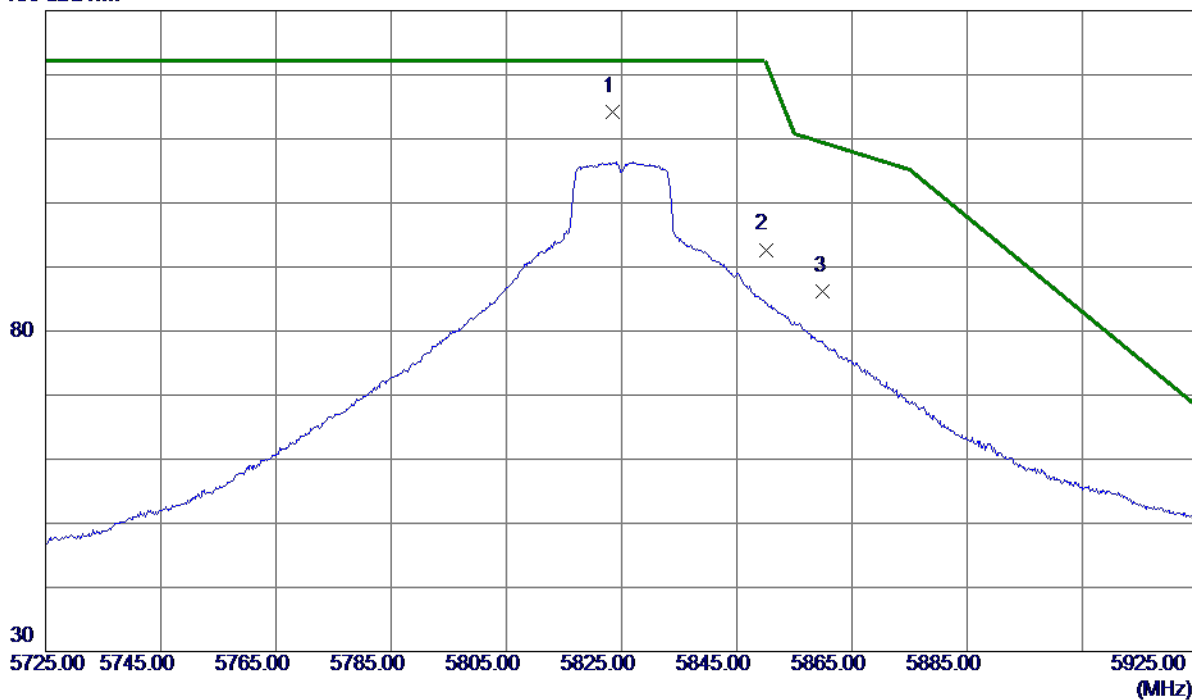
REMARKS:

- (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

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5823.5000	98.95	15.18	114.13	122.20	-8.07	Peak	No Limit
2	5850.0000	77.46	15.24	92.70	122.20	-29.50	Peak	
3	5860.0000	70.96	15.27	86.23	109.40	-23.17	Peak	

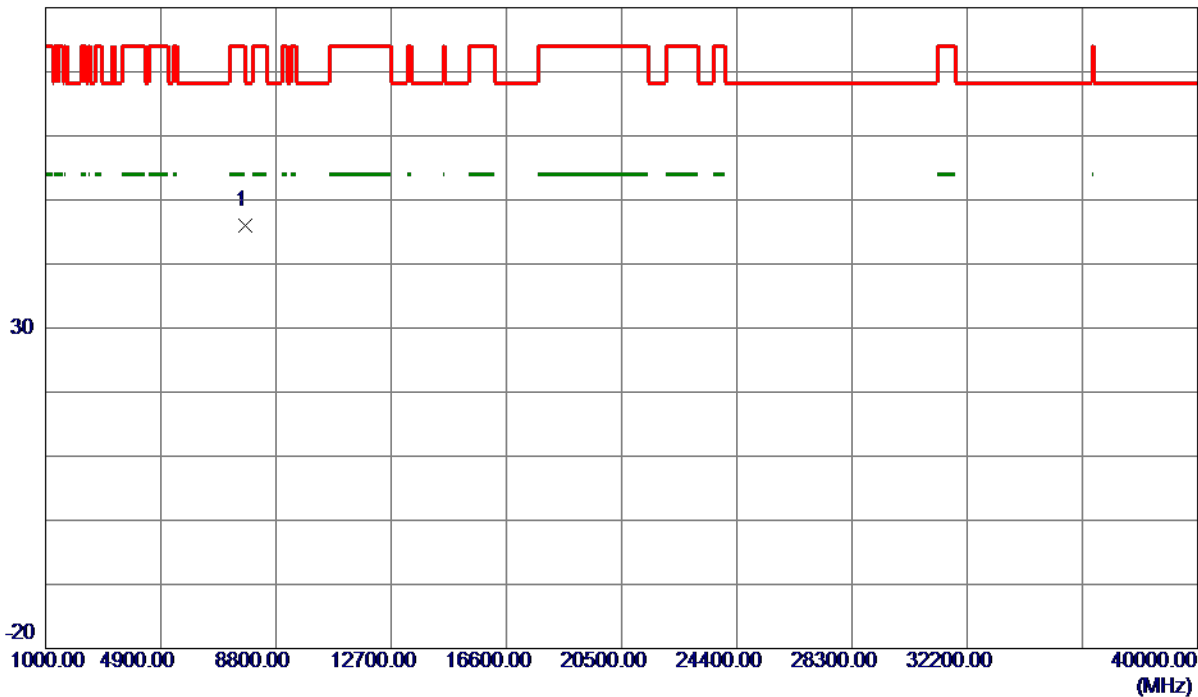
REMARKS:

- (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

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 *	7766.6200	37.41	8.59	46.00	68.30	-22.30	Peak	

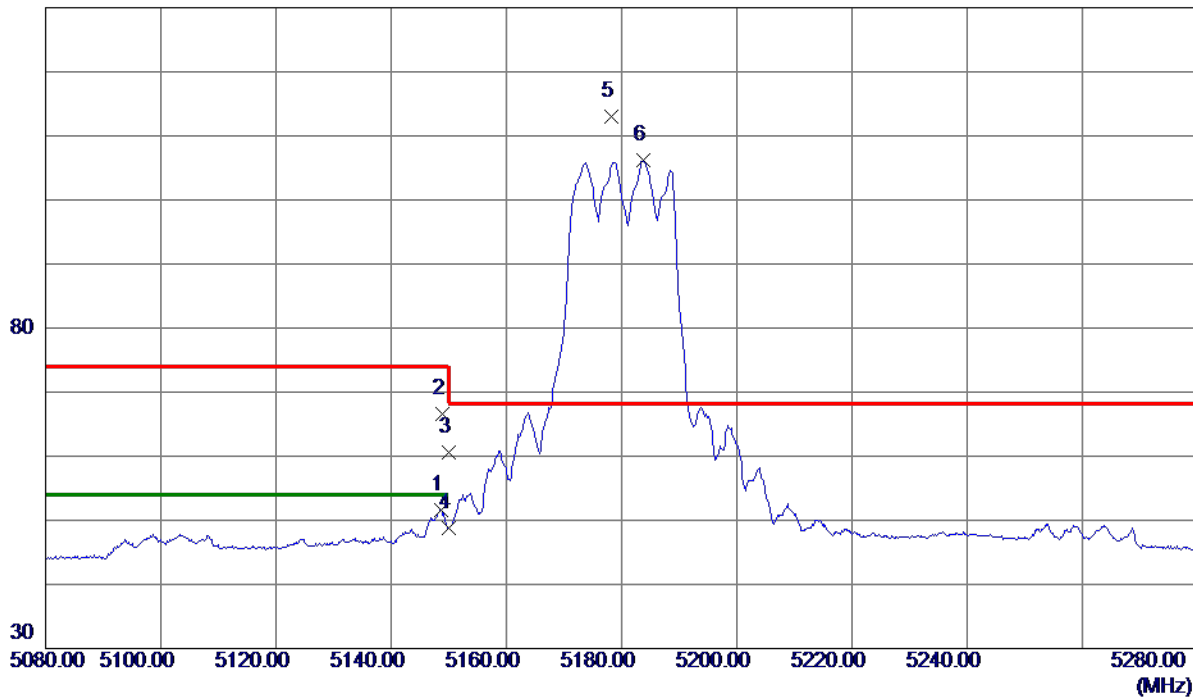
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5148.7000	38.22	13.44	51.66	54.00	-2.34	AVG	
2	5148.9000	53.23	13.44	66.67	74.00	-7.33	Peak	
3	5150.0000	47.23	13.45	60.68	74.00	-13.32	Peak	
4	5150.0000	35.26	13.45	48.71	54.00	-5.29	AVG	
5 *	5178.3000	99.49	13.52	113.01	68.30	44.71	Peak	No Limit
6	5183.8000	92.66	13.53	106.19	999.00	-892.81	AVG	No Limit

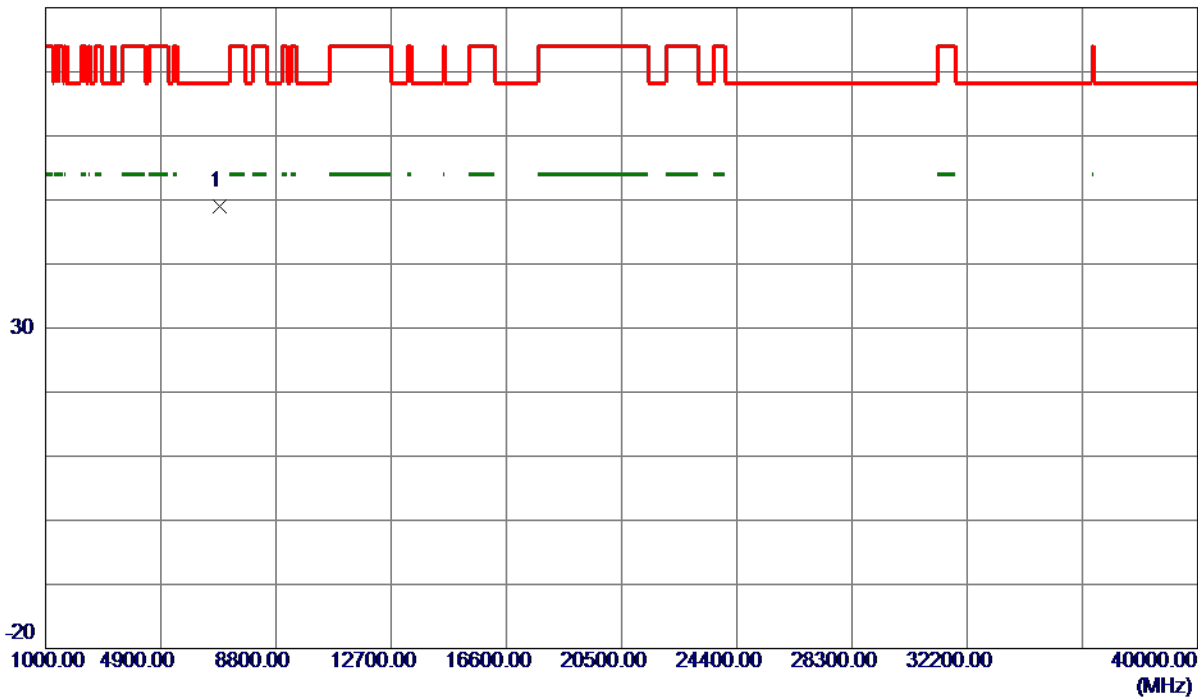
REMARKS:

- (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

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 *	6906.5650	41.14	7.82	48.96	68.30	-19.34	Peak	

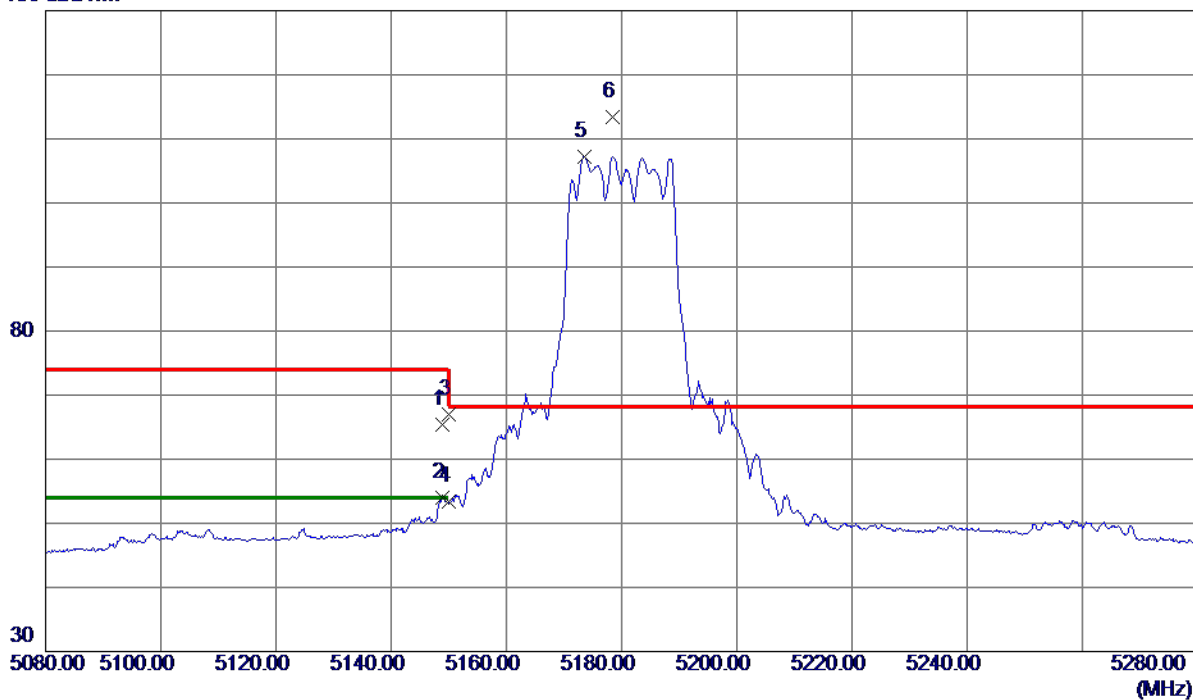
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5148.9000	51.96	13.44	65.40	74.00	-8.60	Peak	
2	5148.9000	40.55	13.44	53.99	54.00	-0.01	AVG	
3	5150.0000	53.63	13.45	67.08	74.00	-6.92	Peak	
4	5150.0000	39.90	13.45	53.35	54.00	-0.65	AVG	
5	5173.5000	93.74	13.51	107.25	999.00	-891.75	AVG	No Limit
6 *	5178.4000	99.97	13.52	113.49	68.30	45.19	Peak	No Limit

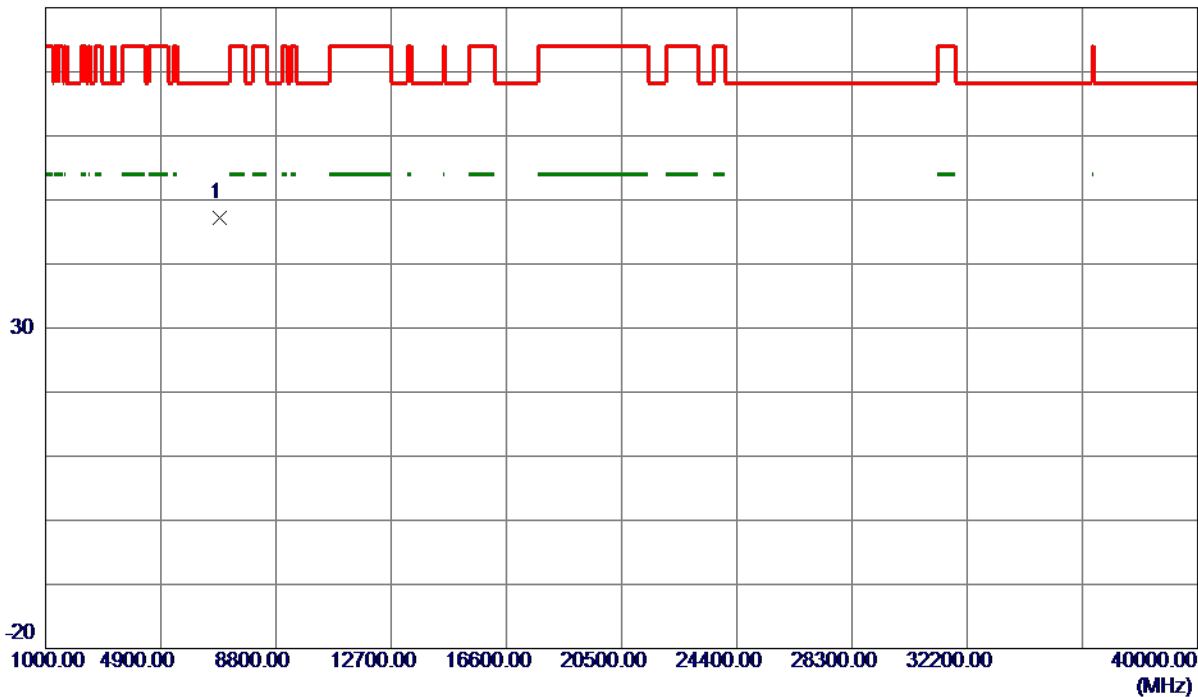
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX 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 *	6906.6450	39.41	7.82	47.23	68.30	-21.07	Peak	

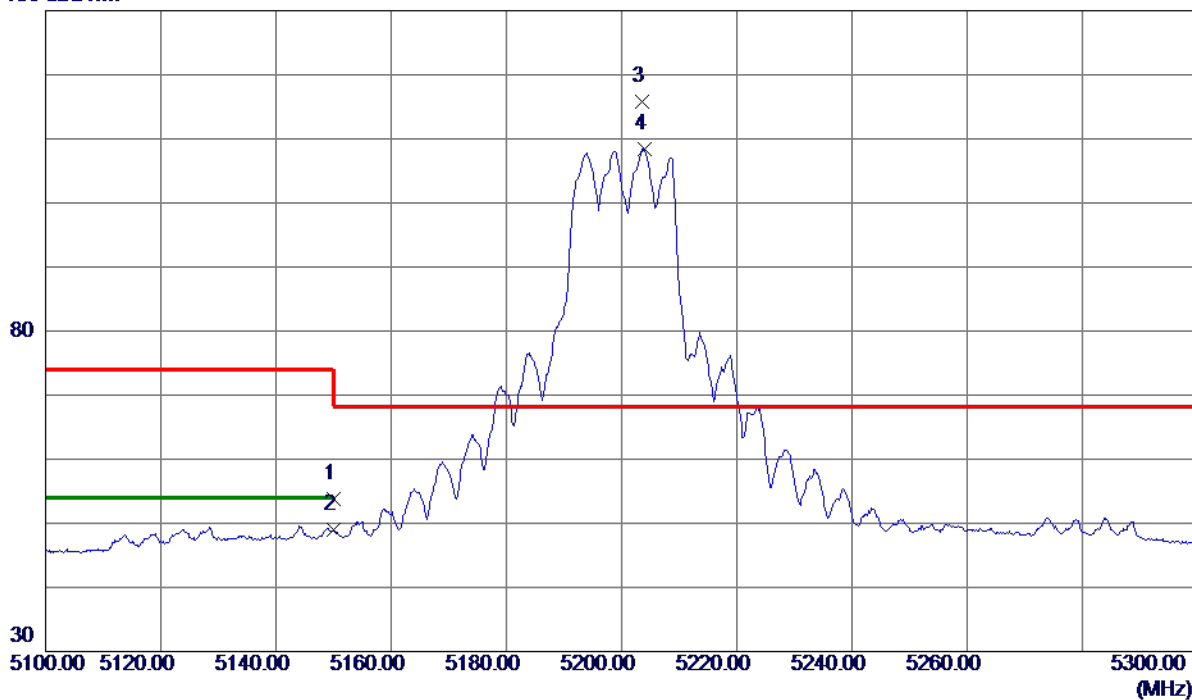
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	40.44	13.45	53.89	74.00	-20.11	Peak	
2	5150.0000	35.55	13.45	49.00	54.00	-5.00	AVG	
3 *	5203.5000	102.22	13.58	115.80	68.30	47.50	Peak	No Limit
4	5203.9000	94.82	13.58	108.40	999.00	-890.60	AVG	No Limit

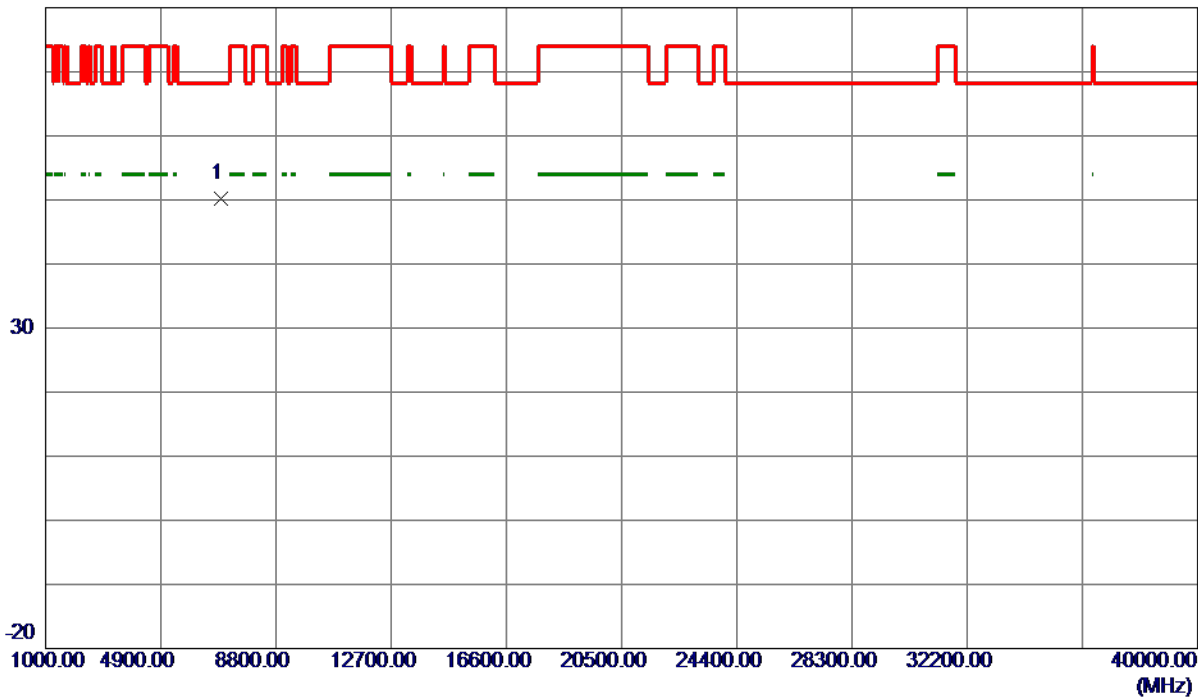
REMARKS:

- (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

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 *	6933.3700	42.31	7.88	50.19	68.30	-18.11	Peak	

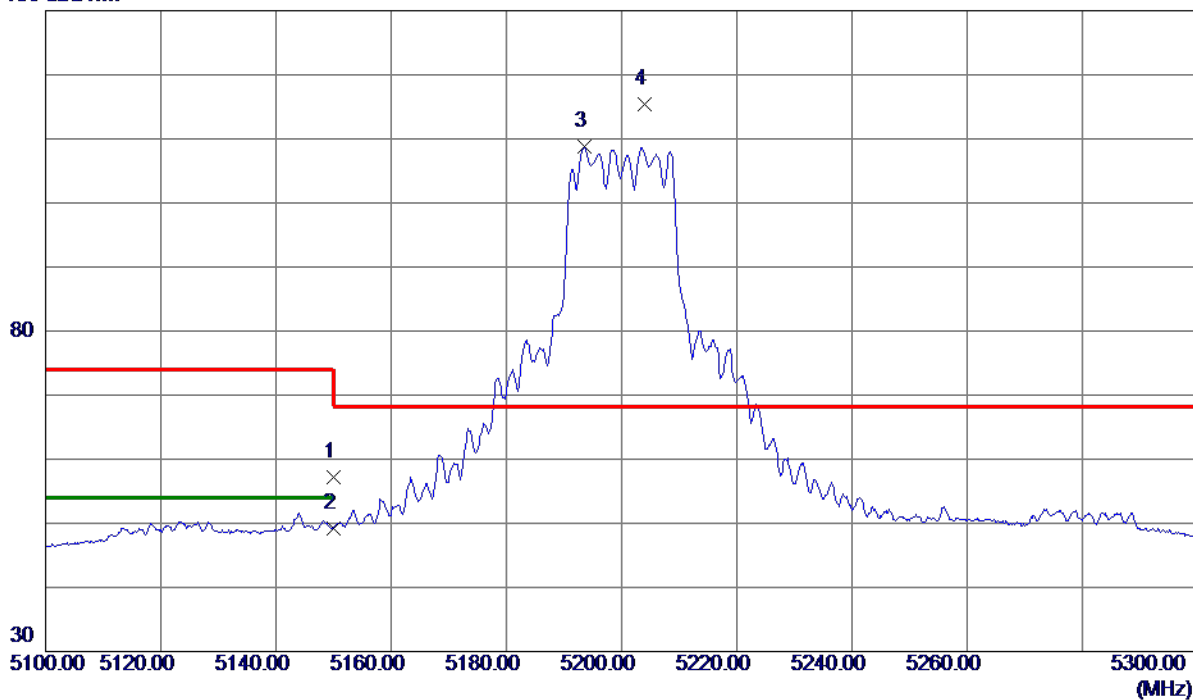
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	43.80	13.45	57.25	74.00	-16.75	Peak	
2	5150.0000	35.80	13.45	49.25	54.00	-4.75	AVG	
3	5193.5000	95.19	13.56	108.75	999.00	-890.25	AVG	No Limit
4 *	5203.9000	101.84	13.58	115.42	68.30	47.12	Peak	No Limit

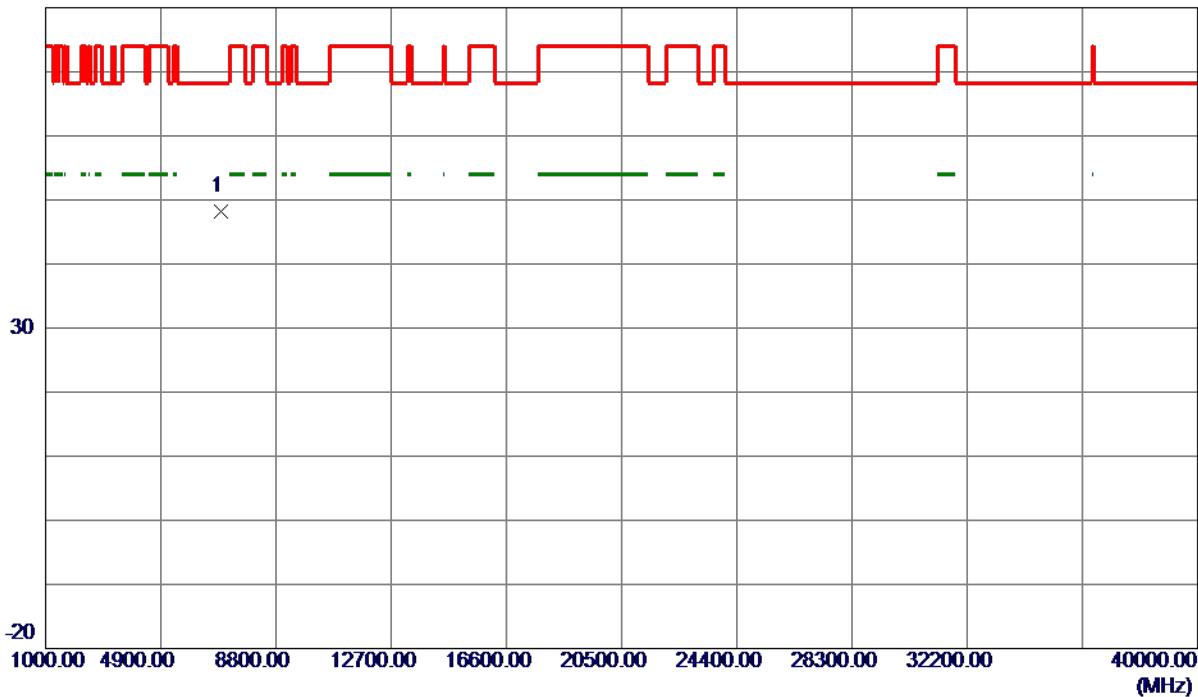
REMARKS:

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

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

Horizontal

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 *	6933.4050	40.32	7.88	48.20	68.30	-20.10	Peak	

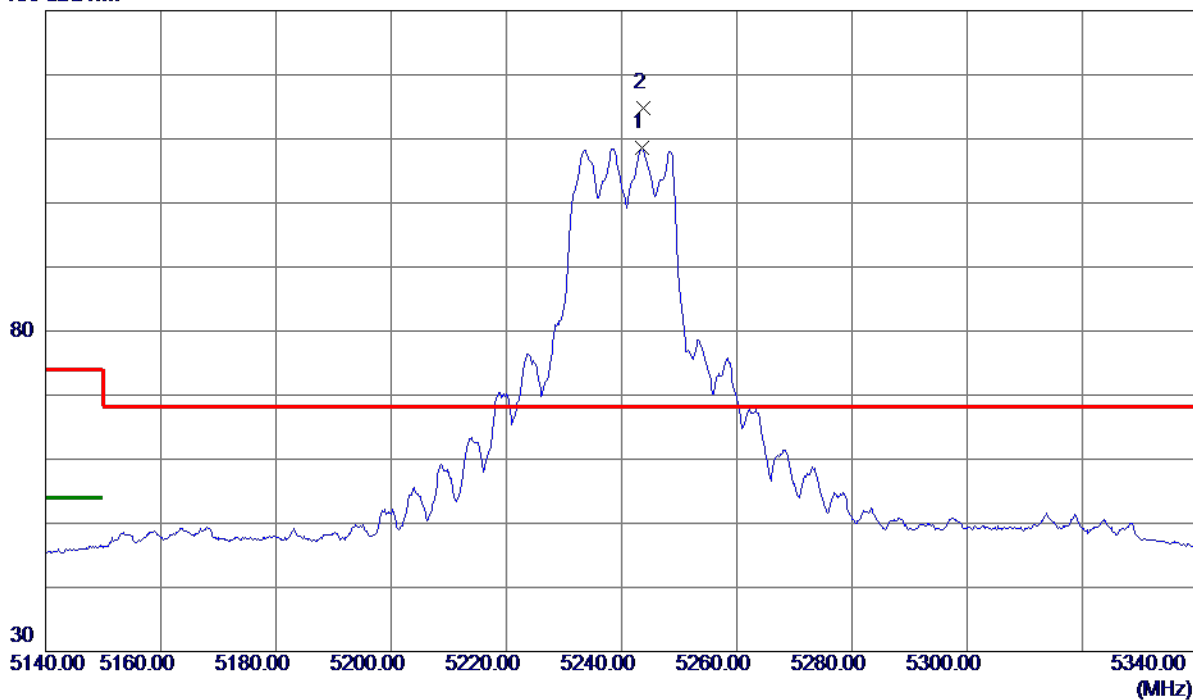
REMARKS:

- (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 5240 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5243.5000	94.91	13.69	108.60	999.00	-890.40	AVG	No Limit
2 *	5243.8000	101.02	13.69	114.71	68.30	46.41	Peak	No Limit

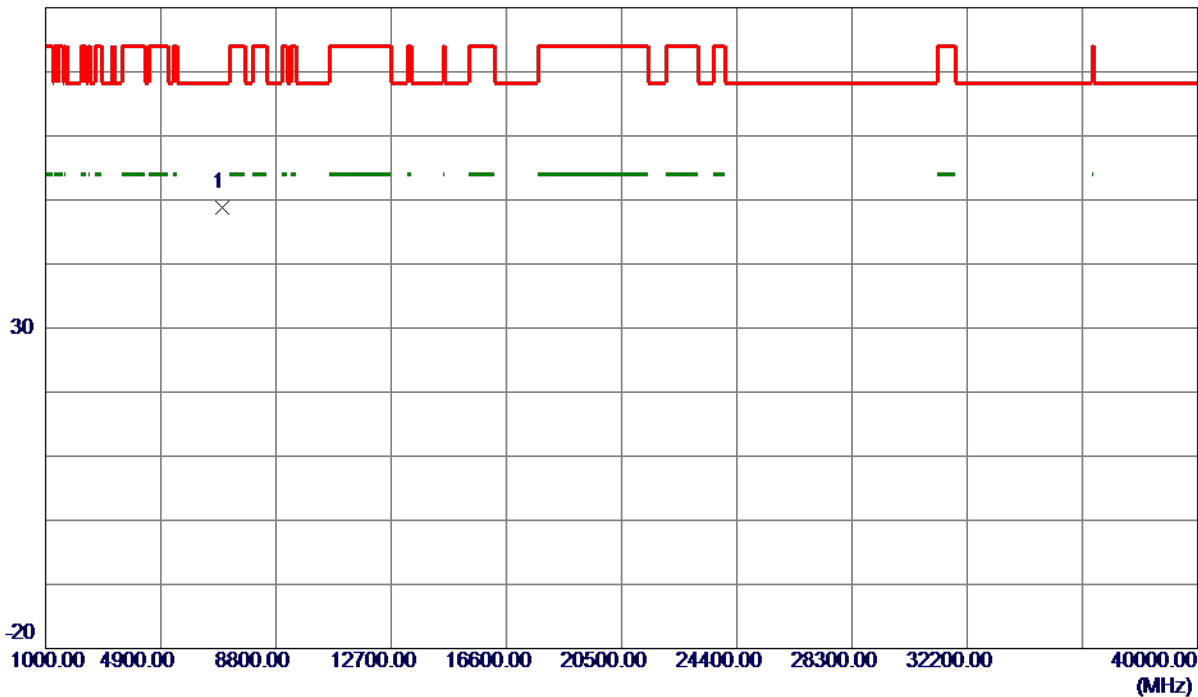
REMARKS:

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

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

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 *	6986.8300	40.73	7.99	48.72	68.30	-19.58	Peak	

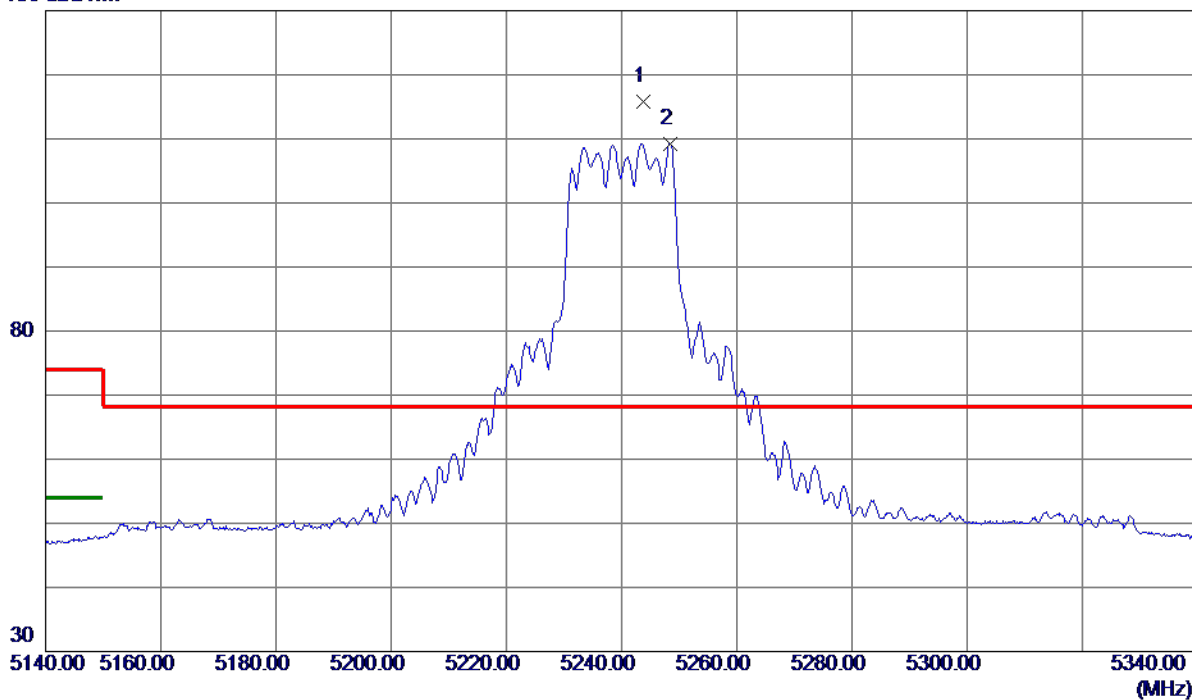
REMARKS:

- (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

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5243.8000	102.04	13.69	115.73	68.30	47.43	Peak	No Limit
2	5248.5000	95.59	13.70	109.29	999.00	-889.71	AVG	No Limit

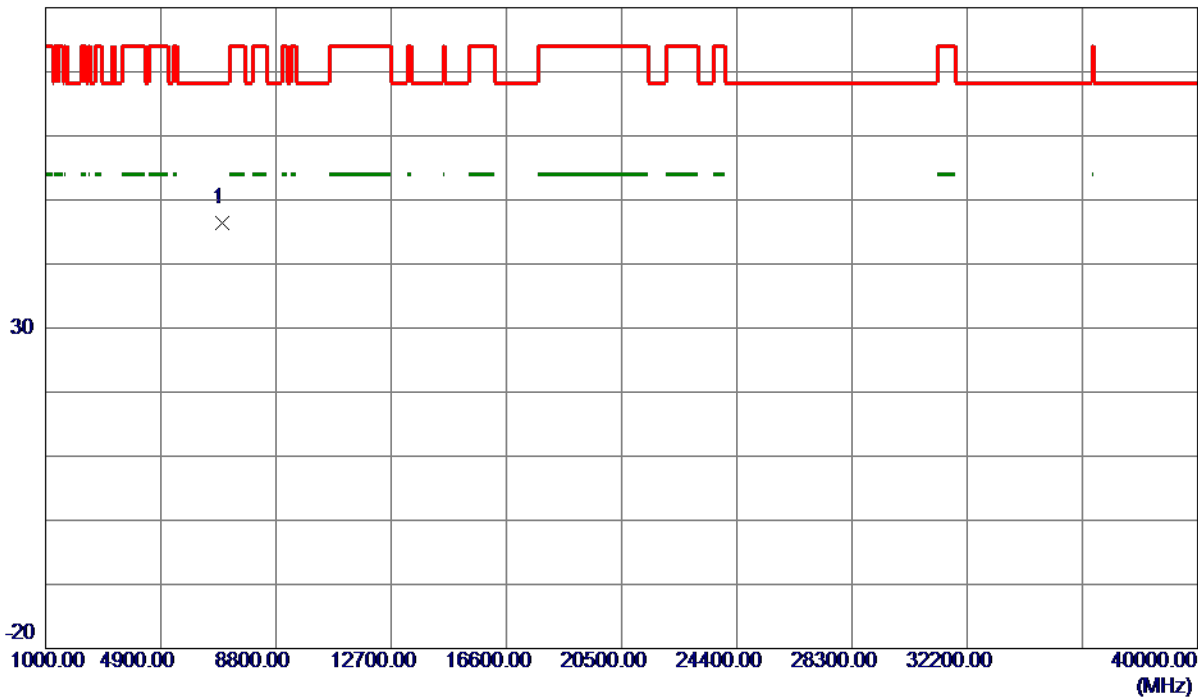
REMARKS:

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

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

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 *	6986.6200	38.32	7.99	46.31	68.30	-21.99	Peak	

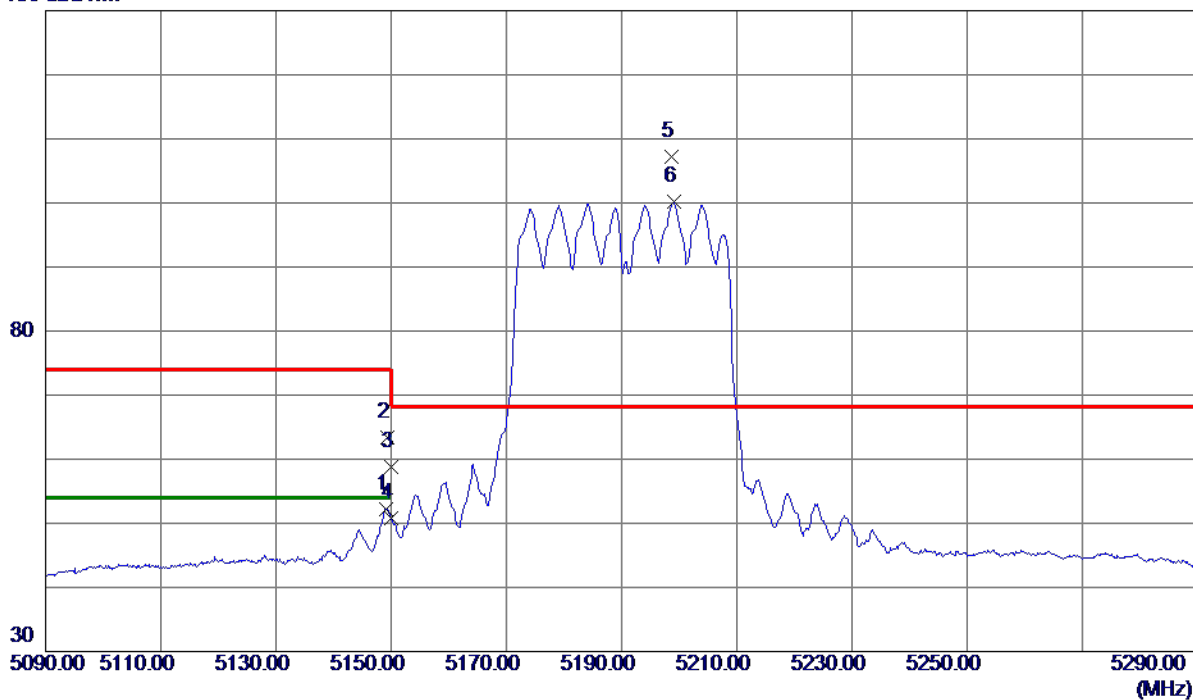
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5149.2000	38.76	13.44	52.20	54.00	-1.80	AVG	
2	5149.3000	49.97	13.44	63.41	74.00	-10.59	Peak	
3	5150.0000	45.41	13.45	58.86	74.00	-15.14	Peak	
4	5150.0000	37.43	13.45	50.88	54.00	-3.12	AVG	
5 *	5198.7000	93.67	13.57	107.24	68.30	38.94	Peak	No Limit
6	5199.1000	86.54	13.57	100.11	999.00	-898.89	AVG	No Limit

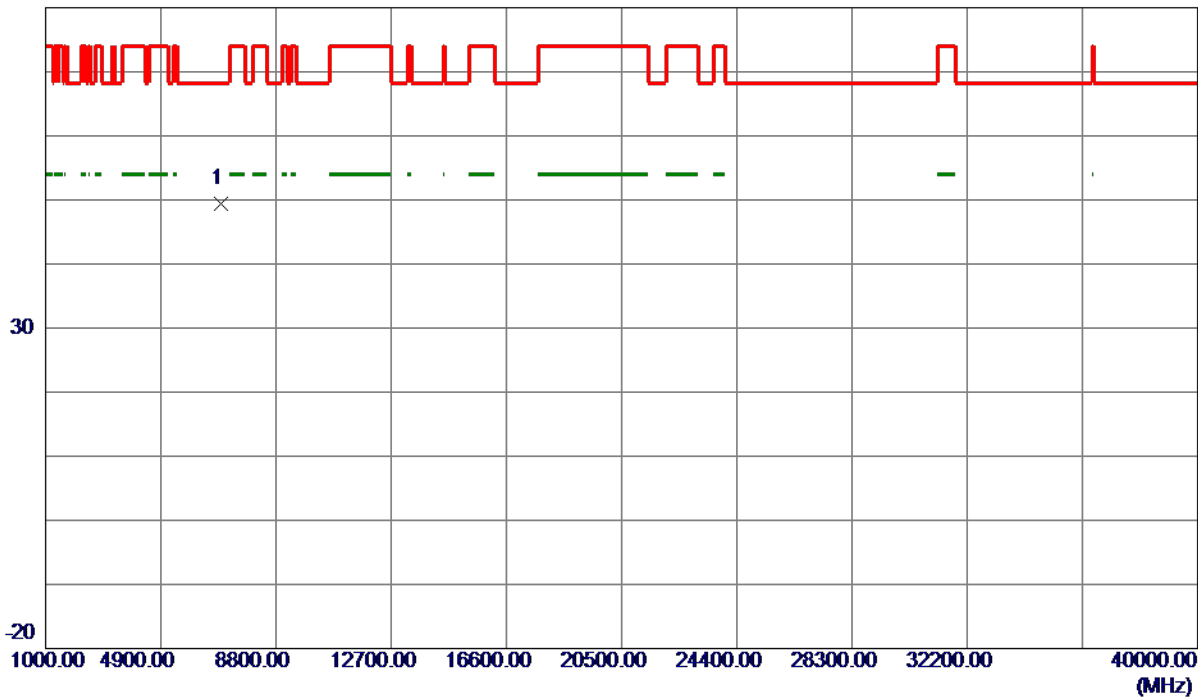
REMARKS:

- (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 *	6920.0750	41.59	7.85	49.44	68.30	-18.86	Peak	

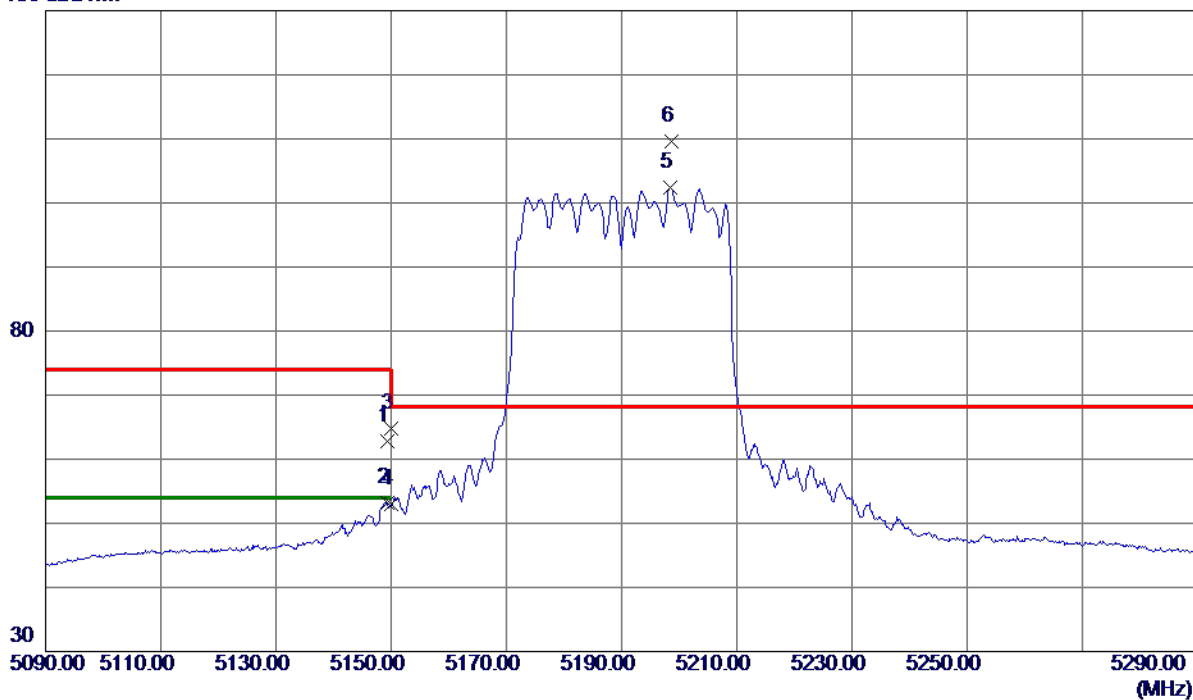
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5149.3000	49.31	13.44	62.75	74.00	-11.25	Peak	
2	5149.3000	39.80	13.44	53.24	54.00	-0.76	AVG	
3	5150.0000	51.30	13.45	64.75	74.00	-9.25	Peak	
4	5150.0000	39.61	13.45	53.06	54.00	-0.94	AVG	
5	5198.5000	88.79	13.57	102.36	999.00	-896.64	AVG	No Limit
6 *	5198.7000	96.06	13.57	109.63	68.30	41.33	Peak	No Limit

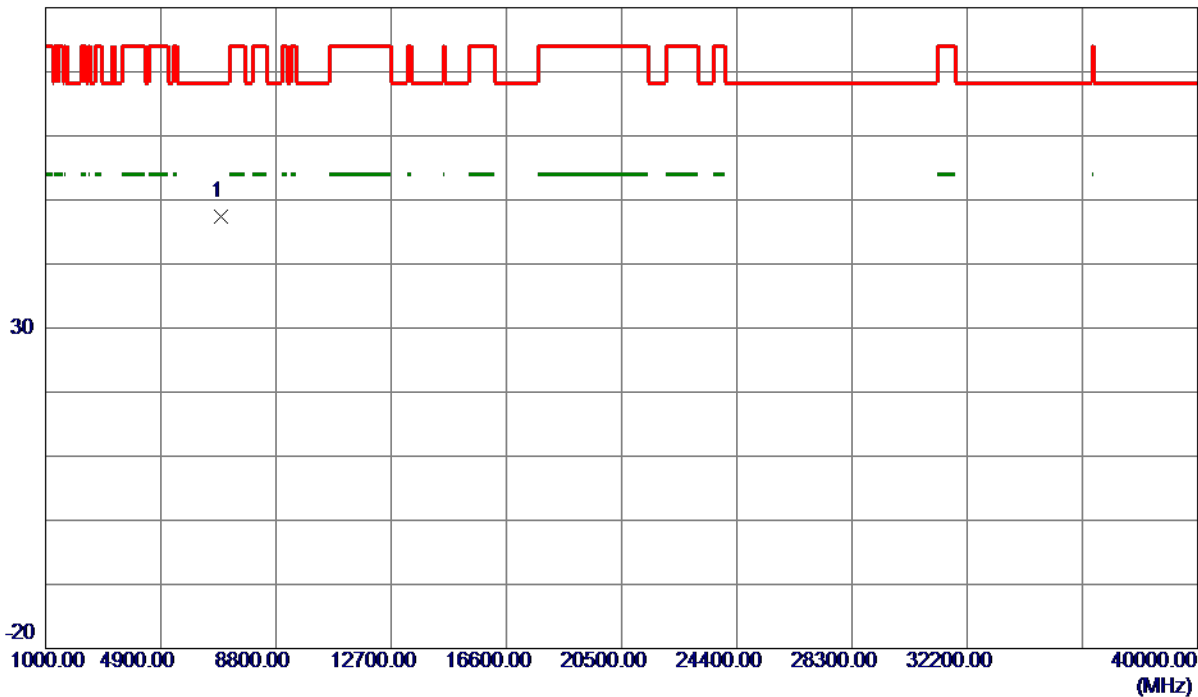
REMARKS:

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

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

Horizontal

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 *	6920.1250	39.52	7.85	47.37	68.30	-20.93	Peak	

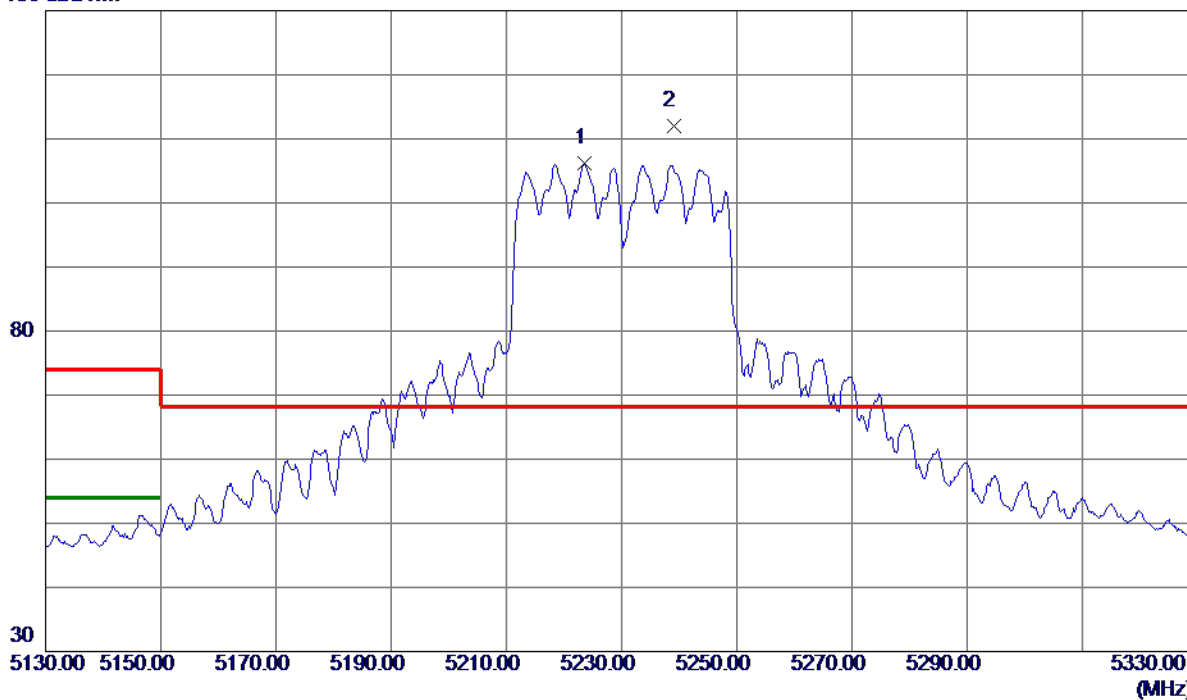
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5223.5000	92.53	13.63	106.16	999.00	-892.84	AVG	No Limit
2 *	5239.0000	98.38	13.67	112.05	68.30	43.75	Peak	No Limit

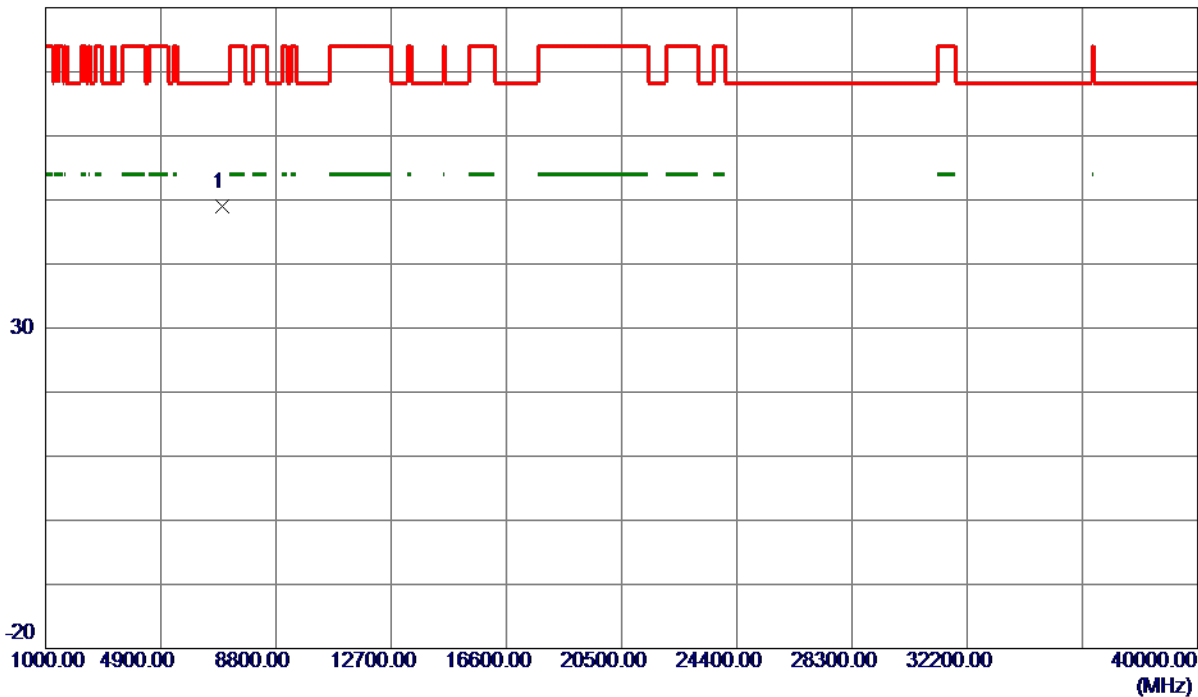
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 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 *	6973.4350	40.94	7.96	48.90	68.30	-19.40	Peak	

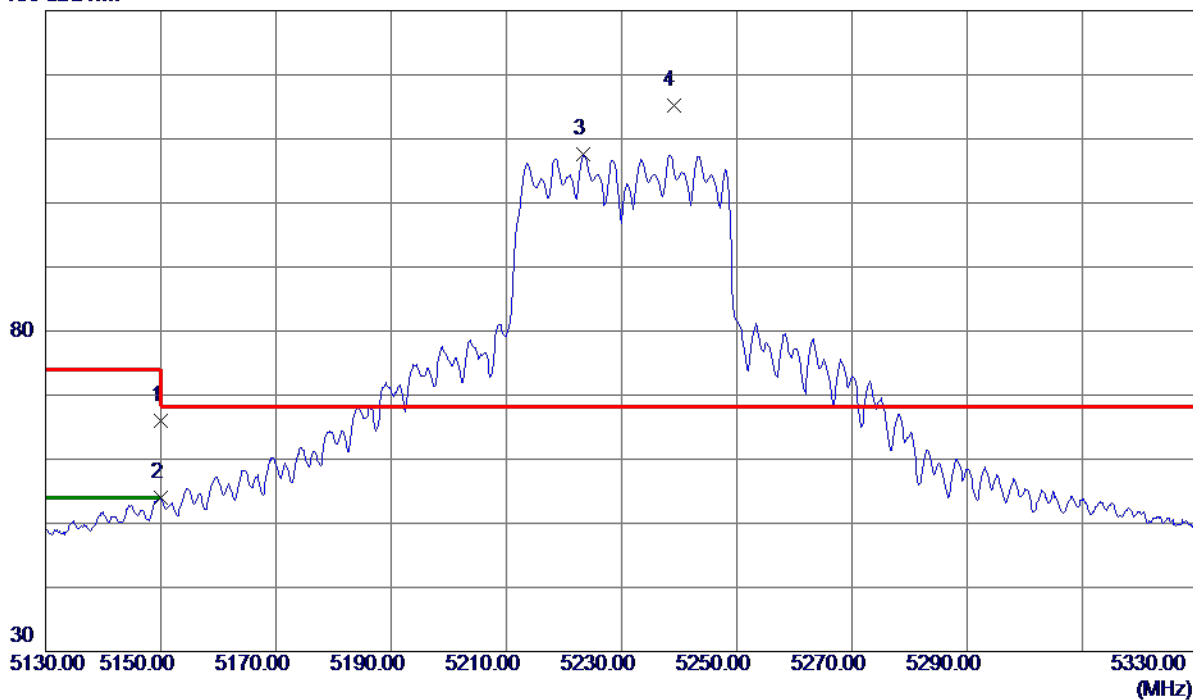
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	52.61	13.45	66.06	74.00	-7.94	Peak	
2	5150.0000	40.51	13.45	53.96	54.00	-0.04	AVG	
3	5223.4000	93.89	13.63	107.52	999.00	-891.48	AVG	No Limit
4 *	5239.0000	101.44	13.67	115.11	68.30	46.81	Peak	No Limit

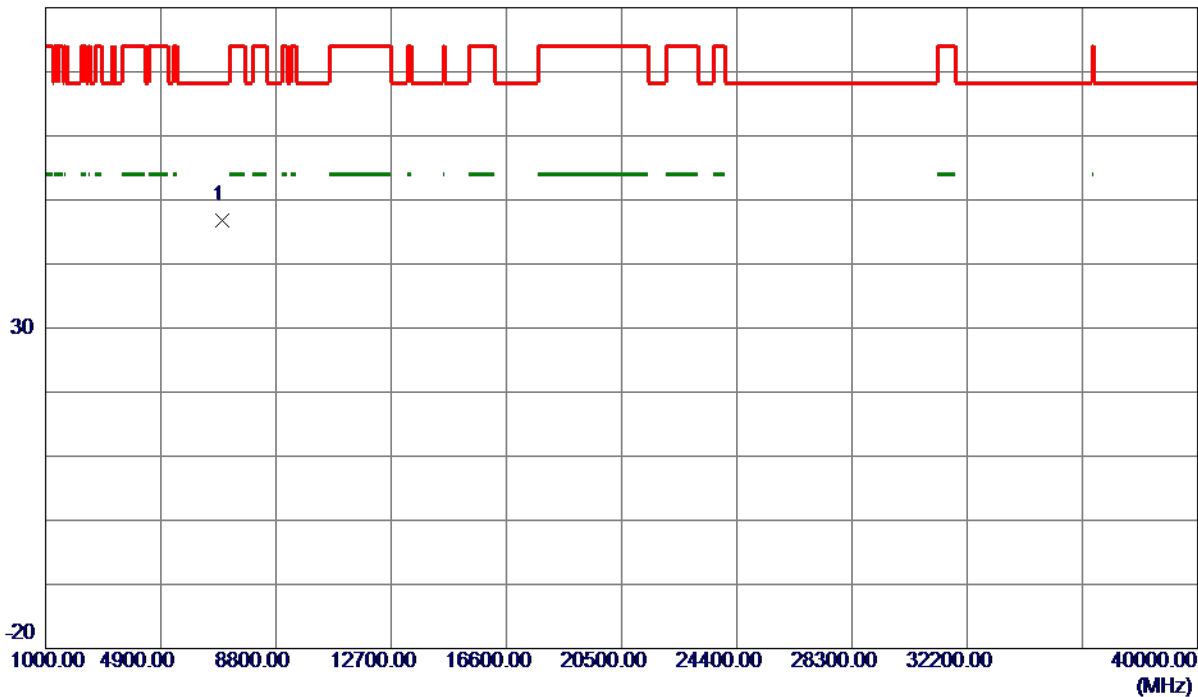
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 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 *	6973.2400	38.85	7.96	46.81	68.30	-21.49	Peak	

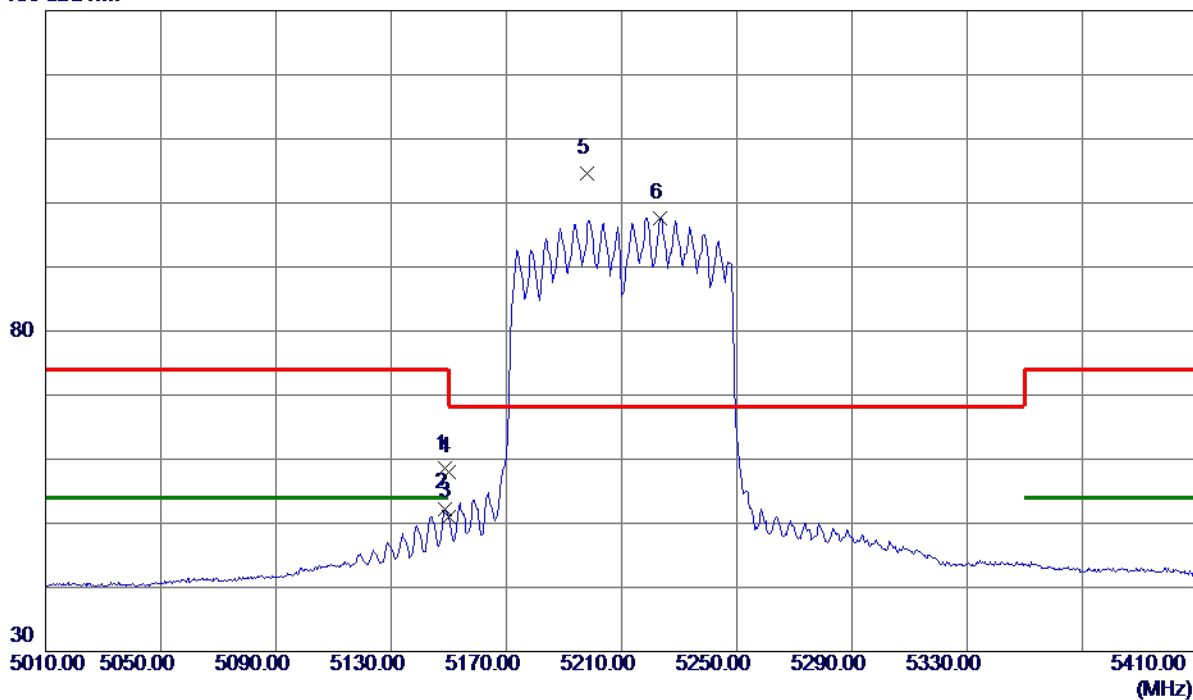
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5148.8000	45.06	13.44	58.50	74.00	-15.50	Peak	
2	5148.8000	38.86	13.44	52.30	54.00	-1.70	AVG	
3	5150.0000	37.53	13.45	50.98	74.00	-23.02	Peak	
4	5150.0000	44.64	13.45	58.09	54.00	4.09	AVG	
5 *	5198.2000	91.09	13.57	104.66	68.30	36.36	Peak	No Limit
6	5223.4000	83.95	13.63	97.58	999.00	-901.42	AVG	No Limit

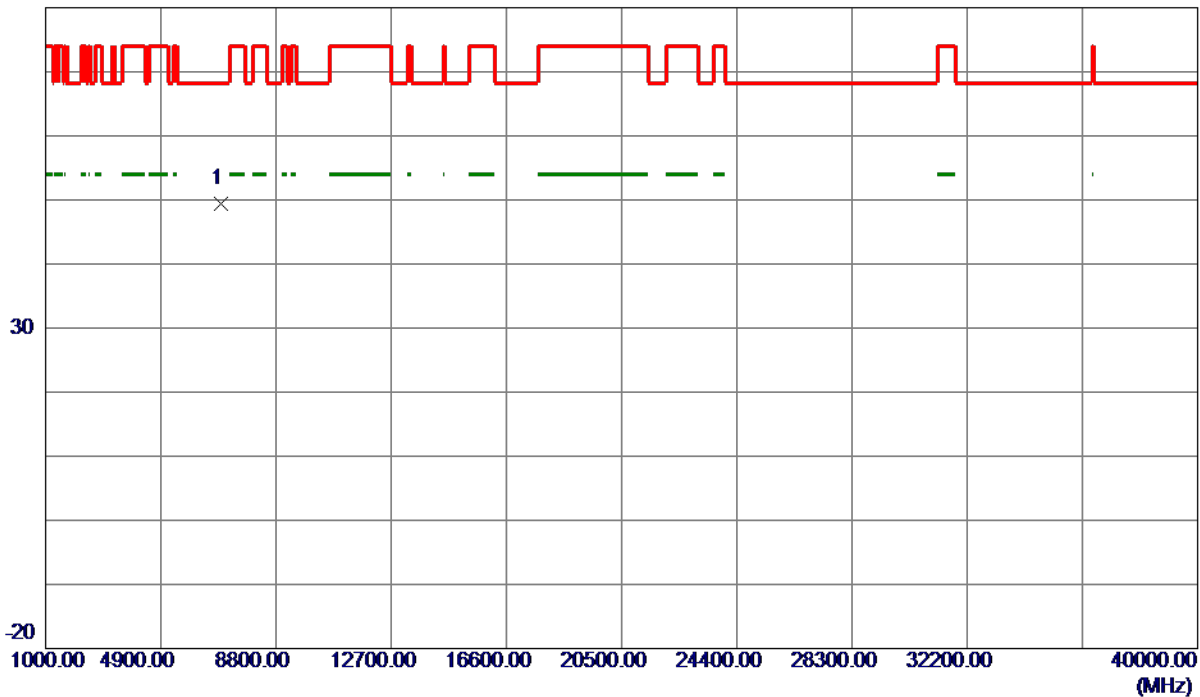
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 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 *	6946.8100	41.54	7.91	49.45	68.30	-18.85	Peak	

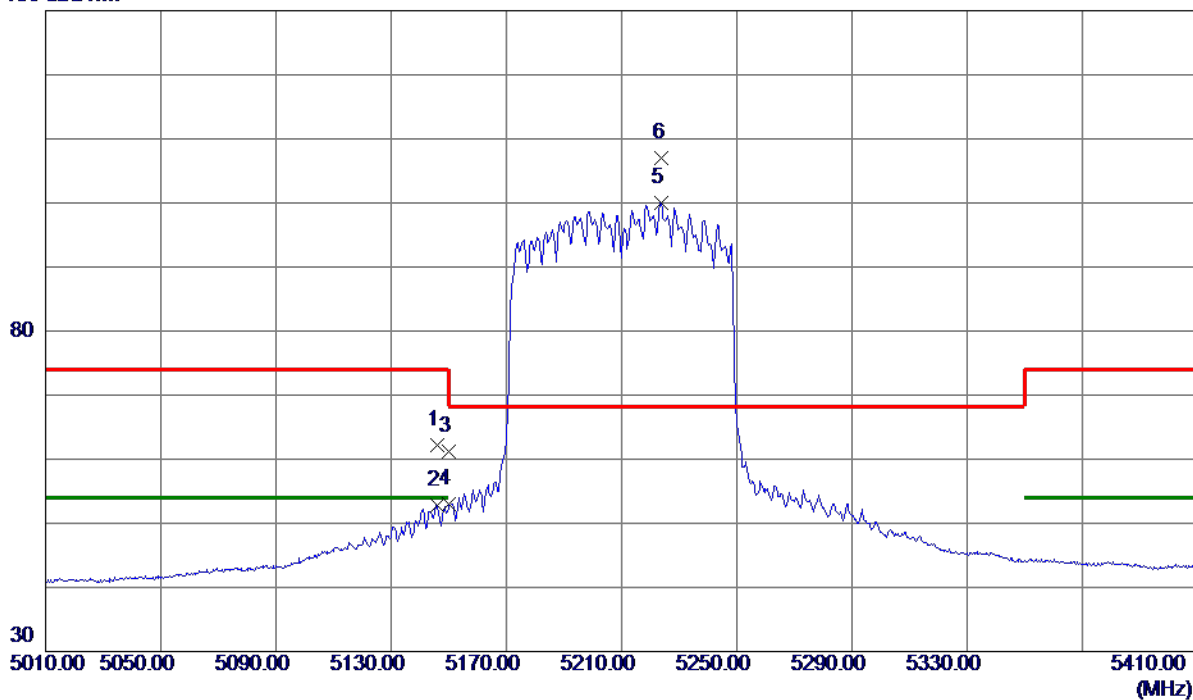
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5146.0000	48.83	13.44	62.27	74.00	-11.73	Peak	
2	5146.0000	39.37	13.44	52.81	54.00	-1.19	AVG	
3	5150.0000	47.79	13.45	61.24	74.00	-12.76	Peak	
4	5150.0000	39.55	13.45	53.00	54.00	-1.00	AVG	
5	5223.6000	86.39	13.63	100.02	999.00	-898.98	AVG	No Limit
6 *	5224.0000	93.45	13.64	107.09	68.30	38.79	Peak	No Limit

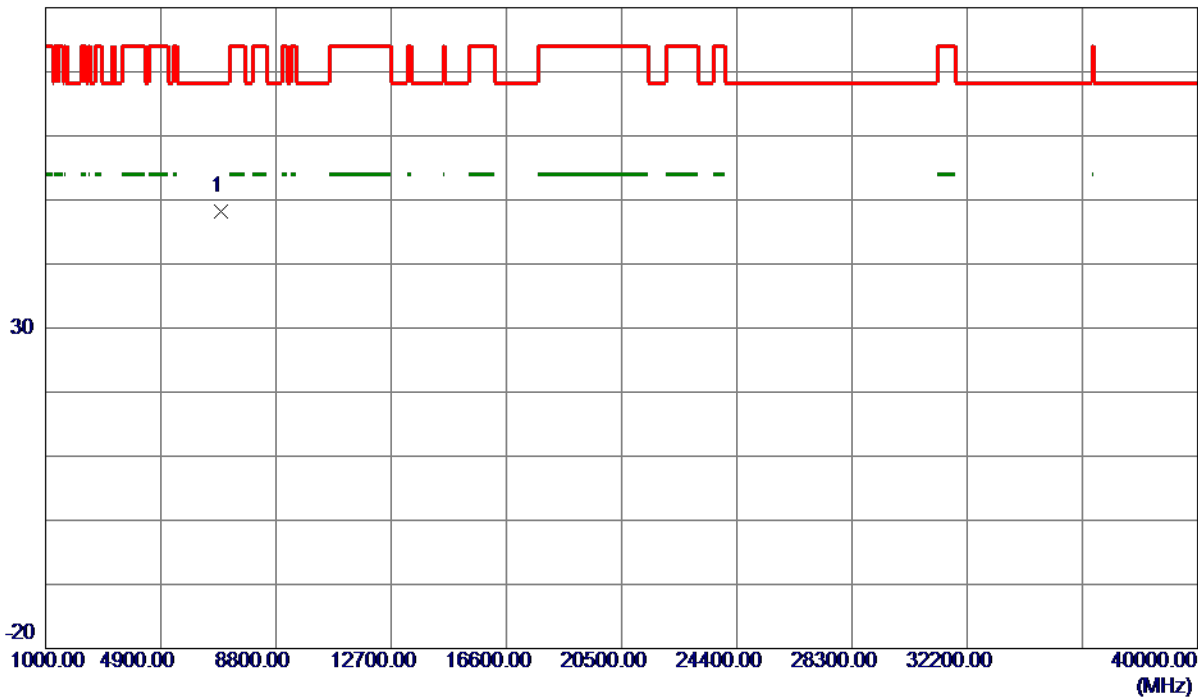
REMARKS:

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

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

Horizontal

80 dBuV/m



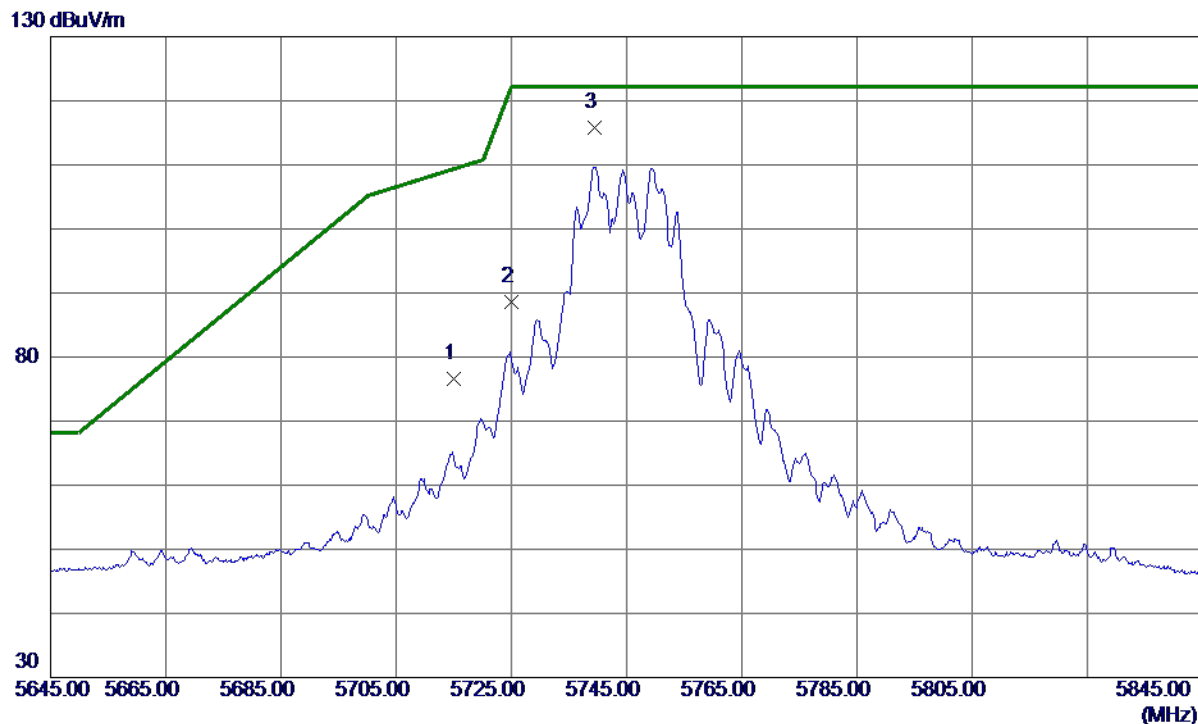
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	6946.7250	40.24	7.91	48.15	68.30	-20.15	Peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) 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	5715.0000	61.66	14.90	76.56	109.40	-32.84	Peak	
2	5725.0000	73.60	14.92	88.52	122.20	-33.68	Peak	
3 *	5739.4000	100.91	14.96	115.87	122.20	-6.33	Peak	No Limit

REMARKS:

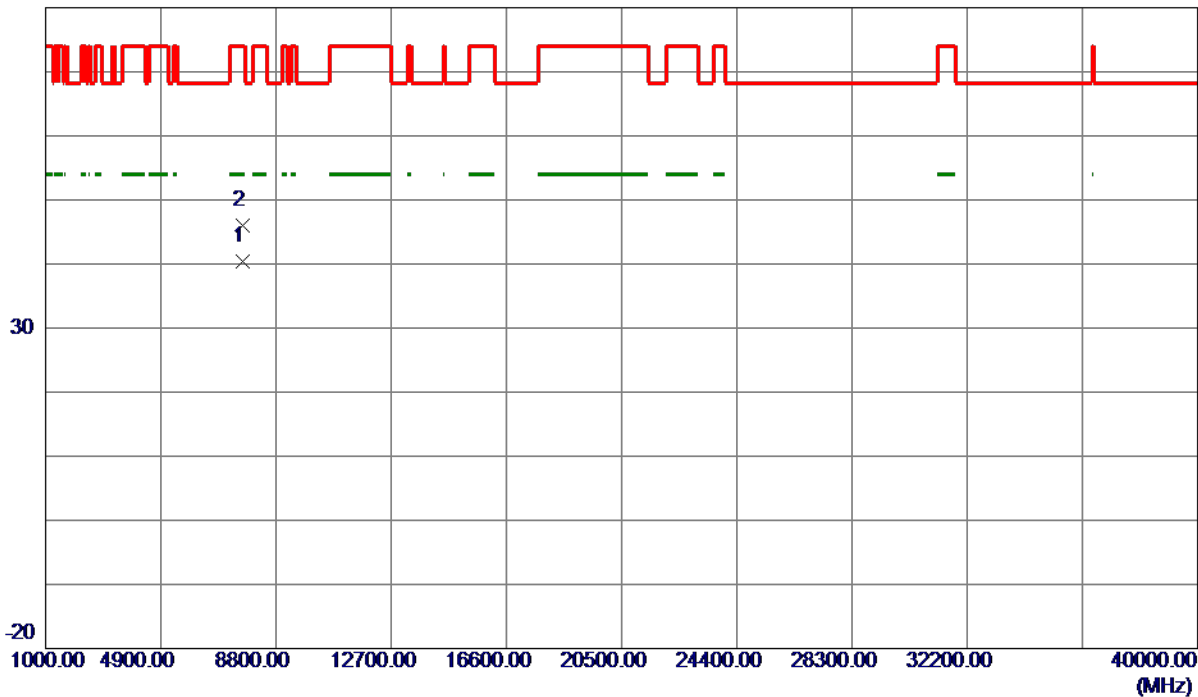
(1) Measurement Value = Reading Level + Correct Factor.

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) 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 *	7660.1500	31.67	8.65	40.32	54.00	-13.68	AVG	
2	7660.2500	37.42	8.65	46.07	74.00	-27.93	Peak	

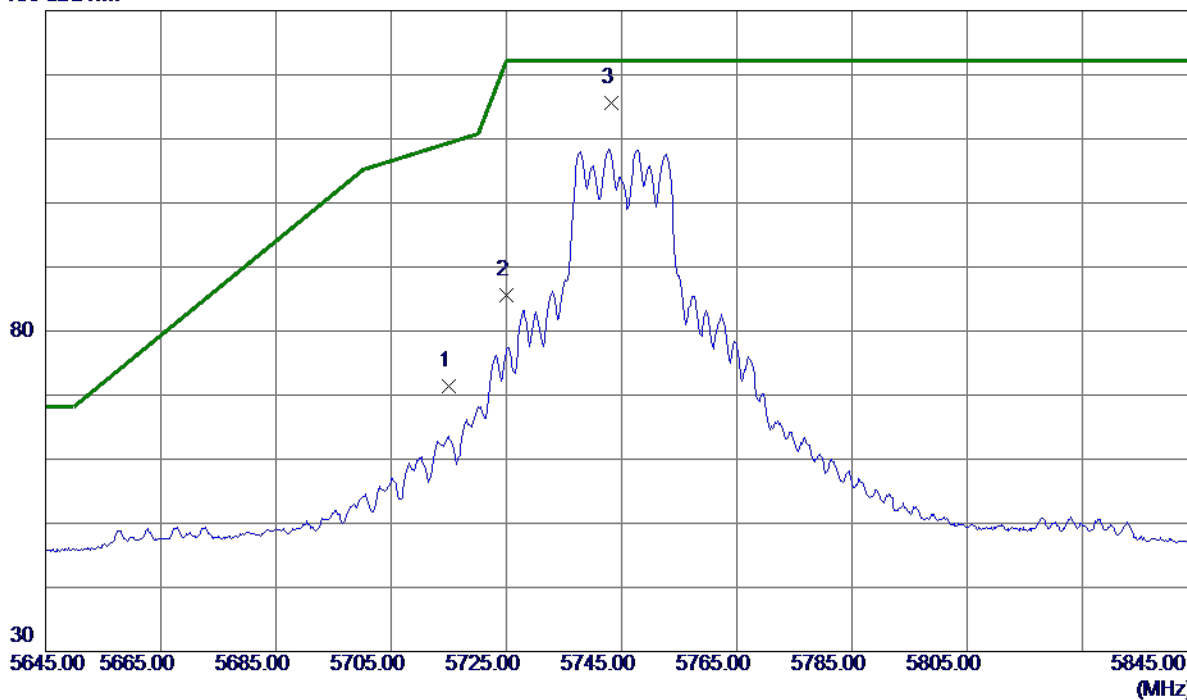
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	56.55	14.90	71.45	109.40	-37.95	Peak	
2	5725.0000	70.61	14.92	85.53	122.20	-36.67	Peak	
3 *	5743.3000	100.56	14.97	115.53	122.20	-6.67	Peak	No Limit

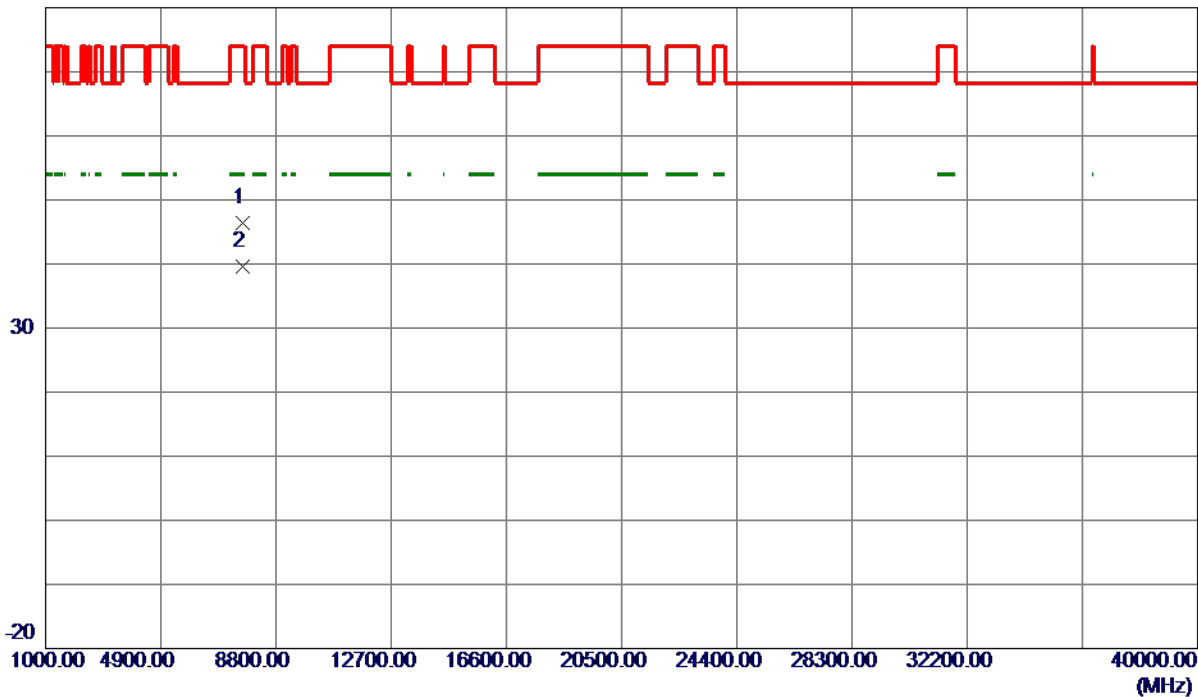
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 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	7660.1400	37.73	8.65	46.38	74.00	-27.62	Peak	
2 *	7660.1400	30.92	8.65	39.57	54.00	-14.43	AVG	

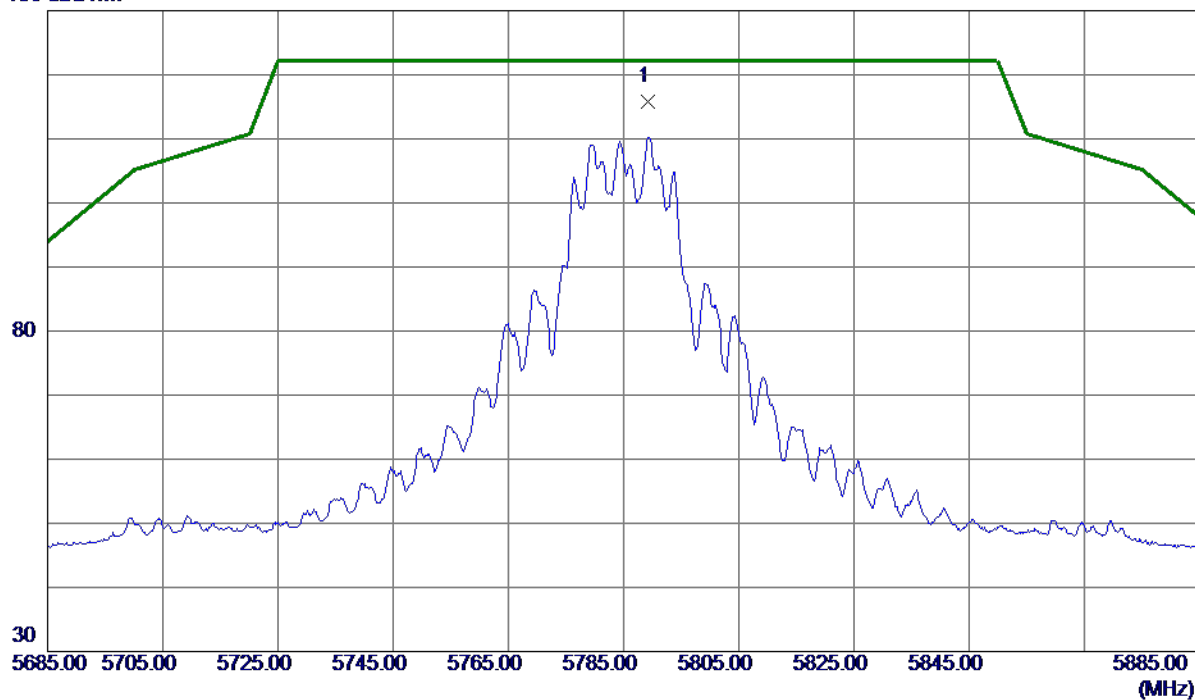
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5789.3000	100.70	15.09	115.79	122.20	-6.41	Peak	No Limit

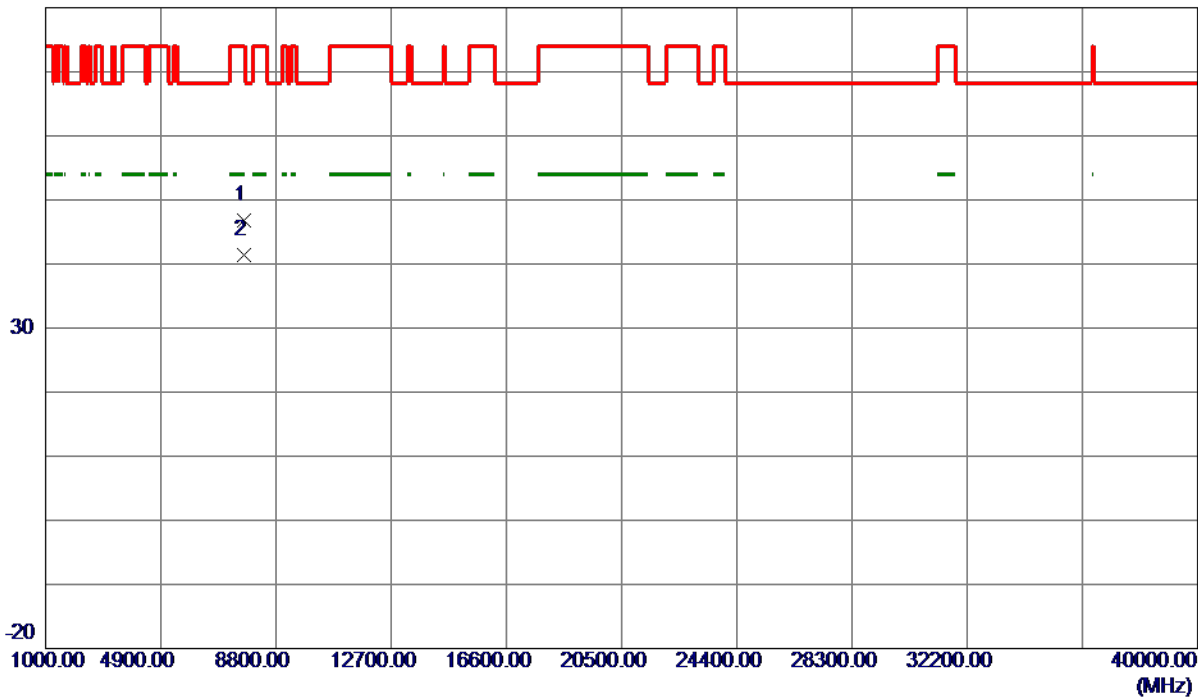
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 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	7713.4200	38.10	8.62	46.72	74.00	-27.28	Peak	
2 *	7713.4800	32.72	8.62	41.34	54.00	-12.66	AVG	

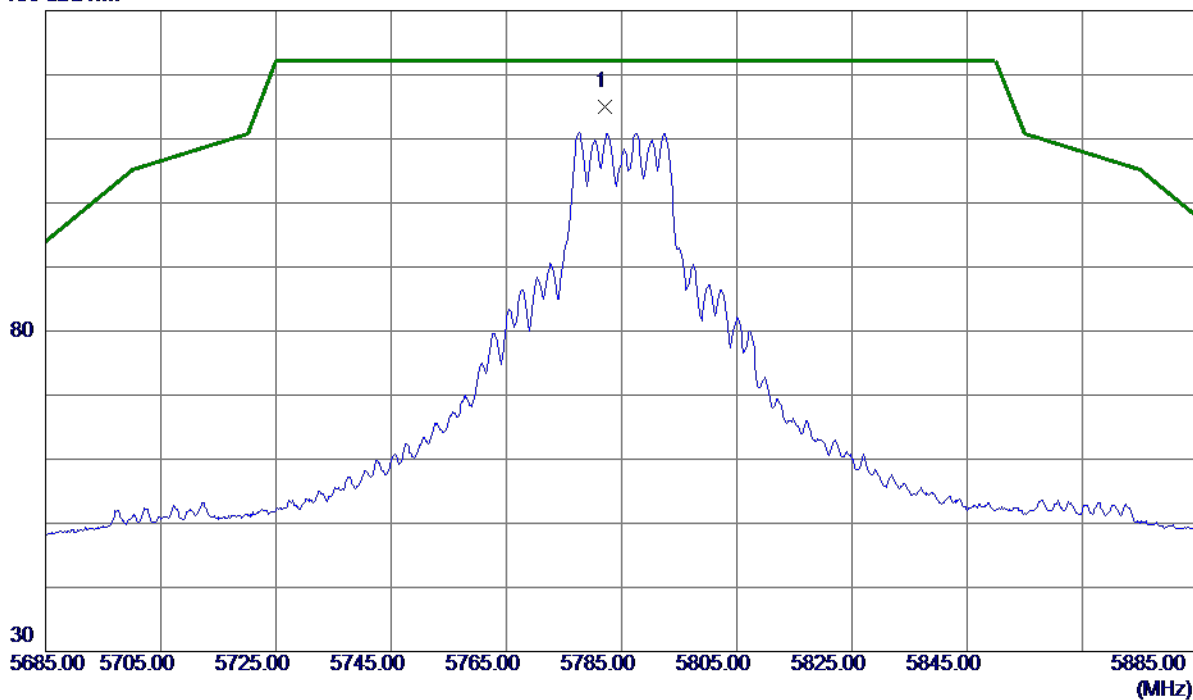
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5782.1000	100.03	15.07	115.10	122.20	-7.10	Peak	No Limit

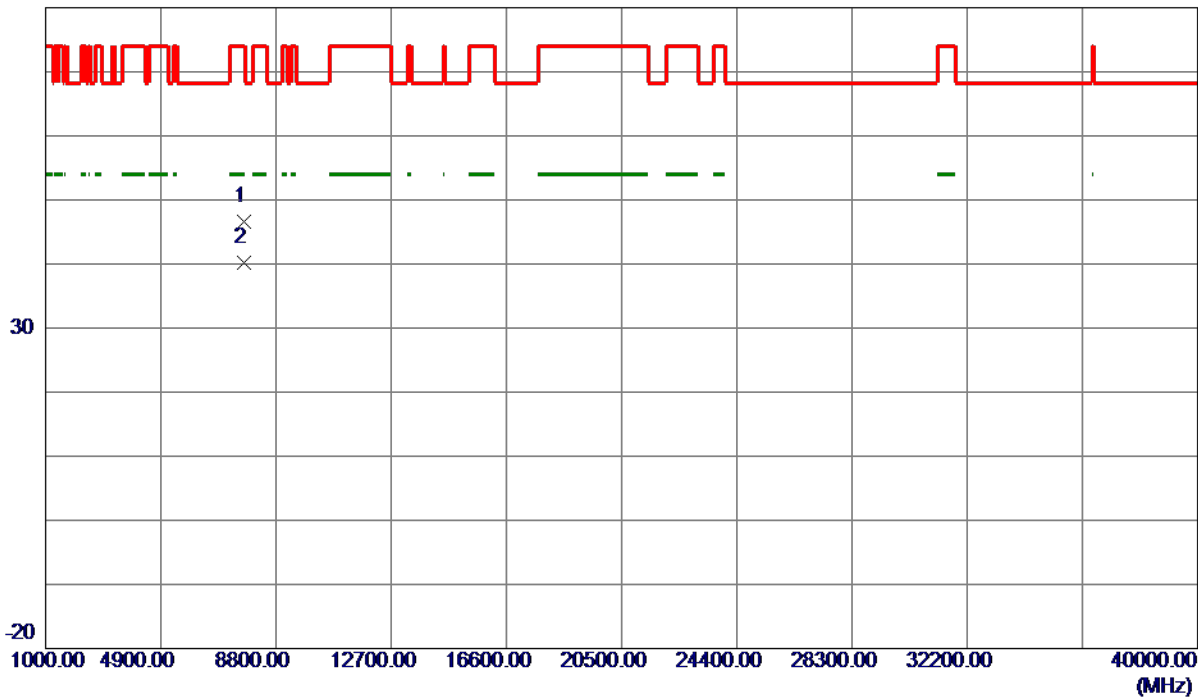
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) 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	7713.2200	37.99	8.62	46.61	74.00	-27.39	Peak	
2 *	7713.4250	31.49	8.62	40.11	54.00	-13.89	AVG	

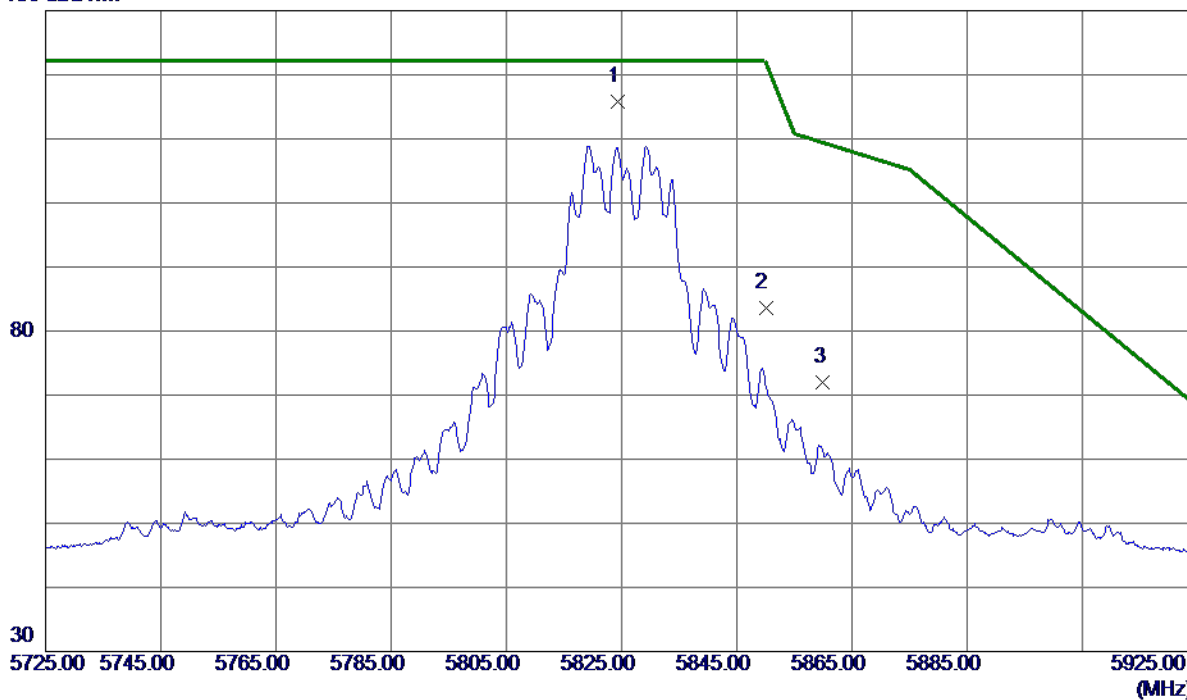
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5824.4000	100.64	15.18	115.82	122.20	-6.38	Peak	No Limit
2	5850.0000	68.29	15.24	83.53	122.20	-38.67	Peak	
3	5860.0000	56.76	15.27	72.03	109.40	-37.37	Peak	

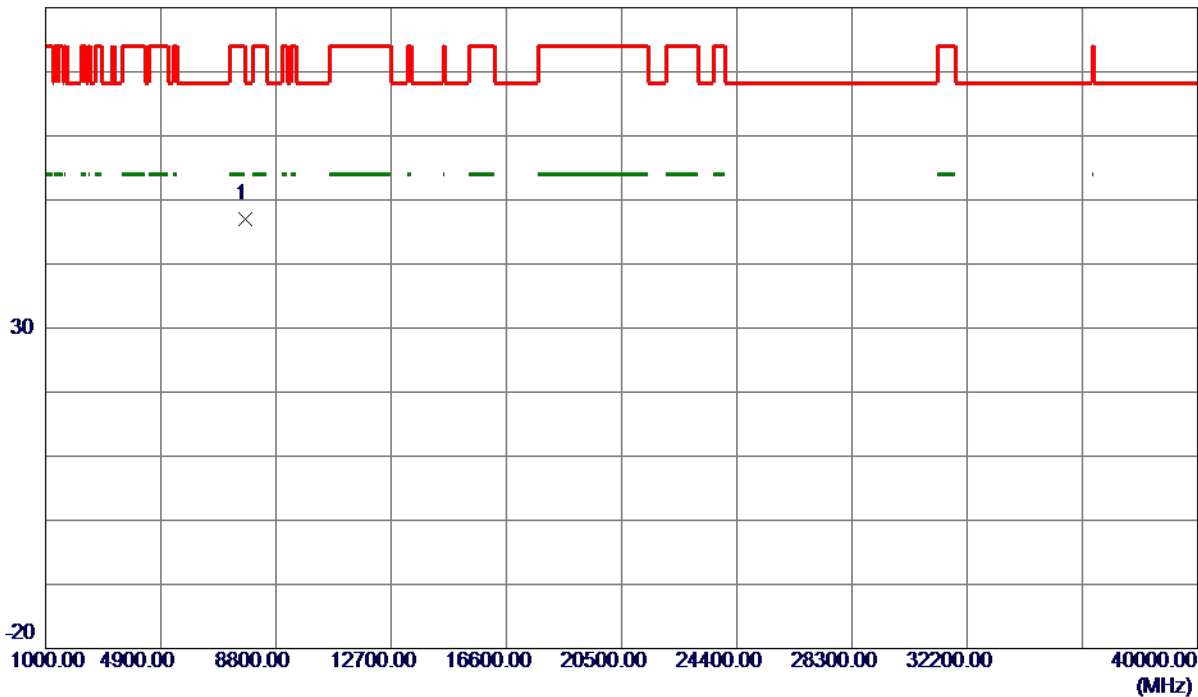
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 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 *	7766.8750	38.36	8.59	46.95	68.30	-21.35	Peak	

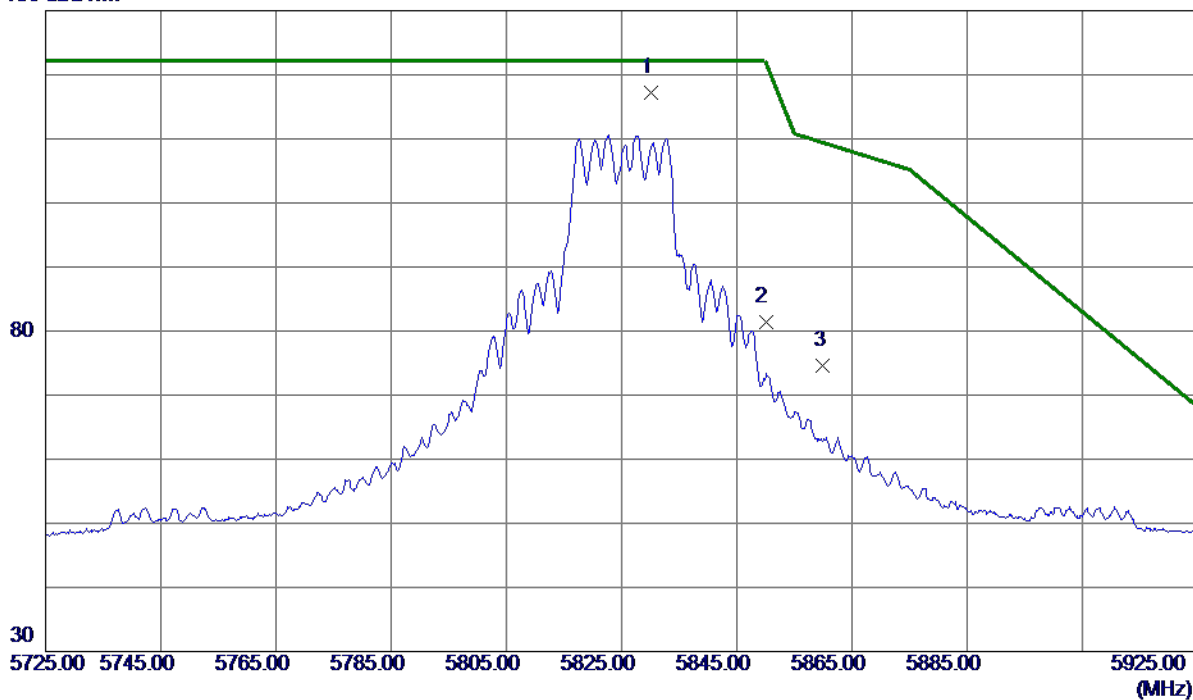
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5830.2000	102.04	15.19	117.23	122.20	-4.97	Peak	No Limit
2	5850.0000	66.13	15.24	81.37	122.20	-40.83	Peak	
3	5860.0000	59.34	15.27	74.61	109.40	-34.79	Peak	

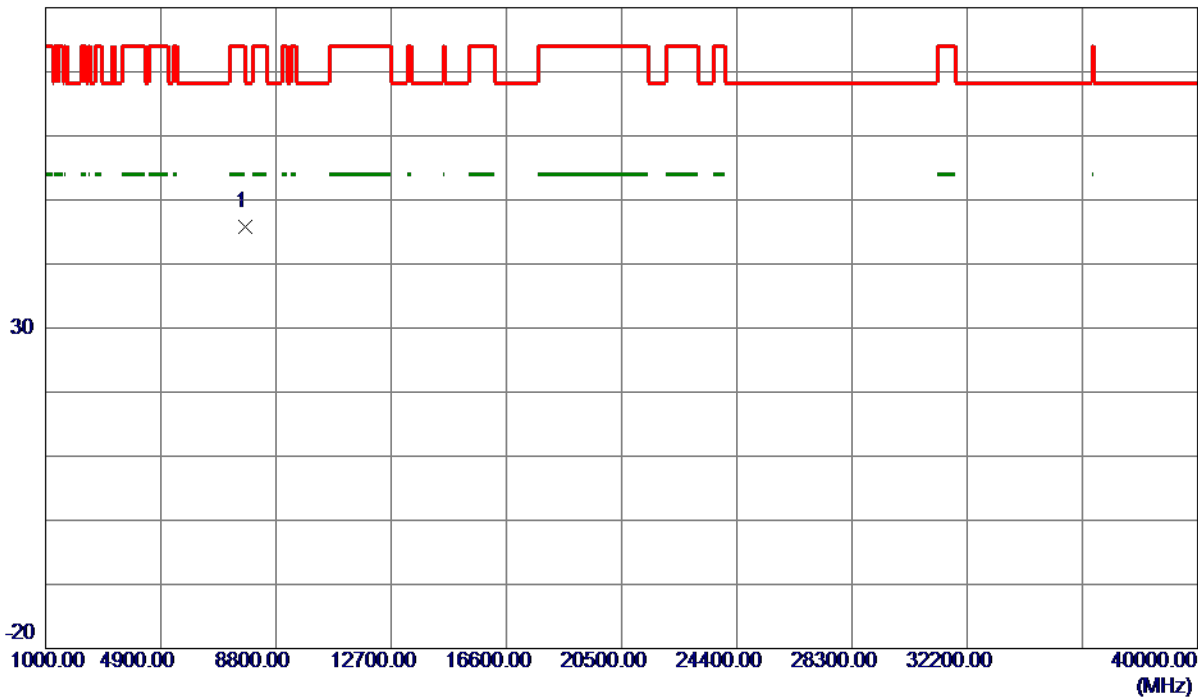
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 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 *	7766.6450	37.27	8.59	45.86	68.30	-22.44	Peak	

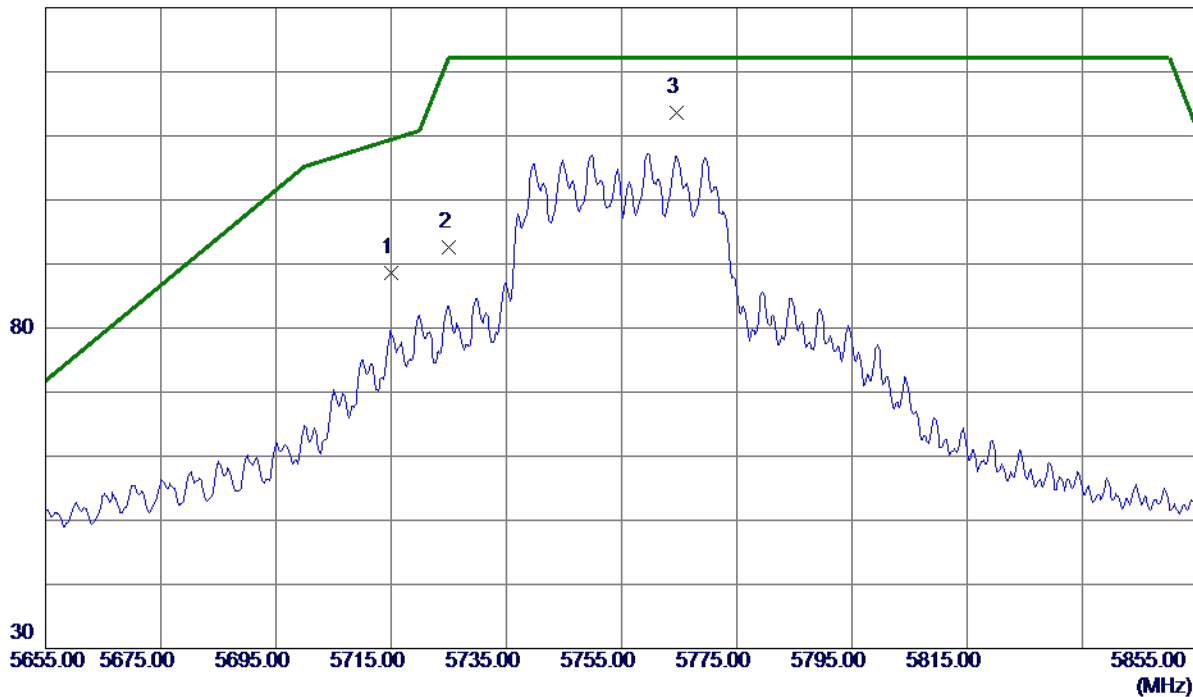
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	73.65	14.90	88.55	109.40	-20.85	Peak	
2	5725.0000	77.62	14.92	92.54	122.20	-29.66	Peak	
3 *	5764.6000	98.57	15.03	113.60	122.20	-8.60	Peak	No Limit

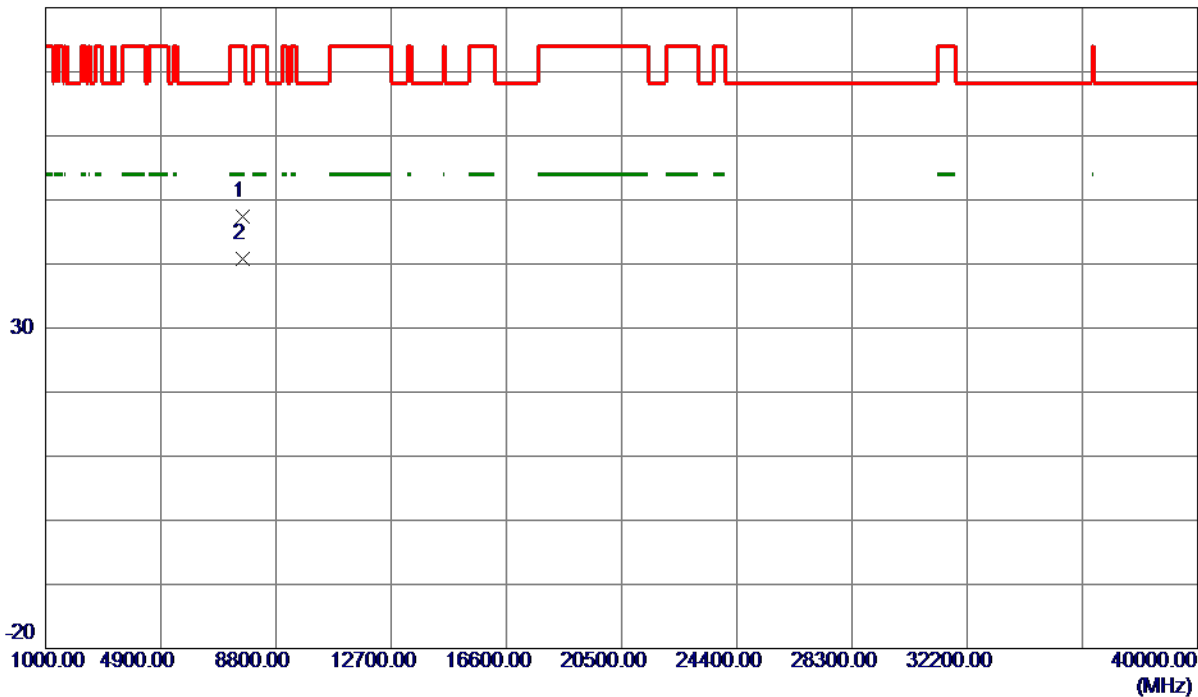
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 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	7673.2150	38.84	8.64	47.48	74.00	-26.52	Peak	
2 *	7673.3650	32.17	8.64	40.81	54.00	-13.19	AVG	

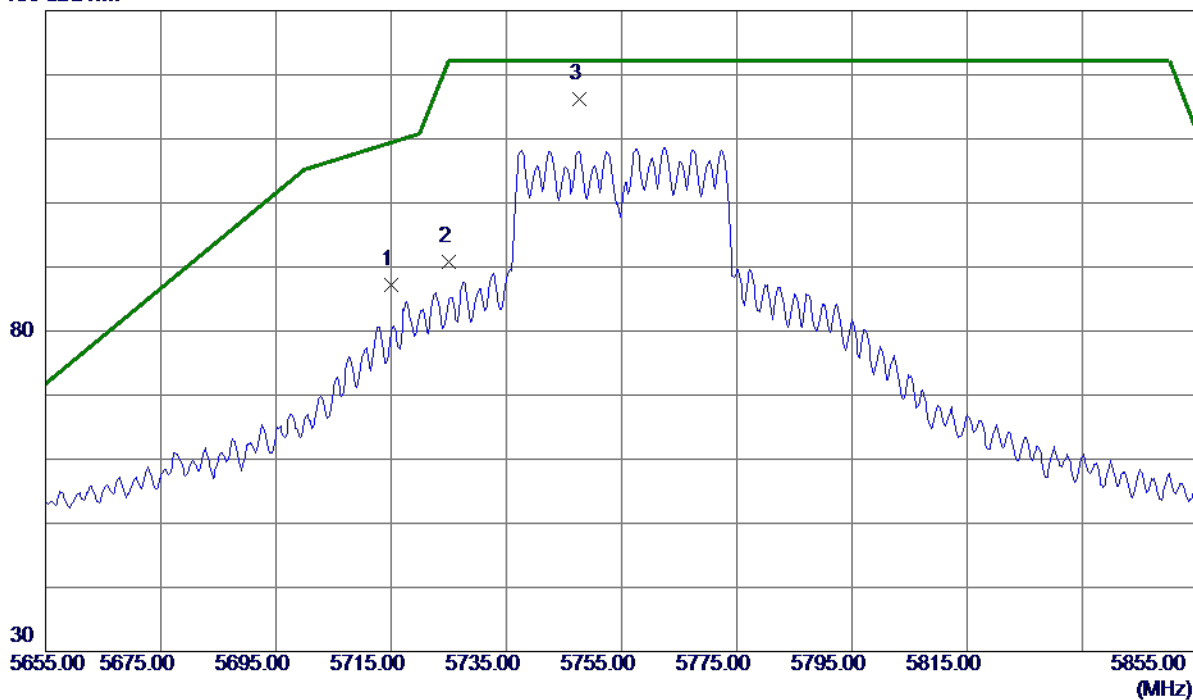
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	72.27	14.90	87.17	109.40	-22.23	Peak	
2	5725.0000	75.89	14.92	90.81	122.20	-31.39	Peak	
3 *	5747.7000	101.19	14.98	116.17	122.20	-6.03	Peak	No Limit

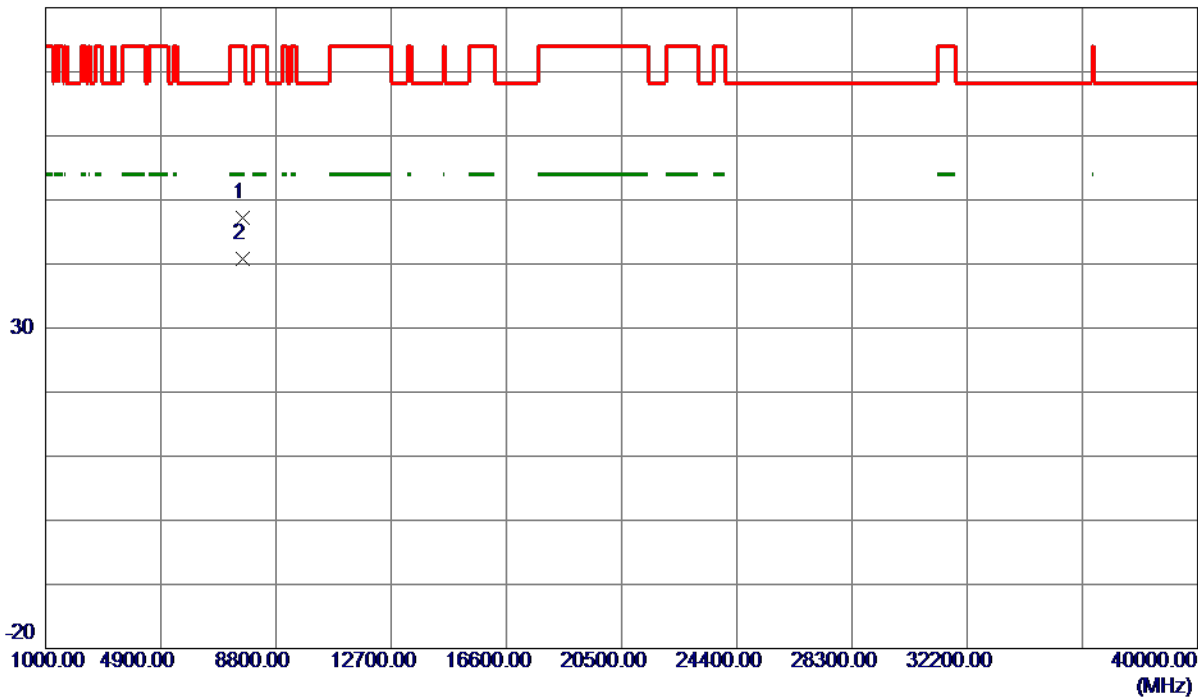
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 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	7673.3100	38.47	8.64	47.11	74.00	-26.89	Peak	
2 *	7673.3850	32.13	8.64	40.77	54.00	-13.23	AVG	

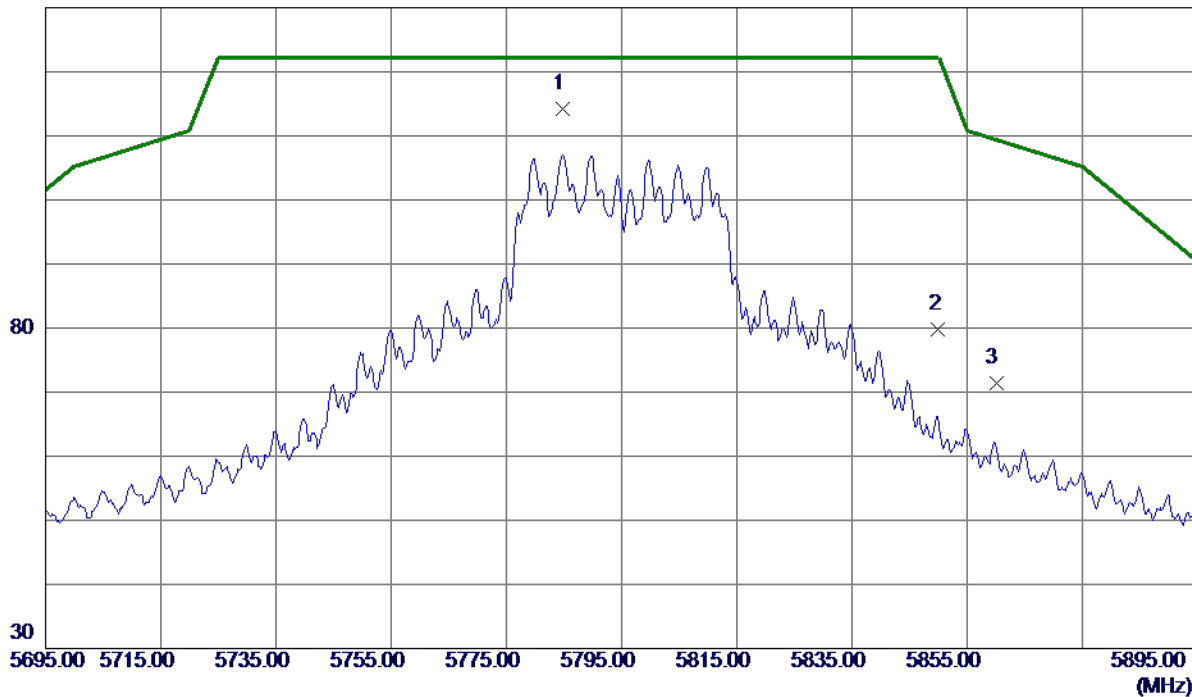
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5784.8000	99.12	15.08	114.20	122.20	-8.00	Peak	No Limit
2	5850.0000	64.50	15.24	79.74	122.20	-42.46	Peak	
3	5860.0000	56.04	15.27	71.31	109.40	-38.09	Peak	

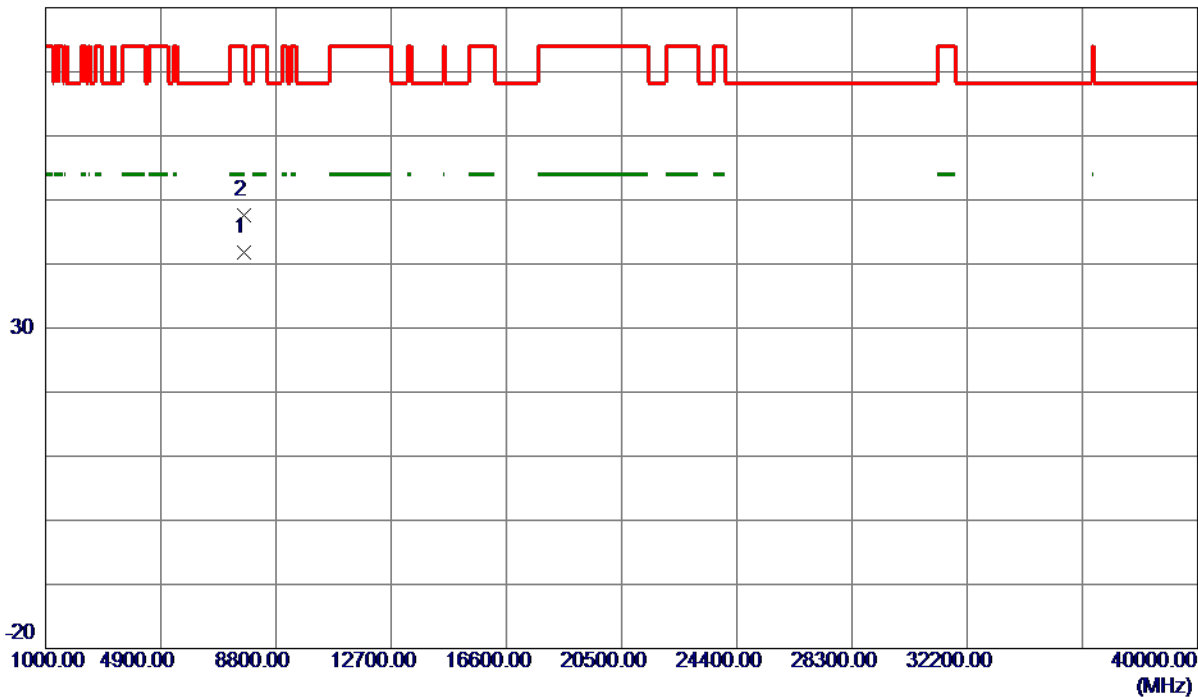
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 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 *	7726.6650	33.24	8.61	41.85	54.00	-12.15	AVG	
2	7726.8250	39.01	8.61	47.62	74.00	-26.38	Peak	

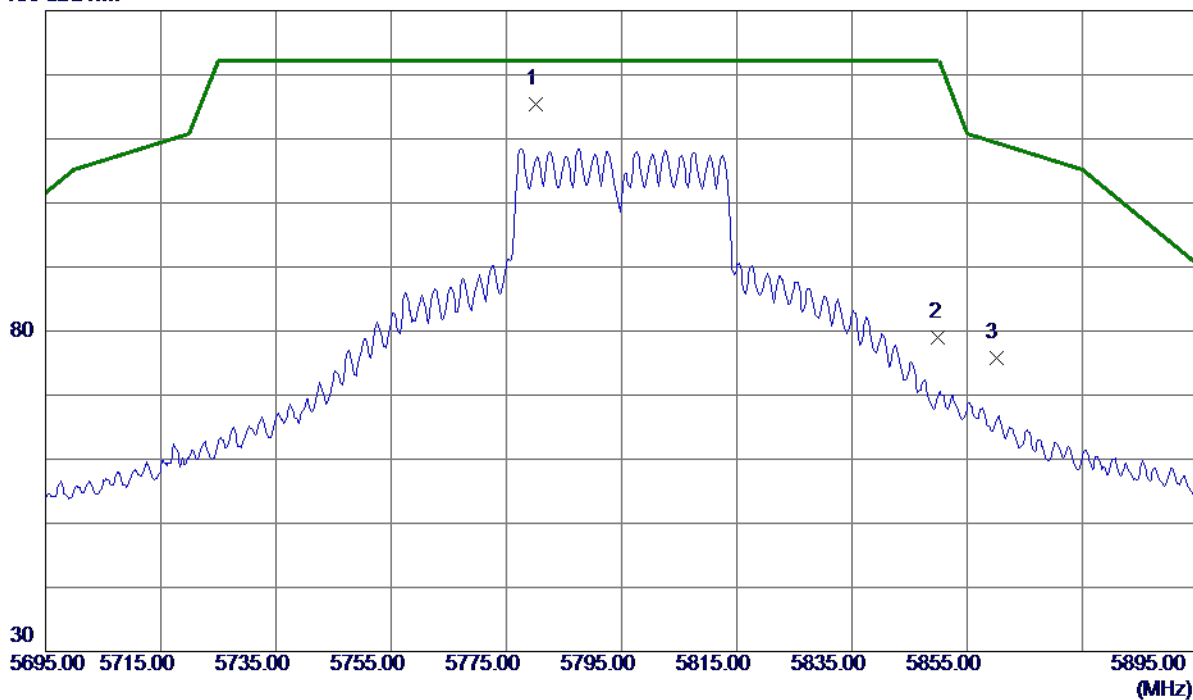
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5780.2000	100.41	15.07	115.48	122.20	-6.72	Peak	No Limit
2	5850.0000	63.71	15.24	78.95	122.20	-43.25	Peak	
3	5860.0000	60.54	15.27	75.81	109.40	-33.59	Peak	

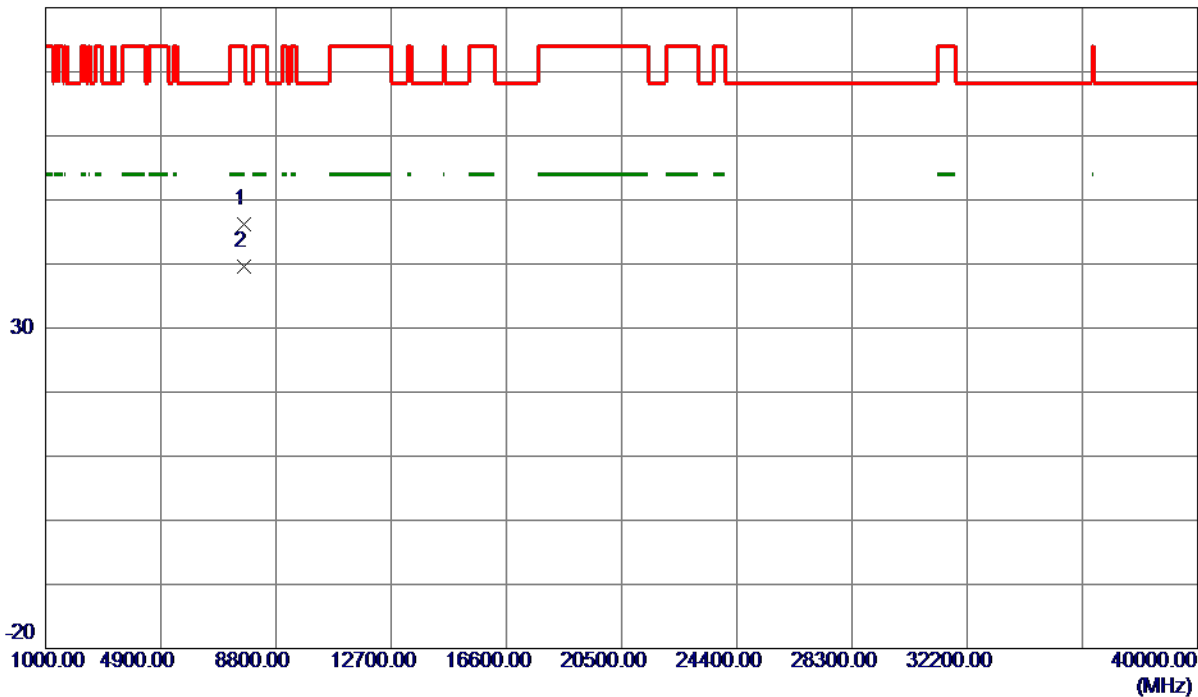
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 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	7726.5700	37.64	8.61	46.25	74.00	-27.75	Peak	
2 *	7726.7200	30.98	8.61	39.59	54.00	-14.41	AVG	

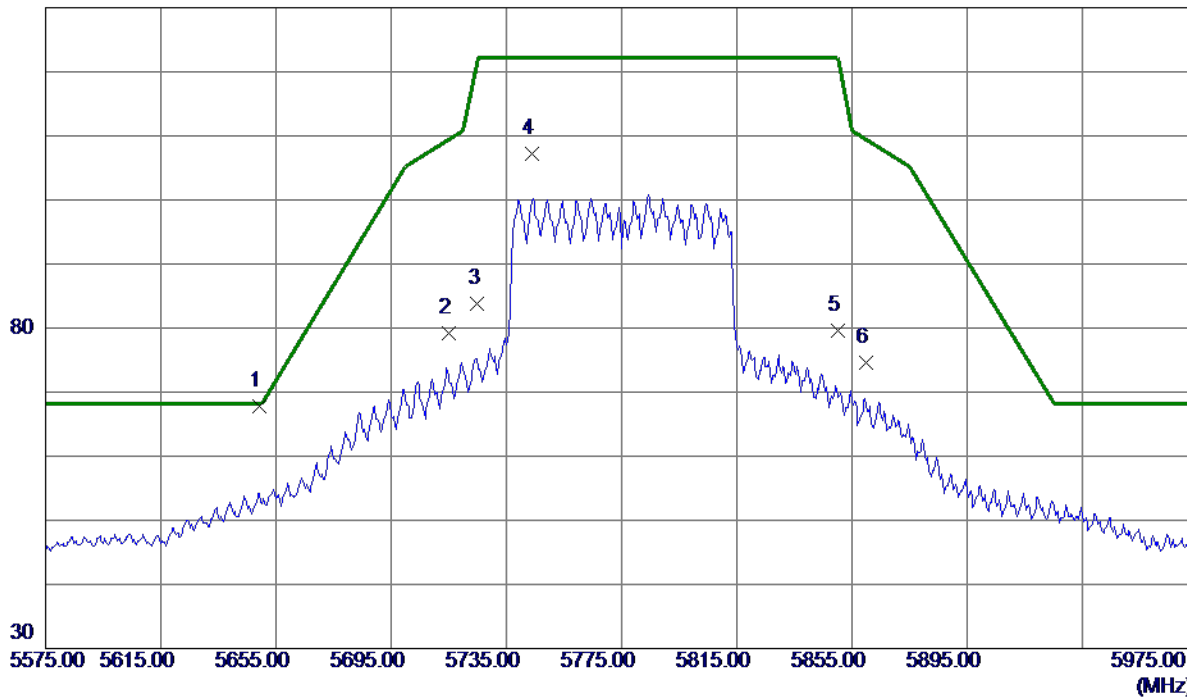
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5649.4000	53.02	14.73	67.75	68.20	-0.45	Peak	
2	5715.0000	64.31	14.90	79.21	109.40	-30.19	Peak	
3	5725.0000	68.79	14.92	83.71	122.20	-38.49	Peak	
4	5743.8000	92.26	14.97	107.23	122.20	-14.97	Peak	No Limit
5	5850.0000	64.33	15.24	79.57	122.20	-42.63	Peak	
6	5860.0000	59.29	15.27	74.56	109.40	-34.84	Peak	

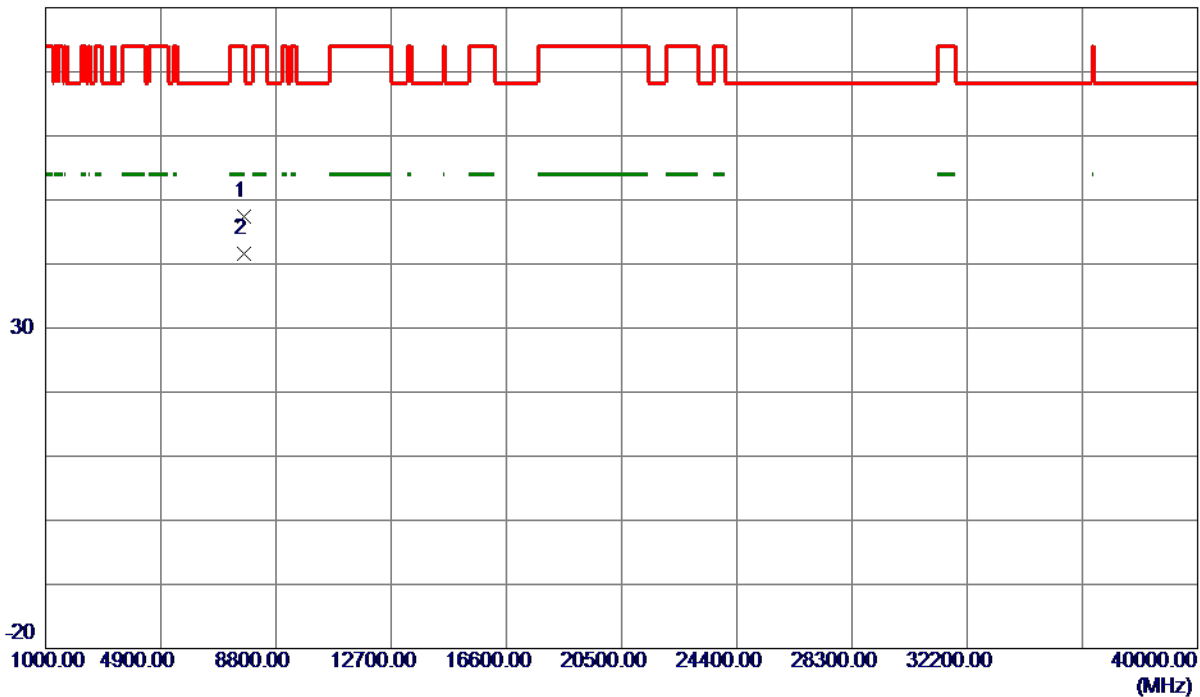
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 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	7699.8900	38.71	8.63	47.34	74.00	-26.66	Peak	
2 *	7700.1700	33.04	8.63	41.67	54.00	-12.33	AVG	

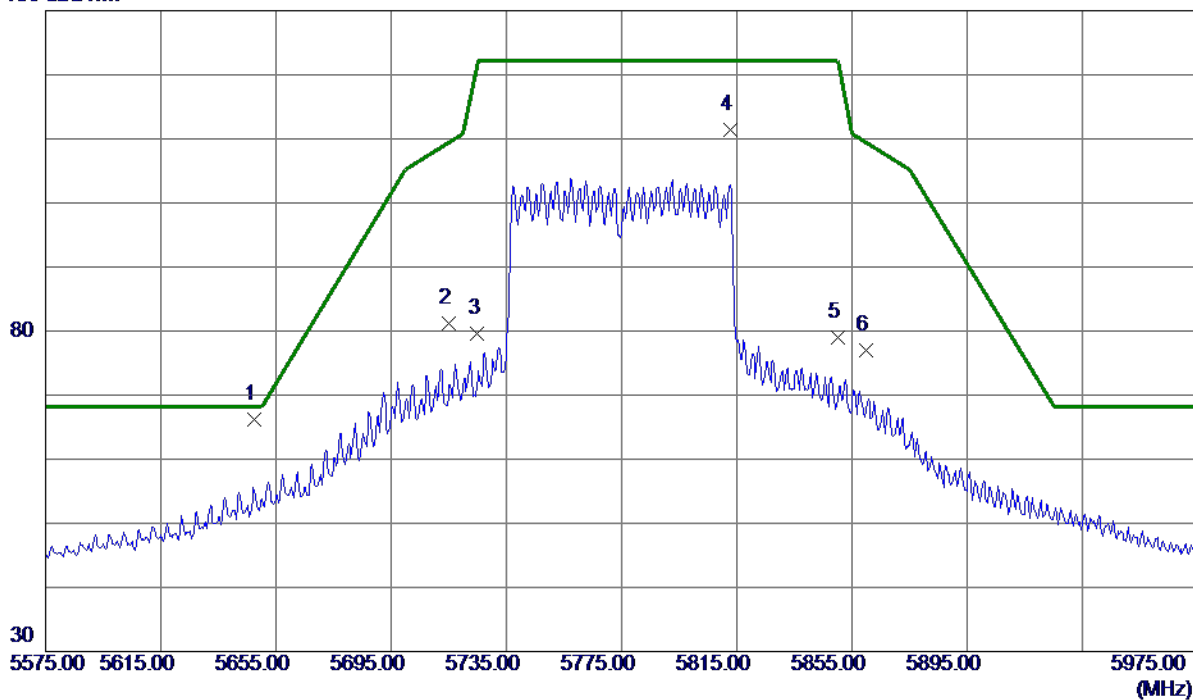
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5647.4000	51.51	14.72	66.23	68.20	-1.97	Peak	
2	5715.0000	66.27	14.90	81.17	109.40	-28.23	Peak	
3	5725.0000	64.67	14.92	79.59	122.20	-42.61	Peak	
4	5812.6000	96.23	15.15	111.38	122.20	-10.82	Peak	No Limit
5	5850.0000	63.74	15.24	78.98	122.20	-43.22	Peak	
6	5860.0000	61.78	15.27	77.05	109.40	-32.35	Peak	

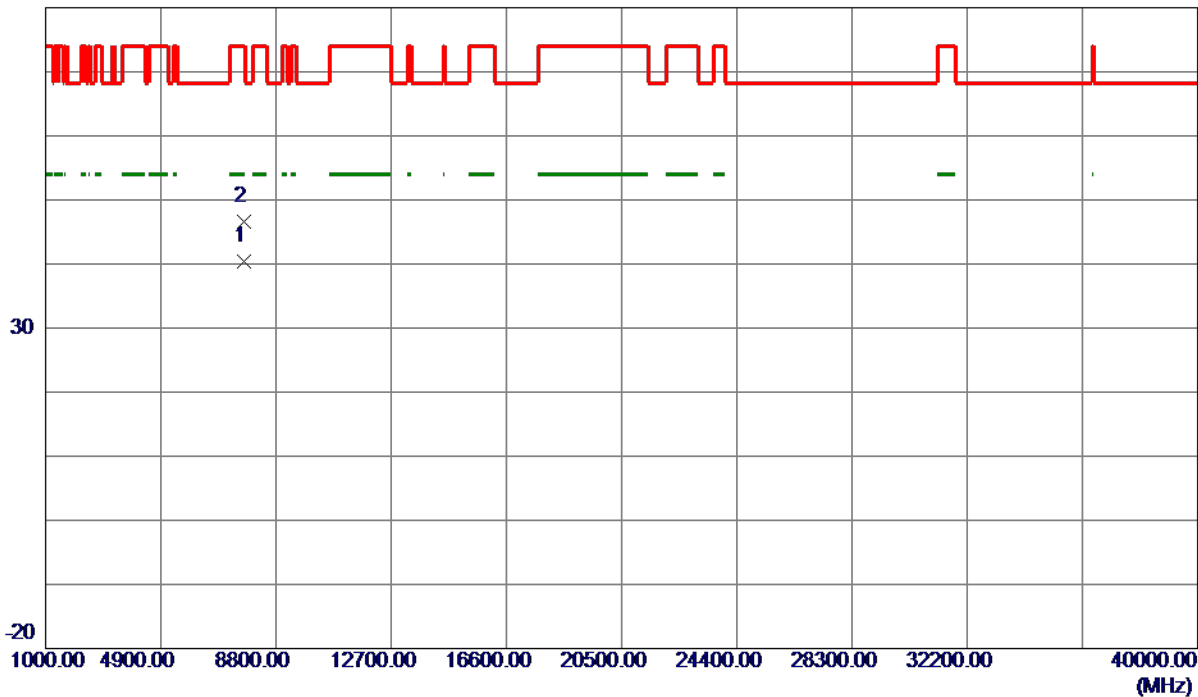
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 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 *	7700.0650	31.77	8.63	40.40	54.00	-13.60	AVG	
2	7700.3400	37.98	8.63	46.61	74.00	-27.39	Peak	

REMARKS:

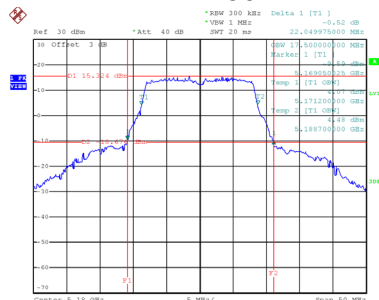
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	UNII-1_TX A Mode
-----------	------------------

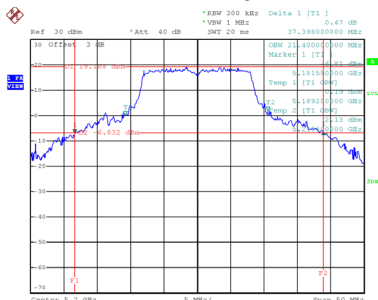
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	22.05	17.50
40	5200	37.40	21.40
48	5240	39.59	22.80

CH36



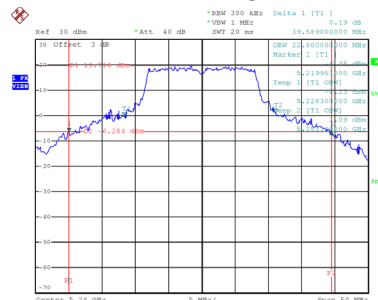
Date: 17.SEP.2019 14:55:54

CH40



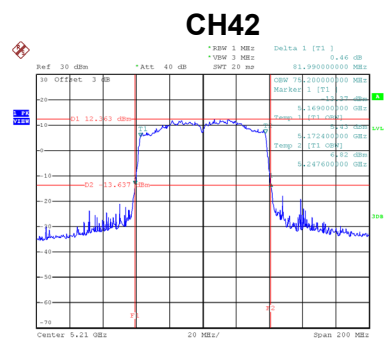
Date: 17.SEP.2019 11:07:03

CH48



Date: 17.SEP.2019 11:10:20

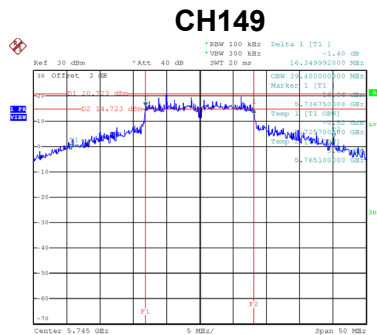
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
42	5210	81.99	75.20



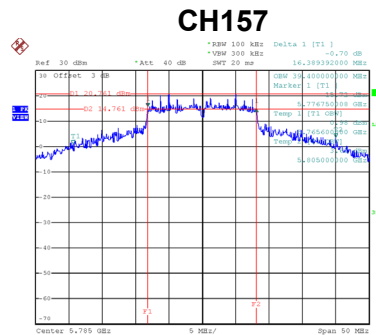
Date: 17.SEP.2019 15:26:08

Test Mode	UNII-3_TX A Mode
-----------	------------------

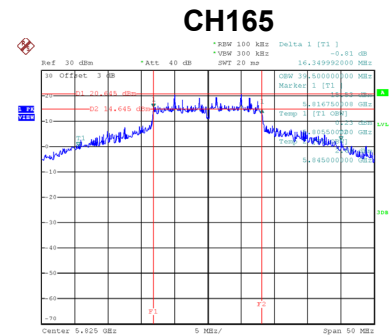
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
149	5745	16.35	500	Complies
157	5785	16.39	500	Complies
165	5825	16.35	500	Complies



Date: 17.SEP.2019 11:12:19



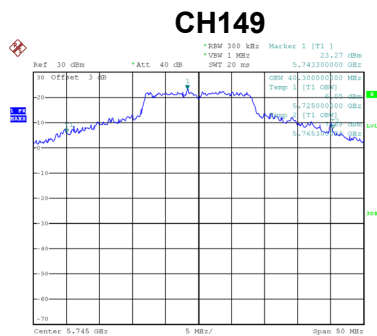
Date: 17.SEP.2019 11:13:46



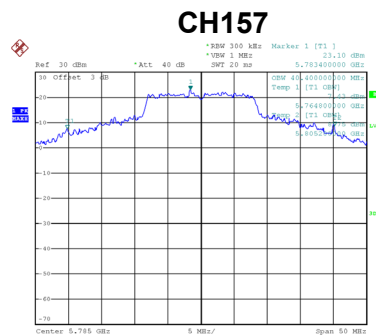
Date: 17.SEP.2019 11:15:35

Test Mode	UNII-3_TX A Mode
-----------	------------------

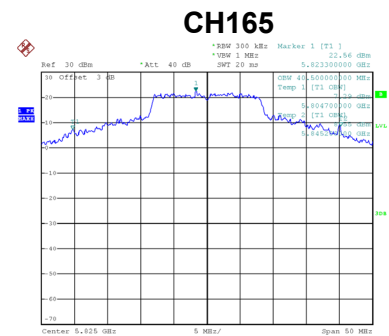
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
149	5745	40.30	Complies
157	5785	40.40	Complies
165	5825	40.50	Complies



Date: 17.SEP.2019 15:03:07



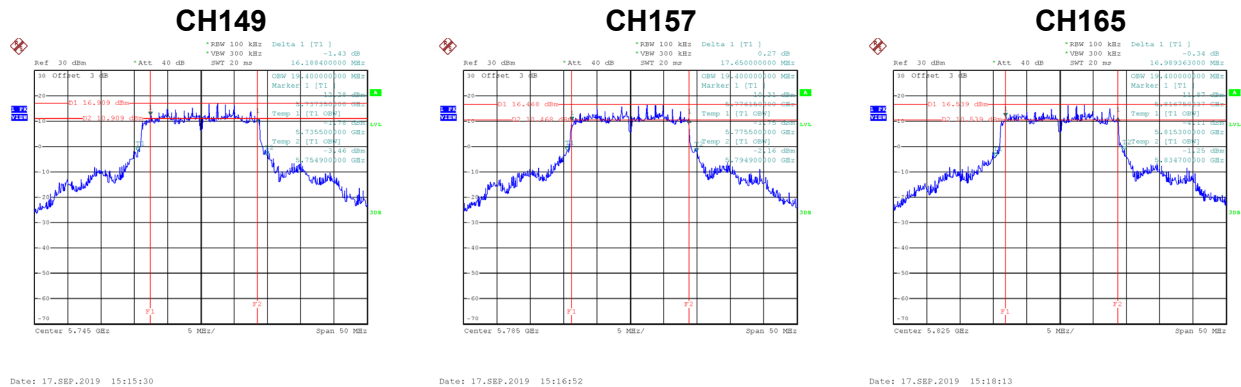
Date: 17.SEP.2019 15:04:08



Date: 17.SEP.2019 15:05:09

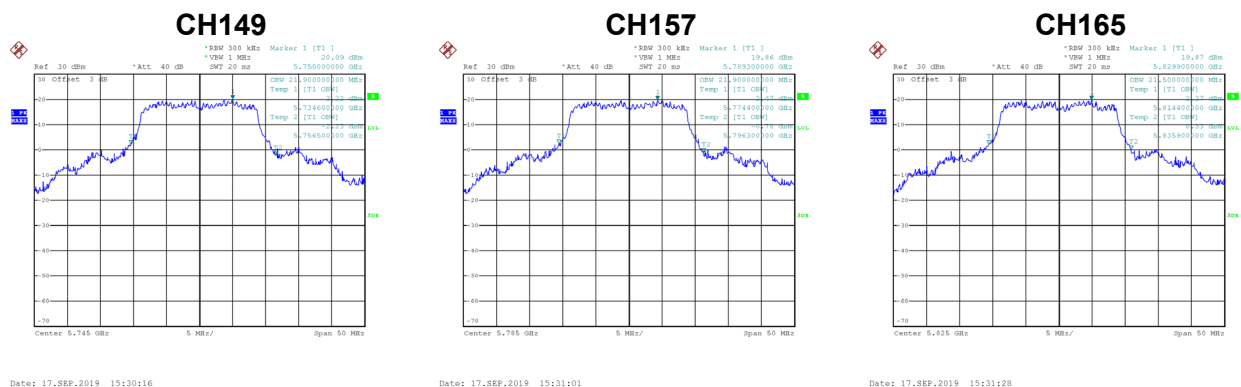
Test Mode	UNII-3_TX AC (VHT20) Mode
-----------	---------------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
149	5745	16.19	500	Complies
157	5785	17.65	500	Complies
165	5825	16.99	500	Complies



Test Mode	UNII-3_TX AC (VHT20) Mode
-----------	---------------------------

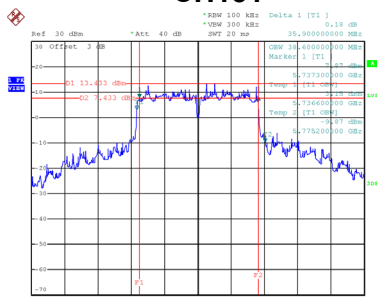
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
149	5745	21.90	Complies
157	5785	21.90	Complies
165	5825	21.50	Complies



Test Mode	UNII-3_TX AC (VHT40) Mode
-----------	---------------------------

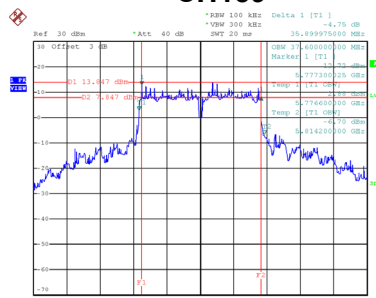
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
151	5755	35.90	500	Complies
159	5795	35.90	500	Complies

CH151



Date: 17.SEP.2019 15:22:59

CH159

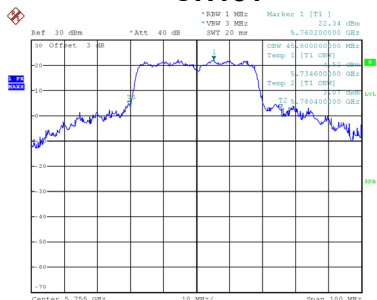


Date: 17.SEP.2019 15:24:27

Test Mode	UNII-3_TX AC (VHT40) Mode
-----------	---------------------------

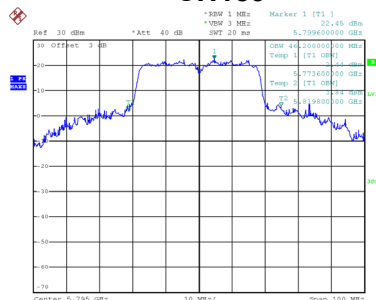
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
151	5755	45.80	Complies
159	5795	46.20	Complies

CH151



Date: 17.SEP.2019 15:32:14

CH159

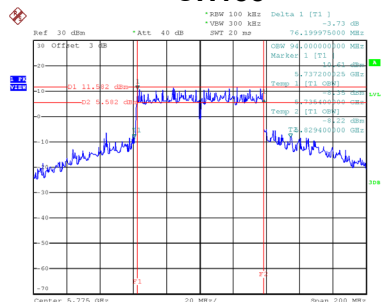


Date: 17.SEP.2019 15:33:41

Test Mode	UNII-3_TX AC (VHT80)
-----------	----------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
155	5775	76.20	500	Complies

CH155

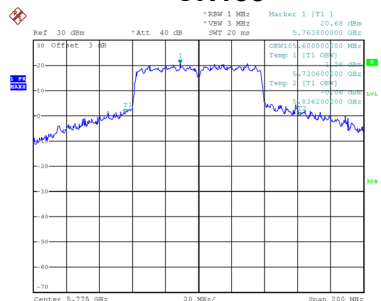


Date: 17.SEP.2019 15:28:16

Test Mode	UNII-3_TX AC (VHT80)
-----------	----------------------

Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
155	5775	105.60	Complies

CH155



Date: 17.SEP.2019 15:34:20