

FCC Radio Test Report

FCC ID: 2AYW8WL21C01

This report concerns: Original Grant

Project No. : 2101C159
Equipment : LTE Wireless Router
Brand Name : WILINQ
Test Model : D010U
Series Model : N/A
Applicant : Acentury Inc.
Address : 120 West Beaver Creek Road, Unit 13, Richmond Hill, ON Canada, L4B 1L2
Manufacturer : Acentury Inc.
Address : 120 West Beaver Creek Road, Unit 13, Richmond Hill, ON Canada, L4B 1L2
Factory : Acentury Inc.
Address : 120 West Beaver Creek Road, Unit 13, Richmond Hill, ON Canada, L4B 1L2
Date of Receipt : Jan. 19, 2021
Date of Test : Jan. 19, 2021 ~ Feb. 10, 2021
Issued Date : Mar. 12, 2021
Report Version : R00
Test Sample : Engineering Sample No.: DG2021011920 for conducted, DG2021011917 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.

Treey Chen

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Declaration

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

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

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

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

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

Limitation

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

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

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	9
2 . GENERAL INFORMATION	10
2.1 GENERAL DESCRIPTION OF EUT	10
2.2 TEST MODES	13
2.3 PARAMETERS OF TEST SOFTWARE	16
2.4 DUTY CYCLE	18
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	20
2.6 SUPPORT UNITS	20
3 . AC POWER LINE CONDUCTED EMISSIONS TEST	21
3.1 LIMIT	21
3.2 TEST PROCEDURE	21
3.3 DEVIATION FROM TEST STANDARD	21
3.4 TEST SETUP	22
3.5 EUT OPERATION CONDITIONS	22
3.6 TEST RESULTS	22
4 . RADIATED EMISSIONS TEST	23
4.1 LIMIT	23
4.2 TEST PROCEDURE	24
4.3 DEVIATION FROM TEST STANDARD	24
4.4 TEST SETUP	25
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
5.3 TEST SETUP	27

Table of Contents	Page
5.4 EUT OPERATION CONDITIONS	27
5.5 TEST RESULTS	27
6 . MAXIMUM OUTPUT POWER TEST	28
6.1 LIMIT	28
6.2 TEST PROCEDURE	28
6.3 DEVIATION FROM STANDARD	28
6.4 TEST SETUP	28
6.5 EUT OPERATION CONDITIONS	28
6.6 TEST RESULTS	28
7 . POWER SPECTRAL DENSITY TEST	29
7.1 LIMIT	29
7.2 TEST PROCEDURE	29
7.3 DEVIATION FROM STANDARD	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
APPENDIX E - BANDWIDTH	285
APPENDIX F - MAXIMUM OUTPUT POWER	310
APPENDIX G - POWER SPECTRAL DENSITY	335

Table of Contents**Page****APPENDIX H - FREQUENCY STABILITY****374**

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Mar. 12, 2021

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	Judgment	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 (2)
15.407(c)	Automatically Discontinue Transmission	-----	PASS	NOTE (3)

Note:

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

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.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	150kHz ~ 30MHz	2.68

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	-	3.02
		30MHz ~ 200MHz	V	4.26
		30MHz ~ 200MHz	H	3.38
		200MHz ~ 1,000MHz	V	3.98
		200MHz ~ 1,000MHz	H	3.94
		1GHz ~ 6GHz	-	3.96
		6GHz ~ 18GHz	-	5.24
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	4.00

C. Other Measurement test:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Output Power	±0.95 dB
Power Spectral Density	±0.86 dB
Frequency Stability	±0.16 dB
Temperature	±0.08 °C
Humidity	±1.5%

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	Luca Jiang
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Grani Zhou
Radiated Emissions-30 MHz to 1GHz	26°C	52%	AC 120V/60Hz	Grani Zhou
Radiated Emissions-Above 1000 MHz	26°C	52%	AC 120V/60Hz	Grani Zhou
Spectrum Bandwidth	23.8°C	49%	AC 120V/60Hz	Rick Kuang
Maximum Output Power	23.8°C	49%	AC 120V/60Hz	Silly Zheng
Power Spectral Density	23.8°C	49%	AC 120V/60Hz	Rick Kuang
Frequency Stability	Normal & Extreme	49%	Normal & Extreme	Rick Kuang

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	LTE Wireless Router
Brand Name	WiLINQ
Test Model	D010U
Series Model	N/A
Model Difference(s)	N/A
Hardware Version	TZ7.821.181
Software Version	V1.0
Power Source	1# DC Voltage supplied from AC adapter. Model: DCT24W120200US-A0 2# Supplied from battery. Model: Z2000
Power Rating	1# I/P: 100-240V~ 50/60Hz 0.7A max O/P: 12V  2.0A 2# 7.4V/ 2000mAh 14.8Wh
Operation Frequency Band(s)	UNII-1: 5150 MHz~5250 MHz UNII-2A: 5250 MHz~5350 MHz UNII-2C: 5470 MHz~5725 MHz UNII-3: 5725 MHz~5850 MHz
Modulation Type	IEEE 802.11a/n/ac: OFDM
Bit Rate of Transmitter	IEEE 802.11a: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps IEEE 802.11ac: up to 866.7 Mbps
Maximum Output Power for UNII-1	IEEE 802.11a: 17.61 dBm (0.0577 W) IEEE 802.11n (HT20): 17.76 dBm (0.0597 W) IEEE 802.11n (HT40): 18.30 dBm (0.0676 W) IEEE 802.11ac (VHT20): 17.70 dBm (0.0589 W) IEEE 802.11ac (VHT40): 18.19 dBm (0.0659 W) IEEE 802.11ac (VHT80): 19.17 dBm (0.0826 W)
Maximum Output Power for UNII-2A	IEEE 802.11a: 17.74 dBm (0.0594 W) IEEE 802.11n (HT20): 17.69 dBm (0.0587 W) IEEE 802.11n (HT40): 18.39 dBm (0.0690 W) IEEE 802.11ac (VHT20): 17.67 dBm (0.0585 W) IEEE 802.11ac (VHT40): 18.25 dBm (0.0668 W) IEEE 802.11ac (VHT80): 19.19 dBm (0.0830 W)
Maximum Output Power for UNII-2C	IEEE 802.11a: 17.77 dBm (0.0598 W) IEEE 802.11n (HT20): 17.76 dBm (0.0597 W) IEEE 802.11n (HT40): 18.35 dBm (0.0684 W) IEEE 802.11ac (VHT20): 17.73 dBm (0.0593 W) IEEE 802.11ac (VHT40): 18.22 dBm (0.0664 W) IEEE 802.11ac (VHT80): 19.24 dBm (0.0839 W)
Maximum Output Power for UNII-3	IEEE 802.11a: 17.77 dBm (0.0598 W) IEEE 802.11n (HT20): 17.79 dBm (0.0601 W) IEEE 802.11n (HT40): 18.28 dBm (0.0673 W) IEEE 802.11ac (VHT20): 17.66 dBm (0.0583 W) IEEE 802.11ac (VHT40): 18.20 dBm (0.0661 W) IEEE 802.11ac (VHT80): 19.21 dBm (0.0834 W)

Note:

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

2. Channel List:

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

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

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

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

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	FPC	IPEX	3
2	N/A	N/A	FPC	IPEX	3

Note:

- (1) This EUT supports MIMO, any transmit signals are correlated with each other, so Directional gain= $G_{ANT}+10\log(N)$ dBi, that is Directional gain= $3+10\log(2)$ dBi=6.01. So, the UNII-1, UNII-3 output power limit is $30-(6.01-6)=29.99$, the UNII-2A, UNII-2C output power limit is $24-(6.01-6)=23.99$. The UNII-1 power spectral density limit is $17-(6.01-6)=16.99$, the UNII-2A, UNII-2C power spectral density limit is $11-(6.01-6)=10.99$, the UNII-3 power spectral density limit is $30-(6.01-6)=29.99$.
- (2) The antenna gain is provided by the manufacturer.

4. Table for Antenna Configuration:

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

2.2 TEST MODES

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

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

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 25	TX AC(VHT80) Mode / CH122 (UNII-2C)

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 25	TX AC(VHT80) Mode / CH122 (UNII-2C)

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

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

Note:

- (1) For radiated emission below 1 GHz test, the IEEE 802.11ac80 is found to be the worst case and recorded.
- (2) For radiated emission above 1 GHz test, 1GHz~26.5GHz and 26.5GHz~40GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.

2.3 PARAMETERS OF TEST SOFTWARE

UNII-1			
Test Software	CMD		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	13/15	13/15	13/15
IEEE 802.11n (HT20)	12/15	13/15	14/15
IEEE 802.11ac (VHT20)	12/15	13/15	14/15
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	13/16	15/16	
IEEE 802.11ac (VHT40)	13/16	15/16	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	14/17		

UNII-2A			
Test Software	CMD		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	13/13	13/14	13/14
IEEE 802.11n (HT20)	14/15	14/15	14/15
IEEE 802.11ac (VHT20)	14/15	14/15	14/15
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	15/16	15/15	
IEEE 802.11ac (VHT40)	15/16	15/15	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	15/17		

UNII-2C			
Test Software	CMD		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11a	10/12	11/13	10/11
IEEE 802.11n (HT20)	11/12	11/13	11/11
IEEE 802.11ac (VHT20)	11/12	11/13	11/11
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	12/14	12/14	11/12
IEEE 802.11ac (VHT40)	12/14	12/14	11/12
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	12/14	11/12	

UNII-3			
Test Software	CMD		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	8/8	9/9	9/9
IEEE 802.11n (HT20)	9/9	9/9	9/9
IEEE 802.11ac (VHT20)	9/9	9/9	9/9
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	10/10	10/10	
IEEE 802.11ac (VHT40)	10/10	10/10	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	11/11		

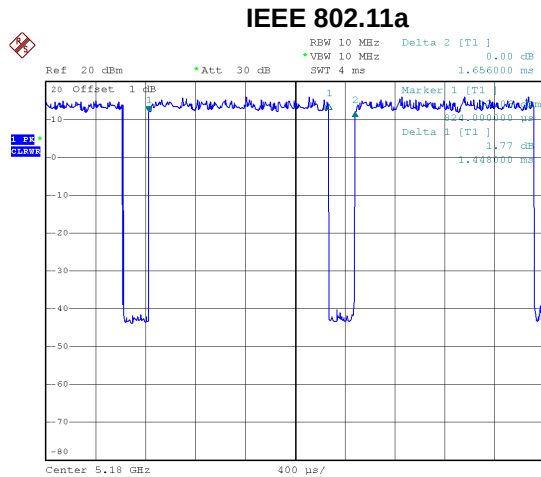
2.4 DUTY CYCLE

If duty cycle is $\geq 98\%$, duty factor is not required.

If duty cycle is $< 98\%$, duty factor shall be considered.

The output power = measured power + duty factor.

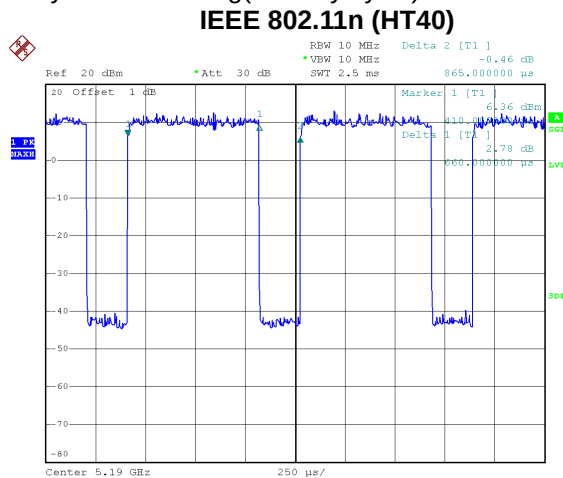
The power spectral density = measured power spectral density + duty factor.



Date: 22.JAN.2021 15:01:59

Duty cycle = $1.448 \text{ ms} / 1.656 \text{ ms} = 87.44\%$

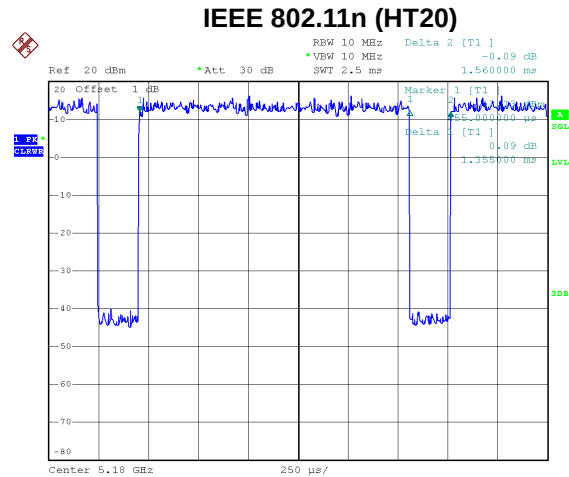
Duty Factor = $10\log(1 / \text{Duty cycle}) = 0.58$



Date: 22.JAN.2021 15:04:40

Duty cycle = $0.660 \text{ ms} / 0.865 \text{ ms} = 76.30\%$

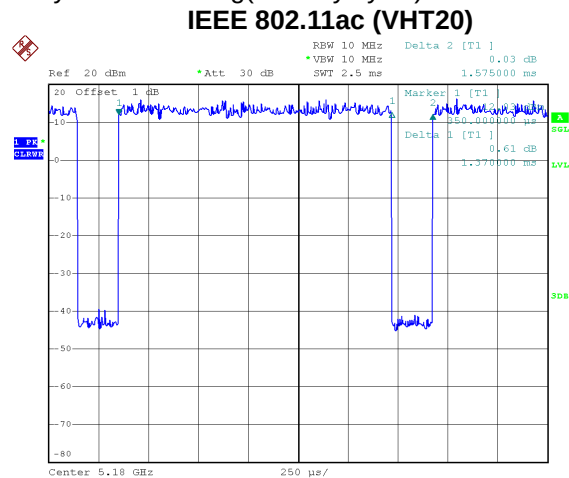
Duty Factor = $10\log(1 / \text{Duty cycle}) = 1.17$



Date: 22.JAN.2021 15:02:22

Duty cycle = $1.355 \text{ ms} / 1.560 \text{ ms} = 86.86\%$

Duty Factor = $10\log(1 / \text{Duty cycle}) = 0.61$

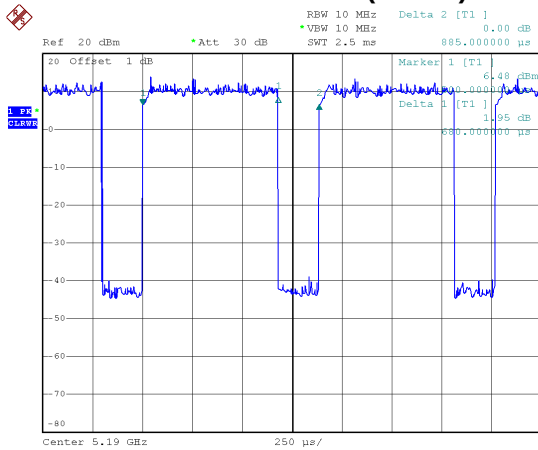


Date: 22.JAN.2021 15:02:39

Duty cycle = $1.370 \text{ ms} / 1.575 \text{ ms} = 86.98\%$

Duty Factor = $10\log(1 / \text{Duty cycle}) = 0.61$

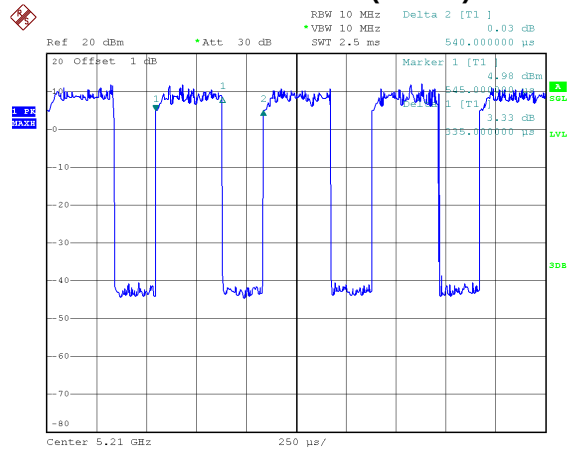
IEEE 802.11ac (VHT40)



Date: 22.JAN.2021 15:05:00

Duty cycle = 0.680 ms / 0.885 ms = 76.84%
Duty Factor = $10\log(1 / \text{Duty cycle}) = 1.14$

IEEE 802.11ac (VHT80)



Date: 22.JAN.2021 15:05:36

Duty cycle = 0.335 ms / 0.540 ms = 62.04%
Duty Factor = $10\log(1 / \text{Duty cycle}) = 2.07$

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%).

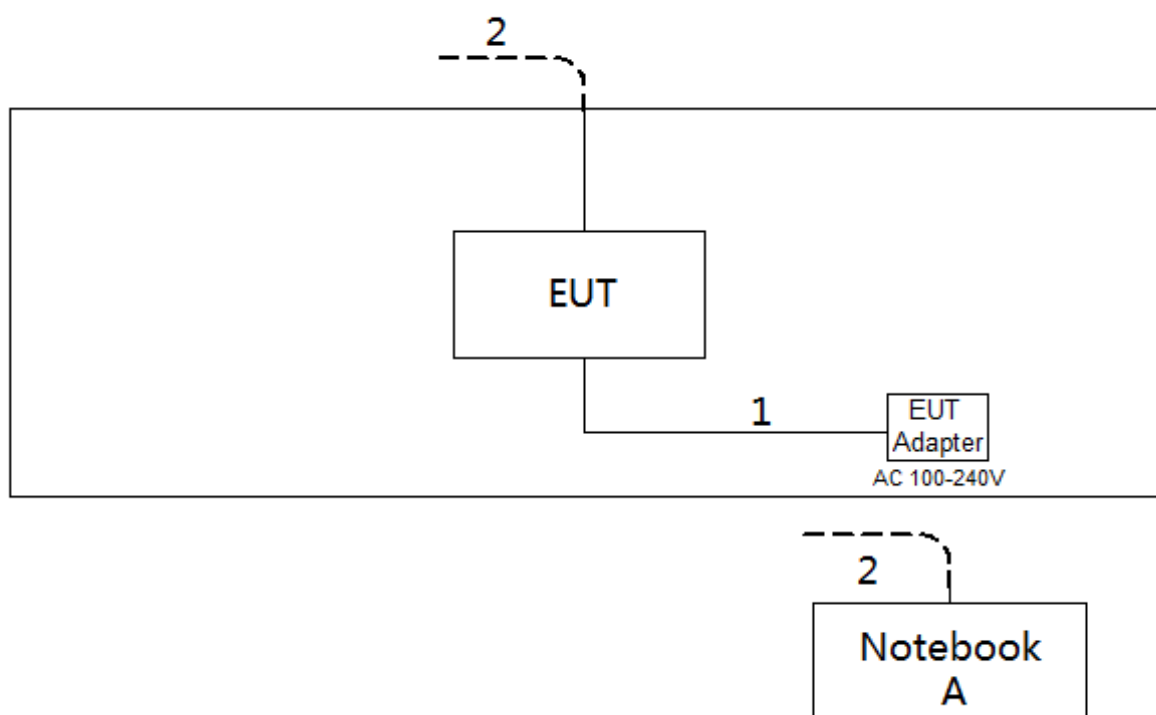
For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):

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*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

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

The following table is the setting of the receiver

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

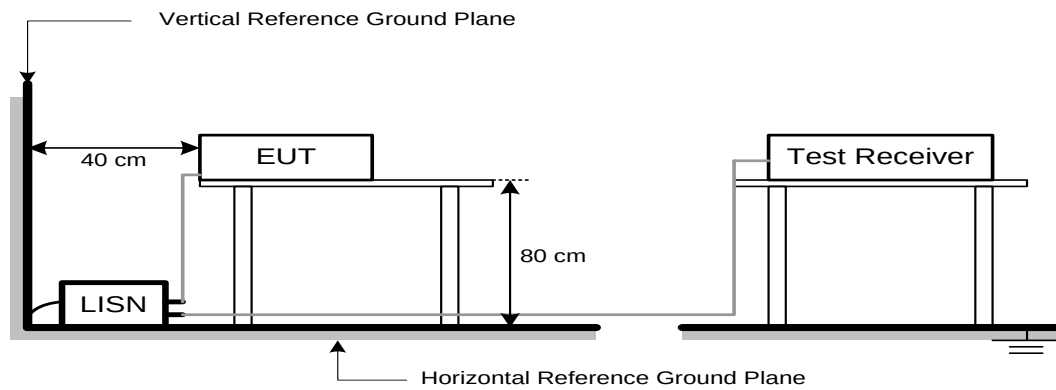
3.2 TEST PROCEDURE

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

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

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

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

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

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

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

NOTE:

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

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

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

4.2 TEST PROCEDURE

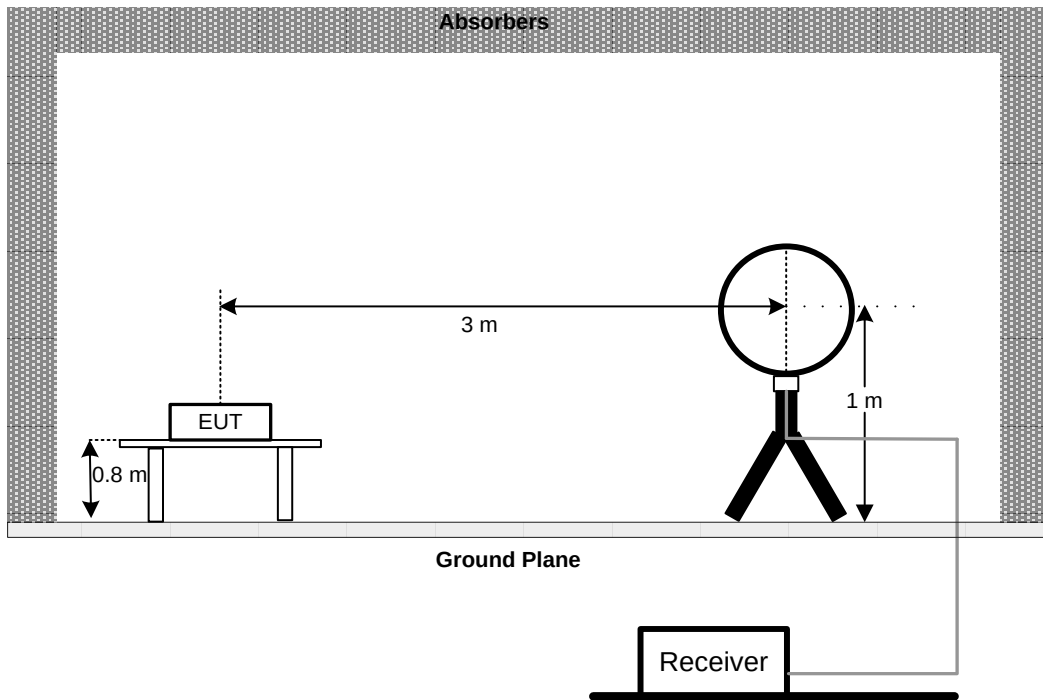
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance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

4.3 DEVIATION FROM TEST STANDARD

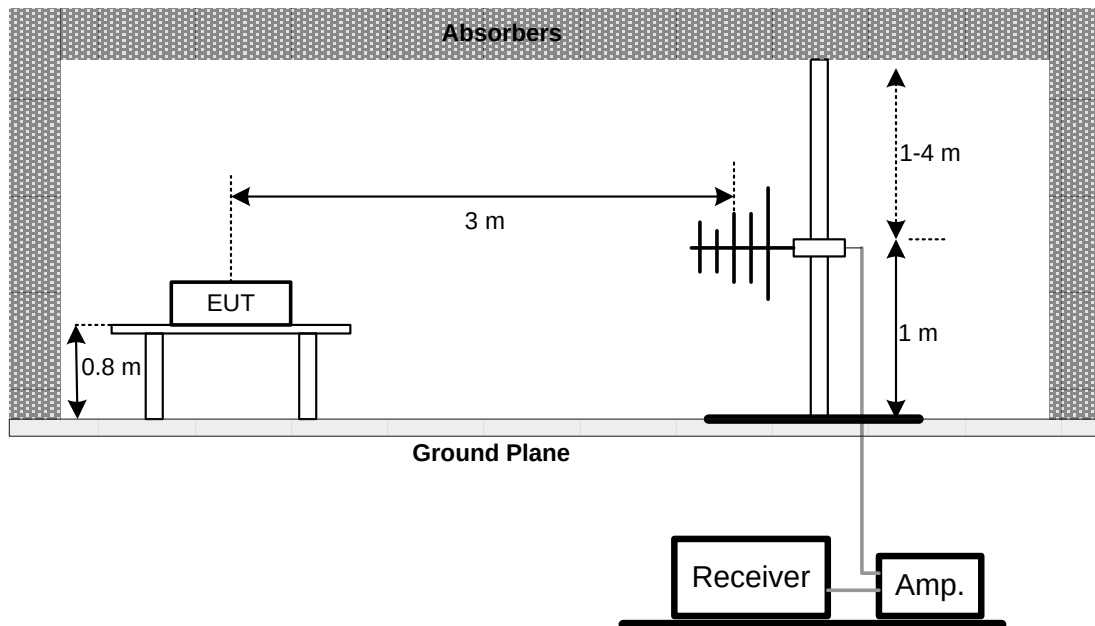
No deviation

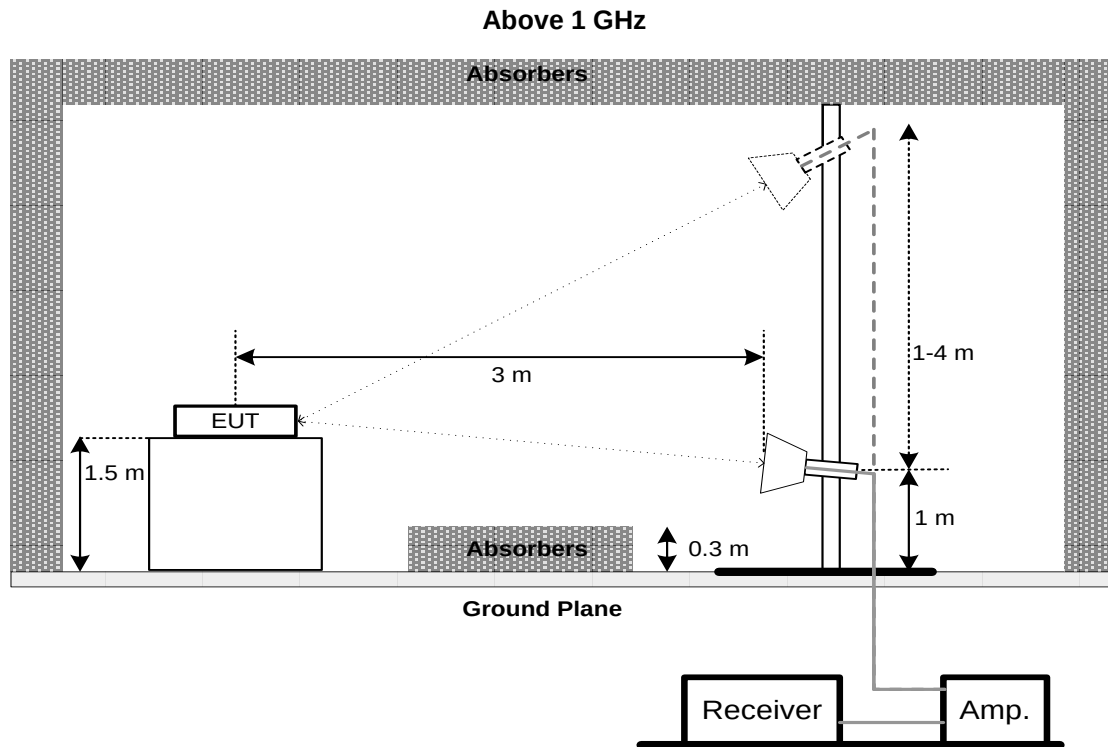
4.4 TEST SETUP

9 kHz to 30 MHz



30 MHz to 1 GHz





4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS - 9 KHZ to 30 MHZ

Please refer to the APPENDIX B

Remark:

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

4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5. BANDWIDTH TEST

5.1 LIMIT

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

5.2 TEST PROCEDURE

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

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26 dB Bandwidth
RBW	300 kHz (Bandwidth 20 MHz and Bandwidth 40 MHz) 1 MHz (Bandwidth 80 MHz)
VBW	1 MHz (Bandwidth 20 MHz and Bandwidth 40 MHz) 3 MHz (Bandwidth 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

- Measured the spectrum width with power higher than 26 dB / 6 dB below carrier.

5.3 TEST SETUP



5.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.5 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
		250 mW (24 dBm)	5250-5350
		250 mW (24 dBm)	5470-5725
		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.
- For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

6.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. POWER SPECTRAL DENSITY TEST

7.1 LIMIT

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

7.2 TEST PROCEDURE

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

- b. Spectrum Setting

For UNII-1, UNII-2A, UNII-2C:

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

For UNII-3:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	100 kHz.
VBW	300 kHz.
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 100kHz and VBW at 300kHz if the spectrum analyzer does not have 500 kHz RBW.
- During the test of U-NII 3 PSD, the measurement result with RBW=100kHz has been added 7 dB by compensating offset. For example, the cable loss is 13 dB, and the final offset is 13 + 7 = 20 dB when RBW=100kHz is used.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP**7.5 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX G.

8. FREQUENCY STABILITY MEASUREMENT

8.1 LIMIT

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

8.2 TEST PROCEDURE

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

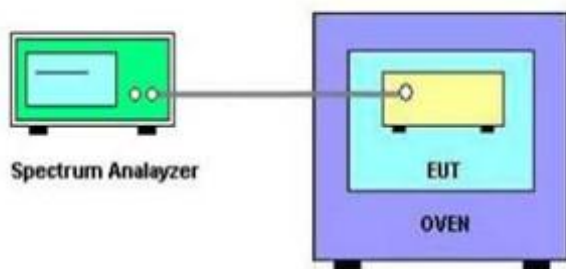
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- User manual temperature is 0°C~45°C.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX H.

9. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Feb. 28, 2022
2	LISN	EMCO	3816/2	52765	Feb. 27, 2022
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 27, 2022
4	50Ω Terminator	SHX	TF5-3	15041305	Feb. 27, 2022
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 09, 2022
7	643 Shield Room	ETS	6*4*3m	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	N/A	May 29, 2021
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 27, 2022
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
5	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9168	586	Nov. 27, 2021
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
4	Cable	emci	LMR-400(30MHz-1G Hz)(8m+5m)	N/A	May 22, 2021
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
8	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 12, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021
3	Amplifier	Agilent	8449B	3008A02333	Feb. 28, 2022
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 28, 2022
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	N/A	EMC104-SM-SM-6000	N/A	Oct. 16, 2021
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	Band Reject Filter	Micro-Tronics	BRC50705-01	10	Feb. 27, 2022
11	Band Reject Filter	Micro-Tronics	BRC50704-01	8	Feb. 27, 2022
12	Band Reject Filter	Micro-Tronics	BRC50703-01	7	Feb. 27, 2022
13	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Bandwidth & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021
2	RF Cable	Tongkaichuan	N/A	N/A	N/A
3	DC Block	Mini	N/A	N/A	N/A
4	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 07, 2021
2	Wideband power sensor	Keysight	N1923A	MY58310004	Jul. 25, 2021
3	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022
4	RF Cable	Tongkaichuan	N/A	N/A	N/A

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021
2	Precision Oven Tester	CEPREI	CEEC-M64T-40	15-008	Feb. 27, 2022
3	RF Cable	Tongkaichuan	N/A	N/A	N/A
4	DC Block	Mini	N/A	N/A	N/A
5	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022

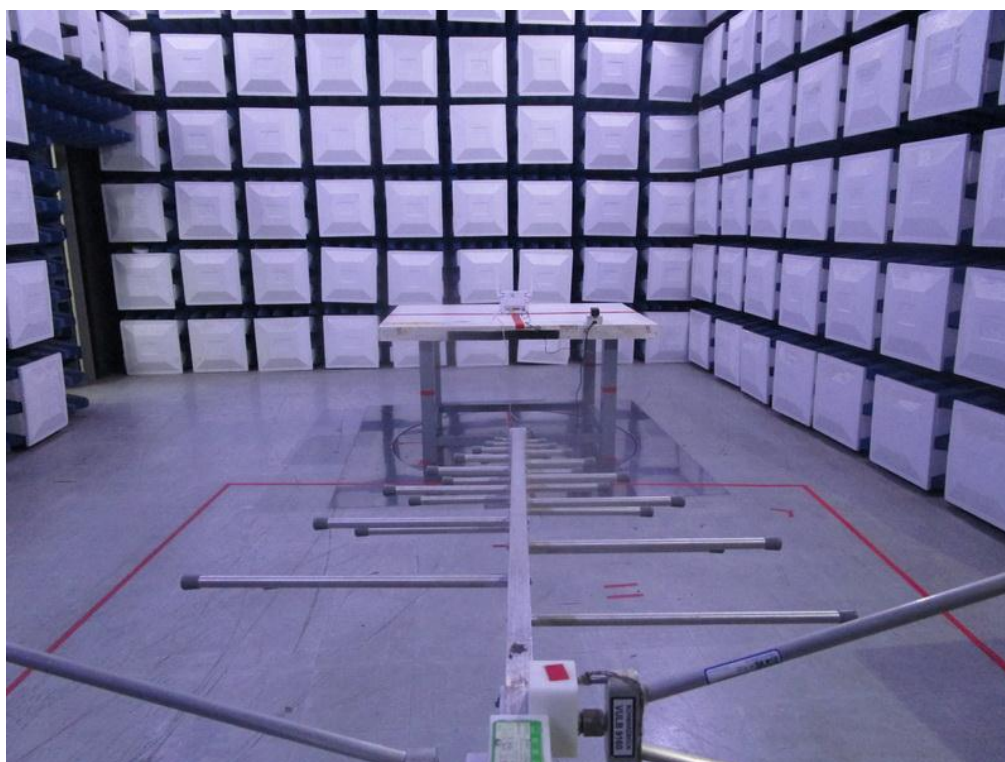
Remark: "N/A" denotes no model name, serial no. or calibration specified.

"*" 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**

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

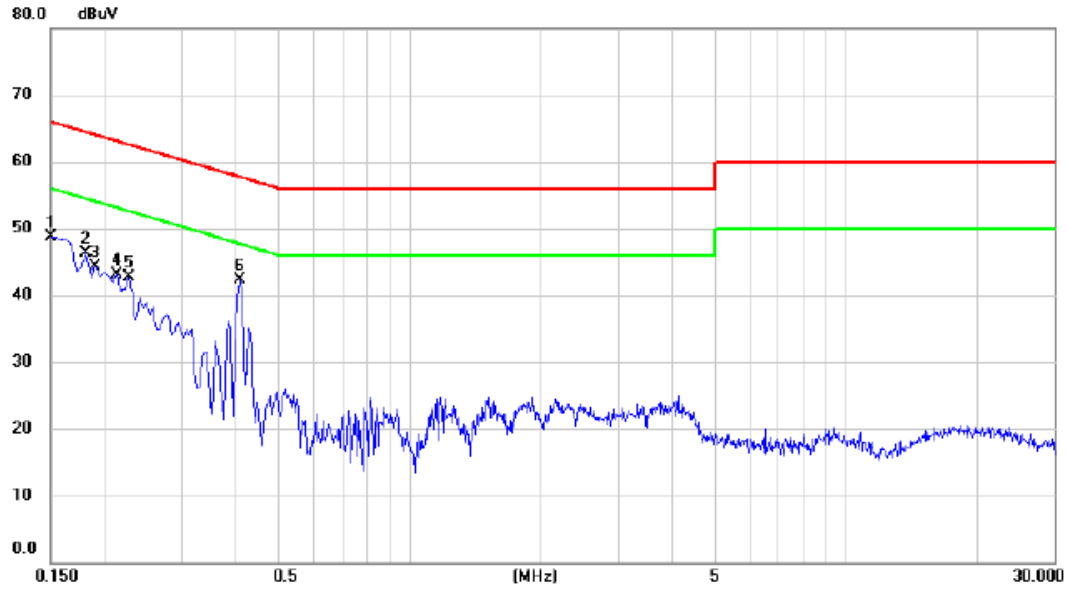
Radiated Emissions Test Photos**30 MHz to 1 GHz**

Radiated Emissions Test Photos**Above 1 GHz**

APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX AC80 Mode Channel 122

Line



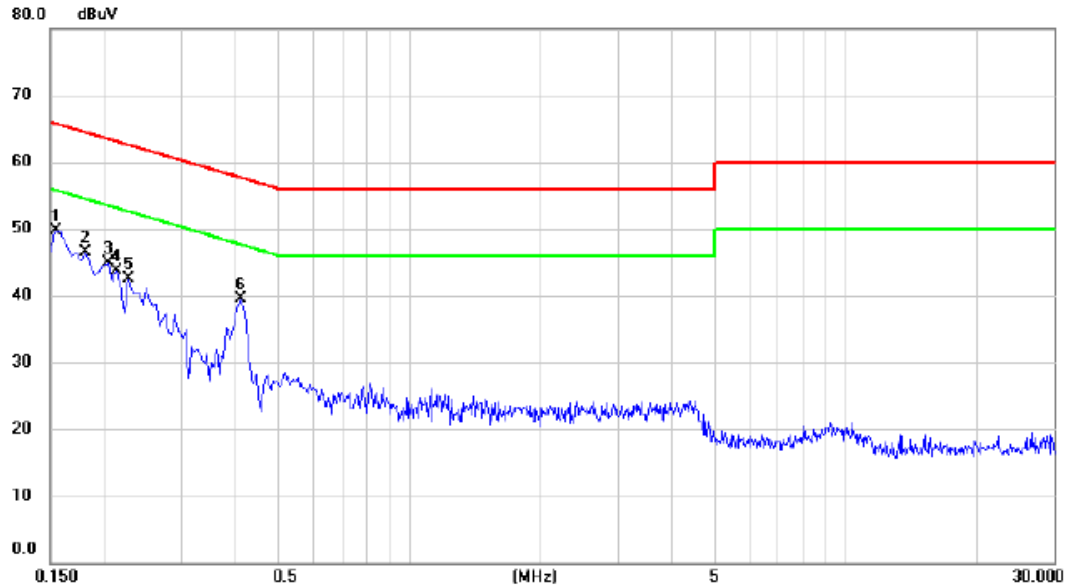
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	39.10	9.67	48.77	66.00	-17.23	peak	
2		0.1815	36.55	9.85	46.40	64.42	-18.02	peak	
3		0.1905	34.46	9.88	44.34	64.01	-19.67	peak	
4		0.2130	33.17	9.90	43.07	63.09	-20.02	peak	
5		0.2265	32.79	9.89	42.68	62.58	-19.90	peak	
6	*	0.4065	32.38	9.90	42.28	57.72	-15.44	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 122

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1545	39.90	9.77	49.67	65.75	-16.08	peak	
2		0.1815	36.62	9.94	46.56	64.42	-17.86	peak	
3		0.2040	34.81	10.01	44.82	63.45	-18.63	peak	
4		0.2130	33.69	10.00	43.69	63.09	-19.40	peak	
5		0.2265	32.48	9.99	42.47	62.58	-20.11	peak	
6		0.4110	29.45	10.07	39.52	57.63	-18.11	peak	

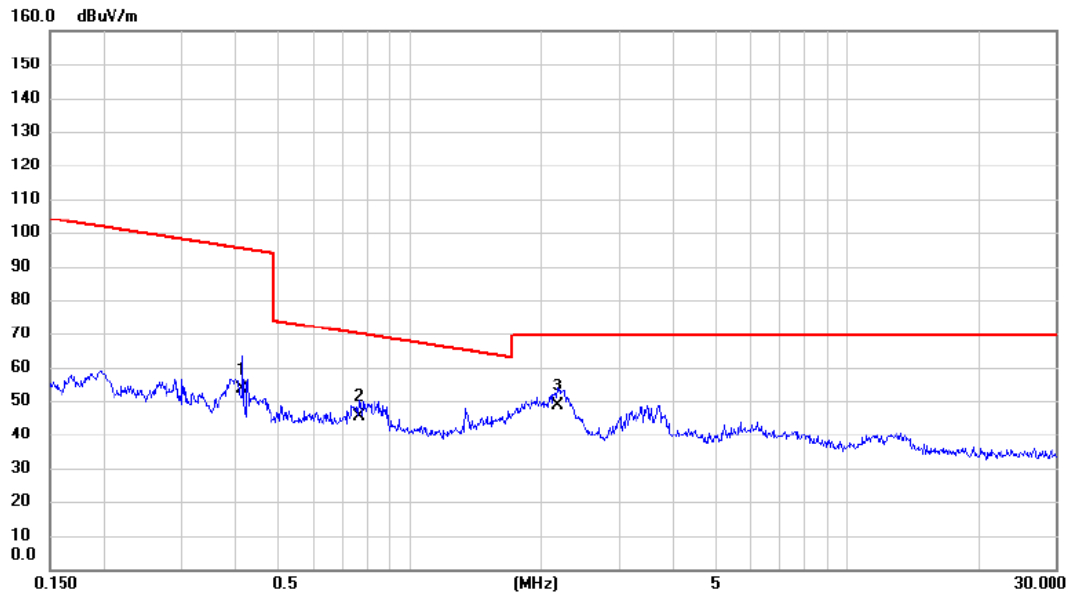
REMARKS:

- (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 122

Ant 0°

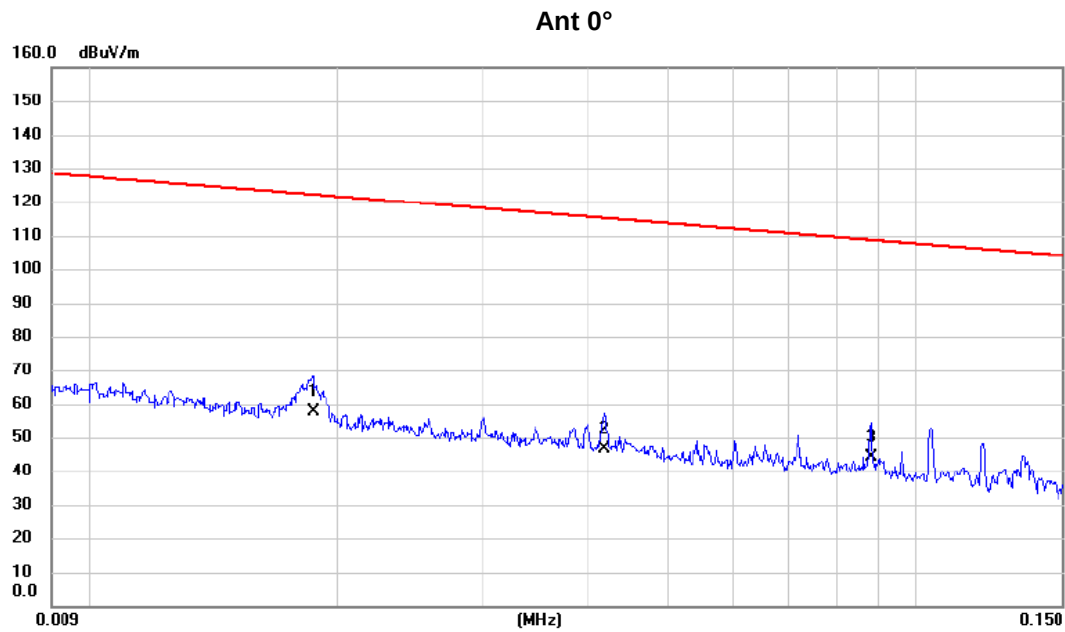


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.415	41.20	12.23	53.43	95.25	-41.82	AVG	
2		0.763	33.69	11.89	45.58	69.95	-24.37	QP	
3	*	2.178	37.58	11.21	48.79	69.54	-20.75	QP	

REMARKS:

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

Test Mode: TX AC80 Mode Channel 122



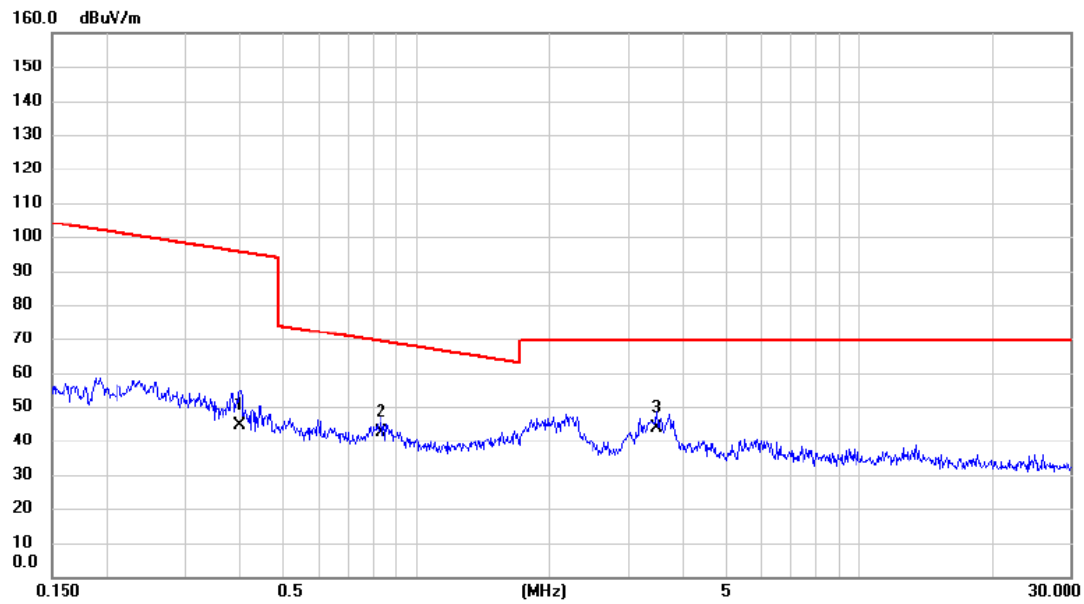
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.019	44.15	13.62	57.77	122.17	-64.40	AVG	
2		0.042	34.17	12.63	46.80	115.14	-68.34	AVG	
3		0.088	31.58	12.65	44.23	108.71	-64.48	AVG	

REMARKS:

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

Test Mode: TX AC80 Mode Channel 122

Ant 90°



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.400	32.37	12.26	44.63	95.57	-50.94	AVG	
2		0.831	30.87	11.87	42.74	69.22	-26.48	QP	
3	*	3.491	32.94	10.88	43.82	69.54	-25.72	QP	

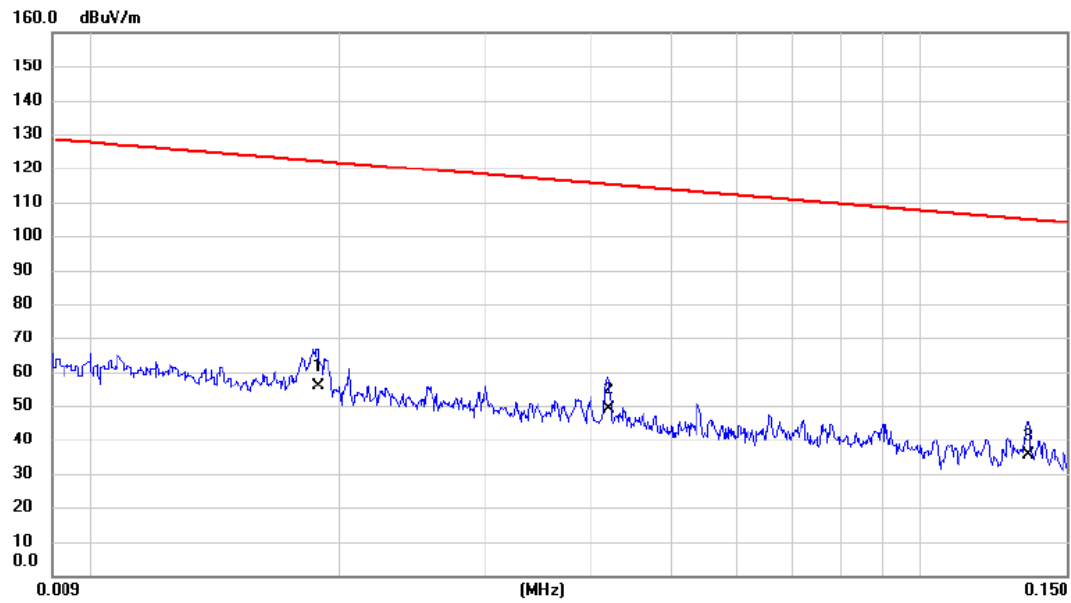
REMARKS:

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

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

Test Mode: TX AC80 Mode Channel 122

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.019	42.36	13.59	55.95	122.12	-66.17	AVG	
2		0.042	36.18	12.63	48.81	115.12	-66.31	AVG	
3		0.135	22.58	12.73	35.31	105.01	-69.70	AVG	

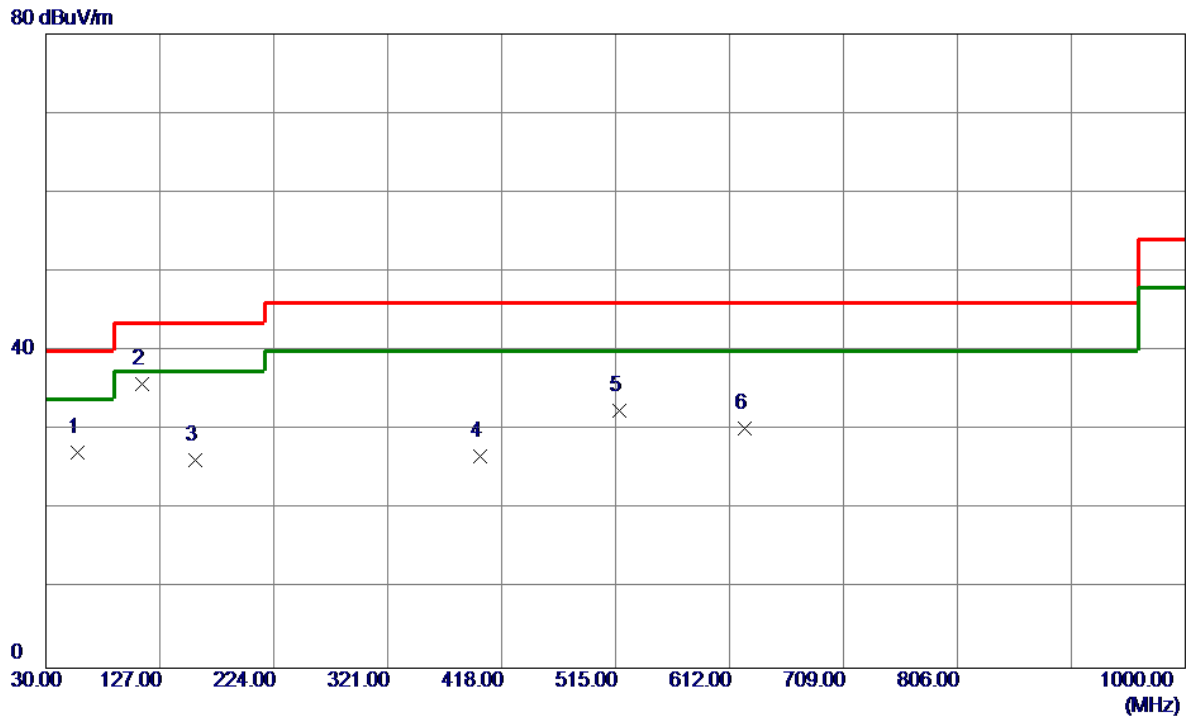
REMARKS:

- (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 122

Vertical



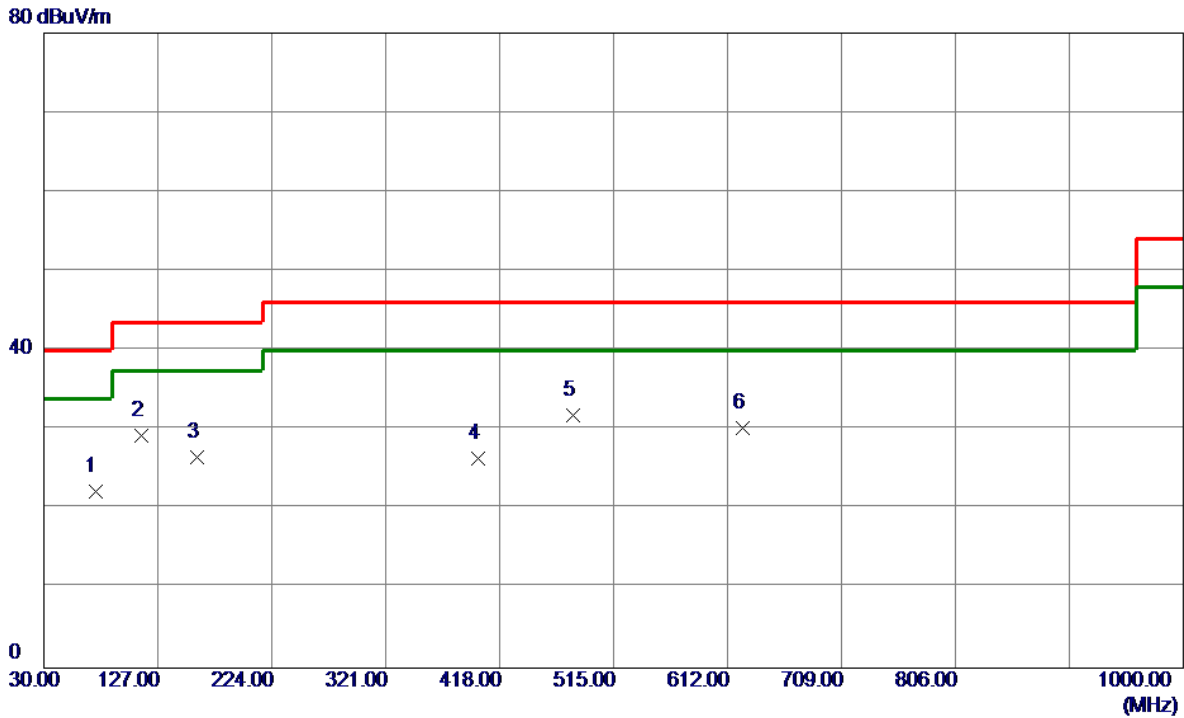
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	56.6750	41.15	-13.95	27.20	40.00	-12.80	Peak	
2 *	111.9650	49.86	-13.94	35.92	43.50	-7.58	Peak	
3	157.0700	37.34	-11.05	26.29	43.50	-17.21	Peak	
4	400.0550	35.80	-9.01	26.79	46.00	-19.21	Peak	
5	518.3950	39.63	-7.10	32.53	46.00	-13.47	Peak	
6	625.0949	35.03	-4.81	30.22	46.00	-15.78	Peak	

REMARKS:

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

Test Mode: TX AC80 Mode Channel 122

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	73.6500	38.77	-16.59	22.18	40.00	-17.82	Peak	
2	112.9350	43.06	-13.79	29.27	43.50	-14.23	Peak	
3	159.9800	37.16	-10.67	26.49	43.50	-17.01	Peak	
4	400.0550	35.45	-9.01	26.44	46.00	-19.56	Peak	
5 *	480.0800	39.28	-7.41	31.87	46.00	-14.13	Peak	
6	625.0949	35.00	-4.81	30.19	46.00	-15.81	Peak	

REMARKS:

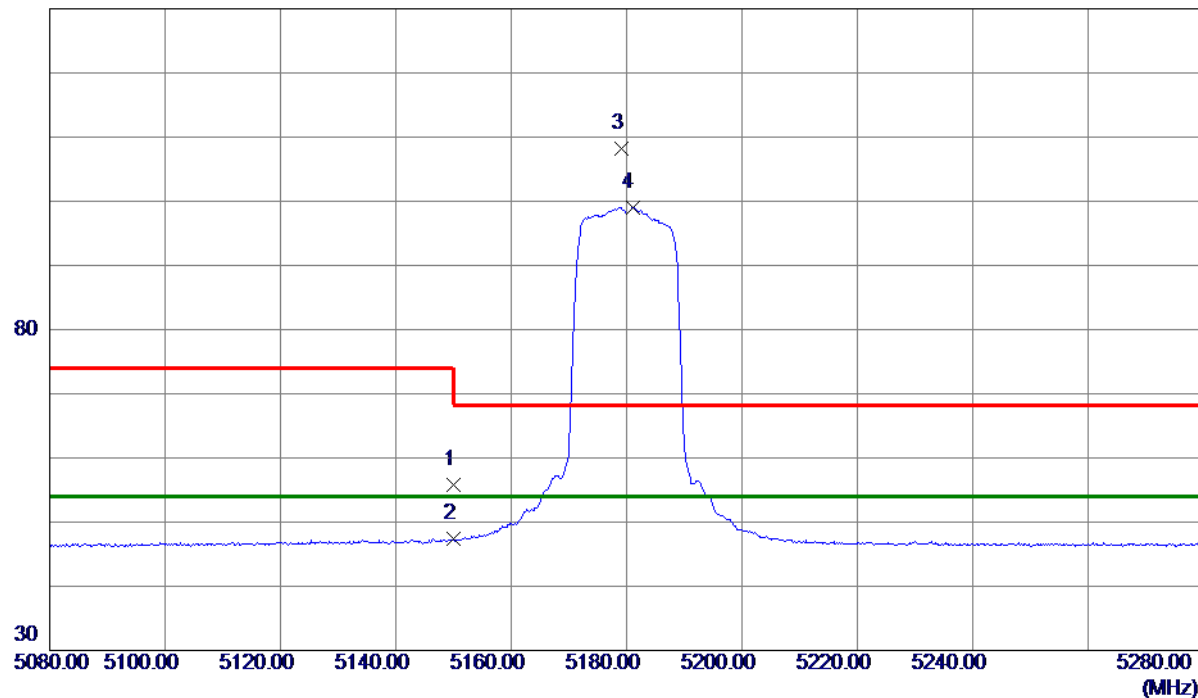
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

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	38.17	17.68	55.85	74.00	-18.15	Peak	
2	5150.0000	29.68	17.68	47.36	54.00	-6.64	AVG	
3	5179.2000	90.45	17.76	108.21	68.30	39.91	Peak	No Limit
4 *	5181.0000	81.33	17.76	99.09	54.00	45.09	AVG	No Limit

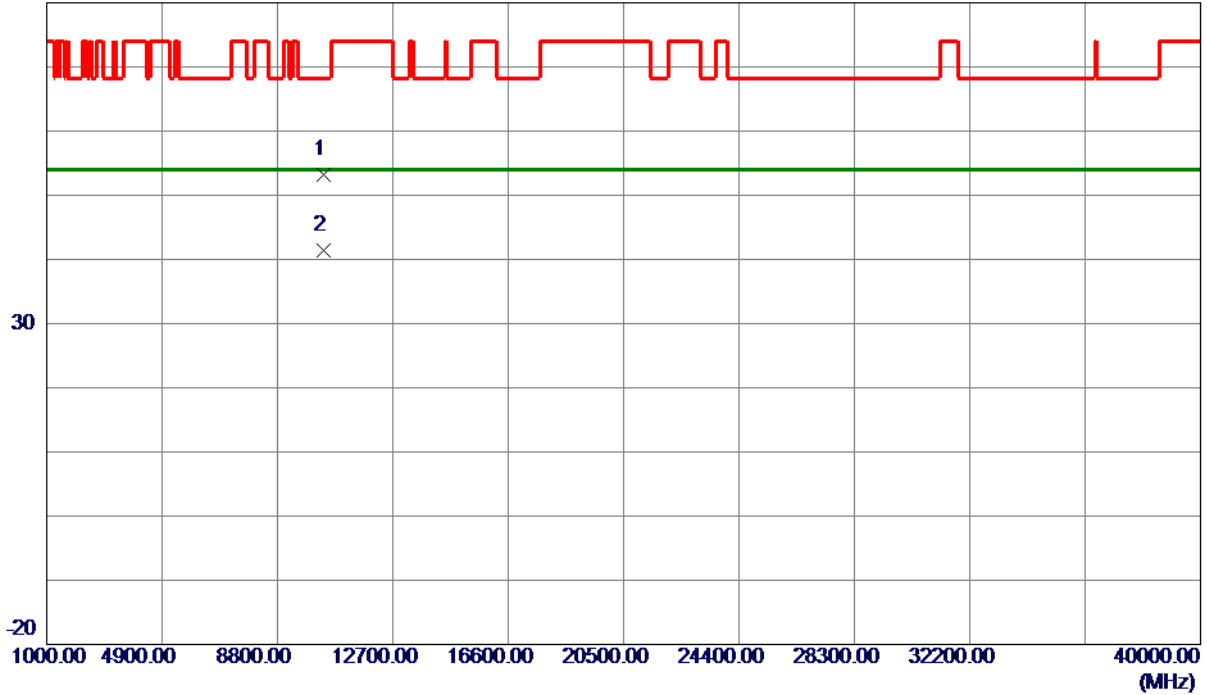
REMARKS:

- (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	10358.6250	38.11	15.08	53.19	68.30	-15.11	Peak	
2 *	10361.5250	26.35	15.09	41.44	54.00	-12.56	AVG	

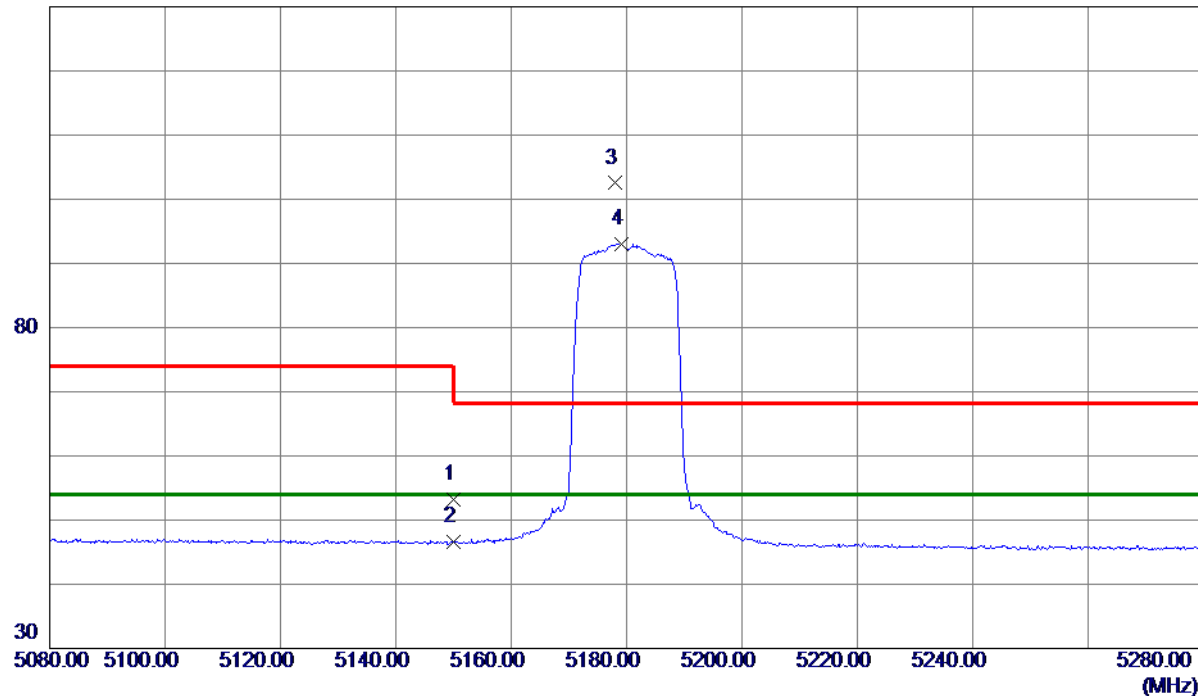
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	35.52	17.68	53.20	74.00	-20.80	Peak	
2	5150.0000	28.85	17.68	46.53	54.00	-7.47	AVG	
3	5178.0000	84.75	17.75	102.50	68.30	34.20	Peak	No Limit
4 *	5179.2000	75.30	17.76	93.06	54.00	39.06	AVG	No Limit

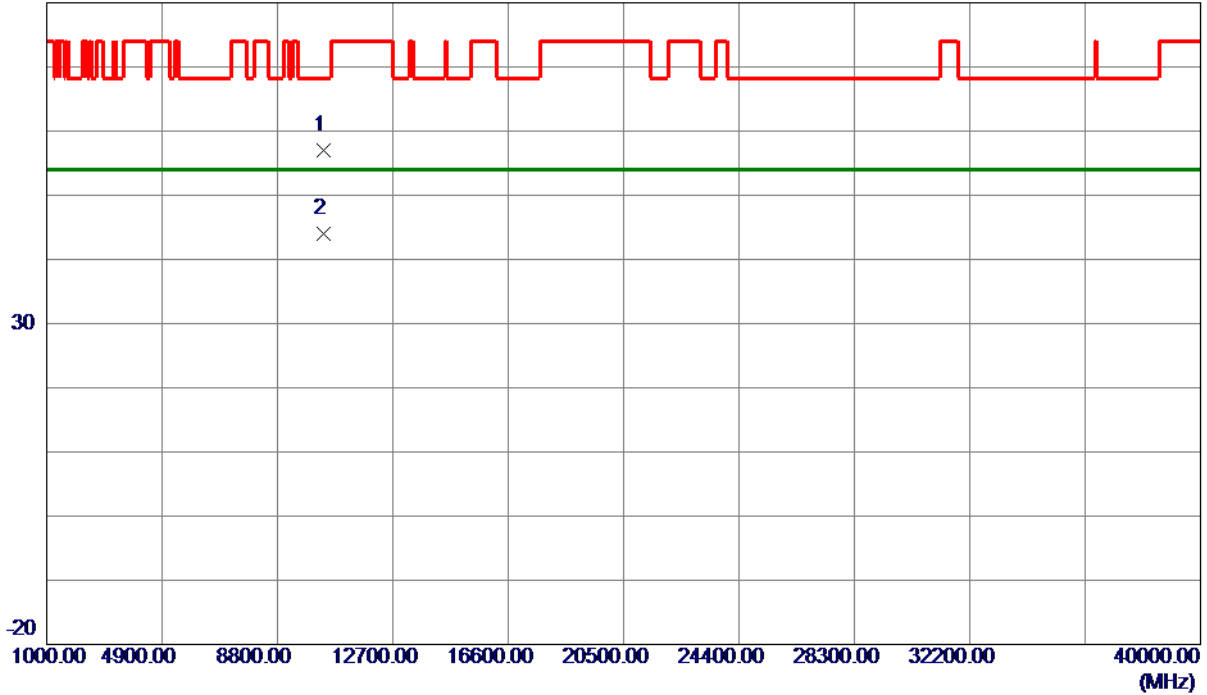
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 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	10356.7750	41.83	15.08	56.91	68.30	-11.39	Peak	
2 *	10360.0000	28.82	15.09	43.91	54.00	-10.09	AVG	

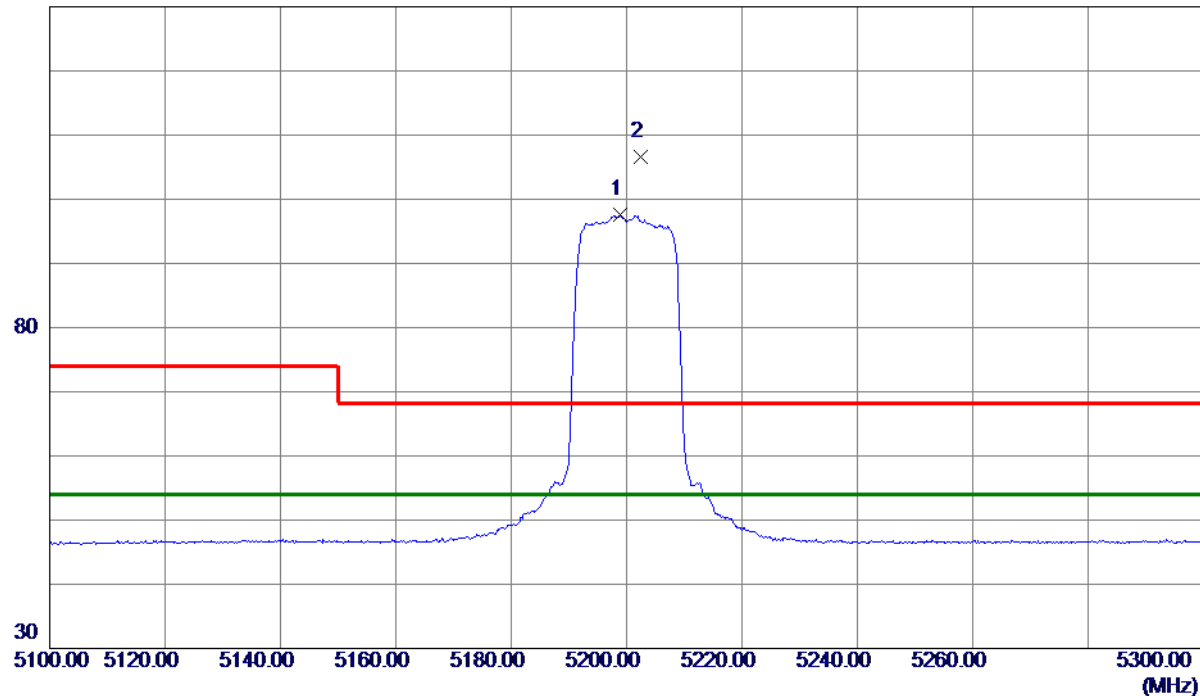
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5198.8000	79.71	17.81	97.52	54.00	43.52	AVG	No Limit
2	5202.4000	88.80	17.82	106.62	68.30	38.32	Peak	No Limit

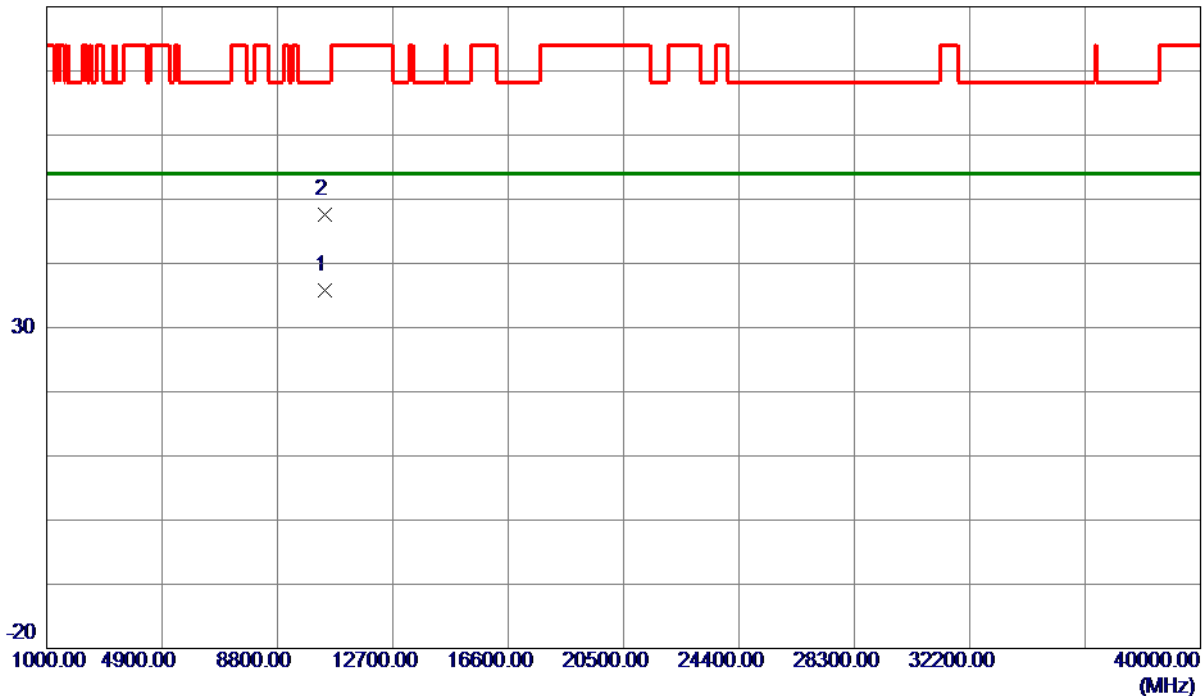
REMARKS:

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

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

Vertical

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 *	10395.5300	20.62	15.15	35.77	54.00	-18.23	AVG	
2	10402.0850	32.53	15.16	47.69	68.30	-20.61	Peak	

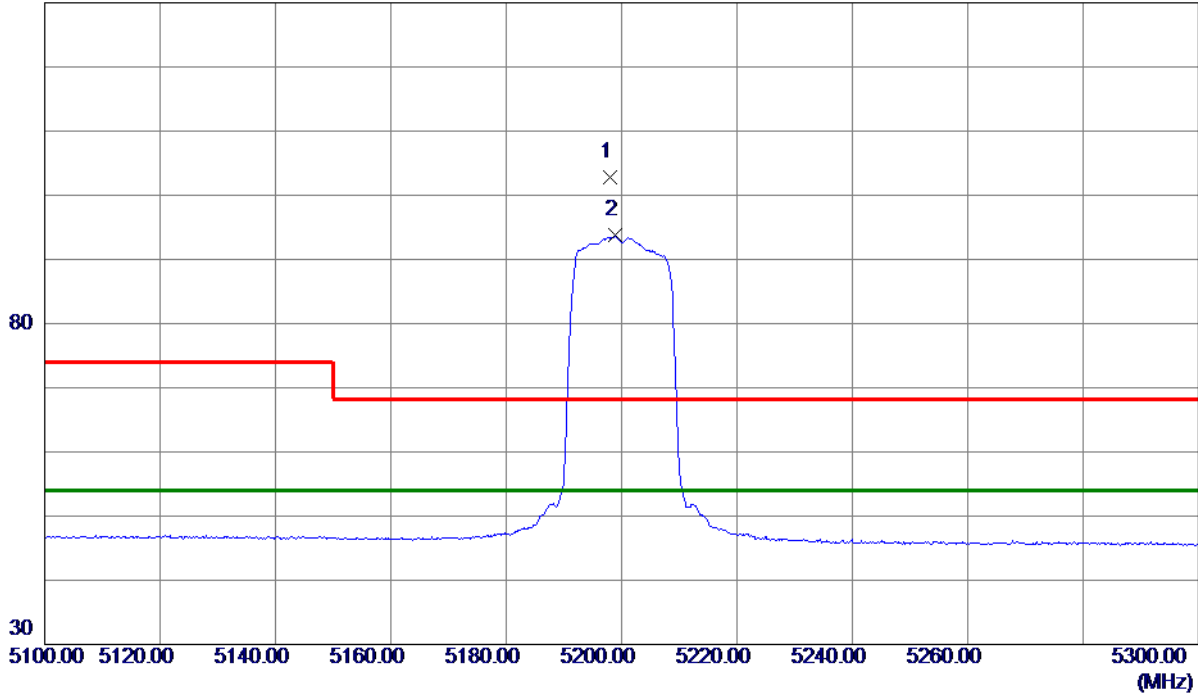
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5198.0000	84.91	17.81	102.72	68.30	34.42	Peak	No Limit
2 *	5198.9000	75.92	17.81	93.73	54.00	39.73	AVG	No Limit

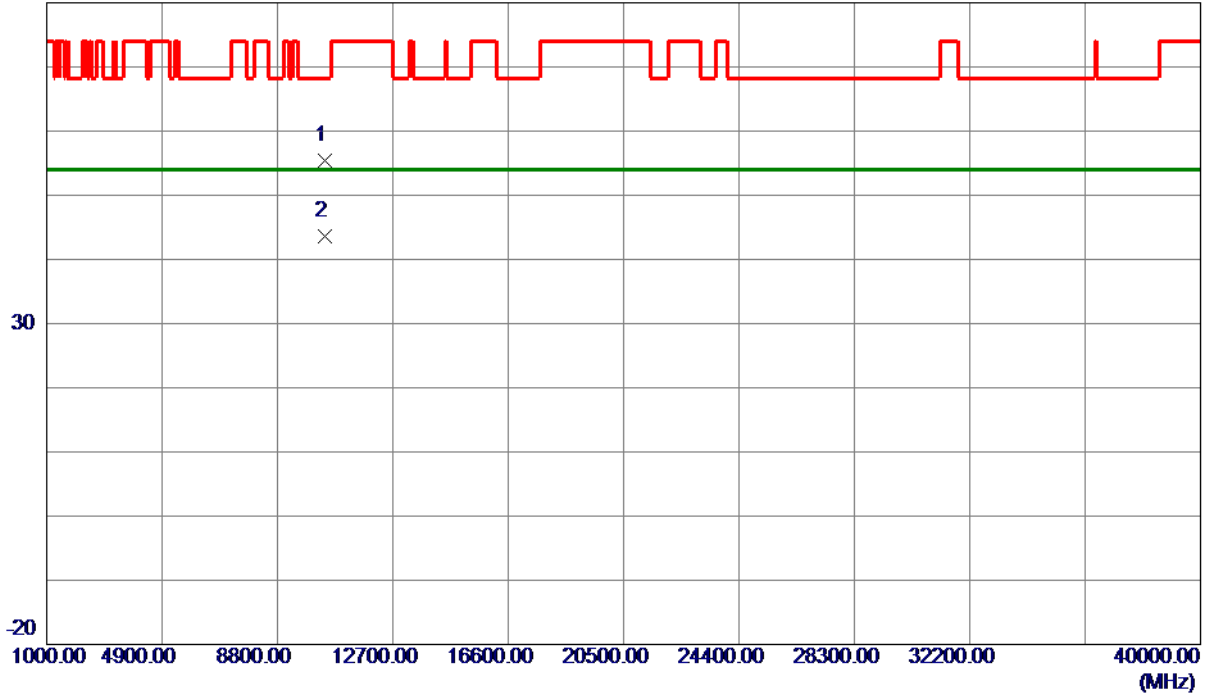
REMARKS:

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

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

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	10395.8750	40.22	15.15	55.37	68.30	-12.93	Peak	
2 *	10400.1500	28.52	15.16	43.68	54.00	-10.32	AVG	

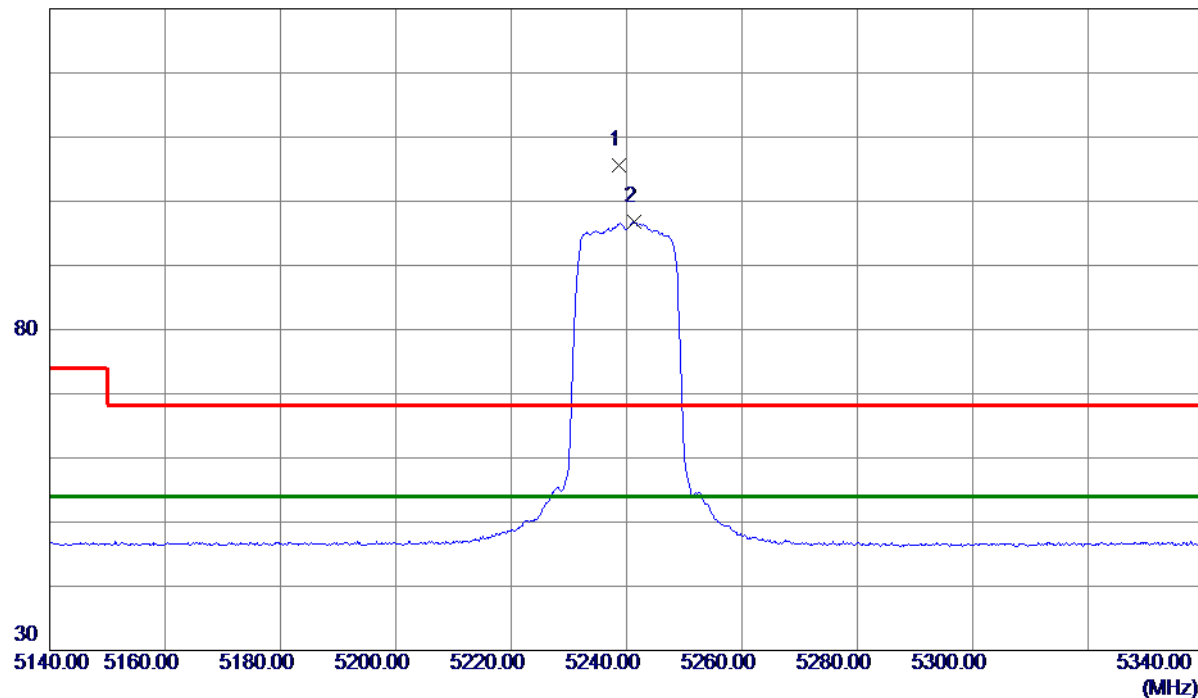
REMARKS:

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

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

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	5238.7000	87.75	17.92	105.67	68.30	37.37	Peak	No Limit
2 *	5241.3000	78.84	17.93	96.77	54.00	42.77	AVG	No Limit

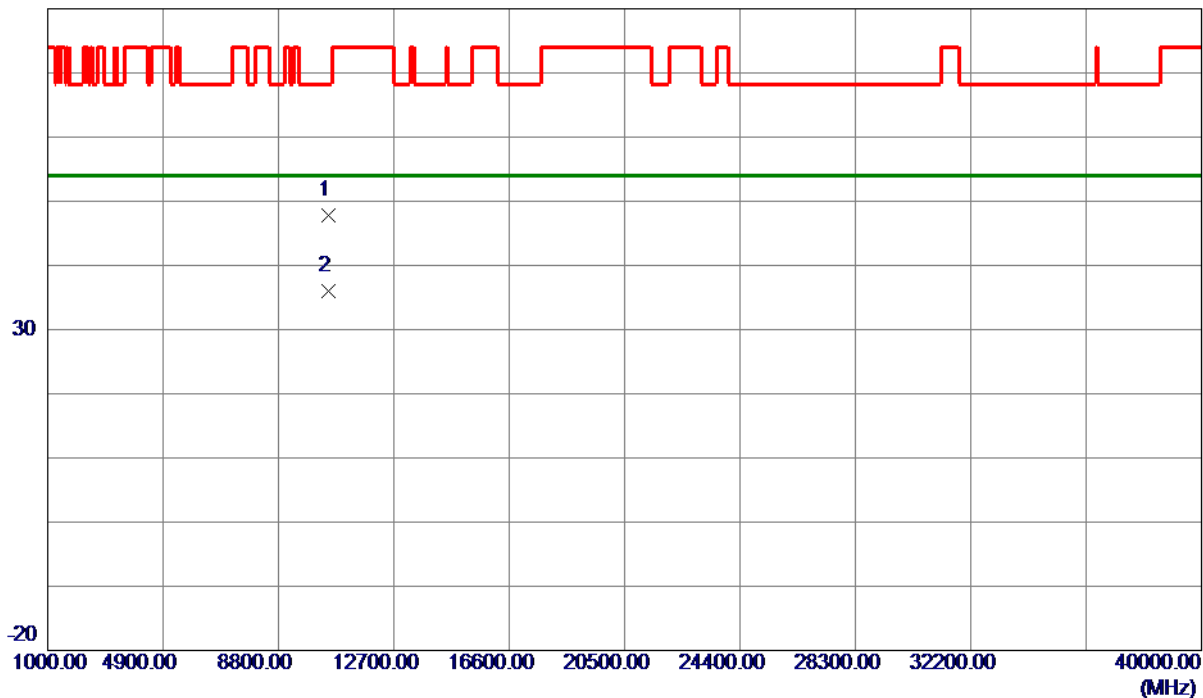
REMARKS:

- (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	10476.1100	32.47	15.29	47.76	68.30	-20.54	Peak	
2 *	10476.2800	20.69	15.29	35.98	54.00	-18.02	AVG	

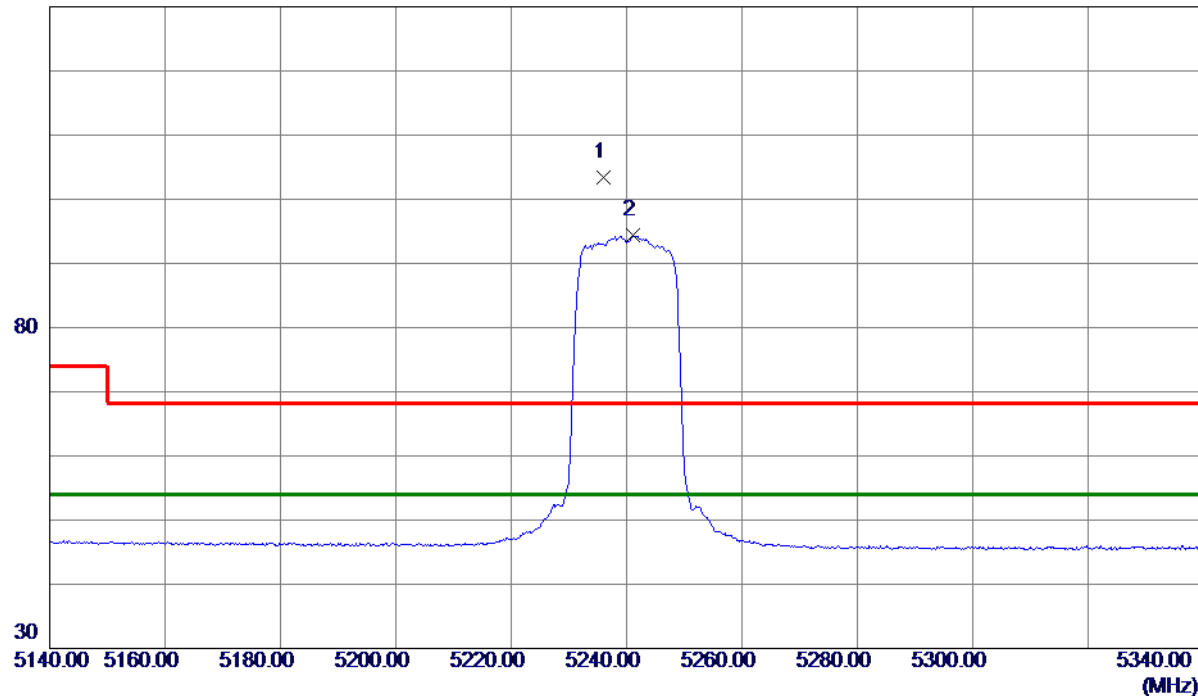
REMARKS:

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

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

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	5236.0000	85.42	17.91	103.33	68.30	35.03	Peak	No Limit
2 *	5241.2000	76.54	17.93	94.47	54.00	40.47	AVG	No Limit

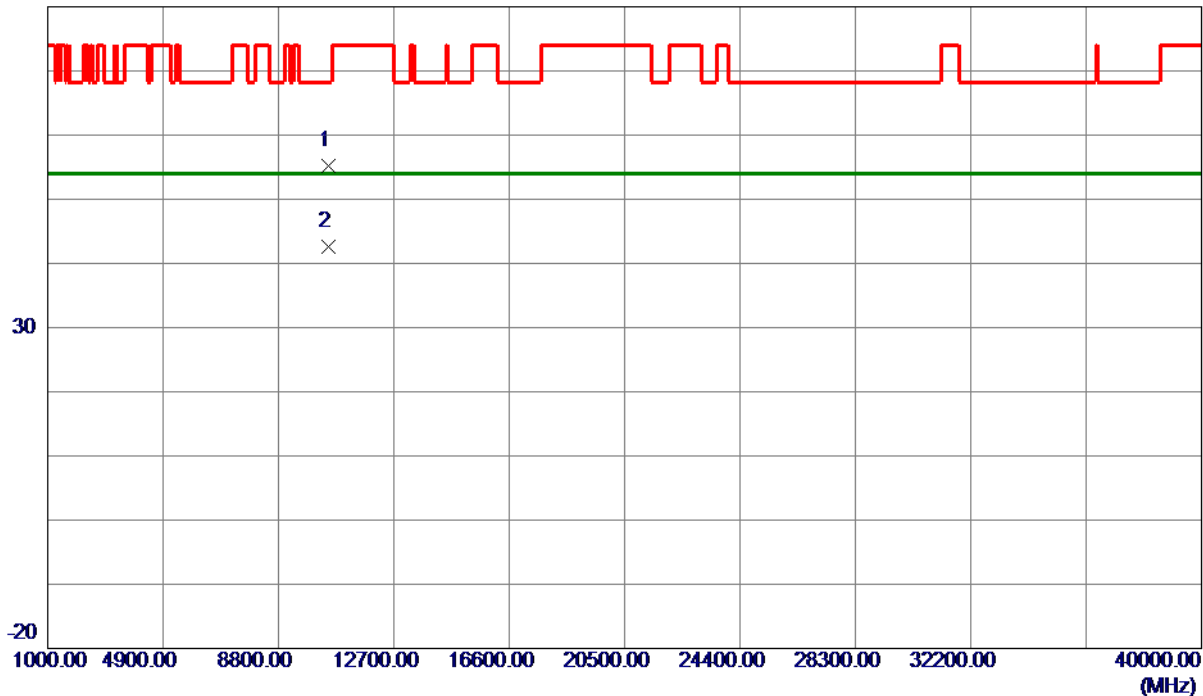
REMARKS:

- (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	10479.0500	39.99	15.29	55.28	68.30	-13.02	Peak	
2 *	10480.3250	27.39	15.30	42.69	54.00	-11.31	AVG	

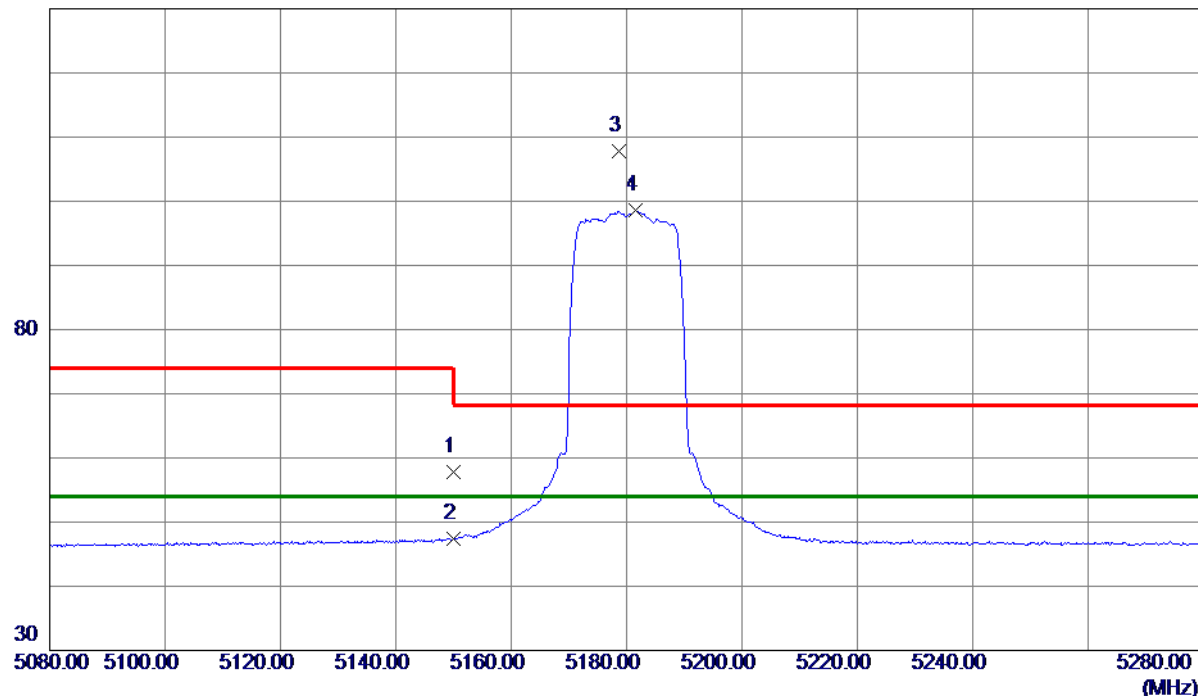
REMARKS:

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

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

Vertical

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	40.12	17.68	57.80	74.00	-16.20	Peak	
2	5150.0000	29.79	17.68	47.47	54.00	-6.53	AVG	
3	5178.7000	90.14	17.75	107.89	68.30	39.59	Peak	No Limit
4 *	5181.5000	80.80	17.76	98.56	54.00	44.56	AVG	No Limit

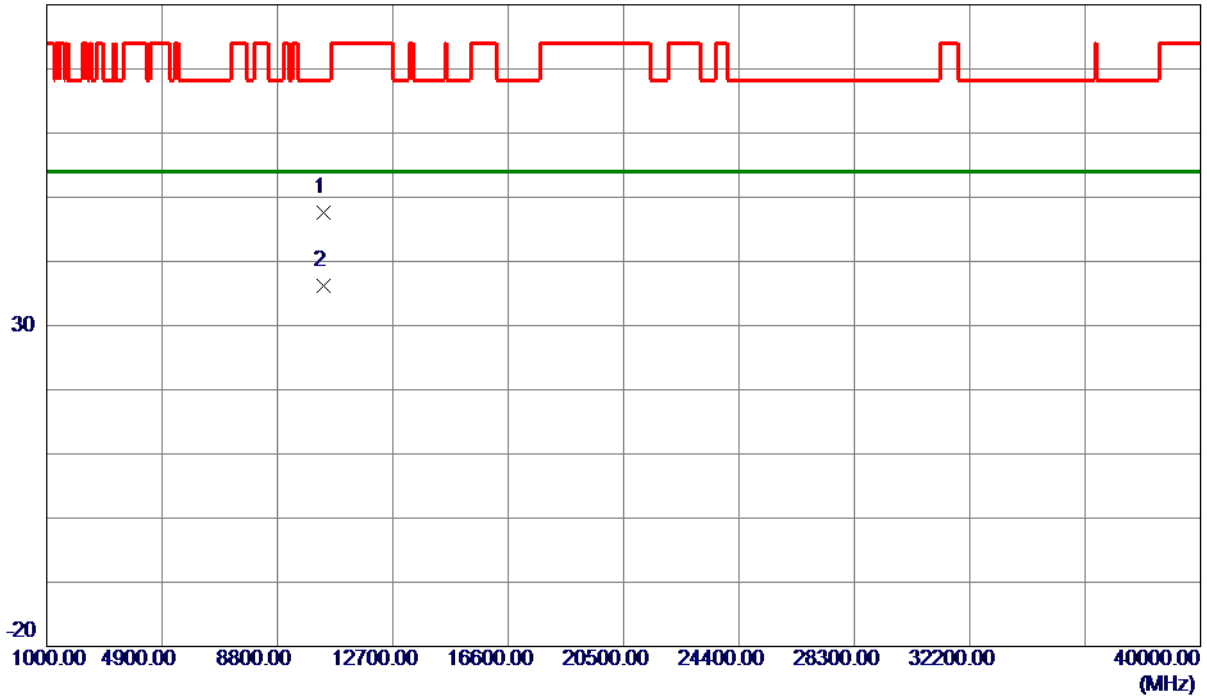
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) 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	10357.1600	32.52	15.08	47.60	68.30	-20.70	Peak	
2 *	10364.9900	21.05	15.09	36.14	54.00	-17.86	AVG	

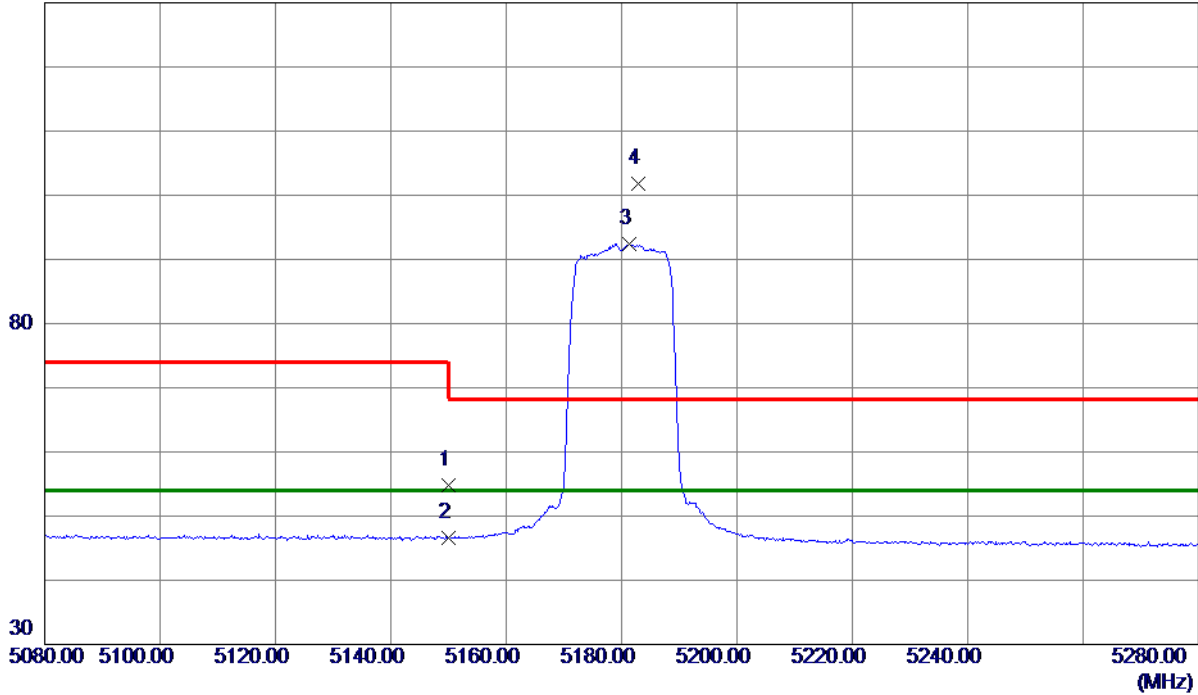
REMARKS:

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

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

Horizontal

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	37.18	17.68	54.86	74.00	-19.14	Peak	
2	5150.0000	28.98	17.68	46.66	54.00	-7.34	AVG	
3 *	5181.3000	74.68	17.76	92.44	54.00	38.44	AVG	No Limit
4	5182.9000	83.94	17.77	101.71	68.30	33.41	Peak	No Limit

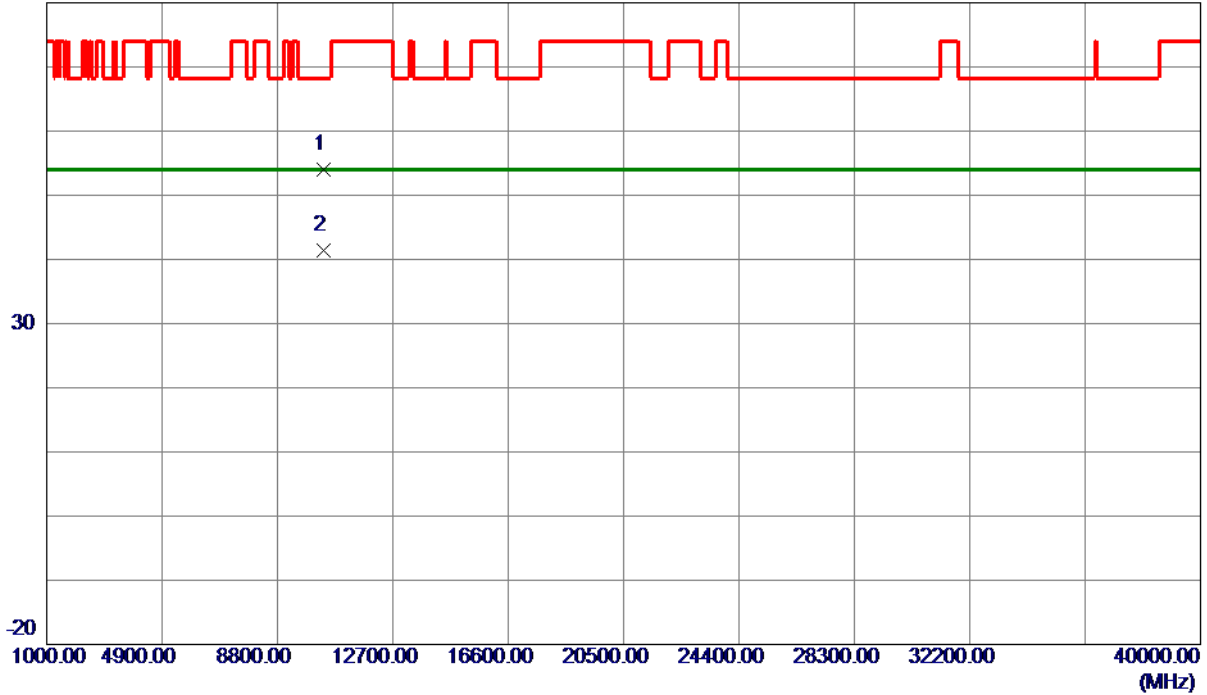
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) 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	10358.1250	38.96	15.08	54.04	68.30	-14.26	Peak	
2 *	10360.0500	26.31	15.09	41.40	54.00	-12.60	AVG	

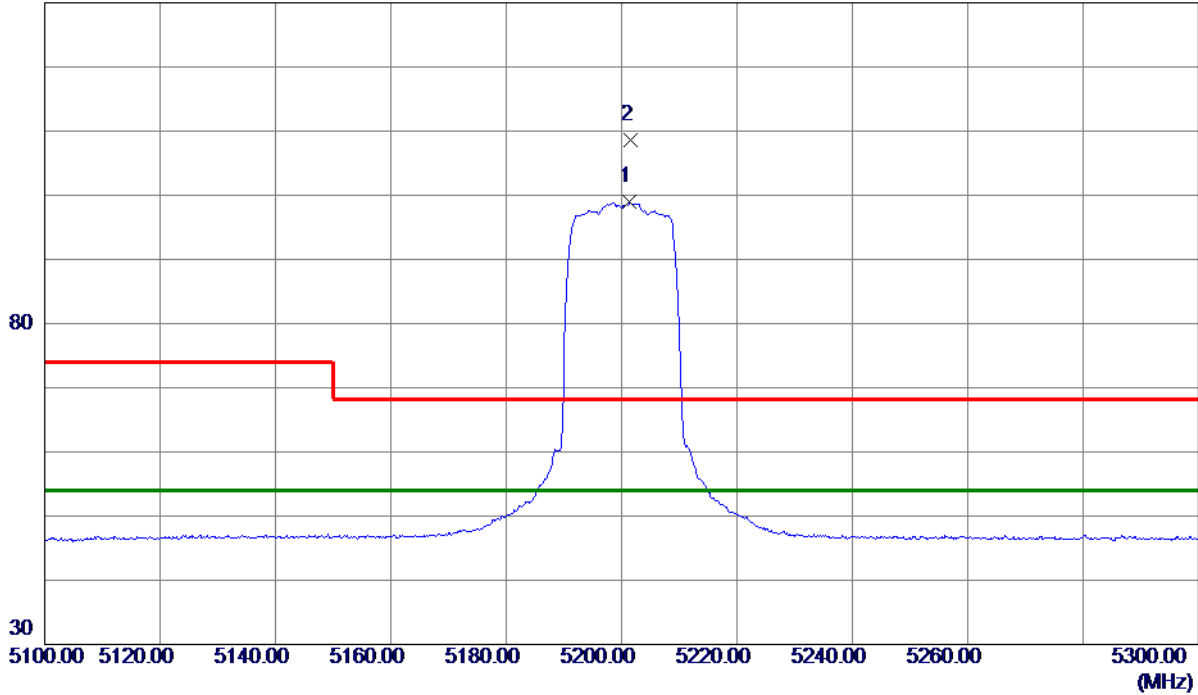
REMARKS:

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

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

Vertical

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 *	5201.4000	81.19	17.82	99.01	54.00	45.01	AVG	No Limit
2	5201.6000	90.75	17.82	108.57	68.30	40.27	Peak	No Limit

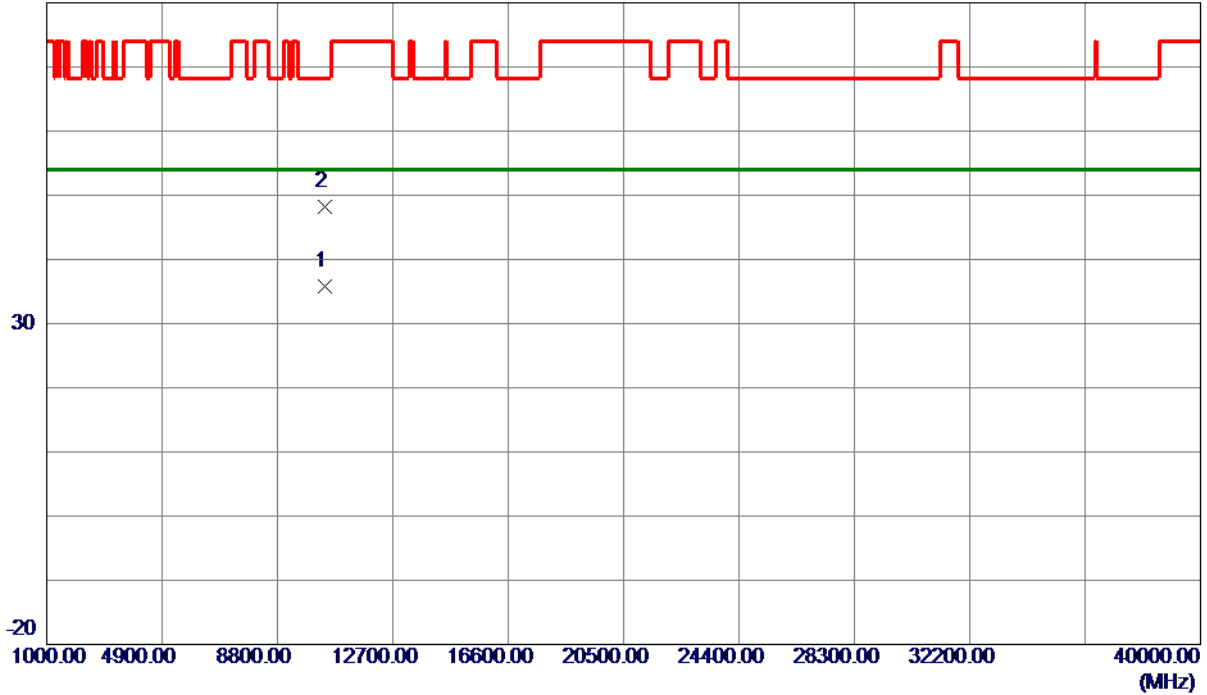
REMARKS:

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

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

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10398.3900	20.60	15.15	35.75	54.00	-18.25	AVG	
2	10401.8700	33.11	15.16	48.27	68.30	-20.03	Peak	

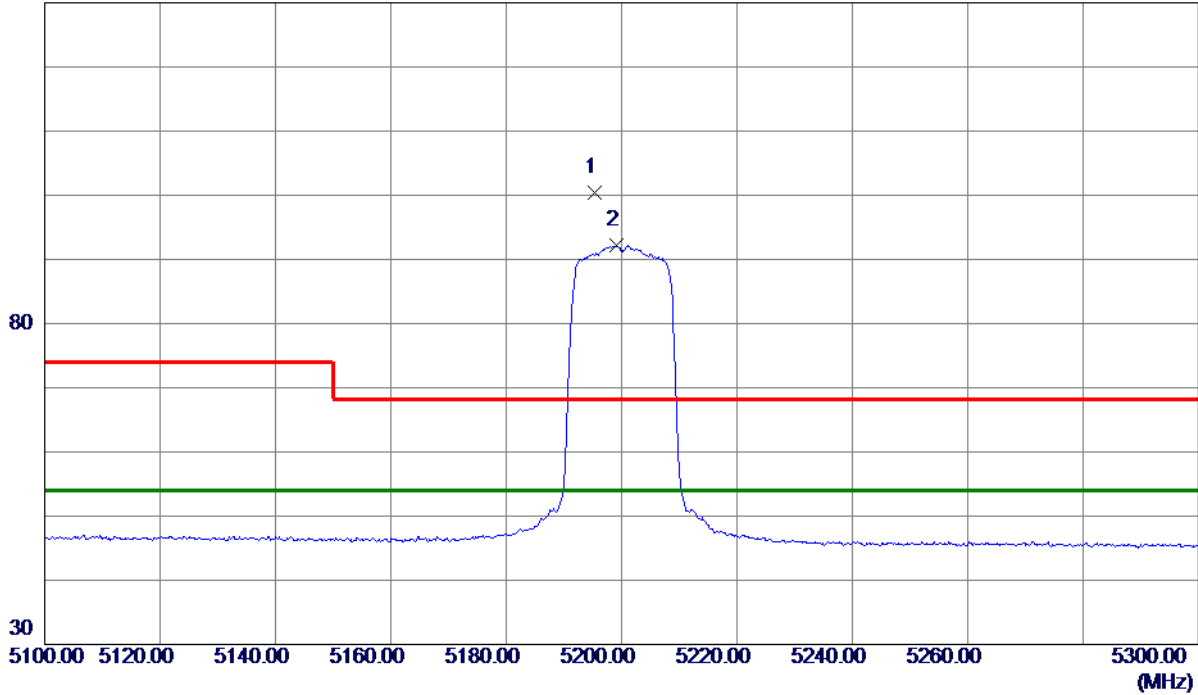
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) 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	5195.4000	82.54	17.80	100.34	68.30	32.04	Peak	No Limit
2 *	5199.1000	74.38	17.81	92.19	54.00	38.19	AVG	No Limit

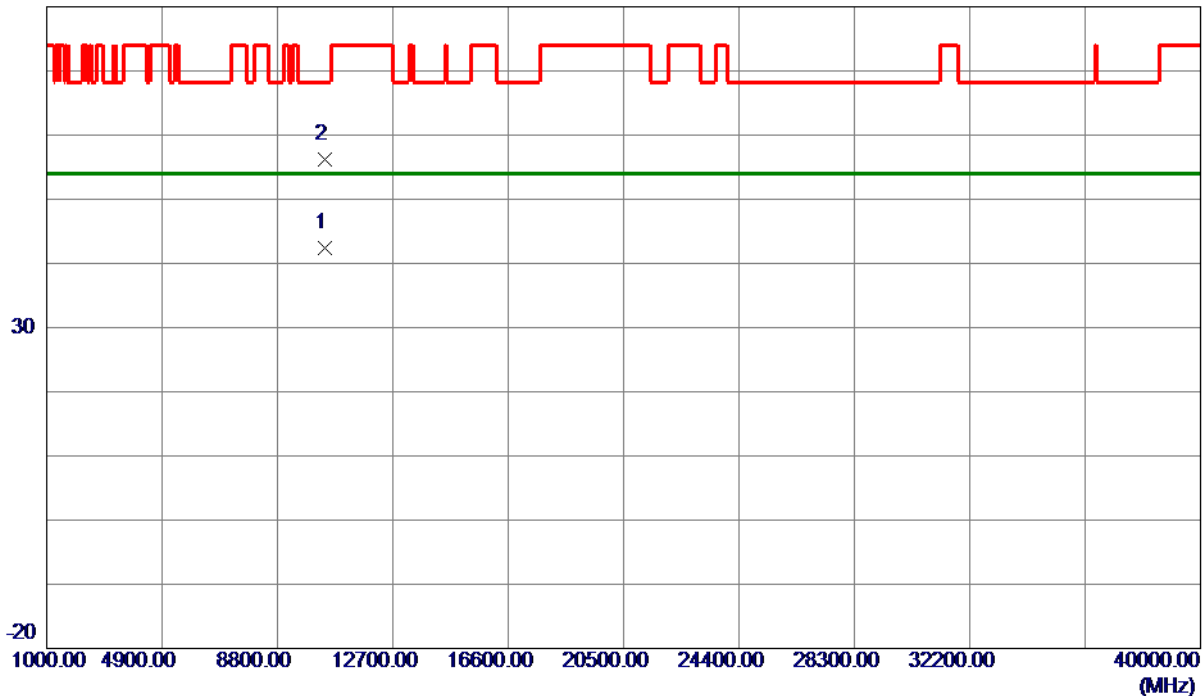
REMARKS:

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

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

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 *	10400.4500	27.22	15.16	42.38	54.00	-11.62	AVG	
2	10402.8750	41.00	15.16	56.16	68.30	-12.14	Peak	

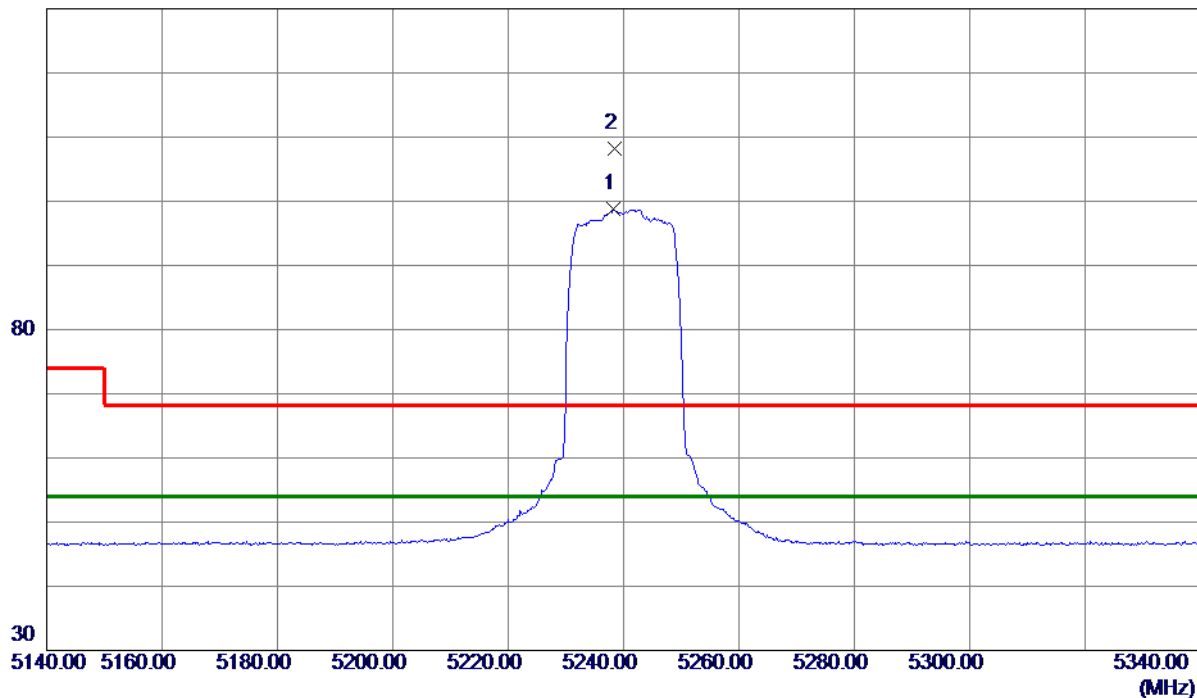
REMARKS:

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

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

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 *	5238.3000	80.88	17.92	98.80	54.00	44.80	AVG	No Limit
2	5238.5000	90.29	17.92	108.21	68.30	39.91	Peak	No Limit

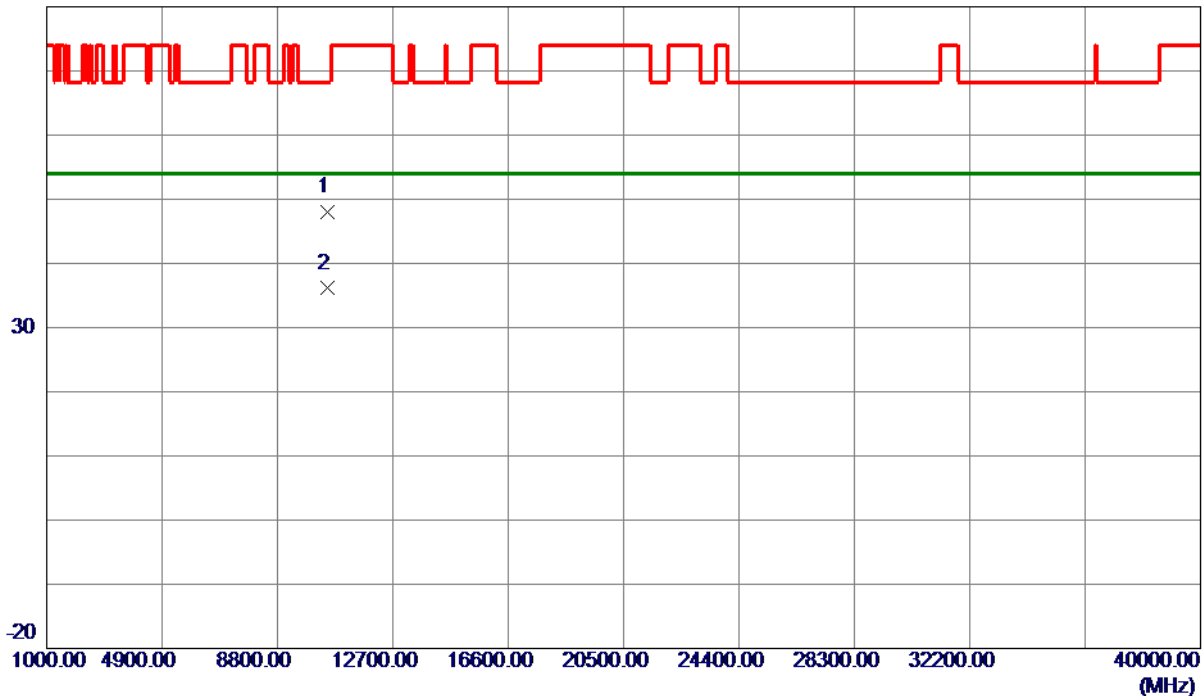
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) 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	10477.8900	32.73	15.29	48.02	68.30	-20.28	Peak	
2 *	10483.5199	20.80	15.30	36.10	54.00	-17.90	AVG	

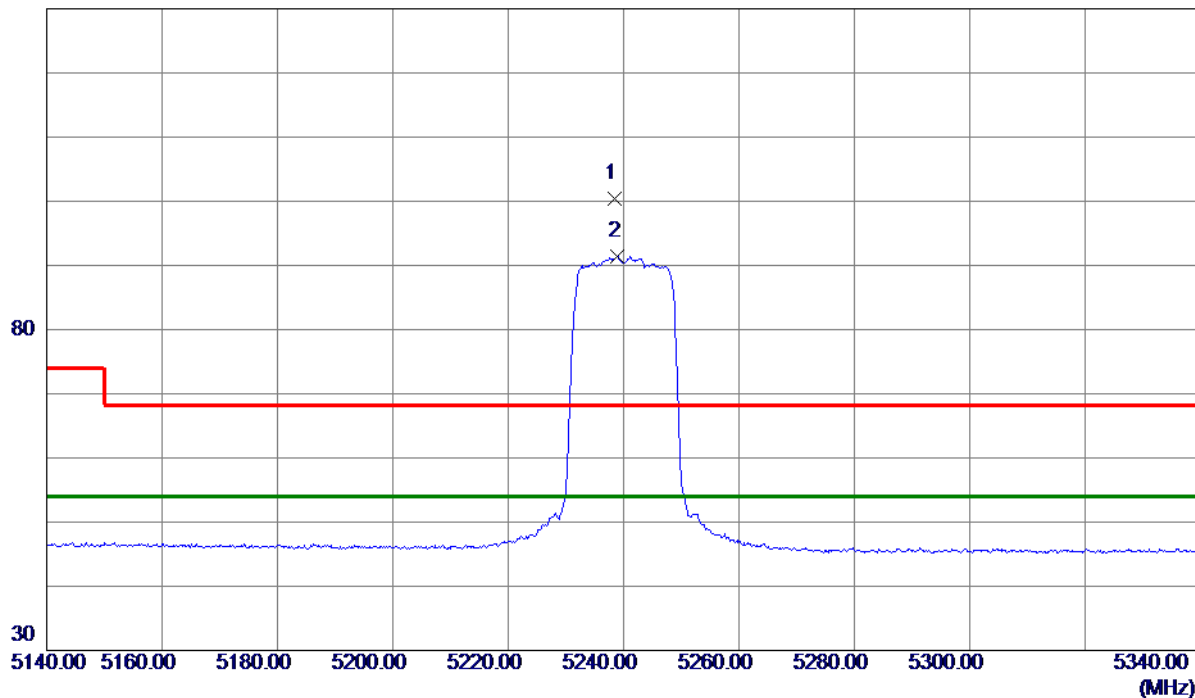
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5238.5000	82.53	17.92	100.45	68.30	32.15	Peak	No Limit
2 *	5239.0000	73.55	17.92	91.47	54.00	37.47	AVG	No Limit

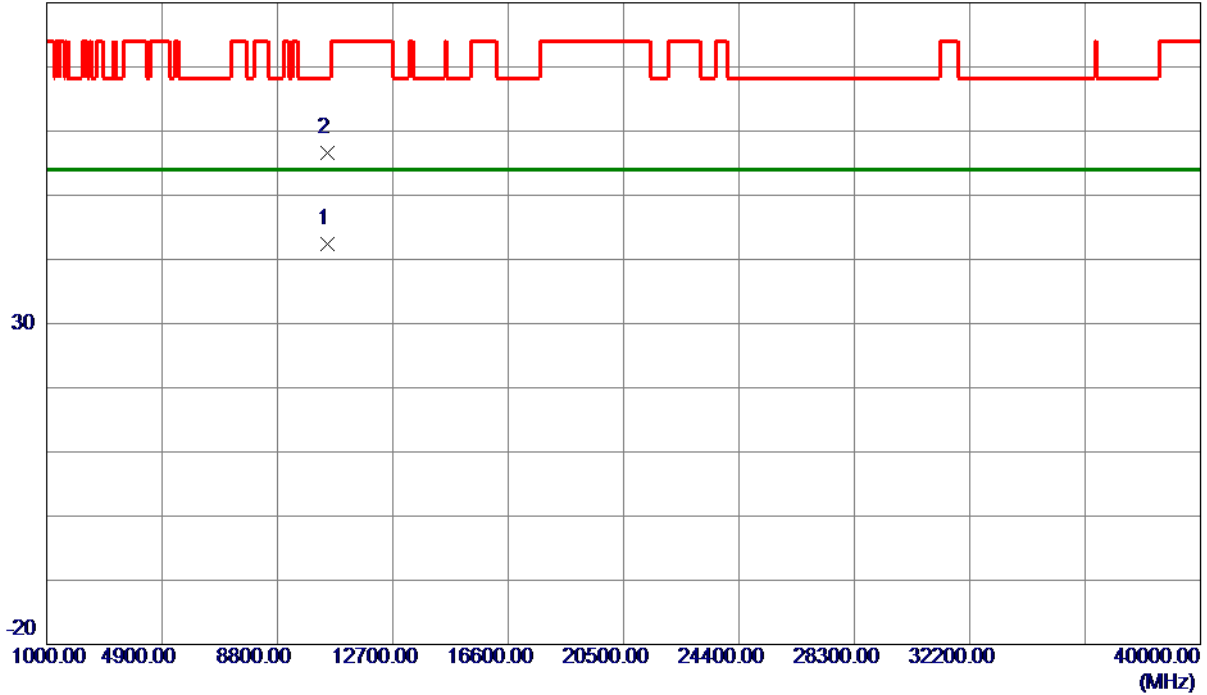
REMARKS:

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

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

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 *	10480.2750	27.12	15.30	42.42	54.00	-11.58	AVG	
2	10481.0750	41.26	15.30	56.56	68.30	-11.74	Peak	

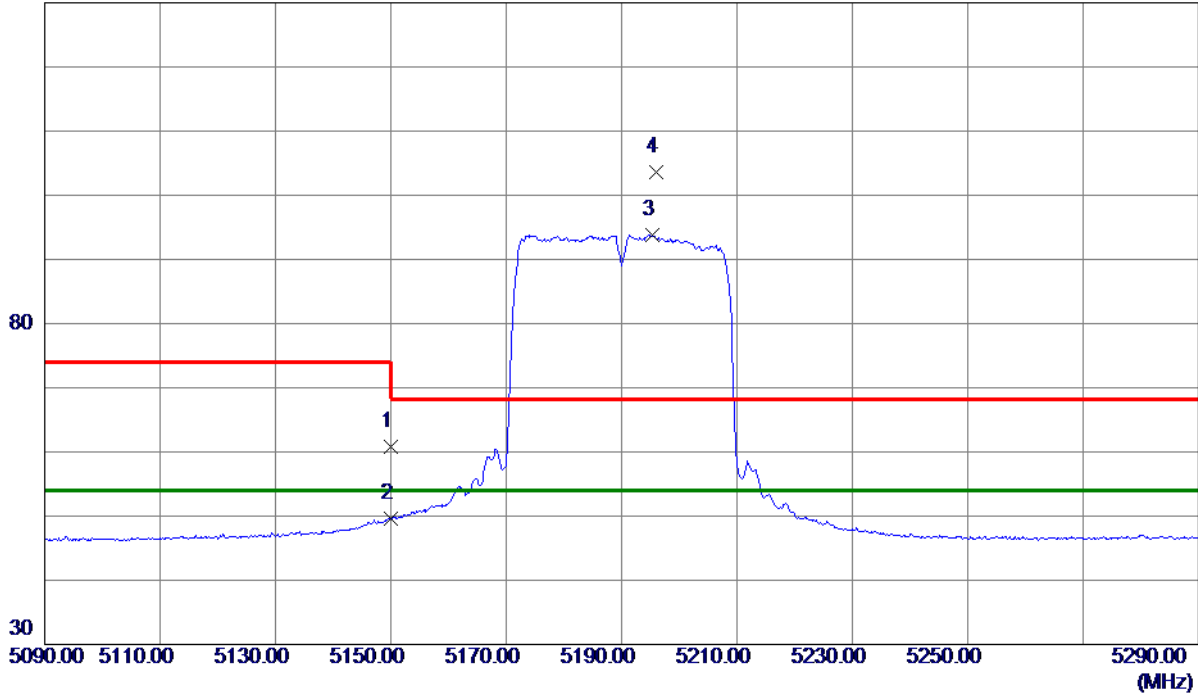
REMARKS:

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

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

Vertical

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	43.05	17.68	60.73	74.00	-13.27	Peak	
2	5150.0000	31.96	17.68	49.64	54.00	-4.36	AVG	
3 *	5195.3000	76.00	17.80	93.80	54.00	39.80	AVG	No Limit
4	5196.0000	85.77	17.80	103.57	68.30	35.27	Peak	No Limit

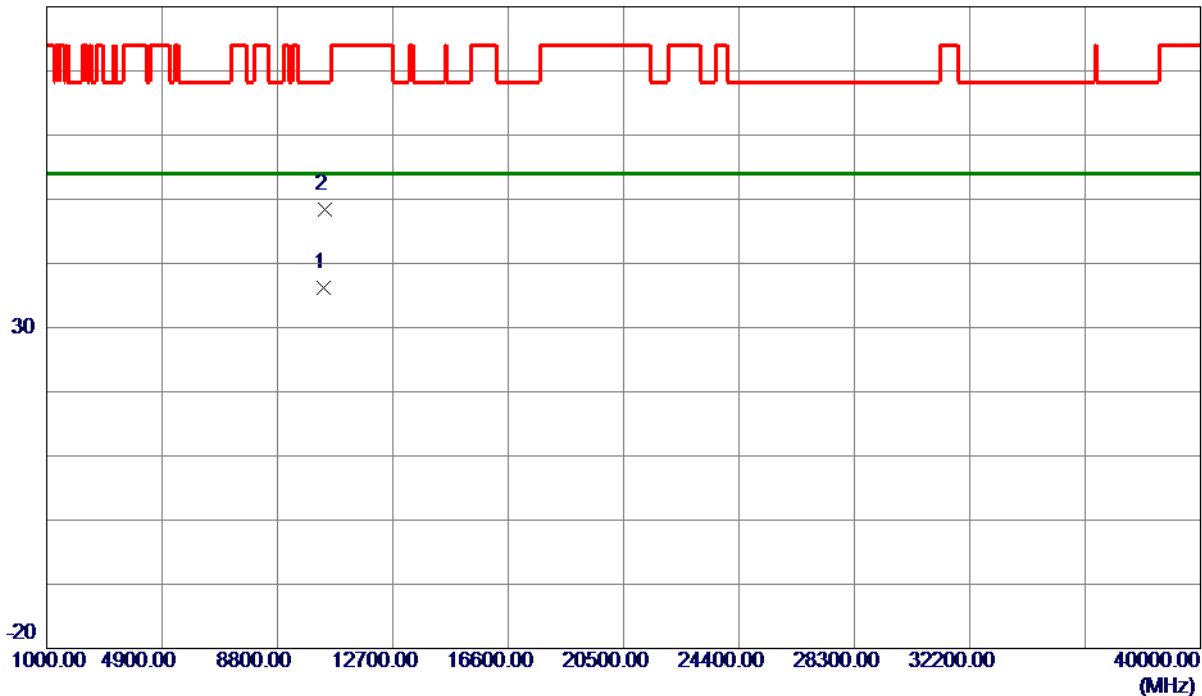
REMARKS:

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

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

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 *	10376.8300	21.04	15.12	36.16	54.00	-17.84	AVG	
2	10381.7350	33.21	15.12	48.33	68.30	-19.97	Peak	

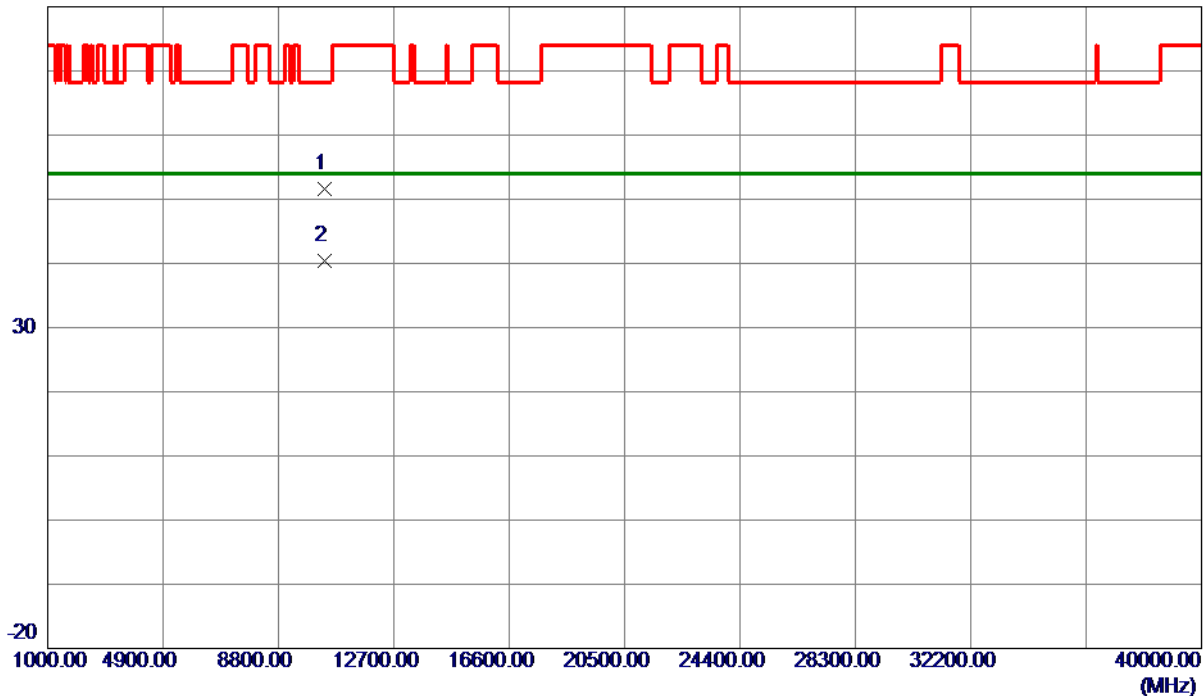
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) 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	10378.6250	36.39	15.12	51.51	68.30	-16.79	Peak	
2 *	10380.0250	25.34	15.12	40.46	54.00	-13.54	AVG	

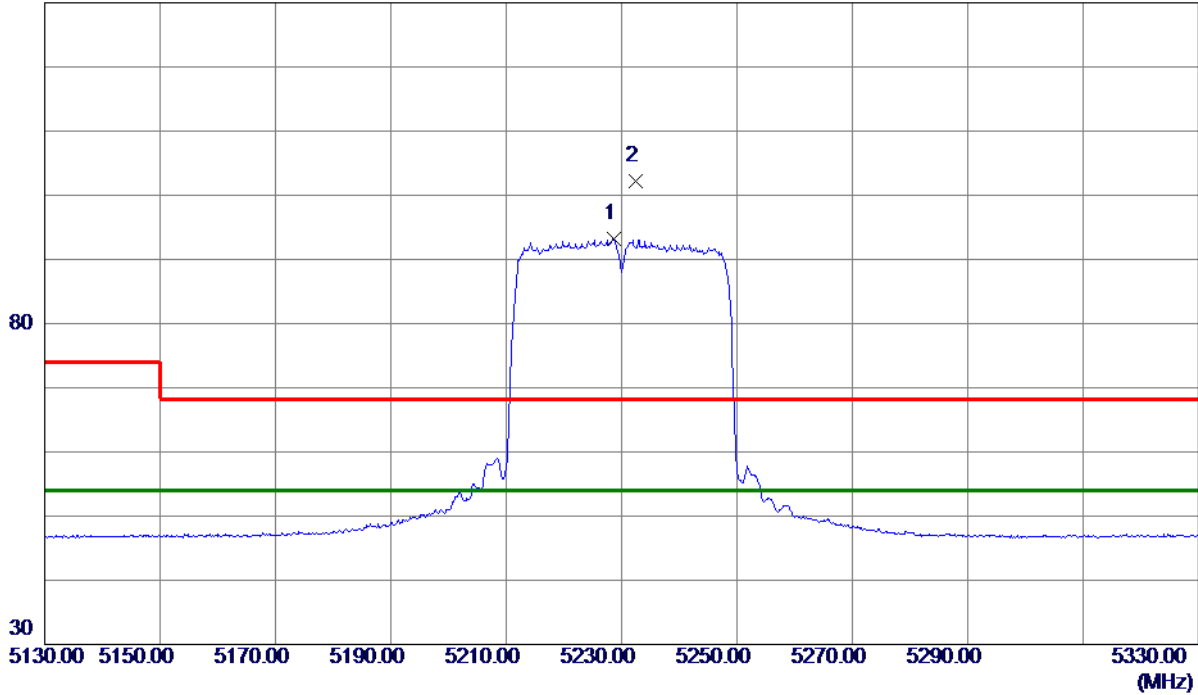
REMARKS:

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

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

Vertical

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 *	5228.6000	75.38	17.89	93.27	54.00	39.27	AVG	No Limit
2	5232.4000	84.29	17.90	102.19	68.30	33.89	Peak	No Limit

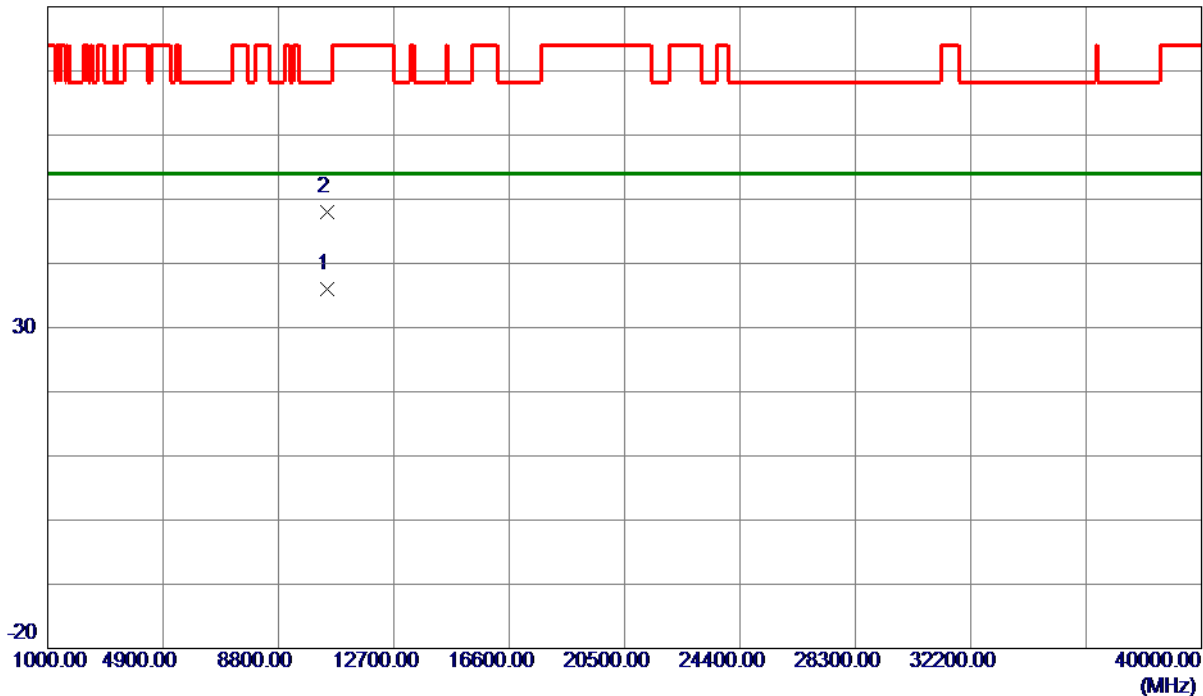
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) 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 *	10460.3150	20.75	15.26	36.01	54.00	-17.99	AVG	
2	10462.1400	32.76	15.26	48.02	68.30	-20.28	Peak	

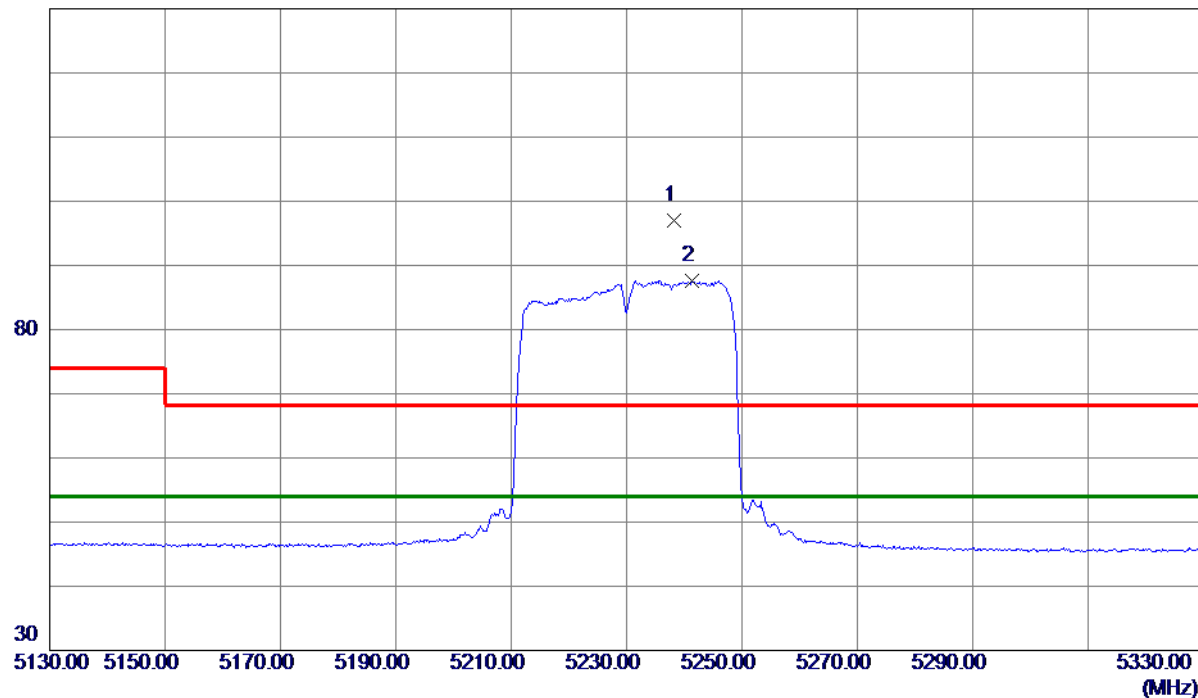
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5238.2000	79.01	17.92	96.93	68.30	28.63	Peak	No Limit
2 *	5241.4000	69.73	17.93	87.66	54.00	33.66	AVG	No Limit

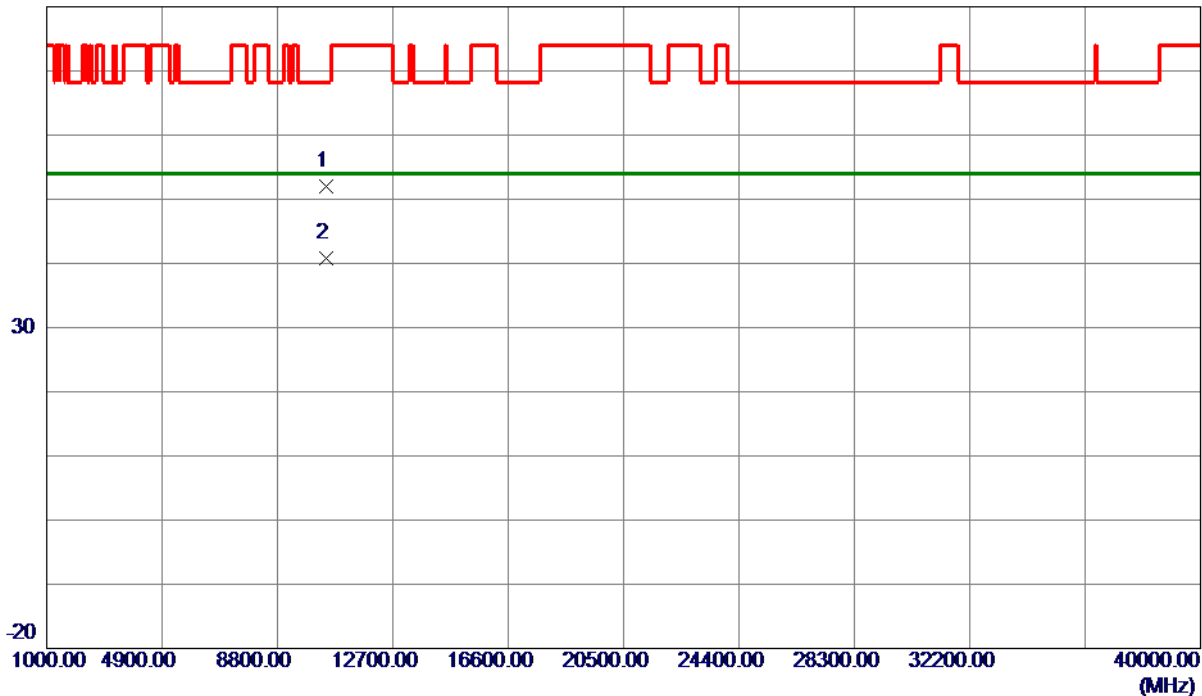
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) 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	10453.3750	36.68	15.25	51.93	68.30	-16.37	Peak	
2 *	10460.0500	25.54	15.26	40.80	54.00	-13.20	AVG	

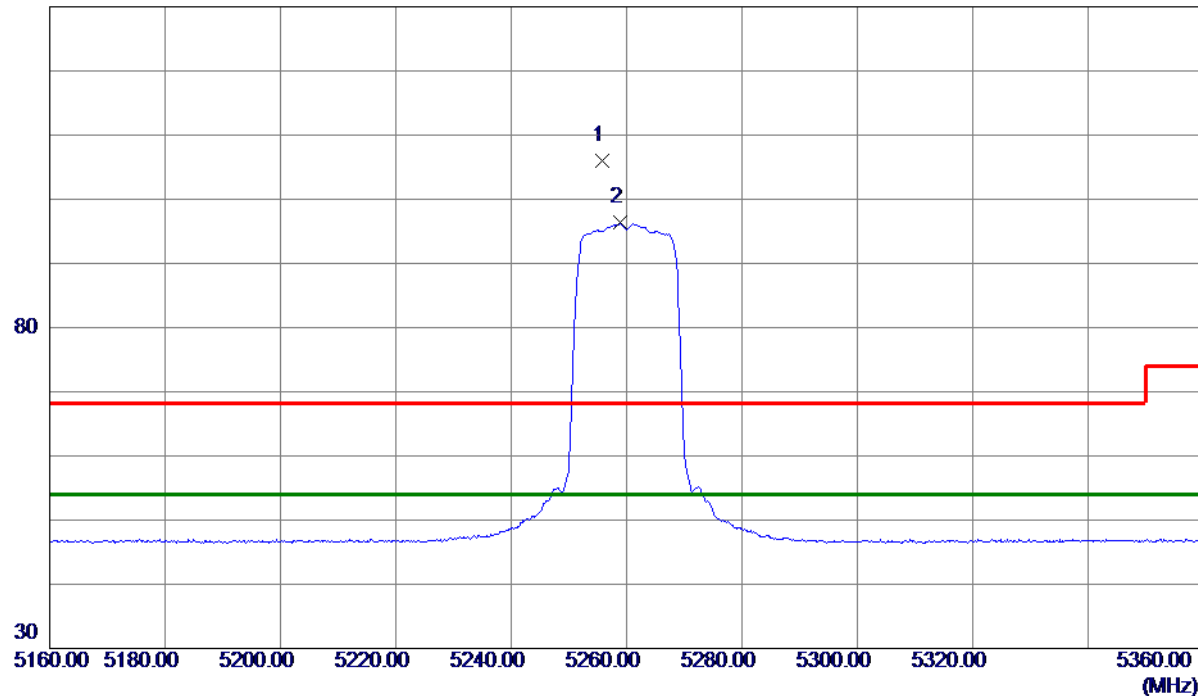
REMARKS:

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

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

Vertical

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	5255.7000	88.04	17.97	106.01	68.30	37.71	Peak	No Limit
2 *	5258.9000	78.39	17.98	96.37	54.00	42.37	AVG	No Limit

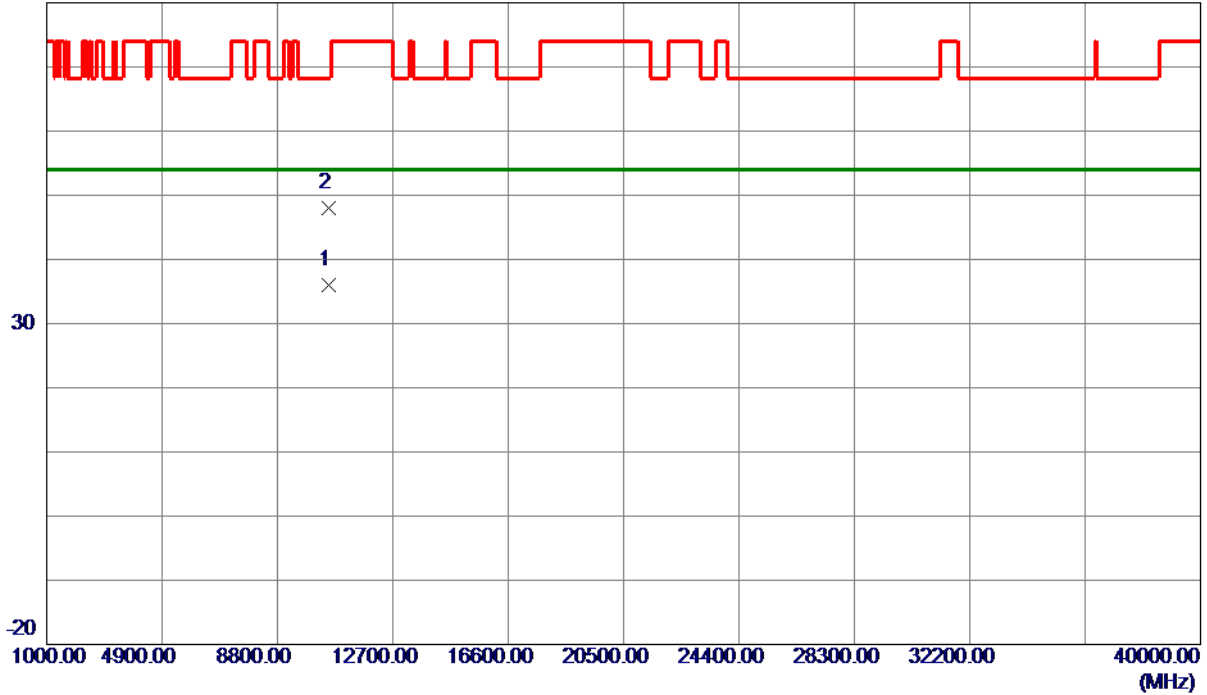
REMARKS:

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

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

Vertical

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 *	10517.2350	20.58	15.35	35.93	54.00	-18.07	AVG	
2	10524.8300	32.65	15.36	48.01	68.30	-20.29	Peak	

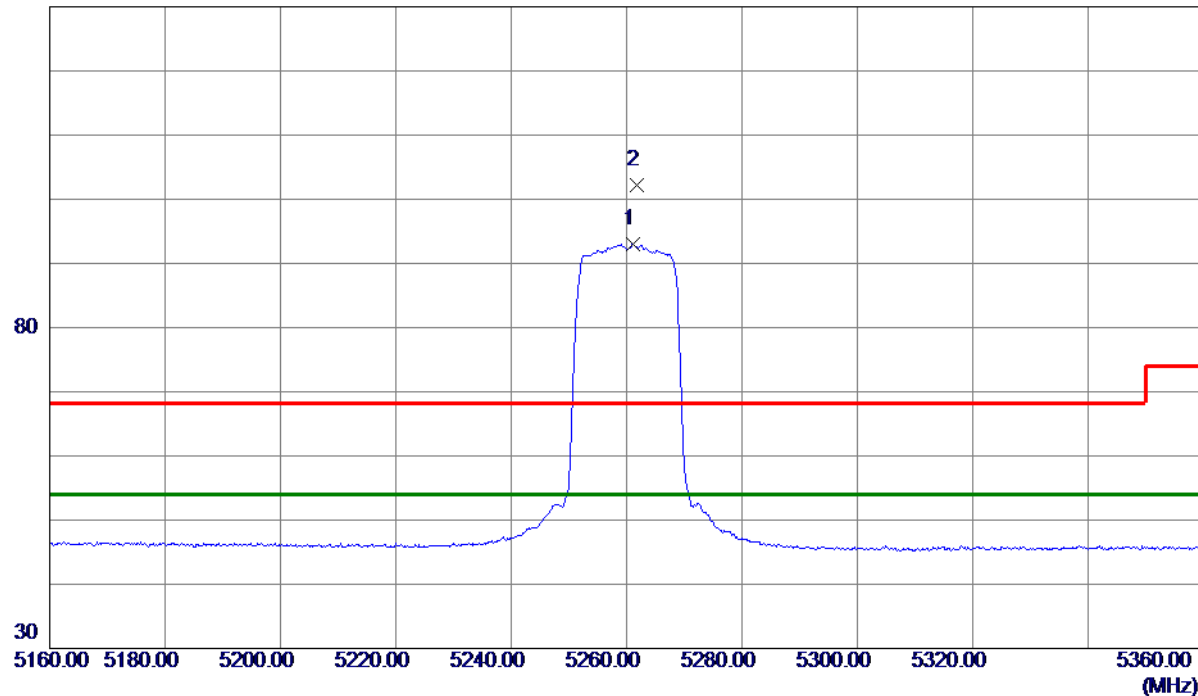
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5261.2000	74.98	17.98	92.96	54.00	38.96	AVG	No Limit
2	5261.8000	84.14	17.99	102.13	68.30	33.83	Peak	No Limit

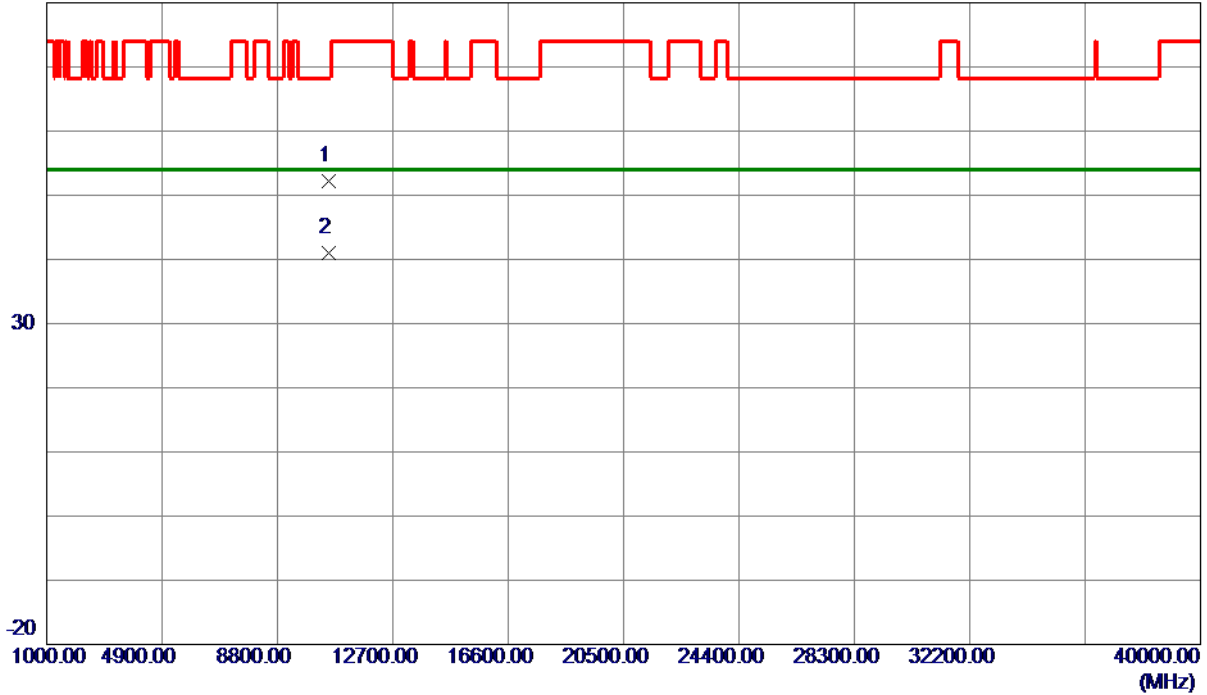
REMARKS:

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

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

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10519.9000	36.78	15.35	52.13	68.30	-16.17	Peak	
2 *	10520.0000	25.73	15.35	41.08	54.00	-12.92	AVG	

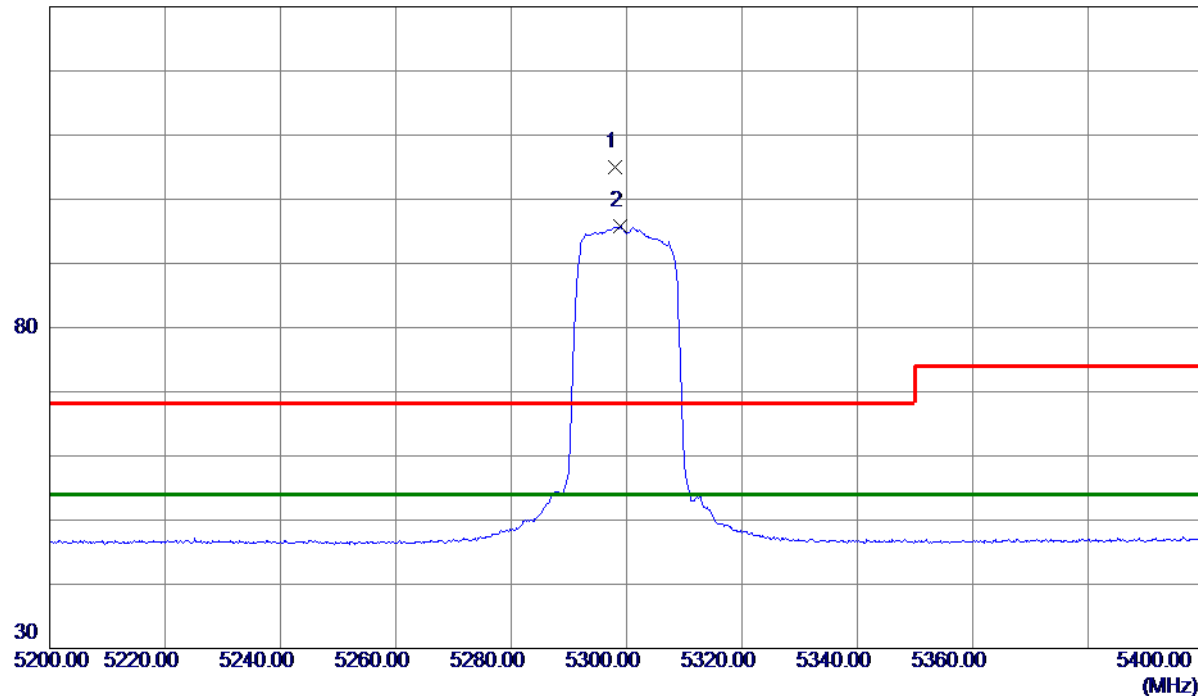
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5297.9000	86.85	18.09	104.94	68.30	36.64	Peak	No Limit
2 *	5298.9000	77.73	18.09	95.82	54.00	41.82	AVG	No Limit

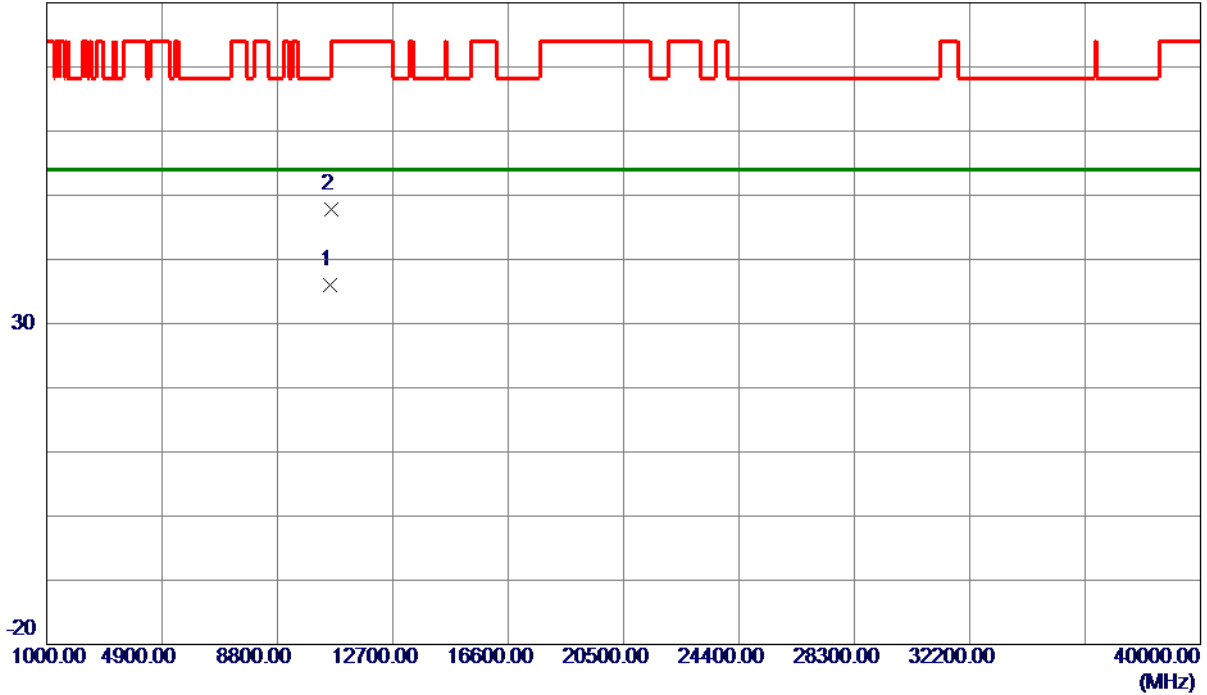
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 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 *	10595.7200	20.60	15.43	36.03	54.00	-17.97	AVG	
2	10599.6900	32.44	15.43	47.87	68.30	-20.43	Peak	

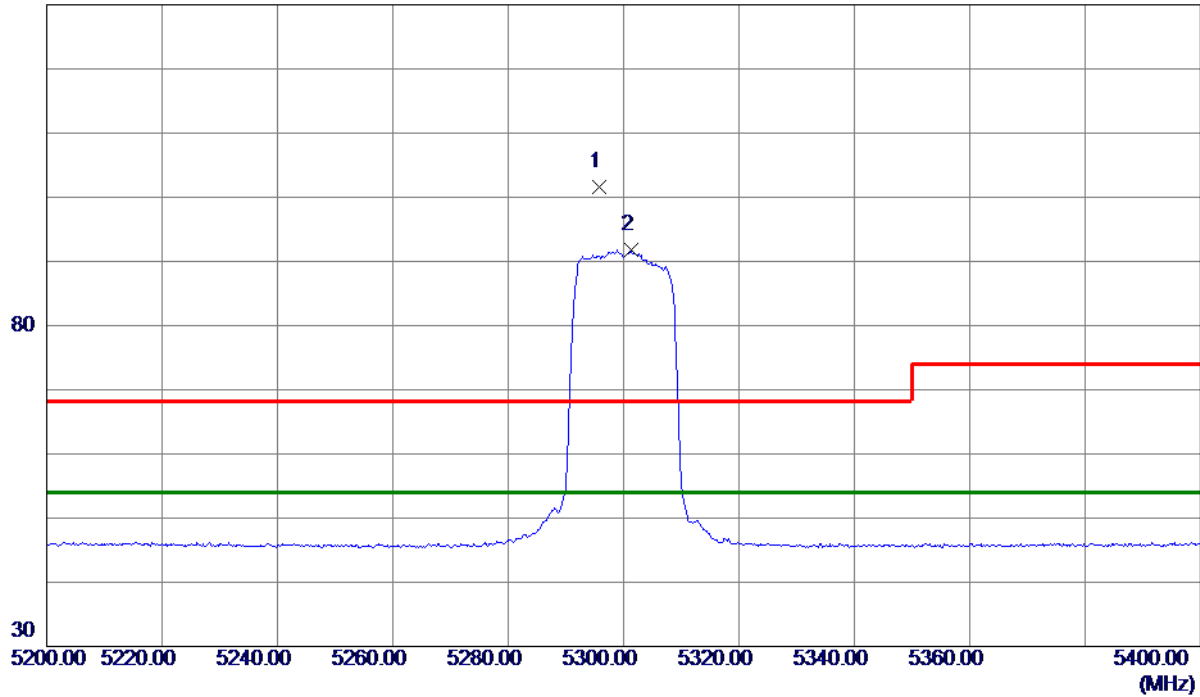
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5295.8000	83.60	18.08	101.68	68.30	33.38	Peak	No Limit
2 *	5301.3000	73.68	18.09	91.77	54.00	37.77	AVG	No Limit

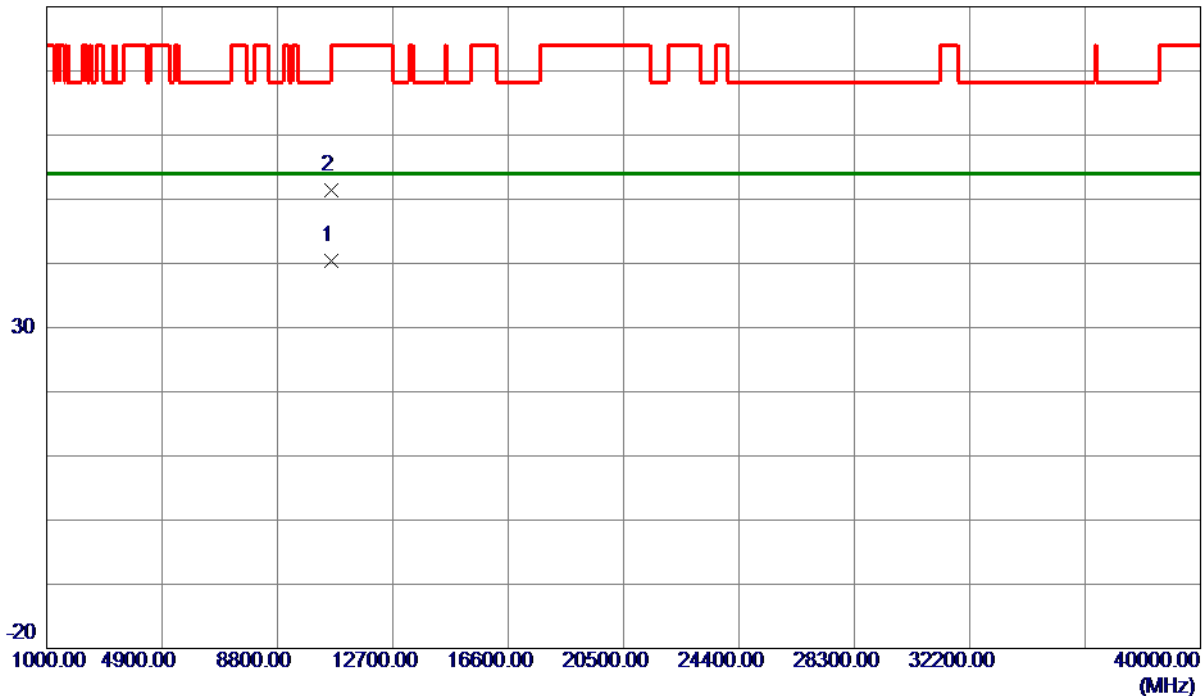
REMARKS:

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

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

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10599.9750	24.94	15.43	40.37	54.00	-13.63	AVG	
2	10600.8250	35.98	15.43	51.41	74.00	-22.59	Peak	

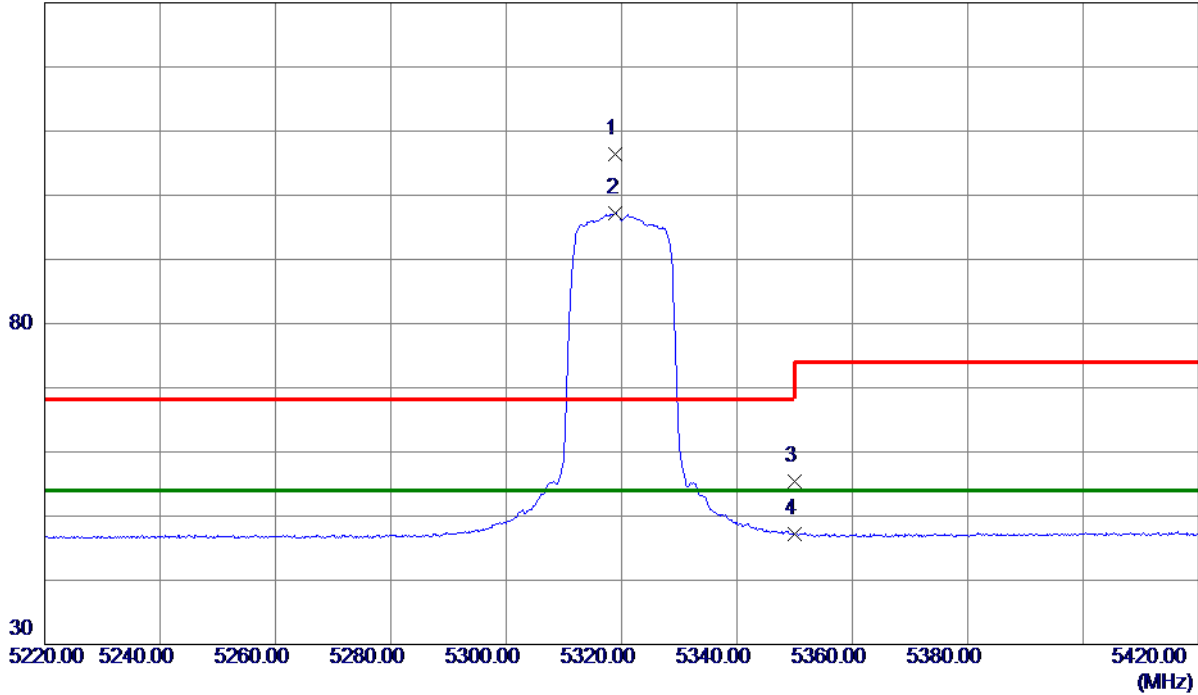
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5318.8000	88.25	18.14	106.39	68.30	38.09	Peak	No Limit
2 *	5319.0000	79.03	18.14	97.17	54.00	43.17	AVG	No Limit
3	5350.0000	37.09	18.23	55.32	74.00	-18.68	Peak	
4	5350.0000	29.04	18.23	47.27	54.00	-6.73	AVG	

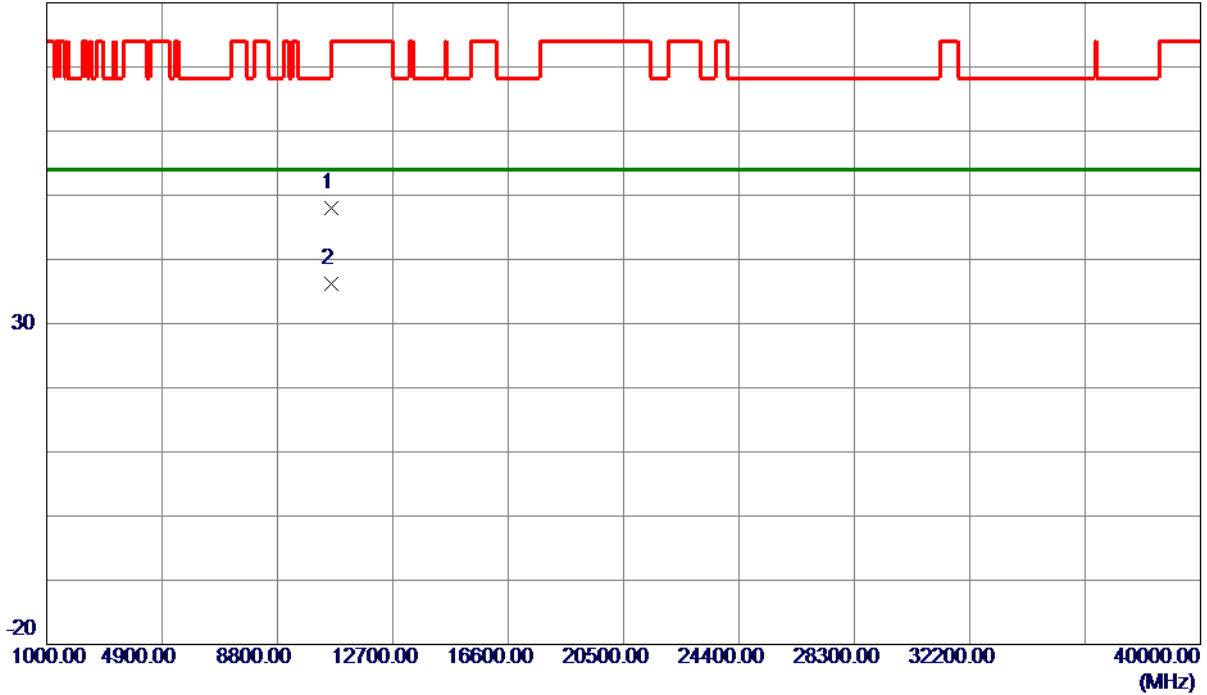
REMARKS:

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

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

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10636.2850	32.53	15.47	48.00	74.00	-26.00	Peak	
2 *	10637.8099	20.71	15.47	36.18	54.00	-17.82	AVG	

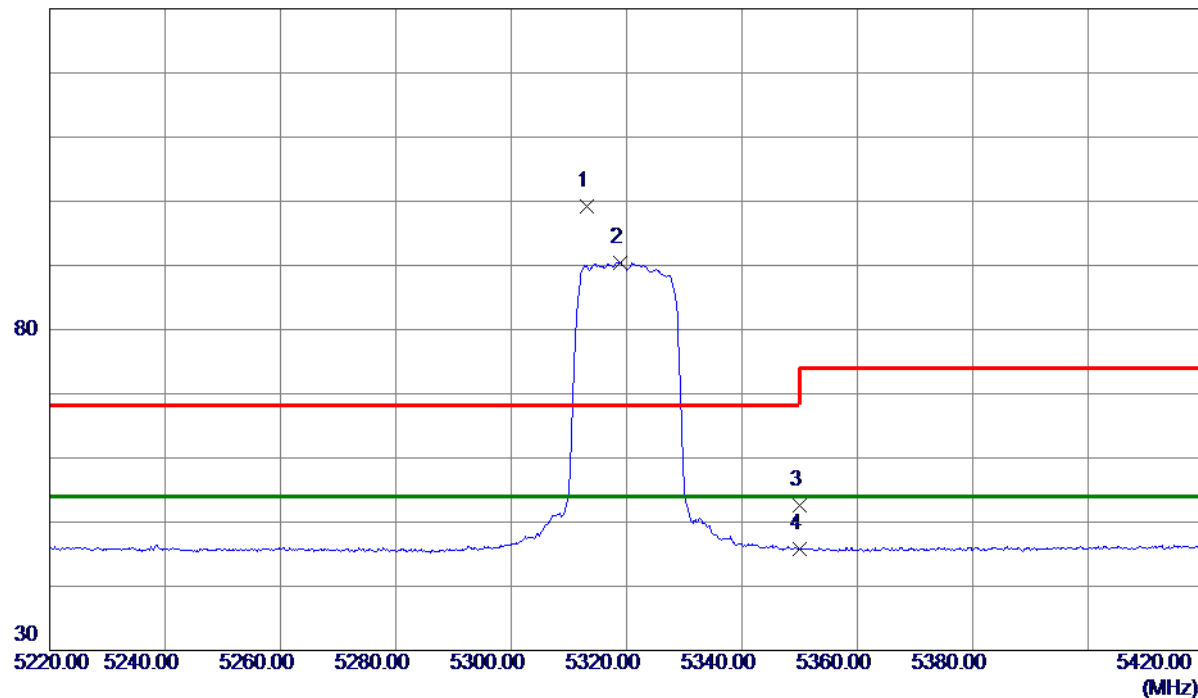
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5313.1000	80.99	18.13	99.12	68.30	30.82	Peak	No Limit
2 *	5318.8000	72.35	18.14	90.49	54.00	36.49	AVG	No Limit
3	5350.0000	34.39	18.23	52.62	74.00	-21.38	Peak	
4	5350.0000	27.58	18.23	45.81	54.00	-8.19	AVG	

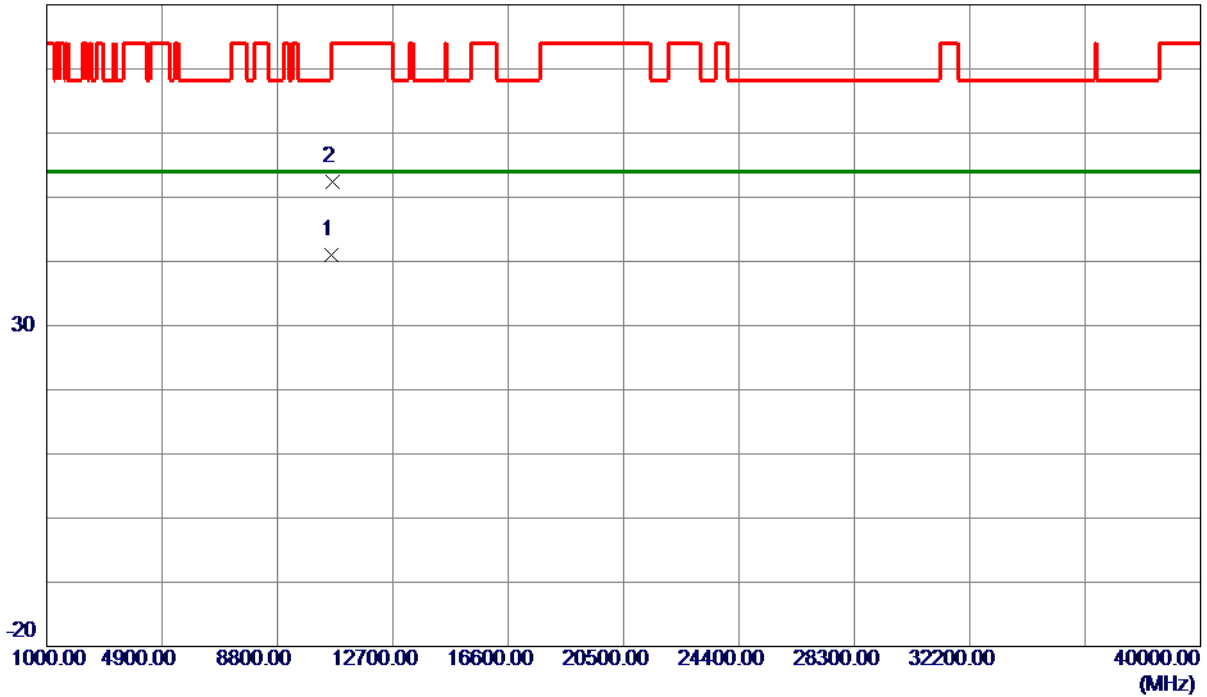
REMARKS:

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

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

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10639.8750	25.59	15.47	41.06	54.00	-12.94	AVG	
2	10644.5500	37.01	15.48	52.49	74.00	-21.51	Peak	

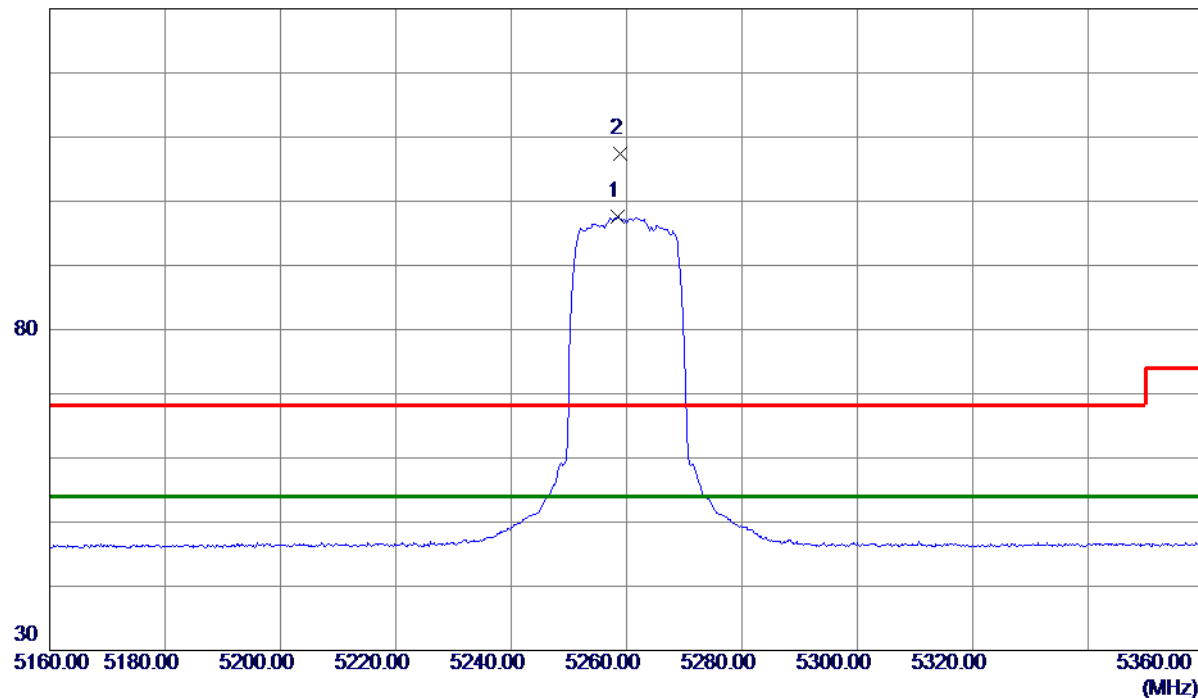
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5258.5000	79.62	17.98	97.60	54.00	43.60	AVG	No Limit
2	5258.9000	89.33	17.98	107.31	68.30	39.01	Peak	No Limit

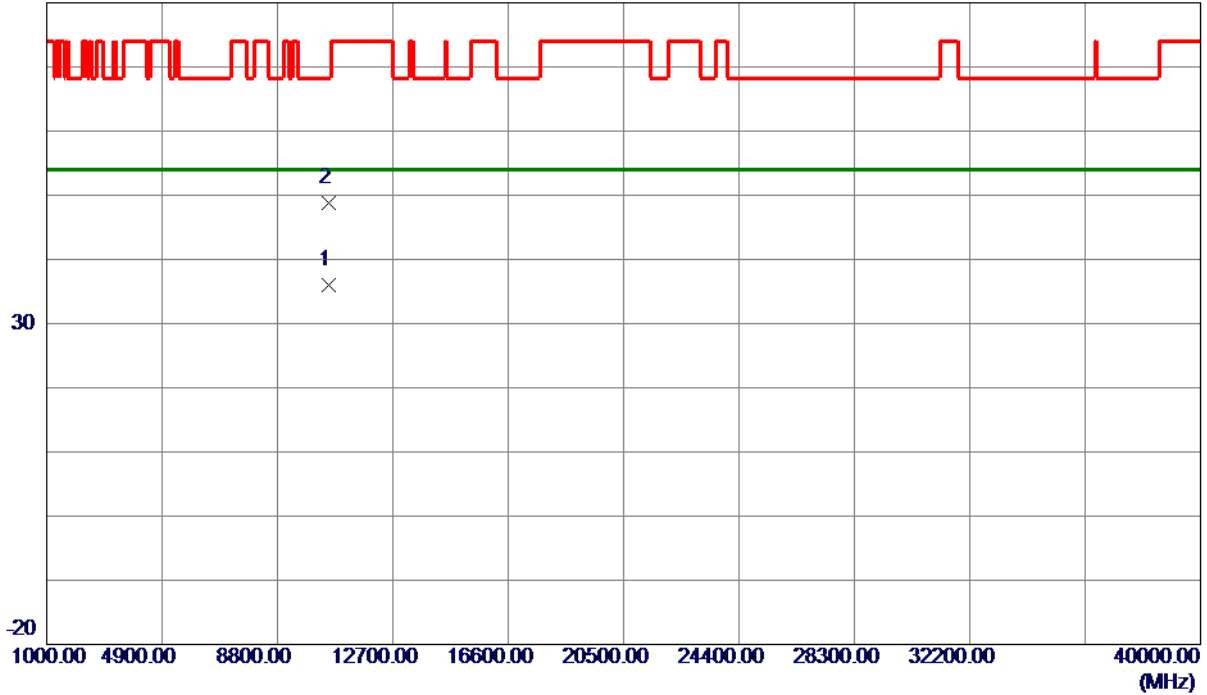
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 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 *	10515.6600	20.68	15.35	36.03	54.00	-17.97	AVG	
2	10518.0800	33.41	15.35	48.76	68.30	-19.54	Peak	

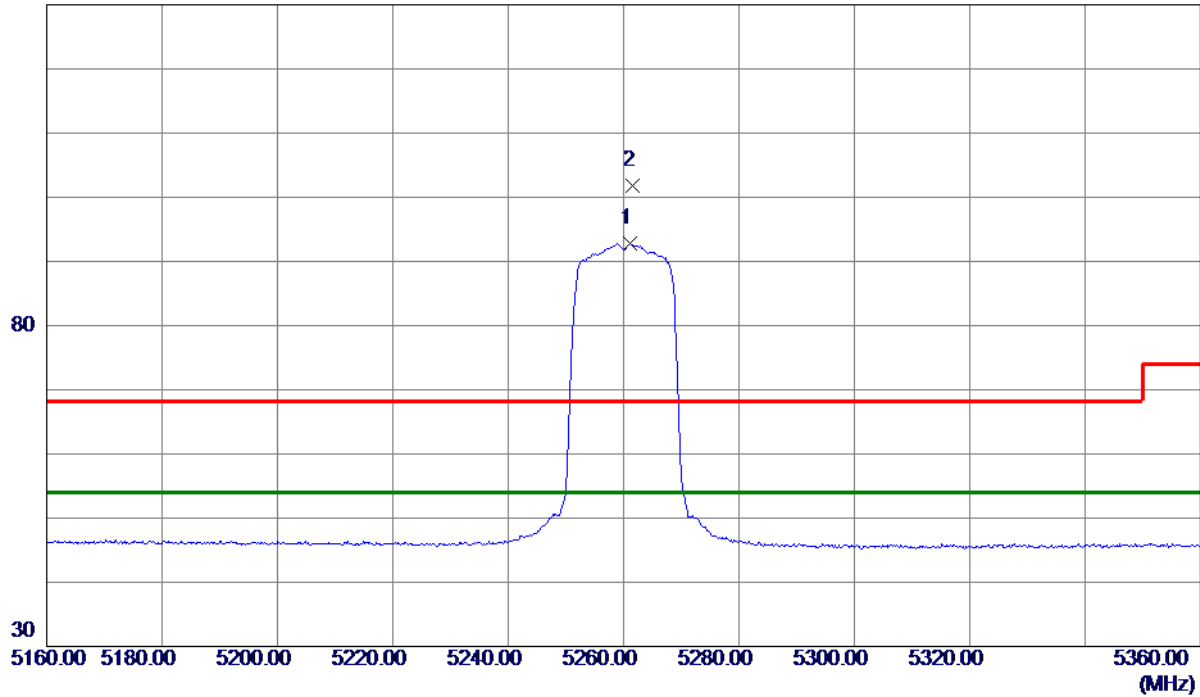
REMARKS:

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

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

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	5261.1000	74.85	17.98	92.83	54.00	38.83	AVG	No Limit
2	5261.6000	83.80	17.98	101.78	68.30	33.48	Peak	No Limit

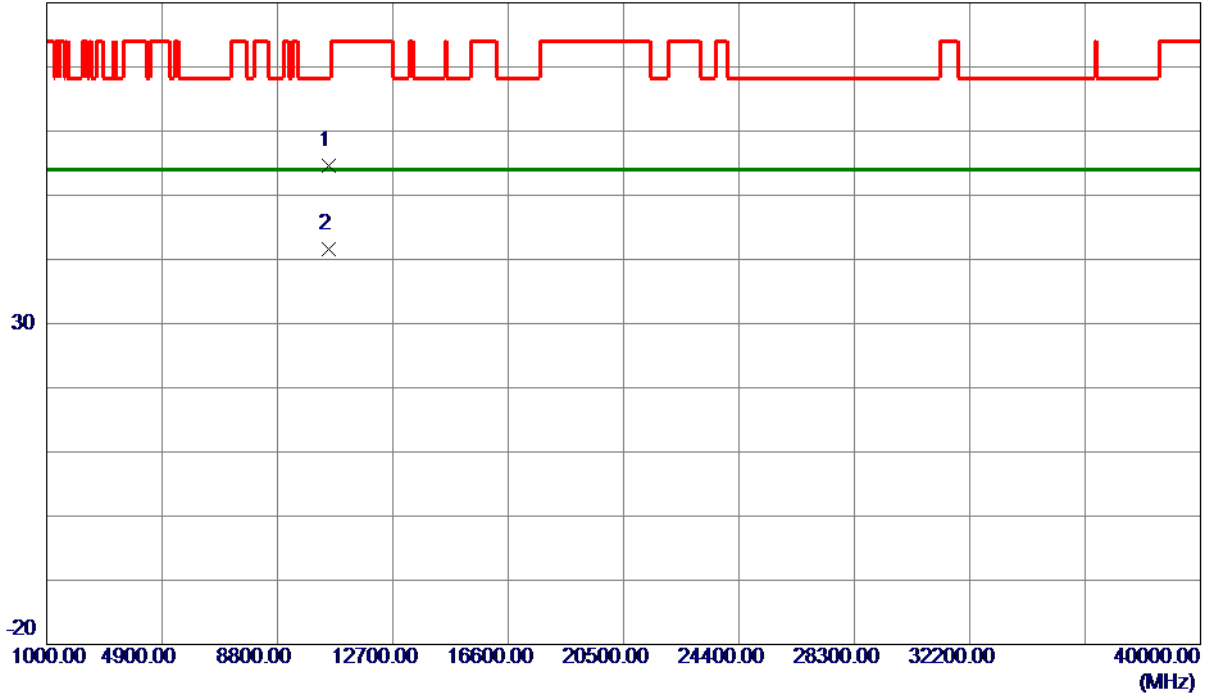
REMARKS:

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

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

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10519.9500	39.22	15.35	54.57	68.30	-13.73	Peak	
2 *	10520.0500	26.31	15.35	41.66	54.00	-12.34	AVG	

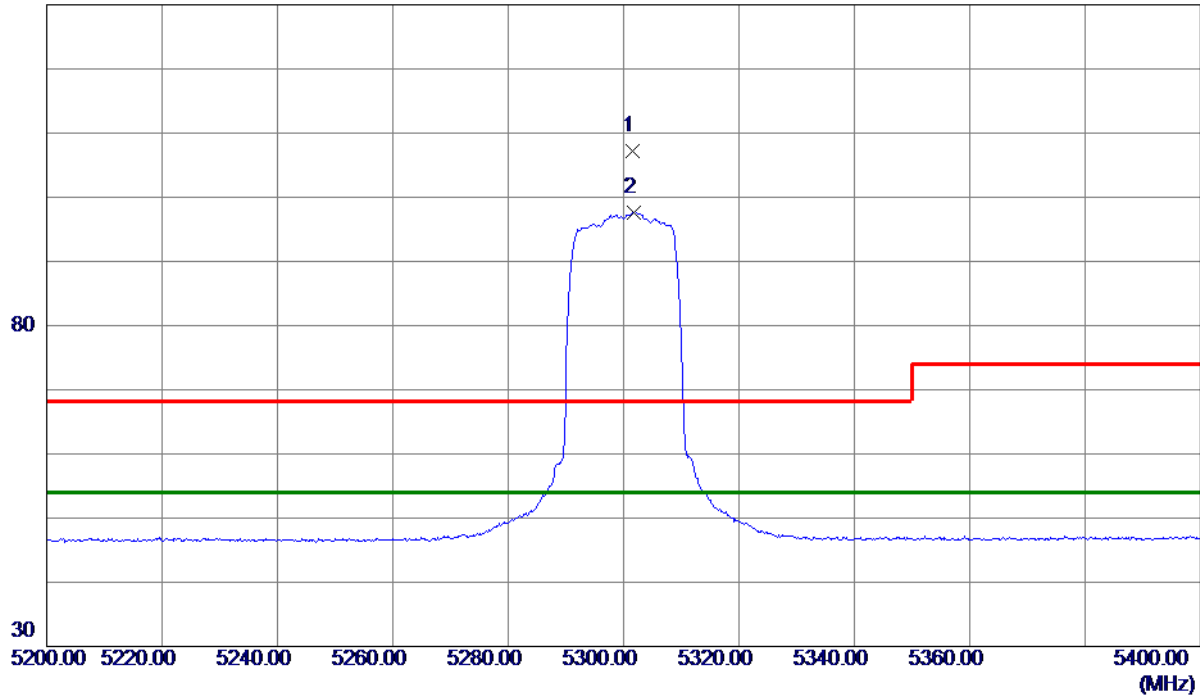
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5301.5000	89.07	18.10	107.17	68.30	38.87	Peak	No Limit
2 *	5301.7000	79.47	18.10	97.57	54.00	43.57	AVG	No Limit

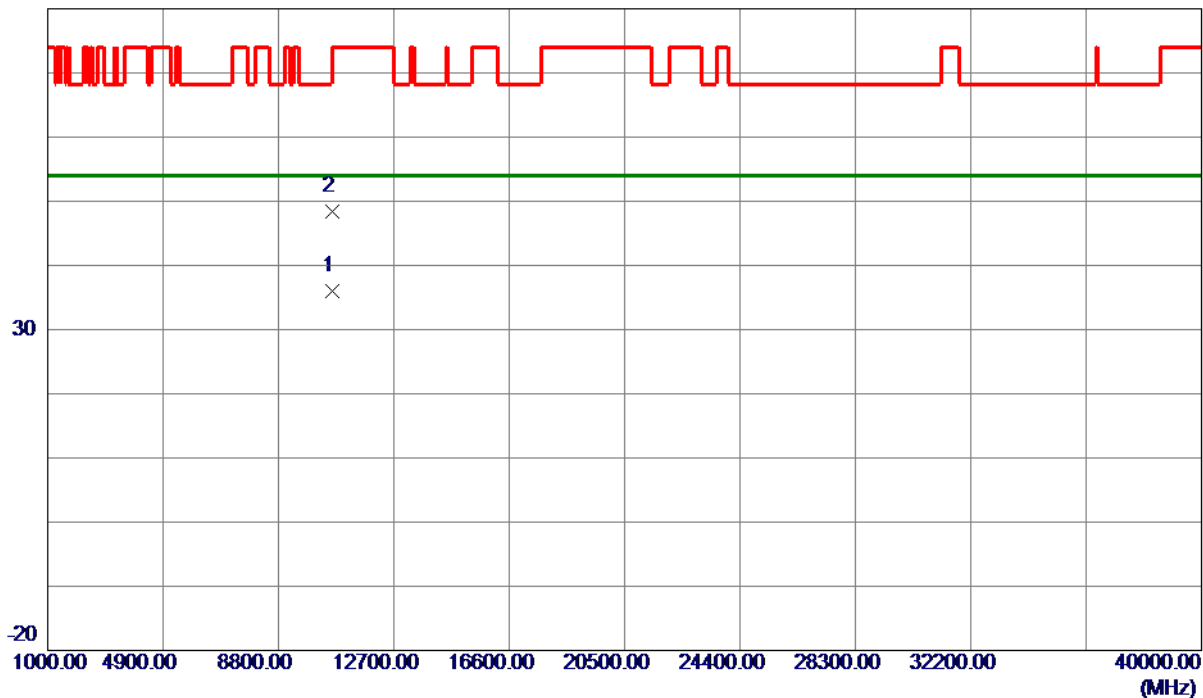
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 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 *	10599.9400	20.63	15.43	36.06	54.00	-17.94	AVG	
2	10600.2450	32.94	15.43	48.37	74.00	-25.63	Peak	

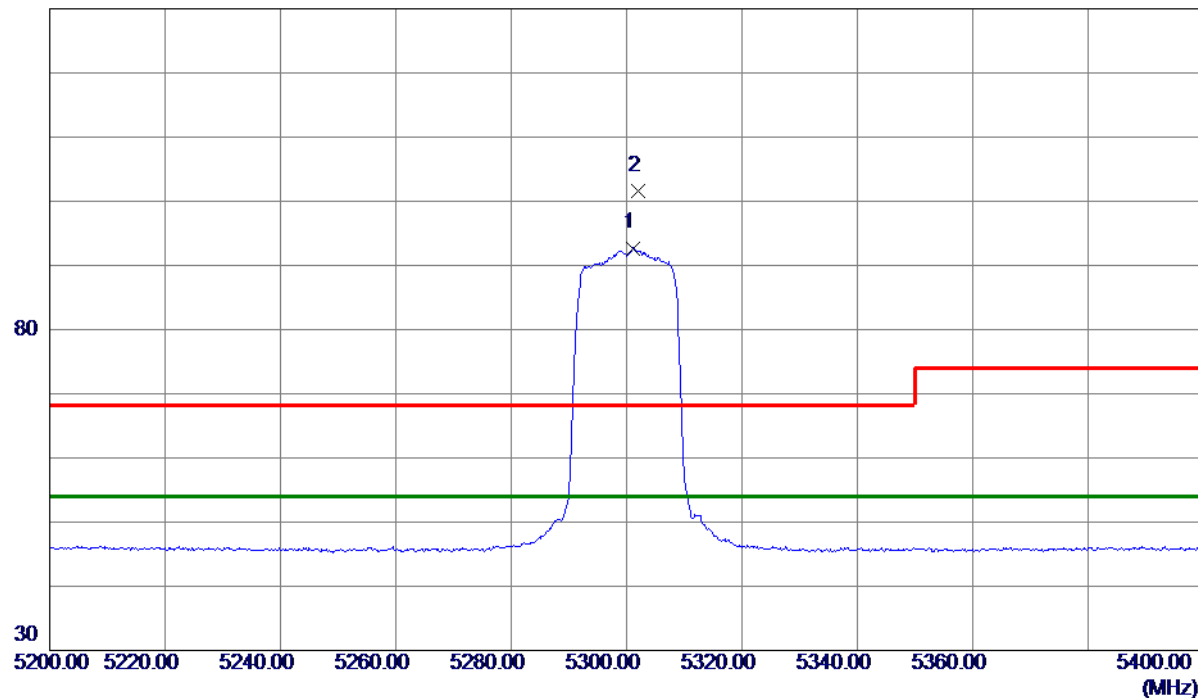
REMARKS:

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

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

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 *	5301.1000	74.61	18.09	92.70	54.00	38.70	AVG	No Limit
2	5301.9000	83.43	18.10	101.53	68.30	33.23	Peak	No Limit

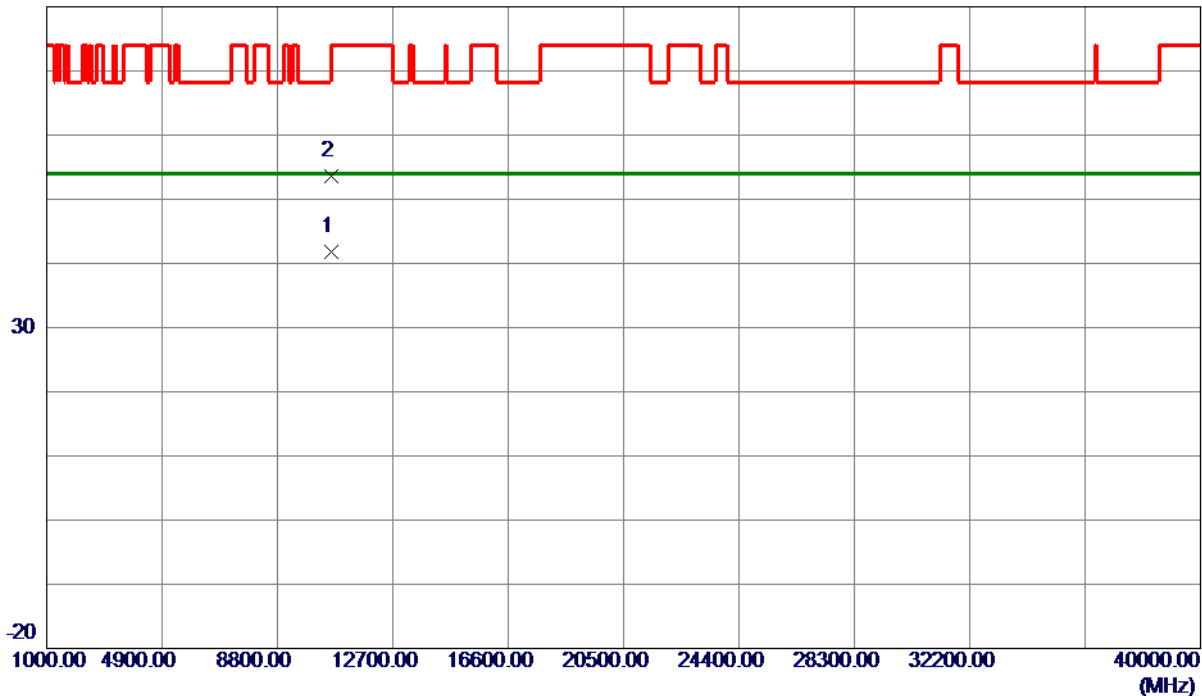
REMARKS:

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

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

Horizontal

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 *	10600.1250	26.29	15.43	41.72	54.00	-12.28	AVG	
2	10603.1500	38.22	15.44	53.66	74.00	-20.34	Peak	

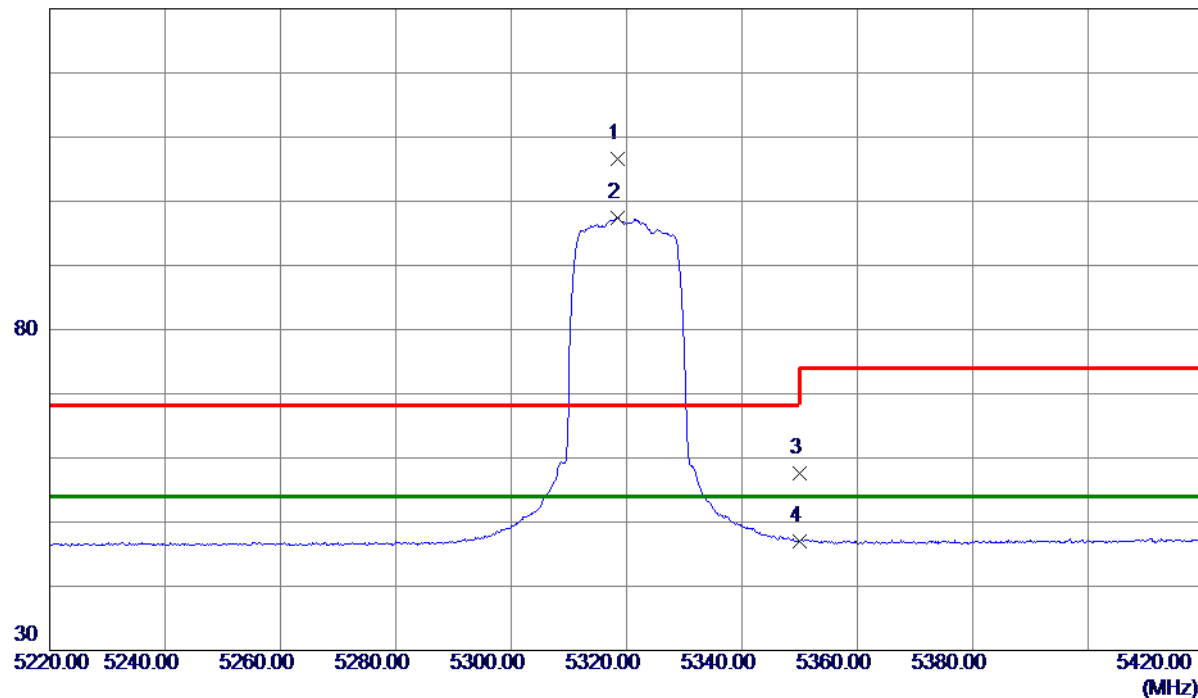
REMARKS:

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

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

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5318.4000	88.55	18.14	106.69	68.30	38.39	Peak	No Limit
2 *	5318.5000	79.28	18.14	97.42	54.00	43.42	AVG	No Limit
3	5350.0000	39.46	18.23	57.69	74.00	-16.31	Peak	
4	5350.0000	28.77	18.23	47.00	54.00	-7.00	AVG	

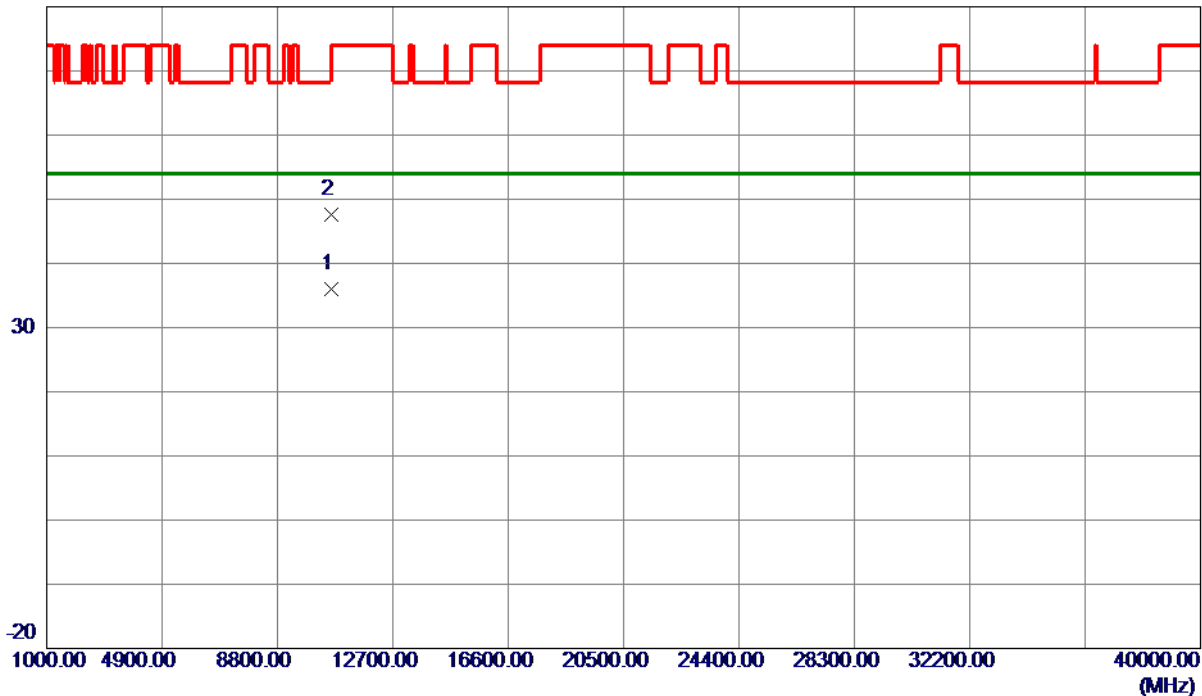
REMARKS:

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

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

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10637.8900	20.62	15.47	36.09	54.00	-17.91	AVG	
2	10639.0700	32.08	15.47	47.55	74.00	-26.45	Peak	

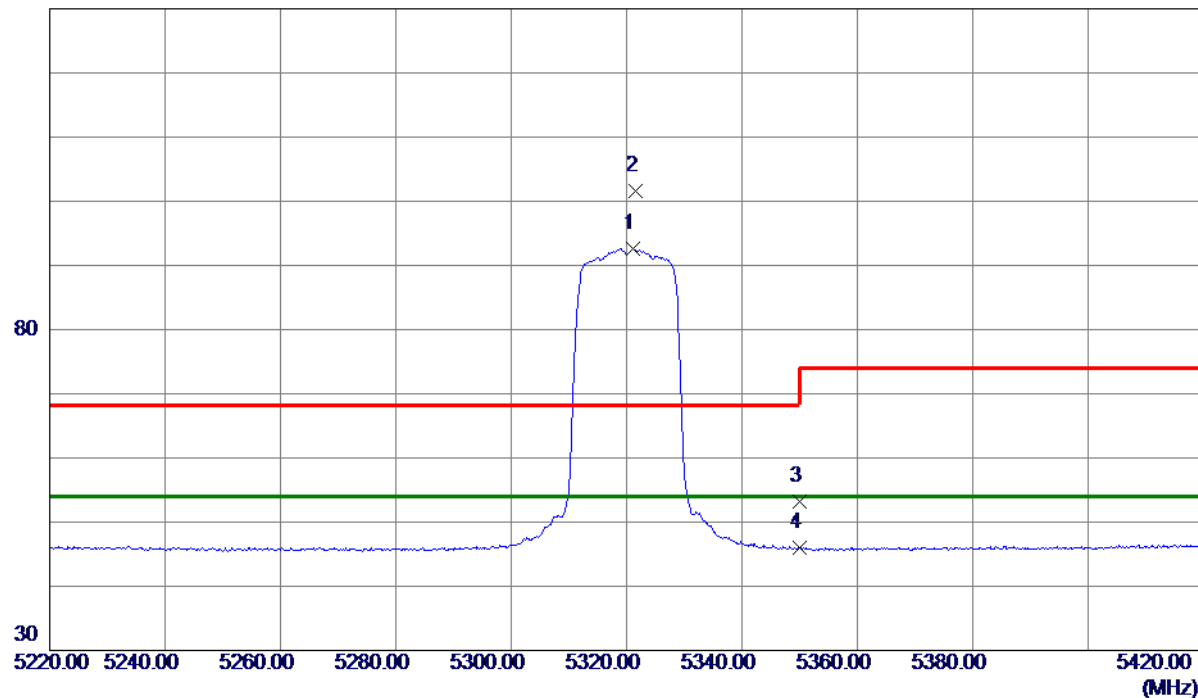
REMARKS:

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

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

Horizontal

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 *	5321.1000	74.47	18.15	92.62	54.00	38.62	AVG	No Limit
2	5321.5000	83.39	18.15	101.54	68.30	33.24	Peak	No Limit
3	5350.0000	34.89	18.23	53.12	74.00	-20.88	Peak	
4	5350.0000	27.80	18.23	46.03	54.00	-7.97	AVG	

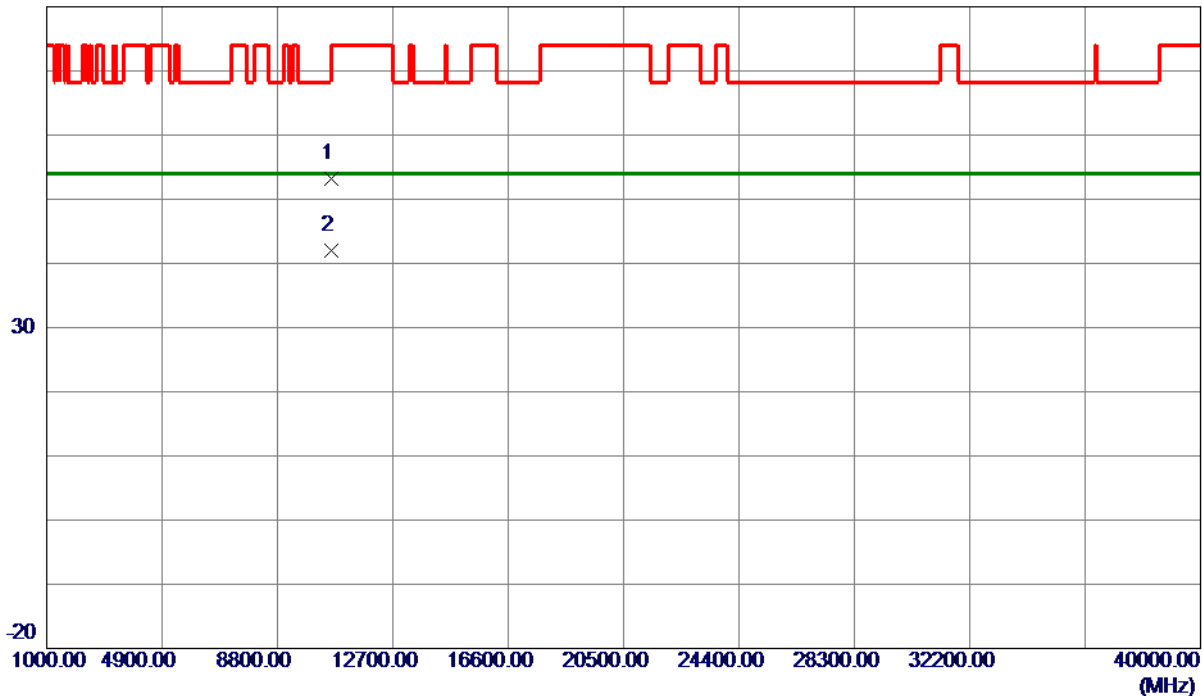
REMARKS:

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

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

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10635.5500	37.78	15.47	53.25	74.00	-20.75	Peak	
2 *	10640.3750	26.56	15.47	42.03	54.00	-11.97	AVG	

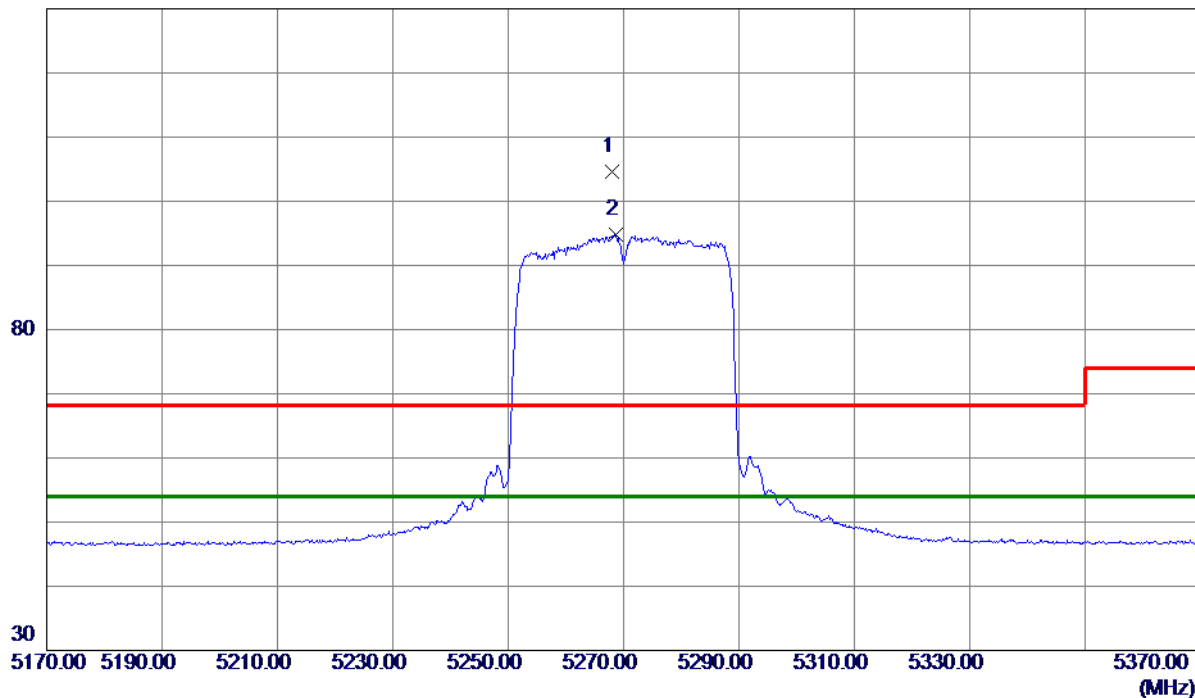
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 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	5268.0000	86.61	18.00	104.61	68.30	36.31	Peak	No Limit
2 *	5268.7000	76.84	18.00	94.84	54.00	40.84	AVG	No Limit

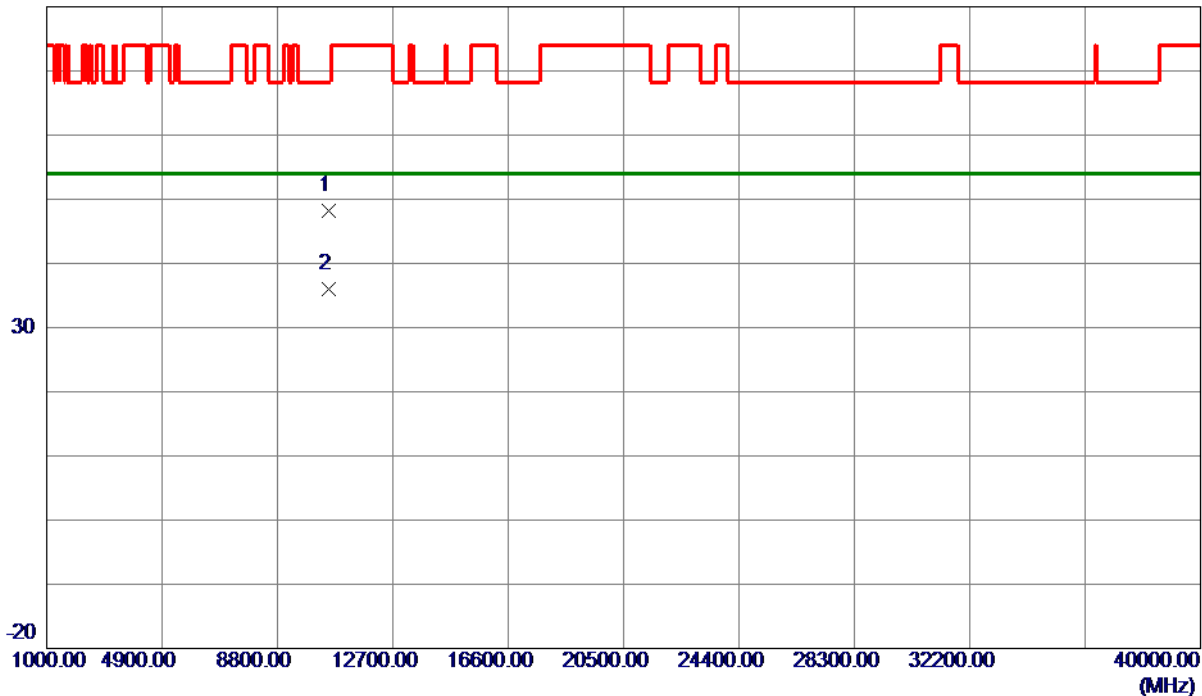
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 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	10542.2550	32.88	15.37	48.25	68.30	-20.05	Peak	
2 *	10544.3150	20.60	15.38	35.98	54.00	-18.02	AVG	

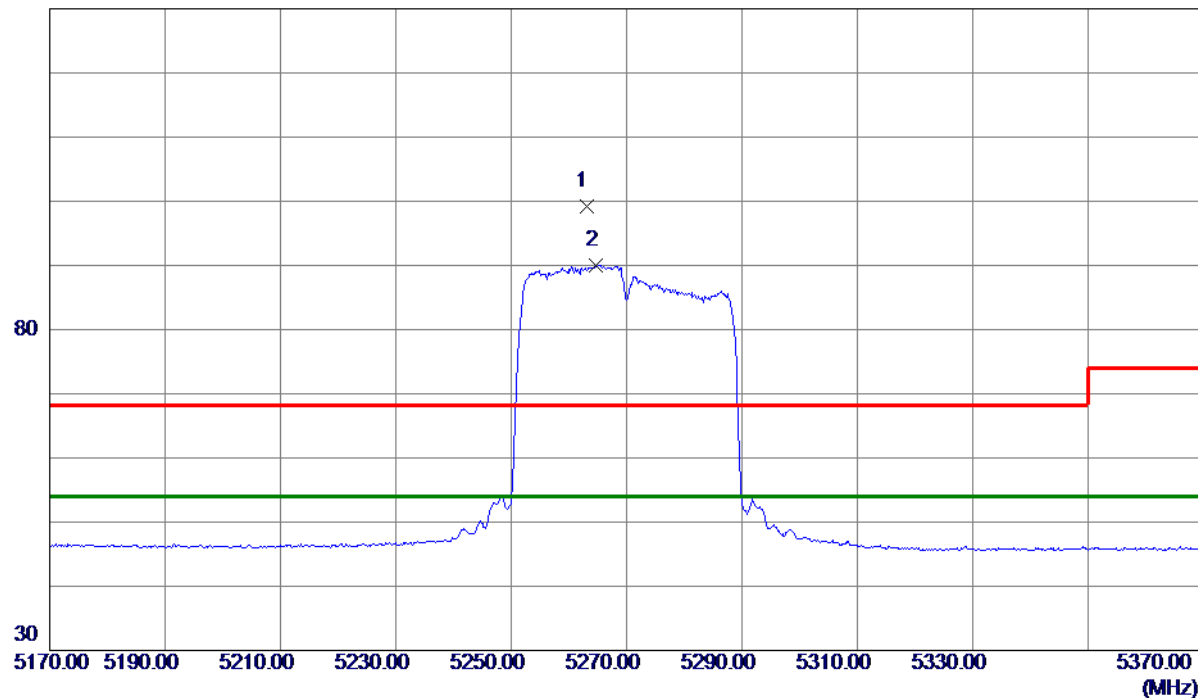
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 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	5263.0000	81.26	17.99	99.25	68.30	30.95	Peak	No Limit
2 *	5264.7000	72.10	17.99	90.09	54.00	36.09	AVG	No Limit

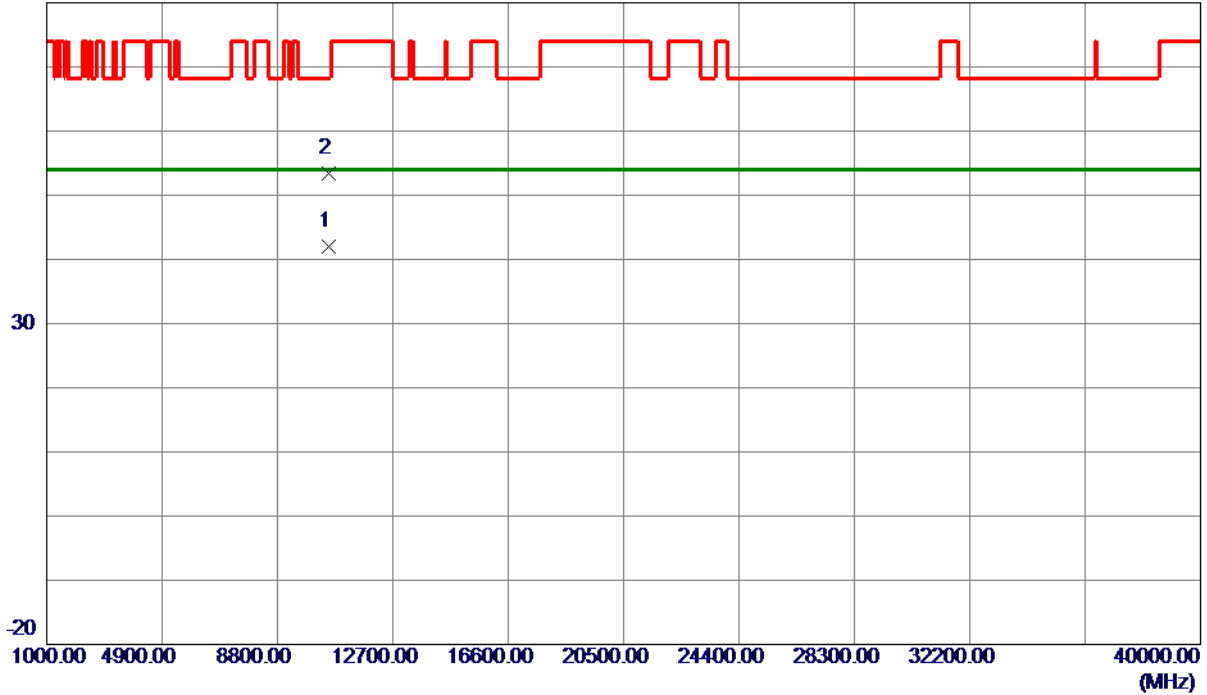
REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 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 *	10539.9000	26.70	15.37	42.07	54.00	-11.93	AVG	
2	10540.9000	38.03	15.37	53.40	68.30	-14.90	Peak	

REMARKS:

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