

FCC Radio Test Report

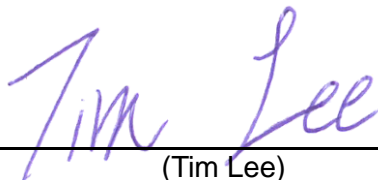
FCC ID: TE7EC440-G4U

This report concerns: Original Grant


Project No. : 1812C143
Equipment : AC2600 Wireless Dual Band Gigabit Router
Test Model : EC440-G4u
Series Model : N/A
Applicant : TP-Link Technologies Co., Ltd.
Address : Building 24 (floors 1,3,4,5) and 28
(floors1-4),CentralScience and Technology
Park,Nanshan Shenzhen,518057China

Date of Receipt : 2018/12/24
Date of Test : 2018/12/24 ~ 2019/4/18
Issued Date : 2019/5/31
Tested by : BTL Inc.


Testing Engineer :


(Tim Lee)

Technical Manager :


(James Chiu)

Authorized Signatory :


(Andy Chiu)

B T L I N C .

No.18, Ln. 171, Sec. 2, Jiuzong Rd.,
Neihu Dist., Taipei City 114, Taiwan (R.O.C.)
TEL: +886-2-2657-3299 FAX: +886-2-2657-3331



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 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.

CONTENTS

REPORT ISSUED HISTORY	5
1 CERTIFICATION	6
2 SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 GENERAL INFORMATION	10
3.1 DESCRIPTION OF EUT	10
3.2 TEST MODES	13
3.3 PARAMETERS OF TEST SOFTWARE	15
3.4 DUTY CYCLE	17
3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	18
3.6 SUPPORT UNITS	18
4 AC POWER LINE CONDUCTED EMISSIONS TEST	19
4.1 LIMIT	19
4.2 TEST PROCEDURE	19
4.3 DEVIATION FROM TEST STANDARD	19
4.4 TEST SETUP	20
4.5 EUT OPERATING CONDITIONS	20
4.6 TEST RESULT	20
5 RADIATED EMISSIONS TEST	21
5.1 LIMIT	21
5.2 TEST PROCEDURE	22
5.3 DEVIATION FROM TEST STANDARD	22
5.4 TEST SETUP	22
5.5 EUT OPERATING CONDITIONS	23
5.6 TEST RESULT – 9 KHZ TO 30 MHZ	24
5.7 TEST RESULT – 30MHZ TO 1000 MHZ	24
5.8 TEST RESULT – ABOVE 1000 MHZ	24
6 BANDWIDTH TEST	25
6.1 LIMIT	25
6.2 TEST PROCEDURE	25
6.3 DEVIATION FROM TEST STANDARD	25
6.4 TEST SETUP	25
6.5 EUT OPERATING CONDITIONS	26
6.6 TEST RESULT	26
7 CONDUCTED OUTPUT POWER TEST	27
7.1 LIMIT	27
7.2 TEST PROCEDURE	27
7.3 DEVIATION FROM TEST STANDARD	27
7.4 TEST SETUP	27
7.5 EUT OPERATING CONDITIONS	28

7.6	TEST RESULT	28
8	POWER SPECTRAL DENSITY	29
8.1	LIMIT	29
8.2	TEST PROCEDURE	29
8.3	DEVIATION FROM TEST STANDARD	29
8.4	TEST SETUP	29
8.5	EUT OPERATING CONDITIONS	30
8.6	TEST RESULT	30
9	FREQUENCY STABILITY TEST	31
9.1	LIMIT	31
9.2	TEST PROCEDURE	31
9.3	DEVIATION FROM TEST STANDARD	31
9.4	TEST SETUP	31
9.5	EUT OPERATING CONDITIONS	31
9.6	TEST RESULT	31
10	LIST OF MEASURING EQUIPMENTS	32
11	EUT TEST PHOTO	34
APPENDIX A	AC POWER LINE CONDUCTED EMISSIONS	38
APPENDIX B	RADIATED EMISSIONS - 9 KHZ TO 30 MHZ	43
APPENDIX C	RADIATED EMISSIONS - 30 MHZ TO 1000 MHZ	52
APPENDIX D	RADIATED EMISSIONS - ABOVE 1000 MHZ	57
APPENDIX E	BANDWIDTH	166
APPENDIX F	CONDUCTED OUTPUT POWER	175
APPENDIX G	POWER SPECTRAL DENSITY	194
APPENDIX H	FREQUENCY STABILITY	219

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	2019/5/31

1 CERTIFICATION

Equipment : AC2600 Wireless Dual Band Gigabit Router
Brand Name : tp-link
Test Model : EC440-G4u
Series Model : N/A
Applicant : TP-Link Technologies Co., Ltd.
Manufacturer : TP-Link Technologies Co., Ltd.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4),CentralScience and Technology Park,Nanshan Shenzhen,518057China
Date of Test : 2018/12/24 ~ 2019/4/18
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart E (15.407)
ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1812C143) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the RLAN 5GHz part.

2 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

FCC Part15, Subpart E (15.407)				
FCC Clause No	Description	Test Result	Judgement	Remark
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	Pass	-----
15.205 15.209 15.407(b)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	Pass	-----
15.407(a)	Bandwidth	APPENDIX E	Pass	-----
15.407(a)	Conducted 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 Requirement	-----	Pass	-----
15.407(c)	Automatically Discontinue Transmission	-----	Pass	NOTE (2)

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving.
The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report:

C05: (FCC RN:674415; FCC DN:TW0659)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

CB15: (VCCI RN: R-20020; FCC RN:674415; FCC DN:TW0659)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{CISPR} requirement.

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
C05	CISPR	150 kHz ~ 30MHz	2.68	C05

B. Radiated emissions below 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
CB15 (3m)	CISPR	30 MHz ~ 200 MHz	V	4.20
		30 MHz ~ 200 MHz	H	3.64
		200 MHz ~ 1,000 MHz	V	4.56
		200 MHz ~ 1,000 MHz	H	3.90

C. Radiated emissions above 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
CB15 (3m)	CISPR	1 GHz ~ 6 GHz	V	4.46
		1 GHz ~ 6 GHz	H	4.40
		6 GHz ~18 GHz	V	3.88
		6 GHz ~18 GHz	H	4.00

Test Site	Method	Measurement Frequency Range	U (dB)
CB15 (1m)	CISPR	18 GHz ~ 26.5 GHz	4.62
		26.5 GHz ~ 40 GHz	5.12

D. Conducted tests:

Item	Method	U
Bandwidth	ANSI	3.8 %
Output Power	ANSI	0.95 dB
Power Spectral Density	ANSI	0.86 dB
Conducted Spurious Emissions	ANSI	2.71 dB

NOTE:

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

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR} , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz : 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz : 5.2 dB

3 GENERAL INFORMATION

3.1 DESCRIPTION OF EUT

Equipment	AC2600 Wireless Dual Band Gigabit Router
Brand Name	tp-link
Test Model	EC440-G4u
Series Model	N/A
Model Difference	N/A
Power Source	DC Voltage supplied from AC/DC adapter.
Power Rating	I/P: 100-240V~50/60Hz, 1.5A O/P: 12.0V---3300mA
Operation Frequency	UNII-1: 5180 MHz to 5240 MHz UNII-3: 5745 MHz to 5825 MHz
Modulation Type	OFDM
Bit Rate of Transmitter	up to 1733 Mbps
Maximum Output Power for UNII-1 For CDD mode	IEEE 802.11a: 22.53 dBm (0.1791 W) IEEE 802.11n (HT20): 22.61 dBm (0.1826 W) IEEE 802.11n (HT40): 25.53 dBm (0.3574 W) IEEE 802.11ac (VHT20): 22.60 dBm (0.1818 W) IEEE 802.11ac (VHT40): 25.29 dBm (0.3378 W) IEEE 802.11ac (VHT80): 21.02 dBm (0.1265 W)
Maximum Output Power for UNII-1 For beamforming mode	IEEE 802.11ac (VHT20): 21.56 dBm (0.1432 W) IEEE 802.11ac (VHT40): 23.84 dBm (0.2423 W) IEEE 802.11ac (VHT80): 21.02 dBm (0.1265 W)
Maximum Output Power for UNII-3 For CDD mode	IEEE 802.11a: 29.37 dBm (0.8650 W) IEEE 802.11n (HT20): 29.25 dBm (0.8406 W) IEEE 802.11n (HT40): 29.20 dBm (0.8318 W) IEEE 802.11ac (VHT20): 29.17 dBm (0.8260 W) IEEE 802.11ac (VHT40): 29.15 dBm (0.8223W) IEEE 802.11ac (VHT80): 27.02 dBm (0.5031 W)
Maximum Output Power for UNII-3 For beamforming mode	IEEE 802.11ac (VHT20): 23.94 dBm (0.2478 W) IEEE 802.11ac (VHT40): 23.66 dBm (0.2321W) IEEE 802.11ac (VHT80): 23.45 dBm (0.2214 W)
Product Covered	1 * Adapter: SO48CU1200330

NOTE:

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

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

UNII-3					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
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) Table for Filed Antenna:

UNII-1:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
1	TP-Link	3101502192	PCB	I-PEX	4.8
2	TP-Link	3101502193	PCB	I-PEX	5.09
3	TP-Link	3101502194	PCB	I-PEX	4.64
4	TP-Link	3101502195	PCB	I-PEX	4.83

UNII-3:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
1	TP-Link	3101502192	PCB	I-PEX	5.4
2	TP-Link	3101502193	PCB	I-PEX	5.66
3	TP-Link	3101502194	PCB	I-PEX	4.67
4	TP-Link	3101502195	PCB	I-PEX	6.47

NOTE:

- (a) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (4T4R). 2.4 GHz and 5GHz can transmit simultaneously.
 (b) The EUT **UNII-1** (AC mode) **and** **UNII-3** (AC mode) are with beamforming function.

(c) For Power Spectral Density

Mode			Directional Gain (dBi.)	Beamforming Gain (dB)	Reduced Limit (dBm/MHz.)
UNII-1	CDD NOTE(1)	IEEE 802.11a	11.11	-	11.89
		IEEE 802.11n (HT20)			
	Beamforming NOTE(2)	IEEE 802.11ac (VHT20)	11.59	0.19	11.22
		IEEE 802.11ac (VHT40)	11.59	0.40	10.92
		IEEE 802.11ac (VHT80)	11.59	0.74	10.67
Mode			Directional Gain (dBi.)	Beamforming Gain (dB)	Reduced Limit (dBm/500KHz.)
UNII-3	CDD NOTE(1)	IEEE 802.11a	12.49	-	23.51
		IEEE 802.11n (HT20)			
	Beamforming NOTE(2)	IEEE 802.11ac (VHT20)	11.59	0.19	24.22
		IEEE 802.11ac (VHT40)	11.59	0.40	23.92
		IEEE 802.11ac (VHT80)	11.59	0.74	23.67

NOTE:

(1) For CDD Mode:

$$\text{Directional Gain} = 10 \log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ANT}}]$$

If the Direction gain exceeds 6 dBi, the reduced power spectral density limits =
Limit - (Directional Gain - 6 dBi)

(2) For Beamforming Mode:

$$\text{Directional Gain} = 10 \log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{\text{ANT}}]$$

If the Direction gain + Beamforming Gain exceeds 6 dBi, the reduced power spectral density limits =
Limit - (Directional Gain + Beamforming Gain - 6 dBi)

(d) For Conducted Output Power

Mode			Directional Gain (dBi.)	Beamforming Gain (dB)	Reduced Limit (dBm)
UNII-1	CDD NOTE(1)	IEEE 802.11a	5.09	-	30
		IEEE 802.11n (HT20)			
	Beamforming NOTE(2)	IEEE 802.11ac (VHT20)	11.59	0.19	24.22
		IEEE 802.11ac (VHT40)	11.59	0.40	23.92
		IEEE 802.11ac (VHT80)	11.59	0.74	23.67
UNII-3	CDD NOTE(1)	IEEE 802.11a	6.47	-	29.53
		IEEE 802.11n (HT20)			
	Beamforming NOTE(2)	IEEE 802.11ac (VHT20)	11.59	0.19	24.22
		IEEE 802.11ac (VHT40)	11.59	0.40	23.92
		IEEE 802.11ac (VHT80)	11.59	0.74	23.67

NOTE:

(1) For CDD Mode:

For $N_{\text{ANT}} = 4 < 5$,

$$\text{Direction gain} = G_{\text{ANT}} + 0$$

If the Direction gain exceeds 6 dBi, the reduced conducted output power limits =
Limit - (Directional Gain - 6 dBi)

(2) For Beamforming Mode:

$$\text{Directional Gain} = G_{\text{ANT}} + 10 \log (N_{\text{ANT}}/N_{\text{SS}})$$

If the Direction gain + Beamforming Gain exceeds 6 dBi, so the reduced power spectral density limits = Limit - (Directional Gain + Beamforming Gain - 6 dBi)

3.2 TEST MODES

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

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

For CDD mode:

AC power line conducted emissions test	
Test Mode	Description
3	UNII-1_TX N (HT40) MODE CHANNEL 38
12	UNII-3_TX AC (VHT80) MODE CHANNEL 155

For CDD mode:

Radiated emissions test	
Test Mode	Description
1	UNII-1_TX A MODE CHANNEL 36/40/48
2	UNII-1_TX N (HT20) MODE CHANNEL 36/40/48
3	UNII-1_TX N (HT40) MODE CHANNEL 38/46
6	UNII-1_TX AC (VHT80) MODE CHANNEL 42
7	UNII-3_TX A MODE CHANNEL 149/157/165
8	UNII-3_TX N (HT20) MODE CHANNEL 149/157/165
9	UNII-3_TX N (HT40) MODE CHANNEL 151/159
12	UNII-3_TX AC (VHT80) MODE CHANNEL 155

For CDD mode:

Conducted test	
Test Mode	Description
1	UNII-1_TX A MODE CHANNEL 36/40/48
2	UNII-1_TX N (HT20) MODE CHANNEL 36/40/48
3	UNII-1_TX N (HT40) MODE CHANNEL 38/46
4	UNII-1_TX AC (VHT20) MODE CHANNEL 36/40/48
5	UNII-1_TX AC (VHT40) MODE CHANNEL 38/46
6	UNII-1_TX AC (VHT80) MODE CHANNEL 42
7	UNII-3_TX A MODE CHANNEL 149/157/165
8	UNII-3_TX N (HT20) MODE CHANNEL 149/157/165
9	UNII-3_TX N (HT40) MODE CHANNEL 151/159
10	UNII-3_TX AC (VHT20) MODE CHANNEL 149/157/165
11	UNII-3_TX AC (VHT40) MODE CHANNEL 151/159
12	UNII-3_TX AC (VHT80) MODE CHANNEL 155

For beamforming mode:

Radiated emissions test	
Test Mode	Description
4	UNII-1_TX AC (VHT20) MODE CHANNEL 36/40/48
5	UNII-1_TX AC (VHT40) MODE CHANNEL 38/46
6	UNII-1_TX AC (VHT80) MODE CHANNEL 42
10	UNII-3_TX AC (VHT20) MODE CHANNEL 149/157/165
11	UNII-3_TX AC (VHT40) MODE CHANNEL 151/159
12	UNII-3_TX AC (VHT80) MODE CHANNEL 155

For beamforming mode:

Conducted test	
Test Mode	Description
4	UNII-1_TX AC (VHT20) MODE CHANNEL 36/40/48
5	UNII-1_TX AC (VHT40) MODE CHANNEL 38/46
6	UNII-1_TX AC (VHT80) MODE CHANNEL 42
10	UNII-3_TX AC (VHT20) MODE CHANNEL 149/157/165
11	UNII-3_TX AC (VHT40) MODE CHANNEL 151/159
12	UNII-3_TX AC (VHT80) MODE CHANNEL 155

NOTE:

- (1) The measurements are performed at the low, middle and high available channels.
- (2) For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated emission below 1 GHz test, the IEEE 802.11ac (VHT80) for UNII-1 and UNII-3 were found to be the worst case and recorded.
- (4) The EUT contains beamforming and Multi-user MIMO (MU-MIMO) functions and the beamforming mode was found to be the worst case and recorded.

3.3 PARAMETERS OF TEST SOFTWARE

For CDD mode:

UNII-1			
Test Software	Lantiq DUT Link		
Mode	5180 MHz	5200 MHz	5240 MHz
IEEE 802.11a	16	16	16.5
IEEE 802.11n (HT20)	16	16	16.5
IEEE 802.11ac (VHT20)	16	16	16.5
Mode	5190 MHz	5230 MHz	
IEEE 802.11n (HT40)	16.5	19.5	
IEEE 802.11ac (VHT40)	16.5	19.5	
Mode	5210 MHz		
IEEE 802.11ac (VHT80)	14.5		

UNII-3			
Test Software	Lantiq DUT Link		
Mode	5745 MHz	5785 MHz	5825 MHz
IEEE 802.11a	24	23.5	24.5
IEEE 802.11n (HT20)	23.5	23.5	24
IEEE 802.11ac (VHT20)	23.5	23.5	24
Mode	5755 MHz	5795 MHz	
IEEE 802.11n (HT40)	23.5	23.5	
IEEE 802.11ac (VHT40)	23.5	23.5	
Mode	5775 MHz		
IEEE 802.11ac (VHT80)	21.5		

For beamforming mode:

UNII-1			
Test Software	Lantiq DUT Link		
Mode	5180 MHz	5200 MHz	5240 MHz
IEEE 802.11ac (VHT20)	15	15	15.5
Mode	5190 MHz	5230 MHz	
IEEE 802.11ac (VHT40)	16.5	18	
Mode	5210 MHz		
IEEE 802.11ac (VHT80)	14.5		

UNII-3			
Test Software	Lantiq DUT Link		
Mode	5745 MHz	5785 MHz	5825 MHz
IEEE 802.11ac (VHT20)	17.5	17.5	17.5
Mode	5755 MHz	5795 MHz	
IEEE 802.11ac (VHT40)	16.5	17	
Mode	5775 MHz		
IEEE 802.11ac (VHT80)	17		

3.4 DUTY CYCLE

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

<p style="text-align: center;">IEEE 802.11a</p> <p>Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 3 [T1] 0.05 dB *VIEW 1 MHz SWT 5 ms 1.430000 ms Marker 1 [T1] 10.82 dBm Delta 3 [T1] 0.17 dB 1.390000 ms LVL 30B Center 5.18 GHz 500 μs/ Date: 11.FEB.2019 10:16:48</p> <p>Duty cycle = 1.390 ms / 1.430 ms = 97.20 % Duty Factor = $10 * \log(1 / 0.9720) = 0.12$ dB</p>	<p style="text-align: center;">IEEE 802.11n (HT20)</p> <p>Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 3 [T1] 0.00 dB *VIEW 1 MHz SWT 5 ms 1.340000 ms Marker 1 [T1] 9.82 dBm Delta 3 [T1] -0.09 dB 1.290000 ms LVL 30B Center 5.18 GHz 500 μs/ Date: 11.FEB.2019 10:20:45</p> <p>Duty cycle = 1.290 ms / 1.340 ms = 96.27 % Duty Factor = $10 * \log(1 / 0.9627) = 0.17$ dB</p>
<p style="text-align: center;">IEEE 802.11n (HT40)</p> <p>Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 3 [T1] 2.58 dB *VIEW 1 MHz SWT 5 ms 680.000000 μs Marker 1 [T1] 7.42 dBm Delta 3 [T1] 0.13 dB 0.620000000 μs LVL 30B Center 5.19 GHz 500 μs/ Date: 11.FEB.2019 10:22:55</p> <p>Duty cycle = 0.620 ms / 0.980 ms = 91.18 % Duty Factor = $10 * \log(1 / 0.9118) = 0.40$ dB</p>	<p style="text-align: center;">IEEE 802.11ac (VHT80)</p> <p>Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 3 [T1] -0.52 dB *VIEW 1 MHz SWT 1 ms 354.000000 μs Marker 1 [T1] -4.46 dBm Delta 3 [T1] -3.26 dB 0.290000000 μs LVL 30B Center 5.21 GHz 100 μs/ Date: 18.FEB.2019 19:49:16</p> <p>Duty cycle = 0.290 ms / 0.354 ms = 81.92 % Duty Factor = $10 * \log(1 / 0.8192) = 0.87$ dB</p>

NOTE:

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

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

For IEEE 802.11n (HT40):

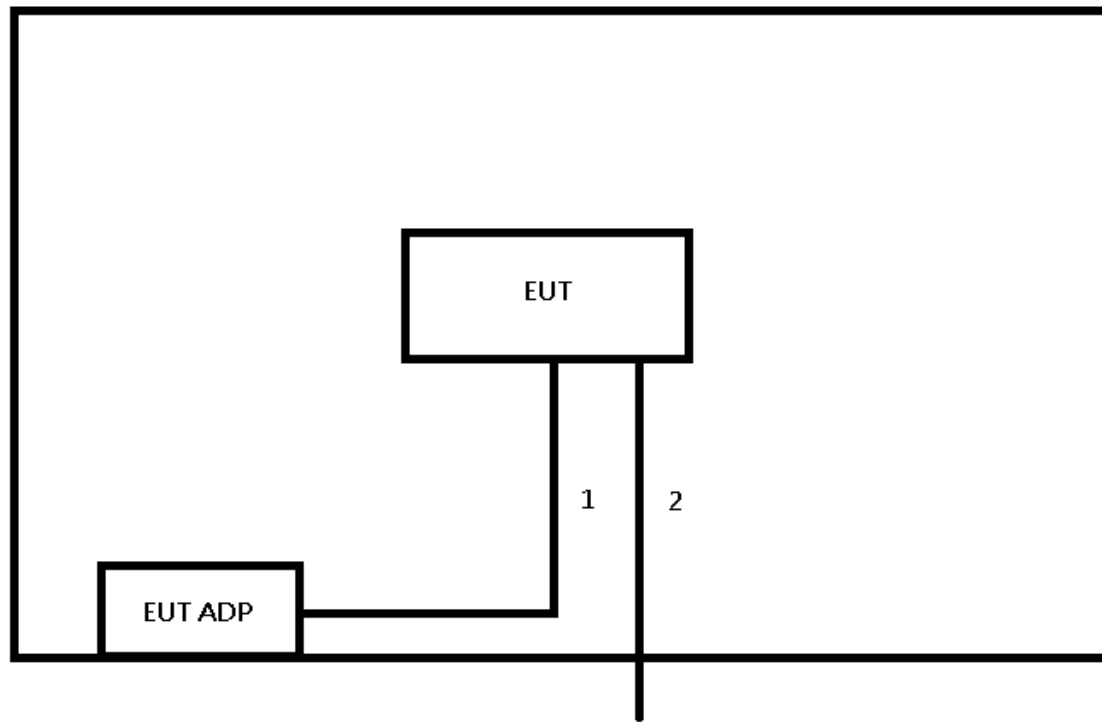
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle $< 98\%$).

For IEEE 802.11ac (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 $< 98\%$).

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 3.6.



3.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
-	-	-	-	-

Item	Cable Type	Shielded	Ferrite Core	Length
1	Power cable	NO	NO	1.2m
2	LAN Cable	NO	NO	5m

4 AC POWER LINE CONDUCTED EMISSIONS TEST

4.1 LIMIT

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

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
 Margin Level = Measurement Value – Limit Value
 Sample calculations: (Refer to page 38, test result No.1.)

Reading Level		Correct Factor		Measurement Value
40.50	+	9.66	=	50.16

Measurement Value		Limit Value		Margin Level
50.16	-	65.88	=	-15.72

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

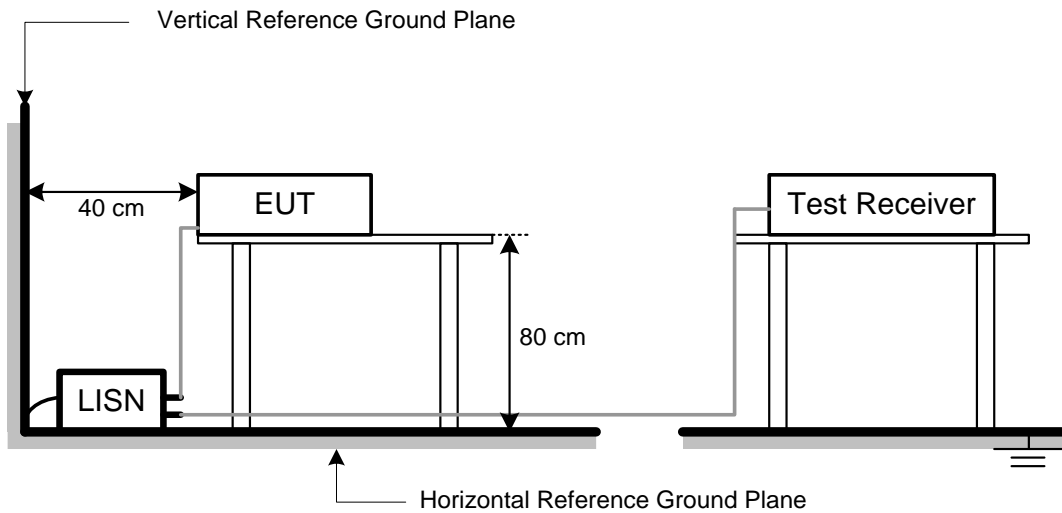
4.2 TEST PROCEDURE

- a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
 All other support equipment were powered from an additional LISN(s).
 The LISN provides 50 Ohm/50uH of 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 to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
 The end of the cable will be terminated, using the correct terminating impedance.
 The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. For the actual test configuration, please refer to the related Item - EUT TEST PHOTO.

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATING CONDITIONS

The EUT was placed on the test table and programmed in normal function.

4.6 TEST RESULT

Temperature: 25 °C Relative Humidity: 45 % Test Voltage: AC 120V/50Hz

Please refer to the APPENDIX A.

5 RADIATED EMISSIONS TEST

5.1 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
960~1000	500	3

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency (MHz)	EIRP Limit (dBm)	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 FCC 16-24, 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.

- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Sample calculations: (Refer to page 42, test result No.1.)

Reading Level		Correct Factor		Measurement Value
14.17	+	14.44	=	28.61

Measurement Value		Limit Value		Margin Level
28.61	-	105.46	=	-76.85

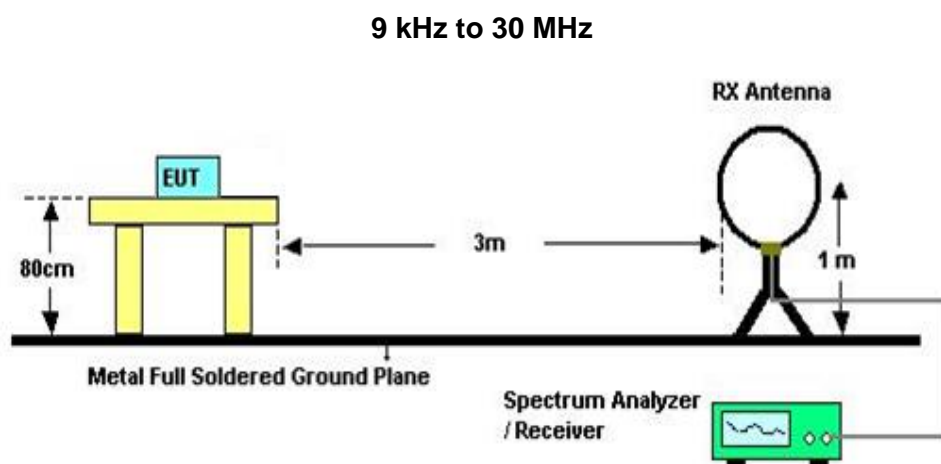
5.2 TEST PROCEDURE

- 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)
- 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)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, 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.
- 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).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- 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.
- 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 1GHz)
- 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 1GHz)
- For the actual test configuration, please refer to the related Item - EUT TEST PHOTO.

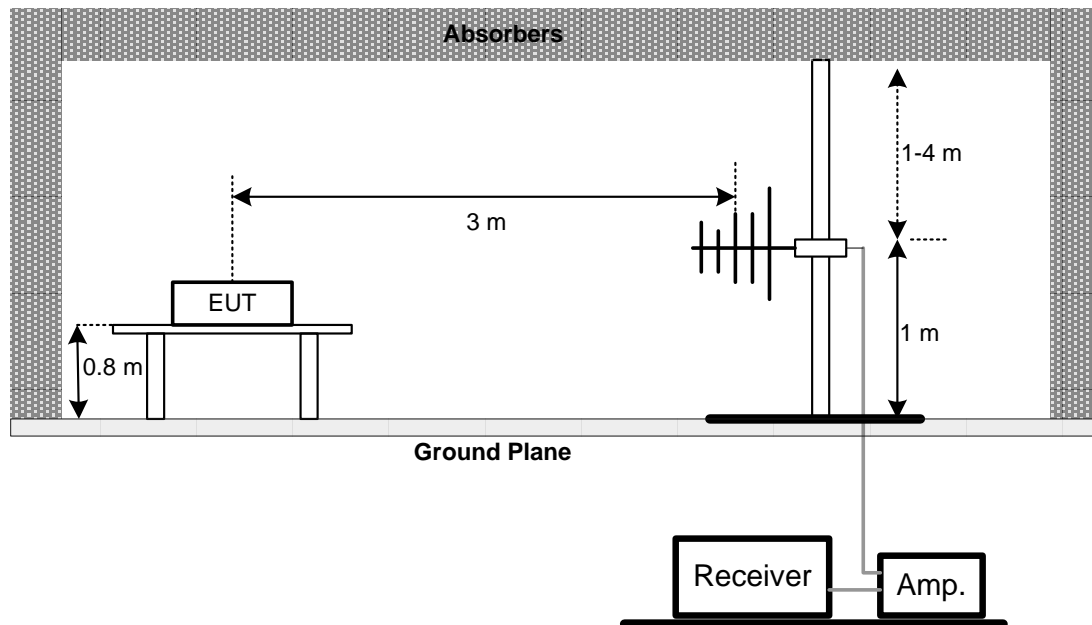
5.3 DEVIATION FROM TEST STANDARD

No deviation.

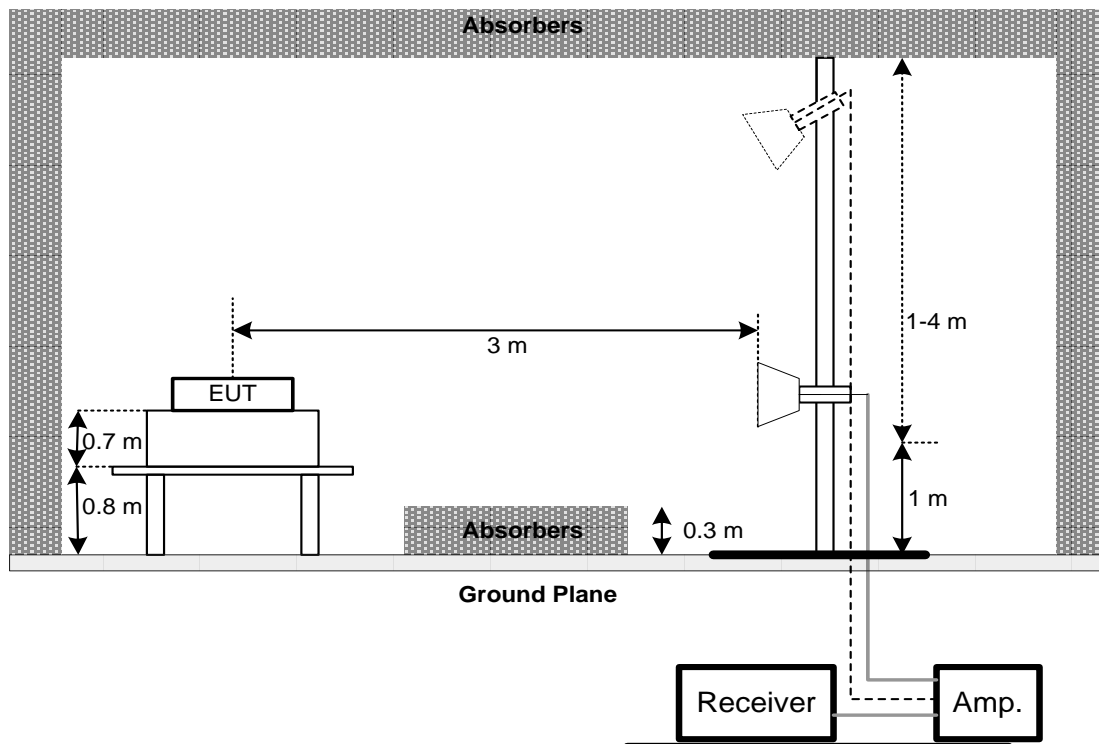
5.4 TEST SETUP



30 MHz to 1 GHz



Above 1 GHz



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT – 9 KHZ TO 30 MHZ

Temperature: 23 °C Relative Humidity: 70 % Test Voltage: AC 120V/50Hz

Please refer to the APPENDIX B.

REMARK:

- (1) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

5.7 TEST RESULT – 30MHZ TO 1000 MHZ

Temperature: 23 °C Relative Humidity: 70 % Test Voltage: AC 120V/50Hz

Please refer to the APPENDIX C.

5.8 TEST RESULT – ABOVE 1000 MHZ

Temperature: 23 °C Relative Humidity: 70 % Test Voltage: AC 120V/50Hz

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.

6 BANDWIDTH TEST

6.1 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

6.2 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:

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

6.3 DEVIATION FROM TEST STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULT

Please refer to the APPENDIX E.

7 CONDUCTED OUTPUT POWER TEST

7.1 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:

- (1) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

7.2 TEST PROCEDURE

- The EUT was directly connected to the power meter 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
Sweep points	≥ 2 x span / RBW
Detector	RMS
Trace	Trace average at least 100 traces in power averaging (rms) mode.
Sweep Time	auto

- Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

7.3 DEVIATION FROM TEST STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULT

Please refer to the APPENDIX F.

8 POWER SPECTRAL DENSITY

8.1 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

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	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.
2. The value measured with RBW=1 MHz is to be added with $10\log(500 \text{ kHz}/1 \text{ MHz})$ which is -3 dB. For example, if the measured value is +10 dBm using RBW = 1 MHz (that is +10 dBm/MHz), then the converted value will be +7 dBm/500 kHz.

8.3 DEVIATION FROM TEST STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULT

Please refer to the APPENDIX G.

9 FREQUENCY STABILITY TEST

9.1 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

9.2 TEST PROCEDURE

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

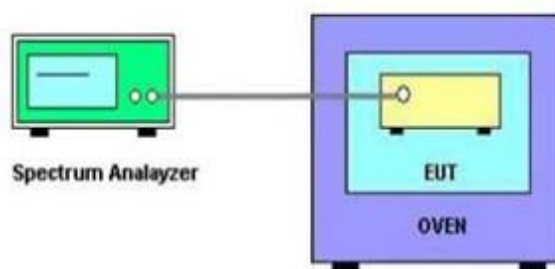
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

- 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~40°C.

9.3 DEVIATION FROM TEST STANDARD

No deviation.

9.4 TEST SETUP



9.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6 TEST RESULT

Please refer to the APPENDIX H.

10 LIST OF MEASURING EQUIPMENTS

AC Power Line Conducted Emissions

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	2019/3/18 2020/3/1
2	Test Cable	EMCI	EMCCFD300-BM -BMR-6000	170715	2019/8/7
3	EMI Test Receiver	R&S	ESR7	101433	2019/12/4
4	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Radiated Emissions

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Preamplifier	EMCI	012645B	980267	2019/4/15 2020/4/3
2	Preamplifier	EMCI	EMC02325	980217	2019/4/15 2020/4/3
3	Preamplifier	EMCI	EMC2654045	980030	2019/4/15 2020/4/3
4	Test Cable	EMCI	EMC104-SM-SM- 8000	8m	2019/4/15 2020/4/3
5	Test Cable	EMCI	EMC104-SM-SM- 800	150207	2019/4/15 2020/4/3
6	Test Cable	EMCI	EEMC104-SM-S M-3000	151205	2019/4/15 2020/4/3
7	MXE EMI Receiver	Agilent	N9038A	MY55420127	2019/3/26 2020/3/15
8	Signal Analyzer	Agilent	N9010A	MY52220990	2019/5/22
9	Loop Ant	EMCO	6502	42960	2019/5/3
10	Horn Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	2019/5/2
11	Horn Ant	Schwarzbeck	BBHA 9170	187	2019/8/16
12	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-548	2019/3/22 2020/3/10
13	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0623	2019/3/22 2020/3/10

26 dB Bandwidth

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	2019/5/27

Conducted Output Power

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	2019/12/5
2	Power Sensor	Anritsu	MA2411B	1126001	2019/12/5

Power Spectral Density

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	2019/5/27

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	2019/5/27

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

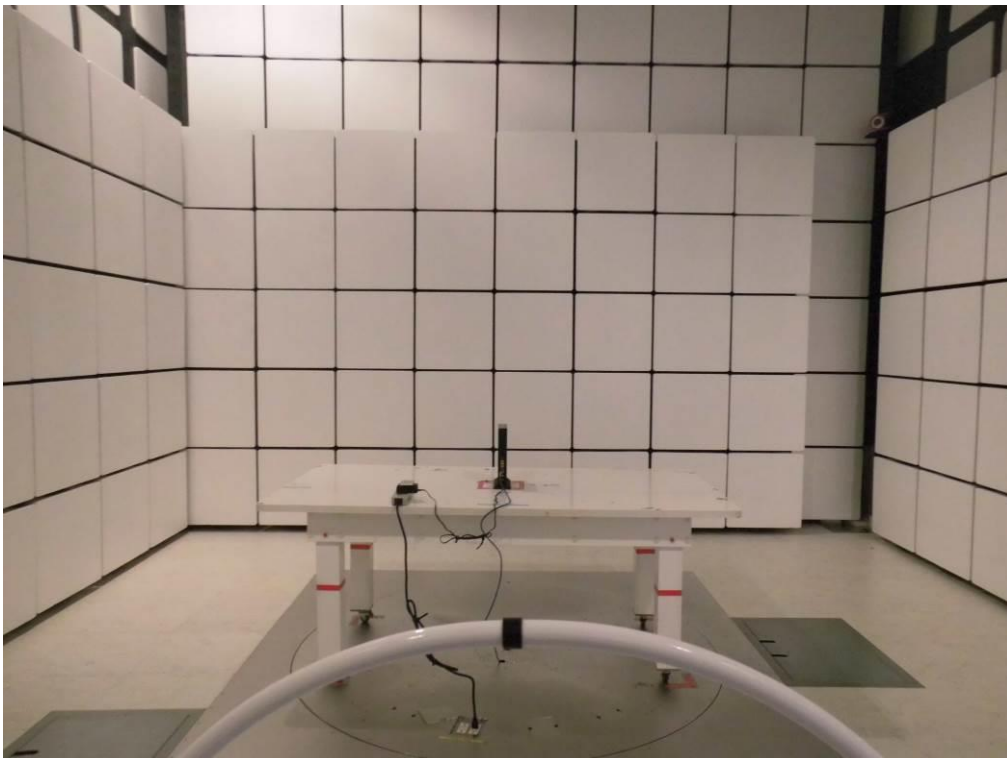
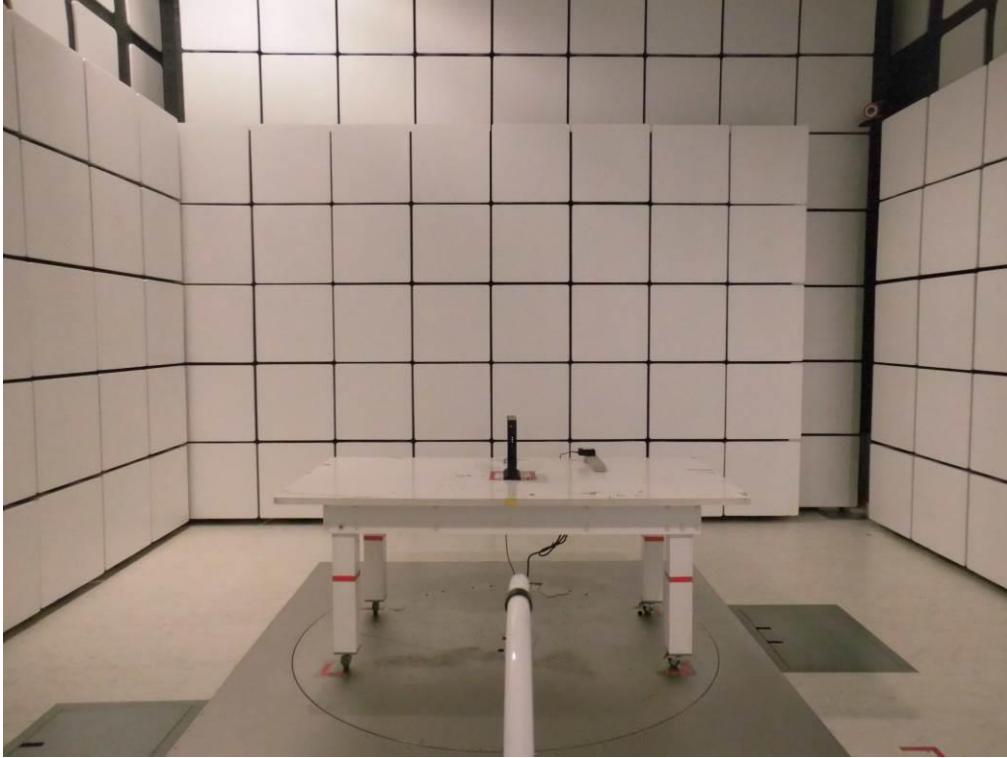
11 EUT TEST PHOTO

Conducted Emissions Test Photos



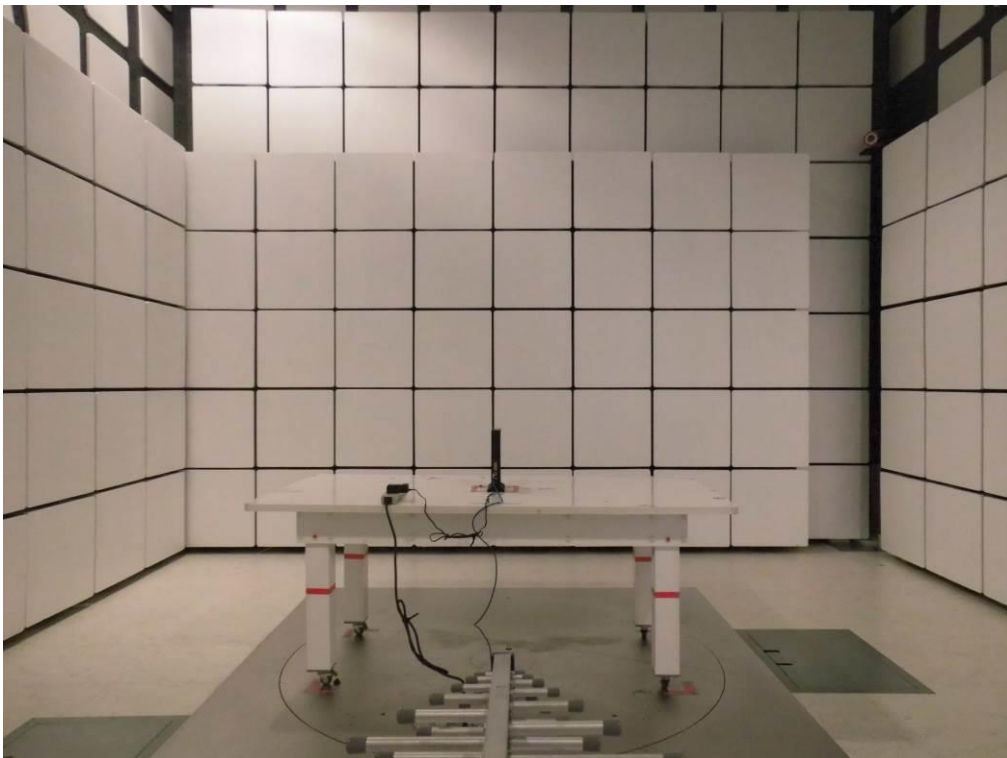
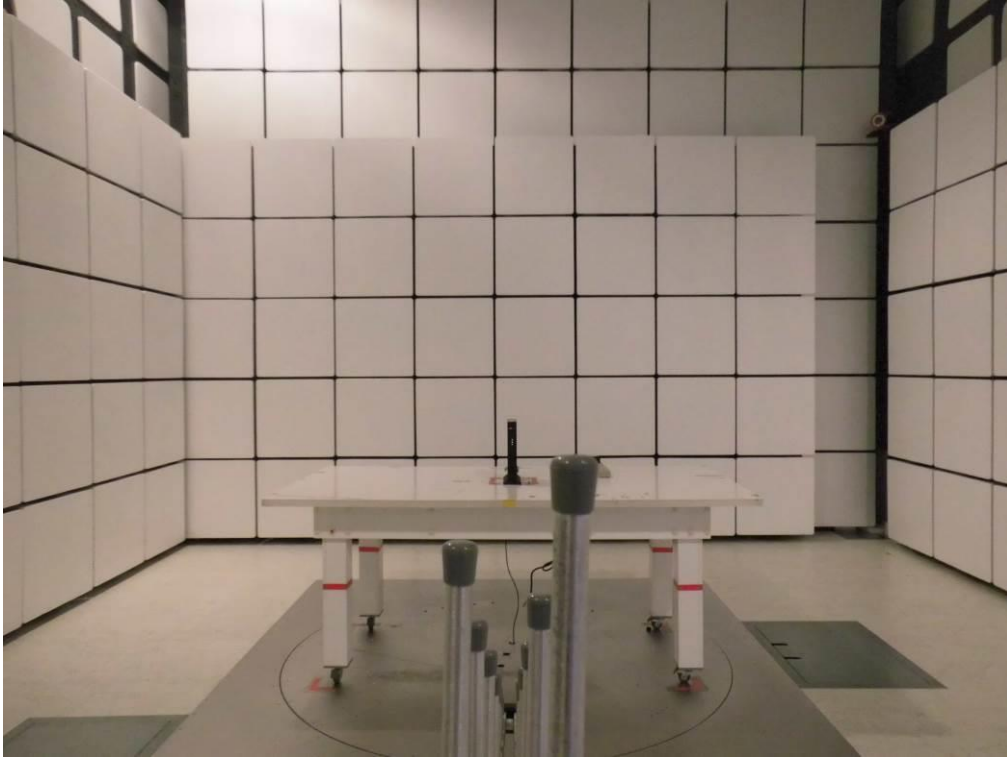
Radiated Emissions Test Photos

9 kHz to 30 MHz



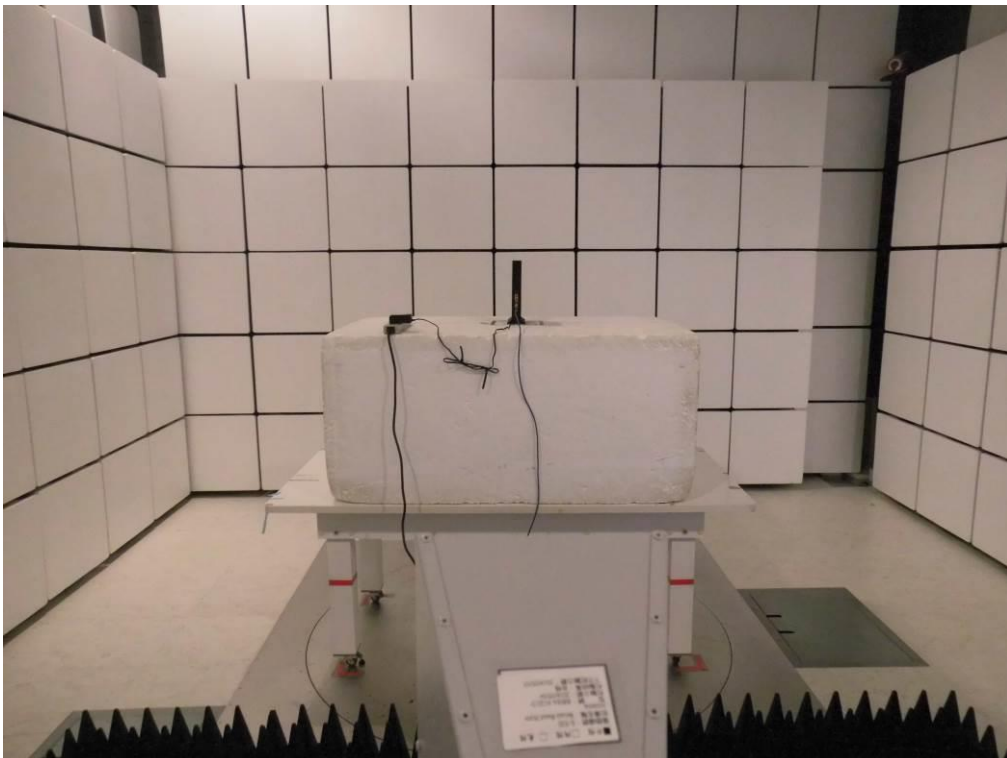
Radiated Emissions Test Photos

30 MHz to 1000 MHz



Radiated Emissions Test Photos

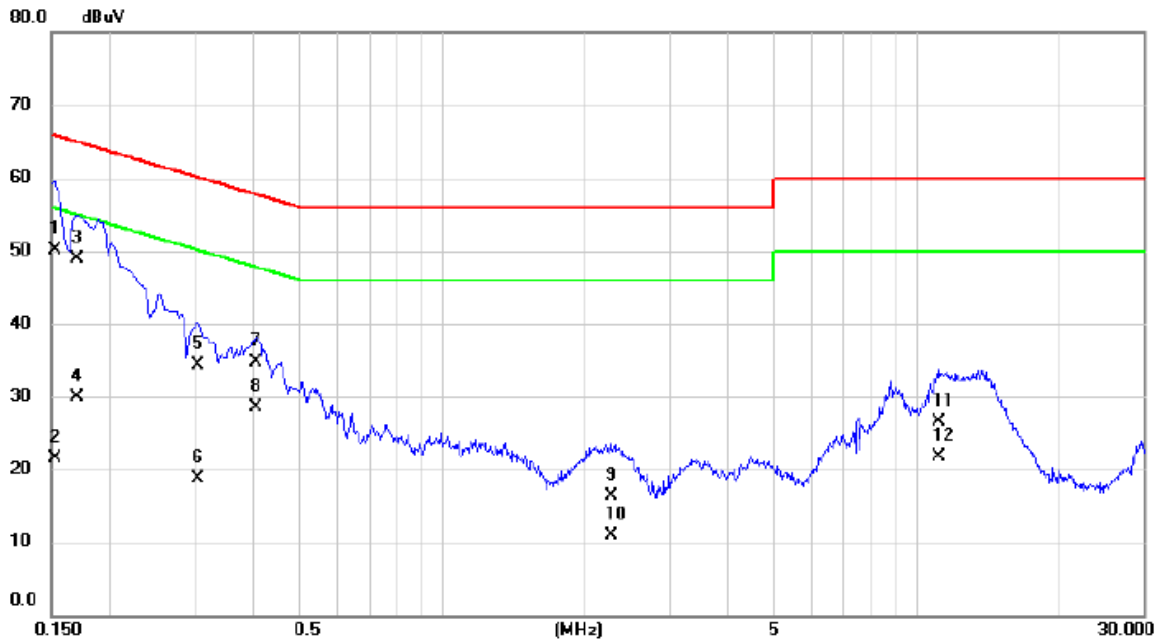
Above 1000 MHz



APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 38

Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1522	40.50	9.66	50.16	65.88	-15.72	QP	
2		0.1522	11.90	9.66	21.56	55.88	-34.32	AVG	
3		0.1702	39.30	9.66	48.96	64.95	-15.99	QP	
4		0.1702	20.20	9.66	29.86	54.95	-25.09	AVG	
5		0.3052	24.70	9.65	34.35	60.10	-25.75	QP	
6		0.3052	9.00	9.65	18.65	50.10	-31.45	AVG	
7		0.4042	25.10	9.65	34.75	57.77	-23.02	QP	
8		0.4042	18.90	9.65	28.55	47.77	-19.22	AVG	
9		2.2672	6.60	9.75	16.35	56.00	-39.65	QP	
10		2.2672	1.10	9.75	10.85	46.00	-35.15	AVG	
11		11.1435	16.60	9.92	26.52	60.00	-33.48	QP	
12		11.1435	11.70	9.92	21.62	50.00	-28.38	AVG	

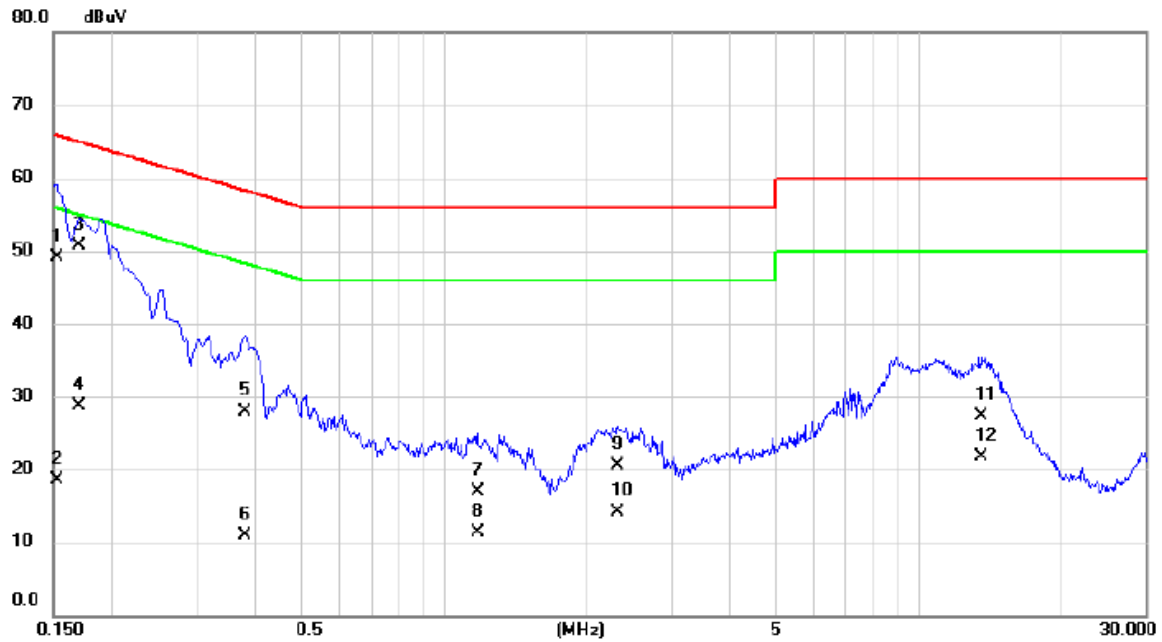
REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 38

Neutral



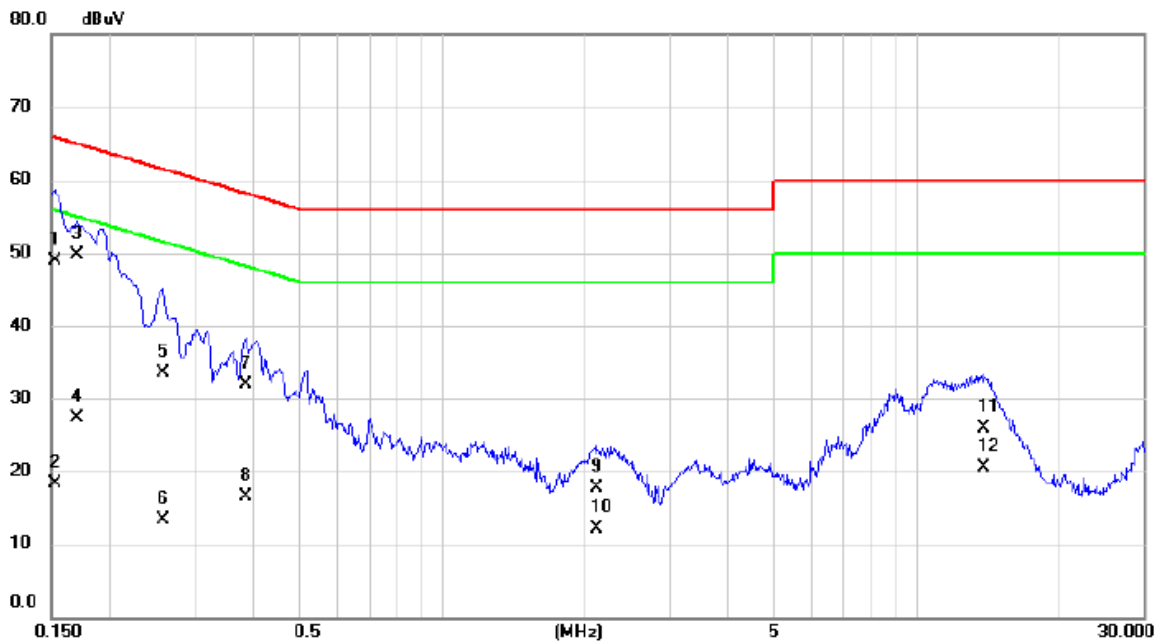
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1522	39.50	9.65	49.15	65.88	-16.73	QP	
2		0.1522	8.90	9.65	18.55	55.88	-37.33	AVG	
3	*	0.1703	41.00	9.65	50.65	64.95	-14.30	QP	
4		0.1703	19.00	9.65	28.65	54.95	-26.30	AVG	
5		0.3795	18.20	9.64	27.84	58.29	-30.45	QP	
6		0.3795	1.30	9.64	10.94	48.29	-37.35	AVG	
7		1.1737	7.30	9.69	16.99	56.00	-39.01	QP	
8		1.1737	1.60	9.69	11.29	46.00	-34.71	AVG	
9		2.3122	10.80	9.73	20.53	56.00	-35.47	QP	
10		2.3122	4.40	9.73	14.13	46.00	-31.87	AVG	
11		13.5713	17.30	9.94	27.24	60.00	-32.76	QP	
12		13.5713	11.70	9.94	21.64	50.00	-28.36	AVG	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1522	39.30	9.66	48.96	65.88	-16.92	QP	
2		0.1522	8.70	9.66	18.36	55.88	-37.52	AVG	
3	*	0.1703	40.10	9.66	49.76	64.95	-15.19	QP	
4		0.1703	17.60	9.66	27.26	54.95	-27.69	AVG	
5		0.2580	23.80	9.66	33.46	61.50	-28.04	QP	
6		0.2580	3.60	9.66	13.26	51.50	-38.24	AVG	
7		0.3862	22.20	9.65	31.85	58.15	-26.30	QP	
8		0.3862	6.90	9.65	16.55	48.15	-31.60	AVG	
9		2.1075	7.90	9.74	17.64	56.00	-38.36	QP	
10		2.1075	2.30	9.74	12.04	46.00	-33.96	AVG	
11		13.8705	15.90	9.95	25.85	60.00	-34.15	QP	
12		13.8705	10.50	9.95	20.45	50.00	-29.55	AVG	

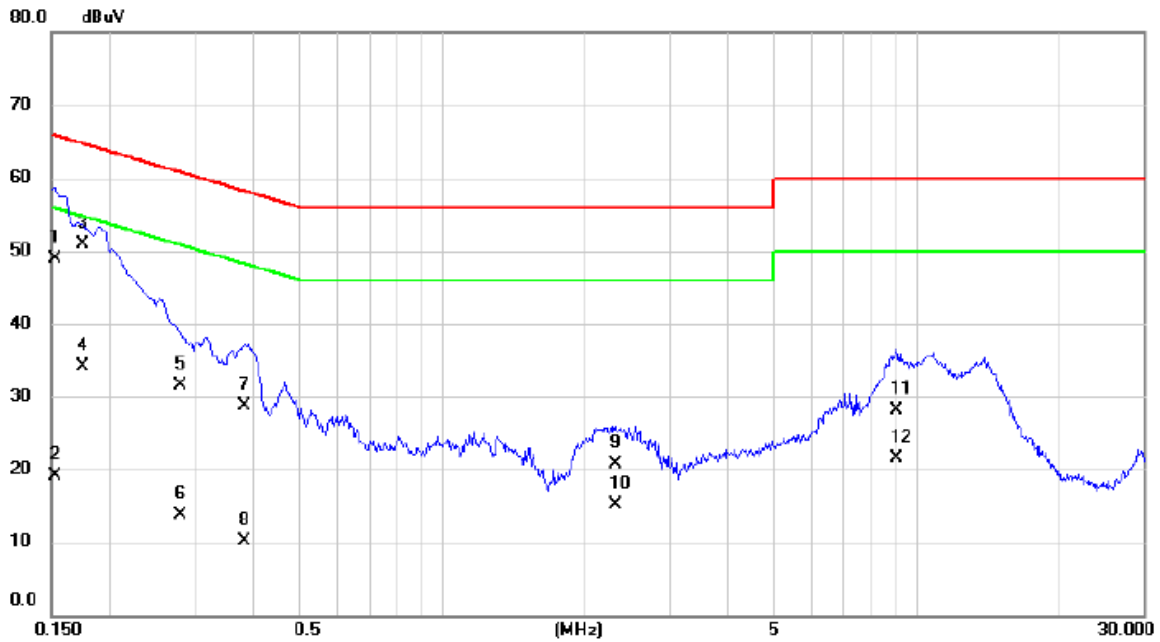
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1522	39.30	9.65	48.95	65.88	-16.93	QP	
2		0.1522	9.40	9.65	19.05	55.88	-36.83	AVG	
3	*	0.1748	41.20	9.65	50.85	64.73	-13.88	QP	
4		0.1748	24.40	9.65	34.05	54.73	-20.68	AVG	
5		0.2805	21.90	9.64	31.54	60.80	-29.26	QP	
6		0.2805	4.10	9.64	13.74	50.80	-37.06	AVG	
7		0.3817	19.10	9.64	28.74	58.24	-29.50	QP	
8		0.3817	0.40	9.64	10.04	48.24	-38.20	AVG	
9		2.3100	11.00	9.73	20.73	56.00	-35.27	QP	
10		2.3100	5.40	9.73	15.13	46.00	-30.87	AVG	
11		9.0465	18.30	9.90	28.20	60.00	-31.80	QP	
12		9.0465	11.60	9.90	21.50	50.00	-28.50	AVG	

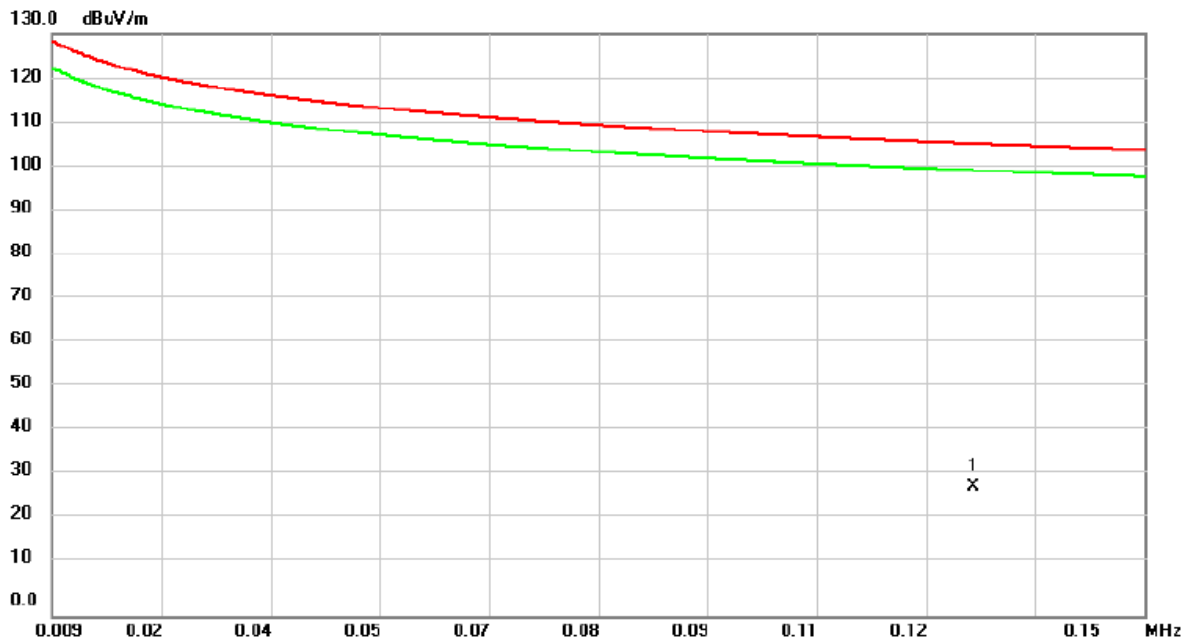
REMARKS:

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

APPENDIX B RADIATED EMISSIONS - 9 KHZ TO 30 MHZ

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1280	14.17	14.44	28.61	105.46	-76.85	AVG	

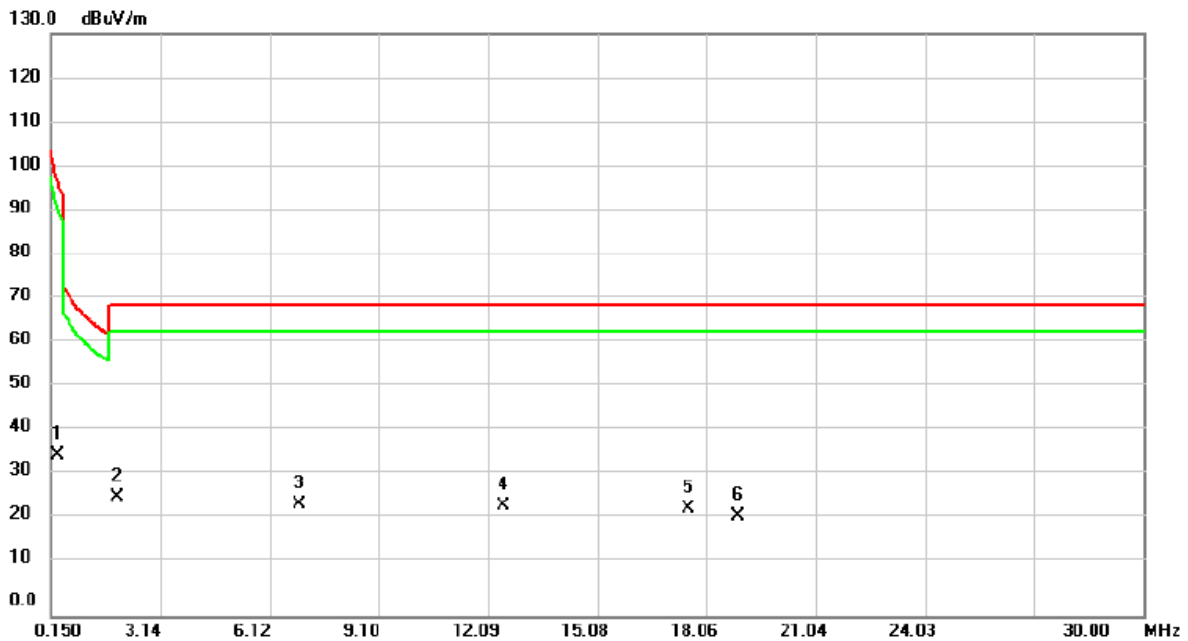
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.3092	29.09	6.81	35.90	97.80	-61.90	AVG	
2	*	1.9410	29.24	-2.79	26.45	69.54	-43.09	QP	
3		6.9160	28.94	-4.11	24.83	69.54	-44.71	QP	
4		12.4880	29.24	-4.82	24.42	69.54	-45.12	QP	
5		17.5823	29.92	-6.06	23.86	69.54	-45.68	QP	
6		18.8958	28.62	-6.42	22.20	69.54	-47.34	QP	

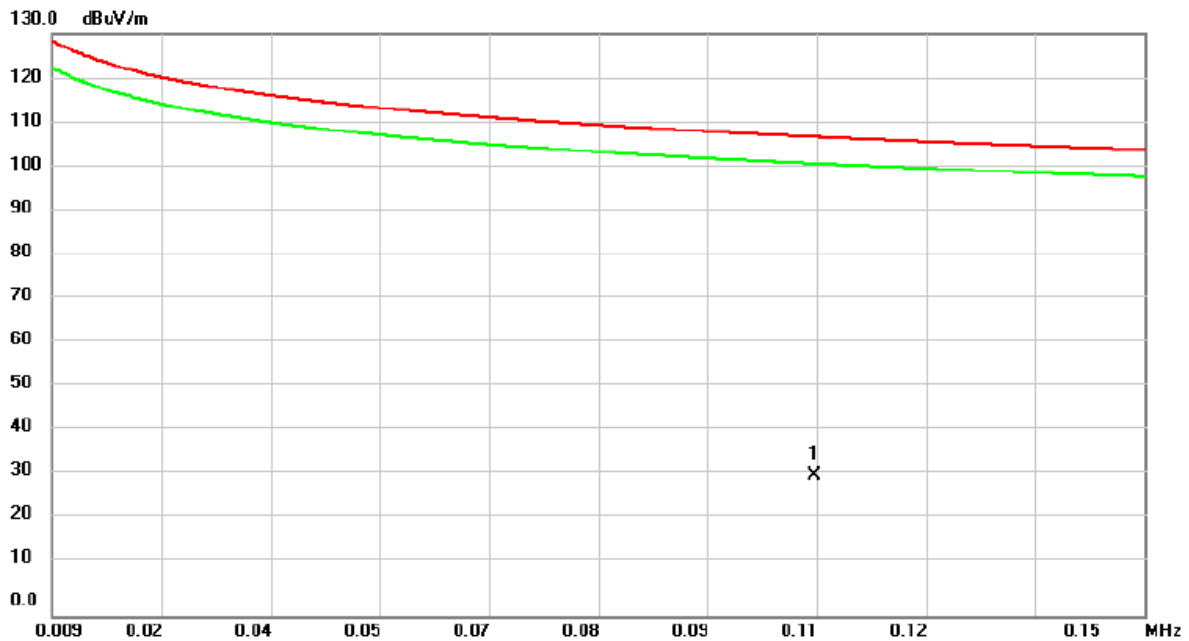
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1075	15.76	15.60	31.36	106.98	-75.62	QP	

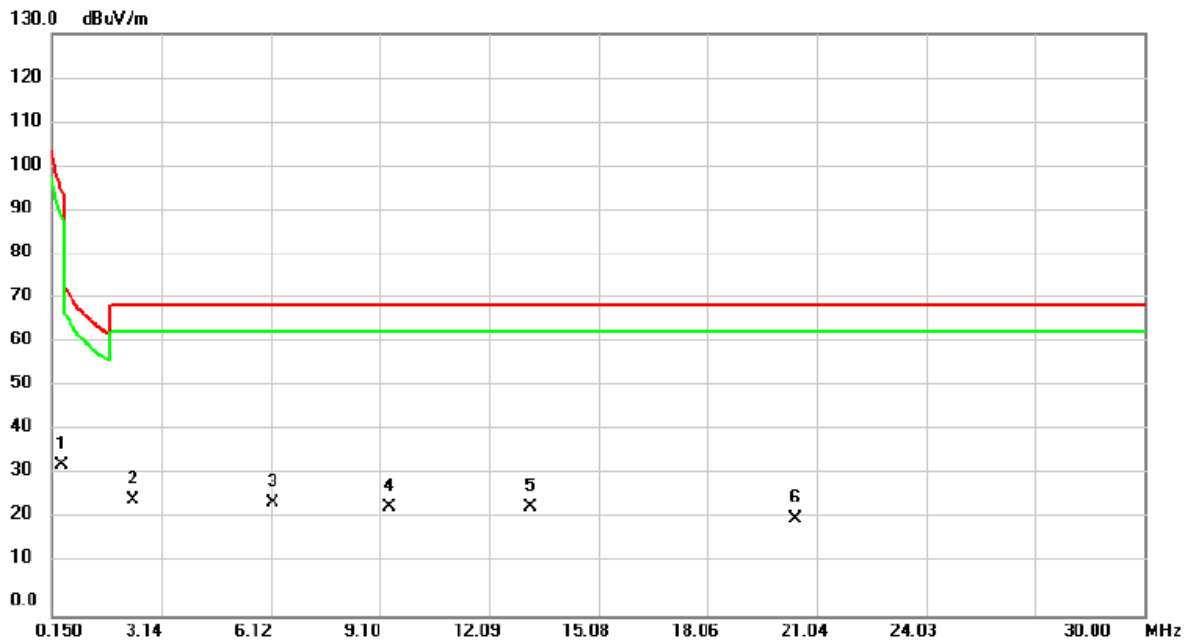
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.3888	28.70	5.10	33.80	95.81	-62.01	AVG	
2	*	2.3390	29.01	-3.19	25.82	69.54	-43.72	QP	
3		6.1598	29.22	-4.04	25.18	69.54	-44.36	QP	
4		9.3438	29.07	-4.72	24.35	69.54	-45.19	QP	
5		13.2044	29.12	-4.82	24.30	69.54	-45.24	QP	
6		20.4480	28.22	-6.54	21.68	69.54	-47.86	QP	

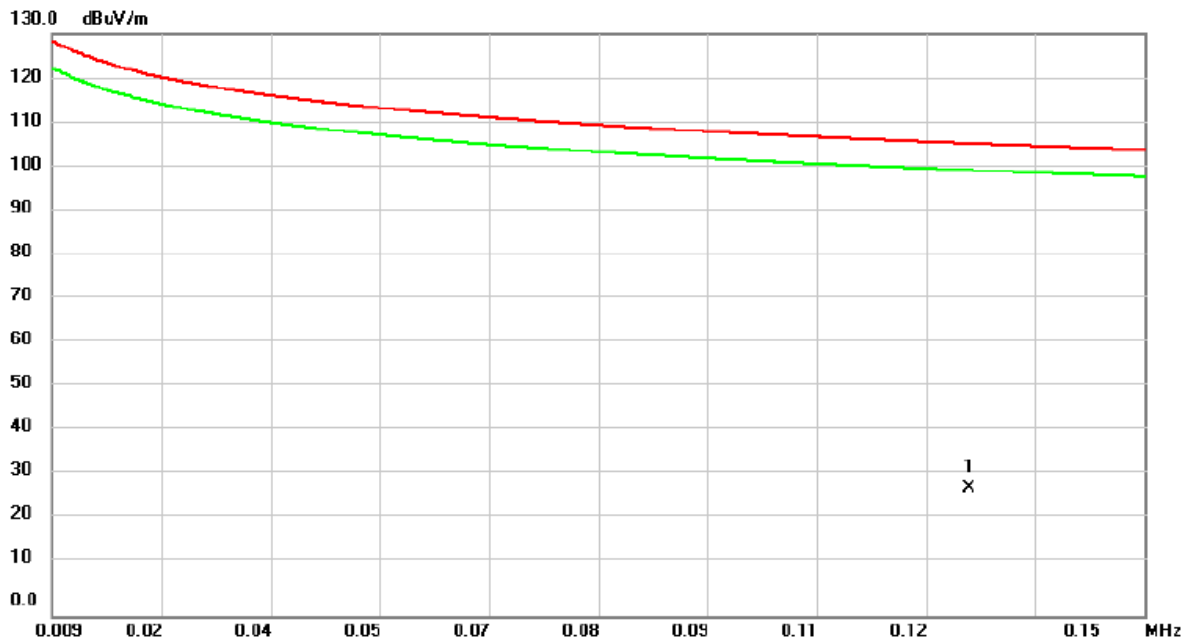
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Ant 90°



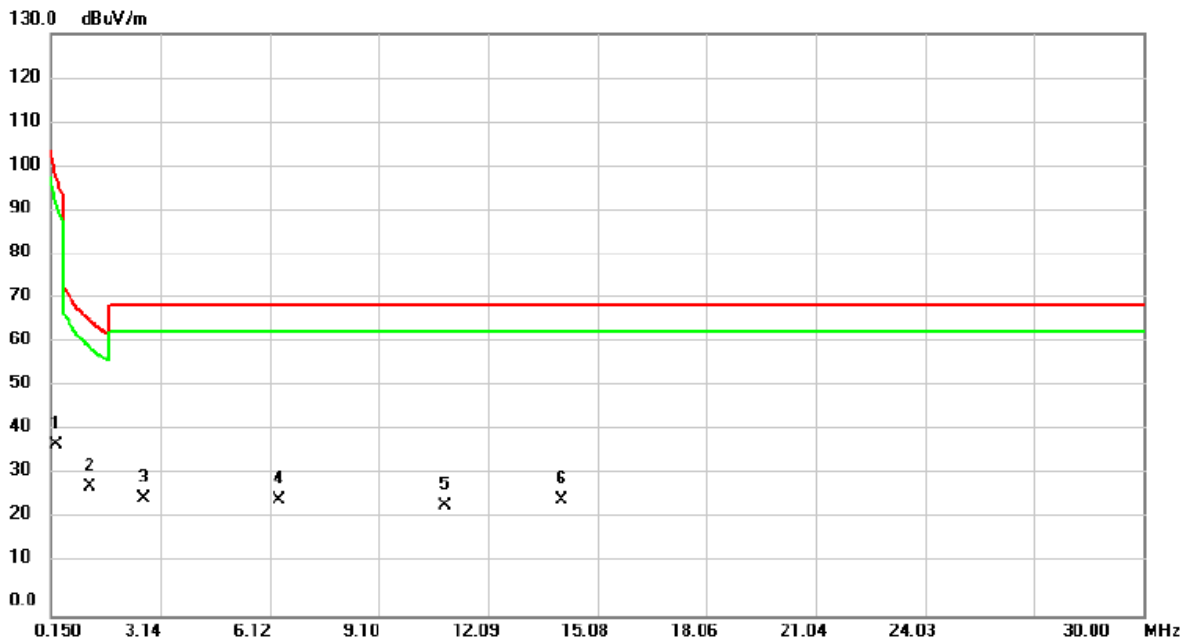
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1274	13.84	14.47	28.31	105.50	-77.19	AVG	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.2694	30.01	8.03	38.04	99.00	-60.96	AVG	
2	*	1.2245	29.63	-0.93	28.70	65.84	-37.14	QP	
3		2.6574	29.52	-3.41	26.11	69.54	-43.43	QP	
4		6.3588	29.84	-4.06	25.78	69.54	-43.76	QP	
5		10.8960	29.27	-4.80	24.47	69.54	-45.07	QP	
6		14.0800	30.59	-4.84	25.75	69.54	-43.79	QP	

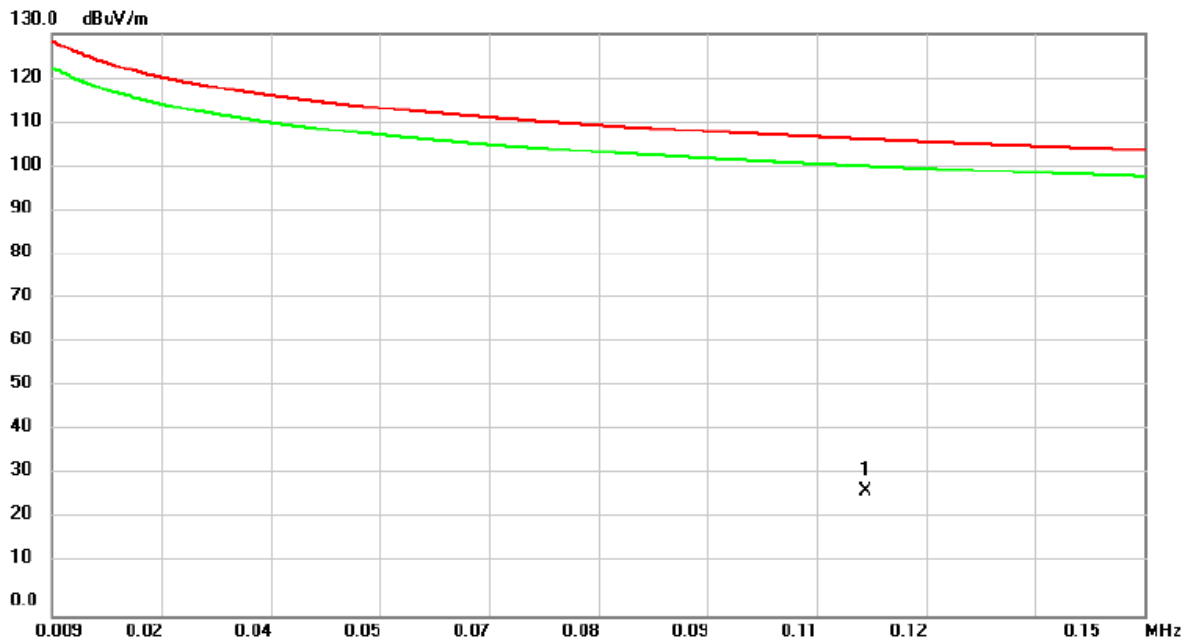
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Ant 0°



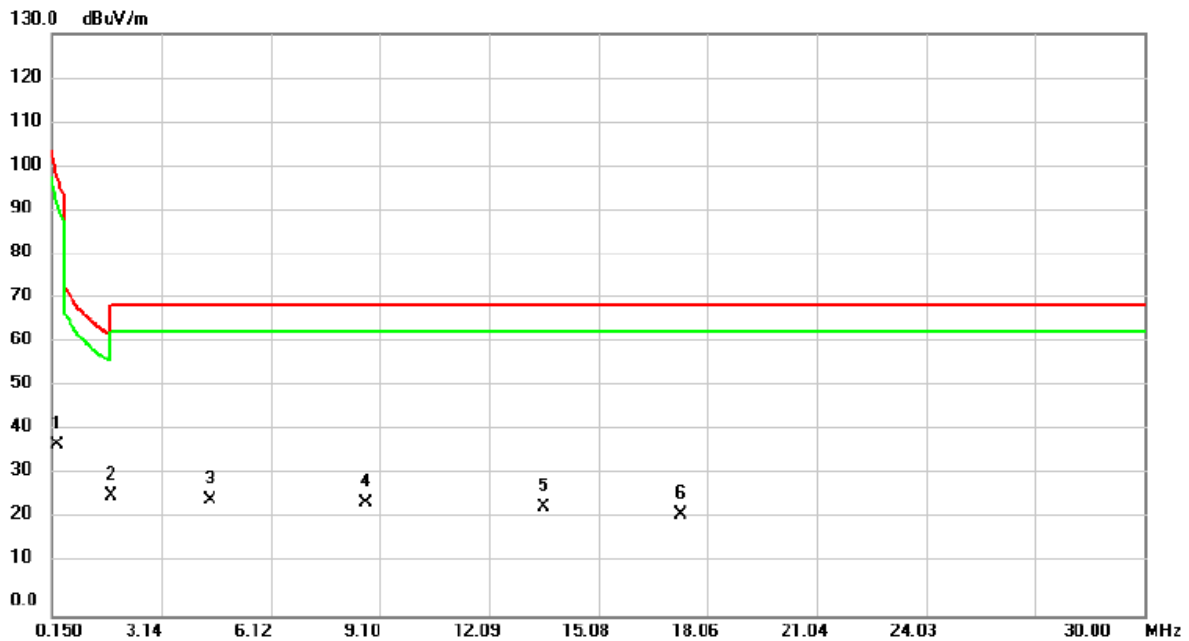
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1140	12.57	15.24	27.81	106.47	-78.66	AVG	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.2694	30.02	8.03	38.05	99.00	-60.95	AVG	
2	*	1.7420	28.98	-2.27	26.71	69.54	-42.83	QP	
3		4.4484	29.73	-3.85	25.88	69.54	-43.66	QP	
4		8.7070	29.87	-4.60	25.27	69.54	-44.27	QP	
5		13.5626	29.13	-4.82	24.31	69.54	-45.23	QP	
6		17.3038	28.61	-5.95	22.66	69.54	-46.88	QP	

REMARKS:

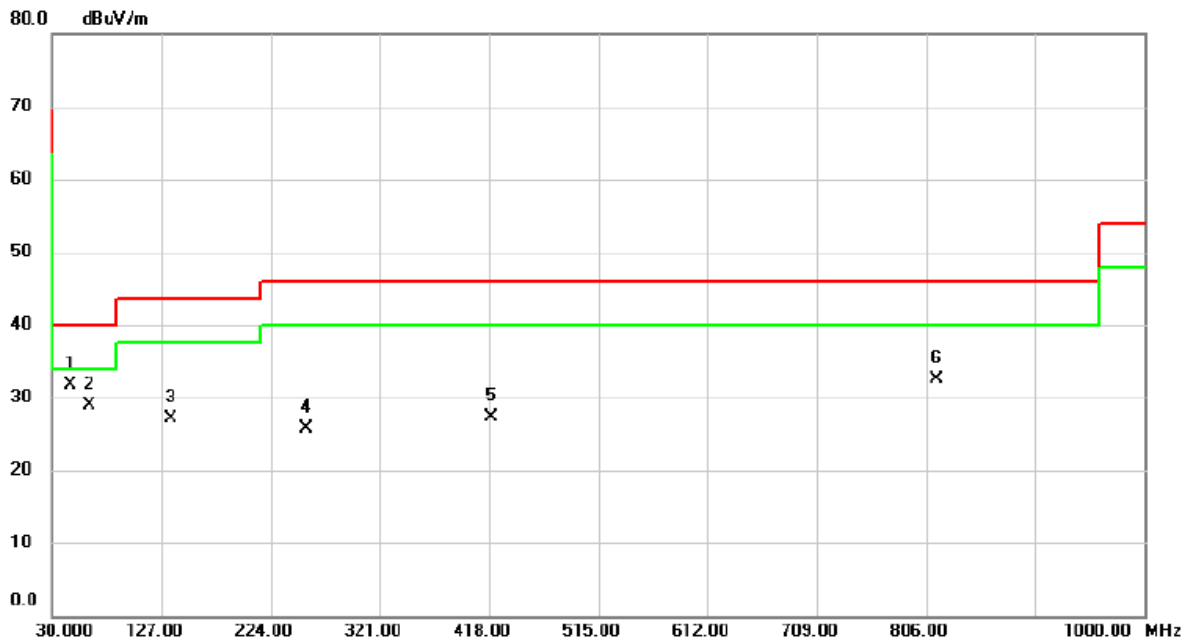
(1) Measurement Value = Reading Level + Correct Factor.

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

APPENDIX C RADIATED EMISSIONS - 30 MHZ TO 1000 MHZ

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	46.4900	39.78	-8.15	31.63	40.00	-8.37	QP	
2		62.9800	38.16	-9.30	28.86	40.00	-11.14	QP	
3		134.7600	36.44	-9.40	27.04	43.50	-16.46	QP	
4		255.0400	34.67	-8.91	25.76	46.00	-20.24	QP	
5		419.9400	31.96	-4.56	27.40	46.00	-18.60	QP	
6		815.7000	29.20	3.35	32.55	46.00	-13.45	QP	

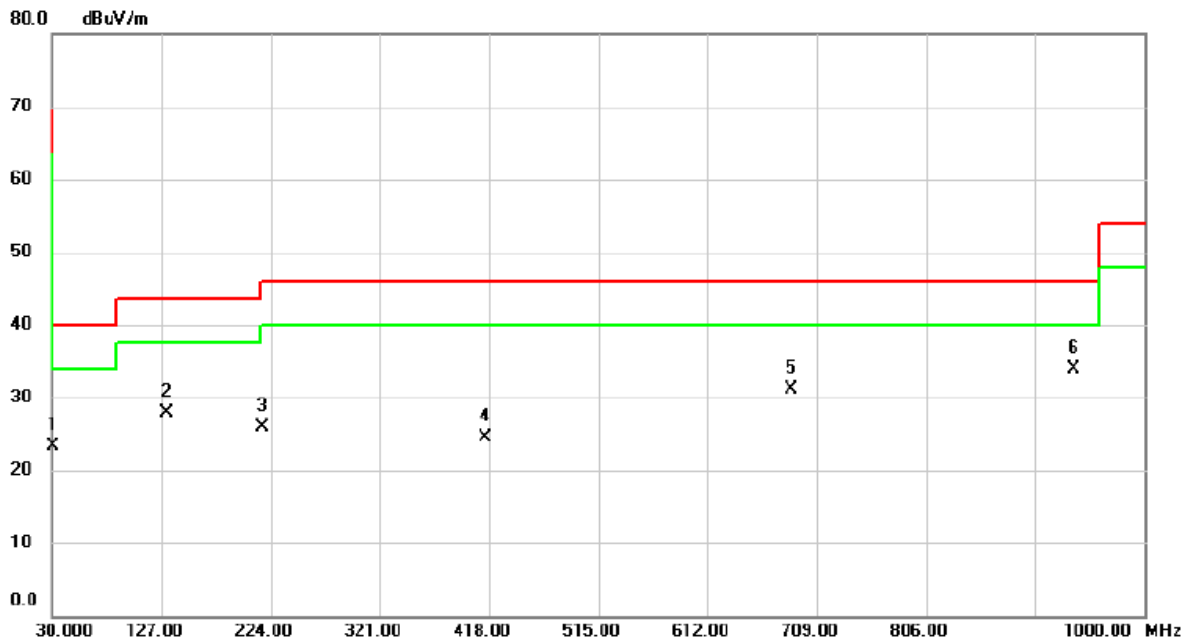
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		30.9700	32.41	-9.05	23.36	40.00	-16.64	QP	
2		130.8800	37.72	-9.81	27.91	43.50	-15.59	QP	
3		217.2100	36.46	-10.61	25.85	46.00	-20.15	QP	
4		415.0900	29.15	-4.69	24.46	46.00	-21.54	QP	
5		685.7200	30.05	0.96	31.01	46.00	-14.99	QP	
6	*	936.9500	28.39	5.58	33.97	46.00	-12.03	QP	

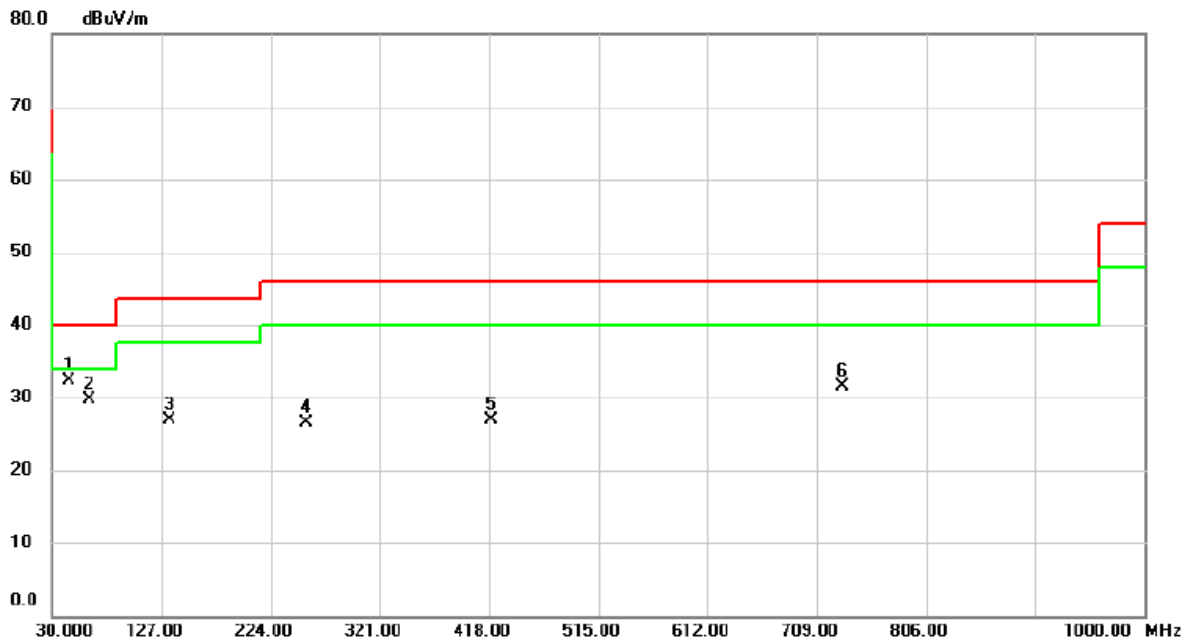
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	44.5500	40.57	-8.25	32.32	40.00	-7.68	QP	
2		62.9800	38.91	-9.30	29.61	40.00	-10.39	QP	
3		133.7900	36.43	-9.50	26.93	43.50	-16.57	QP	
4		255.0400	35.38	-8.91	26.47	46.00	-19.53	QP	
5		419.9400	31.43	-4.56	26.87	46.00	-19.13	QP	
6		731.3100	29.50	1.93	31.43	46.00	-14.57	QP	

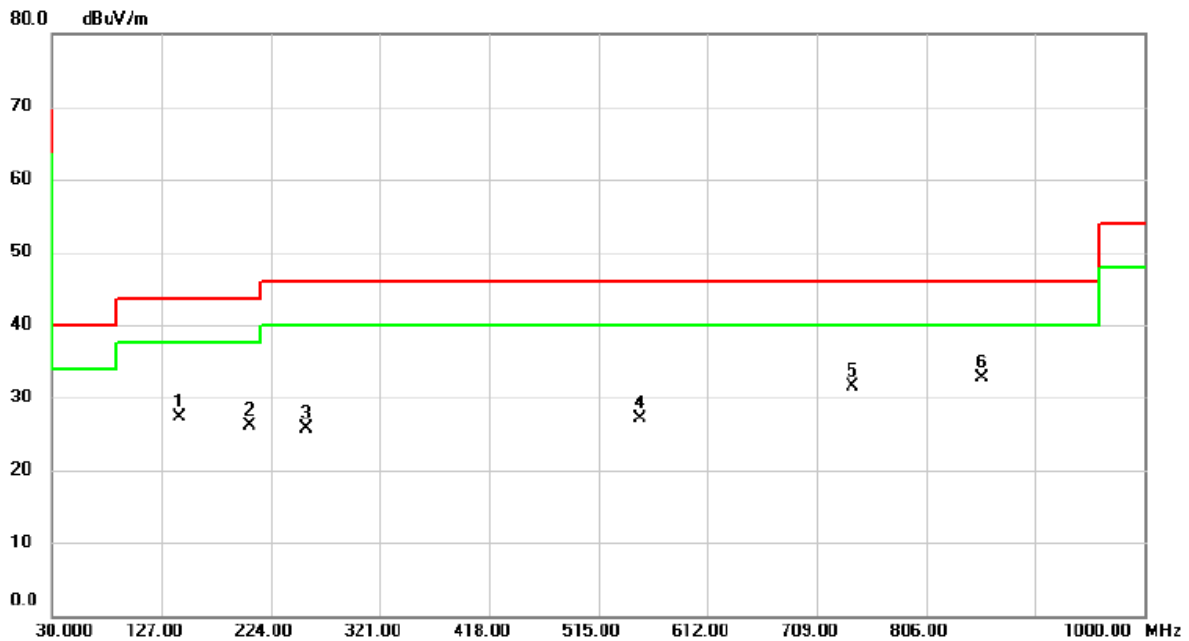
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		142.5200	36.16	-8.77	27.39	43.50	-16.11	QP	
2		205.5700	36.91	-10.79	26.12	43.50	-17.38	QP	
3		255.0400	34.69	-8.91	25.78	46.00	-20.22	QP	
4		551.8600	29.09	-1.95	27.14	46.00	-18.86	QP	
5		740.0400	29.48	2.12	31.60	46.00	-14.40	QP	
6	*	855.4700	28.70	4.08	32.78	46.00	-13.22	QP	

REMARKS:

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

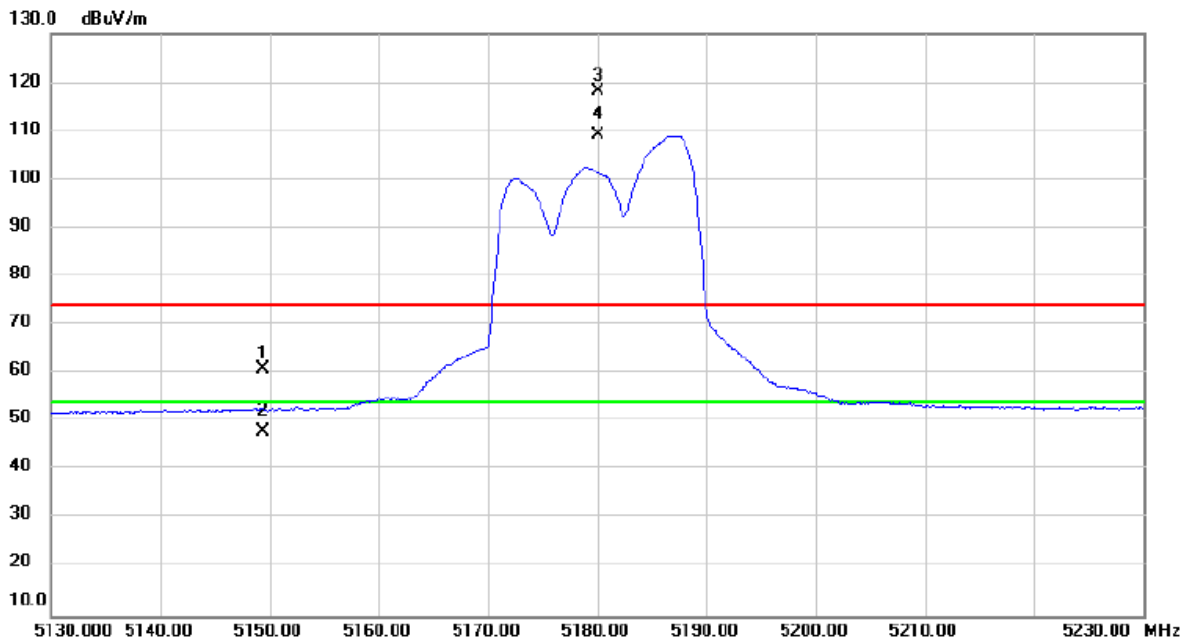
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D RADIATED EMISSIONS - ABOVE 1000 MHZ

CDD Mode

Test Mode UNII-1_TX A MODE CHANNEL 36

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5149.460	23.61	37.23	60.84	74.00	-13.16	peak	
2		5149.460	10.64	37.23	47.87	54.00	-6.13	AVG	
3	X	5180.000	81.00	37.27	118.27	74.00	44.27	peak	No Limit
4	*	5180.000	71.74	37.27	109.01	54.00	55.01	AVG	No Limit

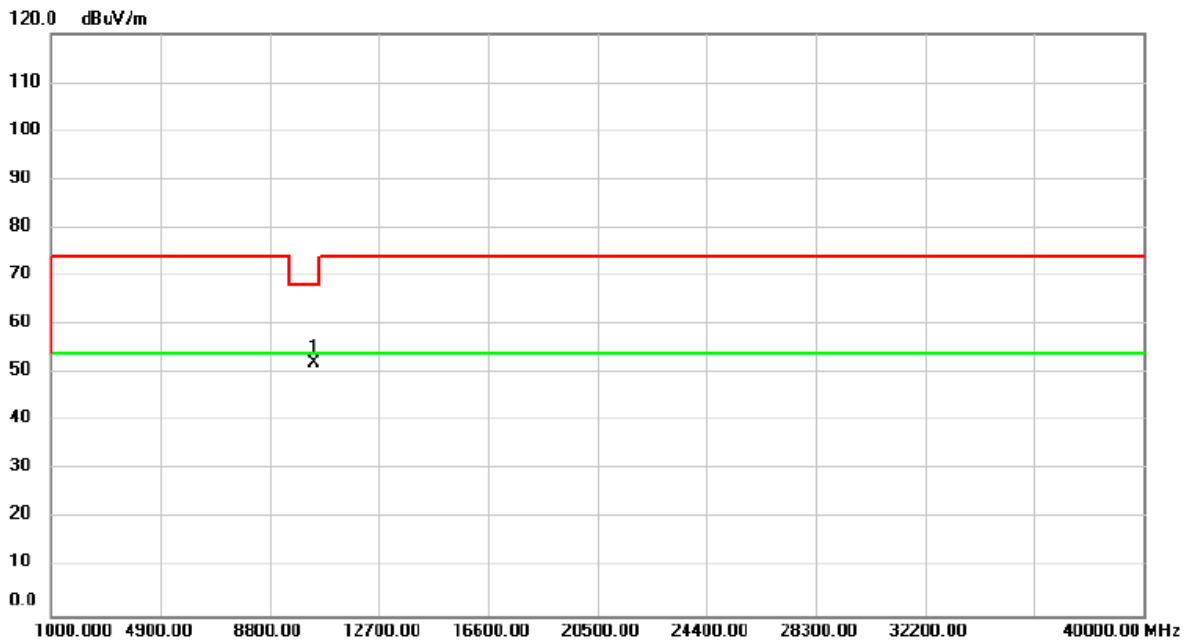
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 36

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.000	50.47	1.65	52.12	68.20	-16.08	peak	

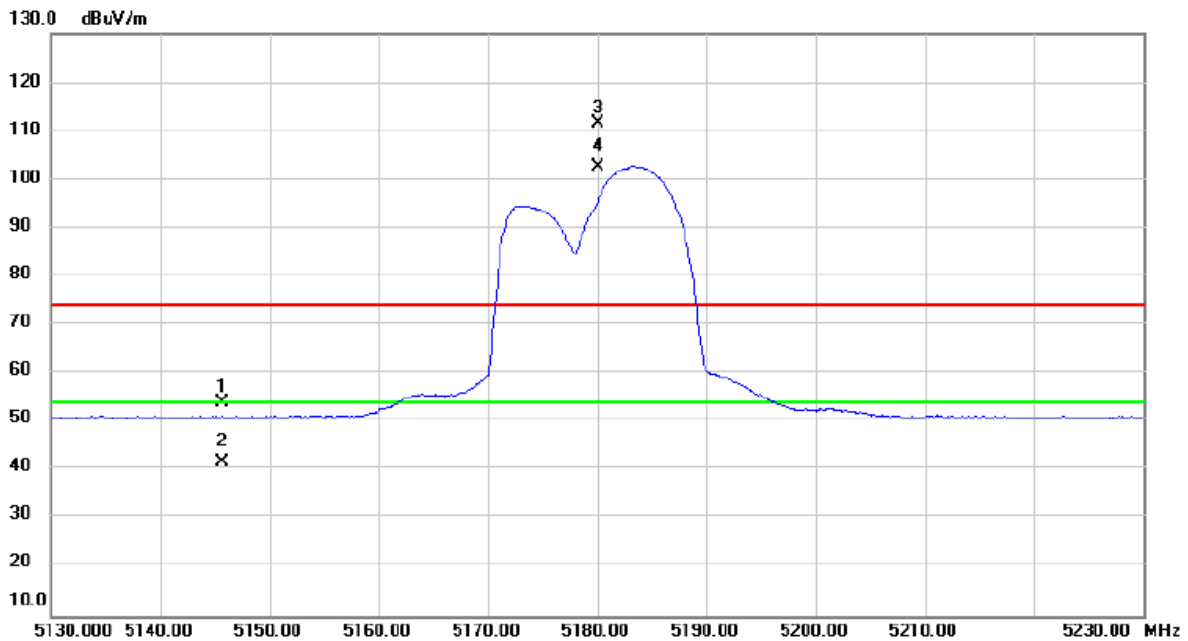
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 36

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5145.700	16.65	37.23	53.88	74.00	-20.12	peak	
2		5145.700	4.29	37.23	41.52	54.00	-12.48	AVG	
3	X	5180.000	74.41	37.27	111.68	74.00	37.68	peak	No Limit
4	*	5180.000	65.41	37.27	102.68	54.00	48.68	AVG	No Limit

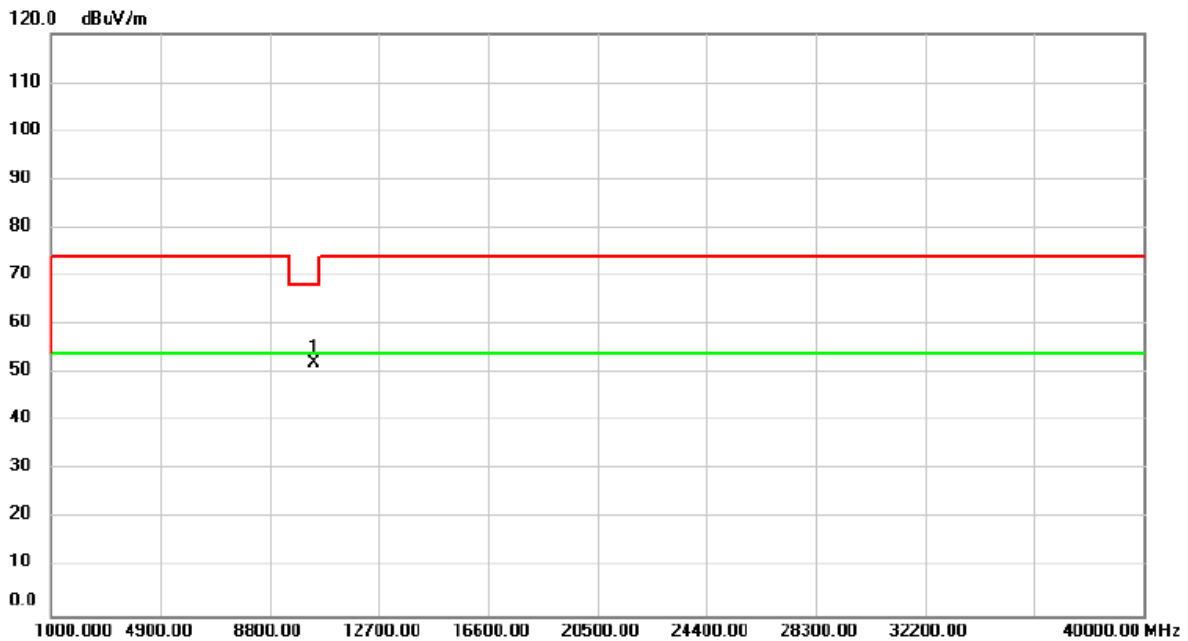
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 36

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.000	50.51	1.65	52.16	68.20	-16.04	peak	

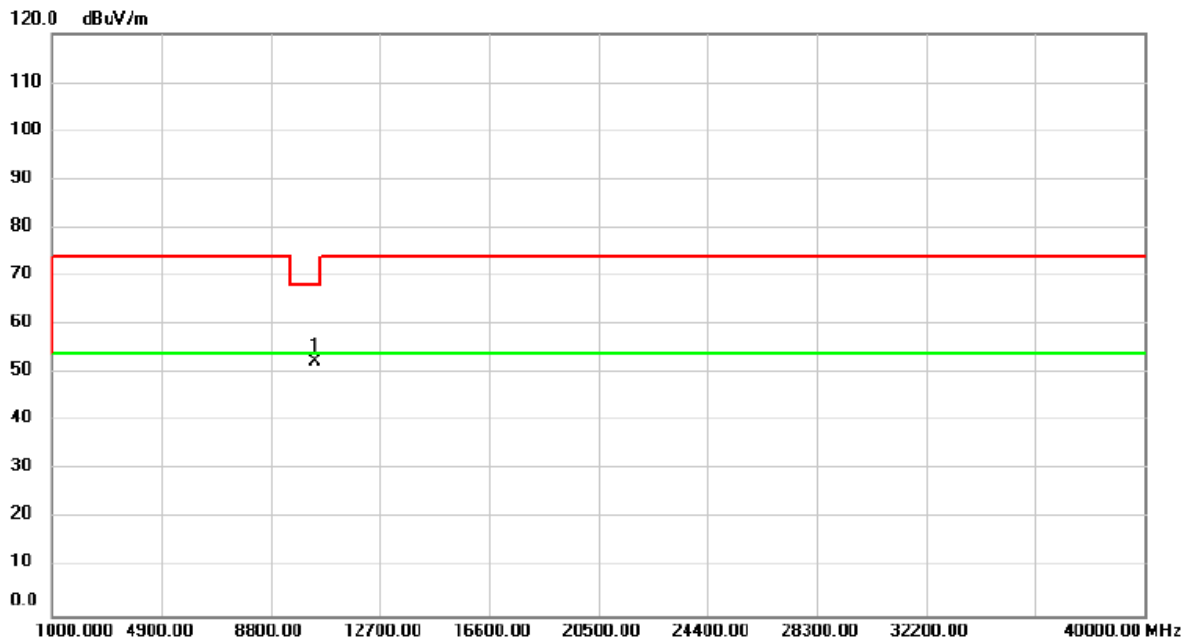
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 40

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.000	50.74	1.70	52.44	68.20	-15.76	peak	

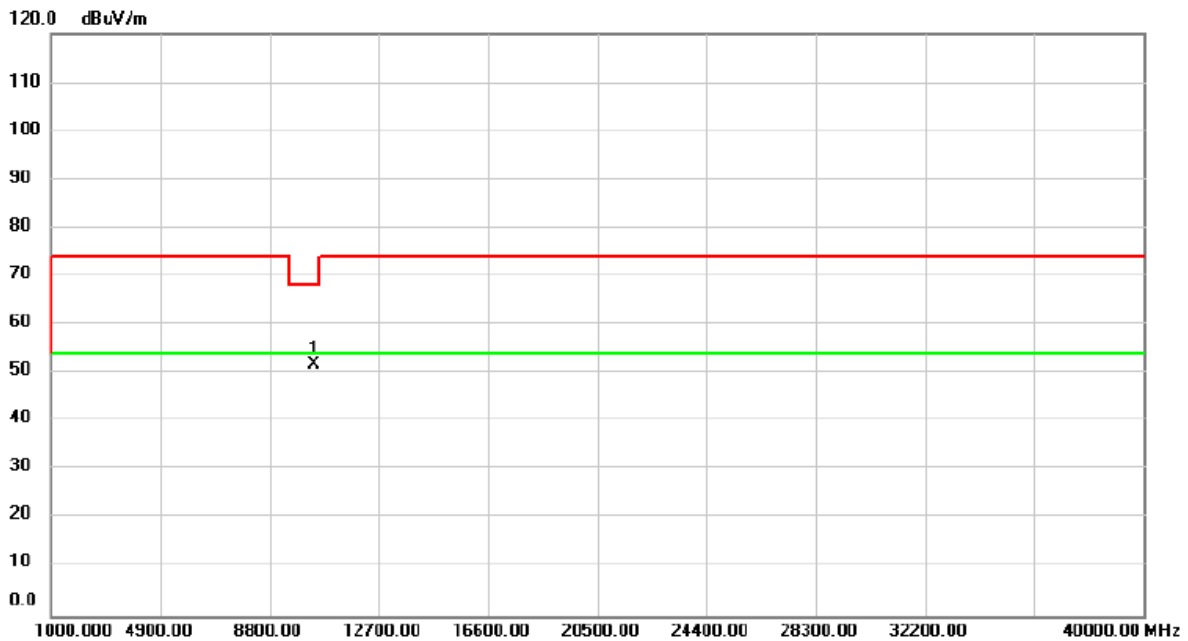
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 40

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.000	49.93	1.70	51.63	68.20	-16.57	peak	

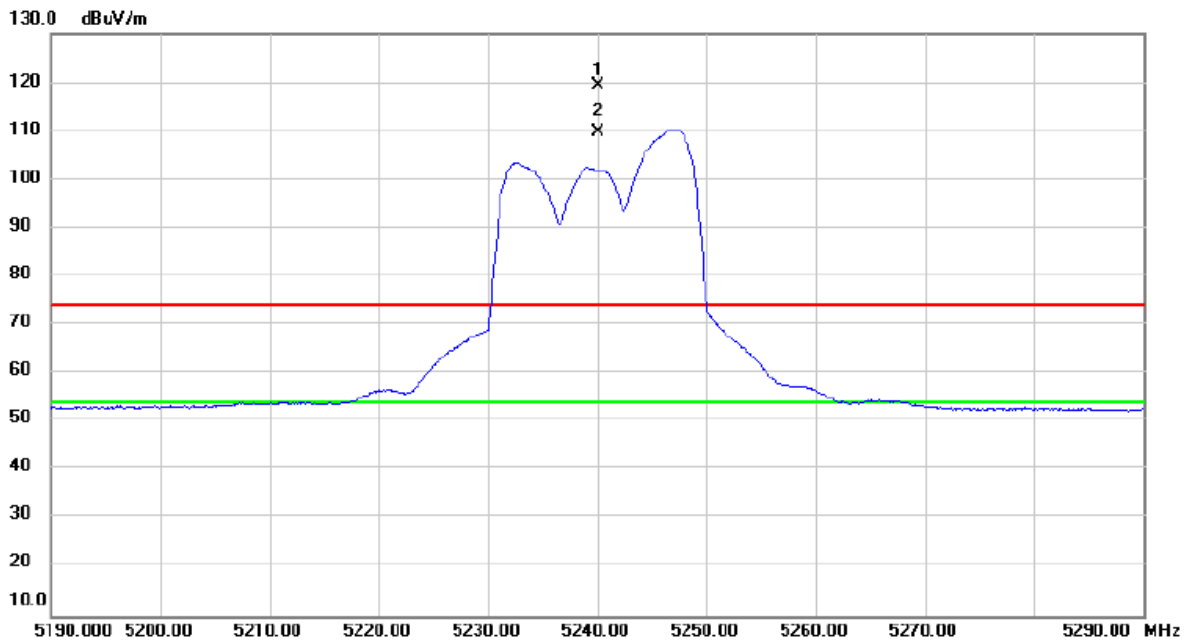
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 48

Vertical



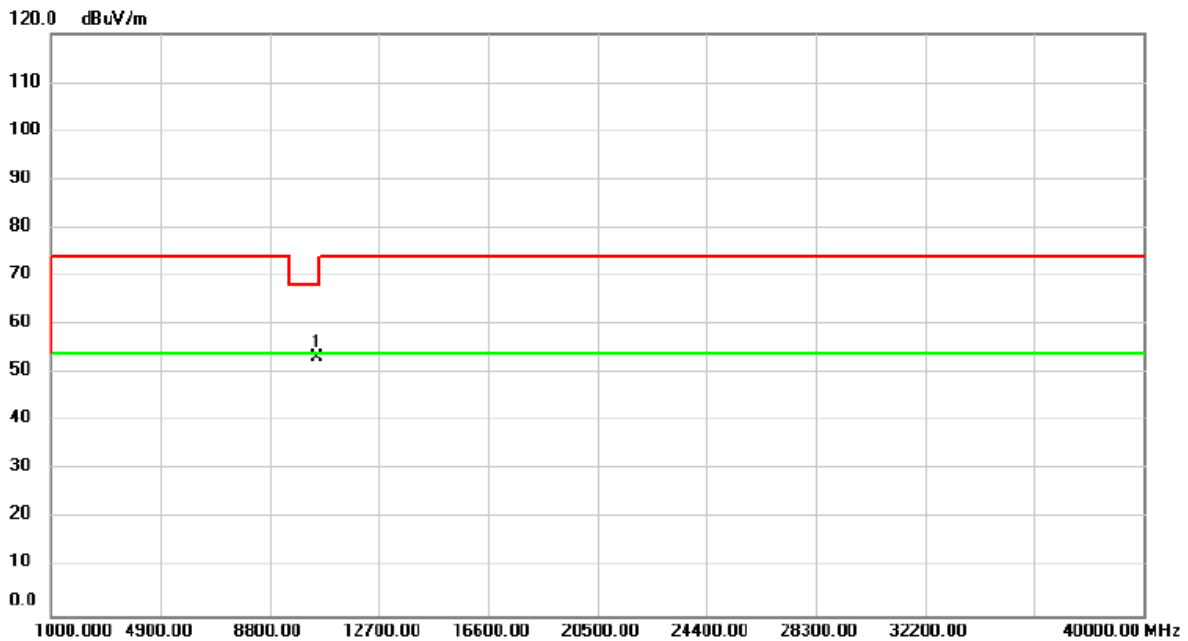
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	81.94	37.35	119.29	74.00	45.29	peak	No Limit
2	*	5240.000	72.49	37.35	109.84	54.00	55.84	AVG	No Limit

REMARKS:

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

Test Mode UNII-1_TX A MODE CHANNEL 48

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.000	51.32	1.79	53.11	68.20	-15.09	peak	

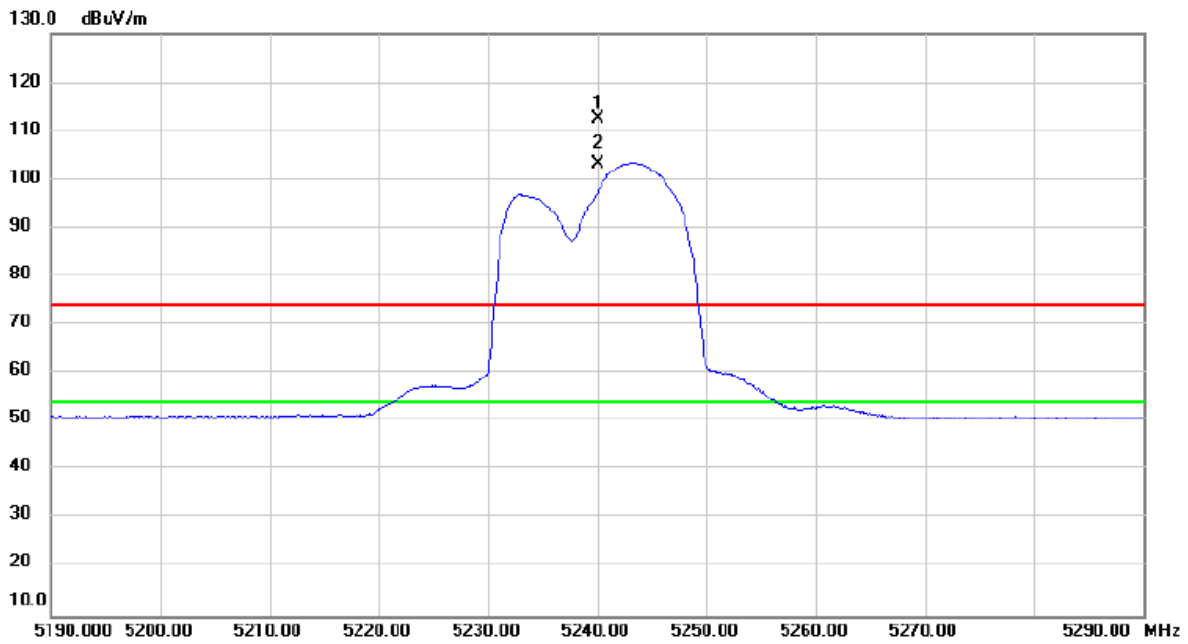
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 48

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	75.10	37.35	112.45	74.00	38.45	peak	No Limit
2	*	5240.000	65.92	37.35	103.27	54.00	49.27	AVG	No Limit

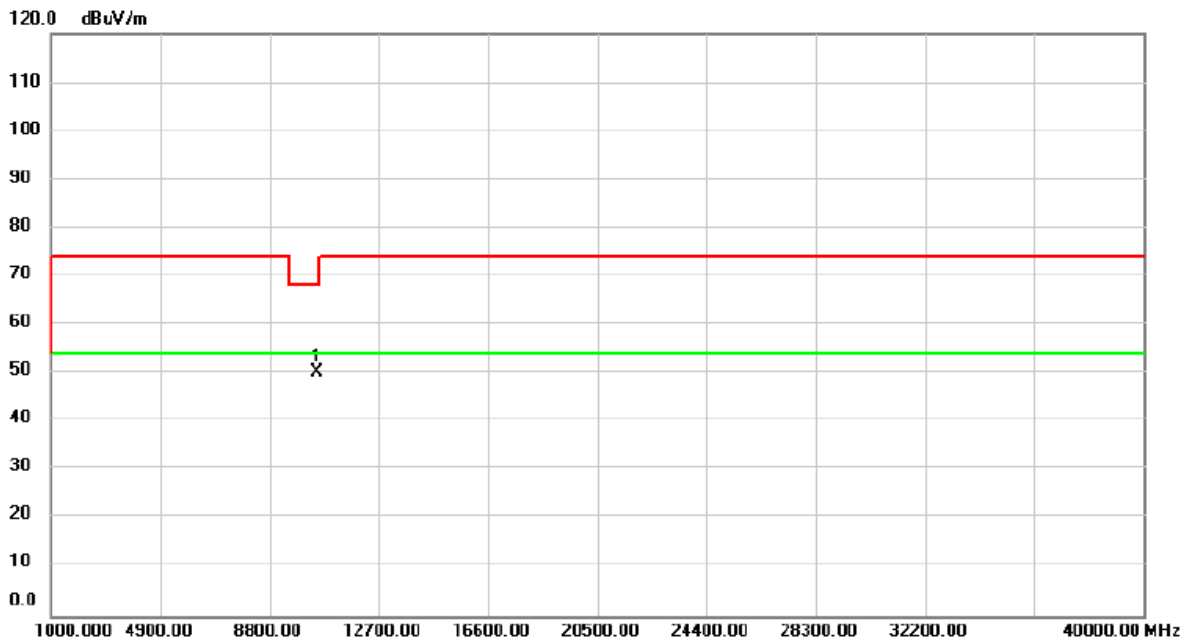
REMARKS:

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

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

Test Mode UNII-1_TX A MODE CHANNEL 48

Horizontal

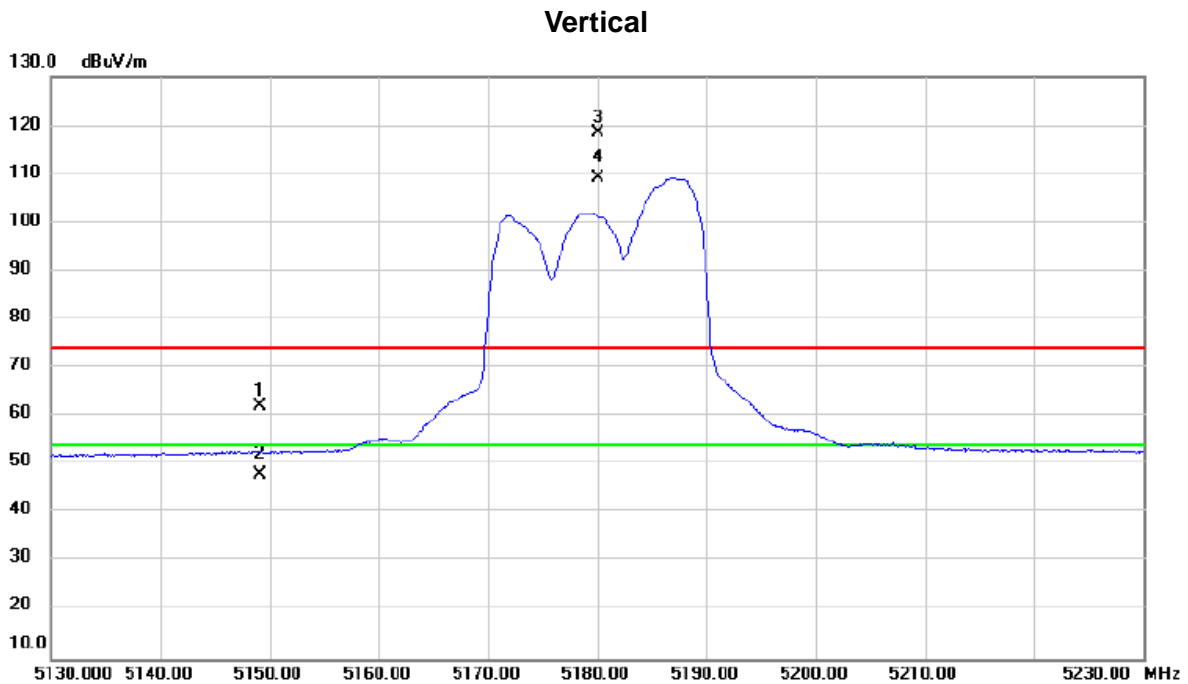


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.000	48.35	1.79	50.14	68.20	-18.06	peak	

REMARKS:

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 36



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5149.080	24.78	37.23	62.01	74.00	-11.99	peak	
2		5149.080	10.80	37.23	48.03	54.00	-5.97	AVG	
3	X	5180.000	81.10	37.27	118.37	74.00	44.37	peak	No Limit
4	*	5180.000	71.94	37.27	109.21	54.00	55.21	AVG	No Limit

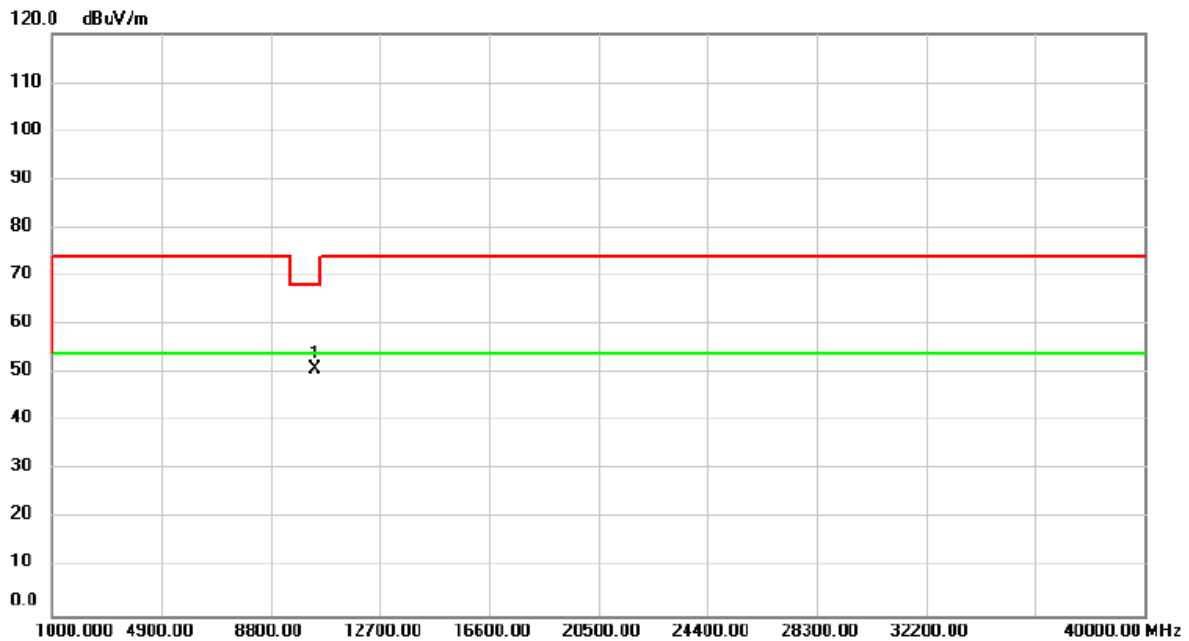
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 36

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.000	49.10	1.65	50.75	68.20	-17.45	peak	

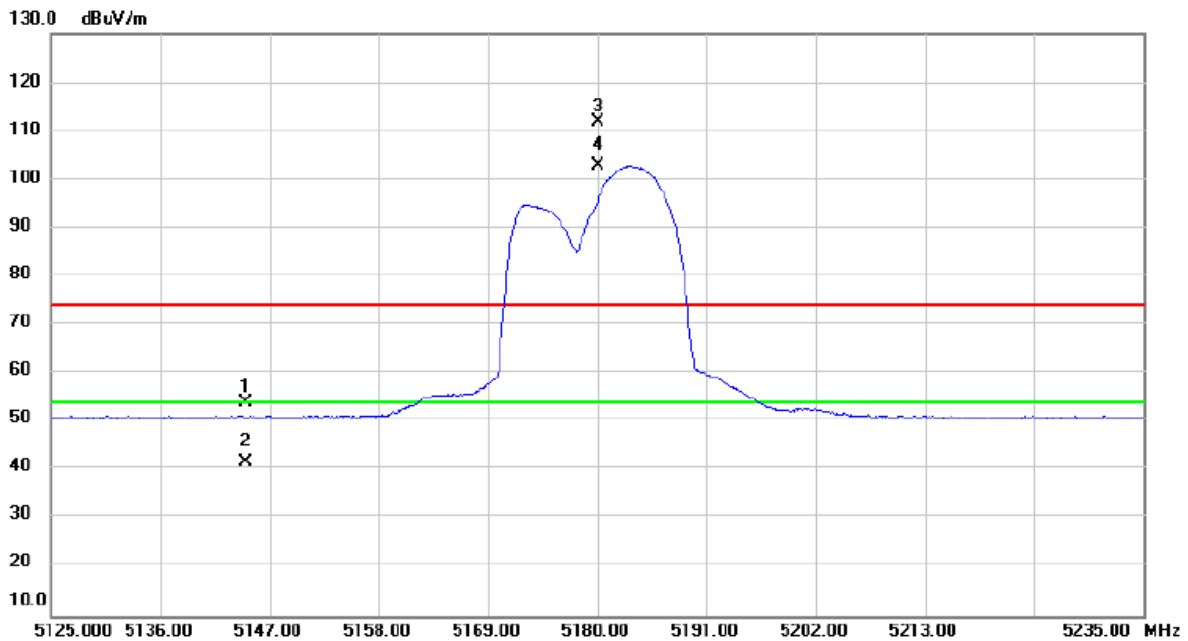
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 36

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5144.525	16.73	37.23	53.96	74.00	-20.04	peak	
2		5144.525	4.40	37.23	41.63	54.00	-12.37	AVG	
3	X	5180.000	74.61	37.27	111.88	74.00	37.88	peak	No Limit
4	*	5180.000	65.49	37.27	102.76	54.00	48.76	AVG	No Limit

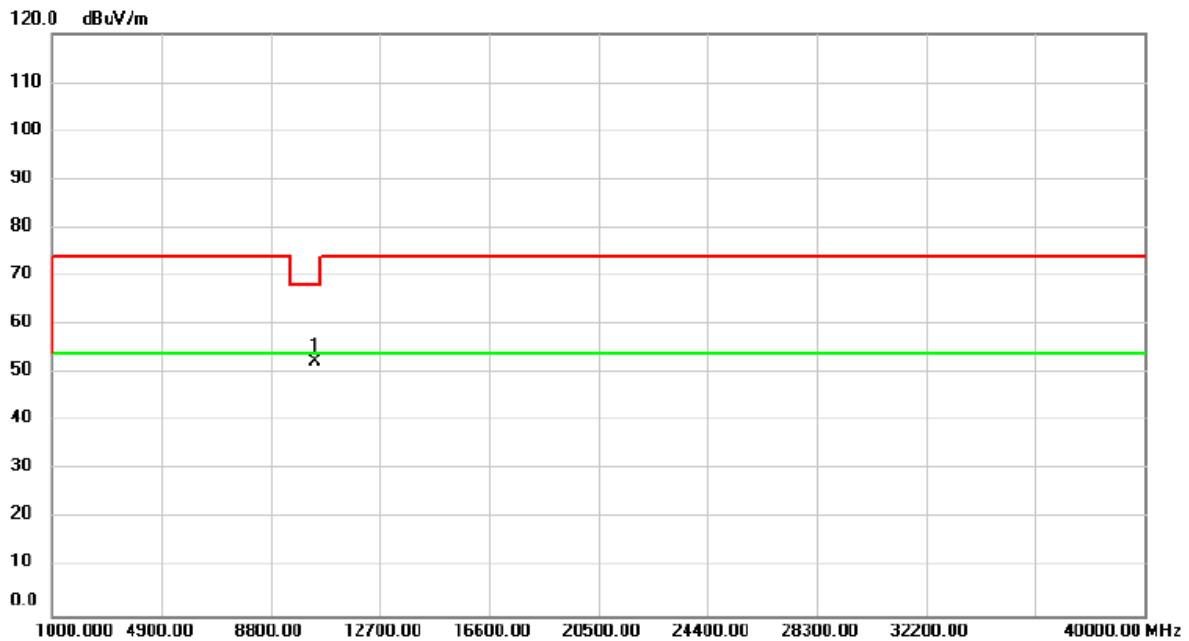
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 36

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.000	50.76	1.65	52.41	68.20	-15.79	peak	

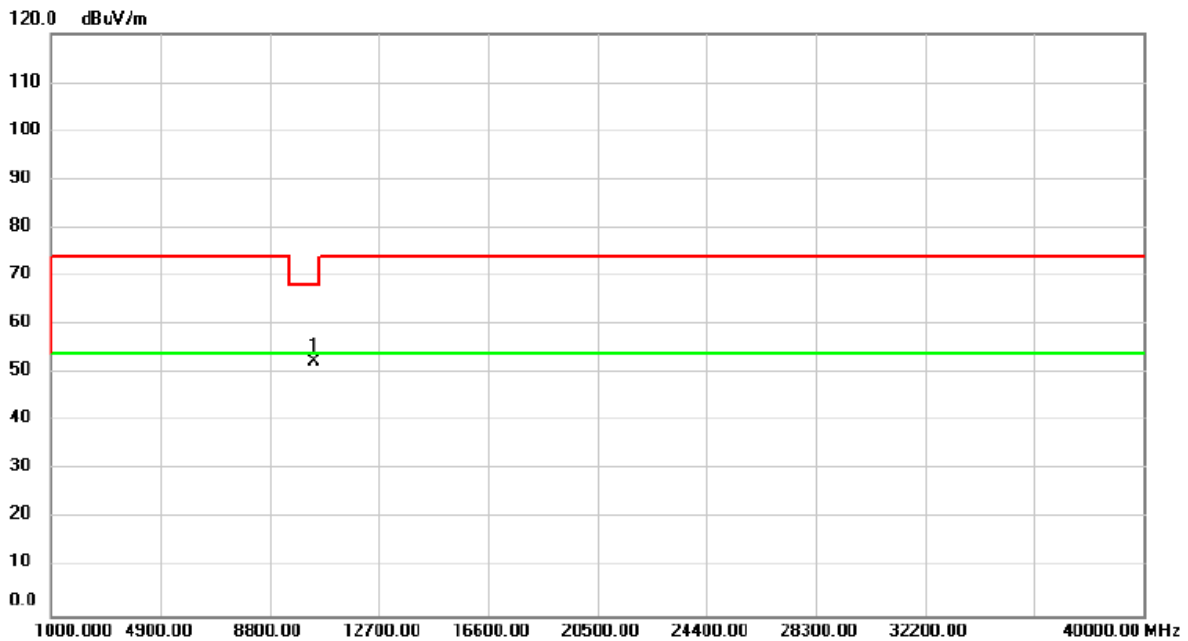
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 40

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.000	50.78	1.70	52.48	68.20	-15.72	peak	

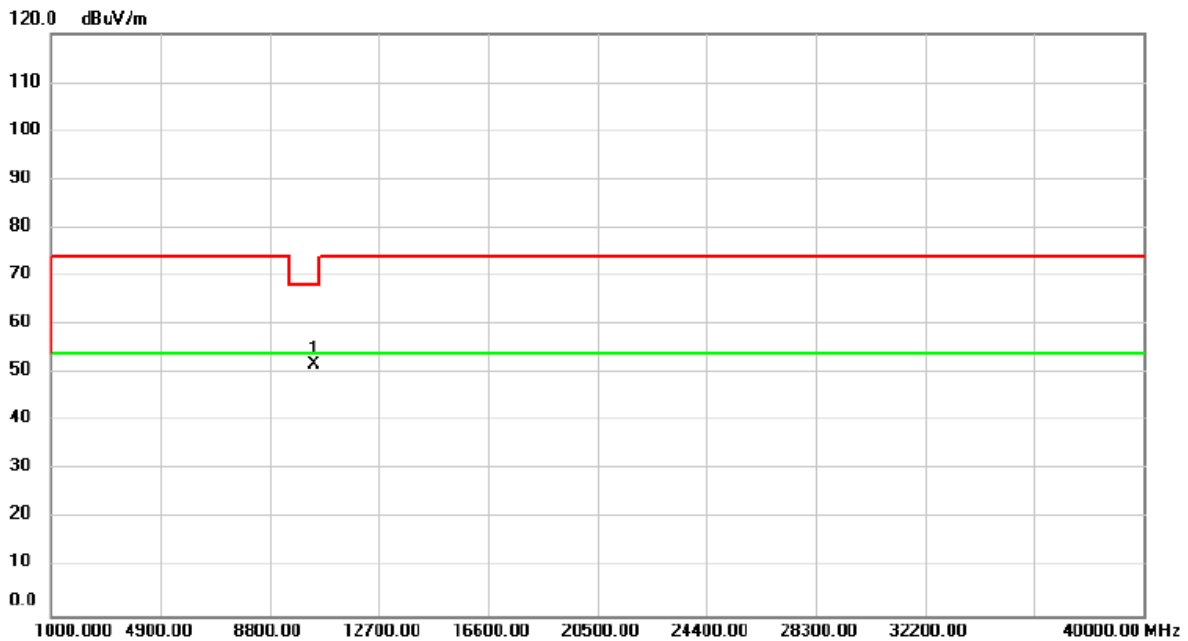
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 40

Horizontal



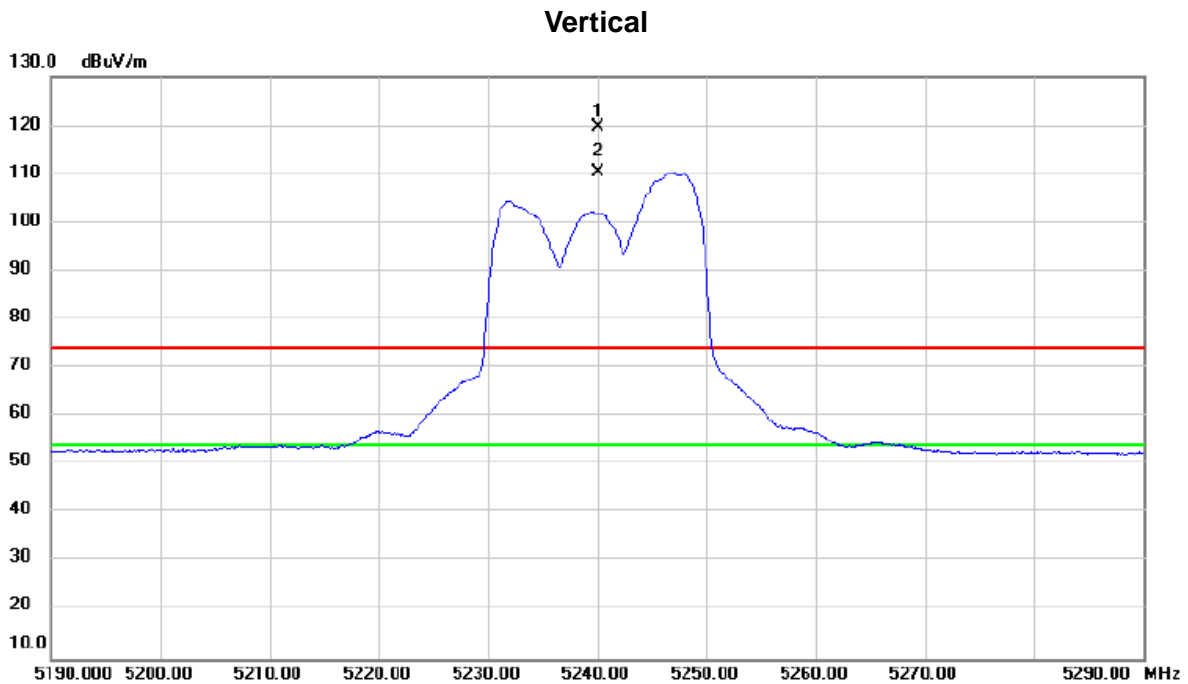
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.000	50.10	1.70	51.80	68.20	-16.40	peak	

REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 48



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5240.000	82.23	37.35	119.58	74.00	45.58	peak	No Limit
2	*	5240.000	72.89	37.35	110.24	54.00	56.24	AVG	No Limit

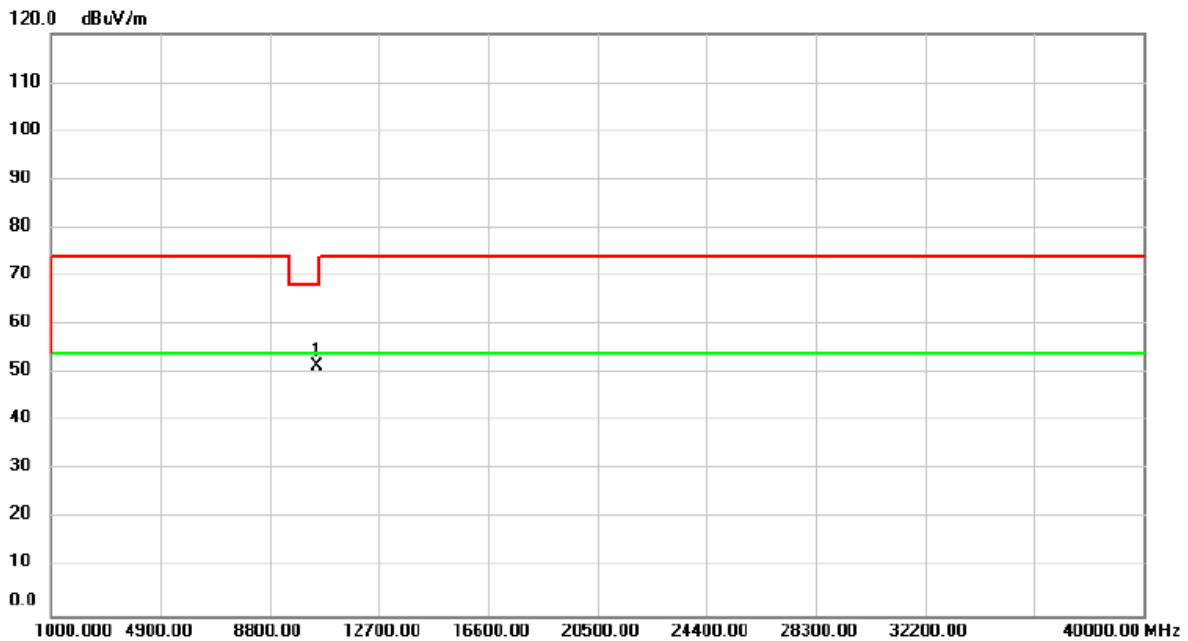
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 48

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.000	49.71	1.79	51.50	68.20	-16.70	peak	

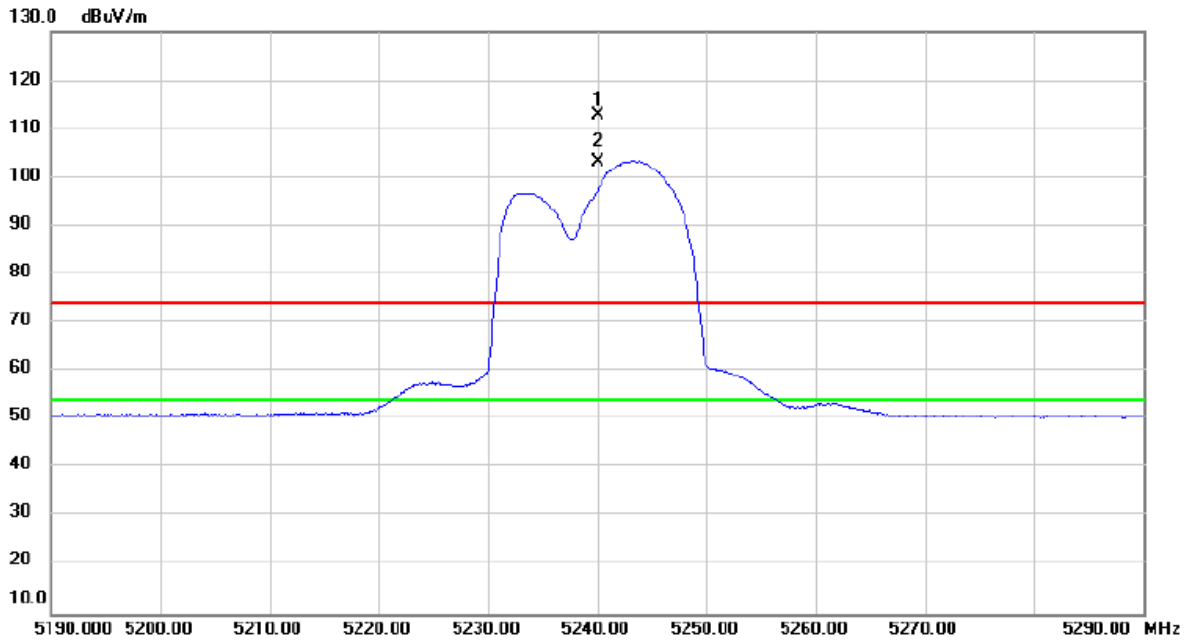
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 48

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	75.35	37.35	112.70	74.00	38.70	peak	No Limit
2	*	5240.000	65.87	37.35	103.22	54.00	49.22	AVG	No Limit

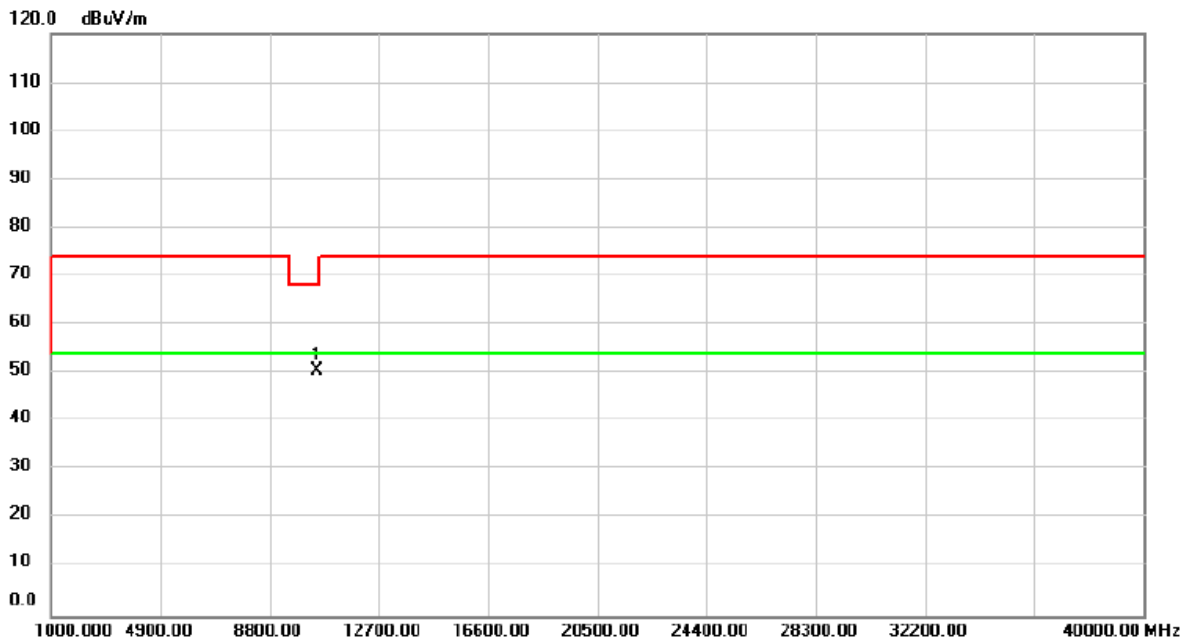
REMARKS:

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

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

Test Mode UNII-1_TX N (HT20) MODE CHANNEL 48

Horizontal



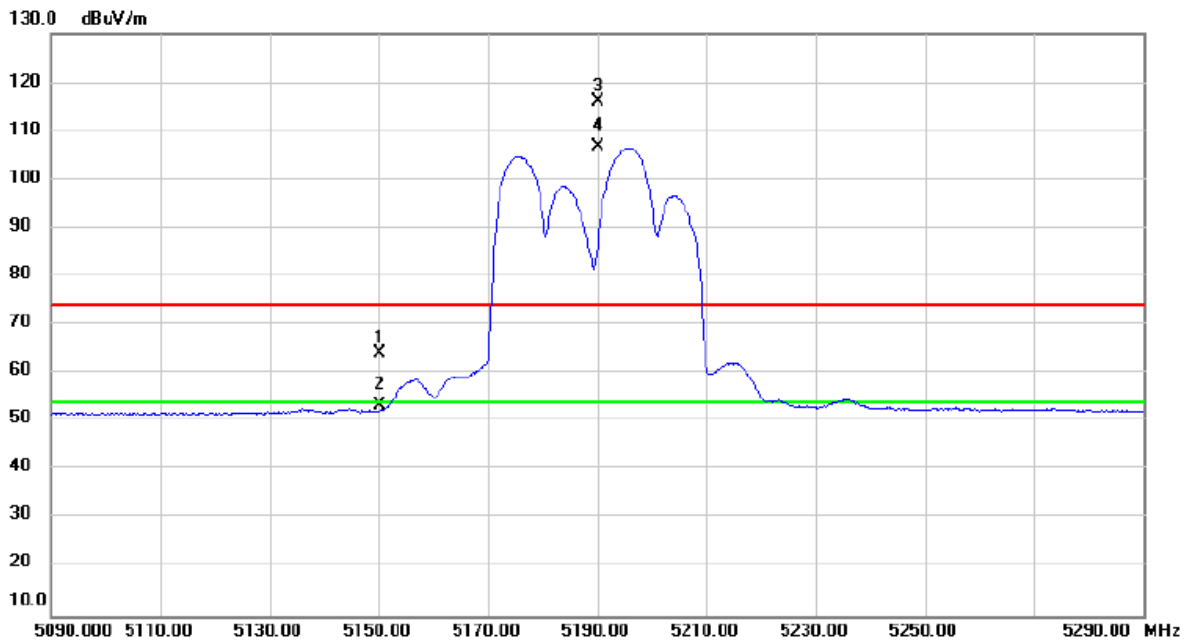
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.000	48.74	1.79	50.53	68.20	-17.67	peak	

REMARKS:

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 38

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5150.000	26.79	37.24	64.03	74.00	-9.97	peak	
2		5150.000	15.98	37.24	53.22	54.00	-0.78	AVG	
3	X	5190.000	78.69	37.28	115.97	74.00	41.97	peak	No Limit
4	*	5190.000	69.34	37.28	106.62	54.00	52.62	AVG	No Limit

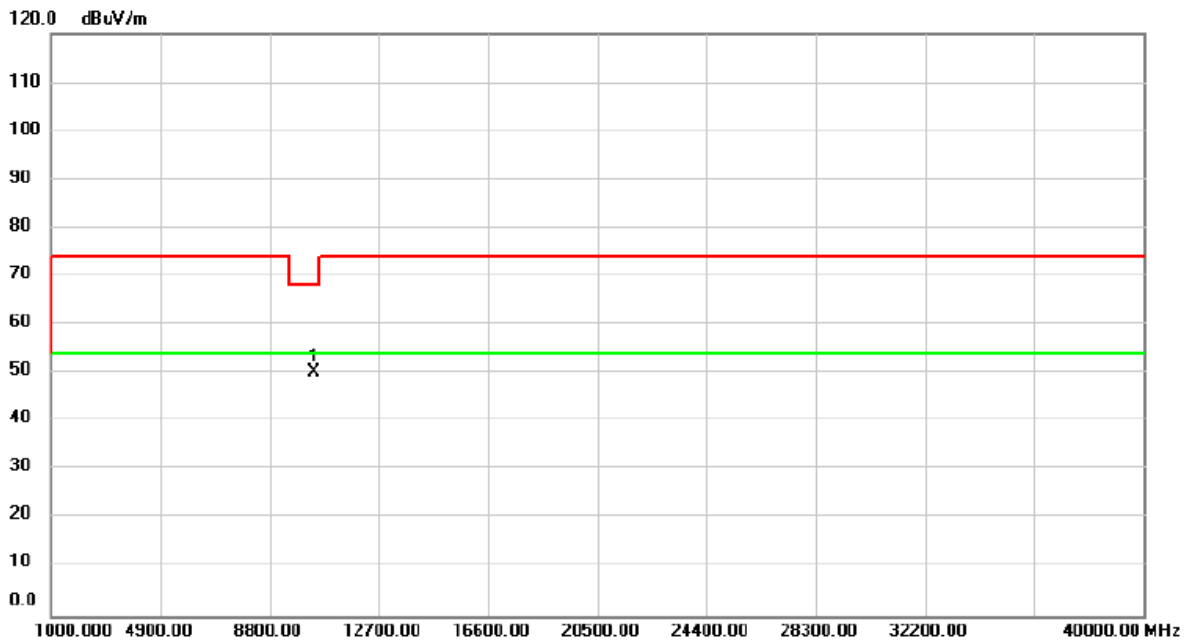
REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 38

Vertical



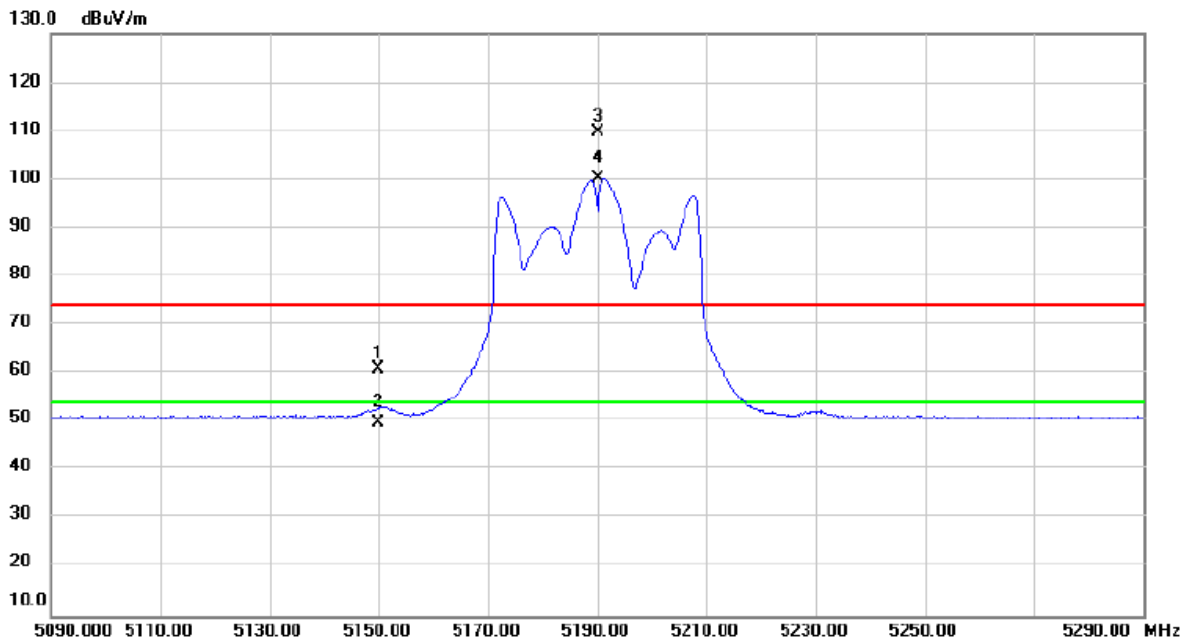
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.000	48.68	1.67	50.35	68.20	-17.85	peak	

REMARKS:

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 38

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5149.940	23.74	37.23	60.97	74.00	-13.03	peak	
2		5149.940	12.49	37.23	49.72	54.00	-4.28	AVG	
3	X	5190.000	72.56	37.28	109.84	74.00	35.84	peak	No Limit
4	*	5190.000	62.75	37.28	100.03	54.00	46.03	AVG	No Limit

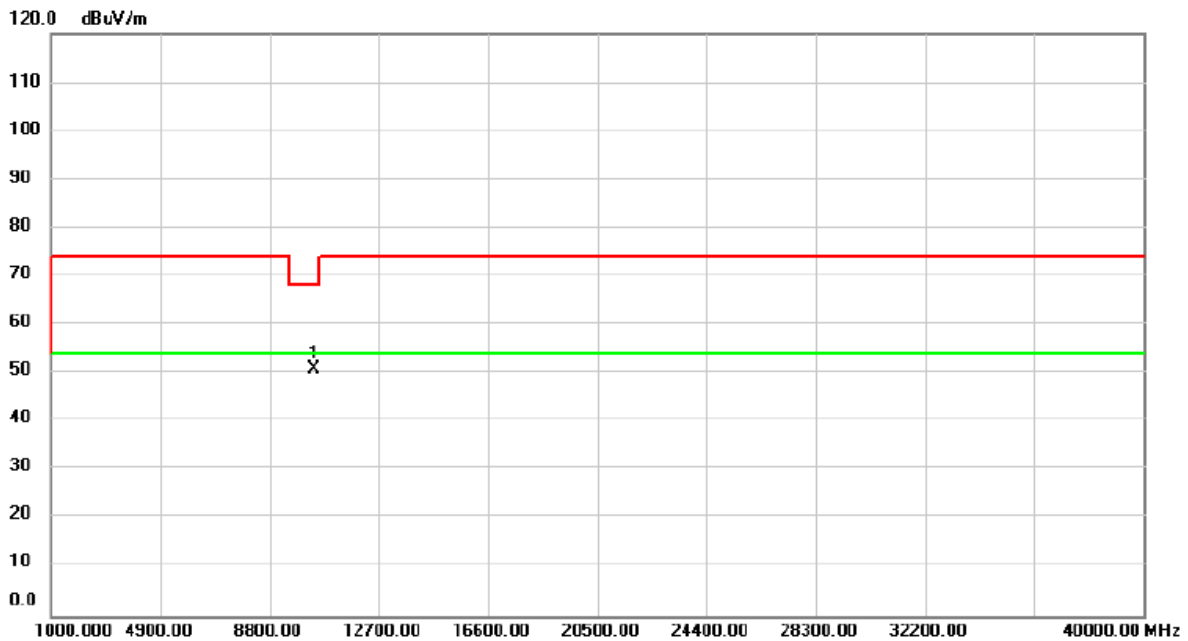
REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 38

Horizontal



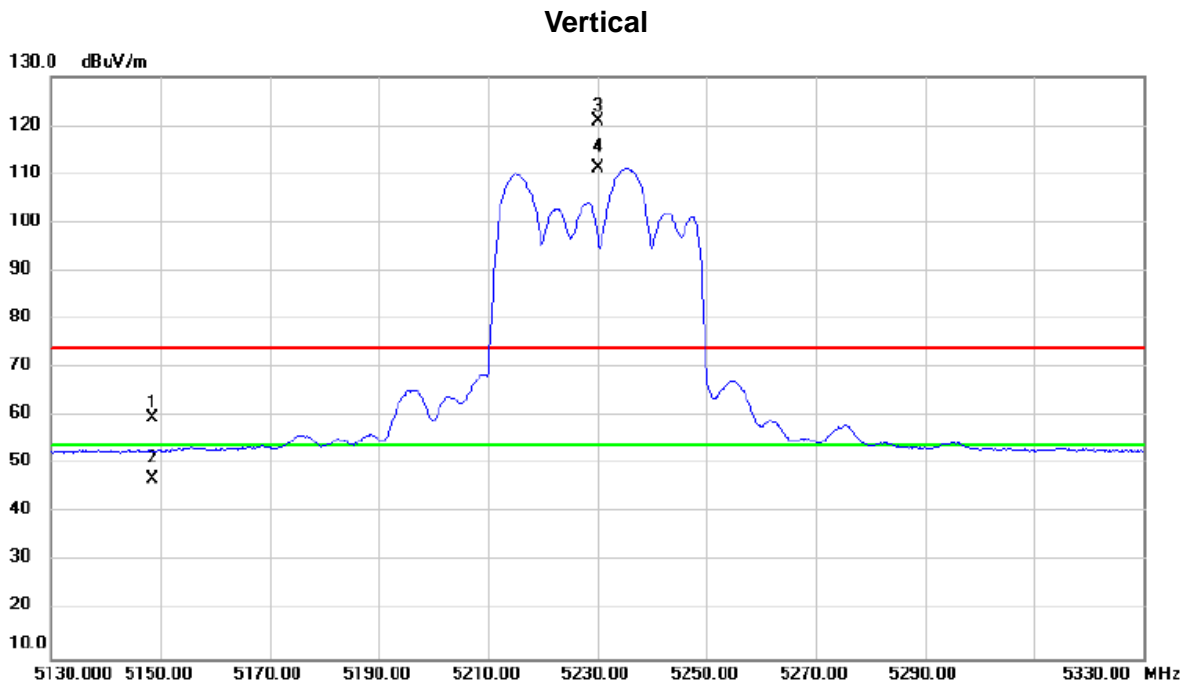
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.000	49.23	1.67	50.90	68.20	-17.30	peak	

REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 46



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5148.420	22.29	37.23	59.52	74.00	-14.48	peak	
2		5148.420	9.70	37.23	46.93	54.00	-7.07	AVG	
3	X	5230.000	83.45	37.34	120.79	74.00	46.79	peak	No Limit
4	*	5230.000	73.98	37.34	111.32	54.00	57.32	AVG	No Limit

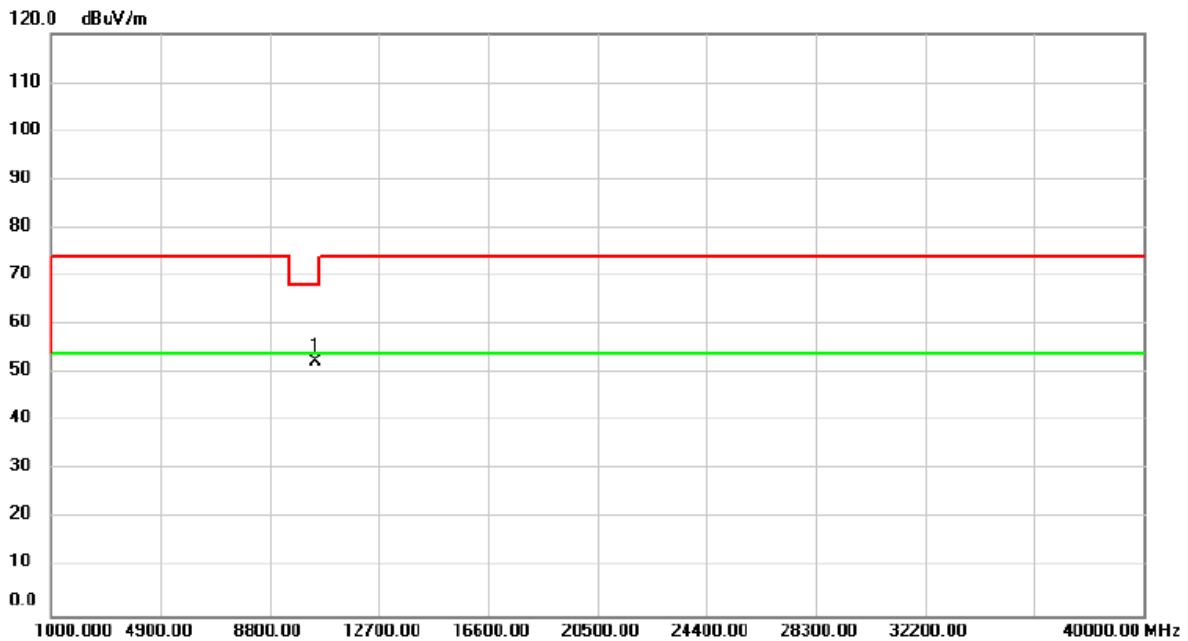
REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 46

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.000	50.58	1.78	52.36	68.20	-15.84	peak	

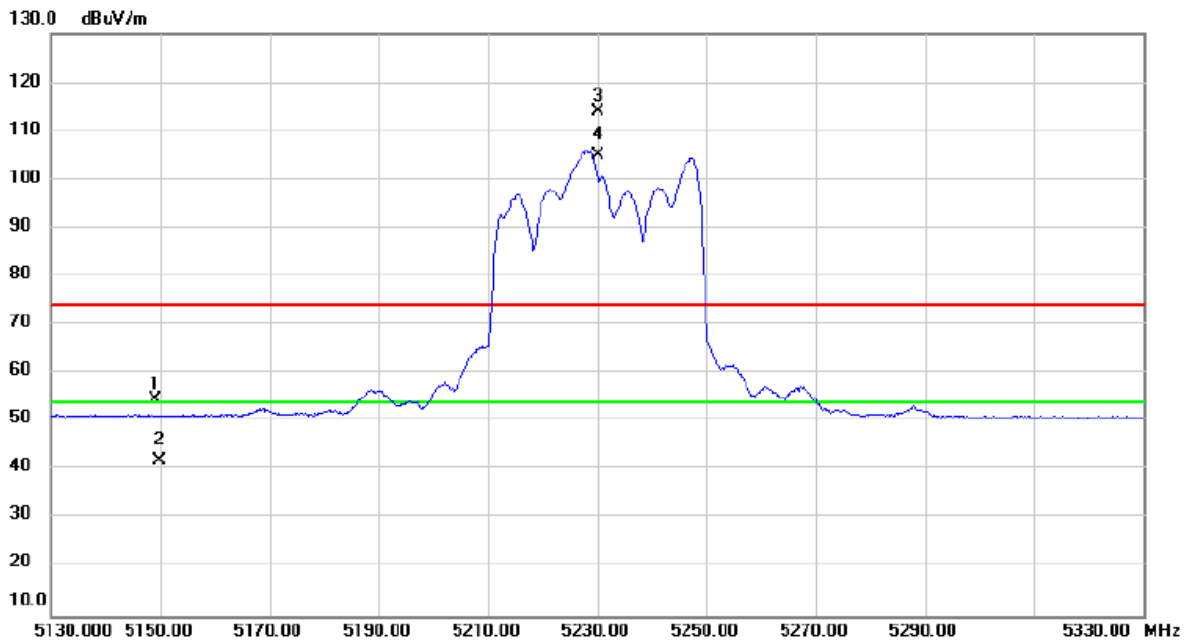
REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 46

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5149.200	17.44	37.23	54.67	74.00	-19.33	peak	
2		5149.840	4.68	37.23	41.91	54.00	-12.09	AVG	
3	X	5230.000	76.57	37.34	113.91	74.00	39.91	peak	No Limit
4	*	5230.000	67.52	37.34	104.86	54.00	50.86	AVG	No Limit

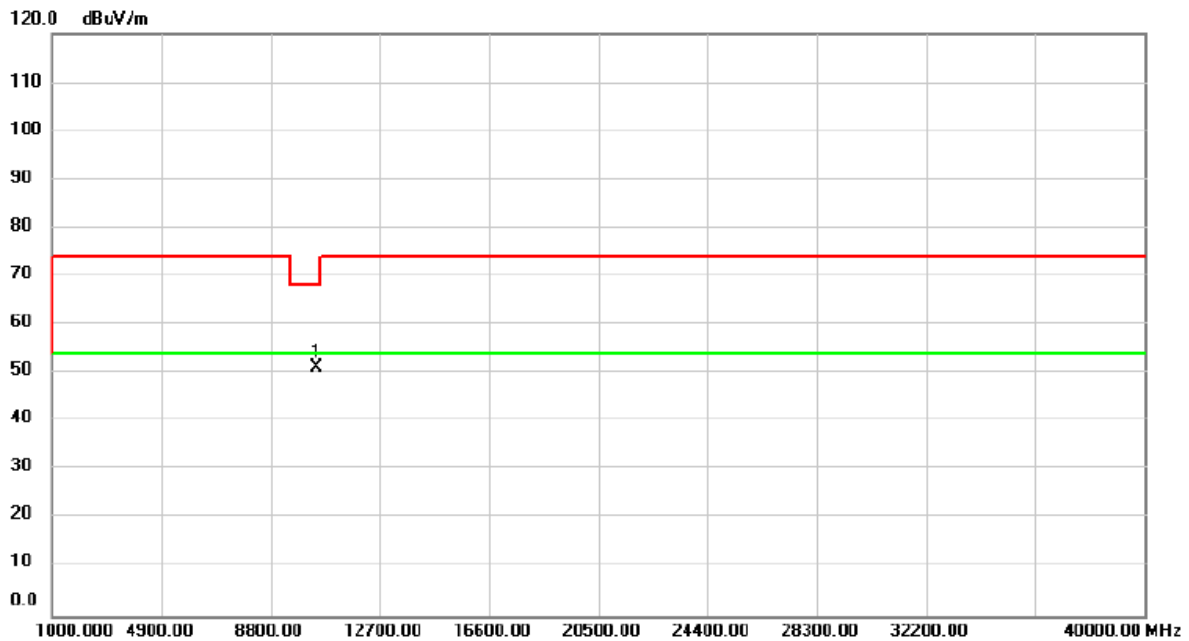
REMARKS:

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

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

Test Mode UNII-1_TX N (HT40) MODE CHANNEL 46

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.000	49.36	1.78	51.14	68.20	-17.06	peak	

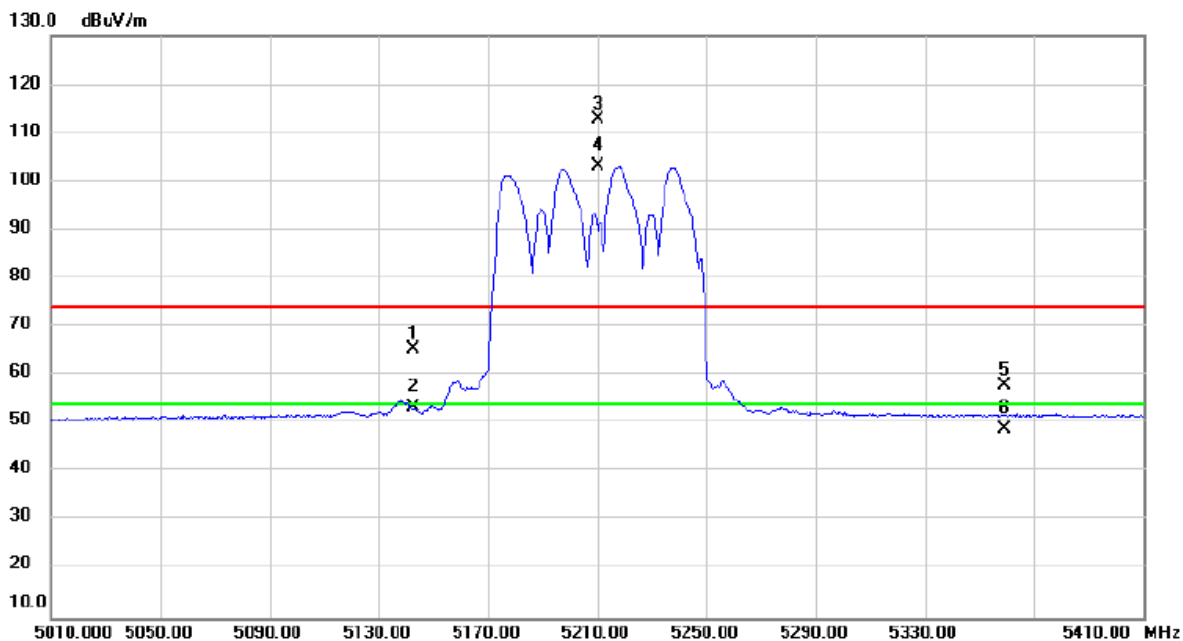
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5142.350	28.11	37.22	65.33	74.00	-8.67	peak	
2		5142.350	16.26	37.22	53.48	54.00	-0.52	AVG	
3	X	5210.000	75.31	37.32	112.63	74.00	38.63	peak	No Limit
4	*	5210.000	65.72	37.32	103.04	54.00	49.04	AVG	No Limit
5		5359.180	20.26	37.51	57.77	74.00	-16.23	peak	
6		5359.180	11.34	37.51	48.85	54.00	-5.15	AVG	

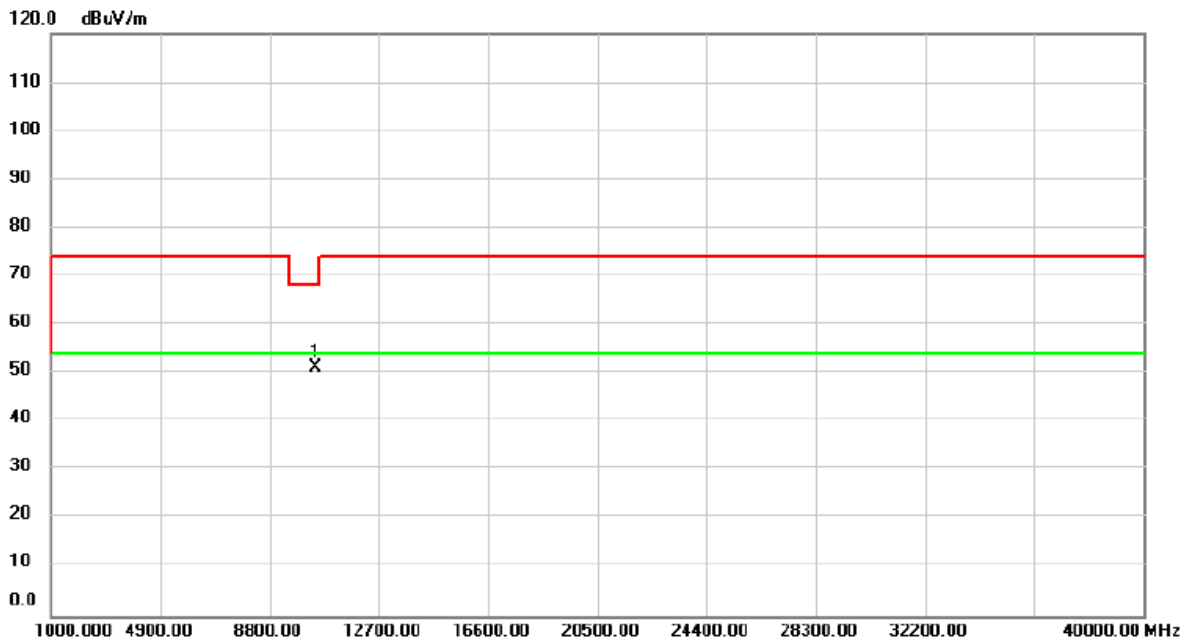
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.000	49.35	1.72	51.07	68.20	-17.13	peak	

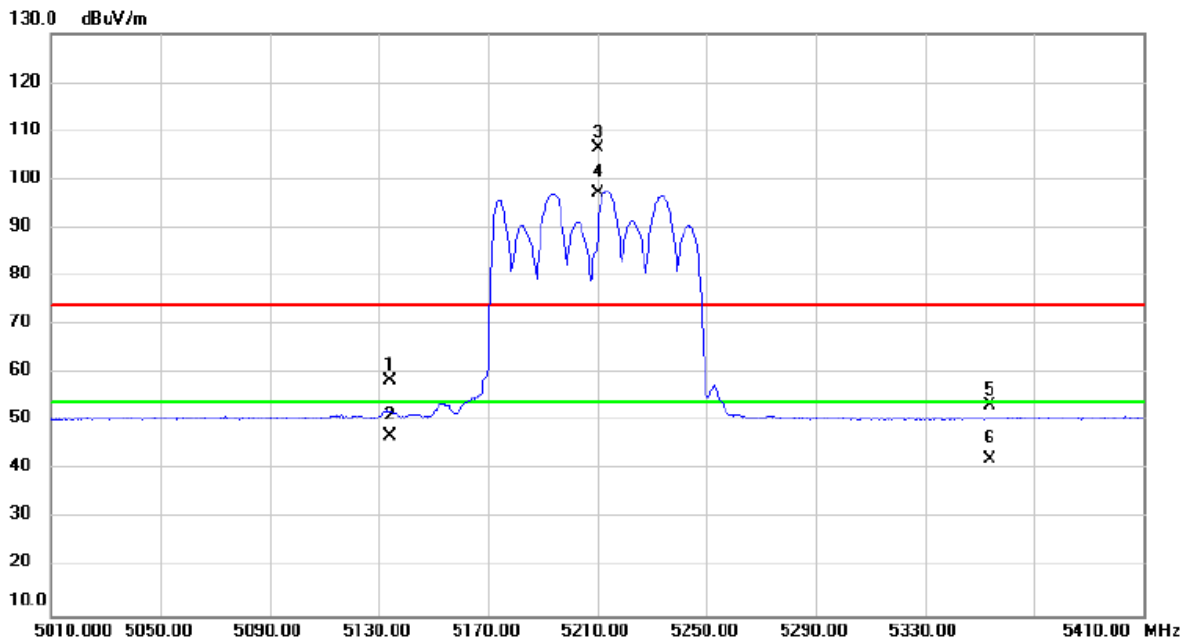
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5133.900	21.18	37.22	58.40	74.00	-15.60	peak	
2		5133.900	9.72	37.22	46.94	54.00	-7.06	AVG	
3	X	5210.000	69.09	37.32	106.41	74.00	32.41	peak	No Limit
4	*	5210.000	59.84	37.32	97.16	54.00	43.16	AVG	No Limit
5		5353.850	15.93	37.50	53.43	74.00	-20.57	peak	
6		5353.850	4.66	37.50	42.16	54.00	-11.84	AVG	

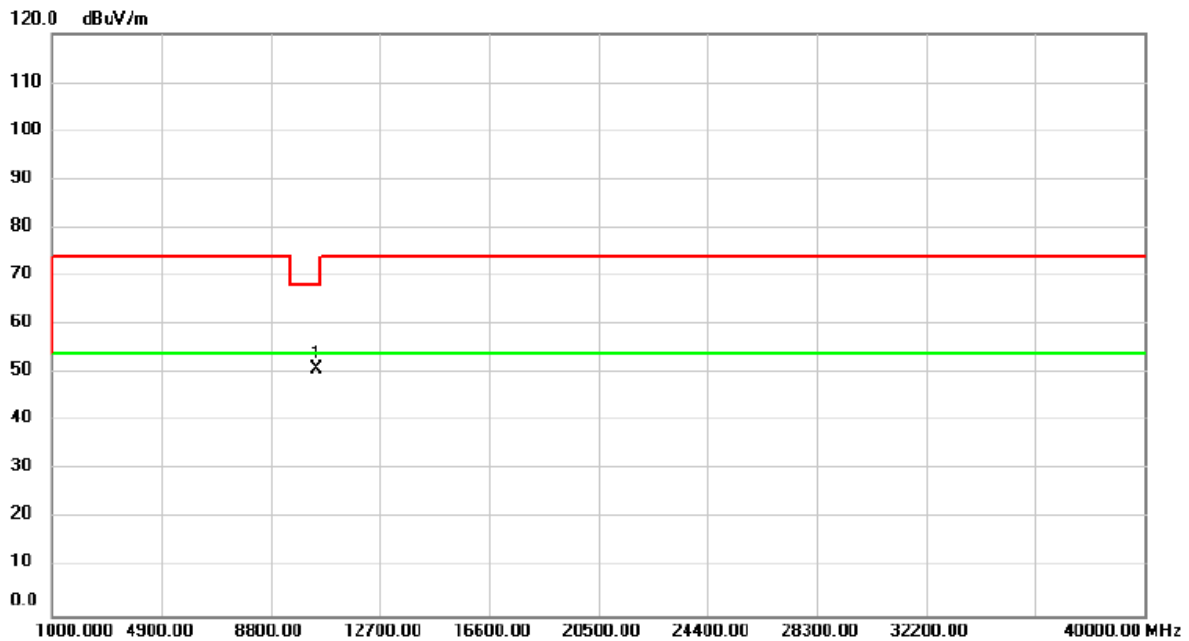
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) MODE CHANNEL 42

Horizontal

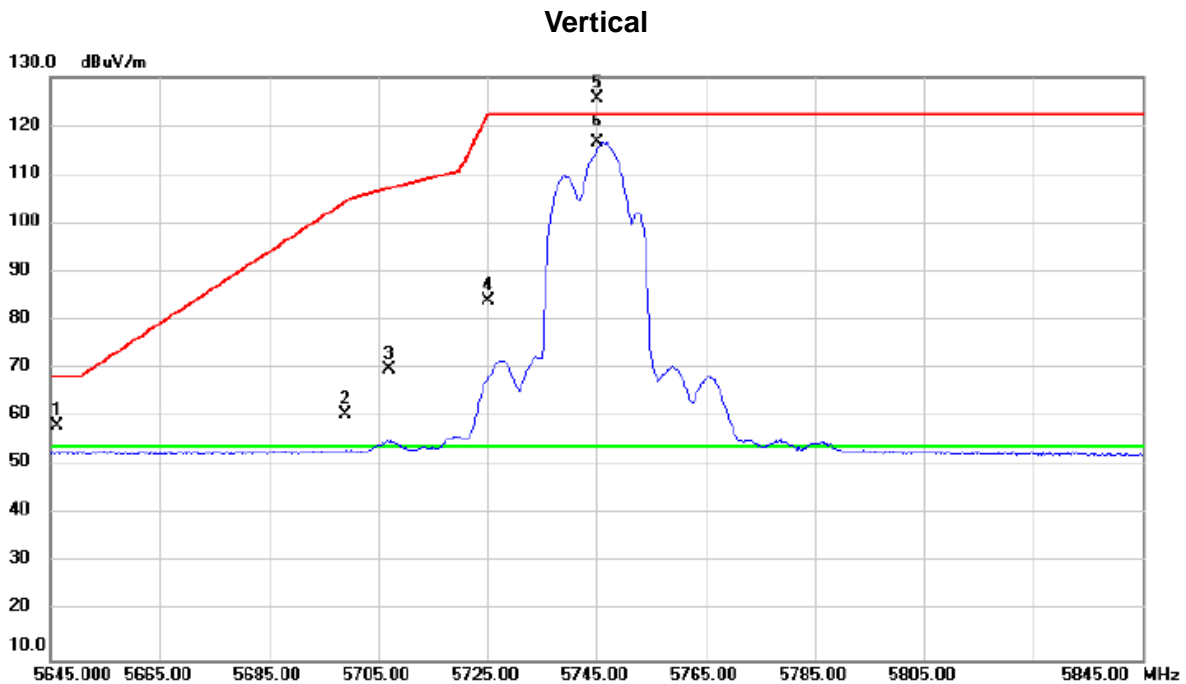


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	10420.000	49.18	1.72	50.90	68.20	-17.30	peak	

REMARKS:

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

Test Mode UNII-3_TX A MODE CHANNEL 149



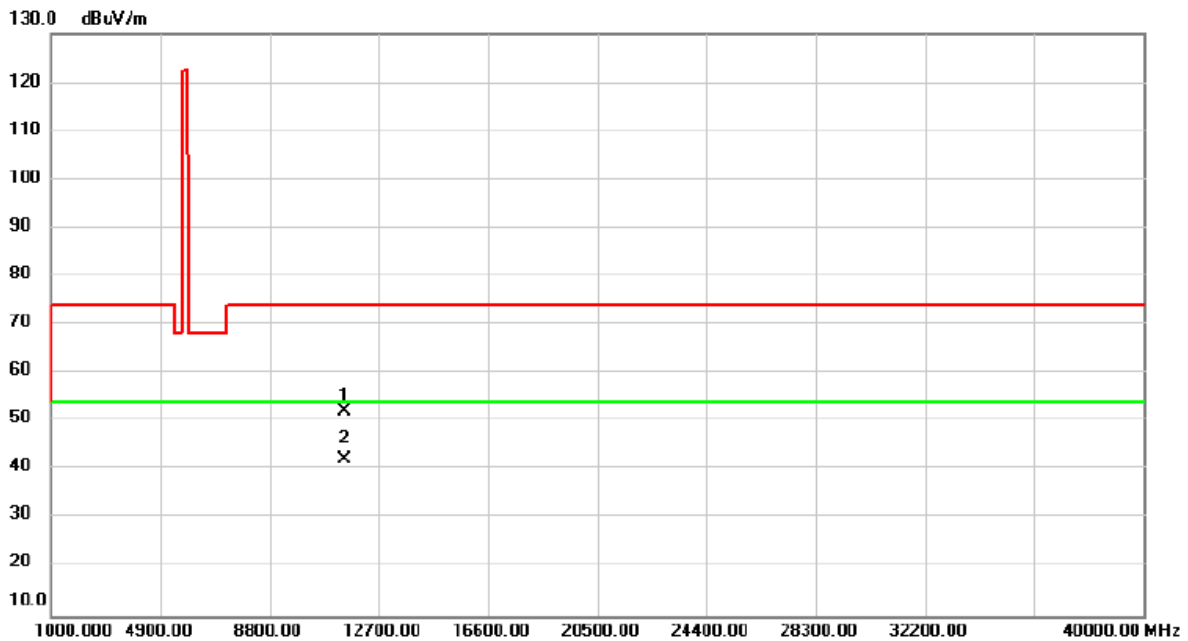
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5646.090	20.24	37.96	58.20	68.20	-10.00	peak	
2		5699.050	22.43	38.06	60.49	104.50	-44.01	peak	
3		5706.900	31.76	38.08	69.84	107.13	-37.29	peak	
4		5725.000	45.89	38.11	84.00	122.20	-38.20	peak	
5	X	5745.000	87.63	38.14	125.77	122.20	3.57	peak	No Limit
6	*	5745.000	78.42	38.14	116.56	54.00	62.56	AVG	No Limit

REMARKS:

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

Test Mode UNII-3_TX A MODE CHANNEL 149

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.000	49.06	2.99	52.05	74.00	-21.95	peak	
2	*	11490.000	39.28	2.99	42.27	54.00	-11.73	AVG	

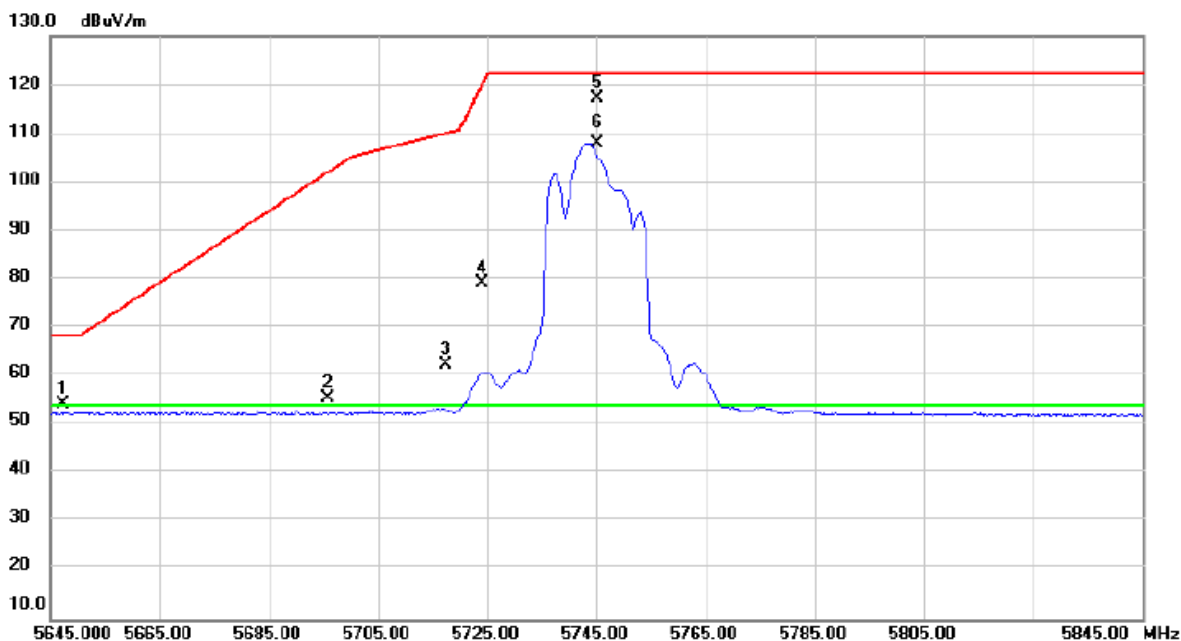
REMARKS:

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

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

Test Mode UNII-3_TX A MODE CHANNEL 149

Horizontal



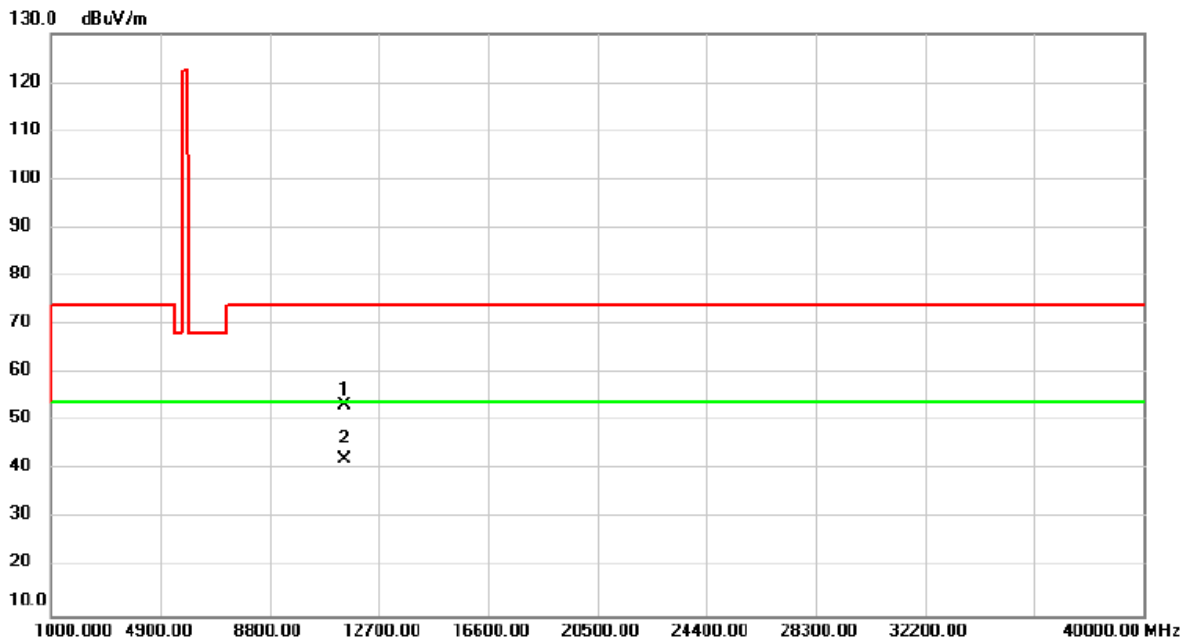
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5647.326	16.32	37.97	54.29	68.20	-13.91	peak	
2		5695.850	17.27	38.05	55.32	102.14	-46.82	peak	
3		5717.400	24.14	38.09	62.23	110.07	-47.84	peak	
4		5724.155	41.00	38.10	79.10	120.27	-41.17	peak	
5		5745.000	79.25	38.14	117.39	122.20	-4.81	peak	No Limit
6	*	5745.000	69.91	38.14	108.05	54.00	54.05	AVG	No Limit

REMARKS:

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

Test Mode UNII-3_TX A MODE CHANNEL 149

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11490.000	50.33	2.99	53.32	74.00	-20.68	peak	
2	*	11490.000	39.27	2.99	42.26	54.00	-11.74	AVG	

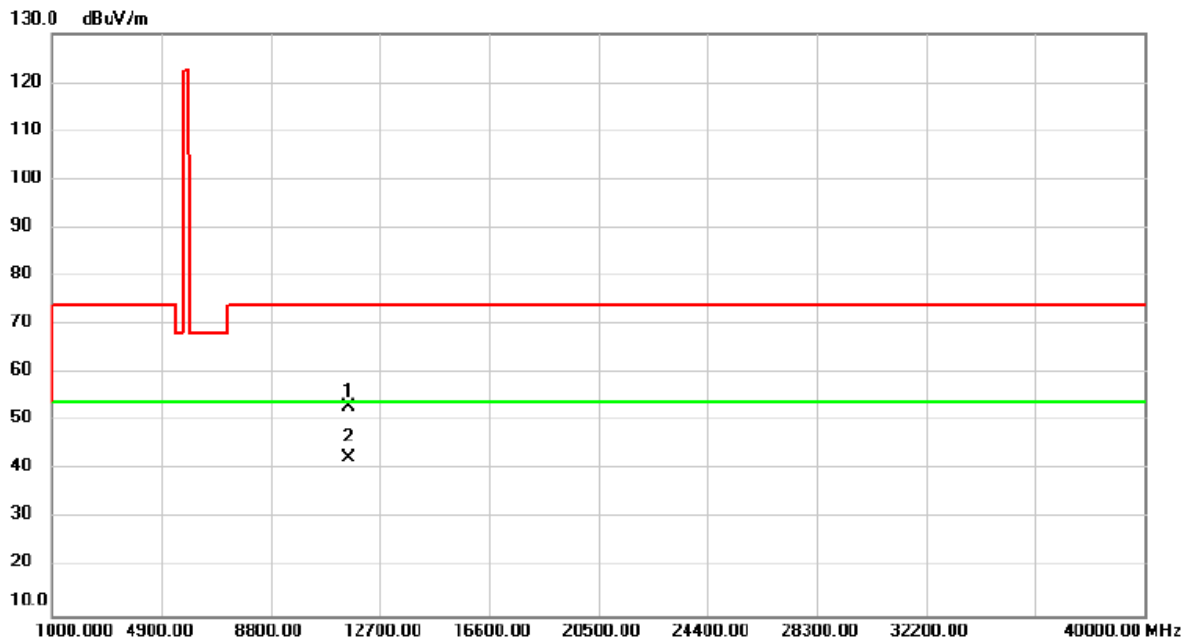
REMARKS:

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

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

Test Mode UNII-3_TX A MODE CHANNEL 157

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.000	50.21	2.82	53.03	74.00	-20.97	peak	
2	*	11570.000	39.82	2.82	42.64	54.00	-11.36	AVG	

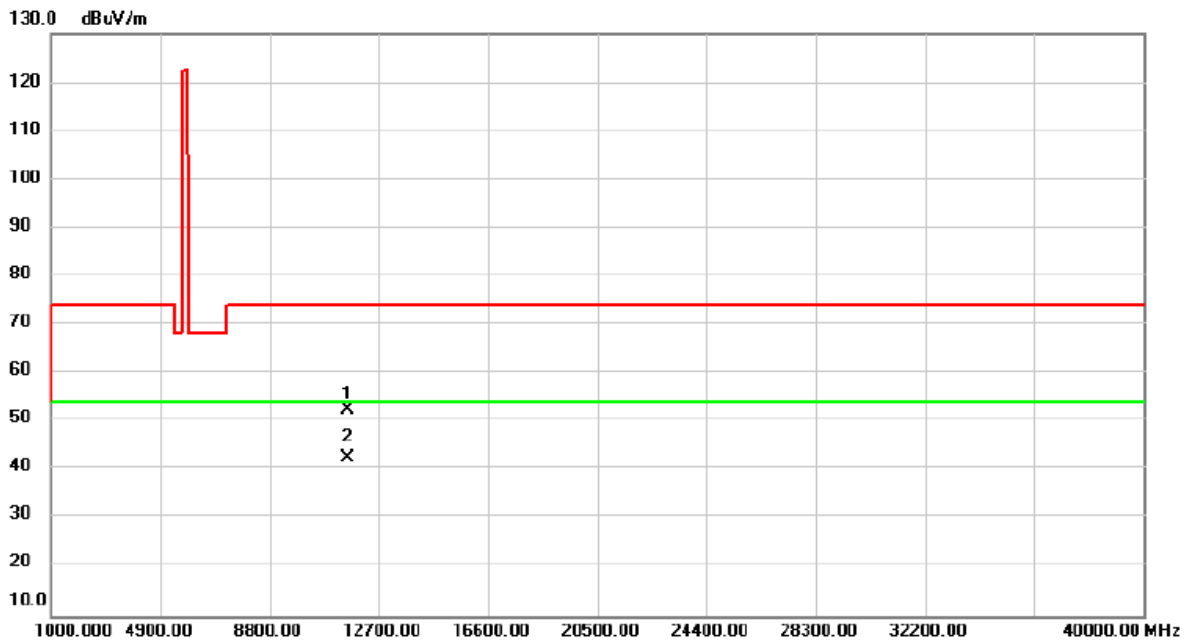
REMARKS:

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

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

Test Mode UNII-3_TX A MODE CHANNEL 157

Horizontal



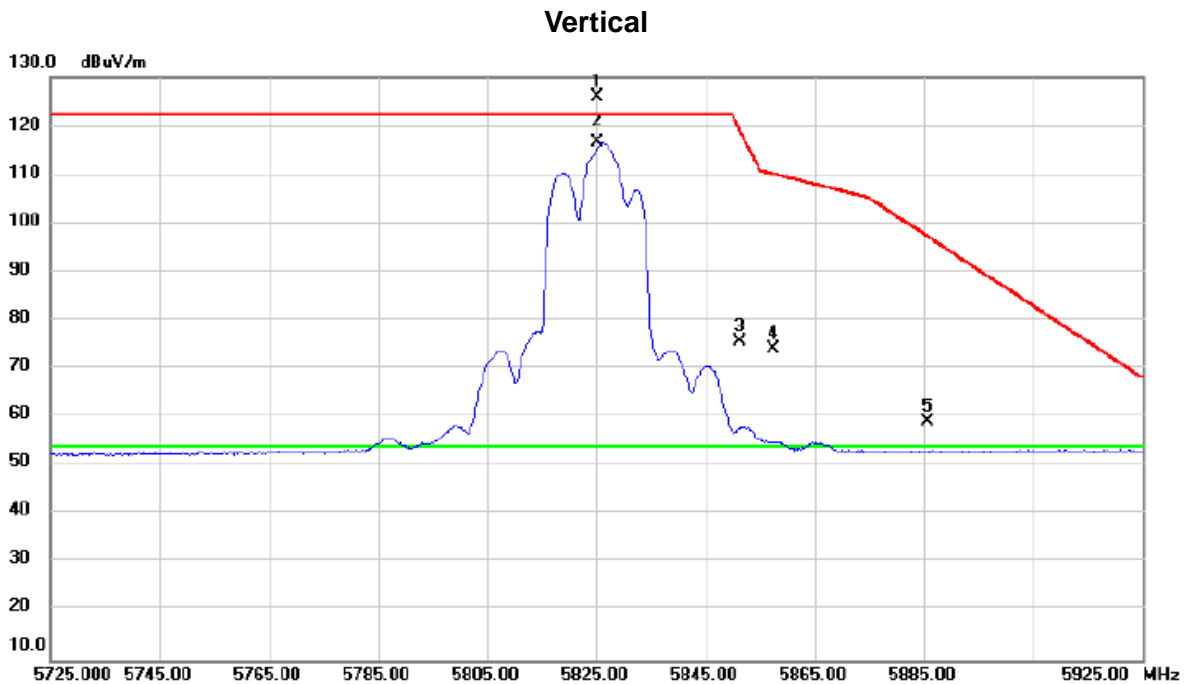
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.000	49.61	2.82	52.43	74.00	-21.57	peak	
2	*	11570.000	39.61	2.82	42.43	54.00	-11.57	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX A MODE CHANNEL 165



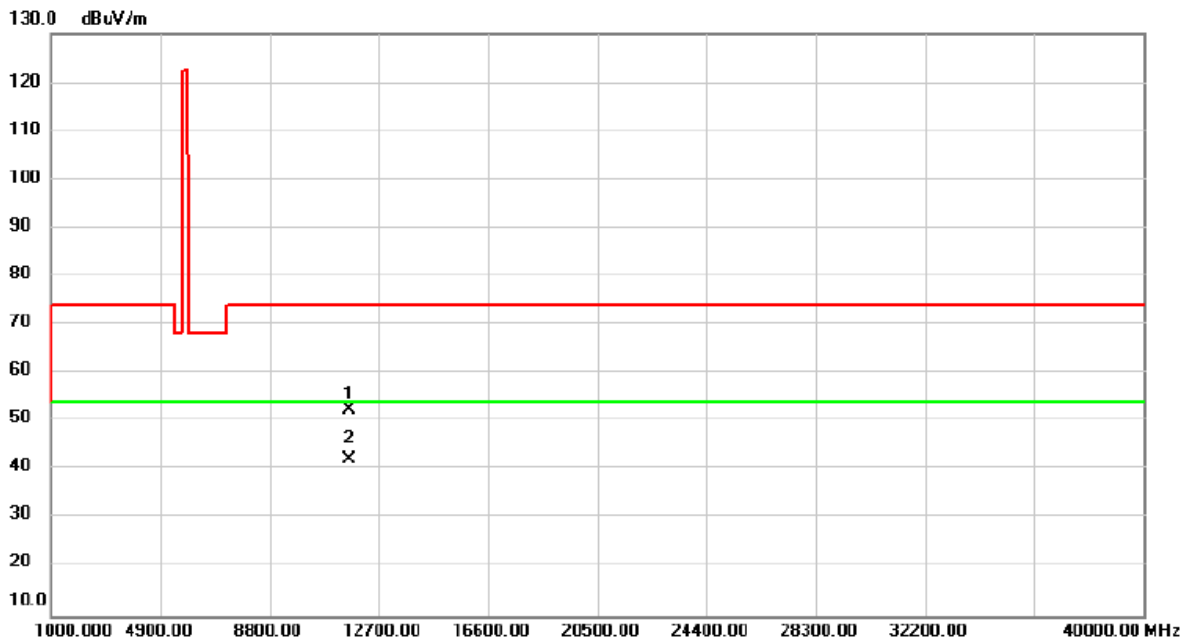
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5825.000	87.54	38.30	125.84	122.20	3.64	peak	No Limit
2	*	5825.000	78.23	38.30	116.53	54.00	62.53	AVG	No Limit
3		5851.205	37.08	38.34	75.42	119.45	-44.03	peak	
4		5857.500	35.82	38.35	74.17	110.10	-35.93	peak	
5		5885.700	20.68	38.41	59.09	97.26	-38.17	peak	

REMARKS:

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

Test Mode UNII-3_TX A MODE CHANNEL 165

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11650.000	49.75	2.60	52.35	74.00	-21.65	peak	
2	*	11650.000	39.79	2.60	42.39	54.00	-11.61	AVG	

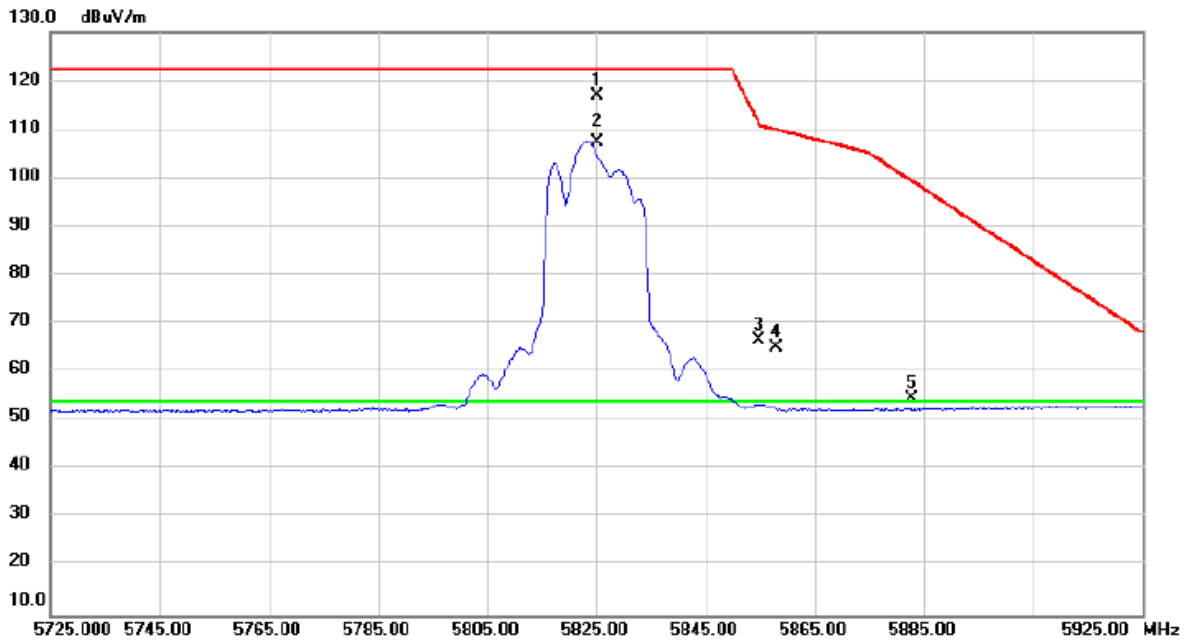
REMARKS:

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

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

Test Mode UNII-3_TX A MODE CHANNEL 165

Horizontal



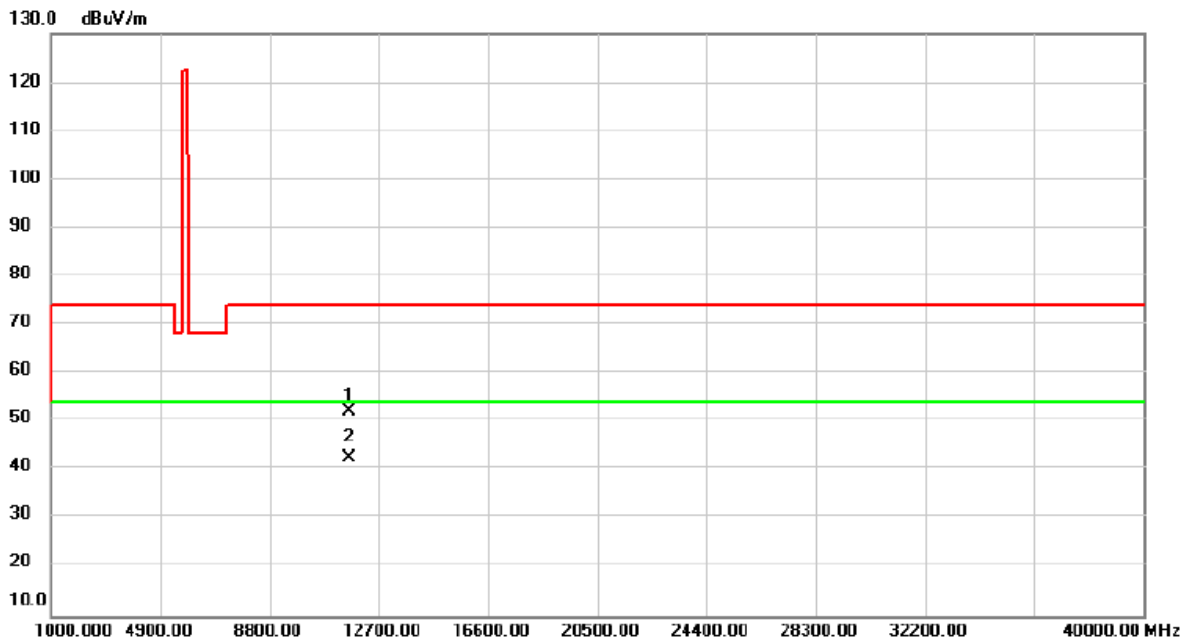
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5825.000	78.79	38.30	117.09	122.20	-5.11	peak	No Limit
2	*	5825.000	69.09	38.30	107.39	54.00	53.39	AVG	No Limit
3		5854.835	28.05	38.35	66.40	111.18	-44.78	peak	
4		5858.060	26.74	38.35	65.09	109.94	-44.85	peak	
5		5882.650	16.04	38.41	54.45	99.52	-45.07	peak	

REMARKS:

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

Test Mode UNII-3_TX A MODE CHANNEL 165

Horizontal



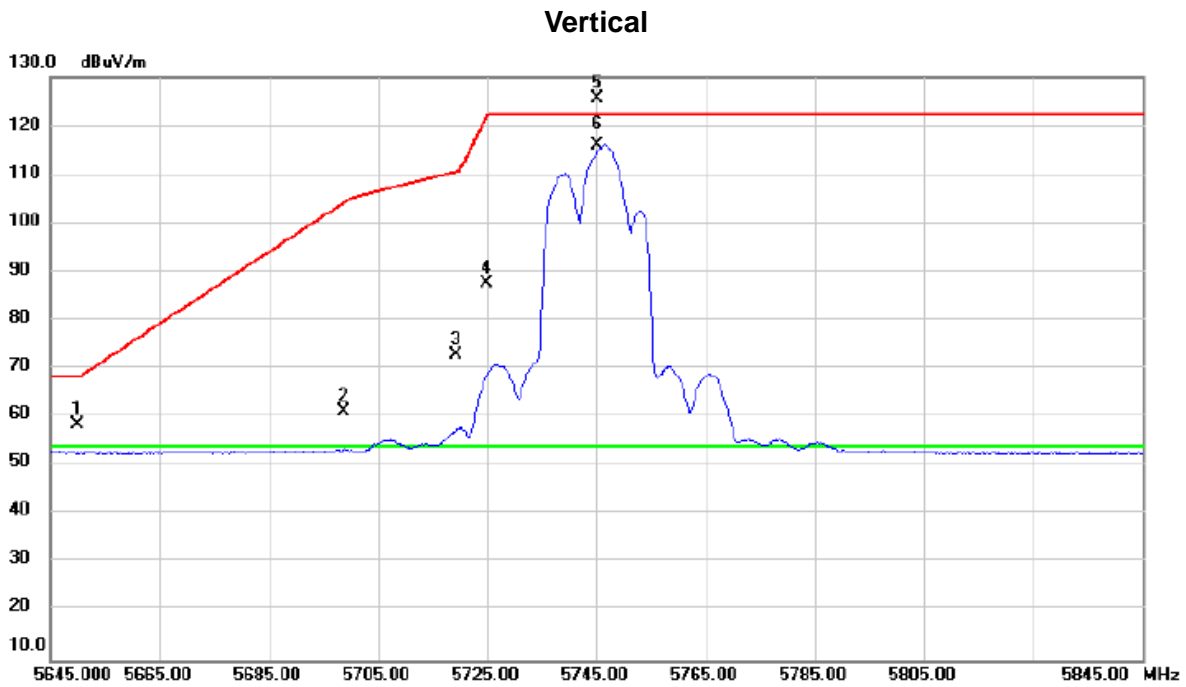
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.000	49.58	2.60	52.18	74.00	-21.82	peak	
2	*	11650.000	39.83	2.60	42.43	54.00	-11.57	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 149



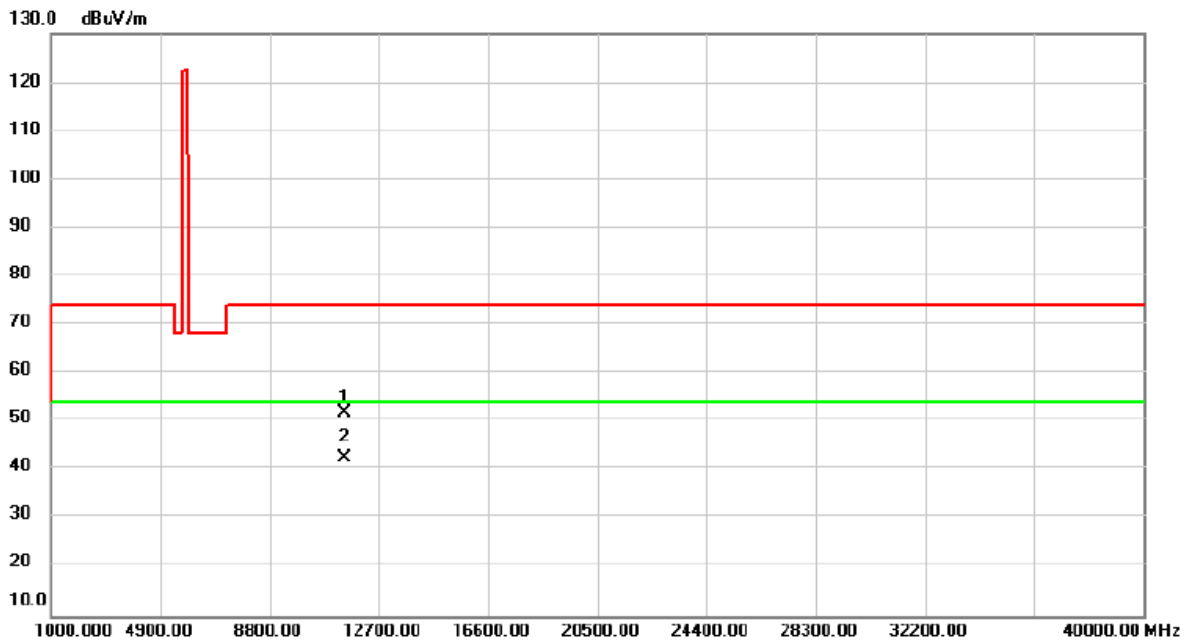
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5649.970	20.57	37.97	58.54	68.20	-9.66	peak	
2		5698.800	23.24	38.06	61.30	104.32	-43.02	peak	
3		5719.320	34.69	38.10	72.79	110.61	-37.82	peak	
4		5724.995	49.51	38.10	87.61	122.19	-34.58	peak	
5	X	5745.000	87.61	38.14	125.75	122.20	3.55	peak	No Limit
6	*	5745.000	78.05	38.14	116.19	54.00	62.19	AVG	No Limit

REMARKS:

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 149

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.000	48.92	2.99	51.91	74.00	-22.09	peak	
2	*	11490.000	39.55	2.99	42.54	54.00	-11.46	AVG	

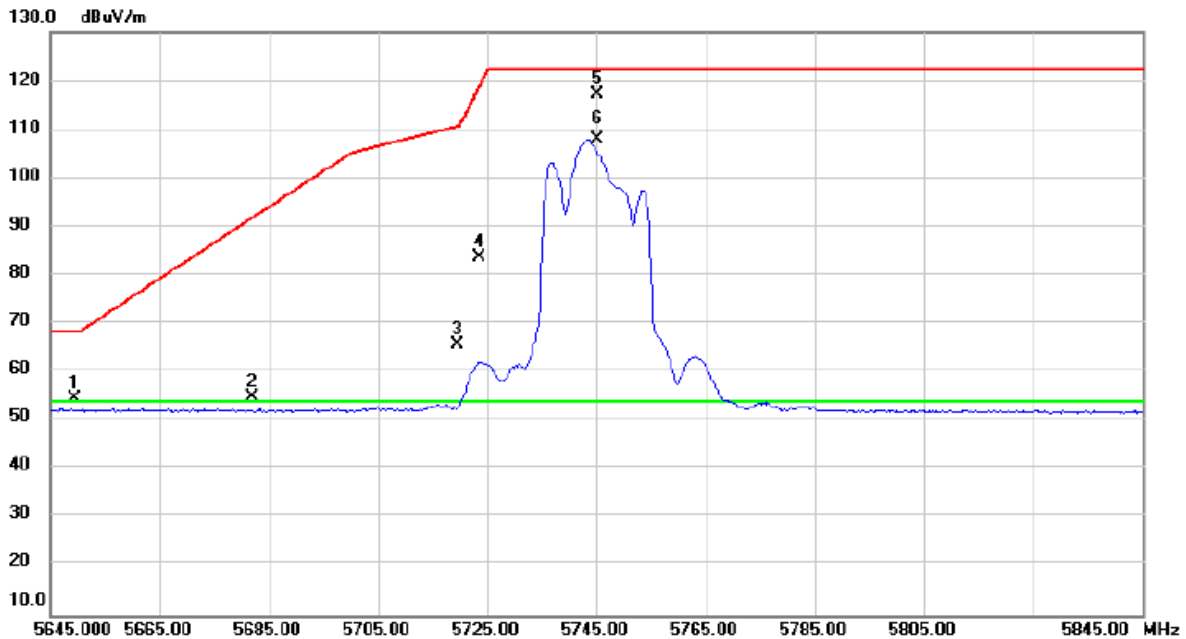
REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 149

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5649.295	16.57	37.97	54.54	68.20	-13.66	peak	
2		5682.050	16.73	38.02	54.75	91.95	-37.20	peak	
3		5719.480	27.43	38.10	65.53	110.65	-45.12	peak	
4		5723.610	45.56	38.10	83.66	119.03	-35.37	peak	
5		5745.000	79.03	38.14	117.17	122.20	-5.03	peak	No Limit
6	*	5745.000	69.68	38.14	107.82	54.00	53.82	AVG	No Limit

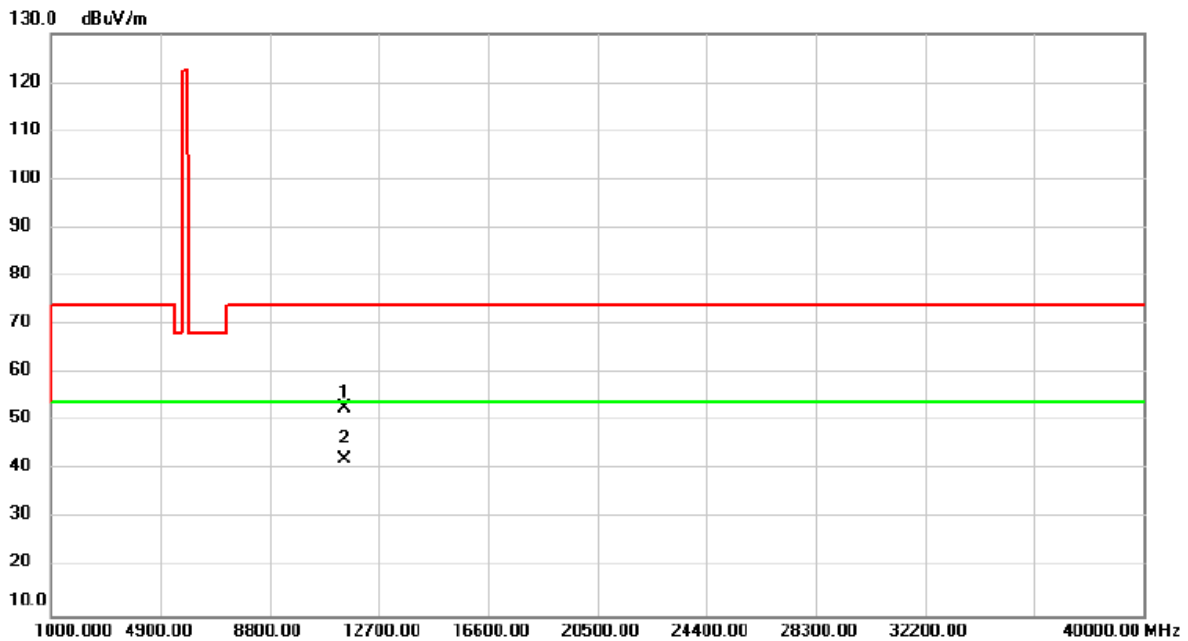
REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 149

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.000	49.88	2.99	52.87	74.00	-21.13	peak	
2	*	11490.000	39.35	2.99	42.34	54.00	-11.66	AVG	

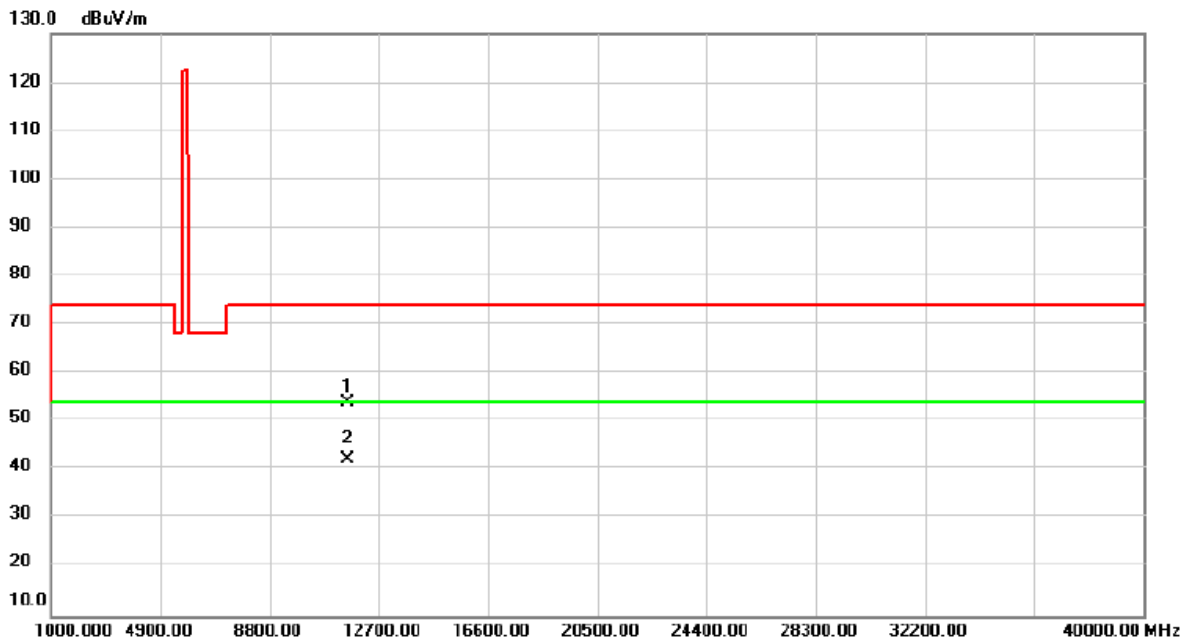
REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 157

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.000	51.19	2.82	54.01	74.00	-19.99	peak	
2	*	11570.000	39.50	2.82	42.32	54.00	-11.68	AVG	

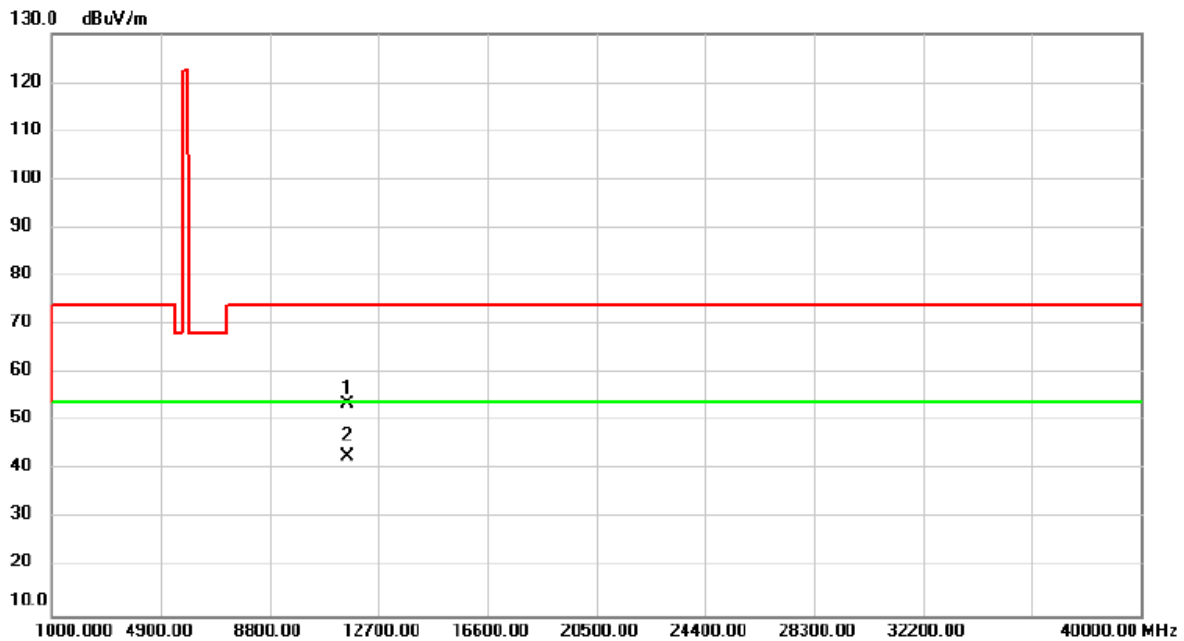
REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 157

Horizontal



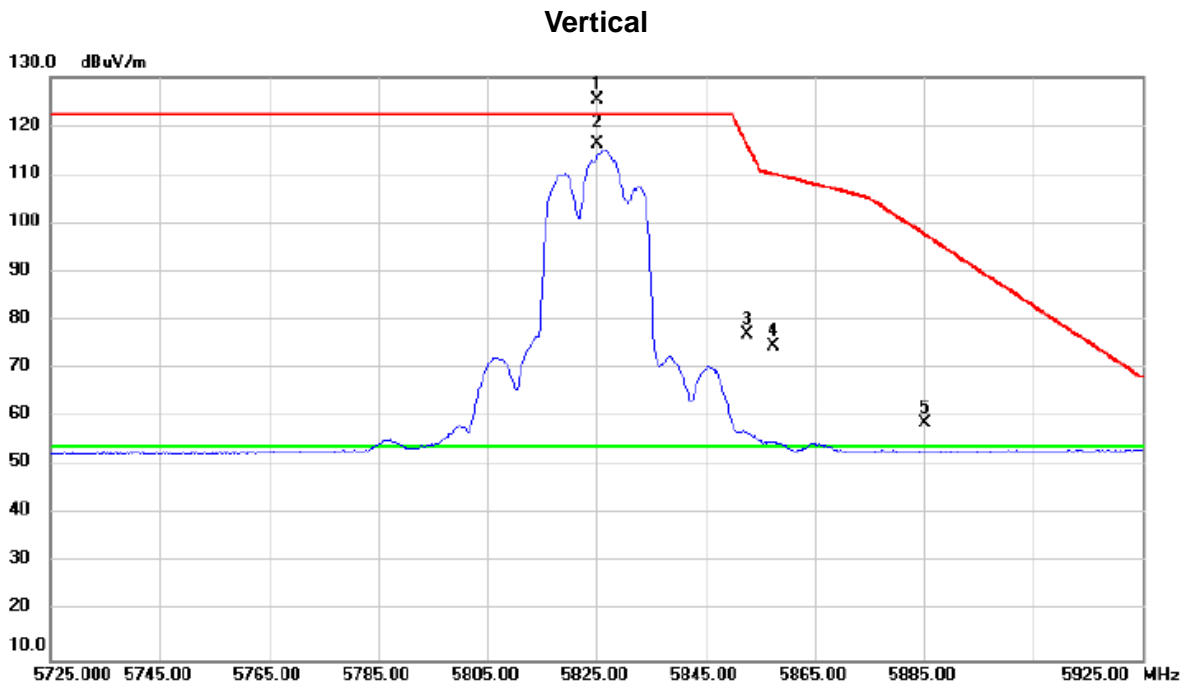
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11570.000	50.74	2.82	53.56	74.00	-20.44	peak	
2	*	11570.000	40.02	2.82	42.84	54.00	-11.16	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 165



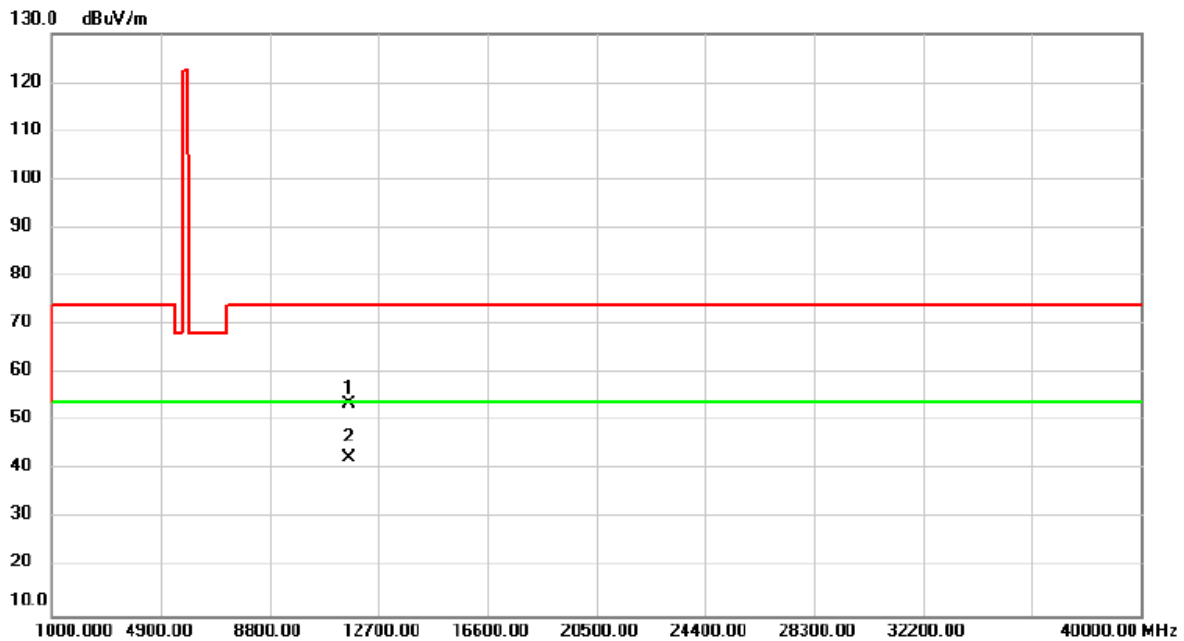
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5825.000	87.02	38.30	125.32	122.20	3.12	peak	No Limit
2	*	5825.000	77.92	38.30	116.22	54.00	62.22	AVG	No Limit
3		5852.700	38.61	38.34	76.95	116.04	-39.09	peak	
4		5857.480	36.43	38.35	74.78	110.10	-35.32	peak	
5		5885.200	20.36	38.41	58.77	97.63	-38.86	peak	

REMARKS:

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 165

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.000	51.18	2.60	53.78	74.00	-20.22	peak	
2	*	11650.000	40.07	2.60	42.67	54.00	-11.33	AVG	

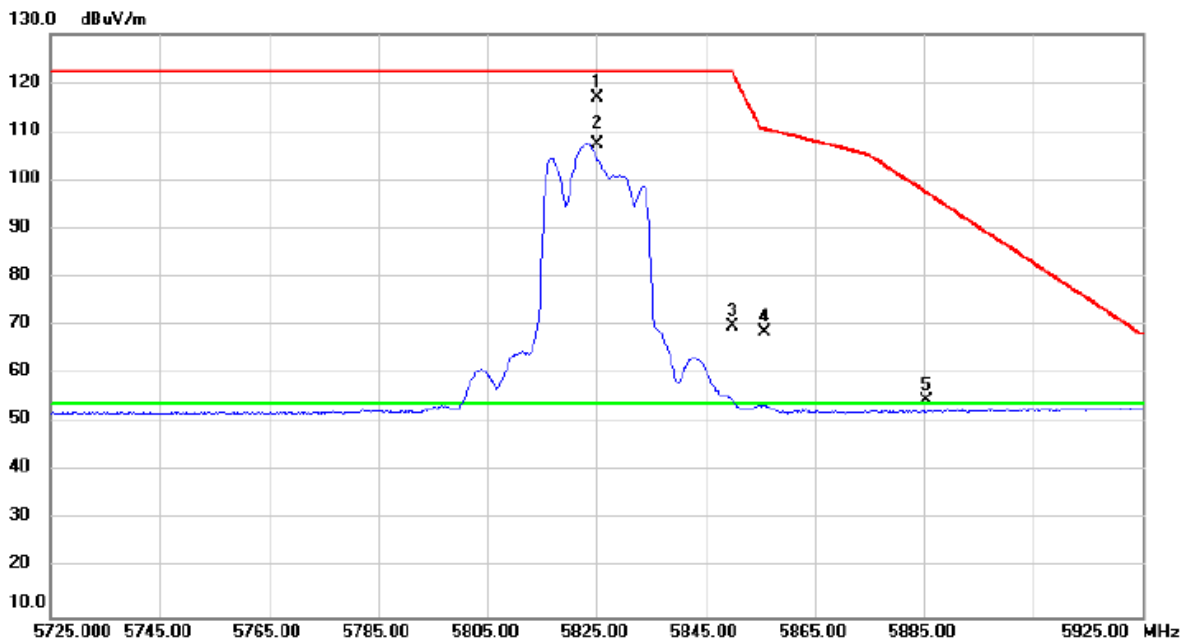
REMARKS:

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

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 165

Horizontal



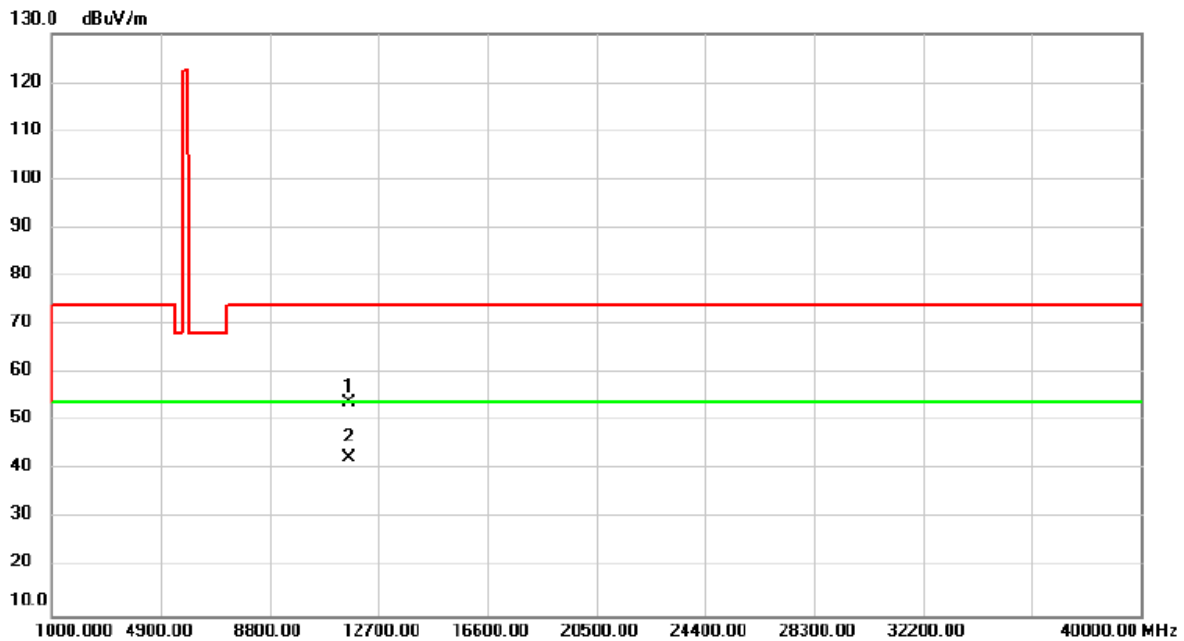
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5825.000	78.79	38.30	117.09	122.20	-5.11	peak	No Limit
2	*	5825.000	69.09	38.30	107.39	54.00	53.39	AVG	No Limit
3		5850.060	31.47	38.34	69.81	122.06	-52.25	peak	
4		5855.720	30.24	38.35	68.59	110.60	-42.01	peak	
5		5885.300	16.02	38.41	54.43	97.55	-43.12	peak	

REMARKS:

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

Test Mode UNII-3_TX N (HT20) MODE CHANNEL 165

Horizontal



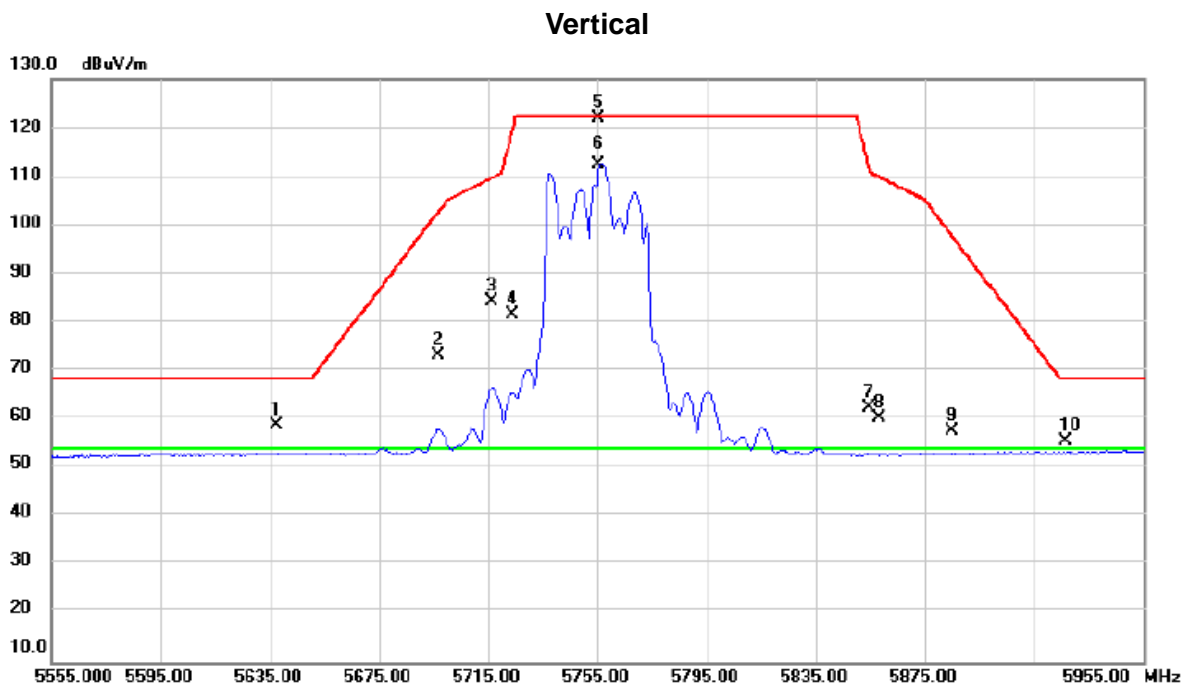
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11650.000	51.39	2.60	53.99	74.00	-20.01	peak	
2	*	11650.000	40.05	2.60	42.65	54.00	-11.35	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 151



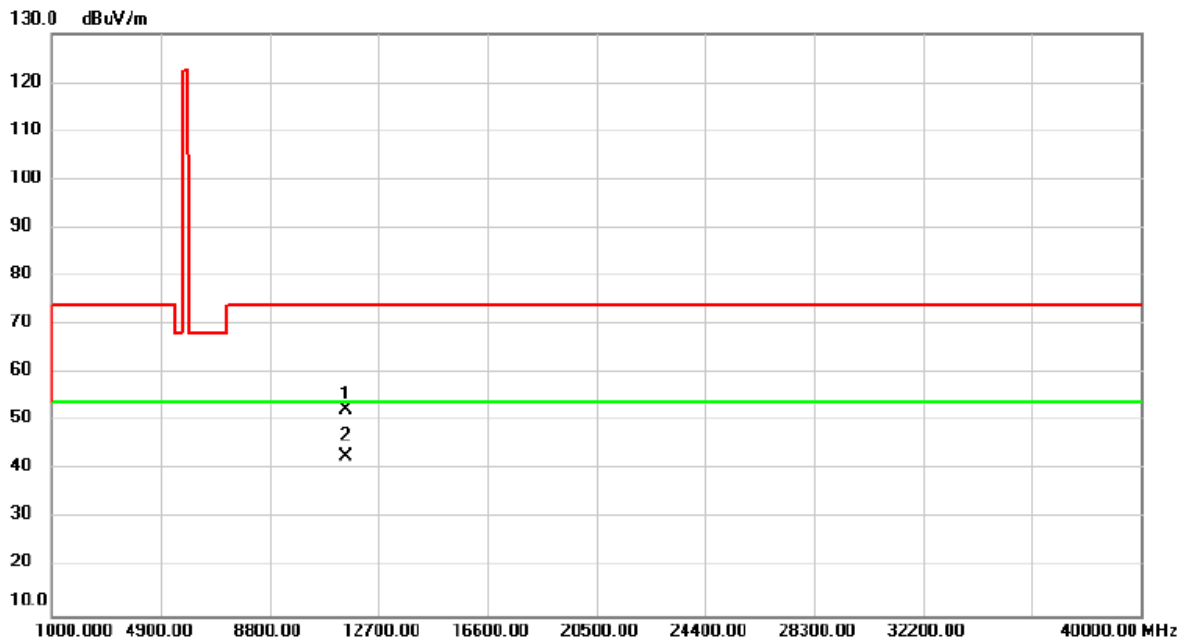
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5637.555	20.87	37.94	58.81	68.20	-9.39	peak	
2		5696.850	34.98	38.06	73.04	102.88	-29.84	peak	
3		5716.580	46.06	38.09	84.15	109.84	-25.69	peak	
4		5723.720	43.51	38.10	81.61	119.28	-37.67	peak	
5		5755.000	83.94	38.17	122.11	122.20	-0.09	peak	No Limit
6	*	5755.000	74.42	38.17	112.59	54.00	58.59	AVG	No Limit
7		5854.350	23.88	38.35	62.23	112.28	-50.05	peak	
8		5858.440	21.98	38.35	60.33	109.84	-49.51	peak	
9		5884.900	19.08	38.41	57.49	97.85	-40.36	peak	
10		5926.680	17.09	38.49	55.58	68.20	-12.62	peak	

REMARKS:

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 151

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.000	49.59	2.98	52.57	74.00	-21.43	peak	
2	*	11510.000	39.74	2.98	42.72	54.00	-11.28	AVG	

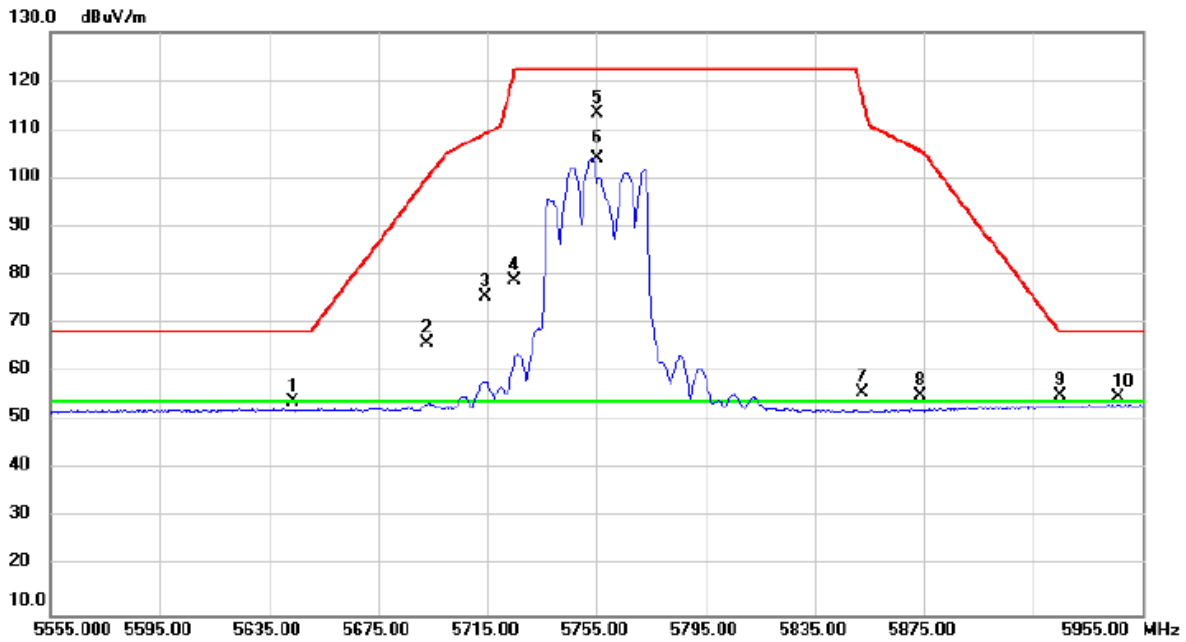
REMARKS:

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

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 151

Horizontal



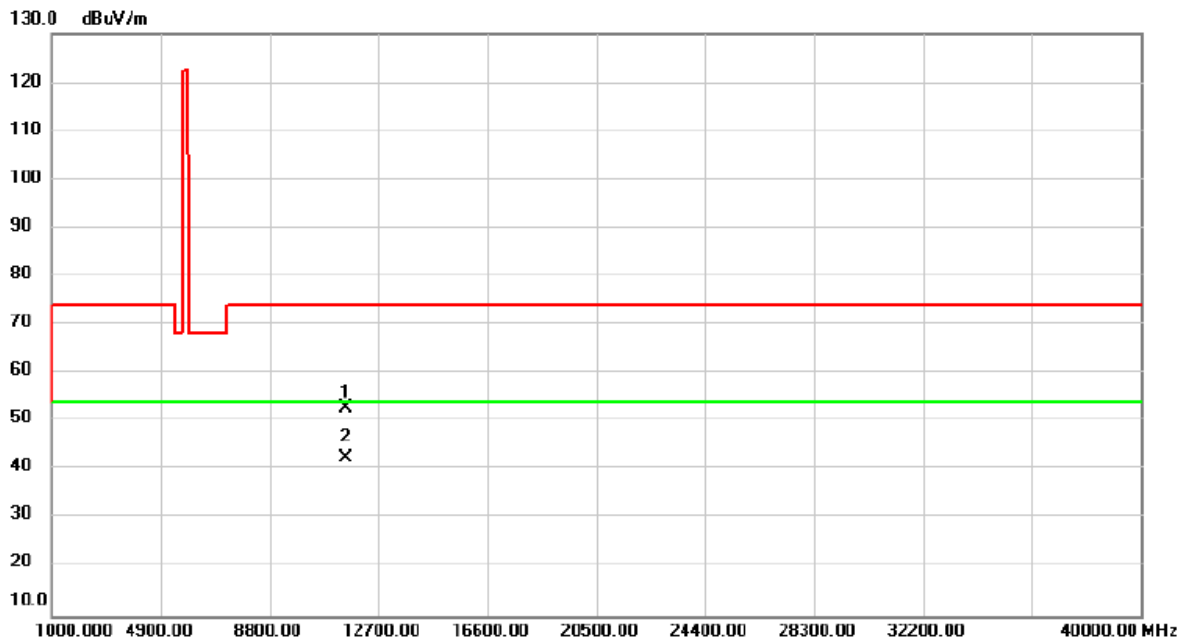
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5643.635	16.09	37.96	54.05	68.20	-14.15	peak	
2		5693.000	27.78	38.05	65.83	100.04	-34.21	peak	
3		5714.280	37.37	38.09	75.46	109.20	-33.74	peak	
4		5724.955	40.66	38.10	78.76	122.10	-43.34	peak	
5		5755.000	75.30	38.17	113.47	122.20	-8.73	peak	No Limit
6	*	5755.000	65.84	38.17	104.01	54.00	50.01	AVG	No Limit
7		5852.215	17.30	38.34	55.64	117.15	-61.51	peak	
8		5873.460	16.92	38.38	55.30	105.63	-50.33	peak	
9		5924.700	16.78	38.48	55.26	68.42	-13.16	peak	
10		5946.060	16.23	38.52	54.75	68.20	-13.45	peak	

REMARKS:

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 151

Horizontal



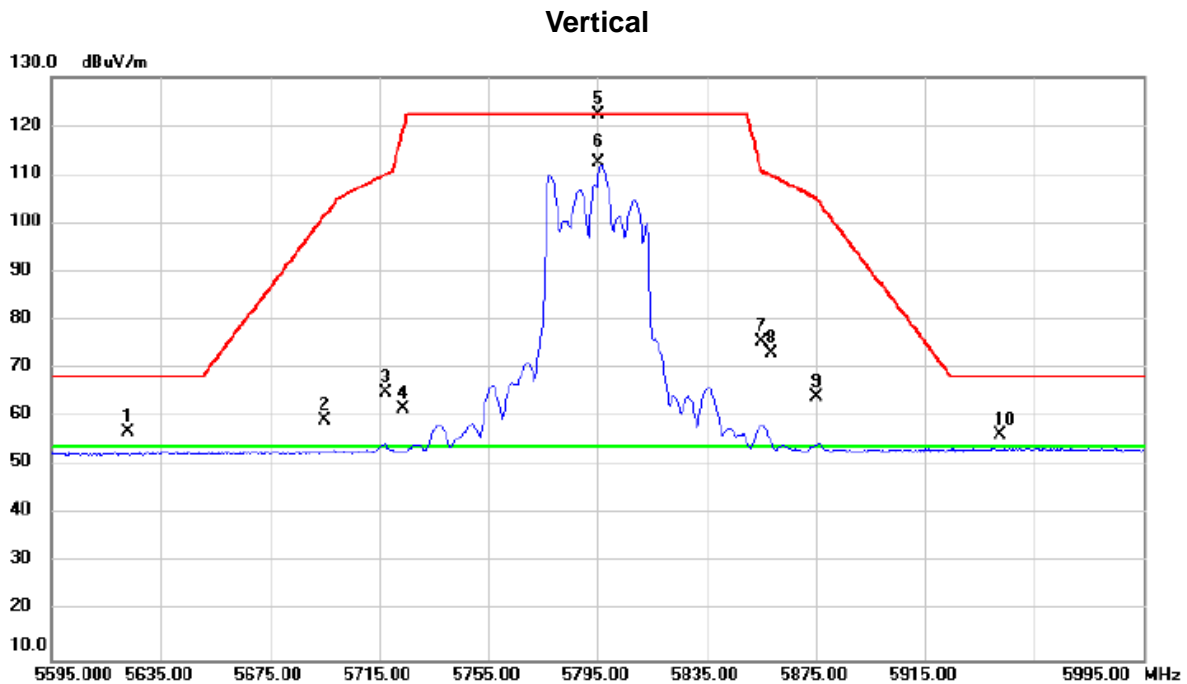
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.000	49.87	2.98	52.85	74.00	-21.15	peak	
2	*	11510.000	39.71	2.98	42.69	54.00	-11.31	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 159



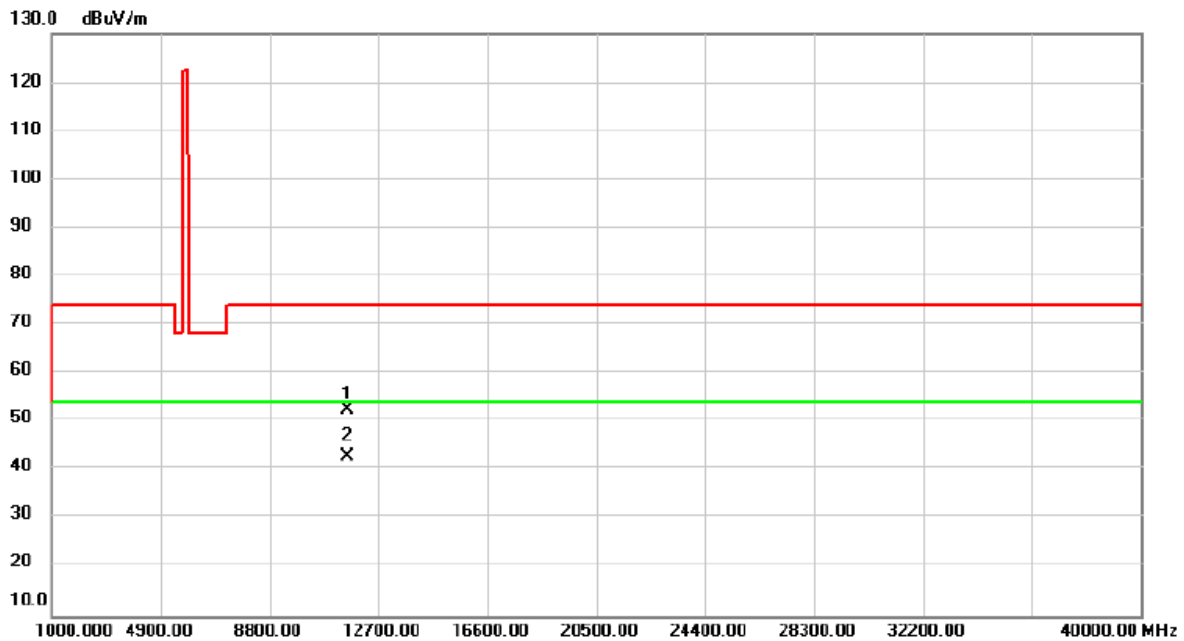
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5623.166	18.91	37.92	56.83	68.20	-11.37	peak	
2		5694.950	21.25	38.05	59.30	101.48	-42.18	peak	
3		5717.200	27.04	38.09	65.13	110.02	-44.89	peak	
4		5724.005	23.56	38.10	61.66	119.93	-58.27	peak	
5	X	5795.000	84.23	38.24	122.47	122.20	0.27	peak	No Limit
6	*	5795.000	74.34	38.24	112.58	54.00	58.58	AVG	No Limit
7		5854.995	37.07	38.35	75.42	110.81	-35.39	peak	
8		5858.600	34.86	38.35	73.21	109.79	-36.58	peak	
9		5875.200	25.81	38.39	64.20	105.05	-40.85	peak	
10		5942.600	17.71	38.51	56.22	68.20	-11.98	peak	

REMARKS:

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 159

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.000	49.75	2.77	52.52	74.00	-21.48	peak	
2	*	11590.000	40.11	2.77	42.88	54.00	-11.12	AVG	

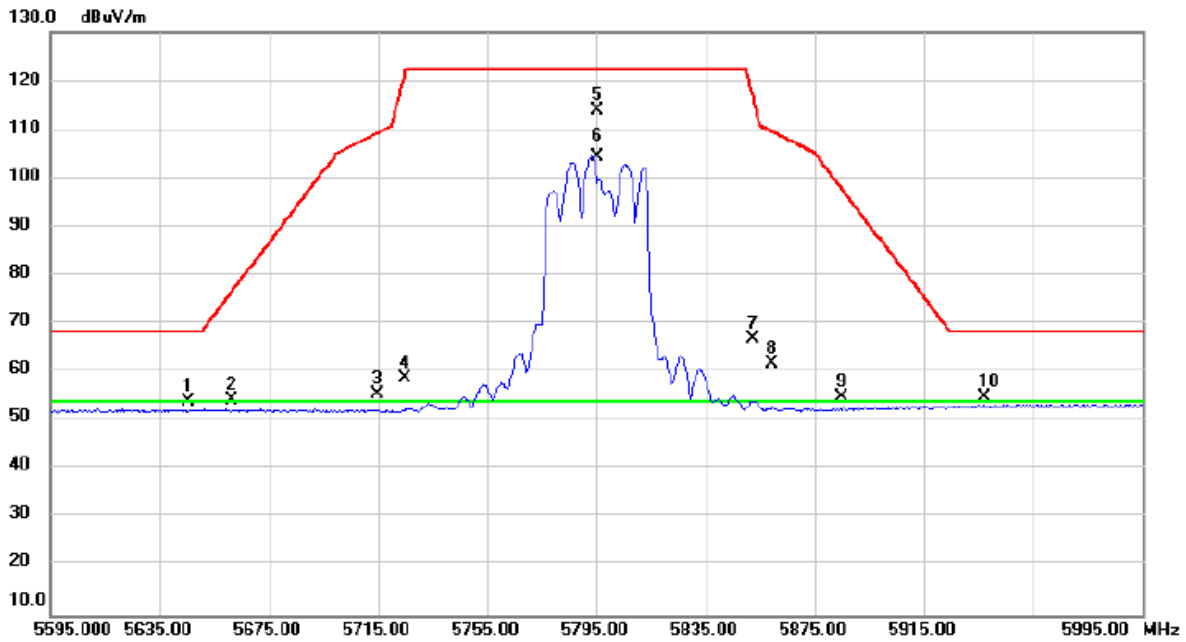
REMARKS:

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

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 159

Horizontal



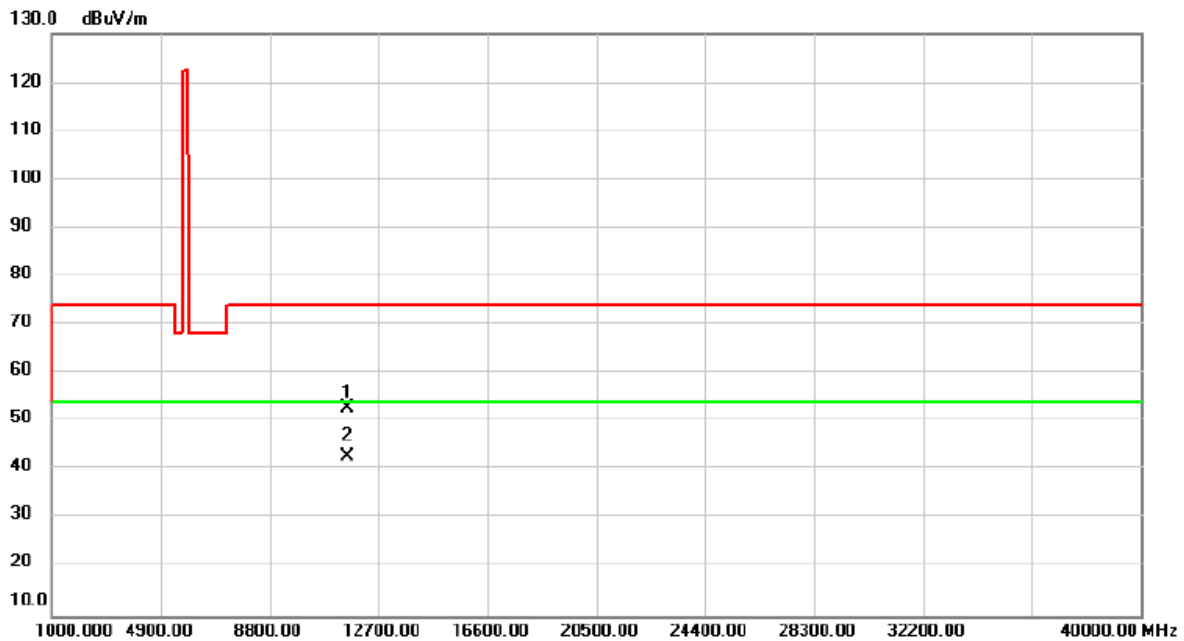
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5645.380	16.10	37.96	54.06	68.20	-14.14	peak	
2		5661.250	16.22	37.99	54.21	76.55	-22.34	peak	
3		5714.700	17.24	38.09	55.33	109.32	-53.99	peak	
4		5724.665	20.71	38.10	58.81	121.44	-62.63	peak	
5		5795.000	75.72	38.24	113.96	122.20	-8.24	peak	No Limit
6	*	5795.000	66.15	38.24	104.39	54.00	50.39	AVG	No Limit
7		5852.330	28.37	38.34	66.71	116.89	-50.18	peak	
8		5859.240	23.46	38.36	61.82	109.61	-47.79	peak	
9		5884.650	16.31	38.41	54.72	98.03	-43.31	peak	
10		5937.000	16.23	38.50	54.73	68.20	-13.47	peak	

REMARKS:

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

Test Mode UNII-3_TX N (HT40) MODE CHANNEL 159

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.000	49.89	2.77	52.66	74.00	-21.34	peak	
2	*	11590.000	39.98	2.77	42.75	54.00	-11.25	AVG	

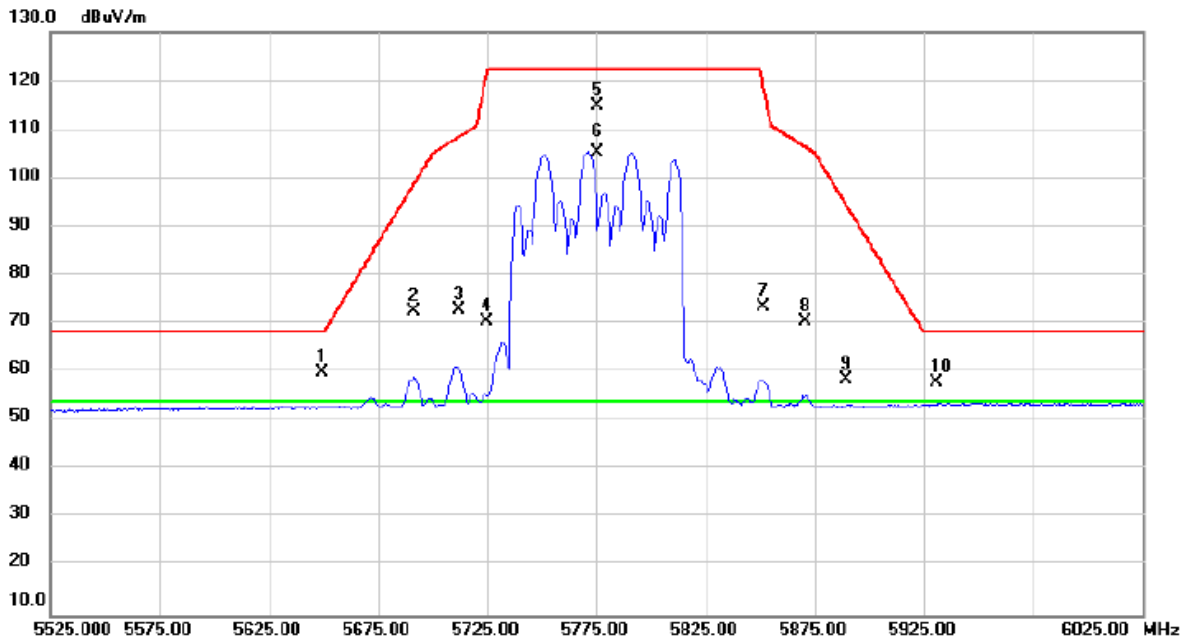
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Vertical



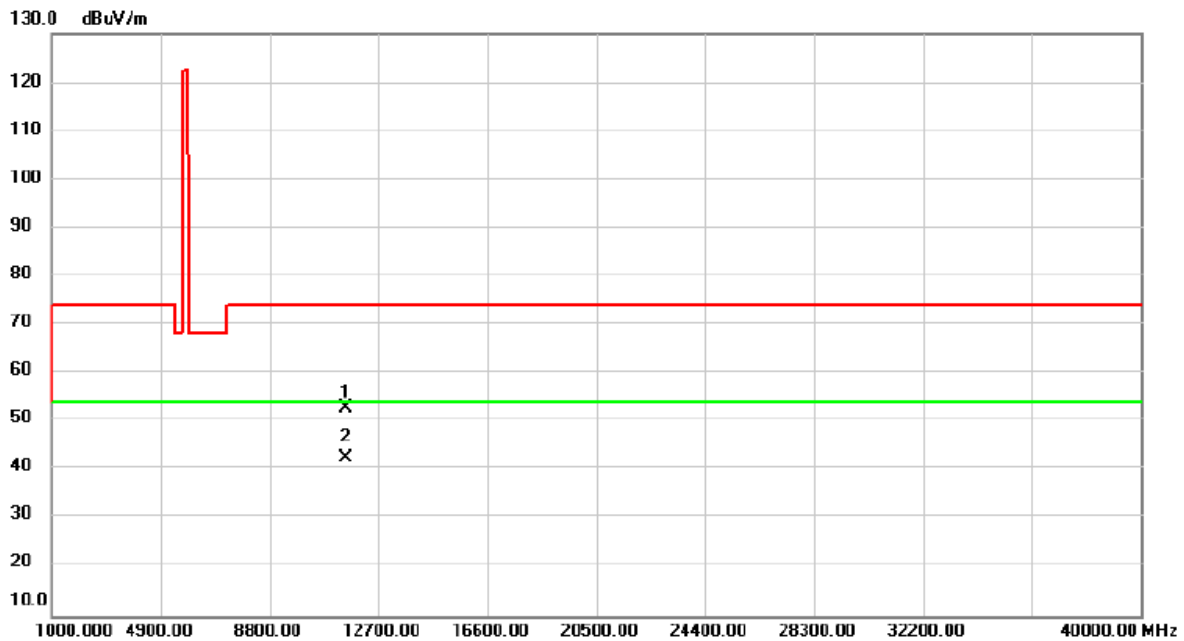
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5649.250	21.96	37.97	59.93	68.20	-8.27	peak	
2		5691.400	34.45	38.05	72.50	98.86	-26.36	peak	
3		5711.680	34.78	38.09	72.87	108.47	-35.60	peak	
4		5724.980	32.25	38.10	70.35	122.15	-51.80	peak	
5		5775.000	76.63	38.21	114.84	122.20	-7.36	peak	No Limit
6	*	5775.000	67.05	38.21	105.26	54.00	51.26	AVG	No Limit
7		5851.490	35.14	38.34	73.48	118.80	-45.32	peak	
8		5870.540	31.96	38.38	70.34	106.45	-36.11	peak	
9		5889.400	19.92	38.42	58.34	94.51	-36.17	peak	
10		5930.375	19.37	38.49	57.86	68.20	-10.34	peak	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.000	49.87	2.87	52.74	74.00	-21.26	peak	
2	*	11550.000	39.65	2.87	42.52	54.00	-11.48	AVG	

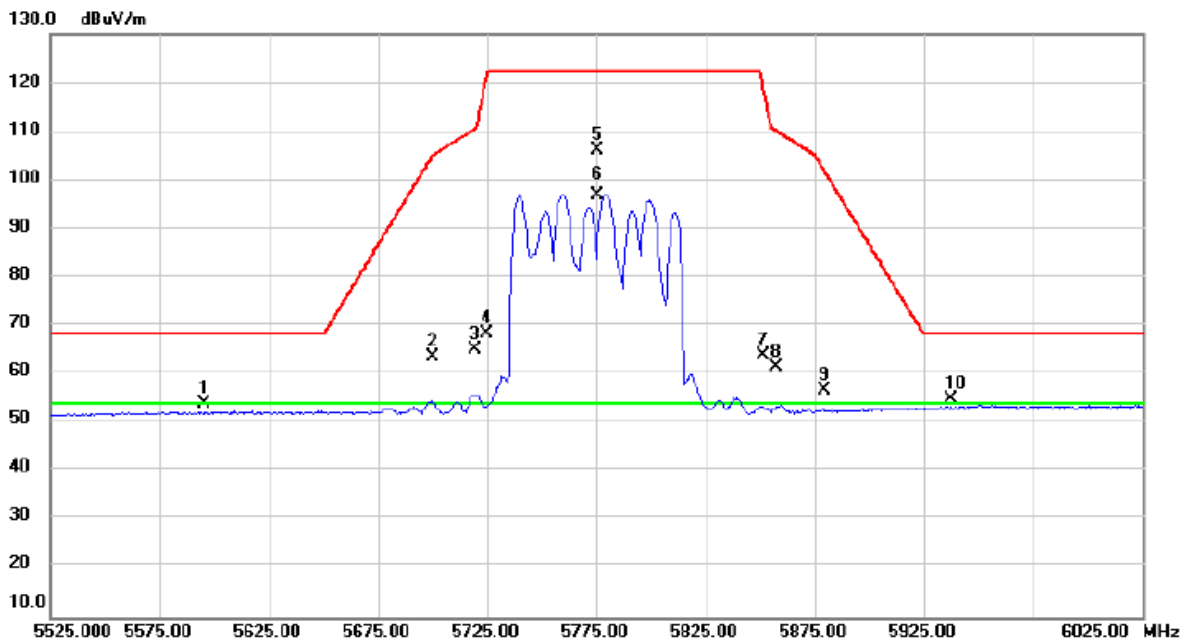
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Horizontal



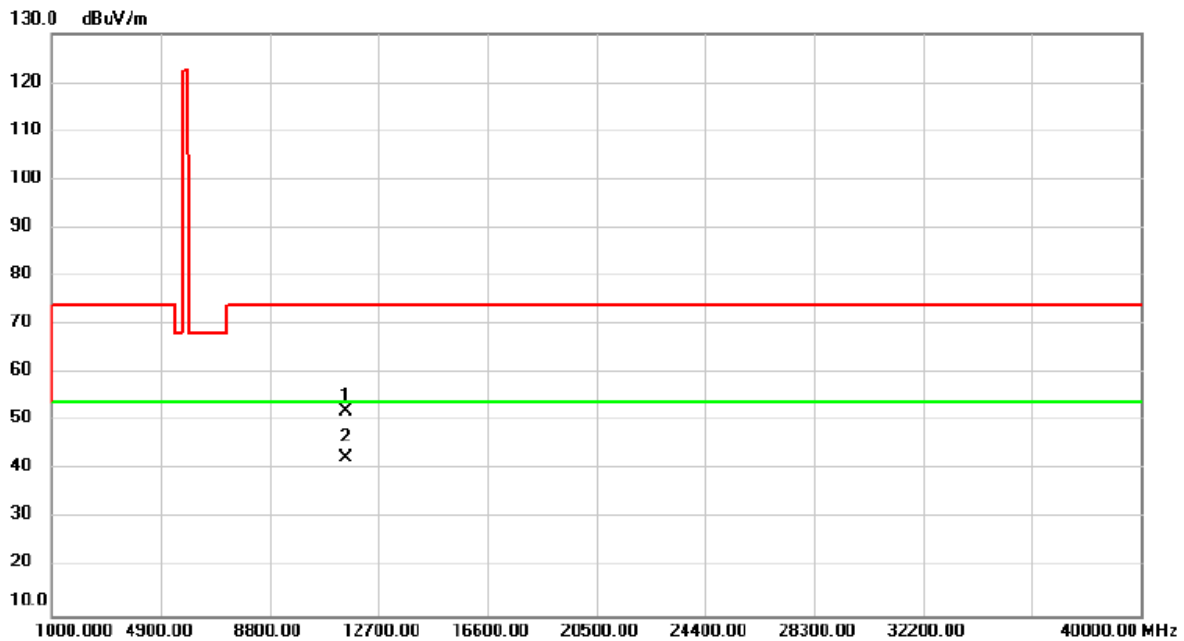
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5595.375	16.02	37.86	53.88	68.20	-14.32	peak	
2		5699.700	25.62	38.06	63.68	104.98	-41.30	peak	
3		5719.560	27.08	38.10	65.18	110.68	-45.50	peak	
4		5724.875	30.16	38.10	68.26	121.92	-53.66	peak	
5		5775.000	68.06	38.21	106.27	122.20	-15.93	peak	No Limit
6	*	5775.000	58.63	38.21	96.84	54.00	42.84	AVG	No Limit
7		5851.195	25.57	38.34	63.91	119.47	-55.56	peak	
8		5857.040	23.05	38.35	61.40	110.23	-48.83	peak	
9		5879.000	18.32	38.39	56.71	102.23	-45.52	peak	
10		5937.500	16.28	38.50	54.78	68.20	-13.42	peak	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) MODE CHANNEL 155

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.000	49.30	2.87	52.17	74.00	-21.83	peak	
2	*	11550.000	39.71	2.87	42.58	54.00	-11.42	AVG	

REMARKS:

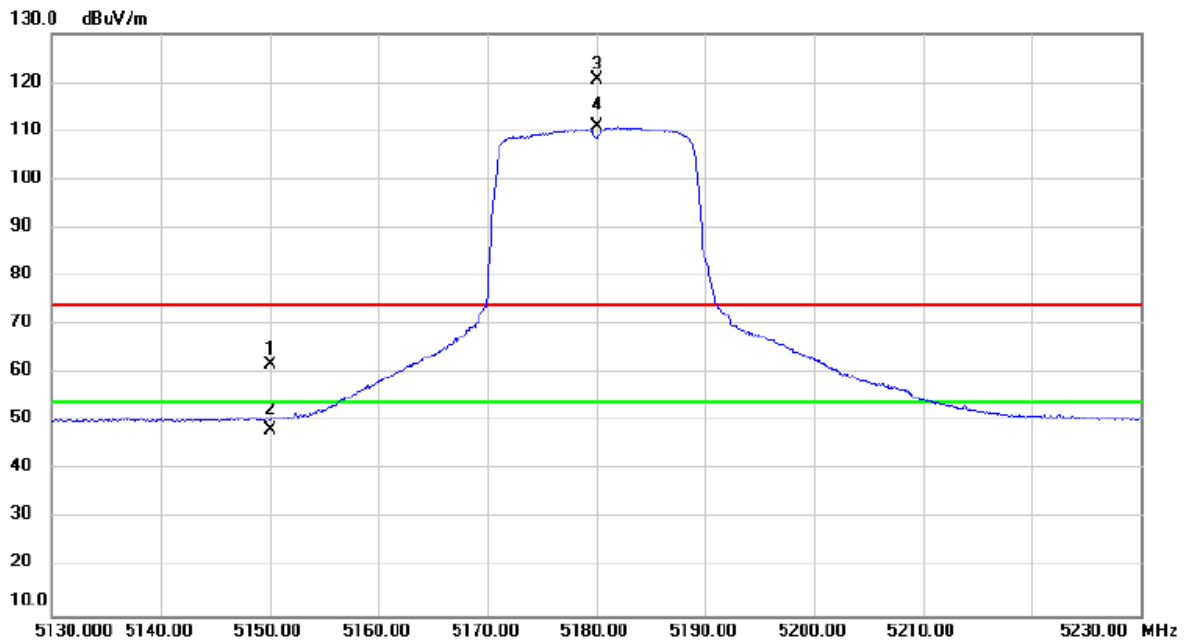
(1) Measurement Value = Reading Level + Correct Factor.

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

Beamforming Mode

Test Mode	UNII-1_TX AC (VHT20) Mode CHANNEL 36
-----------	--------------------------------------

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5150.000	24.54	37.24	61.78	74.00	-12.22	peak	
2		5150.000	10.96	37.24	48.20	54.00	-5.80	AVG	
3	X	5180.000	83.13	37.27	120.40	74.00	46.40	peak	No Limit
4	*	5180.000	73.62	37.27	110.89	54.00	56.89	AVG	No Limit

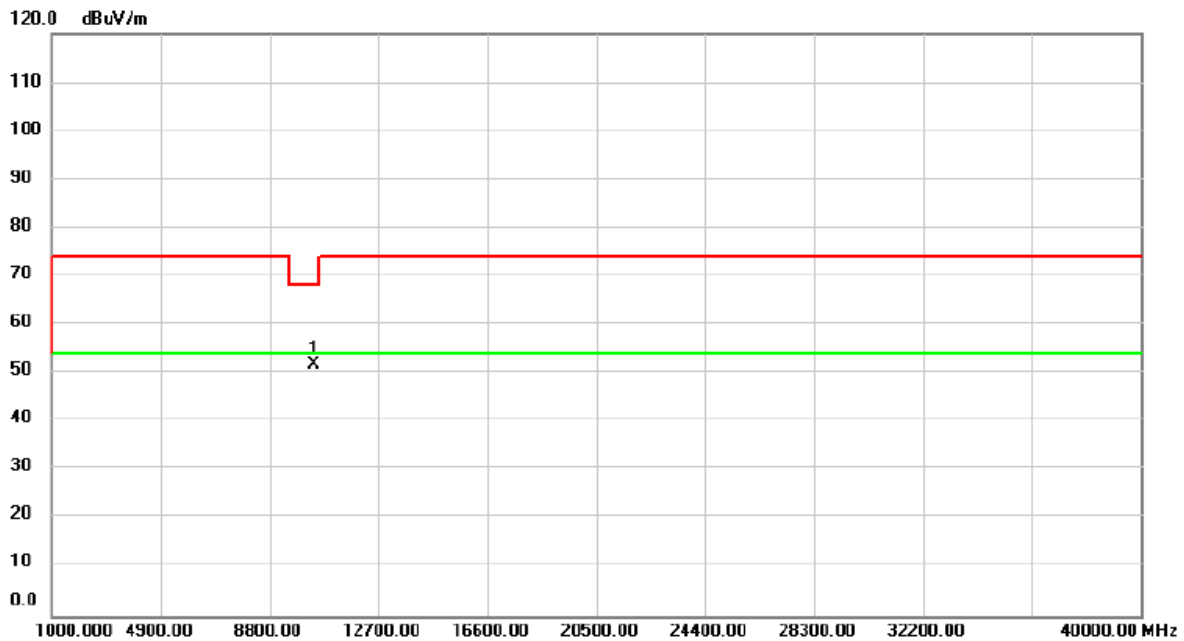
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 36

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.000	50.06	1.65	51.71	68.20	-16.49	peak	

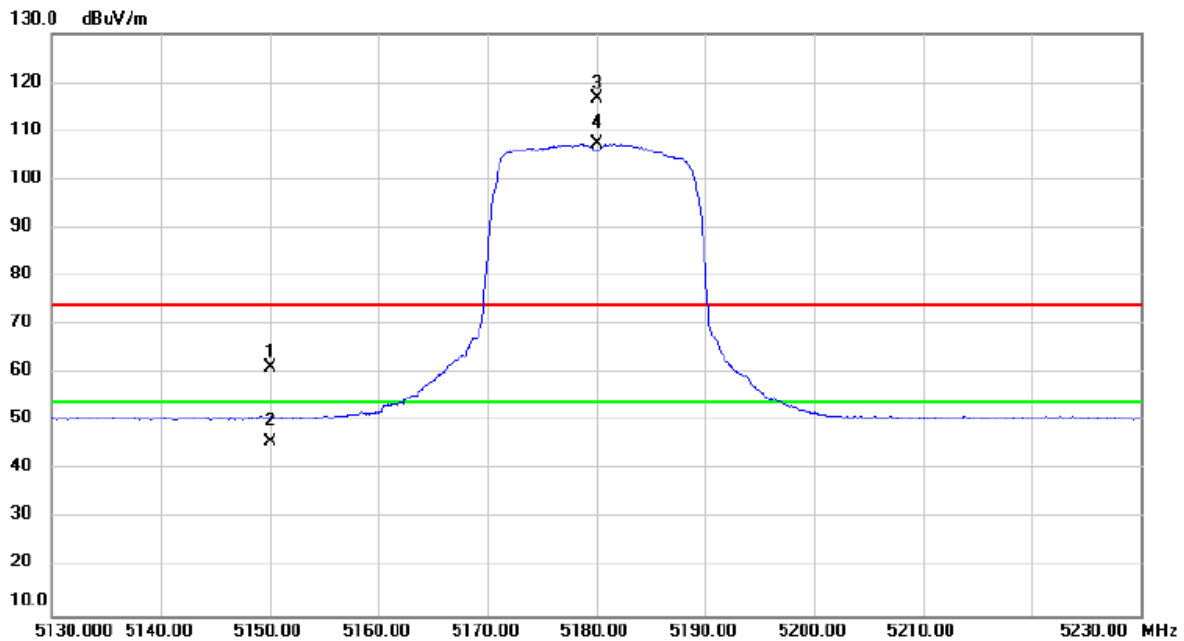
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 36

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5150.000	23.85	37.24	61.09	74.00	-12.91	peak	
2		5150.000	8.65	37.24	45.89	54.00	-8.11	AVG	
3	X	5180.000	79.25	37.27	116.52	74.00	42.52	peak	No Limit
4	*	5180.000	69.99	37.27	107.26	54.00	53.26	AVG	No Limit

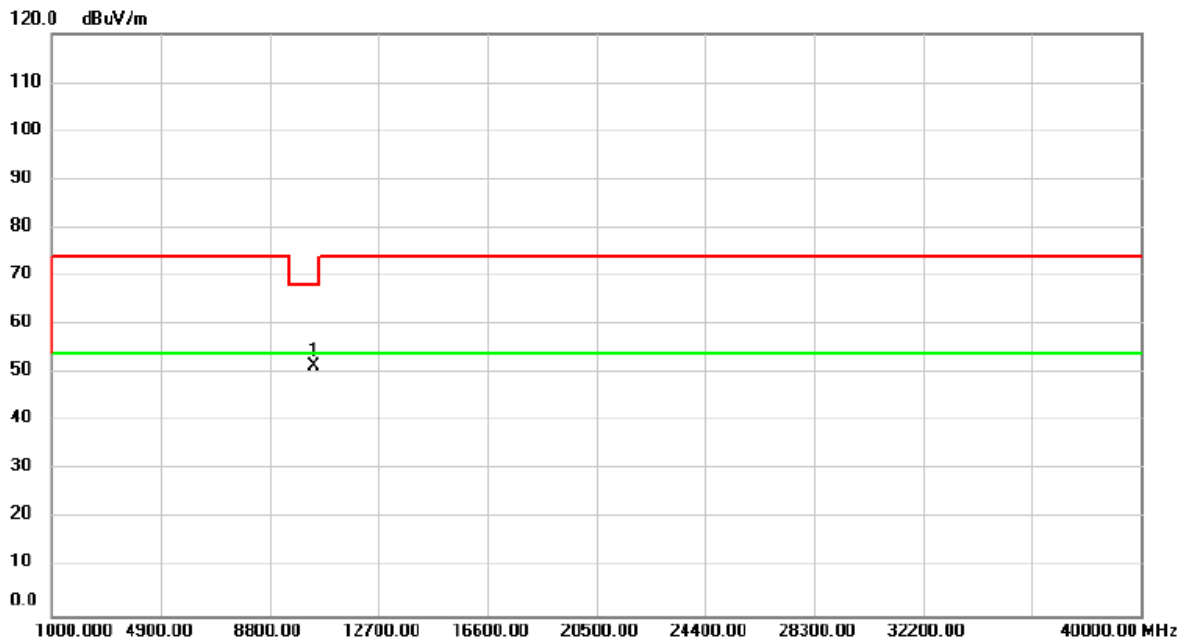
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 36

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.000	49.76	1.65	51.41	68.20	-16.79	peak	

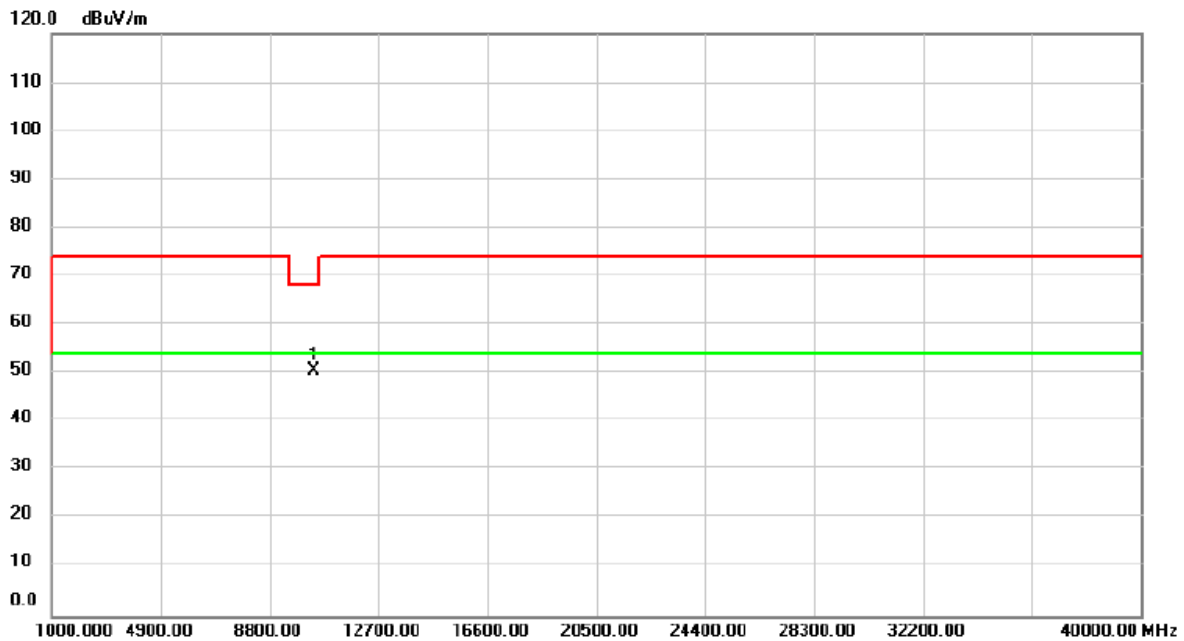
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 40

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.000	48.96	1.70	50.66	68.20	-17.54	peak	

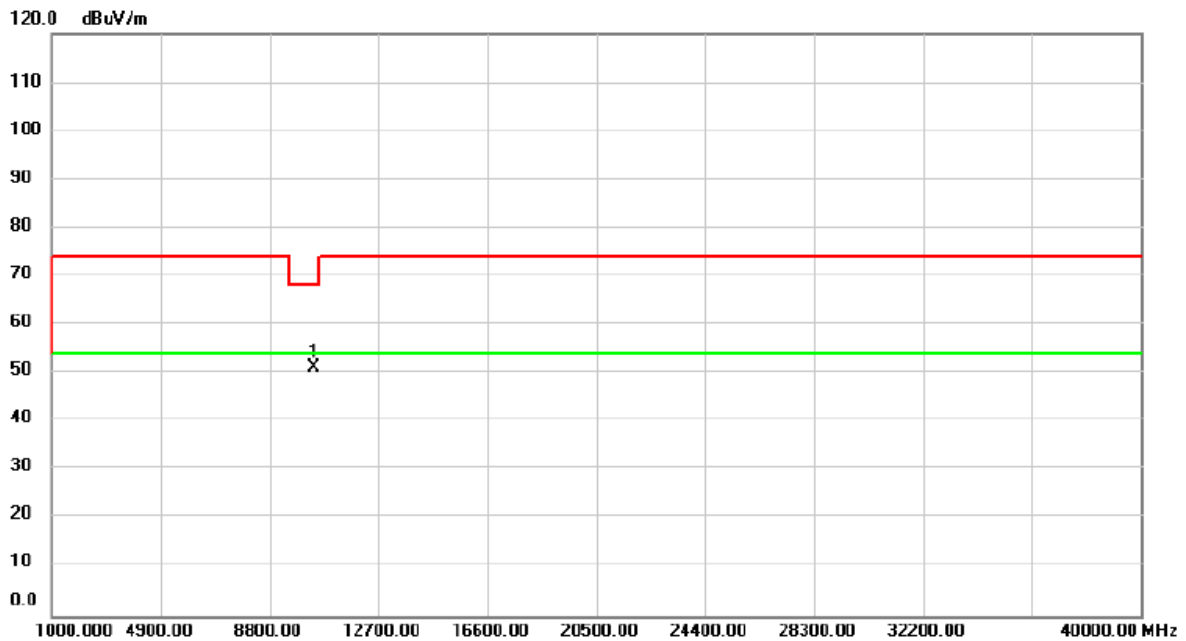
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 40

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.000	49.50	1.70	51.20	68.20	-17.00	peak	

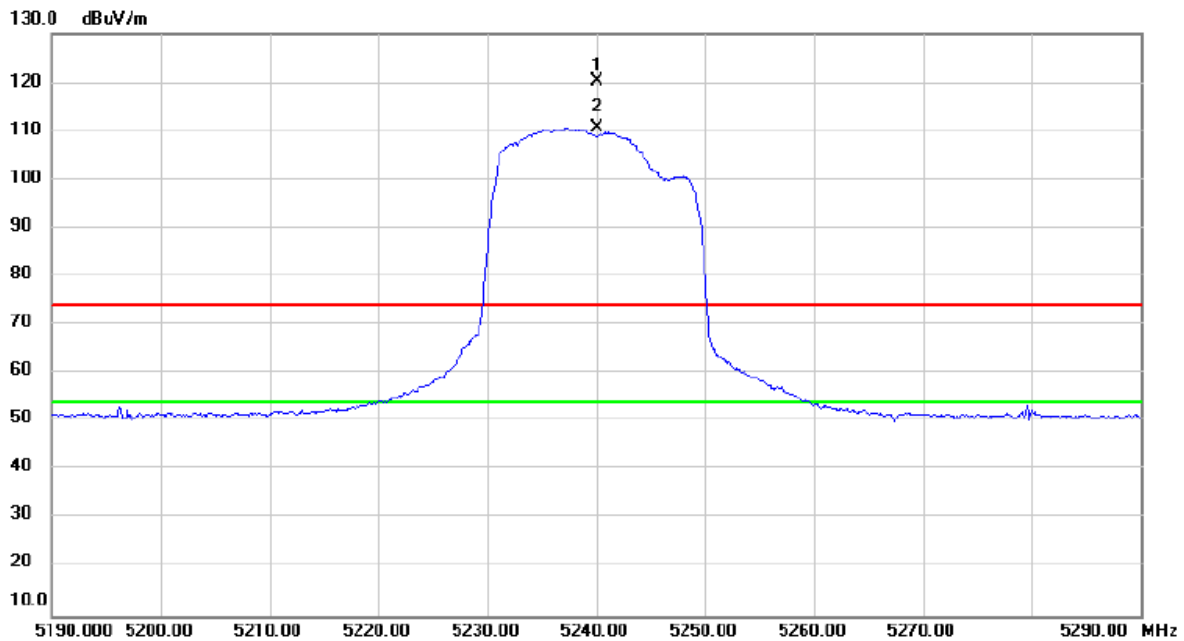
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 48

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	82.92	37.35	120.27	74.00	46.27	peak	No Limit
2	*	5240.000	73.17	37.35	110.52	54.00	56.52	AVG	No Limit

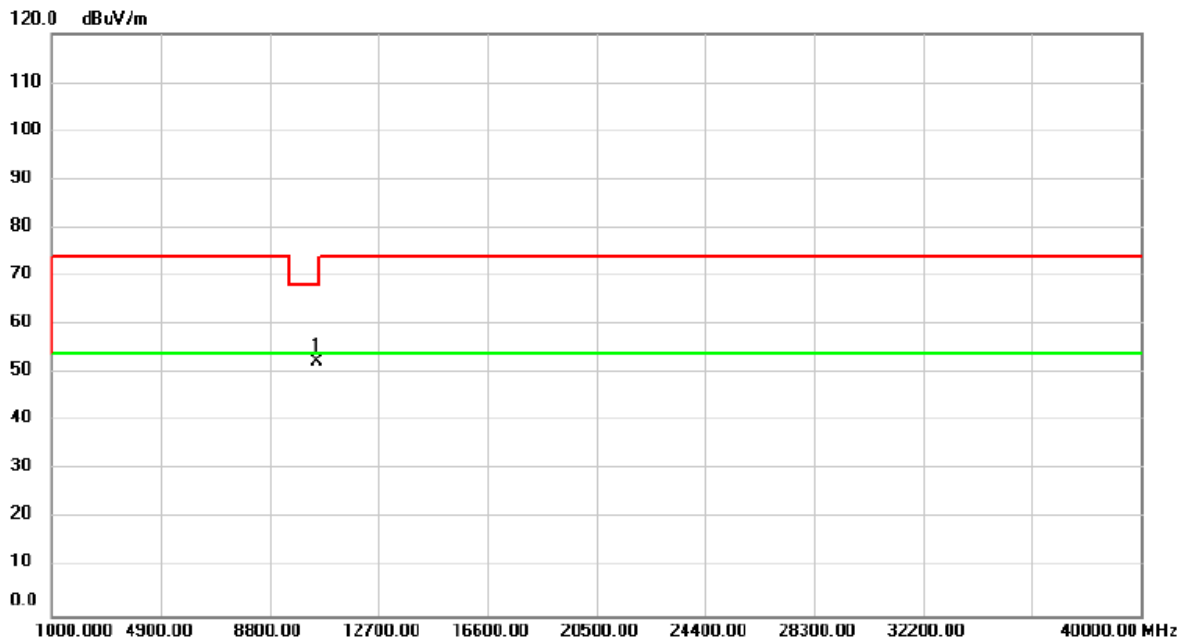
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 48

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.000	50.54	1.79	52.33	68.20	-15.87	peak	

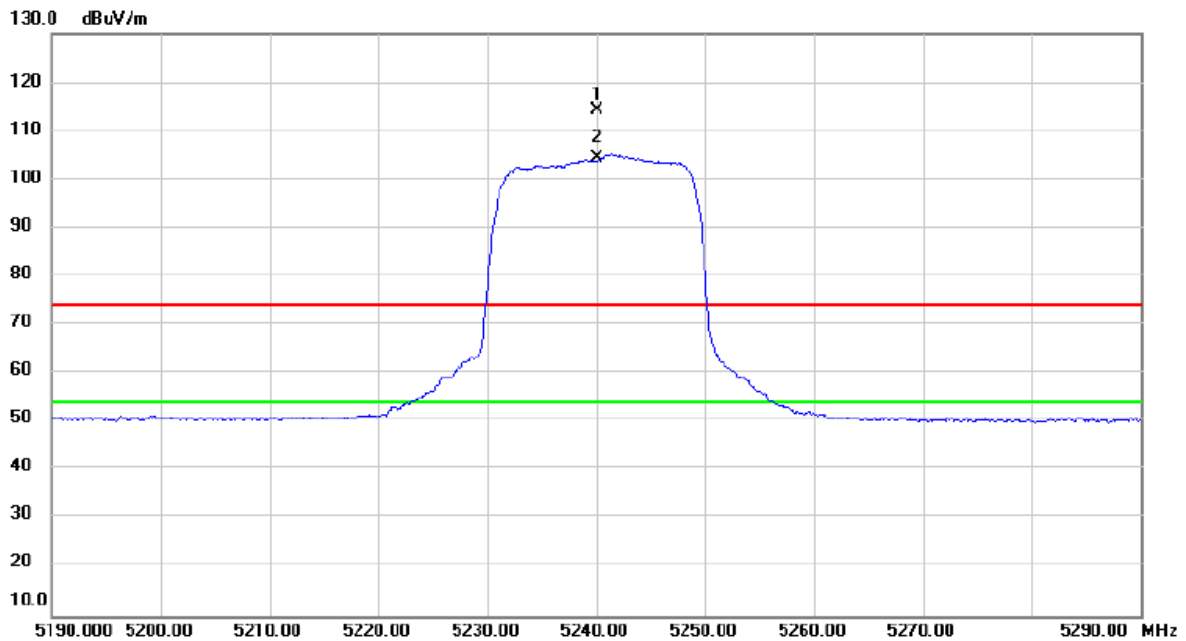
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 48

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5240.000	76.92	37.35	114.27	74.00	40.27	peak	No Limit
2	*	5240.000	67.12	37.35	104.47	54.00	50.47	AVG	No Limit

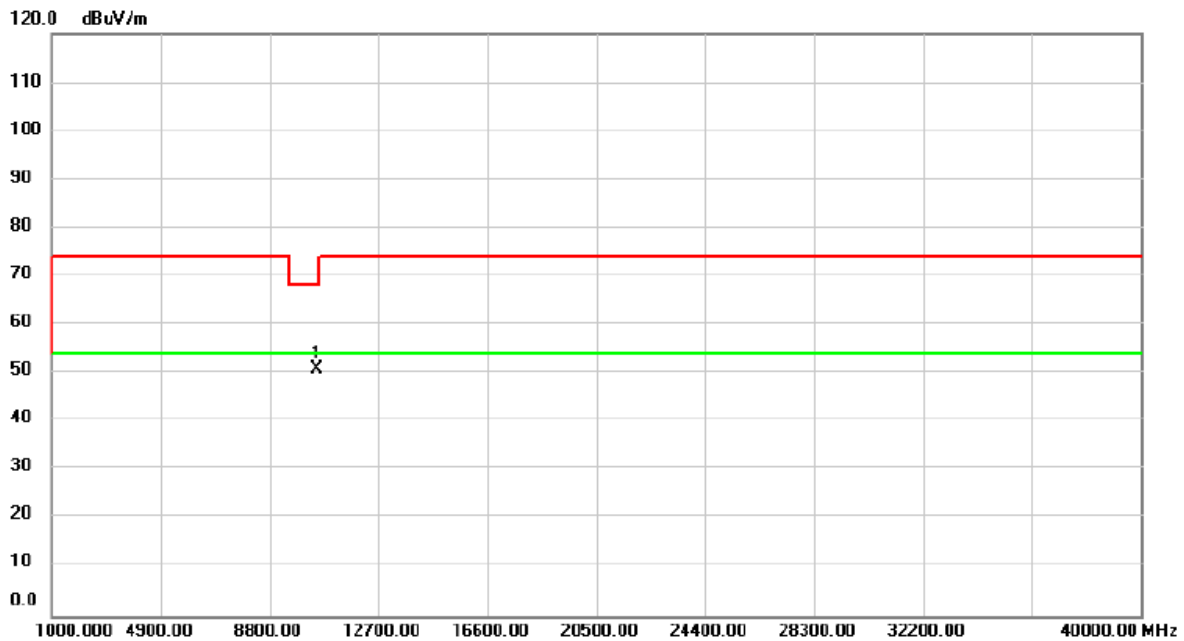
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT20) Mode CHANNEL 48

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.000	48.97	1.79	50.76	68.20	-17.44	peak	

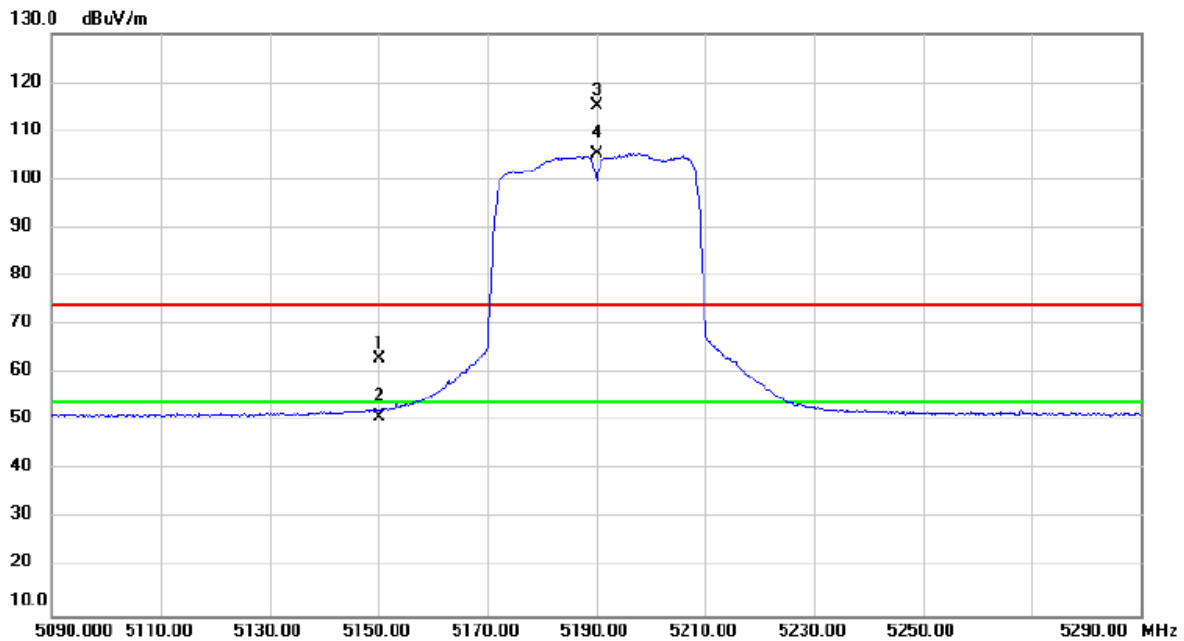
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 38

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5150.000	25.61	37.24	62.85	74.00	-11.15	peak	
2		5150.000	13.78	37.24	51.02	54.00	-2.98	AVG	
3	X	5190.000	78.02	37.28	115.30	74.00	41.30	peak	No Limit
4	*	5190.000	68.04	37.28	105.32	54.00	51.32	AVG	No Limit

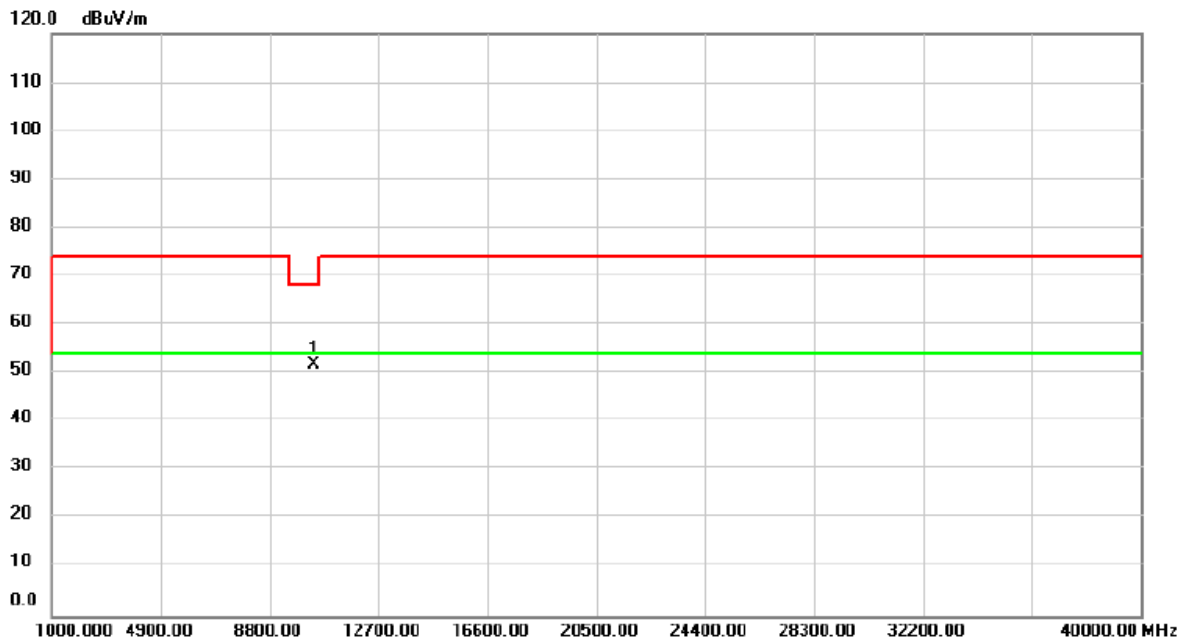
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 38

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.000	50.13	1.67	51.80	68.20	-16.40	peak	

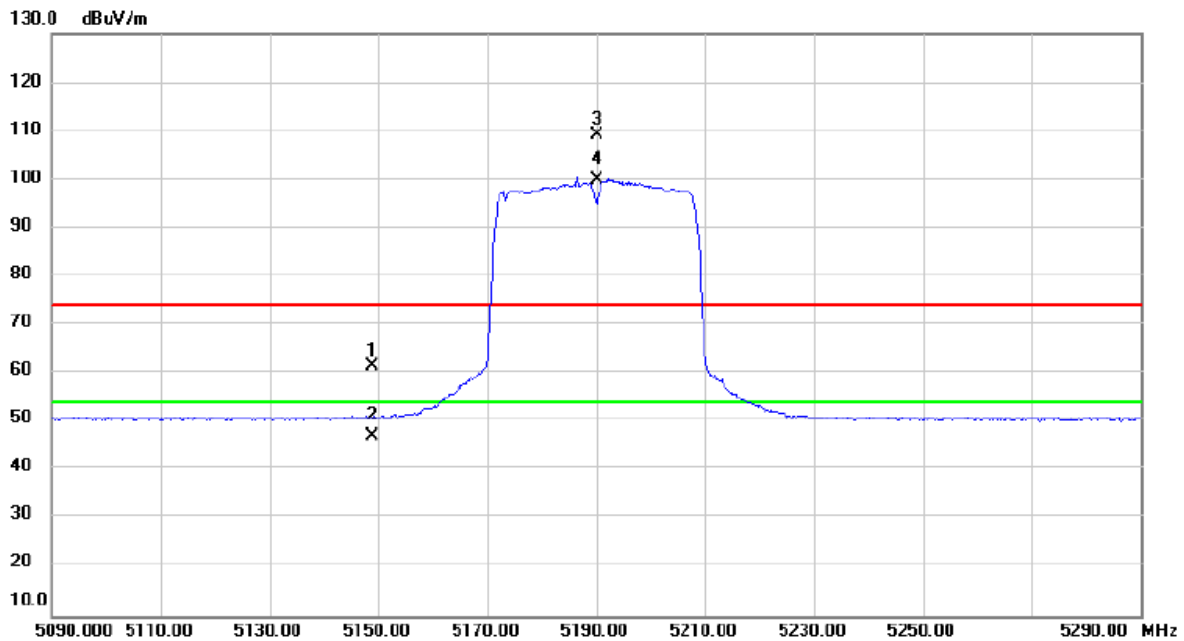
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 38

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5148.680	24.29	37.23	61.52	74.00	-12.48	peak	
2		5148.680	9.68	37.23	46.91	54.00	-7.09	AVG	
3	X	5190.000	71.80	37.28	109.08	74.00	35.08	peak	No Limit
4	*	5190.000	62.50	37.28	99.78	54.00	45.78	AVG	No Limit

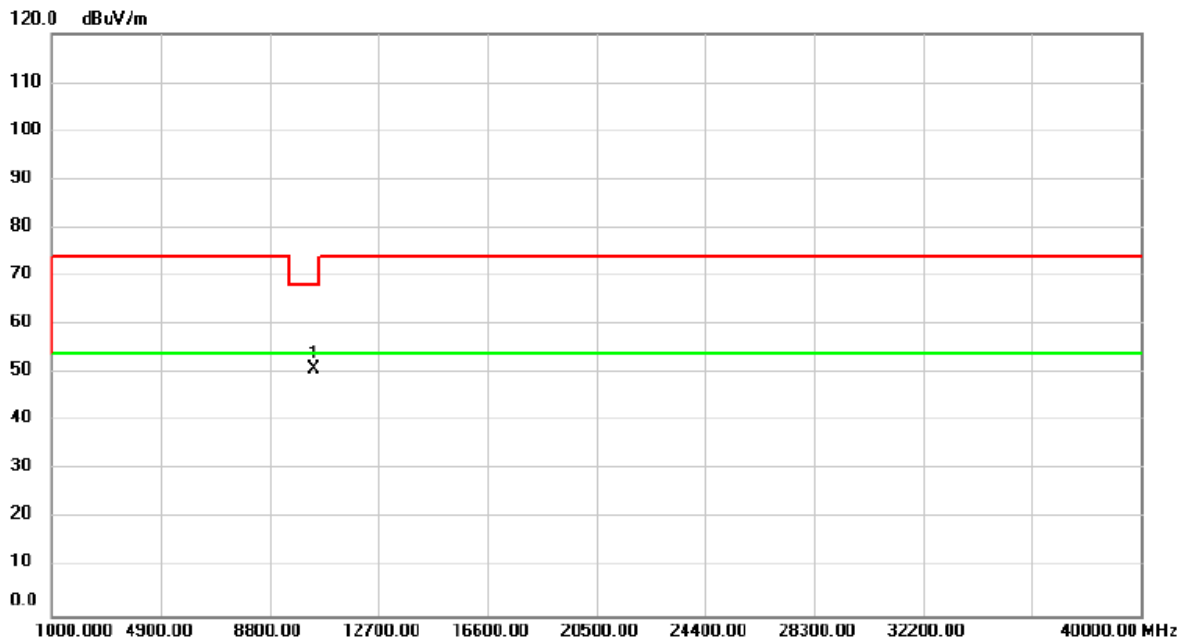
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 38

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	10380.000	49.16	1.67	50.83	68.20	-17.37	peak	

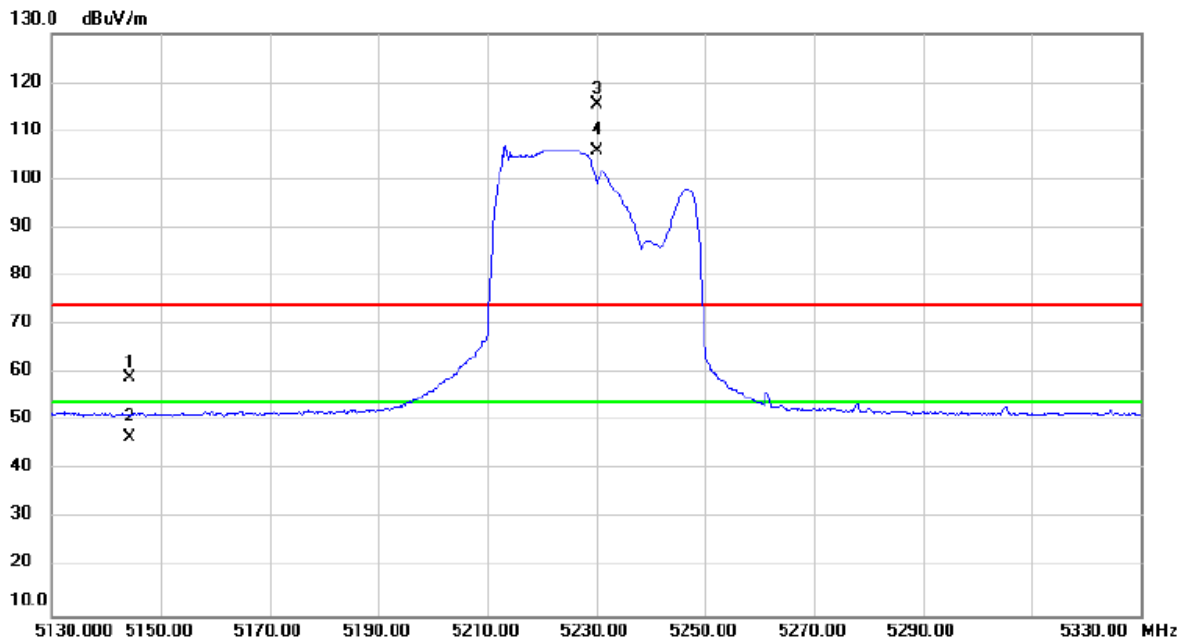
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 46

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5144.300	21.78	37.23	59.01	74.00	-14.99	peak	
2		5144.300	9.67	37.23	46.90	54.00	-7.10	AVG	
3	X	5230.000	78.22	37.34	115.56	74.00	41.56	peak	No Limit
4	*	5230.000	68.41	37.34	105.75	54.00	51.75	AVG	No Limit

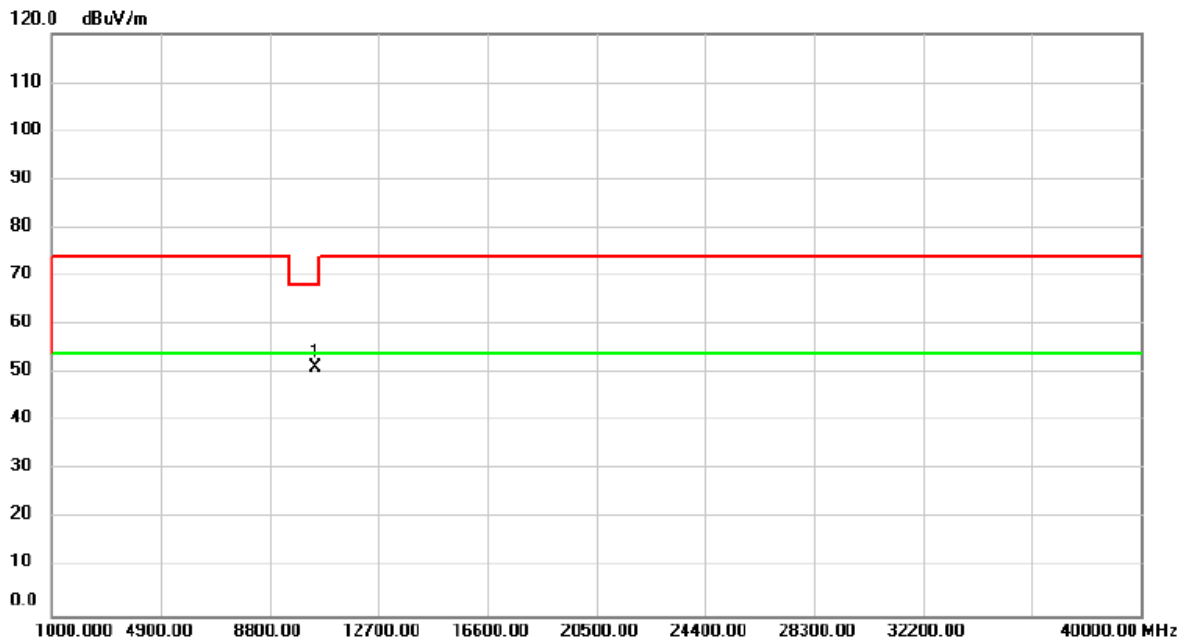
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 46

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.000	49.36	1.78	51.14	68.20	-17.06	peak	

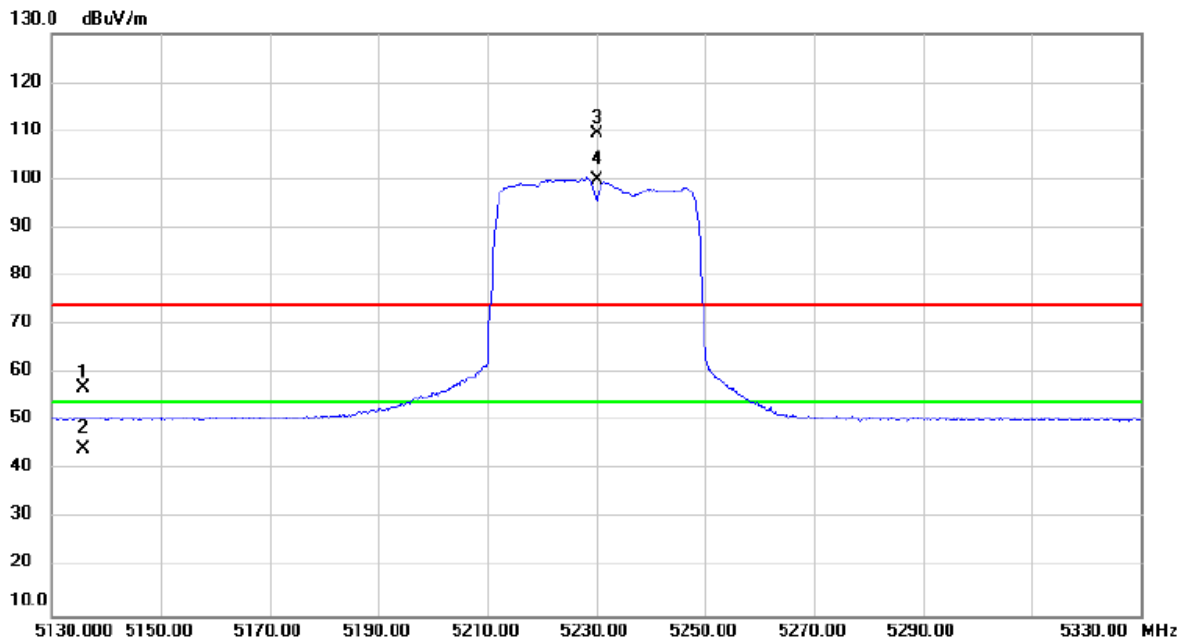
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 46

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5135.820	19.77	37.22	56.99	74.00	-17.01	peak	
2		5135.820	7.17	37.22	44.39	54.00	-9.61	AVG	
3	X	5230.000	72.09	37.34	109.43	74.00	35.43	peak	No Limit
4	*	5230.000	62.63	37.34	99.97	54.00	45.97	AVG	No Limit

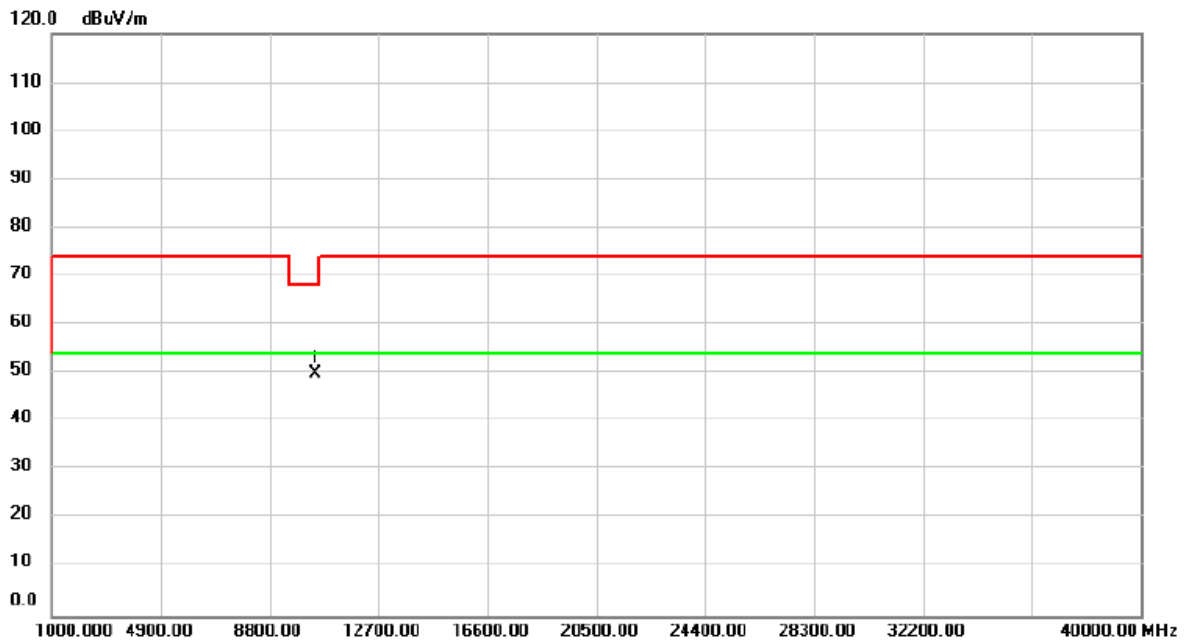
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT40) Mode CHANNEL 46

Horizontal



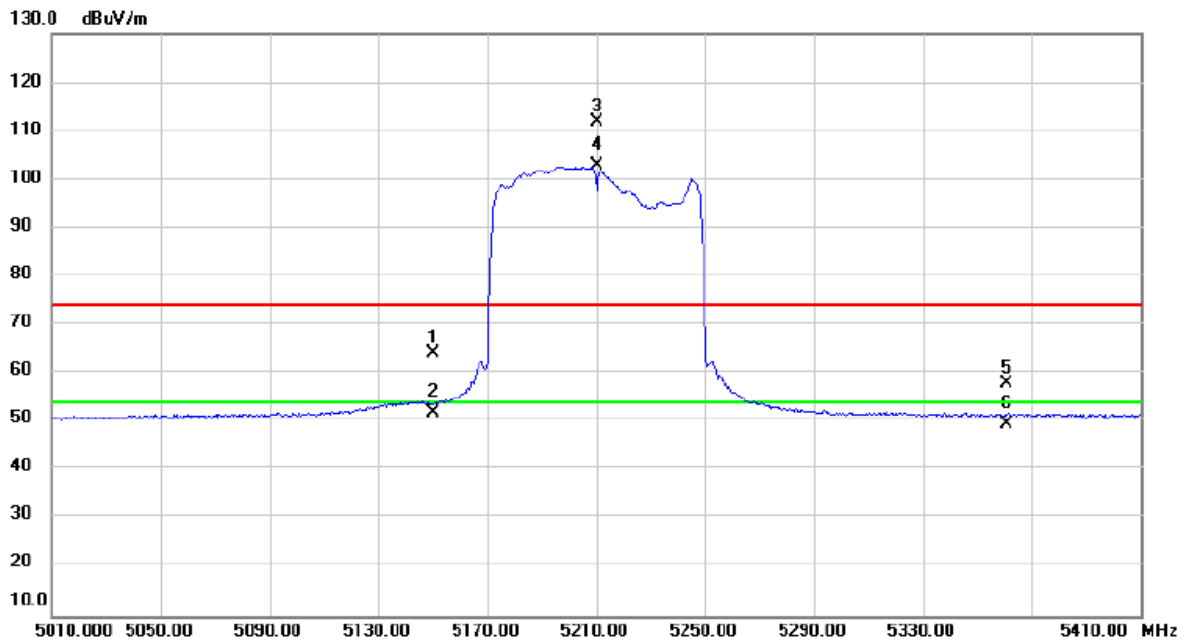
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.000	48.27	1.78	50.05	68.20	-18.15	peak	

REMARKS:

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

Test Mode UNII-1_TX AC (VHT80) Mode CHANNEL 42

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5150.000	27.04	37.24	64.28	74.00	-9.72	peak	
2		5150.000	14.73	37.24	51.97	54.00	-2.03	AVG	
3	X	5210.000	74.59	37.32	111.91	74.00	37.91	peak	No Limit
4	*	5210.000	65.45	37.32	102.77	54.00	48.77	AVG	No Limit
5		5360.500	20.46	37.51	57.97	74.00	-16.03	peak	
6		5360.500	11.86	37.51	49.37	54.00	-4.63	AVG	

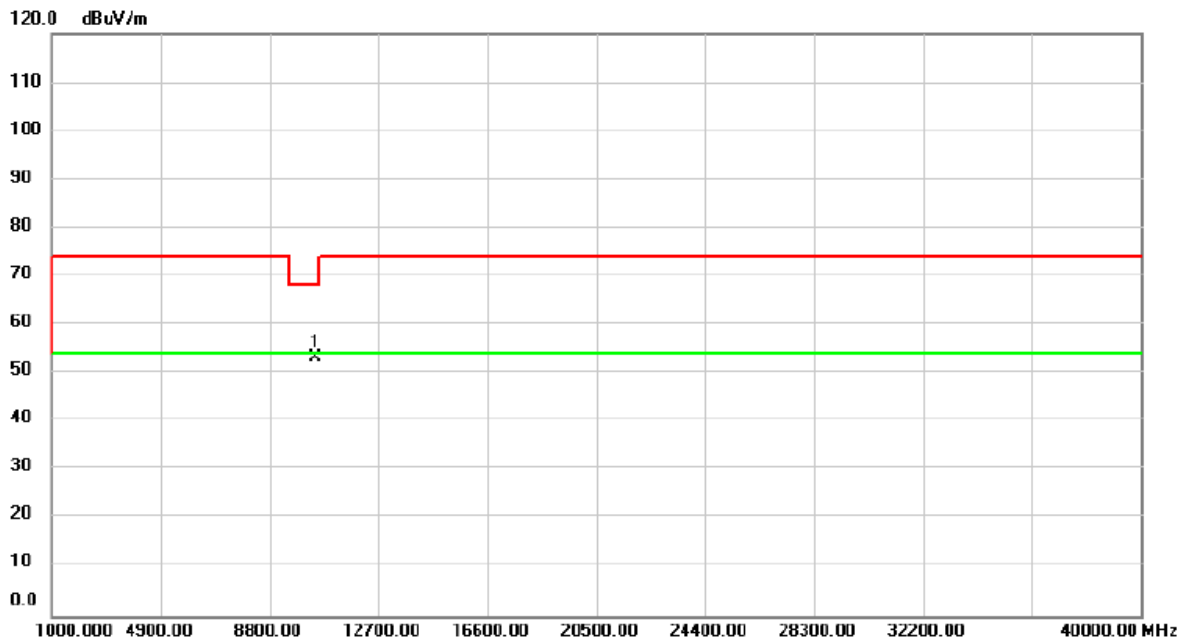
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) Mode CHANNEL 42

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.000	51.43	1.72	53.15	68.20	-15.05	peak	

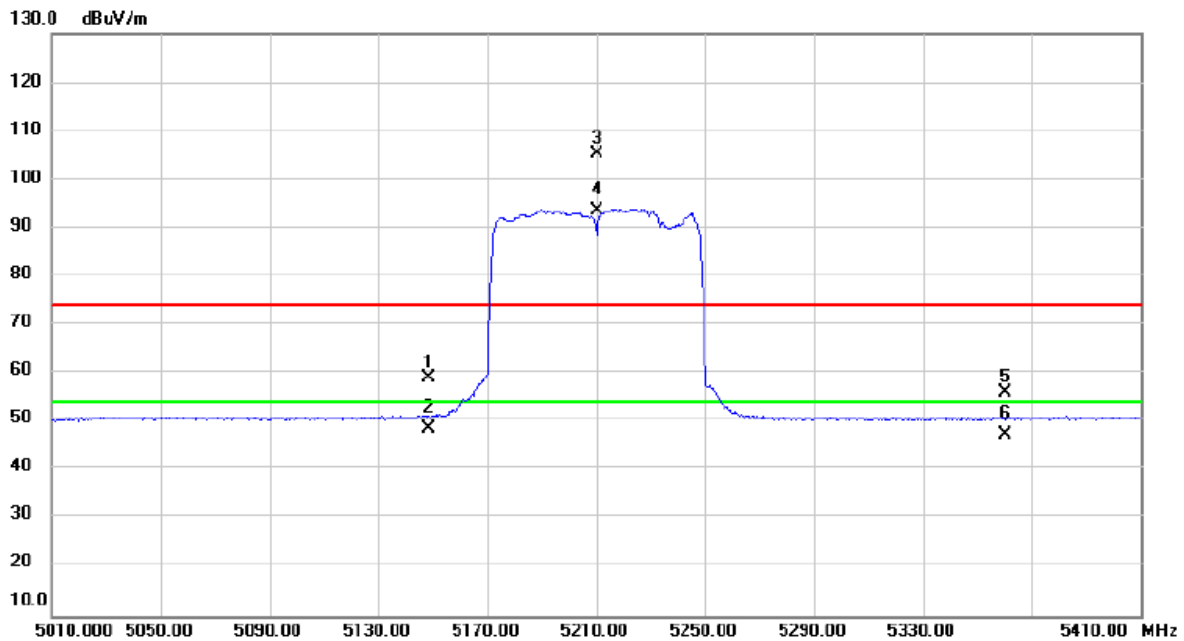
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) Mode CHANNEL 42

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5148.180	21.96	37.23	59.19	74.00	-14.81	peak	
2		5148.180	11.35	37.23	48.58	54.00	-5.42	AVG	
3	X	5210.000	67.85	37.32	105.17	74.00	31.17	peak	No Limit
4	*	5210.000	56.28	37.32	93.60	54.00	39.60	AVG	No Limit
5		5360.010	18.50	37.51	56.01	74.00	-17.99	peak	
6		5360.010	9.80	37.51	47.31	54.00	-6.69	AVG	

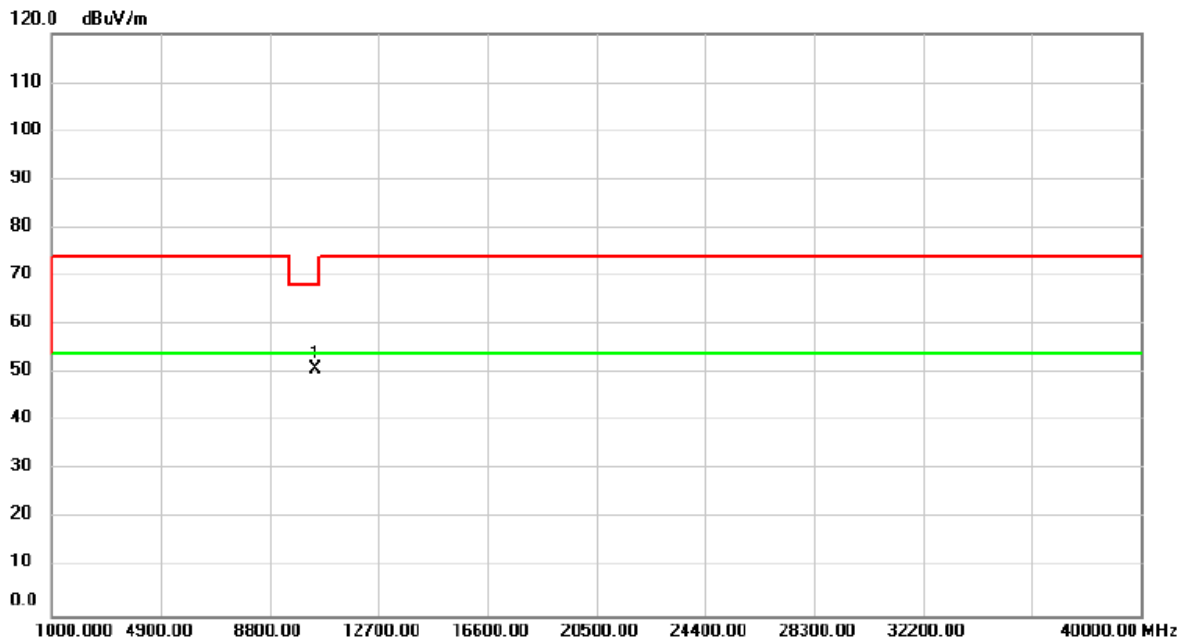
REMARKS:

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

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

Test Mode UNII-1_TX AC (VHT80) Mode CHANNEL 42

Horizontal



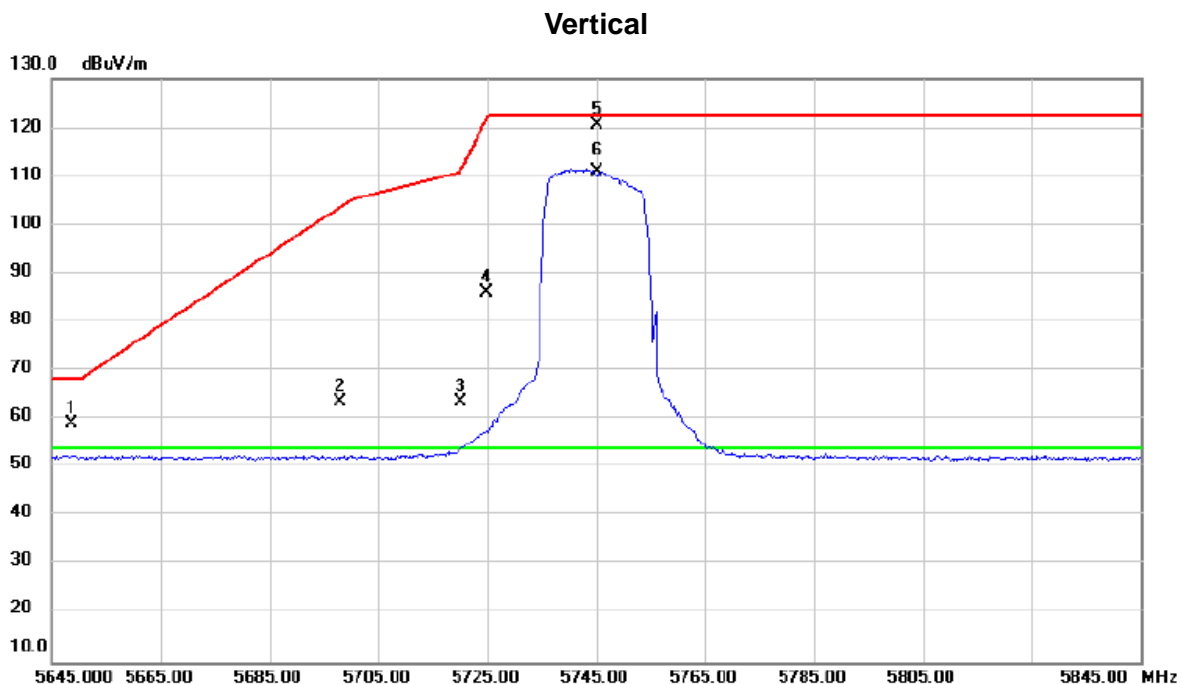
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.000	49.09	1.72	50.81	68.20	-17.39	peak	

REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 149



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5648.730	21.00	37.97	58.97	68.20	-9.23	peak	
2		5698.000	25.60	38.06	63.66	103.73	-40.07	peak	
3		5719.960	25.33	38.10	63.43	110.79	-47.36	peak	
4		5724.930	47.94	38.10	86.04	122.04	-36.00	peak	
5		5745.000	82.48	38.14	120.62	122.20	-1.58	peak	No Limit
6	*	5745.000	72.96	38.14	111.10	54.00	57.10	AVG	No Limit

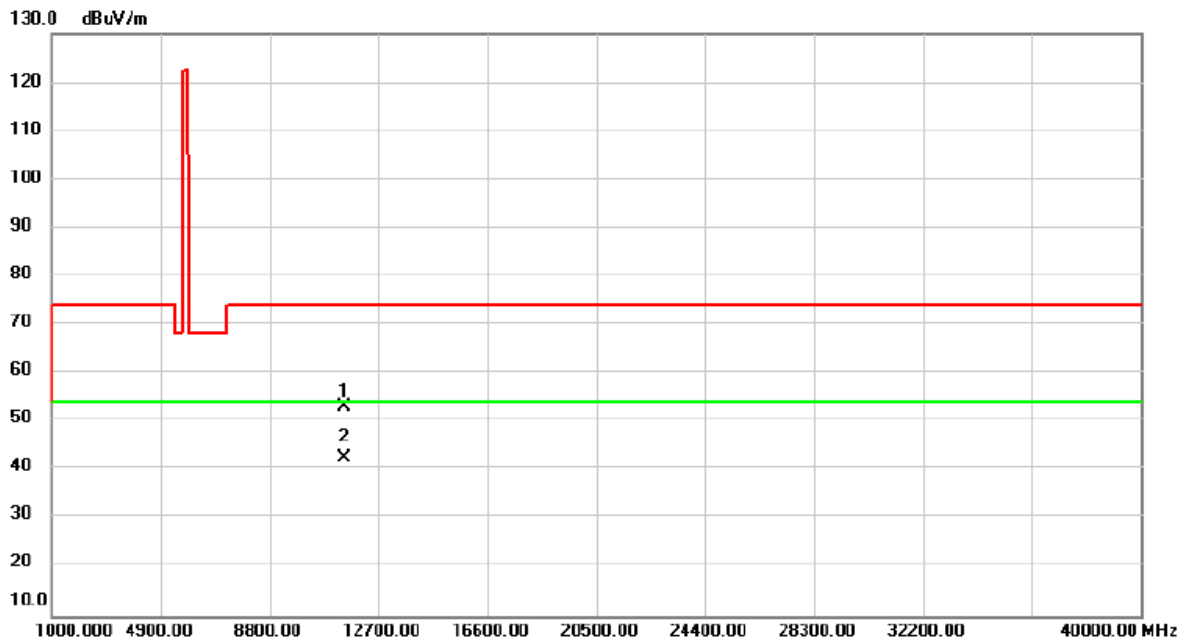
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 149

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	50.13	2.99	53.12	74.00	-20.88	peak	
2	*	11490.00	39.67	2.99	42.66	54.00	-11.34	AVG	

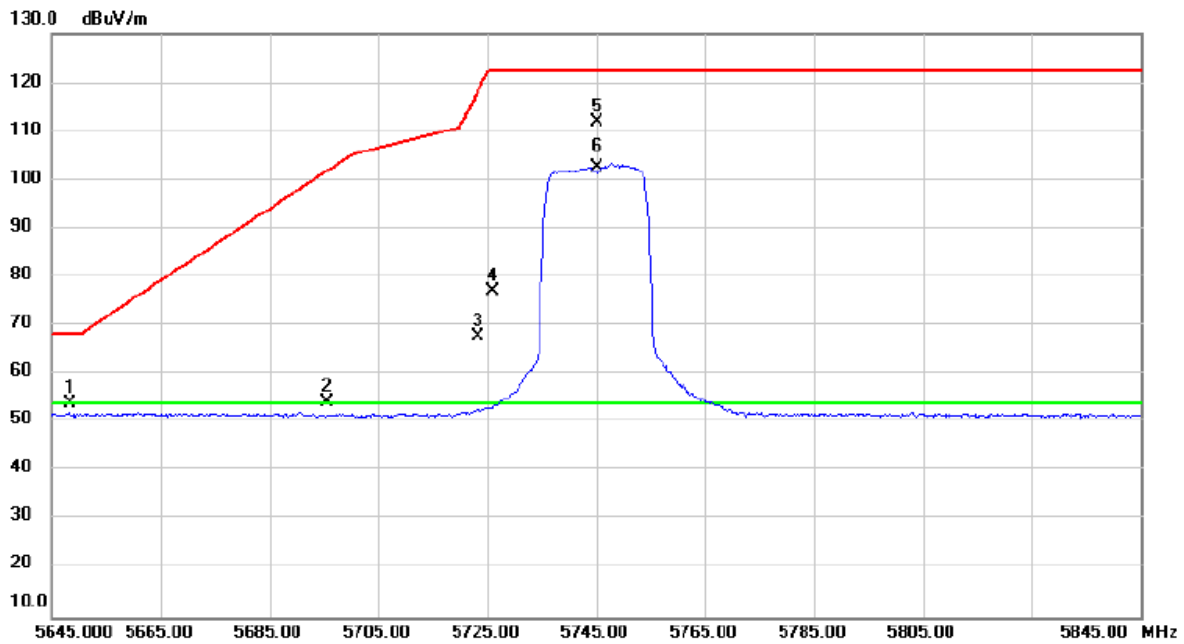
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 149

Horizontal

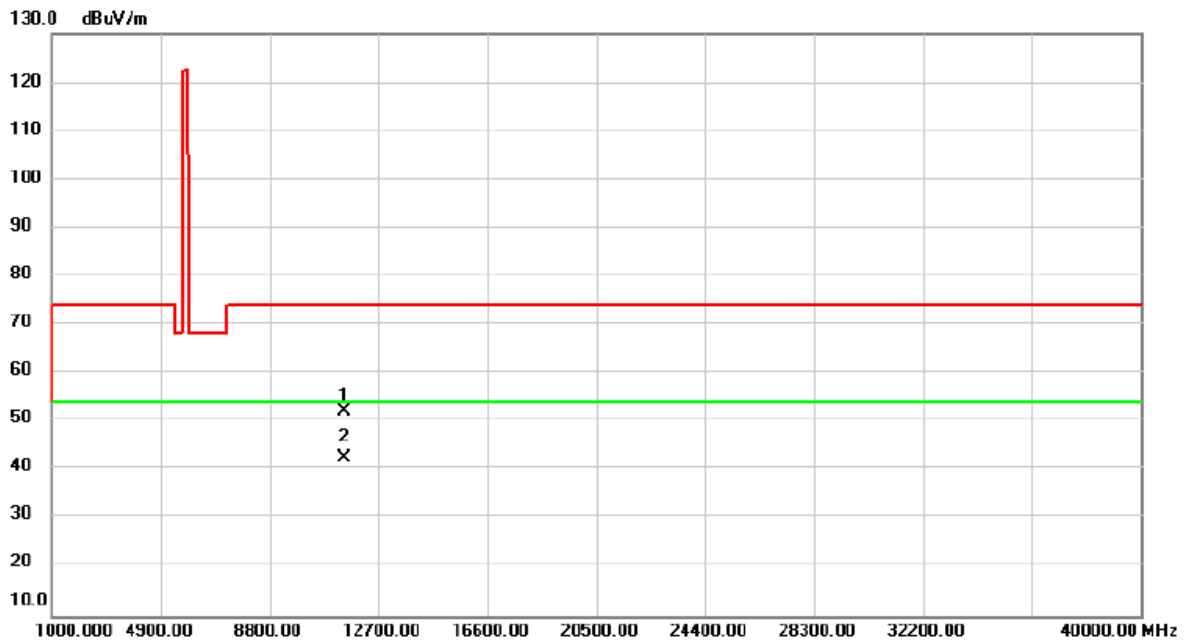


REMARKS:

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 149

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11490.00	49.15	2.99	52.14	74.00	-21.86	peak	
2	*	11490.00	39.65	2.99	42.64	54.00	-11.36	AVG	

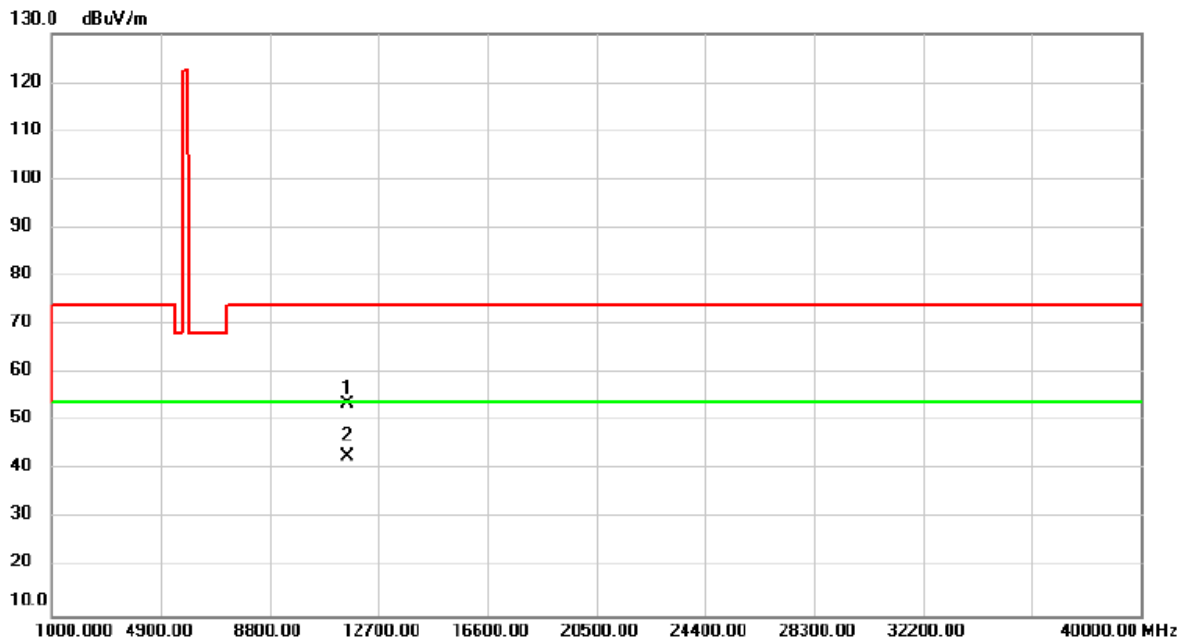
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 157

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	50.89	2.82	53.71	74.00	-20.29	peak	
2	*	11570.00	39.94	2.82	42.76	54.00	-11.24	AVG	

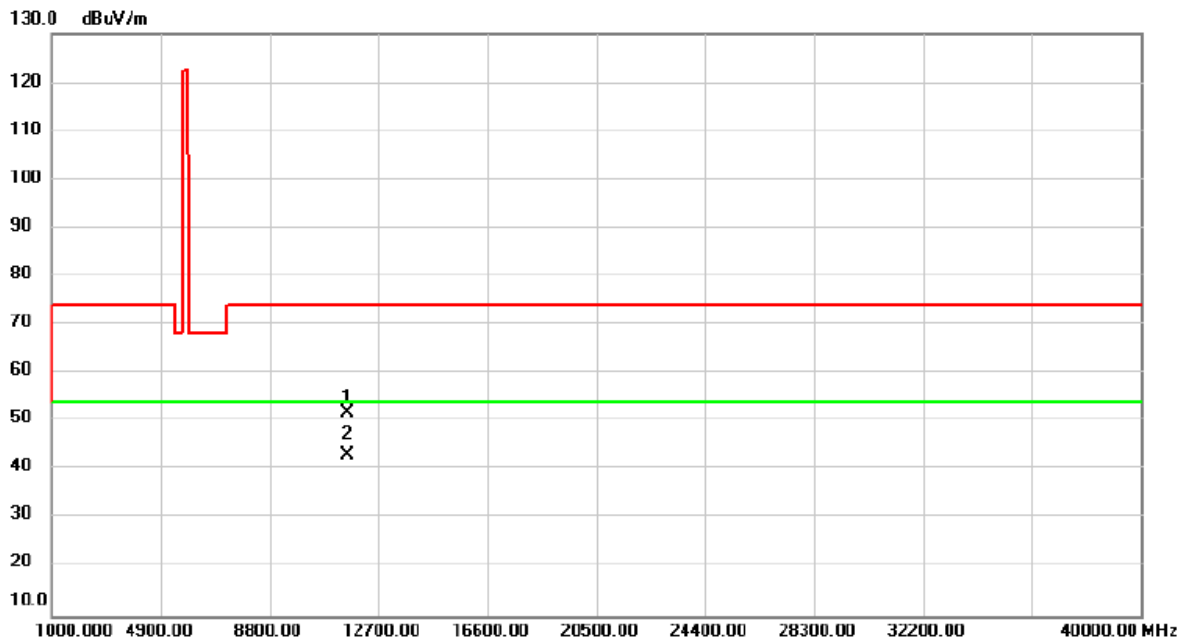
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 157

Horizontal



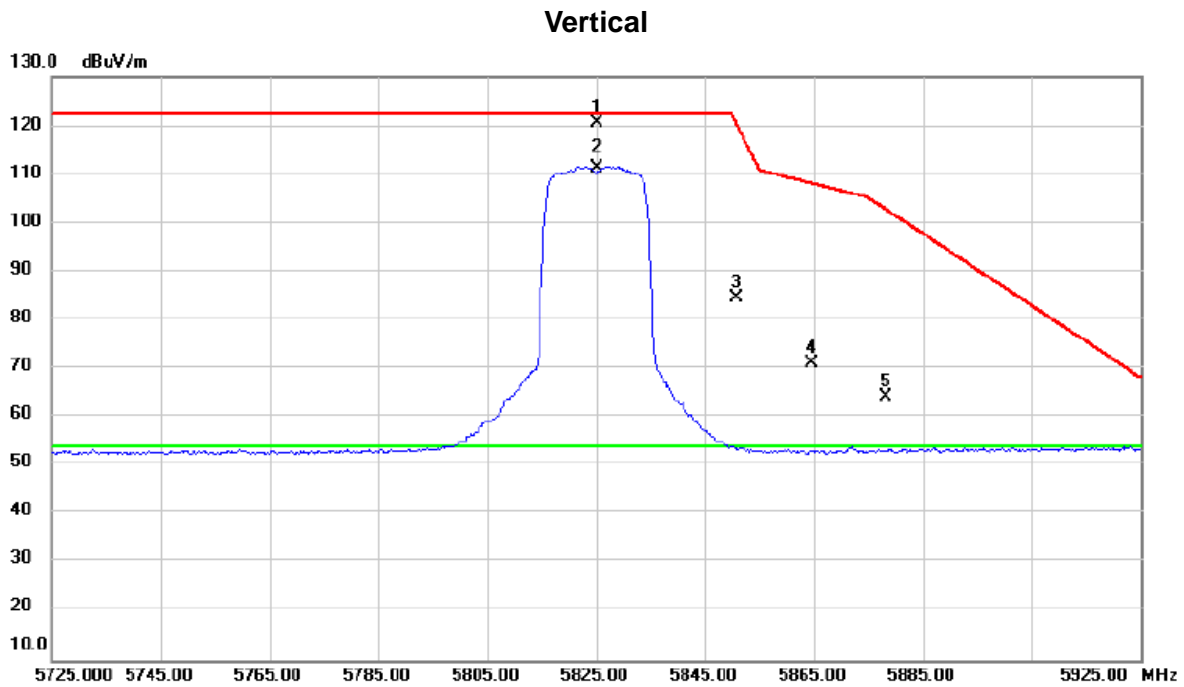
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11570.00	49.18	2.82	52.00	74.00	-22.00	peak	
2	*	11570.00	40.30	2.82	43.12	54.00	-10.88	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 165



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5825.000	82.29	38.30	120.59	122.20	-1.61	peak	No Limit
2	*	5825.000	73.04	38.30	111.34	54.00	57.34	AVG	No Limit
3		5850.620	46.20	38.34	84.54	120.79	-36.25	peak	
4		5864.700	32.63	38.37	71.00	108.08	-37.08	peak	
5		5878.150	25.88	38.39	64.27	102.86	-38.59	peak	

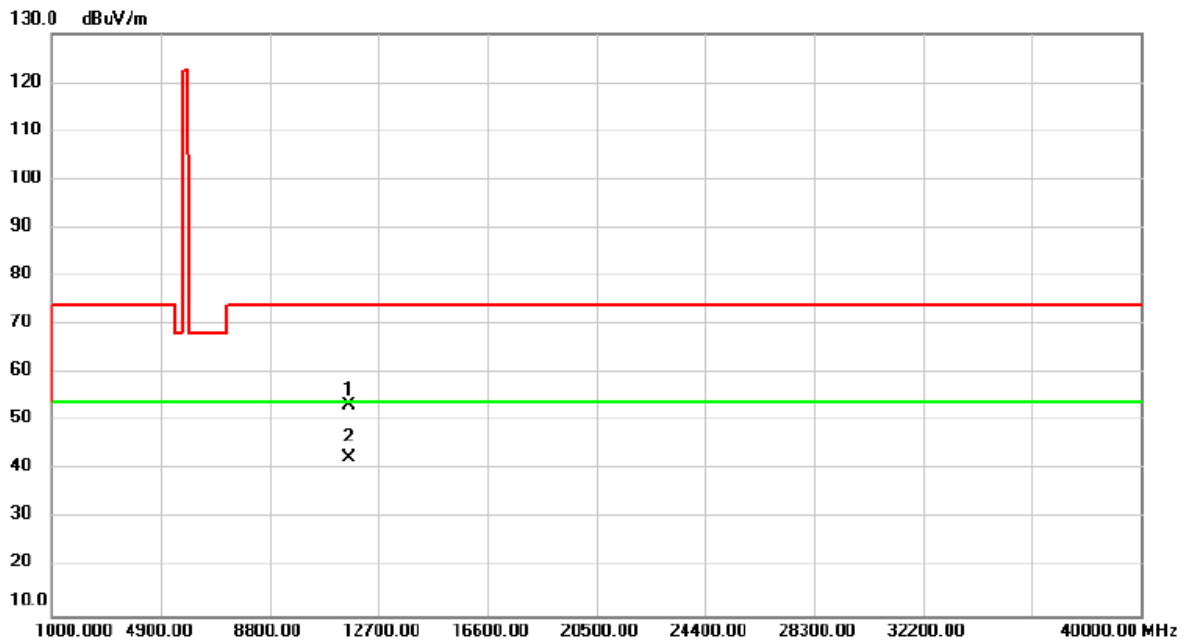
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 165

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11650.00	50.88	2.60	53.48	74.00	-20.52	peak	
2	*	11650.00	40.03	2.60	42.63	54.00	-11.37	AVG	

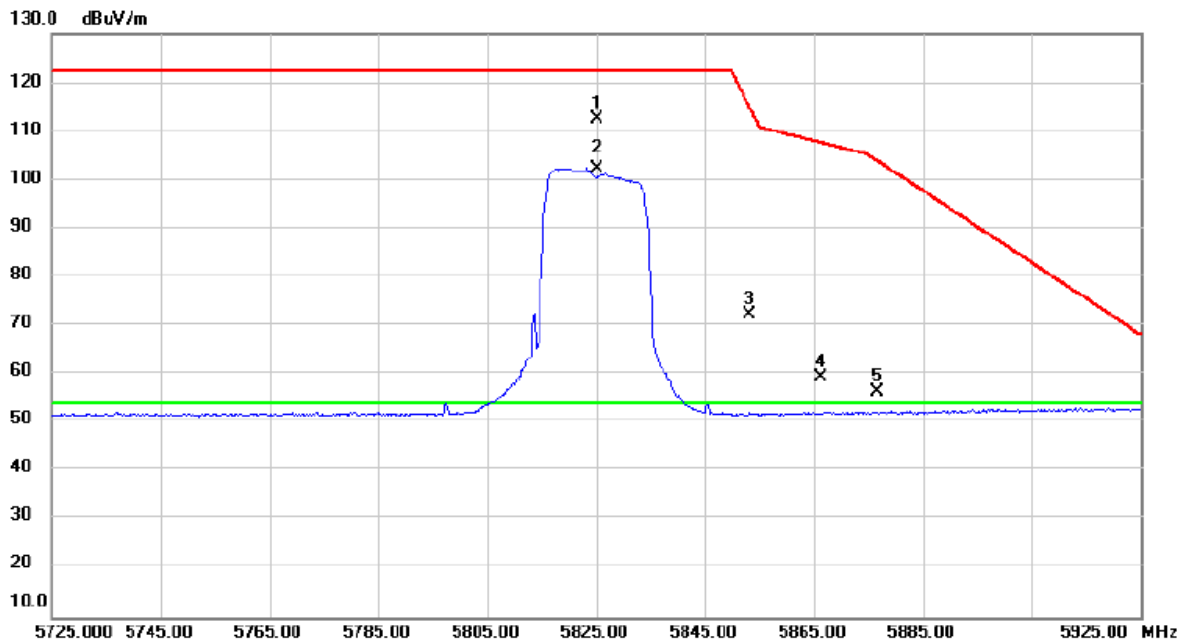
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 165

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5825.000	74.24	38.30	112.54	122.20	-9.66	peak	No Limit
2	*	5825.000	64.04	38.30	102.34	54.00	48.34	AVG	No Limit
3		5853.020	33.84	38.34	72.18	115.31	-43.13	peak	
4		5866.320	20.95	38.37	59.32	107.63	-48.31	peak	
5		5876.700	17.86	38.39	56.25	103.94	-47.69	peak	

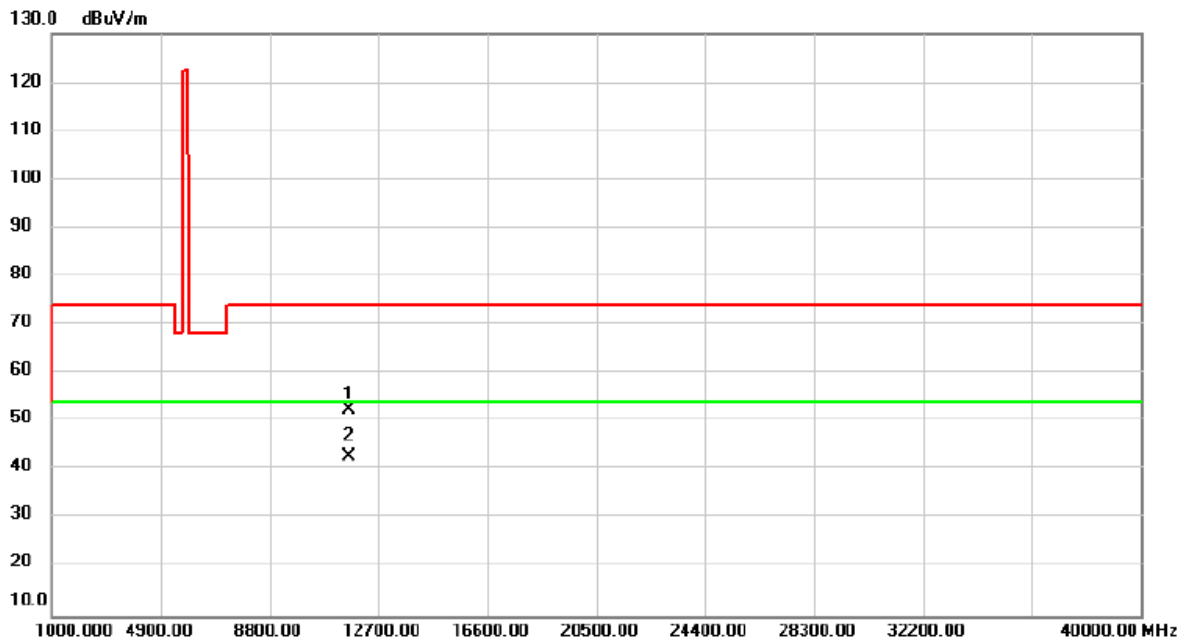
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT20) Mode CHANNEL 165

Horizontal



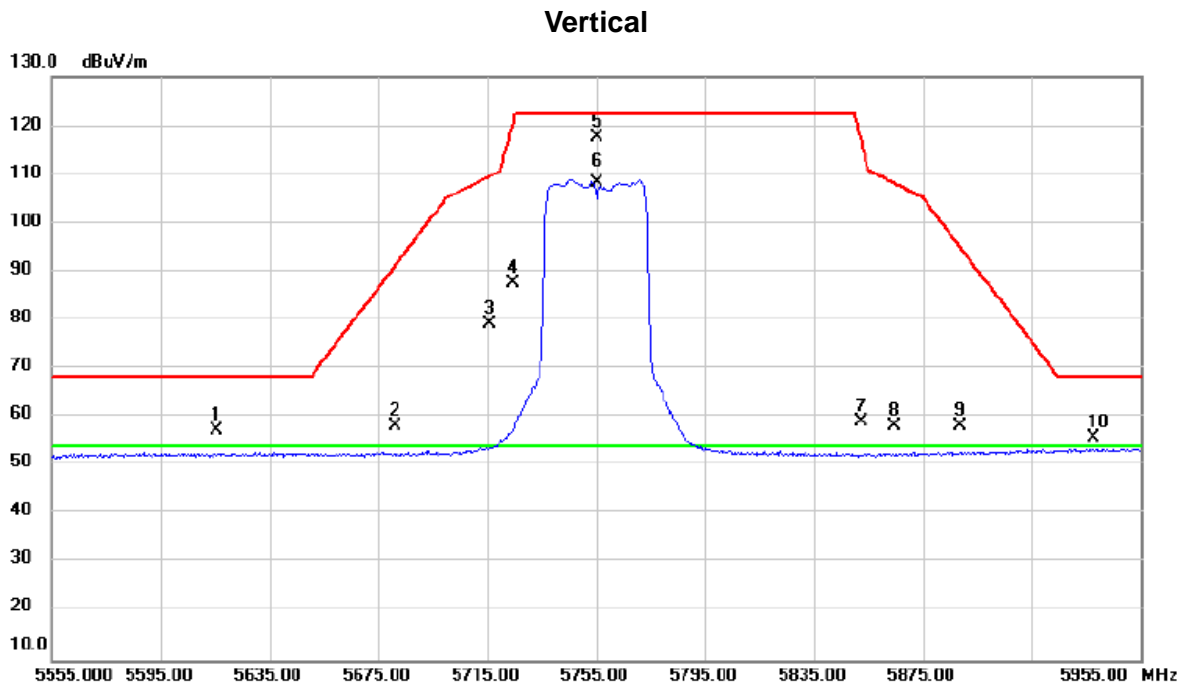
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11650.00	49.75	2.60	52.35	74.00	-21.65	peak	
2	*	11650.00	40.19	2.60	42.79	54.00	-11.21	AVG	

REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 151



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5615.325	19.37	37.90	57.27	68.20	-10.93	peak	
2		5681.300	20.21	38.02	58.23	91.40	-33.17	peak	
3		5716.040	41.11	38.09	79.20	109.69	-30.49	peak	
4		5724.095	49.39	38.10	87.49	120.14	-32.65	peak	
5		5755.000	79.25	38.17	117.42	122.20	-4.78	peak	No Limit
6	*	5755.000	70.22	38.17	108.39	54.00	54.39	AVG	No Limit
7		5852.365	20.77	38.34	59.11	116.81	-57.70	peak	
8		5864.780	19.69	38.37	58.06	108.06	-50.00	peak	
9		5888.550	19.89	38.41	58.30	95.14	-36.84	peak	
10		5937.780	17.31	38.50	55.81	68.20	-12.39	peak	

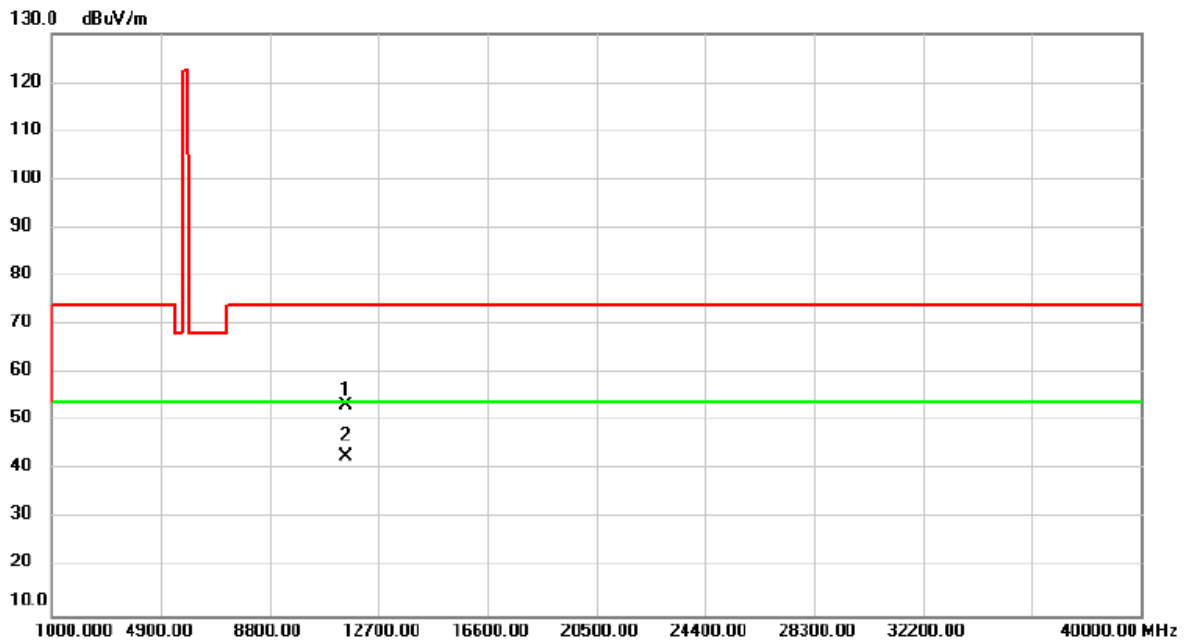
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 151

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	50.32	2.98	53.30	74.00	-20.70	peak	
2	*	11510.00	39.91	2.98	42.89	54.00	-11.11	AVG	

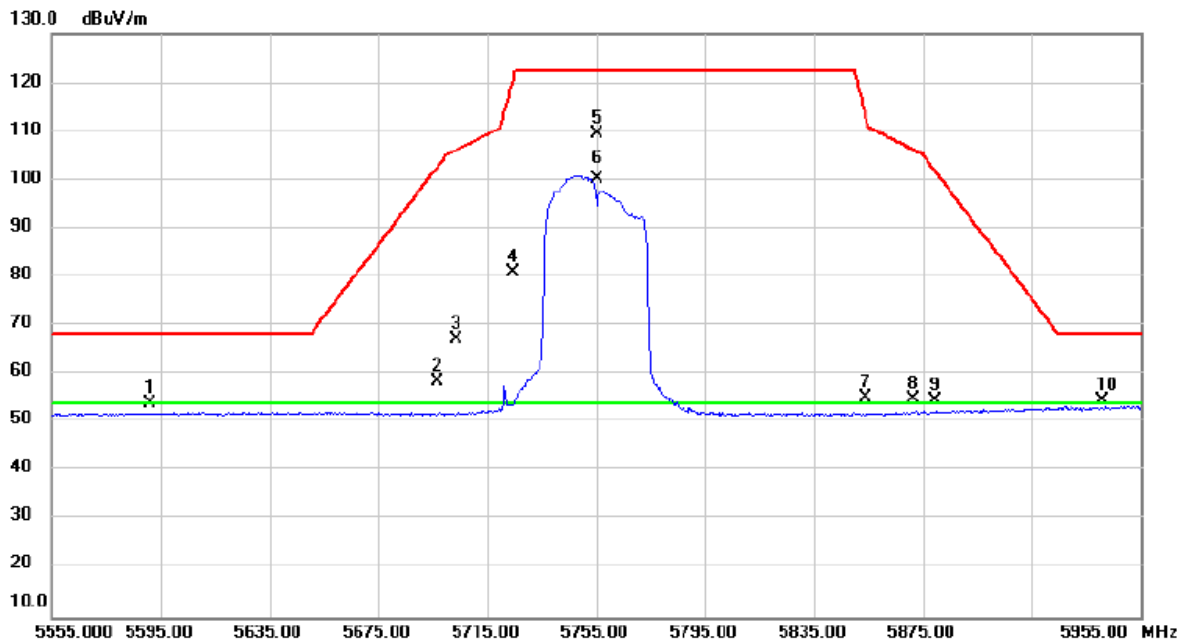
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 151

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5591.100	16.02	37.86	53.88	68.20	-14.32	peak	
2		5696.850	20.27	38.06	58.33	102.88	-44.55	peak	
3		5703.620	29.01	38.07	67.08	106.22	-39.14	peak	
4		5724.250	42.86	38.10	80.96	120.49	-39.53	peak	
5		5755.000	71.34	38.17	109.51	122.20	-12.69	peak	No Limit
6	*	5755.000	61.90	38.17	100.07	54.00	46.07	AVG	No Limit
7		5853.865	16.93	38.35	55.28	113.39	-58.11	peak	
8		5871.640	16.49	38.38	54.87	106.14	-51.27	peak	
9		5879.550	16.27	38.39	54.66	101.82	-47.16	peak	
10		5941.110	16.07	38.51	54.58	68.20	-13.62	peak	

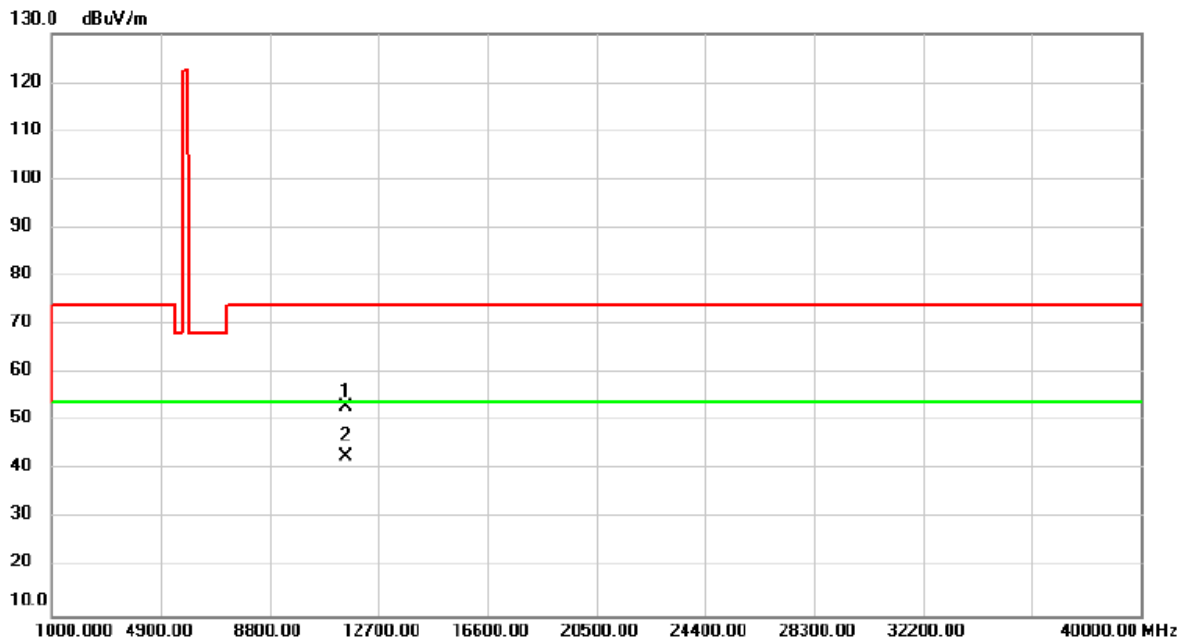
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 151

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	50.18	2.98	53.16	74.00	-20.84	peak	
2	*	11510.00	39.86	2.98	42.84	54.00	-11.16	AVG	

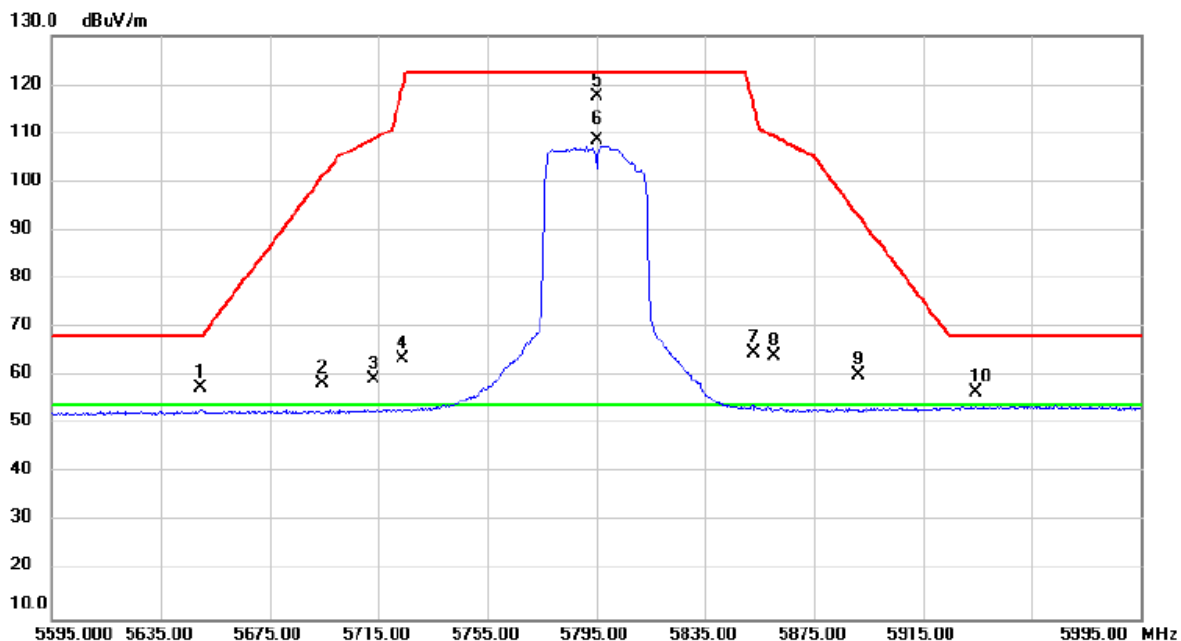
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 159

Vertical



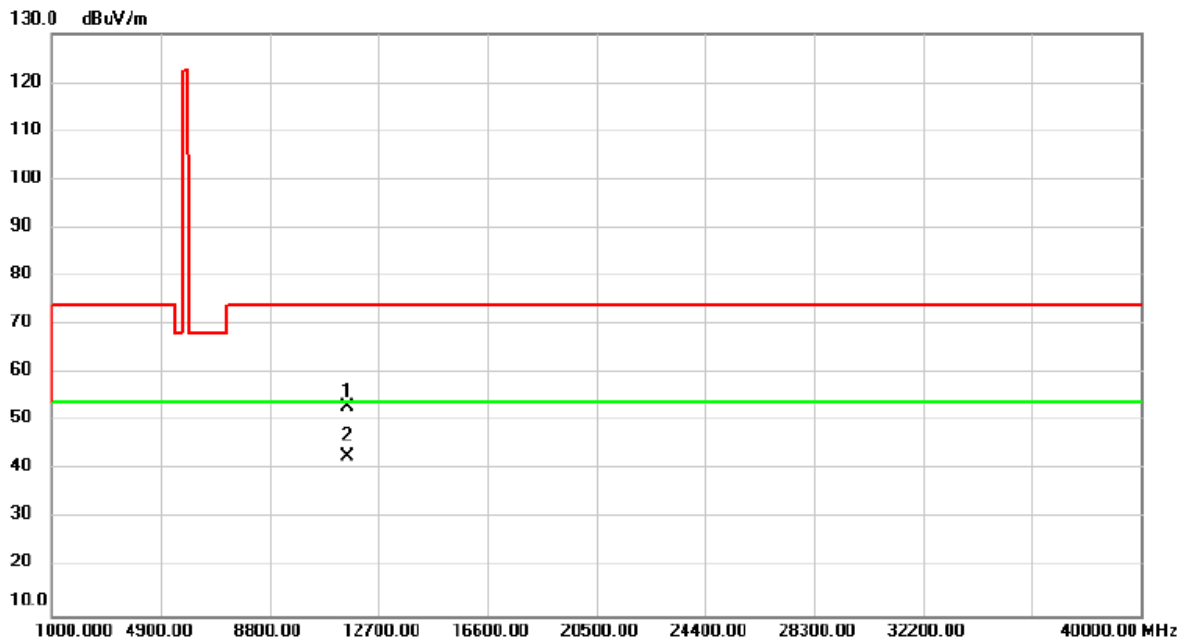
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5649.835	19.64	37.97	57.61	68.20	-10.59	peak	
2		5694.650	20.49	38.05	58.54	101.26	-42.72	peak	
3		5712.980	21.11	38.09	59.20	108.84	-49.64	peak	
4		5723.565	25.56	38.10	63.66	118.93	-55.27	peak	
5		5795.000	79.44	38.24	117.68	122.20	-4.52	peak	No Limit
6	*	5795.000	70.24	38.24	108.48	54.00	54.48	AVG	No Limit
7		5852.675	26.41	38.34	64.75	116.10	-51.35	peak	
8		5860.500	25.74	38.36	64.10	109.26	-45.16	peak	
9		5891.420	21.72	38.42	60.14	93.01	-32.87	peak	
10		5934.520	18.10	38.50	56.60	68.20	-11.60	peak	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 159

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11590.00	50.20	2.77	52.97	74.00	-21.03	peak	
2	*	11590.00	40.12	2.77	42.89	54.00	-11.11	AVG	

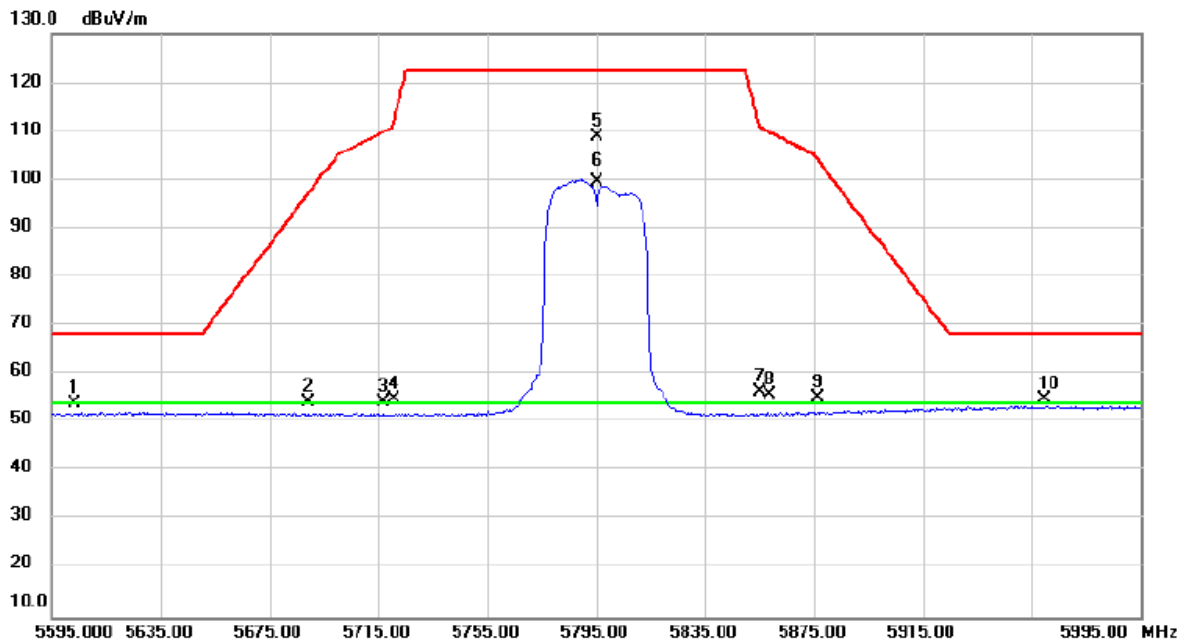
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 159

Horizontal



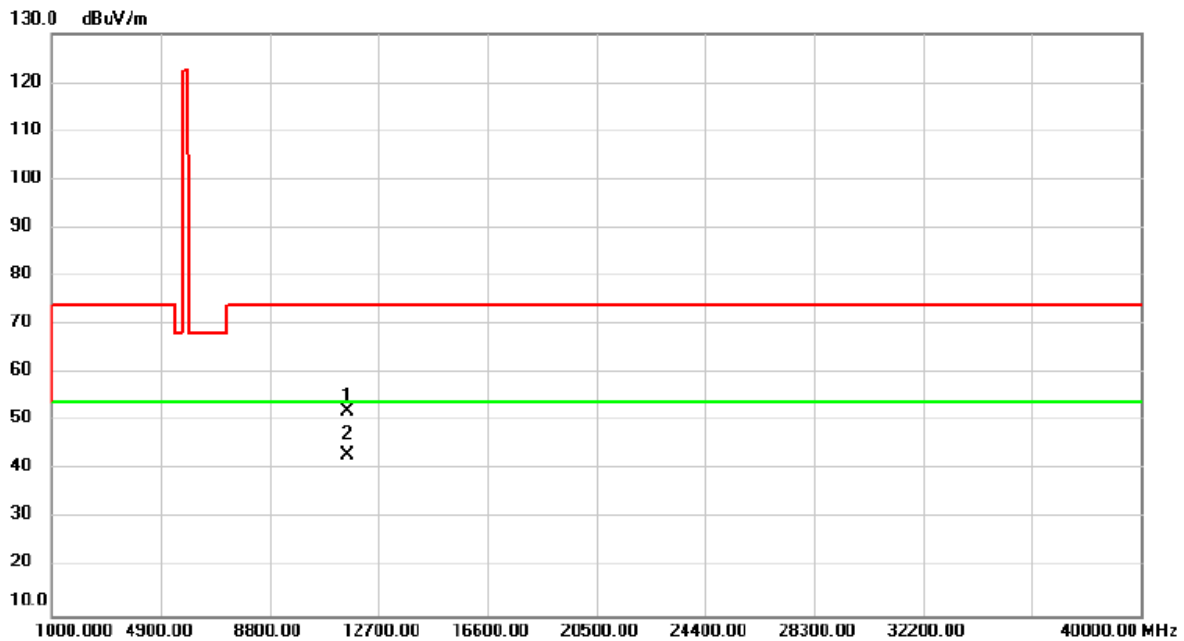
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5603.360	16.12	37.88	54.00	68.20	-14.20	peak	
2		5689.200	16.21	38.04	54.25	97.24	-42.99	peak	
3		5716.805	16.31	38.09	54.40	109.91	-55.51	peak	
4		5720.670	16.85	38.10	54.95	112.33	-57.38	peak	
5		5795.000	70.71	38.24	108.95	122.20	-13.25	peak	No Limit
6	*	5795.000	61.30	38.24	99.54	54.00	45.54	AVG	No Limit
7		5854.885	18.09	38.35	56.44	111.06	-54.62	peak	
8		5858.700	17.31	38.36	55.67	109.76	-54.09	peak	
9		5876.400	16.79	38.39	55.18	104.16	-48.98	peak	
10		5959.720	16.21	38.54	54.75	68.20	-13.45	peak	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT40) Mode CHANNEL 159

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.00	49.48	2.77	52.25	74.00	-21.75	peak	
2	*	11590.00	40.25	2.77	43.02	54.00	-10.98	AVG	

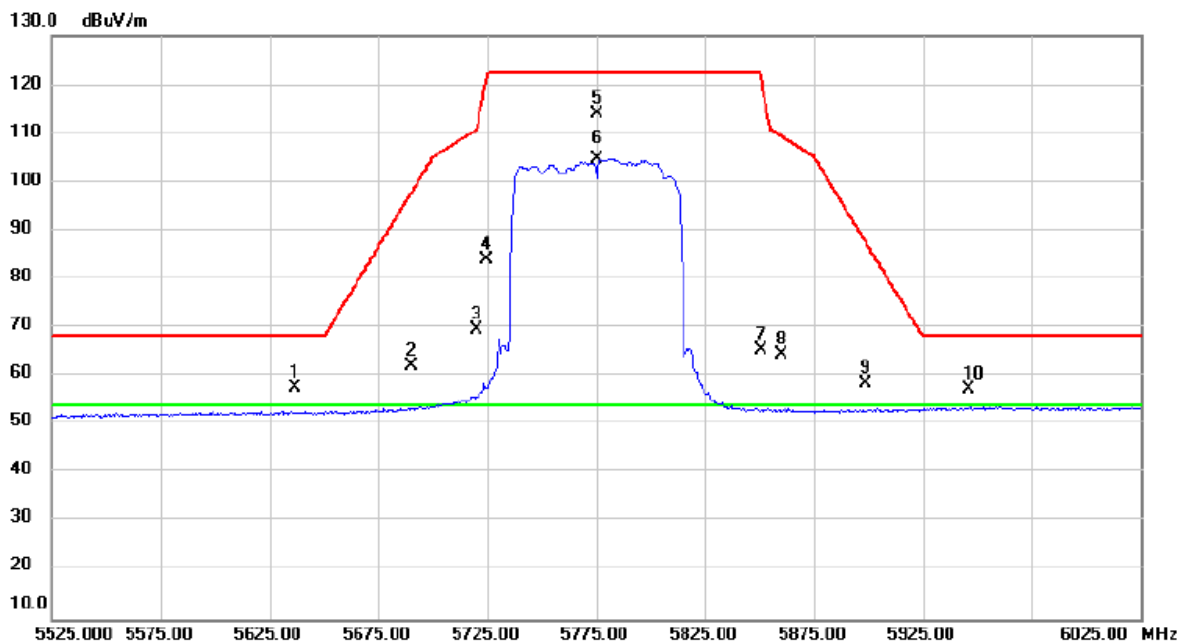
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) Mode CHANNEL 155

Vertical



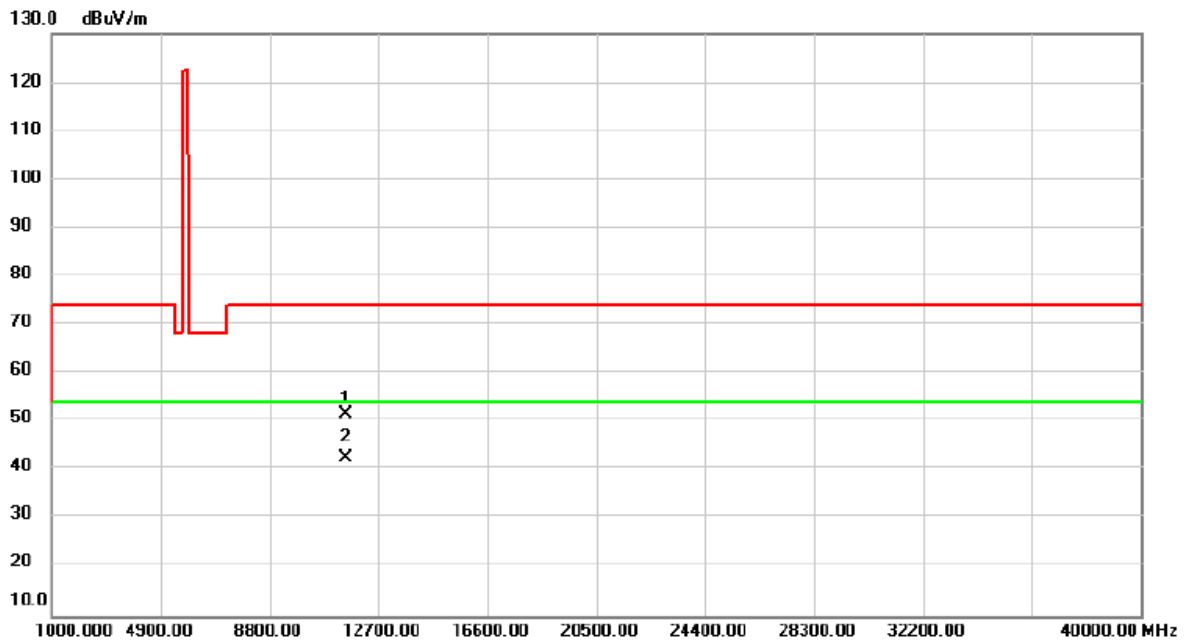
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5636.500	19.54	37.94	57.48	68.20	-10.72	peak	
2		5690.000	24.13	38.05	62.18	97.83	-35.65	peak	
3		5719.840	31.30	38.10	69.40	110.76	-41.36	peak	
4		5724.460	45.81	38.10	83.91	120.97	-37.06	peak	
5		5775.000	75.83	38.21	114.04	122.20	-8.16	peak	No Limit
6	*	5775.000	66.50	38.21	104.71	54.00	50.71	AVG	No Limit
7		5850.345	27.00	38.34	65.34	121.41	-56.07	peak	
8		5859.740	26.03	38.36	64.39	109.47	-45.08	peak	
9		5898.550	19.94	38.43	58.37	87.73	-29.36	peak	
10		5946.300	18.63	38.52	57.15	68.20	-11.05	peak	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) Mode CHANNEL 155

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	48.56	2.87	51.43	74.00	-22.57	peak	
2	*	11550.00	39.78	2.87	42.65	54.00	-11.35	AVG	

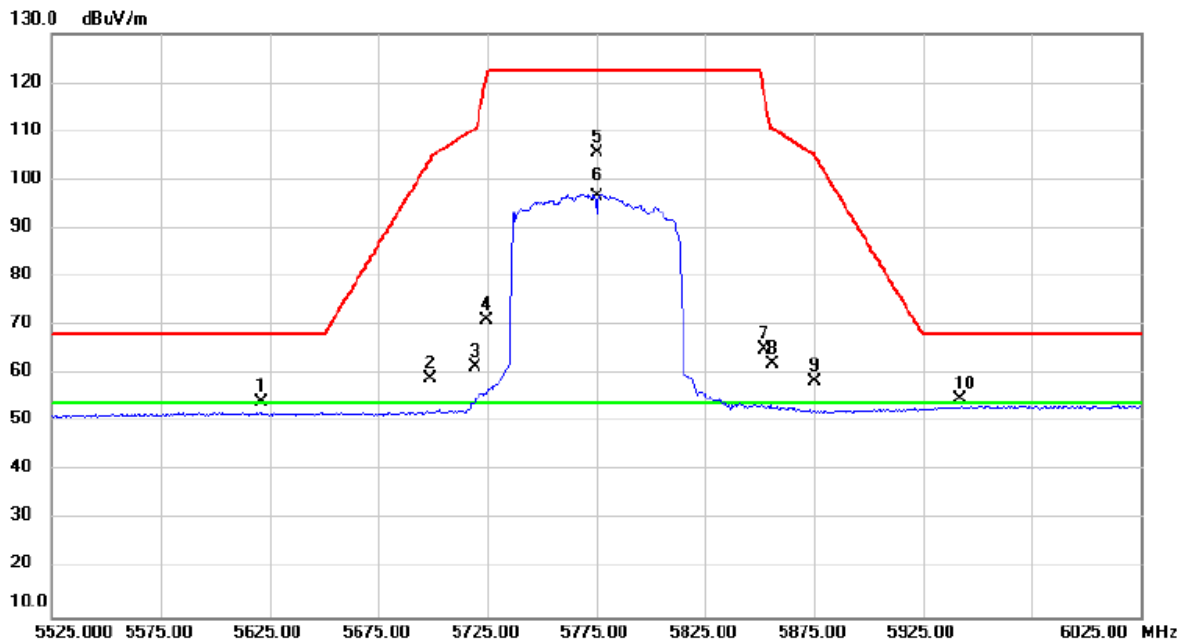
REMARKS:

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

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

Test Mode UNII-3_TX AC (VHT80) Mode CHANNEL 155

Horizontal



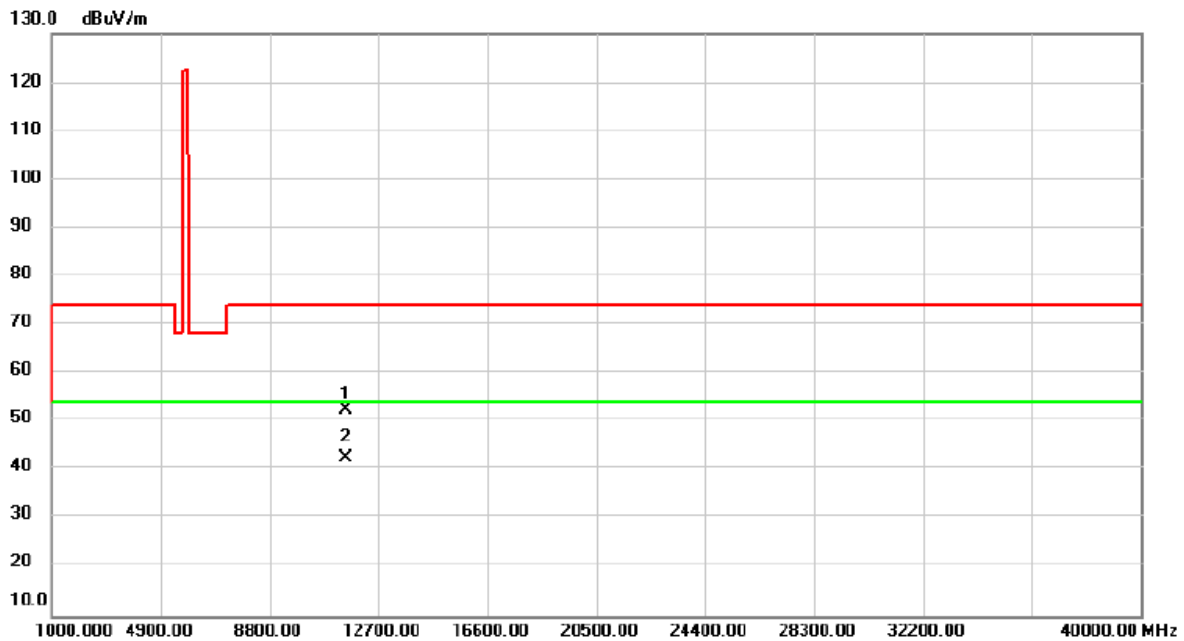
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5621.625	16.21	37.92	54.13	68.20	-14.07	peak	
2		5698.800	20.85	38.06	58.91	104.32	-45.41	peak	
3		5719.280	23.40	38.10	61.50	110.60	-49.10	peak	
4		5724.730	33.05	38.10	71.15	121.58	-50.43	peak	
5		5775.000	67.44	38.21	105.65	122.20	-16.55	peak	No Limit
6	*	5775.000	58.34	38.21	96.55	54.00	42.55	AVG	No Limit
7		5852.225	26.56	38.34	64.90	117.13	-52.23	peak	
8		5855.940	23.71	38.35	62.06	110.54	-48.48	peak	
9		5875.450	20.04	38.39	58.43	104.87	-46.44	peak	
10		5942.200	16.23	38.51	54.74	68.20	-13.46	peak	

REMARKS:

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

Test Mode UNII-3_TX AC (VHT80) Mode CHANNEL 155

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11550.00	49.52	2.87	52.39	74.00	-21.61	peak	
2	*	11550.00	39.56	2.87	42.43	54.00	-11.57	AVG	

REMARKS:

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

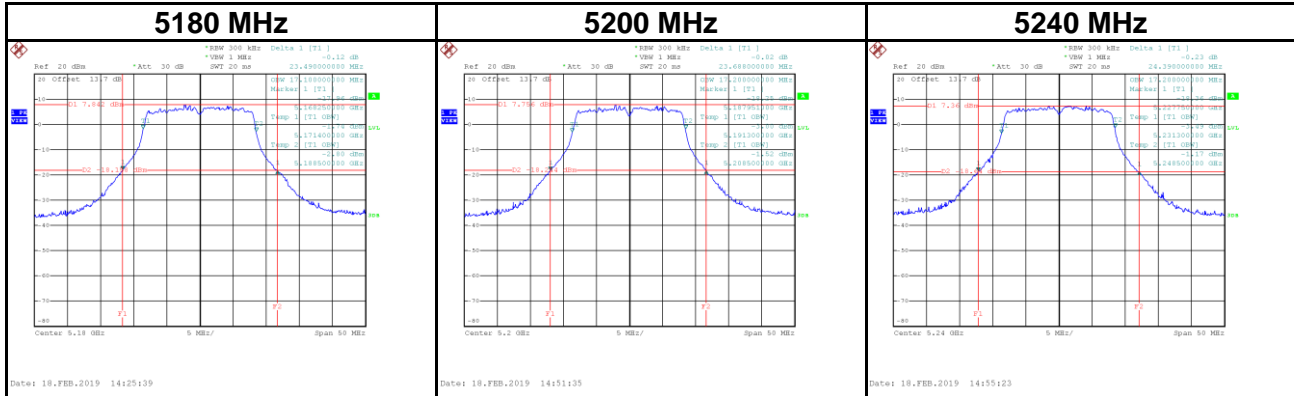
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E BANDWIDTH

CDD Mode

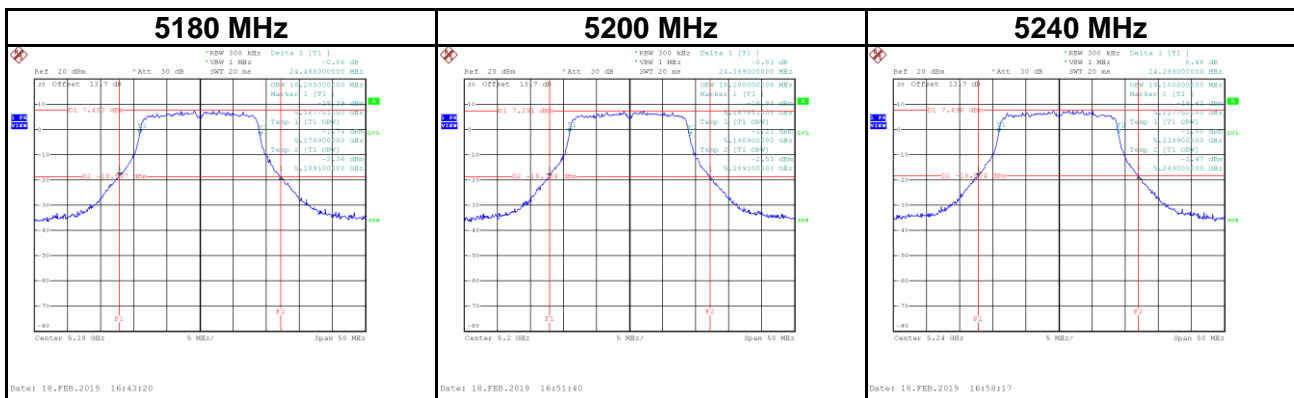
Test Mode UNII-1_ IEEE 802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
36	5180	23.49	17.10
40	5200	23.69	17.20
48	5240	24.39	17.20



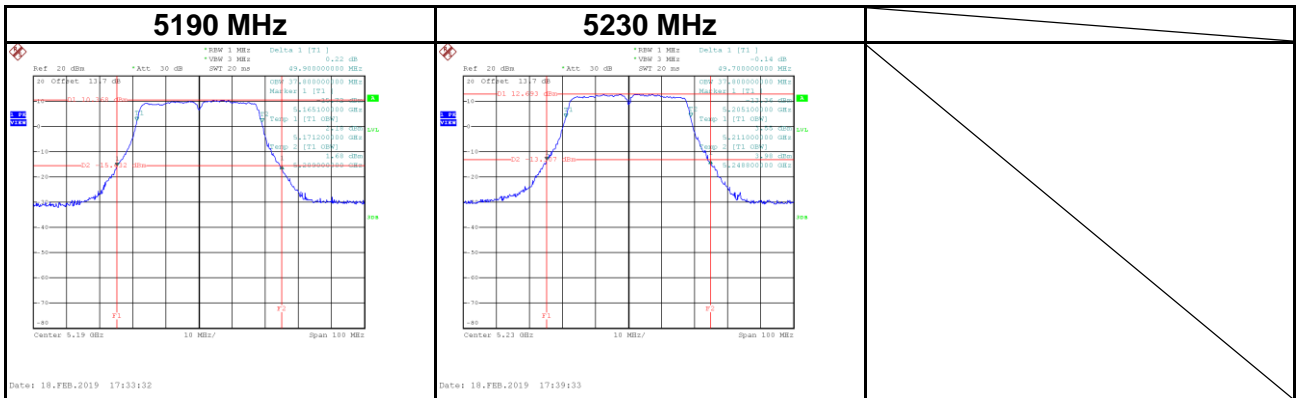
Test Mode UNII-1_ IEEE 802.11n (HT20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
36	5180	24.49	18.20
40	5200	24.39	18.20
48	5240	24.29	18.10



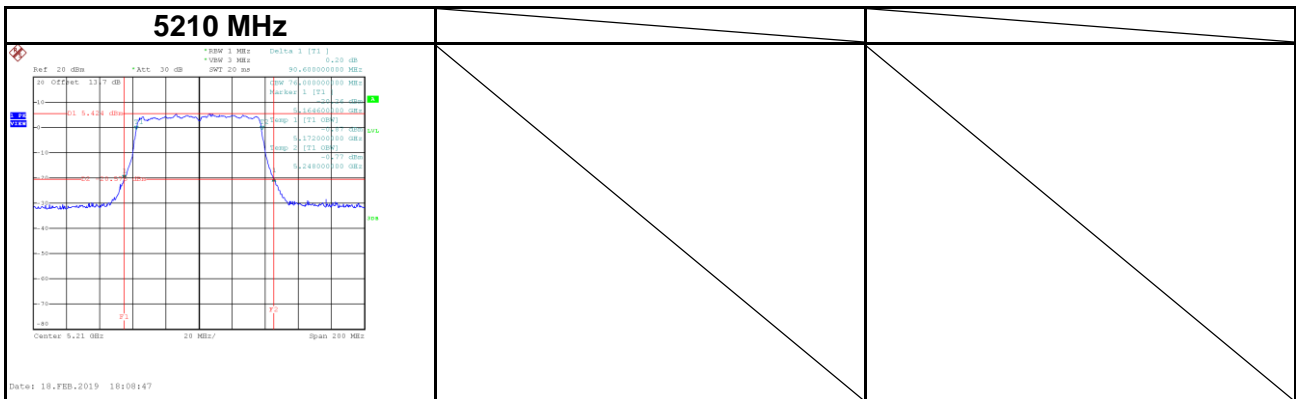
Test Mode	UNII-1_ IEEE 802.11n (HT40)
-----------	-----------------------------

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
38	5190	49.90	37.80
46	5230	49.70	37.80



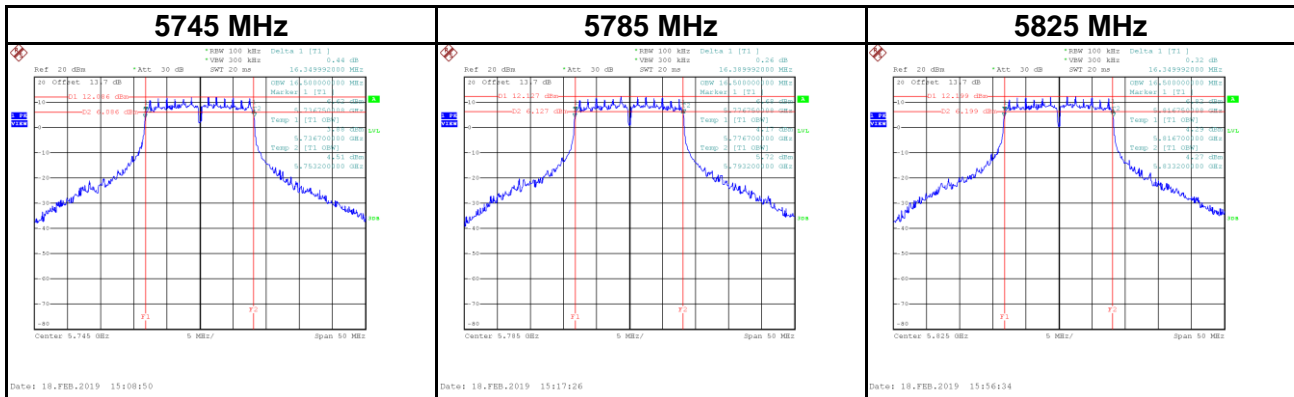
Test Mode	UNII-1_ IEEE 802.11ac (VHT80)
-----------	-------------------------------

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
42	5210	90.60	76.00



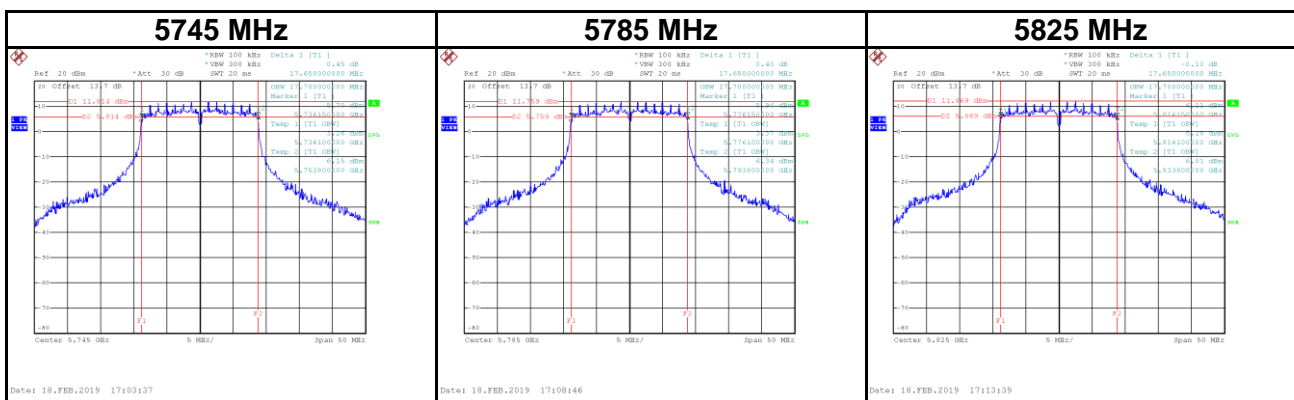
Test Mode	UNII-3_IEEE 802.11a
-----------	---------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
149	5745	16.35	16.50
157	5785	16.39	16.50
165	5825	16.35	16.50



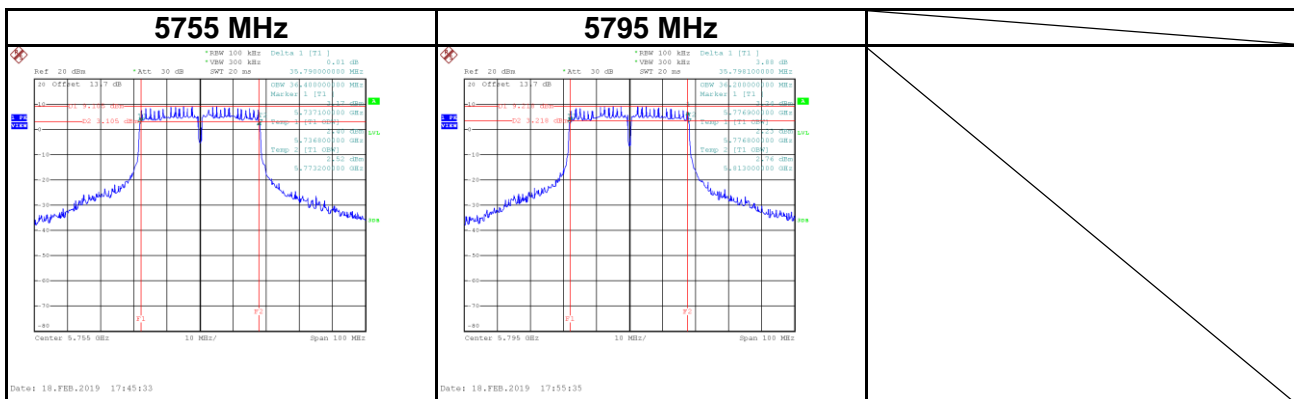
Test Mode	UNII-3_IEEE 802.11n (HT20)
-----------	----------------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
149	5745	17.65	17.70
157	5785	17.65	17.70
165	5825	17.65	17.70



Test Mode	UNII-3_IIEEE 802.11n (HT40)
-----------	-----------------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
151	5755	35.79	36.40
159	5795	35.80	36.20



Test Mode	UNII-3_IIEEE 802.11ac (VHT80)
-----------	-------------------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
155	5775	75.40	75.20

