FCC Radio Test Report

FCC ID: KA2APX1870A1

This report concerns: Original Grant

Project No.	:	2007H040
Equipment	:	AX1800 Mesh Wi-Fi Extender
Brand Name	:	D-Link
Test Model	:	DAP-X1870
Series Model	:	N/A
Applicant	:	D-Link Corporation
Address	:	17595 Mt. Herrmann, Fountain Valley, California United State 92708
Manufacturer	:	D-Link Corporation
Address	:	17595 Mt. Herrmann, Fountain Valley, California United State 92708
Date of Receipt	:	Jul. 22, 2020
Date of Test	:	Jul. 22, 2020~Sep. 04, 2020
Issued Date	:	Sep. 23, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: SH20200721109
Standard(s)	:	FCC Part15, Subpart E(15.407) ANSI C63.10-2013 FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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

Allen Wei

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Certificate # 5123.03

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Declaration

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

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

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

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

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

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.
Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Sep. 23, 2020

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)				
Standard(s) Section	**Test Item**	**Test Result**	**Judgement**	**Remark**
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	N/A	------
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS	------
15.407(a)	Maximum Output Power	APPENDIX F	PASS	------
15.407(a)	Power Spectral Density	APPENDIX G	PASS	------
15.203	Antenna Requirements	------	PASS	**NOTE (3)**
15.407(c)	Automatically Discontinue Transmission	------	PASS	**NOTE (3)**

Note:

(1) "N/A" denotes test is not applicable in this test report.

(2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

(3) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

(4) For UNII-1 this device was functioned as a

☒ Access point device ☐ Client device

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China
BTL's Test Firm Registration Number for FCC: 476765
BTL's Designation Number for FCC: CN1241

1.2 MEASUREMENT UNCERTAINTY

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

A. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
SH-CB01	CISPR	9 KHz~30 MHz	V	3.79
		9 KHz~30 MHz	H	3.57
		30 MHz~200 MHz	V	4.04
		30 MHz~200 MHz	H	3.76
		200 MHz~1,000 MHz	V	4.24
		200 MHz~1,000 MHz	H	3.84
		1 GHz~18 GHz	V	4.46
		1 GHz~18 GHz	H	4.40
		18 GHz~40 GHz	V	3.95
		18 GHz~40 GHz	H	3.95

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

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	26°C	60%	AC 120V/60Hz	Forest Li
Radiated Emissions-30 MHz to 1GHz	23°C	52%	AC 120V/60Hz	Forest Li
Radiated Emissions-Above 1000 MHz	24°C	58%	AC 120V/60Hz	Forest Li
Spectrum Bandwidth	24°C	58%	AC 120V/60Hz	Forest Li
Maximum Output Power	24°C	58%	AC 120V/60Hz	Forest Li
Power Spectral Density	24°C	58%	AC 120V/60Hz	Forest Li

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AX1800 Mesh Wi-Fi Extender
Brand Name	D-Link
Test Model	DAP-X1870
Series Model	N/A
Model Difference(s)	N/A
Software Version	1
Hardware Version	A1
Power Source	AC power supply.
Power Rating	100~240Vac, 50/60Hz, 0.2A
Operation Frequency	UNII-1: 5150 MHz~5250 MHz UNII-3: 5725 MHz~5850 MHz
Modulation Type	OFDM, OFDMA
Bit Rate of Transmitter	Up to 1201 Mbps
Maximum Conducted Output Power for UNII-1 Non-Beamforming	IEEE 802.11a: 25.73 dBm (0.3741 W) IEEE 802.11n (HT20): 28.42 dBm (0.6950 W) IEEE 802.11n (HT40): 25.55 dBm (0.3589 W) IEEE 802.11ac (VHT20): 28.50 dBm (0.7079 W) IEEE 802.11ac (VHT40): 25.61 dBm (0.3639 W) IEEE 802.11ac (VHT80): 21.60 dBm (0.1445 W) IEEE 802.11ax (HE20): 28.44 dBm (0.6982 W) IEEE 802.11 ax (HE40): 25.59 dBm (0.3622 W) IEEE 802.11 ax (HE80): 22.38 dBm (0.1730 W)
Maximum Conducted Output Power for UNII-1 Beamforming	IEEE 802.11n (HT20): 28.26 dBm (0.6699 W) IEEE 802.11n (HT40): 25.35 dBm (0.3428 W) IEEE 802.11ac (VHT20): 28.27 dBm (0.6714 W) IEEE 802.11ac (VHT40): 25.42 dBm (0.3483 W) IEEE 802.11ac (VHT80): 21.27 dBm (0.1340 W) IEEE 802.11ax (HE20): 28.10 dBm (0.6457 W) IEEE 802.11 ax (HE40): 25.38 dBm (0.3451 W) IEEE 802.11 ax (HE80): 22.18 dBm (0.1652 W)
Maximum Conducted Output Power for UNII-3 (2TX) Non-Beamforming	IEEE 802.11a: 26.13 dBm (0.4102 W) IEEE 802.11n (HT20): 28.92 dBm (0.7798 W) IEEE 802.11n (HT40): 26.07 dBm (0.4046 W) IEEE 802.11ac (VHT20): 29.03 dBm (0.7998 W) IEEE 802.11ac (VHT40): 26.12 dBm (0.4093 W) IEEE 802.11ac (VHT80): 22.81 dBm (0.1910 W) IEEE 802.11ax (HE20): 29.35 dBm (0.8610 W) IEEE 802.11 ax (HE40): 26.57 dBm (0.4540 W) IEEE 802.11 ax (HE80): 24.62 dBm (0.2897 W)
Maximum Conducted Output Power for UNII-3 Beamforming	IEEE 802.11n (HT20): 28.63 dBm (0.7295 W) IEEE 802.11n (HT40): 25.83 dBm (0.3828 W) IEEE 802.11ac (VHT20): 28.75 dBm (0.7499 W) IEEE 802.11ac (VHT40): 25.91 dBm (0.3899 W) IEEE 802.11ac (VHT80): 22.63 dBm (0.1832 W) IEEE 802.11ax (HE20): 29.15 dBm (0.8222 W) IEEE 802.11 ax (HE40): 26.35 dBm (0.4315 W) IEEE 802.11 ax (HE80): 24.29 dBm (0.2630 W)

Note:

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

2. Channel List:

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20) IEEE 802.11ax (HE20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40) IEEE 802.11ax (HE40)		IEEE 802.11ac (VHT80) IEEE 802.11ax (HE80)	
UNII-1		UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20) IEEE 802.11ax (HE20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40) IEEE 802.11ax (HE40)		IEEE 802.11ac (VHT80) IEEE 802.11ax (HE80)	
UNII-3		UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3. Antenna Specification:

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

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain =3.

(2) The EUT incorporates beamforming Function, so Directional gain = G_{ANT} + 10 log(N_{ANT}) dBi, that is Directional gain =3+10 log(2)dBi =6.01 dBi. the output power limit is 30-6.01+6=29.99, the power spectral density limit is UNII-1:17-6.01+6=16.99. UNII-3: 30-6.01+6=29.99.

4. Table for Antenna Configuration:

Operating Mode / TX Mode	Ant. 1	Ant. 2	Ant. 1 + Ant. 2
IEEE 802.11a	✓	✓	×
IEEE 802.11n (HT20)	✓	✓	✓
IEEE 802.11n (HT40)	✓	✓	✓
IEEE 802.11ac (VHT20)	✓	✓	✓
IEEE 802.11ac (VHT40)	✓	✓	✓
IEEE 802.11ac (VHT80)	✓	✓	✓
IEEE 802.11ax (HE20)	✓	✓	✓
IEEE 802.11ax (HE40)	✓	✓	✓
IEEE 802.11ax (HE80)	✓	✓	✓

2.2 TEST MODES

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

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX AX (HE20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 8	TX AX (HE40) Mode / CH38, CH46 (UNII-1)
Mode 9	TX AX (HE80) Mode / CH42 (UNII-1)
Mode 10	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 12	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 13	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 14	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 15	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 16	TX AX (HE20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 17	TX AX (HE40) Mode / CH151,CH159 (UNII-3)
Mode 18	TX AX (HE80) Mode / CH155 (UNII-3)
Mode 19	TX AX(HE20) Mode / CH157 (UNII-3)

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 19	TX AX(HE20) Mode / CH157 (UNII-3)

Radiated emissions test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX AX (HE20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 8	TX AX (HE40) Mode / CH38, CH46 (UNII-1)
Mode 9	TX AX (HE80) Mode / CH42 (UNII-1)
Mode 10	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 12	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 13	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 14	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 15	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 16	TX AX (HE20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 17	TX AX (HE40) Mode / CH151,CH159 (UNII-3)
Mode 18	TX AX (HE80) Mode / CH155 (UNII-3)

Conducted test	
Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX AX (HE20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 8	TX AX (HE40) Mode / CH38, CH46 (UNII-1)
Mode 9	TX AX (HE80) Mode / CH42 (UNII-1)
Mode 10	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 12	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 13	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 14	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 15	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 16	TX AX (HE20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 17	TX AX (HE40) Mode / CH151,CH159 (UNII-3)
Mode 18	TX AX (HE80) Mode / CH155 (UNII-3)

Note：

(1) For radiated emission below 1 GHz test, the IEEE 802.11ax20 is found to be the worst case and recorded.

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

(3) For conducted emission, the power of Non-Beamforming is higher than Beamforming, so only recorded the worst case.

2.3 PARAMETERS OF TEST SOFTWARE

Non-Beamforming

UNII-1 - 2TX			
Test Software	Mtool		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	85	95	98
IEEE 802.11n (HT20)	79	91	98
IEEE 802.11ac (VHT20)	79	91	98
IEEE 802.11ax (HE20)	80	92	97
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	71	89	
IEEE 802.11ac (VHT40)	71	89	
IEEE 802.11ax (HE40)	70	88	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	73		
IEEE 802.11ax (HE80)	73		

UNII-3 - 2TX			
Test Software	Mtool		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	100	100	100
IEEE 802.11n (HT20)	100	100	100
IEEE 802.11ac (VHT20)	100	100	100
IEEE 802.11ax (HE20)	100	100	100
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	93	95	
IEEE 802.11ac (VHT40)	93	95	
IEEE 802.11ax (HE40)	93	95	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	80		
IEEE 802.11ax (HE80)	85		

Beamforming

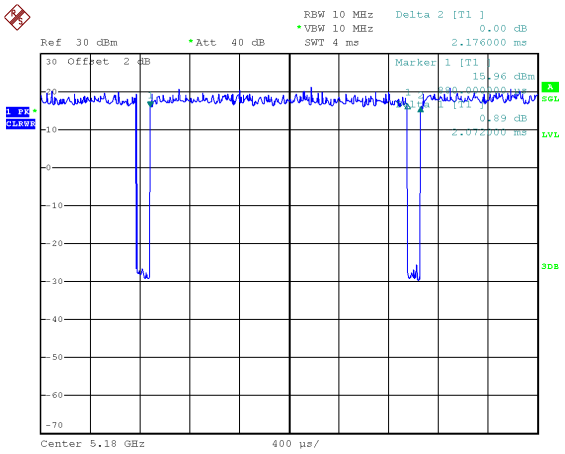
UNII-1 - 2TX			
Test Software	Mtool		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11n (HT20)	79	91	98
IEEE 802.11ac (VHT20)	79	91	98
IEEE 802.11ax (HE20)	80	92	97
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	71	89	
IEEE 802.11ac (VHT40)	71	89	
IEEE 802.11ax (HE40)	70	88	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	73		
IEEE 802.11ax (HE80)	73		

UNII-3 - 2TX			
Test Software	Mtool		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11n (HT20)	100	100	100
IEEE 802.11ac (VHT20)	100	100	100
IEEE 802.11ax (HE20)	100	100	100
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	93	95	
IEEE 802.11ac (VHT40)	93	95	
IEEE 802.11ax (HE40)	93	95	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	80		
IEEE 802.11ax (HE80)	85		

2.4 DUTY CYCLE

If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.
The output power = measured power + duty factor.

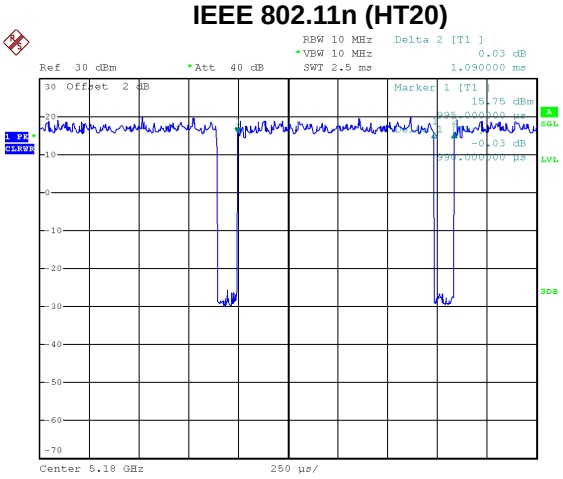
IEEE 802.11a



Date: 27.JUL.2020 20:28:13

Duty cycle = 2.072 ms / 2.176 ms = 95.22%
Duty Factor = 10 * log(1 / Duty cycle) = 0.21 dB

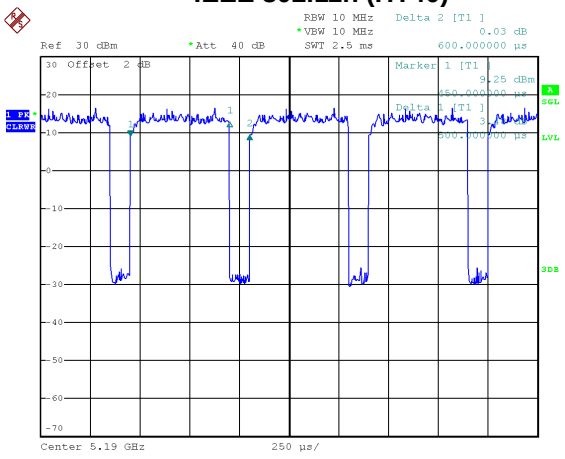
IEEE 802.11n (HT20)



Date: 27.JUL.2020 20:29:06

Duty cycle = 0.990 ms / 1.090 ms = 90.83%
Duty Factor = 10 * log(1 / Duty cycle) = 0.42 dB

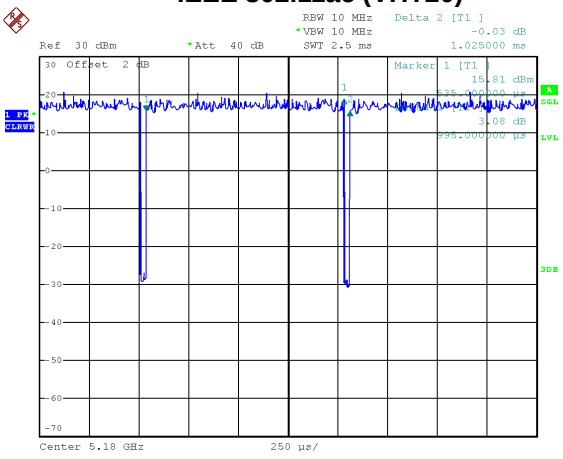
IEEE 802.11n (HT40)



Date: 27.JUL.2020 20:29:55

Duty cycle = 0.500 ms / 0.600 ms = 83.33%
Duty Factor = 10 * log(1 / Duty cycle) = 0.79 dB

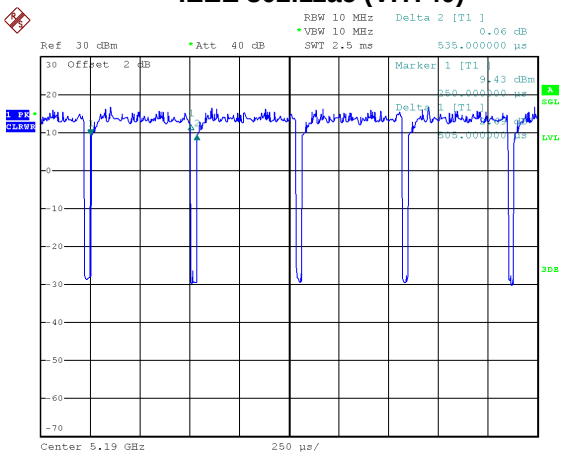
IEEE 802.11ac (VHT20)



Date: 27.JUL.2020 20:32:28

Duty cycle = 0.995 ms / 1.025 ms = 97.07%
Duty Factor = 10 * log(1 / Duty cycle) = 0.13 dB

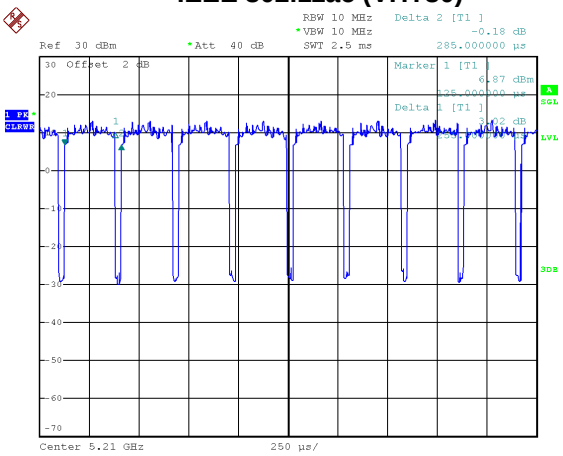
IEEE 802.11ac (VHT40)



Date: 27.JUL.2020 20:35:31

Duty cycle = 0.505 ms / 0.535 ms = 94.39%
Duty Factor = 10 * log(1 / Duty cycle) = 0.25 dB

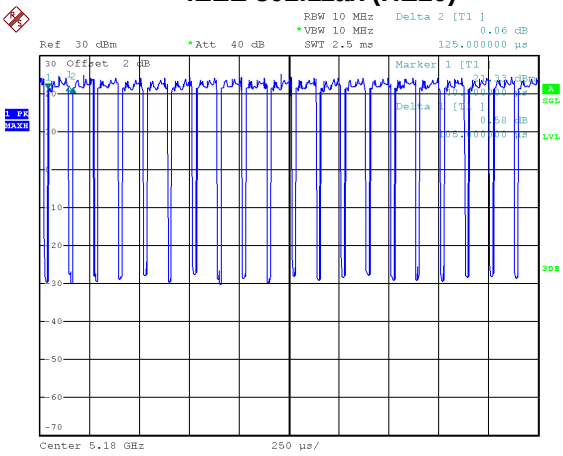
IEEE 802.11ac (VHT80)



Date: 27.JUL.2020 20:33:57

Duty cycle = 0.255 ms / 0.285 ms = 89.47%
Duty Factor = 10 * log(1 / Duty cycle) = 0.48 dB

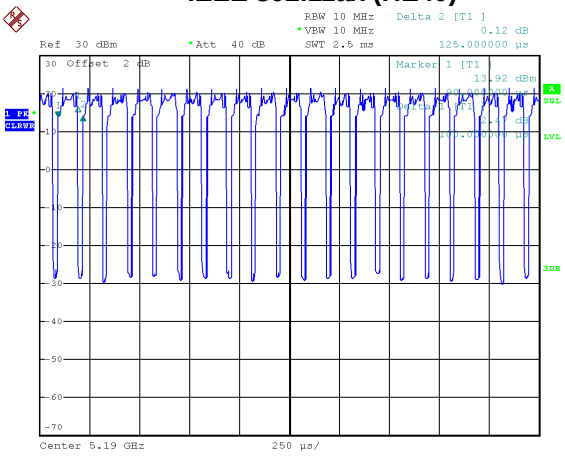
IEEE 802.11ax (HE20)



Date: 17.AUG.2020 15:46:04

Duty cycle = 0.105 ms / 0.125 ms = 84.00%
Duty Factor = 10 * log(1 / Duty cycle) = 0.76 dB

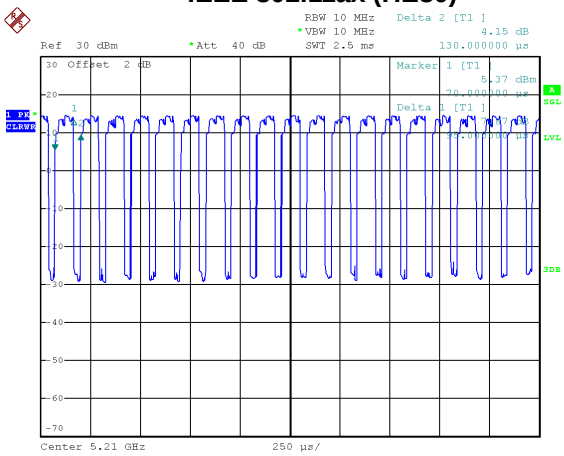
IEEE 802.11ax (HE40)



Date: 17.AUG.2020 15:47:35

Duty cycle = 0.100 ms / 0.125 ms = 80.00%
Duty Factor = 10 * log(1 / Duty cycle) = 0.97 dB

IEEE 802.11ax (HE80)

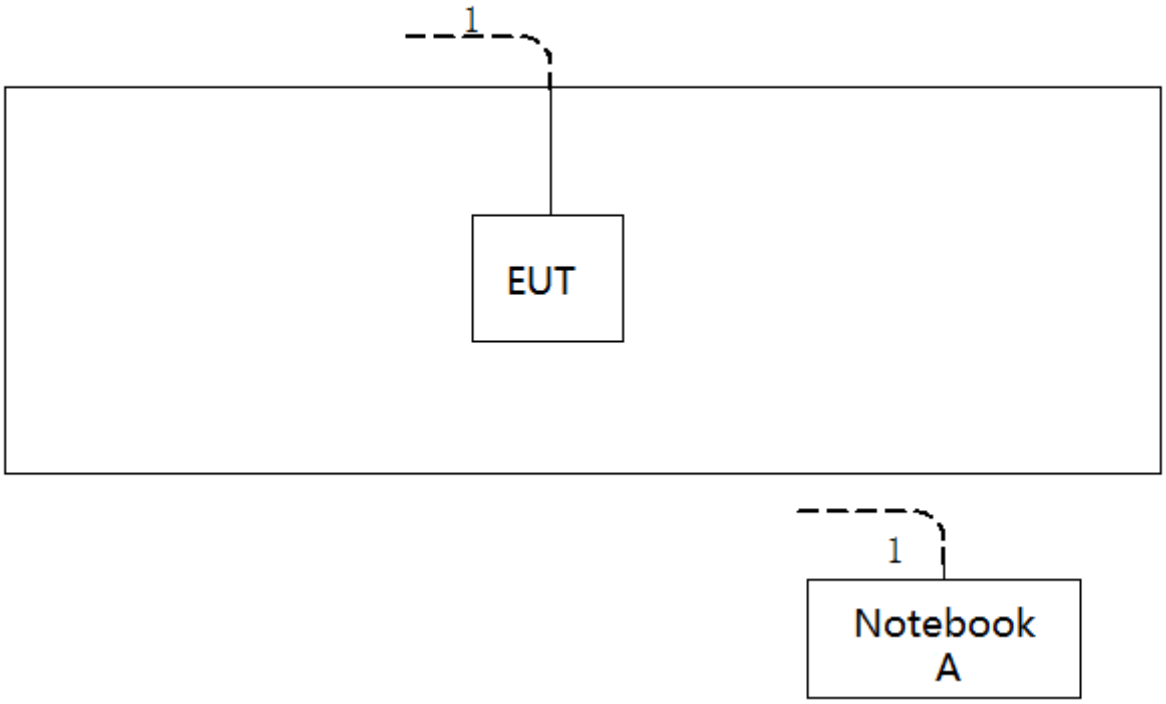


Date: 17.AUG.2020 15:48:45

Duty cycle = 0.095 ms / 0.130 ms = 73.08%
Duty Factor = 10 * log(1 / Duty cycle) = 1.36 dB

NOTE:
For IEEE 802.11a,:
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 (HT20) , IEEE 802.11n (HT40), IEEE 802.11ac (VHT20) and IEEE 802.11ac (VHT40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).
For IEEE 802.11ac (VHT80):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 5 kHz (Duty cycle < 98%).
For IEEE 802.11ax (HE 20), IEEE 802.11ax (HE 40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 kHz (Duty cycle < 98%).
For IEEE 802.11ax (HE 80):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 11 kHz (Duty cycle < 98%).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Dell	Inspiron 15-7559	N/A

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

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

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

The following table is the setting of the receiver

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

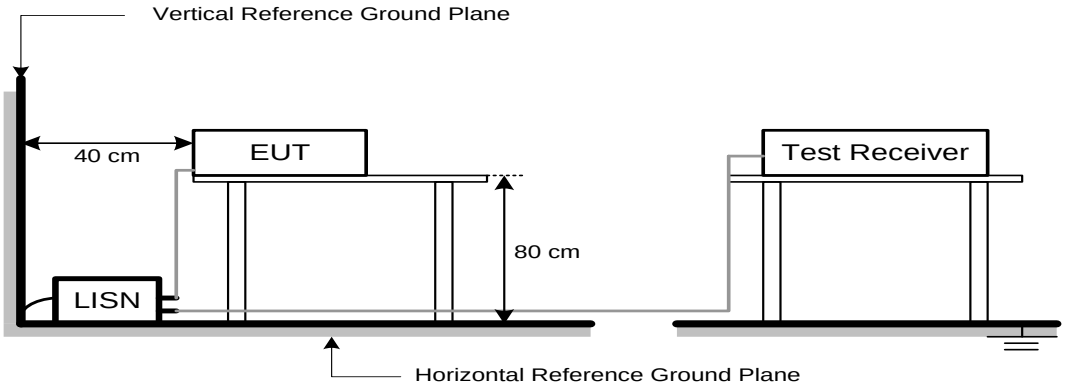
3.2 TEST PROCEDURE

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

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

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

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

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

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

NOTE:

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

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

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

4.2 TEST PROCEDURE

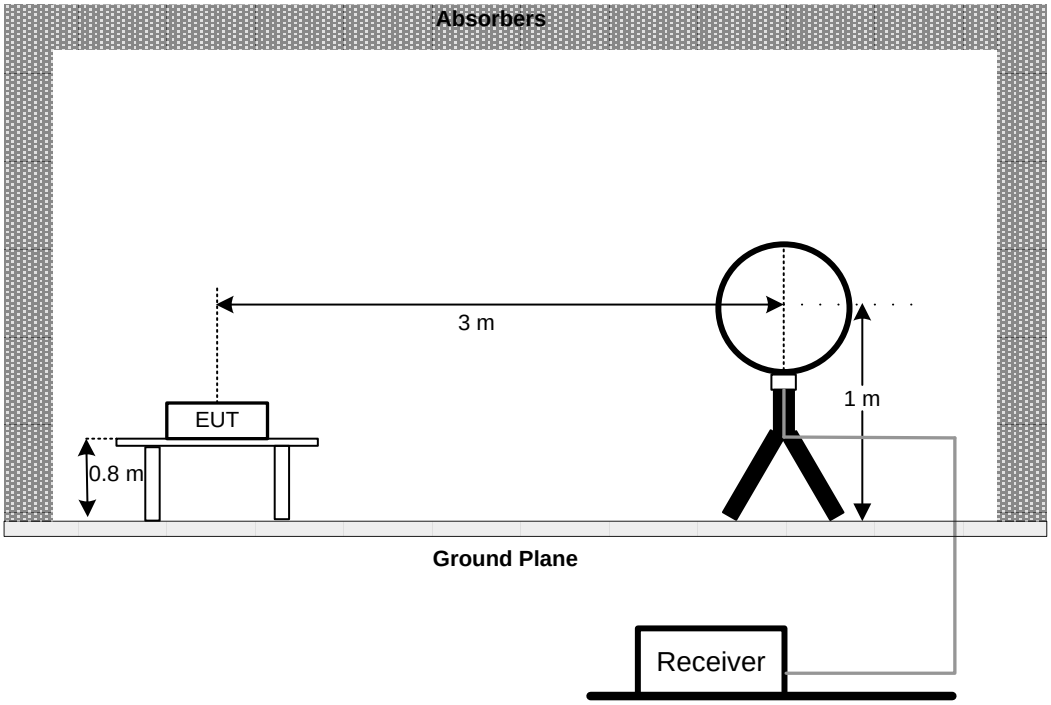
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1 GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1 GHz)
i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.3 DEVIATION FROM TEST STANDARD

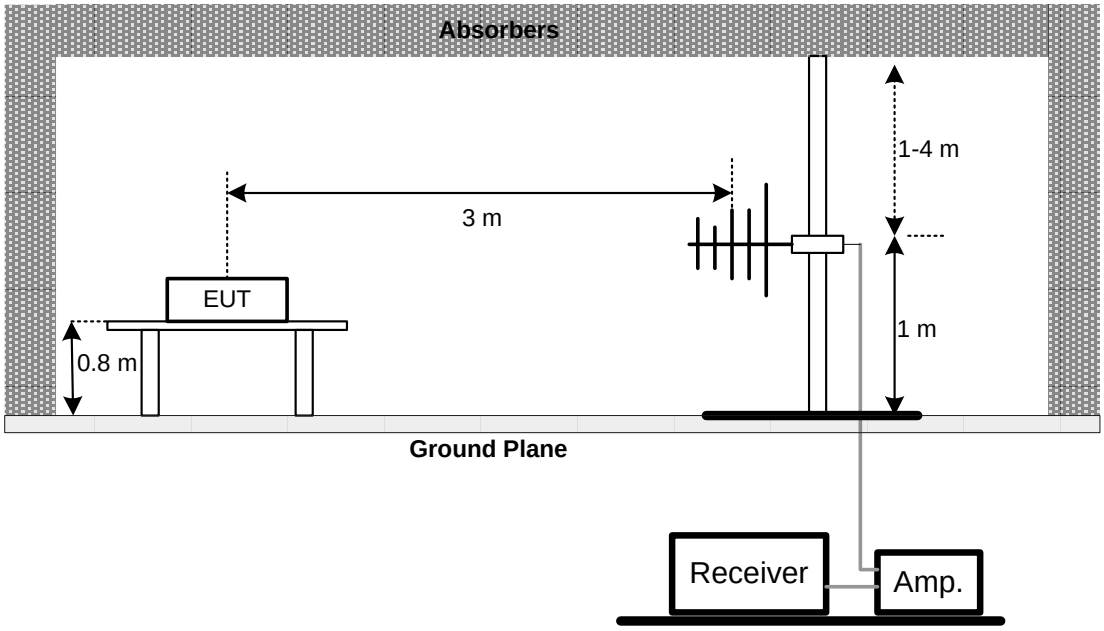
No deviation

4.4 TEST SETUP

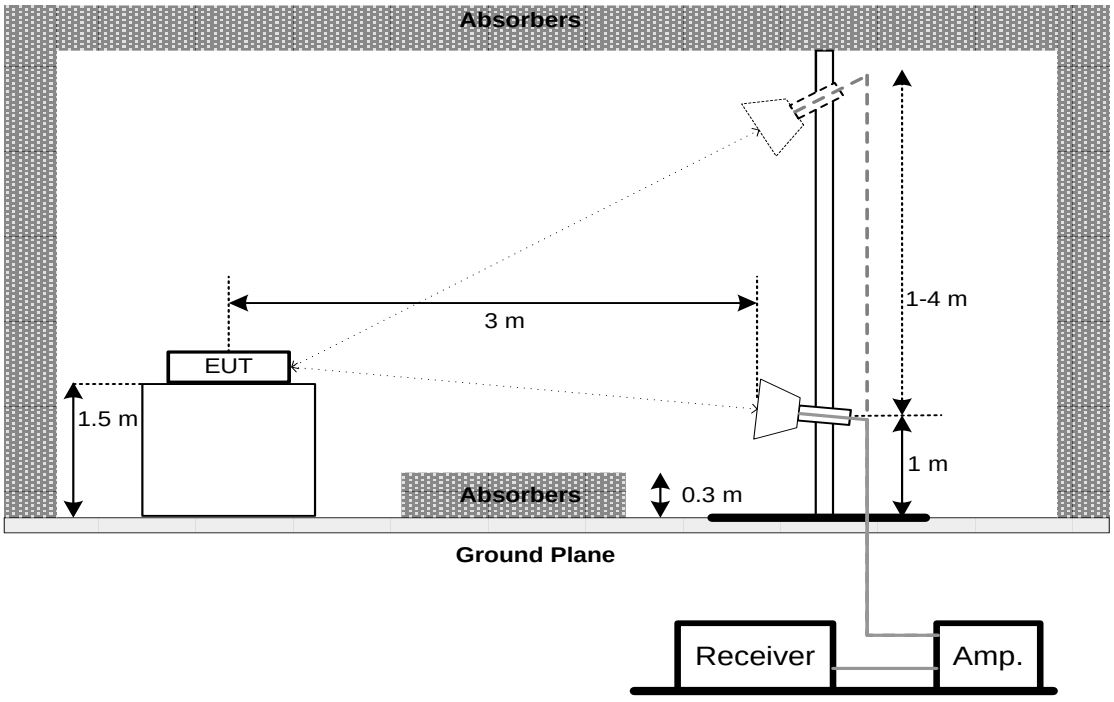
9 kHz to 30 MHz



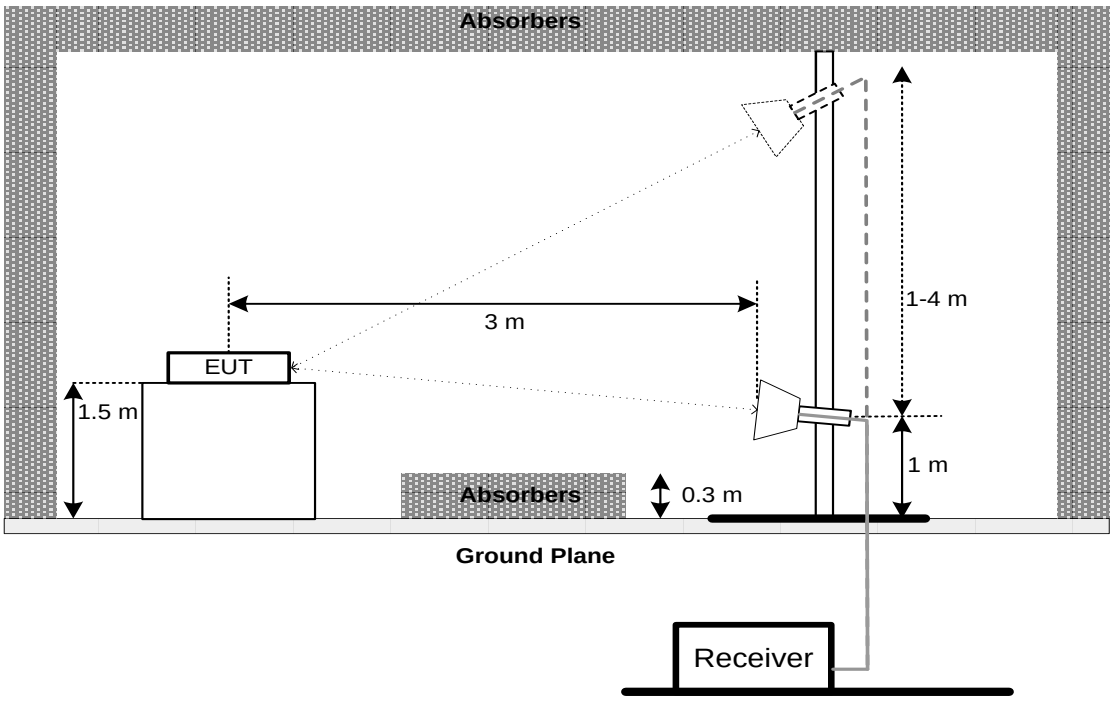
30 MHz to 1 GHz



Above 1 GHz



Above 1 GHz
Band edge



4.5 EUT OPERATION CONDITIONS

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

4.6 TEST RESULTS - 9 KHZ to 30 MHZ

Please refer to the APPENDIX B

Remark:

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

4.7 TEST RESULTS - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHz

Please refer to the APPENDIX D.

Remark:

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

5. BANDWIDTH TEST

5.1 LIMIT

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

5.2 TEST PROCEDURE

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

b. a. Spectrum Setting:

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

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26 dB Bandwidth
RBW	300 kHz (Bandwidth 20 MHz) 1 MHz (Bandwidth 40 MHz and 80 MHz)
VBW	1 MHz (Bandwidth 20 MHz) 3 MHz (Bandwidth 40 MHz and 80 MHz)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

For UNII-3:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26 dB below carrier

5.3 TEST PROCEDURE

No deviation.

5.4 TEST SETUP

5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS

Please refer to the APPENDIX E.

6. MAXIMUM OUTPUT POWER TEST

6.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Conducted Output Power	AP device: 1 Watt (30 dBm) Client device: 250 mW (24 dBm)	5150-5250
		250 mW (24 dBm)	5250-5350
		250 mW (24 dBm)	5470-5725
		1 Watt (30dBm)	5725-5850

Note:

a. For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. （Slave （Client）

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

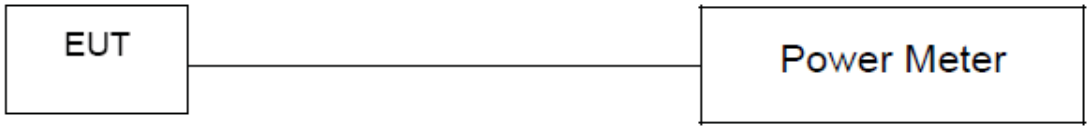
6.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. POWER SPECTRAL DENSITY TEST

7.1 LIMIT

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

7.2 TEST PROCEDURE

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

b. Spectrum Setting

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:

1. 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 10log(500 kHz/1 MHz) which is -3 dB. For example, if the measured value is +10dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7dBm/500kHz.
3. The value measured with RBW=100kHz is to be added with 10log(500 kHz/100kHz) which is 7 dB. For example, if the measured value is +10dBm using RBW=100kHz (that is +10 dBm/100kHz), then the converted value will be +17dBm/500kHz.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP

7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX G.

8. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Line Impedance Stabilisation Network	Schwarzbeck	NNLK 8121	8121-822	Mar. 21, 2021
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Aug. 23, 2021
3	EMI Test Receiver	R&S	ESCI	100082	Mar. 21, 2021
4	50Ω coaxial switch	Anritsu	MP59B	6201750902	Mar. 21, 2021
5	Cable	10m	EMCRG400-BM-NM-10000	170628	Jul. 15, 2021
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EMCI	EMCI LPA600	275	Apr. 15, 2021
2	Cable	N/A	EMCRG400-BM-NM-10000	170628	Jun. 08, 2021
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	May. 06, 2021
4	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	719	Apr. 02, 2021
2	Pre-Amplifier	emci	EMC9135	980400	Mar. 21, 2021
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	May. 06, 2021
4	Attenuator	emci	EMCI-N-6-06	AT-N0644	Mar. 21, 2021
5	Cable	7m	EMC104-SM-SM-7000	170330	Apr. 13, 2021
6	Cable	1m	EMC104-SM-SM-1000	170331	Apr. 13, 2021
7	Cable	3.5m	EMC104-SM-NM-3500	170621	Apr. 13, 2021
8	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double-Ridged Waveguide Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1786	Apr. 13, 2021
2	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C	203919	Jul. 20, 2021
3	Pre-Amplifier	emci	EMC012645SE	980421	May. 11, 2021
4	Pre-Amplifier	emci	EMC184045SE	980409	May. 11, 2021
5	EXA Spectrum Analyzer	Keysight	N9010A	MY56480559	Mar. 21, 2021
6	MXE EMI Receiver	Keysight	N9038A	MY56400088	Mar. 21, 2021
7	Cable	7m	EMC104-SM-SM-7000	170330	Apr. 13, 2021
8	Cable	1m	EMC104-SM-SM-1000	170331	Apr. 13, 2021
9	Cable	3.5m	EMC104-SM-NM-3500	170621	Apr. 13, 2021
10	Cable	0.8m	EMC102-SM-SM-800	170335	Apr. 13, 2021
11	Cable	6m	EMC102-SM-SM-6000	170336	Apr. 13, 2021
12	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	May. 06, 2021

Conducted Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	May. 06, 2021

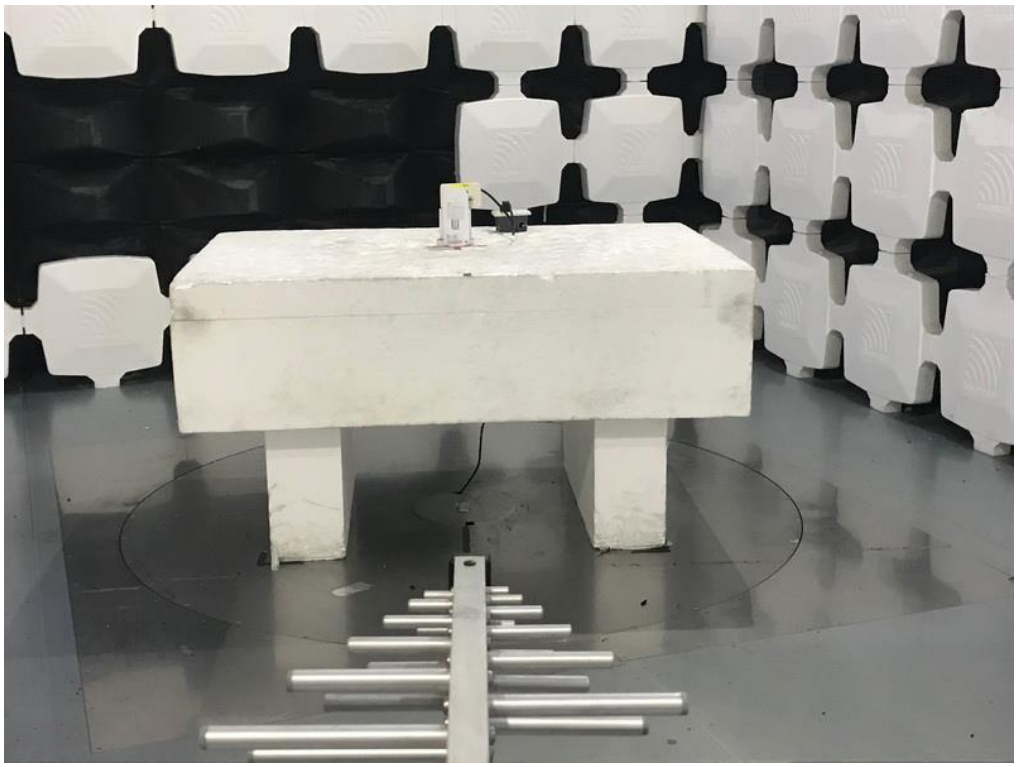
Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	May. 06, 2021

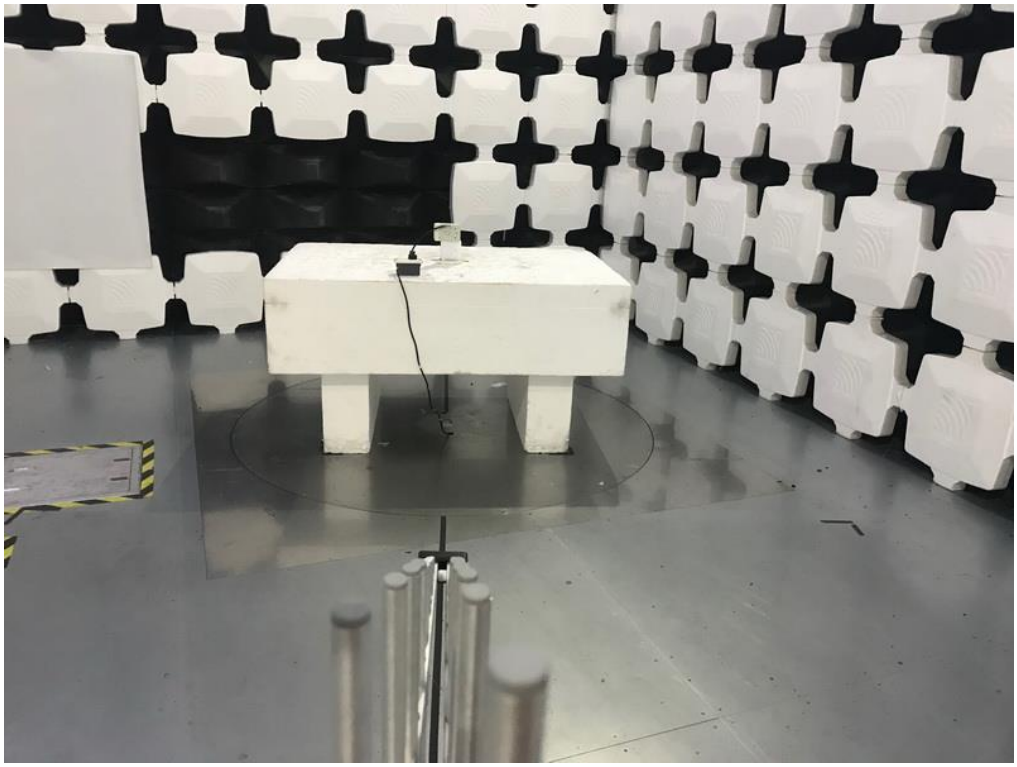
Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

9. EUT TEST PHOTOS

Radiated Emissions Test Photos

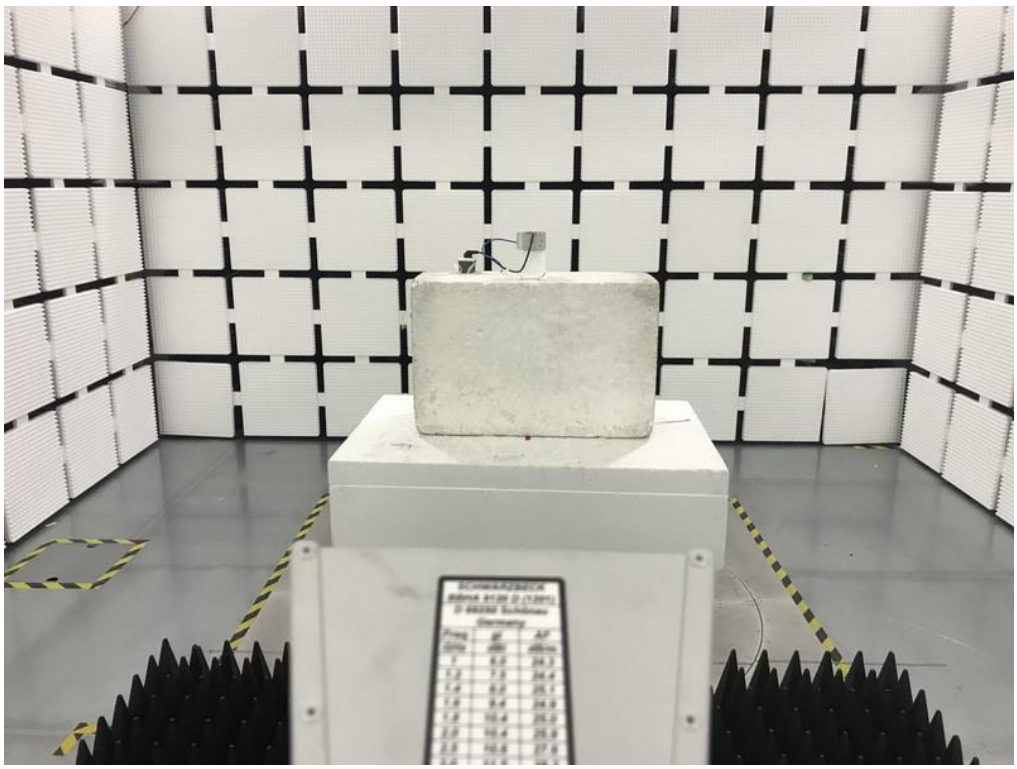
30 MHz to 1 GHz

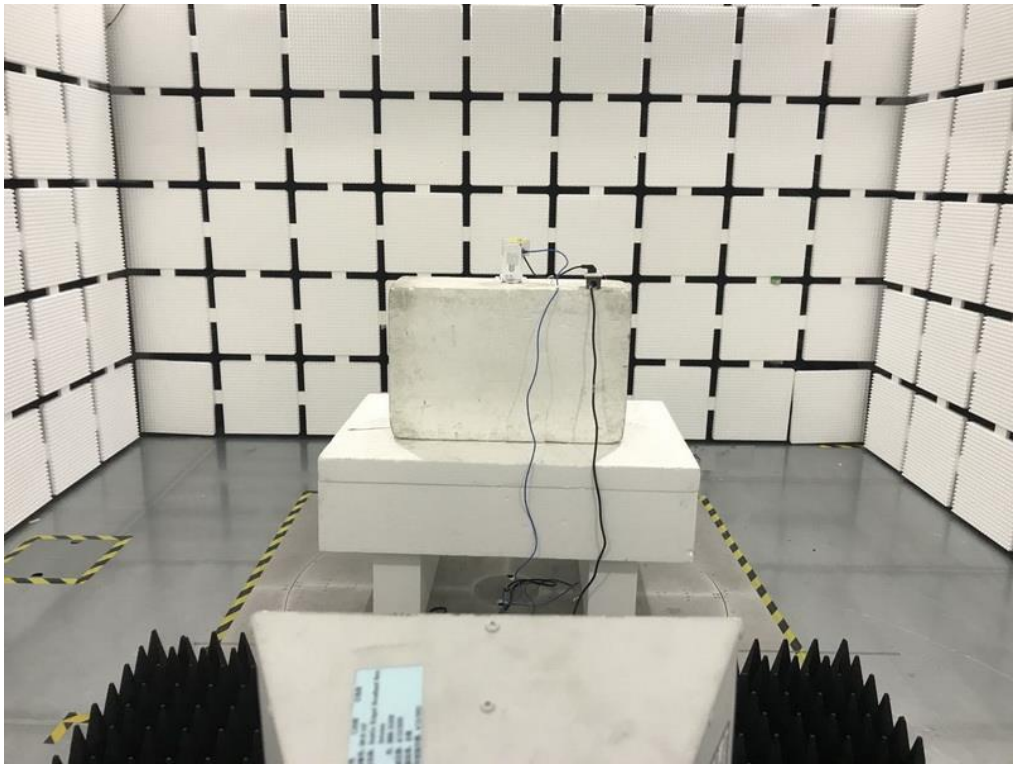




Radiated Emissions Test Photos

Above 1 GHz

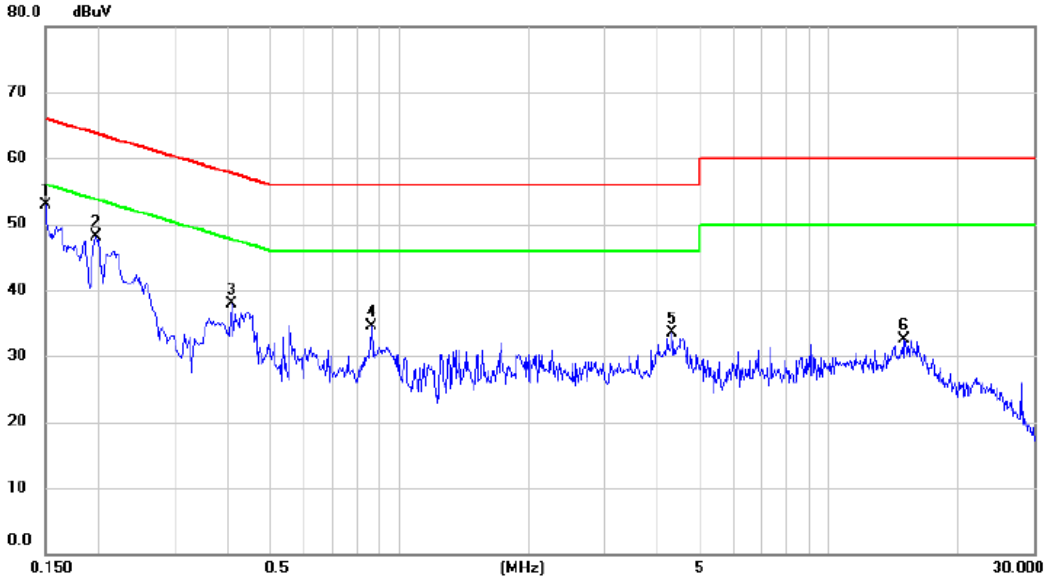




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	TX AX20 MODE CHANNEL 157

Line

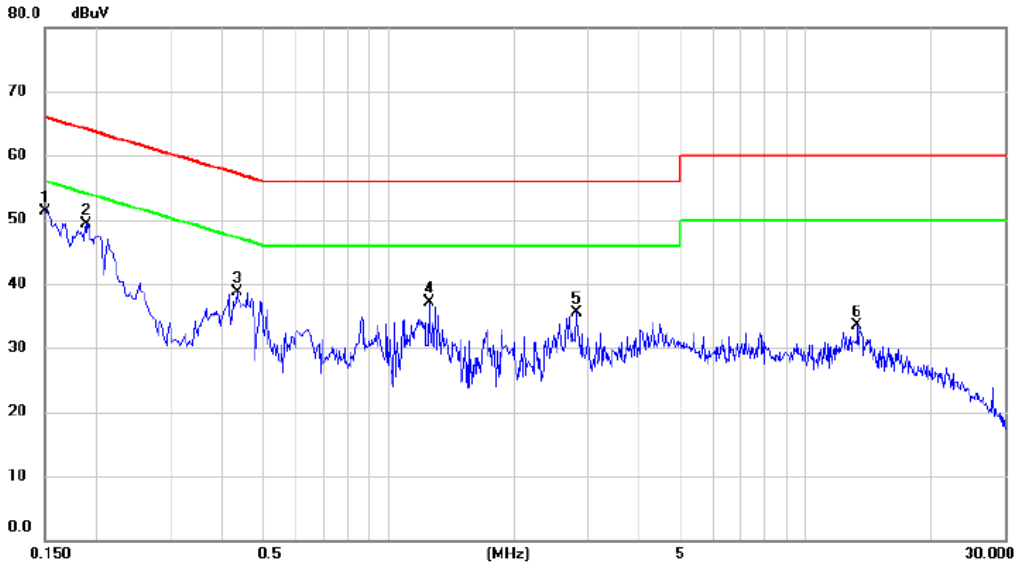


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	43.22	9.73	52.95	66.00	-13.05	peak	
2		0.1975	38.32	9.78	48.10	63.72	-15.62	peak	
3		0.4063	28.09	9.86	37.95	57.72	-19.77	peak	
4		0.8610	24.67	9.79	34.46	56.00	-21.54	peak	
5		4.3033	23.51	9.92	33.43	56.00	-22.57	peak	
6		14.9863	22.21	10.20	32.41	60.00	-27.59	peak	

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

Test Mode:	TX AX20 MODE CHANNEL 157

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	41.63	9.61	51.24	66.00	-14.76	peak	
2		0.1882	39.58	9.63	49.21	64.12	-14.91	peak	
3		0.4334	29.03	9.67	38.70	57.19	-18.49	peak	
4		1.2521	27.44	9.74	37.18	56.00	-18.82	peak	
5		2.8184	25.65	9.83	35.48	56.00	-20.52	peak	
6		13.2855	23.36	10.15	33.51	60.00	-26.49	peak	

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

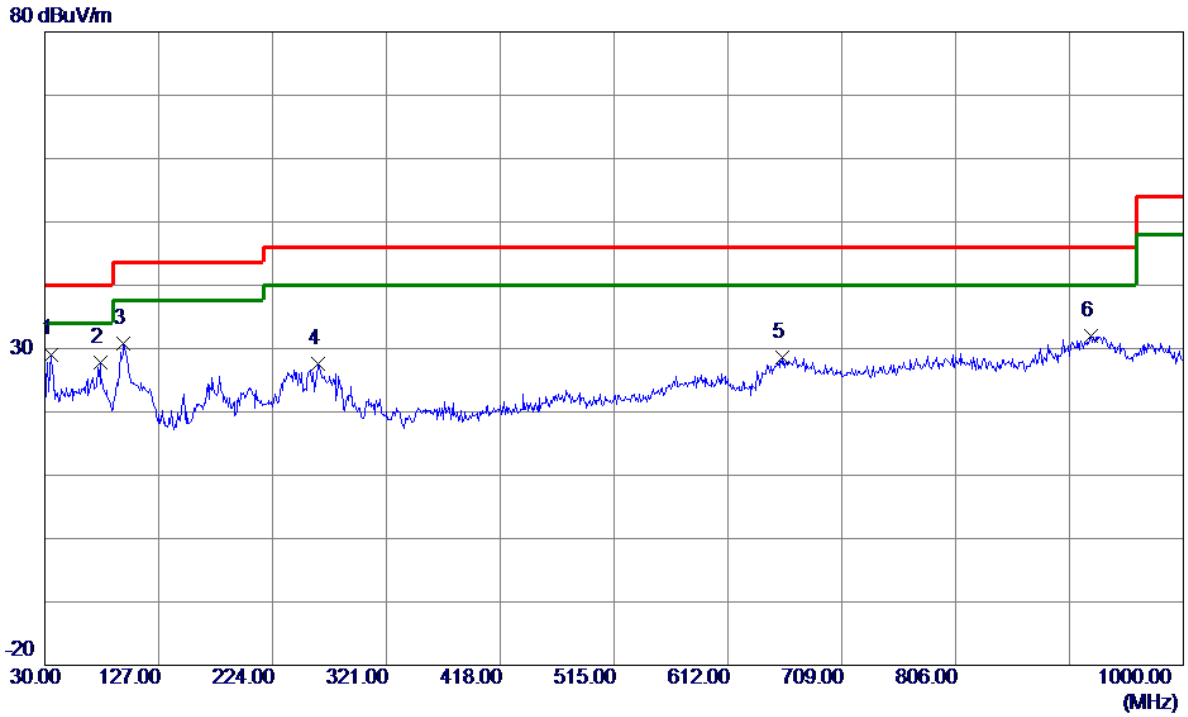
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ

Test Mode:	TX AX20 MODE CHANNEL 157

Vertical

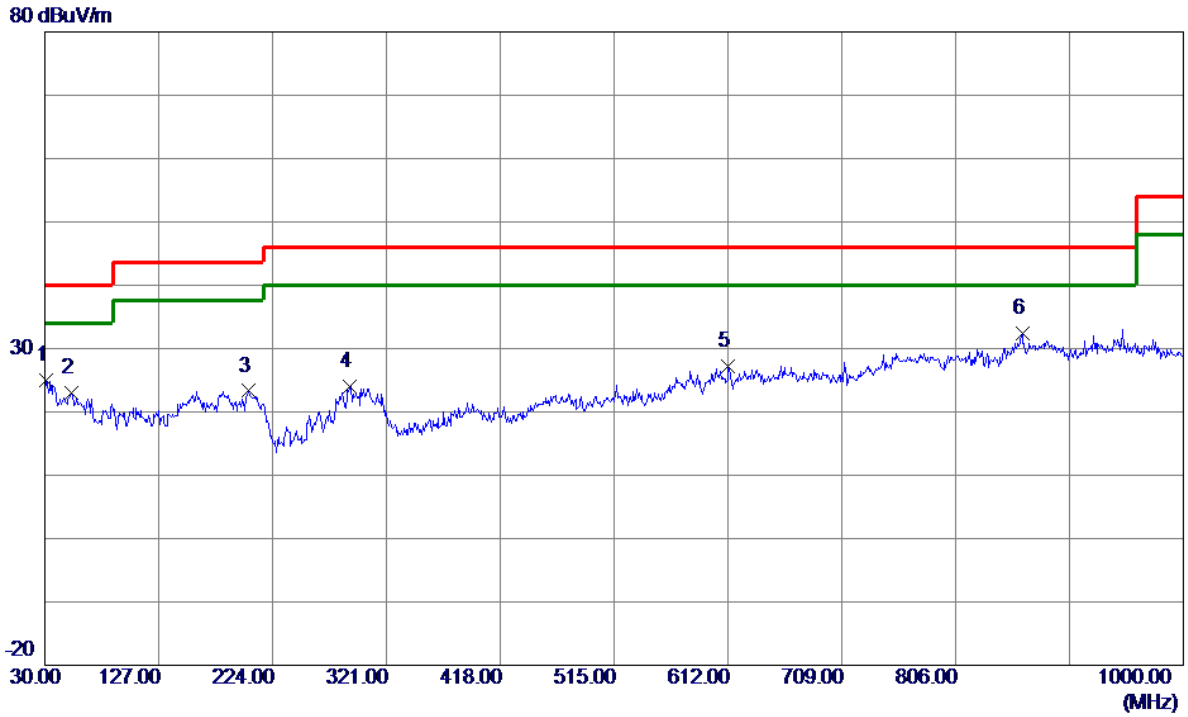


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	35.3350	46.93	-17.83	29.10	40.00	-10.90	Peak	
2	77.0450	47.68	-19.80	27.88	40.00	-12.12	Peak	
3	96.9300	52.02	-21.16	30.86	43.50	-12.64	Peak	
4	263.2850	43.82	-16.21	27.61	46.00	-18.39	Peak	
5	658.5600	35.93	-7.30	28.63	46.00	-17.37	Peak	
6	921.4300	35.99	-4.01	31.98	46.00	-14.02	Peak	

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

Test Mode:	TX AX20 MODE CHANNEL 157

Horizontal



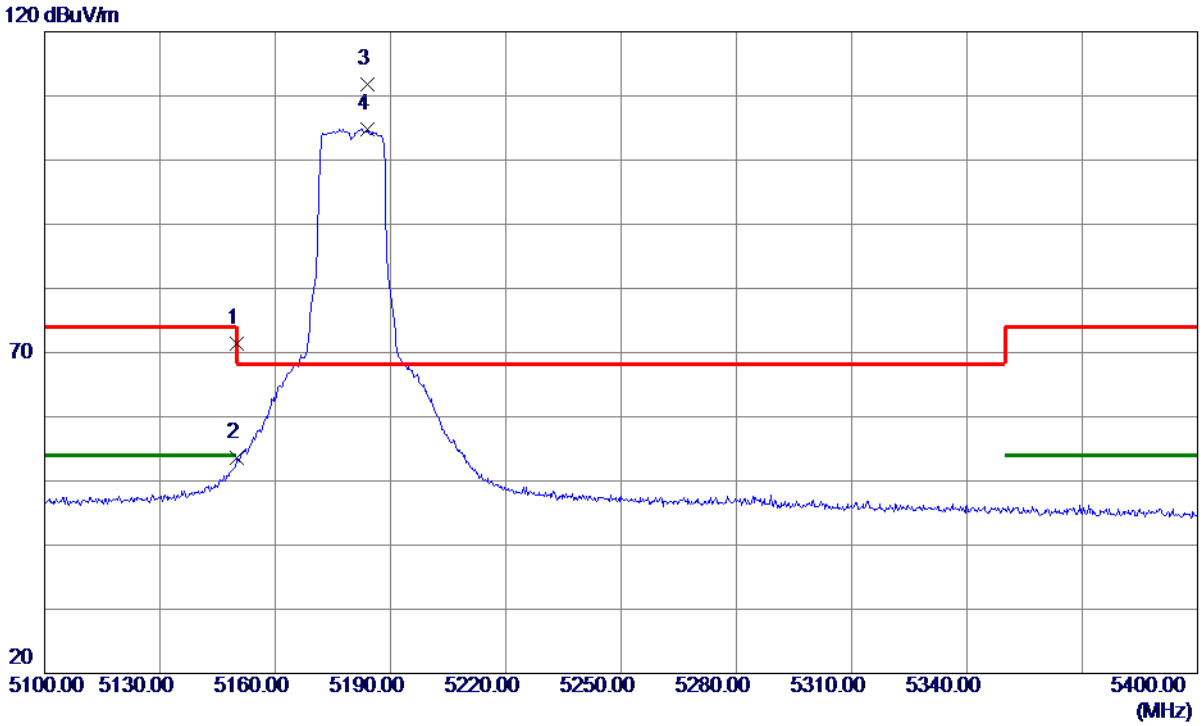
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	31.4550	43.07	-18.12	24.95	40.00	-15.05	Peak	
2	52.3100	39.46	-16.50	22.96	40.00	-17.04	Peak	
3	203.1450	41.91	-18.61	23.30	43.50	-20.20	Peak	
4	289.9600	39.23	-15.14	24.09	46.00	-21.91	Peak	
5	612.4850	35.05	-7.94	27.11	46.00	-18.89	Peak	
6 *	862.7450	37.15	-4.78	32.37	46.00	-13.63	Peak	

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

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

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

Vertical

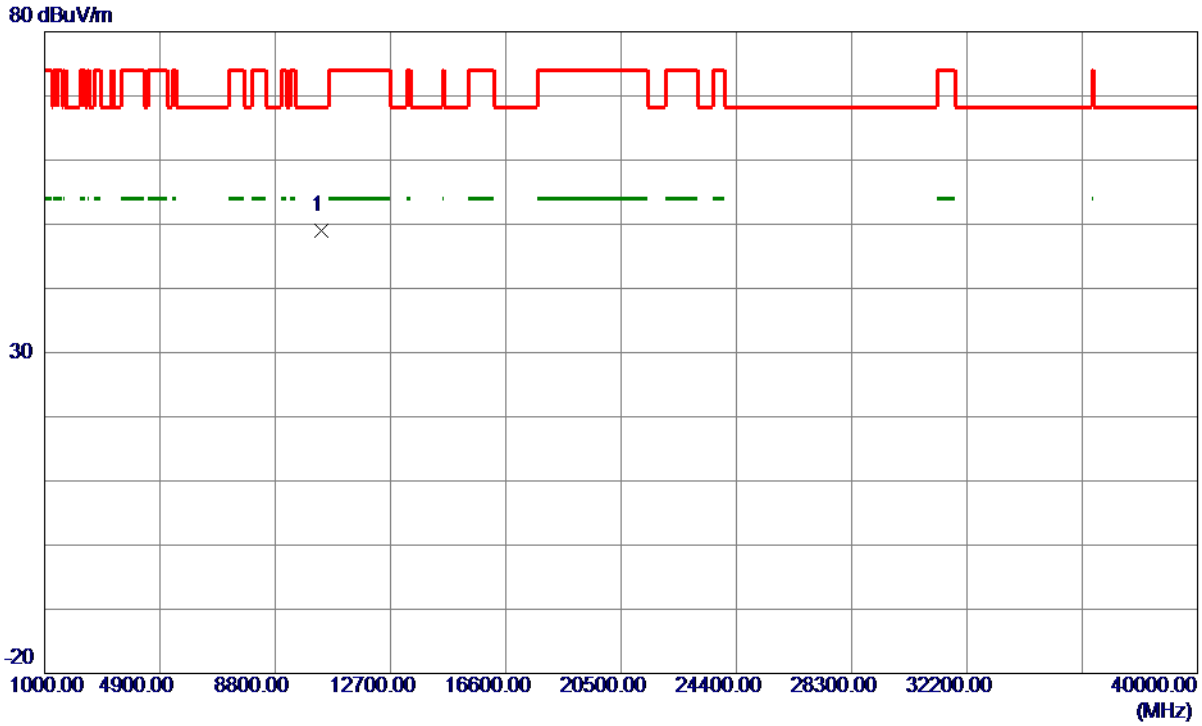


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	33.50	37.88	71.38	74.00	-2.62	Peak	
2	5150.0000	15.81	37.88	53.69	54.00	-0.31	AVG	
3 *	5184.1500	74.00	37.74	111.74	68.30	43.44	Peak	NO limit
4	5184.1500	67.03	37.74	104.77	999.00	-894.23	AVG	NO limit

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

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

Vertical

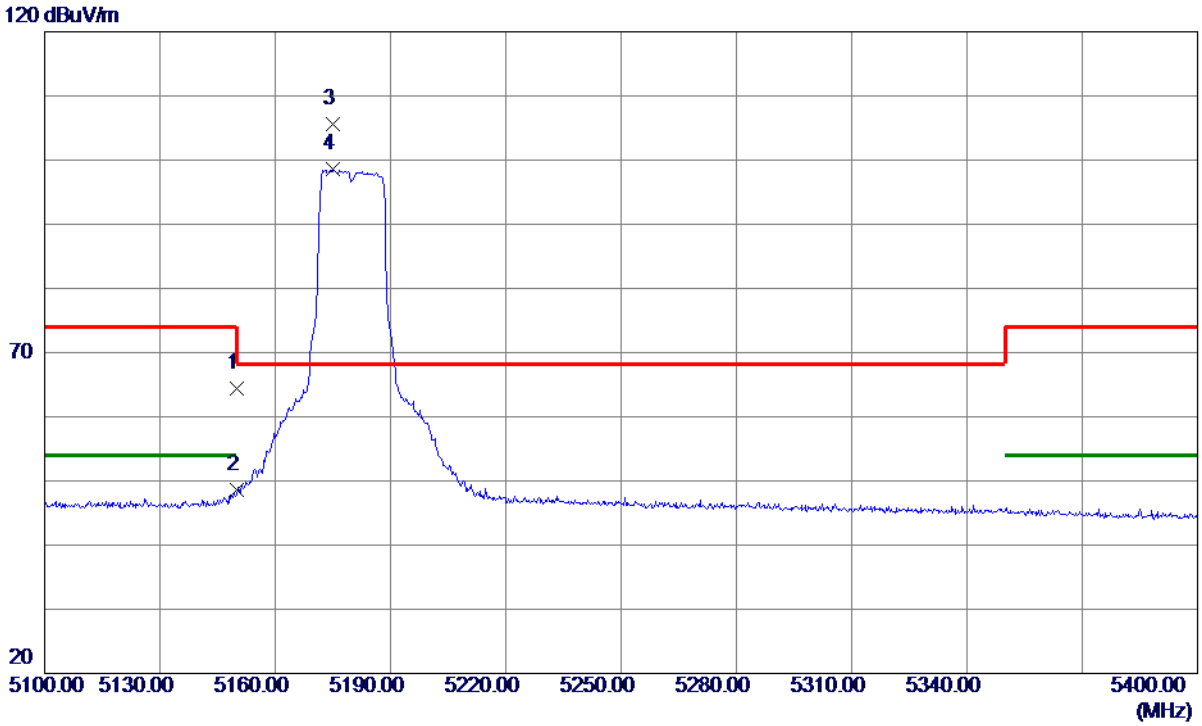


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10360.0000	47.30	1.65	48.95	68.30	-19.35	Peak	

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

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

Horizontal

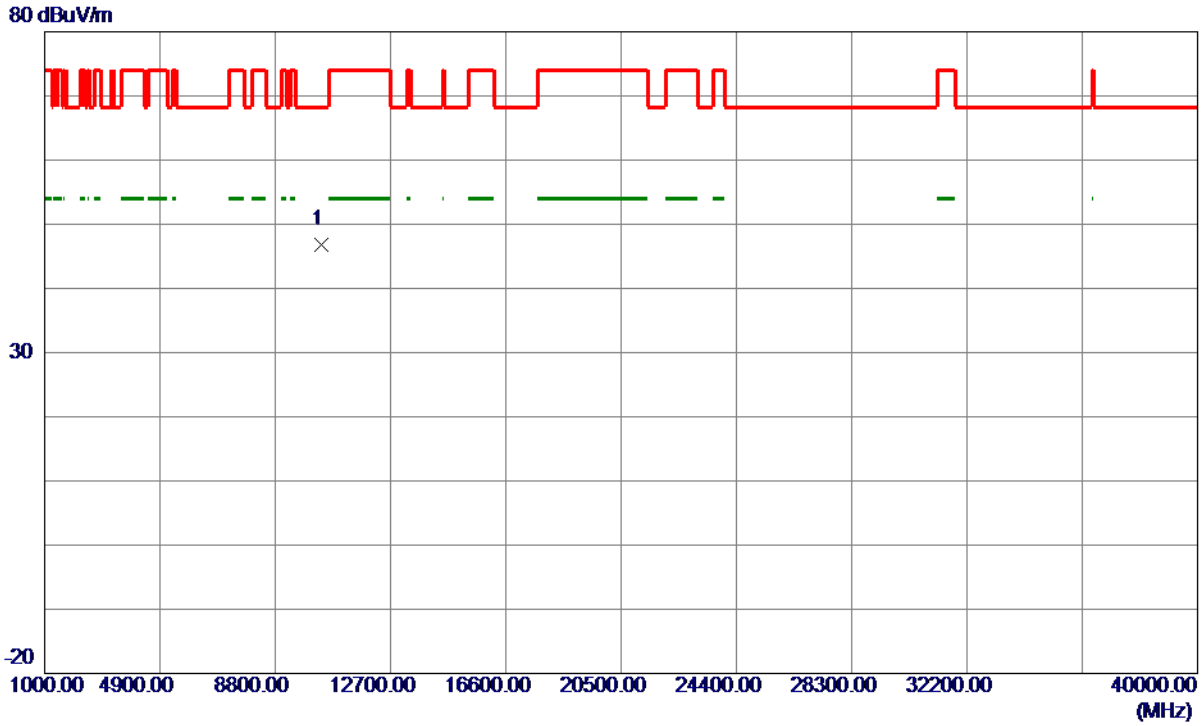


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	26.59	37.88	64.47	74.00	-9.53	Peak	
2	5150.0000	10.74	37.88	48.62	54.00	-5.38	AVG	
3 *	5175.1500	67.85	37.78	105.63	68.30	37.33	Peak	NO limit
4	5175.1500	60.79	37.78	98.57	999.00	-900.43	AVG	NO limit

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

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

Horizontal

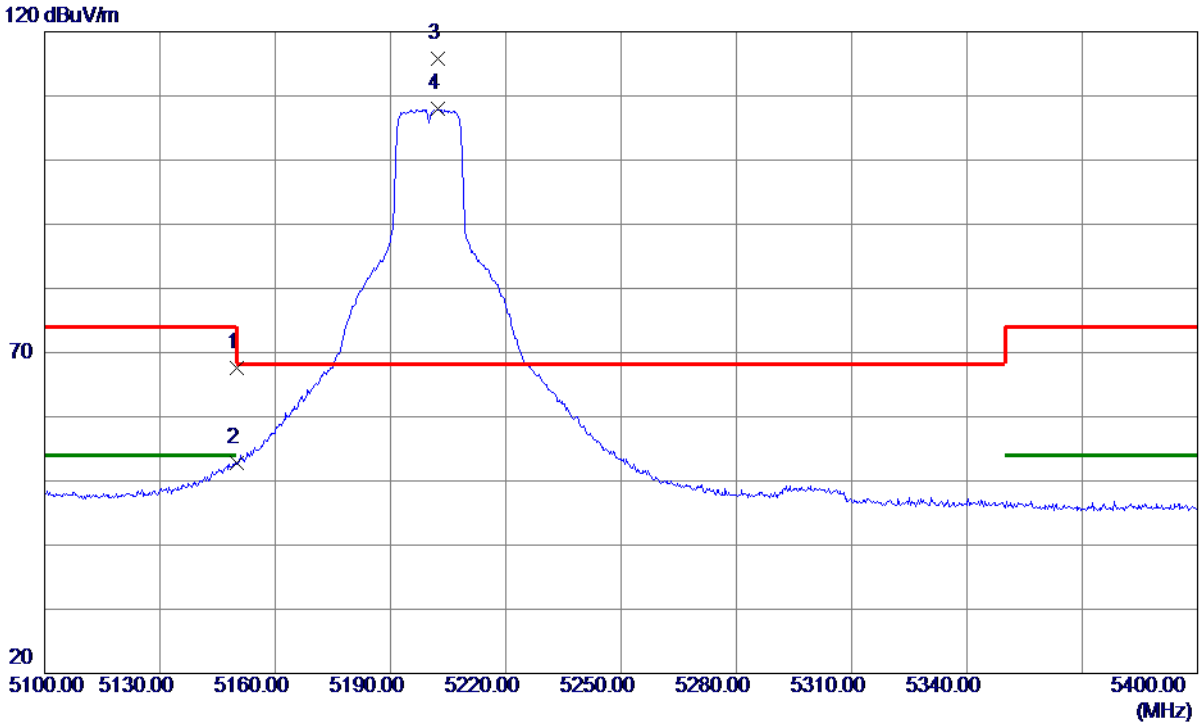


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10360.0000	45.15	1.65	46.80	68.30	-21.50	Peak	

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

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

Vertical

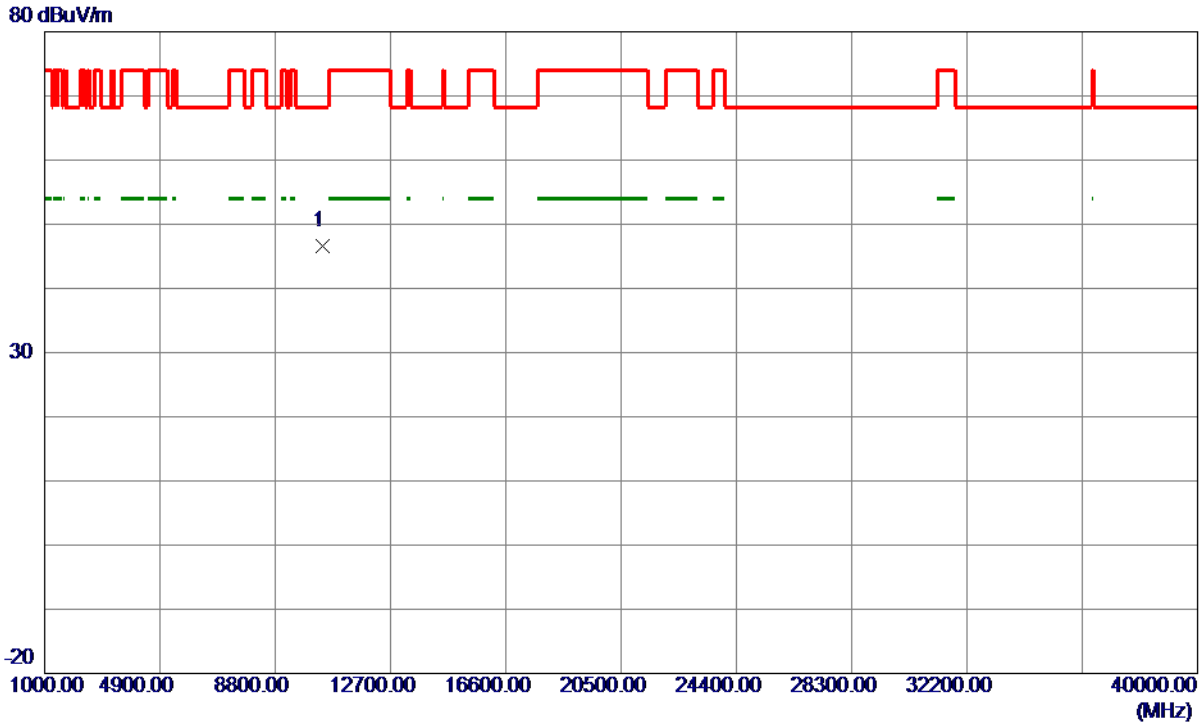


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	29.74	37.88	67.62	74.00	-6.38	Peak	
2	5150.0000	14.89	37.88	52.77	54.00	-1.23	AVG	
3 *	5202.3000	78.05	37.68	115.73	68.30	47.43	Peak	NO limit
4	5202.3000	70.22	37.68	107.90	999.00	-891.10	AVG	NO limit

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

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

Vertical

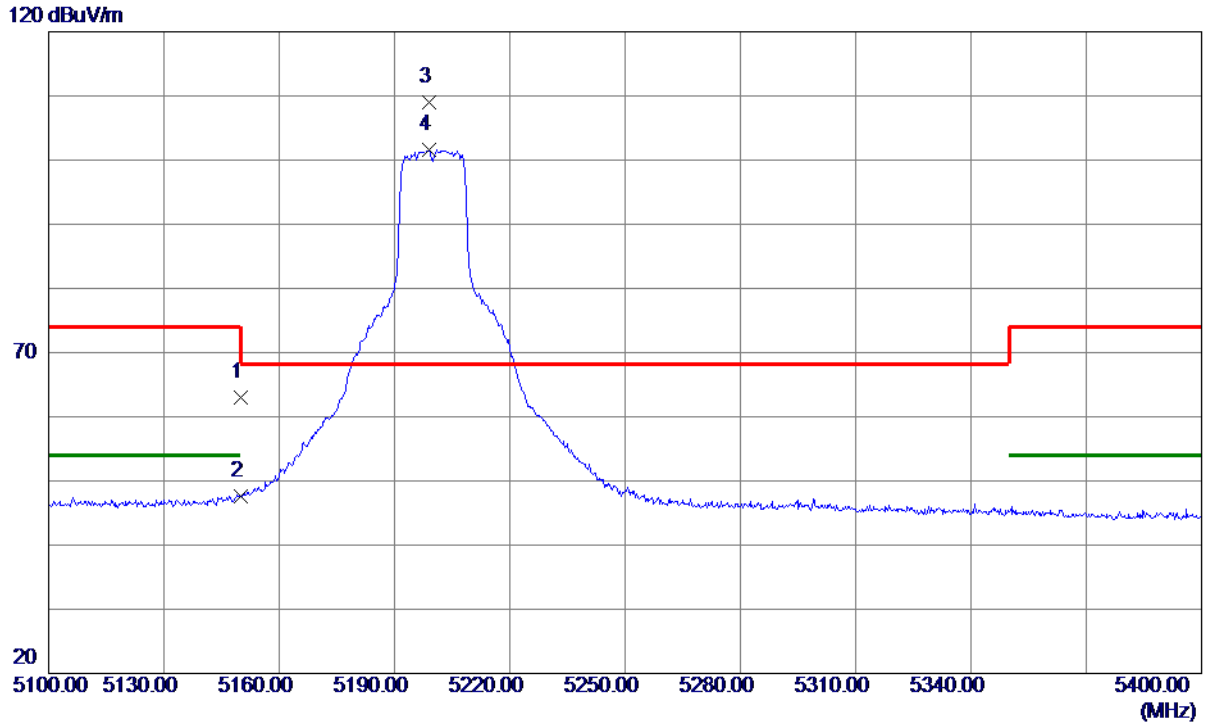


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10400.0000	44.92	1.72	46.64	68.30	-21.66	Peak	

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

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

Horizontal

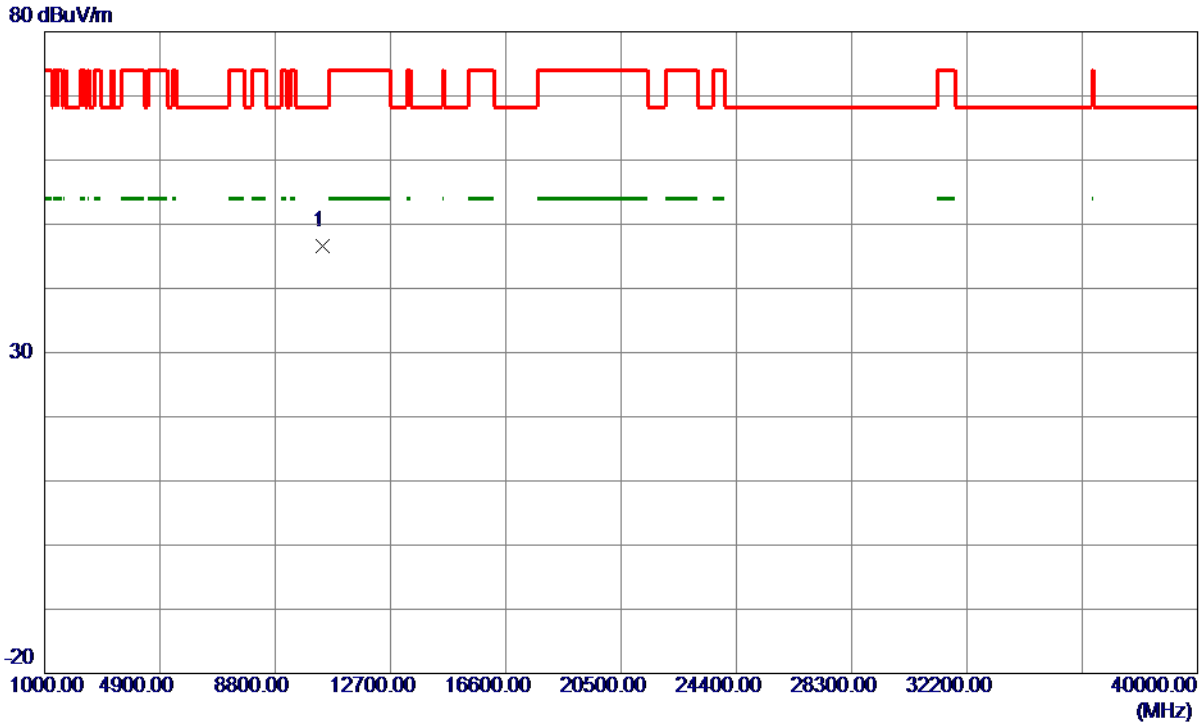


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	25.04	37.88	62.92	74.00	-11.08	Peak	
2	5150.0000	9.80	37.88	47.68	54.00	-6.32	AVG	
3 *	5199.1500	71.28	37.68	108.96	68.30	40.66	Peak	NO limit
4	5199.1500	63.83	37.68	101.51	999.00	-897.49	AVG	NO limit

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

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

Horizontal

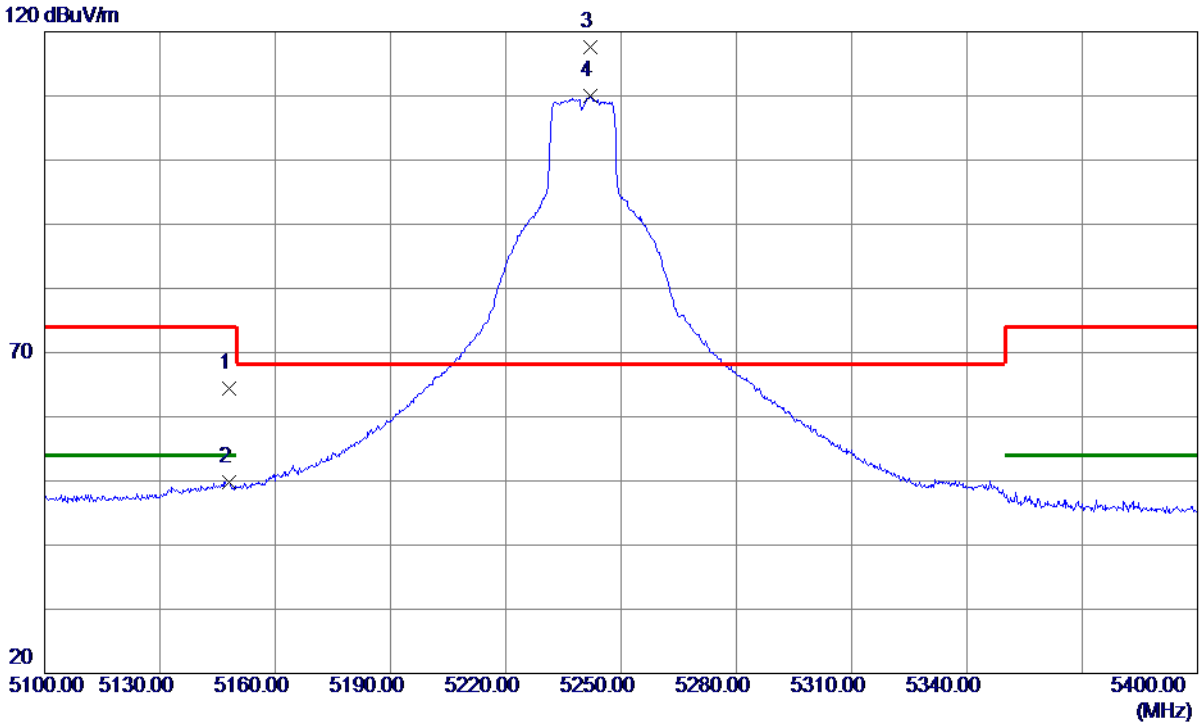


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10400.0000	44.80	1.72	46.52	68.30	-21.78	Peak	

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

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

Vertical

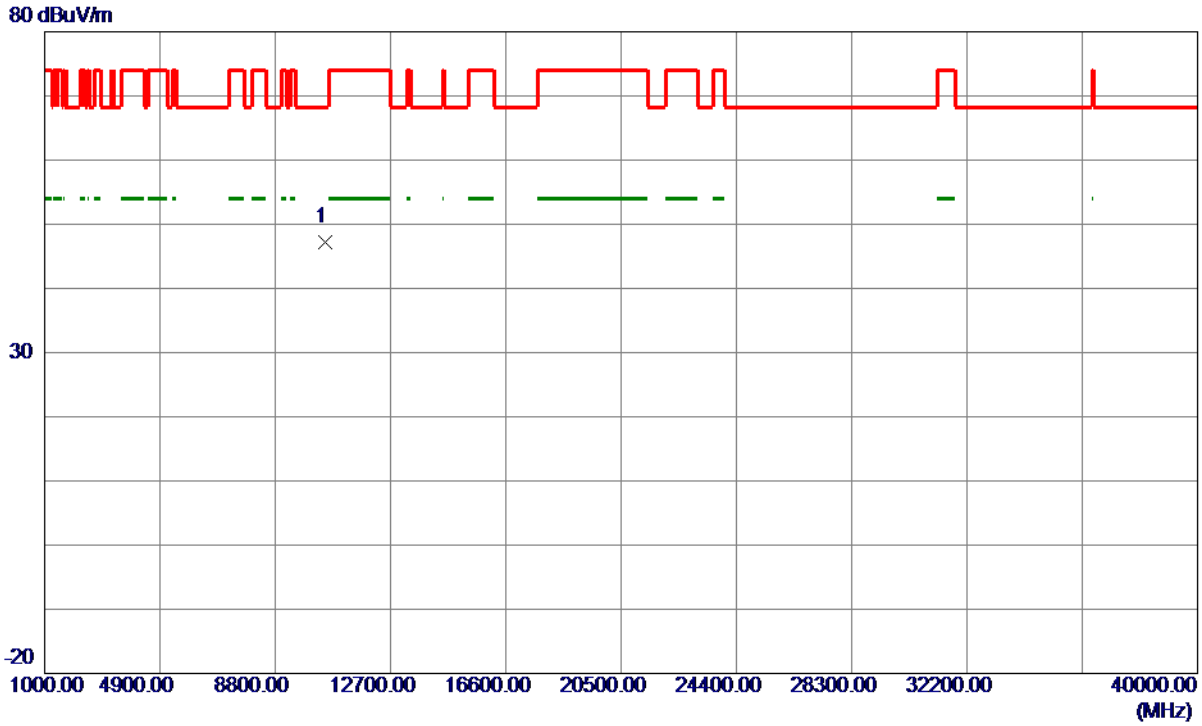


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5148.1500	26.46	37.88	64.34	74.00	-9.66	Peak	
2	5148.1500	11.98	37.88	49.86	54.00	-4.14	AVG	
3 *	5242.0500	80.02	37.62	117.64	68.30	49.34	Peak	NO limit
4	5242.0500	72.29	37.62	109.91	999.00	-889.09	AVG	NO limit

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

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

Vertical

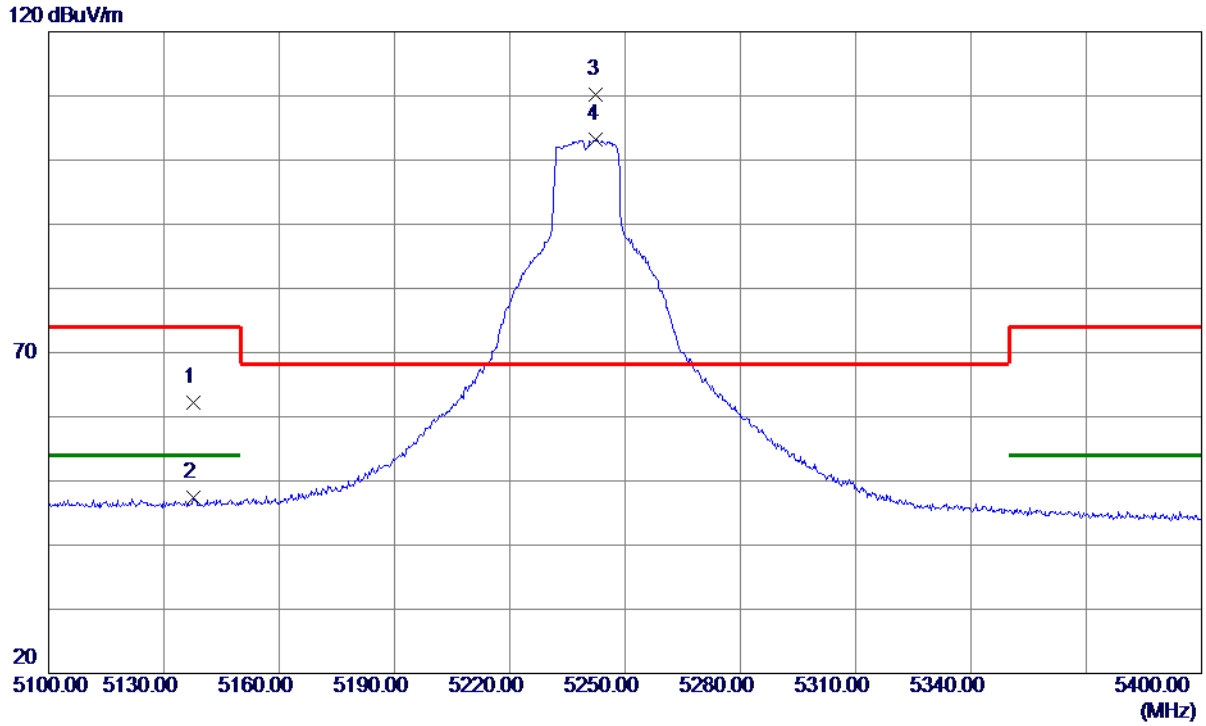


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10480.0000	45.49	1.80	47.29	68.30	-21.01	Peak	

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

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

Horizontal

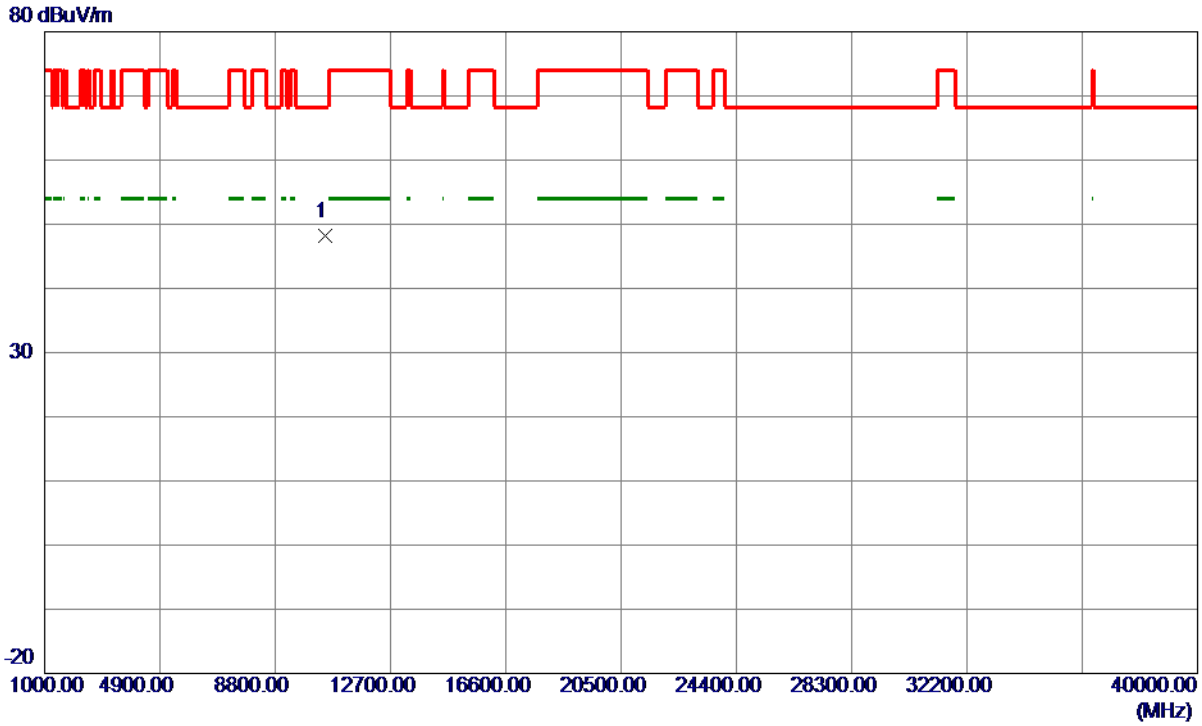


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5137.6500	24.36	37.92	62.28	74.00	-11.72	Peak	
2	5137.6500	9.39	37.92	47.31	54.00	-6.69	AVG	
3 *	5242.5000	72.49	37.62	110.11	68.30	41.81	Peak	NO limit
4	5242.5000	65.55	37.62	103.17	999.00	-895.83	AVG	NO limit

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

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

Horizontal

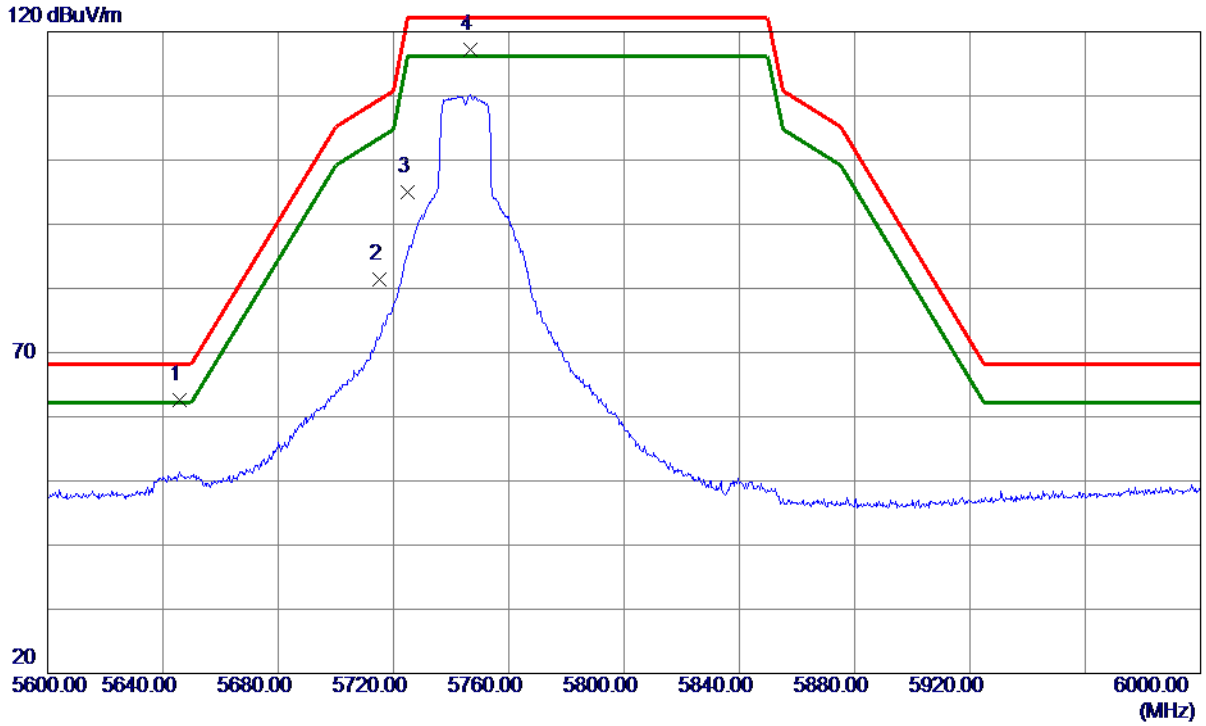


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10480.0000	46.30	1.80	48.10	68.30	-20.20	Peak	

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

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

Vertical

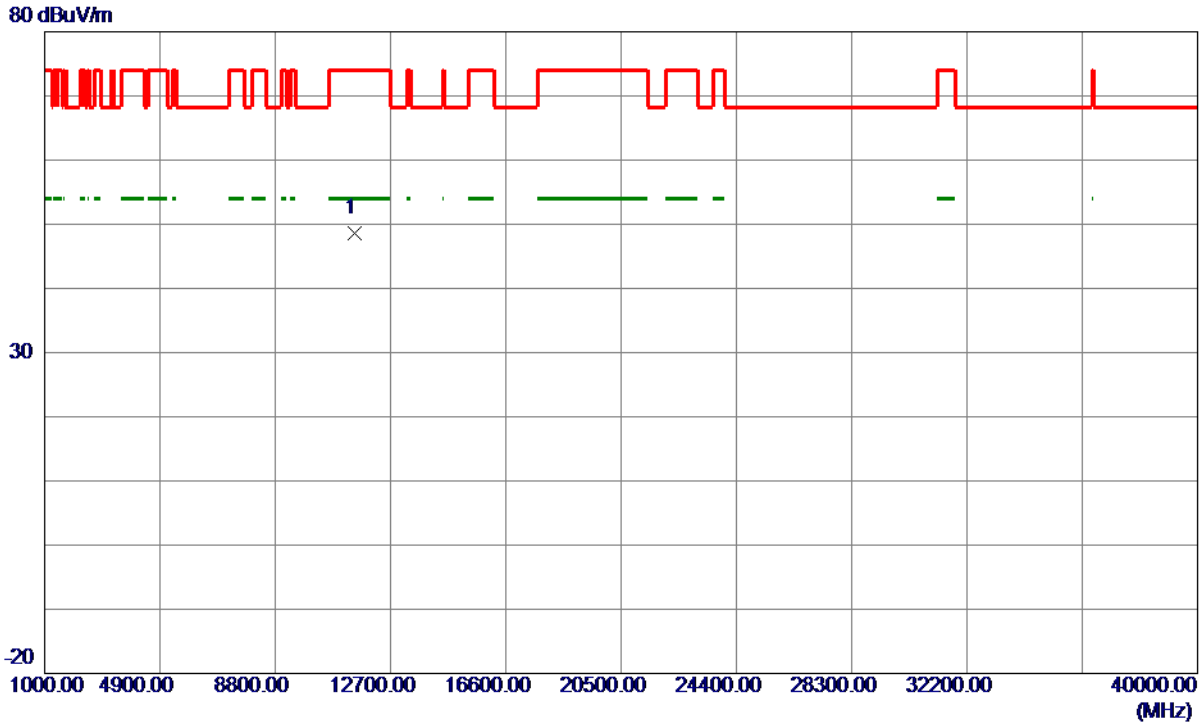


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5645.6000	24.31	38.37	62.68	68.20	-5.52	Peak	
2	5715.0000	42.85	38.46	81.31	109.40	-28.09	Peak	
3	5725.0000	56.46	38.50	94.96	122.20	-27.24	Peak	
4 *	5746.8000	78.71	38.58	117.29	122.20	-4.91	Peak	

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

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

Vertical

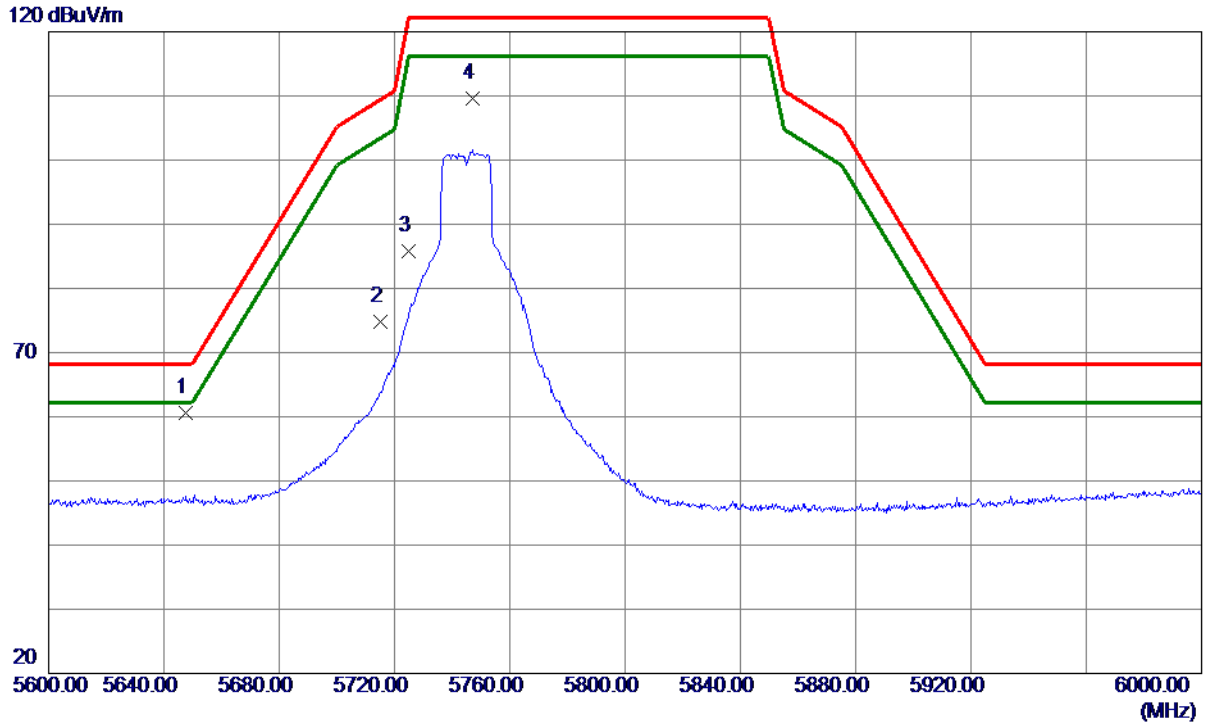


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11490.0000	46.33	2.21	48.54	74.00	-25.46	Peak	

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

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

Horizontal

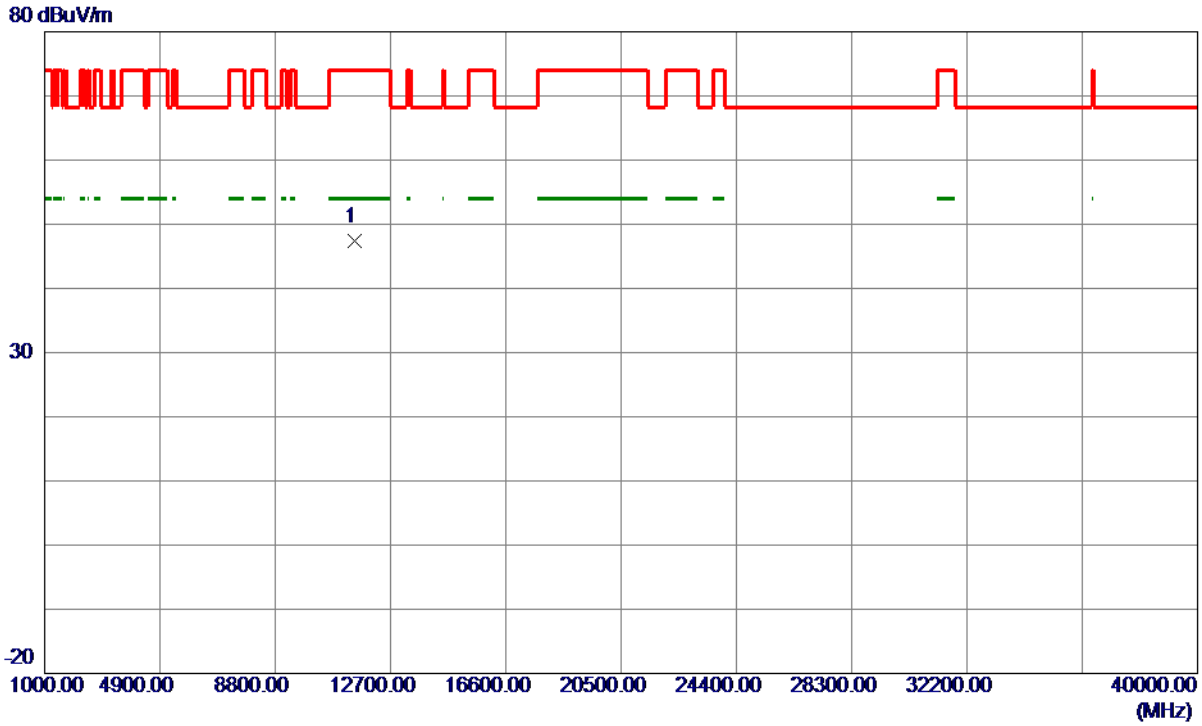


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5647.6000	22.15	38.37	60.52	68.20	-7.68	Peak	
2	5715.0000	36.31	38.46	74.77	109.40	-34.63	Peak	
3	5725.0000	47.32	38.50	85.82	122.20	-36.38	Peak	
4	5747.2000	70.95	38.58	109.53	122.20	-12.67	Peak	

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

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

Horizontal

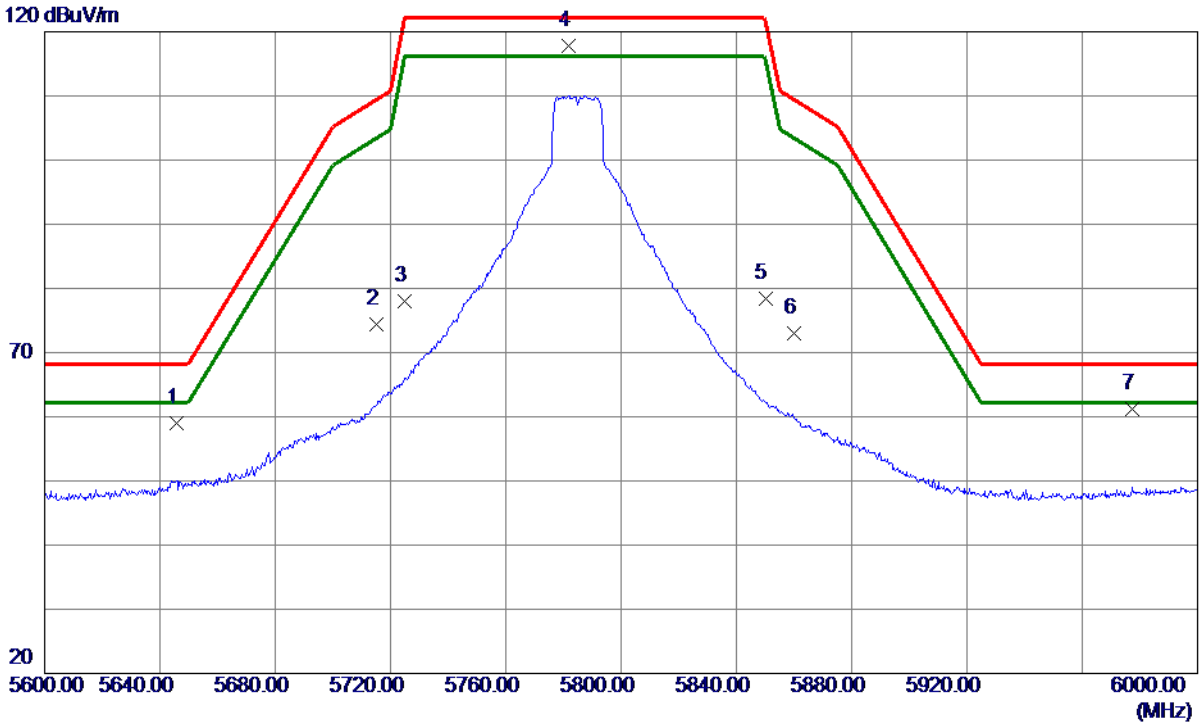


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11490.0000	45.09	2.21	47.30	74.00	-26.70	Peak	

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

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

Vertical

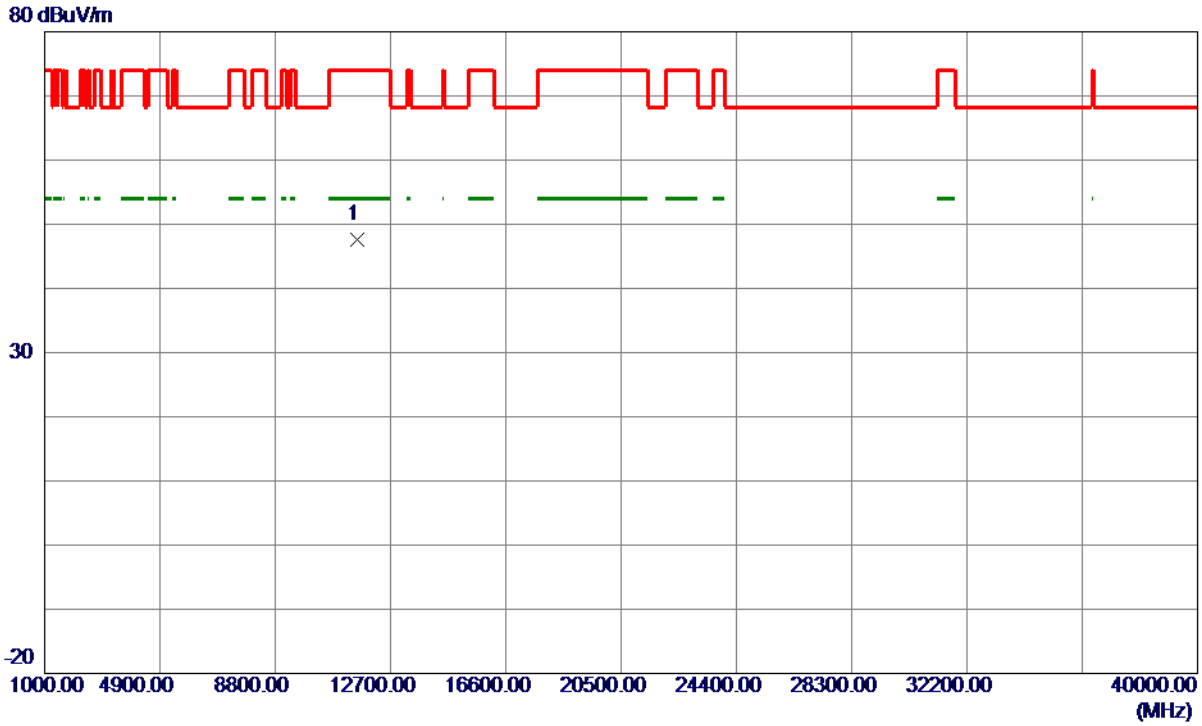


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5645.8000	20.57	38.37	58.94	68.20	-9.26	Peak	
2	5715.0000	35.96	38.46	74.42	109.40	-34.98	Peak	
3	5725.0000	39.53	38.50	78.03	122.20	-44.17	Peak	
4 *	5781.8000	79.15	38.71	117.86	122.20	-4.34	Peak	
5	5850.0000	39.52	38.91	78.43	122.20	-43.77	Peak	
6	5860.0000	34.08	38.94	73.02	109.40	-36.38	Peak	
7	5977.2000	21.93	39.20	61.13	68.20	-7.07	Peak	

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

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

Vertical

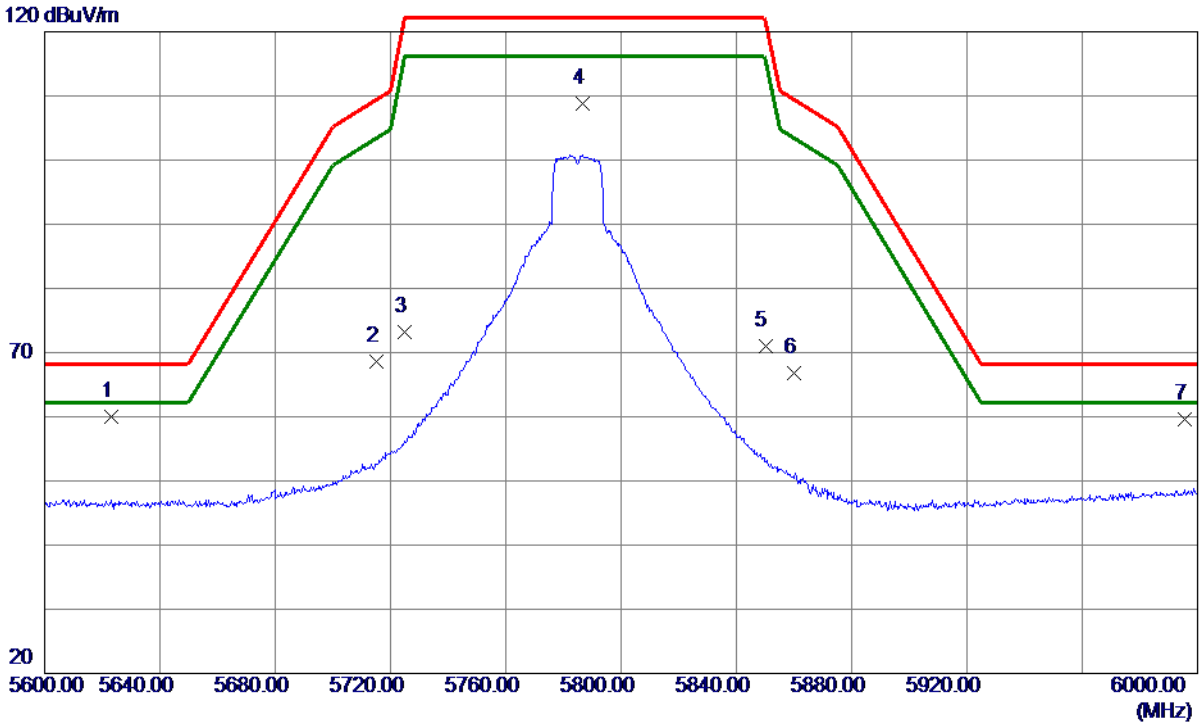


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11570.0000	45.25	2.27	47.52	74.00	-26.48	Peak	

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

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

Horizontal

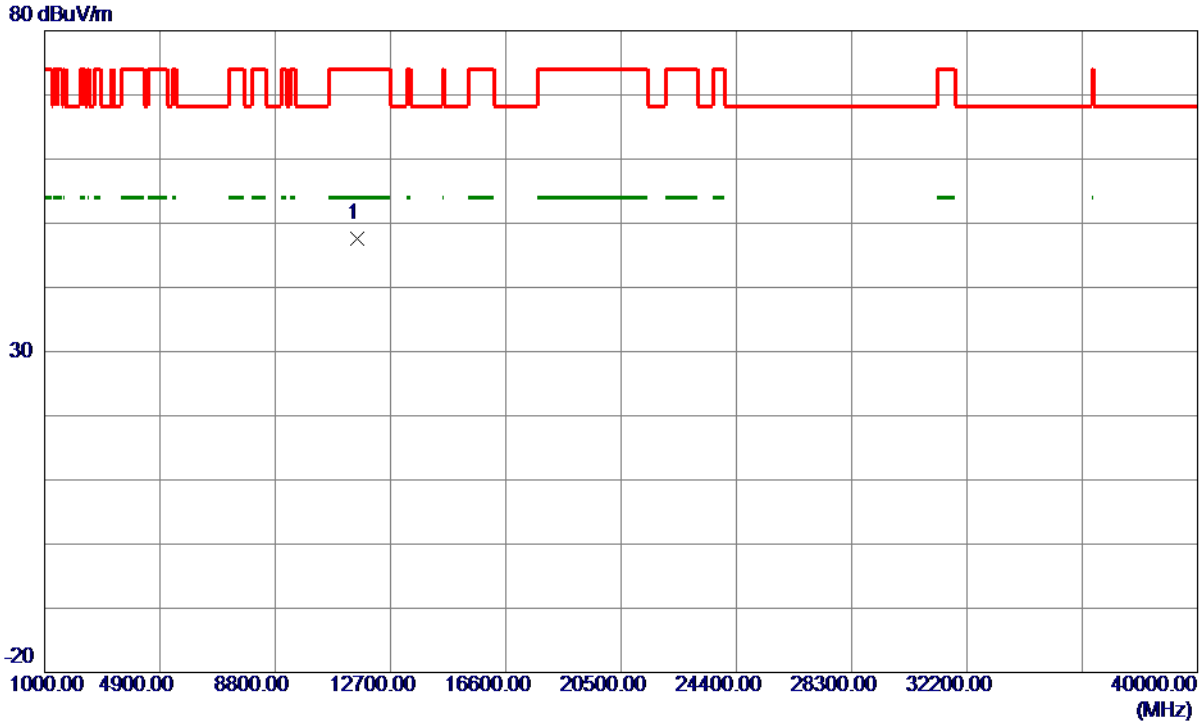


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5623.0000	21.73	38.35	60.08	68.20	-8.12	Peak	
2	5715.0000	30.23	38.46	68.69	109.40	-40.71	Peak	
3	5725.0000	34.65	38.50	73.15	122.20	-49.05	Peak	
4	5786.8000	70.09	38.73	108.82	122.20	-13.38	Peak	
5	5850.0000	32.16	38.91	71.07	122.20	-51.13	Peak	
6	5860.0000	27.93	38.94	66.87	109.40	-42.53	Peak	
7	5995.6000	20.39	39.24	59.63	68.20	-8.57	Peak	

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

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

Horizontal

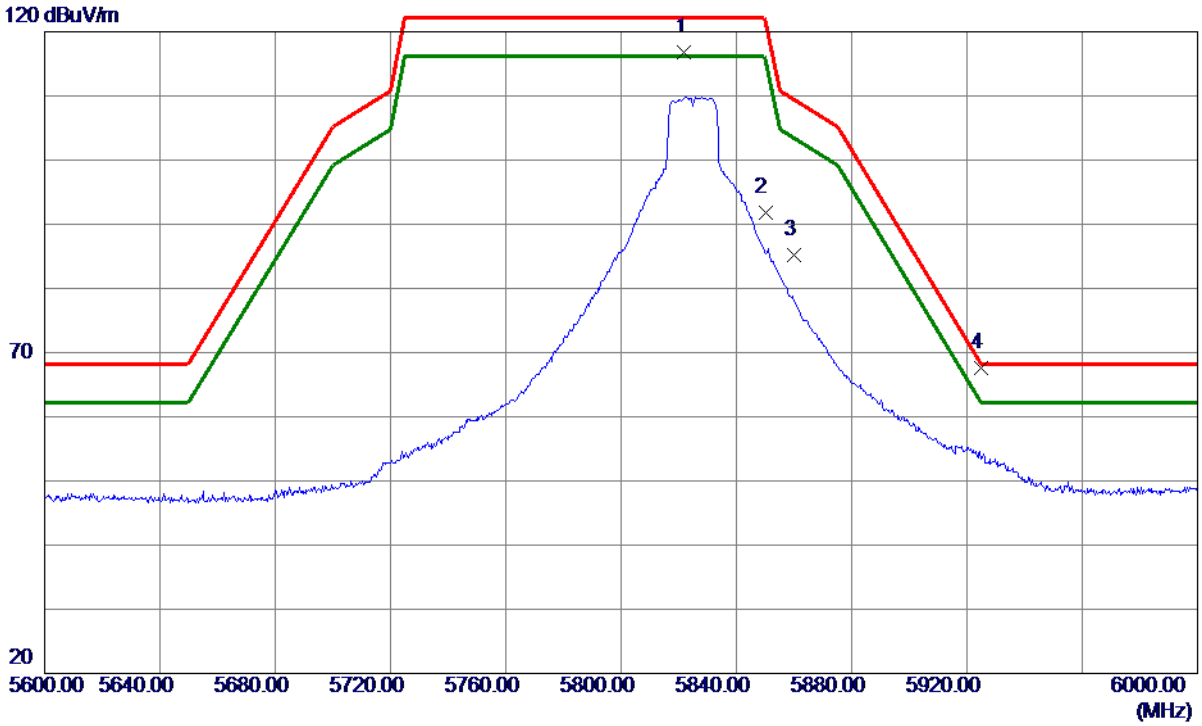


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11570.0000	45.29	2.27	47.56	74.00	-26.44	Peak	

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

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

Vertical

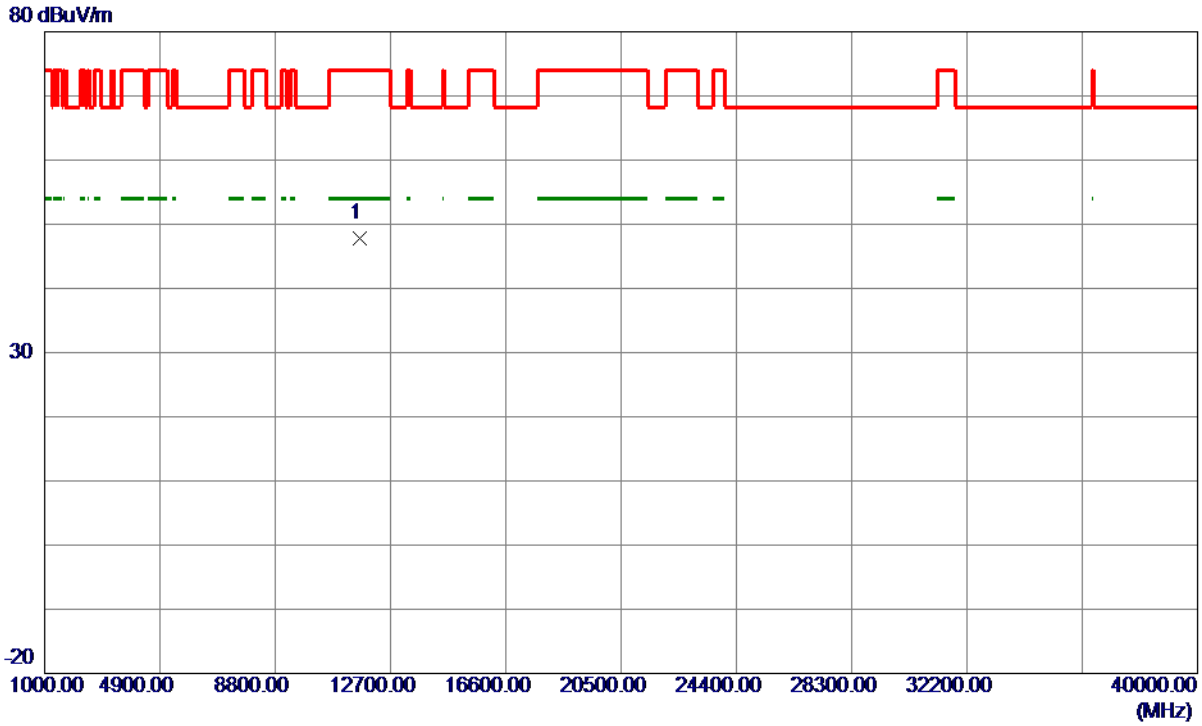


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5822.0000	78.01	38.84	116.85	122.20	-5.35	Peak	
2	5850.0000	52.85	38.91	91.76	122.20	-30.44	Peak	
3	5860.0000	46.30	38.94	85.24	109.40	-24.16	Peak	
4 *	5925.0000	28.41	39.10	67.51	68.20	-0.69	Peak	

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

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

Vertical

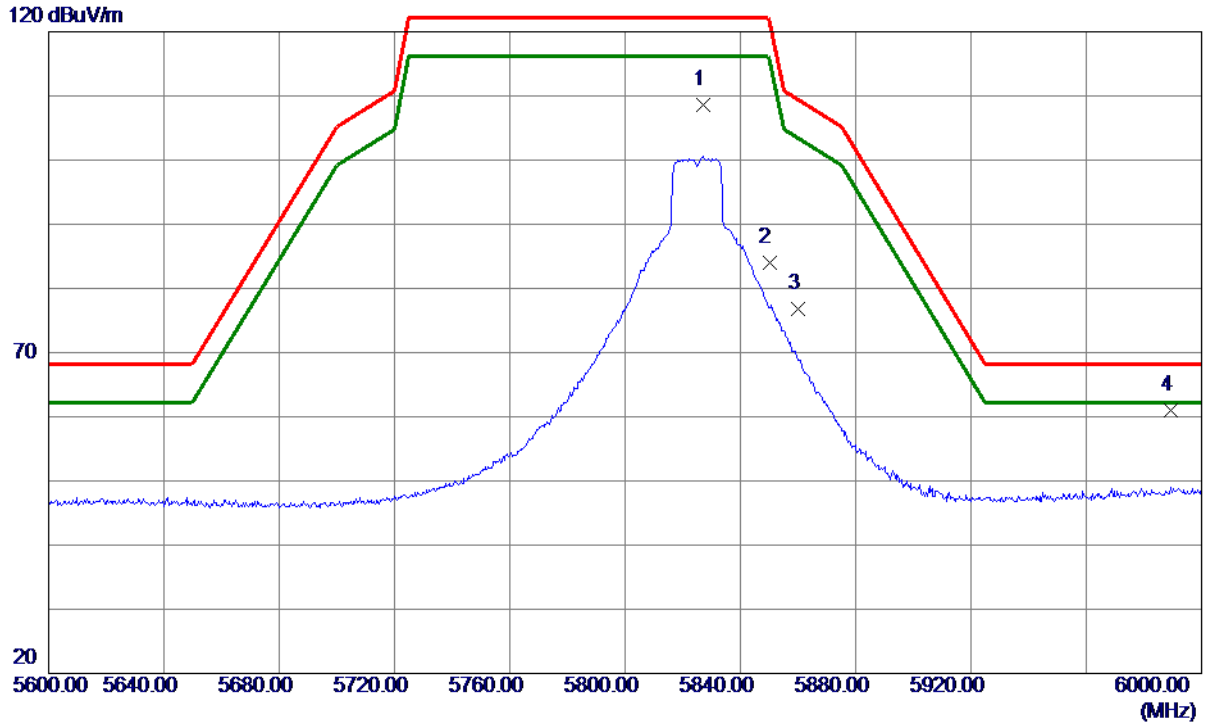


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11650.0000	45.63	2.10	47.73	74.00	-26.27	Peak	

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

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

Horizontal

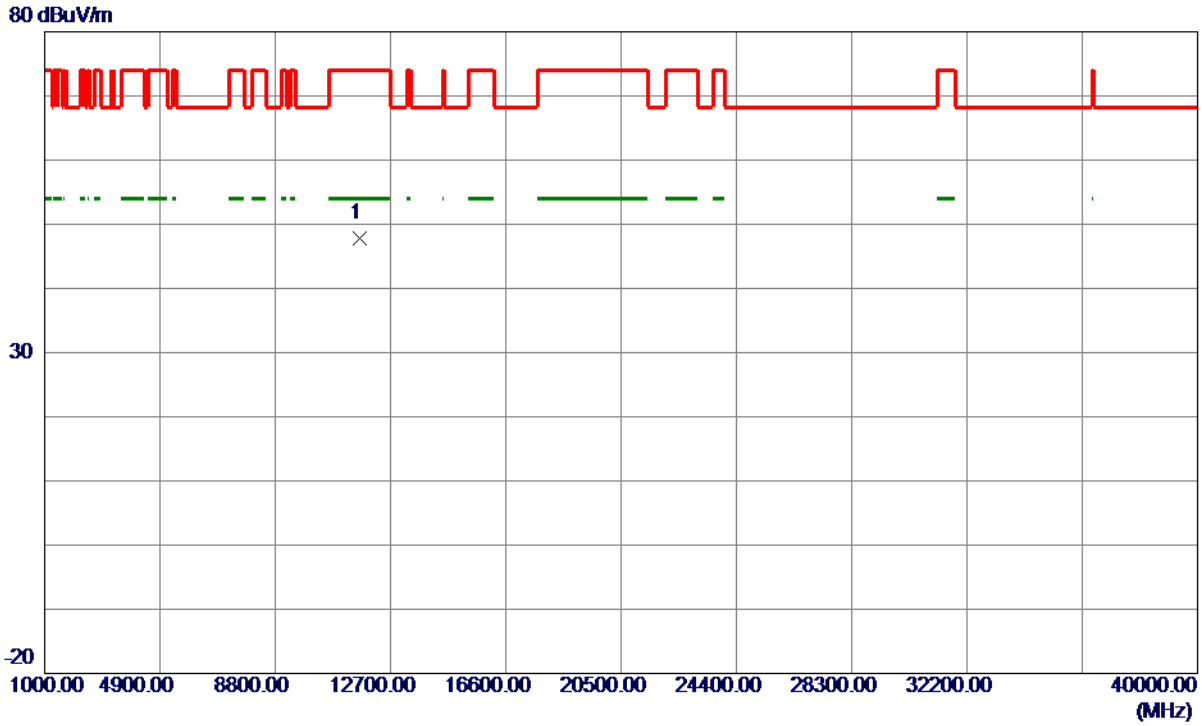


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5827.2000	69.75	38.85	108.60	122.20	-13.60	Peak	
2	5850.0000	45.19	38.91	84.10	122.20	-38.10	Peak	
3	5860.0000	37.87	38.94	76.81	109.40	-32.59	Peak	
4 *	5989.4000	21.68	39.23	60.91	68.20	-7.29	Peak	

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

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

Horizontal

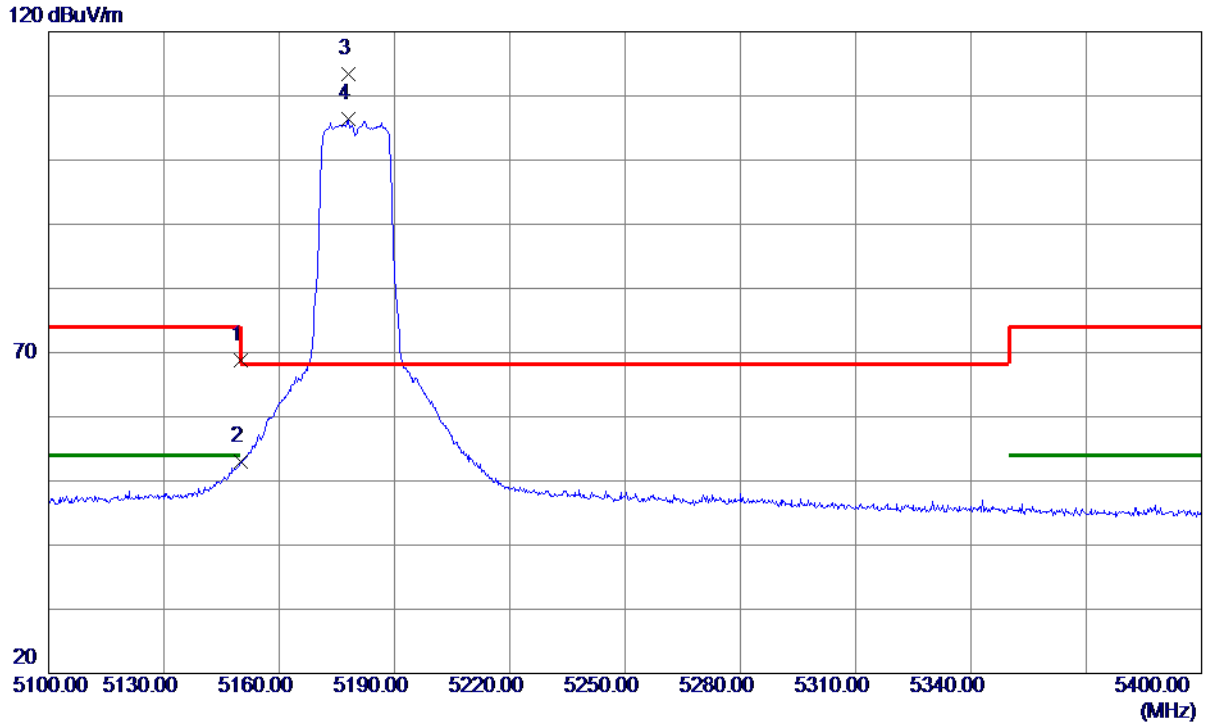


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11650.0000	45.69	2.10	47.79	74.00	-26.21	Peak	

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

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

Vertical

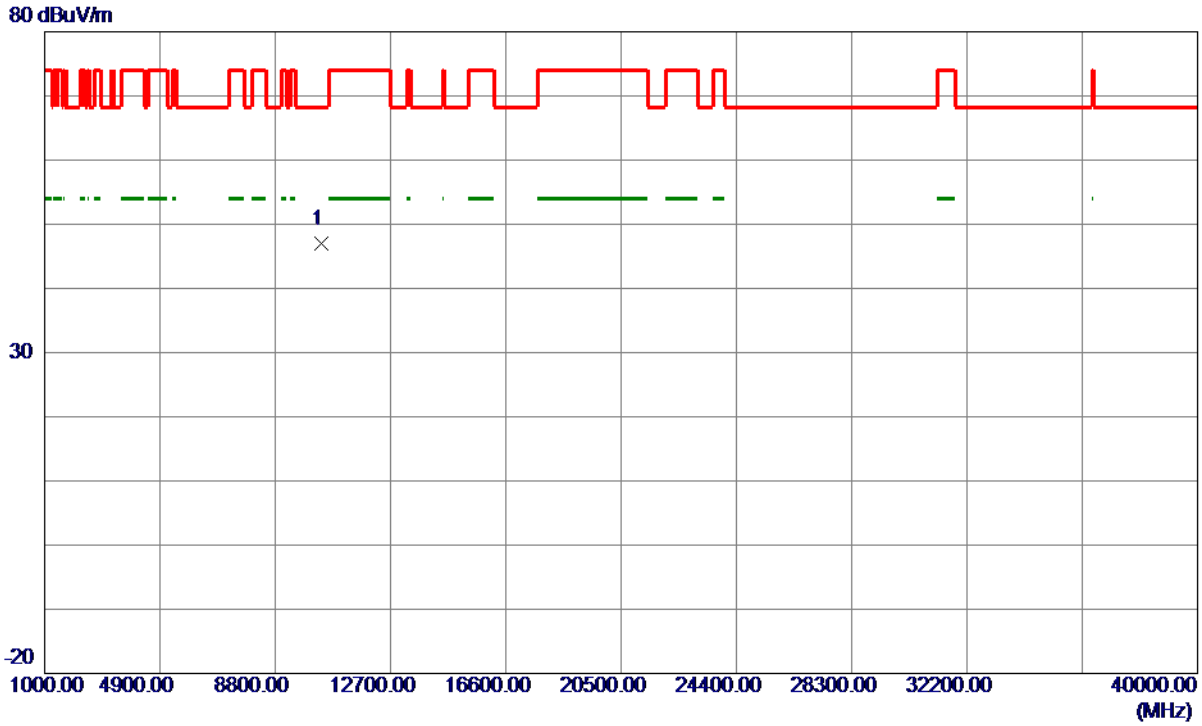


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	30.95	37.88	68.83	74.00	-5.17	Peak	
2	5150.0000	15.10	37.88	52.98	54.00	-1.02	AVG	
3 *	5177.8500	75.66	37.77	113.43	68.30	45.13	Peak	NO limit
4	5177.8500	68.68	37.77	106.45	999.00	-892.55	AVG	NO limit

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

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

Vertical

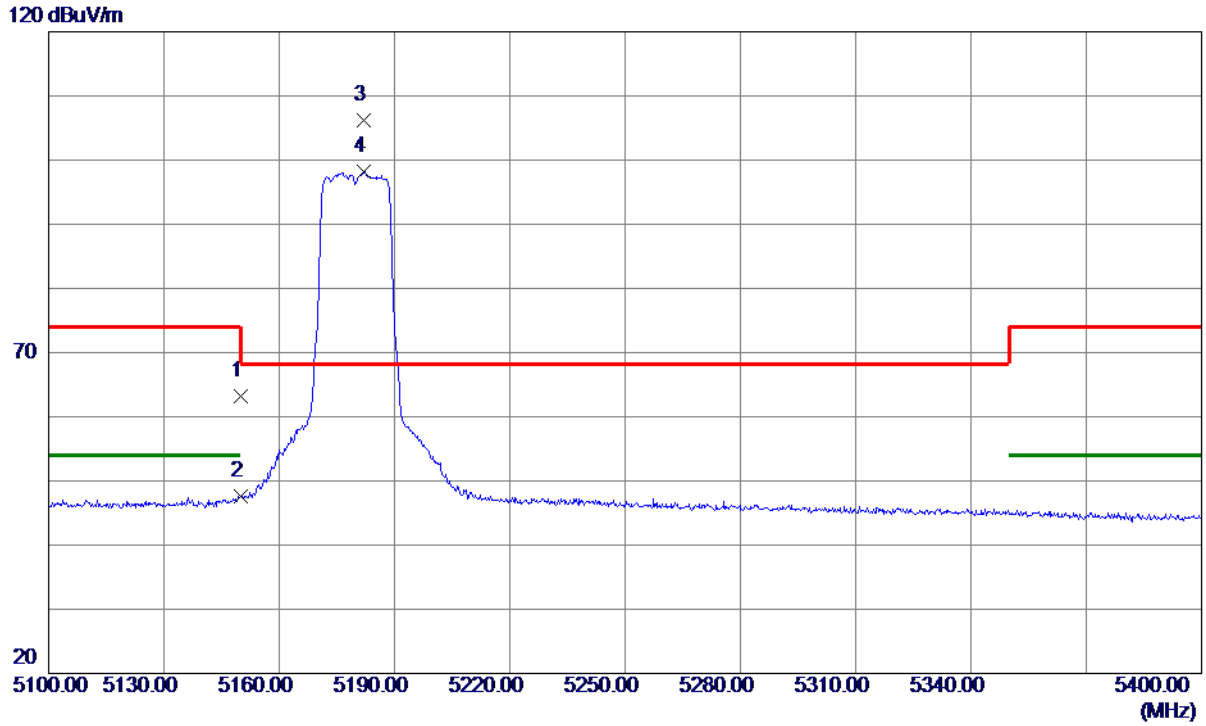


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10360.0000	45.25	1.65	46.90	68.30	-21.40	Peak	

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

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

Horizontal

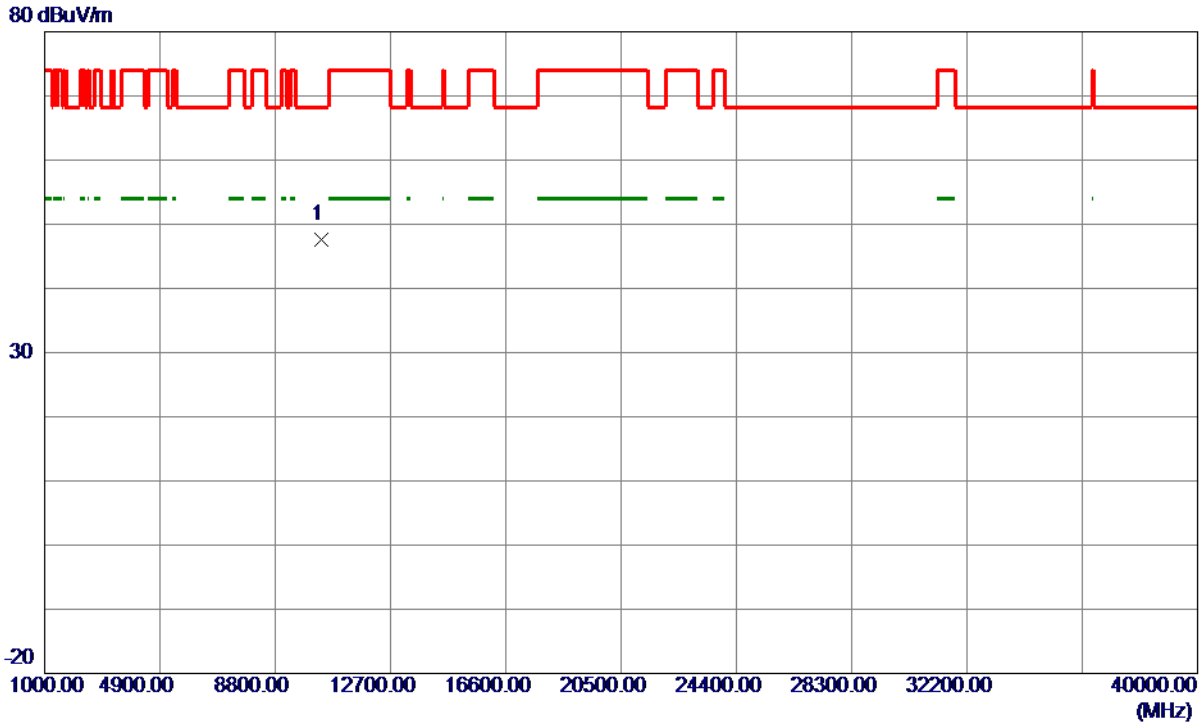


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	25.37	37.88	63.25	74.00	-10.75	Peak	
2	5150.0000	9.79	37.88	47.67	54.00	-6.33	AVG	
3 *	5182.0500	68.52	37.75	106.27	68.30	37.97	Peak	NO limit
4	5182.0500	60.44	37.75	98.19	999.00	-900.81	AVG	NO limit

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

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

Horizontal

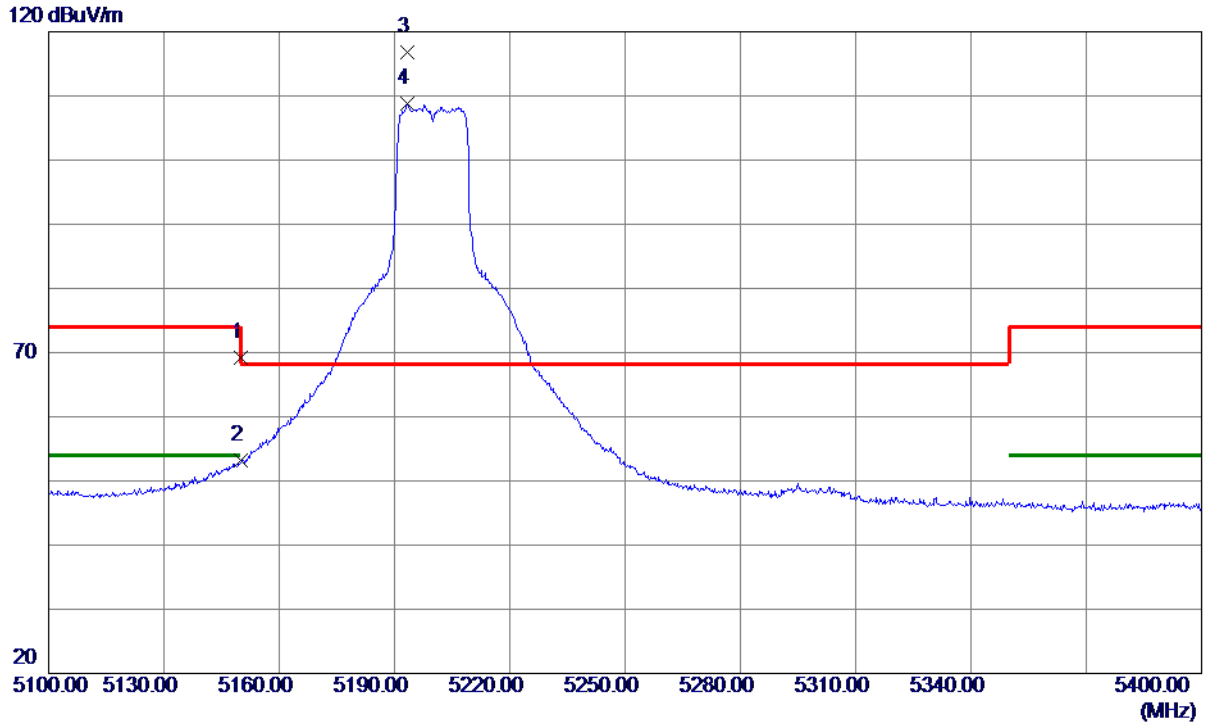


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10360.0000	45.88	1.65	47.53	68.30	-20.77	Peak	

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

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

Vertical

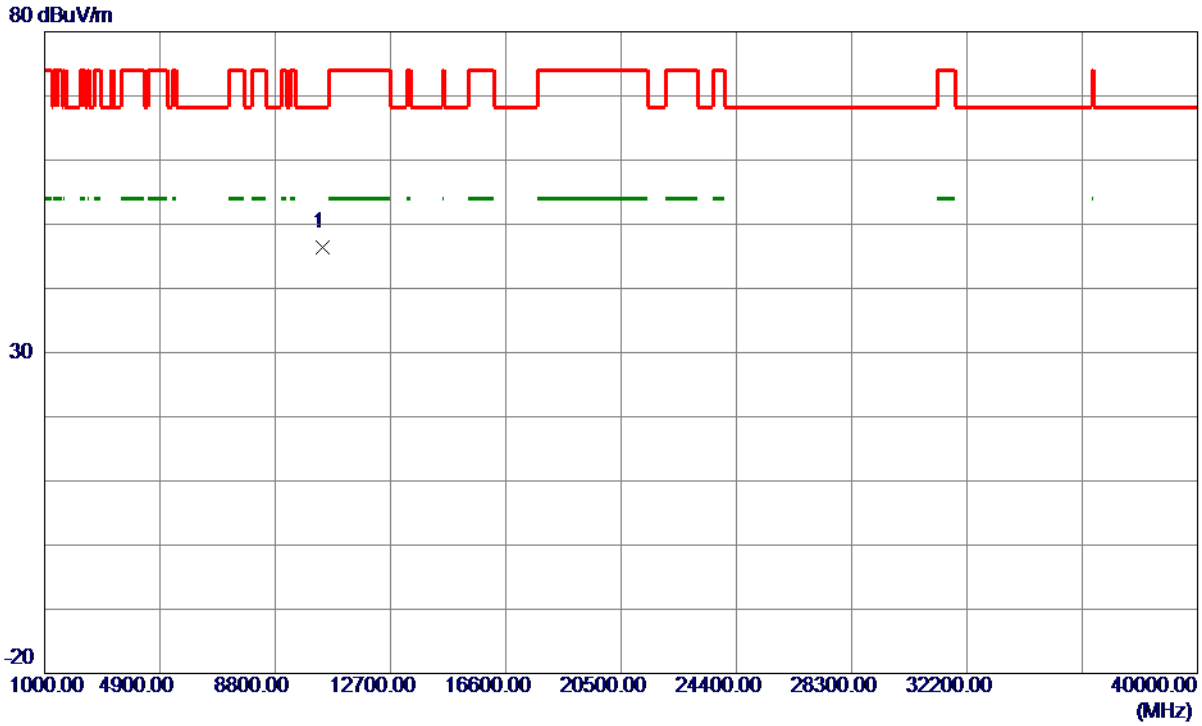


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	31.27	37.88	69.15	74.00	-4.85	Peak	
2	5150.0000	15.27	37.88	53.15	54.00	-0.85	AVG	
3 *	5193.3000	79.00	37.71	116.71	68.30	48.41	Peak	NO limit
4	5193.3000	71.06	37.71	108.77	999.00	-890.23	AVG	NO limit

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

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

Vertical

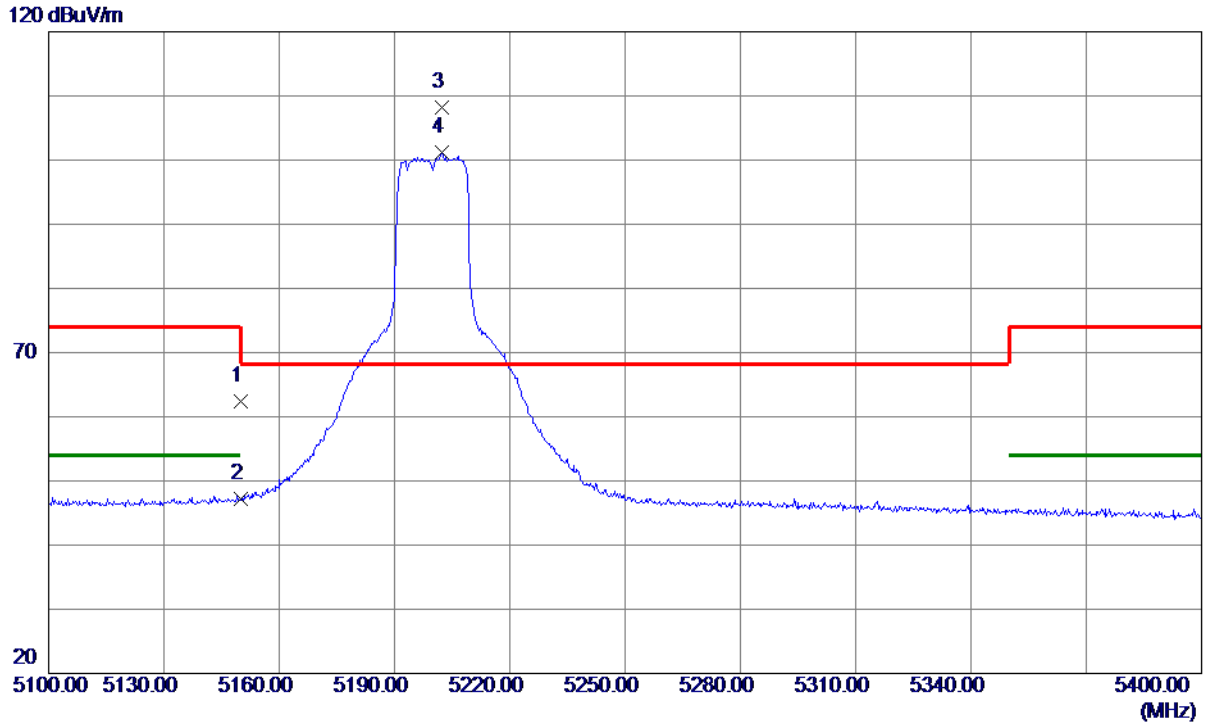


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10400.0000	44.71	1.72	46.43	68.30	-21.87	Peak	

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

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

Horizontal

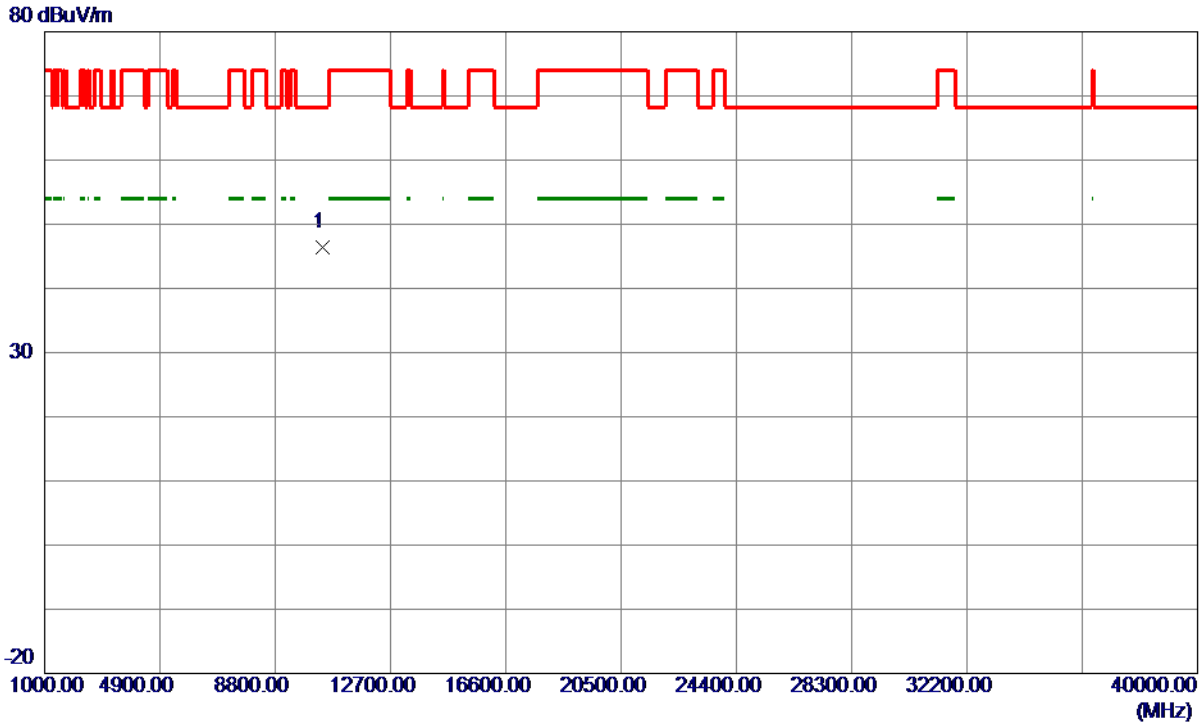


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	24.48	37.88	62.36	74.00	-11.64	Peak	
2	5150.0000	9.35	37.88	47.23	54.00	-6.77	AVG	
3 *	5202.3000	70.52	37.68	108.20	68.30	39.90	Peak	NO limit
4	5202.3000	63.57	37.68	101.25	999.00	-897.75	AVG	NO limit

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

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

Horizontal

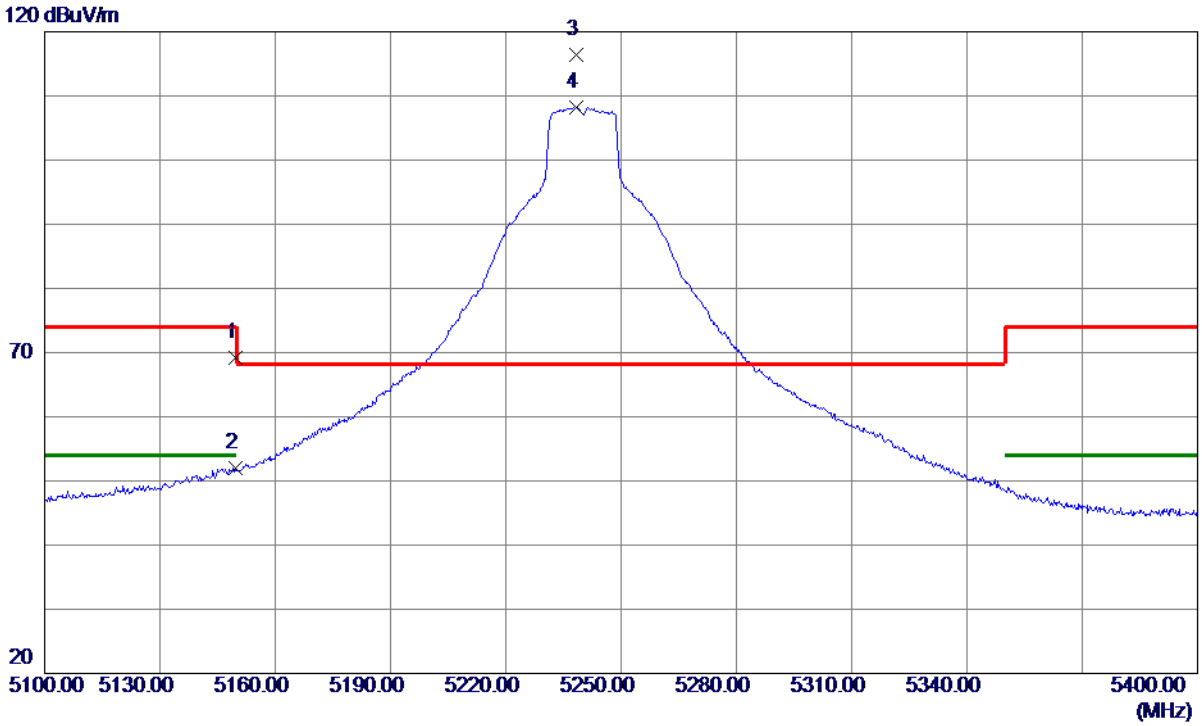


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10400.0000	44.70	1.72	46.42	68.30	-21.88	Peak	

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

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

Vertical

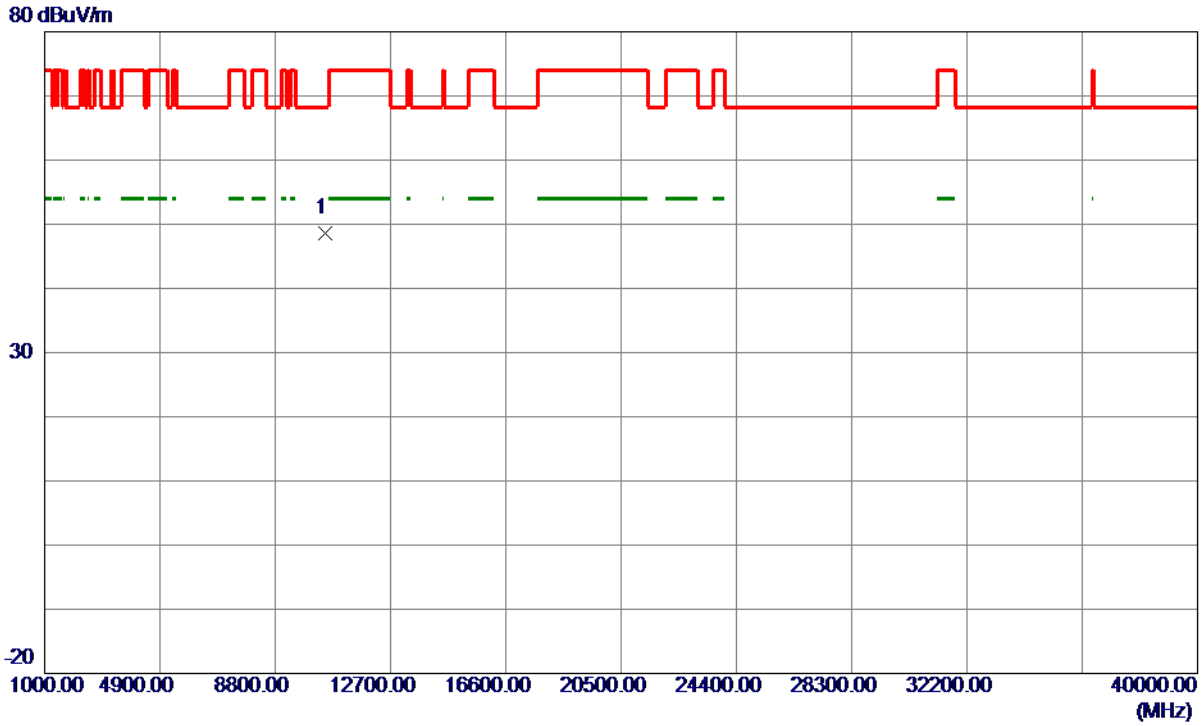


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5149.8000	31.24	37.88	69.12	74.00	-4.88	Peak	
2	5149.8000	14.16	37.88	52.04	54.00	-1.96	AVG	
3 *	5238.4500	78.69	37.62	116.31	68.30	48.01	Peak	NO limit
4	5238.4500	70.66	37.62	108.28	999.00	-890.72	AVG	NO limit

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

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

Vertical

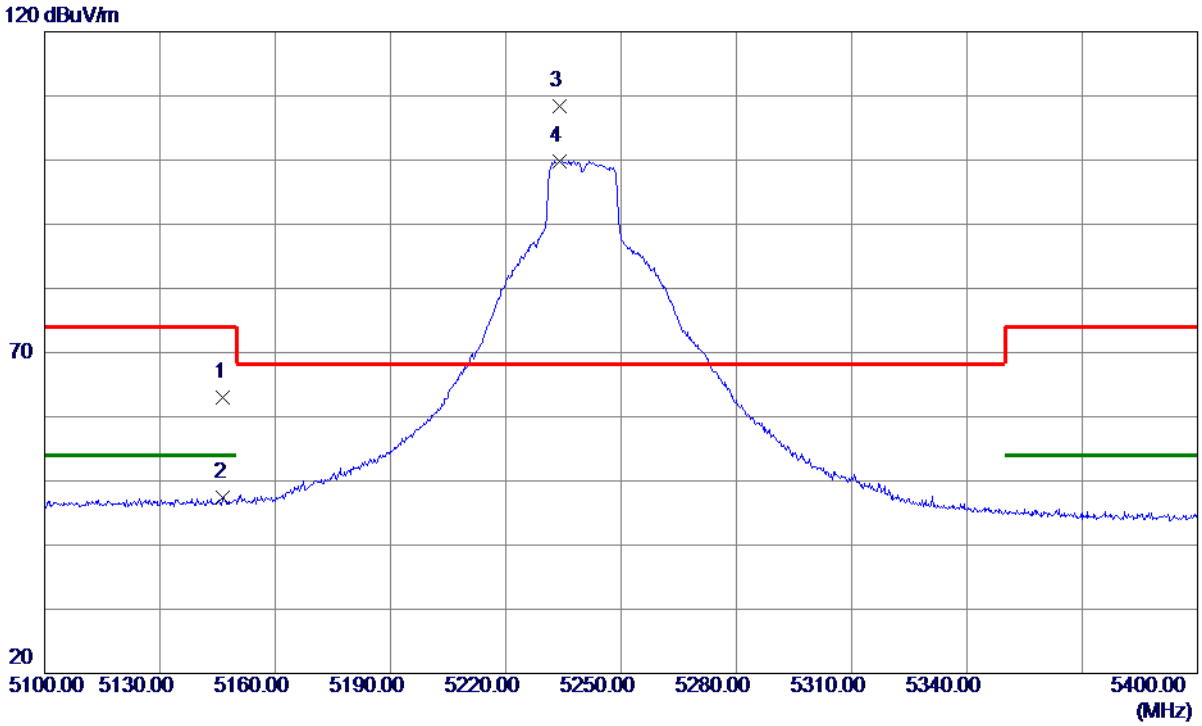


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10480.0000	46.78	1.80	48.58	68.30	-19.72	Peak	

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

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

Horizontal

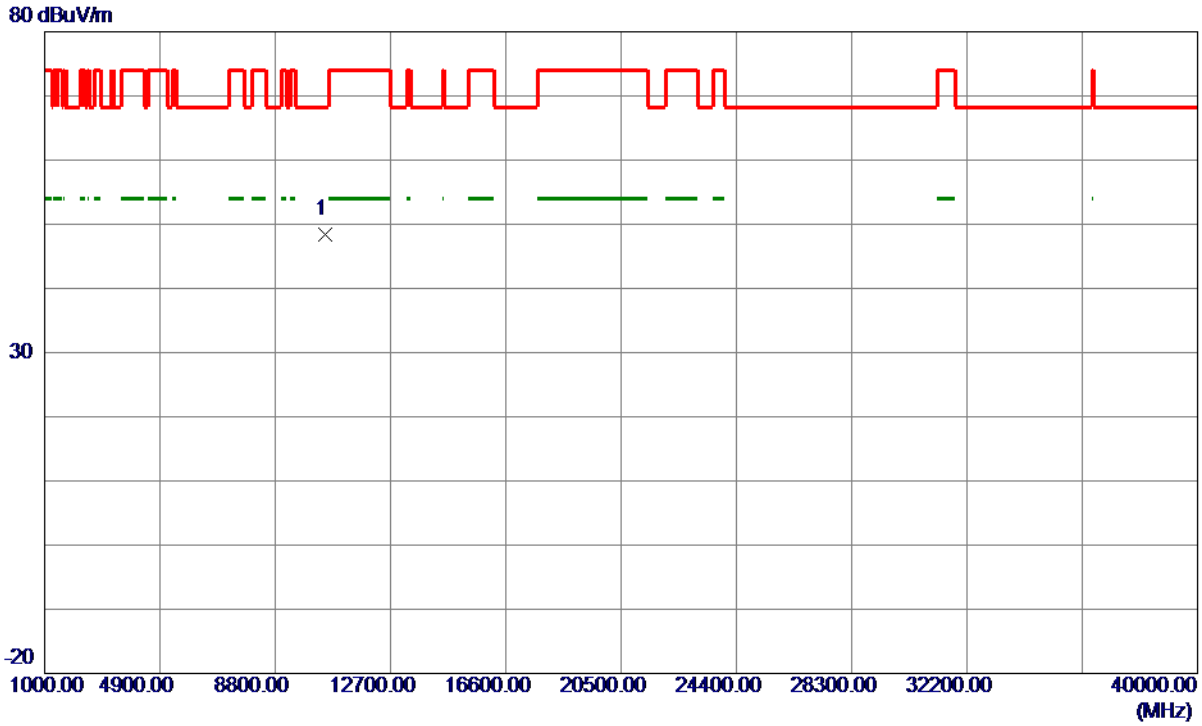


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5146.5000	25.08	37.89	62.97	74.00	-11.03	Peak	
2	5146.5000	9.47	37.89	47.36	54.00	-6.64	AVG	
3 *	5233.9500	70.73	37.63	108.36	68.30	40.06	Peak	NO limit
4	5233.9500	62.15	37.63	99.78	999.00	-899.22	AVG	NO limit

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

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

Horizontal

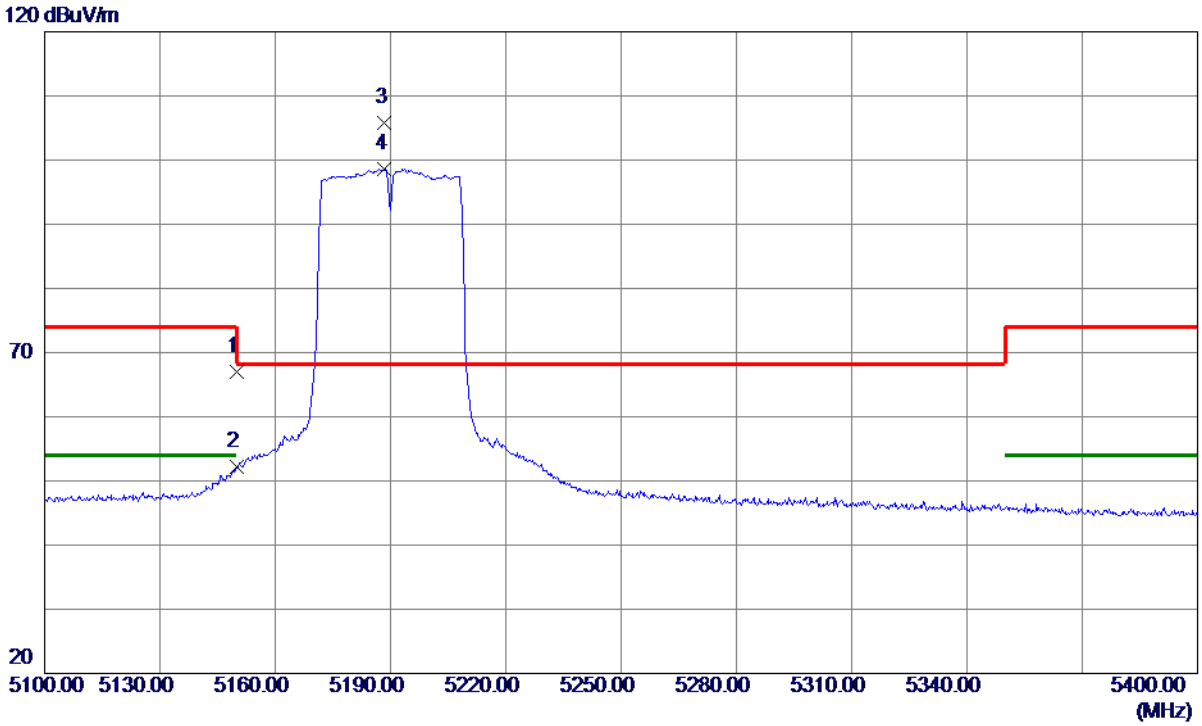


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10480.0000	46.64	1.80	48.44	68.30	-19.86	Peak	

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

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

Vertical

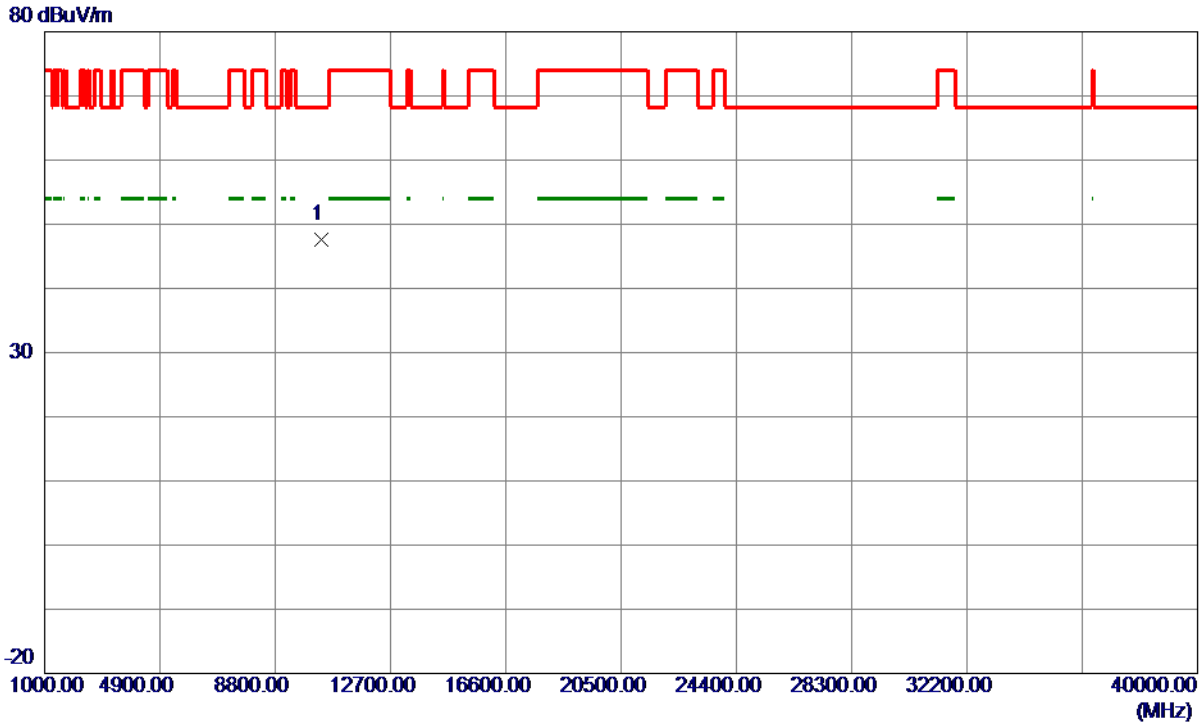


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	29.04	37.88	66.92	74.00	-7.08	Peak	
2	5150.0000	14.23	37.88	52.11	54.00	-1.89	AVG	
3 *	5188.5000	68.11	37.72	105.83	68.30	37.53	Peak	NO limit
4	5188.5000	60.96	37.72	98.68	999.00	-900.32	AVG	NO limit

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

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

Vertical

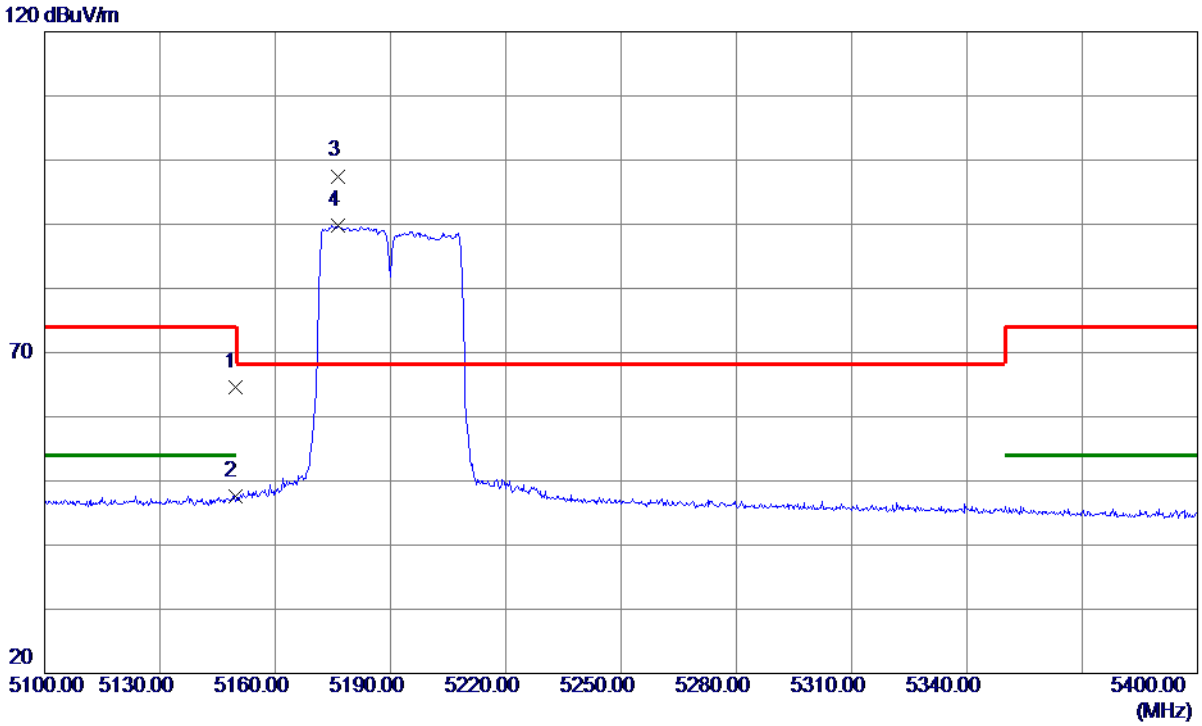


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10380.0000	45.91	1.68	47.59	68.30	-20.71	Peak	

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

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

Horizontal

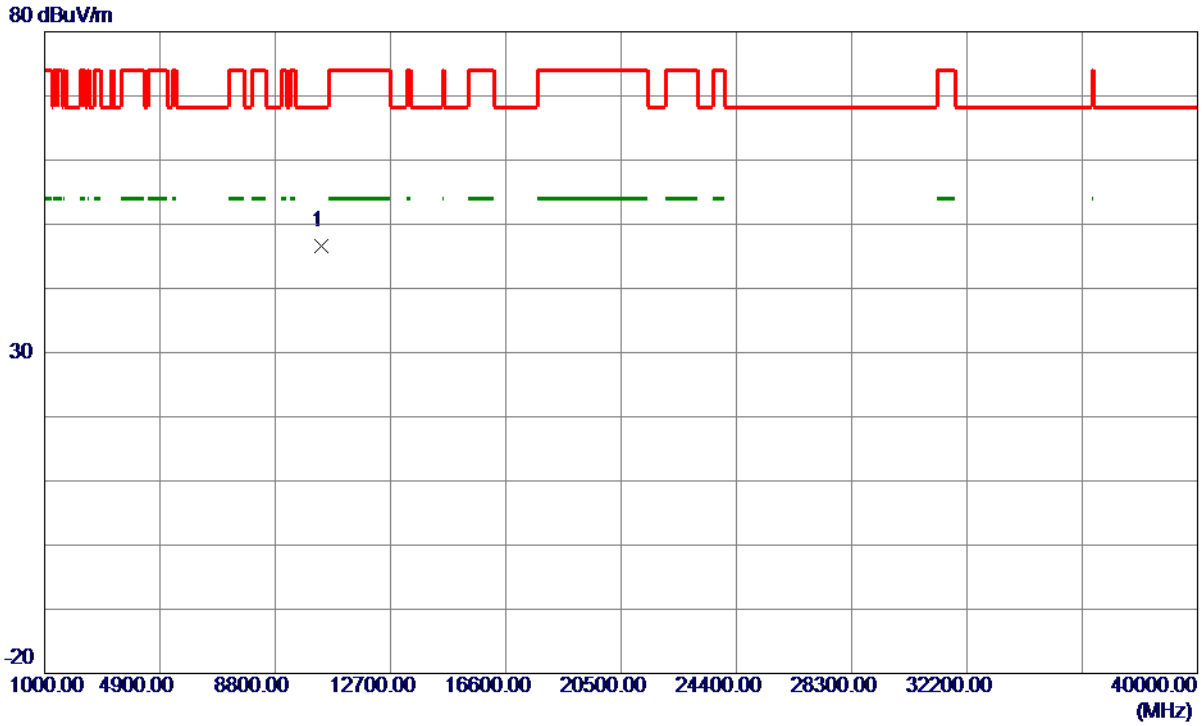


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5149.5000	26.75	37.88	64.63	74.00	-9.37	Peak	
2	5149.5000	9.78	37.88	47.66	54.00	-6.34	AVG	
3 *	5176.2000	59.73	37.77	97.50	68.30	29.20	Peak	NO limit
4	5176.2000	51.98	37.77	89.75	999.00	-909.25	AVG	NO limit

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

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

Horizontal

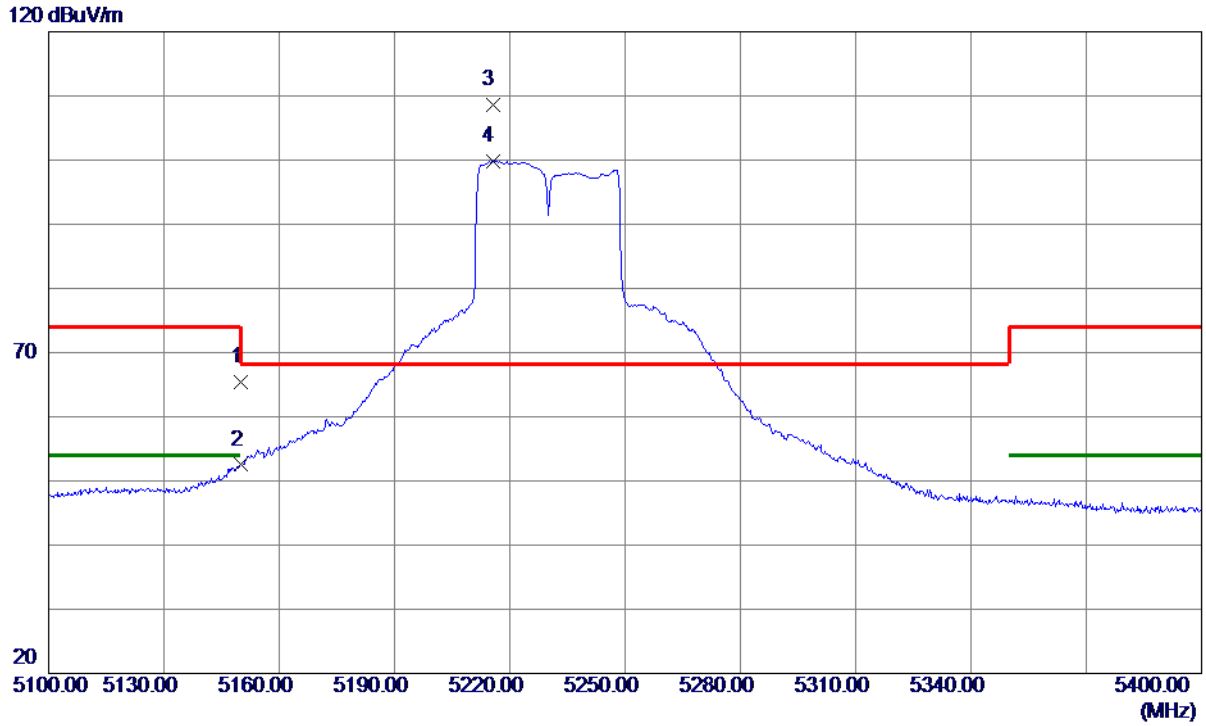


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10380.0000	44.95	1.68	46.63	68.30	-21.67	Peak	

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

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

Vertical

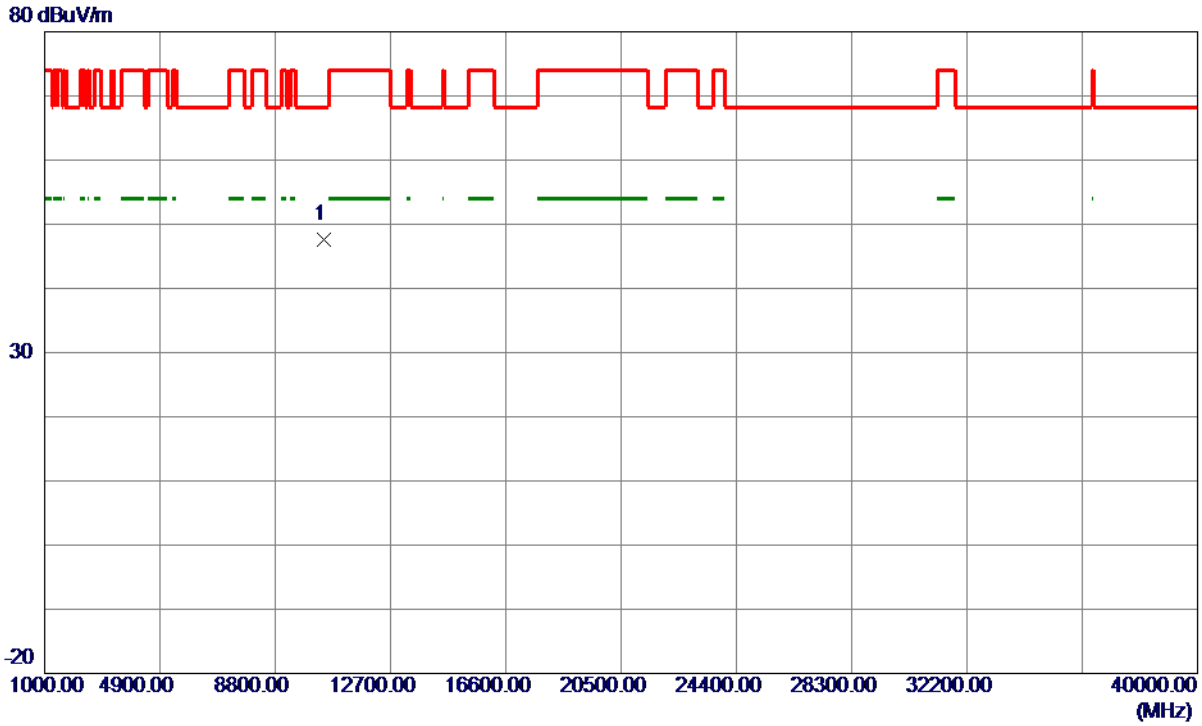


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	27.58	37.88	65.46	74.00	-8.54	Peak	
2	5150.0000	14.62	37.88	52.50	54.00	-1.50	AVG	
3 *	5215.5000	70.99	37.66	108.65	68.30	40.35	Peak	NO limit
4	5215.5000	62.11	37.66	99.77	999.00	-899.23	AVG	NO limit

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

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

Vertical

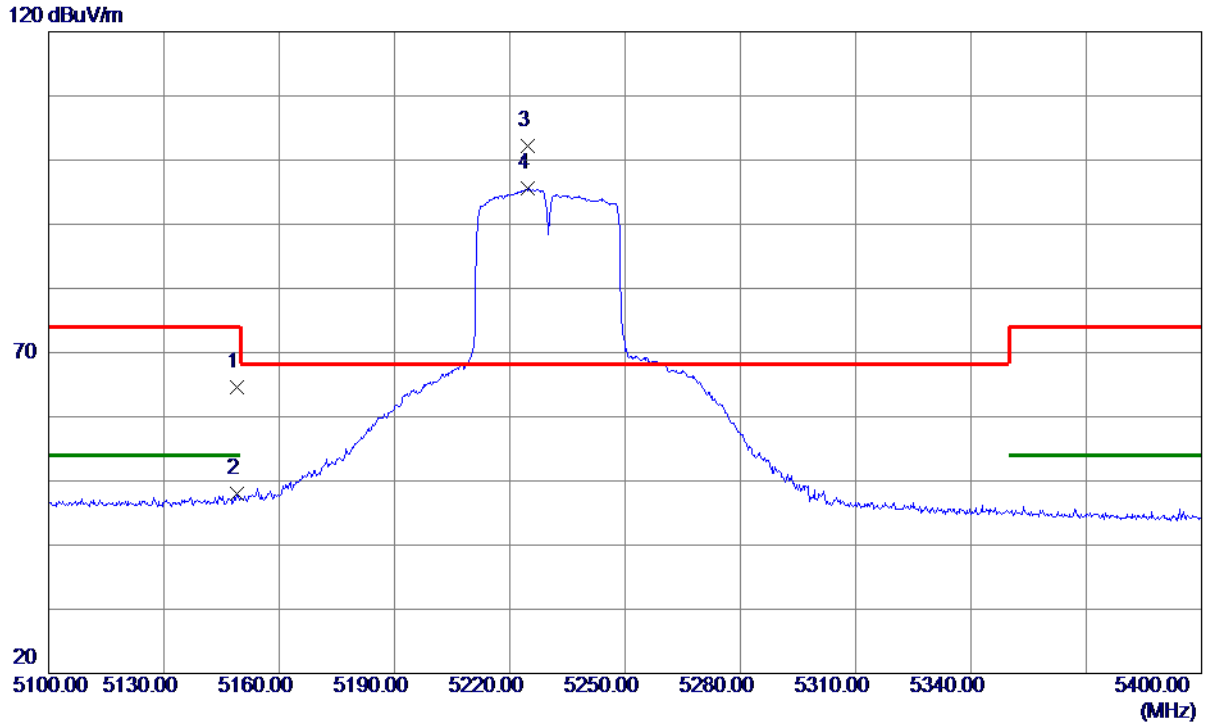


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10460.0000	45.84	1.78	47.62	68.30	-20.68	Peak	

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

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

Horizontal

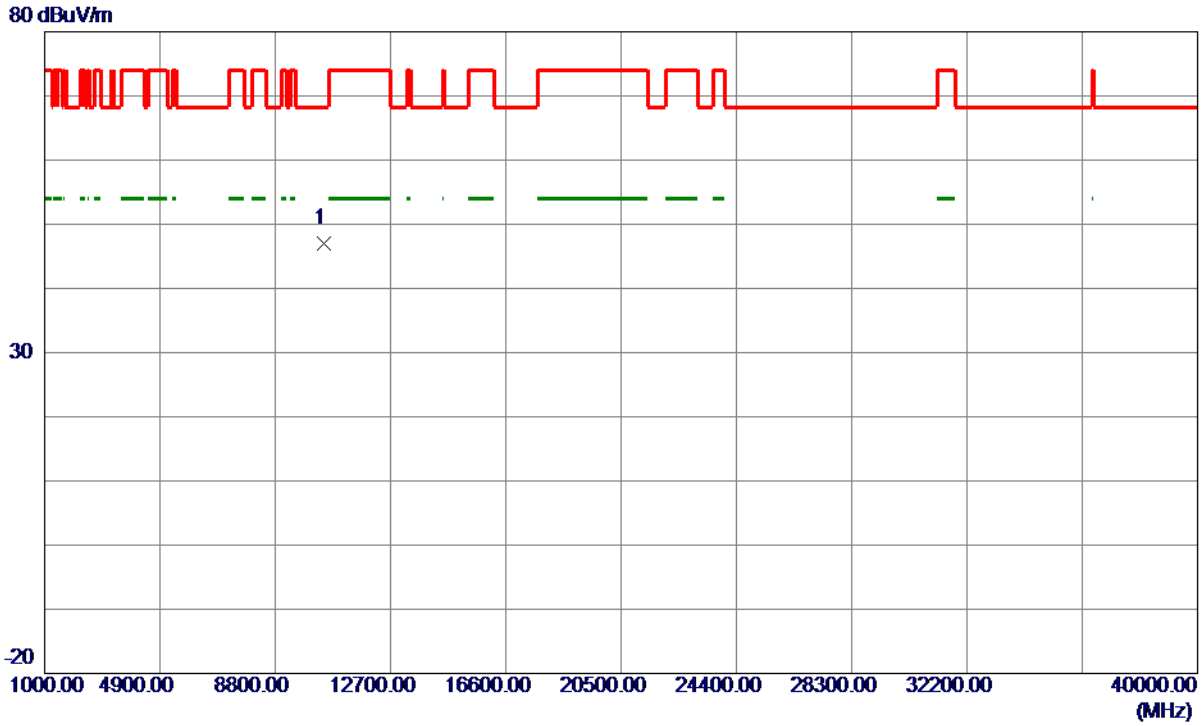


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5149.0500	26.78	37.88	64.66	74.00	-9.34	Peak	
2	5149.0500	10.04	37.88	47.92	54.00	-6.08	AVG	
3 *	5224.8000	64.53	37.64	102.17	68.30	33.87	Peak	NO limit
4	5224.8000	57.88	37.64	95.52	999.00	-903.48	AVG	NO limit

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

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

Horizontal

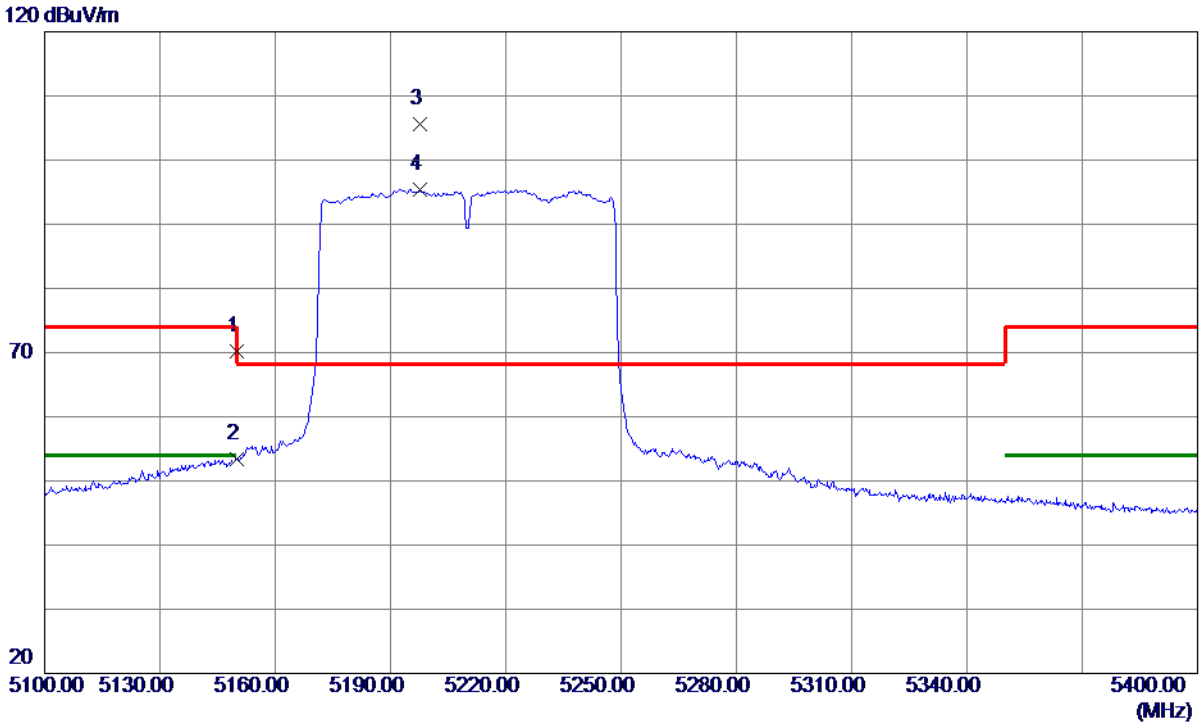


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10460.0000	45.27	1.78	47.05	68.30	-21.25	Peak	

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

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

Vertical

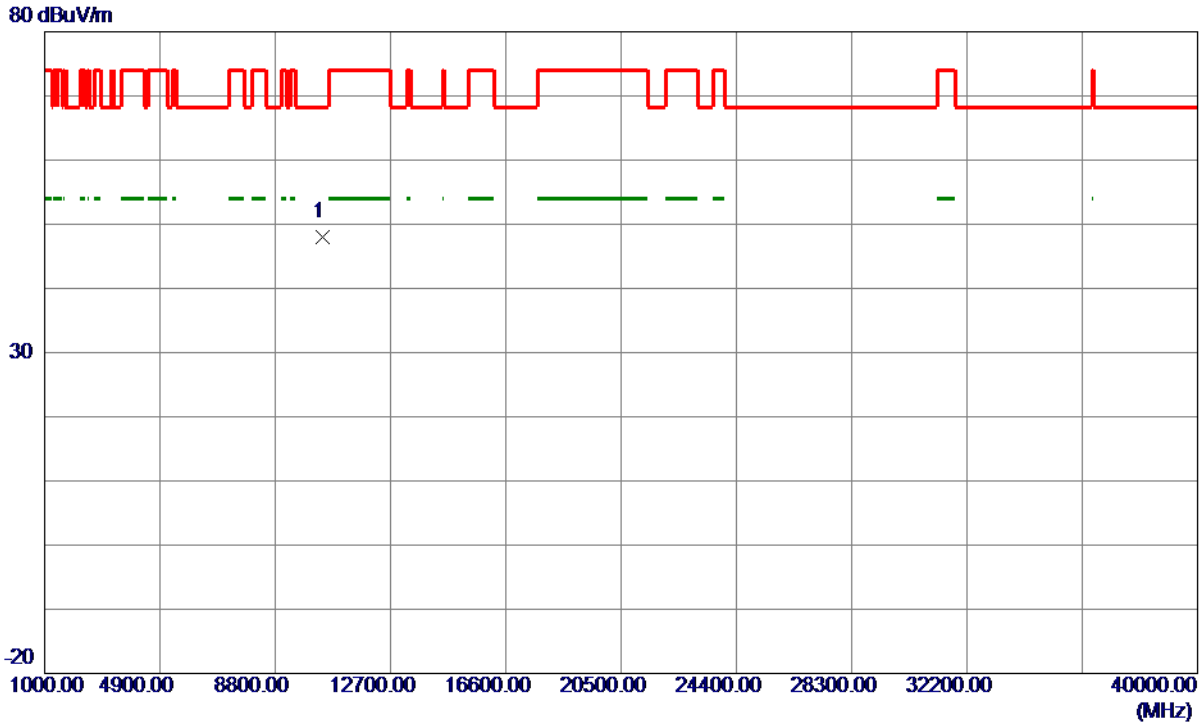


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	32.37	37.88	70.25	74.00	-3.75	Peak	
2	5150.0000	15.46	37.88	53.34	54.00	-0.66	AVG	
3 *	5197.8000	67.90	37.69	105.59	68.30	37.29	Peak	NO limit
4	5197.8000	57.63	37.69	95.32	999.00	-903.68	AVG	NO limit

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

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

Vertical

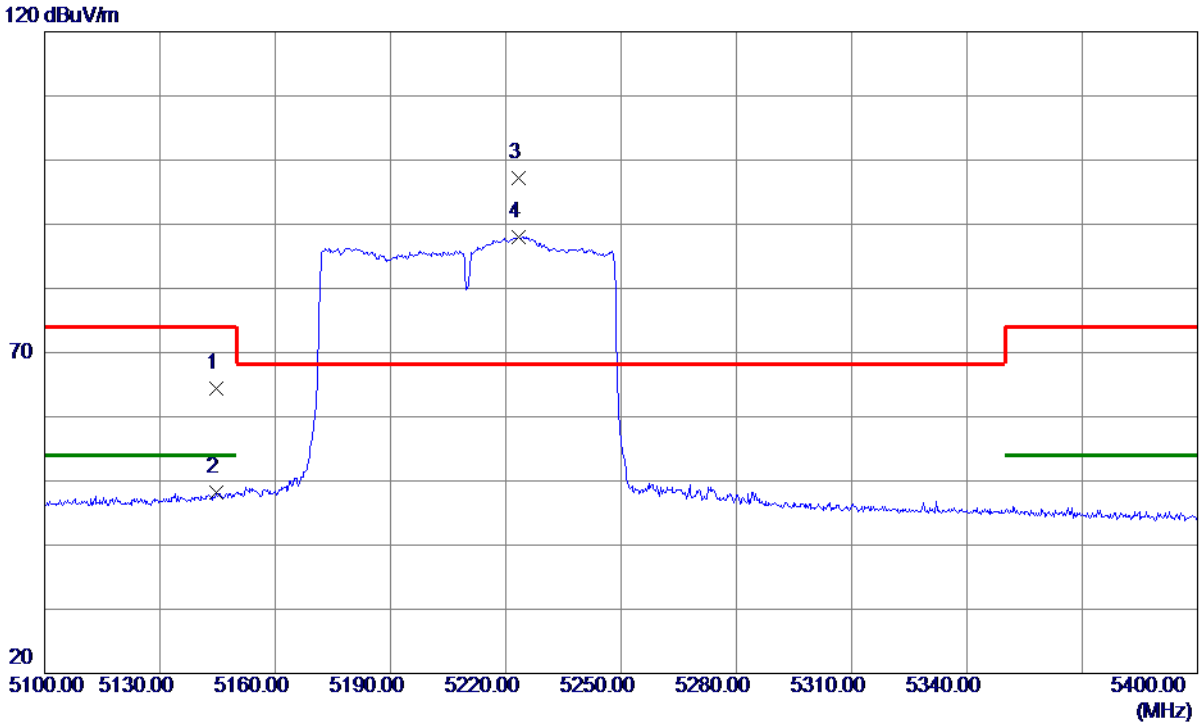


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10420.0000	46.27	1.74	48.01	68.30	-20.29	Peak	

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

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

Horizontal

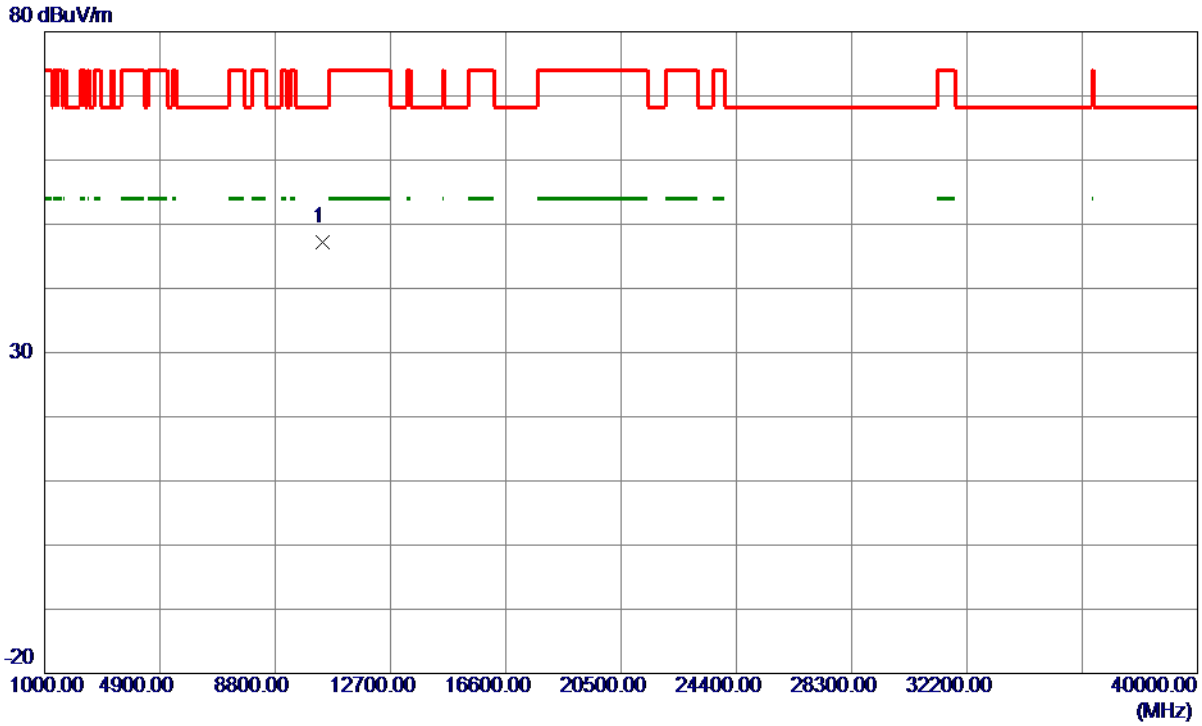


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5144.5500	26.43	37.90	64.33	74.00	-9.67	Peak	
2	5144.5500	10.32	37.90	48.22	54.00	-5.78	AVG	
3 *	5223.4500	59.46	37.65	97.11	68.30	28.81	Peak	NO limit
4	5223.4500	50.34	37.65	87.99	999.00	-911.01	AVG	NO limit

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

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

Horizontal

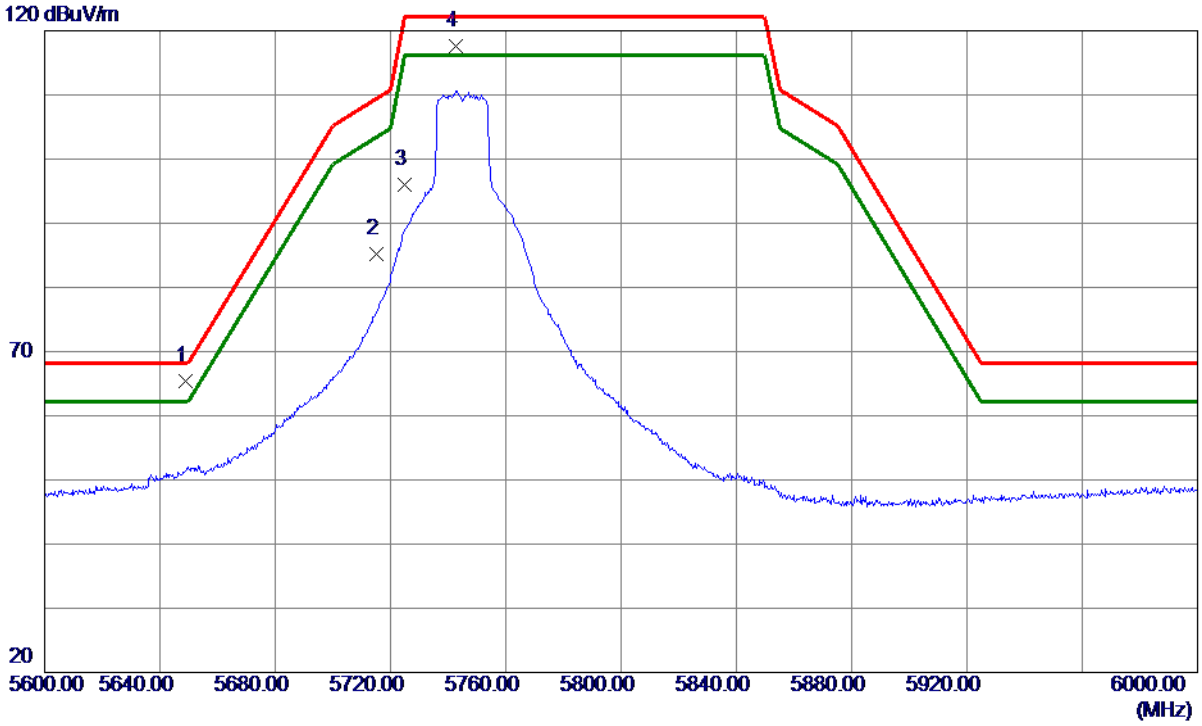


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	10420.0000	45.53	1.74	47.27	68.30	-21.03	Peak	

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

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

Vertical

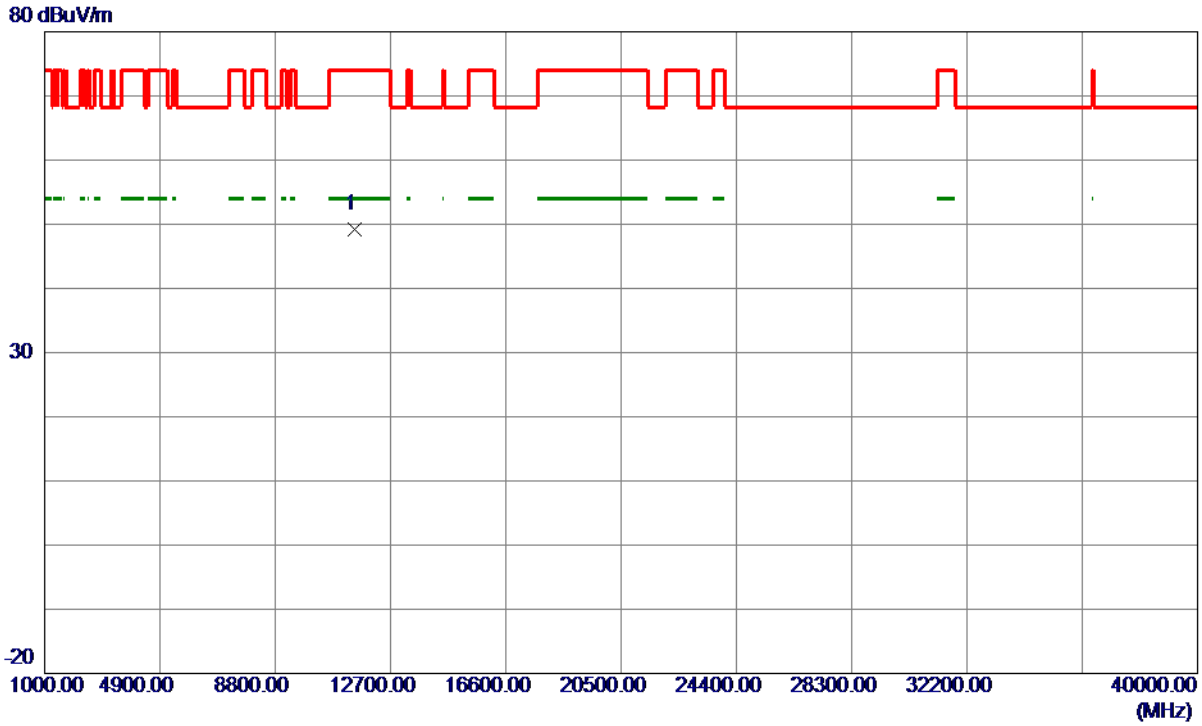


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5648.8000	27.09	38.37	65.46	68.20	-2.74	Peak	
2	5715.0000	46.72	38.46	85.18	109.40	-24.22	Peak	
3	5725.0000	57.59	38.50	96.09	122.20	-26.11	Peak	
4	5742.6000	79.03	38.56	117.59	122.20	-4.61	Peak	

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

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

Vertical

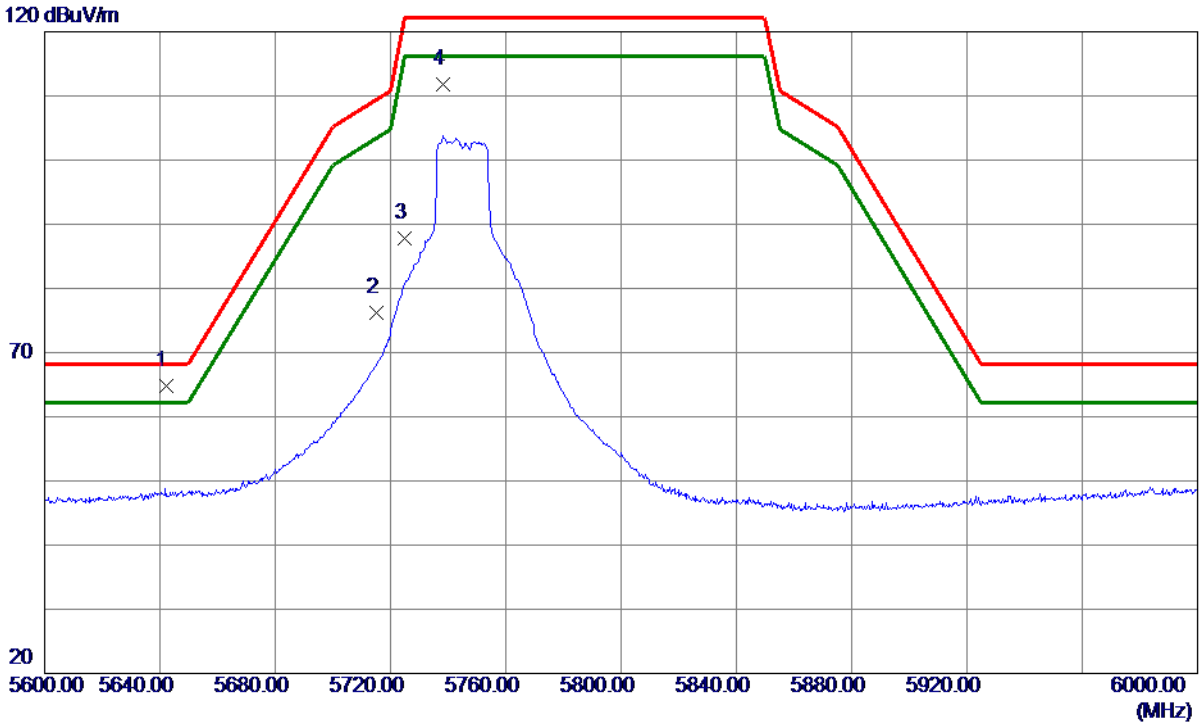


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11490.0000	46.92	2.21	49.13	74.00	-24.87	Peak	

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

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

Horizontal

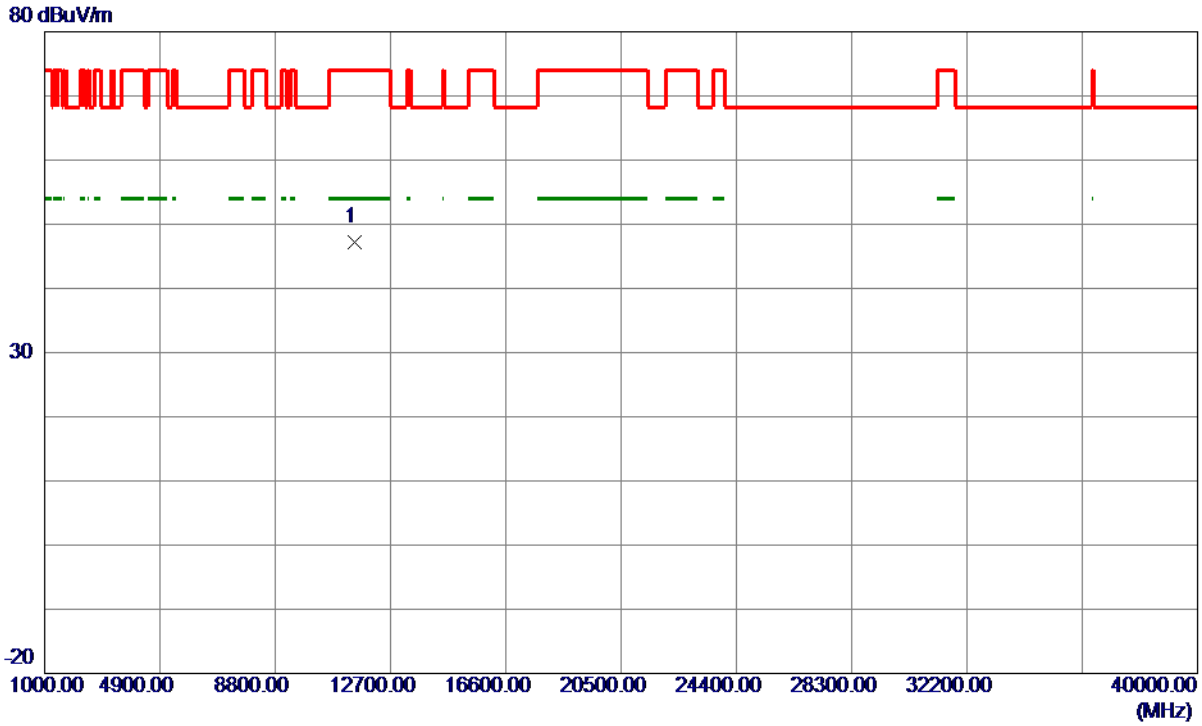


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5642.0000	26.35	38.37	64.72	68.20	-3.48	Peak	
2	5715.0000	37.69	38.46	76.15	109.40	-33.25	Peak	
3	5725.0000	49.31	38.50	87.81	122.20	-34.39	Peak	
4	5738.4000	73.30	38.55	111.85	122.20	-10.35	Peak	

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

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

Horizontal

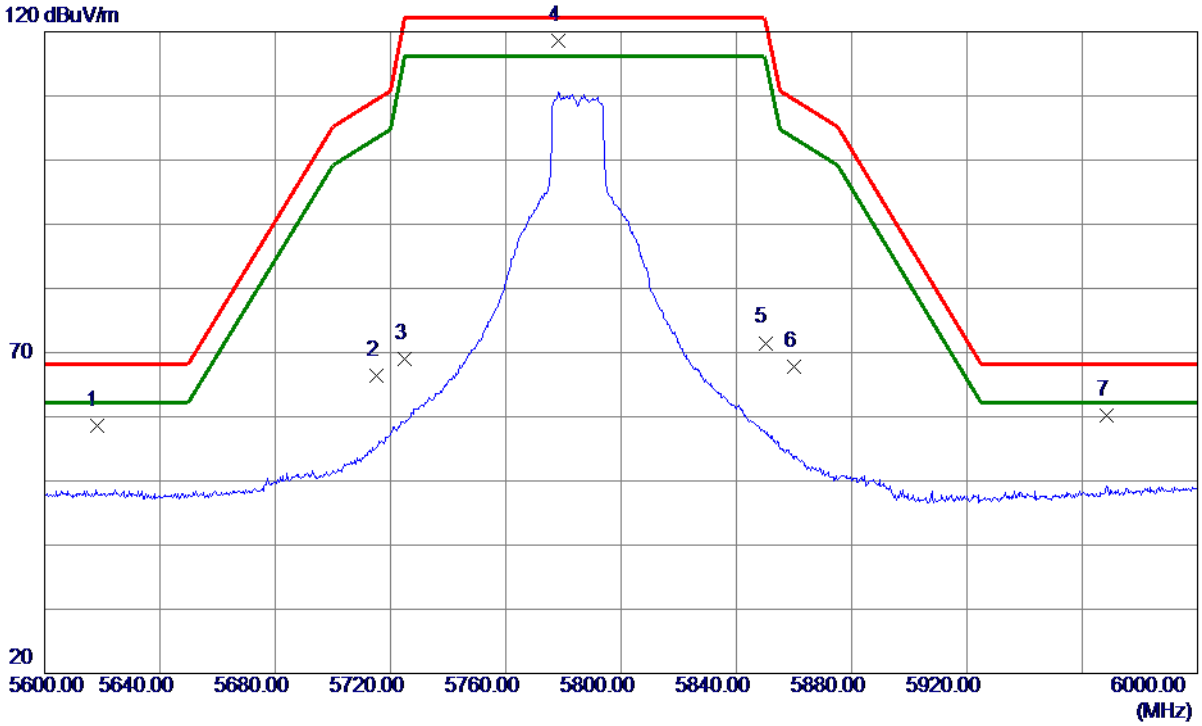


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11490.0000	44.98	2.21	47.19	74.00	-26.81	Peak	

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

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

Vertical

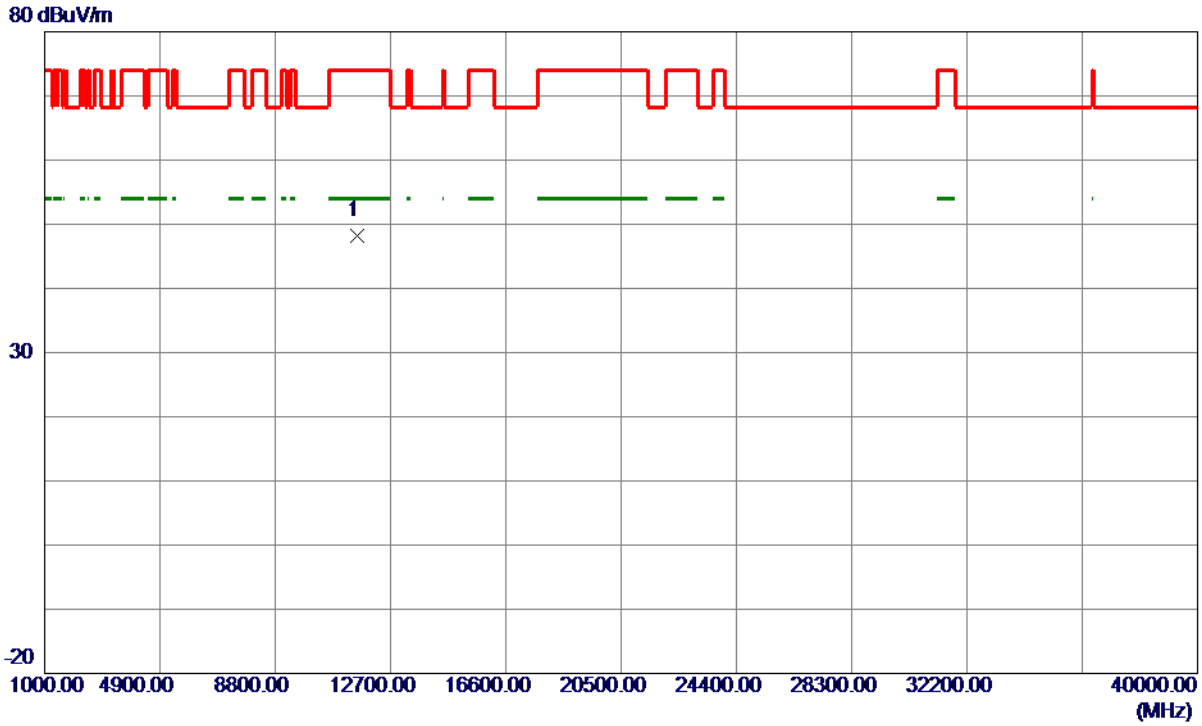


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5618.0000	20.24	38.35	58.59	68.20	-9.61	Peak	
2	5715.0000	27.99	38.46	66.45	109.40	-42.95	Peak	
3	5725.0000	30.45	38.50	68.95	122.20	-53.25	Peak	
4 *	5778.2000	79.91	38.70	118.61	122.20	-3.59	Peak	
5	5850.0000	32.59	38.91	71.50	122.20	-50.70	Peak	
6	5860.0000	28.87	38.94	67.81	109.40	-41.59	Peak	
7	5968.6000	21.00	39.19	60.19	68.20	-8.01	Peak	

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

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

Vertical

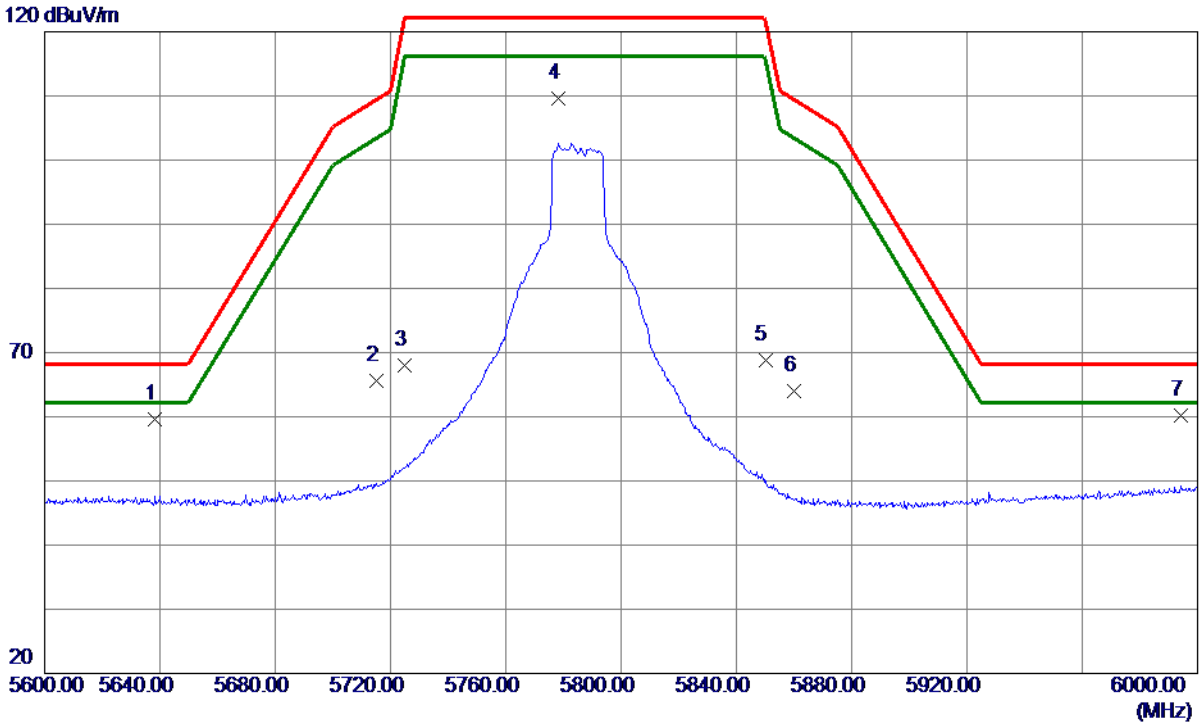


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11570.0000	45.85	2.27	48.12	74.00	-25.88	Peak	

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

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

Horizontal

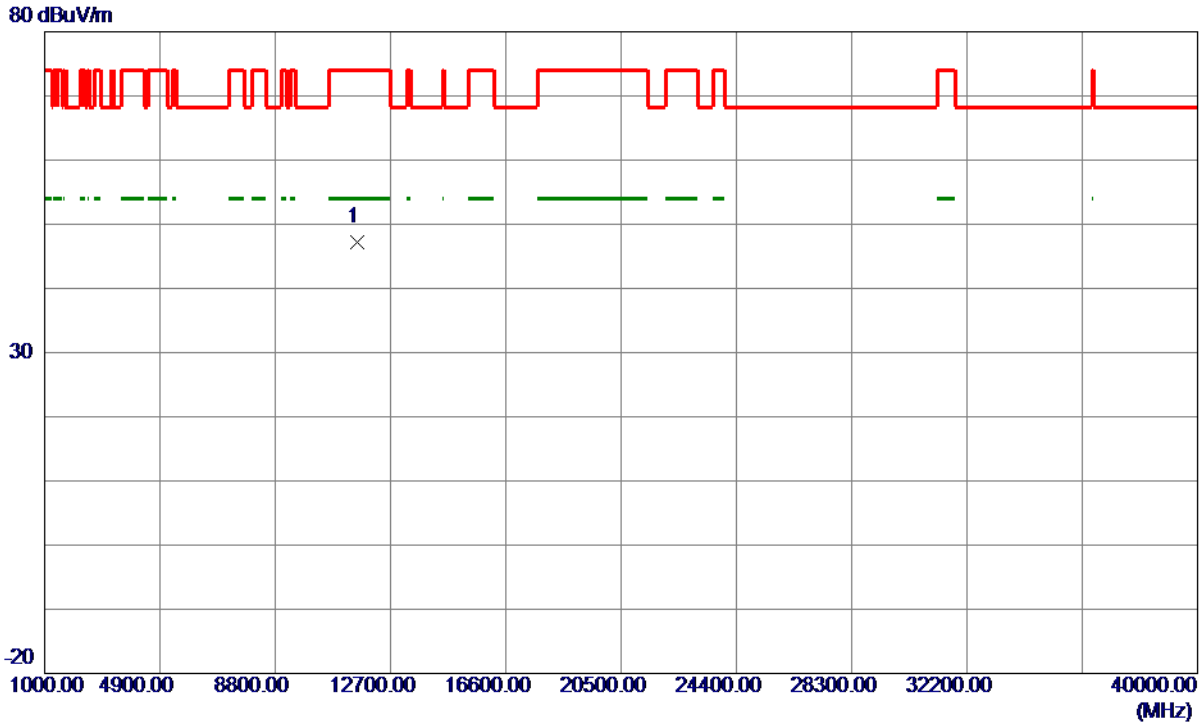


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5638.4000	21.28	38.36	59.64	68.20	-8.56	Peak	
2	5715.0000	27.08	38.46	65.54	109.40	-43.86	Peak	
3	5725.0000	29.52	38.50	68.02	122.20	-54.18	Peak	
4	5778.4000	70.96	38.70	109.66	122.20	-12.54	Peak	
5	5850.0000	29.82	38.91	68.73	122.20	-53.47	Peak	
6	5860.0000	25.11	38.94	64.05	109.40	-45.35	Peak	
7 *	5994.2000	21.01	39.24	60.25	68.20	-7.95	Peak	

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

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

Horizontal

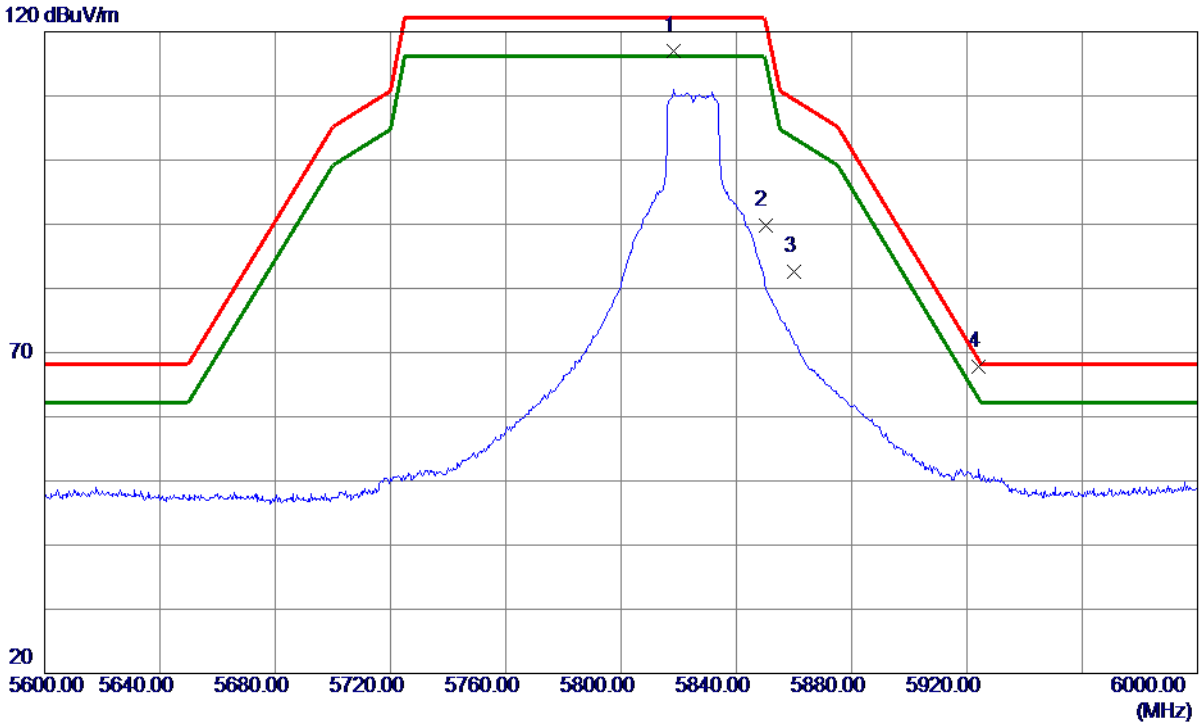


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11570.0000	45.00	2.27	47.27	74.00	-26.73	Peak	

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

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

Vertical

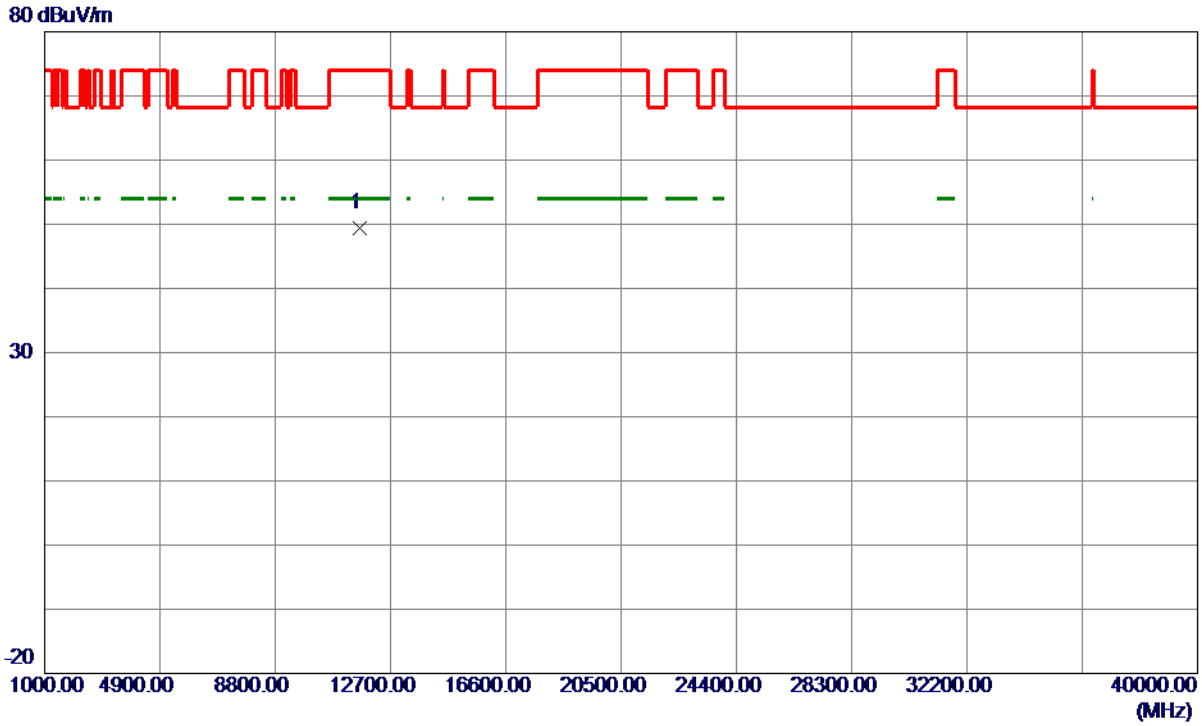


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5818.4000	78.14	38.83	116.97	122.20	-5.23	Peak	
2	5850.0000	50.82	38.91	89.73	122.20	-32.47	Peak	
3	5860.0000	43.66	38.94	82.60	109.40	-26.80	Peak	
4 *	5924.0000	28.63	39.10	67.73	68.94	-1.21	Peak	

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

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

Vertical

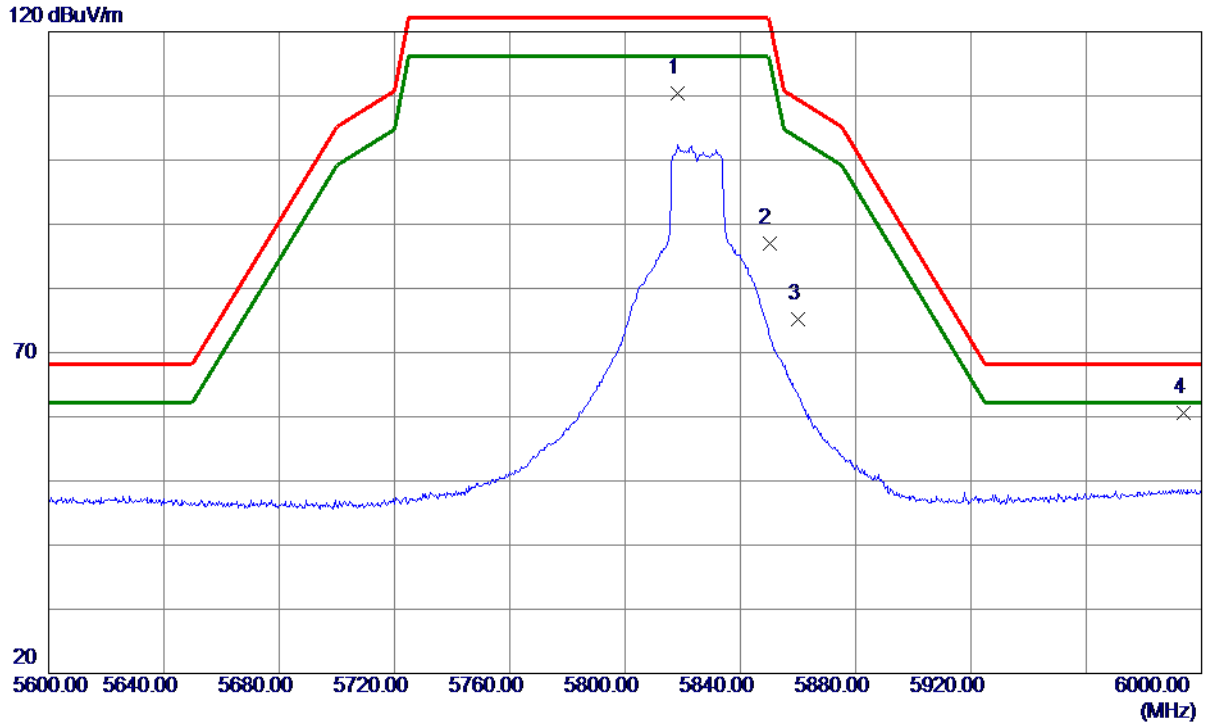


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11650.0000	47.32	2.10	49.42	74.00	-24.58	Peak	

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

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

Horizontal

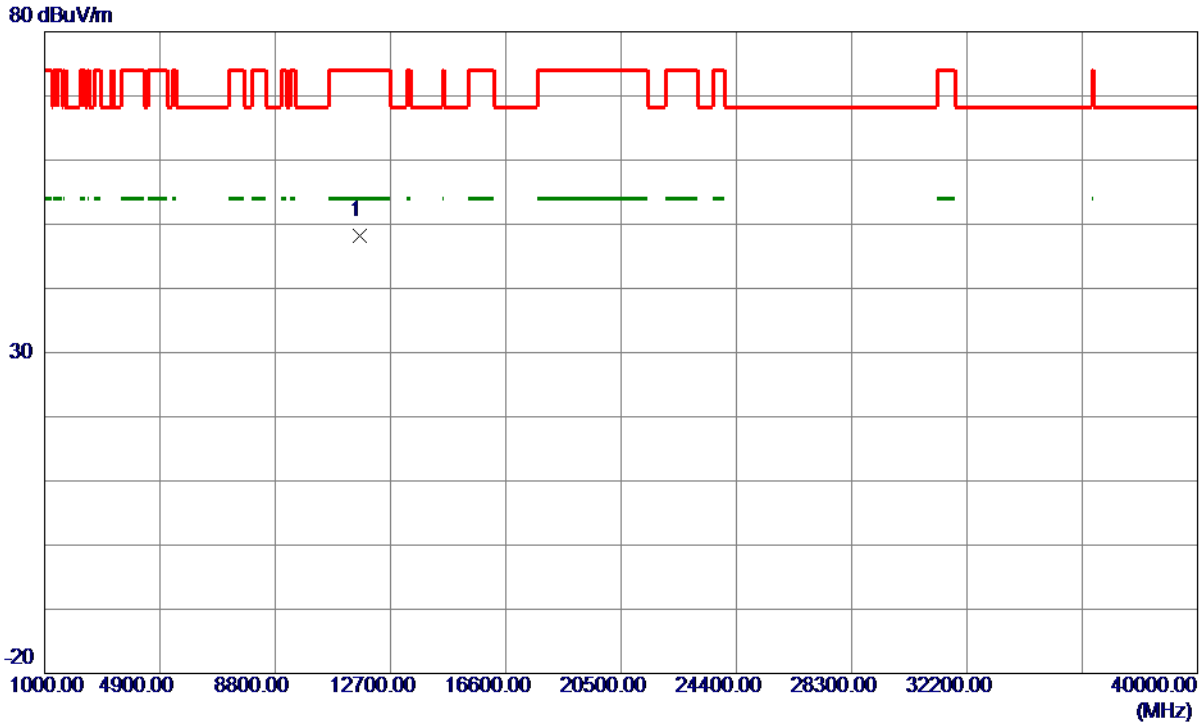


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5818.4000	71.54	38.83	110.37	122.20	-11.83	Peak	
2	5850.0000	48.07	38.91	86.98	122.20	-35.22	Peak	
3	5860.0000	36.32	38.94	75.26	109.40	-34.14	Peak	
4 *	5993.8000	21.45	39.24	60.69	68.20	-7.51	Peak	

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

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

Horizontal

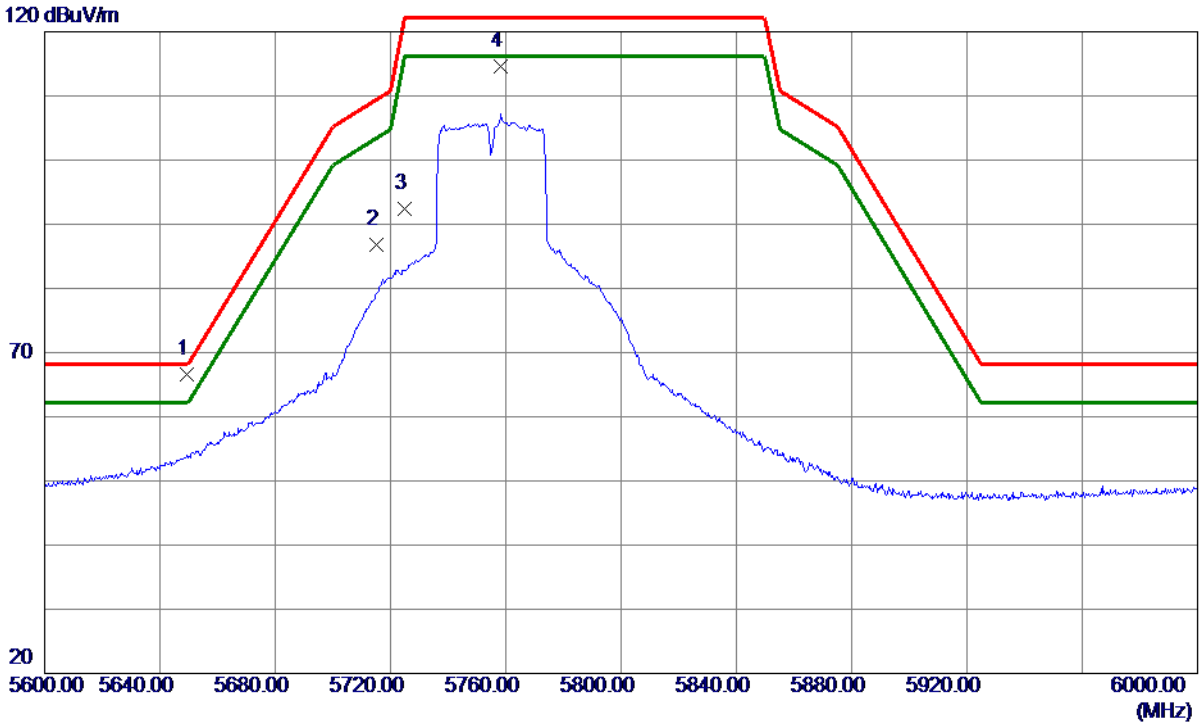


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11650.0000	46.01	2.10	48.11	74.00	-25.89	Peak	

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

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

Vertical

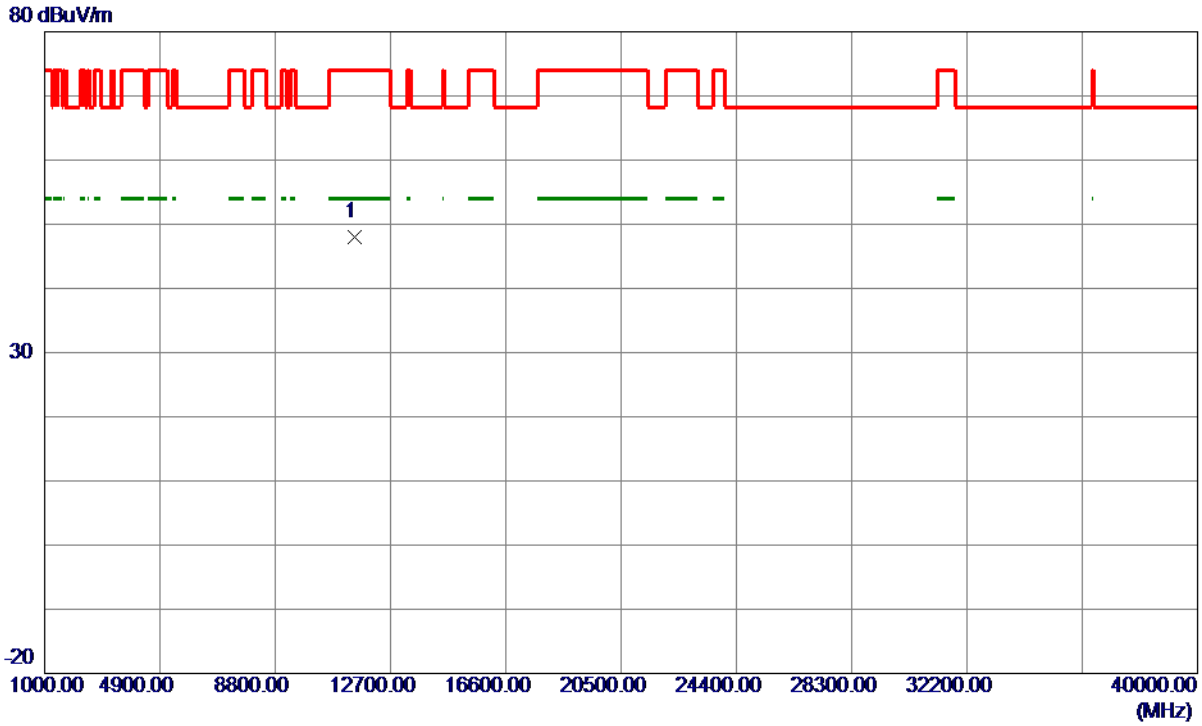


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5649.4000	28.17	38.37	66.54	68.20	-1.66	Peak	
2	5715.0000	48.43	38.46	86.89	109.40	-22.51	Peak	
3	5725.0000	53.90	38.50	92.40	122.20	-29.80	Peak	
4	5758.4000	75.90	38.62	114.52	122.20	-7.68	Peak	

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

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

Vertical

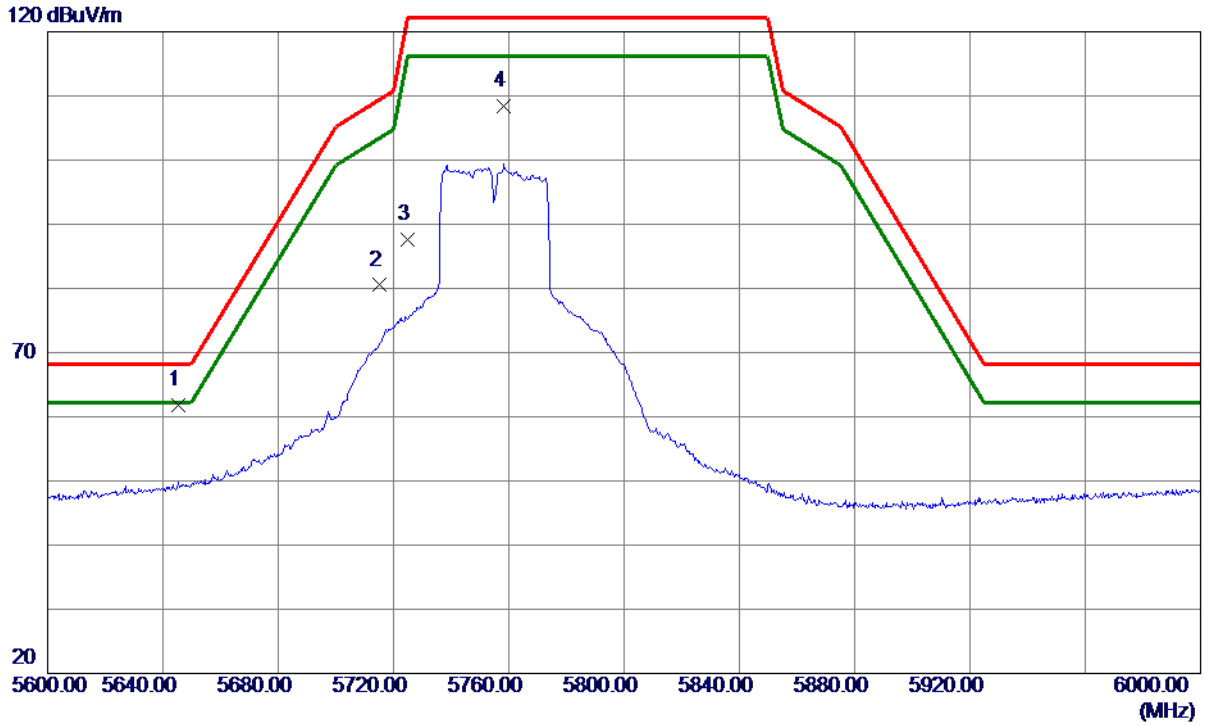


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11490.0000	45.88	2.21	48.09	74.00	-25.91	Peak	

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

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

Horizontal

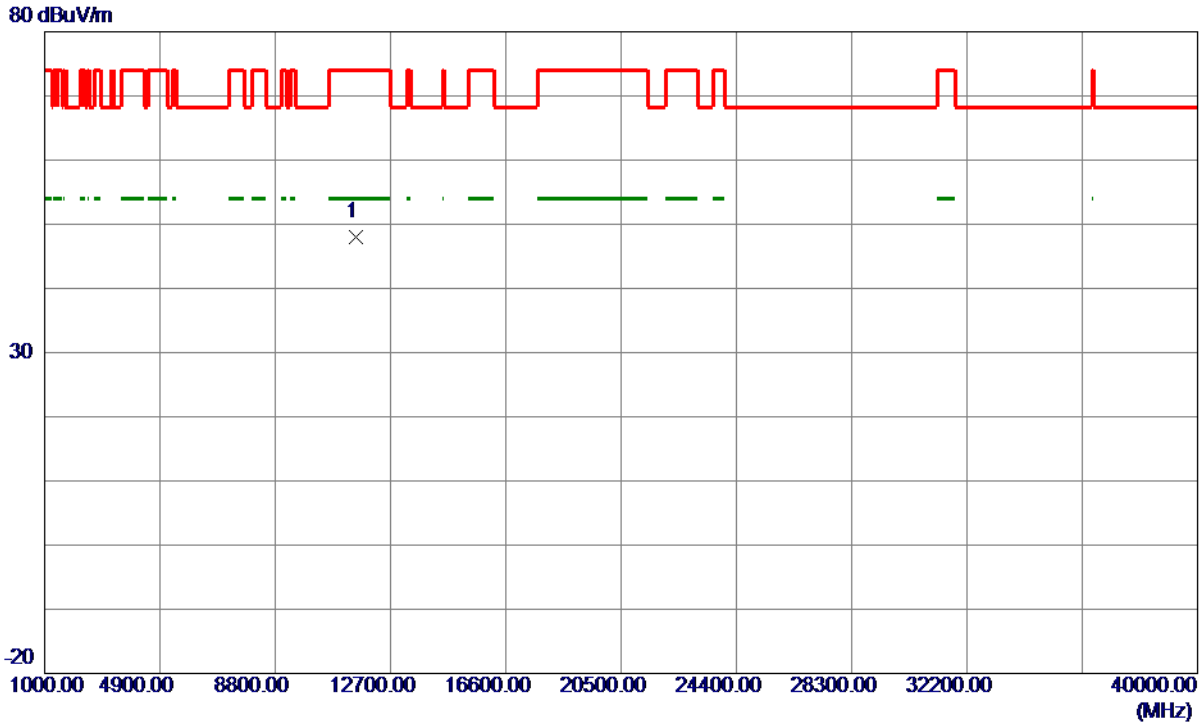


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5645.2000	23.38	38.37	61.75	68.20	-6.45	Peak	
2	5715.0000	42.04	38.46	80.50	109.40	-28.90	Peak	
3	5725.0000	49.04	38.50	87.54	122.20	-34.66	Peak	
4	5758.4000	69.75	38.62	108.37	122.20	-13.83	Peak	

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

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

Horizontal

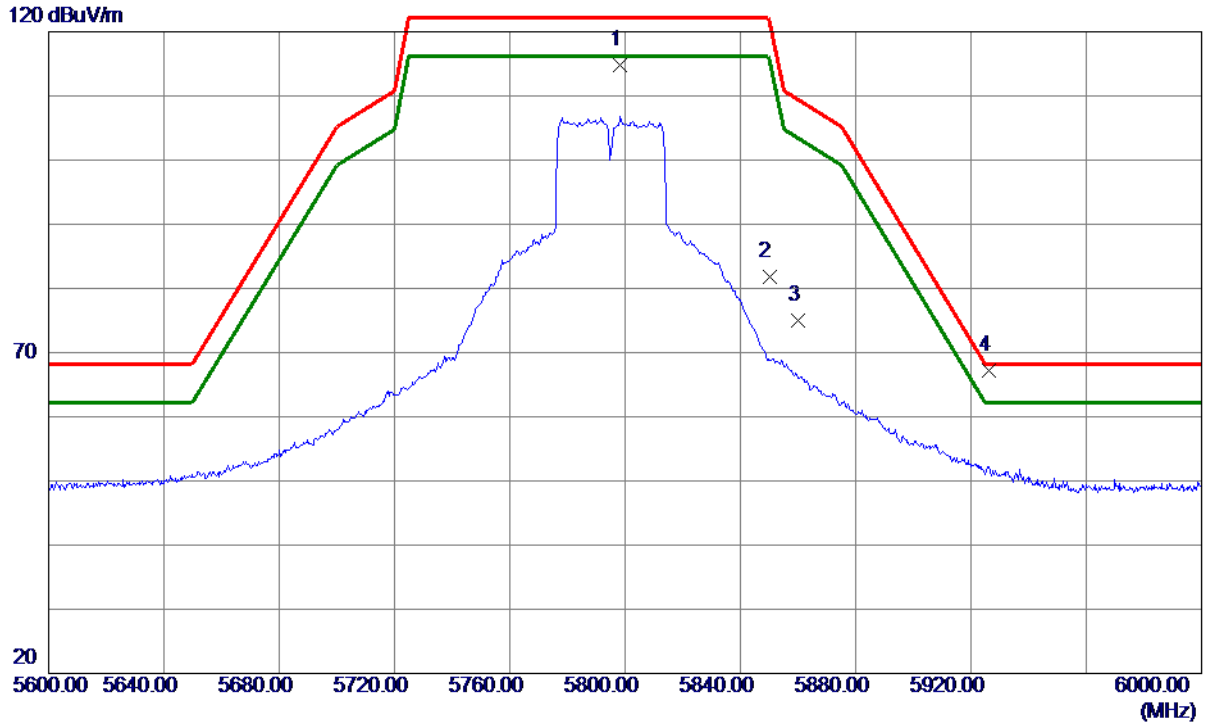


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11510.0000	45.73	2.22	47.95	74.00	-26.05	Peak	

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

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

Vertical

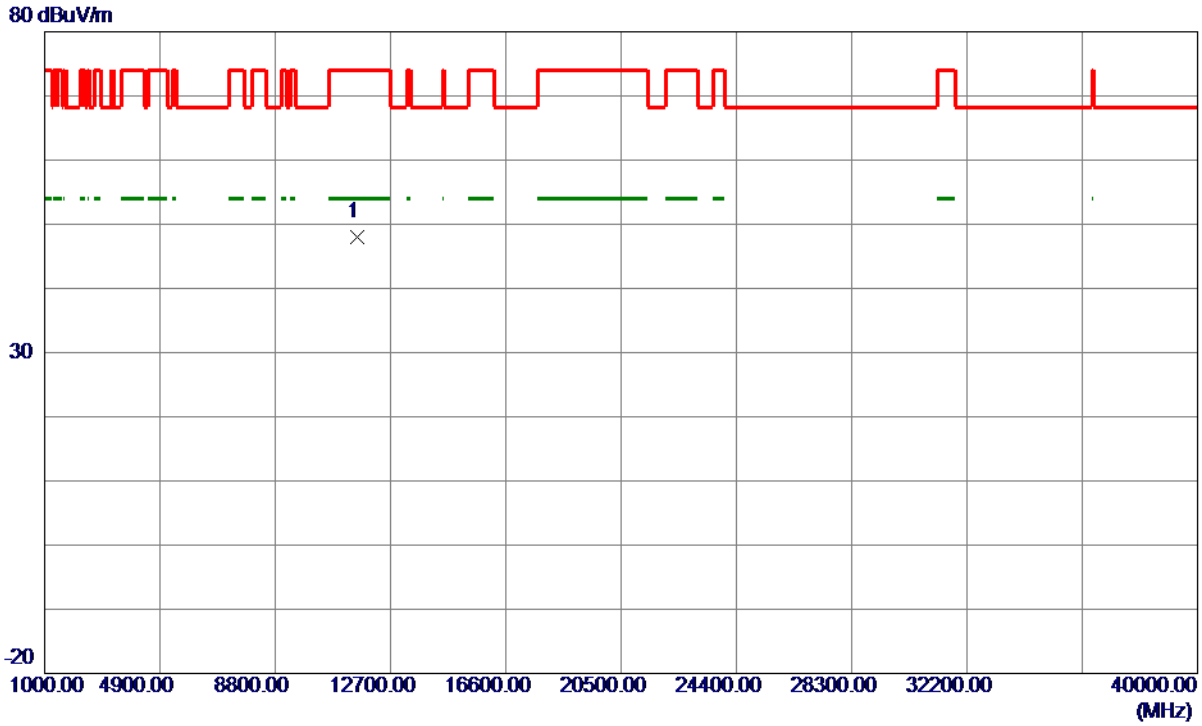


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5798.4000	75.98	38.77	114.75	122.20	-7.45	Peak	
2	5850.0000	42.86	38.91	81.77	122.20	-40.43	Peak	
3	5860.0000	36.08	38.94	75.02	109.40	-34.38	Peak	
4 *	5926.2000	28.19	39.10	67.29	68.20	-0.91	Peak	

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

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

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11590.0000	45.70	2.29	47.99	74.00	-26.01	Peak	

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