FCC Radio Test Report

FCC ID: KA2CS8635LHA1

This report concerns: Original Grant

Project No.	:	2103H005
Equipment	:	2K QHD Pan & Zoom Outdoor Wi-Fi Camera
Brand Name	:	D-Link
Test Model	:	DCS-8635LH
Series Model	:	N/A
Applicant	:	D-Link Corporation
Address	:	14420 Myford Road Suite 100 Irvine California United States 92606
Manufacturer	:	D-Link Corporation
Address	:	14420 Myford Road Suite 100 Irvine California United States 92606
Date of Receipt	:	Mar. 09, 2021
Date of Test	:	Mar. 09, 2021~Apr. 15, 2021
Issued Date	:	May 19, 2021
Report Version	:	R01
Test Sample	:	Engineering Sample No.: SH2021030889 for radiation; SH2021030888 for conducted; SH2021030887-5 for adapter
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.

Maker Qi

Prepared by : Maker Qi

Issac Song

Approved by : Issac Song

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.	May 13, 2021
R01	Revised report to address TCB's comments.	May 19, 2021

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)				
Standard(s) Section	**Test Item**	**Test Result**	**Judgement**	**Remark**
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS	------
15.407(a)	Maximum Output Power	APPENDIX F	PASS	------
15.407(a)	Power Spectral Density	APPENDIX G	PASS	------
15.203	Antenna Requirements	------	PASS	**NOTE (2)**
15.407(c)	Automatically Discontinue Transmission	------	PASS	**NOTE (3)**

Note:

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

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

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

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

☒ Access point device ☐ Client device

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 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. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
SH-C01	CISPR	150 kHz ~ 30 MHz	2.70

B. 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	21°C	43%	AC 120V/60Hz	Joven Xiong
Radiated Emissions-30 MHz to 1GHz	24°C	58%	AC 120V/60Hz	Forest Li
Radiated Emissions-Above 1000 MHz	24°C	58%	AC 120V/60Hz	Forest Li
Spectrum Bandwidth	21°C	53%	AC 120V/60Hz	Vince Zong
Maximum Output Power	21°C	53%	AC 120V/60Hz	Vince Zong
Power Spectral Density	21°C	53%	AC 120V/60Hz	Vince Zong

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	2K QHD Pan & Zoom Outdoor Wi-Fi Camera
Brand Name	D-Link
Test Model	DCS-8635LH
Series Model	N/A
Model Difference(s)	N/A
Software Version	1.00
Hardware Version	A1
Power Source	DC Voltage supplied from AC/DC adapter. #1 Brand/ Model: AMIGO/ AMS159A-1201000F #2 Brand/ Model: Keyu/ KA1201A-1201000DE
Power Rating	#1 I/P: 100-240V~50/60Hz 0.5A O/P: 12.0V ⎓ 1.0A 12.0W #2 I/P: 100-240V~50/60Hz 0.4A Max O/P: 12.0V ⎓ 1.0A 12.0W
Operation Frequency	UNII-1: 5150 MHz~5250 MHz UNII-2A: 5250 MHz~5350 MHz UNII-2C: 5470 MHz ~ 5600 MHz & 5650 MHz ~ 5725 MHz UNII-3: 5725 MHz~5850 MHz
Modulation Type	OFDM
Bit Rate of Transmitter	Up to 667Mbps Mbps
Maximum Conducted Output Power for UNII-1 (1TX)	IEEE 802.11a: 17.00 dBm (0.0501 W)
Maximum Conducted Output Power for UNII-2A (1TX)	IEEE 802.11a: 17.40 dBm (0.0550 W)
Maximum Conducted Output Power for UNII-2C (1TX)	IEEE 802.11a: 21.64 dBm (0.1459 W)
Maximum Conducted Output Power for UNII-3 (1TX)	IEEE 802.11a: 21.86 dBm (0.1535 W)
Maximum Conducted Output Power for UNII-1 (2TX)	IEEE 802.11n (HT20): 15.90 dBm (0.0389 W) IEEE 802.11n (HT40): 16.33 dBm (0.0430 W) IEEE 802.11ac (VHT20): 16.26 dBm (0.0423 W) IEEE 802.11ac (VHT40): 16.62 dBm (0.0459 W) IEEE 802.11ac (VHT80): 11.36 dBm (0.0137 W)
Maximum Conducted Output Power for UNII-2A (2TX)	IEEE 802.11n (HT20): 15.95 dBm (0.0394 W) IEEE 802.11n (HT40): 18.02 dBm (0.0634 W) IEEE 802.11ac (VHT20): 16.34 dBm (0.0431 W) IEEE 802.11ac (VHT40): 18.35 dBm (0.0684 W) IEEE 802.11ac (VHT80): 13.71 dBm (0.0235 W)
Maximum Conducted Output Power for UNII-2C (2TX)	IEEE 802.11n (HT20): 21.63 dBm (0.1455 W) IEEE 802.11n (HT40): 20.66 dBm (0.1164 W) IEEE 802.11ac (VHT20): 21.86 dBm (0.1535 W) IEEE 802.11ac (VHT40): 20.92 dBm (0.1236 W) IEEE 802.11ac (VHT80): 15.83 dBm (0.0383 W)
Maximum Conducted Output Power for UNII-3 (2TX)	IEEE 802.11n (HT20): 21.71 dBm (0.1478 W) IEEE 802.11n (HT40): 20.72 dBm (0.1180 W) IEEE 802.11ac (VHT20): 21.97 dBm (0.1574 W) IEEE 802.11ac (VHT40): 20.95 dBm (0.1245 W) IEEE 802.11ac (VHT80): 20.94 dBm (0.1242 W)

Note:

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

2. Channel List:

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

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

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

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

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	IFA	N/A	3.87	N/A
2	N/A	N/A	IFA	N/A	3.16	N/A

Note:

1. This EUT supports CDD, all antennas have unequal gains, any transmit signals are correlated with each other, so
   For power spectral density measurements, the Directional gain=10log[$(10^{G1/20}+10^{G2/20}+....+10^{GN/20})^2/N_{ANT}$]dBi,
   that is Directional gain=10log[$(10^{G1/20}+10^{G2/20}+....+10^{GN/20})^2/N_{ANT}$]dBi=6.53;
   Then, the UNII-1 power spectral density limited is 17-6.53+6=16.47, UNII-2A,UNII-2C power spectral density limit is 11-6.53+6=10.47, the UNII-3 power spectral density limit is 30-6.53+6=29.47.
   For power meansurements, Directional gain= GANT MAX.+Array Gain.Array Gain=0dB(NANT≤4), so the Directional gain=3.87
2. The antenna gain is provided by the manufacturer.

4. Table for Antenna Configuration:

Operating Mode / TX Mode	Ant. 1	Ant. 2	Ant. 1 + Ant. 2
802.11a	✓	✓	×
802.11n(20 MHz)	✓	✓	✓
802.11n(40 MHz)	✓	✓	✓
802.11ac(20 MHz)	✓	✓	✓
802.11ac(40 MHz)	✓	✓	✓
802.11ac(80 MHz)	✓	✓	✓

2.2 TEST MODES

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

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

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 20	TX AC(VHT20) 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 A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 18	TX AC (VHT80) Mode / CH106 (UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)

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

Note：

(1) For radiated emission below 1 GHz and AC Power Line Conducted Emissions test, all adapters had been pre-tested and in this report only recorded the worst case.

(2) For radiated emission below 1 GHz and AC Power Line Conducted Emissions test, the IEEE 802.11ac 20 channell 157 is found to be the worst case and recorded.

2.3 PARAMETERS OF TEST SOFTWARE

UNII-1 - 1TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	85	86	86

UNII-2A - 1TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	90	91	91

UNII-2C - 1TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11a	106	102	100.

UNII-3 - 1TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	100	100	103

UNII-1 - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11n (HT20)	83/82	85/84	86/90
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	89/88	90/94	

UNII-2A - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11n (HT20)	78/85	88/87	88/87
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	90/97	100/99	

UNII-2C - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11n (HT20)	103/101	93/96	98/96
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	99/97	96/91	93/93

UNII-3 - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11n (HT20)	92/90	95/93	95/96
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	92/93	95/93	

UNII-1 - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11ac (VHT20)	83/82	85/84	86/90
Test Frequency (MHz)	5190	5230	
IEEE 802.11ac (VHT40)	89/88	90/94	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	70/71		

UNII-2A - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11ac (VHT20)	78/85	88/87	88/87
Test Frequency (MHz)	5270	5310	
IEEE 802.11ac (VHT40)	90/97	100/99	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	82/85		

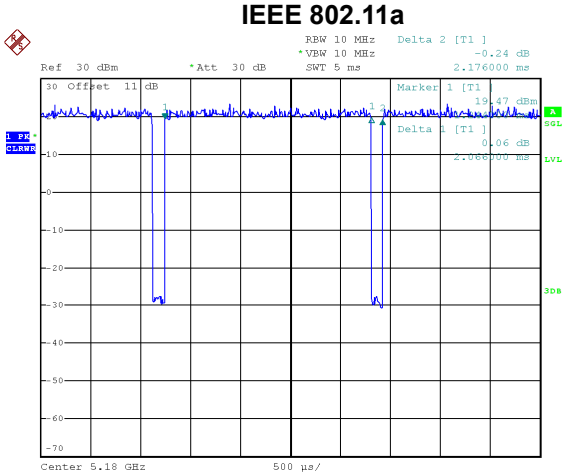
UNII-2C - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11ac (VHT20)	103/101	93/96	98/96
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11ac (VHT40)	99/97	96/91	93/93
Test Frequency (MHz)	5530		
IEEE 802.11ac (VHT80)	86/82		

UNII-3 - 2TX			
Test Software	IPOP_4.0		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11ac (VHT20)	92/90	95/93	95/96
Test Frequency (MHz)	5755	5795	
IEEE 802.11ac (VHT40)	92/93	95/93	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	95/93		

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.

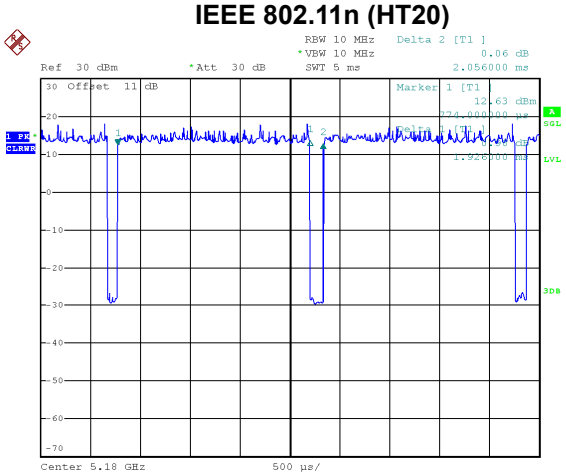
IEEE 802.11a



Date: 15.MAR.2021 16:44:59

Duty cycle = 2.066 ms / 2.176 ms = 94.94%
Duty Factor = 10 * log(1 / Duty cycle) = 0.23 dB

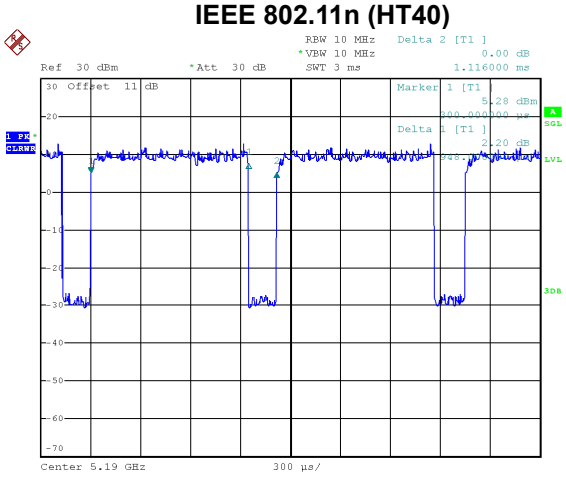
IEEE 802.11n (HT20)



Date: 15.MAR.2021 16:46:48

Duty cycle = 1.926 ms / 2.056 ms = 93.68%
Duty Factor = 10 * log(1 / Duty cycle) = 0.28 dB

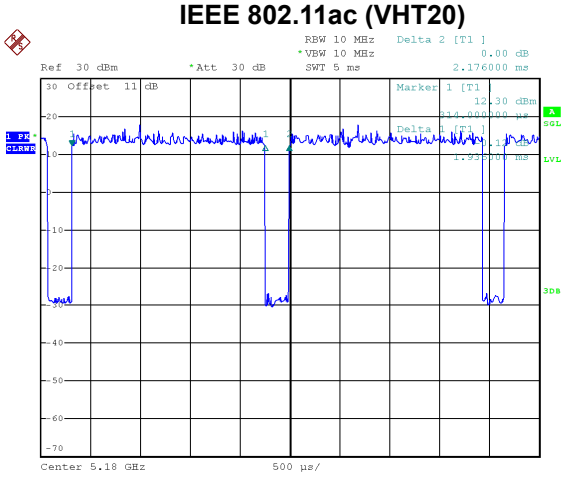
IEEE 802.11n (HT40)



Date: 15.MAR.2021 16:50:48

Duty cycle = 0.948 ms / 1.116 ms = 84.95%
Duty Factor = 10 * log(1 / Duty cycle) = 0.71 dB

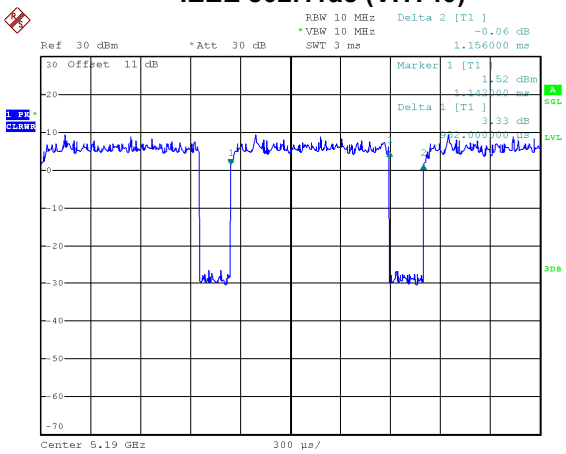
IEEE 802.11ac (VHT20)



Date: 15.MAR.2021 16:47:54

Duty cycle = 1.936 ms / 2.176 ms = 88.97%
Duty Factor = 10 * log(1 / Duty cycle) = 0.51 dB

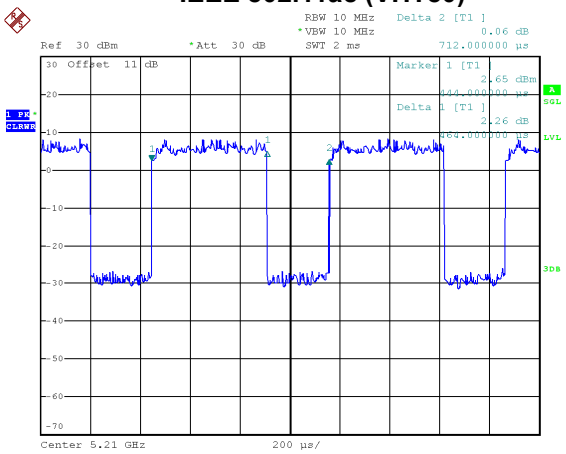
IEEE 802.11ac (VHT40)



Date: 16.MAR.2021 16:50:12

Duty cycle = 0.952 ms / 1.156 ms = 82.35%
Duty Factor = 10 * log(1 / Duty cycle) = 0.84 dB

IEEE 802.11ac (VHT80)



Date: 15.MAR.2021 16:52:38

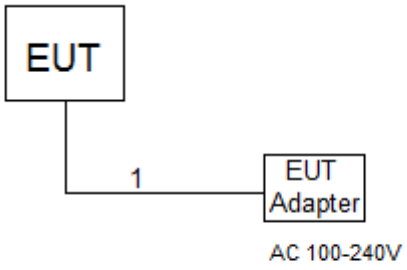
Duty cycle = 0.464 ms / 0.712ms = 65.17%
Duty Factor = 10 * log(1 / Duty cycle) = 1.86 dB

NOTE:
For IEEE 802.11a, IEEE 802.11n (HT20) and IEEE 802.11ac (VHT20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

For IEEE 802.11ac (VHT80):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 kHz (Duty cycle < 98%).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC	N/A	N/A	2M

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

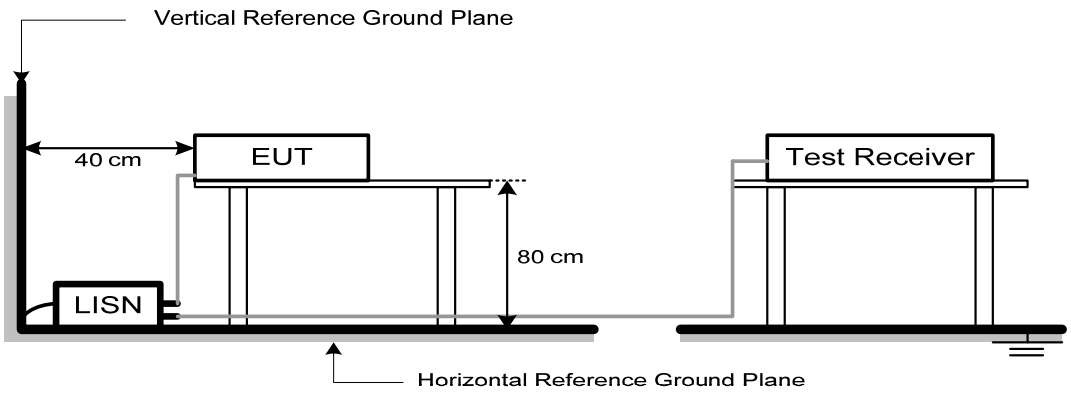
3.2 TEST PROCEDURE

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	68.2
5250-5350	-27	68.2
5470-5725	-27	68.2
5725-5850	-27 NOTE (2)	68.2
	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.

(3) There is no limit to the main frequency.

4.2 TEST PROCEDURE

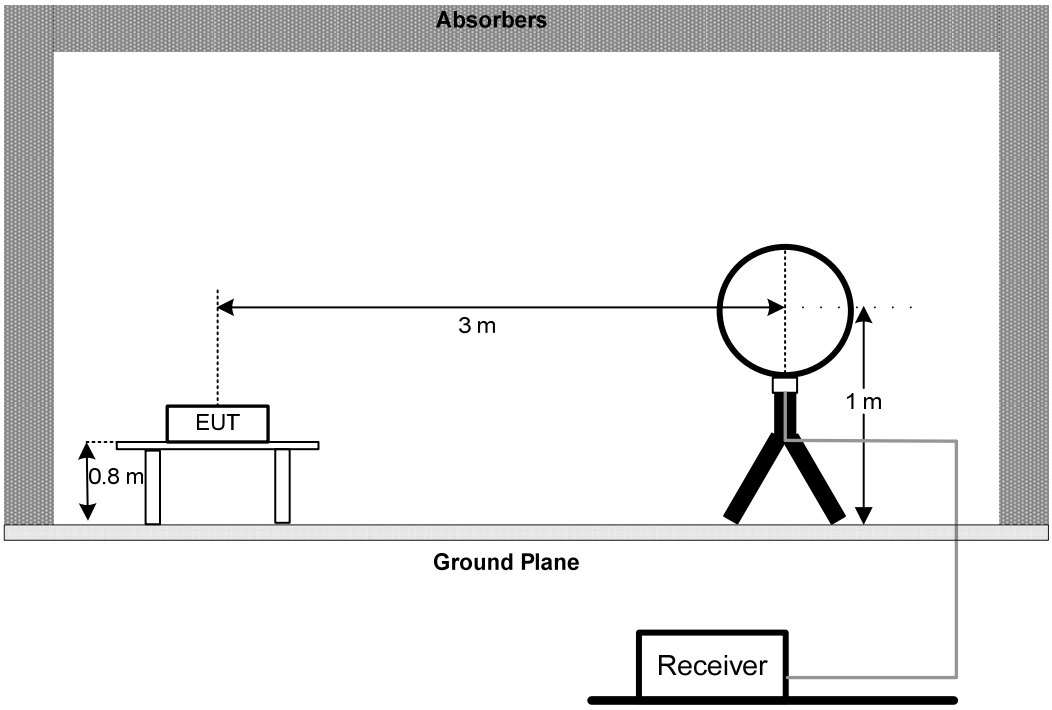
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance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

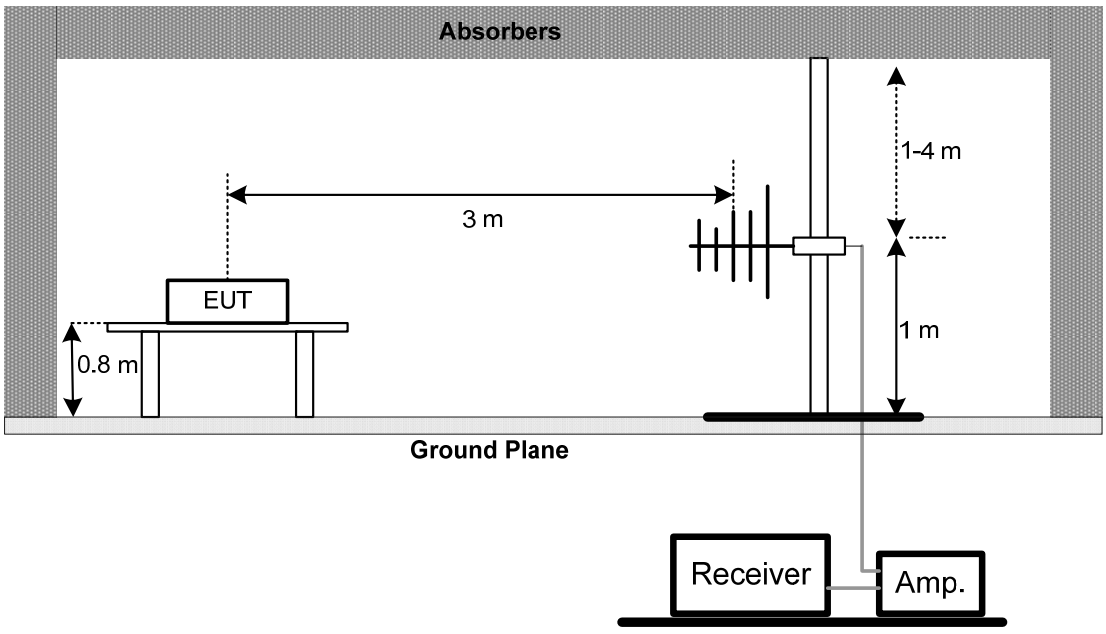
No deviation

4.4 TEST SETUP

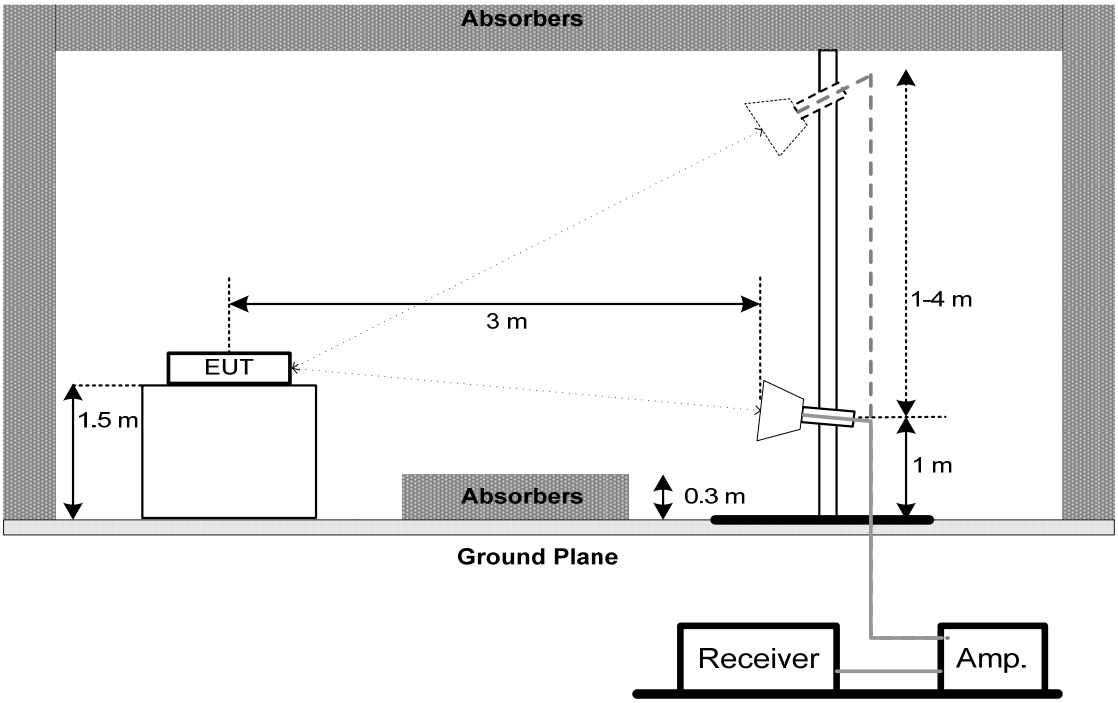
9 kHz to 30 MHz



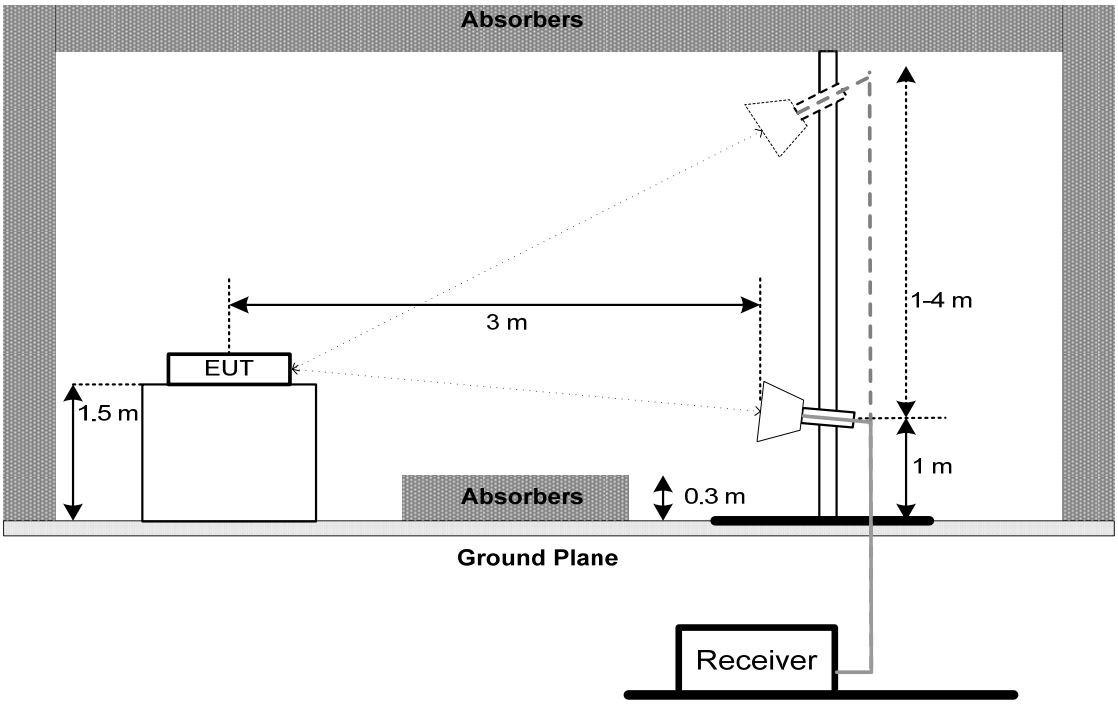
30 MHz to 1 GHz



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:

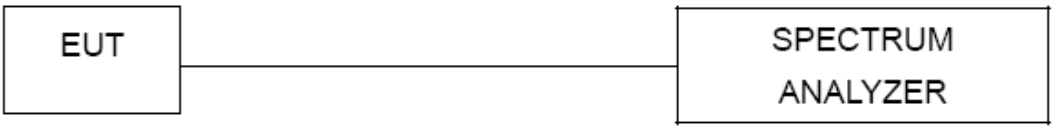
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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.

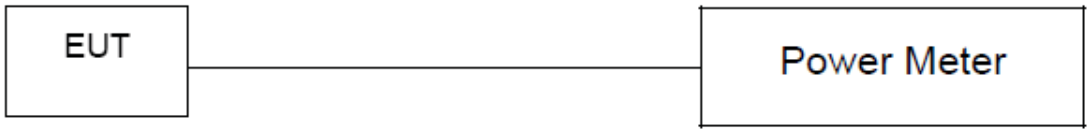
6.2 TEST PROCEDURE

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

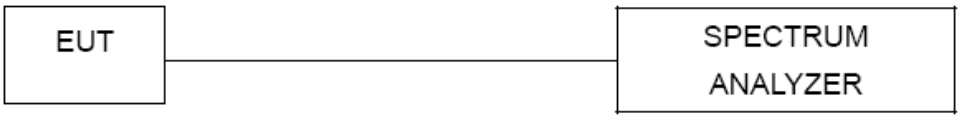
Note:

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.

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 Mar. 20, 2022
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Aug. 23, 2021
3	EMI Test Receiver	R&S	ESCI	100082	Mar. 28, 2021 Mar. 21, 2022
4	50Ω coaxial switch	Anritsu	MP59B	6201750902	Mar. 21, 2021 Mar. 21, 2022
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 - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	719	Mar. 28, 2021 Mar. 26, 2022
2	Pre-Amplifier	emci	EMC9135	980400	Mar. 21, 2021 Mar. 20, 2022
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 21, 2021 Mar. 21, 2022
4	Attenuator	emci	EMCI-N-6-06	AT-N0644	Apr. 13, 2021 Apr. 11, 2022
5	Cable	7m	EMC104-SM-SM-7000	170330	Apr. 13, 2021 Apr. 11, 2022
6	Cable	1m	EMC104-SM-SM-1000	170331	Apr. 13, 2021 Apr. 11, 2022
7	Cable	3.5m	EMC104-SM-NM-3500	170621	N/A
8	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	Mar. 28, 2021 Mar. 26, 2022

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-1787	Apr. 02, 2021 Mar. 26, 2022
2	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C	00203919	Jul. 20, 2021
3	Pre-Amplifier	emci	EMC012645SE	980421	May. 11, 2021
4	Pre-Amplifier	emci	EMC184045SE	980409	Mar. 21, 2021 Mar. 21, 2022
5	EXA Spectrum Analyzer	Keysight	N9010A	MY56480559	Mar. 21, 2021 Mar. 21, 2022
6	MXE EMI Receiver	Keysight	N9038A	MY56400088	Mar. 21, 2021 Mar. 21, 2022
7	Cable	7m	EMC104-SM-SM-7000	170330	Apr. 13, 2021 Apr. 11, 2022
8	Cable	1m	EMC104-SM-SM-1000	170331	Apr. 13, 2021 Apr. 11, 2022
9	Cable	3.5m	EMC104-SM-NM-3500	170621	Apr. 13, 2021 Apr. 11, 2022
10	Cable	0.8m	EMC102-SM-SM-800	170335	Apr. 13, 2021 Apr. 11, 2022
11	Cable	6m	EMC102-SM-SM-6000	170336	Apr. 13, 2021 Apr. 11, 2022
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
2	Attenuator	JUK	ATT-2W6G-S-10	N/A	N/A

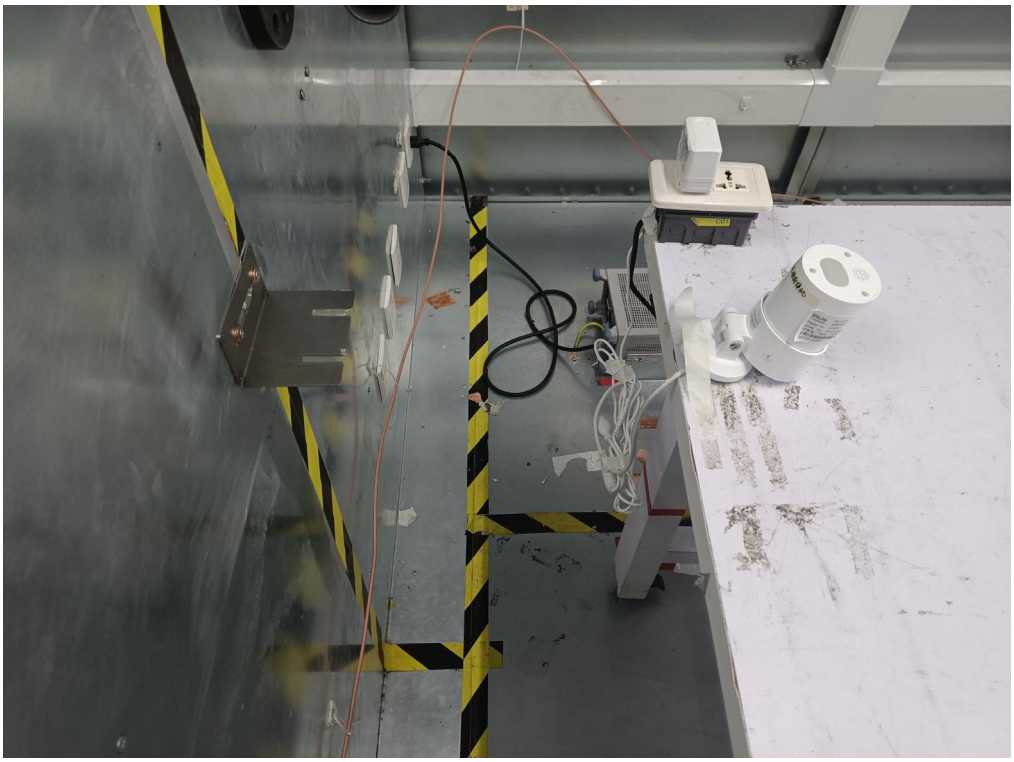
Conducted Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	May 06, 2021
2	Attenuator	JUK	ATT-2W6G-S-10	N/A	N/A

Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	May 06, 2021
2	Attenuator	JUK	ATT-2W6G-S-10	N/A	N/A

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

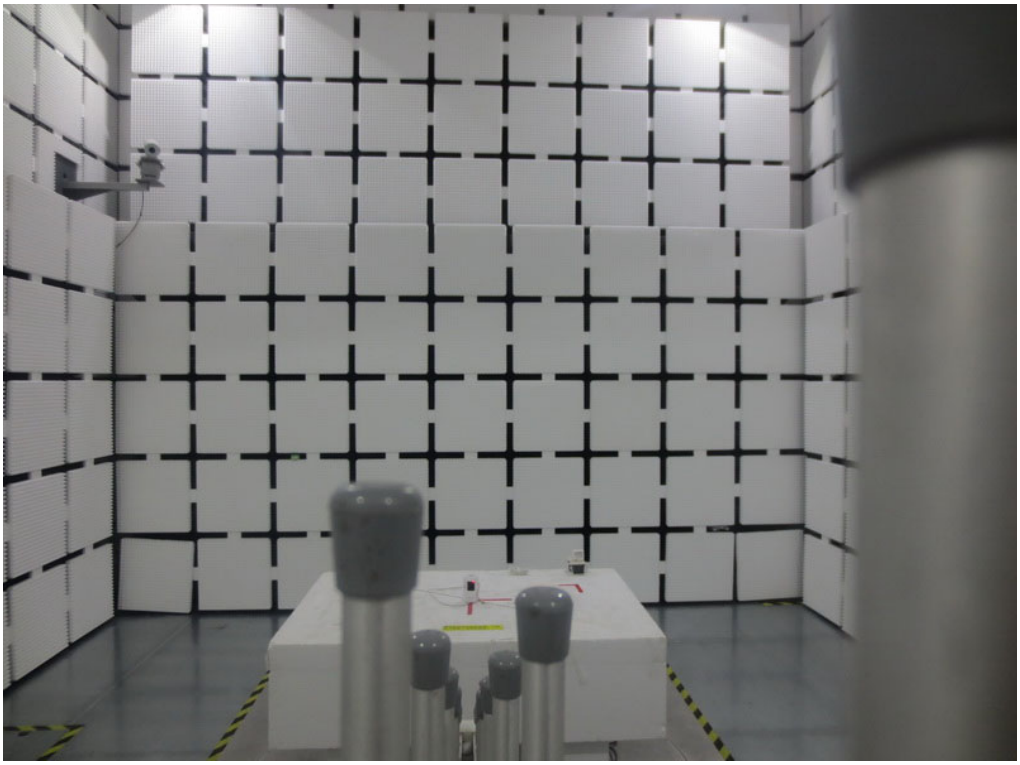
9. EUT TEST PHOTOS

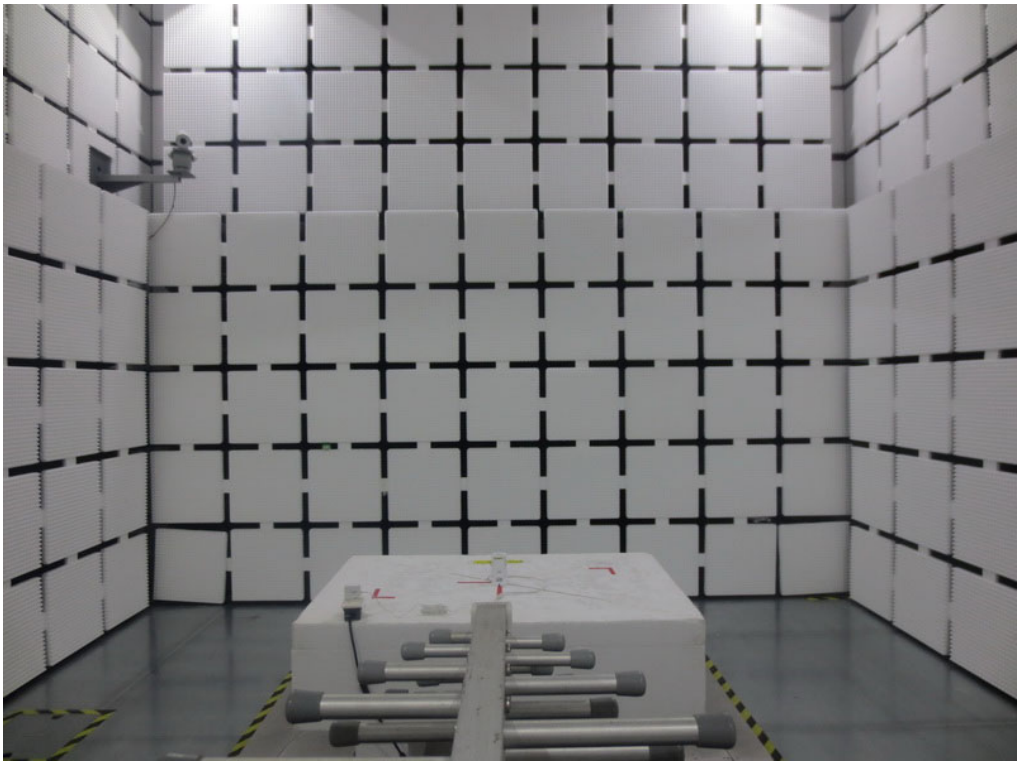
Conducted Emissions Test Photos



Radiated Emissions Test Photos

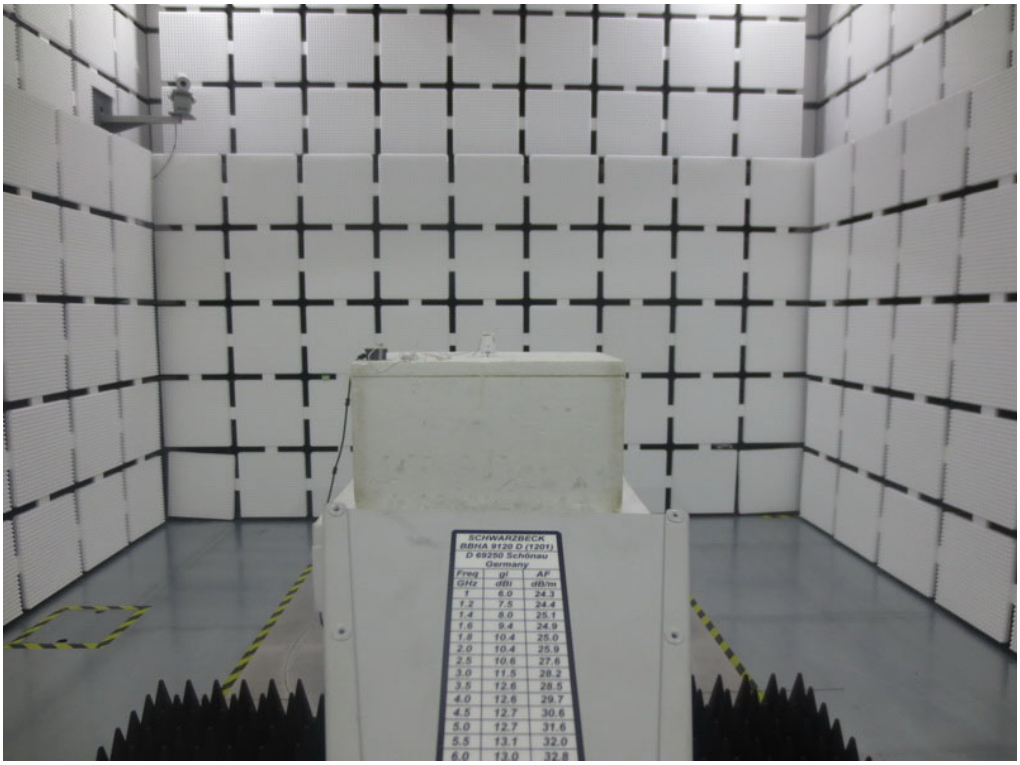
30 MHz to 1 GHz

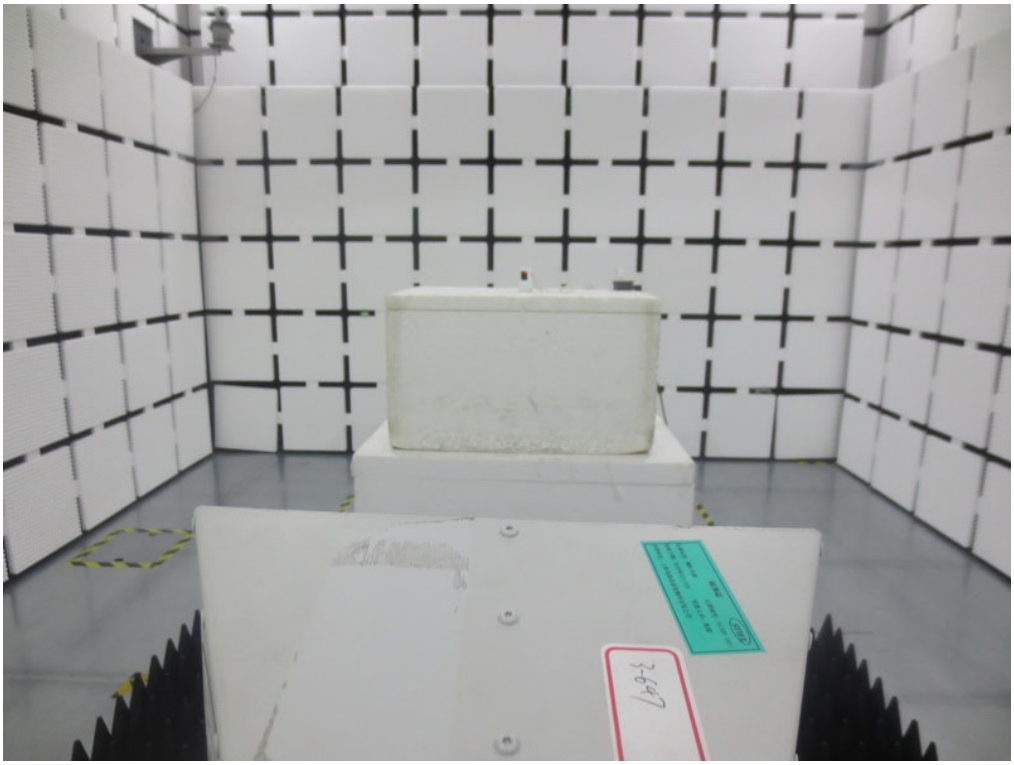




Radiated Emissions Test Photos

Above 1 GHz

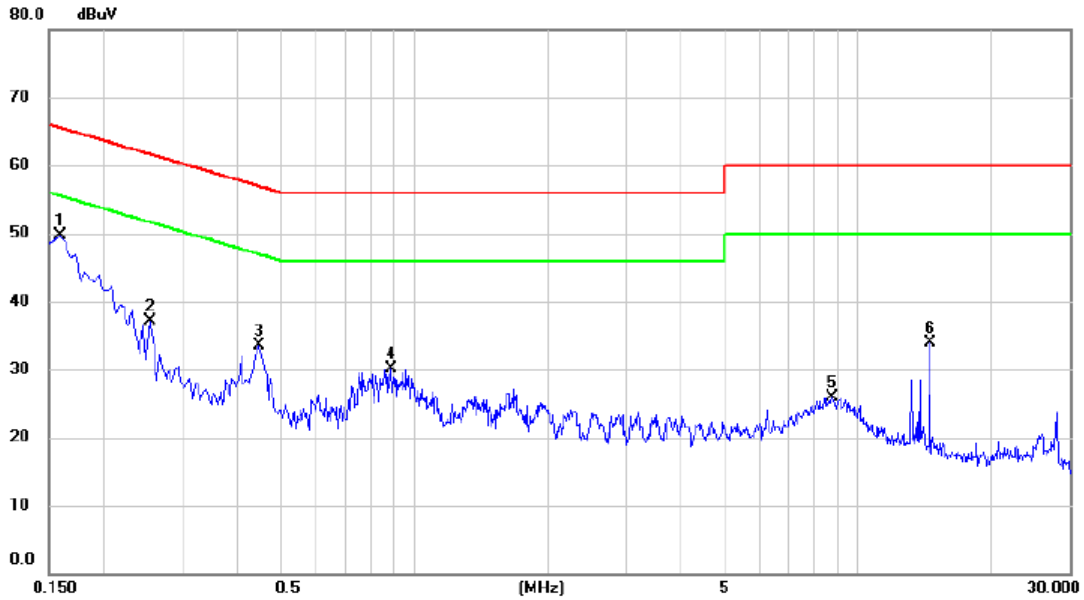




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	UNII-3_TX AC (VHT20) Mode 5785 MHz

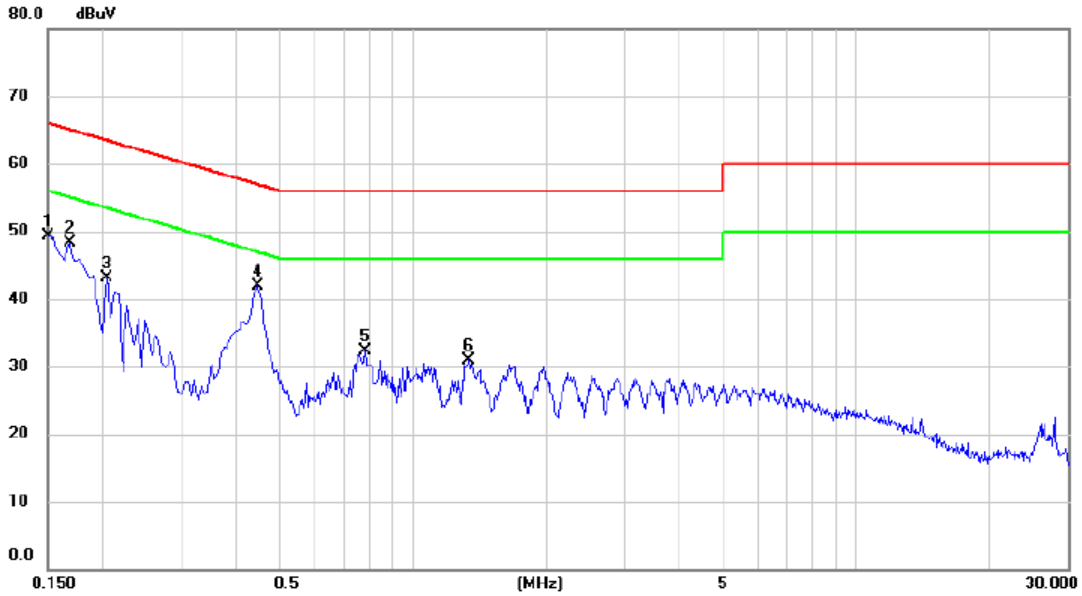
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1590	39.89	9.72	49.61	65.52	-15.91	peak	
2		0.2535	27.43	9.76	37.19	61.64	-24.45	peak	
3		0.4470	23.71	9.78	33.49	56.93	-23.44	peak	
4		0.8880	20.28	9.82	30.10	56.00	-25.90	peak	
5		8.7450	15.58	10.23	25.81	60.00	-34.19	peak	
6		14.5050	23.44	10.45	33.89	60.00	-26.11	peak	

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

Test Mode:	UNII-3_TX AC (VHT20) Mode 5785 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	39.68	9.68	49.36	66.00	-16.64	peak	
2		0.1680	38.58	9.70	48.28	65.06	-16.78	peak	
3		0.2040	33.43	9.71	43.14	63.45	-20.31	peak	
4	*	0.4470	32.09	9.76	41.85	56.93	-15.08	peak	
5		0.7800	22.59	9.81	32.40	56.00	-23.60	peak	
6		1.3380	21.16	9.84	31.00	56.00	-25.00	peak	

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

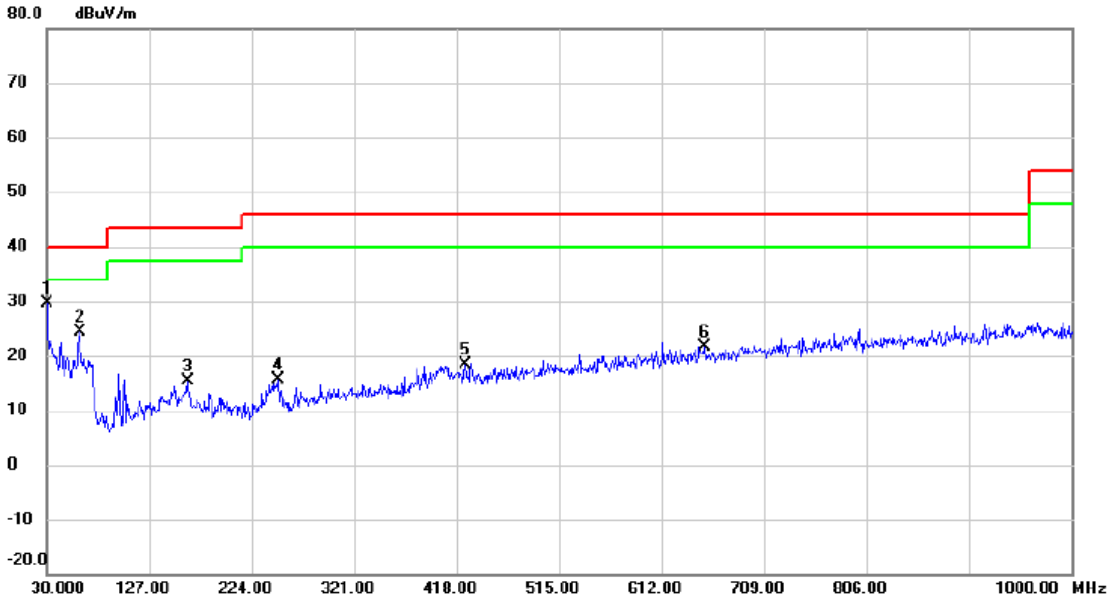
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Note: 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:	UNII-3_TX AC (VHT20) Mode 5785 MHz

Vertical

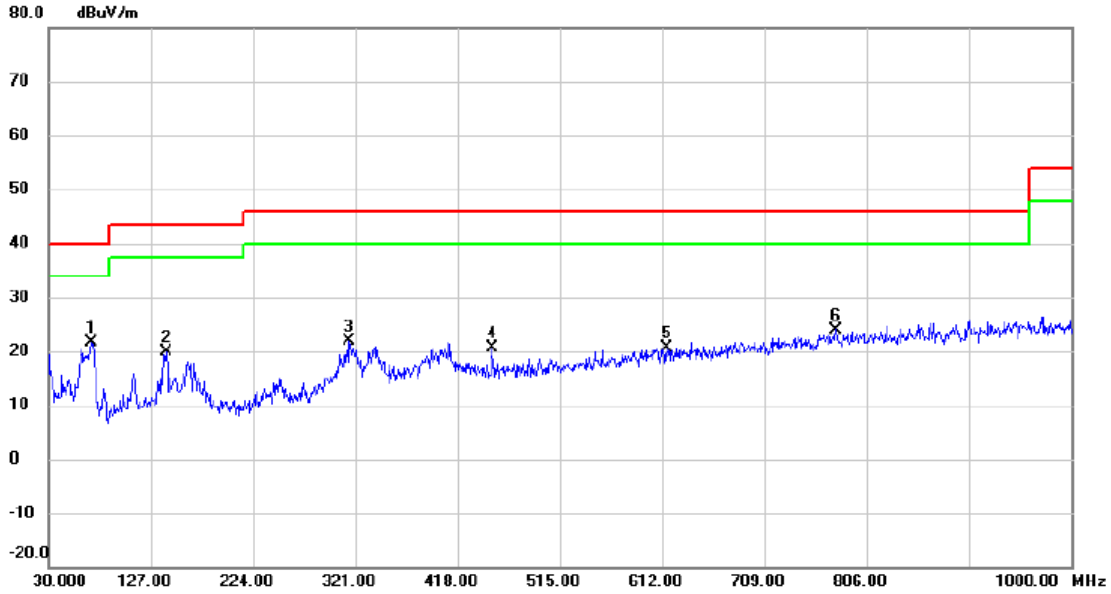


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	30.0000	48.12	-18.45	29.67	40.00	-10.33	peak	
2		61.5250	41.63	-17.36	24.27	40.00	-15.73	peak	
3		163.3750	31.42	-16.15	15.27	43.50	-28.23	peak	
4		249.2200	33.00	-17.38	15.62	46.00	-30.38	peak	
5		426.2450	31.01	-12.72	18.29	46.00	-27.71	peak	
6		652.2550	30.23	-8.53	21.70	46.00	-24.30	peak	

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

Test Mode:	UNII-3_TX AC (VHT20) Mode 5785 MHz

Horizontal



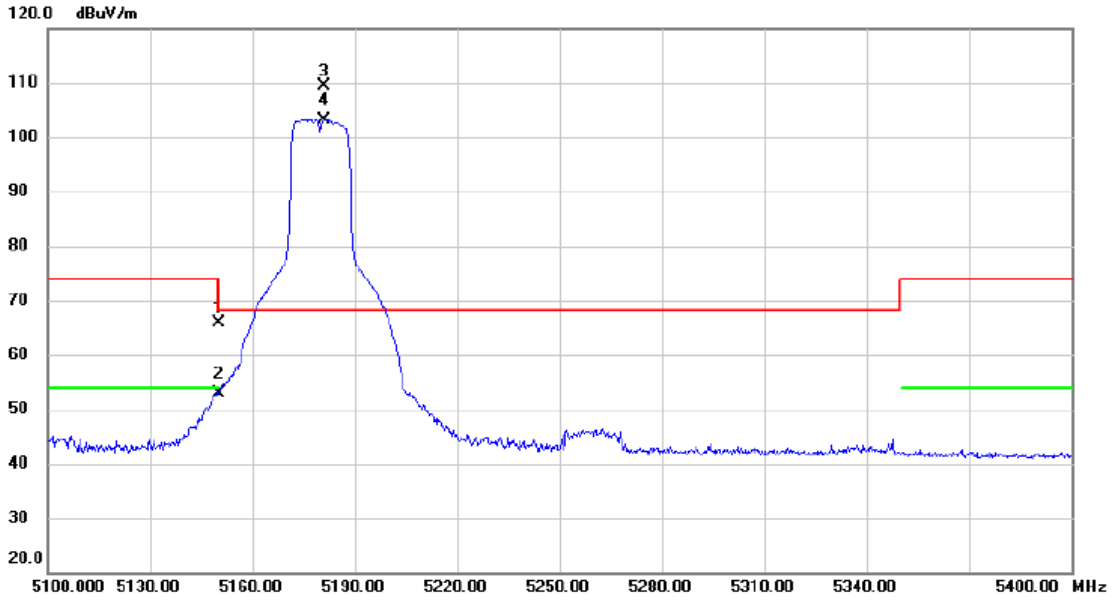
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	70.2550	40.20	-18.64	21.56	40.00	-18.44	peak	
2		141.5500	36.62	-16.72	19.90	43.50	-23.60	peak	
3		315.1800	37.05	-15.18	21.87	46.00	-24.13	peak	
4		451.4650	32.45	-11.92	20.53	46.00	-25.47	peak	
5		615.8800	29.61	-8.98	20.63	46.00	-25.37	peak	
6		776.9000	30.80	-6.80	24.00	46.00	-22.00	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

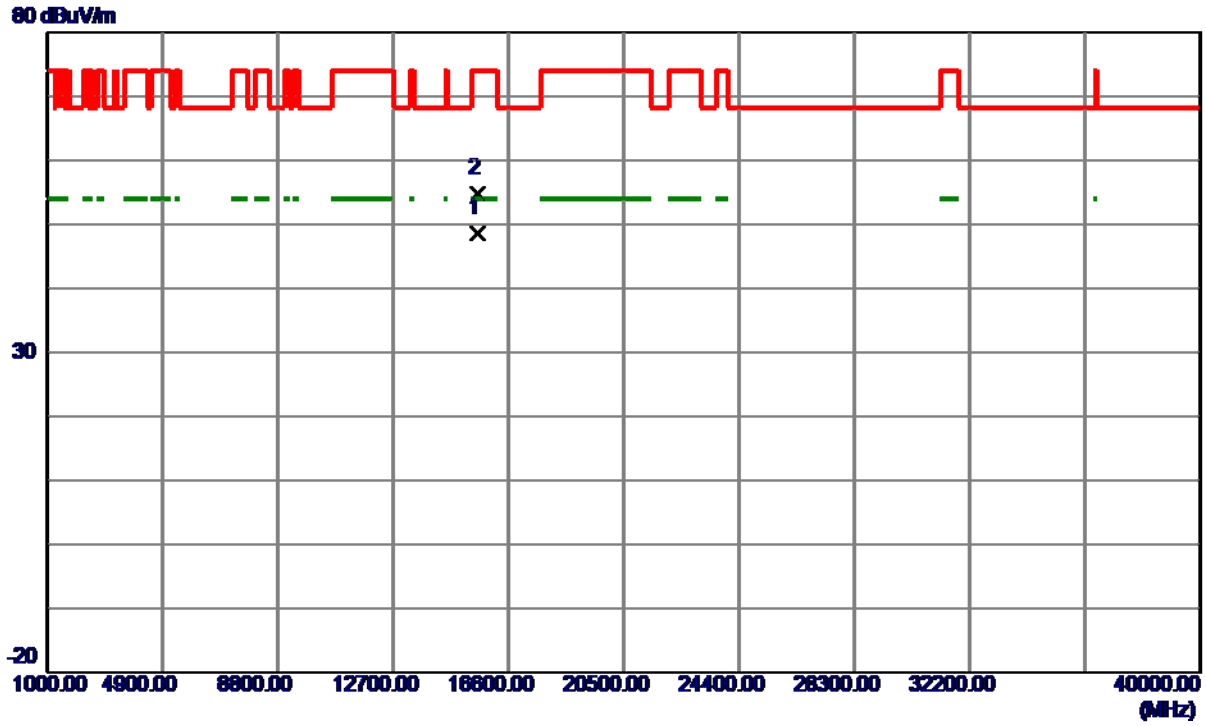


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	27.93	37.88	65.81	74.00	-8.19	peak	
2		5150.000	15.07	37.88	52.95	54.00	-1.05	AVG	
3	*	5181.150	71.59	37.75	109.34	68.20	41.14	peak	
4	X	5181.150	65.50	37.75	103.25	68.20	35.05	AVG	

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

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

Vertical

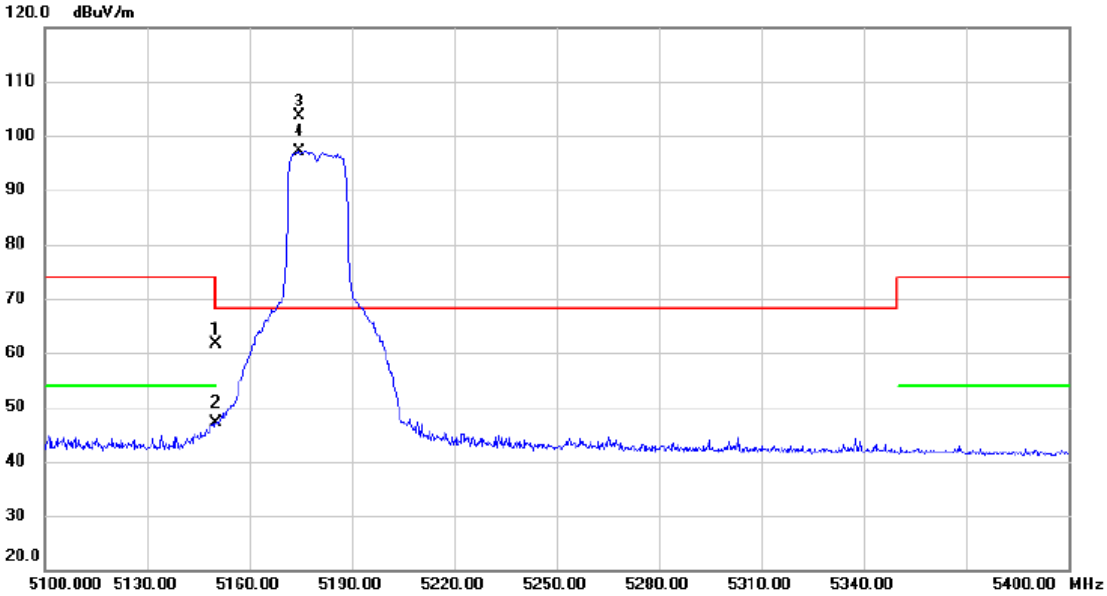


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	15541.8650	45.65	3.01	48.66	54.00	-5.34	AVG	
2	15543.1000	51.75	3.01	54.76	74.00	-19.24	Peak	

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

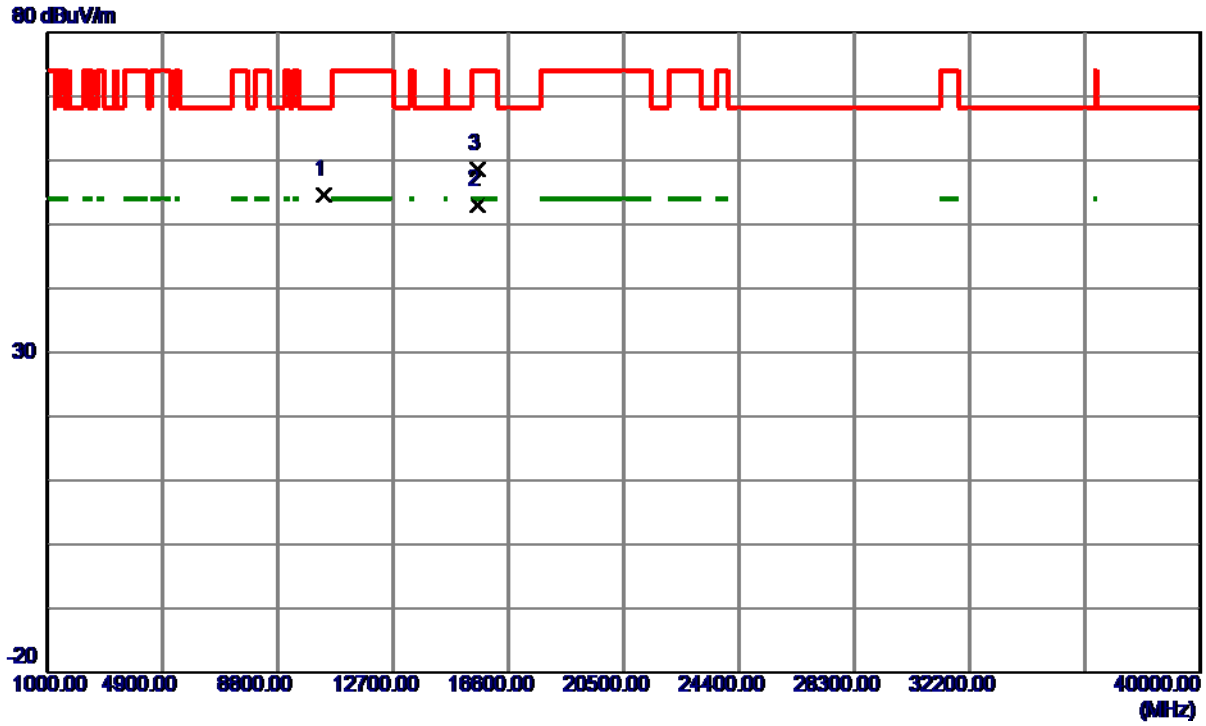


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	23.80	37.88	61.68	74.00	-12.32	peak	
2		5150.000	9.28	37.88	47.16	54.00	-6.84	AVG	
3	*	5174.700	65.84	37.78	103.62	68.20	35.42	peak	
4	X	5174.700	59.29	37.78	97.07	68.20	28.87	AVG	

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

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

Horizontal

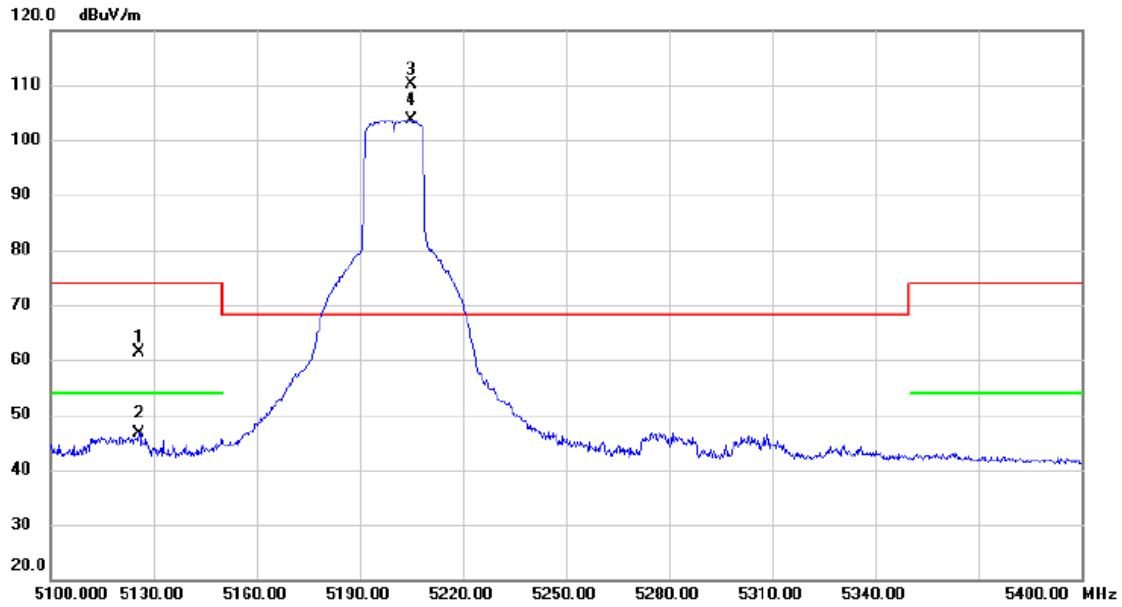


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10360.0000	52.95	1.65	54.60	68.20	-13.60	Peak	
2 *	15541.5580	49.90	3.01	52.91	54.00	-1.09	AVG	
3	15547.0000	55.60	3.00	58.60	74.00	-15.40	Peak	

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

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

Vertical

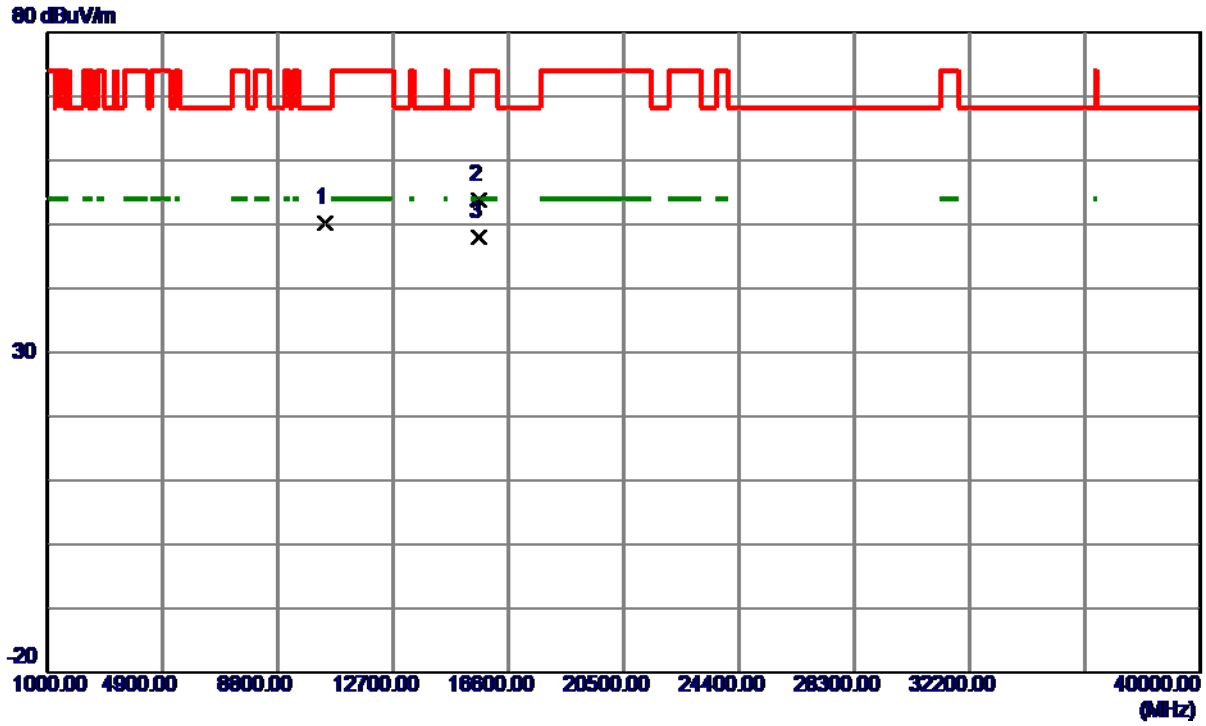


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5125.950	23.33	37.97	61.30	74.00	-12.70	peak	
2		5125.950	8.64	37.97	46.61	54.00	-7.39	AVG	
3	*	5204.850	72.48	37.67	110.15	68.20	41.95	peak	
4	X	5204.850	65.90	37.67	103.57	68.20	35.37	AVG	

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

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

Vertical

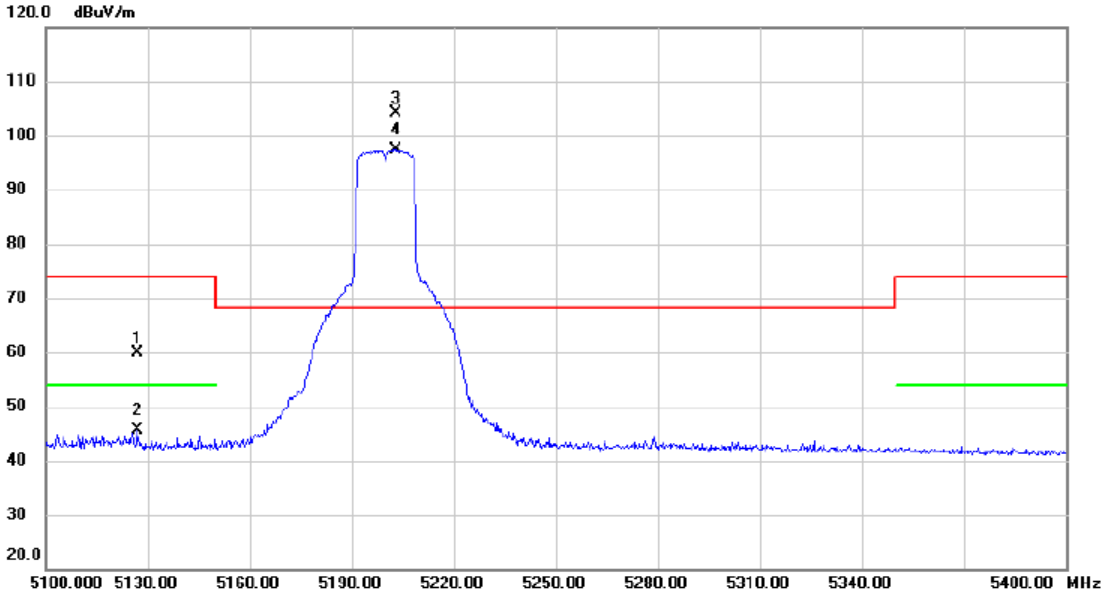


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10395.1000	48.54	1.71	50.25	68.20	-17.95	Peak	
2	15586.0000	50.81	2.90	53.71	74.00	-20.29	Peak	
3 *	15599.9150	45.22	2.87	48.09	54.00	-5.91	AVG	

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

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

Horizontal

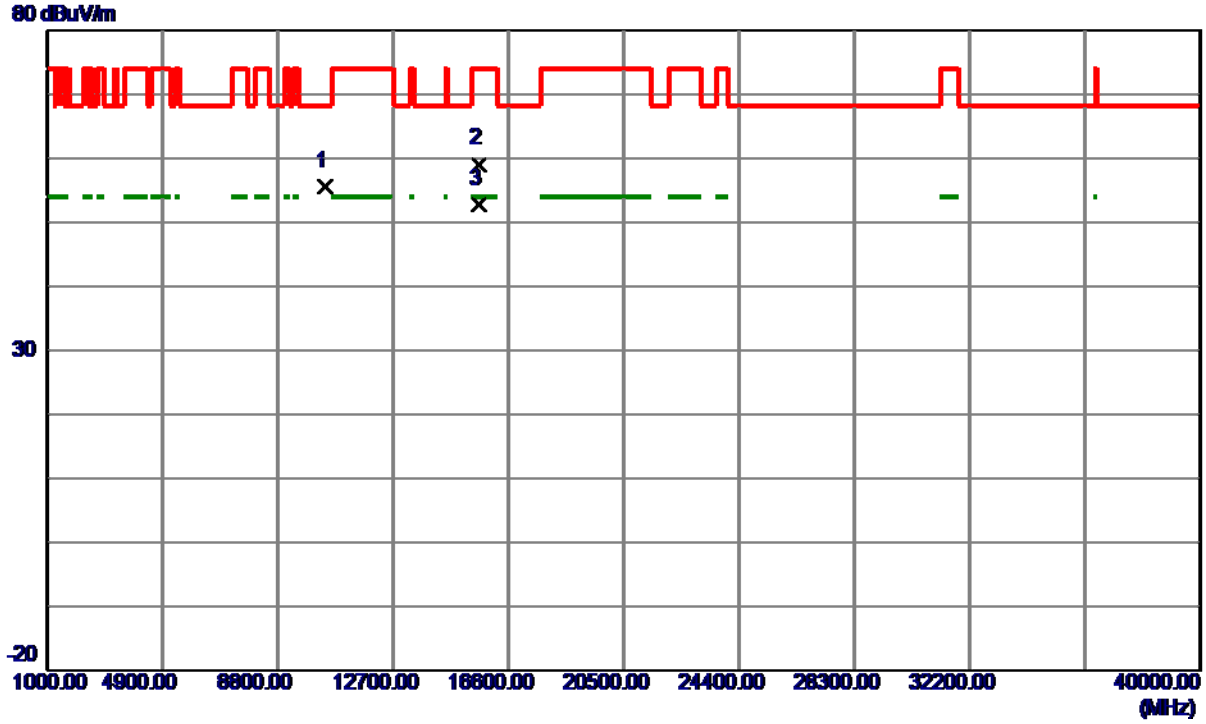


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5126.850	21.95	37.97	59.92	74.00	-14.08	peak	
2		5126.850	7.58	37.97	45.55	54.00	-8.45	AVG	
3	*	5202.900	66.53	37.67	104.20	68.20	36.00	peak	
4	X	5202.900	59.63	37.67	97.30	68.20	29.10	AVG	

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

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

Horizontal

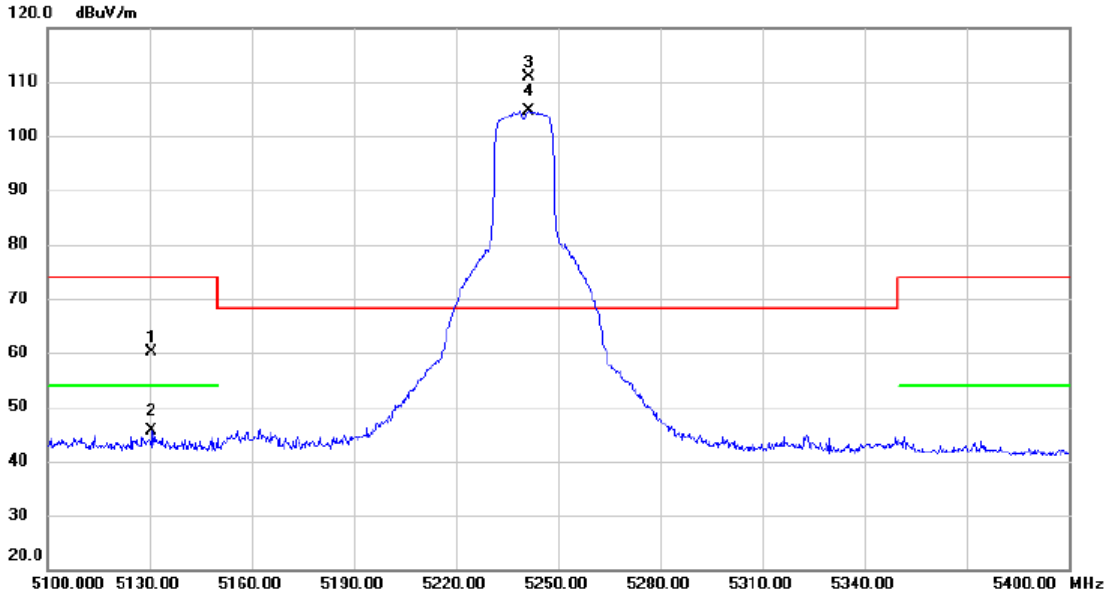


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10397.0500	53.80	1.71	55.51	68.20	-12.69	Peak	
2	15597.7000	56.22	2.88	59.10	74.00	-14.90	Peak	
3 *	15597.7000	49.85	2.88	52.73	54.00	-1.27	AVG	

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

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

Vertical

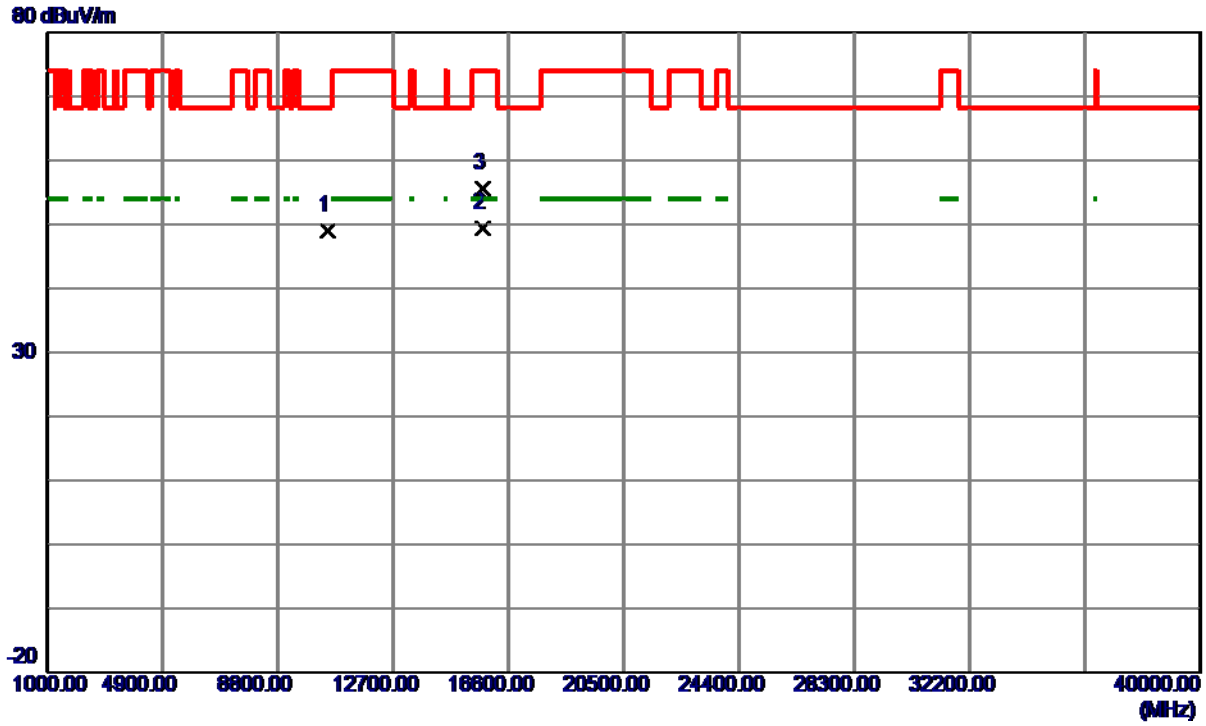


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5130.750	22.14	37.95	60.09	74.00	-13.91	peak	
2		5130.750	7.66	37.95	45.61	54.00	-8.39	AVG	
3	*	5241.450	73.21	37.62	110.83	68.20	42.63	peak	
4	X	5241.450	66.97	37.62	104.59	68.20	36.39	AVG	

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

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

Vertical

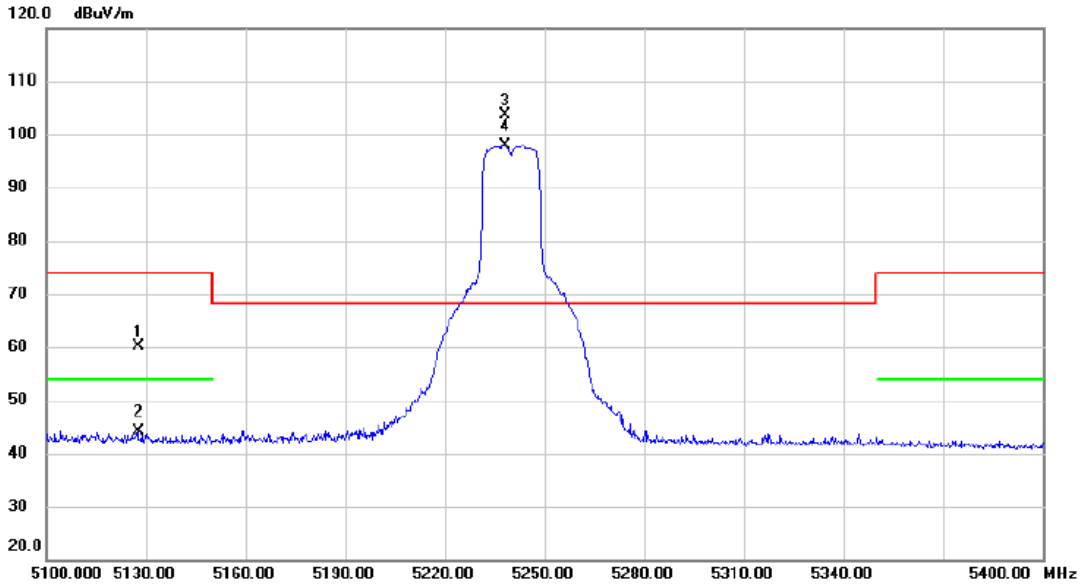


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10478.9500	47.16	1.80	48.96	68.20	-19.24	Peak	
2 *	15716.2350	46.60	2.75	49.35	54.00	-4.65	AVG	
3	15724.4500	52.94	2.74	55.68	74.00	-18.32	Peak	

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

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

Horizontal

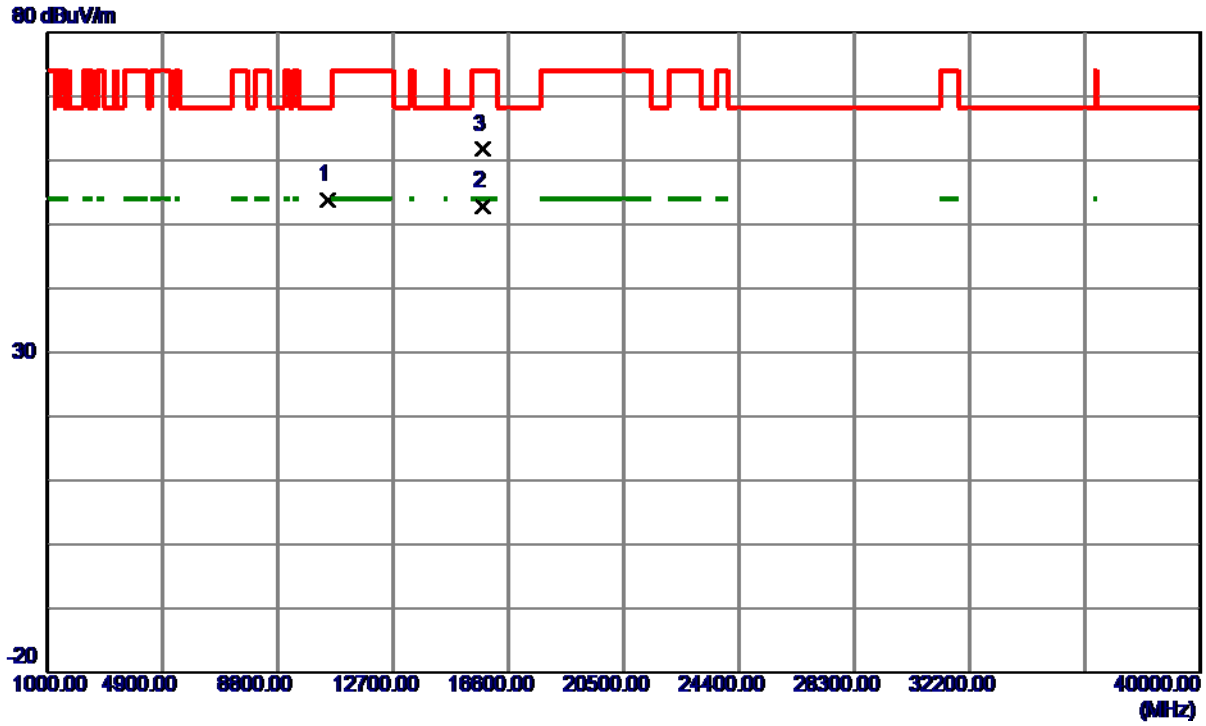


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5127.750	22.11	37.96	60.07	74.00	-13.93	peak	
2		5127.750	6.28	37.96	44.24	54.00	-9.76	AVG	
3	*	5238.000	66.12	37.63	103.75	68.20	35.55	peak	
4	X	5238.000	60.23	37.63	97.86	68.20	29.66	AVG	

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

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

Horizontal

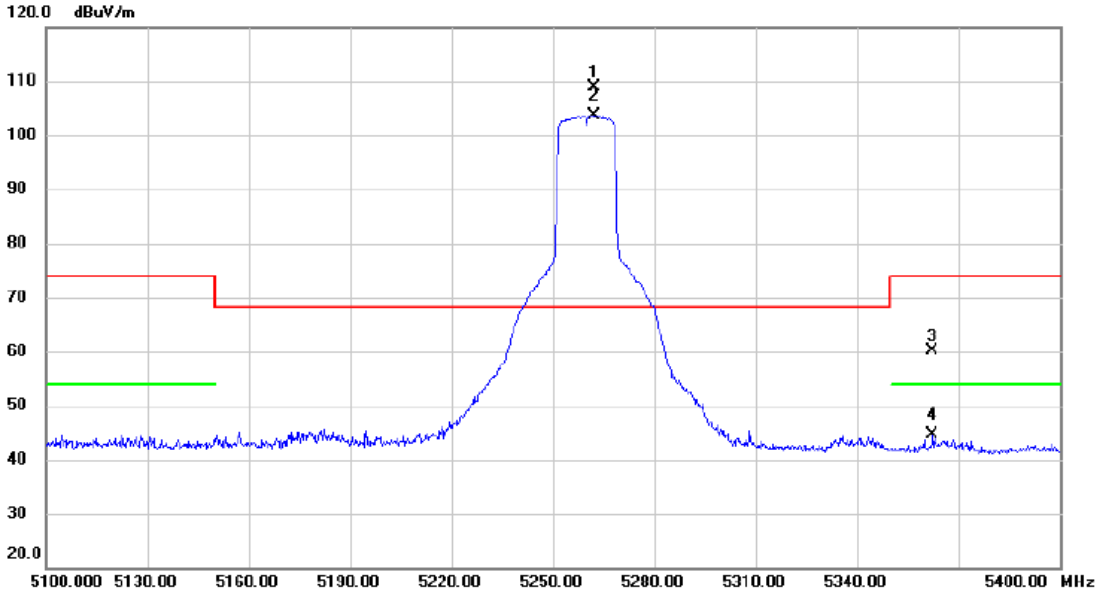


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10478.9500	52.08	1.80	53.88	68.20	-14.32	Peak	
2 *	15725.1040	50.14	2.74	52.88	54.00	-1.12	AVG	
3	15728.3500	58.96	2.74	61.70	74.00	-12.30	Peak	

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

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

Vertical

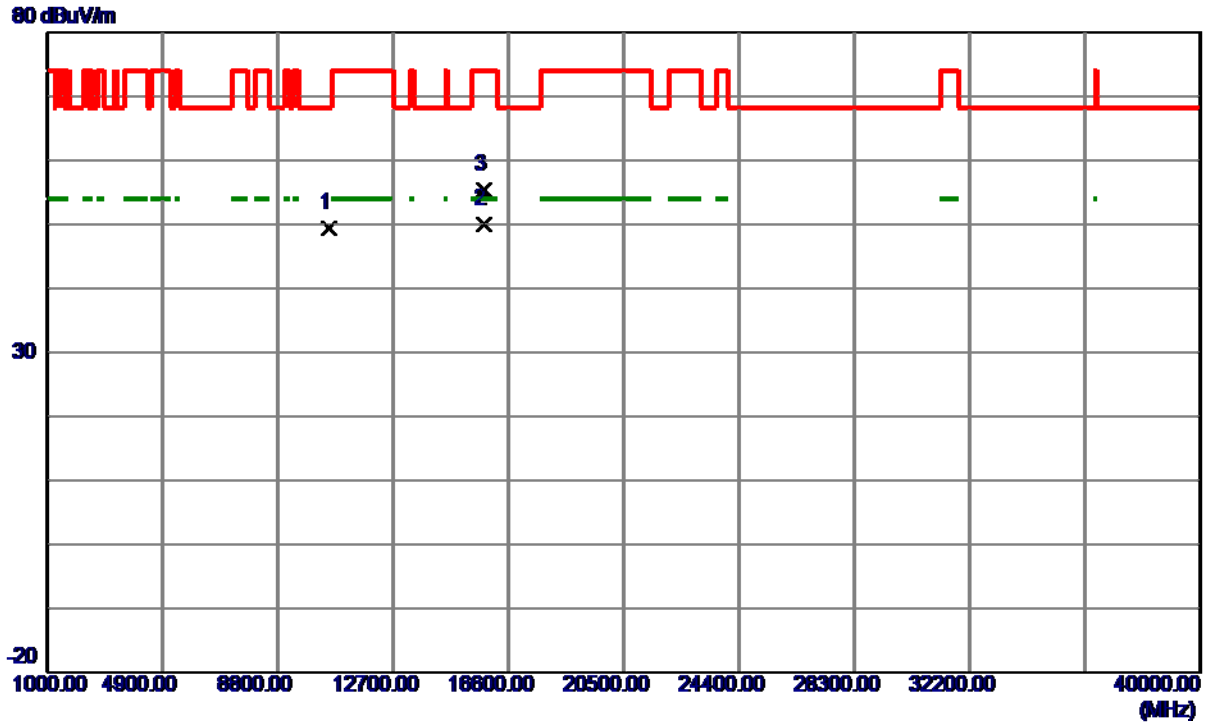


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5262.300	71.34	37.59	108.93	68.20	40.73	peak	
2	X	5262.300	65.96	37.59	103.55	68.20	35.35	AVG	
3		5362.350	22.28	37.78	60.06	74.00	-13.94	peak	
4		5362.350	6.77	37.78	44.55	54.00	-9.45	AVG	

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

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

Vertical

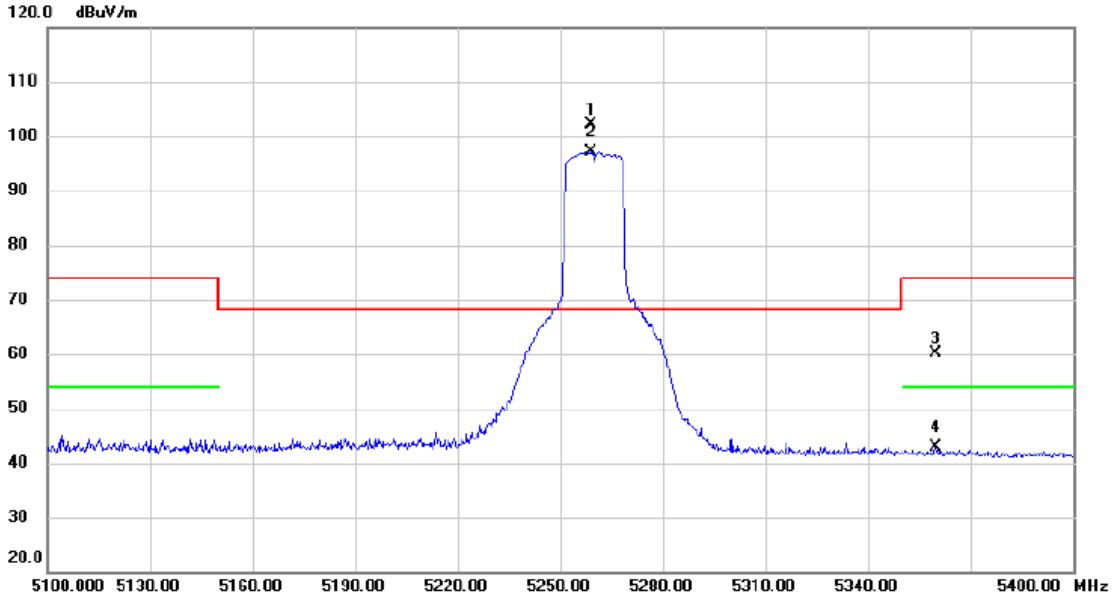


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10521.8500	47.62	1.84	49.46	68.20	-18.74	Peak	
2 *	15780.6150	47.22	2.69	49.91	54.00	-4.09	AVG	
3	15781.0000	52.74	2.69	55.43	74.00	-18.57	Peak	

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

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

Horizontal

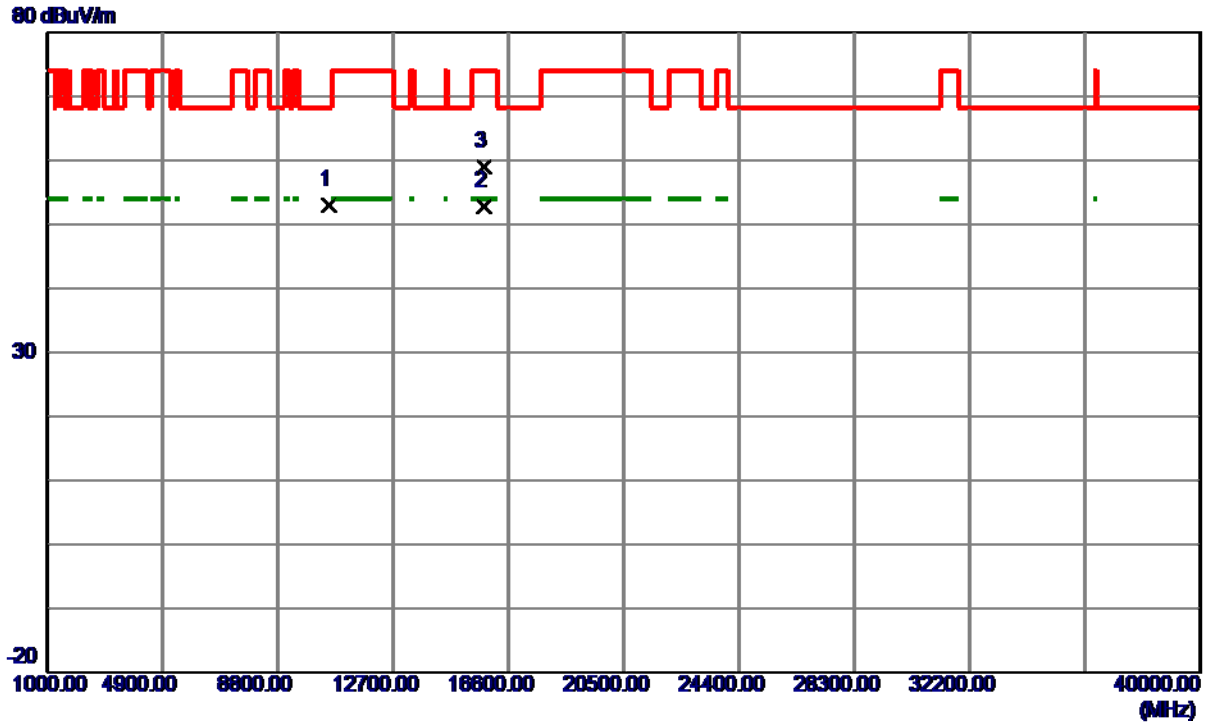


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5259.150	64.44	37.60	102.04	68.20	33.84	peak	
2	X	5259.150	59.53	37.60	97.13	68.20	28.93	AVG	
3		5359.950	22.25	37.78	60.03	74.00	-13.97	peak	
4		5359.950	5.01	37.78	42.79	54.00	-11.21	AVG	

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

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

Horizontal

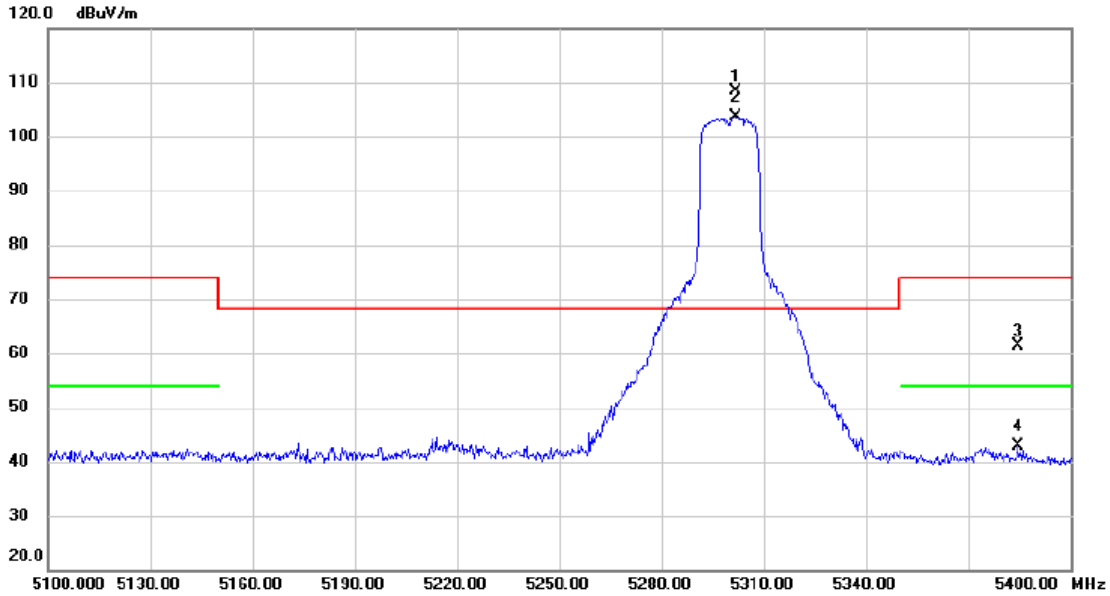


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10521.8500	51.17	1.84	53.01	68.20	-15.19	Peak	
2 *	15782.6530	50.03	2.68	52.71	54.00	-1.29	AVG	
3	15782.9500	56.28	2.68	58.96	74.00	-15.04	Peak	

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

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

Vertical

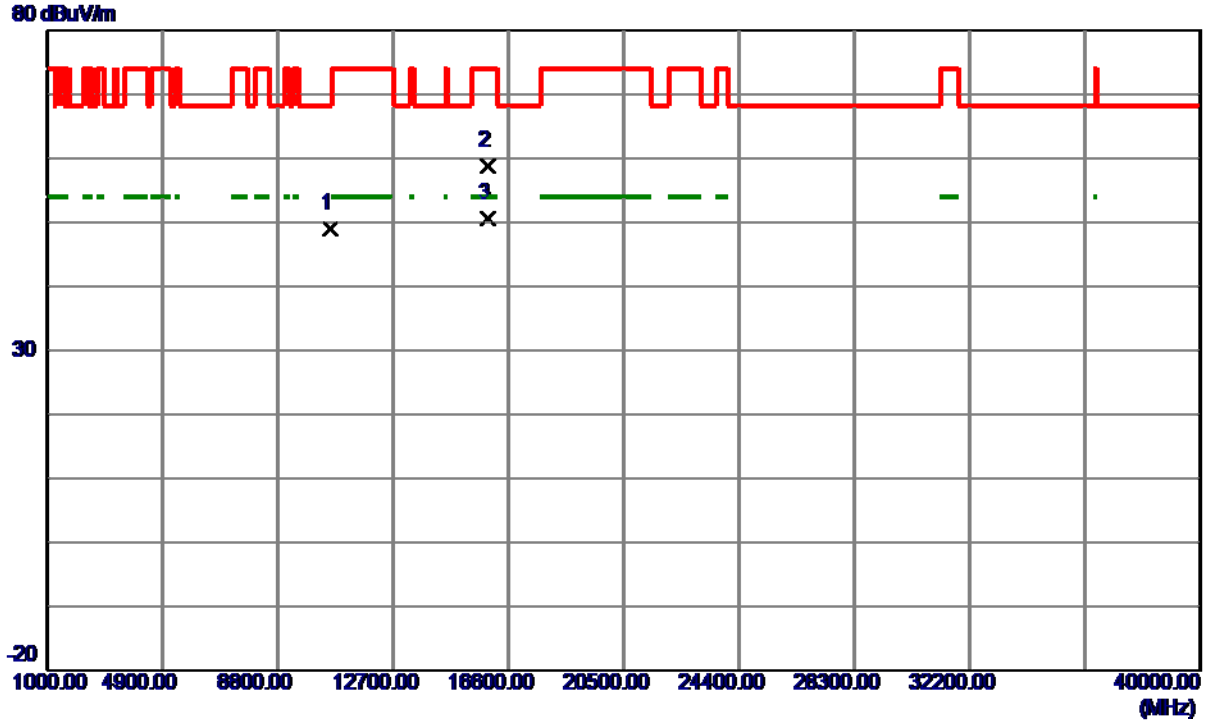


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5301.900	70.71	37.55	108.26	68.20	40.06	peak	
2	X	5301.900	65.98	37.55	103.53	68.20	35.33	AVG	
3		5384.550	23.39	37.88	61.27	74.00	-12.73	peak	
4		5384.550	5.10	37.88	42.98	54.00	-11.02	AVG	

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

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

Vertical

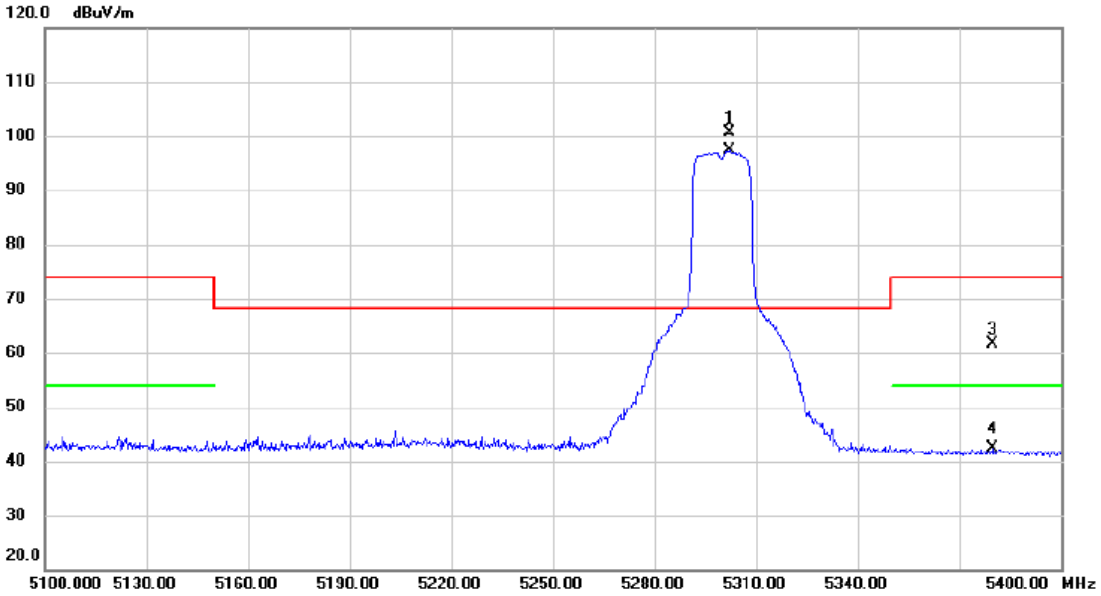


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10597.9000	47.14	1.92	49.06	68.20	-19.14	Peak	
2	15898.0000	56.13	2.61	58.74	74.00	-15.26	Peak	
3 *	15898.4230	47.93	2.61	50.54	54.00	-3.46	AVG	

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

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

Horizontal

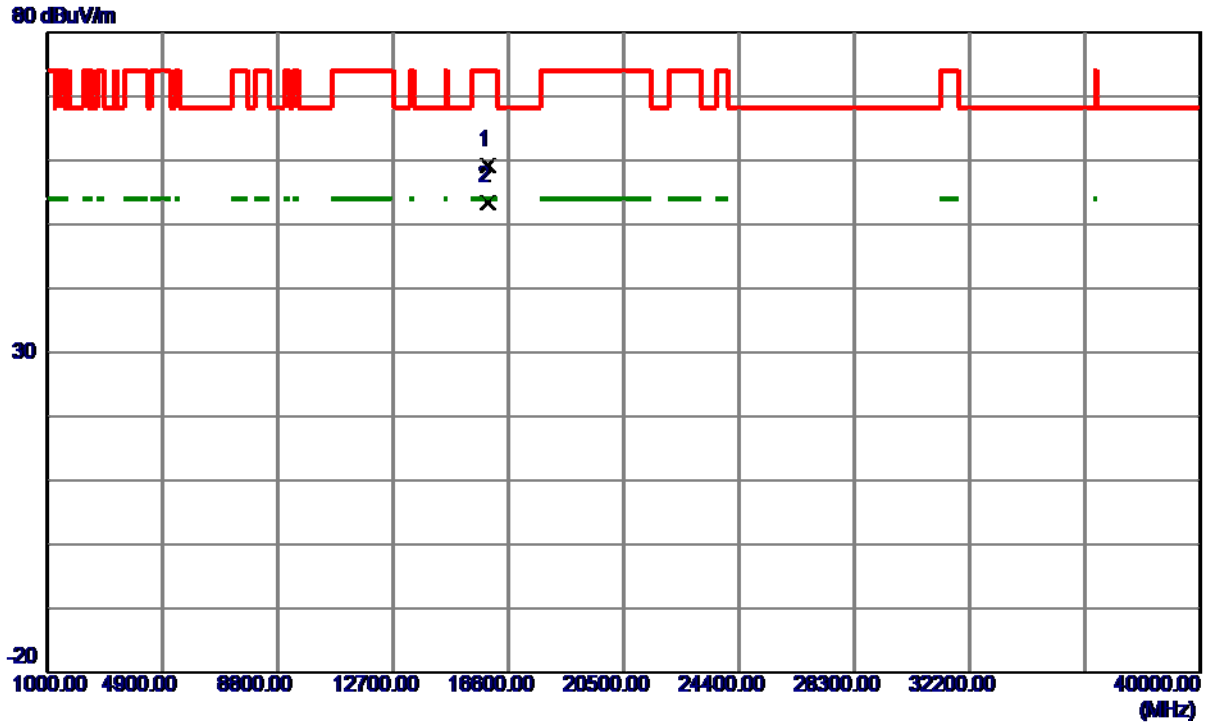


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5302.350	62.98	37.55	100.53	68.20	32.33	peak	
2	X	5302.350	59.71	37.55	97.26	68.20	29.06	AVG	
3		5379.750	23.72	37.86	61.58	74.00	-12.42	peak	
4		5379.750	4.61	37.86	42.47	54.00	-11.53	AVG	

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

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

Horizontal

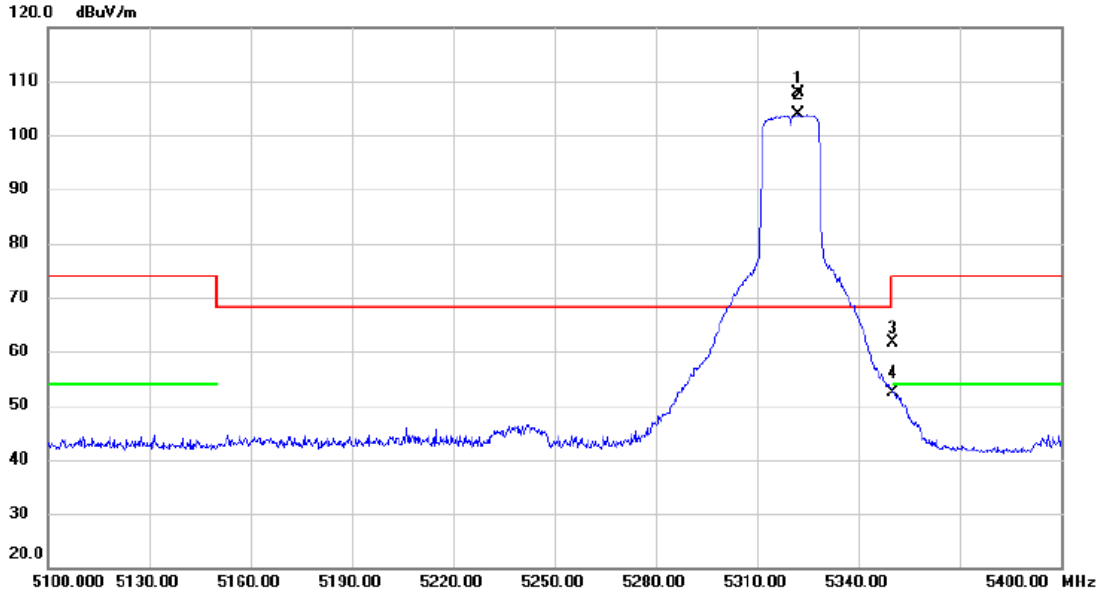


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	15892.1500	56.66	2.61	59.27	74.00	-14.73	Peak	
2 *	15899.4600	50.89	2.61	53.50	54.00	-0.50	AVG	

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

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

Vertical

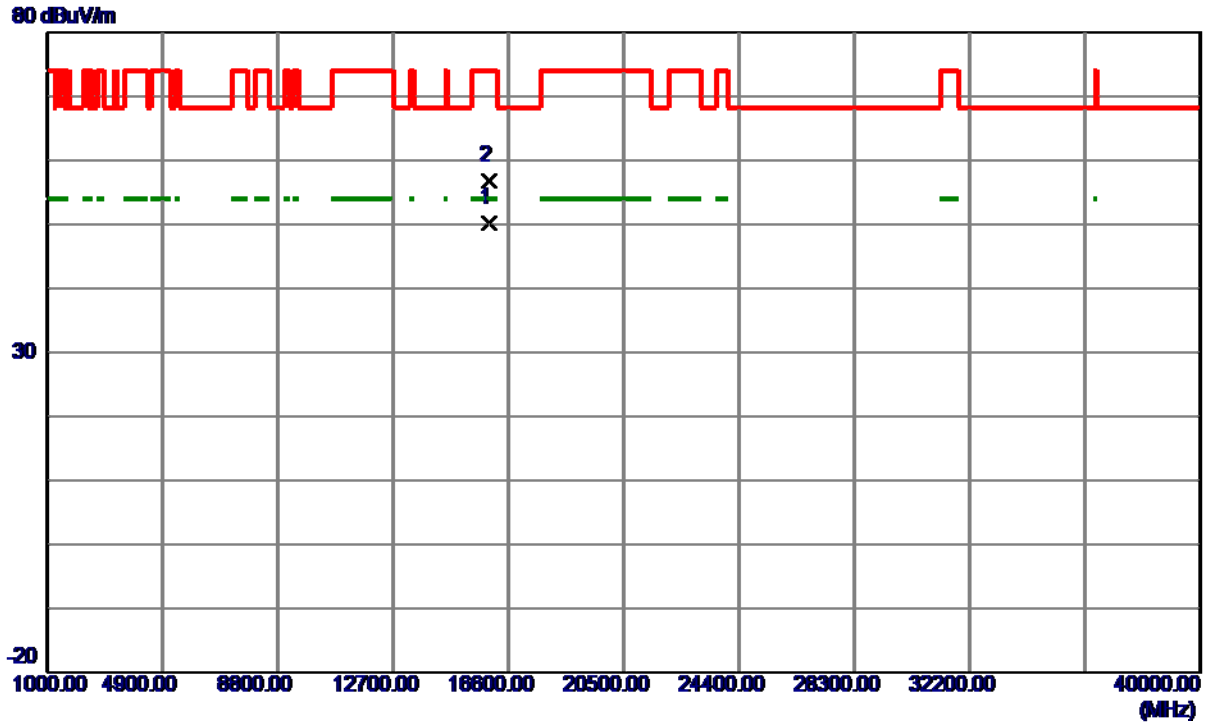


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5322.000	70.23	37.63	107.86	68.20	39.66	peak	
2	X	5322.000	66.16	37.63	103.79	68.20	35.59	AVG	
3		5350.000	23.89	37.73	61.62	74.00	-12.38	peak	
4		5350.000	14.71	37.73	52.44	54.00	-1.56	AVG	

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

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

Vertical

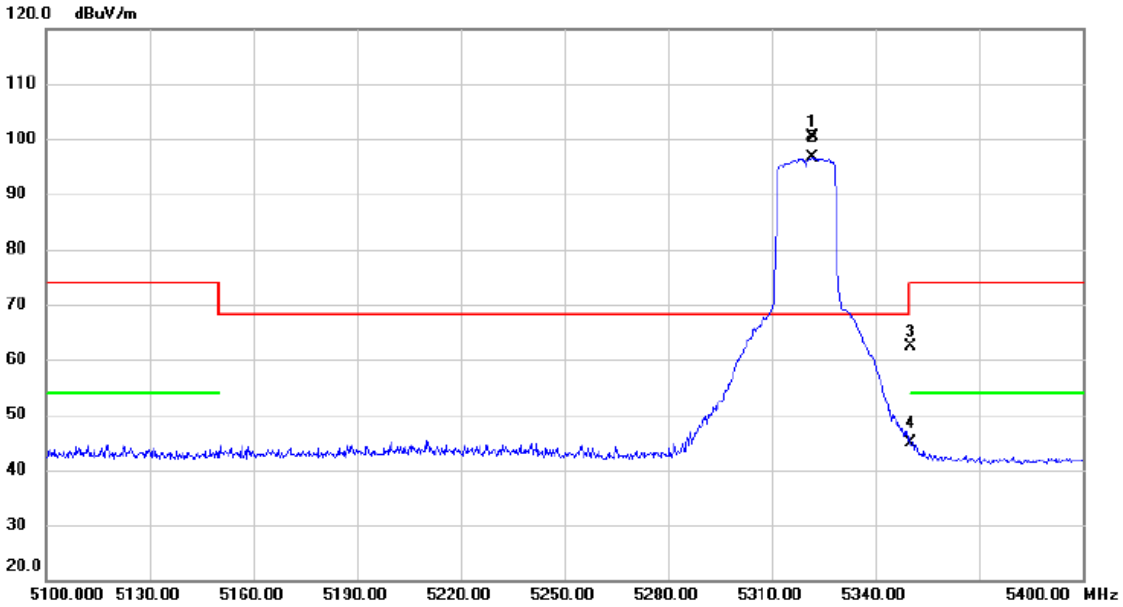


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	15963.5050	47.58	2.57	50.15	54.00	-3.85	AVG	
2	15968.2000	54.24	2.56	56.80	74.00	-17.20	Peak	

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

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

Horizontal

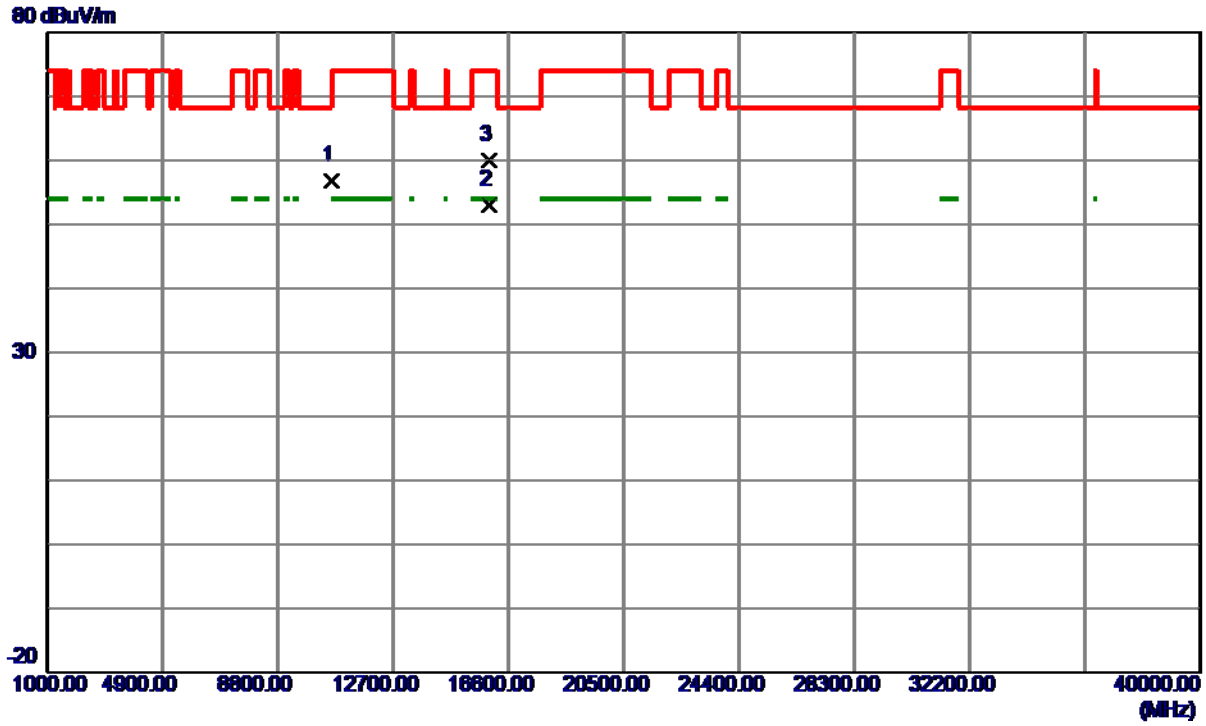


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5321.850	62.80	37.63	100.43	68.20	32.23	peak	
2	X	5321.850	58.96	37.63	96.59	68.20	28.39	AVG	
3		5350.000	24.59	37.73	62.32	74.00	-11.68	peak	
4		5350.000	7.21	37.73	44.94	54.00	-9.06	AVG	

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

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

Horizontal

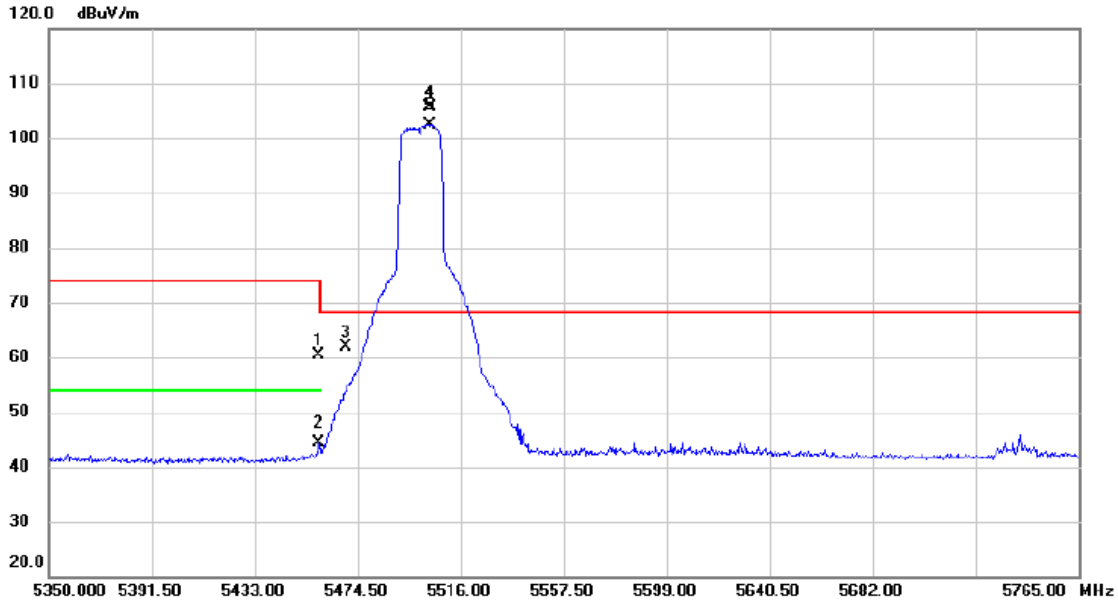


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10638.8500	54.94	1.94	56.88	74.00	-17.12	Peak	
2 *	15959.9650	50.37	2.57	52.94	54.00	-1.06	AVG	
3	15968.2000	57.38	2.56	59.94	74.00	-14.06	Peak	

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

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

Vertical

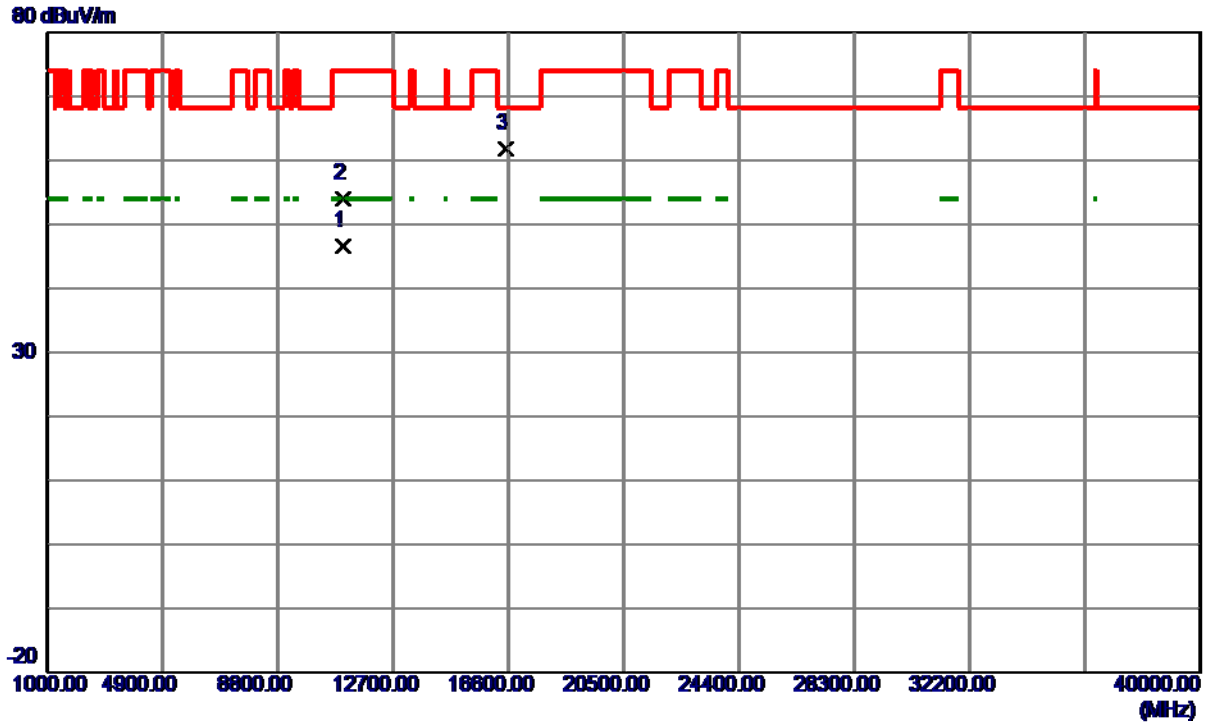


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5458.730	22.15	38.11	60.26	74.00	-13.74	peak	
2		5458.730	6.31	38.11	44.42	54.00	-9.58	AVG	
3		5470.000	23.77	38.15	61.92	68.20	-6.28	peak	
4	*	5503.757	67.33	38.24	105.57	68.20	37.37	peak	
5	X	5503.757	64.14	38.24	102.38	68.20	34.18	AVG	

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

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

Vertical

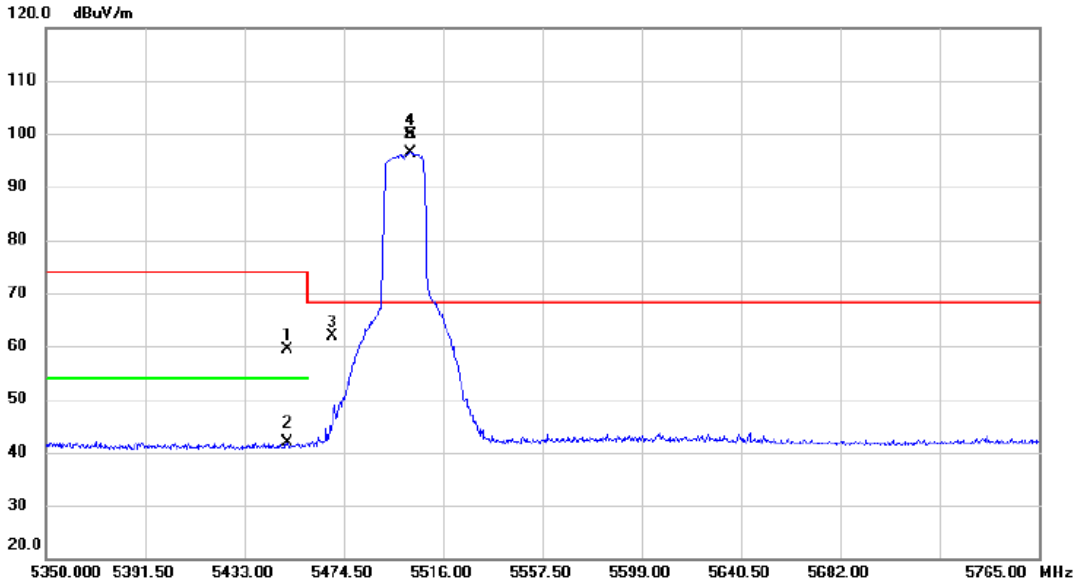


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11000.2900	44.31	2.34	46.65	54.00	-7.35	AVG	
2	11001.5500	51.71	2.34	54.05	74.00	-19.95	Peak	
3 *	16508.3500	57.86	4.02	61.88	68.20	-6.32	Peak	

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

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

Horizontal

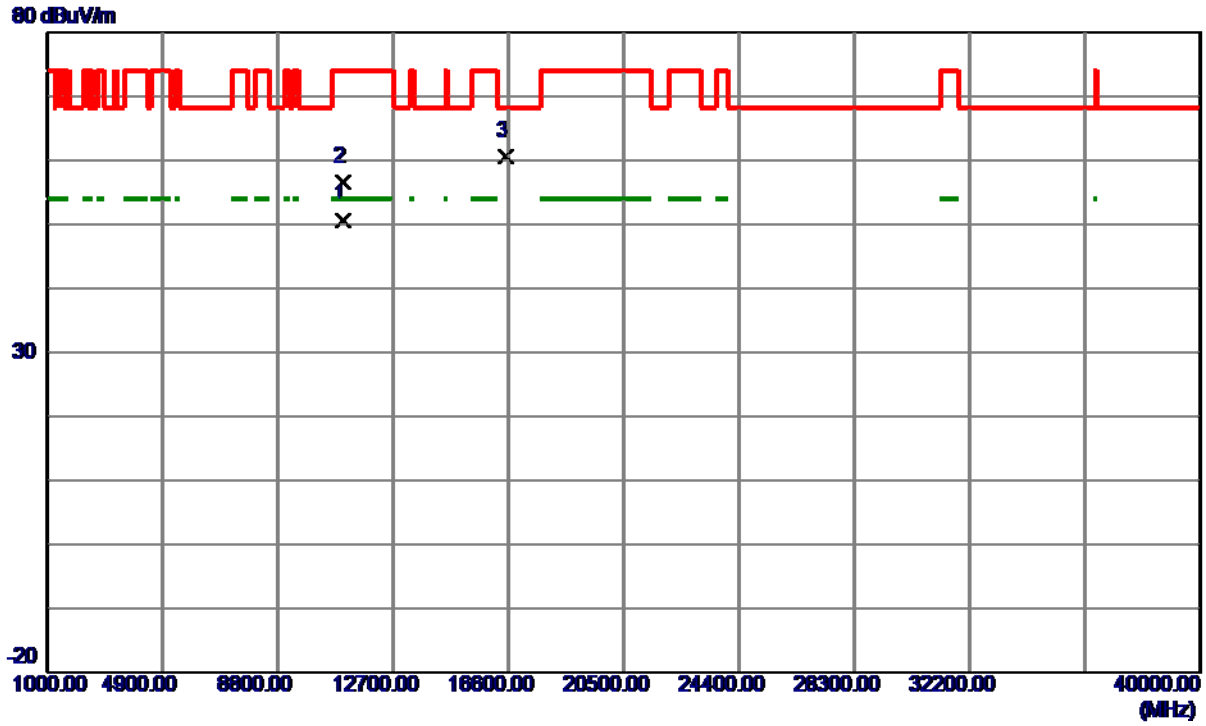


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5451.052	21.16	38.10	59.26	74.00	-14.74	peak	
2		5451.052	3.82	38.10	41.92	54.00	-12.08	AVG	
3		5470.000	23.61	38.15	61.76	68.20	-6.44	peak	
4	*	5502.305	61.68	38.24	99.92	68.20	31.72	peak	
5	X	5502.305	58.26	38.24	96.50	68.20	28.30	AVG	

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

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

Horizontal

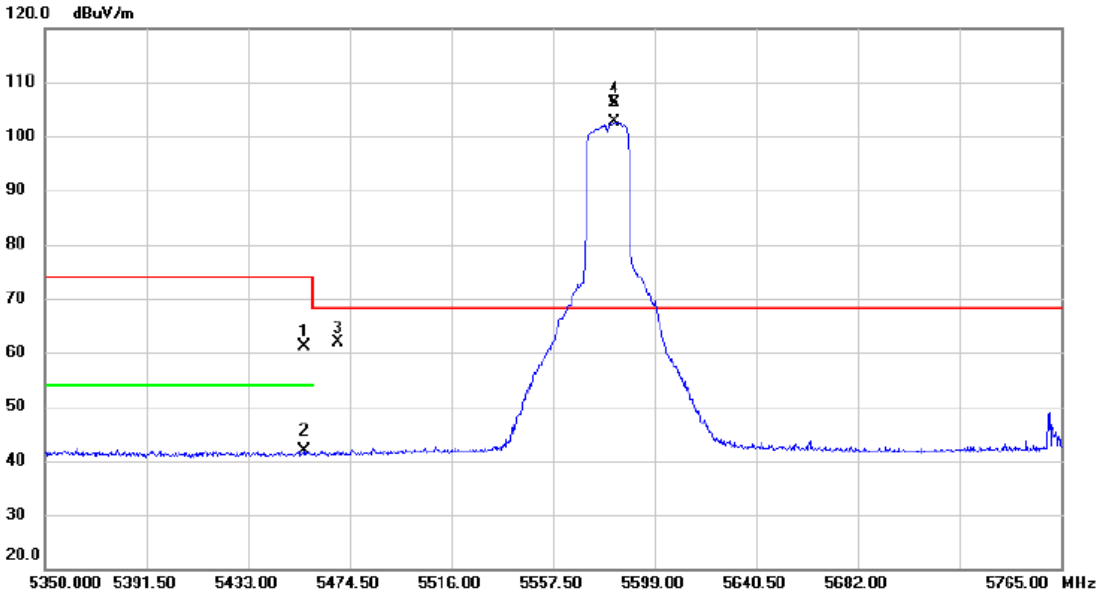


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11000.3400	48.36	2.34	50.70	54.00	-3.30	AVG	
2	11003.5000	54.33	2.33	56.66	74.00	-17.34	Peak	
3	16510.3000	56.57	4.03	60.60	68.20	-7.60	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Vertical

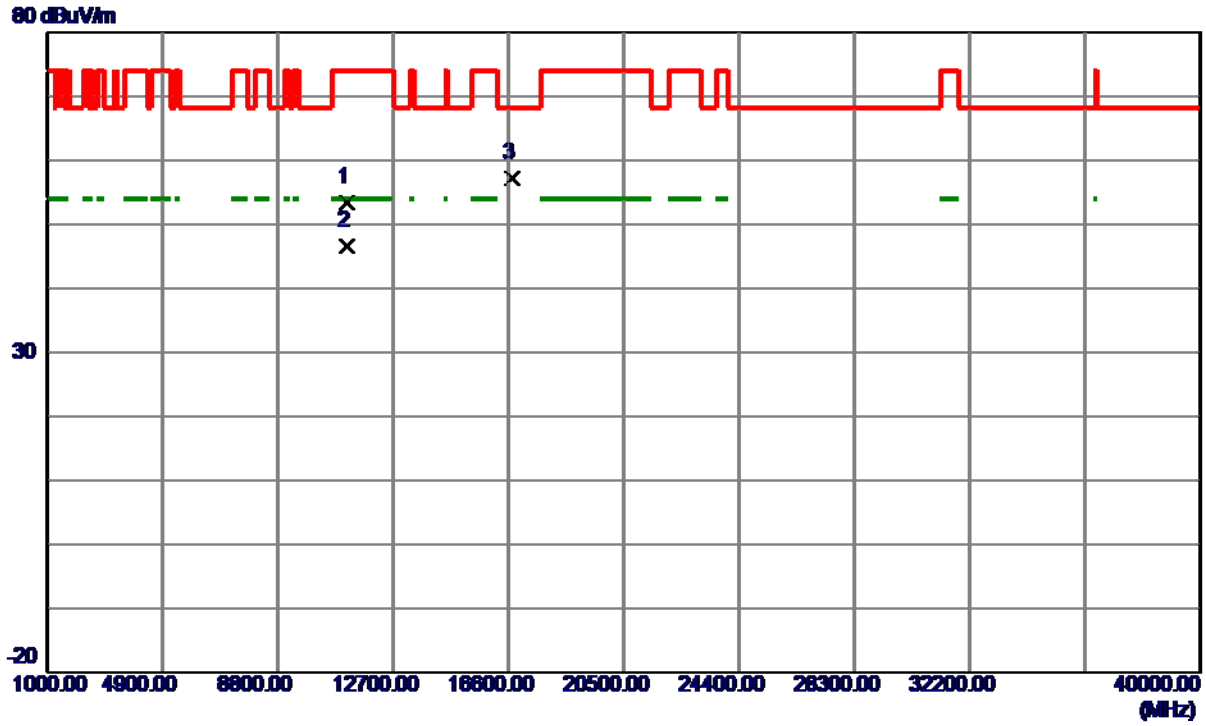


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5456.240	22.93	38.11	61.04	74.00	-12.96	peak	
2		5456.240	3.80	38.11	41.91	54.00	-12.09	AVG	
3		5470.000	23.64	38.15	61.79	68.20	-6.41	peak	
4	*	5582.608	67.82	38.32	106.14	68.20	37.94	peak	
5	X	5582.608	64.24	38.32	102.56	68.20	34.36	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Vertical

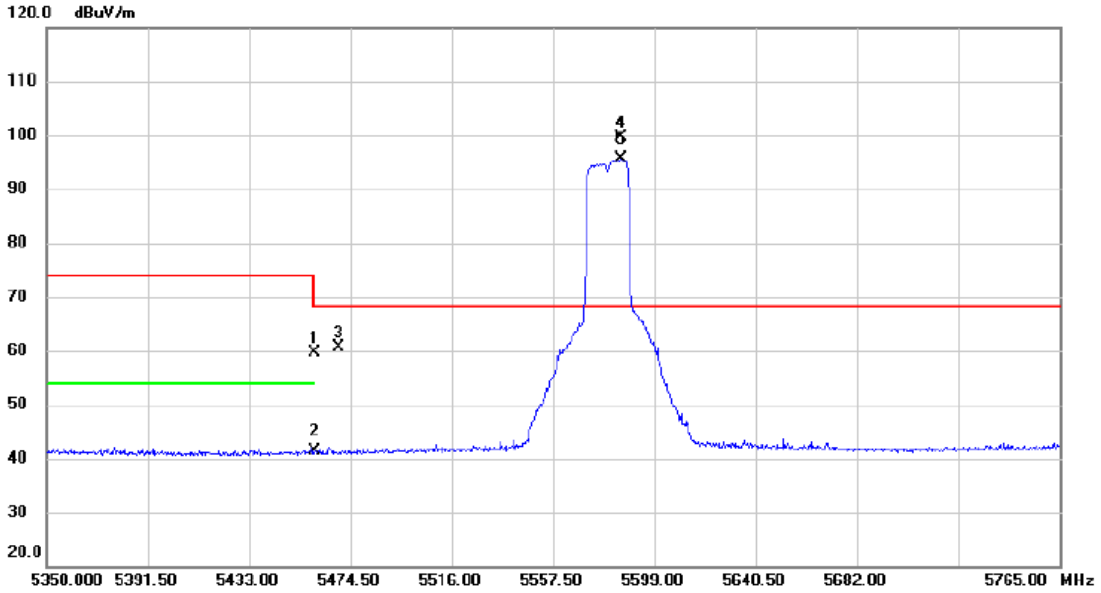


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11159.5000	51.41	2.04	53.45	74.00	-20.55	Peak	
2 *	11160.3200	44.55	2.04	46.59	54.00	-7.41	AVG	
3	16734.5500	52.40	4.74	57.14	68.20	-11.06	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Horizontal

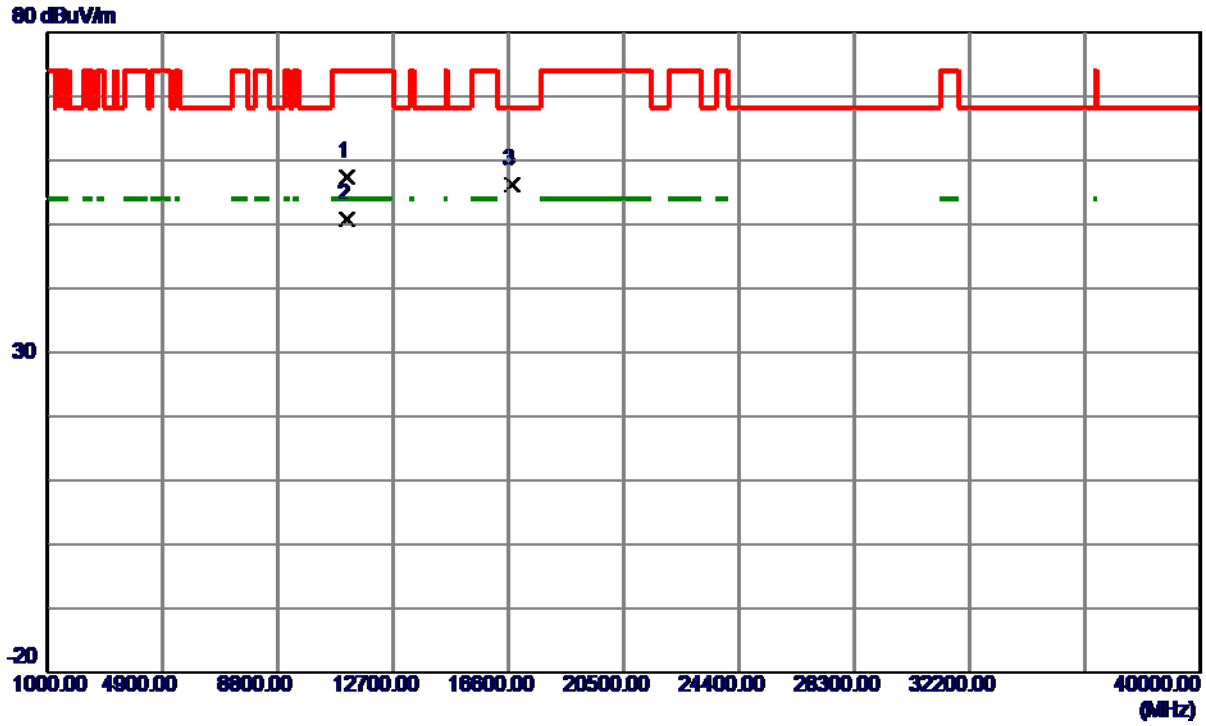


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5460.000	21.56	38.12	59.68	74.00	-14.32	peak	
2		5460.000	3.14	38.12	41.26	54.00	-12.74	AVG	
3		5470.000	22.45	38.15	60.60	68.20	-7.60	peak	
4	*	5585.305	61.38	38.33	99.71	68.20	31.51	peak	
5	X	5585.305	57.32	38.33	95.65	68.20	27.45	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5580 MHz

Horizontal

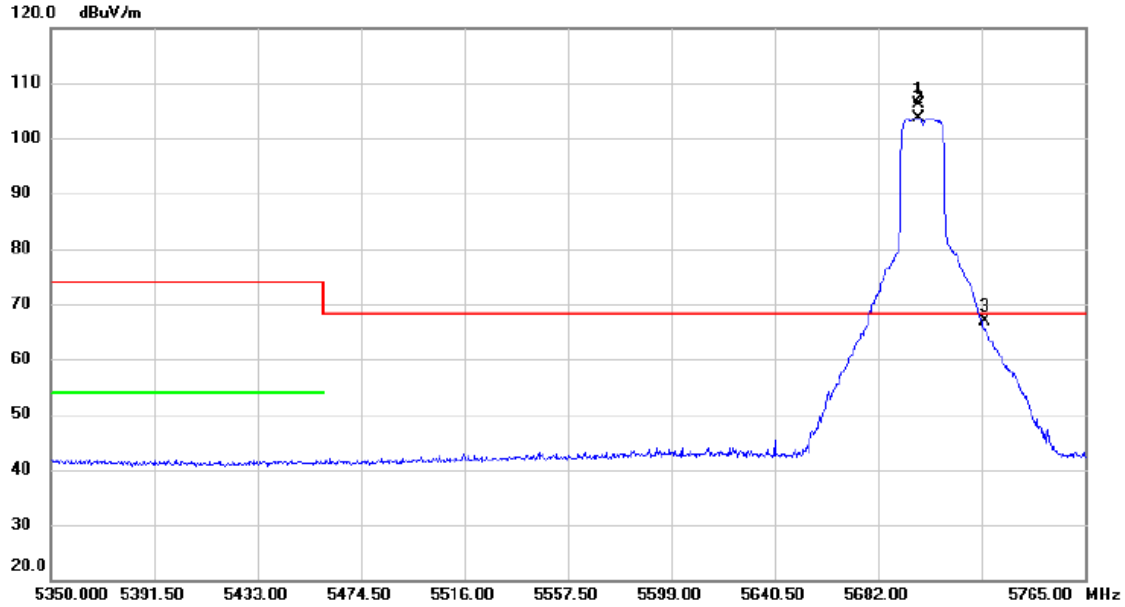


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11151.7000	55.42	2.05	57.47	74.00	-16.53	Peak	
2 *	11161.3300	48.68	2.03	50.71	54.00	-3.29	AVG	
3	16740.4000	51.46	4.76	56.22	68.20	-11.98	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Vertical

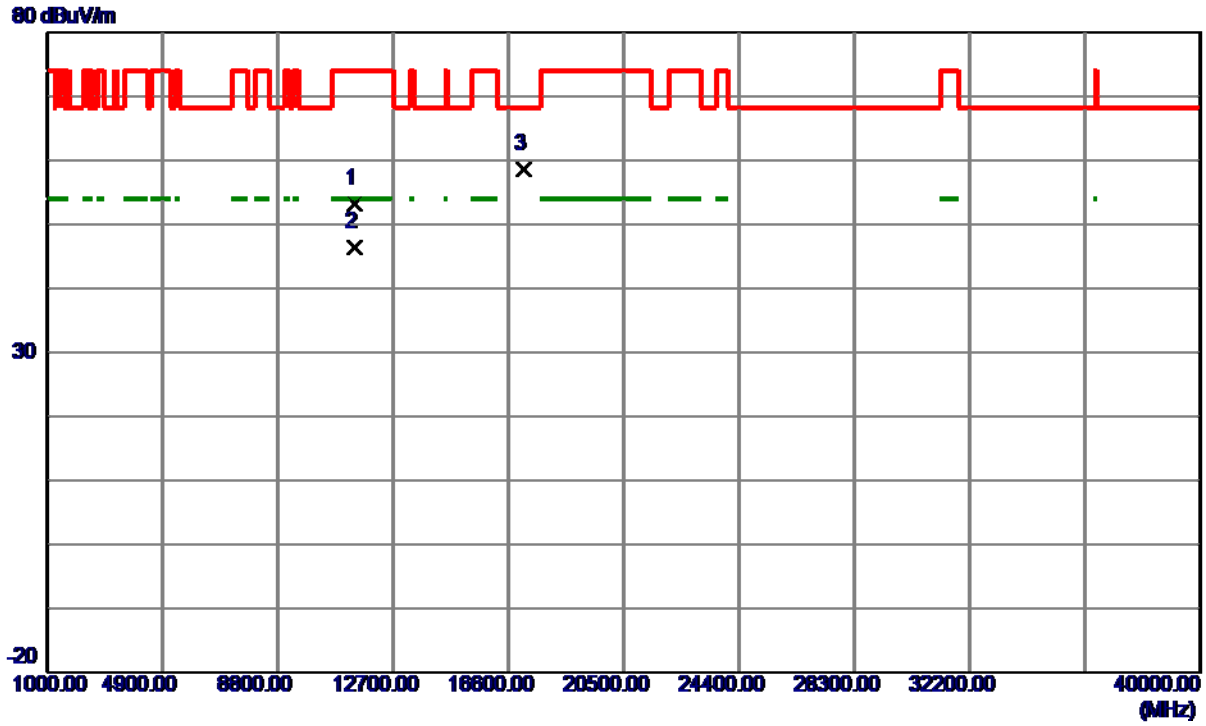


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5698.392	67.85	38.40	106.25	68.20	38.05	peak	
2	X	5698.392	65.28	38.40	103.68	68.20	35.48	AVG	
3		5725.000	28.40	38.50	66.90	68.20	-1.30	peak	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Vertical

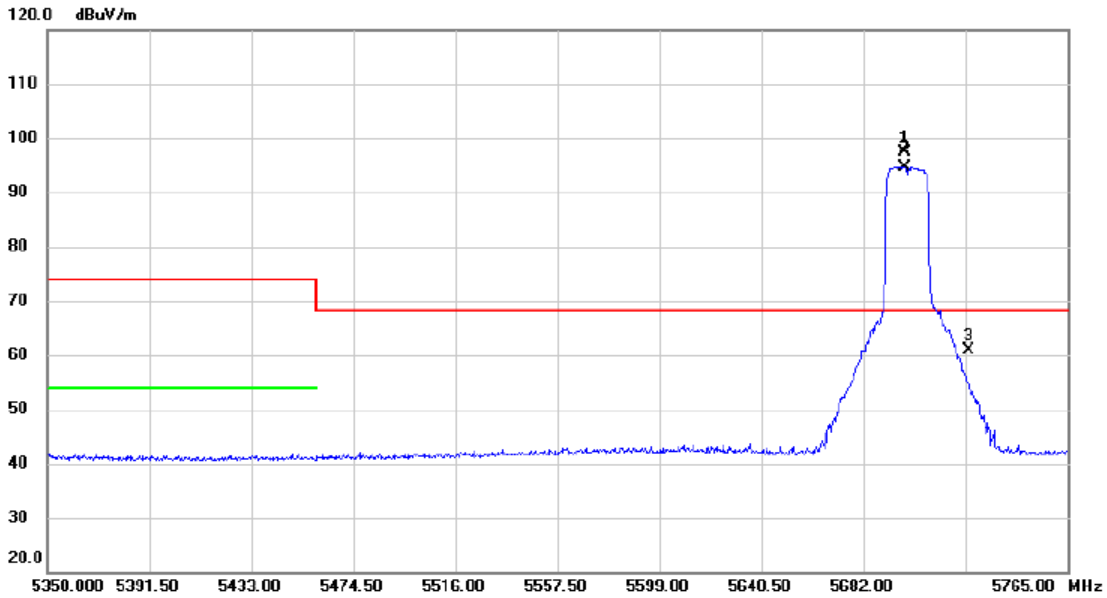


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11403.2500	51.04	2.13	53.17	74.00	-20.83	Peak	
2 *	11404.1280	44.21	2.13	46.34	54.00	-7.66	AVG	
3	17099.2000	52.64	5.93	58.57	68.20	-9.63	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Horizontal

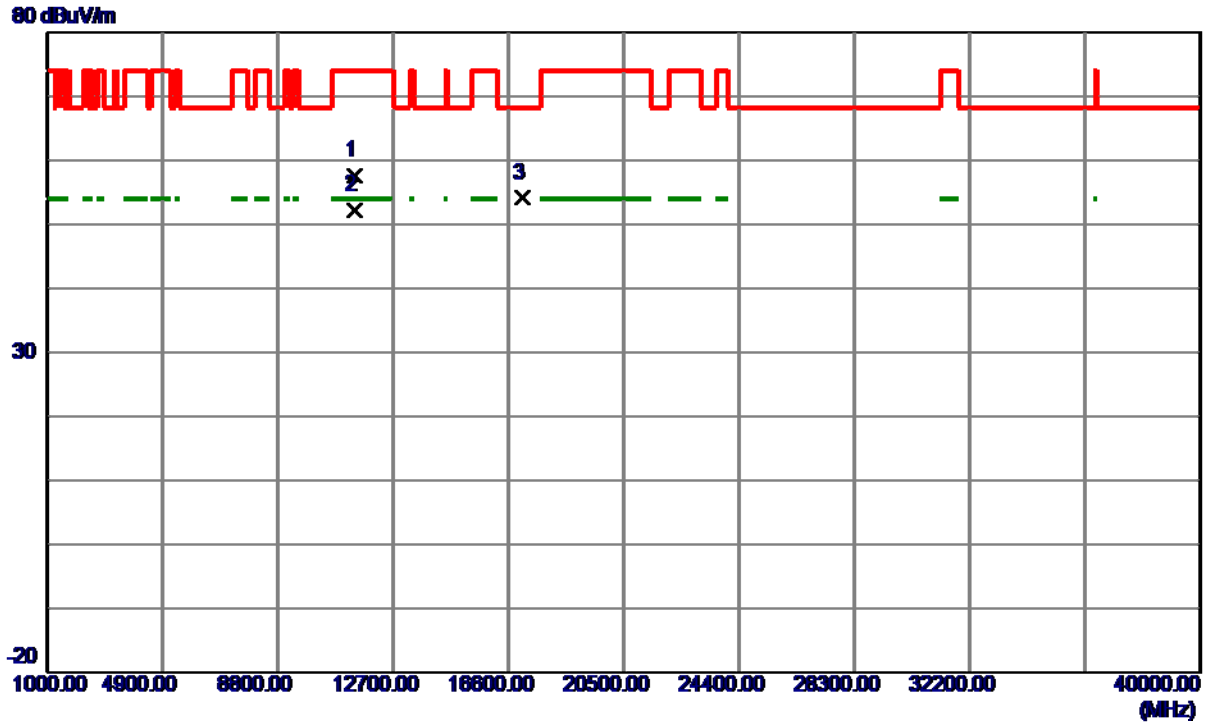


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5698.807	58.96	38.40	97.36	68.20	29.16	peak	
2	X	5698.807	56.29	38.40	94.69	68.20	26.49	AVG	
3		5725.000	22.36	38.50	60.86	68.20	-7.34	peak	

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

Horizontal

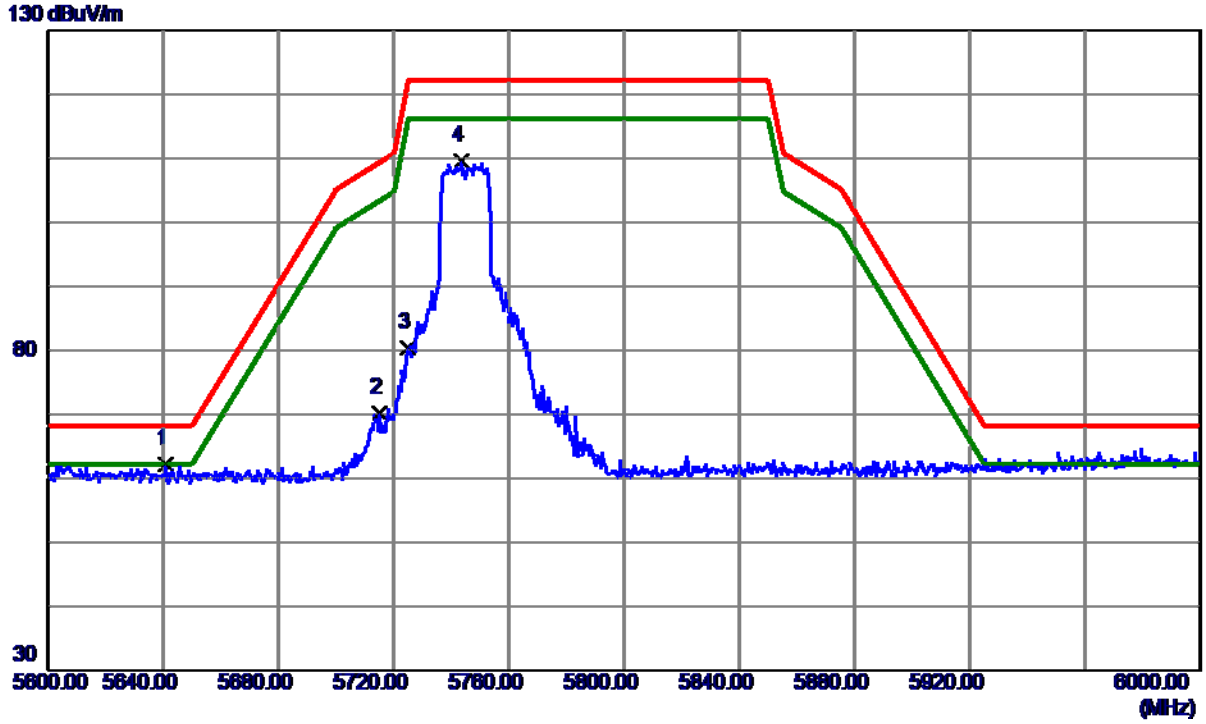


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11395.4500	55.49	2.13	57.62	74.00	-16.38	Peak	
2 *	11399.9480	50.14	2.13	52.27	54.00	-1.73	AVG	
3	17095.3000	48.19	5.91	54.10	68.20	-14.10	Peak	

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

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

Vertical

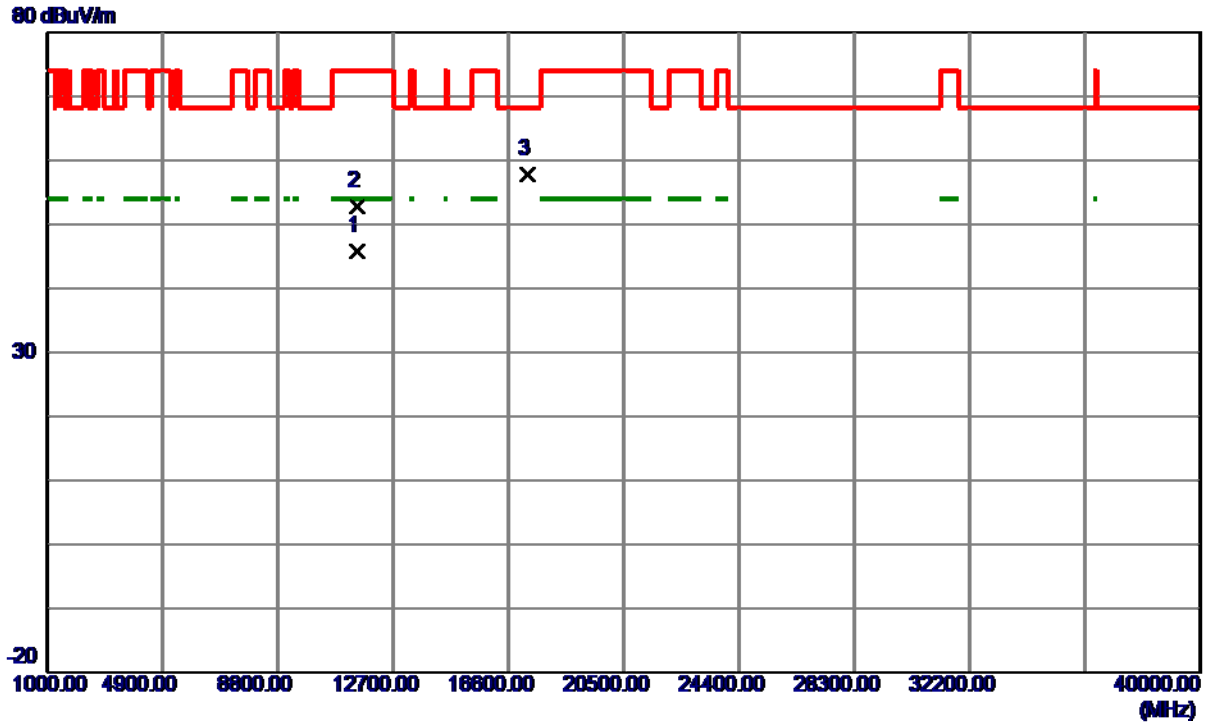


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5640.8000	23.75	38.37	62.12	68.20	-6.08	Peak	
2	5715.0000	31.77	38.46	70.23	109.40	-39.17	Peak	
3	5725.0000	41.81	38.50	80.31	122.20	-41.89	Peak	
4	5743.6000	70.95	38.57	109.52	122.20	-12.68	Peak	

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

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

Vertical

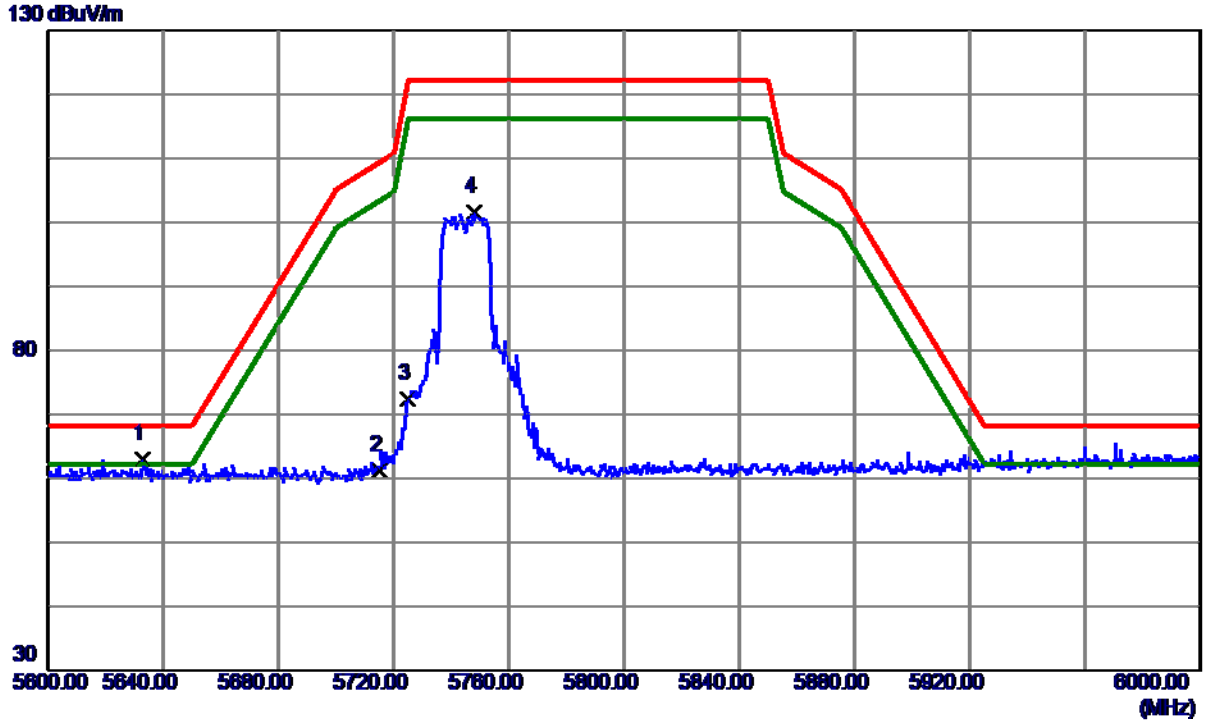


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11488.9900	43.63	2.21	45.84	54.00	-8.16	AVG	
2	11489.0500	50.55	2.21	52.76	74.00	-21.24	Peak	
3	17241.5500	51.12	6.67	57.79	68.20	-10.41	Peak	

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

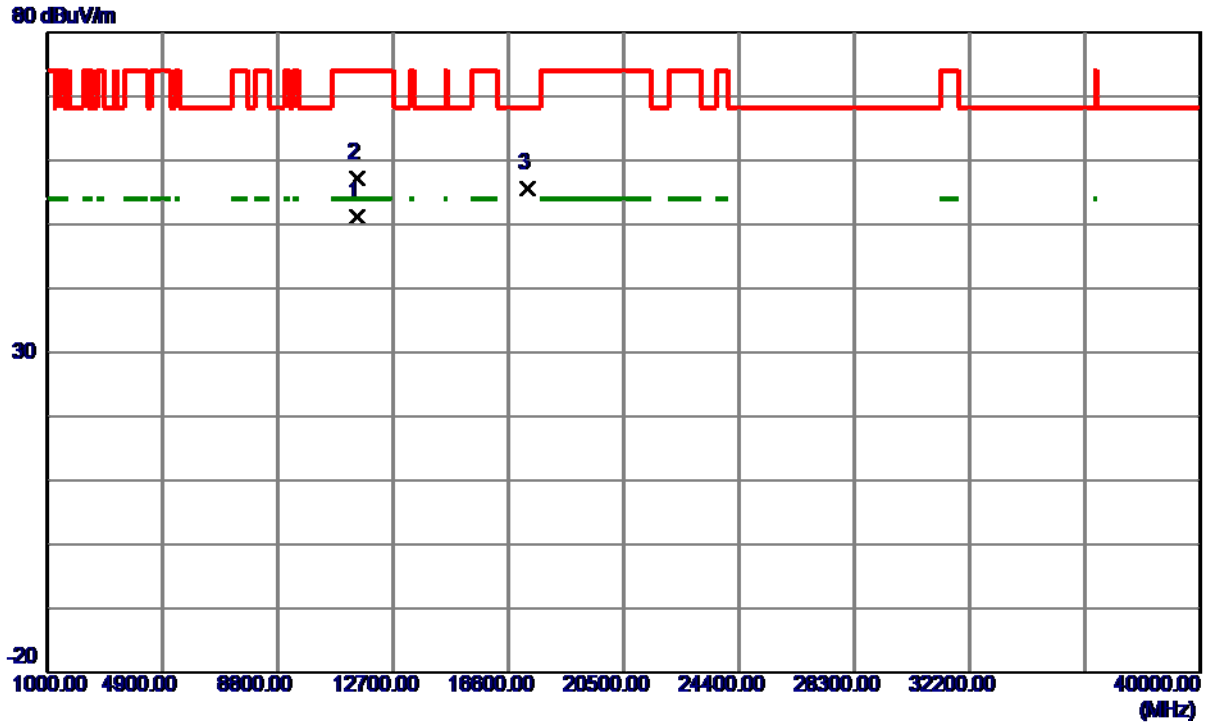


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5633.0000	24.56	38.36	62.92	68.20	-5.28	Peak	
2	5715.0000	22.76	38.46	61.22	109.40	-48.18	Peak	
3	5725.0000	33.95	38.50	72.45	122.20	-49.75	Peak	
4	5748.2000	62.95	38.59	101.54	122.20	-20.66	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

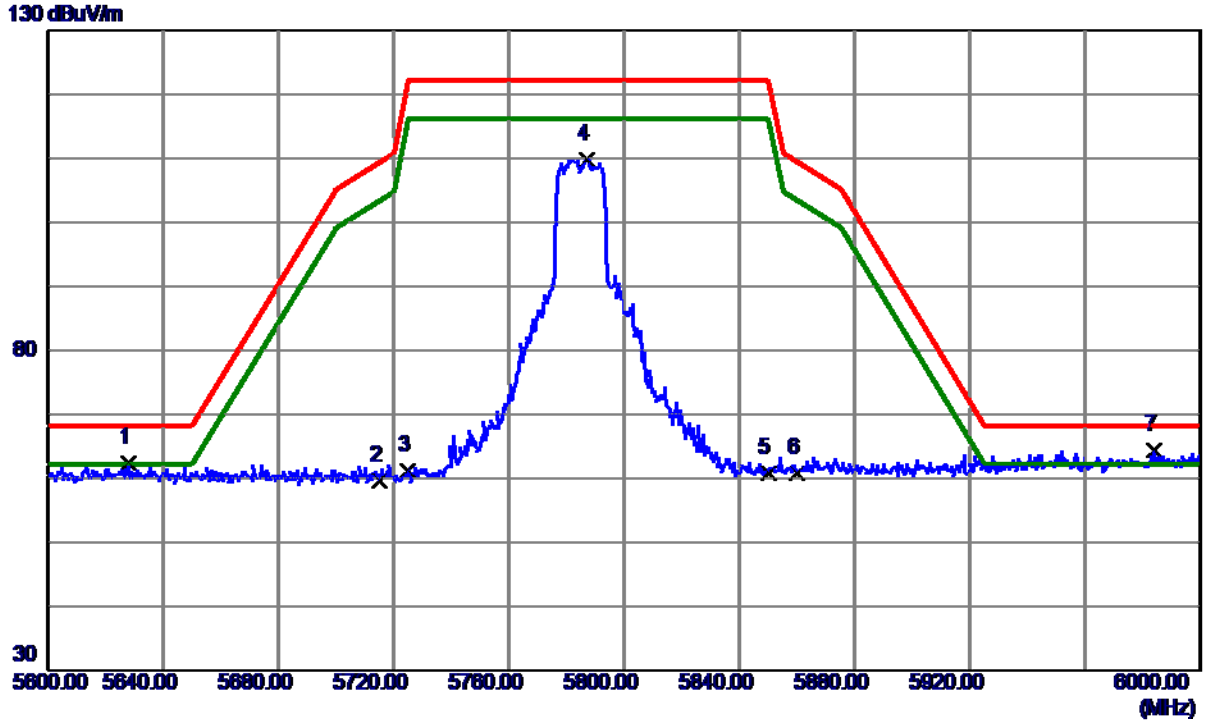


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11487.3680	49.06	2.20	51.26	54.00	-2.74	AVG	
2	11492.9500	54.99	2.21	57.20	74.00	-16.80	Peak	
3	17235.7000	48.95	6.63	55.58	68.20	-12.62	Peak	

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

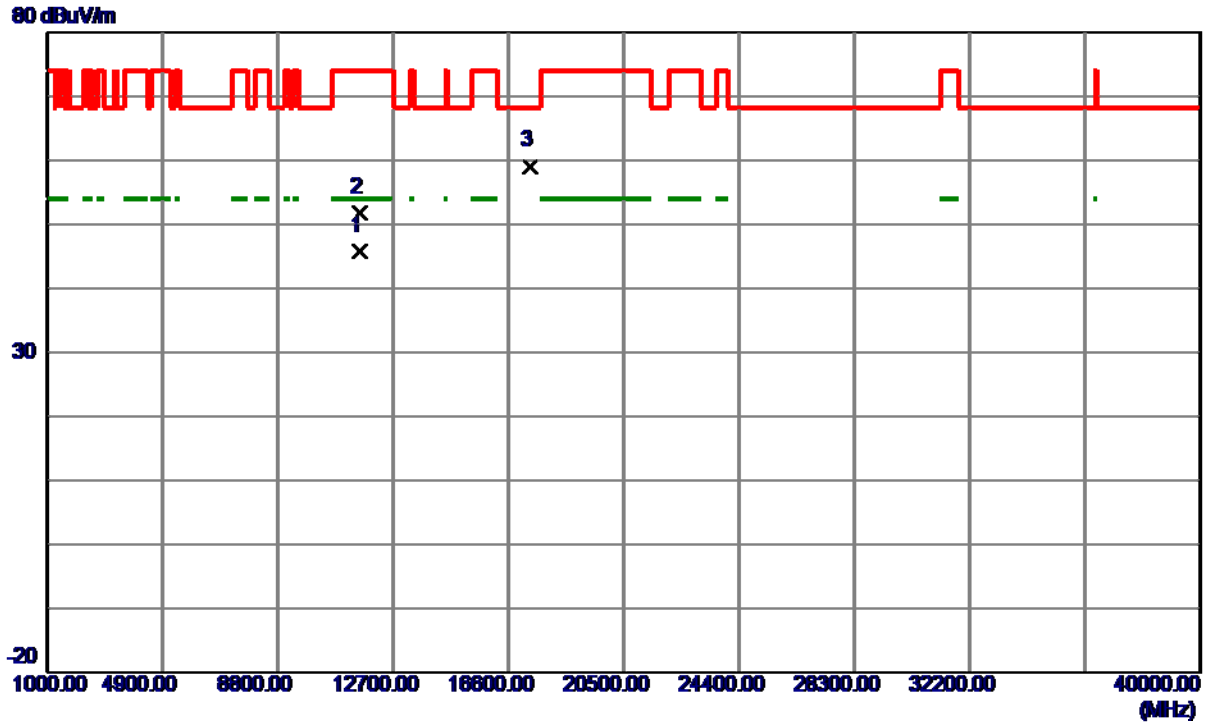


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5627.8000	24.03	38.36	62.39	68.20	-5.81	Peak	
2	5715.0000	21.17	38.46	59.63	109.40	-49.77	Peak	
3	5725.0000	22.65	38.50	61.15	122.20	-61.05	Peak	
4	5787.2000	71.09	38.73	109.82	122.20	-12.38	Peak	
5	5850.0000	21.80	38.91	60.71	122.20	-61.49	Peak	
6	5860.0000	21.81	38.94	60.75	109.40	-48.65	Peak	
7 *	5983.8000	25.23	39.22	64.45	68.20	-3.75	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

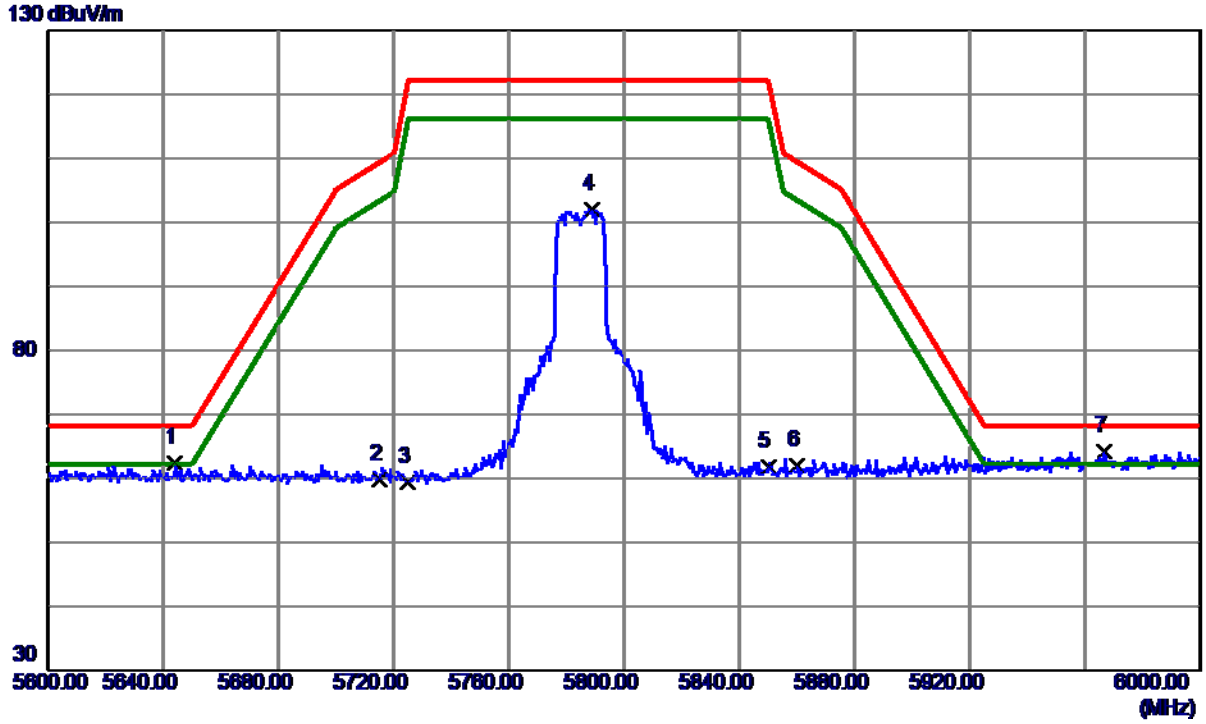


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11570.5170	43.48	2.27	45.75	54.00	-8.25	AVG	
2	11574.8500	49.56	2.28	51.84	74.00	-22.16	Peak	
3	17356.6000	51.71	7.39	59.10	68.20	-9.10	Peak	

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

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

Horizontal

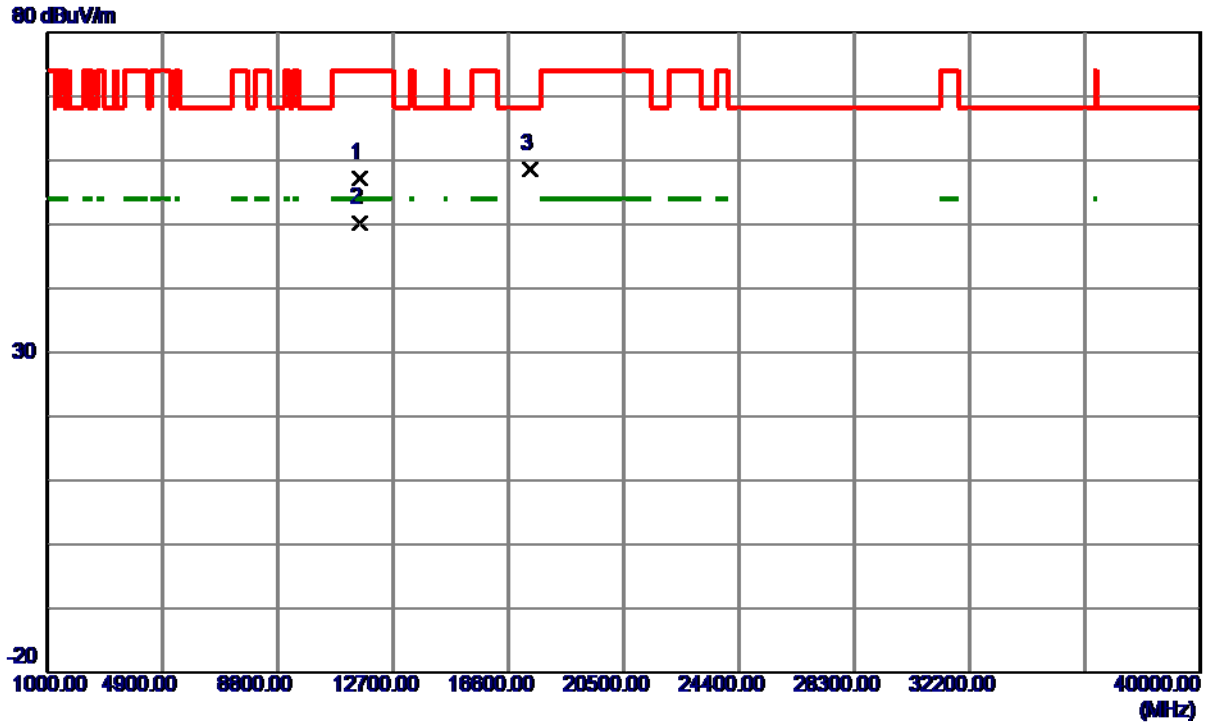


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5644.2000	24.02	38.37	62.39	68.20	-5.81	Peak	
2	5715.0000	21.39	38.46	59.85	109.40	-49.55	Peak	
3	5725.0000	20.98	38.50	59.48	122.20	-62.72	Peak	
4	5789.0000	63.26	38.74	102.00	122.20	-20.20	Peak	
5	5850.0000	22.91	38.91	61.82	122.20	-60.38	Peak	
6	5860.0000	23.12	38.94	62.06	109.40	-47.34	Peak	
7 *	5966.8000	24.99	39.18	64.17	68.20	-4.03	Peak	

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

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

Horizontal

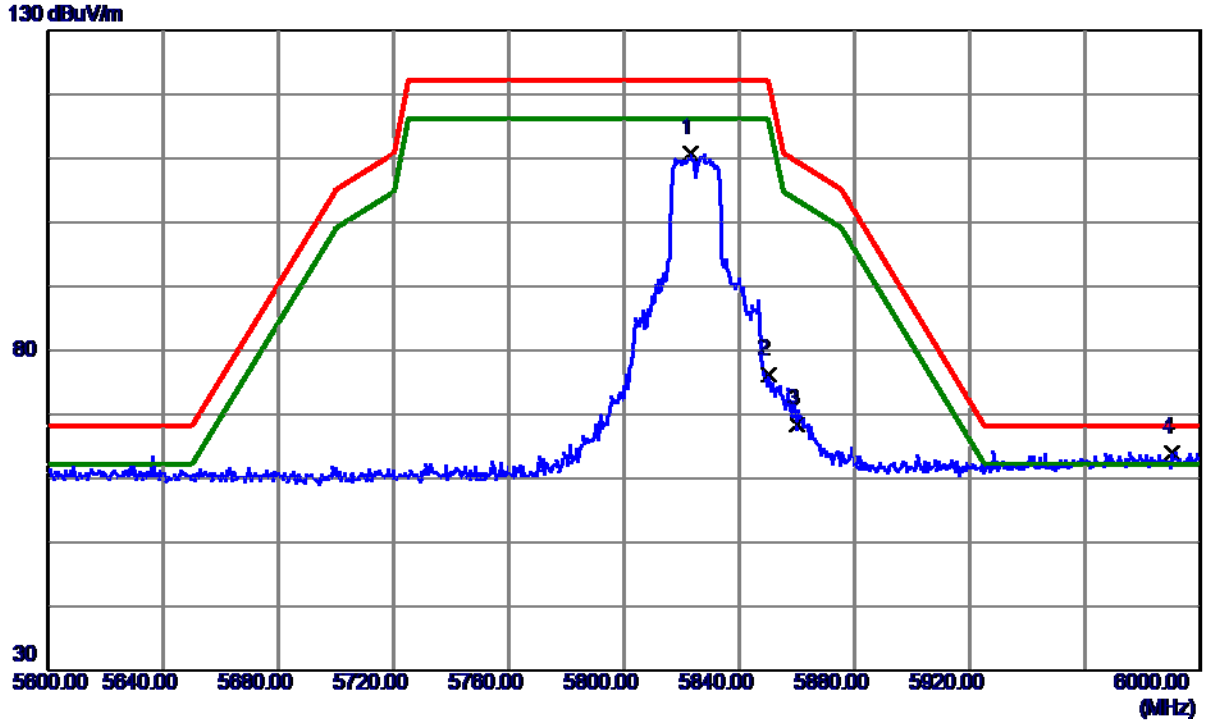


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11569.0000	54.85	2.27	57.12	74.00	-16.88	Peak	
2 *	11570.0070	47.99	2.27	50.26	54.00	-3.74	AVG	
3	17348.8000	51.25	7.35	58.60	68.20	-9.60	Peak	

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

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

Vertical

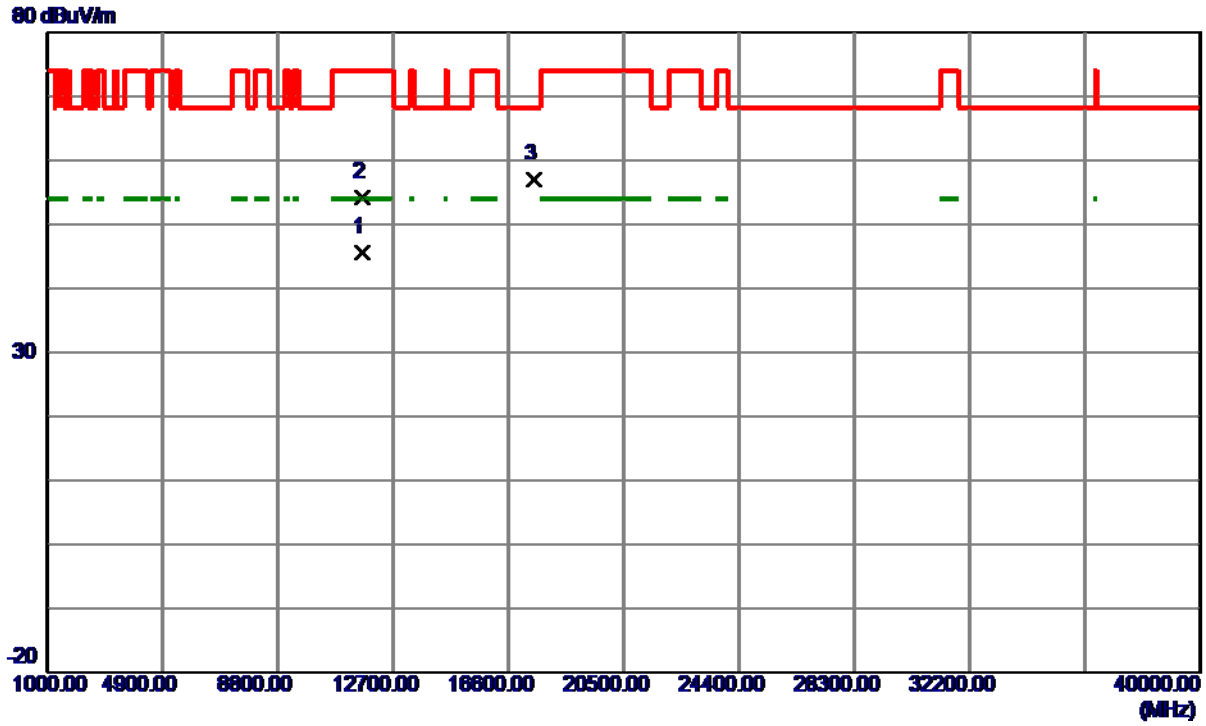


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5823.2000	71.92	38.84	110.76	122.20	-11.44	Peak	
2	5850.0000	37.22	38.91	76.13	122.20	-46.07	Peak	
3	5860.0000	29.37	38.94	68.31	109.40	-41.09	Peak	
4 *	5990.2000	24.84	39.23	64.07	68.20	-4.13	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

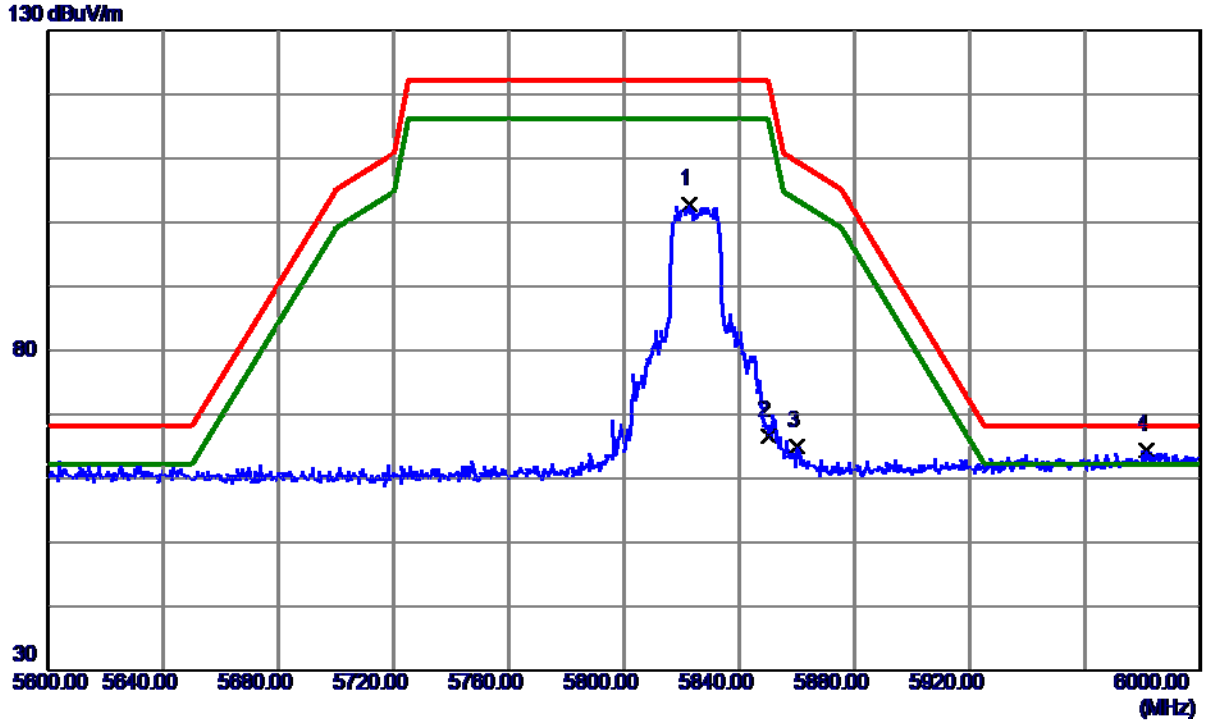


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11650.2800	43.41	2.10	45.51	54.00	-8.49	AVG	
2	11650.9000	52.08	2.10	54.18	74.00	-19.82	Peak	
3	17459.9500	48.97	7.96	56.93	68.20	-11.27	Peak	

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

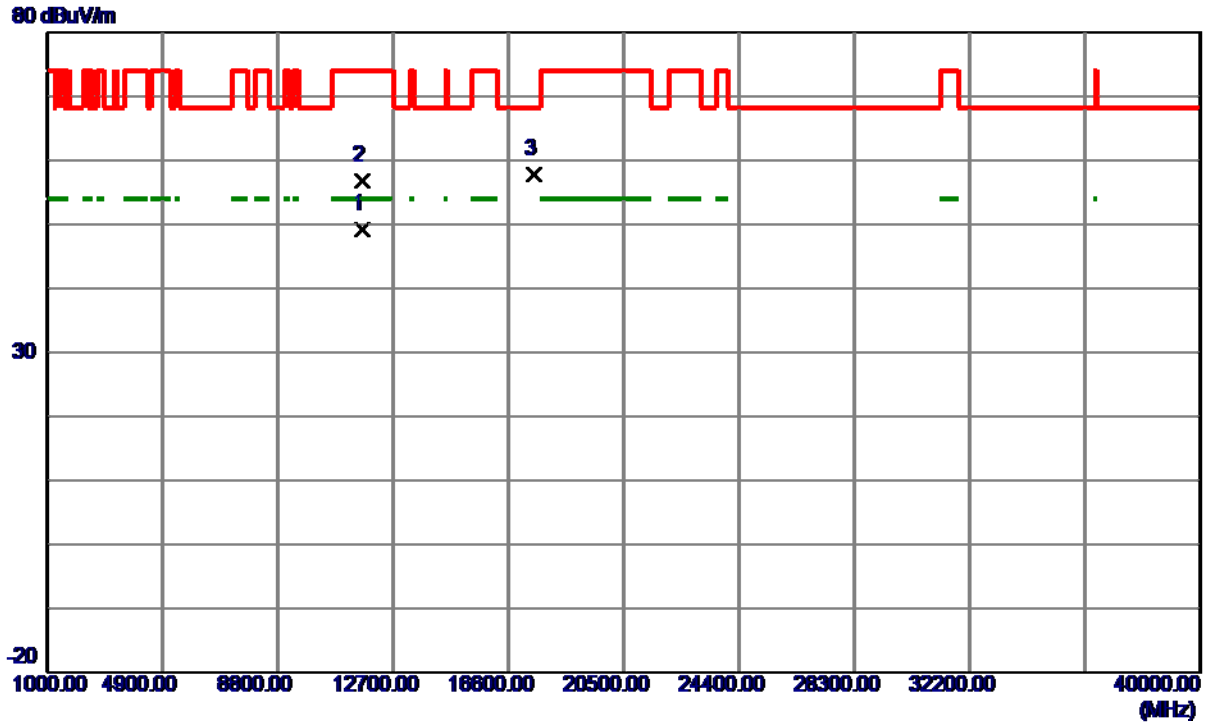


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5822.8000	64.05	38.84	102.89	122.20	-19.31	Peak	
2	5850.0000	27.65	38.91	66.56	122.20	-55.64	Peak	
3	5860.0000	26.12	38.94	65.06	109.40	-44.34	Peak	
4 *	5981.2000	25.14	39.21	64.35	68.20	-3.85	Peak	

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

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

Horizontal

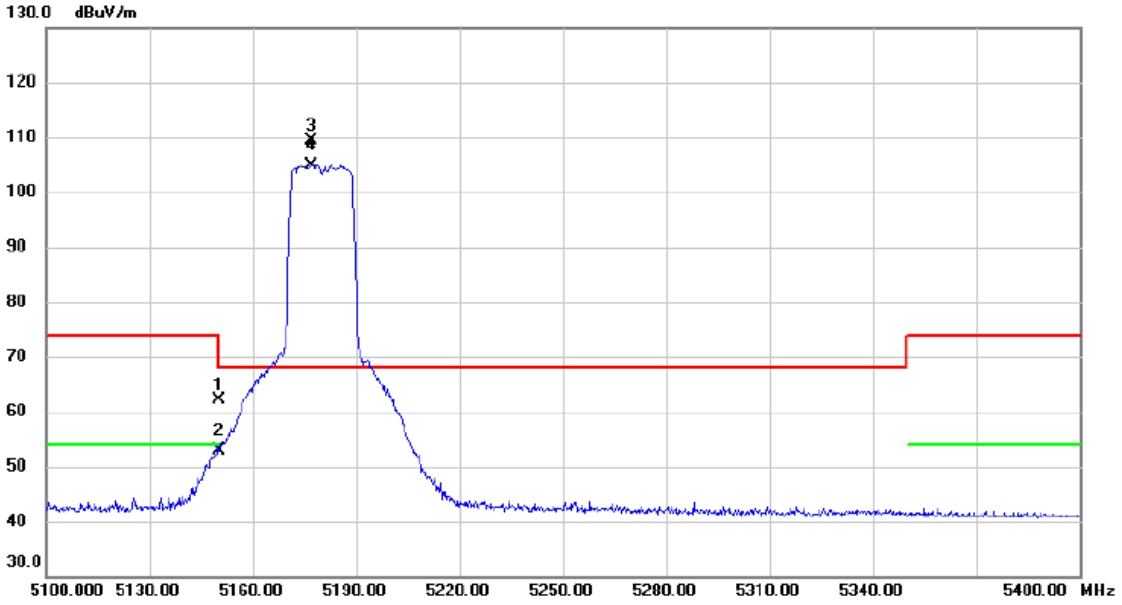


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11648.5870	47.14	2.11	49.25	54.00	-4.75	AVG	
2	11648.9500	54.75	2.11	56.86	74.00	-17.14	Peak	
3	17469.7000	49.76	8.00	57.76	68.20	-10.44	Peak	

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

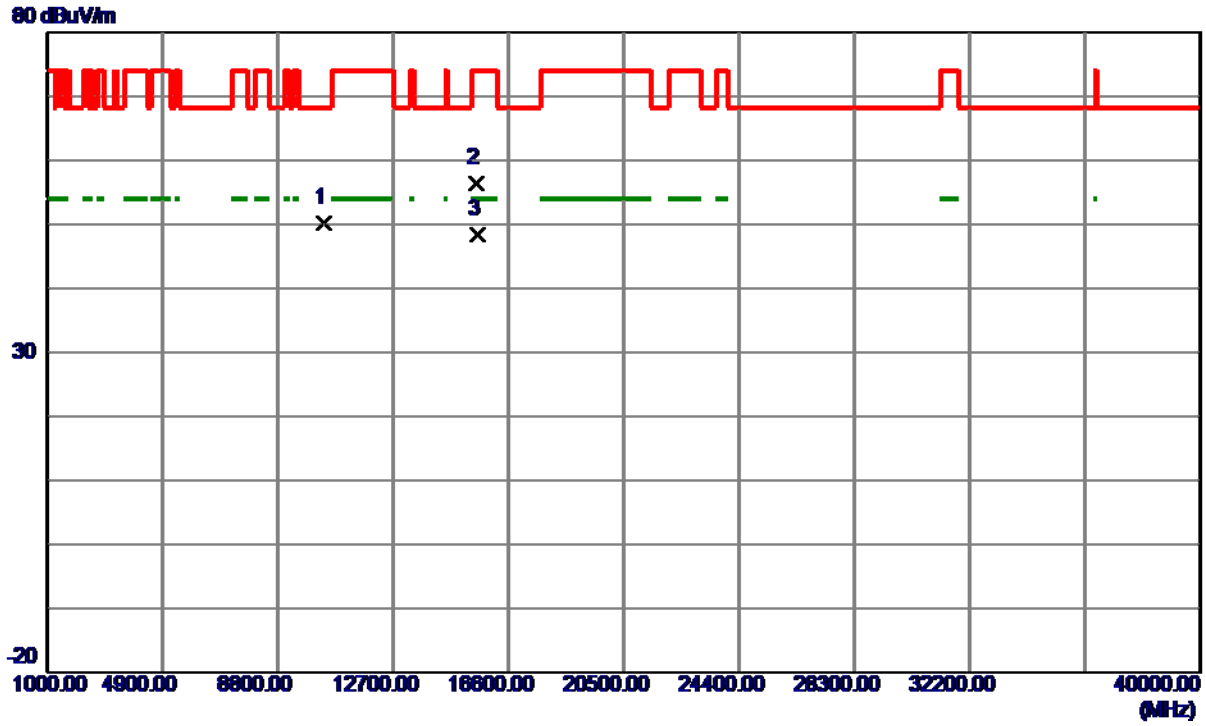


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	24.16	37.88	62.04	74.00	-11.96	peak	
2		5150.000	15.01	37.88	52.89	54.00	-1.11	AVG	
3	*	5176.950	71.63	37.77	109.40	68.20	41.20	peak	
4	X	5176.950	67.22	37.77	104.99	68.20	36.79	AVG	

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

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

Vertical

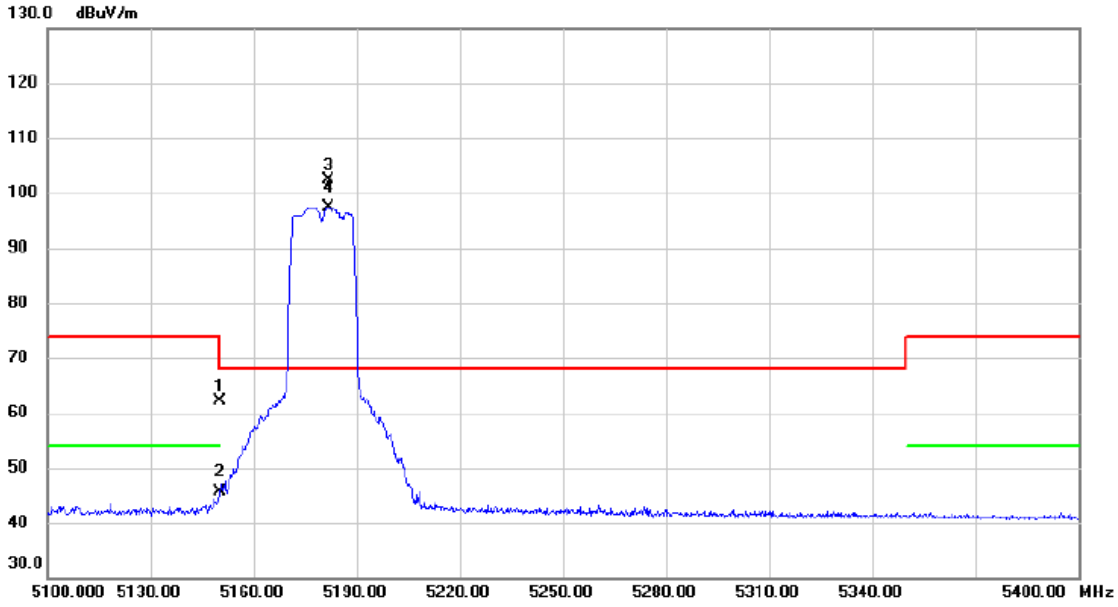


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10360.0000	48.60	1.65	50.25	68.20	-17.95	Peak	
2	15533.3500	53.32	3.03	56.35	74.00	-17.65	Peak	
3 *	15539.4780	45.34	3.02	48.36	54.00	-5.64	AVG	

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

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

Horizontal

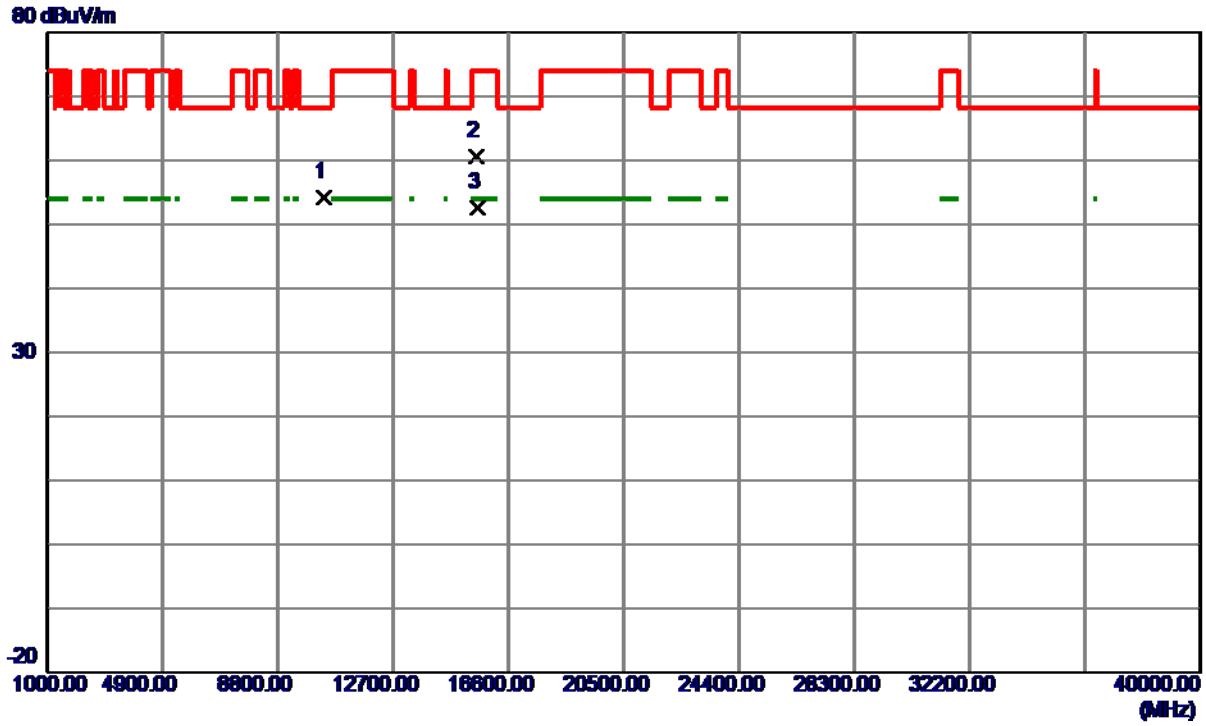


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	24.15	37.88	62.03	74.00	-11.97	peak	
2		5150.000	7.70	37.88	45.58	54.00	-8.42	AVG	
3	*	5181.600	64.56	37.75	102.31	68.20	34.11	peak	
4	X	5181.600	59.73	37.75	97.48	68.20	29.28	AVG	

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

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

Horizontal

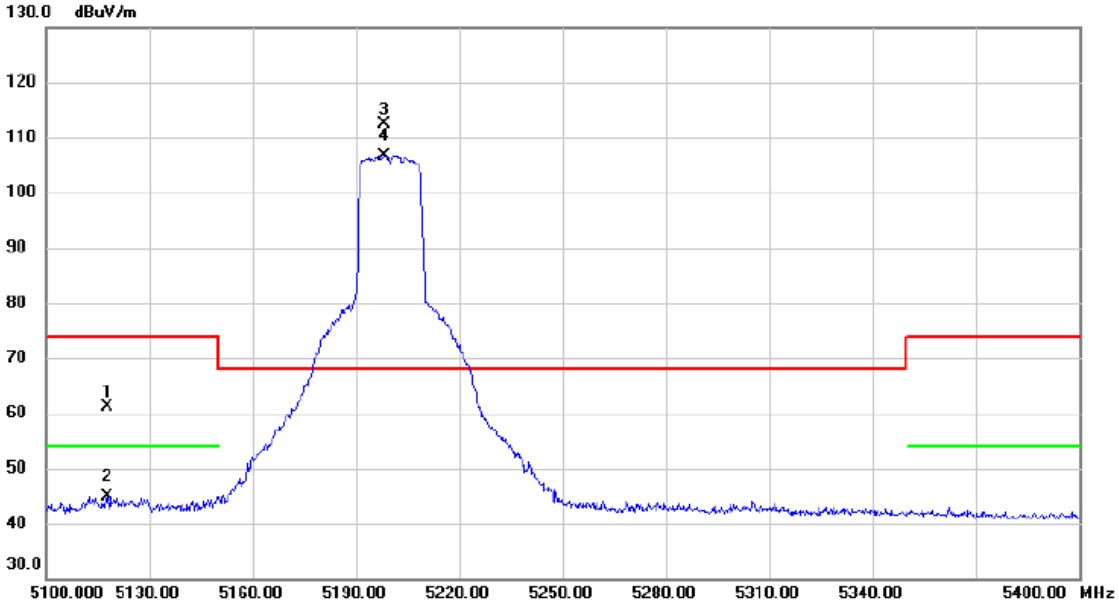


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10356.1000	52.59	1.64	54.23	68.20	-13.97	Peak	
2	15537.2500	57.56	3.02	60.58	74.00	-13.42	Peak	
3 *	15538.7370	49.61	3.02	52.63	54.00	-1.37	AVG	

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

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

Vertical

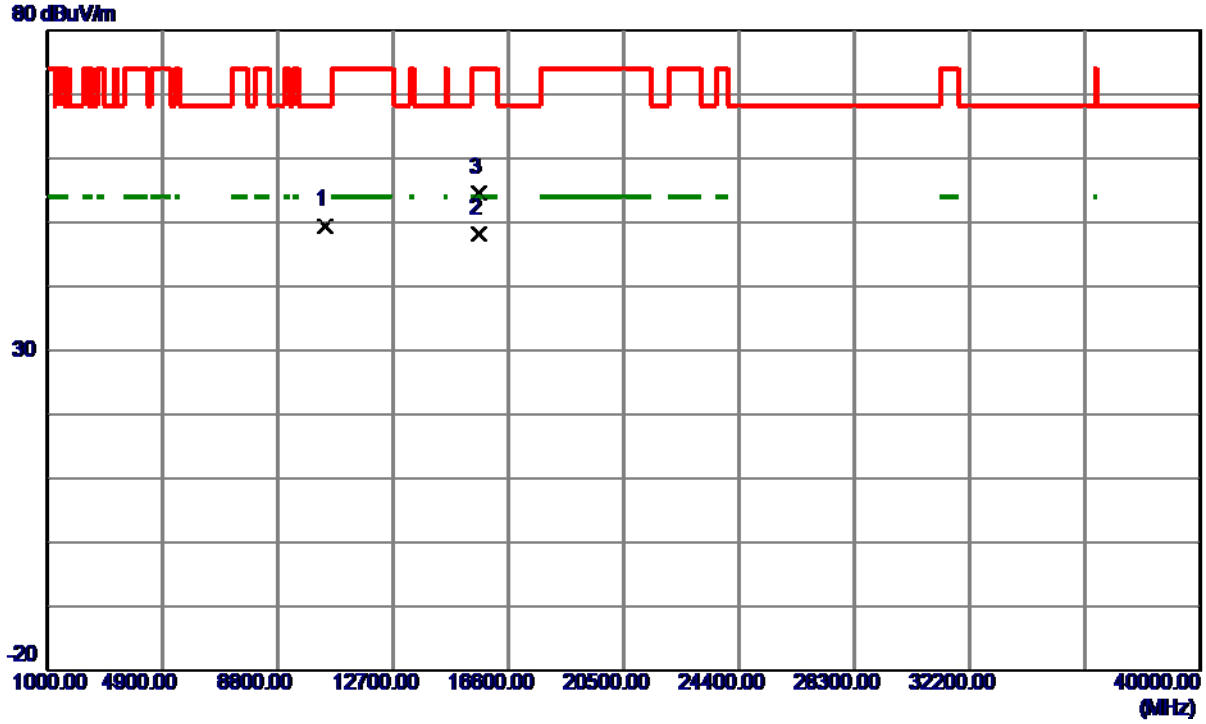


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5117.700	23.01	38.00	61.01	74.00	-12.99	peak	
2		5117.700	6.96	38.00	44.96	54.00	-9.04	AVG	
3	*	5198.250	74.76	37.69	112.45	68.20	44.25	peak	
4	X	5198.250	69.06	37.69	106.75	68.20	38.55	AVG	

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

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

Vertical

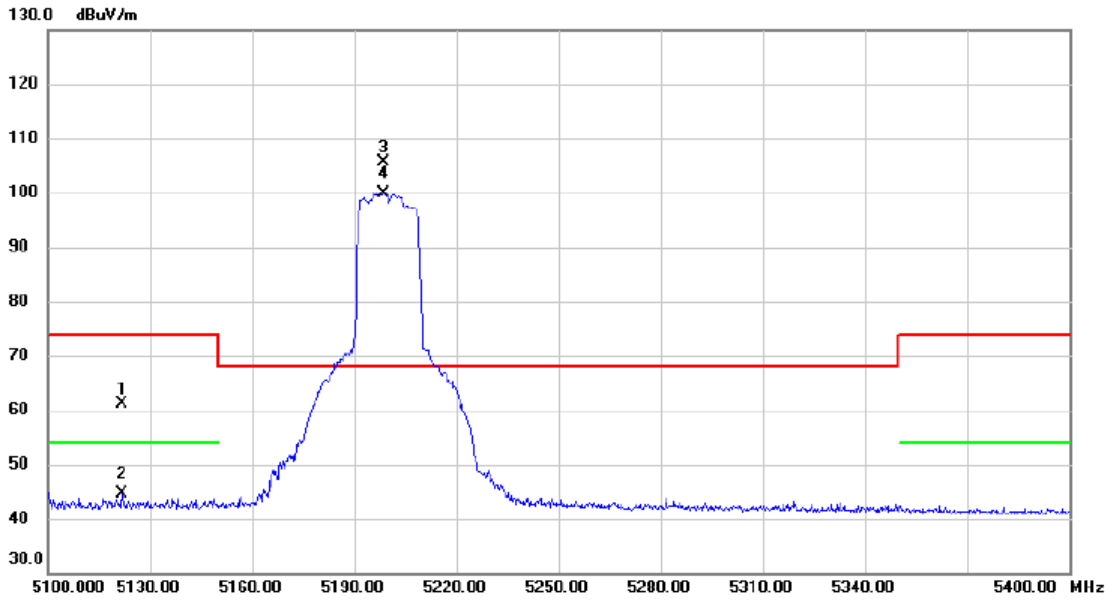


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10406.8000	47.77	1.73	49.50	68.20	-18.70	Peak	
2 *	15599.8950	45.25	2.87	48.12	54.00	-5.88	AVG	
3	15603.5500	51.73	2.87	54.60	74.00	-19.40	Peak	

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

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

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5121.750	23.21	37.99	61.20	74.00	-12.80	peak	
2		5121.750	6.54	37.99	44.53	54.00	-9.47	AVG	
3	*	5198.700	67.85	37.69	105.54	68.20	37.34	peak	
4	X	5198.700	62.21	37.69	99.90	68.20	31.70	AVG	

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