

FCC Radio Test Report

FCC ID: 2ACFN-HORA301W

This report concerns: Original Grant

Project No.	: 2002H016A
Equipment	: New Generation WiFi 6 and Dual 10GbE SD-WAN Router
Brand Name	: QNAP
Test Model	: QHora-301W
Series Model	: N/A
Applicant	: QNAP Systems, Inc.
Address	: 2F,No.22,Zhongxing Road,Xizhi District., New Taipei City,Taiwan, 221
Manufacturer	: QNAP Systems, Inc.
Address	: 2F,No.22,Zhongxing Rd,Xizhi Dist., New Taipei City,221,Taiwan
Date of Receipt	: Oct. 28, 2020
Date of Test	: Oct. 28,2020~Nov. 13, 2020
Issued Date	: Nov. 23, 2020
Report Version	: R01
Test Sample	: Engineering Sample No.: SH2020022569, SH2020022569-2 SH2020022569-1
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

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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.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	This report is based on the regular report (BTL-FCCP-2-2002H016_5G RLAN R00& BTL-FCCP-3-2002H016_RLAN 5G R00 for 802.11 ax) , Only added the 80+80 MHz mode, please refer to the regular report for other data.	Nov. 23, 2020
R01	Revised the power value.	Nov. 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	PASS	-----
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS	-----
15.407(a)	Maximum Output Power	APPENDIX F	PASS	-----
15.407(a)	Power Spectral Density	APPENDIX G	PASS	-----
15.407(g)	Frequency Stability	APPENDIX H	PASS	-----
15.203	Antenna Requirements	-----	PASS	-----
15.407(c)	Automatically Discontinue Transmission	-----	PASS	NOTE (2)

Note:

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

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	± 2.26

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	24°C	58%	AC 120V/60Hz	Forest
Radiated Emissions-30 MHz to 1GHz	24°C	58%	AC 120V/60Hz	Forest
Radiated Emissions-Above 1000 MHz	24°C	58%	AC 120V/60Hz	Forest
Spectrum Bandwidth	22°C	54%	AC 120V/60Hz	Danny
Maximum Output Power	22°C	54%	AC 120V/60Hz	Danny
Power Spectral Density	22°C	54%	AC 120V/60Hz	Vince

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	New Generation WiFi 6 and Dual 10GbE SD-WAN Router
Brand Name	QNAP
Test Model	QHora-301W
Series Model	N/A
Model Difference(s)	N/A
Software Version	0.6.1.0001
Hardware Version	AM4
Power Source	DC voltage supplied from AC/DC adapter. #1: DELTA ELECTRONICS, INC./DPS-40AB-11 #2: EDAC/EA10443D-120
Power Rating	#1: 100-240V ~/1.2A, 50Hz-60Hz O/P: 12V---3.33A Max. #1: 100-240V ~, 1.0A, 50-60Hz O/P: 12.0V---3.33A 40.0W
Operation Frequency	UNII-1: 5150 MHz~5250 MHz UNII-2A: 5250 MHz~5350 MHz UNII-2C: 5470 MHz~5725 MHz UNII-3: 5725 MHz~5850 MHz
Modulation Type	OFDM, OFDMA
Bit Rate of Transmitter	Up to 1733.2 Mbps
Maximum Conducted Output Power CDD	IEEE 802.11ac (VHT80+80): 24.95 dBm (0.3126W) IEEE 802.11ax (HEW80+80): 25.33 dBm (0.3412 W)
Maximum Conducted Output Power Beamforming	IEEE 802.11ac (VHT80+80): 24.84dBm (0.3048 W) IEEE 802.11ax (HEW80+80): 24.70 dBm (0.2951 W)

Note:

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

2. Channel List:

IEEE 802.11ac(80 MHz+80MHz) / IEEE 802.11ax (80 MHz+80MHz)		
Test Channel	EUT Channel	Test Frequency
low high	CH42+ CH58	5210 MHz+5290 MHz
	CH42+ CH106	5210 MHz+5530 MHz
	CH42+ CH122	5210 MHz+5610 MHz
	CH42+ CH155	5210 MHz+5775 MHz
	CH58+ CH106	5290 MHz+5530 MHz
	CH58+ CH122	5290 MHz+5610 MHz
	CH58+ CH155	5290 MHz+5775 MHz
	CH106+ CH122	5530 MHz+5610 MHz
	CH106+ CH155	5530 MHz+5775 MHz
	CH122+ CH155	5610 MHz+5775 MHz

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1		N/A	PCB	N/A	2.40	N/A
2		N/A	PCB	N/A	4.96	N/A
3		N/A	PCB	N/A	4.48	N/A
4		N/A	PCB	N/A	4.21	N/A

Note:

This EUT supports Beamforming and CDD, all antennas have unequal gains, any transmit signals are correlated with each other, so

1) Beamforming:

Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}] \text{dBi}$,

that is Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}] \text{dBi} = 10.09$;

Then, the UNII-1, UNII-3 output power limit is $30 - 10.09 + 6 = 25.91$, the UNII-2A, UNII-2C output power limit is $24 - 10.09 + 6 = 19.91$. The UNII-1 power spectral density limit is $17 - 10.09 + 6 = 12.91$, UNII-2A, UNII-2C power spectral density limit is $11 - 10.09 + 6 = 6.91$, the UNII-3 power spectral density limit is $30 - 10.09 + 6 = 25.91$.

2) CDD:

For power spectral density measurements, the Directional

gain = $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}] \text{dBi}$,

that is Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}] \text{dBi} = 10.09$;

Then, the UNII-1 power spectral density limited is $17 - 10.09 + 6 = 12.91$,

UNII-2A, UNII-2C power spectral density limit is $11 - 10.09 + 6 = 6.91$, the UNII-3 power spectral density limit is $30 - 10.09 + 6 = 25.91$.

For power measurements, Directional gain = $G_{ANT \text{ MAX.}} + \text{Array Gain. Array}$

Gain = $0 \text{dB} (N_{ANT} \leq 4)$, so the Directional gain = 4.96 .

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 AC (VHT80+80) Mode / CH42+CH58
Mode 2	TX AC (VHT80+80) Mode / CH42+CH106
Mode 3	TX AC (VHT80+80) Mode / CH42+CH122
Mode 4	TX AC (VHT80+80) Mode / CH58+CH106
Mode 5	TX AC (VHT80+80) Mode / CH58+CH122
Mode 6	TX AC (VHT80+80) Mode / CH106+CH122
Mode 7	TX AC (VHT80+80) Mode / CH42+CH155
Mode 8	TX AC (VHT80+80) Mode / CH58+CH155
Mode 9	TX AC (VHT80+80) Mode / CH106+CH155
Mode 10	TX AC (VHT80+80) Mode / CH122+CH155
Mode 11	TX AX (HEW80+80) Mode/ CH42+CH58
Mode 12	TX AX (HEW80+80) Mode / CH42+CH106
Mode 13	TX AX (HEW80+80) Mode / CH42+CH122
Mode 14	TX AX (HEW80+80) Mode / CH58+CH106
Mode 15	TX AX (HEW80+80) Mode / CH58+CH122
Mode 16	TX AX (HEW80+80) Mode / CH106+CH122
Mode 17	TX AX (HEW80+80) Mode / CH42+CH155
Mode 18	TX AX (HEW80+80) Mode / CH58+CH155
Mode 19	TX AX (HEW80+80) Mode / CH106+CH155
Mode 20	TX AX (HEW80+80) Mode / CH122+CH155

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 15	TX AX(HEW80) Mode 5290+5610 MHz

Radiated emissions test	
Final Test Mode	Description
Mode 1	TX AC (VHT80+80) Mode / CH42+CH58
Mode 2	TX AC (VHT80+80) Mode / CH42+CH106
Mode 3	TX AC (VHT80+80) Mode / CH42+CH122
Mode 4	TX AC (VHT80+80) Mode / CH58+CH106
Mode 5	TX AC (VHT80+80) Mode / CH58+CH122
Mode 6	TX AC (VHT80+80) Mode / CH106+CH122
Mode 7	TX AC (VHT80+80) Mode / CH42+CH155
Mode 8	TX AC (VHT80+80) Mode / CH58+CH155
Mode 9	TX AC (VHT80+80) Mode / CH106+CH155
Mode 10	TX AC (VHT80+80) Mode / CH122+CH155
Mode 11	TX AX (HEW80+80) Mode/ CH42+CH58
Mode 12	TX AX (HEW80+80) Mode / CH42+CH106
Mode 13	TX AX (HEW80+80) Mode / CH42+CH122
Mode 14	TX AX (HEW80+80) Mode / CH58+CH106
Mode 15	TX AX (HEW80+80) Mode / CH58+CH122
Mode 16	TX AX (HEW80+80) Mode / CH106+CH122
Mode 17	TX AX (HEW80+80) Mode / CH42+CH155
Mode 18	TX AX (HEW80+80) Mode / CH58+CH155
Mode 19	TX AX (HEW80+80) Mode / CH106+CH155
Mode 20	TX AX (HEW80+80) Mode / CH122+CH155

Note:

- (1) For conducted emissions and radiated emission below 1 GHz test, two power adapter has been pre-tested, but only the worst case recorded in this report.
- (2) The measurements for RF Output Power were tested during CDD and Beamforming, the worst case was CDD, only worst case was documented for other test items.
- (3) The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

2.3 PARAMETERS OF TEST SOFTWARE

CDD

2TX		
Test Software	QRCT	
Operating Mode	Test Frequency (MHz)	Parameters of Test Software
IEEE 802.11ac (VHT80+80)	5210(1/2)+5530(3/4)	16.5
	5210(1/2)+5610(3/4)	18
	5210(1/2)+5775(3/4)	17.5
	5290(1/2)+5530(3/4)	18.5
	5290(1/2)+5610(3/4)	20
	5290(1/2)+5775(3/4)	18.5
	5530(1/2)+5775(3/4)	17.5
	5610(1/2)+5775(3/4)	20
	5210(1/2)+5290(3/4)	18
	5530(1/2)+5610(3/4)	17.5
IEEE 802.11ax (he80+80)	5210(1/2)+5530(3/4)	17.5
	5210(1/2)+5610(3/4)	18
	5210(1/2)+5775(3/4)	17.5
	5290(1/2)+5530(3/4)	18.5
	5290(1/2)+5610(3/4)	20
	5290(1/2)+5775(3/4)	18.5
	5530(1/2)+5775(3/4)	17.5
	5610(1/2)+5775(3/4)	19.5
	5210(1/2)+5290(3/4)	17
	5530(1/2)+5610(3/4)	17.5

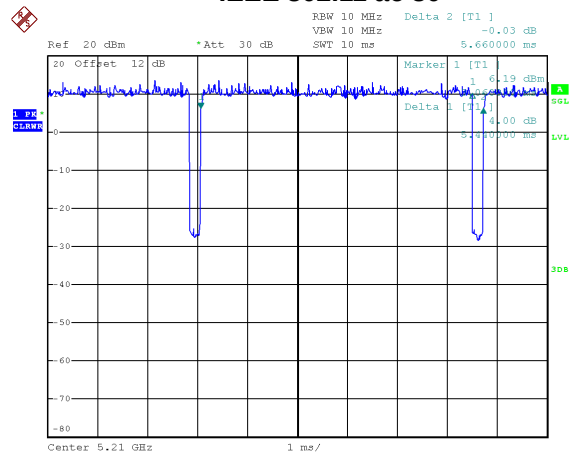
Beamforming

2TX		
Test Software	QRCT	
Operating Mode	Test Frequency (MHz)	Parameters of Test Software
IEEE 802.11 ac 80+80	5210(1/2)+5530(3/4)	16.5
	5210(1/2)+5610(3/4)	18
	5210(1/2)+5775(3/4)	17.5
	5290(1/2)+5530(3/4)	17.5
	5290(1/2)+5610(3/4)	20
	5290(1/2)+5775(3/4)	16.5
	5530(1/2)+5775(3/4)	17.5
	5610(1/2)+5775(3/4)	19.5
	5210(1/2)+5290(3/4)	18
	5530(1/2)+5610(3/4)	17.5
IEEE 802.11 ax 80+80	5210(1/2)+5530(3/4)	17.5
	5210(1/2)+5610(3/4)	18
	5210(1/2)+5775(3/4)	17.5
	5290(1/2)+5530(3/4)	17.5
	5290(1/2)+5610(3/4)	20
	5290(1/2)+5775(3/4)	17.5
	5530(1/2)+5775(3/4)	17.5
	5610(1/2)+5775(3/4)	19
	5210(1/2)+5290(3/4)	18
	5530(1/2)+5610(3/4)	17.5

2.4 DUTY CYCLE

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

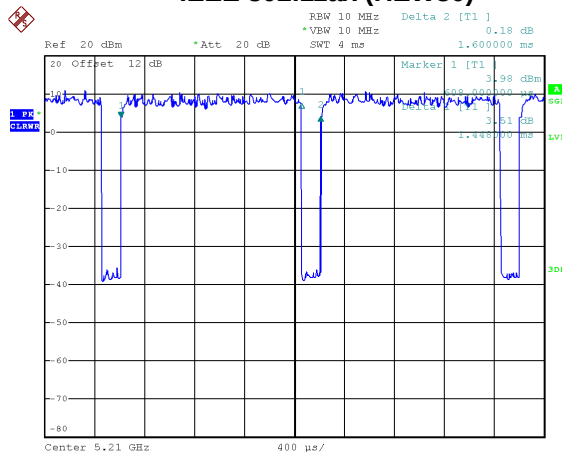
IEEE 802.11 ac 80



Date: 2.NOV.2020 18:51:17

Duty cycle = 5.44 ms / 5.66 ms = 96.11%
Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.17\text{dB}$

IEEE 802.11ax (HEW80)



Date: 16.NOV.2020 11:49:58

Duty cycle = 1.448 ms / 1.60 ms = 90.50%
Duty Factor = $10 * \log(1 / \text{Duty cycle}) = 0.43\text{ dB}$

NOTE:

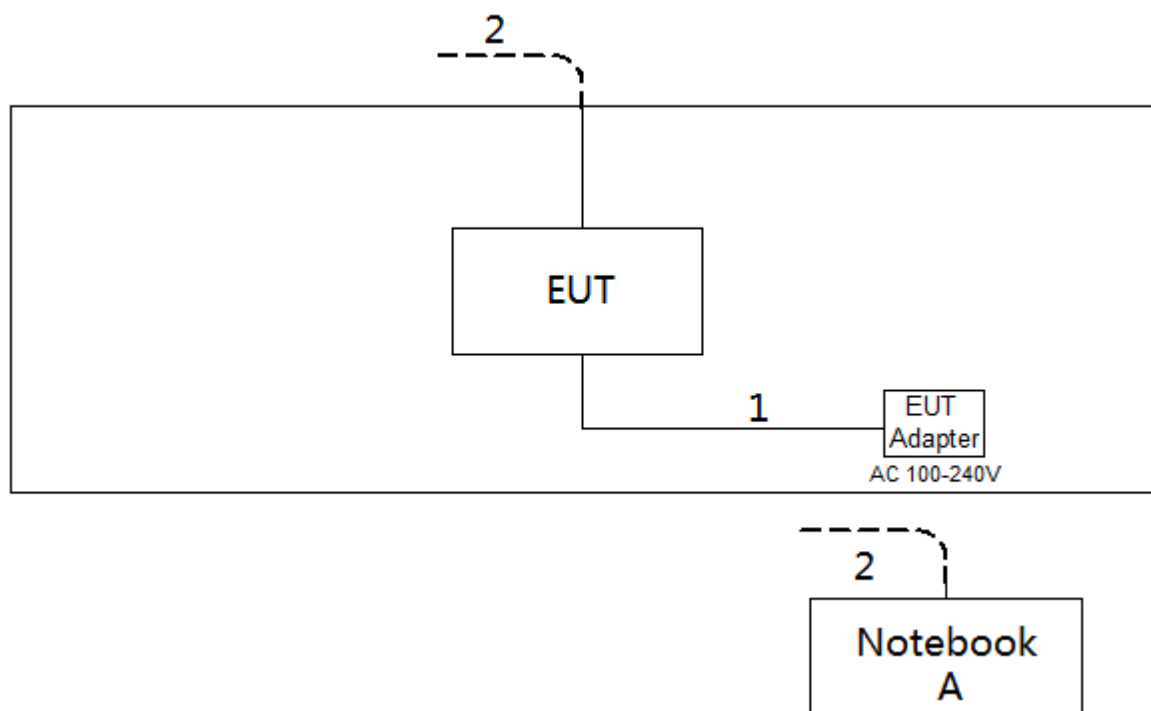
For IEEE 802.11ac (VHT80):

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 $< 98\%$).

For IEEE 802.11ax (he80):

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 $< 98\%$).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

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

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

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 - 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

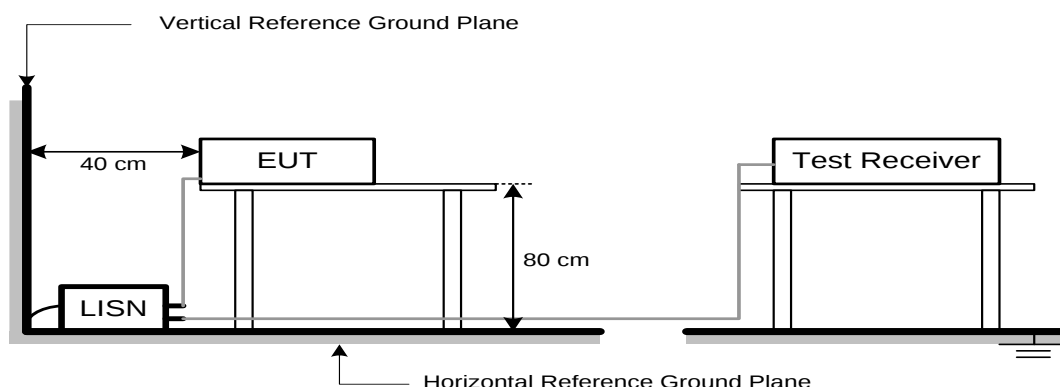
3.2 TEST PROCEDURE

- 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:

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

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

4.2 TEST PROCEDURE

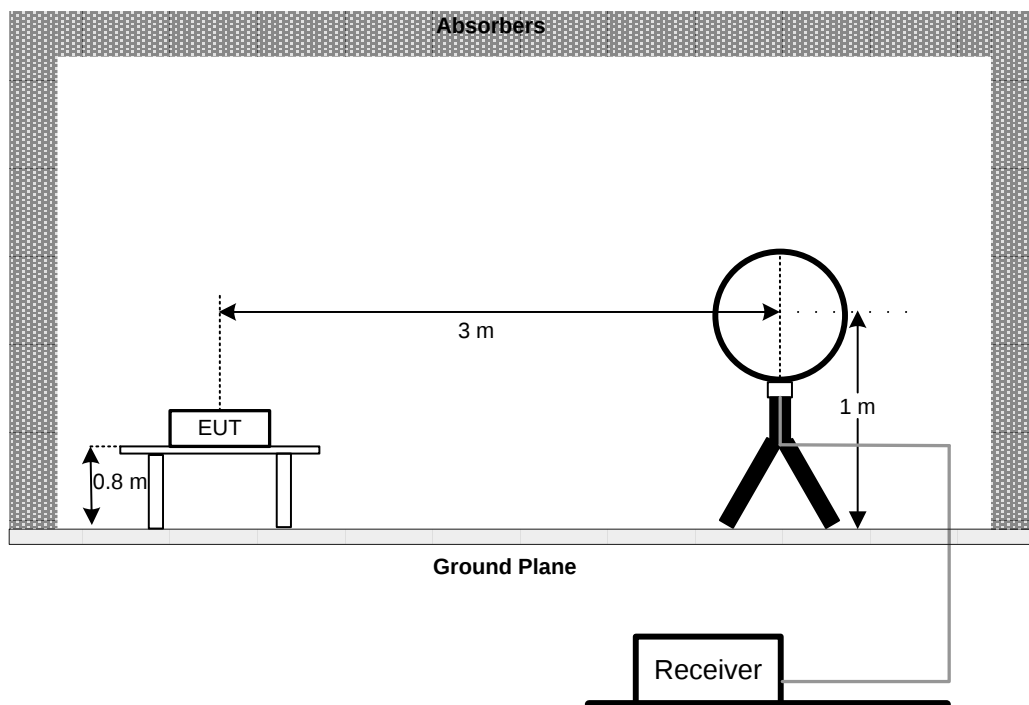
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance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

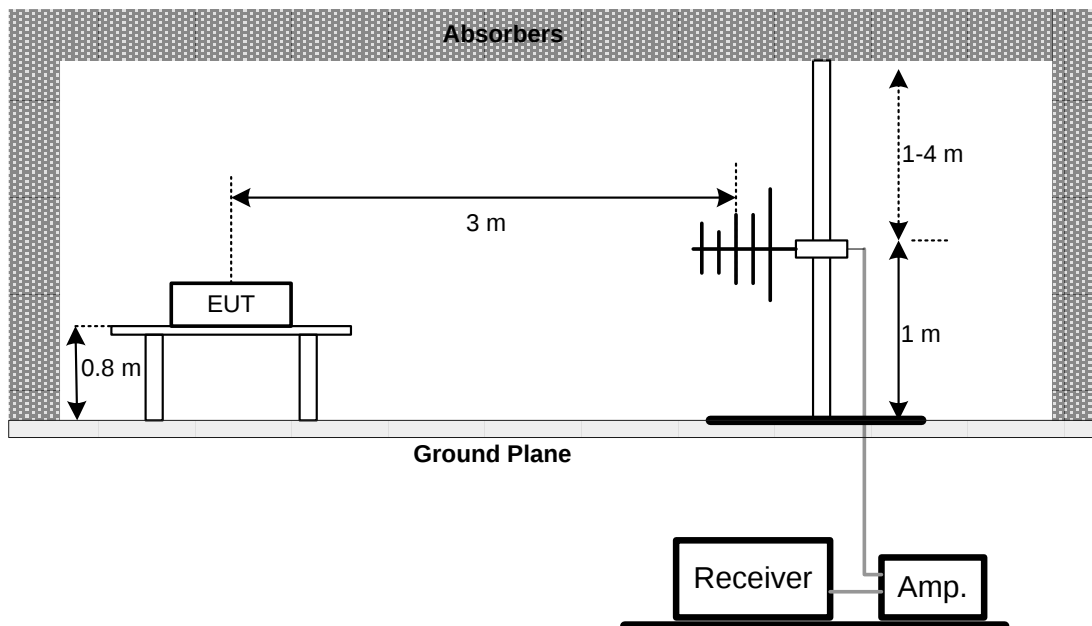
No deviation

4.4 TEST SETUP

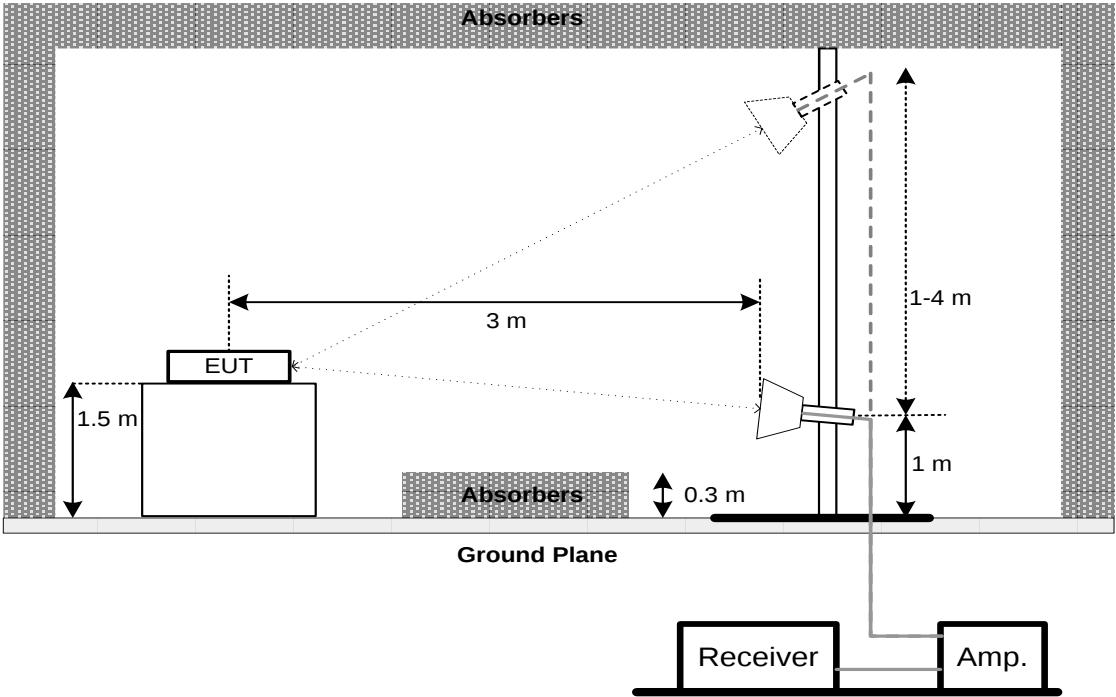
9 kHz to 30 MHz



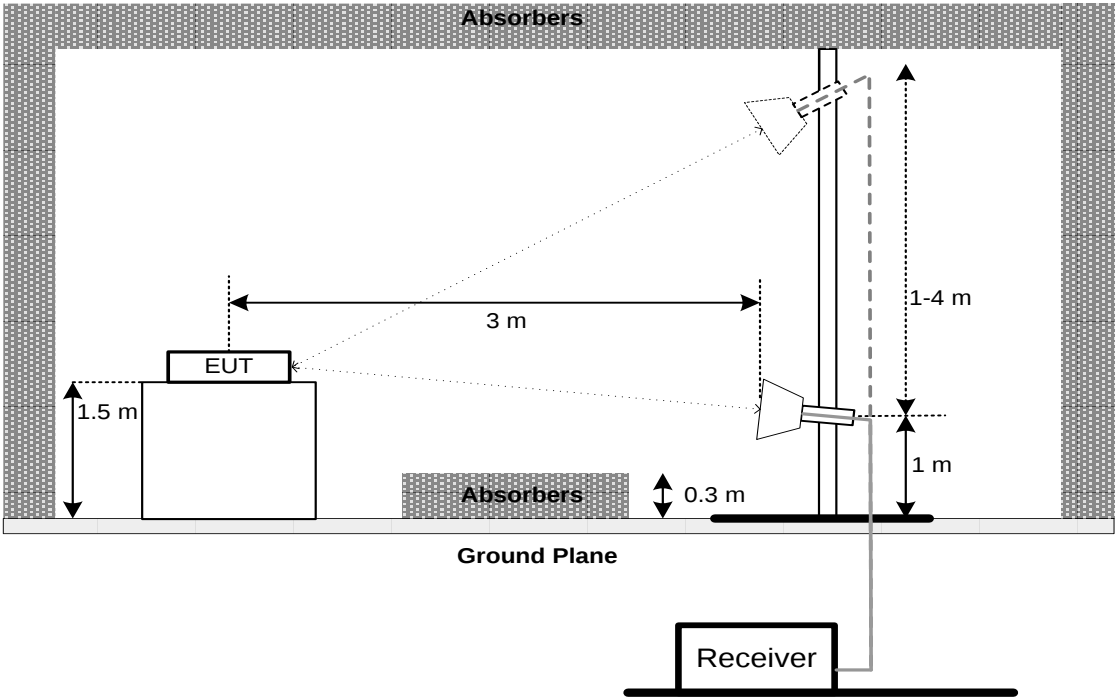
30 MHz to 1 GHz



Above 1 GHz



Above 1 GHz Band edge



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS - 30 MHz TO 1000 MHz

Please refer to the APPENDIX B.

4.7 TEST RESULTS - ABOVE 1000 MHz

Please refer to the APPENDIX C.

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:

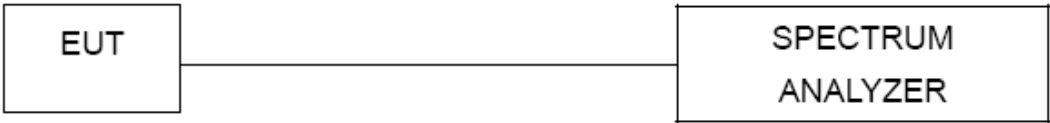
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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 D.

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:

- For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

6.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX E.

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

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

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz.
VBW	≥ 3 MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

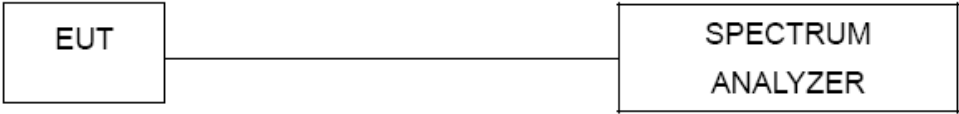
Note:

- For UNII-2C, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.
- The value measured with RBW=1 MHz is to be added with $10\log(500 \text{ kHz}/1 \text{ MHz})$ which is -3 dB. For example, if the measured value is +10dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7dBm/500kHz.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX F.

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-N M-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. 02, 2021
2	Cable	N/A	EMCRG400-BM-N M-10000	170628	Jul. 15, 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-7 000	170330	Apr. 13, 2021
6	Cable	1m	EMC104-SM-SM-1 000	170331	Apr. 13, 2021
7	Cable	3.5m	EMC104-SM-NM-3 500	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-1787	Mar. 21, 2021
2	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C	00203919	Mar. 21, 2021
3	Pre-Amplifier	emci	EMC012645SE	980421	May. 11, 2021
4	Pre-Amplifier	emci	EMC184045SE	980409	Mar. 21, 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-700 0	170330	Apr. 13, 2021
8	Cable	1m	EMC104-SM-SM-100 0	170331	Apr. 13, 2021
9	Cable	3.5m	EMC104-SM-NM-350 0	170621	Apr. 13, 2021
10	Cable	0.8m	EMC102-SM-SM-800	170335	Apr. 13, 2021
11	Cable	6m	EMC102-SM-SM-600 0	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

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Keysight	8990B	MY51000507	Mar. 21, 2021
2	Pulse Power Sensor	Keysight	N1923A	MY58310003	Mar. 21, 2021

Antenna Conducted Spurious Emissions					
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.

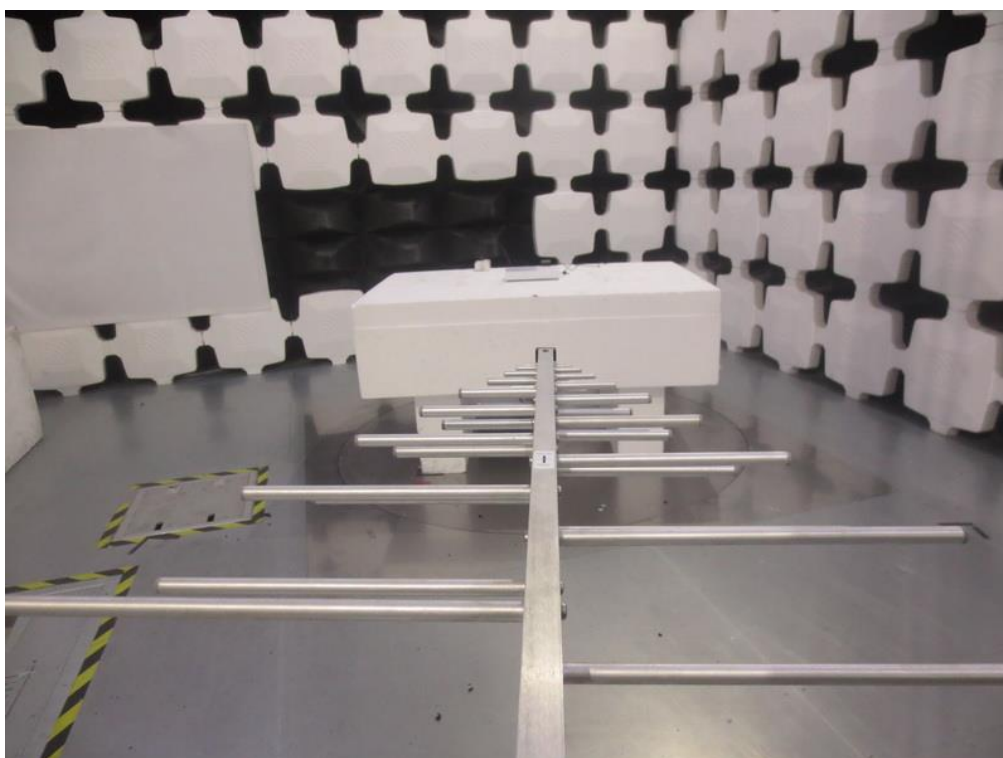
9. EUT TEST PHOTOS

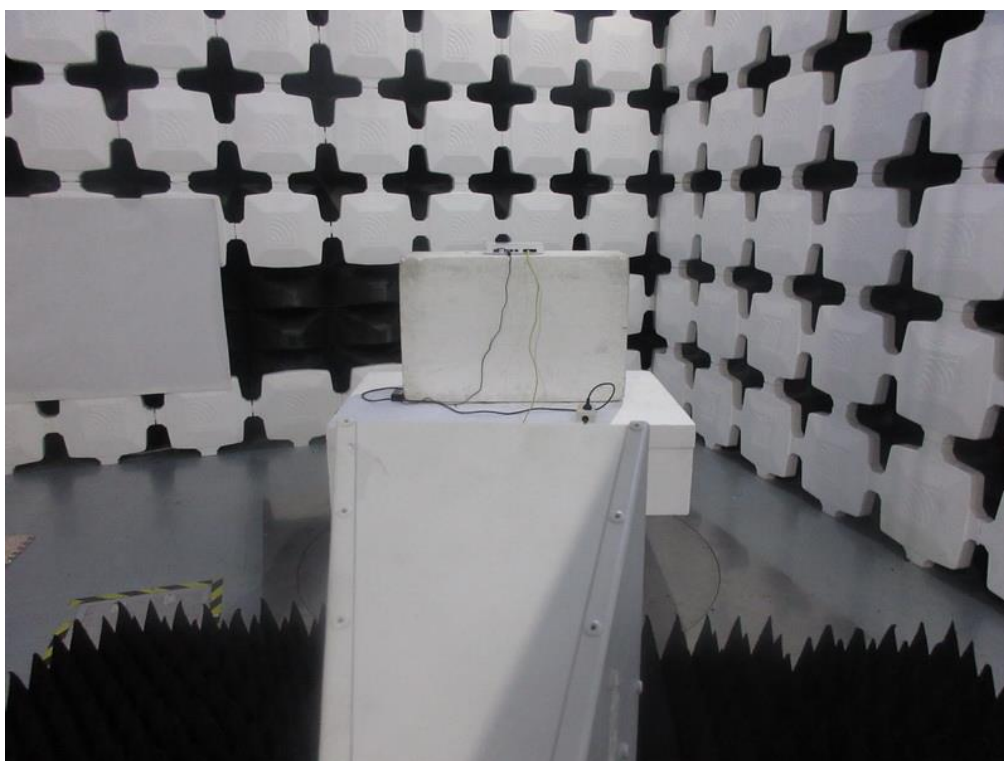
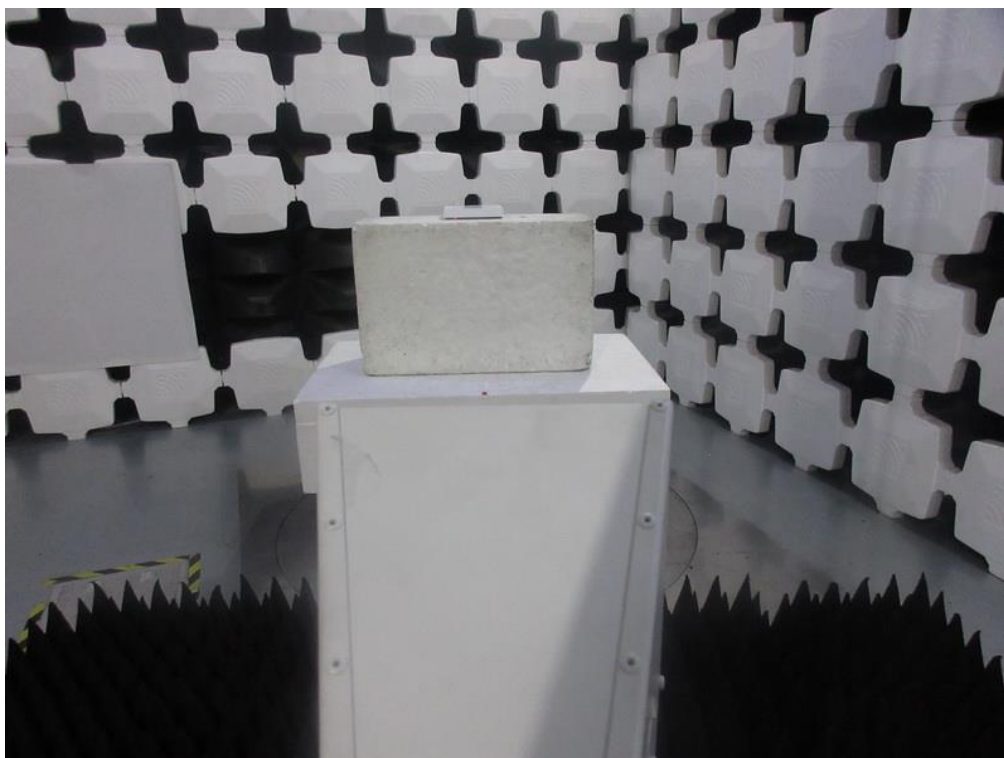
Conducted Emissions Test Photos



Radiated Emissions Test Photos

30 MHz to 1 GHz

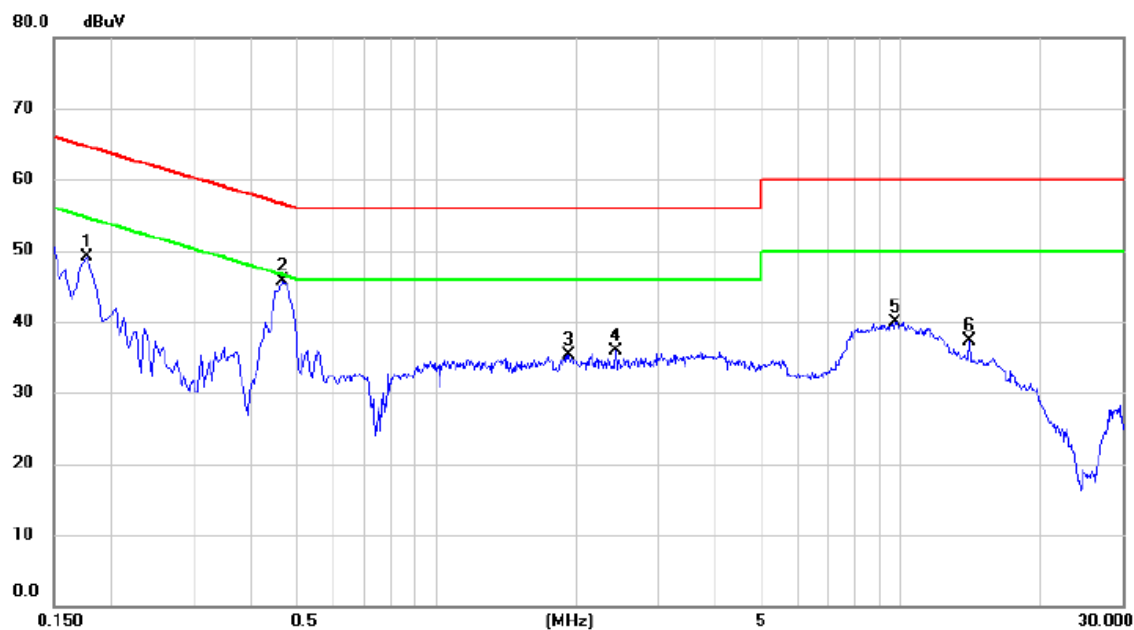


Radiated Emissions Test Photos**Above 1 GHz**

APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX AX(HEW80) Mode 5290+5610 MHz--ANT.1+2/3+4

Line



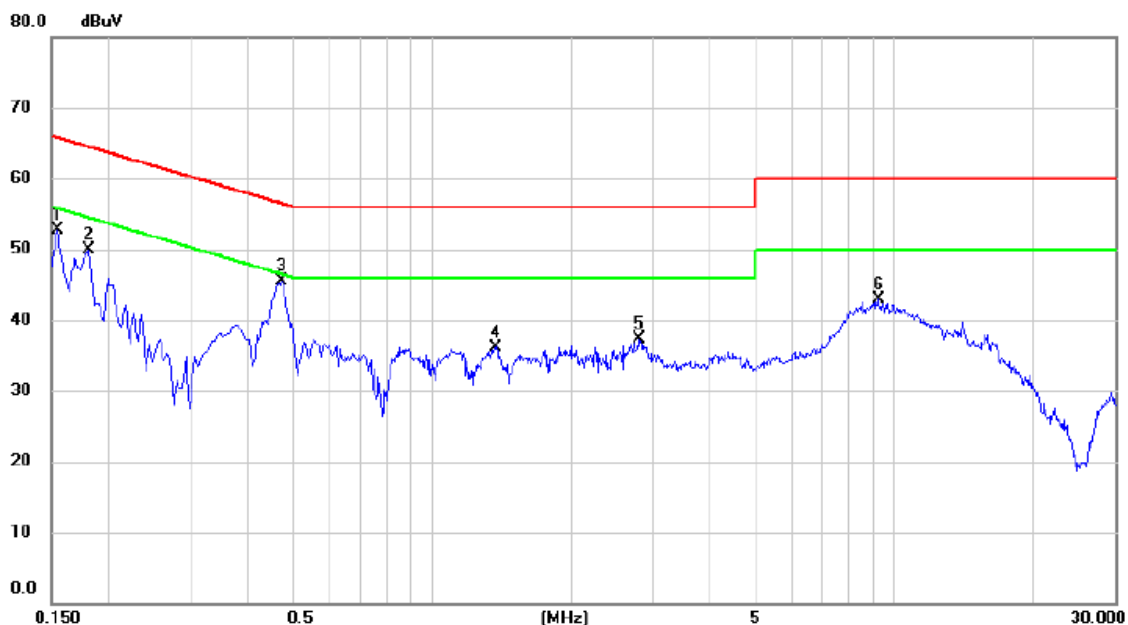
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1770	39.41	9.76	49.17	64.63	-15.46	peak	
2	*	0.4650	35.74	9.89	45.63	56.60	-10.97	peak	
3		1.9320	25.48	9.80	35.28	56.00	-20.72	peak	
4		2.4314	26.04	9.82	35.86	56.00	-20.14	peak	
5		9.7080	29.71	10.18	39.89	60.00	-20.11	peak	
6		14.0010	27.09	10.19	37.28	60.00	-22.72	peak	

REMARKS:

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

Test Mode: TX AX(HEW80) Mode 5290+5610 MHz--ANT.1+2/3+4

Neutral



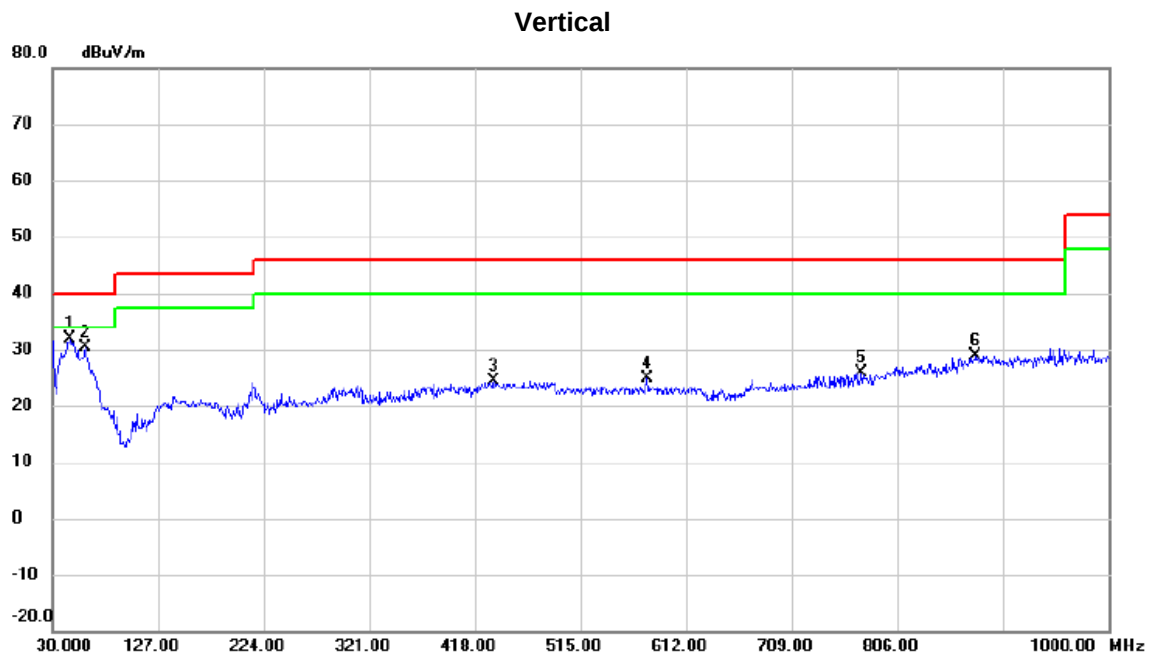
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1547	43.14	9.61	52.75	65.74	-12.99	peak	
2		0.1814	40.20	9.63	49.83	64.42	-14.59	peak	
3	*	0.4740	35.86	9.69	45.55	56.44	-10.89	peak	
4		1.3740	26.46	9.74	36.20	56.00	-19.80	peak	
5		2.8093	27.38	9.83	37.21	56.00	-18.79	peak	
6		9.2263	32.71	10.14	42.85	60.00	-17.15	peak	

REMARKS:

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

APPENDIX B - RADIATED EMISSION - 30 MHZ TO 1 GHZ

Test Mode: TX AX(HEW80) Mode 5290+5610 MHz--ANT.1+2/3+4



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	46.4900	48.77	-16.85	31.92	40.00	-8.08	peak	
2		60.5550	47.73	-17.26	30.47	40.00	-9.53	peak	
3		435.4600	36.66	-12.37	24.29	46.00	-21.71	peak	
4		576.1100	34.61	-9.80	24.81	46.00	-21.19	peak	
5		773.5050	32.78	-6.85	25.93	46.00	-20.07	peak	
6		877.7800	35.13	-6.13	29.00	46.00	-17.00	peak	

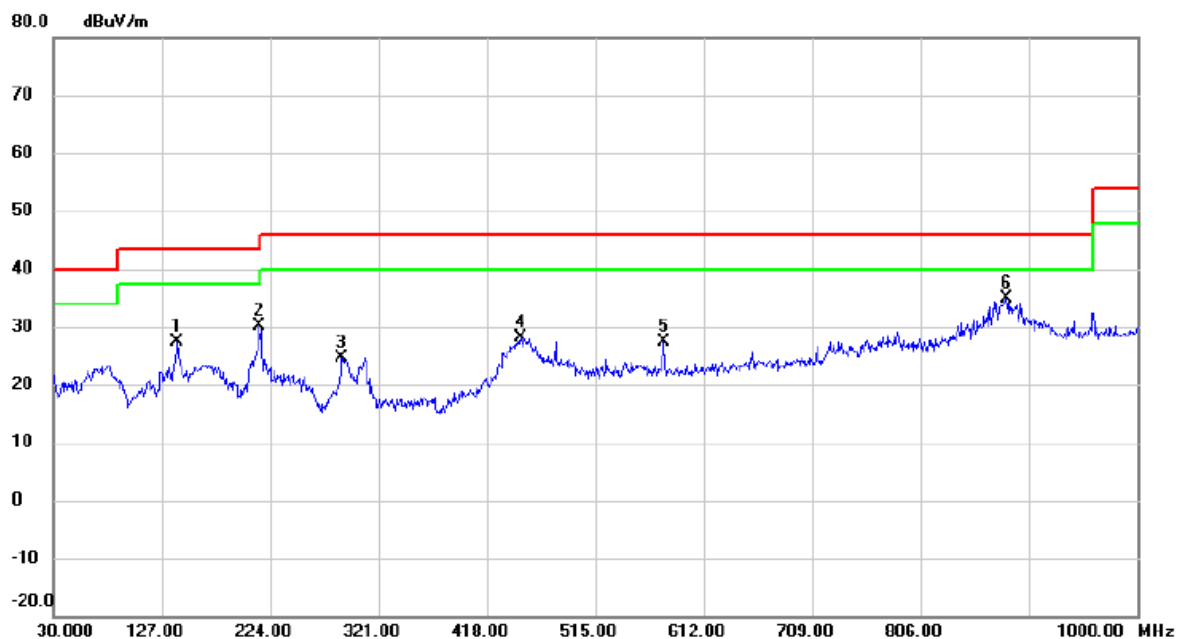
REMARKS:

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

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

Test Mode: TX AX(HEW80) Mode 5290+5610 MHz--ANT.1+2/3+4

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		140.5800	44.03	-16.77	27.26	43.50	-16.24	peak	
2		214.7850	49.57	-19.35	30.22	43.50	-13.28	peak	
3		288.5050	40.56	-15.89	24.67	46.00	-21.33	peak	
4		448.0700	40.03	-12.00	28.03	46.00	-17.97	peak	
5		576.1100	37.07	-9.80	27.27	46.00	-18.73	peak	
6	*	883.1150	40.90	-6.09	34.81	46.00	-11.19	peak	

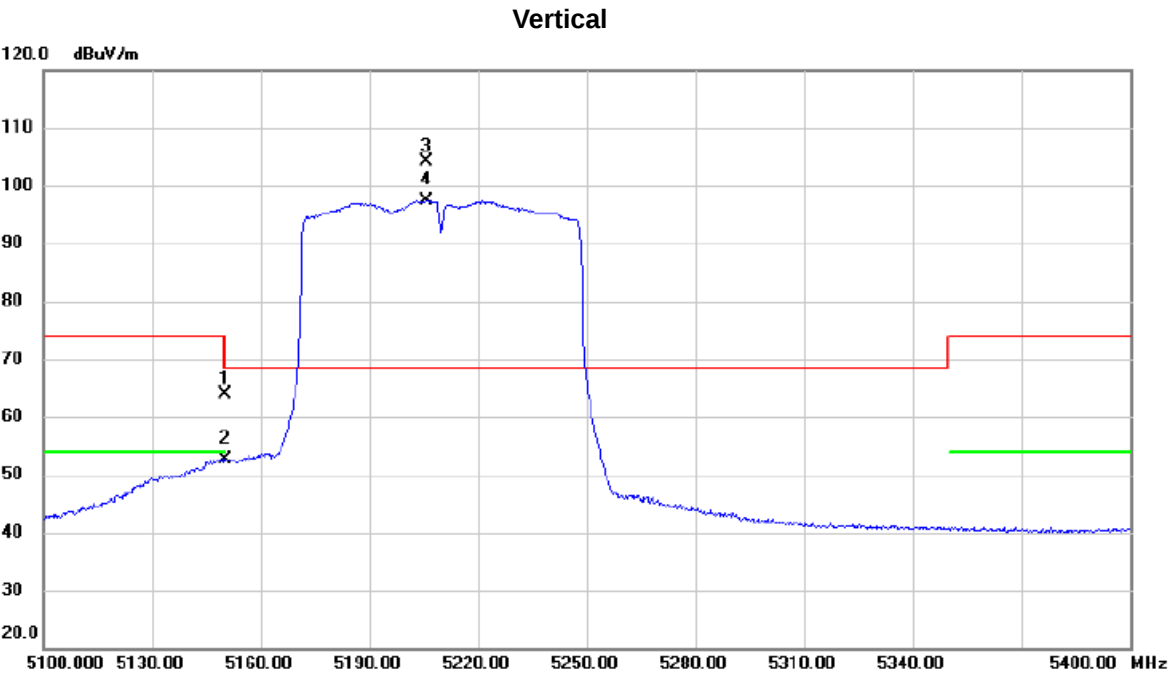
REMARKS:

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

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

APPENDIX C - RADIATED EMISSION - ABOVE 1000 MHZ

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz--ANT.1+ANT.2

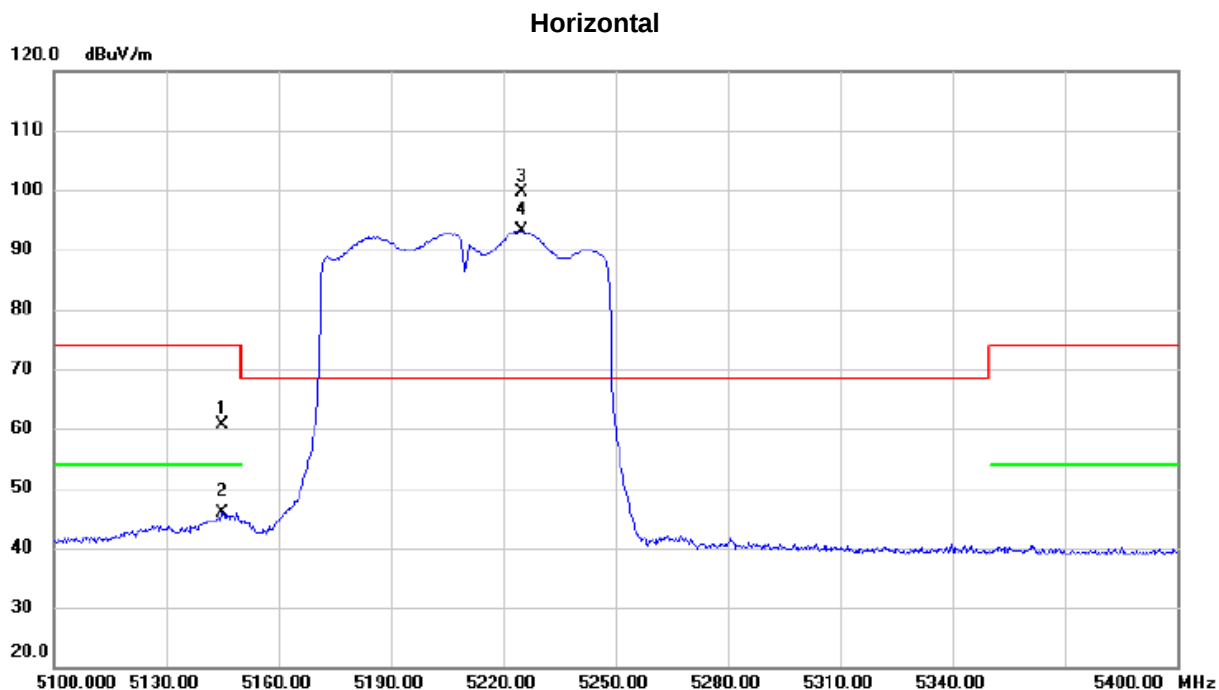


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	26.09	37.88	63.97	74.00	-10.03	peak	
2		5150.000	14.63	37.88	52.51	54.00	-1.49	AVG	
3	*	5205.900	66.34	37.68	104.02	68.30	35.72	peak	
4	X	5205.900	59.71	37.68	97.39	68.30	29.09	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz--ANT.1+ANT.2

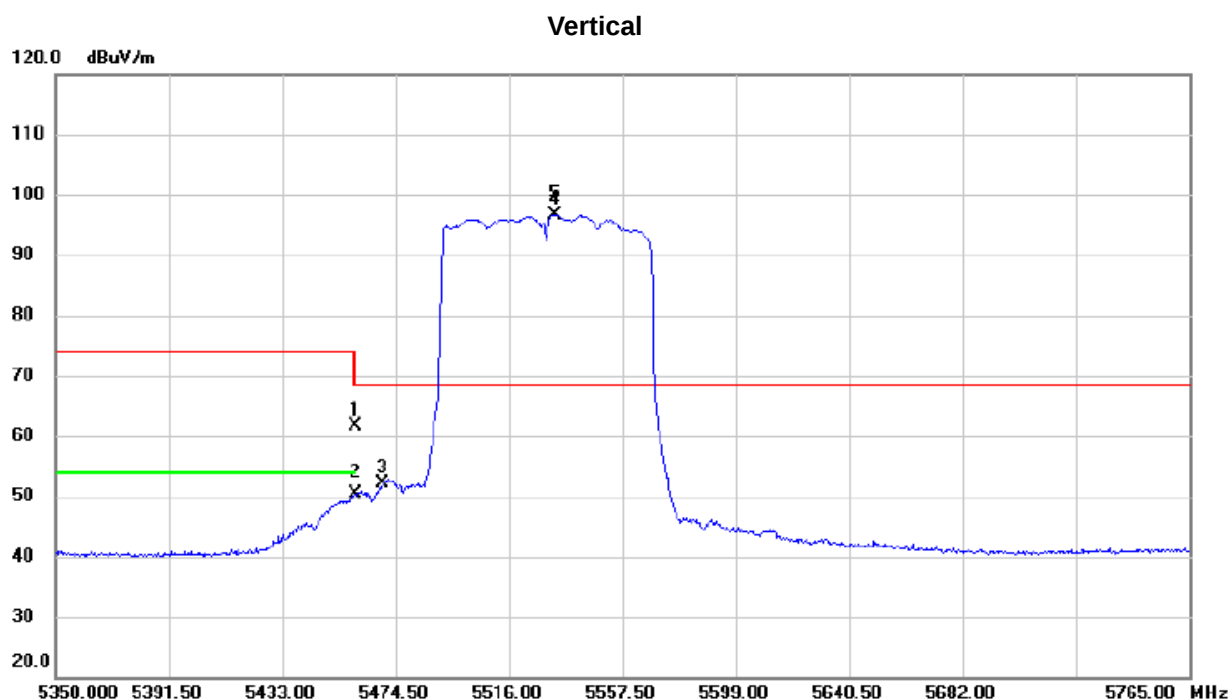


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5145.150	22.67	37.89	60.56	74.00	-13.44	peak	
2		5145.150	8.11	37.89	46.00	54.00	-8.00	AVG	
3	*	5224.950	62.03	37.64	99.67	68.30	31.37	peak	
4	X	5224.950	55.53	37.64	93.17	68.30	24.87	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz --ANT.3+ANT.4



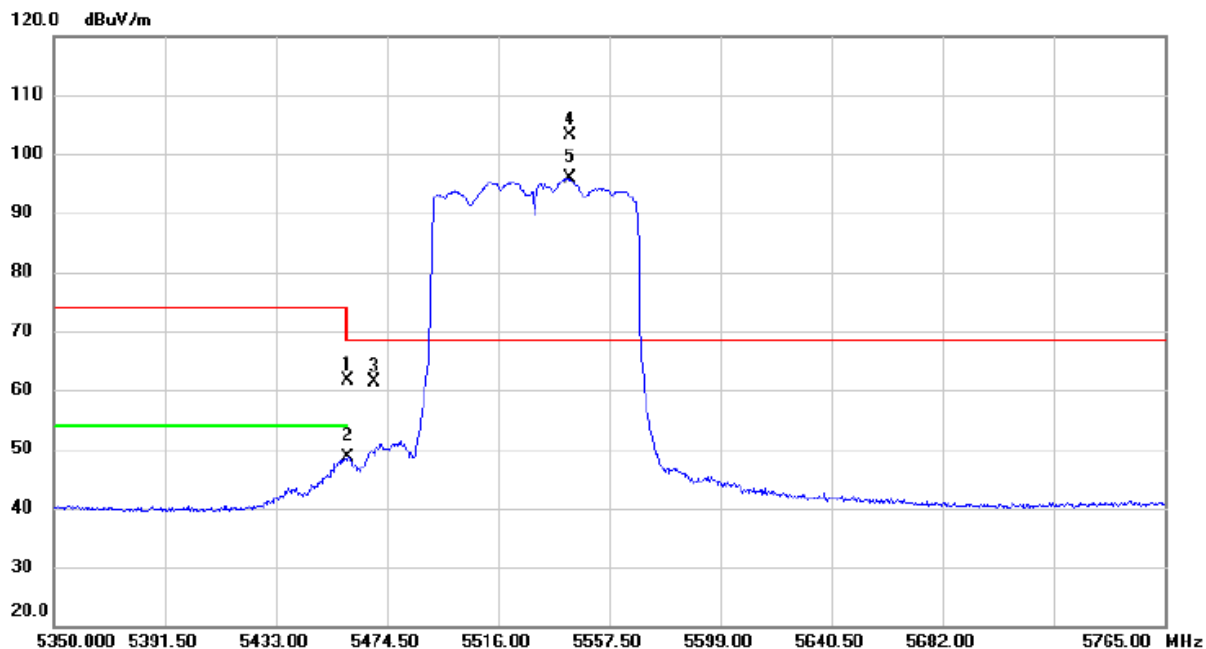
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	23.45	38.12	61.57	74.00	-12.43	peak	
2		5460.000	12.27	38.12	50.39	54.00	-3.61	AVG	
3		5470.000	14.00	38.15	52.15	68.30	-16.15	peak	
4	*	5532.807	58.46	38.27	96.73	68.30	28.43	peak	
5	X	5532.807	58.46	38.27	96.73	68.30	28.43	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz--ANT.3+ANT.4

Horizontal

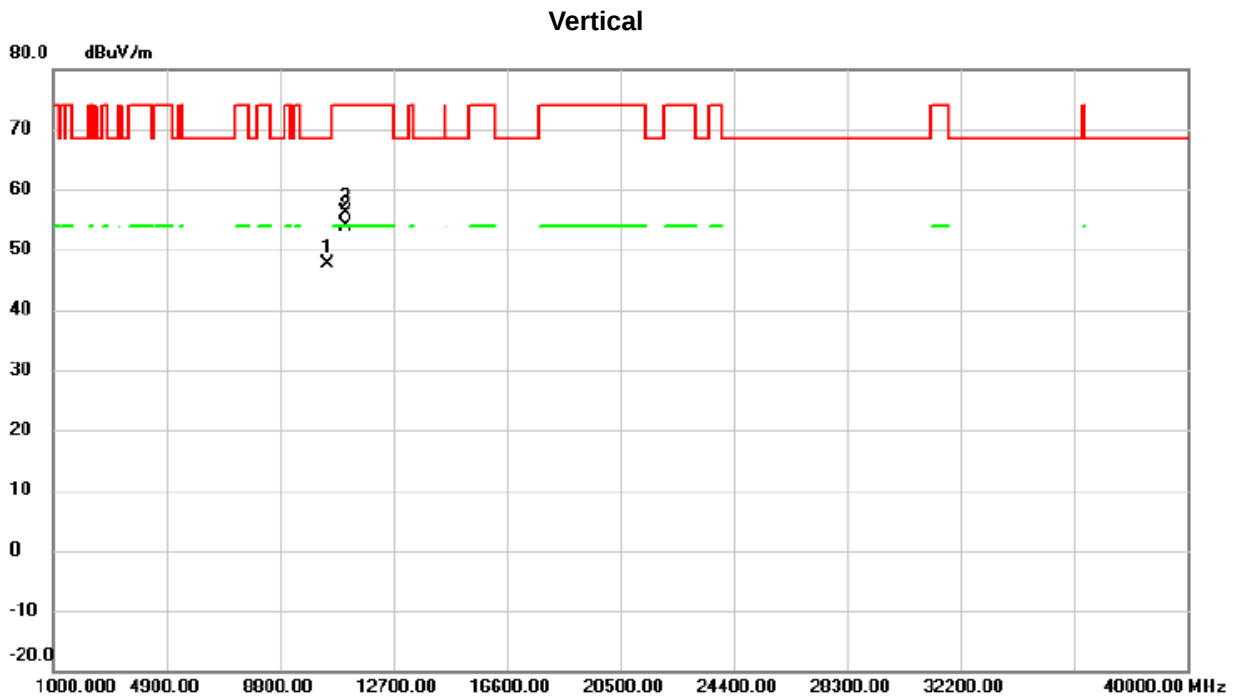


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	23.48	38.12	61.60	74.00	-12.40	peak	
2		5460.000	10.43	38.12	48.55	54.00	-5.45	AVG	
3		5470.000	23.20	38.15	61.35	68.30	-6.95	peak	
4	*	5542.560	64.75	38.28	103.03	68.30	34.73	peak	
5	X	5542.560	57.55	38.28	95.83	68.30	27.53	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5530 MHz--ANT.1+2/3+4

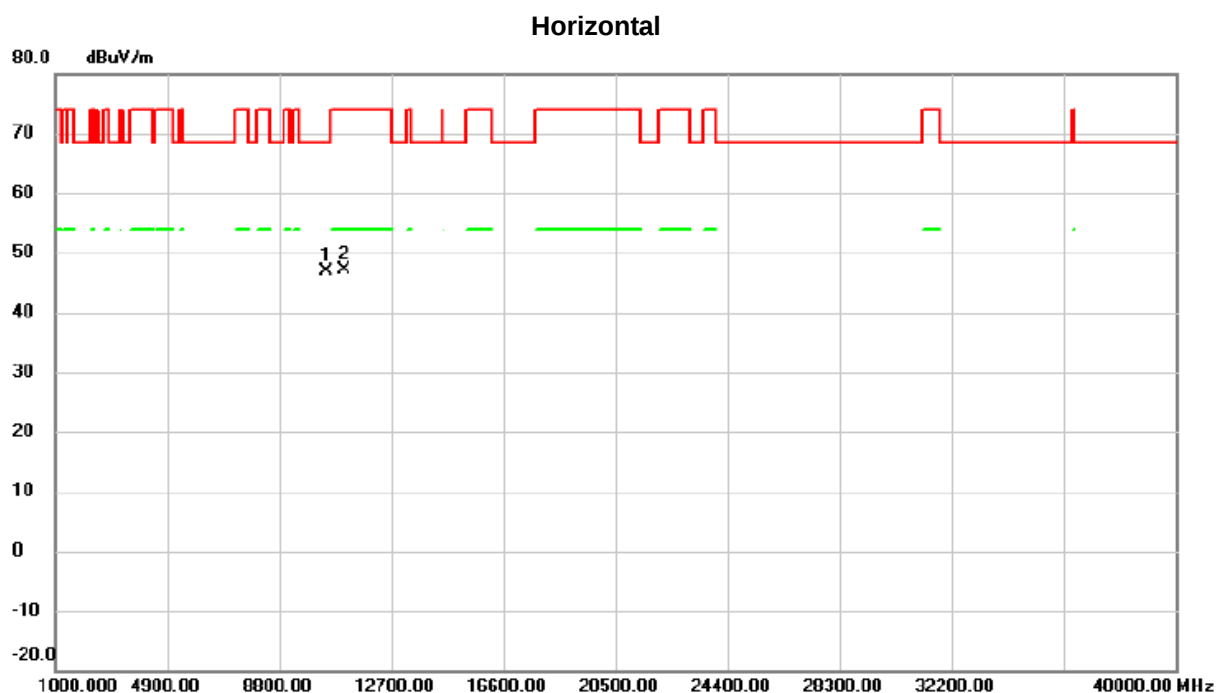


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10420.00	45.93	1.74	47.67	68.30	-20.63	peak	
2	*	11059.98	51.72	2.23	53.95	54.00	-0.05	AVG	
3		11060.05	53.95	2.23	56.18	74.00	-17.82	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5530 MHz--ANT.1+2/3+4



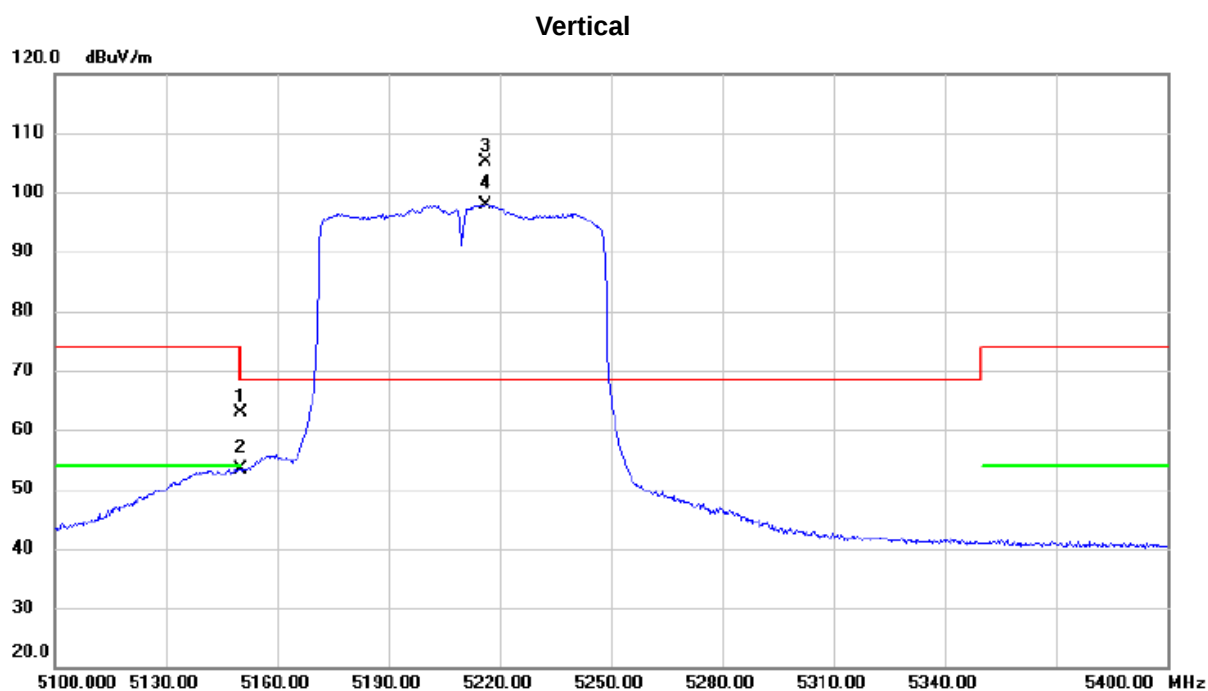
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10420.00	45.03	1.74	46.77	68.30	-21.53	peak	
2		11060.00	44.95	2.23	47.18	74.00	-26.82	peak	

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--ANT.1+ANT.2



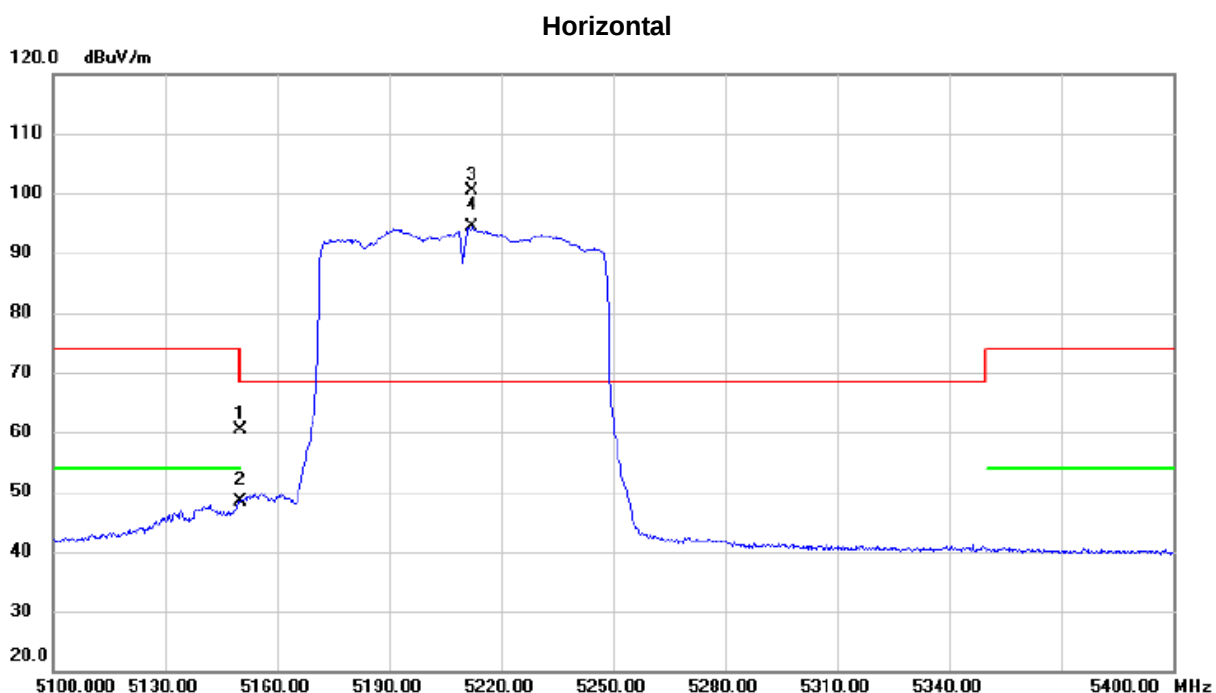
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	25.06	37.88	62.94	74.00	-11.06	peak	
2		5150.000	15.43	37.88	53.31	54.00	-0.69	AVG	
3	*	5216.250	67.39	37.66	105.05	68.30	36.75	peak	
4	X	5216.250	60.16	37.66	97.82	68.30	29.52	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 (VHT80) Mode 5210 MHz--ANT.1+ANT.2



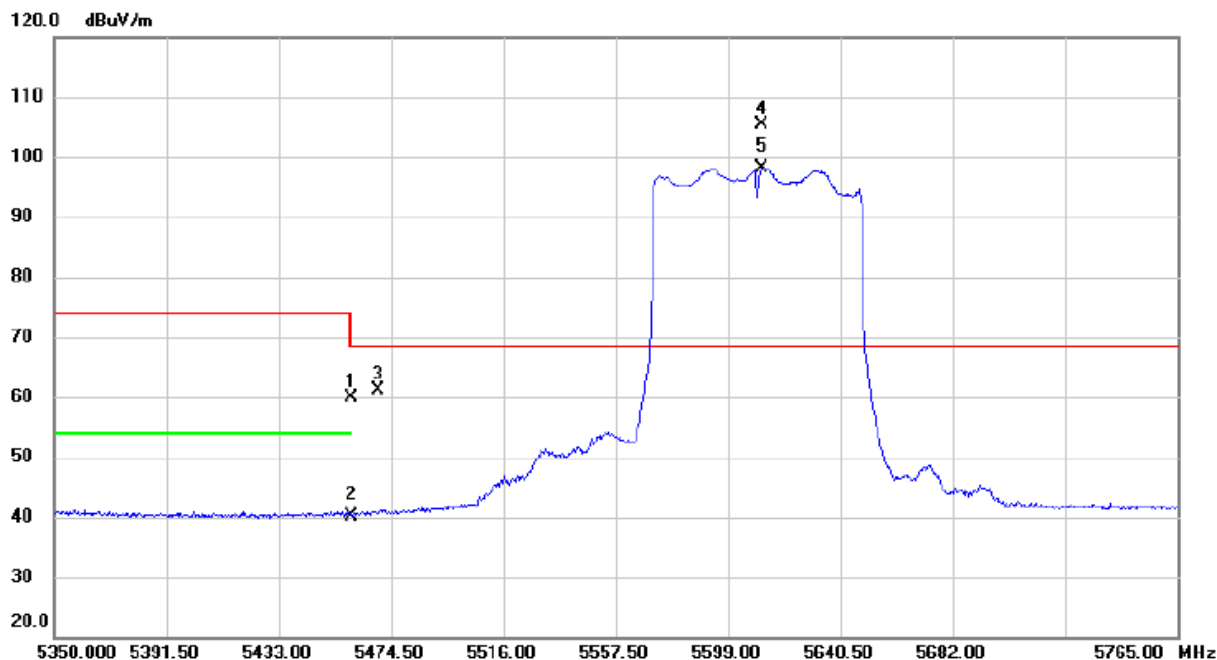
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	22.38	37.88	60.26	74.00	-13.74	peak	
2		5150.000	10.58	37.88	48.46	54.00	-5.54	AVG	
3	*	5212.200	62.80	37.66	100.46	68.30	32.16	peak	
4	X	5212.200	56.60	37.66	94.26	68.30	25.96	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz--ANT.3+ANT.4

Vertical



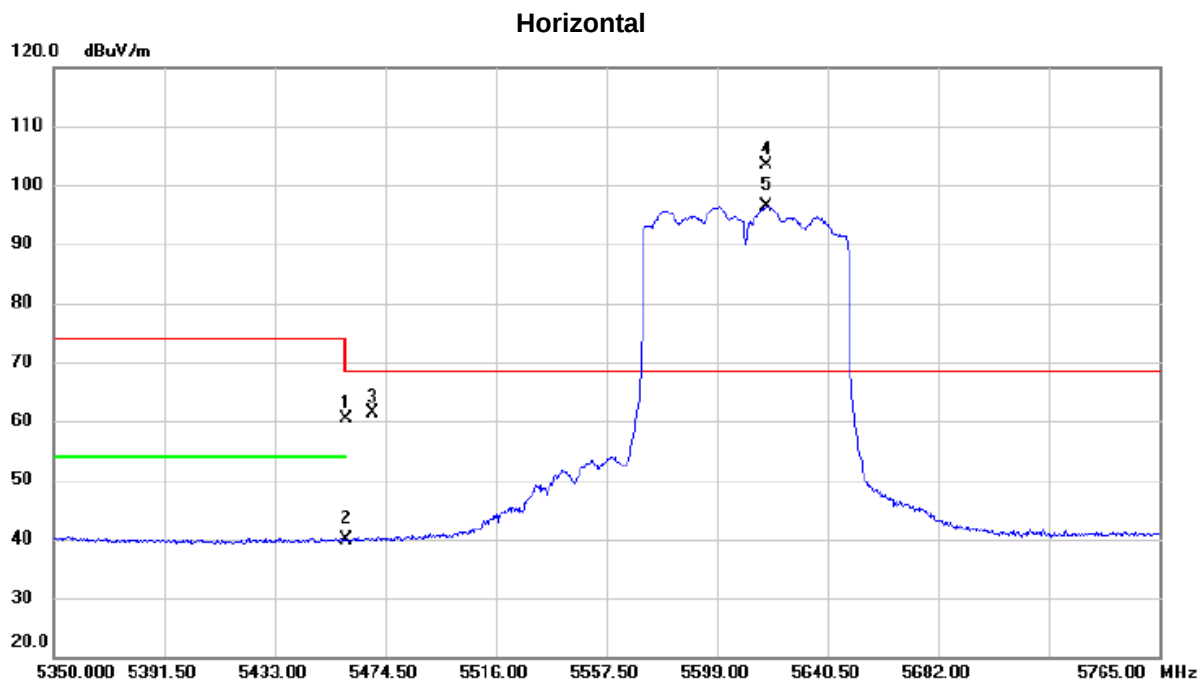
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	21.87	38.12	59.99	74.00	-14.01	peak	
2		5460.000	2.12	38.12	40.24	54.00	-13.76	AVG	
3		5470.000	23.04	38.15	61.19	68.30	-7.11	peak	
4	*	5611.658	66.99	38.34	105.33	68.30	37.03	peak	
5	X	5611.658	59.81	38.34	98.15	68.30	29.85	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz--ANT.3+ANT.4



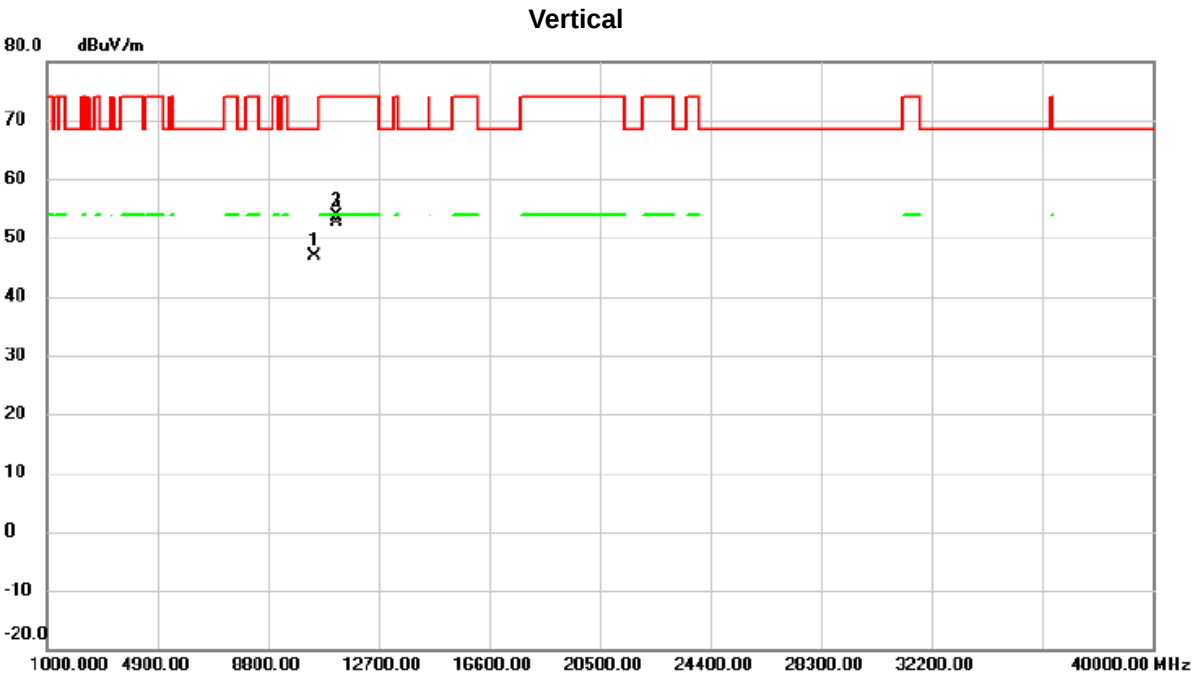
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	22.35	38.12	60.47	74.00	-13.53	peak	
2		5460.000	1.79	38.12	39.91	54.00	-14.09	AVG	
3		5470.000	23.28	38.15	61.43	68.30	-6.87	peak	
4	*	5617.675	65.10	38.35	103.45	68.30	35.15	peak	
5	X	5617.675	58.02	38.35	96.37	68.30	28.07	AVG	

REMARKS:

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

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

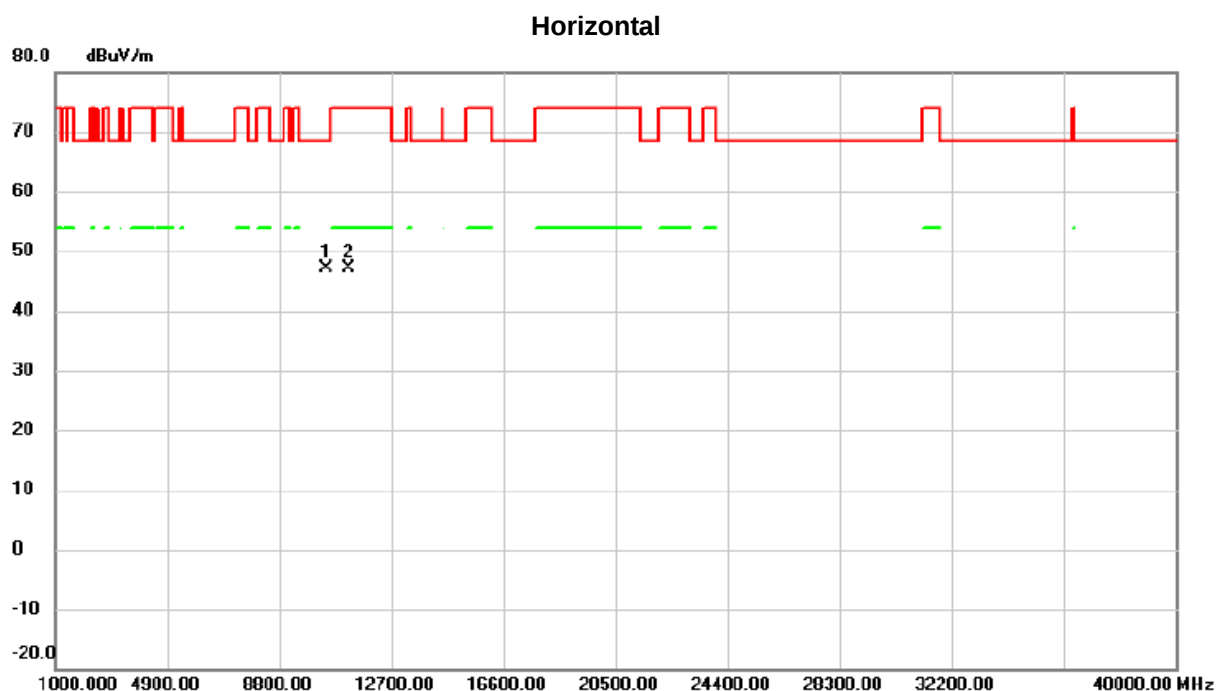
Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5610 MHz--ANT.1+2/3+4



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10420.00	45.22	1.74	46.96	68.30	-21.34	peak	
2		11219.95	51.56	1.97	53.53	74.00	-20.47	peak	
3	*	11219.97	50.58	1.97	52.55	54.00	-1.45	AVG	

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5610 MHz--ANT.1+2/3+4

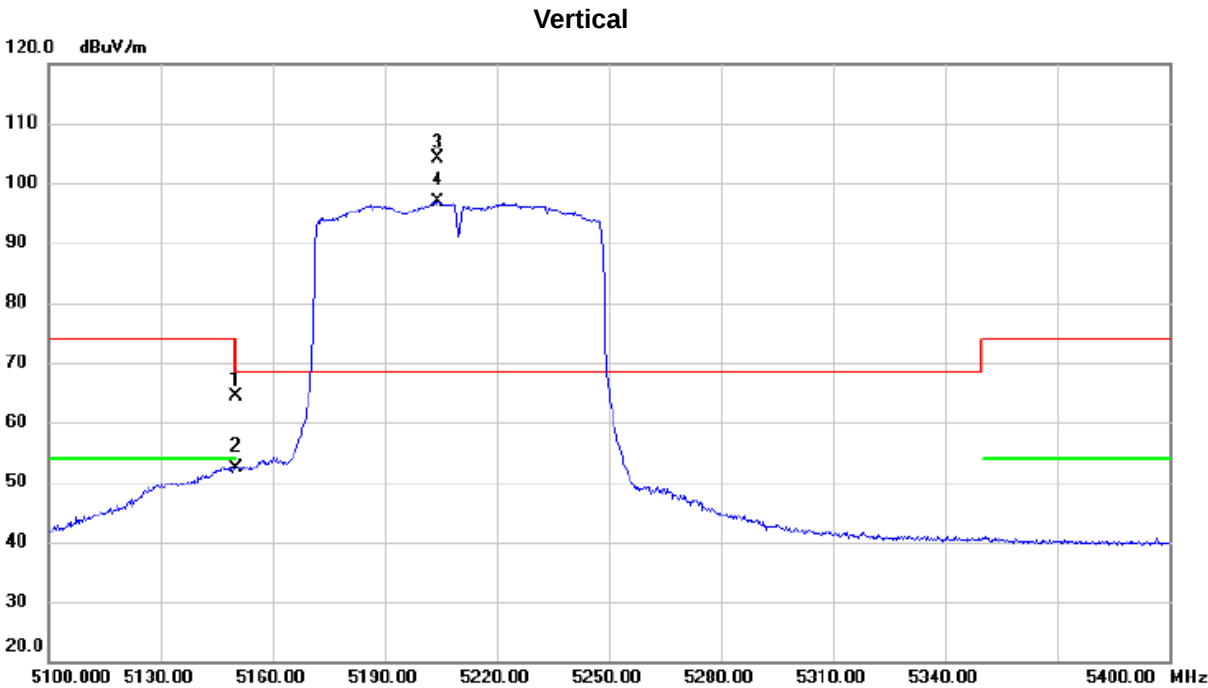


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.00	45.36	1.74	47.10	68.30	-21.20	peak	
2		11220.00	45.11	1.97	47.08	74.00	-26.92	peak	

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 ANT.1+2

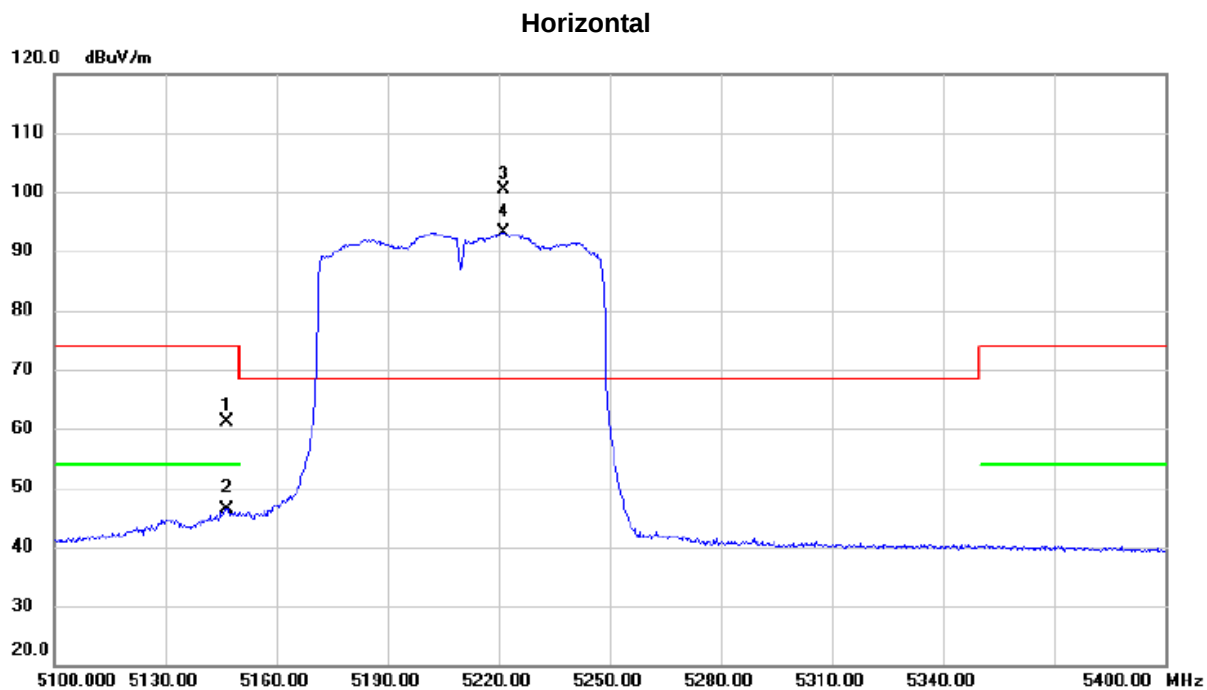


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	26.42	37.88	64.30	74.00	-9.70	peak	
2		5150.000	14.46	37.88	52.34	54.00	-1.66	AVG	
3	*	5204.100	66.39	37.67	104.06	68.30	35.76	peak	
4	X	5204.100	59.16	37.67	96.83	68.30	28.53	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 (VHT80) Mode 5210 MHz ANT.1+2

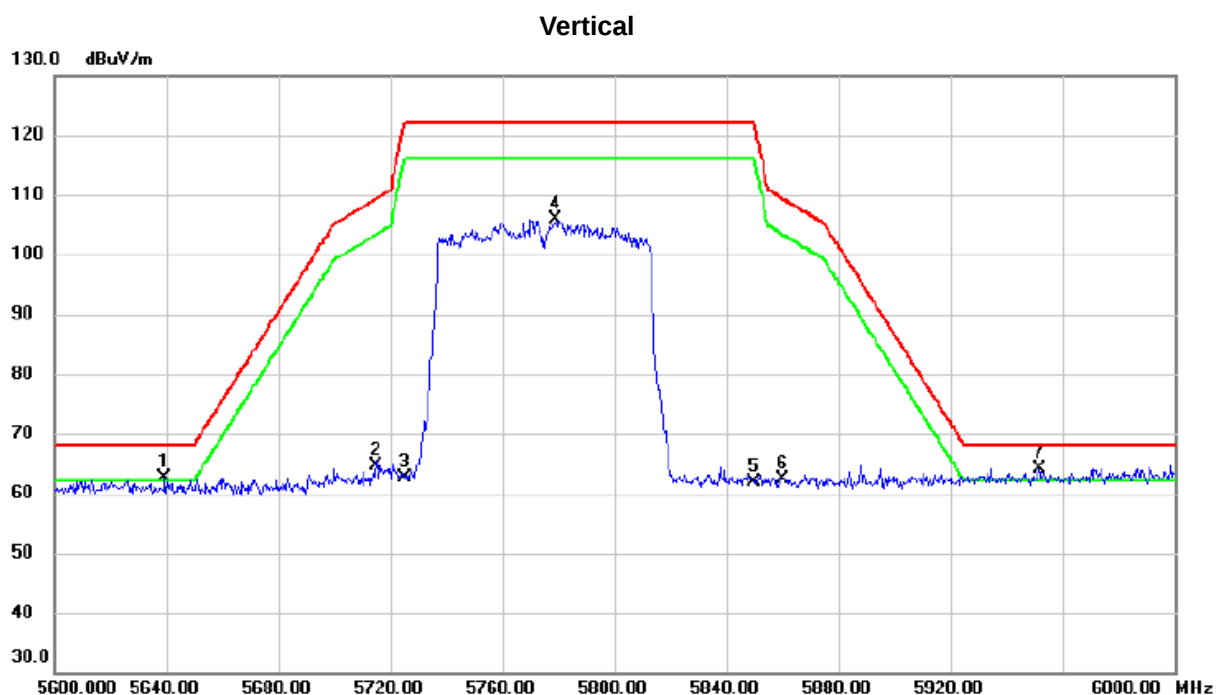


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5146.650	23.27	37.89	61.16	74.00	-12.84	peak	
2		5146.650	8.54	37.89	46.43	54.00	-7.57	AVG	
3	*	5221.500	62.71	37.65	100.36	68.30	32.06	peak	
4	X	5221.500	55.48	37.65	93.13	68.30	24.83	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz --ANT.3+4

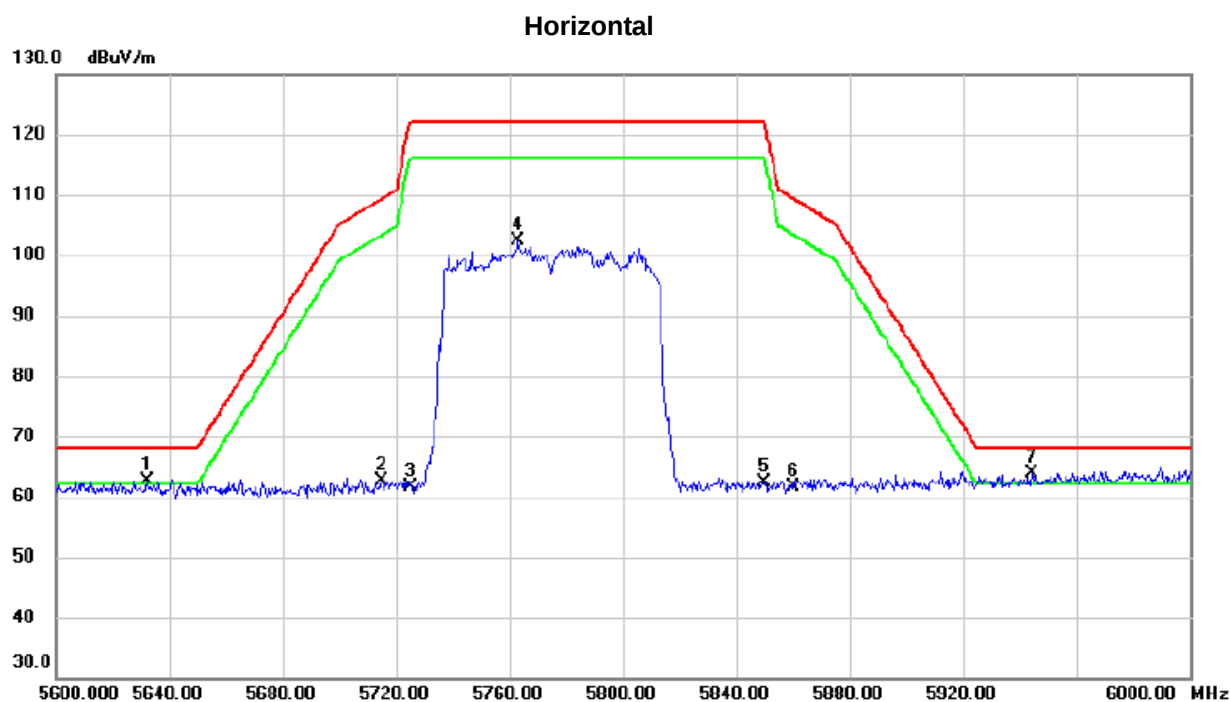


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	!	5639.400	24.27	38.37	62.64	68.20	-5.56	peak	
2		5715.000	26.28	38.46	64.74	109.40	-44.66	peak	
3		5725.000	24.04	38.50	62.54	122.20	-59.66	peak	
4		5778.800	67.27	38.70	105.97	122.20	-16.23	peak	
5		5850.000	23.06	38.91	61.97	122.20	-60.23	peak	
6		5860.000	23.36	38.95	62.31	109.40	-47.09	peak	
7	*	5951.800	24.88	39.16	64.04	68.20	-4.16	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz --ANT.3+4

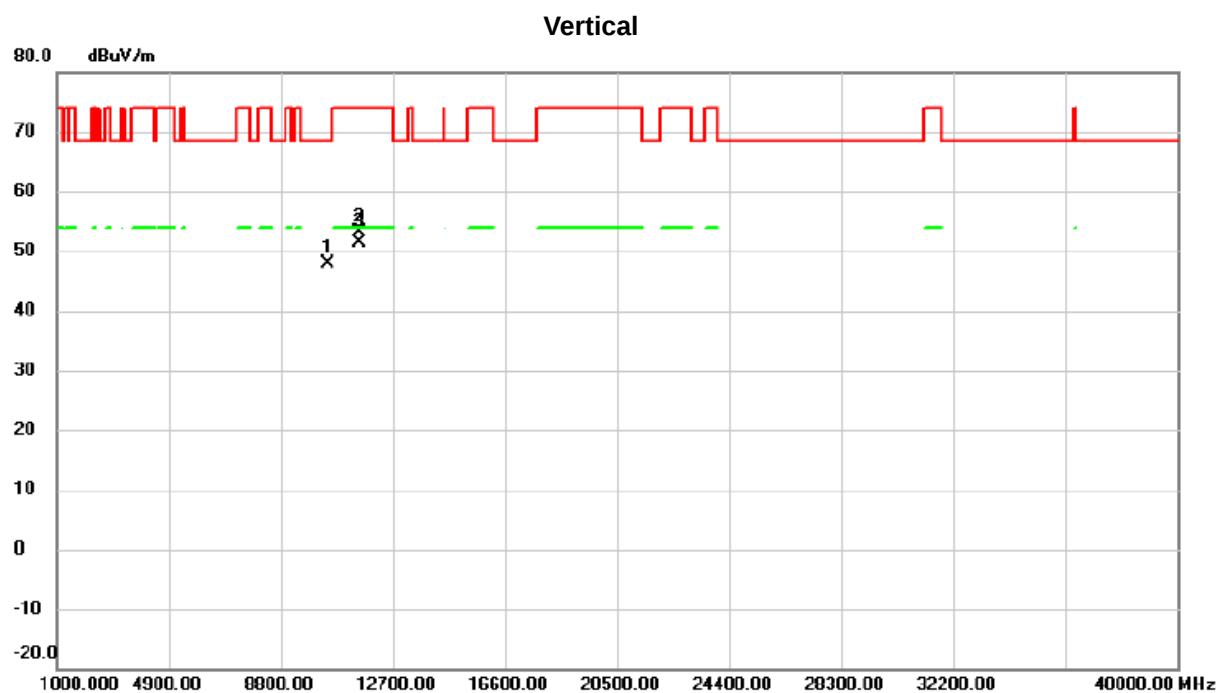


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	!	5632.200	24.35	38.36	62.71	68.20	-5.49	peak	
2		5715.000	24.08	38.46	62.54	109.40	-46.86	peak	
3		5725.000	23.04	38.50	61.54	122.20	-60.66	peak	
4		5763.200	63.62	38.64	102.26	122.20	-19.94	peak	
5		5850.000	23.47	38.91	62.38	122.20	-59.82	peak	
6		5860.000	22.78	38.95	61.73	109.40	-47.67	peak	
7	*	5944.200	24.73	39.14	63.87	68.20	-4.33	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5775 MHz --ANT.1+2/3+4

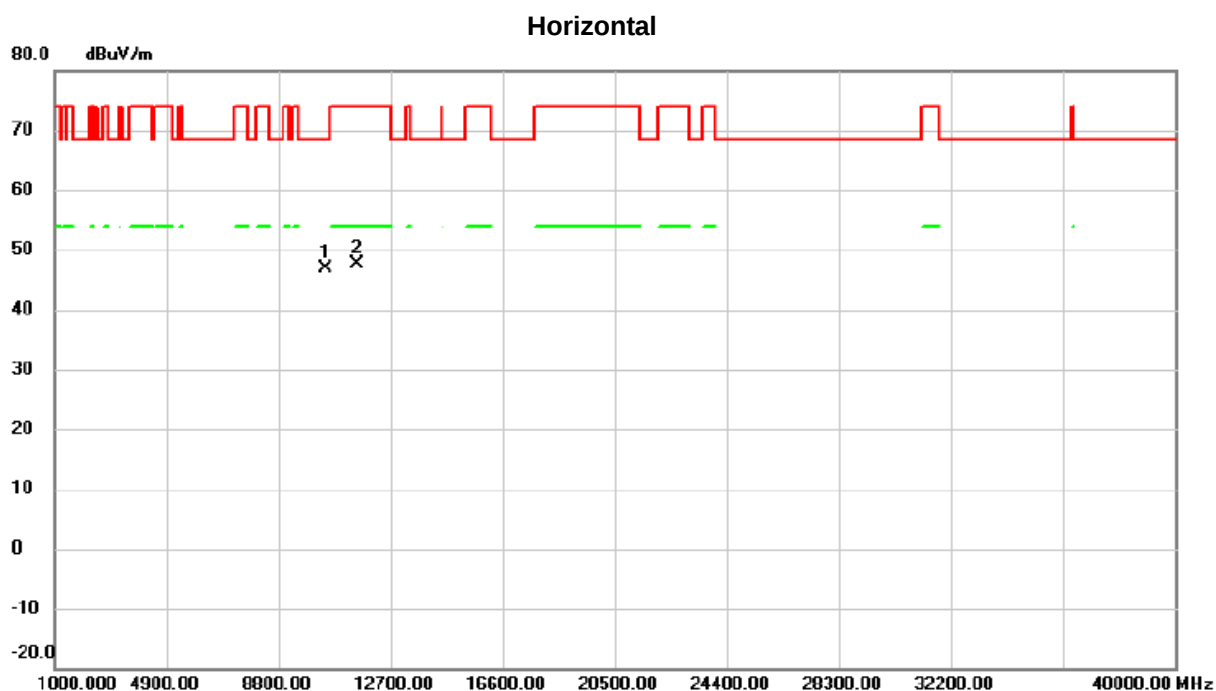


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10420.00	46.08	1.74	47.82	68.30	-20.48	peak	
2		11549.50	50.89	2.25	53.14	74.00	-20.86	peak	
3	*	11549.96	49.14	2.25	51.39	54.00	-2.61	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5775 MHz --ANT.1+2/3+4



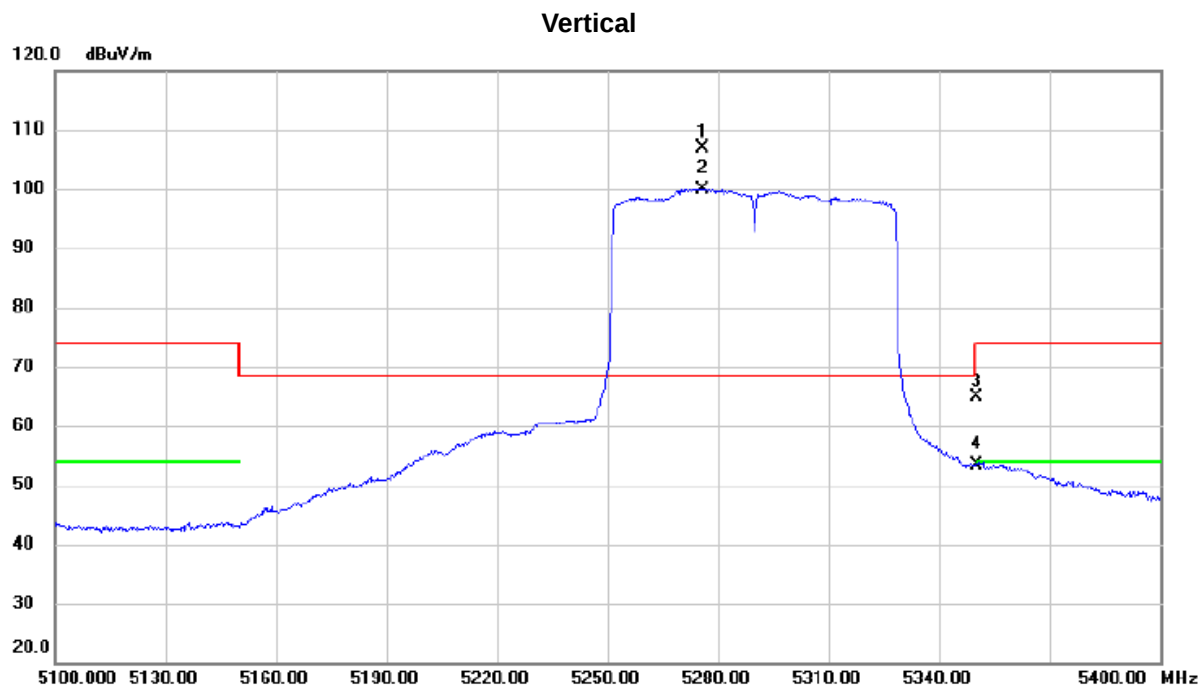
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10420.00	45.19	1.74	46.93	68.30	-21.37	peak	
2		11550.00	45.40	2.26	47.66	74.00	-26.34	peak	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz--ANT.1+2



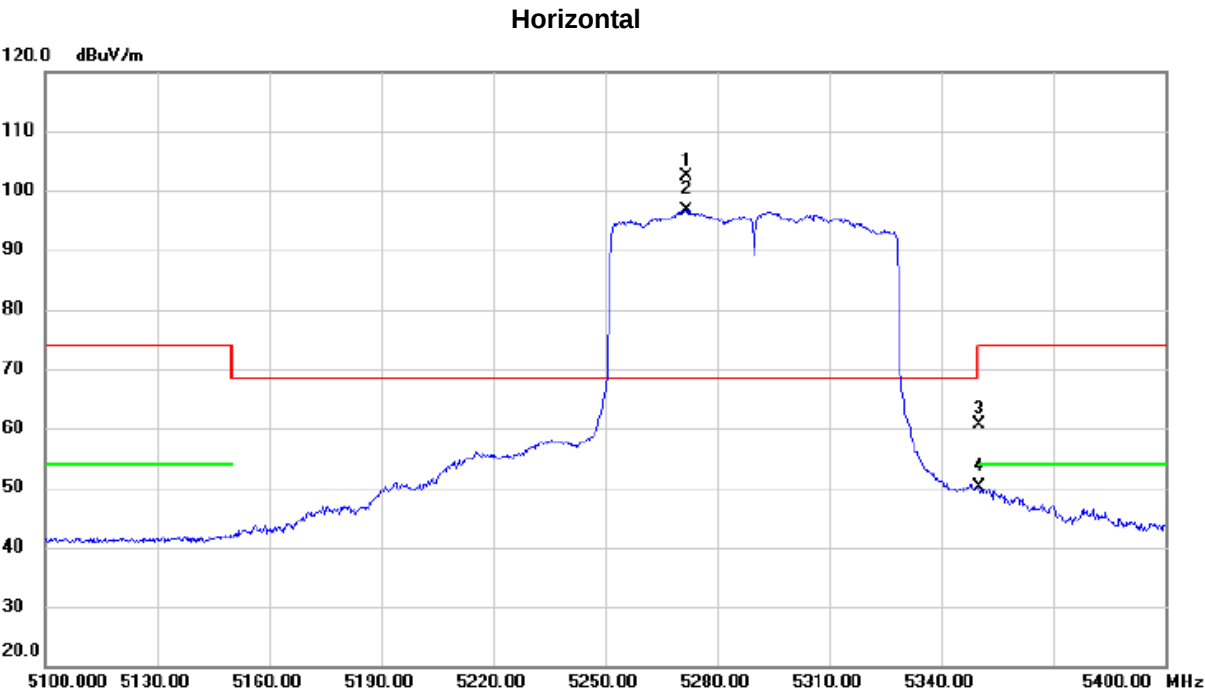
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5275.650	69.34	37.57	106.91	68.30	38.61	peak	
2	X	5275.650	62.40	37.57	99.97	68.30	31.67	AVG	
3		5350.000	27.12	37.73	64.85	74.00	-9.15	peak	
4		5350.000	15.65	37.73	53.38	54.00	-0.62	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz--ANT.1+2

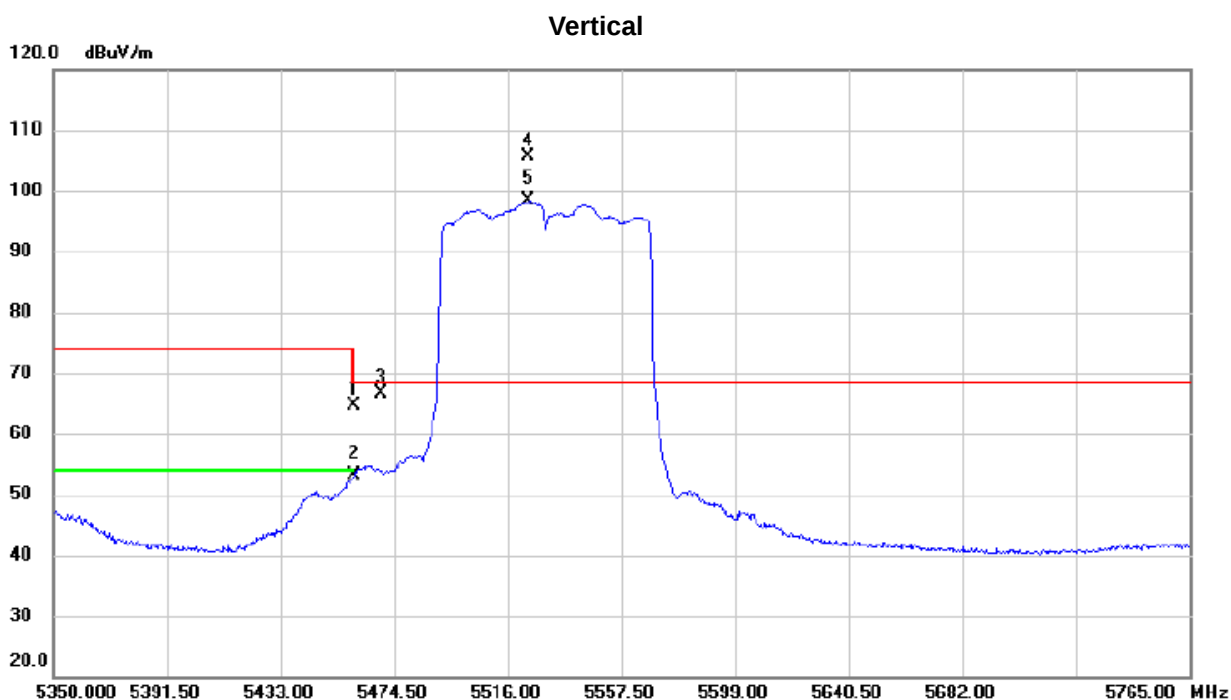


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5271.600	64.86	37.58	102.44	68.30	34.14	peak	
2	X	5271.600	59.12	37.58	96.70	68.30	28.40	AVG	
3		5350.000	22.82	37.73	60.55	74.00	-13.45	peak	
4		5350.000	12.33	37.73	50.06	54.00	-3.94	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz--ANT.3+4

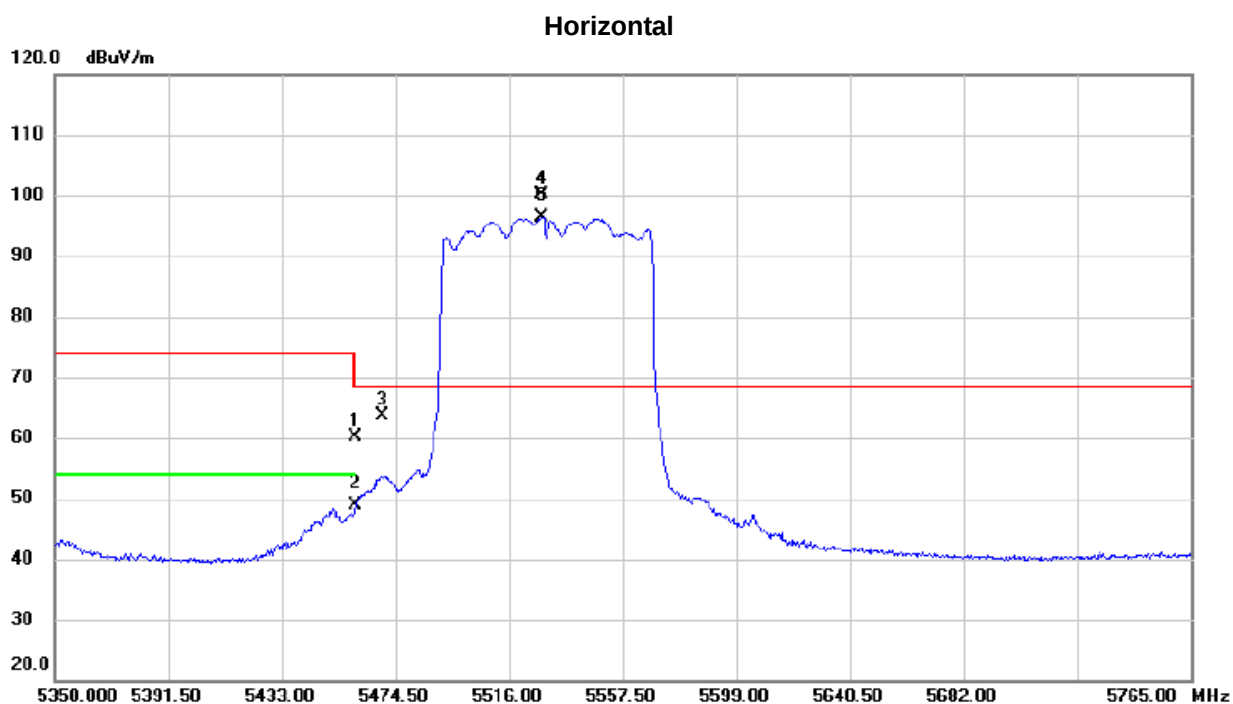


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	26.45	38.12	64.57	74.00	-9.43	peak	
2		5460.000	14.98	38.12	53.10	54.00	-0.90	AVG	
3		5470.000	28.57	38.15	66.72	68.30	-1.58	peak	
4	*	5523.470	67.41	38.26	105.67	68.30	37.37	peak	
5	X	5523.470	60.03	38.26	98.29	68.30	29.99	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz--ANT.3+4



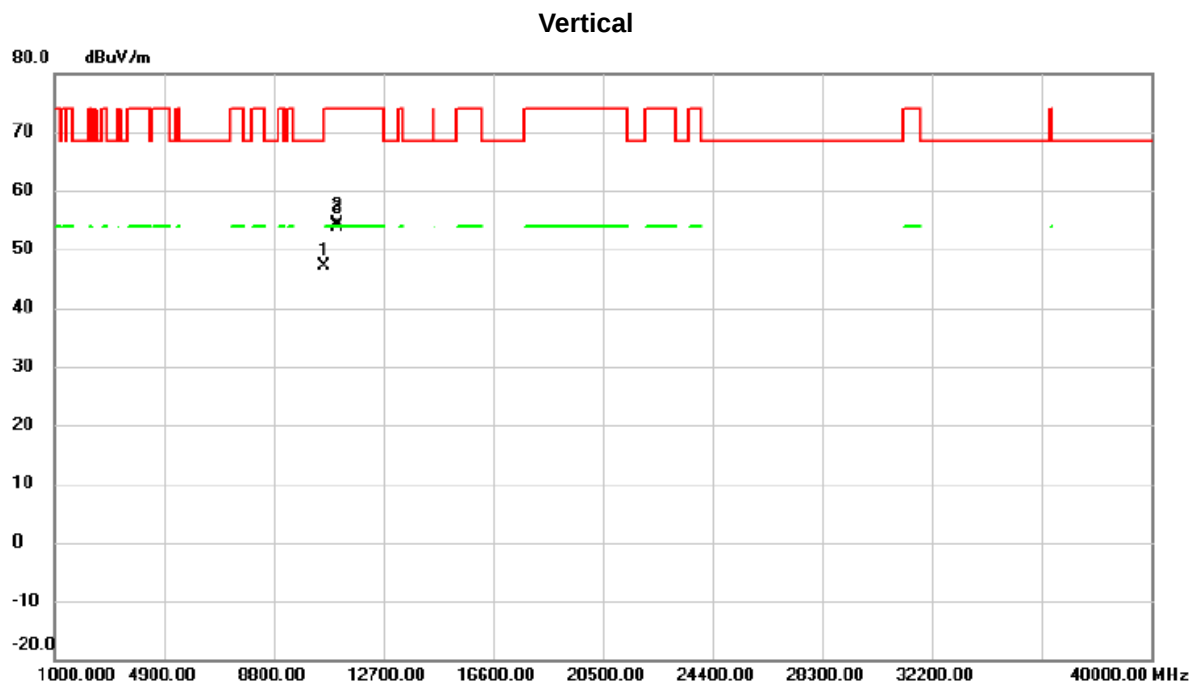
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5460.000	22.10	38.12	60.22	74.00	-13.78	peak	
2		5460.000	10.67	38.12	48.79	54.00	-5.21	AVG	
3		5470.000	25.37	38.15	63.52	68.30	-4.78	peak	
4	*	5528.035	61.93	38.27	100.20	68.30	31.90	peak	
5	X	5528.035	58.17	38.27	96.44	68.30	28.14	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5290+5530 MHz--ANT.1+2/3+4

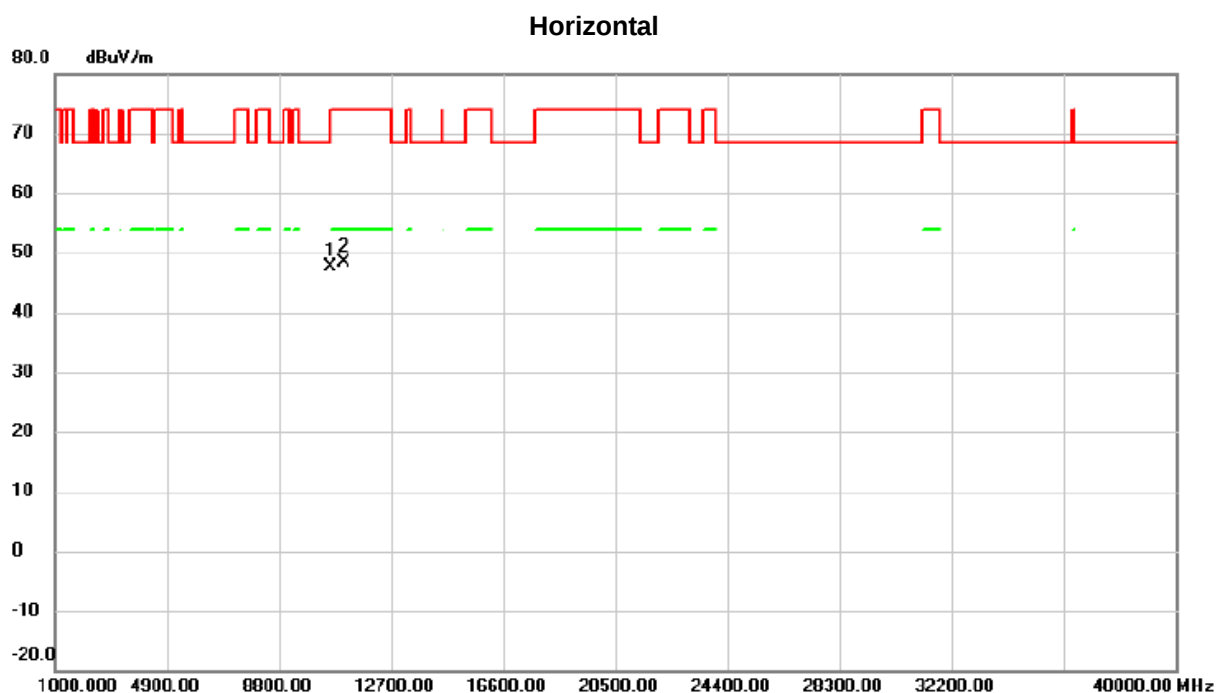


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10580.00	45.31	1.90	47.21	68.30	-21.09	peak	
2	*	11059.97	51.57	2.23	53.80	54.00	-0.20	AVG	
3		11060.00	52.25	2.23	54.48	74.00	-19.52	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5290+5530 MHz--ANT.1+2/3+4

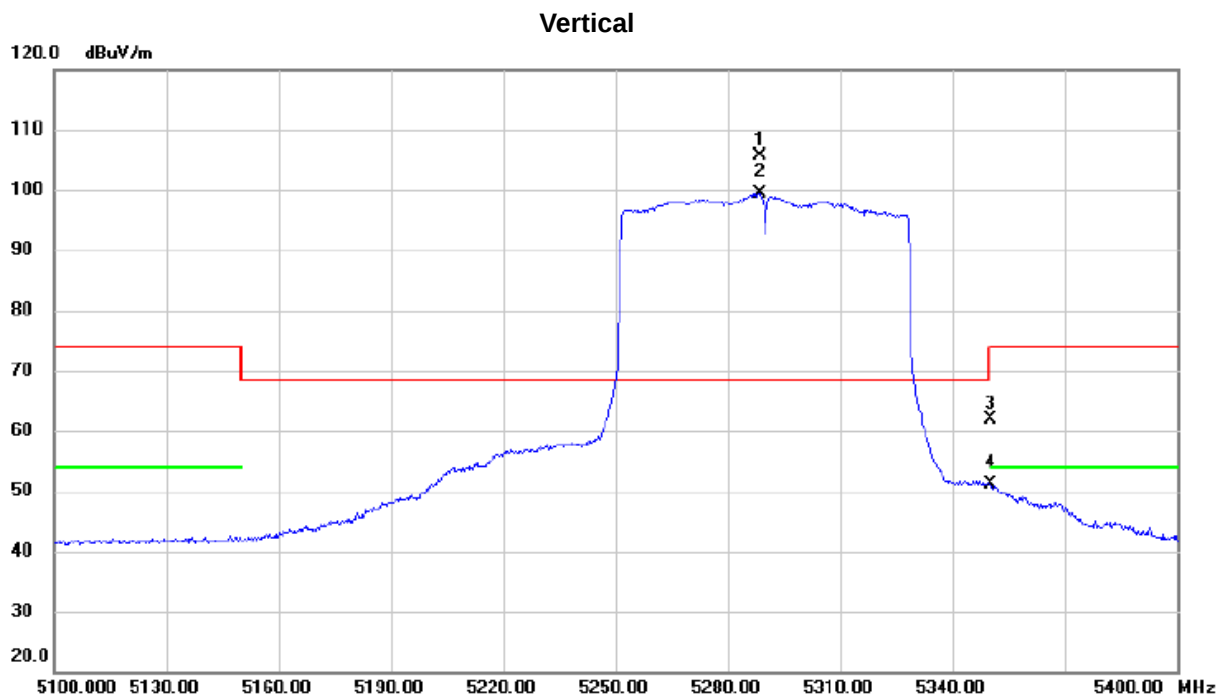


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10580.00	45.65	1.90	47.55	68.30	-20.75	peak	
2		11060.00	46.23	2.23	48.46	74.00	-25.54	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz--ANT.1+2

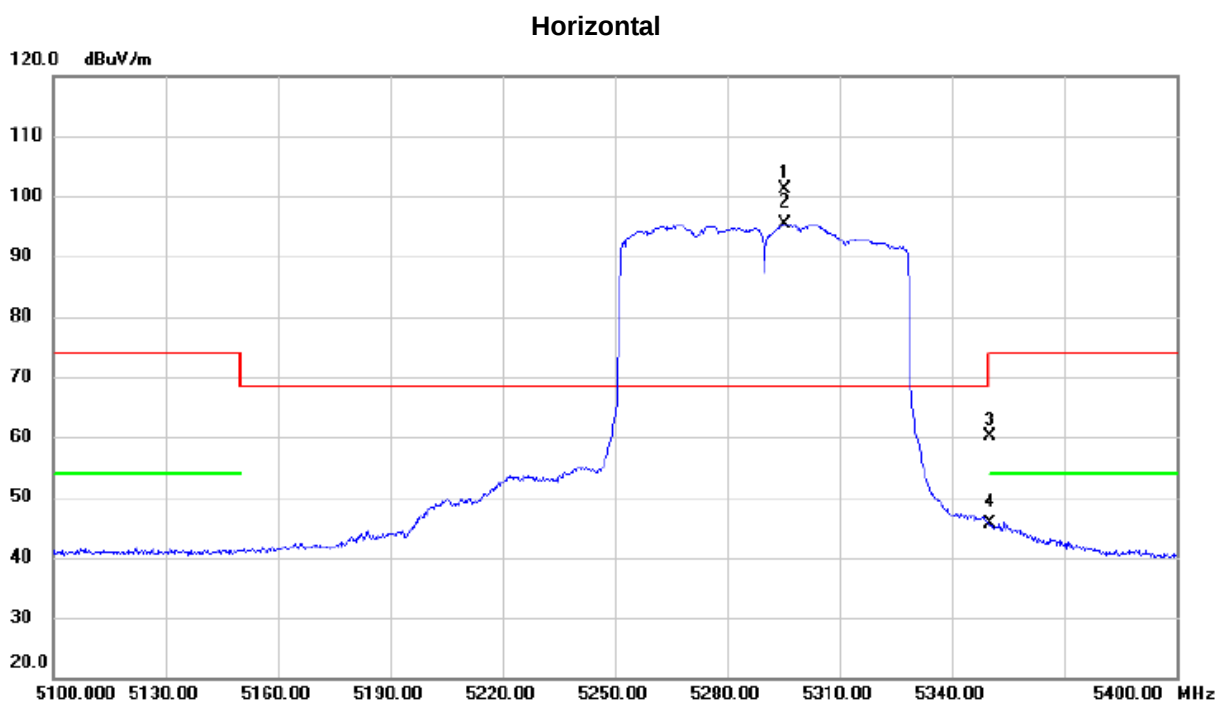


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5288.550	67.98	37.55	105.53	68.30	37.23	peak	
2	X	5288.550	61.77	37.55	99.32	68.30	31.02	AVG	
3		5350.000	24.09	37.73	61.82	74.00	-12.18	peak	
4		5350.000	13.29	37.73	51.02	54.00	-2.98	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz--ANT.1+2



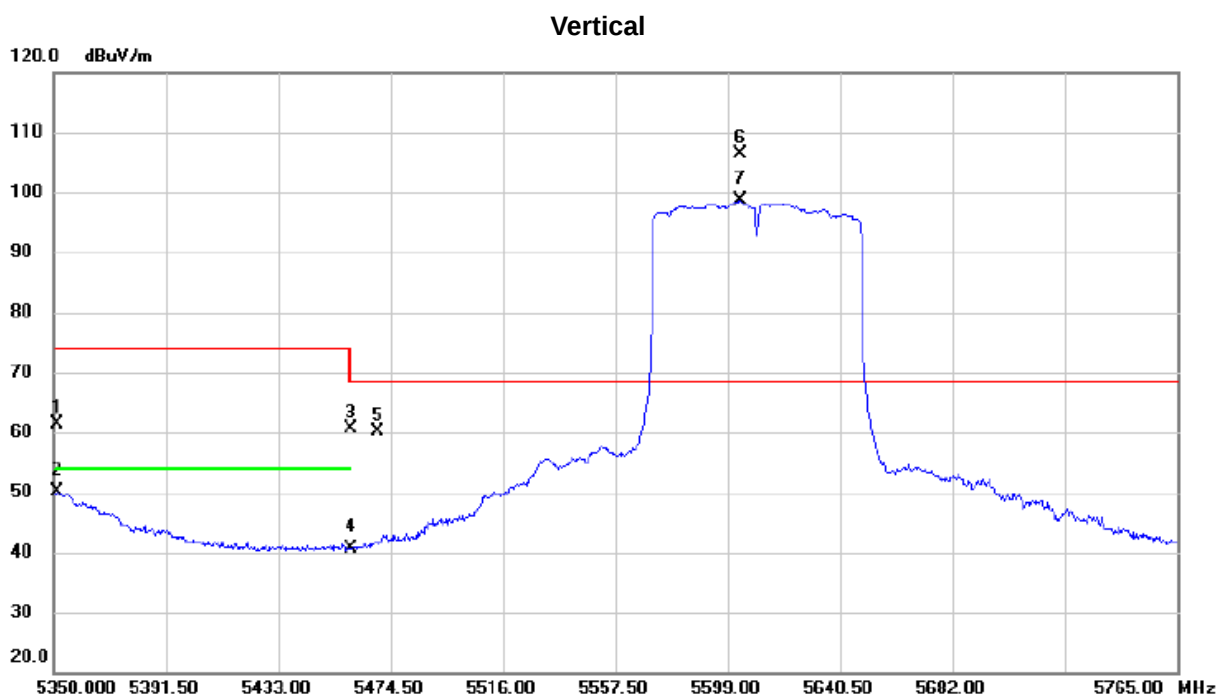
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5295.300	63.65	37.54	101.19	68.30	32.89	peak	
2	X	5295.300	57.83	37.54	95.37	68.30	27.07	AVG	
3		5350.000	22.45	37.73	60.18	74.00	-13.82	peak	
4		5350.000	7.97	37.73	45.70	54.00	-8.30	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz--ANT.3+4



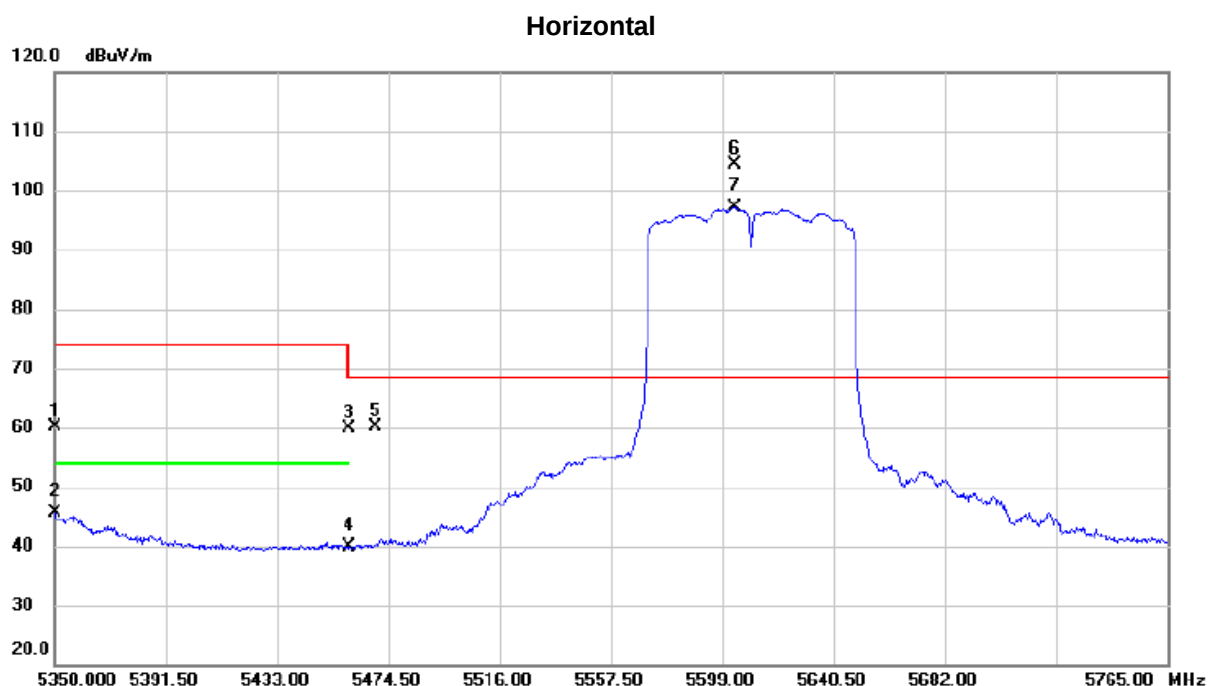
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5351.245	23.65	37.74	61.39	74.00	-12.61	peak	
2		5351.245	12.31	37.74	50.05	54.00	-3.95	AVG	
3		5460.000	22.54	38.12	60.66	74.00	-13.34	peak	
4		5460.000	2.40	38.12	40.52	54.00	-13.48	AVG	
5		5470.000	22.08	38.15	60.23	68.30	-8.07	peak	
6	*	5603.565	68.15	38.34	106.49	68.30	38.19	peak	
7	X	5603.565	60.24	38.34	98.58	68.30	30.28	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz--ANT.3+4

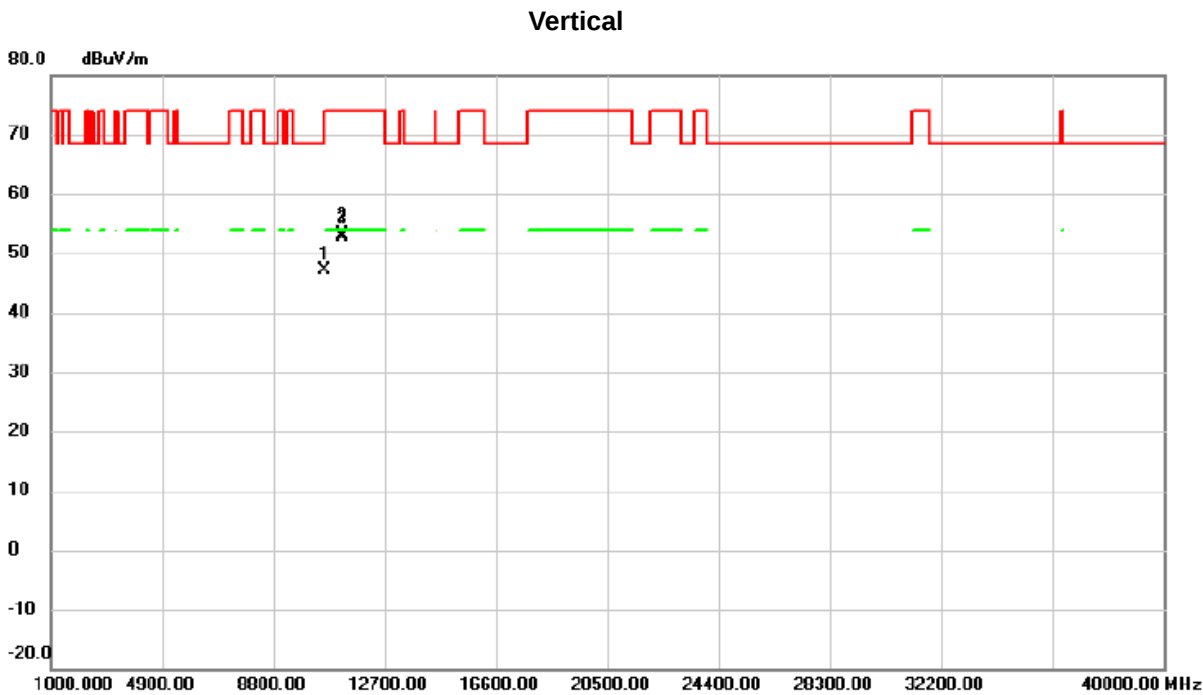


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5350.000	22.37	37.73	60.10	74.00	-13.90	peak	
2		5350.000	7.96	37.73	45.69	54.00	-8.31	AVG	
3		5460.000	21.70	38.12	59.82	74.00	-14.18	peak	
4		5460.000	1.65	38.12	39.77	54.00	-14.23	AVG	
5		5470.000	21.87	38.15	60.02	68.30	-8.28	peak	
6	*	5603.565	66.13	38.34	104.47	68.30	36.17	peak	
7	X	5603.565	58.75	38.34	97.09	68.30	28.79	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5290+5610 MHz--ANT.1+2/3+4

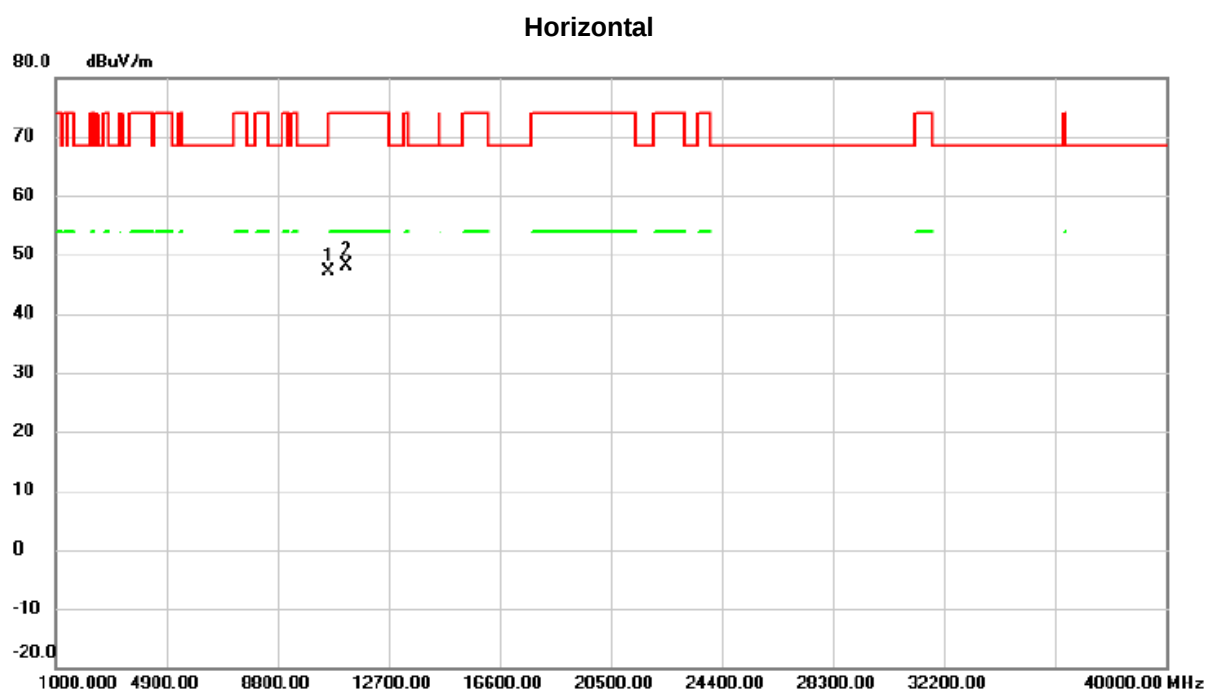


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10580.00	45.12	1.90	47.02	68.30	-21.28	peak	
2	*	11219.93	50.60	1.97	52.57	54.00	-1.43	AVG	
3		11219.95	51.07	1.97	53.04	74.00	-20.96	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5290+5610 MHz--ANT.1+2/3+4



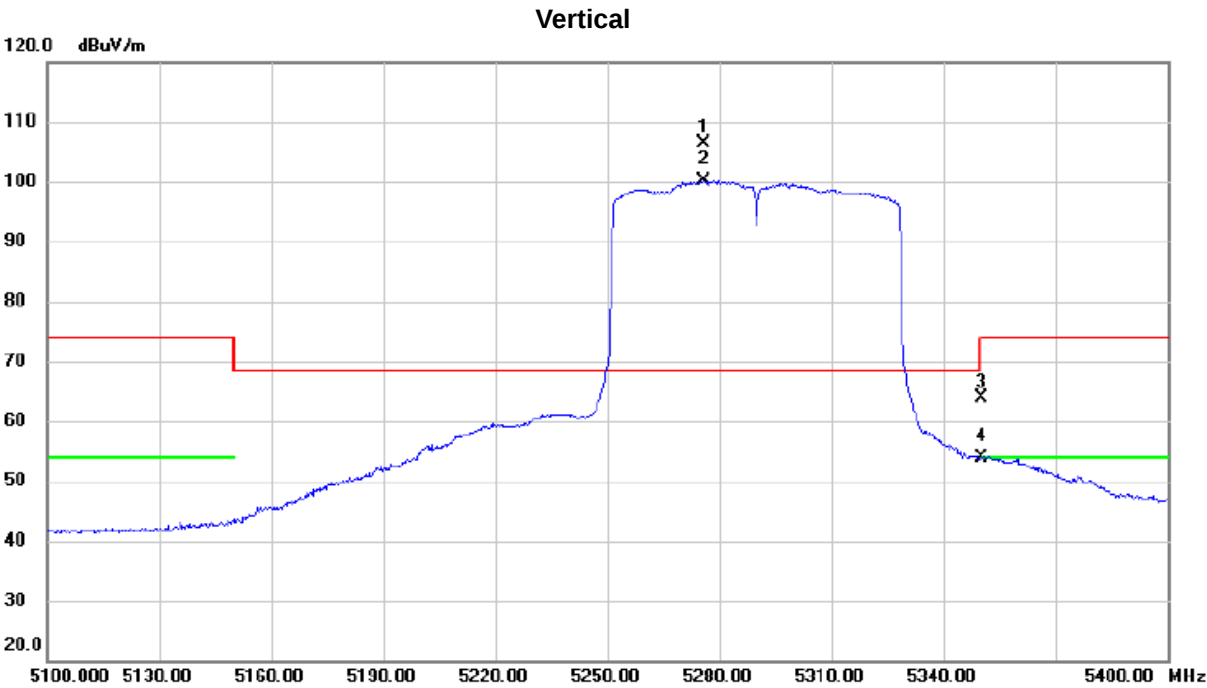
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10580.00	45.27	1.90	47.17	68.30	-21.13	peak	
2		11220.00	46.10	1.97	48.07	74.00	-25.93	peak	

REMARKS:

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

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

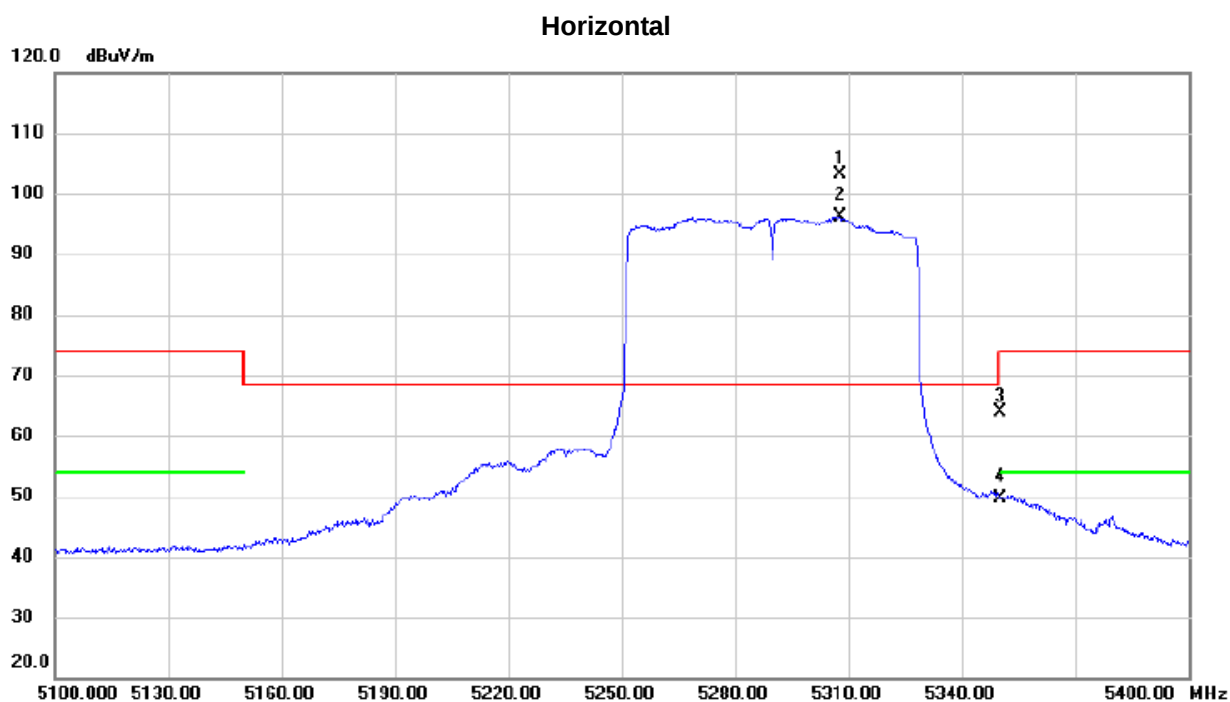
Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz--ANT.1+2



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5275.800	68.81	37.57	106.38	68.30	38.08	peak	
2	X	5275.800	62.45	37.57	100.02	68.30	31.72	AVG	
3		5350.000	26.18	37.73	63.91	74.00	-10.09	peak	
4		5350.000	16.04	37.73	53.77	54.00	-0.23	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz--ANT.1+2



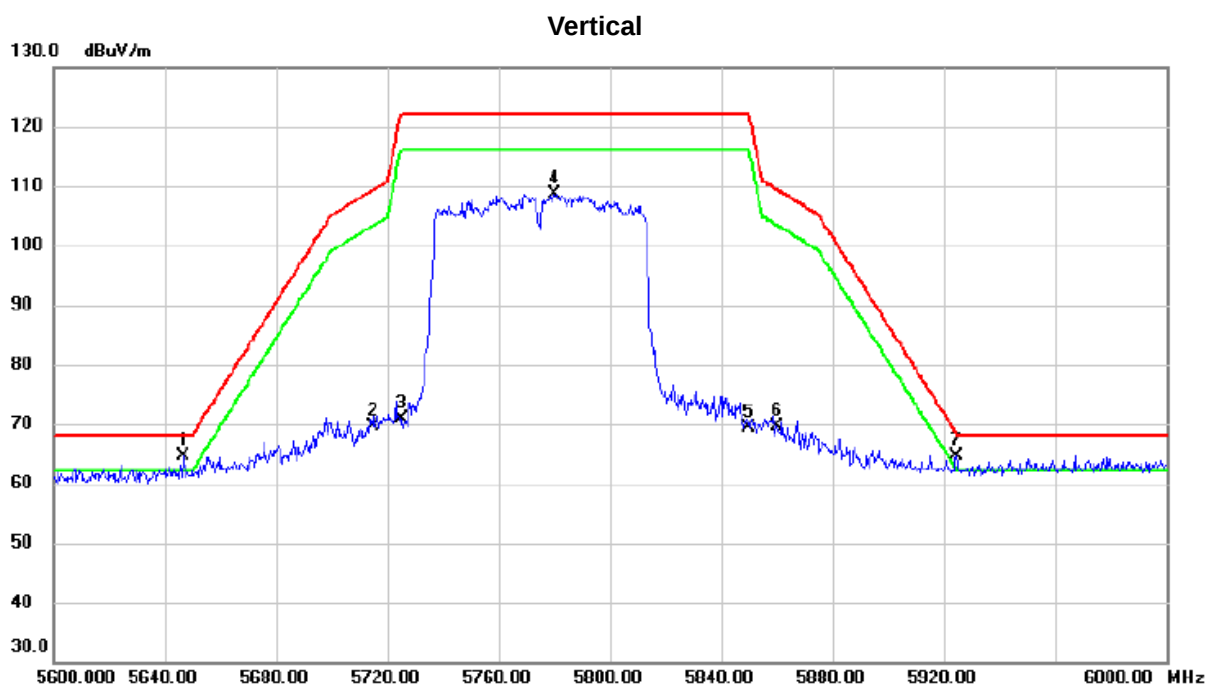
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5307.600	65.45	37.56	103.01	68.30	34.71	peak	
2	X	5307.600	58.52	37.56	96.08	68.30	27.78	AVG	
3		5350.000	26.27	37.73	64.00	74.00	-10.00	peak	
4		5350.000	11.84	37.73	49.57	54.00	-4.43	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz--ANT.3+4

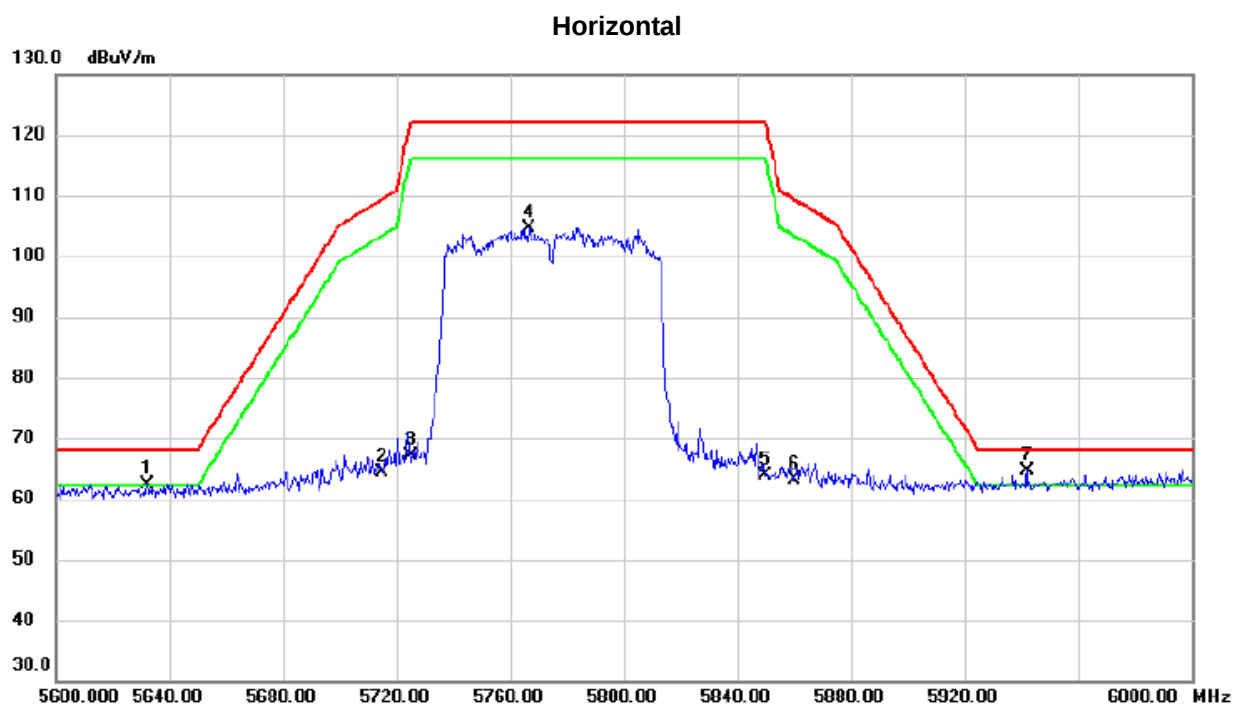


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5646.800	26.26	38.37	64.63	68.20	-3.57	peak	
2		5715.000	31.24	38.46	69.70	109.40	-39.70	peak	
3		5725.000	32.41	38.50	70.91	122.20	-51.29	peak	
4		5780.200	69.96	38.71	108.67	122.20	-13.53	peak	
5		5850.000	30.57	38.91	69.48	122.20	-52.72	peak	
6		5860.000	30.66	38.95	69.61	109.40	-39.79	peak	
7	!	5924.400	25.58	39.10	64.68	68.64	-3.96	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz--ANT.3+4



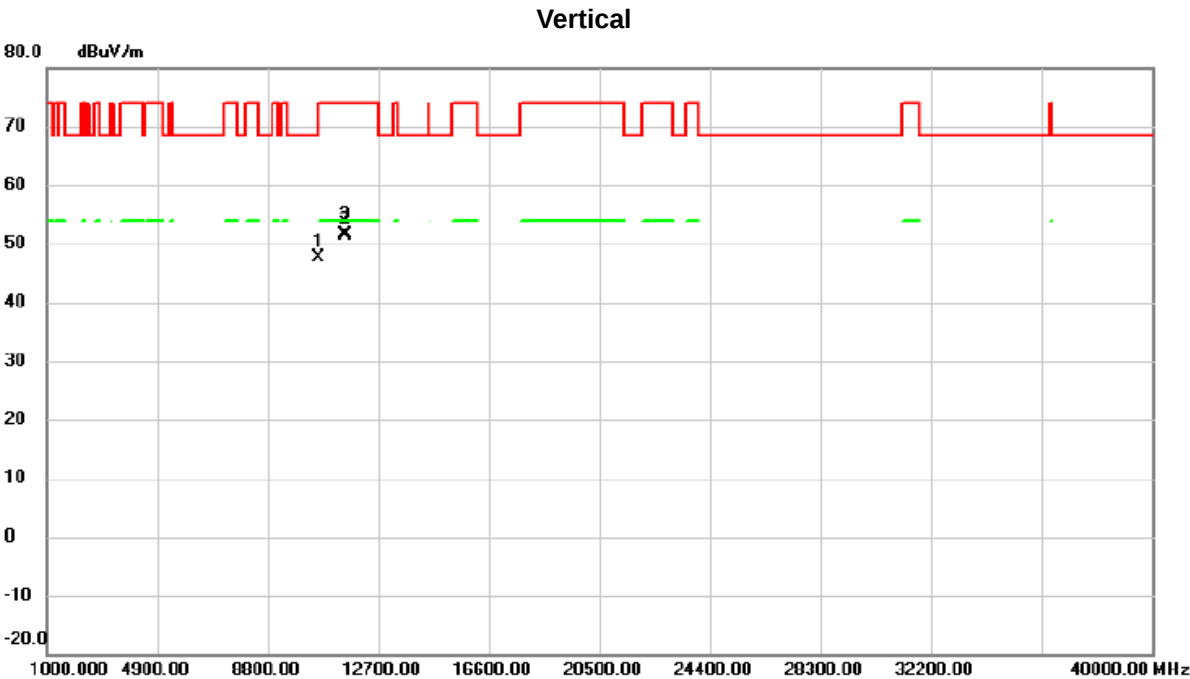
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	!	5632.000	24.14	38.36	62.50	68.20	-5.70	peak	
2		5715.000	25.98	38.46	64.44	109.40	-44.96	peak	
3		5725.000	28.70	38.50	67.20	122.20	-55.00	peak	
4		5766.800	66.09	38.65	104.74	122.20	-17.46	peak	
5		5850.000	24.90	38.91	63.81	122.20	-58.39	peak	
6		5860.000	24.15	38.95	63.10	109.40	-46.30	peak	
7	*	5942.000	25.39	39.14	64.53	68.20	-3.67	peak	

REMARKS:

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

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

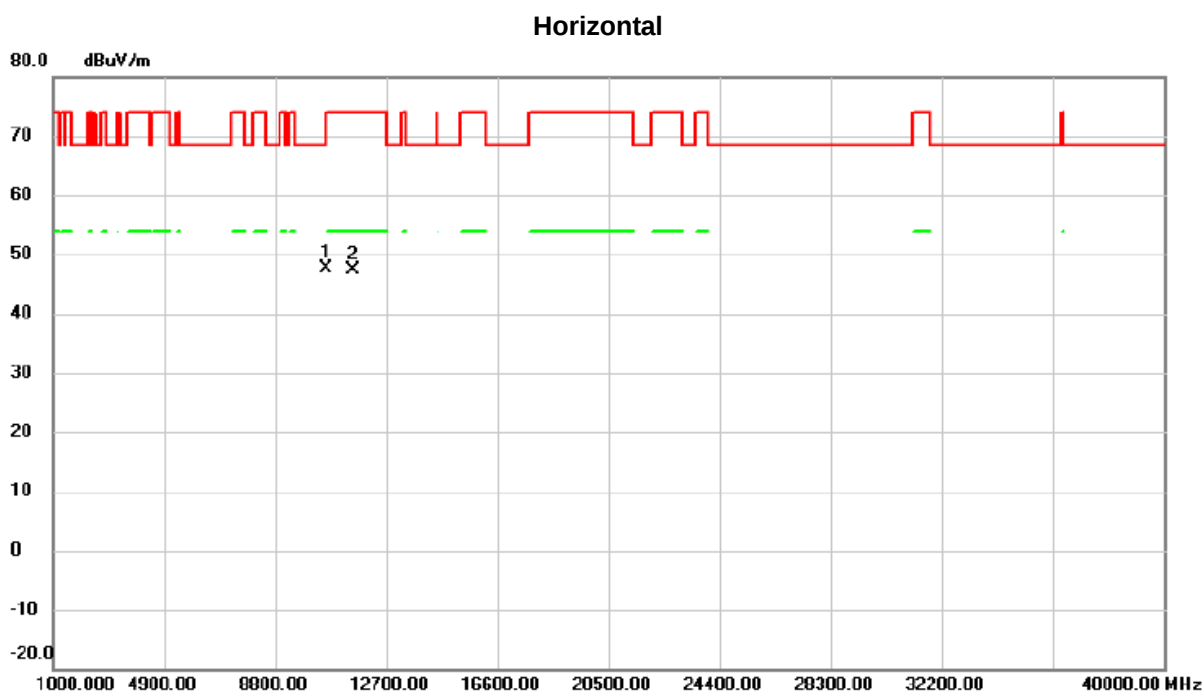
Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5290+5775 MHz--ANT.1+2/3+4



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10580.00	45.64	1.90	47.54	68.30	-20.76	peak	
2		11549.50	49.43	2.25	51.68	74.00	-22.32	peak	
3	*	11549.95	49.04	2.25	51.29	54.00	-2.71	AVG	

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5290+5775 MHz--ANT.1+2/3+4

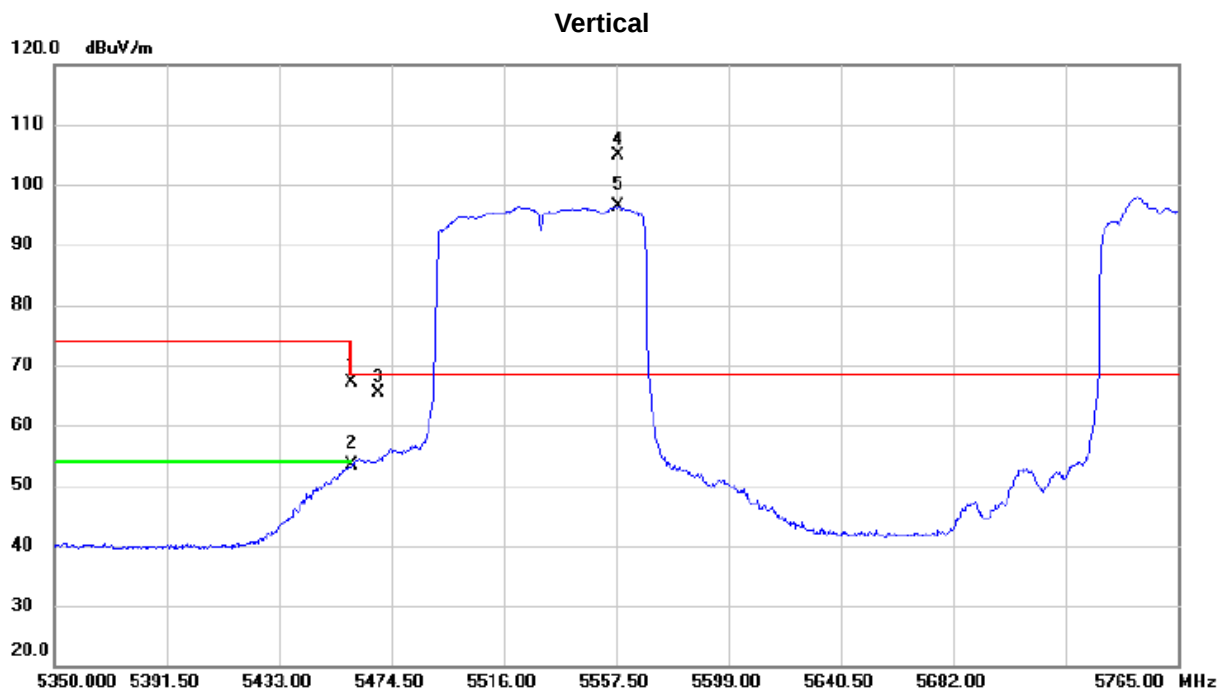


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10580.00	45.76	1.90	47.66	68.30	-20.64	peak	
2		11550.00	45.18	2.26	47.44	74.00	-26.56	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz--ANT.1+2



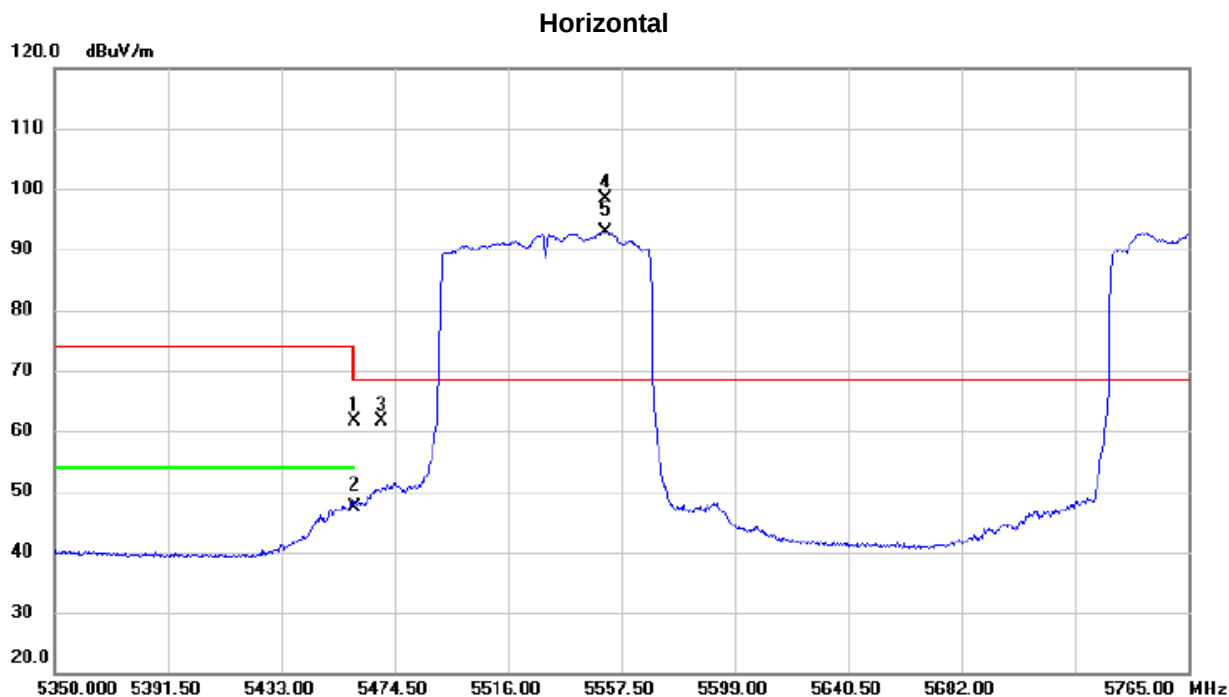
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	29.00	38.12	67.12	74.00	-6.88	peak	
2		5460.000	15.36	38.12	53.48	54.00	-0.52	AVG	
3		5470.000	27.20	38.15	65.35	68.30	-2.95	peak	
4	*	5558.538	66.69	38.30	104.99	68.30	36.69	peak	
5	X	5558.538	58.04	38.30	96.34	68.30	28.04	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz--ANT.1+2

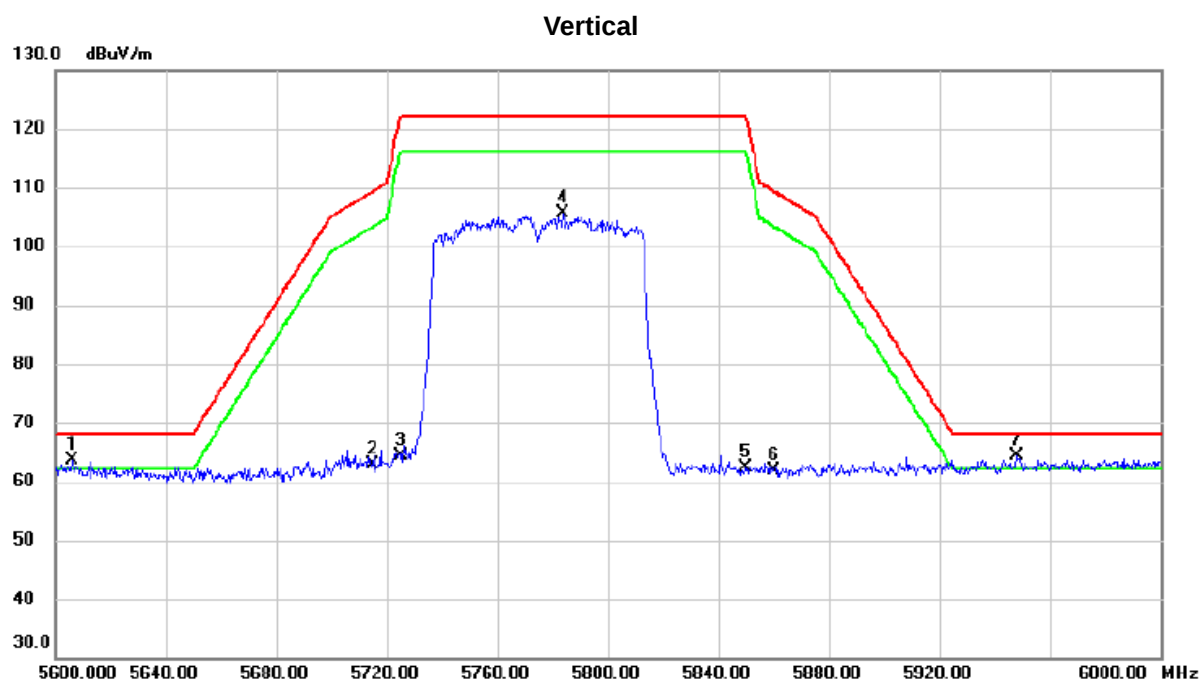


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	23.60	38.12	61.72	74.00	-12.28	peak	
2		5460.000	9.37	38.12	47.49	54.00	-6.51	AVG	
3		5470.000	23.55	38.15	61.70	68.30	-6.60	peak	
4	*	5551.483	60.14	38.30	98.44	68.30	30.14	peak	
5	X	5551.483	54.62	38.30	92.92	68.30	24.62	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz--ANT.3+4



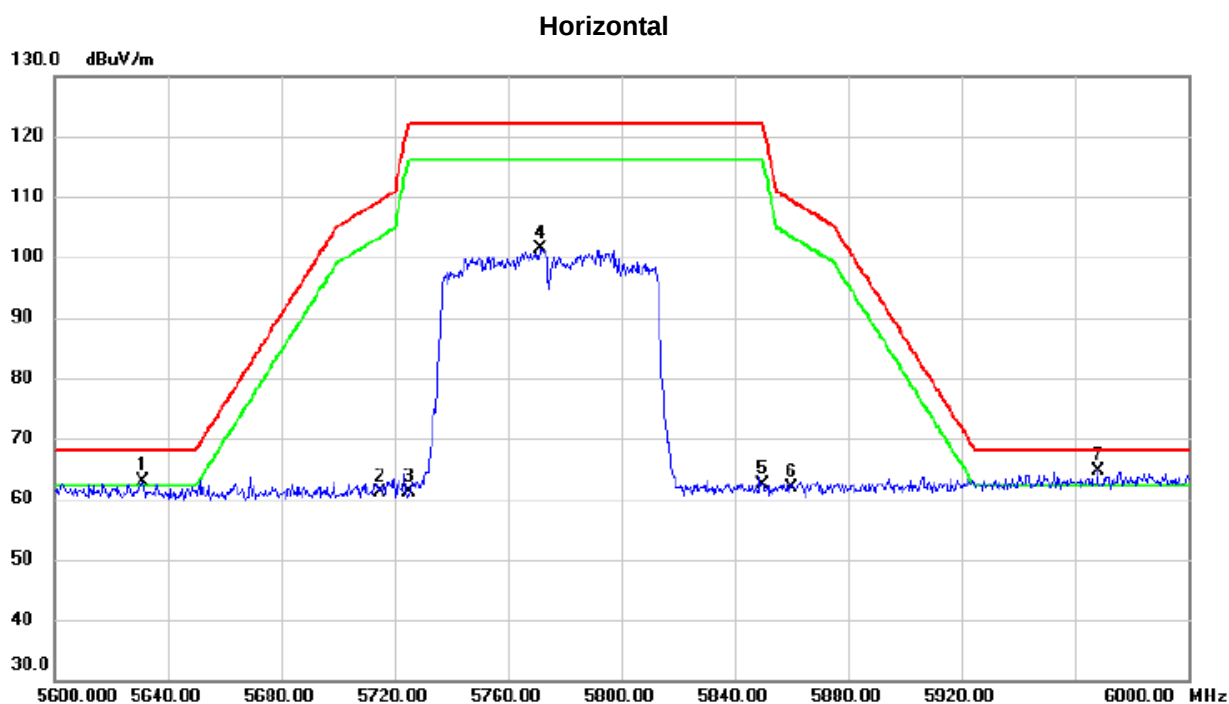
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	!	5606.200	25.26	38.34	63.60	68.20	-4.60	peak	
2		5715.000	24.39	38.46	62.85	109.40	-46.55	peak	
3		5725.000	25.86	38.50	64.36	122.20	-57.84	peak	
4		5783.800	66.89	38.72	105.61	122.20	-16.59	peak	
5		5850.000	23.56	38.91	62.47	122.20	-59.73	peak	
6		5860.000	22.81	38.95	61.76	109.40	-47.64	peak	
7	*	5948.200	25.35	39.14	64.49	68.20	-3.71	peak	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz--ANT.3+4



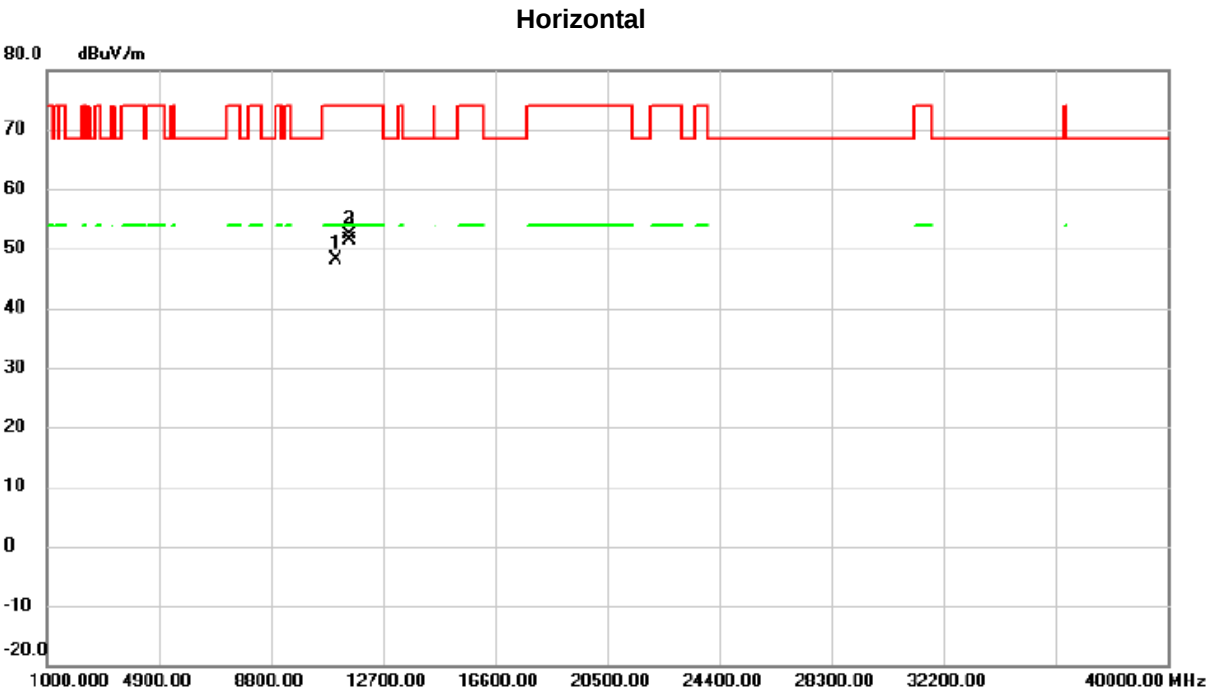
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	!	5631.400	24.50	38.36	62.86	68.20	-5.34	peak	
2		5715.000	22.55	38.46	61.01	109.40	-48.39	peak	
3		5725.000	22.60	38.50	61.10	122.20	-61.10	peak	
4		5771.400	62.65	38.67	101.32	122.20	-20.88	peak	
5		5850.000	23.38	38.91	62.29	122.20	-59.91	peak	
6		5860.000	22.90	38.95	61.85	109.40	-47.55	peak	
7	*	5968.200	25.54	39.19	64.73	68.20	-3.47	peak	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5530+5775 MHz--ANT.1+2/3+4



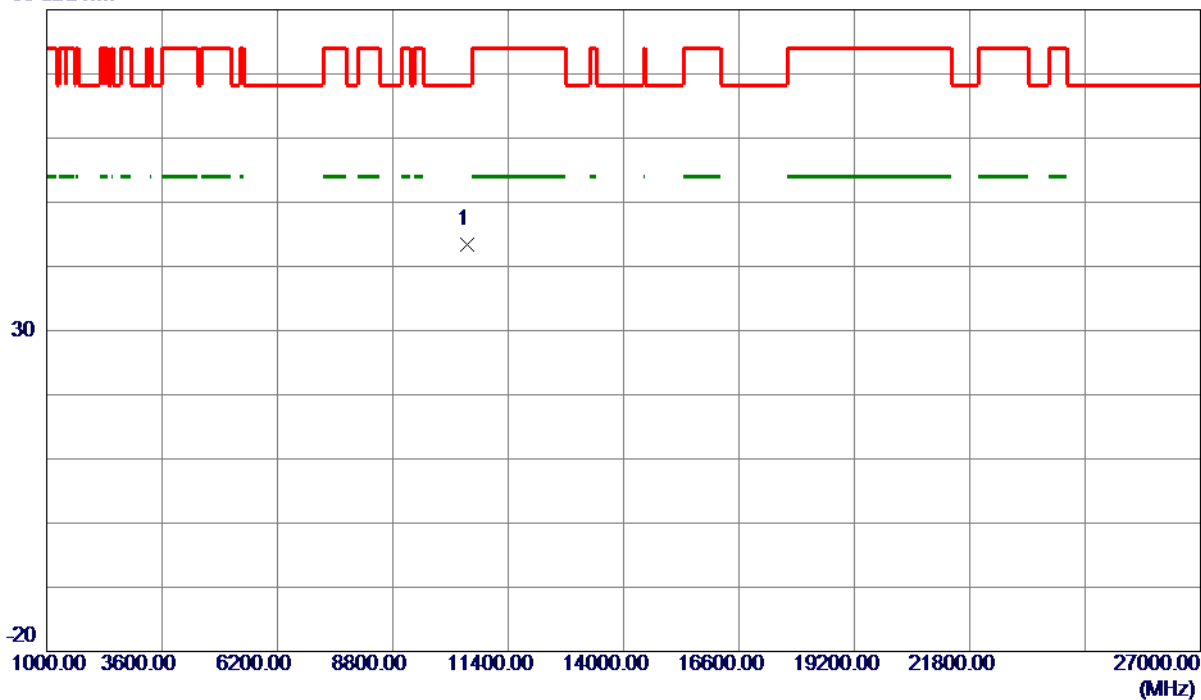
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		11060.00	45.98	2.23	48.21	74.00	-25.79	peak	
2		11549.50	50.03	2.25	52.28	74.00	-21.72	peak	
3	*	11549.96	49.12	2.25	51.37	54.00	-2.63	AVG	

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5530+5775 MHz--ANT.1+2/3+4

Vertical

80 dBuV/m

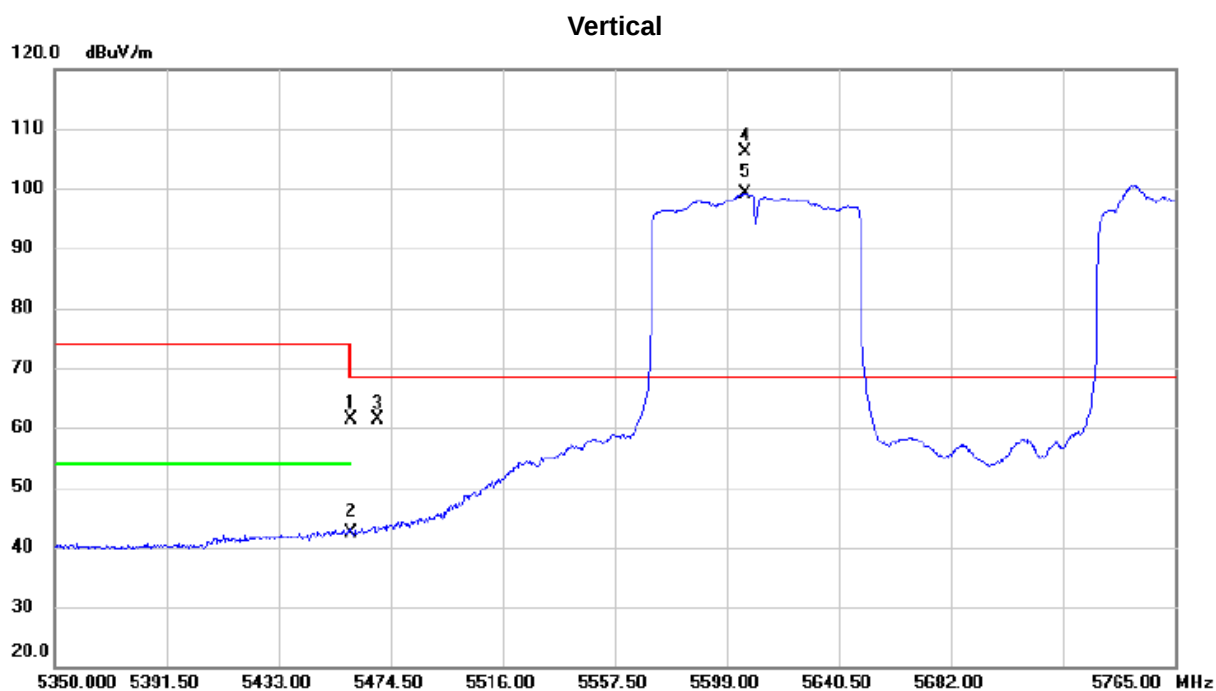


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	10480.0000	44.94	-1.53	43.41	68.30	-24.89	Peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz--ANT.1+2



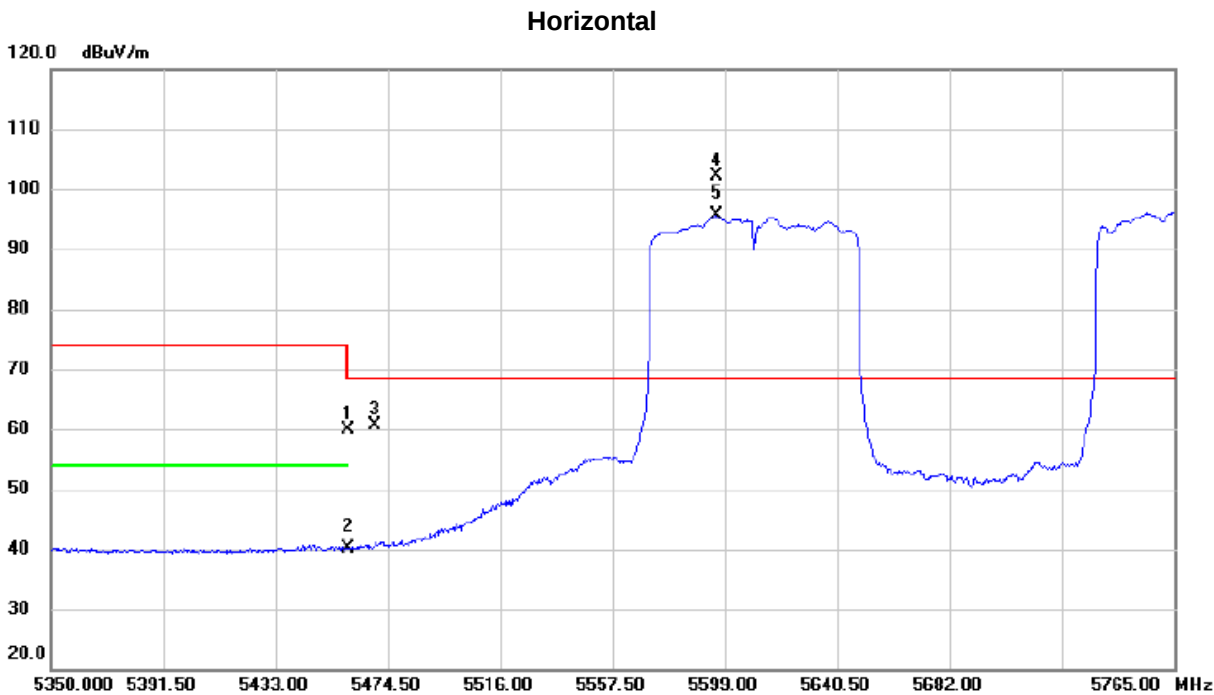
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	23.33	38.12	61.45	74.00	-12.55	peak	
2		5460.000	4.25	38.12	42.37	54.00	-11.63	AVG	
3		5470.000	23.11	38.15	61.26	68.30	-7.04	peak	
4	*	5605.847	67.89	38.34	106.23	68.30	37.93	peak	
5	X	5605.847	60.80	38.34	99.14	68.30	30.84	AVG	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz--ANT.1+2

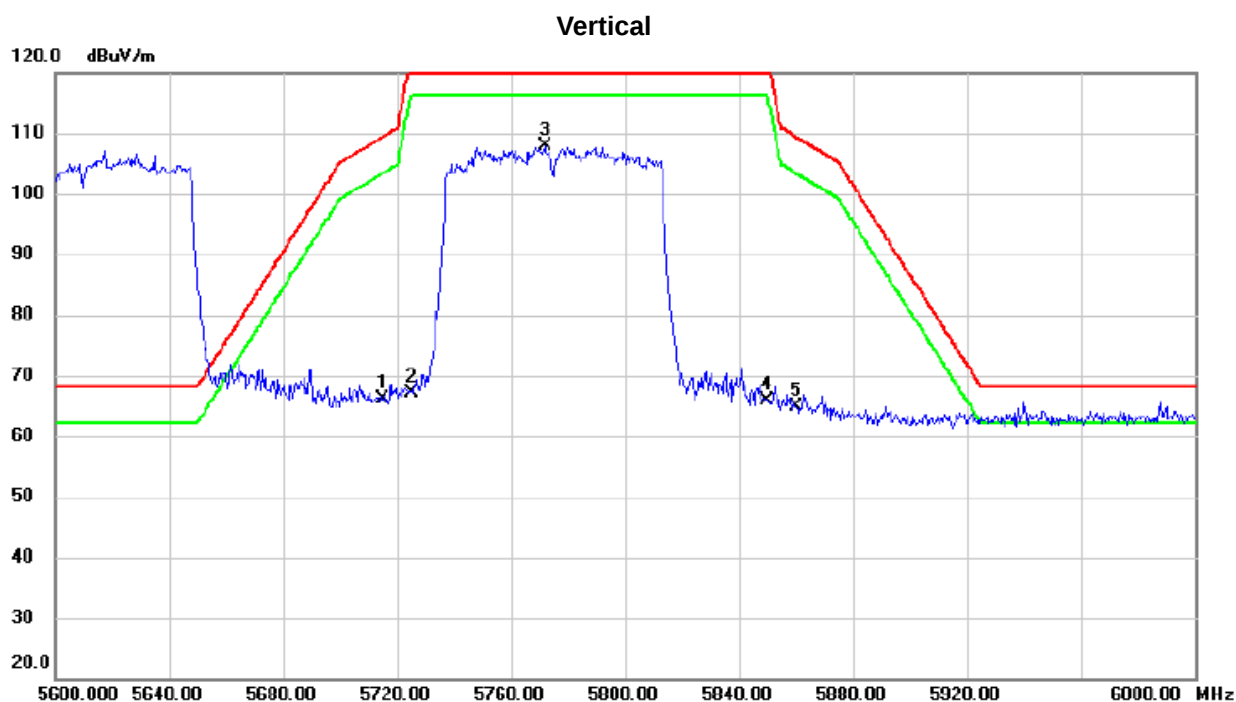


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	21.68	38.12	59.80	74.00	-14.20	peak	
2		5460.000	2.04	38.12	40.16	54.00	-13.84	AVG	
3		5470.000	22.56	38.15	60.71	68.30	-7.59	peak	
4	*	5595.887	63.69	38.34	102.03	68.30	33.73	peak	
5	X	5595.887	57.17	38.34	95.51	68.30	27.21	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz--ANT.3+4

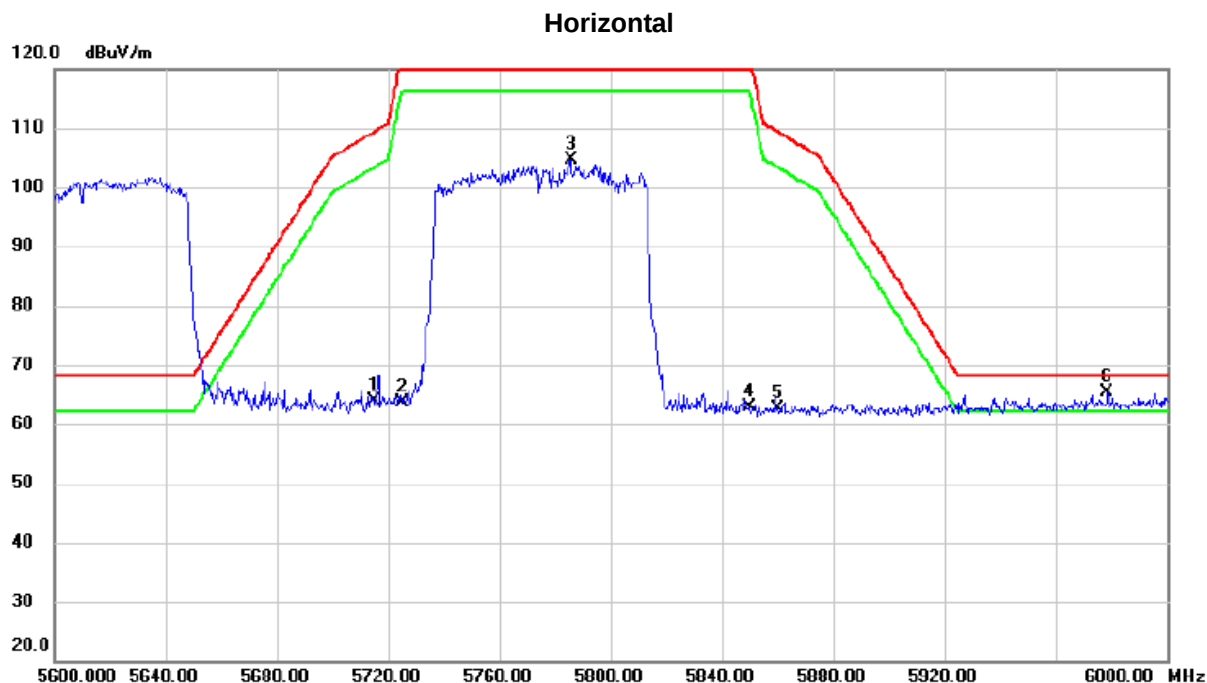


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5715.000	27.56	38.46	66.02	109.40	-43.38	peak	
2		5725.000	28.59	38.50	67.09	122.20	-55.11	peak	
3	*	5771.800	69.16	38.67	107.83	122.20	-14.37	peak	
4		5850.000	27.03	38.91	65.94	122.20	-56.26	peak	
5		5860.000	25.98	38.95	64.93	109.40	-44.47	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz--ANT.3+4

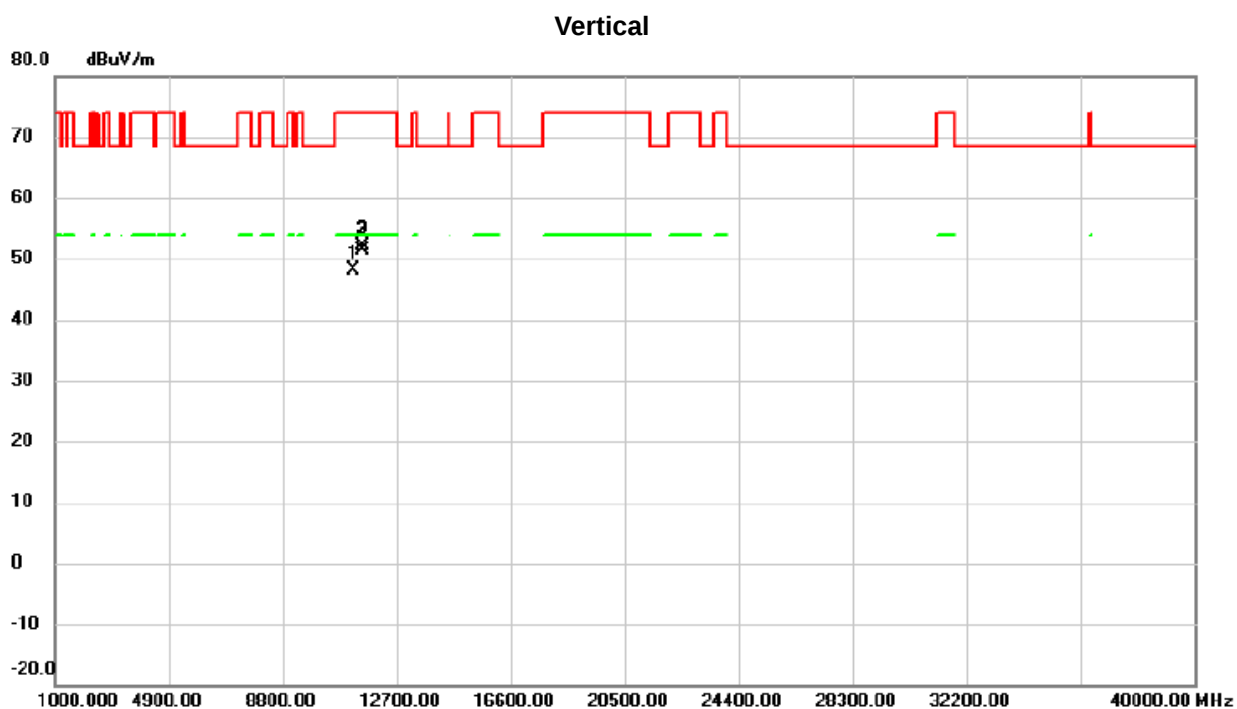


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5715.000	25.33	38.46	63.79	109.40	-45.61	peak	
2		5725.000	25.20	38.50	63.70	122.20	-58.50	peak	
3		5785.600	65.86	38.73	104.59	122.20	-17.61	peak	
4		5850.000	24.05	38.91	62.96	122.20	-59.24	peak	
5		5860.000	23.63	38.95	62.58	109.40	-46.82	peak	
6	*	5978.600	26.14	39.21	65.35	68.20	-2.85	peak	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5610+5775 MHz--ANT.1+2/3+4

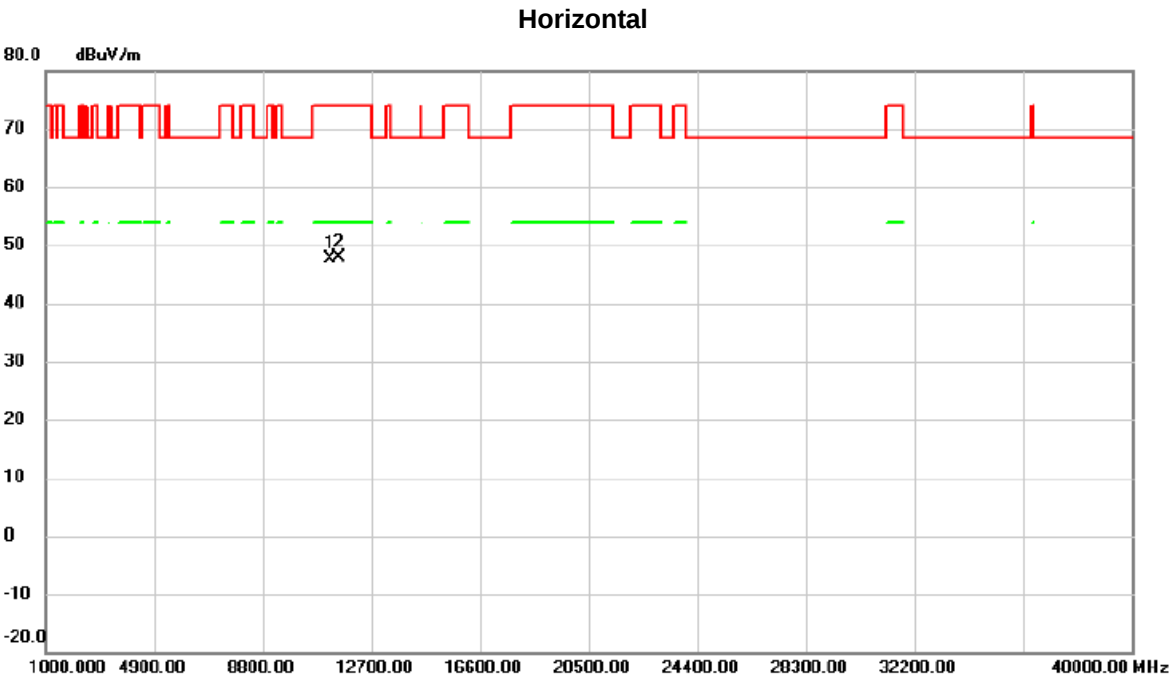


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		11220.00	46.19	1.97	48.16	74.00	-25.84	peak	
2		11549.50	49.84	2.25	52.09	74.00	-21.91	peak	
3	*	11549.98	49.13	2.25	51.38	54.00	-2.62	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5610+5775 MHz--ANT.1+2/3+4



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		11220.00	45.73	1.97	47.70	74.00	-26.30	peak	
2	*	11550.00	45.70	2.26	47.96	74.00	-26.04	peak	

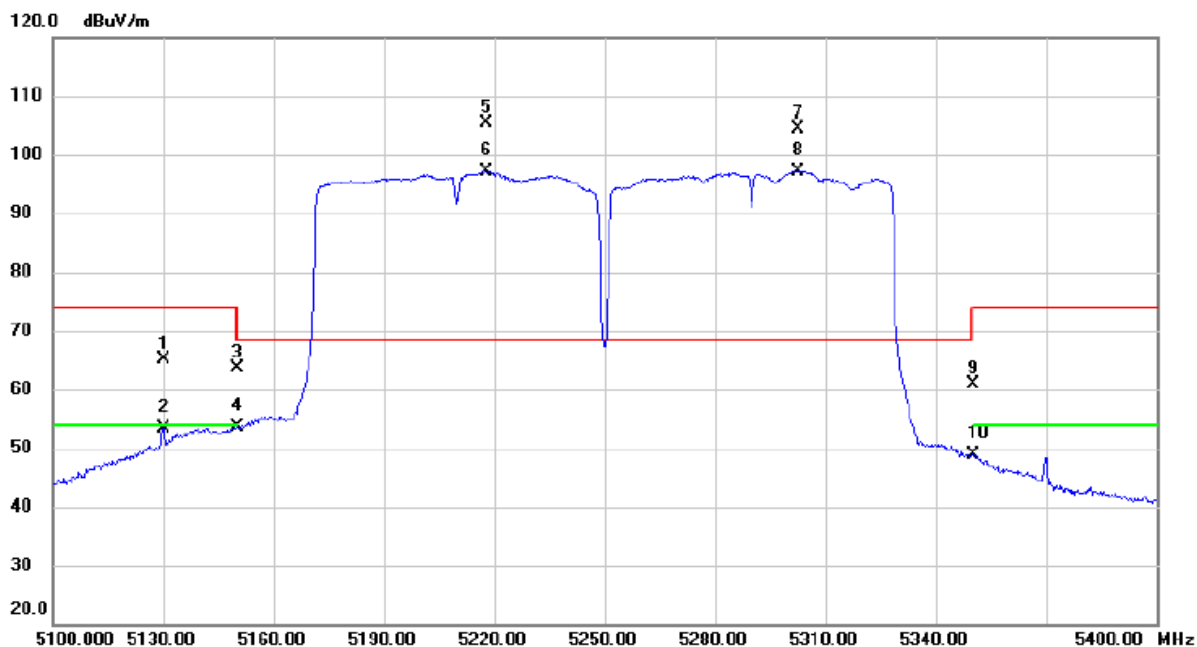
REMARKS:

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

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5290 MHz--ANT.1+2/3+4

Vertical



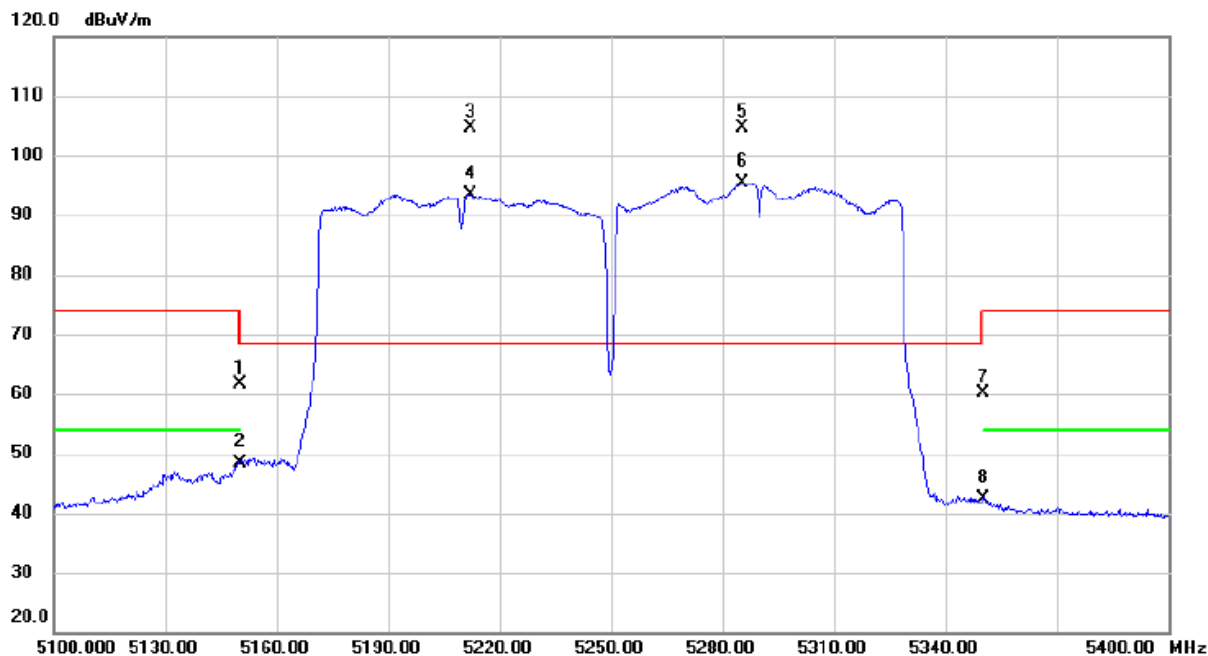
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5130.000	27.19	37.95	65.14	74.00	-8.86	peak	
2		5130.000	15.52	37.95	53.47	54.00	-0.53	AVG	
3		5150.000	25.77	37.88	63.65	74.00	-10.35	peak	
4		5150.000	15.75	37.88	53.63	54.00	-0.37	AVG	
5	*	5217.600	67.84	37.66	105.50	68.30	37.20	peak	
6	X	5217.600	59.45	37.66	97.11	68.30	28.81	AVG	
7	X	5302.500	66.71	37.55	104.26	68.30	35.96	peak	
8	X	5302.500	59.67	37.55	97.22	68.30	28.92	AVG	
9		5350.000	23.11	37.73	60.84	74.00	-13.16	peak	
10		5350.000	11.18	37.73	48.91	54.00	-5.09	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5290 MHz--ANT.1+2/3+4

Horizontal

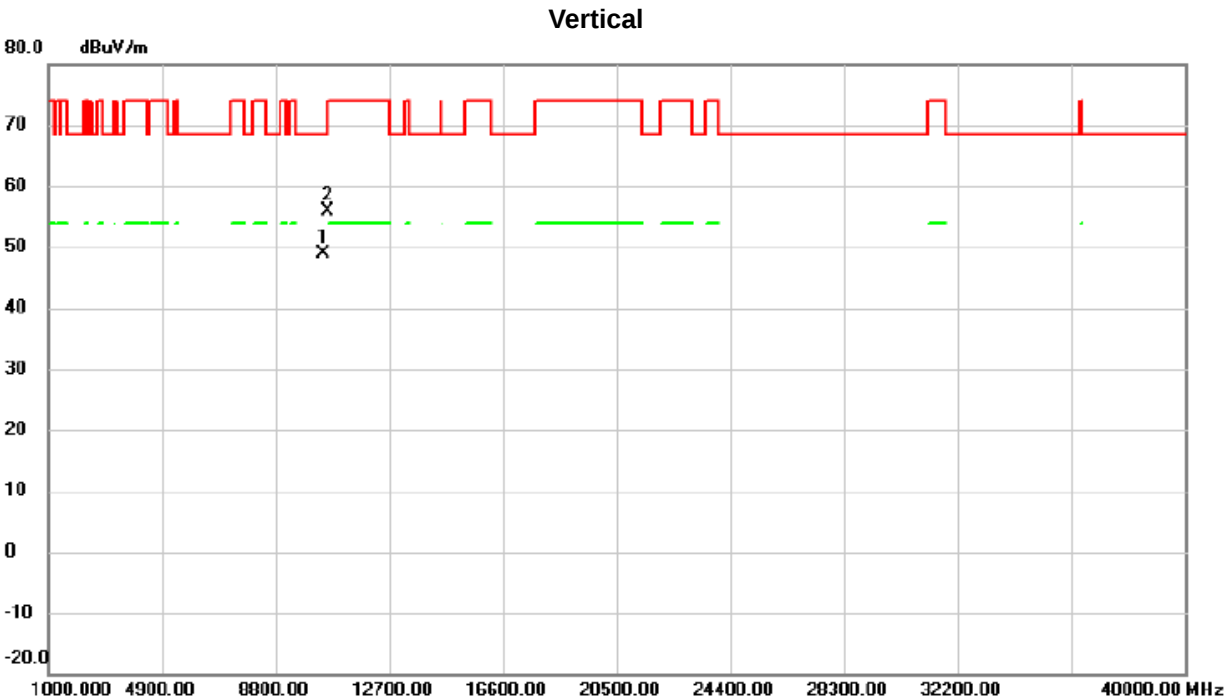


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	23.64	37.88	61.52	74.00	-12.48	peak	
2		5150.000	10.39	37.88	48.27	54.00	-5.73	AVG	
3	*	5212.200	67.02	37.66	104.68	68.30	36.38	peak	
4	X	5212.200	55.83	37.66	93.49	68.30	25.19	AVG	
5	X	5285.550	67.13	37.55	104.68	68.30	36.38	peak	
6	X	5285.550	57.79	37.55	95.34	68.30	27.04	AVG	
7		5350.000	22.46	37.73	60.19	74.00	-13.81	peak	
8		5350.000	4.53	37.73	42.26	54.00	-11.74	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5290 MHz--ANT.1+2/3+4



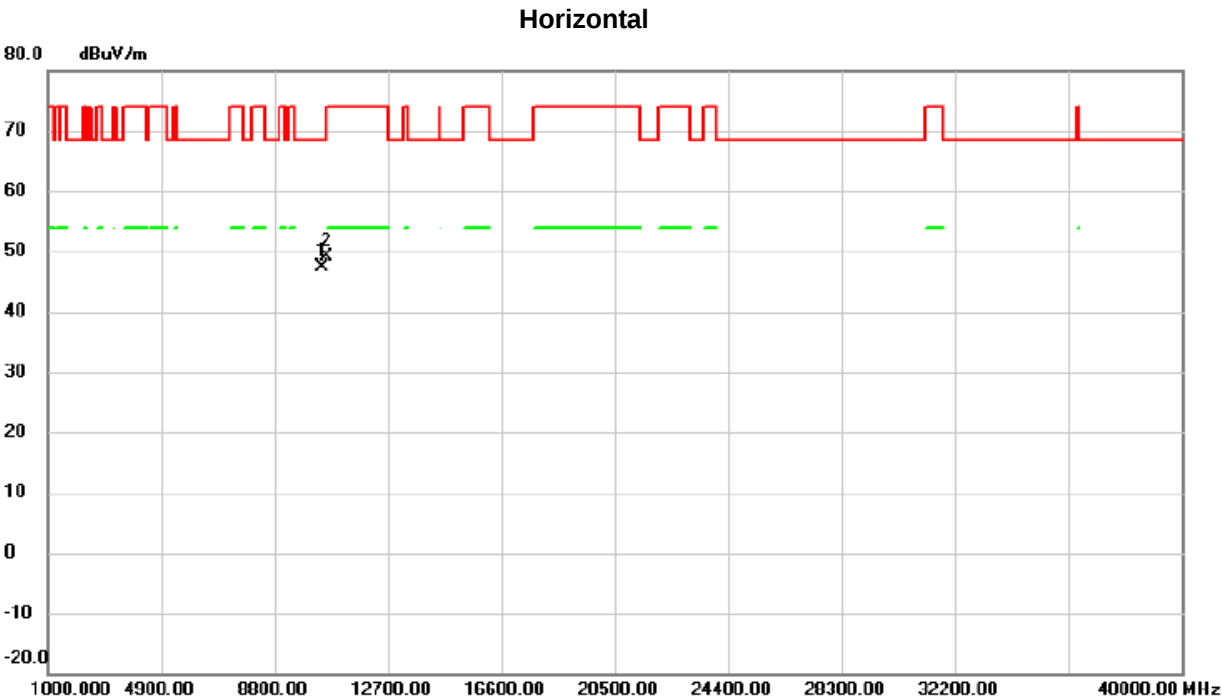
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10420.00	47.10	1.74	48.84	68.30	-19.46	peak	
2	*	10580.35	53.96	1.91	55.87	68.30	-12.43	peak	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5210+5290 MHz--ANT.1+2/3+4



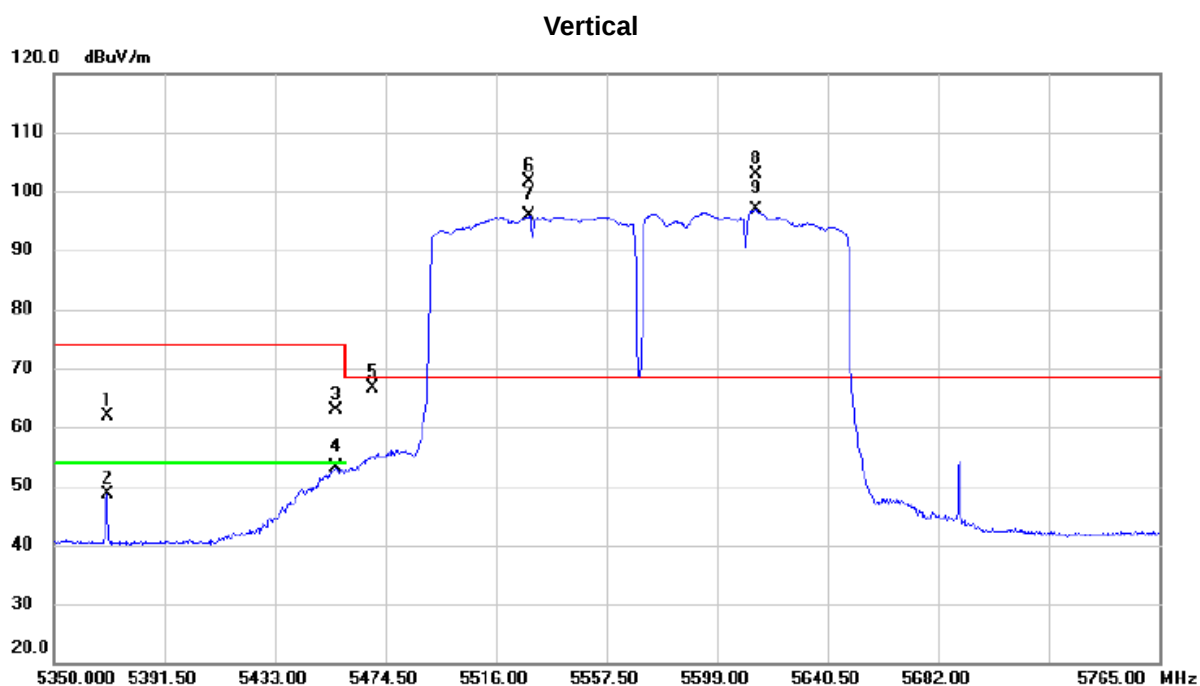
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10420.00	45.64	1.74	47.38	68.30	-20.92	peak	
2	*	10580.00	47.27	1.90	49.17	68.30	-19.13	peak	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5530+5610 MHz--ANT.1+2/3+4



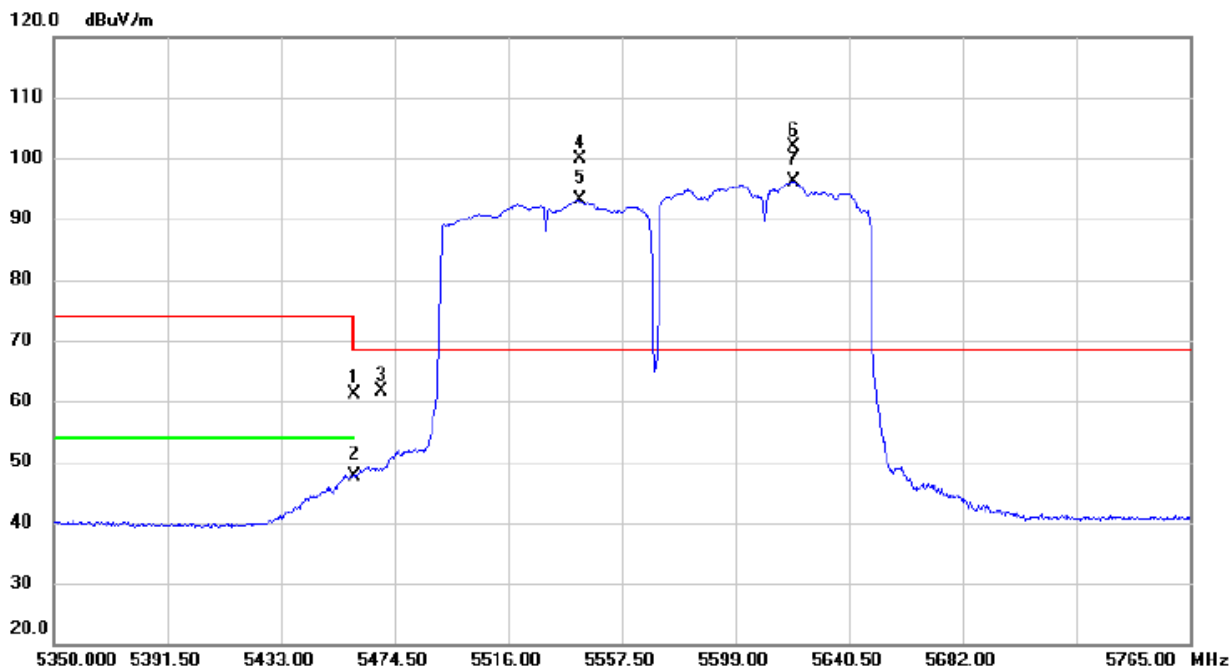
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5369.920	24.18	37.82	62.00	74.00	-12.00	peak	
2		5369.920	10.81	37.82	48.63	74.00	-25.37	peak	
3		5455.825	24.78	38.11	62.89	74.00	-11.11	peak	
4		5455.825	14.90	38.11	53.01	54.00	-0.99	AVG	
5		5470.000	28.56	38.15	66.71	68.30	-1.59	peak	
6	X	5528.658	63.40	38.27	101.67	68.30	33.37	peak	
7	X	5528.658	57.55	38.27	95.82	68.30	27.52	AVG	
8	*	5613.525	64.58	38.35	102.93	68.30	34.63	peak	
9	X	5613.525	58.42	38.35	96.77	68.30	28.47	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5530+5610 MHz--ANT.1+2/3+4

Horizontal

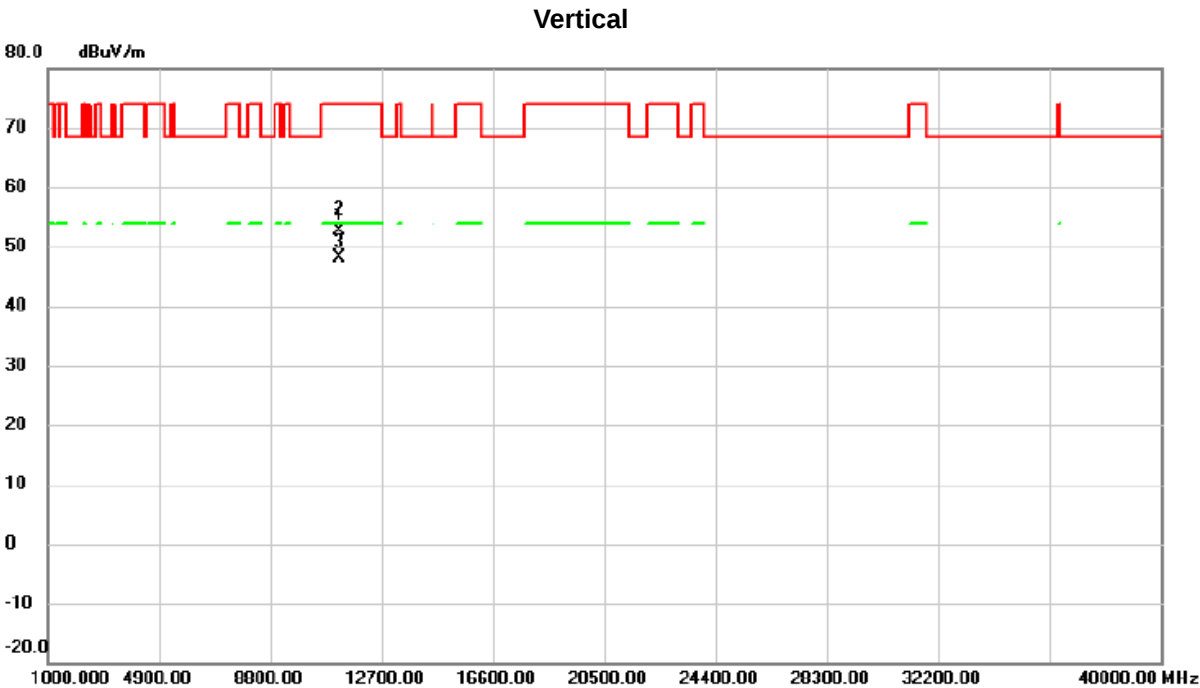


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	22.92	38.12	61.04	74.00	-12.96	peak	
2		5460.000	9.59	38.12	47.71	54.00	-6.29	AVG	
3		5470.000	23.60	38.15	61.75	68.30	-6.55	peak	
4	X	5542.145	61.70	38.28	99.98	68.30	31.68	peak	
5	X	5542.145	54.91	38.28	93.19	68.30	24.89	AVG	
6	*	5620.373	63.58	38.36	101.94	68.30	33.64	peak	
7	X	5620.373	57.74	38.36	96.10	68.30	27.80	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5530+5610 MHz--ANT.1+2/3+4



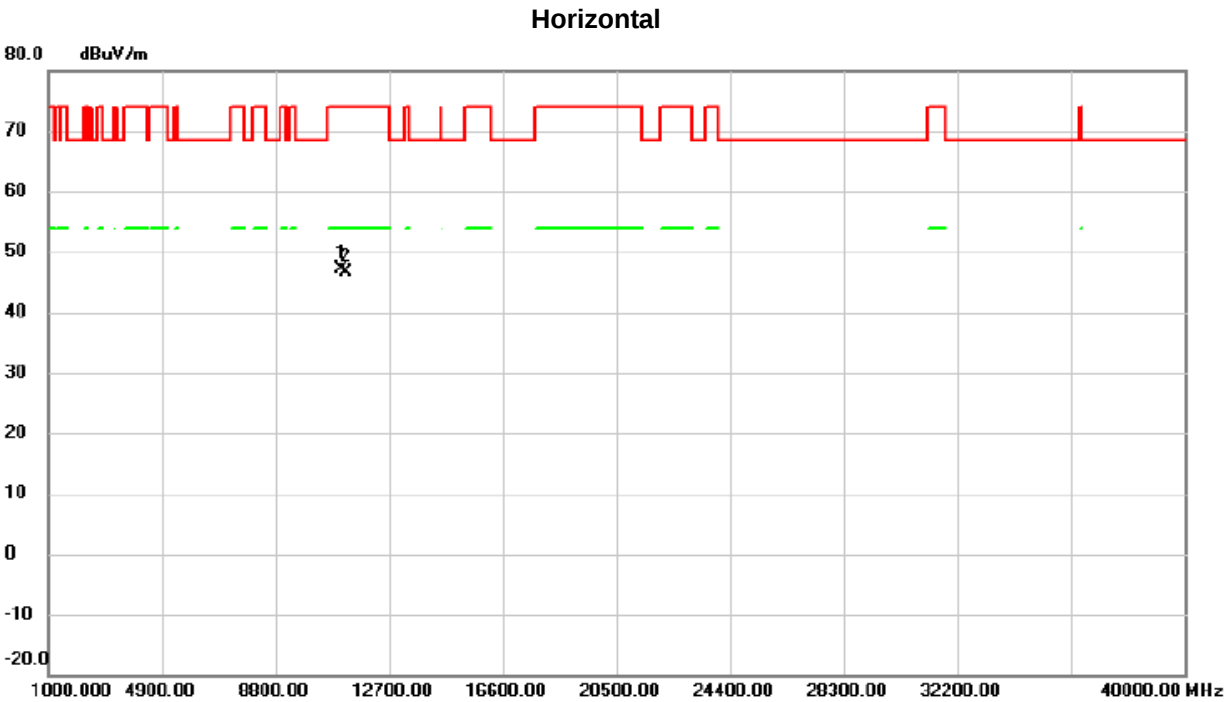
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		11219.95	50.60	1.97	52.57	74.00	-21.43	peak	
2	*	11219.95	50.55	1.97	52.52	54.00	-1.48	AVG	
3		11220.00	46.13	1.97	48.10	74.00	-25.90	peak	

REMARKS:

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

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

Orthogonal Axis	X
Test Mode	TX AC (VHT80) Mode 5530+5610 MHz--ANT.1+2/3+4



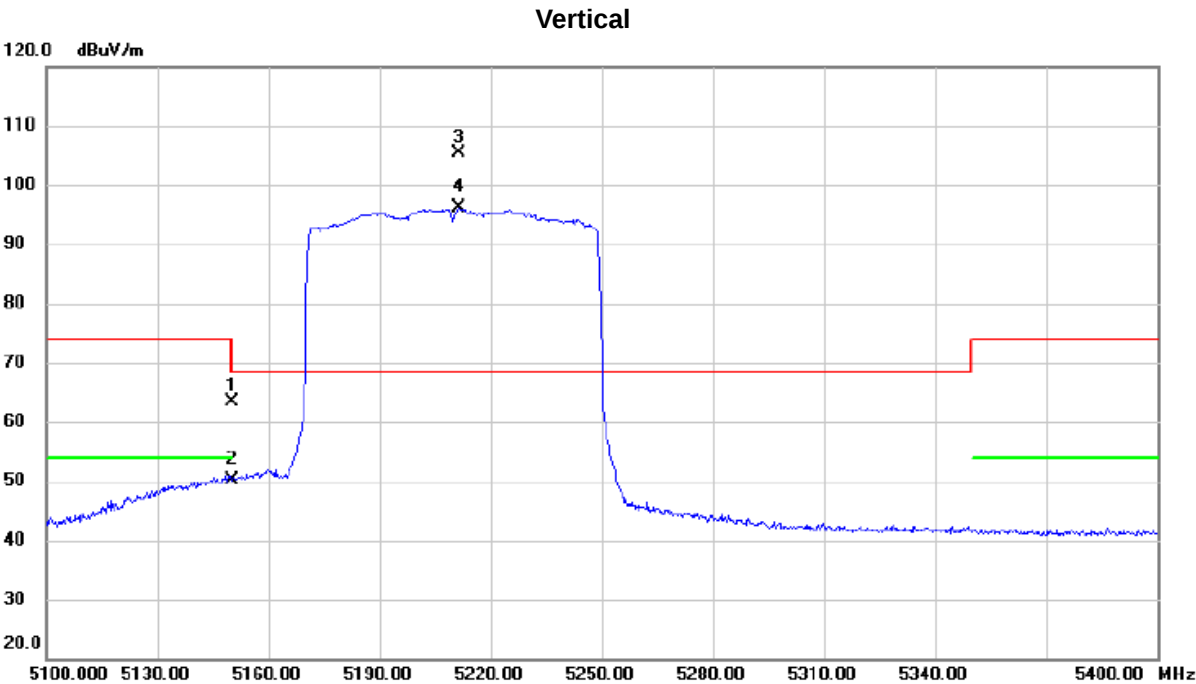
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11060.00	44.90	2.23	47.13	74.00	-26.87	peak	
2		11220.00	44.74	1.97	46.71	74.00	-27.29	peak	

REMARKS:

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

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

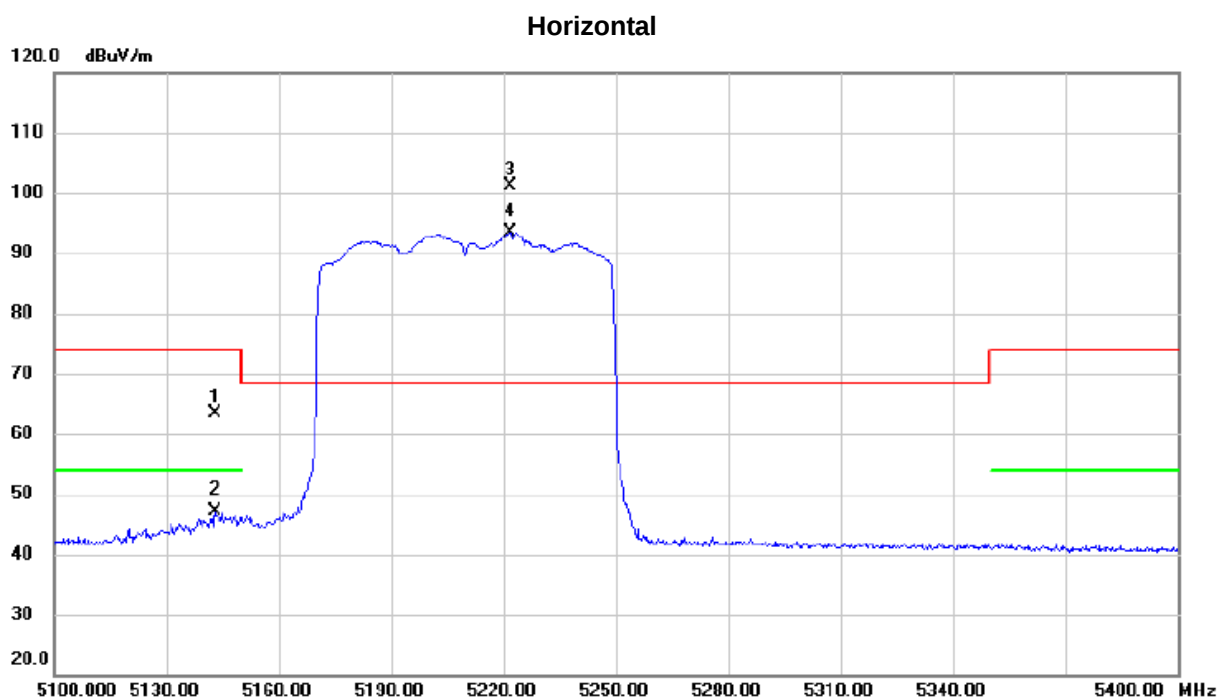
Orthogonal Axis	X
Test Mode	UNII-1_TX AX(HEW80) Mode 5210 MHz--ANT.1+ANT.2



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	25.58	37.88	63.46	74.00	-10.54	peak	
2		5150.000	12.20	37.88	50.08	54.00	-3.92	AVG	
3	*	5211.450	67.83	37.66	105.49	68.30	37.19	peak	
4	X	5211.450	58.40	37.66	96.06	68.30	27.76	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-1_TX AX(HEW80) Mode 5210 MHz--ANT.1+ANT.2

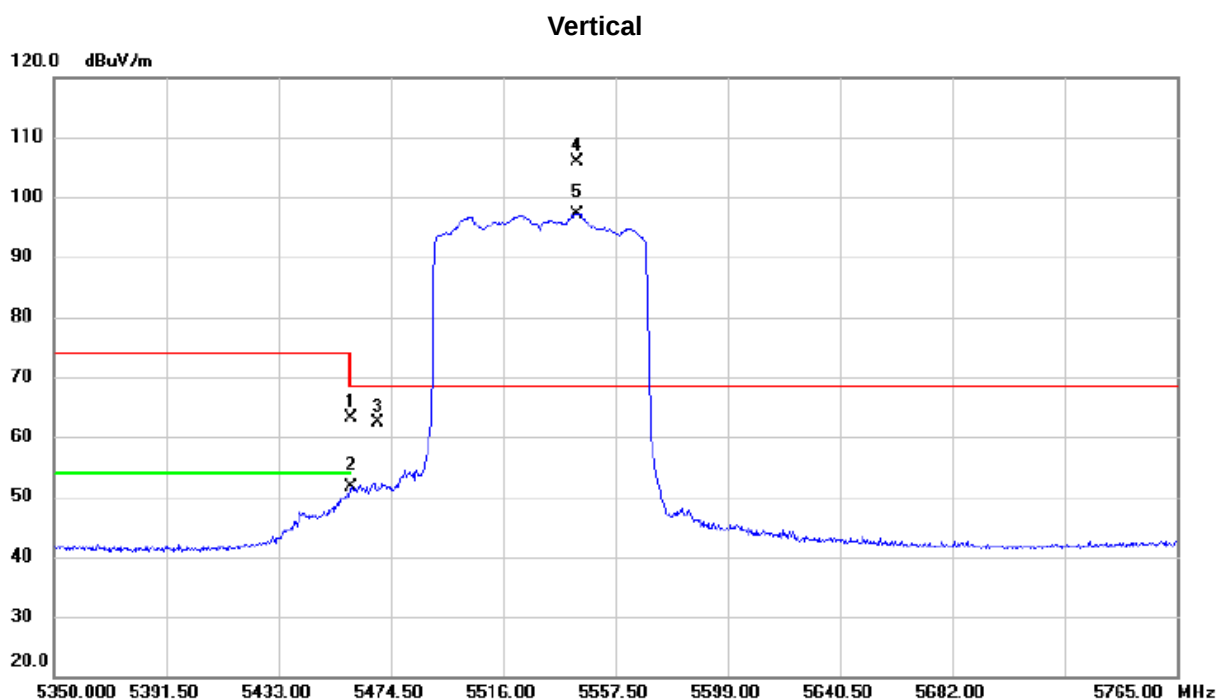


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5143.050	25.55	37.90	63.45	74.00	-10.55	peak	
2		5143.050	9.35	37.90	47.25	54.00	-6.75	AVG	
3	*	5221.800	63.38	37.65	101.03	68.30	32.73	peak	
4	X	5221.800	55.63	37.65	93.28	68.30	24.98	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AX(HEW80) Mode 5530 MHz --ANT.3+ANT.4

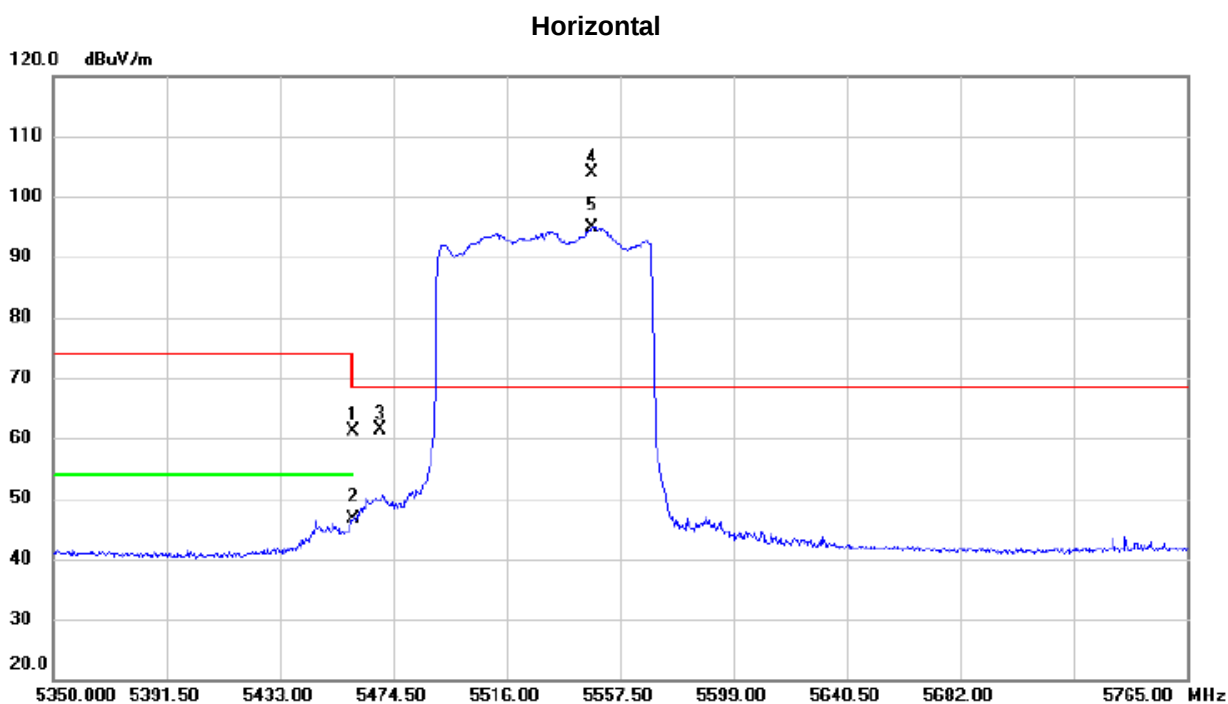


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5460.000	24.89	38.12	63.01	74.00	-10.99	peak	
2		5460.000	13.44	38.12	51.56	54.00	-2.44	AVG	
3		5470.000	24.33	38.15	62.48	68.30	-5.82	peak	
4	*	5543.182	67.57	38.28	105.85	68.30	37.55	peak	
5	X	5543.182	58.94	38.28	97.22	68.30	28.92	AVG	

REMARKS:

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

Orthogonal Axis	X
Test Mode	UNII-2C_TX AX(HEW80) Mode 5530 MHz--ANT.3+ANT.4



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5460.000	23.10	38.12	61.22	74.00	-12.78	peak	
2		5460.000	8.59	38.12	46.71	54.00	-7.29	AVG	
3		5470.000	23.29	38.15	61.44	68.30	-6.86	peak	
4	*	5547.540	65.48	38.28	103.76	68.30	35.46	peak	
5	X	5547.540	56.72	38.28	95.00	68.30	26.70	AVG	

REMARKS:

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

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