

TEST REPORT

Report No.	CISRR26010501102V1
Project No.	CISR260105011
FCC ID	SMQUWM3
Applicant	Edan Instruments, Inc.
Address	#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R.China
Manufacturer	Edan Instruments, Inc.
Address	#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R.China
Product Name	WiFi module
Trade mark	Edan
Model/Type reference	UWM3
Listed Model(s)	-
Standard	47 CFR Part 15E
Date of sample receipt	January 8, 2026
Test date	January 8, 2026 to June 5, 2026
Issue date	June 5, 2026
Test result	Complied

Morgan Tan

Reviewed by: Morgan Tan



Approved by: Hans Hu

The test results relate only to the tested samples.

The test report should not be reproduced except in full without the written approval of Shenzhen Bangce Testing Technology Co., Ltd.

Contents

1. STANDARD AND APPLICABLE TEST METHODS	3
2. REPORT VERSION	3
3. TEST DESCRIPTION	4
4. SUMMARY	5
4.1. Product Description *	5
4.2. Radio Specification Description *	5
4.3. Modification of EUT	6
4.4. Deviation from standards	6
4.5. Testing Site	6
5. TEST CONFIGURATION	7
5.1. Test frequency list	7
5.2. Descriptions of test mode	7
5.3. Support unit used in test configuration	7
5.4. Test sample information	8
5.5. Environmental conditions	8
5.6. Statement of the measurement uncertainty	8
5.7. Equipment Used during the Test	9
6. TEST RESULTS	11
6.1. Evaluation Results (Evaluation)	11
6.1.1. Antenna requirement	11
6.2. Radio Spectrum Matter Test Results (RF)	12
6.2.1. Duty Cycle	12
6.2.2. Emission bandwidth and occupied bandwidth	13
6.2.3. Maximum conducted output power	15
6.2.4. Power spectral density	17
6.2.5. Band edge emissions (Radiated)	19
6.2.6. Undesirable emission limits (below 1GHz)	38
6.2.7. Undesirable emission limits (above 1GHz)	43

1. STANDARD AND APPLICABLE TEST METHODS

The tests were performed according to following standards:

47 CFR Part 15E: Unlicensed National Information Infrastructure Devices

ANSI C63.10-2020: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

2. REPORT VERSION

Version No.	Issue date	Description
00	June 5, 2026	Original

3. TEST DESCRIPTION

No.	Test Item	Standard Requirement	Result
1	Antenna requirement	Part 15.203	Pass
2	Duty Cycle		Pass
3	Emission bandwidth and occupied bandwidth	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use. 47 CFR Part 15.407(e)	Pass
4	Maximum conducted output power	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)	Pass
5	Power spectral density	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)	Pass
6	Band edge emissions (Radiated)	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass
7	Undesirable emission limits (below 1GHz)	47 CFR Part 15.407(b)(9)	Pass
8	Undesirable emission limits (above 1GHz)	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass

Note:

- The measurement uncertainty is not included in the test result.

4. SUMMARY

4.1. Product Description *

Main unit information:	
Product Name:	WiFi module
Trade mark:	Edan
Model No.:	UWM3
Listed Model(s):	-
Model difference:	-
Power supply:	DC 3.3V
Hardware version:	-
Software version:	-
Accessory unit (AU) information:	
AU-1	-

4.2. Radio Specification Description *

Modulation type:	802.11a: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Operation frequency:	802.11a/n(HT20)/ac(HT20)/ax(HE20): U-NII Band 1: 5180MHz to 5240MHz; U-NII Band 3: 5745MHz to 5825MHz; 802.11n(HT40)/ac(HT40)/ax(HE40): U-NII Band 1: 5190MHz to 5230MHz; U-NII Band 3: 5755MHz to 5795MHz; 802.11ac(HT80)/ax(HE80): U-NII Band 1: 5210MHz; U-NII Band 3: 5775MHz
Channel number:	802.11a/n(HT20)/ac(HT20)/ax(HE20): U-NII Band 1: 4; U-NII Band 3: 5; 802.11n(HT40)/ac(HT40)/ax(HE40): U-NII Band 1: 2; U-NII Band 3: 2; 802.11ac(HT80)/ax(HE80): U-NII Band 1: 1; U-NII Band 3: 1
Channel separation:	802.11a/n(HT20)/ac(HT20)/ax(HEW20): 20MHz 802.11n(HT40)/ac(HT40)/ax(HEW40): 40MHz 802.11ac(HT80)/ax(HEW80): 80MHz
Antenna type:	FPC Antenna or PCB Antenna

Antenna gain:	Ant6:1.94dBi for 5.1G WiFi;3.60dBi for 5.8G WiFi; Ant7:3.04dBi for 5.1G WiFi;1.52dBi for 5.8G WiFi;
---------------	--

Note:

- 1) *: As the above information is provided by the applicant, all relevant results and conclusions of this report are based solely on such information. Bangce lab shall not be liable for the authenticity, integrity, and resulting outcomes of the information, and/or the validity of the conclusions herein.
- 2) Operation frequency list as follow:

U-NII Band 1

Bandwidth:	20MHz	Bandwidth:	40MHz	Bandwidth:	80MHz
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	/	/
44	5220	/	/	/	/
48	5240	/	/	/	/

U-NII Band 3

Bandwidth:	20MHz	Bandwidth:	40MHz	Bandwidth:	80MHz
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	/	/	/	/

4.3. Modification of EUT

No modifications are made to the EUT during all test items.

4.4. Deviation from standards

None

4.5. Testing Site

Laboratory Name	Shenzhen Bangce Testing Technology Co., Ltd.
Laboratory Location	101, building 10, Yunli Intelligent Park, Shutianpu community, Matian Street, Guangming District, Shenzhen, Guangdong, China
Contact information	Tel: 86-755-2319 6848, email: service@cis-cn.net Website: http://www.cis-cn.net/
FCC registration number	736346
FCC designation number	CN1372

5. TEST CONFIGURATION

5.1. Test frequency list

Bandwidth (MHz)	Lowest Channel (LCH) (MHz)	Middle Channel (MCH) (MHz)	Highest Channel (HCH) (MHz)
20	5180	5200	5240
40	5190	/	5230
80	/	5210	/

Bandwidth (MHz)	Lowest Channel (LCH) (MHz)	Middle Channel (MCH) (MHz)	Highest Channel (HCH) (MHz)
20	5745	5785	5825
40	5755	/	5795
80	/	5775	/

5.2. Descriptions of test mode

No	Test mode	Description
TM1	802.11a mode	Keep the EUT in continuously transmitting mode with 802.11a modulation type at lowest, middle and highest channel. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.
TM2	802.11n mode	Keep the EUT in continuously transmitting mode with 802.11n modulation type at lowest, middle and highest channel. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
TM3	802.11ac mode	Keep the EUT in continuously transmitting mode with 802.11ac modulation type at lowest, middle and highest channel. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
TM4	802.11ax mode	Keep the EUT in continuously transmitting mode with 802.11ax modulation type at lowest, middle and highest channel. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Note: The sample is equipped with five antennas, hence the report presents five sets of radiation test data. This module has only one antenna input port.

5.3. Support unit used in test configuration

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Item	Equipment name	Trade Name	Model No.
1	Adapter	Guangdong Sangu Technology Co. Ltd	SG-0501000AU

5.4. Test sample information

Type	Sample No.
Engineer sample	CISR260105011-S01
Normal sample	CISR260105011-S02

5.5. Environmental conditions

Type	Requirement
Temperature:	15~35°C
Relative Humidity:	25~75%
Air Pressure:	860~1060mbar

5.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	Time	2.3ns
2	Bandwidth	0.19%
3	Conducted output power	1.38dB
4	Power spectral density	1.39dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

5.7. Equipment Used during the Test

Duty Cycle Emission bandwidth and occupied bandwidth Maximum conducted output power Power spectral density						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Spectrum analyzer	ROHDE&SCHWARZ	FSV-40N	CIS-EE076	2026-01-06	2027-01-05
2	Notch Filter Assembly	WCS	SMU-1003	CIS-EE093	2026-01-06	2027-01-05
3	Vector Signal Generator	Agilent	N5182A	CIS-RE012	2026-01-06	2027-01-05
4	Analog Signal Generator	Agilent	N5181A	CIS-RE013	2026-01-06	2027-01-05
5	Test software	WCS	WCN-Regulator y	CIS-EE103	/	/

Band edge emissions (Radiated) Undesirable emission limits (below 1GHz) Undesirable emission limits (above 1GHz)						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	9*6*6 anechoic chamber	SKET	9.3*6.3*6	N/A	2024-09-02	2027-09-01
2	Spectrum analyzer	Agilent	N9020A	MY50530263	2026-01-06	2027-01-05
3	Spectrum analyzer	R&S	FSV-40N	102130	2026-01-06	2027-01-05
4	Bilog Antenna	Schwarzbeck	VULB 9163	1463	2026-01-06	2029-01-05
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	2487	2026-01-06	2029-01-05
6	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	/	2026-01-06	2029-01-05
7	RF Cable	Tonscend	Cable 1	/	2026-01-06	2027-01-05
8	RF Cable	Tonscend	Cable 2	/	2026-01-06	2027-01-05
9	RF Cable	SKET	Cable 3	/	2026-01-06	2027-01-05
10	L.I.S.N.#1	Schwarzbeck	NSLK8127	/	2026-01-06	2027-01-05
11	L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	2026-01-06	2027-01-05
12	Horn Antenna	SCHWARZBECK	BBHA9170	1130	2026-01-06	2029-01-05
13	Preamplifier	Tonscend	TAP18040048	AP21C806126	2026-01-06	2027-01-05
14	Variable-frequency power source	Pinhong	PH1110	/	2026-01-06	2027-01-05

15	6dB Attenuator	SKET	DC-6G	/	2026-01-06	2027-01-05
16	Antenna tower	SKT	Bk-4AT-BS	AT202104010 1-V1	2026-01-06	2027-01-05

6. TEST RESULTS

6.1. Evaluation Results (Evaluation)

6.1.1. Antenna requirement

Test Requirement:

Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

6.1.1.1. Test Result

Pass

6.1.1.2. Conclusion:

The EUT antenna is FPC Antenna or PCB Antenna. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used. Antenna structure please refer to the EUT internal photographs antenna photo.

6.2. Radio Spectrum Matter Test Results (RF)

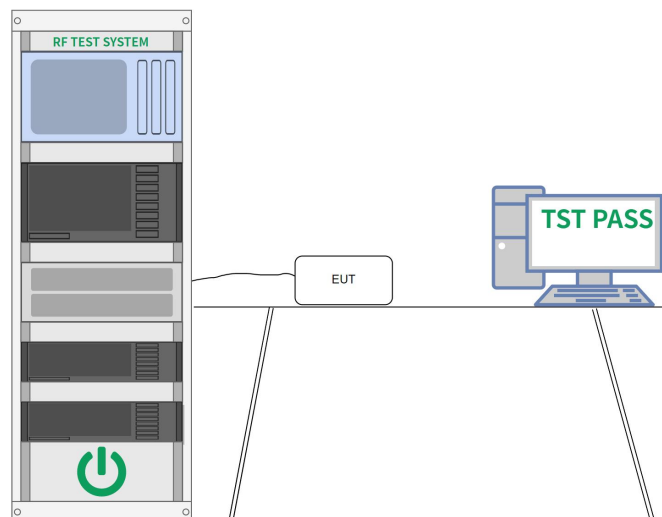
6.2.1. Duty Cycle

Test Requirement:	All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximum-power transmission duration, T, are required for each tested mode of operation.
Test Limit:	No limits, only for report use.
Test Method:	ANSI C63.10-2020 section 12.2 (b)
Procedure:	i) Set the center frequency of the instrument to the center frequency of the transmission. ii) Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value. iii) Set VBW $\geq$ RBW. iv) Set detector = peak. v) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in item a1) of 12.2, and the number of sweep points across duration T exceeds 100.

6.2.1.1. E.U.T. Operation

Operating Environment:					
Temperature:	22.6 °C	Humidity:	56.9 %	Atmospheric Pressure:	102.9 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.1.2. Test Setup Diagram



6.2.1.3. Test Result

Pass

6.2.1.4. Test Data

Please Refer to Appendix for Details.

6.2.2. Emission bandwidth and occupied bandwidth

Test Requirement:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use. U-NII 3, U-NII 4: 47 CFR Part 15.407(e)
Test Limit:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use. U-NII 3, U-NII 4: Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Test Method:	ANSI C63.10-2020, section 6.9 & 12.5 KDB 789033 D02, Clause C.2
Procedure:	Emission bandwidth: - Set RBW = approximately 1% of the emission bandwidth. - Set the VBW > RBW. - Detector = peak. - Trace mode = max hold. - Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%. Occupied bandwidth: - The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW. - The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement. - Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2. - Step a) through step c) might require iteration to adjust within the specified range. - Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used. - Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth. - If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies. - The occupied bandwidth shall be reported by providing plot(s) of the measuring

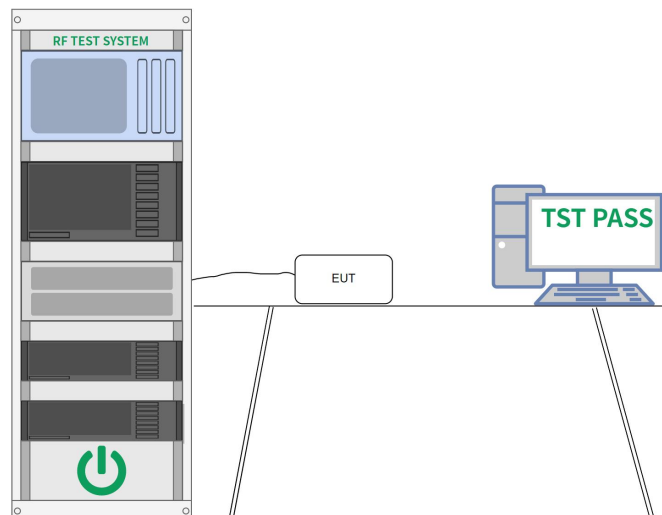
instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

6 dB emission bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.2.2.1. E.U.T. Operation

Operating Environment:					
Temperature:	22.3 °C	Humidity:	56.4 %	Atmospheric Pressure:	102.9 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.2.2. Test Setup Diagram



6.2.2.3. Test Result

Pass

6.2.2.4. Test Data

Please Refer to Appendix for Details.

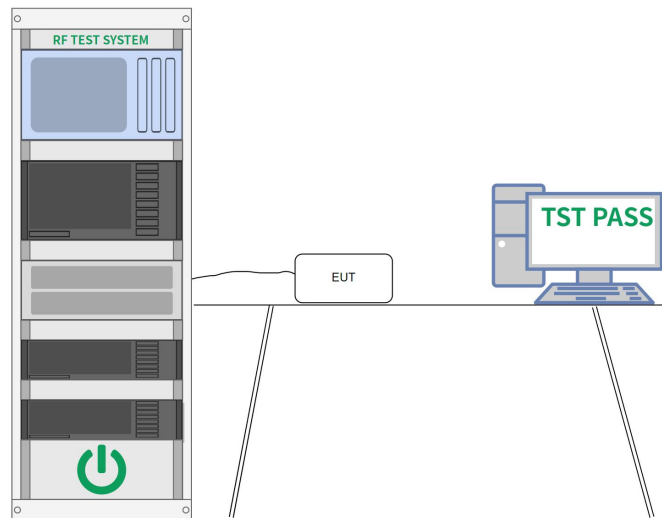
6.2.3. Maximum conducted output power

Test Requirement:	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)
Test Limit:	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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power 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. 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. 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 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 colocated 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated 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.
Test Method:	ANSI C63.10-2020, section 12.4
Procedure:	Refer to ANSI C63.10-2020 section 12.4

6.2.3.1. E.U.T. Operation

Operating Environment:					
Temperature:	22.2 °C	Humidity:	55.5 %	Atmospheric Pressure:	102.9 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.3.2. Test Setup Diagram



6.2.3.3. Test Result

Pass

6.2.3.4. Test Data

Please Refer to Appendix for Details.

6.2.4. Power spectral density

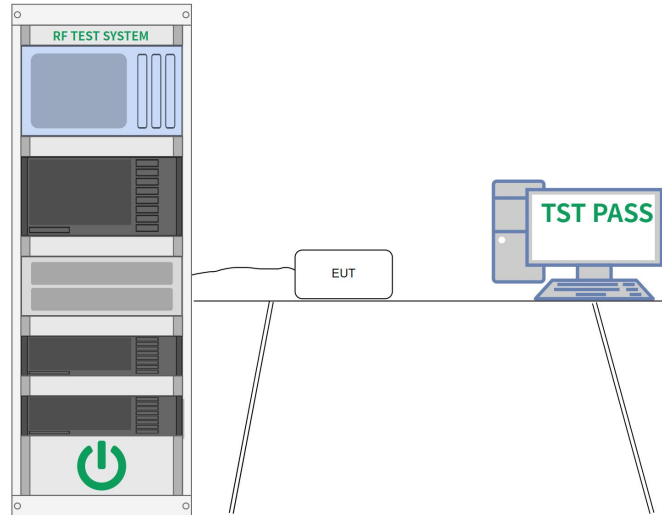
Test Requirement:	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)
Test Limit:	For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For an indoor access point operating in the band 5.15-5.25 GHz, 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, 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 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 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 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 colocated 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 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, 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 band 5.725-5.850 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated 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.
Test Method:	ANSI C63.10-2020, section 12.6
Procedure:	Refer to ANSI C63.10-2020, section 12.6

6.2.4.1. E.U.T. Operation

Operating Environment:					
Temperature:	22.2 °C	Humidity:	56.3 %	Atmospheric Pressure:	102.9 kPa

Pre test mode:	TM1, TM2, TM3, TM4
Final test mode:	TM1, TM2, TM3, TM4

6.2.4.2. Test Setup Diagram



6.2.4.3. Test Result

Pass

6.2.4.4. Test Data

Please Refer to Appendix for Details.

6.2.5. Band edge emissions (Radiated)

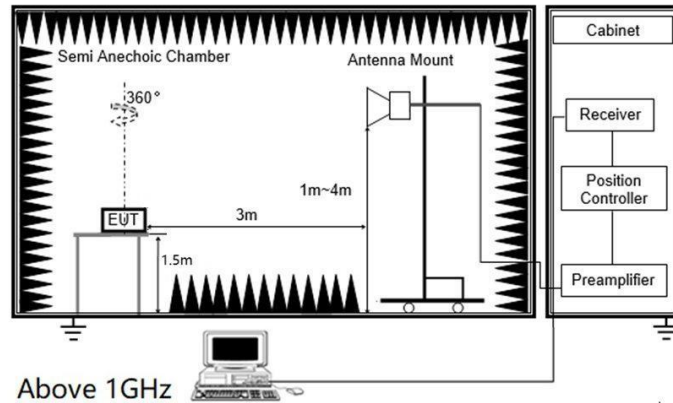
Test Requirement:	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)			
Test Limit:	For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.			
	For transmitters operating solely in the 5.725-5.850 GHz band: 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.			
	MHz	MHz	MHz	GHz
	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
	¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
	2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
	4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
	6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
	6.31175-6.31225	123-138	2200-2300	14.47-14.5
	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
	8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
	12.57675-12.57725	322-335.4	3600-4400	(²)
	13.36-13.41			
	¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.			
	² Above 38.6			
	The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35 apply to these measurements.			
	Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:			
	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
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7		
Procedure:	Above 1GHz: a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel, the middle channel, the Highest channel. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete. Remark: 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor 2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report. 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.		

6.2.5.1. E.U.T. Operation

Operating Environment:					
Temperature:	22.1 °C	Humidity:	57 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (TM4) is recorded in the report				

6.2.5.2. Test Setup Diagram



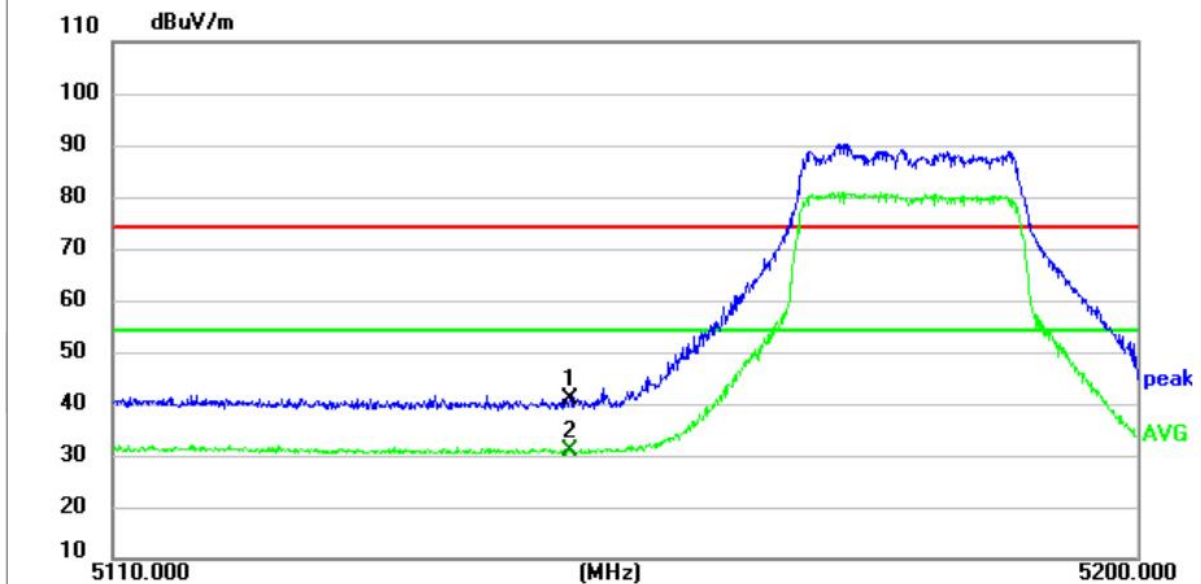
6.2.5.3. Test Result

Pass

6.2.5.4. Test Data

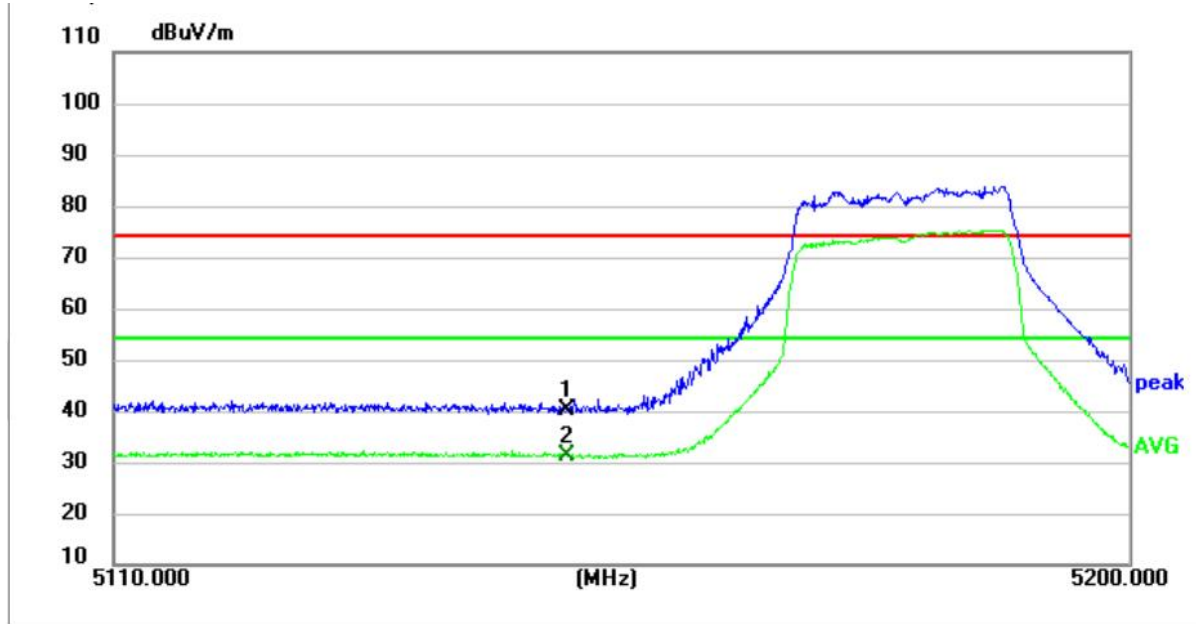
Ant6:

Mode4 / Polarization: Horizontal / CH: L



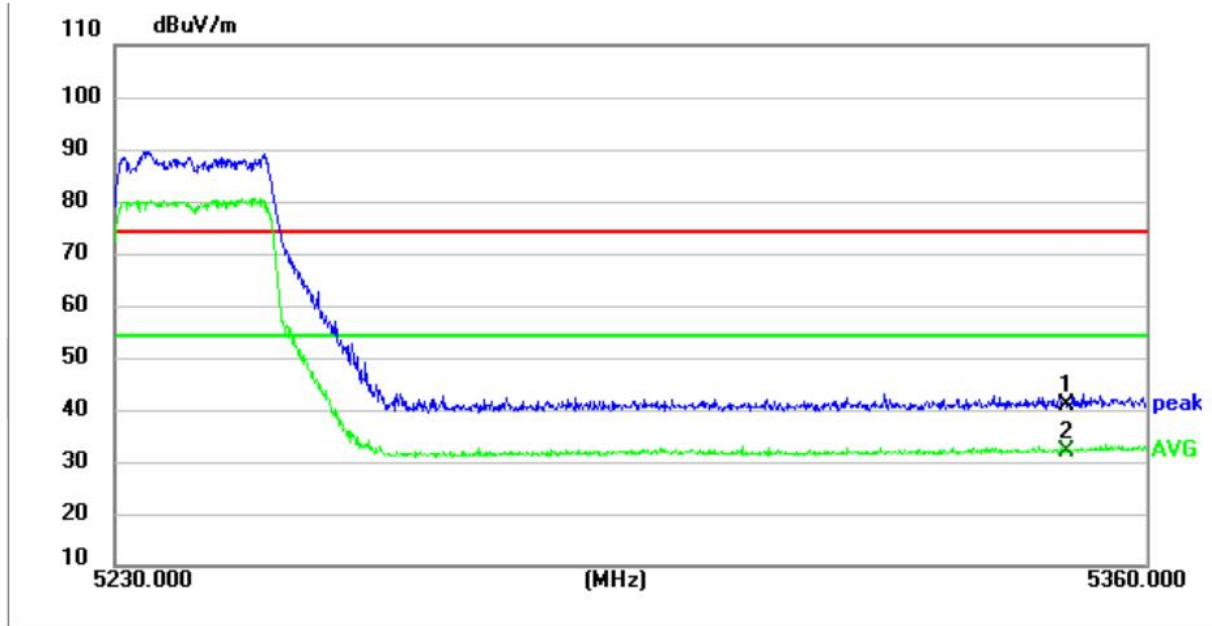
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.0000	48.88	-8.16	40.72	74.00	33.28	peak
2 *	5150.0000	38.91	-8.16	30.75	54.00	23.25	AVG

Mode4 / Polarization: Vertical / CH: L



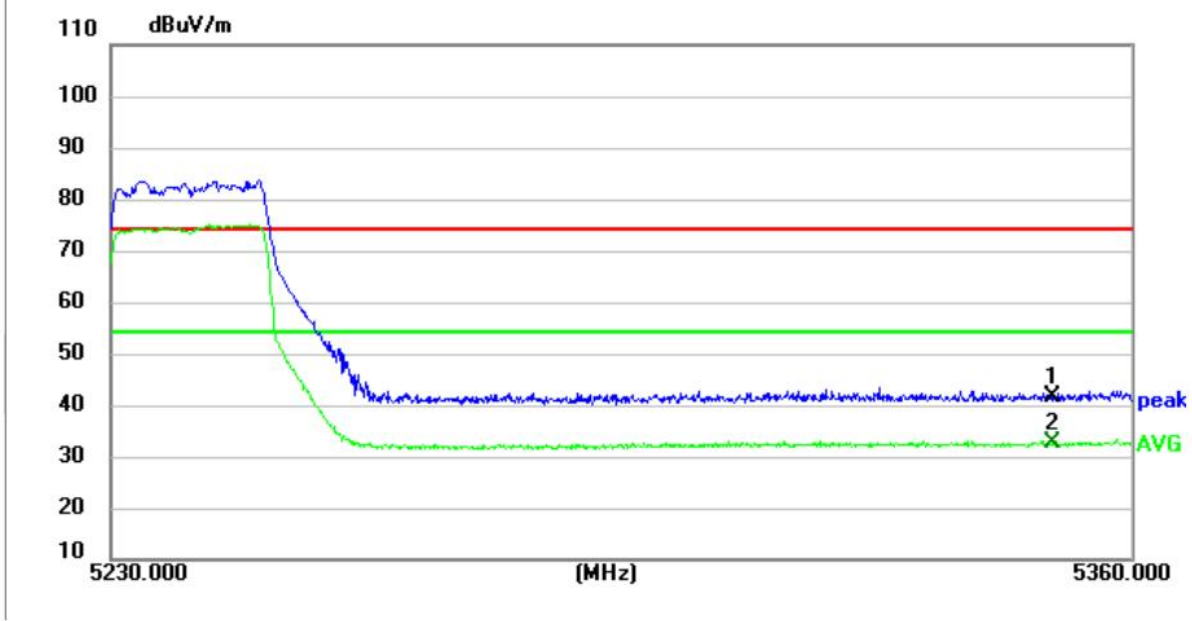
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.0000	48.34	-8.16	40.18	74.00	33.82	peak
2 *	5150.0000	39.41	-8.16	31.25	54.00	22.75	AVG

Mode4 / Polarization: Horizontal / CH: H



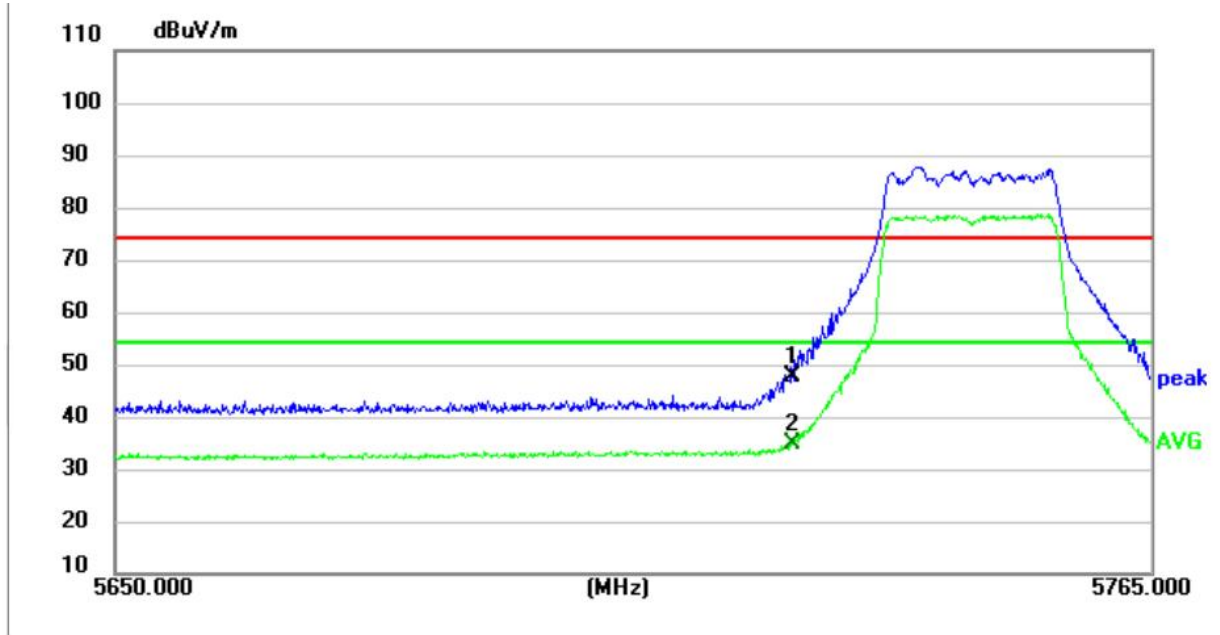
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.0000	48.49	-7.60	40.89	74.00	33.11	peak
2 *	5350.0000	39.62	-7.60	32.02	54.00	21.98	AVG

Mode4 / Polarization: Vertical / CH: H



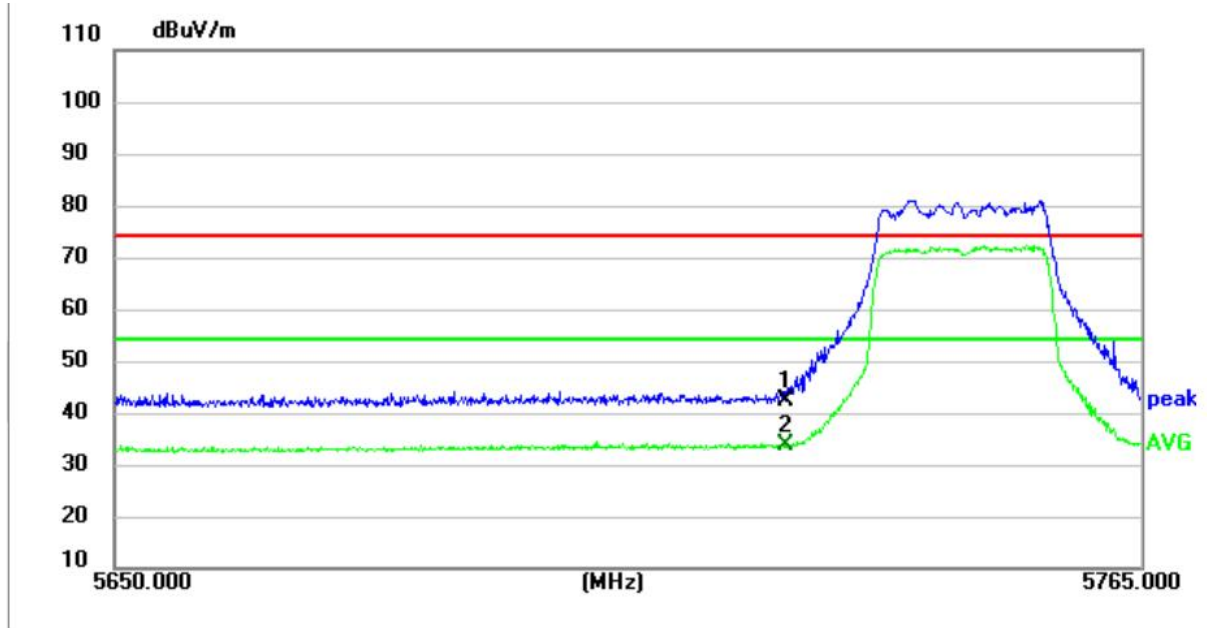
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.0000	49.11	-7.60	41.51	74.00	32.49	peak
2 *	5350.0000	40.21	-7.60	32.61	54.00	21.39	AVG

Mode4 / Polarization: Horizontal / CH: L



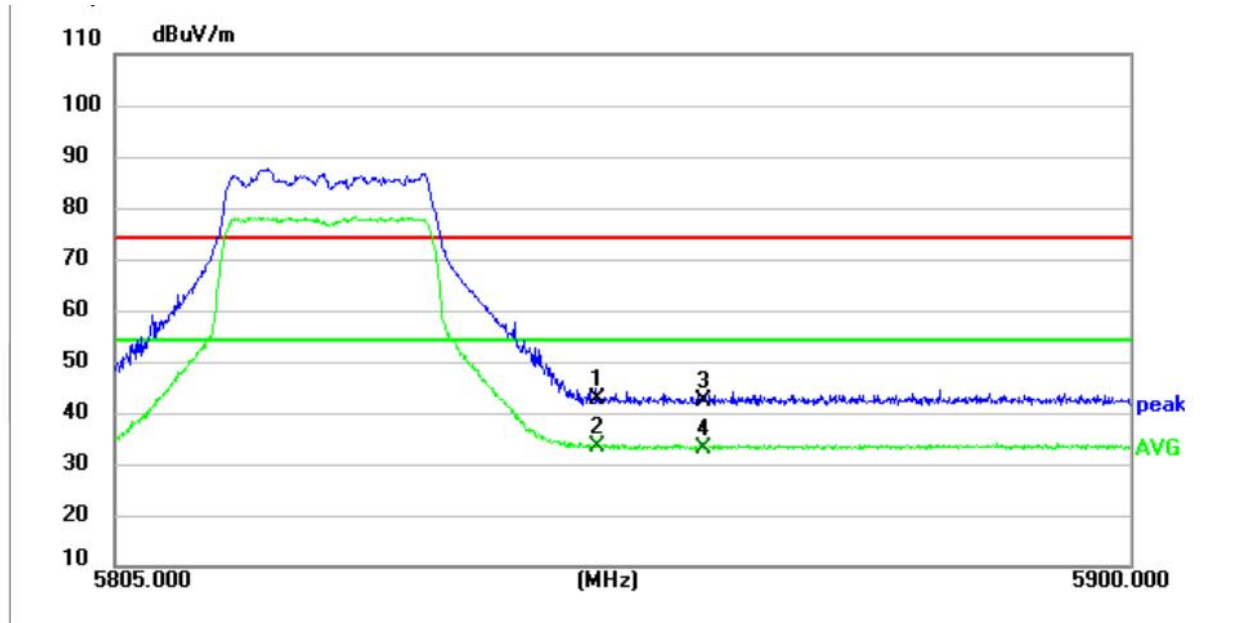
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.0000	53.92	-6.23	47.69	74.00	26.31	peak
2 *	5725.0000	41.04	-6.23	34.81	54.00	19.19	AVG

Mode4 / Polarization: Vertical / CH: L



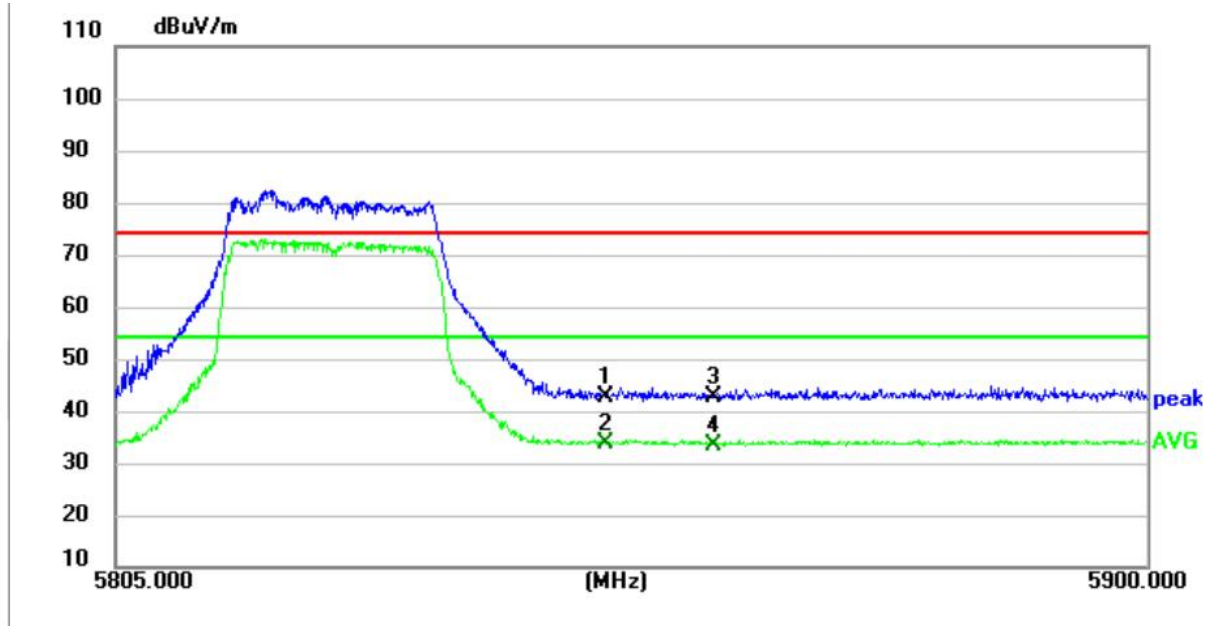
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.0000	48.65	-6.23	42.42	74.00	31.58	peak
2 *	5725.0000	39.90	-6.23	33.67	54.00	20.33	AVG

Mode4 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5850.0000	48.73	-6.20	42.53	74.00	31.47	peak
2 *	5850.0000	39.63	-6.20	33.43	54.00	20.57	AVG
3	5860.0000	48.66	-6.16	42.50	74.00	31.50	peak
4	5860.0000	39.28	-6.16	33.12	54.00	20.88	AVG

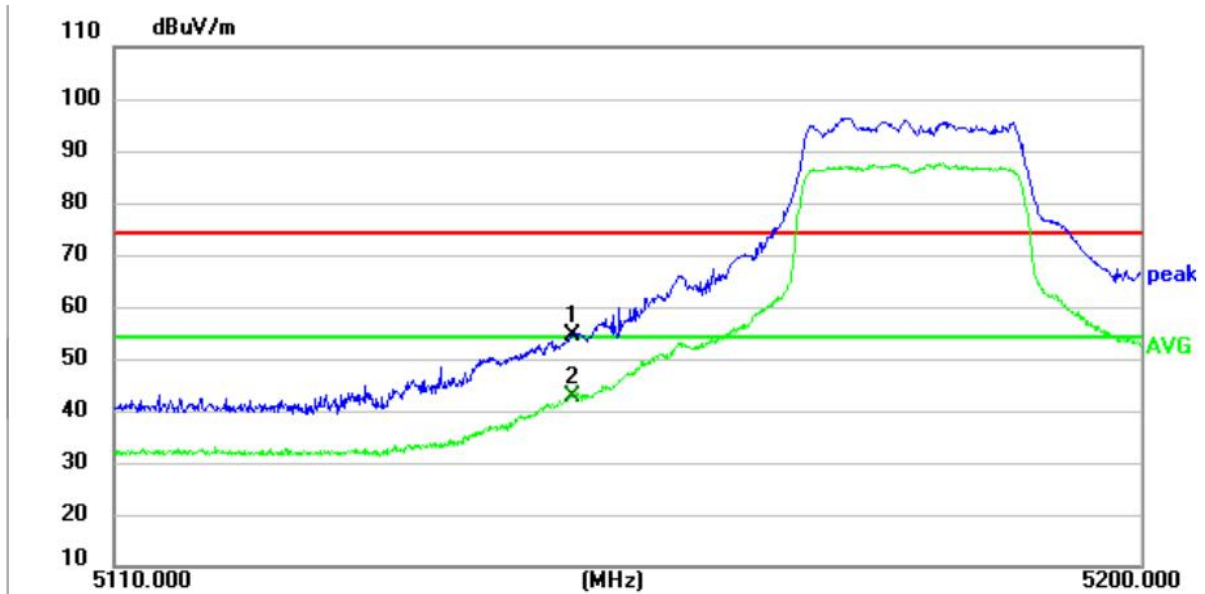
Mode4 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5850.0000	48.89	-6.20	42.69	74.00	31.31	peak
2 *	5850.0000	40.02	-6.20	33.82	54.00	20.18	AVG
3	5860.0000	48.88	-6.16	42.72	74.00	31.28	peak
4	5860.0000	39.73	-6.16	33.57	54.00	20.43	AVG

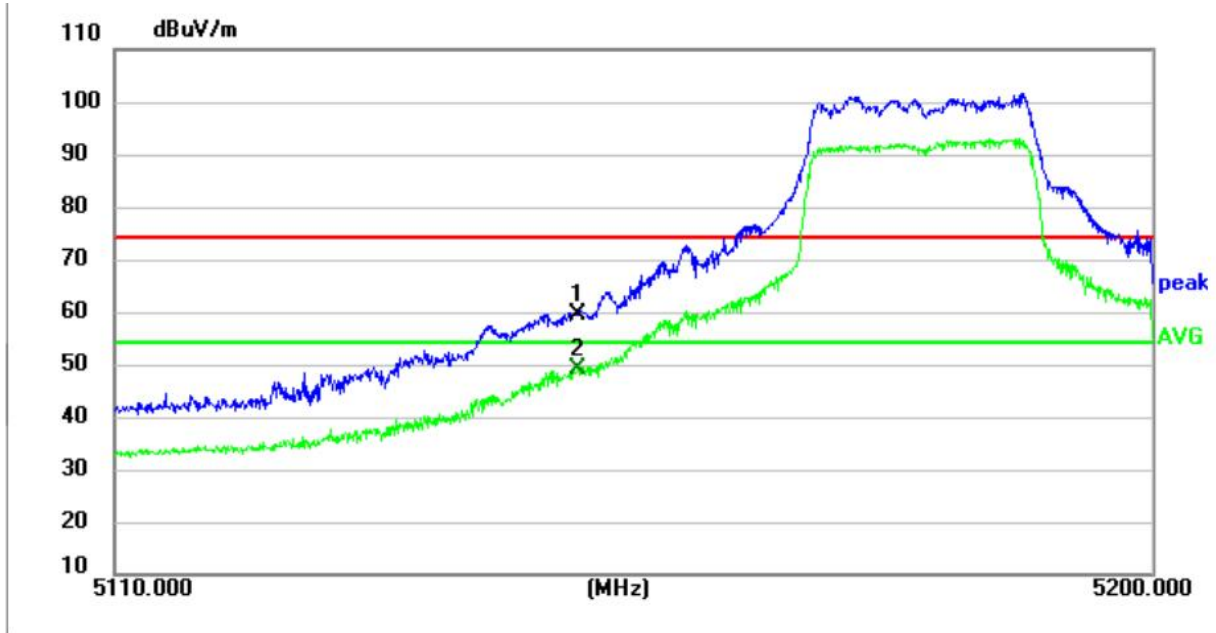
Ant7:

Mode4 / Polarization: Horizontal / CH: L



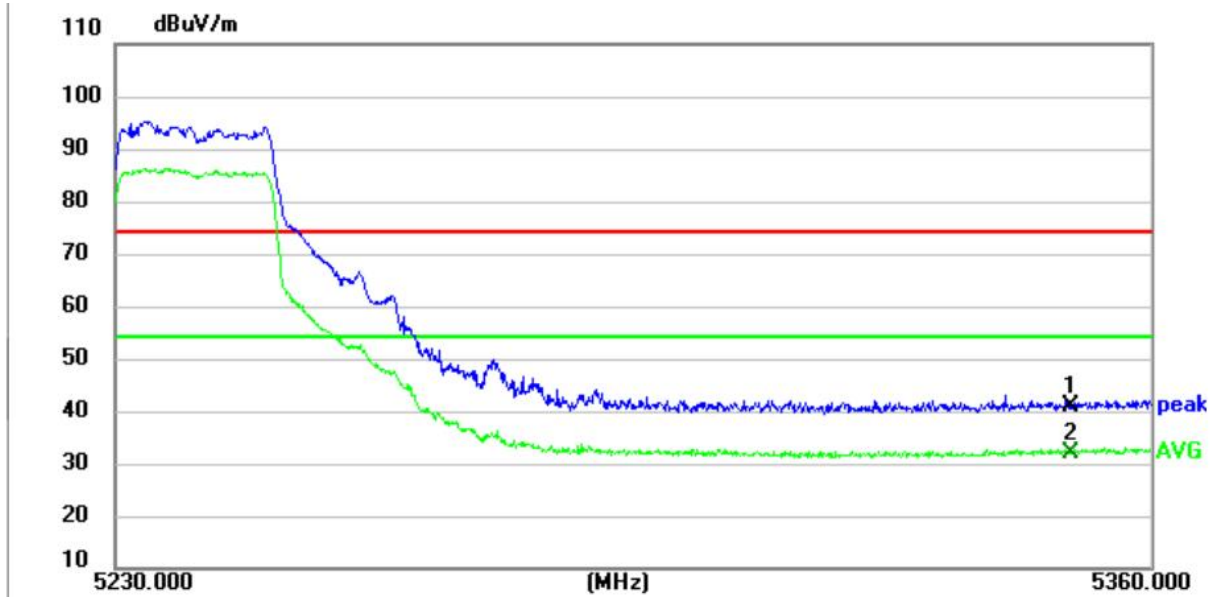
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.0000	62.65	-8.16	54.49	74.00	19.51	peak
2 *	5150.0000	50.87	-8.16	42.71	54.00	11.29	AVG

Mode4 / Polarization: Vertical / CH: L



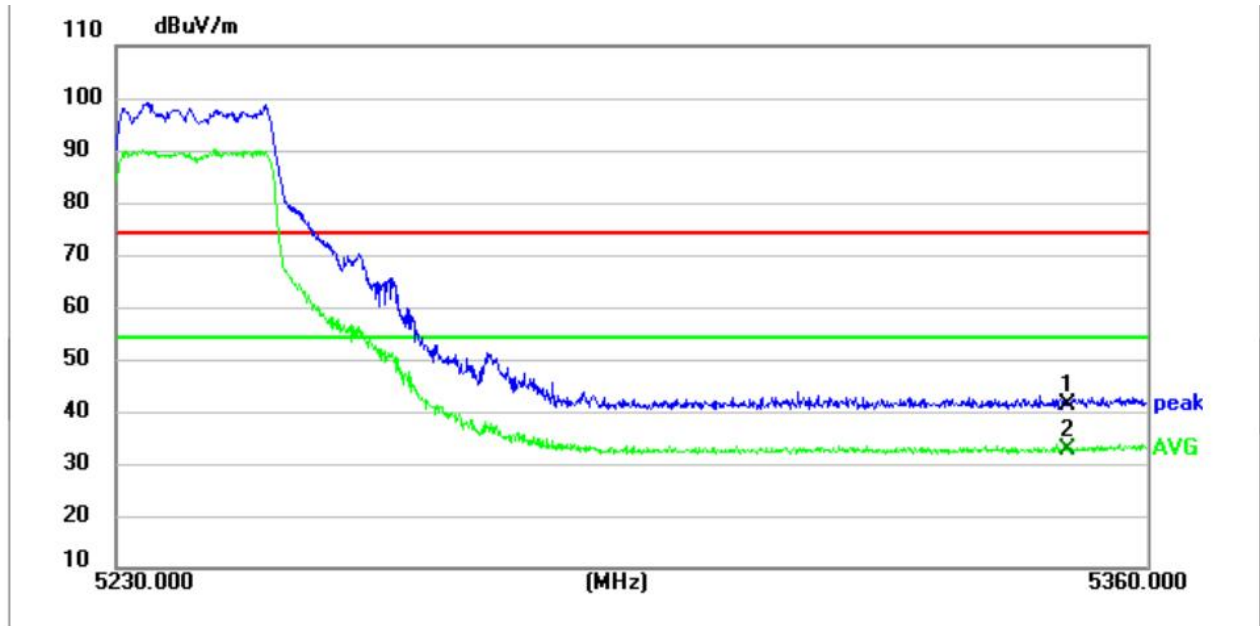
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.0000	67.73	-8.16	59.57	74.00	14.43	peak
2 *	5150.0000	57.30	-8.16	49.14	54.00	4.86	AVG

Mode4 / Polarization: Horizontal / CH: H



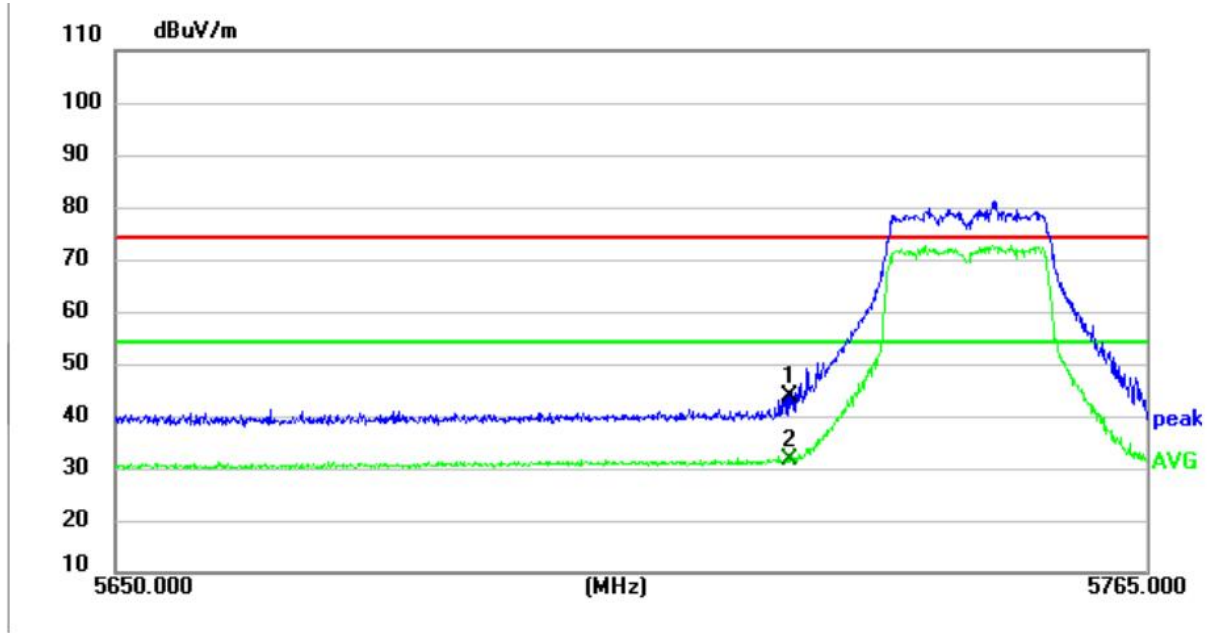
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.0000	48.65	-7.60	41.05	74.00	32.95	peak
2 *	5350.0000	39.46	-7.60	31.86	54.00	22.14	AVG

Mode4 / Polarization: Vertical / CH: H



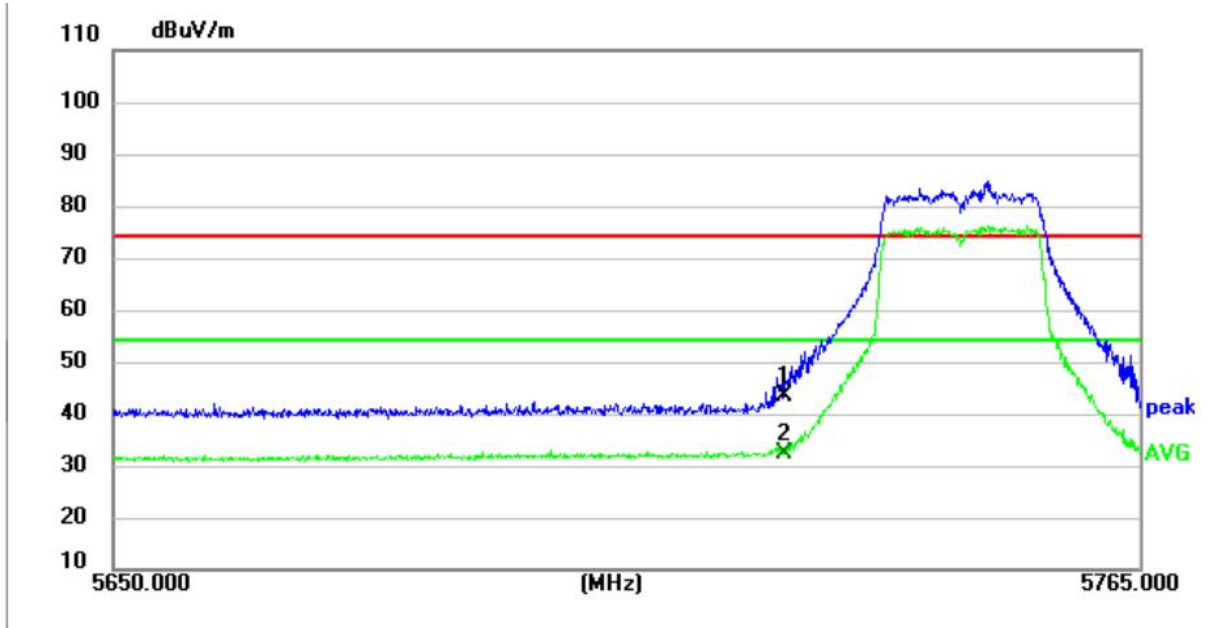
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.0000	49.00	-7.60	41.40	74.00	32.60	peak
2 *	5350.0000	40.31	-7.60	32.71	54.00	21.29	AVG

Mode4 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.0000	50.11	-6.23	43.88	74.00	30.12	peak
2 *	5725.0000	37.78	-6.23	31.55	54.00	22.45	AVG

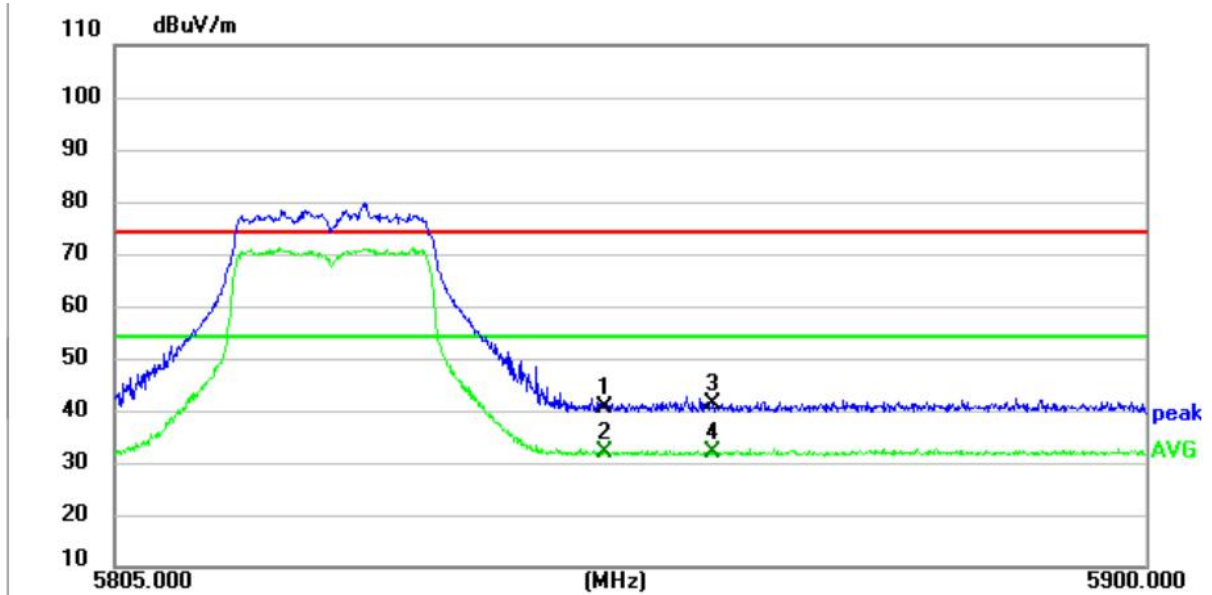
Mode4 / Polarization: Vertical / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.0000	49.70	-6.23	43.47	74.00	30.53	peak
2 *	5725.0000	38.59	-6.23	32.36	54.00	21.64	AVG

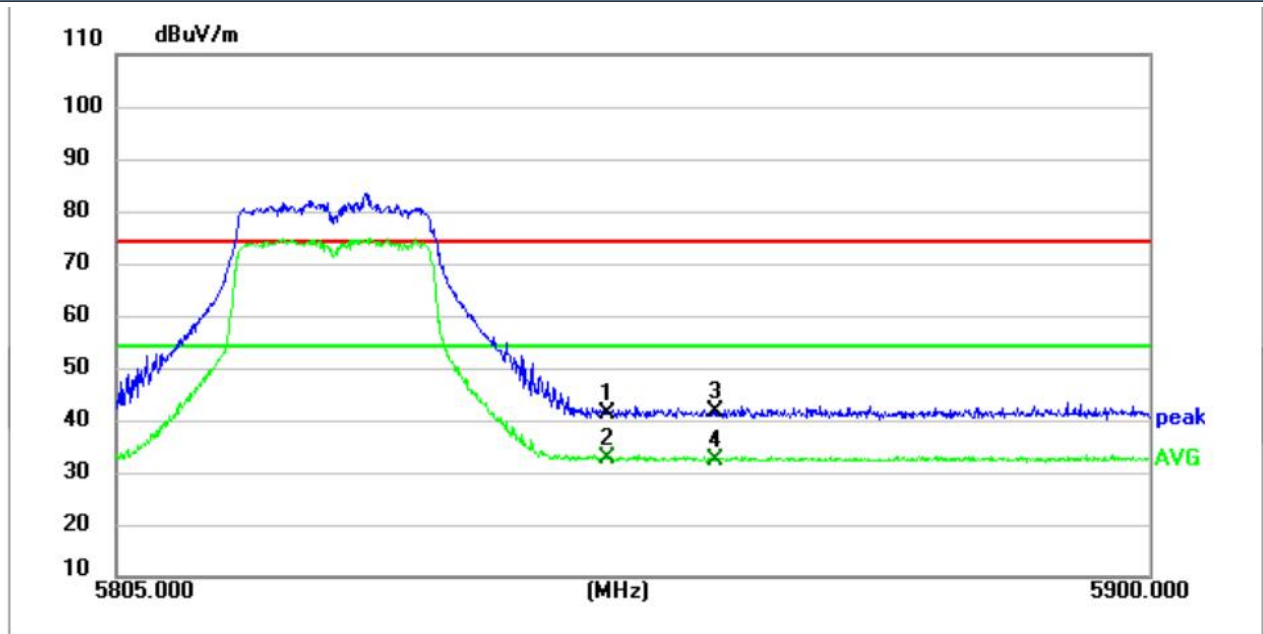
v

Mode4 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5850.0000	46.58	-6.20	40.38	74.00	33.62	peak
2	5850.0000	37.99	-6.20	31.79	54.00	22.21	AVG
3	5860.0000	47.37	-6.16	41.21	74.00	32.79	peak
4 *	5860.0000	38.14	-6.16	31.98	54.00	22.02	AVG

Mode4 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5850.0000	47.42	-6.20	41.22	74.00	32.78	peak
2 *	5850.0000	39.01	-6.20	32.81	54.00	21.19	AVG
3	5860.0000	47.87	-6.16	41.71	74.00	32.29	peak
4	5860.0000	38.50	-6.16	32.34	54.00	21.66	AVG

6.2.6. Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9)																								
Test Limit:	Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.																								
	Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:																								
	<table><tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr><tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr><tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr><tr><td>1.705-30.0</td><td>30</td><td>30</td></tr><tr><td>30-88</td><td>100 **</td><td>3</td></tr><tr><td>88-216</td><td>150 **</td><td>3</td></tr><tr><td>216-960</td><td>200 **</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>3</td></tr></table>	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
	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																							
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.																									
In the emission table above, the tighter limit applies at the band edges.																									
The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.																									
Test Method:	ANSI C63.10-2020, section 12.7.4, 12.7.5																								
Procedure:	Below 1GHz:																								
	a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.																								
	b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.																								
	c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.																								
	e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.																								
	f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.																								
	g. Test the EUT in the lowest channel, the middle channel, the Highest channel.																								
	h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.																								
	i. Repeat above procedures until all frequencies measured was complete.																								
Remark:																									
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor																									
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when																									

testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

Above 1GHz:

- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

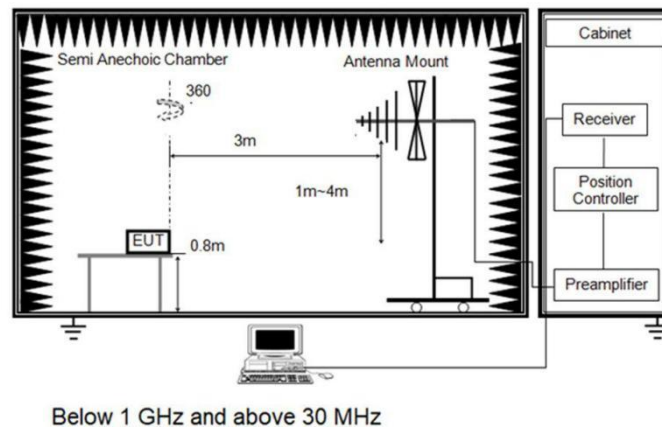
Remark:

- Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

6.2.6.1. E.U.T. Operation

Operating Environment:					
Temperature:	23.1 °C	Humidity:	56.3 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (TM4) is recorded in the report				

6.2.6.2. Test Setup Diagram



6.2.6.3. Test Result

Pass

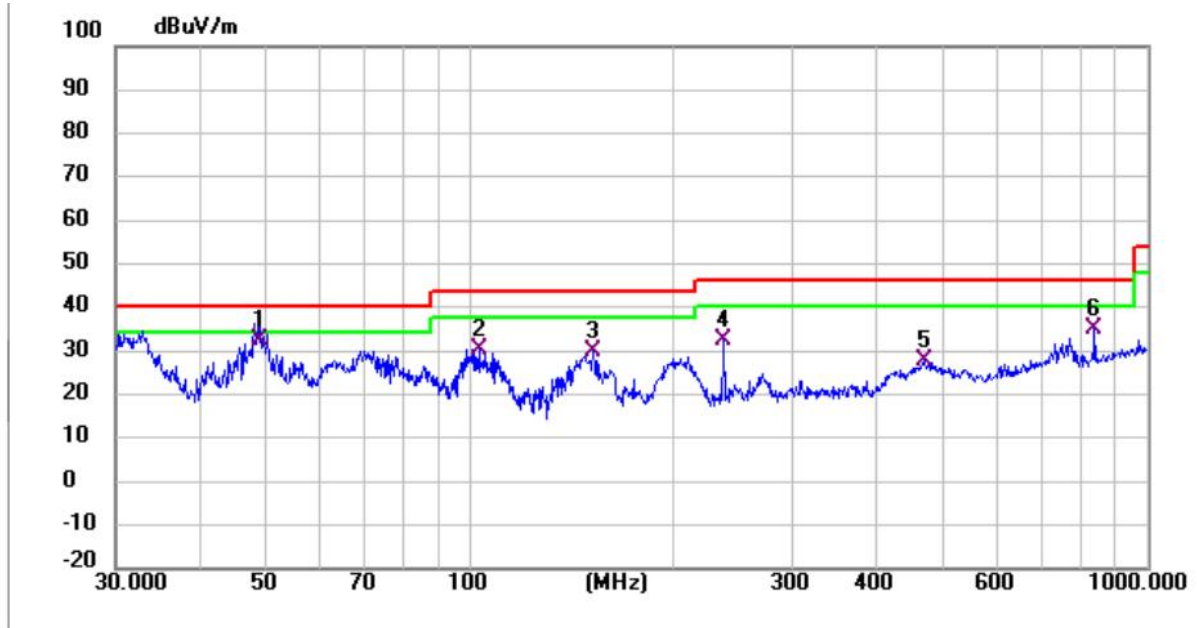
6.2.6.4. Test Data

Mode4 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	47.9940	49.96	-29.21	20.75	40.00	19.25	QP
2	69.3568	50.80	-32.89	17.91	40.00	22.09	QP
3	99.1796	56.90	-31.07	25.83	43.50	17.67	QP
4	150.0107	62.46	-33.36	29.10	43.50	14.40	QP
5	283.9791	60.61	-27.71	32.90	46.00	13.10	QP
6 *	760.7034	52.55	-17.28	35.27	46.00	10.73	QP

Mode4 / Polarization: Vertical / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	48.8427	61.73	-29.18	32.55	40.00	7.45	QP
2	103.0800	61.31	-30.82	30.49	43.50	13.01	QP
3	152.1297	63.22	-33.30	29.92	43.50	13.58	QP
4	237.4760	61.15	-28.85	32.30	46.00	13.70	QP
5	470.5231	50.25	-22.64	27.61	46.00	18.39	QP
6	836.2441	51.26	-16.15	35.11	46.00	10.89	QP

6.2.7. Undesirable emission limits (above 1GHz)

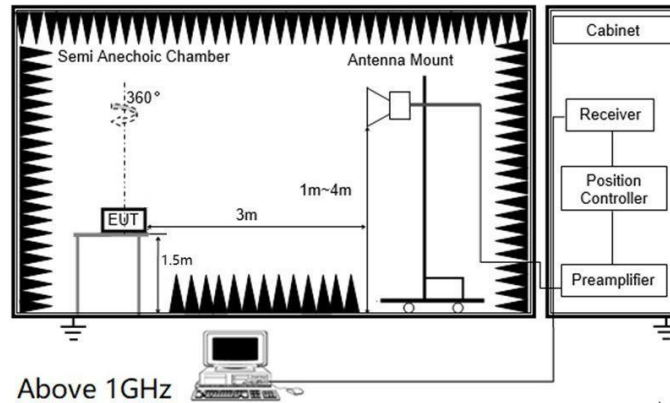
Test Requirement:	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)			
Test Limit:	For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.			
	For transmitters operating solely in the 5.725-5.850 GHz band: 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.			
	MHz	MHz	MHz	GHz
	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
	¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
	2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
	4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
	6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
	6.31175-6.31225	123-138	2200-2300	14.47-14.5
	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
	8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
	12.57675-12.57725	322-335.4	3600-4400	(²)
	13.36-13.41			
	¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.			
	² Above 38.6			
	The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35 apply to these measurements.			
	Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:			
	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
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7		
Procedure:	Above 1GHz: a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel, the middle channel, the Highest channel. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete. Remark: 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor 2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report. 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.		

6.2.7.1. E.U.T. Operation

Operating Environment:					
Temperature:	23.4 °C	Humidity:	55.1 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (TM4) is recorded in the report				

6.2.7.2. Test Setup Diagram



6.2.7.3. Test Result

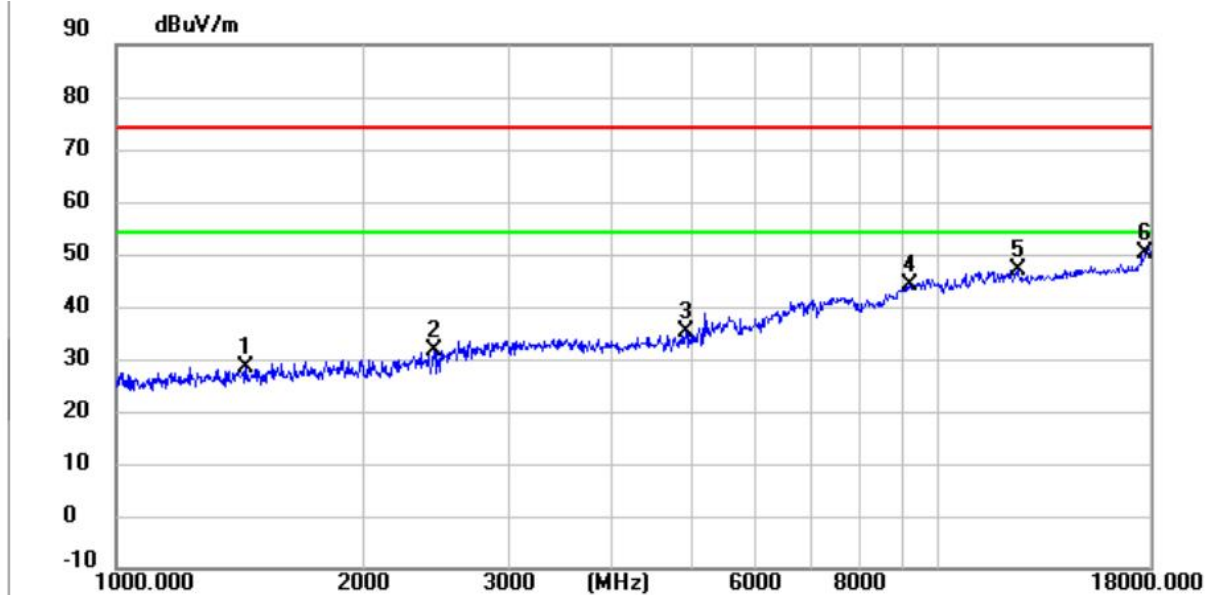
Pass

6.2.7.4. Test Data

WIFI 5.1G

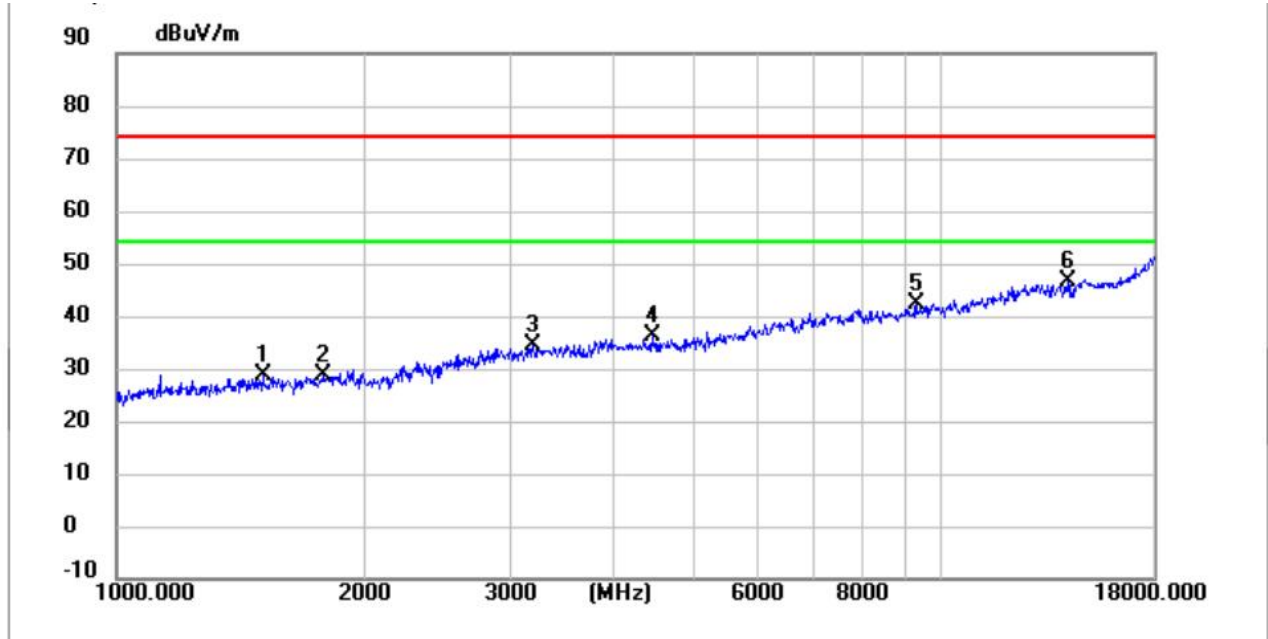
Ant6:

Mode4 / Polarization: Horizontal / CH: L



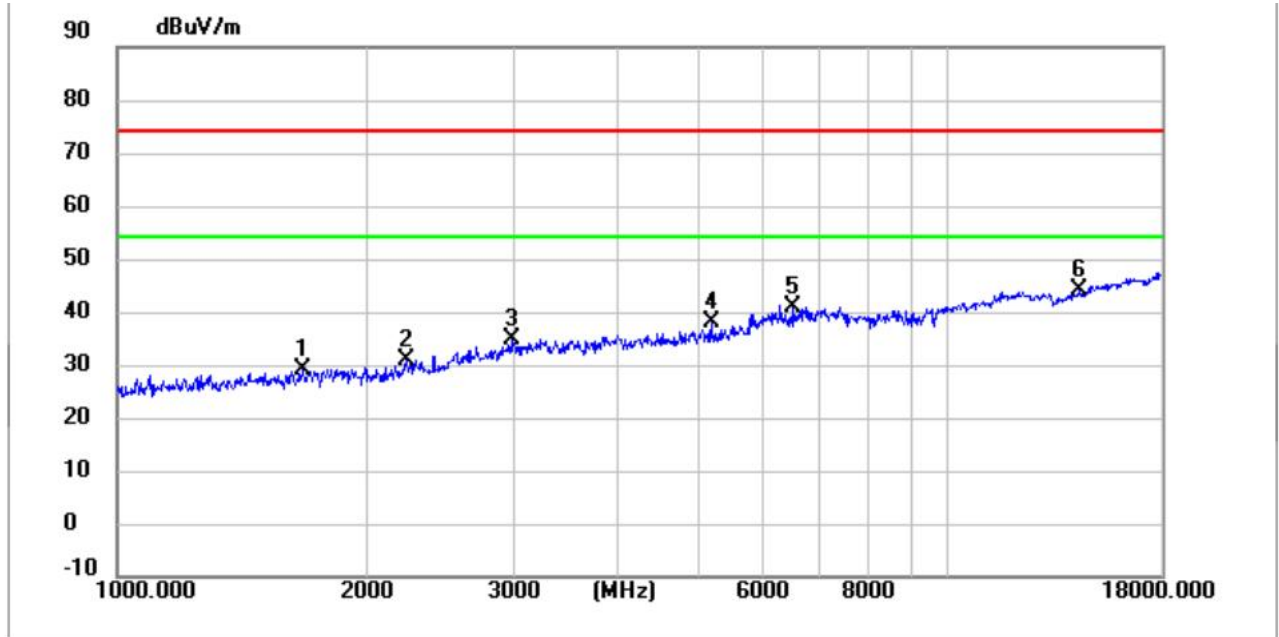
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1440.3000	49.24	-20.88	28.36	74.00	45.64	peak
2	2433.1000	48.80	-17.23	31.57	74.00	42.43	peak
3	4918.5000	44.39	-9.26	35.13	74.00	38.87	peak
4	9216.1000	35.14	9.09	44.23	74.00	29.77	peak
5	12449.5000	32.05	14.94	46.99	74.00	27.01	peak
6 *	17813.0000	27.41	22.66	50.07	74.00	23.93	peak

Mode4 / Polarization: Vertical / CH: L



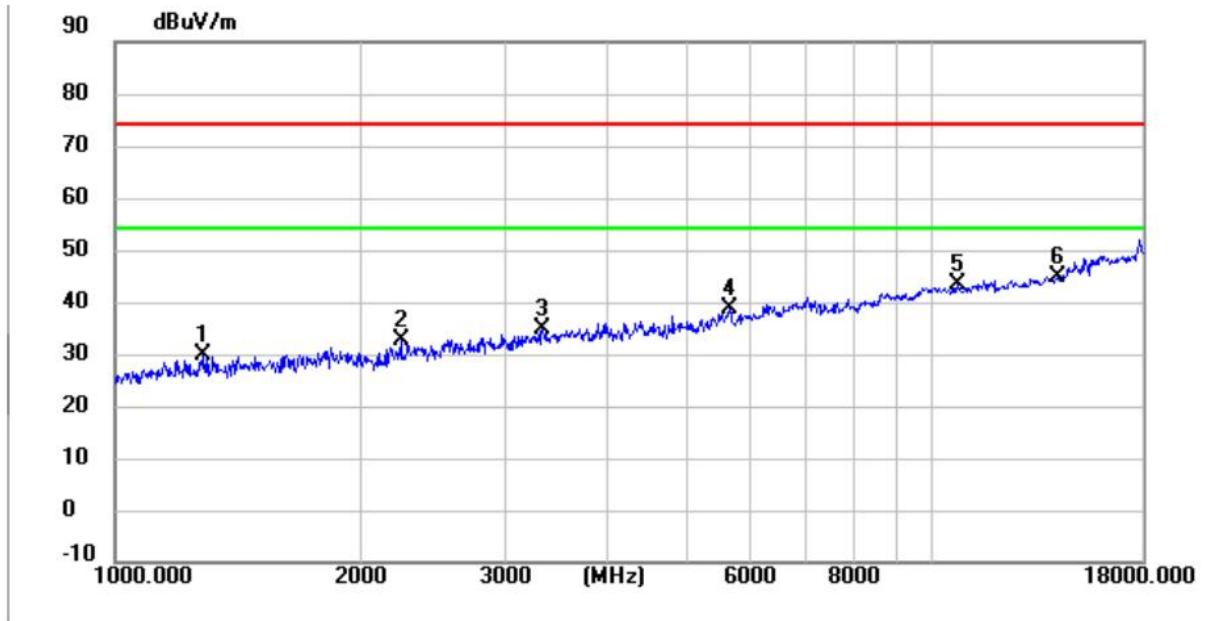
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1504.9000	49.60	-20.72	28.88	74.00	45.12	peak
2	1787.1000	48.33	-19.58	28.75	74.00	45.25	peak
3	3201.5000	48.63	-14.04	34.59	74.00	39.41	peak
4	4461.2000	47.10	-11.01	36.09	74.00	37.91	peak
5	9309.6000	32.91	9.40	42.31	74.00	31.69	peak
6 *	14180.1000	28.16	18.61	46.77	74.00	27.23	peak

Mode4 / Polarization: Horizontal / CH: M



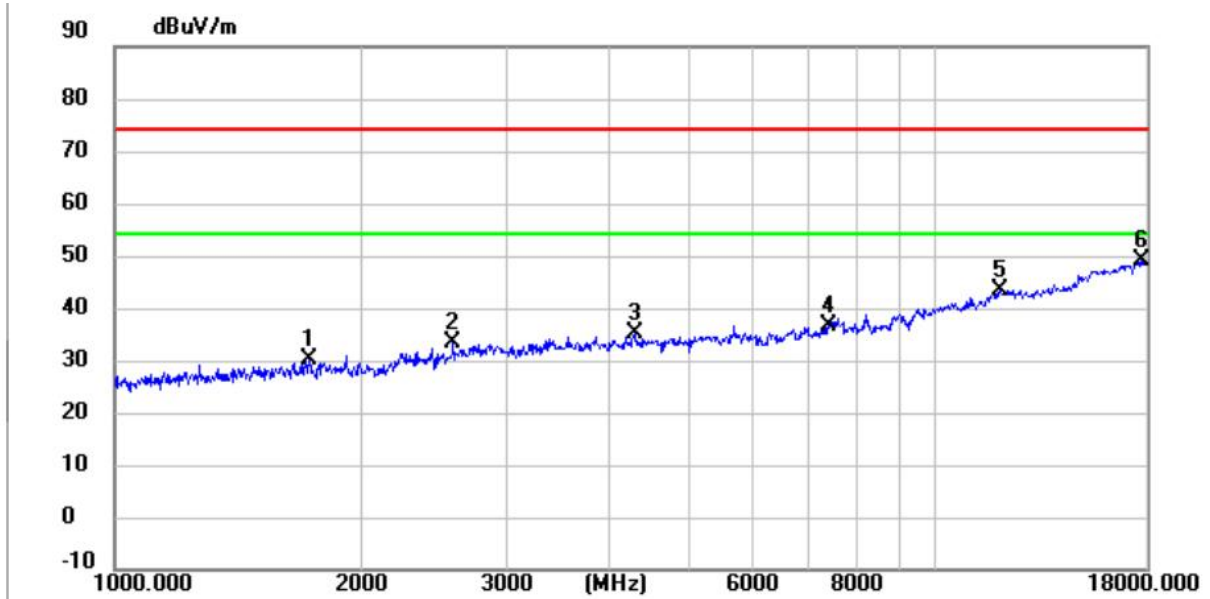
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1669.8000	49.46	-20.26	29.20	74.00	44.80	peak
2	2232.5000	48.51	-17.72	30.79	74.00	43.21	peak
3	2987.3000	49.51	-14.67	34.84	74.00	39.16	peak
4	5182.0000	46.08	-8.05	38.03	74.00	35.97	peak
5	6516.5000	41.71	-0.71	41.00	74.00	33.00	peak
6 *	14368.8000	25.41	18.53	43.94	74.00	30.06	peak

Mode4 / Polarization: Vertical / CH: M



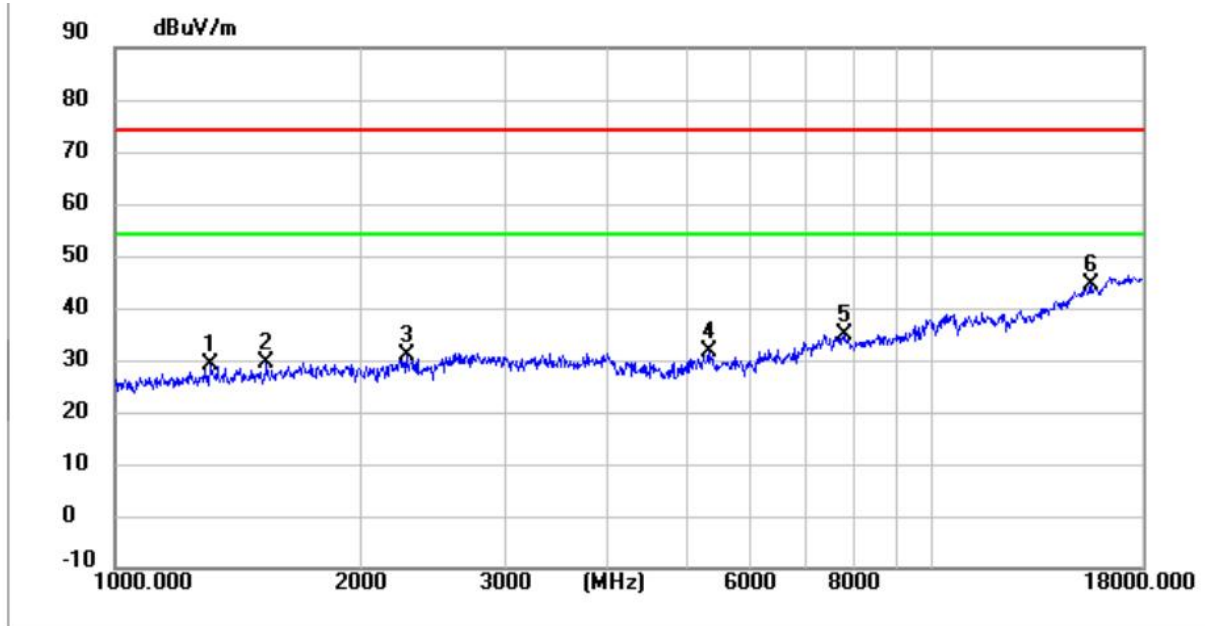
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1282.2000	51.02	-21.32	29.70	74.00	44.30	peak
2	2237.6000	50.45	-17.72	32.73	74.00	41.27	peak
3	3337.5000	48.72	-13.87	34.85	74.00	39.15	peak
4	5663.1000	45.06	-6.41	38.65	74.00	35.35	peak
5	10752.9000	30.73	12.54	43.27	74.00	30.73	peak
6 *	14241.3000	26.24	18.57	44.81	74.00	29.19	peak

Mode4 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1731.0000	49.93	-19.91	30.02	74.00	43.98	peak
2	2584.4000	49.80	-16.31	33.49	74.00	40.51	peak
3	4299.7000	46.77	-11.69	35.08	74.00	38.92	peak
4	7400.5000	31.68	4.91	36.59	74.00	37.41	peak
5	11944.6000	29.06	14.23	43.29	74.00	30.71	peak
6 *	17843.6000	26.03	22.91	48.94	74.00	25.06	peak

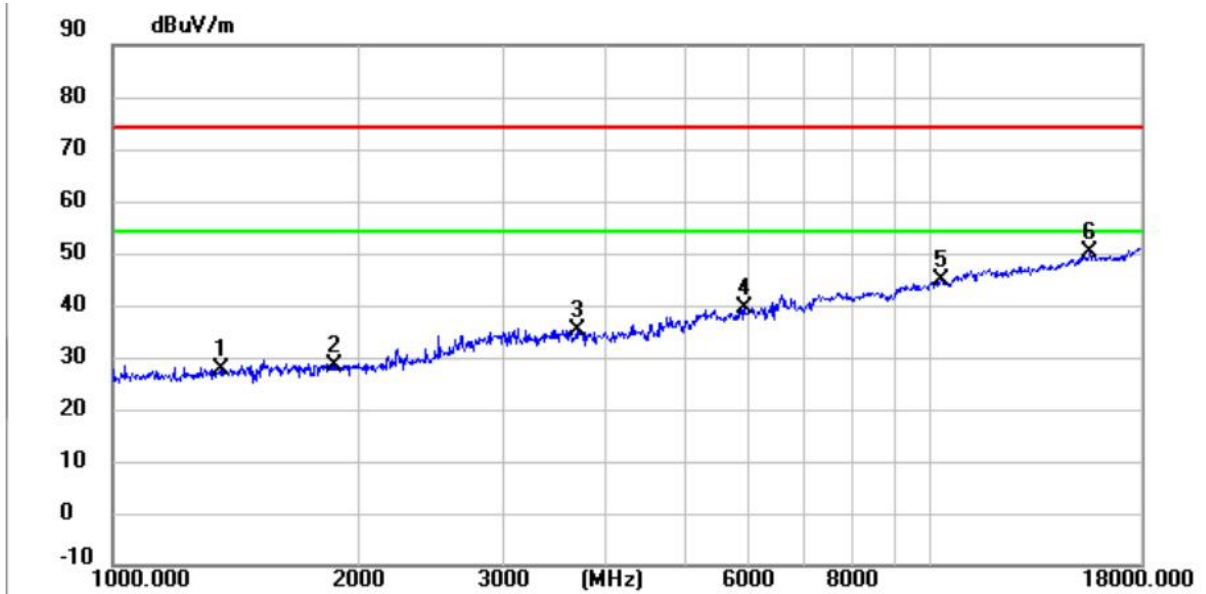
Mode4 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1309.4000	50.48	-21.27	29.21	74.00	44.79	peak
2	1537.2000	50.06	-20.67	29.39	74.00	44.61	peak
3	2278.4000	48.45	-17.59	30.86	74.00	43.14	peak
4	5345.2000	39.22	-7.61	31.61	74.00	42.39	peak
5	7827.2000	29.08	5.83	34.91	74.00	39.09	peak
6 *	15604.7000	27.37	16.96	44.33	74.00	29.67	peak

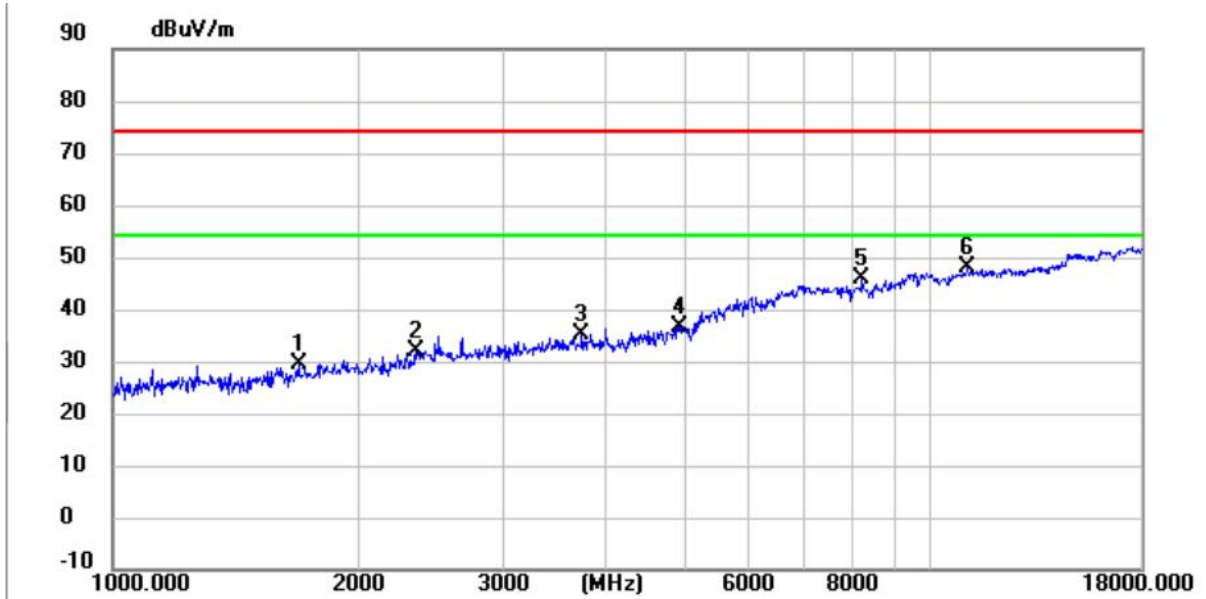
Ant7:

Mode4 / Polarization: Horizontal / CH: L



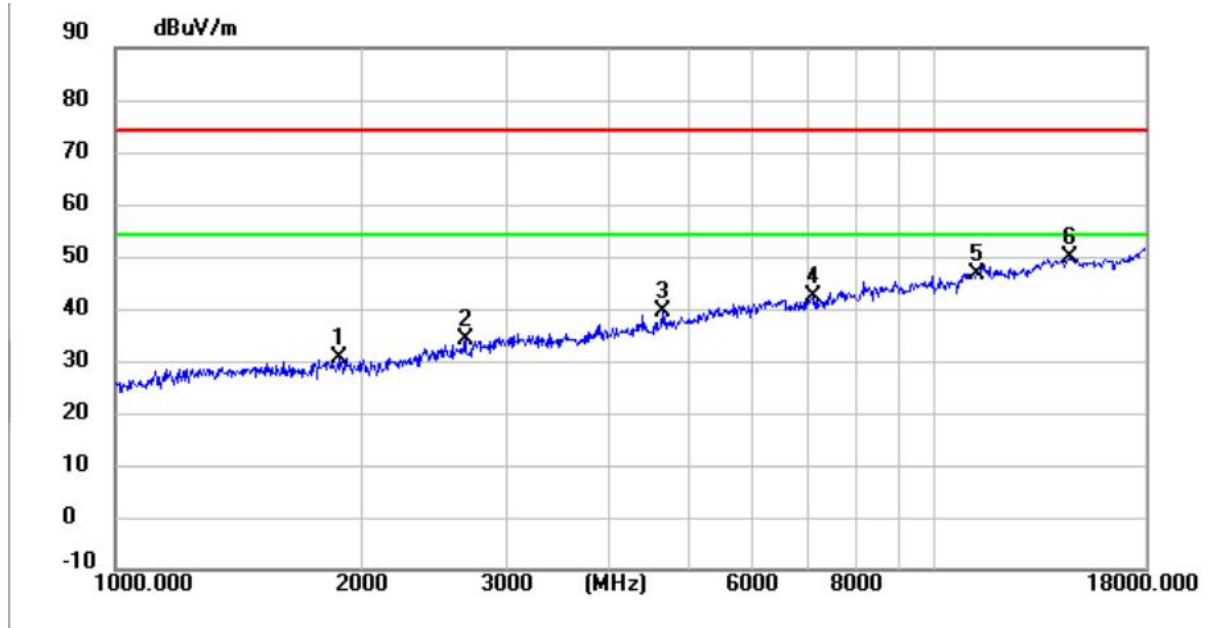
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1360.4000	48.82	-21.18	27.64	74.00	46.36	peak
2	1867.0000	47.87	-19.37	28.50	74.00	45.50	peak
3	3703.0000	48.22	-13.08	35.14	74.00	38.86	peak
4	5913.0000	45.32	-6.01	39.31	74.00	34.69	peak
5	10287.1000	33.18	11.59	44.77	74.00	29.23	peak
6 *	15640.4000	33.15	16.90	50.05	74.00	23.95	peak

Mode4 / Polarization: Vertical / CH: L



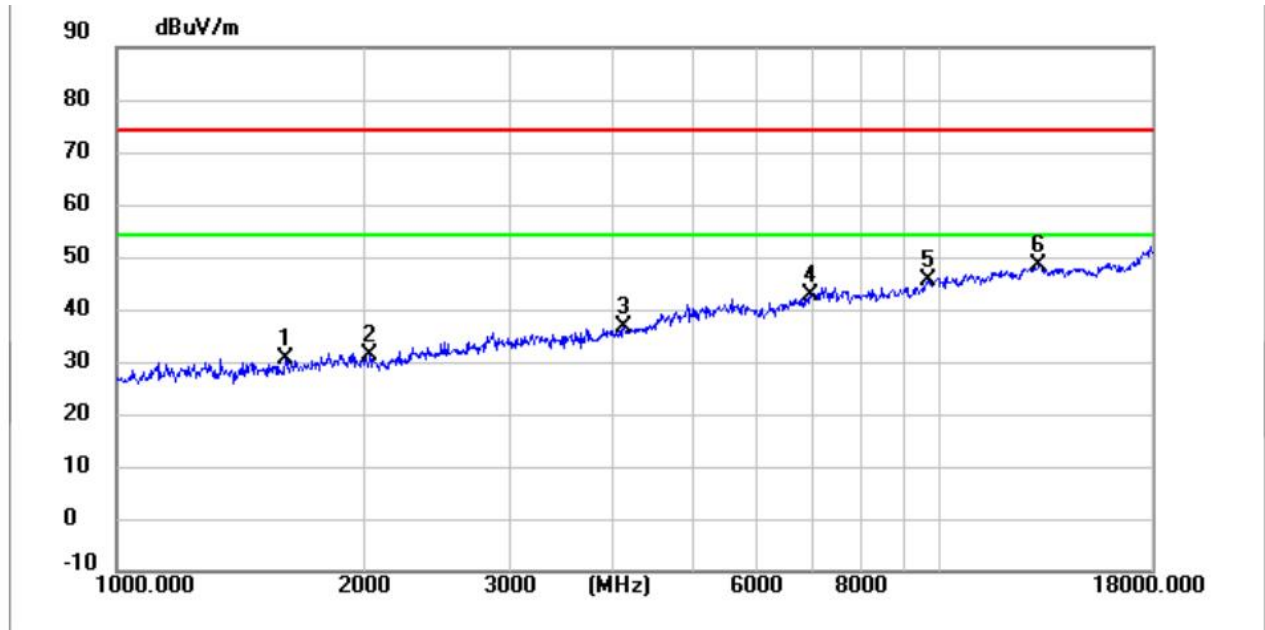
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1690.2000	49.50	-20.14	29.36	74.00	44.64	peak
2	2353.2000	49.33	-17.44	31.89	74.00	42.11	peak
3	3737.0000	48.07	-13.02	35.05	74.00	38.95	peak
4	4928.7000	45.97	-9.21	36.76	74.00	37.24	peak
5	8225.0000	39.21	6.81	46.02	74.00	27.98	peak
6 *	11081.0000	34.56	13.45	48.01	74.00	25.99	peak

Mode4 / Polarization: Horizontal / CH: M



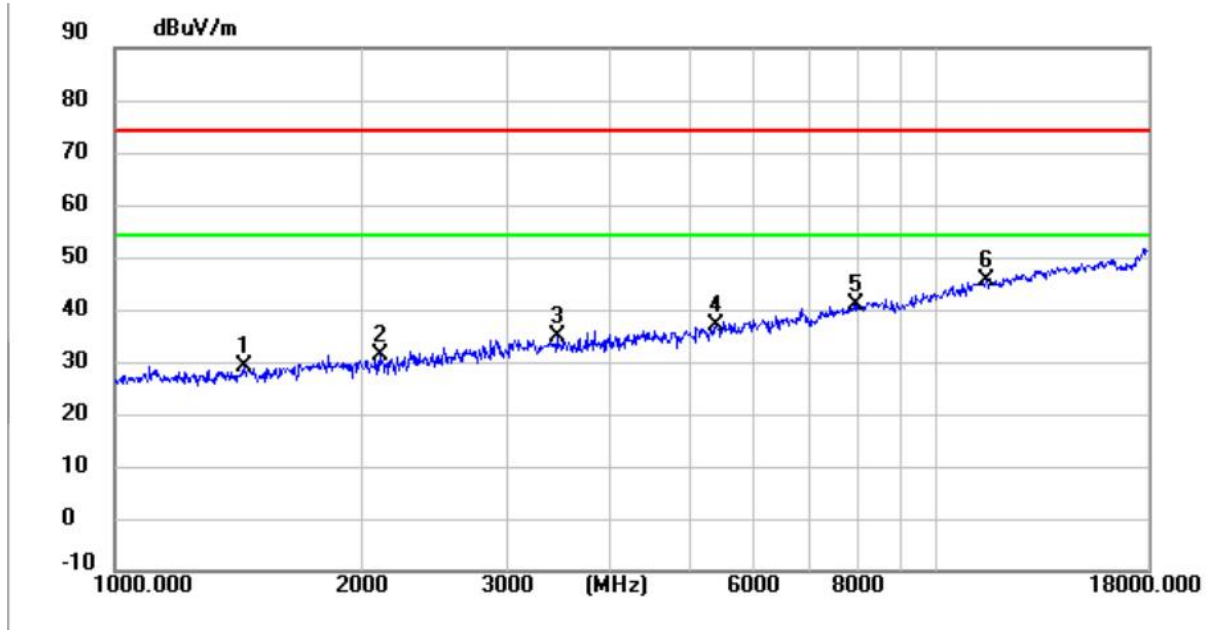
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1878.9000	49.90	-19.32	30.58	74.00	43.42	peak
2	2672.8000	50.05	-15.85	34.20	74.00	39.80	peak
3	4653.3000	49.88	-10.50	39.38	74.00	34.62	peak
4	7087.7000	38.50	3.99	42.49	74.00	31.51	peak
5	11228.9000	33.06	13.69	46.75	74.00	27.25	peak
6 *	14593.2000	31.62	18.30	49.92	74.00	24.08	peak

Mode4 / Polarization: Vertical / CH: M



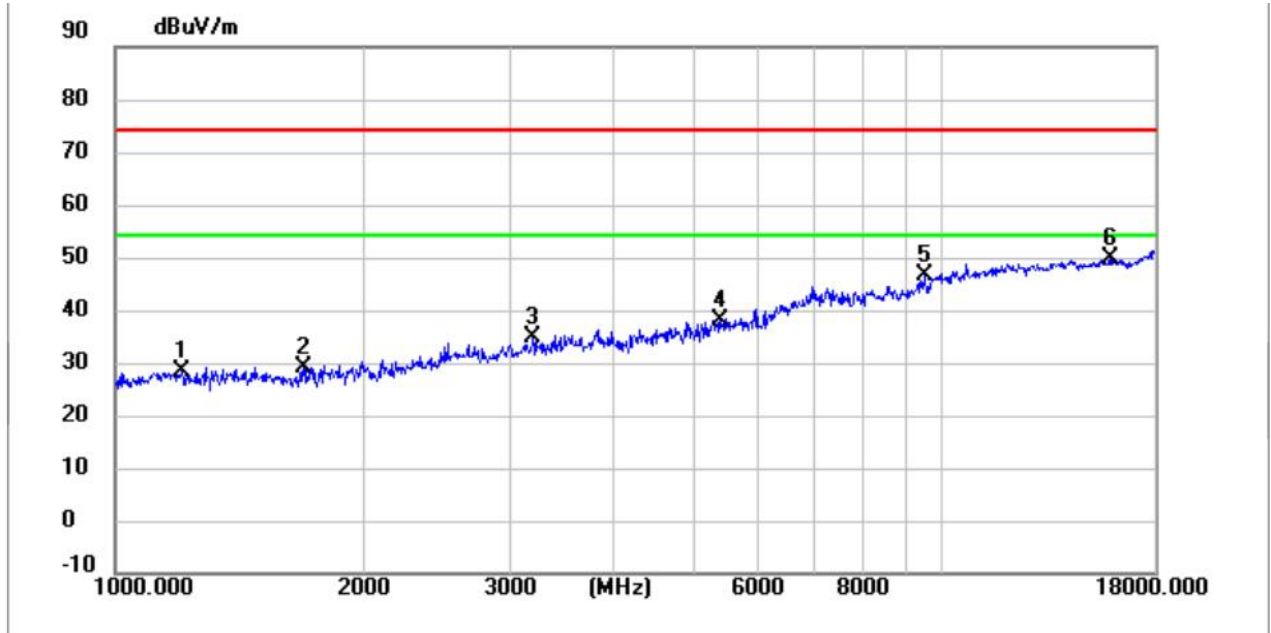
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1605.2000	51.16	-20.45	30.71	74.00	43.29	peak
2	2033.6000	49.73	-18.34	31.39	74.00	42.61	peak
3	4122.9000	48.60	-11.98	36.62	74.00	37.38	peak
4	6960.2000	39.43	3.31	42.74	74.00	31.26	peak
5	9666.6000	35.33	10.17	45.50	74.00	28.50	peak
6 *	13141.4000	32.45	16.11	48.56	74.00	25.44	peak

Mode4 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1440.3000	50.16	-20.88	29.28	74.00	44.72	peak
2	2106.7000	49.31	-18.11	31.20	74.00	42.80	peak
3	3454.8000	48.66	-13.76	34.90	74.00	39.10	peak
4	5396.2000	43.41	-6.41	37.00	74.00	37.00	peak
5	7976.8000	34.60	6.25	40.85	74.00	33.15	peak
6 *	11465.2000	31.60	14.00	45.60	74.00	28.40	peak

Mode4 / Polarization: Vertical / CH: H

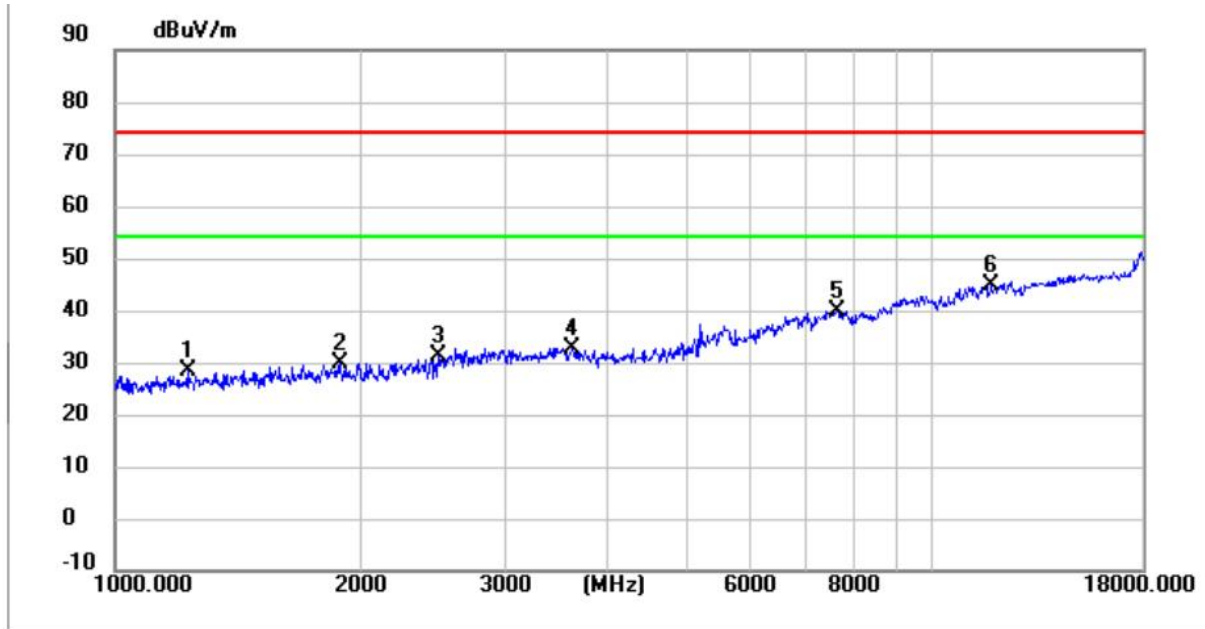


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1205.7000	49.80	-21.45	28.35	74.00	45.65	peak
2	1693.6000	49.33	-20.13	29.20	74.00	44.80	peak
3	3203.2000	48.86	-14.03	34.83	74.00	39.17	peak
4	5396.2000	44.37	-6.41	37.96	74.00	36.04	peak
5	9477.9000	36.75	9.69	46.44	74.00	27.56	peak
6 *	15898.8000	33.37	16.40	49.77	74.00	24.23	peak

WIFI 5.8G

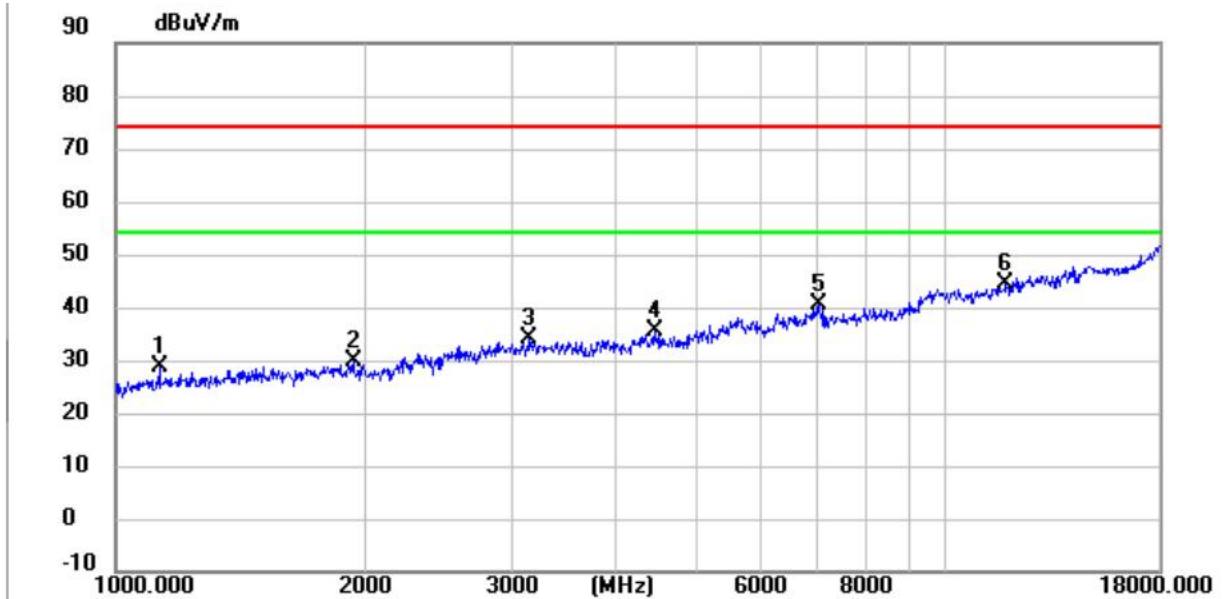
Ant6:

Mode4 / Polarization: Horizontal / CH: L



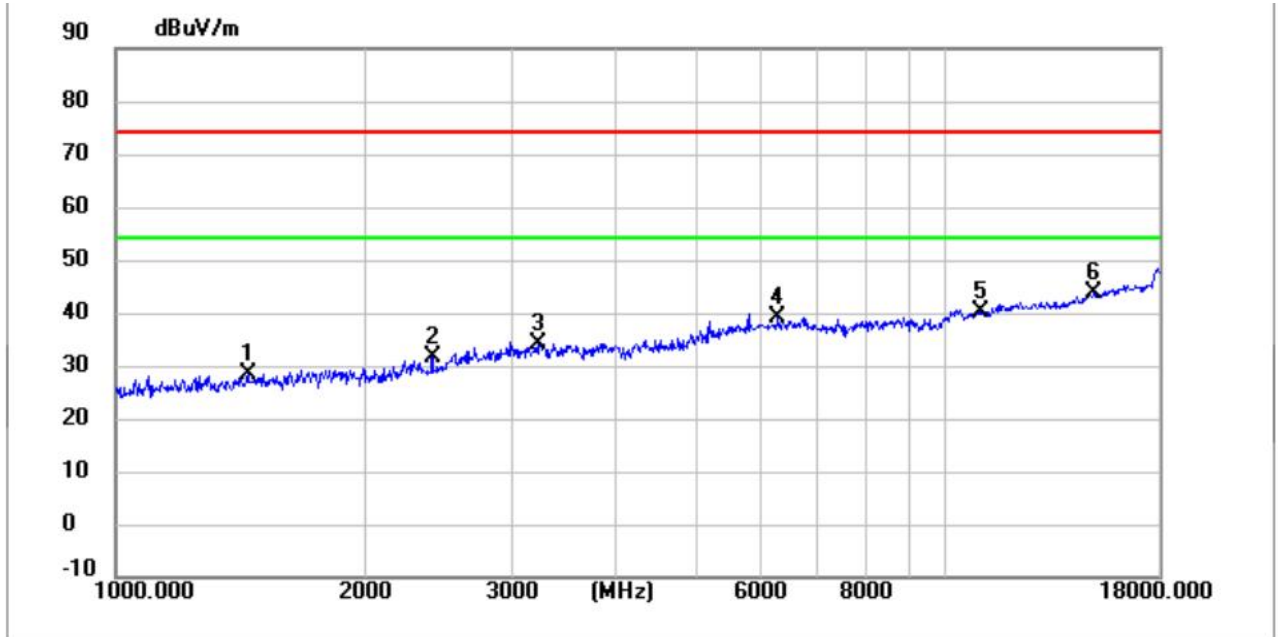
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1227.8000	49.70	-21.41	28.29	74.00	45.71	peak
2	1884.0000	49.09	-19.29	29.80	74.00	44.20	peak
3	2492.6000	48.20	-16.98	31.22	74.00	42.78	peak
4	3628.2000	45.94	-13.31	32.63	74.00	41.37	peak
5	7631.7000	34.09	5.69	39.78	74.00	34.22	peak
6 *	11788.2000	30.53	14.19	44.72	74.00	29.28	peak

Mode4 / Polarization: Vertical / CH: L



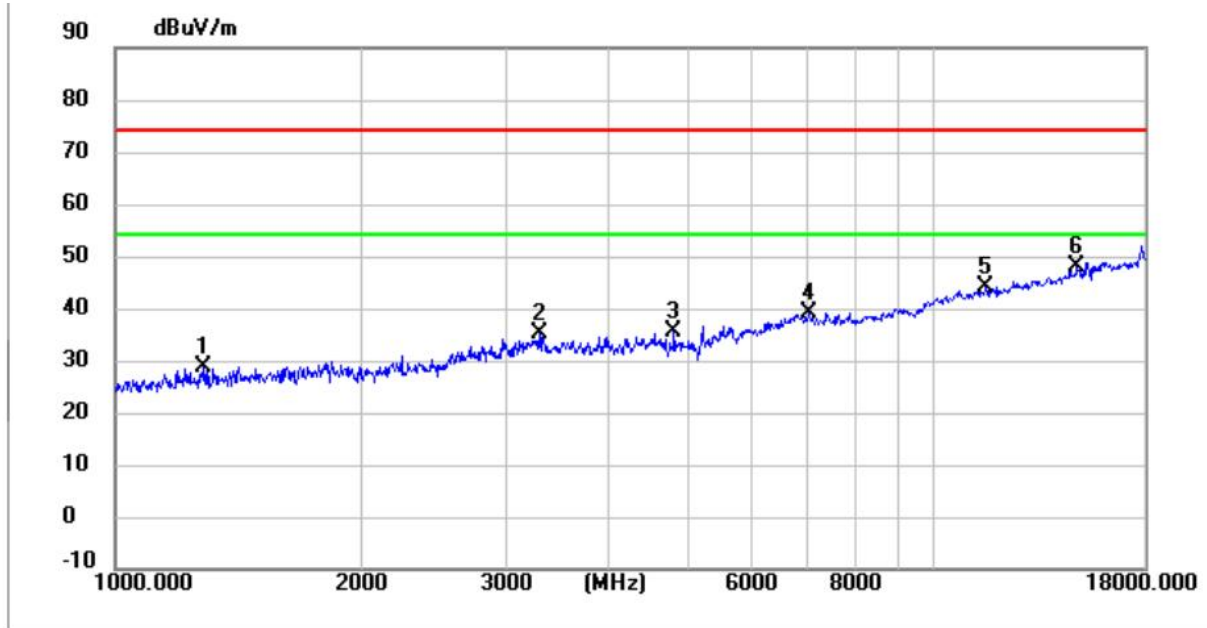
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1129.2000	50.51	-21.68	28.83	74.00	45.17	peak
2	1938.4000	48.90	-19.17	29.73	74.00	44.27	peak
3	3150.5000	48.19	-14.23	33.96	74.00	40.04	peak
4	4461.2000	46.60	-11.01	35.59	74.00	38.41	peak
5	7023.1000	36.70	3.75	40.45	74.00	33.55	peak
6 *	11793.3000	30.19	14.19	44.38	74.00	29.62	peak

Mode4 / Polarization: Horizontal / CH: M



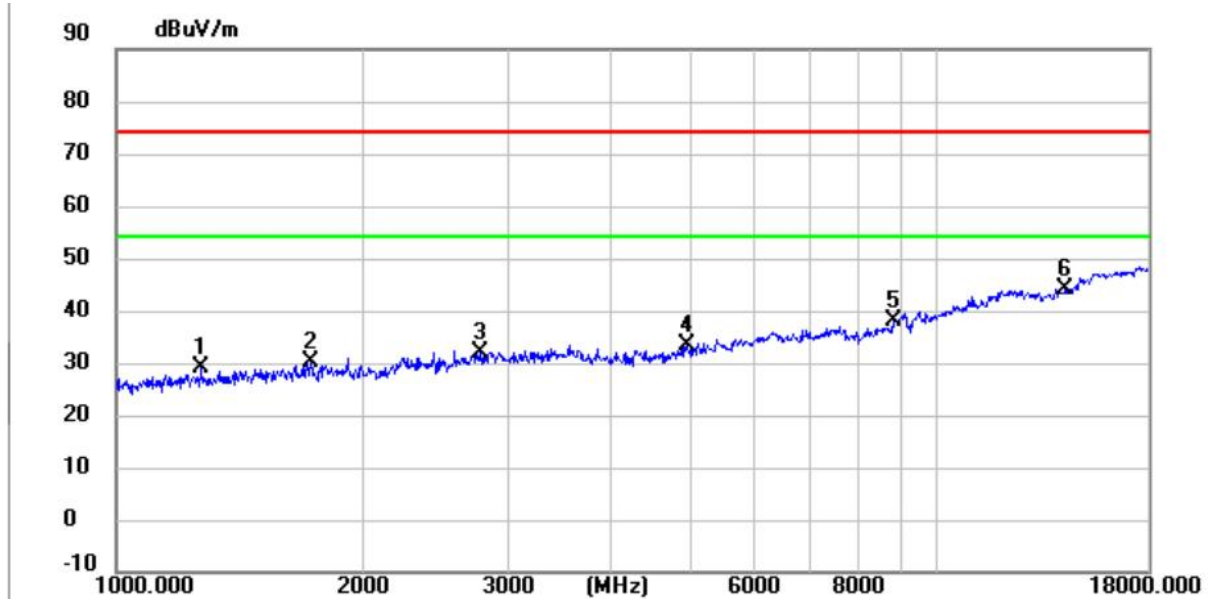
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1443.7000	49.10	-20.86	28.24	74.00	45.76	peak
2	2409.3000	49.04	-17.27	31.77	74.00	42.23	peak
3	3238.9000	48.21	-13.96	34.25	74.00	39.75	peak
4	6273.4000	42.32	-3.14	39.18	74.00	34.82	peak
5	11028.3000	26.94	13.41	40.35	74.00	33.65	peak
6 *	15057.3000	26.09	17.70	43.79	74.00	30.21	peak

Mode4 / Polarization: Vertical / CH: M



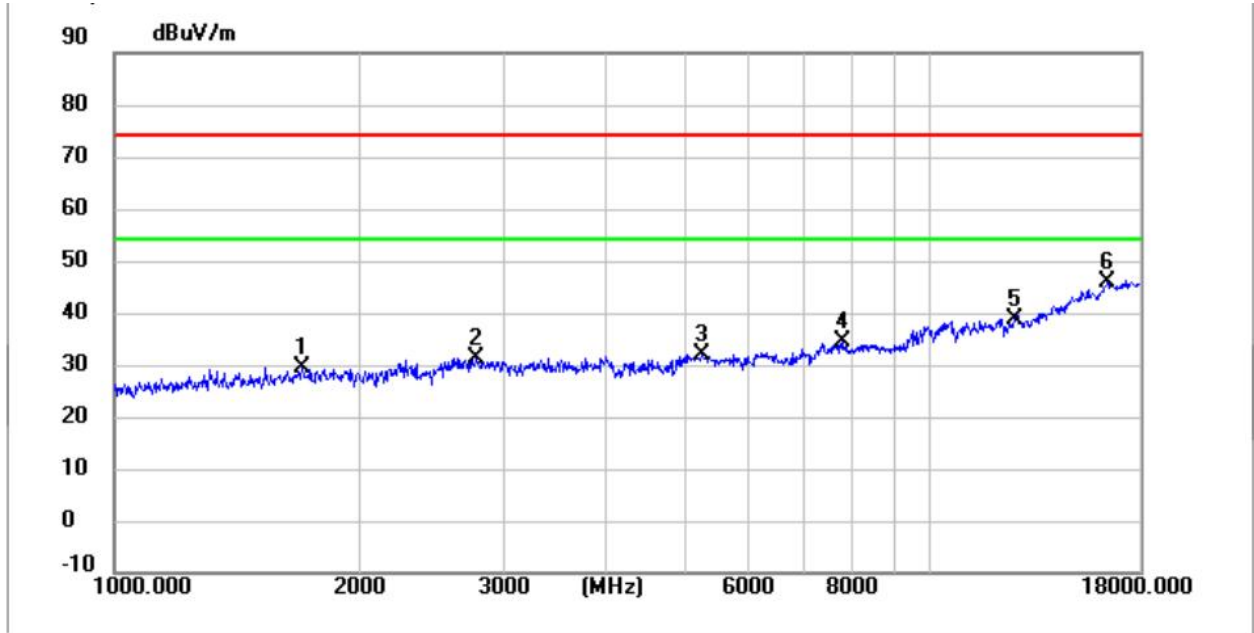
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1282.2000	50.02	-21.32	28.70	74.00	45.30	peak
2	3291.6000	49.24	-13.94	35.30	74.00	38.70	peak
3	4816.5000	45.19	-9.77	35.42	74.00	38.58	peak
4	7043.5000	35.19	3.82	39.01	74.00	34.99	peak
5	11536.6000	29.91	14.02	43.93	74.00	30.07	peak
6 *	14948.5000	30.43	17.78	48.21	74.00	25.79	peak

Mode4 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1272.0000	50.51	-21.33	29.18	74.00	44.82	peak
2	1731.0000	49.93	-19.91	30.02	74.00	43.98	peak
3	2768.0000	47.69	-15.55	32.14	74.00	41.86	peak
4	4969.5000	42.34	-8.95	33.39	74.00	40.61	peak
5	8821.7000	30.11	7.77	37.88	74.00	36.12	peak
6 *	14292.3000	25.55	18.47	44.02	74.00	29.98	peak

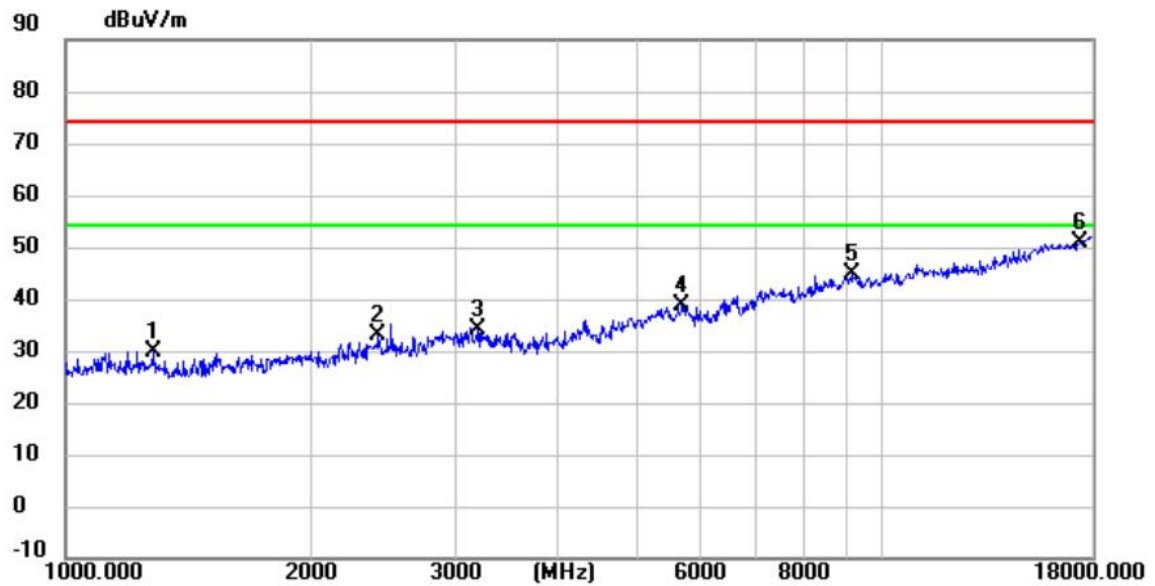
Mode4 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1703.8000	49.55	-20.07	29.48	74.00	44.52	peak
2	2776.5000	46.80	-15.48	31.32	74.00	42.68	peak
3	5246.6000	39.99	-7.90	32.09	74.00	41.91	peak
4	7827.2000	28.58	5.83	34.41	74.00	39.59	peak
5	12697.7000	23.65	15.21	38.86	74.00	35.14	peak
6 *	16487.0000	28.82	16.92	45.74	74.00	28.26	peak

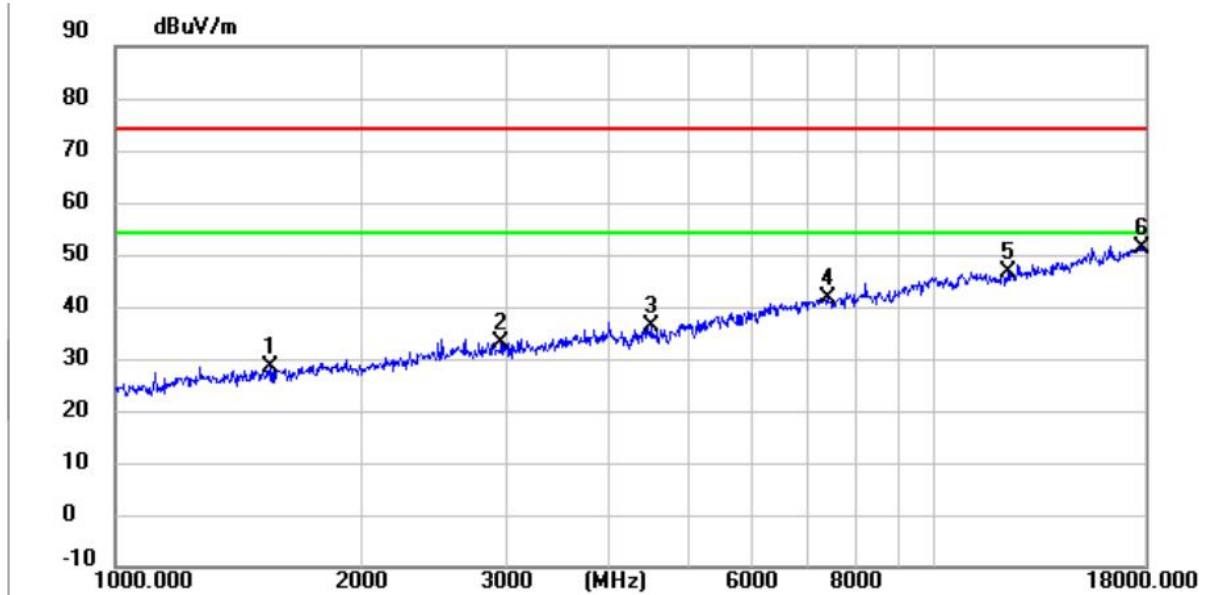
Ant7:

Mode4 / Polarization: Horizontal / CH: L



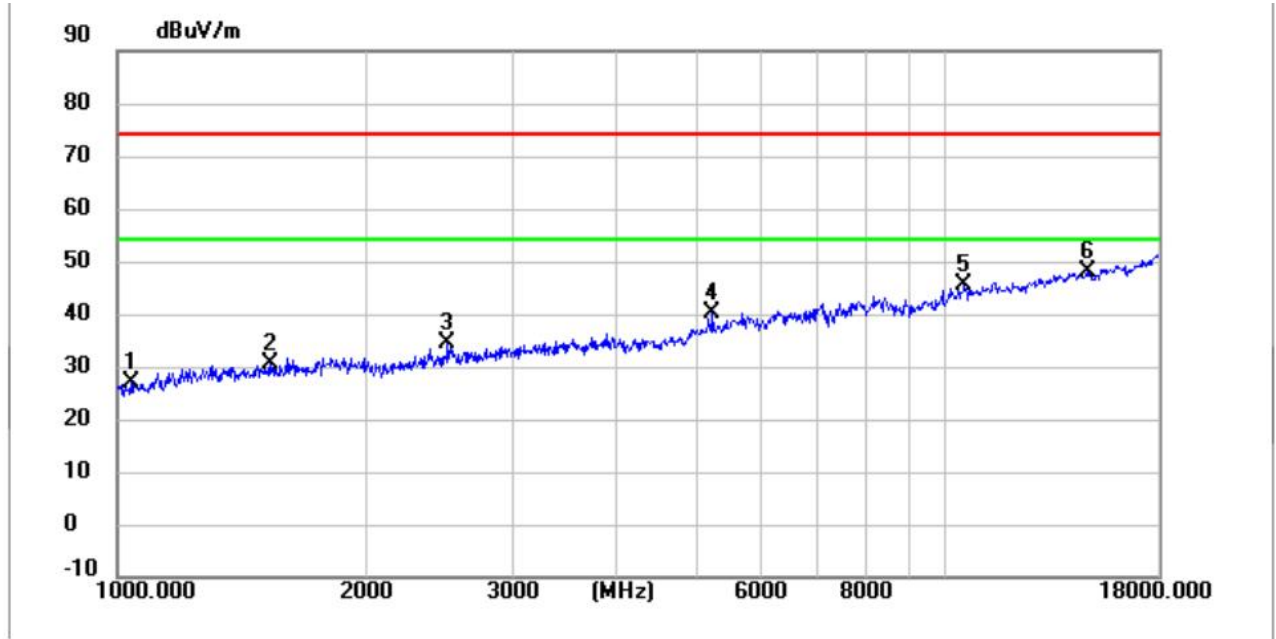
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1278.8000	51.21	-21.33	29.88	74.00	44.12	peak
2	2421.2000	50.38	-17.26	33.12	74.00	40.88	peak
3	3199.8000	48.15	-14.04	34.11	74.00	39.89	peak
4	5695.4000	45.07	-6.29	38.78	74.00	35.22	peak
5	9163.4000	35.99	8.83	44.82	74.00	29.18	peak
6 *	17406.7000	31.29	19.74	51.03	74.00	22.97	peak

Mode4 / Polarization: Vertical / CH: L



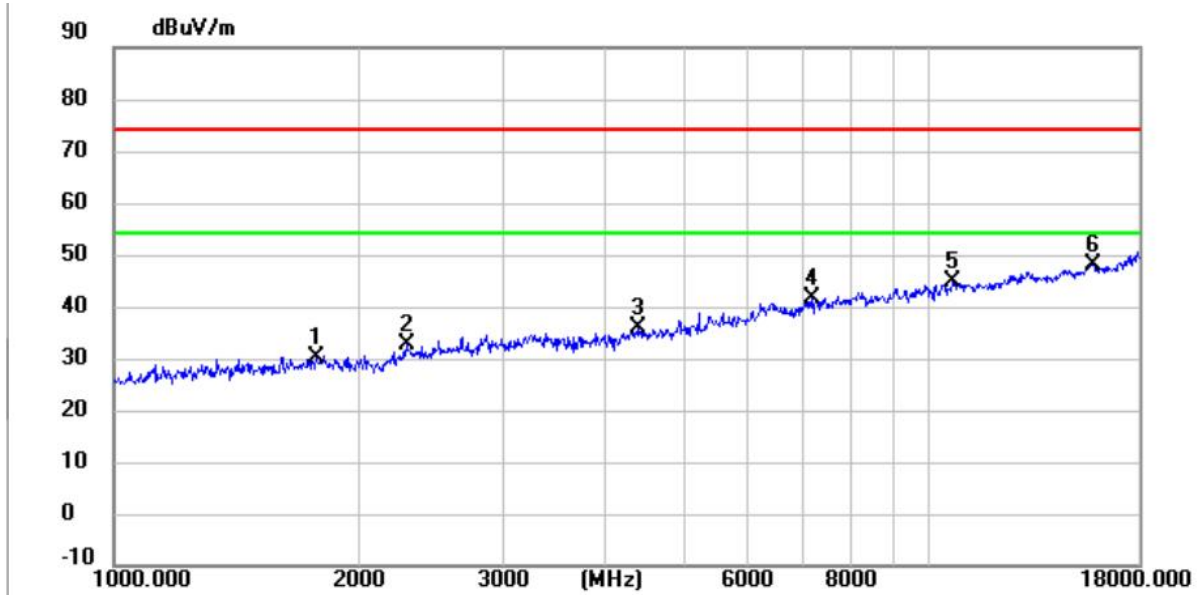
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1549.1000	49.01	-20.64	28.37	74.00	45.63	peak
2	2958.4000	47.96	-14.76	33.20	74.00	40.80	peak
3	4498.6000	47.37	-10.98	36.39	74.00	37.61	peak
4	7395.4000	36.70	4.90	41.60	74.00	32.40	peak
5	12264.2000	31.82	14.71	46.53	74.00	27.47	peak
6 *	17848.7000	28.21	22.96	51.17	74.00	22.83	peak

Mode4 / Polarization: Horizontal / CH: M



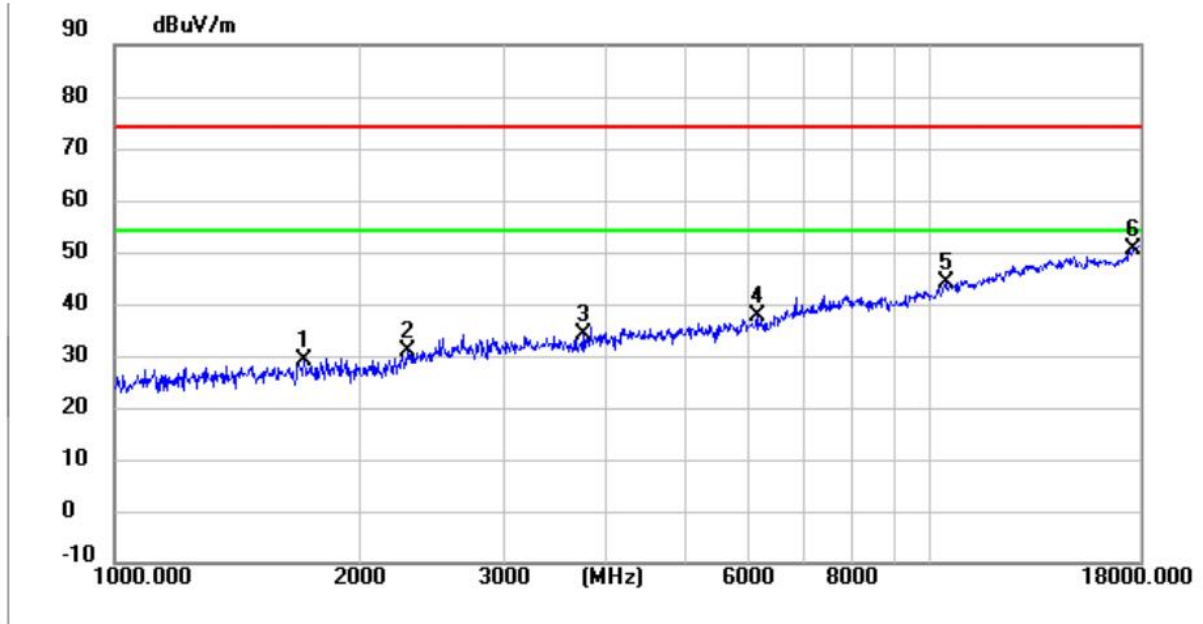
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1039.1000	48.95	-22.04	26.91	74.00	47.09	peak
2	1533.8000	51.04	-20.67	30.37	74.00	43.63	peak
3	2504.5000	51.37	-16.90	34.47	74.00	39.53	peak
4	5233.0000	48.04	-7.91	40.13	74.00	33.87	peak
5	10518.3000	33.44	12.01	45.45	74.00	28.55	peak
6 *	14790.4000	29.98	18.05	48.03	74.00	25.97	peak

Mode4 / Polarization: Vertical / CH: M



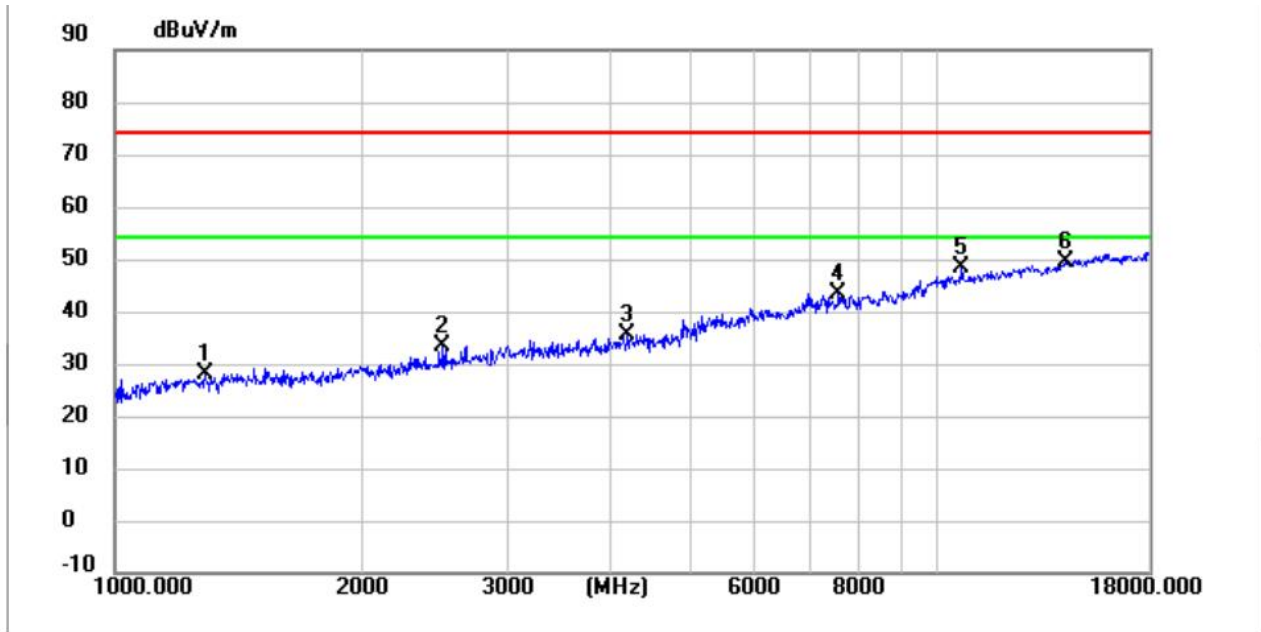
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1771.8000	49.90	-19.67	30.23	74.00	43.77	peak
2	2288.6000	50.09	-17.56	32.53	74.00	41.47	peak
3	4381.3000	47.11	-11.38	35.73	74.00	38.27	peak
4	7176.1000	37.49	4.28	41.77	74.00	32.23	peak
5	10678.1000	32.45	12.39	44.84	74.00	29.16	peak
6 *	15832.5000	31.56	16.57	48.13	74.00	25.87	peak

Mode4 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1708.9000	49.04	-20.03	29.01	74.00	44.99	peak
2	2297.1000	48.34	-17.54	30.80	74.00	43.20	peak
3	3750.6000	47.13	-12.99	34.14	74.00	39.86	peak
4	6130.6000	42.12	-4.61	37.51	74.00	36.49	peak
5	10445.2000	32.15	11.86	44.01	74.00	29.99	peak
6 *	17729.7000	28.61	21.96	50.57	74.00	23.43	peak

Mode4 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1287.3000	49.51	-21.31	28.20	74.00	45.80	peak
2	2504.5000	50.45	-16.90	33.55	74.00	40.45	peak
3	4199.4000	47.49	-11.80	35.69	74.00	38.31	peak
4	7563.7000	37.72	5.55	43.27	74.00	30.73	peak
5	10678.1000	35.95	12.39	48.34	74.00	25.66	peak
6 *	14258.3000	30.86	18.52	49.38	74.00	24.62	peak

Notes:

- 1). Measuring frequencies from 9 KHz ~ 40GHz, emissions are attenuated more than 20dB below the permissible limits generated frequency to 30MHz.
- 2). Radiated emissions measured in frequency range from 9 KHz ~ 40GHz were made with an instrument using Peak detector mode.
- 3). 18~40GHz at least have 20dB margin. No recording in the test report.

-----End of the report-----