



FCC TEST REPORT

FCC ID: 2BWHU1LD

On Behalf of

A.O. Smith Corporation

Universal WIFI module

Model No.: 1LD

Prepared for : A.O. Smith Corporation
Address : 300 Maddox-Simpson Pkwy Lebanon, TN 37090 United States

Prepared By : Shenzhen PSI Testing Co., Ltd.
Address : 1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road,
Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Report Number : psi2605163-C01-R01
Date of Receipt : May 27, 2026
Date of Test : May 27, 2026–July 7, 2026
Date of Report : July 7, 2026
Version Number : V0

TABLE OF CONTENTS

Description	Page
1. Summary Of Standards And Results-----	6
1.1. Description of Standards and Results-----	6
2. General Information-----	7
2.1. Description of Device (EUT)-----	7
2.2. Accessories of Device (EUT)-----	8
2.3. Tested Supporting System Details-----	8
2.4. Block Diagram of Connection Between EUT and Simulators-----	8
2.5. Test Mode Description -----	9
2.6. Software test version and power setting information-----	9
2.7. Test Conditions -----	9
2.8. Test Facility -----	10
2.9. Measurement Uncertainty-----	10
2.10. Test Equipment List-----	11
3. Spurious Emission-----	12
3.1. Test Limits-----	12
3.2. Block Diagram of Test setup-----	13
3.3. Test Procedure-----	14
3.4. Test Results-----	15
4. Power Line Conducted Emission -----	58
4.1. Test Limits-----	58
4.2. Test Procedure-----	58
4.3. Test Setup-----	58
4.4. Test Results-----	59
5. Out-of-band Emissions -----	62
5.1. Test Limits-----	62
5.2. Test Procedure-----	62
5.3. Test Setup-----	62
5.4. Test Results-----	62
6. Conducted Maximum Output Power -----	79
6.1. Test limits-----	79
6.2. Test Procedure-----	79
6.3. Test Setup-----	79
6.4. Test Results-----	79
7. Peak Power Spectral Density-----	80
7.1. Test limits-----	80
7.2. Test Procedure-----	80
7.3. Test Setup-----	80
7.4. Test Results-----	80
8. Occupied Bandwidth -----	86
8.1. Test limits-----	86
8.2. Test Procedure-----	86
8.3. Test Setup-----	86
8.4. Test Results-----	86
9. Band Edge Test-----	97
9.1. Test Limit -----	97
9.2. Block Diagram of Test Setup -----	97
9.3. Test Procedure-----	97
9.4. Test Results-----	98
10. Antenna Requirement-----	114
10.1. Standard Requirement-----	114

10.2. Results	114
11. Photos of test setup	115
12. Photos of EUT	115

TEST REPORT DECLARATION

Applicant : A.O. Smith Corporation
Address : 300 Maddox-Simpson Pkwy Lebanon, TN 37090 United States
Manufacturer : A.O. Smith Corporation
Address : 300 Maddox-Simpson Pkwy Lebanon, TN 37090 United States
EUT Description : Universal WIFI module
(A) Model No. : 1LD
(B) Trademark : N/A

Measurement Standard Used:

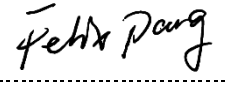
FCC Rules and Regulations Part 15 Subpart C Section 15.247

ANSI C63.10-2020+Cor.1-2023

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC Part 15C requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:	Felix Pang Test Engineer	
Approved by (name + signature).....:	Simple Guan Project Manager	
Date of issue.....:	July 7, 2026	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	July 7, 2026	Initial released Issue	Felix Pang

1. Summary Of Standards And Results

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Test Item	Standards Paragraph	Result
Conducted Emission	FCC Part 15: 15.207ANSI C63.10-2020+Cor.1-2023	P
6dB Bandwidth	FCC PART 15:15.247(a)(2), ANSI C63.10-2020+Cor.1-2023	P
Output Power	FCC Part 15: 15.247(b)(3), ANSI C63.10-2020+Cor.1-2023	P
Radiated Spurious Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d), ANSI C63.10-2020+Cor.1-2023	P
Conducted Spurious & Band Edge Emission	FCC Part 15: 15.247(d), ANSI C63.10-2020+Cor.1-2023	P
Power Spectral Density	FCC PART 15:15.247(e), ANSI C63.10-2020+Cor.1-2023	P
Radiated Band Edge Emission	FCC Part 15: 15.247(d), ANSI C63.10-2020+Cor.1-2023	P
Antenna Requirement	FCC Part 15: 15.203	P
Note: 1. P is an abbreviation for Pass. 2. F is an abbreviation for Fail. 3. N/A is an abbreviation for Not Applicable. 4. Conclusion determination rules of this report: Unless there are clear provisions on measurement uncertainty in the standard or customer requirements, decision by actual test data without considering measurement uncertainty. 5. Measurement method usage KDB 558074 D01 15.247 Meas Guidance v05r02.		

2. General Information

2.1. Description of Device (EUT)

Product Name : Murata Wi-Fi
Model : 1LD
Diff : There is no difference except the external antenna differs. All tests are made with the Green narrow antenna 1LD model.
Test Voltage : DC 3.3V from USB

Radio technology	: 2.4G WiFi
Operation frequency	: 2412MHz-2462MHz for IEEE 802.11 b, g, n/HT20
Channel No.	: 802.11b/802.11g/802.11n(HT20): 11CH IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)
Modulation type	: IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n:OFDM(64QAM, 16QAM, QPSK, BPSK) External antenna Green narrow antenna, Maximum Gain is -0.26dBi.
Antenna Type	: Green wide antenna, Maximum Gain is -0.26dBi. Black narrow antenna, Maximum Gain is 4.51dBi. Black wide antenna, Maximum Gain is 4.51dBi.
PMN	: N/A
HVIN	: N/A
Software version	: N/A
Hardware version/FVIN	: N/A

Note : Antenna information is provided by applicant.
Testing lab is not responsible for the accuracy of the information.

2.2. Accessories of Device (EUT)

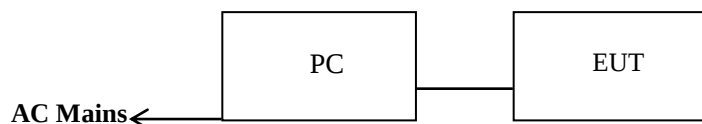
Accessories 1 : N/A
 Manufacturer : N/A
 Model : N/A
 Rating : N/A

2.3. Tested Supporting System Details

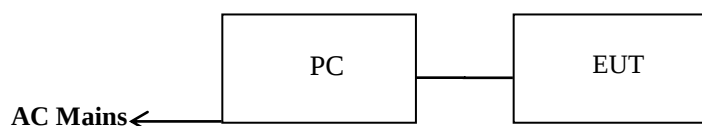
No.	Description	Manufacturer	Model	Serial Number
1	Notebook PC	Dell	Latitude 3490	N/A
2	USB TO TTL	FTDI	FT232RL	N/A

2.4. Block Diagram of Connection Between EUT and Simulators

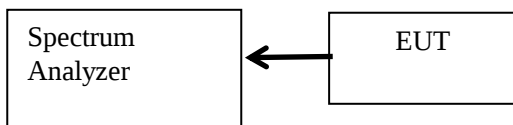
Spurious Emission



Power Line Conducted Emission



RF



2.5. Test Mode Description

Keeping TX			
Mode	Data rate (Mbps)	Channel	Frequency(MHz)
IEEE 802.11 b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11 g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11 n/HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
Note: According exploratory test, EUT will have maximum output power in those data rate. So those data rate were used for all test.			

Channel list:					
For IEEE 802.11b, g, n/HT20					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437	CH10	2457
CH3	2422	CH7	2442	CH11	2462
CH4	2427	CH8	2447		

2.6. Software test version and power setting information

Software testing version	wl_tool.exe		
Mode	The client 's preset testing software is used to control the operation of EUT in continuous transmission mode and select the testing channel, wireless mode:		
Power level setup by client			
Mode	Channel	Frequency (MHz)	Soft Set
IEEE 802.11b/g/n20	Low :CH1	2412	TX level is set as defaults
	Middle: CH6	2437	TX level is set as defaults
	High: CH11	2462	TX level is set as defaults

2.7. Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	26℃
Humidity range:	25-75%	54%
Pressure range:	86-106kPa	101kPa

2.8. Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission

Registration Number: 916281

Designation Number: CN1362

September 21, 2023 Certificated by IC

Registration Number: 31123

CAB identifier: CN0158

2.9. Measurement Uncertainty

(95% confidence levels, $k=2$)

Item	Uncertainty
Power Line Conducted Emissions Test	2.13dB
Radiation Emission test in 3m chamber(below 30MHz)	4.07dB
Radiation Emission test in 3m chamber(30MHz to 1GHz)	4.51dB
Radiation Emission test in 3m chamber(1GHz to 18GHz)	5.07dB
Radiation Emission test in 3m chamber(18GHz to 40GHz)	5.21dB
Radio Frequency	48.24KHz
Conducted RF Power	0.41dB
Power Spectral Density	0.39 dB
Occupied-Bandwidth	968Hz
Duty Cycle	1%
Conducted-Spurious Emission	1.26dB

2.10. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2025.12.18	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2025.12.18	1 Year
3.	L.I.S.N.#1	Rohde&Schwarz	ENV 216	102282	/	2025.12.18	1 Year
4.	L.I.S.N.#2	EMCO	3810-2	00094944	/	2025.12.18	1 Year
5.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2025.01.02	2 Year
6.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2025.01.02	2 Year
7.	Spectrum Analyzer	Rohde&Schwarz	FSV40-N	101648	3.70	2025.12.18	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2025.01.02	2 Year
9.	Amplifier	SKET	LNPA_0118 G-50	SK20220329 01	/	2025.12.18	1 Year
10.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2024.12.31	2 Year
11.	Amplifier	SKET	LNPA_1840 G-50	SK20190403 02	/	2025.12.18	1 Year
12.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.0 2-1111533-F Z	/	2025.12.18	1 Year
13.	RF Sensor Unit	Tachoy	TR1029-2	20220428P0 08	/	2025.12.18	1 Year
14.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2025.12.18	1 Year
15.	Temp. & Humid Chamber	Auchno	9606	/	/	2025.12.18	1 Year
16.	Regulated DC Power Supply	Xinouhua	ADC120V10 A	2022112516 38	/	2025.12.18	1 Year
17.	Cable	SKET	Cable-RE-1	#02/#03	/	2025.12.18	1 Year
18.	Cable	SKET	Cable-RE-2	#01	/	2025.12.18	1 Year
19.	Cable	SKET	Cable-RE-3	#04	/	2025.12.18	1 Year
20.	Cable	SKET	Cable-CE-1	A-E-24	/	2025.12.18	1 Year
21.	6dB Attenuator	Schwarzbeck	DGA 9552N 6dB	CK4186	/	2025.12.18	1 Year
22.	Power meter	Agilent	E4419B	GB40202121	/	2025.12.18	1 Year
23.	Comprehensive Test Instrument	Rohde&Schwarz	CMW 500	145266	/	2025.12.18	1 Year
For Test Software Information							
Item	Software Name	Manufacturer		Version			
RE	EZ EMC	Farad		PSI-3A1			
CE	EZ EMC	Farad		PSI-3A1			
RF	RTS	TACHOY		V1.0.0			

3. Spurious Emission

3.1. Test Limits

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

Note: The peak limit is 20 dB higher than the average limit

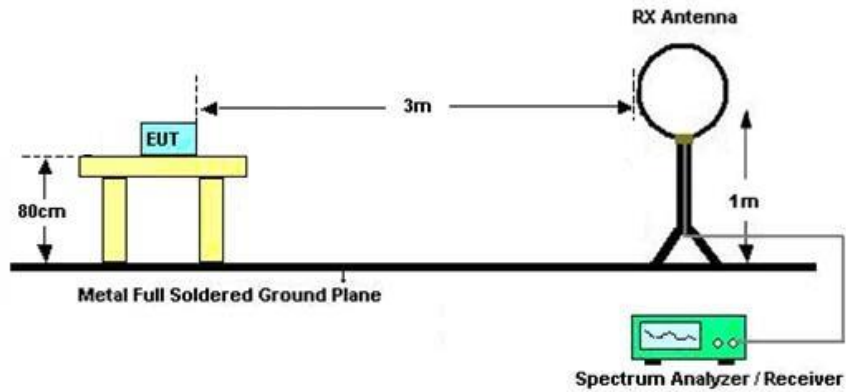
All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

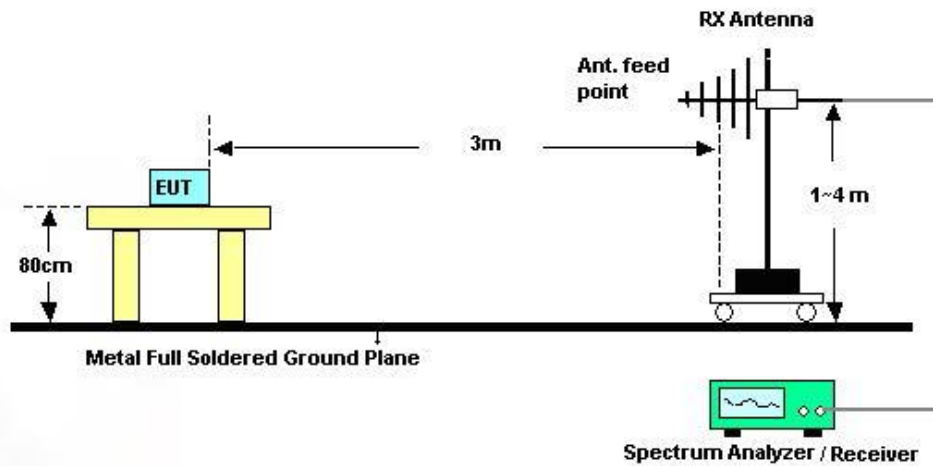
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 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)

3.2. Block Diagram of Test setup

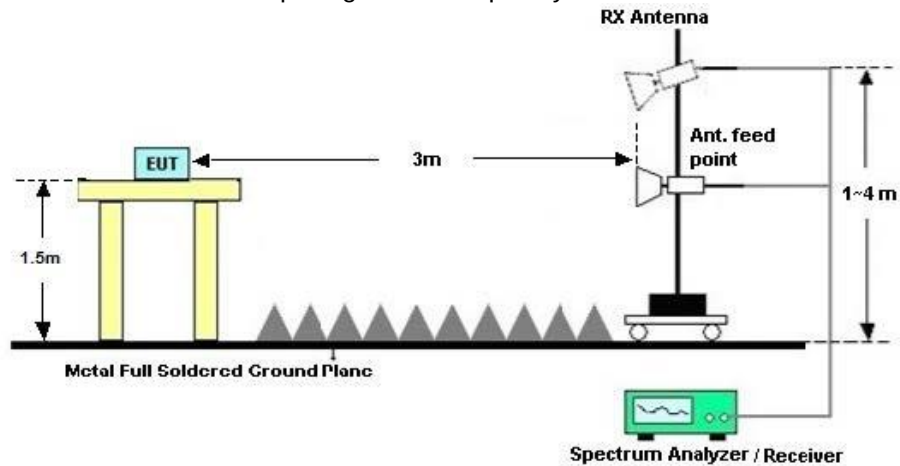
(1) In 3m Anechoic Chamber Test Setup Diagram for below 30MHz



(2) In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



(3) In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



3.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and simulator
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
 - (a) Change work frequency or channel of device if practicable.
 - (b) Change modulation type of device if practicable.
 - (c) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2020+Cor.1-2023 on Radiated Emission test.
- (6) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure.

Test setup information:

9KHz~150KHz	RBW200Hz	VBW1KHz
150KHz~30MHz	RBW9KHz	VBW 30KHz
30MHZ~1GHz	RBW120KHz	VBW 300KHz
Above1GHz	RBW1MHz	VBW 3MHz

3.4. Test Results

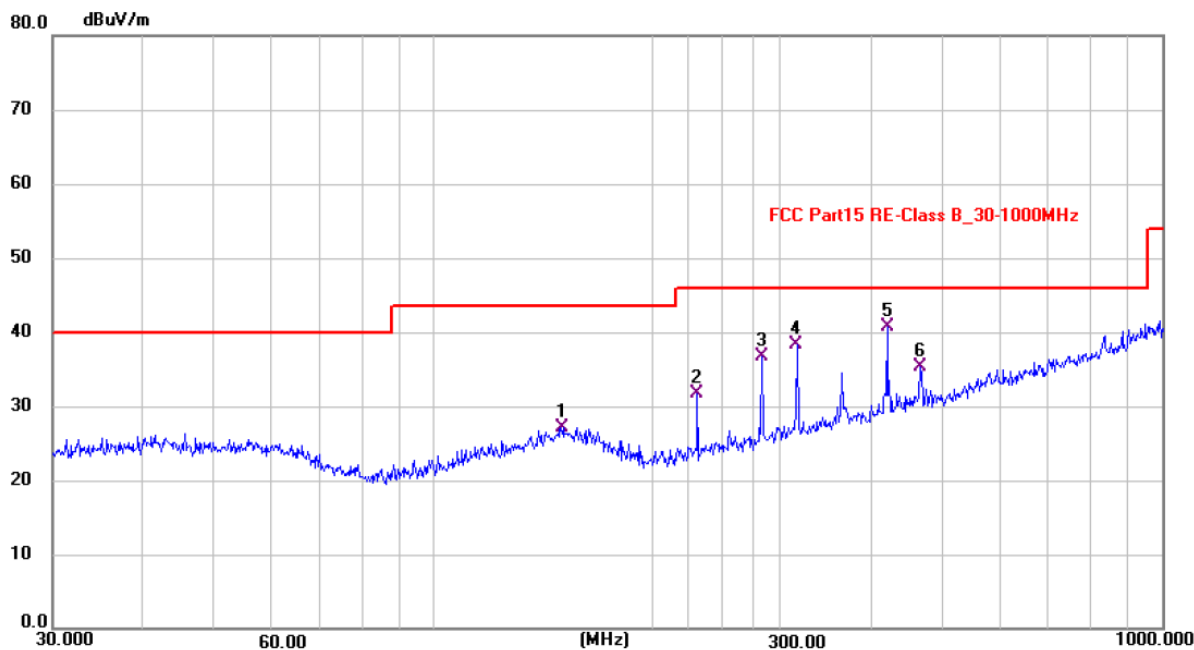
We have scanned from 9kHz to the 10th harmonic of the EUT's highest frequency.
Detailed information please see the following page.

From 9KHz to 30MHz:	
Test Date : 2026.06.15	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : IEEE 802.11b mode	
Test Voltage : DC 3.3V	
Test Results : PASS	
Note:	The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

From 30MHz to 1000MHz:	
Test Date : 2026.06.15	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : IEEE 802.11b mode	
Test voltage : DC 3.3V	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. All modes have been tested, and only worst data of IEEE 802.11b mode, Channel 2412MHz was listed in this report.

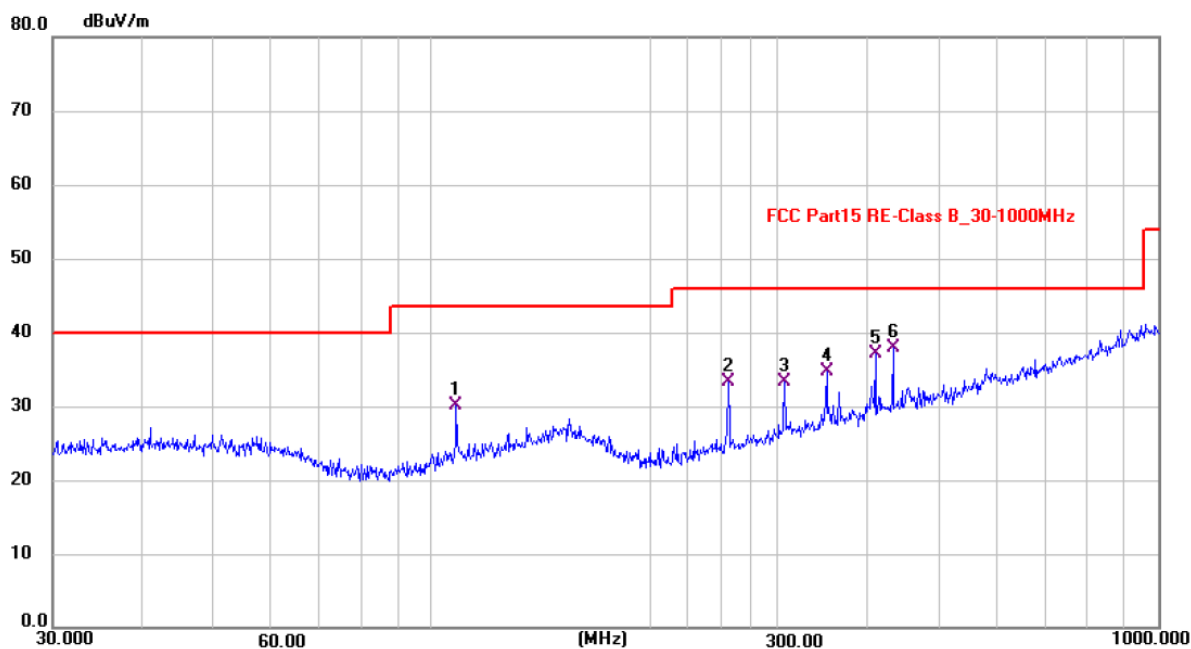
Green narrow antenna

Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	150.8679	11.94	15.21	27.15	43.50	-16.35	QP
2	230.0985	18.99	12.77	31.76	46.00	-14.24	QP
3	281.9945	22.18	14.57	36.75	46.00	-9.25	QP
4	316.1729	22.68	15.60	38.28	46.00	-7.72	QP
5 *	420.2117	22.48	18.28	40.76	46.00	-5.24	QP
6	466.6210	15.89	19.33	35.22	46.00	-10.78	QP

Level = Reading + Factor
Margin = Level - Limit

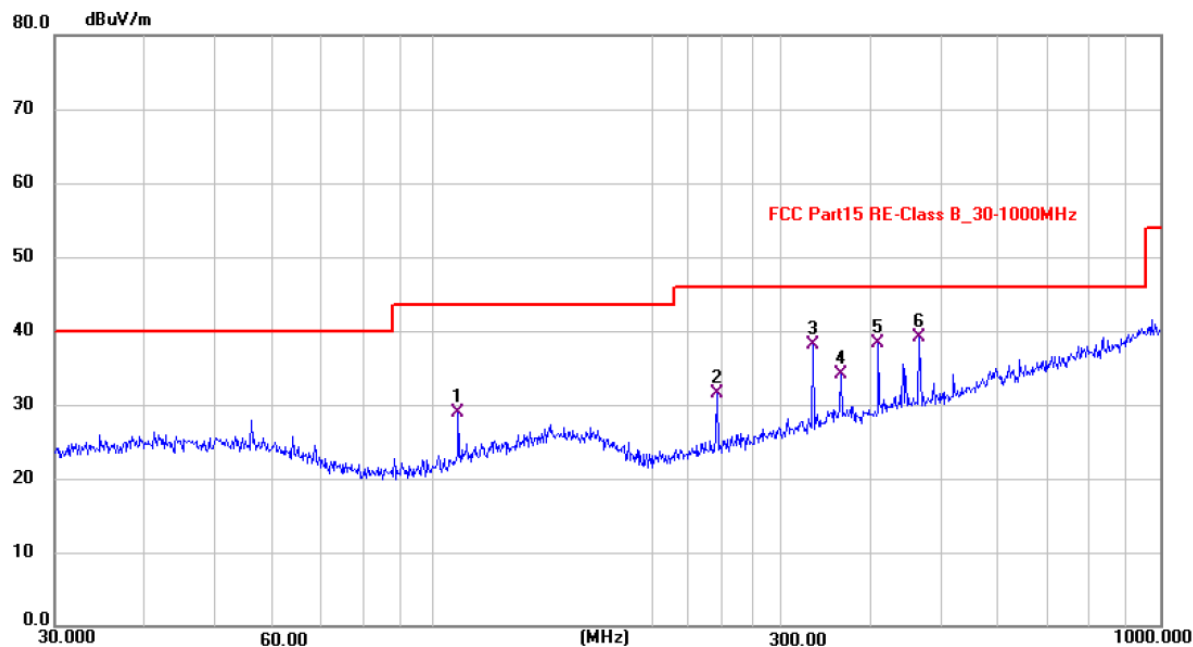
Polarization: Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	107.9822	18.40	11.80	30.20	43.50	-13.30	QP
2	255.9593	19.65	13.64	33.29	46.00	-12.71	QP
3	305.9480	18.12	15.28	33.40	46.00	-12.60	QP
4	350.0162	18.17	16.57	34.74	46.00	-11.26	QP
5	408.4085	19.27	17.86	37.13	46.00	-8.87	QP
6 *	432.3561	19.21	18.65	37.86	46.00	-8.14	QP

Level = Reading + Factor Margin = Level - Limit

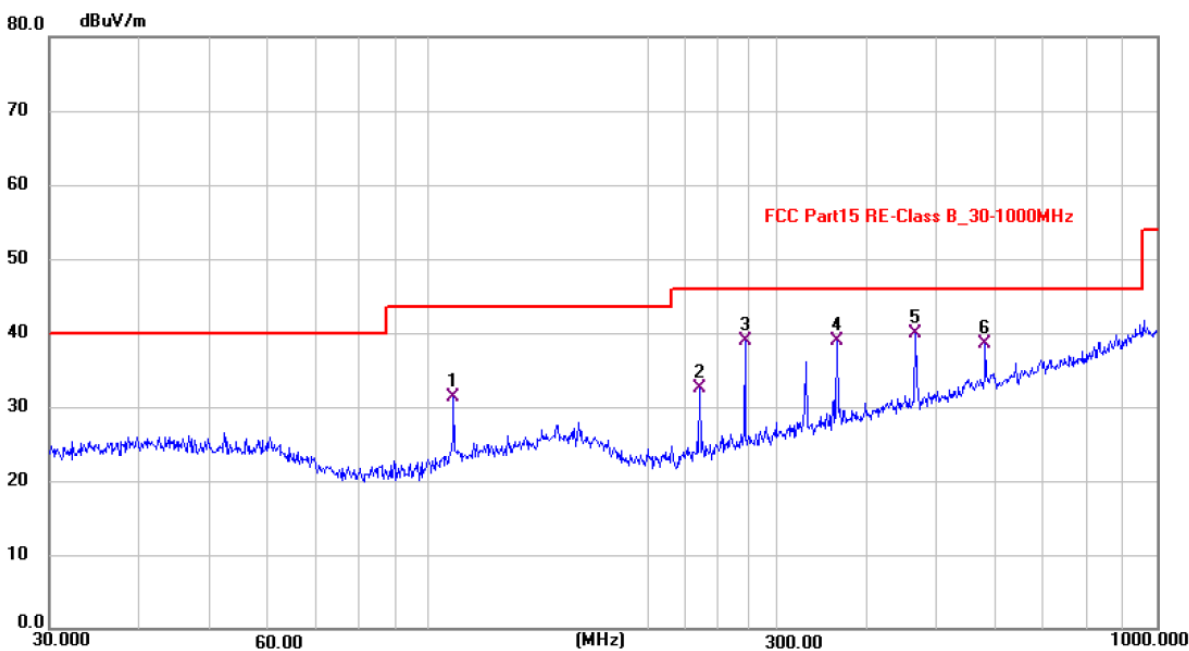
Green wide antenna

Polarization: Horizontal



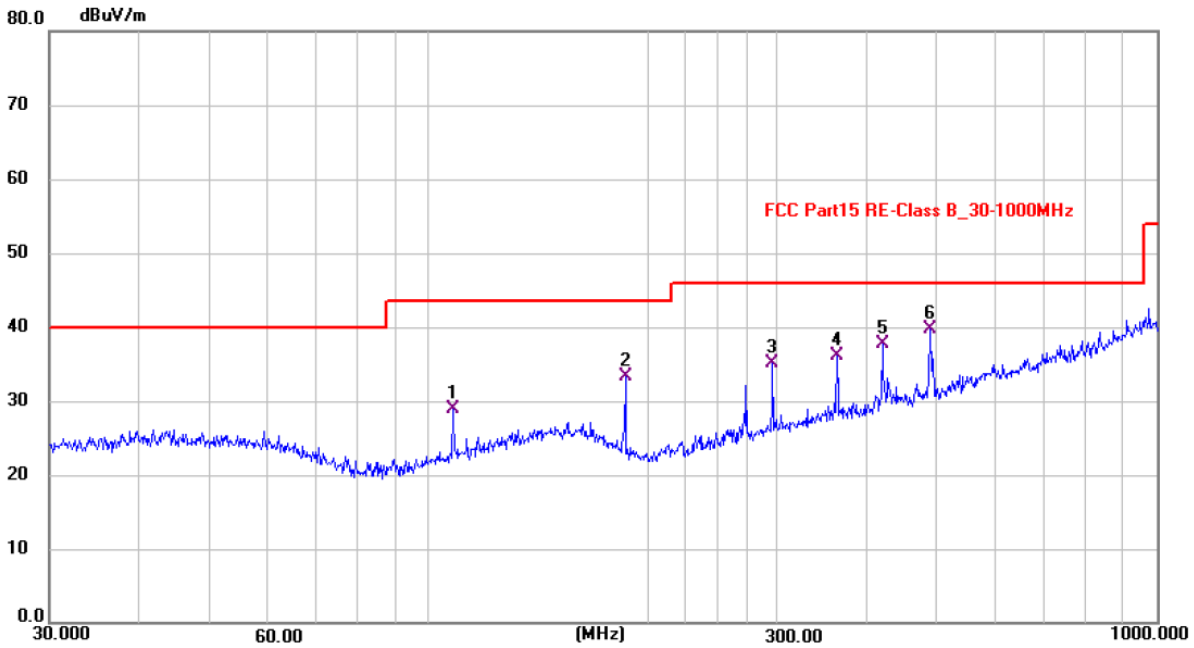
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	108.0296	17.16	11.80	28.96	43.50	-14.54	QP
2	245.6277	18.18	13.39	31.57	46.00	-14.43	QP
3	333.5405	21.93	16.11	38.04	46.00	-7.96	QP
4	364.1000	17.28	16.85	34.13	46.00	-11.87	QP
5	409.3045	20.42	17.89	38.31	46.00	-7.69	QP
6 *	466.0076	19.86	19.33	39.19	46.00	-6.81	QP

Level = Reading + Factor Margin = Level - Limit

Polarization: Vertical

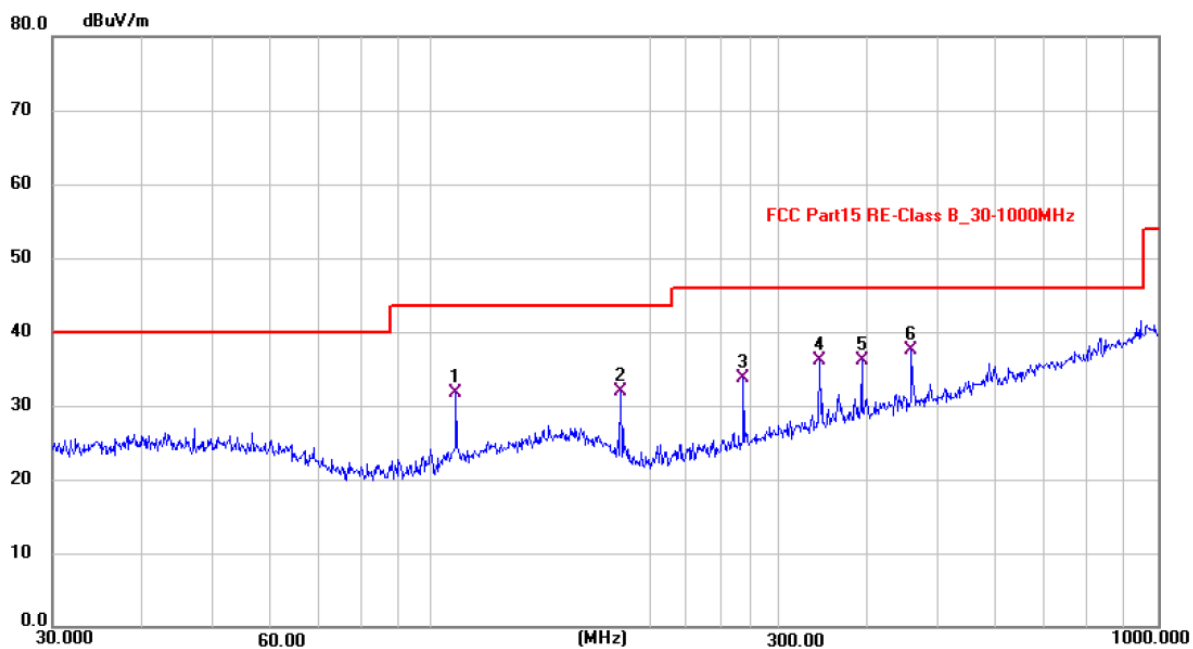
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	107.9822	19.56	11.80	31.36	43.50	-12.14	QP
2	235.5064	19.41	13.04	32.45	46.00	-13.55	QP
3	271.8004	24.73	14.19	38.92	46.00	-7.08	QP
4	363.9402	22.12	16.84	38.96	46.00	-7.04	QP
5 *	466.8254	20.63	19.33	39.96	46.00	-6.04	QP
6	582.2318	16.81	21.70	38.51	46.00	-7.49	QP

Level = Reading + Factor Margin = Level - Limit

Black narrow antenna**Polarization: Horizontal**

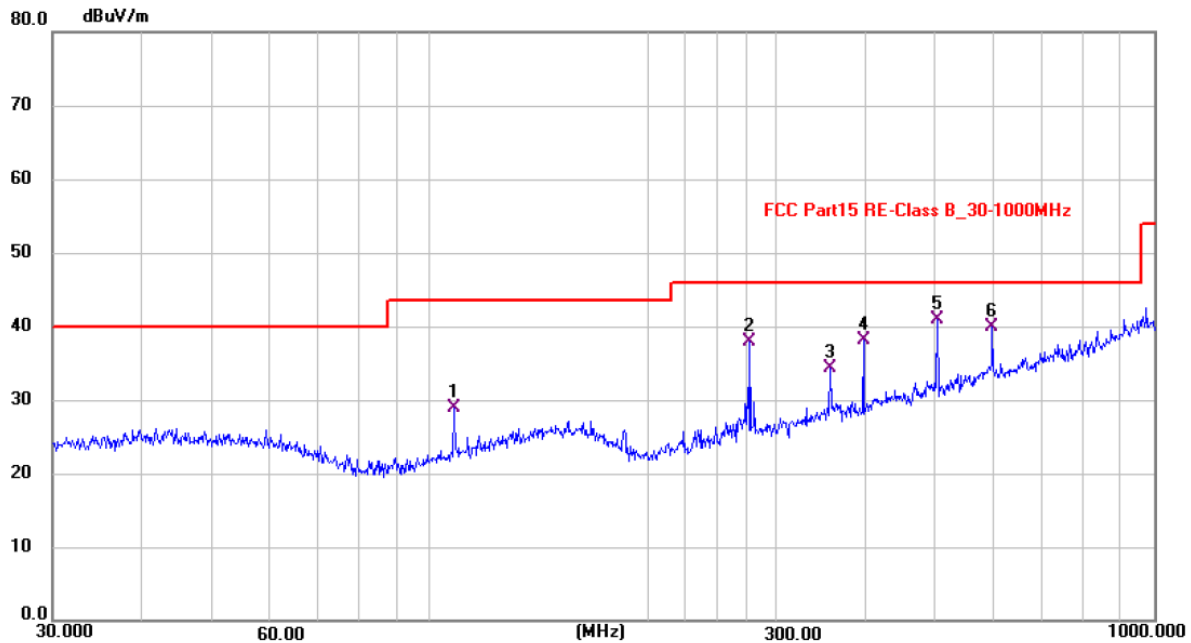
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	107.7930	17.20	11.78	28.98	43.50	-14.52	QP
2	186.0326	20.99	12.25	33.24	43.50	-10.26	QP
3	296.5733	20.03	14.99	35.02	46.00	-10.98	QP
4	364.1000	19.20	16.85	36.05	46.00	-9.95	QP
5	419.6594	19.45	18.26	37.71	46.00	-8.29	QP
6 *	489.0267	20.00	19.65	39.65	46.00	-6.35	QP

Level = Reading + Factor
Margin = Level - Limit

Polarization: Vertical

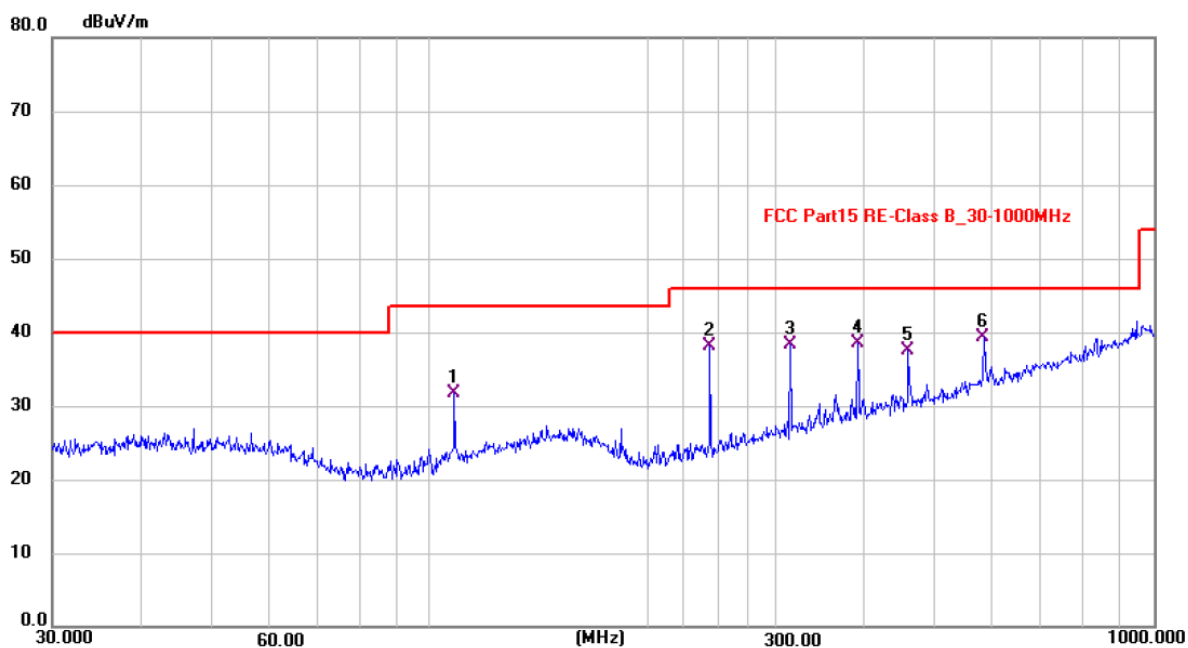
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	107.9822	19.97	11.80	31.77	43.50	-11.73	QP
2	182.3190	19.32	12.63	31.95	43.50	-11.55	QP
3	268.8385	19.69	14.08	33.77	46.00	-12.23	QP
4	342.5788	19.71	16.37	36.08	46.00	-9.92	QP
5	391.5797	18.70	17.39	36.09	46.00	-9.91	QP
6 *	458.9132	18.34	19.24	37.58	46.00	-8.42	QP

Level = Reading + Factor Margin = Level - Limit

Black wide antenna**Polarization: Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	107.7930	17.20	11.78	28.98	43.50	-14.52	QP
2	276.8507	23.51	14.39	37.90	46.00	-8.10	QP
3	356.9886	17.54	16.71	34.25	46.00	-11.75	QP
4	396.9368	20.53	17.49	38.02	46.00	-7.98	QP
5 *	501.6184	21.01	19.86	40.87	46.00	-5.13	QP
6	598.7960	17.81	22.04	39.85	46.00	-6.15	QP

Level = Reading + Factor Margin = Level - Limit

Polarization: Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	107.9822	19.97	11.80	31.77	43.50	-11.73	QP
2	243.9111	24.70	13.35	38.05	46.00	-7.95	QP
3	314.5142	22.72	15.55	38.27	46.00	-7.73	QP
4	389.8670	21.07	17.36	38.43	46.00	-7.57	QP
5	458.9132	18.34	19.24	37.58	46.00	-8.42	QP
6 *	584.5329	17.54	21.75	39.29	46.00	-6.71	QP

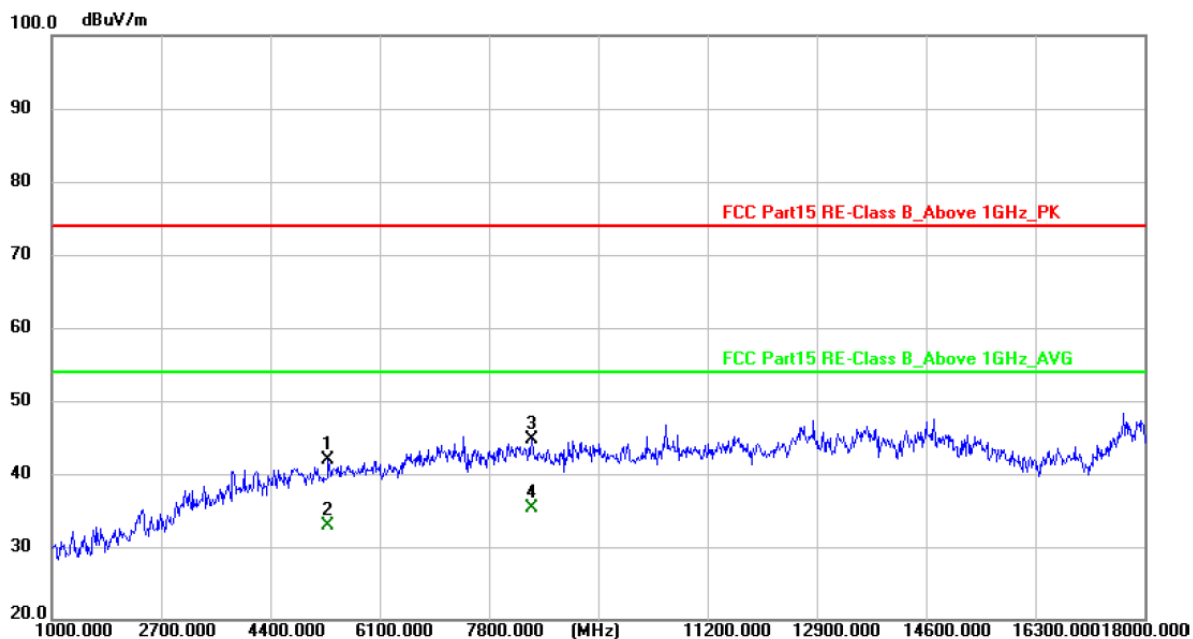
Level = Reading + Factor Margin = Level - Limit

From 1GHz to 18GHz:	
Test Date : 2026.06.15	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : WIFI mode	
Test voltage : DC 3.3V	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.

Green narrow antenna

Test Mode : g 2412MHz

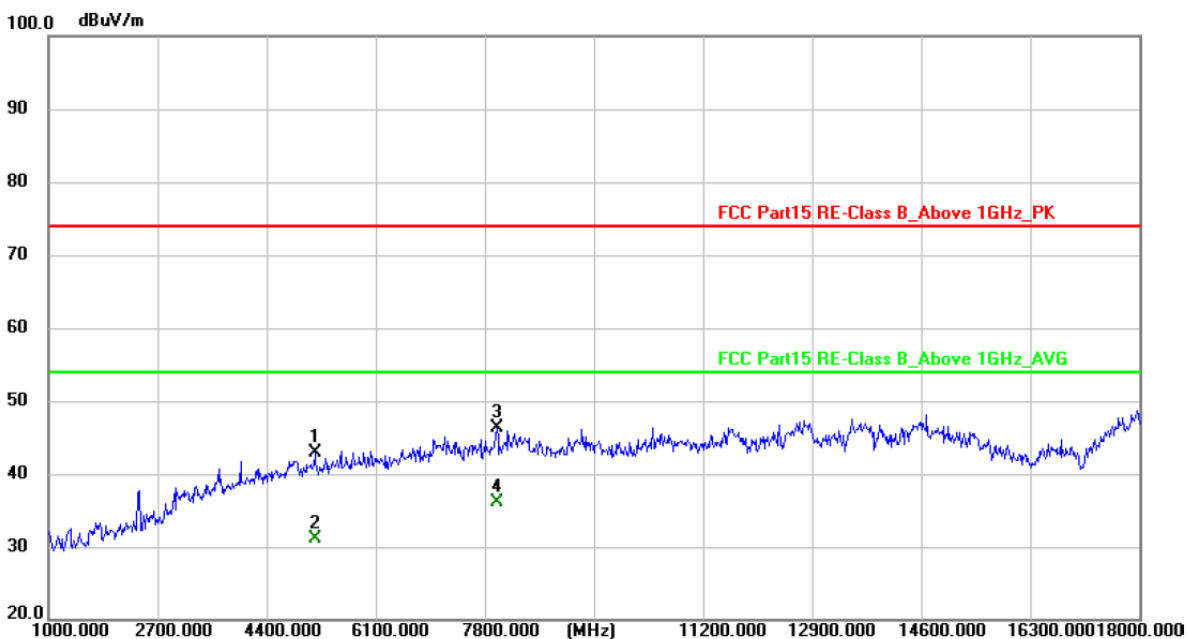
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5303.125	57.15	-15.17	41.98	74.00	-32.02	peak
2	5303.125	48.15	-15.17	32.98	54.00	-21.02	AVG
3	8469.375	55.19	-10.54	44.65	74.00	-29.35	peak
4 *	8469.375	45.85	-10.54	35.31	54.00	-18.69	AVG

Test Mode : g 2412MHz

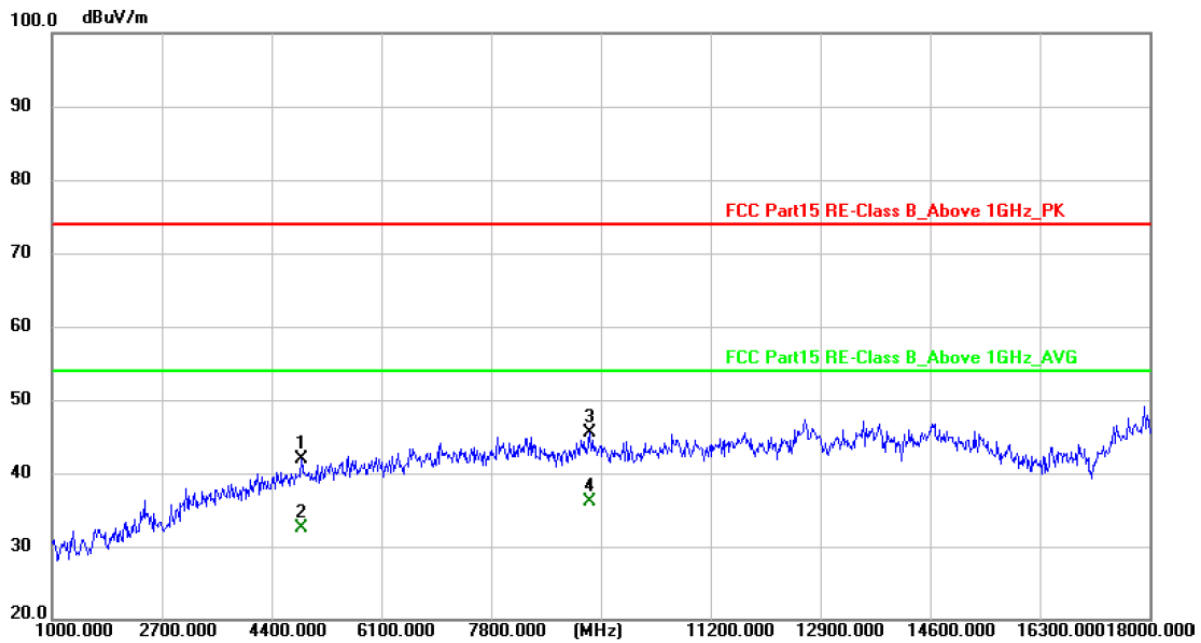
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5160.750	58.31	-15.47	42.84	74.00	-31.16	peak
2	5160.750	46.65	-15.47	31.18	54.00	-22.82	AVG
3	7995.500	56.95	-10.66	46.29	74.00	-27.71	peak
4 *	7995.500	46.77	-10.66	36.11	54.00	-17.89	AVG

Test Mode : g 2437MHz

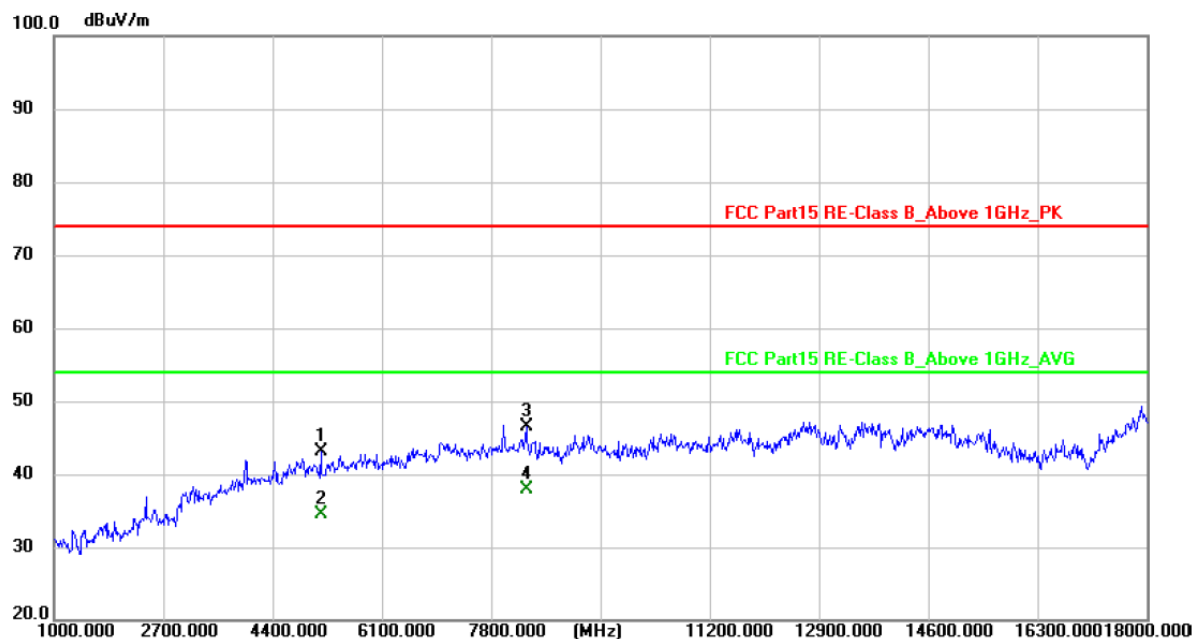
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4873.875	58.21	-16.22	41.99	74.00	-32.01	peak
2	4873.875	48.70	-16.22	32.48	54.00	-21.52	AVG
3	9338.500	55.65	-10.24	45.41	74.00	-28.59	peak
4 *	9338.500	46.42	-10.24	36.18	54.00	-17.82	AVG

Test Mode : g 2437MHz

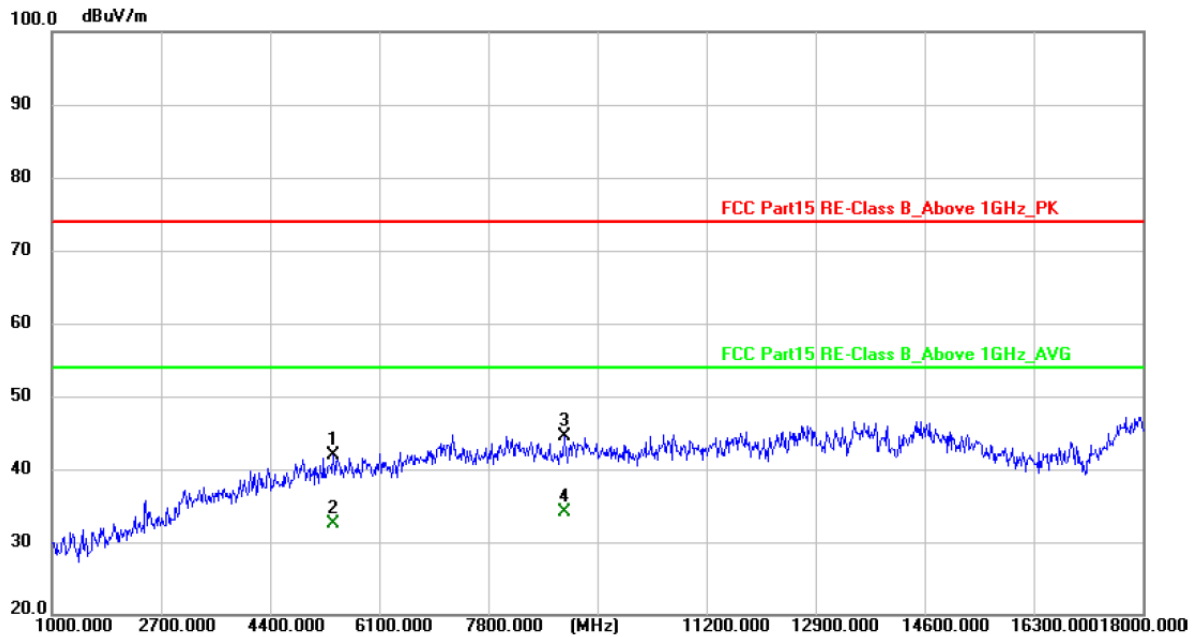
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5160.750	58.51	-15.47	43.04	74.00	-30.96	peak
2	5160.750	49.91	-15.47	34.44	54.00	-19.56	AVG
3	8350.375	57.09	-10.57	46.52	74.00	-27.48	peak
4 *	8350.375	48.55	-10.57	37.98	54.00	-16.02	AVG

Test Mode : g 2462MHz

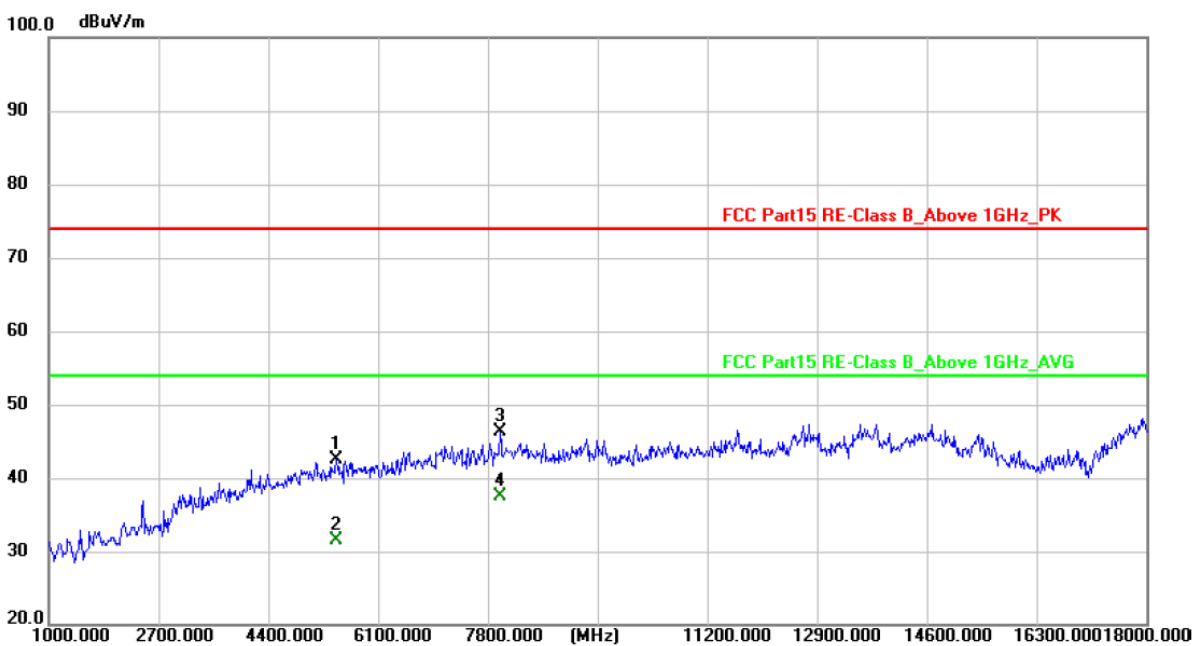
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5392.375	56.87	-14.98	41.89	74.00	-32.11	peak
2	5392.375	47.53	-14.98	32.55	54.00	-21.45	AVG
3	8994.250	54.97	-10.41	44.56	74.00	-29.44	peak
4 *	8994.250	44.57	-10.41	34.16	54.00	-19.84	AVG

Test Mode : g 2462MHz

Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5462.500	57.29	-14.83	42.46	74.00	-31.54	peak
2	5462.500	46.24	-14.83	31.41	54.00	-22.59	AVG
3	7989.125	56.88	-10.66	46.22	74.00	-27.78	peak
4 *	7989.125	48.17	-10.66	37.51	54.00	-16.49	AVG

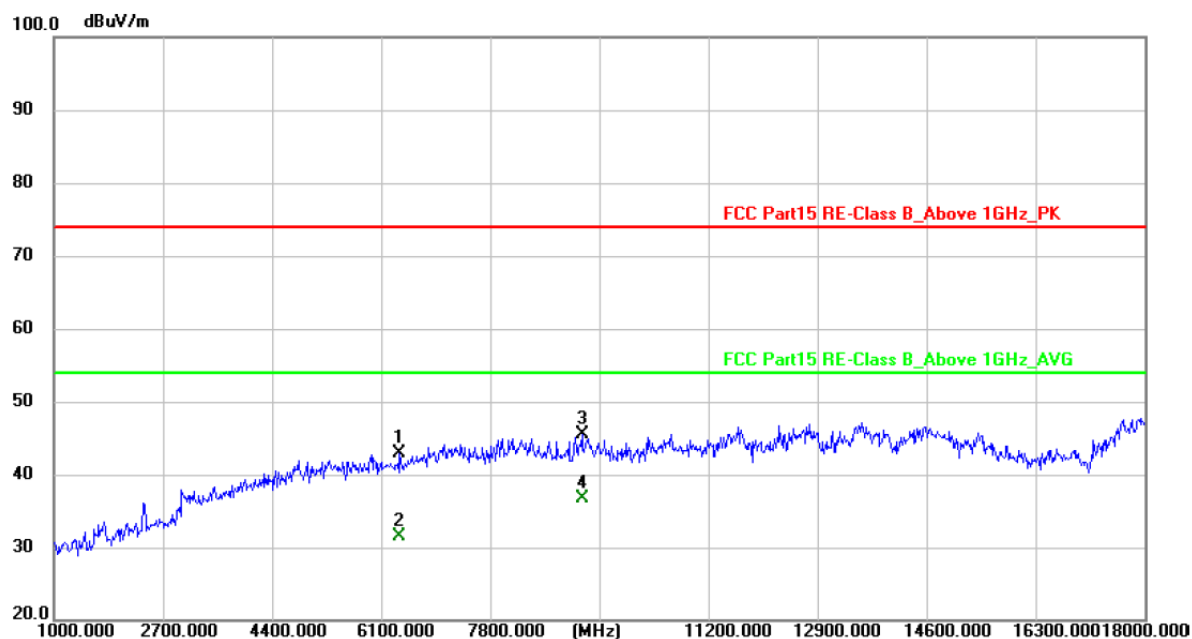
Note:

1. Means other frequency and mode comply with standard requirements and at least have 20dB margin.
2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain.
Result=Reading + Correct Factor, Margin= Result-Limit.
3. During the test, pre-scan the 802.11b,g,n(HT20) mode, and found the 802.11g mode is worse case , the report only record this mode.

Green wide antenna

Test Mode : n20 2412MHz

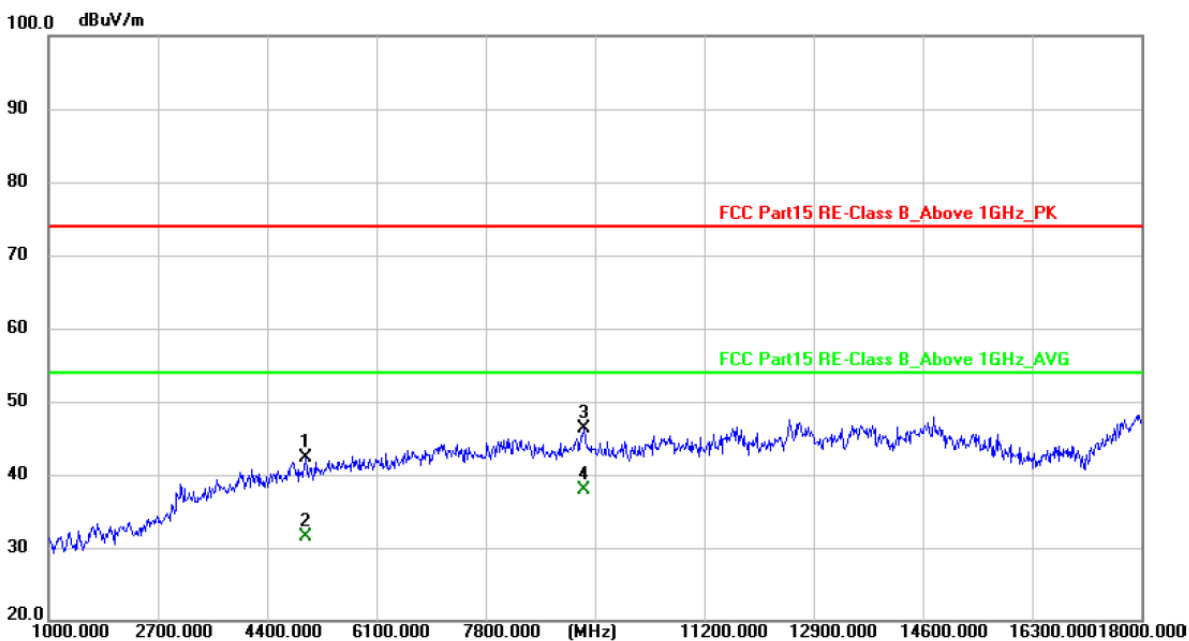
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	6399.625	55.61	-12.76	42.85	74.00	-31.15	peak
2	6399.625	44.23	-12.76	31.47	54.00	-22.53	AVG
3	9232.250	55.86	-10.29	45.57	74.00	-28.43	peak
4 *	9232.250	47.08	-10.29	36.79	54.00	-17.21	AVG

Test Mode : n20 2412MHz

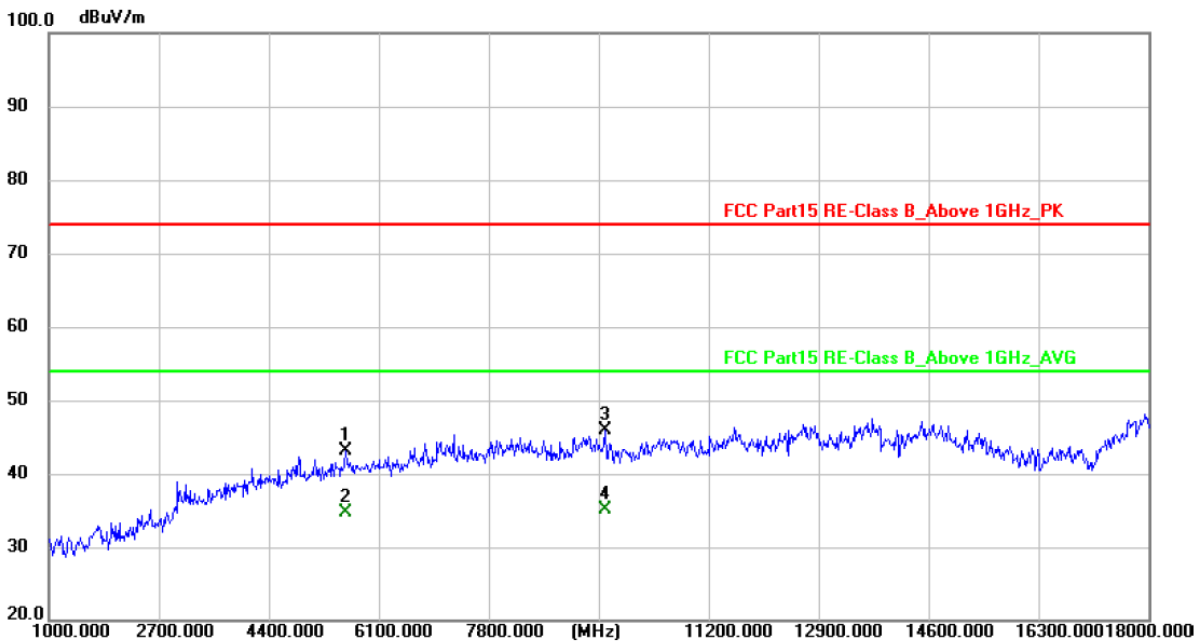
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5009.875	58.07	-15.79	42.28	74.00	-31.72	peak
2	5009.875	47.35	-15.79	31.56	54.00	-22.44	AVG
3	9340.625	56.51	-10.24	46.27	74.00	-27.73	peak
4 *	9340.625	48.19	-10.24	37.95	54.00	-16.05	AVG

Test Mode : n20 2437MHz

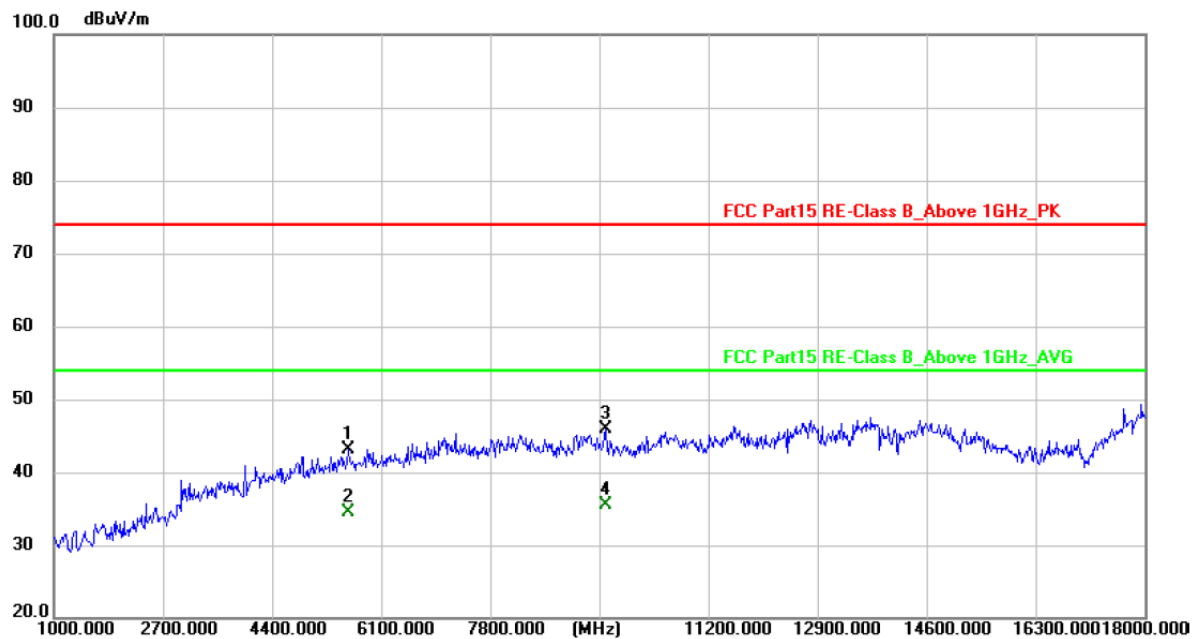
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5600.625	57.63	-14.54	43.09	74.00	-30.91	peak
2	5600.625	49.30	-14.54	34.76	54.00	-19.24	AVG
3	9604.125	55.96	-10.13	45.83	74.00	-28.17	peak
4 *	9604.125	45.24	-10.13	35.11	54.00	-18.89	AVG

Test Mode : n20 2437MHz

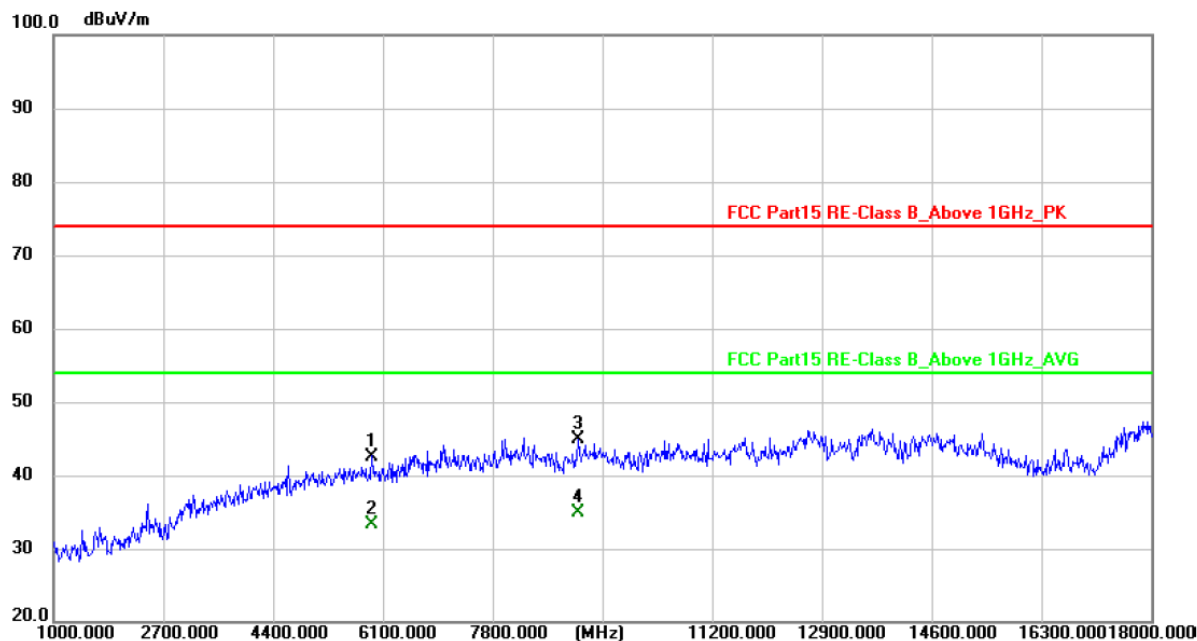
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5600.625	57.63	-14.54	43.09	74.00	-30.91	peak
2	5600.625	49.00	-14.54	34.46	54.00	-19.54	AVG
3	9604.125	55.96	-10.13	45.83	74.00	-28.17	peak
4 *	9604.125	45.64	-10.13	35.51	54.00	-18.49	AVG

Test Mode : n20 2462MHz

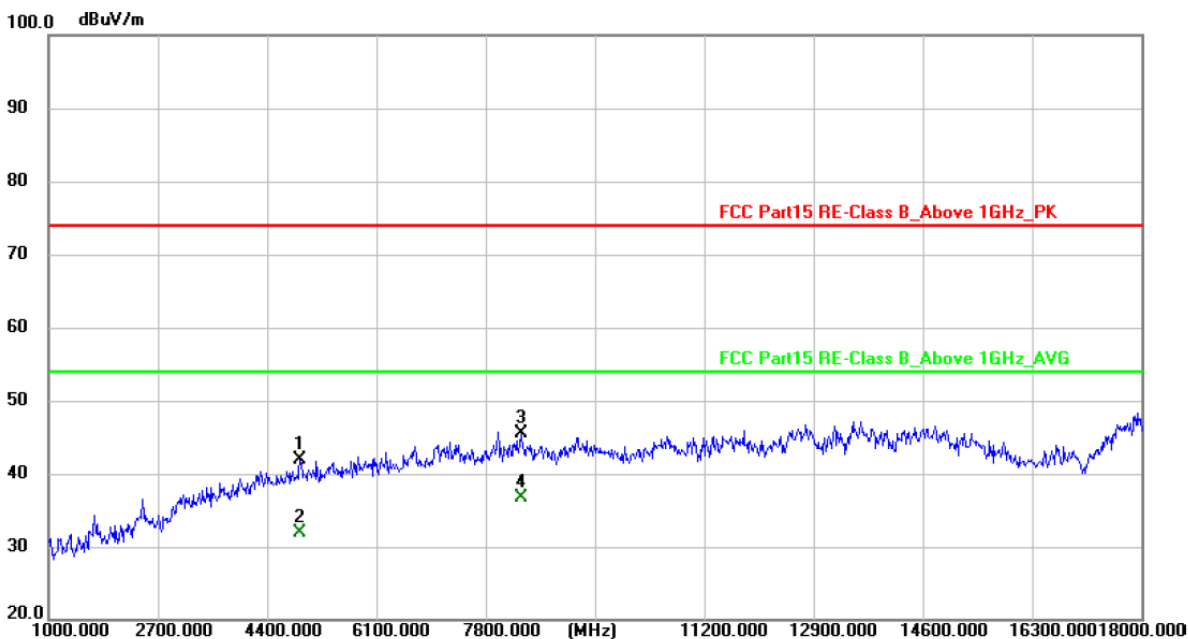
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5932.125	56.43	-13.83	42.60	74.00	-31.40	peak
2	5932.125	47.07	-13.83	33.24	54.00	-20.76	AVG
3	9128.125	55.23	-10.33	44.90	74.00	-29.10	peak
4 *	9128.125	45.19	-10.33	34.86	54.00	-19.14	AVG

Test Mode : n20 2462MHz

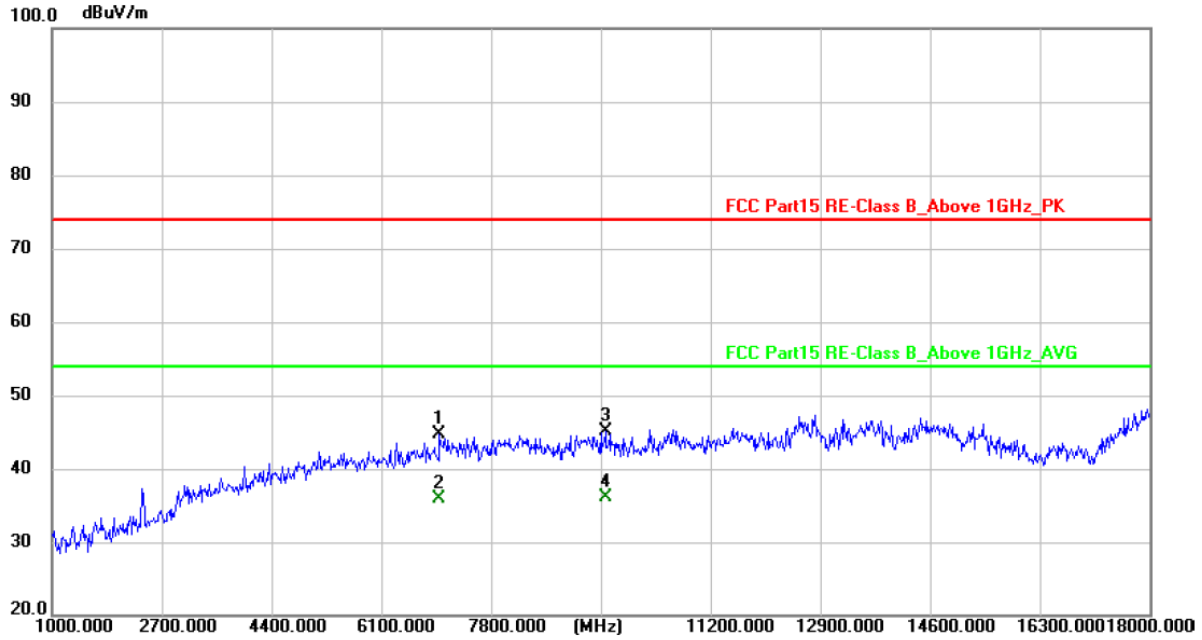
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4922.750	58.00	-16.06	41.94	74.00	-32.06	peak
2	4922.750	47.99	-16.06	31.93	54.00	-22.07	AVG
3	8358.875	56.01	-10.58	45.43	74.00	-28.57	peak
4 *	8358.875	47.30	-10.58	36.72	54.00	-17.28	AVG

Note:

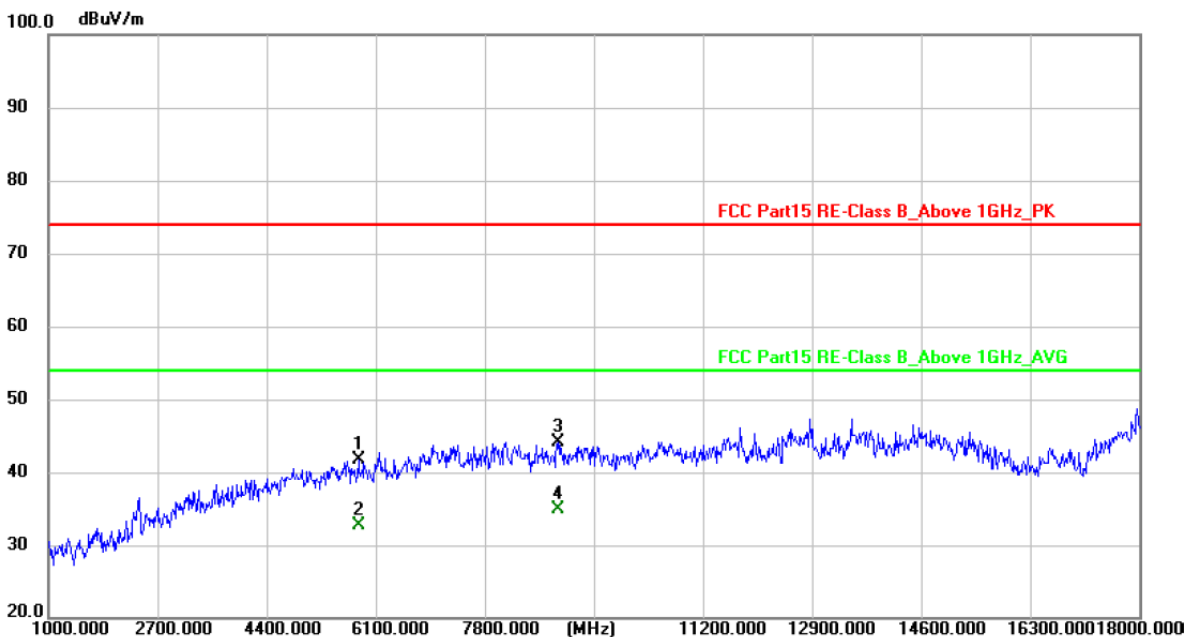
1. Means other frequency and mode comply with standard requirements and at least have 20dB margin.
2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain.
Result=Reading + Correct Factor, Margin= Result-Limit.
3. During the test, pre-scan the 802.11b,g,n(HT20) mode, and found the 802.11 n(HT20) mode is worse case , the report only record this mode.

Black narrow antenna**Test Mode : n20 2412MHz****Polarization: Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	7007.375	55.99	-11.35	44.64	74.00	-29.36	peak
2	7007.375	47.21	-11.35	35.86	54.00	-18.14	AVG
3	9568.000	55.24	-10.15	45.09	74.00	-28.91	peak
4 *	9568.000	46.28	-10.15	36.13	54.00	-17.87	AVG

Test Mode : n20 2412MHz

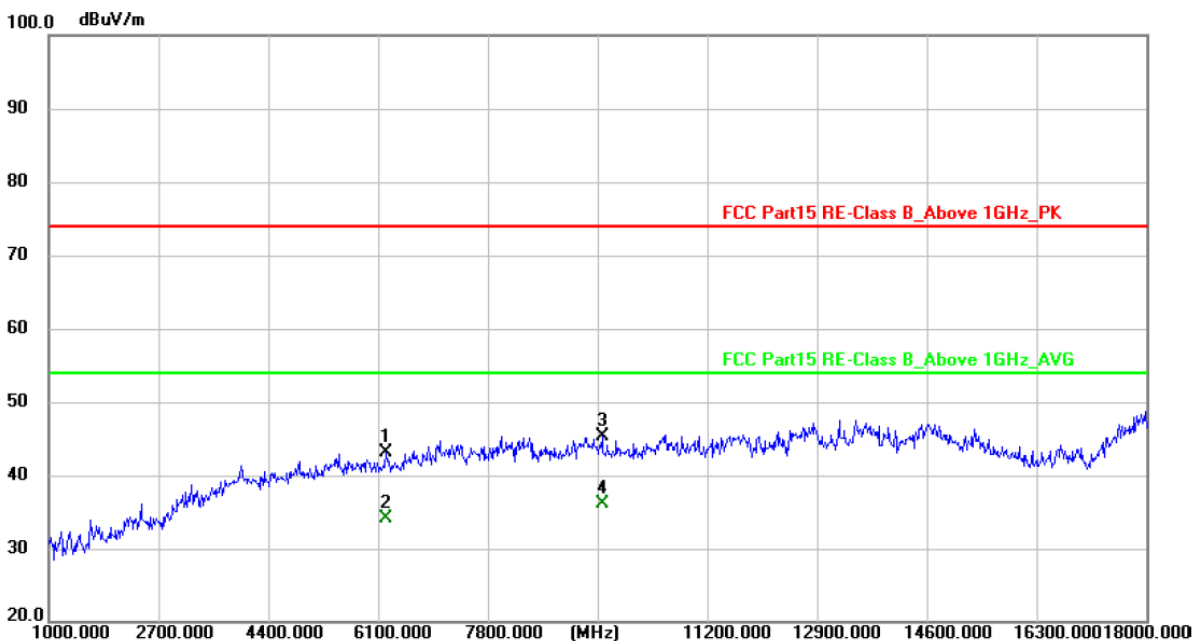
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5834.375	55.76	-14.04	41.72	74.00	-32.28	peak
2	5834.375	46.64	-14.04	32.60	54.00	-21.40	AVG
3	8947.500	54.49	-10.41	44.08	74.00	-29.92	peak
4 *	8947.500	45.22	-10.41	34.81	54.00	-19.19	AVG

Test Mode : n20 2437MHz

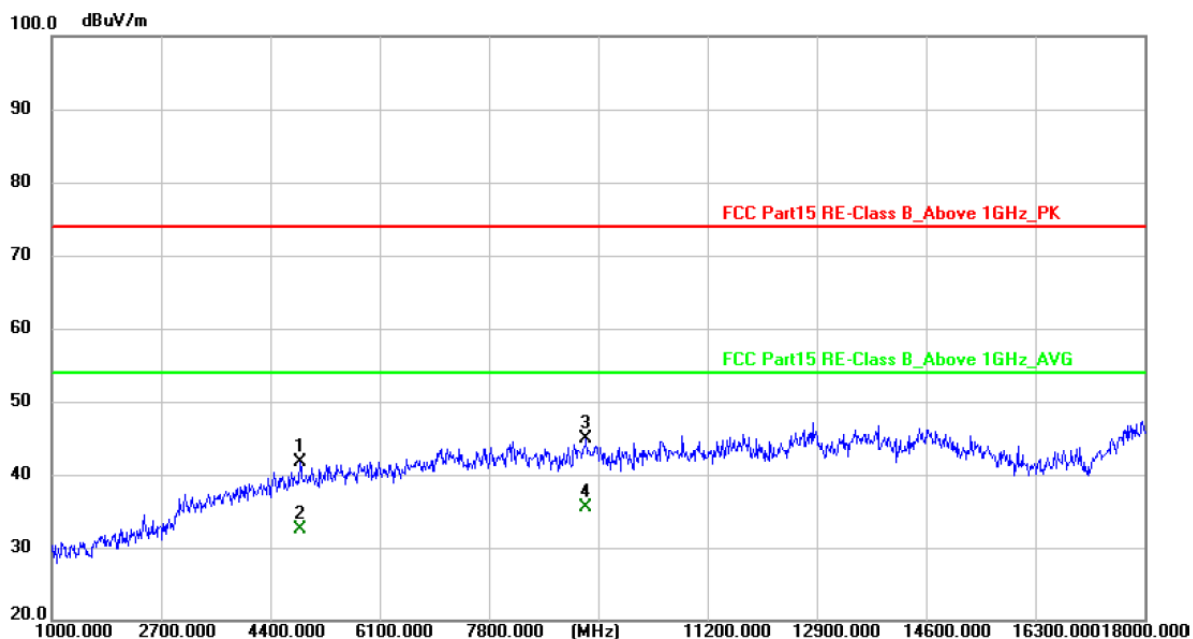
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	6231.750	56.28	-13.15	43.13	74.00	-30.87	peak
2	6231.750	47.34	-13.15	34.19	54.00	-19.81	AVG
3	9580.750	55.39	-10.13	45.26	74.00	-28.74	peak
4 *	9580.750	46.17	-10.13	36.04	54.00	-17.96	AVG

Test Mode : n20 2437MHz

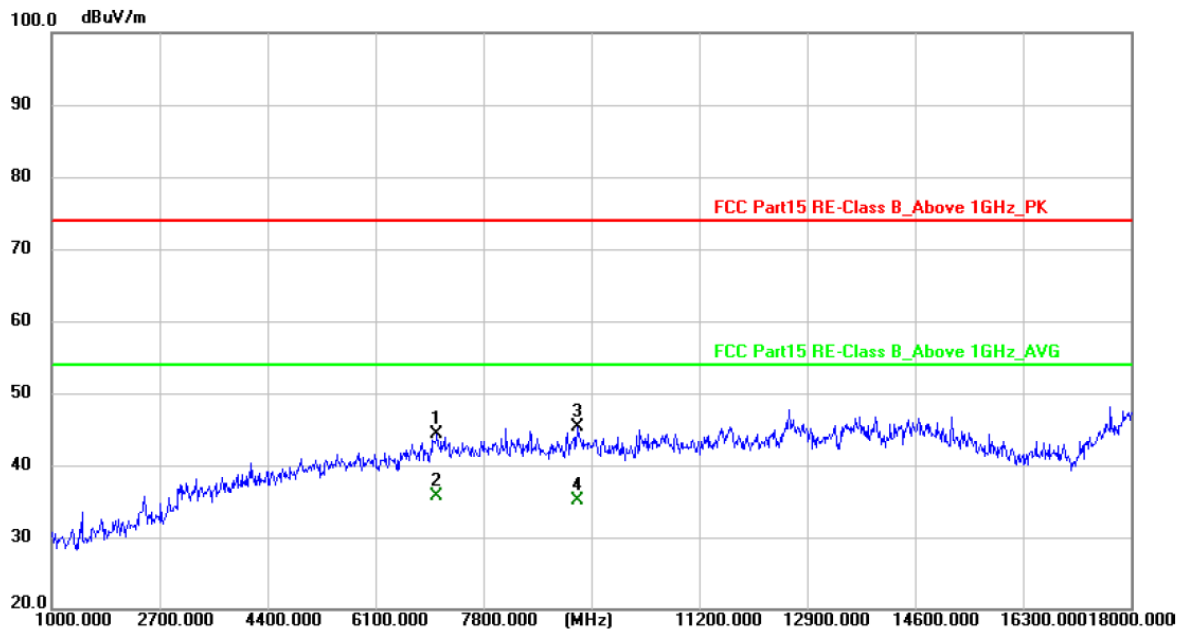
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4873.875	57.99	-16.22	41.77	74.00	-32.23	peak
2	4873.875	48.81	-16.22	32.59	54.00	-21.41	AVG
3	9315.125	55.20	-10.26	44.94	74.00	-29.06	peak
4 *	9315.125	45.68	-10.26	35.42	54.00	-18.58	AVG

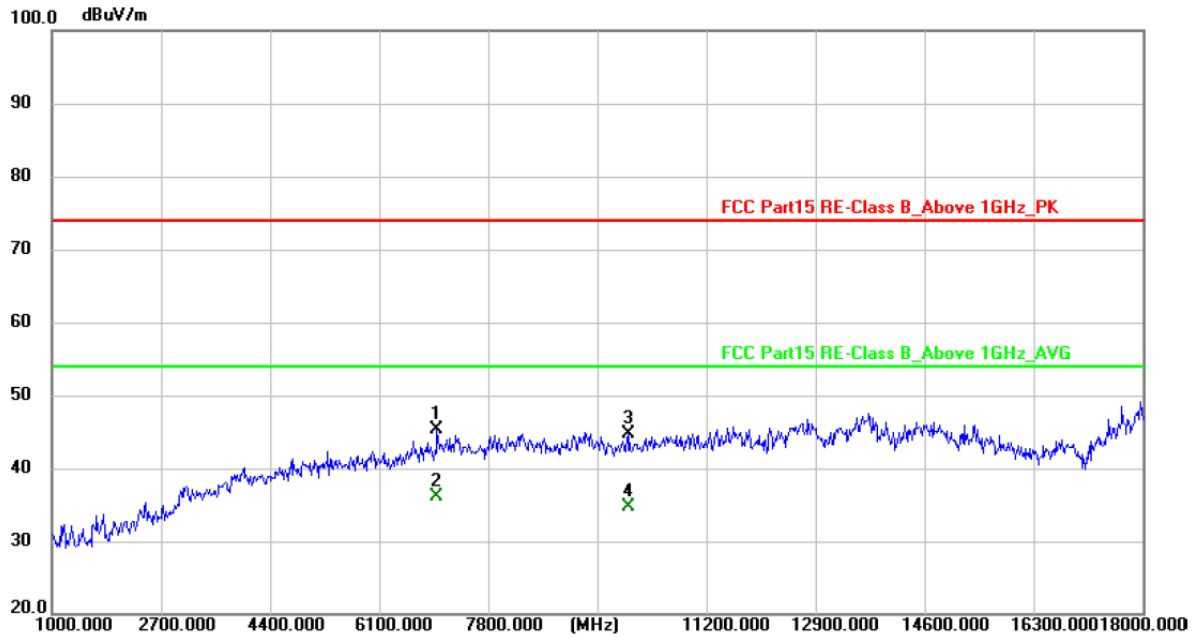
Test Mode : n20 2462MHz

Polarization: Horizontal



Test Mode : n20 2462MHz

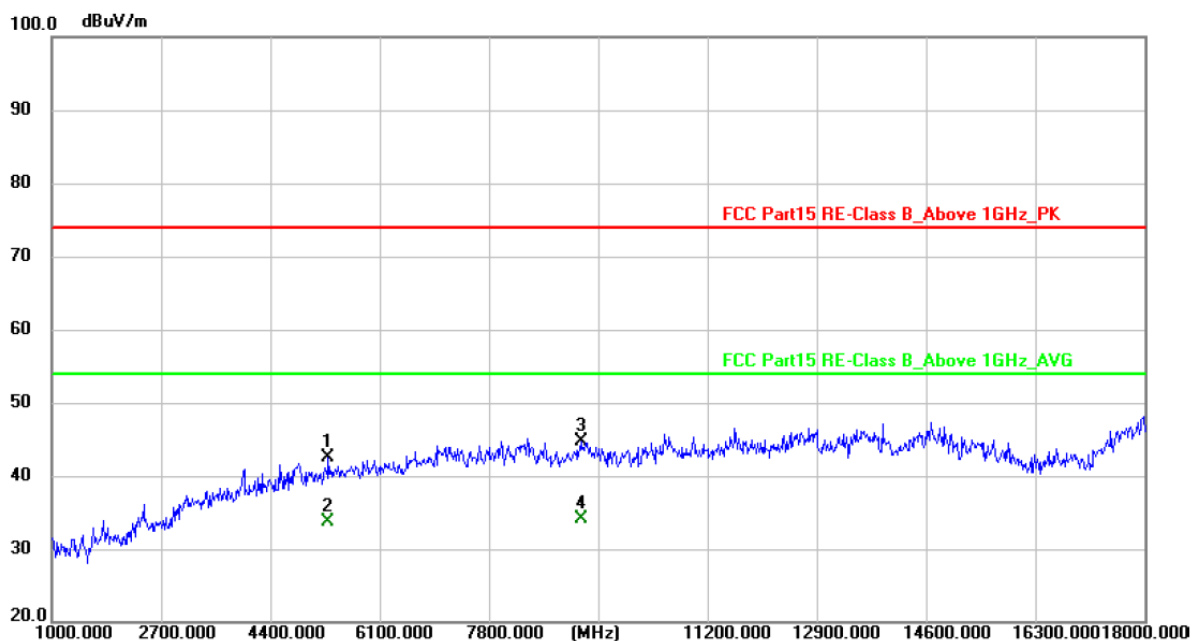
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	7005.250	56.69	-11.36	45.33	74.00	-28.67	peak
2 *	7005.250	47.48	-11.36	36.12	54.00	-17.88	AVG
3	9997.250	54.64	-9.95	44.69	74.00	-29.31	peak
4	9997.250	44.72	-9.95	34.77	54.00	-19.23	AVG

Note:

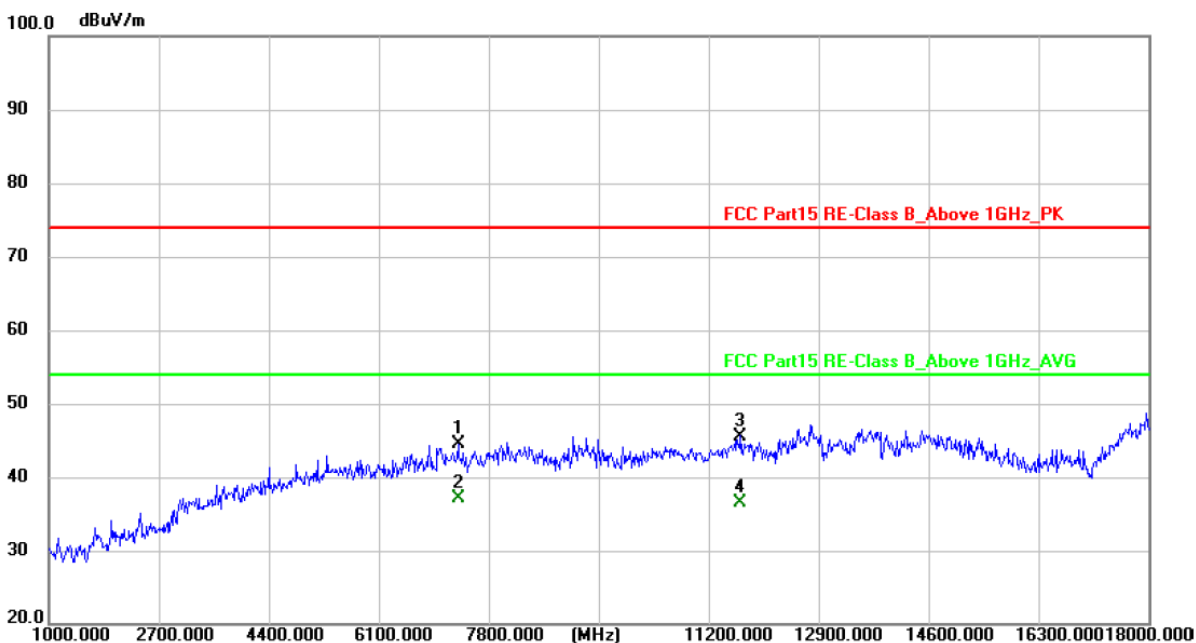
1. Means other frequency and mode comply with standard requirements and at least have 20dB margin.
2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain.
Result=Reading + Correct Factor, Margin= Result-Limit.
3. During the test, pre-scan the 802.11b,g,n(HT20) mode, and found the 802.11 n(HT20) mode is worse case , the report only record this mode.

Black wide antenna**Test Mode : g 2412MHz****Polarization: Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5311.625	57.67	-15.15	42.52	74.00	-31.48	peak
2	5311.625	48.90	-15.15	33.75	54.00	-20.25	AVG
3	9228.000	54.93	-10.29	44.64	74.00	-29.36	peak
4 *	9228.000	44.45	-10.29	34.16	54.00	-19.84	AVG

Test Mode : g 2412MHz

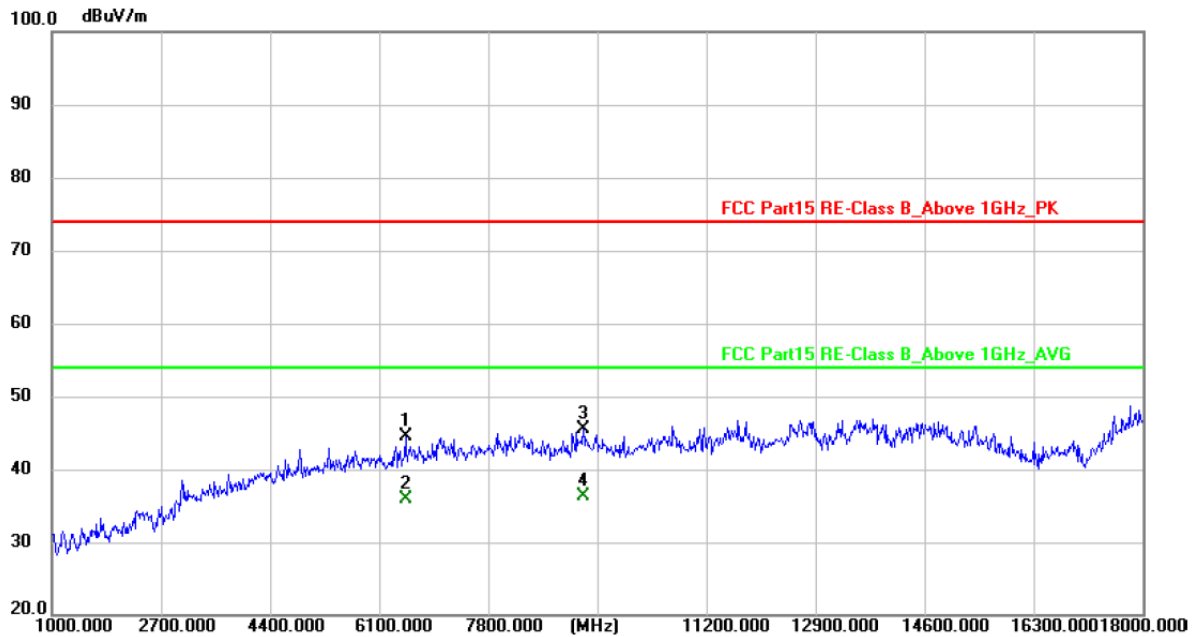
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	7334.625	55.67	-11.13	44.54	74.00	-29.46	peak
2 *	7334.625	48.32	-11.13	37.19	54.00	-16.81	AVG
3	11701.500	54.32	-8.72	45.60	74.00	-28.40	peak
4	11701.500	45.16	-8.72	36.44	54.00	-17.56	AVG

Test Mode : g 2437MHz

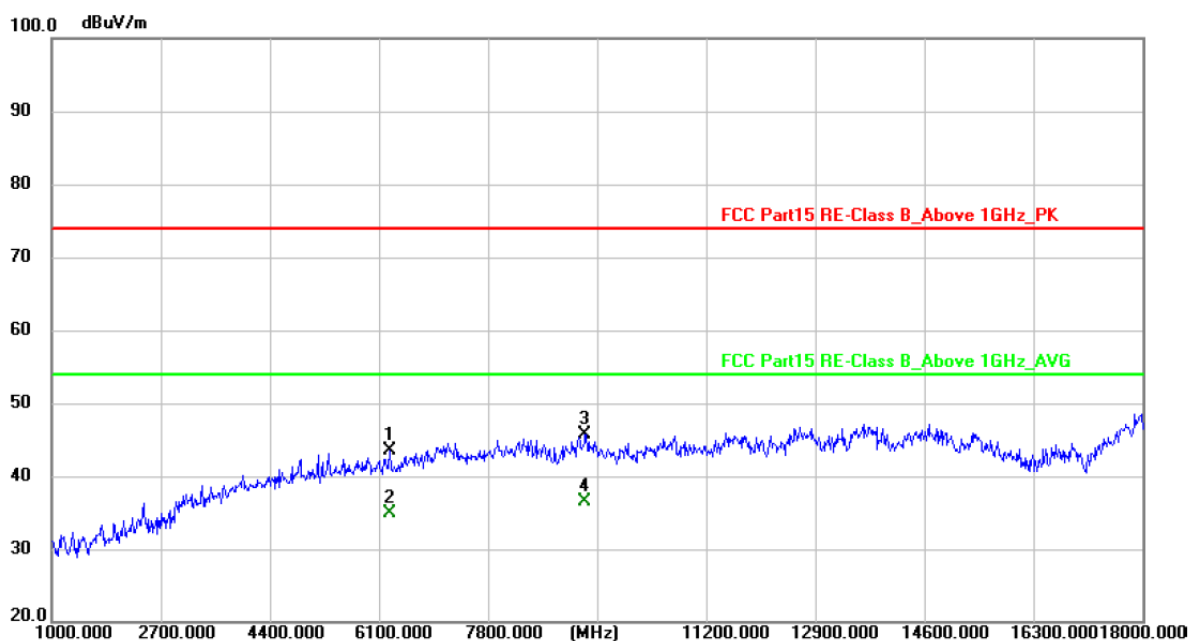
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	6512.250	57.03	-12.49	44.54	74.00	-29.46	peak
2	6512.250	48.47	-12.49	35.98	54.00	-18.02	AVG
3	9283.250	55.76	-10.27	45.49	74.00	-28.51	peak
4 *	9283.250	46.48	-10.27	36.21	54.00	-17.79	AVG

Test Mode : g 2437MHz

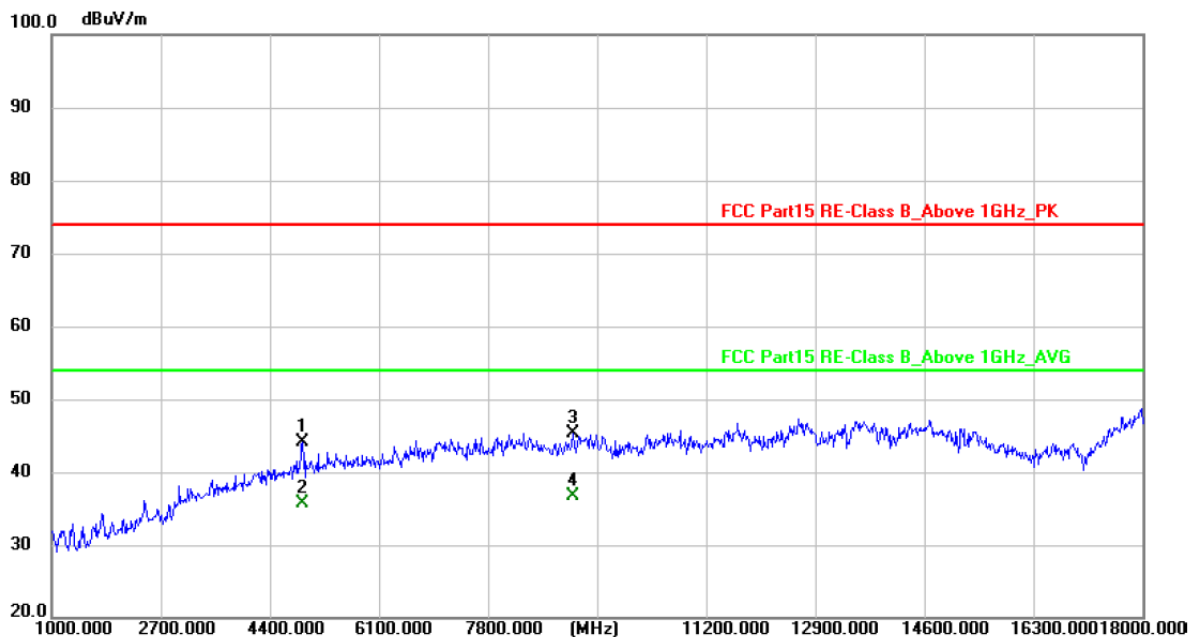
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	6270.000	56.53	-13.06	43.47	74.00	-30.53	peak
2	6270.000	47.88	-13.06	34.82	54.00	-19.18	AVG
3	9313.000	55.98	-10.26	45.72	74.00	-28.28	peak
4 *	9313.000	46.71	-10.26	36.45	54.00	-17.55	AVG

Test Mode : g 2462MHz

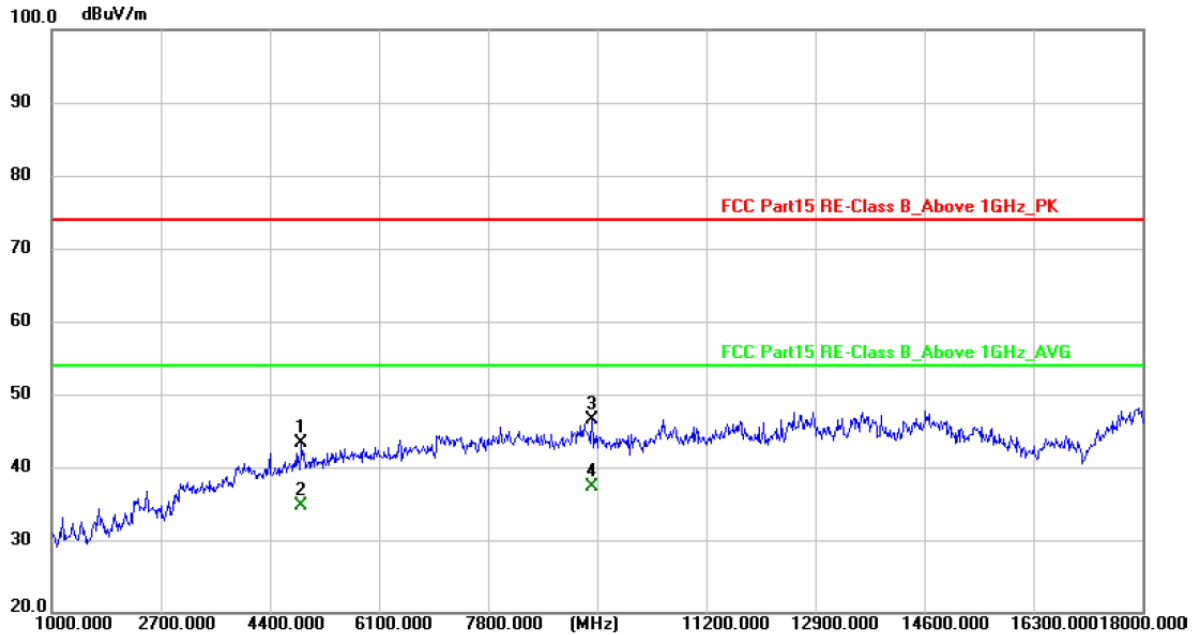
Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4910.000	60.12	-16.10	44.02	74.00	-29.98	peak
2	4910.000	51.81	-16.10	35.71	54.00	-18.29	AVG
3	9126.000	55.58	-10.33	45.25	74.00	-28.75	peak
4 *	9126.000	47.02	-10.33	36.69	54.00	-17.31	AVG

Test Mode : g 2462MHz

Polarization: Vertical

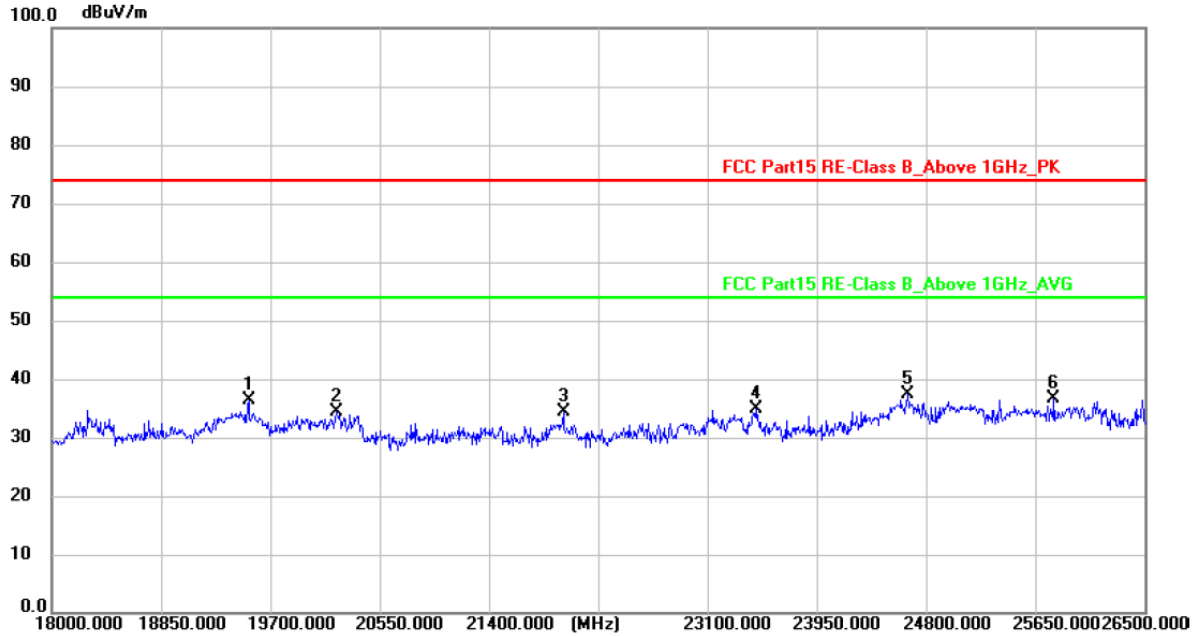


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4899.375	59.35	-16.13	43.22	74.00	-30.78	peak
2	4899.375	50.92	-16.13	34.79	54.00	-19.21	AVG
3	9427.750	56.78	-10.20	46.58	74.00	-27.42	peak
4 *	9427.750	47.46	-10.20	37.26	54.00	-16.74	AVG

Note:

1. Means other frequency and mode comply with standard requirements and at least have 20dB margin.
2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain.
Result=Reading + Correct Factor, Margin= Result-Limit.
3. During the test, pre-scan the 802.11b,g,n(HT20) mode, and found the 802.11g mode is worse case , the report only record this mode.

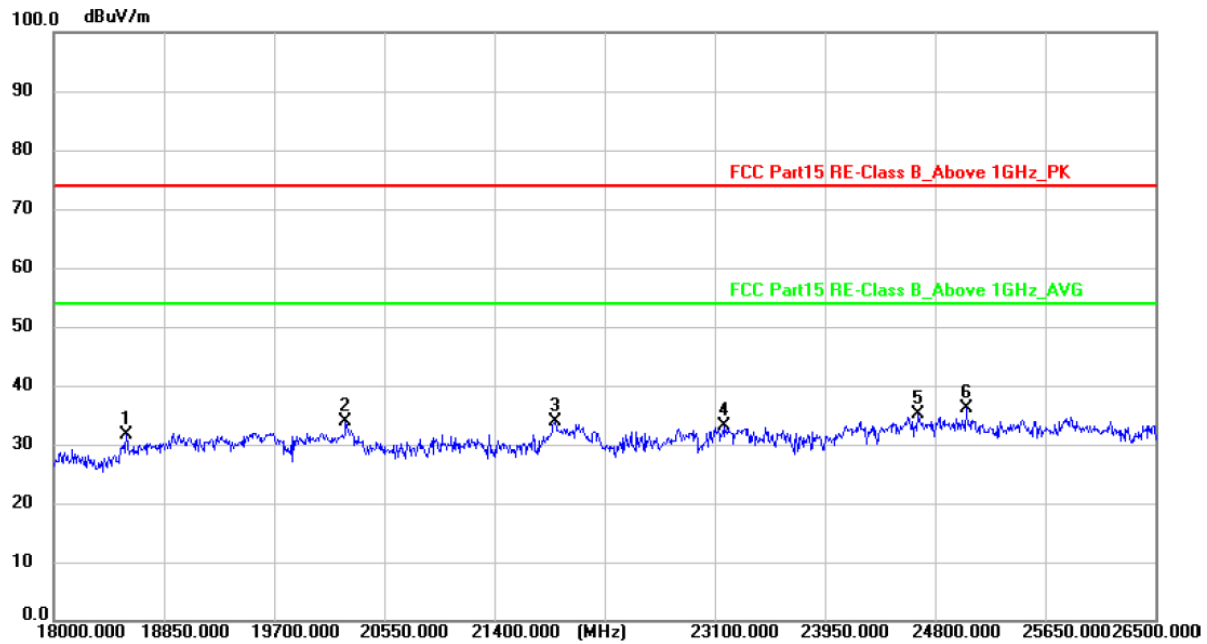
From 18GHz to 25GHz:	
Test Date : 2026.06.15	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : WIFI mode	
Test voltage : DC 3.3V	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out. 4. Data from 18 GHz to 26.5 G and above is background noise, only IEEE 802.11g TX Low channel test data was presented in the report.

Green narrow antenna**Test Mode : g 2412MHz****Polarization: Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	19536.375	43.92	-7.66	36.26	74.00	-37.74	peak
2	20216.375	41.80	-7.46	34.34	74.00	-39.66	peak
3	21978.000	41.70	-7.24	34.46	74.00	-39.54	peak
4	23481.438	40.92	-6.06	34.86	74.00	-39.14	peak
5 *	24662.938	41.95	-4.66	37.29	74.00	-36.71	peak
6	25798.750	41.15	-4.46	36.69	74.00	-37.31	peak

Test Mode : g 2412MHz

Polarization: Vertical

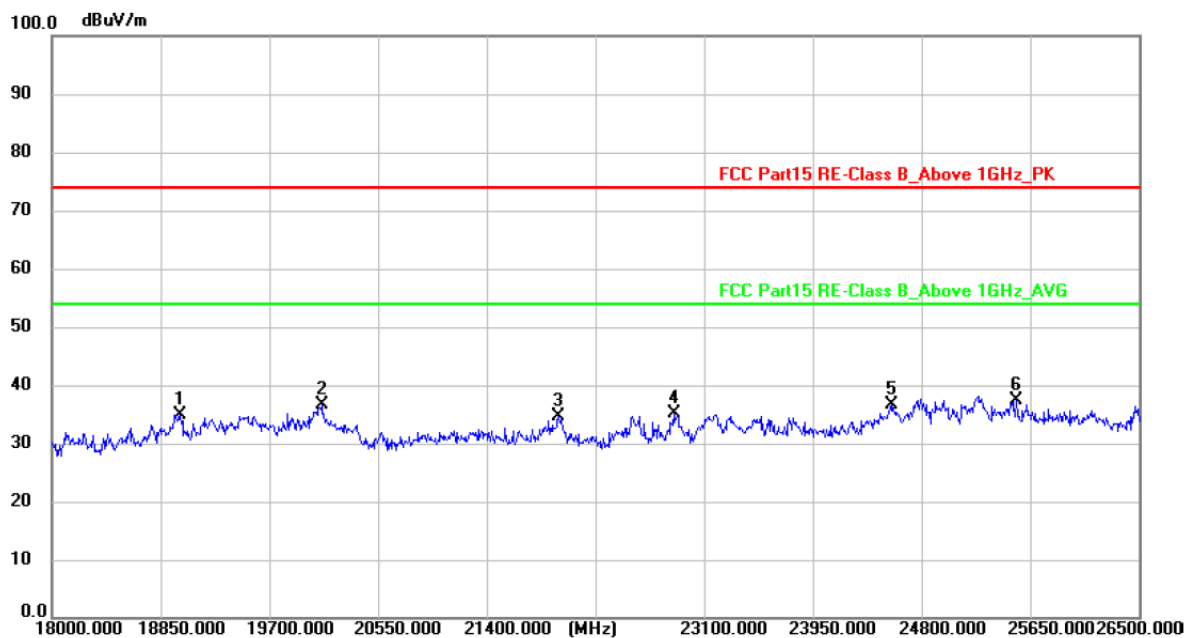


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	18563.125	40.09	-8.52	31.57	74.00	-42.43	peak
2	20258.875	41.39	-7.42	33.97	74.00	-40.03	peak
3	21868.563	41.08	-7.18	33.90	74.00	-40.10	peak
4	23173.313	39.25	-6.18	33.07	74.00	-40.93	peak
5	24667.188	39.68	-4.65	35.03	74.00	-38.97	peak
6 *	25045.438	40.14	-4.07	36.07	74.00	-37.93	peak

Green wide antenna

Test Mode : n20 2412MHz

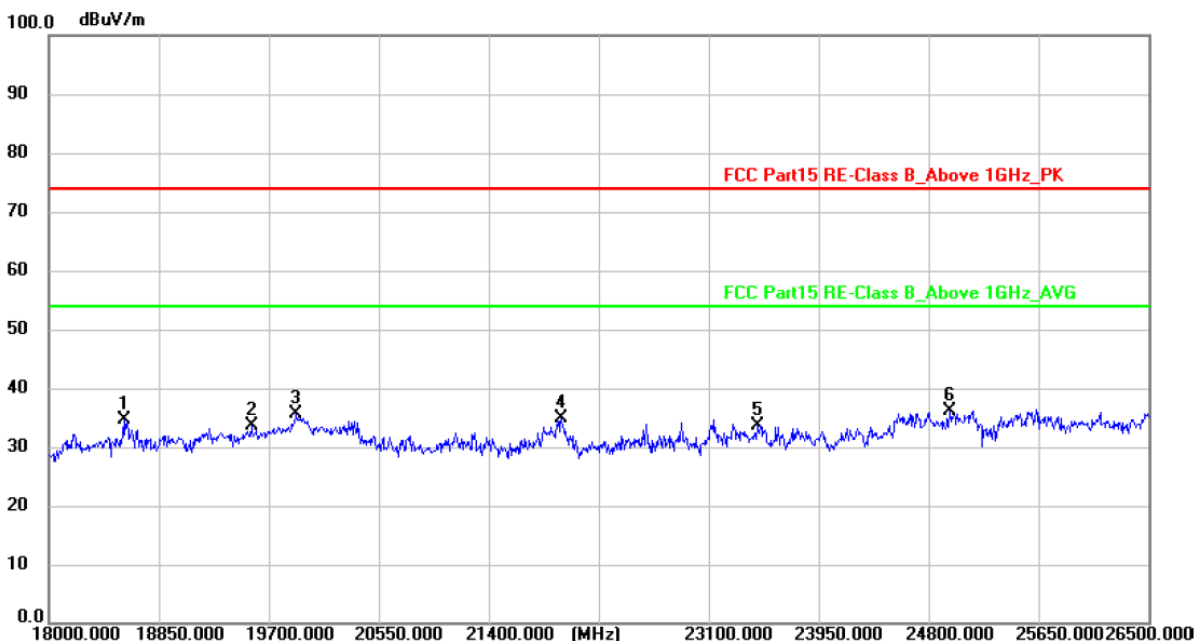
Polarization: Horizontal



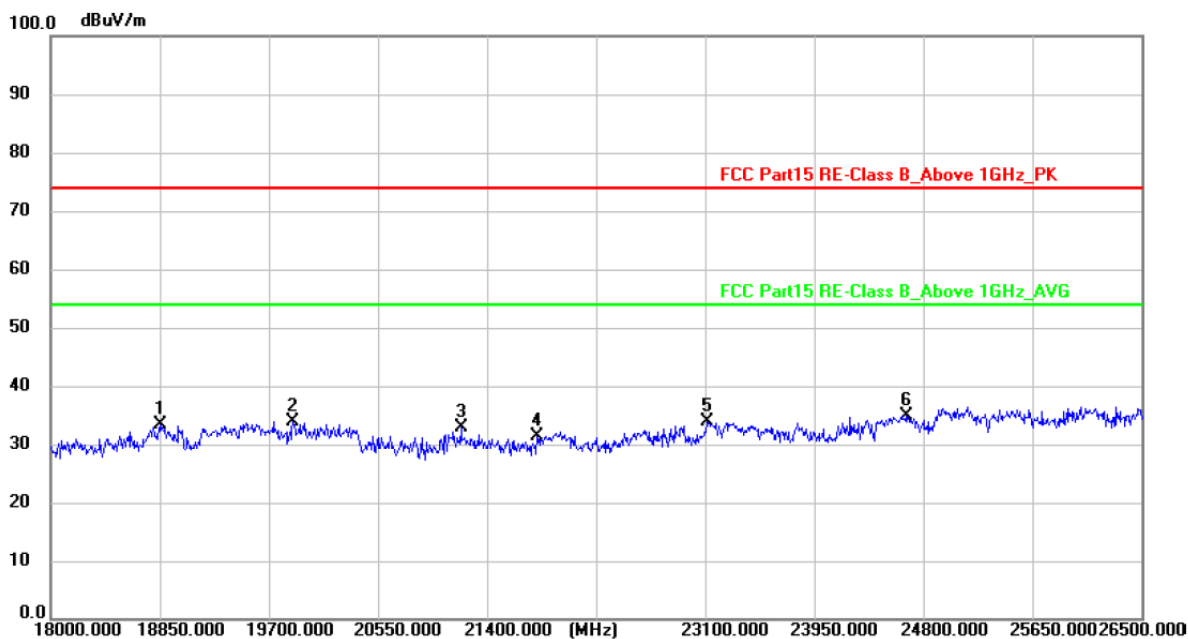
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	19008.313	42.59	-7.64	34.95	74.00	-39.05	peak
2	20111.188	44.22	-7.56	36.66	74.00	-37.34	peak
3	21961.000	41.86	-7.24	34.62	74.00	-39.38	peak
4	22869.438	41.52	-6.39	35.13	74.00	-38.87	peak
5	24562.000	41.38	-4.84	36.54	74.00	-37.46	peak
6 *	25542.688	41.78	-4.33	37.45	74.00	-36.55	peak

Test Mode : n20 2412MHz

Polarization: Vertical



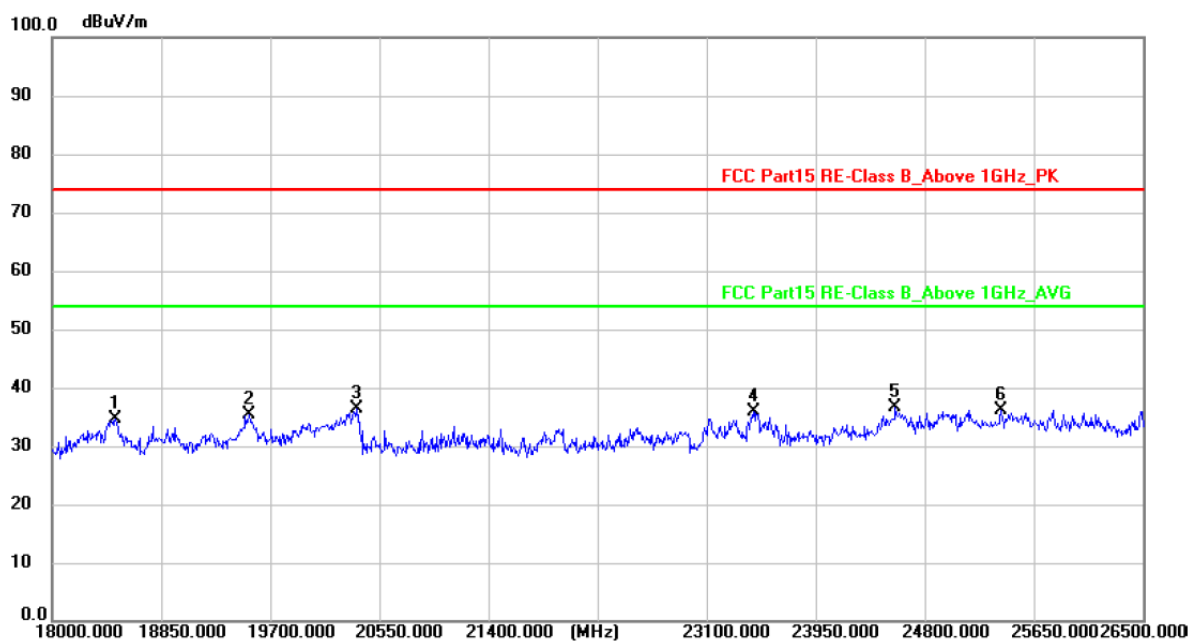
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	18584.375	43.12	-8.48	34.64	74.00	-39.36	peak
2	19566.125	41.33	-7.67	33.66	74.00	-40.34	peak
3	19914.625	43.28	-7.68	35.60	74.00	-38.40	peak
4	21966.313	42.02	-7.24	34.78	74.00	-39.22	peak
5	23482.500	39.69	-6.07	33.62	74.00	-40.38	peak
6 *	24968.938	40.17	-4.11	36.06	74.00	-37.94	peak

Black narrow antenna**Test Mode : n20 2412MHz****Polarization: Horizontal**

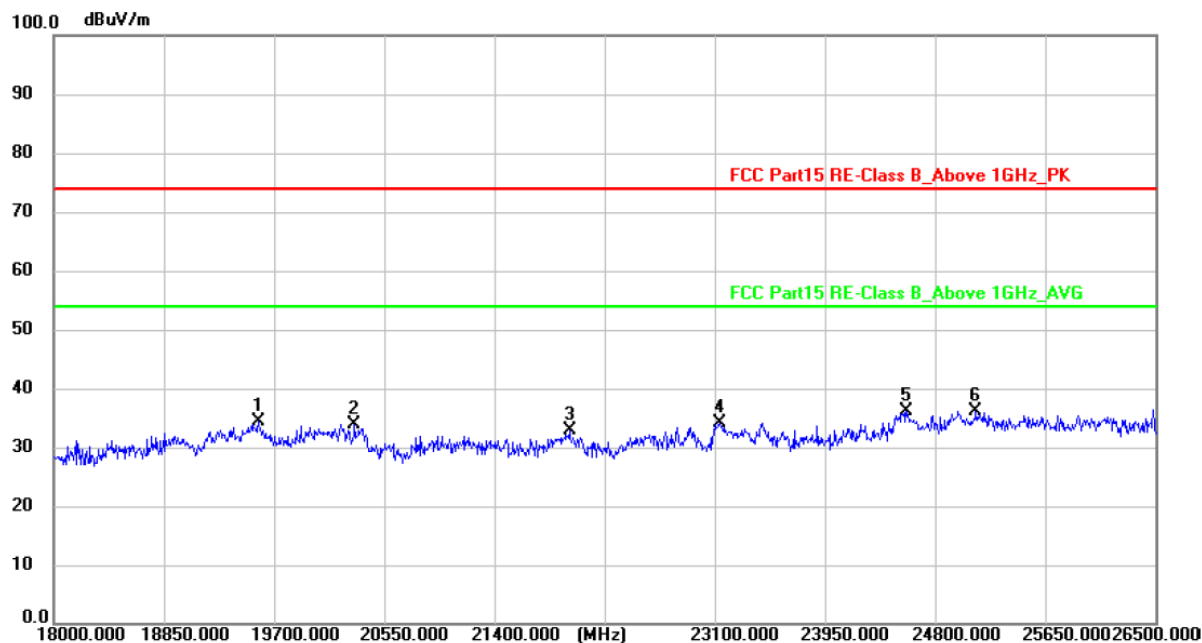
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	18861.688	41.34	-7.93	33.41	74.00	-40.59	peak
2	19892.313	41.53	-7.68	33.85	74.00	-40.15	peak
3	21200.250	39.62	-6.78	32.84	74.00	-41.16	peak
4	21791.000	38.46	-7.13	31.33	74.00	-42.67	peak
5	23118.063	40.09	-6.21	33.88	74.00	-40.12	peak
6 *	24668.250	39.52	-4.65	34.87	74.00	-39.13	peak

Test Mode : n20 2412MHz

Polarization: Vertical



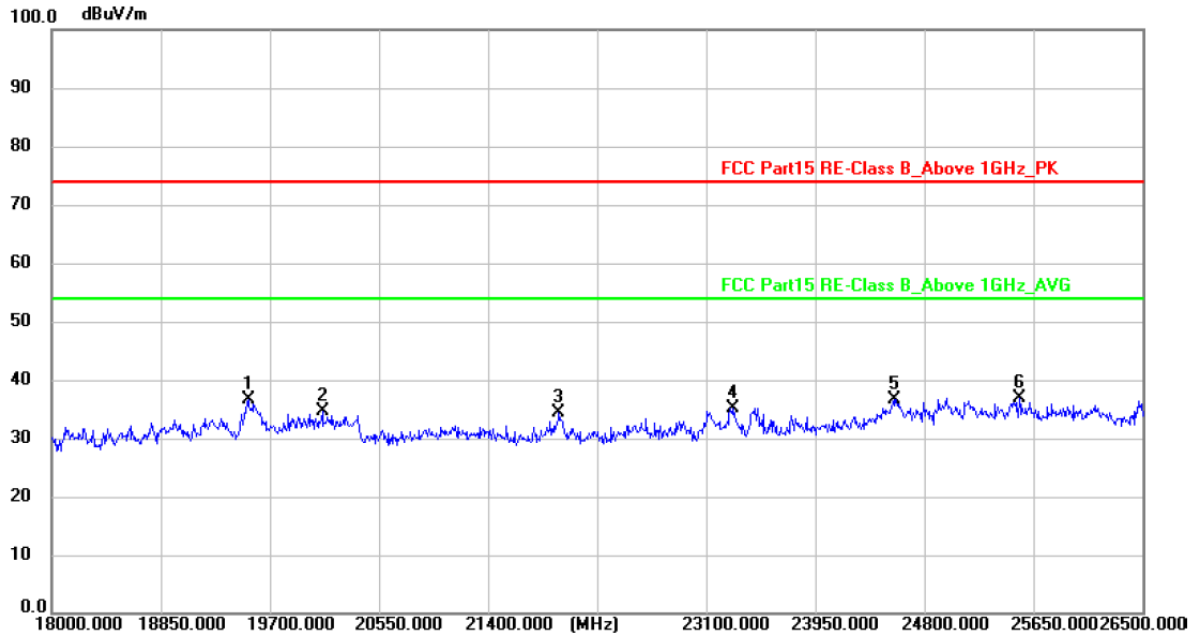
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	18493.000	43.38	-8.66	34.72	74.00	-39.28	peak
2	19543.813	42.98	-7.66	35.32	74.00	-38.68	peak
3	20374.688	43.56	-7.30	36.26	74.00	-37.74	peak
4	23472.938	41.95	-6.06	35.89	74.00	-38.11	peak
5 *	24576.875	41.49	-4.81	36.68	74.00	-37.32	peak
6	25399.250	40.48	-4.26	36.22	74.00	-37.78	peak

Black wide antenna**Test Mode : g 2412MHz****Polarization: Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	19584.188	41.99	-7.66	34.33	74.00	-39.67	peak
2	20323.688	41.24	-7.35	33.89	74.00	-40.11	peak
3	21978.000	40.20	-7.24	32.96	74.00	-41.04	peak
4	23134.000	40.39	-6.20	34.19	74.00	-39.81	peak
5	24581.125	40.99	-4.81	36.18	74.00	-37.82	peak
6 *	25121.938	40.35	-4.12	36.23	74.00	-37.77	peak

Test Mode : g 2412MHz

Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	19530.000	44.22	-7.66	36.56	74.00	-37.44	peak
2	20111.188	42.22	-7.56	34.66	74.00	-39.34	peak
3	21959.938	41.72	-7.24	34.48	74.00	-39.52	peak
4	23316.750	41.22	-6.12	35.10	74.00	-38.90	peak
5	24562.000	41.38	-4.84	36.54	74.00	-37.46	peak
6 *	25542.688	41.28	-4.33	36.95	74.00	-37.05	peak

4. Power Line Conducted Emission

4.1. Test Limits

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 -0.50	66 -56*	56 - 46*
0.50 -5.00	56	46
5.00 -30.00	60	50

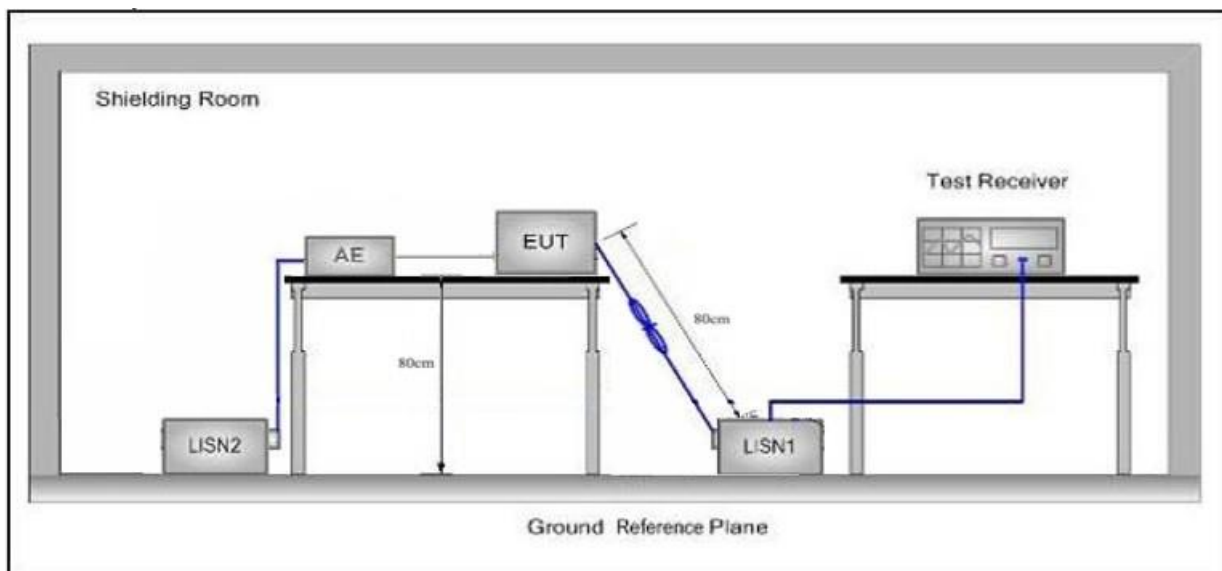
Notes: 1. *Decreasing linearly with logarithm of frequency.
 2. The lower limit shall apply at the transition frequencies.
 3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.2. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10-2020+Cor.1-2023 on Conducted Emission Measurement.

The bandwidth of test receiver is set at 9 kHz.

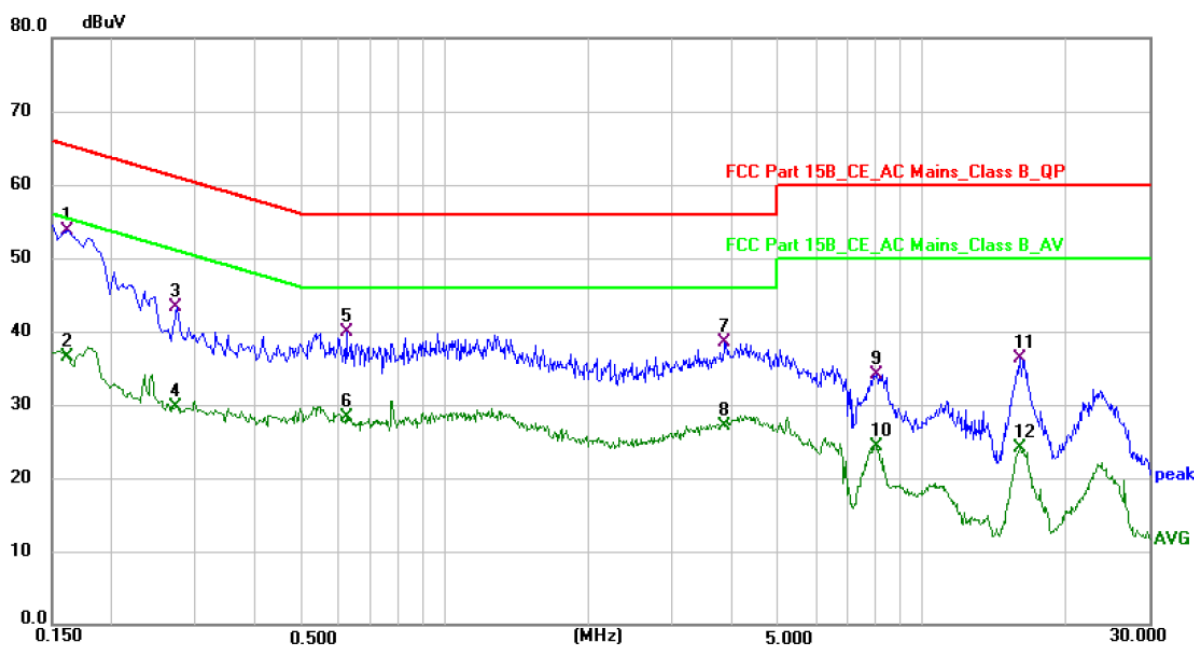
4.3. Test Setup



4.4. Test Results

Test Date	: 2026.06.15	Temperature	: 26℃
Test Engineer	: Felix Pang	Humidity	: 54%
Test Mode	: WIFI mode		
Test Voltage	: DC 3.3V		
Test Results	: PASS		
Note:	1. The test results are listed in next pages.		
	2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out.		
	3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.		
	4. All modes have been tested, and only worst data of b mode, Channel 2412MHz was listed in this report.		

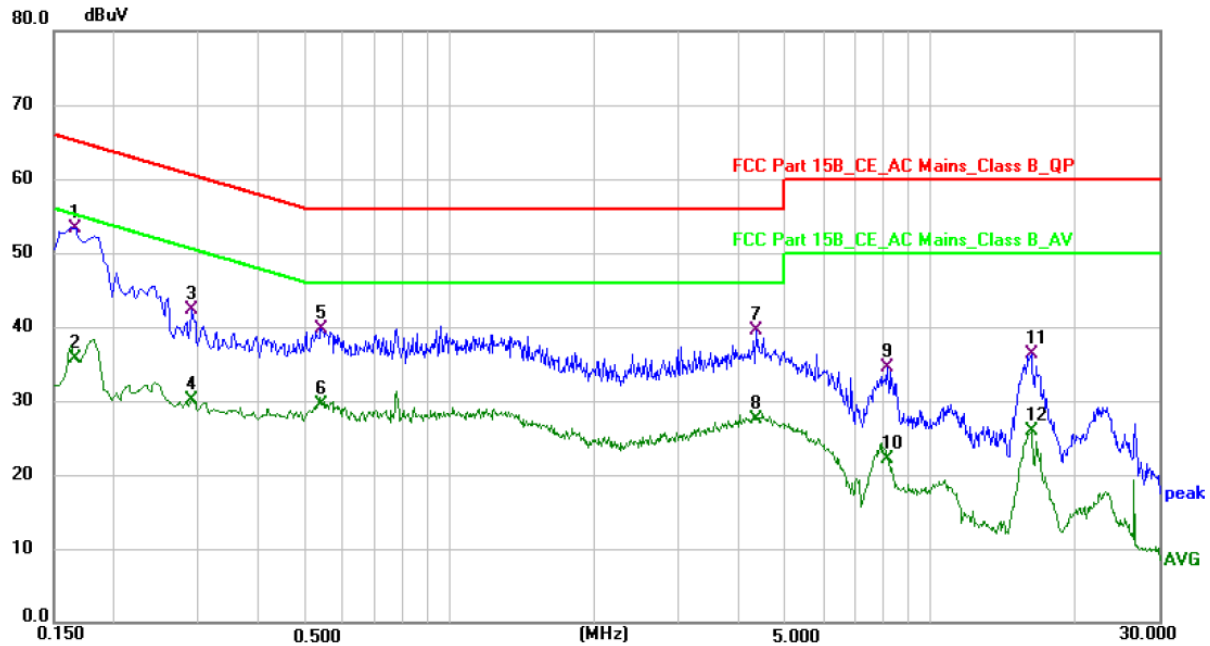
Polarization: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1 *	0.1620	44.10	9.63	53.73	65.36	-11.63	QP
2	0.1620	26.89	9.63	36.52	55.36	-18.84	AVG
3	0.2740	33.90	9.40	43.30	61.00	-17.70	QP
4	0.2740	20.37	9.40	29.77	51.00	-21.23	AVG
5	0.6220	30.35	9.52	39.87	56.00	-16.13	QP
6	0.6220	18.78	9.52	28.30	46.00	-17.70	AVG
7	3.8740	28.69	9.81	38.50	56.00	-17.50	QP
8	3.8740	17.33	9.81	27.14	46.00	-18.86	AVG
9	8.0380	24.40	9.73	34.13	60.00	-25.87	QP
10	8.0380	14.62	9.73	24.35	50.00	-25.65	AVG
11	16.1020	26.58	9.76	36.34	60.00	-23.66	QP
12	16.1020	14.25	9.76	24.01	50.00	-25.99	AVG

Note: Level = Reading + Factor Margin = Level - Limit

Polarization: N



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1 *	0.1660	43.75	9.54	53.29	65.16	-11.87	QP
2	0.1660	26.12	9.54	35.66	55.16	-19.50	AVG
3	0.2900	32.93	9.40	42.33	60.52	-18.19	QP
4	0.2900	20.66	9.40	30.06	50.52	-20.46	AVG
5	0.5420	29.99	9.74	39.73	56.00	-16.27	QP
6	0.5420	19.77	9.74	29.51	46.00	-16.49	AVG
7	4.3420	29.81	9.60	39.41	56.00	-16.59	QP
8	4.3420	17.83	9.60	27.43	46.00	-18.57	AVG
9	8.1580	24.87	9.58	34.45	60.00	-25.55	QP
10	8.1580	12.44	9.58	22.02	50.00	-27.98	AVG
11	16.2540	26.78	9.45	36.23	60.00	-23.77	QP
12	16.2540	16.40	9.45	25.85	50.00	-24.15	AVG

Note: Level = Reading + Factor Margin = Level - Limit

5. Out-of-band Emissions

5.1. Test Limits

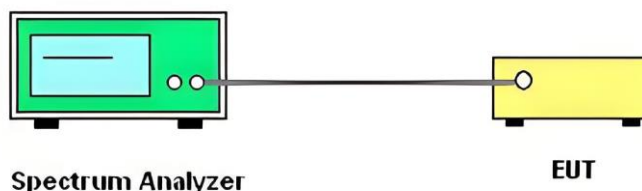
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.

5.2. Test Procedure

ANSI C63.10-2020+Cor.1-2023 Section 11.11.1, Section 11.11.2, Section 11.11.3

Connect the transmitter output to spectrum analyzer using a low loss RF cable, and set the spectrum analyzer to RBW=100 kHz, VBW= 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, band edge and out-of-band emissions.

5.3. Test Setup



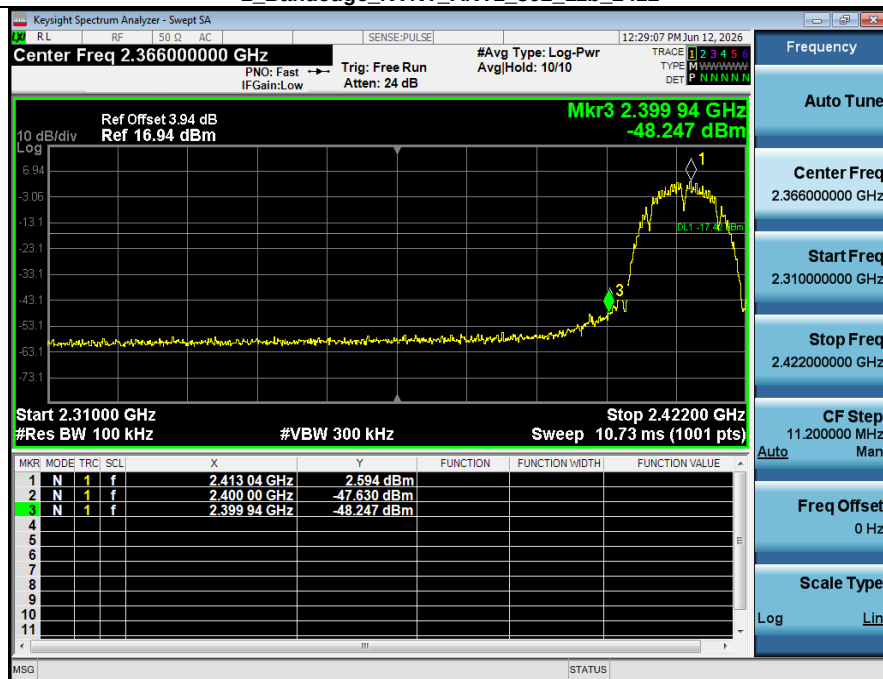
5.4. Test Results

PASS.

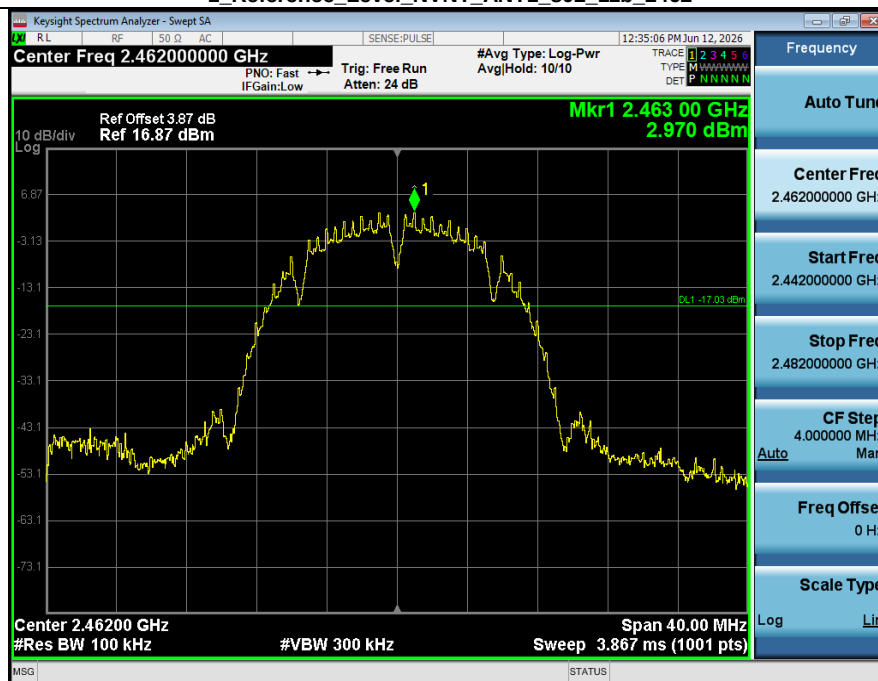
The test results are listed in next pages.

Band Edge: Pass

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	2.578	-48.247	-17.422	Pass
NVNT	ANT1	802.11b	2462.00	2495.344	2.970	-52.548	-17.030	Pass
NVNT	ANT1	802.11g	2412.00	2399.936	-2.793	-39.218	-22.793	Pass
NVNT	ANT1	802.11g	2462.00	2488.240	-2.112	-55.068	-22.112	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.936	-4.075	-41.166	-24.075	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	-3.065	-55.063	-23.065	Pass

1. Reference Level NVNT_ANT1_802_11b_2412**2. Bandedge NVNT_ANT1_802_11b_2412**

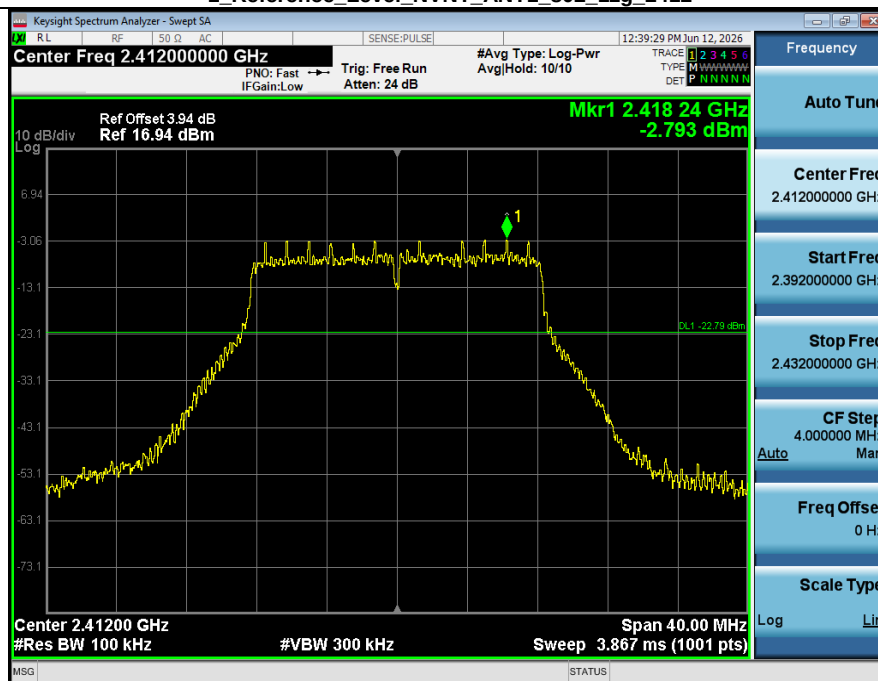
1_Reference_Level_NVNT_ANT1_802_11b_2462



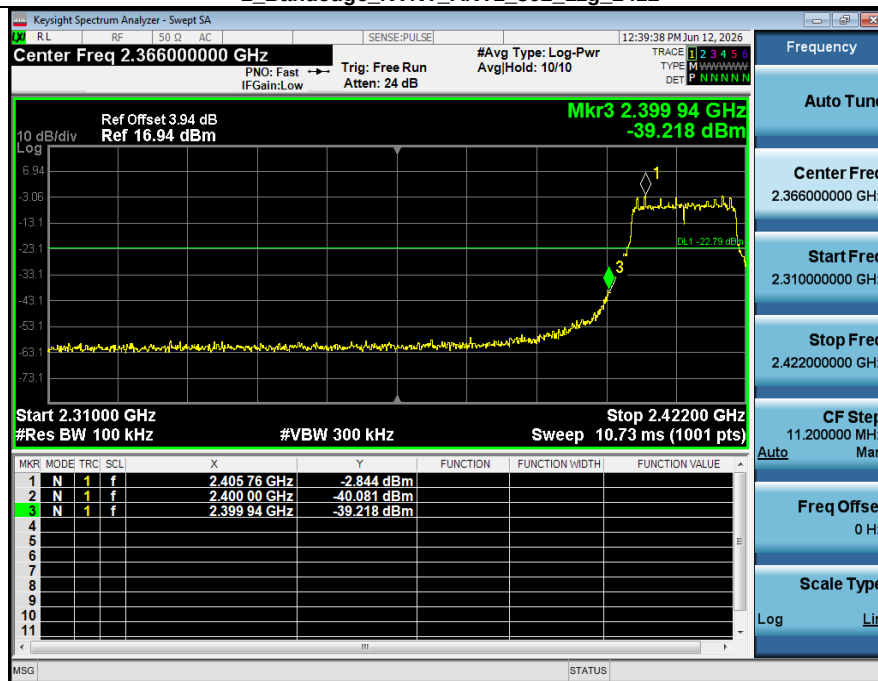
2_Bandedge_NVNT_ANT1_802_11b_2462



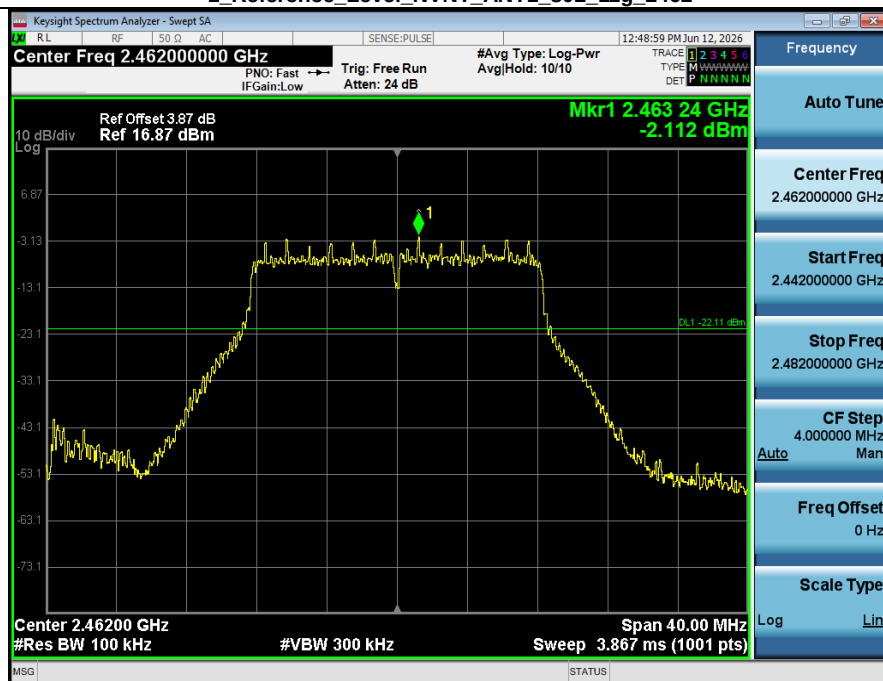
1_Reference_Level_NVNT_ANT1_802_11g_2412



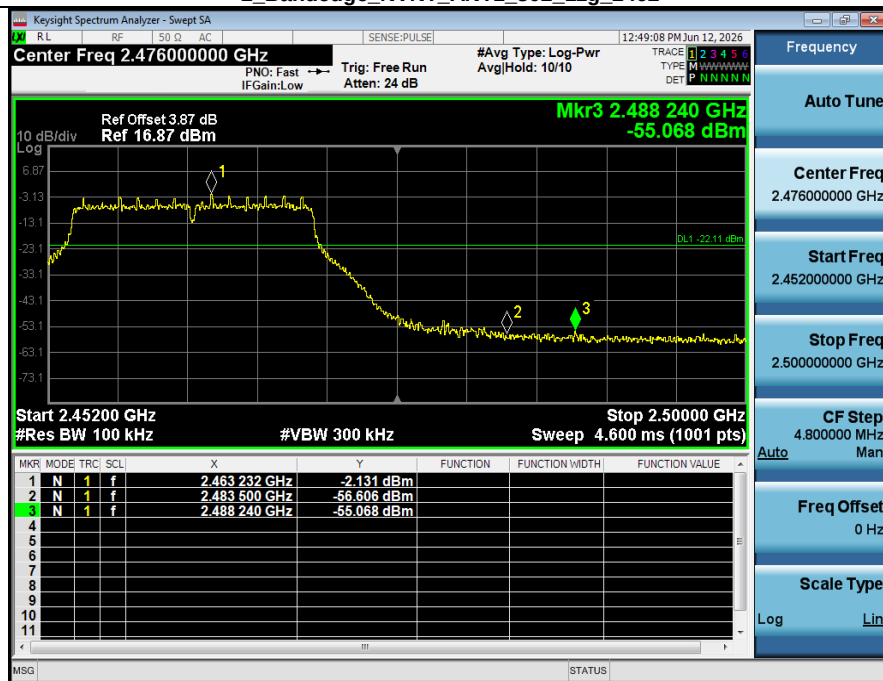
2_Bandedge_NVNT_ANT1_802_11g_2412



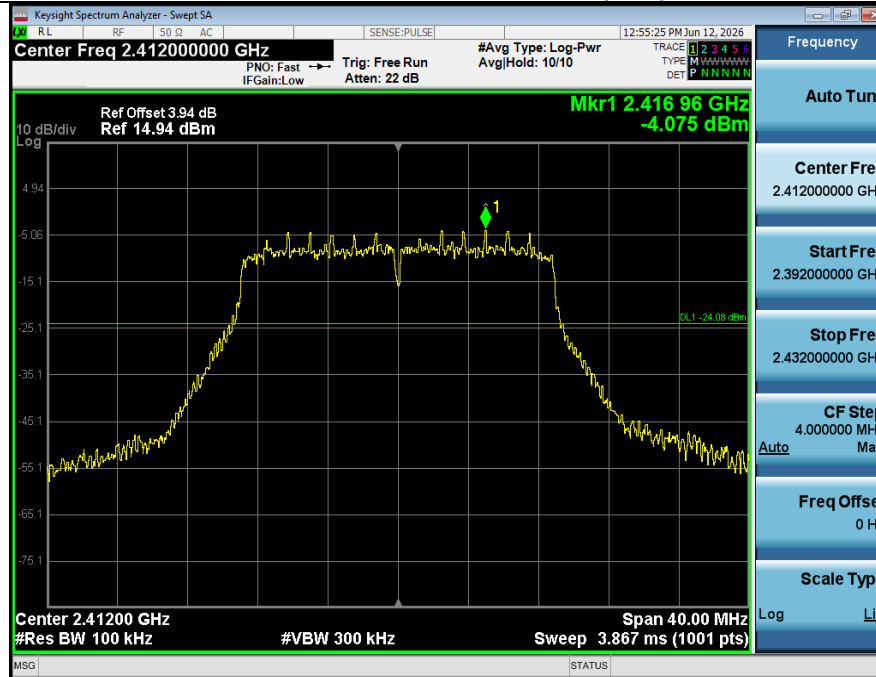
1_Reference_Level_NVNT_ANT1_802_11g_2462



2_Bandedge_NVNT_ANT1_802_11g_2462



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412

