TEST REPORT

Application No.:	SUCR2601000069MO
FCC ID:	XMR2025FCM363X
Applicant:	Quectel Wireless Solutions Co., Ltd.
Address of Applicant:	No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China
Manufacturer:	Quectel Wireless Solutions Co., Ltd.
Address of Manufacturer:	No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China
Equipment Under Test (EUT):	
EUT Name:	Wi-Fi & Bluetooth Module
Model No.:	FCM363X-L
Trade Mark:	QUECTEL
Standard(s) :	47 CFR Part 15, Subpart C 15.247
Date of Receipt:	2026-01-26
Date of Test:	2026-02-03 to 2026-02-03
Date of Issue:	2026-02-04
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

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Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	2026-02-04	/

Authorized for issue by:				
Tested By		Nature Shen **Nature Shen/Project Engineer**		
Approved By		Cedar Cheng **Cedar Cheng /Reviewer**		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)	Pass

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2020) Section 6.10.5 & 11.12	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions Below 1GHz		ANSI C63.10 (2020) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions Above 1GHz		ANSI C63.10 (2020) Section 6.6 & 11.12	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Maximum Conducted Output Power		ANSI C63.10 (2020) Section 11.9.2	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Minimum 6dB Bandwidth		ANSI C63.10 (2020) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Power Spectral Density		ANSI C63.10 (2020) Section 11.10.3	47 CFR Part 15, Subpart C 15.247(e)	Pass (Note1)
Conducted Band Edges Measurement		ANSI C63.10 (2020) Section 6.10.4	47 CFR Part 15, Subpart C 15.247(d)	Pass (Note1)
Conducted Spurious Emissions		ANSI C63.10 (2020) Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass (Note1)

Note1:

This test report (Report No.: SUCR260100006902 issue on 2026/2/4) is based on the original test report (Report No.: PD20250047-R3B issue on 2025/7/21).
Review this report and original report, this report just changing the parts according to the declaration letter from client.
Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report only EIRP, Radiated Spurious Emissions and 6dB Bandwidth Measurement is performed based on the worst case of the original report with report number PD20250047-R3B issue on 2025/7/21, other test data in this report are based on the previous report with report number PD20250047-R3B issue on 2025/7/21.

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4 General Information

4.1 Details of E.U.T.

Power supply:	3.3V	
Operation Frequency:	802.11b/g/n(HT20)/ax(HEW20): 2412MHz to 2462MHz	
Modulation Type:	802.11b: DSSS (DBPSK, DQPSK, CCK); 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024-QAM)	
Number of Channels:	802.11b/g/n(HT20)/ax(HEW20):11	
Channel Spacing:	5MHz	
Antenna Type:	PCB Antenna	
Antenna Gain:	2.4dBi (Provided by the manufacturer)	
Antenna Number:	1	
Hardware Version	R1.1	R1.2
Software Version	FCM363XLAAR02A02M08	
Remark:The client claims FCM363X-L(R1.0), FCM363X-L(R1.1), and FCM363X-L(R1.2) all use the NXP chip RW610UK/A2IZ, and they share the same chip baseline and PCB. The main differences are: FCM363X-L(R1.0) supports 8M flash and does not support PSRAM; FCM363X-L(R1.1) supports 8M flash and 8M PSRAM; FCM363X-L(R1.2) supports 16M flash and 8M PSRAM.		

4.2 Environment Parameter

Environment Parameter	Selected Values During Tests	
Relative Humidity	Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	25	3.3

Note:

NV:Normal Voltage	LV:Low Extreme Test Voltage	HV:High Extreme Test Voltage
NT:Normal Temperature	LT:Low Extreme Test Temperature	HT:High Extreme Test Temperature

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--
The EUT has been tested as an independent unit.			

4.4 Measurement Uncertainty & Decision Rule

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 7.25 x 10^{-8}
2	Duty cycle	± 0.37%
3	Occupied Bandwidth	± 3%
4	Conduction emission	± 3.0dB (150kHz to 30MHz)
5	RF conducted power	± 0.75dB
6	RF power density	± 2.84dB
7	Conducted Spurious emissions	± 0.75dB
8	RF Radiated power	±1.56dB (9KHz-30MHz)
		±4.80dB (30MHz-1GHz)
		±4.80dB (1GHz-18GHz)
		±4.80dB (18GHz-40GHz)
9	Temperature test	± 1°C
10	Humidity test	± 3%
11	Supply voltages	± 1%
12	Time	± 3%

Remark:
The U_{lab} (lab Uncertainty) is less than $U_{cispr/ETSI}$ (CISPR/ETSI Uncertainty), so the test results
– compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
– non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone

No tests were sub-contracted.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

3. Sample source: sent by customer.

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 6336.01)

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.is accredited by the American Association for Laboratory Accreditation (A2LA).

• FCC (Designation Number: CN1312)

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized as an accredited testing laboratory. Test Firm Registration Number:717327

• ISED (CAB Identifier: CN0120)

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 27594

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/14/2026	1/13/2027
2	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-15	11/21/2025	11/20/2026
3	MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	1/14/2026	1/13/2027
4	Signal Generator	ROHDE&SCHWARZ	SMW200A	SUWI-01-07-08	1/14/2026	1/13/2027
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-08-01	1/14/2026	1/13/2027
6	MXG Vector Signal Generator	ROHDE&SCHWARZ	SMR20	SUWI-01-33-01	11/21/2025	11/20/2026
7	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-13	5/8/2025	5/7/2026
8	Wideband Radio Communication Test Station	Anritsu	MT8000A	SUWI-01-34-02	11/21/2025	11/20/2026
9	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	11/21/2025	11/20/2026
10	Power meter	Anritsu	ML2495A	SUWI-01-31-01	11/21/2025	11/20/2026
11	Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	11/21/2025	11/20/2026
12	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	1/14/2026	1/13/2027
13	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2/13/2025	2/12/2026
14	Temperature Chamber	GIANT FORCE	ICT-017-40-SP-SD	SUWI-01-13-02	5/7/2025	5/6/2026
15	Measurement Software	TST	TST 272 V2.02	SUWI-03-55-03	NCR	NCR
16	RF Control unit	TST	TSCB3023R2	SUWI-02-20-01	NCR	NCR
17	RFCables	Tonscend	NA	SUWI-01-03-01	NCR	NCR
RF Radiated Test						
1	Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	6/3/2023	6/2/2026
2	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/14/2026	1/13/2027
3	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-09	11/21/2025	11/20/2026
4	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	1/14/2026	1/13/2027
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-18-01	1/14/2026	1/13/2027
6	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	9/10/2025	9/9/2027
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	5/7/2025	5/6/2027

8	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/7/2025	5/6/2027
9	Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/7/2025	5/6/2027
10	Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	1/14/2026	1/13/2027
11	Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	1/14/2026	1/13/2027
12	Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	1/14/2026	1/13/2027
13	Wideband Radio Communication Tester	Anritsu	MT8820C	SUWI-01-26-01	11/21/2025	11/20/2026
14	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	8/25/2025	8/24/2026
15	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-09	8/26/2025	8/25/2026
16	Radio Communication Analyzer	StarPoint	SP9500E	SUWI-01-28-02	11/21/2025	11/20/2026
17	Signal Generator	ROHDE&SCHWARZ	SMB100A	SUWI-01-08-01	1/14/2026	1/13/2027
18	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	1/14/2026	1/13/2027
19	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2/13/2025	2/12/2026
20	Measurement Software	Tonscend	JS32-RE 4.0.0.0	SUWI-02-09-06	NCR	NCR
21	RF Control unit	Tonscend	JS0806-1	SUWI-02-20-01	NCR	NCR
22	RFCables	Tonscend	NA	SUWI-01-03-02	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)

6.1.2 Conclusion

Standard Requirement: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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.15.247(b) (4) requirement:The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The module is equipped with an integrated PCB antenna, which is permanently fixed on the product and cannot be removed or replaced by the user. This design meets the requirements of FCC §15.203.

The best case gain of the antenna is 2.4dBi.

7 Radio Spectrum Matter Test Results

7.1 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2020) Section 6.10.5 & 11.12

Limit:

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
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, 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.		

7.1.1 E.U.T. Operation

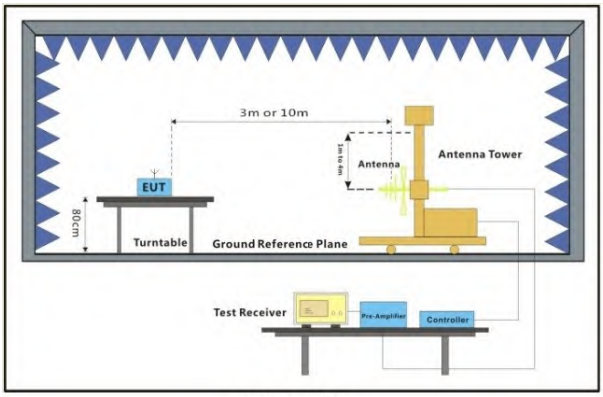
Operating Environment:

Temperature: 23 °C Humidity: 44 % RH Atmospheric Pressure: 1001 mbar

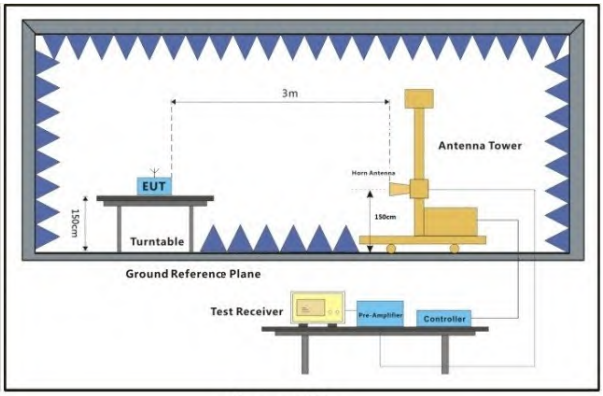
7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode(2.4G)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested. Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



30MHz-1GHz



Above 1GHz

7.1.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. 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.

c. 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.

d. 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.

e. 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.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. 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, quasi-peak or average method as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. 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.

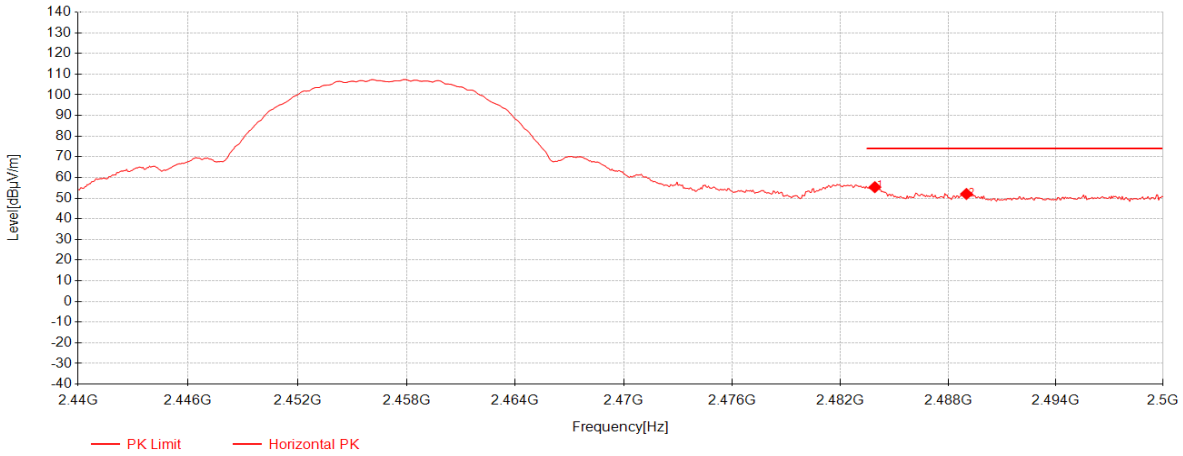
j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: 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.

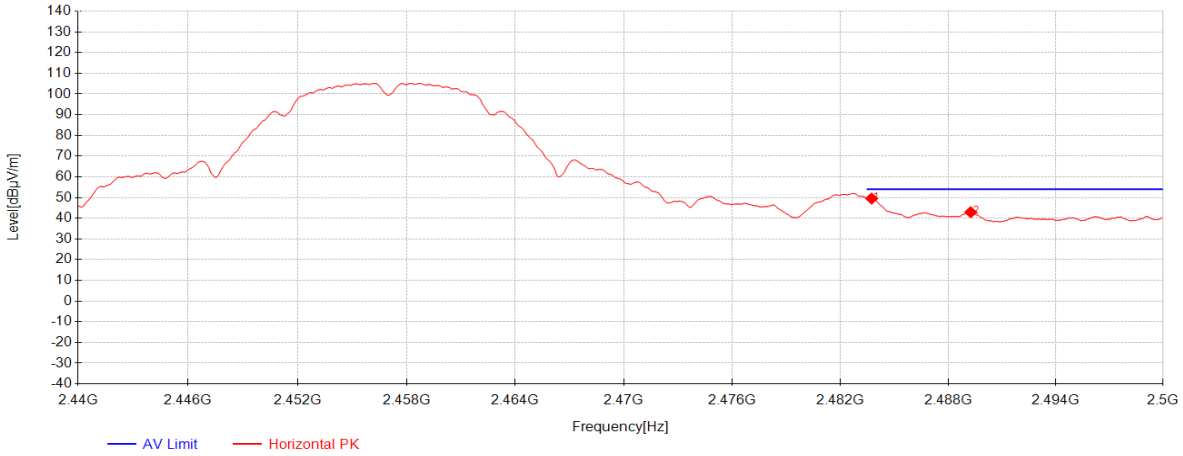
Hardware Version: 1.1(Additional testing of adjacent channels)

11b_TX_CH_10_Horizontal_Peak



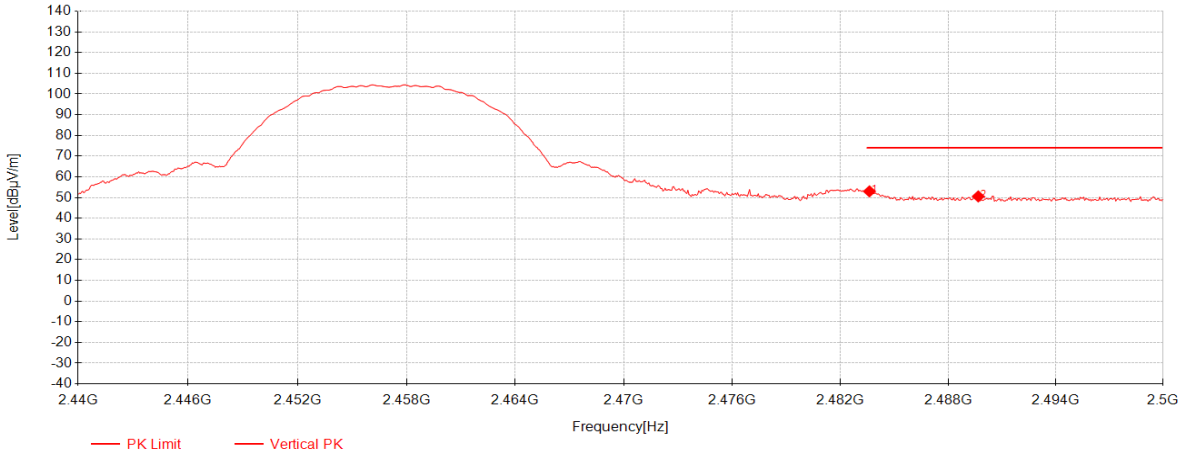
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	52.38	27.55	-24.63	55.30	74.00	18.70	Horizontal
2	2489.02	49.05	27.57	-24.62	52.00	74.00	22.00	Horizontal

11b_TX_CH_10_Horizontal_Average



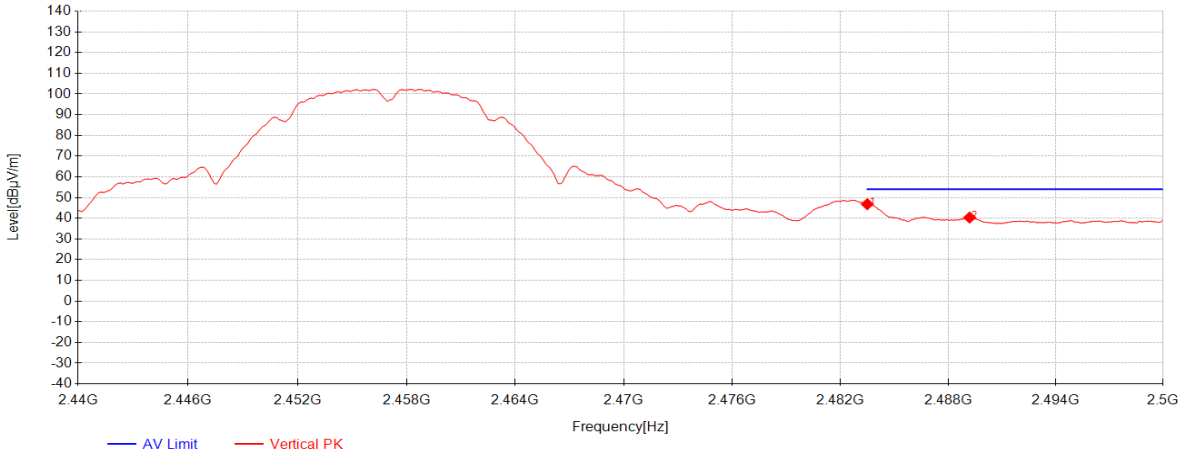
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.74	46.60	27.55	-24.63	49.52	54.00	4.48	Horizontal
2	2489.26	39.98	27.57	-24.62	42.93	54.00	11.07	Horizontal

11b_TX_CH_10_Vertical_Peak



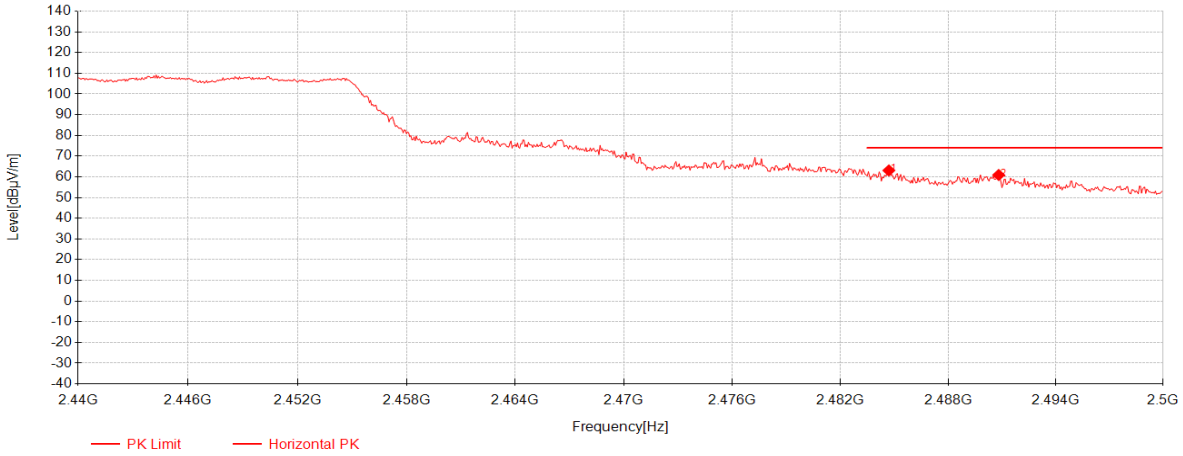
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.62	50.07	27.55	-24.63	52.99	74.00	21.01	Vertical
2	2489.68	47.60	27.57	-24.62	50.55	74.00	23.45	Vertical

11b_TX_CH_10_Vertical_Average



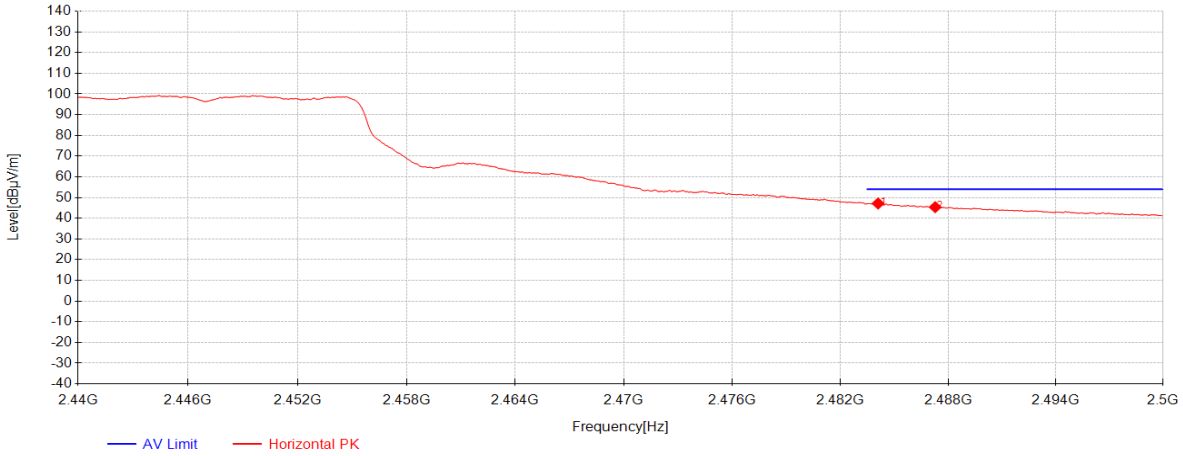
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.5	43.88	27.55	-24.63	46.80	54.00	7.20	Vertical
2	2489.2	37.40	27.57	-24.62	40.35	54.00	13.65	Vertical

11g_TX_CH_08_Horizontal_Peak



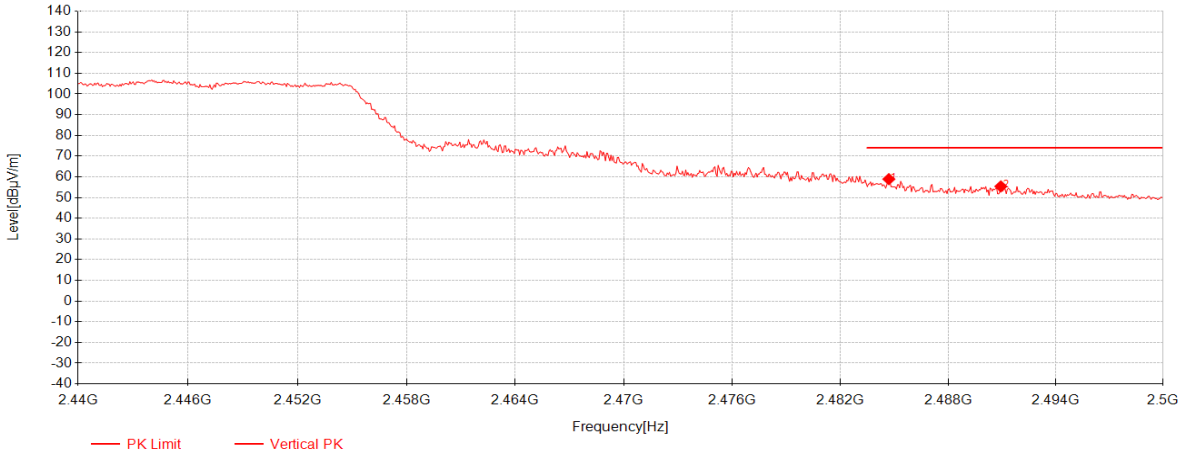
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.7	60.16	27.56	-24.63	63.09	74.00	10.91	Horizontal
2	2490.82	57.94	27.57	-24.62	60.90	74.00	13.10	Horizontal

11g_TX_CH_08_Horizontal_Average



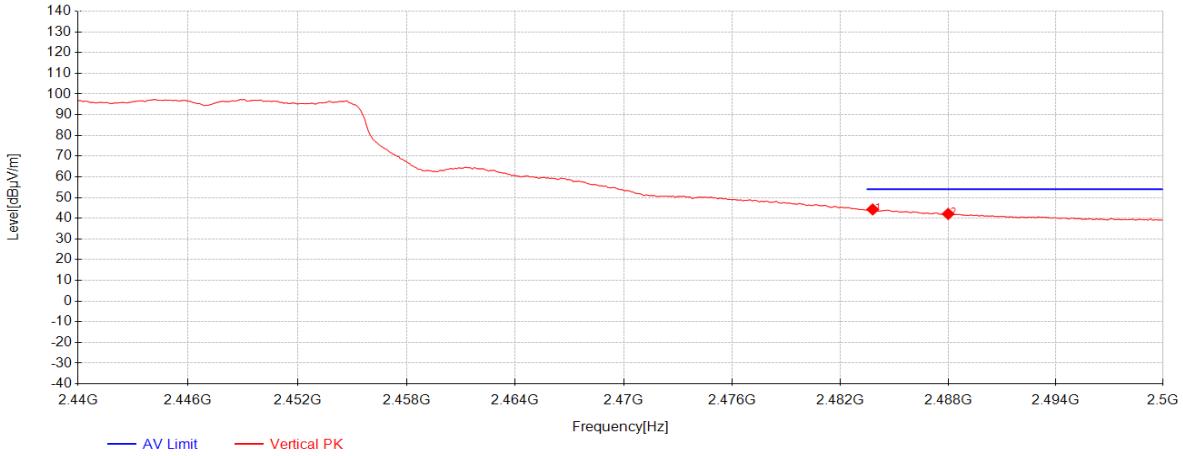
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.1	44.20	27.56	-24.63	47.12	54.00	6.88	Horizontal
2	2487.28	42.43	27.56	-24.63	45.37	54.00	8.63	Horizontal

11g_TX_CH_08_Vertical_Peak



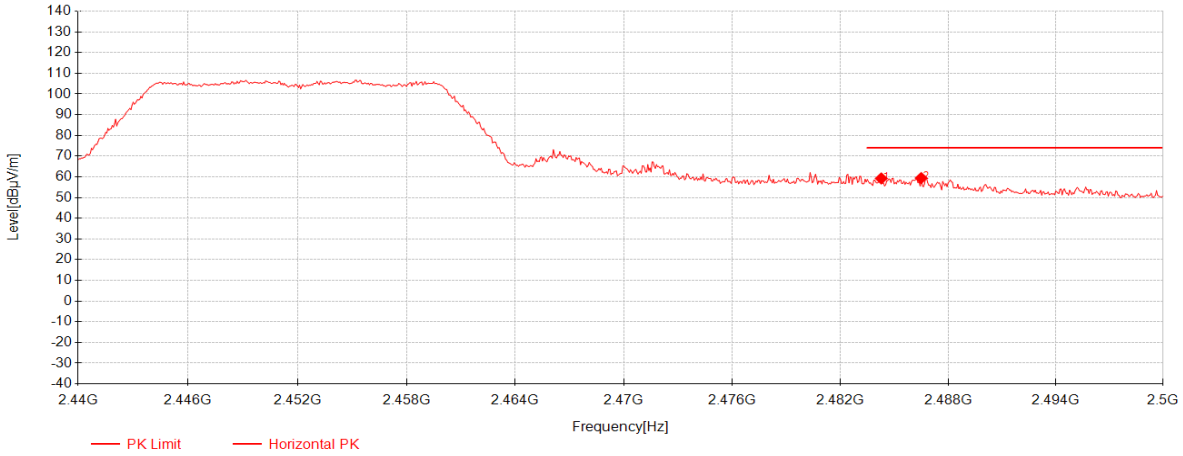
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.7	55.96	27.56	-24.63	58.89	74.00	15.11	Vertical
2	2490.94	52.43	27.57	-24.62	55.39	74.00	18.61	Vertical

11g_TX_CH_08_Vertical_Average



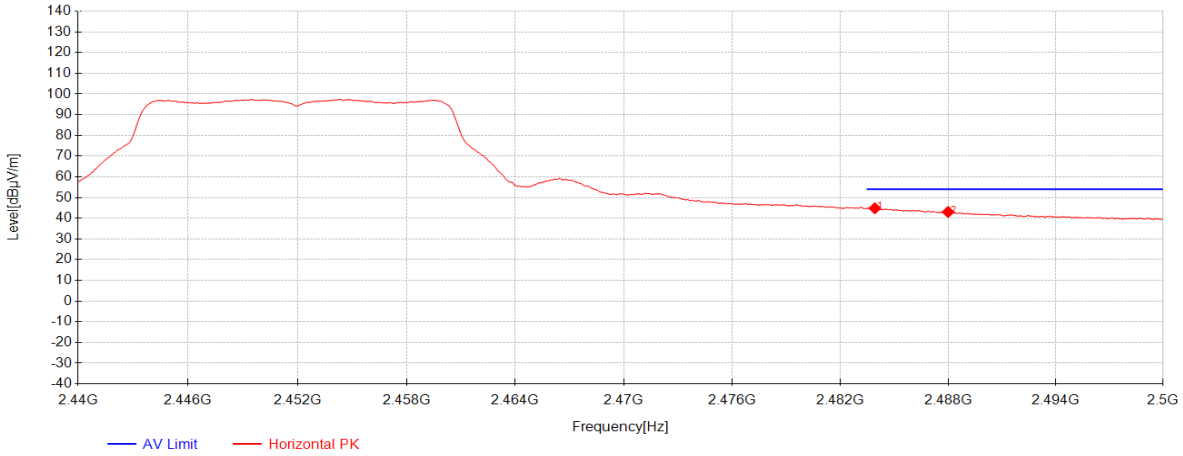
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.8	41.34	27.55	-24.63	44.26	54.00	9.74	Vertical
2	2488	39.15	27.57	-24.63	42.09	54.00	11.91	Vertical

11g_TX_CH_09_Horizontal_Peak



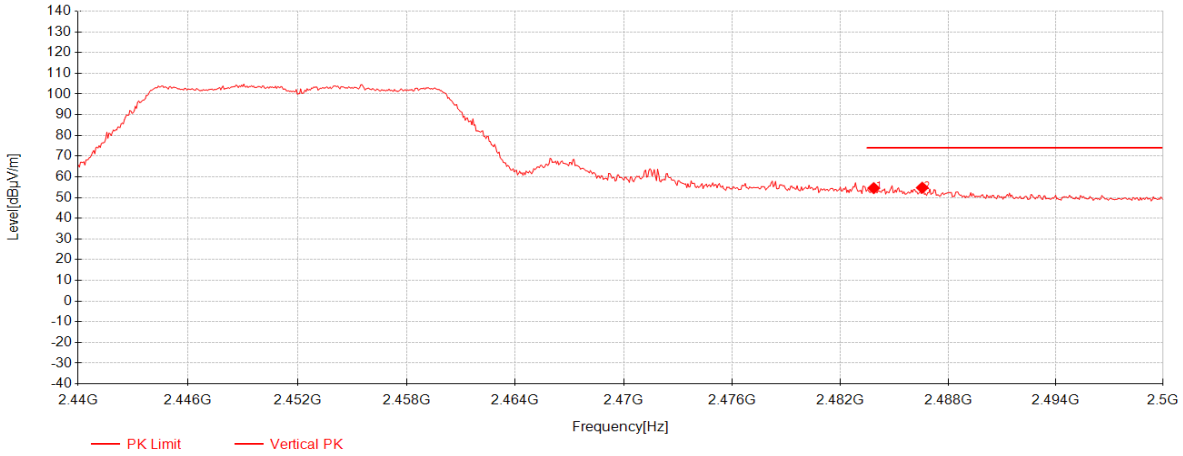
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.28	56.30	27.56	-24.63	59.22	74.00	14.78	Horizontal
2	2486.5	56.49	27.56	-24.63	59.42	74.00	14.58	Horizontal

11g_TX_CH_09_Horizontal_Average



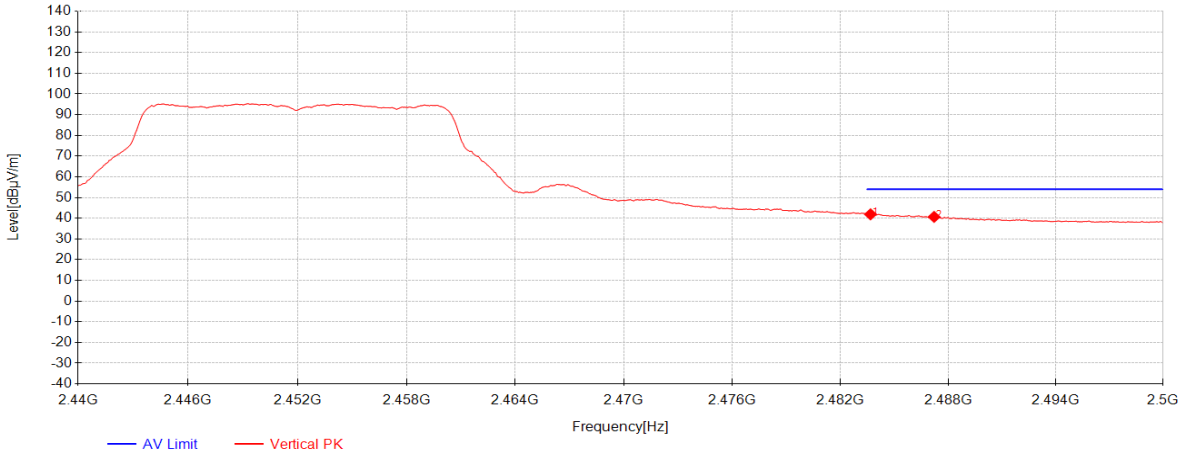
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	41.90	27.55	-24.63	44.82	54.00	9.18	Horizontal
2	2488	40.09	27.57	-24.63	43.03	54.00	10.97	Horizontal

11g_TX_CH_09_Vertical_Peak



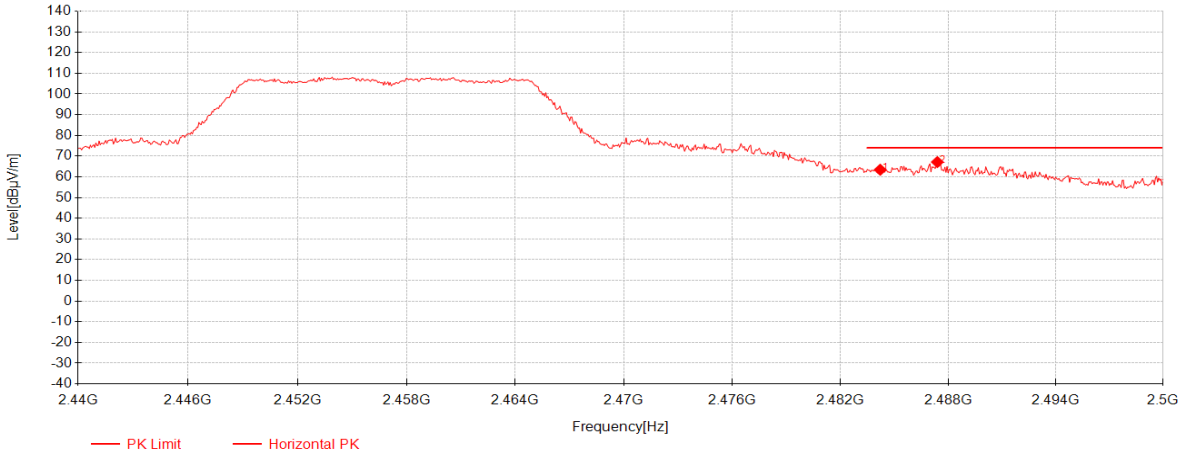
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.86	51.62	27.55	-24.63	54.54	74.00	19.46	Vertical
2	2486.56	51.82	27.56	-24.63	54.75	74.00	19.25	Vertical

11g_TX_CH_09_Vertical_Average



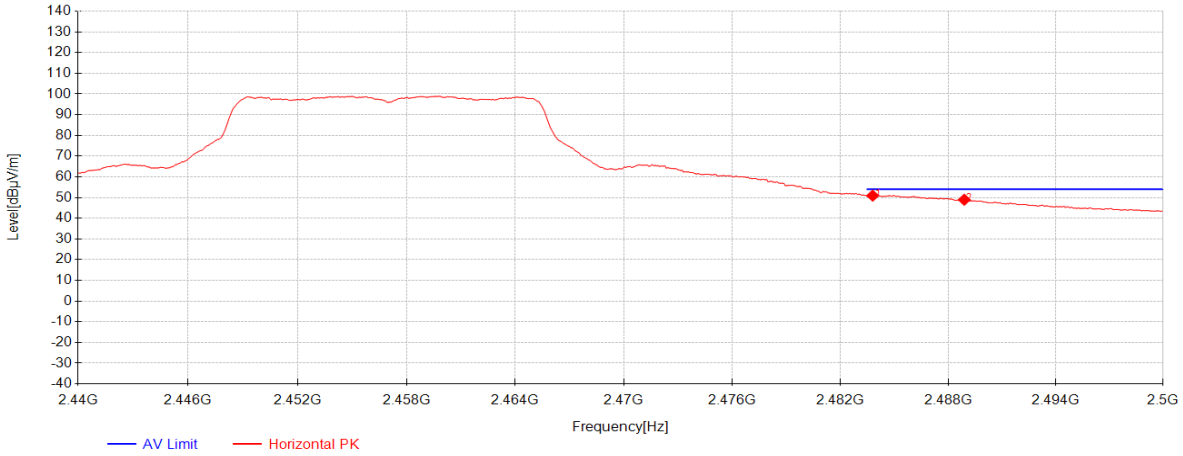
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.68	38.98	27.55	-24.63	41.90	54.00	12.10	Vertical
2	2487.22	37.71	27.56	-24.63	40.65	54.00	13.35	Vertical

11g_TX_CH_10_Horizontal_Peak



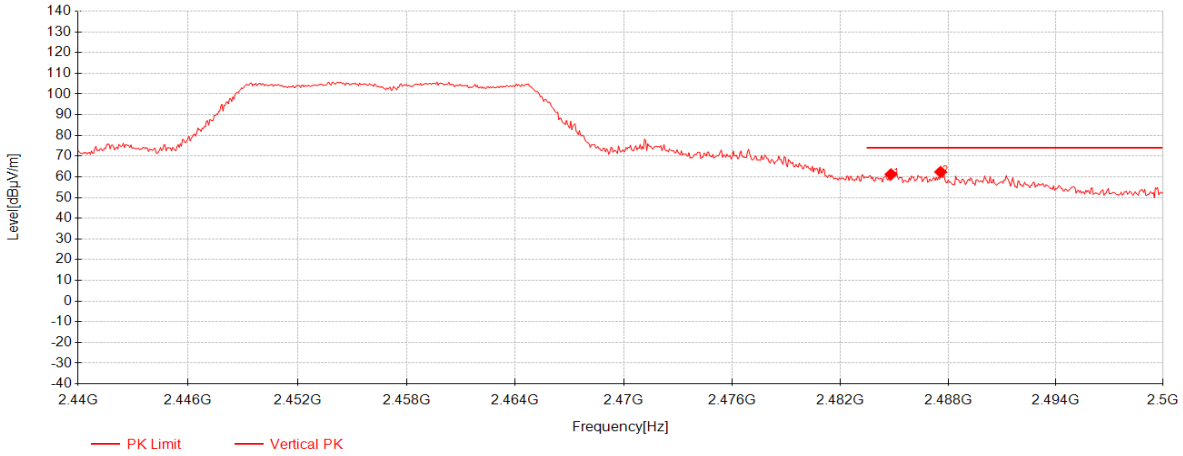
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.22	60.51	27.56	-24.63	63.43	74.00	10.57	Horizontal
2	2487.4	64.21	27.56	-24.63	67.15	74.00	6.85	Horizontal

11g_TX_CH_10_Horizontal_Average



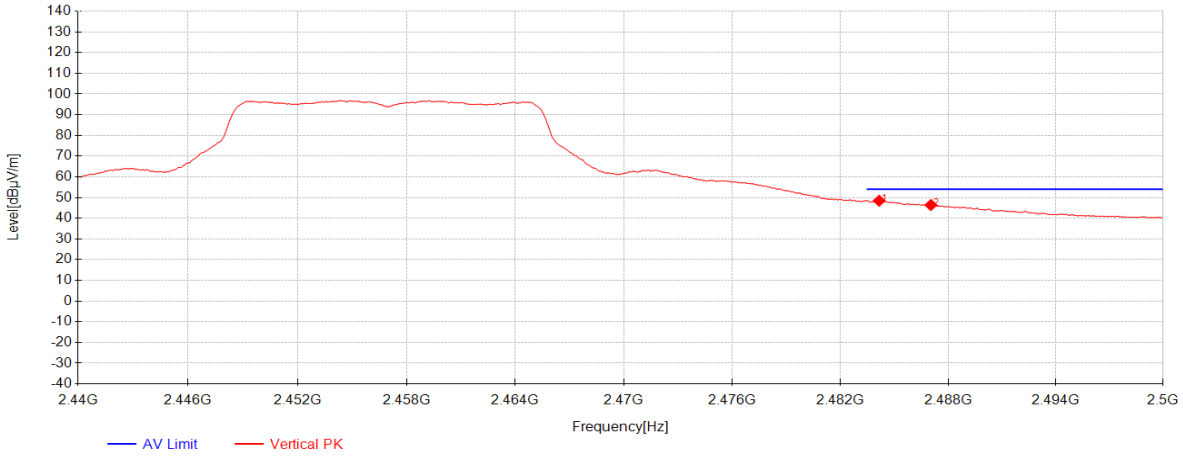
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.8	47.99	27.55	-24.63	50.91	54.00	3.09	Horizontal
2	2488.9	45.99	27.57	-24.62	48.94	54.00	5.06	Horizontal

11g_TX_CH_10_Vertical_Peak



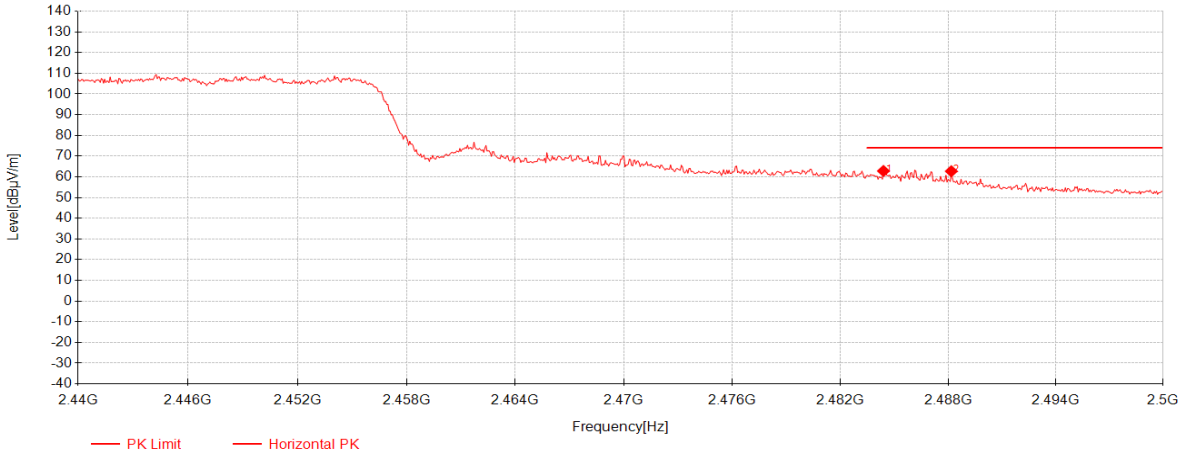
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.82	58.29	27.56	-24.63	61.22	74.00	12.78	Vertical
2	2487.58	59.42	27.57	-24.63	62.36	74.00	11.64	Vertical

11g_TX_CH_10_Vertical_Average



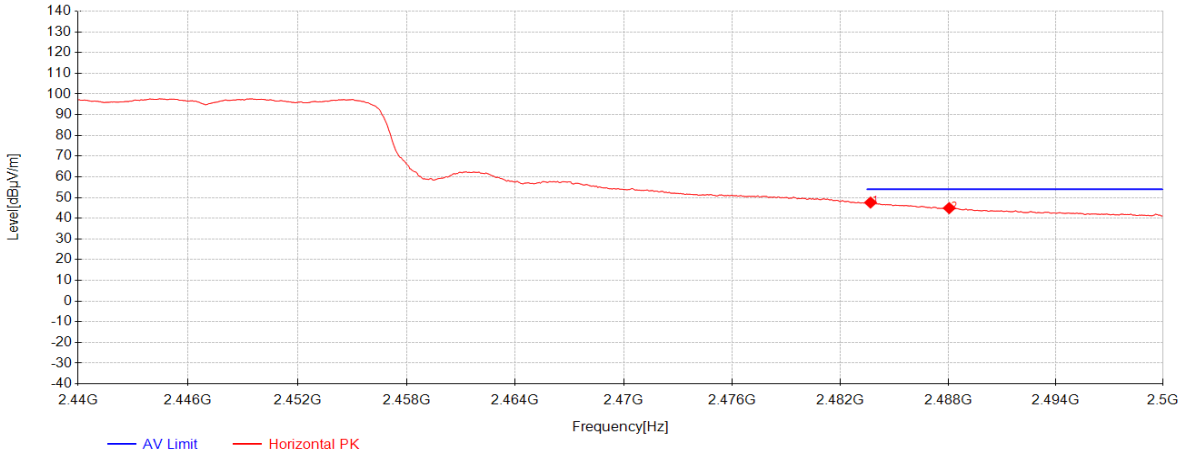
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.16	45.52	27.56	-24.63	48.44	54.00	5.56	Vertical
2	2487.04	43.44	27.56	-24.63	46.38	54.00	7.62	Vertical

11ax(HE20)_TX_CH_08_Horizontal_Peak



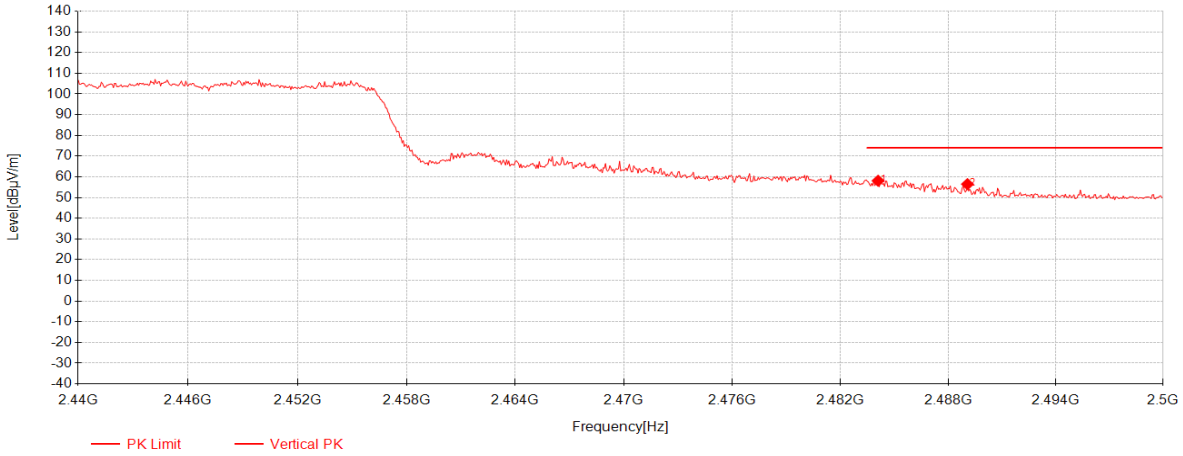
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.4	59.91	27.56	-24.63	62.83	74.00	11.17	Horizontal
2	2488.18	59.76	27.57	-24.62	62.70	74.00	11.30	Horizontal

11ax(HE20)_TX_CH_08_Horizontal_Average



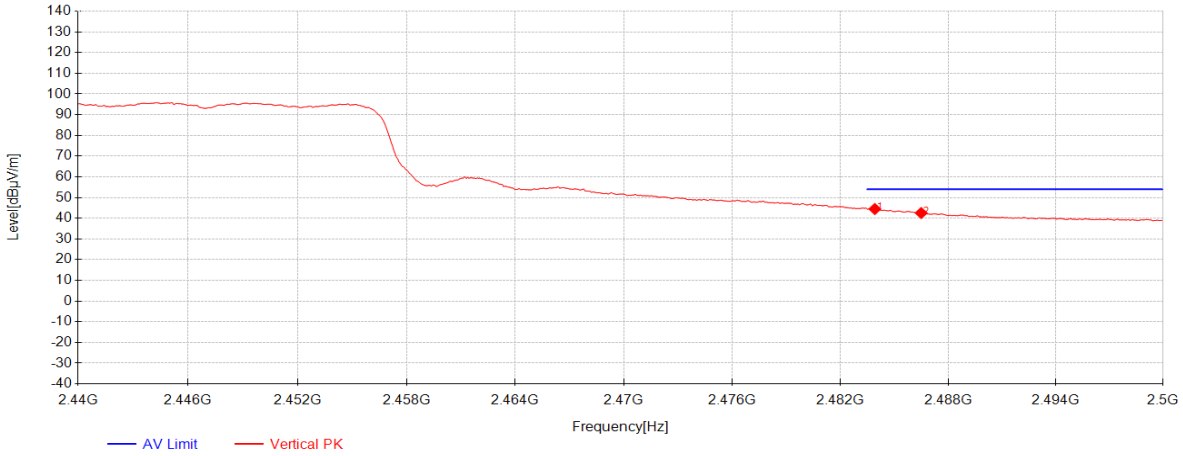
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.68	44.67	27.55	-24.63	47.59	54.00	6.41	Horizontal
2	2488.06	41.96	27.57	-24.63	44.90	54.00	9.10	Horizontal

11ax(HE20)_TX_CH_08_Vertical_Peak



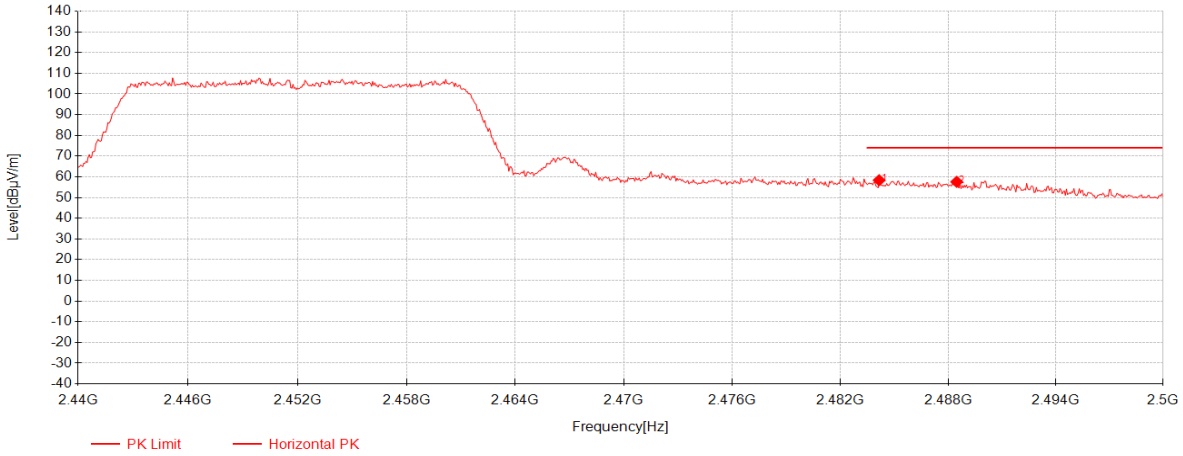
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.1	55.19	27.56	-24.63	58.11	74.00	15.89	Vertical
2	2489.08	53.51	27.57	-24.62	56.46	74.00	17.54	Vertical

11ax(HE20)_TX_CH_08_Vertical_Average



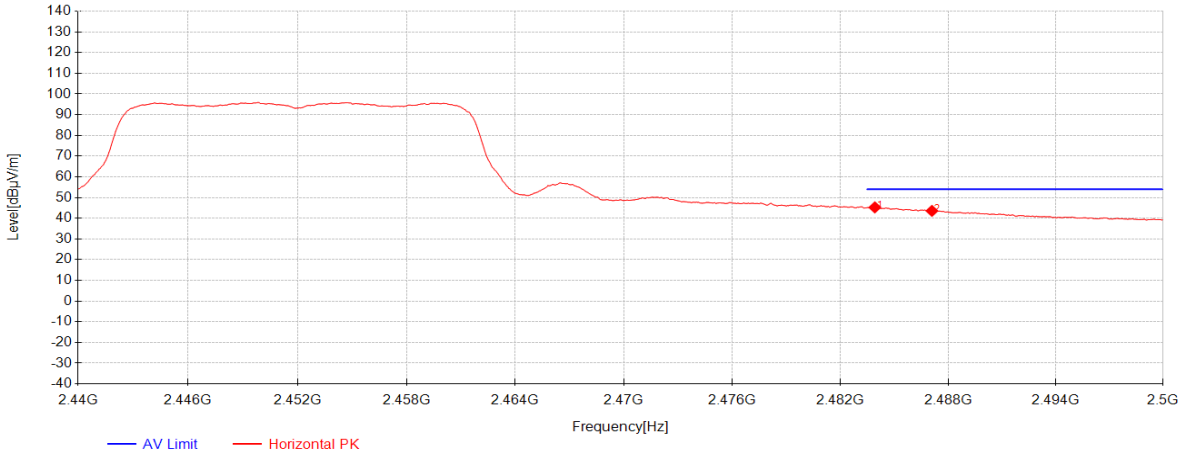
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	41.53	27.55	-24.63	44.45	54.00	9.55	Vertical
2	2486.5	39.59	27.56	-24.63	42.52	54.00	11.48	Vertical

11ax(HE20)_TX_CH_09_Horizontal_Peak



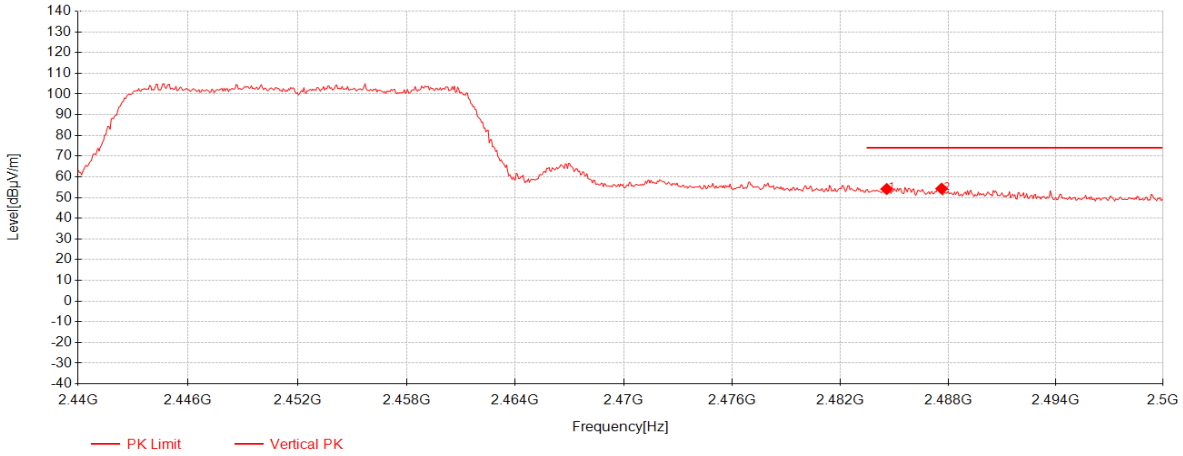
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.16	55.46	27.56	-24.63	58.38	74.00	15.62	Horizontal
2	2488.48	54.66	27.57	-24.62	57.60	74.00	16.40	Horizontal

11ax(HE20)_TX_CH_09_Horizontal_Average



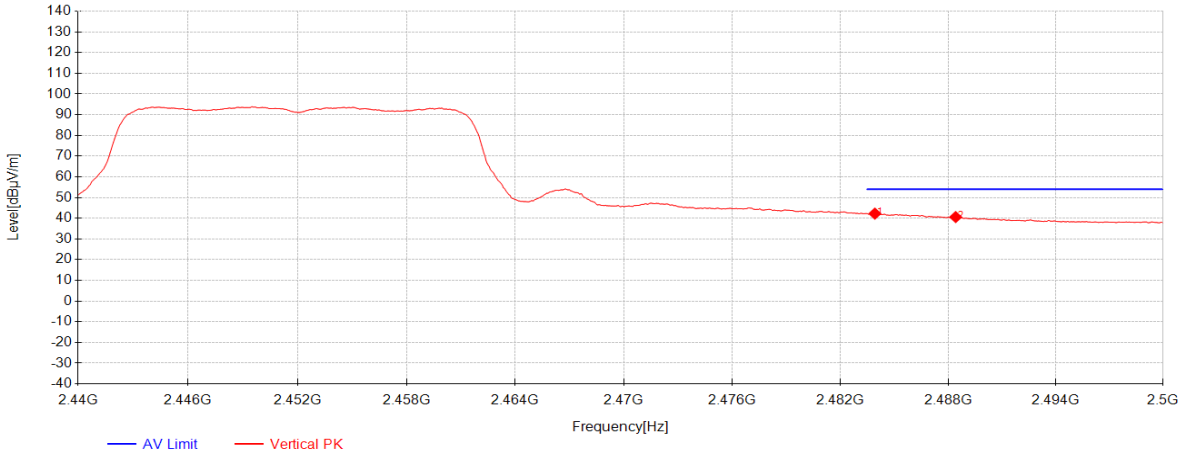
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	42.32	27.55	-24.63	45.24	54.00	8.76	Horizontal
2	2487.1	40.62	27.56	-24.63	43.56	54.00	10.44	Horizontal

11ax(HE20)_TX_CH_09_Vertical_Peak



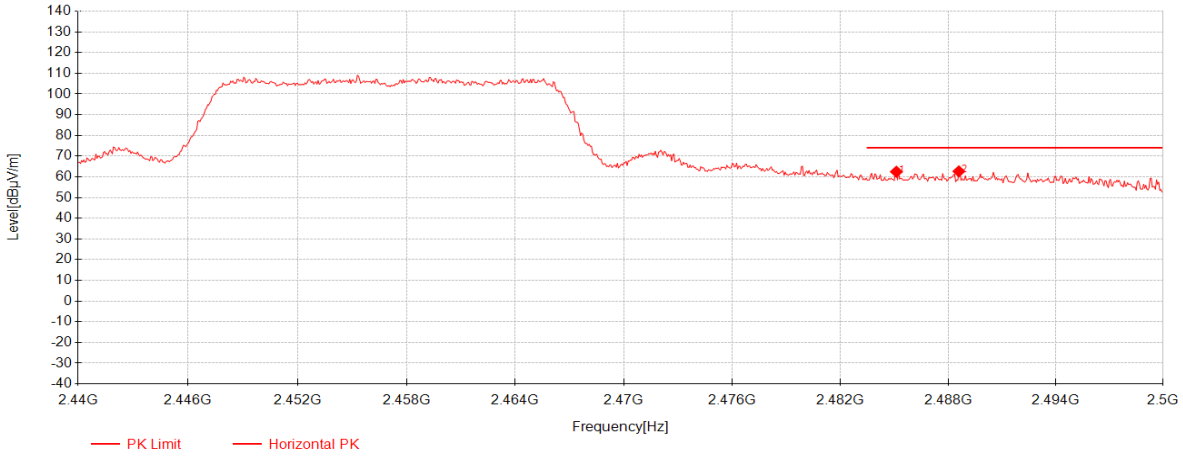
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.58	51.19	27.56	-24.63	54.11	74.00	19.89	Vertical
2	2487.64	51.36	27.57	-24.63	54.30	74.00	19.70	Vertical

11ax(HE20)_TX_CH_09_Vertical_Average



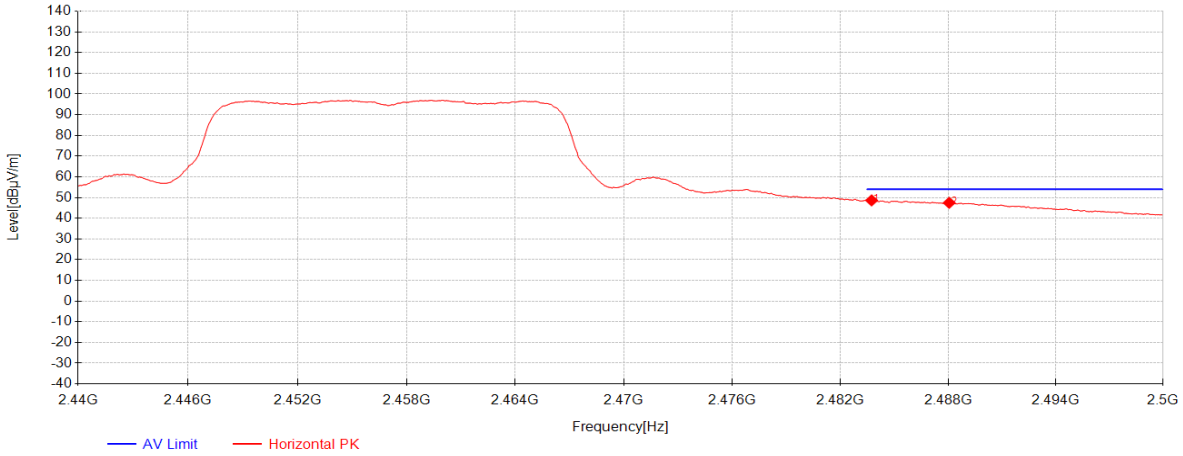
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	39.32	27.55	-24.63	42.24	54.00	11.76	Vertical
2	2488.42	37.64	27.57	-24.62	40.58	54.00	13.42	Vertical

11ax(HE20)_TX_CH_10_Horizontal_Peak



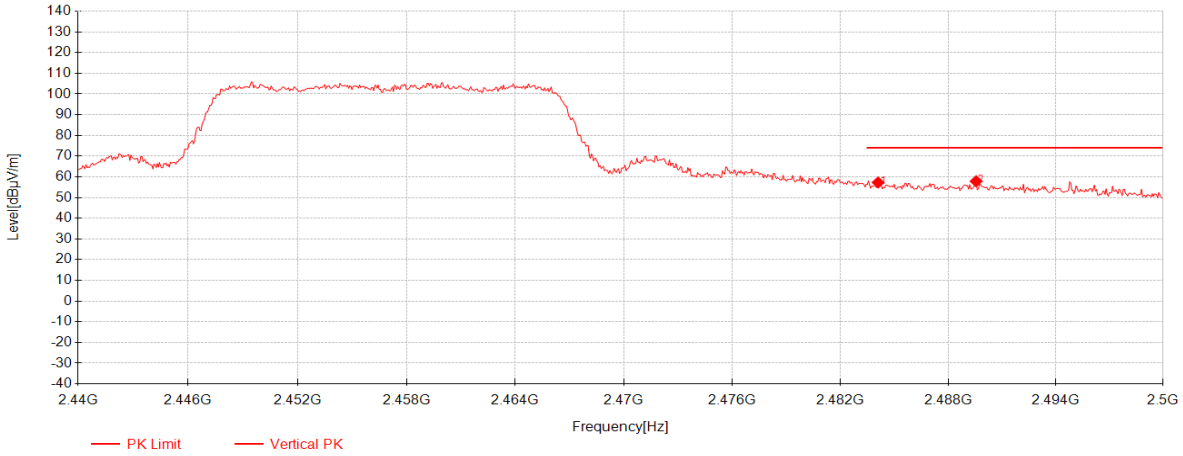
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485.12	59.55	27.56	-24.63	62.48	74.00	11.52	Horizontal
2	2488.6	59.70	27.57	-24.62	62.64	74.00	11.36	Horizontal

11ax(HE20)_TX_CH_10_Horizontal_Average



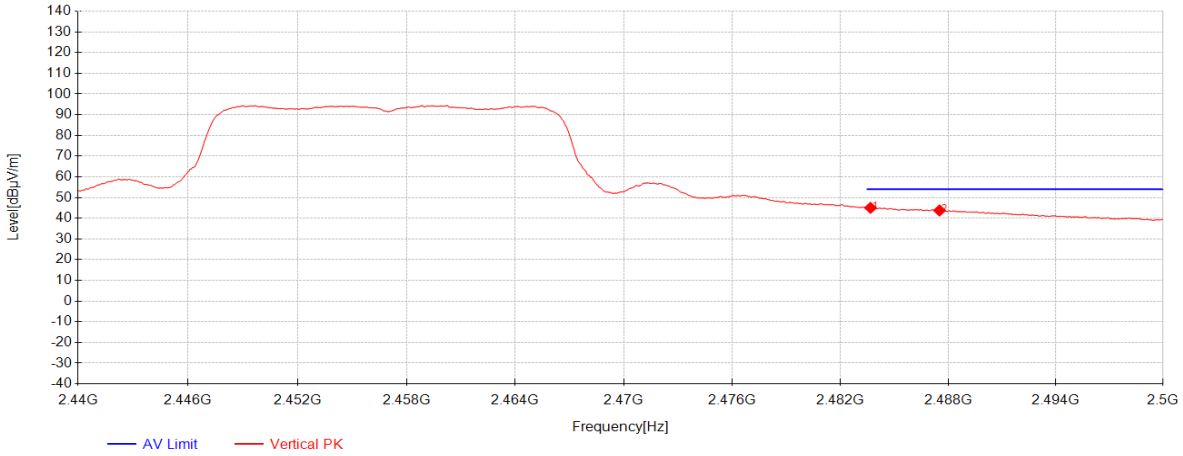
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.74	45.70	27.55	-24.63	48.62	54.00	5.38	Horizontal
2	2488.06	44.51	27.57	-24.63	47.45	54.00	6.55	Horizontal

11ax(HE20)_TX_CH_10_Vertical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.1	54.36	27.56	-24.63	57.28	74.00	16.72	Vertical
2	2489.56	54.91	27.57	-24.62	57.86	74.00	16.14	Vertical

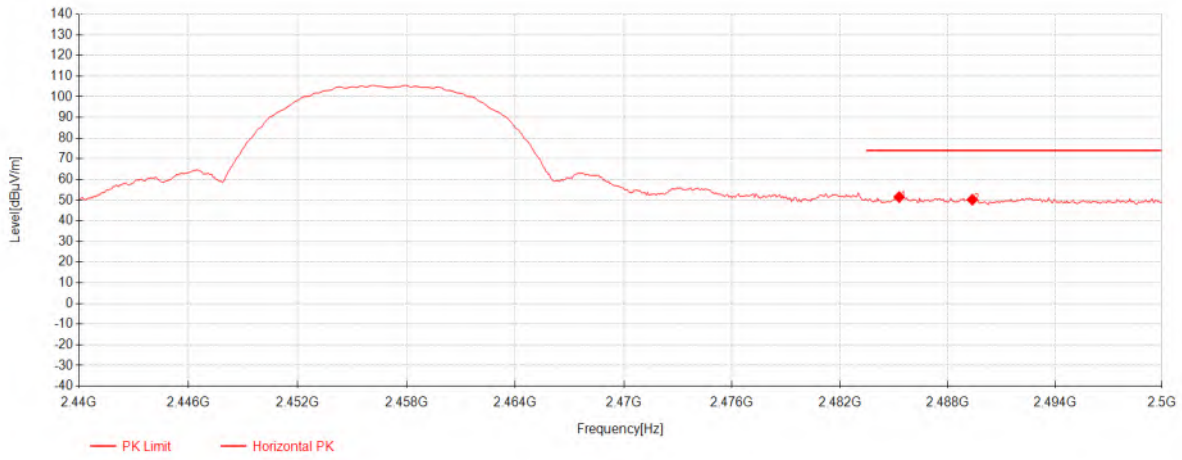
11ax(HE20)_TX_CH_10_Vertical_Average



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.68	42.09	27.55	-24.63	45.01	54.00	8.99	Vertical
2	2487.52	40.83	27.57	-24.63	43.77	54.00	10.23	Vertical

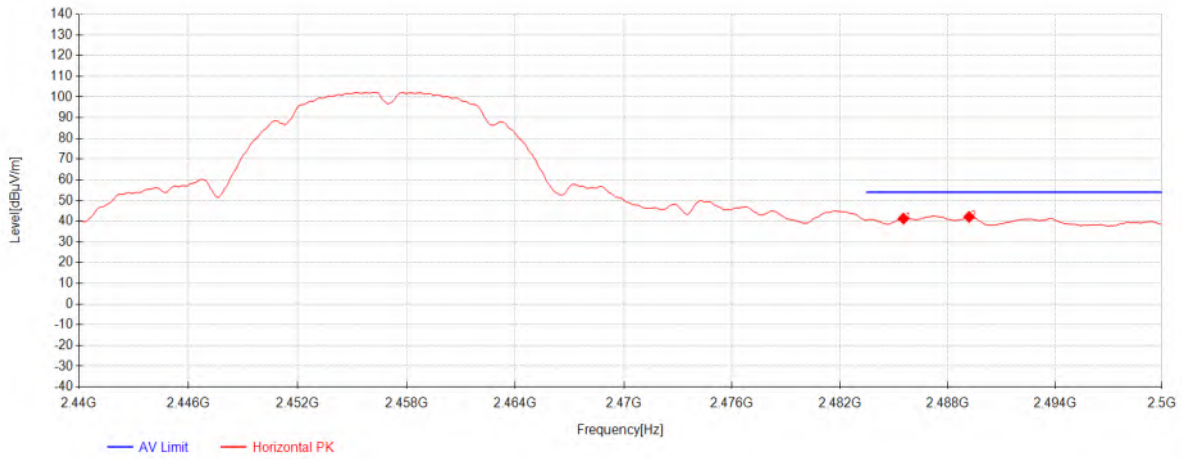
Hardware Version: 1.2(Additional testing of adjacent channels)

11b_TX_CH_10_Horizontal_Peak



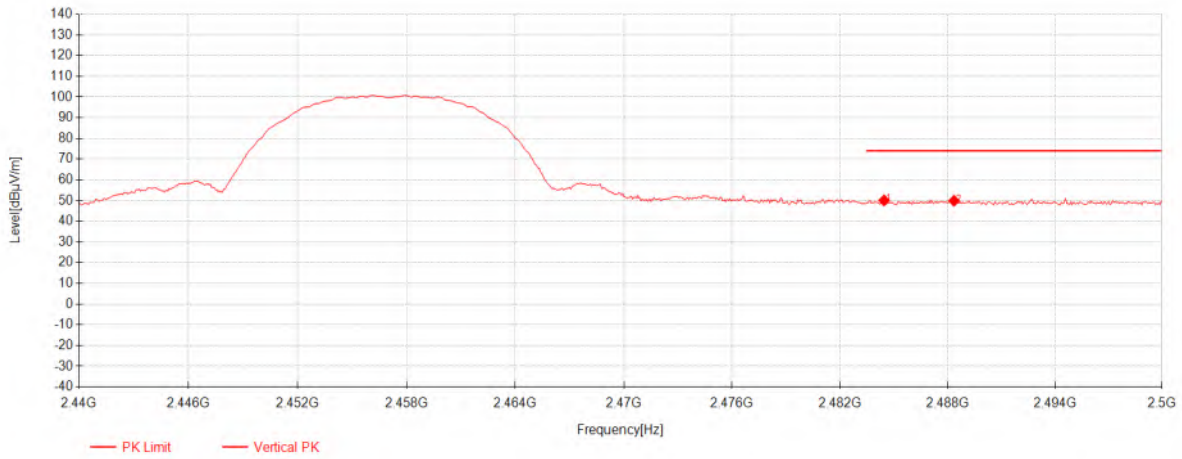
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485.3	48.54	27.56	-24.63	51.47	74.00	22.53	Horizontal
2	2489.38	47.27	27.57	-24.62	50.22	74.00	23.78	Horizontal

11b_TX_CH_10_Horizontal_Average



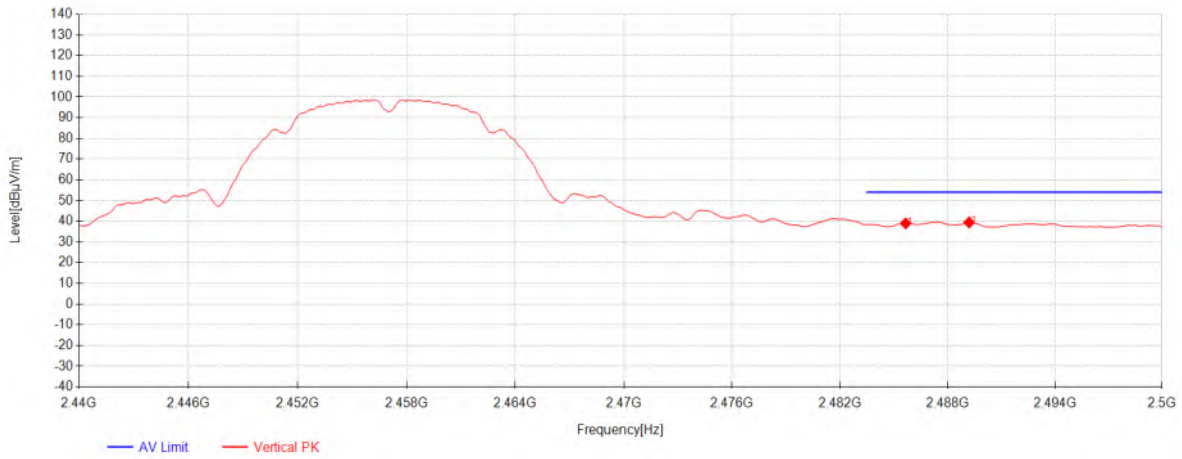
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485.54	38.37	27.56	-24.63	41.30	54.00	12.70	Horizontal
2	2489.2	39.16	27.57	-24.62	42.11	54.00	11.89	Horizontal

11b_TX_CH_10_Vertical_Peak



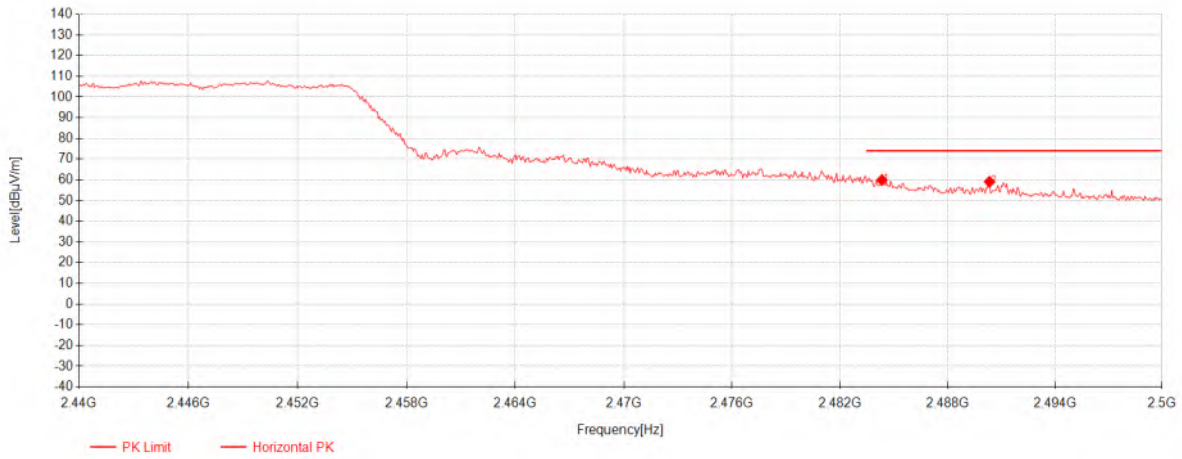
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.46	47.15	27.56	-24.63	50.07	74.00	23.93	Vertical
2	2488.36	46.96	27.57	-24.62	49.90	74.00	24.10	Vertical

11b_TX_CH_10_Vertical_Average



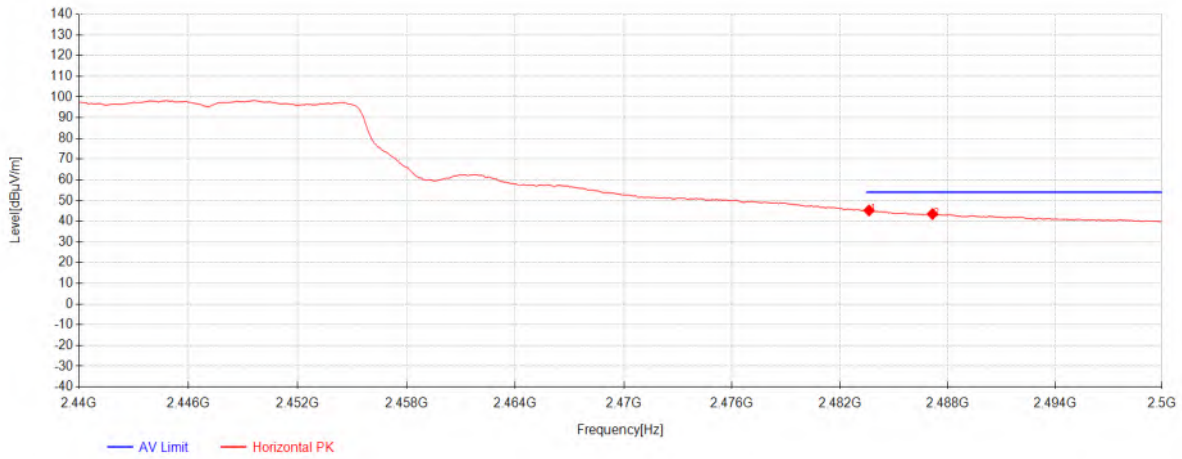
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485.66	36.02	27.56	-24.63	38.95	54.00	15.05	Vertical
2	2489.2	36.45	27.57	-24.62	39.40	54.00	14.60	Vertical

11g_TX_CH_08_Horizontal_Peak



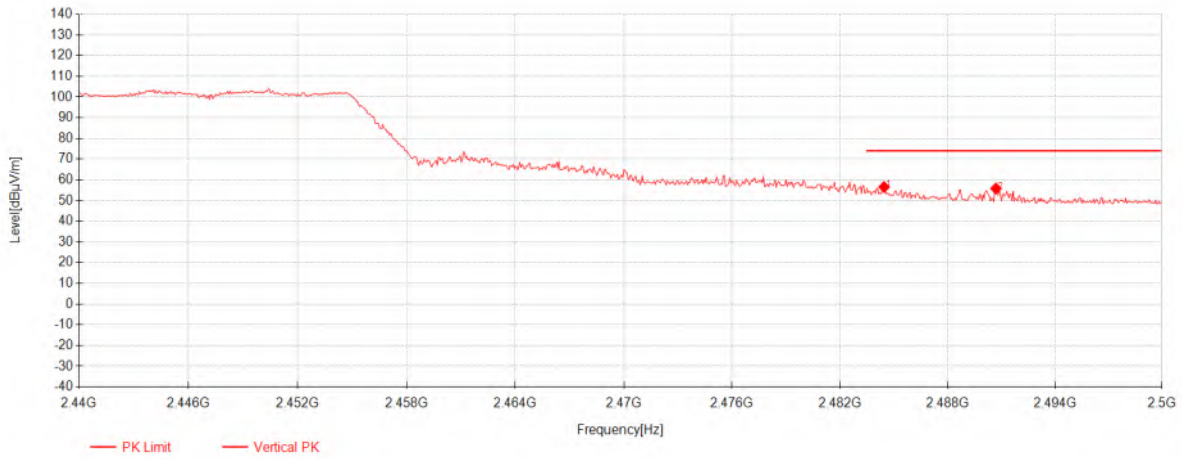
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.34	56.96	27.56	-24.63	59.88	74.00	14.12	Horizontal
2	2490.34	56.11	27.57	-24.62	59.06	74.00	14.94	Horizontal

11g_TX_CH_08_Horizontal_Average



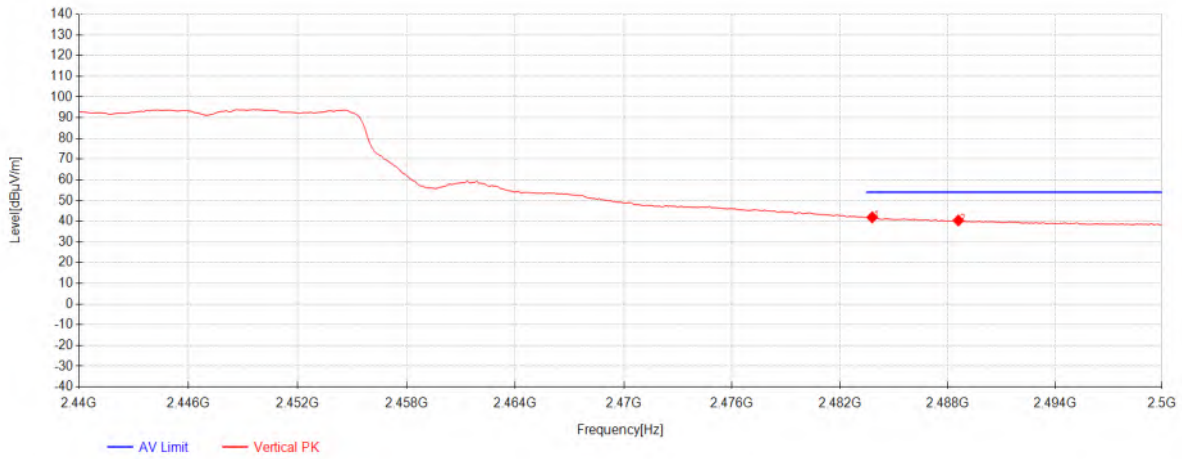
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.62	42.30	27.55	-24.63	45.22	54.00	8.78	Horizontal
2	2487.16	40.53	27.56	-24.63	43.47	54.00	10.53	Horizontal

11g_TX_CH_08_Vertical_Peak



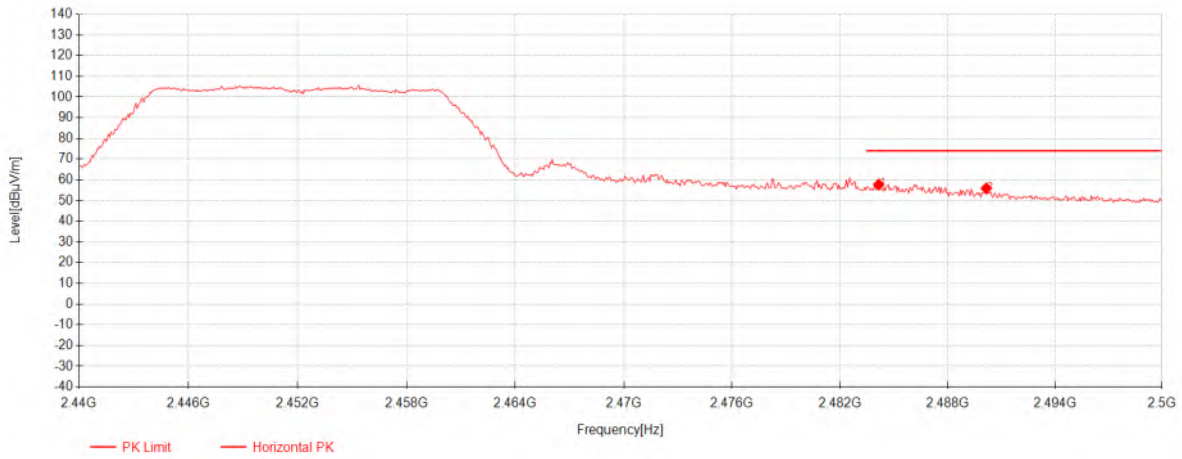
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.46	53.61	27.56	-24.63	56.53	74.00	17.47	Vertical
2	2490.7	52.85	27.57	-24.62	55.80	74.00	18.20	Vertical

11g_TX_CH_08_Vertical_Average



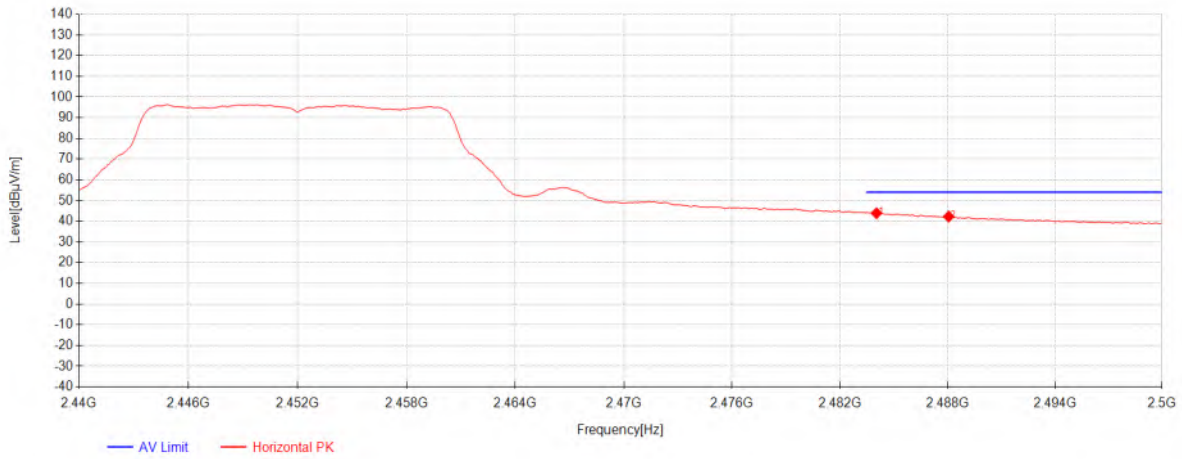
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.8	38.96	27.55	-24.63	41.88	54.00	12.12	Vertical
2	2488.6	37.43	27.57	-24.62	40.37	54.00	13.63	Vertical

11g_TX_CH_09_Horizontal_Peak



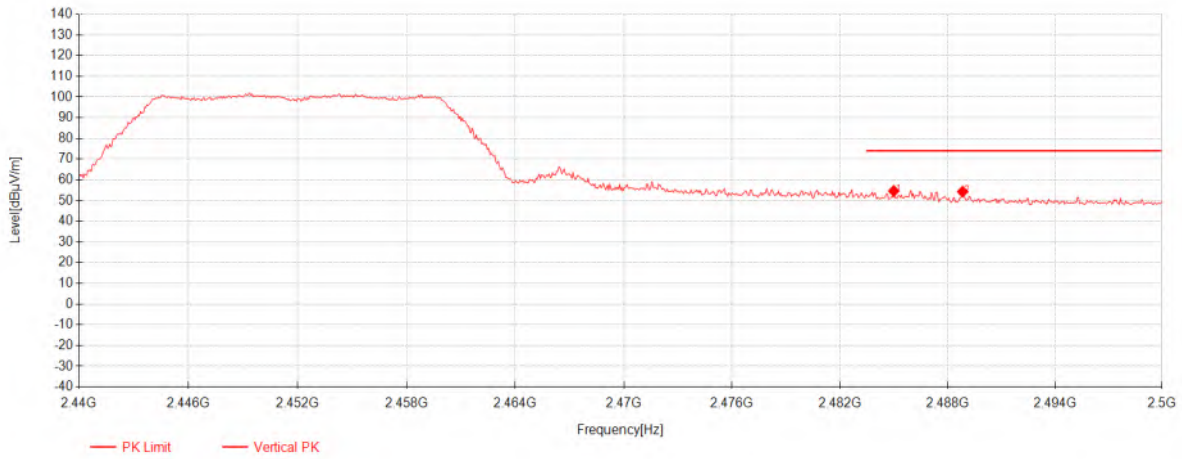
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.16	54.81	27.56	-24.63	57.73	74.00	16.27	Horizontal
2	2490.16	52.96	27.57	-24.62	55.91	74.00	18.09	Horizontal

11g_TX_CH_09_Horizontal_Average



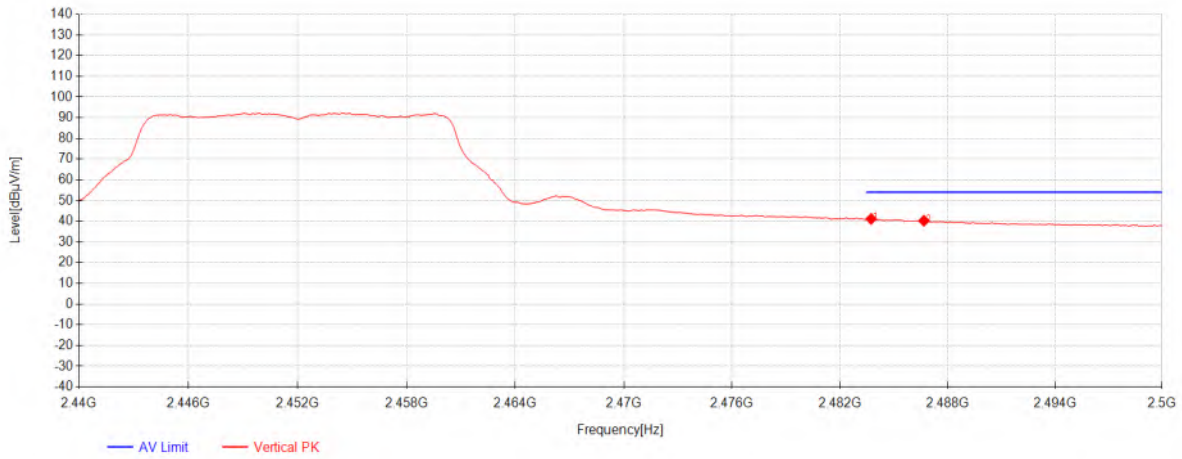
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.04	40.96	27.56	-24.63	43.88	54.00	10.12	Horizontal
2	2488.06	39.32	27.57	-24.63	42.26	54.00	11.74	Horizontal

11g_TX_CH_09_Vertical_Peak



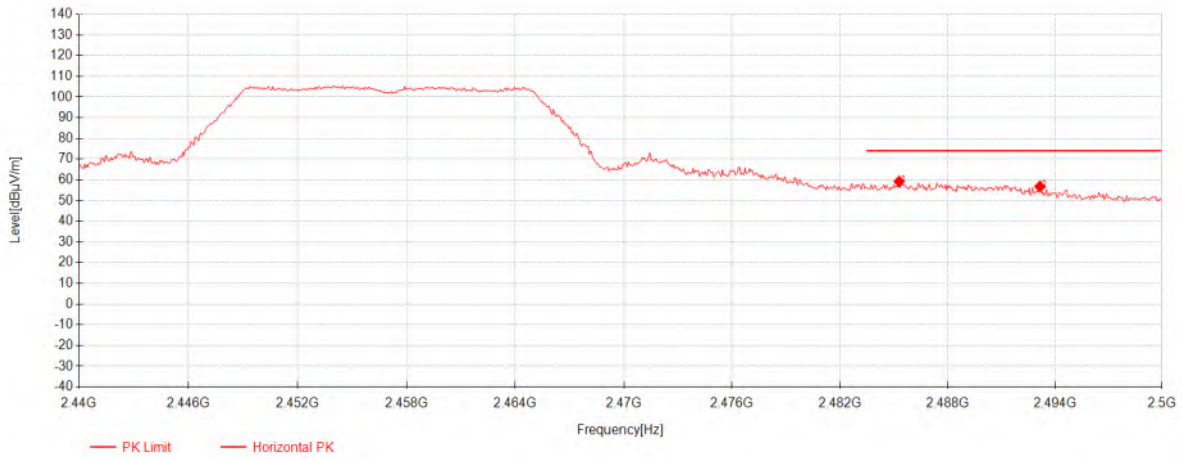
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485	51.67	27.56	-24.63	54.60	74.00	19.40	Vertical
2	2488.84	51.34	27.57	-24.62	54.29	74.00	19.71	Vertical

11g_TX_CH_09_Vertical_Average



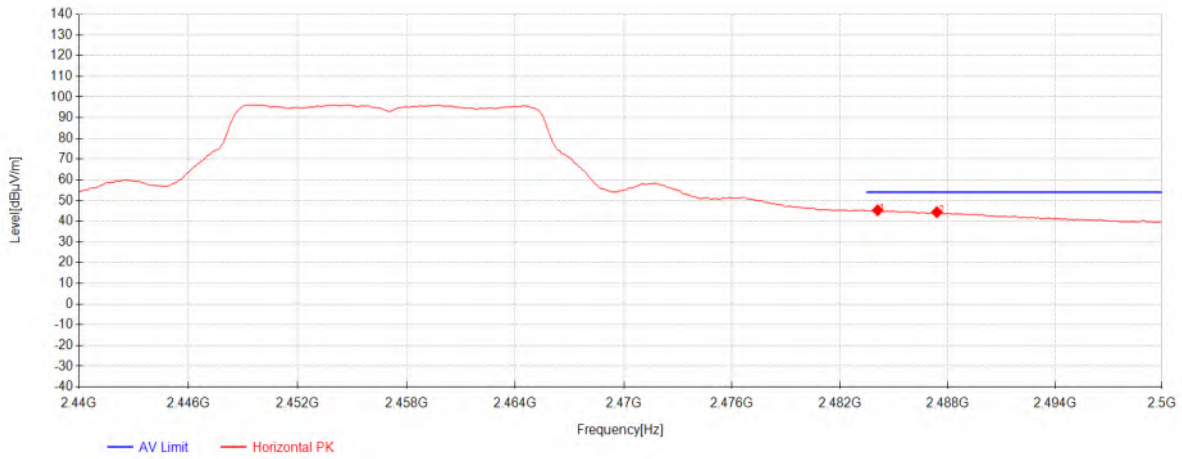
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.74	38.22	27.55	-24.63	41.14	54.00	12.86	Vertical
2	2486.68	37.29	27.56	-24.63	40.22	54.00	13.78	Vertical

11g_TX_CH_10_Horizontal_Peak



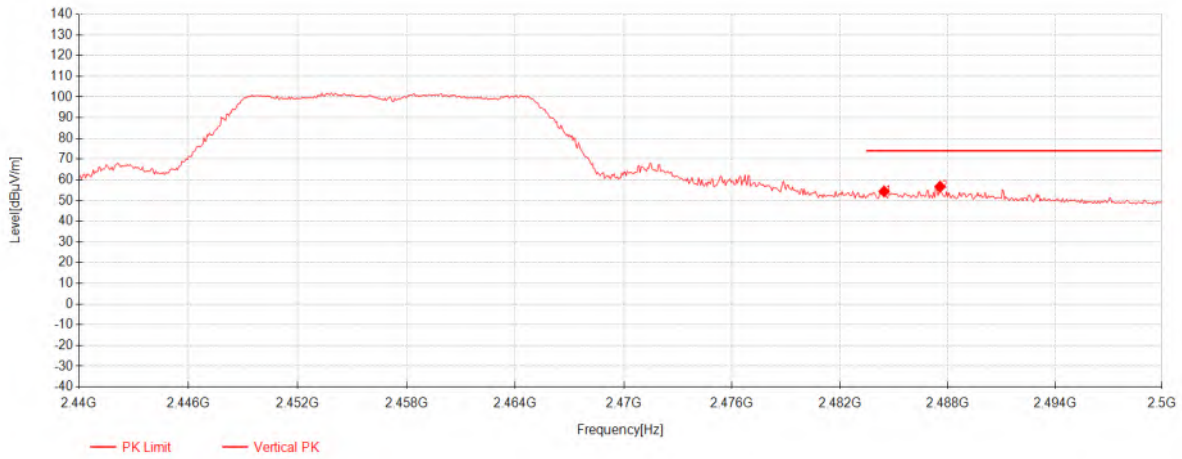
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485.3	56.24	27.56	-24.63	59.17	74.00	14.83	Horizontal
2	2493.16	53.80	27.58	-24.61	56.77	74.00	17.23	Horizontal

11g_TX_CH_10_Horizontal_Average



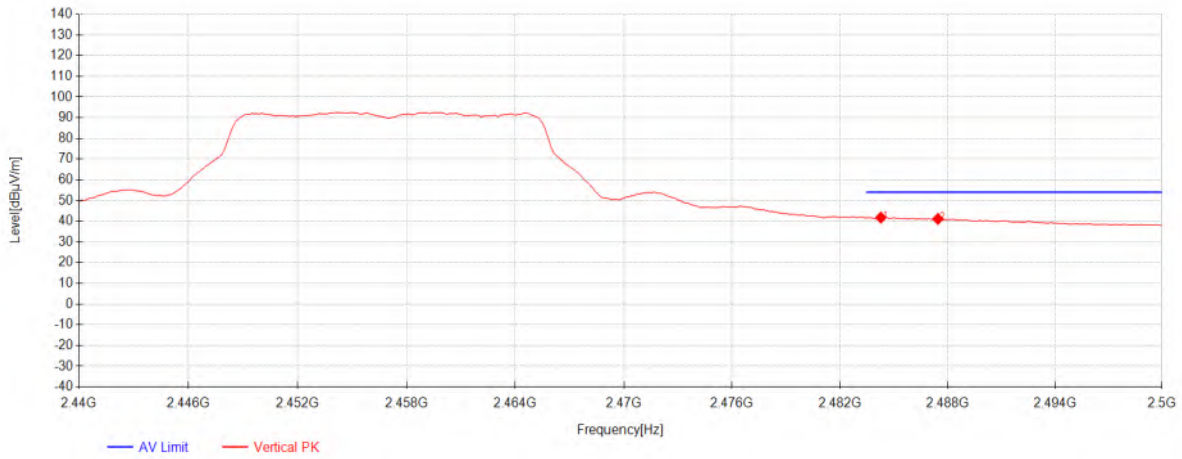
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.1	42.39	27.56	-24.63	45.31	54.00	8.69	Horizontal
2	2487.4	41.40	27.56	-24.63	44.34	54.00	9.66	Horizontal

11g_TX_CH_10_Vertical_Peak



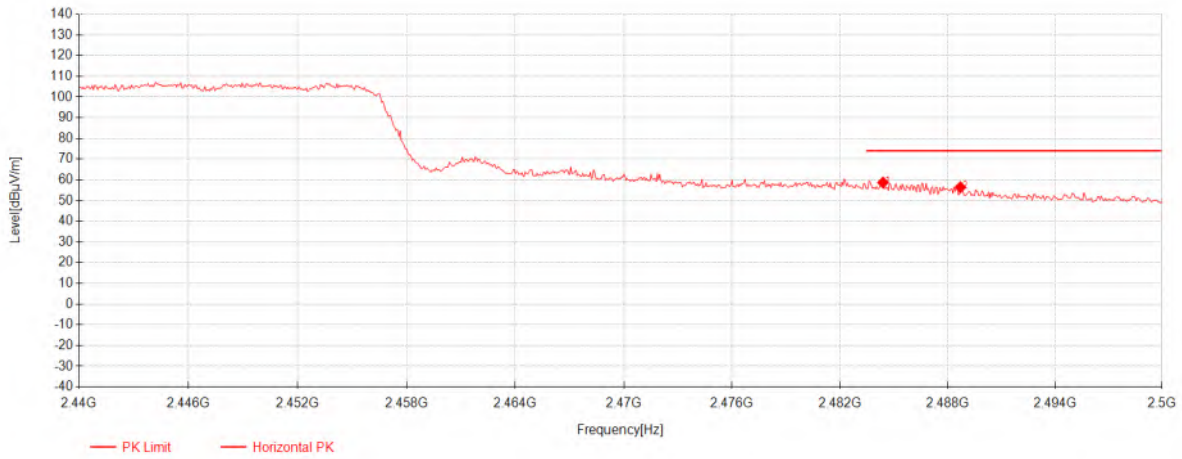
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.46	51.51	27.56	-24.63	54.43	74.00	19.57	Vertical
2	2487.58	53.78	27.57	-24.63	56.72	74.00	17.28	Vertical

11g_TX_CH_10_Vertical_Average



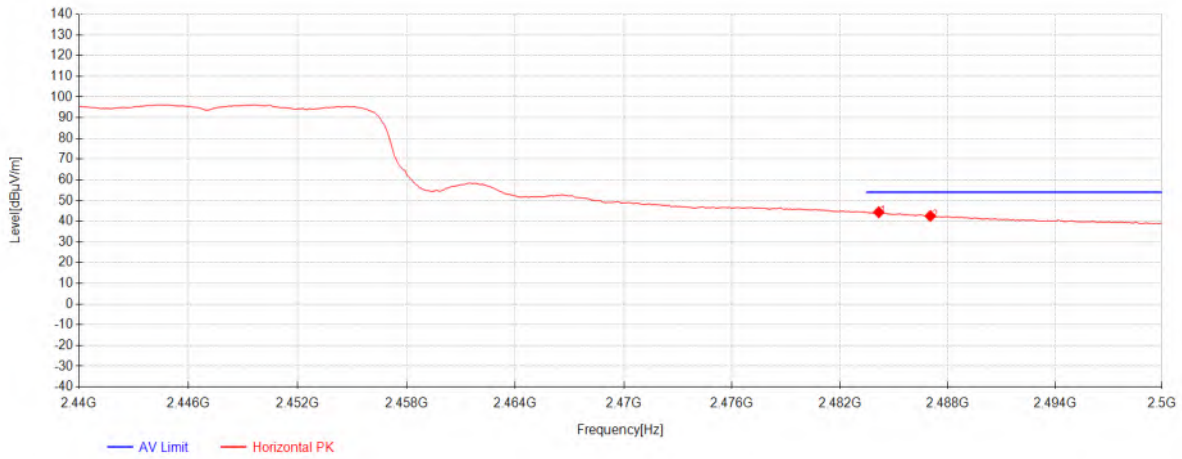
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.28	38.86	27.56	-24.63	41.78	54.00	12.22	Vertical
2	2487.46	38.19	27.56	-24.63	41.13	54.00	12.87	Vertical

11ax(HE20)_TX_CH_08_Horizontal_Peak



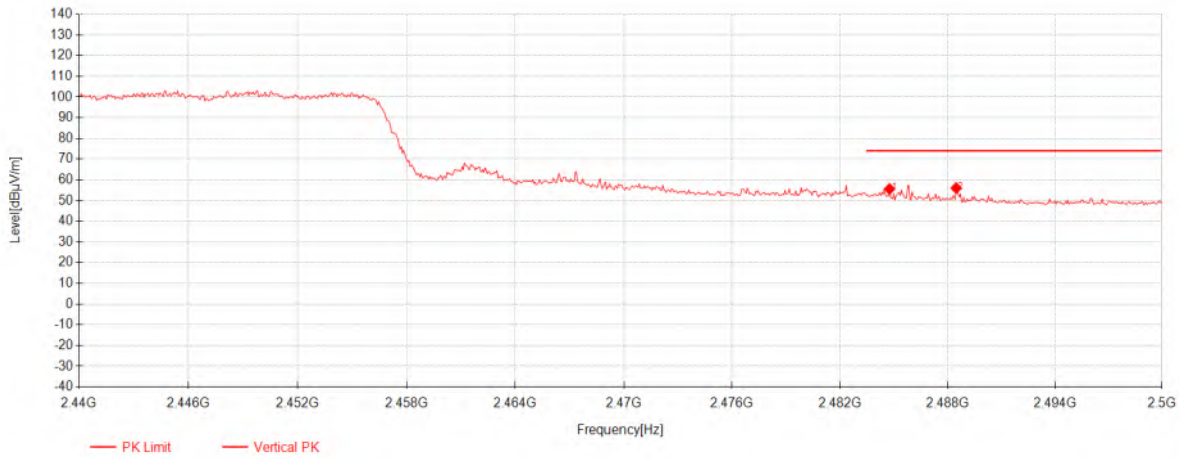
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.4	55.76	27.56	-24.63	58.68	74.00	15.32	Horizontal
2	2488.72	53.50	27.57	-24.62	56.44	74.00	17.56	Horizontal

11ax(HE20)_TX_CH_08_Horizontal_Average



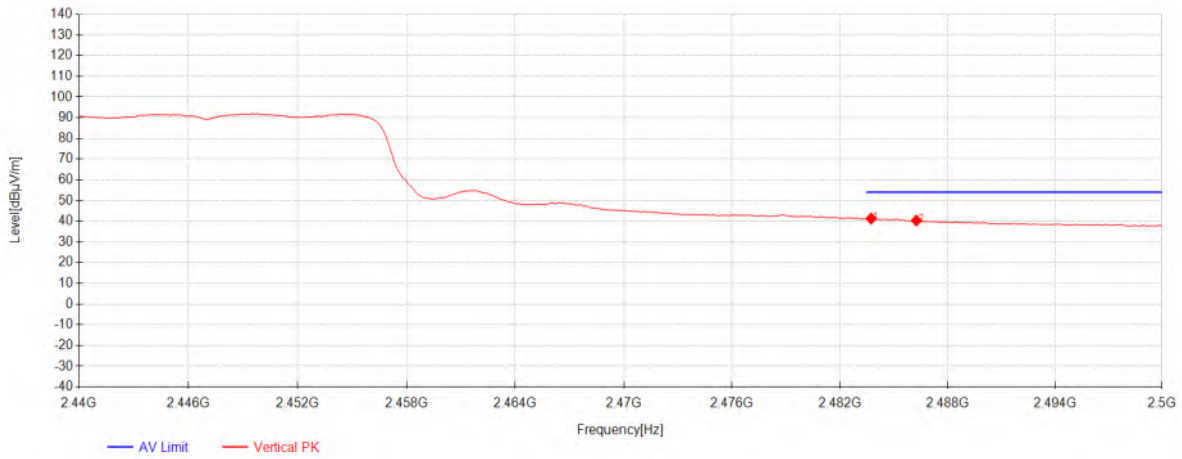
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.16	41.43	27.56	-24.63	44.35	54.00	9.65	Horizontal
2	2487.04	39.61	27.56	-24.63	42.55	54.00	11.45	Horizontal

11ax(HE40)_TX_CH_08_Vertical_Peak



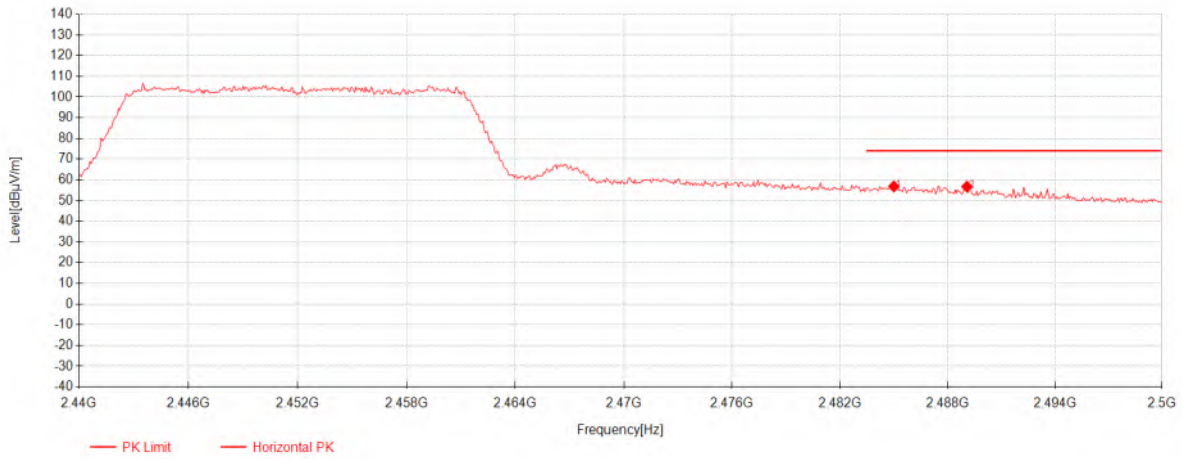
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.76	52.67	27.56	-24.63	55.60	74.00	18.40	Vertical
2	2488.48	53.07	27.57	-24.62	56.01	74.00	17.99	Vertical

11ax(HE20)_TX_CH_08_Vertical_Average



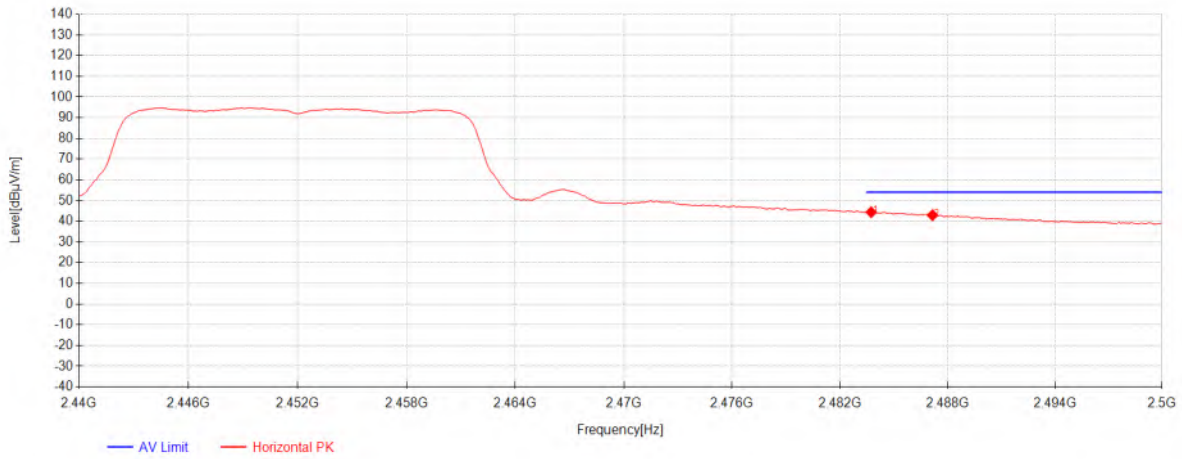
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.74	38.38	27.55	-24.63	41.30	54.00	12.70	Vertical
2	2486.26	37.41	27.56	-24.63	40.34	54.00	13.66	Vertical

11ax(HE20)_TX_CH_09_Horizontal_Peak



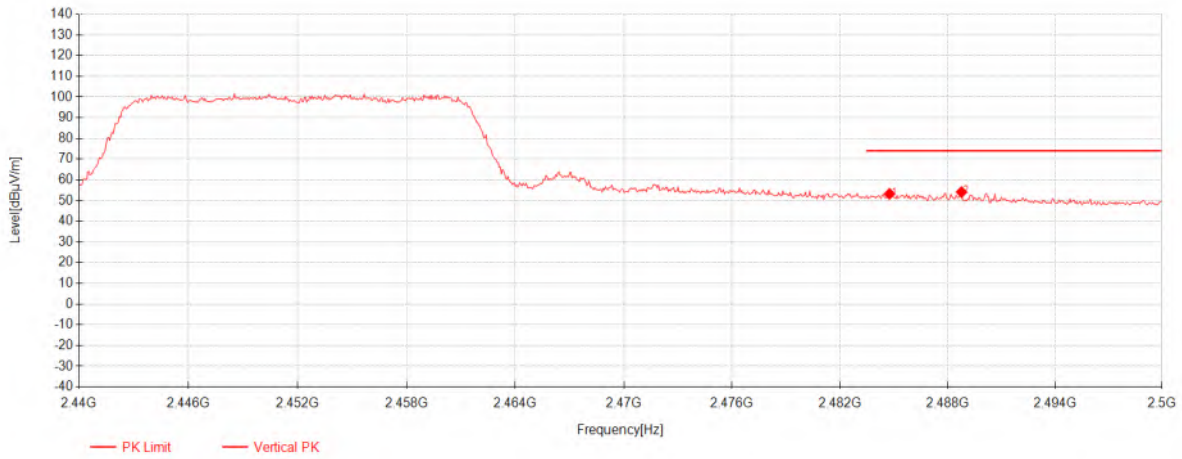
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2485	53.90	27.56	-24.63	56.83	74.00	17.17	Horizontal
2	2489.08	53.77	27.57	-24.62	56.72	74.00	17.28	Horizontal

11ax(HE20)_TX_CH_09_Horizontal_Average



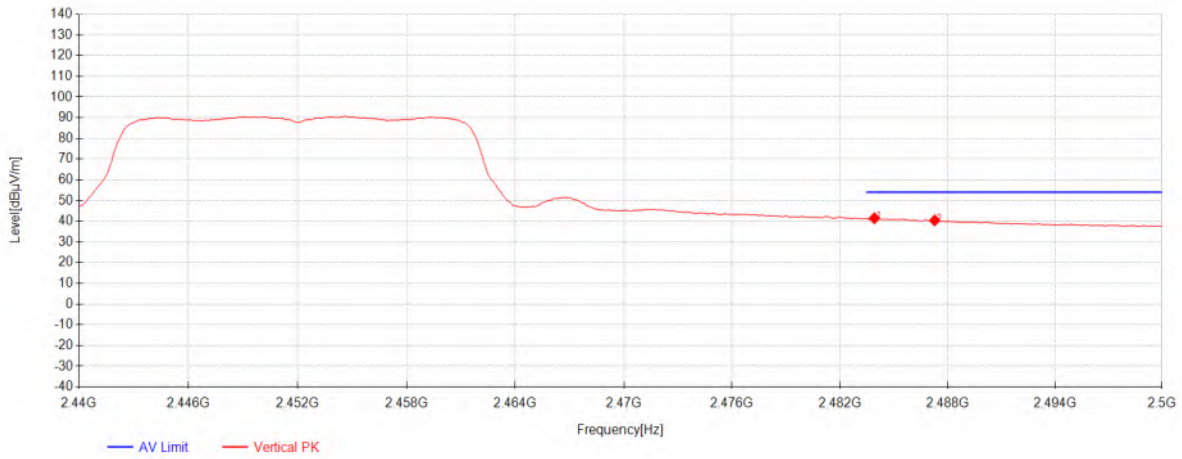
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.74	41.44	27.55	-24.63	44.36	54.00	9.64	Horizontal
2	2487.16	39.98	27.56	-24.63	42.92	54.00	11.08	Horizontal

11ax(HE20)_TX_CH_09_Vertical_Peak



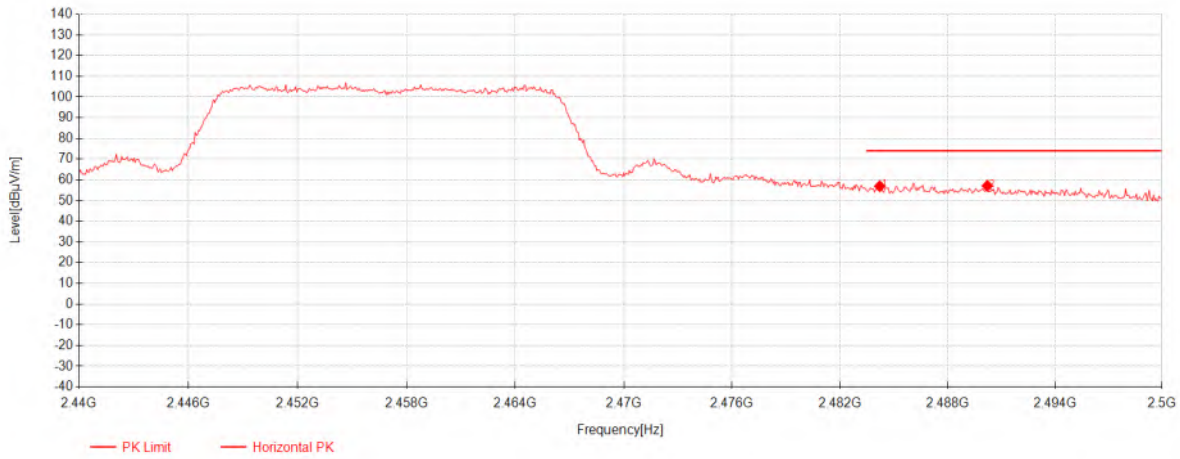
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.76	50.29	27.56	-24.63	53.22	74.00	20.78	Vertical
2	2488.78	51.14	27.57	-24.62	54.09	74.00	19.91	Vertical

11ax(HE20)_TX_CH_09_Vertical_Average



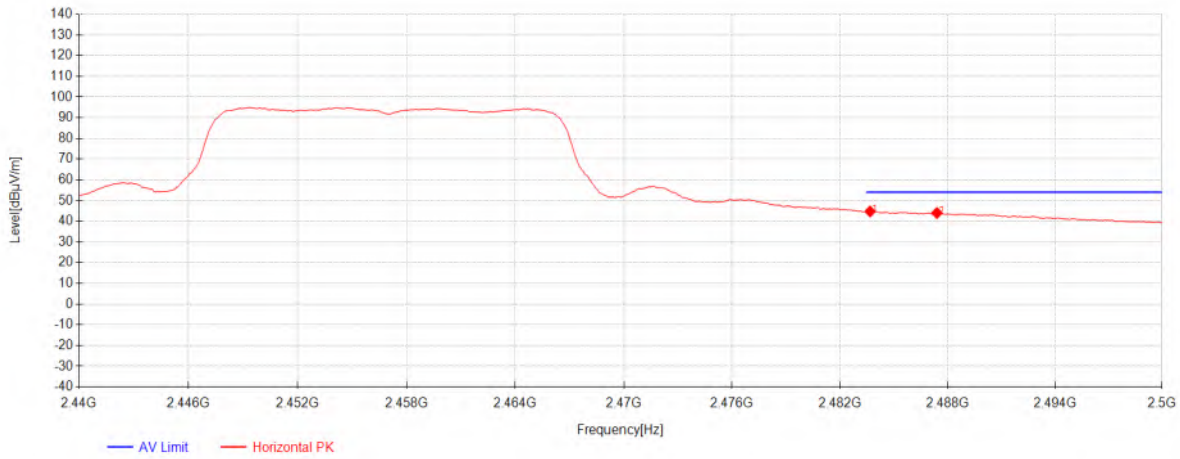
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	38.55	27.55	-24.63	41.47	54.00	12.53	Vertical
2	2487.28	37.46	27.56	-24.63	40.40	54.00	13.60	Vertical

11ax(HE20)_TX_CH_10_Horizontal_Peak



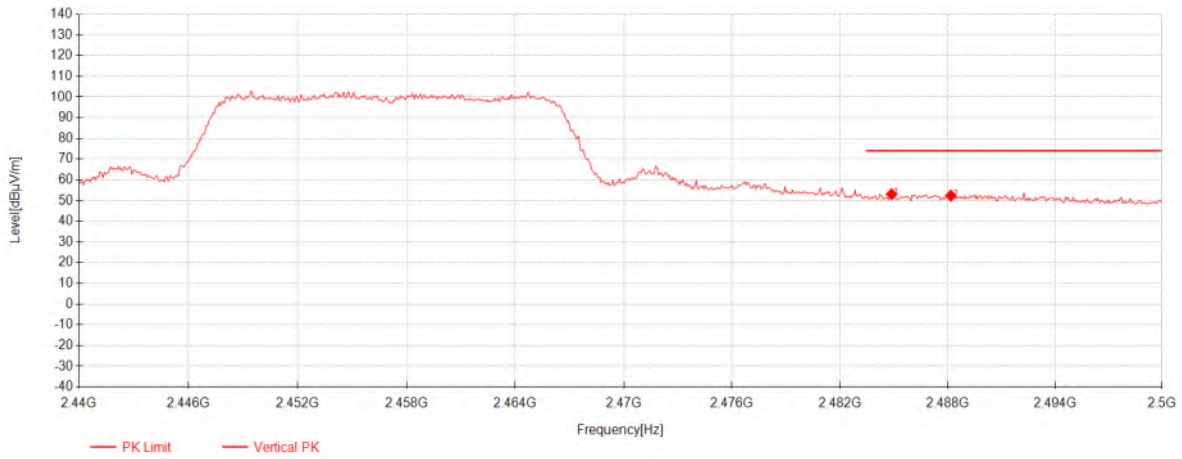
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.22	53.99	27.56	-24.63	56.91	74.00	17.09	Horizontal
2	2490.22	54.15	27.57	-24.62	57.10	74.00	16.90	Horizontal

11ax(HE20)_TX_CH_10_Horizontal_Average



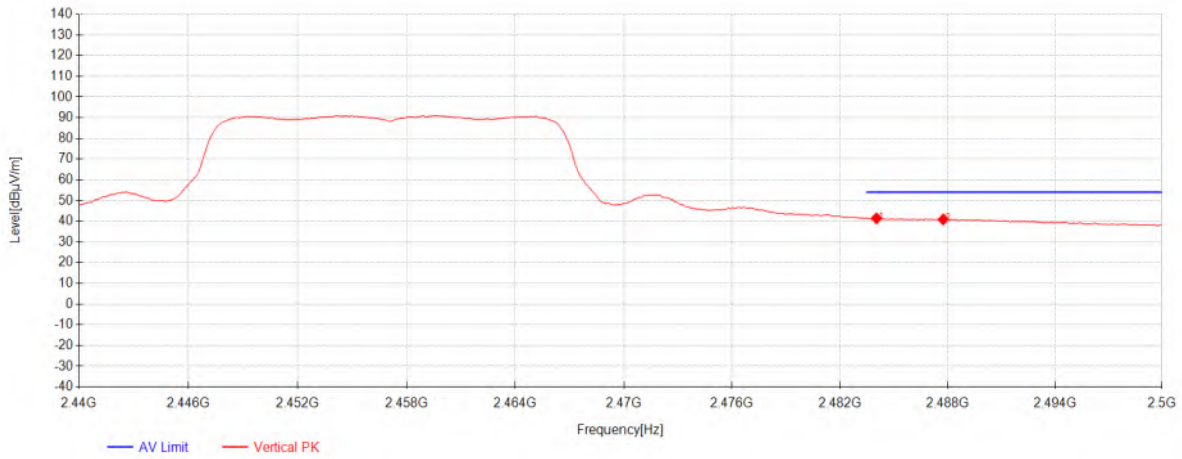
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.68	41.82	27.55	-24.63	44.74	54.00	9.26	Horizontal
2	2487.4	41.04	27.56	-24.63	43.98	54.00	10.02	Horizontal

11ax(HE20)_TX_CH_10_Vertical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.88	50.15	27.56	-24.63	53.08	74.00	20.92	Vertical
2	2488.18	49.43	27.57	-24.62	52.37	74.00	21.63	Vertical

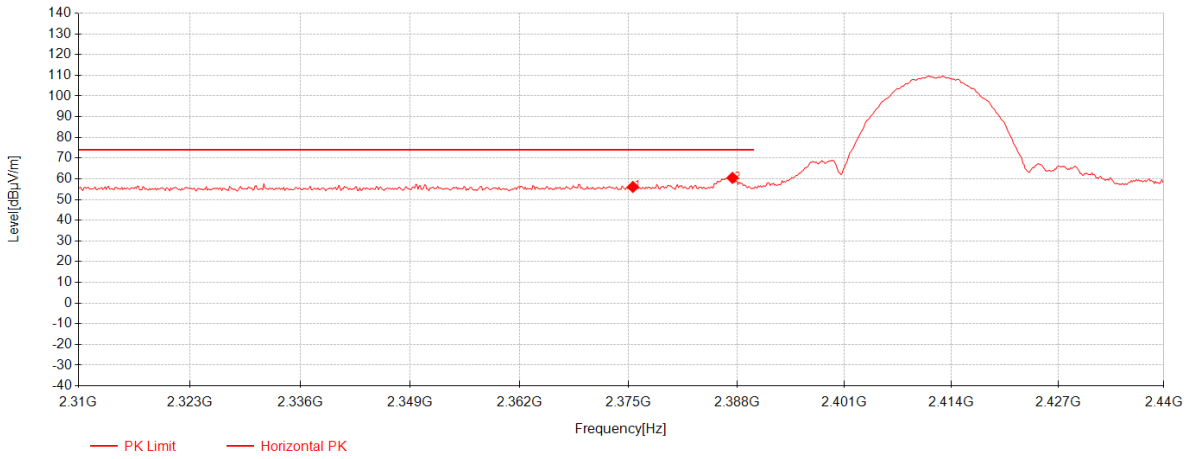
11ax(HE20)_TX_CH_10_Vertical_Average



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.04	38.49	27.56	-24.63	41.41	54.00	12.59	Vertical
2	2487.76	37.94	27.57	-24.63	40.88	54.00	13.12	Vertical

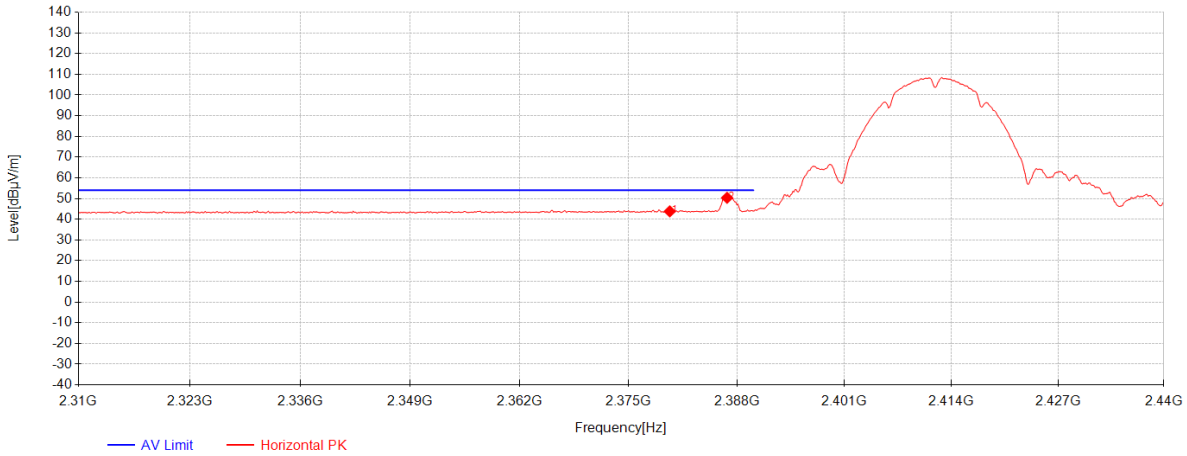
Spot check worst mode_R1.1

11b_TX_CH_01_Horizontal_Peak



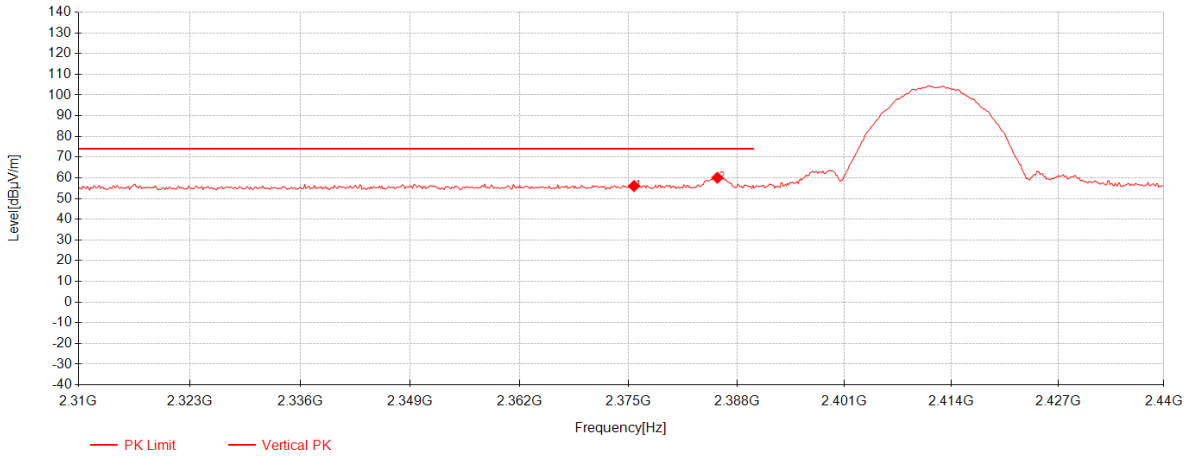
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2375.52	53.67	27.25	-24.83	56.09	74.00	17.91	Horizontal
2	2387.48	57.99	27.28	-24.82	60.46	74.00	13.54	Horizontal

11b_TX_CH_01_Horizontal_Average



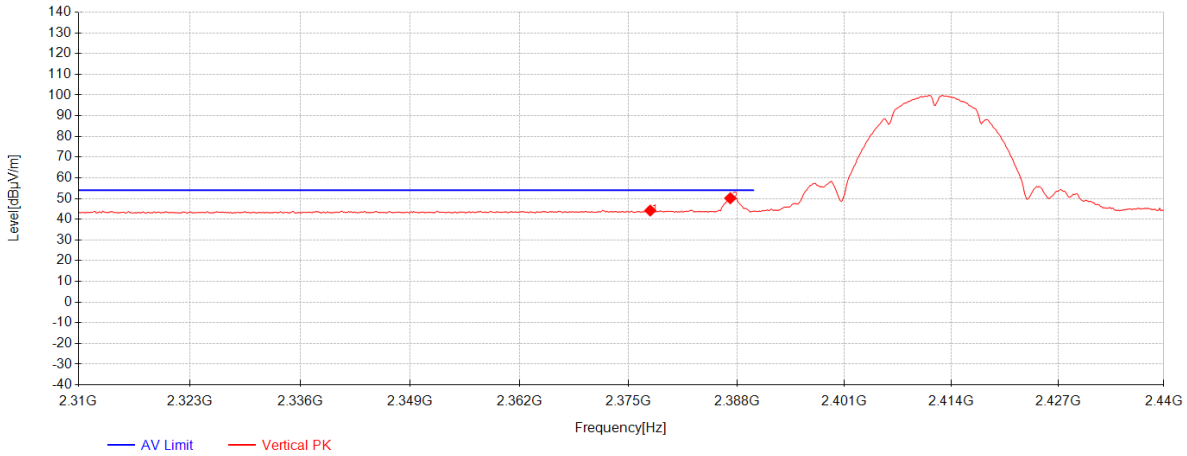
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2379.94	41.36	27.26	-24.82	43.80	54.00	16.20	Horizontal
2	2386.83	47.91	27.28	-24.82	50.37	54.00	3.63	Horizontal

11b_TX_CH_01_Vertical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2375.65	53.62	27.25	-24.83	56.04	74.00	17.96	Vertical
2	2385.66	57.57	27.28	-24.82	60.03	74.00	13.97	Vertical

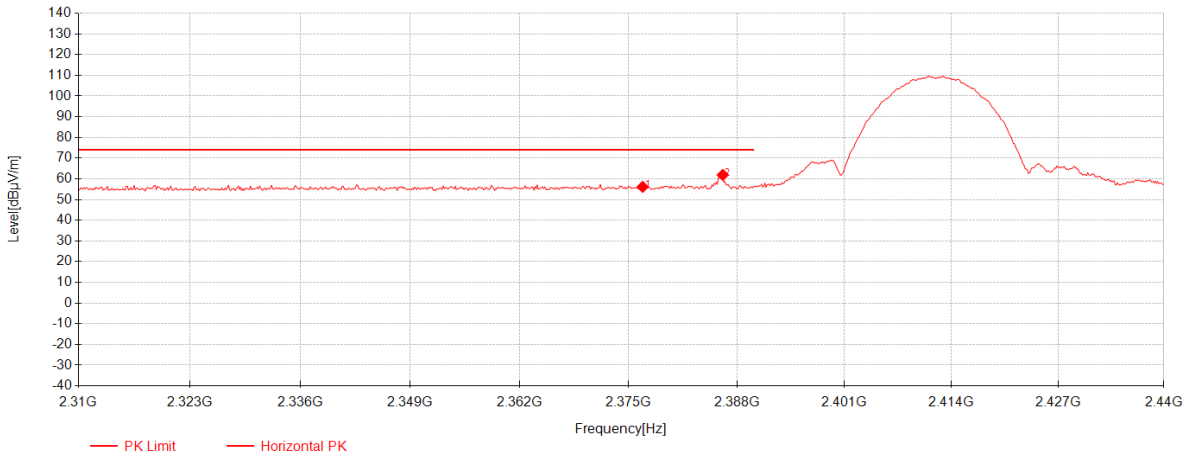
11b_TX_CH_01_Vertical_Average



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2377.6	41.75	27.26	-24.83	44.18	54.00	9.82	Vertical
2	2387.22	47.68	27.28	-24.82	50.15	54.00	3.85	Vertical

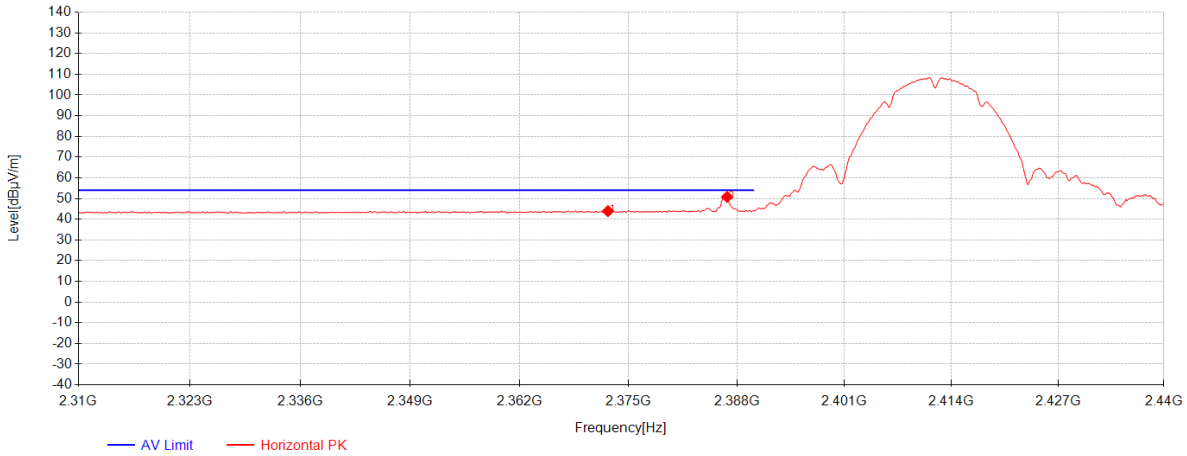
Spot check worst mode_R1.2

11b_TX_CH_01_Horizontal_Peak



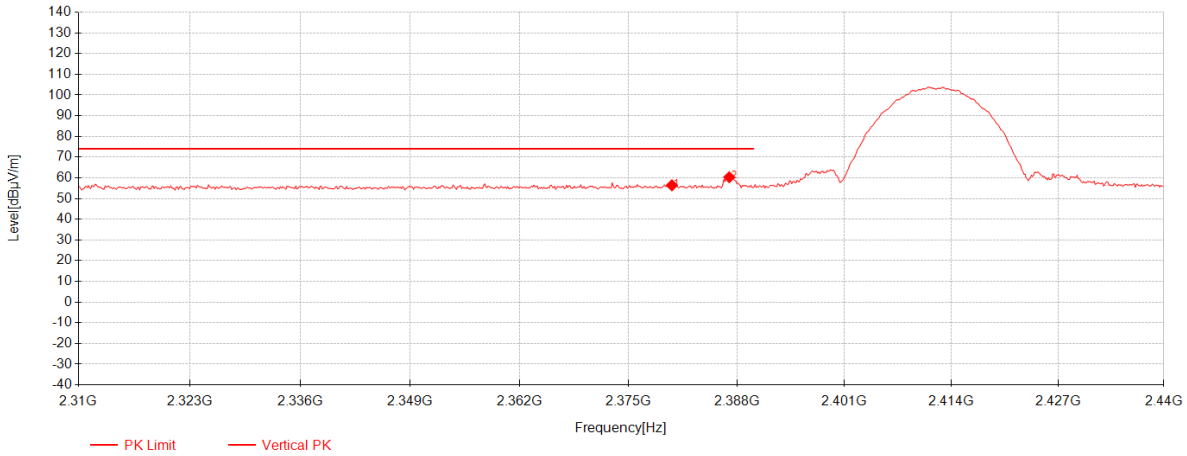
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2376.69	53.70	27.25	-24.83	56.13	74.00	17.87	Horizontal
2	2386.31	59.43	27.28	-24.82	61.89	74.00	12.11	Horizontal

11b_TX_CH_01_Horizontal_Average



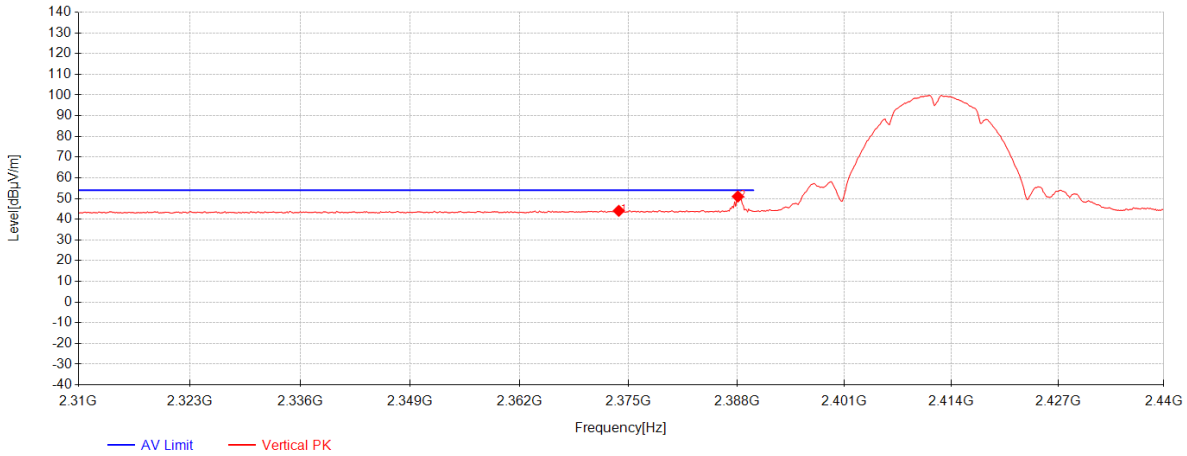
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2372.53	41.50	27.24	-24.83	43.91	54.00	10.09	Horizontal
2	2386.83	48.33	27.28	-24.82	50.79	54.00	3.21	Horizontal

11b_TX_CH_01_Vertical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2380.2	53.95	27.26	-24.82	56.39	74.00	17.61	Vertical
2	2387.09	57.84	27.28	-24.82	60.30	74.00	13.70	Vertical

11b_TX_CH_01_Vertical_Average



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2373.83	41.65	27.25	-24.83	44.07	54.00	9.93	Vertical
2	2388.13	48.49	27.29	-24.82	50.96	54.00	3.04	Vertical

7.2 Radiated Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2020) Section 6.4,6.5

Limit:

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
960-1000	500	3

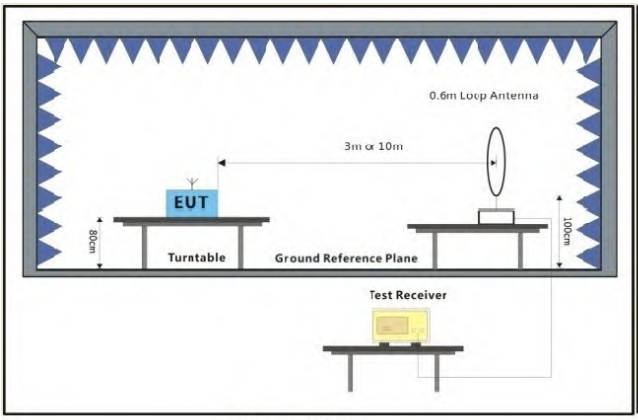
7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 43 % RH Atmospheric Pressure: 1001 mbar

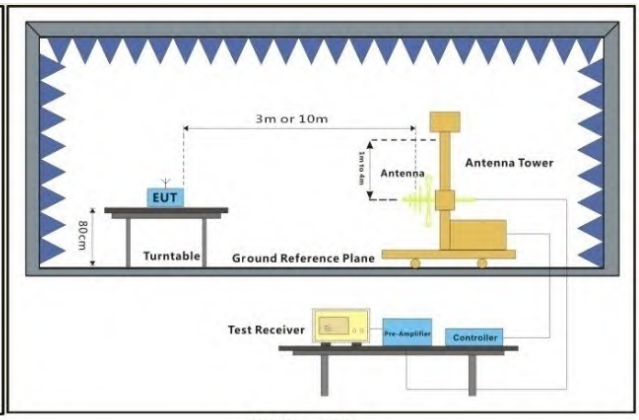
7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode(2.4G)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested. Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



Below 30MHz



30MHz-1GHz

7.2.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8m above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3m or 10m away from the interference-receiving antenna, which was mounted on the variable-height antenna tower.

c. The antenna height is varied from 1m to 4m 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 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1m) 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.

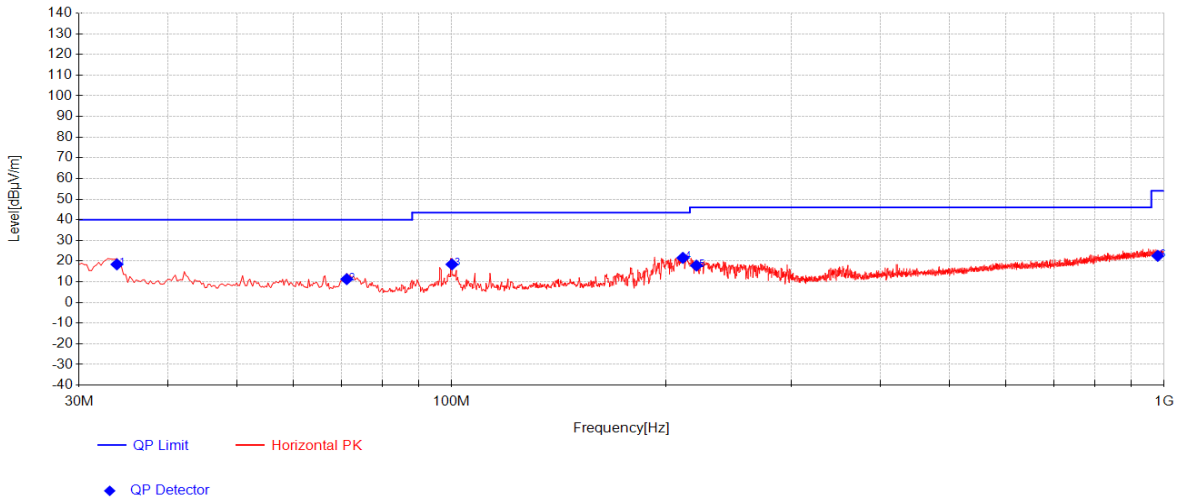
Remark:

1. 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 below 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.

2. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the worst-case test curve is displayed.

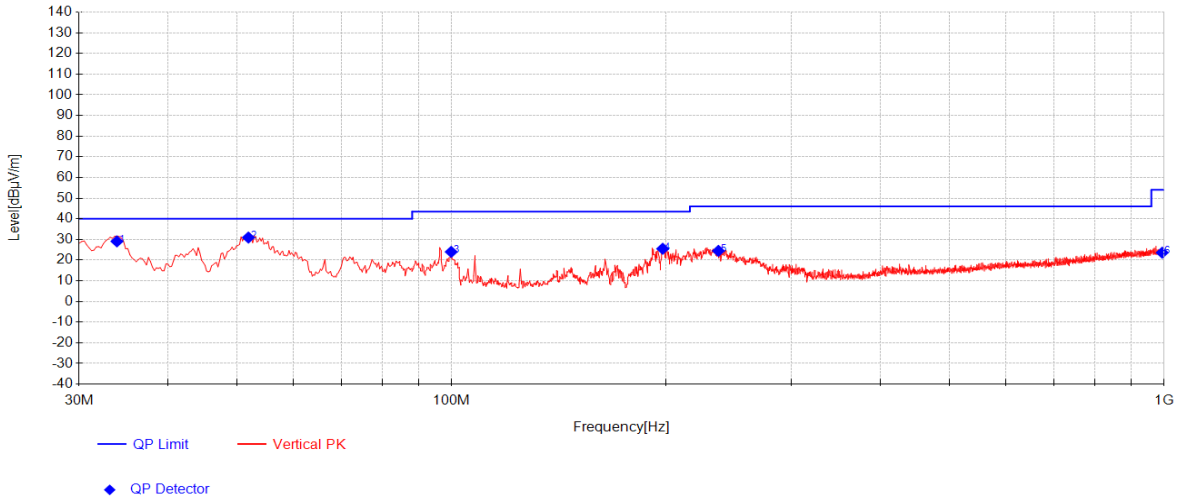
Hardware Version: 1.1

Test Mode: 07; Polarity: Horizontal



Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.88	39.67	12.73	-33.96	18.44	40.00	21.56	153	128	Horizontal
2	71.225	34.6	10.09	-33.41	11.28	40.00	28.72	199	265	Horizontal
3	100.0825	42.34	9.21	-33.12	18.43	43.50	25.07	184	316	Horizontal
4	211.1475	43.6	10.13	-32.17	21.57	43.50	21.93	125	244	Horizontal
5	220.605	39.56	10.45	-32.13	17.87	46.00	28.13	113	128	Horizontal
6	980.115	26.18	24.34	-27.97	22.55	54.00	31.45	156	87	Horizontal

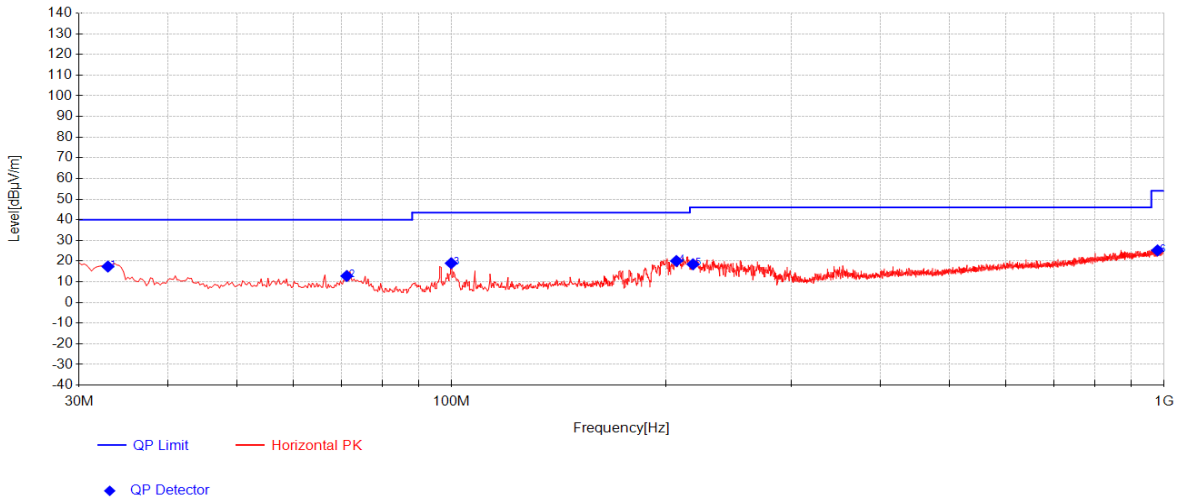
Test Mode: 07; Polarity: Vertical



Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.88	50.31	12.73	-33.96	29.08	40.00	10.92	154	139	Vertical
2	51.825	51.31	13.28	-33.67	30.93	40.00	9.07	182	44	Vertical
3	99.84	47.93	9.20	-33.13	24.00	43.50	19.50	163	243	Vertical
4	197.81	47.87	9.90	-32.27	25.50	43.50	18.00	174	243	Vertical
5	236.8525	44.89	11.66	-32.06	24.50	46.00	21.50	151	53	Vertical
6	994.4225	27.03	24.46	-27.86	23.62	54.00	30.38	136	127	Vertical

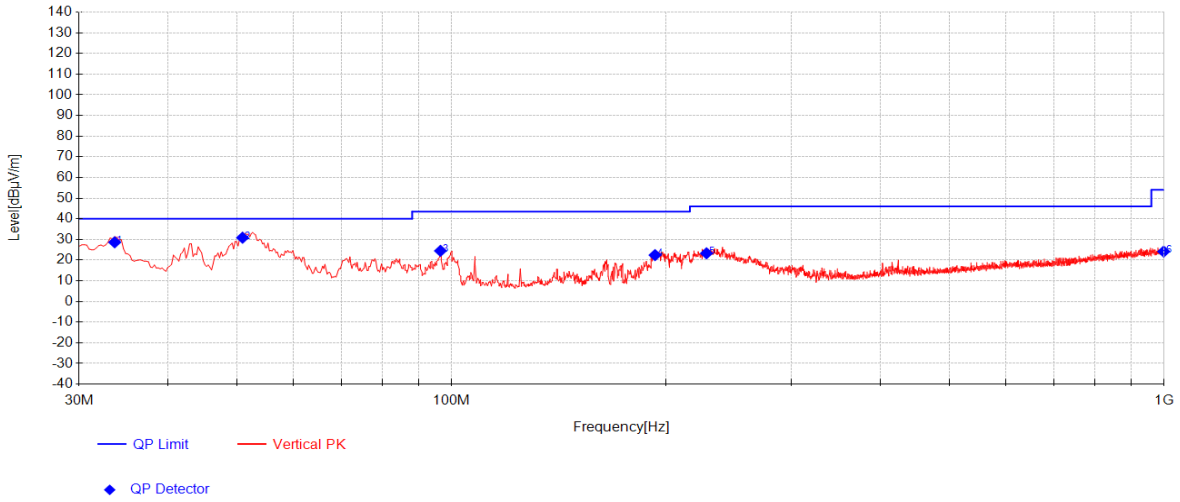
Hardware Version: 1.2

Test Mode: 07; Polarity: Horizontal



Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.91	38.69	12.67	-33.98	17.38	40.00	22.62	132	111	Horizontal
2	71.225	36.14	10.09	-33.41	12.82	40.00	27.18	167	80	Horizontal
3	99.84	42.92	9.20	-33.13	18.99	43.50	24.51	128	339	Horizontal
4	206.7825	42.24	10.00	-32.20	20.05	43.50	23.45	134	245	Horizontal
5	218.18	40.27	10.35	-32.14	18.47	46.00	27.53	115	255	Horizontal
6	979.3875	28.84	24.34	-27.98	25.20	54.00	28.80	169	1	Horizontal

Test Mode: 07; Polarity: Vertical



Final Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.6375	49.88	12.72	-33.97	28.63	40.00	11.37	128	360	Vertical
2	50.855	51.12	13.40	-33.68	30.84	40.00	9.16	131	107	Vertical
3	96.445	48.59	9.09	-33.17	24.51	43.50	18.99	164	359	Vertical
4	192.96	44.63	10.12	-32.31	22.44	43.50	21.06	125	242	Vertical
5	227.88	44.42	10.99	-32.11	23.30	46.00	22.70	123	64	Vertical
6	999.2725	27.46	24.49	-27.81	24.15	54.00	29.85	147	295	Vertical

7.3 Radiated Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2020) Section 6.6 & 11.12

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1000	500	3

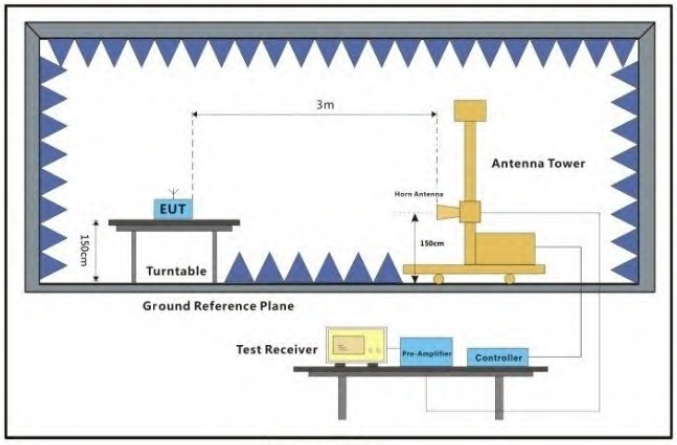
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 43 % RH Atmospheric Pressure: 1001 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode(2.4G)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested. Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



Above 1GHz

7.3.4 Measurement Procedure and Data

a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5m above the ground at a 3m fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3m away from the interference-receiving antenna from 1GHz to 18GHz, and 1m away from the interference-receiving antenna above 18GHz.

b. The interference-receiving antenna was mounted on the variable-height antenna tower, with its boresight facing the EUT throughout the test.

c. The antenna height is varied from 1m to 4m 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 1m to 4m 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. Test the EUT in the lowest channel, the middle channel, the Highest channel.

g. 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.

h. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Scan from 18GHz to 10th harmonic of the highest frequency or 40 GHz, whichever is lower.

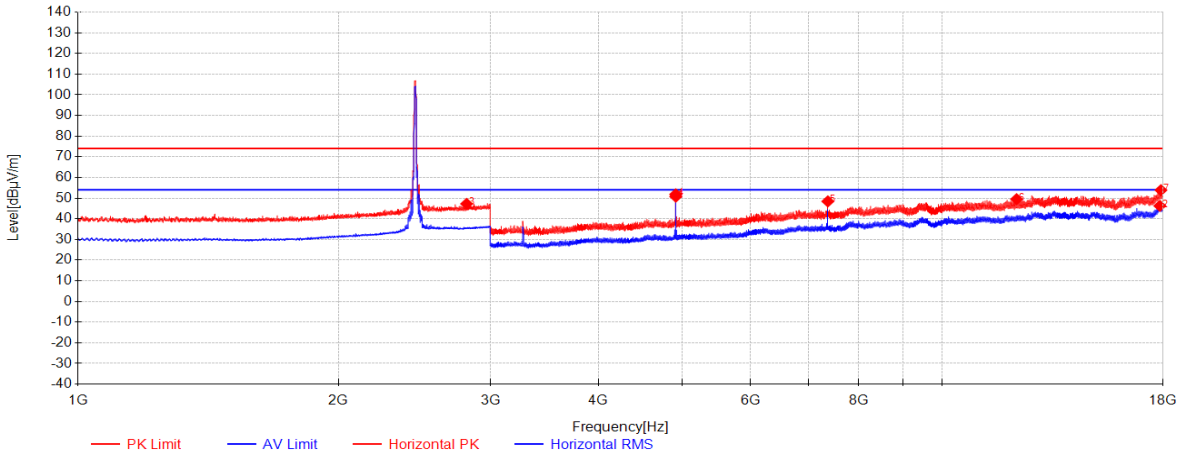
2. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

3. For the frequency above 18GHz, testing had been executed under all test modes, only the worst-case test curve is displayed in the report.

4. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst-case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.

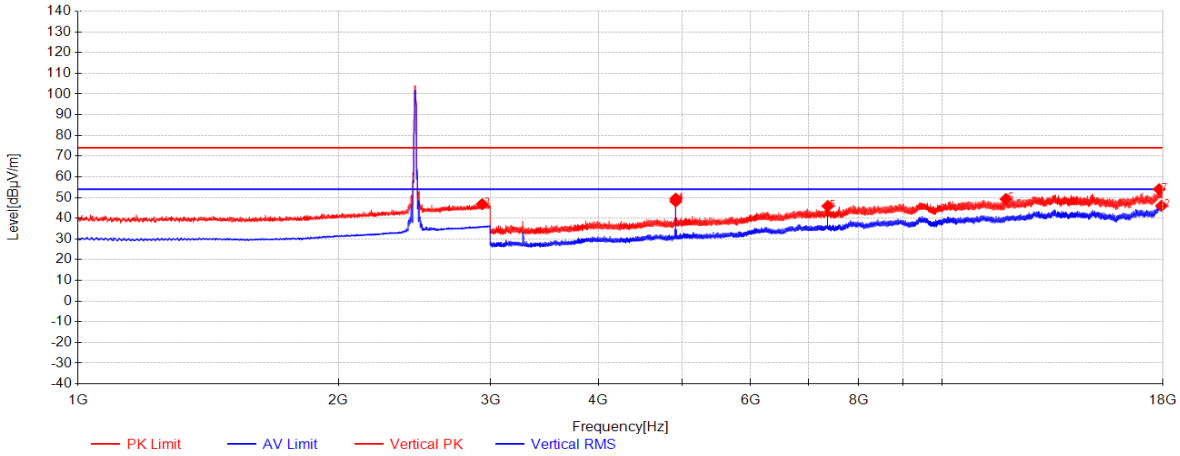
Hardware Version: 1.1(Additional testing of adjacent channels)

11b_TX_CH_10_Horizontal



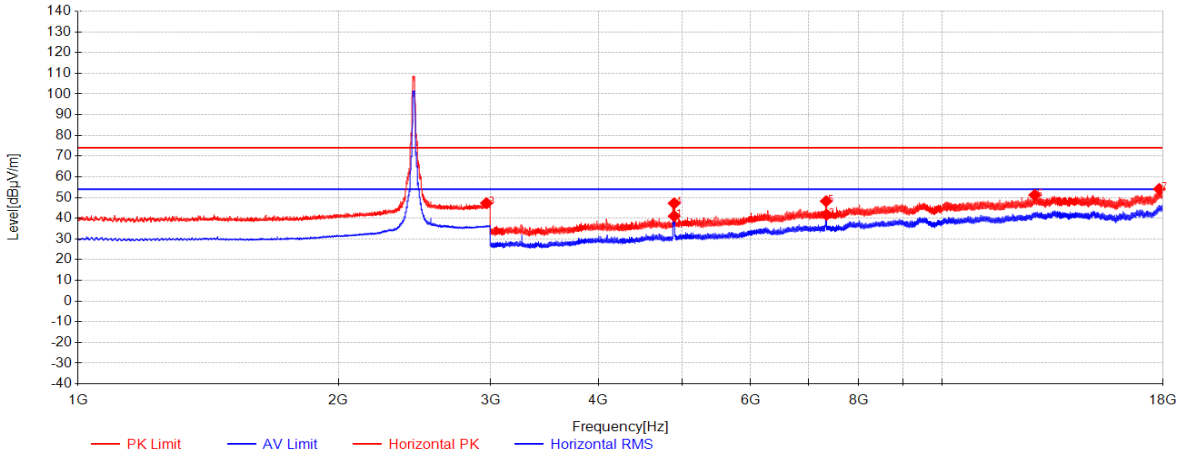
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4914.375	62.67	32.89	-44.83	50.73	54.00	3.27	Horizontal
2	17852.25	35.81	41.27	-30.81	46.27	54.00	7.73	Horizontal
3	2814.5	42.41	28.86	-24.03	47.24	74.00	26.76	Horizontal
4	4914	63.77	32.89	-44.83	51.83	74.00	22.17	Horizontal
5	7369.5	54.48	36.30	-42.36	48.42	74.00	25.58	Horizontal
6	12186.75	46.06	38.92	-35.49	49.49	74.00	24.51	Horizontal
7	17904.75	43.54	41.42	-31.11	53.86	74.00	20.14	Horizontal

11b_TX_CH_10_Vertical



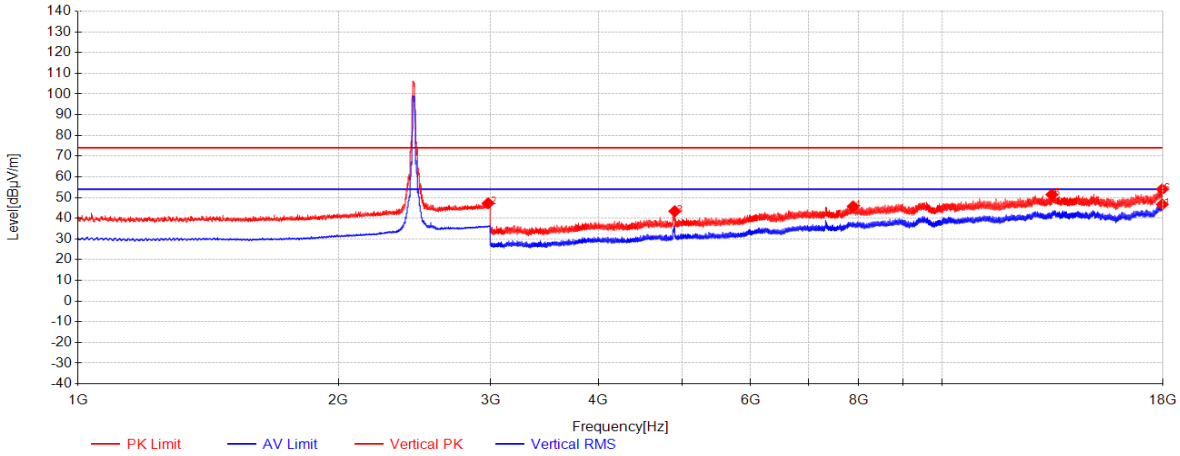
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4914.375	60.09	32.89	-44.83	48.15	54.00	5.85	Vertical
2	17933.25	35.57	41.51	-31.08	46.00	54.00	8.00	Vertical
3	2933.5	40.96	29.33	-23.50	46.79	74.00	27.21	Vertical
4	4914	61.39	32.89	-44.83	49.45	74.00	24.55	Vertical
5	7369.5	51.95	36.30	-42.36	45.89	74.00	28.11	Vertical
6	11846.25	46.04	38.79	-35.55	49.28	74.00	24.72	Vertical
7	17818.125	43.41	41.17	-30.60	53.98	74.00	20.02	Vertical

11g_TX_CH_08_Horizontal



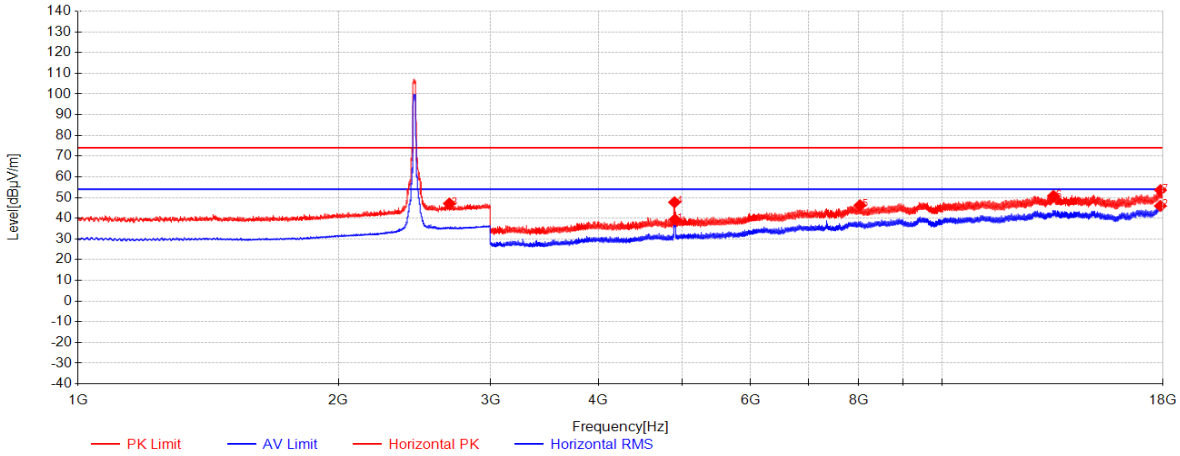
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4893.375	53.07	32.84	-44.85	41.06	54.00	12.94	Horizontal
2	7345.125	47.64	36.30	-42.25	41.69	54.00	12.31	Horizontal
3	2967.5	41.31	29.47	-23.48	47.30	74.00	26.70	Horizontal
4	4893	59.22	32.84	-44.85	47.21	74.00	26.79	Horizontal
5	7337.625	54.15	36.30	-42.21	48.24	74.00	25.76	Horizontal
6	12790.875	46.36	39.65	-34.80	51.21	74.00	22.79	Horizontal
7	17826.375	43.58	41.20	-30.65	54.12	74.00	19.88	Horizontal

11g_TX_CH_08_Vertical



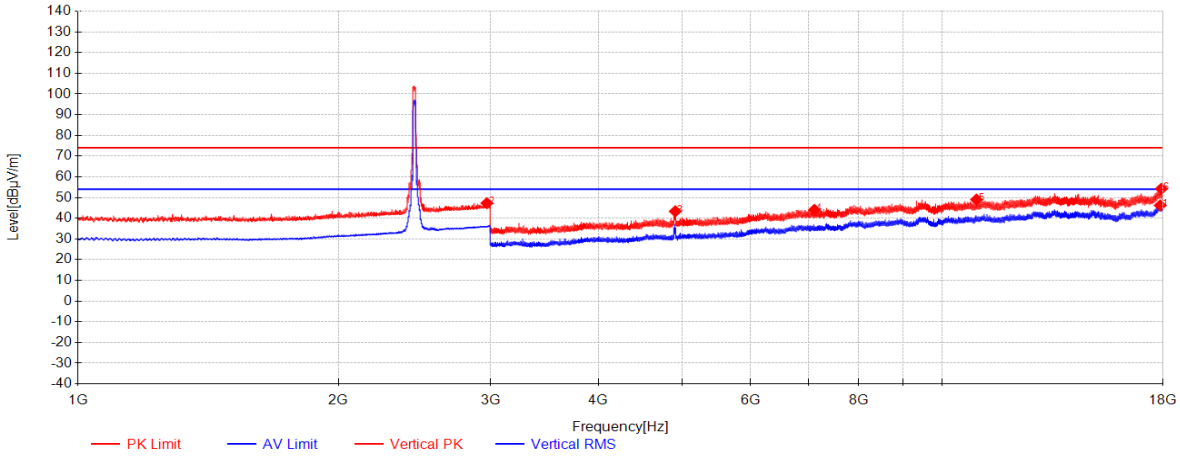
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17967.375	36.12	41.61	-31.05	46.68	54.00	7.32	Vertical
2	2981	41.23	29.52	-23.47	47.28	74.00	26.72	Vertical
3	4900.875	55.33	32.86	-44.83	43.36	74.00	30.64	Vertical
4	7882.125	50.00	37.06	-41.35	45.71	74.00	28.29	Vertical
5	13386.75	46.72	40.09	-35.39	51.42	74.00	22.58	Vertical
6	17967	43.43	41.60	-31.05	53.98	74.00	20.02	Vertical

11g_TX_CH_09_Horizontal



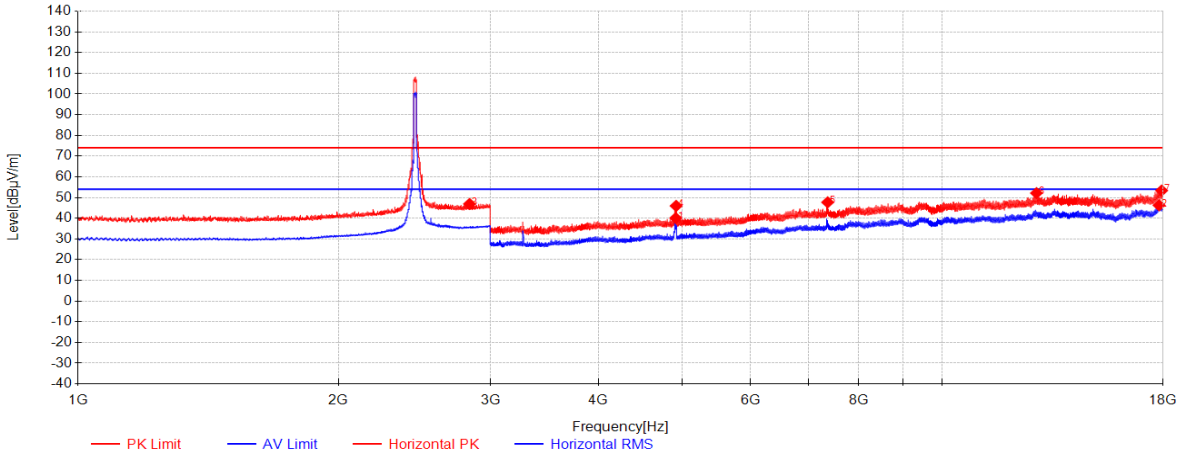
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4903.5	51.35	32.87	-44.83	39.39	54.00	14.61	Horizontal
2	17875.125	35.57	41.34	-30.96	45.95	54.00	8.05	Horizontal
3	2688	43.06	28.35	-24.31	47.11	74.00	26.89	Horizontal
4	4897.875	59.68	32.85	-44.84	47.70	74.00	26.30	Horizontal
5	8029.875	50.11	37.32	-41.18	46.25	74.00	27.75	Horizontal
6	13444.5	45.67	40.12	-35.02	50.77	74.00	23.23	Horizontal
7	17883.375	43.23	41.36	-31.01	53.58	74.00	20.42	Horizontal

11g_TX_CH_09_Vertical



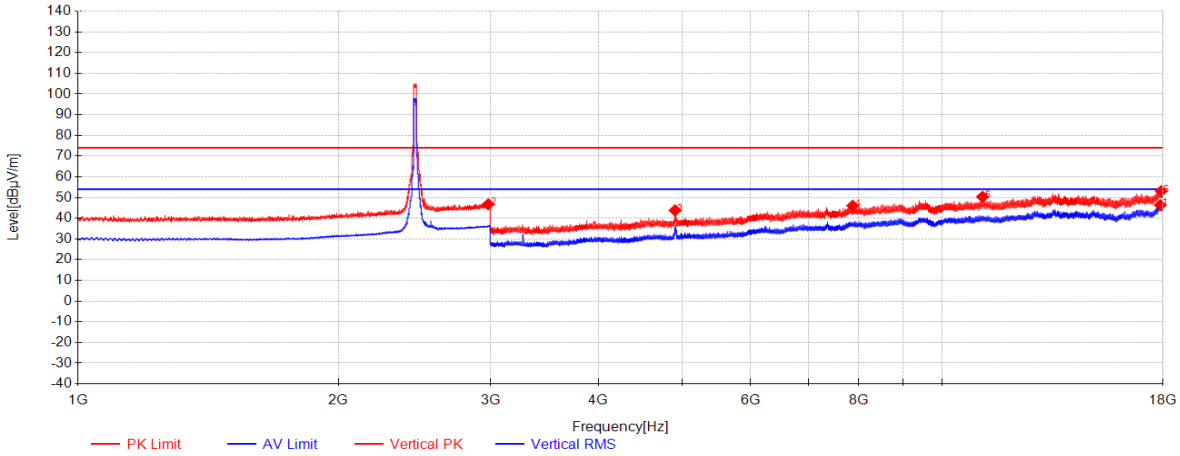
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17869.875	35.81	41.32	-30.92	46.21	54.00	7.79	Vertical
2	2970.5	41.27	29.48	-23.48	47.27	74.00	26.73	Vertical
3	4908	55.30	32.88	-44.83	43.35	74.00	30.65	Vertical
4	7109.625	50.35	36.30	-42.59	44.06	74.00	29.94	Vertical
5	10952.25	46.04	39.24	-36.25	49.03	74.00	24.97	Vertical
6	17926.125	43.85	41.49	-31.09	54.25	74.00	19.75	Vertical

11g_TX_CH_10_Horizontal



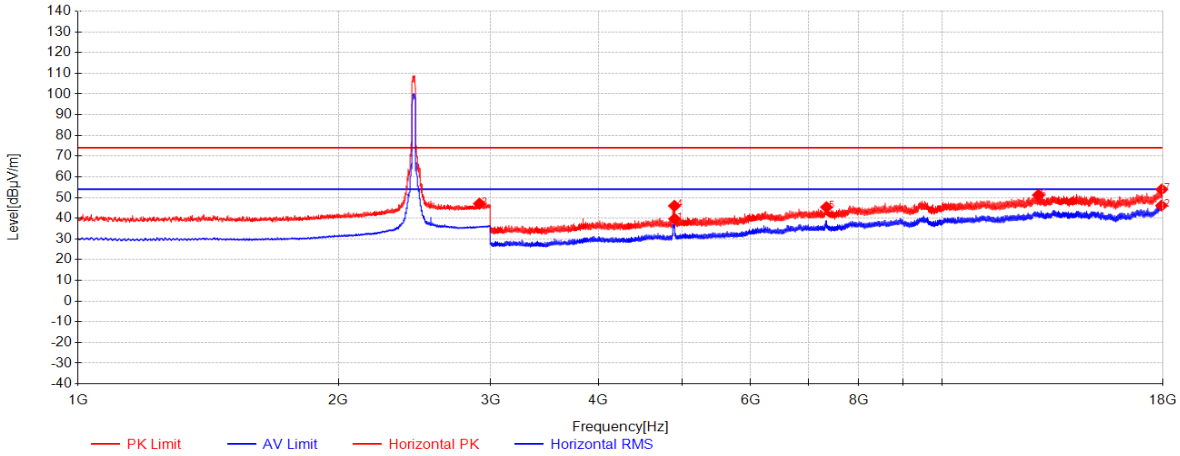
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4914.375	52.00	32.89	-44.83	40.06	54.00	13.94	Horizontal
2	17814	35.67	41.16	-30.58	46.25	54.00	7.75	Horizontal
3	2837	41.86	28.95	-23.90	46.91	74.00	27.09	Horizontal
4	4918.875	57.91	32.91	-44.84	45.98	74.00	28.02	Horizontal
5	7366.5	53.74	36.30	-42.35	47.69	74.00	26.31	Horizontal
6	12850.875	47.49	39.72	-35.05	52.16	74.00	21.84	Horizontal
7	17937.75	42.94	41.52	-31.08	53.38	74.00	20.62	Horizontal

11g_TX_CH_10_Vertical



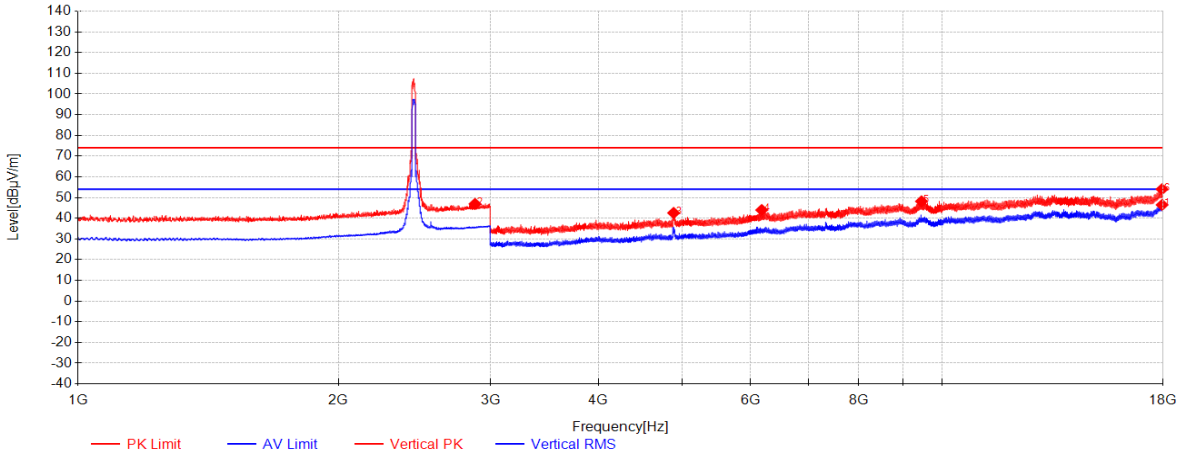
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17871	35.97	41.33	-30.93	46.37	54.00	7.63	Vertical
2	2981.5	40.70	29.53	-23.47	46.75	74.00	27.25	Vertical
3	4905.375	55.77	32.87	-44.83	43.81	74.00	30.19	Vertical
4	7874.25	50.31	37.05	-41.32	46.03	74.00	27.97	Vertical
5	11130.75	47.12	39.22	-35.98	50.36	74.00	23.64	Vertical
6	17913.75	42.75	41.45	-31.10	53.10	74.00	20.90	Vertical

11ax(HE20)_TX_CH_08_Horizontal



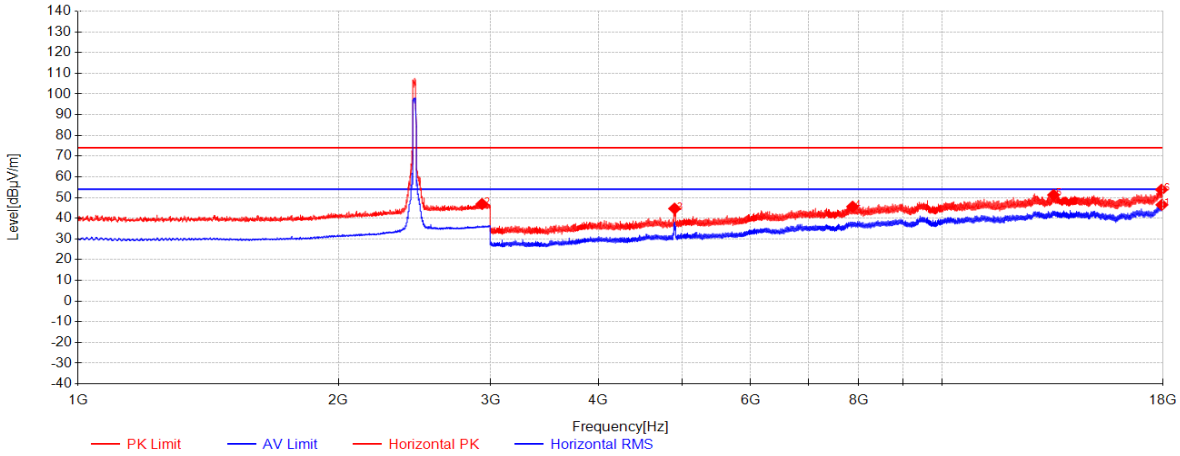
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4900.125	51.65	32.86	-44.83	39.68	54.00	14.32	Horizontal
2	17936.25	35.70	41.52	-31.08	46.14	54.00	7.86	Horizontal
3	2912.5	41.33	29.25	-23.51	47.07	74.00	26.93	Horizontal
4	4897.125	57.96	32.85	-44.84	45.97	74.00	28.03	Horizontal
5	7342.875	51.30	36.30	-42.24	45.36	74.00	28.64	Horizontal
6	12914.25	46.75	39.80	-35.34	51.21	74.00	22.79	Horizontal
7	17946.375	43.42	41.54	-31.07	53.90	74.00	20.10	Horizontal

11ax(HE20)_TX_CH_08_Vertical



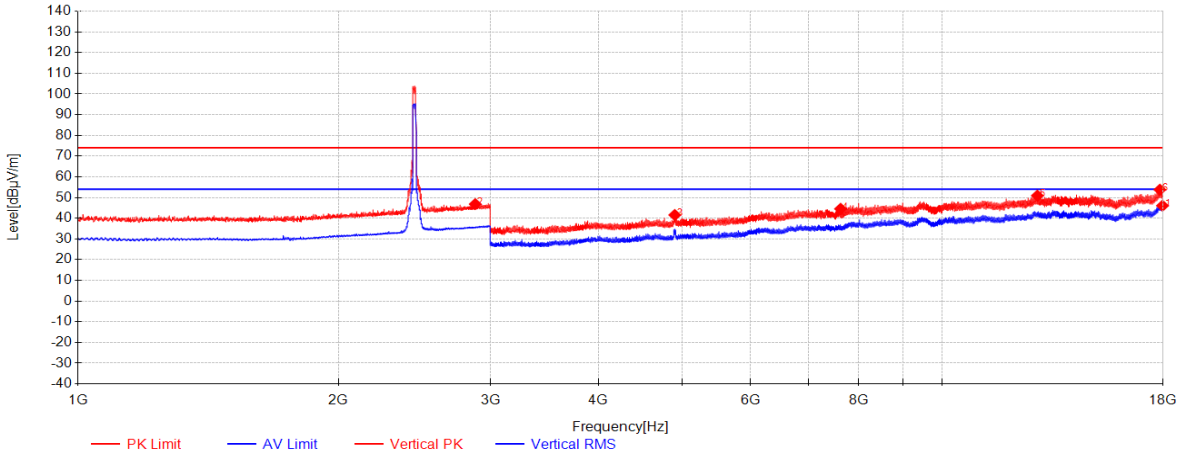
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17959.125	35.94	41.58	-31.06	46.46	54.00	7.54	Vertical
2	2878.5	41.44	29.11	-23.65	46.91	74.00	27.09	Vertical
3	4885.875	54.62	32.83	-44.88	42.57	74.00	31.43	Vertical
4	6178.875	52.94	34.86	-43.83	43.97	74.00	30.03	Vertical
5	9457.875	48.86	38.05	-38.73	48.17	74.00	25.83	Vertical
6	17953.875	43.52	41.57	-31.06	54.02	74.00	19.98	Vertical

11ax(HE20)_TX_CH_09_Horizontal



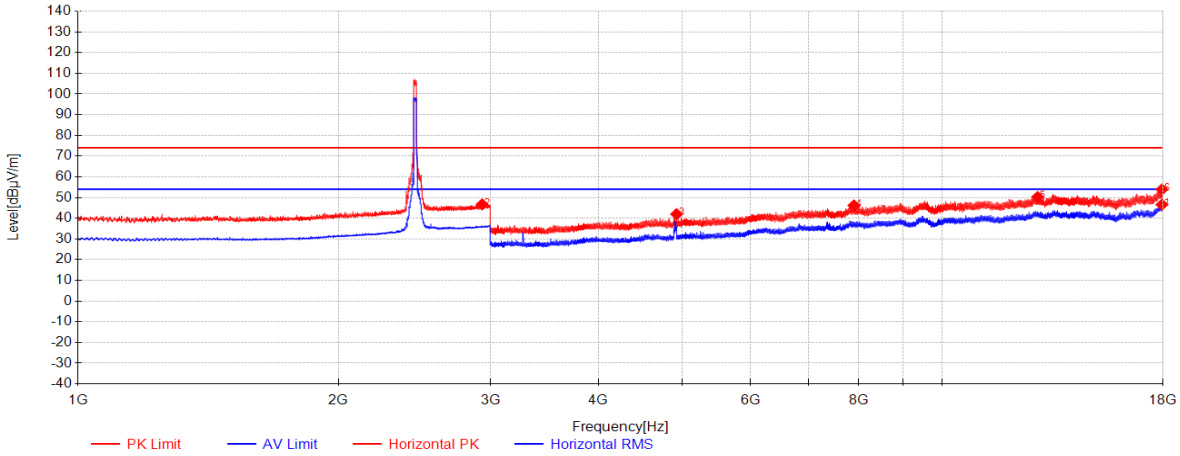
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17950.125	35.99	41.56	-31.06	46.48	54.00	7.52	Horizontal
2	2932.5	41.06	29.33	-23.50	46.89	74.00	27.11	Horizontal
3	4898.625	56.64	32.86	-44.83	44.66	74.00	29.34	Horizontal
4	7871.625	49.86	37.04	-41.32	45.59	74.00	28.41	Horizontal
5	13448.25	46.12	40.12	-34.99	51.26	74.00	22.74	Horizontal
6	17934.375	43.33	41.51	-31.08	53.76	74.00	20.24	Horizontal

11ax(HE20)_TX_CH_09_Vertical



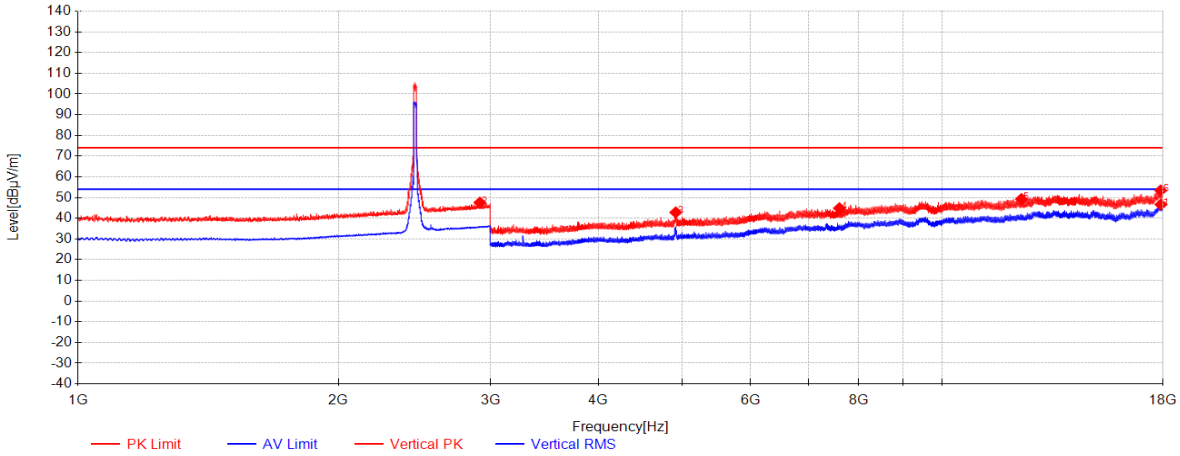
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17978.625	35.45	41.64	-31.04	46.05	54.00	7.95	Vertical
2	2880	41.34	29.12	-23.64	46.82	74.00	27.18	Vertical
3	4901.625	53.53	32.86	-44.83	41.56	74.00	32.44	Vertical
4	7624.5	49.83	36.55	-41.83	44.55	74.00	29.45	Vertical
5	12881.25	46.38	39.76	-35.23	50.91	74.00	23.09	Vertical
6	17853.375	43.34	41.27	-30.82	53.79	74.00	20.21	Vertical

11ax(HE20)_TX_CH_10_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17952	36.10	41.56	-31.06	46.60	54.00	7.40	Horizontal
2	2933.5	40.85	29.33	-23.50	46.68	74.00	27.32	Horizontal
3	4925.25	53.89	32.92	-44.84	41.97	74.00	32.03	Horizontal
4	7900.875	50.49	37.10	-41.42	46.17	74.00	27.83	Horizontal
5	12889.125	45.76	39.77	-35.28	50.25	74.00	23.75	Horizontal
6	17951.625	43.40	41.56	-31.06	53.90	74.00	20.10	Horizontal

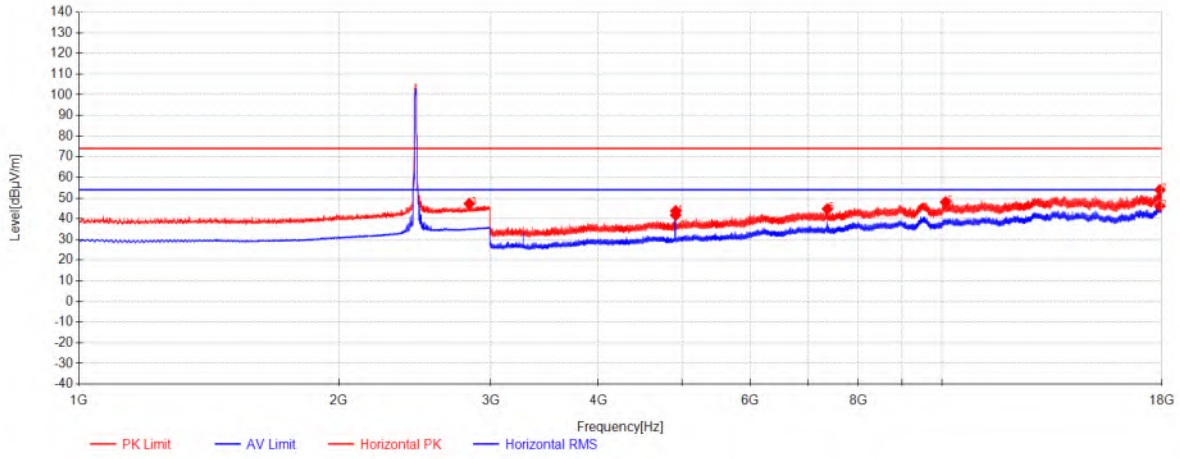
11ax(HE20)_TX_CH_10_Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17904	36.31	41.42	-31.11	46.63	54.00	7.37	Vertical
2	2915.5	41.79	29.26	-23.51	47.54	74.00	26.46	Vertical
3	4914.375	54.78	32.89	-44.83	42.84	74.00	31.16	Vertical
4	7600.875	50.12	36.50	-41.79	44.83	74.00	29.17	Vertical
5	12346.875	45.10	39.12	-34.95	49.27	74.00	24.73	Vertical
6	17892	43.10	41.39	-31.06	53.43	74.00	20.57	Vertical

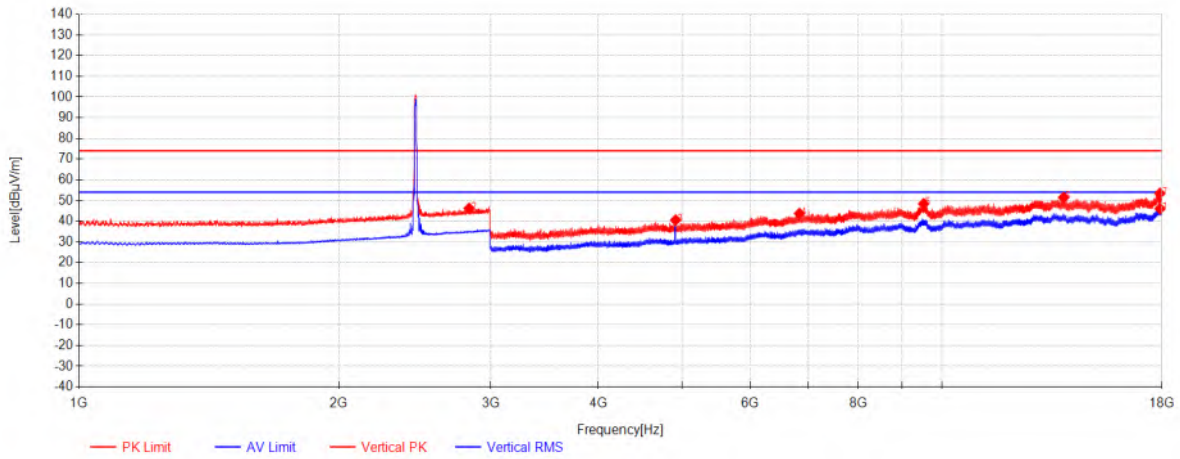
Hardware Version: 1.2(Additional testing of adjacent channels)

11b_TX_CH_10_Horizontal



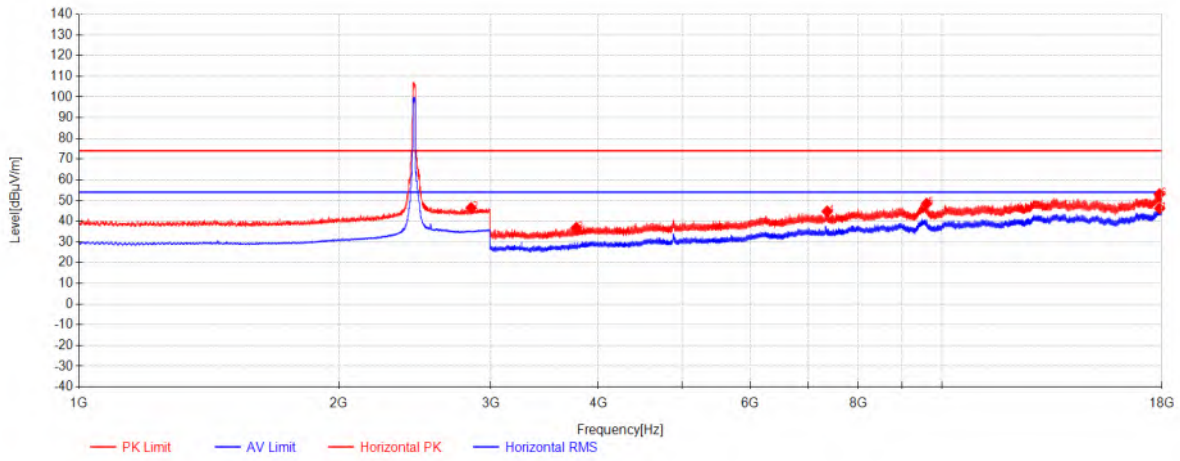
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4914.375	53.70	32.89	-44.83	41.76	54.00	12.24	Horizontal
2	17883.75	35.79	41.36	-31.01	46.14	54.00	7.86	Horizontal
3	2833	42.28	28.93	-23.92	47.29	74.00	26.71	Horizontal
4	4914	55.72	32.89	-44.83	43.78	74.00	30.22	Horizontal
5	7368.75	50.80	36.30	-42.36	44.74	74.00	29.26	Horizontal
6	10100.625	47.34	38.22	-37.51	48.05	74.00	25.95	Horizontal
7	17893.125	43.63	41.39	-31.07	53.95	74.00	20.05	Horizontal

11b_TX_CH_10_Vertical



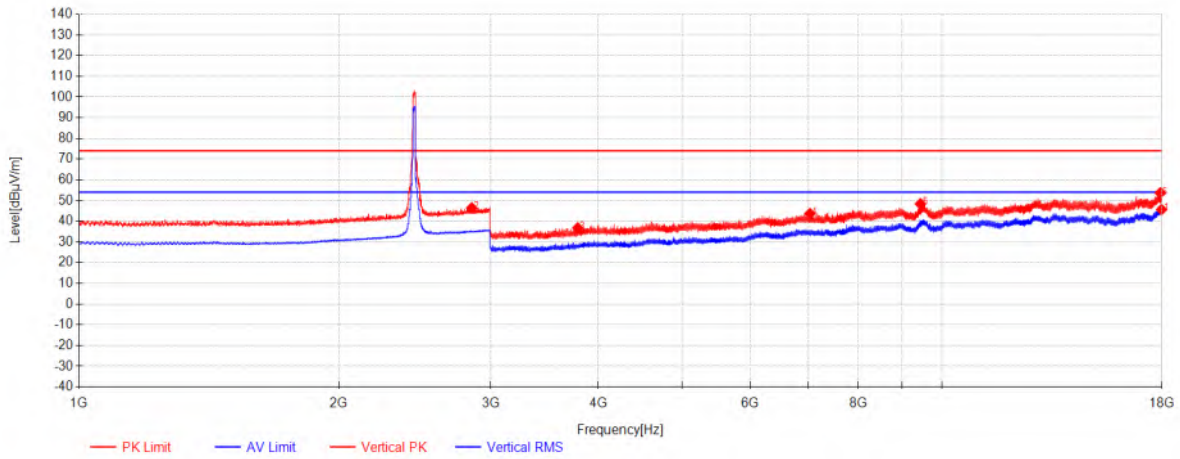
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17902.125	35.78	41.42	-31.11	46.09	54.00	7.91	Vertical
2	2832.5	41.19	28.93	-23.93	46.20	74.00	27.80	Vertical
3	4913.625	52.48	32.89	-44.83	40.54	74.00	33.46	Vertical
4	6838.125	50.69	36.04	-43.00	43.73	74.00	30.27	Vertical
5	9523.5	48.93	38.05	-38.57	48.41	74.00	25.59	Vertical
6	13839	46.17	40.32	-35.03	51.46	74.00	22.54	Vertical
7	17894.625	43.10	41.39	-31.08	53.42	74.00	20.58	Vertical

11g_TX_CH_08_Horizontal



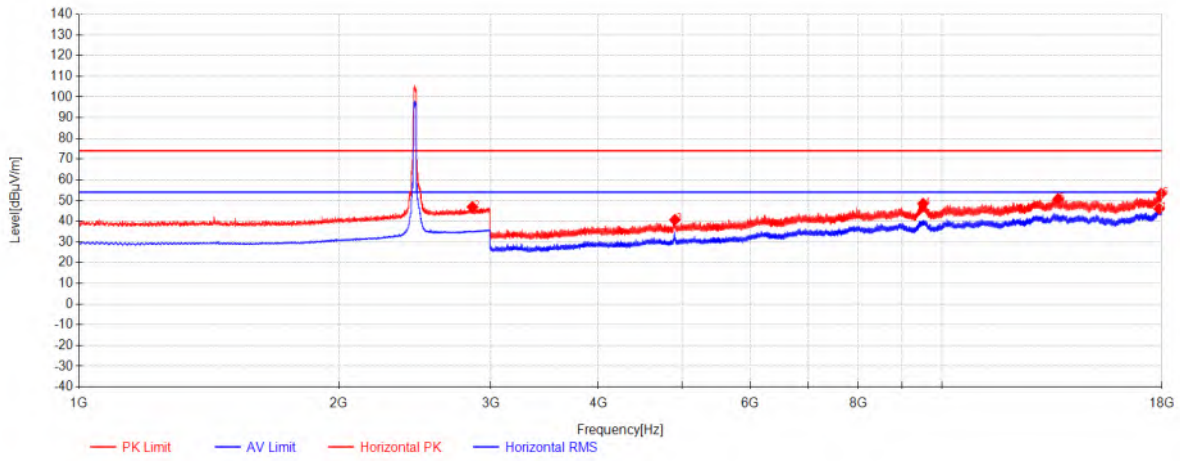
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17883.75	35.84	41.36	-31.01	46.19	54.00	7.81	Horizontal
2	2847.5	41.27	28.99	-23.84	46.43	74.00	27.57	Horizontal
3	3770.25	51.70	30.27	-45.10	36.87	74.00	37.13	Horizontal
4	7363.875	50.77	36.30	-42.33	44.74	74.00	29.26	Horizontal
5	9600	48.72	38.06	-38.26	48.52	74.00	25.48	Horizontal
6	17871	42.67	41.33	-30.93	53.07	74.00	20.93	Horizontal

11g_TX_CH_08_Vertical



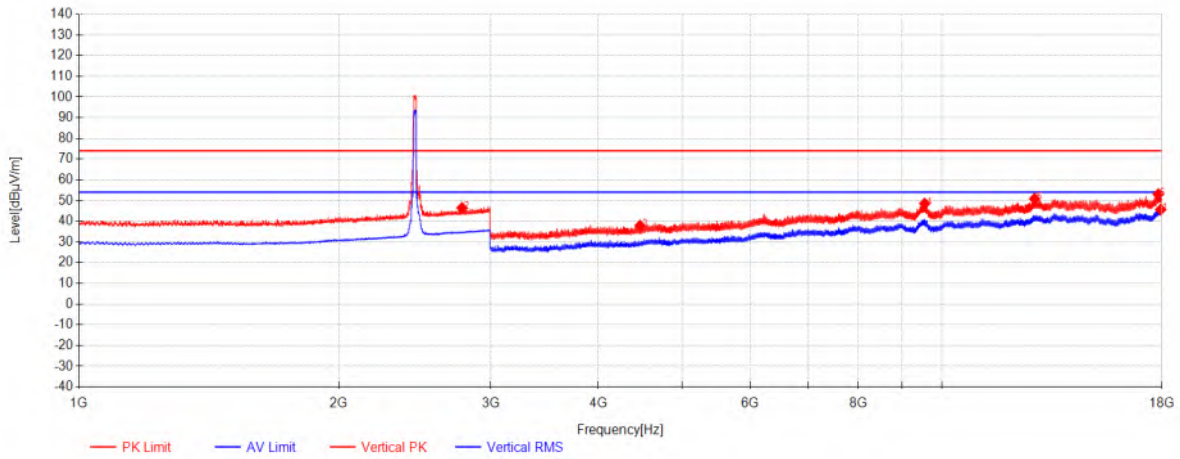
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17973.375	35.07	41.62	-31.04	45.65	54.00	8.35	Vertical
2	2851.5	41.21	29.01	-23.81	46.41	74.00	27.59	Vertical
3	3784.875	51.45	30.33	-45.03	36.74	74.00	37.26	Vertical
4	7032	50.41	36.30	-43.03	43.68	74.00	30.32	Vertical
5	9443.625	49.10	38.04	-38.75	48.39	74.00	25.61	Vertical
6	17913	43.29	41.45	-31.10	53.64	74.00	20.36	Vertical

11g_TX_CH_09_Horizontal



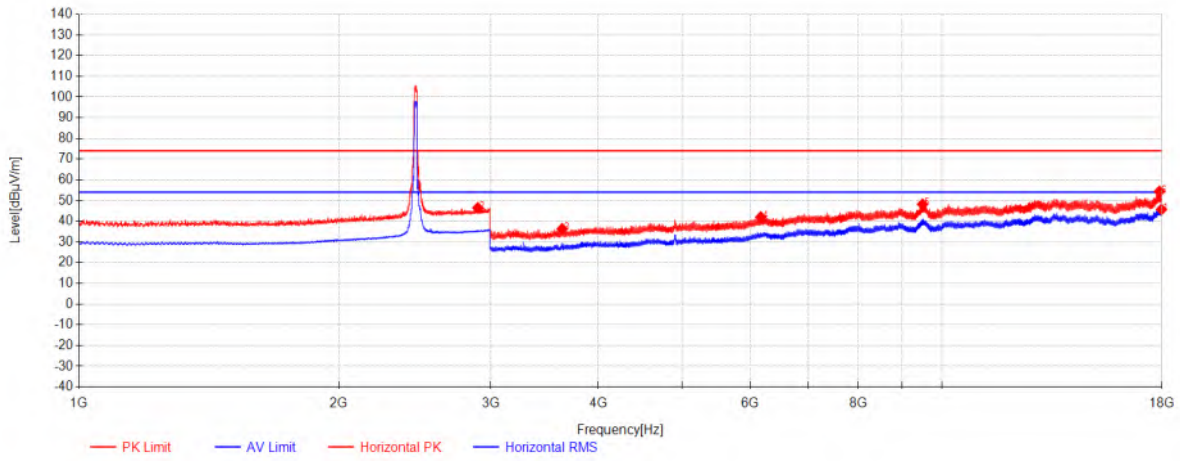
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17861.25	35.58	41.30	-30.87	46.01	54.00	7.99	Horizontal
2	2856.5	41.63	29.03	-23.78	46.88	74.00	27.12	Horizontal
3	4904.625	52.61	32.87	-44.83	40.65	74.00	33.35	Horizontal
4	9509.25	49.06	38.05	-38.63	48.48	74.00	25.52	Horizontal
5	13635.375	45.67	40.22	-35.18	50.71	74.00	23.29	Horizontal
6	17956.875	42.81	41.57	-31.06	53.33	74.00	20.67	Horizontal

11g_TX_CH_09_Vertical



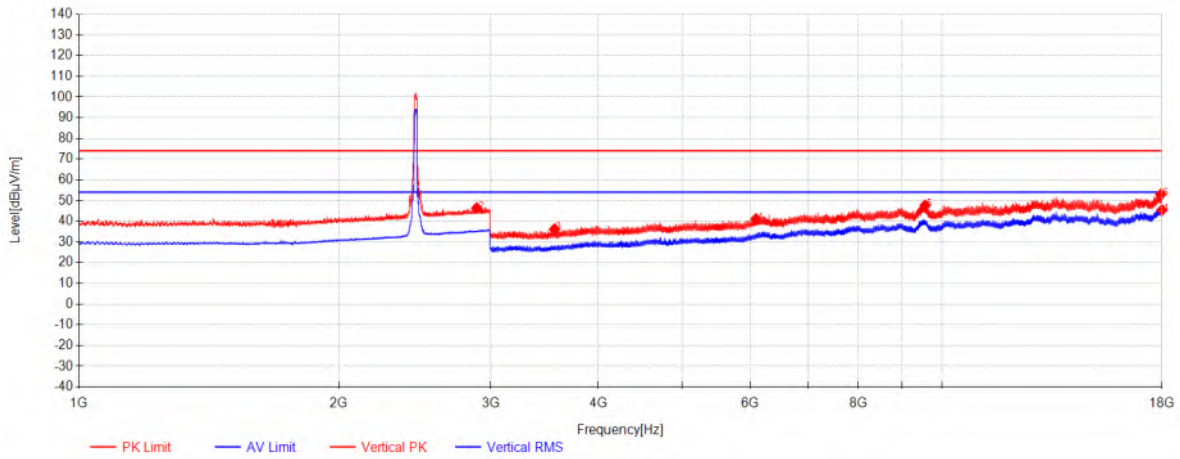
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17932.875	35.25	41.51	-31.08	45.67	54.00	8.33	Vertical
2	2778.5	41.90	28.71	-24.16	46.46	74.00	27.54	Vertical
3	4469.625	51.29	31.85	-45.29	37.85	74.00	36.15	Vertical
4	9552	48.92	38.06	-38.46	48.52	74.00	25.48	Vertical
5	12807.75	45.96	39.67	-34.80	50.83	74.00	23.17	Vertical
6	17816.25	42.44	41.17	-30.59	53.02	74.00	20.98	Vertical

11g_TX_CH_10_Horizontal



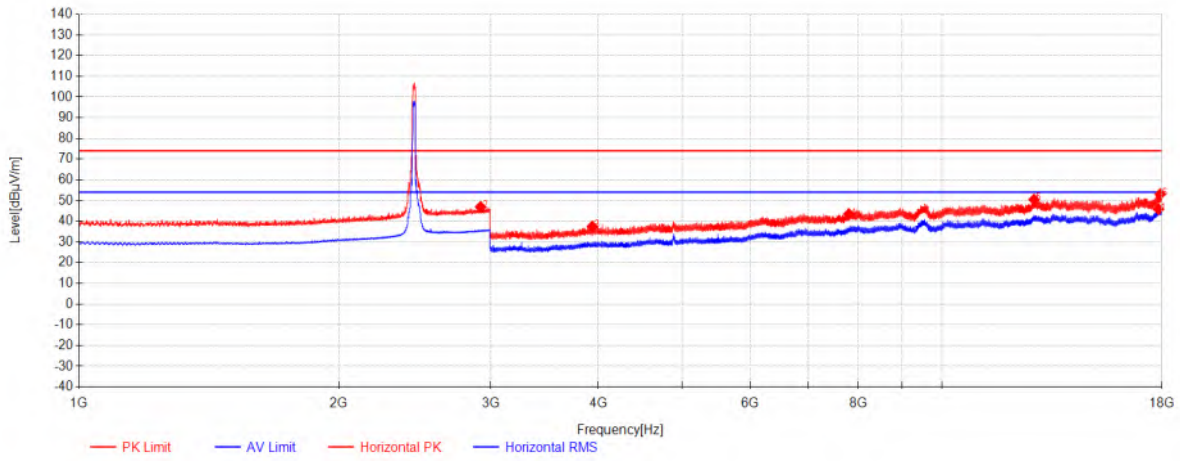
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17970	35.14	41.61	-31.05	45.71	54.00	8.29	Horizontal
2	2898.5	40.78	29.19	-23.53	46.45	74.00	27.55	Horizontal
3	3630.75	51.47	29.77	-44.92	36.32	74.00	37.68	Horizontal
4	6167.25	51.04	34.83	-43.87	42.01	74.00	31.99	Horizontal
5	9499.125	48.83	38.05	-38.67	48.21	74.00	25.79	Horizontal
6	17874.375	44.03	41.34	-30.95	54.41	74.00	19.59	Horizontal

11g_TX_CH_10_Vertical



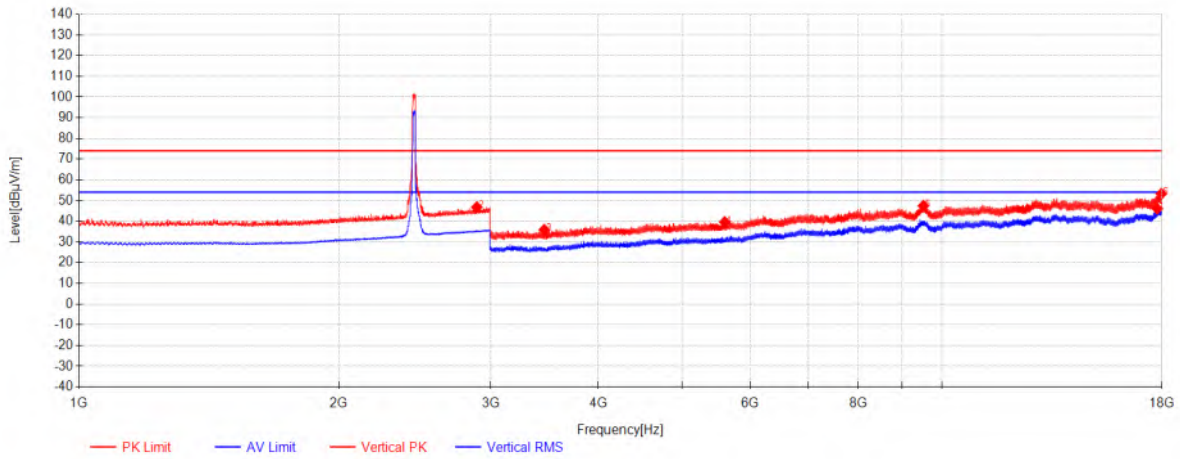
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17994.75	34.80	41.68	-31.02	45.46	54.00	8.54	Vertical
2	2890	40.79	29.16	-23.58	46.37	74.00	27.63	Vertical
3	3556.875	51.71	29.50	-45.02	36.20	74.00	37.80	Vertical
4	6087.75	50.56	34.68	-44.11	41.12	74.00	32.88	Vertical
5	9563.25	47.98	38.06	-38.41	47.63	74.00	26.37	Vertical
6	17939.25	42.49	41.52	-31.07	52.94	74.00	21.06	Vertical

11ax(HE20)_TX_CH_08_Horizontal



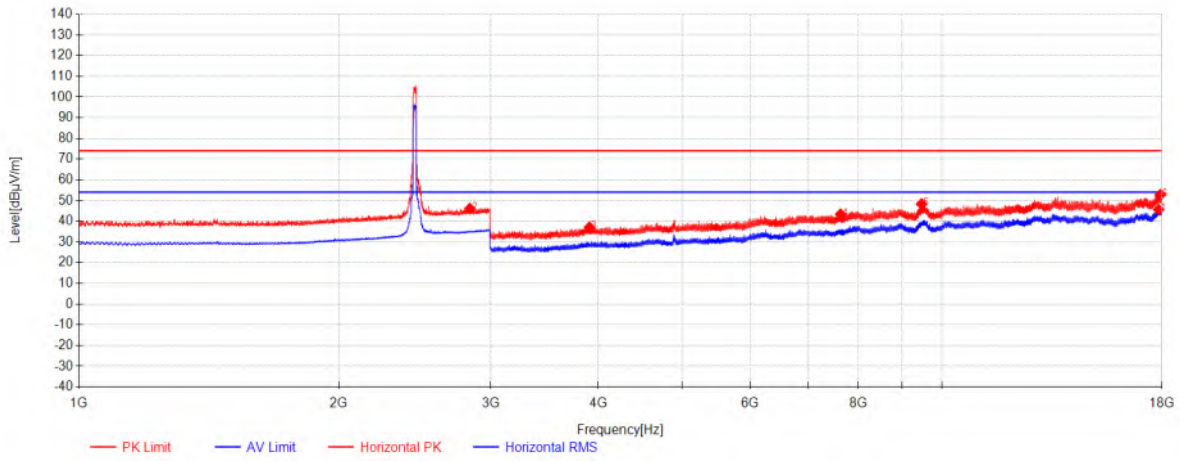
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17825.25	35.32	41.19	-30.65	45.87	54.00	8.13	Horizontal
2	2919.5	41.13	29.28	-23.51	46.90	74.00	27.10	Horizontal
3	3934.125	51.61	30.86	-45.00	37.47	74.00	36.53	Horizontal
4	7801.5	47.64	36.90	-41.06	43.49	74.00	30.51	Horizontal
5	12788.25	45.63	39.65	-34.82	50.46	74.00	23.54	Horizontal
6	17911.125	42.71	41.44	-31.10	53.05	74.00	20.95	Horizontal

11ax(HE20)_TX_CH_08_Vertical



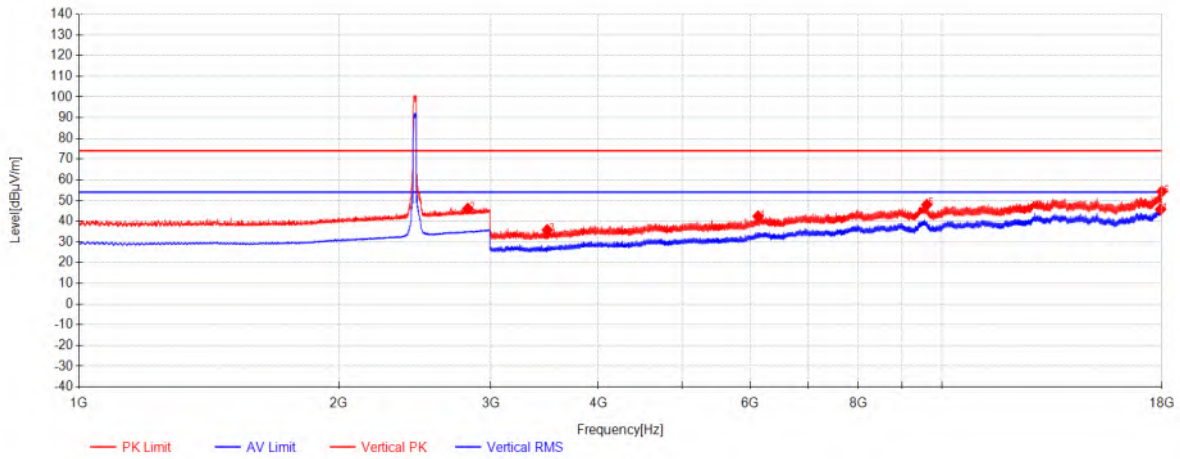
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17771.625	35.80	41.04	-30.77	46.07	54.00	7.93	Vertical
2	2890.5	41.23	29.16	-23.58	46.82	74.00	27.18	Vertical
3	3460.875	52.13	29.32	-45.59	35.86	74.00	38.14	Vertical
4	5601.75	51.00	33.31	-44.70	39.61	74.00	34.39	Vertical
5	9519.375	48.01	38.05	-38.59	47.47	74.00	26.53	Vertical
6	17964	42.71	41.60	-31.05	53.25	74.00	20.75	Vertical

11ax(HE20)_TX_CH_09_Horizontal



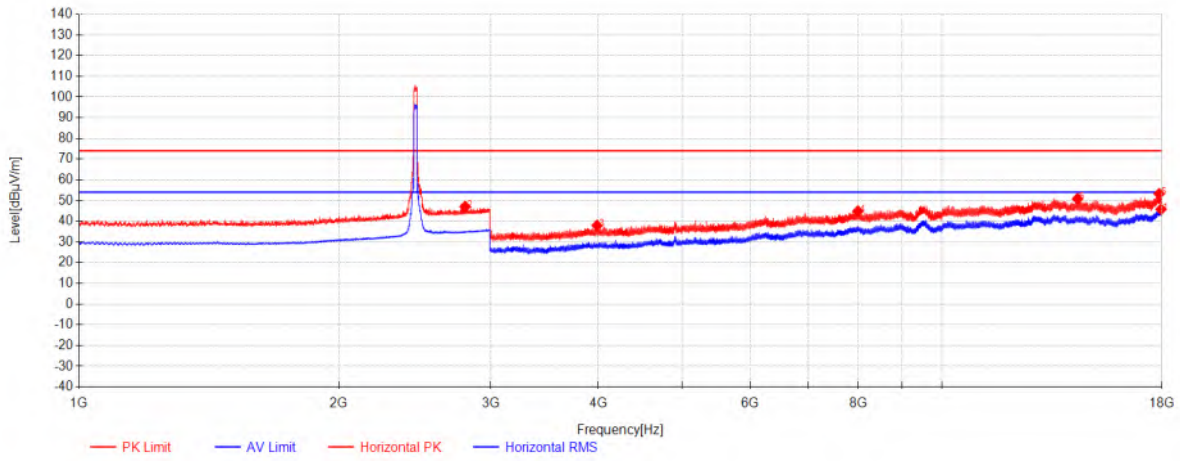
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17833.125	35.09	41.22	-30.70	45.61	54.00	8.39	Horizontal
2	2837.5	41.07	28.95	-23.90	46.13	74.00	27.87	Horizontal
3	3904.5	51.27	30.76	-44.92	37.10	74.00	36.90	Horizontal
4	7631.25	48.65	36.56	-41.84	43.37	74.00	30.63	Horizontal
5	9472.5	48.98	38.05	-38.71	48.32	74.00	25.68	Horizontal
6	17914.5	42.43	41.45	-31.10	52.79	74.00	21.21	Horizontal

11ax(HE20)_TX_CH_09_Vertical



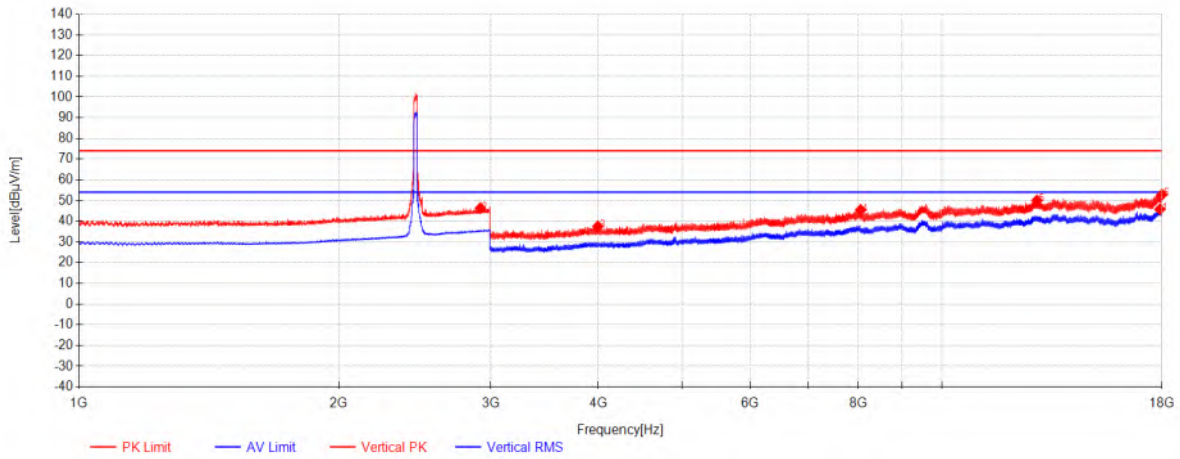
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17927.625	35.36	41.49	-31.09	45.76	54.00	8.24	Vertical
2	2822	41.16	28.89	-23.99	46.06	74.00	27.94	Vertical
3	3489	51.98	29.31	-45.49	35.80	74.00	38.20	Vertical
4	6123.75	51.67	34.75	-44.02	42.39	74.00	31.61	Vertical
5	9607.5	48.17	38.06	-38.25	47.99	74.00	26.01	Vertical
6	17986.125	43.72	41.66	-31.03	54.35	74.00	19.65	Vertical

11ax(HE20)_TX_CH_10_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17950.5	35.30	41.56	-31.06	45.79	54.00	8.21	Horizontal
2	2801.5	42.36	28.81	-24.11	47.06	74.00	26.94	Horizontal
3	3984.75	52.02	31.05	-45.14	37.93	74.00	36.07	Horizontal
4	7993.5	48.80	37.29	-41.23	44.85	74.00	29.15	Horizontal
5	14363.25	45.20	40.18	-34.57	50.81	74.00	23.19	Horizontal
6	17859.375	42.82	41.29	-30.86	53.25	74.00	20.75	Horizontal

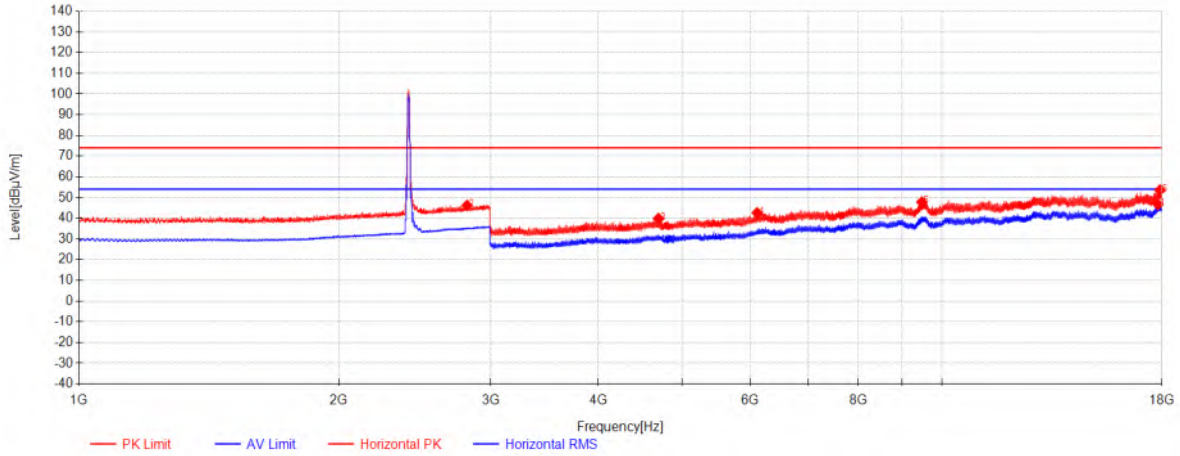
11ax(HE20)_TX_CH_10_Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17898.375	35.48	41.41	-31.10	45.79	54.00	8.21	Vertical
2	2918.5	40.56	29.27	-23.51	46.33	74.00	27.67	Vertical
3	3993.375	51.64	31.08	-45.16	37.55	74.00	36.45	Vertical
4	8052.75	49.28	37.34	-41.15	45.47	74.00	28.53	Vertical
5	12888.75	45.54	39.77	-35.27	50.03	74.00	23.97	Vertical
6	17995.875	42.19	41.69	-31.02	52.85	74.00	21.15	Vertical

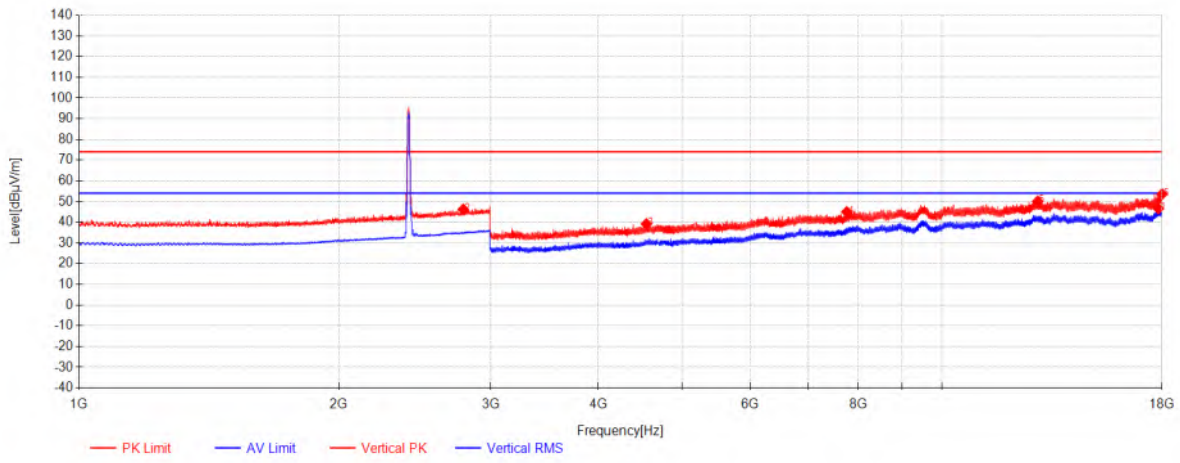
Spot check worst mode_R1.1

11b_TX_CH_01_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17802.75	36.07	41.13	-30.51	46.69	54.00	7.31	Horizontal
2	2817	41.32	28.87	-24.02	46.17	74.00	27.83	Horizontal
3	4694.625	52.29	32.37	-44.84	39.81	74.00	34.19	Horizontal
4	6108	51.95	34.72	-44.08	42.58	74.00	31.42	Horizontal
5	9480	48.44	38.05	-38.70	47.79	74.00	26.21	Horizontal
6	17898.75	43.24	41.41	-31.10	53.54	74.00	20.46	Horizontal

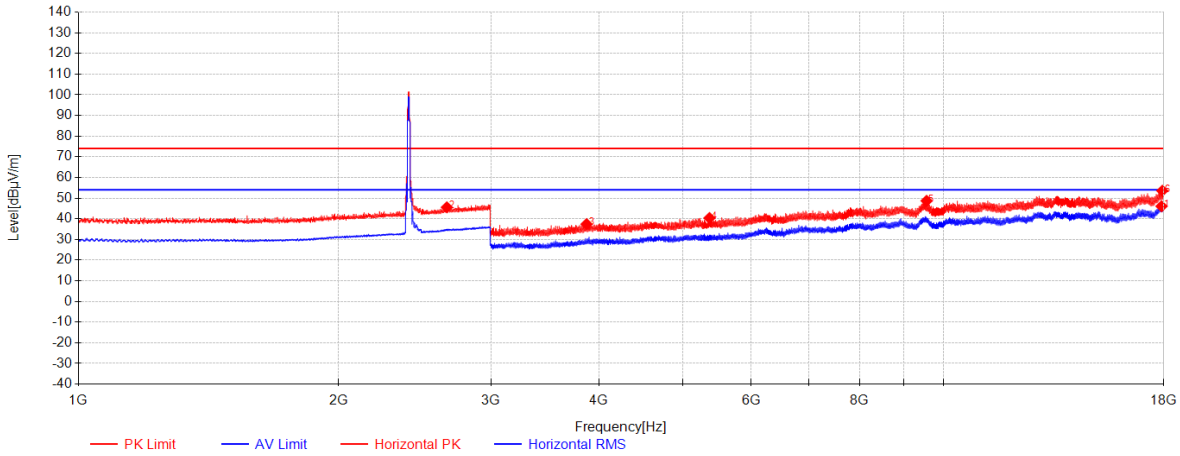
11b_TX_CH_01_Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17822.625	36.04	41.19	-30.63	46.60	54.00	7.40	Vertical
2	2788	41.59	28.75	-24.14	46.20	74.00	27.80	Vertical
3	4545.375	52.31	32.01	-45.16	39.16	74.00	34.84	Vertical
4	7759.125	49.59	36.82	-41.42	44.99	74.00	29.01	Vertical
5	12913.125	45.62	39.80	-35.34	50.08	74.00	23.92	Vertical
6	18000	42.92	41.70	-31.02	53.60	74.00	20.40	Vertical

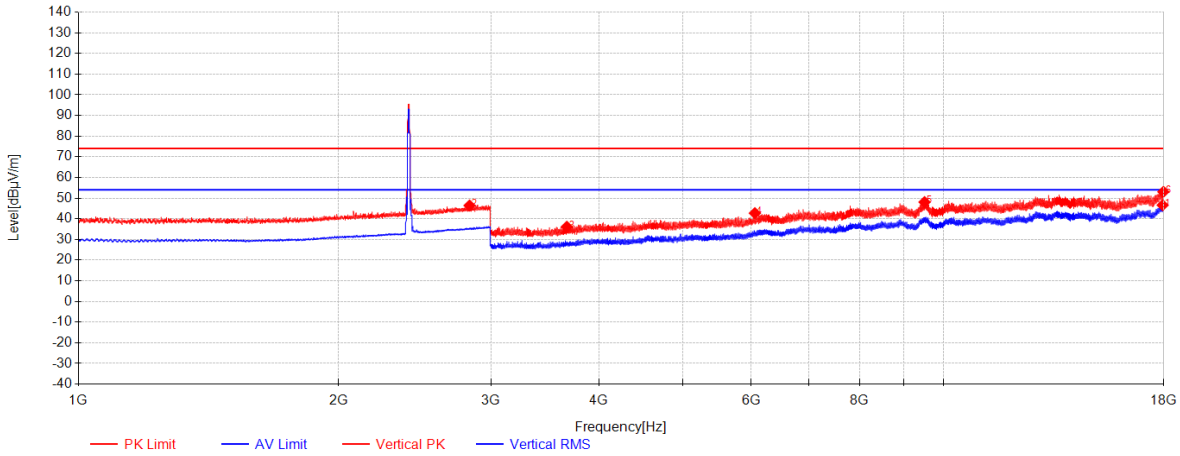
Spot check worst mode_R1.2

11b_TX_CH_01_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17886.375	35.73	41.37	-31.03	46.07	54.00	7.93	Horizontal
2	2667.5	41.63	28.27	-24.33	45.57	74.00	28.43	Horizontal
3	3869.625	51.71	30.63	-44.93	37.42	74.00	36.58	Horizontal
4	5367.75	52.05	33.03	-44.71	40.36	74.00	33.64	Horizontal
5	9568.875	49.03	38.06	-38.39	48.70	74.00	25.30	Horizontal
6	17923.5	43.19	41.48	-31.09	53.58	74.00	20.42	Horizontal

11b_TX_CH_01_Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	17937.75	36.16	41.52	-31.08	46.60	54.00	7.40	Vertical
2	2833.5	41.42	28.93	-23.92	46.44	74.00	27.56	Vertical
3	3671.25	51.45	29.92	-45.22	36.15	74.00	37.85	Vertical
4	6057	52.24	34.61	-44.12	42.73	74.00	31.27	Vertical
5	9516.375	48.63	38.05	-38.60	48.08	74.00	25.92	Vertical
6	17974.875	42.48	41.63	-31.04	53.06	74.00	20.94	Vertical

7.4 Maximum Conducted Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)
Test Method: ANSI C63.10 (2020) Section 11.9.2

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥50 hopping channels
	0.25 for 25≤ hopping channels <50
	1 for digital modulation
2400-2483.5	1 for ≥75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

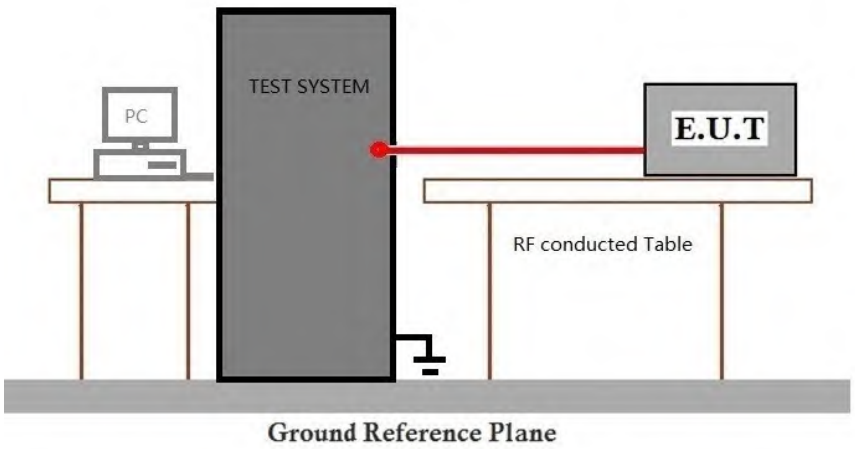
7.4.1 E.U.T. Operation

Operating Environment:
Temperature: 20.3 °C Humidity: 56.0 % RH Atmospheric Pressure: 1001 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode(2.4G)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested. Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details

7.5 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)
Test Method: ANSI C63.10 (2020) Section 11.8.1

Limit:

≥500 kHz

7.5.1 E.U.T. Operation

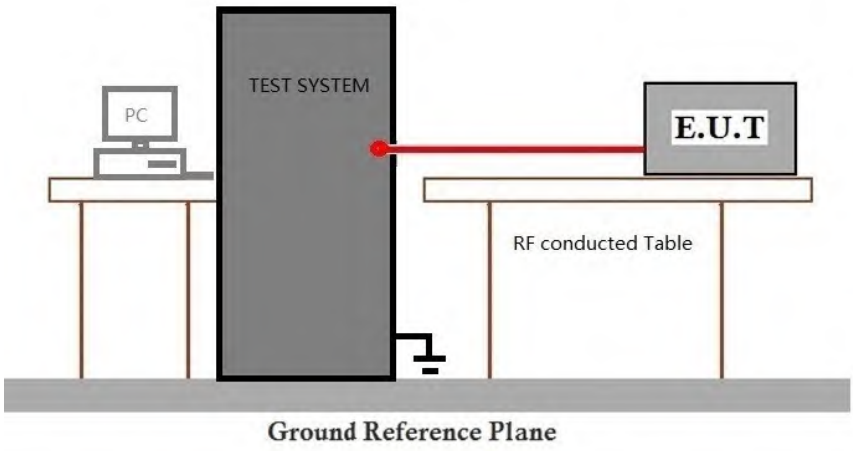
Operating Environment:

Temperature: 20.3 °C Humidity: 56.0 % RH Atmospheric Pressure: 1001 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode(2.4G)_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested. Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for SUCR2601000069MO

9 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for SUCR2601000069MO

10 Appendix

Hardware Version: 1.1

1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	11.786	/	Pass
		2437	/	/	1	11.909	/	Pass
		2462	/	/	1	11.714	/	Pass
802.11g	SISO	2412	/	/	1	17.340	/	Pass
		2437	/	/	1	17.437	/	Pass
		2462	/	/	1	17.350	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	18.066	/	Pass
		2437	/	/	1	18.076	/	Pass
		2462	/	/	1	18.117	/	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.950	/	Pass
		2437	SU	/	1	18.974	/	Pass
		2462	SU	/	1	18.971	/	Pass

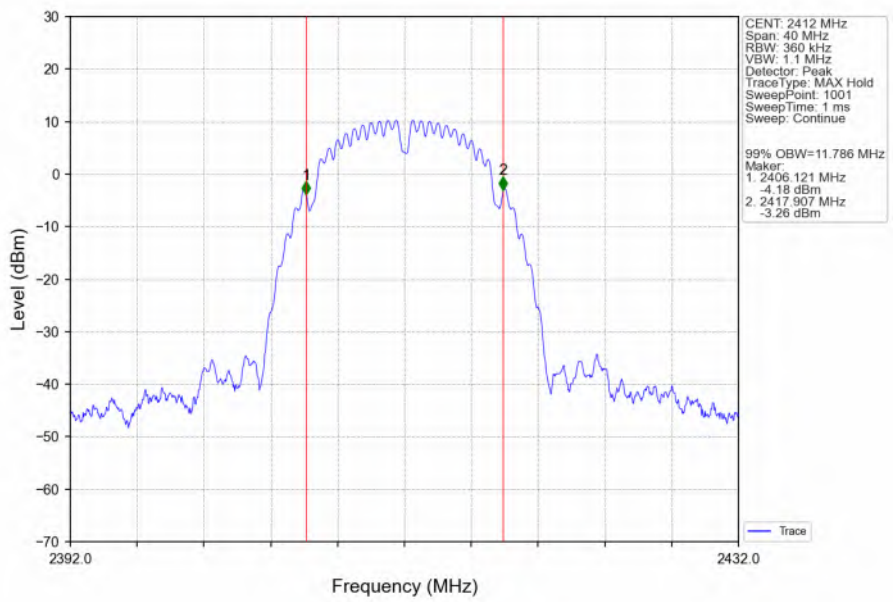
1.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	9.214	>=0.5	Pass
		2437	/	/	1	9.230	>=0.5	Pass
		2462	/	/	1	9.212	>=0.5	Pass
802.11g	SISO	2412	/	/	1	16.578	>=0.5	Pass
		2437	/	/	1	16.611	>=0.5	Pass
		2462	/	/	1	16.602	>=0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.637	>=0.5	Pass
		2437	/	/	1	17.665	>=0.5	Pass
		2462	/	/	1	17.739	>=0.5	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.740	>=0.5	Pass
		2437	SU	/	1	18.835	>=0.5	Pass
		2462	SU	/	1	18.749	>=0.5	Pass

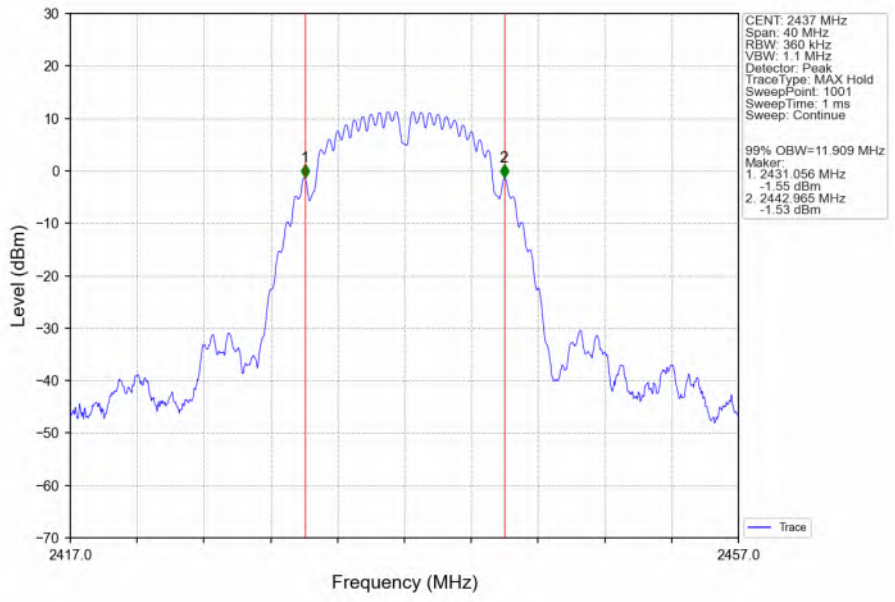
1.2 Test Graph

1.2.1 OBW

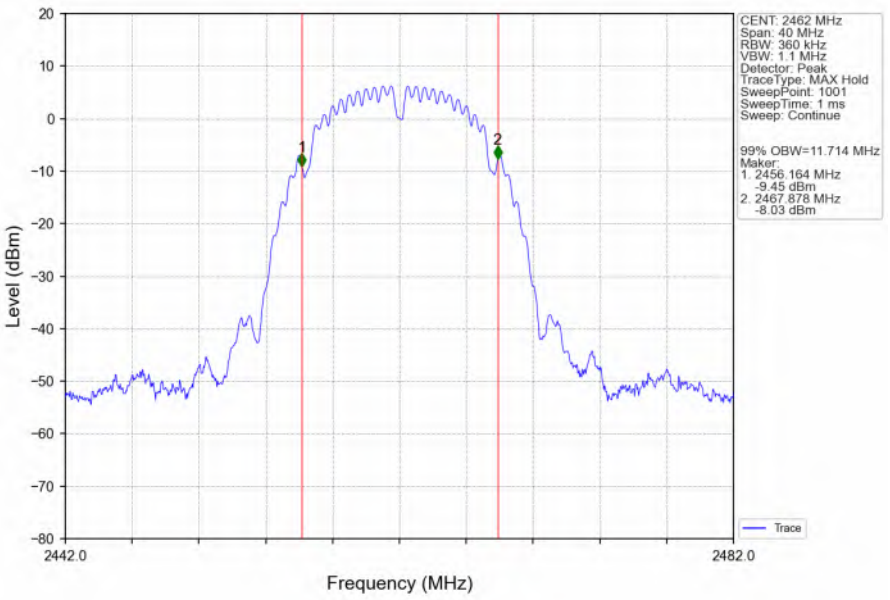
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



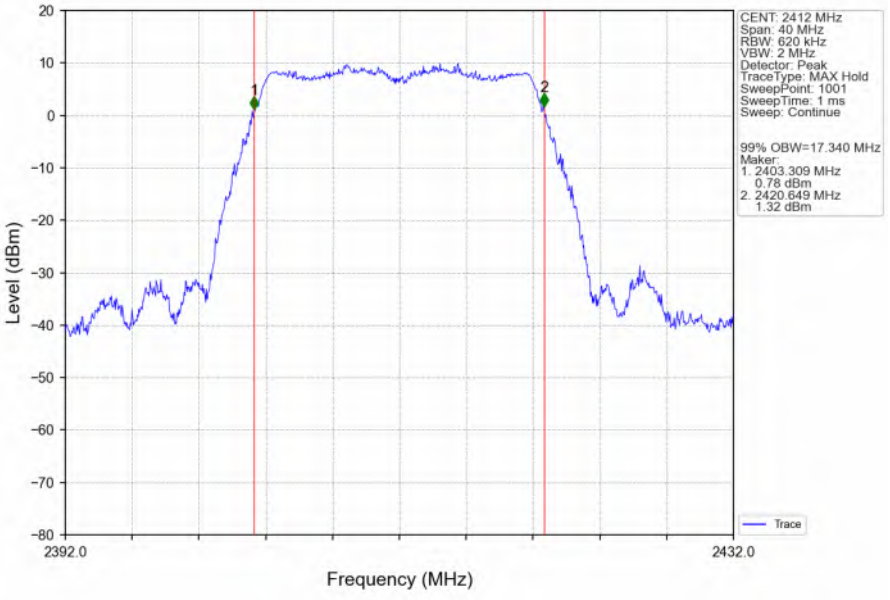
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



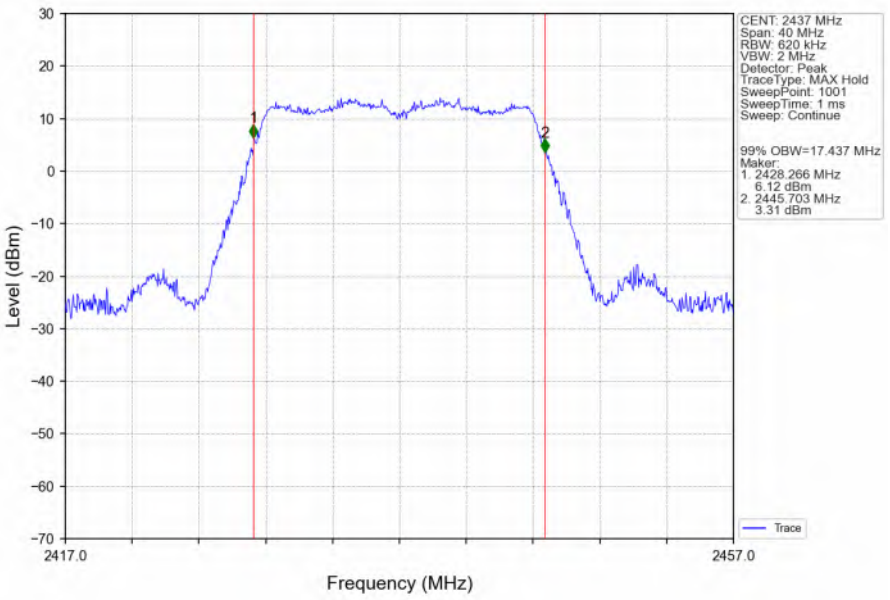
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



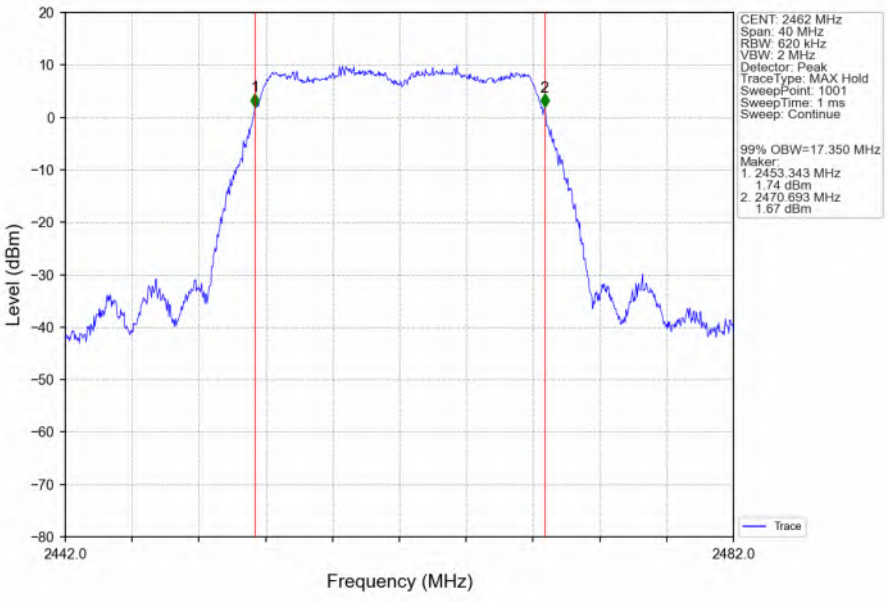
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



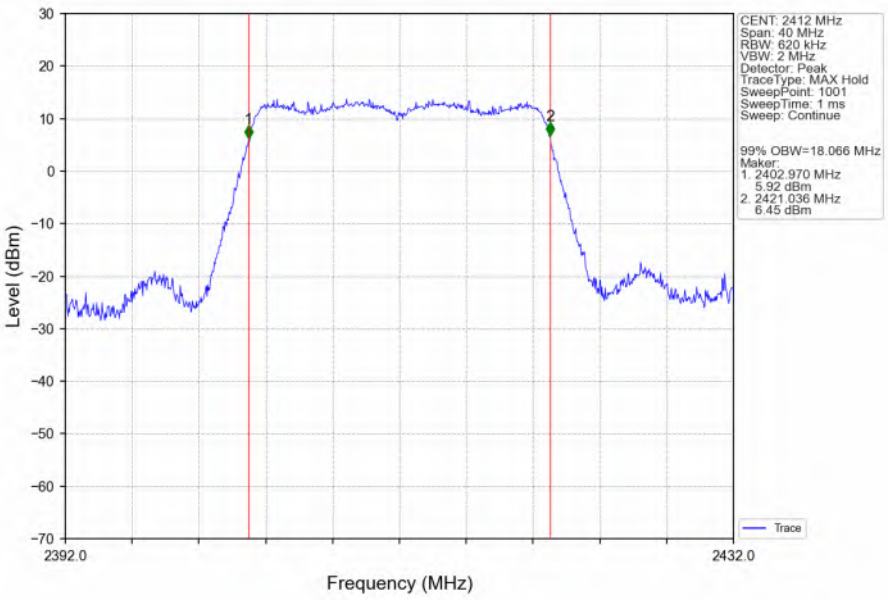
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



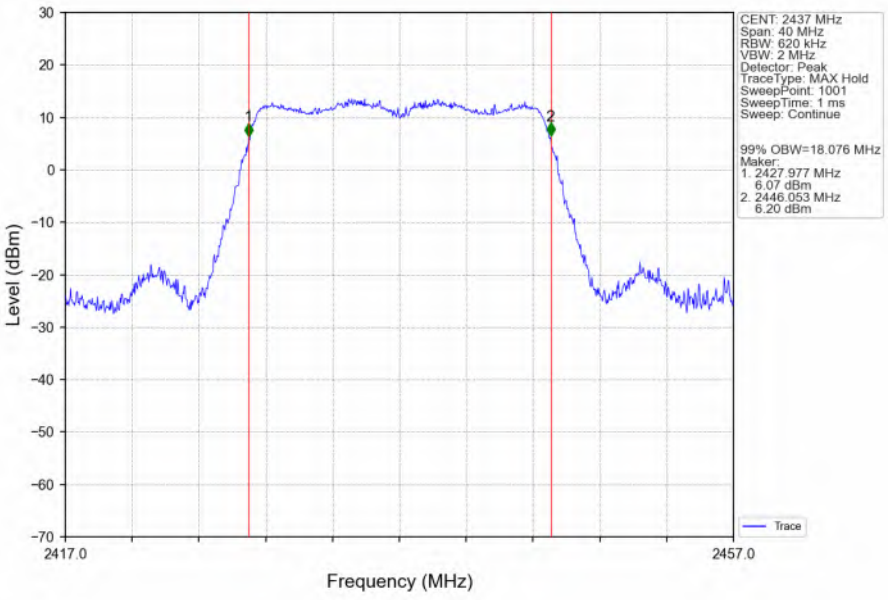
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



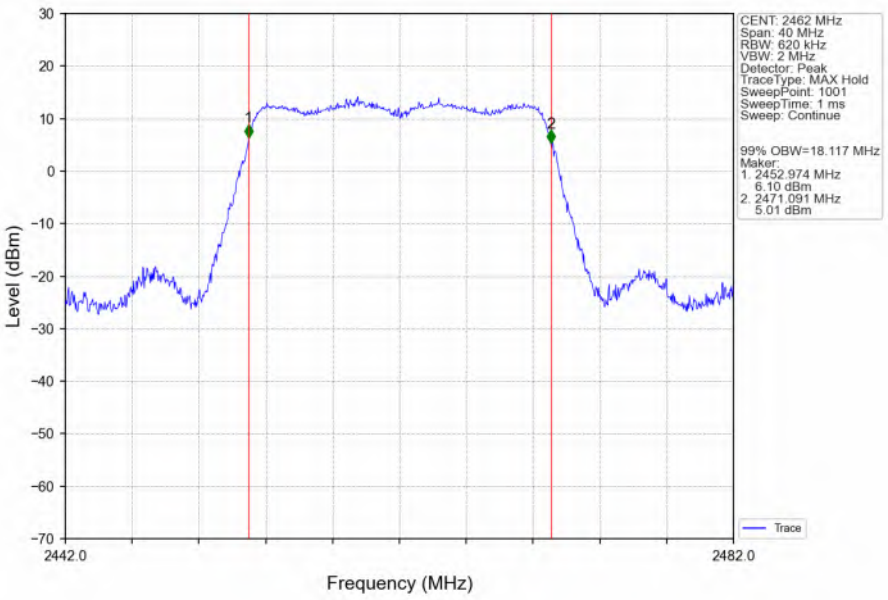
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



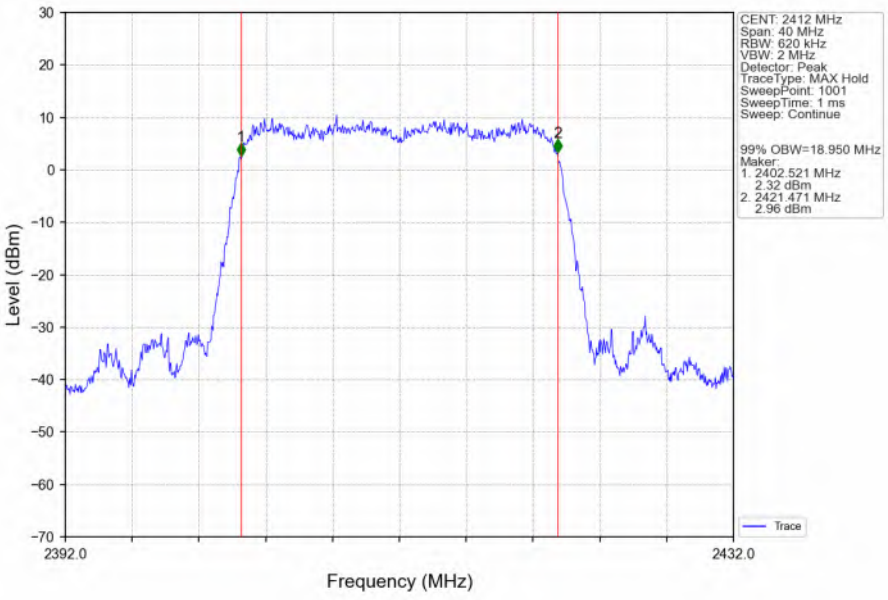
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



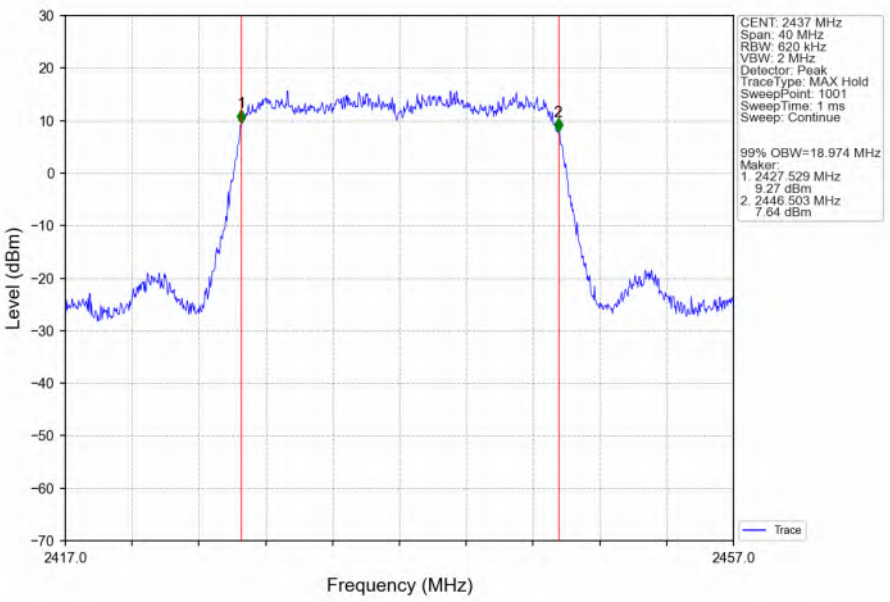
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



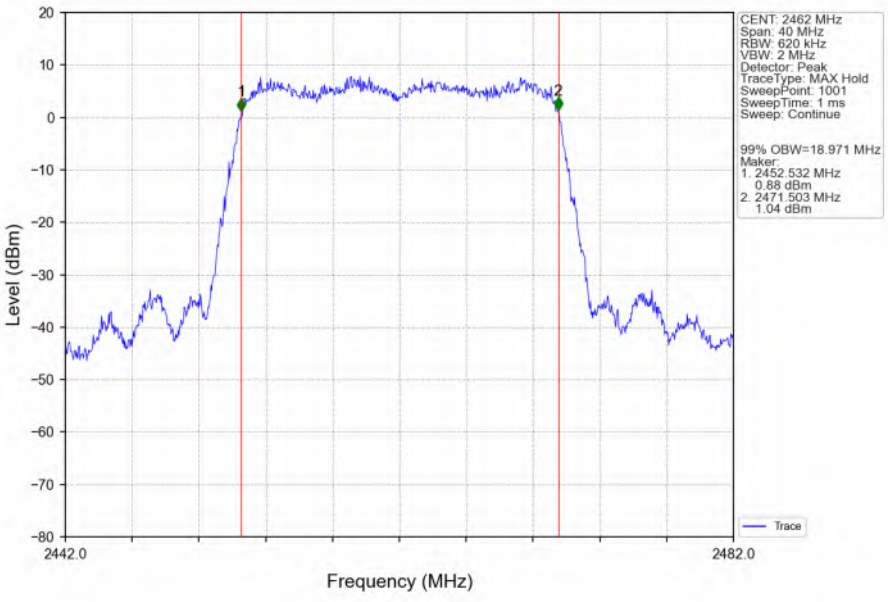
802.11ax(HEW20)_LCH_2412MHz_SU_ / _Ant1 (SISO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant1 (SISO)_NTNV

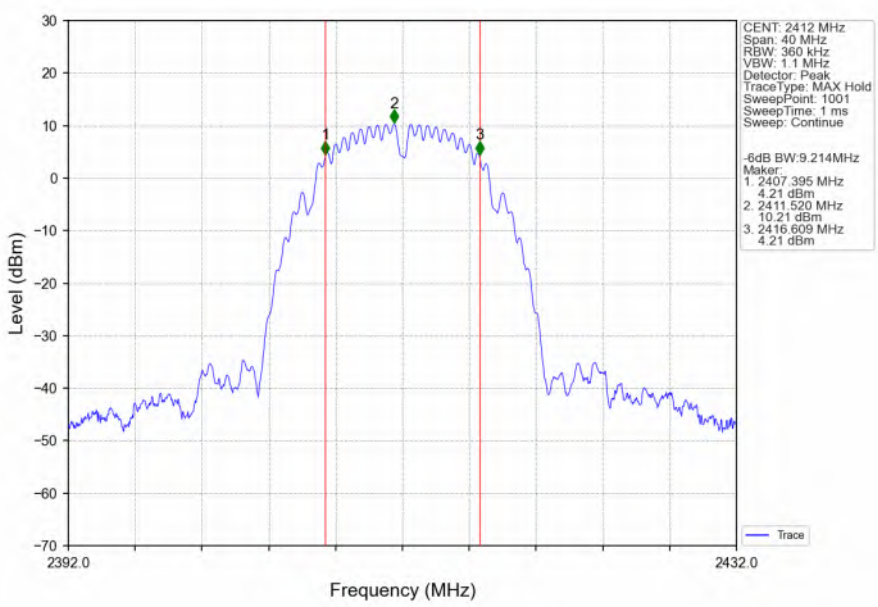


802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant1 (SISO)_NTNV

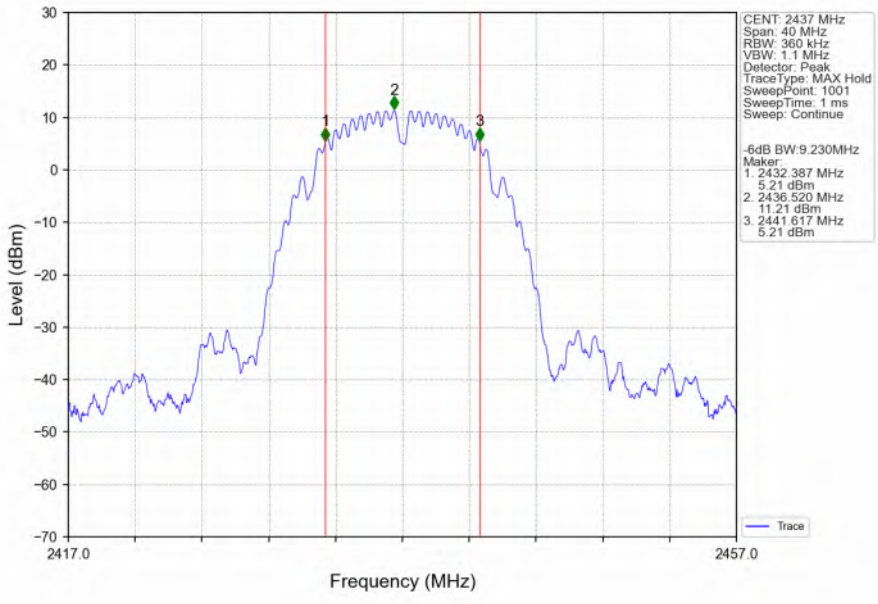


1.2.2 6dB BW

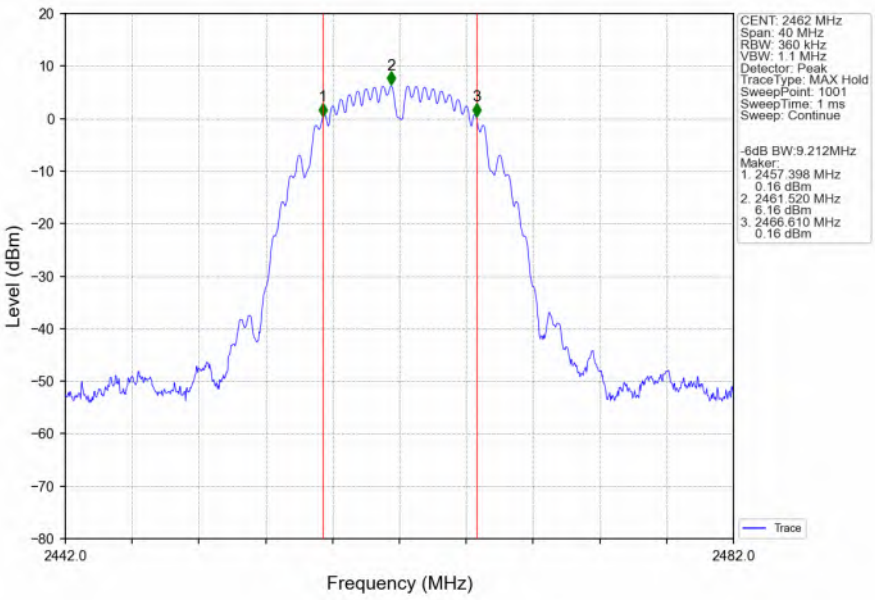
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



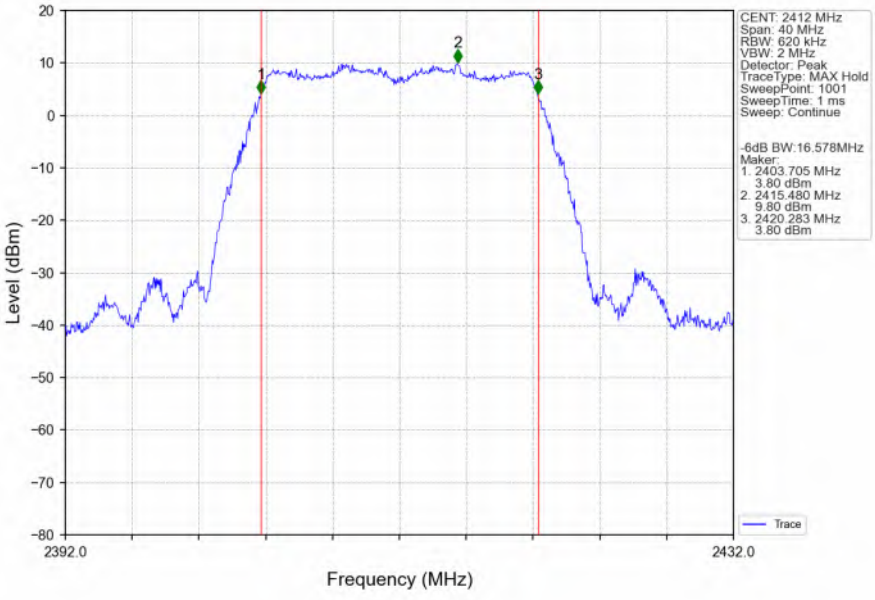
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



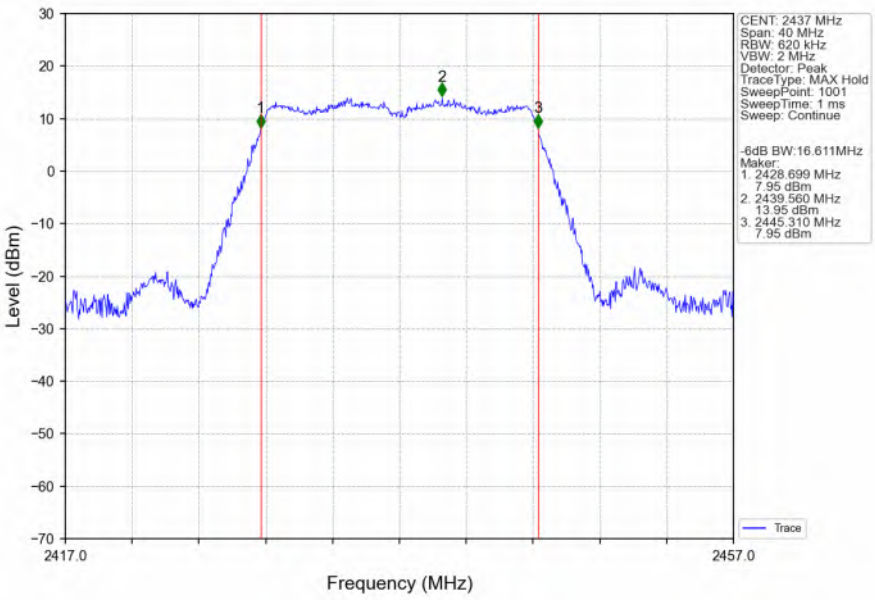
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



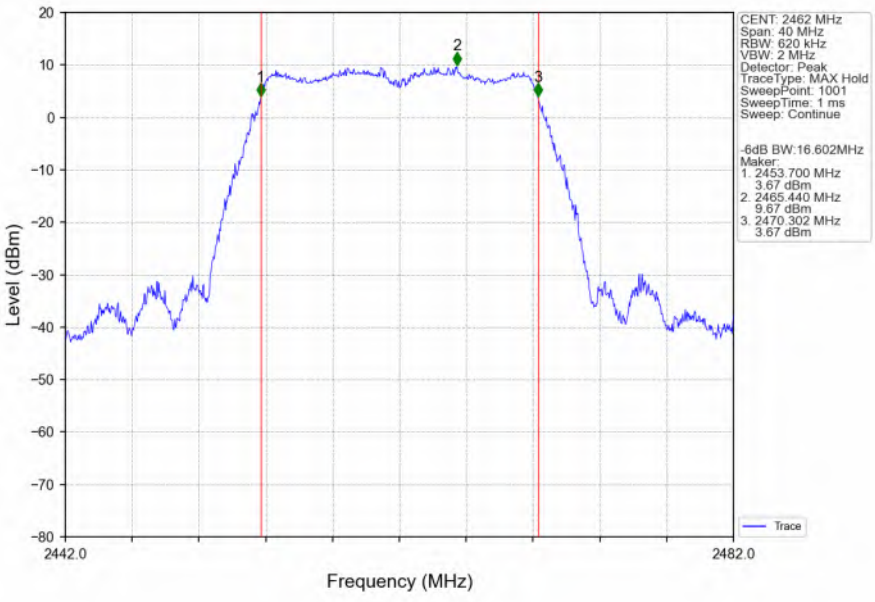
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



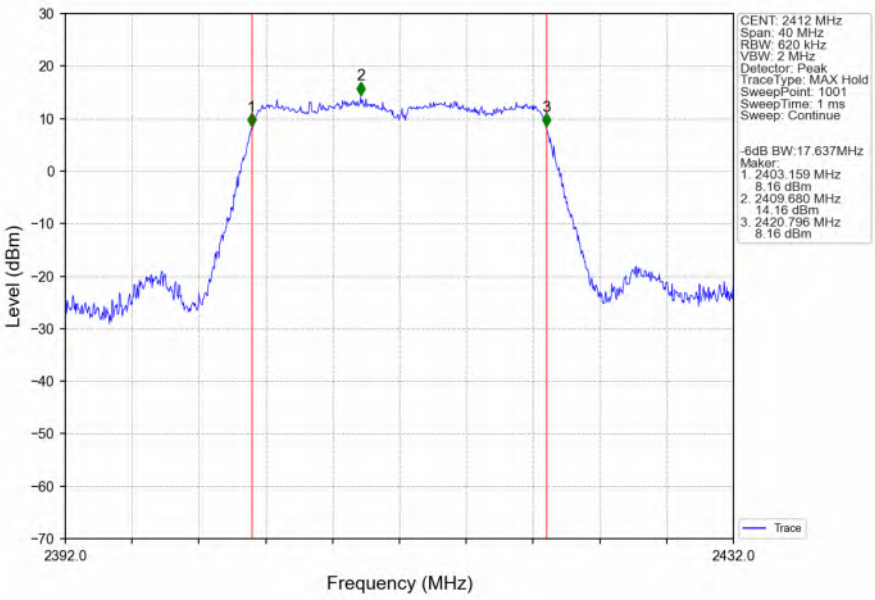
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



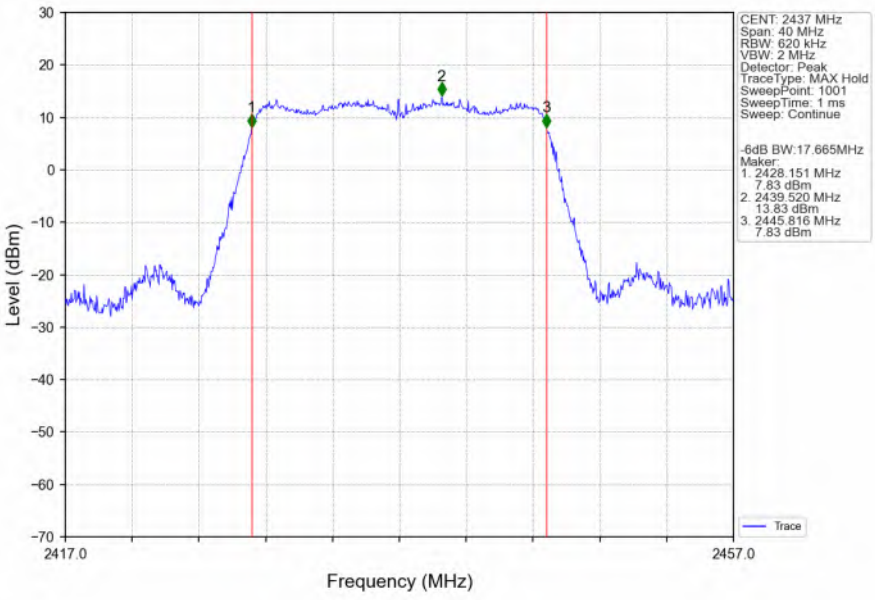
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



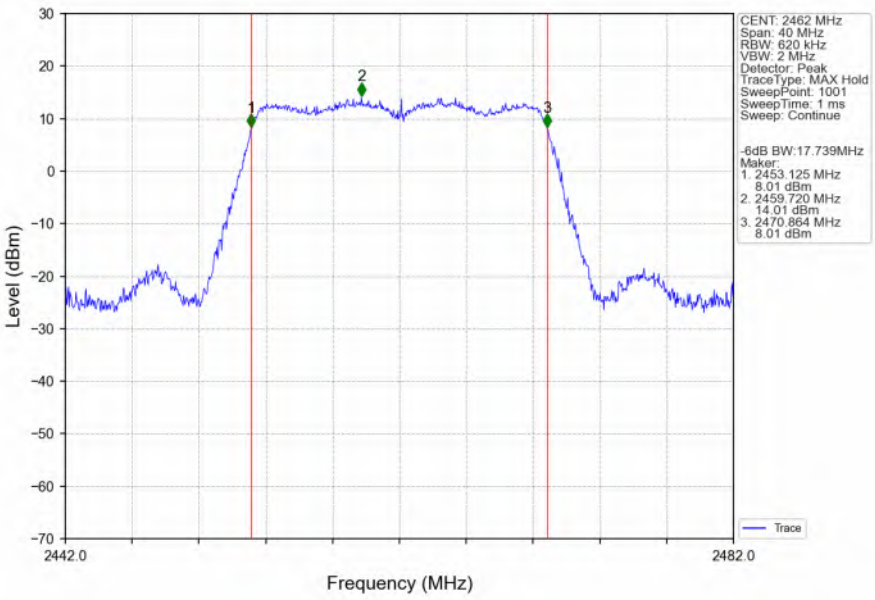
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



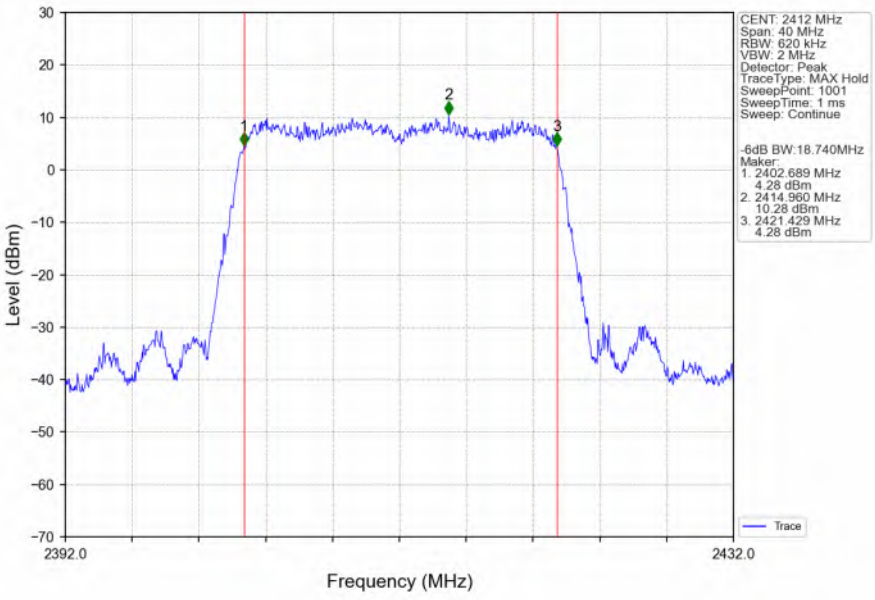
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



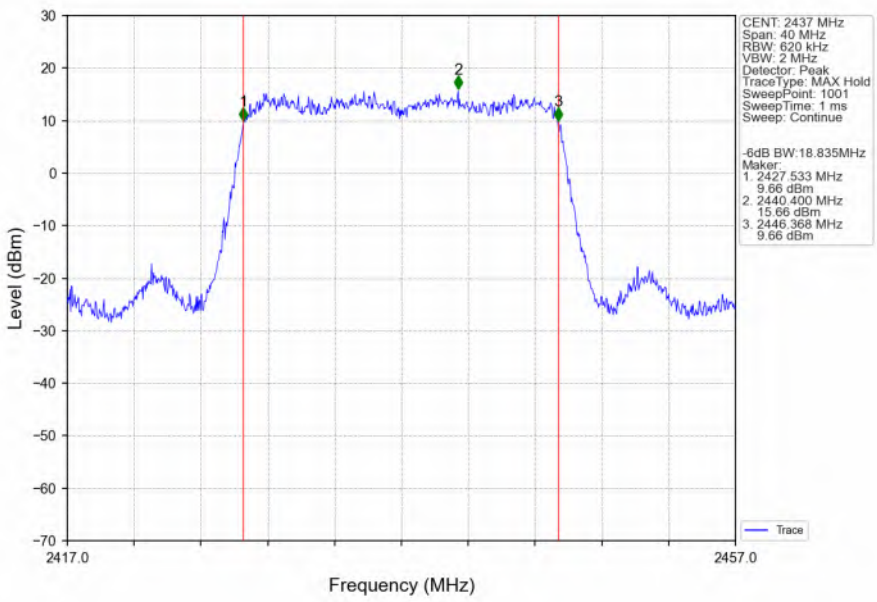
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



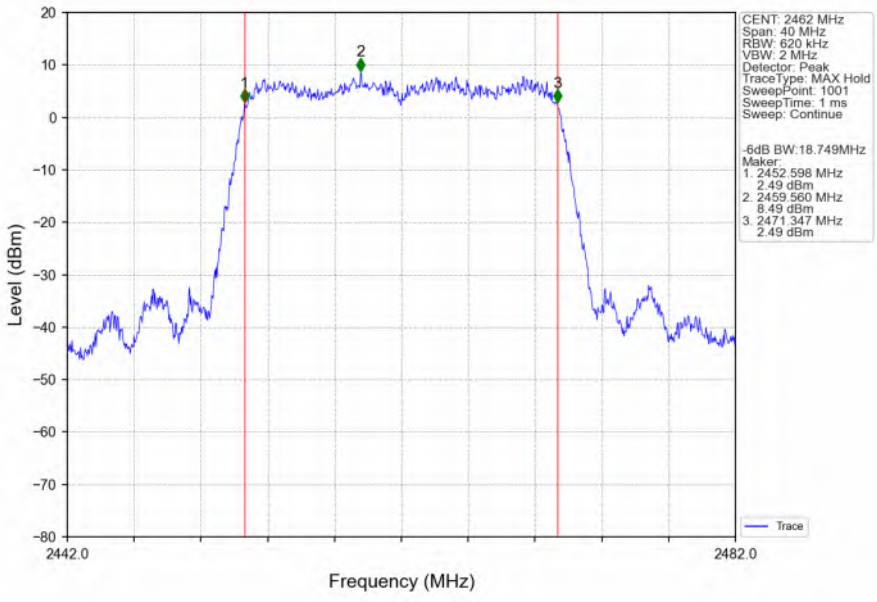
802.11ax(HEW20)_LCH_2412MHz_SU_ / _Ant1 (SISO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant1 (SISO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant1 (SISO)_NTNV



2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Peak Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	21.08	<=30	Pass
		2437	/	/	22.11	<=30	Pass
		2457	/	/	20.03	<=30	Pass
		2462	/	/	17.04	<=30	Pass
802.11g	SISO	2412	/	/	22.64	<=30	Pass
		2437	/	/	26.80	<=30	Pass
		2447	/	/	23.81	<=30	Pass
		2452	/	/	21.65	<=30	Pass
		2457	/	/	21.68	<=30	Pass
		2462	/	/	22.59	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	27.07	<=30	Pass
		2437	/	/	26.86	<=30	Pass
		2462	/	/	27.07	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	22.06	<=30	Pass
		2437	SU	/	27.52	<=30	Pass
		2447	SU	/	24.61	<=30	Pass
		2452	SU	/	22.67	<=30	Pass
		2457	SU	/	22.63	<=30	Pass
		2462	SU	/	19.97	<=30	Pass
Note1: Antenna Gain: Ant1: 2.40dBi;							

2.1.2 Avg Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Avg Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	16.42	<=30	Pass
		2437	/	/	17.35	<=30	Pass
		2457	/	/	16.41	<=30	Pass
		2462	/	/	13.04	<=30	Pass
802.11g	SISO	2412	/	/	12.13	<=30	Pass
		2437	/	/	17.22	<=30	Pass
		2447	/	/	15.21	<=30	Pass
		2452	/	/	14.03	<=30	Pass
		2457	/	/	14.35	<=30	Pass
		2462	/	/	13.38	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	17.32	<=30	Pass
		2437	/	/	17.16	<=30	Pass

		2462	/	/	17.22	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	11.68	<=30	Pass
		2437	SU	/	17.21	<=30	Pass
		2447	SU	/	14.42	<=30	Pass
		2452	SU	/	12.57	<=30	Pass
		2457	SU	/	13.65	<=30	Pass
		2462	SU	/	10.03	<=30	Pass
Note1: Antenna Gain: Ant1: 2.40dBi;							

Hardware Version: 1.2

1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	11.755	/	Pass
		2437	/	/	1	11.791	/	Pass
		2462	/	/	1	11.683	/	Pass
802.11g	SISO	2412	/	/	1	17.316	/	Pass
		2437	/	/	1	17.383	/	Pass
		2462	/	/	1	17.333	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	18.049	/	Pass
		2437	/	/	1	18.054	/	Pass
		2462	/	/	1	18.073	/	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.997	/	Pass
		2437	SU	/	1	18.949	/	Pass
		2462	SU	/	1	18.950	/	Pass

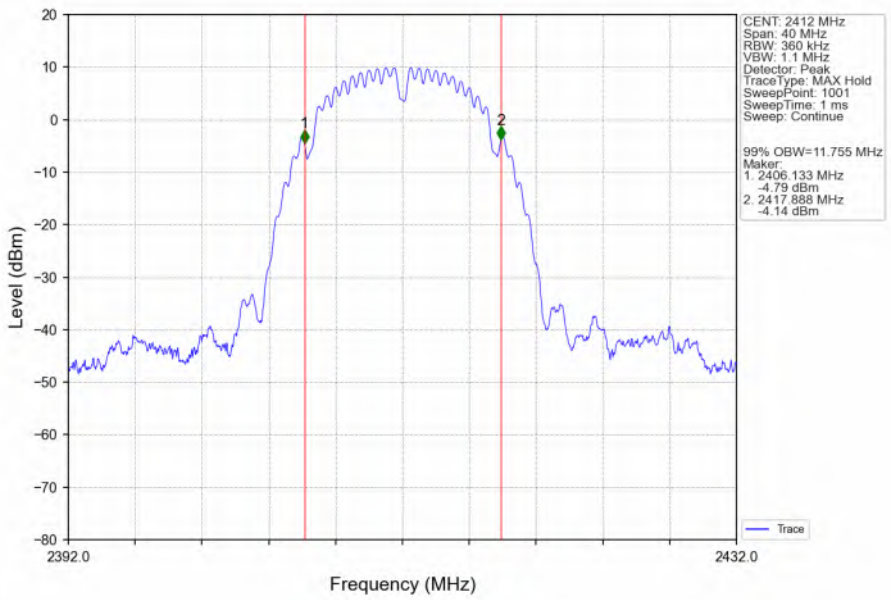
1.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	9.217	>=0.5	Pass
		2437	/	/	1	9.219	>=0.5	Pass
		2462	/	/	1	9.210	>=0.5	Pass
802.11g	SISO	2412	/	/	1	16.639	>=0.5	Pass
		2437	/	/	1	16.579	>=0.5	Pass
		2462	/	/	1	16.589	>=0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	17.638	>=0.5	Pass
		2437	/	/	1	17.743	>=0.5	Pass
		2462	/	/	1	17.736	>=0.5	Pass
802.11ax (HEW20)	SISO	2412	SU	/	1	18.744	>=0.5	Pass
		2437	SU	/	1	18.514	>=0.5	Pass
		2462	SU	/	1	18.770	>=0.5	Pass

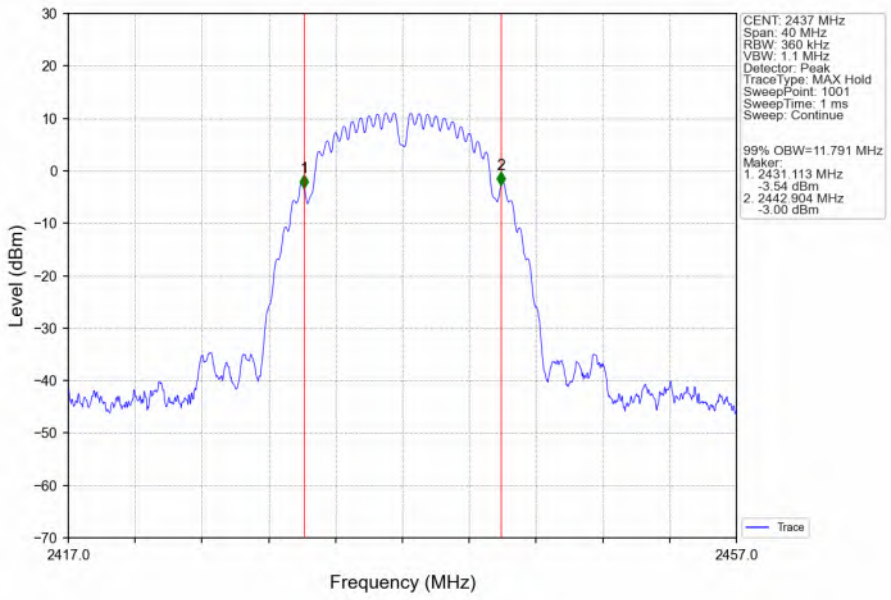
2.2 Test Graph

2.2.1 OBW

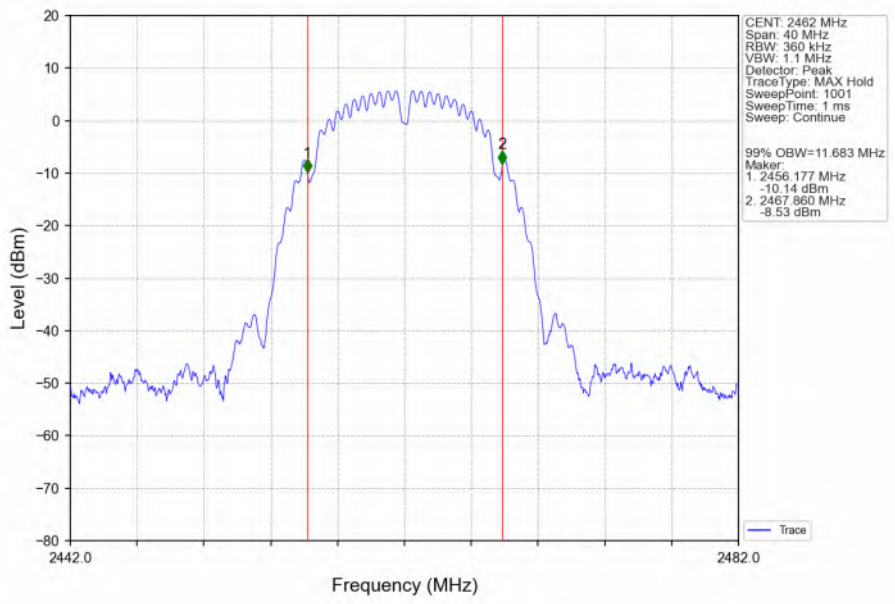
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



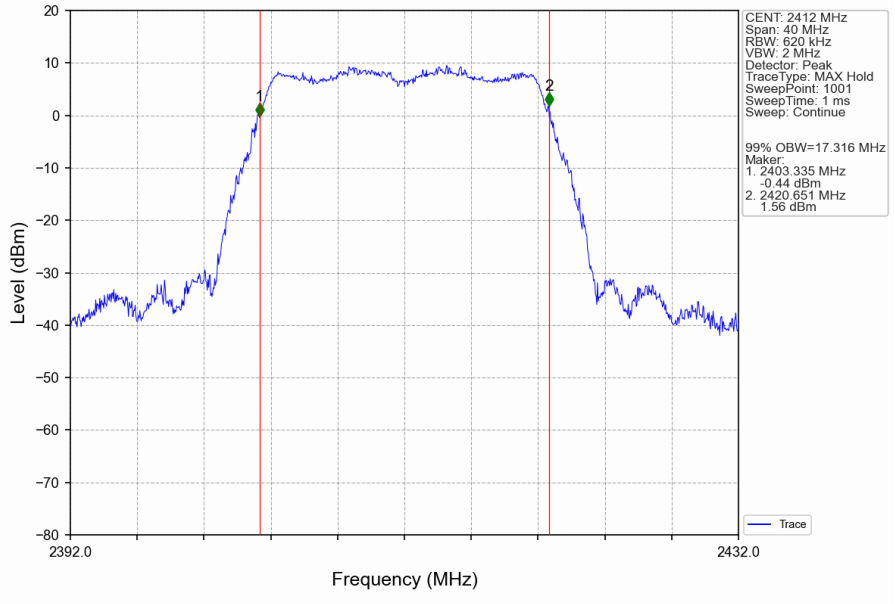
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



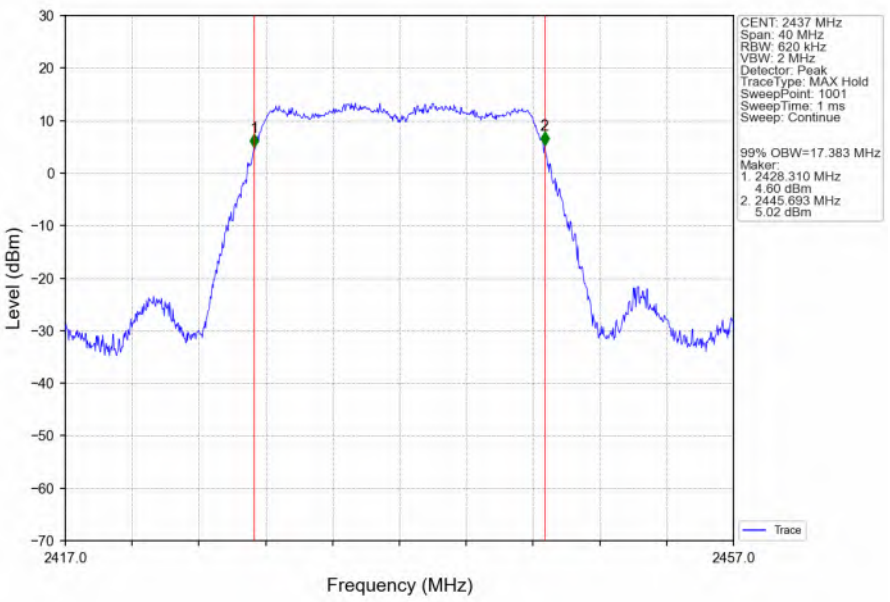
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



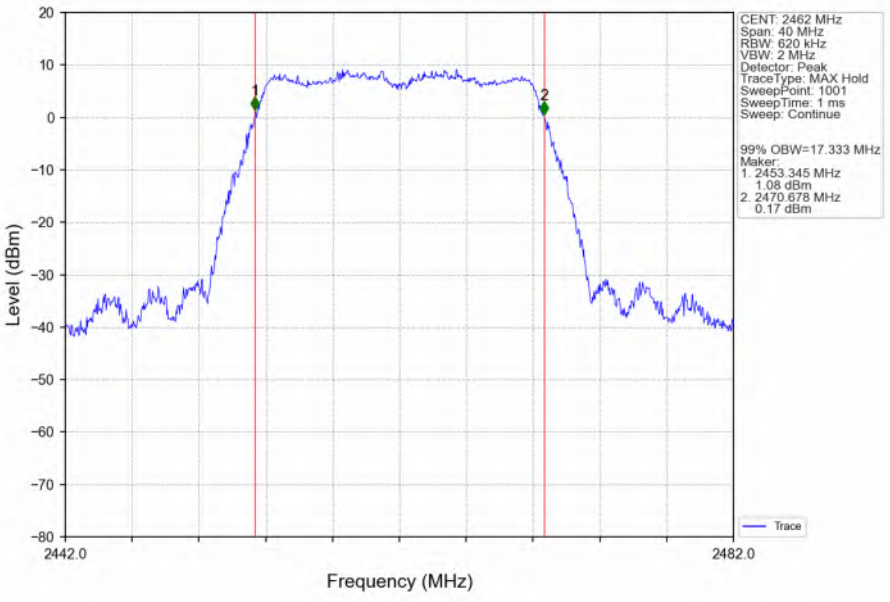
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



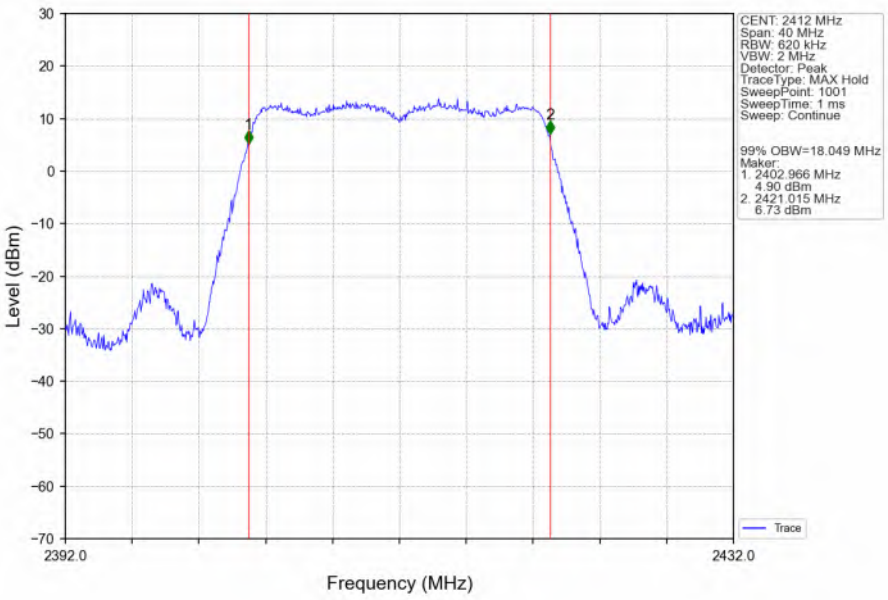
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



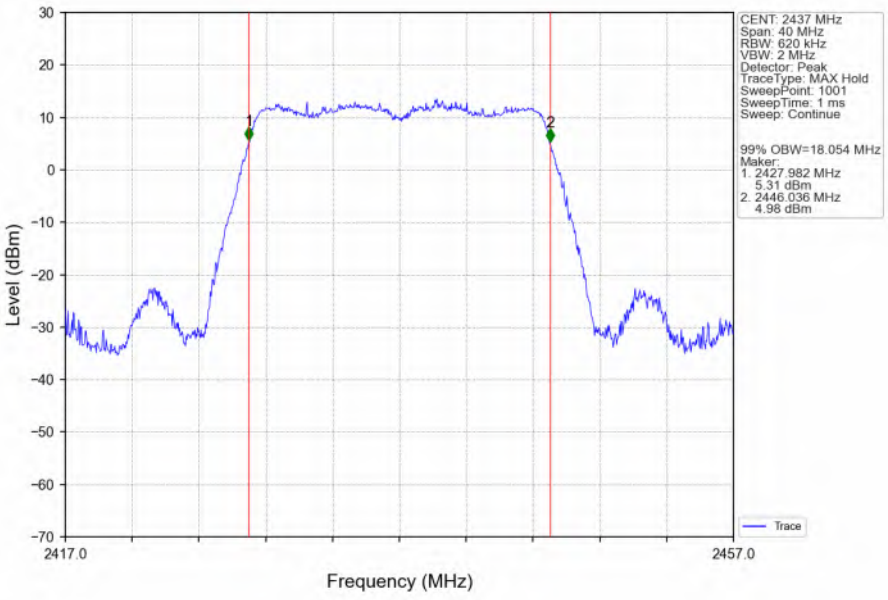
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



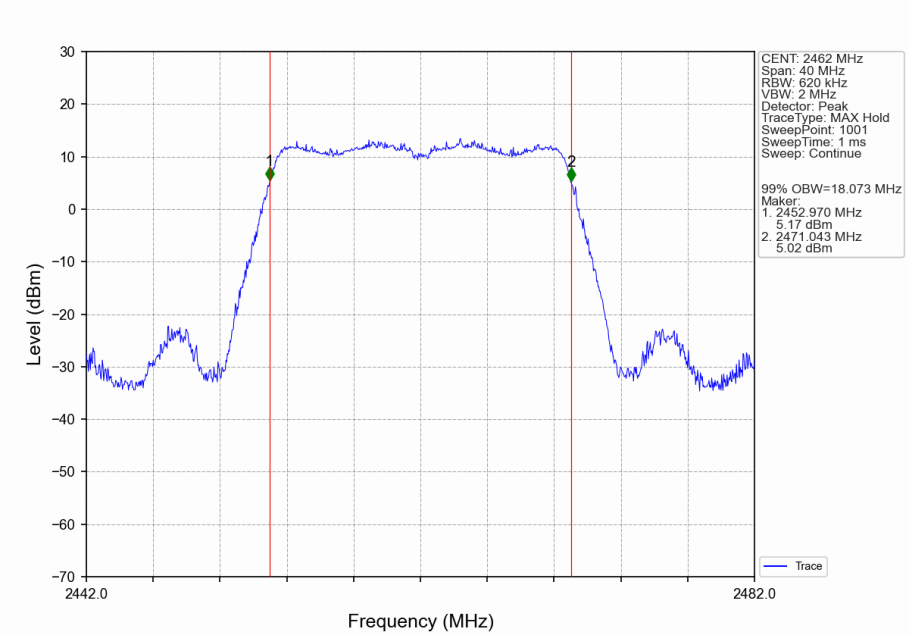
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



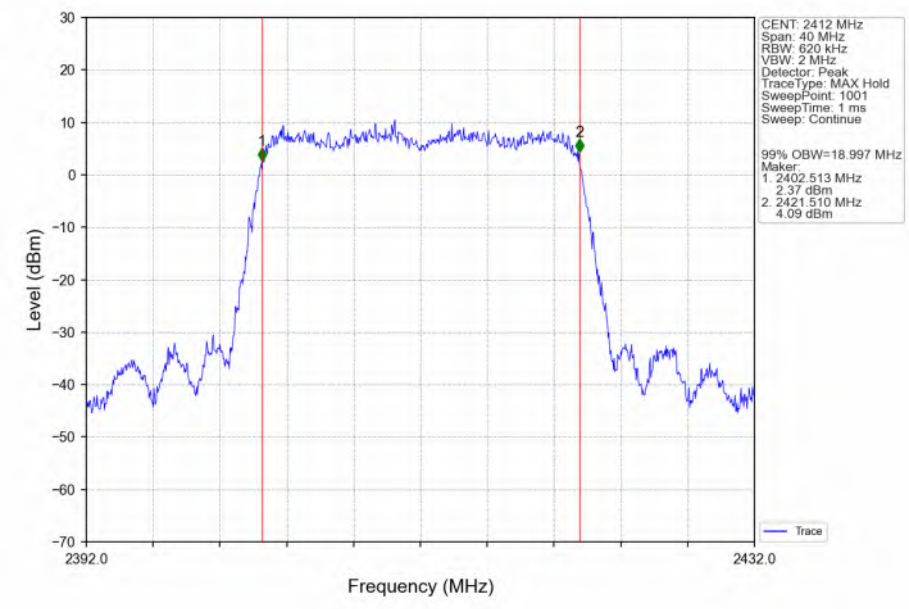
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



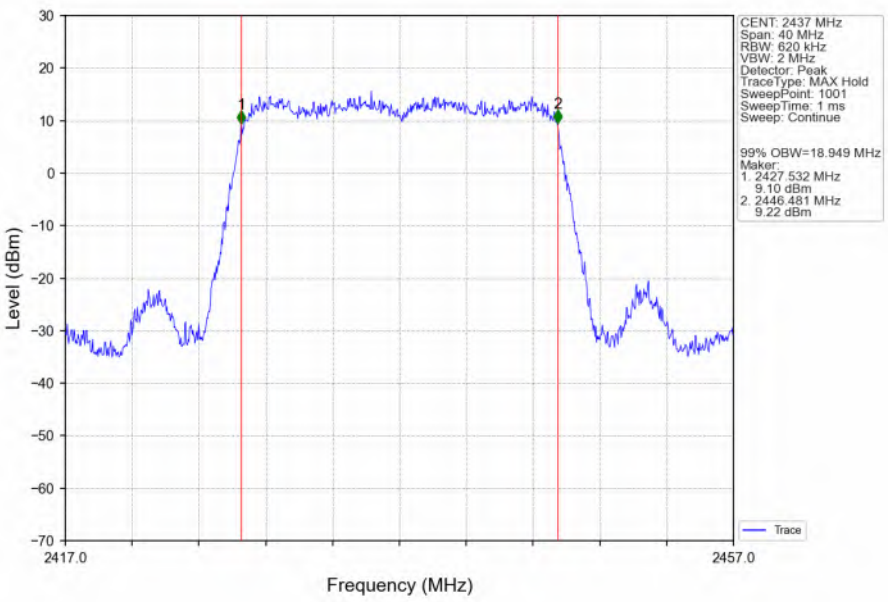
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



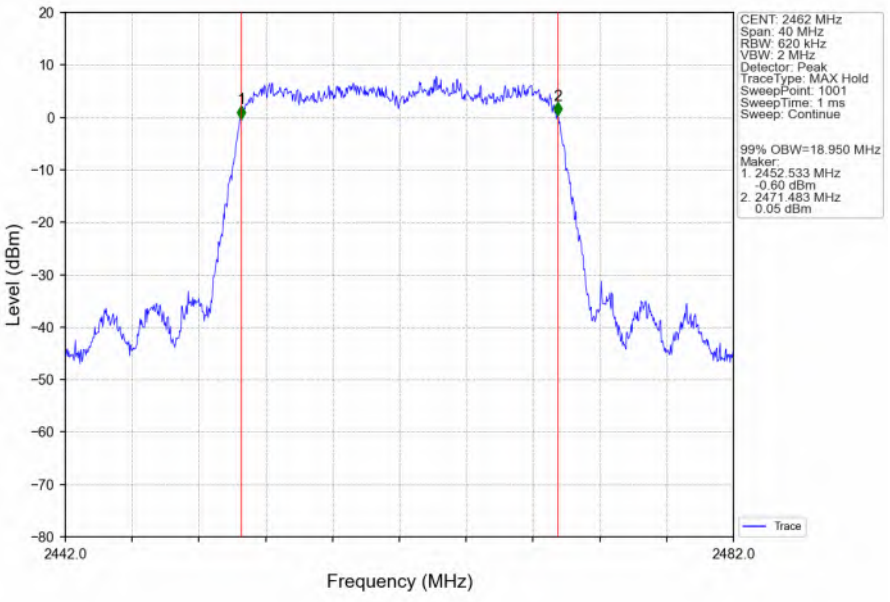
802.11ax(HEW20)_LCH_2412MHz_SU_ / _Ant1 (SISO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant1 (SISO)_NTNV

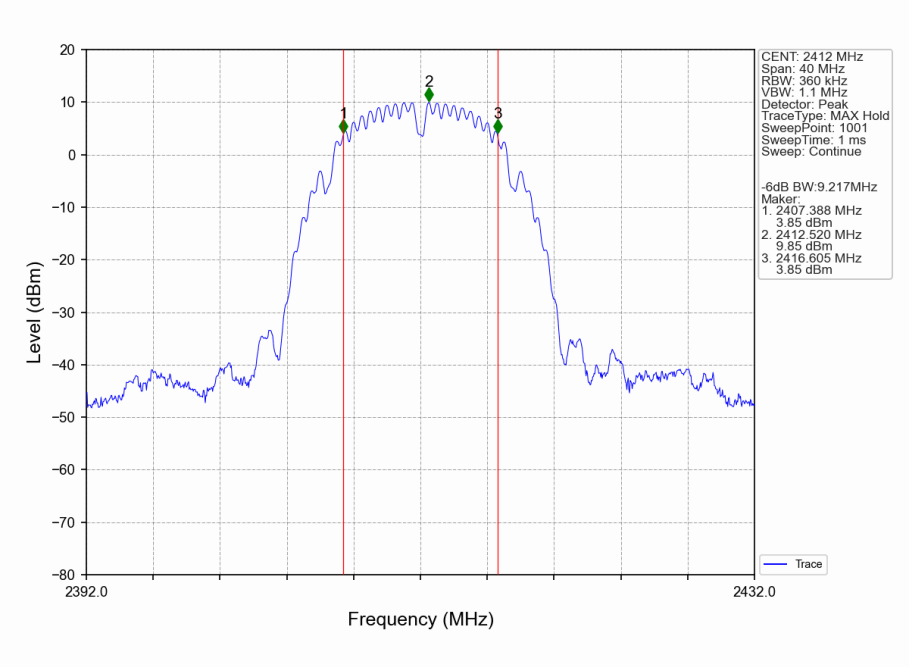


802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant1 (SISO)_NTNV

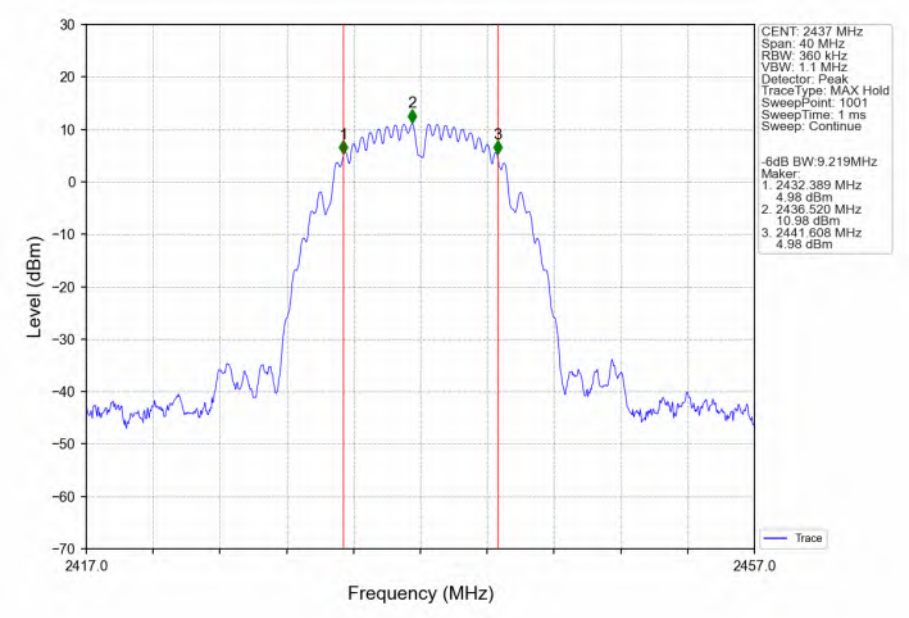


1.2.2 6dB BW

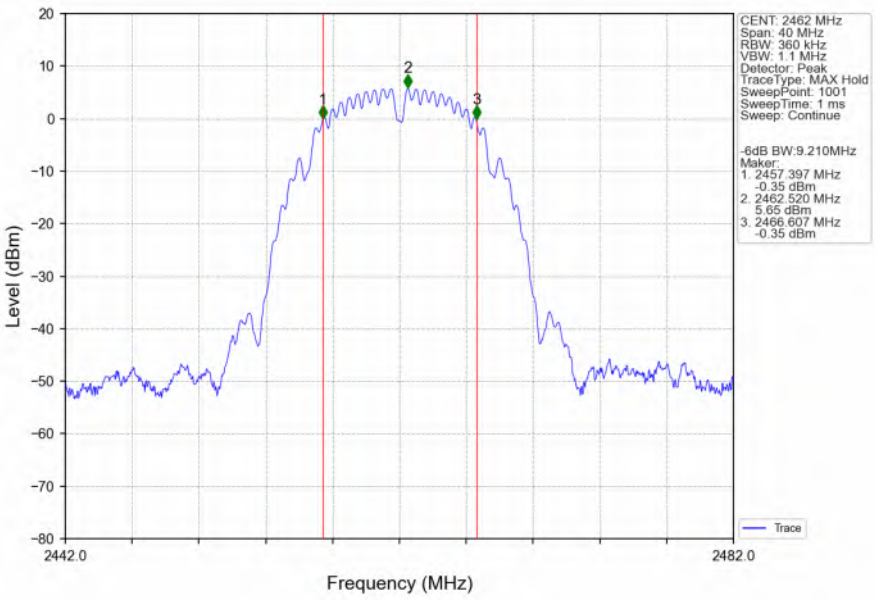
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



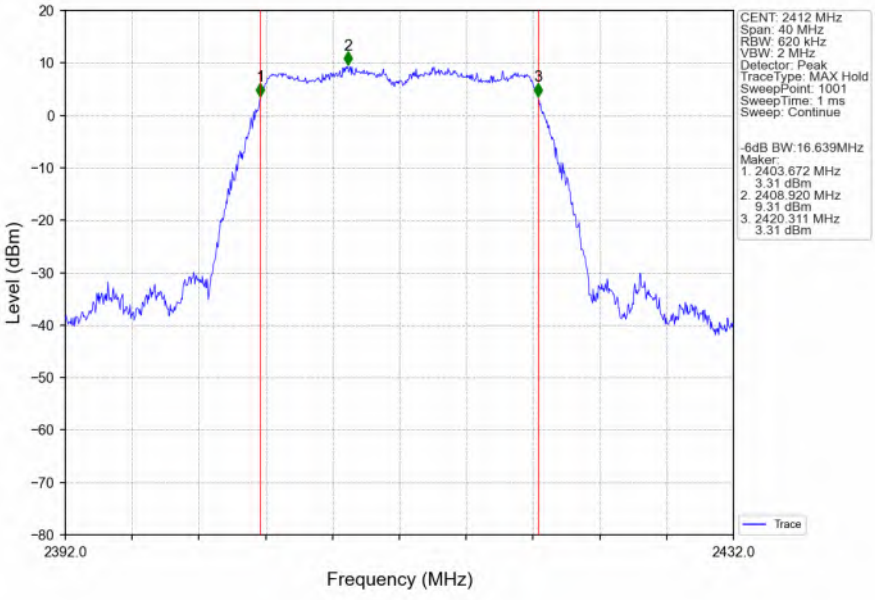
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



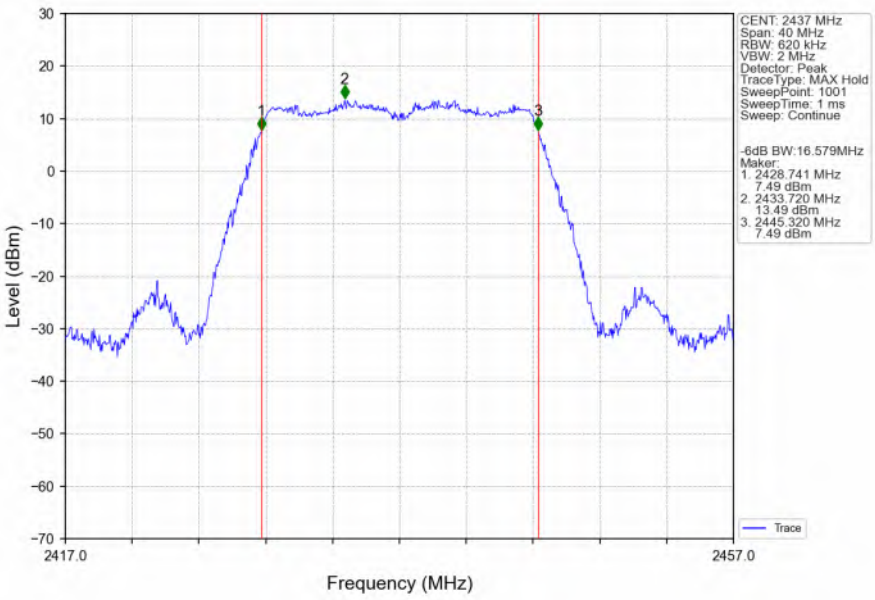
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



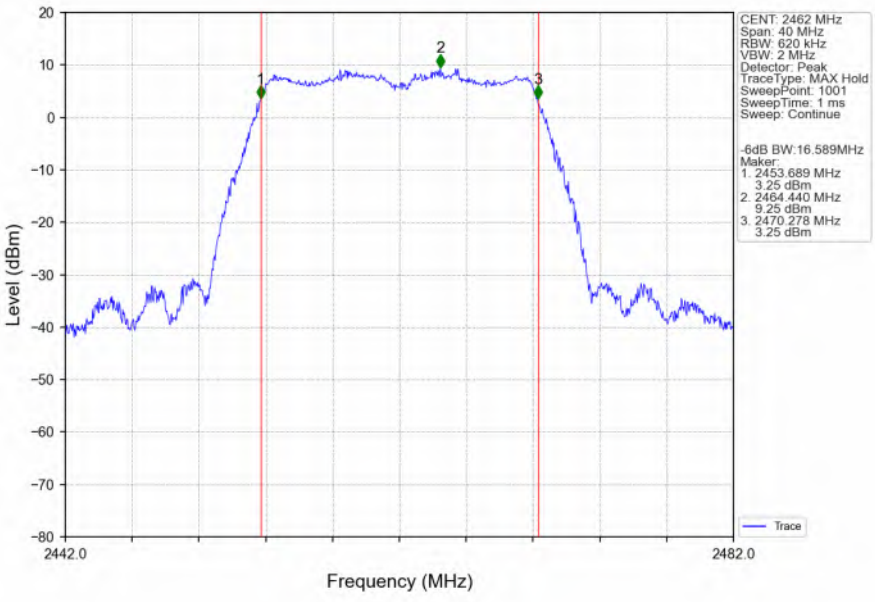
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



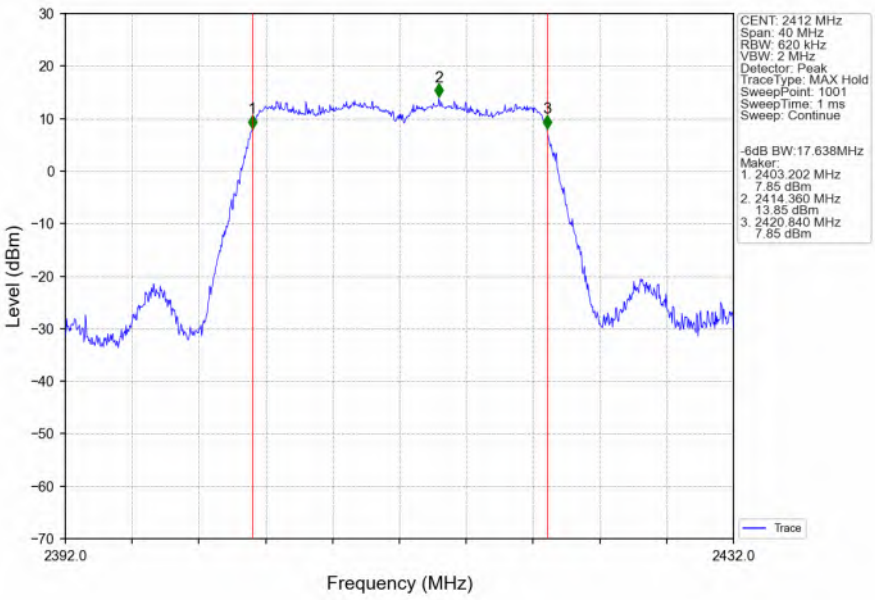
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



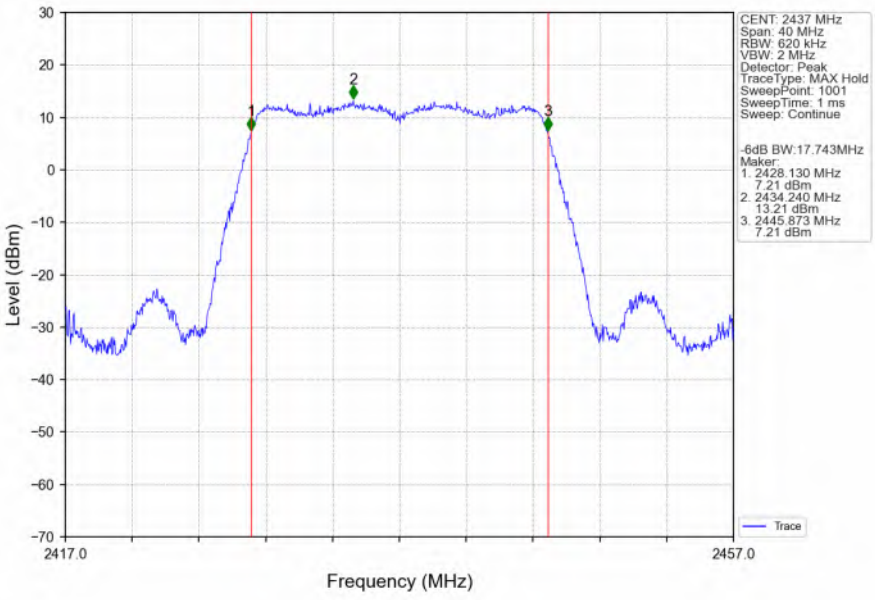
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



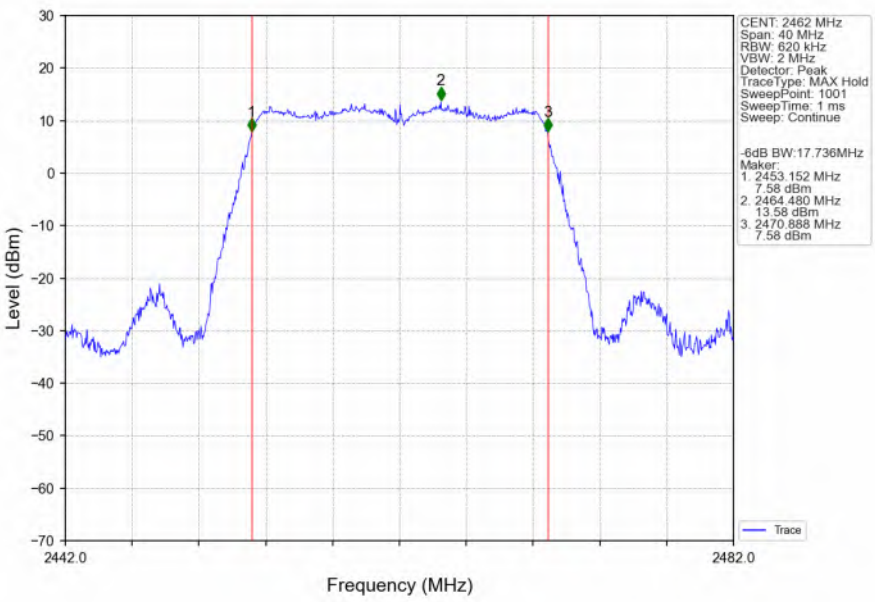
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



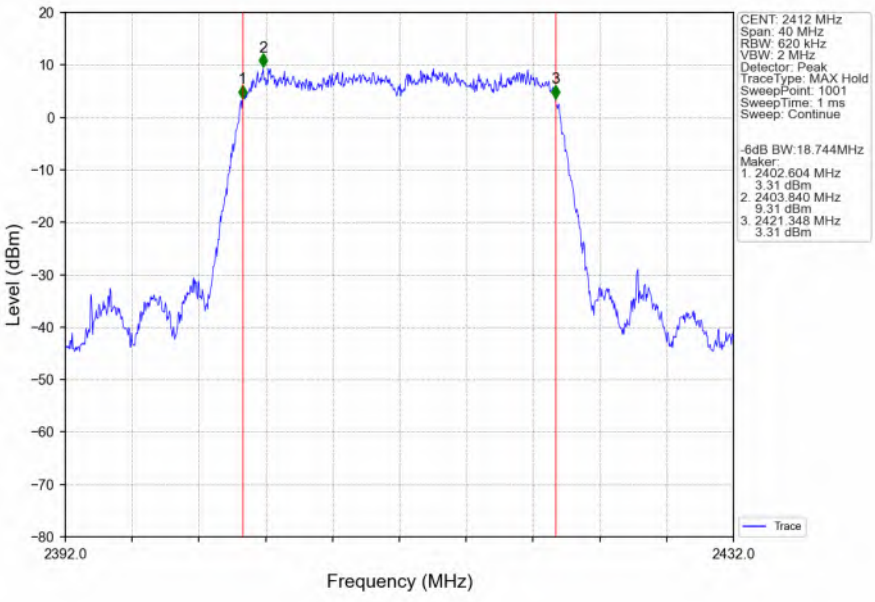
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



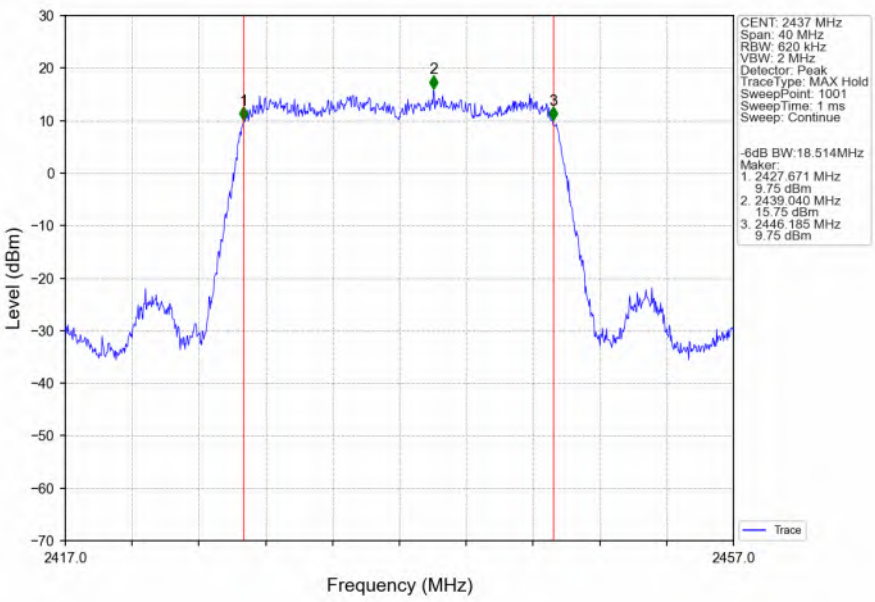
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



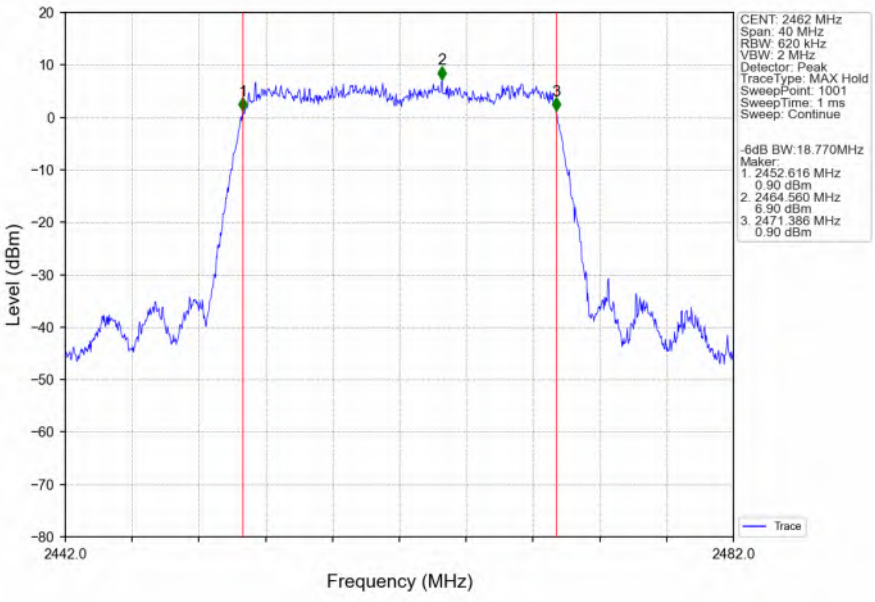
802.11ax(HEW20)_LCH_2412MHz_SU_ / _Ant1 (SISO)_NTNV



802.11ax(HEW20)_MCH_2437MHz_SU_ / _Ant1 (SISO)_NTNV



802.11ax(HEW20)_HCH_2462MHz_SU_ / _Ant1 (SISO)_NTNV



2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Peak Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	20.69	<=30	Pass
		2437	/	/	21.79	<=30	Pass
		2452	/	/	20.01	<=30	Pass
		2462	/	/	16.46	<=30	Pass
802.11g	SISO	2412	/	/	22.87	<=30	Pass
		2437	/	/	25.82	<=30	Pass
		2447	/	/	24.01	<=30	Pass
		2452	/	/	23.01	<=30	Pass
		2457	/	/	22.98	<=30	Pass
		2462	/	/	22.04	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	26.79	<=30	Pass
		2437	/	/	26.41	<=30	Pass
		2462	/	/	26.49	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	21.51	<=30	Pass
		2437	SU	/	26.98	<=30	Pass
		2447	SU	/	24.03	<=30	Pass
		2452	SU	/	22.26	<=30	Pass
		2457	SU	/	22.03	<=30	Pass
		2462	SU	/	19.19	<=30	Pass
Note1: Antenna Gain: Ant1: 2.40dBi;							

2.1.2 Avg Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Avg Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	18.32	<=30	Pass
		2437	/	/	19.41	<=30	Pass
		2452	/	/	17.02	<=30	Pass
		2462	/	/	12.04	<=30	Pass
802.11g	SISO	2412	/	/	12.34	<=30	Pass
		2437	/	/	18.44	<=30	Pass
		2447	/	/	16.35	<=30	Pass
		2452	/	/	14.99	<=30	Pass
		2457	/	/	15.14	<=30	Pass
		2462	/	/	12.41	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	17.03	<=30	Pass
		2437	/	/	16.43	<=30	Pass

		2462	/	/	17.11	<=30	Pass
802.11ax (HEW20)	SISO	2412	SU	/	12.65	<=30	Pass
		2437	SU	/	18.42	<=30	Pass
		2447	SU	/	15.63	<=30	Pass
		2452	SU	/	13.54	<=30	Pass
		2457	SU	/	13.25	<=30	Pass
		2462	SU	/	9.37	<=30	Pass
Note1: Antenna Gain: Ant1: 2.40dBi;							

- End of the Report -