TEST REPORT

Application No.:	KSCR2409001732AT
FCC ID:	2BHGF-0211C6U4
IC:	32743-0211C6U4
Name of Testing Laboratory preparing the Report:	Compliance Certification Services (Kunshan) Inc.
Address of Testing Laboratory preparing the Report:	No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.
Applicant:	KeyLife International Technology Limited
Address of Applicant:	27th Floor, Alexandra House, 18 Chater Road,Central, Hong Kong
Manufacturer:	KeyLife International Technology Limited
Address of Manufacturer:	27th Floor, Alexandra House, 18 Chater Road,Central, Hong Kong
Factory:	Zhejiang Uniview Systems Technology Co., Ltd.
Address of Factory:	No.1277 South Qingfeng South Road, Tongxiang City, Jiaxing City, Zhejiang Province, China
Equipment Under Test (EUT):	
EUT Name:	Dual-cam Doorbell (battery)
Model No.:	DB312,DB312 XXX XXX(where X may be 0-9 A-Z a-z or blank. The differences no impact safety related constructions and EMC) ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
For IC Model No.:	DB312
Standard(s) :	47 CFR Part 15, Subpart C 15.247 RSS-247 Issue 3, August 2023 RSS-Gen Issue 5 Amendment 2 (February 2021)
Date of Receipt:	2024-09-04
Date of Test:	2024-09-16 to 2024-10-22
Date of Issue:	2024-10-22
Test Result:	**Pass***

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

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Member of the SGS Group (SGS SA)

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	2024-10-22	/

Authorized for issue by:				
Tested By		Maker Qi **Maker_Qi/Project Engineer**		
Approved By		Terry Hou **Terry Hou /Reviewer**		

2 Test Summary

Radio Spectrum Technical Requirement					
Item	**FCC Requirement**	**IC Requirement**	**Method**	**Result**	**Test Lab***
Antenna Requirement	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	RSS-Gen Clause 6.8	N/A	Customer Declaration	N/A

N/A: Not applicable

Radio Spectrum Matter Part					
Item	**FCC Requirement**	**IC Requirement**	**Method**	**Result**	**Test Lab***
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.207	RSS-Gen Clause 8.8	ANSI C63.10 (2013) Section 6.2	Pass	B
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247a(2)	RSS-247 Clause 5.2(a)	ANSI C63.10 (2013) Section 11.8.1	Pass	A
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247(b)(3)	RSS-247 Clause 5.4(d)	ANSI C63.10 (2013) Section 11.9.1	Pass	A
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247(e)	RSS-247 Clause 5.2(b)	ANSI C63.10 (2013) Section 11.10.3	Pass	A
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247(d)	RSS-247 Clause 5.5	ANSI C63.10 (2013) Section 11.13.3.2	Pass	A
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247(d)	RSS-247 Clause 5.5	ANSI C63.10 (2013) Section 11.11	Pass	A
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	RSS-247 Section 3.3 & RSS-Gen Section 8.9	ANSI C63.10 (2013) Section 6.10.5	Pass	B
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	RSS-247 Section 3.3 & RSS-Gen Section 8.9	ANSI C63.10 (2013) Section 6.4,6.5,6.6	Pass	B
99% Bandwidth	-	RSS-Gen Section 6.7	ANSI C63.10 Section 6.9.3	Pass	A

Model No.: DB312,DB312 XXX XXX(where X may be 0-9 A-Z a-z or blank. The differences no impact safety related constructions and EMC)

Only the model DB312 was tested.

There are series models mentioned in this report, and they are identical in electrical and electronic characters. Only the model DB312 was tested since their differences were the model number and appearance.

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4 General Information

4.1 Details of E.U.T.

Power supply:	~12-24V,50/60Hz,1.0A DC 5V/2A DC 3.6V by battery
Test voltage:	AC 120V/60Hz
Operation Frequency:	802.11b/g/n(HT20)/ax(HE20):2412MHz to 2462MHz; 802.11n(HT40)/ax(HE40):2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK), 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK), 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024-QAM)
Number of Channels:	802.11b/g/n(HT20)/ax(HE20):11;802.11n(HT40)/ax(HE40):7
Channel Spacing:	5MHz
Antenna Type:	Internal antenna
Antenna Gain:	3.9dBi (Provided by the manufacturer)

4.2 Power level setting using in test:

Channel	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)
	Ant 1	Ant 1	Ant 1	Ant 1
L	7	9	10	9
M	9	9	9	9
H	9	7	7	10

Channel	802.11AX(HE20)	802.11AX(HE40)
	Ant 1	Ant 1
L	8	8
M	8	8
H	6	8

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645

4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%
Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.		

4.5 Test Location

Lab A:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

Lab B:

Conducted Emissions at AC Power Line (150kHz-30MHz); Radiated Emissions; Radiated Emissions which fall in the restricted bands test 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

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:

Lab A:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

Lab B:

• A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• FCC –Designation Number: CN1312

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Lab A:

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/01/2024	07/31/2025
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/01/2024	07/31/2025
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/15/2024	01/14/2025
4	Signal Generator	R&S	SMBV100B	KSEM032	03/19/2024	03/18/2025
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/02/2024	08/01/2025
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/01/2024	07/31/2025
7	Signal Generator	Agilent	E8257C	KS301066	08/06/2024	08/05/2025
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/01/2024	07/31/2025
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/12/2024	08/11/2025
11	Switcher	TST	FY562	KUS2001M001-4	01/15/2024	01/14/2025
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/15/2024	01/14/2025
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/26/2024	08/25/2025
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
15	Software	BST	TST-PASS	/	NCR	NCR

Lab B:

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2/1/2024	1/31/2025
2	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2/8/2024	2/7/2025
3	Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-03	2/4/2024	2/3/2025
4	Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-04	2/4/2024	2/3/2025
5	Measurement Software	Tonscend	JS32-CE	SUWI-02-09-05	NCR	NCR
RF Radiated Test						
1	Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-02	6/3/2023	6/2/2026
2	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-13	2/8/2024	2/7/2025
3	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	5/8/2024	5/7/2025
4	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-06	11/21/2023	11/20/2024
5	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2/1/2024	1/31/2025
6	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	11/25/2023	11/24/2024
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	11/25/2023	11/24/2024
8	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/12/2023	5/11/2025
9	Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/13/2023	5/12/2025
10	Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2/1/2024	1/31/2025
11	Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	2/1/2024	1/31/2025
12	Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	2/1/2024	1/31/2025
13	Measurement Software	Tonscend	JS32-RE	SUWI-02-09-04	NCR	NCR
14	Measurement Software	Tonscend	JS32-RSE	SUWI-02-09-06	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 antenna is Internal antenna on the main PCB and no consideration of replacement. The best case gain of the antenna is 3.9 dBi.

Antenna location: Refer to internal photo.

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207
Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency.		
Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz		

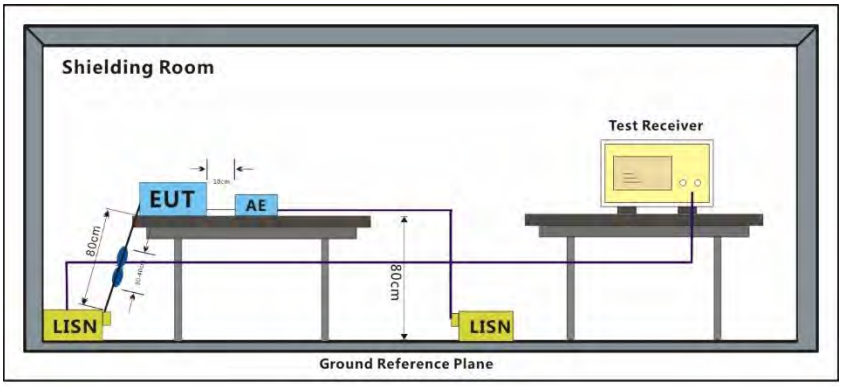
7.1.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 49 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

1) The mains terminal disturbance voltage test was conducted in a shielded room.

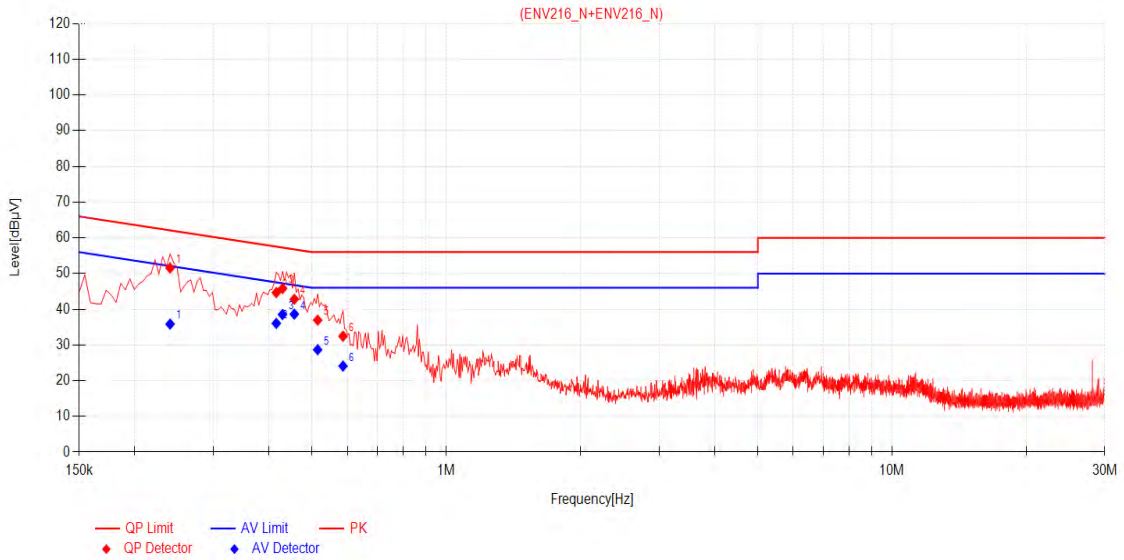
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.

4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

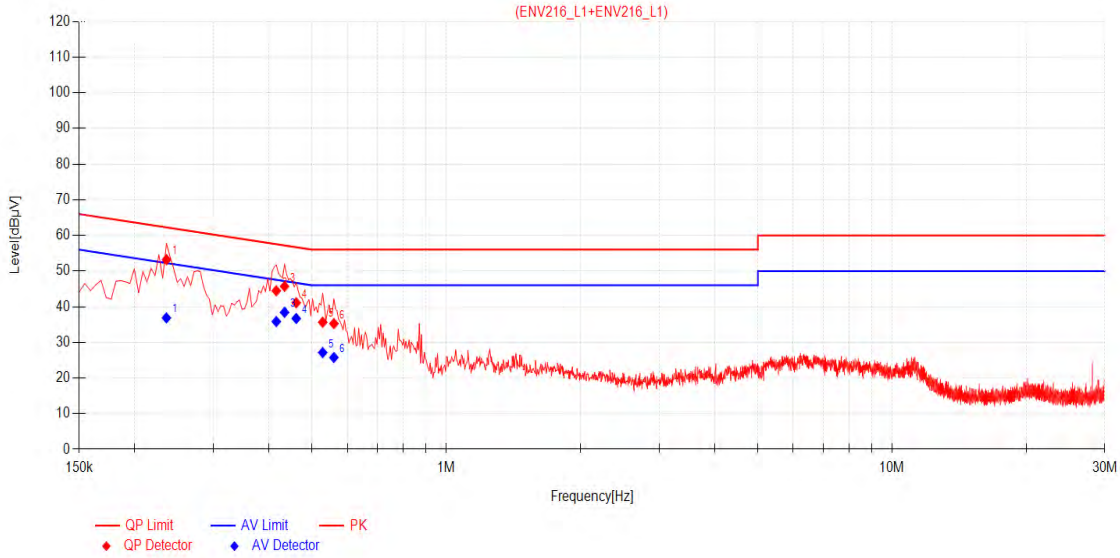
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor



Final Data List

NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.2400	10.16	41.40	51.56	62.10	10.54	25.68	35.84	52.10	16.26	PASS
2	0.4155	10.16	34.50	44.66	57.54	12.88	25.89	36.05	47.54	11.49	PASS
3	0.4290	10.16	35.63	45.79	57.27	11.48	28.38	38.54	47.27	8.73	PASS
4	0.4560	10.16	32.65	42.81	56.77	13.96	28.47	38.63	46.77	8.14	PASS
5	0.5145	10.17	26.78	36.95	56.00	19.05	18.50	28.67	46.00	17.33	PASS
6	0.5865	10.19	22.26	32.45	56.00	23.55	13.91	24.10	46.00	21.90	PASS



Final Data List											
NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBμV]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Reading [dBμV]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.2355	10.16	43.03	53.19	62.25	9.06	26.70	36.86	52.25	15.39	PASS
2	0.4155	10.17	34.29	44.46	57.54	13.08	25.67	35.84	47.54	11.70	PASS
3	0.4335	10.17	35.52	45.69	57.19	11.50	28.24	38.41	47.19	8.78	PASS
4	0.4605	10.17	30.94	41.11	56.68	15.57	26.52	36.69	46.68	9.99	PASS
5	0.5280	10.18	25.46	35.64	56.00	20.36	16.96	27.14	46.00	18.86	PASS
6	0.5595	10.18	25.08	35.26	56.00	20.74	15.57	25.75	46.00	20.25	PASS

7.2 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 (2013) Section 6.10.5

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
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.		

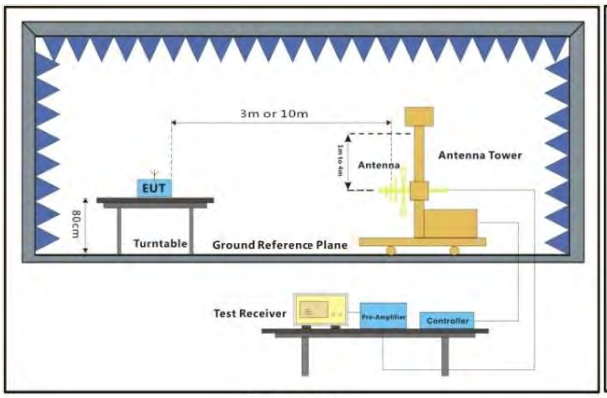
7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

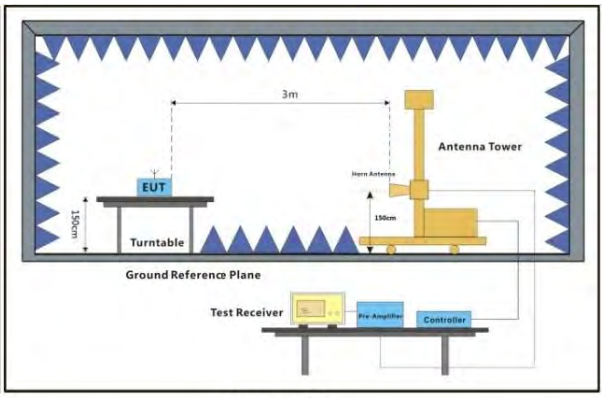
7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



30MHz-1GHz



Above 1GHz

7.2.4 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.

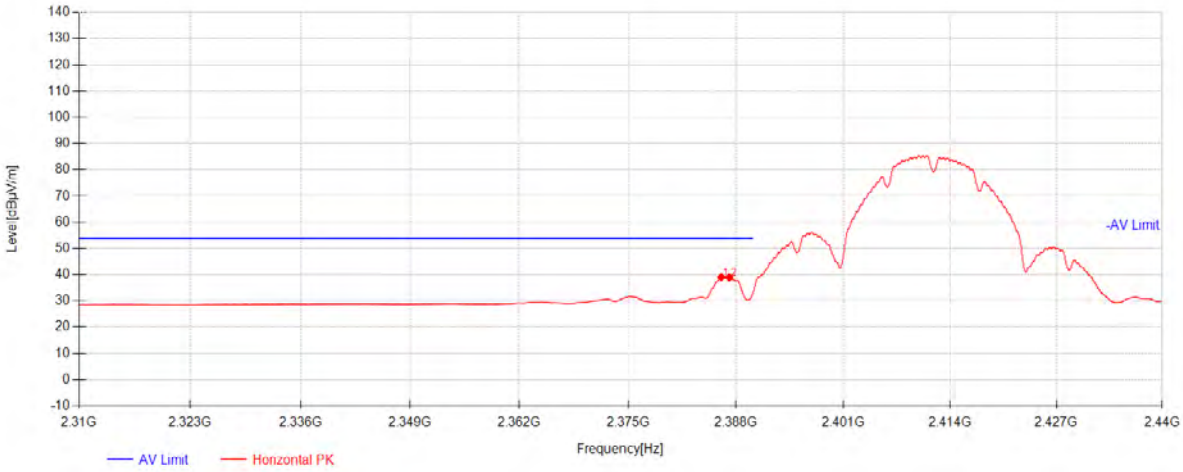
Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

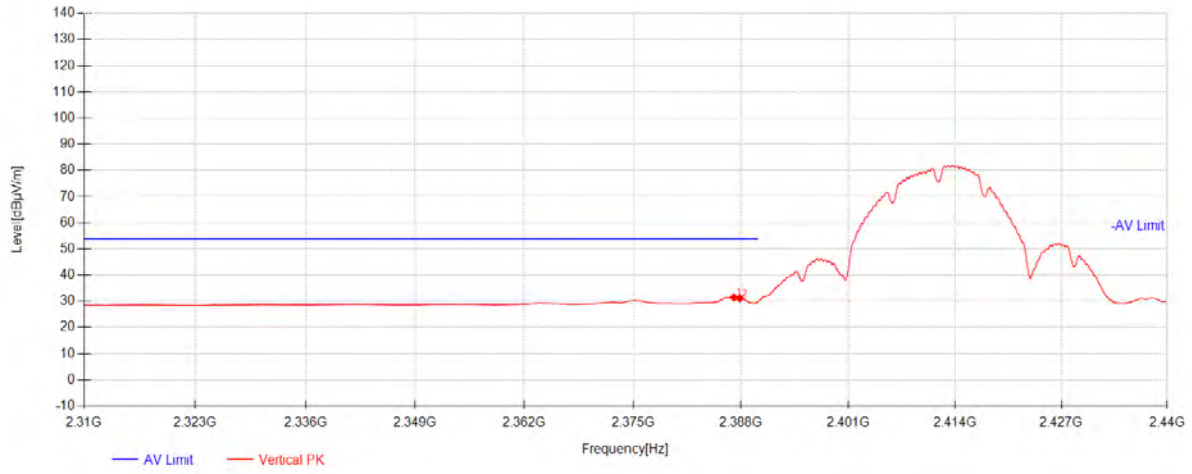
3. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ⩾1/T (Duty cycle＜98%) or 10Hz (Duty cycle⩾98%) for Average detection (AV) at frequency above 1GHz.

802.11b_Channel 01



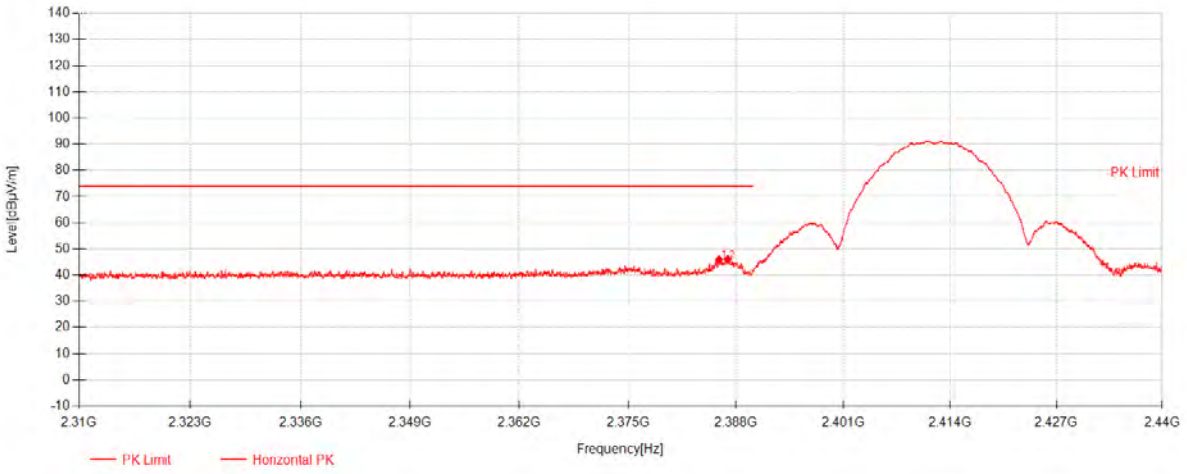
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2386.245	35.66	26.97	-23.57	39.06	54.00	14.94	Horizontal
2	2387.1875	35.54	26.97	-23.57	38.94	54.00	15.06	Horizontal

802.11b_Channel 01



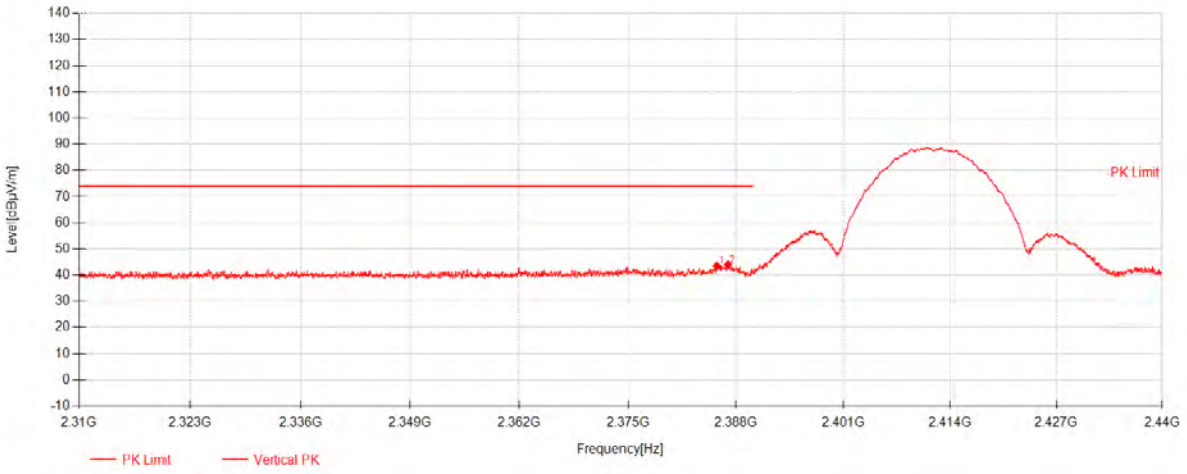
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.155	28.11	26.97	-23.57	31.51	54.00	22.49	Vertical
2	2387.87	27.77	26.98	-23.57	31.17	54.00	22.83	Vertical

802.11b_Channel 01



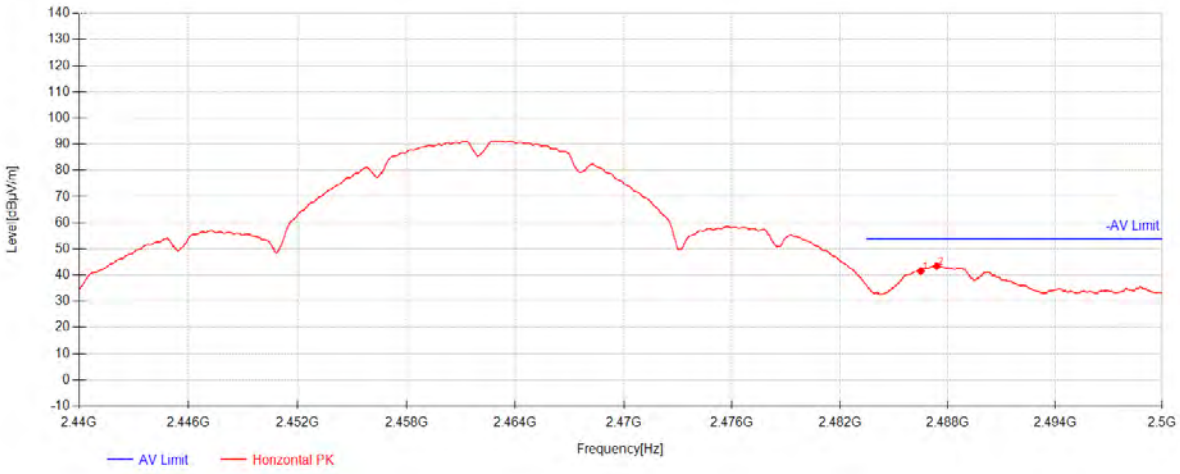
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2385.9688	42.52	26.97	-23.57	45.92	74.00	28.08	Horizontal
2	2387.0088	42.70	26.97	-23.57	46.10	74.00	27.90	Horizontal

802.11b_Channel 01



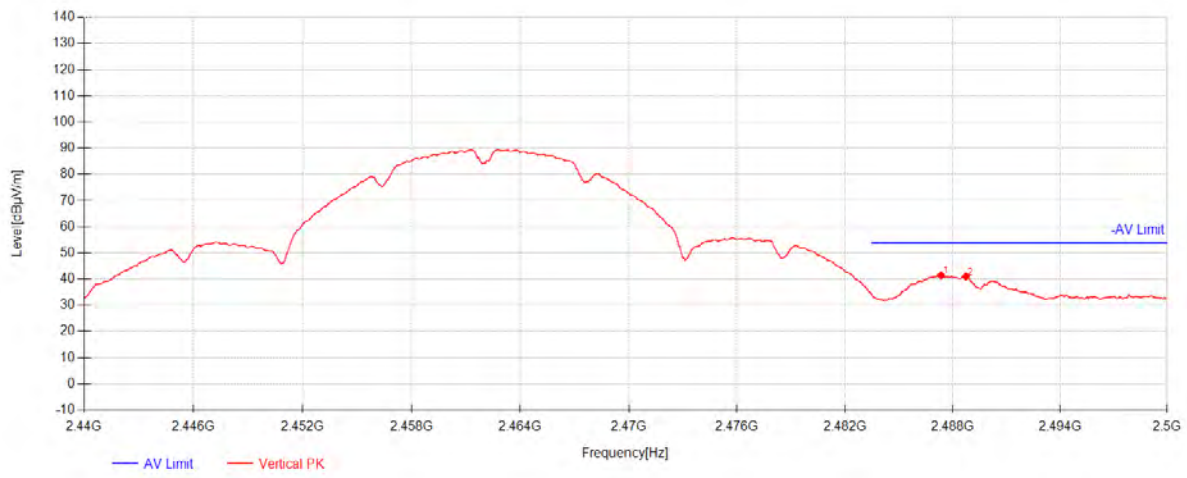
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2385.6925	40.22	26.97	-23.57	43.62	74.00	30.38	Vertical
2	2387.0413	40.63	26.97	-23.57	44.03	74.00	29.97	Vertical

802.11b_Channel 11



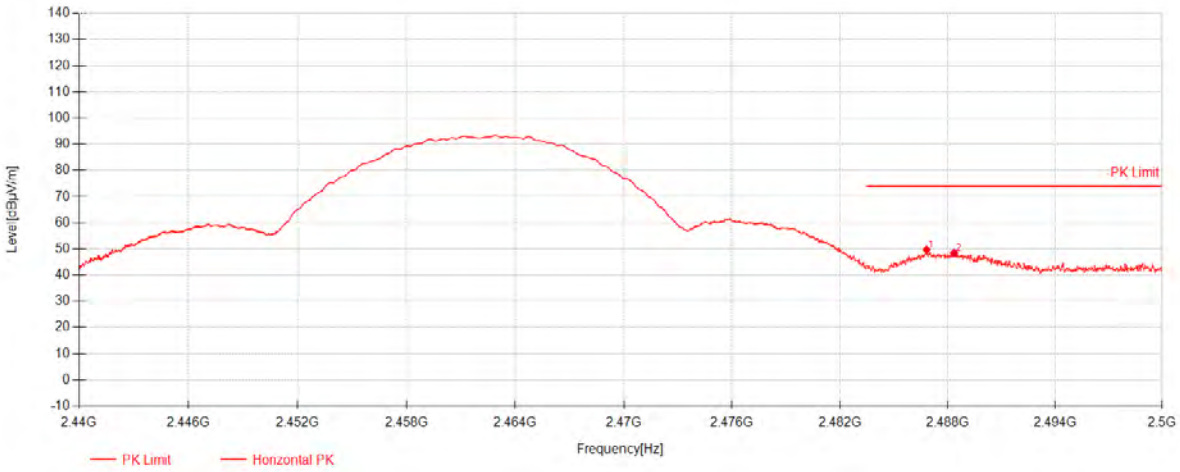
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2486.5075	37.89	27.17	-23.54	41.52	54.00	12.48	Horizontal
2	2487.385	39.83	27.17	-23.54	43.46	54.00	10.54	Horizontal

802.11b_Channel 11



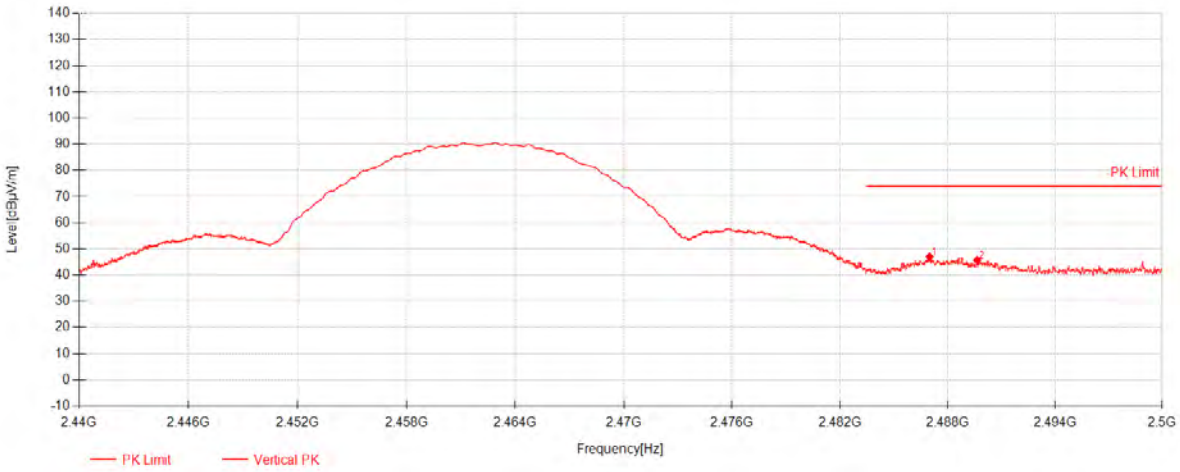
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2487.355	37.81	27.17	-23.54	41.44	54.00	12.56	Vertical
2	2488.7425	37.38	27.18	-23.54	41.01	54.00	12.99	Vertical

802.11b_Channel 11



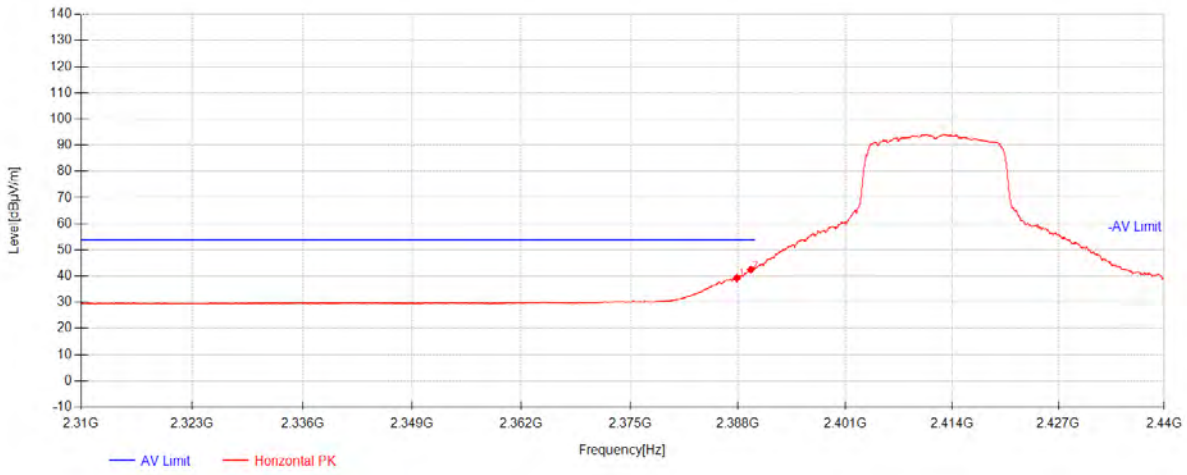
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2486.83	46.05	27.17	-23.54	49.68	74.00	24.32	Horizontal
2	2488.36	44.85	27.18	-23.54	48.48	74.00	25.52	Horizontal

802.11b_Channel 11



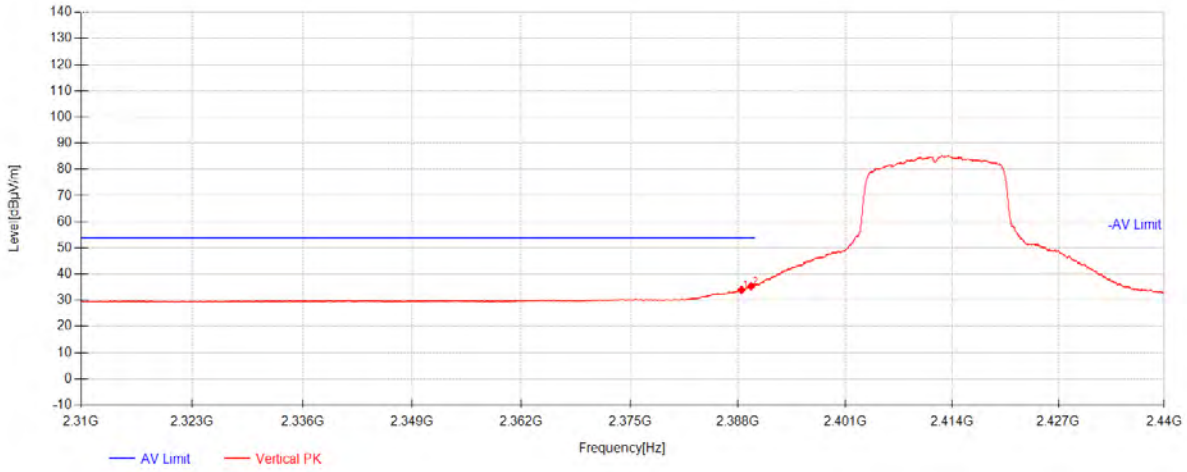
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2486.995	43.38	27.17	-23.54	47.01	74.00	26.99	Vertical
2	2489.65	42.11	27.18	-23.54	45.75	74.00	28.25	Vertical

802.11g_Channel 01



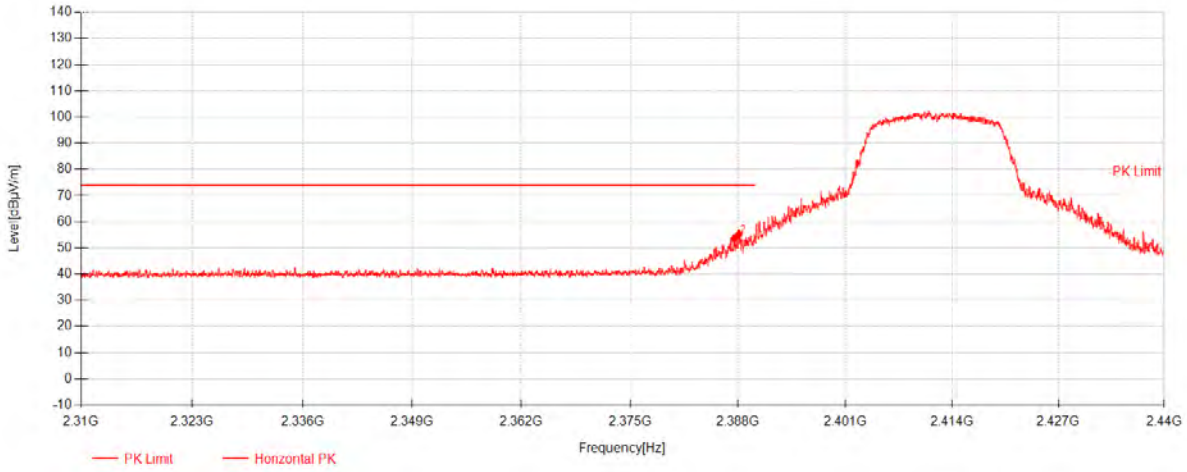
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.87	35.87	26.98	-23.57	39.27	54.00	14.73	Horizontal
2	2389.56	39.13	26.98	-23.57	42.54	54.00	11.46	Horizontal

802.11g_Channel 01



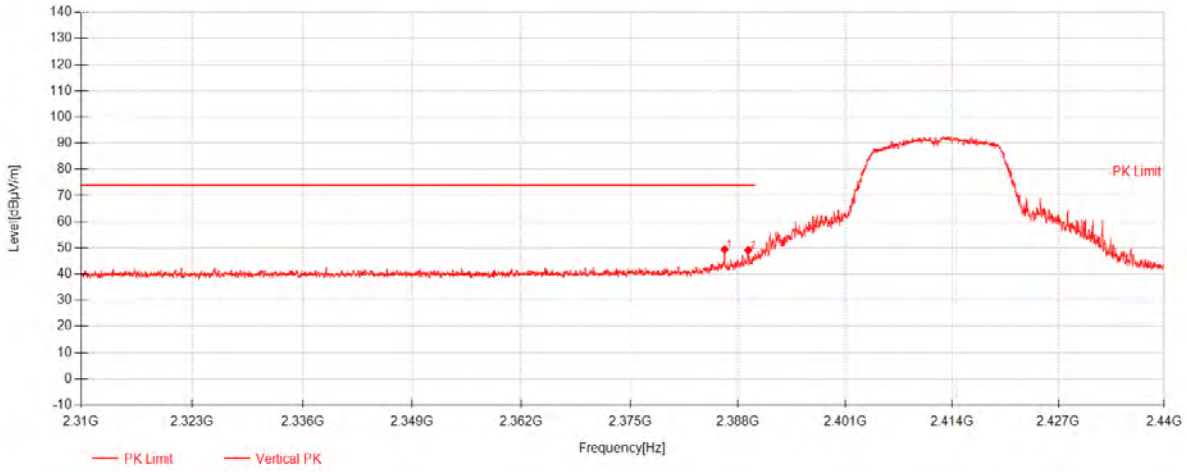
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2388.4225	30.63	26.98	-23.57	34.04	54.00	19.96	Vertical
2	2389.5925	32.02	26.98	-23.57	35.43	54.00	18.57	Vertical

802.11g_Channel 01



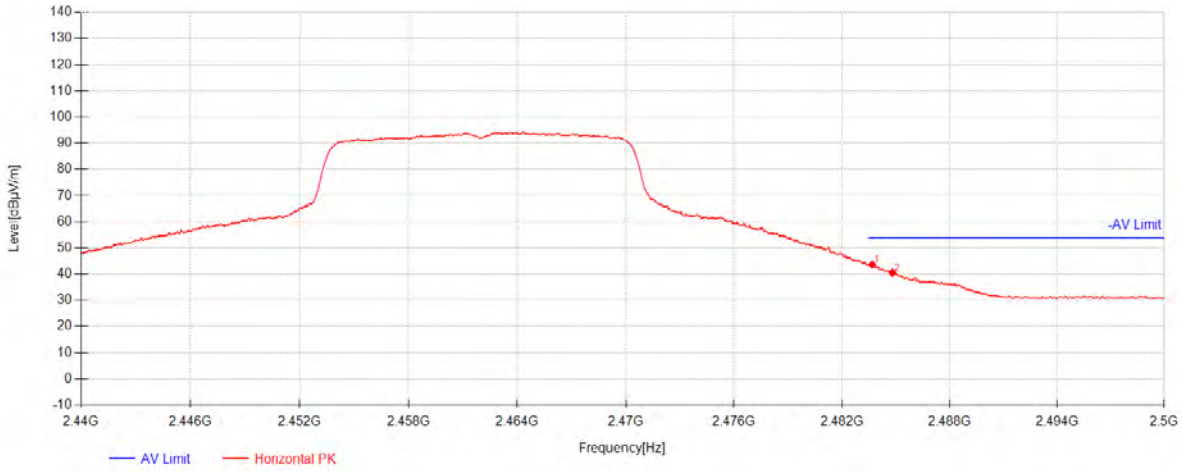
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.5613	50.35	26.98	-23.57	53.75	74.00	20.25	Horizontal
2	2388.13	51.87	26.98	-23.57	55.28	74.00	18.72	Horizontal

802.11g_Channel 01



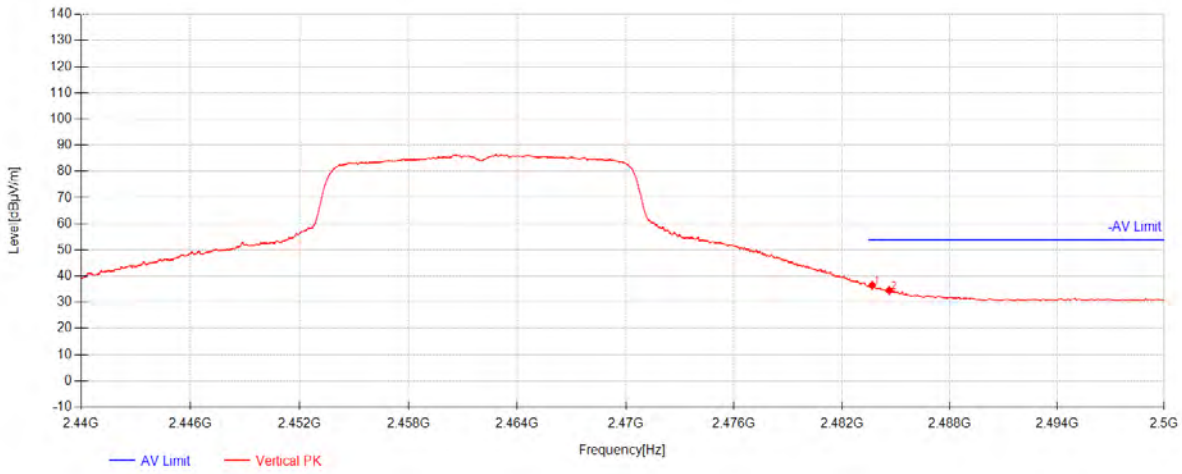
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2386.3912	46.07	26.97	-23.57	49.47	74.00	24.53	Vertical
2	2389.235	45.70	26.98	-23.57	49.11	74.00	24.89	Vertical

802.11g_Channel 11



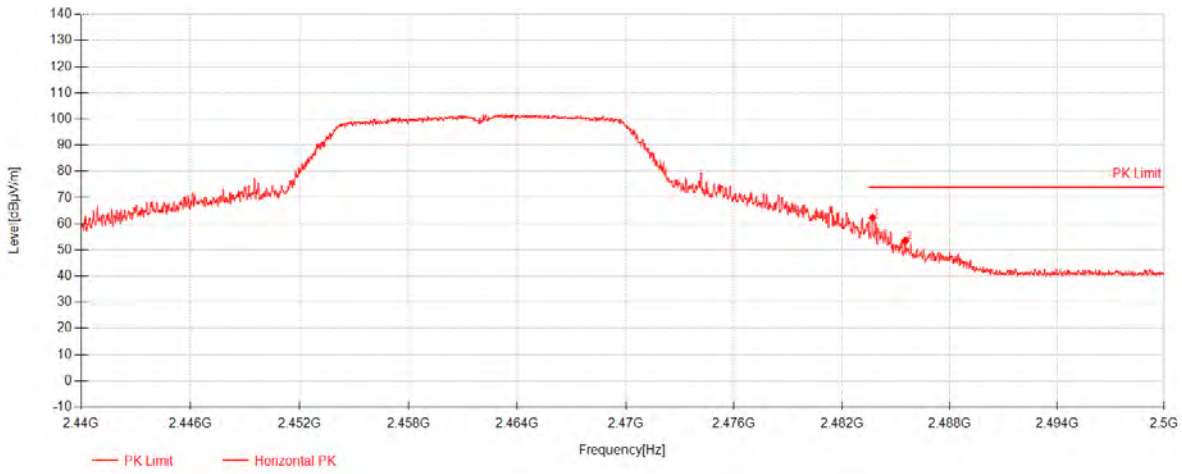
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.6875	40.06	27.17	-23.54	43.68	54.00	10.32	Horizontal
2	2484.8125	36.86	27.17	-23.54	40.49	54.00	13.51	Horizontal

802.11g_Channel 11



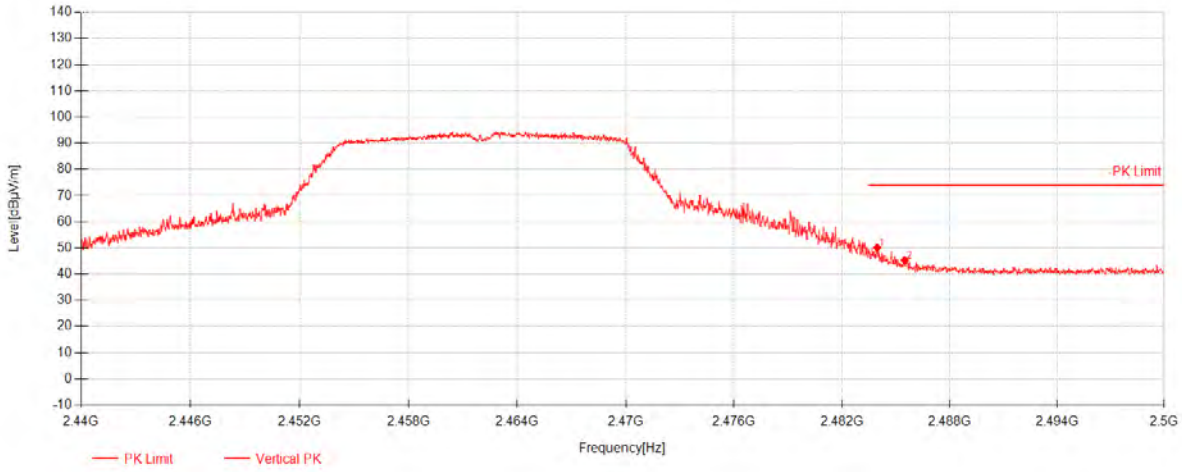
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.6875	32.91	27.17	-23.54	36.53	54.00	17.47	Vertical
2	2484.6325	30.96	27.17	-23.54	34.58	54.00	19.42	Vertical

802.11g_Channel 11



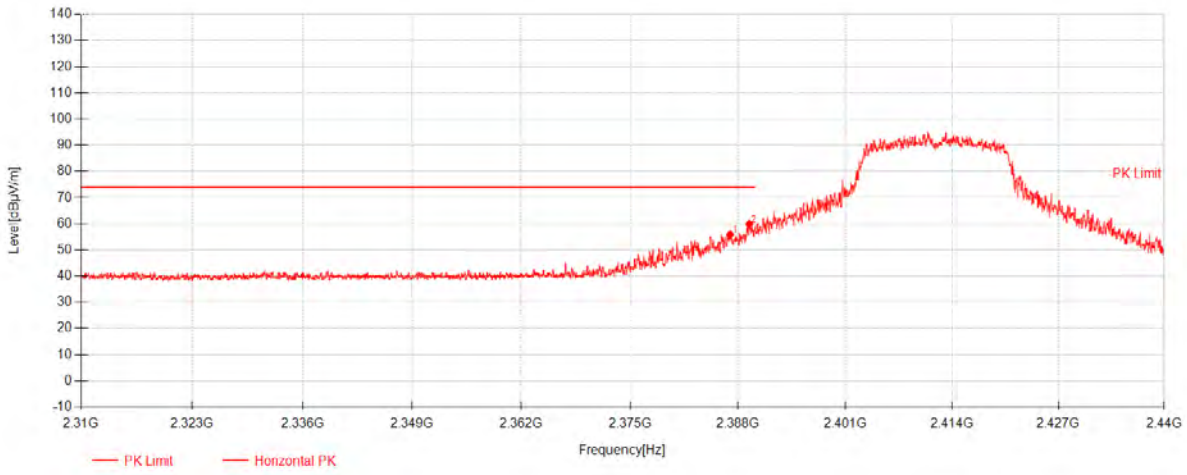
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.71	58.68	27.17	-23.54	62.30	74.00	11.70	Horizontal
2	2485.525	49.90	27.17	-23.54	53.53	74.00	20.47	Horizontal

802.11g_Channel 11



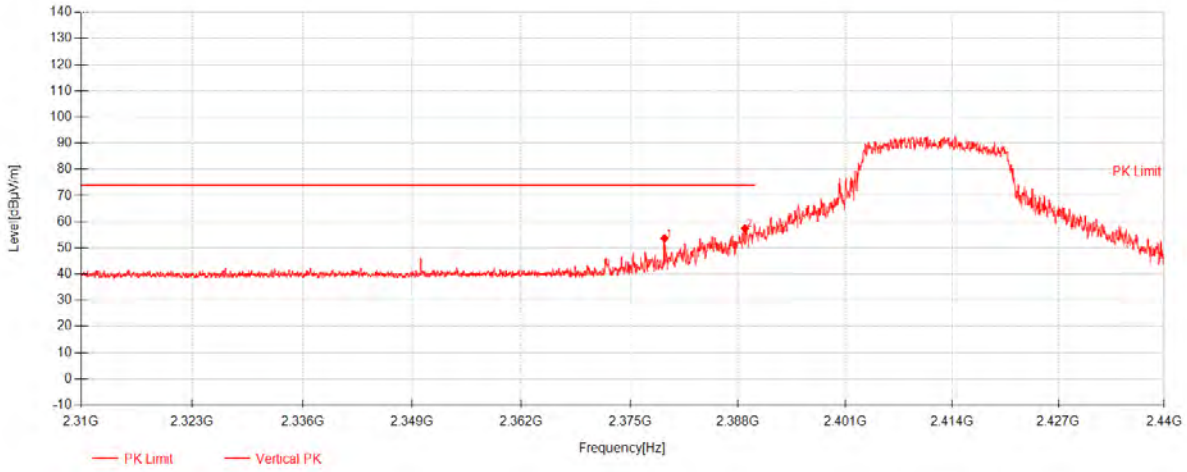
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.965	46.47	27.17	-23.54	50.09	74.00	23.91	Vertical
2	2485.495	41.75	27.17	-23.54	45.38	74.00	28.62	Vertical

802.11n20_Channel 01



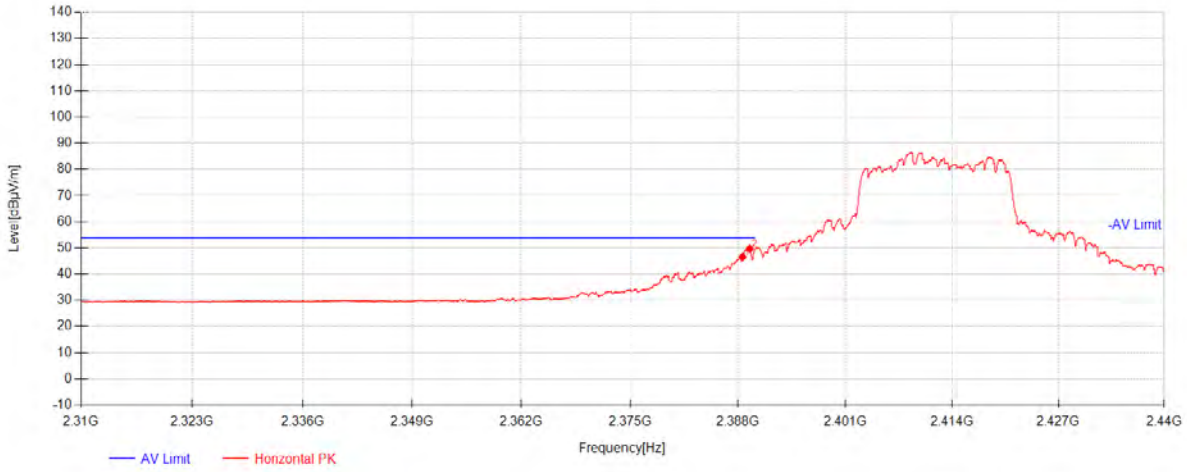
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.0575	52.57	26.97	-23.57	55.97	74.00	18.03	Horizontal
2	2389.365	56.47	26.98	-23.57	59.88	74.00	14.12	Horizontal

802.11n20_Channel 01



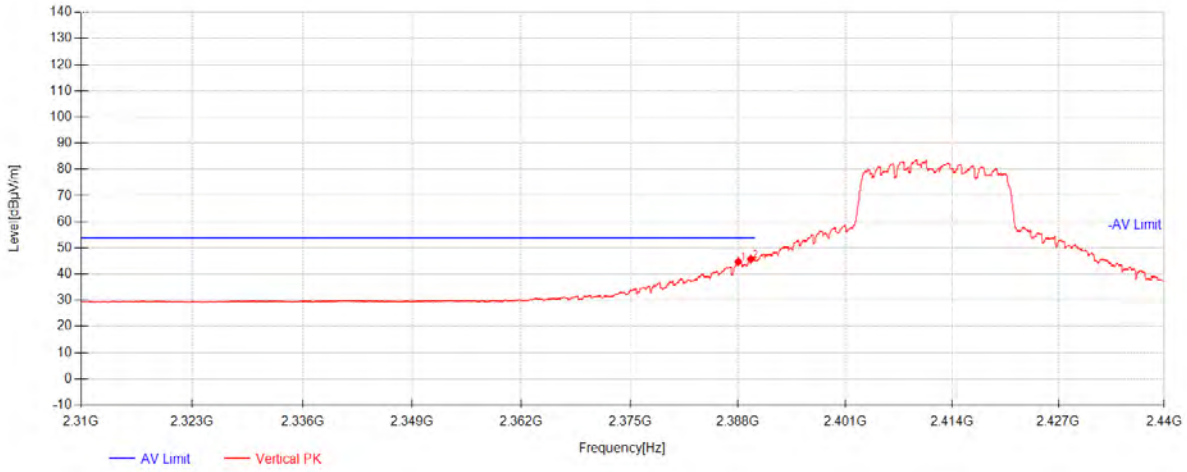
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2379.1438	50.34	26.96	-23.57	53.73	74.00	20.27	Vertical
2	2388.845	54.02	26.98	-23.57	57.43	74.00	16.57	Vertical

802.11n20_Channel 01



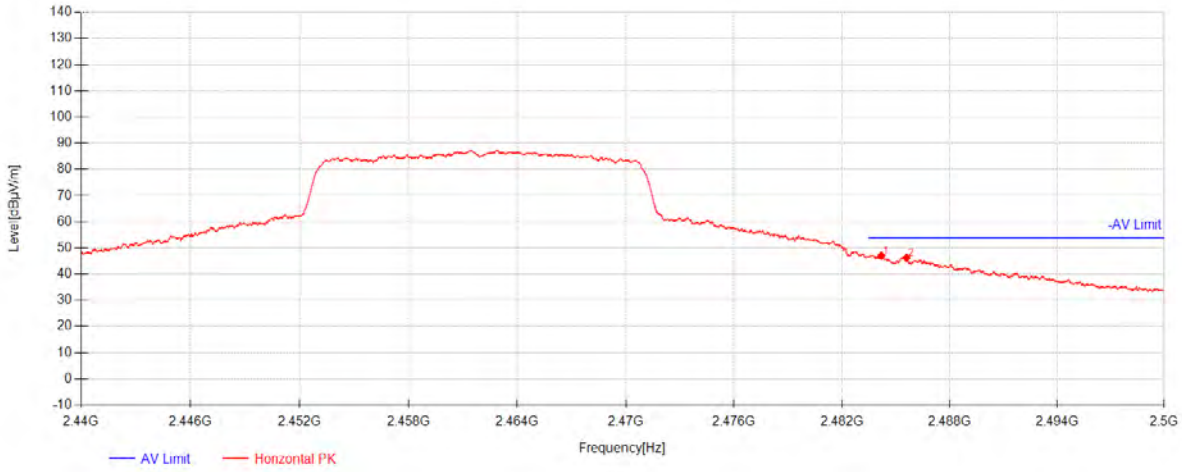
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2388.5525	43.21	26.98	-23.57	46.62	54.00	7.38	Horizontal
2	2389.43	46.30	26.98	-23.57	49.71	54.00	4.29	Horizontal

802.11n20_Channel 01



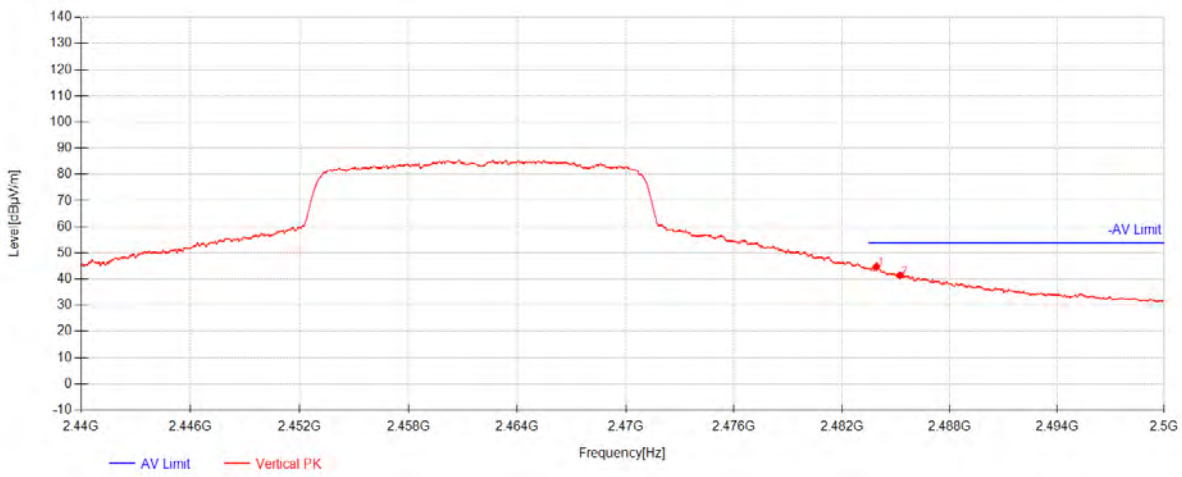
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2388.0325	41.42	26.98	-23.57	44.82	54.00	9.18	Vertical
2	2389.56	42.38	26.98	-23.57	45.79	54.00	8.21	Vertical

802.11n20_Channel 11



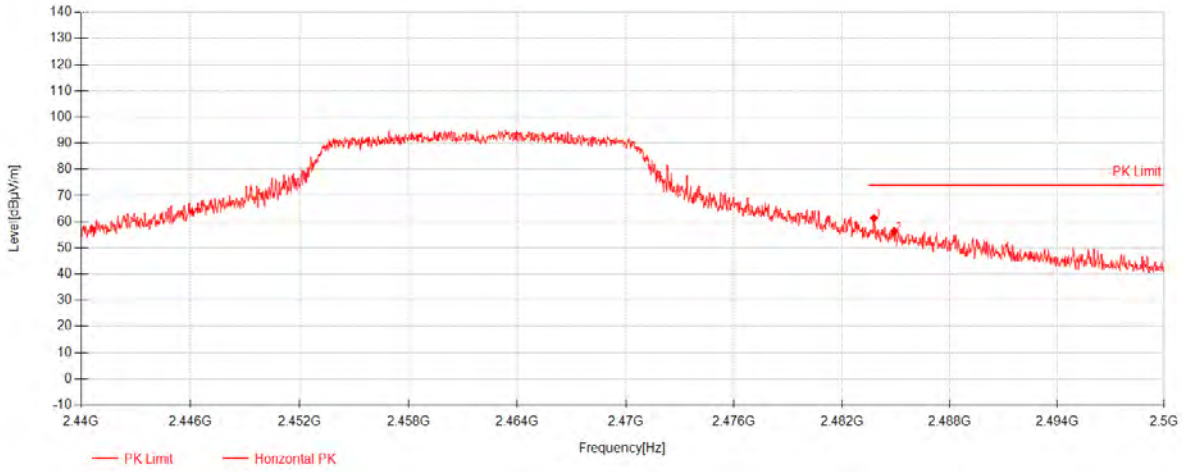
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.1975	43.44	27.17	-23.54	47.06	54.00	6.94	Horizontal
2	2485.5925	42.62	27.17	-23.54	46.25	54.00	7.75	Horizontal

802.11n20_Channel 11



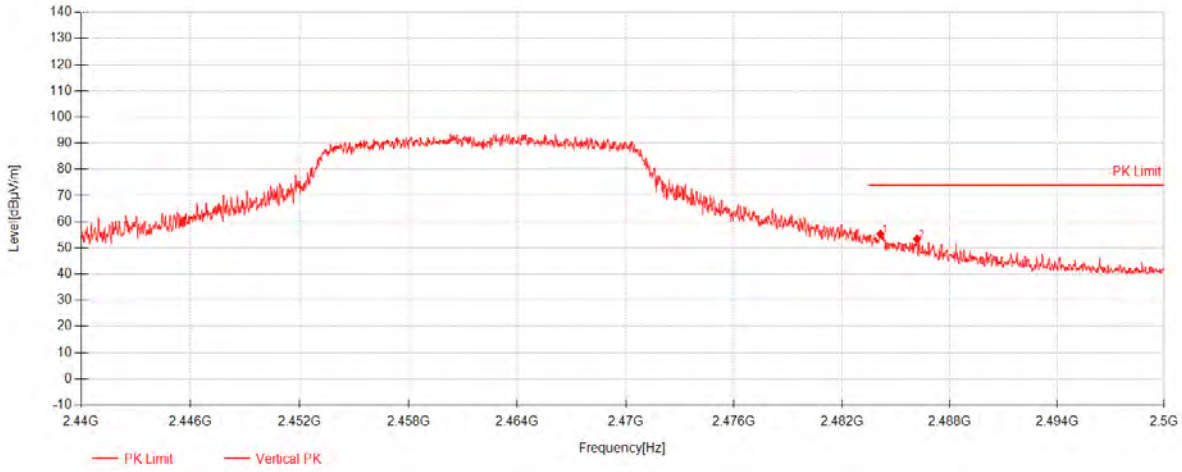
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.9275	41.23	27.17	-23.54	44.85	54.00	9.15	Vertical
2	2485.24	37.86	27.17	-23.54	41.49	54.00	12.51	Vertical

802.11n20_Channel 11



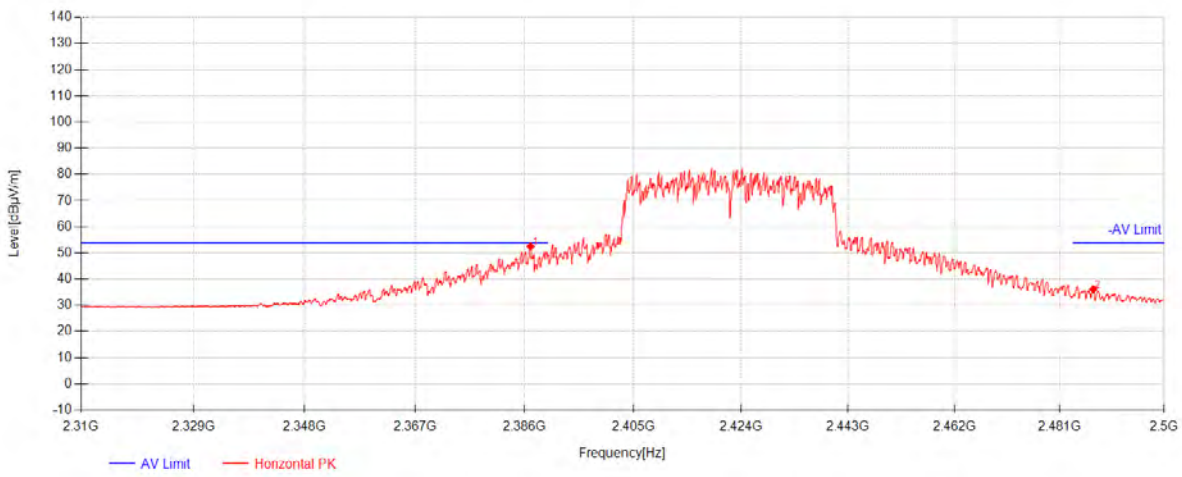
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.785	57.77	27.17	-23.54	61.39	74.00	12.61	Horizontal
2	2484.91	52.77	27.17	-23.54	56.40	74.00	17.60	Horizontal

802.11n20_Channel 11



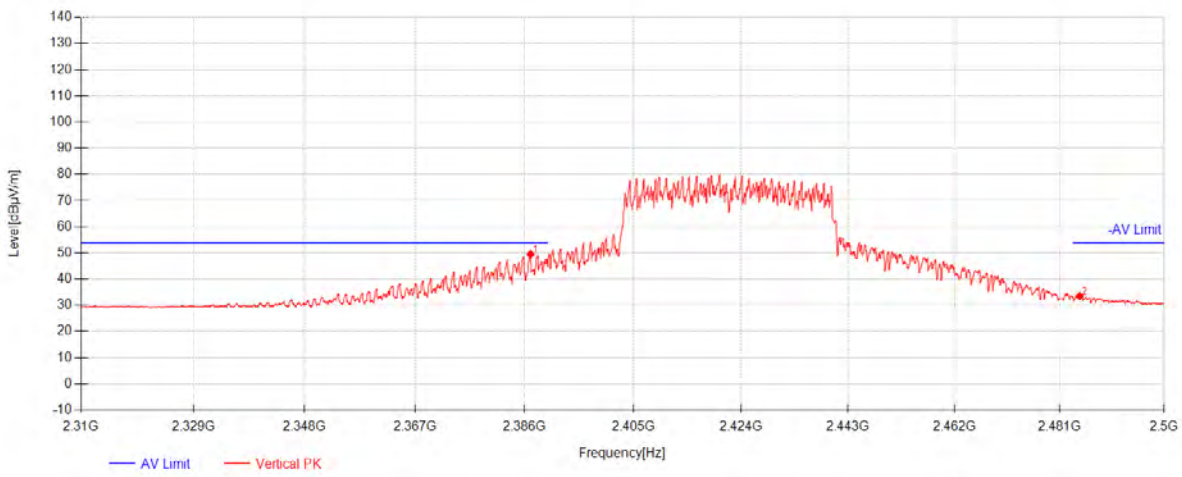
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.145	51.74	27.17	-23.54	55.36	74.00	18.64	Vertical
2	2486.185	49.83	27.17	-23.54	53.46	74.00	20.54	Vertical

802.11n40_Channel 03



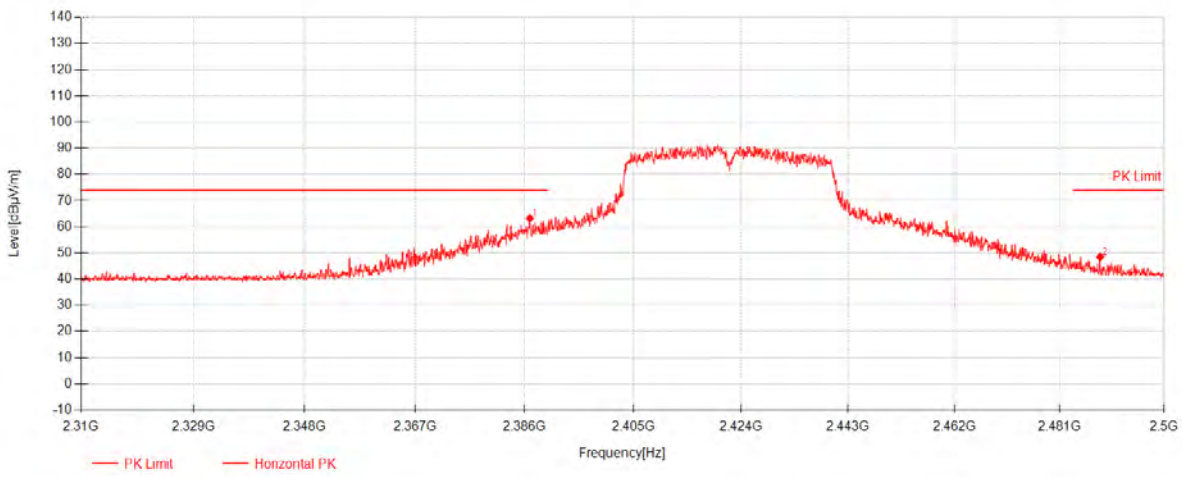
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.0467	49.13	26.97	-23.57	52.53	54.00	1.47	Horizontal
2	2487.1	32.53	27.17	-23.54	36.16	54.00	17.84	Horizontal

802.11n40_Channel 03



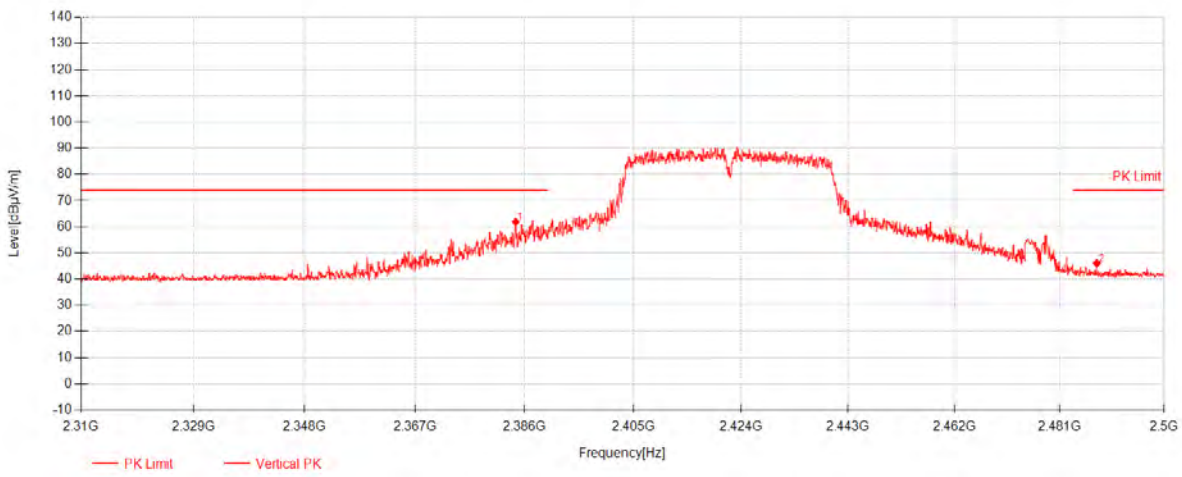
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.0467	46.10	26.97	-23.57	49.50	54.00	4.50	Vertical
2	2484.64	29.96	27.17	-23.54	33.58	54.00	20.42	Vertical

802.11n40_Channel 03



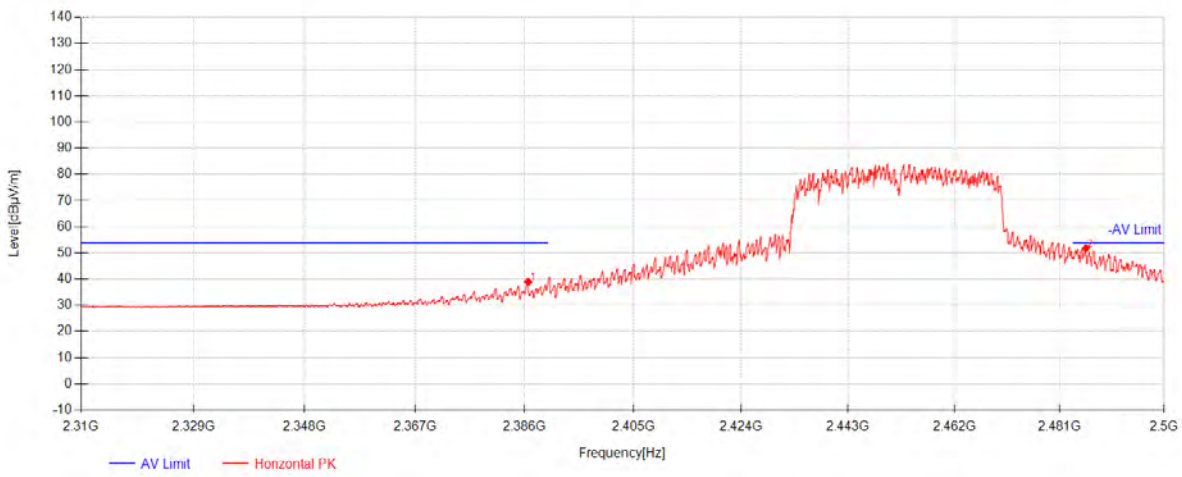
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2386.9167	59.90	26.97	-23.57	63.30	74.00	10.70	Horizontal
2	2488.36	44.87	27.18	-23.54	48.50	74.00	25.50	Horizontal

802.11n40_Channel 03



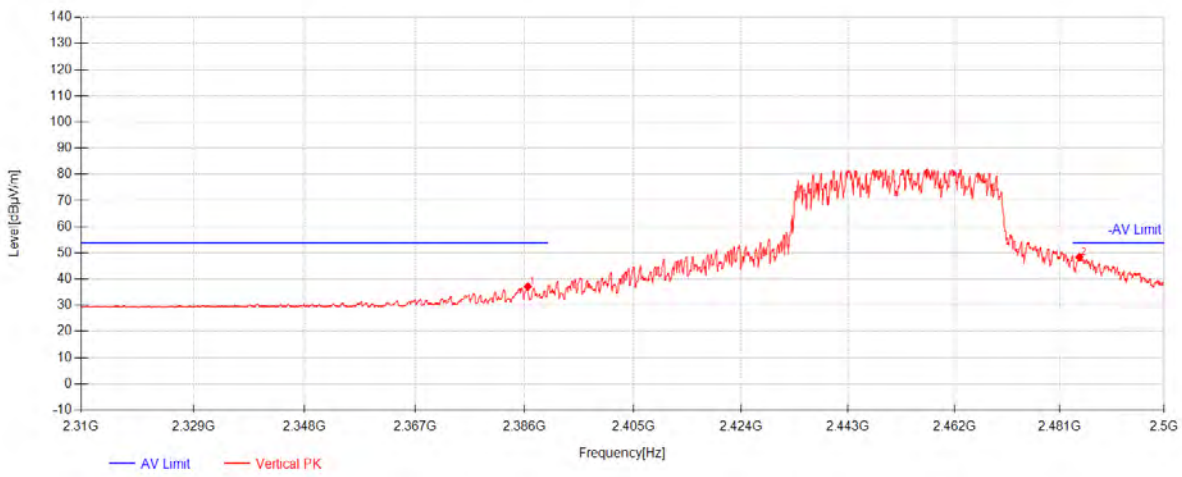
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2384.4467	58.50	26.97	-23.57	61.90	74.00	12.10	Vertical
2	2487.76	42.44	27.18	-23.54	46.07	74.00	27.93	Vertical

802.11n40_Channel 09



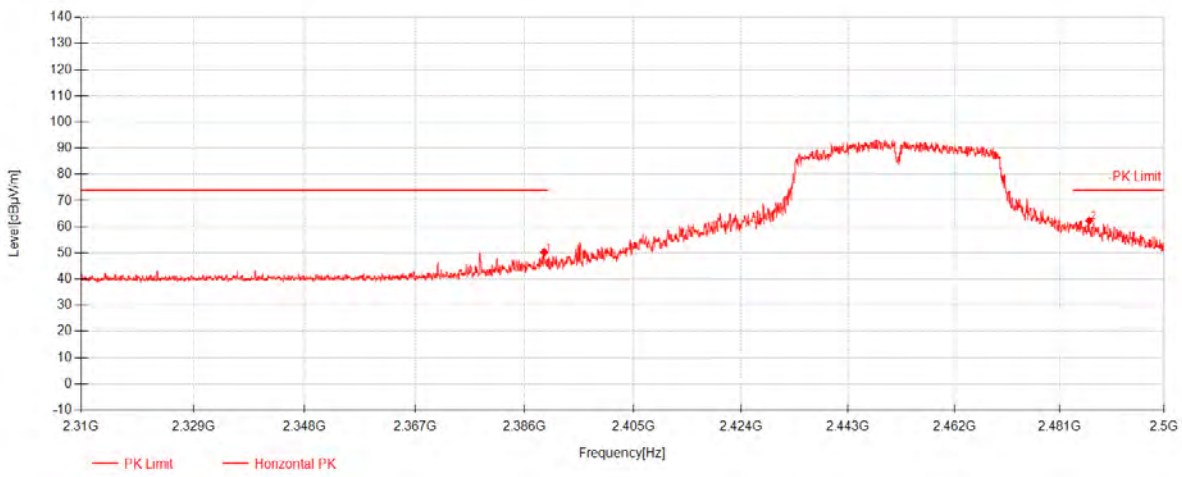
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2386.6133	35.53	26.97	-23.57	38.93	54.00	15.07	Horizontal
2	2485.78	48.21	27.17	-23.54	51.84	54.00	2.16	Horizontal

802.11n40_Channel 09



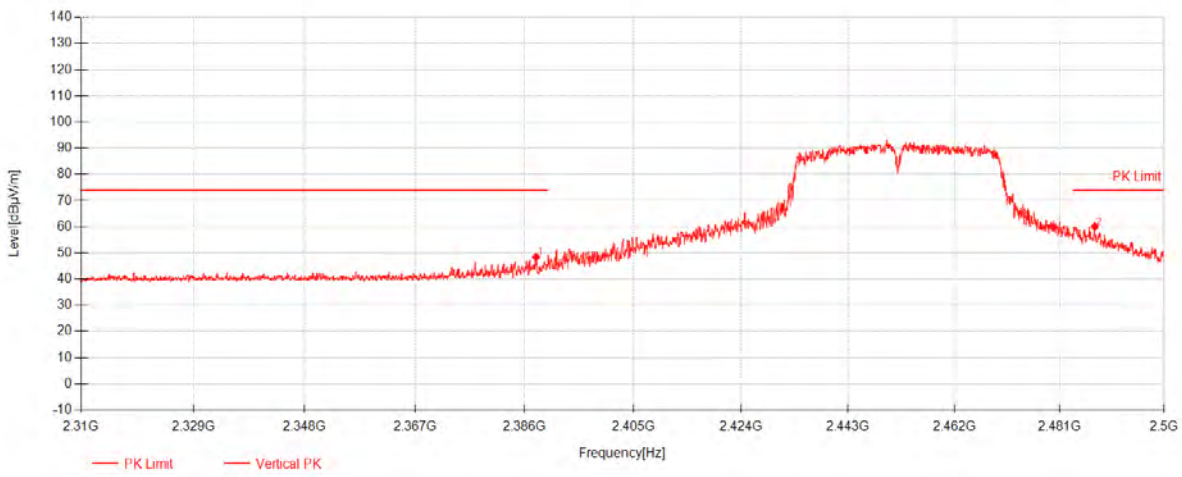
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2386.57	33.81	26.97	-23.57	37.21	54.00	16.79	Vertical
2	2484.58	44.81	27.17	-23.54	48.43	54.00	5.57	Vertical

802.11n40_Channel 09



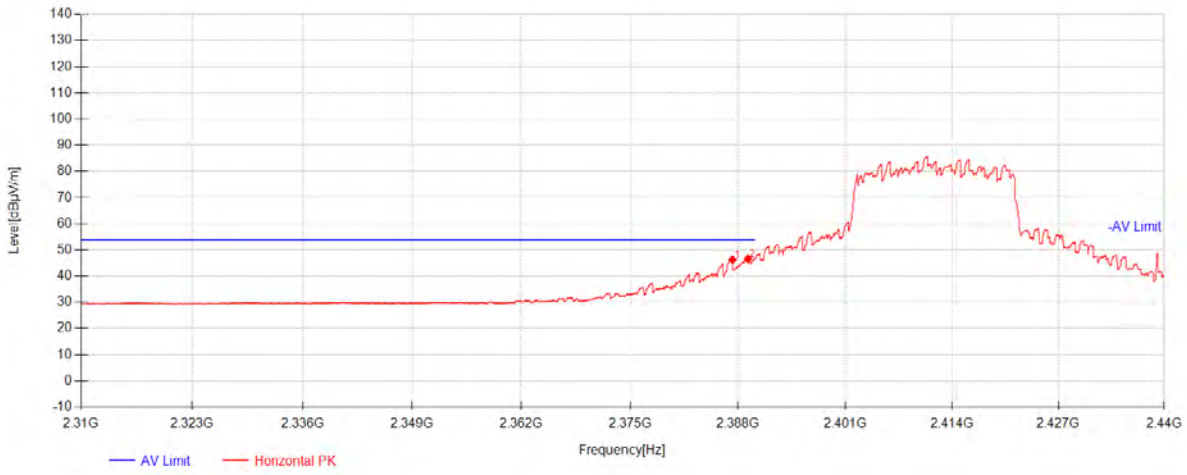
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2389.43	46.85	26.98	-23.57	50.26	74.00	23.74	Horizontal
2	2486.38	58.68	27.17	-23.54	62.31	74.00	11.69	Horizontal

802.11n40_Channel 09



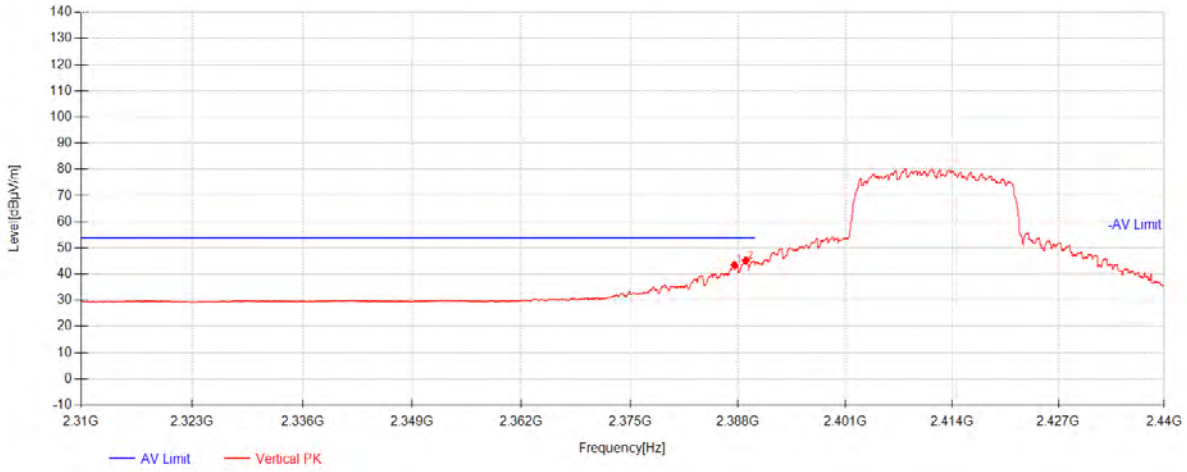
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2388	45.03	26.98	-23.57	48.43	74.00	25.57	Vertical
2	2487.4	56.41	27.17	-23.54	60.04	74.00	13.96	Vertical

802.11ax20_Channel 01



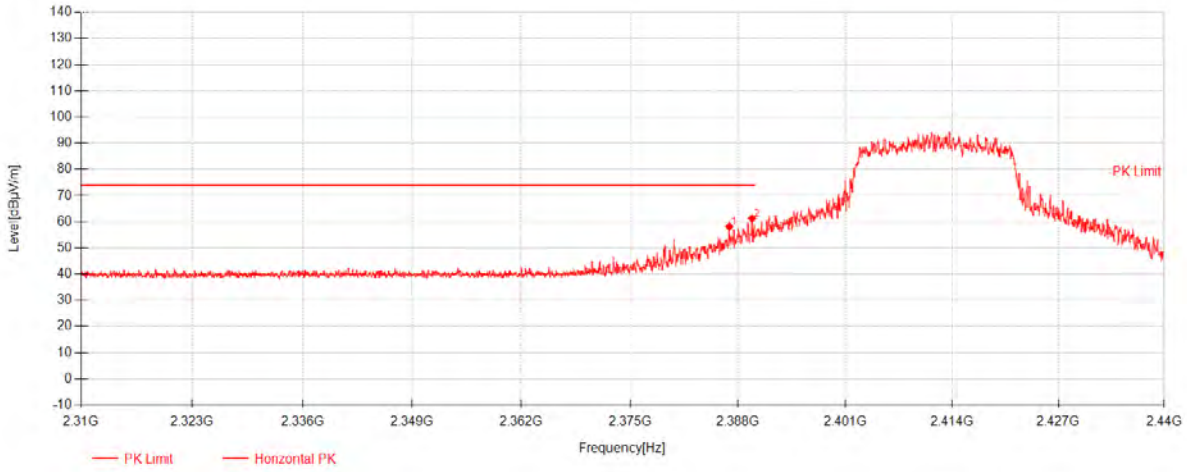
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.35	42.93	26.97	-23.57	46.33	54.00	7.67	Horizontal
2	2389.2025	43.25	26.98	-23.57	46.66	54.00	7.34	Horizontal

802.11ax20_Channel 01



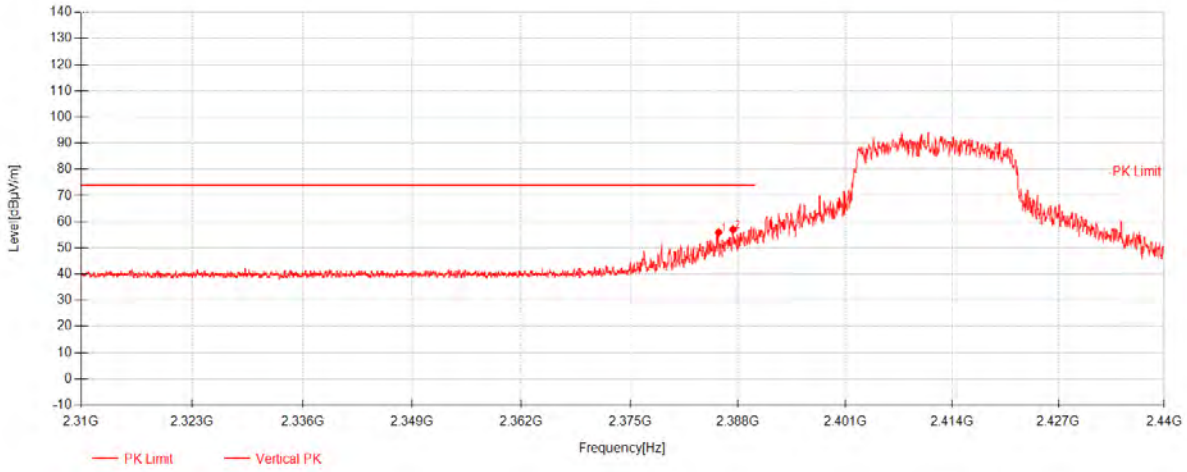
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.5775	40.21	26.98	-23.57	43.61	54.00	10.39	Vertical
2	2388.9425	41.79	26.98	-23.57	45.20	54.00	8.80	Vertical

802.11ax20_Channel 01



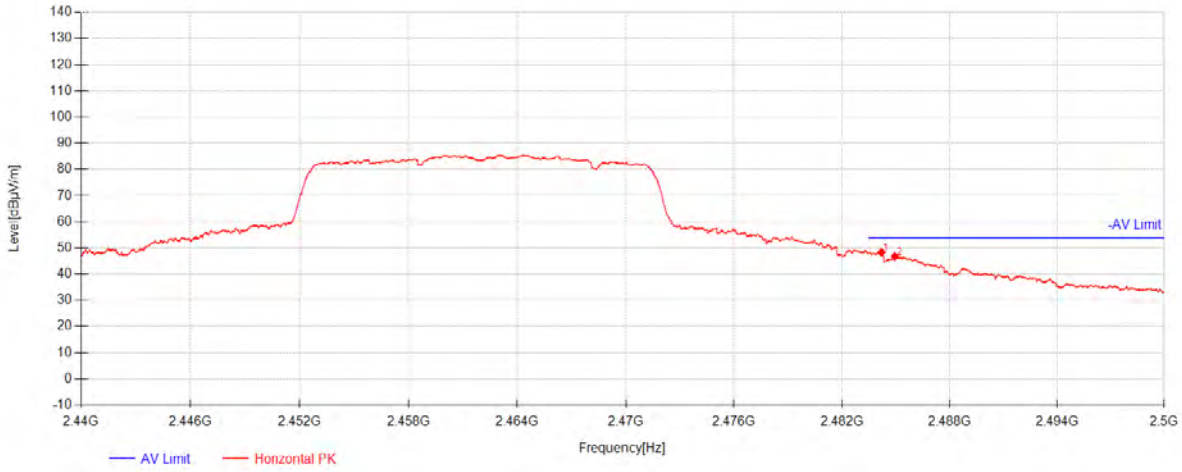
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2386.96	54.74	26.97	-23.57	58.14	74.00	15.86	Horizontal
2	2389.7062	57.84	26.98	-23.57	61.25	74.00	12.75	Horizontal

802.11ax20_Channel 01



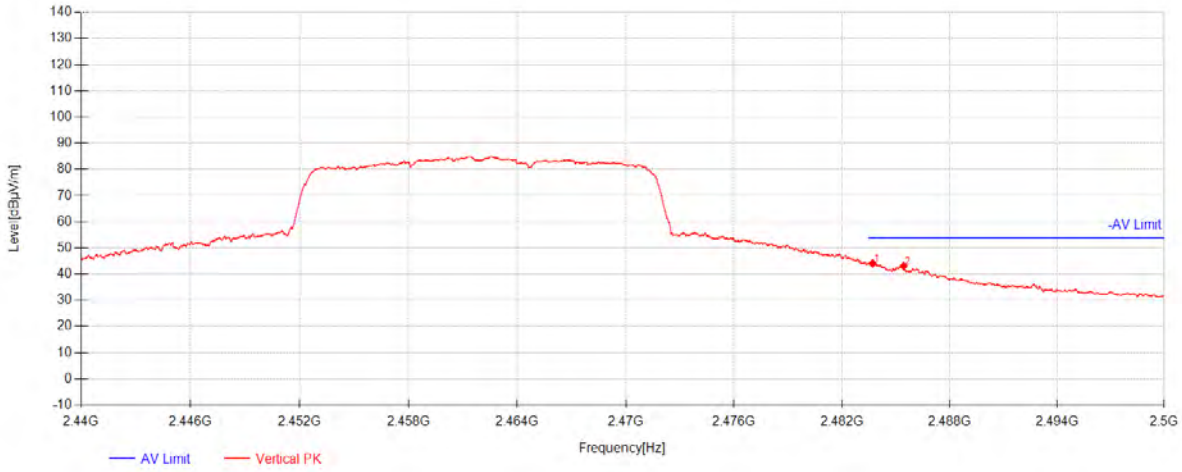
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2385.6762	52.61	26.97	-23.57	56.01	74.00	17.99	Vertical
2	2387.3988	53.63	26.97	-23.57	57.03	74.00	16.97	Vertical

802.11ax20_Channel 11



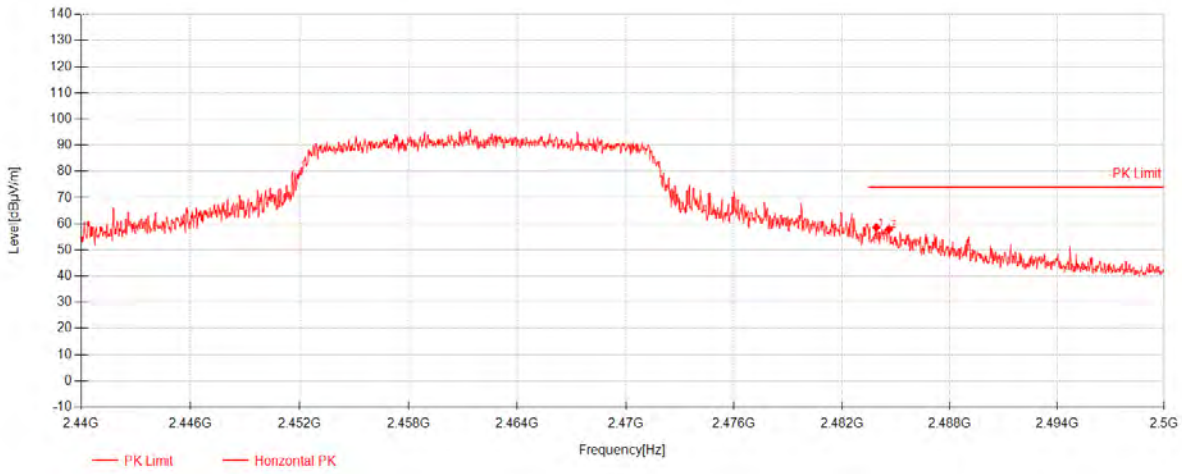
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2484.205	44.73	27.17	-23.54	48.35	54.00	5.65	Horizontal
2	2484.94	43.16	27.17	-23.54	46.79	54.00	7.21	Horizontal

802.11ax20_Channel 11



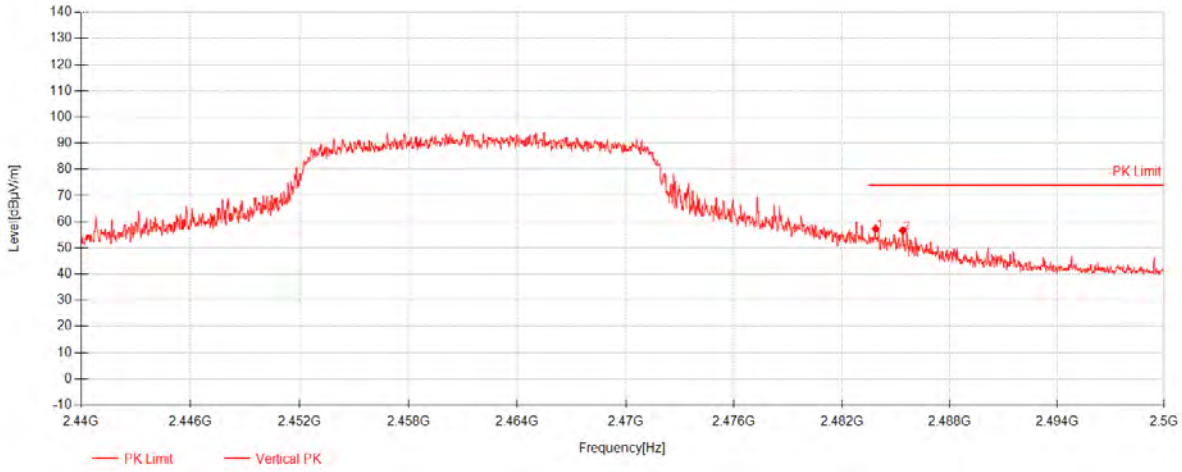
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.71	40.53	27.17	-23.54	44.15	54.00	9.85	Vertical
2	2485.435	39.47	27.17	-23.54	43.10	54.00	10.90	Vertical

802.11ax20_Channel 11



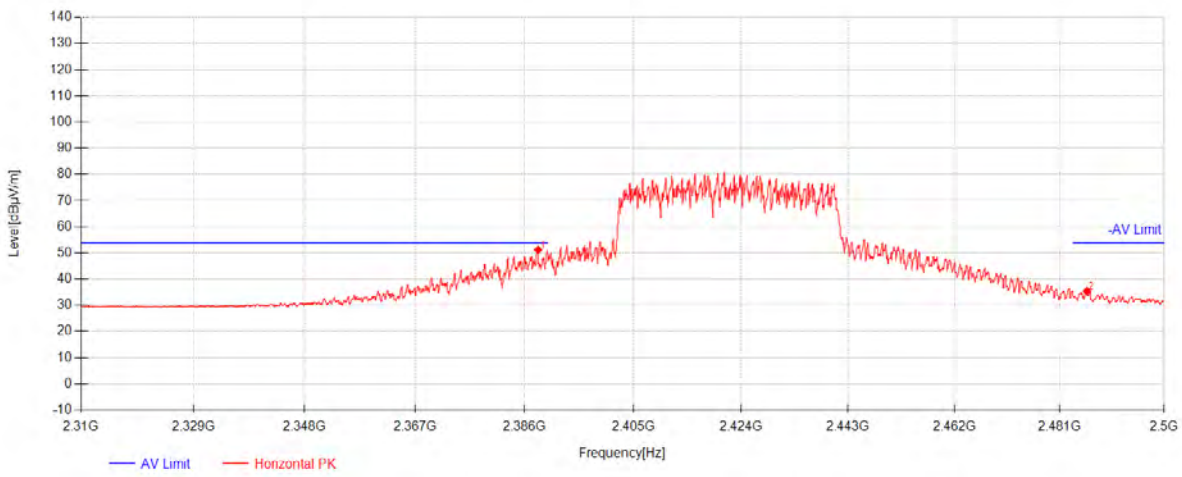
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.92	54.99	27.17	-23.54	58.61	74.00	15.39	Horizontal
2	2484.625	54.32	27.17	-23.54	57.94	74.00	16.06	Horizontal

802.11ax20_Channel 11



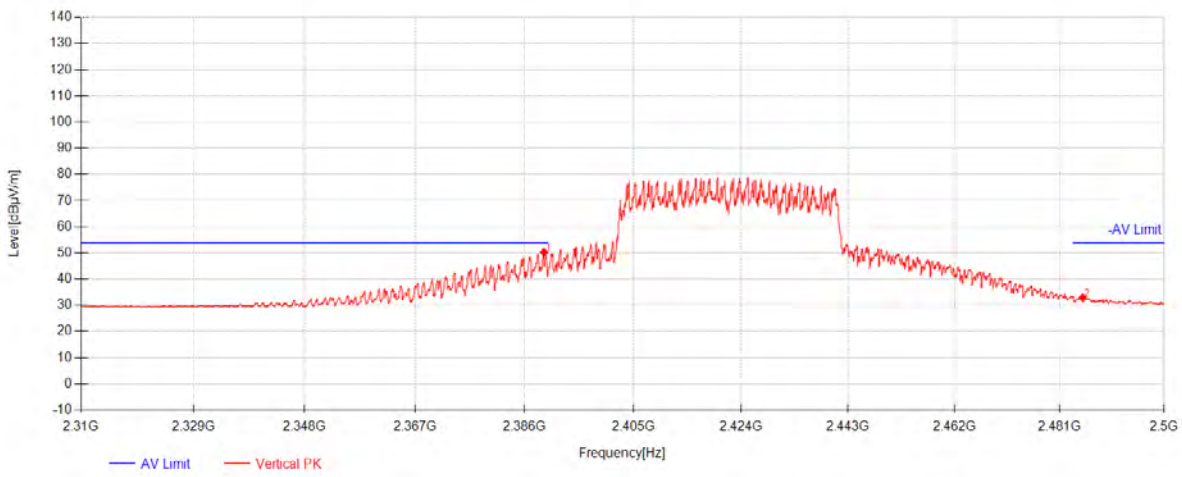
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.875	53.65	27.17	-23.54	57.27	74.00	16.73	Vertical
2	2485.39	53.05	27.17	-23.54	56.68	74.00	17.32	Vertical

802.11ax40_Channel 03



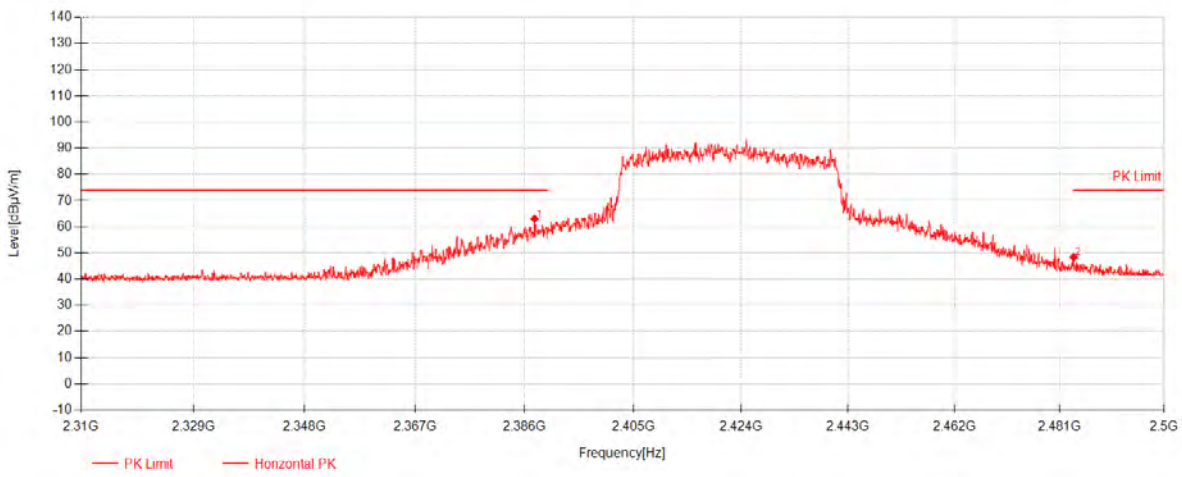
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2388.3467	47.78	26.98	-23.57	51.19	54.00	2.81	Horizontal
2	2485.96	31.87	27.17	-23.54	35.50	54.00	18.50	Horizontal

802.11ax40_Channel 03



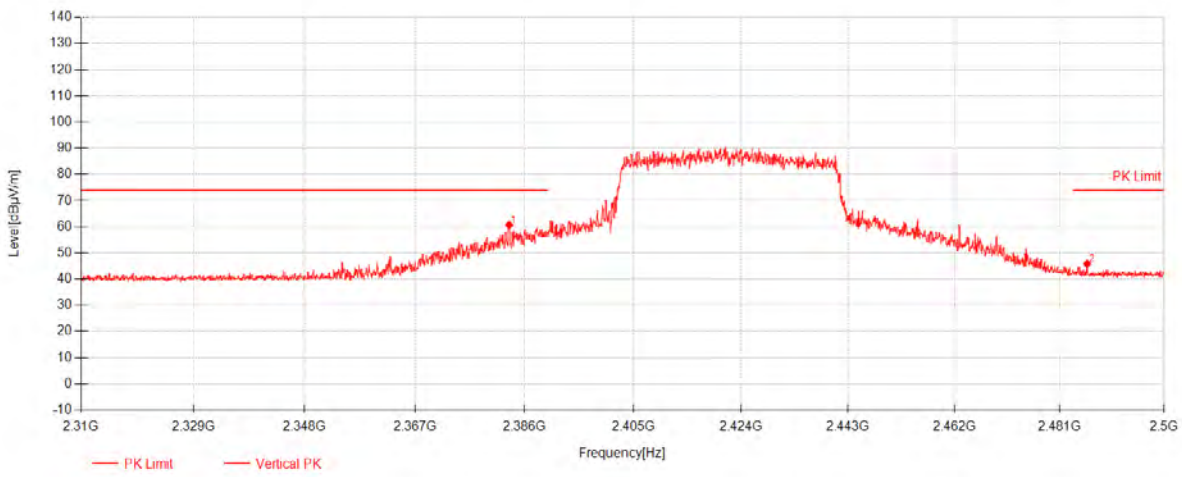
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2389.3867	46.84	26.98	-23.57	50.25	54.00	3.75	Vertical
2	2485.18	29.34	27.17	-23.54	32.97	54.00	21.03	Vertical

802.11ax40_Channel 03



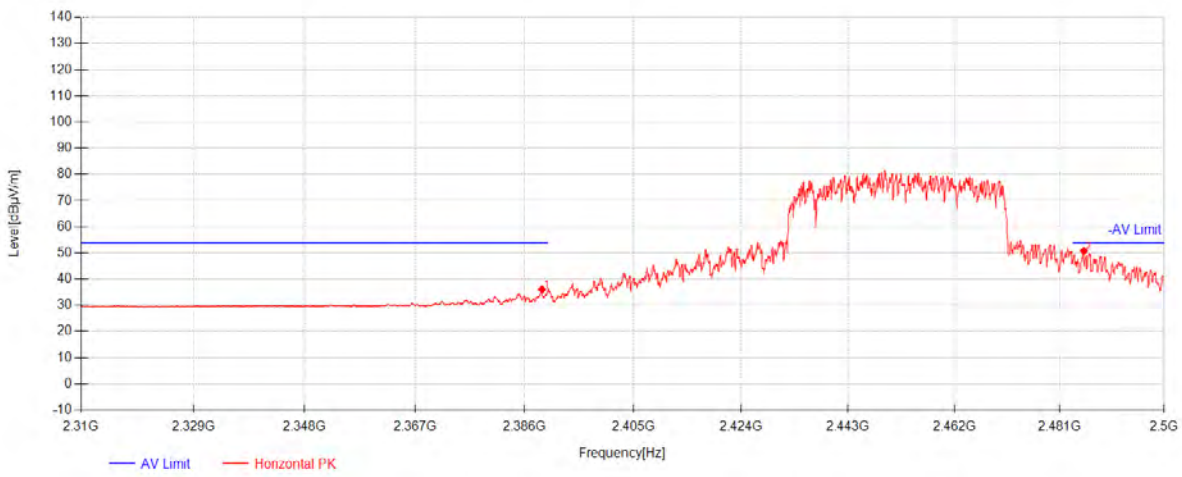
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2387.74	59.70	26.98	-23.57	63.10	74.00	10.90	Horizontal
2	2483.56	44.79	27.17	-23.54	48.41	74.00	25.59	Horizontal

802.11ax40_Channel 03



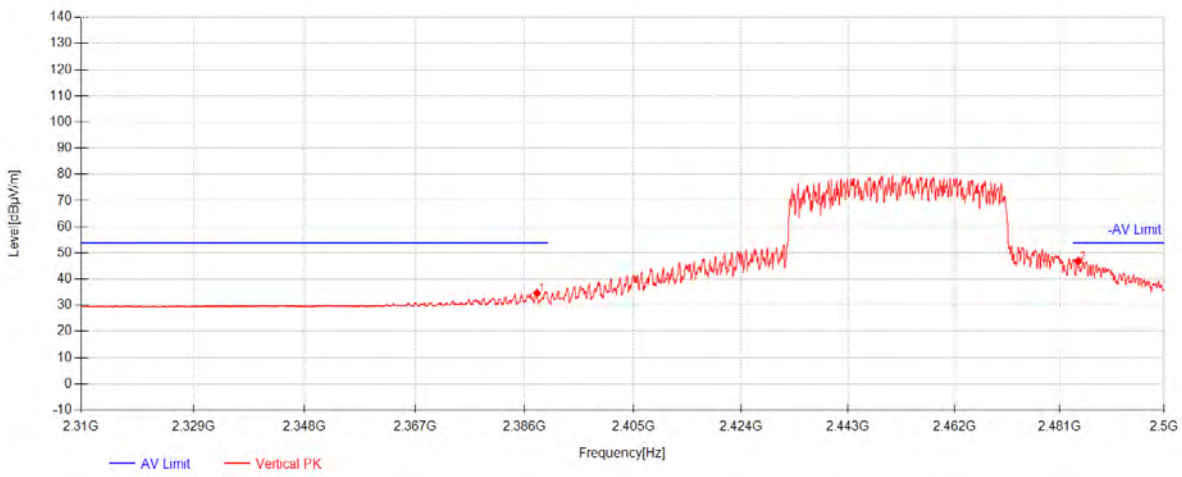
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2383.32	57.27	26.97	-23.57	60.66	74.00	13.34	Vertical
2	2486.02	42.24	27.17	-23.54	45.87	74.00	28.13	Vertical

802.11ax40_Channel 09



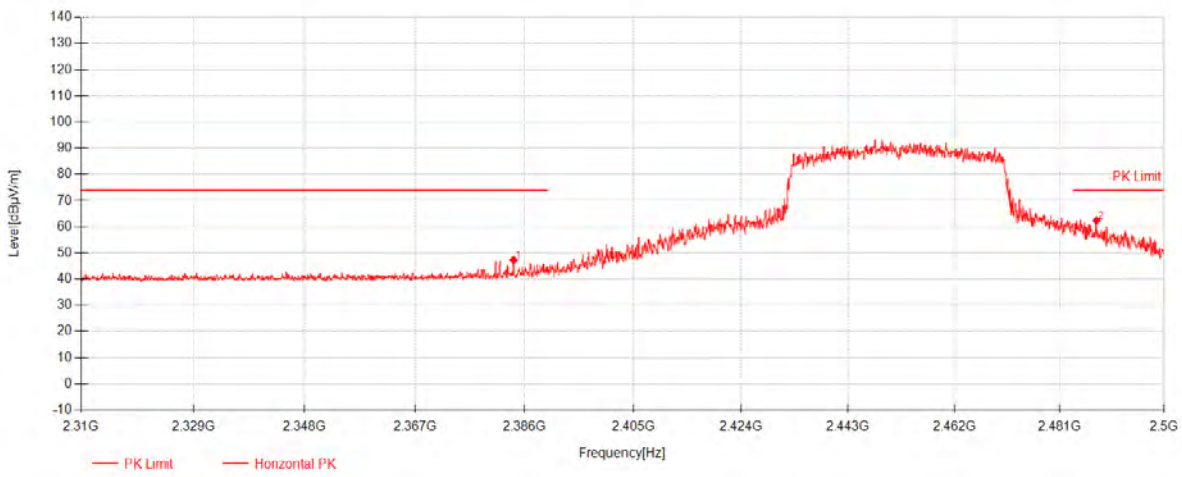
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2389.04	32.73	26.98	-23.57	36.14	54.00	17.86	Horizontal
2	2485.42	47.12	27.17	-23.54	50.75	54.00	3.25	Horizontal

802.11ax40_Channel 09



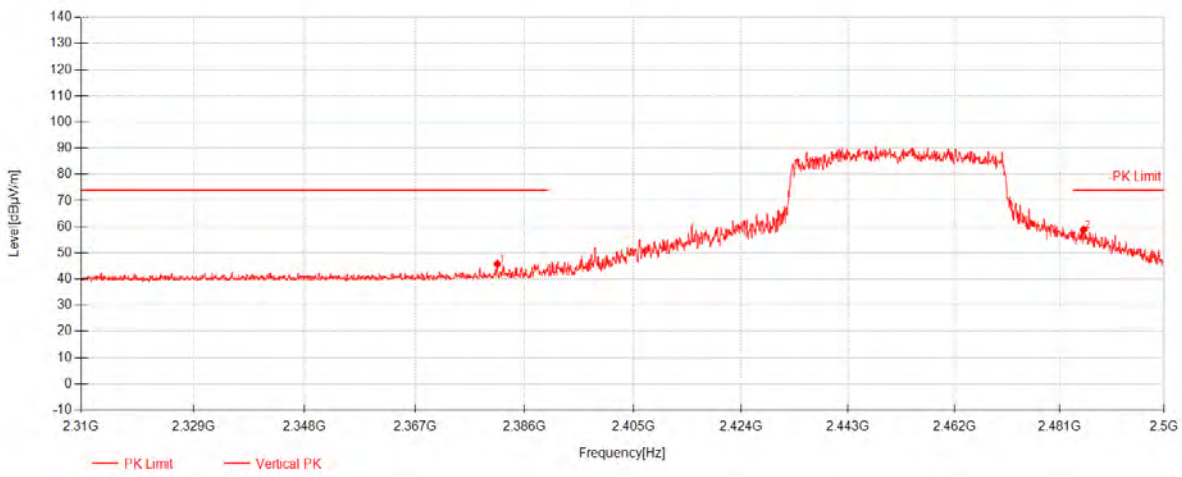
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2388.1733	31.31	26.98	-23.57	34.72	54.00	19.28	Vertical
2	2484.4	43.29	27.17	-23.54	46.91	54.00	7.09	Vertical

802.11ax40_Channel 09



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2384.1	43.96	26.97	-23.57	47.36	74.00	26.64	Horizontal
2	2487.7	58.75	27.18	-23.54	62.38	74.00	11.62	Horizontal

802.11ax40_Channel 09



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2381.2833	42.41	26.96	-23.57	45.80	74.00	28.20	Vertical
2	2485.36	55.22	27.17	-23.54	58.85	74.00	15.15	Vertical

7.3 Radiated Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.4,6.5
Measurement Distance: 3m

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

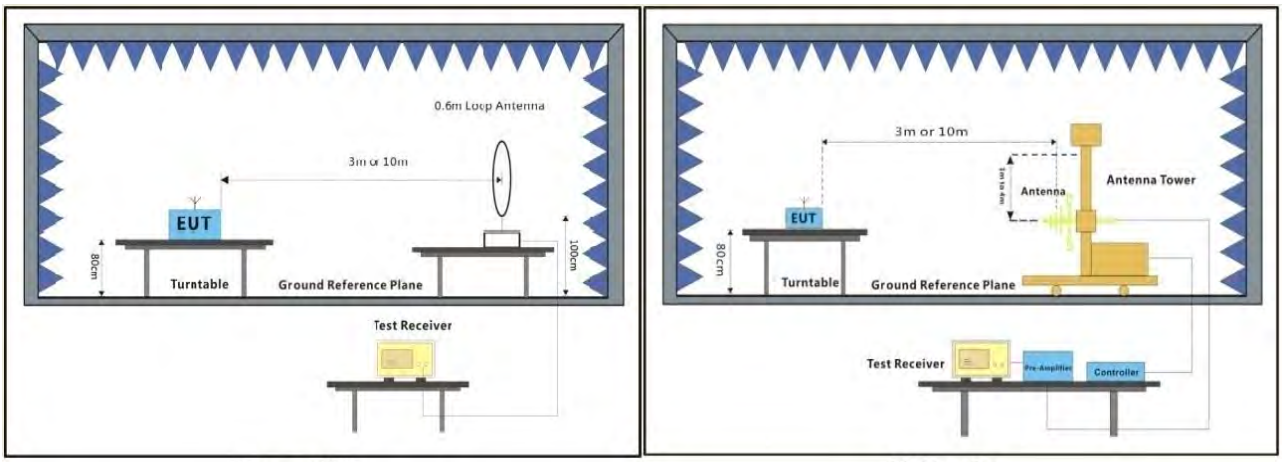
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



Below 30MHz 30MHz-1GHz

7.3.4 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. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

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

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.

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

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

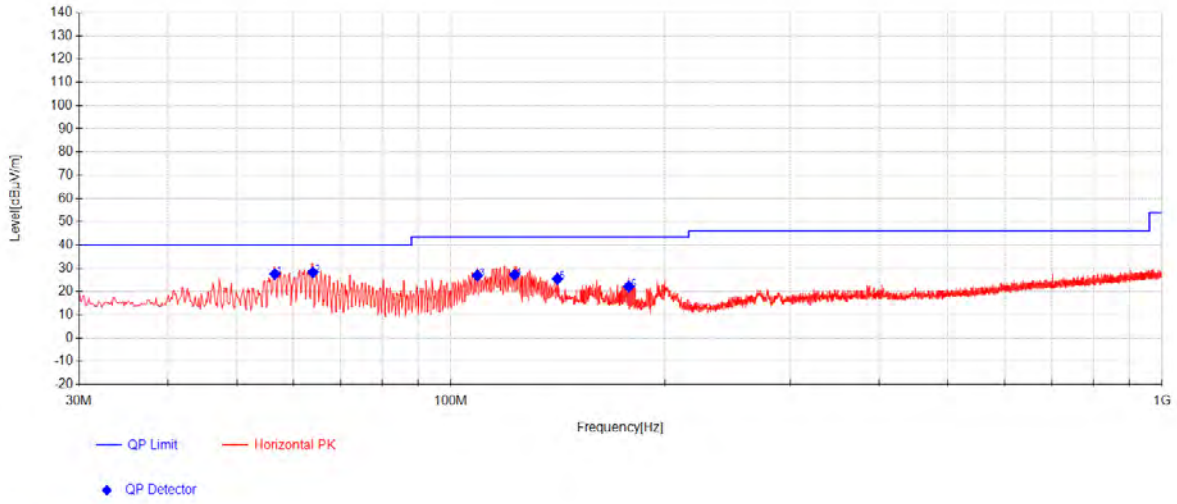
i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

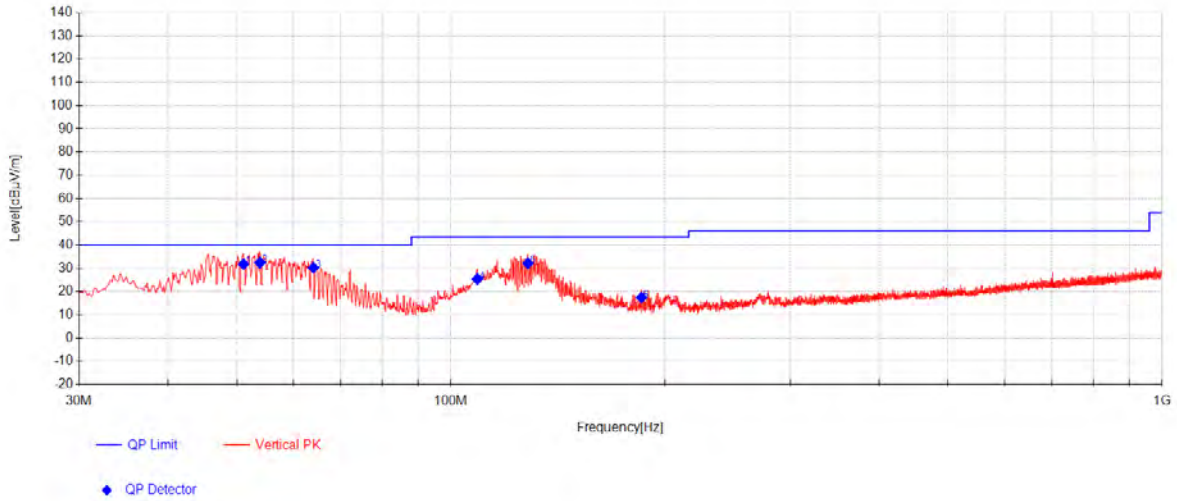
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

11b_Channel 11



Final Data List								
NO.	Frequency [MHz]]	Reading [dBμV]	Factor [dB]	AF [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity
1	56.5538	43.26	-33.90	18.14	27.50	40.00	12.50	Horizontal
2	63.95	44.53	-33.81	17.51	28.22	40.00	11.78	Horizontal
3	108.9338	44.75	-33.40	15.50	26.85	43.50	16.65	Horizontal
4	122.8775	43.24	-33.33	17.21	27.13	43.50	16.37	Horizontal
5	141.1862	40.24	-33.23	18.44	25.44	43.50	18.06	Horizontal
6	177.925	38.24	-32.89	16.83	22.18	43.50	21.32	Horizontal

11b_Channel 11



Final Data List								
NO.	Frequency [MHz]]	Reading [dBμV]	Factor [dB]	AF [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity
1	51.0975	47.32	-33.97	18.49	31.84	40.00	8.16	Vertical
2	53.8862	48.27	-33.93	18.11	32.45	40.00	7.55	Vertical
3	64.0713	46.59	-33.81	17.48	30.26	40.00	9.74	Vertical
4	108.9338	43.27	-33.40	15.50	25.37	43.50	18.13	Vertical
5	128.3338	48.16	-33.30	17.33	32.20	43.50	11.30	Vertical
6	185.3212	34.28	-32.85	16.00	17.44	43.50	26.06	Vertical

7.4 Radiated Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.6
Measurement Distance: 3m

Limit:

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

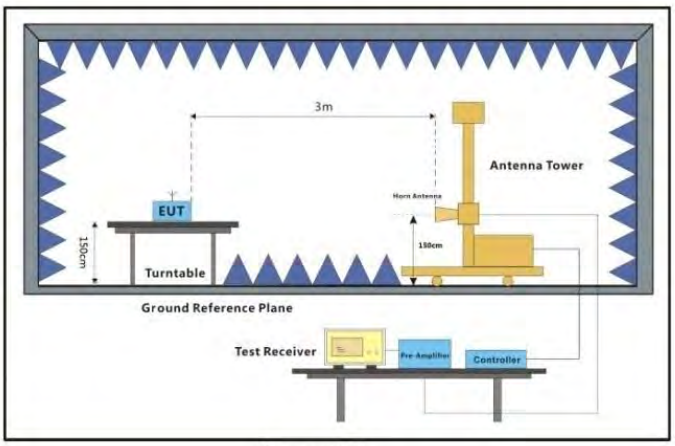
7.4.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



Above 1GHz

7.4.4 Measurement Procedure and Data

a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

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

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.

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

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

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

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

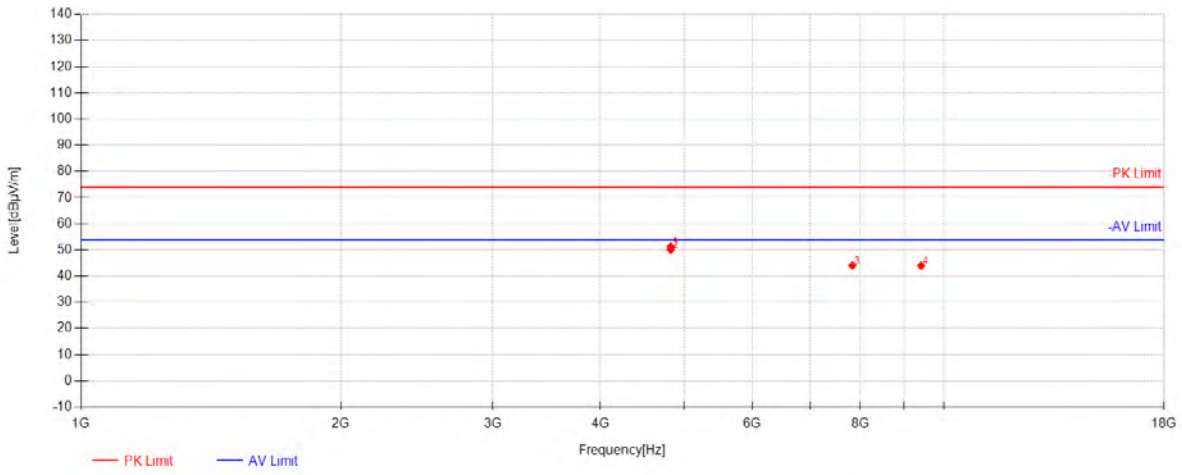
2. Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

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

4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

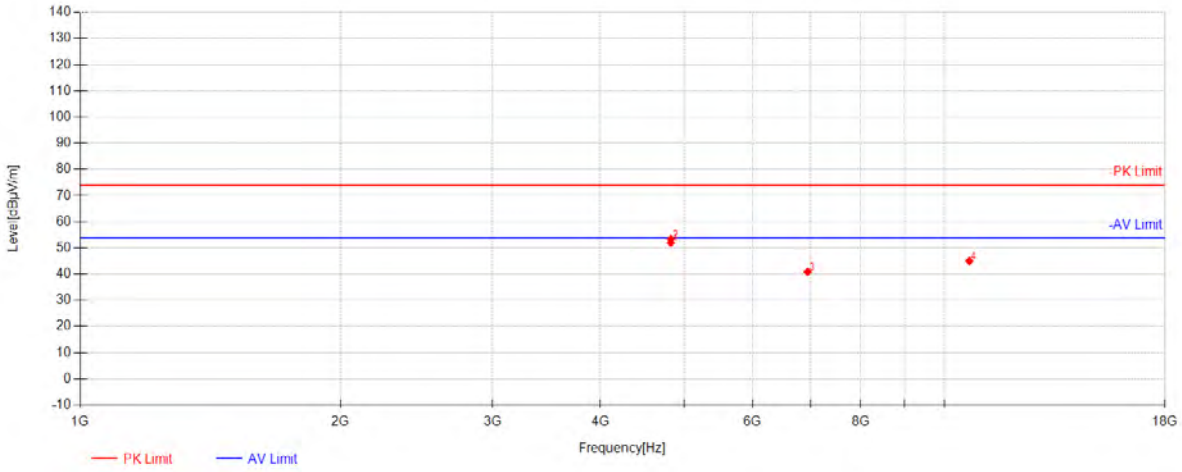
5. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ⩾1/T (Duty cycle＜98%) or 10Hz (Duty cycle⩾98%) for Average detection (AV) at frequency above 1GHz.

802.11b_Channel 01



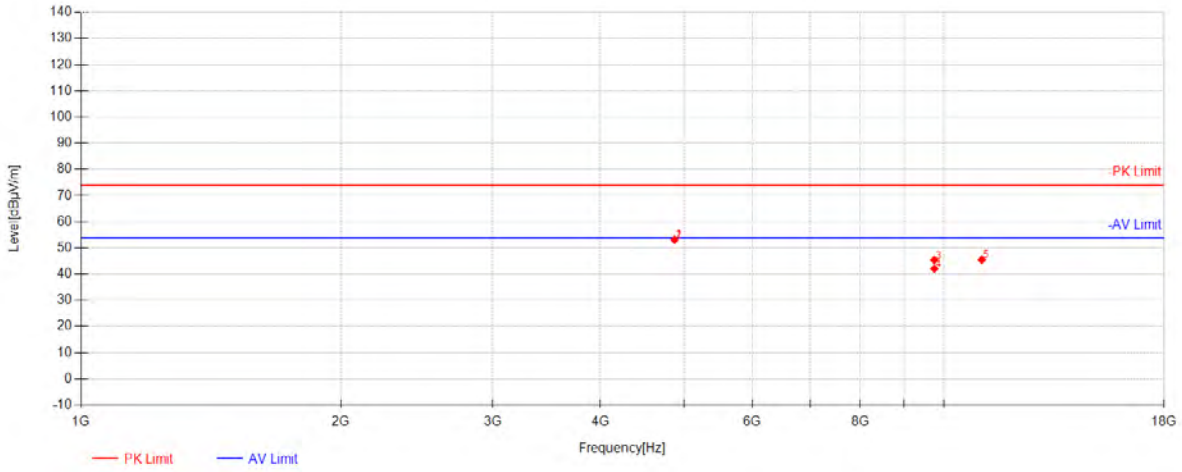
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4824	65.76	31.12	-45.54	51.34	74.00	22.66	Horizontal
2	4824.375	64.49	31.12	-45.54	50.07	54.00	3.93	Horizontal
3	7833.375	49.73	36.87	-42.48	44.12	74.00	29.88	Horizontal
4	9412.5	46.56	37.33	-39.88	44.01	74.00	29.99	Horizontal

802.11b_Channel 01



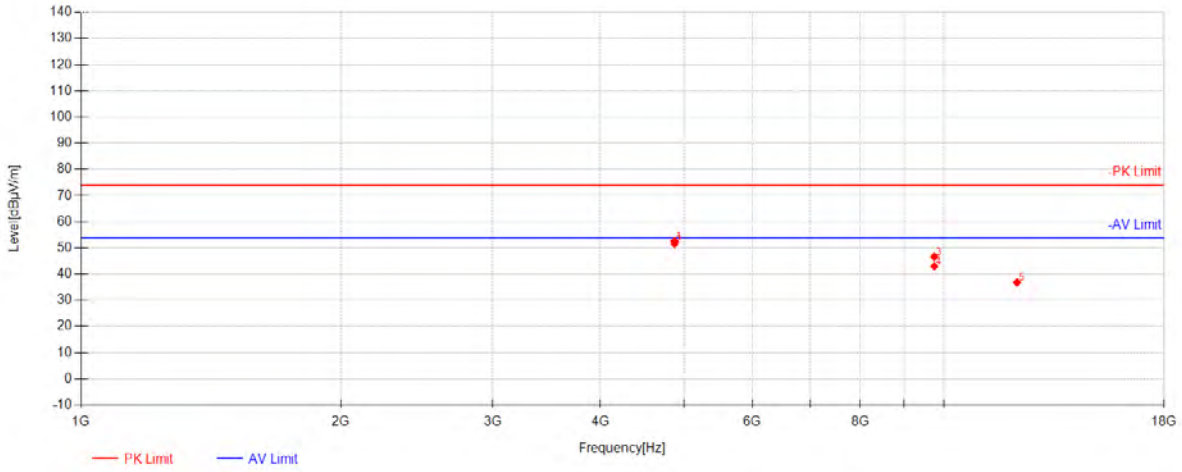
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4824	66.39	31.12	-45.54	51.97	74.00	22.03	Vertical
2	4824.375	67.78	31.12	-45.54	53.36	54.00	0.64	Vertical
3	6946.5	49.78	34.90	-43.84	40.84	74.00	33.16	Vertical
4	10686	44.44	38.57	-37.96	45.05	74.00	28.95	Vertical

802.11b_Channel 06



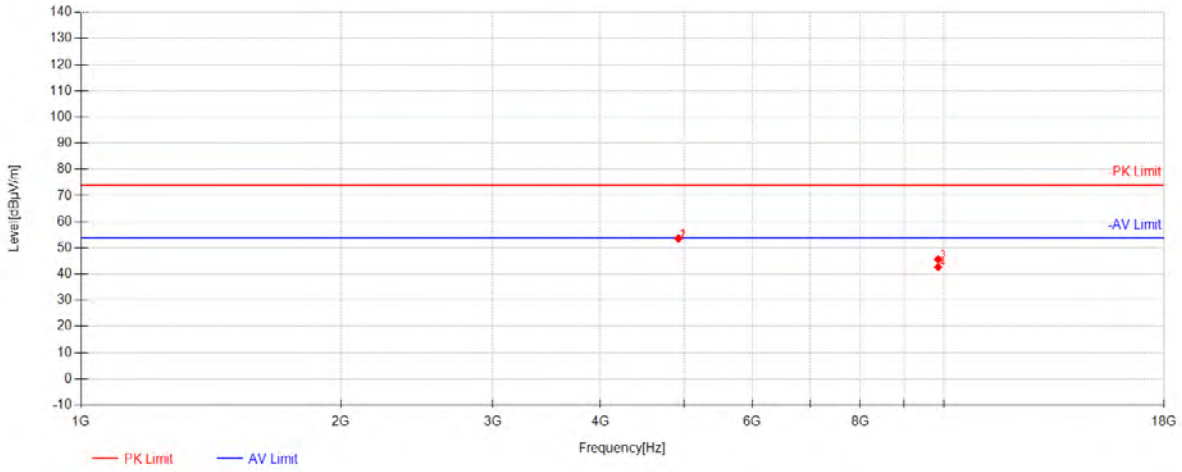
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4873.875	67.53	31.20	-45.53	53.20	74.00	20.80	Horizontal
2	4874.25	67.58	31.20	-45.53	53.25	54.00	0.75	Horizontal
3	9747.75	46.92	38.00	-39.46	45.46	74.00	28.54	Horizontal
4	9748.5	43.54	38.00	-39.46	42.08	54.00	11.92	Horizontal
5	11065.875	44.84	38.63	-37.93	45.55	74.00	28.45	Horizontal

802.11b_Channel 06



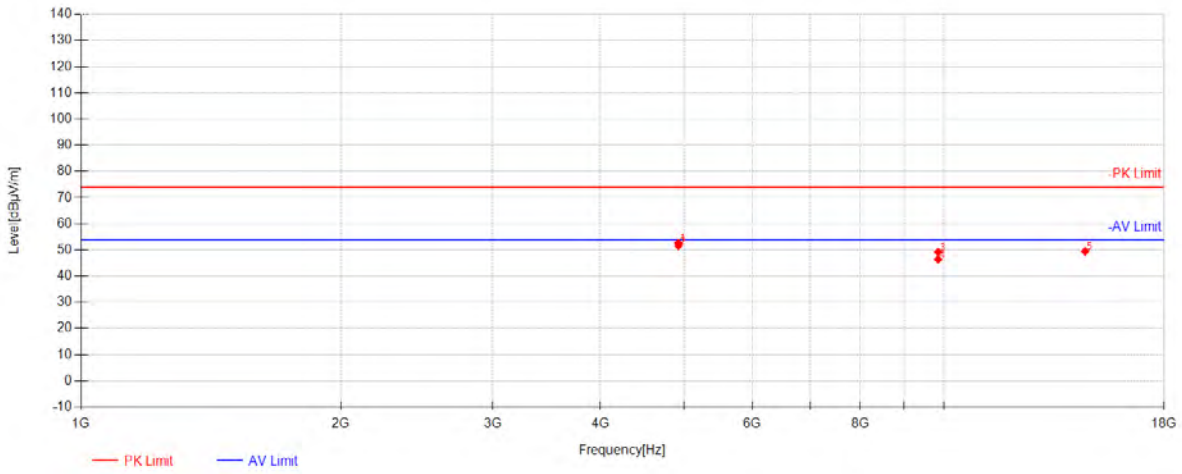
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4873.875	67.02	31.20	-45.53	52.69	74.00	21.31	Vertical
2	4874.25	65.91	31.20	-45.53	51.58	54.00	2.42	Vertical
3	9747.75	48.13	38.00	-39.46	46.67	74.00	27.33	Vertical
4	9748.5	44.47	38.00	-39.46	43.01	54.00	10.99	Vertical
5	12157.5	35.14	39.15	-37.43	36.86	54.00	17.14	Vertical

802.11b_Channel 11



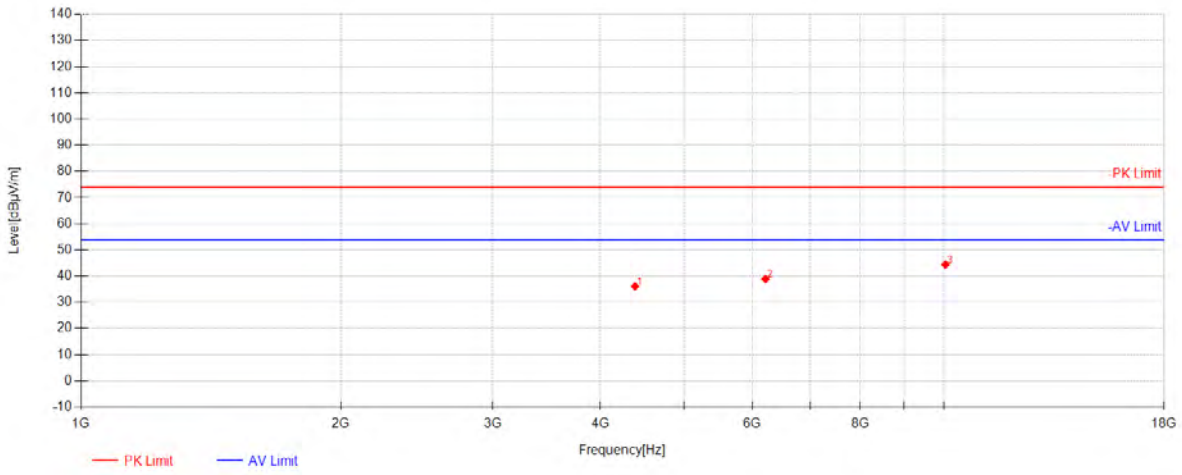
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4924.125	67.94	31.28	-45.56	53.66	74.00	20.34	Horizontal
2	4924.5	67.79	31.28	-45.56	53.51	54.00	0.49	Horizontal
3	9848.25	46.89	38.20	-39.41	45.68	74.00	28.32	Horizontal
4	9848.25	43.87	38.20	-39.41	42.66	54.00	11.34	Horizontal

802.11b_Channel 11



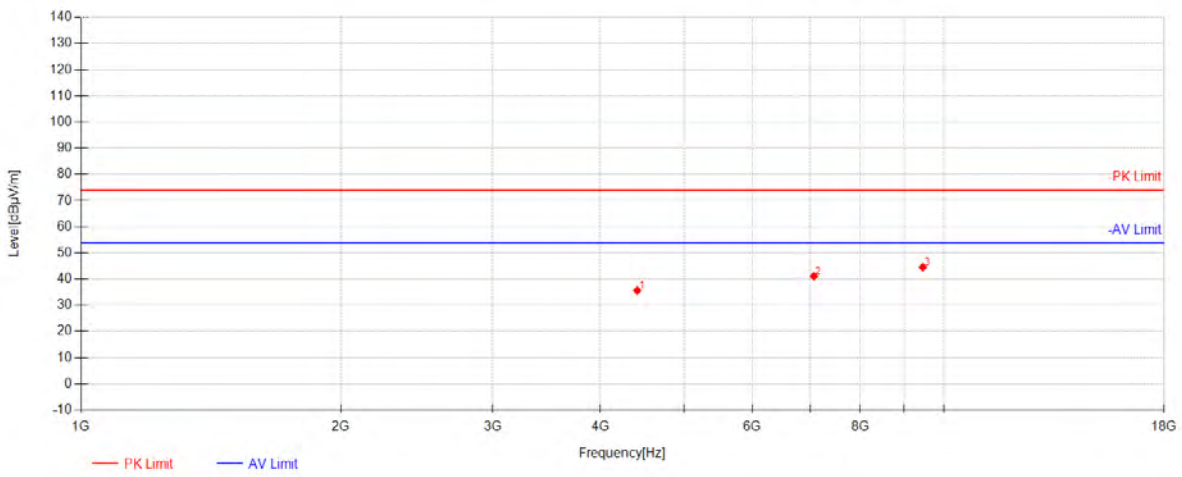
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4924.125	66.98	31.28	-45.56	52.70	74.00	21.30	Vertical
2	4924.5	65.86	31.28	-45.56	51.58	54.00	2.42	Vertical
3	9847.875	50.42	38.20	-39.41	49.21	74.00	24.79	Vertical
4	9848.25	47.67	38.20	-39.41	46.46	54.00	7.54	Vertical
5	14578.125	43.39	41.26	-35.19	49.46	74.00	24.54	Vertical

802.11g_Channel 01



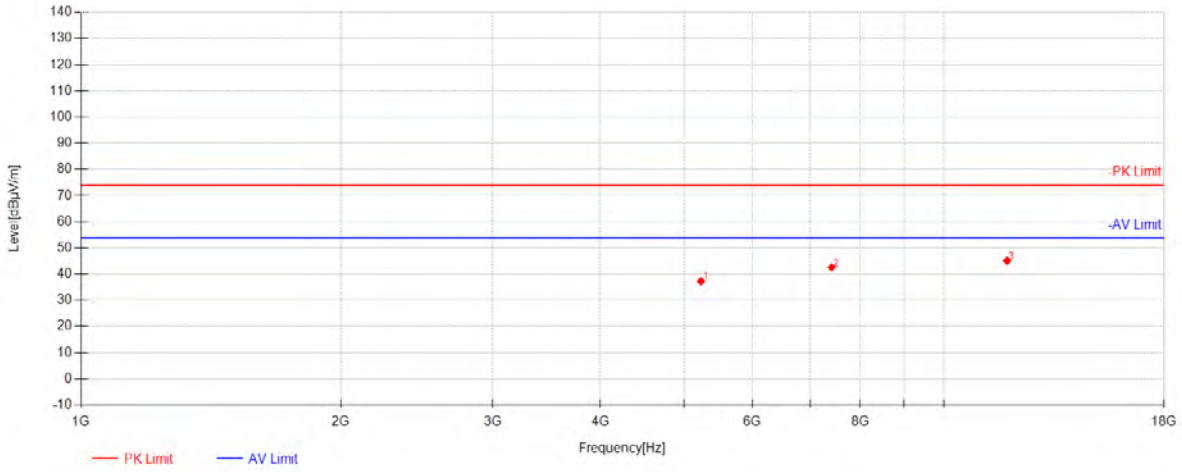
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4386.375	51.60	30.33	-45.78	36.15	74.00	37.85	Horizontal
2	6212.625	50.49	33.12	-44.73	38.88	74.00	35.12	Horizontal
3	10041	45.18	38.50	-39.19	44.49	74.00	29.51	Horizontal

802.11g_Channel 01



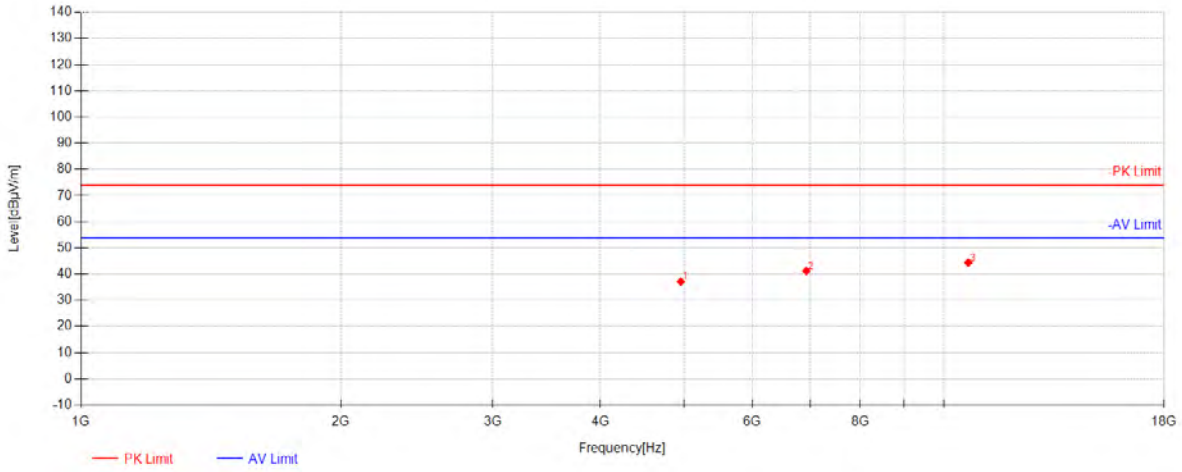
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4411.875	51.12	30.39	-45.81	35.70	74.00	38.30	Vertical
2	7068.75	49.90	35.19	-44.00	41.09	74.00	32.91	Vertical
3	9454.875	47.28	37.41	-40.05	44.64	74.00	29.36	Vertical

802.11g_Channel 06



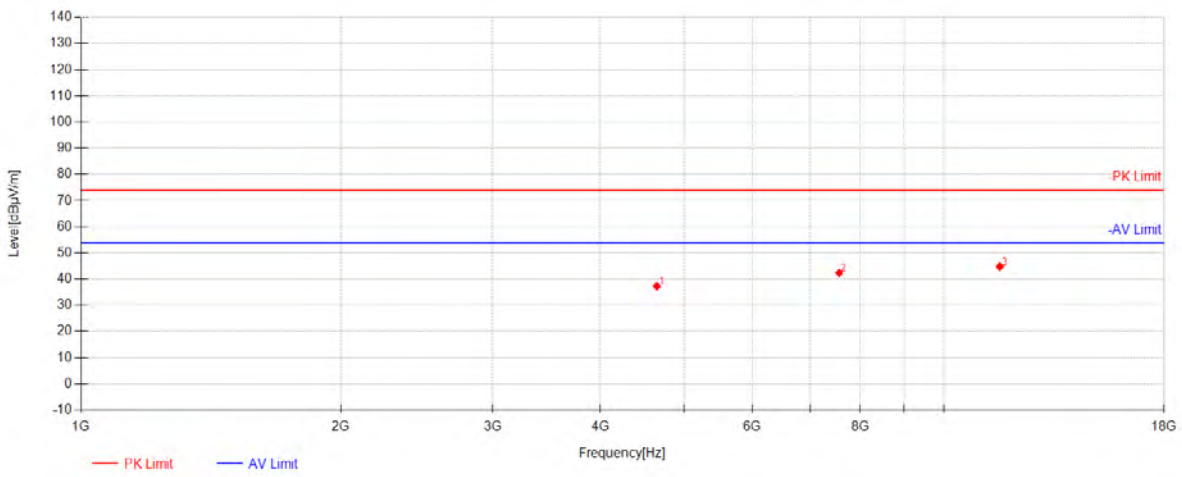
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5229.75	50.72	31.81	-45.22	37.31	74.00	36.69	Horizontal
2	7411.125	49.81	36.15	-43.38	42.58	74.00	31.42	Horizontal
3	11838.375	43.13	39.02	-37.00	45.15	74.00	28.85	Horizontal

802.11g_Channel 06



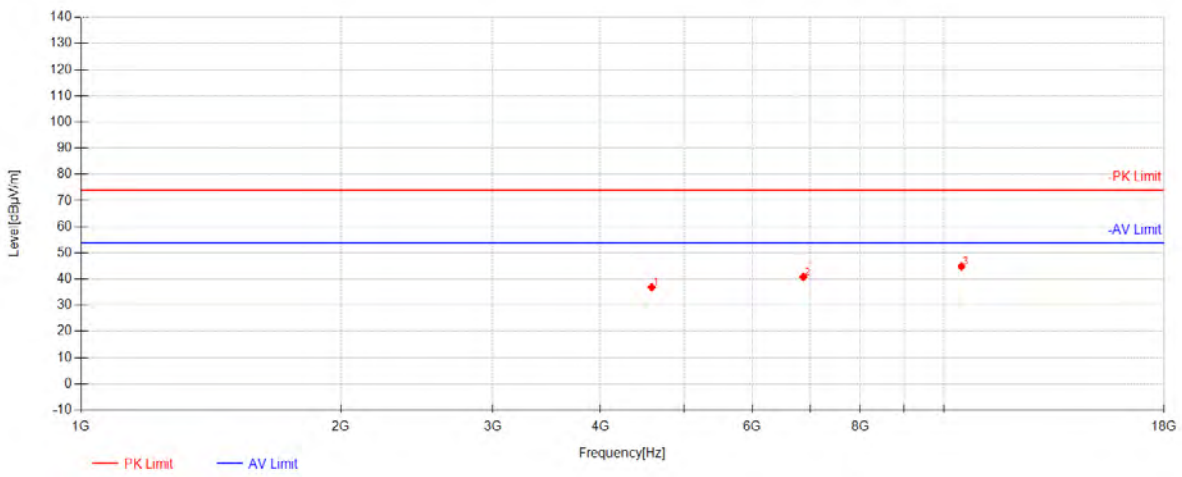
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4956.375	51.44	31.33	-45.59	37.18	74.00	36.82	Vertical
2	6927	50.27	34.87	-43.95	41.19	74.00	32.81	Vertical
3	10673.25	43.94	38.57	-38.04	44.47	74.00	29.53	Vertical

802.11g_Channel 11



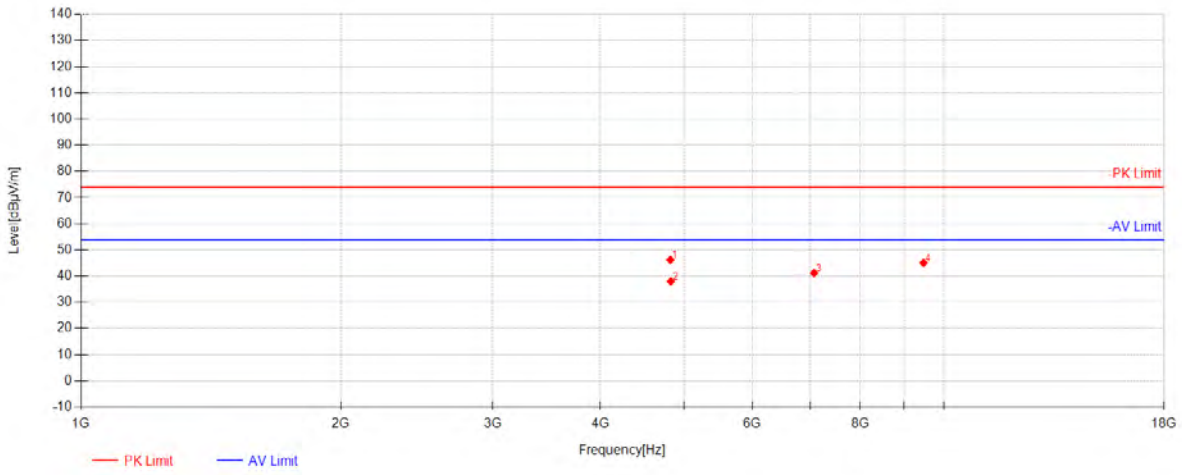
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4649.625	52.14	30.84	-45.64	37.34	74.00	36.66	Horizontal
2	7561.875	48.90	36.49	-43.01	42.38	74.00	31.62	Horizontal
3	11609.25	42.85	38.90	-36.91	44.85	74.00	29.15	Horizontal

802.11g_Channel 11



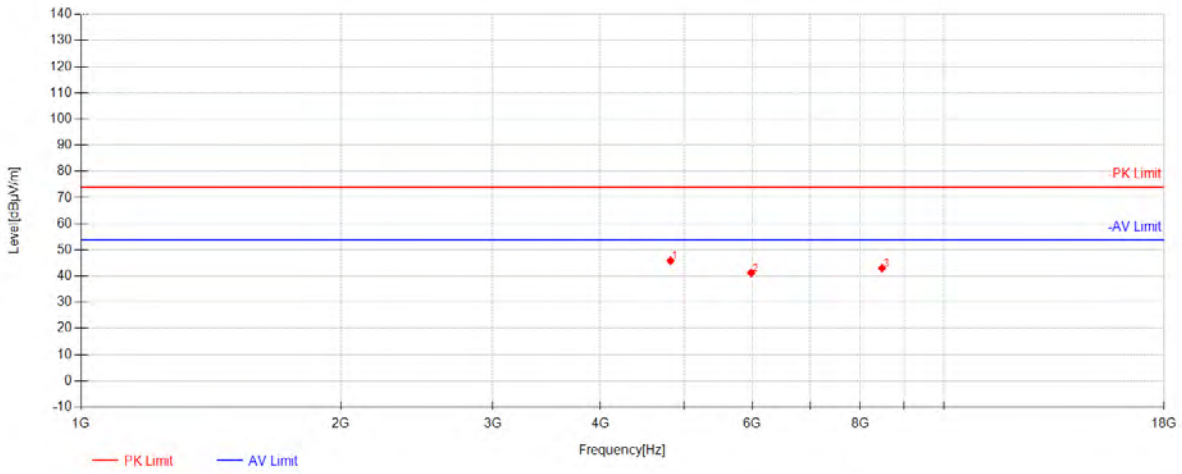
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4585.875	51.85	30.74	-45.68	36.91	74.00	37.09	Vertical
2	6873	50.13	34.77	-44.12	40.78	74.00	33.22	Vertical
3	10481.25	45.17	38.55	-38.84	44.88	74.00	29.12	Vertical

802.11n20_Channel 01



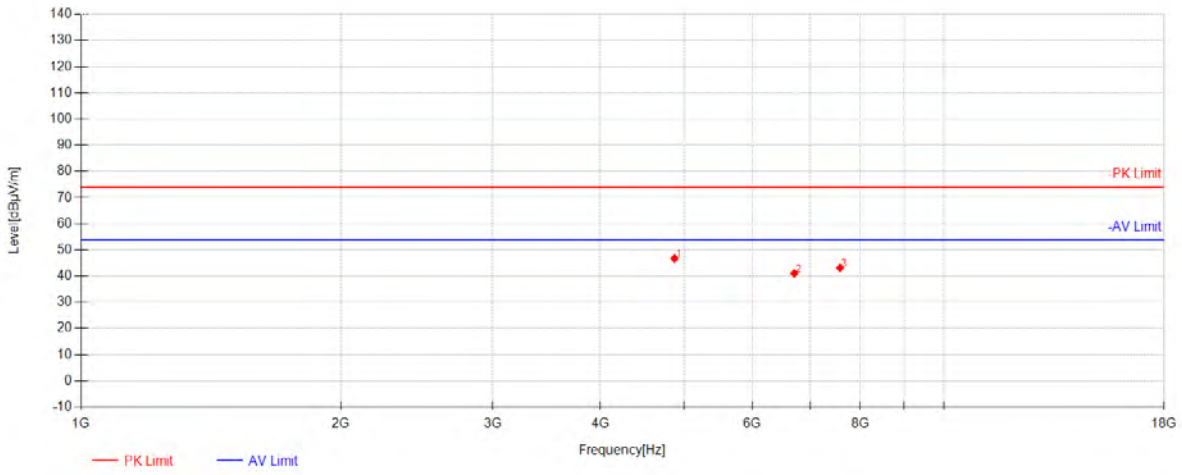
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4819.875	60.68	31.11	-45.54	46.25	74.00	27.75	Horizontal
2	4825.5	52.42	31.12	-45.54	38.00	54.00	16.00	Horizontal
3	7073.625	50.01	35.21	-44.04	41.18	74.00	32.82	Horizontal
4	9472.5	47.79	37.45	-40.12	45.11	74.00	28.89	Horizontal

802.11n20_Channel 01



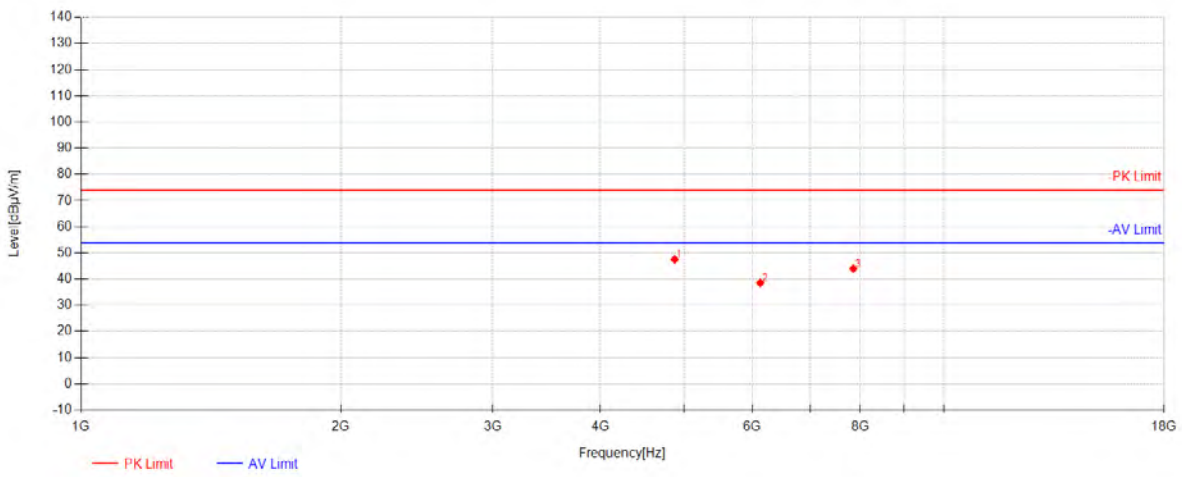
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4822.125	60.34	31.12	-45.54	45.92	74.00	28.08	Vertical
2	5979	53.67	32.40	-44.86	41.21	74.00	32.79	Vertical
3	8479.5	47.83	36.81	-41.59	43.06	74.00	30.94	Vertical

802.11n20_Channel 06



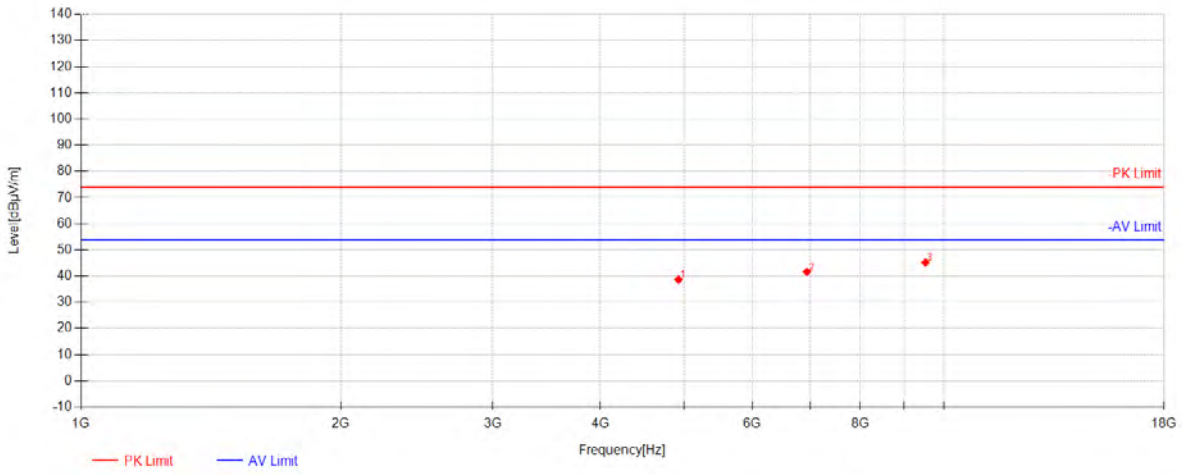
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4872.75	61.13	31.20	-45.53	46.79	74.00	27.21	Horizontal
2	6707.625	50.37	34.47	-43.84	41.01	74.00	32.99	Horizontal
3	7579.5	49.63	36.51	-42.97	43.17	74.00	30.83	Horizontal

802.11n20_Channel 06



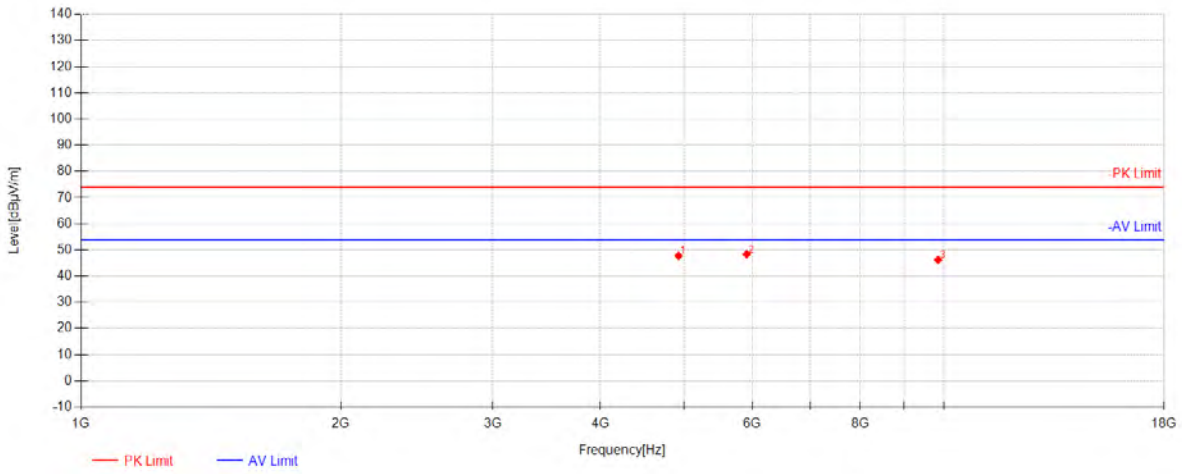
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4875	61.90	31.20	-45.53	47.57	74.00	26.43	Vertical
2	6126.75	50.25	32.83	-44.53	38.55	74.00	35.45	Vertical
3	7854	49.73	36.90	-42.59	44.04	74.00	29.96	Vertical

802.11n20_Channel 11



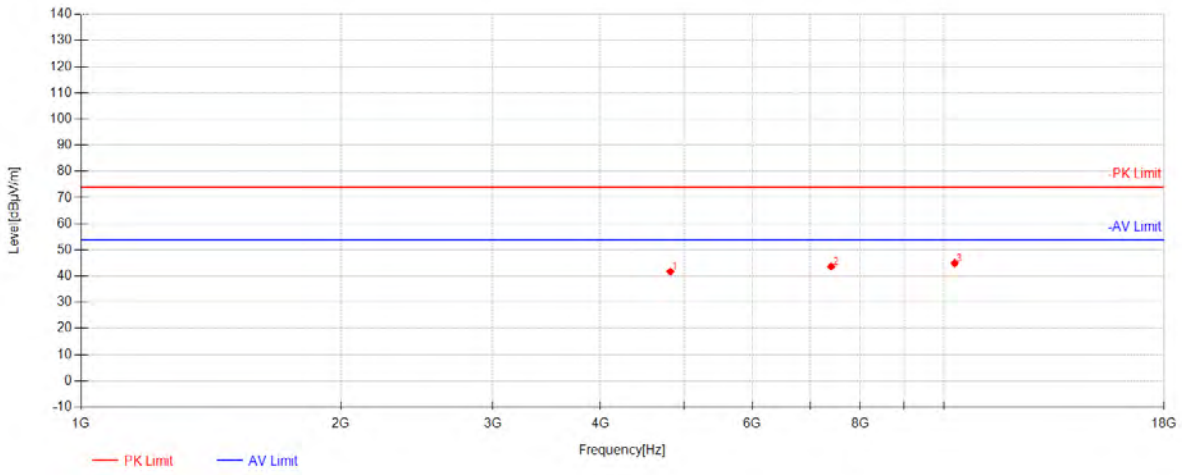
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4926	52.94	31.28	-45.56	38.66	74.00	35.34	Horizontal
2	6939	50.64	34.89	-43.89	41.64	74.00	32.36	Horizontal
3	9521.25	47.80	37.54	-40.11	45.23	74.00	28.77	Horizontal

802.11n20_Channel 11



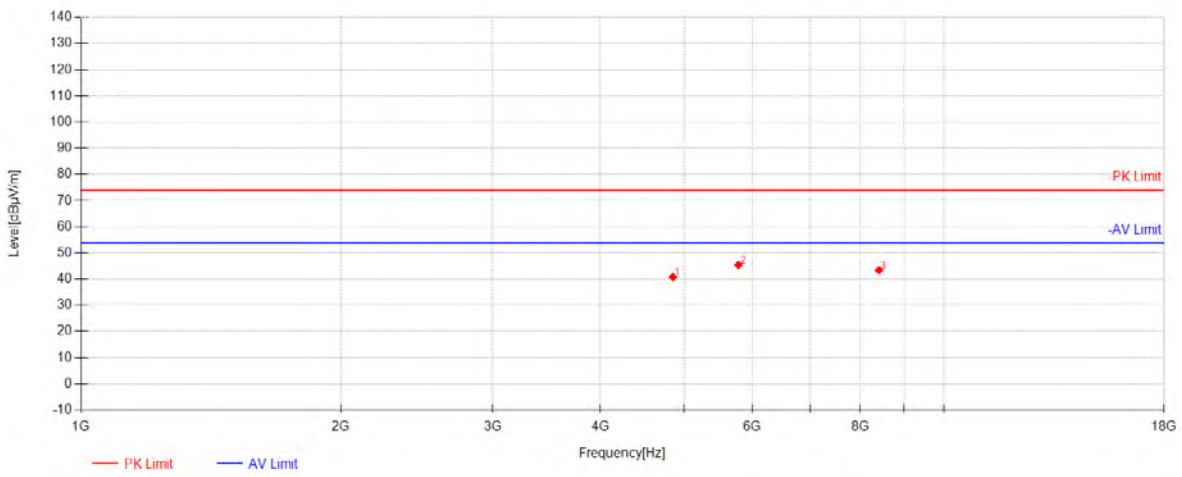
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4926.375	62.04	31.28	-45.56	47.76	74.00	26.24	Vertical
2	5908.5	60.95	32.38	-44.96	48.37	74.00	25.63	Vertical
3	9848.25	47.43	38.20	-39.41	46.22	74.00	27.78	Vertical

802.11n40_Channel 03



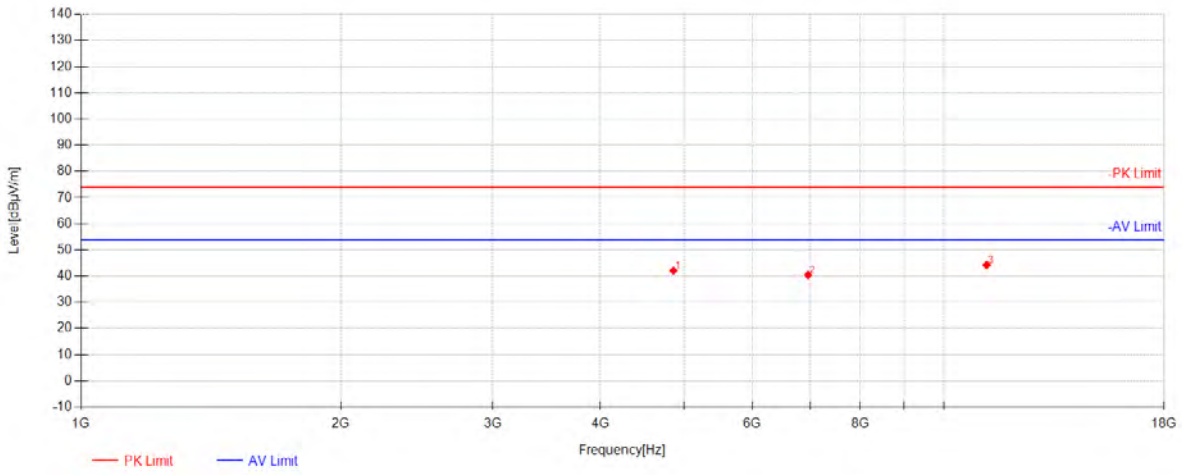
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4820.25	56.16	31.11	-45.54	41.73	74.00	32.27	Horizontal
2	7402.875	50.97	36.13	-43.40	43.70	74.00	30.30	Horizontal
3	10293.75	45.58	38.53	-39.12	44.99	74.00	29.01	Horizontal

802.11n40_Channel 03



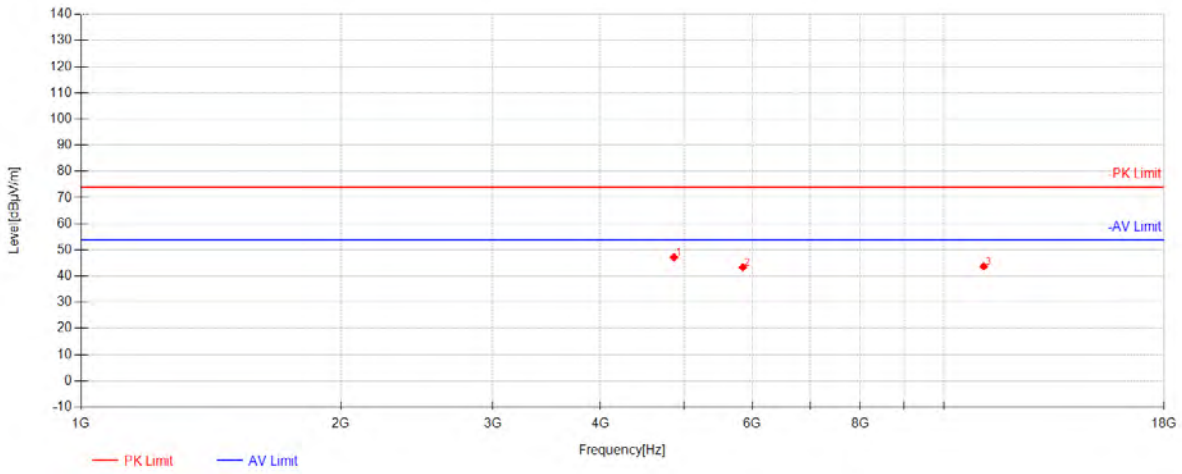
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4852.875	55.15	31.16	-45.53	40.78	74.00	33.22	Vertical
2	5779.125	57.91	32.36	-44.77	45.49	74.00	28.51	Vertical
3	8407.875	48.03	36.86	-41.46	43.42	74.00	30.58	Vertical

802.11n40_Channel 06



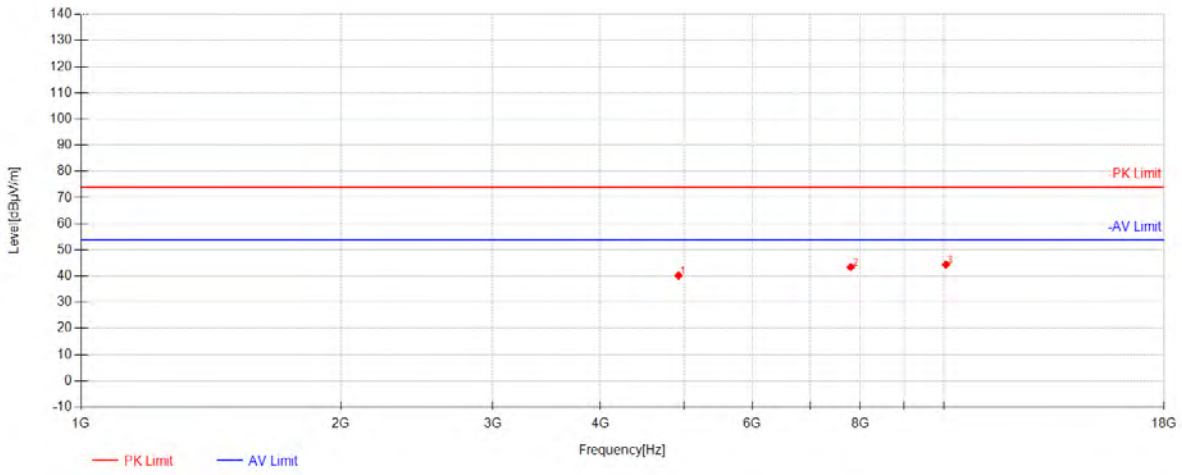
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4859.25	56.47	31.17	-45.53	42.11	74.00	31.89	Horizontal
2	6961.5	49.25	34.93	-43.76	40.42	74.00	33.58	Horizontal
3	11209.875	43.00	38.70	-37.39	44.31	74.00	29.69	Horizontal

802.11n40_Channel 06



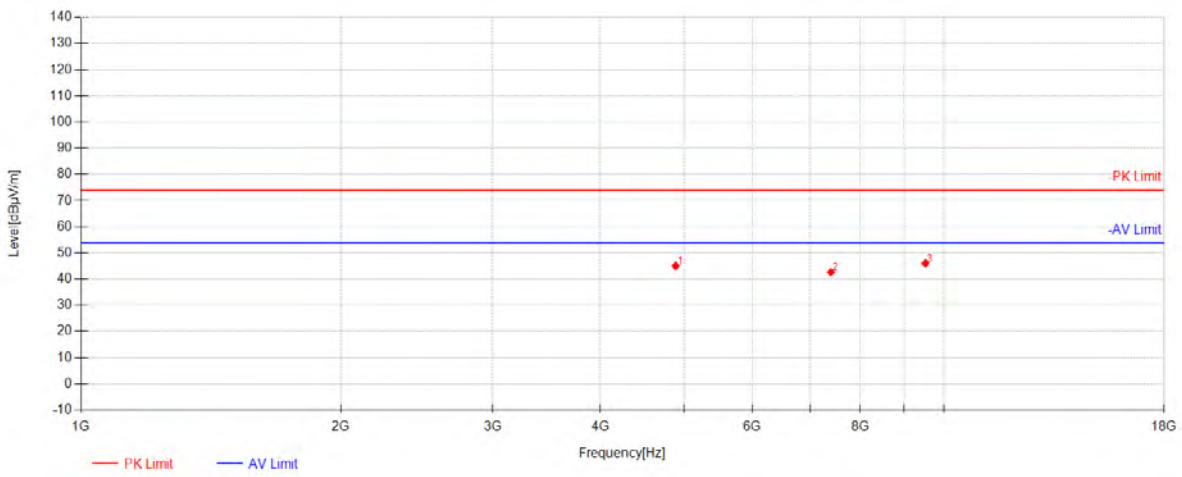
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4866.375	61.54	31.19	-45.53	47.19	74.00	26.81	Vertical
2	5847.75	55.88	32.37	-44.86	43.39	74.00	30.61	Vertical
3	11121.375	42.95	38.66	-37.85	43.76	74.00	30.24	Vertical

802.11n40_Channel 09



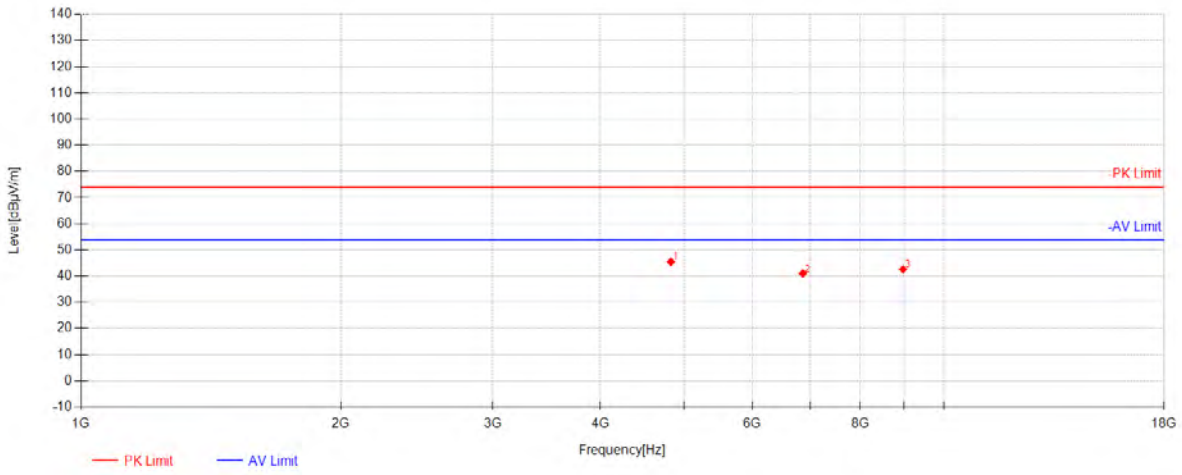
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4927.125	54.48	31.28	-45.56	40.20	74.00	33.80	Horizontal
2	7798.5	48.96	36.82	-42.32	43.46	74.00	30.54	Horizontal
3	10056	45.14	38.51	-39.17	44.47	74.00	29.53	Horizontal

802.11n40_Channel 09



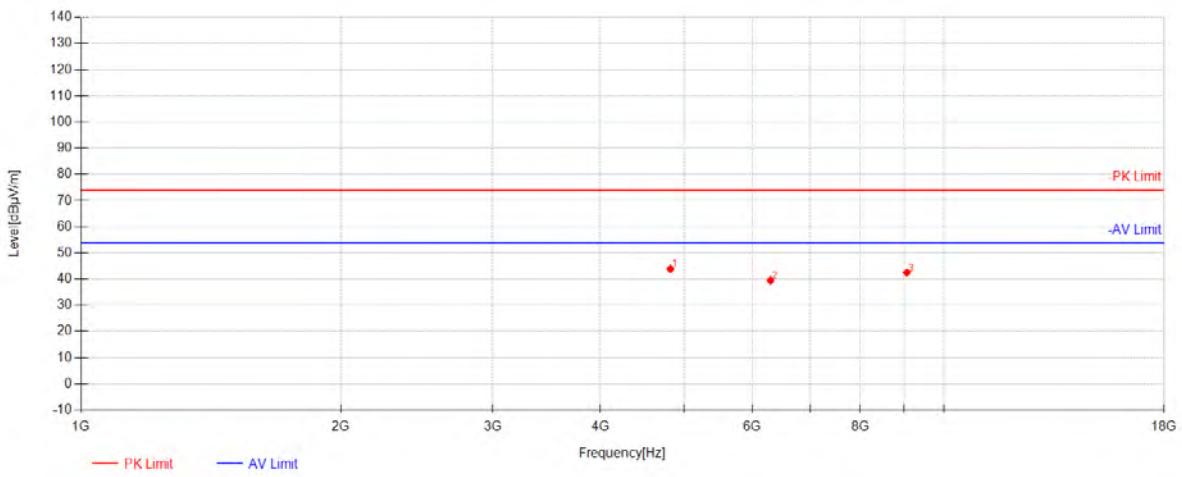
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4888.125	59.41	31.22	-45.53	45.10	74.00	28.90	Vertical
2	7398	49.97	36.11	-43.42	42.67	74.00	31.33	Vertical
3	9522	48.61	37.54	-40.11	46.05	74.00	27.95	Vertical

802.11ax20_Channel 01



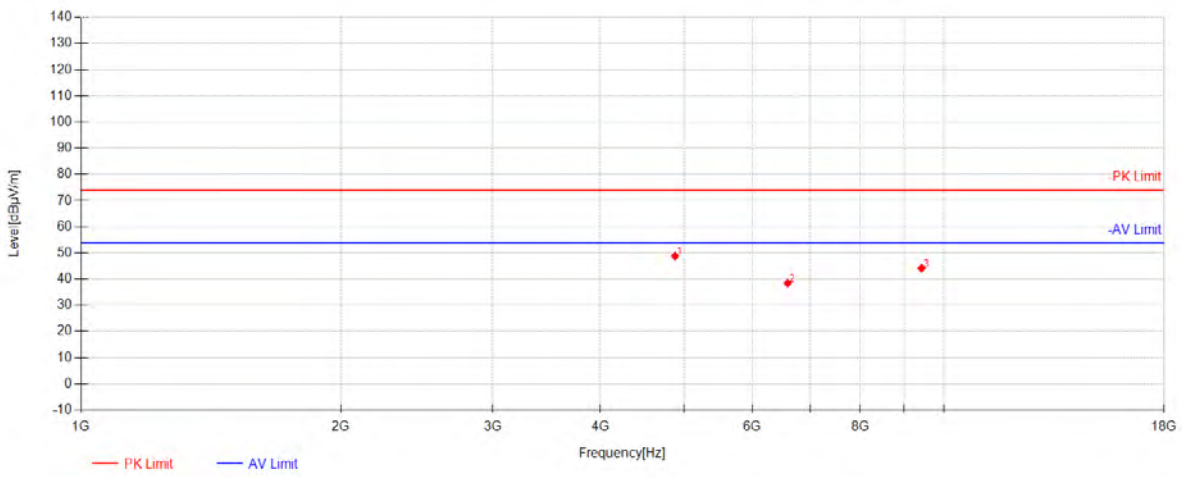
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4826.625	59.94	31.12	-45.54	45.53	74.00	28.47	Horizontal
2	6864	50.38	34.76	-44.13	41.01	74.00	32.99	Horizontal
3	8968.5	47.19	36.52	-41.08	42.63	74.00	31.37	Horizontal

802.11ax20_Channel 01



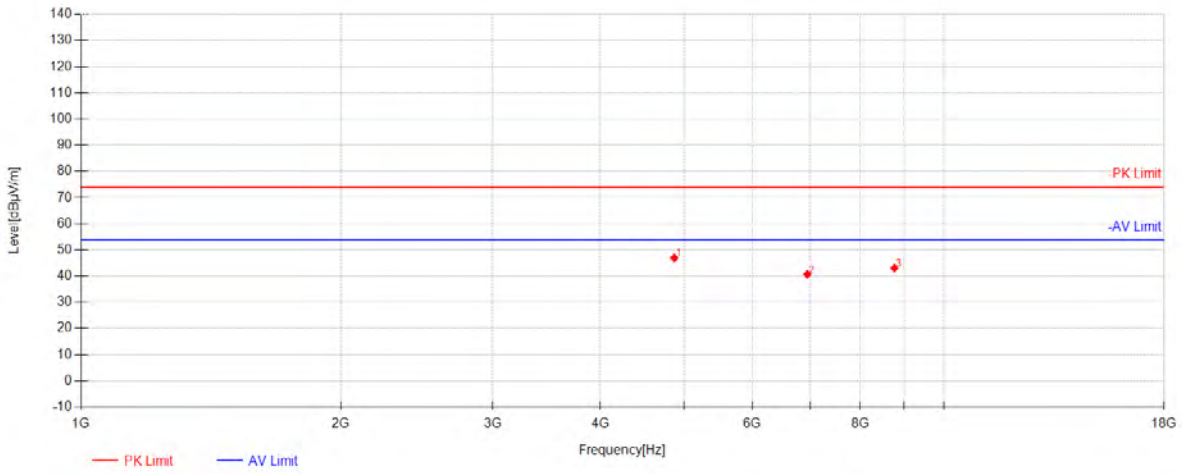
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4820.625	58.34	31.11	-45.54	43.92	74.00	30.08	Vertical
2	6297	50.61	33.41	-44.55	39.47	74.00	34.53	Vertical
3	9057.75	46.49	36.62	-40.62	42.48	74.00	31.52	Vertical

802.11ax20_Channel 06



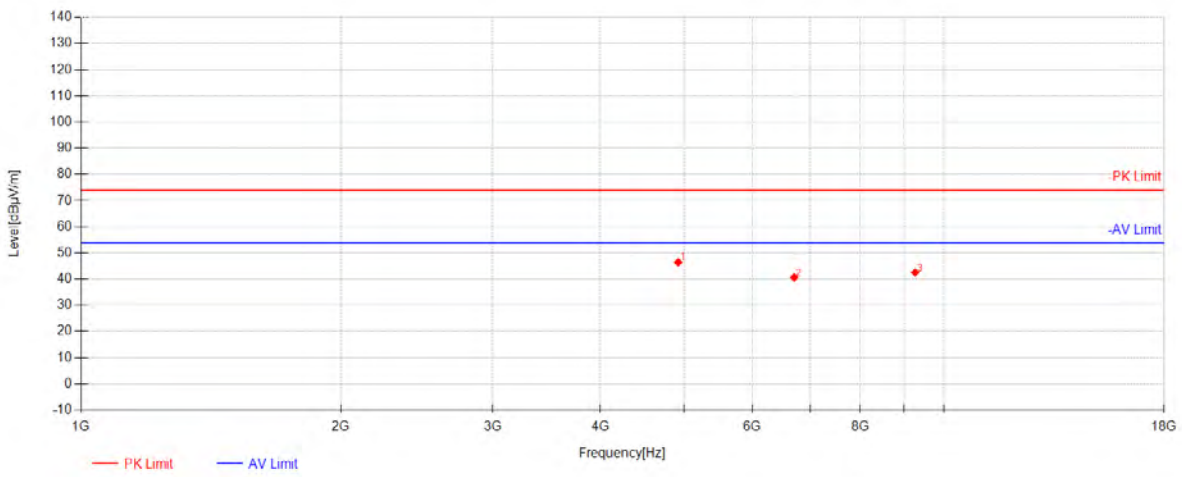
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4880.25	63.11	31.21	-45.53	48.79	74.00	25.21	Horizontal
2	6591.375	48.56	34.26	-44.37	38.45	74.00	35.55	Horizontal
3	9422.25	46.79	37.34	-39.92	44.22	74.00	29.78	Horizontal

802.11ax20_Channel 06



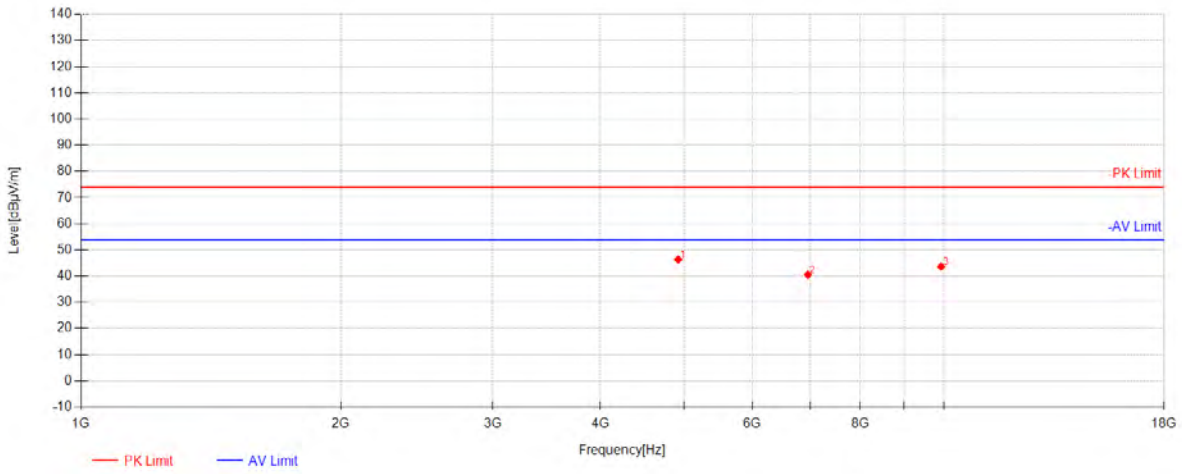
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4870.5	61.30	31.19	-45.53	46.96	74.00	27.04	Vertical
2	6946.875	49.58	34.90	-43.84	40.64	74.00	33.36	Vertical
3	8763.375	47.86	36.64	-41.41	43.09	74.00	30.91	Vertical

802.11ax20_Channel 11



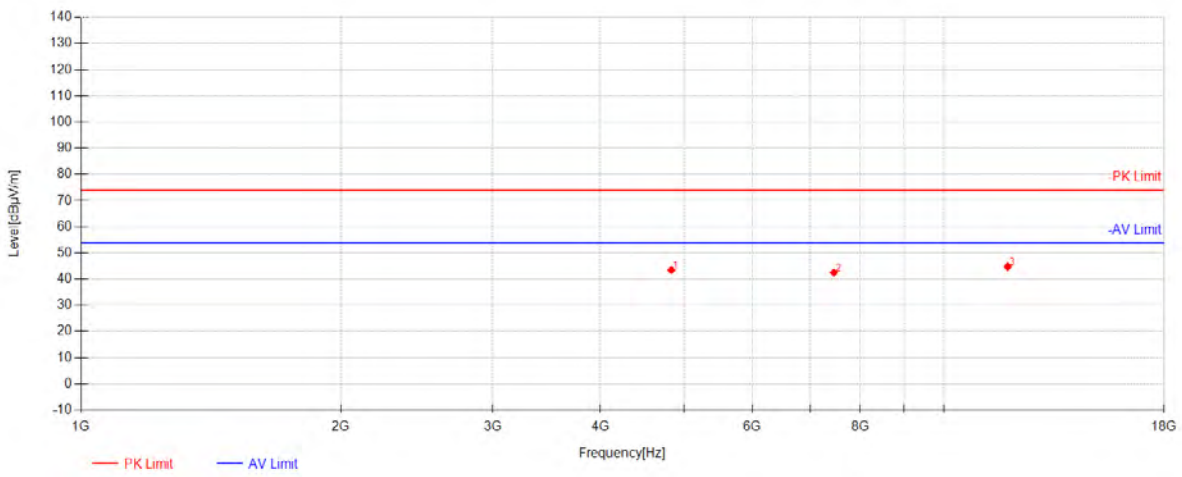
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4921.875	60.77	31.28	-45.55	46.49	74.00	27.51	Horizontal
2	6706.5	49.94	34.47	-43.83	40.58	74.00	33.42	Horizontal
3	9263.25	45.76	37.03	-40.23	42.56	74.00	31.44	Horizontal

802.11ax20_Channel 11



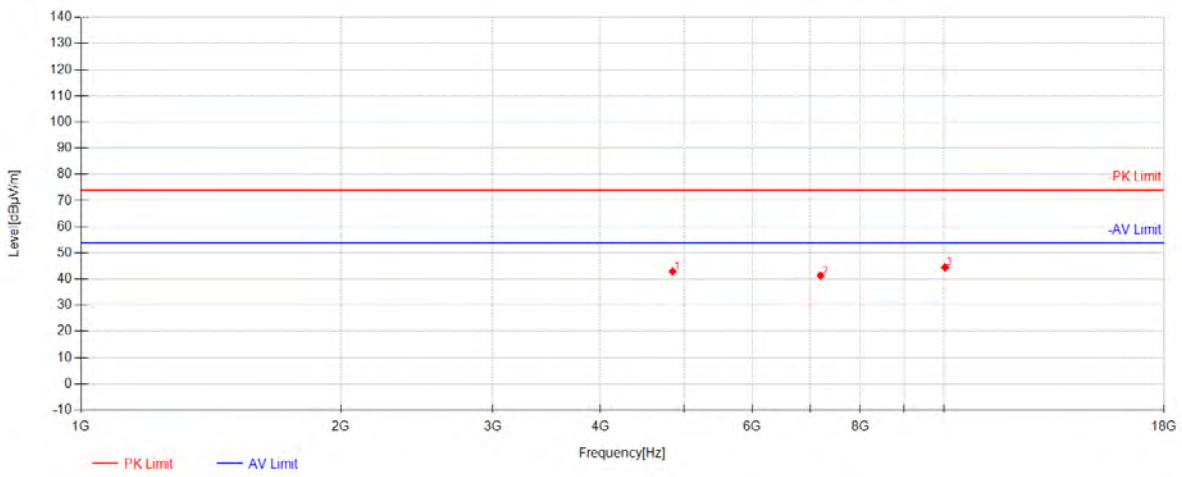
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4922.25	60.69	31.28	-45.55	46.41	74.00	27.59	Vertical
2	6957.75	49.35	34.92	-43.78	40.49	74.00	33.51	Vertical
3	9927.75	44.64	38.36	-39.31	43.69	74.00	30.31	Vertical

802.11ax40_Channel 03



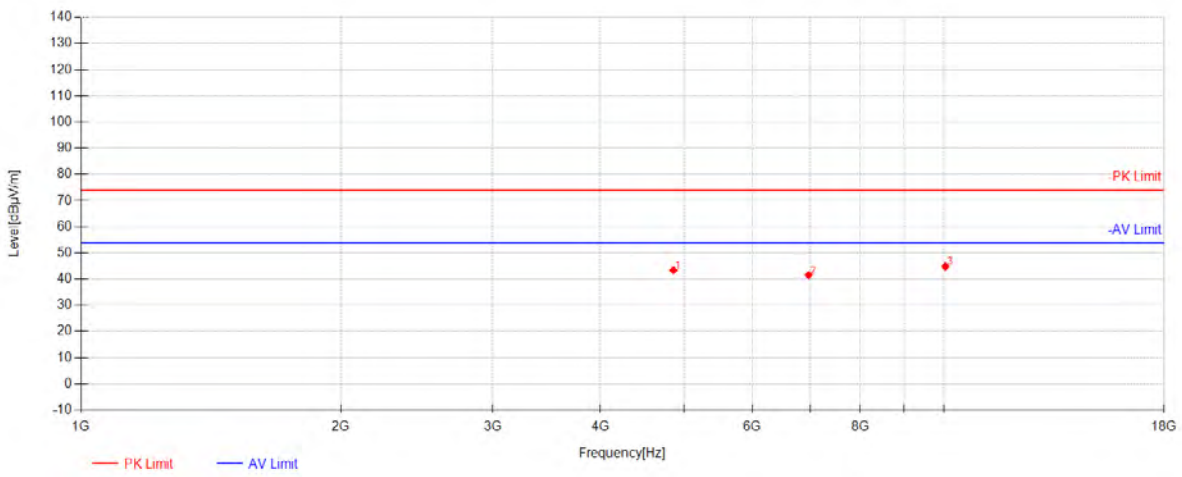
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4832.25	57.91	31.13	-45.54	43.50	74.00	30.50	Horizontal
2	7455.375	49.49	36.28	-43.26	42.50	74.00	31.50	Horizontal
3	11858.25	42.83	39.03	-37.03	44.83	74.00	29.17	Horizontal

802.11ax40_Channel 03



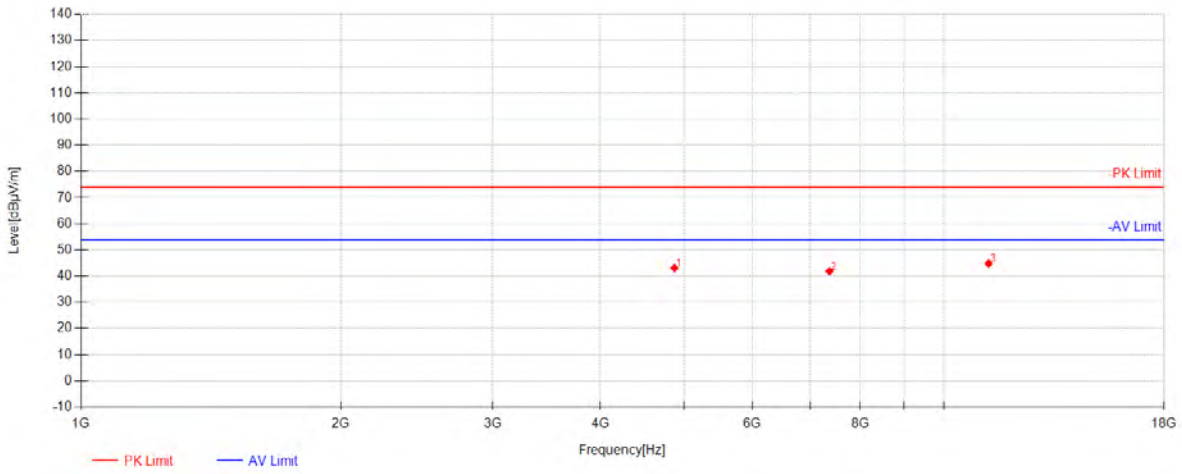
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4849.875	57.33	31.16	-45.54	42.95	74.00	31.05	Vertical
2	7196.25	49.25	35.55	-43.45	41.35	74.00	32.65	Vertical
3	10034.25	45.27	38.50	-39.20	44.57	74.00	29.43	Vertical

802.11ax40_Channel 06



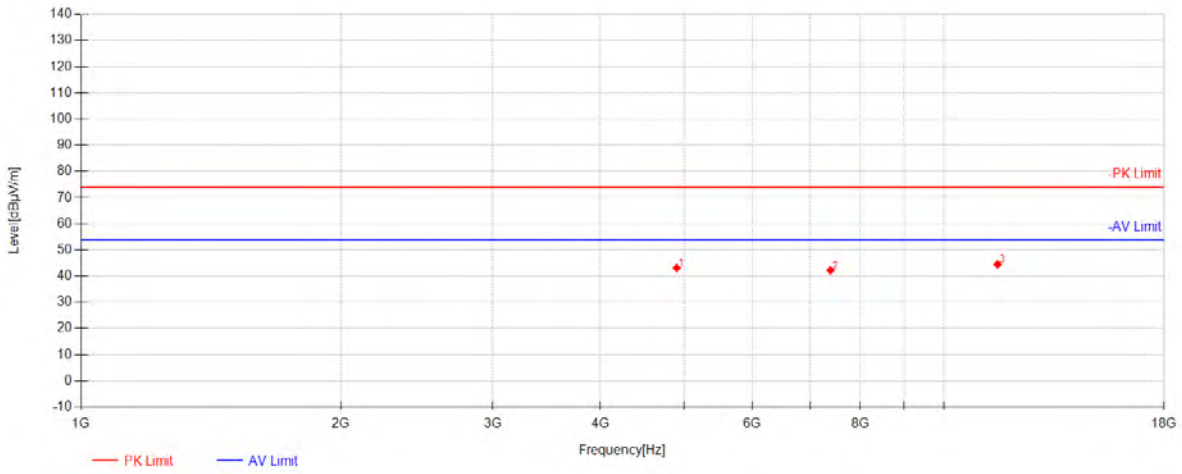
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4859.25	57.79	31.17	-45.53	43.43	74.00	30.57	Horizontal
2	6970.125	50.29	34.95	-43.71	41.52	74.00	32.48	Horizontal
3	10041	45.58	38.50	-39.19	44.89	74.00	29.11	Horizontal

802.11ax40_Channel 06



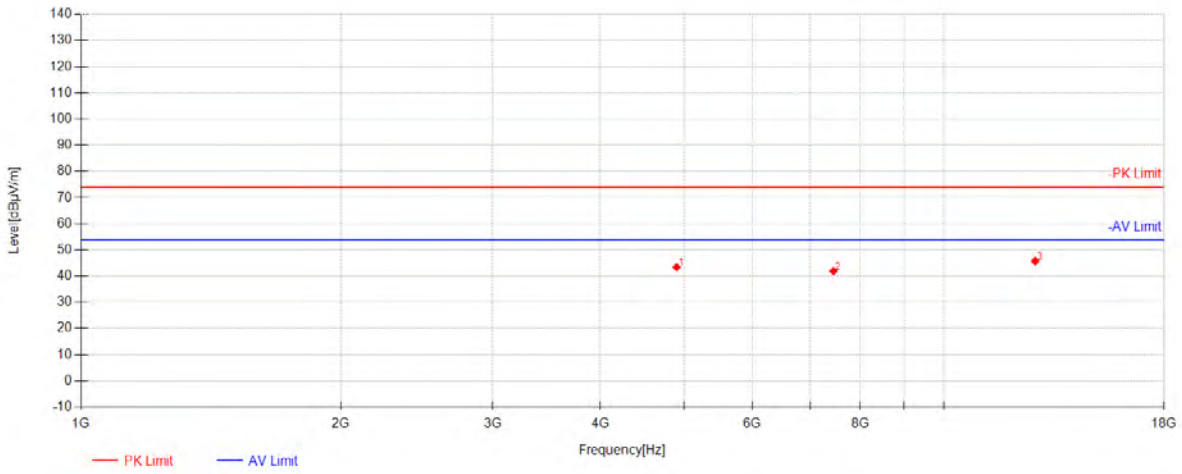
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4872	57.47	31.20	-45.53	43.13	74.00	30.87	Vertical
2	7369.5	49.34	36.03	-43.51	41.86	74.00	32.14	Vertical
3	11270.625	43.55	38.74	-37.41	44.87	74.00	29.13	Vertical

802.11ax40_Channel 09



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4902.375	57.45	31.24	-45.53	43.16	74.00	30.84	Horizontal
2	7389	49.61	36.09	-43.45	42.25	74.00	31.75	Horizontal
3	11542.5	42.85	38.87	-37.14	44.59	74.00	29.41	Horizontal

802.11ax40_Channel 09



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	4900.875	57.76	31.24	-45.53	43.47	74.00	30.53	Vertical
2	7448.625	48.95	36.26	-43.28	41.93	74.00	32.07	Vertical
3	12759.375	43.23	39.33	-36.77	45.79	74.00	28.21	Vertical

7.5 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)
Test Method: ANSI C63.10 (2013) Section 11.9.1

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

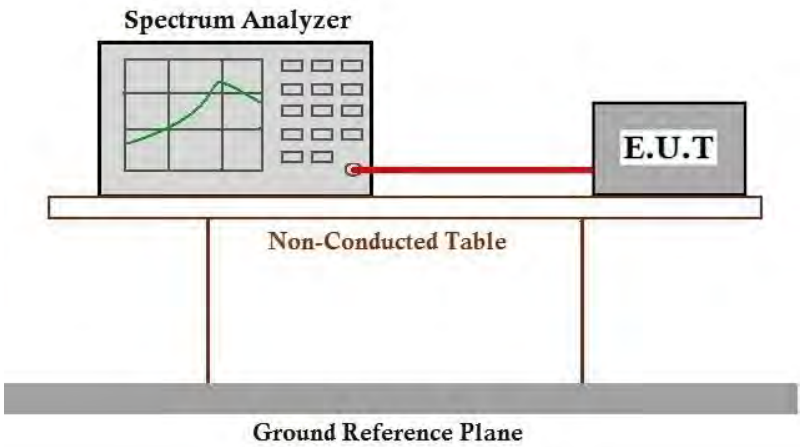
7.5.1 E.U.T. Operation

Operating Environment:
Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 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

7.6 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)
Test Method: ANSI C63.10 (2013) Section 11.8.1

Limit:

≥500 kHz

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.6.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e)
Test Method: ANSI C63.10 (2013) Section 11.10.2

Limit:
≤8dBm in any 3 kHz band during any time interval of continuous transmission

7.7.1 E.U.T. Operation

Operating Environment:
Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.7.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Conducted Band Edges Measurement

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)
Test Method: ANSI C63.10 (2013) Section 11.13.3.2

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c).

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.8.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.9 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)
Test Method: ANSI C63.10 (2013) Section 11.11

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c).

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE20); data rate @ MCS0 is the worst case of IEEE 802.11ax(HE40). Only the data of worst case is recorded in the report.

7.9.3 Measurement Procedure and Data

Please Refer to Appendix for Details

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2409001732AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2409001732AT

10 Appendix

1. Duty Cycle

1.1 Test Result

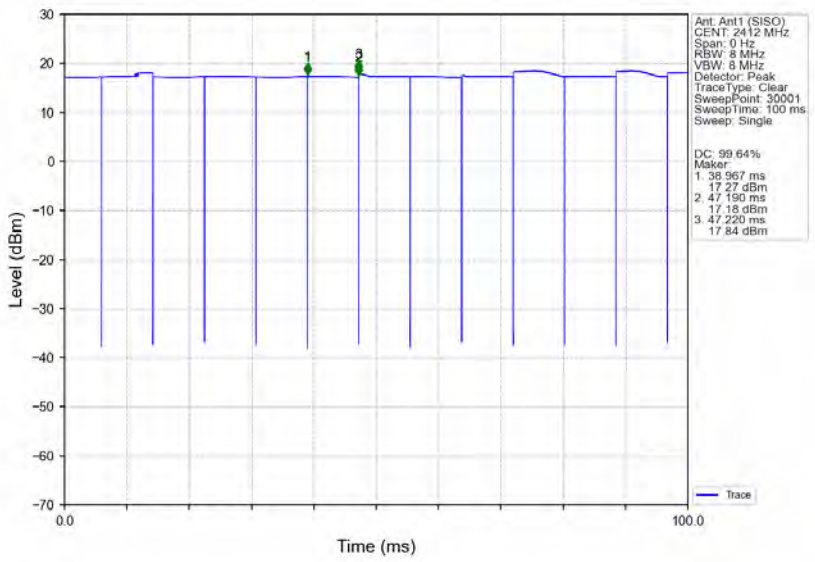
1.1.1 Ant1

Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	/	/	8.223	8.253	99.64	0.02	0.04
		2437	/	/	8.224	8.254	99.64	0.02	0.04
		2462	/	/	8.224	8.252	99.66	0.01	0.03
802.11g	SISO	2412	/	/	1.364	1.401	97.36	0.12	0.03
		2437	/	/	1.364	1.406	97.01	0.13	0.39
		2462	/	/	1.363	1.400	97.36	0.12	0.03
802.11n (HT20)	SISO	2412	/	/	1.276	1.313	97.18	0.12	0.03
		2437	/	/	1.276	1.312	97.26	0.12	0.03
		2462	/	/	1.276	1.312	97.26	0.12	0.03
802.11n (HT40)	SISO	2422	/	/	0.639	0.671	95.23	0.21	0.07
		2437	/	/	0.639	0.672	95.09	0.22	0.00
		2452	/	/	0.637	0.671	94.93	0.23	0.07
802.11ax (HE20)	SISO	2412	RU242	Left	1.003	1.036	96.81	0.14	0.07
		2437	RU242	Left	1.002	1.035	96.81	0.14	0.03
		2462	RU242	Left	0.999	1.035	96.52	0.15	0.03
802.11ax (HE40)	SISO	2422	RU484	Left	0.533	0.567	94.00	0.27	0.07
		2437	RU484	Left	0.533	0.566	94.17	0.26	0.07
		2452	RU484	Left	0.533	0.567	94.00	0.27	0.04

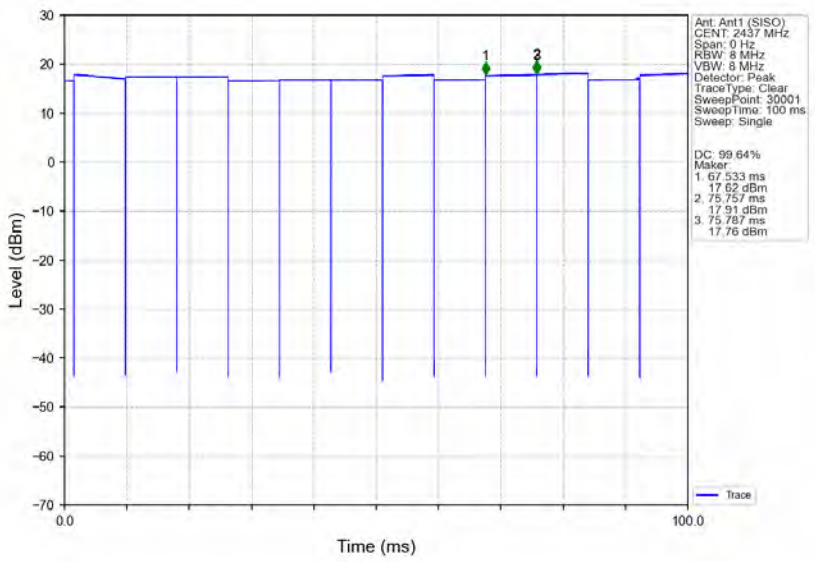
1.2 Test Graph

1.2.1 Ant1

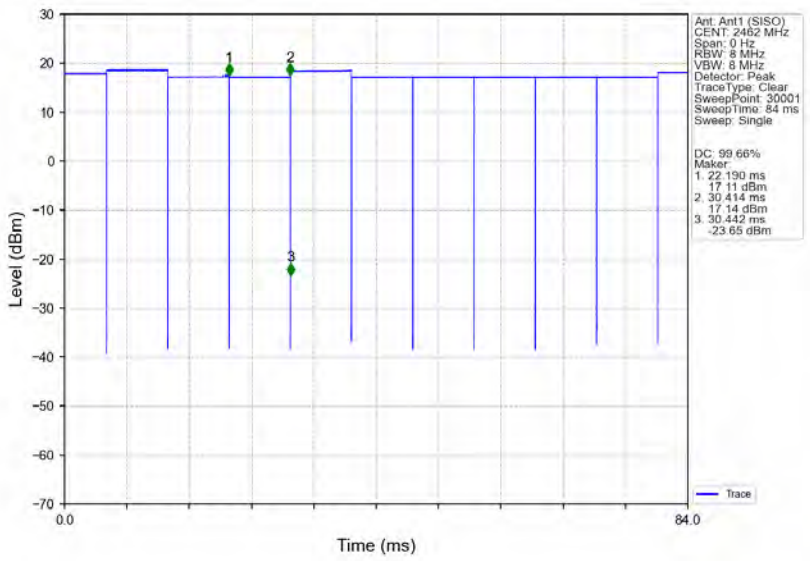
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



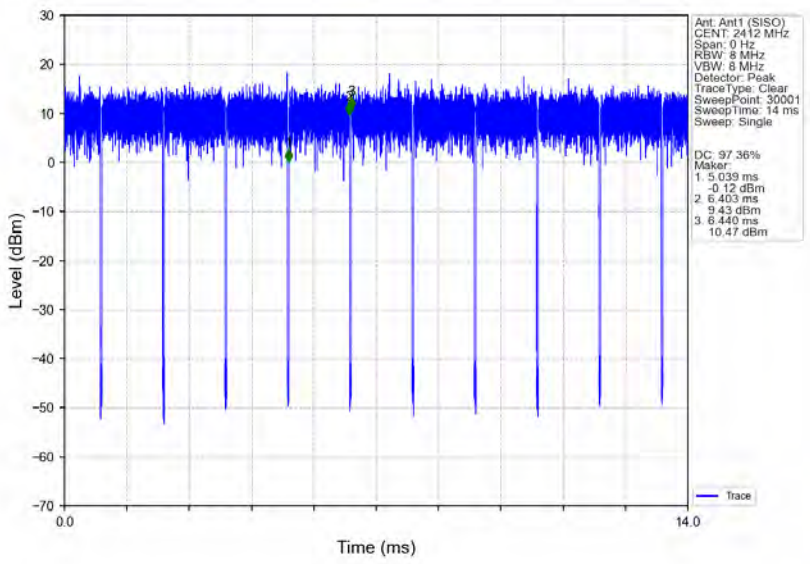
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



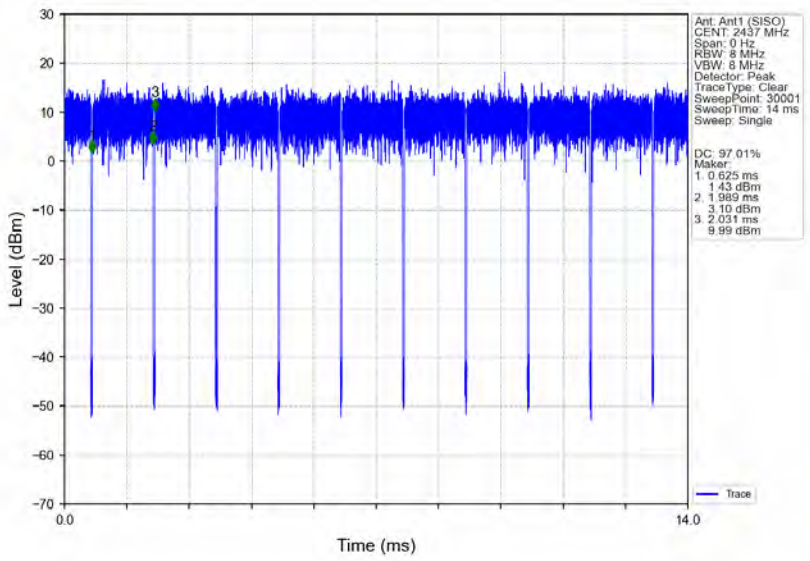
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



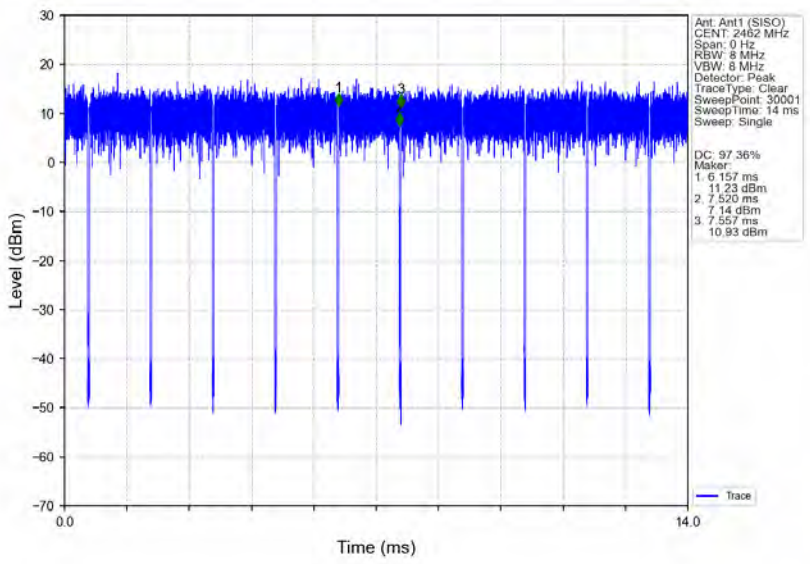
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



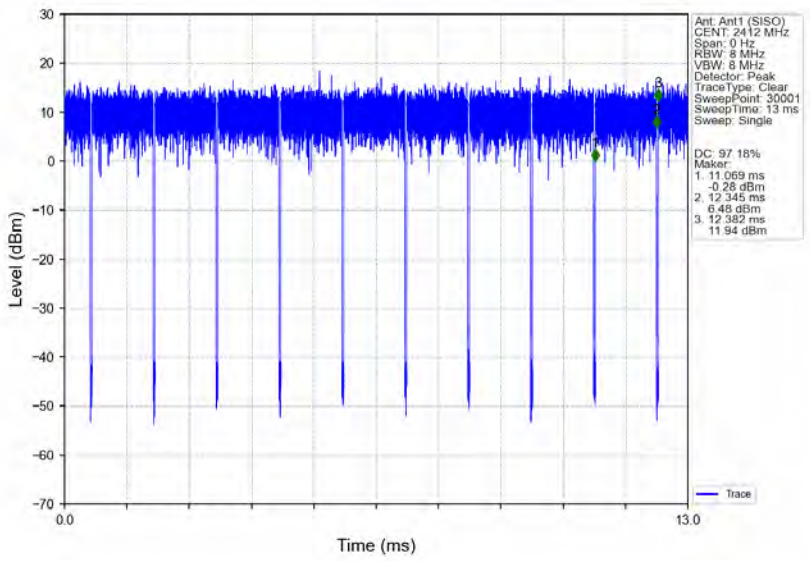
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



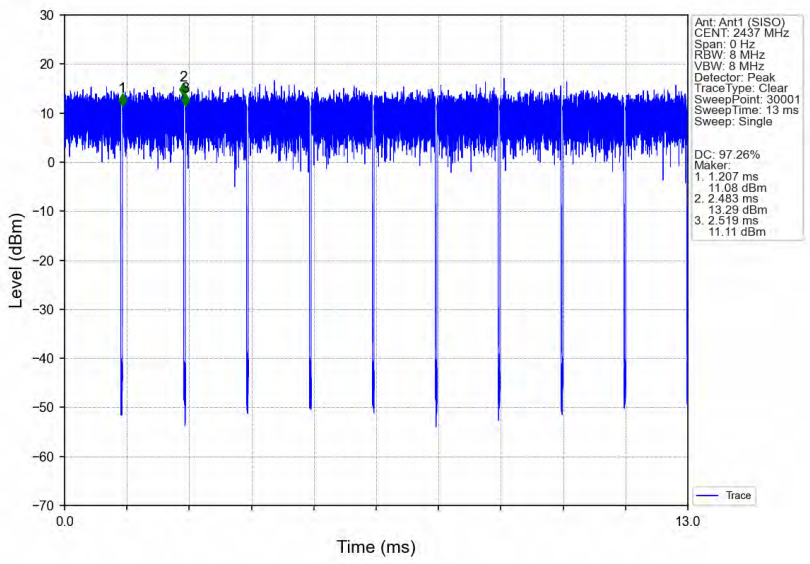
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



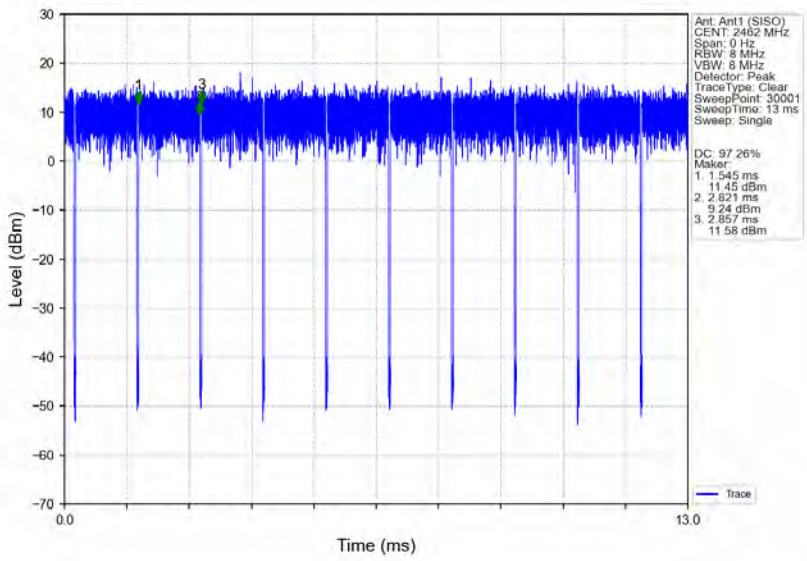
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



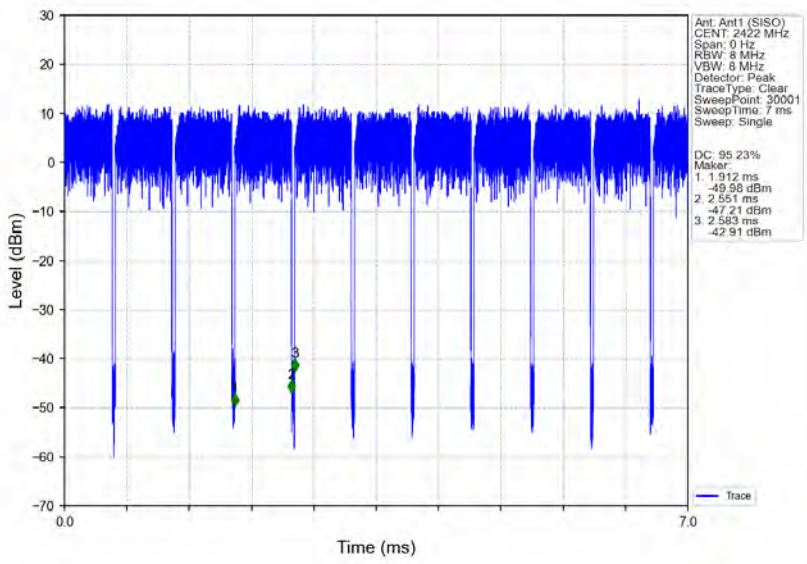
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



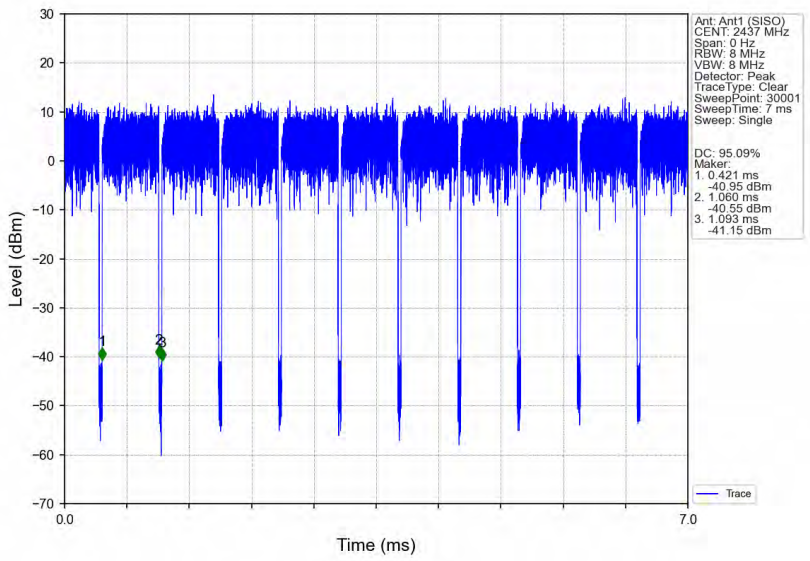
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



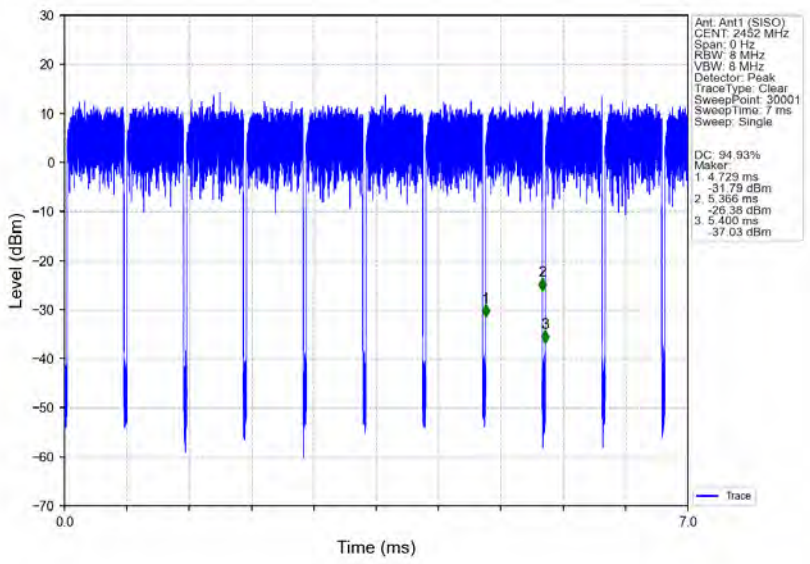
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



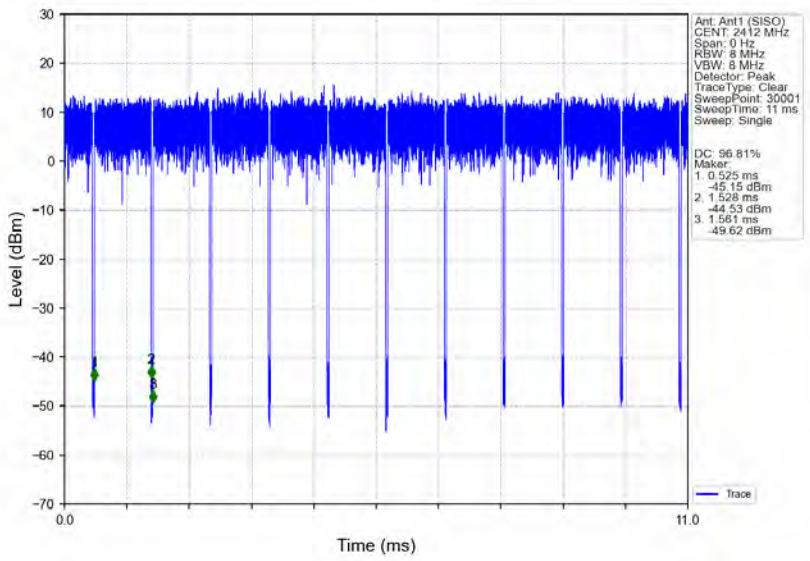
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



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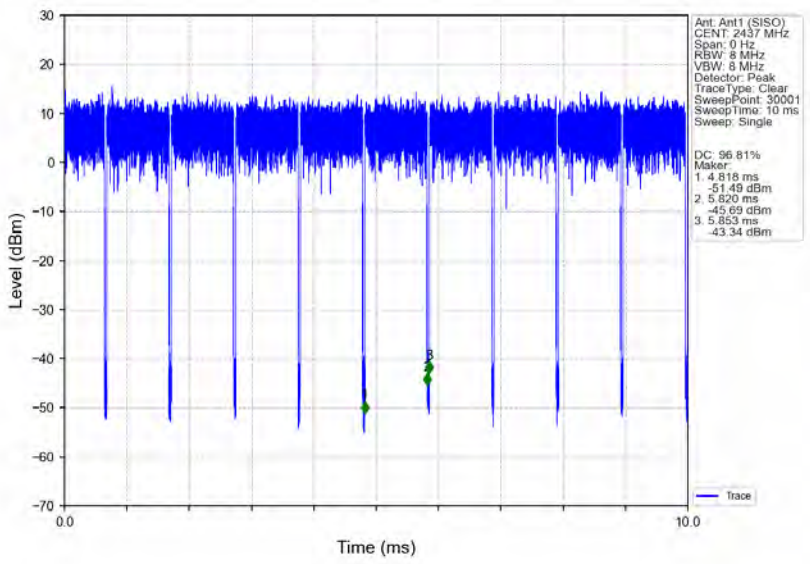

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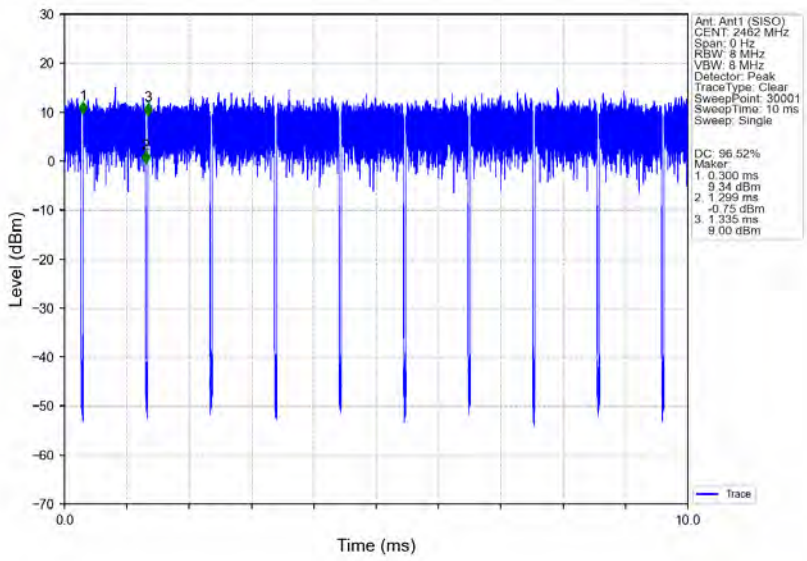
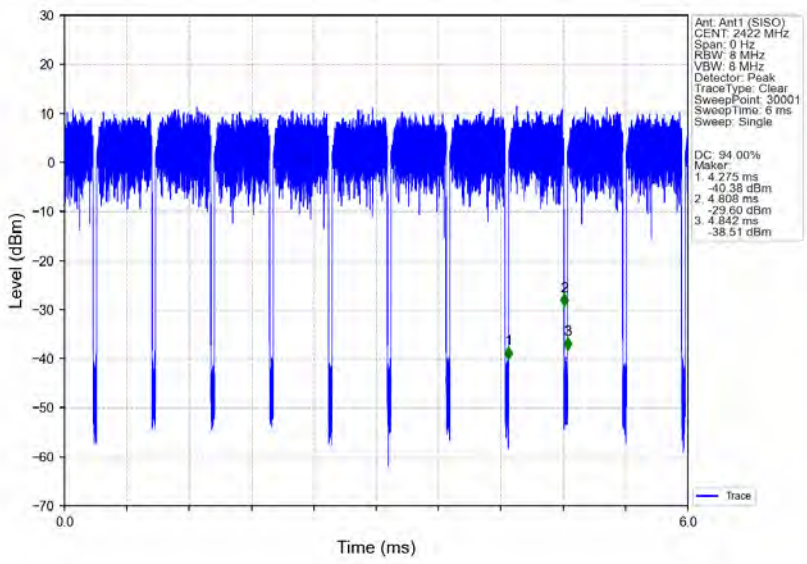
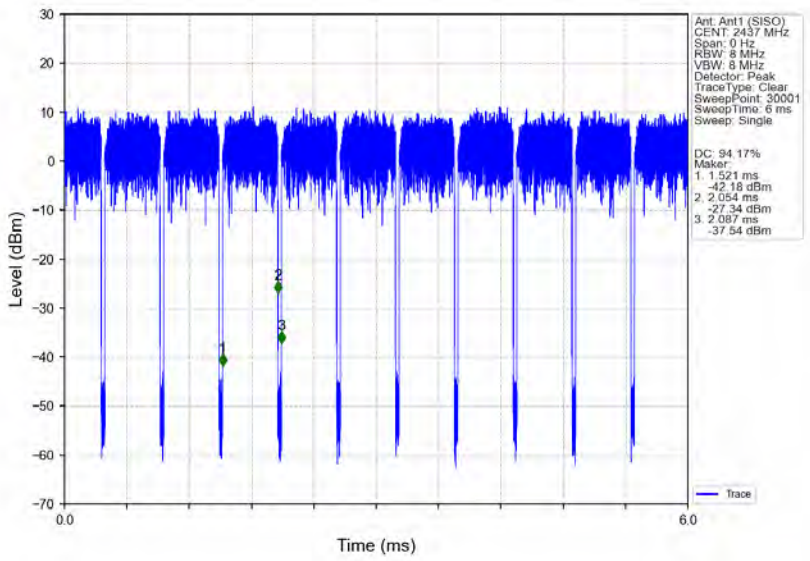


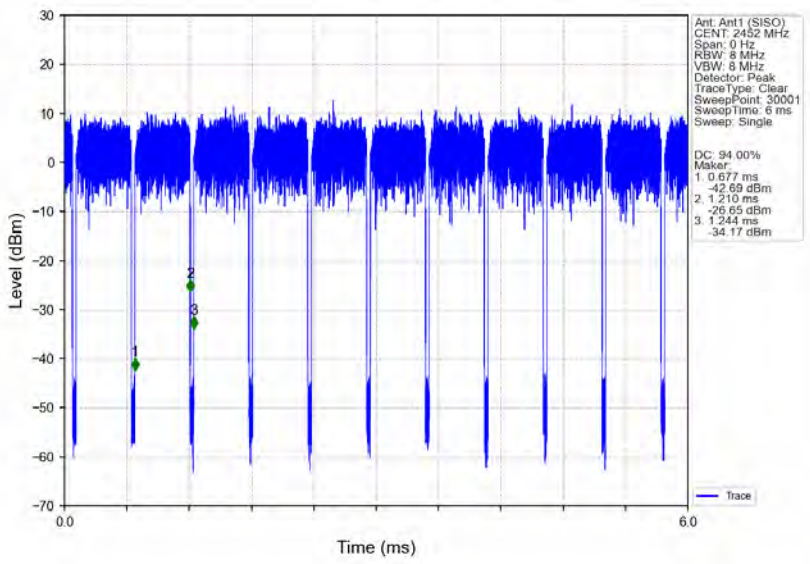
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	14.863	/	Pass
		2437	/	/	1	14.864	/	Pass
		2462	/	/	1	14.911	/	Pass
802.11g	SISO	2412	/	/	1	18.583	/	Pass
		2437	/	/	1	18.442	/	Pass
		2462	/	/	1	18.462	/	Pass
802.11n (HT20)	SISO	2412	/	/	1	19.492	/	Pass
		2437	/	/	1	19.313	/	Pass
		2462	/	/	1	19.408	/	Pass
802.11n (HT40)	SISO	2422	/	/	1	37.361	/	Pass
		2437	/	/	1	37.371	/	Pass
		2452	/	/	1	37.440	/	Pass
802.11ax (HE20)	SISO	2412	RU242	Left	1	19.757	/	Pass
		2437	RU242	Left	1	19.784	/	Pass
		2462	RU242	Left	1	19.802	/	Pass
802.11ax (HE40)	SISO	2422	RU484	Left	1	38.291	/	Pass
		2437	RU484	Left	1	38.321	/	Pass
		2452	RU484	Left	1	38.332	/	Pass

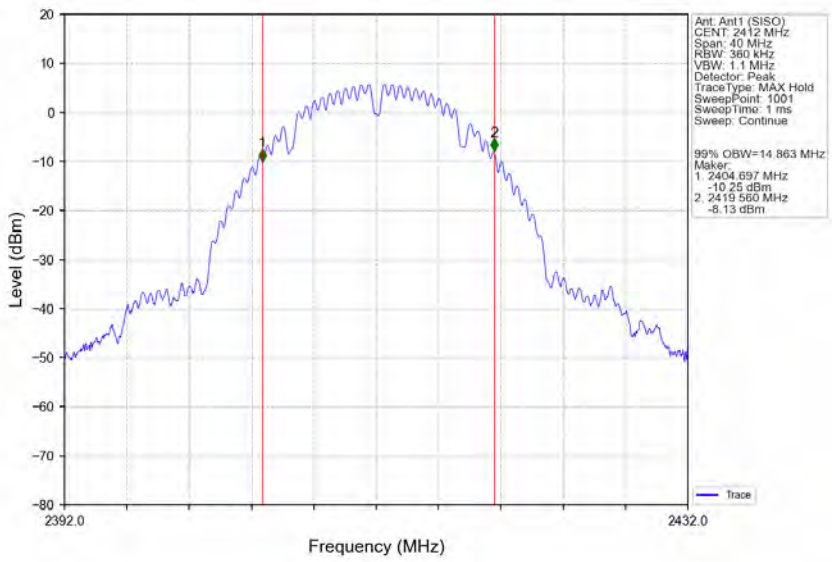
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11b	SISO	2412	/	/	1	9.145	>=0.5	Pass
		2437	/	/	1	10.068	>=0.5	Pass
		2462	/	/	1	10.062	>=0.5	Pass
802.11g	SISO	2412	/	/	1	15.463	>=0.5	Pass
		2437	/	/	1	15.792	>=0.5	Pass
		2462	/	/	1	16.046	>=0.5	Pass
802.11n (HT20)	SISO	2412	/	/	1	15.435	>=0.5	Pass
		2437	/	/	1	16.476	>=0.5	Pass
		2462	/	/	1	15.488	>=0.5	Pass
802.11n (HT40)	SISO	2422	/	/	1	35.169	>=0.5	Pass
		2437	/	/	1	35.168	>=0.5	Pass
		2452	/	/	1	35.168	>=0.5	Pass
802.11ax (HE20)	SISO	2412	RU242	Left	1	18.177	>=0.5	Pass
		2437	RU242	Left	1	17.739	>=0.5	Pass
		2462	RU242	Left	1	17.536	>=0.5	Pass
802.11ax (HE40)	SISO	2422	RU484	Left	1	36.168	>=0.5	Pass
		2437	RU484	Left	1	36.925	>=0.5	Pass
		2452	RU484	Left	1	36.389	>=0.5	Pass

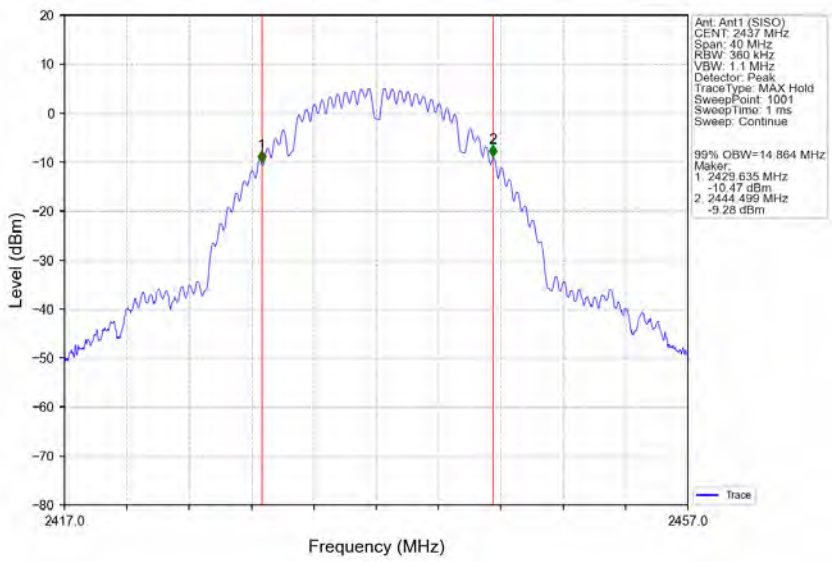
2.2 Test Graph

2.2.1 OBW

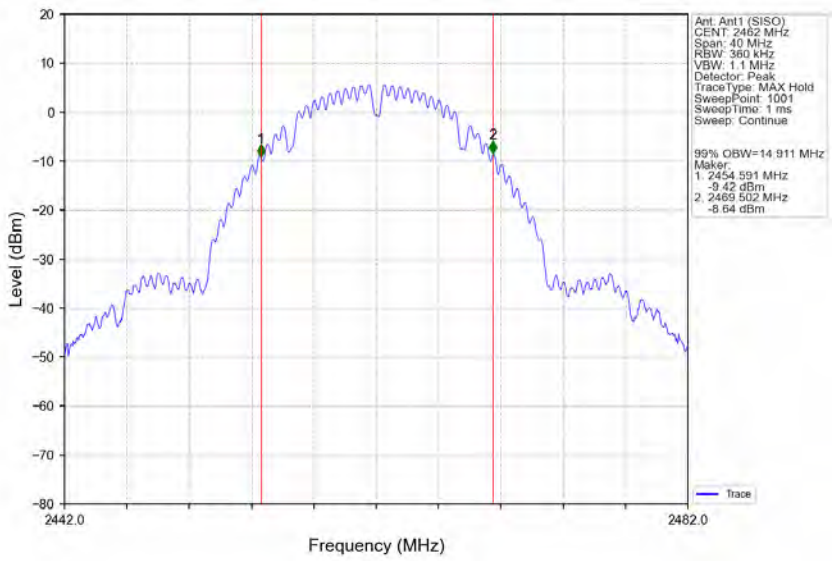
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



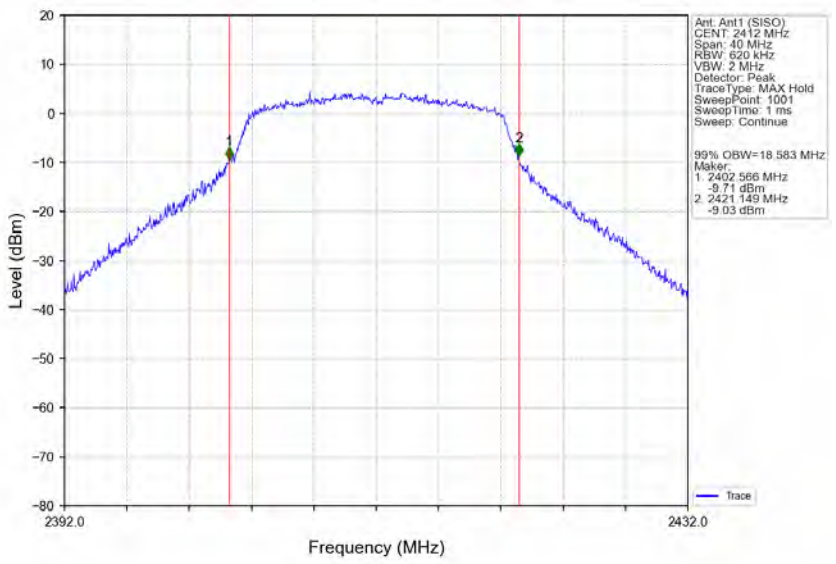
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



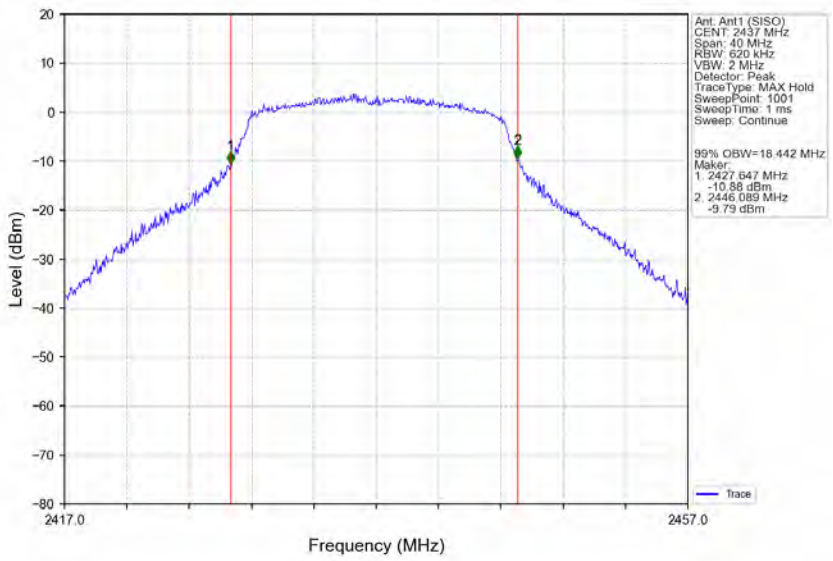
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



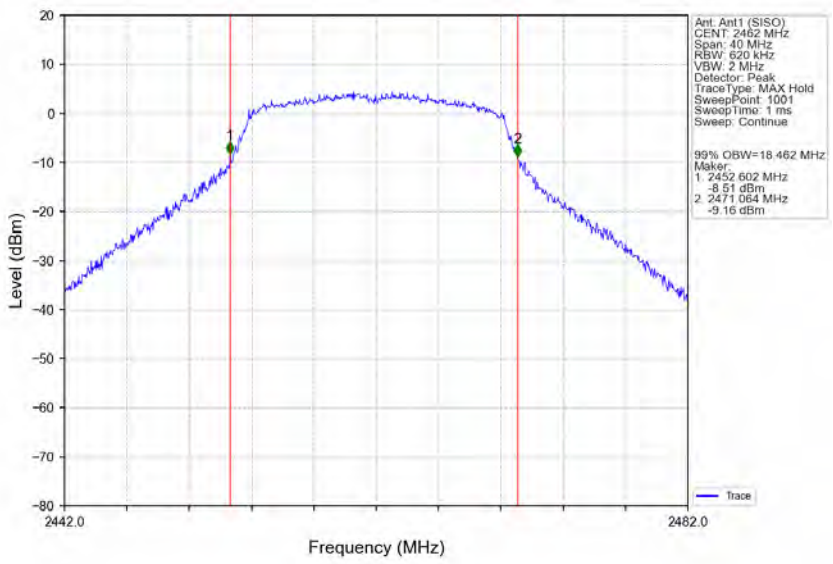
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



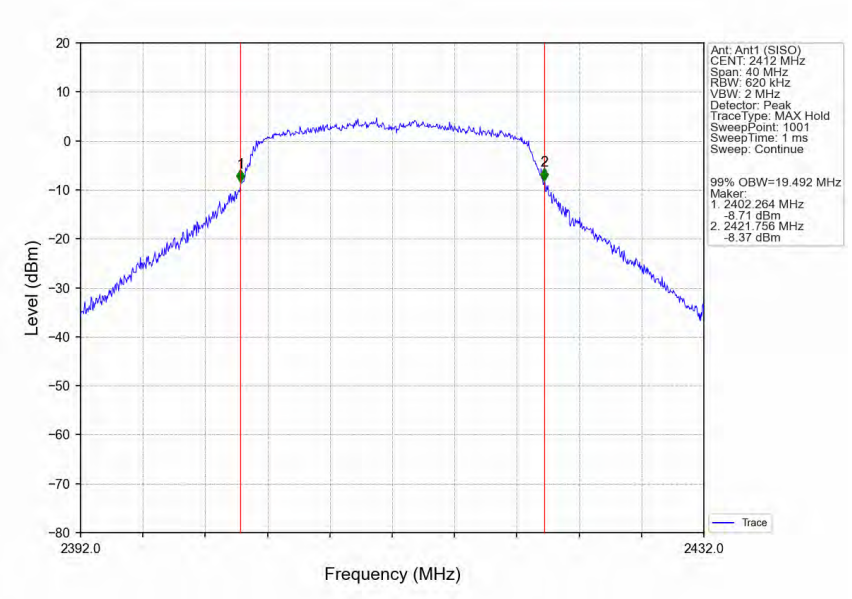
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



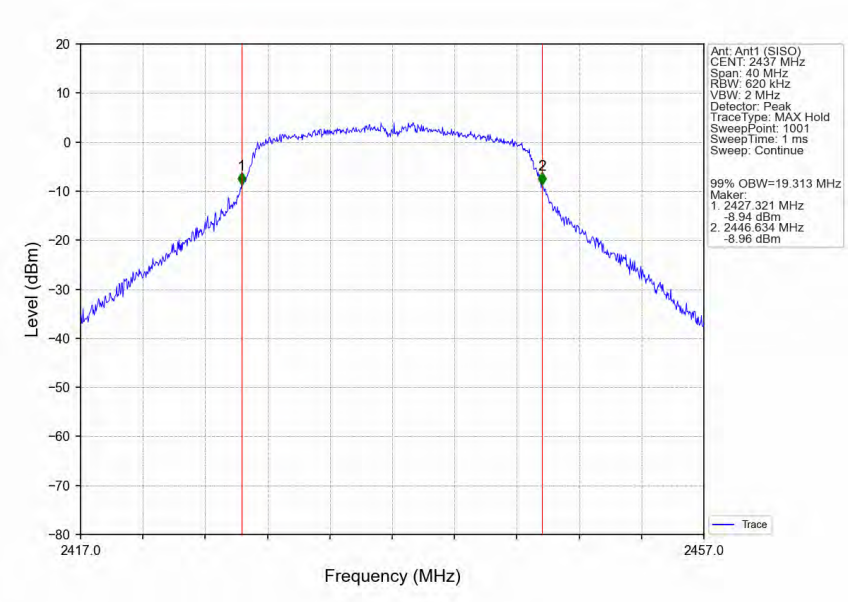
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



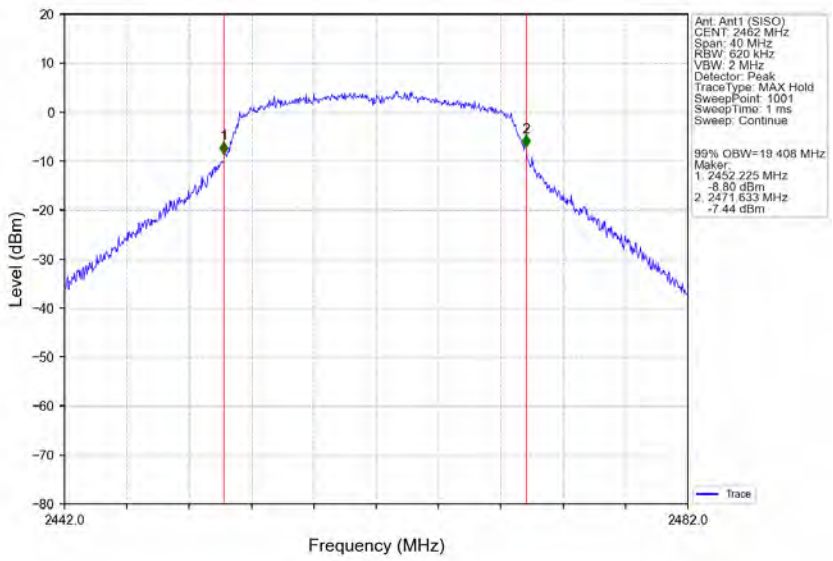
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



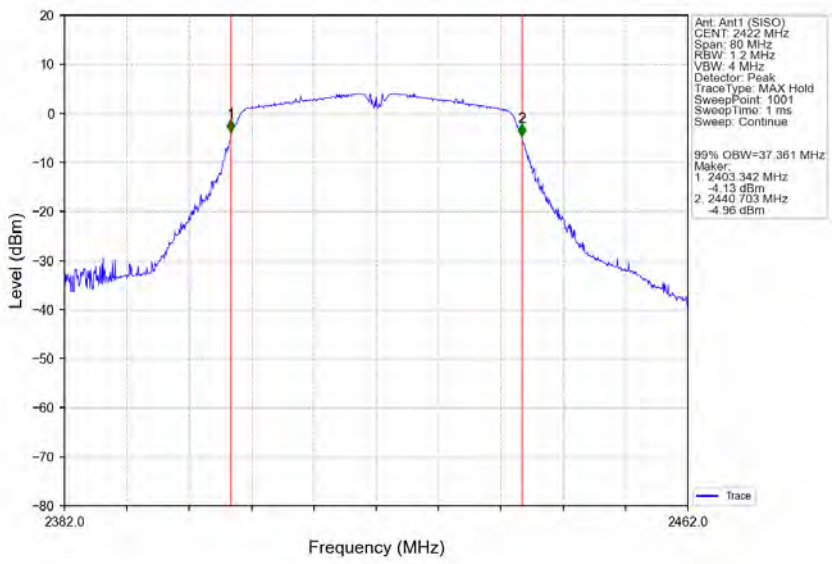
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



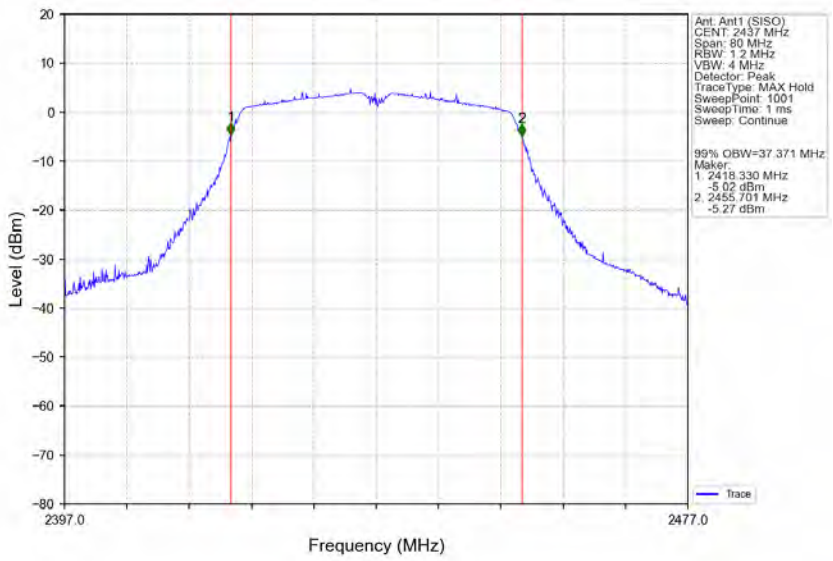
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



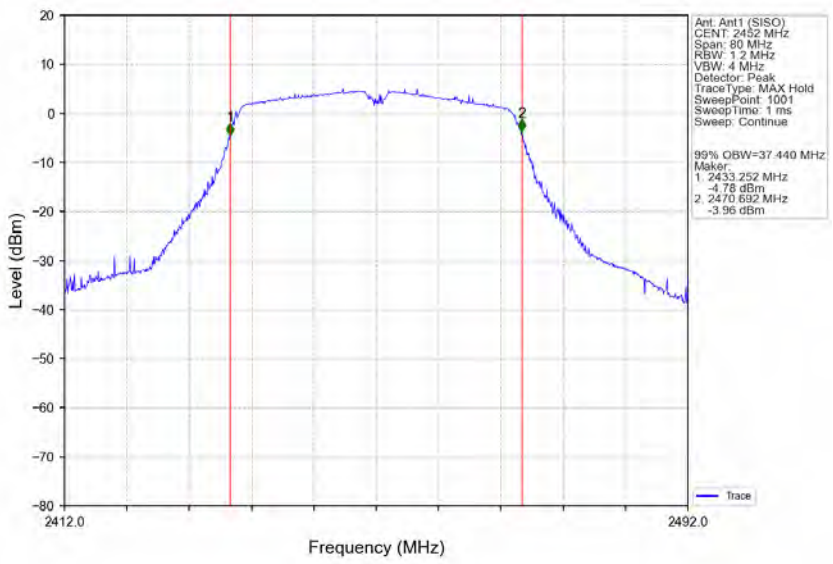
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



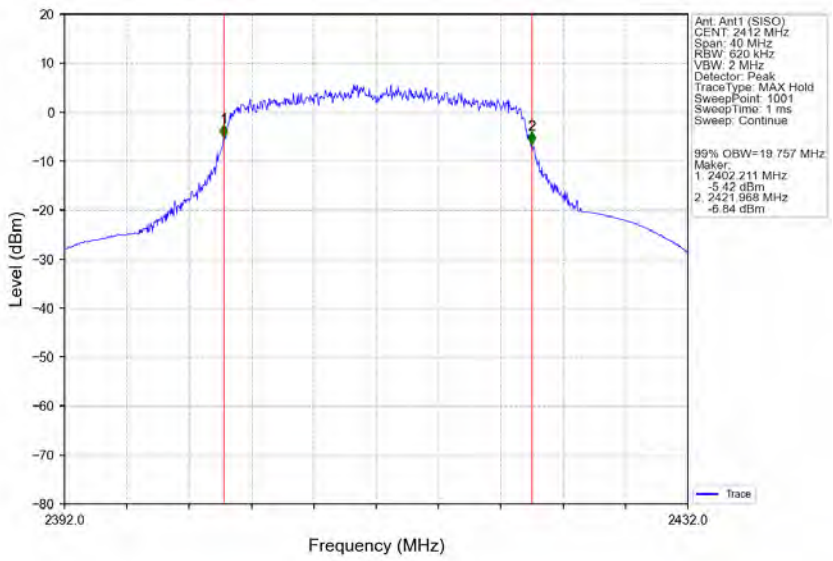
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



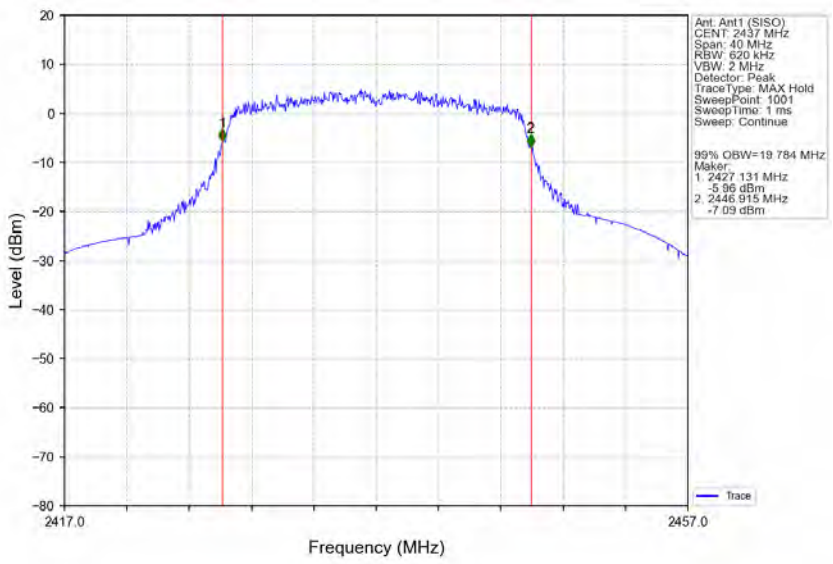
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



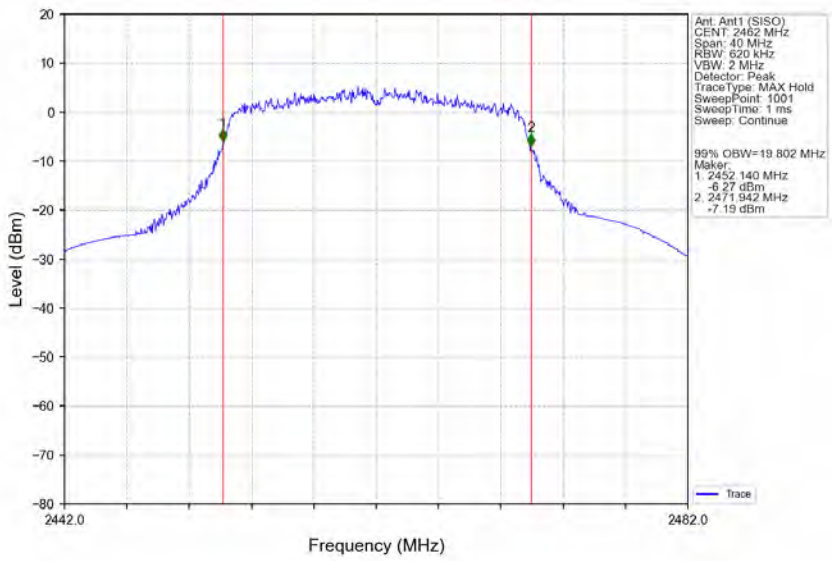
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



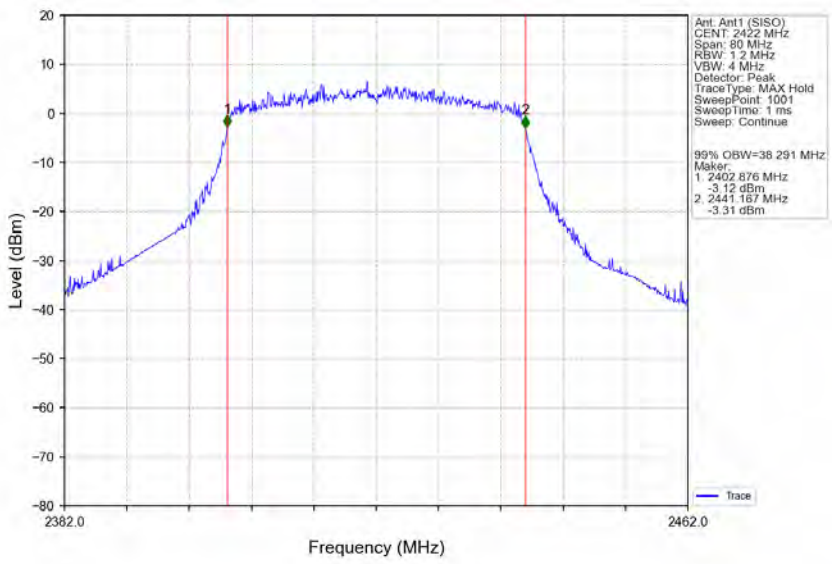
802.11ax(HE20)_MCH_2437MHz_RU242_Left_Ant1 (SISO)_NTNV



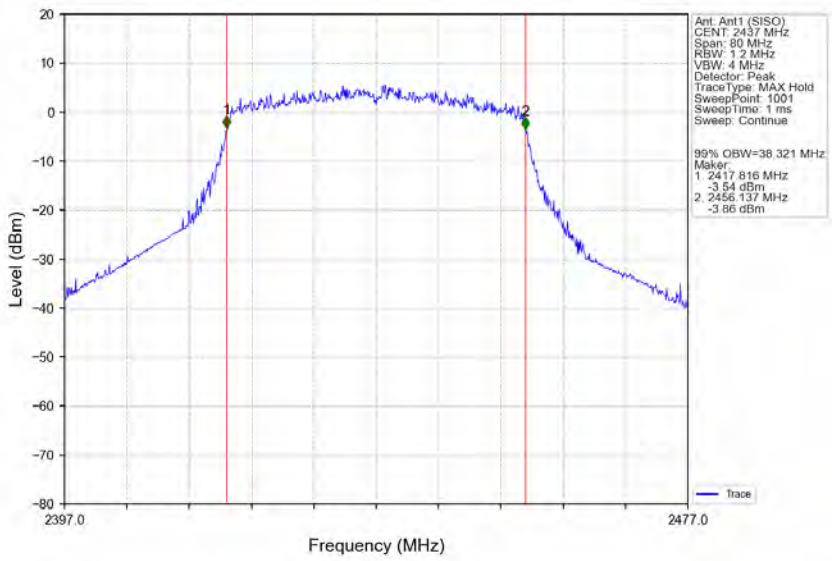
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



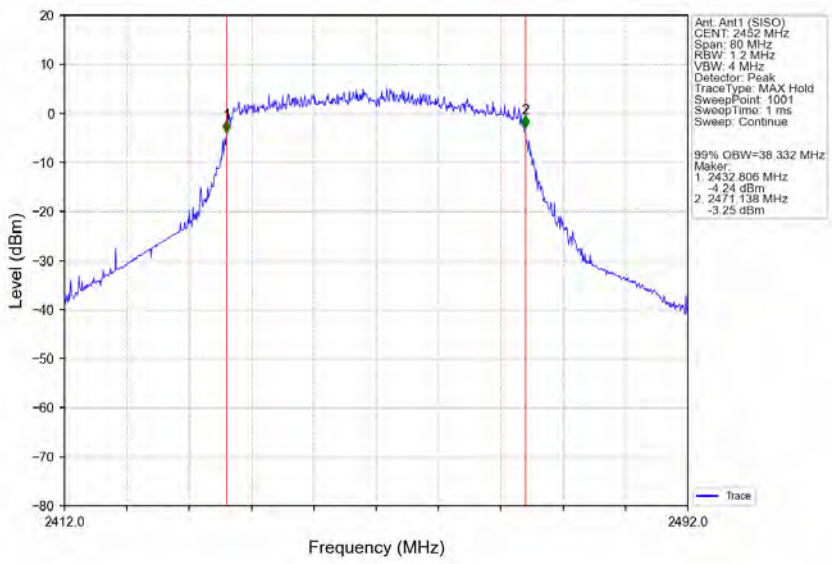
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV

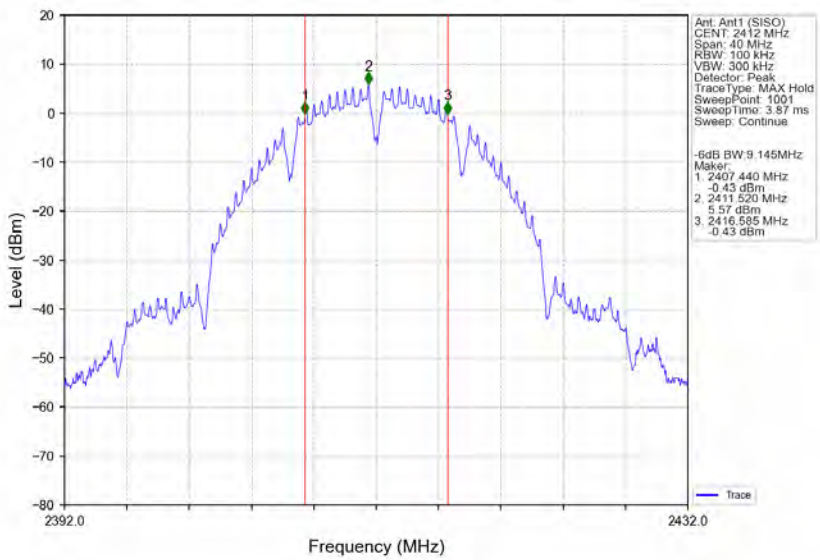


802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



2.2.2 6dB BW

802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



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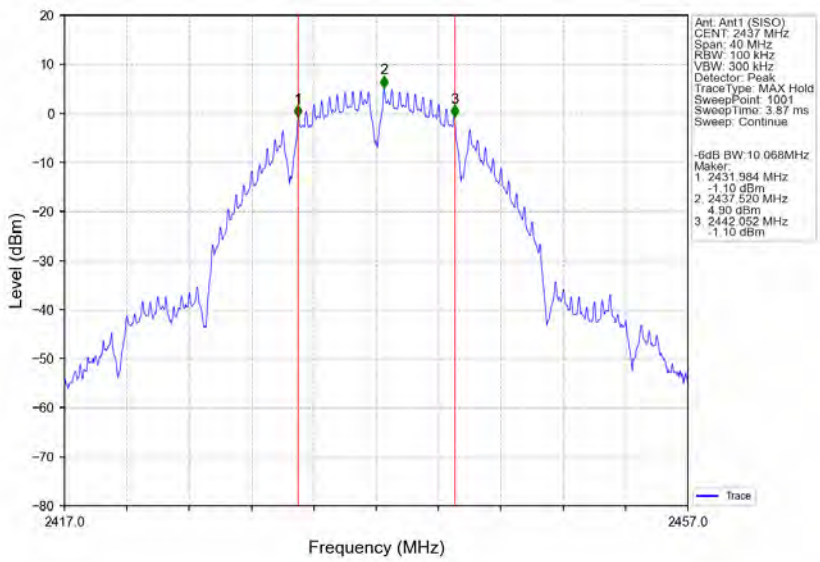

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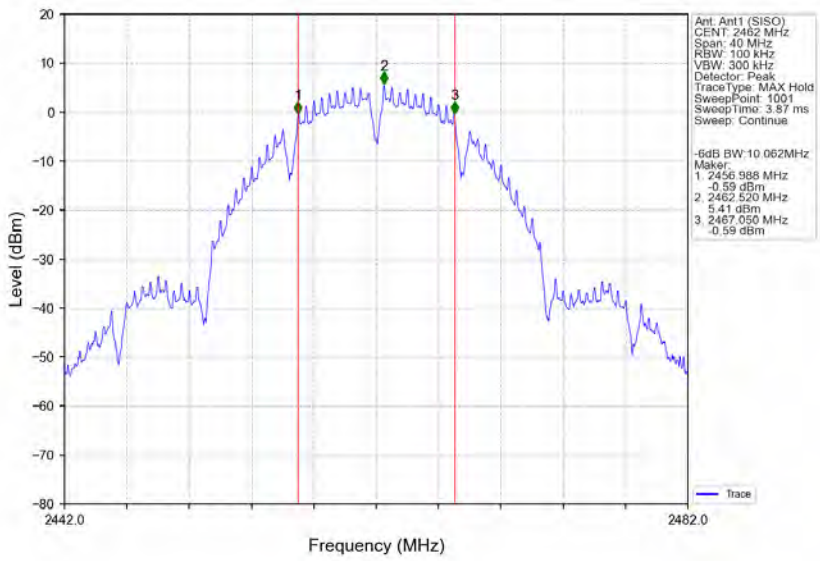

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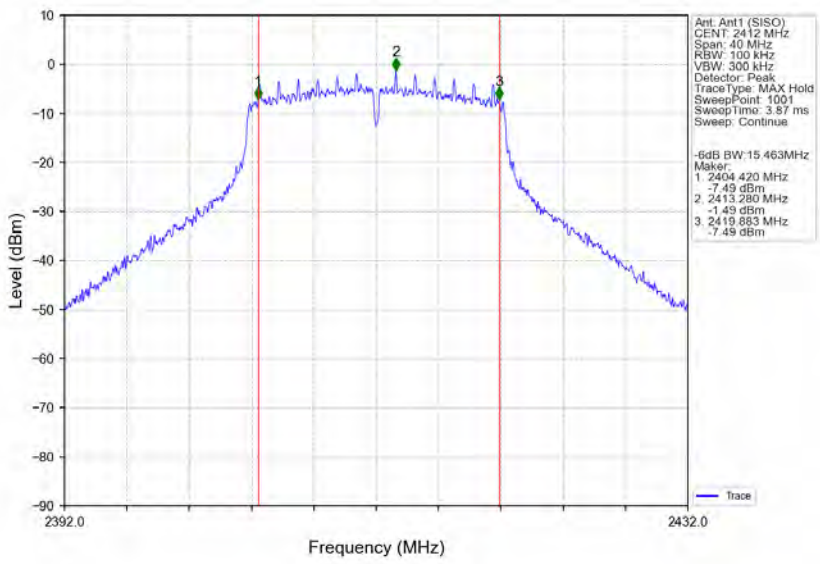
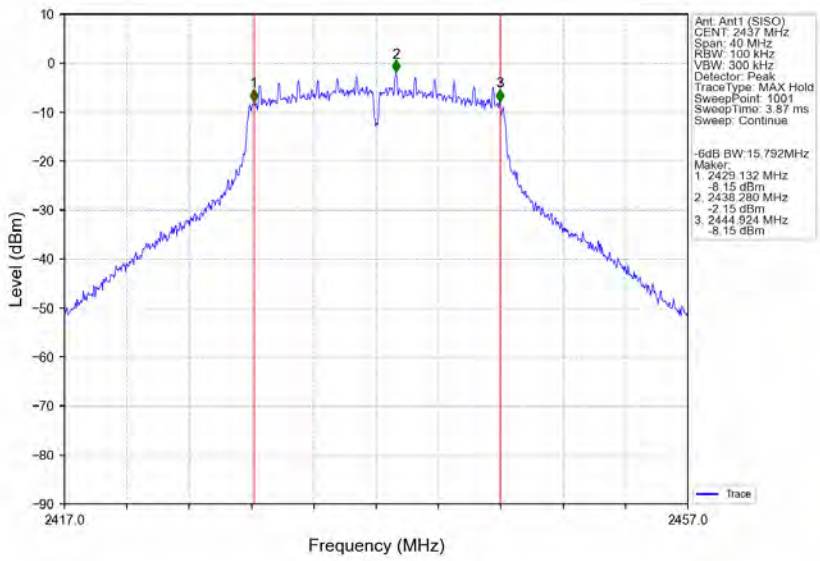
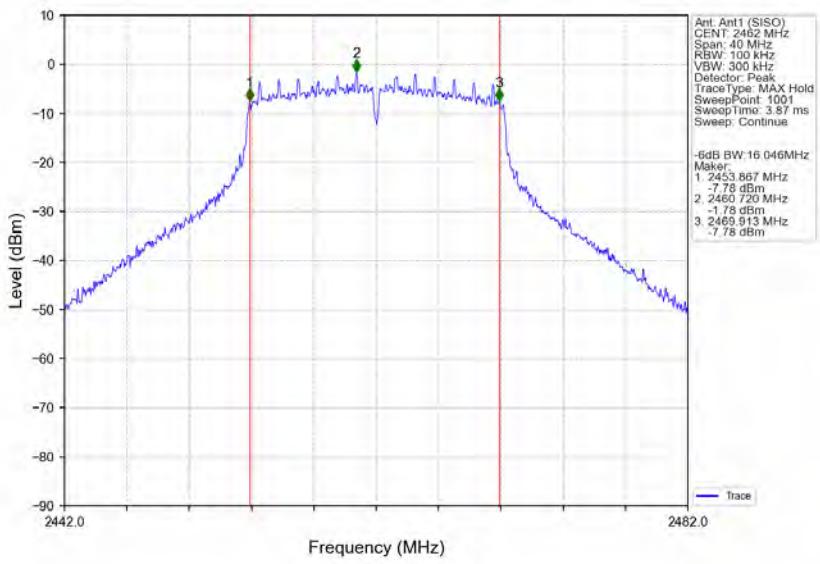


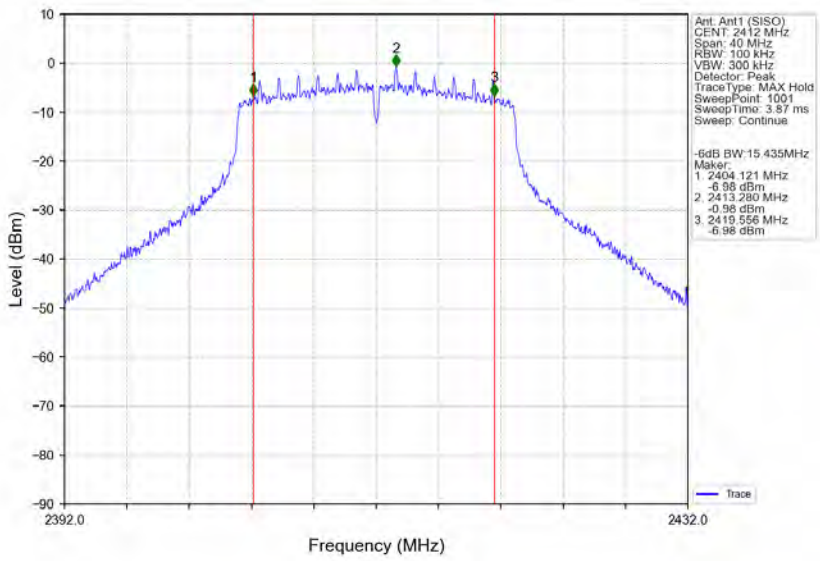
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



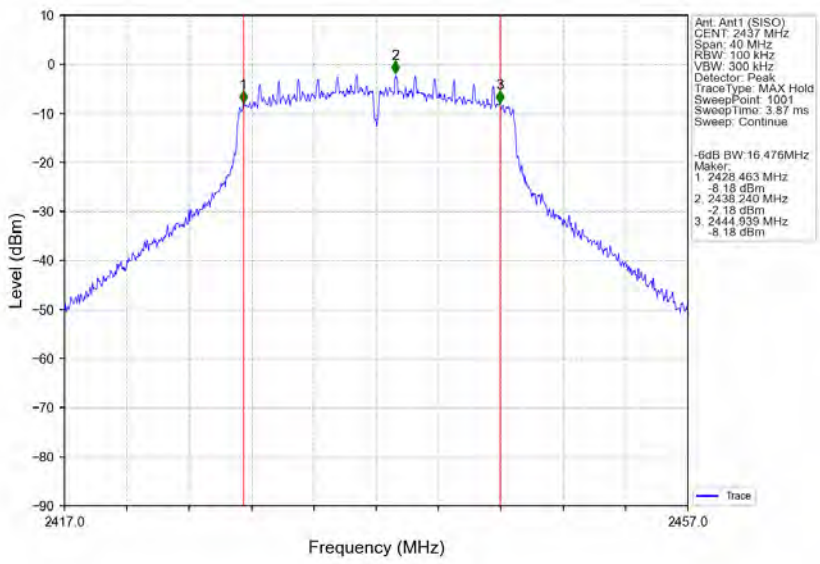
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



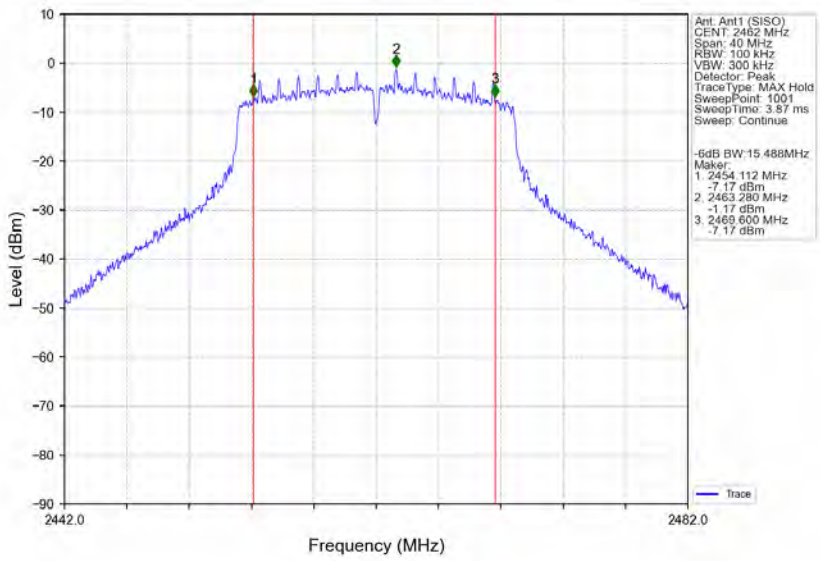
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



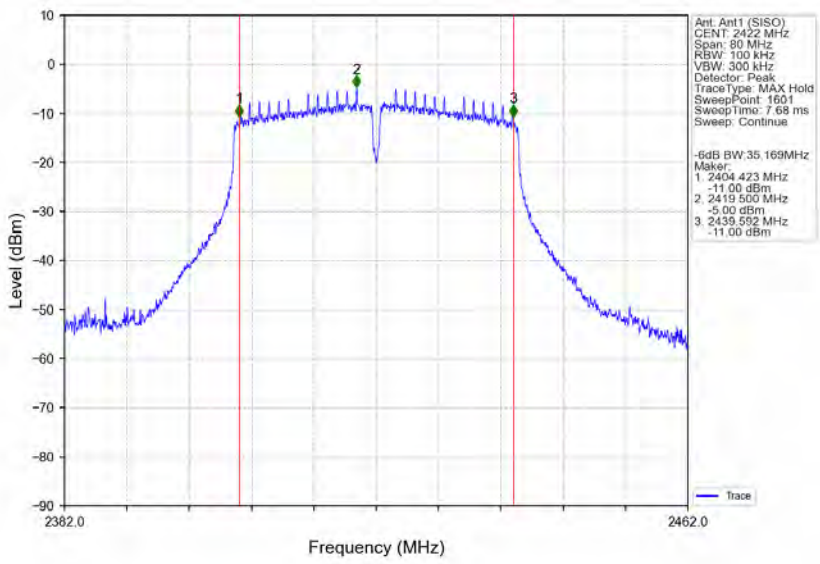
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



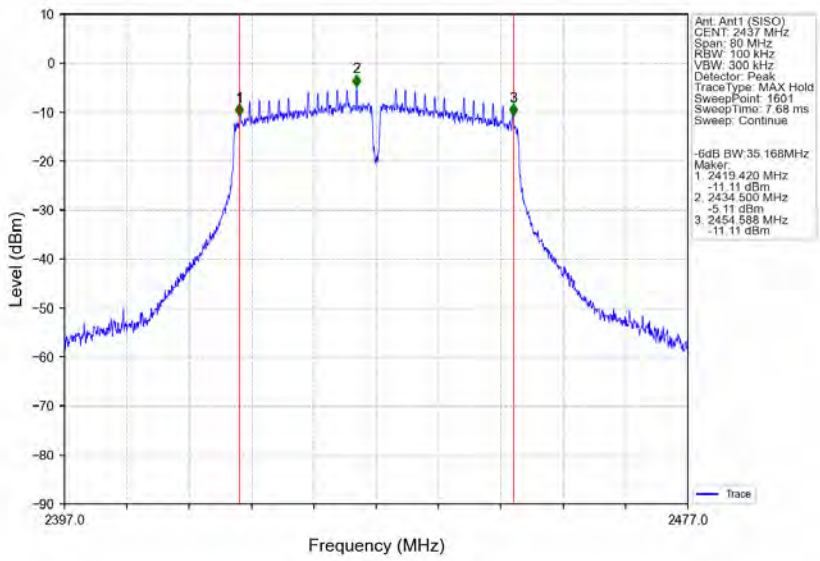
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



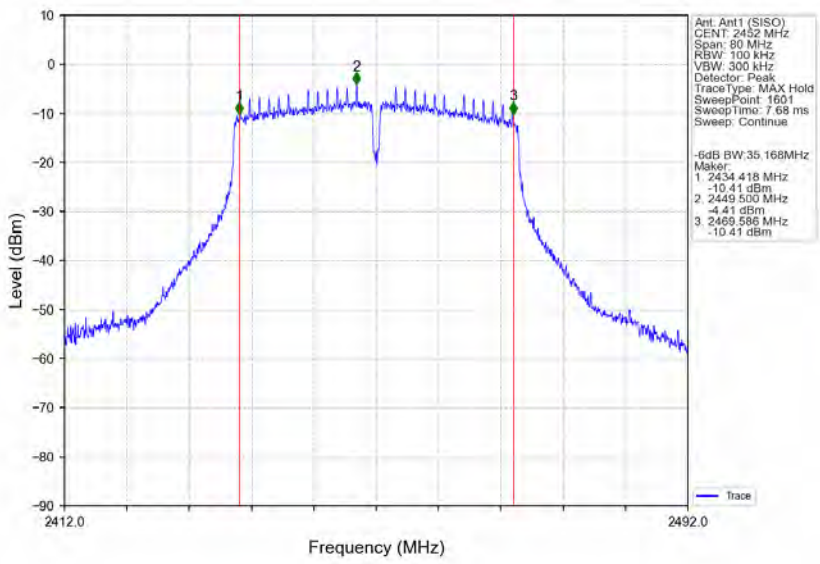
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



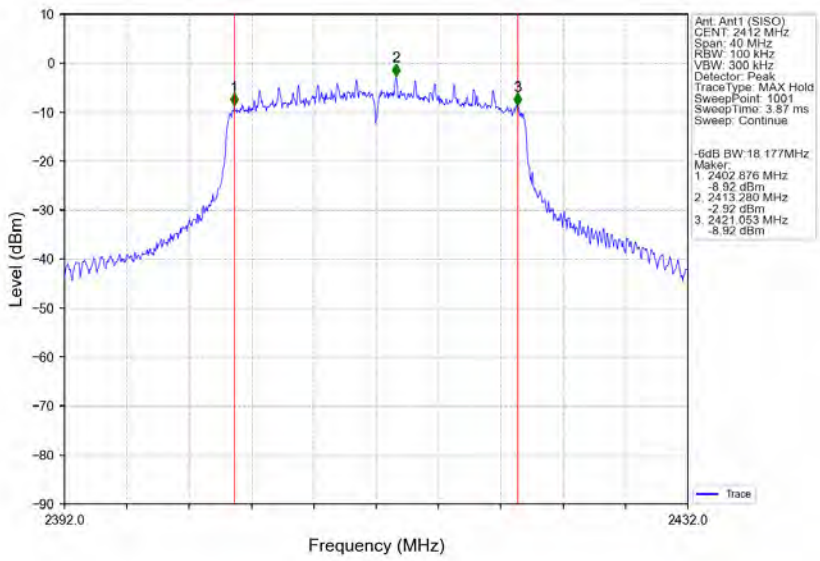
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



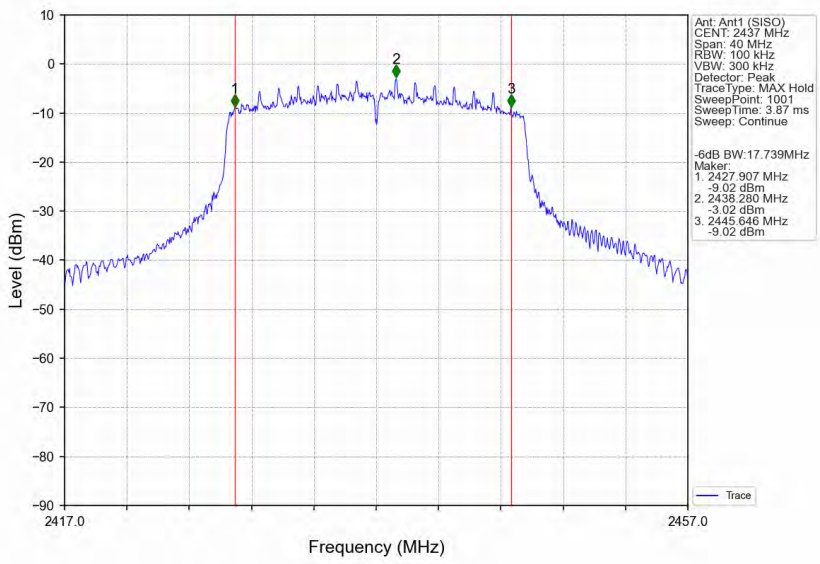
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



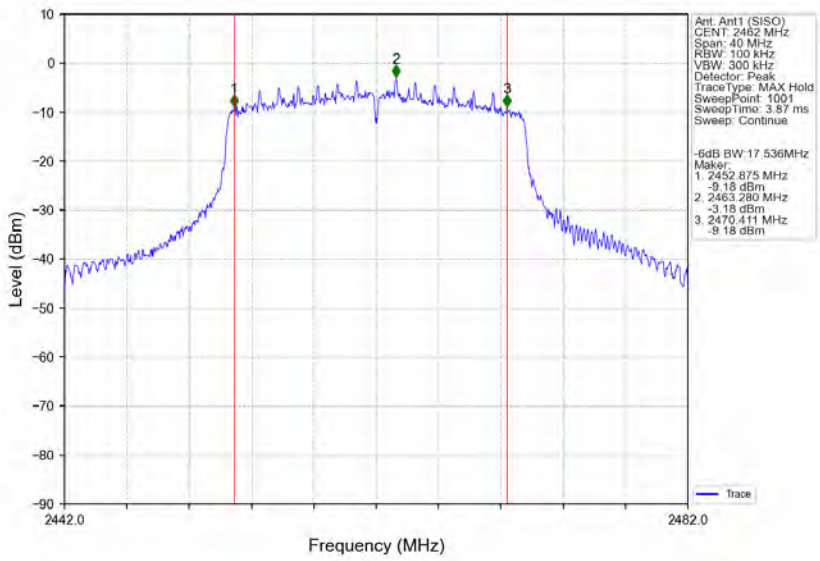
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



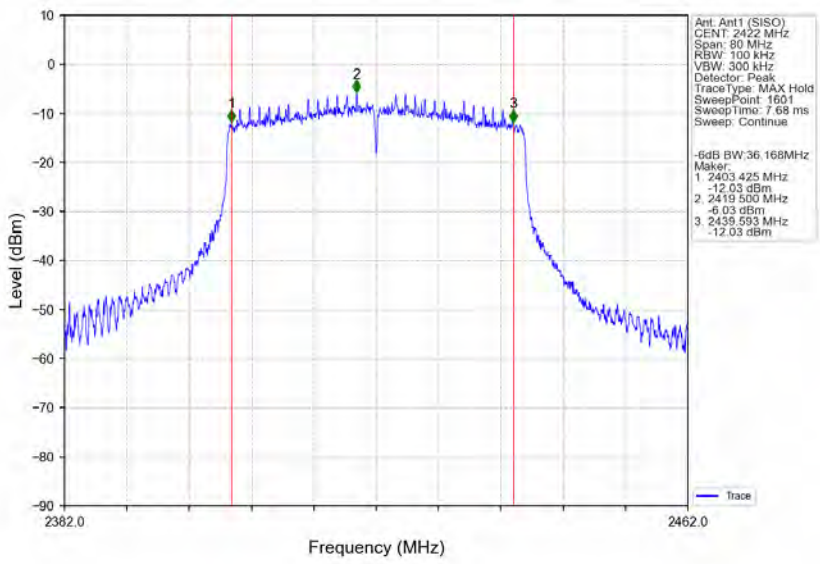
802.11ax(HE20)_MCH_2437MHz_RU242_Left_Ant1 (SISO)_NTNV



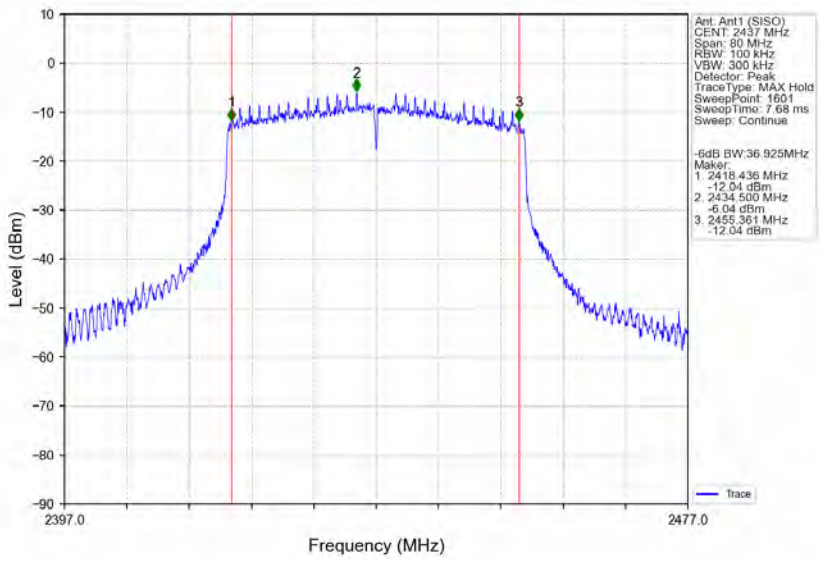
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



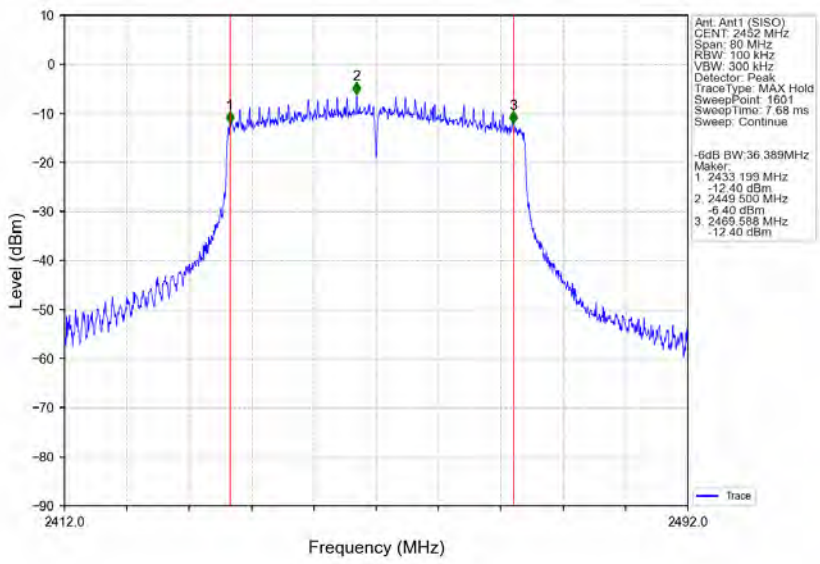
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

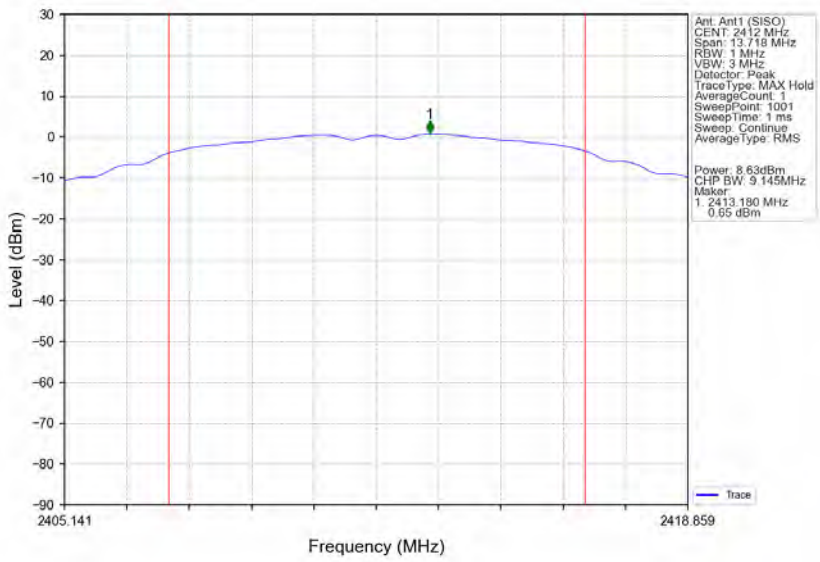
3.1.1 Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Peak Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	8.63	<=30	Pass
		2437	/	/	10.13	<=30	Pass
		2462	/	/	10.60	<=30	Pass
802.11g	SISO	2412	/	/	16.61	<=30	Pass
		2437	/	/	16.03	<=30	Pass
		2462	/	/	16.90	<=30	Pass
802.11n (HT20)	SISO	2412	/	/	16.83	<=30	Pass
		2437	/	/	16.38	<=30	Pass
		2462	/	/	16.58	<=30	Pass
802.11n (HT40)	SISO	2422	/	/	16.12	<=30	Pass
		2437	/	/	16.01	<=30	Pass
		2452	/	/	16.70	<=30	Pass
802.11ax (HE20)	SISO	2412	RU242	Left	16.60	<=30	Pass
		2437	RU242	Left	16.38	<=30	Pass
		2462	RU242	Left	16.26	<=30	Pass
802.11ax (HE40)	SISO	2422	RU484	Left	16.60	<=30	Pass
		2437	RU484	Left	16.63	<=30	Pass
		2452	RU484	Left	16.04	<=30	Pass
Note1: Antenna Gain: Ant1: 3.90dBi;							

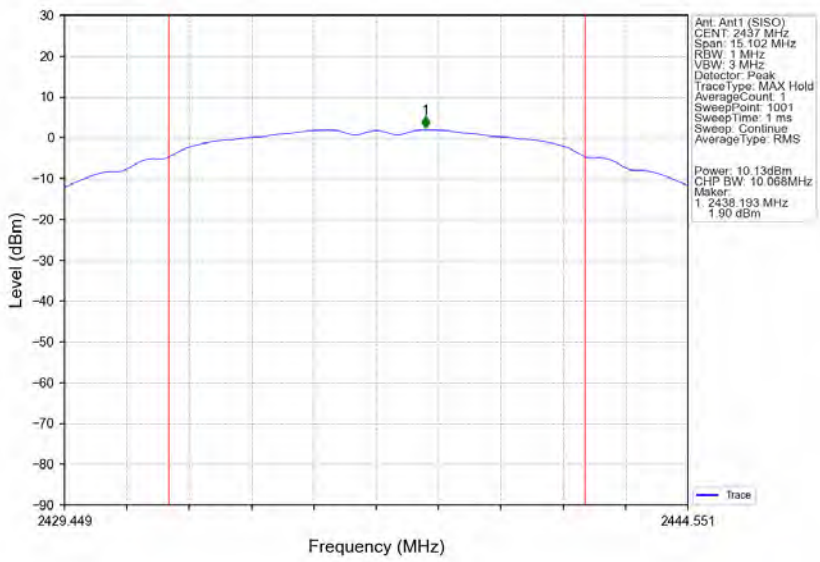
3.2 Test Graph

3.2.1 Power

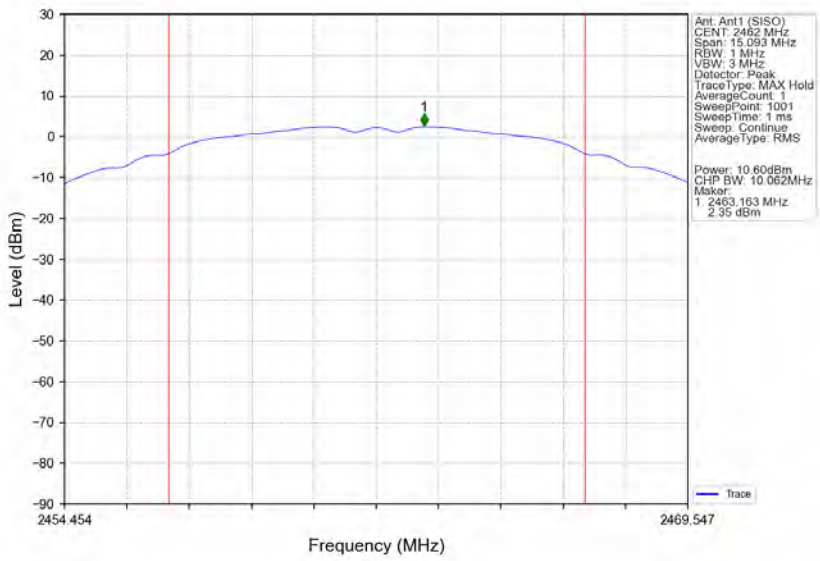
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



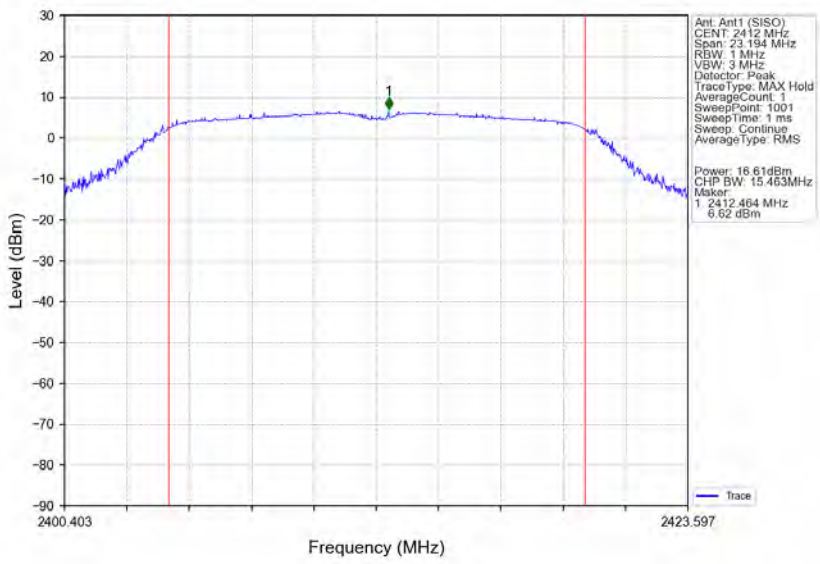
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



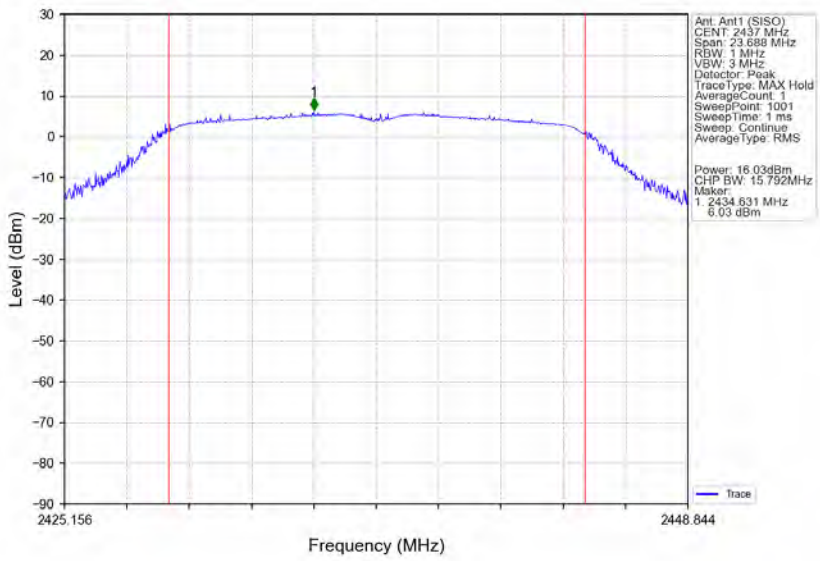
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



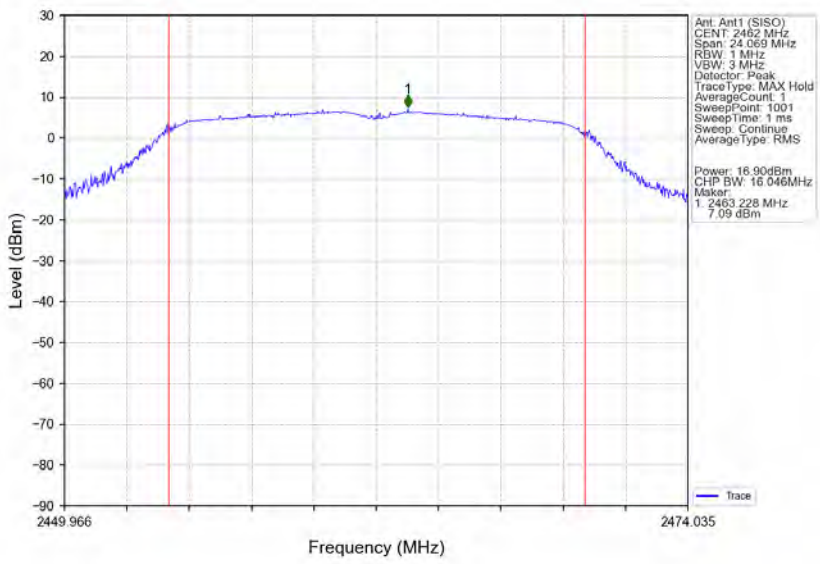
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



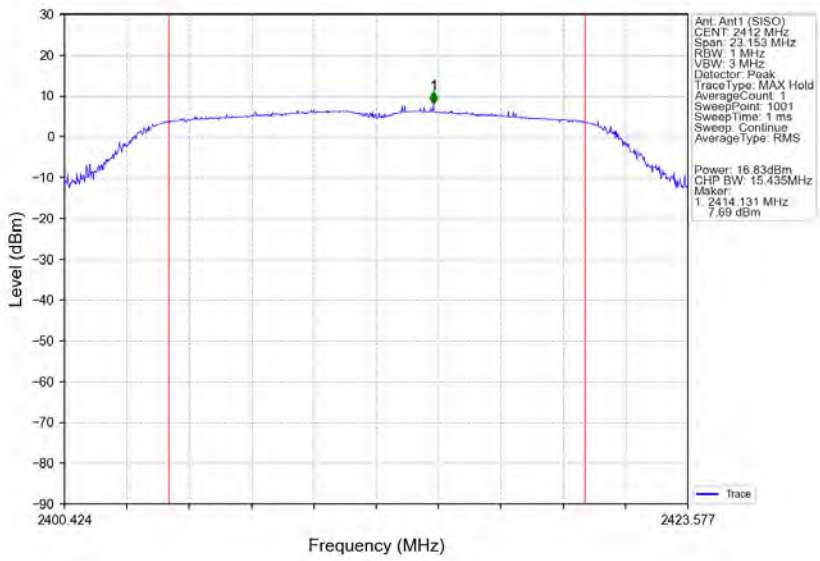
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



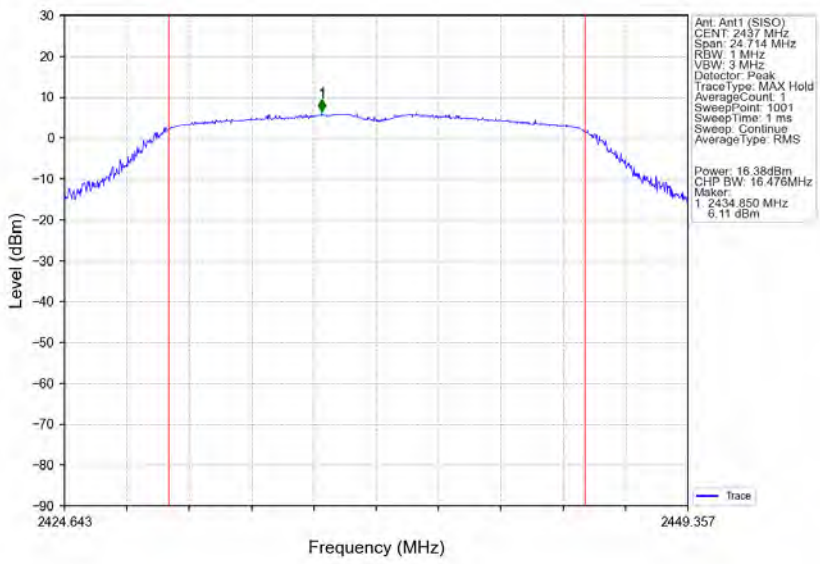
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



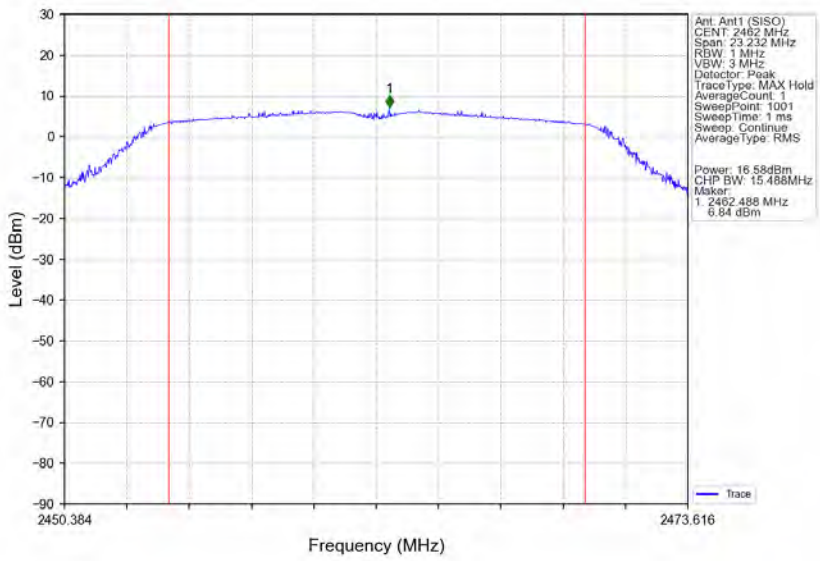
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



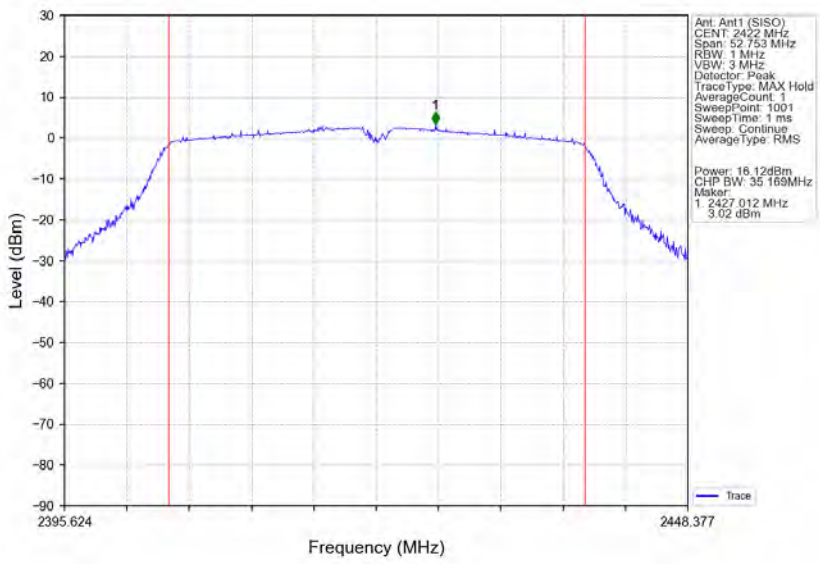
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



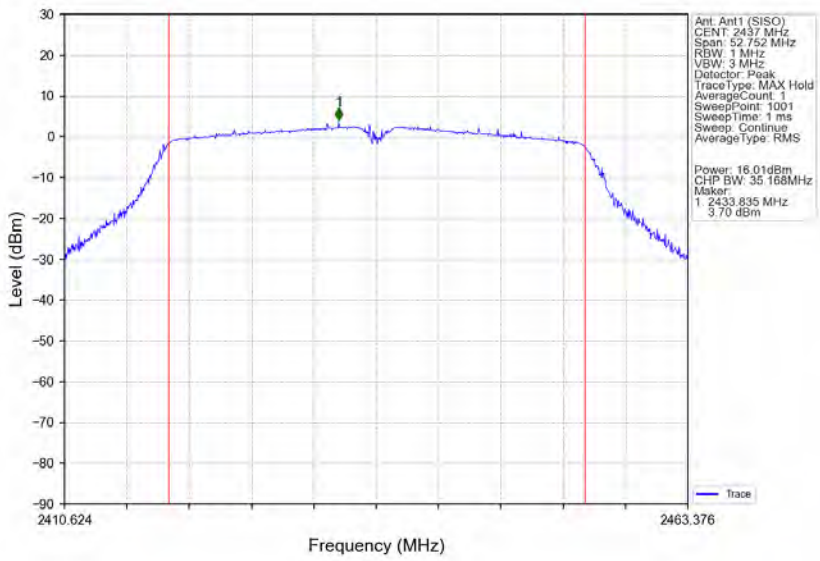
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



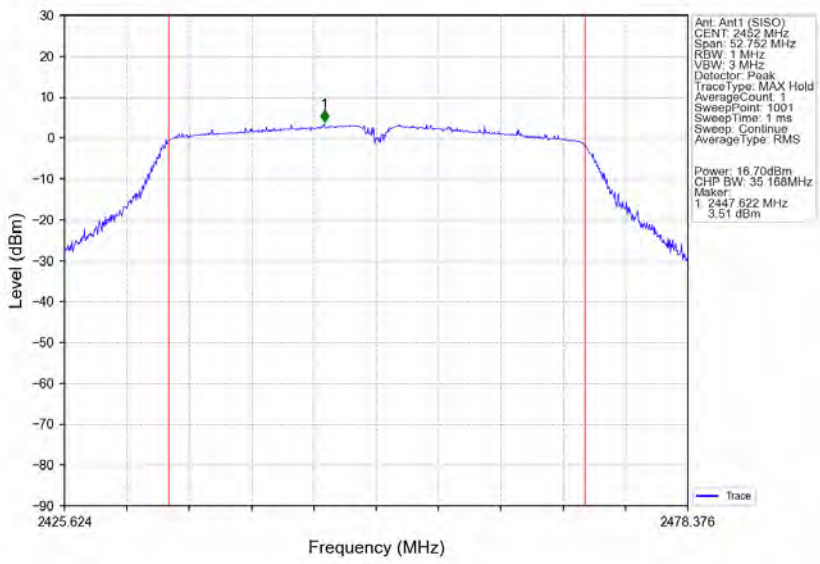
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



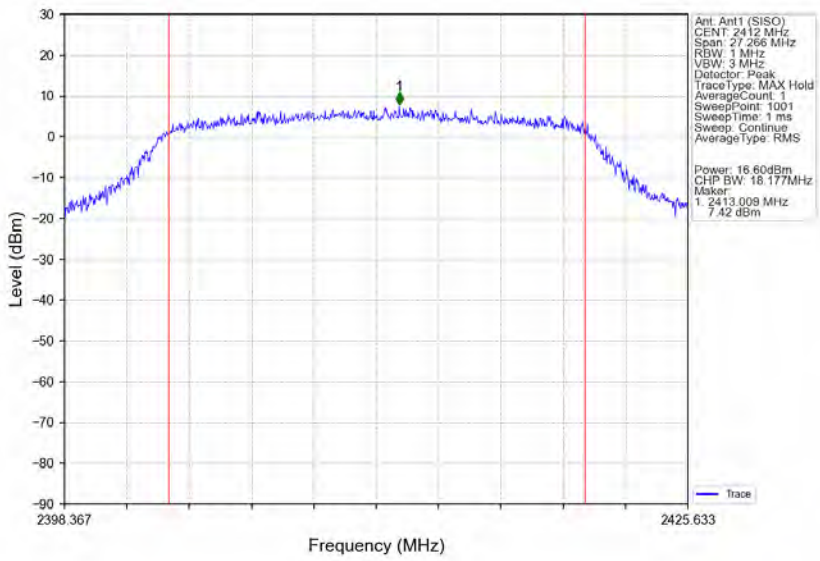
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



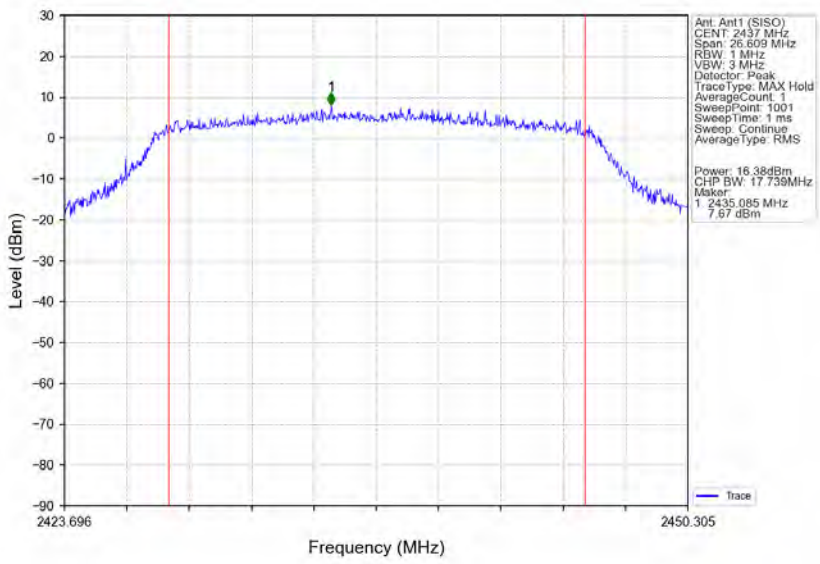
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



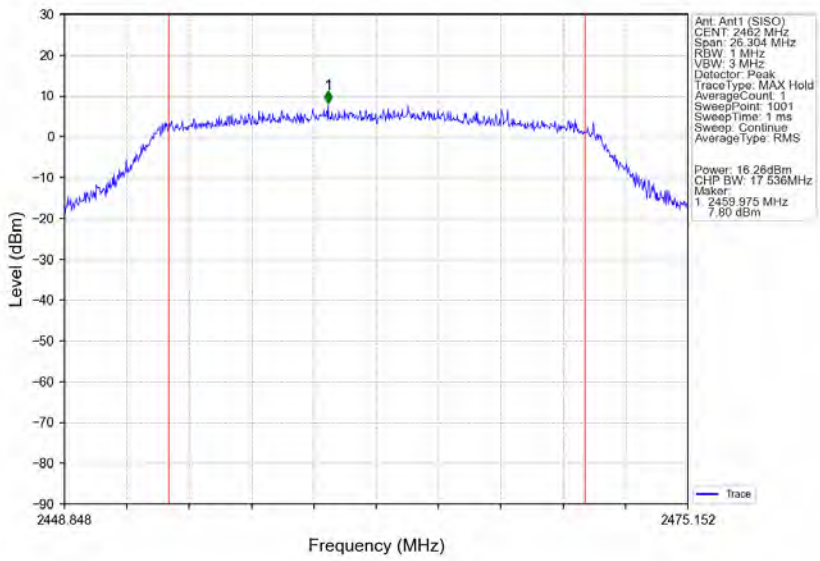
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



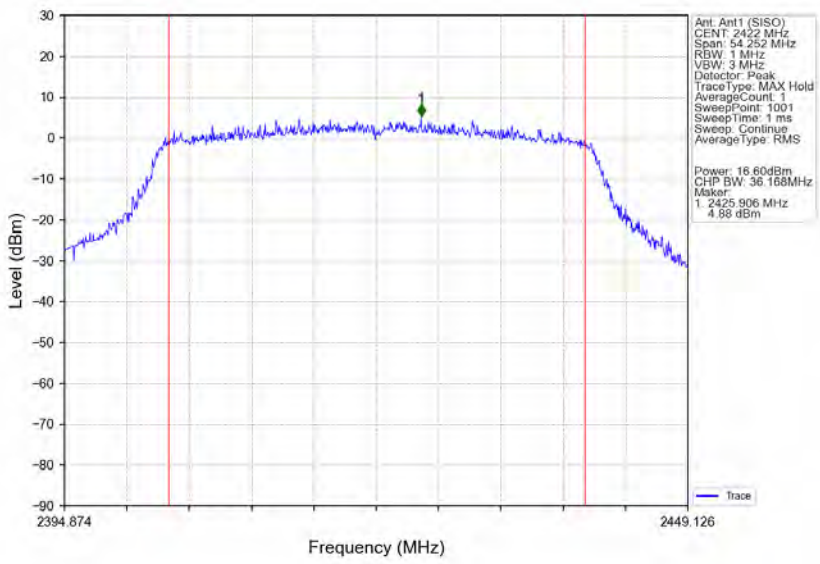
802.11ax(HE20)_MCH_2437MHz_RU242_Left_Ant1 (SISO)_NTNV



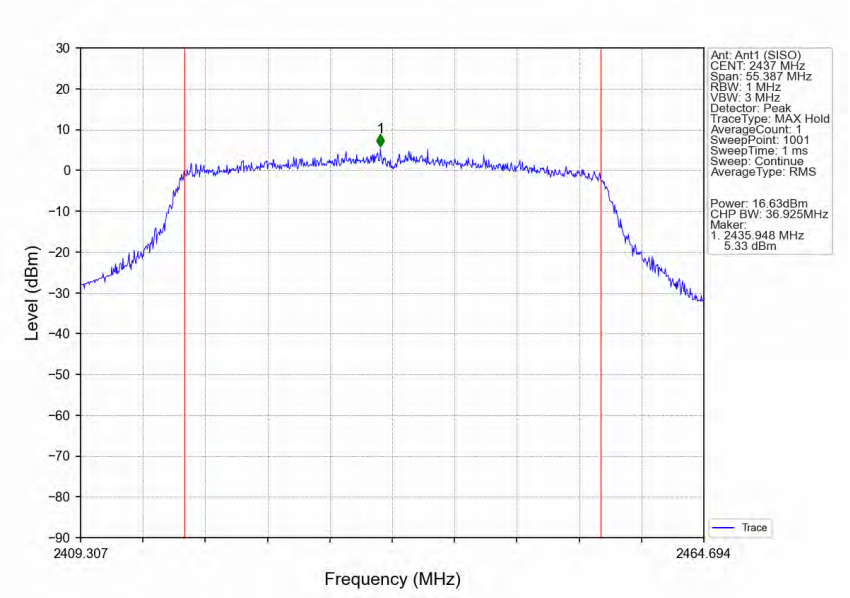
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



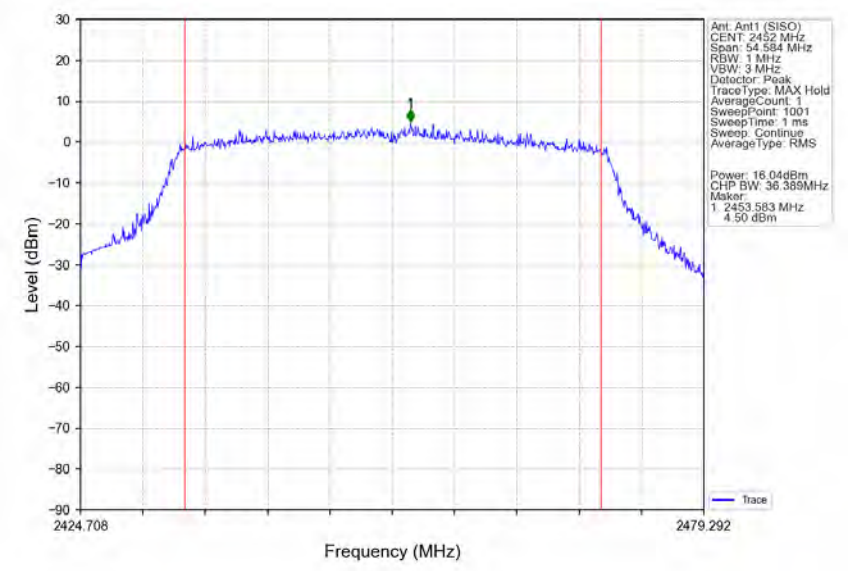
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



4. Maximum Power Spectral Density

4.1 Test Result

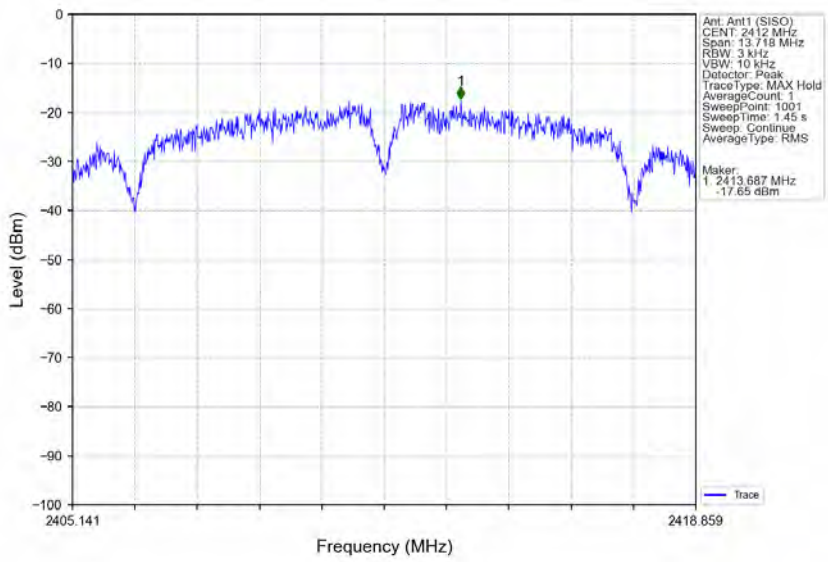
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum PSD (dBm/3kHz)		Verdict
					ANT1	Limit	
802.11b	SISO	2412	/	/	-17.65	<=8	Pass
		2437	/	/	-16.00	<=8	Pass
		2462	/	/	-15.73	<=8	Pass
802.11g	SISO	2412	/	/	-16.15	<=8	Pass
		2437	/	/	-16.92	<=8	Pass
		2462	/	/	-16.55	<=8	Pass
802.11n (HT20)	SISO	2412	/	/	-16.01	<=8	Pass
		2437	/	/	-16.16	<=8	Pass
		2462	/	/	-14.93	<=8	Pass
802.11n (HT40)	SISO	2422	/	/	-19.19	<=8	Pass
		2437	/	/	-19.53	<=8	Pass
		2452	/	/	-18.99	<=8	Pass
802.11ax (HE20)	SISO	2412	RU242	Left	-17.13	<=8	Pass
		2437	RU242	Left	-19.32	<=8	Pass
		2462	RU242	Left	-18.45	<=8	Pass
802.11ax (HE40)	SISO	2422	RU484	Left	-22.15	<=8	Pass
		2437	RU484	Left	-20.71	<=8	Pass
		2452	RU484	Left	-20.47	<=8	Pass
Note1: Antenna Gain: Ant1: 3.90dBi;							

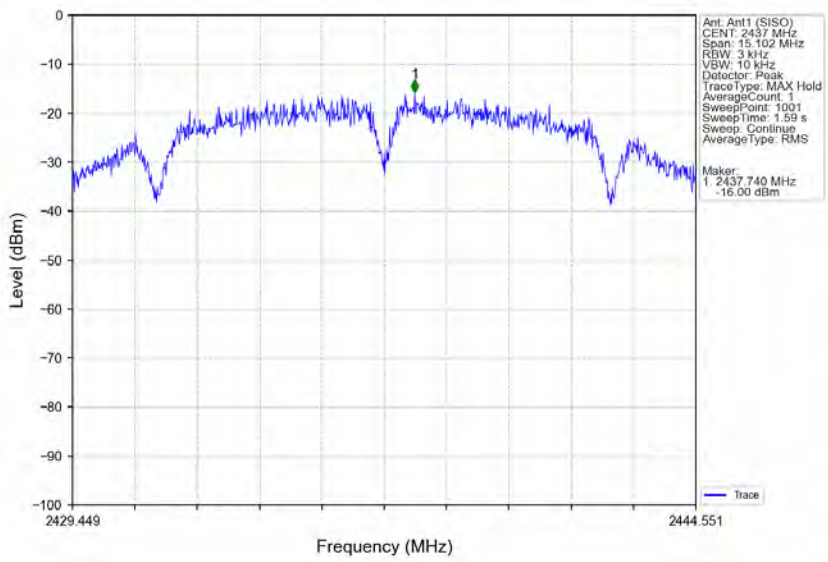
4.2 Test Graph

4.2.1 PSD

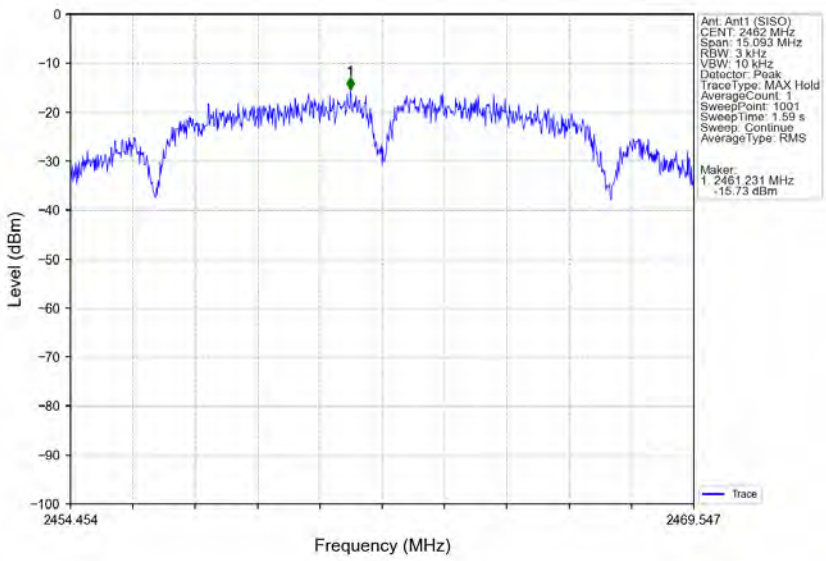
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



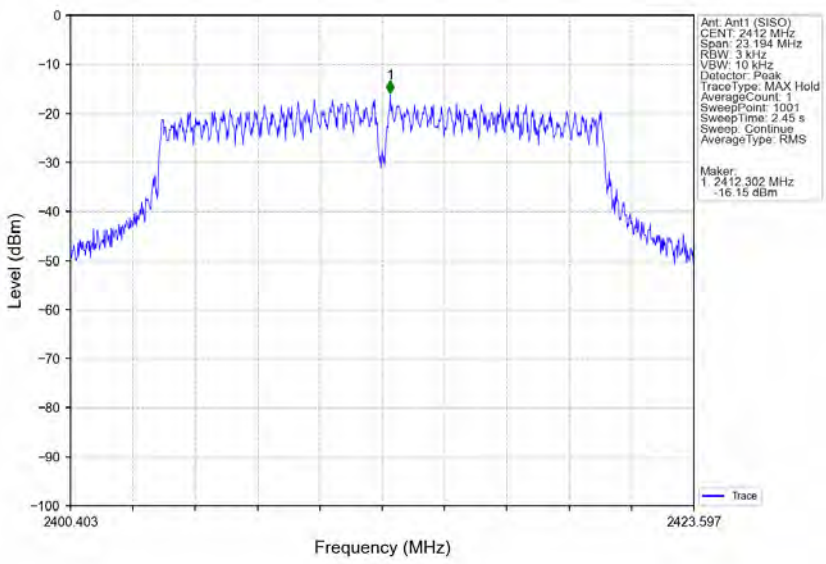
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



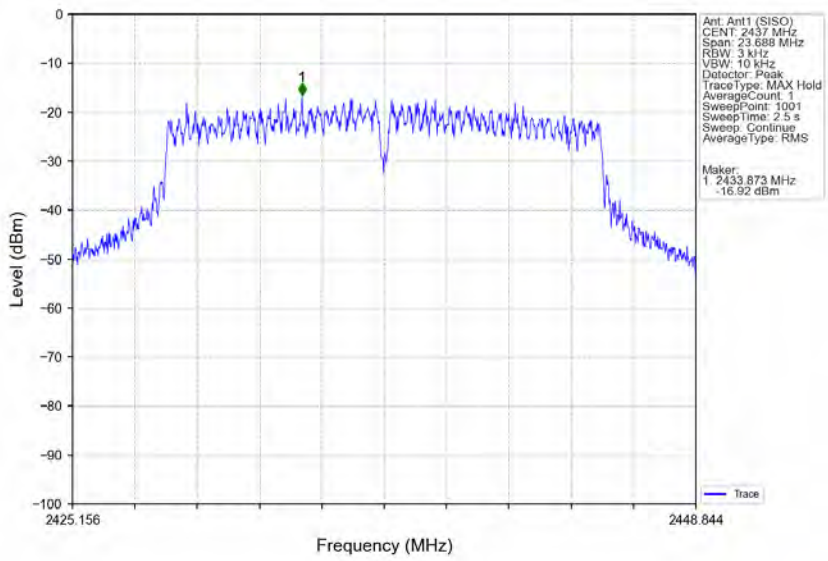
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



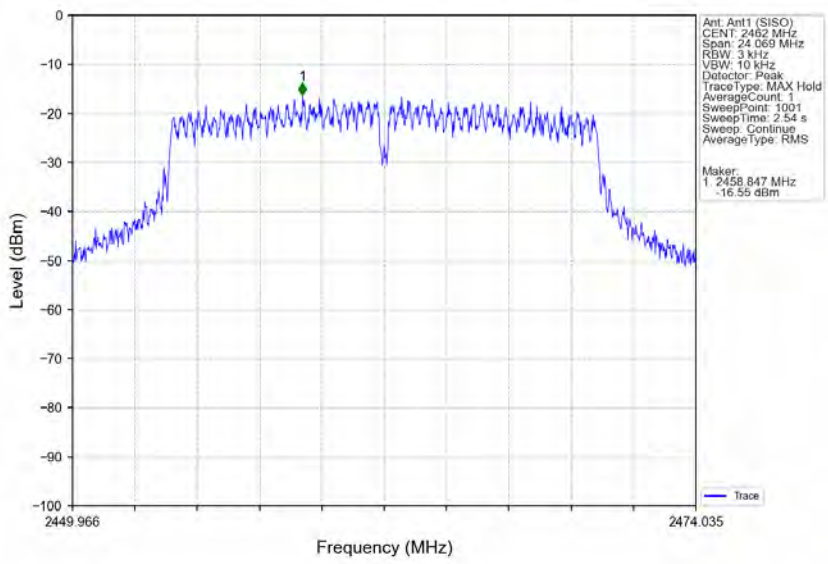
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



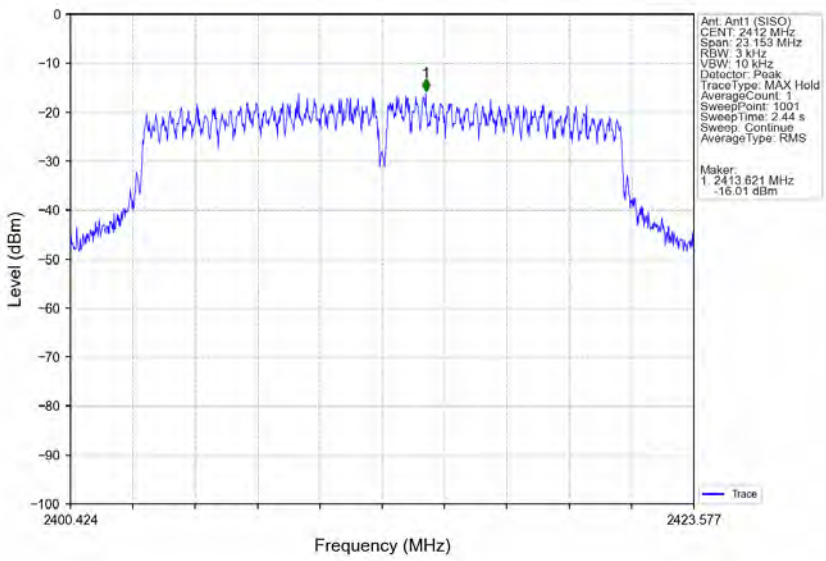
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



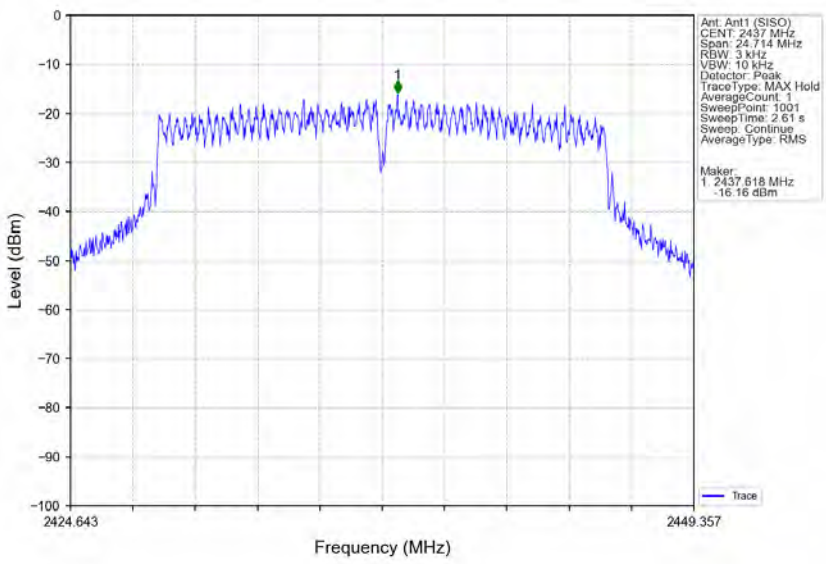
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



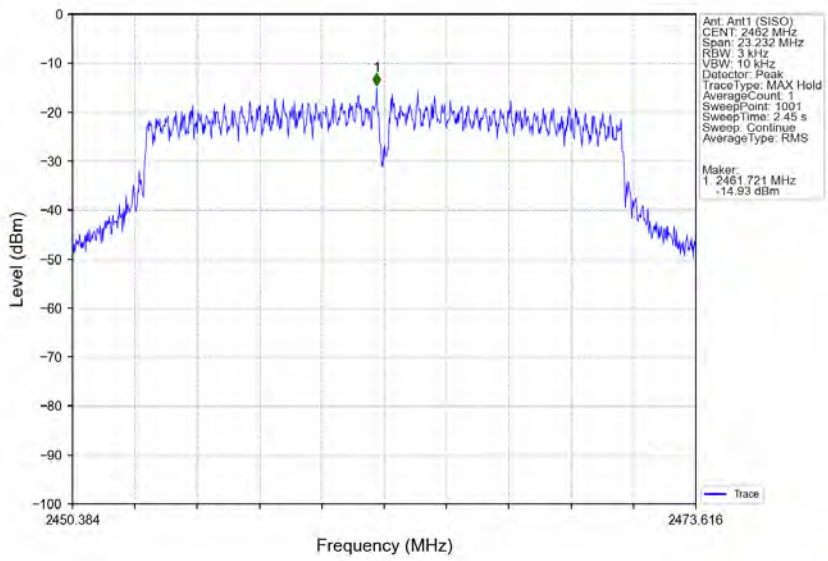
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



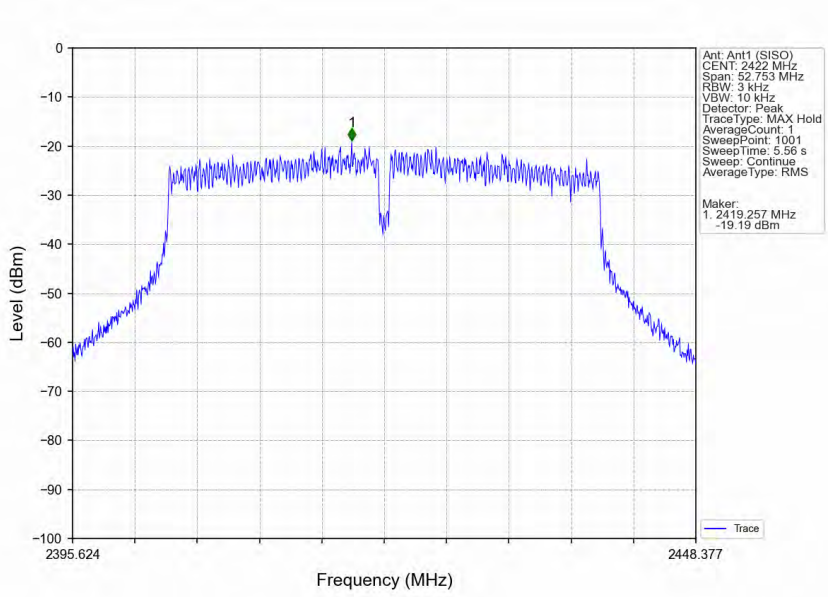
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



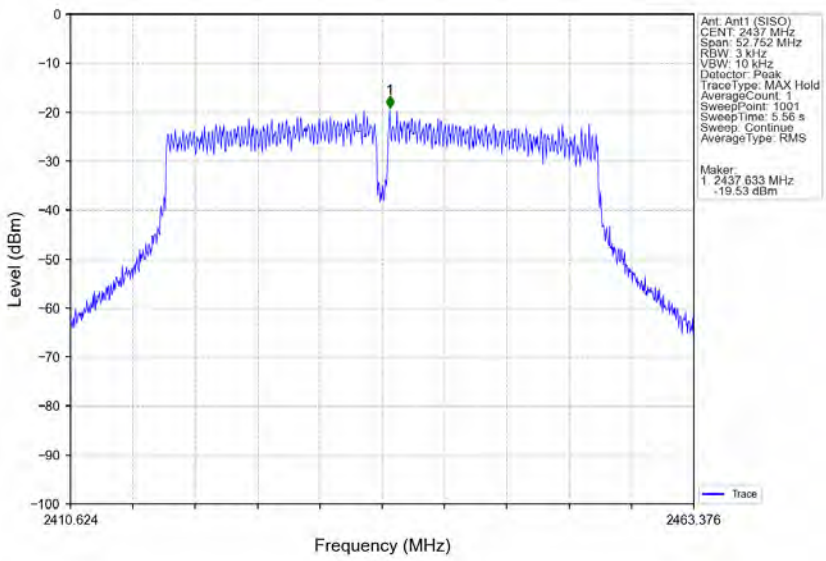
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



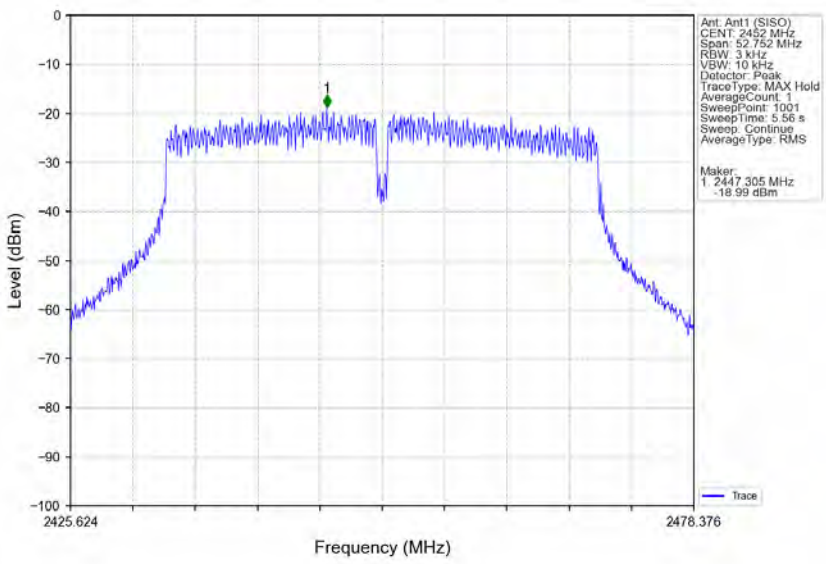
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



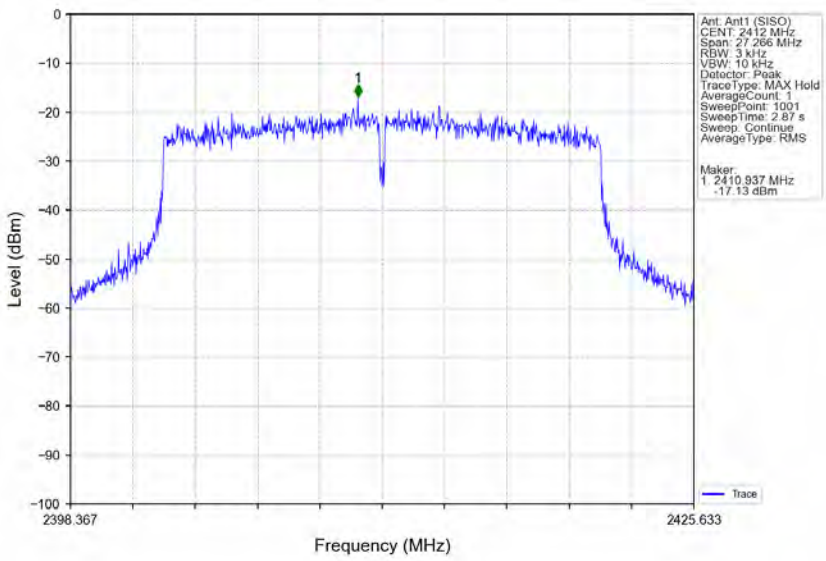
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



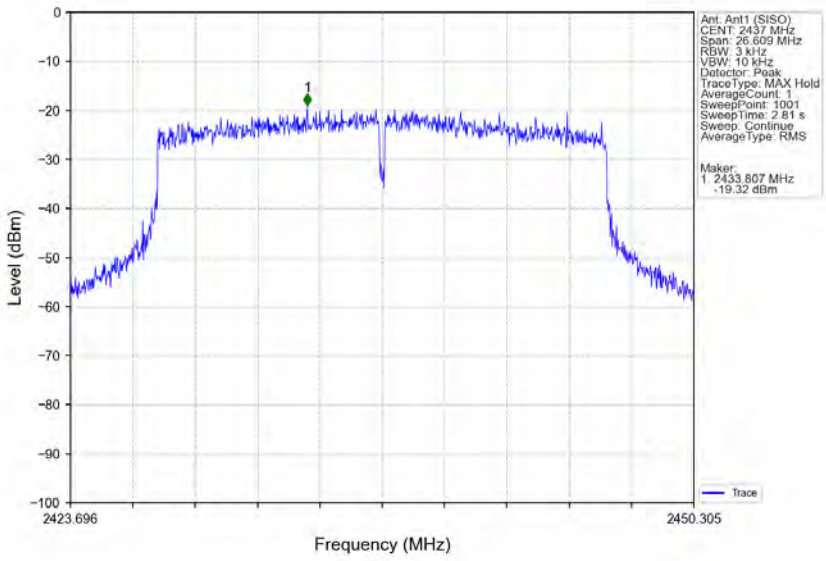
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



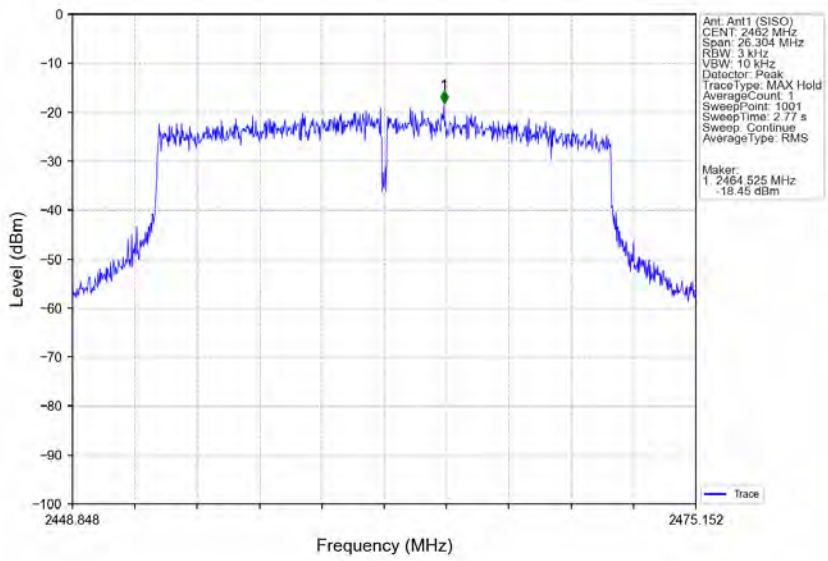
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



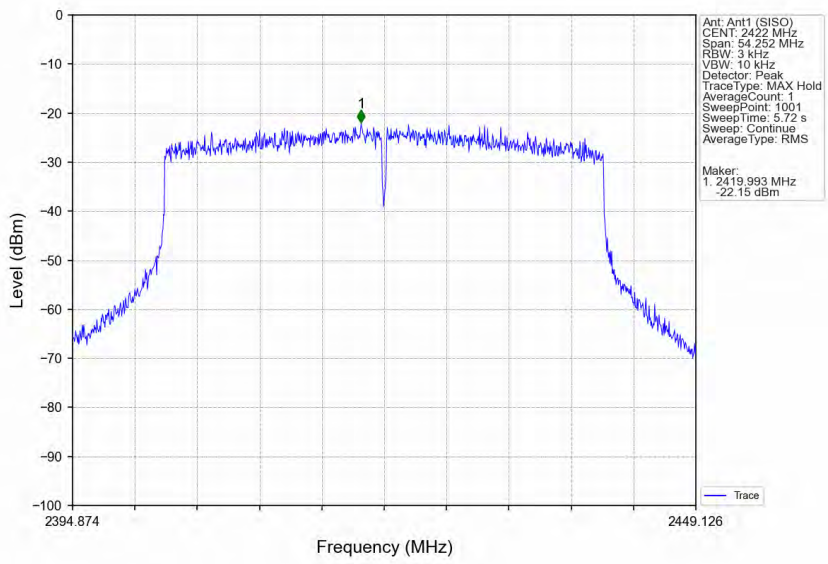
802.11ax(HE20)_MCH_2437MHz_RU242_Left_Ant1 (SISO)_NTNV



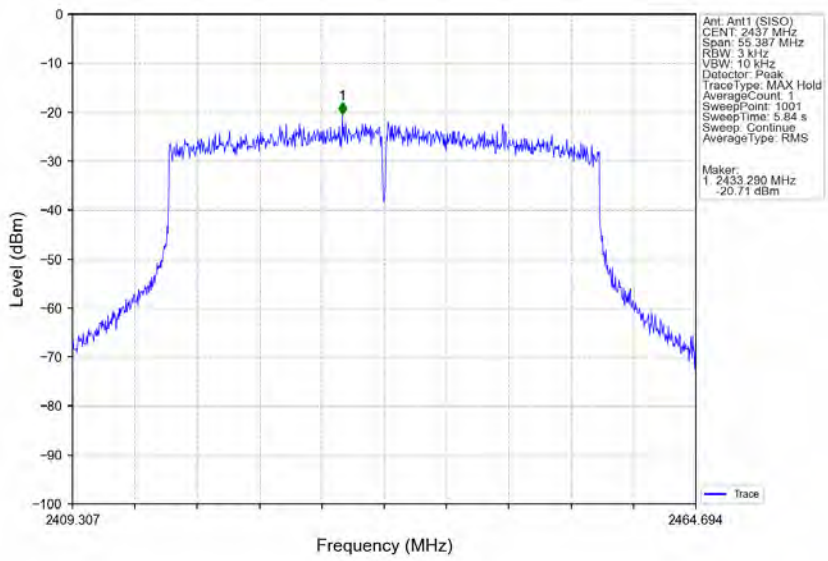
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



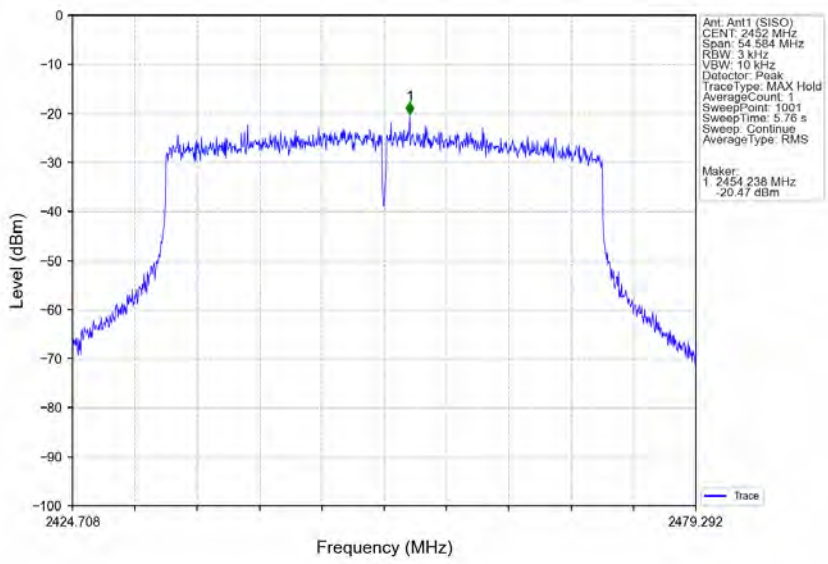
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)
802.11b	SISO	2412	/	/	1	5.61
		2437	/	/	1	4.95
		2462	/	/	1	5.42
802.11g	SISO	2412	/	/	1	-1.46
		2437	/	/	1	-2.07
		2462	/	/	1	-1.23
802.11n (HT20)	SISO	2412	/	/	1	-1.21
		2437	/	/	1	-1.59
		2462	/	/	1	-1.20
802.11n (HT40)	SISO	2422	/	/	1	-5.06
		2437	/	/	1	-5.06
		2452	/	/	1	-4.75
802.11ax (HE20)	SISO	2412	RU242	Left	1	-2.92
		2437	RU242	Left	1	-3.27
		2462	RU242	Left	1	-3.25
802.11ax (HE40)	SISO	2422	RU484	Left	1	-5.94
		2437	RU484	Left	1	-6.04
		2452	RU484	Left	1	-6.40
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.						

5.1.2 CSE

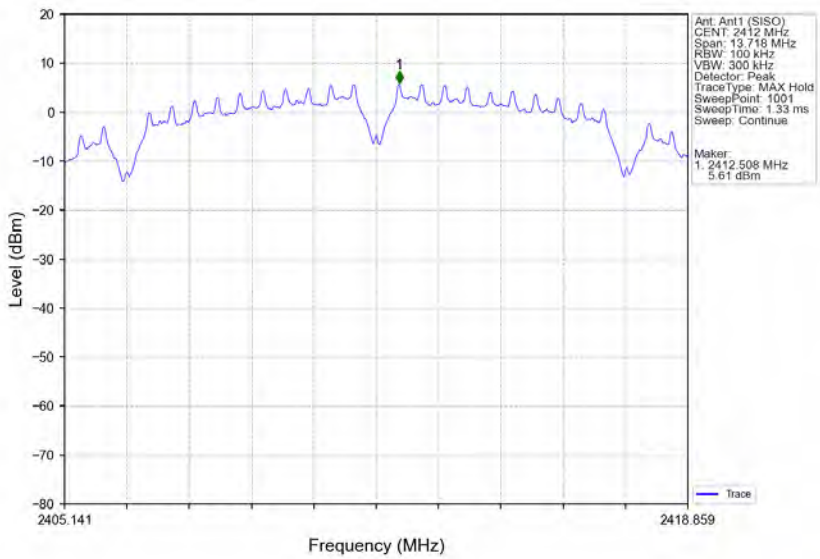
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	/	/	1	5.61	-14.39	Pass
		2437	/	/	1	5.61	-14.39	Pass
		2462	/	/	1	5.61	-14.39	Pass
802.11g	SISO	2412	/	/	1	-1.23	-21.23	Pass
		2437	/	/	1	-1.23	-21.23	Pass
		2462	/	/	1	-1.23	-21.23	Pass
802.11n (HT20)	SISO	2412	/	/	1	-1.20	-21.20	Pass
		2437	/	/	1	-1.20	-21.20	Pass
		2462	/	/	1	-1.20	-21.20	Pass
802.11n (HT40)	SISO	2422	/	/	1	-4.75	-24.75	Pass
		2437	/	/	1	-4.75	-24.75	Pass
		2452	/	/	1	-4.75	-24.75	Pass
802.11ax (HE20)	SISO	2412	RU242	Left	1	-2.92	-22.92	Pass
		2437	RU242	Left	1	-2.92	-22.92	Pass
		2462	RU242	Left	1	-2.92	-22.92	Pass
802.11ax (HE40)	SISO	2422	RU484	Left	1	-5.94	-25.94	Pass
		2437	RU484	Left	1	-5.94	-25.94	Pass
		2452	RU484	Left	1	-5.94	-25.94	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

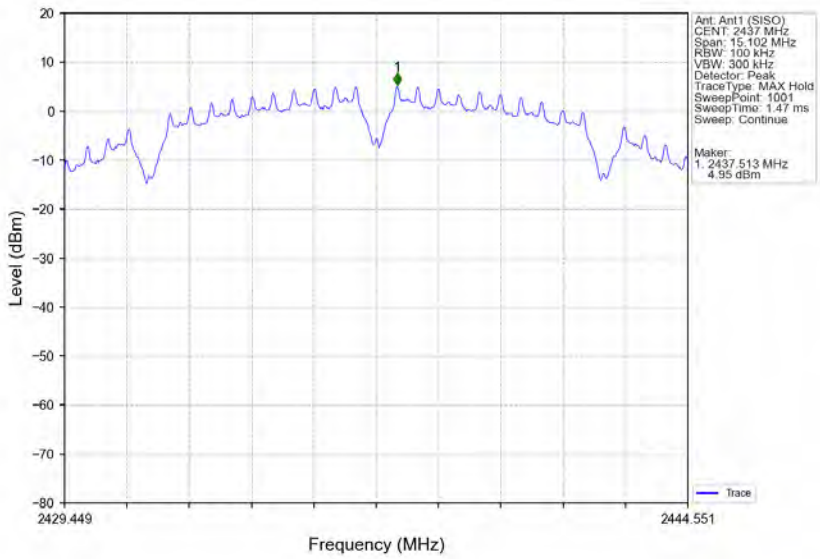
5.2 Test Graph

5.2.1 Ref

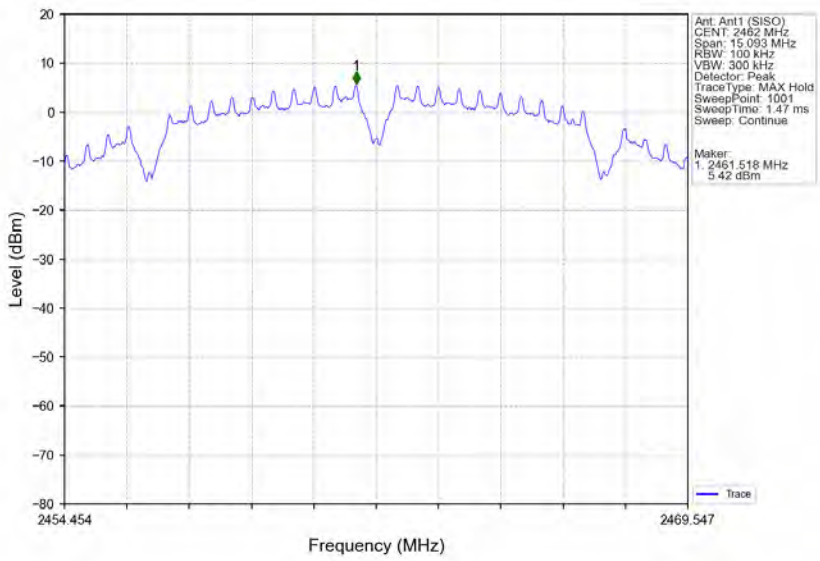
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



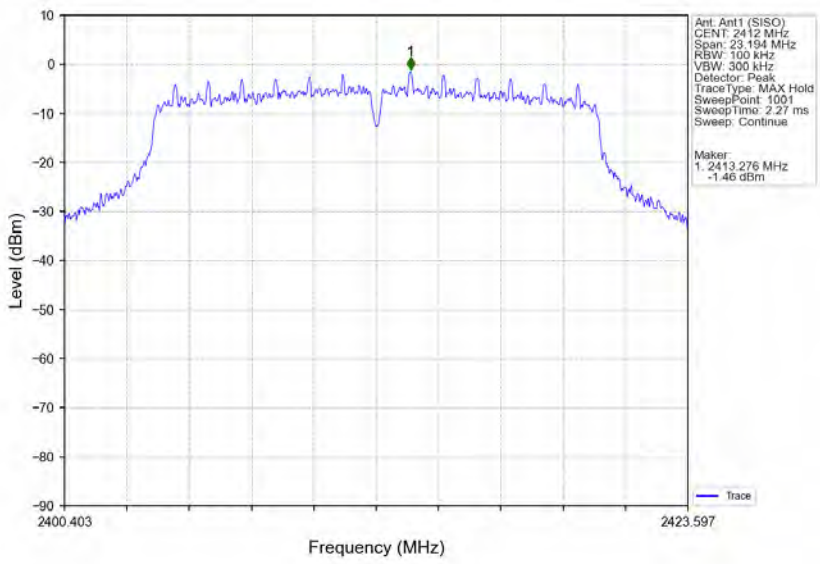
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



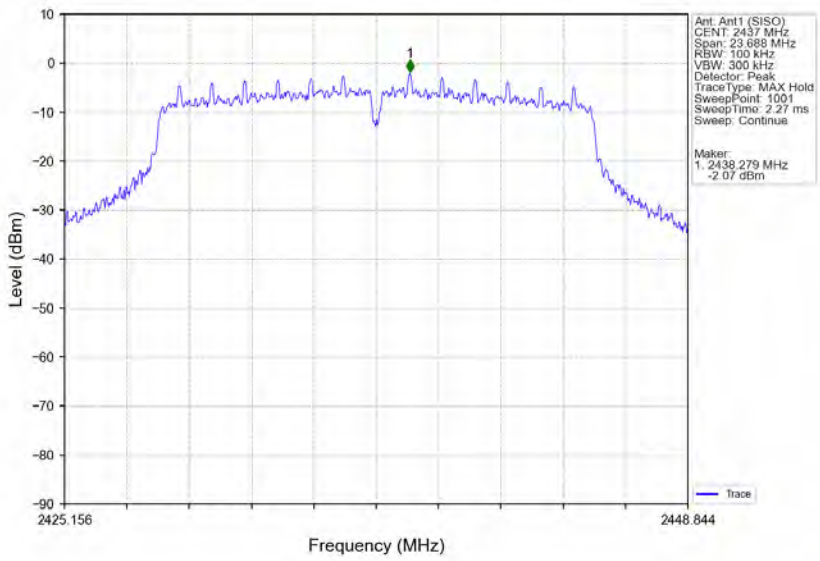
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



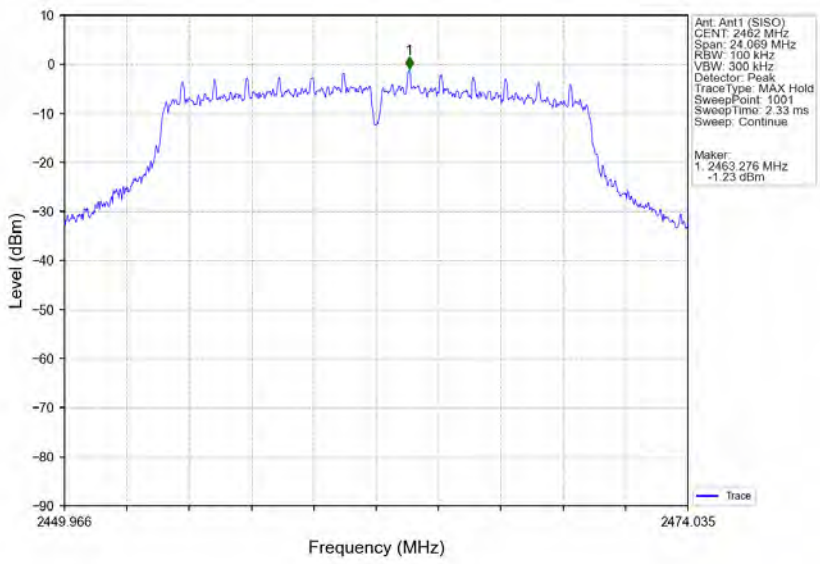
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



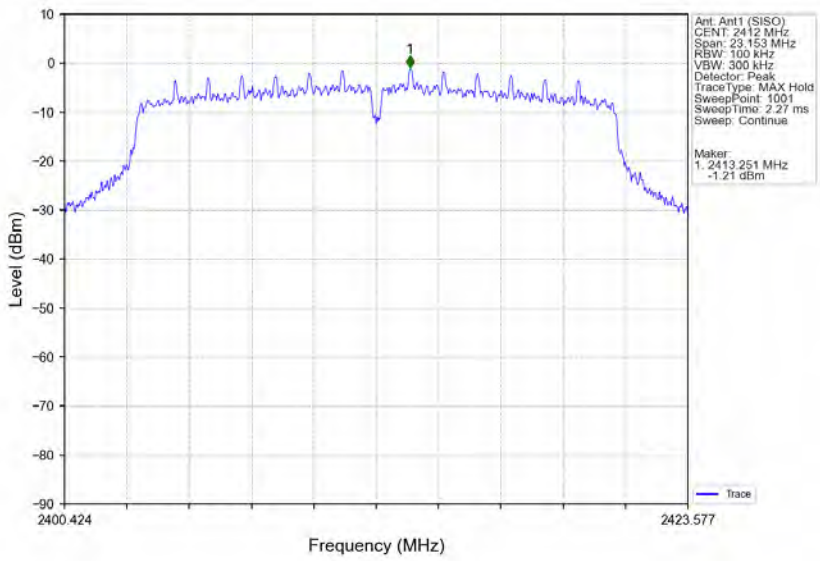
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



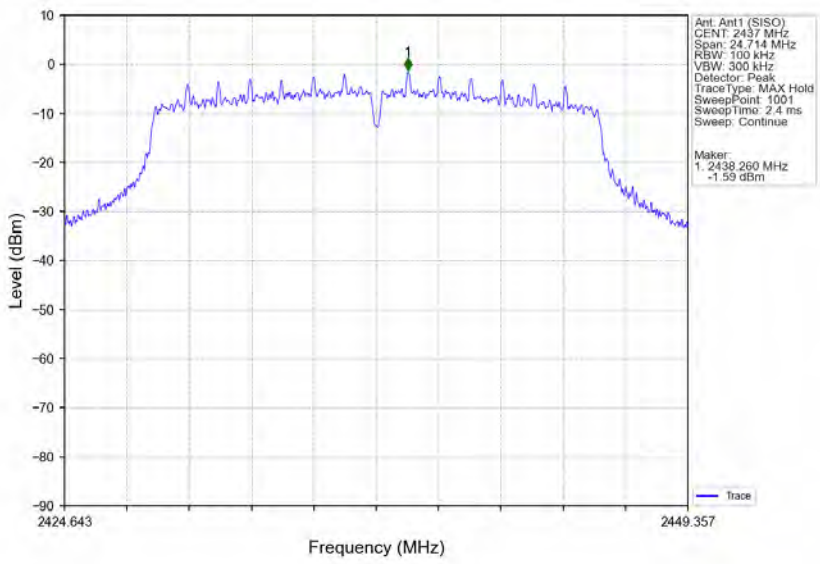
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



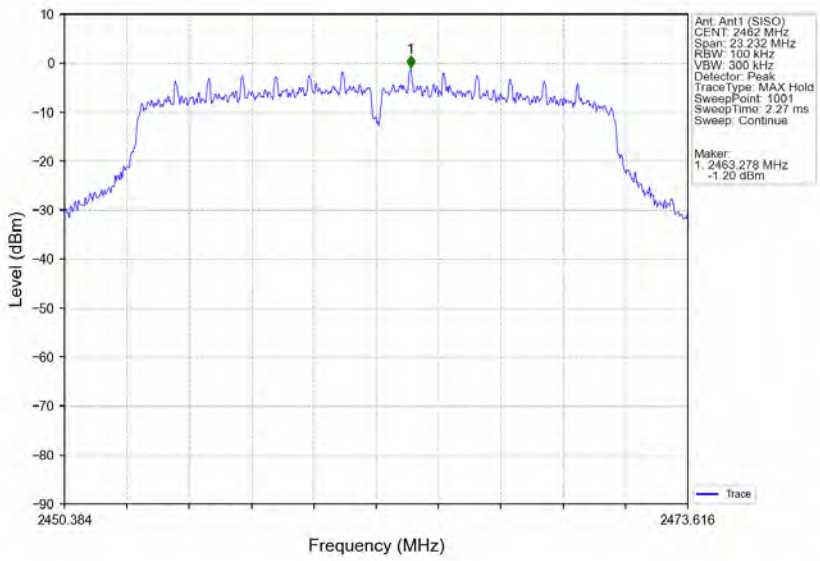
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



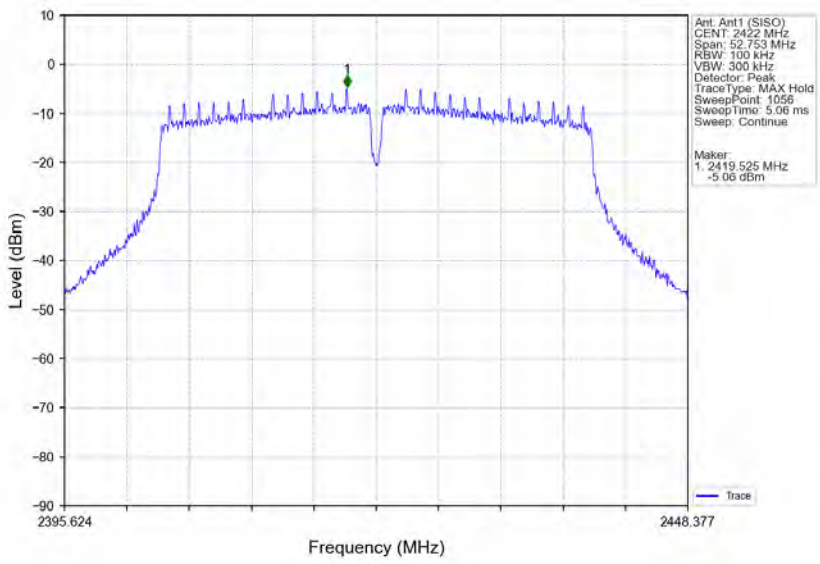
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



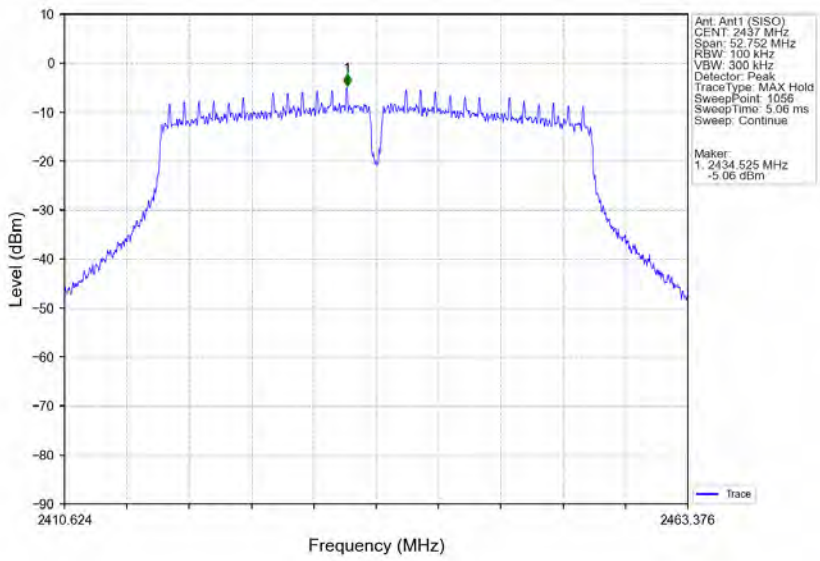
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



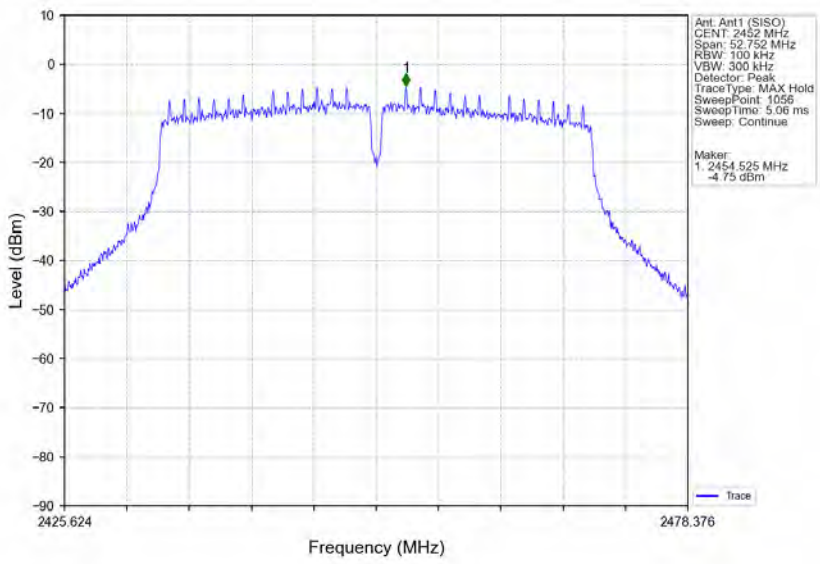
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



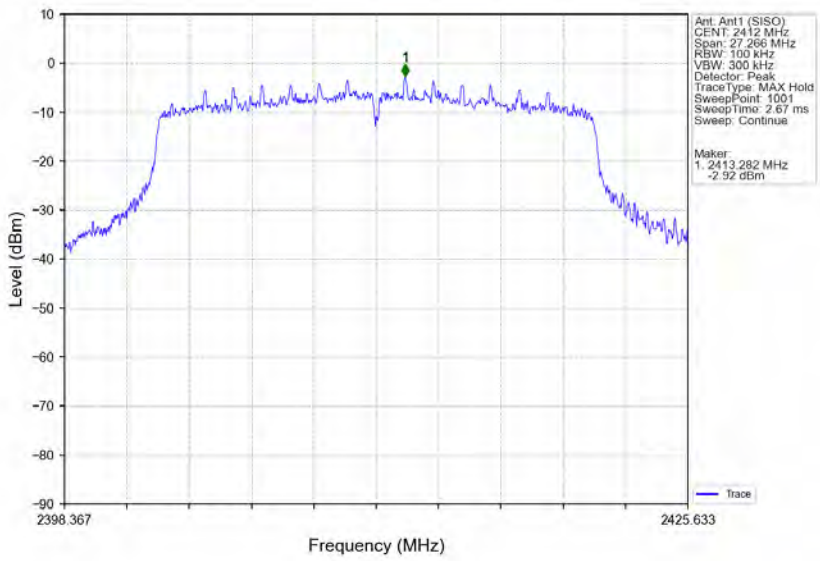
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



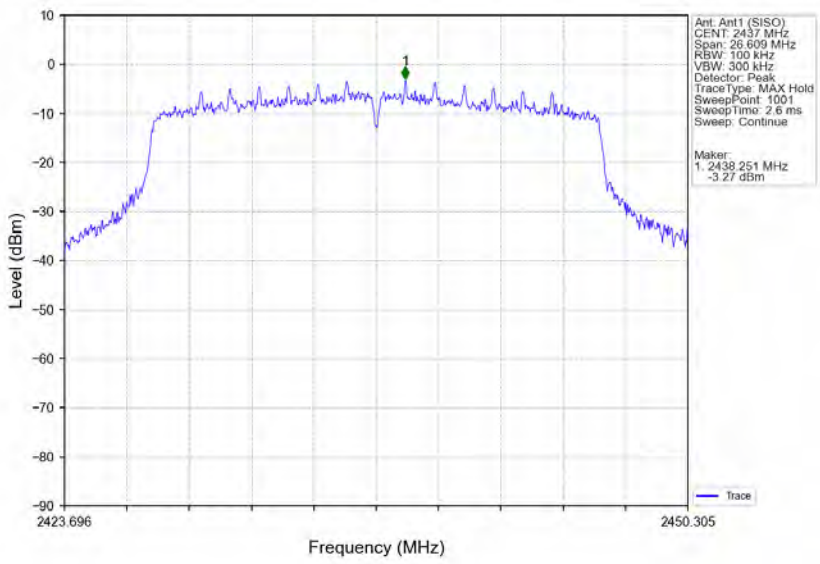
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



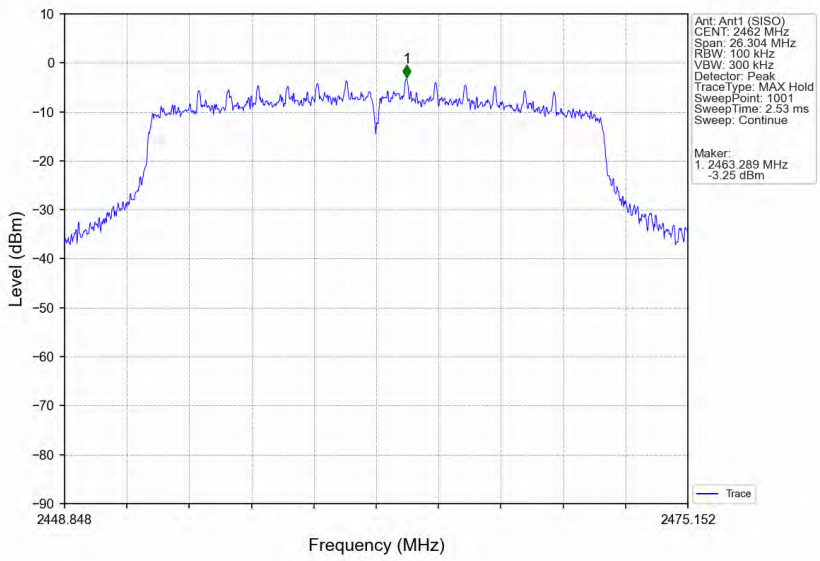
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



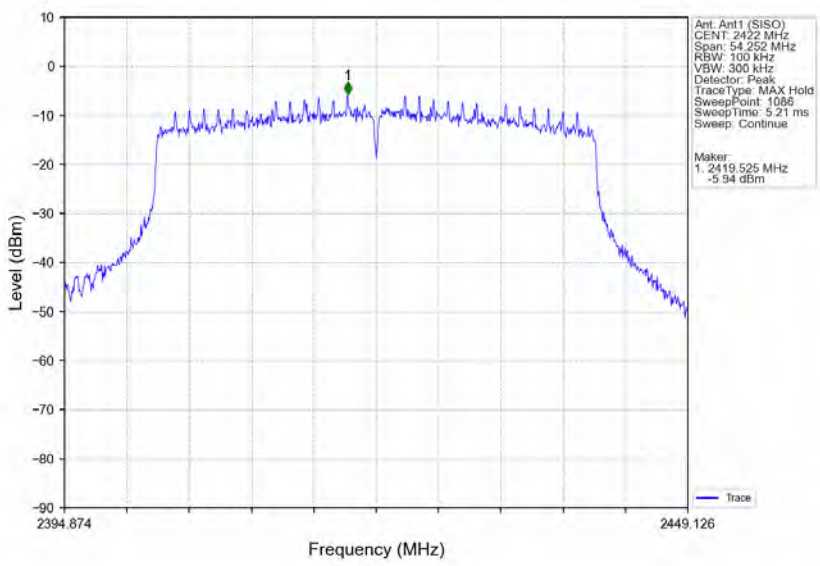
802.11ax(HE20)_MCH_2437MHz_RU242_Left_Ant1 (SISO)_NTNV



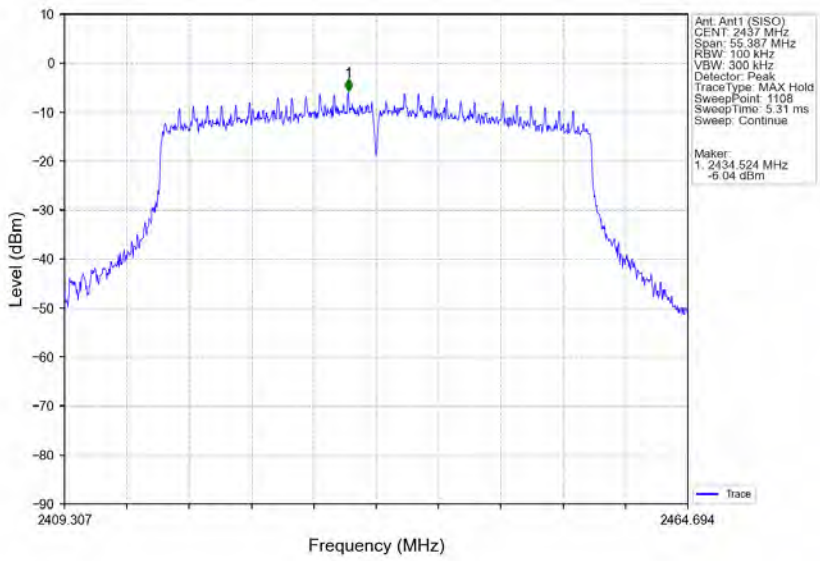
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



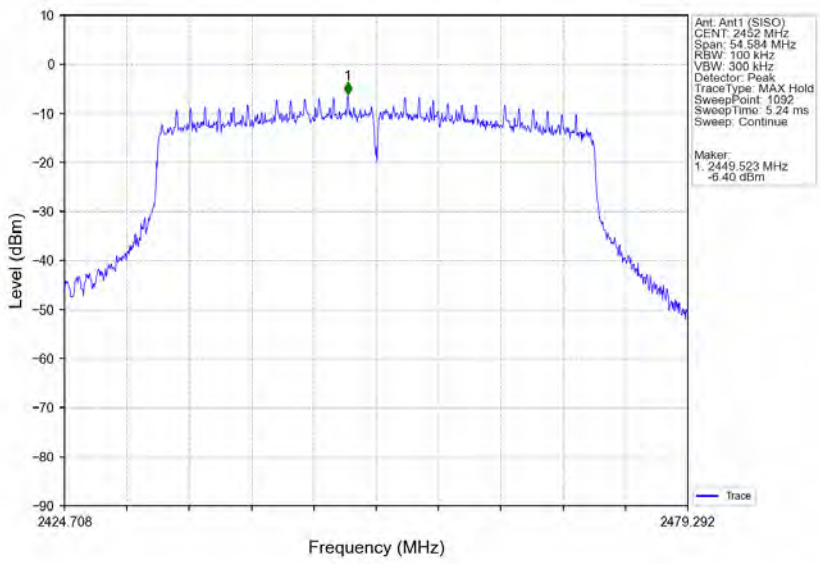
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV

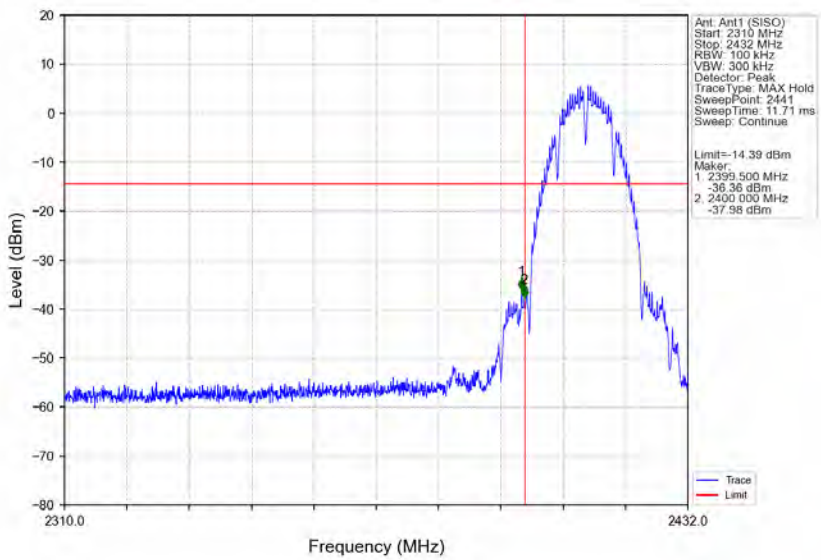


802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV

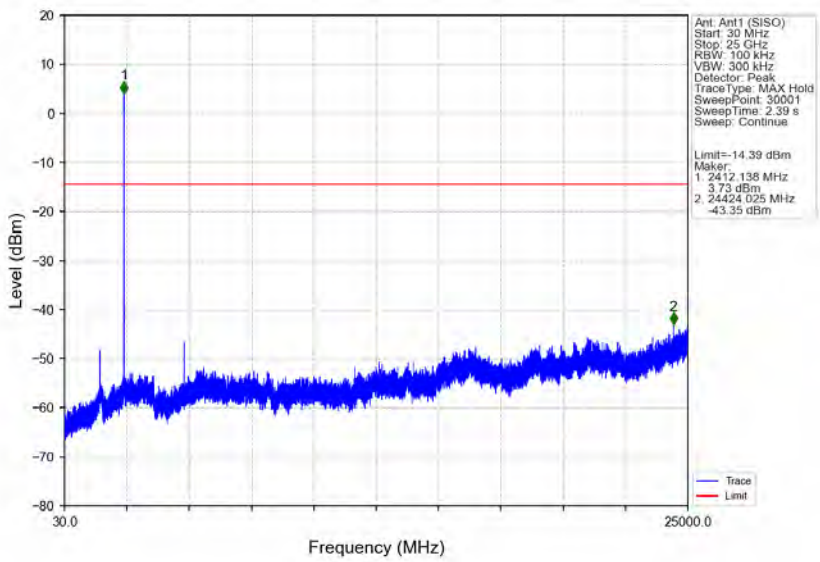


5.2.2 CSE

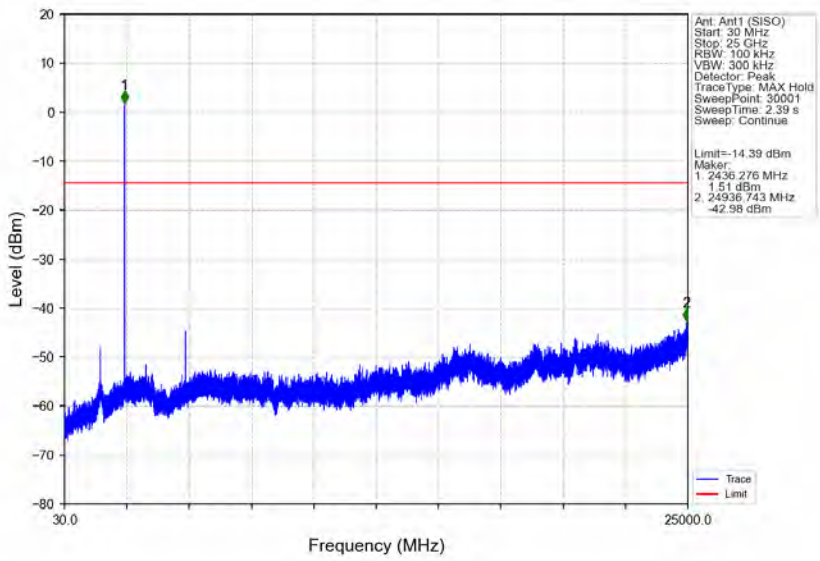
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



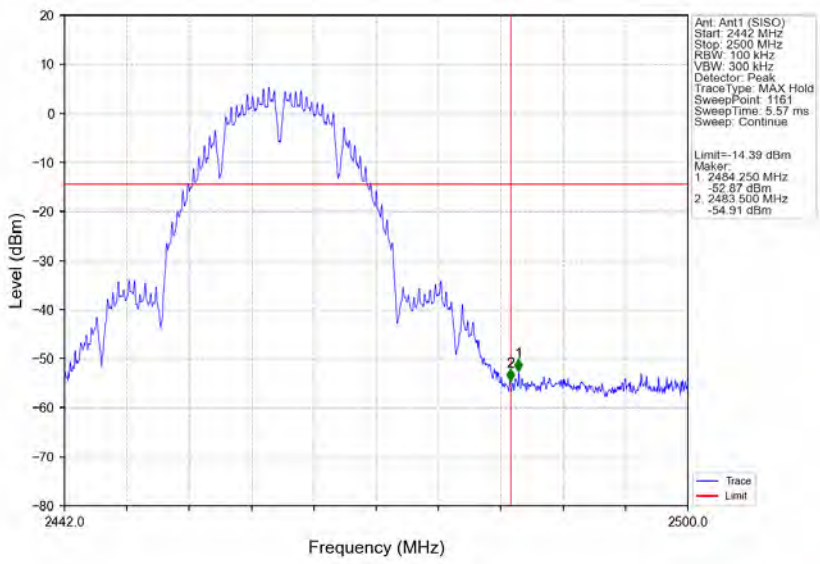
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



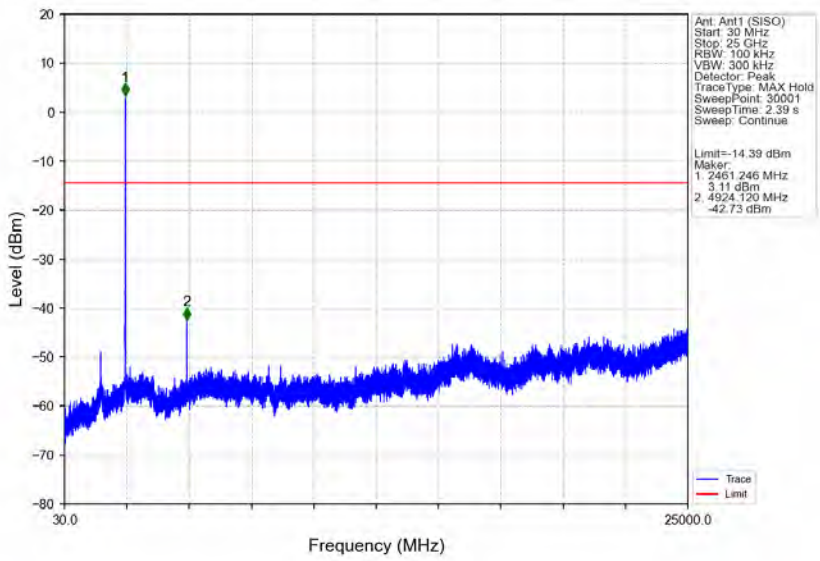
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



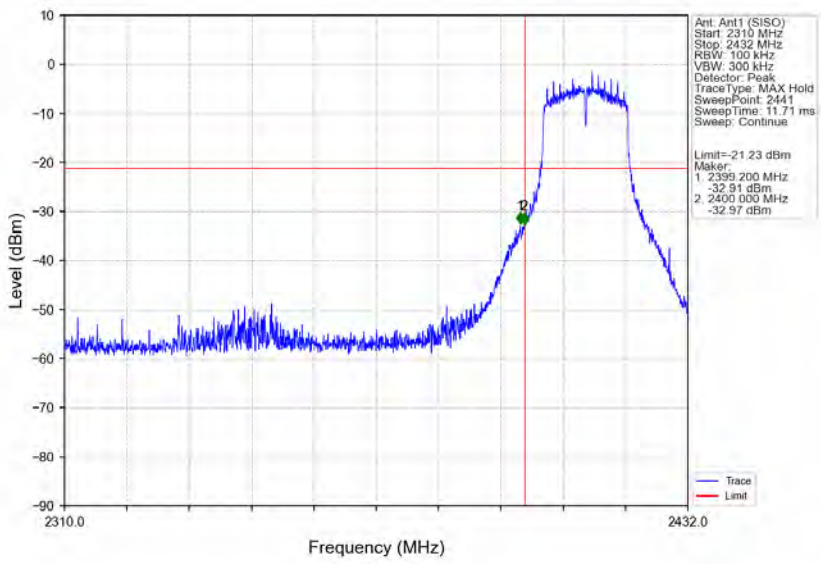
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



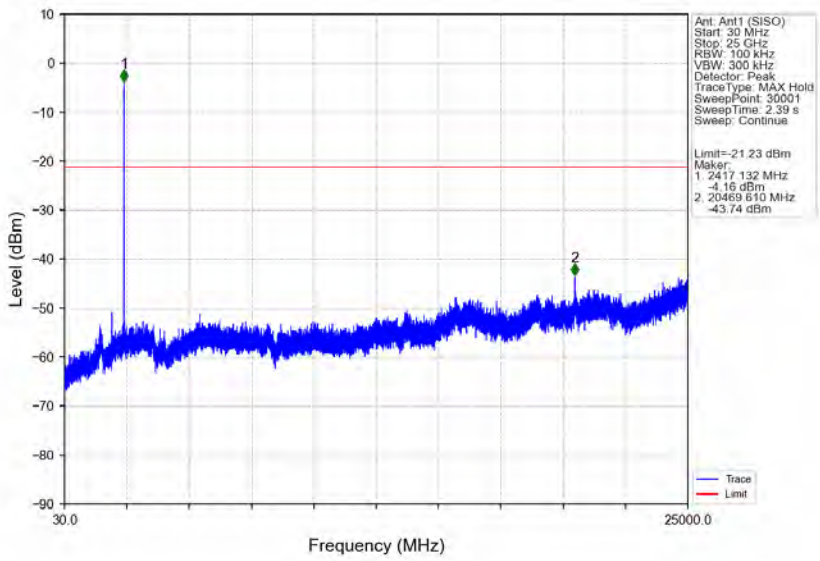
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



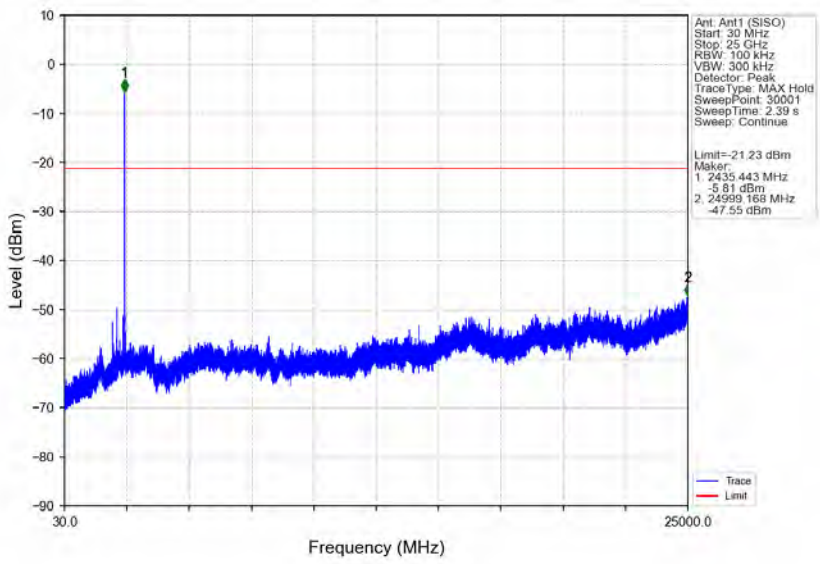
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



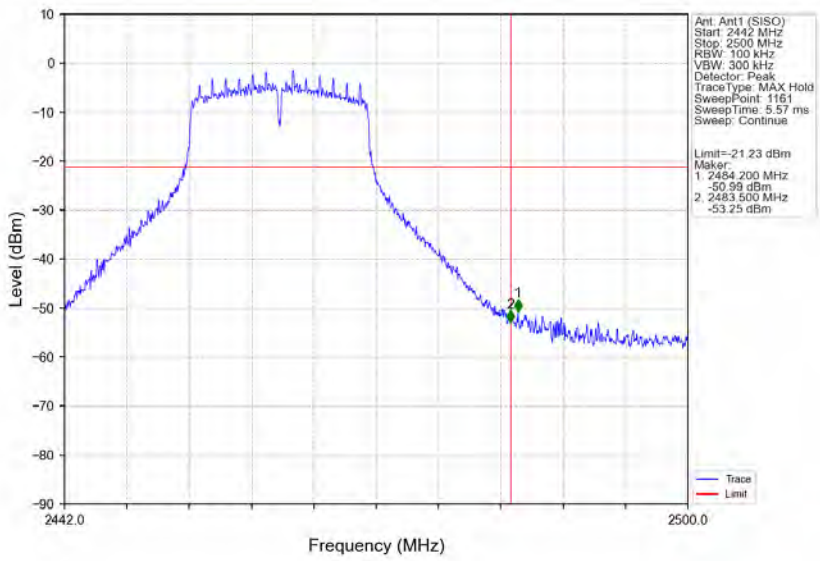
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



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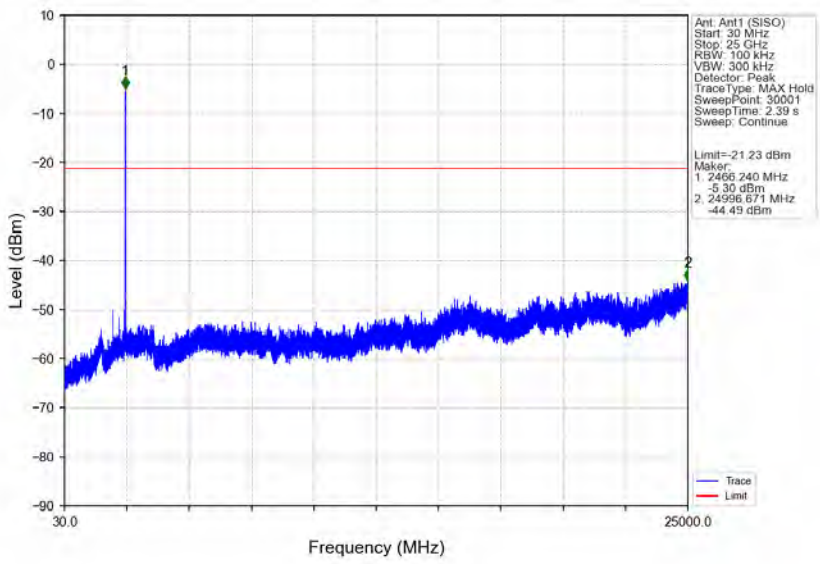
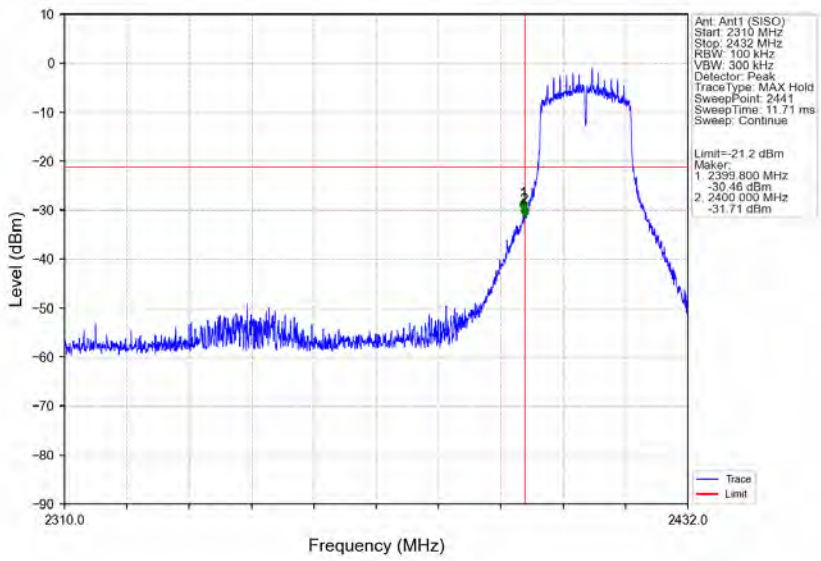
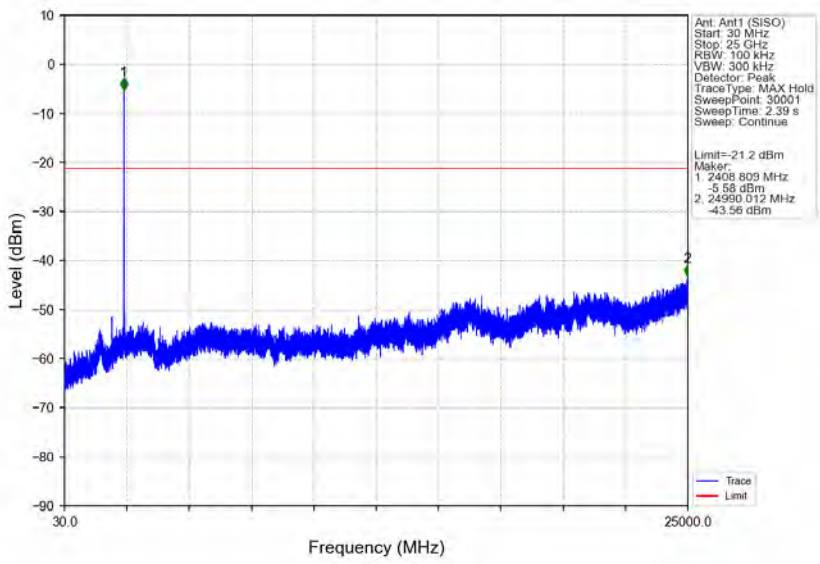


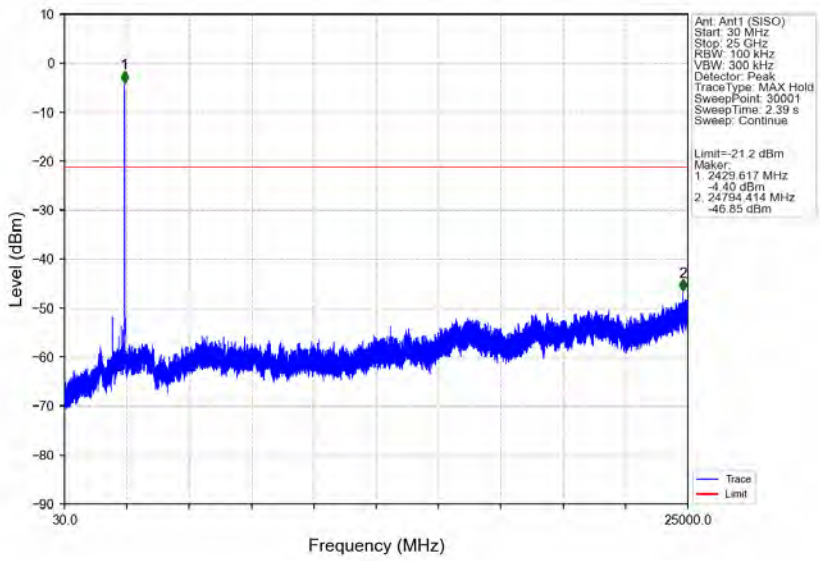
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



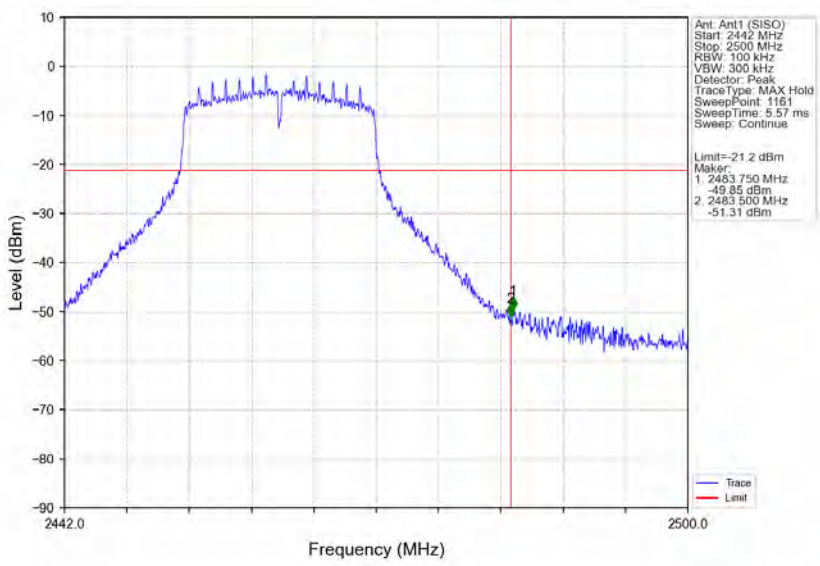
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



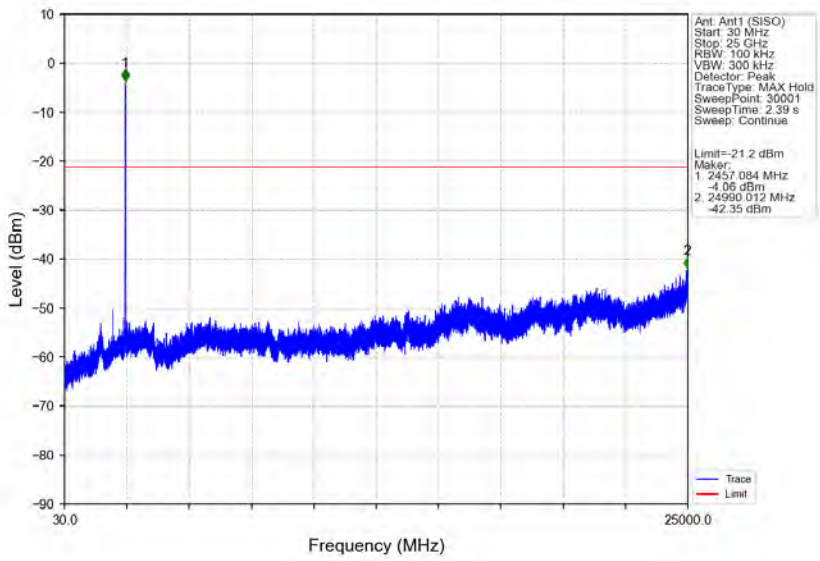
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



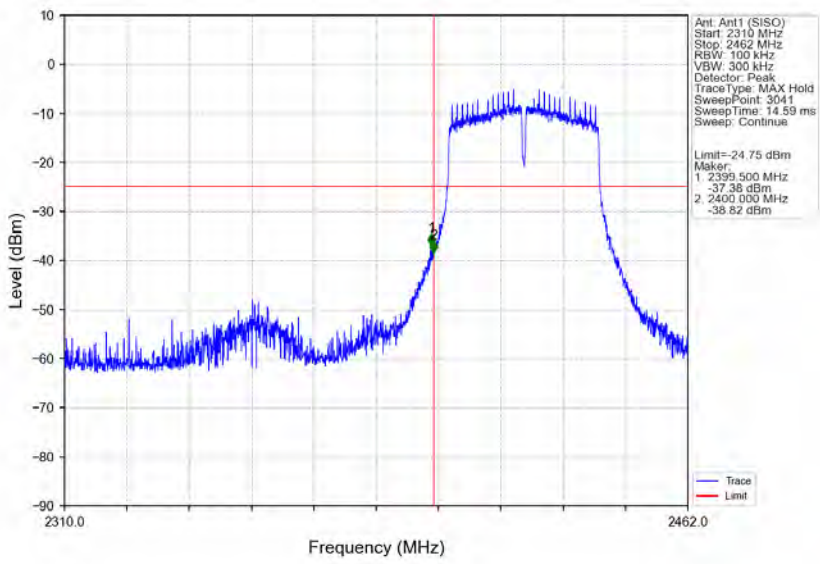
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



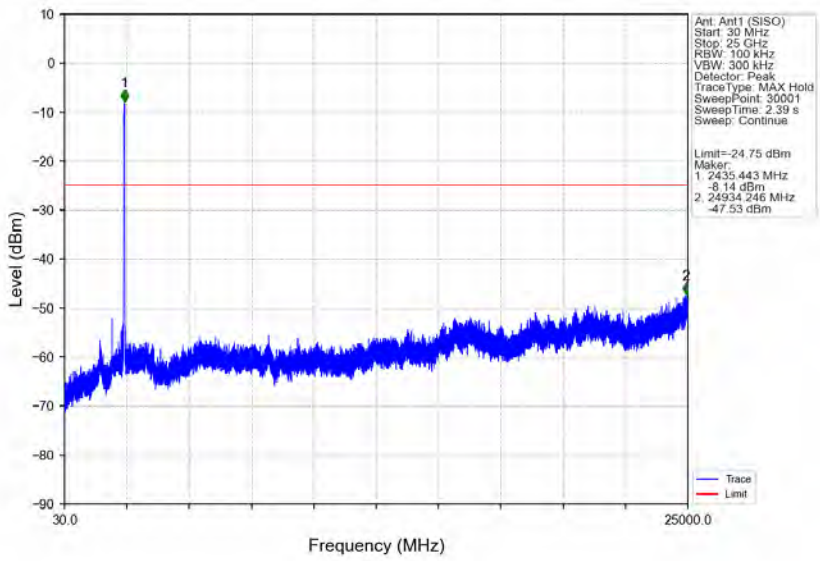
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



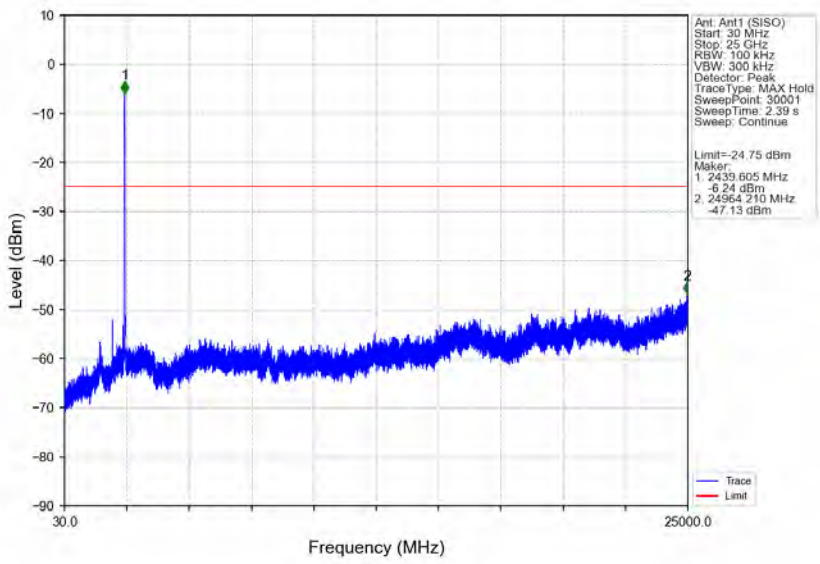
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



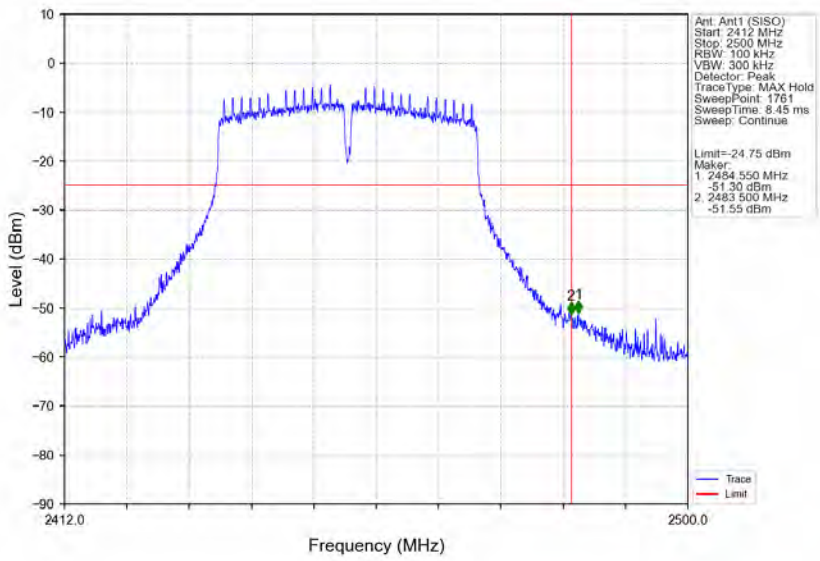
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



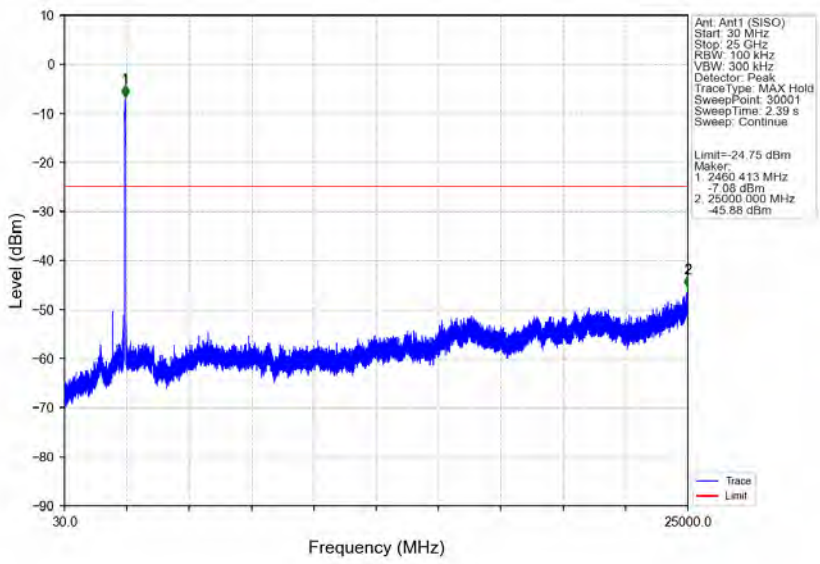
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



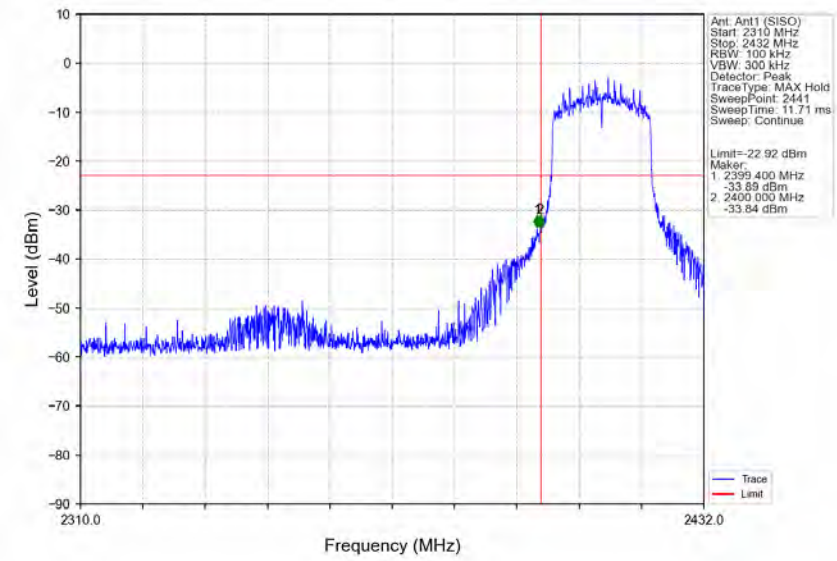
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



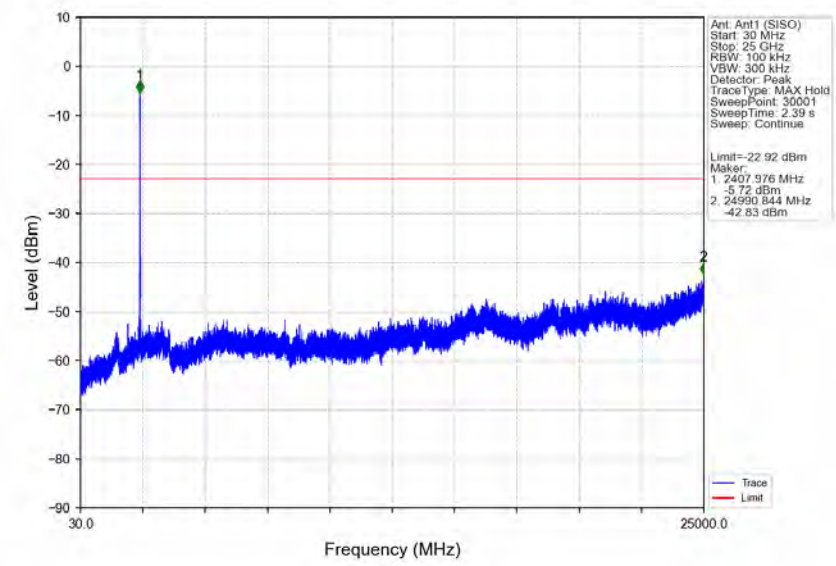
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



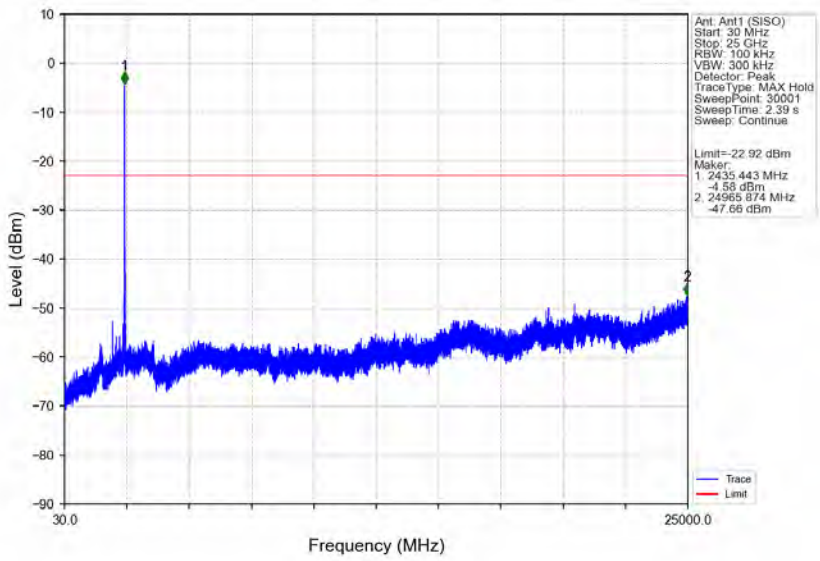
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



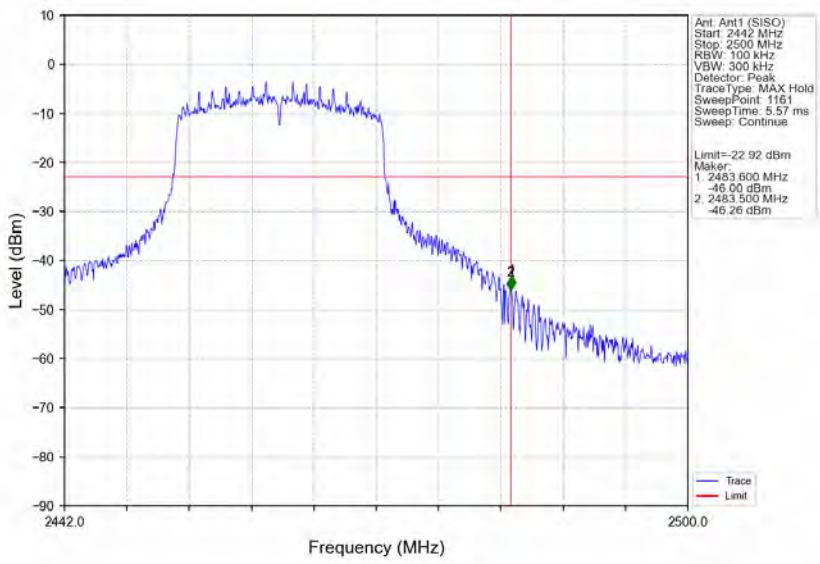
802.11ax(HE20)_LCH_2412MHz_RU242_Left_Ant1 (SISO)_NTNV



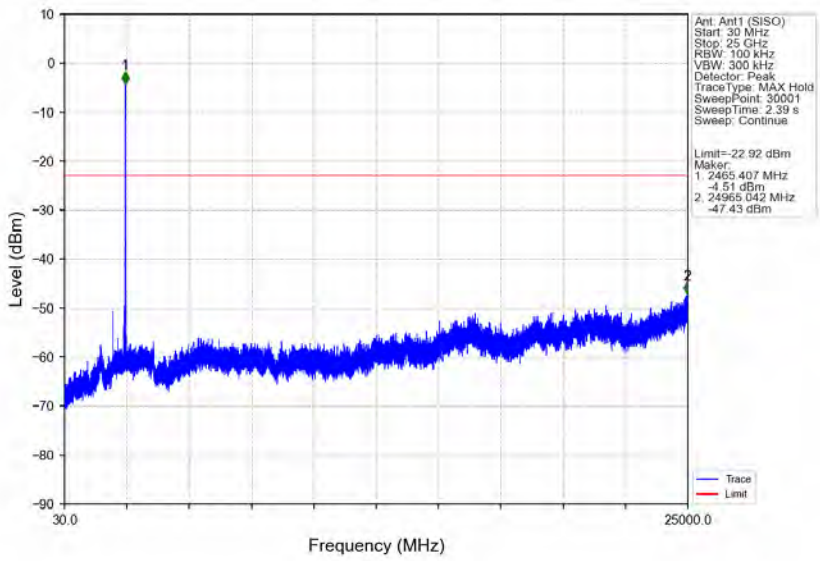
802.11ax(HE20)_MCH_2437MHz_RU242_Left_Ant1 (SISO)_NTNV



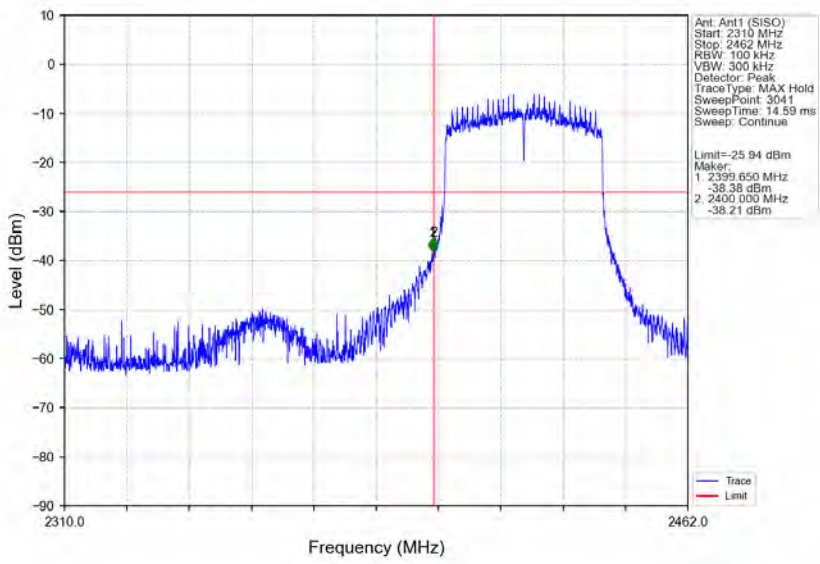
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



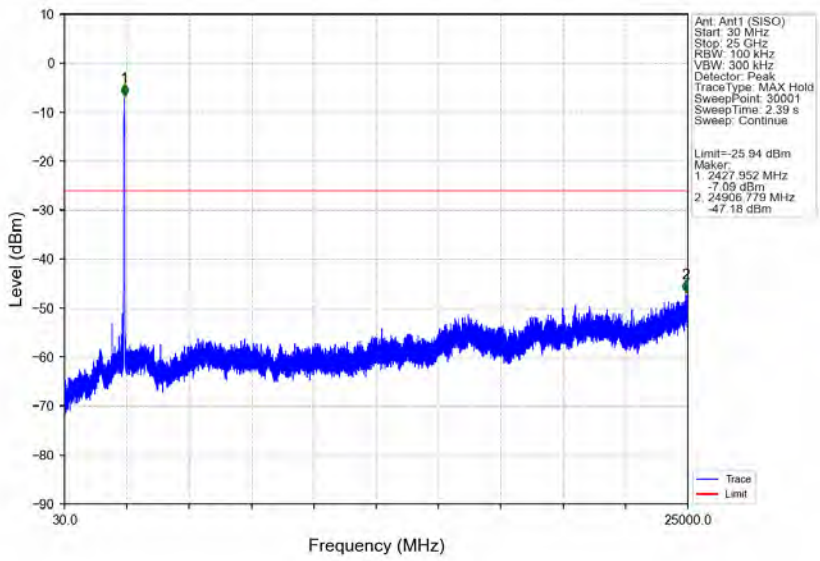
802.11ax(HE20)_HCH_2462MHz_RU242_Left_Ant1 (SISO)_NTNV



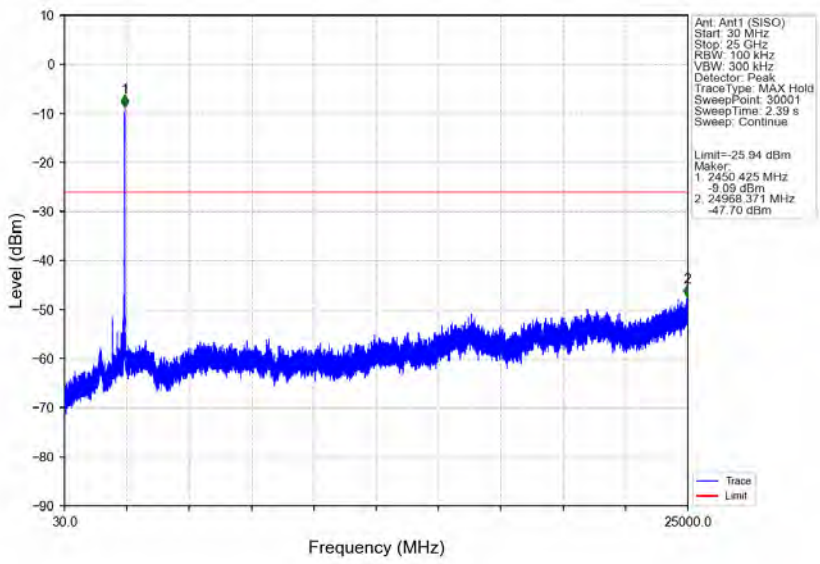
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



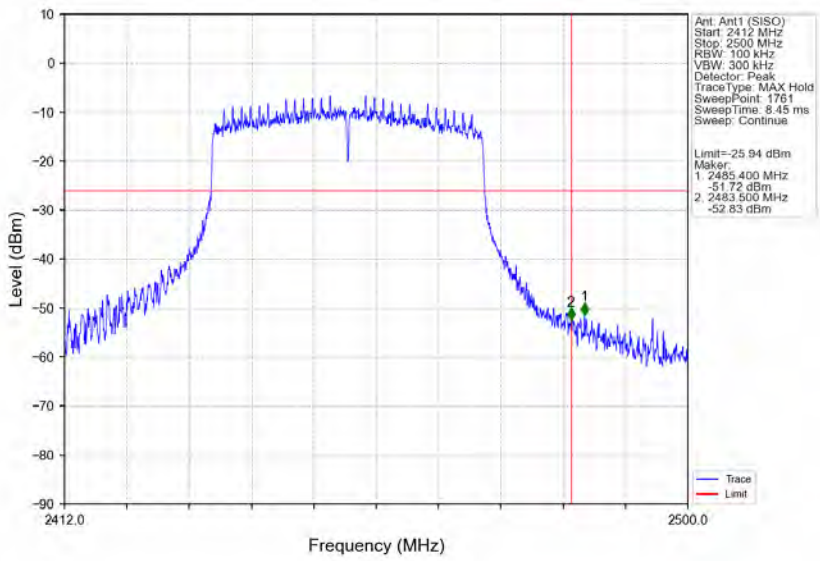
802.11ax(HE40)_LCH_2422MHz_RU484_Left_Ant1 (SISO)_NTNV



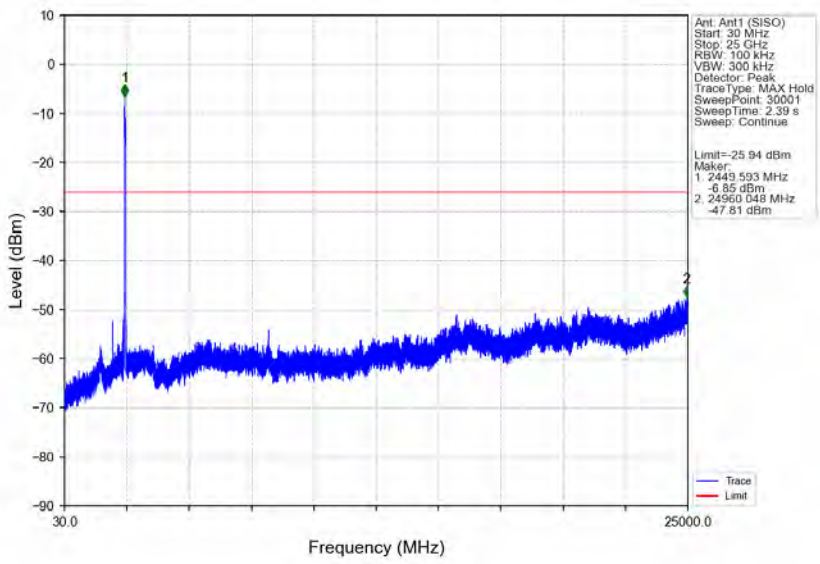
802.11ax(HE40)_MCH_2437MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



802.11ax(HE40)_HCH_2452MHz_RU484_Left_Ant1 (SISO)_NTNV



- End of the Report -