

TEST REPORT

Application No.: KSCR2604000796HS
FCC ID: 2A4A3-HL7602
Applicant: Hisense Ronshen (Guangdong) Refrigerator Co., Ltd.
Address of Applicant: No.8 Ronggang Road Ronggui Shunde Foshan Guangdong P.R.China
Manufacturer: Hisense Ronshen (Guangdong) Refrigerator Co., Ltd.
Address of Manufacturer: No.8 Ronggang Road Ronggui Shunde Foshan Guangdong P.R.China
Equipment Under Test (EUT):
EUT Name: Display Components
Model No.: HL7602SET
Trade Mark: Hisense
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2026-04-13
Date of Test: 2026-04-14 to 2026-05-15
Date of Issue: 2026-05-19

Test Result:
Pass*

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

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record			
Version	Description	Date	Remark
00	Original	2026-05-19	/

Authorized for issue by:			
Tested By		<i>Tommie Tang</i>	
		<u>Tommie_Tang/Project Engineer</u>	
Approved By		<i>Terry Hou</i>	
		<u>Terry Hou /Reviewer</u>	

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2020) Section 6.2	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)	Pass
Radiated Emissions (Below 1GHz)		ANSI C63.10 (2020) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions (Above 1GHz)		ANSI C63.10 (2020) Section 6.6 & 12.7	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands		ANSI C63.10 (2020) Section 6.10.5 & 12.7.2	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Duty Cycle		ANSI C63.10 (2020) Section 12.2	ANSI C63.10 (2020) Section 12.2	Pass
99% Bandwidth		ANSI C63.10 (2020) Section 12.5.3	ANSI C63.10 (2020) Section 12.5.3	Pass
26dB Emission Bandwidth		ANSI C63.10 (2020) Section 12.5.2	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Maximum Conducted Output Power		ANSI C63.10 (2020) Section 12.4	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Power Spectral Density		ANSI C63.10 (2020) Section 12.6	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Frequency Stability		ANSI C63.10 (2020) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Pass

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 12V
Operation Frequency/Number of channels (20MHz):	U-NII-1: 5180-5240MHz (4 Channels)
Operation Frequency/Number of channels/(40MHz):	U-NII-1: 5190-5230MHz (2 Channels)
Operation Frequency/Number of channels (80MHz):	U-NII-1: 5210MHz (1 Channel)
Modulation Type:	802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024-QAM)
Channel Spacing:	802.11a/n/ac/ax 20: 20MHz; 802.11n/ac/ax 40: 40MHz; 802.11ac/ax 80: 80MHz
Antenna Type:	Antenna 1: PCB Antenna, Antenna 2: PCB Antenna Note: Antenna 1 and Antenna 2 are SISO and uncorrelated
Antenna Gain:	Antenna 1: 3.69dBi, (Provided by the manufacturer) Antenna 2: 3.67dBi, (Provided by the manufacturer)

4.2 Power level setting using in test

Channel	802.11a		802.11ac(VHT20)		802.11ax(HEW20)	
	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
36	21.5	22.5	21.5	22.5	21.5	22.5
40	21.5	22.5	21.5	22.5	21.5	22.5
48	21.5	22.5	21.5	22.5	21.5	22.5
Channel	802.11ac(VHT40)		802.11ax(HEW40)			
	Ant 1	Ant 2	Ant 1	Ant 2		
38	19	21.5	18	19		
46	19	21.5	18	19		
Channel	802.11ac(VHT80)		802.11ax(HEW80)			
	Ant 1	Ant 2	Ant 1	Ant 2		
42	20	22	18	18.5		

4.3 Description of Support Units

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



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Adapter	SHENZHEN HONOR ELECTRONIC CO., LTD.	ADS-12AM-12 12012EPCU	/
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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

All tests were performed at:

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

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

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

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1172)**

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

- **ISED (CAB Identifier: CN0072)**

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 (Member No:1938)**

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.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESCI	KS301196	07/09/2025	07/08/2026
2	LISN	R&S	ENV216	KS301197	01/08/2026	01/07/2027
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/08/2026	01/07/2027
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	12/18/2025	12/17/2026
5	CE test Cable	Thermax	/	CZ301102	12/18/2025	12/17/2026
6	Software	Faratronic	E3	/	N.C.R	N.C.R
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	07/09/2025	07/08/2026
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	07/09/2025	07/08/2026
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	12/17/2025	12/16/2026
4	Signal Generator	R&S	SMBV100B	KSEM032	12/17/2025	12/16/2026
5	Signal Generator	R&S	SMW200A	KSEM020-1	07/09/2025	07/08/2026
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	07/08/2025	07/07/2026
7	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	07/09/2025	07/08/2026
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	12/17/2025	12/16/2026
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	07/08/2025	07/07/2026
11	Switcher	TST	FY562	KUS2001M001-4	12/17/2025	12/16/2026
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111- CZ301120	12/17/2025	12/16/2026
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	07/15/2025	07/14/2026
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	12/30/2025	12/29/2026
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	07/09/2025	07/08/2026
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	12/17/2025	12/16/2026
3	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
4	Loop Antenna (9KHz-30MHz)	COM-POWER	AL-130R	KUS1806E001	07/11/2025	07/10/2026
5	Bilog Antenna (30MHz-1GHz)	TESEQ	CBL 6112D	KUS1806E005	07/12/2025	07/11/2026
6	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	01/11/2026	01/10/2028
7	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/11/2026	01/10/2028
8	Amplifier(30MHz~1GHz)	TST	LNA009100G30	KSEM061	12/18/2025	12/17/2026
9	Amplifier(400MHz~8GHz)	TST	LNA004080G30	KSEM062	12/18/2025	12/17/2026
10	Amplifier(1GHz~18GHz)	TST	LNA010180G45	KSEM039	07/09/2025	07/08/2026
11	Amplifier(18~40GHz)	TST	LNA180400G40	KSEM038	07/09/2025	07/08/2026
12	RF Test Cable	REBES MICROWAVE	A81-SMSM-10M	CZ301097- CZ301100	11/14/2025	11/13/2026
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	12/30/2025	12/29/2026
14	Software	ESE	E3_V 6.111221a	/	NCR	NCR
15	Measurement Software	Tonscend	JS32-RE V5.0.0.1	/	NCR	NCR
16	Measurement Software	Tonscend	JS32-RSE V5.0.0.0	/	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antennas are PCB antenna and no consideration of replacement. The best case gain of the antenna 1 is 3.69 dBi and antenna 2 is 3.67 dBi

Antenna location: Refer to External Photo.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

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 & Subpart E 15.407 b(9)

Test Method: ANSI C63.10 (2020) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	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.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

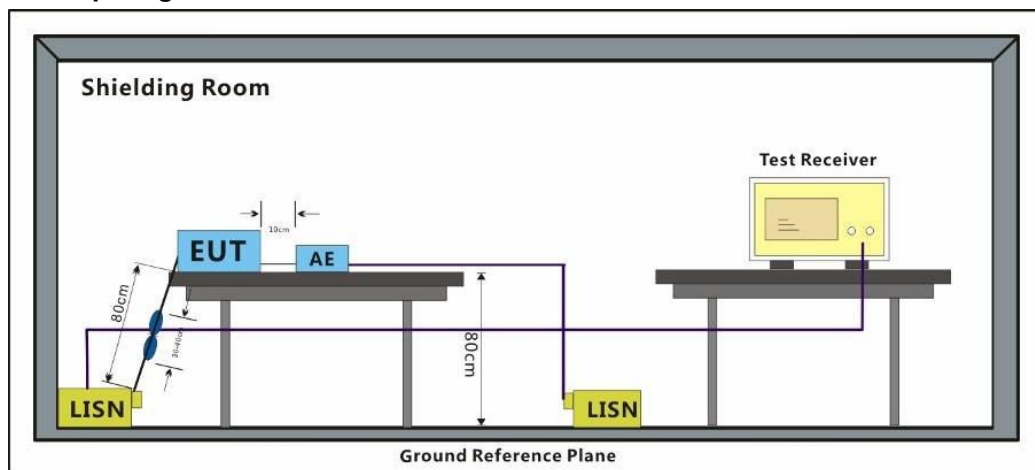
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



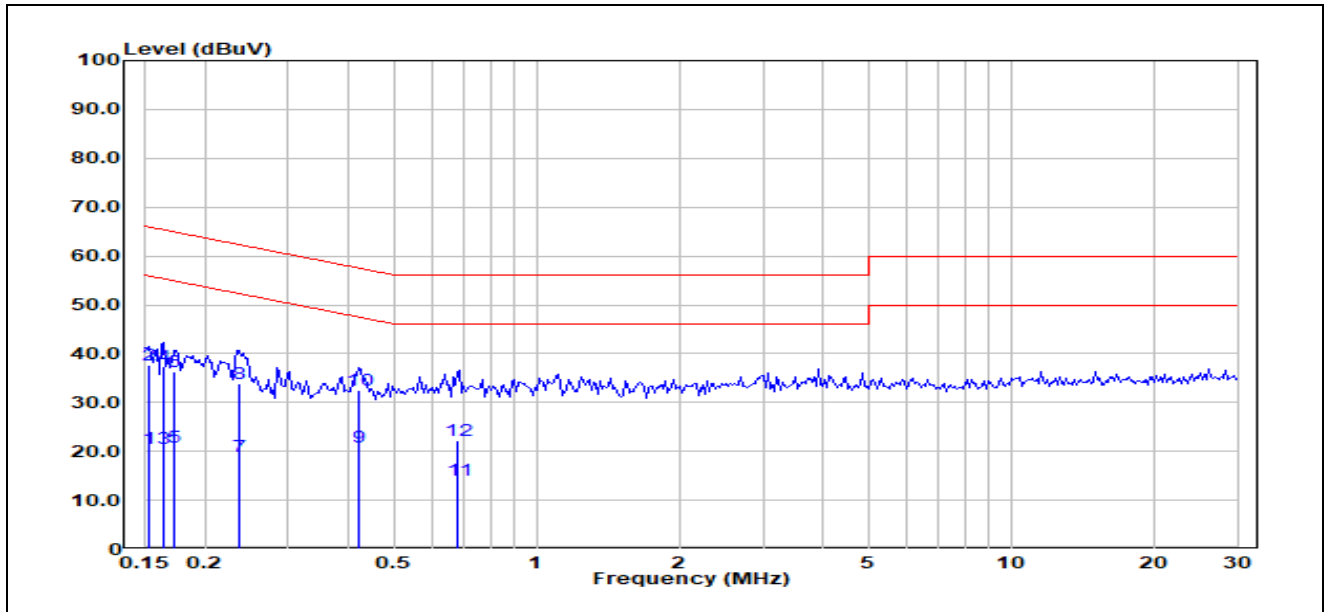
7.1.4 Measurement Procedure and Data

- 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 $50\Omega/50\mu\text{H} + 50\Omega$ 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 1: $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{LISN Factor}$

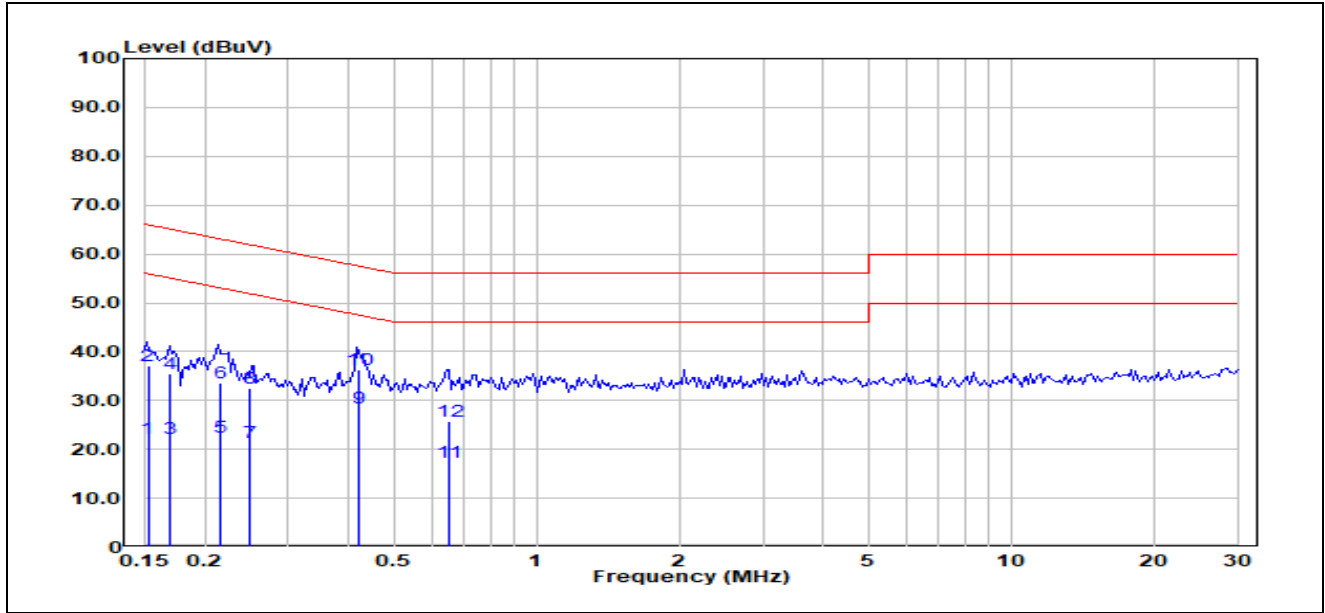
Remark 2: Pre-test AC 120V/50-60Hz & AC 240V/50-60Hz then choose the AC 120/60Hz as worst case.

Test Mode: 01; Line: Live line



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1532	0.32	20.37	20.69	55.83	-35.14	Average
2	0.1532	17.42	20.37	37.79	65.83	-28.04	QP
3	0.1635	0.30	20.32	20.62	55.28	-34.66	Average
4	0.1635	17.09	20.32	37.41	65.28	-27.87	QP
5	0.1723	0.55	20.29	20.84	54.85	-34.01	Average
6	0.1723	16.04	20.29	36.33	64.85	-28.52	QP
7	0.2366	-1.13	20.14	19.01	52.22	-33.21	Average
8	0.2366	13.67	20.14	33.81	62.22	-28.41	QP
9	0.4234	0.63	20.21	20.84	47.38	-26.54	Average
10	0.4234	12.19	20.21	32.40	57.38	-24.98	QP
11	0.6839	-5.98	20.19	14.21	46.00	-31.79	Average
12	0.6839	2.12	20.19	22.31	56.00	-33.69	QP

Test Mode: 01; Line: Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1517	1.83	20.44	22.27	55.91	-33.64	Average
2	0.1517	16.81	20.44	37.25	65.91	-28.66	QP
3	0.1694	1.90	20.39	22.29	54.99	-32.70	Average
4	0.1694	15.02	20.39	35.41	64.99	-29.58	QP
5	0.2149	2.41	20.21	22.62	53.02	-30.40	Average
6	0.2149	13.39	20.21	33.60	63.02	-29.42	QP
7	0.2497	1.37	20.14	21.51	51.77	-30.26	Average
8	0.2497	12.43	20.14	32.57	61.77	-29.20	QP
9	0.4230	8.20	20.17	28.37	47.39	-19.02	Average
10	0.4230	16.21	20.17	36.38	57.39	-21.01	QP
11	0.6522	-2.83	20.21	17.38	46.00	-28.62	Average
12	0.6522	5.66	20.21	25.87	56.00	-30.13	QP

7.2 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: ANSI C63.10 (2020) 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

Note

1.The above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

2. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

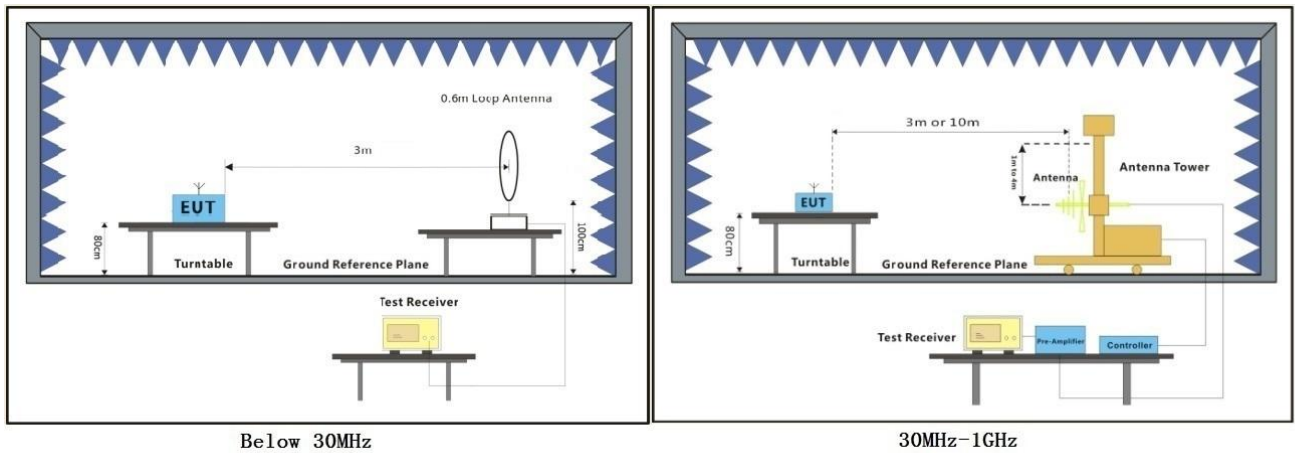
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8m above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3m or 10m away from the interference-receiving antenna, which was mounted on the variable-height antenna tower.
- c. The antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1m) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

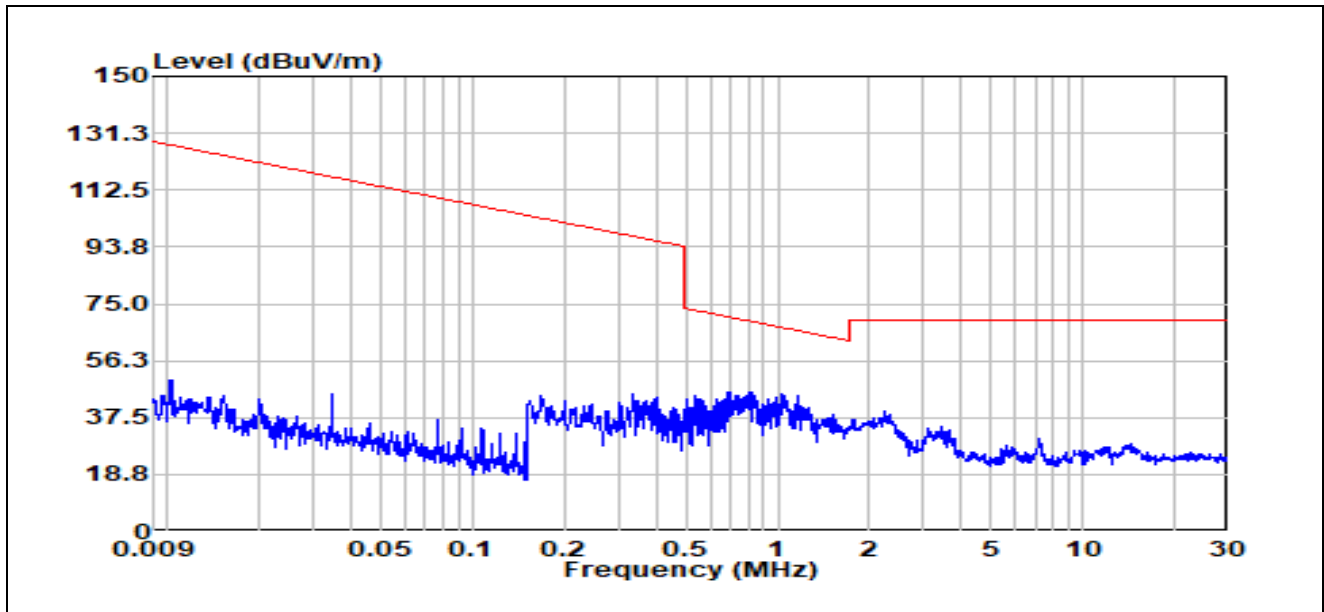
The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

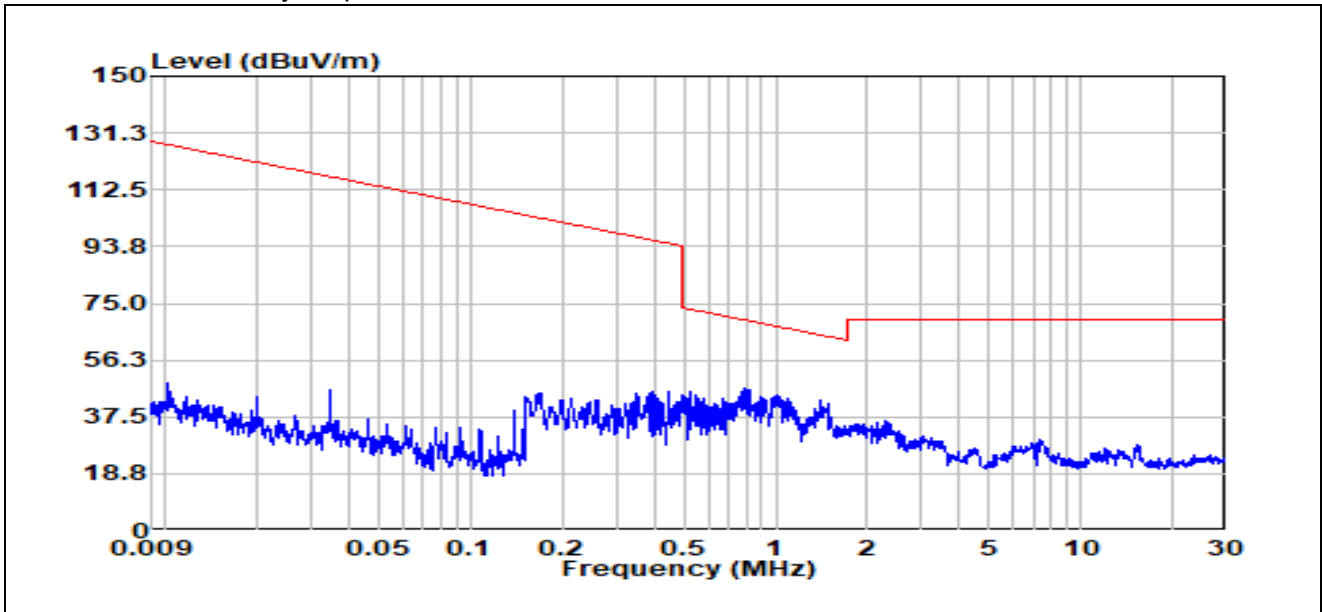
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the worst-case test curve is displayed.

Test Mode: 01; Polarity: Coaxial



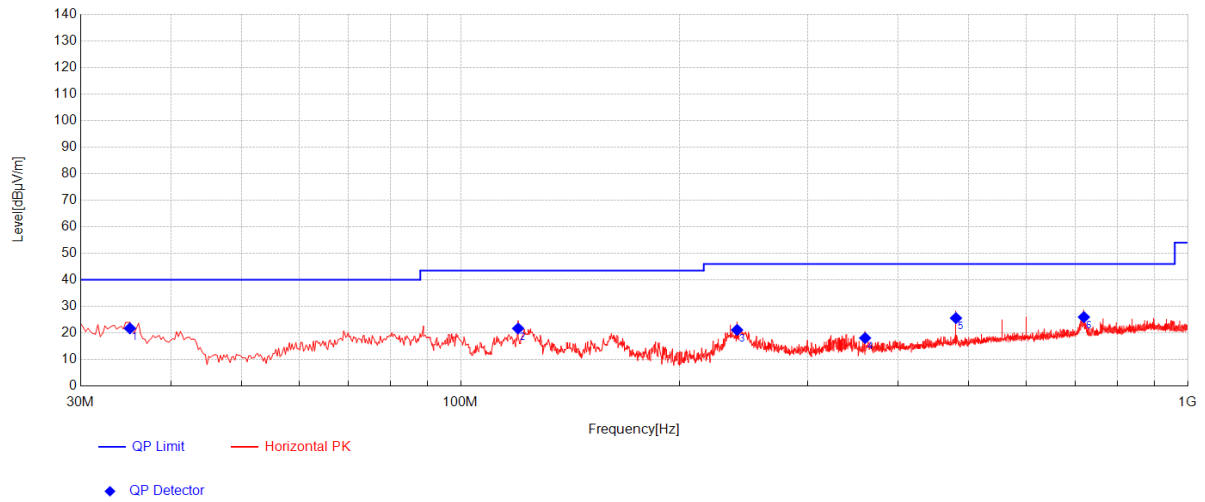
Remark: margin more than 20dB.

Test Mode: 01; Polarity: Coplanar



Remark: margin more than 20dB.

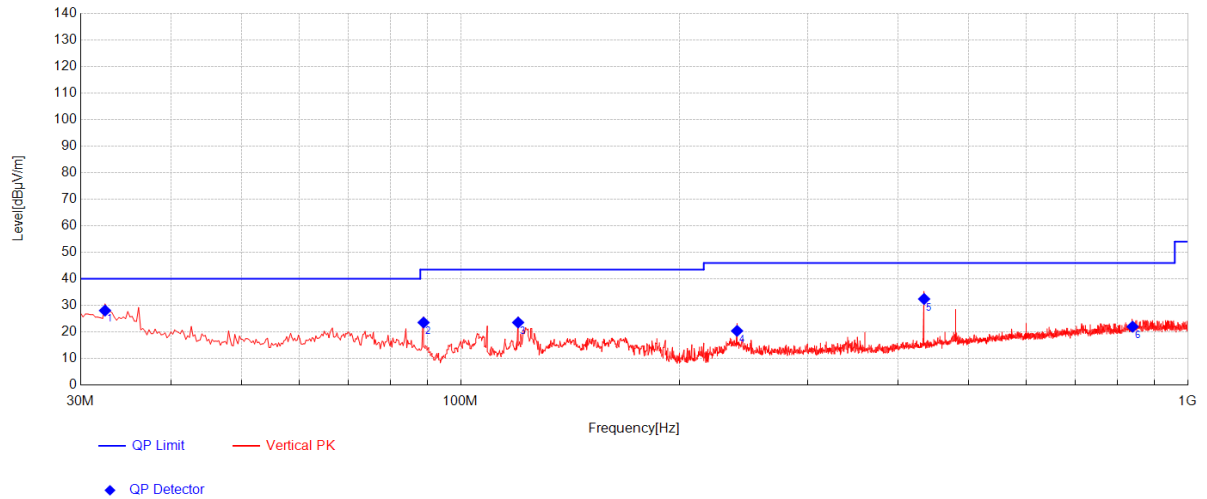
Test Mode: 01; Polarity: Horizontal



Final Data List

NO.	Frequency [MHz]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.0925	15.55	-32.47	21.73	40.00	18.27	255	238	Horizontal
2	119.9675	13.69	-31.77	21.70	43.50	21.80	255	14	Horizontal
3	240.005	12.80	-31.13	21.15	46.00	24.85	255	29	Horizontal
4	360.0425	15.60	-30.61	18.10	46.00	27.90	255	212	Horizontal
5	480.08	18.30	-30.48	25.60	46.00	20.40	255	106	Horizontal
6	719.9125	21.90	-29.72	25.98	46.00	20.02	255	200	Horizontal

Test Mode: 01; Polarity: Vertical



Final Data List

NO.	Frequency [MHz]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.425	17.60	-32.51	28.07	40.00	11.93	255	96	Vertical
2	88.9275	10.78	-31.92	23.56	43.50	19.94	255	256	Vertical
3	119.9675	13.69	-31.77	23.57	43.50	19.93	255	40	Vertical
4	240.005	12.80	-31.13	20.42	46.00	25.58	255	136	Vertical
5	434.005	17.58	-30.42	32.41	46.00	13.59	255	4	Vertical
6	839.95	22.90	-29.11	21.99	46.00	24.01	255	81	Vertical

7.3 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10 (2020) Section 6.6 & 12.7

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
Above 960	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

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

Remark:

1. 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 1000MHz. 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.

2. Above 18GHz, measurements may be performed at a distance shorter than that specified in the regulations

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Above 18GHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(1/3) = -9.54\text{dB}$ (for 1m test distance).

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

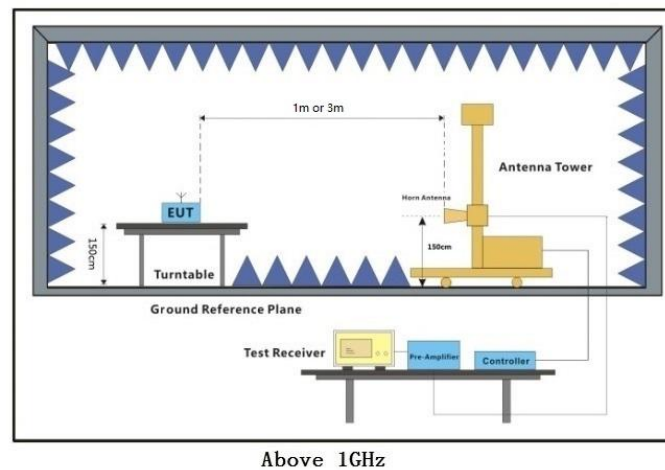
Humidity: 45.7 % RH

Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



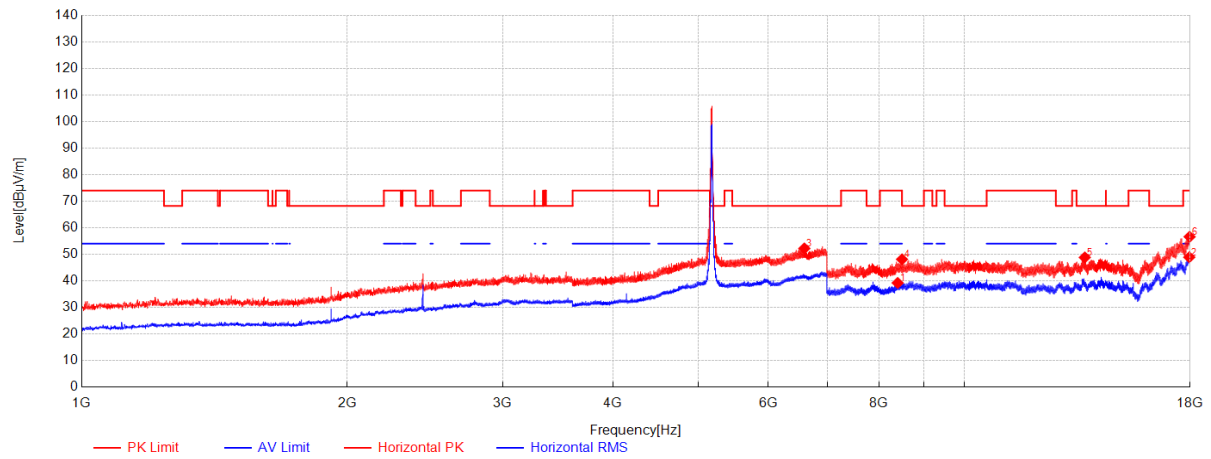
7.3.4 Measurement Procedure and Data

- 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:

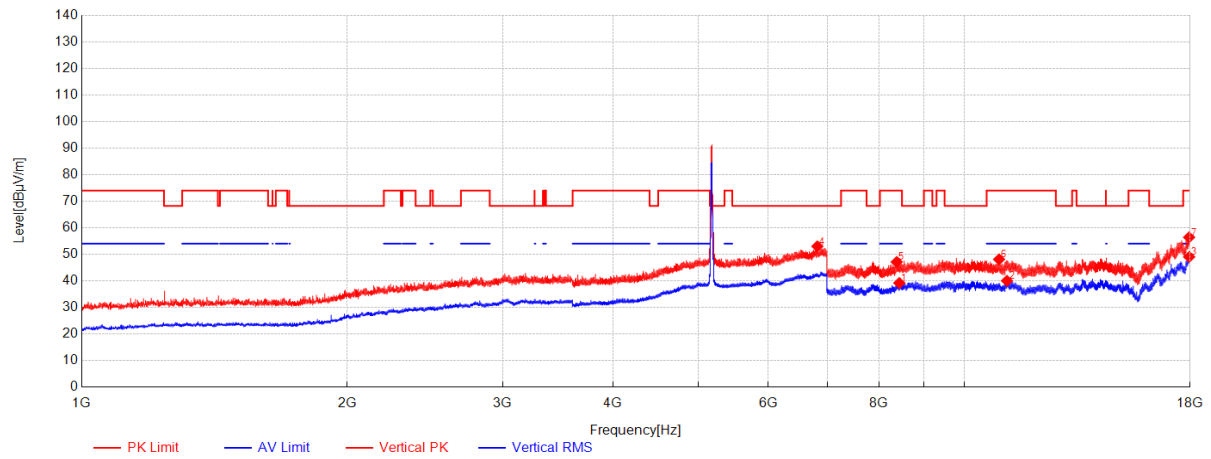
1. $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$
2. Scan from 1GHz to 40GHz, The points marked on below plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the below harmonics were the highest point could be found when testing, so only the below harmonics had been displayed.
5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.
6. 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.
7. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

11a_TX_CH_36_Horizontal



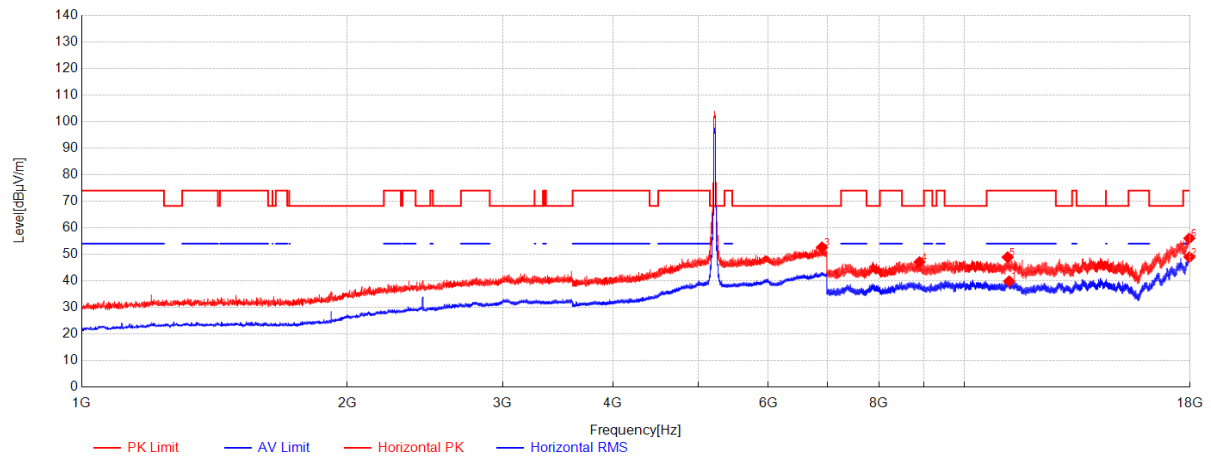
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8405.0667	49.16	37.07	-47.02	39.21	54.00	14.79	Horizontal
2	17984.9667	47.64	43.20	-41.95	48.89	54.00	5.11	Horizontal
3	6588.5	39.07	34.78	-21.65	52.20	68.20	16.00	Horizontal
4	8500.7667	57.30	36.90	-46.11	48.09	68.20	20.11	Horizontal
5	13692.7667	51.08	40.59	-42.86	48.81	68.20	19.39	Horizontal
6	18000	55.14	43.20	-41.75	56.59	74.00	17.41	Horizontal

11a_TX_CH_36_Vertical



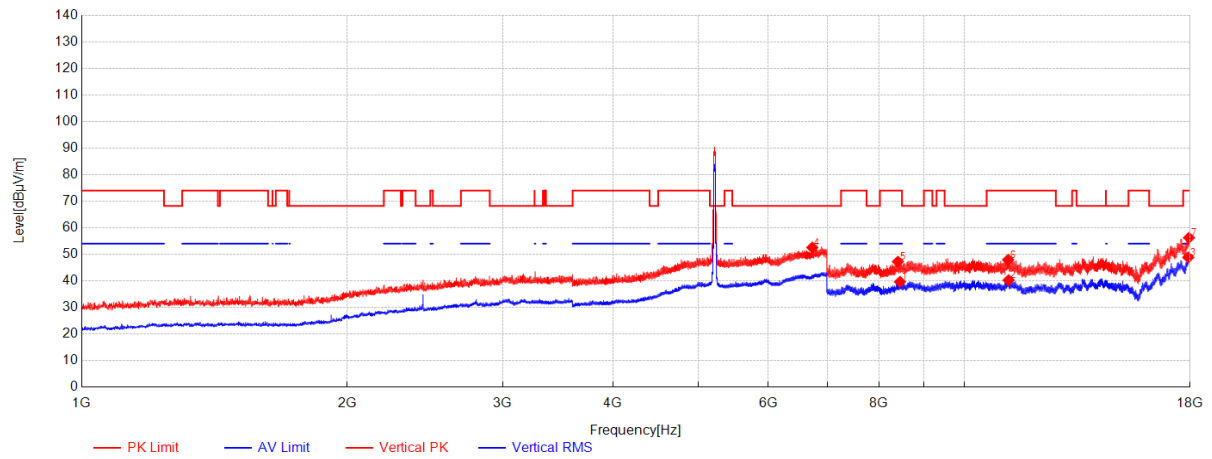
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8441.3667	49.00	36.85	-46.67	39.18	54.00	14.82	Vertical
2	11177.4333	45.17	39.41	-44.57	40.01	54.00	13.99	Vertical
3	17978.7333	47.83	43.20	-42.03	49.00	54.00	5.00	Vertical
4	6816.5	39.63	34.77	-21.40	53.00	68.20	15.20	Vertical
5	8383.8	57.34	36.94	-47.16	47.12	74.00	26.88	Vertical
6	10949.7333	53.60	39.70	-45.21	48.09	74.00	25.91	Vertical
7	17975.0667	55.26	43.20	-42.08	56.38	74.00	17.62	Vertical

11a_TX_CH_44_Horizontal



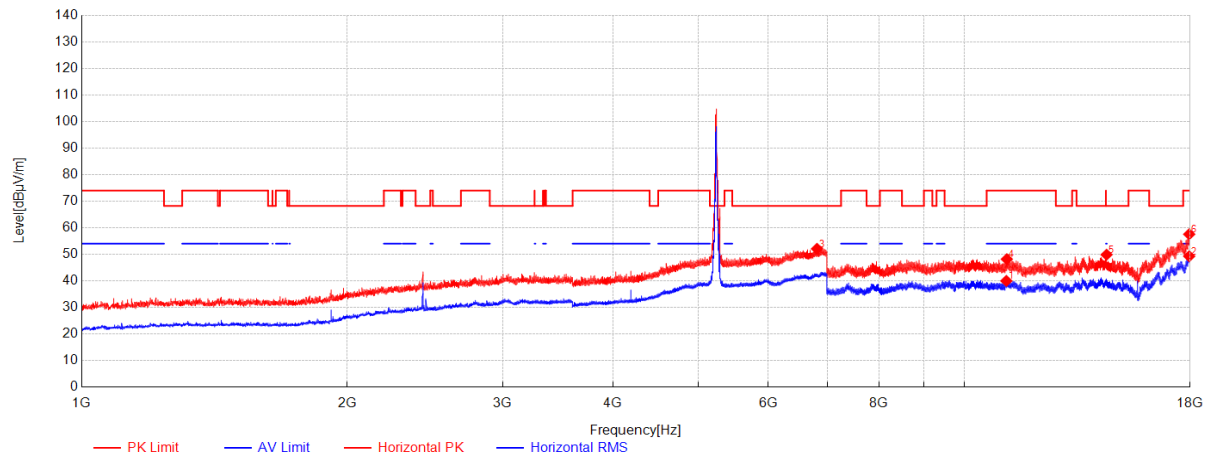
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11242.3333	44.80	39.58	-44.52	39.86	54.00	14.14	Horizontal
2	17990.8333	47.61	43.20	-41.87	48.94	54.00	5.06	Horizontal
3	6898	38.51	35.17	-21.08	52.60	68.20	15.60	Horizontal
4	8897.1333	55.69	37.70	-46.33	47.06	68.20	21.14	Horizontal
5	11197.6	53.90	39.49	-44.52	48.87	74.00	25.13	Horizontal
6	17986.4333	54.73	43.20	-41.93	56.00	74.00	18.00	Horizontal

11a_TX_CH_44_Vertical



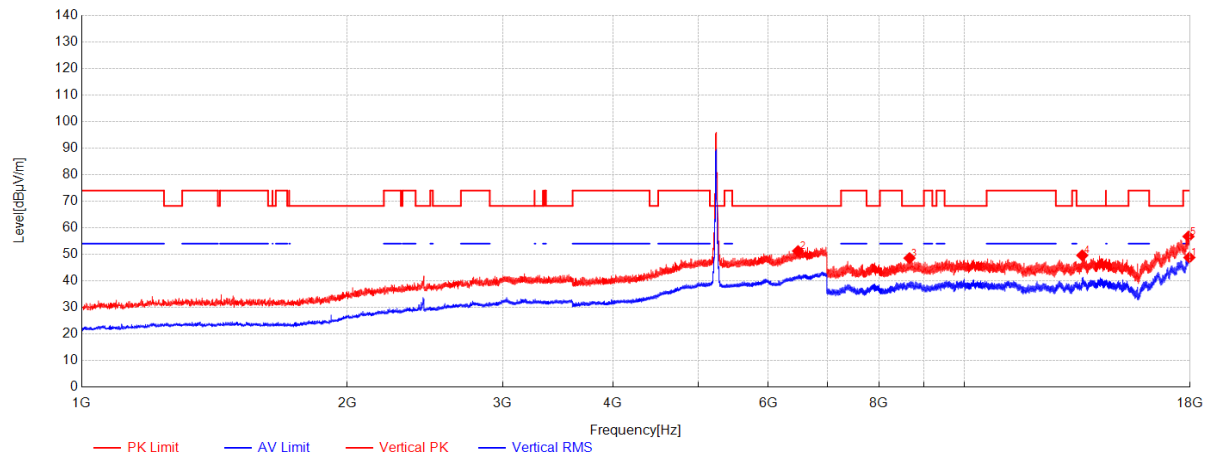
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8456.4	49.37	36.81	-46.53	39.65	54.00	14.35	Vertical
2	11225.1	45.22	39.55	-44.52	40.25	54.00	13.75	Vertical
3	17936.9333	48.33	43.07	-42.58	48.82	54.00	5.18	Vertical
4	6727	39.76	34.65	-21.88	52.53	68.20	15.67	Vertical
5	8409.1	57.16	37.05	-46.98	47.23	74.00	26.77	Vertical
6	11211.1667	52.92	39.52	-44.51	47.93	74.00	26.07	Vertical
7	17970.6667	55.16	43.20	-42.13	56.23	74.00	17.77	Vertical

11a_TX_CH_48_Horizontal



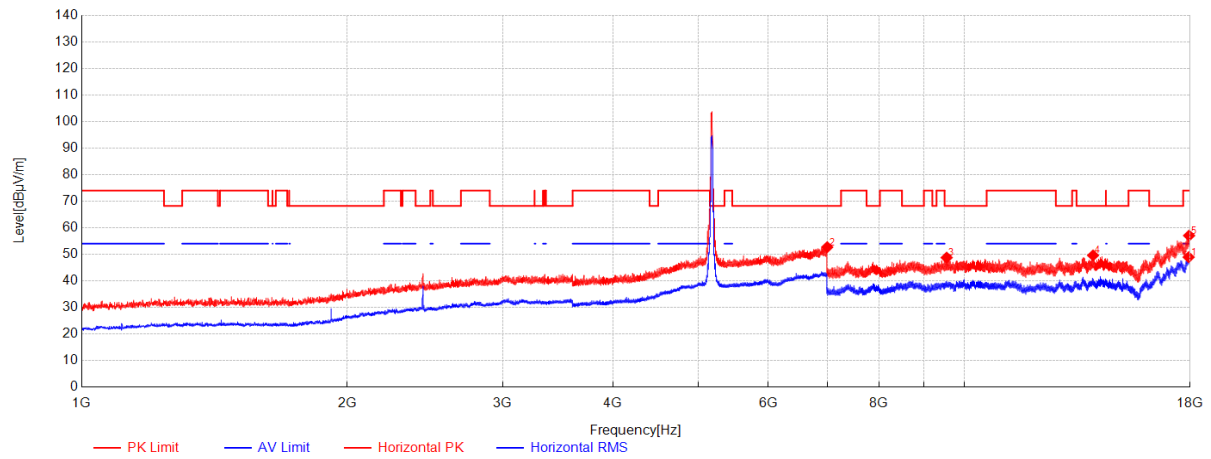
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11159.4667	45.27	39.34	-44.62	39.99	54.00	14.01	Horizontal
2	17980.5667	48.06	43.20	-42.00	49.26	54.00	4.74	Horizontal
3	6809.5	38.67	34.82	-21.42	52.07	68.20	16.13	Horizontal
4	11173.0333	53.36	39.39	-44.58	48.17	74.00	25.83	Horizontal
5	14494.6667	52.47	40.39	-43.01	49.85	74.00	24.15	Horizontal
6	17979.4667	56.35	43.20	-42.02	57.53	74.00	16.47	Horizontal

11a_TX_CH_48_Vertical



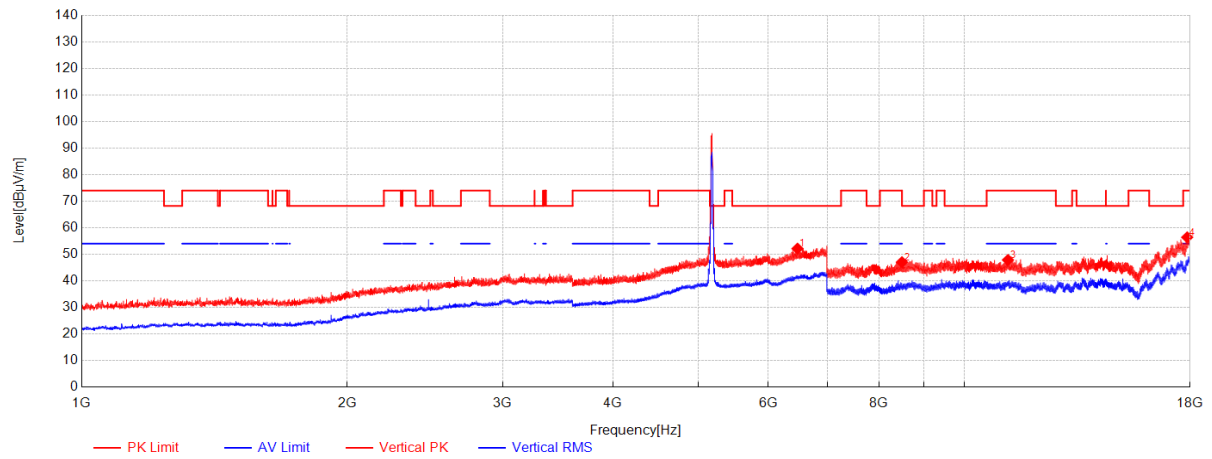
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	17988.6333	47.47	43.20	-41.90	48.77	54.00	5.23	Vertical
2	6481.5	38.56	34.20	-21.54	51.22	68.20	16.98	Vertical
3	8669.0667	57.10	37.44	-45.98	48.56	68.20	19.64	Vertical
4	13603.3	51.88	40.41	-42.70	49.59	68.20	18.61	Vertical
5	17946.1	55.99	43.16	-42.46	56.69	74.00	17.31	Vertical

11ax(HE20)_TX_CH_36_Horizontal



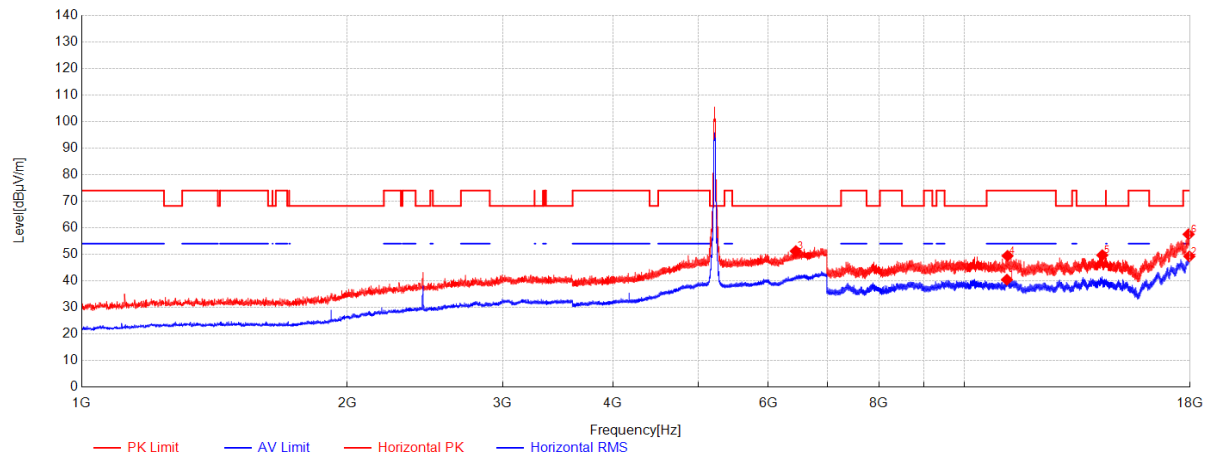
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	17954.1667	48.07	43.20	-42.35	48.92	54.00	5.08	Horizontal
2	6994	38.99	35.45	-21.76	52.68	68.20	15.52	Horizontal
3	9550.9	55.31	38.70	-45.26	48.75	68.20	19.45	Horizontal
4	13991.2333	51.50	40.35	-42.26	49.59	68.20	18.61	Horizontal
5	17975.4333	55.91	43.20	-42.07	57.04	74.00	16.96	Horizontal

11ax(HE20)_TX_CH_36_Verical



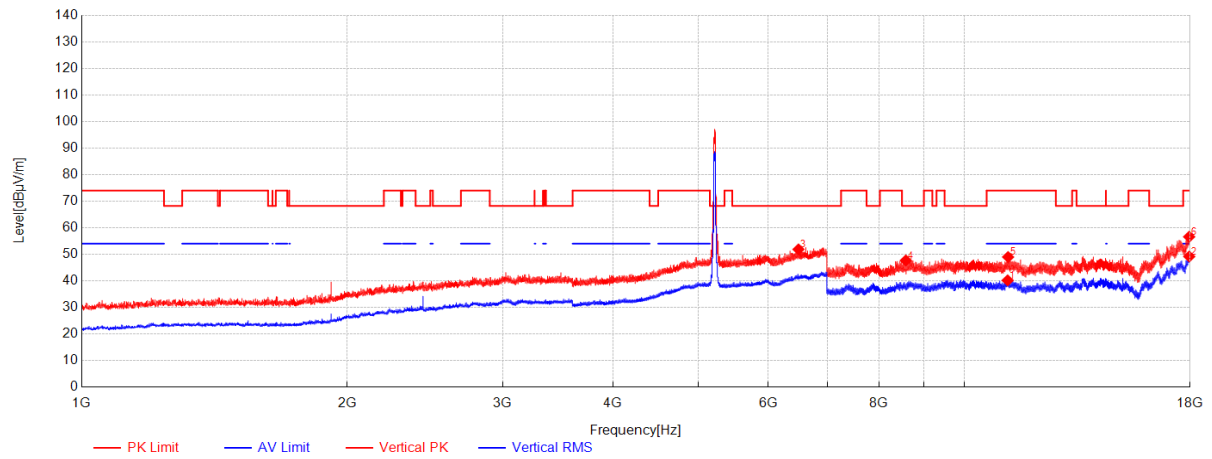
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	6472	39.54	34.20	-21.60	52.14	68.20	16.06	Vertical
2	8499.3	56.26	36.90	-46.12	47.04	74.00	26.96	Vertical
3	11206.0333	52.87	39.51	-44.51	47.87	74.00	26.13	Vertical
4	17885.6	56.93	42.73	-43.26	56.40	74.00	17.60	Vertical

11ax(HE20)_TX_CH_44_Horizontal



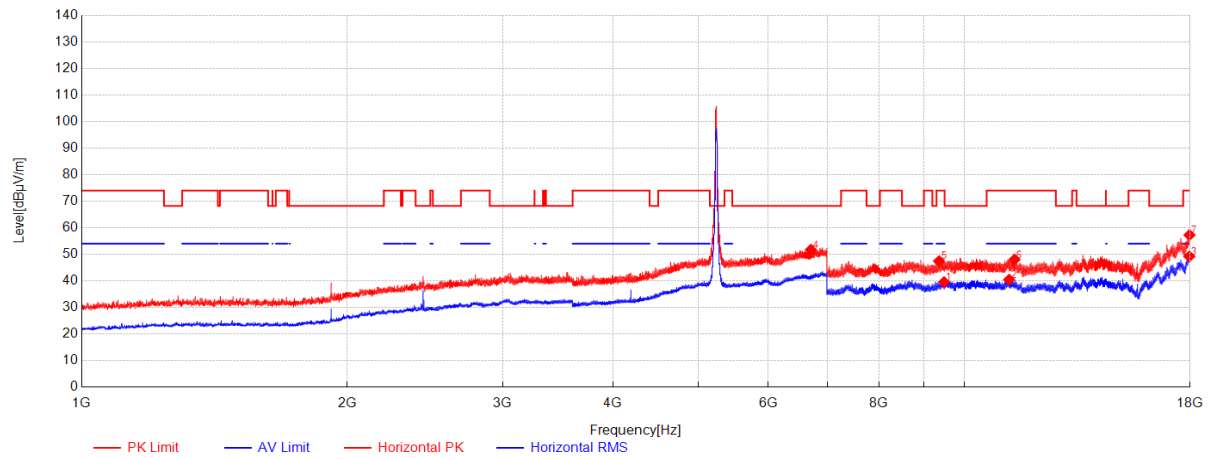
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11176.7	45.61	39.41	-44.57	40.45	54.00	13.55	Horizontal
2	17987.9	47.94	43.20	-41.91	49.23	54.00	4.77	Horizontal
3	6445	38.80	34.17	-21.79	51.18	68.20	17.02	Horizontal
4	11194.3	54.46	39.48	-44.53	49.41	74.00	24.59	Horizontal
5	14333.7	52.27	40.27	-42.88	49.66	68.20	18.54	Horizontal
6	17954.5333	56.67	43.20	-42.35	57.52	74.00	16.48	Horizontal

11ax(HE20)_TX_CH_44_Vertical



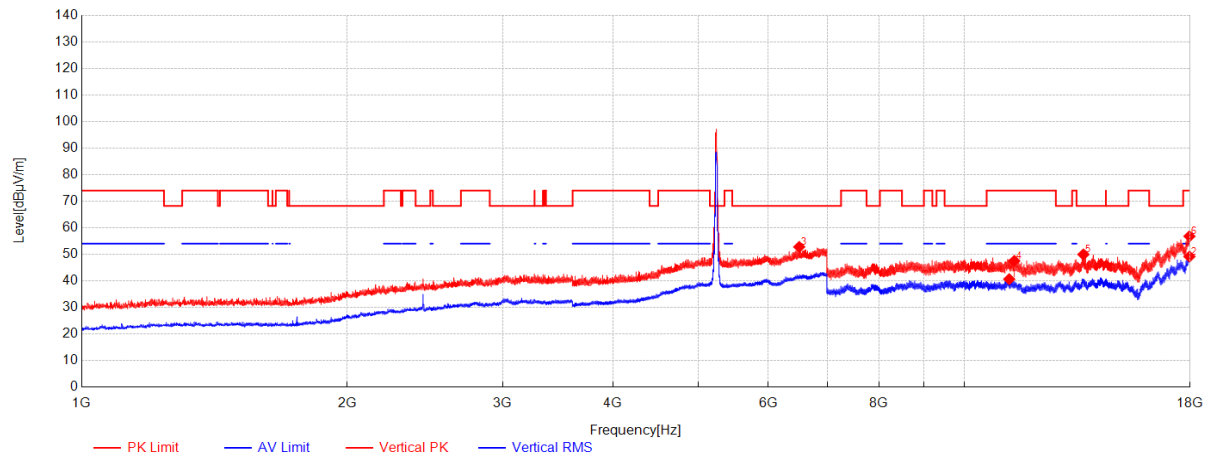
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11197.2333	45.22	39.49	-44.52	40.19	54.00	13.81	Vertical
2	17980.9333	47.96	43.20	-42.00	49.16	54.00	4.84	Vertical
3	6489	39.14	34.20	-21.49	51.85	68.20	16.35	Vertical
4	8586.5667	56.66	37.32	-46.31	47.67	68.20	20.53	Vertical
5	11210.4333	53.95	39.52	-44.51	48.96	74.00	25.04	Vertical
6	17976.5333	55.44	43.20	-42.06	56.58	74.00	17.42	Vertical

11ax(HE20)_TX_CH_48_Horizontal



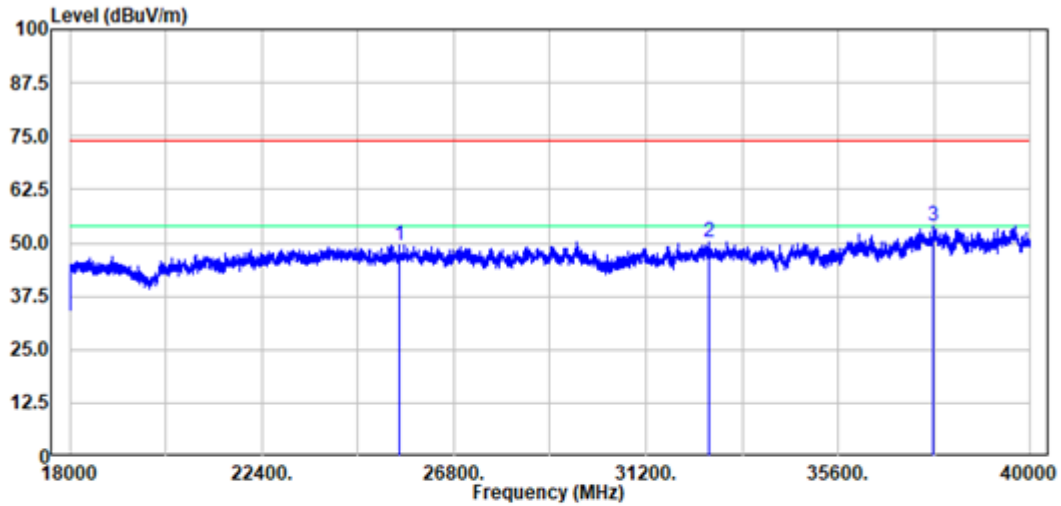
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	9486	46.57	38.38	-45.40	39.55	54.00	14.45	Horizontal
2	11240.1333	45.40	39.58	-44.52	40.46	54.00	13.54	Horizontal
3	17983.8667	47.95	43.20	-41.96	49.19	54.00	4.81	Horizontal
4	6701	39.04	34.70	-22.02	51.72	68.20	16.48	Horizontal
5	9363.5333	55.52	38.33	-46.42	47.43	74.00	26.57	Horizontal
6	11399.6333	52.74	39.40	-44.13	48.01	74.00	25.99	Horizontal
7	17993.4	55.88	43.20	-41.84	57.24	74.00	16.76	Horizontal

11ax(HE20)_TX_CH_48_Verical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11243.8	45.57	39.59	-44.52	40.64	54.00	13.36	Vertical
2	17991.5667	47.80	43.20	-41.86	49.14	54.00	4.86	Vertical
3	6501	39.97	34.21	-21.41	52.77	68.20	15.43	Vertical
4	11393.0333	52.28	39.41	-44.16	47.53	74.00	26.47	Vertical
5	13643.2667	52.21	40.49	-42.77	49.93	68.20	18.27	Vertical
6	17991.2	55.43	43.20	-41.87	56.76	74.00	17.24	Vertical

Test Mode: 01; Polarity: Horizontal

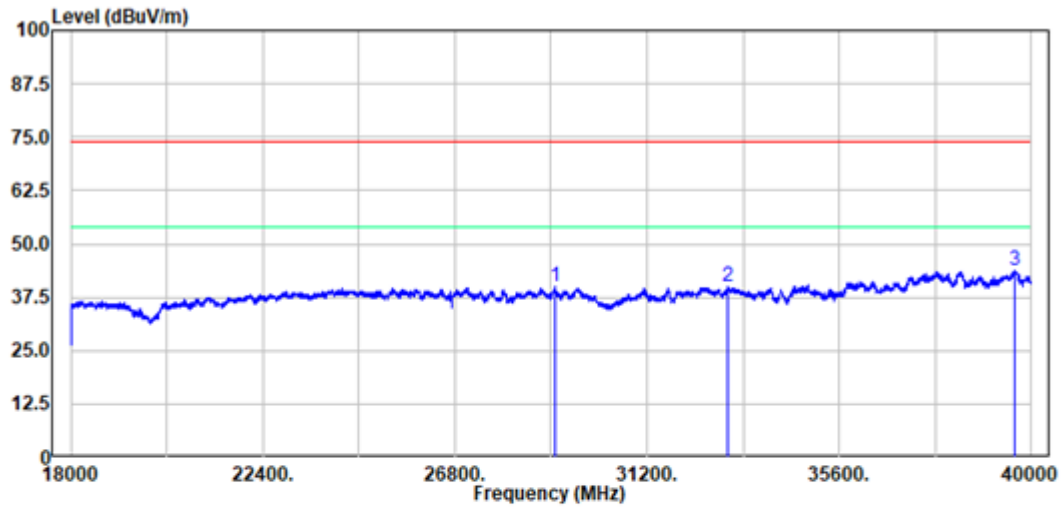


Antenna Polarity :Horizontal

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamplifier Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	25543.11	53.69	39.70	10.88	54.69	49.58	74.00	-24.42	Peak
2	32624.13	53.72	40.68	12.07	56.25	50.22	74.00	-23.78	Peak
3	37786.36	51.69	42.81	13.95	54.34	54.11	74.00	-19.89	Peak

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamplifier Factor

Test Mode: 01; Polarity: Horizontal

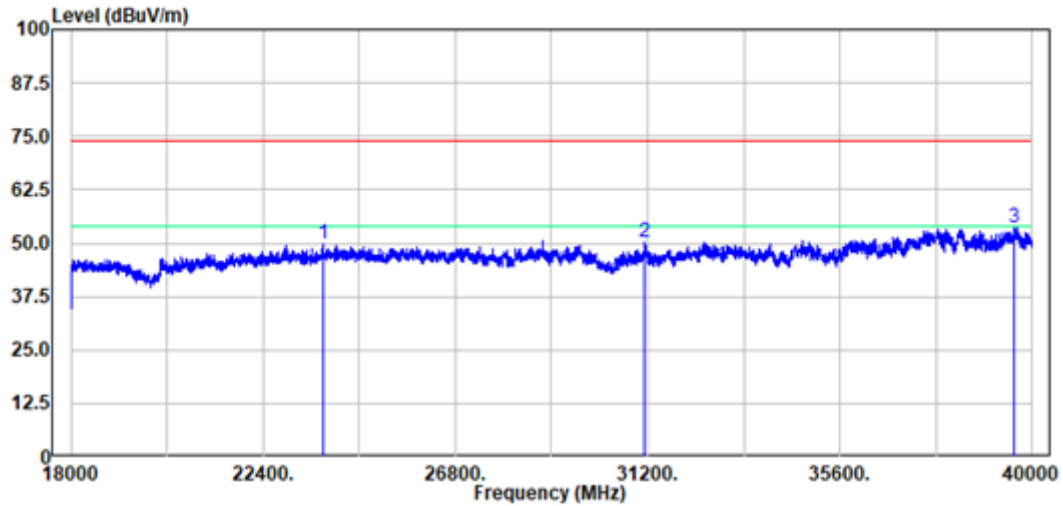


Antenna Polarity :Horizontal

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	29077.02	44.75	40.00	11.44	56.38	39.81	54.00	-14.19	Average
2	33037.81	43.68	40.78	12.57	57.05	39.98	54.00	-14.02	Average
3	39643.53	40.90	43.68	14.89	55.66	43.81	54.00	-10.19	Average

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 01; Polarity: Vertical

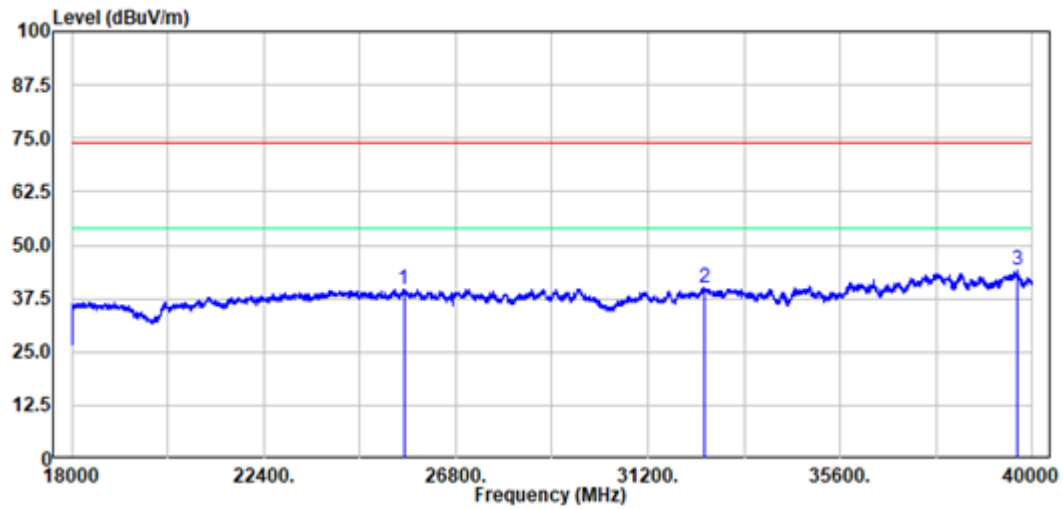


Antenna Polarity :Vertical

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	23773.96	54.82	39.16	10.16	54.51	49.63	74.00	-24.37	Peak
2	31132.23	52.96	40.42	12.65	55.84	50.19	74.00	-23.81	Peak
3	39603.92	50.53	43.66	14.76	55.53	53.42	74.00	-20.58	Peak

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Test Mode: 01; Polarity: Vertical



Antenna Polarity :Vertical

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	25600.32	43.93	39.70	10.88	54.80	39.71	54.00	-14.29	Average
2	32500.90	43.37	40.66	11.87	56.00	39.90	54.00	-14.10	Average
3	39669.93	41.10	43.69	14.98	55.74	44.03	54.00	-9.97	Average

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

7.4 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: ANSI C63.10 (2020) Section 6.10.5 & 12.7.2
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
Above 960	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

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

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.

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

Humidity: 45.6 % RH

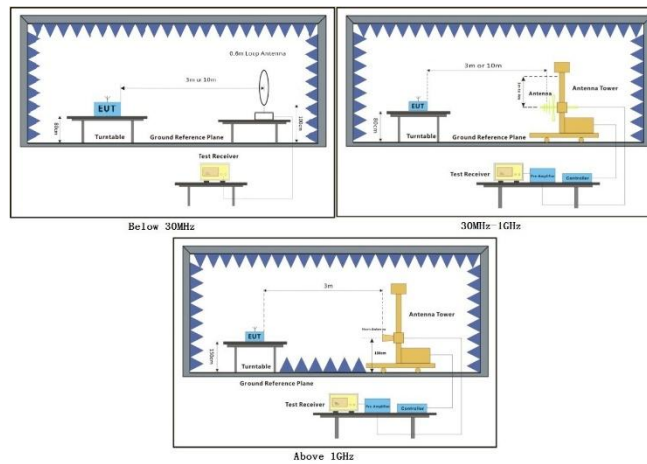
Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan /	Mode	Description
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Final test	Code	
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

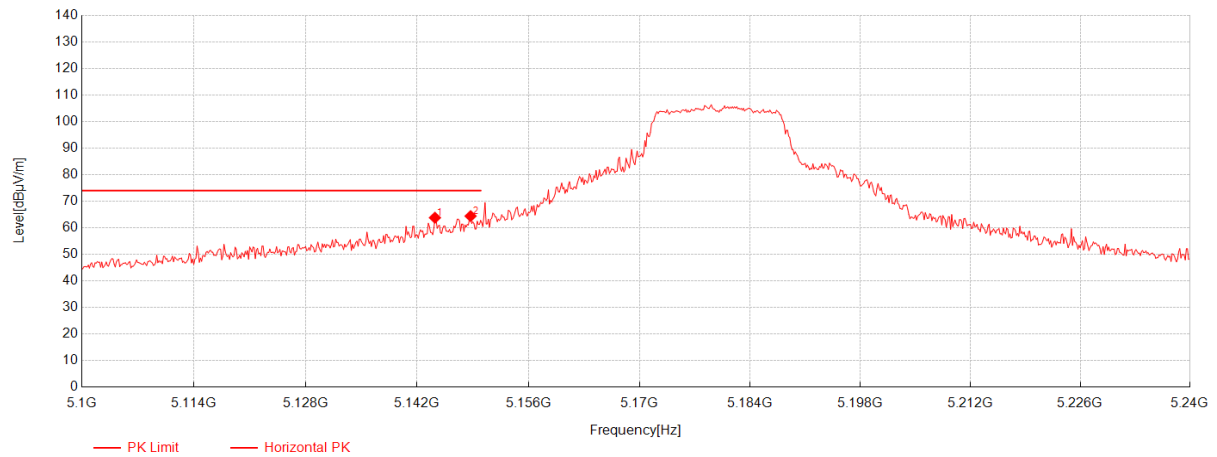
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 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: $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$

Remark 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.

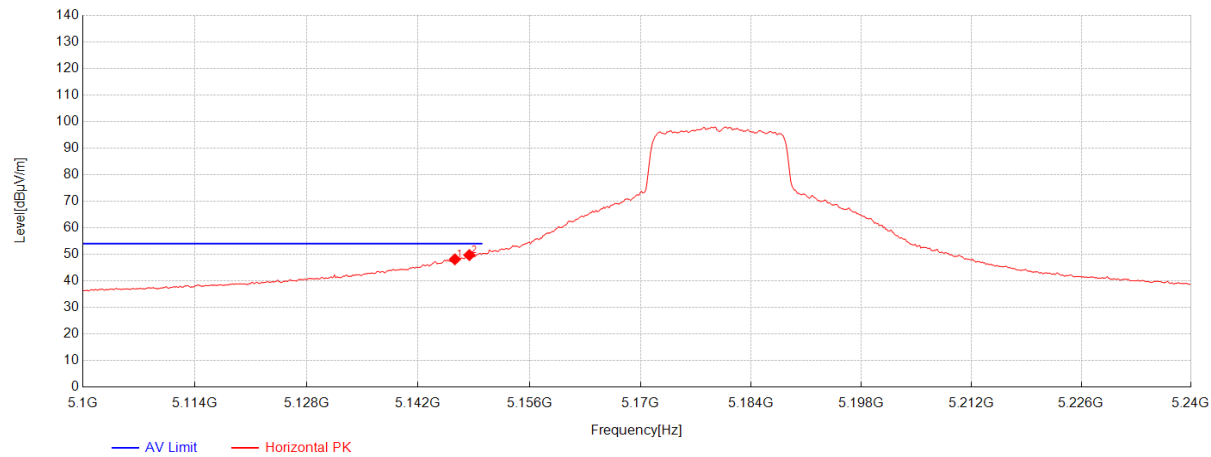
Remark 3: For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

11a_TX_CH_36_Horizontal_Peak



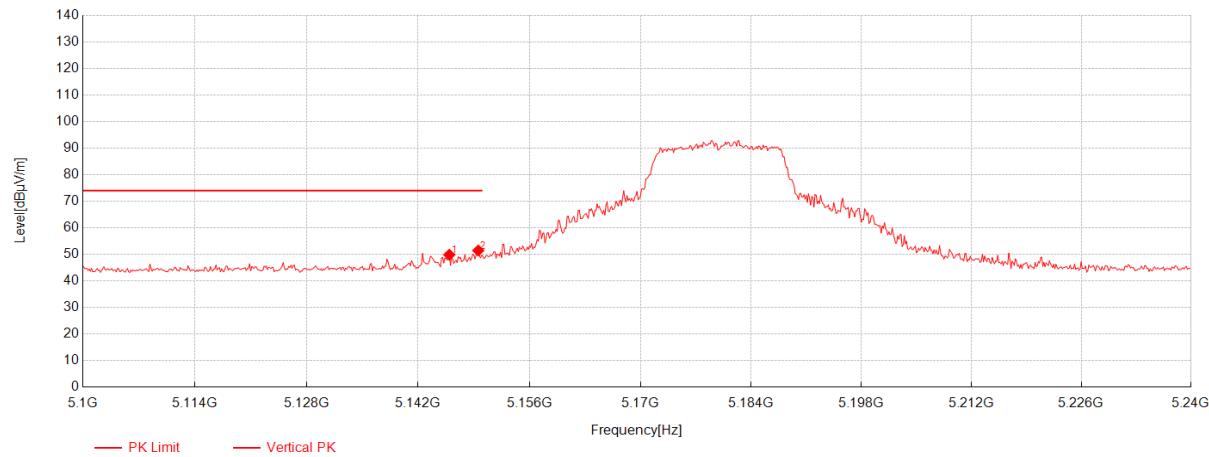
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5144.24	53.66	31.81	-21.71	63.76	74.00	10.24	Horizontal
2	5148.72	54.27	31.80	-21.70	64.37	74.00	9.63	Horizontal

11a_TX_CH_36_Horizontal_Average



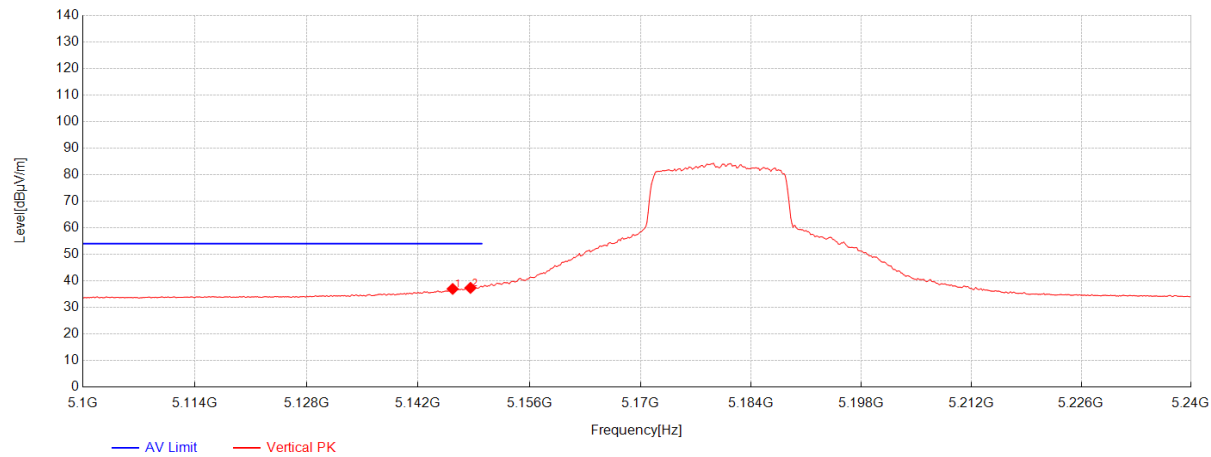
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.62	38.00	31.81	-21.70	48.11	54.00	5.89	Horizontal
2	5148.44	39.59	31.80	-21.70	49.69	54.00	4.31	Horizontal

11a_TX_CH_36_Vertical_Peak



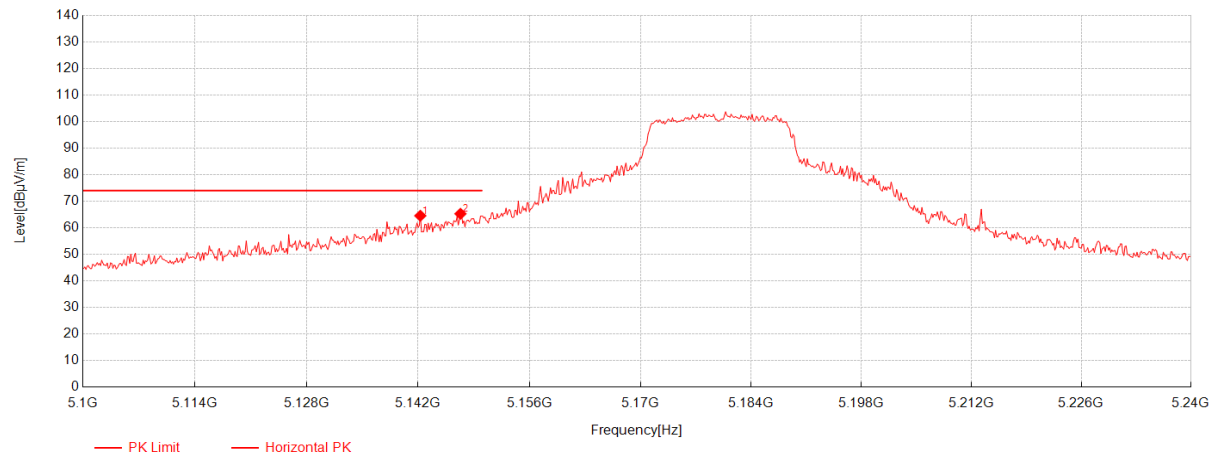
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5145.92	39.73	31.81	-21.71	49.83	74.00	24.17	Vertical
2	5149.56	41.32	31.80	-21.69	51.43	74.00	22.57	Vertical

11a_TX_CH_36_Vertical_Average



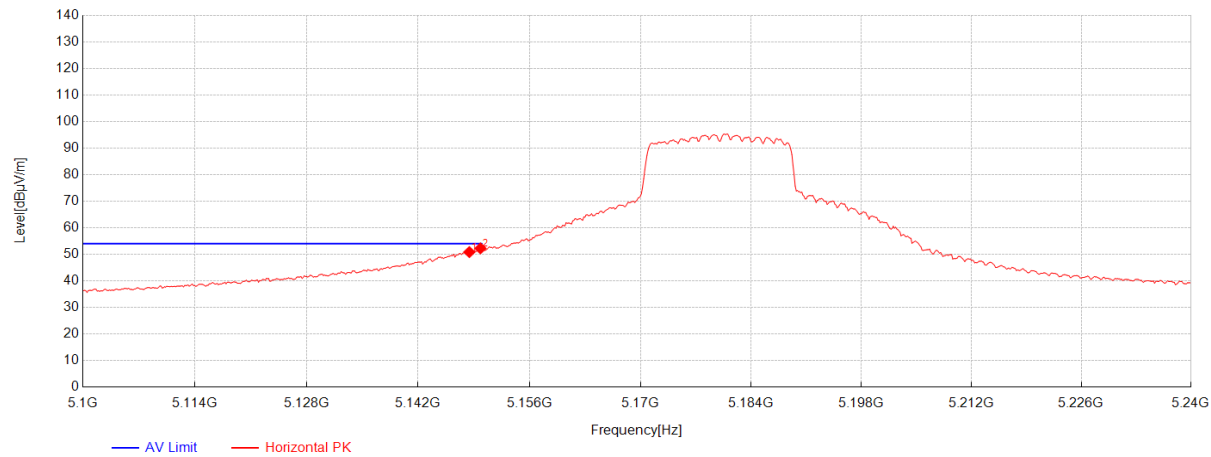
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5146.34	26.86	31.81	-21.71	36.96	54.00	17.04	Vertical
2	5148.58	27.26	31.80	-21.70	37.36	54.00	16.64	Vertical

11ac(VHT20)_TX_CH_36_Horizontal_Peak



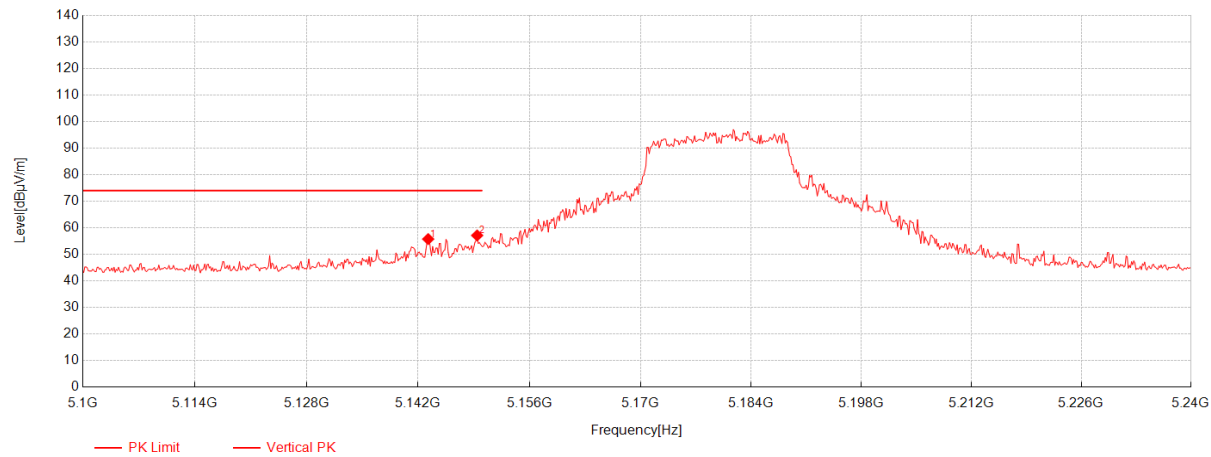
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5142.28	54.40	31.82	-21.72	64.50	74.00	9.50	Horizontal
2	5147.32	55.14	31.81	-21.70	65.25	74.00	8.75	Horizontal

11ac(VHT20)_TX_CH_36_Horizontal_Average



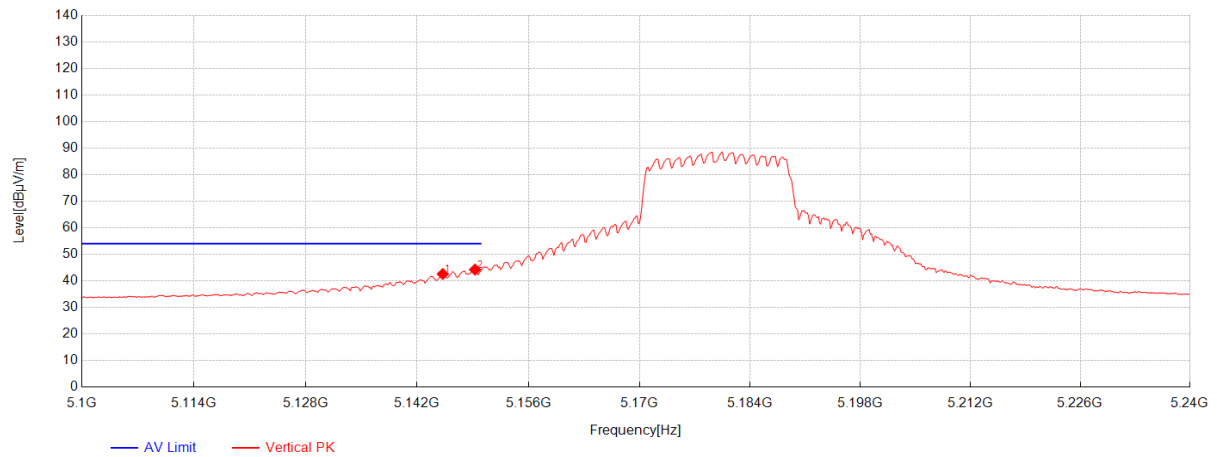
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.44	40.72	31.80	-21.70	50.82	54.00	3.18	Horizontal
2	5149.84	42.12	31.80	-21.69	52.23	54.00	1.77	Horizontal

11ac(VHT20)_TX_CH_36_Vertical_Peak



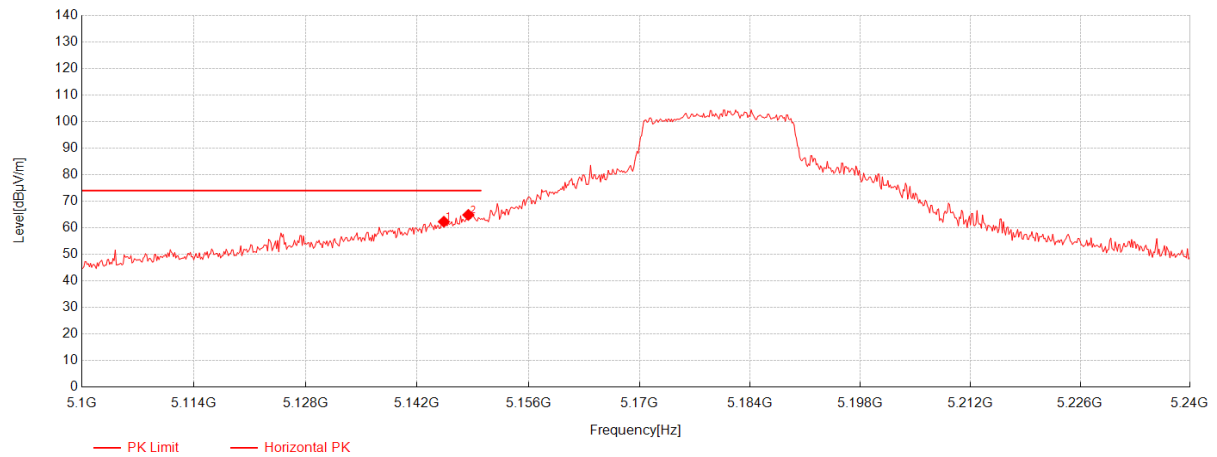
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5143.26	45.64	31.81	-21.72	55.73	74.00	18.27	Vertical
2	5149.42	46.97	31.80	-21.69	57.08	74.00	16.92	Vertical

11ac(VHT20)_TX_CH_36_Vetical_Average



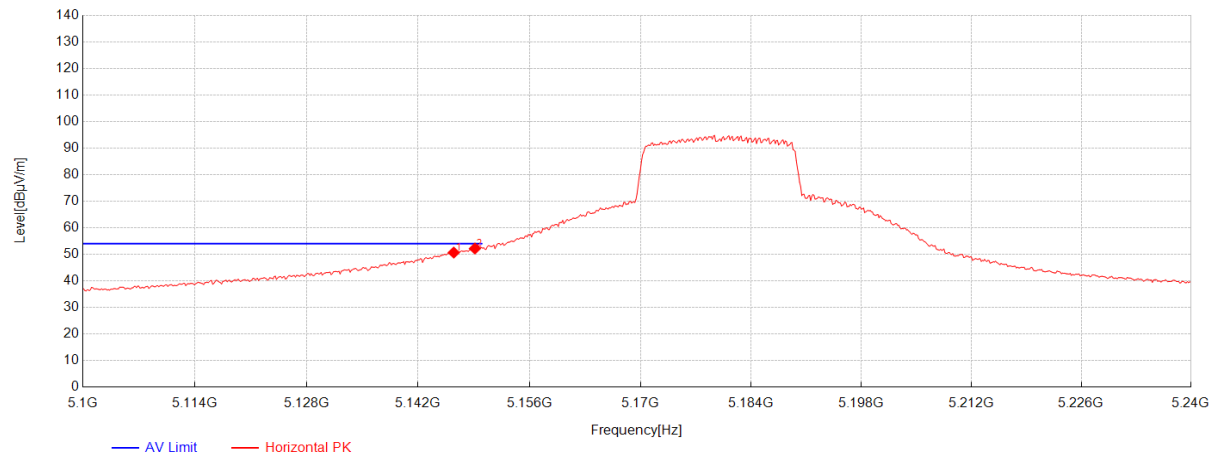
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NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.22	32.49	31.81	-21.71	42.59	54.00	11.41	Vertical
2	5149.28	34.12	31.80	-21.69	44.23	54.00	9.77	Vertical

11ax(HE20)_TX_CH_36_Horizontal_Peak



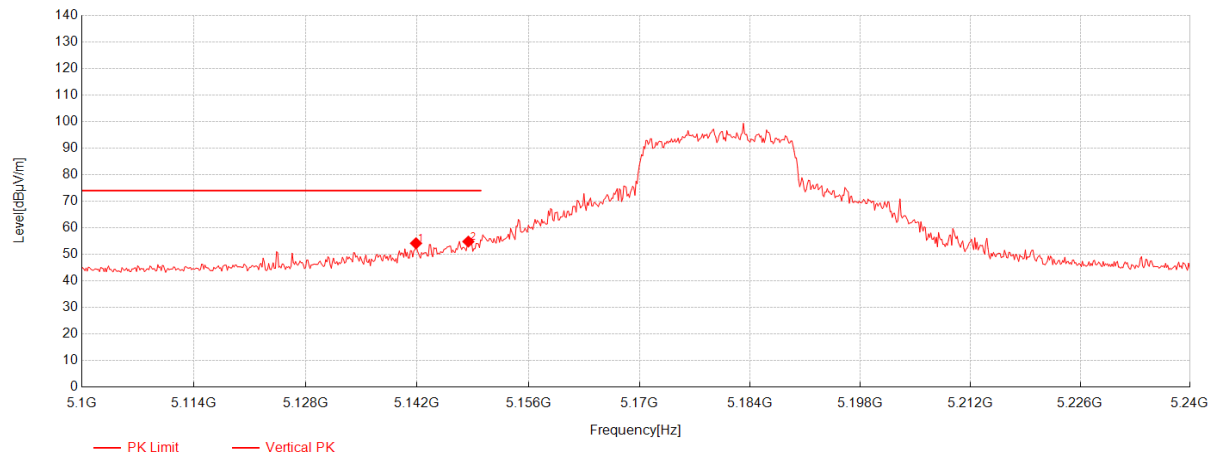
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.36	52.15	31.81	-21.71	62.25	74.00	11.75	Horizontal
2	5148.44	54.71	31.80	-21.70	64.81	74.00	9.19	Horizontal

11ax(HE20)_TX_CH_36_Horizontal_Average



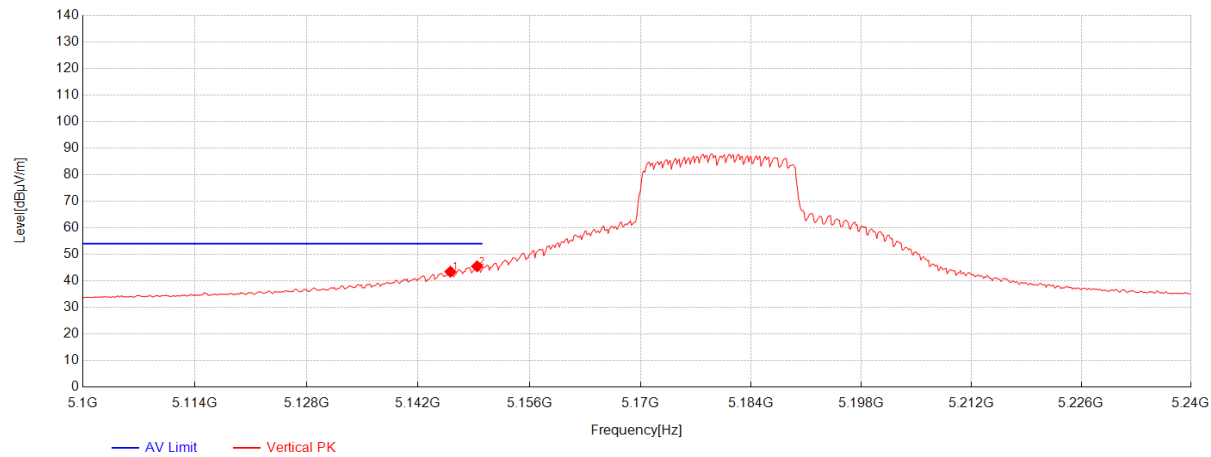
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5146.48	40.54	31.81	-21.70	50.65	54.00	3.35	Horizontal
2	5149.14	42.06	31.80	-21.69	52.17	54.00	1.83	Horizontal

11ax(HE20)_TX_CH_36_Veritical_Peak



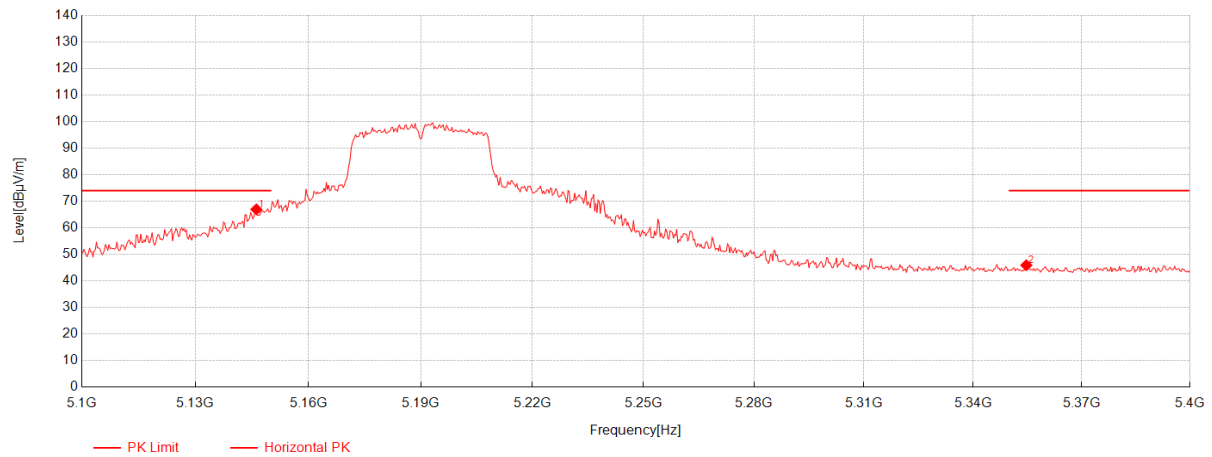
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5141.86	44.04	31.82	-21.72	54.14	74.00	19.86	Vertical
2	5148.44	44.69	31.80	-21.70	54.79	74.00	19.21	Vertical

11ax(HE20)_TX_CH_36_Veritical_Average



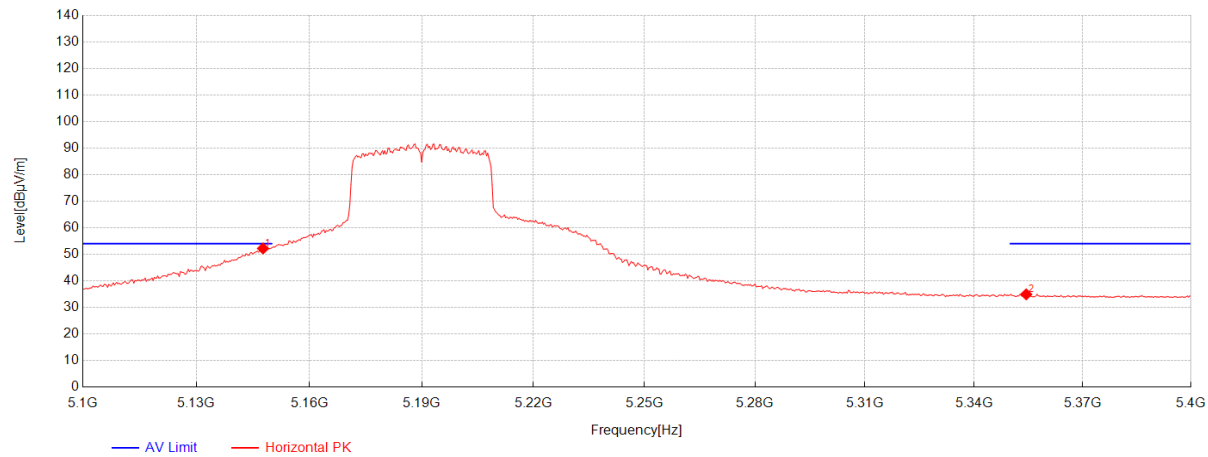
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.06	33.33	31.81	-21.71	43.43	54.00	10.57	Vertical
2	5149.42	35.37	31.80	-21.69	45.48	54.00	8.52	Vertical

11ac(VHT40)_TX_CH_38_Horizontal_Peak



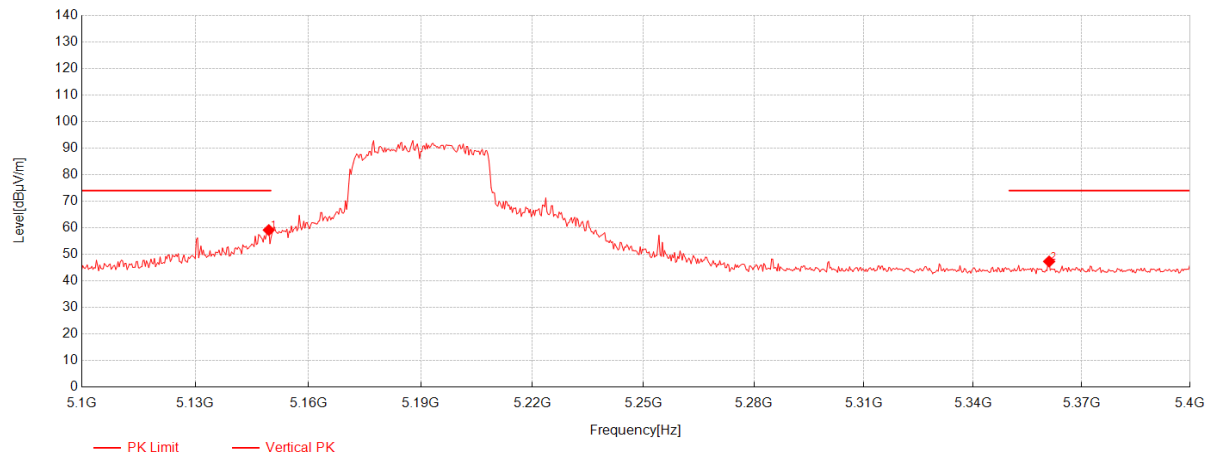
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.2	56.80	31.81	-21.71	66.90	74.00	7.10	Horizontal
2	5354.7	36.83	31.70	-22.66	45.87	74.00	28.13	Horizontal

11ac(VHT40)_TX_CH_38_Horizontal_Average



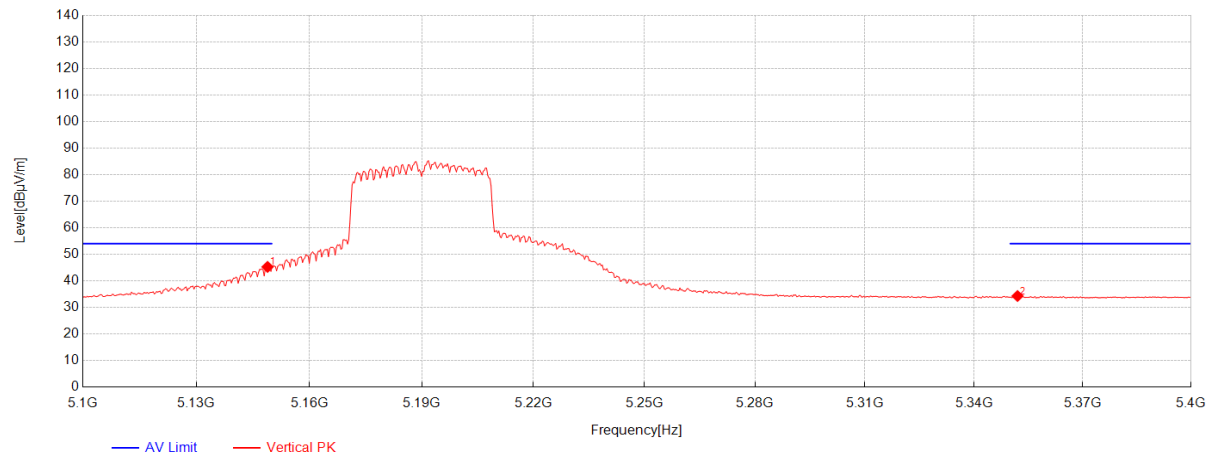
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	42.10	31.80	-21.70	52.20	54.00	1.80	Horizontal
2	5354.4	25.88	31.70	-22.66	34.92	54.00	19.08	Horizontal

11ac(VHT40)_TX_CH_38_Vetical_Peak



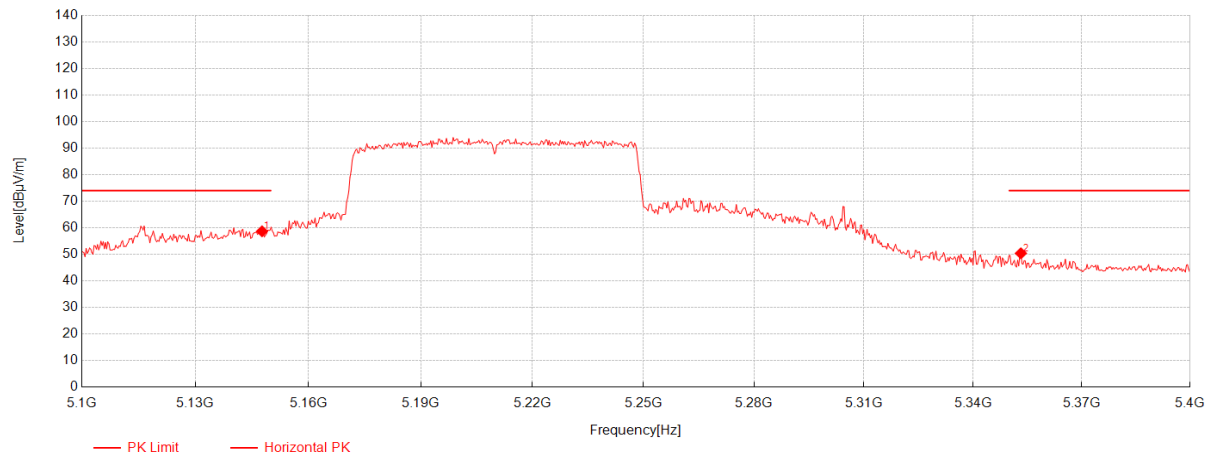
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.5	49.00	31.80	-21.69	59.11	74.00	14.89	Vertical
2	5361	38.26	31.70	-22.66	47.30	74.00	26.70	Vertical

11ac(VHT40)_TX_CH_38_Vetical_Average



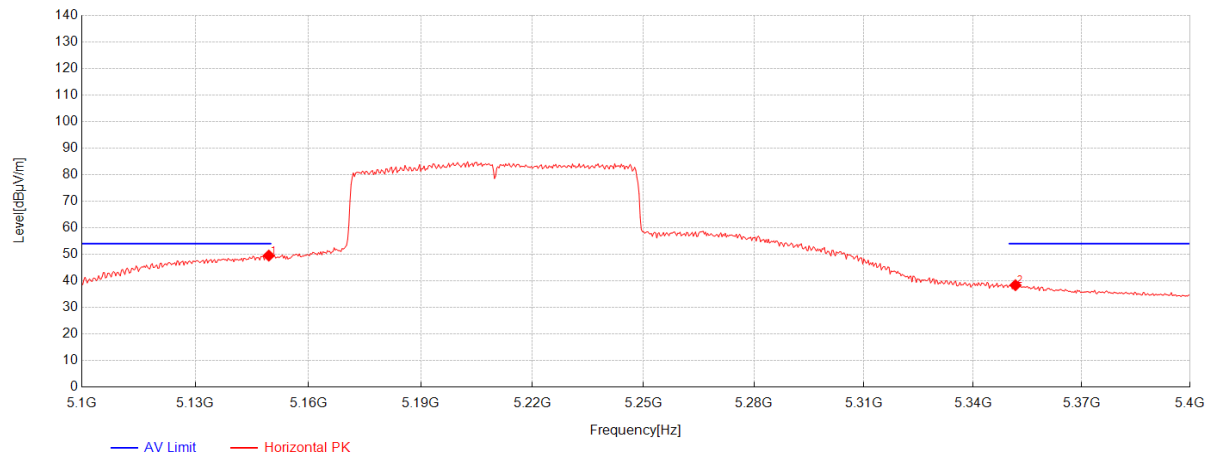
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5148.9	35.14	31.80	-21.69	45.25	54.00	8.75	Vertical
2	5352	25.25	31.70	-22.66	34.29	54.00	19.71	Vertical

11ac(VHT80)_TX_CH_42_Horizontal_Peak



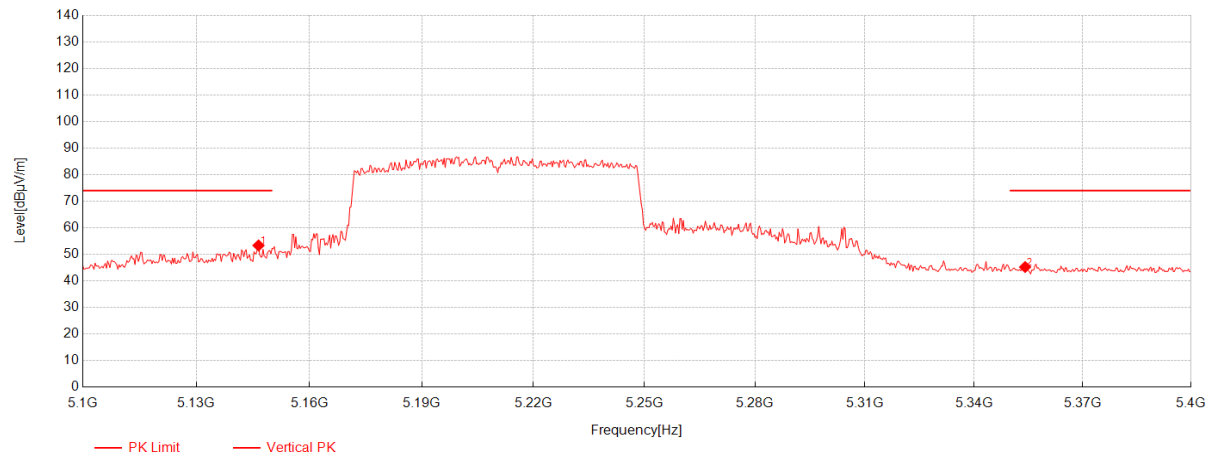
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	48.54	31.80	-21.70	58.64	74.00	15.36	Horizontal
2	5353.2	41.32	31.70	-22.66	50.36	74.00	23.64	Horizontal

11ac(VHT80)_TX_CH_42_Horizontal_Average



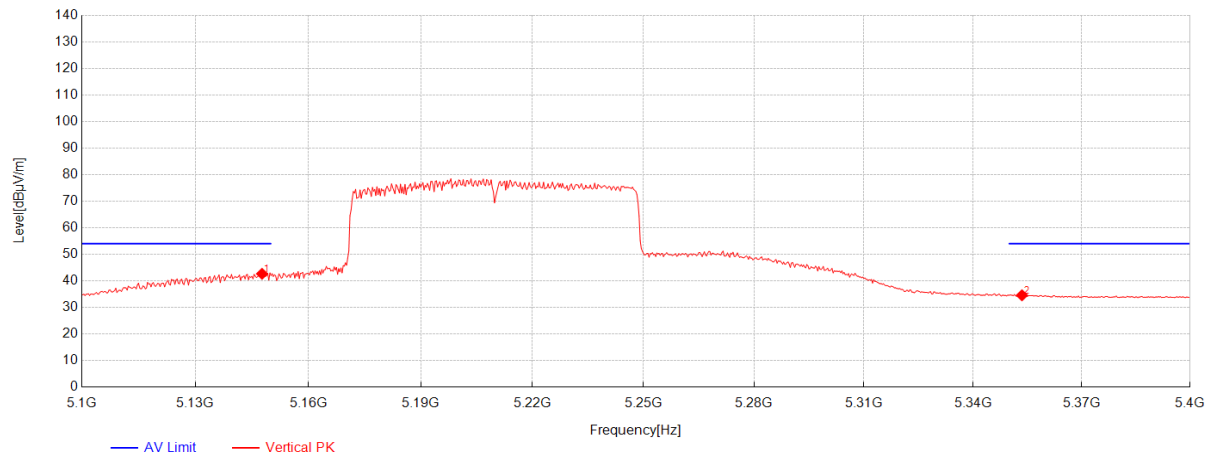
Data List								
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1	5149.5	39.40	31.80	-21.69	49.51	54.00	4.49	Horizontal
2	5351.7	29.32	31.70	-22.66	38.36	54.00	15.64	Horizontal

11ac(VHT80)_TX_CH_42_Vertical_Peak



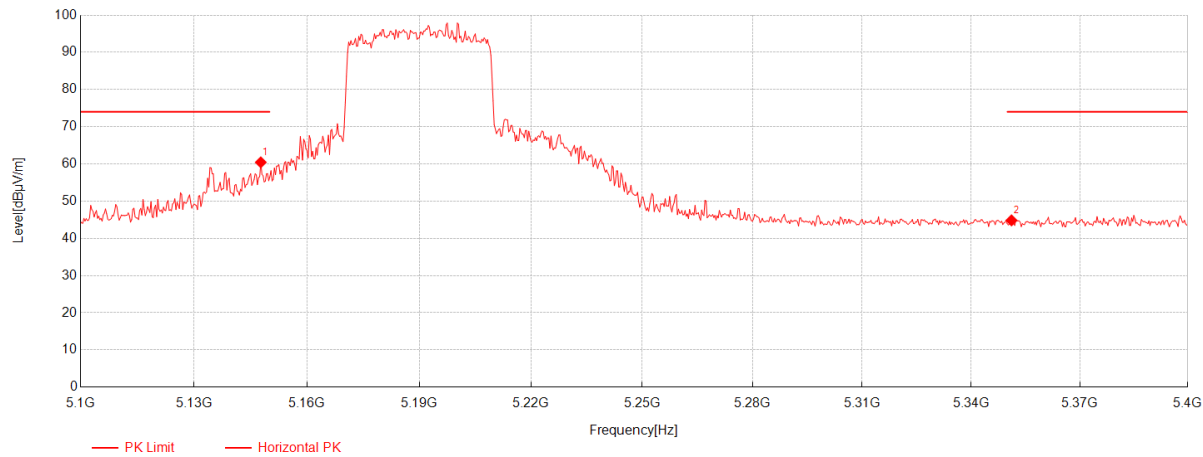
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.5	43.21	31.81	-21.70	53.32	74.00	20.68	Vertical
2	5354.1	36.16	31.70	-22.66	45.20	74.00	28.80	Vertical

11ac(VHT80)_TX_CH_42_Vertical_Average



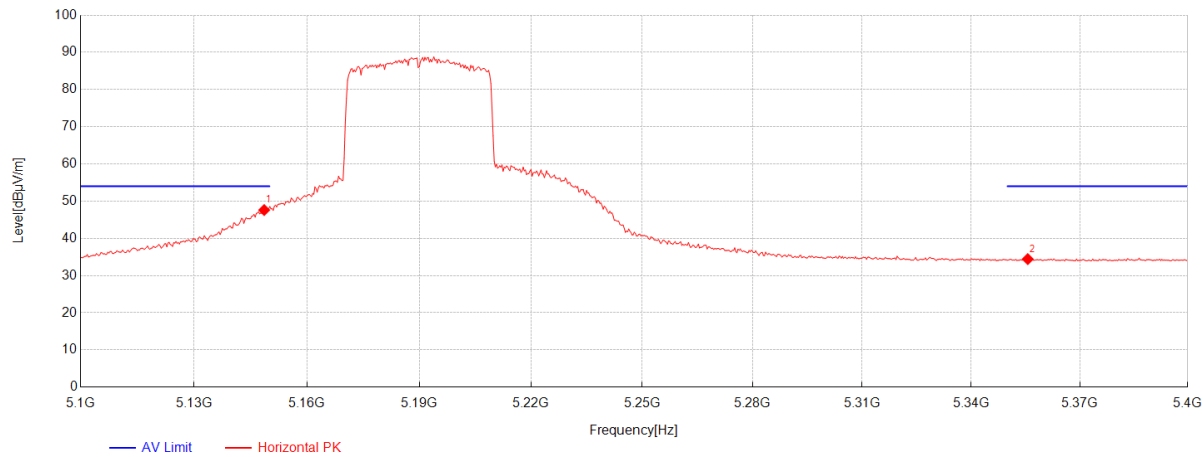
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	32.55	31.80	-21.70	42.65	54.00	11.35	Vertical
2	5353.5	25.53	31.70	-22.66	34.57	54.00	19.43	Vertical

11ax(HE40)_Full_TX_CH_38_Horizontal_Peak



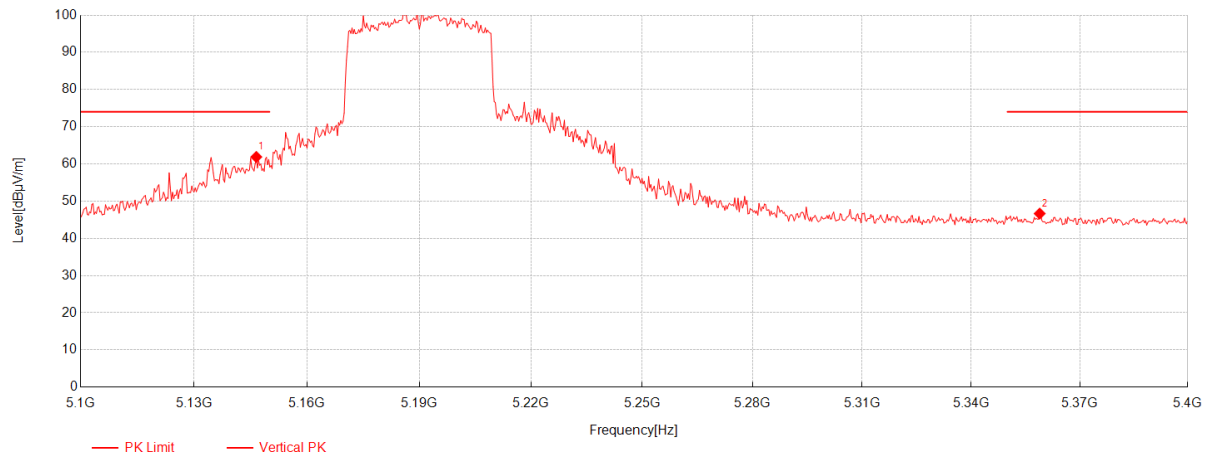
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	50.34	31.80	-21.70	60.44	74.00	13.56	Horizontal
2	5351.1	35.79	31.70	-22.66	44.83	74.00	29.17	Horizontal

11ax(HE40)_Full_TX_CH_38_Horizontal_Average



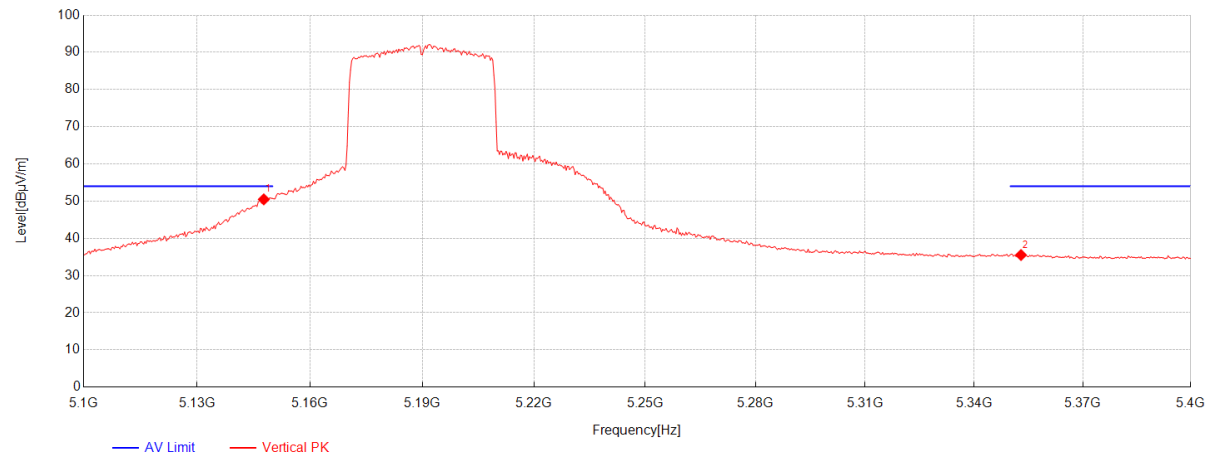
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.6	37.51	31.80	-21.70	47.61	54.00	6.39	Horizontal
2	5355.6	25.38	31.70	-22.66	34.42	54.00	19.58	Horizontal

11ax(HE40)_Full_TX_CH_38_Vertical_Peak



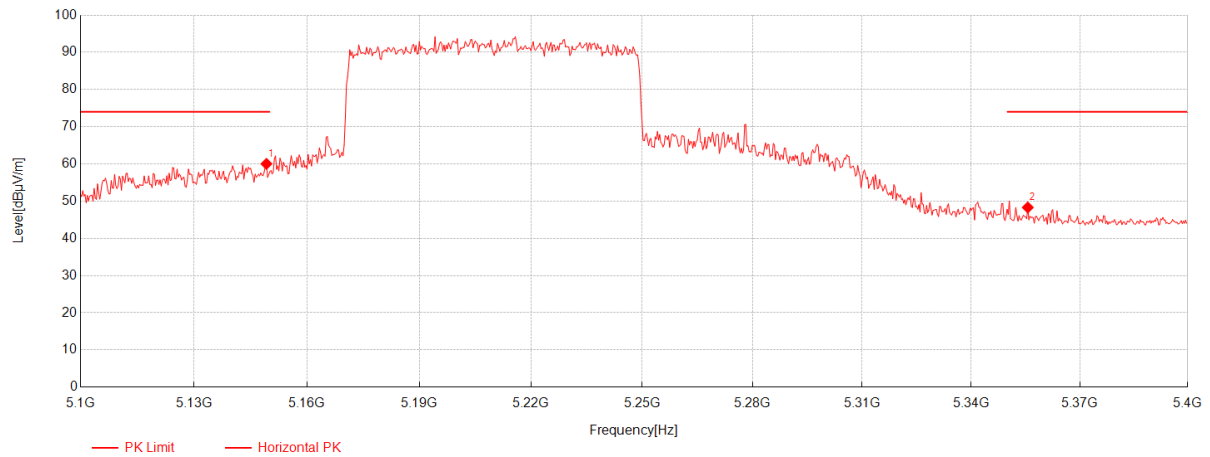
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.5	51.76	31.81	-21.70	61.87	74.00	12.13	Vertical
2	5358.9	37.61	31.70	-22.66	46.65	74.00	27.35	Vertical

11ax(HE40)_Full_TX_CH_38_Vertical_Average



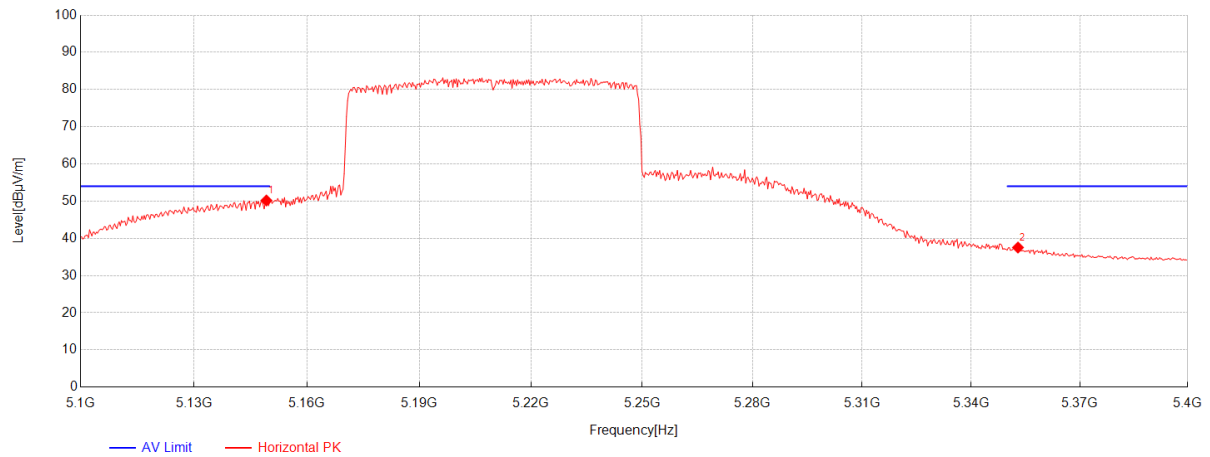
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	40.38	31.80	-21.70	50.48	54.00	3.52	Vertical
2	5352.9	26.47	31.70	-22.66	35.51	54.00	18.49	Vertical

11ax(HE80)_Full_TX_CH_42_Horizontal_Peak



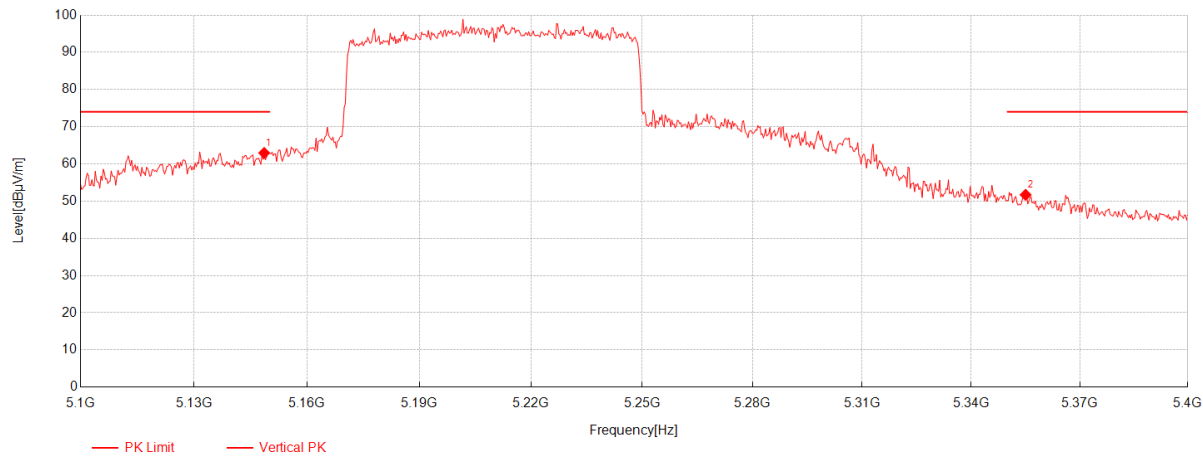
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.2	49.91	31.80	-21.69	60.02	74.00	13.98	Horizontal
2	5355.6	39.26	31.70	-22.66	48.30	74.00	25.70	Horizontal

11ax(HE80)_Full_TX_CH_42_Horizontal_Average



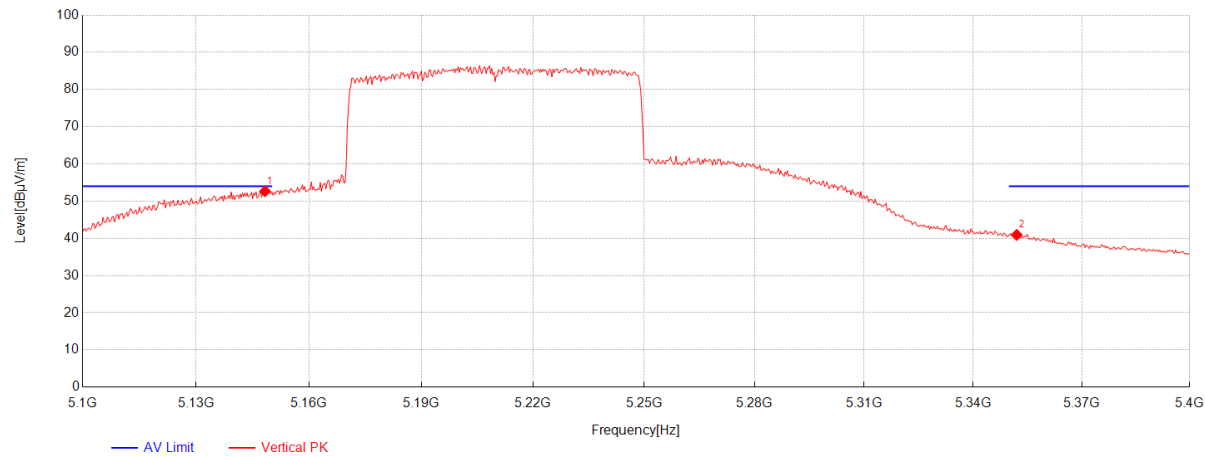
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.2	40.06	31.80	-21.69	50.17	54.00	3.83	Horizontal
2	5352.9	28.49	31.70	-22.66	37.53	54.00	16.47	Horizontal

11ax(HE80)_Full_TX_CH_42_Vertical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5148.6	52.85	31.80	-21.70	62.95	74.00	11.05	Vertical
2	5355	42.66	31.70	-22.66	51.70	74.00	22.30	Vertical

11ax(HE80)_Full_TX_CH_42_Vertical_Average



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.3	42.58	31.80	-21.70	52.68	54.00	1.32	Vertical
2	5352	31.89	31.70	-22.66	40.93	54.00	13.07	Vertical

7.5 Duty Cycle

Test Requirement ANSI C63.10 (2020) Section 12.2

Test Method: ANSI C63.10 (2020) Section 12.2

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

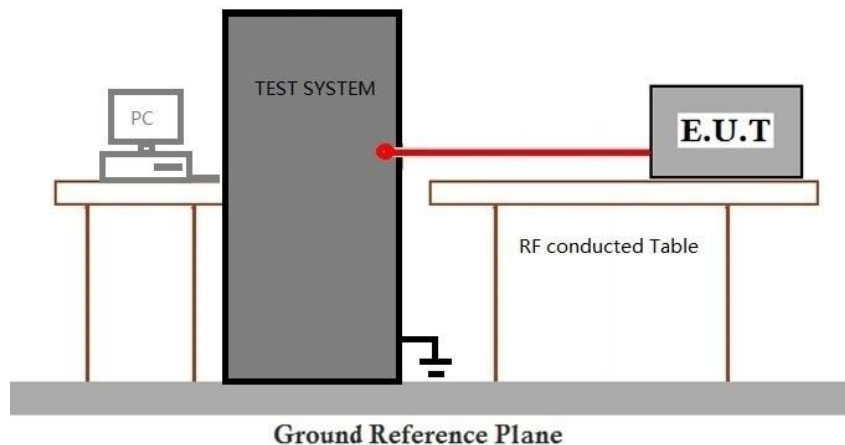
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 99% Bandwidth

Test Requirement ANSI C63.10 (2020) Section 12.5.3

Test Method: ANSI C63.10 (2020) Section 12.5.3

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

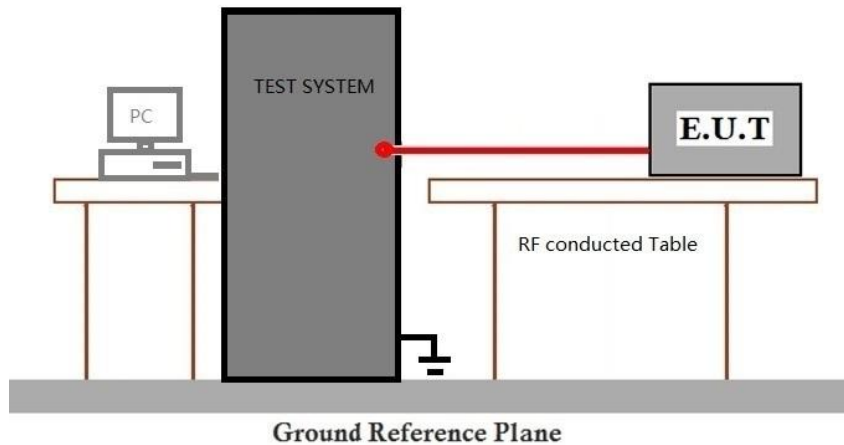
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 26dB Emission Bandwidth

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10 (2020) Section 12.5.2

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

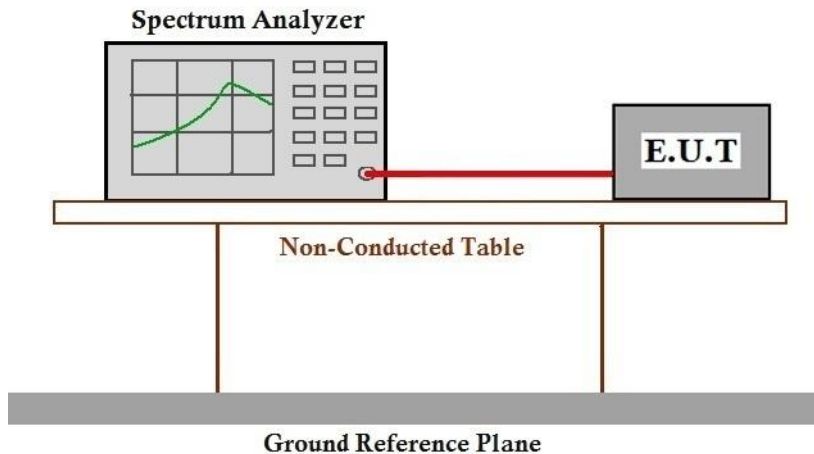
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Maximum Conducted Output Power

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10 (2020) Section 12.4

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) or 11dBm+10logB*
5470-5725	≤250mW(24dBm) or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

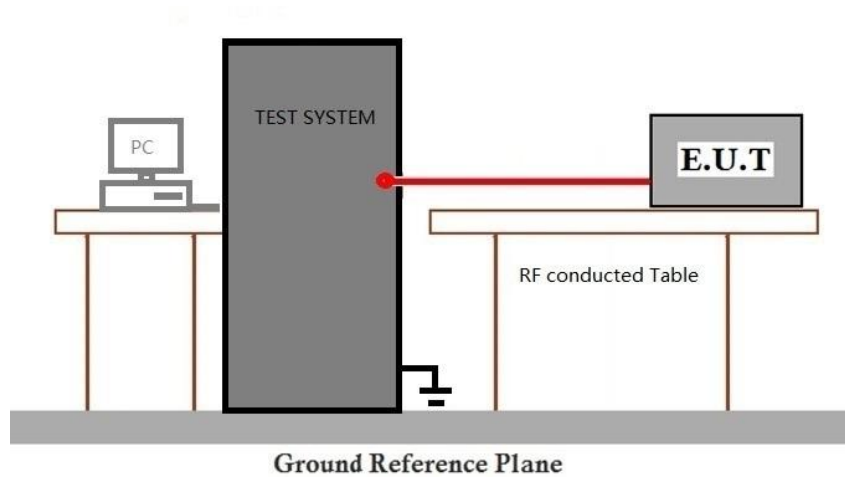
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

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

AV Output power Level = Reading level + Cable loss + DCCF

Please Refer to Appendix for Details

7.9 Power Spectral Density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10 (2020) Section 12.6

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

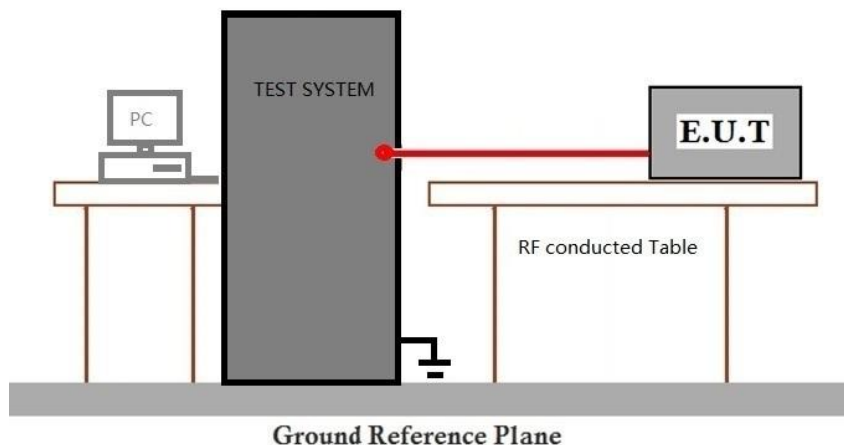
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram





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7.9.4 Measurement Procedure and Data

RBW conversion factor from 300kHz to 500kHz (2.22dB) for UNII Band 3 has been considered.

Please Refer to Appendix for Details

7.10 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)

Test Method: ANSI C63.10 (2020) Section 6.8

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C

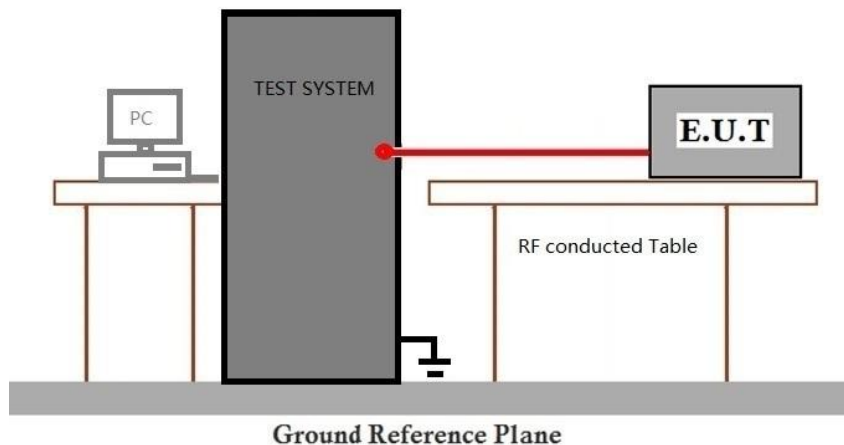
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_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 @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2604000796HS

9 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for KSCR2604000796HS

10 Appendix

1. Duty Cycle

1.1 Test Result

1.1.1 Ant1

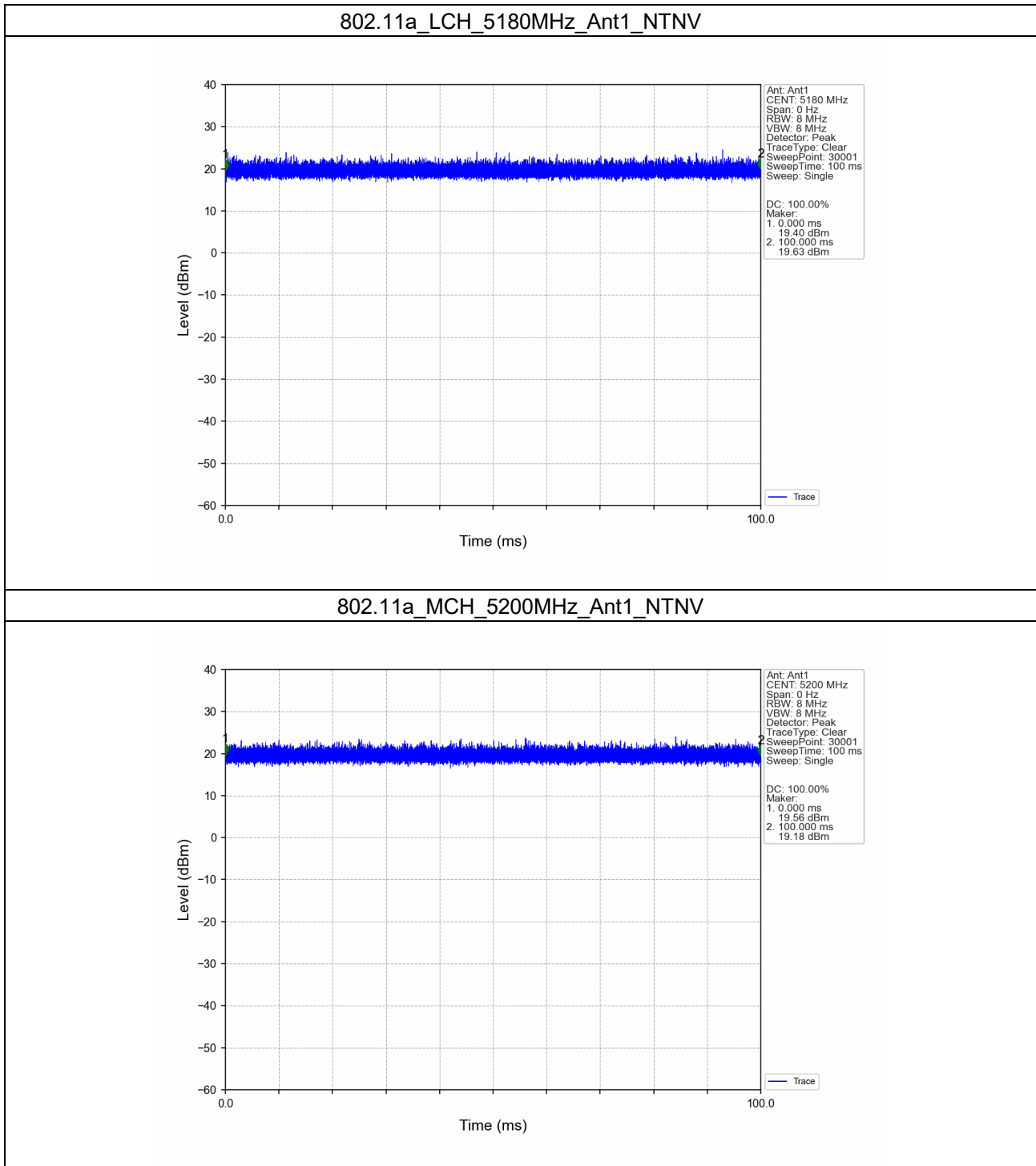
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	100.000	100.000	100.00	0.00	0.00
		5200	/	/	100.000	100.000	100.00	0.00	0.00
		5240	/	/	100.000	100.000	100.00	0.00	0.00
802.11ac (VHT20)	SISO	5180	/	/	100.000	100.000	100.00	0.00	0.00
		5200	/	/	100.000	100.000	100.00	0.00	0.00
		5240	/	/	100.000	100.000	100.00	0.00	0.00
802.11ac (VHT40)	SISO	5190	/	/	100.000	100.000	100.00	0.00	0.00
		5230	/	/	100.000	100.000	100.00	0.00	0.00
802.11ac (VHT80)	SISO	5210	/	/	100.000	100.000	100.00	0.00	0.00
802.11ax (HEW20)	SISO	5180	SU	/	100.000	100.000	100.00	0.00	0.00
		5200	SU	/	100.000	100.000	100.00	0.00	0.00
		5240	SU	/	100.000	100.000	100.00	0.00	0.00
802.11ax (HEW40)	SISO	5190	SU	/	100.000	100.000	100.00	0.00	0.00
		5230	SU	/	100.000	100.000	100.00	0.00	0.00
802.11ax (HEW80)	SISO	5210	SU	/	100.000	100.000	100.00	0.00	0.00

1.1.2 Ant2

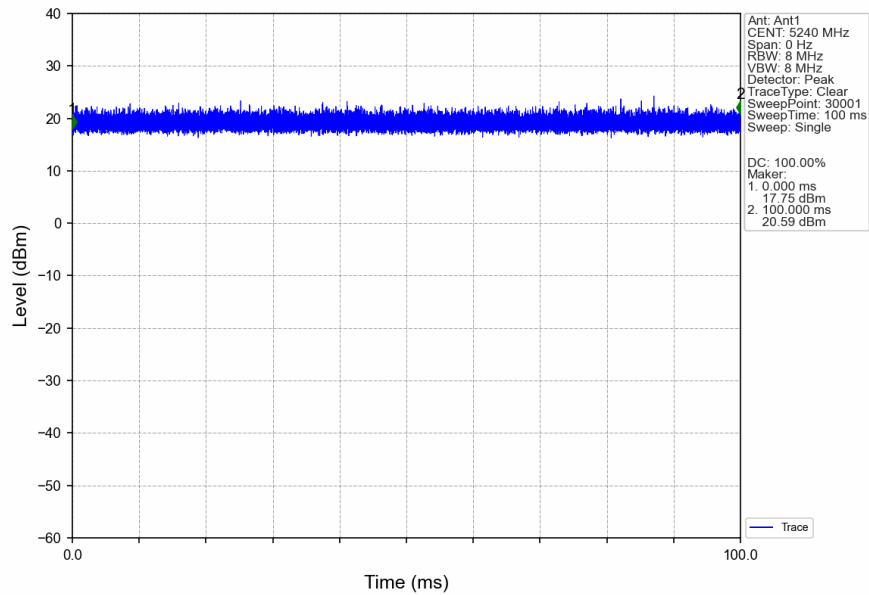
Ant2									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	100.000	100.000	100.00	0.00	0.00
		5200	/	/	100.000	100.000	100.00	0.00	0.00
		5240	/	/	100.000	100.000	100.00	0.00	0.00
802.11ac (VHT20)	SISO	5180	/	/	100.000	100.000	100.00	0.00	0.00
		5200	/	/	100.000	100.000	100.00	0.00	0.00
		5240	/	/	100.000	100.000	100.00	0.00	0.00
802.11ac (VHT40)	SISO	5190	/	/	100.000	100.000	100.00	0.00	0.00
		5230	/	/	100.000	100.000	100.00	0.00	0.00
802.11ac (VHT80)	SISO	5210	/	/	100.000	100.000	100.00	0.00	0.00
802.11ax (HEW20)	SISO	5180	SU	/	100.000	100.000	100.00	0.00	0.00
		5200	SU	/	100.000	100.000	100.00	0.00	0.00
		5240	SU	/	100.000	100.000	100.00	0.00	0.00
802.11ax (HEW40)	SISO	5190	SU	/	100.000	100.000	100.00	0.00	0.00
		5230	SU	/	100.000	100.000	100.00	0.00	0.00
802.11ax (HEW80)	SISO	5210	SU	/	100.000	100.000	100.00	0.00	0.00

1.2 Test Graph

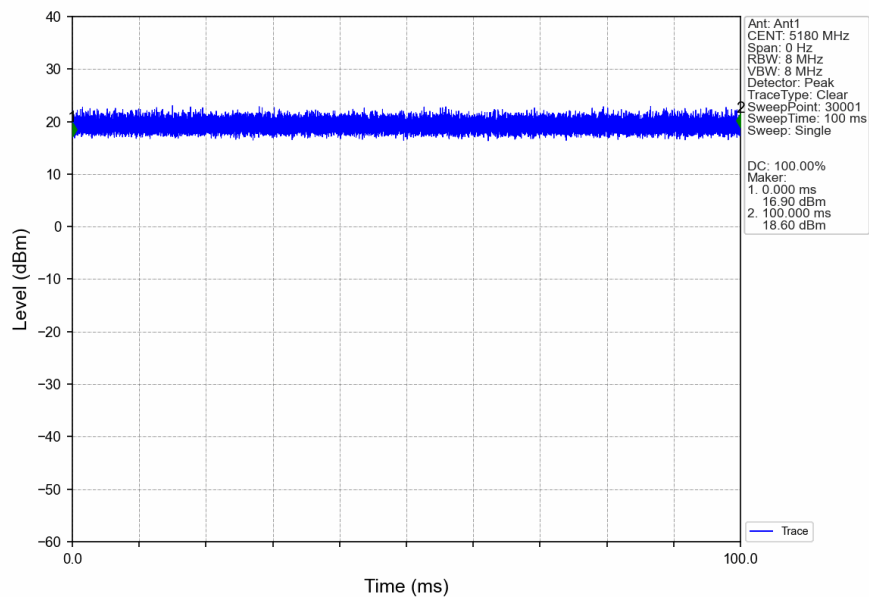
1.2.1 Ant1



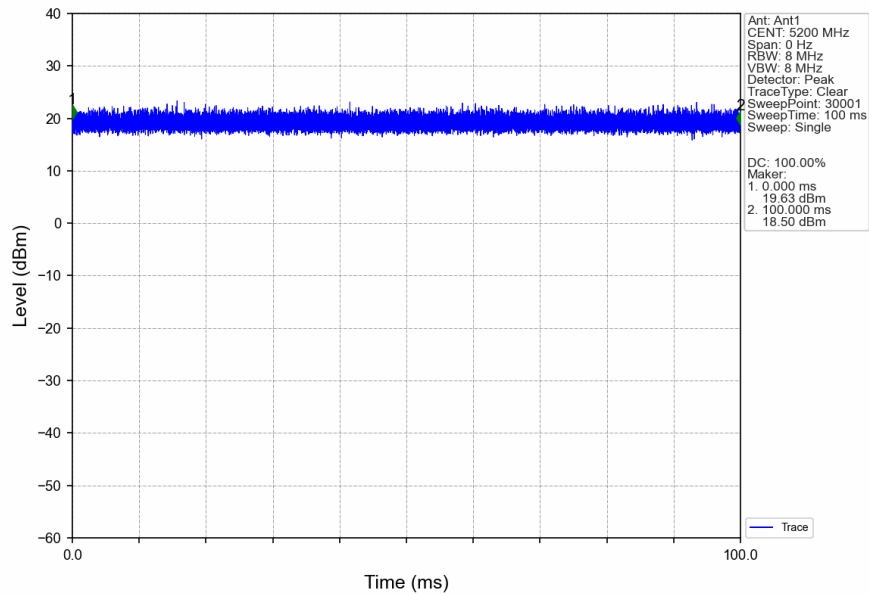
802.11a_HCH_5240MHz_Ant1_NTNV



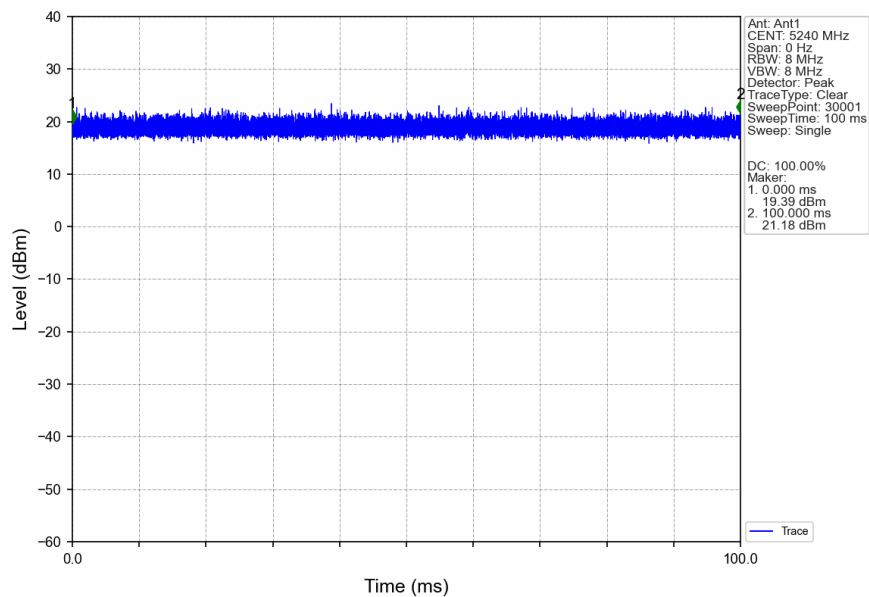
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



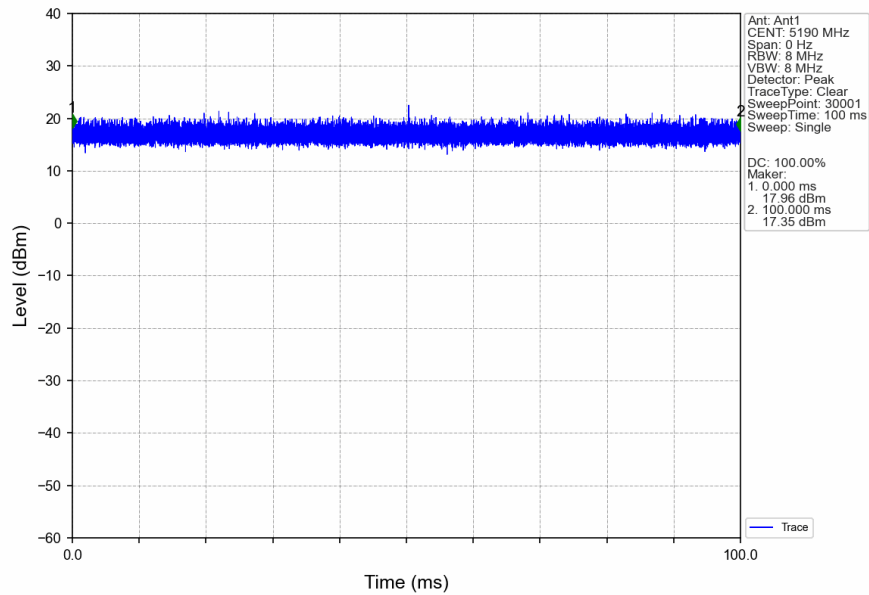
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



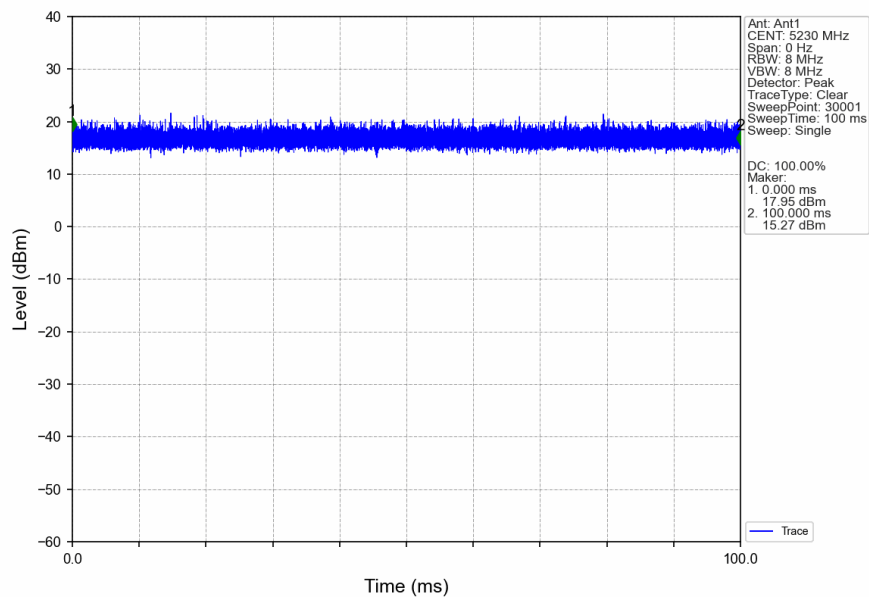
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



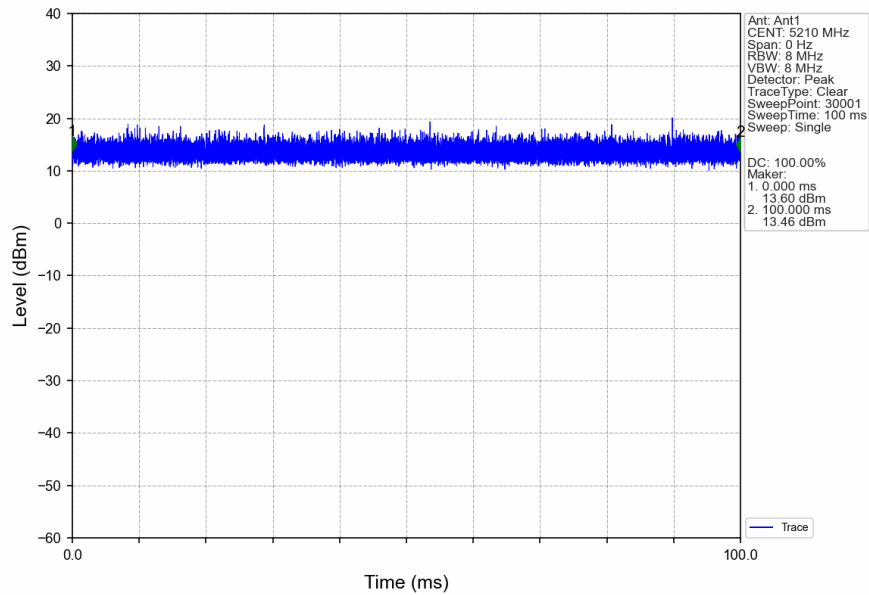
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



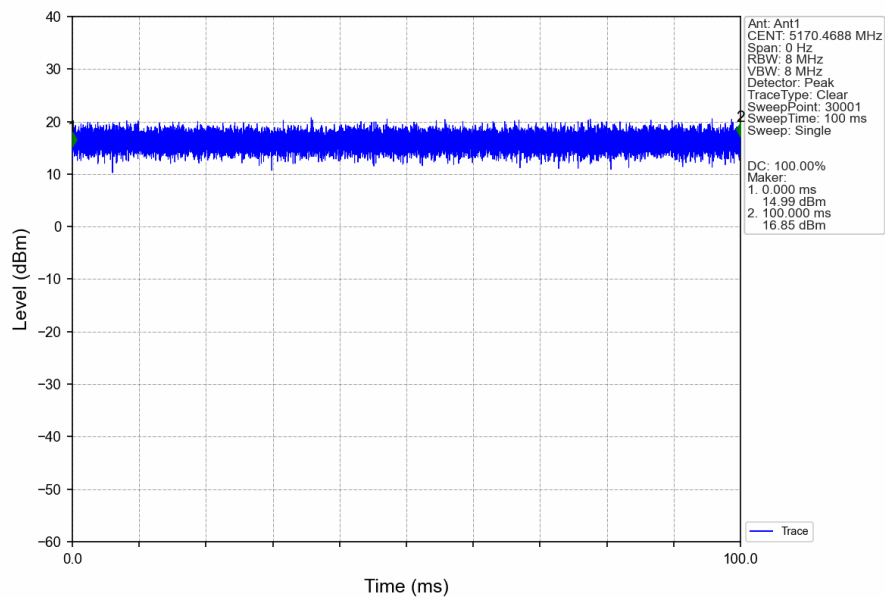
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



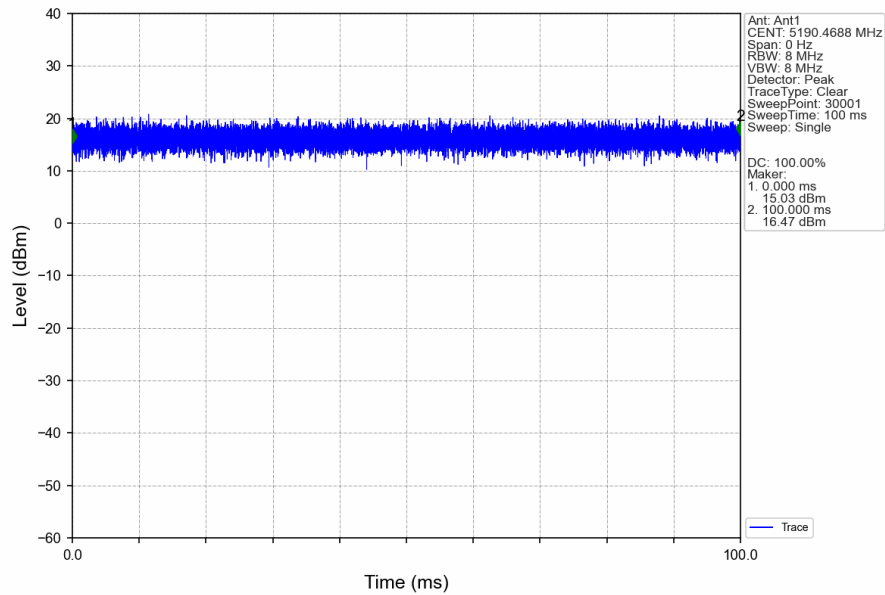
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



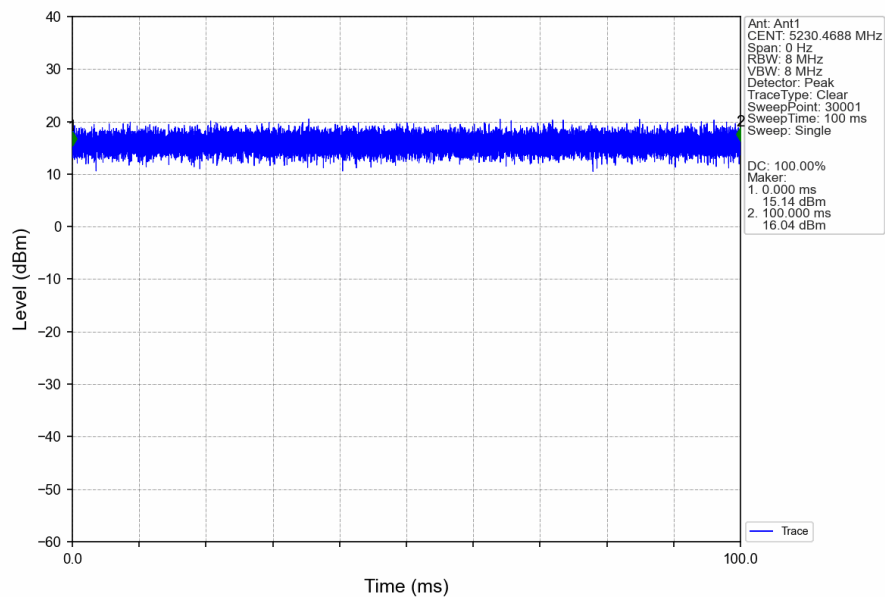
802.11ax(HEW20)_LCH_5180MHz_SU_ / _Ant1_NTNV



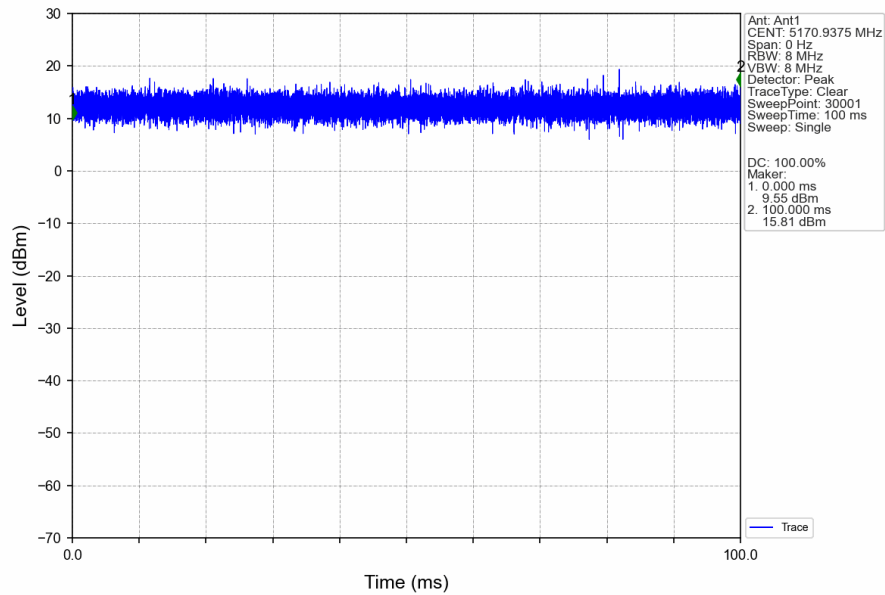
802.11ax(HEW20)_MCH_5200MHz_SU_ / _Ant1_NTNV



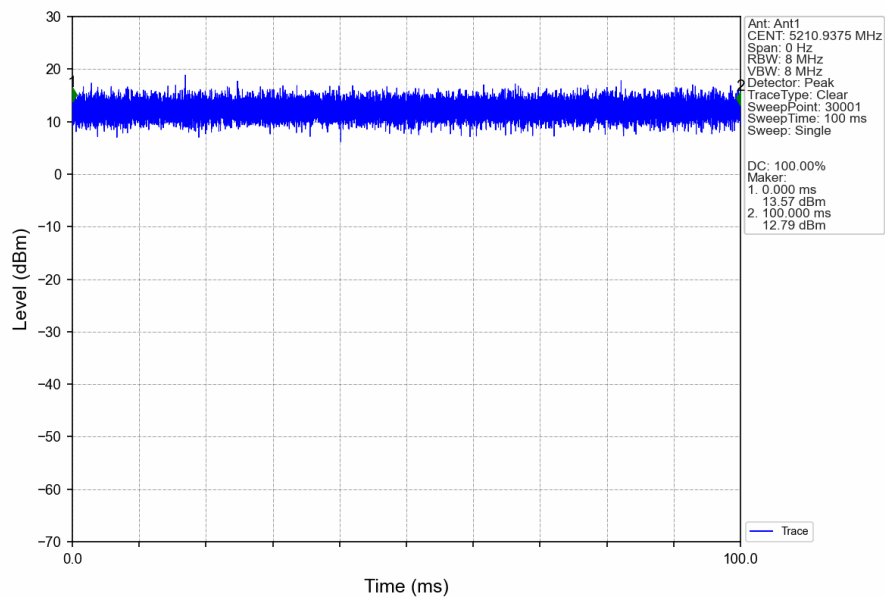
802.11ax(HEW20)_HCH_5240MHz_SU_ / _Ant1_NTNV



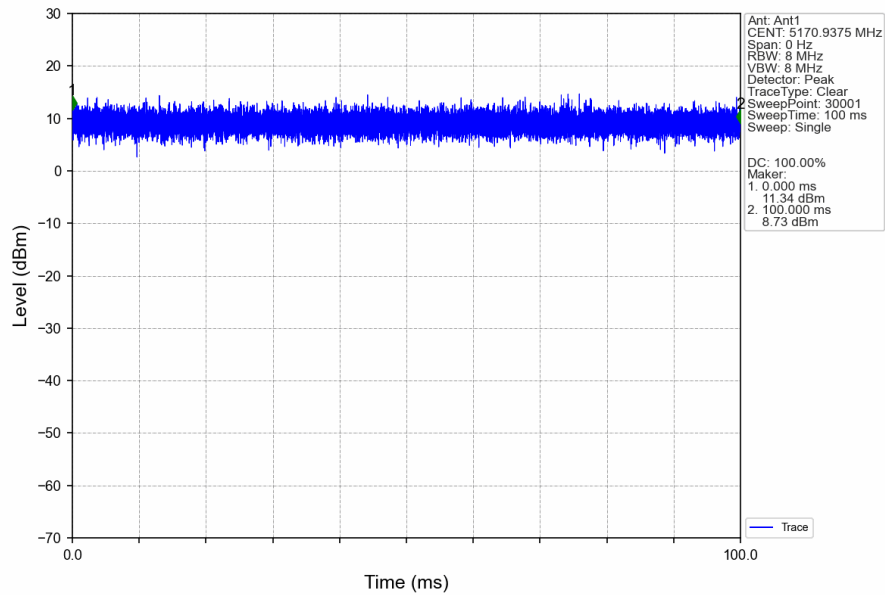
802.11ax(HEW40)_LCH_5190MHz_SU_ / _Ant1_NTNV



802.11ax(HEW40)_HCH_5230MHz_SU_ / _Ant1_NTNV

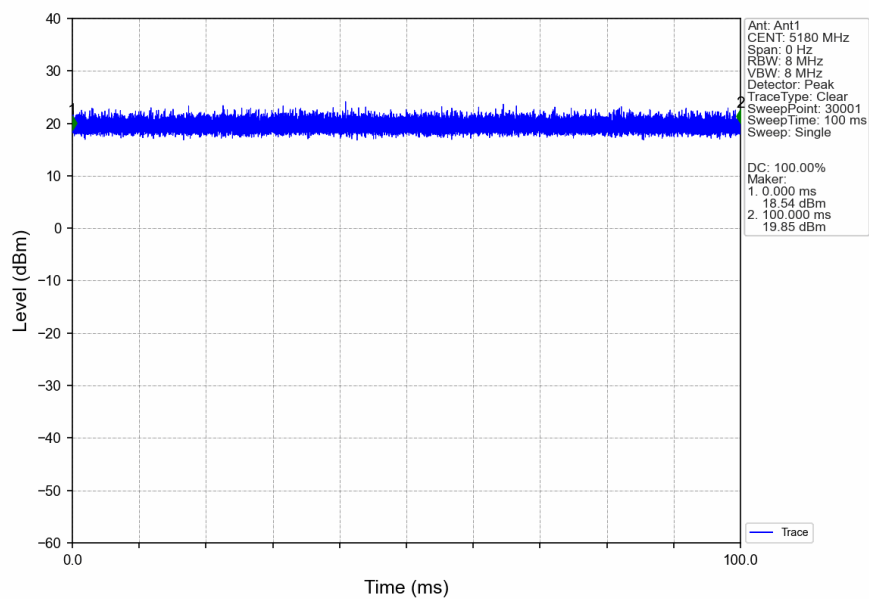


802.11ax(HEW80)_MCH_5210MHz_SU_/_Ant1_NTNV

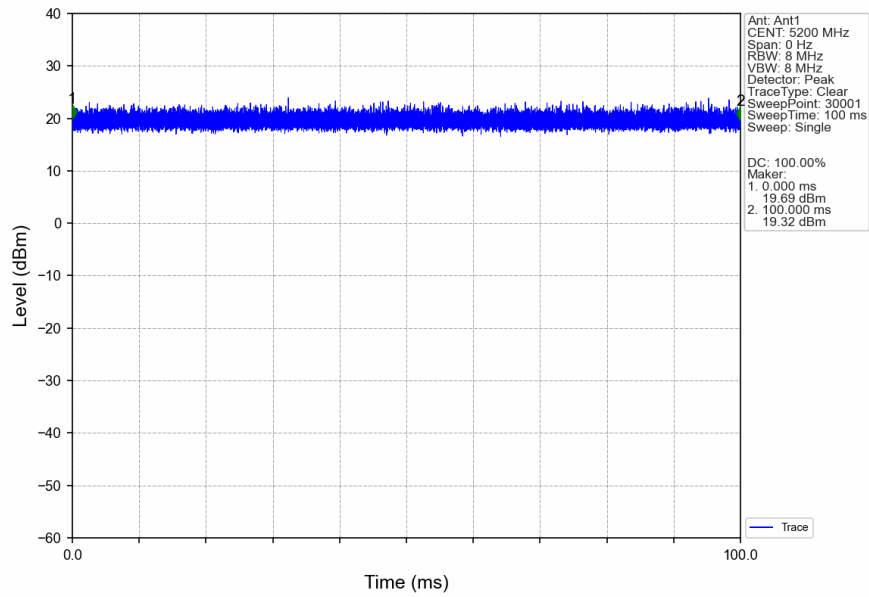


1.2.2 Ant2

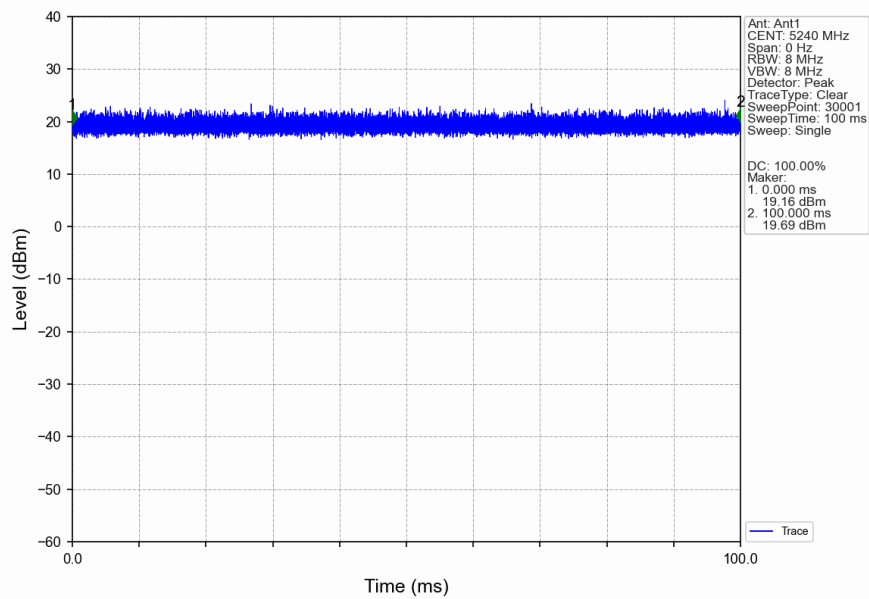
802.11a_LCH_5180MHz_Ant2_NTNV



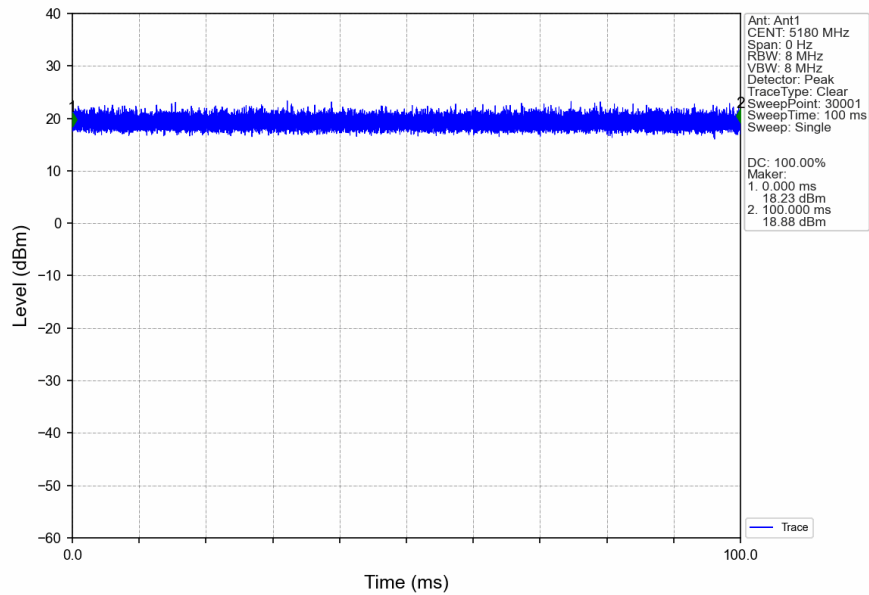
802.11a_MCH_5200MHz_Ant2_NTNV



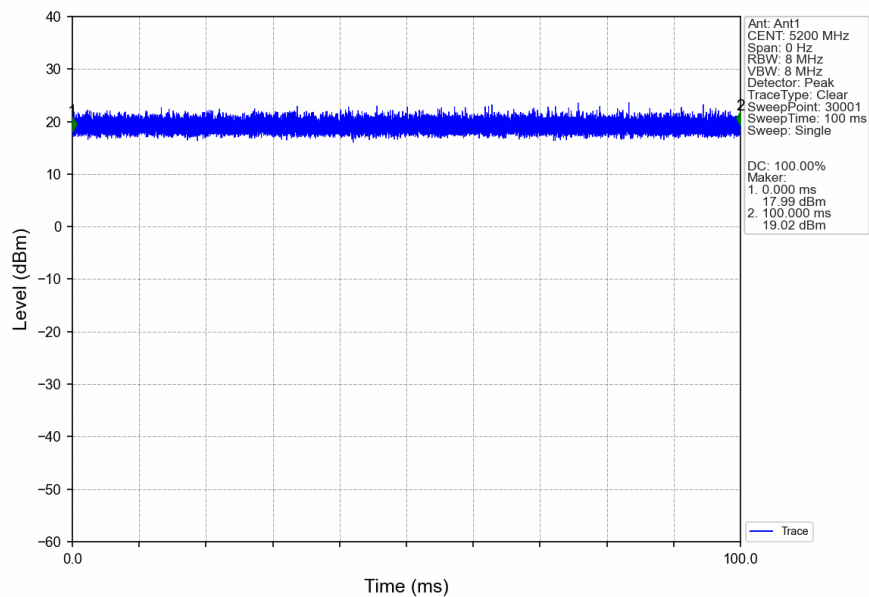
802.11a_HCH_5240MHz_Ant2_NTNV



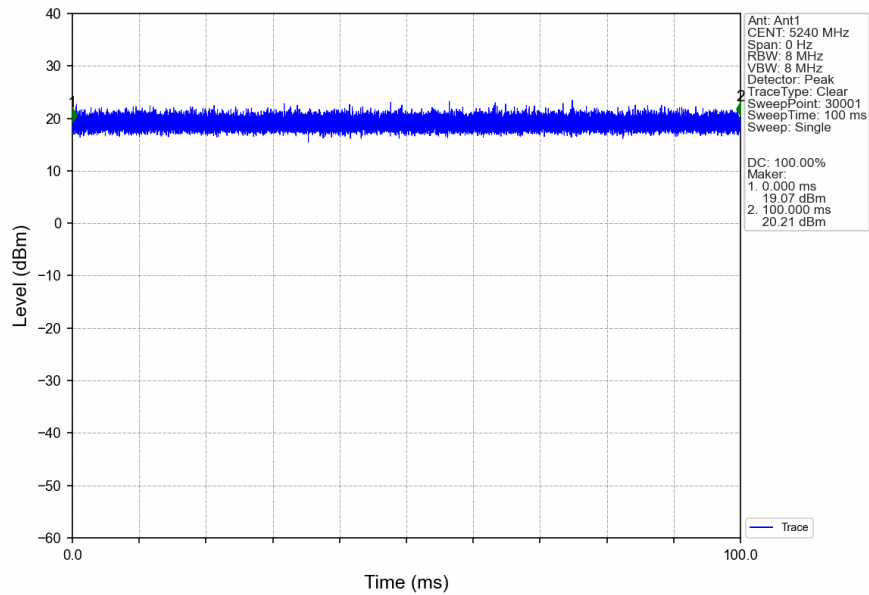
802.11ac(VHT20)_LCH_5180MHz_Ant2_NTNV



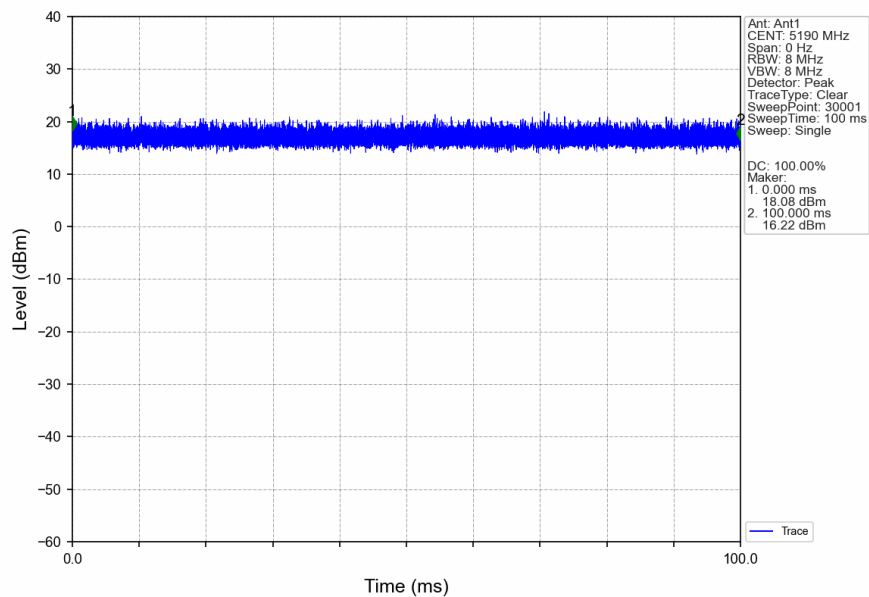
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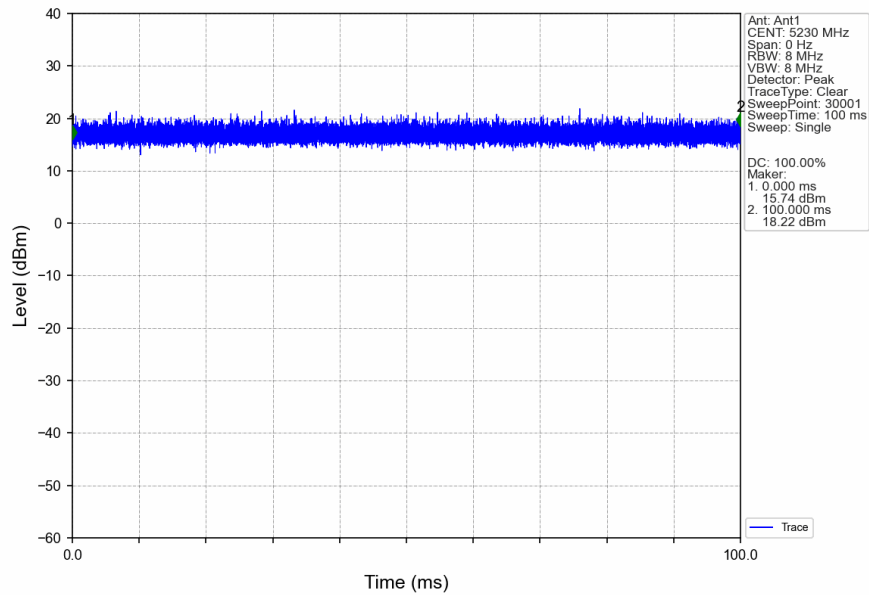
802.11ac(VHT20)_HCH_5240MHz_Ant2_NTNV



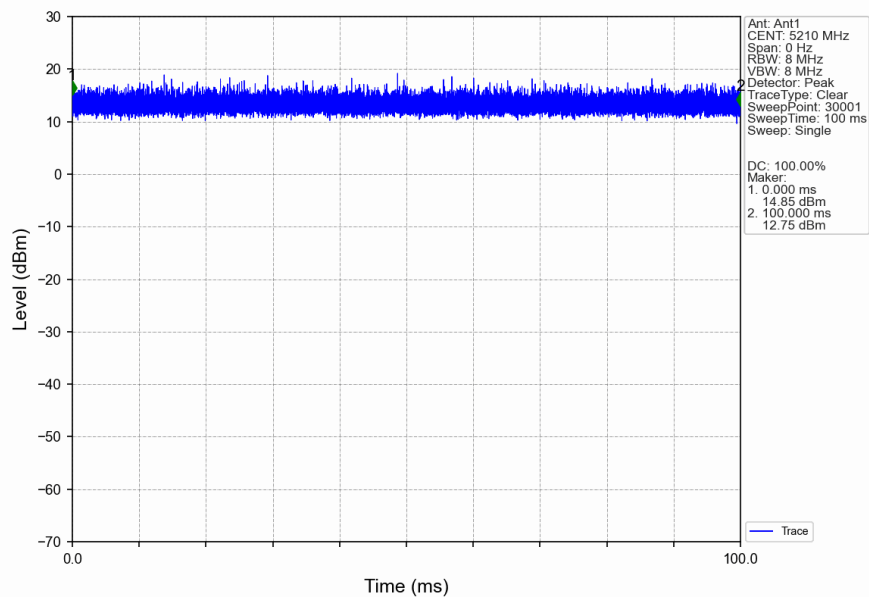
802.11ac(VHT40)_LCH_5190MHz_Ant2_NTNV



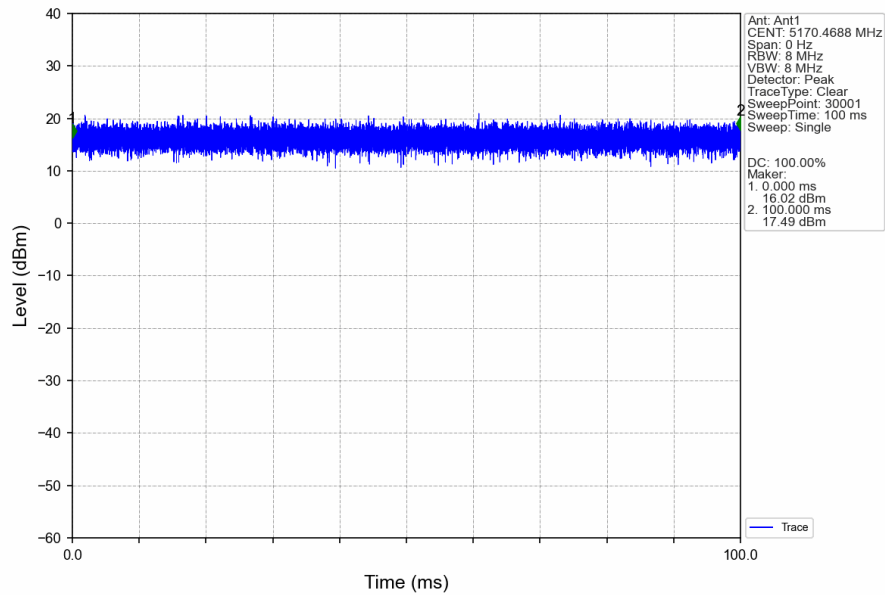
802.11ac(VHT40)_HCH_5230MHz_Ant2_NTNV



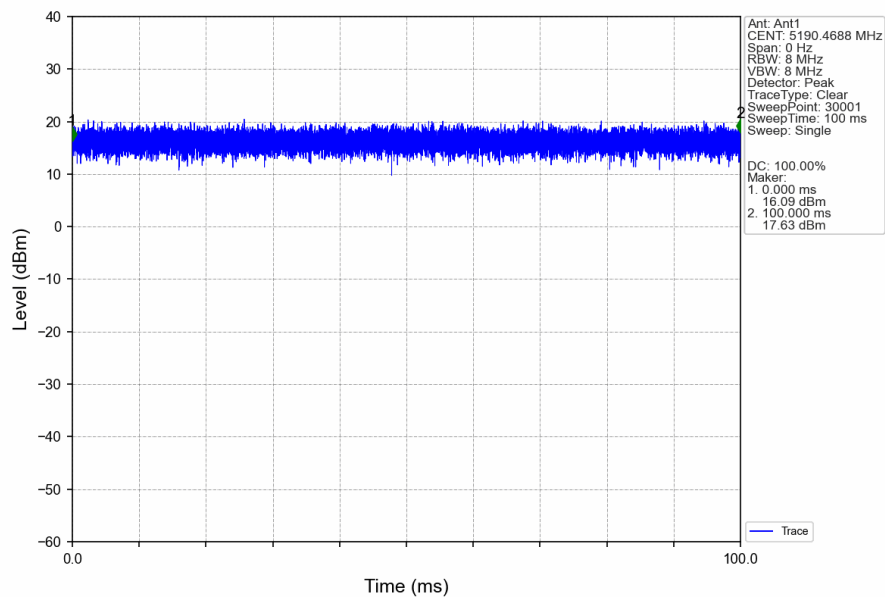
802.11ac(VHT80)_MCH_5210MHz_Ant2_NTNV



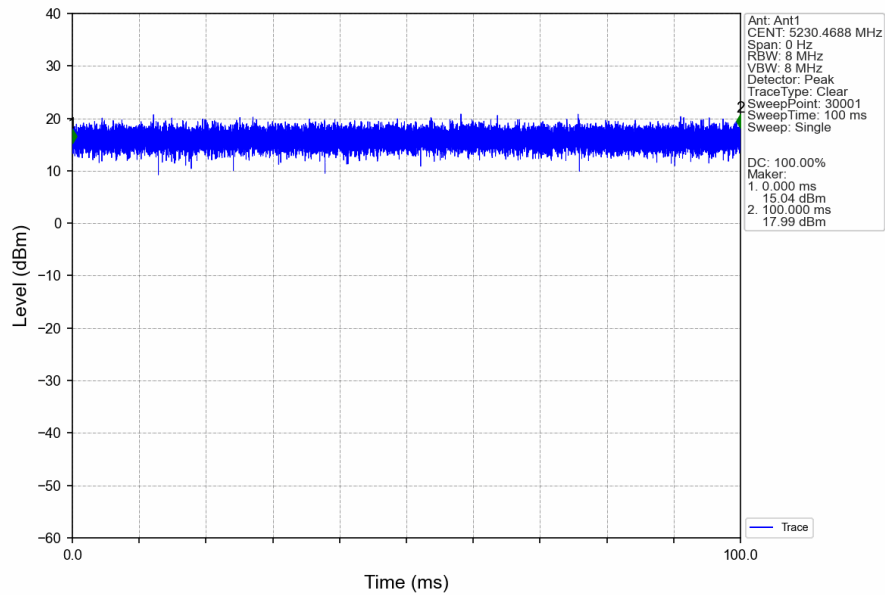
802.11ax(HEW20)_LCH_5180MHz_SU_ / _Ant2_NTNV



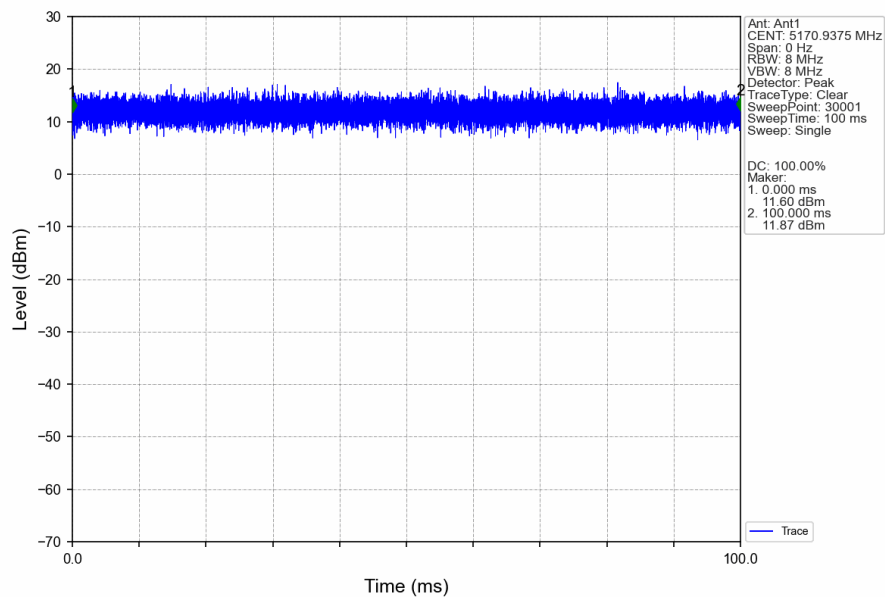
802.11ax(HEW20)_MCH_5200MHz_SU_ / _Ant2_NTNV



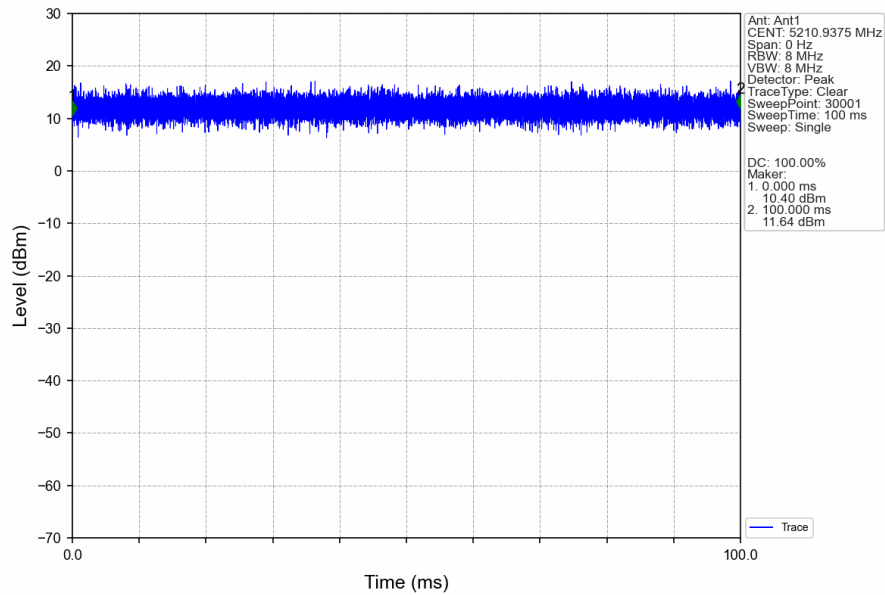
802.11ax(HEW20)_HCH_5240MHz_SU_ / _Ant2_NTNV



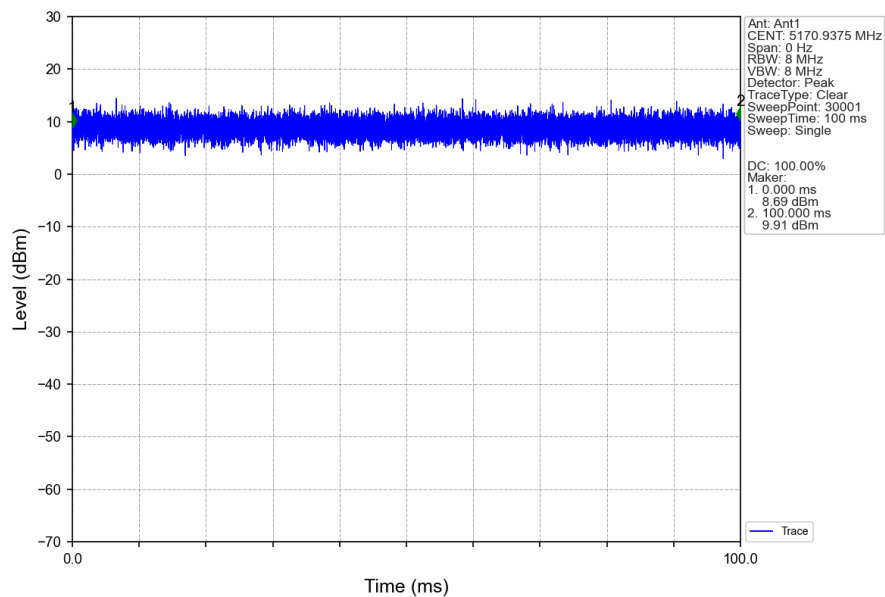
802.11ax(HEW40)_LCH_5190MHz_SU_ / _Ant2_NTNV



802.11ax(HEW40)_HCH_5230MHz_SU_ / _Ant2_NTNV



802.11ax(HEW80)_MCH_5210MHz_SU_ / _Ant2_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	
802.11a	SISO	5180	/	/	1	17.552	/	Pass
		5200	/	/	1	17.403	/	Pass
		5240	/	/	1	17.662	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	18.555	/	Pass
		5200	/	/	1	18.621	/	Pass
		5240	/	/	1	18.762	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	37.597	/	Pass
		5230	/	/	1	37.714	/	Pass
802.11ac (VHT80)	SISO	5210	/	/	1	76.830	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	19.500	/	Pass
		5200	SU	/	1	19.334	/	Pass
		5240	SU	/	1	19.425	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	38.455	/	Pass
		5230	SU	/	1	38.634	/	Pass
802.11ax (HEW80)	SISO	5210	SU	/	1	78.056	/	Pass

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	2	18.387	/	Pass
		5200	/	/	2	18.228	/	Pass
		5240	/	/	2	18.052	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	2	19.203	/	Pass
		5200	/	/	2	19.123	/	Pass
		5240	/	/	2	19.092	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	2	38.214	/	Pass
		5230	/	/	2	38.428	/	Pass
802.11ac (VHT80)	SISO	5210	/	/	2	76.746	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	2	19.473	/	Pass
		5200	SU	/	2	19.524	/	Pass
		5240	SU	/	2	19.534	/	Pass
802.11ax	SISO	5190	SU	/	2	38.463	/	Pass

(HEW40)		5230	SU	/	2	38.592	/	Pass
802.11ax (HEW80)	SISO	5210	SU	/	2	78.127	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	39.623	/	Pass
		5200	/	/	1	40.729	/	Pass
		5240	/	/	1	41.234	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	42.402	/	Pass
		5200	/	/	1	44.765	/	Pass
		5240	/	/	1	44.676	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	70.130	/	Pass
		5230	/	/	1	83.615	/	Pass
802.11ac (VHT80)	SISO	5210	/	/	1	142.055	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	44.669	/	Pass
		5200	SU	/	1	46.058	/	Pass
		5240	SU	/	1	45.700	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	73.249	/	Pass
		5230	SU	/	1	83.358	/	Pass
802.11ax (HEW80)	SISO	5210	SU	/	1	140.463	/	Pass

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	2	42.388	/	Pass
		5200	/	/	2	42.267	/	Pass
		5240	/	/	2	40.934	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	2	43.870	/	Pass
		5200	/	/	2	44.430	/	Pass
		5240	/	/	2	45.997	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	2	80.012	/	Pass
		5230	/	/	2	91.078	/	Pass
802.11ac (VHT80)	SISO	5210	/	/	2	147.804	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	2	45.671	/	Pass
		5200	SU	/	2	46.652	/	Pass
		5240	SU	/	2	44.510	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	2	75.512	/	Pass
		5230	SU	/	2	85.847	/	Pass



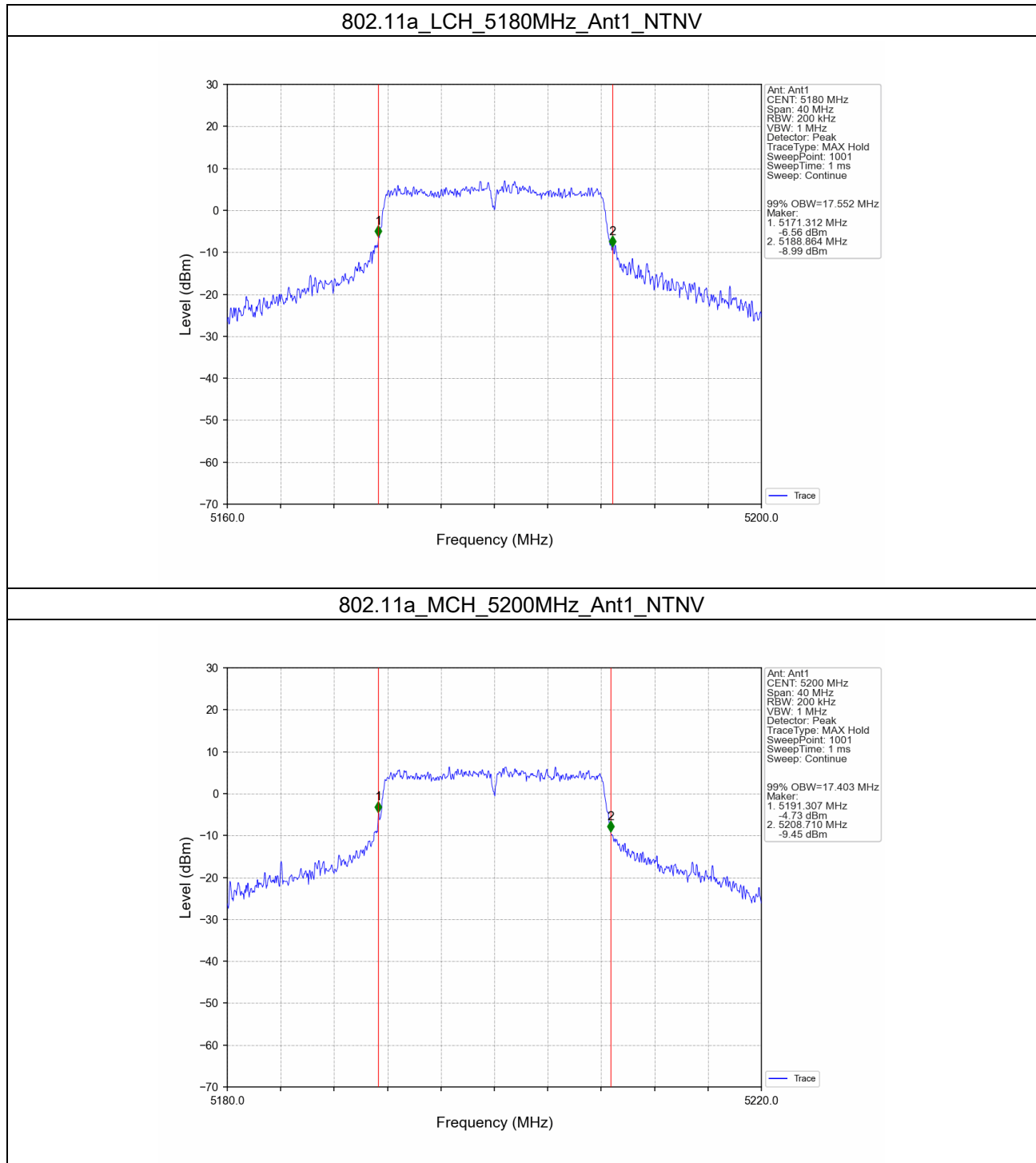
Report No.: KSCR260400079603

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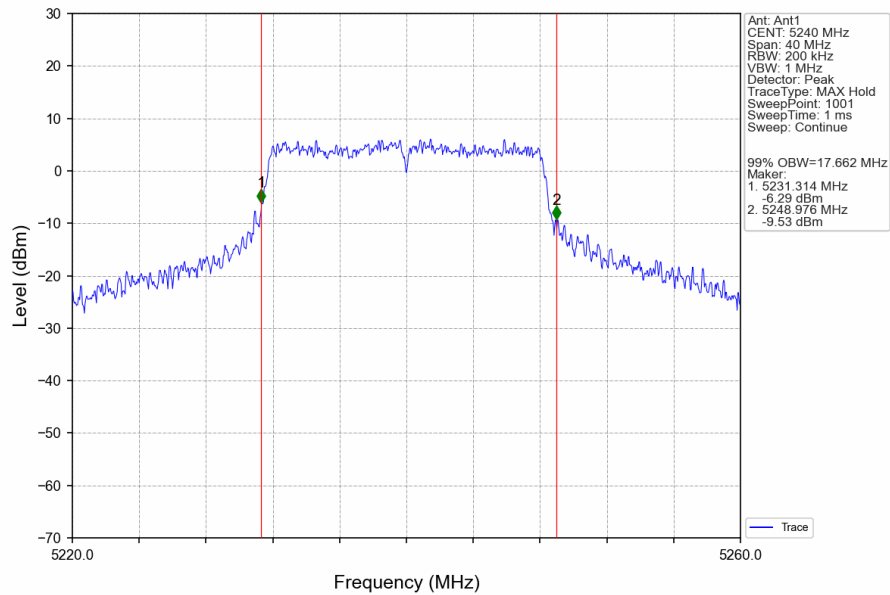
802.11ax (HEW80)	SISO	5210	SU	/	2	154.505	/	Pass
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2.2 Test Graph

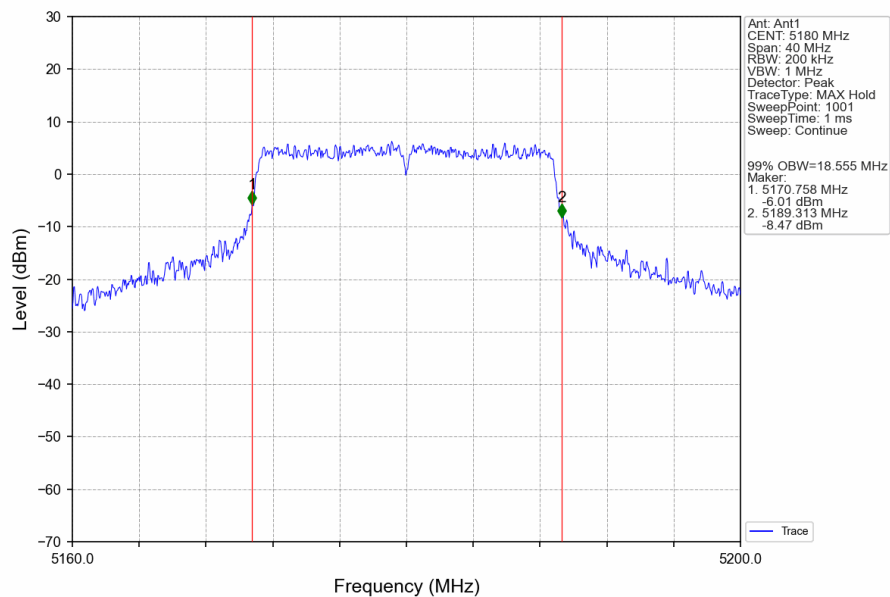
2.2.1 OBW



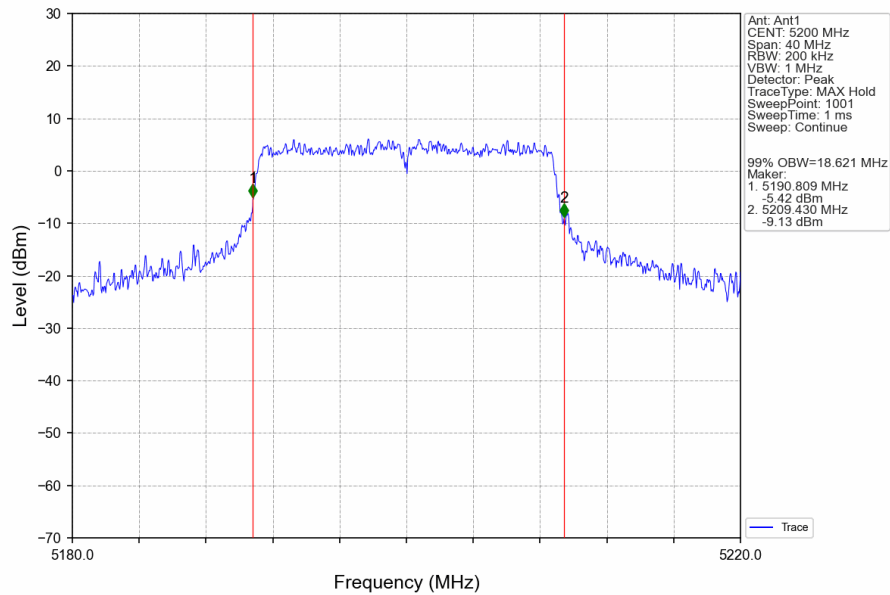
802.11a_HCH_5240MHz_Ant1_NTNV



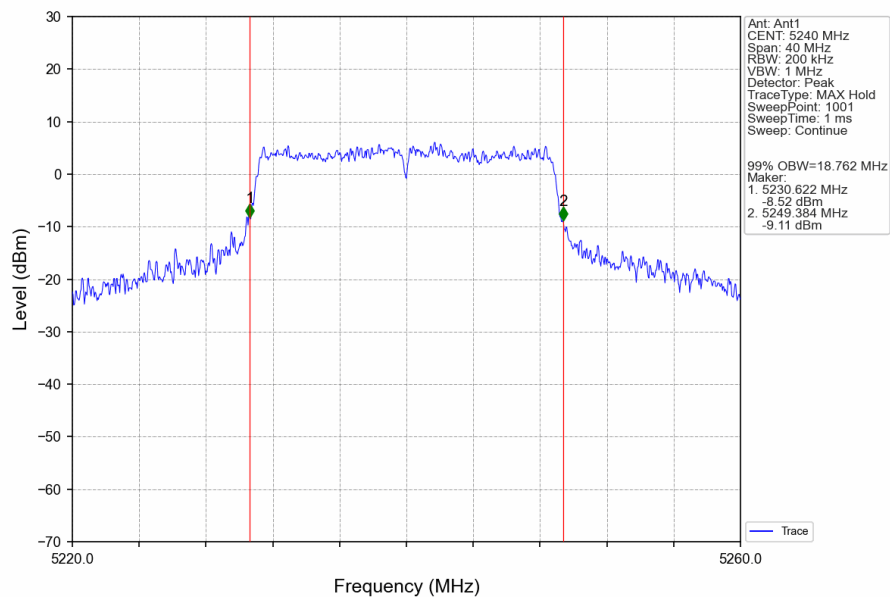
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



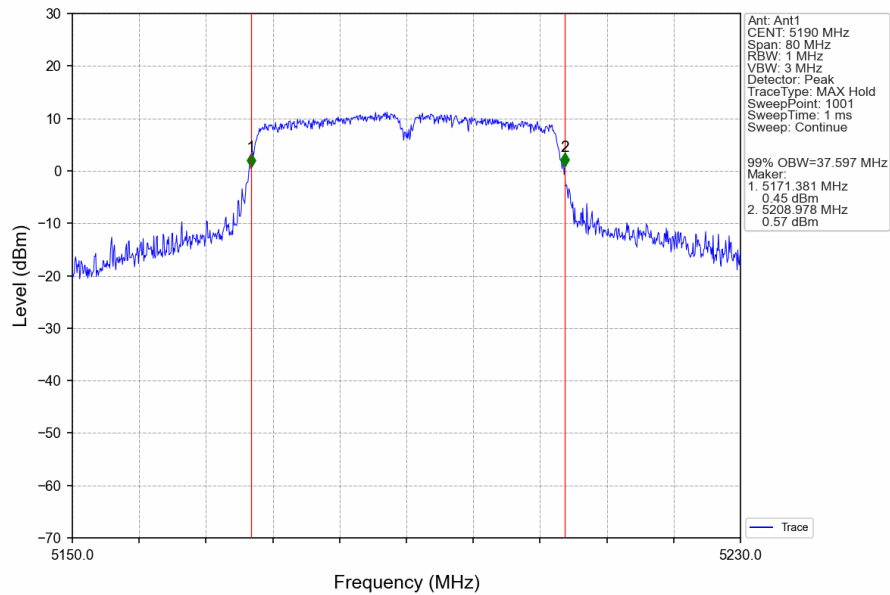
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



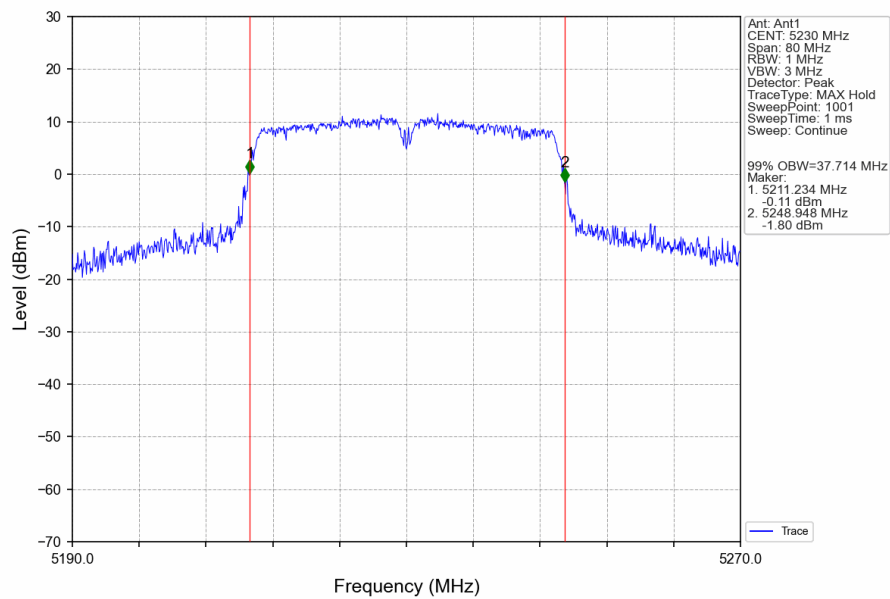
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



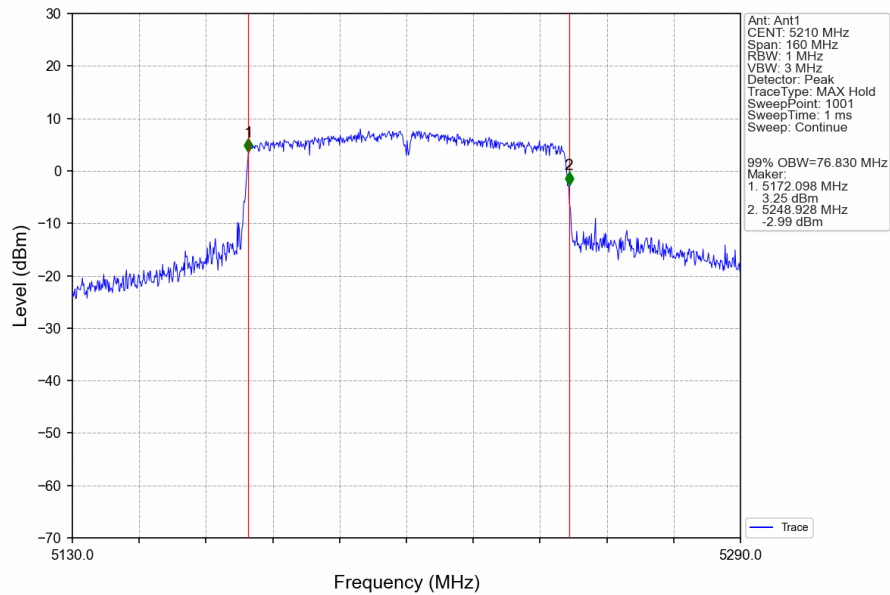
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



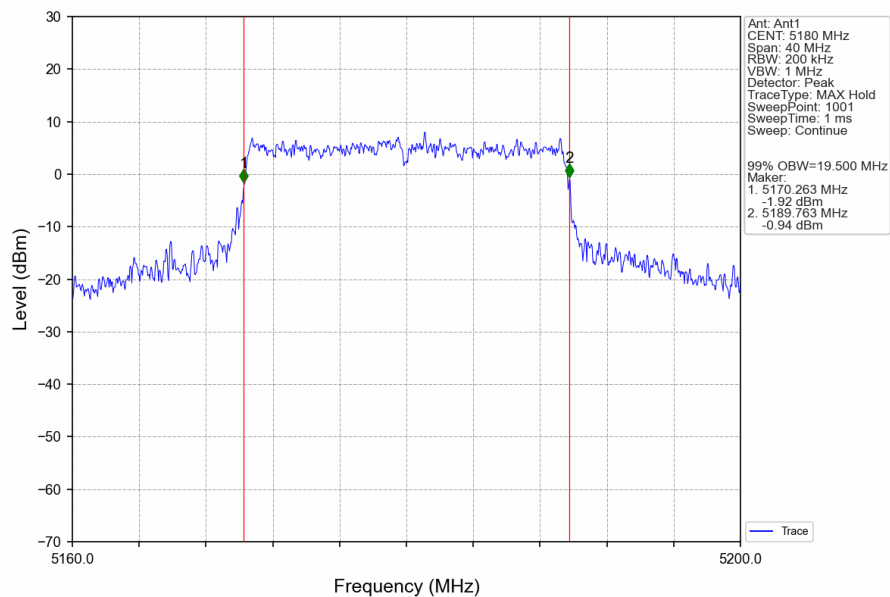
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



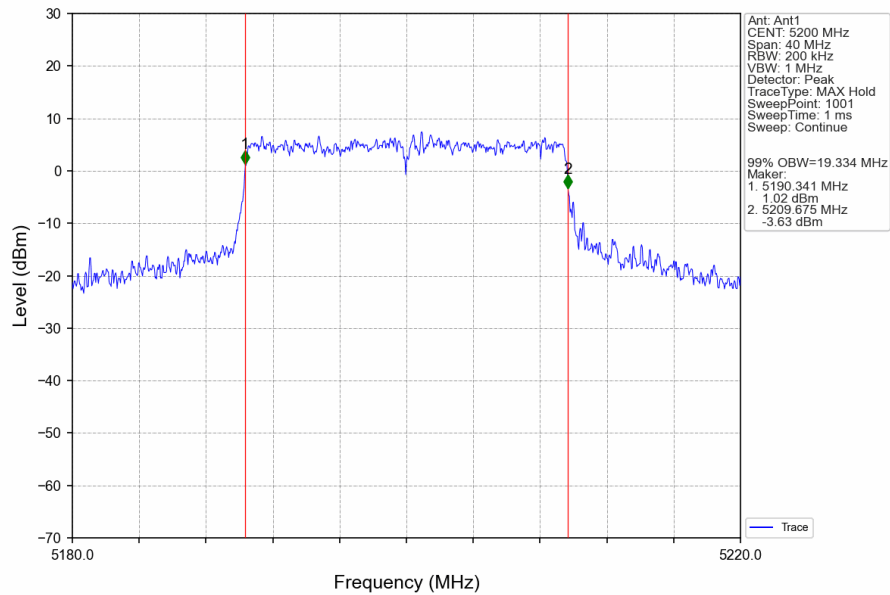
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



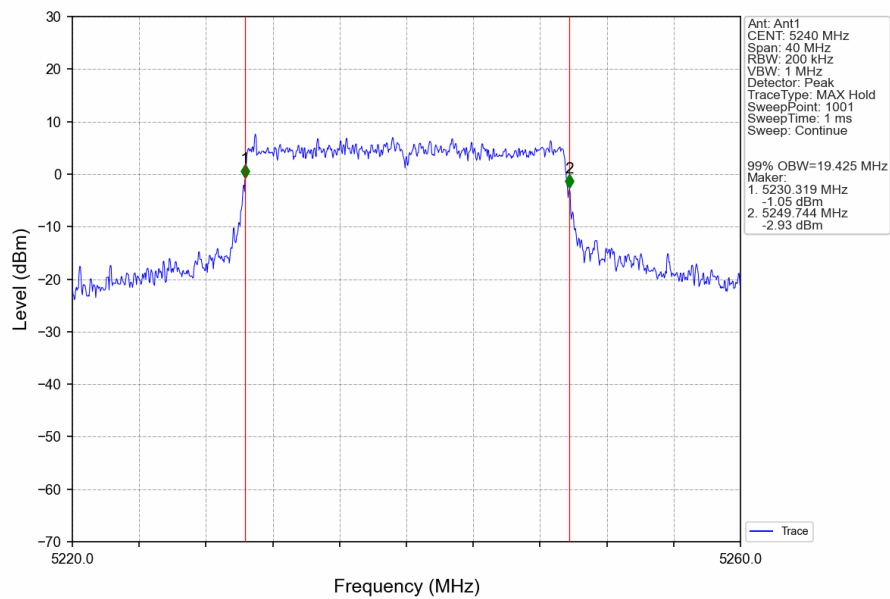
802.11ax(HEW20)_LCH_5180MHz_SU_ / _Ant1_NTNV



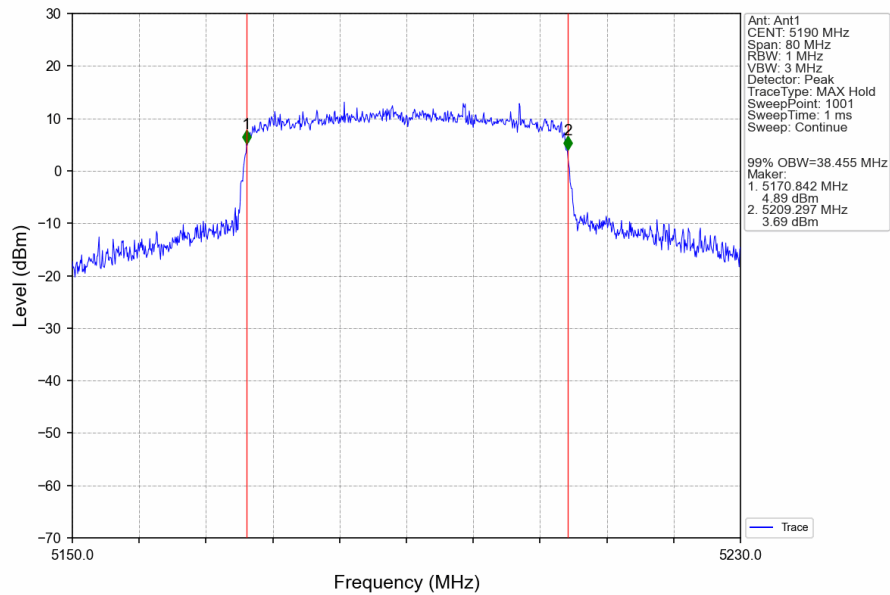
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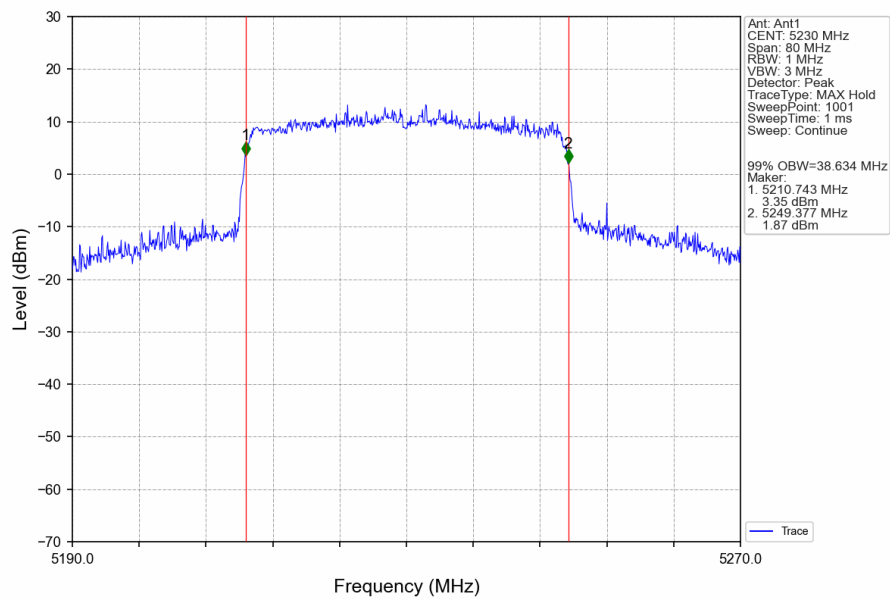
802.11ax(HEW20)_HCH_5240MHz_SU_ / _Ant1_NTNV

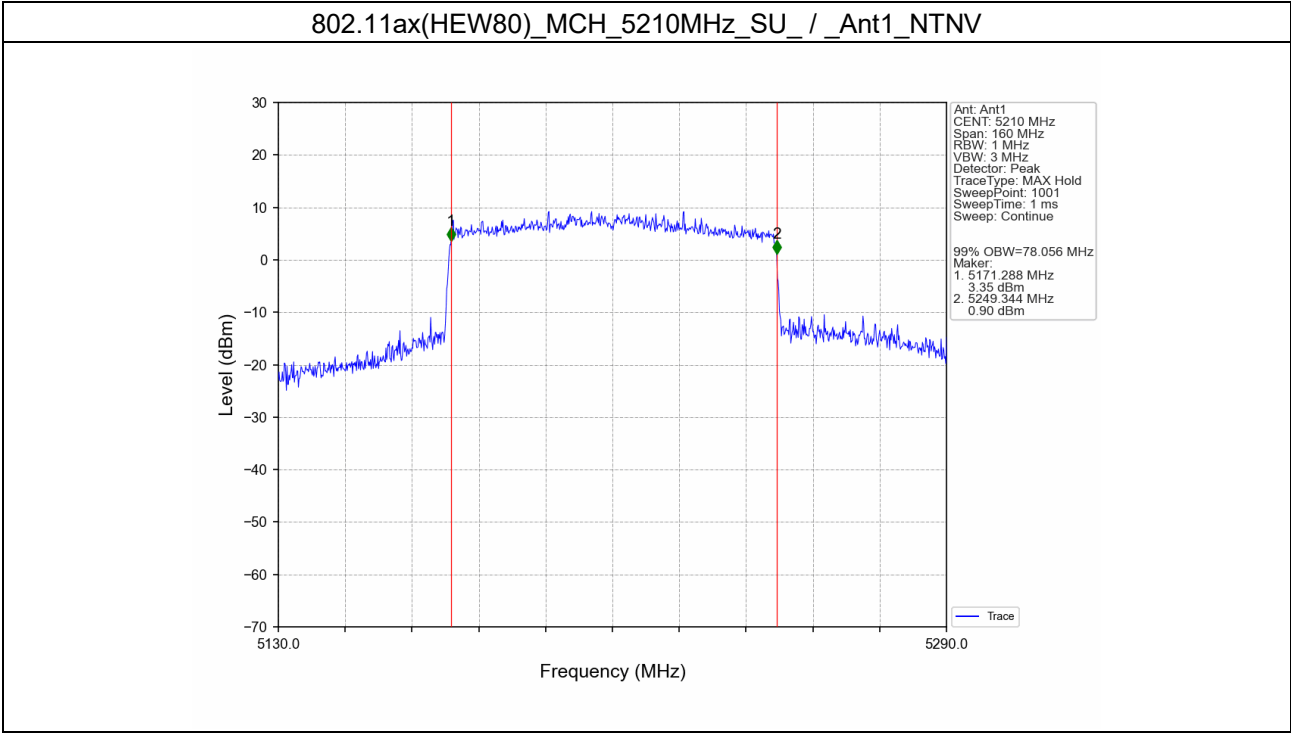


802.11ax(HEW40)_LCH_5190MHz_SU_ / _Ant1_NTNV

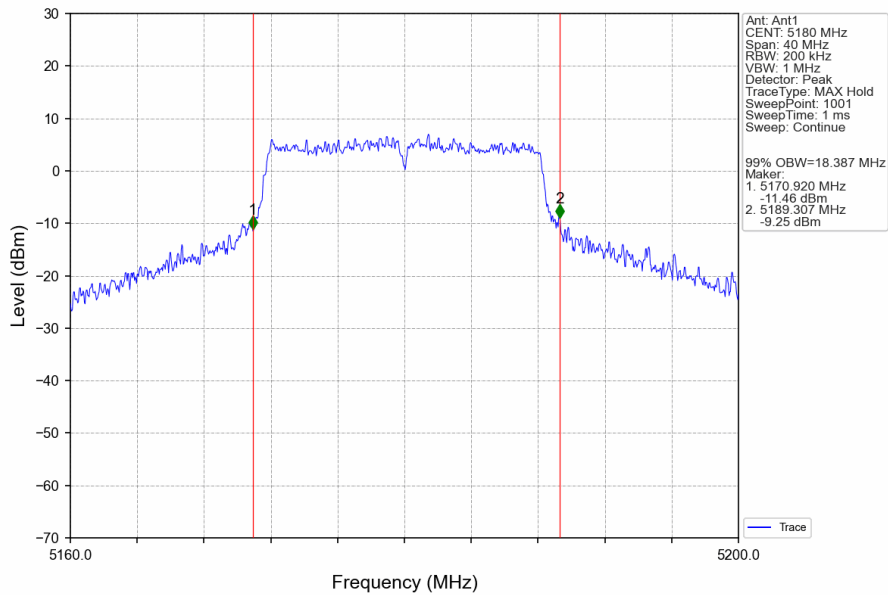


802.11ax(HEW40)_HCH_5230MHz_SU_ / _Ant1_NTNV

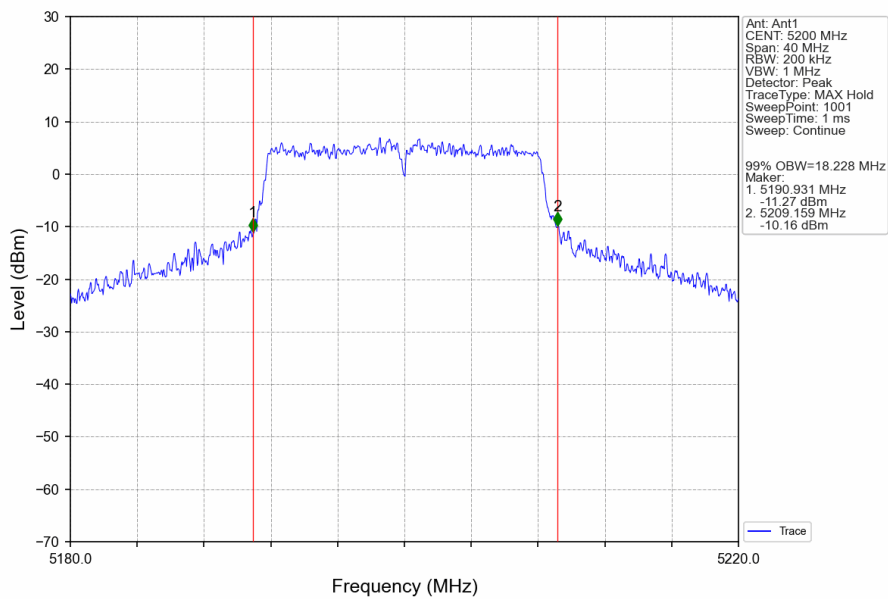




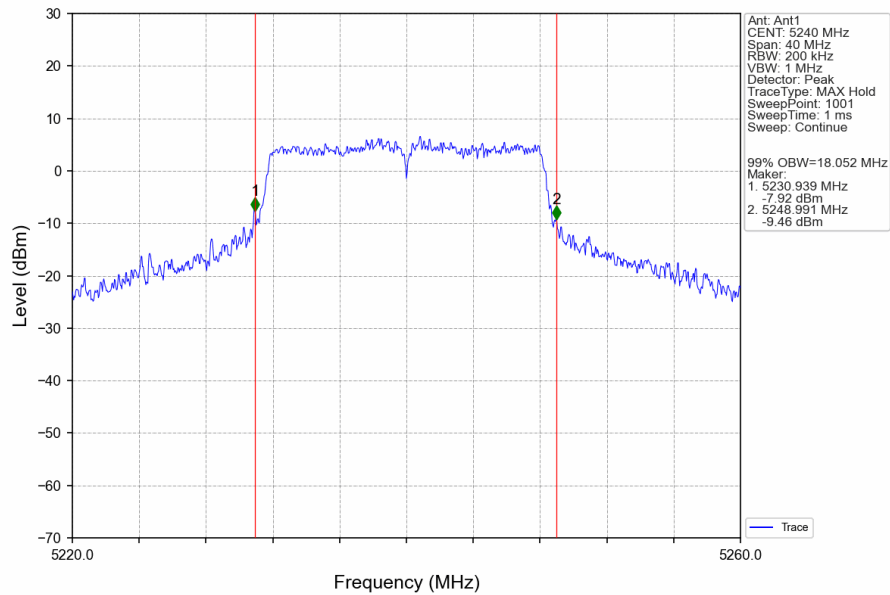
802.11a_LCH_5180MHz_Ant2_NTNV



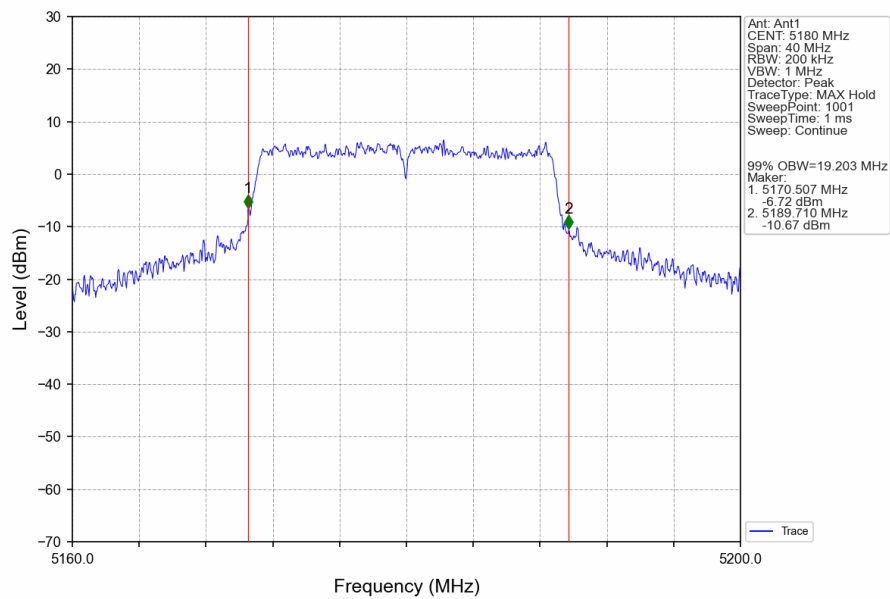
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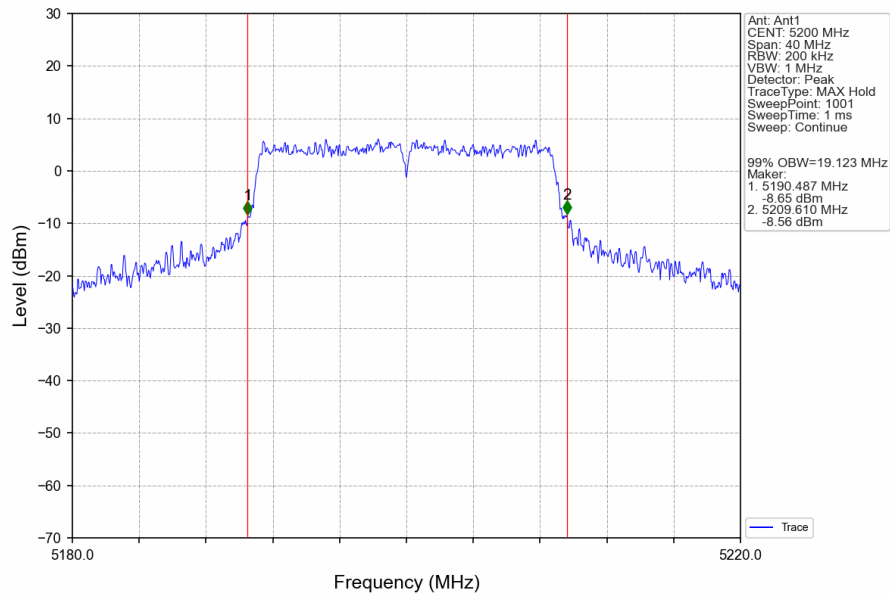
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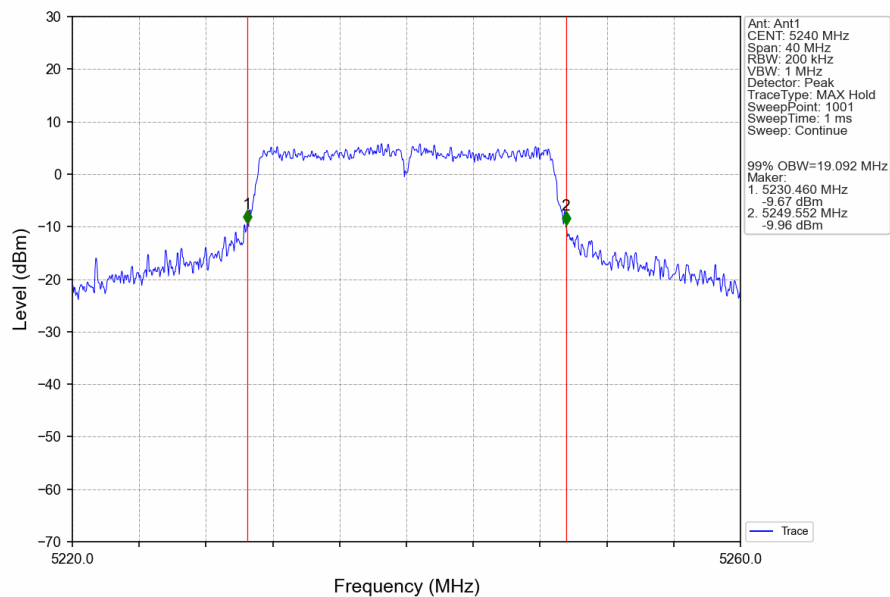
802.11ac(VHT20)_LCH_5180MHz_Ant2_NTNV



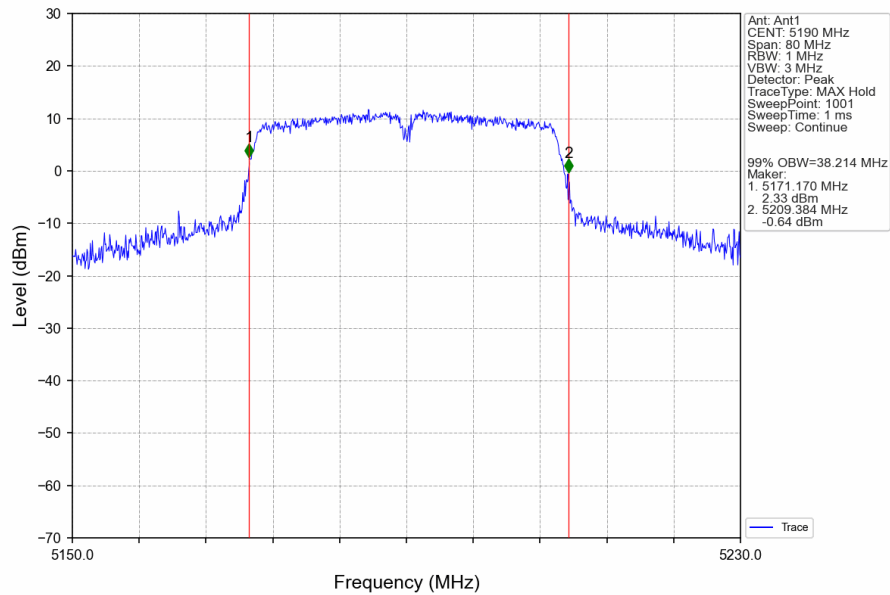
802.11ac(VHT20)_MCH_5200MHz_Ant2_NTNV



802.11ac(VHT20)_HCH_5240MHz_Ant2_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant2_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant2_NTNV

