



Report No.: SUCR251200116101

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TEST REPORT

Application No.: SUCR2512001161MO
Applicant: Quectel Wireless Solutions Co., Ltd.
Address of Applicant: No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China
Manufacturer: Quectel Wireless Solutions Co., Ltd.
Address of Manufacturer: No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China
Equipment Under Test (EUT):
EUT Name: Wi-Fi Halow Module
Model No.: FGH200M
Trade Mark: QUECTEL
FCC ID: XMR2025FGH200M
Standard(s) : 47 CFR Part 15, Subpart C 15.247
Date of Receipt: 2025-12-01
Date of Test: 2026-01-09 to 2026-01-12
Date of Issue: 2026-01-12

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Revision Record			
Version	Description	Date	Remark
00	Original	2026-01-12	/

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



2 Test Summary

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

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2020) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Radiated Spurious Emissions Below 1GHz		ANSI C63.10 (2020) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions Above 1GHz		ANSI C63.10 (2020) Section 6.6 & 11.12	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Conducted Output Power		ANSI C63.10 (2020) Section 11.9.1&11.9.2	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Minimum 6dB Bandwidth		ANSI C63.10 (2020) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Power Spectrum Density		ANSI C63.10 (2020) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Band Edges Measurement		ANSI C63.10 (2020) Section 6.10.4	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Spurious Emissions		ANSI C63.10 (2020) Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass



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4 General Information

4.1 Details of E.U.T.

Power Supply:	3.3V
Operation Frequency:	903.5MHz-926.5MHz (1MHz Channel Bandwidth) 905MHz-925MHz (2MHz Channel Bandwidth) 906MHz-926MHz (4MHz Channel Bandwidth) 908MHz-924MHz (8MHz Channel Bandwidth)
Modulation Type:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM
Number of Channels:	24 Channels for 802.11ah(1MHz Channel Bandwidth) 11 Channels for 802.11ah(2MHz Channel Bandwidth) 5 Channels for 802.11ah(4MHz Channel Bandwidth) 3 Channels for 802.11ah(8MHz Channel Bandwidth)
Rate:	0.1 to 4.4Mbps for 802.11ah(1MHz Channel Bandwidth) 0.7 to 8.9Mbps for 802.11ah(2MHz Channel Bandwidth) 1.5 to 20Mbps for 802.11ah(4MHz Channel Bandwidth) 3.3 to 43Mbps for 802.11ah(8MHz Channel Bandwidth)
Antenna Type:	External Antenna
Antenna Gain:	2.50dBi
Remark:	As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

Channel list for 802.11ah			
Bandwidth (MHz)	Low Channel (MHz)	Middle Channel (MHz)	High Channel (MHz)
1	903.5	914.5	926.5
2	905	915	925
4	906	914	926
8	908	916	924

Selected test rate for 802.11ah			
Bandwidth (MHz)	Low Channel	Middle Channel	High Channel
1	MCS0	MCS0	MCS0
2	MCS0	MCS0	MCS0
4	MCS0	MCS0	MCS0
8	MCS0	MCS0	MCS0

4.2 Environment Parameter

Environment Parameter	Selected Values During Tests	
Relative Humidity	Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	25	3.3
Note: NV:Normal Voltage LV:Low Extreme Test Voltage HV:High Extreme Test Voltage NT:Normal Temperature LT:Low Extreme Test Temperature HT:High Extreme Test Temperature		

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Computer	Lenovo	T14	2YK6GR
Mouse	Lenovo	3D optical Mouse	N/A

4.4 Measurement Uncertainty & Decision Rule

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	Conduction emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
5	RF conducted power	$\pm 0.75\text{dB}$
6	RF power density	$\pm 2.84\text{dB}$
7	Conducted Spurious emissions	$\pm 0.75\text{dB}$
8	RF Radiated power	$\pm 2.6\text{dB}$ (30MHz-1GHz)
		$\pm 2.7\text{dB}$ (1GHz-18GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Supply voltages	$\pm 1\%$
12	Time	$\pm 3\%$

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{\text{CISPR/ETSI}}$ (CISPR/ETSI Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.5 Test Location

All tests were performed at:

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

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

No tests were sub-contracted.

Note:

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

4.6 Test Facility

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

- **A2LA (Certificate No. 6336.01)**

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

- **FCC (Designation Number: CN1312)**

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

- **ISED (CAB Identifier: CN0120)**

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

Company Number: 27594

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESR7	SUWI-01-10-01	1/15/2025	1/14/2026
2	LISN	R&S	ENV216	SUWI-01-19-03	5/8/2025	5/7/2026
3	LISN	Schwarzbeck	ENV216	SUWI-01-19-04	5/8/2025	5/7/2026
4	Test Software	Tonscend	JS32-CE_4.0.0.2	SUWI-02-09-05	NCR	NCR
RF Conducted Test						
1	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/20/2025	1/19/2026
2	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-15	11/21/2025	11/20/2026
3	MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	1/15/2025	1/14/2026
4	Signal Generator	ROHDE&SCHWARZ	SMW200A	SUWI-01-07-08	3/27/2025	3/26/2026
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-08-01	1/16/2025	1/15/2026
6	MXG Vector Signal Generator	ROHDE&SCHWARZ	SMR20	SUWI-01-33-01	11/21/2025	11/20/2026
7	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-13	5/8/2025	5/7/2026
8	Wideband Radio Communication Test Station	Anritsu	MT8000A	SUWI-01-34-02	11/21/2025	11/20/2026
9	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	11/21/2025	11/20/2026
10	Power meter	Anritsu	ML2495A	SUWI-01-31-01	11/21/2025	11/20/2026
11	Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	11/21/2025	11/20/2026
12	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	1/15/2025	1/14/2026
13	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2/13/2025	2/12/2026
14	Temperature Chamber	GIANT FORCE	ICT-017-40-SP-SD	SUWI-01-13-02	5/7/2025	5/6/2026
15	Measurement Software	TST	TST 272 V2.02	SUWI-03-55-03	NCR	NCR
16	RF Control unit	TST	TSCB3023R2	SUWI-02-20-01	NCR	NCR
17	RFCables	Tonscend	NA	SUWI-01-03-01	1/16/2025	1/15/2026
RF Radiated Test						
1	Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	6/3/2023	6/2/2026
2	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/20/2025	1/19/2026
3	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-09	11/21/2025	11/20/2026
4	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	1/15/2025	1/14/2026
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-18-01	1/16/2025	1/15/2026
6	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	9/10/2025	9/9/2027
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	5/7/2025	5/6/2027
8	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/7/2025	5/6/2027
9	Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/7/2025	5/6/2027
10	Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	1/16/2025	1/15/2026
11	Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	1/16/2025	1/15/2026
12	Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	1/20/2025	1/19/2026
13	Wideband Radio Communication Tester	Anritsu	MT8820C	SUWI-01-26-01	11/21/2025	11/20/2026



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14	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	8/25/2025	8/24/2026
15	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-09	8/26/2025	8/25/2026
16	Radio Communication Analyzer	StarPoint	SP9500E	SUWI-01-28-02	11/21/2025	11/20/2026
17	Signal Generator	ROHDE&SCHWARZ	SMB100A	SUWI-01-08-01	1/16/2025	1/15/2026
18	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	1/15/2025	1/14/2026
19	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2/13/2025	2/12/2026
20	Measurement Software	Tonscend	JS32-RE 4.0.0.0	SUWI-02-09-06	NCR	NCR
21	RF Control unit	Tonscend	JS0806-1	SUWI-02-20-01	NCR	NCR
22	RFCables	Tonscend	NA	SUWI-01-03-02	1/16/2025	1/15/2026

Remark: NCR=No Calibration Requirement.

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

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

6.1.2 Conclusion

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The module uses a dedicated RF connector not intended for user replacement, meeting §15.203. The best case gain of the antenna is 2.50 dBi.



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 (2020) 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: 23 °C

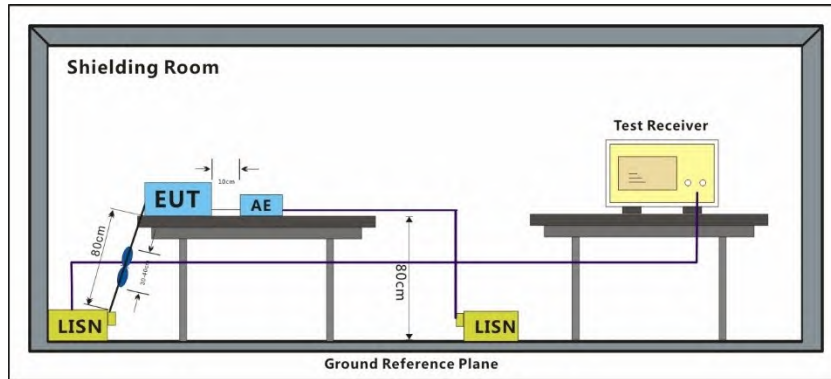
Humidity: 44 % RH

Atmospheric Pressure: 1001 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Pre-scan	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Pre-scan	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Pre-scan	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.1.3 Test Setup Diagram

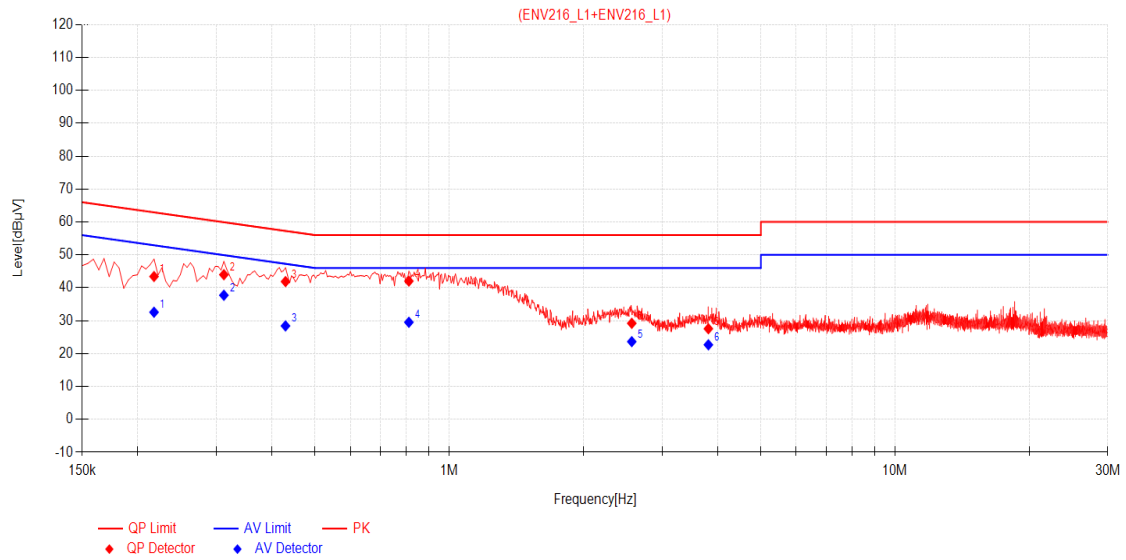


7.1.4 Measurement Procedure and Data

- 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

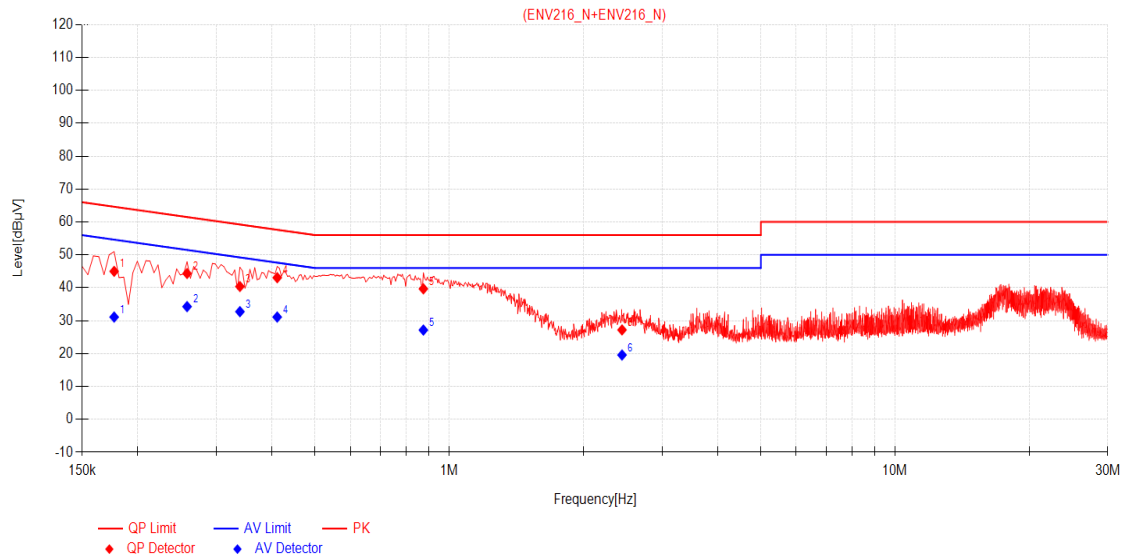
Test Mode: 00; Line: Live line



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	0.2175	9.96	33.47	43.43	62.91	19.48	22.60	32.56	52.91	20.35	PASS
2	0.3120	9.97	34.01	43.98	59.92	15.94	27.76	37.73	49.92	12.19	PASS
3	0.4290	9.95	31.93	41.88	57.27	15.39	18.46	28.41	47.27	18.86	PASS
4	0.8115	9.95	32.07	42.02	56.00	13.98	19.57	29.52	46.00	16.48	PASS
5	2.5665	10.21	19.00	29.21	56.00	26.79	13.42	23.63	46.00	22.37	PASS
6	3.8130	10.35	17.21	27.56	56.00	28.44	12.32	22.67	46.00	23.33	PASS

Test Mode: 00; Line: Neutral Line



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	0.1770	9.97	35.02	44.99	64.63	19.64	21.13	31.10	54.63	23.53	PASS
2	0.2580	9.97	34.36	44.33	61.50	17.17	24.30	34.27	51.50	17.23	PASS
3	0.3390	9.95	30.44	40.39	59.23	18.84	22.79	32.74	49.23	16.49	PASS
4	0.4110	9.94	33.12	43.06	57.63	14.57	21.16	31.10	47.63	16.53	PASS
5	0.8745	9.90	29.77	39.67	56.00	16.33	17.25	27.15	46.00	18.85	PASS
6	2.4405	10.14	17.05	27.19	56.00	28.81	9.42	19.56	46.00	26.44	PASS



7.2 Radiated Spurious Emissions Below 1GHz

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

Test Method: ANSI C63.10 (2020) Section 6.4,6.5

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

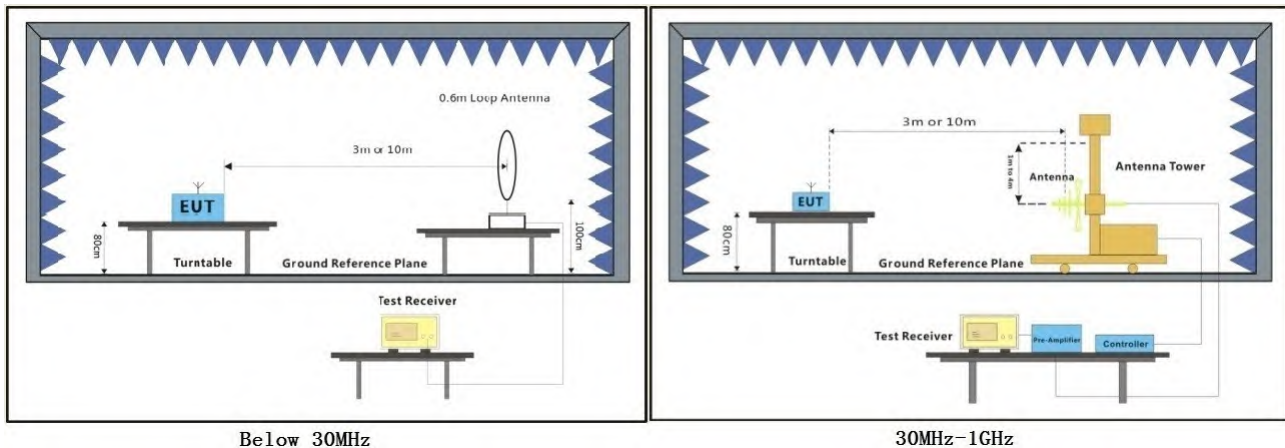
Humidity: 44 % RH

Atmospheric Pressure: 1001 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.2.3 Test Setup Diagram



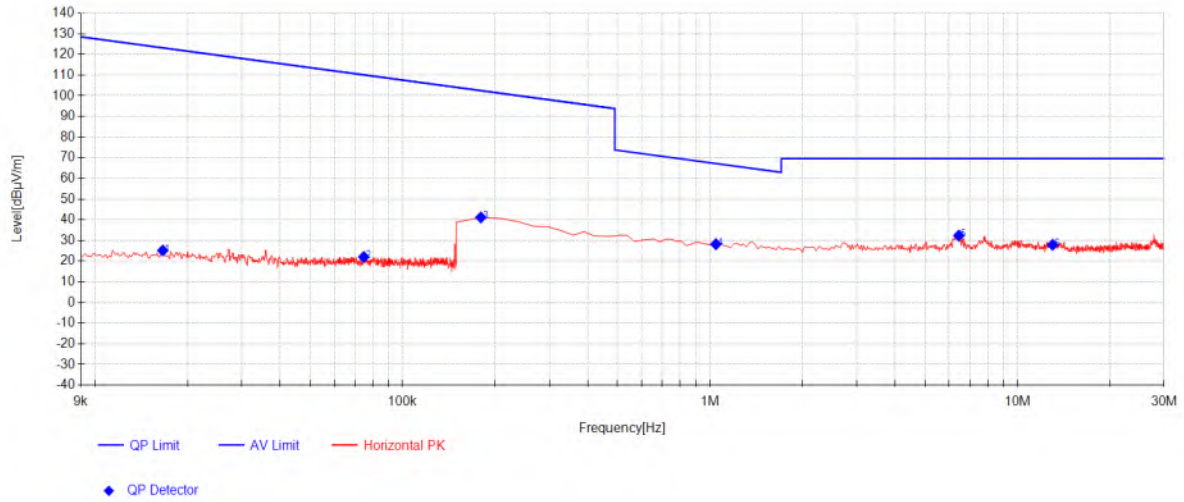
7.2.4 Measurement Procedure and Data

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

Remark:

- Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- For radiated emission testing in the frequency band of 9 kHz to 30 MHz, all channels were tested, and only the test data for the worst case is recorded in the report.

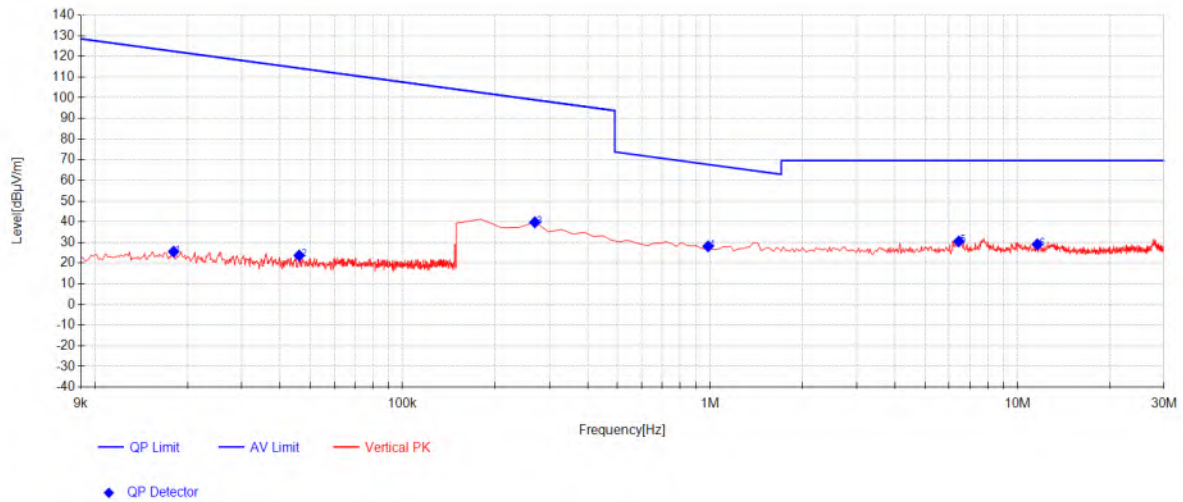
11ah_1M_TX_CH_Low_Coaxial



Final Data List

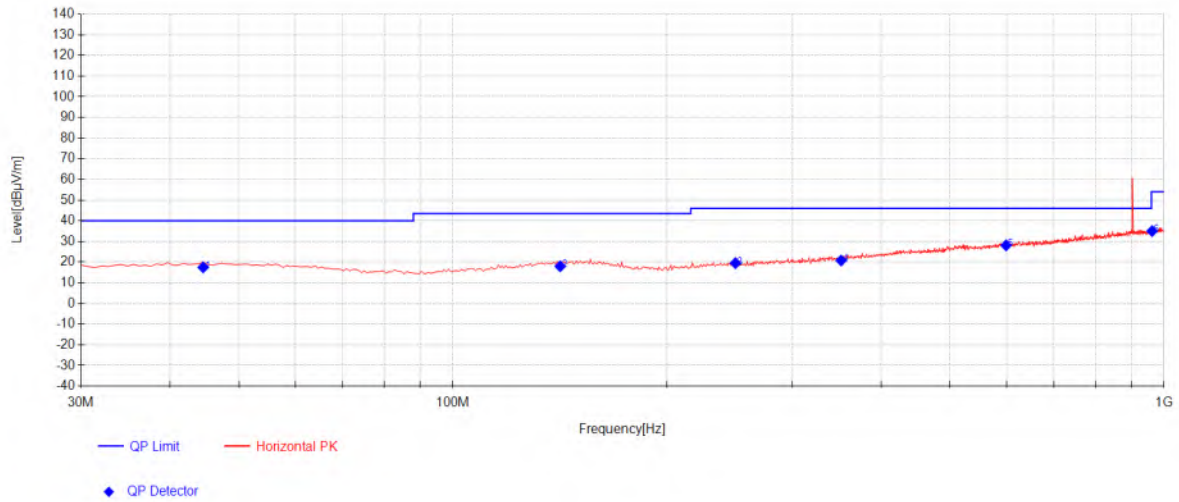
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
4	1.0455	7.64	20.10	0.45	28.19	67.22	39.03	100	140	Coaxial
5	6.4483	11.53	20.27	0.55	32.35	69.54	37.19	100	270	Coaxial
6	13.0154	7.08	20.10	0.68	27.86	69.54	41.68	100	0	Coaxial
NO.	Frequency [MHz]	AV Reading [dBμV]	AF [dB/m]	Factor [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	0.0166	5.03	19.70	0.43	25.16	123.19	98.03	100	210	Coaxial
2	0.0748	1.70	19.90	0.43	22.03	110.12	88.09	100	120	Coaxial
3	0.1798	20.81	19.91	0.43	41.15	102.51	61.36	100	40	Coaxial

11ah_1M_TX_CH_Low_Coplanar



Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
4	0.9858	7.56	20.10	0.45	28.11	67.73	39.62	100	180	Coplanar
5	6.4483	9.69	20.27	0.55	30.51	69.54	39.03	100	270	Coplanar
6	11.6124	8.27	20.17	0.65	29.09	69.54	40.45	100	210	Coplanar
NO.	Frequency [MHz]	AV Reading [dBμV]	AF [dB/m]	Factor [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	0.018	5.43	19.70	0.43	25.56	122.49	96.93	100	260	Coplanar
2	0.0461	3.48	19.78	0.43	23.69	114.32	90.63	100	110	Coplanar
3	0.2694	19.4	19.93	0.43	39.77	98.99	59.22	100	240	Coplanar

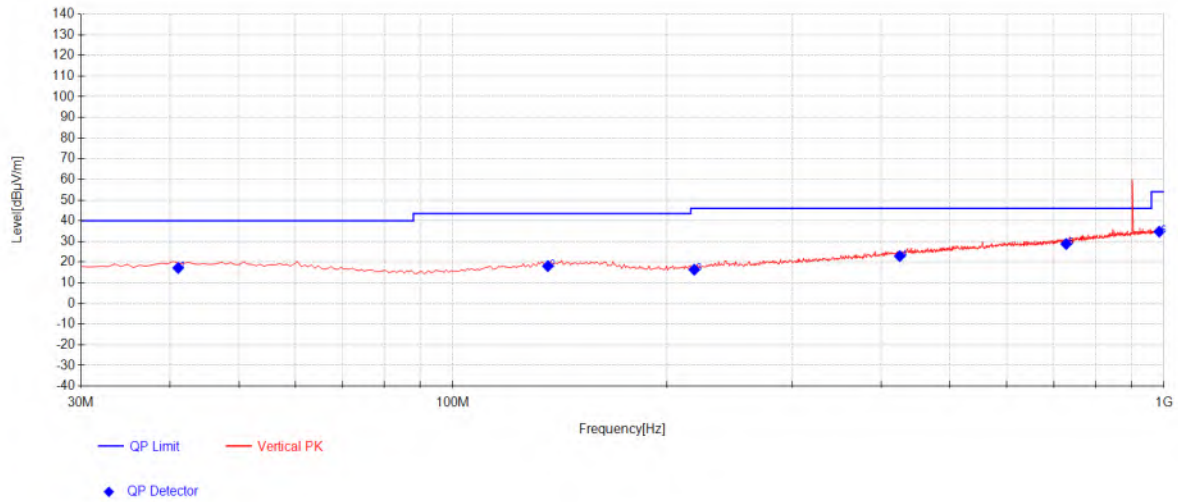
11ah_1M_TX_CH_Low_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	44.55	36.8	13.35	-32.69	17.46	40.00	22.54	125	273	Horizontal
2	141.55	36.95	12.62	-31.58	17.99	43.50	25.51	141	357	Horizontal
3	249.6357	39.28	11.66	-31.42	19.52	46.00	26.48	163	360	Horizontal
4	351.4857	37.4	14.19	-30.82	20.77	46.00	25.23	128	360	Horizontal
5	599.5286	38.21	19.59	-29.70	28.10	46.00	17.90	111	354	Horizontal
6	961.8929	38.9	24.36	-28.25	35.00	54.00	19.00	187	3	Horizontal

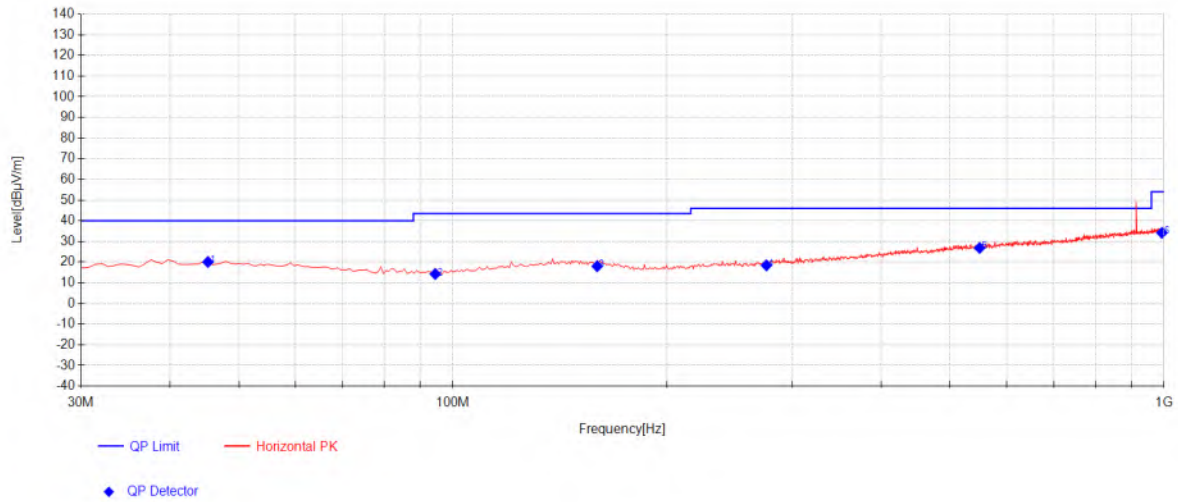
11ah_1M_TX_CH_Low_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	41.0857	36.5	13.39	-32.70	17.19	40.00	22.81	124	44	Vertical
2	136.0071	37.38	12.34	-31.64	18.08	43.50	25.42	142	0	Vertical
3	218.4571	37.09	10.55	-31.30	16.34	46.00	29.66	211	318	Vertical
4	424.9286	36.84	16.15	-30.10	22.89	46.00	23.11	287	330	Vertical
5	728.4	37.1	20.92	-29.24	28.78	46.00	17.22	187	6	Vertical
6	984.7571	38.16	24.56	-27.99	34.73	54.00	19.27	188	213	Vertical

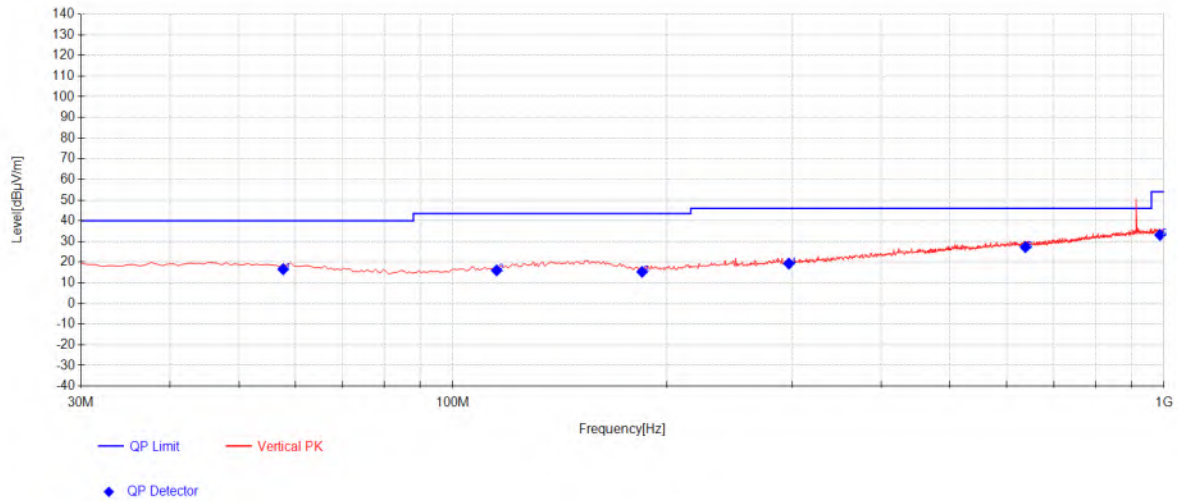
11ah_1M_TX_CH_Mid_Horizontal_QP



Final Data List

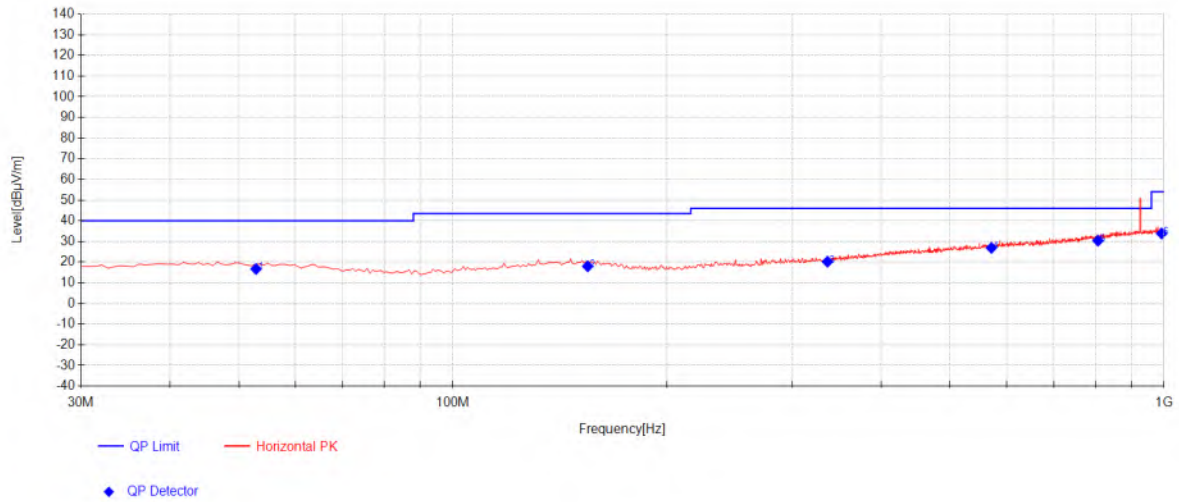
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	45.2429	39.42	13.35	-32.69	20.08	40.00	19.92	111	70	Horizontal
2	94.4357	37.43	9.11	-32.33	14.21	43.50	29.29	135	340	Horizontal
3	159.5643	36.75	12.89	-31.62	18.02	43.50	25.48	274	47	Horizontal
4	275.9643	37.24	12.38	-31.19	18.43	46.00	27.57	184	236	Horizontal
5	550.3357	38.22	18.71	-30.09	26.84	46.00	19.16	135	164	Horizontal
6	993.0714	37.57	24.64	-28.05	34.16	54.00	19.84	174	181	Horizontal

11ah_1M_TX_CH_Mid_Vertical_QP



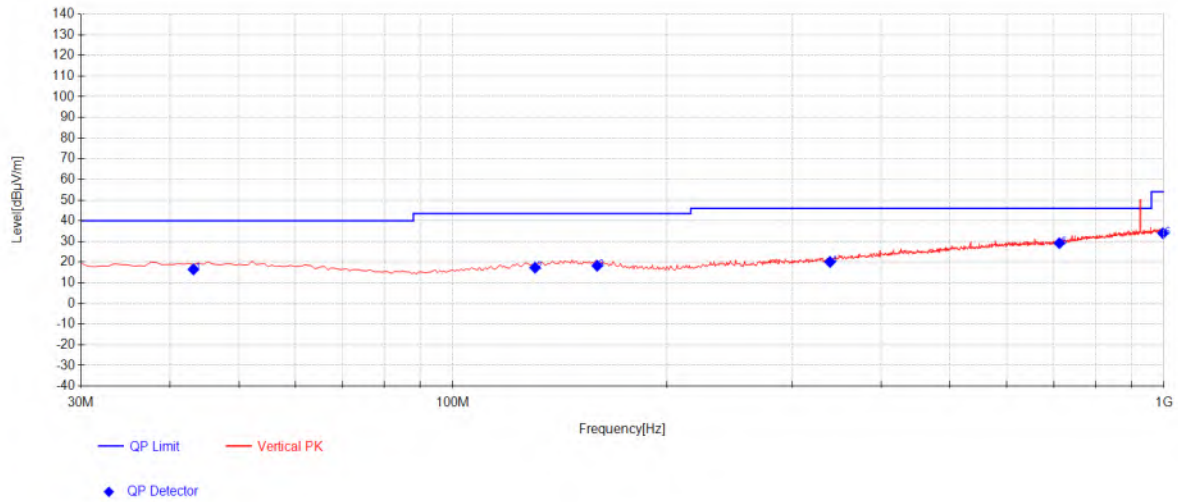
Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	57.7143	36.5	12.61	-32.59	16.52	40.00	23.48	141	1	Vertical
2	115.2214	37.21	10.87	-32.09	15.99	43.50	27.51	144	142	Vertical
3	184.5071	36.74	10.36	-31.83	15.28	43.50	28.22	135	181	Vertical
4	296.75	37.67	12.68	-31.07	19.28	46.00	26.72	184	208	Vertical
5	638.3286	36.96	19.87	-29.59	27.24	46.00	18.76	124	280	Vertical
6	986.8357	36.52	24.58	-28.00	33.10	54.00	20.90	188	246	Vertical

11ah_1M_TX_CH_High_Horizontal_QP



Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	52.8643	36.29	13.04	-32.65	16.69	40.00	23.31	152	290	Horizontal
2	154.7143	36.78	12.82	-31.60	18.00	43.50	25.50	141	268	Horizontal
3	336.2429	37.47	13.75	-31.02	20.20	46.00	25.80	136	98	Horizontal
4	571.8143	37.71	19.09	-29.92	26.88	46.00	19.12	162	114	Horizontal
5	807.3857	36.87	22.60	-29.09	30.37	46.00	15.63	172	355	Horizontal
6	992.3786	37.27	24.63	-28.04	33.86	54.00	20.14	155	53	Horizontal

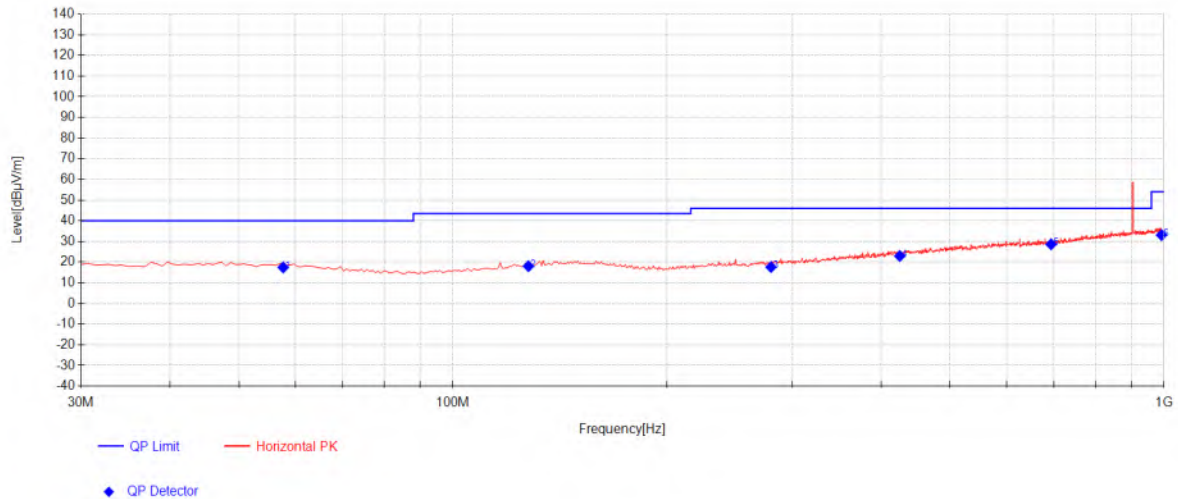
11ah_1M_TX_CH_High_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	43.1643	35.82	13.37	-32.69	16.49	40.00	23.51	235	15	Vertical
2	130.4643	37.04	11.98	-31.72	17.30	43.50	26.20	172	202	Vertical
3	159.5643	36.97	12.89	-31.62	18.24	43.50	25.26	124	230	Vertical
4	339.0143	37.26	13.83	-31.00	20.09	46.00	25.91	174	1	Vertical
5	712.4643	37.7	20.57	-29.12	29.16	46.00	16.84	165	0	Vertical
6	996.5357	37.4	24.67	-28.09	33.97	54.00	20.03	174	0	Vertical

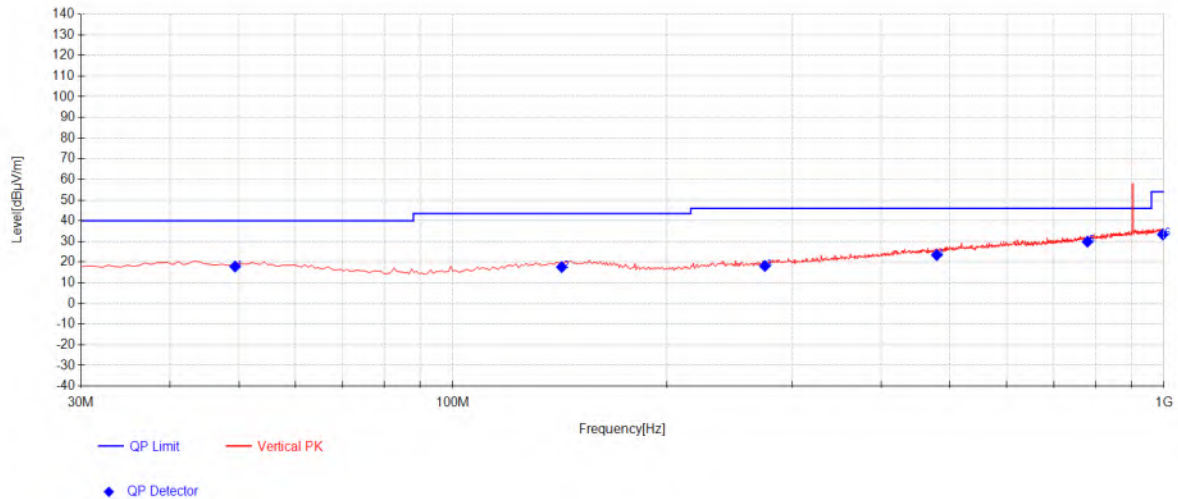
11ah_2M_TX_CH_Low_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	57.7143	37.42	12.61	-32.59	17.44	40.00	22.56	132	196	Horizontal
2	127.6929	38.01	11.80	-31.79	18.02	43.50	25.48	128	156	Horizontal
3	280.1214	36.16	12.60	-31.13	17.63	46.00	28.37	175	86	Horizontal
4	424.9286	36.89	16.15	-30.10	22.94	46.00	23.06	152	316	Horizontal
5	693.7571	37.72	20.26	-29.35	28.63	46.00	17.37	155	316	Horizontal
6	991.6857	36.51	24.63	-28.03	33.10	54.00	20.90	187	140	Horizontal

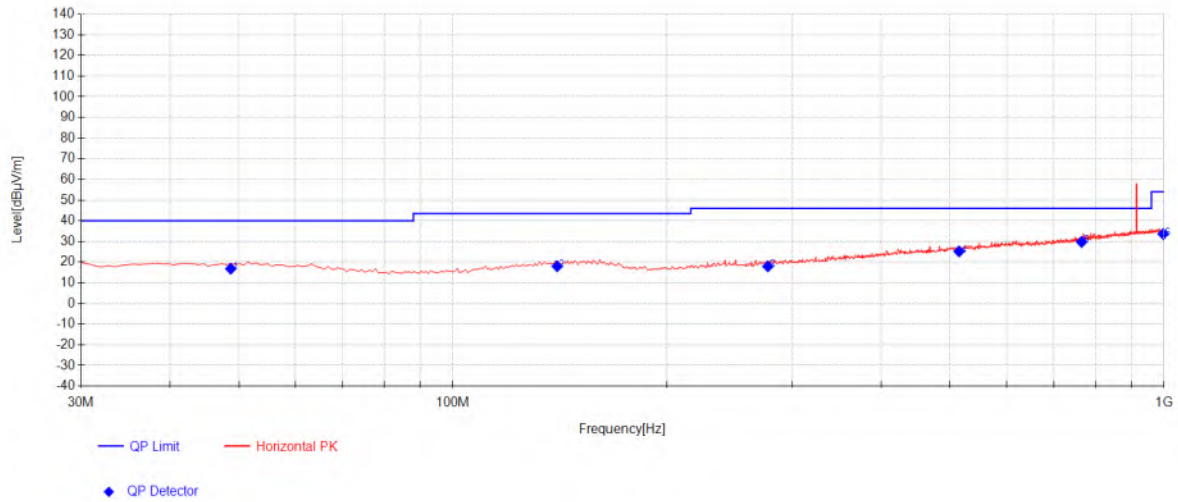
11ah_2M_TX_CH_Low_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.4	37.23	13.31	-32.68	17.85	40.00	22.15	187	0	Vertical
2	142.2429	36.55	12.63	-31.58	17.60	43.50	25.90	163	82	Vertical
3	274.5786	37.07	12.30	-31.21	18.16	46.00	27.84	188	136	Vertical
4	478.9714	36.49	17.34	-30.38	23.45	46.00	22.55	174	174	Vertical
5	780.3643	36.75	22.07	-28.93	29.88	46.00	16.12	124	2	Vertical
6	995.8429	36.81	24.66	-28.09	33.39	54.00	20.61	138	240	Vertical

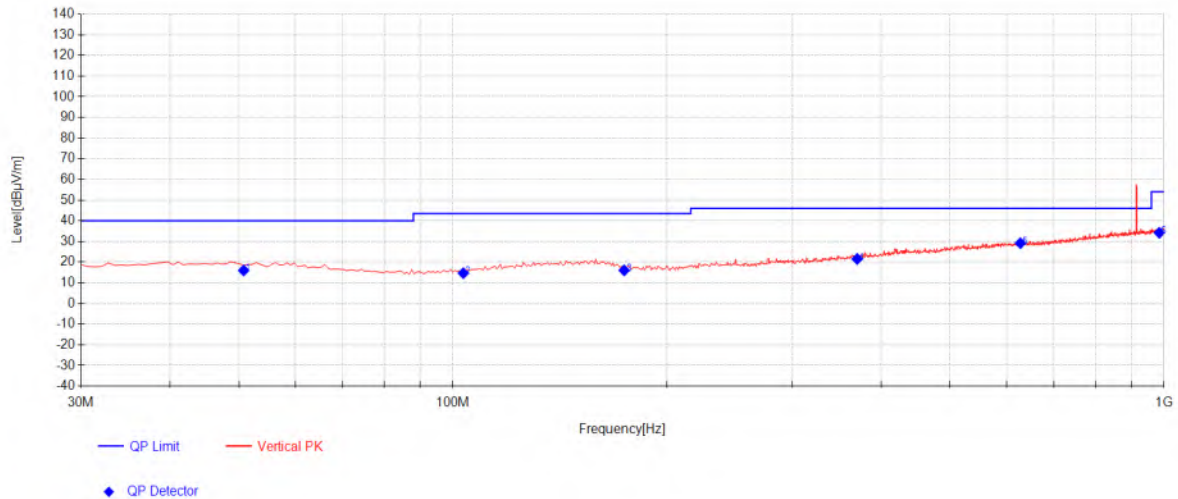
11ah_2M_TX_CH_Mid_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	48.7071	36.15	13.31	-32.68	16.78	40.00	23.22	187	300	Horizontal
2	140.1643	36.97	12.60	-31.58	17.99	43.50	25.51	141	234	Horizontal
3	277.35	36.66	12.45	-31.17	17.94	46.00	28.06	133	195	Horizontal
4	515	36.93	18.07	-29.82	25.18	46.00	20.82	127	174	Horizontal
5	765.8143	37.05	21.75	-29.01	29.79	46.00	16.21	174	343	Horizontal
6	997.2286	37.02	24.68	-28.10	33.59	54.00	20.41	144	343	Horizontal

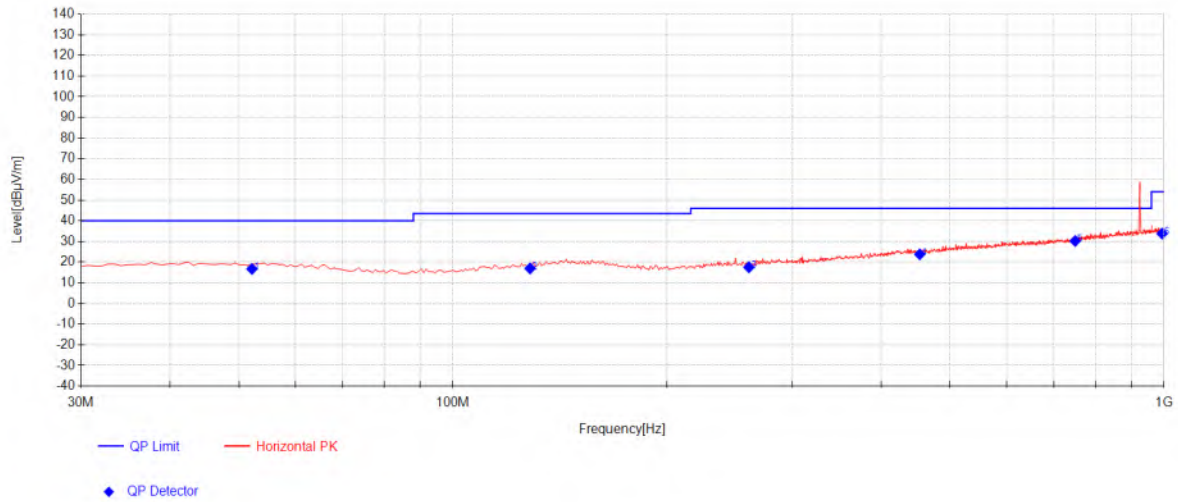
11ah_2M_TX_CH_Mid_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	50.7857	35.41	13.23	-32.67	15.97	40.00	24.03	152	275	Vertical
2	103.4429	37.13	9.81	-32.27	14.67	43.50	28.83	166	334	Vertical
3	174.1143	36.64	11.21	-31.82	16.03	43.50	27.47	172	247	Vertical
4	370.1929	37.64	14.74	-30.82	21.55	46.00	24.45	133	171	Vertical
5	627.9357	39.02	19.80	-29.64	29.17	46.00	16.83	187	192	Vertical
6	984.7571	37.64	24.56	-27.99	34.21	54.00	19.79	198	313	Vertical

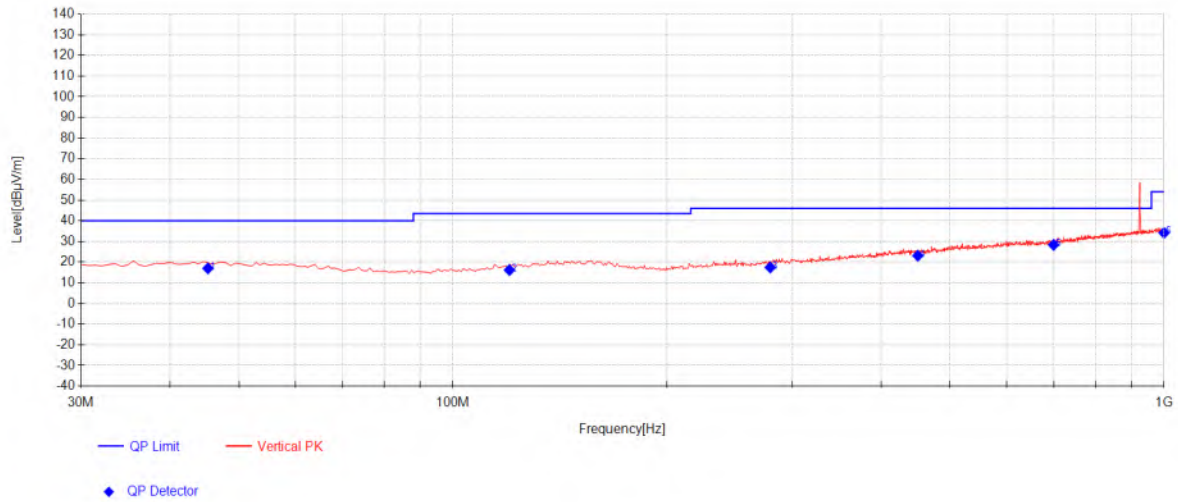
11ah_2M_TX_CH_High_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	52.1714	36.26	13.10	-32.65	16.71	40.00	23.29	152	229	Horizontal
2	128.3857	36.9	11.85	-31.77	16.97	43.50	26.53	171	197	Horizontal
3	260.7214	37.35	11.54	-31.36	17.53	46.00	28.47	168	9	Horizontal
4	453.3357	37.29	16.77	-30.27	23.79	46.00	22.21	144	175	Horizontal
5	749.8786	38.1	21.40	-29.29	30.21	46.00	15.79	158	49	Horizontal
6	993.7643	37.23	24.64	-28.06	33.81	54.00	20.19	143	357	Horizontal

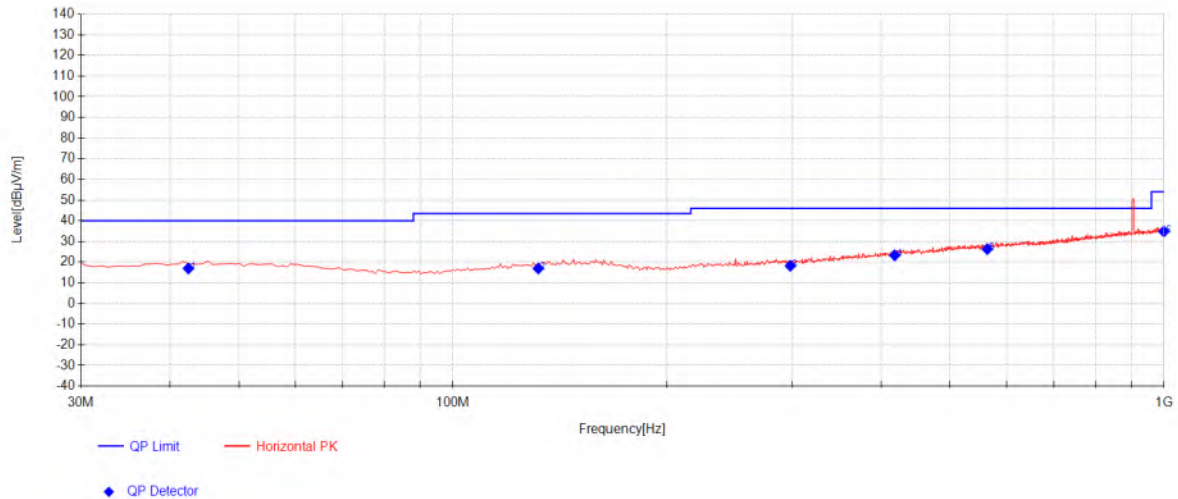
11ah_2M_TX_CH_High_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	45.2429	36.33	13.35	-32.69	16.99	40.00	23.01	166	124	Vertical
2	120.0714	36.85	11.30	-31.99	16.17	43.50	27.33	138	135	Vertical
3	279.4286	36.01	12.57	-31.14	17.44	46.00	28.56	142	169	Vertical
4	450.5643	36.6	16.71	-30.21	23.10	46.00	22.90	188	22	Vertical
5	699.3	37.31	20.30	-29.24	28.36	46.00	17.64	197	158	Vertical
6	1000	37.6	24.70	-28.14	34.16	54.00	19.84	193	196	Vertical

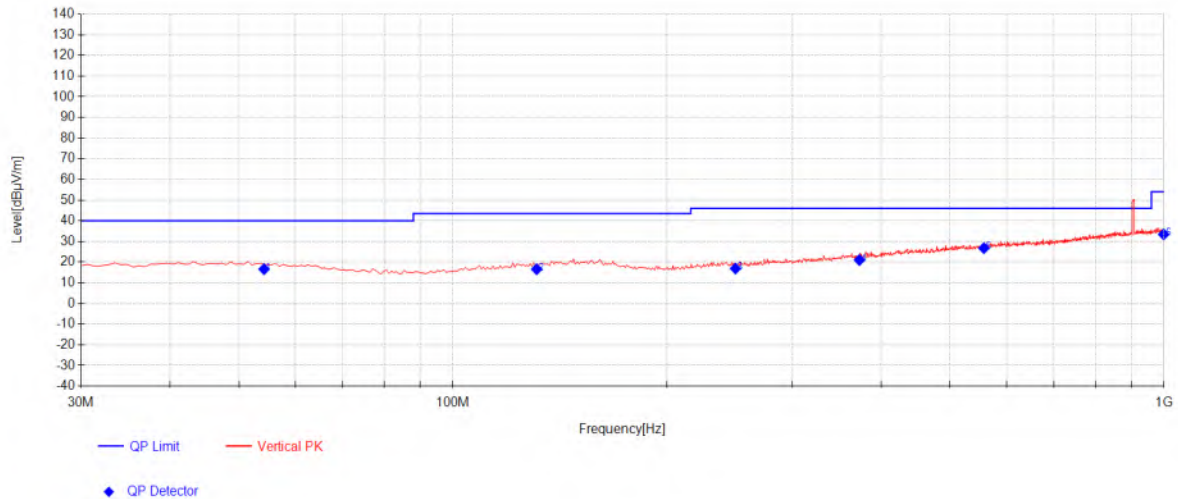
11ah_4M_TX_CH_Low_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	42.4714	36.28	13.38	-32.70	16.96	40.00	23.04	187	180	Horizontal
2	131.85	36.59	12.07	-31.70	16.96	43.50	26.54	144	191	Horizontal
3	298.1357	36.62	12.69	-31.08	18.23	46.00	27.77	136	230	Horizontal
4	418	37.5	16.00	-30.21	23.28	46.00	22.72	187	360	Horizontal
5	564.1929	37.33	18.96	-30.01	26.28	46.00	19.72	124	26	Horizontal
6	999.3071	38.26	24.69	-28.13	34.82	54.00	19.18	199	70	Horizontal

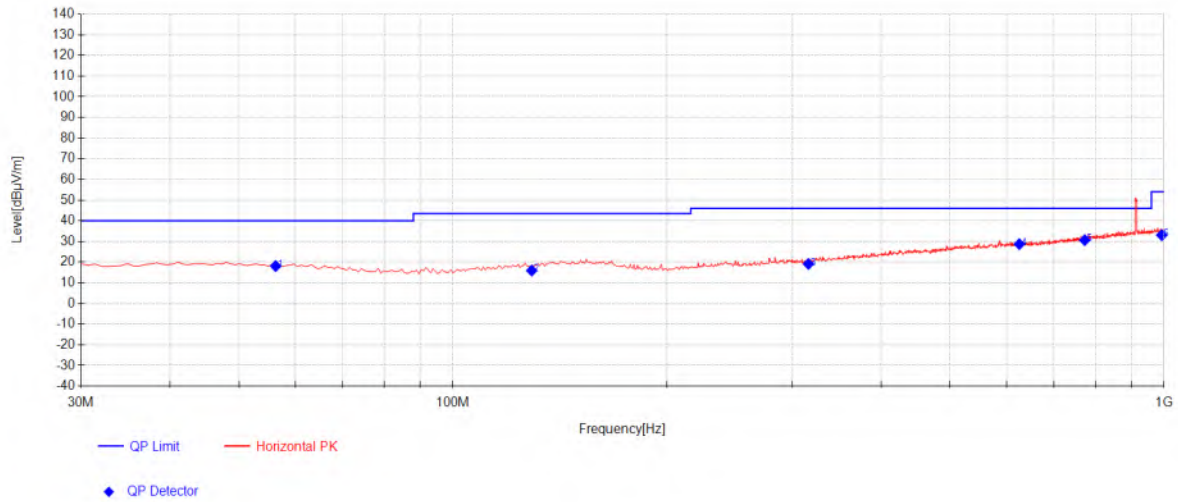
11ah_4M_TX_CH_Low_Vertical_QP



Final Data List

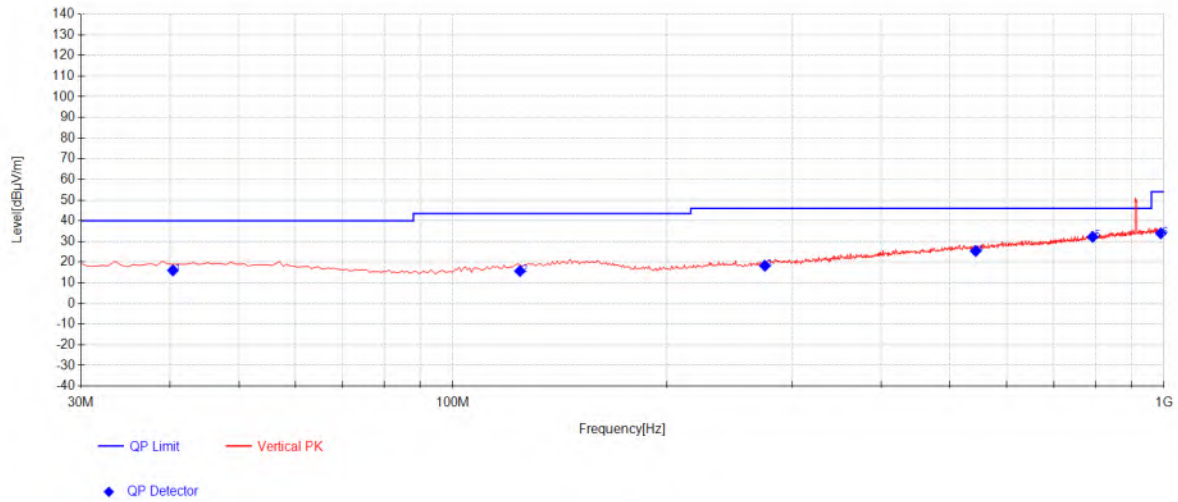
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	54.25	36.31	12.92	-32.63	16.60	40.00	23.40	182	5	Vertical
2	131.1571	36.26	12.03	-31.71	16.57	43.50	26.93	166	213	Vertical
3	249.6357	36.66	11.66	-31.42	16.90	46.00	29.10	134	356	Vertical
4	372.9643	37.03	14.82	-30.83	21.01	46.00	24.99	174	207	Vertical
5	557.9571	37.99	18.84	-30.07	26.77	46.00	19.23	155	246	Vertical
6	998.6143	36.83	24.69	-28.12	33.40	54.00	20.60	187	48	Vertical

11ah_4M_TX_CH_Mid_Horizontal_QP



Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	56.3286	37.96	12.73	-32.60	18.09	40.00	21.91	153	190	Horizontal
2	129.0786	35.79	11.89	-31.75	15.93	43.50	27.57	125	125	Horizontal
3	316.15	37.08	13.17	-31.14	19.11	46.00	26.89	166	20	Horizontal
4	625.8571	38.58	19.78	-29.65	28.71	46.00	17.29	124	360	Horizontal
5	773.4357	37.66	21.92	-28.94	30.64	46.00	15.36	141	256	Horizontal
6	992.3786	36.47	24.63	-28.04	33.06	54.00	20.94	198	316	Horizontal

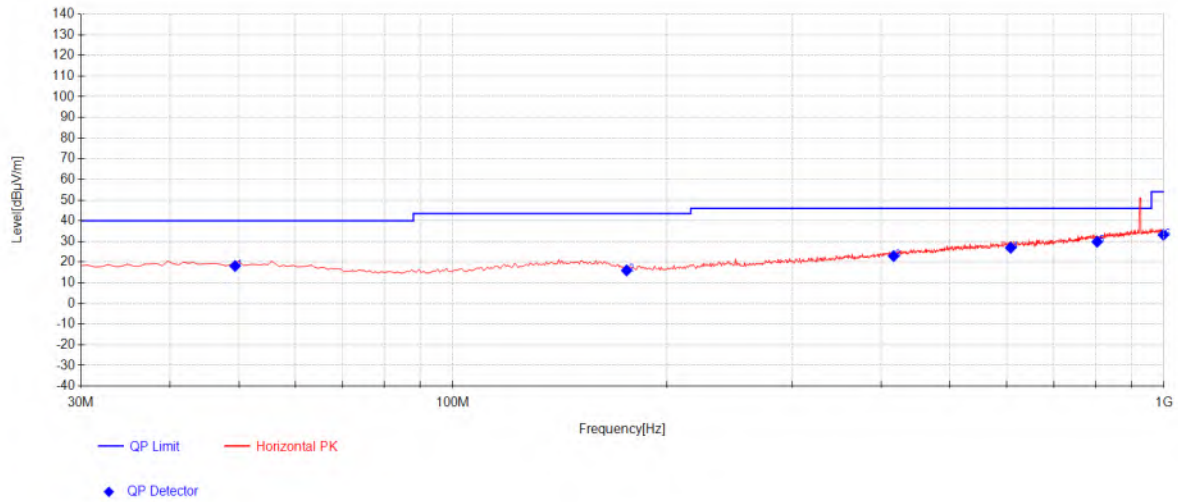
11ah_4M_TX_CH_Mid_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.3929	35.32	13.40	-32.70	16.02	40.00	23.98	136	59	Vertical
2	124.2286	36	11.57	-31.88	15.69	43.50	27.81	187	307	Vertical
3	274.5786	37.15	12.30	-31.21	18.24	46.00	27.76	141	136	Vertical
4	543.4071	36.88	18.58	-30.12	25.34	46.00	20.66	166	197	Vertical
5	793.5286	38.9	22.36	-29.04	32.22	46.00	13.78	124	38	Vertical
6	989.6071	37.32	24.61	-28.01	33.92	54.00	20.08	197	0	Vertical

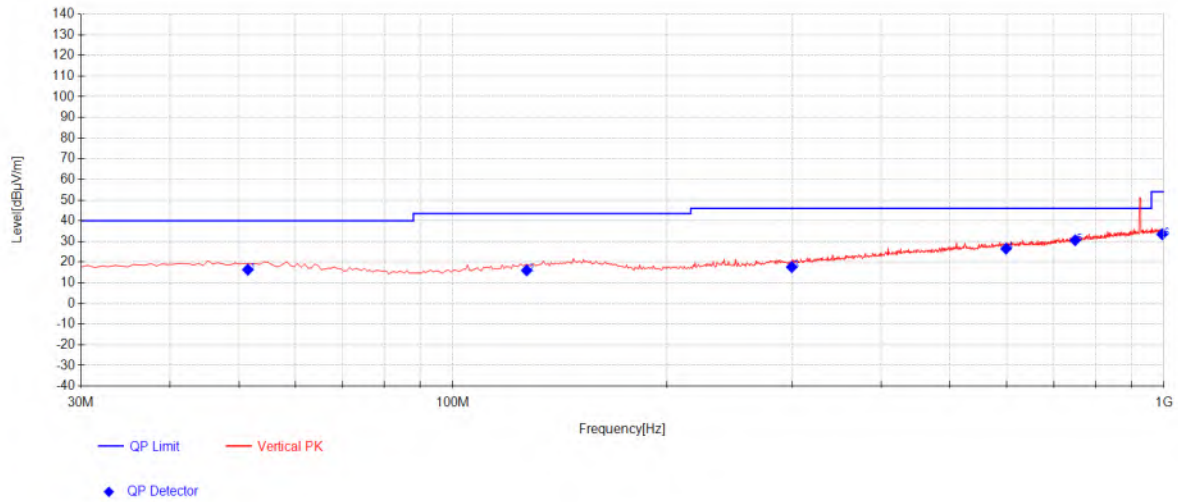
11ah_4M_TX_CH_High_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.4	37.51	13.31	-32.68	18.13	40.00	21.87	187	354	Horizontal
2	175.5	36.79	11.04	-31.83	16.00	43.50	27.50	141	168	Horizontal
3	416.6143	37.22	15.97	-30.25	22.94	46.00	23.06	166	142	Horizontal
4	608.5357	37	19.66	-29.71	26.95	46.00	19.05	124	278	Horizontal
5	805.3071	36.37	22.57	-29.09	29.85	46.00	16.15	155	168	Horizontal
6	997.9214	36.62	24.68	-28.11	33.19	54.00	20.81	169	328	Horizontal

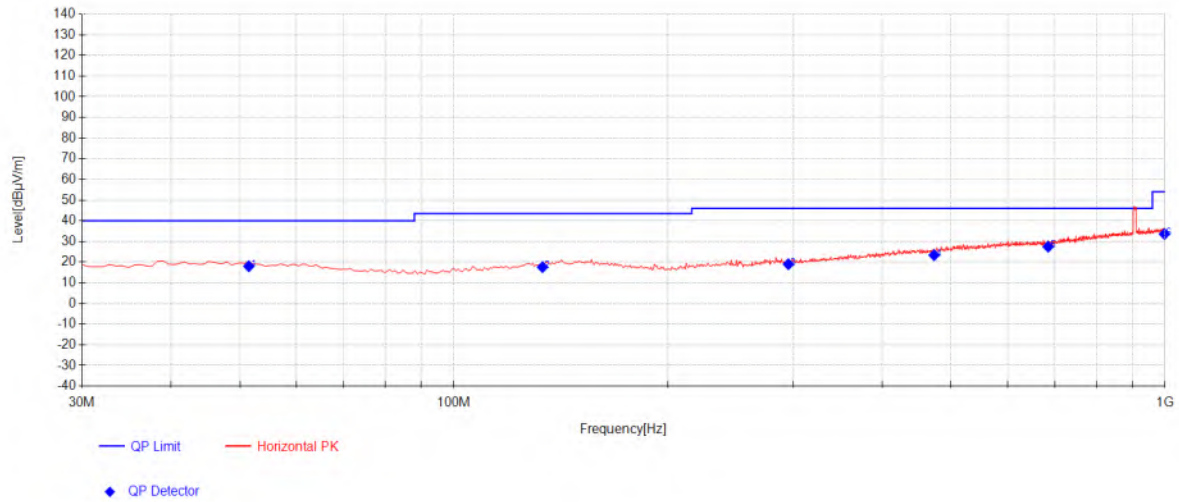
11ah_4M_TX_CH_High_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	51.4786	35.83	13.17	-32.66	16.33	40.00	23.67	163	105	Vertical
2	127	36.06	11.76	-31.81	16.01	43.50	27.49	141	34	Vertical
3	299.5214	35.99	12.70	-31.08	17.61	46.00	28.39	187	171	Vertical
4	599.5286	36.61	19.59	-29.70	26.50	46.00	19.50	144	88	Vertical
5	749.8786	38.49	21.40	-29.29	30.60	46.00	15.40	188	50	Vertical
6	993.7643	36.89	24.64	-28.06	33.47	54.00	20.53	137	77	Vertical

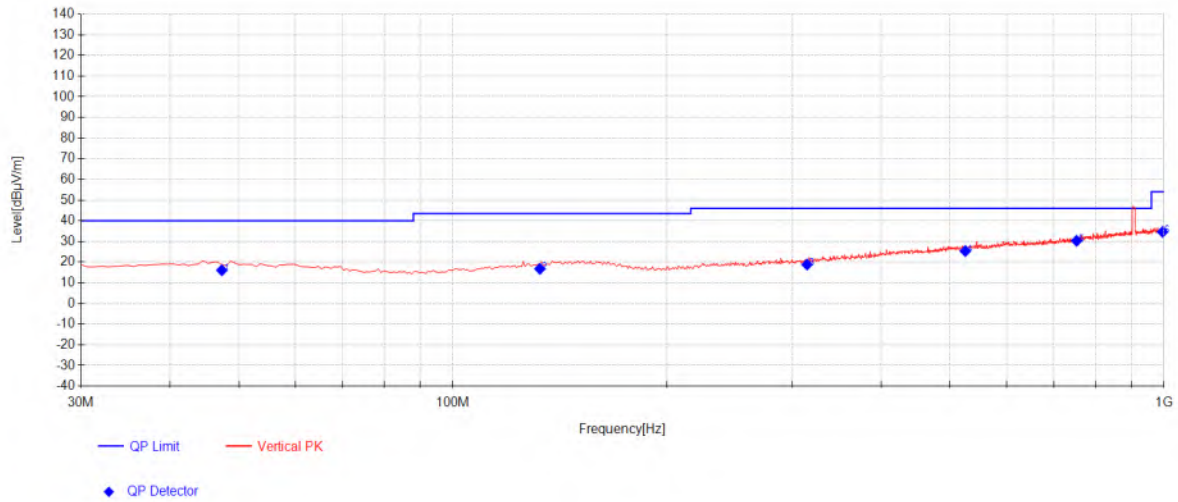
11ah_8M_TX_CH_Low_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	51.4786	37.48	13.17	-32.66	17.98	40.00	22.02	163	263	Horizontal
2	133.2357	37.12	12.16	-31.68	17.60	43.50	25.90	171	47	Horizontal
3	295.3643	37.37	12.68	-31.07	18.98	46.00	27.02	111	102	Horizontal
4	473.4286	36.6	17.22	-30.44	23.37	46.00	22.63	187	291	Horizontal
5	684.75	36.78	20.19	-29.51	27.46	46.00	18.54	123	136	Horizontal
6	997.9214	37.01	24.68	-28.11	33.58	54.00	20.42	197	119	Horizontal

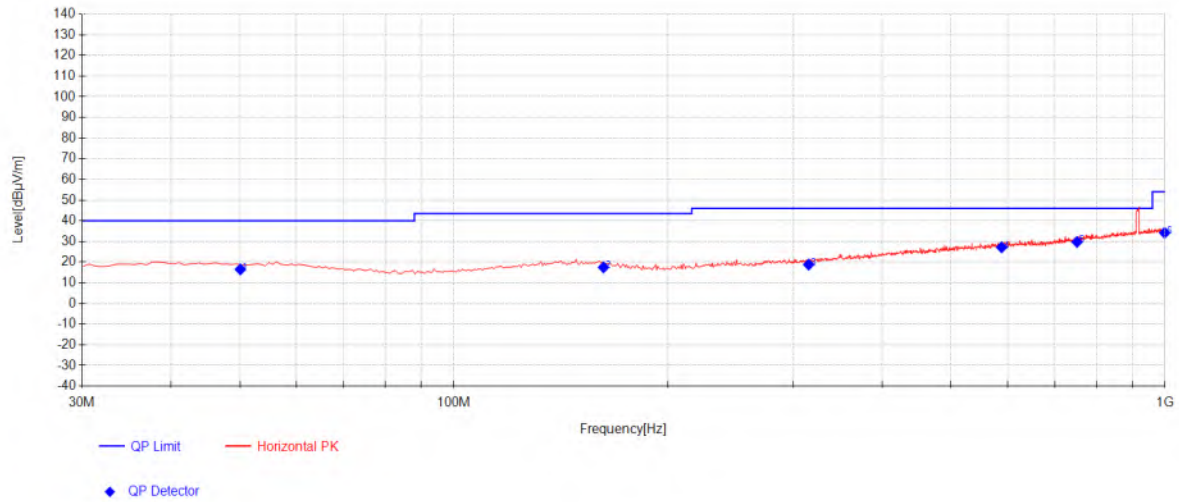
11ah_8M_TX_CH_Low_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.3214	35.43	13.33	-32.69	16.07	40.00	23.93	152	109	Vertical
2	132.5429	36.33	12.12	-31.69	16.75	43.50	26.75	141	65	Vertical
3	314.7643	36.83	13.13	-31.14	18.82	46.00	27.18	177	131	Vertical
4	525.3929	36.98	18.26	-29.90	25.34	46.00	20.66	198	268	Vertical
5	753.3429	38.07	21.47	-29.23	30.32	46.00	15.68	134	143	Vertical
6	995.15	38.04	24.66	-28.08	34.62	54.00	19.38	155	1	Vertical

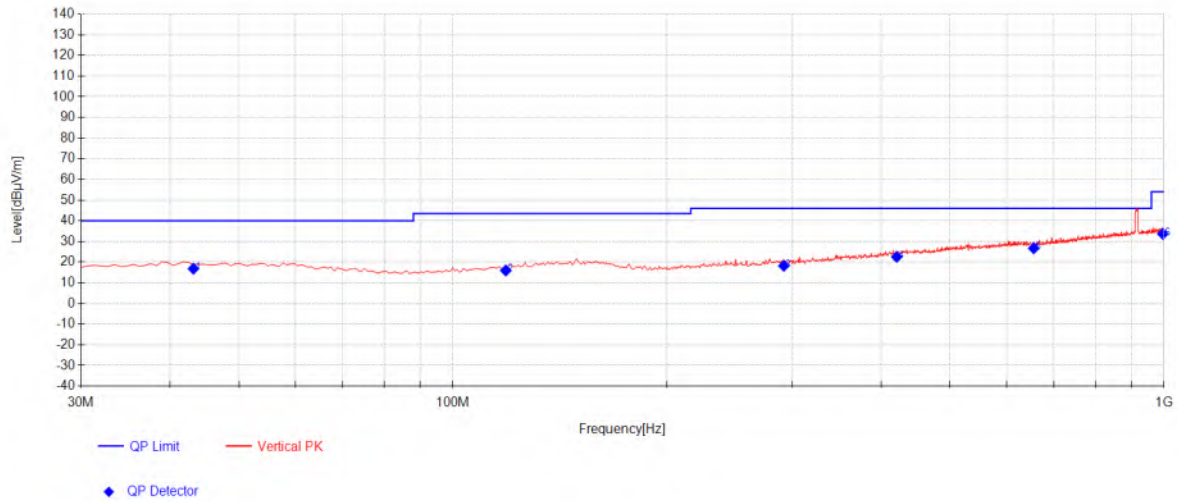
11ah_8M_TX_CH_Mid_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	50.0929	35.88	13.29	-32.68	16.49	40.00	23.51	163	360	Horizontal
2	162.3357	36.54	12.62	-31.66	17.50	43.50	26.00	171	142	Horizontal
3	315.4571	36.8	13.15	-31.14	18.81	46.00	27.19	133	115	Horizontal
4	589.1357	37.52	19.40	-29.77	27.16	46.00	18.84	129	21	Horizontal
5	751.9571	37.56	21.44	-29.25	29.75	46.00	16.25	146	224	Horizontal
6	998.6143	37.6	24.69	-28.12	34.17	54.00	19.83	178	15	Horizontal

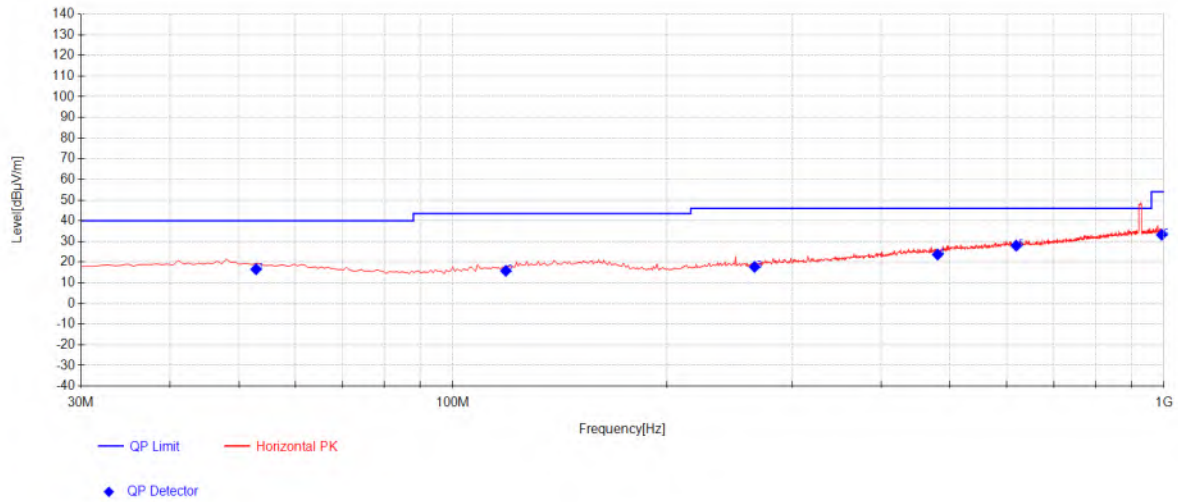
11ah_8M_TX_CH_Mid_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	43.1643	36.14	13.37	-32.69	16.81	40.00	23.19	187	49	Vertical
2	118.6857	36.81	11.18	-32.02	15.97	43.50	27.53	136	268	Vertical
3	291.9	36.61	12.66	-31.06	18.21	46.00	27.79	134	176	Vertical
4	420.7714	36.61	16.06	-30.15	22.52	46.00	23.48	177	242	Vertical
5	655.65	36.37	19.99	-29.66	26.70	46.00	19.30	142	209	Vertical
6	995.8429	37.06	24.66	-28.09	33.64	54.00	20.36	188	1	Vertical

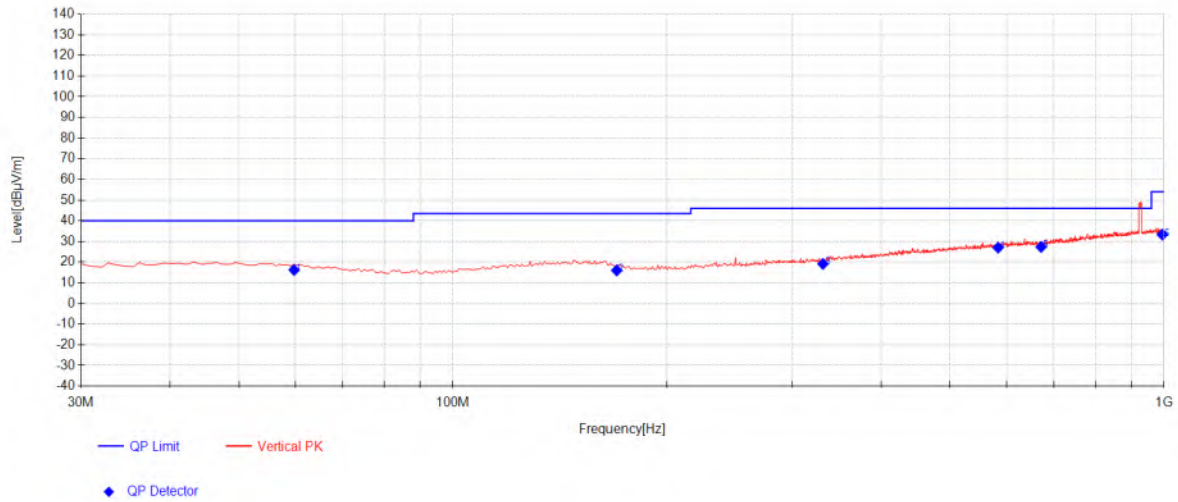
11ah_8M_TX_CH_High_Horizontal_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	52.8643	36.16	13.04	-32.65	16.56	40.00	23.44	235	246	Horizontal
2	118.6857	36.62	11.18	-32.02	15.78	43.50	27.72	272	323	Horizontal
3	265.5714	37.21	11.81	-31.32	17.70	46.00	28.30	144	59	Horizontal
4	480.3571	36.64	17.37	-30.36	23.65	46.00	22.35	135	312	Horizontal
5	619.6214	37.88	19.74	-29.66	27.96	46.00	18.04	187	334	Horizontal
6	992.3786	36.64	24.63	-28.04	33.23	54.00	20.77	166	20	Horizontal

11ah_8M_TX_CH_High_Vertical_QP



Final Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	59.7929	36.33	12.42	-32.56	16.19	40.00	23.81	136	153	Vertical
2	169.9571	36.09	11.71	-31.78	16.02	43.50	27.48	142	153	Vertical
3	331.3929	36.57	13.61	-31.04	19.14	46.00	26.86	171	257	Vertical
4	584.2857	37.49	19.32	-29.80	27.01	46.00	18.99	155	15	Vertical
5	671.5857	36.91	20.10	-29.64	27.37	46.00	18.63	174	142	Vertical
6	994.4571	36.75	24.65	-28.07	33.33	54.00	20.67	198	108	Vertical

7.3 Radiated Spurious Emissions Above 1GHz

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

Test Method: ANSI C63.10 (2020) Section 6.6 & 11.12

Limit:

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

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

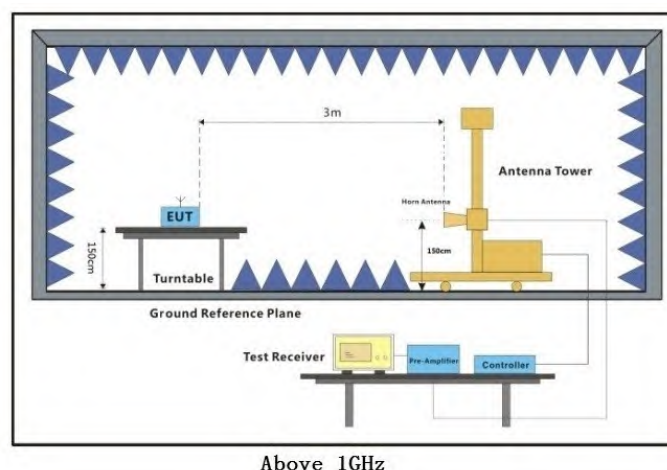
Humidity: 43 % RH

Atmospheric Pressure: 1001 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

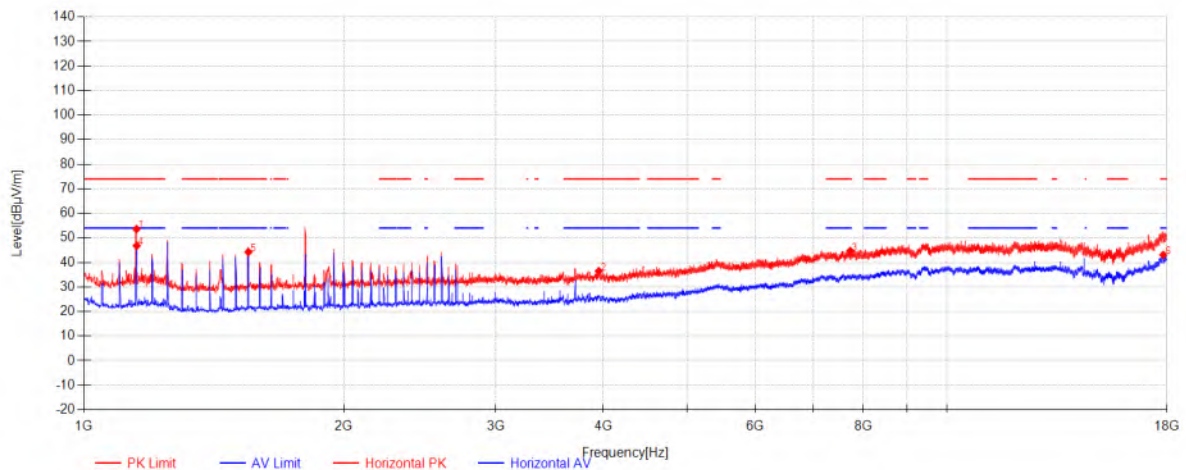
- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was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

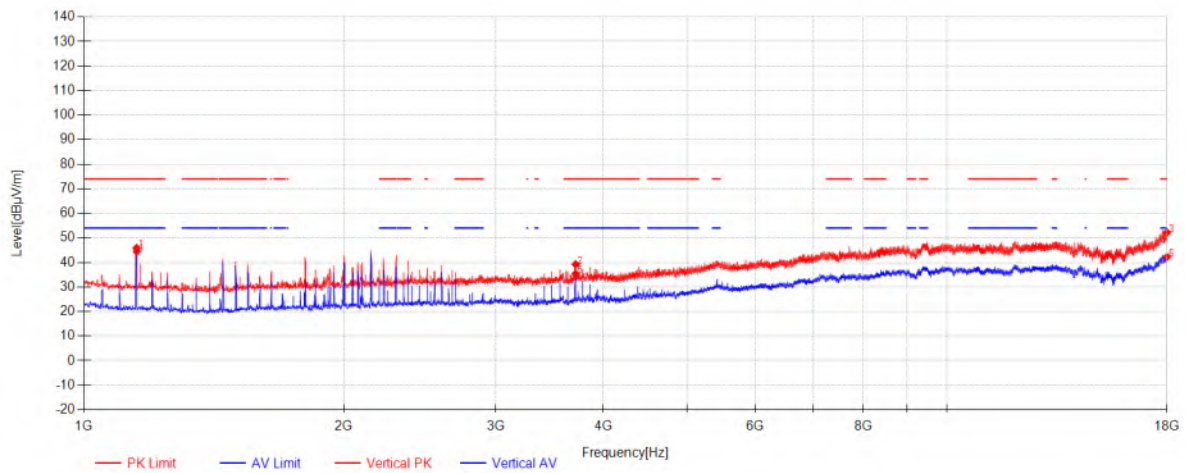
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

11ah_1M_TX_CH_Low_Horizontal



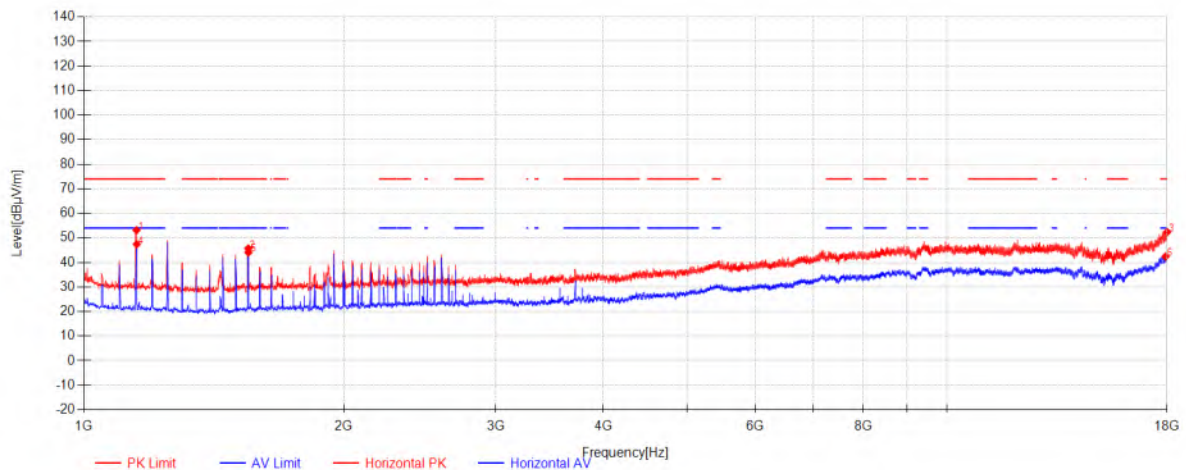
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.85	53.58	-25.27	74.00	20.42	Horizontal
2	3949.5	55.63	36.46	-19.17	74.00	37.54	Horizontal
3	7727.75	53.53	44.67	-8.86	74.00	29.33	Horizontal
4	1150.875	72.05	46.78	-25.27	54.00	7.22	Horizontal
5	1550.375	68.97	44.24	-24.73	54.00	9.76	Horizontal
6	17821.5	35.17	43.06	7.89	54.00	10.94	Horizontal

11ah_1M_TX_CH_Low_Vertical



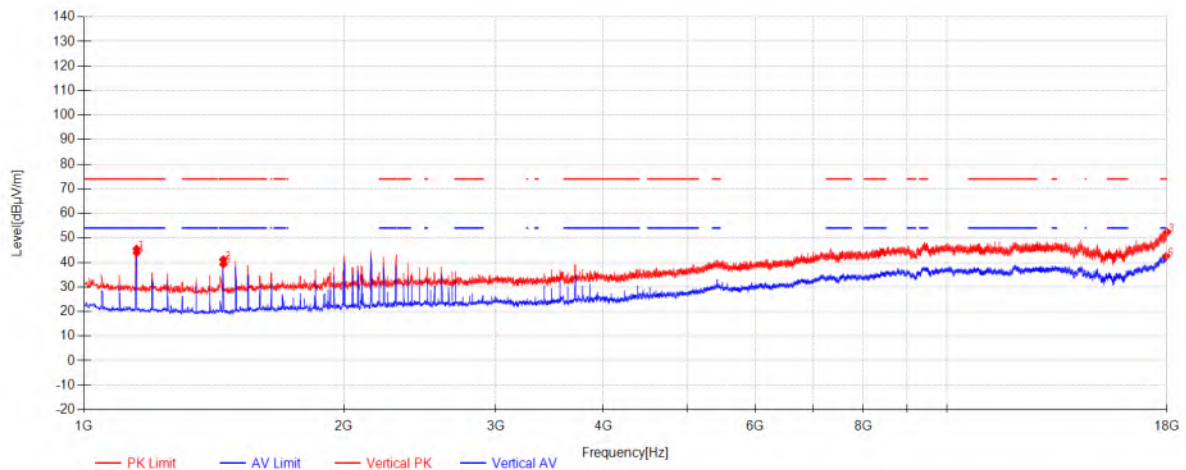
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	71.12	45.85	-25.27	74.00	28.15	Vertical
2	3712.9167	59.02	39.20	-19.82	74.00	34.80	Vertical
3	17993.625	44.56	52.17	7.61	74.00	21.83	Vertical
4	1150.875	69.71	44.44	-25.27	54.00	9.56	Vertical
5	3712.9167	55.15	35.33	-19.82	54.00	18.67	Vertical
6	17992.9167	34.59	42.20	7.61	54.00	11.80	Vertical

11ah_1M_TX_CH_Mid_Horizontal



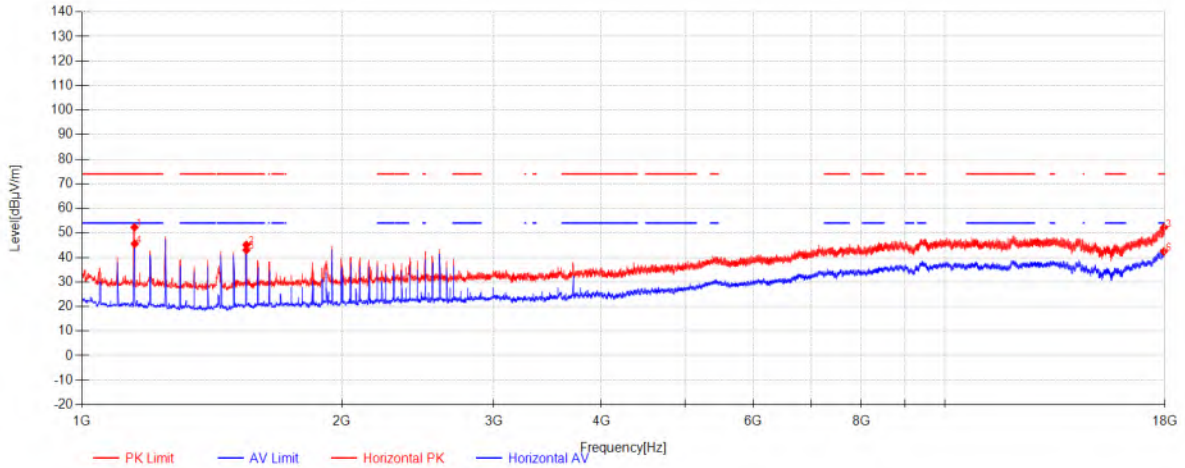
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.37	53.10	-25.27	74.00	20.90	Horizontal
2	1549.6667	70.41	45.68	-24.73	74.00	28.32	Horizontal
3	18000	44.74	52.35	7.61	74.00	21.65	Horizontal
4	1150.875	72.68	47.41	-25.27	54.00	6.59	Horizontal
5	1550.375	68.80	44.07	-24.73	54.00	9.93	Horizontal
6	17922.7917	34.74	42.37	7.63	54.00	11.63	Horizontal

11ah_1M_TX_CH_Mid_Vertical



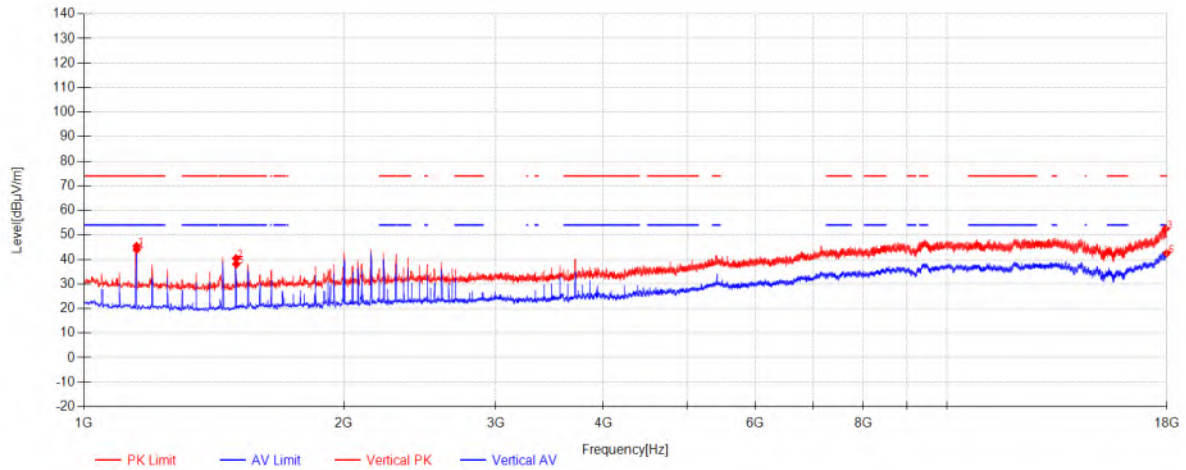
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.77	45.50	-25.27	74.00	28.50	Vertical
2	1449.7917	66.65	41.18	-25.47	74.00	32.82	Vertical
3	18000	44.70	52.31	7.61	74.00	21.69	Vertical
4	1150.875	69.18	43.91	-25.27	54.00	10.09	Vertical
5	1450.5	64.72	39.25	-25.47	54.00	14.75	Vertical
6	17951.125	34.83	42.45	7.62	54.00	11.55	Vertical

11ah_1M_TX_CH_High_Horizontal



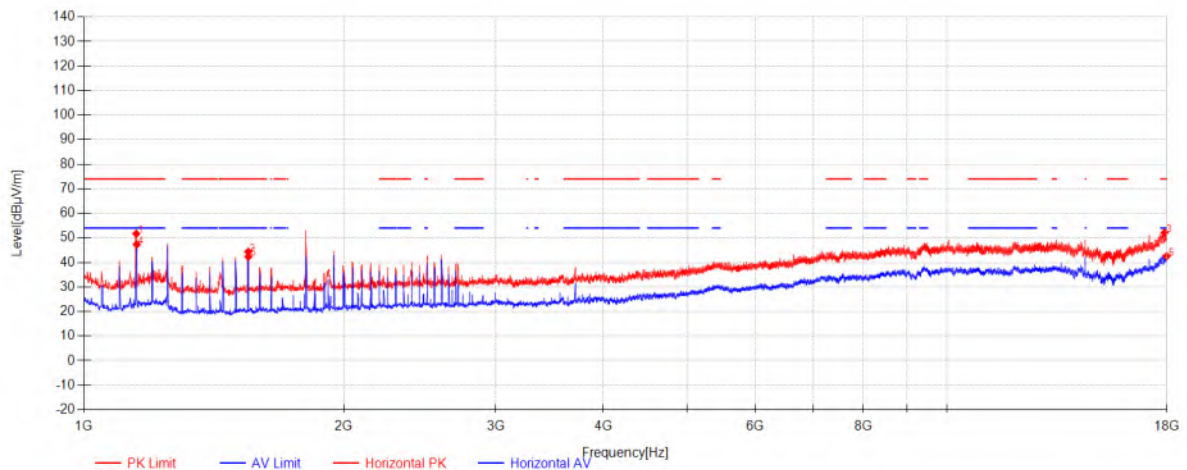
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	77.52	52.25	-25.27	74.00	21.75	Horizontal
2	1550.375	69.88	45.15	-24.73	74.00	28.85	Horizontal
3	17944.0417	44.57	52.19	7.62	74.00	21.81	Horizontal
4	1150.875	70.86	45.59	-25.27	54.00	8.41	Horizontal
5	1550.375	67.71	42.98	-24.73	54.00	11.02	Horizontal
6	17939.7917	34.82	42.44	7.62	54.00	11.56	Horizontal

11ah_1M_TX_CH_High_Vertical



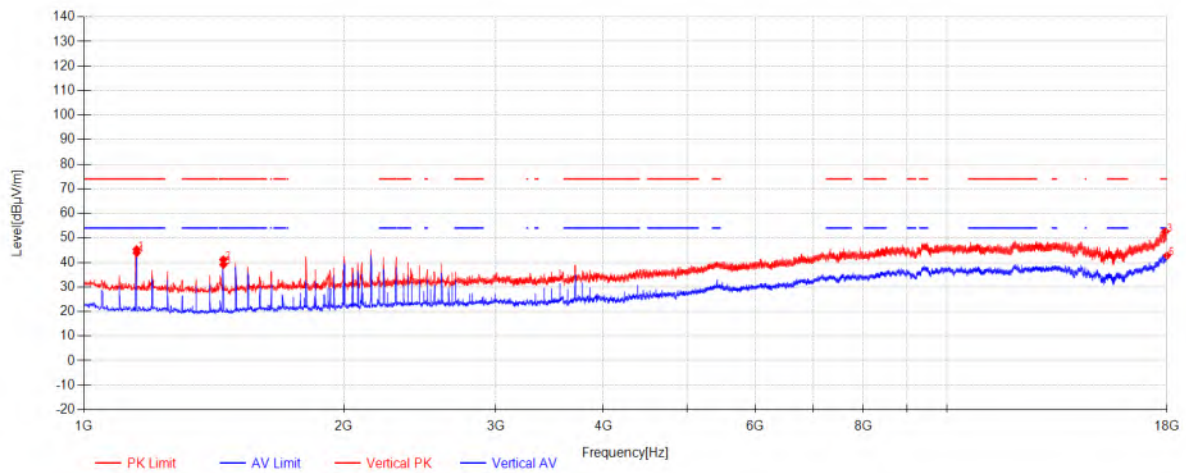
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1	1150.1667	70.69	45.42	-25.27	74.00	28.58	Vertical
2	1500.0833	65.45	40.42	-25.03	74.00	33.58	Vertical
3	17925.625	44.79	52.41	7.62	74.00	21.59	Vertical
4	1150.875	69.23	43.96	-25.27	54.00	10.04	Vertical
5	1500.7917	63.13	38.10	-25.03	54.00	15.90	Vertical
6	17987.9583	34.94	42.55	7.61	54.00	11.45	Vertical

11ah_2M_TX_CH_Low_Horizontal



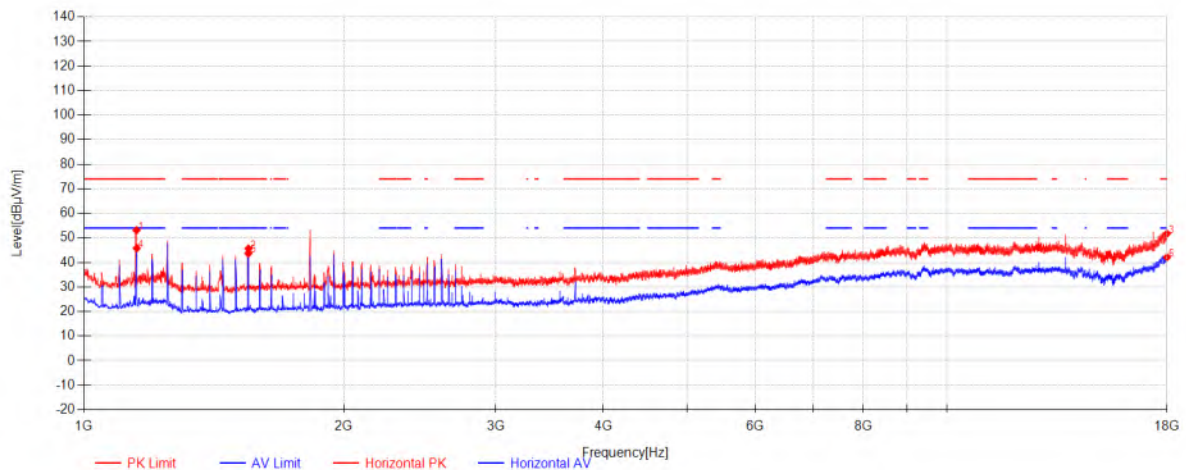
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1149.4583	76.92	51.66	-25.26	74.00	22.34	Horizontal
2	1549.6667	69.05	44.32	-24.73	74.00	29.68	Horizontal
3	17885.25	44.45	52.13	7.68	74.00	21.87	Horizontal
4	1150.875	72.60	47.33	-25.27	54.00	6.67	Horizontal
5	1550.375	67.06	42.33	-24.73	54.00	11.67	Horizontal
6	17977.3333	34.94	42.55	7.61	54.00	11.45	Horizontal

11ah_2M_TX_CH_Low_Vertical



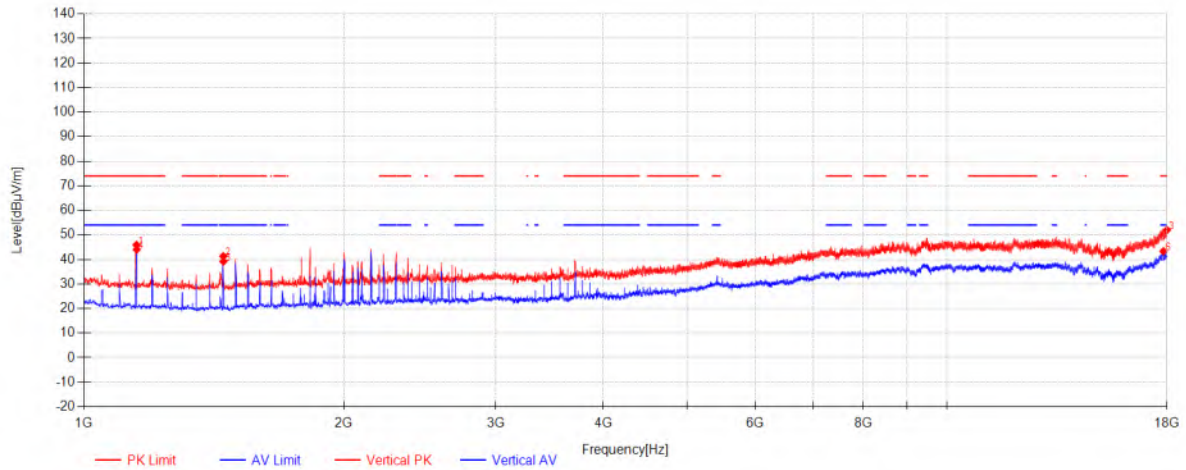
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.56	45.29	-25.27	74.00	28.71	Vertical
2	1449.7917	66.58	41.11	-25.47	74.00	32.89	Vertical
3	17916.4167	44.91	52.54	7.63	74.00	21.46	Vertical
4	1150.875	69.15	43.88	-25.27	54.00	10.12	Vertical
5	1450.5	64.55	39.08	-25.47	54.00	14.92	Vertical
6	17997.875	35.16	42.77	7.61	54.00	11.23	Vertical

11ah_2M_TX_CH_Mid_Horizontal



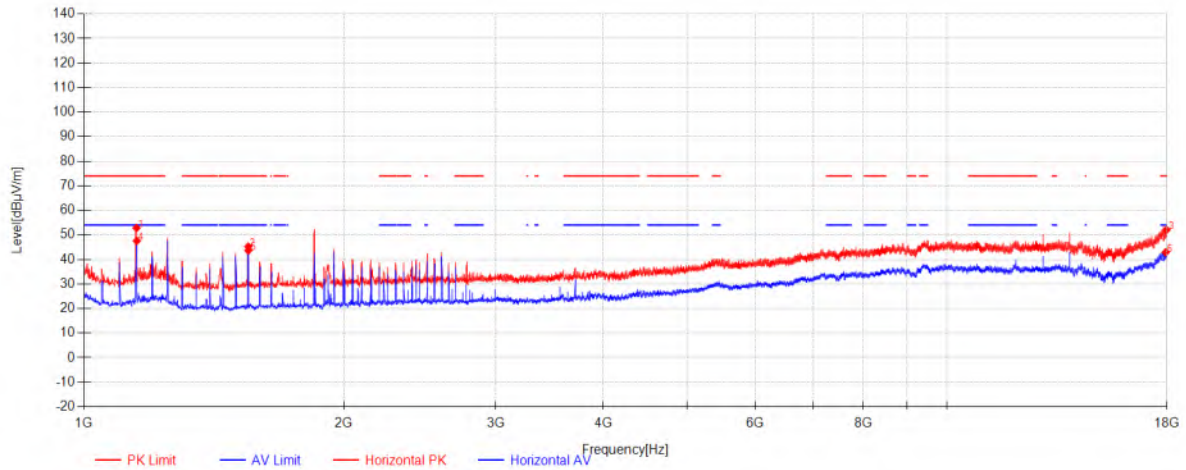
Final Data List							
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1	1150.1667	78.36	53.09	-25.27	74.00	20.91	Horizontal
2	1550.375	70.35	45.62	-24.73	74.00	28.38	Horizontal
3	17990.7917	44.11	51.72	7.61	74.00	22.28	Horizontal
4	1150.875	71.07	45.80	-25.27	54.00	8.20	Horizontal
5	1550.375	68.41	43.68	-24.73	54.00	10.32	Horizontal
6	17995.0417	34.49	42.10	7.61	54.00	11.90	Horizontal

11ah_2M_TX_CH_Mid_Vertical



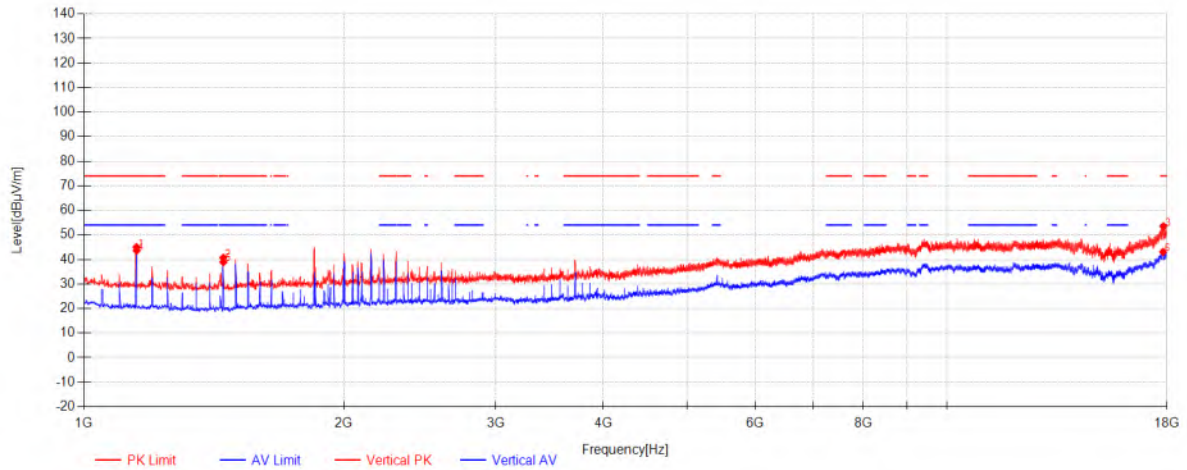
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	71.18	45.91	-25.27	74.00	28.09	Vertical
2	1449.7917	66.78	41.31	-25.47	74.00	32.69	Vertical
3	17993.625	44.37	51.98	7.61	74.00	22.02	Vertical
4	1150.875	69.31	44.04	-25.27	54.00	9.96	Vertical
5	1450.5	64.63	39.16	-25.47	54.00	14.84	Vertical
6	17821.5	35.43	43.32	7.89	54.00	10.68	Vertical

11ah_2M_TX_CH_High_Horizontal



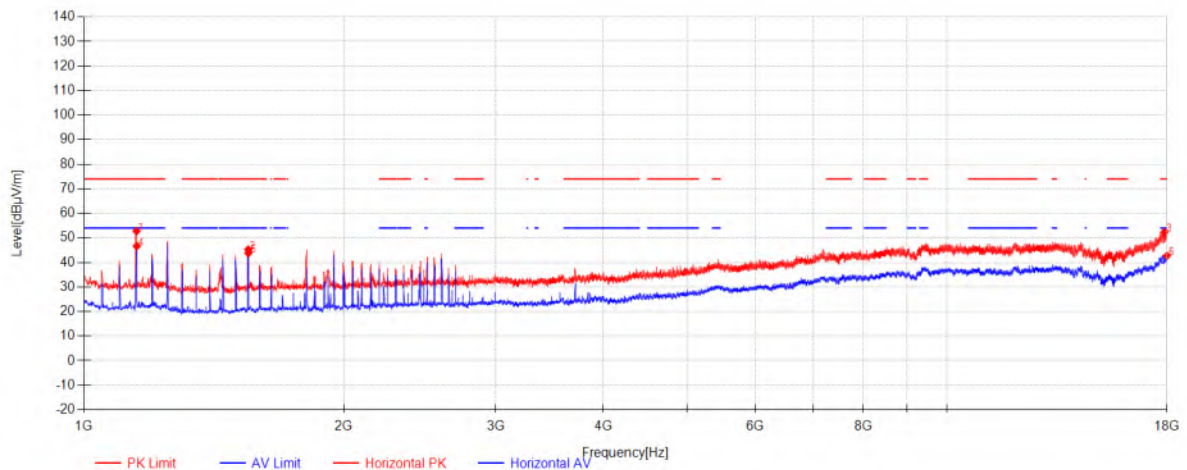
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.06	52.79	-25.27	74.00	21.21	Horizontal
2	1549.6667	69.96	45.23	-24.73	74.00	28.77	Horizontal
3	17974.5	44.43	52.05	7.62	74.00	21.95	Horizontal
4	1150.875	72.82	47.55	-25.27	54.00	6.45	Horizontal
5	1550.375	68.35	43.62	-24.73	54.00	10.38	Horizontal
6	17930.5833	35.24	42.86	7.62	54.00	11.14	Horizontal

11ah_2M_TX_CH_High_Vertical



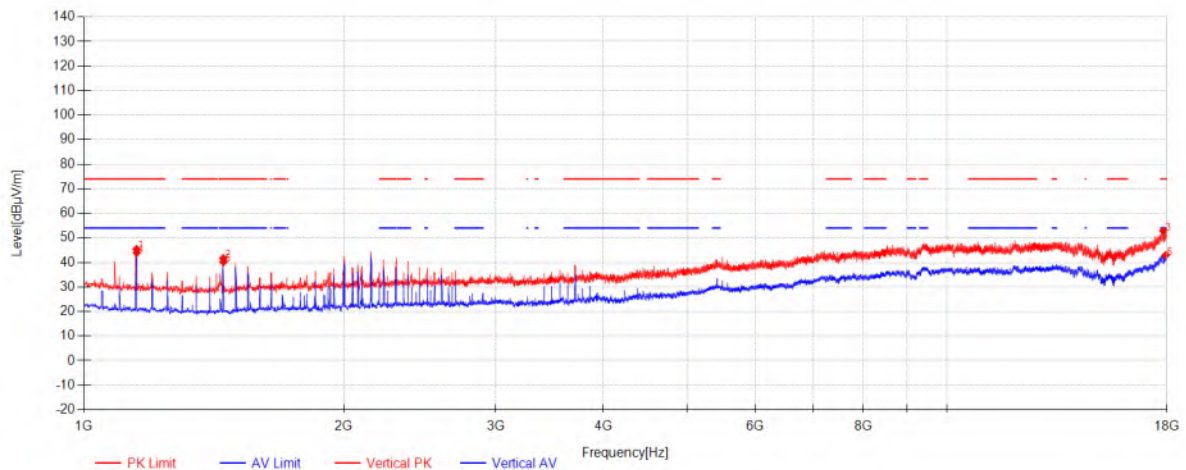
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.28	45.01	-25.27	74.00	28.99	Vertical
2	1449.7917	66.13	40.66	-25.47	74.00	33.34	Vertical
3	17824.3333	45.57	53.45	7.88	74.00	20.55	Vertical
4	1150.875	68.87	43.60	-25.27	54.00	10.40	Vertical
5	1450.5	64.38	38.91	-25.47	54.00	15.09	Vertical
6	17809.4583	35.12	43.05	7.93	54.00	10.95	Vertical

11ah_4M_TX_CH_Low_Horizontal



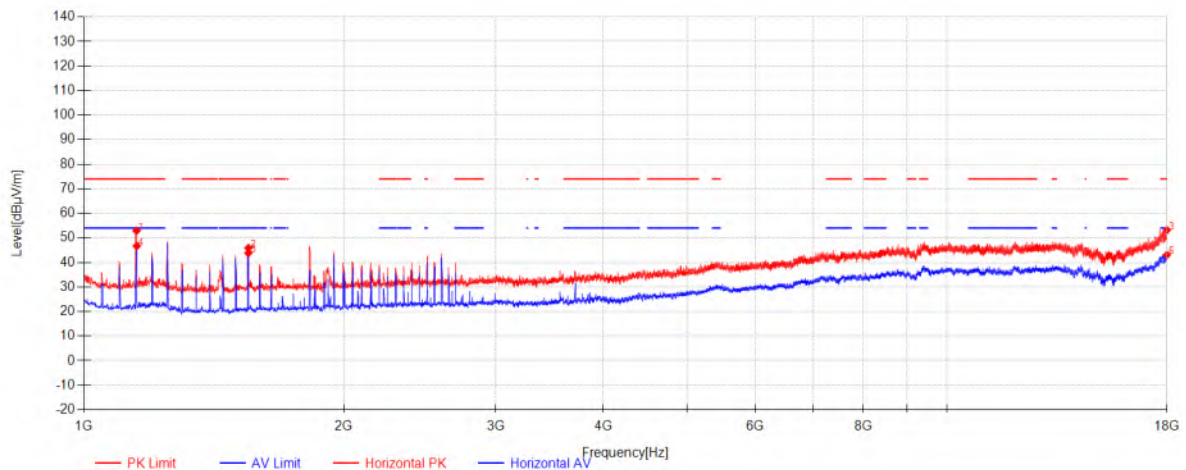
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	77.99	52.72	-25.27	74.00	21.28	Horizontal
2	1549.6667	69.97	45.24	-24.73	74.00	28.76	Horizontal
3	17876.0417	44.62	52.33	7.71	74.00	21.67	Horizontal
4	1150.875	71.87	46.60	-25.27	54.00	7.40	Horizontal
5	1550.375	68.51	43.78	-24.73	54.00	10.22	Horizontal
6	17991.5	35.08	42.69	7.61	54.00	11.31	Horizontal

11ah_4M_TX_CH_Low_Vertical



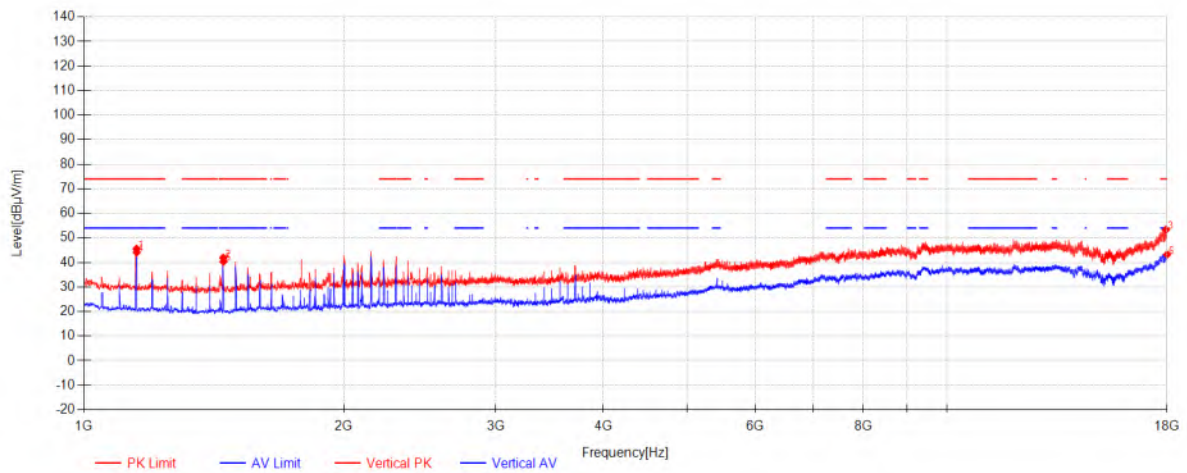
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.64	45.37	-25.27	74.00	28.63	Vertical
2	1449.7917	67.12	41.65	-25.47	74.00	32.35	Vertical
3	17821.5	44.99	52.88	7.89	74.00	21.12	Vertical
4	1150.875	69.18	43.91	-25.27	54.00	10.09	Vertical
5	1450.5	65.66	40.19	-25.47	54.00	13.81	Vertical
6	17929.875	35.26	42.88	7.62	54.00	11.12	Vertical

11ah_4M_TX_CH_Mid_Horizontal



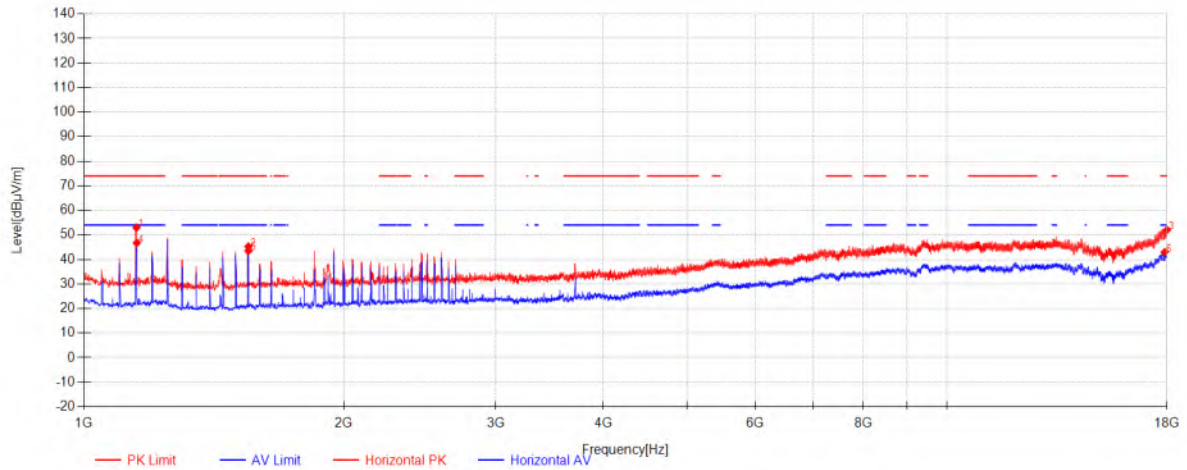
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.13	52.86	-25.27	74.00	21.14	Horizontal
2	1550.375	70.57	45.84	-24.73	74.00	28.16	Horizontal
3	17992.9167	45.56	53.17	7.61	74.00	20.83	Horizontal
4	1150.875	71.92	46.65	-25.27	54.00	7.35	Horizontal
5	1550.375	68.53	43.80	-24.73	54.00	10.20	Horizontal
6	17992.9167	35.45	43.06	7.61	54.00	10.94	Horizontal

11ah_4M_TX_CH_Mid_Vertical



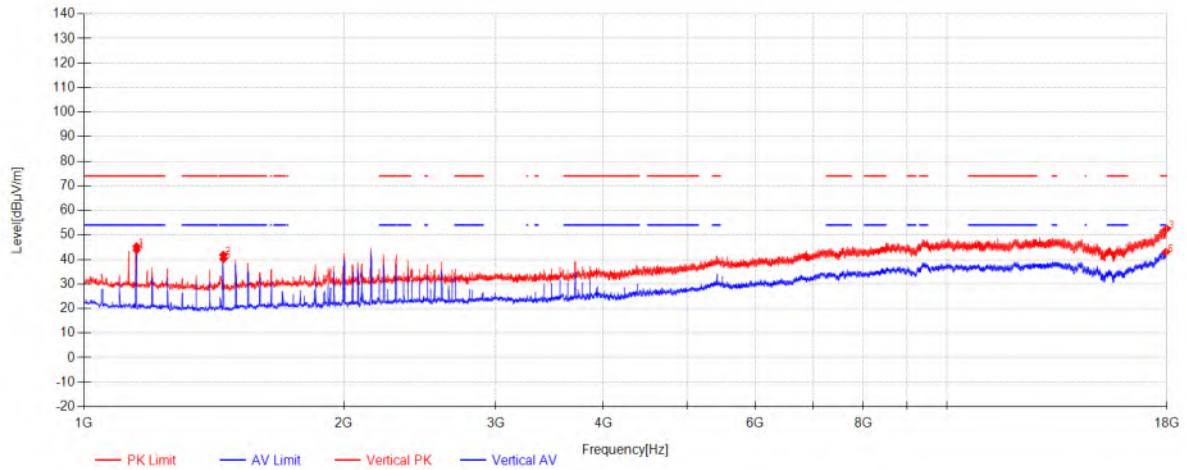
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.81	45.54	-25.27	74.00	28.46	Vertical
2	1449.7917	67.36	41.89	-25.47	74.00	32.11	Vertical
3	17941.9167	45.70	53.32	7.62	74.00	20.68	Vertical
4	1150.875	69.40	44.13	-25.27	54.00	9.87	Vertical
5	1450.5	65.77	40.30	-25.47	54.00	13.70	Vertical
6	18000	35.58	43.19	7.61	54.00	10.81	Vertical

11ah_4M_TX_CH_High_Horizontal



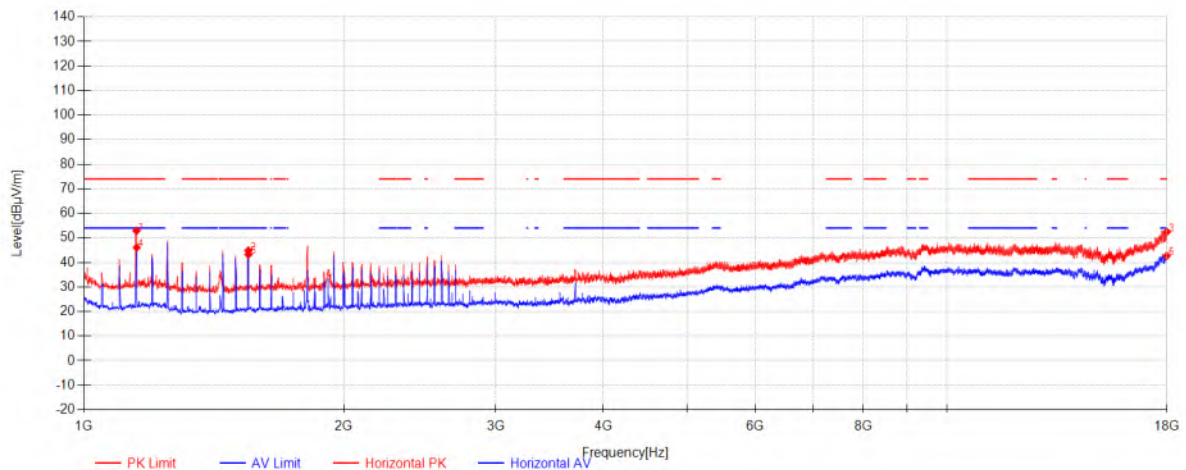
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.22	52.95	-25.27	74.00	21.05	Horizontal
2	1550.375	70.00	45.27	-24.73	74.00	28.73	Horizontal
3	17991.5	44.38	51.99	7.61	74.00	22.01	Horizontal
4	1150.875	71.95	46.68	-25.27	54.00	7.32	Horizontal
5	1550.375	68.24	43.51	-24.73	54.00	10.49	Horizontal
6	17882.4167	35.26	42.95	7.69	54.00	11.05	Horizontal

11ah_4M_TX_CH_High_Vertical



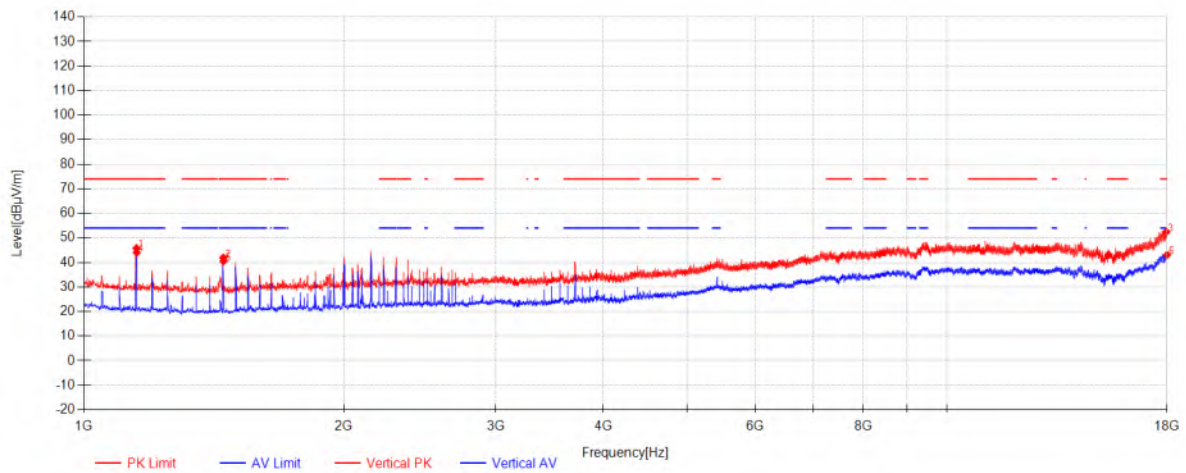
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.54	45.27	-25.27	74.00	28.73	Vertical
2	1449.7917	67.29	41.82	-25.47	74.00	32.18	Vertical
3	17984.4167	44.87	52.48	7.61	74.00	21.52	Vertical
4	1150.875	69.12	43.85	-25.27	54.00	10.15	Vertical
5	1450.5	65.67	40.20	-25.47	54.00	13.80	Vertical
6	17941.2083	35.32	42.94	7.62	54.00	11.06	Vertical

11ah_8M_TX_CH_Low_Horizontal



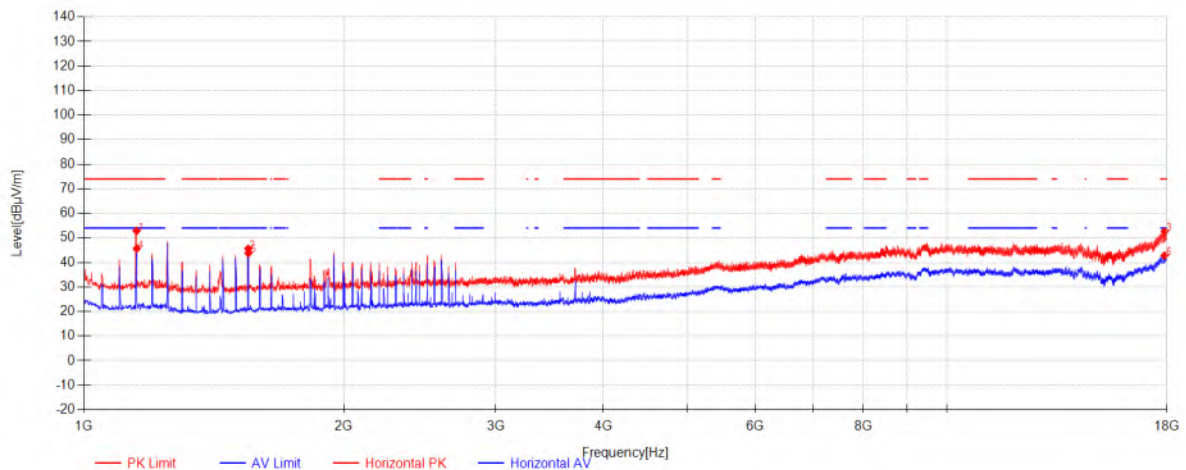
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.14	52.87	-25.27	74.00	21.13	Horizontal
2	1550.375	69.55	44.82	-24.73	74.00	29.18	Horizontal
3	17988.6667	44.79	52.40	7.61	74.00	21.60	Horizontal
4	1150.875	71.34	46.07	-25.27	54.00	7.93	Horizontal
5	1550.375	67.93	43.20	-24.73	54.00	10.80	Horizontal
6	17983	35.05	42.66	7.61	54.00	11.34	Horizontal

11ah_8M_TX_CH_Low_Vertical



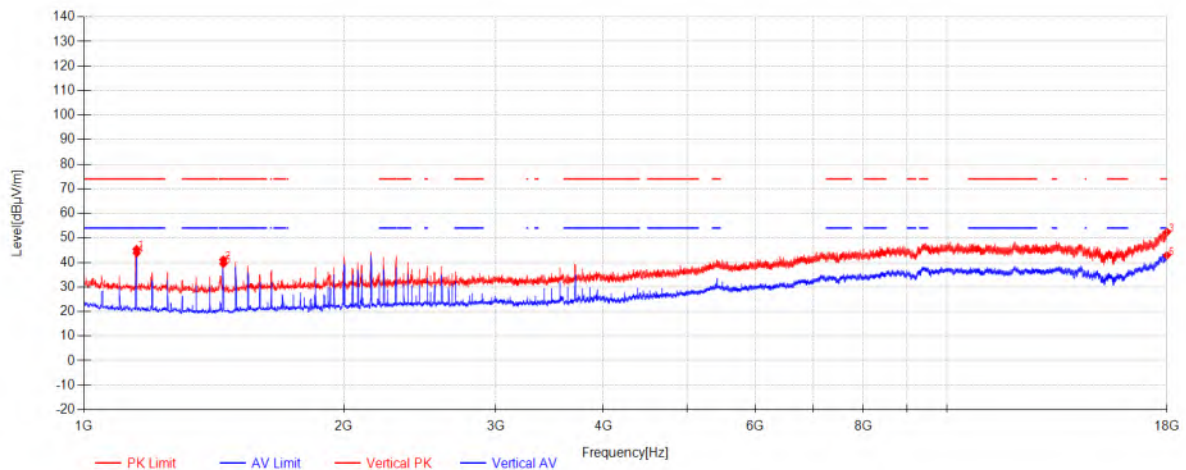
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	71.03	45.76	-25.27	74.00	28.24	Vertical
2	1449.7917	67.38	41.91	-25.47	74.00	32.09	Vertical
3	17954.6667	44.72	52.34	7.62	74.00	21.66	Vertical
4	1150.875	69.30	44.03	-25.27	54.00	9.97	Vertical
5	1450.5	65.93	40.46	-25.47	54.00	13.54	Vertical
6	17995.0417	35.42	43.03	7.61	54.00	10.97	Vertical

11ah_8M_TX_CH_Mid_Horizontal



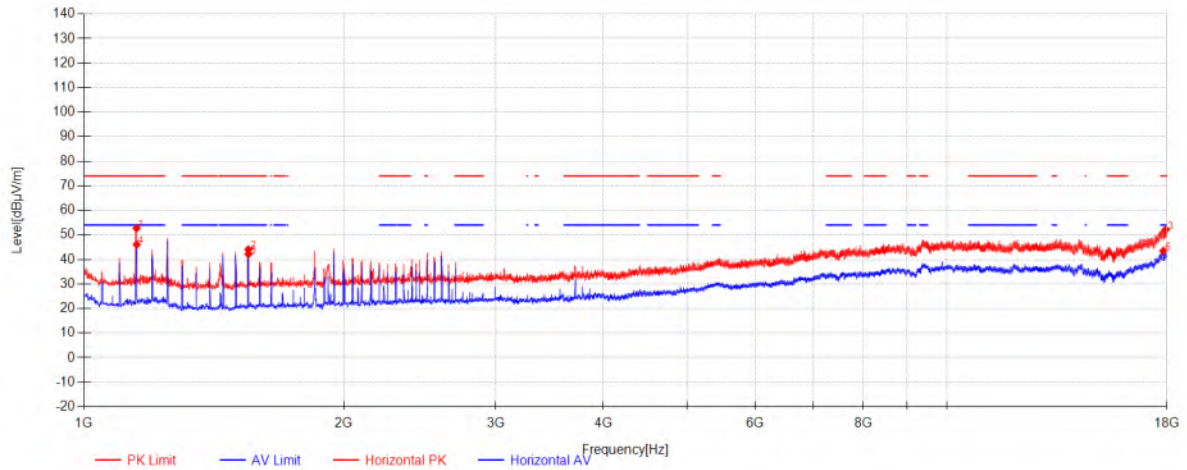
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	78.11	52.84	-25.27	74.00	21.16	Horizontal
2	1549.6667	70.35	45.62	-24.73	74.00	28.38	Horizontal
3	17885.25	44.88	52.56	7.68	74.00	21.44	Horizontal
4	1150.875	70.90	45.63	-25.27	54.00	8.37	Horizontal
5	1550.375	68.49	43.76	-24.73	54.00	10.24	Horizontal
6	17882.4167	35.09	42.78	7.69	54.00	11.22	Horizontal

11ah_8M_TX_CH_Mid_Vertical



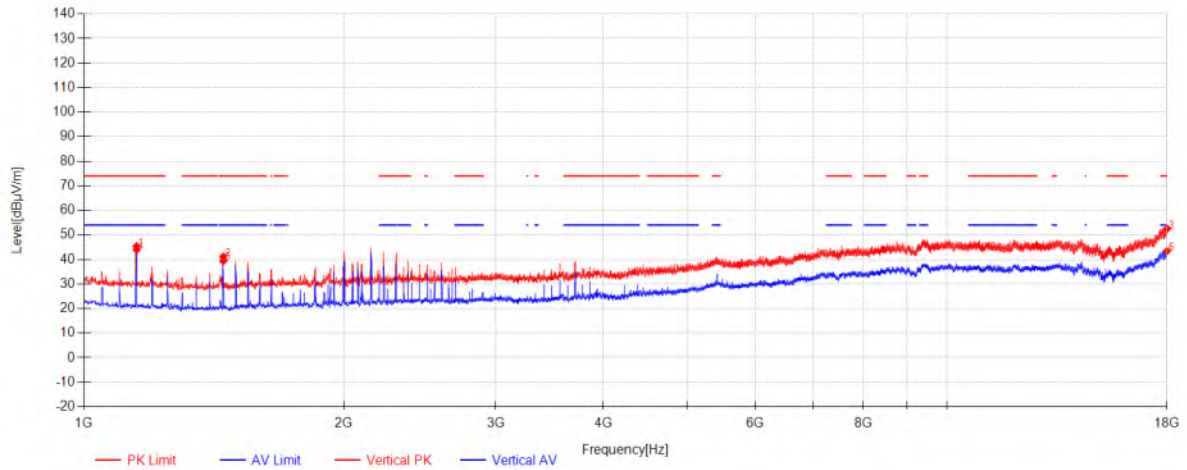
Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.64	45.37	-25.27	74.00	28.63	Vertical
2	1449.7917	66.55	41.08	-25.47	74.00	32.92	Vertical
3	17997.875	44.76	52.37	7.61	74.00	21.63	Vertical
4	1150.875	69.10	43.83	-25.27	54.00	10.17	Vertical
5	1450.5	64.92	39.45	-25.47	54.00	14.55	Vertical
6	17992.9167	35.25	42.86	7.61	54.00	11.14	Vertical

11ah_8M_TX_CH_High_Horizontal



Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	77.97	52.70	-25.27	74.00	21.30	Horizontal
2	1550.375	68.75	44.02	-24.73	74.00	29.98	Horizontal
3	17934.125	44.47	52.09	7.62	74.00	21.91	Horizontal
4	1150.875	71.32	46.05	-25.27	54.00	7.95	Horizontal
5	1550.375	66.92	42.19	-24.73	54.00	11.81	Horizontal
6	17820.7917	35.58	43.47	7.89	54.00	10.53	Horizontal

11ah_8M_TX_CH_High_Vertical



Final Data List							
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1150.1667	70.60	45.33	-25.27	74.00	28.67	Vertical
2	1449.7917	66.54	41.07	-25.47	74.00	32.93	Vertical
3	17997.1667	44.87	52.48	7.61	74.00	21.52	Vertical
4	1150.875	69.21	43.94	-25.27	54.00	10.06	Vertical
5	1450.5	64.85	39.38	-25.47	54.00	14.62	Vertical
6	17992.9167	35.82	43.43	7.61	54.00	10.57	Vertical



7.4 Conducted Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)
Test Method: ANSI C63.10 (2020) Section 11.9.1& 11.9.2

Limit:

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

7.4.1 E.U.T. Operation

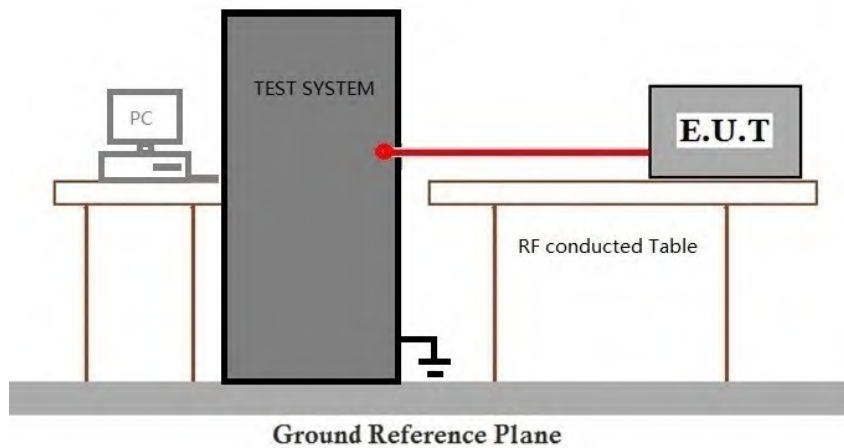
Operating Environment:

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

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

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

Please Refer to Appendix for Details

7.5 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)

Test Method: ANSI C63.10 (2020) Section 11.8.1

Limit:

≥500 kHz

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

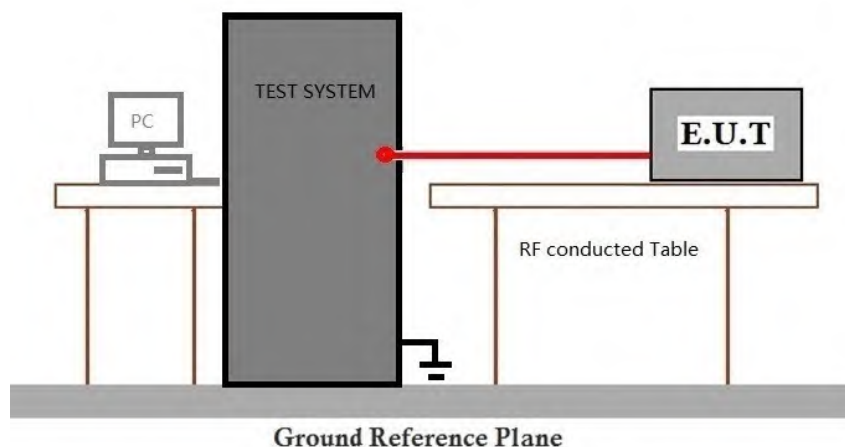
Humidity: 44 % RH

Atmospheric Pressure: 1001 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e)

Test Method: ANSI C63.10 (2020) Section 11.10.2

Limit:

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

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

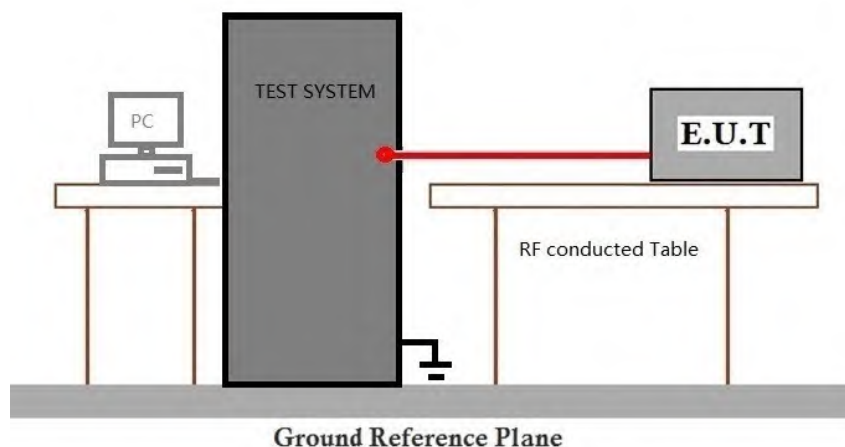
Humidity: 44 % RH

Atmospheric Pressure: 1001 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 Conducted Band Edges Measurement

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)
Test Method: ANSI C63.10 (2020) Section 6.10.4

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)).

7.7.1 E.U.T. Operation

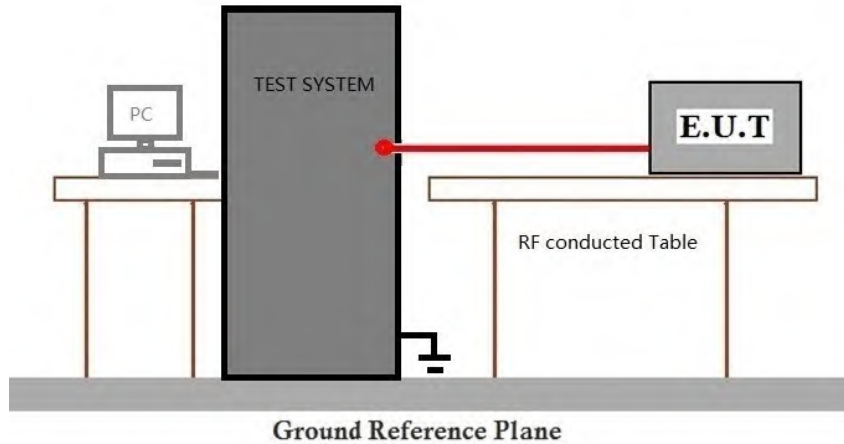
Operating Environment:

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

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details



7.8 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

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

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

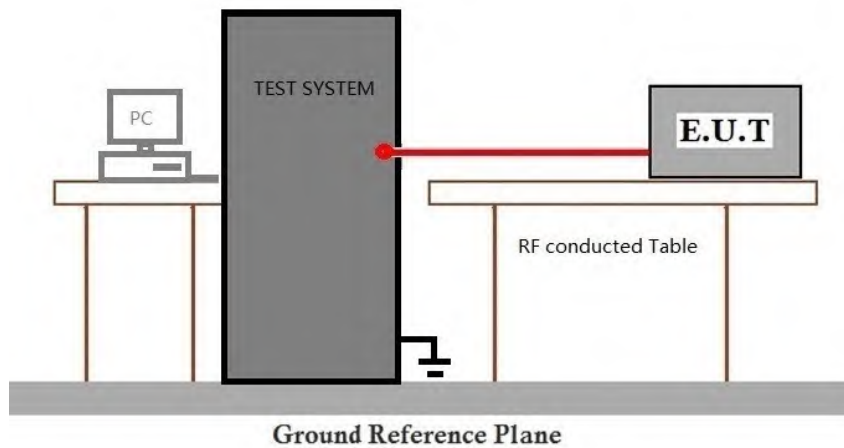
Humidity: 43 % RH

Atmospheric Pressure: 1001 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	02	TX mode(4Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.
Final test	03	TX mode(8Mbps)_Keep the EUT in charging and continuously transmitting mode with OFDM modulation.

7.8.3 Test Setup Diagram



7.8.4 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 SUCR2512001161MO

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - External Photos for SUCR2512001161MO and Appendix - Internal Photos for SUCR2512001161MO



10 Appendix

1. Duty Cycle for 1MHz/2MHz

1.1 Test Result

1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	903.5	8.077	9.027	89.48	0.48	9.79
		914.5	8.073	9.027	89.43	0.49	9.83
		926.5	8.077	9.027	89.48	0.48	9.79
2M	SISO	905	12.687	13.673	92.79	0.33	0.02
		915	12.687	13.673	92.79	0.33	0.02
		925	12.687	13.673	92.79	0.33	0.02



2. Bandwidth for 1MHz/2MHz

2.1 Test Result

2.1.1 OBW

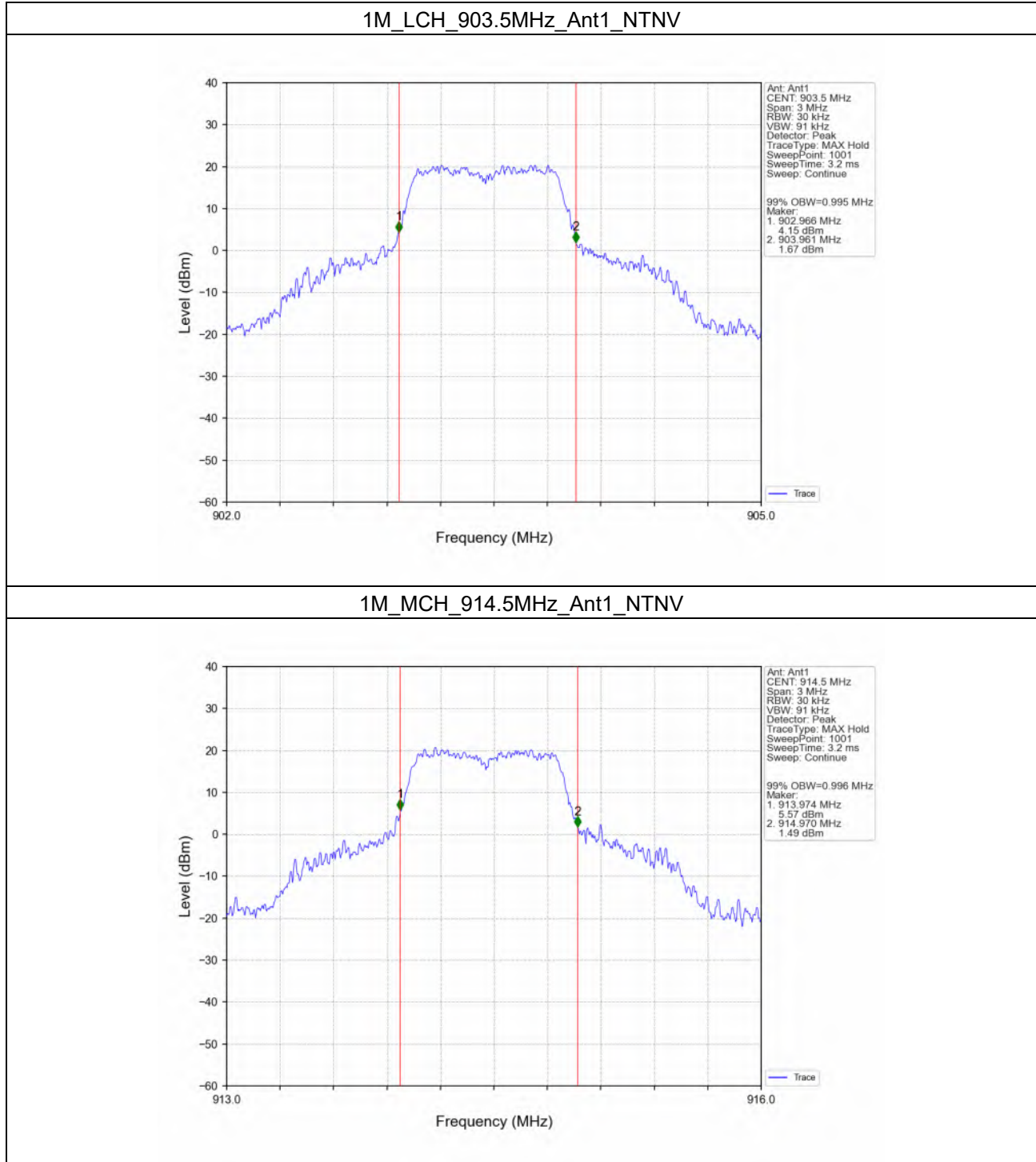
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	903.5	1	0.995	/	Pass
		914.5	1	0.996	/	Pass
		926.5	1	0.994	/	Pass
2M	SISO	905	1	2.343	/	Pass
		915	1	2.301	/	Pass
		925	1	2.344	/	Pass

2.1.2 6dB BW

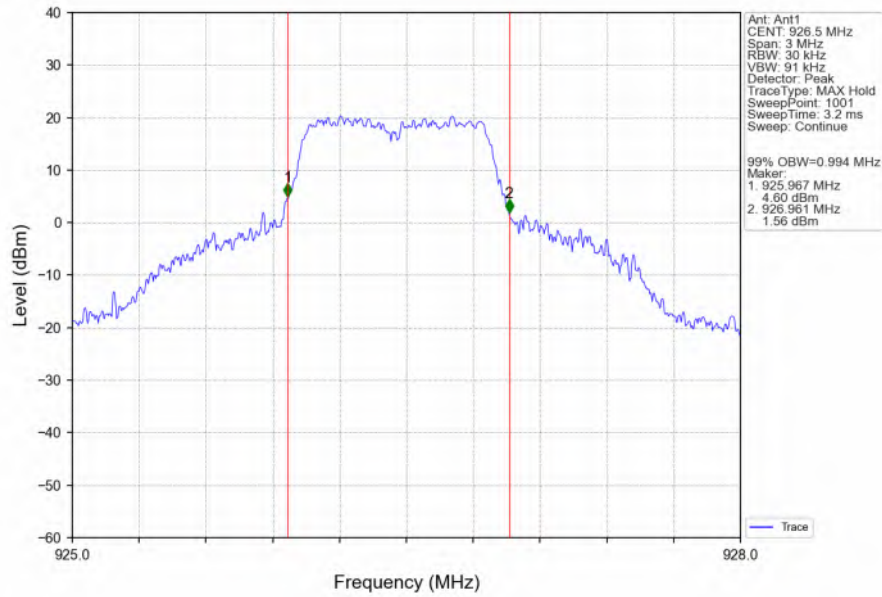
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	903.5	1	0.858	≥ 0.5	Pass
		914.5	1	0.869	≥ 0.5	Pass
		926.5	1	0.874	≥ 0.5	Pass
2M	SISO	905	1	1.815	≥ 0.5	Pass
		915	1	1.812	≥ 0.5	Pass
		925	1	1.805	≥ 0.5	Pass

2.2 Test Graph

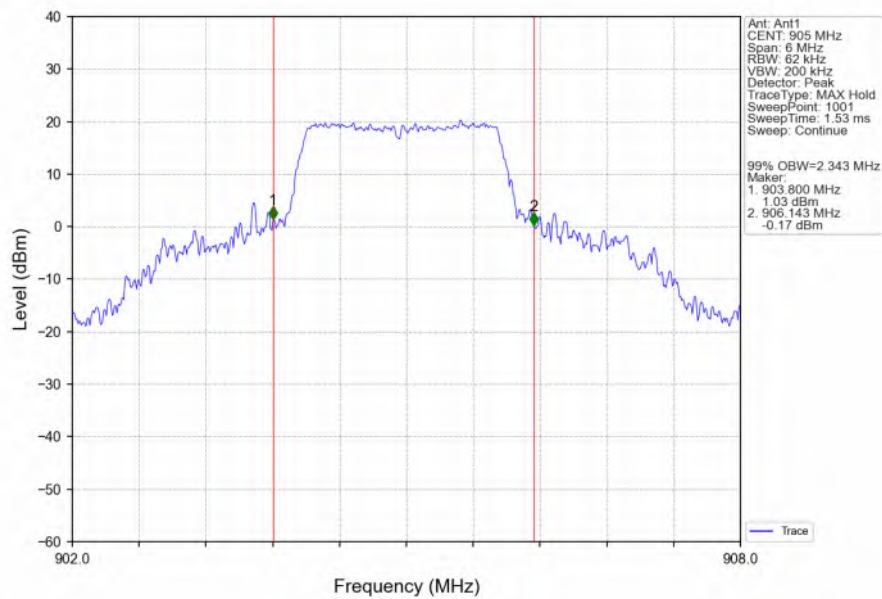
2.2.1 OBW



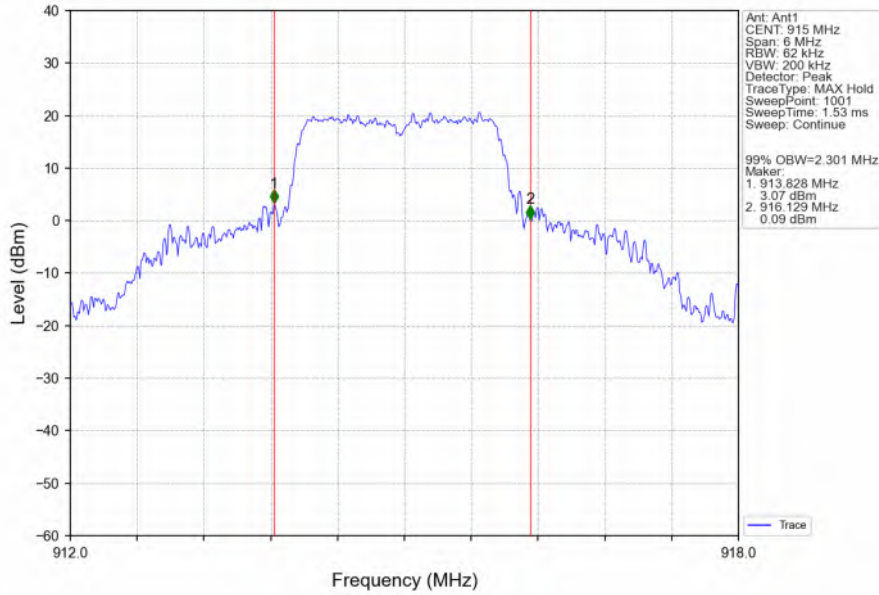
1M_HCH_926.5MHz_Ant1_NTNV



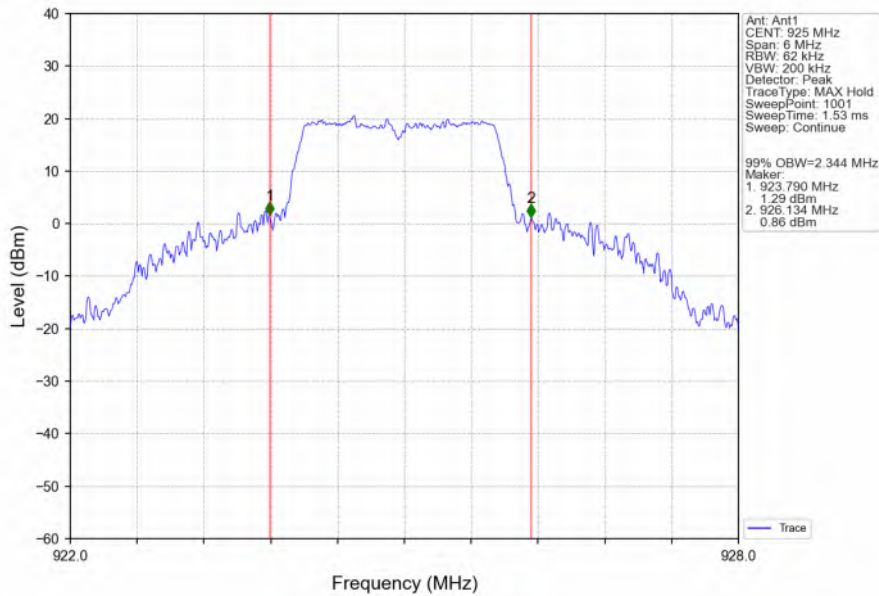
2M_LCH_905MHz_Ant1_NTNV



2M_MCH_915MHz_Ant1_NTNV

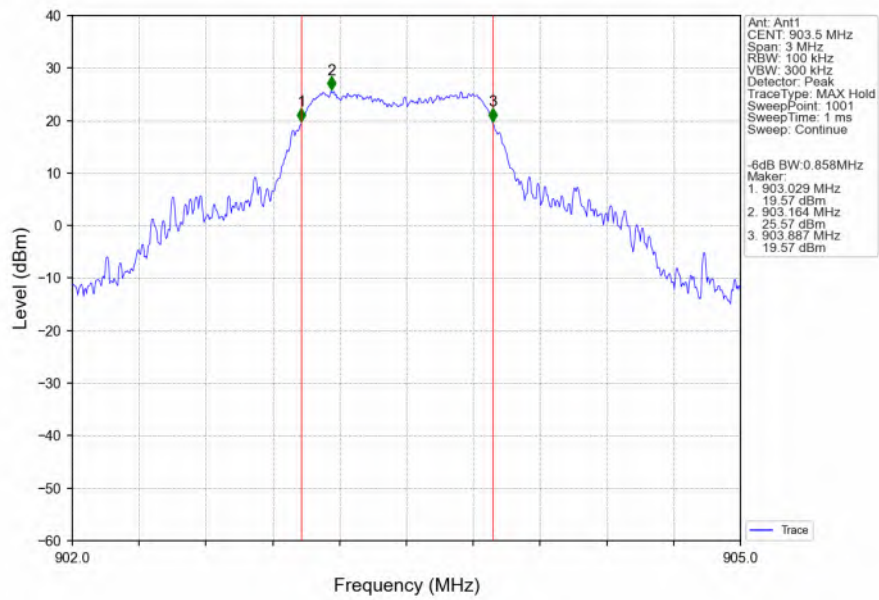


2M_HCH_925MHz_Ant1_NTNV

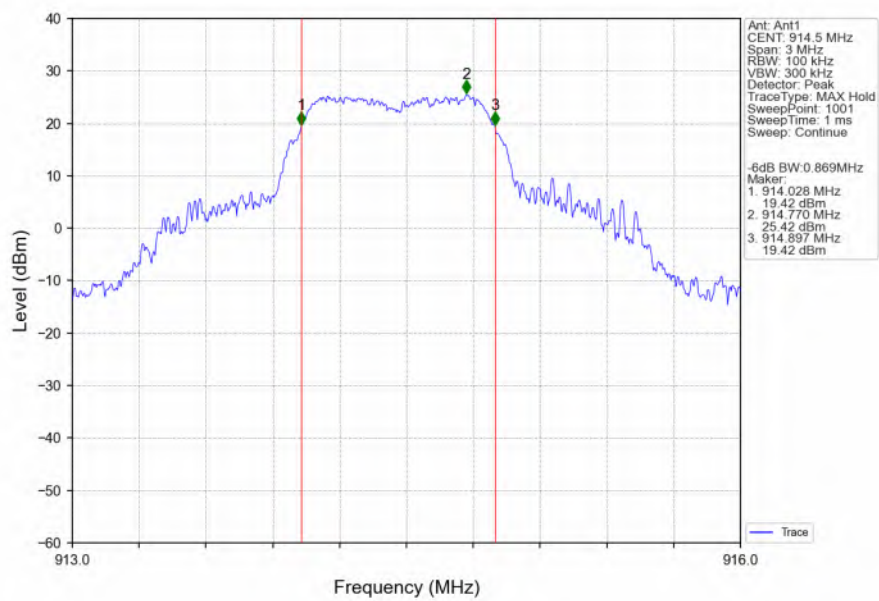


2.2.2 6dB BW

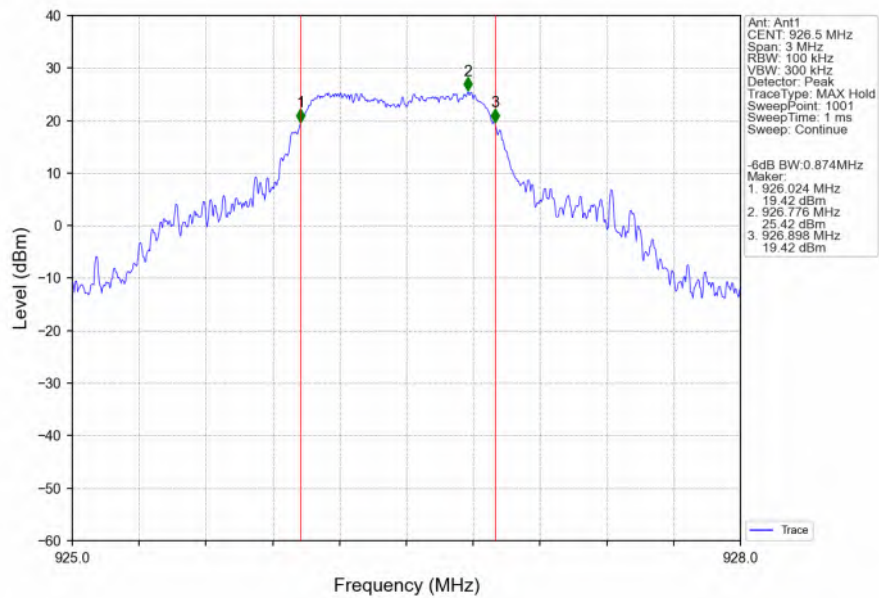
1M_LCH_903.5MHz_Ant1_NTNV



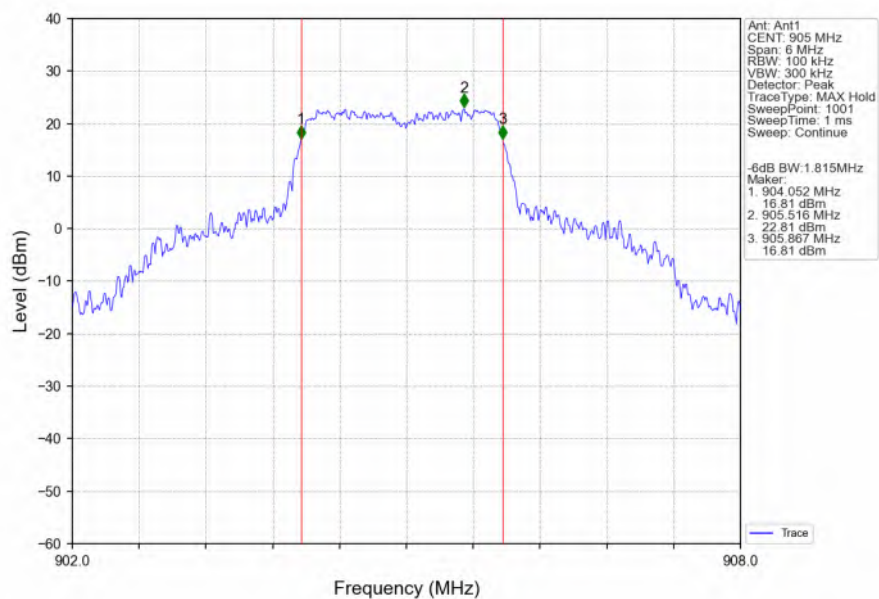
1M_MCH_914.5MHz_Ant1_NTNV



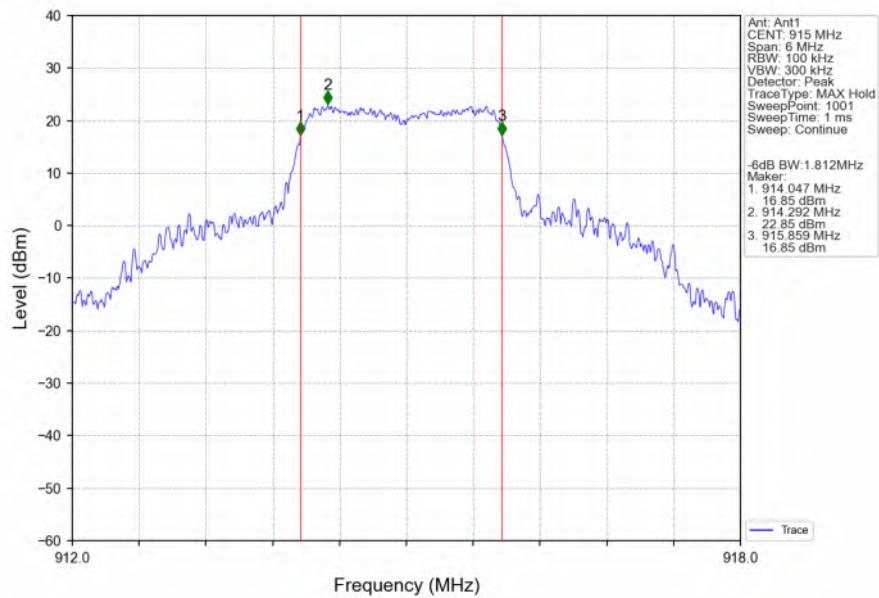
1M_HCH_926.5MHz_Ant1_NTNV



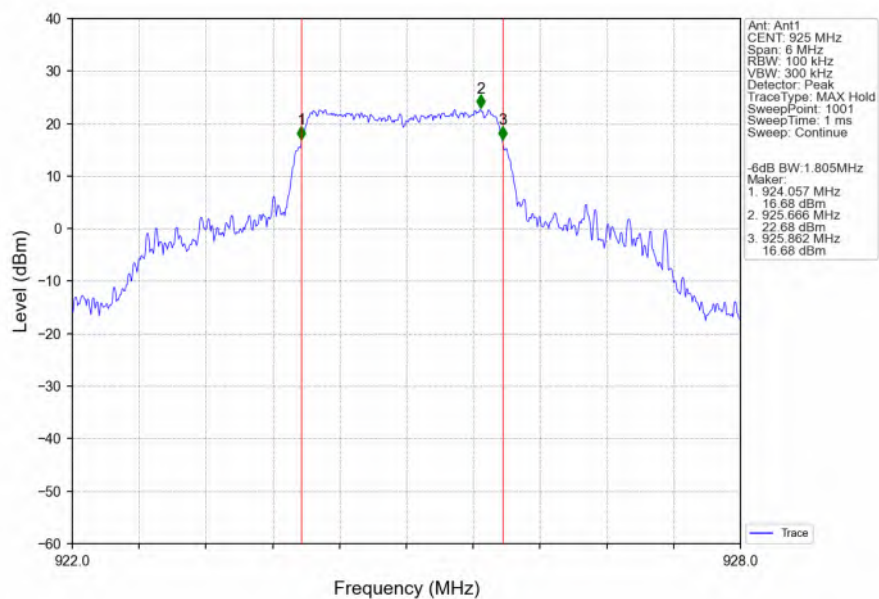
2M_LCH_905MHz_Ant1_NTNV



2M_MCH_915MHz_Ant1_NTNV



2M_HCH_925MHz_Ant1_NTNV





3. Maximum Conducted Output Power for 1MHz/2MHz

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	903.5	26.03	<=30	Pass
		914.5	25.88	<=30	Pass
		926.5	26.02	<=30	Pass
2M	SISO	905	26.32	<=30	Pass
		915	26.26	<=30	Pass
		925	26.29	<=30	Pass

Note1: Antenna Gain: Ant1: 2.50dBi;



4. Maximum Power Spectral Density for 1MHz/2MHz

4.1 Test Result

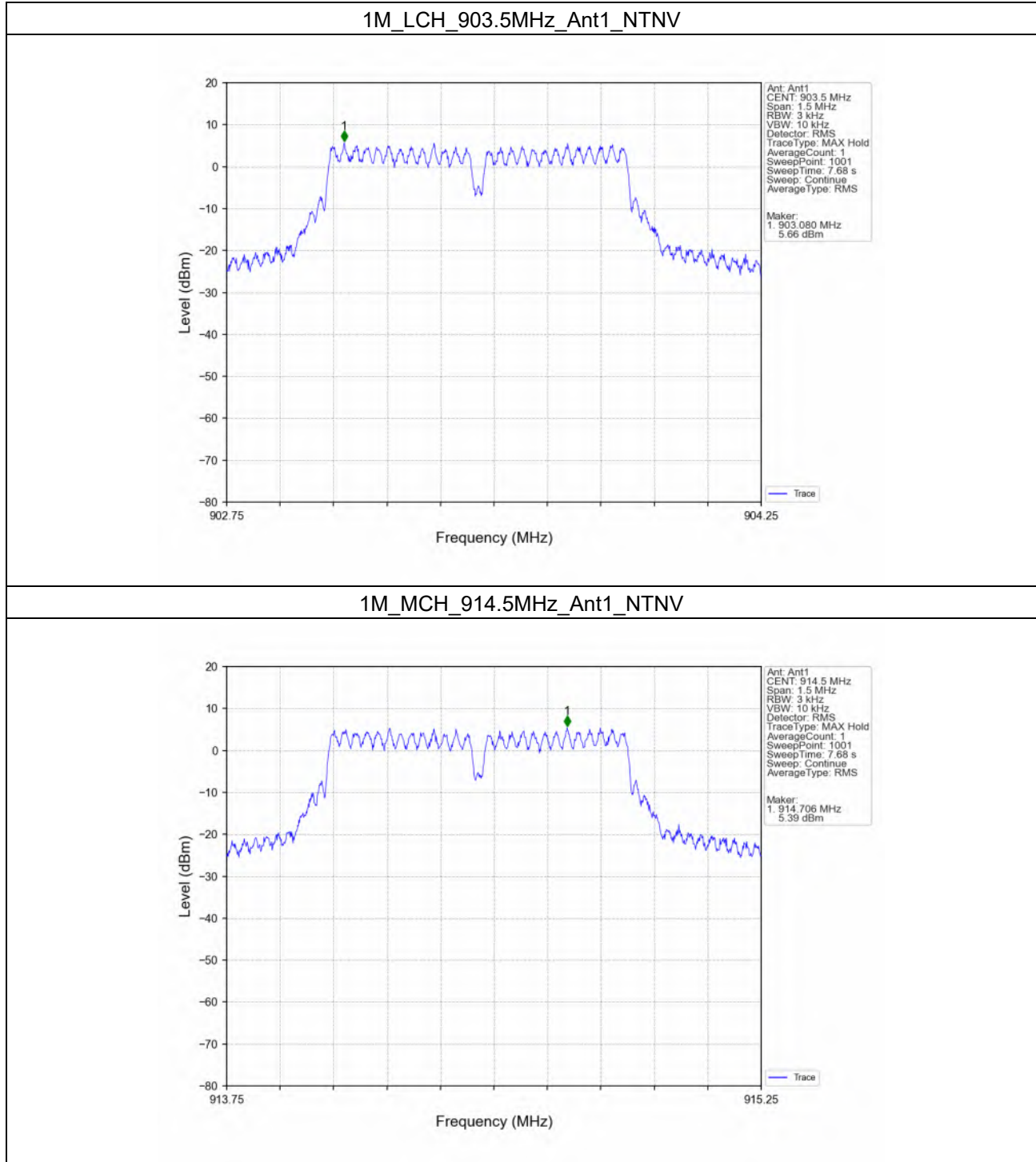
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit	
1M	SISO	903.5	5.66	<=8	Pass
		914.5	5.39	<=8	Pass
		926.5	5.56	<=8	Pass
2M	SISO	905	1.39	<=8	Pass
		915	1.36	<=8	Pass
		925	1.45	<=8	Pass

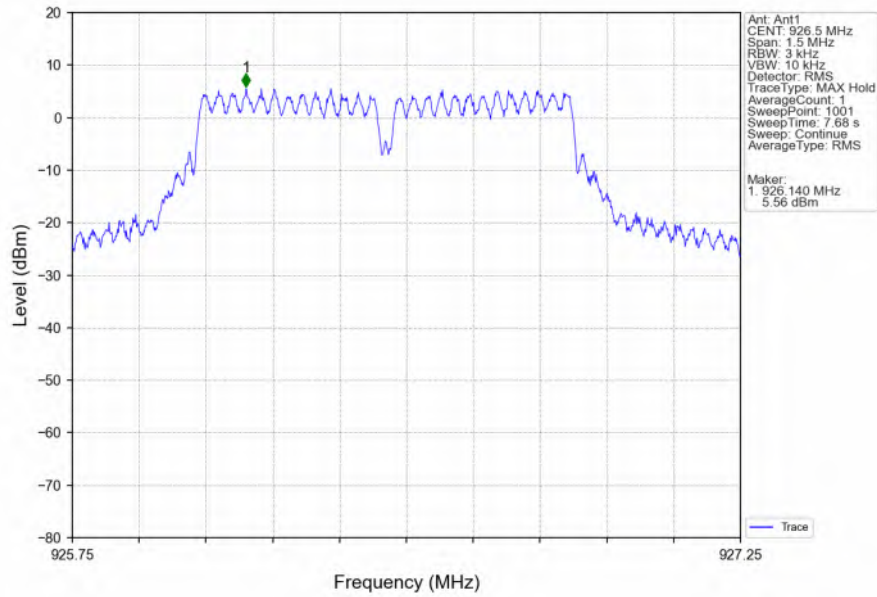
Note1: Antenna Gain: Ant1: 2.50dBi;

4.2 Test Graph

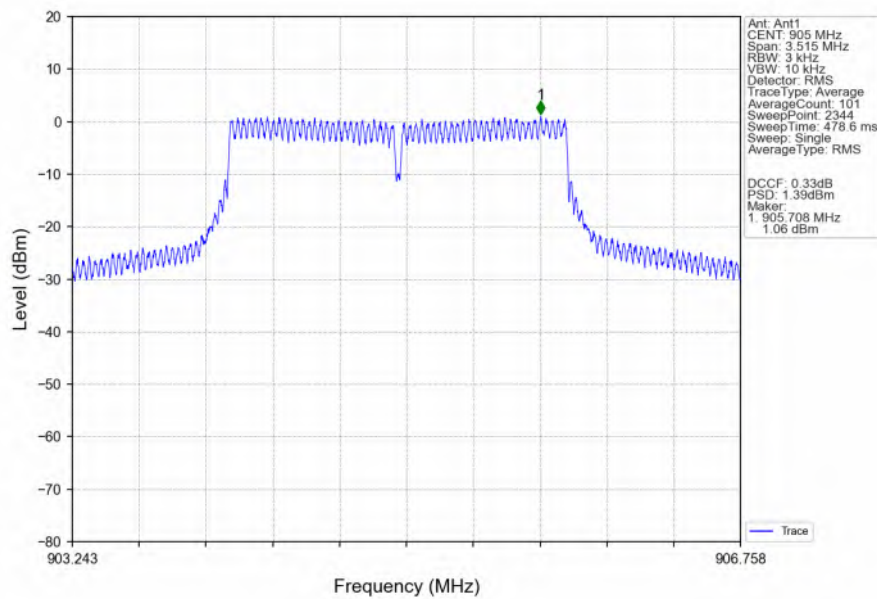
4.2.1 PSD



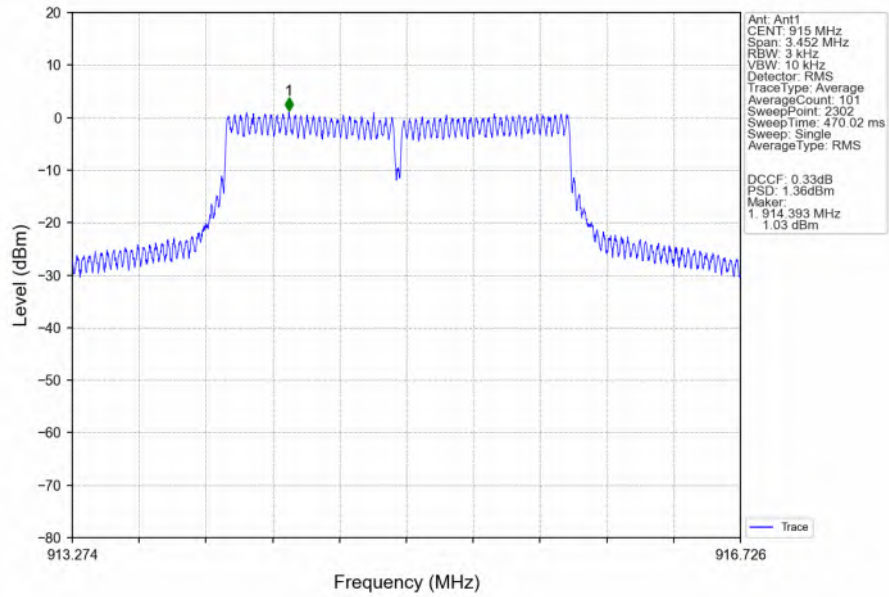
1M_HCH_926.5MHz_Ant1_NTNV



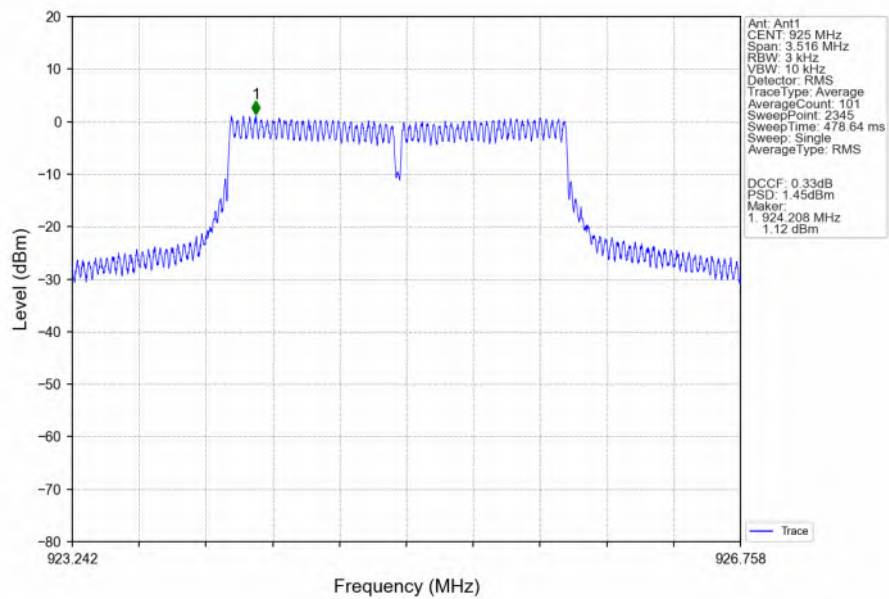
2M_LCH_905MHz_Ant1_NTNV



2M_MCH_915MHz_Ant1_NTNV



2M_HCH_925MHz_Ant1_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands for 1MHz/2MHz

5.1 Test Result

5.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	903.5	1	25.62
		914.5	1	25.48
		926.5	1	25.52
2M	SISO	905	1	22.83
		915	1	22.88
		925	1	22.89

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

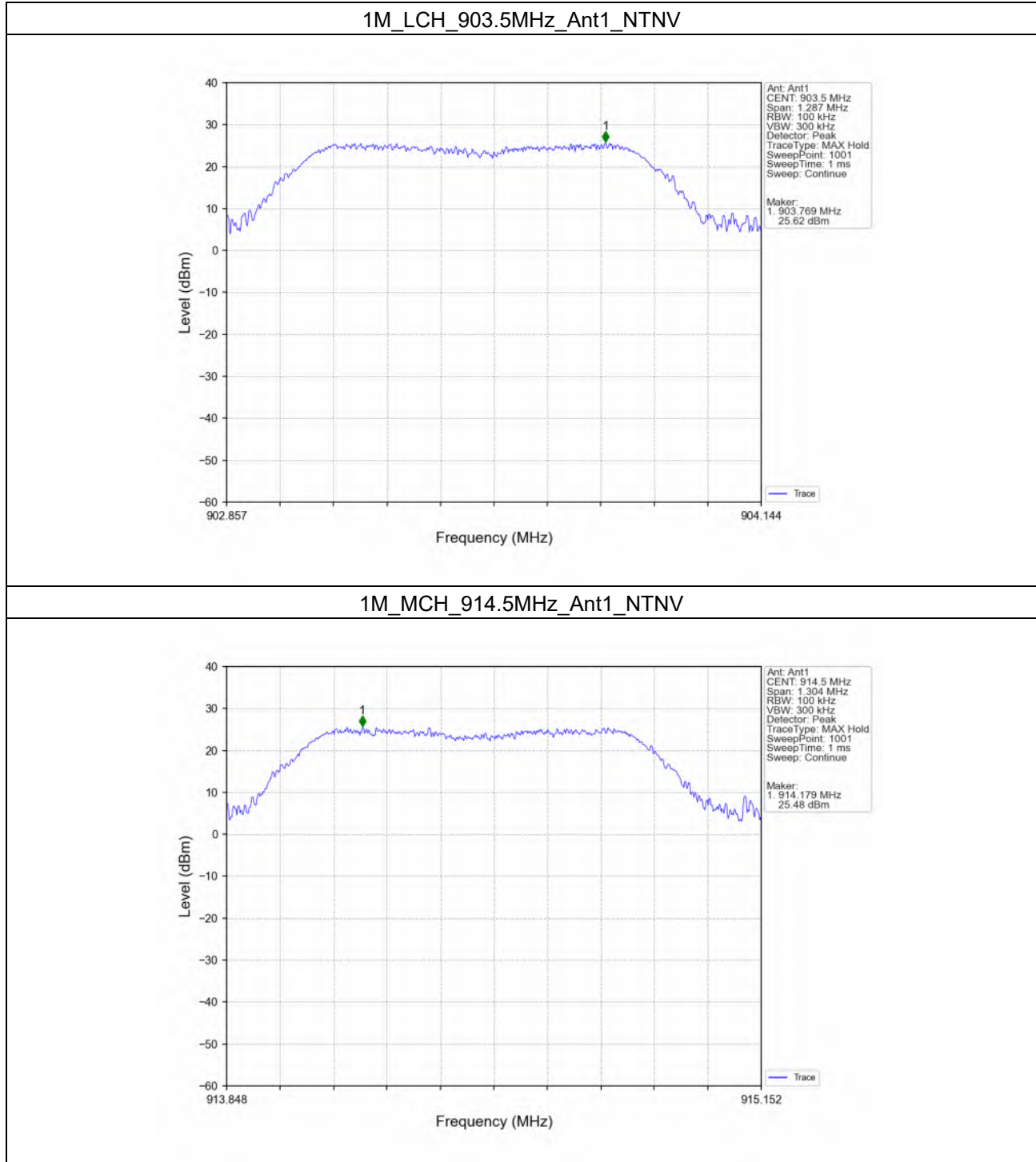
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	903.5	1	25.62	-4.38	Pass
		914.5	1	25.62	-4.38	Pass
		926.5	1	25.62	-4.38	Pass
2M	SISO	905	1	22.89	-7.11	Pass
		915	1	22.89	-7.11	Pass
		925	1	22.89	-7.11	Pass

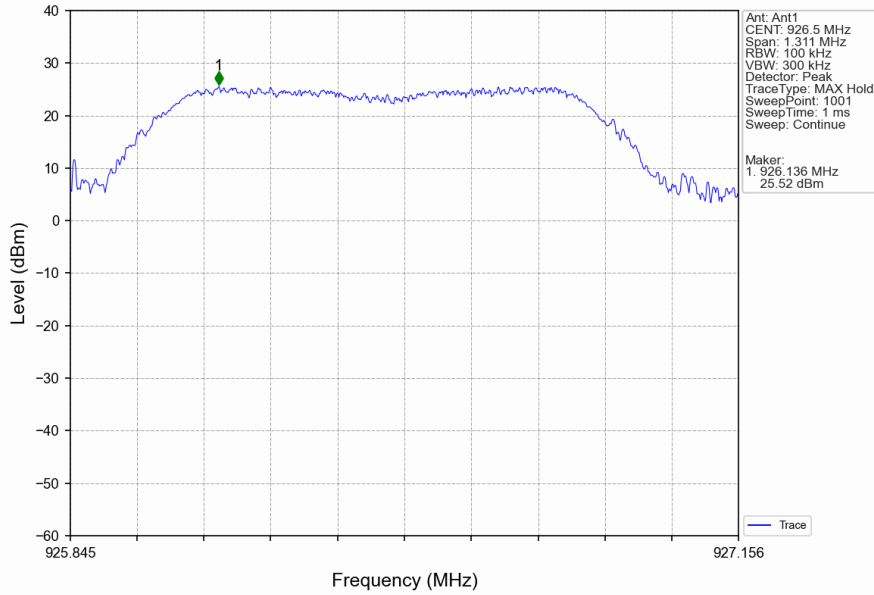
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

5.2 Test Graph

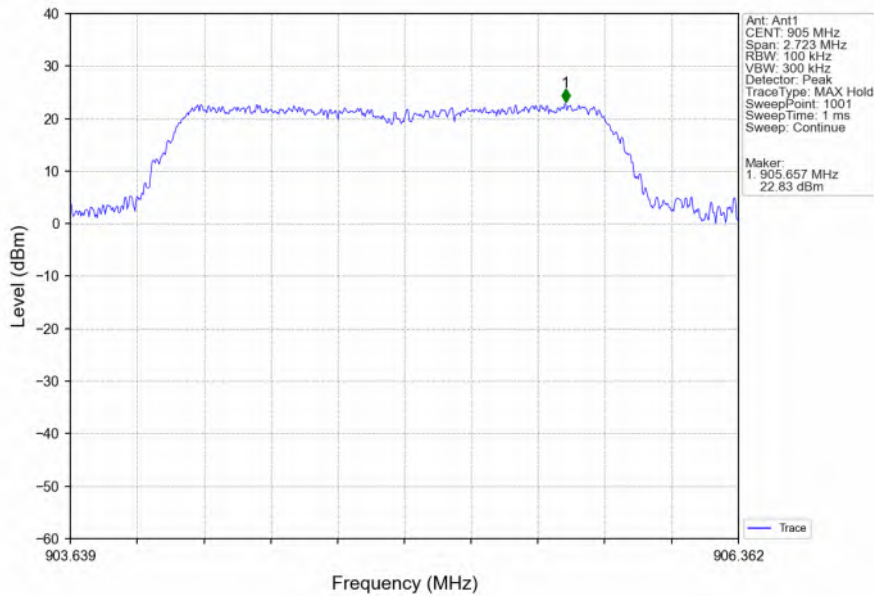
5.2.1 Ref



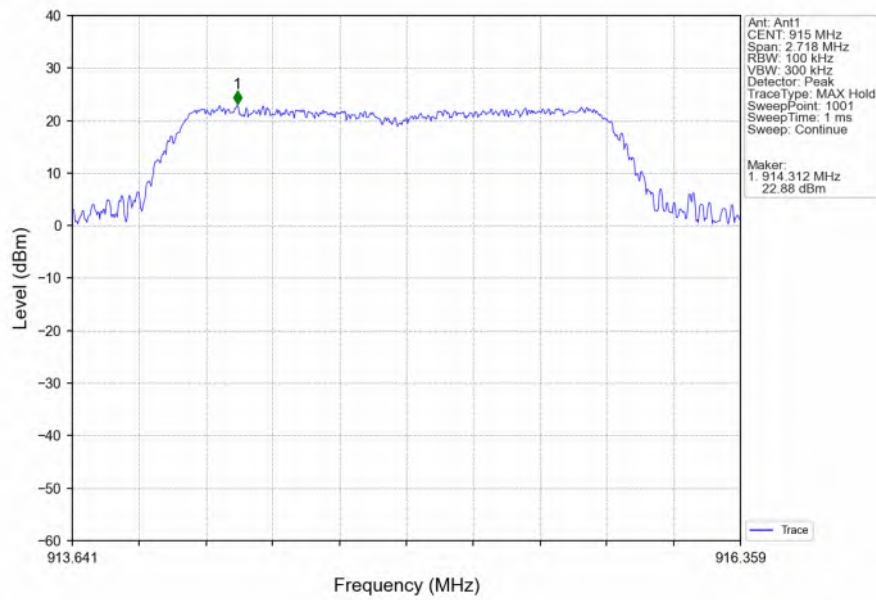
1M_HCH_926.5MHz_Ant1_NTNV



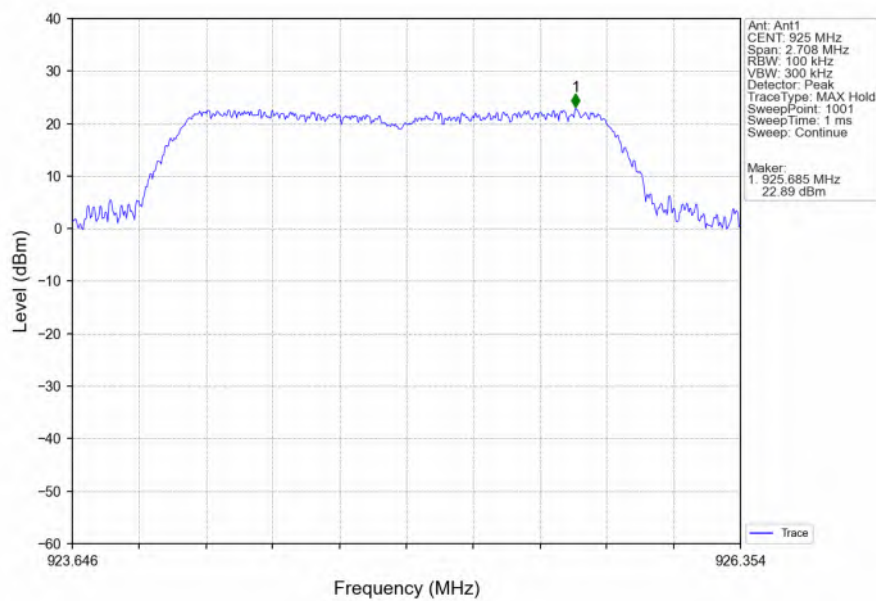
2M_LCH_905MHz_Ant1_NTNV



2M_MCH_915MHz_Ant1_NTNV

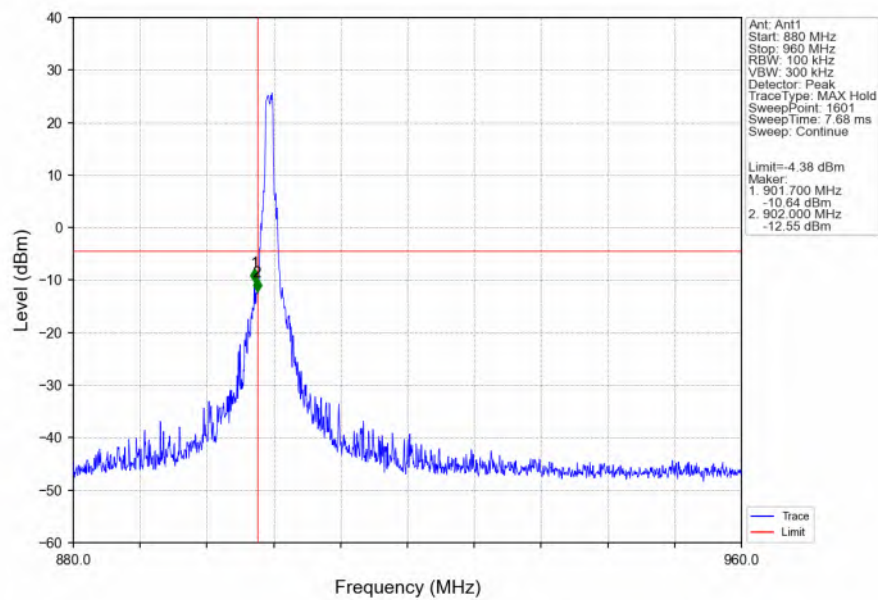


2M_HCH_925MHz_Ant1_NTNV

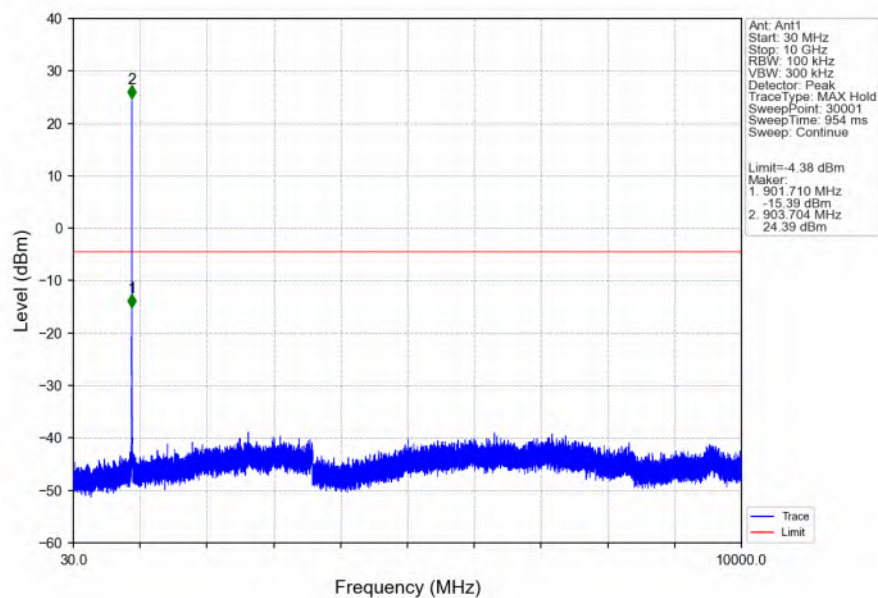


5.2.2 CSE

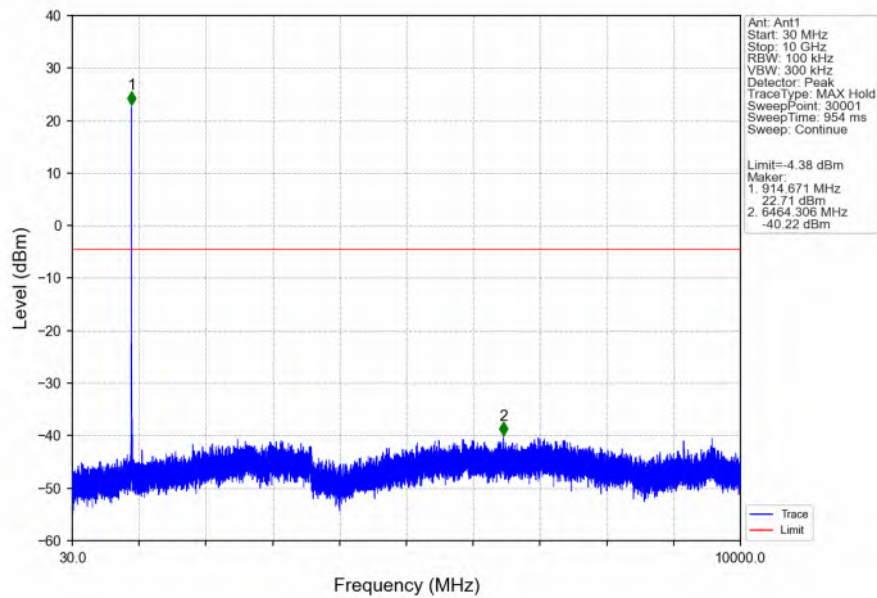
1M_LCH_903.5MHz_Ant1_NTNV



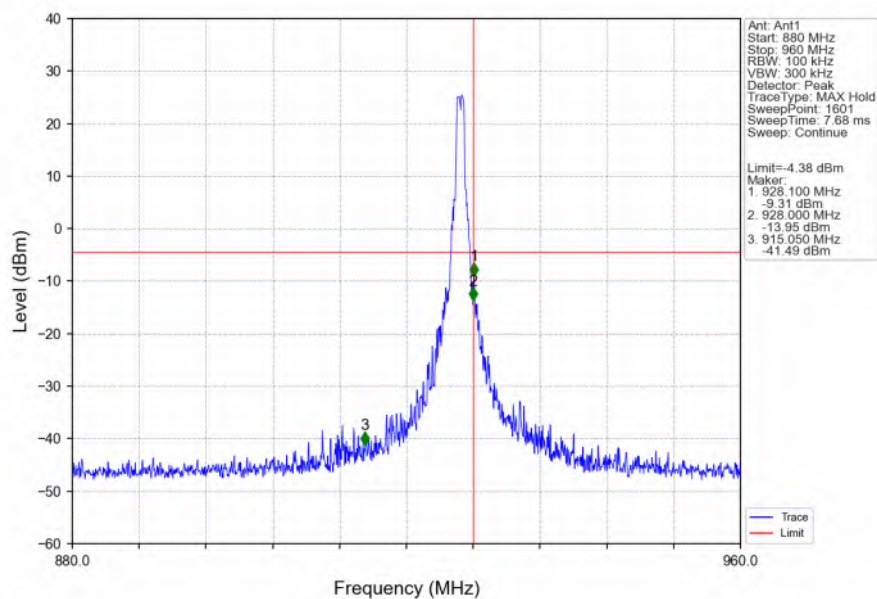
1M_LCH_903.5MHz_Ant1_NTNV



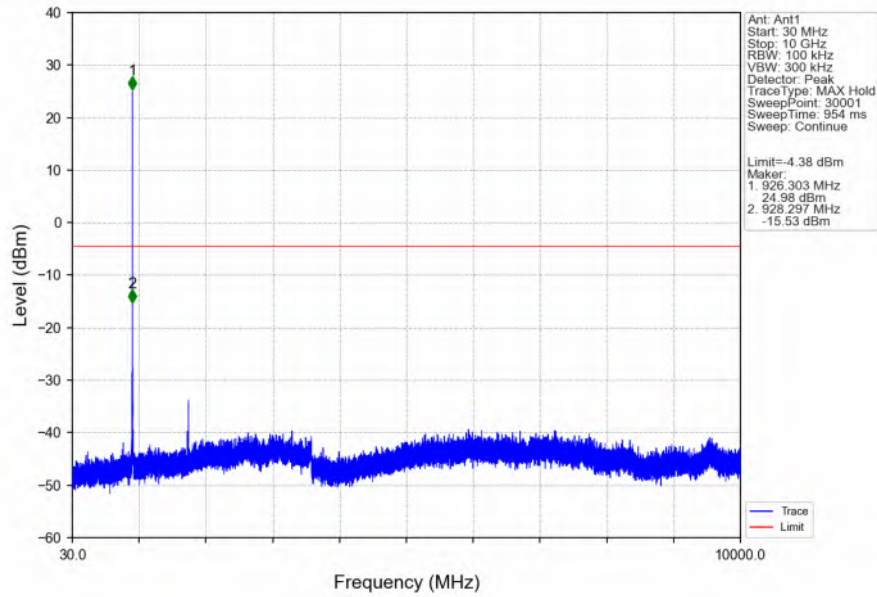
1M_MCH_914.5MHz_Ant1_NTNV



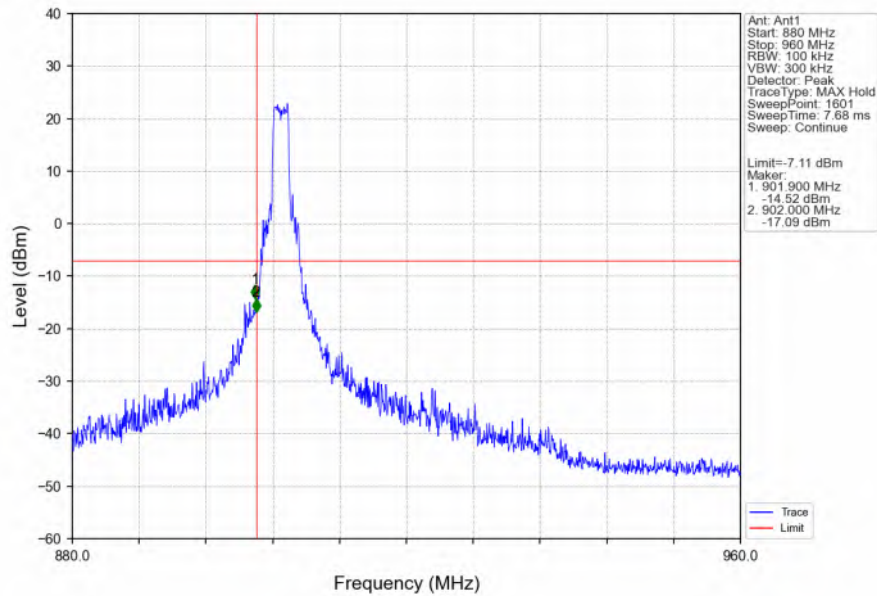
1M_HCH_926.5MHz_Ant1_NTNV



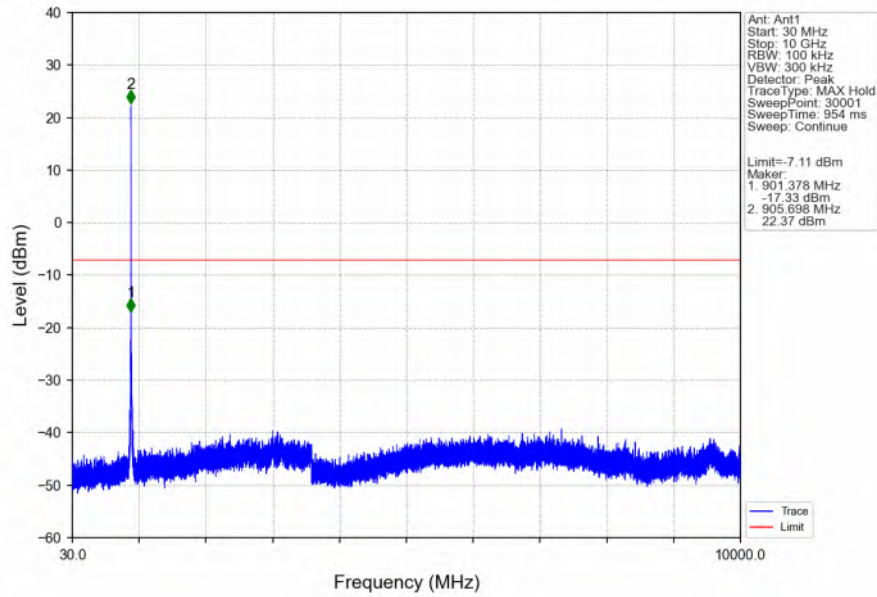
1M_HCH_926.5MHz_Ant1_NTNV



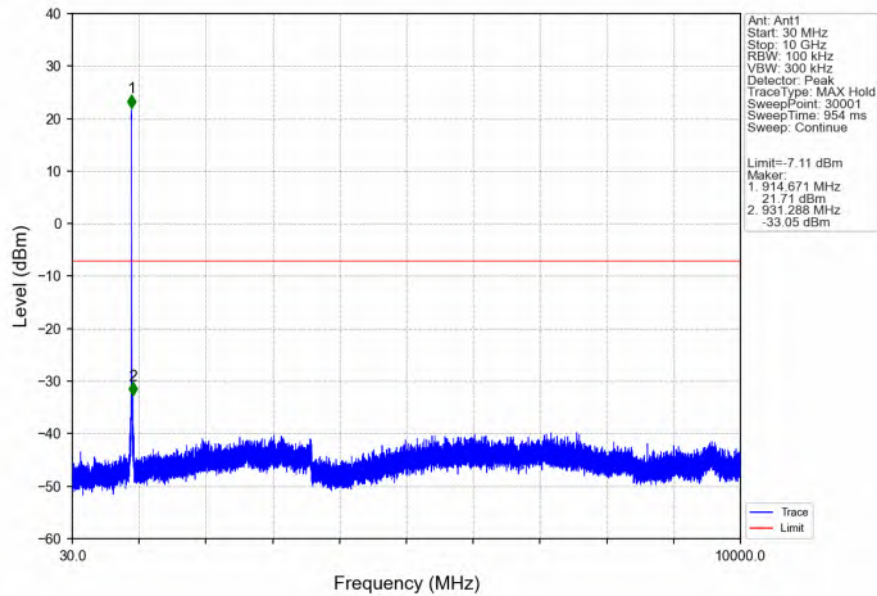
2M_LCH_905MHz_Ant1_NTNV



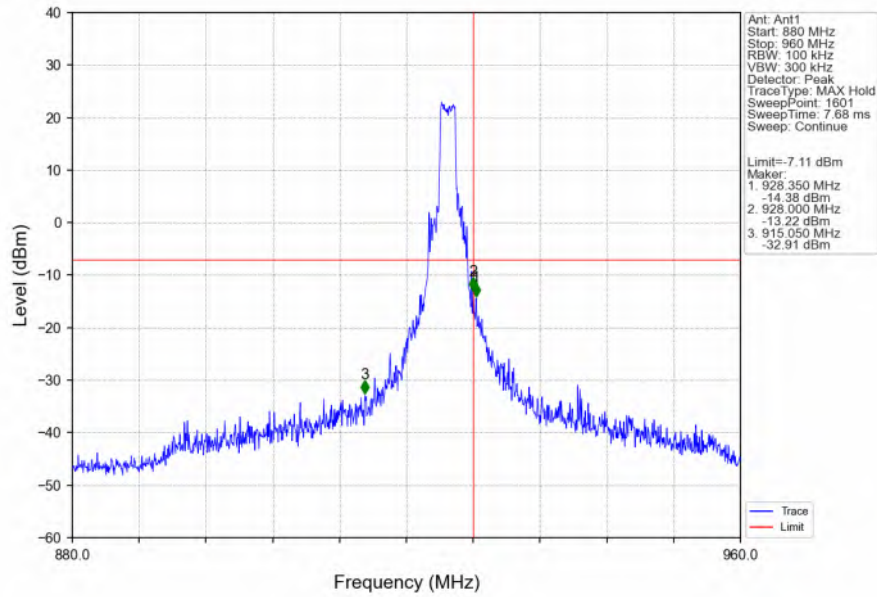
2M_LCH_905MHz_Ant1_NTNV



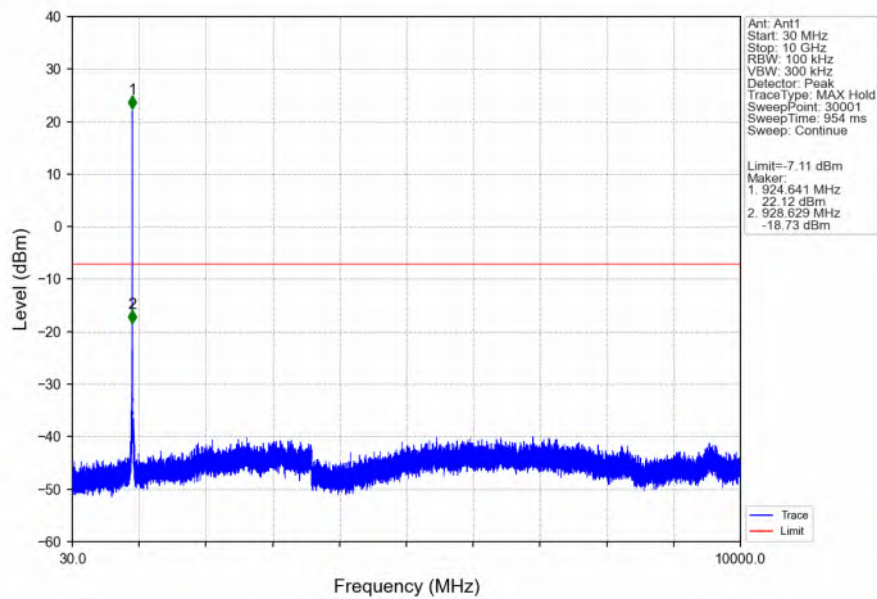
2M_MCH_915MHz_Ant1_NTNV



2M_HCH_925MHz_Ant1_NTNV



2M_HCH_925MHz_Ant1_NTNV





6. Duty Cycle for 4MHz/8MHz

6.1 Test Result

6.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T _{on} (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
4M	SISO	906	6.244	7.235	86.30	0.64	0.08
		914	6.248	7.254	86.13	0.65	0.22
		926	6.245	7.238	86.28	0.64	0.07
8M	SISO	908	3.044	4.060	74.98	1.25	0.34
		916	3.042	4.043	75.24	1.24	0.06
		924	3.042	4.043	75.24	1.24	0.06



7. Bandwidth for 4MHz/8MHz

7.1 Test Result

7.1.1 OBW

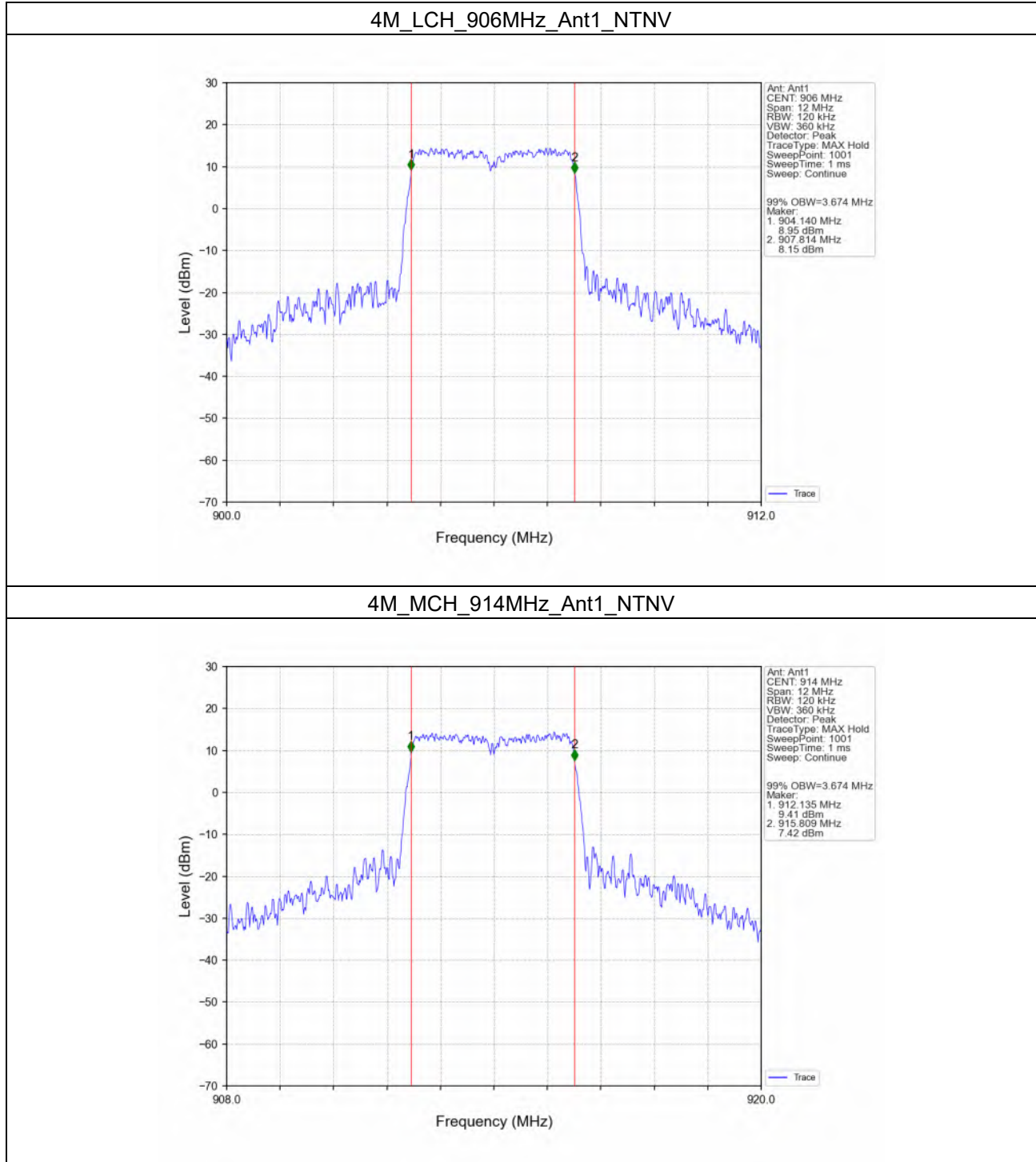
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
4M	SISO	906	1	3.674	/	Pass
		914	1	3.674	/	Pass
		926	1	3.676	/	Pass
8M	SISO	908	1	7.639	/	Pass
		916	1	7.669	/	Pass
		924	1	7.623	/	Pass

7.1.2 6dB BW

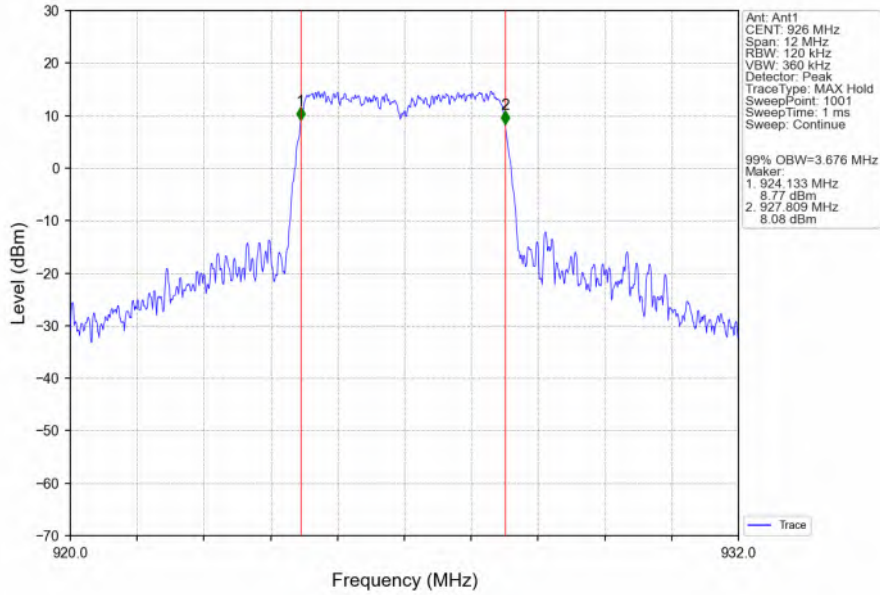
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
4M	SISO	906	1	3.665	≥ 0.5	Pass
		914	1	3.667	≥ 0.5	Pass
		926	1	3.654	≥ 0.5	Pass
8M	SISO	908	1	7.554	≥ 0.5	Pass
		916	1	7.527	≥ 0.5	Pass
		924	1	7.516	≥ 0.5	Pass

7.2 Test Graph

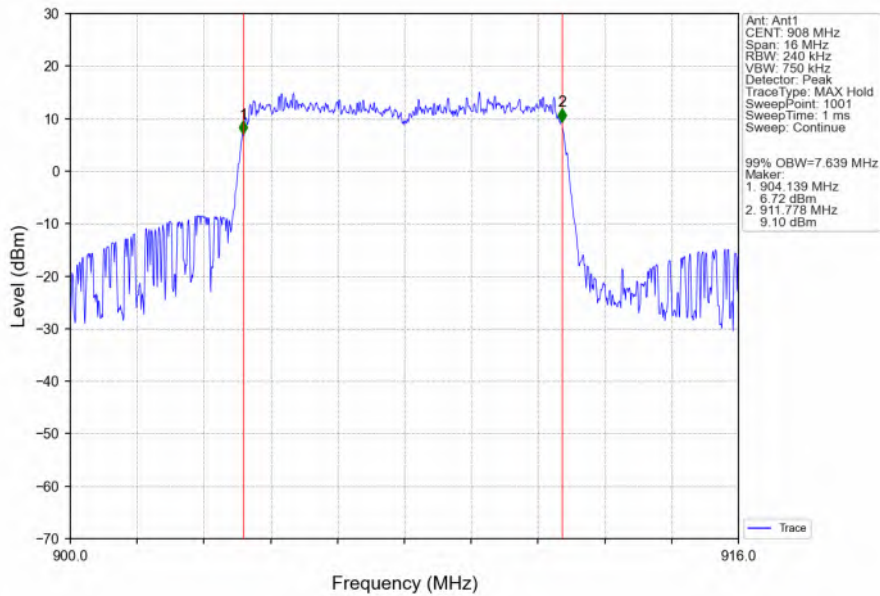
7.2.1 OBW



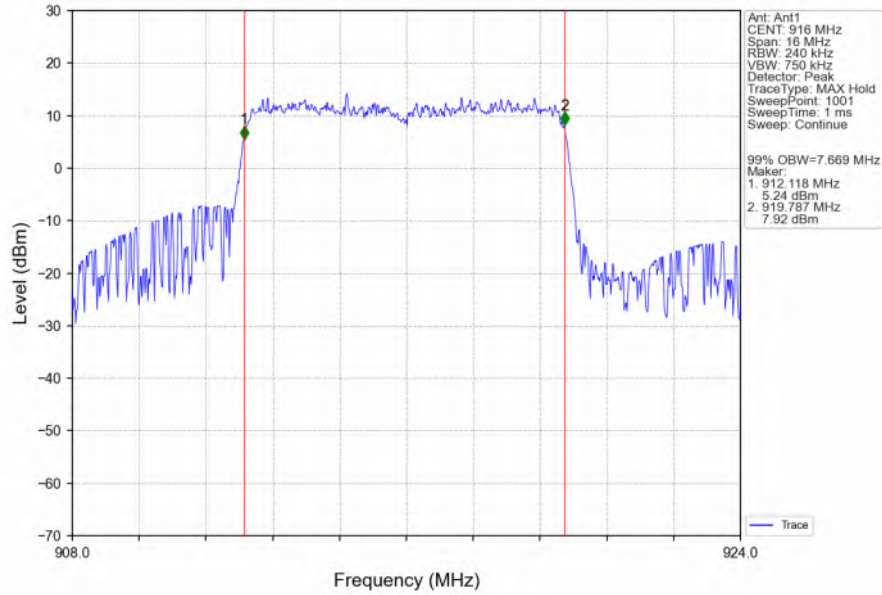
4M_HCH_926MHz_Ant1_NTNV



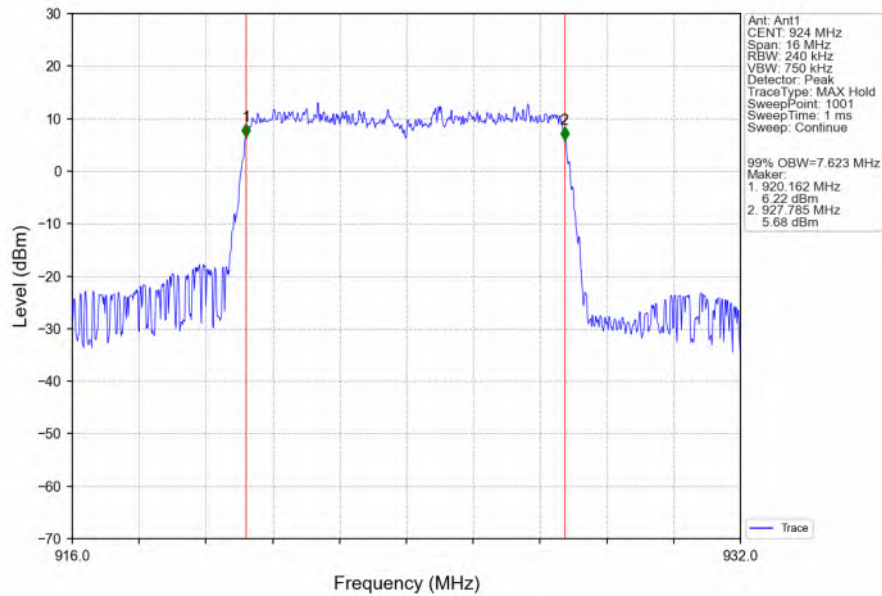
8M_LCH_908MHz_Ant1_NTNV



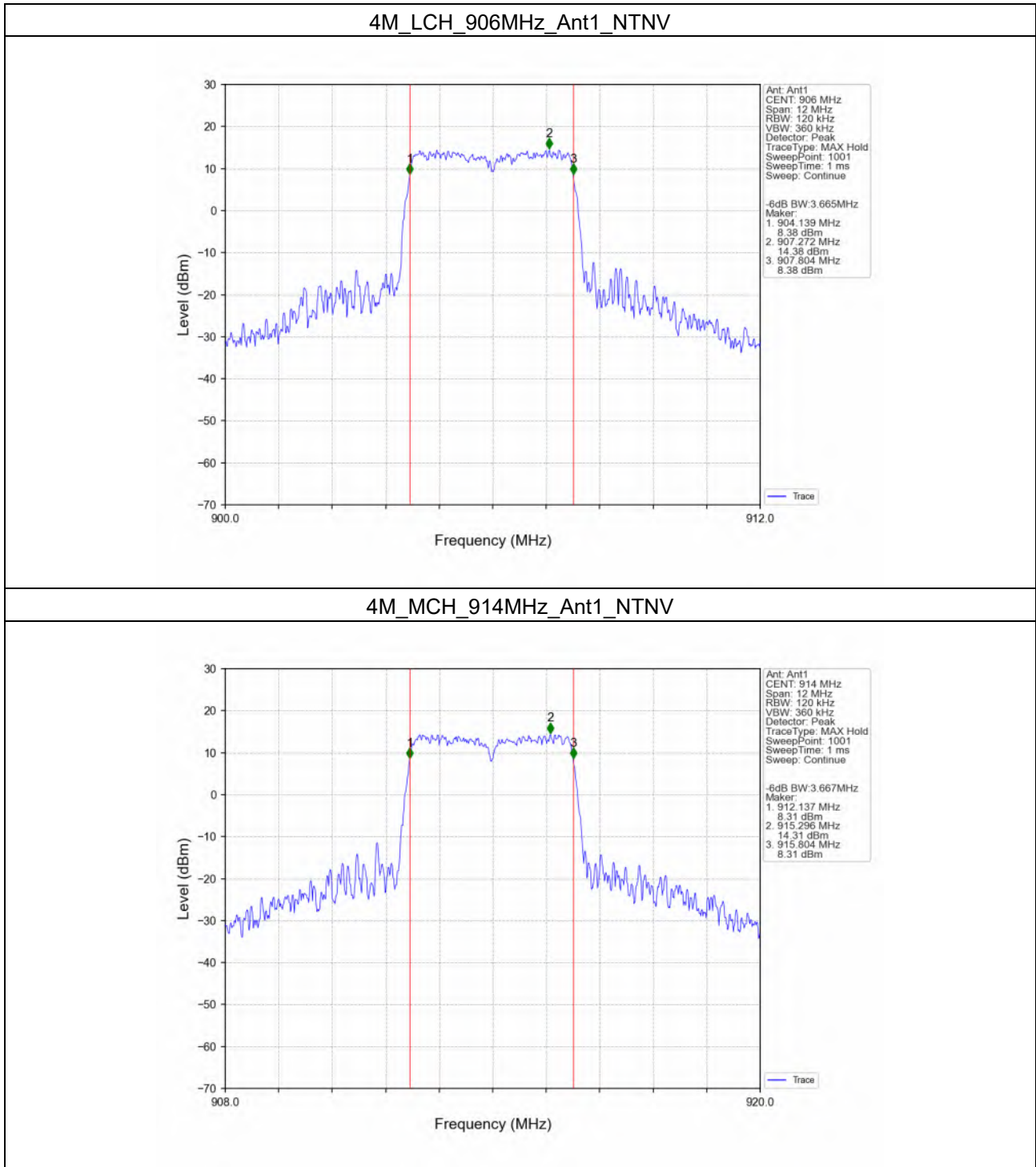
8M_MCH_916MHz_Ant1_NTNV



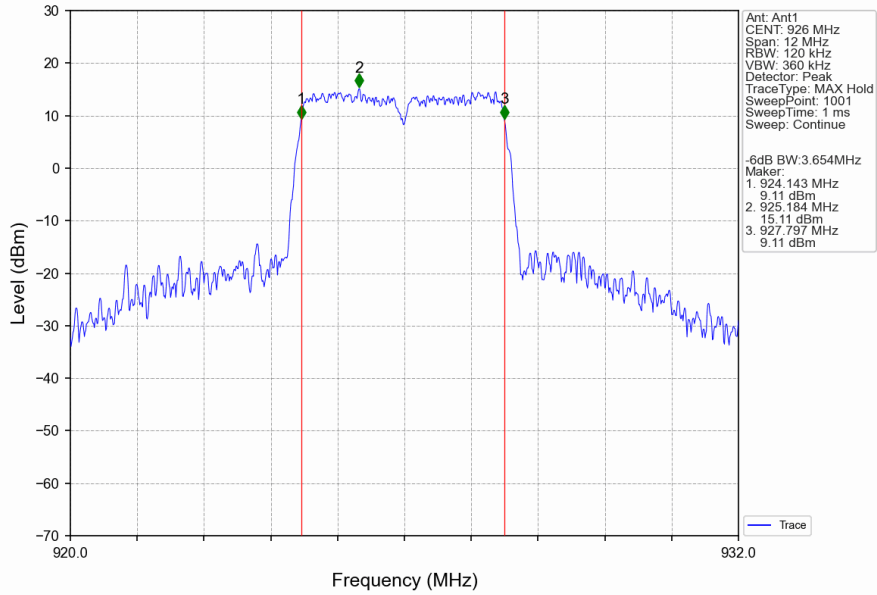
8M_HCH_924MHz_Ant1_NTNV



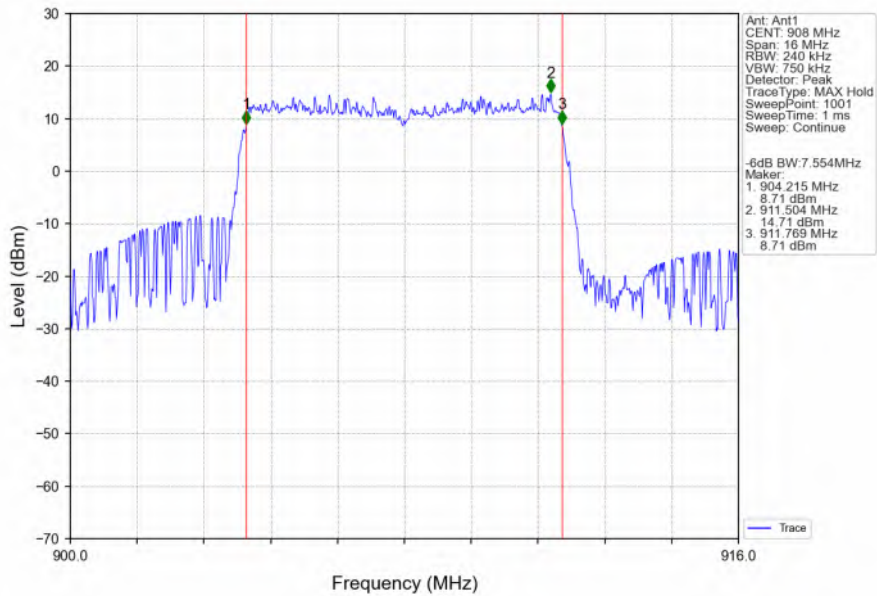
7.2.2 6dB BW



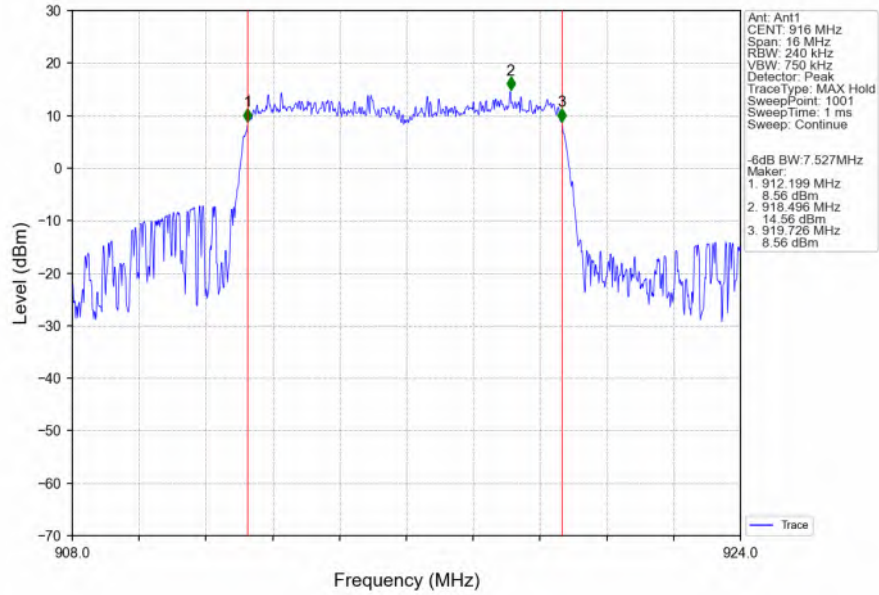
4M_HCH_926MHz_Ant1_NTNV



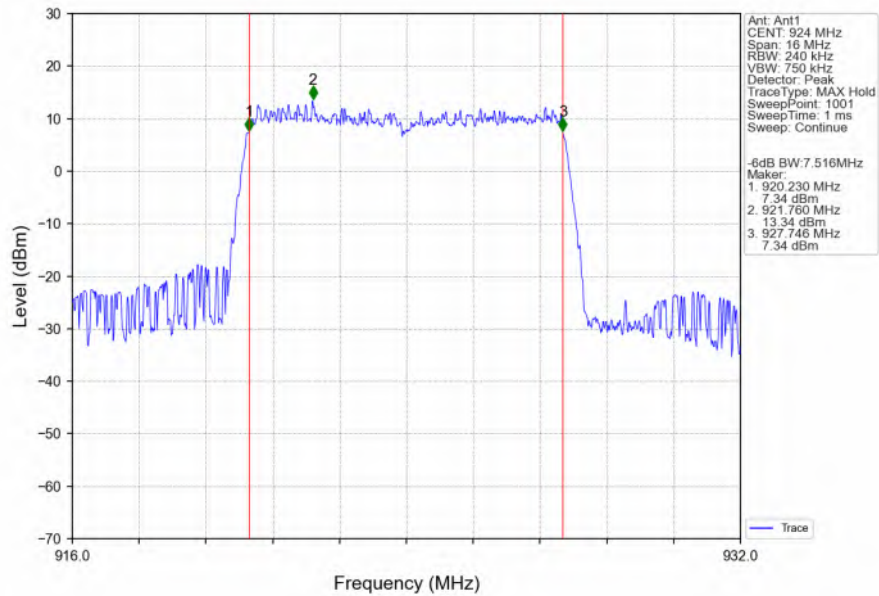
8M_LCH_908MHz_Ant1_NTNV



8M_MCH_916MHz_Ant1_NTNV



8M_HCH_924MHz_Ant1_NTNV





8. Maximum Conducted Output Power for 4MHz/8MHz

8.1 Test Result

8.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
4M	SISO	906	29.02	<=30	Pass
		914	29.14	<=30	Pass
		926	29.05	<=30	Pass
8M	SISO	908	29.69	<=30	Pass
		916	29.09	<=30	Pass
		924	28.83	<=30	Pass

Note1: Antenna Gain: Ant1: 2.50dBi;



9. Maximum Power Spectral Density for 4MHz/8MHz

9.1 Test Result

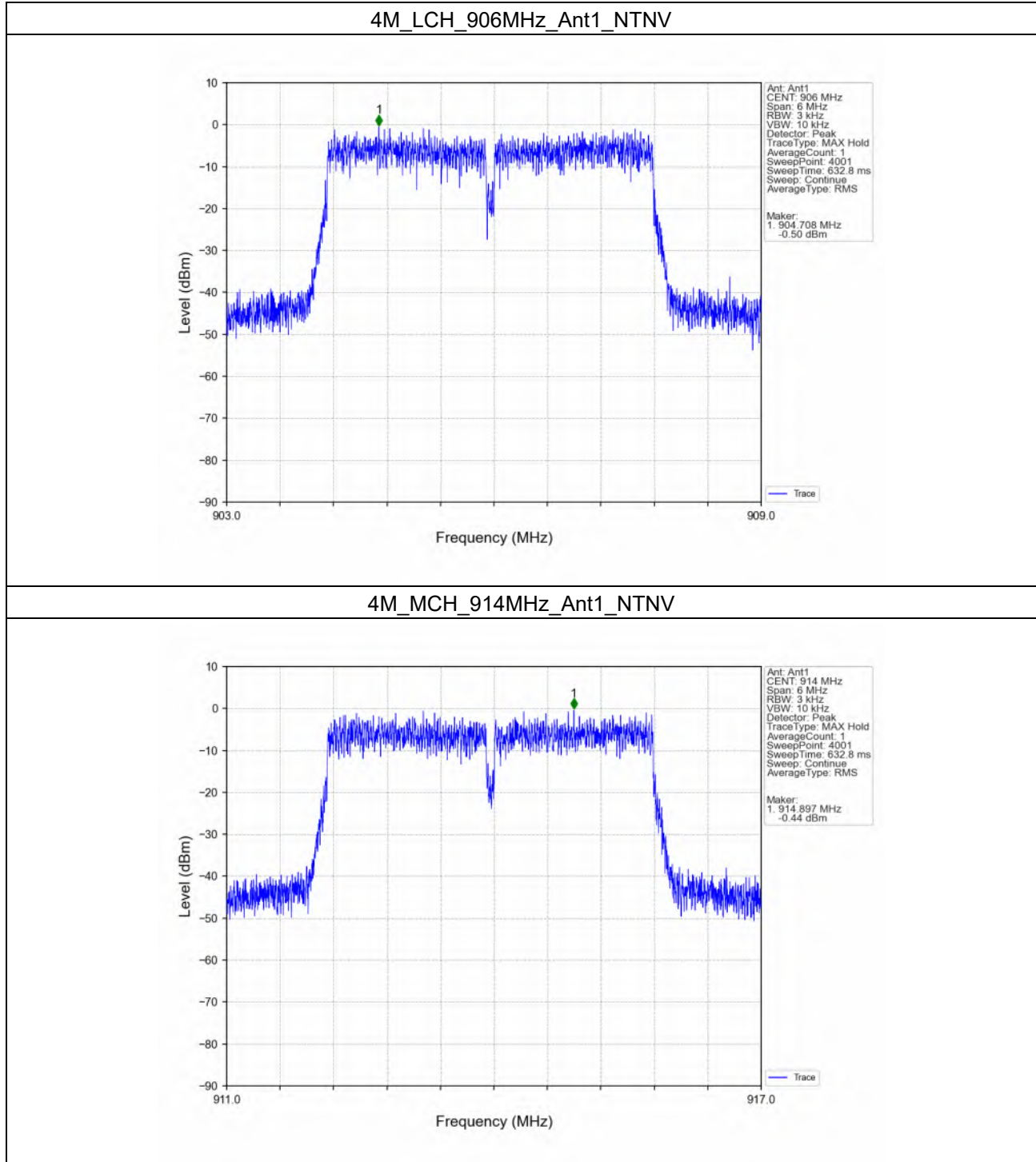
9.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit	
4M	SISO	906	-0.50	≤ 8	Pass
		914	-0.44	≤ 8	Pass
		926	-0.08	≤ 8	Pass
8M	SISO	908	-3.65	≤ 8	Pass
		916	-4.09	≤ 8	Pass
		924	-5.01	≤ 8	Pass

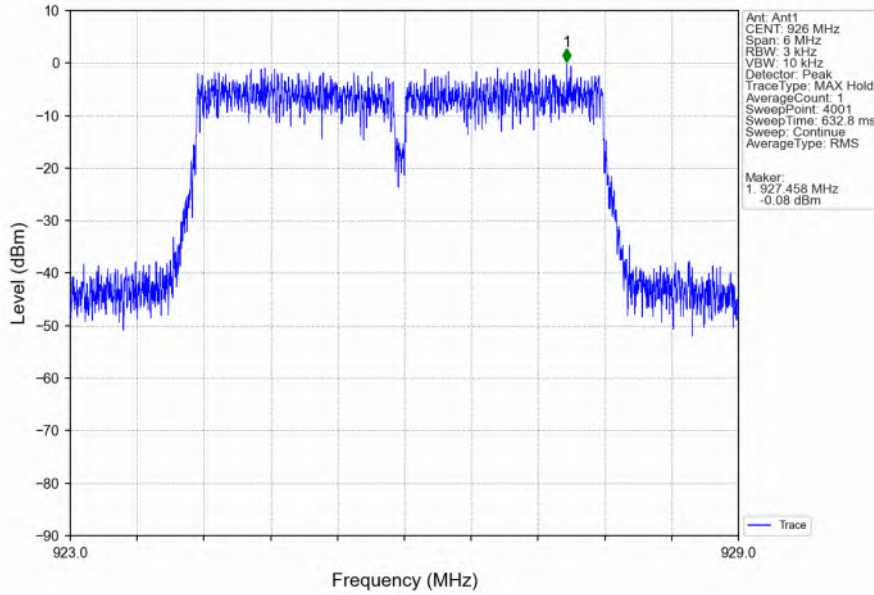
Note1: Antenna Gain: Ant1: 2.50dBi;

9.2 Test Graph

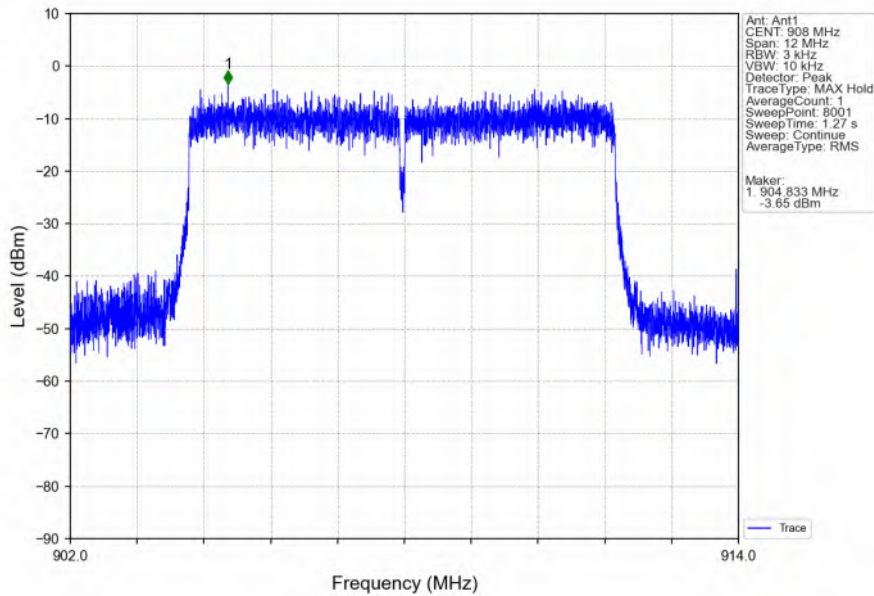
9.2.1 PSD



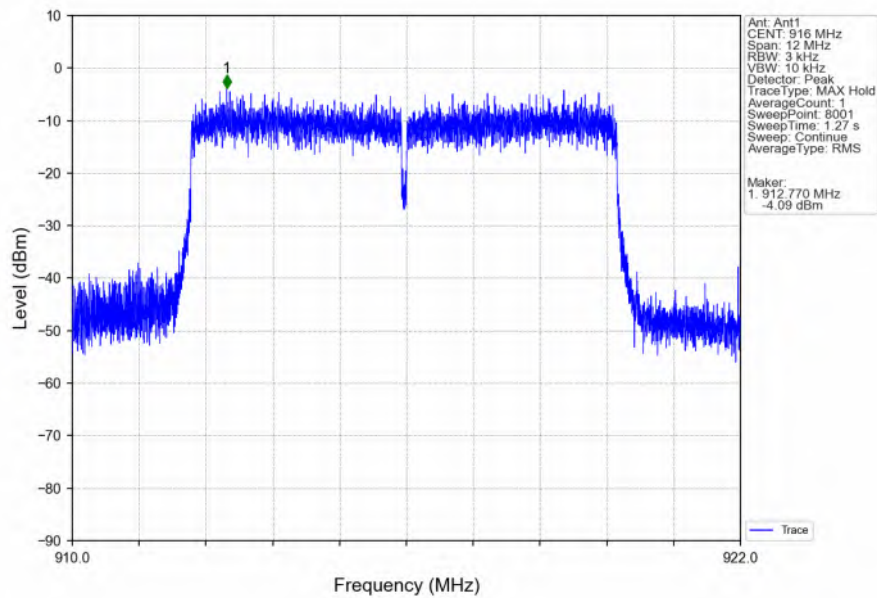
4M_HCH_926MHz_Ant1_NTNV



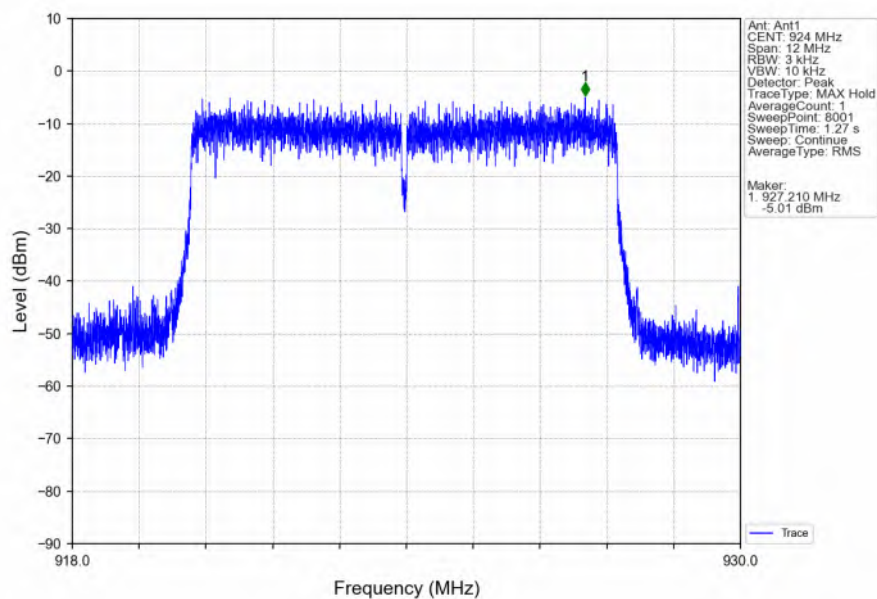
8M_LCH_908MHz_Ant1_NTNV



8M_MCH_916MHz_Ant1_NTNV



8M_HCH_924MHz_Ant1_NTNV



10. Unwanted Emissions In Non-restricted Frequency Bands for 4MHz/8MHz

10.1 Test Result

10.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
4M	SISO	906	1	12.77
		914	1	12.77
		926	1	13.30
8M	SISO	908	1	9.19
		916	1	8.49
		924	1	7.99

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

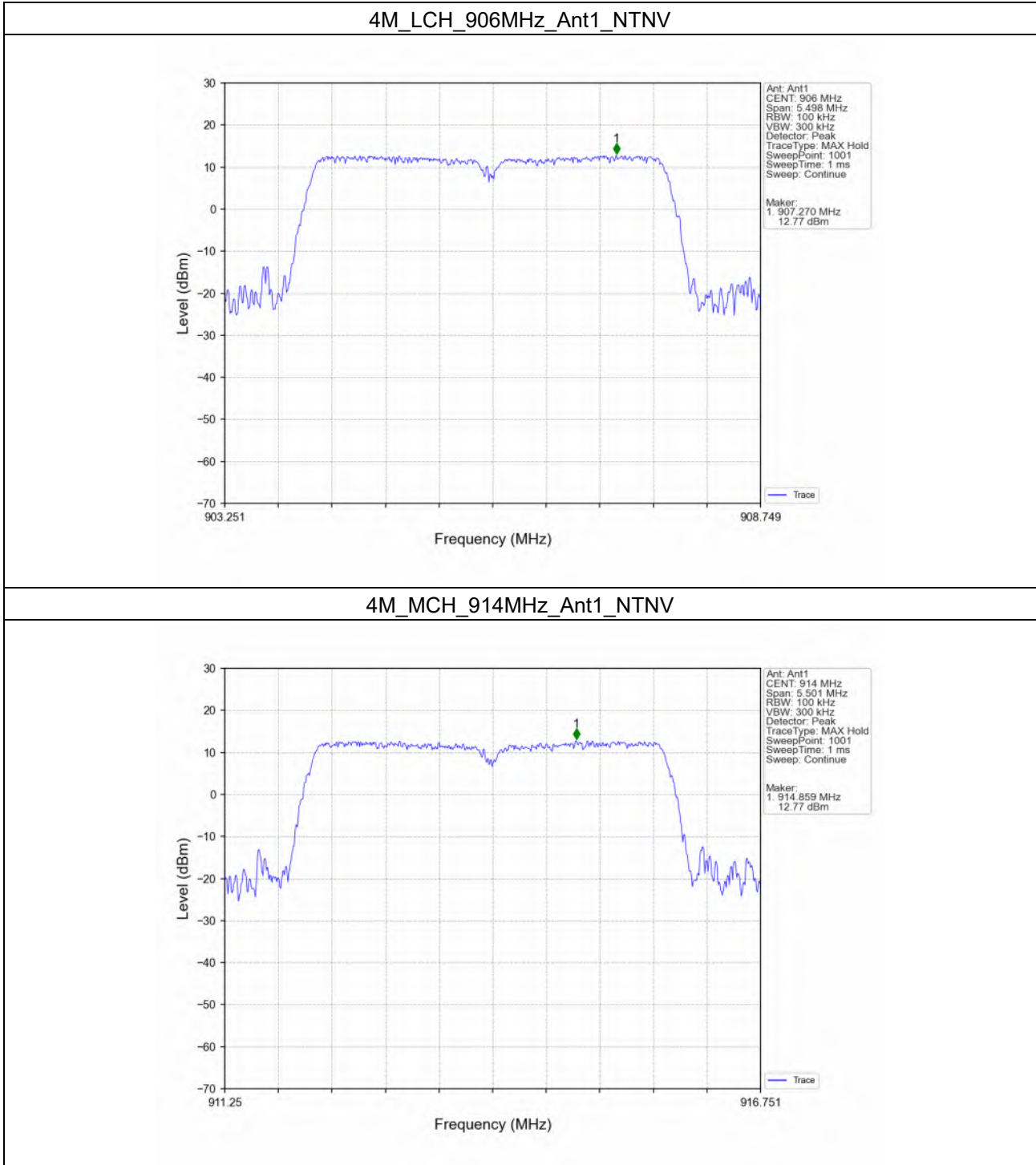
10.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
4M	SISO	906	1	13.30	-6.70	Pass
		914	1	13.30	-6.70	Pass
		926	1	13.30	-6.70	Pass
8M	SISO	908	1	9.19	-10.81	Pass
		916	1	9.19	-10.81	Pass
		924	1	9.19	-10.81	Pass

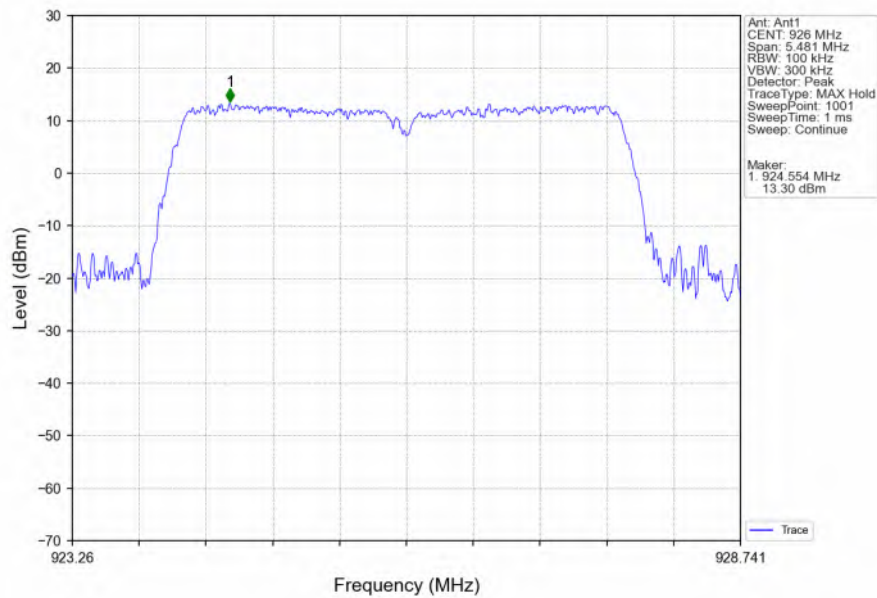
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

10.2 Test Graph

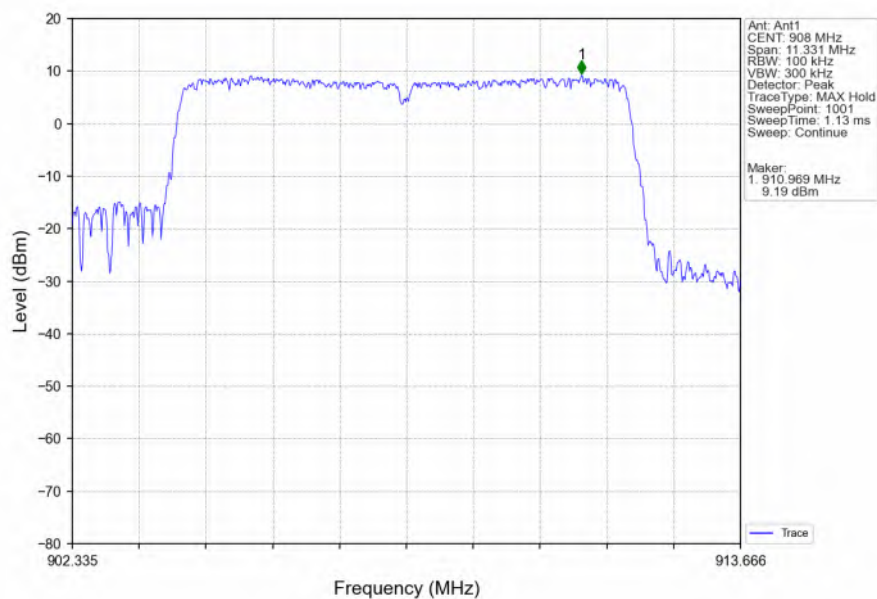
10.2.1 Ref



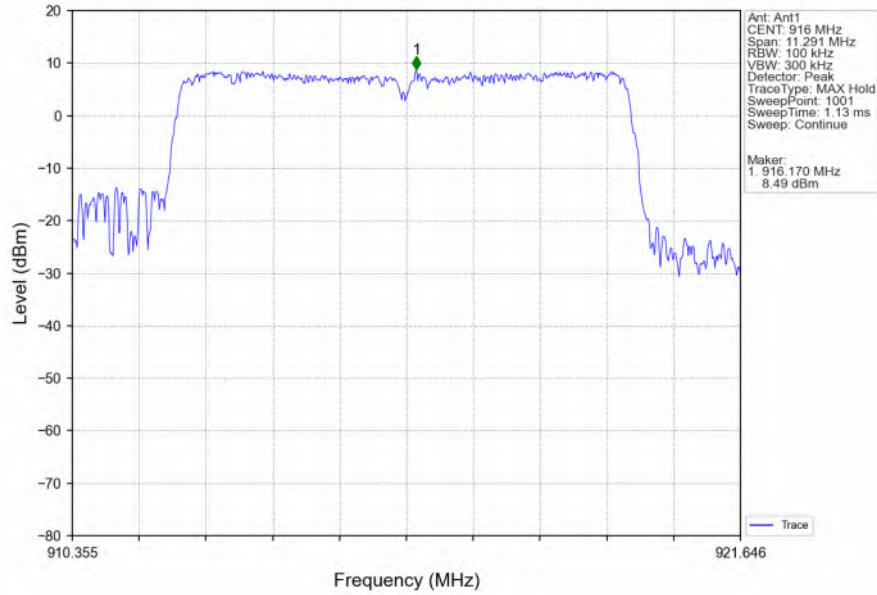
4M_HCH_926MHz_Ant1_NTNV



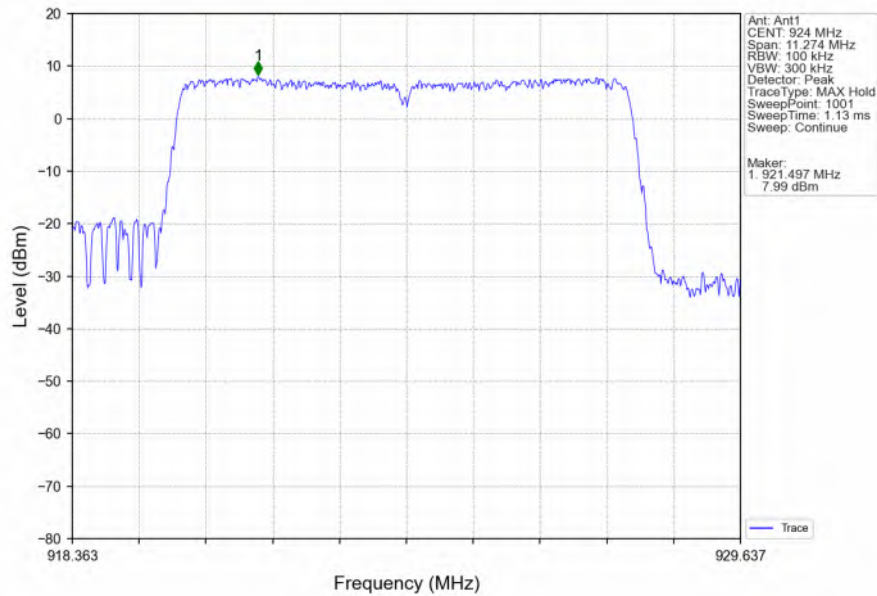
8M_LCH_908MHz_Ant1_NTNV



8M_MCH_916MHz_Ant1_NTNV

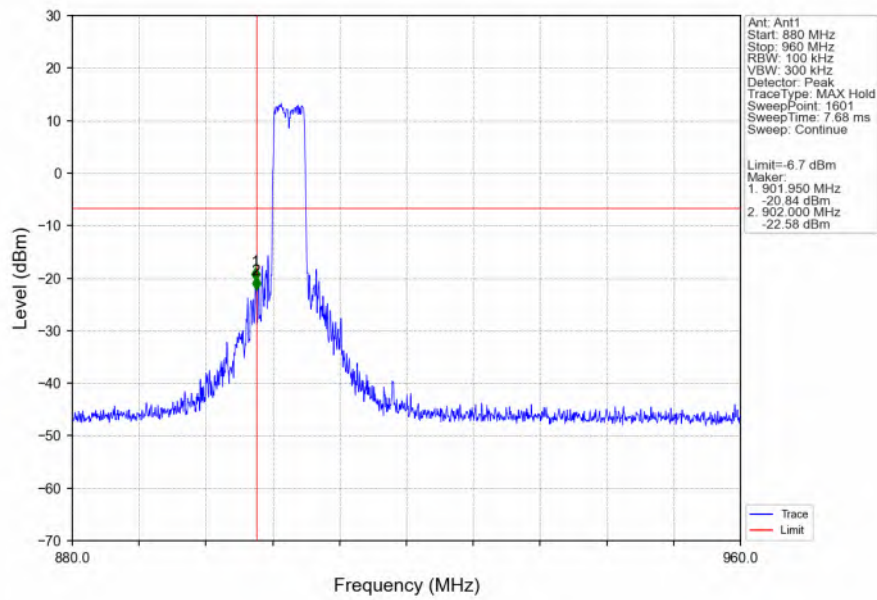


8M_HCH_924MHz_Ant1_NTNV

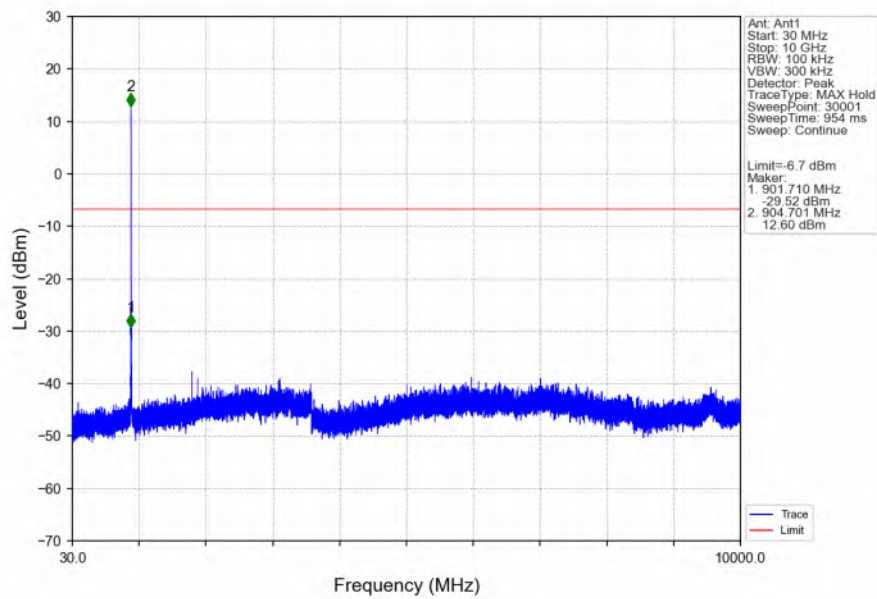


10.2.2 CSE

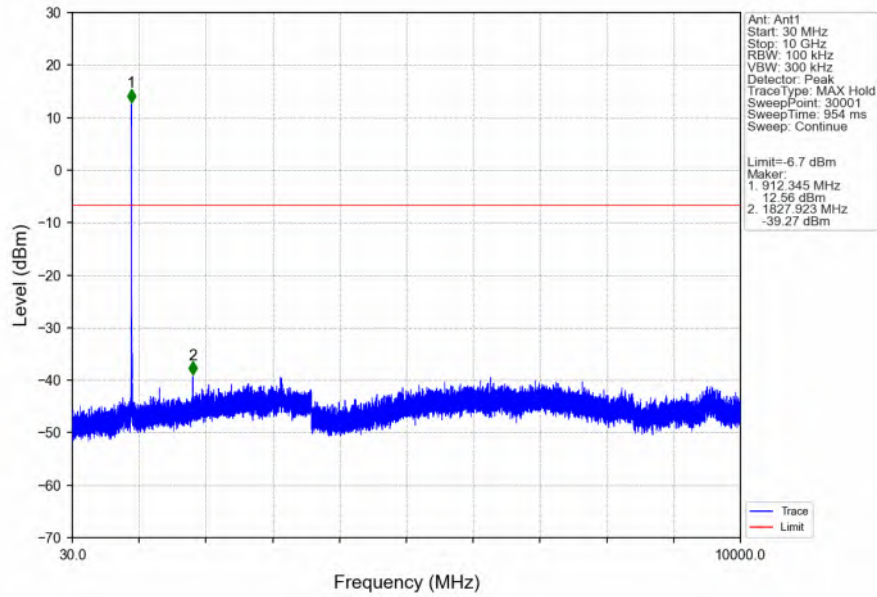
4M_LCH_906MHz_Ant1_NTNV



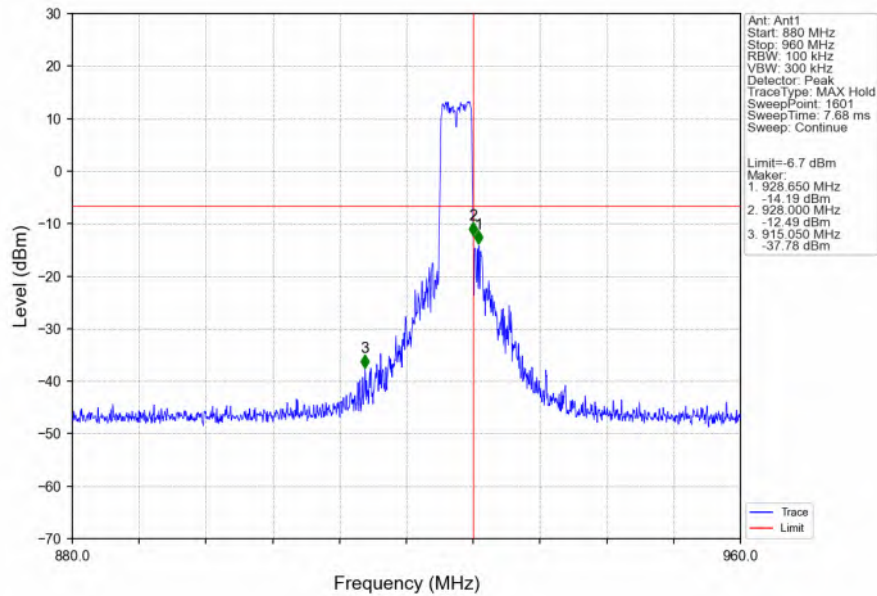
4M_LCH_906MHz_Ant1_NTNV



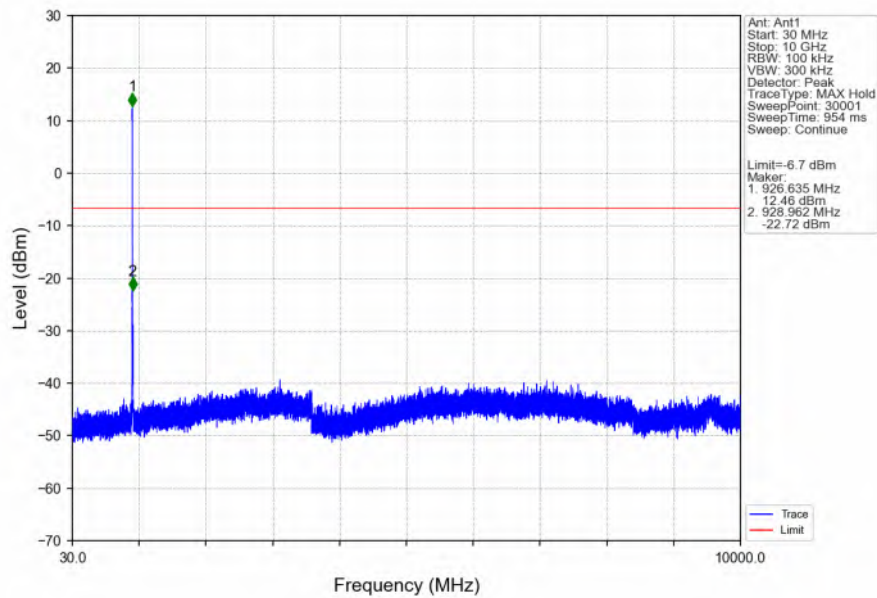
4M_MCH_914MHz_Ant1_NTNV



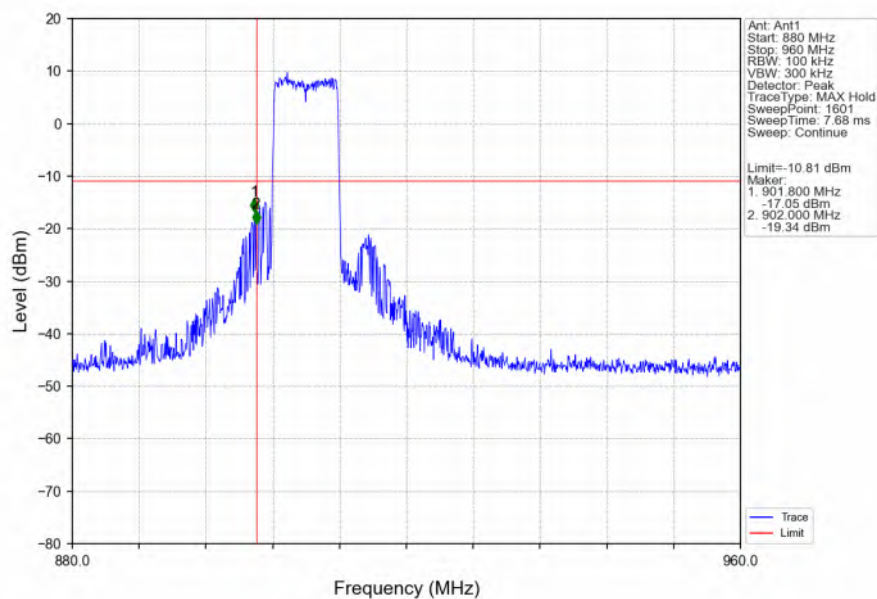
4M_HCH_926MHz_Ant1_NTNV



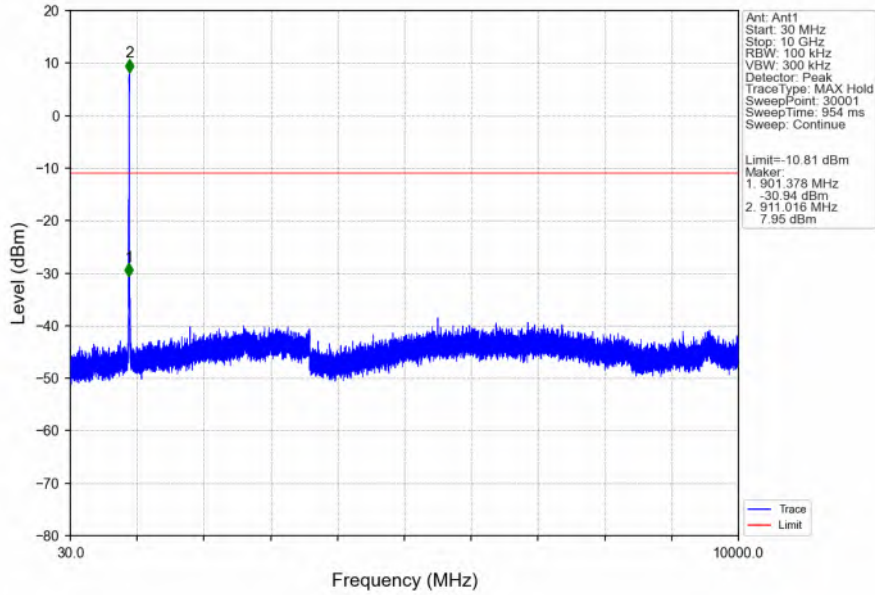
4M_HCH_926MHz_Ant1_NTNV



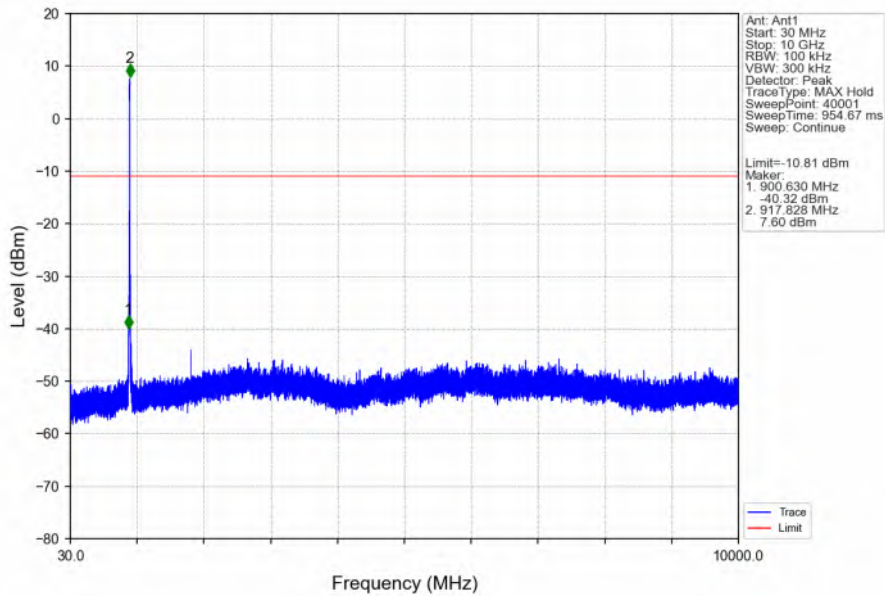
8M_LCH_908MHz_Ant1_NTNV



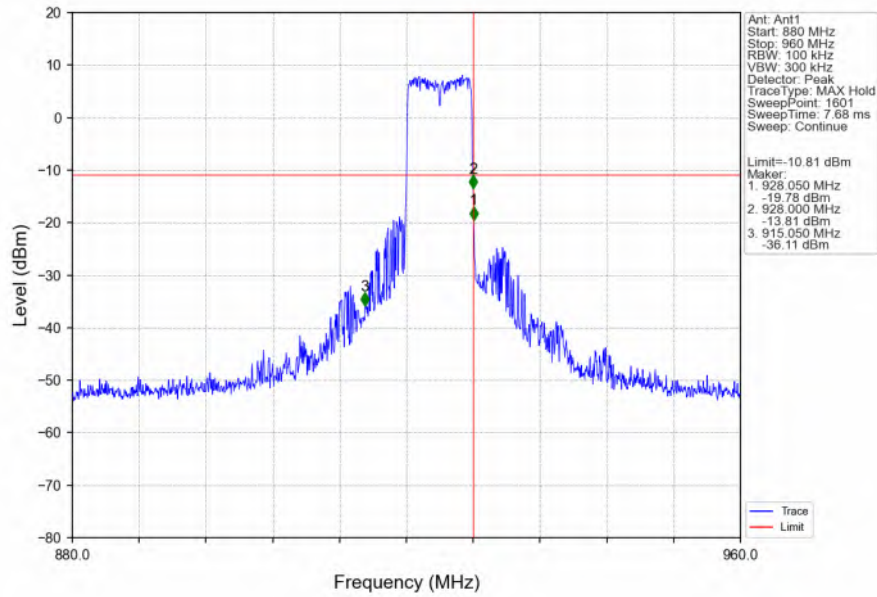
8M_LCH_908MHz_Ant1_NTNV



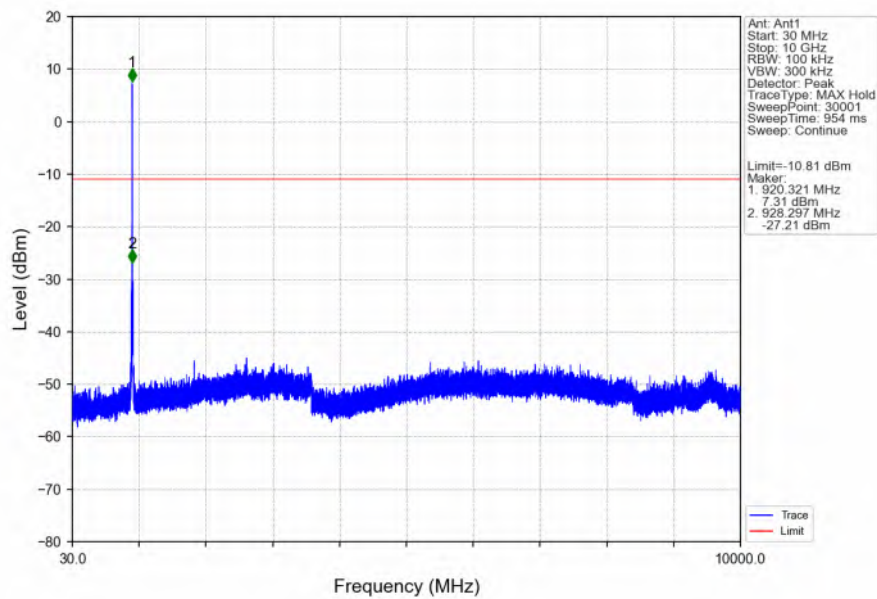
8M_MCH_916MHz_Ant1_NTNV



8M_HCH_924MHz_Ant1_NTNV



8M_HCH_924MHz_Ant1_NTNV



- End of the Report -