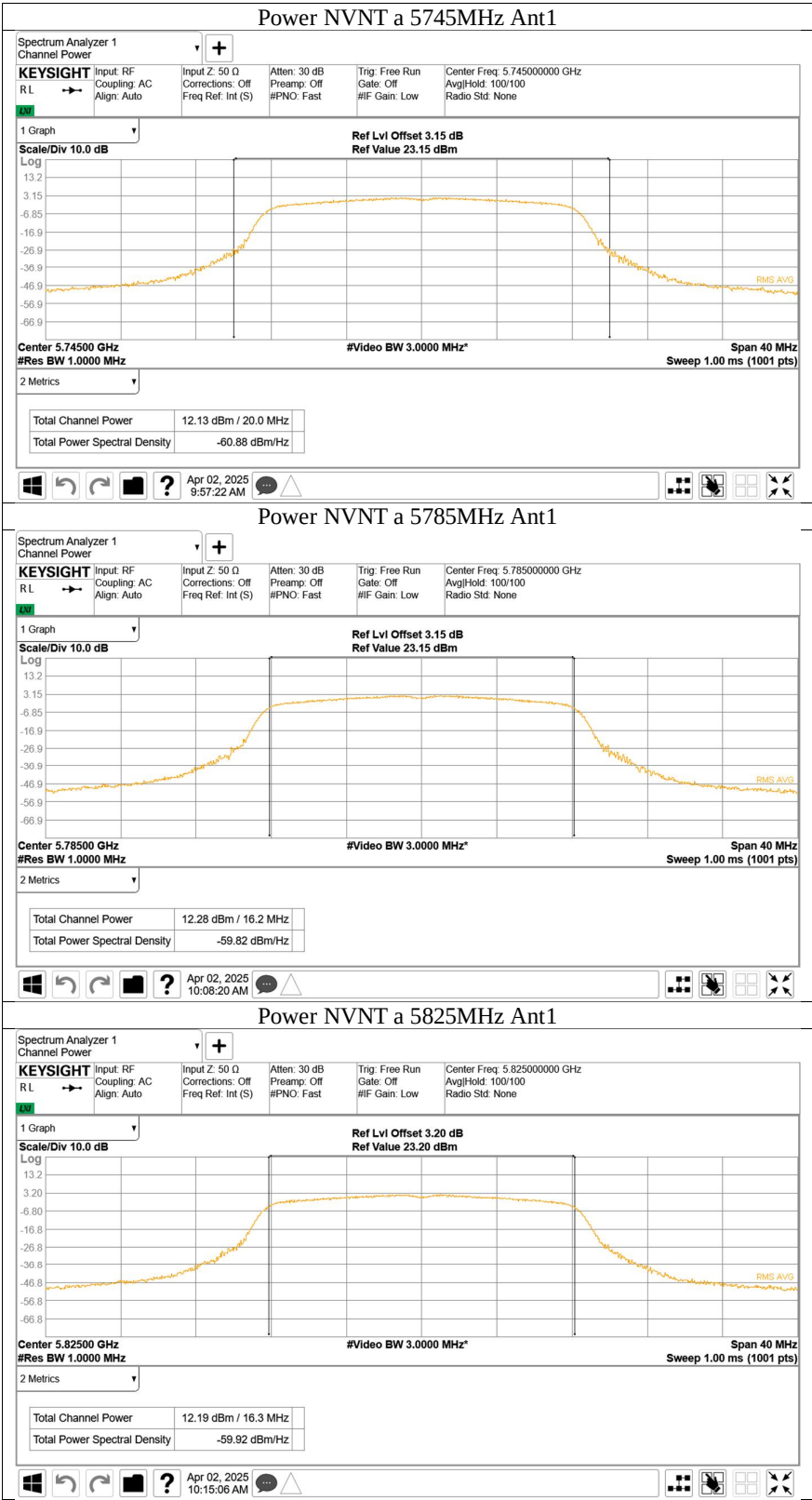
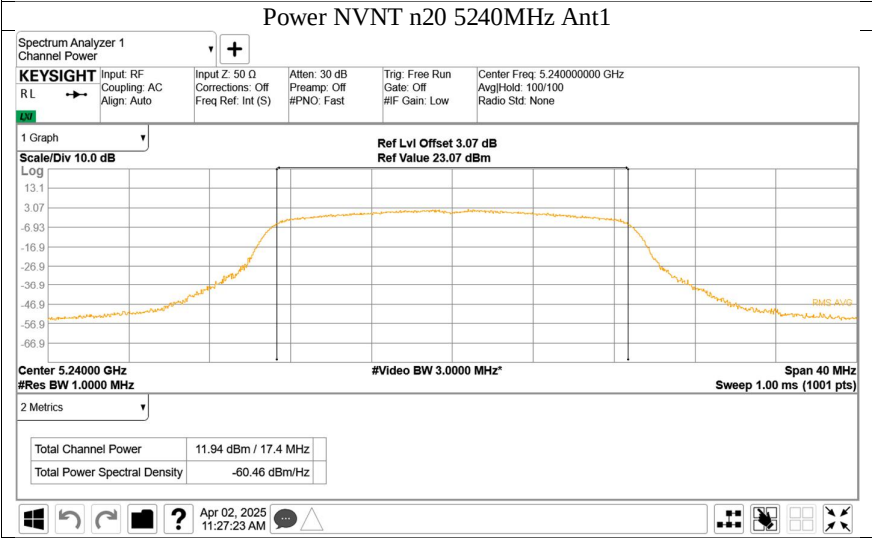
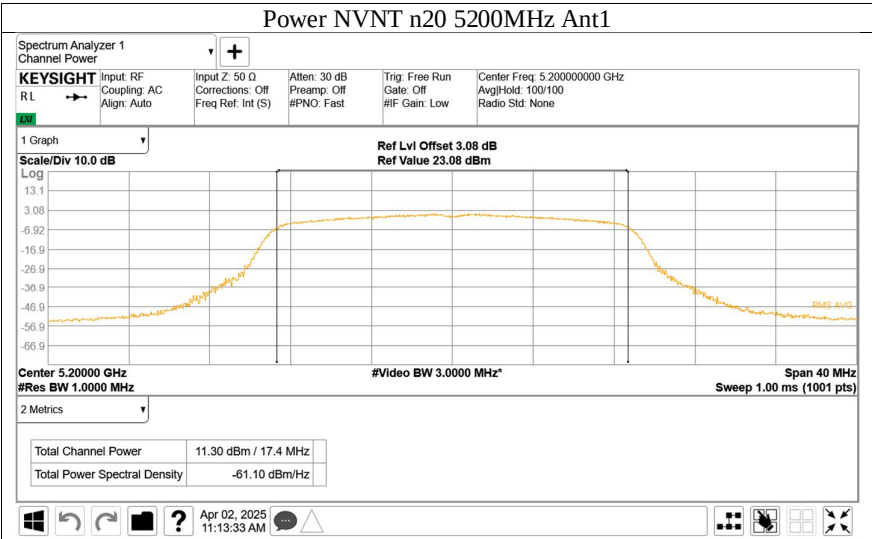
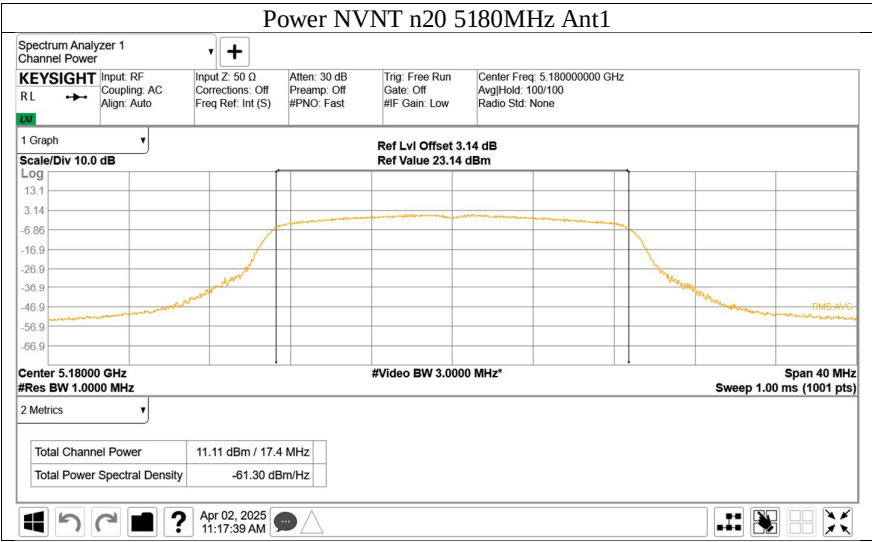
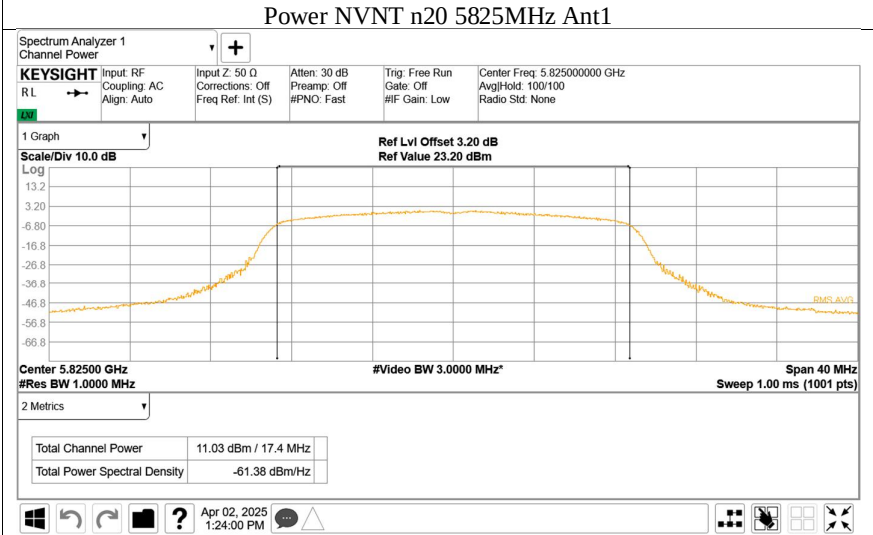
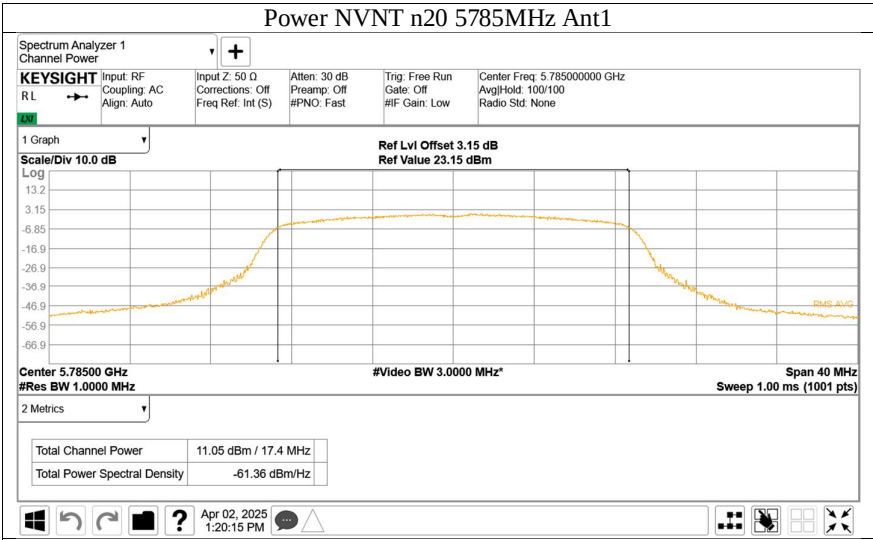
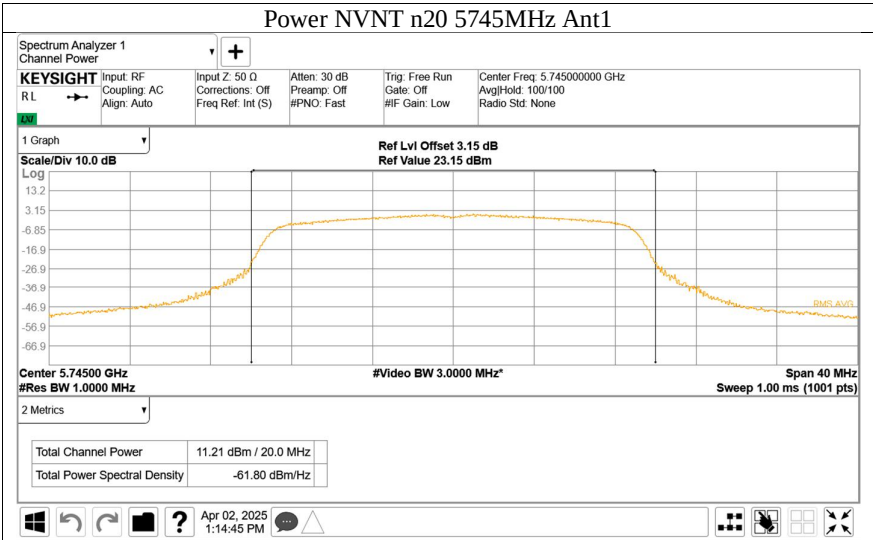
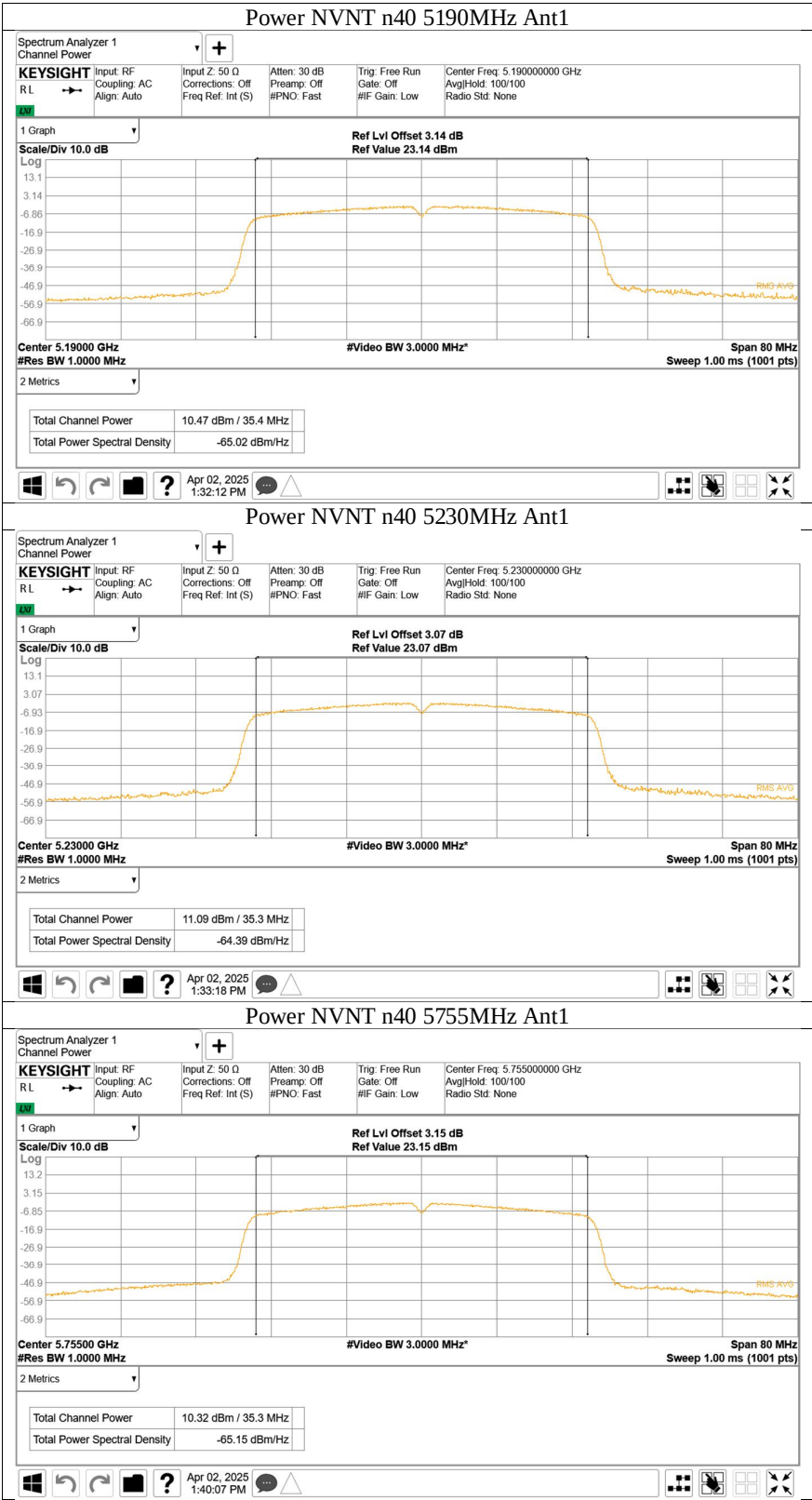
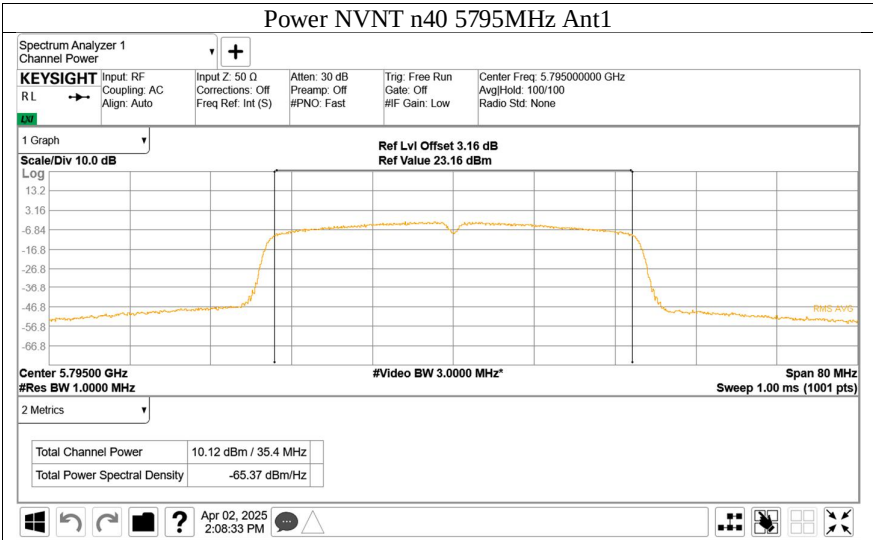












10.3 Maximum power spectral density

Test Method

According to C63.10, the EUT was placed on 0.8m height table, the RF output of EUT was connected to the test power meter by RF cable. The path loss was compensated to the results for each measurement.

1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...." (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
3. Make the following adjustments to the peak value of the spectrum, if applicable:
 - a) If Method SA-2 or SA-2 Alternative was used, add $10 \log (1/x)$, where x is the duty cycle, to the peak of the spectrum.
 - b) If Method SA-3 Alternative was used and the linear mode was used in II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
4. The result is the Maximum PSD over 1 MHz reference bandwidth.
5. For devices operating in the bands 5.15–5.25 GHz, 5.25–5.35 GHz, and 5.47–5.725 GHz, the preceding procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725–5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:
 - a) Set $RBW \geq 1/T$, where T is defined in II.B.I.a).
 - b) Set $VBW \geq 3 RBW$.
 - c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
 - d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
 - e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) and II.F.5.d), since $RBW=100 \text{ kHz}$ is available on nearly all spectrum analyzers.

Limit: The maximum power spectral density shall not exceed 11dBm for the 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725 GHz Band in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30dBm in any 500kHz band.

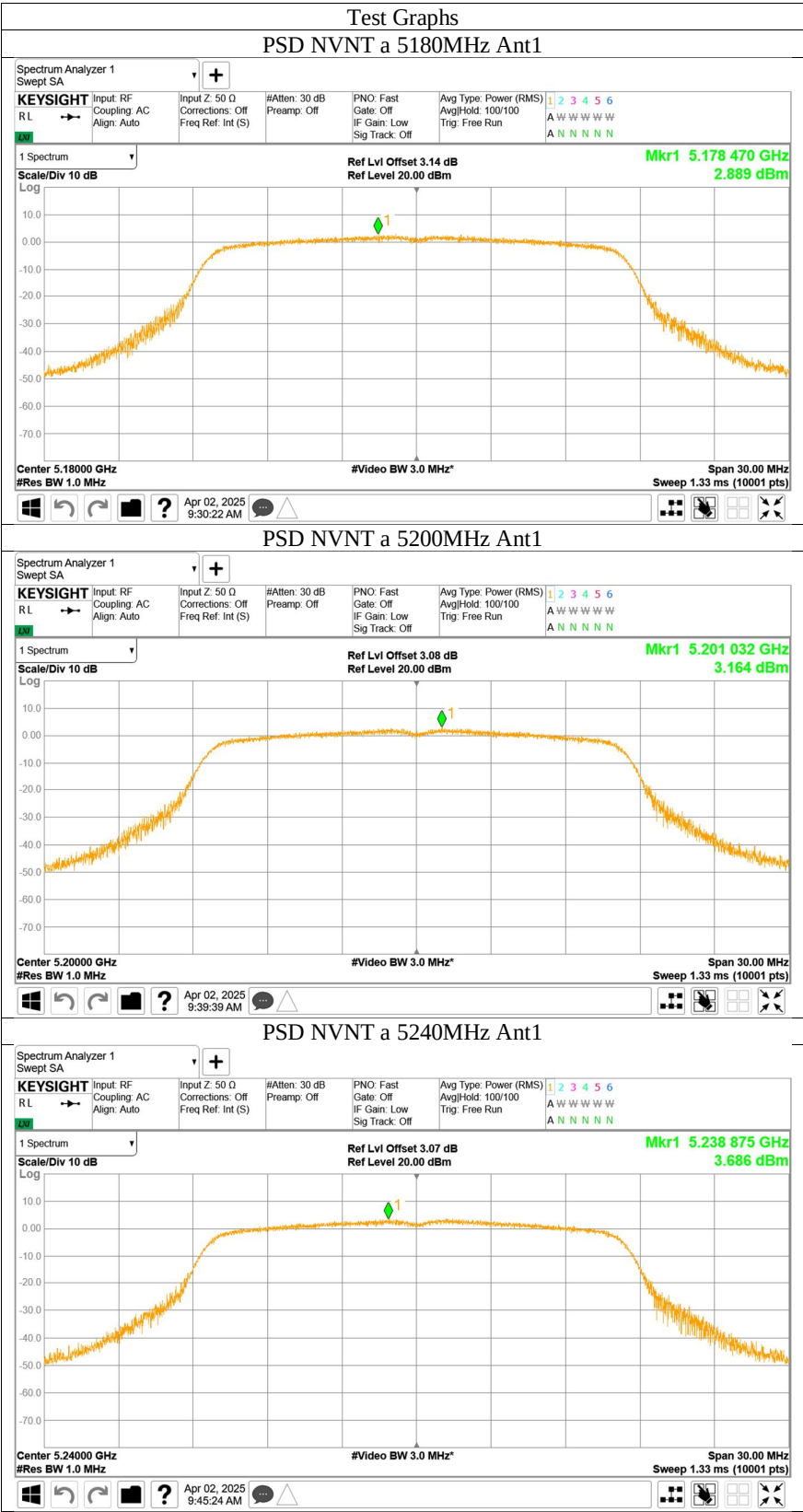
**Test Result:**

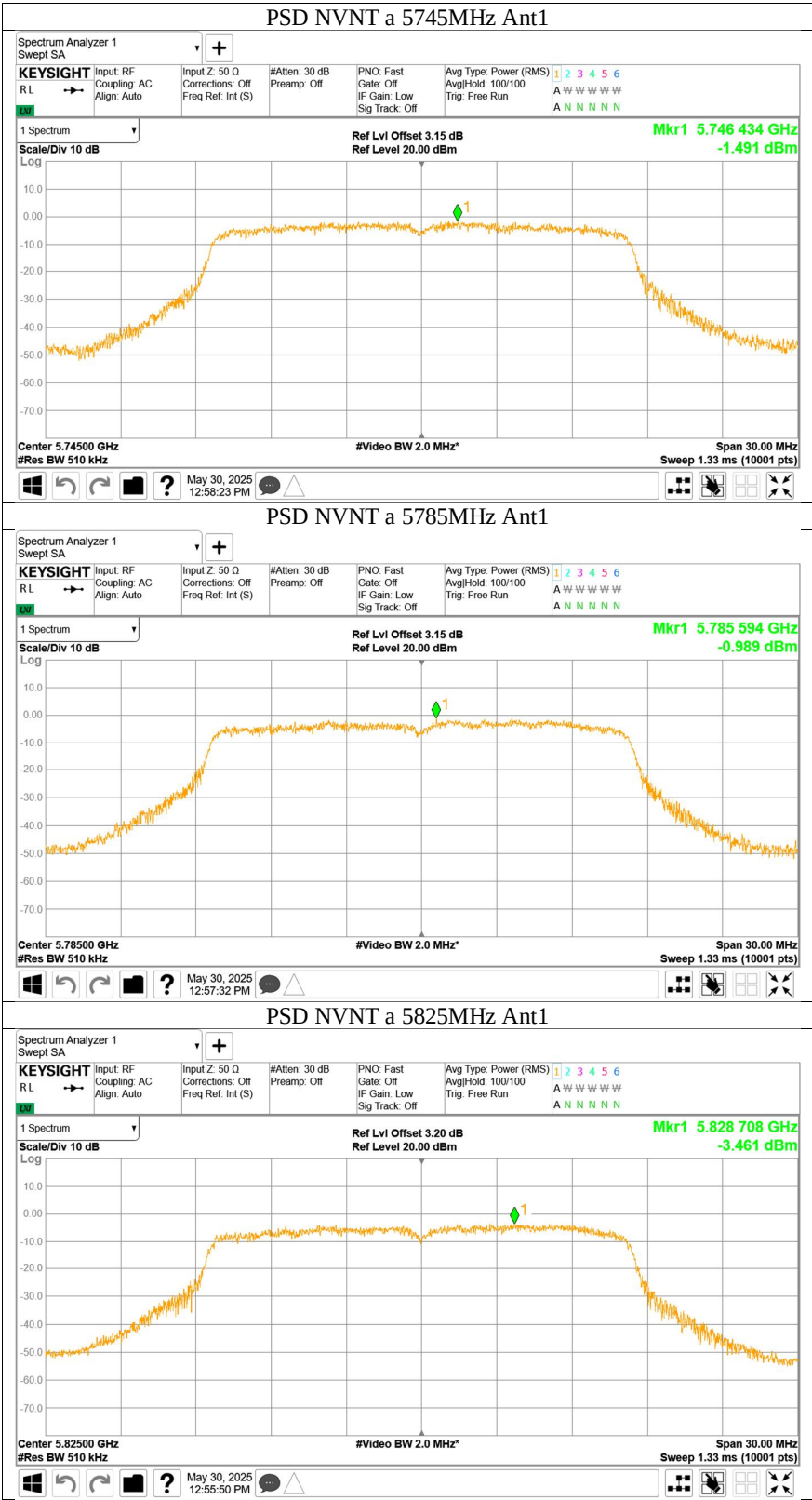
5180~5240 MHz (U-NII-1)

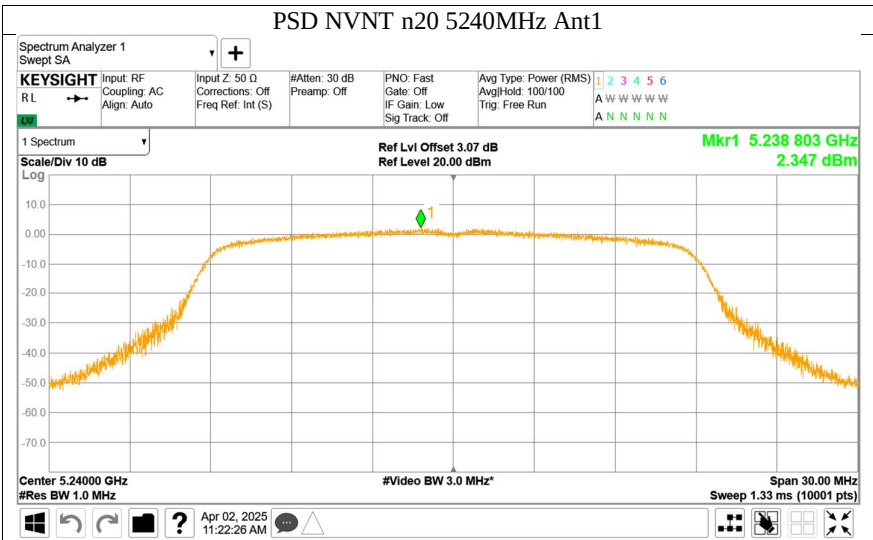
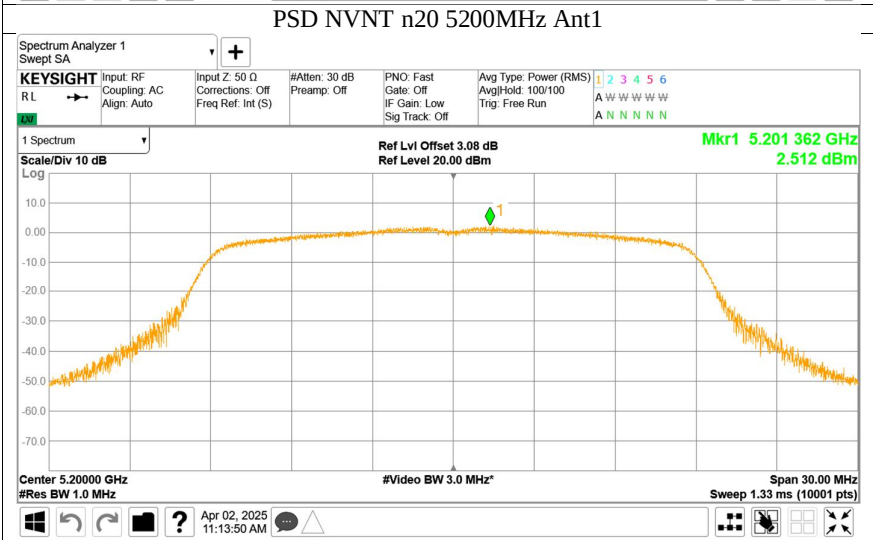
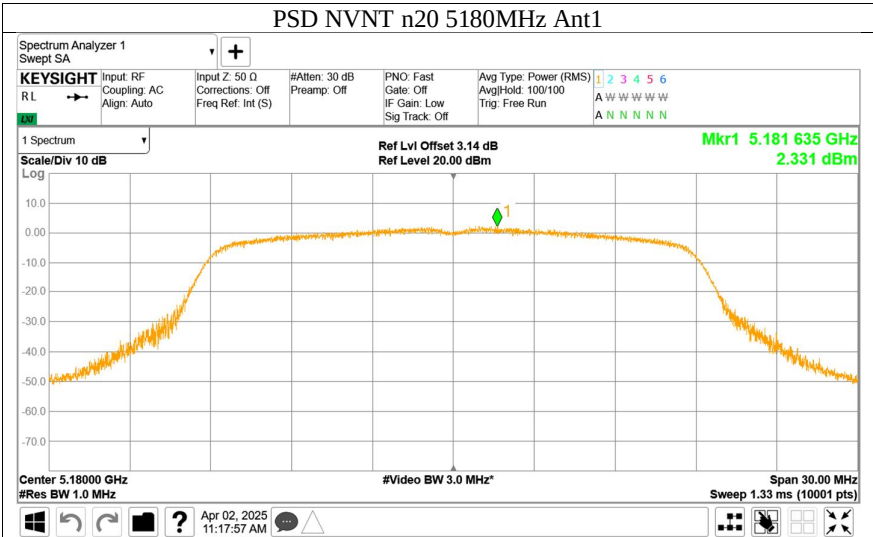
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	FCC Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	2.89	0.96	3.85	11	Pass
NVNT	a	5200	Ant1	3.16	0.96	4.12	11	Pass
NVNT	a	5240	Ant1	3.69	0.96	4.65	11	Pass
NVNT	n20	5180	Ant1	2.33	1.02	3.35	11	Pass
NVNT	n20	5200	Ant1	2.51	1.02	3.53	11	Pass
NVNT	n20	5240	Ant1	2.35	1.02	3.37	11	Pass
NVNT	n40	5190	Ant1	-1.49	1.88	0.39	11	Pass
NVNT	n40	5230	Ant1	-1.11	1.88	0.77	11	Pass

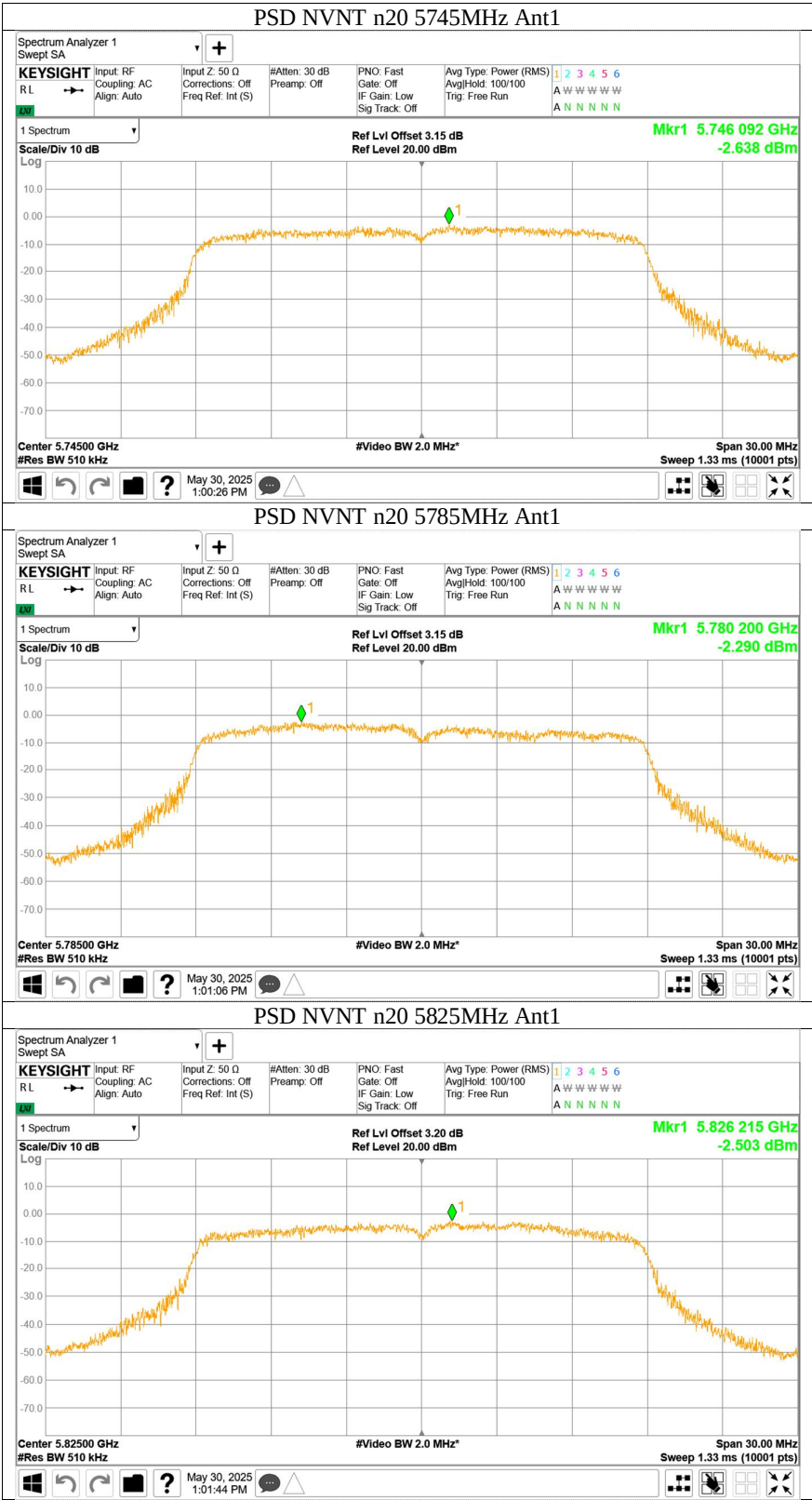
5745~5825 MHz (U-NII-3)

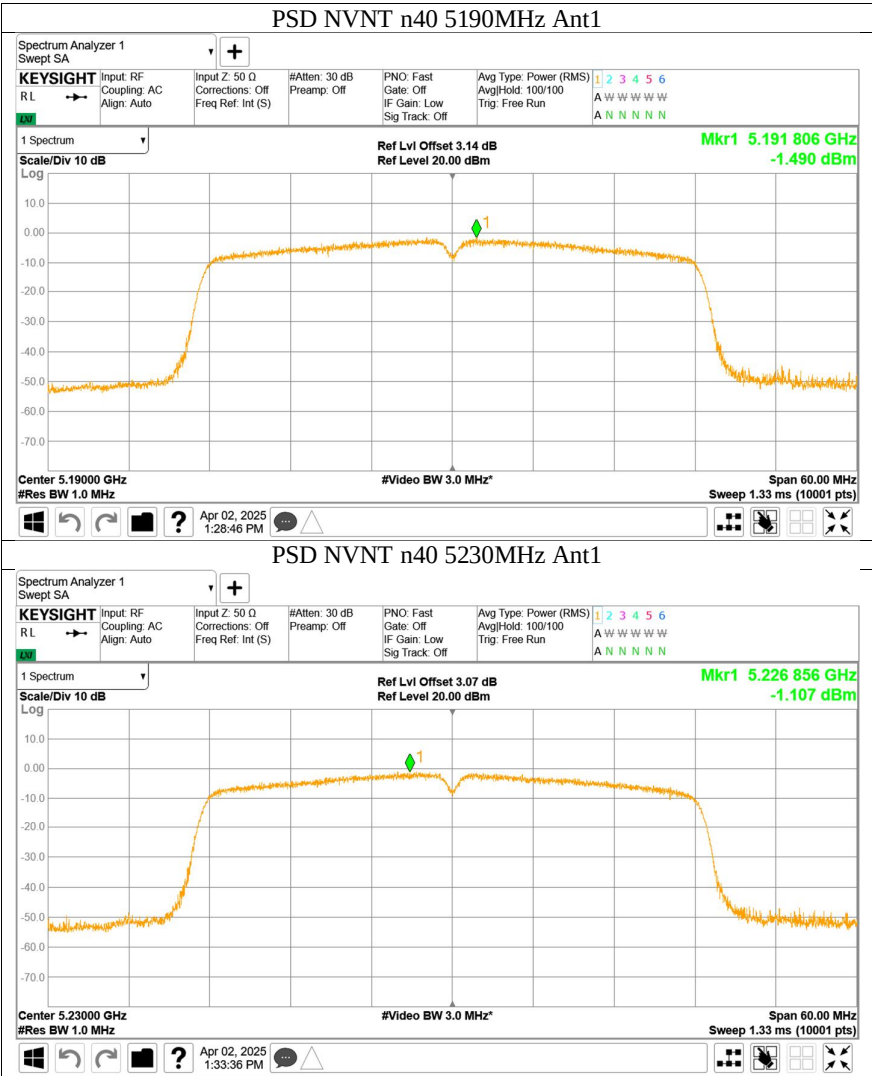
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/500KHz)	Duty Factor (dB)	Total PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	Ant1	-1.49	0.96	-0.53	30	Pass
NVNT	a	5785	Ant1	-0.99	0.96	-0.03	30	Pass
NVNT	a	5825	Ant1	-3.46	0.96	-2.5	30	Pass
NVNT	n20	5745	Ant1	-2.64	1.02	-1.62	30	Pass
NVNT	n20	5785	Ant1	-2.29	1.02	-1.27	30	Pass
NVNT	n20	5825	Ant1	-2.5	1.02	-1.48	30	Pass
NVNT	n40	5755	Ant1	-6.77	1.87	-4.9	30	Pass
NVNT	n40	5795	Ant1	-6.3	1.88	-4.42	30	Pass

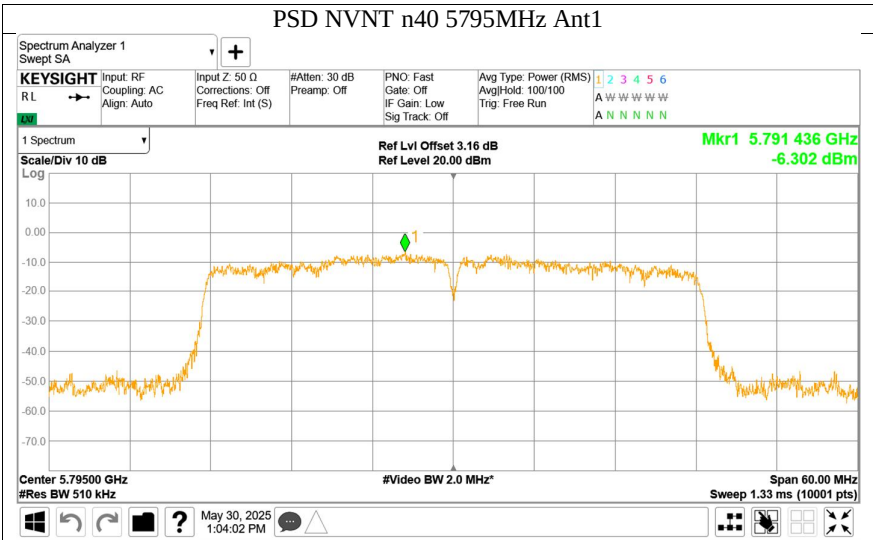
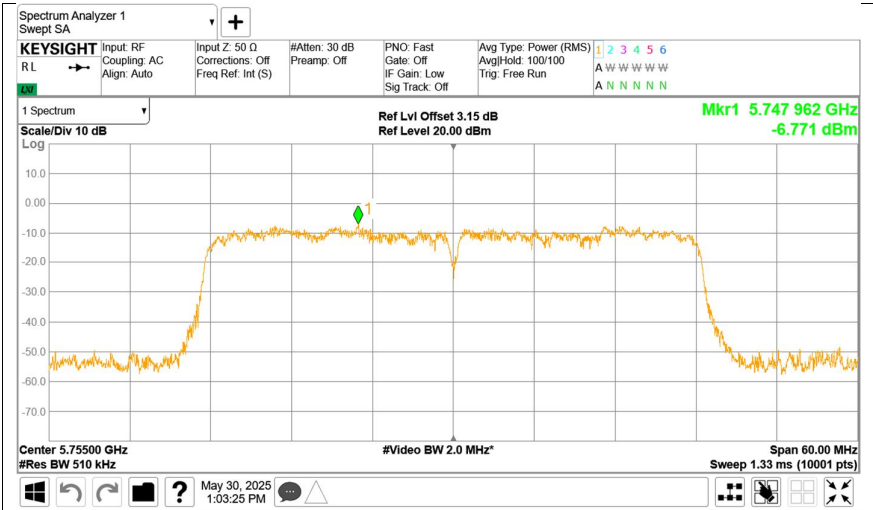














10.4 Frequencies Stability

Test Method

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement. The EUT was placed inside the environmental test chamber.
2. Set center frequency of the channel under test.
3. Test the OBW and record the frequency of the left and right frequency point.
4. Repeat the test at temperature specified by manufacture as below by not more than 10 °C step by normal voltage.
5. Repeat the test at 85% and 115% of the nominal supply voltage as below under normal temperature (+15 °C to +25 °C).

Limit:

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

Test Results (All conditions and all modes were performed, only list Worst-Case in the report)

Remark: NV is normal Voltage: 5V DC, HV is High Voltage: 5.75V DC, LV is Low Voltage: 4.25V DC, NT is normal Temperature: +20 °C. User manual temperature is -10°C to +60°C, normal Temperature is +20°C.

Pre-Scan all possible combinations between available conditions, such as NVNT, HVHT, LTLV, etc. ...
Only listed the worst result as below table

Test Result:

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Limit (MHz)	Verdict
20°C 5.75V	a	5180	Ant1	5180.59	5150-5250	Pass
20°C 4.25V	a	5180	Ant1	5180.44	5150-5250	Pass
-10°C 5V	a	5180	Ant1	5179.98	5150-5250	Pass
0°C 5V	a	5180	Ant1	5179.98	5150-5250	Pass
10°C 5V	a	5180	Ant1	5179.98	5150-5250	Pass
20°C 5V	a	5180	Ant1	5180	5150-5250	Pass
30°C 5V	a	5180	Ant1	5179.94	5150-5250	Pass
40°C 5V	a	5180	Ant1	5180.59	5150-5250	Pass
50°C 5V	a	5180	Ant1	5179.71	5150-5250	Pass
60°C 5V	a	5180	Ant1	5179.98	5150-5250	Pass
20°C 5.75V	a	5200	Ant1	5200.42	5150-5250	Pass
20°C 4.25V	a	5200	Ant1	5199.49	5150-5250	Pass
-10°C 5V	a	5200	Ant1	5200	5150-5250	Pass
0°C 5V	a	5200	Ant1	5199.98	5150-5250	Pass
10°C 5V	a	5200	Ant1	5199.98	5150-5250	Pass
20°C 5V	a	5200	Ant1	5199.96	5150-5250	Pass
30°C 5V	a	5200	Ant1	5199.52	5150-5250	Pass
40°C 5V	a	5200	Ant1	5200.68	5150-5250	Pass
50°C 5V	a	5200	Ant1	5200.11	5150-5250	Pass
60°C 5V	a	5200	Ant1	5200	5150-5250	Pass
20°C 5.75V	a	5240	Ant1	5240.05	5150-5250	Pass
20°C 4.25V	a	5240	Ant1	5239.54	5150-5250	Pass
-10°C 5V	a	5240	Ant1	5239.98	5150-5250	Pass
0°C 5V	a	5240	Ant1	5239.98	5150-5250	Pass
10°C 5V	a	5240	Ant1	5239.98	5150-5250	Pass
20°C 5V	a	5240	Ant1	5240	5150-5250	Pass
30°C 5V	a	5240	Ant1	5239.19	5150-5250	Pass
40°C 5V	a	5240	Ant1	5240.33	5150-5250	Pass
50°C 5V	a	5240	Ant1	5239.87	5150-5250	Pass
60°C 5V	a	5240	Ant1	5239.96	5150-5250	Pass
20°C 5.75V	a	5745	Ant1	5744.47	5725-5850	Pass
20°C 4.25V	a	5745	Ant1	5744.90	5725-5850	Pass
-10°C 5V	a	5745	Ant1	5745	5725-5850	Pass
0°C 5V	a	5745	Ant1	5744.98	5725-5850	Pass
10°C 5V	a	5745	Ant1	5744.98	5725-5850	Pass
20°C 5V	a	5745	Ant1	5745	5725-5850	Pass
30°C 5V	a	5745	Ant1	5744.40	5725-5850	Pass
40°C 5V	a	5745	Ant1	5744.04	5725-5850	Pass
50°C 5V	a	5745	Ant1	5745.98	5725-5850	Pass
60°C 5V	a	5745	Ant1	5744.98	5725-5850	Pass
20°C 5.75V	a	5785	Ant1	5785.20	5725-5850	Pass
20°C 4.25V	a	5785	Ant1	5785.13	5725-5850	Pass
-10°C 5V	a	5785	Ant1	5785	5725-5850	Pass
0°C 5V	a	5785	Ant1	5784.96	5725-5850	Pass
10°C 5V	a	5785	Ant1	5784.98	5725-5850	Pass
20°C 5V	a	5785	Ant1	5785	5725-5850	Pass
30°C 5V	a	5785	Ant1	5784.49	5725-5850	Pass
40°C 5V	a	5785	Ant1	5784.12	5725-5850	Pass
50°C 5V	a	5785	Ant1	5785.04	5725-5850	Pass
60°C 5V	a	5785	Ant1	5784.98	5725-5850	Pass



20°C 5.75V	a	5825	Ant1	5825.34	5725-5850	Pass
20°C 4.25V	a	5825	Ant1	5824.34	5725-5850	Pass
-10°C 5V	a	5825	Ant1	5824.98	5725-5850	Pass
0°C 5V	a	5825	Ant1	5824.98	5725-5850	Pass
10°C 5V	a	5825	Ant1	5824.98	5725-5850	Pass
20°C 5V	a	5825	Ant1	5824.98	5725-5850	Pass
30°C 5V	a	5825	Ant1	5824.23	5725-5850	Pass
40°C 5V	a	5825	Ant1	5825.21	5725-5850	Pass
50°C 5V	a	5825	Ant1	5825.49	5725-5850	Pass
60°C 5V	a	5825	Ant1	5824.98	5725-5850	Pass
20°C 5.75V	n20	5180	Ant1	5179.79	5150-5250	Pass
20°C 4.25V	n20	5180	Ant1	5179.26	5150-5250	Pass
-10°C 5V	n20	5180	Ant1	5180	5150-5250	Pass
0°C 5V	n20	5180	Ant1	5179.98	5150-5250	Pass
10°C 5V	n20	5180	Ant1	5179.98	5150-5250	Pass
20°C 5V	n20	5180	Ant1	5179.98	5150-5250	Pass
30°C 5V	n20	5180	Ant1	5179.28	5150-5250	Pass
40°C 5V	n20	5180	Ant1	5180.11	5150-5250	Pass
50°C 5V	n20	5180	Ant1	5180.17	5150-5250	Pass
60°C 5V	n20	5180	Ant1	5179.98	5150-5250	Pass
20°C 5.75V	n20	5200	Ant1	5200.47	5150-5250	Pass
20°C 4.25V	n20	5200	Ant1	5200.52	5150-5250	Pass
-10°C 5V	n20	5200	Ant1	5199.98	5150-5250	Pass
0°C 5V	n20	5200	Ant1	5199.98	5150-5250	Pass
10°C 5V	n20	5200	Ant1	5199.98	5150-5250	Pass
20°C 5V	n20	5200	Ant1	5199.98	5150-5250	Pass
30°C 5V	n20	5200	Ant1	5199.40	5150-5250	Pass
40°C 5V	n20	5200	Ant1	5200.67	5150-5250	Pass
50°C 5V	n20	5200	Ant1	5200.82	5150-5250	Pass
60°C 5V	n20	5200	Ant1	5199.96	5150-5250	Pass
20°C 5.75V	n20	5240	Ant1	5240.99	5150-5250	Pass
20°C 4.25V	n20	5240	Ant1	5239.81	5150-5250	Pass
-10°C 5V	n20	5240	Ant1	5239.96	5150-5250	Pass
0°C 5V	n20	5240	Ant1	5240	5150-5250	Pass
10°C 5V	n20	5240	Ant1	5239.98	5150-5250	Pass
20°C 5V	n20	5240	Ant1	5239.96	5150-5250	Pass
30°C 5V	n20	5240	Ant1	5240.20	5150-5250	Pass
40°C 5V	n20	5240	Ant1	5239.73	5150-5250	Pass
50°C 5V	n20	5240	Ant1	5240.90	5150-5250	Pass
60°C 5V	n20	5240	Ant1	5239.98	5150-5250	Pass
20°C 5.75V	n20	5745	Ant1	5745.62	5725-5850	Pass
20°C 4.25V	n20	5745	Ant1	5745.00	5725-5850	Pass
-10°C 5V	n20	5745	Ant1	5745	5725-5850	Pass
0°C 5V	n20	5745	Ant1	5744.98	5725-5850	Pass
10°C 5V	n20	5745	Ant1	5744.98	5725-5850	Pass
20°C 5V	n20	5745	Ant1	5745.02	5725-5850	Pass
30°C 5V	n20	5745	Ant1	5745.12	5725-5850	Pass
40°C 5V	n20	5745	Ant1	5745.93	5725-5850	Pass
50°C 5V	n20	5745	Ant1	5744.03	5725-5850	Pass
60°C 5V	n20	5745	Ant1	5745	5725-5850	Pass
20°C 5.75V	n20	5785	Ant1	5784.97	5725-5850	Pass
20°C 4.25V	n20	5785	Ant1	5784.51	5725-5850	Pass
-10°C 5V	n20	5785	Ant1	5784.94	5725-5850	Pass
0°C 5V	n20	5785	Ant1	5785	5725-5850	Pass
10°C 5V	n20	5785	Ant1	5785	5725-5850	Pass
20°C 5V	n20	5785	Ant1	5784.98	5725-5850	Pass



30°C 5V	n20	5785	Ant1	5784.19	5725-5850	Pass
40°C 5V	n20	5785	Ant1	5784.36	5725-5850	Pass
50°C 5V	n20	5785	Ant1	5785.90	5725-5850	Pass
60°C 5V	n20	5785	Ant1	5785	5725-5850	Pass
20°C 5.75V	n20	5825	Ant1	5825.95	5725-5850	Pass
20°C 4.25V	n20	5825	Ant1	5824.28	5725-5850	Pass
-10°C 5V	n20	5825	Ant1	5825	5725-5850	Pass
0°C 5V	n20	5825	Ant1	5824.96	5725-5850	Pass
10°C 5V	n20	5825	Ant1	5825	5725-5850	Pass
20°C 5V	n20	5825	Ant1	5824.96	5725-5850	Pass
30°C 5V	n20	5825	Ant1	5824.76	5725-5850	Pass
40°C 5V	n20	5825	Ant1	5824.91	5725-5850	Pass
50°C 5V	n20	5825	Ant1	5825.56	5725-5850	Pass
60°C 5V	n20	5825	Ant1	5824.94	5725-5850	Pass
20°C 5.75V	n40	5190	Ant1	5190.55	5150-5250	Pass
20°C 4.25V	n40	5190	Ant1	5189.08	5150-5250	Pass
-10°C 5V	n40	5190	Ant1	5190	5150-5250	Pass
0°C 5V	n40	5190	Ant1	5190.04	5150-5250	Pass
10°C 5V	n40	5190	Ant1	5189.96	5150-5250	Pass
20°C 5V	n40	5190	Ant1	5189.92	5150-5250	Pass
30°C 5V	n40	5190	Ant1	5190.40	5150-5250	Pass
40°C 5V	n40	5190	Ant1	5189.71	5150-5250	Pass
50°C 5V	n40	5190	Ant1	5189.05	5150-5250	Pass
60°C 5V	n40	5190	Ant1	5189.00	5150-5250	Pass
20°C 5.75V	n40	5230	Ant1	5230.28	5150-5250	Pass
20°C 4.25V	n40	5230	Ant1	5230.70	5150-5250	Pass
-10°C 5V	n40	5230	Ant1	5229.96	5150-5250	Pass
0°C 5V	n40	5230	Ant1	5229.96	5150-5250	Pass
10°C 5V	n40	5230	Ant1	5229.92	5150-5250	Pass
20°C 5V	n40	5230	Ant1	5230.08	5150-5250	Pass
30°C 5V	n40	5230	Ant1	5230.26	5150-5250	Pass
40°C 5V	n40	5230	Ant1	5230.04	5150-5250	Pass
50°C 5V	n40	5230	Ant1	5230.56	5150-5250	Pass
60°C 5V	n40	5230	Ant1	5230	5150-5250	Pass
20°C 5.75V	n40	5755	Ant1	5755.04	5725-5850	Pass
20°C 4.25V	n40	5755	Ant1	5755.63	5725-5850	Pass
-10°C 5V	n40	5755	Ant1	5754.96	5725-5850	Pass
0°C 5V	n40	5755	Ant1	5755.08	5725-5850	Pass
10°C 5V	n40	5755	Ant1	5754.92	5725-5850	Pass
20°C 5V	n40	5755	Ant1	5754.96	5725-5850	Pass
30°C 5V	n40	5755	Ant1	5755.31	5725-5850	Pass
40°C 5V	n40	5755	Ant1	5754.95	5725-5850	Pass
50°C 5V	n40	5755	Ant1	5754.05	5725-5850	Pass
60°C 5V	n40	5755	Ant1	5755	5725-5850	Pass
20°C 5.75V	n40	5795	Ant1	5795.59	5725-5850	Pass
20°C 4.25V	n40	5795	Ant1	5795.31	5725-5850	Pass
-10°C 5V	n40	5795	Ant1	5794.96	5725-5850	Pass
0°C 5V	n40	5795	Ant1	5795.08	5725-5850	Pass
10°C 5V	n40	5795	Ant1	5794.98	5725-5850	Pass
20°C 5V	n40	5795	Ant1	5794.96	5725-5850	Pass
30°C 5V	n40	5795	Ant1	5795.29	5725-5850	Pass
40°C 5V	n40	5795	Ant1	5795.16	5725-5850	Pass
50°C 5V	n40	5795	Ant1	5794.50	5725-5850	Pass
60°C 5V	n40	5795	Ant1	5794.92	5725-5850	Pass

10.5 Unwanted emissions

Transmitting spurious emission test result as below:

Test Method

Radiated Mode:

1. The EUT was placed on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
3. The height of antenna 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.
4. 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 and the rotatable table was turned
5. Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious
 RBW = 1MHz, VBW ≥ RBW for peak measurement and VBW = 10Hz for average measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious
 RBW = 100 KHz, VBW ≥ RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (20log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.

Limit

- (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 5.725-5.85 GHz band:

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.



According to part 15.407(b), the radio emission outside the operating frequency band 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. Radiated emissions which fall in the restricted bands, as defined in section 15.205, must comply with the radiated emission limits specified in section 15.209.

FCC part 15.209(a): Field strength limits at frequencies below 30 MHz

Frequency MHz	Field Strength $\mu\text{V/m}$	Field Strength $\text{dB}\mu\text{V/m}$	Detector	Measurement distance meters
0.009-0.490	2400/F(kHz)	48.5-13.8	AV	300
0.490-1.705	24000/F(kHz)	33.8-23.0	QP	30
1.705-30	30	29.5	QP	30

Note 1: Limit 3m(dB $\mu\text{V/m}$)=Limit 300m(dB $\mu\text{V/m}$)+40Log(300m/3m) (Below 30MHz)

Note 2: Limit 3m(dB $\mu\text{V/m}$)=Limit 30m(dB $\mu\text{V/m}$)+40Log(30m/3m) (Below 30MHz)

FCC part 15.209(a): Field strength limits at frequencies above 30MHz

Frequency MHz	Field Strength $\mu\text{V/m}$	Field Strength $\text{dB}\mu\text{V/m}$	Detector	Measurement distance meters
30-88	100	40	QP	3
88-216	150	43.5	QP	3
216-960	200	46	QP	3
960-1000	500	54	QP	3
Above 1000	500	54	AV	3
Above 1000	5000	74	PK	3

Worst case Radiated Emission 9KHz-30MHz

0.009-30MHz Radiated Emission

EUT Information

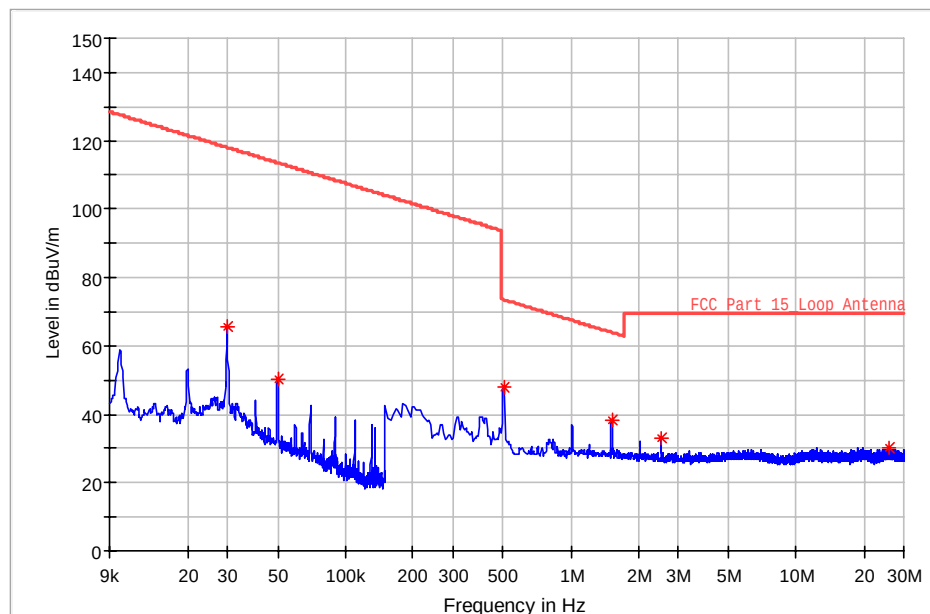
EUT Name: DASH CAM
 Model: M800-2
 Client: 70mai Co., Ltd.
 Op Cond: Power on and TX_5180MHz at 802.11 a mode
 Operator: Chengjie Guo
 Test Spec: FCC 15.209 (a)
 Comment: Horizontal
 Sample No: SHA-899681-2

Sweep Setup: RE_Loop E_pre [EMI radiated]

Hardware Setup: RE_Loop Antenna V
 Receiver: [ESR 3]
 Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 150 kHz	88.125 Hz	PK+	200 Hz	0.01 s	0 dB
150 kHz - 30 MHz	4.39 kHz	PK+	9 kHz	0.01 s	0 dB

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.029974	65.43	118.07	52.64	100.0	H	104.0	18.9
0.049978	50.32	113.63	63.31	100.0	H	5.0	18.9
0.505566	48.03	73.53	25.49	100.0	H	235.0	18.7
1.519588	38.40	63.97	25.57	100.0	H	235.0	18.8
2.533610	32.92	69.54	36.62	100.0	H	235.0	19.0
25.961471	30.14	69.54	39.40	100.0	H	110.0	19.5

0.009-30MHz Radiated Emission

EUT Information

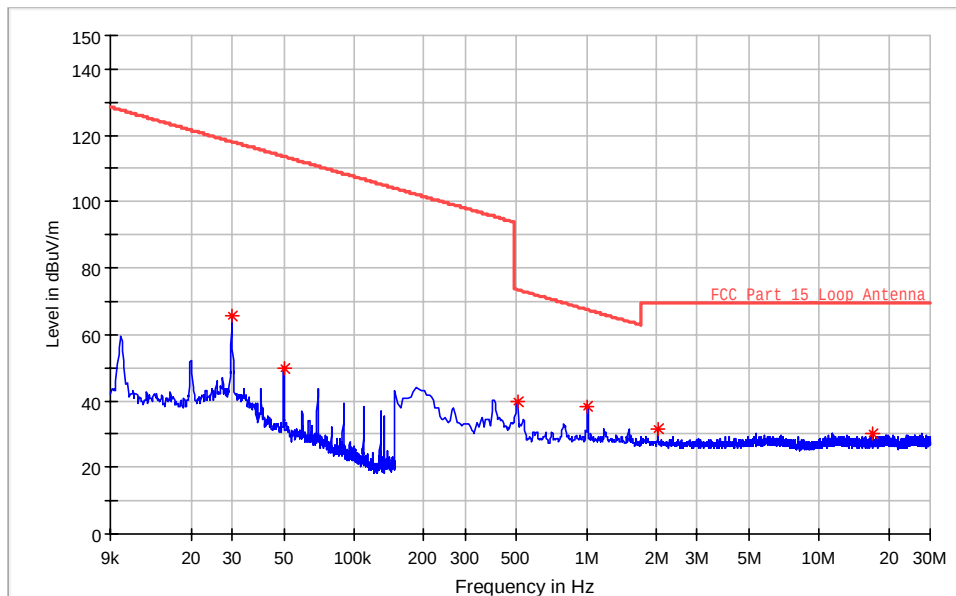
EUT Name: DASH CAM
 Model: M800-2
 Client: 70mai Co., Ltd.
 Op Cond: Power on and TX_5180MHz at 802.11 a mode
 Operator: Chengjie Guo
 Test Spec: FCC 15.209 (a)
 Comment: Vertical
 Sample No: SHA-899681-2

Sweep Setup: RE_Loop E_pre [EMI radiated]

Hardware Setup: RE_Loop Antenna V
 Receiver: [ESR 3]
 Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 150 kHz	88.125 Hz	PK+	200 Hz	0.01 s	0 dB
150 kHz - 30 MHz	4.39 kHz	PK+	9 kHz	0.01 s	0 dB

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.029974	65.73	118.07	52.34	100.0	Y	115.0	18.9
0.049978	49.69	113.63	63.93	100.0	Y	140.0	18.9
0.505566	39.76	73.53	33.77	100.0	Y	275.0	18.7
1.010383	38.29	67.51	29.22	100.0	Y	275.0	18.8
2.024405	31.48	69.54	38.06	100.0	Y	275.0	18.9
17.094265	30.40	69.54	39.15	100.0	Y	117.0	18.9

Worst case Radiated Emission 30MHz-1GHz

30-1000MHz Radiated Emission

EUT Information

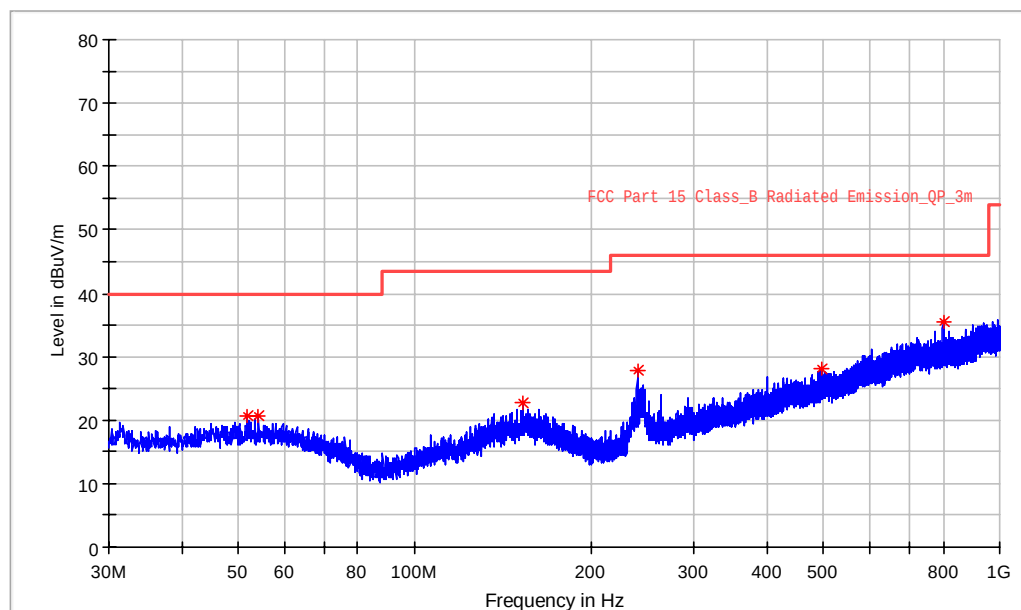
EUT Name: DASH CAM
 Model: M800-2
 Client: 70mai Co., Ltd.
 Op Cond: Power on and TX_5180MHz at 802.11 a mode
 Operator: Chengjie Guo
 Test Spec: FCC 15.209 (a)
 Comment: Horizontal
 Sample No: SHA-899681-2

Sweep Setup: RE_VULB9168_pre_Cont_30-1000 [EMI radiated]

Hardware Setup: RE_VULB9168
 Receiver: [ESR 3]
 Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	48.5 kHz	PK+	120 kHz	0.2 s	20 dB

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
51.728000	20.69	40.00	19.31	150.0	H	290.0	20.9
54.104500	20.66	40.00	19.34	100.0	H	143.0	20.9
153.238500	22.76	43.50	20.74	250.0	H	0.0	21.0
240.005000	27.78	46.00	18.22	200.0	H	138.0	19.7
496.279000	28.17	46.00	17.83	100.0	H	245.0	27.0
800.034500	35.61	46.00	10.39	150.0	H	97.0	32.8

30-1000MHz Radiated Emission

EUT Information

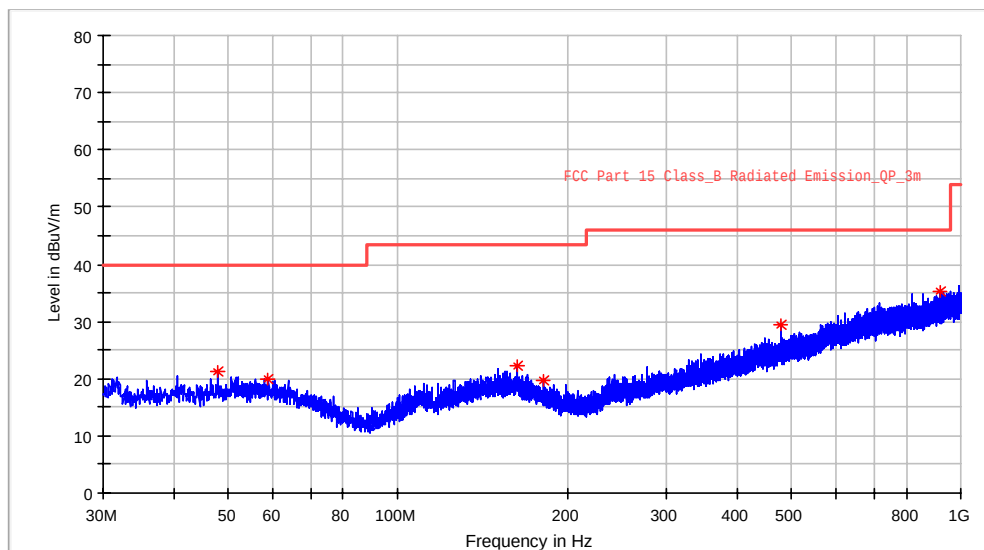
EUT Name: DASH CAM
 Model: M800-2
 Client: 70mai Co., Ltd.
 Op Cond: Power on and TX_5180MHz at 802.11 a mode
 Operator: Chengjie Guo
 Test Spec: FCC 15.209 (a)
 Comment: Vertical
 Sample No: SHA-899681-2

Sweep Setup: RE_VULB9168_pre_Cont_30-1000 [EMI radiated]

Hardware Setup: RE_VULB9168
 Receiver: [ESR 3]
 Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	48.5 kHz	PK+	120 kHz	0.2 s	20 dB

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
47.945000	21.11	40.00	18.89	200.0	V	359.0	20.7
59.003000	20.04	40.00	19.96	100.0	V	86.0	20.7
163.569000	22.24	43.50	21.26	250.0	V	236.0	20.9
181.271500	19.63	43.50	23.87	100.0	V	115.0	19.4
480.031500	29.30	46.00	16.70	300.0	V	68.0	26.5
918.471500	35.29	46.00	10.71	200.0	V	318.0	34.3

Note 1:

Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

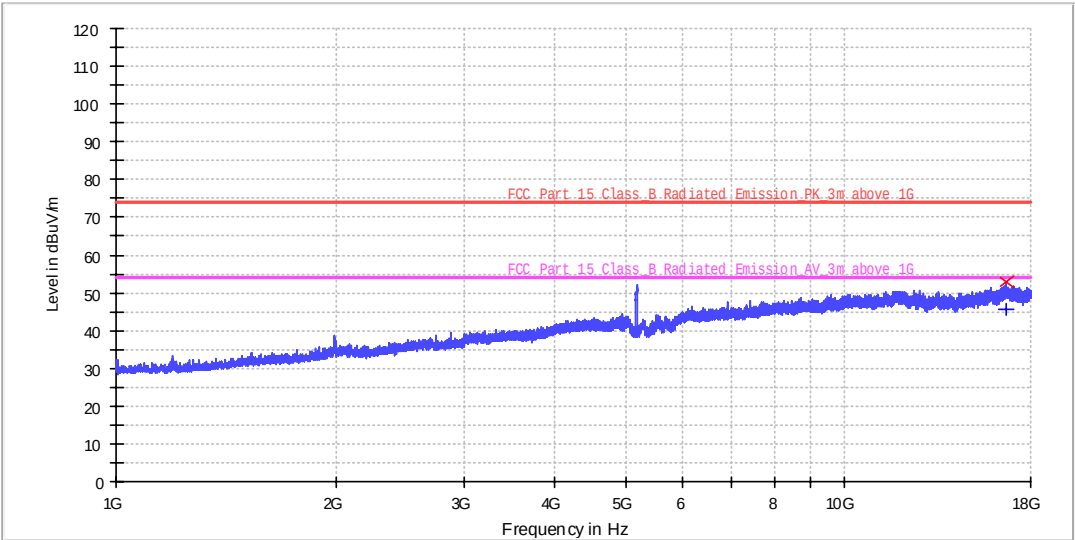
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



Radiated Emission 1-18 GHz

Spurious Emission: 802.11a 5180MHz

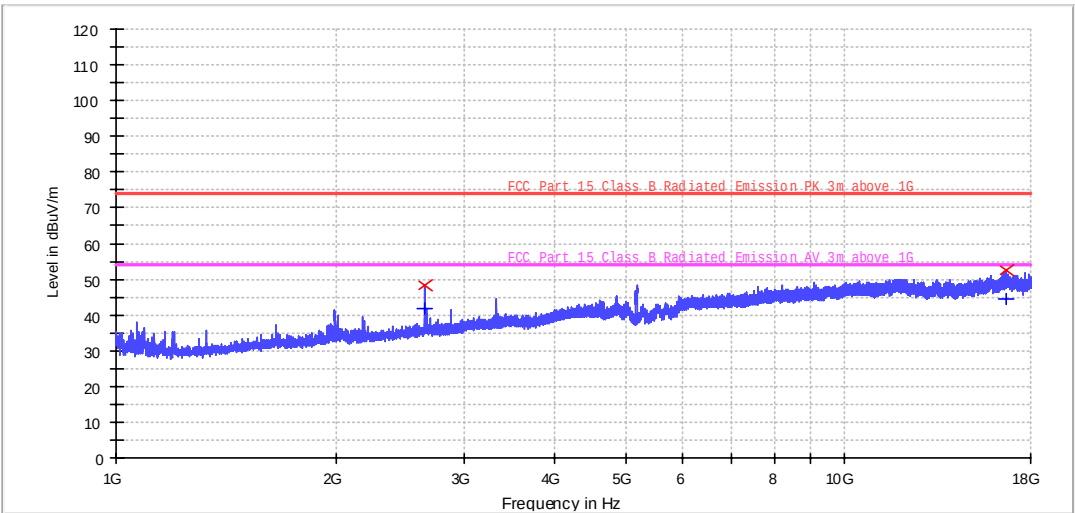
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	RMS (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
16646.500000	52.8	45.6	150.0	H	241.0	7.0	21.2	74.0	8.4	54.0

RE_HF907_BRF_Pre



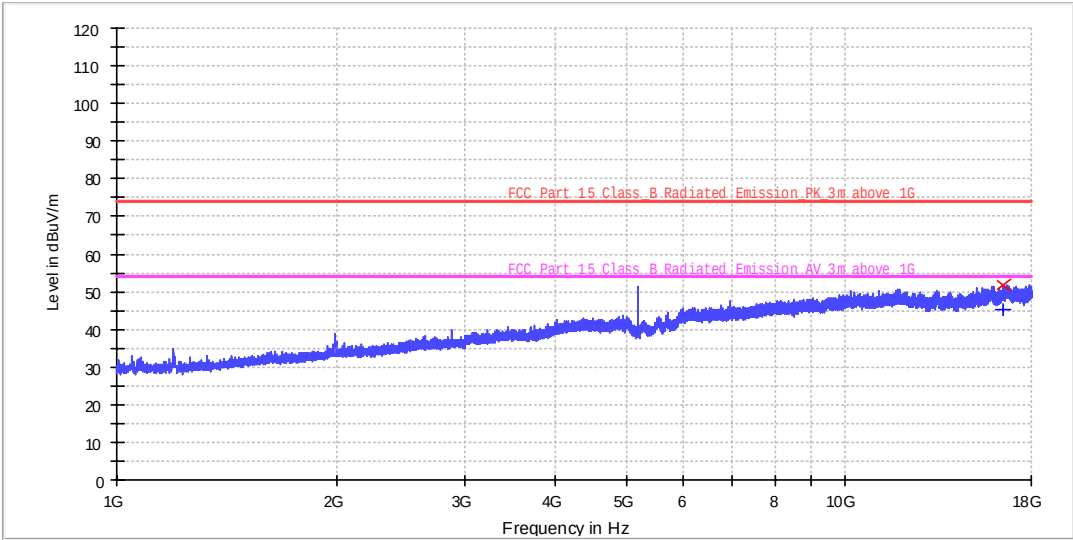
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
2654.200000	48.2	41.7	250.0	V	143.0	-9.6	25.8	74.0	12.3	54.0
16683.100000	52.5	44.6	150.0	V	309.0	7.1	21.5	74.0	9.4	54.0



Spurious Emission: 802.11a 5200MHz

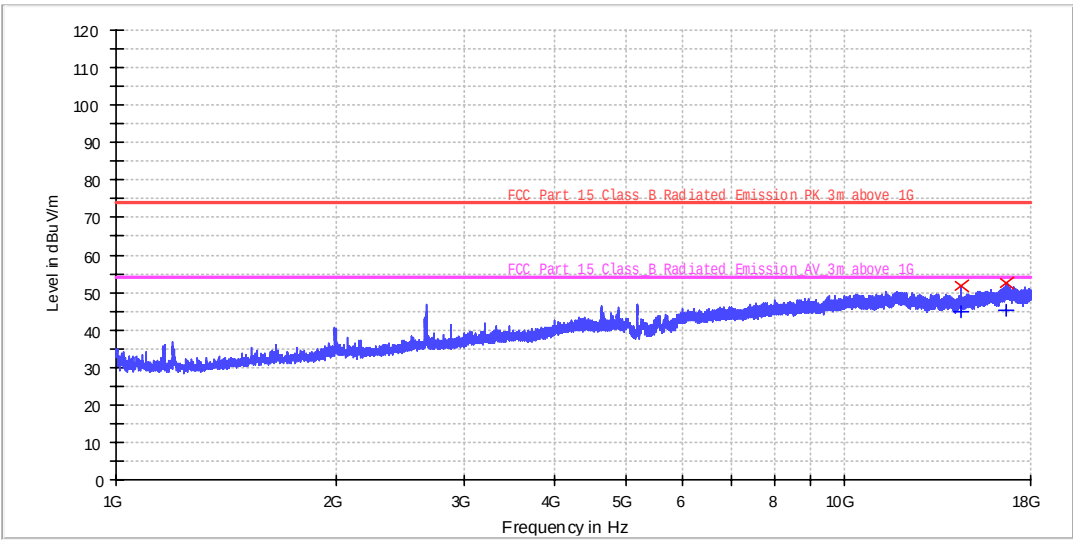
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
16455.700000	51.7	45.3	150.0	H	250.0	6.6	22.3	74.0	8.7	54.0

RE_HF907_BRF_Pre



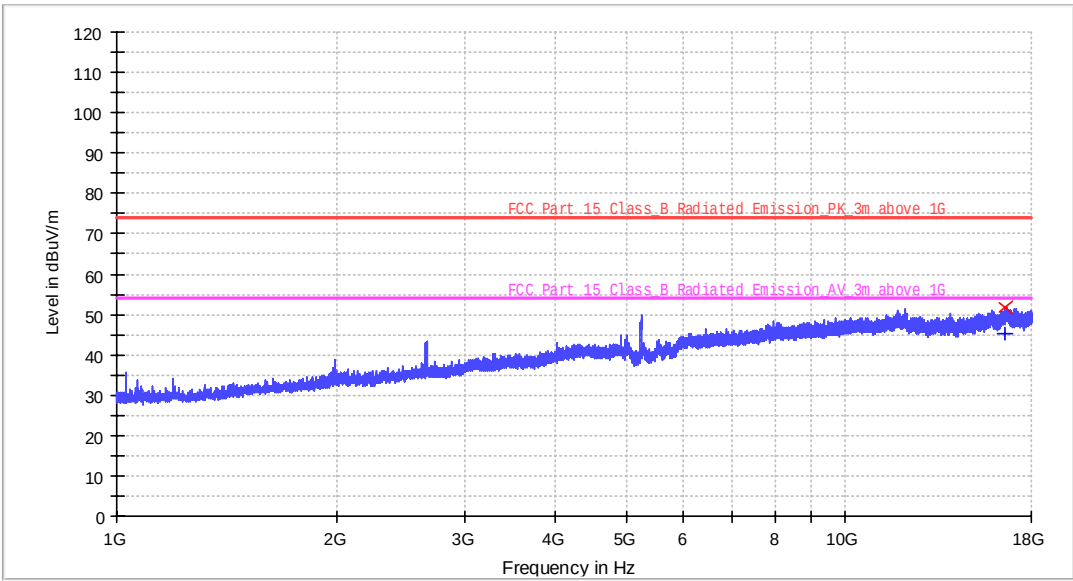
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
14420.500000	51.8	44.9	200.0	V	139.0	4.5	22.2	74.0	9.1	54.0
16679.800000	52.5	45.3	250.0	V	317.0	7.0	21.5	74.0	8.7	54.0



Spurious Emission: 802.11a 5240MHz

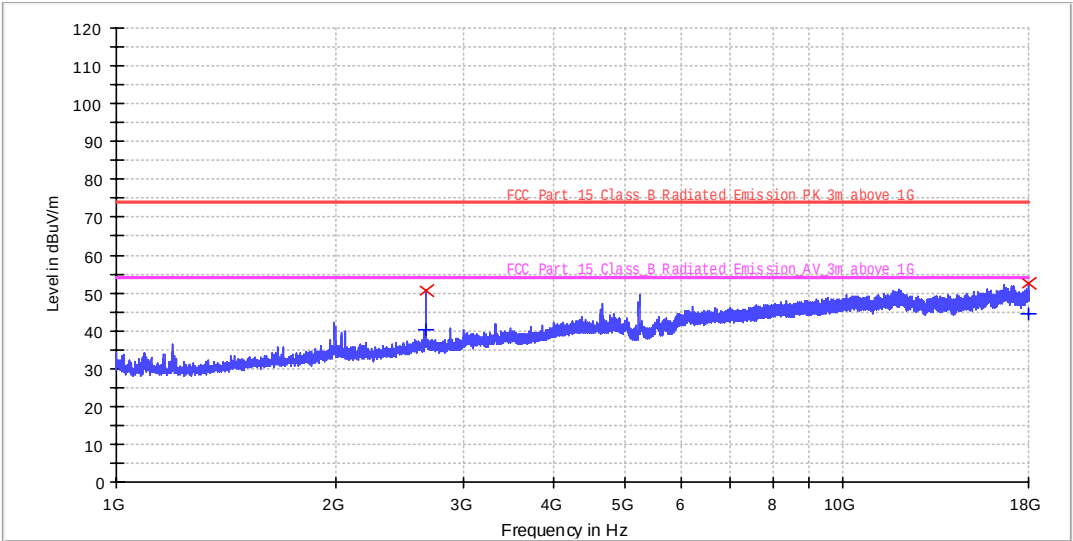
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
16581.700000	51.8	45.3	300.0	H	195.0	6.8	22.2	74.0	8.7	54.0

RE_HF907_BRF_Pre



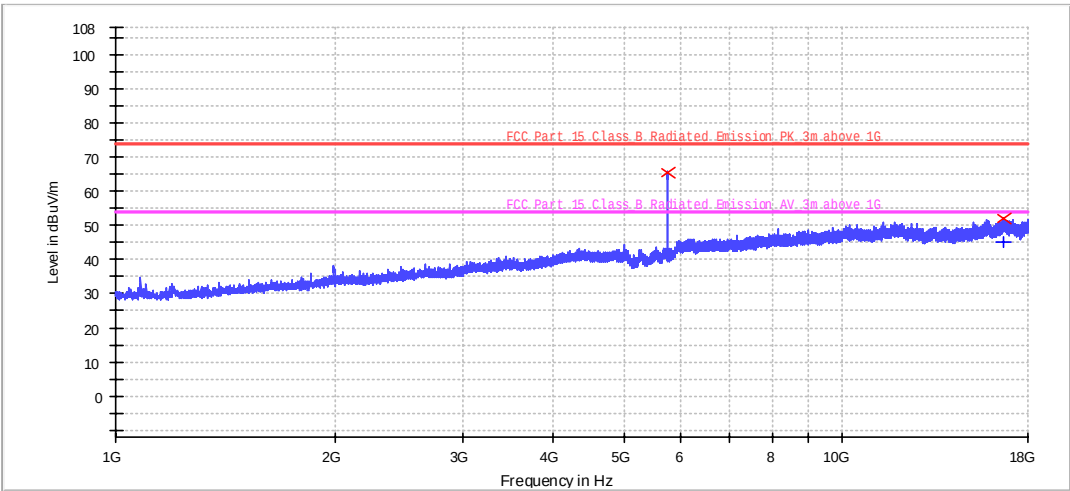
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
2665.000000	50.6	40.4	300.0	V	155.0	-9.6	23.4	74.0	13.6	54.0
17947.300000	52.5	44.5	150.0	V	293.0	7.8	21.5	74.0	9.5	54.0



Spurious Emission: 802.11a 5745MHz

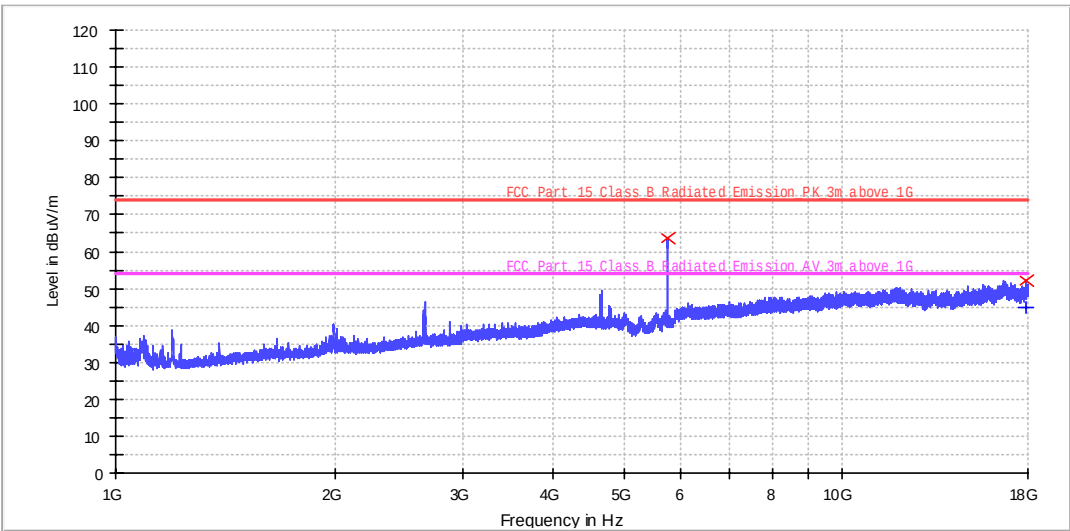
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/)	Margin - AV (dB)	Limit - AV (dBuV/m)
5744.062500	65.4	---	150.0	V	254.0	-1.5	8.6	74.0	---	---
16709.500000	51.9	45.3	200.0	V	146.0	7.1	22.1	74.0	8.7	54.0

RE_HF907_BRF_Pre



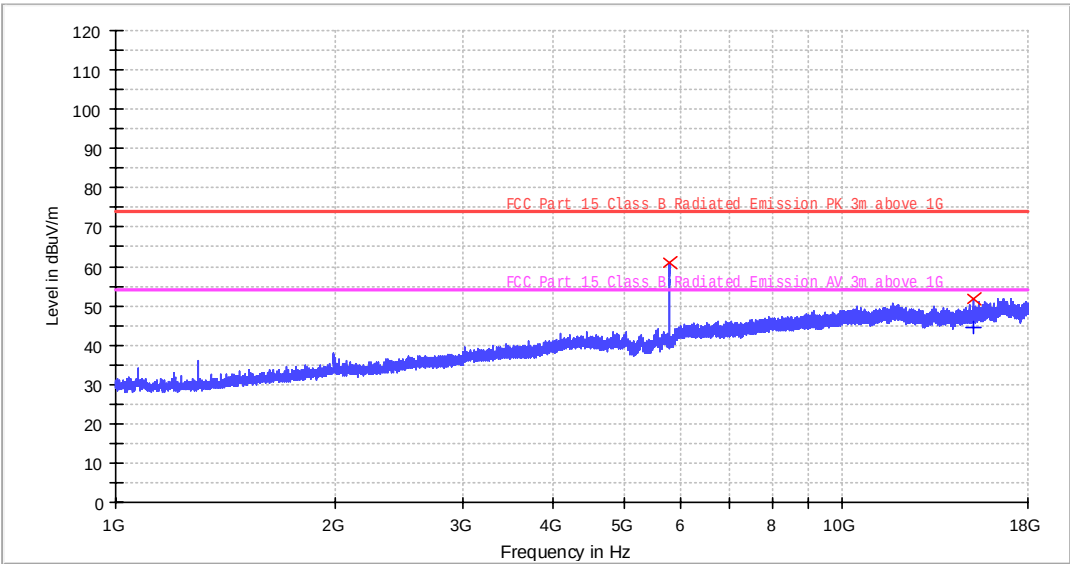
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5743.000000	63.6	---	200.0	V	225.0	-1.5	10.4	74.0	---	---
17893.600000	52.1	44.9	150.0	V	318.0	7.8	21.9	74.0	9.2	54.0



Spurious Emission: 802.11a 5785MHz

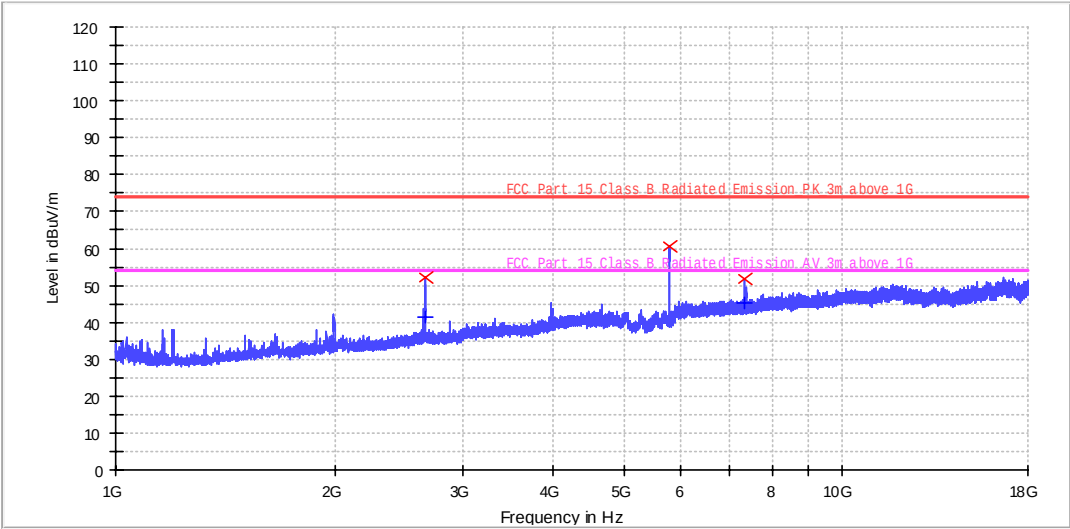
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5784.437500	60.3	---	150.0	H	149.0	-1.4	13.7	74.0	---	---
15120.700000	51.9	44.4	250.0	H	258.0	5.0	22.1	74.0	9.6	54.0

RE_HF907_BRF_Pre



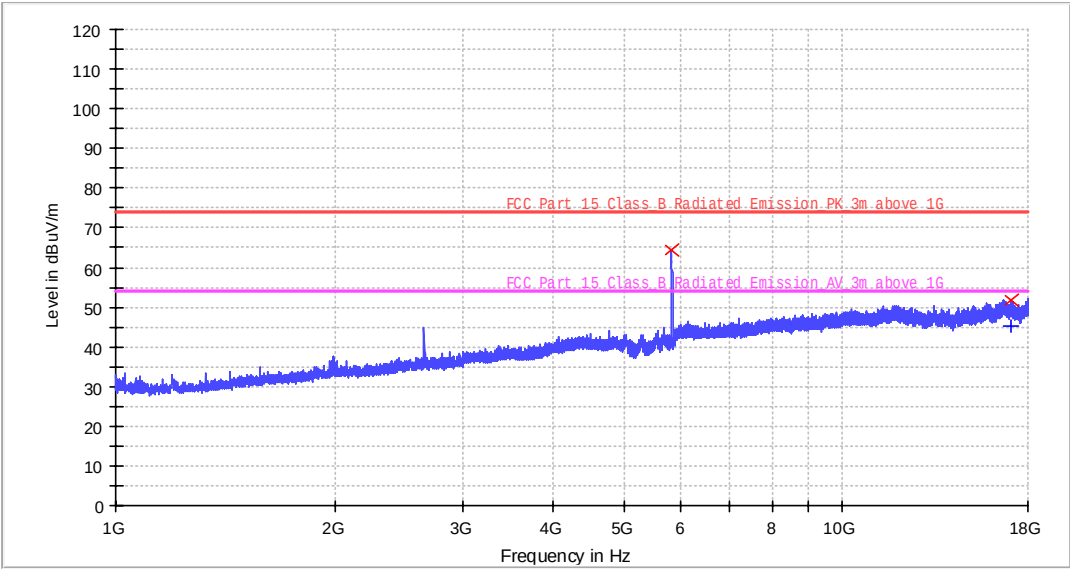
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
2661.700000	52.1	41.3	150.0	V	112.0	-9.6	21.9	74.0	12.7	54.0
5783.906250	60.8	---	250.0	V	198.0	-1.4	13.2	74.0	---	---
7314.400000	51.7	45.2	200.0	V	267.0	0.8	22.3	74.0	8.8	54.0



Spurious Emission: 802.11a 5825MHz

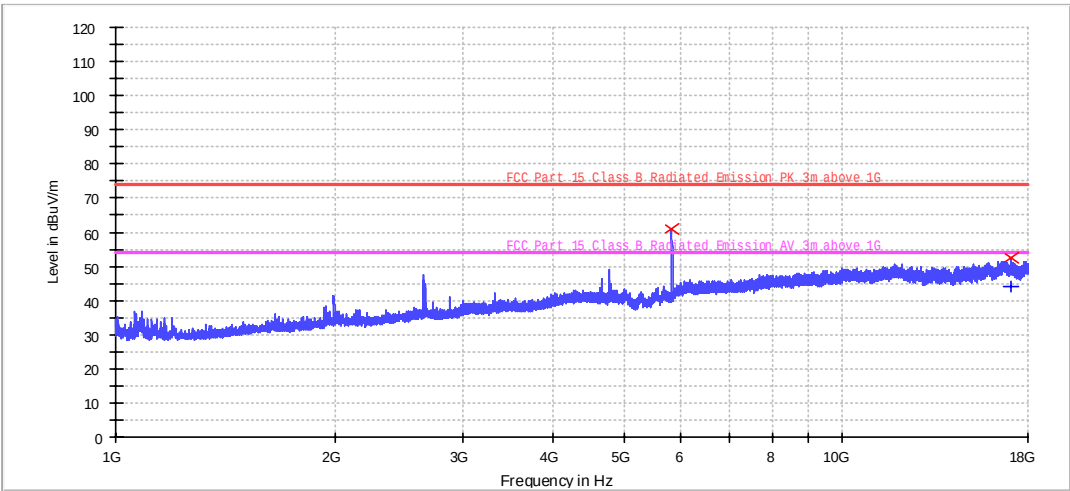
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5824.300000	64.3	---	300.0	H	155.0	-1.3	9.7	74.0	---	---
17100.100000	51.9	45.1	150.0	H	273.0	7.2	22.1	74.0	8.9	54.0

RE_HF907_BRF_Pre



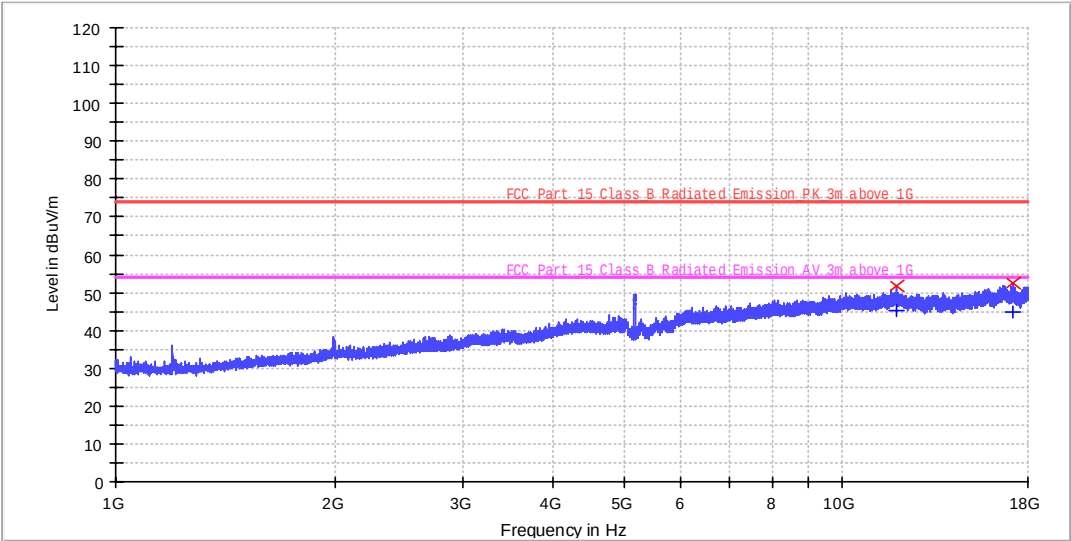
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5826.400000	61.1	---	150.0	V	198.0	-1.3	12.9	74.0	---	---
17082.400000	52.5	44.0	350.0	V	218.0	7.1	21.5	74.0	10.0	54.0



Spurious Emission: 802.11n20 5180MHz

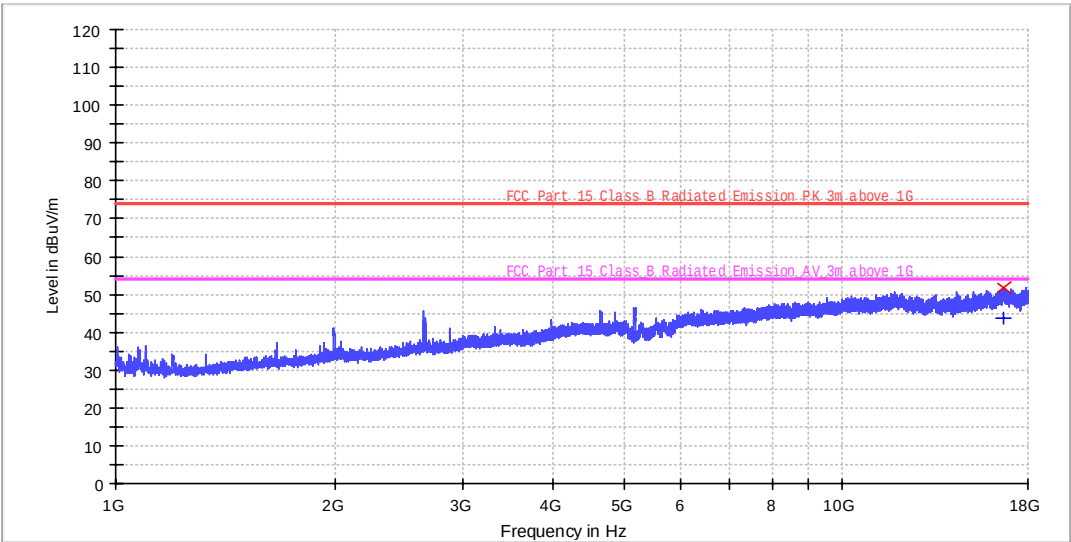
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
11883.700000	51.7	45.3	200.0	H	251.0	5.1	22.3	74.0	8.7	54.0
17119.300000	52.4	44.7	150.0	H	317.0	7.2	21.6	74.0	9.3	54.0

RE_HF907_BRF_Pre



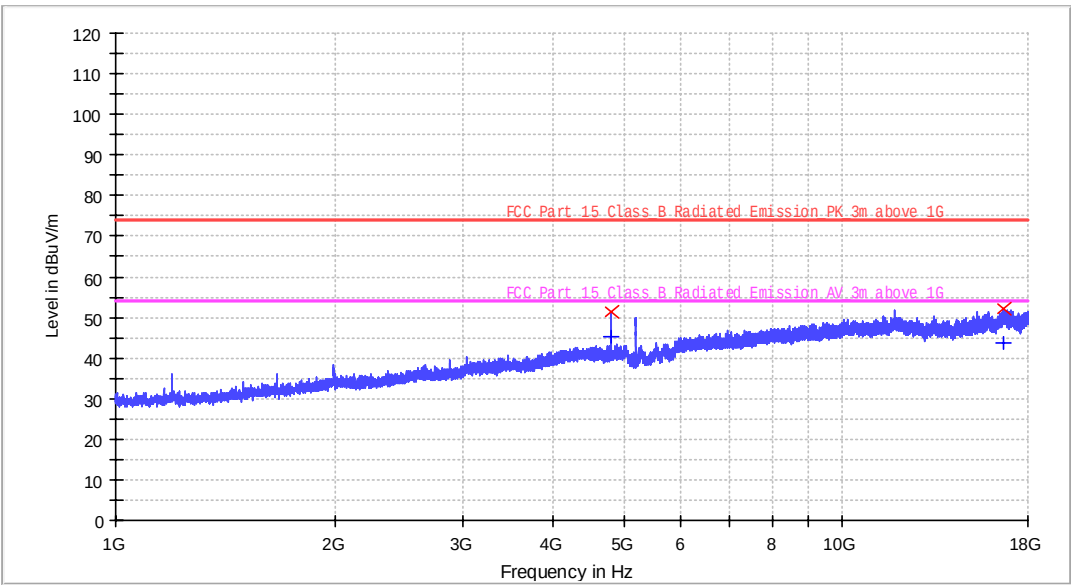
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
16676.800000	51.9	43.8	300.0	V	334.0	7.0	22.1	74.0	10.2	54.0



Spurious Emission: 802.11n20 5200MHz

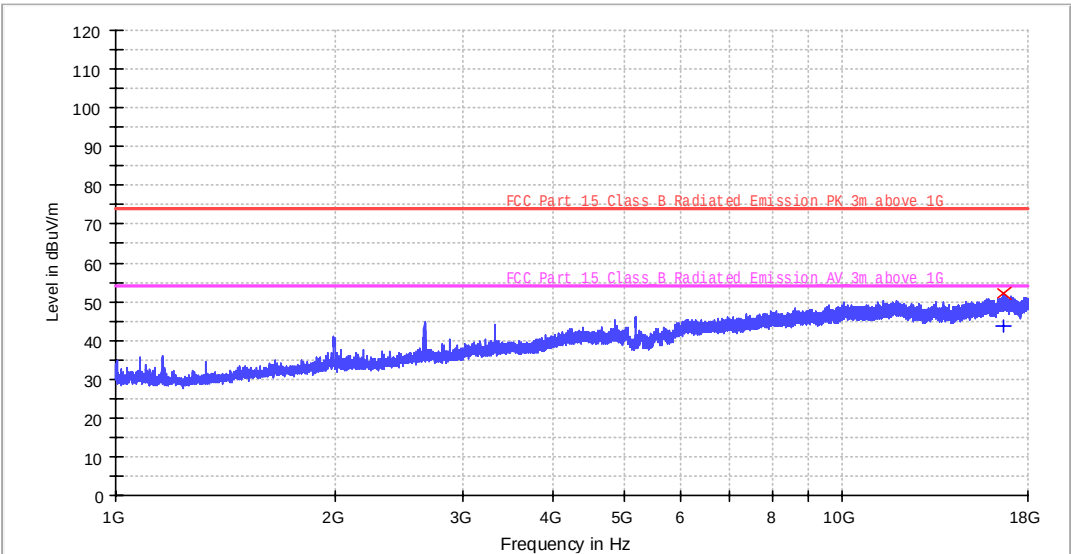
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
4812.100000	51.5	45.2	250.0	H	241.0	-2.7	22.5	74.0	8.8	54.0
16674.400000	52.2	43.9	150.0	H	185.0	7.0	21.8	74.0	10.2	54.0

RE_HF907_BRF_Pre



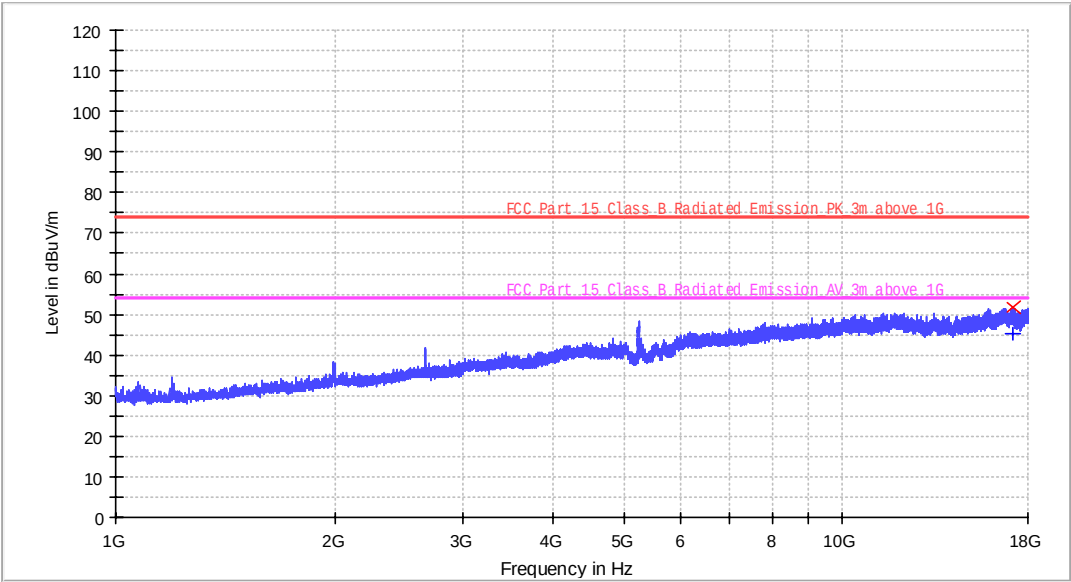
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
16680.906250	52.2	43.9	150.0	V	241.0	7.0	21.8	74.0	10.1	54.0



Spurious Emission: 802.11n20 5240MHz

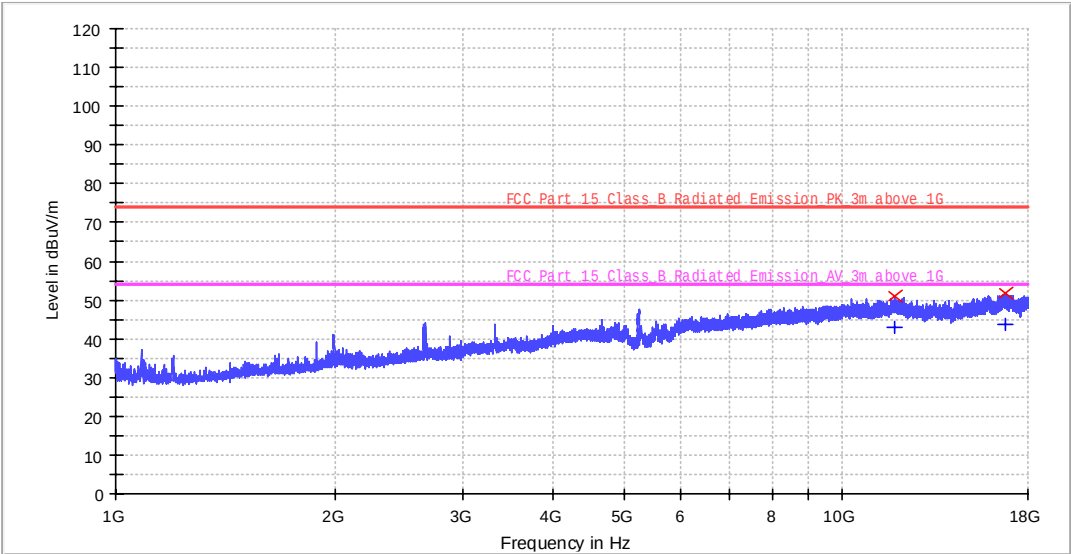
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
17154.100000	51.8	45.2	200.0	H	144.0	7.3	22.2	74.0	8.8	54.0

RE_HF907_BRF_Pre



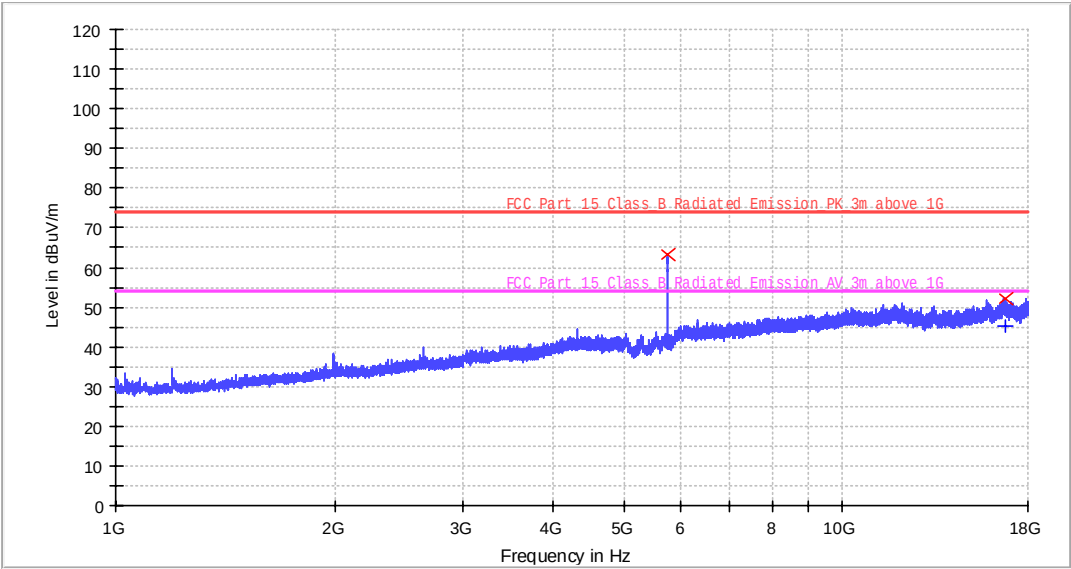
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
11805.100000	50.9	42.9	150.0	V	234.0	5.1	23.1	74.0	11.1	54.0
16728.100000	51.8	43.9	200.0	V	199.0	7.1	22.2	74.0	10.2	54.0



Spurious Emission: 802.11n20 5745MHz

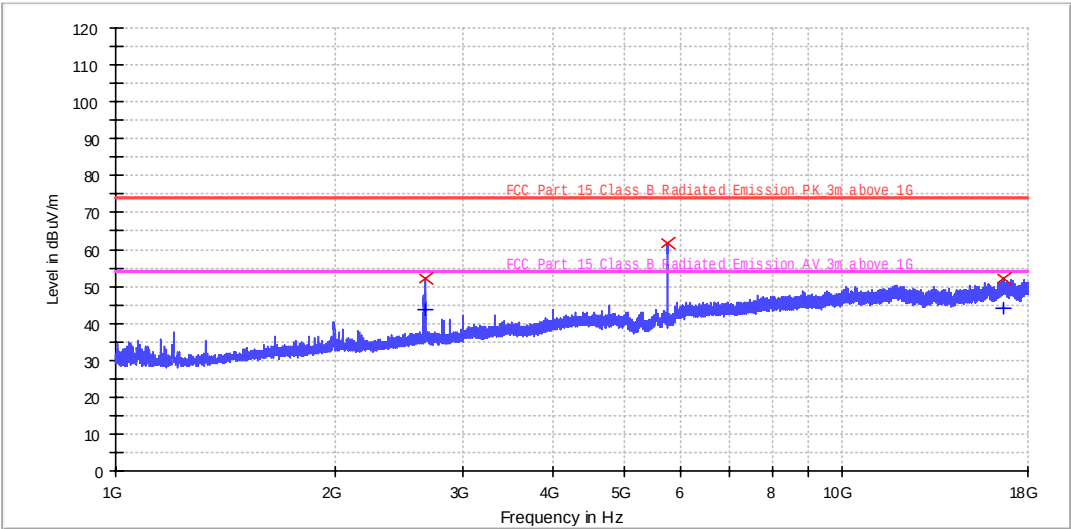
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5747.250000	63.2	---	200.0	H	128.0	-1.5	10.8	74.0	---	---
16710.700000	52.0	45.1	150.0	H	269.0	7.1	22.0	74.0	8.9	54.0

RE_HF907_BRF_Pre



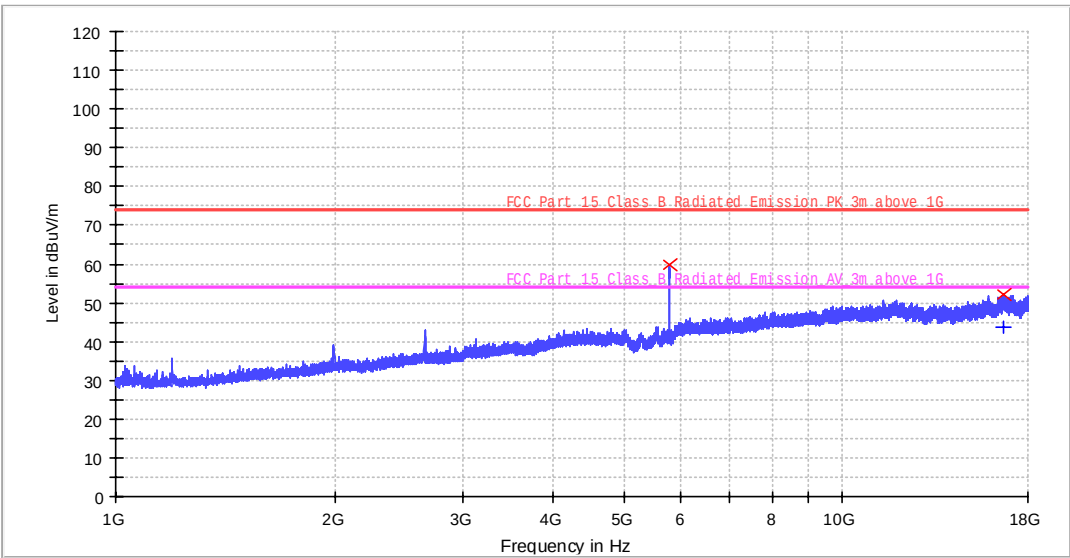
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
2662.300000	52.1	43.5	150.0	V	143.0	-9.6	21.9	74.0	10.5	54.0
5745.700000	61.9	---	250.0	V	249.0	-1.5	12.1	74.0	---	---
16660.300000	52.0	44.2	300.0	V	307.0	7.0	22.0	74.0	9.8	54.0



Spurious Emission: 802.11n20 5785MHz

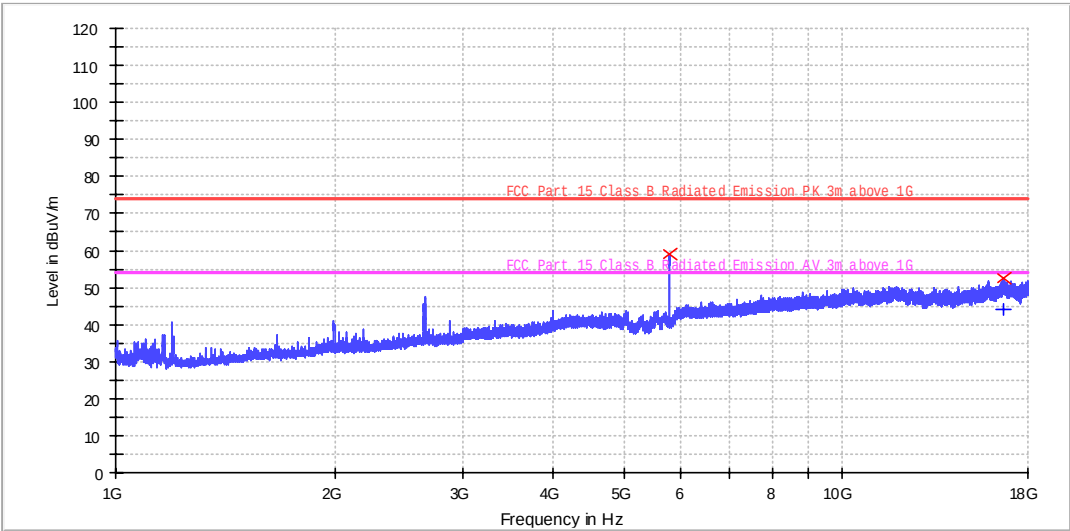
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5783.375000	59.7	---	150.0	H	192.0	-1.4	14.3	74.0	---	---
16648.900000	52.2	43.8	350.0	H	273.0	7.0	21.8	74.0	10.2	54.0

RE_HF907_BRF_Pre



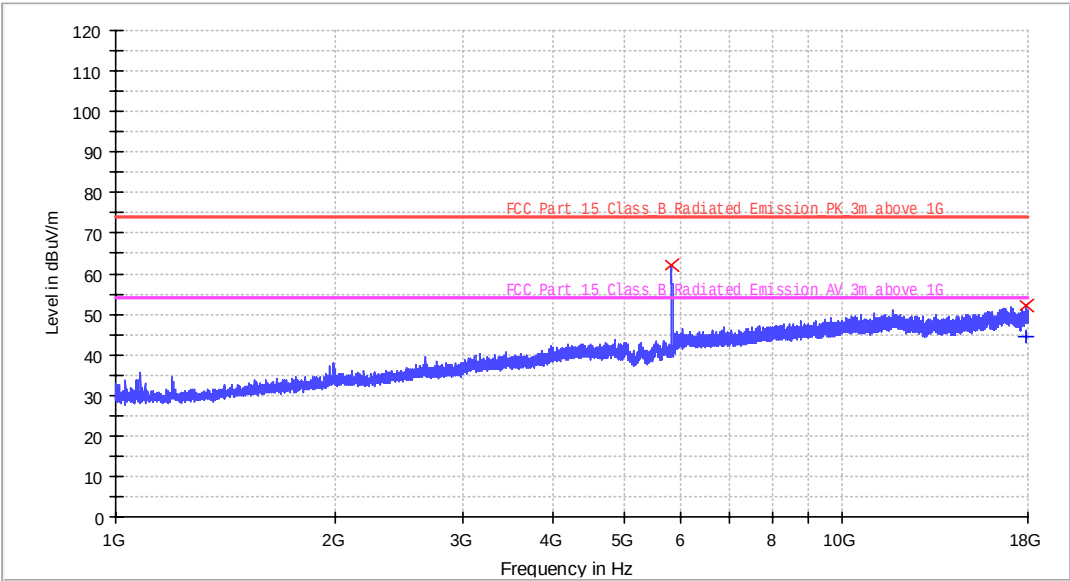
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5790.400000	59.2	---	150.0	V	214.0	-1.3	14.8	74.0	---	---
16643.800000	52.5	44.3	200.0	V	334.0	7.0	21.5	74.0	9.7	54.0



Spurious Emission: 802.11n20 5825MHz

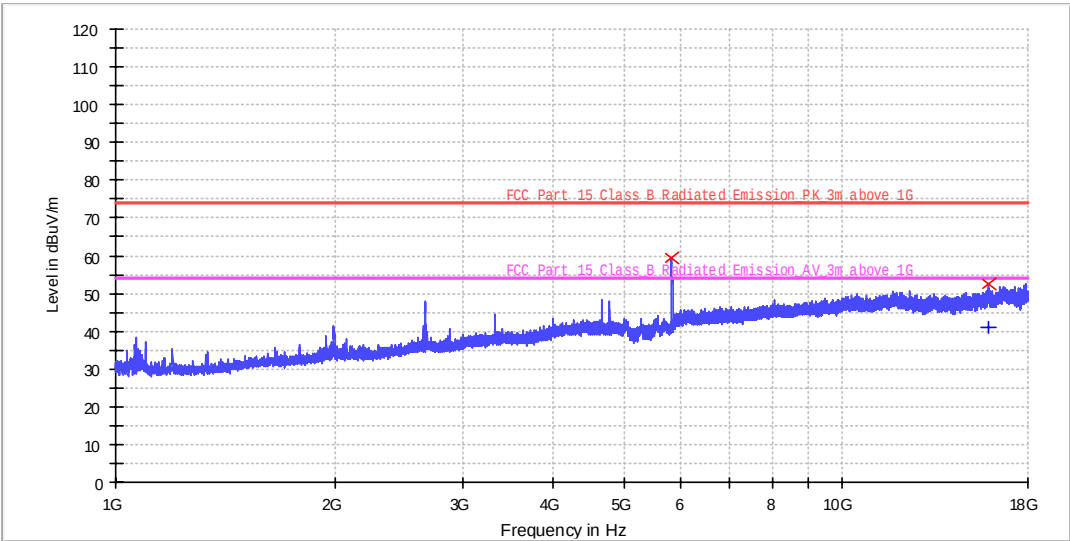
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5825.800000	62.1	---	150.0	H	318.0	-1.3	11.9	74.0	---	---
17898.400000	52.2	44.5	350.0	H	214.0	7.8	21.8	74.0	9.5	54.0

RE_HF907_BRF_Pre



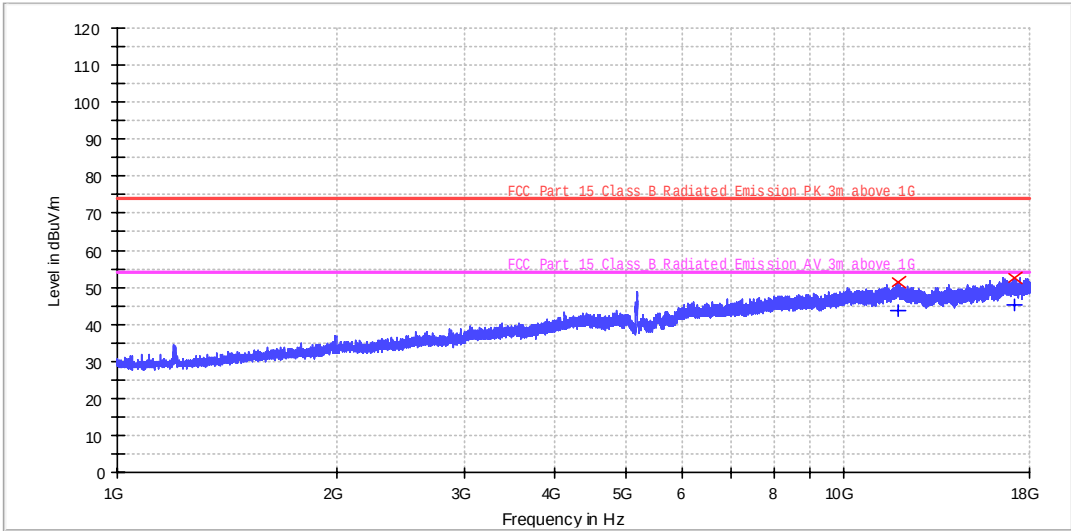
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5822.156250	59.6	---	200.0	V	143.0	-1.3	14.4	74.0	---	---
15925.900000	52.6	41.0	150.0	V	302.0	5.8	21.4	74.0	13.0	54.0



Spurious Emission: 802.11n40 5190MHz

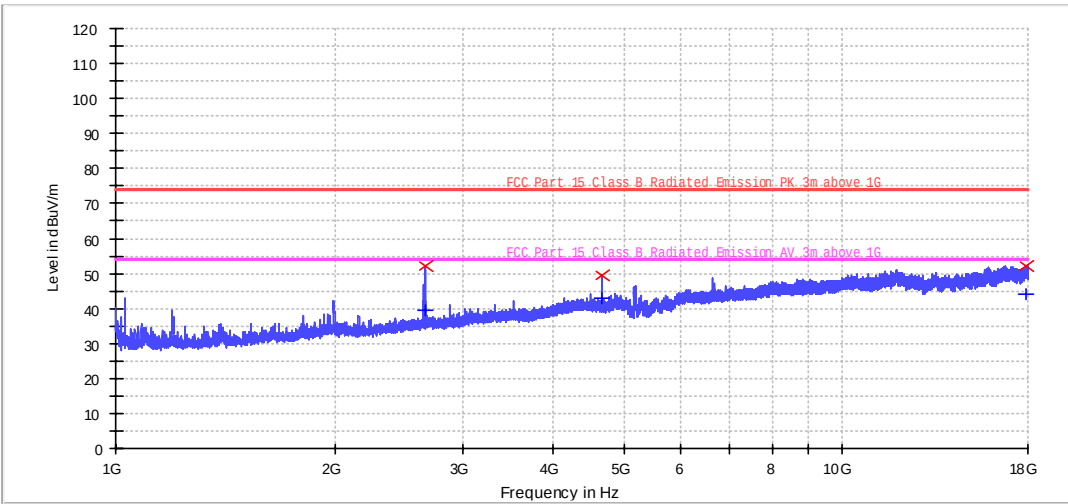
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
11876.800000	51.5	43.6	250.0	H	295.0	5.1	22.5	74.0	10.4	54.0
17148.406250	52.7	45.4	150.0	H	147.0	7.2	21.3	74.0	8.6	54.0

RE_HF907_BRF_Pre



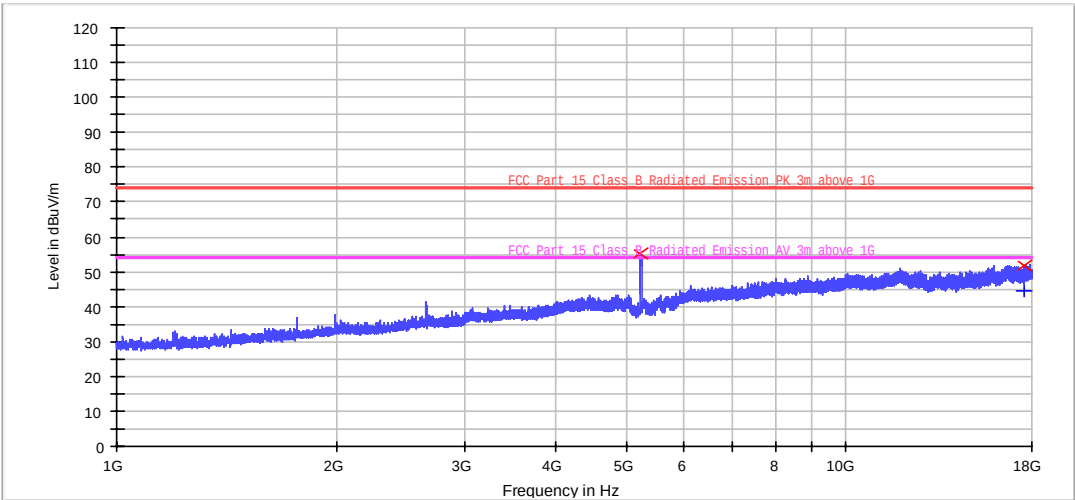
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
2660.200000	52.0	39.6	150.0	V	241.0	-9.6	22.0	74.0	14.4	54.0
4665.700000	49.5	42.8	250.0	V	348.0	-3.4	24.5	74.0	11.2	54.0
17883.100000	52.3	44.2	100.0	V	156.0	7.8	21.7	74.0	9.8	54.0



Spurious Emission: 802.11n40 5230MHz

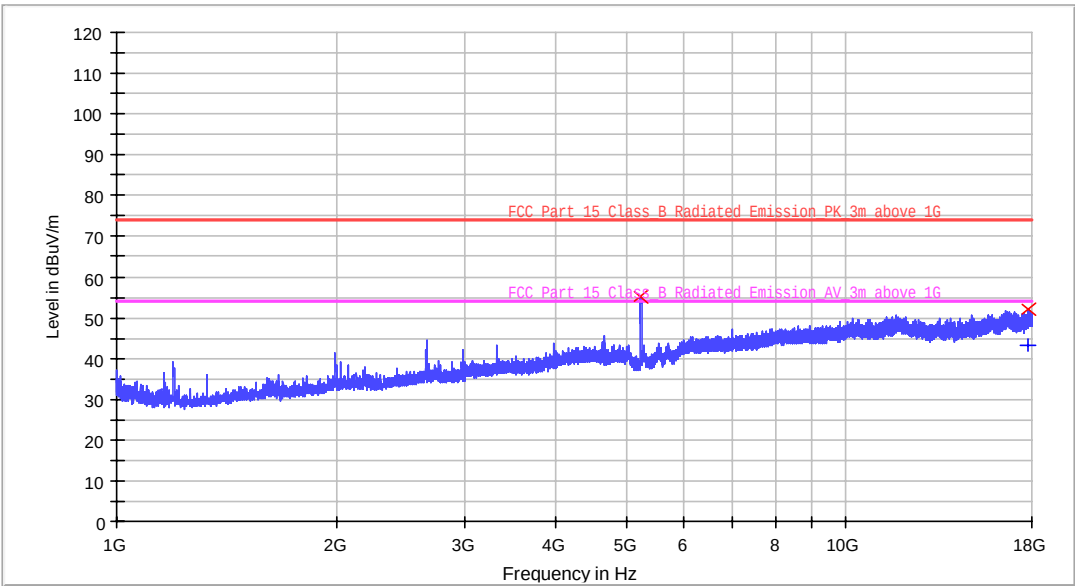
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/)	Margin - AV (dB)	Limit - AV (dBuV/m)
5234.062500	55.2	---	250.0	H	157.0	-2.3	18.8	74.0	---	---
17621.200000	51.9	44.5	150.0	H	227.0	7.3	22.1	74.0	9.5	54.0

RE_HF907_BRF_Pre



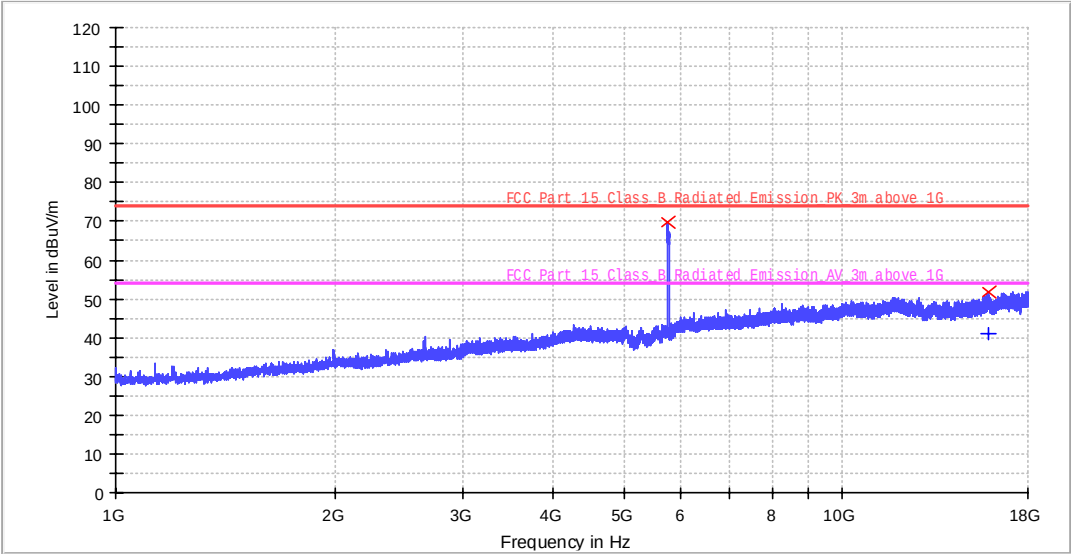
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/)	Margin - AV (dB)	Limit - AV (dBuV/)
5237.200000	55.4	---	200.0	V	317.0	-2.3	18.6	74.0	---	---
17811.400000	52.1	43.2	150.0	V	142.0	7.7	21.9	74.0	10.8	54.0



Spurious Emission: 802.11n40 5755MHz

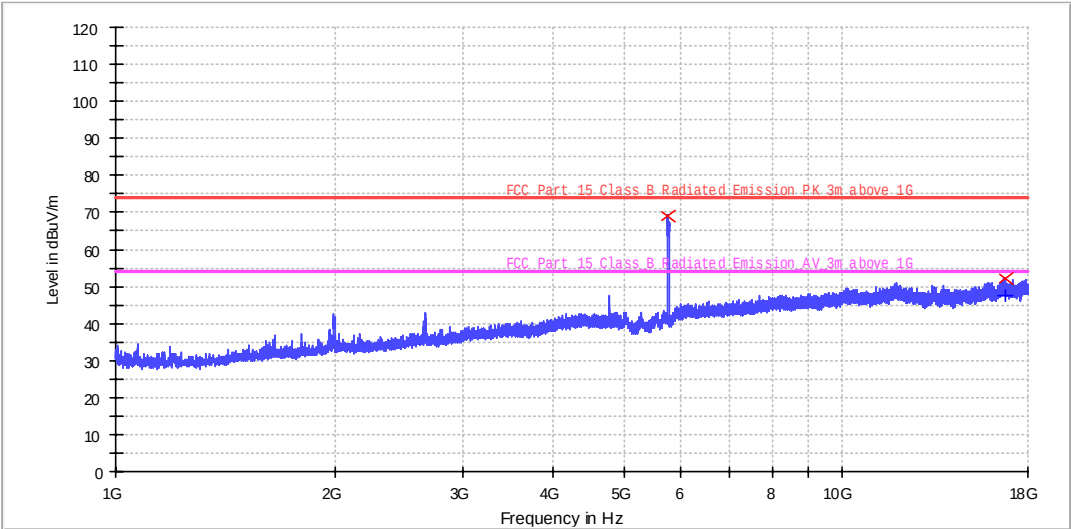
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5755.200000	69.9	---	200.0	H	241.0	-1.5	4.1	74.0	---	---
15856.300000	51.7	40.9	350.0	H	339.0	5.7	22.3	74.0	13.1	54.0

RE_HF907_BRF_Pre



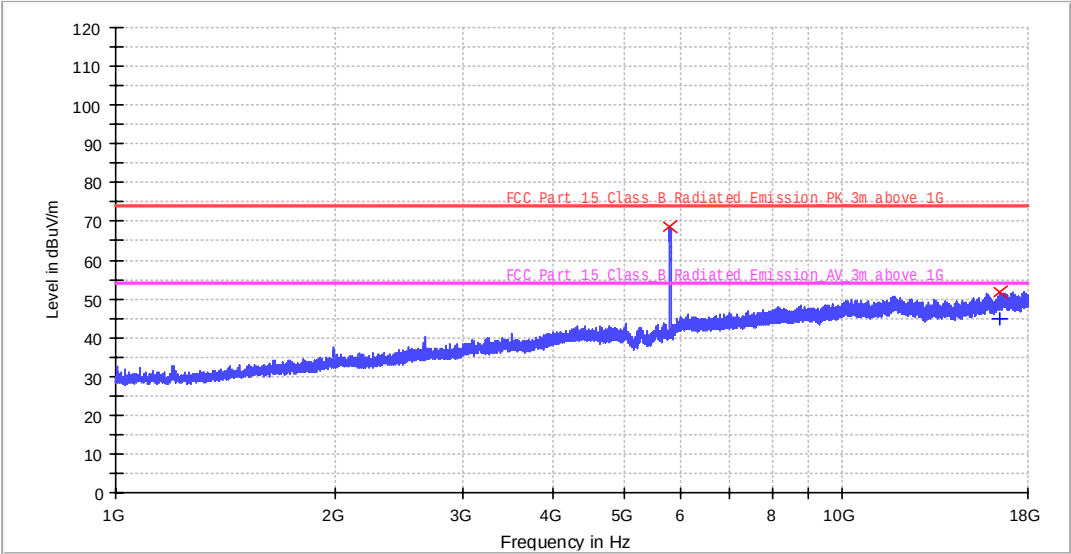
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5755.700000	69.1	---	350.0	V	157.0	-1.5	4.9	74.0	---	---
16786.600000	52.3	47.4	100.0	V	270.0	7.0	21.7	74.0	6.6	54.0



Spurious Emission: 802.11n40 5795MHz

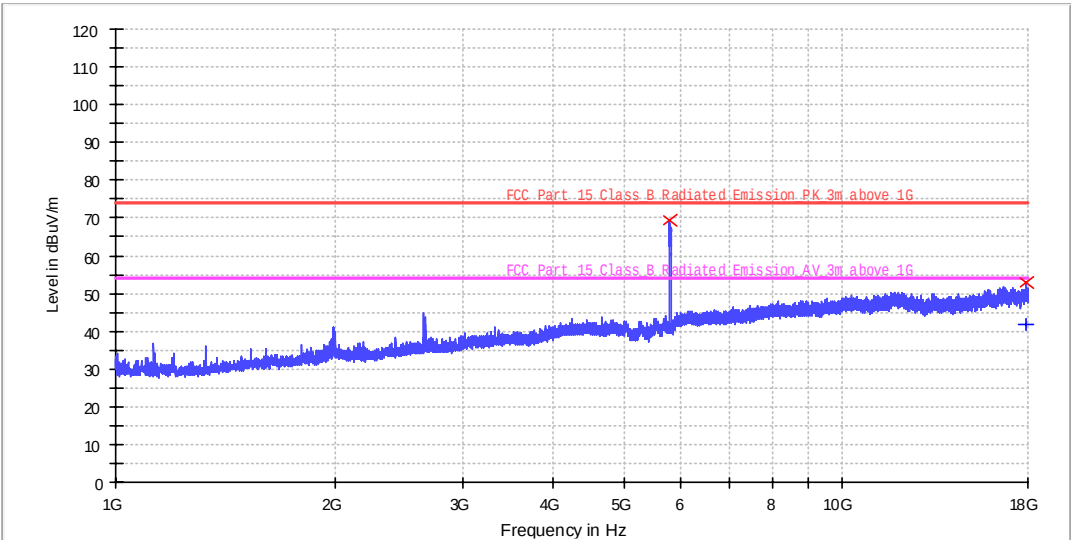
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/)	Margin - AV (dB)	Limit - AV (dBuV/m)
5796.500000	68.7	---	200.0	H	153.0	-1.4	5.3	74.0	---	---
16488.100000	51.8	44.9	300.0	H	342.0	6.6	22.2	74.0	9.1	54.0

RE_HF907_BRF_Pre



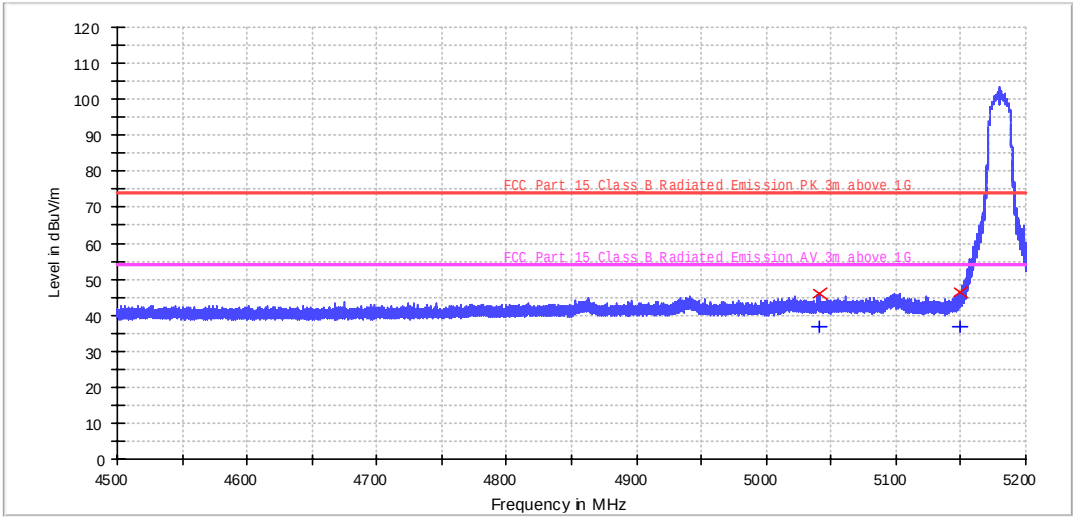
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5790.281250	69.5	---	250.0	V	247.0	-1.4	4.5	74.0	---	---
17911.300000	52.7	41.7	100.0	V	199.0	7.8	21.3	74.0	12.3	54.0



Band Edge
802.11a 5180MHz

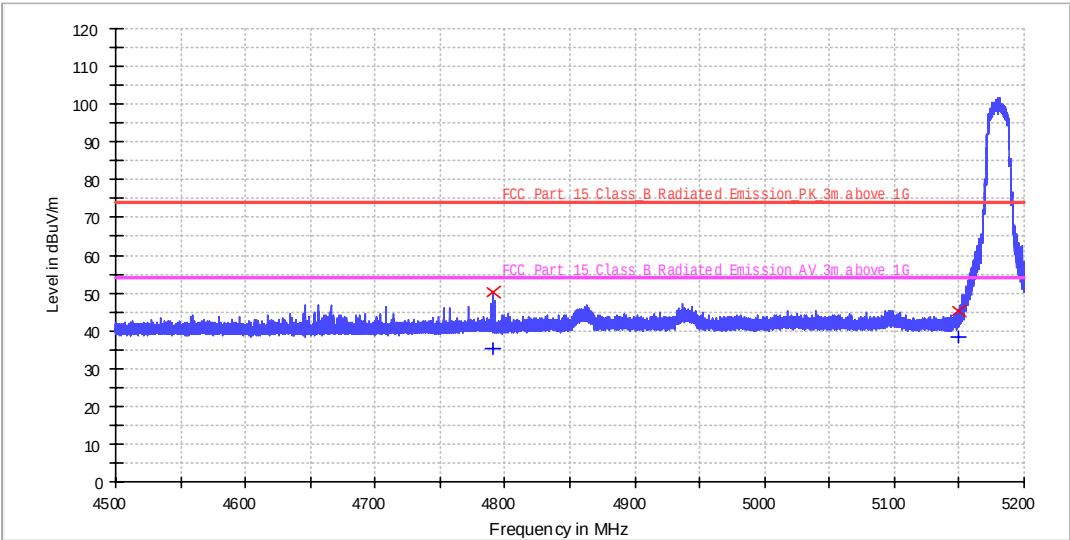
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5040.443750	46.2	36.9	250.0	H	179.0	-2.3	27.8	74.0	17.1	54.0
5150.000000	46.3	36.7	300.0	H	321.0	-2.3	27.7	74.0	17.3	54.0

RE_HF907_BRF_Pre



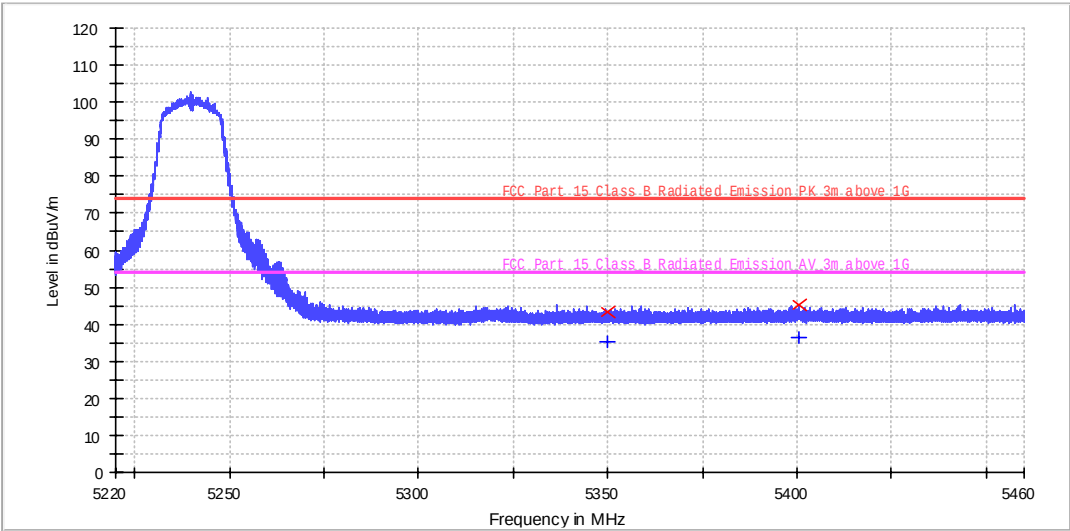
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV)	Margin - AV (dB)	Limit - AV (dBuV)
4790.893750	50.1	35.4	250.0	V	114.0	-2.8	23.9	74.0	18.6	54.0
5150.000000	45.3	38.2	150.0	V	183.0	-2.3	28.7	74.0	15.8	54.0



802.11a 5240MHz

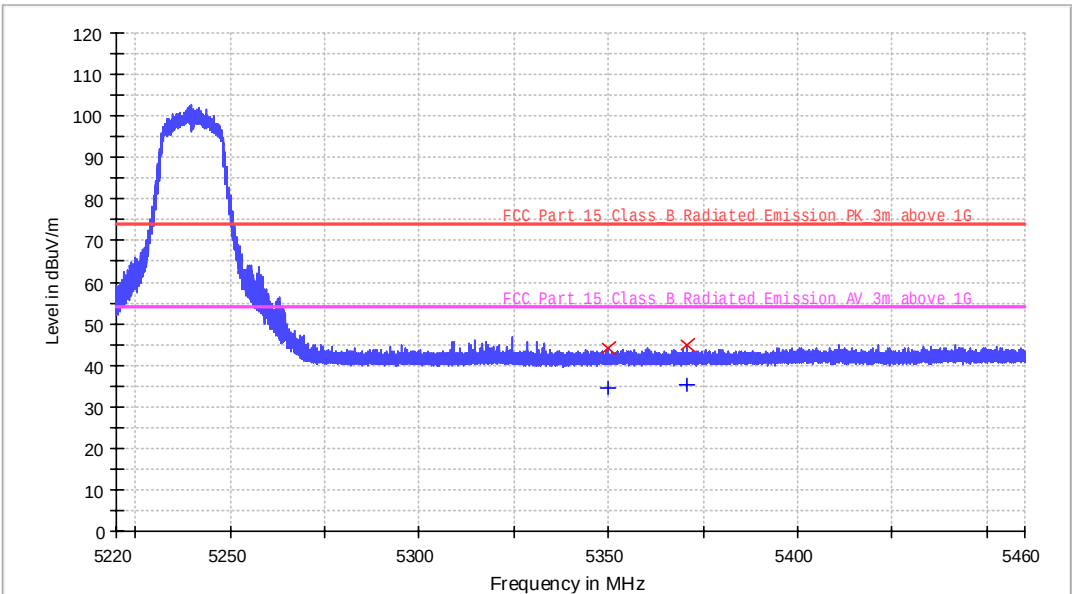
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5350.000000	43.5	35.2	250.0	H	228.0	-2.0	30.5	74.0	18.8	54.0
5400.382500	45.1	36.5	300.0	H	143.0	-1.8	28.9	74.0	17.5	54.0

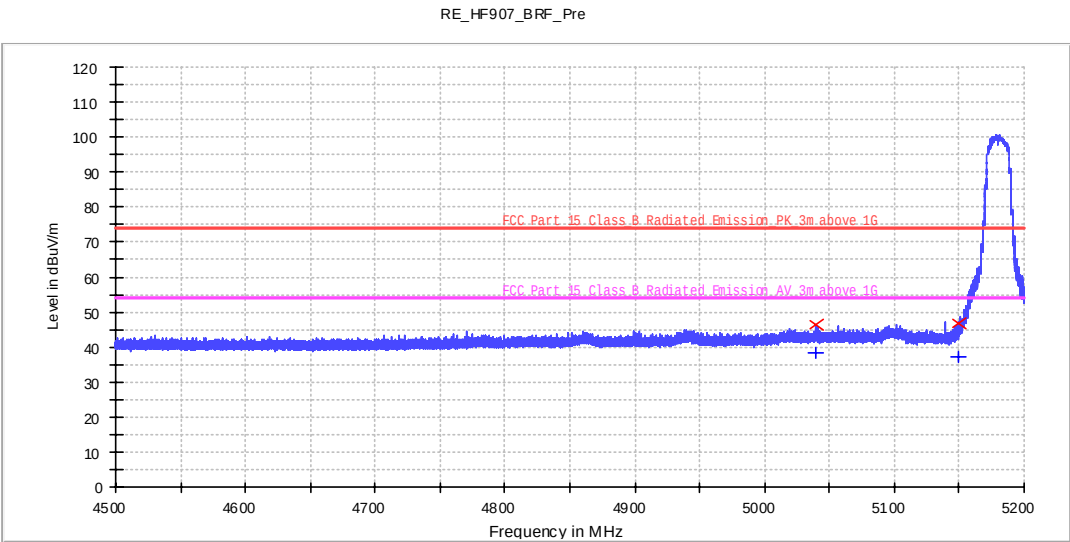
RE_HF907_BRF_Pre



Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5350.000000	44.2	34.6	200.0	V	269.0	-2.1	29.8	74.0	19.4	54.0
5370.570000	44.8	35.5	150.0	V	318.0	-1.9	29.2	74.0	18.5	54.0

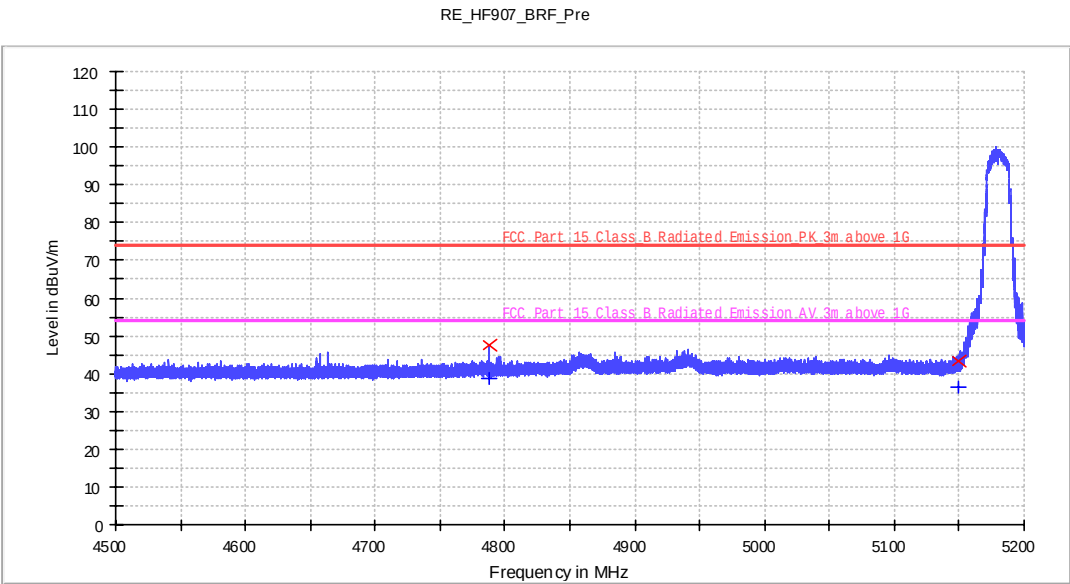


802.11n 5180MHz



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5039.918750	46.5	38.2	250.0	H	192.0	-2.3	27.5	74.0	15.8	54.0
5150.000000	46.8	37.2	150.0	H	336.0	-2.3	27.2	74.0	16.8	54.0



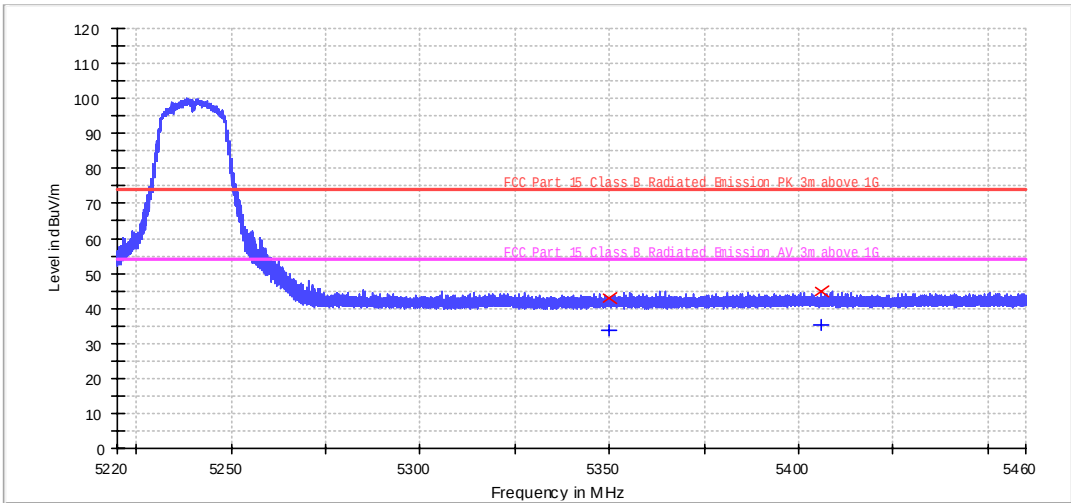
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
4788.100000	47.6	38.6	350.0	V	334.0	-2.8	26.4	74.0	15.4	54.0
5150.000000	43.3	36.5	200.0	V	199.0	-2.3	30.7	74.0	17.6	54.0



802.11n 5240MHz

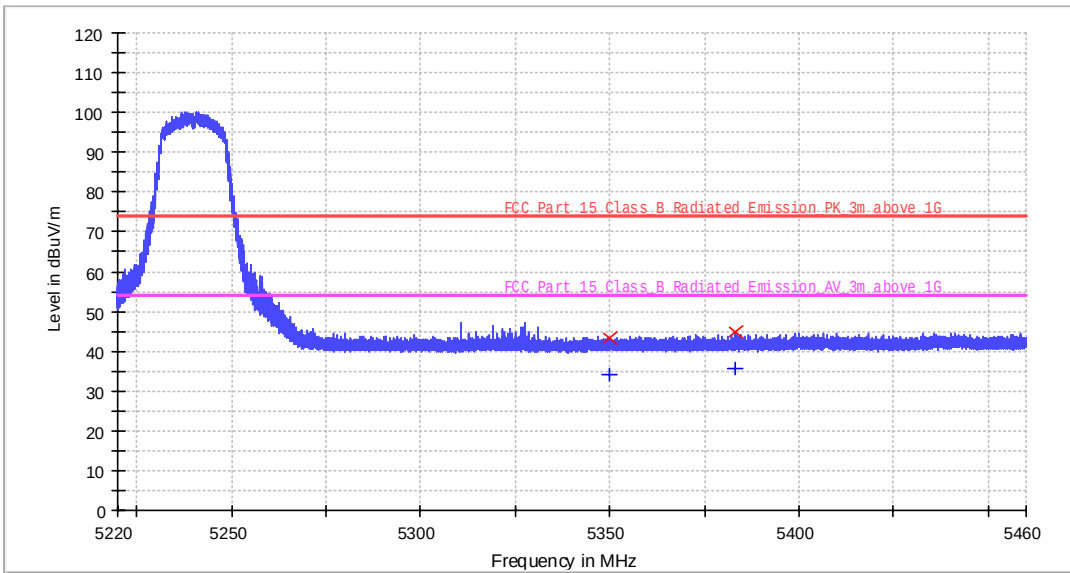
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5350.000000	43.1	33.9	150.0	H	244.0	-2.0	30.9	74.0	20.1	54.0
5405.730000	45.0	35.2	200.0	H	309.0	-1.8	29.0	74.0	18.8	54.0

RE_HF907_BRF_Pre



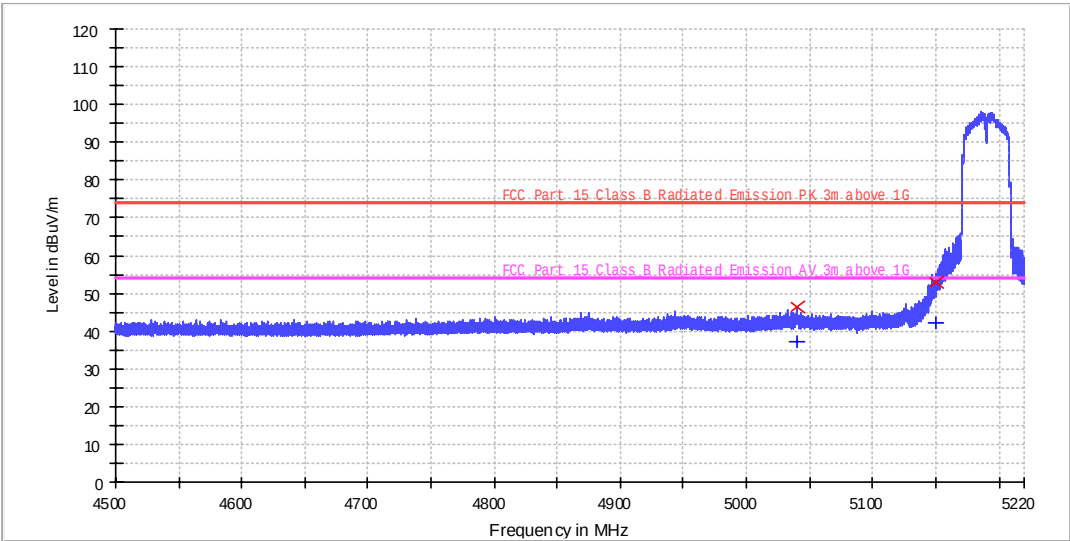
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5350.000000	43.5	34.3	350.0	V	143.0	-2.0	30.5	74.0	19.8	54.0
5383.300000	44.7	35.7	100.0	V	271.0	-1.9	29.3	74.0	18.3	54.0



802.11n 5190MHz

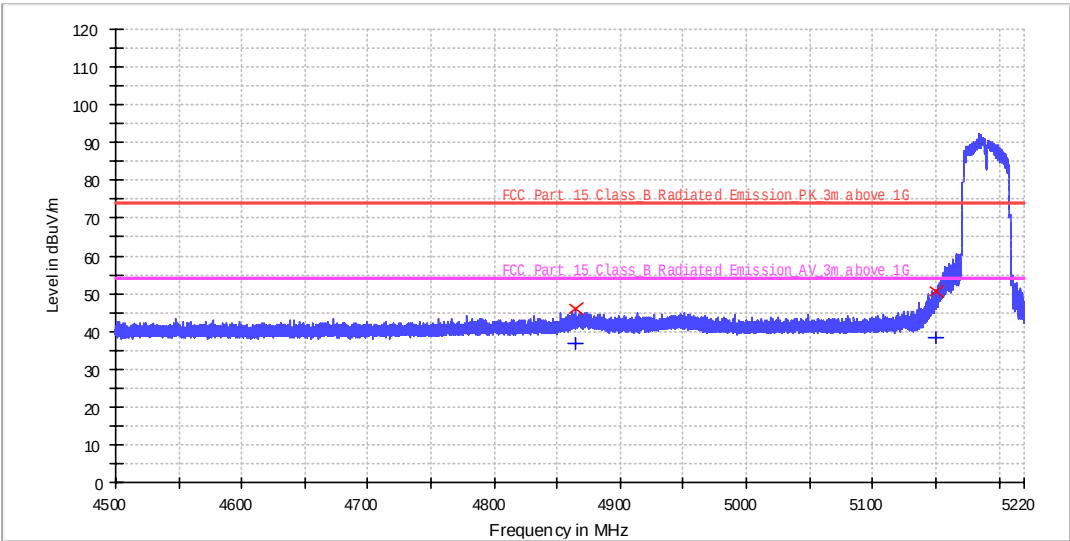
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5040.100000	46.3	37.4	350.0	H	286.0	-2.3	27.7	74.0	16.7	54.0
5150.000000	53.0	42.3	150.0	H	241.0	-2.3	21.0	74.0	11.7	54.0

RE_HF907_BRF_Pre



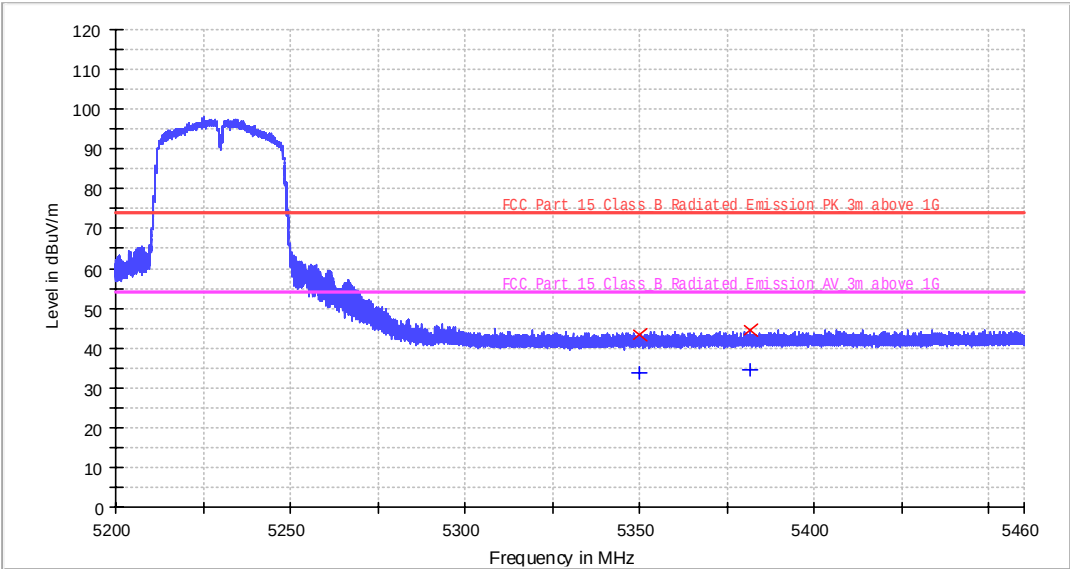
Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
4864.387500	46.1	36.8	200.0	V	318.0	-2.5	27.9	74.0	17.2	54.0
5150.000000	50.5	38.4	150.0	V	254.0	-2.3	23.5	74.0	15.6	54.0



802.11n 5230MHz

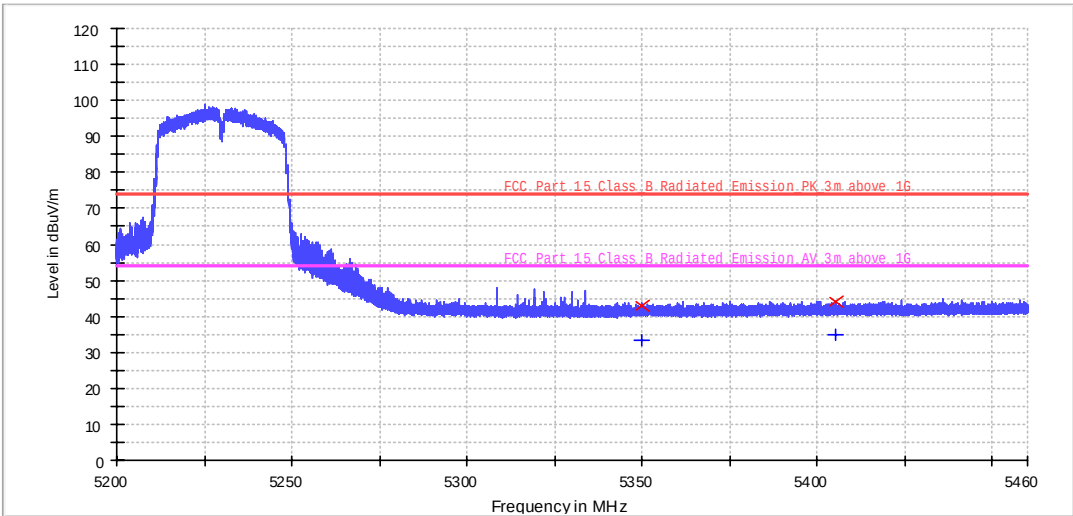
RE_HF907_BRF_Pre



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5350.000000	43.4	33.8	250.0	H	293.0	-2.1	30.6	74.0	20.2	54.0
5381.431250	44.5	34.7	350.0	H	143.0	-1.9	29.5	74.0	19.3	54.0

RE_HF907_BRF_Pre



Limit and Margin

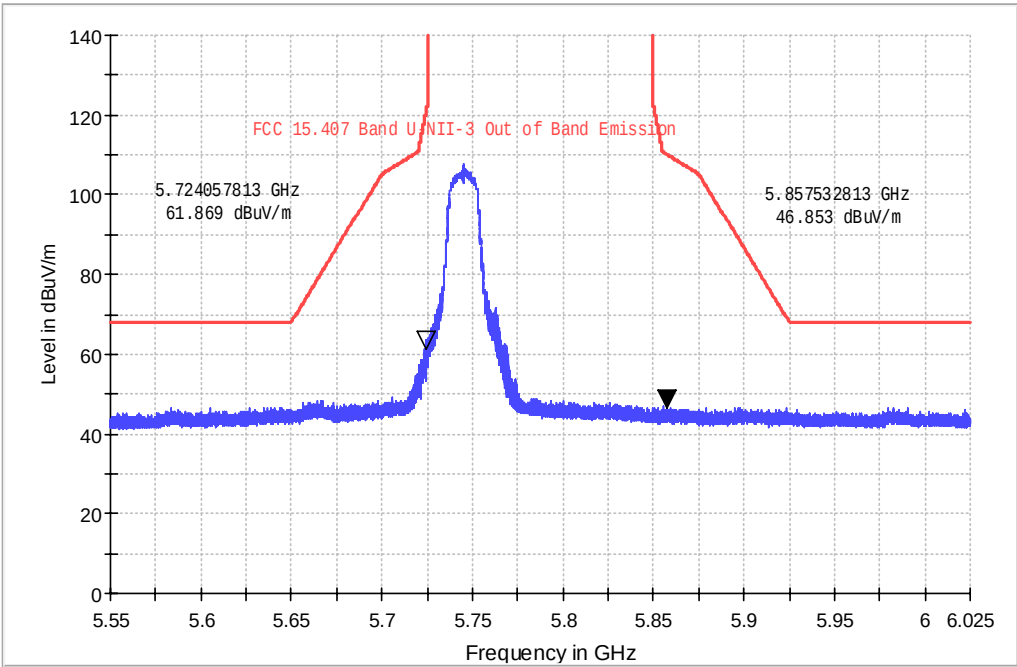
Frequency (MHz)	MaxPeak (dBuV/m)	AV (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - AV (dB)	Limit - AV (dBuV/m)
5350.000000	45.4	33.4	250.0	V	247.0	-2.1	28.6	74.0	20.6	54.0
5405.237500	44.1	34.7	150.0	V	168.0	-2.0	29.9	74.0	19.3	54.0



802.11a 5745MHz

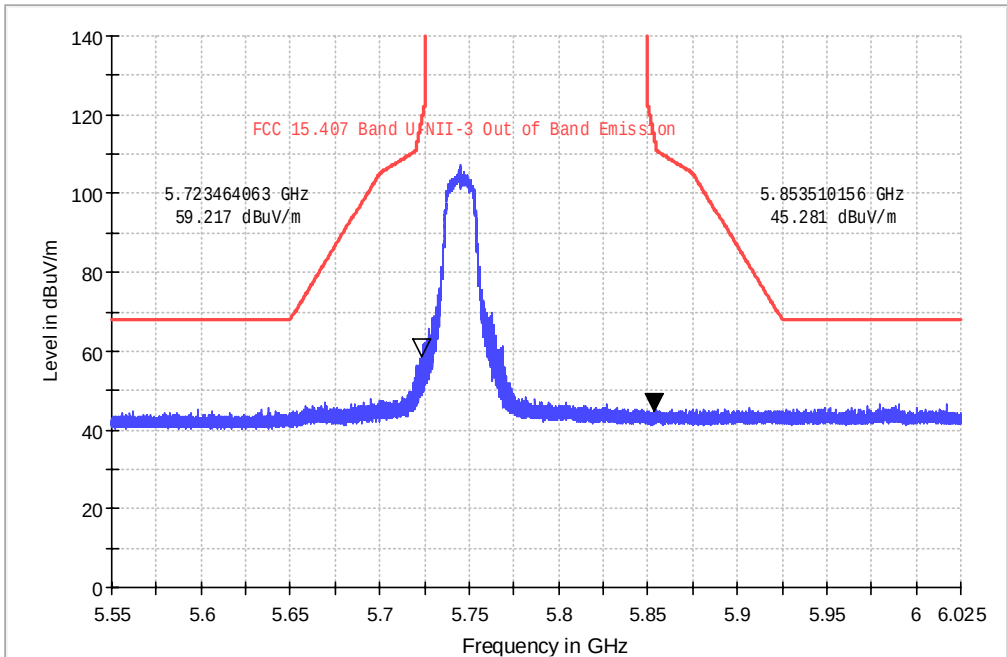
Horizontal

RE_HF907_BRF_Pre



Vertical

RE_HF907_BRF_Pre

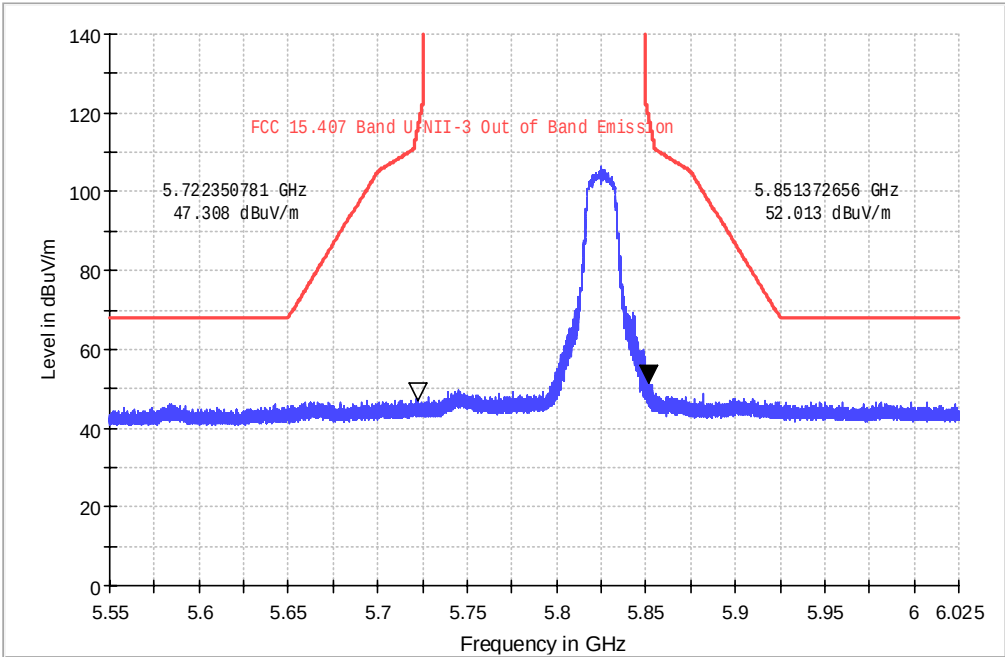




802.11a 5825MHz

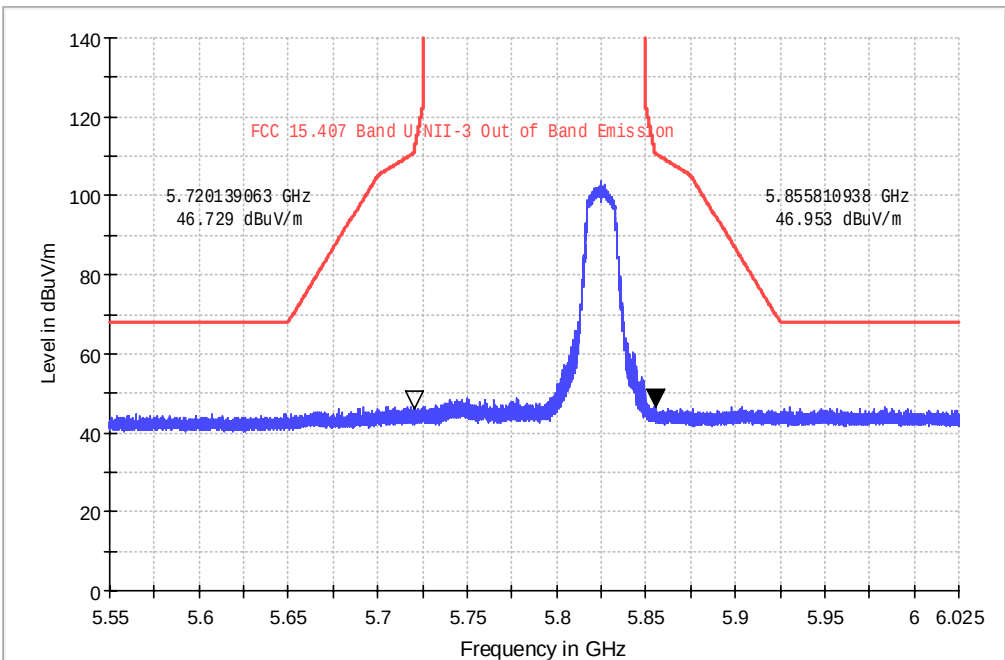
Horizontal

RE_HF907_BRF_Pre



Vertical

RE_HF907_BRF_Pre

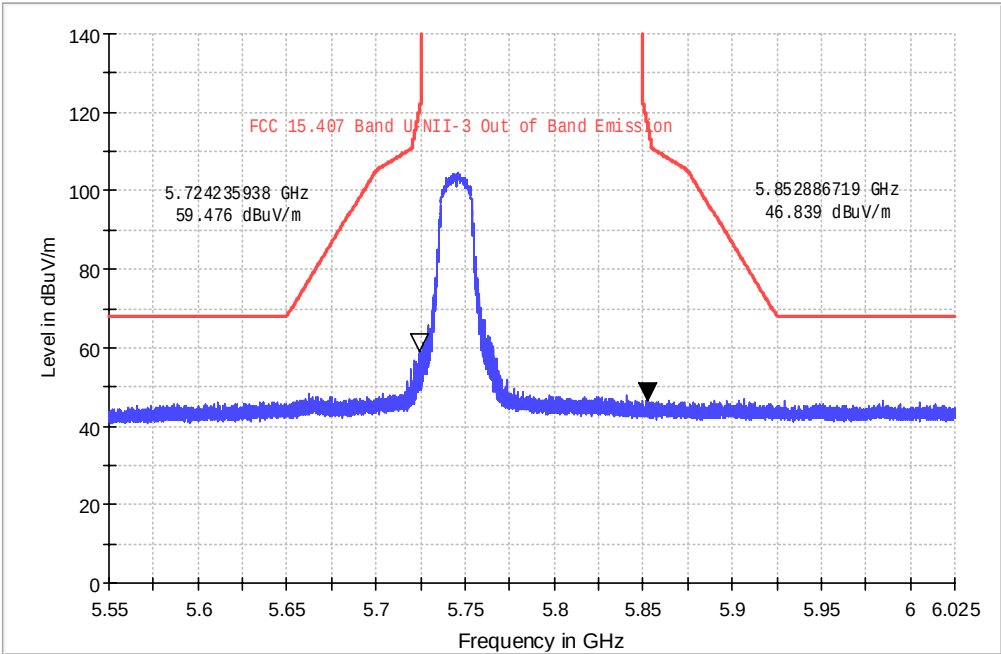




802.11n 5745MHz

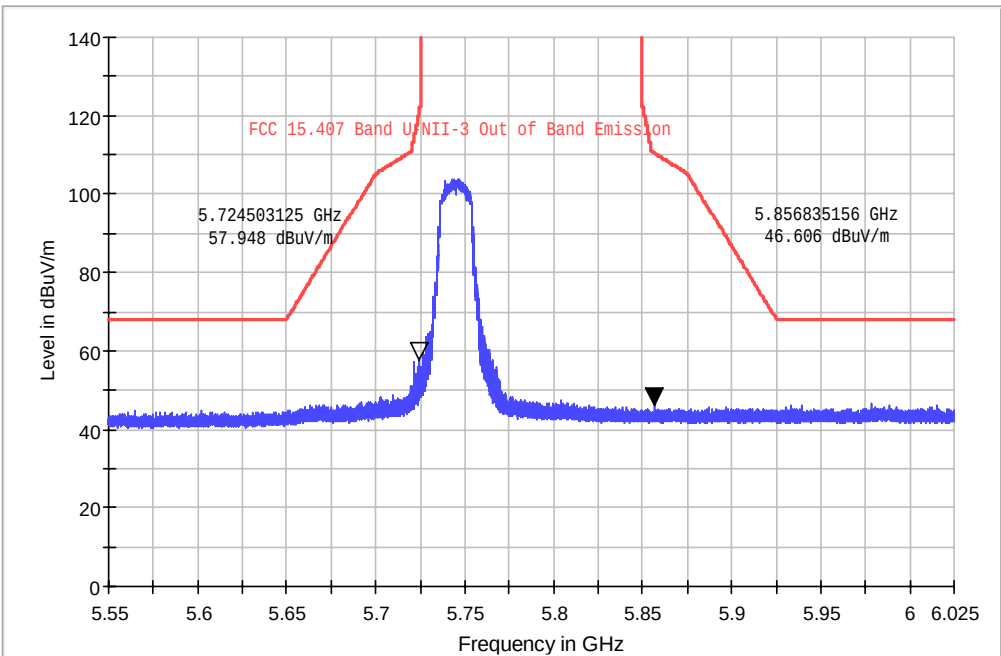
Horizontal

RE_HF907_BRF_Pre



Vertical

RE_HF907_BRF_Pre

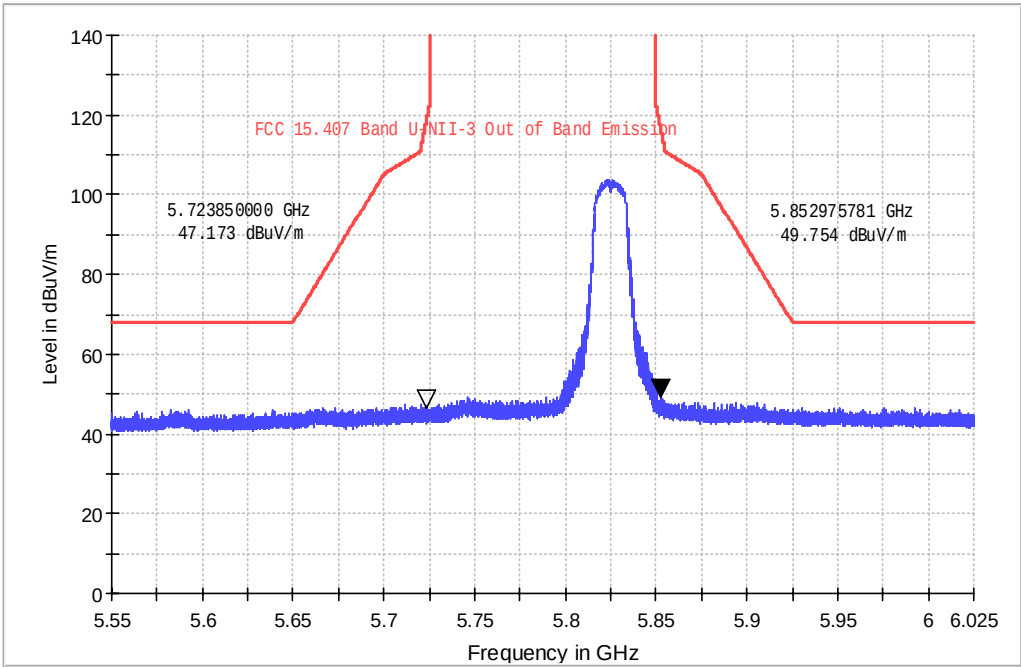




802.11n 5825MHz

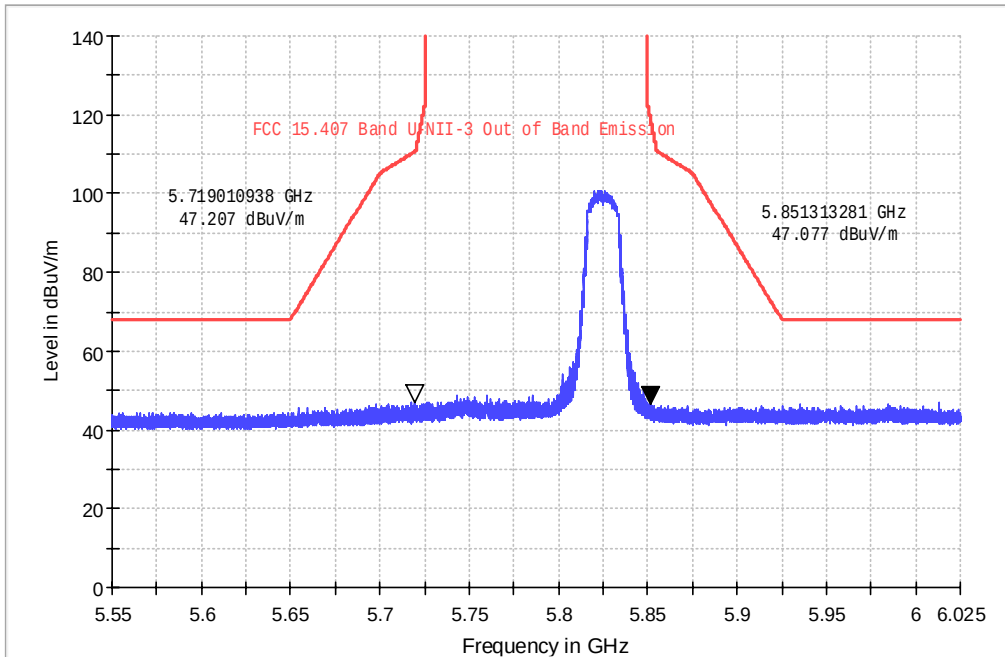
Horizontal

RE_HF907_BRF_Pre



Vertical

RE_HF907_BRF_Pre

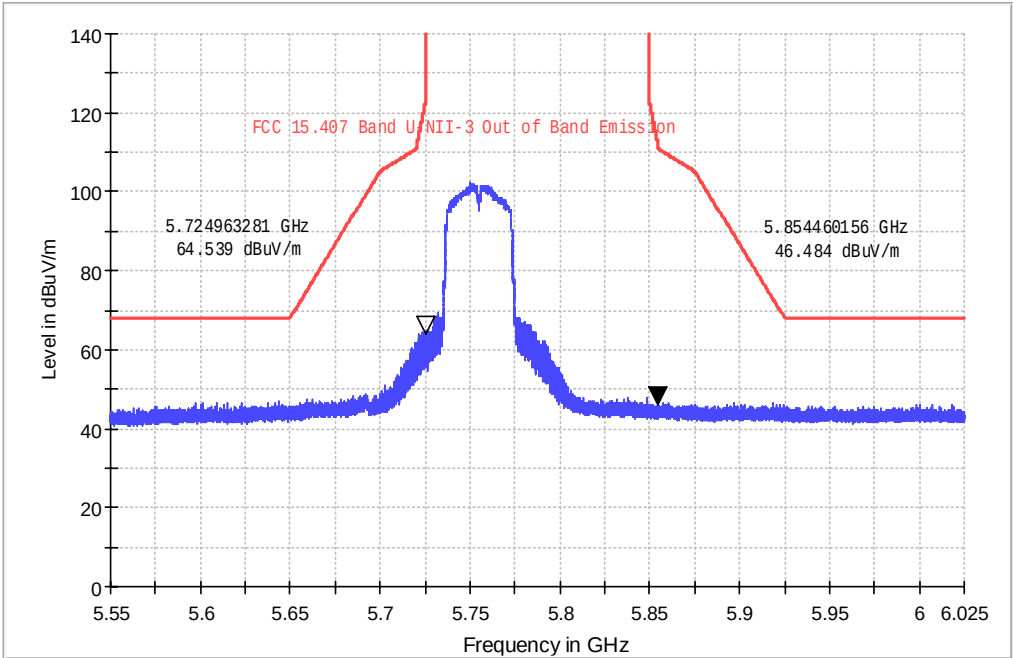




802.11n40 5755MHz

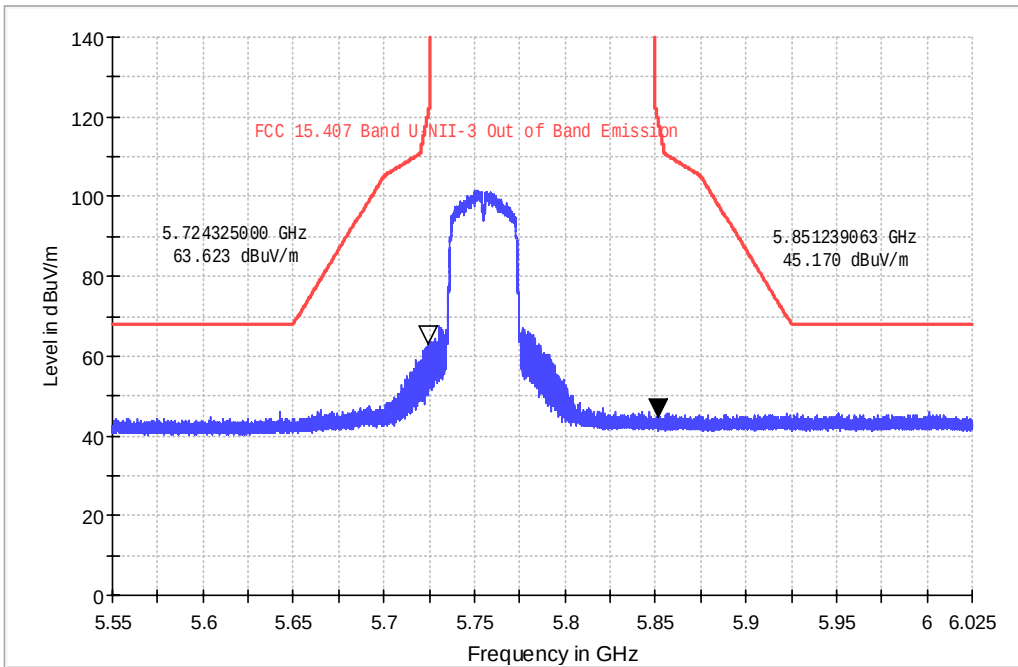
Horizontal

RE_HF907_BRF_Pre



Vertical

RE_HF907_BRF_Pre

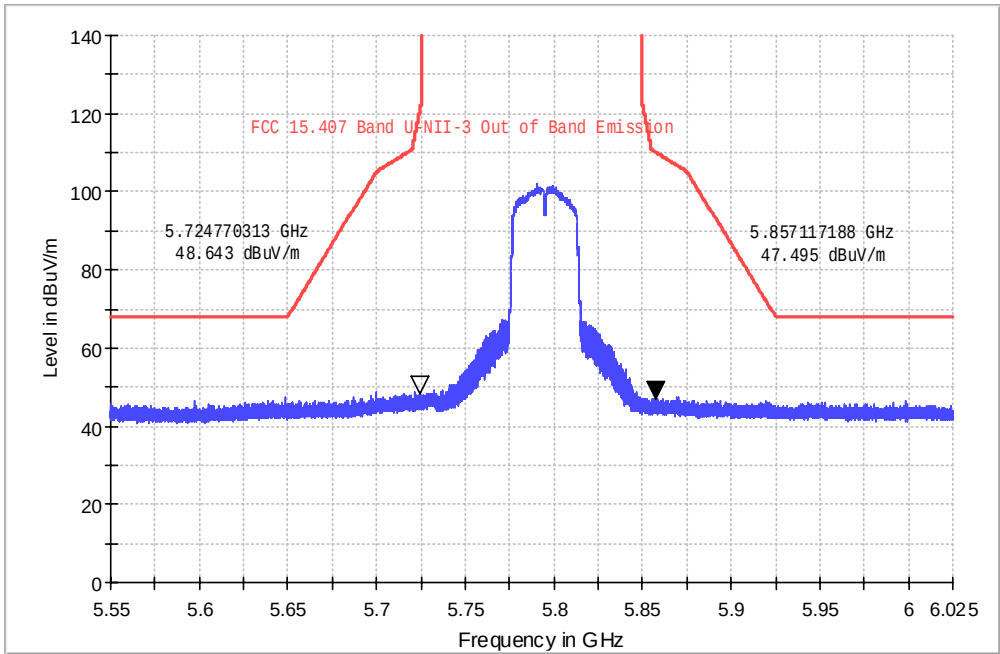




802.11n40 5795MHz

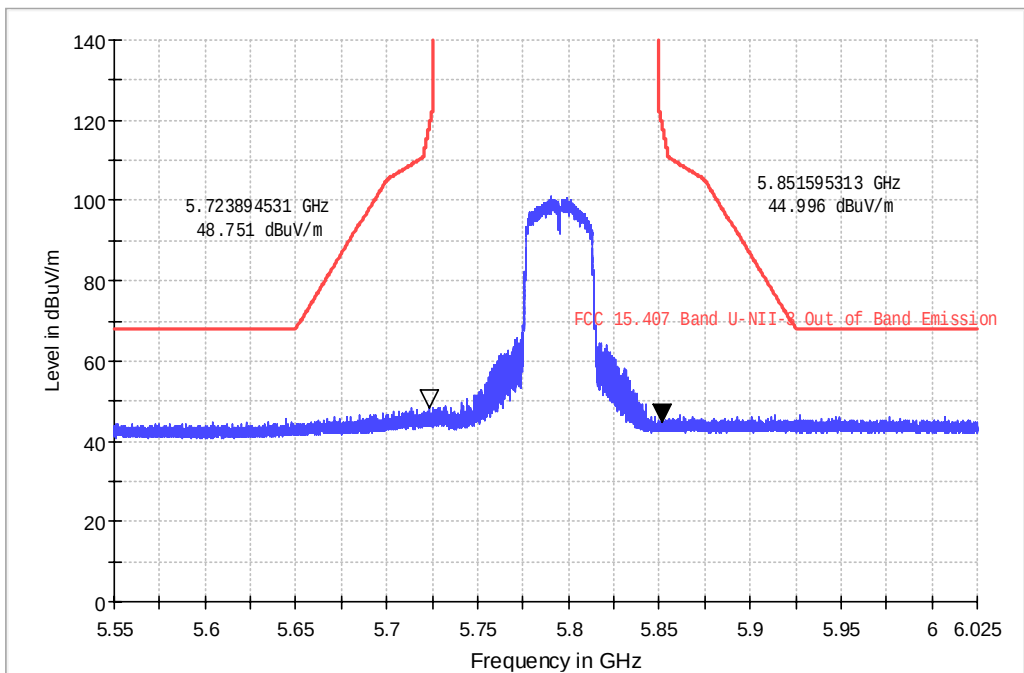
Horizontal

RE_HF907_BRF_Pre



Vertical

RE_HF907_BRF_Pre





Remark:

- (1) Above 1GHz Corrector factor= Antenna Factor +Cable Loss - Amp. Factor.
- (2) Below 1GHz Corrector factor= Antenna Factor +Cable Loss.
- (3) In non-restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.
- (4) All the test result for unwanted emissions and band edge (included the restricted bands) shown from page 59 to 79 are used the stringent limit.
- (5) We test all modes and only the worst case for each bandwidth recorded in the report.

Worst case Radiated Emission 18-40 GHz

18-40GHz Radiated Emission

EUT Information

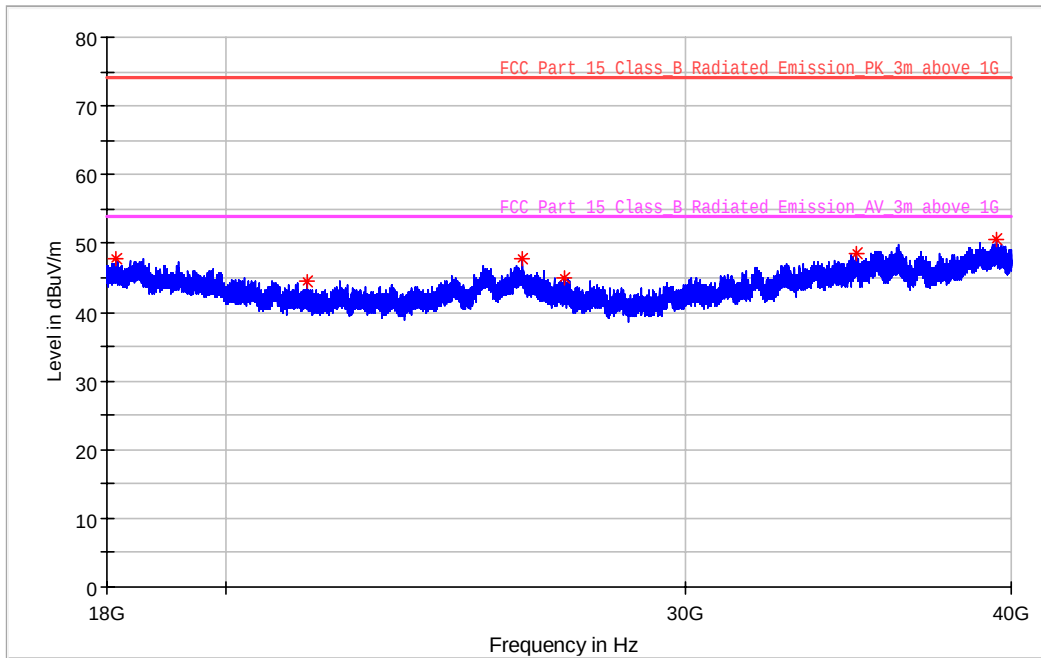
EUT Name: DASH CAM
 Model: M800-2
 Client: 70mai Co., Ltd.
 Op Cond: Power on and TX_5180MHz at 802.11a mode
 Operator: Chengjie Guo
 Test Spec: FCC 15.209 (a)
 Comment: Horizontal
 Sample No: SHA-899681-2

Sweep Setup: RE_3116C_pre [EMI radiated]

Hardware Setup: RE_3116C
 Receiver: [FSV 40]
 Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
18 GHz - 25 GHz	500 kHz	PK+ ; AVG	1 MHz	0.05 s	0 dB

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18149.875000	47.89	74.00	26.11	100.0	H	290.0	8.1
21491.125000	44.49	74.00	29.51	100.0	H	217.0	8.6
25972.250000	47.90	74.00	26.10	100.0	H	122.0	9.7
26973.937500	45.07	74.00	28.93	100.0	H	243.0	9.1
34902.875000	48.48	74.00	25.52	100.0	H	280.0	12.3
39467.187500	50.67	74.00	23.33	100.0	H	301.0	13.7

18-40GHz Radiated Emission

EUT Information

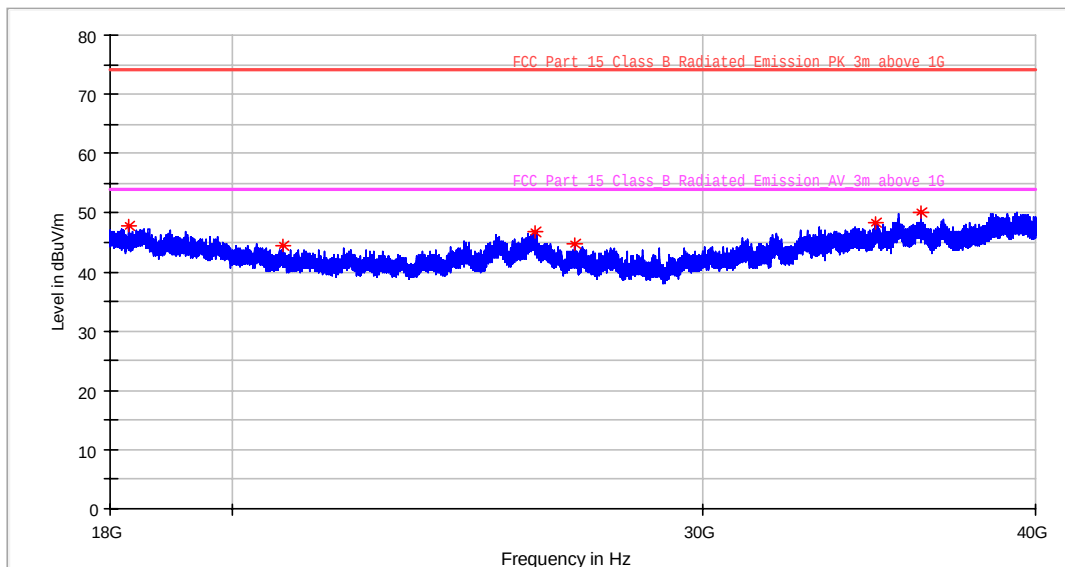
EUT Name: DASH CAM
 Model: M800-2
 Client: 70mai Co., Ltd.
 Op Cond: Power on and TX_5180MHz at 802.11a mode
 Operator: Chengjie Guo
 Test Spec: FCC 15.209 (a)
 Comment: Vertical
 Sample No: SHA-899681-2

Sweep Setup: RE_3116C_pre [EMI radiated]

Hardware Setup: RE_3116C
 Receiver: [FSV 40]
 Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
18 GHz - 25 GHz	500 kHz	PK+ ; AVG	1 MHz	0.05 s	0 dB

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18281.187500	47.76	74.00	26.24	100.0	V	245.0	8.1
20893.000000	44.37	74.00	29.63	100.0	V	161.0	8.5
25964.000000	46.76	74.00	27.24	100.0	V	18.0	9.7
26881.125000	44.63	74.00	29.37	100.0	V	291.0	9.2
34841.000000	48.38	74.00	25.62	100.0	V	263.0	12.2
36220.125000	50.04	74.00	23.96	100.0	V	144.0	13.2

Remark:

- (1) Emission level= Original Receiver Reading + Correct Factor
- (2) Correct Factor = Antenna Factor + Cable Loss -Amplifier gain
- (3) Margin = limit – Corrected Reading

11 Test Equipment List

List of Test Instruments
Test Site1

	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE DATE
C	Signal spectrum analyzer	Agilent	N9020B	MY59050168	2024-2-19	2025-2-18
RE	EMI Test Receiver	Rohde & Schwarz	ESR3	101906	2024-8-1	2025-7-31
	Signal Analyzer	Rohde & Schwarz	FSV40	101091	2024-8-1	2025-7-31
	Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9168	961	2024-8-30	2025-8-29
	Double-ridged waveguide horn antenna	Rohde & Schwarz	HF907	102868	2024-4-14	2025-4-13
	Pre-amplifier	Shenzhen HzEMC	HPA-081843	HYP A23026	2024-4-16	2025-4-15
	Loop antenna	Rohde & Schwarz	HFH2-Z2	100443	2024-6-26	2025-6-25
	DOUBLE-RIDGED WAVEGUIDE HORN WITH PRE-AMPLIFIER (18 GHZ - 40 GHZ)	ETS-Lindgren	3116C	00246076	2023-7-7	2026-7-6
	5G Band reject filter	Shanghai Huaxiang	SHX-DZ-5.15/5.85-40S	RF201910001	2024-8-1	2025-7-31
	3m Semi-anechoic chamber	TDK	9X6X6	----	2024-5-8	2027-5-7
	Coaxial Cable	----	----	RE Cable 01	2024-8-1	2025-7-31
	Coaxial Cable	----	----	RE Cable 02	2024-8-1	2025-7-31
	Coaxial Cable	----	----	RE Cable 03	2024-8-1	2025-7-31
	Coaxial Cable	----	----	RE Cable 04	2024-8-1	2025-7-31

Measurement Software Information			
Test Item	Software	Manufacturer	Version
C	MTS 8310	MWRFTtest	3.0.0.0
RE	EMC 32	Rohde & Schwarz	V10.50.40

C - Conducted RF tests

- Conducted peak output power
- 6dB Occupied Bandwidth
- Power spectral density
- Conducted Band Edge and Out-of-Band Emissions

12 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

Items	Extended Uncertainty
Conducted Disturbance at Mains Terminals	150kHz to 30MHz, LISN, $\pm 3.16\text{dB}$
Radiated Disturbance	30MHz to 1GHz, $\pm 5.03\text{dB}$ (Horizontal) $\pm 5.12\text{dB}$ (Vertical) 1GHz to 18GHz, $\pm 5.15\text{dB}$ (Horizontal) $\pm 5.12\text{dB}$ (Vertical) 18GHz to 25GHz, $\pm 4.76\text{dB}$

Measurement Uncertainty Decision Rule:

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.3.3.



13 Photographs of Test Set-ups

Refer to the < Test Setup photos >.



14 Photographs of EUT

Refer to the < External Photos > & < Internal Photos >.

THE END