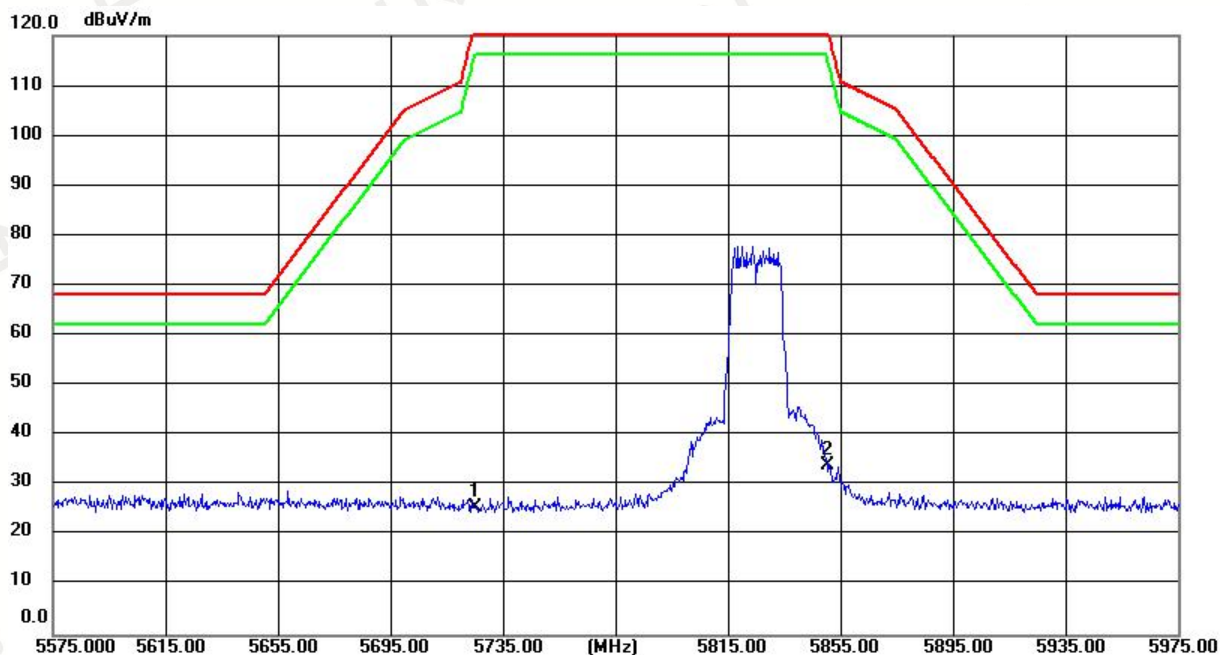


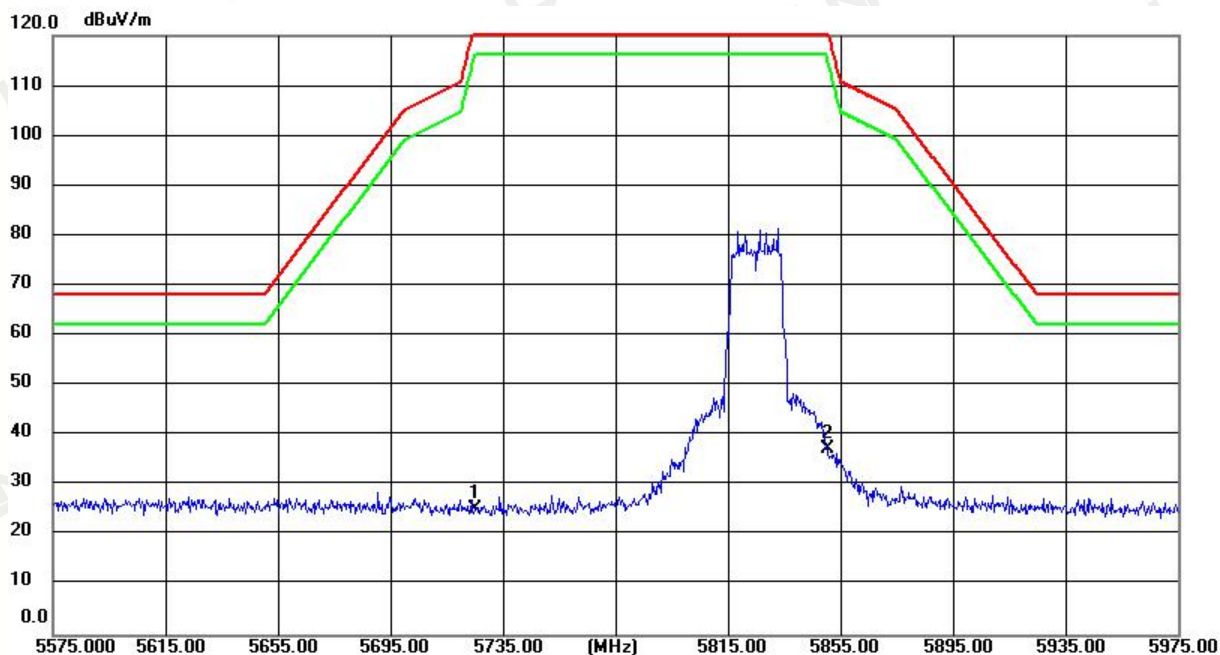
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

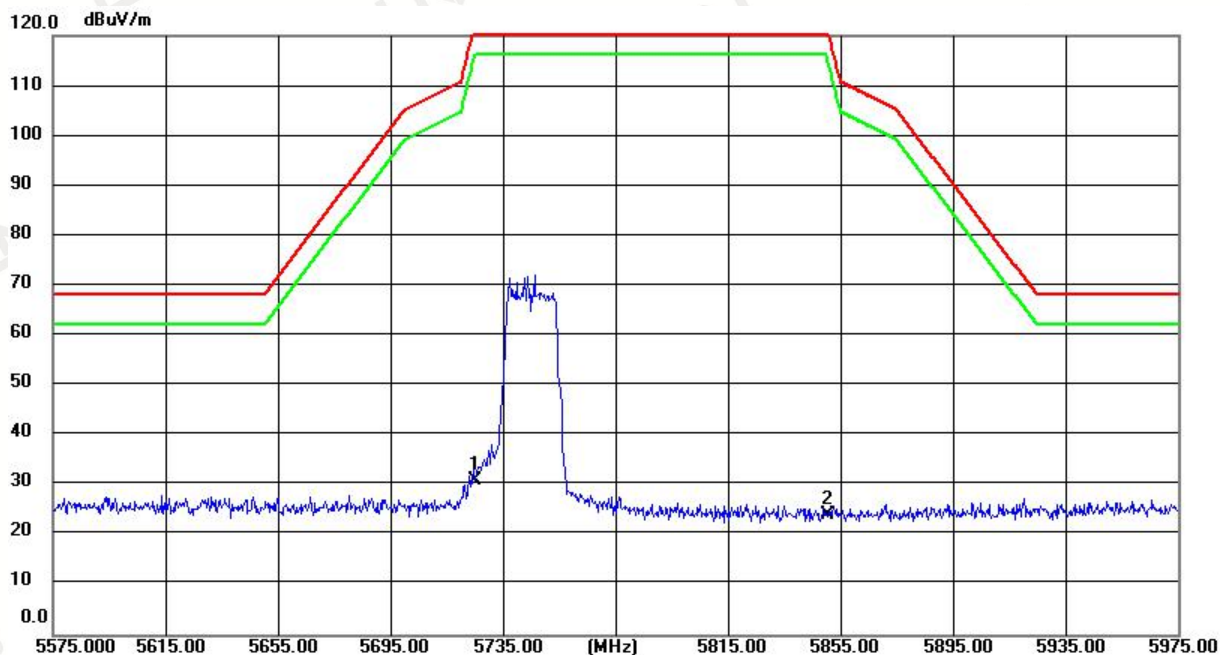


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11ac20(5G) CH 149		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5725.000	V	27.08	3.95	31.03	122.20	CH 149
5850.000	V	20.27	3.96	24.23	122.20	CH 149
5725.000	H	33.17	3.95	37.12	122.20	CH 149
5850.000	H	21.90	3.96	25.86	122.20	CH 149

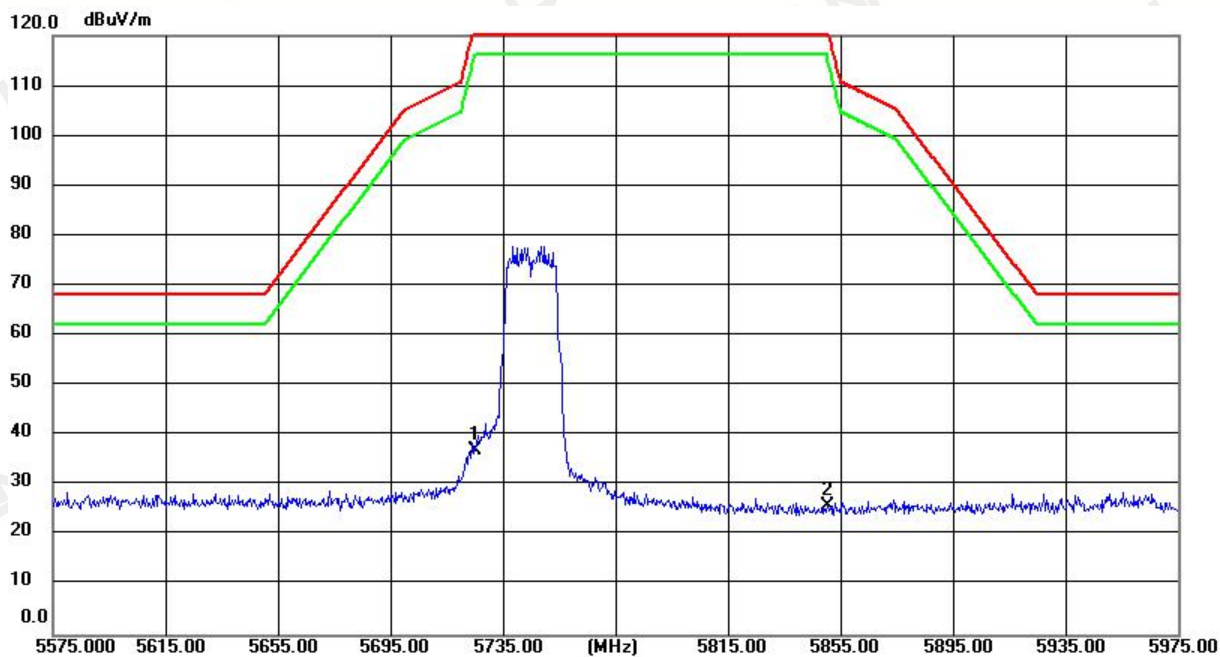
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

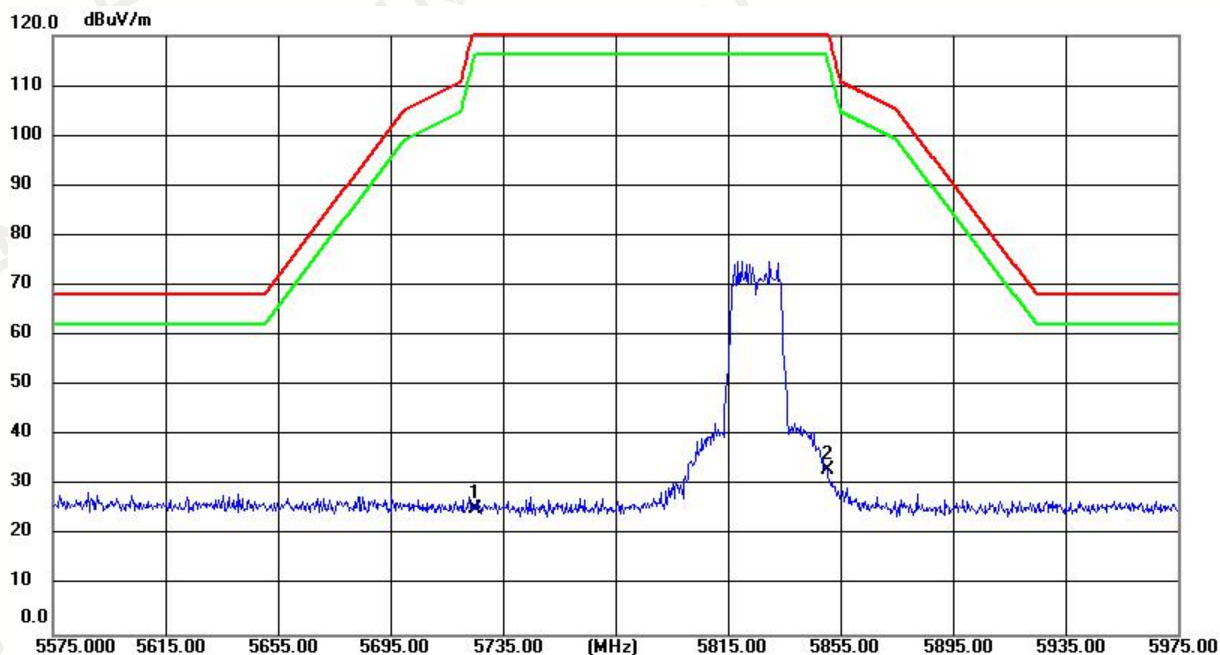


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11ac20(5G) CH 165		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5725.000	V	21.30	3.95	25.25	122.20	CH 165
5850.000	V	29.32	3.96	33.28	122.20	CH 165
5725.000	H	20.39	3.95	24.34	122.20	CH 165
5850.000	H	33.45	3.96	37.41	122.20	CH 165

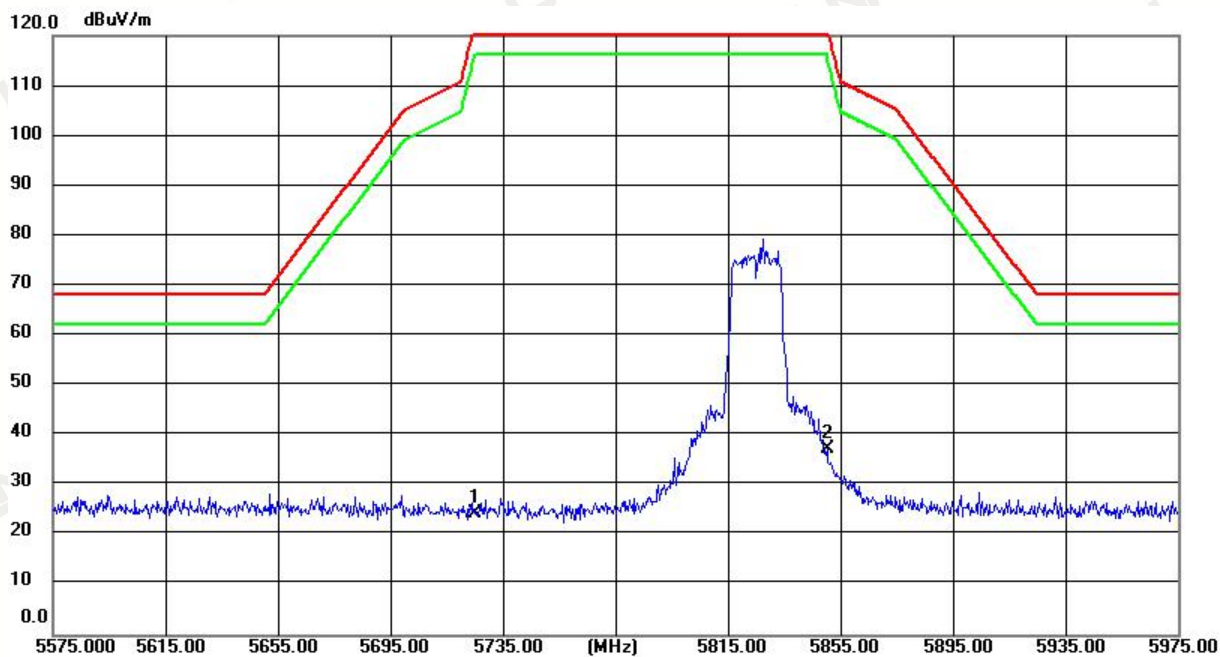
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

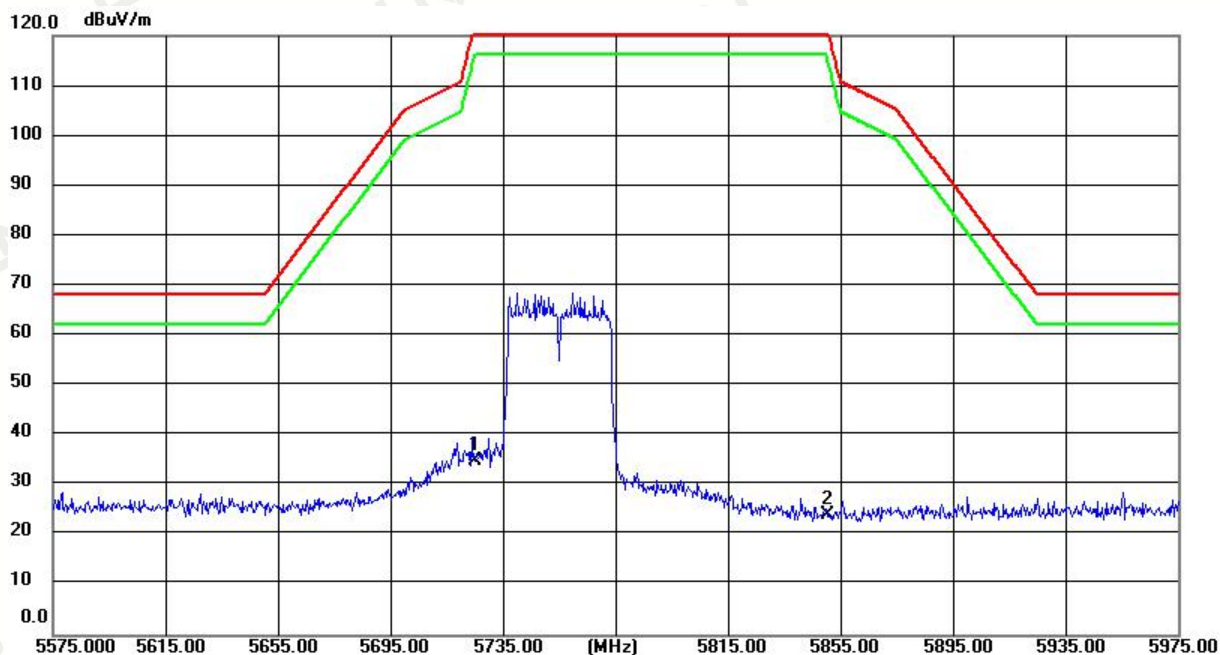


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11n40(5G) CH 151		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5725.000	V	30.86	3.95	34.81	122.20	CH 151
5850.000	V	20.17	3.96	24.13	122.20	CH 151
5725.000	H	38.99	3.95	42.94	122.20	CH 151
5850.000	H	22.06	3.96	26.02	122.20	CH 151

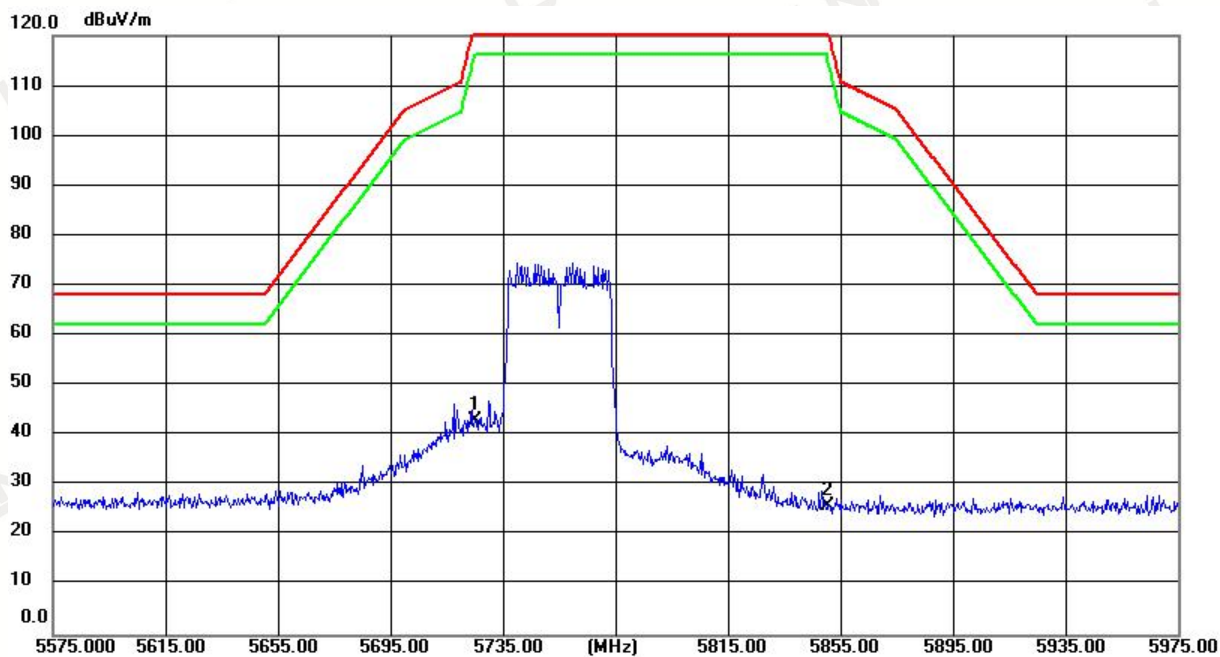
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

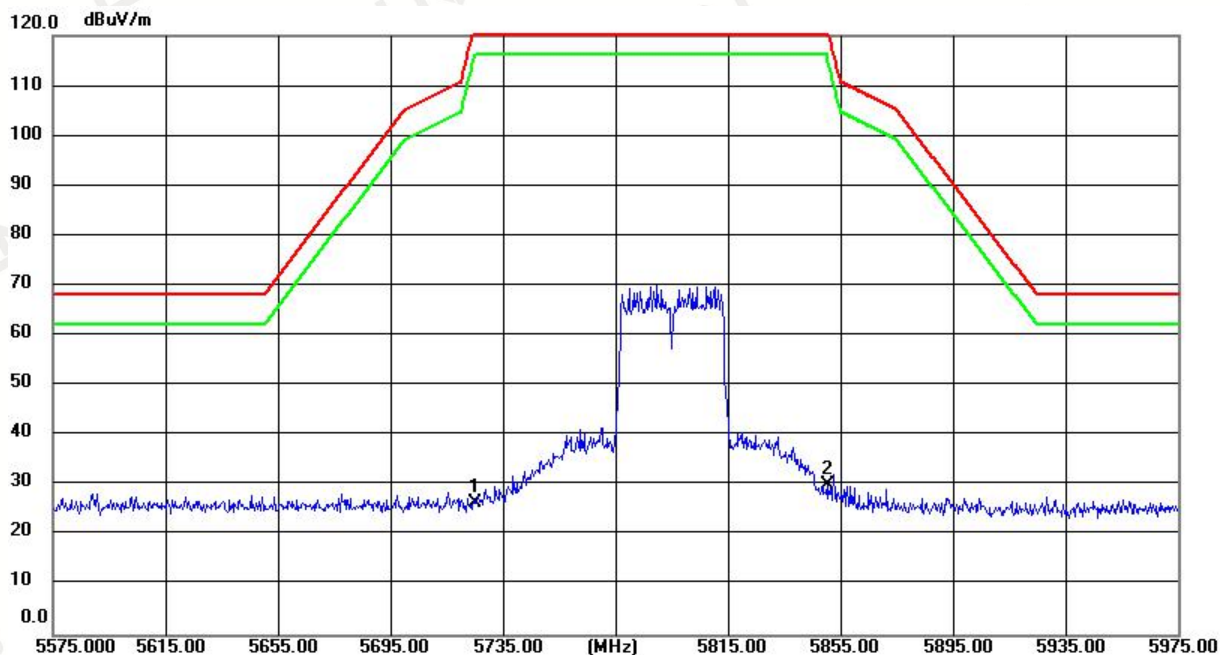


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11n40(5G) CH 159		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5725.000	V	22.66	3.95	26.61	122.20	CH 159
5850.000	V	26.13	3.96	30.09	122.20	CH 159
5725.000	H	26.33	3.95	30.28	122.20	CH 159
5850.000	H	26.35	3.96	30.31	122.20	CH 159

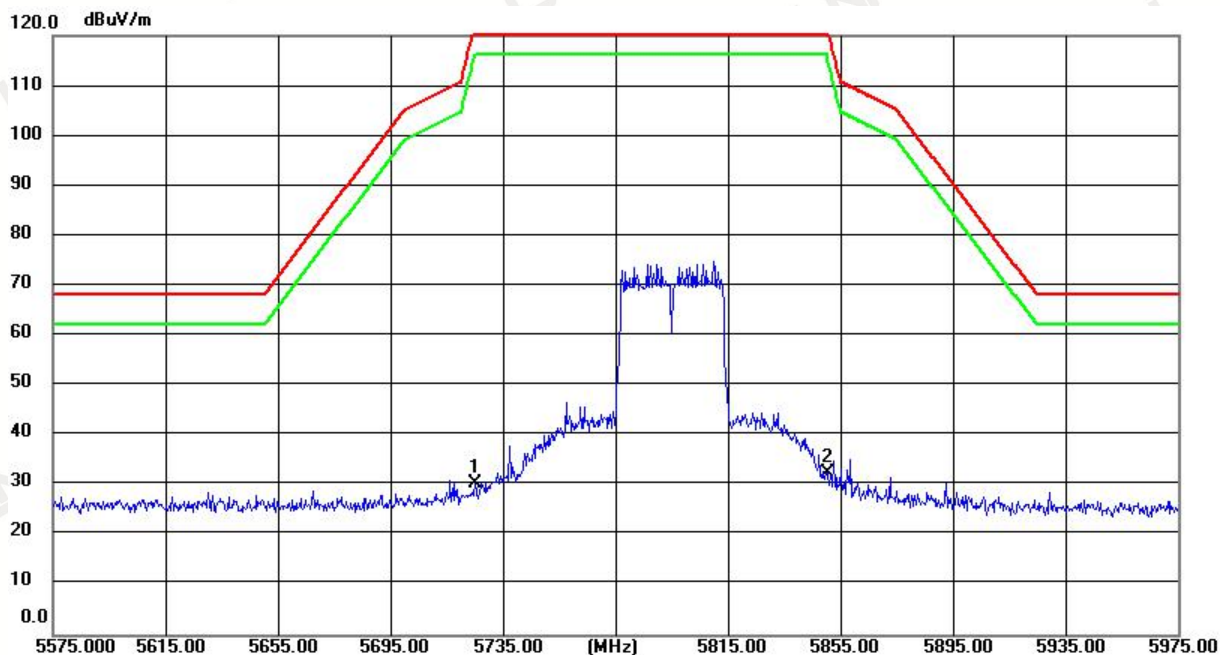
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

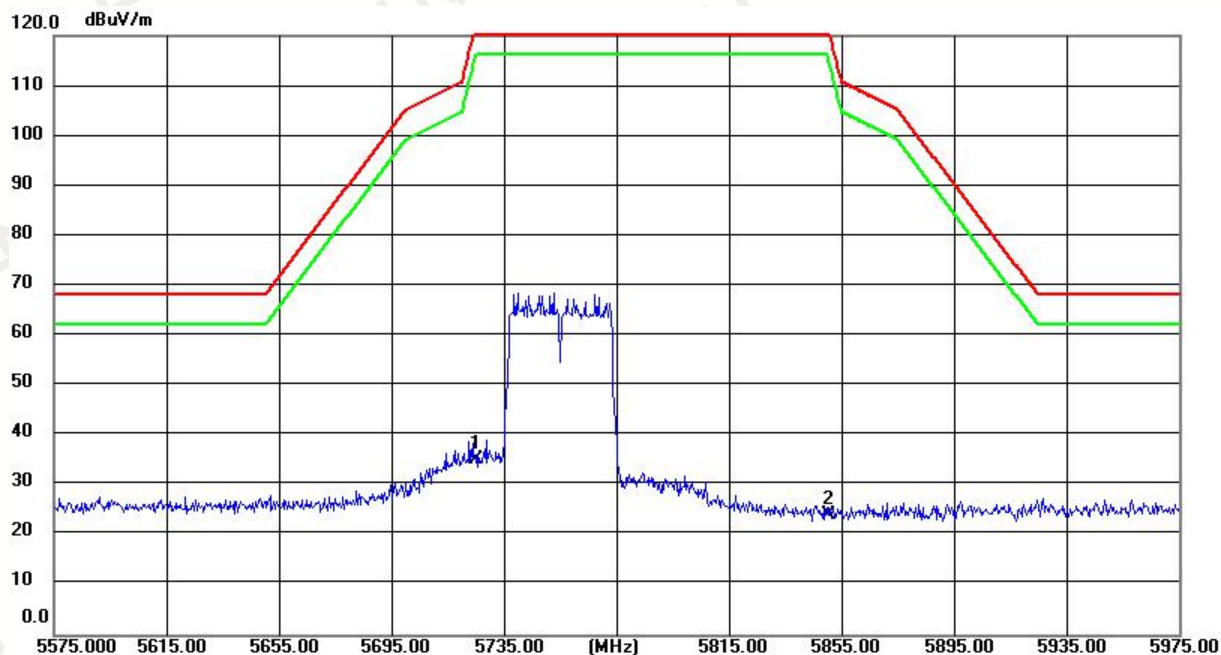


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11ac40(5G) CH 149		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5725.000	V	31.31	3.95	35.26	122.20	CH 149
5850.000	V	20.11	3.96	24.07	122.20	CH 149
5725.000	H	36.17	3.95	40.12	122.20	CH 149
5850.000	H	21.89	3.96	25.85	122.20	CH 149

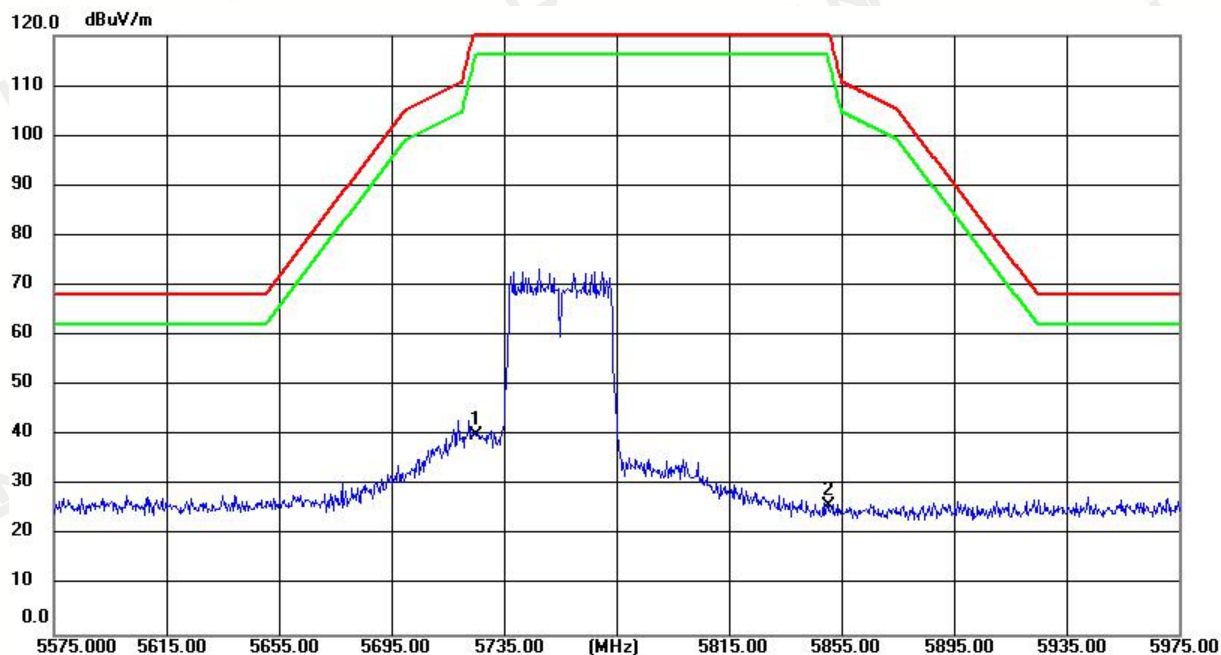
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

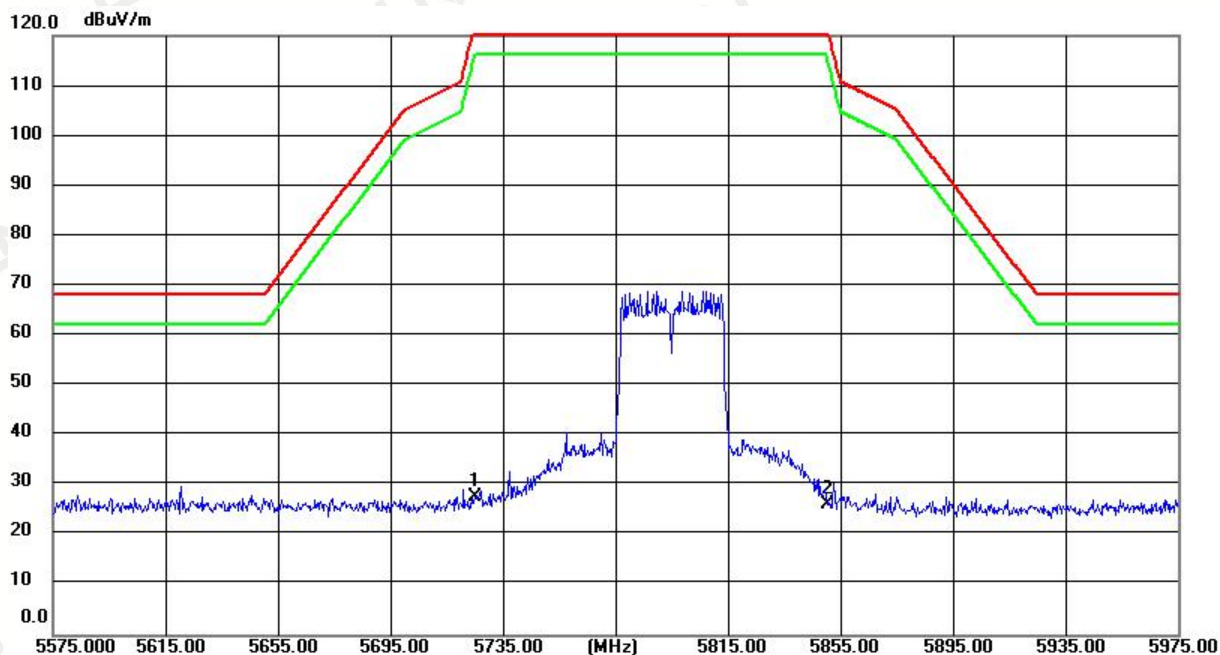


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11ac40(5G) CH 159		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuv)	Ant/CF (dB)	Act (dBuv/m)	Limit (dBuv/m)	Note
5725.000	V	23.65	3.95	27.60	122.20	CH 159
5850.000	V	22.30	3.96	26.26	122.20	CH 159
5725.000	H	26.40	3.95	30.35	122.20	CH 159
5850.000	H	28.53	3.96	32.49	122.20	CH 159

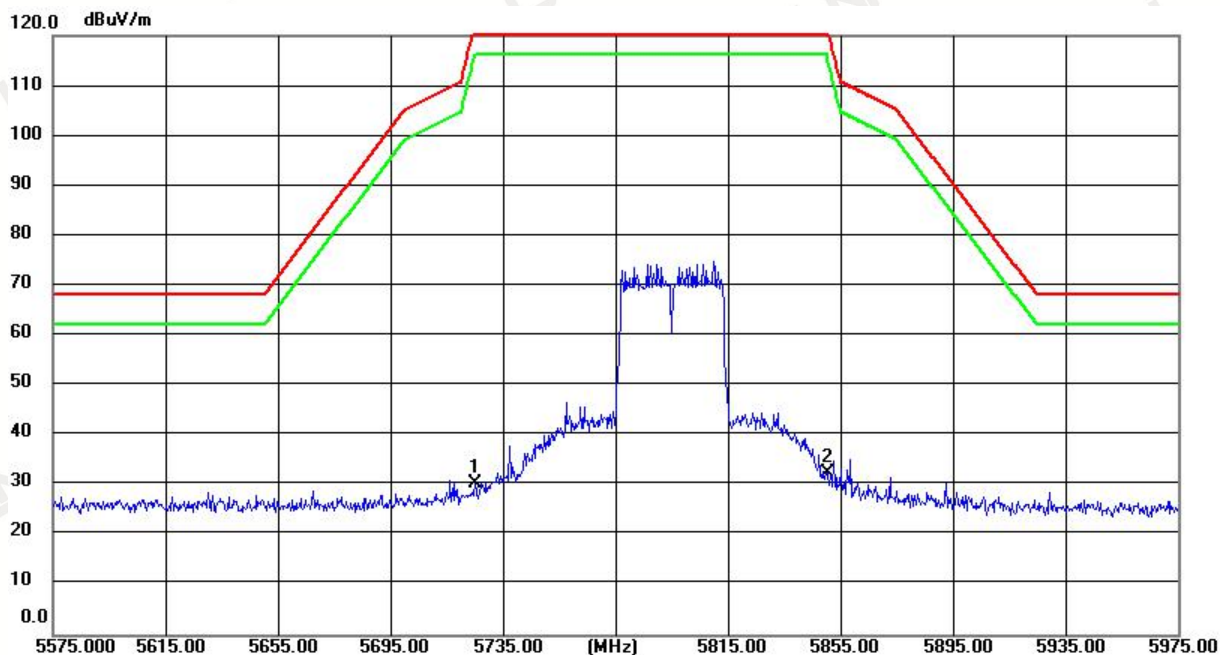
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal

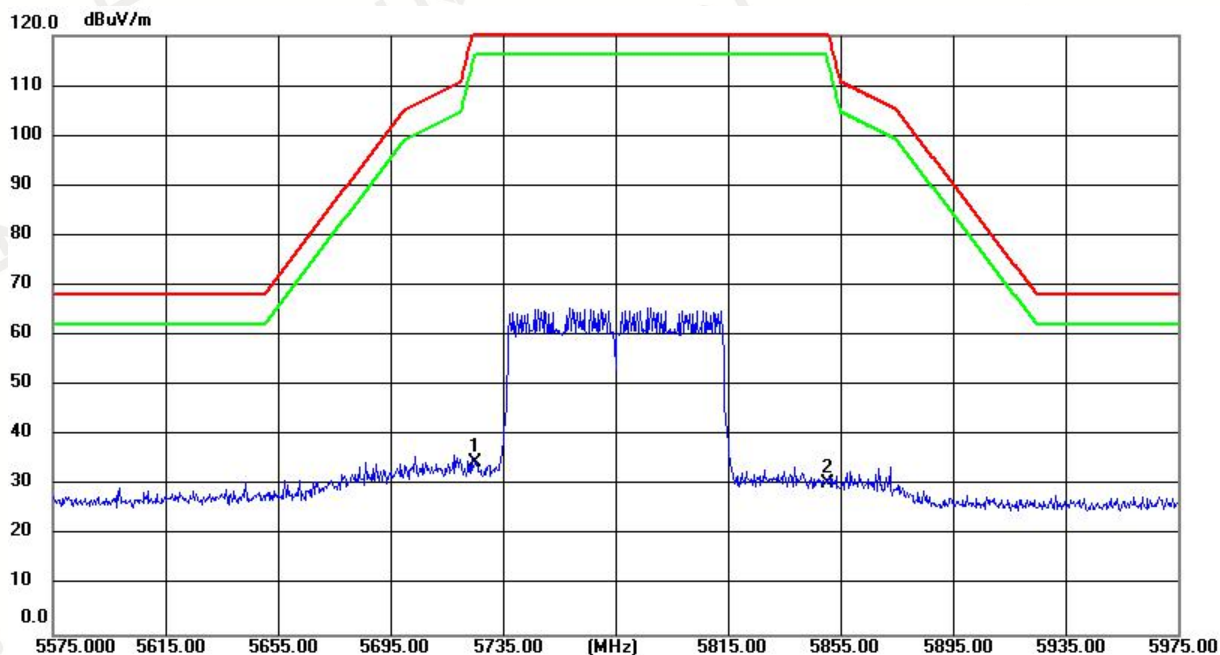


EUT:	ALL IN ONE	Model Name :	1786AIO
Temperature:	25 °C	Relative Humidity:	56%
Pressure:	1010 hPa	Test Voltage:	DC 7.4V
Test Mode :	802.11 AC80(5G) CH 155		
Test Date :	2022-03-14		
Note:	In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.		

Freq. (MHz)	Ant.Pol. H/V	Reading (dBuV)	Ant/CF (dB)	Act (dBuV/m)	Limit (dBuV/m)	Note
5725.000	V	30.82	3.95	34.77	122.20	CH 155
5850.000	V	30.81	3.96	34.77	122.20	CH 155
5725.000	H	32.46	3.95	36.41	122.20	CH 155
5850.000	H	29.83	3.96	33.79	122.20	CH 155

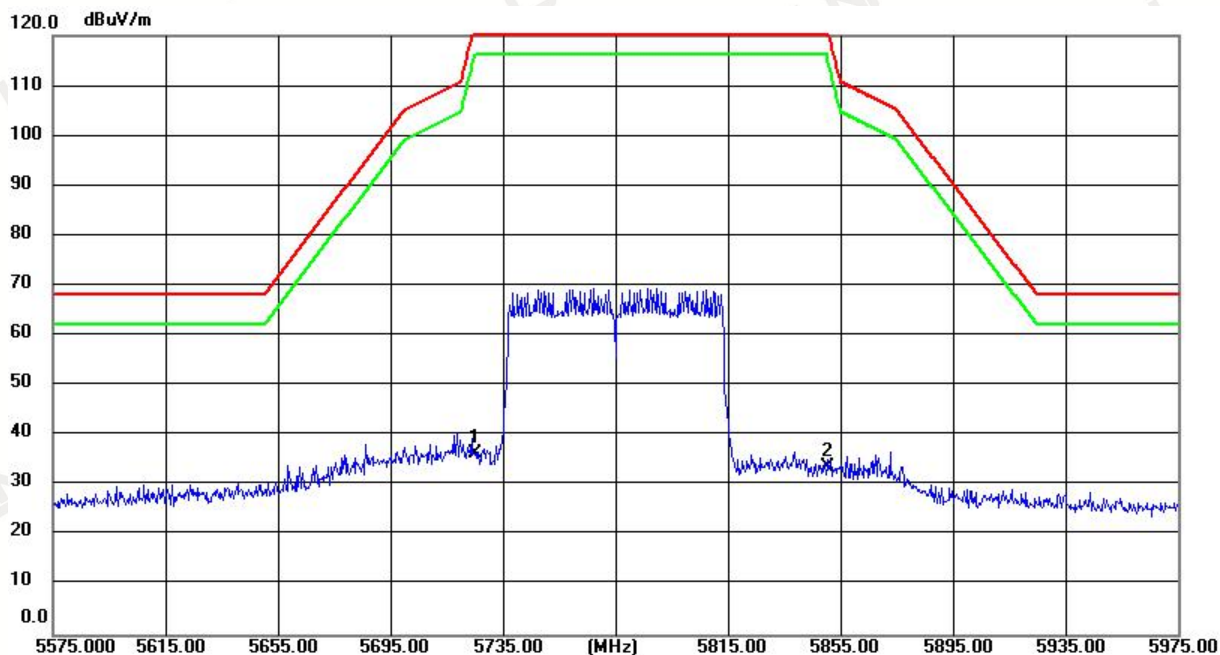
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal



12. FCC LINE CONDUCTED EMISSION TEST

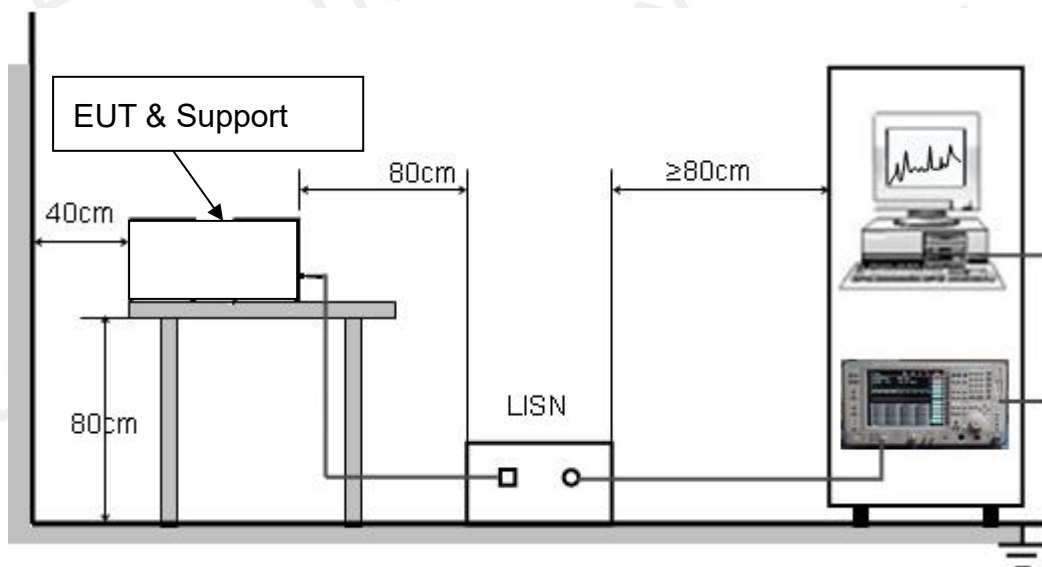
12.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



12.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2. Support equipment, if needed, was placed as per ANSI C63.10.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
4. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received charging voltage by adapter which received 120V/60Hz power by a LISN.
6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

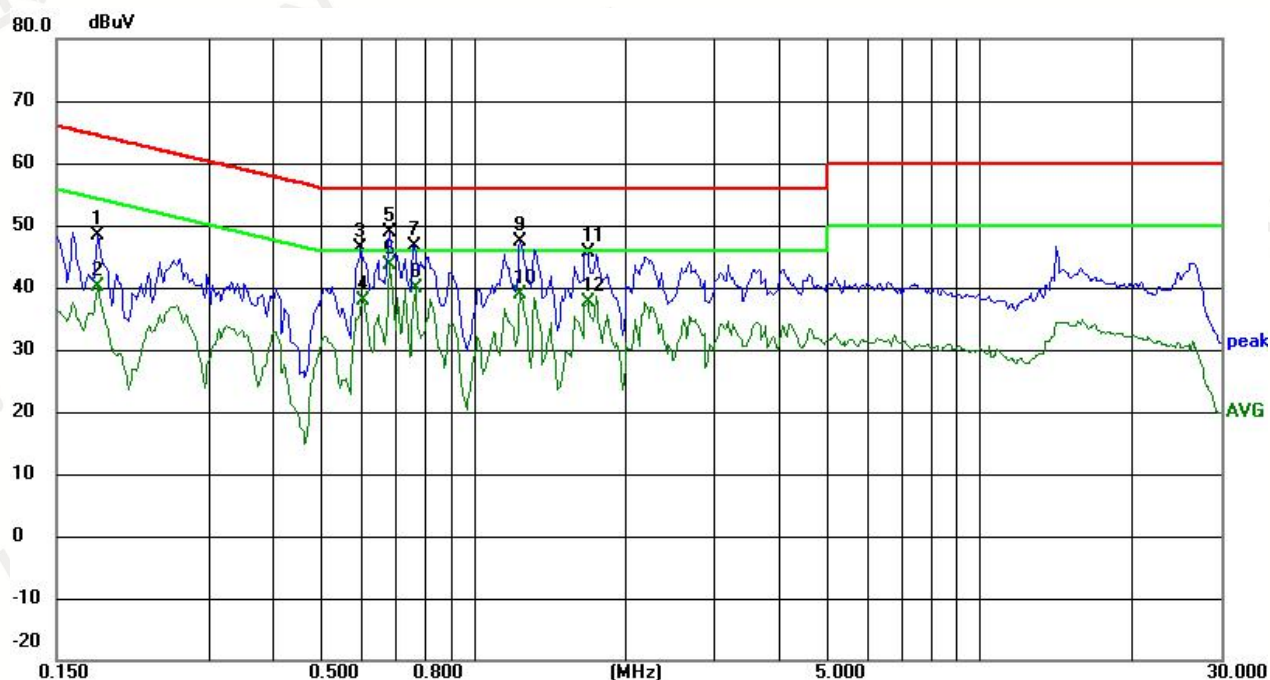
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

12.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

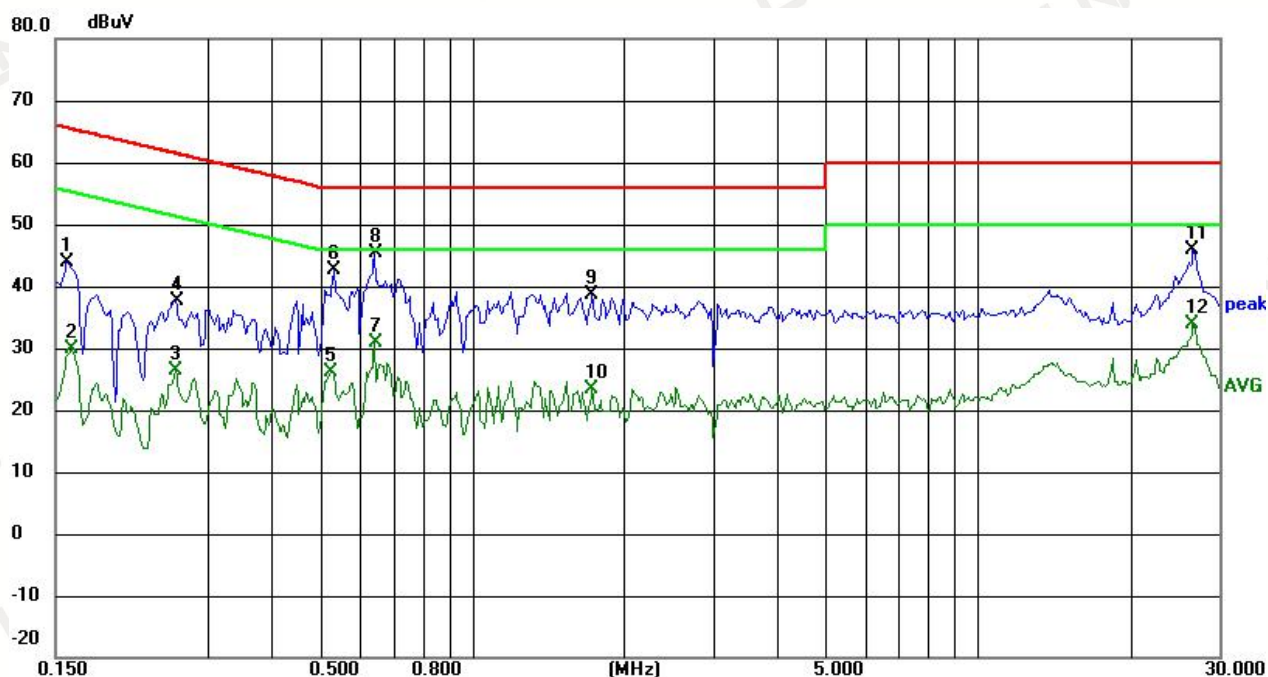
12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Temperature:	24°C	Relative Humidity:	48%
Test Date:	Mar. 11, 2022	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Phase:	Line
Test Mode:	Transmitting mode of 802.11a20 5745MHz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1811	38.58	9.76	48.34	64.44	-16.10	peak	P
2	0.1811	30.38	9.76	40.14	54.44	-14.30	AVG	P
3	0.5985	36.61	9.77	46.38	56.00	-9.62	peak	P
4	0.6060	27.98	9.78	37.76	46.00	-8.24	AVG	P
5	0.6843	39.12	9.78	48.90	56.00	-7.10	peak	P
6 *	0.6843	33.73	9.78	43.51	46.00	-2.49	AVG	P
7	0.7621	36.94	9.78	46.72	56.00	-9.28	peak	P
8	0.7700	30.11	9.78	39.89	46.00	-6.11	AVG	P
9	1.2379	37.61	9.79	47.40	56.00	-8.60	peak	P
10	1.2379	29.10	9.79	38.89	46.00	-7.11	AVG	P
11	1.6827	35.82	9.80	45.62	56.00	-10.38	peak	P
12	1.6827	27.82	9.80	37.62	46.00	-8.38	AVG	P

Temperature:	24°C	Relative Humidity:	48%
Test Date:	Mar. 11, 2022	Pressure:	1010hPa
Test Voltage:	AC 120V, 60Hz	Phase:	Neutral
Test Mode:	Transmitting mode of 802.11a20 5745MHz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1578	34.12	9.78	43.90	65.58	-21.68	peak	P
2	0.1617	20.07	9.78	29.85	55.38	-25.53	AVG	P
3	0.2590	16.64	9.75	26.39	51.46	-25.07	AVG	P
4	0.2592	27.97	9.75	37.72	61.46	-23.74	peak	P
5	0.5243	16.39	9.77	26.16	46.00	-19.84	AVG	P
6	0.5322	32.75	9.77	42.52	56.00	-13.48	peak	P
7	0.6413	21.13	9.78	30.91	46.00	-15.09	AVG	P
8 *	0.6414	35.58	9.78	45.36	56.00	-10.64	peak	P
9	1.7256	28.86	9.80	38.66	56.00	-17.34	peak	P
10	1.7256	13.48	9.80	23.28	46.00	-22.72	AVG	P
11	26.6886	34.70	11.09	45.79	60.00	-14.21	peak	P
12	26.6886	22.81	11.09	33.90	50.00	-16.10	AVG	P

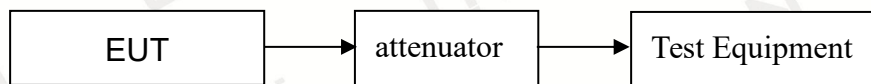
RESULT: PASS

13. Frequency Stability

13.1. TEST 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 users manual.

13.2. BLOCK DIAGRAM OF SETUP



13.3 Test Procedure

Determining compliance with the peak excursion requirement shall be done by confirming that the ratio of the maximum of the peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission does not exceed the regulatory requirement. The procedure for this method is as follows:

- a) The following guidance for limiting the number of tests applies only to peak excursion measurements:
 - 1) Testing each modulation mode on a single channel in a single operating band is sufficient to determine compliance with the peak excursion requirement. (If all modulation modes are not available on a single channel in a single band, then testing must be extended to other channels and bands as needed to ensure that all modulation modes are tested.)
 - 2) Tests must include all variations in signal structure, such as:
 - i) All signal types [e.g., direct sequence spread spectrum (DSSS) and OFDM].
 - ii) All modulation types [e.g., binary phase-shift keying (BPSK), quadrature phase-shift keying (QPSK), 16-QAM, 64-QAM, and 256-QAM].
 - iii) All bandwidth modes.
 - iv) All variations in signal parameters (e.g., changes in subcarrier spacing or number of subcarriers).
 - 3) For a given signal structure, testing of multiple error-correction coding rates is not

required (e.g., 1/2, 2/3, and 3/4).

4) For MIMO devices, testing of a single output port is sufficient to determine compliance with the peak excursion requirement. If a given signal structure can be exercised with various combinations of spatial multiplexing (such as different numbers of spatial streams), beamforming, and cyclic delay diversity, peak excursion tests are not required to include those variations.

b) The procedure is as follows:

- 1) Set the span of the spectrum analyzer or EMI receiver to view the entire emission bandwidth or occupied bandwidth.
- 2) Find the maximum of the peak-max-hold spectrum:
 - i) Set RBW = 1 MHz.
 - ii) VBW = 3 MHz.
 - iii) Detector = peak.
 - iv) Trace mode = max-hold.
 - v) Allow the sweeps to continue until the trace stabilizes.
 - vi) Use the peak search function to find the peak of the spectrum.
- 3) Use the procedure found in 12.5 to measure the PPSD.
- 4) Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

13.4 Deviation From Test Standard

No deviation

13.5. TEST RESULT

801.11a U-NII-3: 5745 MHz:

Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
4.5	5745.0210
5	5745.0120
5.5	5745.0520
Limit Range (MHz)	5725-5850
Result	PASS
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5745.0620
10	5745.0230
20	5745.0220
30	5745.0330
40	5745.0320
50	5745.0520
Limit Range (MHz)	5725-5850
Result	PASS

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ



FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ



FCC LINE CONDUCTED EMISSION TEST SETUP



----END OF REPORT----