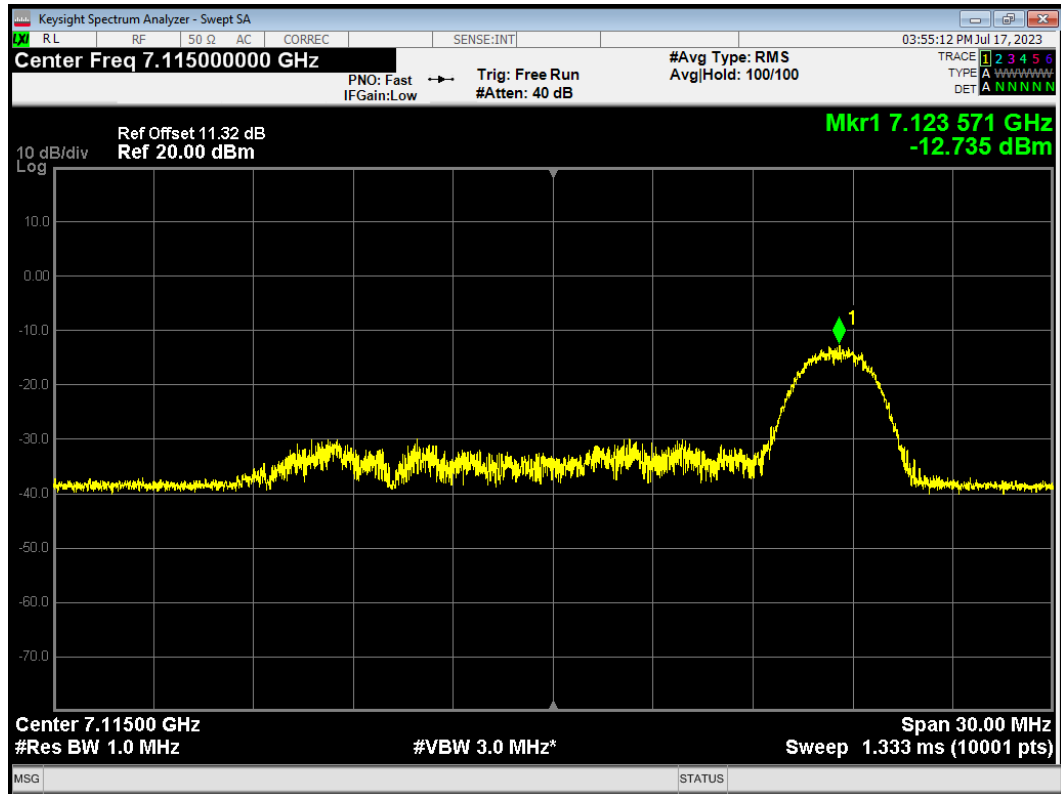
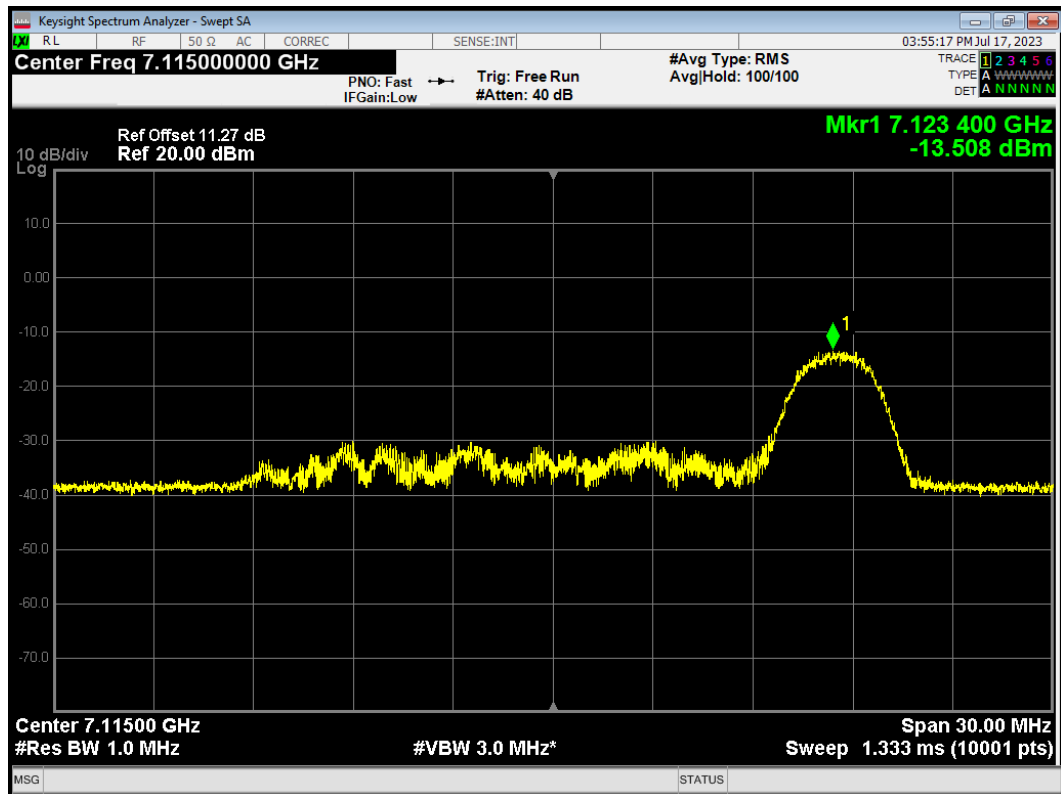


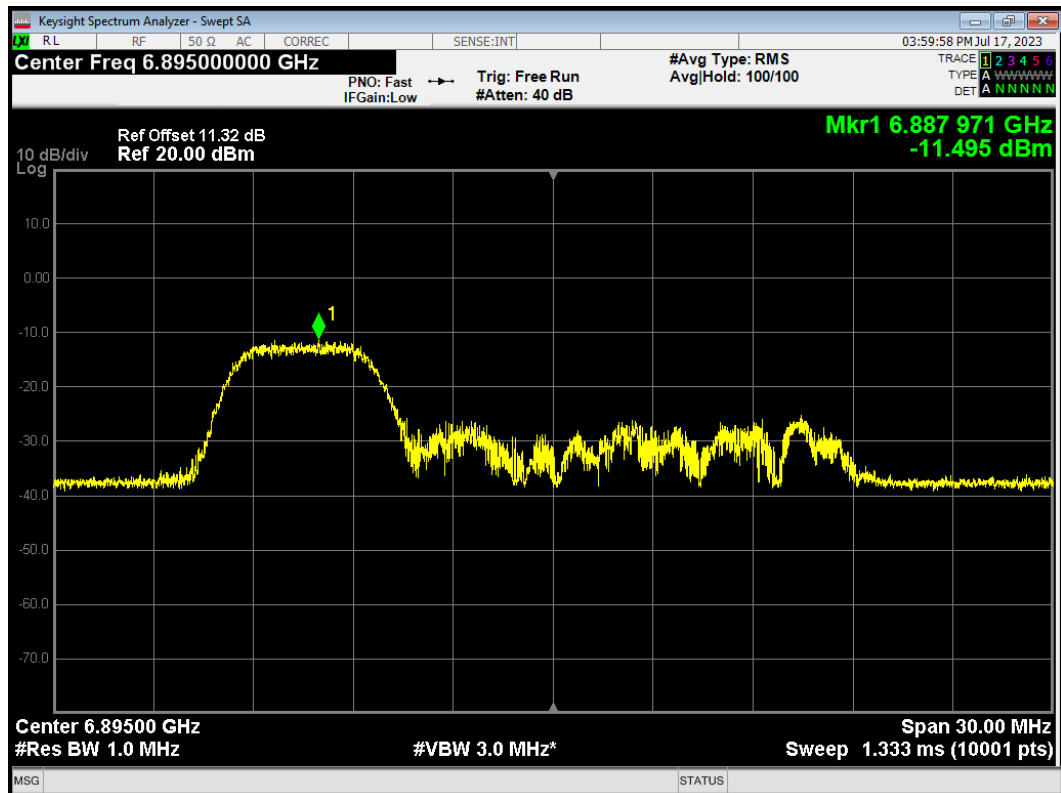
PSD 802.11ax HE20 26-Tone, RU Index 8, 7115MHz Antenna 1



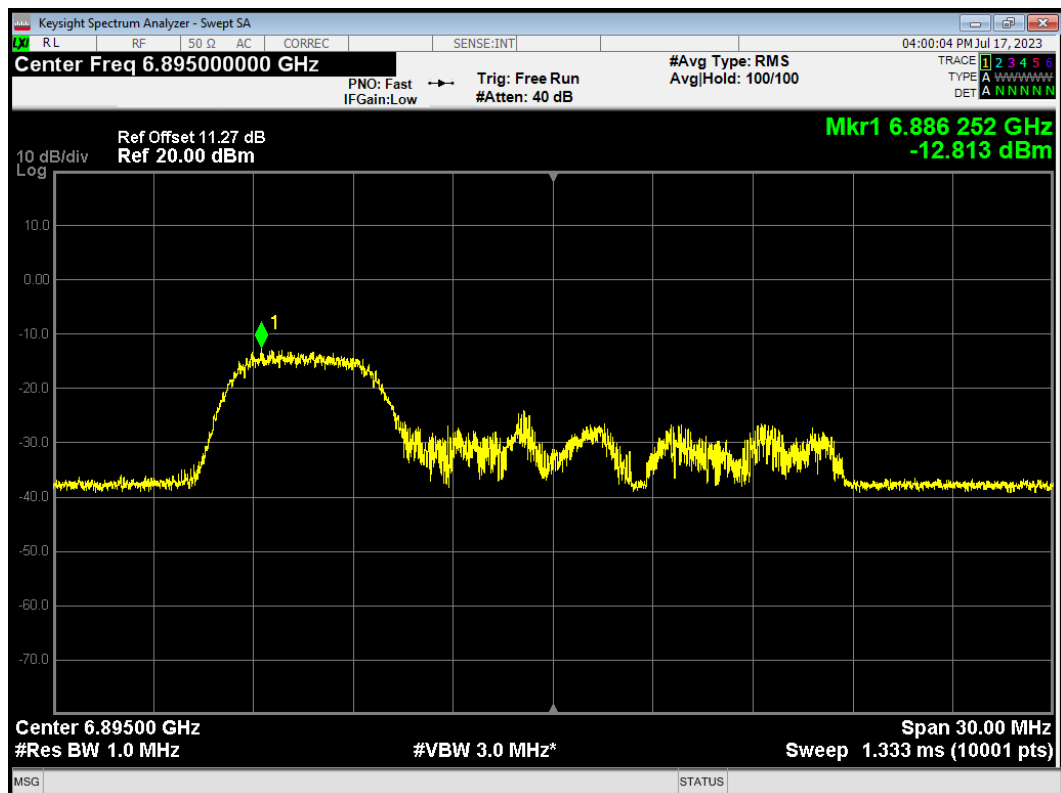
PSD 802.11ax HE20 26-Tone, RU Index 8, 7115MHz Antenna 2



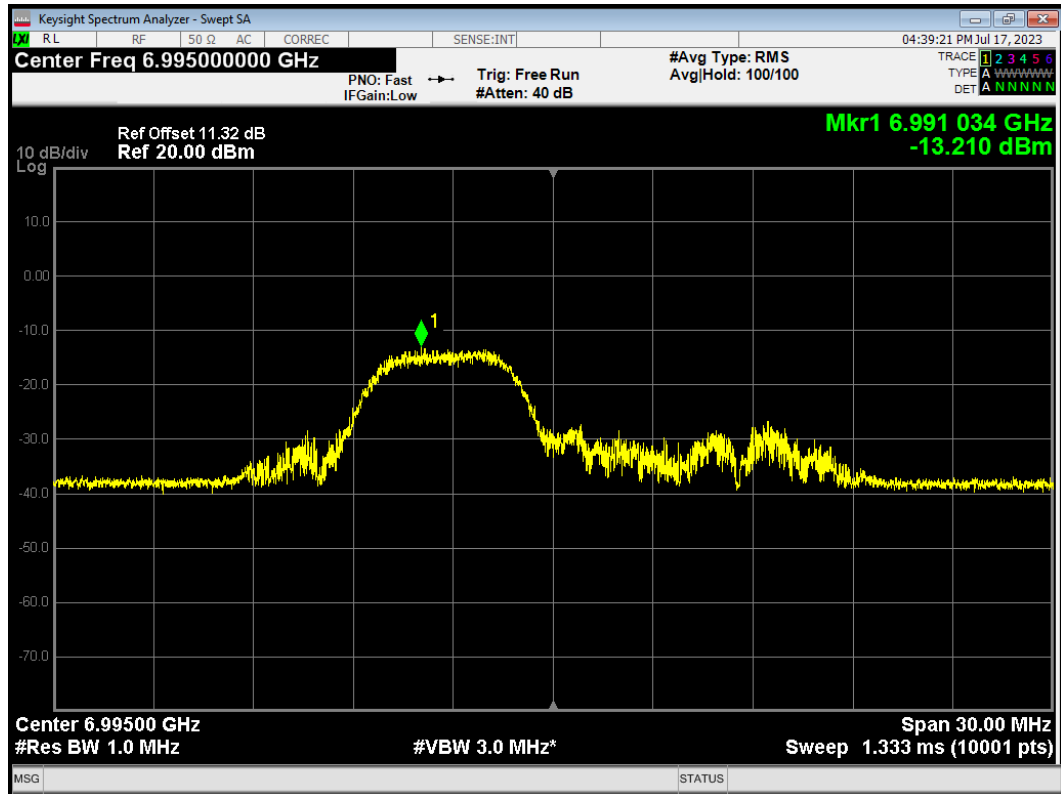
PSD 802.11ax HE20 52-Tone, RU Index 37, 6895MHz Antenna 1



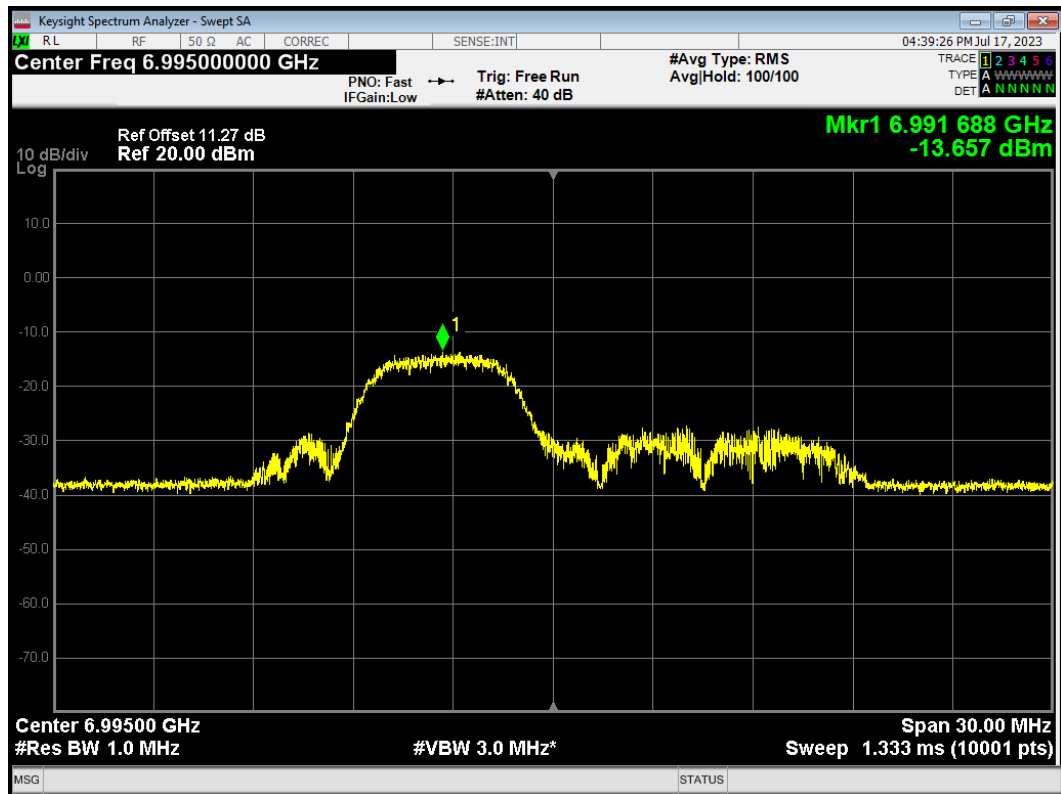
PSD 802.11ax HE20 52-Tone, RU Index 37, 6895MHz Antenna 2



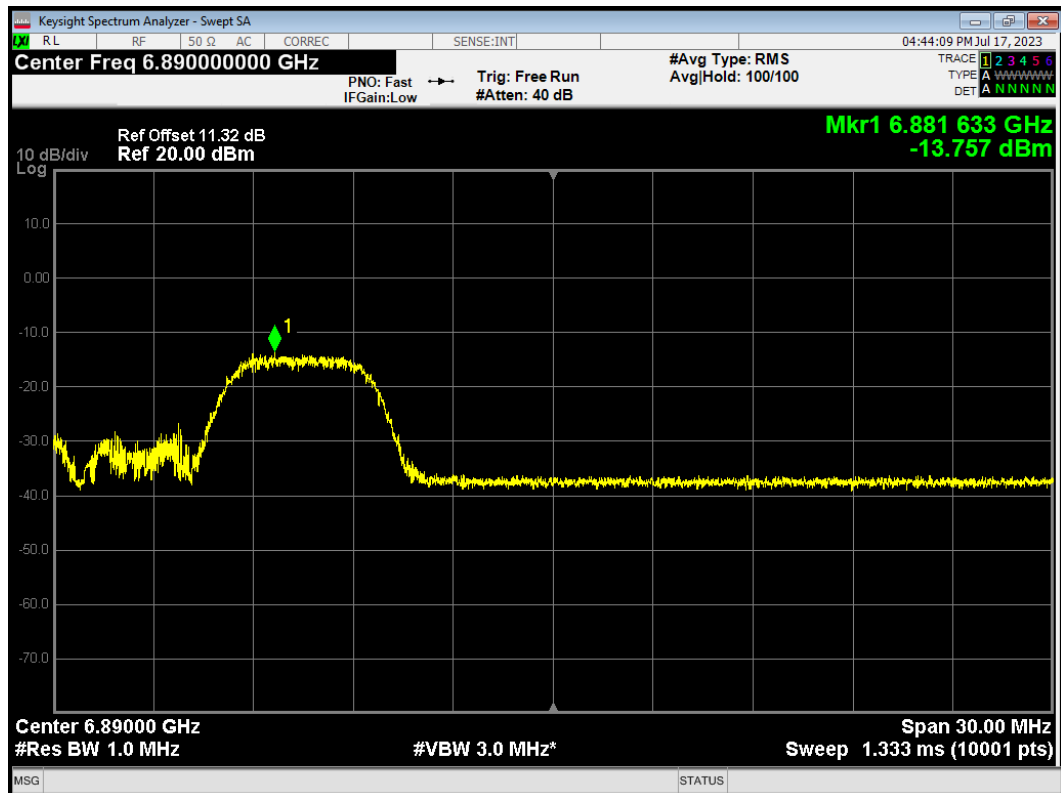
PSD 802.11ax HE20 52-Tone, RU Index 38, 6995MHz Antenna 1



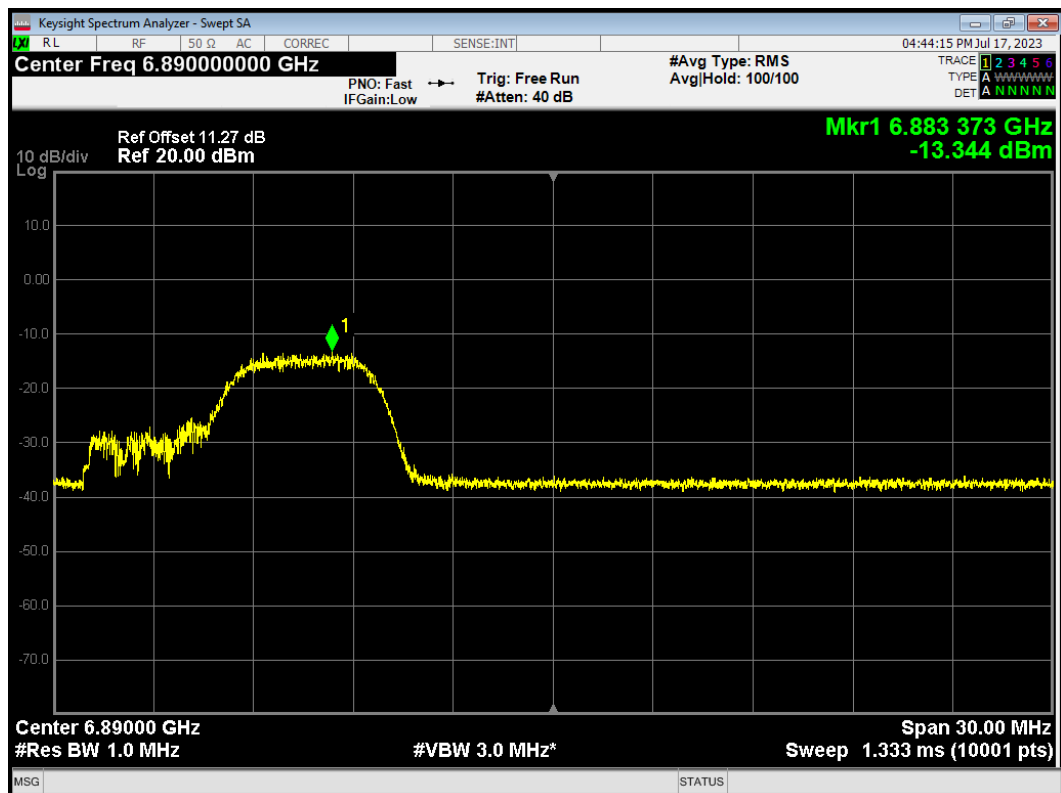
PSD 802.11ax HE20 52-Tone, RU Index 38, 6995MHz Antenna 2



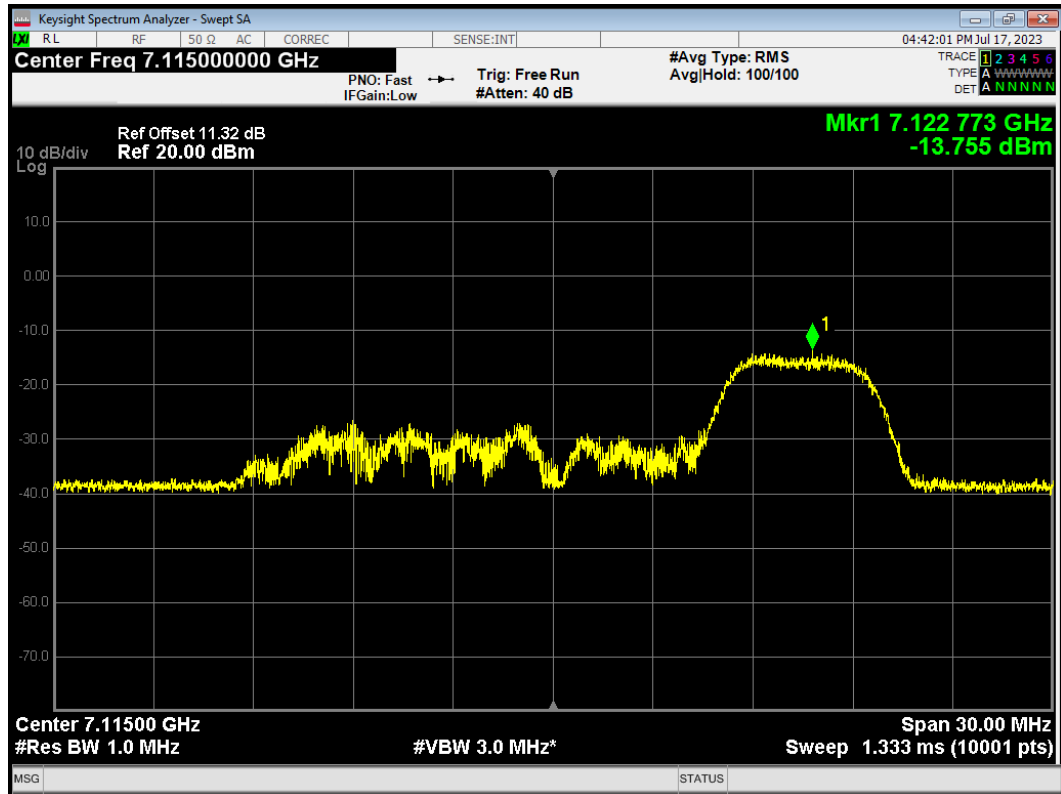
PSD 802.11ax HE20 52-Tone, RU Index 40, 6890MHz Antenna 1



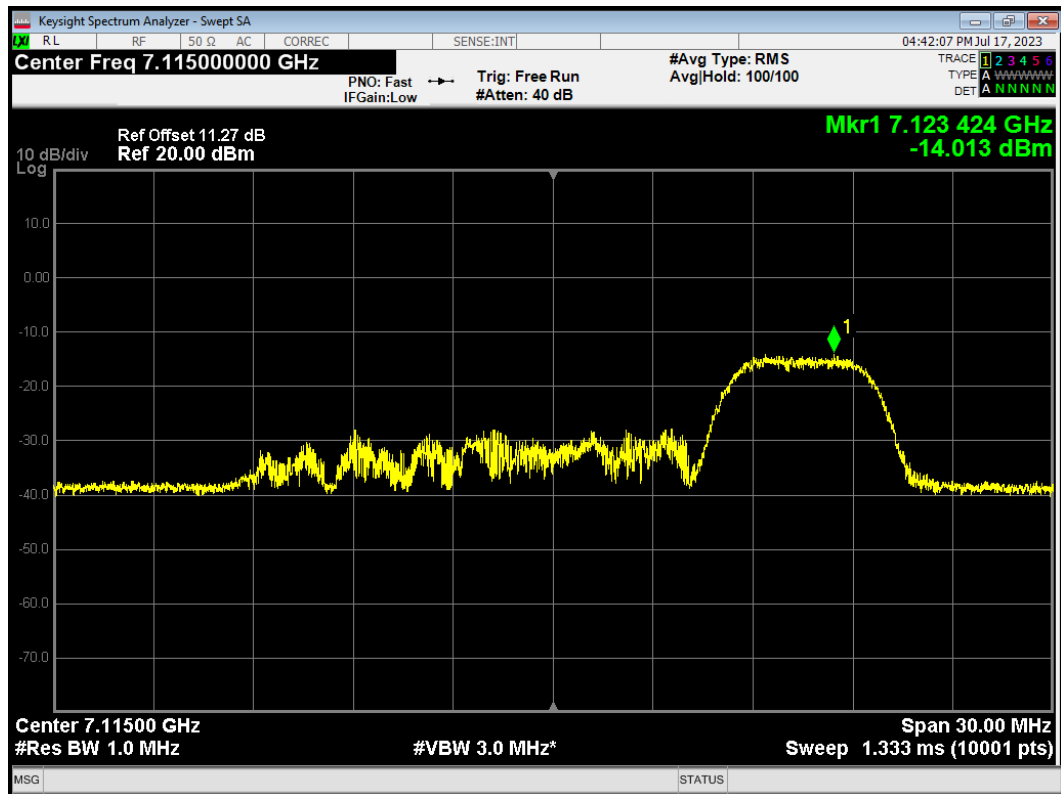
PSD 802.11ax HE20 52-Tone, RU Index 40, 6890MHz Antenna 2



PSD 802.11ax HE20 52-Tone, RU Index 40, 7115MHz Antenna 1



PSD 802.11ax HE20 52-Tone, RU Index 40, 7115MHz Antenna 2



5.4. Frequency Stability

Ambient Condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

- a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
- e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

Limit

The frequency of the carrier signal shall be maintained within band of operation.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936\text{Hz}$

Test Results

Voltage (V)	Temperature (°C)	Test Results			
		6175 MHz			
		1min	2min	5min	10min
5.00	-20	6175.006029	6175.000447	6174.997541	6174.988507
5.00	-10	6175.011539	6174.991535	6174.994855	6174.978769
5.00	0	6175.004746	6174.986588	6174.990604	6174.976251
5.00	10	6174.996679	6174.980132	6174.988199	6174.975810
5.00	20	6174.994694	6174.977315	6174.984082	6174.975788
5.00	30	6174.986562	6174.975185	6174.983639	6174.967643
5.00	40	6174.983806	6174.966223	6174.983185	6174.962892
5.00	50	6174.979258	6174.960204	6174.976325	6174.958763
4.50	20	6174.975535	6174.951570	6174.972332	6174.950666
5.50	20	6174.974632	6174.943549	6174.971026	6174.941868
MHz		-0.025368	-0.056451	-0.028974	-0.058132
PPM		-4.108178	-9.141862	-4.692146	-9.414089

Voltage (V)	Temperature (°C)	Test Results			
		6475 MHz			
		1min	2min	5min	10min
5.00	-20	6475.007411	6474.997937	6474.994950	6474.986583
5.00	-10	6474.998765	6474.996808	6474.987031	6474.986145
5.00	0	6474.997479	6474.993482	6474.980365	6474.984398
5.00	10	6474.987607	6474.984138	6474.976019	6474.982562
5.00	20	6474.981221	6474.983514	6474.971167	6474.974590
5.00	30	6474.974102	6474.975889	6474.968097	6474.968899
5.00	40	6474.964708	6474.967504	6474.959277	6474.961012
5.00	50	6474.958159	6474.960843	6474.954218	6474.960077
4.50	20	6474.957447	6474.960587	6474.949020	6474.954634
5.50	20	6474.952574	6474.959603	6474.940483	6474.952166
MHz		-0.047426	-0.040397	-0.059517	-0.047834
PPM		-7.324479	-6.238919	-9.191815	-7.387490

Voltage (V)	Temperature (°C)	Test Results			
		6695 MHz			
		1min	2min	5min	10min
5.00	-20	6694.999144	6694.996893	6694.995515	6694.985539
5.00	-10	6694.994520	6694.987367	6694.985834	6694.982865
5.00	0	6694.984911	6694.984322	6694.985322	6694.977867
5.00	10	6694.980888	6694.978391	6694.982143	6694.975134

5.00	20	6694.973078	6694.972384	6694.980874	6694.967937
5.00	30	6694.969907	6694.962856	6694.980128	6694.966411
5.00	40	6694.960395	6694.962085	6694.978629	6694.964080
5.00	50	6694.950696	6694.960932	6694.976246	6694.954774
4.50	20	6694.941747	6694.956038	6694.974374	6694.951061
5.50	20	6694.938876	6694.954192	6694.970837	6694.949473
MHz		-0.061124	-0.045808	-0.029163	-0.050527
PPM		-9.129798	-6.842121	-4.355937	-7.546975

Voltage (V)	Temperature (°C)	Test Results			
		6995 MHz			
		1min	2min	5min	10min
5.00	-20	6994.994972	6994.986484	6994.976585	6994.967738
5.00	-10	6994.989068	6994.985637	6994.974268	6994.958047
5.00	0	6994.981755	6994.980317	6994.972846	6994.948231
5.00	10	6994.976897	6994.979922	6994.972618	6994.941762
5.00	20	6994.968141	6994.975539	6994.964289	6994.941247
5.00	30	6994.964938	6994.968383	6994.954402	6994.939862
5.00	40	6994.959591	6994.963731	6994.949750	6994.935417
5.00	50	6994.956739	6994.954595	6994.947527	6994.932662
4.50	20	6994.952955	6994.948448	6994.941054	6994.931651
5.50	20	6994.943881	6994.946720	6994.935830	6994.928375
MHz		-0.056119	-0.053280	-0.064170	-0.071625
PPM		-8.022731	-7.616869	-9.173695	-10.239457

5.5. In-Band Emission (Mask)

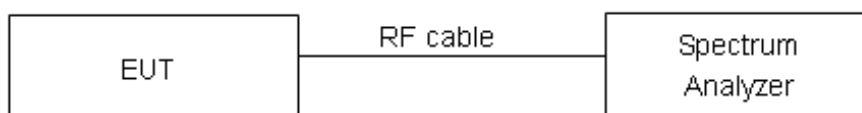
Ambient Condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

1. Connect output of the antenna port to a spectrum analyzer and adjust appropriate attenuation.
2. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10. (Determine the channel edge.)
3. Measure the power spectral density (for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
4. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
 - b) Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
5. Adjust the span to encompass the entire mask as necessary and clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

Test Setup



Limits

Test Item	Frequencies (MHz)	(X) dBc ^{*1}
Emission Mask	At 1 MHz outside of channel edge	20
	At one channel bandwidth from the channel center ^{*2}	28
	At one- and one-half times the channel bandwidth away from channel center ^{*3}	40
	More than one- and one-half times the channel bandwidth	40

*1: The power spectral density must be suppressed by “x” dB

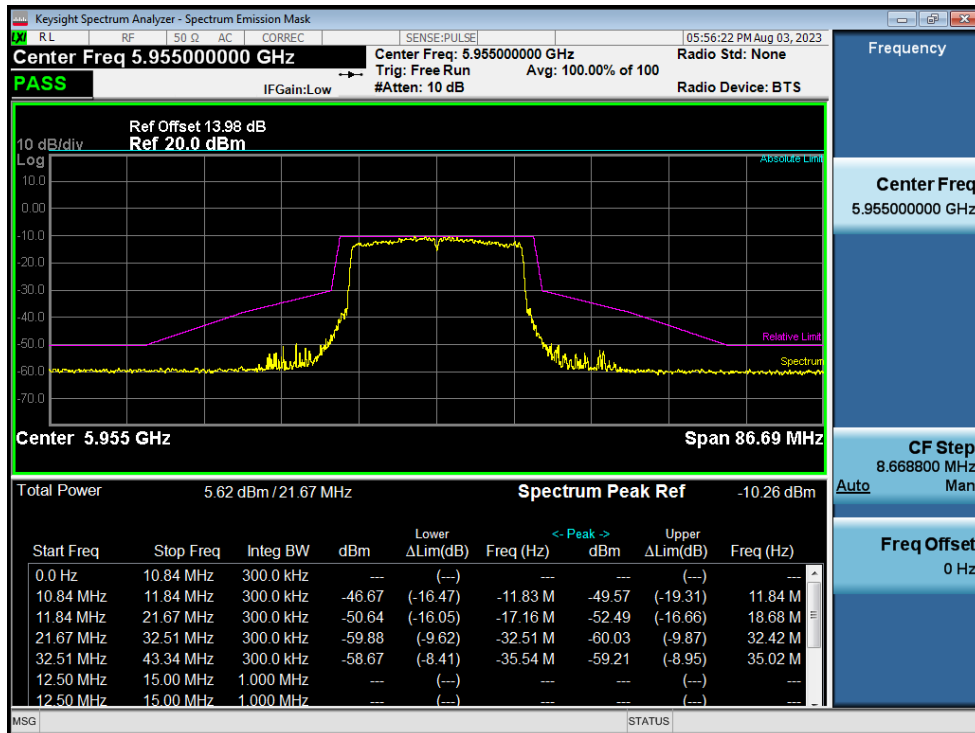
*2: At frequencies between one megahertz outside an unlicensed device’s channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression,

3: At frequencies between one and one- and one-half times an unlicensed device’s channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression.

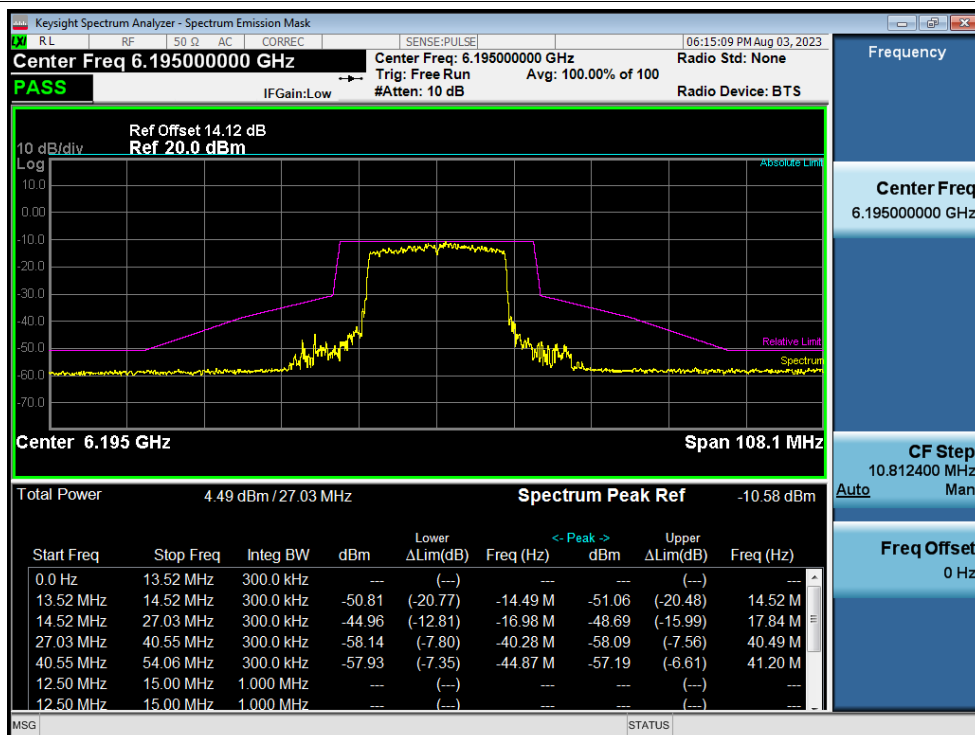
Test Results:

U-NII-5

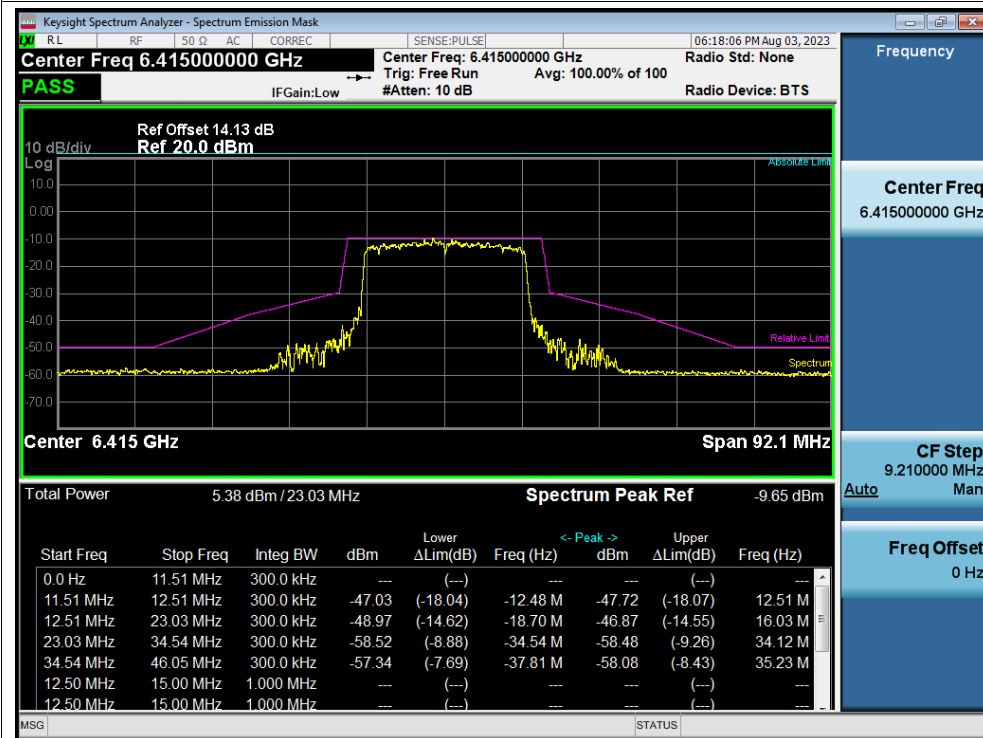
Power spectral mask ax20 5955MHz



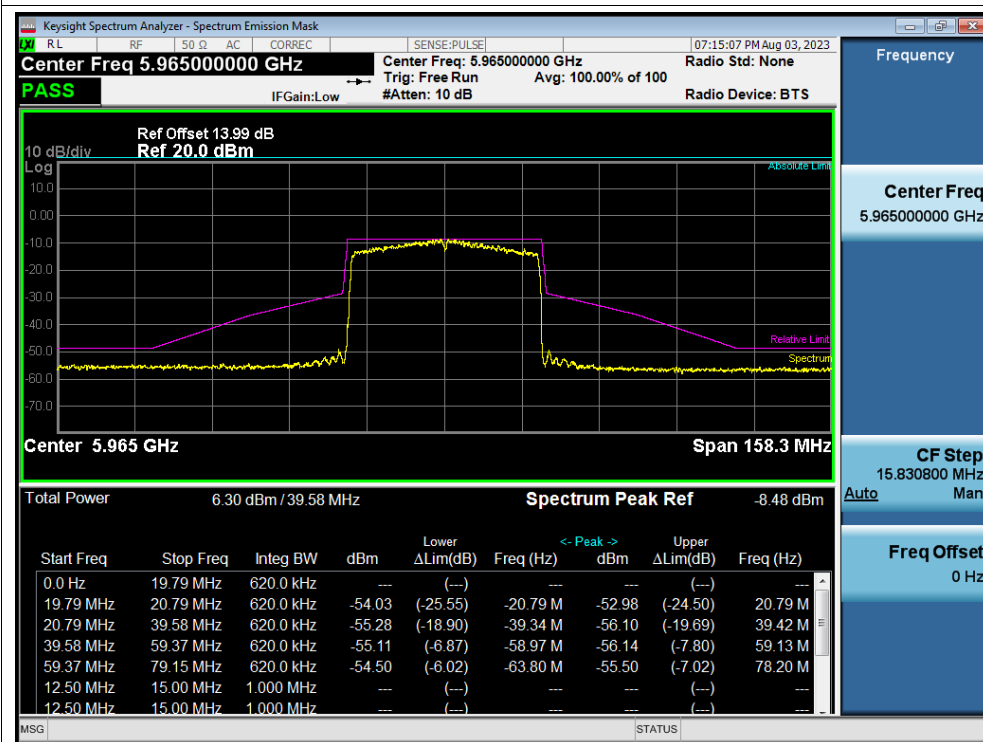
Power spectral mask ax20 6195MHz



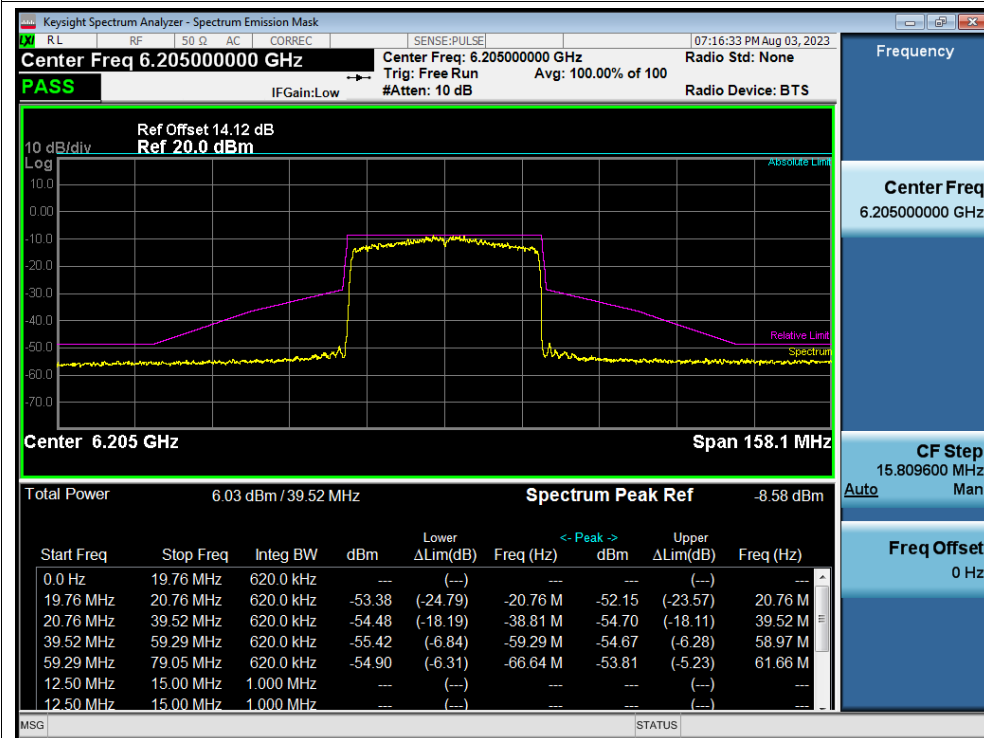
Power spectral mask ax20 6415MHz



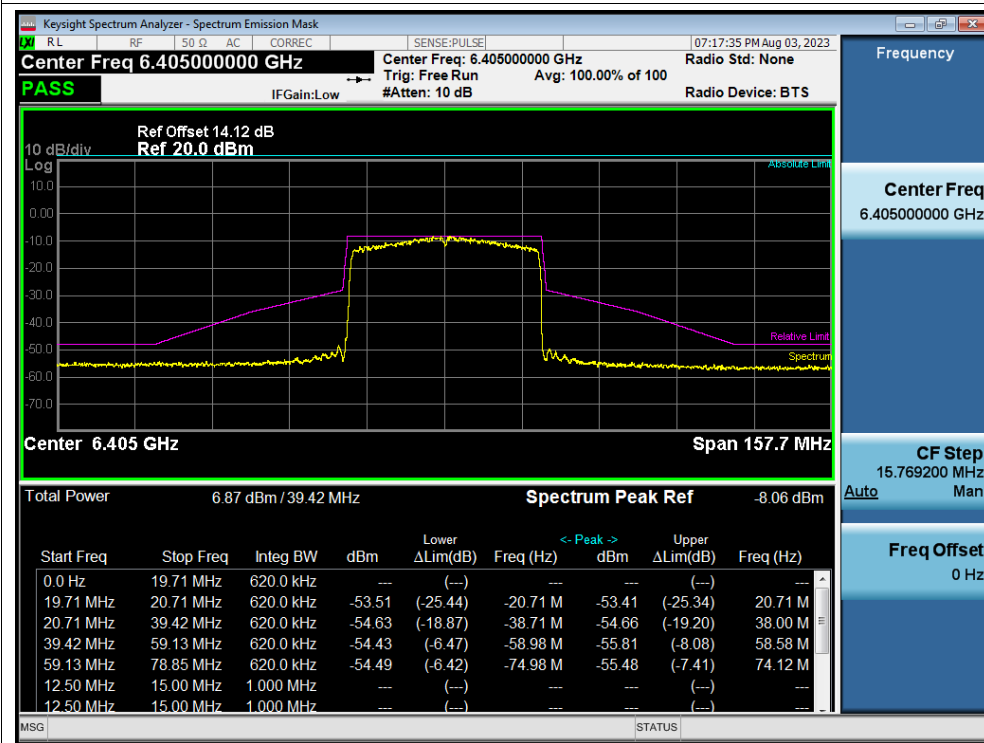
Power spectral mask ax40 5965MHz



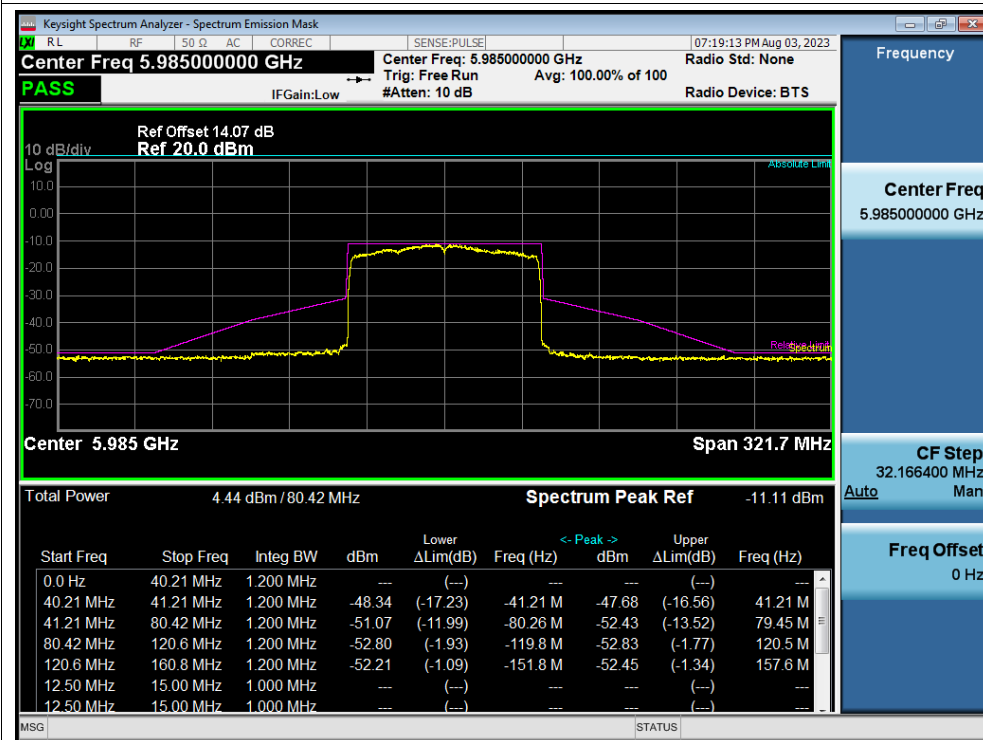
Power spectral mask ax40 6205MHz



Power spectral mask ax40 6405MHz

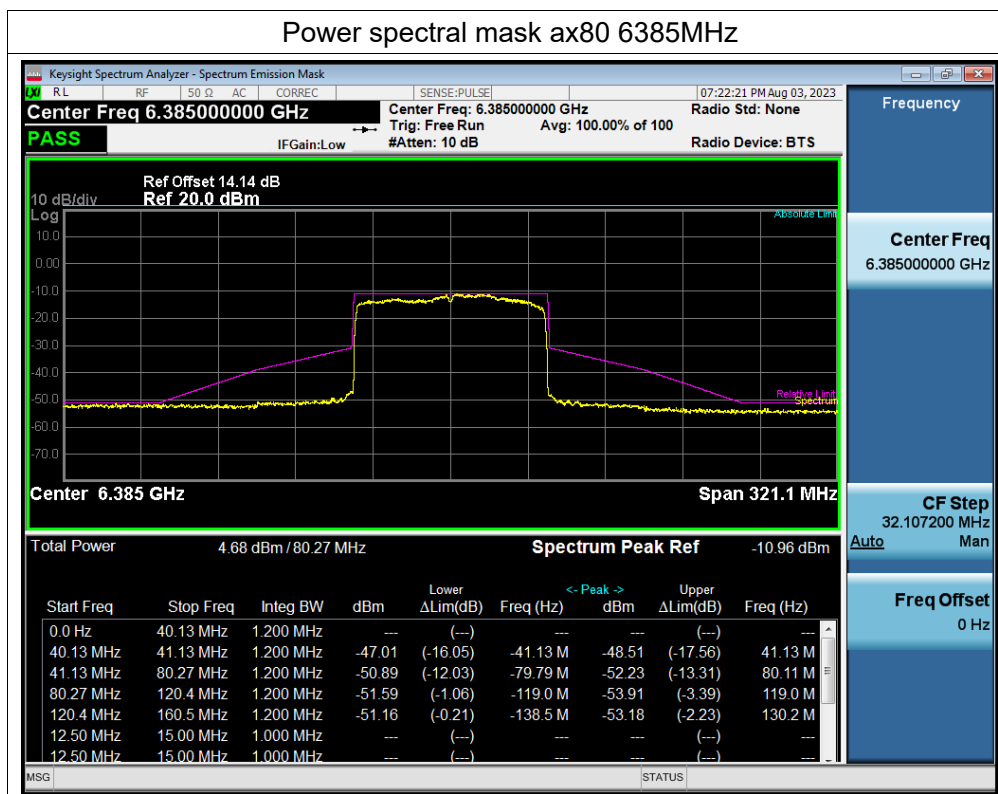


Power spectral mask ax80 5985MHz



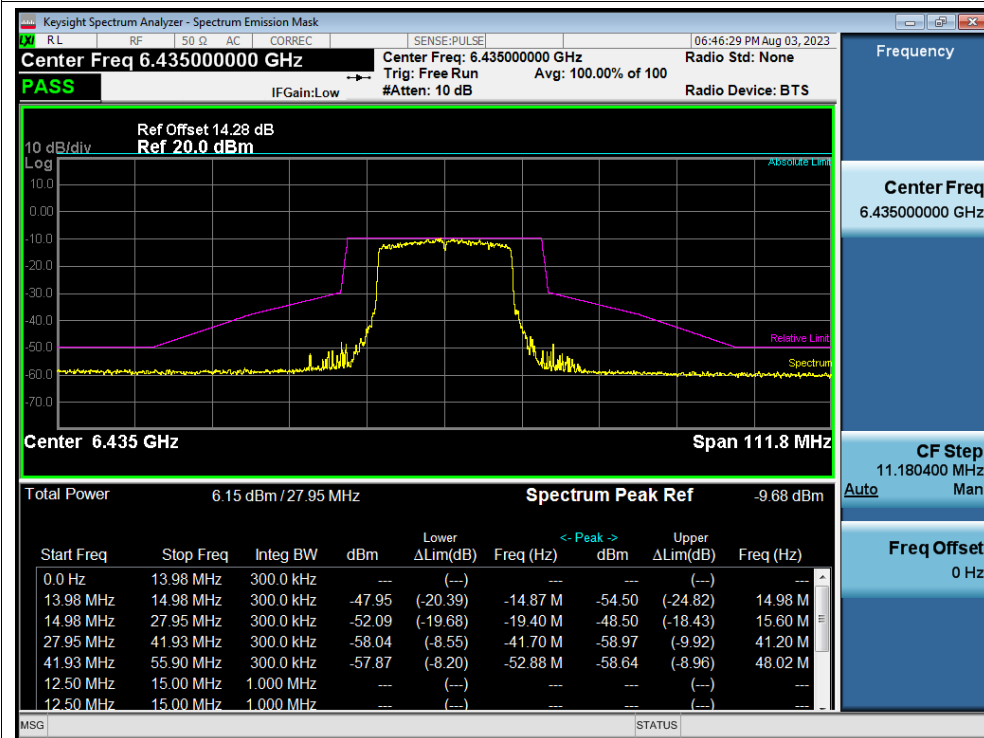
Power spectral mask ax80 6225MHz



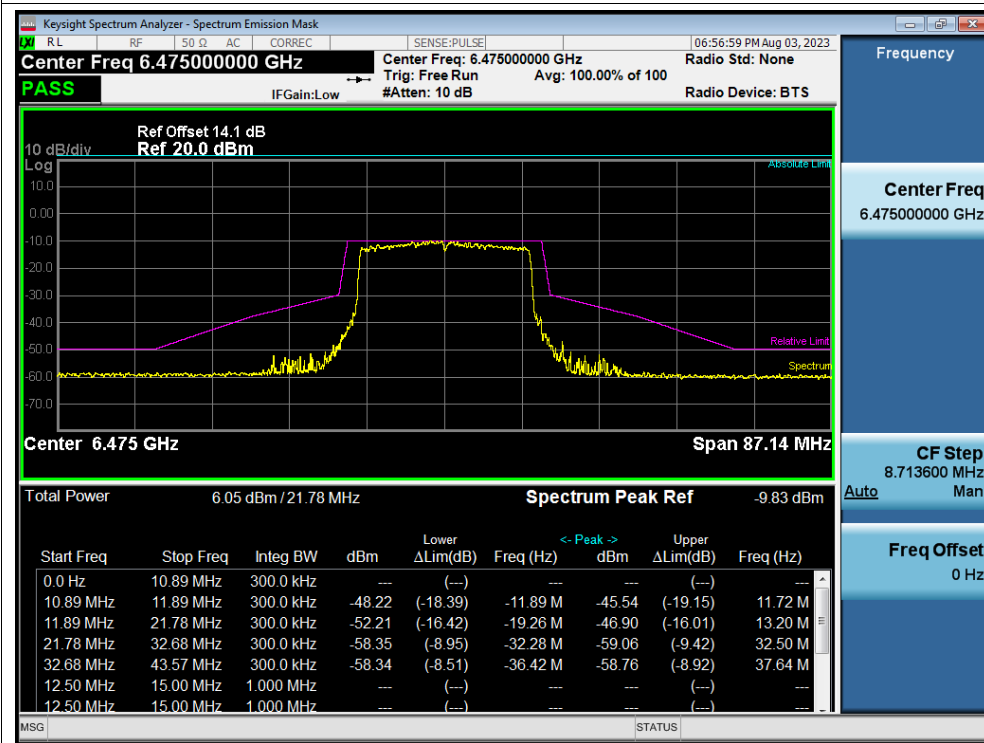


U-NII-6

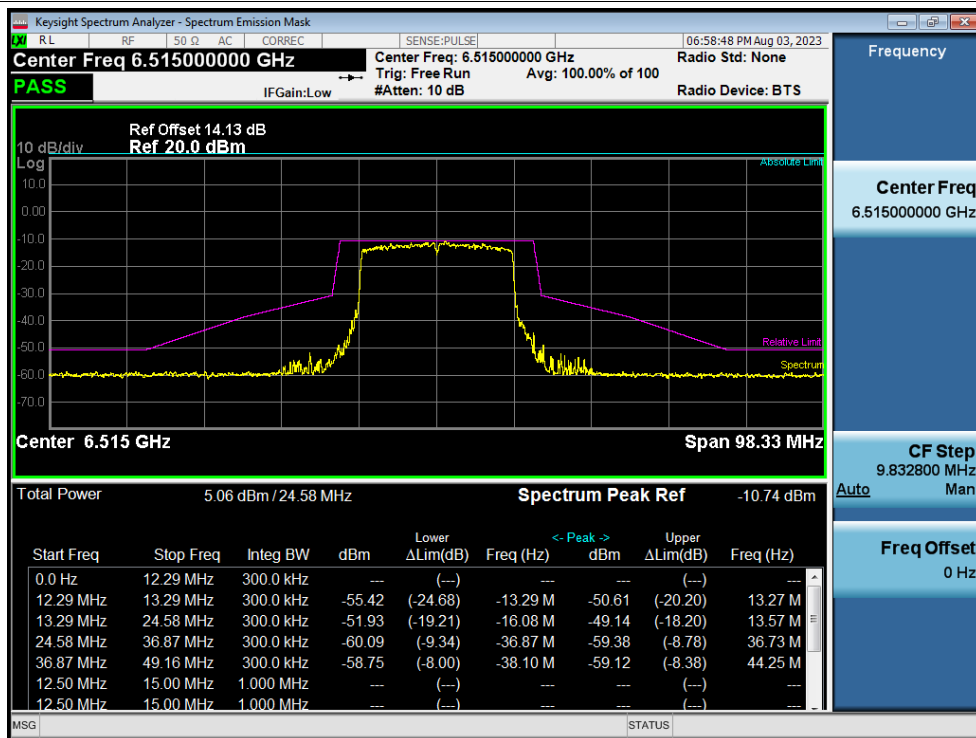
Power spectral mask ax20 6435MHz



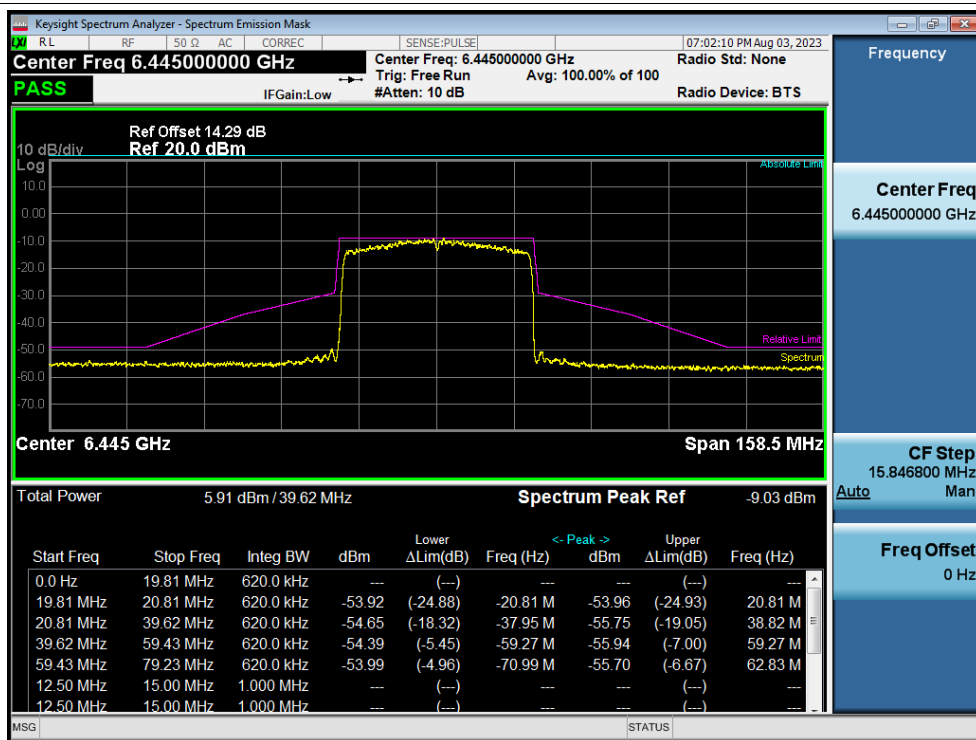
Power spectral mask ax20 6475MHz



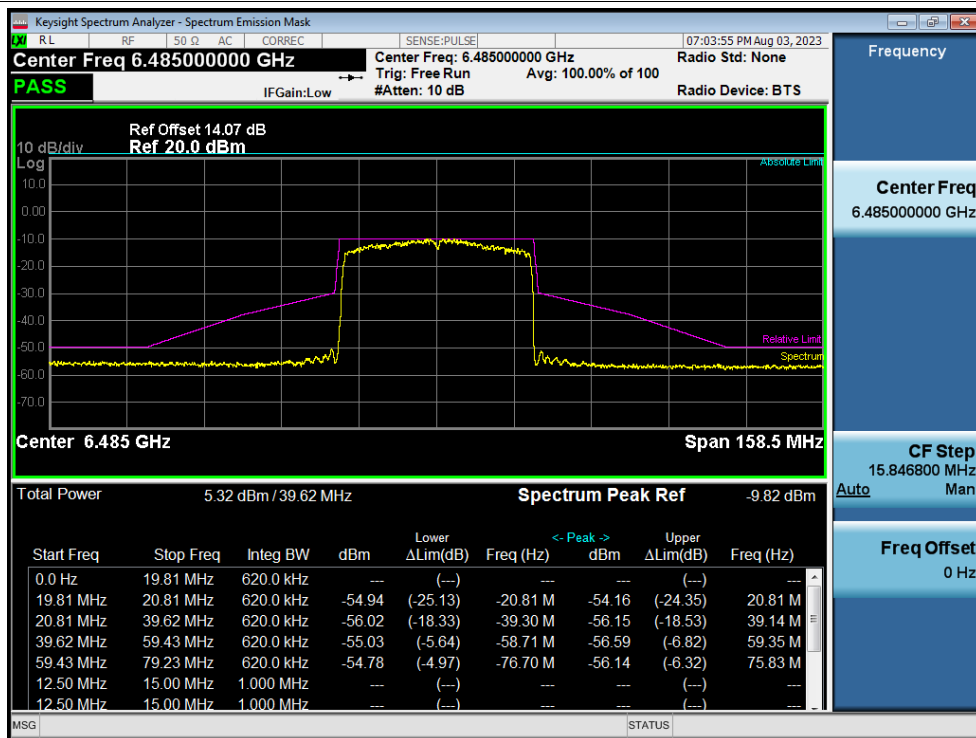
Power spectral mask ax20 6515MHz



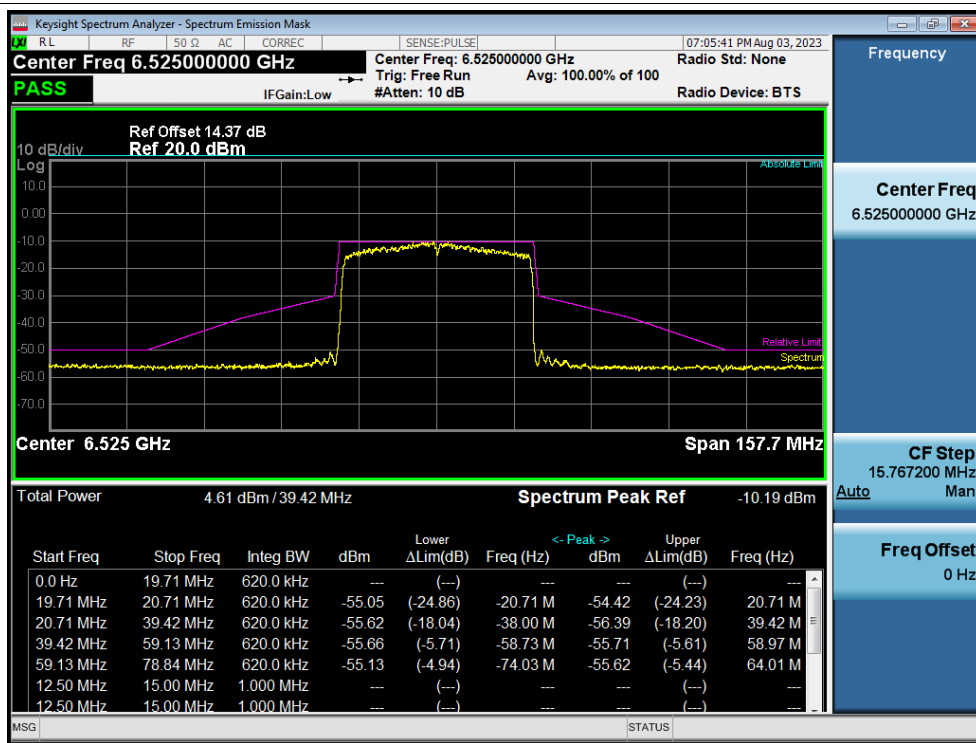
Power spectral mask ax40 6445MHz



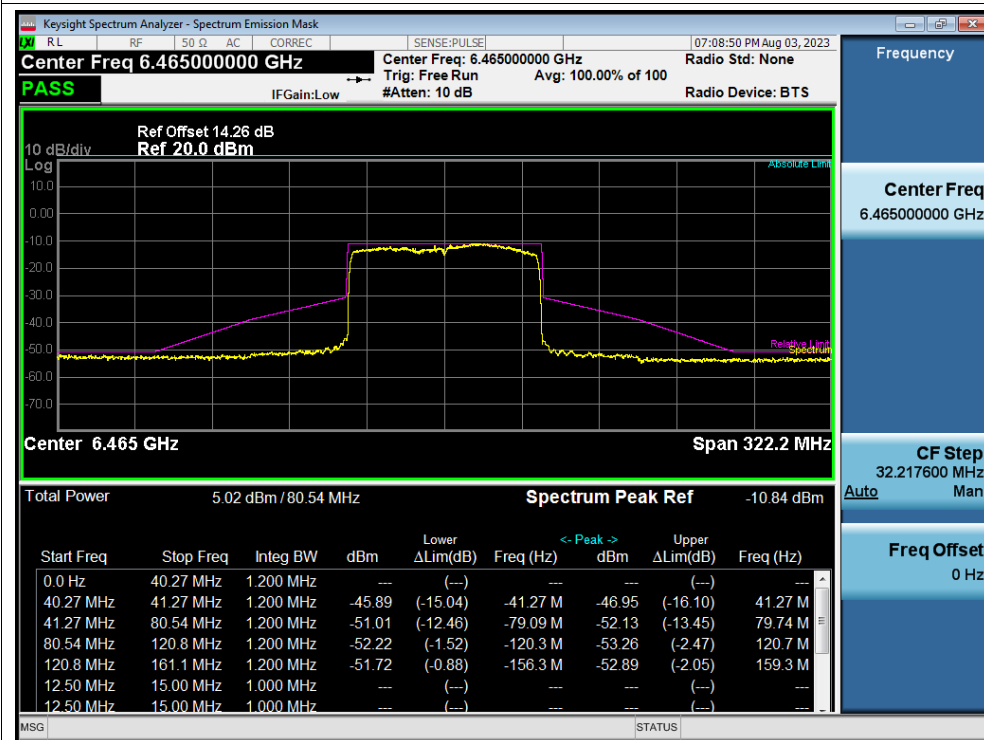
Power spectral mask ax40 6485MHz



Power spectral mask ax40 6525MHz



Power spectral mask ax80 6465MHz

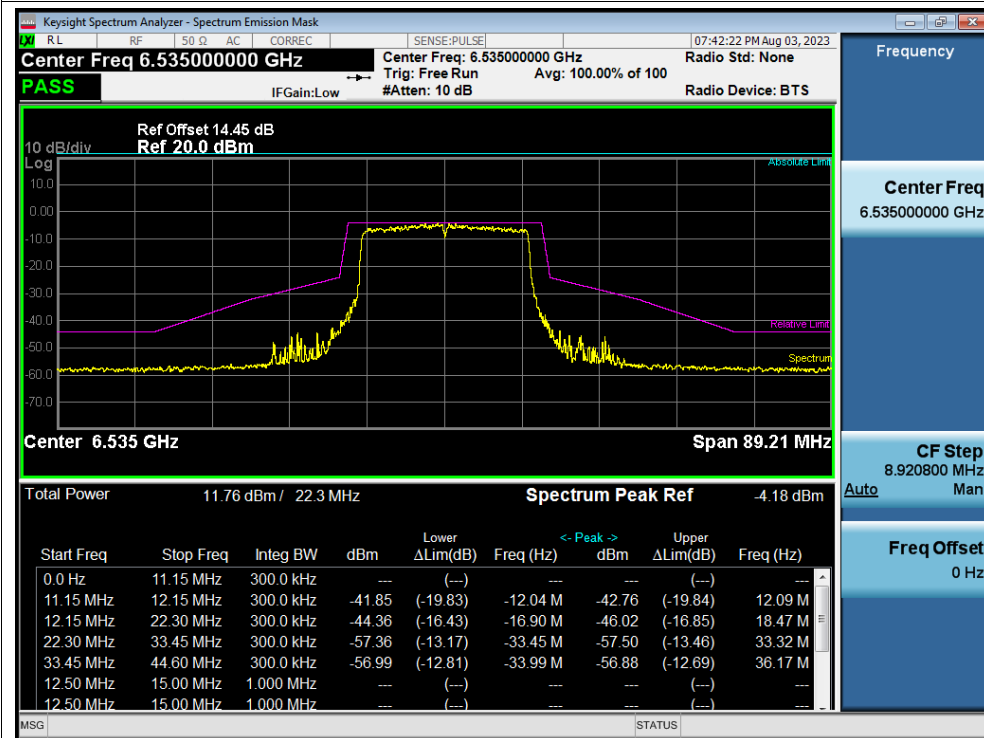


Power spectral mask ax80 6545MHz

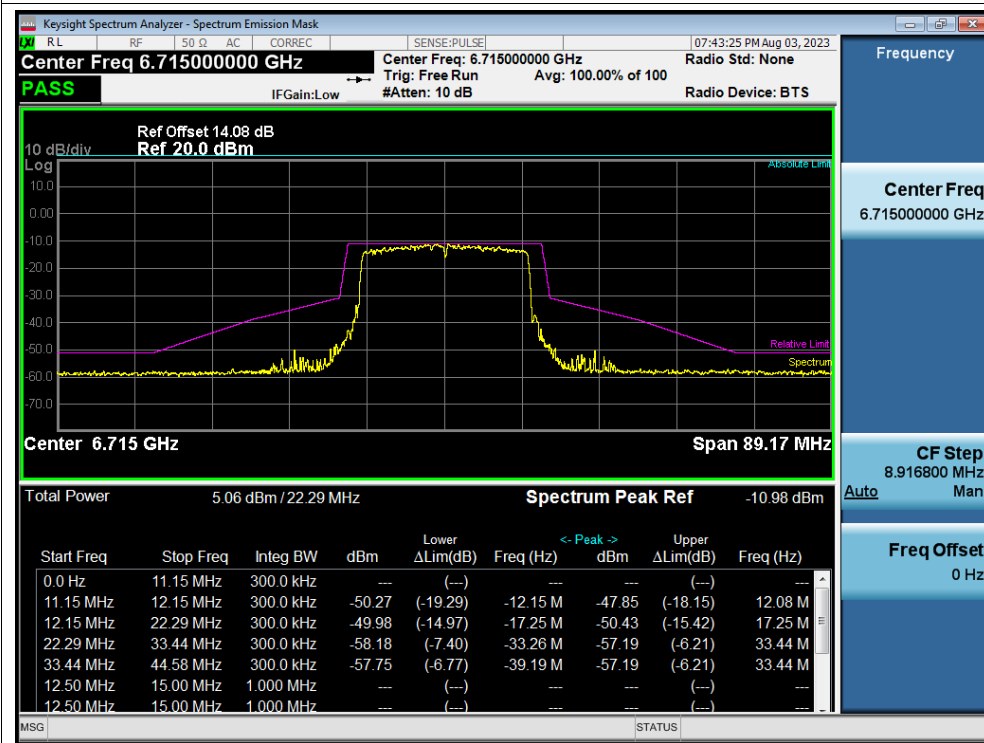


U-NII-7

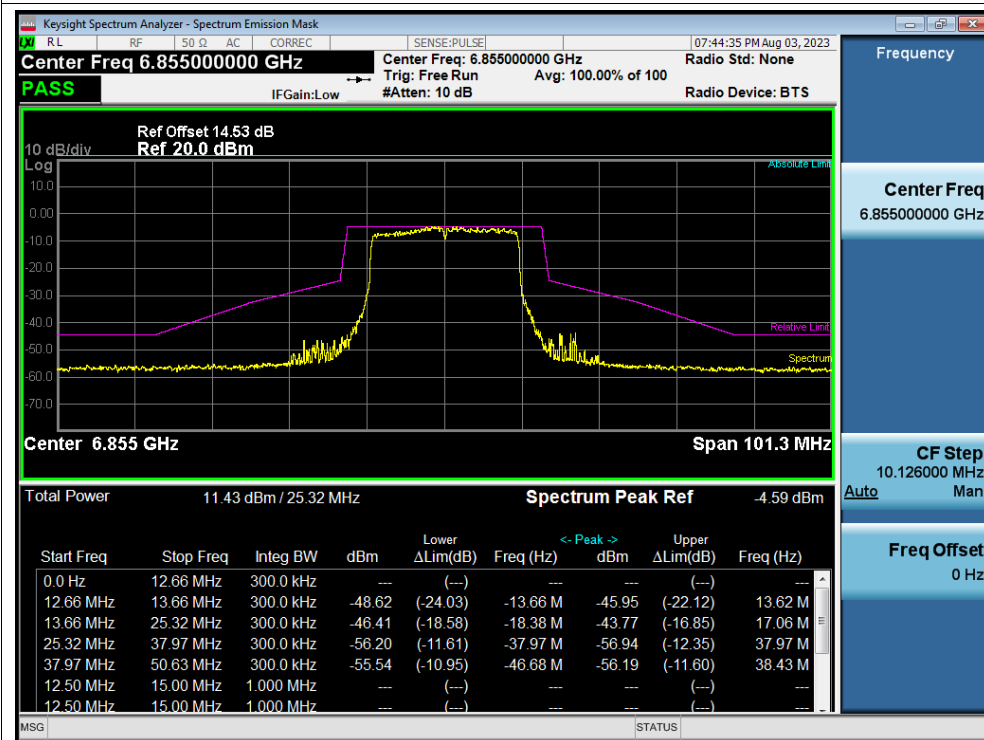
Power spectral mask ax20 6535MHz



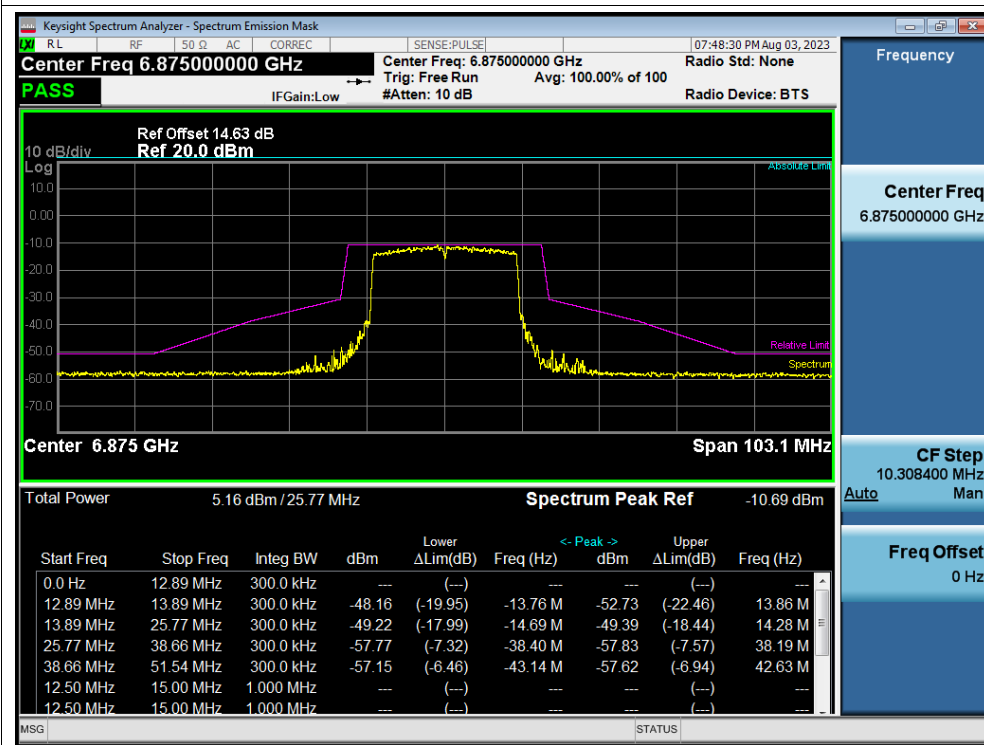
Power spectral mask ax20 6715MHz



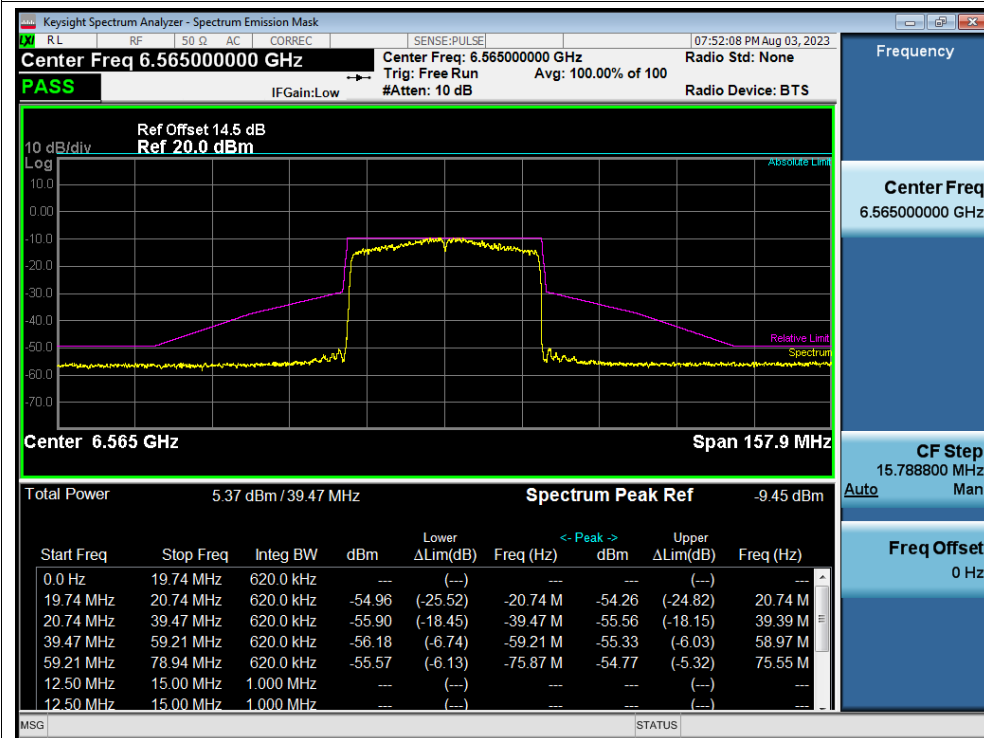
Power spectral mask ax20 6855MHz



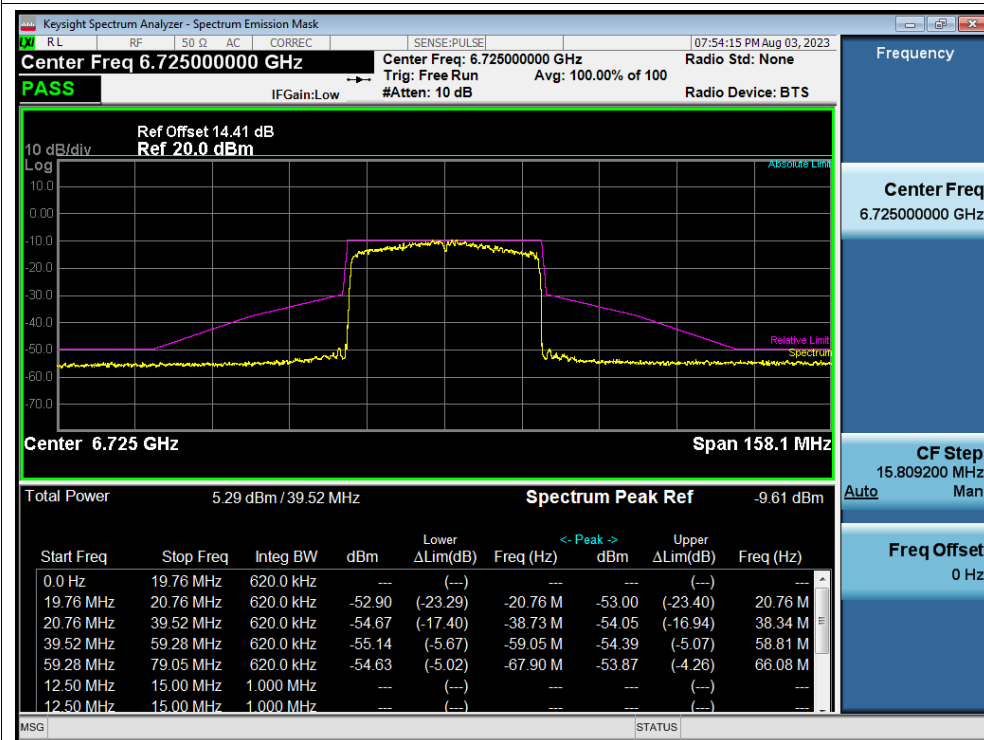
Power spectral mask ax20 6875MHz



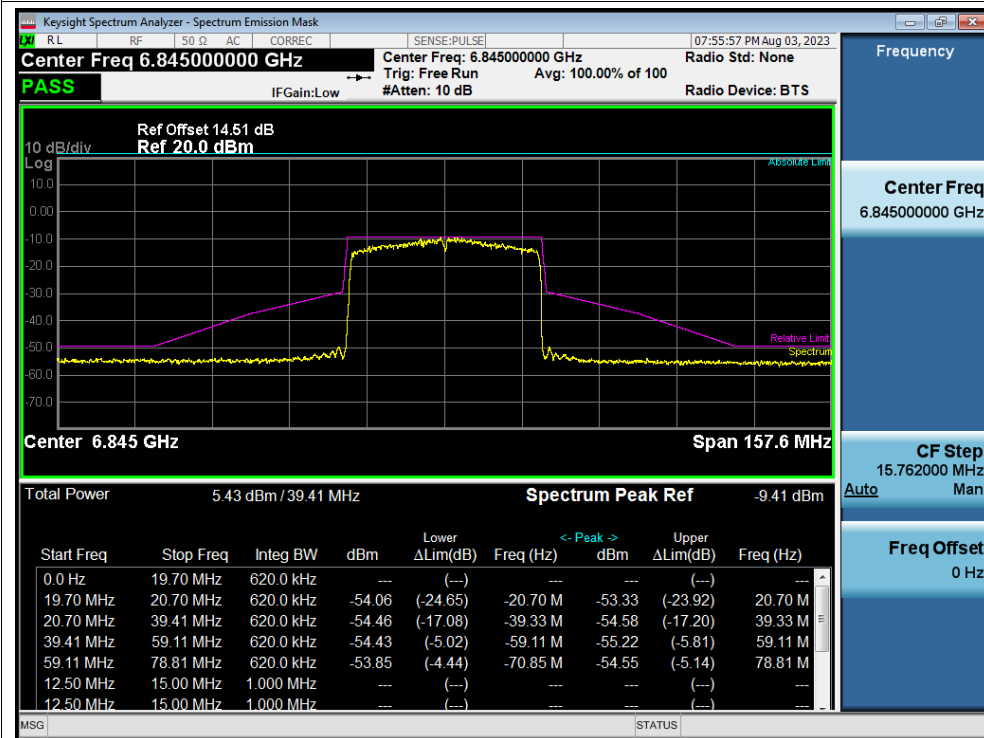
Power spectral mask ax40 6565MHz



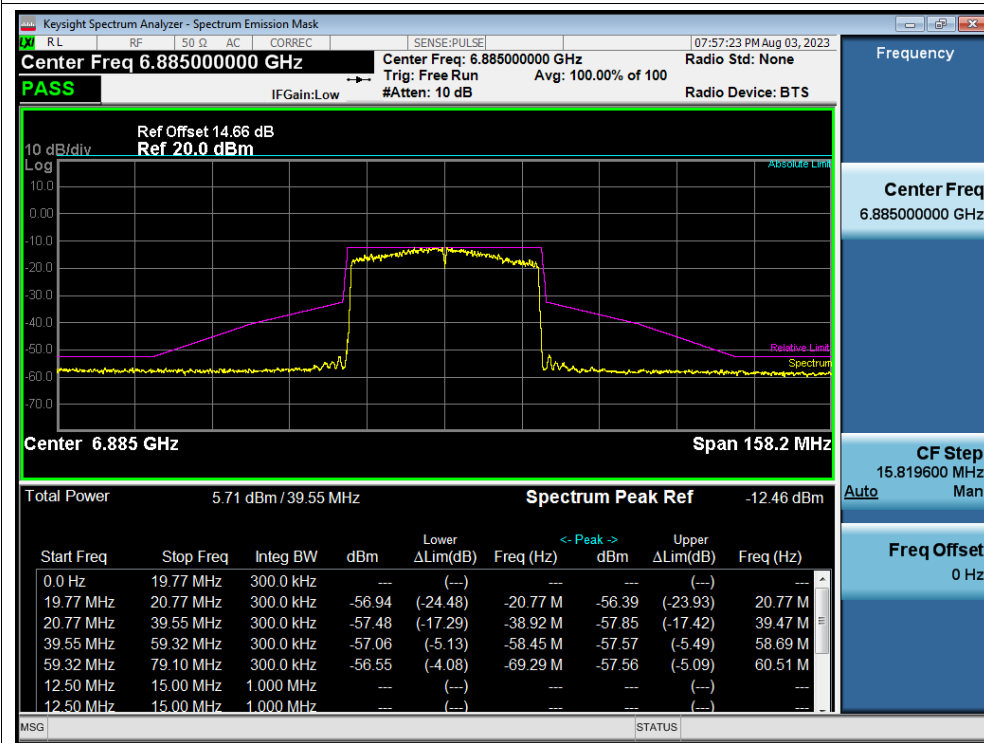
Power spectral mask ax40 6725MHz



Power spectral mask ax40 6845MHz



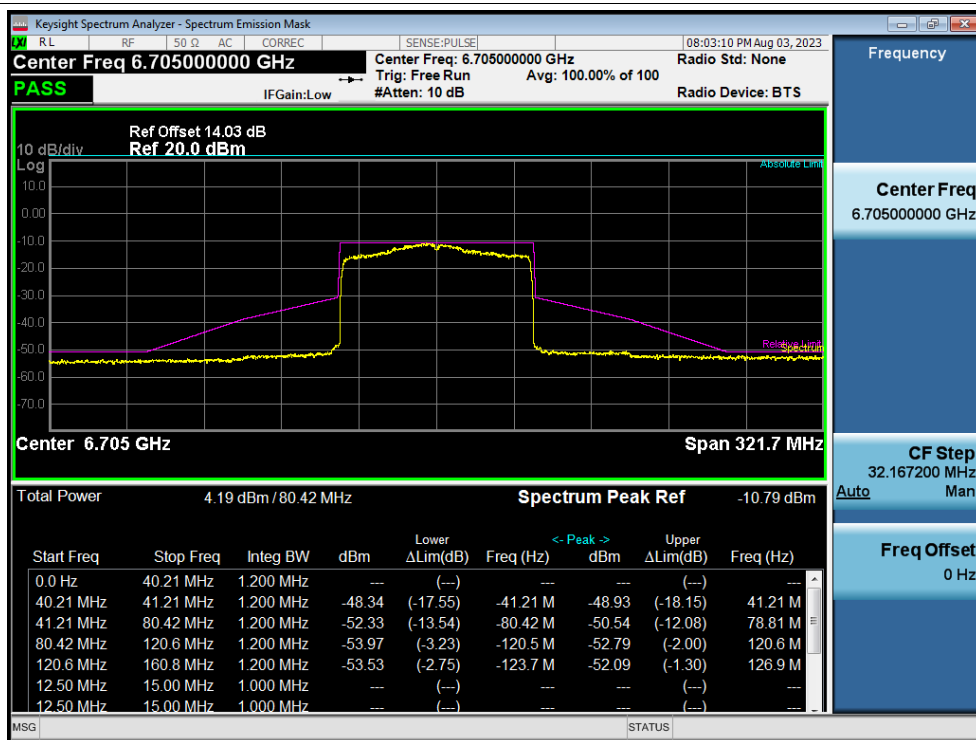
Power spectral mask ax40 6885MHz



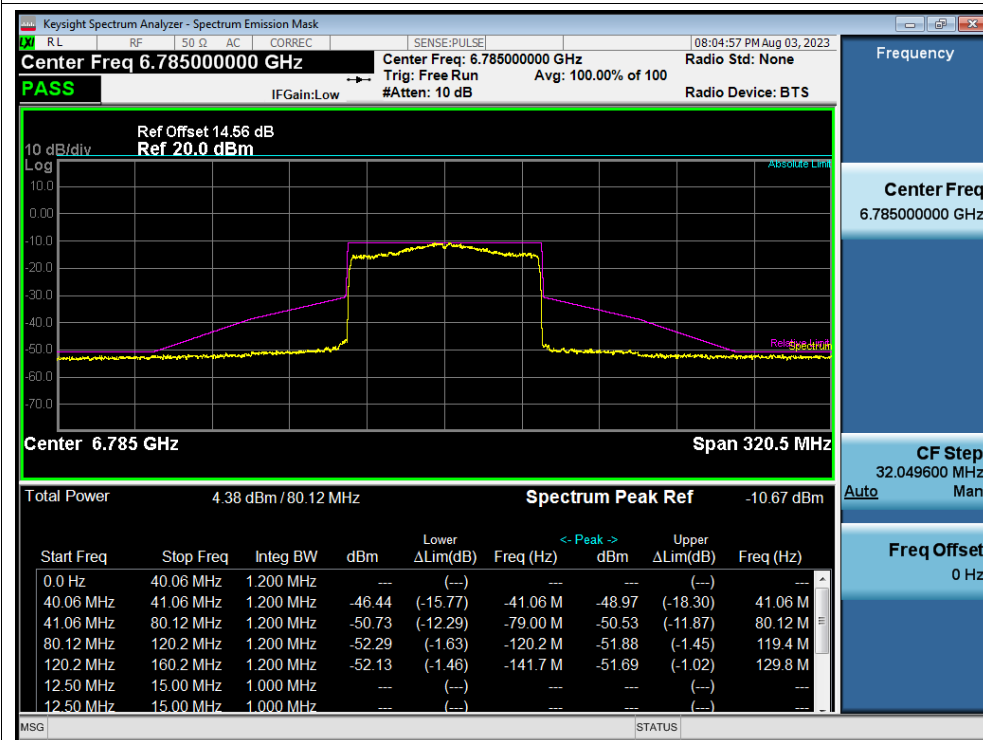
Power spectral mask ax80 6625MHz



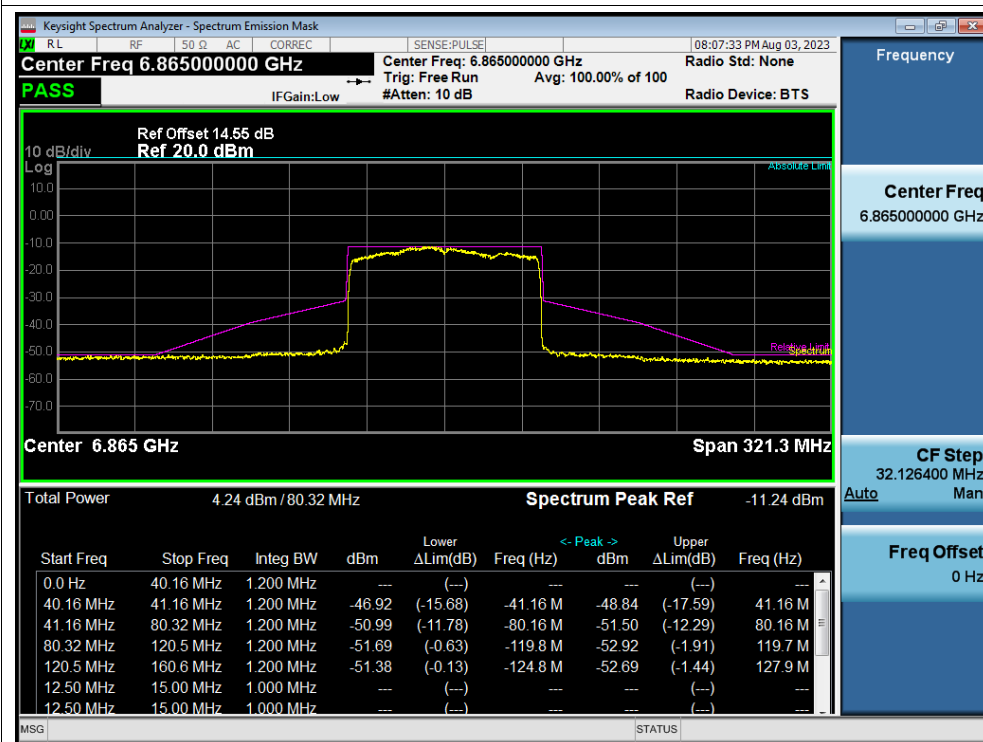
Power spectral mask ax80 6705MHz



Power spectral mask ax80 6785MHz

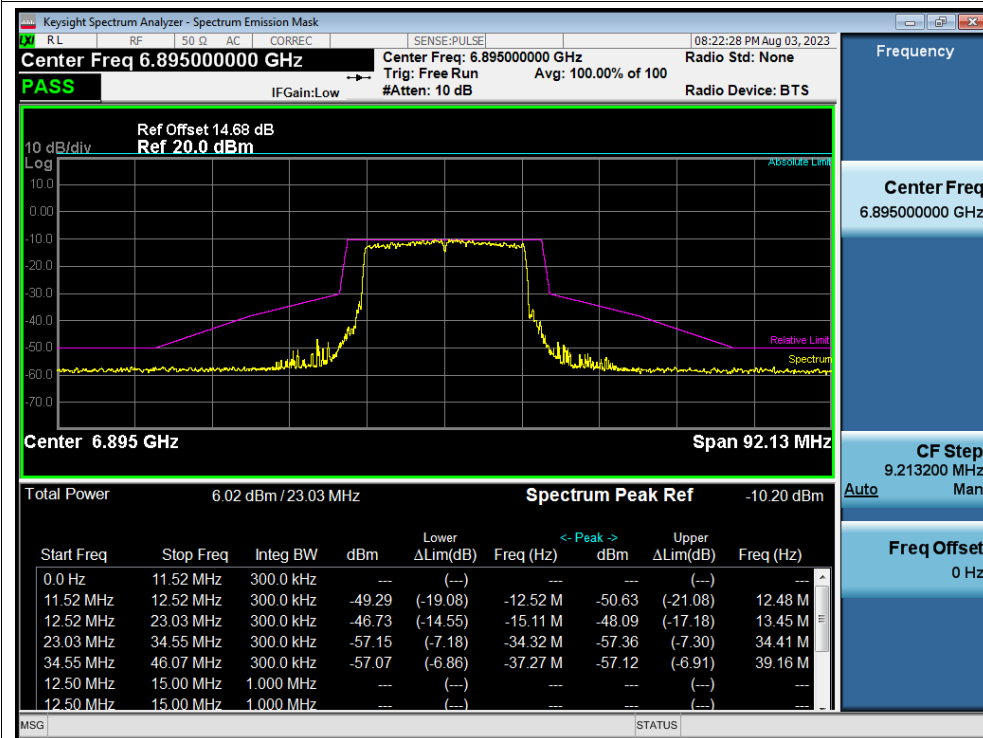


Power spectral mask ax80 6865MHz

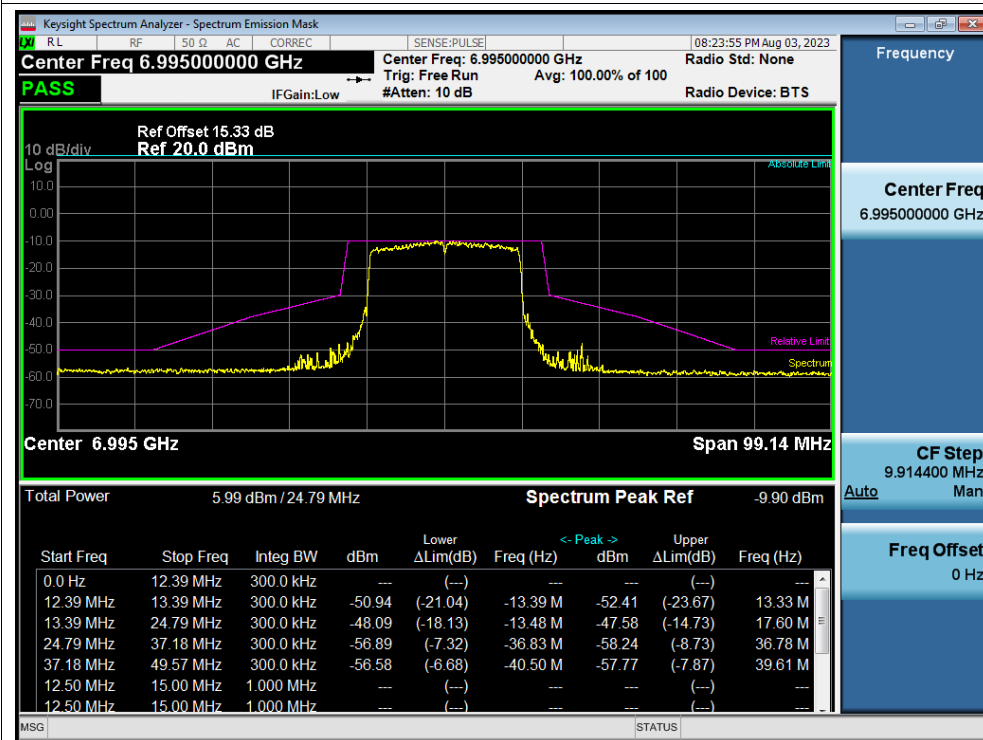


U-NII-8

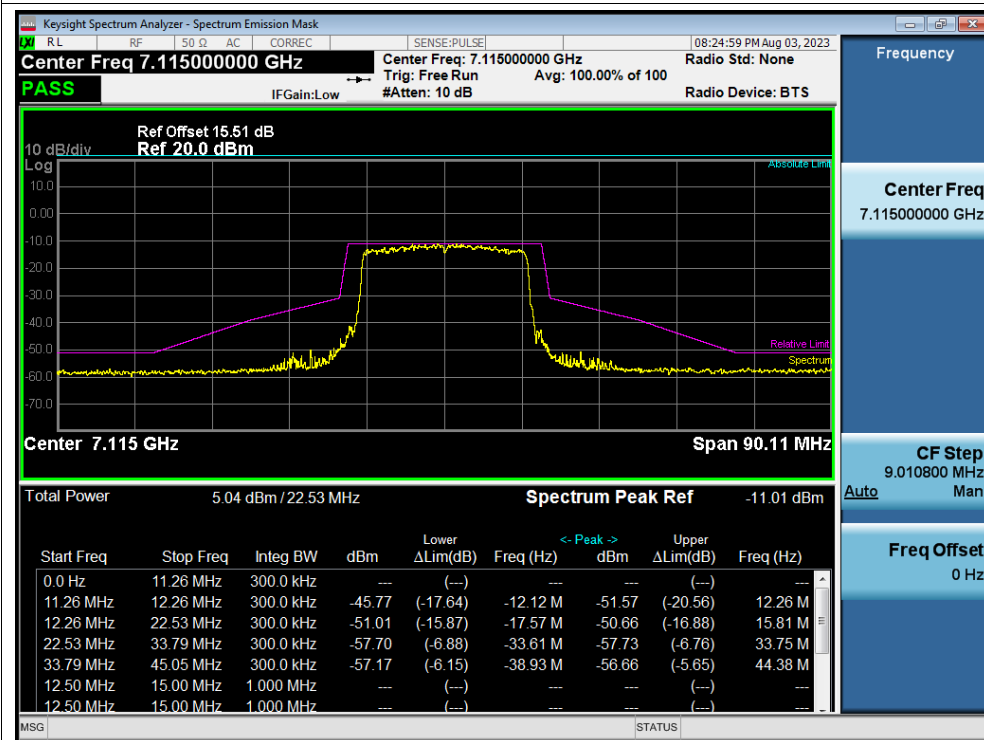
Power spectral mask ax20 6895MHz



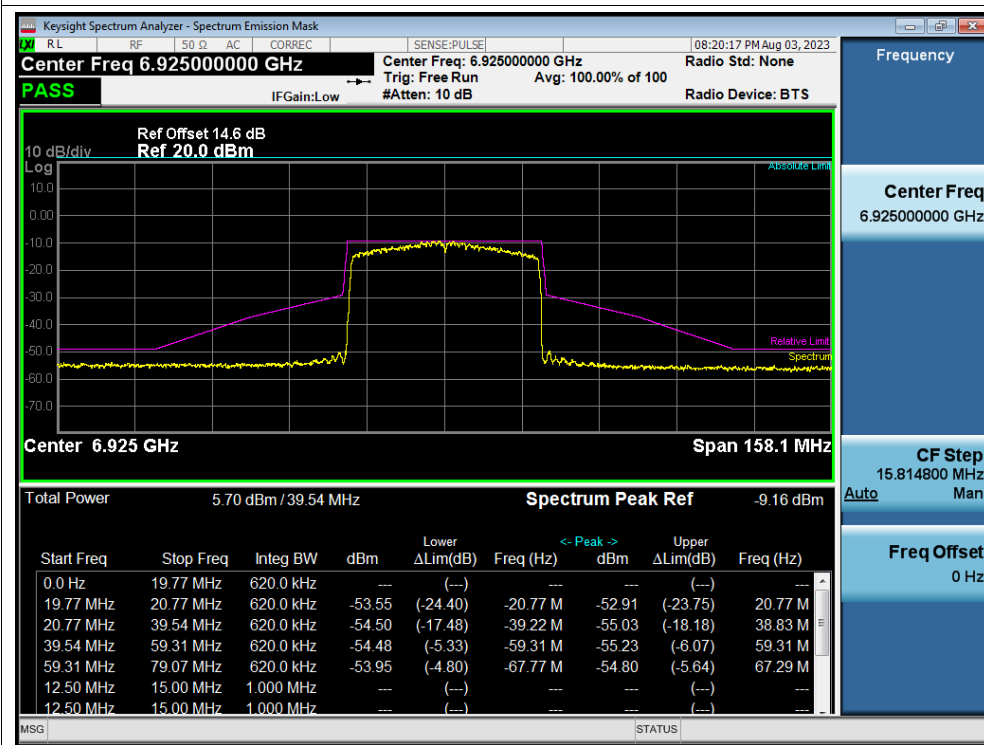
Power spectral mask ax20 6995MHz



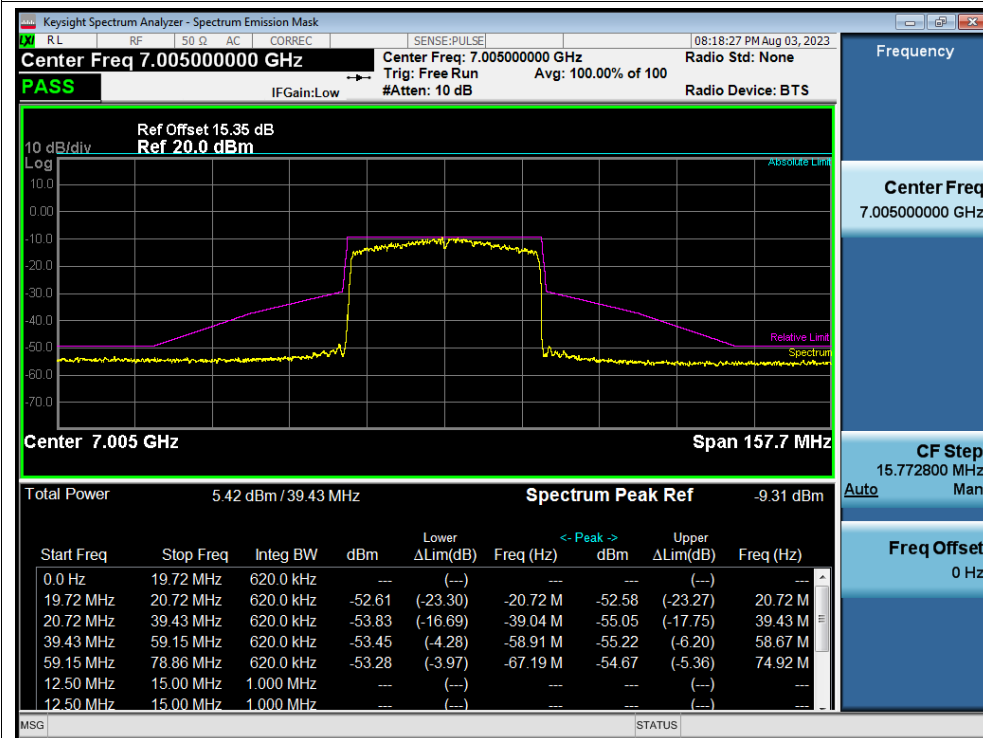
Power spectral mask ax20 7115MHz



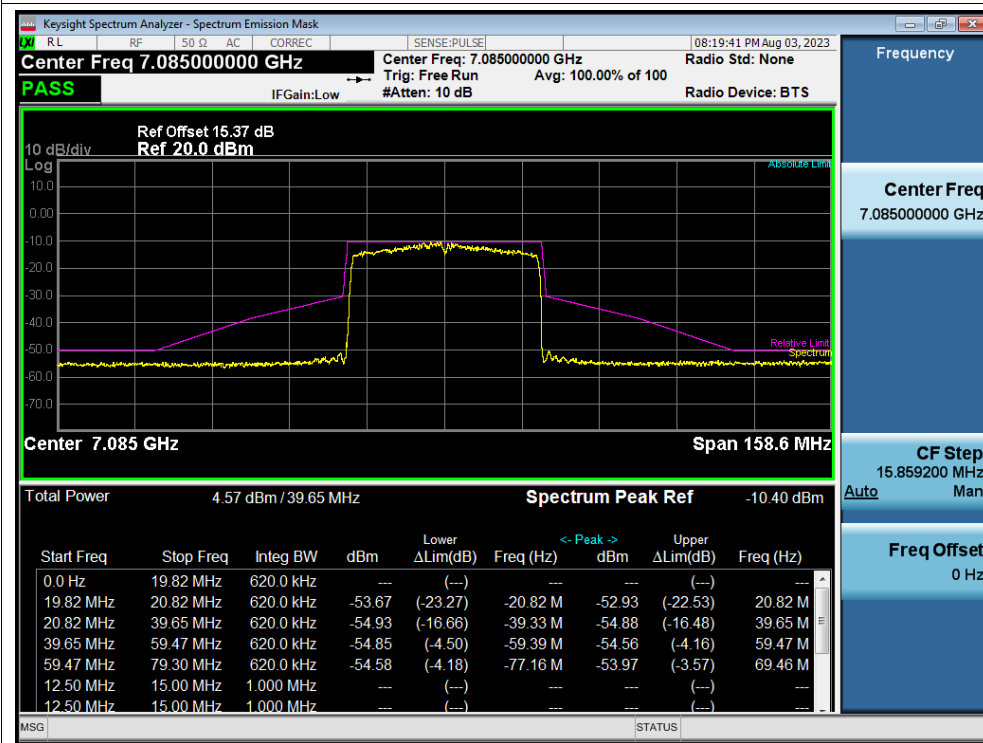
Power spectral mask ax40 6925MHz



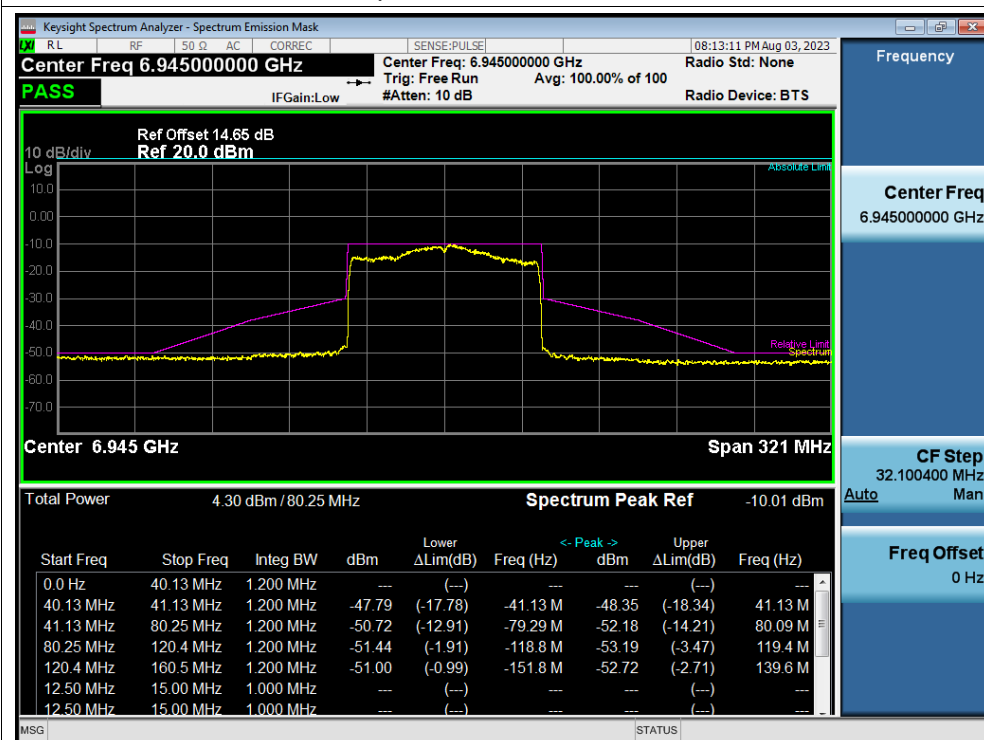
Power spectral mask ax40 7005MHz



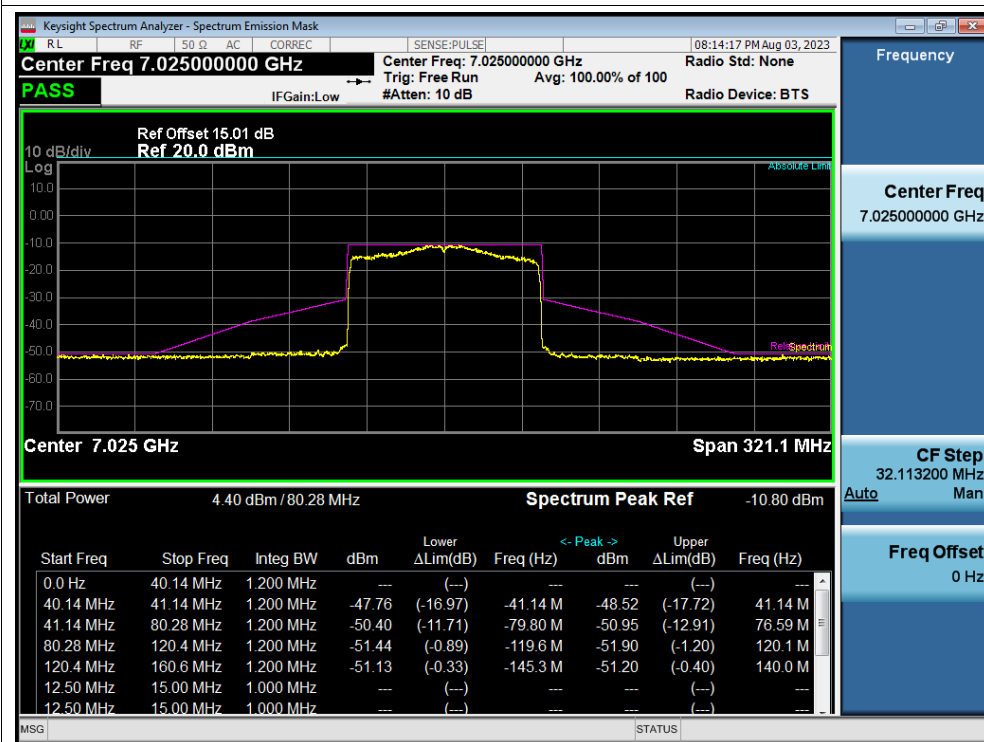
Power spectral mask ax40 7085MHz



Power spectral mask ax80 6945MHz



Power spectral mask ax80 7025MHz



5.6. Contention-Based Protocol

Ambient Condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

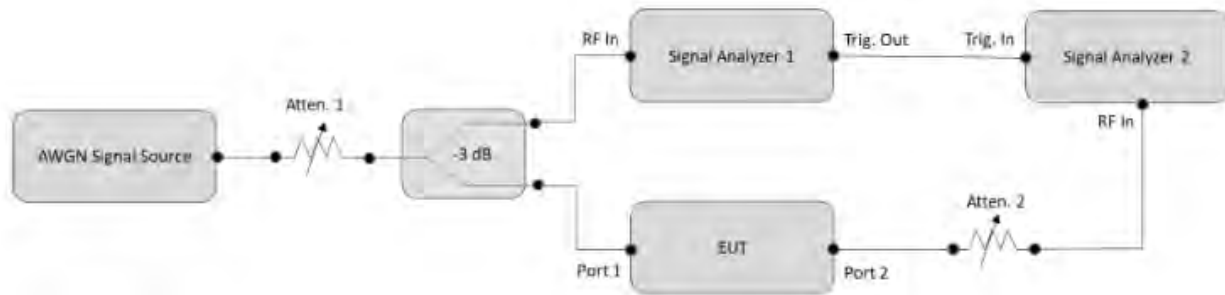
Method of Measurement

- a. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation o not overload the signal analyzer 2 receiver.
- b. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- c. Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2 \times BW_{Inc}$	Once	Contained within BW_{EUT}
$2 \times BW_{Inc} < BW_{EUT} \leq 4 \times BW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4 \times BW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- d. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- e. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- f. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- g. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- h. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- i. Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

Test Setup



Limits

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62dBm (The threshold is referenced to a 0dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

Test Results:

U-NII-5

Wi-Fi CBP														
Mode	EUT Frequency	BW EUT	AWGN Signal Frequency	Bw INC	state	Injected (AWGN) Power	Ant. Gain	path loss	Detection Power	Detection Limit	Success no./Trial no.	Detection Probability (%)	Limit	Verdict
	[MHz]	[MHz]	[MHz]	[MHz]		[dBm]	[dBi]	[dB]	[dBm]	[dBm]				pass/fail
802.11ax (HE20)	CH 37/ 6135	20	6130	10	OFF	-64.98	-0.3	-14.75	-79.43	-62	10/10	100	90%	pass
					Minimal	-66.00	-0.3	-14.75	-80.45	-62	10/10	100	90%	pass
					ON	-69.00	-0.3	-14.75	-83.45	-62	10/10	100	90%	pass
802.11ax (HE80)	CH 39/ 6145	80	6110	10	OFF	-49.99	-0.3	-14.58	-64.27	-62	10/10	100	90%	pass
					Minimal	-51.00	-0.3	-14.58	-65.28	-62	10/10	100	90%	pass
					ON	-53.00	-0.3	-14.58	-67.28	-62	10/10	100	90%	pass
			6145	10	OFF	-55.03	-0.3	-14.73	-69.46	-62	10/10	100	90%	pass
					Minimal	-56.00	-0.3	-14.73	-70.43	-62	10/10	100	90%	pass
					ON	-64.00	-0.3	-14.73	-78.43	-62	10/10	100	90%	pass
			6180	10	OFF	-49.96	-0.3	-14.40	-64.06	-62	10/10	100	90%	pass
					Minimal	-51.00	-0.3	-14.40	-65.10	-62	10/10	100	90%	pass
					ON	-54.00	-0.3	-14.40	-68.10	-62	10/10	100	90%	pass

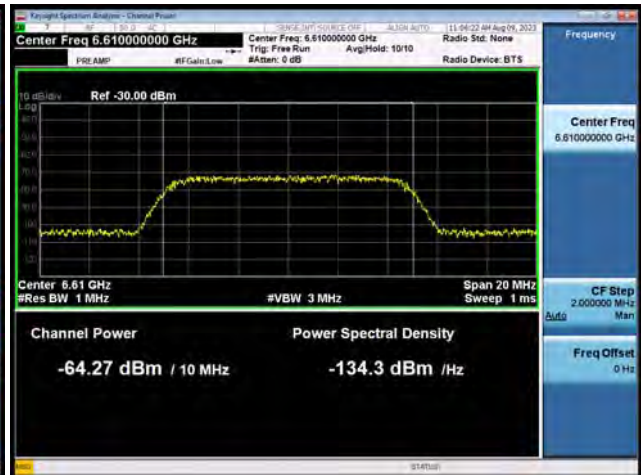
Note:

- 1) OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- 2) Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- 3) ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds
- 4) Detection Level = Injected AWGN Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)

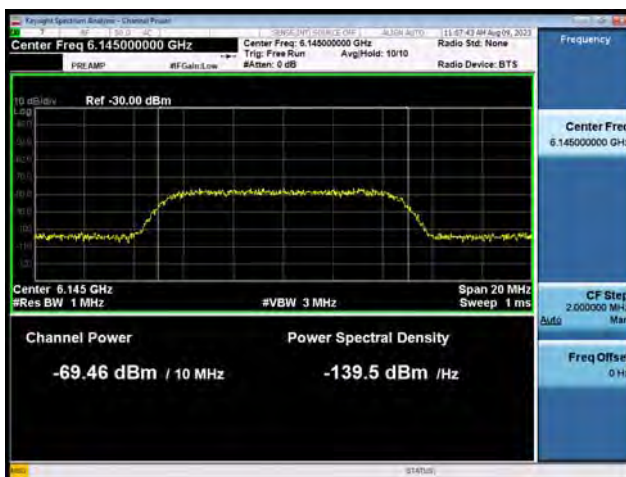
Photos of Detection Power



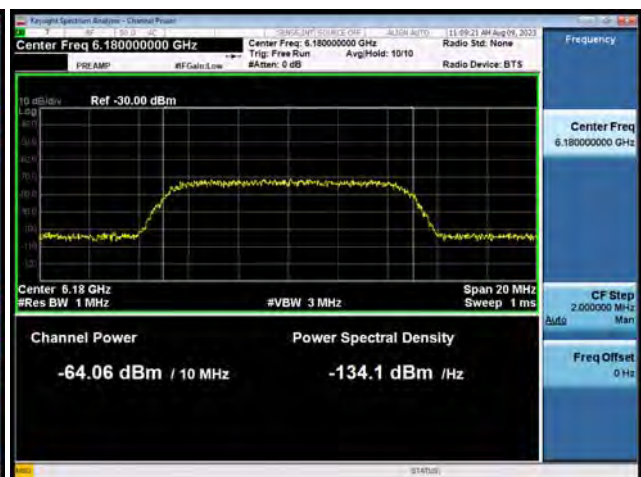
802.11ax (HE20) CH33



802.11ax (HE80) CH39 Low Edge 6110MHz



802.11ax (HE80) CH39 Middle Edge 6145MHz

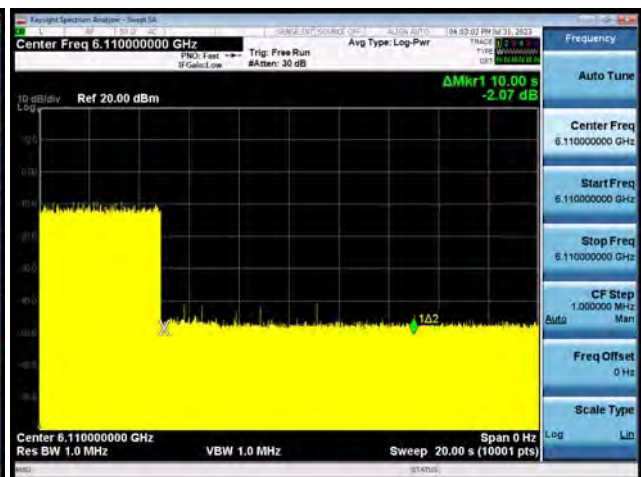


802.11ax (HE80) CH39 High Edge 6180MHz

Photos of EUT ceased transmission



802.11ax (HE20) CH33



802.11ax (HE80) CH39 Low Edge 6110MHz



802.11ax (HE80) CH39 Middle 6145MHz



802.11ax (HE80) CH39 High Edge 6180MHz

U-NII-6

Wi-Fi CBP														
Mode	EUT Frequency	BW EUT	AWGN Signal Frequency	Bw INC	state	Injected (AWGN) Power	Ant. Gain	path loss	Detection Power	Detection Limit	Success no./Trial no.	Detection Probability (%)	Limit	Verdict
	[MHz]	[MHz]	[MHz]	[MHz]		[dBm]	[dBi]	[dB]	[dBm]	[dBm]				pass/fail
802.11ax (HE20)	CH 101/6455	20	6450	10	OFF	-62.06	1.6	-14.62	-78.28	-62	10/10	100	90%	pass
					Minimal	-63.00	1.6	-14.62	-79.22	-62	10/10	100	90%	pass
					ON	-67.00	1.6	-14.62	-83.22	-62	10/10	100	90%	pass
802.11ax (HE80)	CH 103/6465	80	6430	10	OFF	-49.98	1.6	-14.46	-66.04	-62	10/10	100	90%	pass
					Minimal	-51.00	1.6	-14.46	-67.06	-62	10/10	100	90%	pass
					ON	-53.00	1.6	-14.46	-69.06	-62	10/10	100	90%	pass
			6465	10	OFF	-54.98	1.6	-14.85	-71.43	-62	10/10	100	90%	pass
					Minimal	-56.00	1.6	-14.85	-72.45	-62	10/10	100	90%	pass
					ON	-66.00	1.6	-14.85	-82.45	-62	10/10	100	90%	pass
			6500	10	OFF	-50.00	1.6	-14.64	-66.24	-62	10/10	100	90%	pass
					Minimal	-51.00	1.6	-14.64	-67.24	-62	10/10	100	90%	pass
					ON	-53.00	1.6	-14.64	-69.24	-62	10/10	100	90%	pass

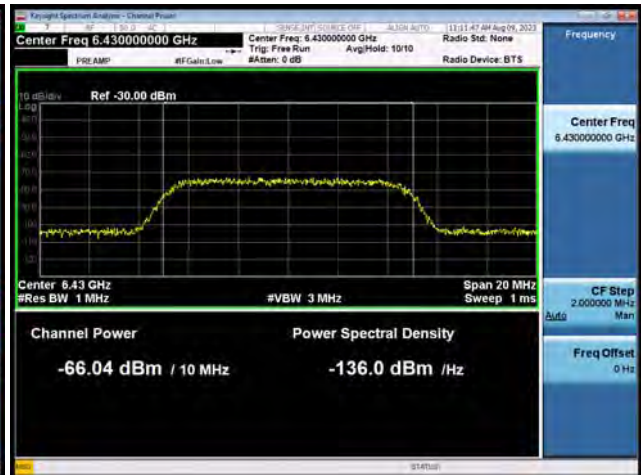
Note:

- 1) OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- 2) Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- 3) ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds
- 4) Detection Level = Injected AWGN Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)

Photos of Detection Power



802.11ax (HE20) CH101



802.11ax (HE80) CH103 Low Edge 6430MHz



802.11ax (HE80) CH103 Middle Edge 6465MHz

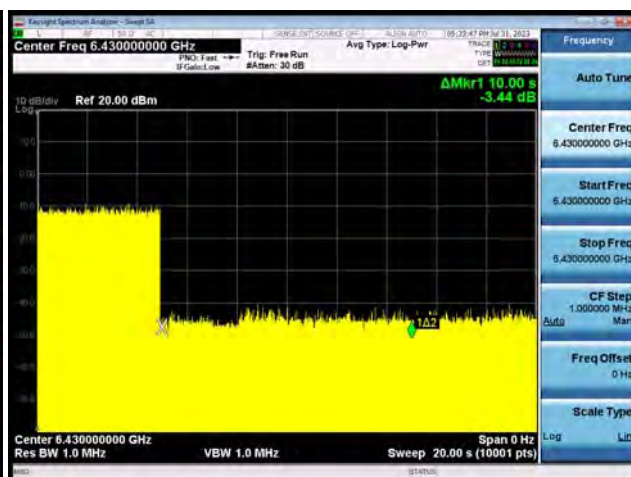


802.11ax (HE80) CH103 High Edge 6500MHz

Photos of EUT ceased transmission



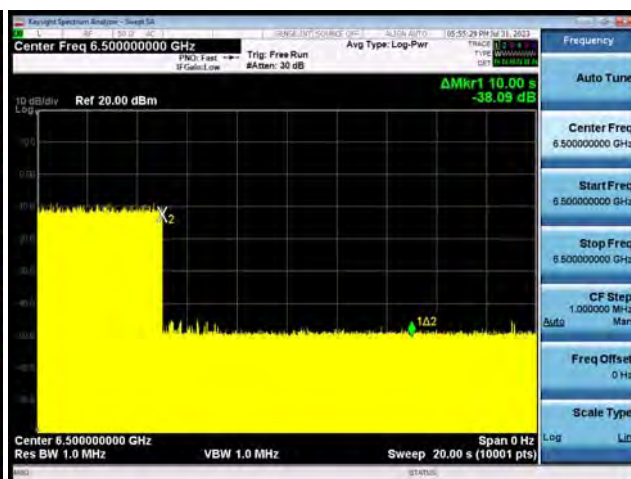
802.11ax (HE20) CH101



802.11ax (HE80) CH103 Low Edge 6430MHz



802.11ax (HE80) CH103 Middle Edge 6465MHz



802.11ax (HE80) CH103 High Edge 6500MHz

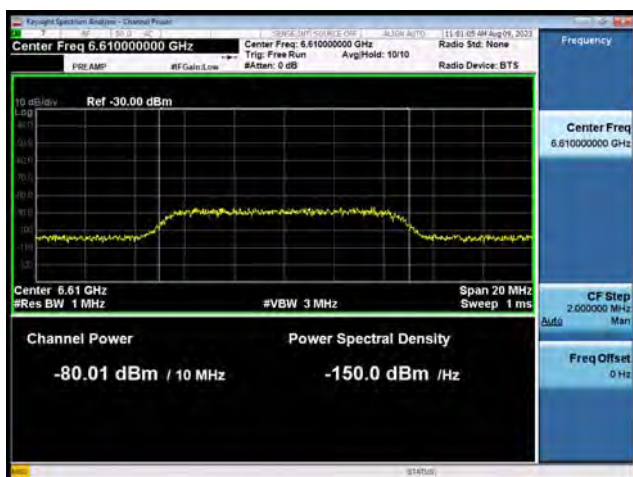
U-NII-7

Wi-Fi CBP														
Mode	EUT Frequency	BW EUT	AWGN Signal Frequency	Bw INC	state	Injected (AWGN) Power	Ant. Gain	path loss	Detection Power	Detection Limit	Success no./Trial no.	Detection Probability (%)	Limit	Verdict
	[MHz]	[MHz]	[MHz]	[MHz]		[dBm]	[dBi]	[dB]	[dBm]	[dBm]				pass/fail
802.11ax (HE20)	CH 133/6615	20	6610	10	OFF	-62.98	2.2	-14.83	-80.01	-62	9/10	90	90%	pass
					Minimal	-64.00	2.2	-14.83	-81.03	-62	10/10	100	90%	pass
					ON	-67.00	2.2	-14.83	-84.03	-62	10/10	100	90%	pass
802.11ax (HE80)	CH 135/6625	80	6590	10	OFF	-49.97	2.2	-14.79	-66.96	-62	10/10	100	90%	pass
					Minimal	-51.00	2.2	-14.79	-67.99	-62	10/10	100	90%	pass
					ON	-54.00	2.2	-14.79	-70.99	-62	10/10	100	90%	pass
			6625	10	OFF	-53.99	2.2	-14.82	-71.01	-62	10/10	100	90%	pass
					Minimal	-55.00	2.2	-14.82	-72.02	-62	10/10	100	90%	pass
					ON	-64.00	2.2	-14.82	-81.02	-62	10/10	100	90%	pass
			6660	10	OFF	-50.03	2.2	-14.90	-67.13	-62	10/10	100	90%	pass
					Minimal	-51.00	2.2	-14.90	-68.10	-62	10/10	100	90%	pass
					ON	-53.00	2.2	-14.90	-70.10	-62	10/10	100	90%	pass

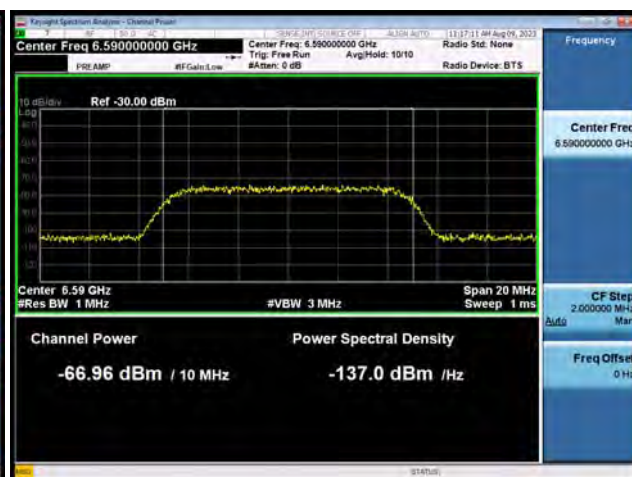
Note:

- 1) OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- 2) Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- 3) ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds
- 4) Detection Level = Injected AWGN Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)

Photos of Detection Power



802.11ax (HE20) CH 133



802.11ax (HE80) CH135 Low Edge 6590MHz



802.11ax (HE80) CH135 Middle Edge 6625MHz

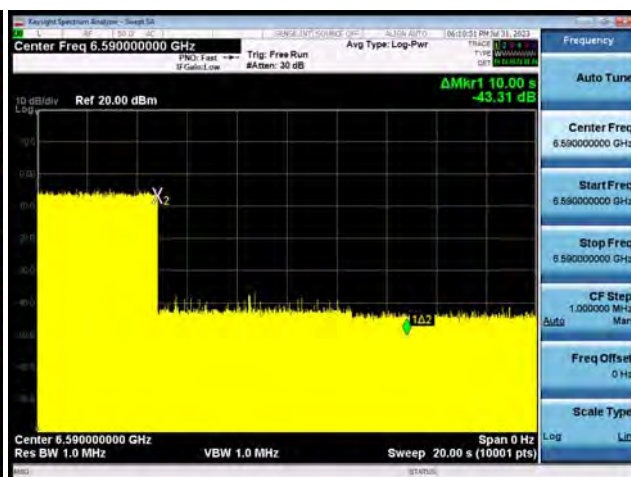


802.11ax (HE80) CH135 High Edge 6660MHz

Photos of EUT ceased transmission



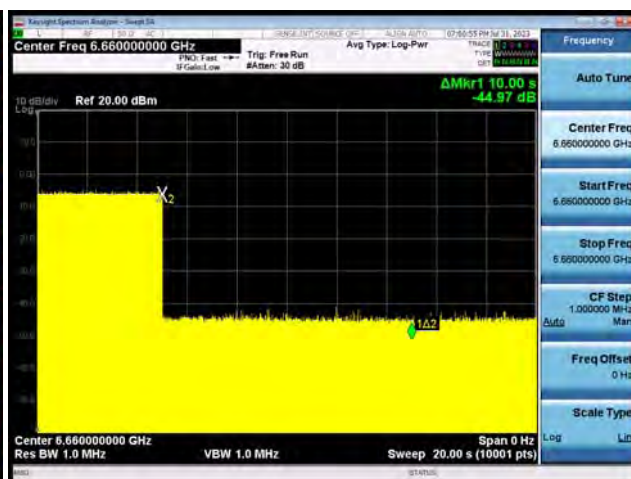
802.11ax (HE20) CH 133



802.11ax (HE80) CH135 Low Edge 6590MHz



802.11ax (HE80) CH135 Middle Edge 6625MHz



802.11ax (HE80) CH135 High Edge 6660MHz

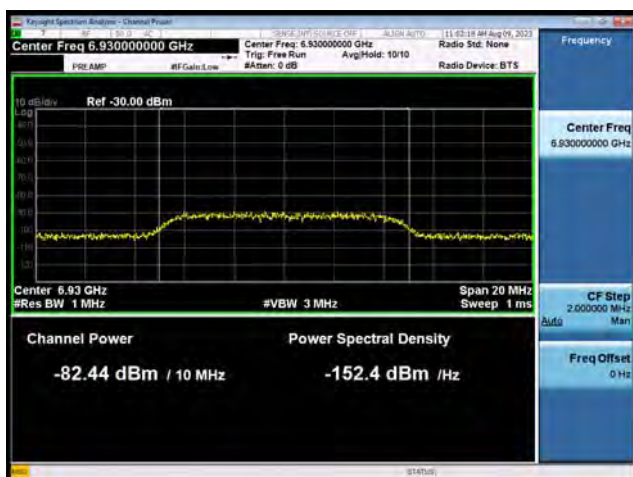
U-NII-8

Wi-Fi CBP														
Mode	EUT Frequency	BW EUT	AWGN Signal Frequency	Bw INC	state	Injected (AWGN) Power	Ant. Gain	path loss	Detection Power	Detection Limit	Success no./Trial no.	Detection Probability (%)	Limit	Verdict
	[MHz]	[MHz]	[MHz]	[MHz]		[dBm]	[dBi]	[dB]	[dBm]	[dBm]				pass/fail
802.11ax (HE20)	CH 197/6935	20	6930	10	OFF	-66.99	0.8	-14.65	-82.44	-62	10/10	100	90%	pass
					Minimal	-68.00	0.8	-14.65	-83.45	-62	10/10	100	90%	pass
					ON	-70.00	0.8	-14.65	-85.45	-62	10/10	100	90%	pass
802.11ax (HE80)	CH 199/6945	80	6910	10	OFF	-48.98	0.8	-14.75	-64.53	-62	10/10	100	90%	pass
					Minimal	-50.00	0.8	-14.75	-65.55	-62	10/10	100	90%	pass
					ON	-53.00	0.8	-14.75	-68.55	-62	10/10	100	90%	pass
			6945	10	OFF	-54.00	0.8	-14.59	-69.39	-62	10/10	100	90%	pass
					Minimal	-55.00	0.8	-14.59	-70.39	-62	10/10	100	90%	pass
					ON	-65.00	0.8	-14.59	-80.39	-62	10/10	100	90%	pass
			6980	10	OFF	-48.95	0.8	-14.60	-64.35	-62	10/10	100	90%	pass
					Minimal	-50.00	0.8	-14.60	-65.40	-62	10/10	100	90%	pass
					ON	-53.00	0.8	-14.60	-68.40	-62	10/10	100	90%	pass

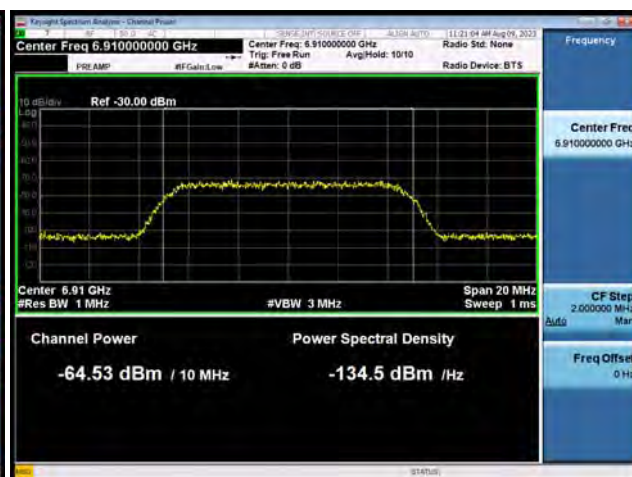
Note:

- 1) OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- 2) Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- 3) ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds
- 4) Detection Level = Injected AWGN Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)

Photos of Detection Power



802.11ax (HE20) CH197



802.11ax (HE80) CH199 Low Edge 6910MHz



802.11ax (HE80) CH199 Middle Edge 6945MHz

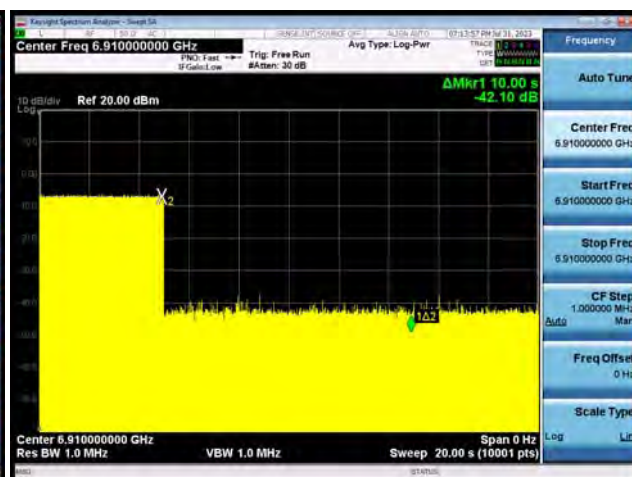


802.11ax (HE80) CH199 High Edge 6980MHz

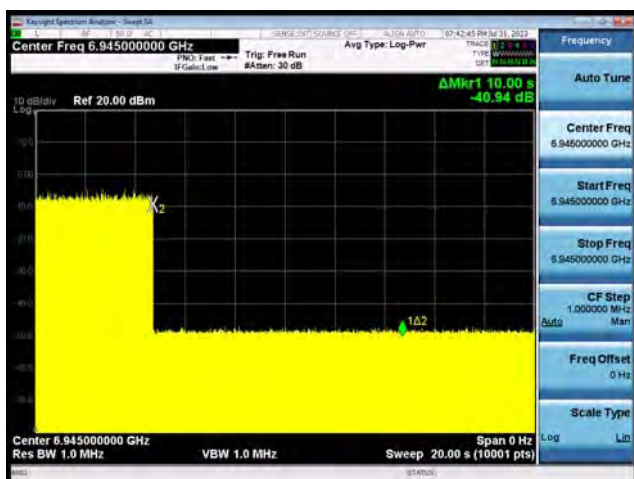
Photos of EUT ceased transmission



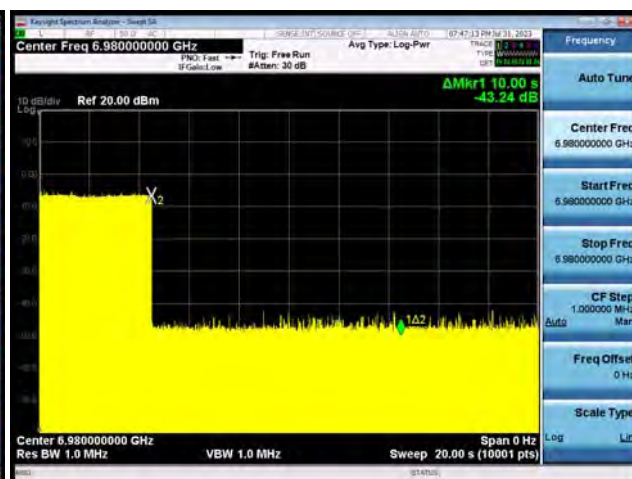
802.11ax (HE20) CH197



802.11ax (HE80) CH199 Low Edge 6910MHz



802.11ax (HE80) CH199 Middle Edge 6945MHz



802.11ax (HE80) CH199 High Edge 6980MHz

5.7. Unwanted Emission

Ambient Condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.

Sweep the whole frequency band range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

9kHz~150 kHz

RBW=200Hz, VBW=1kHz/ Sweep=AUTO

150 kHz~30MHz

RBW=9KHz, VBW=30KHz,/ Sweep=AUTO

Below 1GHz

RBW=100kHz / VBW=300kHz / Sweep=AUTO

a) Peak emission levels are measured by setting the instrument as follows:

Above 1GHz

PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

b) Average emission levels are measured by setting the instrument as follows:

Above 1GHz

AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

c) Detector: The measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)

e) Sweep time = auto.

f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific

emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)

g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is $[10 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is $[20 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels.

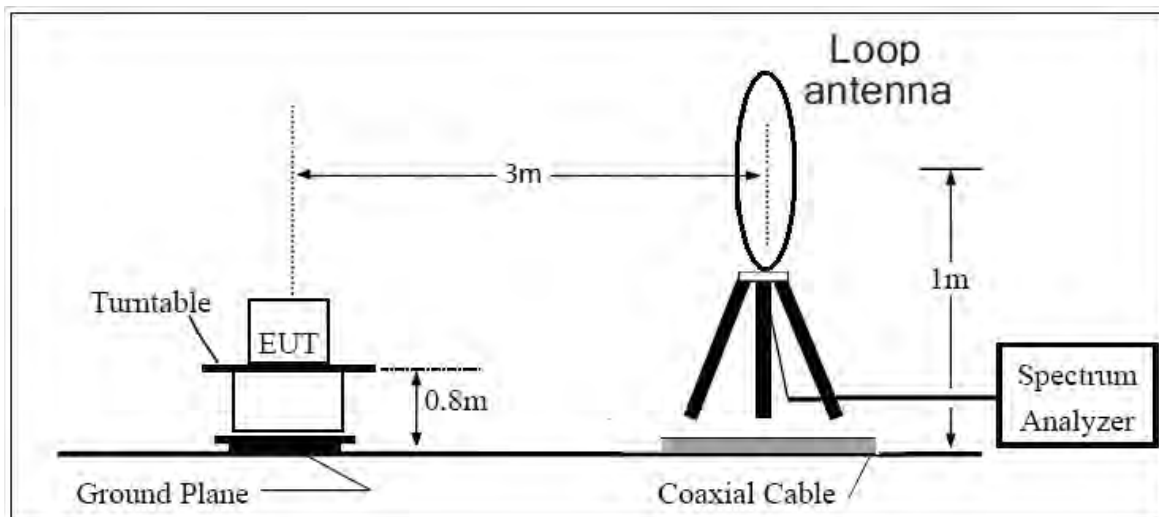
3) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Reduce the video bandwidth until no significant variations in the displayed signal are observed in subsequent traces, provided the video bandwidth is no less than 1 Hz. For regulatory requirements that specify averaging only over the transmit duration (e.g., digital transmission system [DTS] and Unlicensed National Information Infrastructure [U-NII]), the video bandwidth shall be greater than $[1 / (\text{minimum transmitter on time})]$ and no less than 1 Hz.

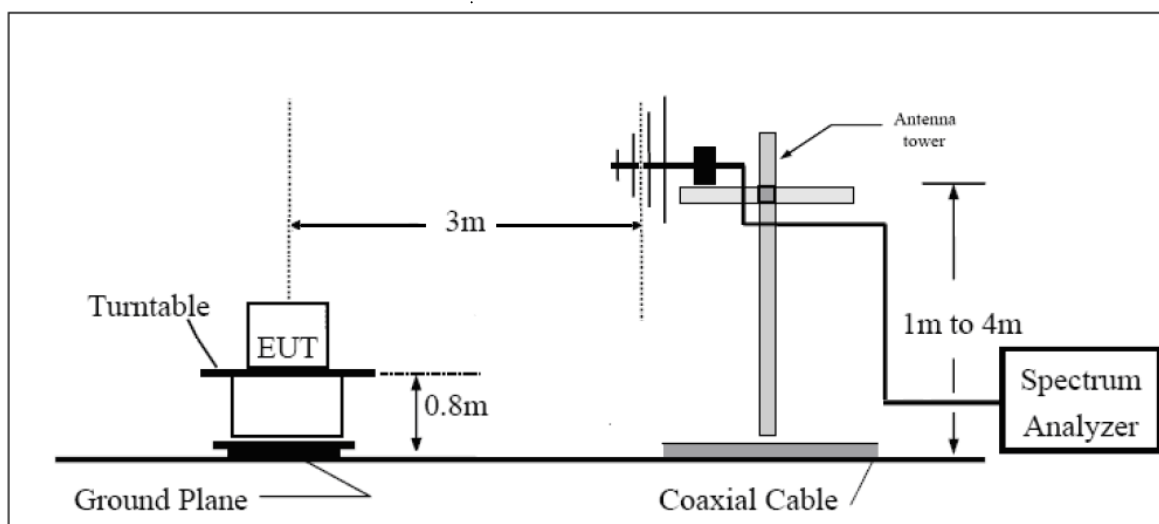
The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the loop antenna is vertical, others antenna are vertical and horizontal.

The test is in transmitting mode.

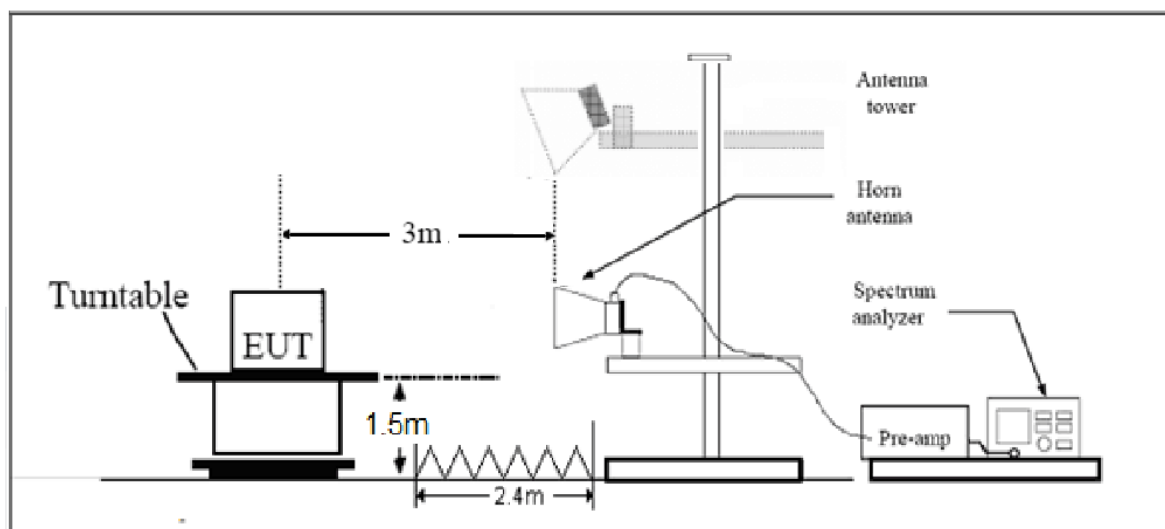
9kHz~~~30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

- (1) For transmitters operating in the 5725-5850 MHz 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.
- (2) 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 (68.2dBμV/m).
- (3) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz (68.2dBμV/m).
- (4) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz (68.2dBμV/m).
- (5) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz (68.2dBμV/m).

Note: the following formula is used to convert the EIRP to field strength

§1、 $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and

d = distance at which field strength limit is specified in the rules;

§2、 $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for d = 3 meters

- (6) Unwanted spurious emissions fallen in restricted bands per FCC Part 15.205 shall comply with the general field strength limits set forth in § 15.209 as below table.

Frequency of emission (MHz)	Field strength(μV/m)	Field strength(dBμV/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

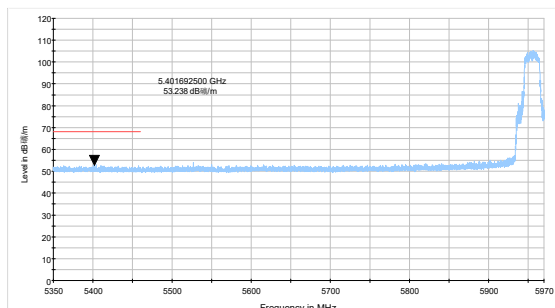
Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.17 dB
200MHz-1GHz	4.84 dB
1-18GHz	4.35 dB
18-26.5GHz	5.90 dB
26.5GHz~40GHz	5.92 dB

Test Results:

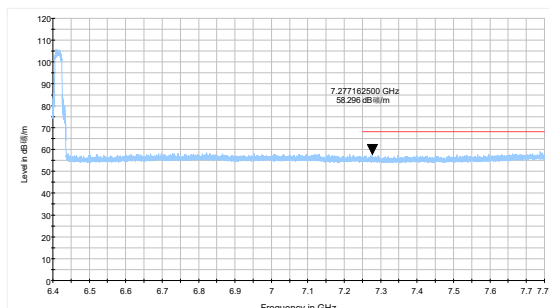
A symbol ($\text{dB}\mu\text{V}/\text{m}$) in the test plot below means ($\text{dB}\mu\text{V}/\text{m}$)

The signal beyond the limit is carrier.

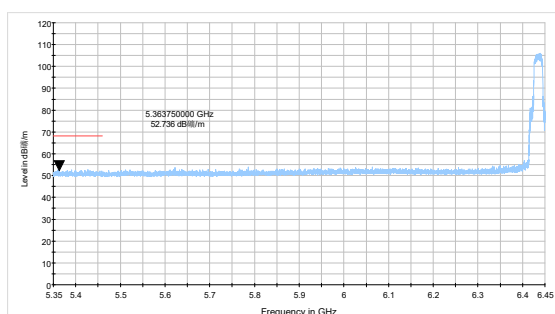
802.11ax HE20-Channel 1: Peak



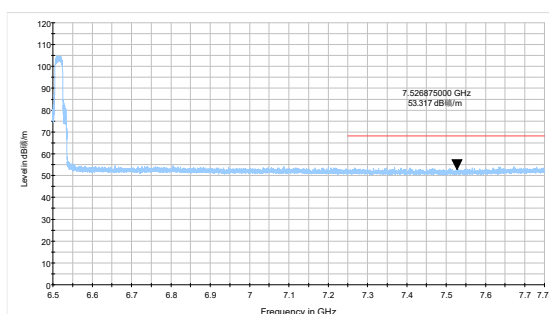
802.11ax HE20-Channel 93: Peak



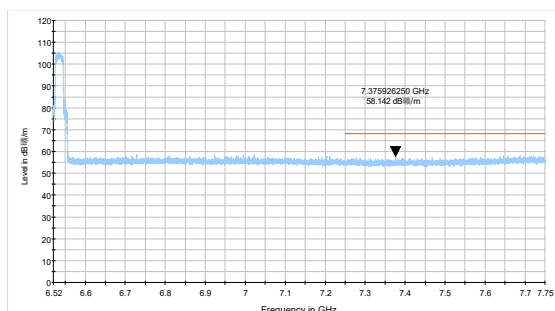
802.11ax HE20-Channel 97: Peak



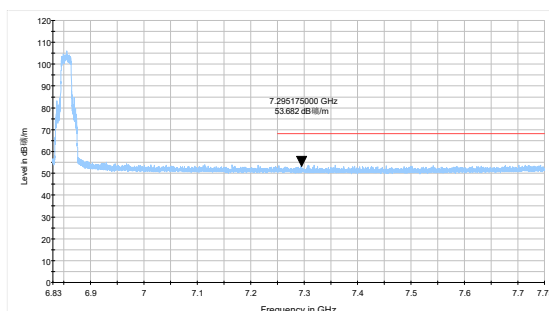
802.11ax HE20-Channel 113: Peak



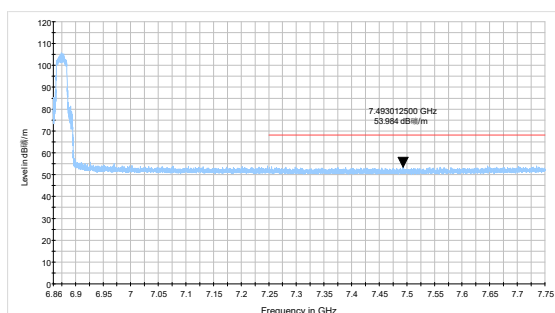
802.11ax HE20-Channel 117: Peak



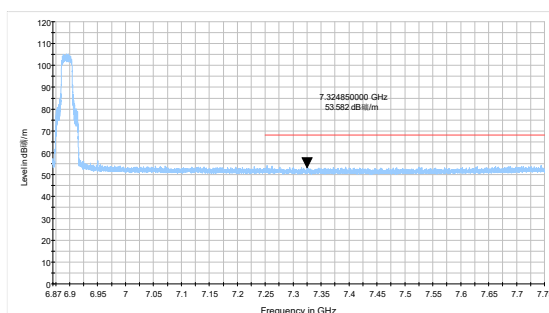
802.11ax HE20-Channel 181: Peak



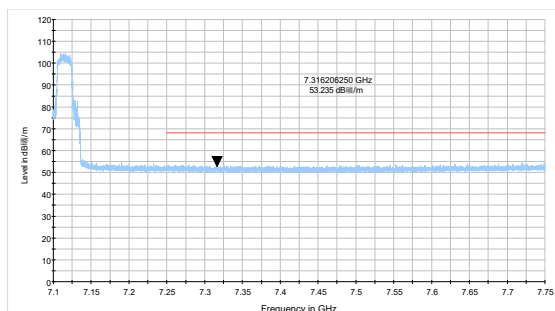
802.11ax HE20-Channel 185: Peak



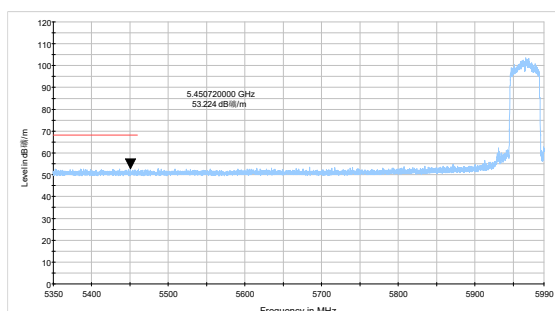
802.11ax HE20-Channel 189: Peak



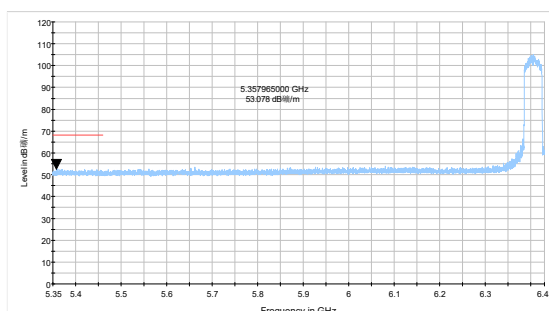
802.11ax HE20-Channel 233: Peak



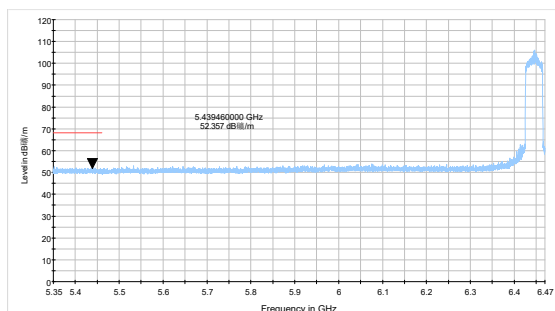
802.11ax HE40-Channel 3: Peak



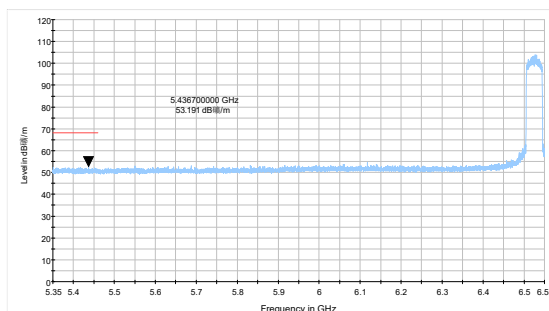
802.11ax HE40-Channel 91: Peak



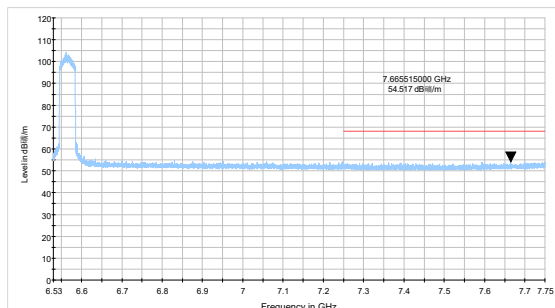
802.11ax HE40-Channel 99: Peak



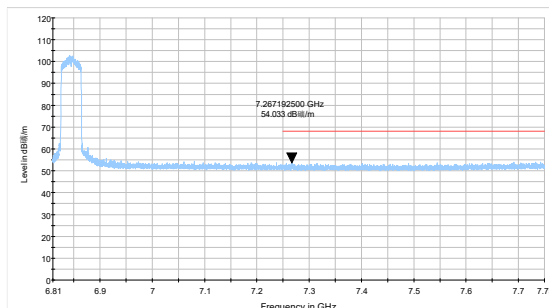
802.11ax HE40-Channel 115: Peak



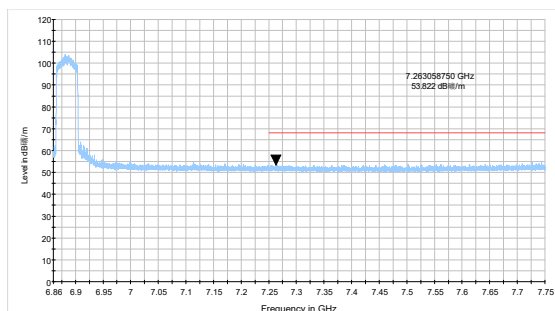
802.11ax HE40-Channel 123: Peak



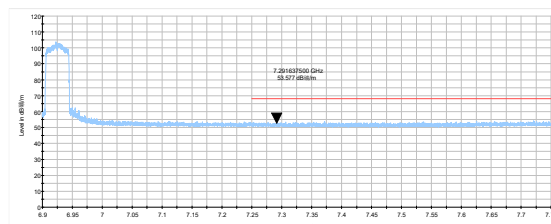
802.11ax HE40-Channel 179: Peak



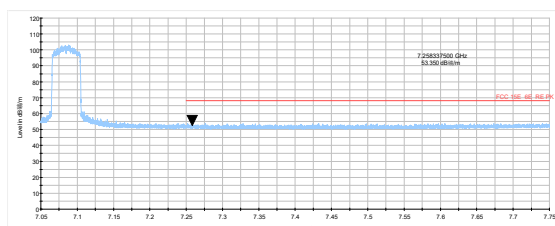
802.11ax HE40-Channel 187: Peak



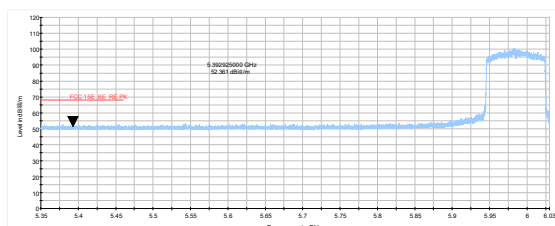
802.11ax HE40-Channel 195: Peak



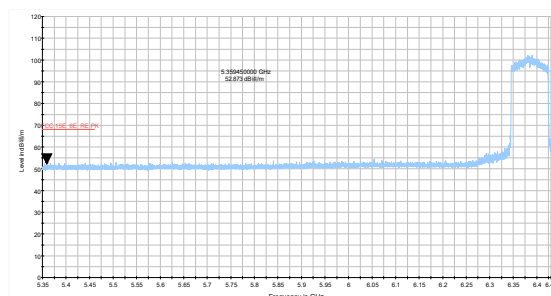
802.11ax HE40-Channel 227: Peak



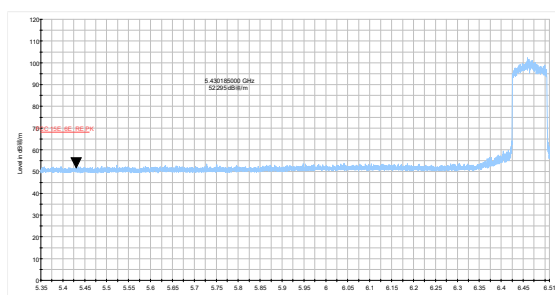
802.11ax HE80-Channel 7: Peak



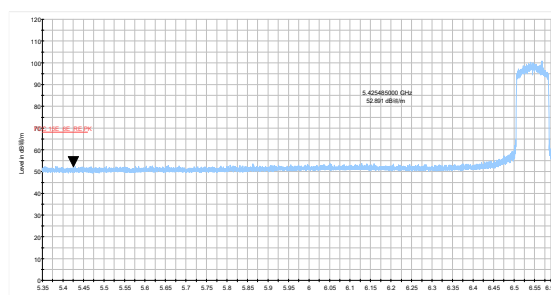
802.11ax HE80-Channel 87: Peak



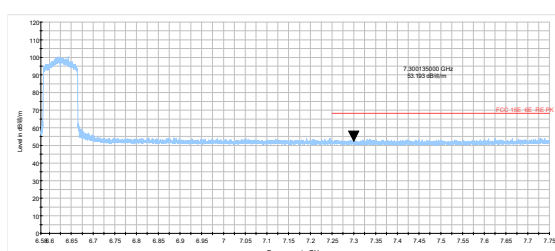
802.11ax HE80-Channel 103: Peak



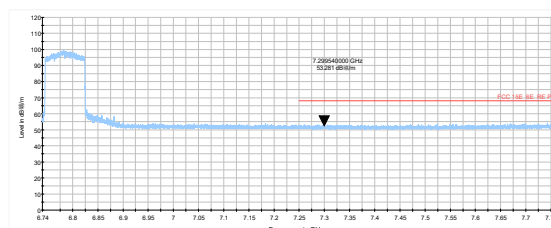
802.11ax HE80-Channel 119: Peak



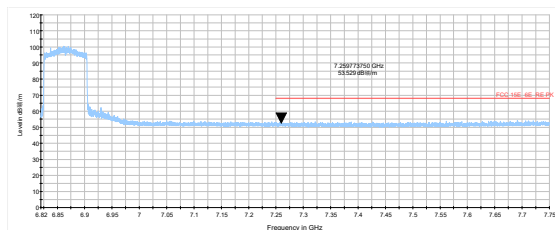
802.11ax HE80-Channel 135: Peak



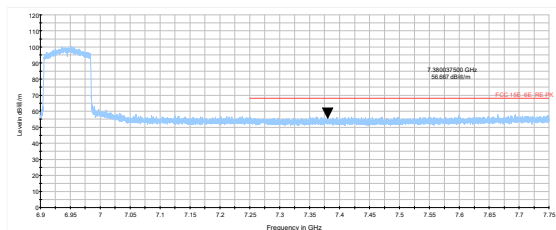
802.11ax HE80-Channel 167: Peak



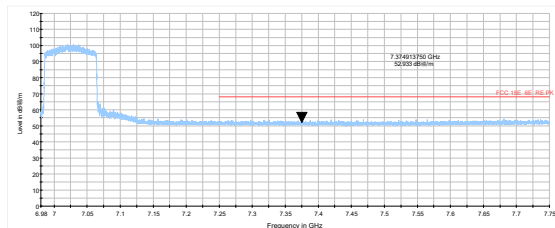
802.11ax HE80-Channel 183: Peak



802.11ax HE80-Channel 199: Peak

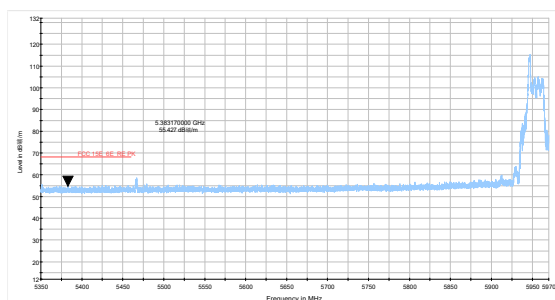


802.11ax HE80-Channel 215: Peak

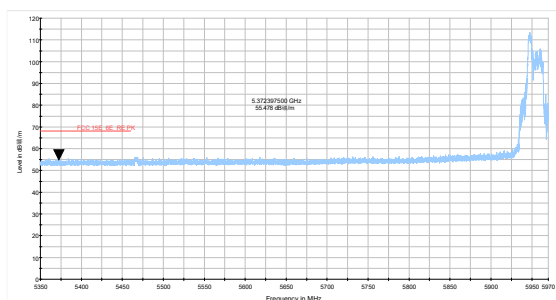


TB Mode

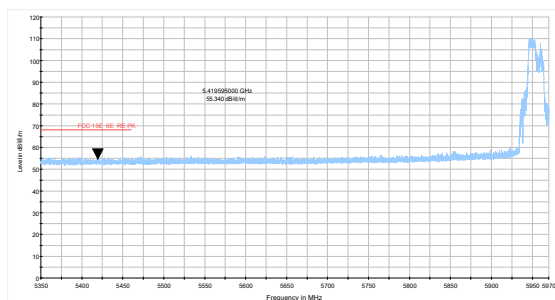
802.11ax HE20 26Tone-Channel 1: Peak



802.11ax HE20 52Tone -Channel 1: Peak



802.11ax HE20 106Tone-Channel 1: Peak



Result of RE

Test result

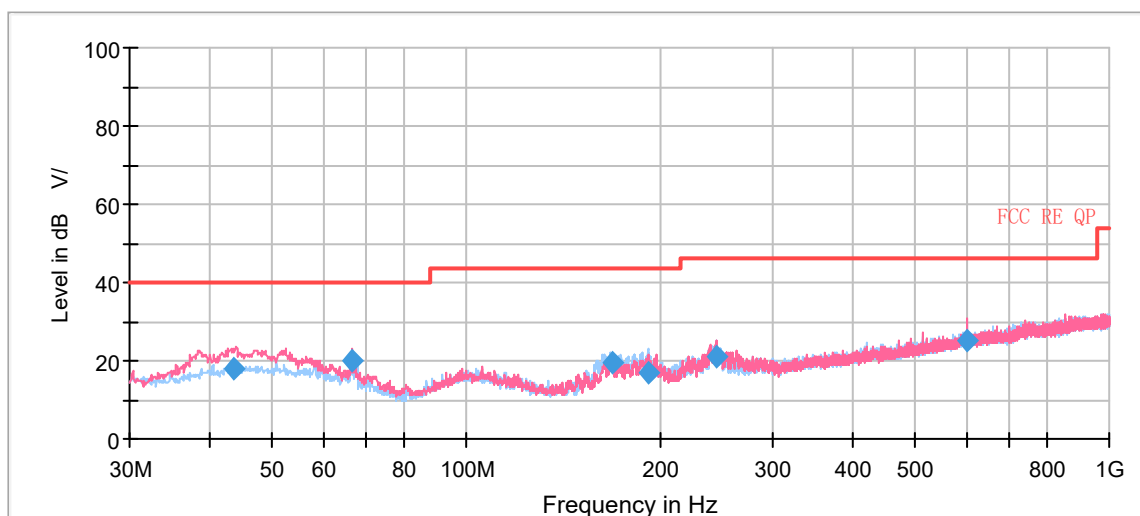
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the Emissions in the frequency band 9kHz-30MHz are more than 20dB below the limit are not reported.

A symbol ($\text{dB}\mu\text{V/m}$) in the test plot below means ($\text{dB}\mu\text{V/m}$)

A symbol (dB V/) in the test plot below means ($\text{dB}\mu\text{V/m}$)

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11ax HE20 CH 49 is selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Continuous TX mode:



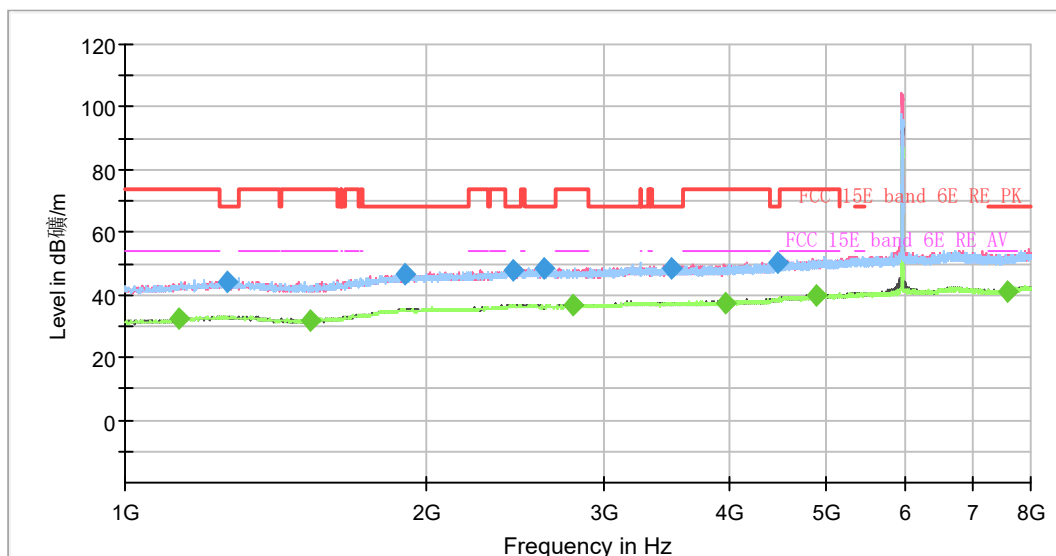
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak ($\text{dB}\mu\text{V/m}$)	Limit ($\text{dB}\mu\text{V/m}$)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
43.663750	18.08	40.00	21.92	100.0	V	303.0	20.2
66.657500	20.07	40.00	19.93	100.0	V	0.0	17.4
168.428750	19.24	43.50	24.26	175.0	H	258.0	15.6
191.985000	16.79	43.50	26.71	175.0	H	82.0	18.0
244.815000	21.14	46.00	24.86	110.0	H	68.0	19.7
599.996250	25.23	46.00	20.77	125.0	V	319.0	27.0

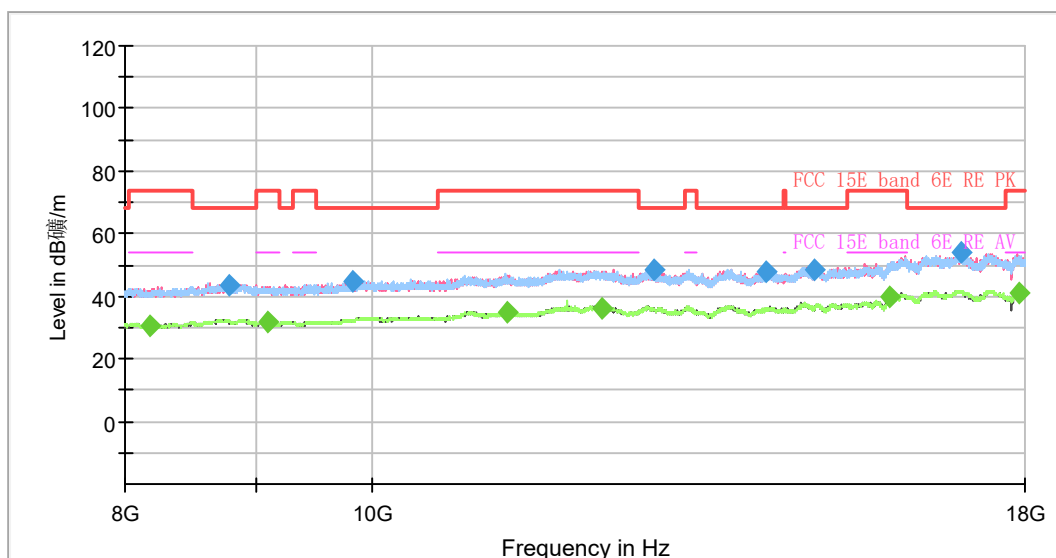
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – Quasi-Peak

802.11ax HE20 CH 1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



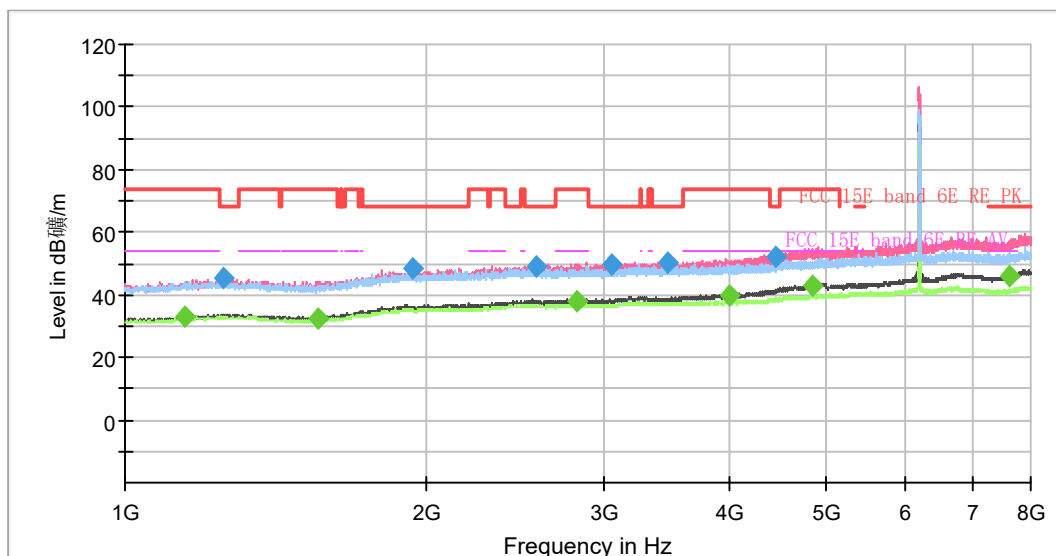
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1131.250000	---	32.58	54.00	21.42	100.0	H	209.0	-0.8
1262.500000	44.01	---	68.20	24.19	100.0	V	0.0	0.3
1531.125000	---	31.85	54.00	22.15	100.0	H	249.0	-0.1
1898.625000	46.79	---	68.20	21.41	200.0	H	27.0	3.9
2441.125000	47.73	---	68.20	20.47	200.0	H	268.0	5.5
2619.625000	48.46	---	68.20	19.74	100.0	V	0.0	5.6
2795.500000	---	36.52	54.00	17.48	200.0	H	48.0	5.9
3508.625000	48.18	---	68.20	20.02	200.0	H	167.0	7.4
3972.375000	---	37.56	54.00	16.44	200.0	V	0.0	8.3
4472.875000	50.38	---	68.20	17.82	200.0	V	306.0	9.8
4888.500000	---	39.85	54.00	14.15	200.0	V	285.0	10.6
7583.500000	---	41.22	54.00	12.78	200.0	V	247.0	14.1

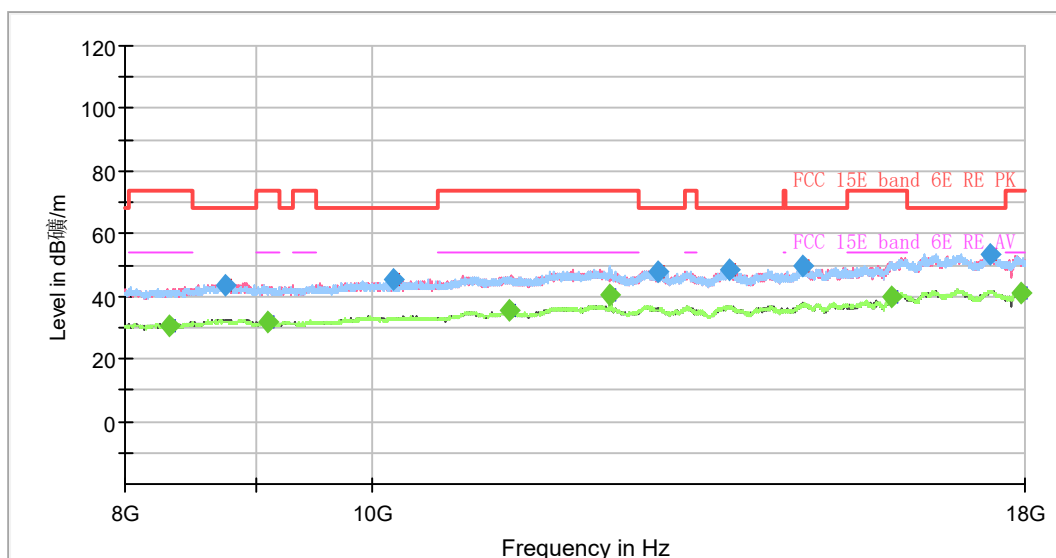
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 49



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



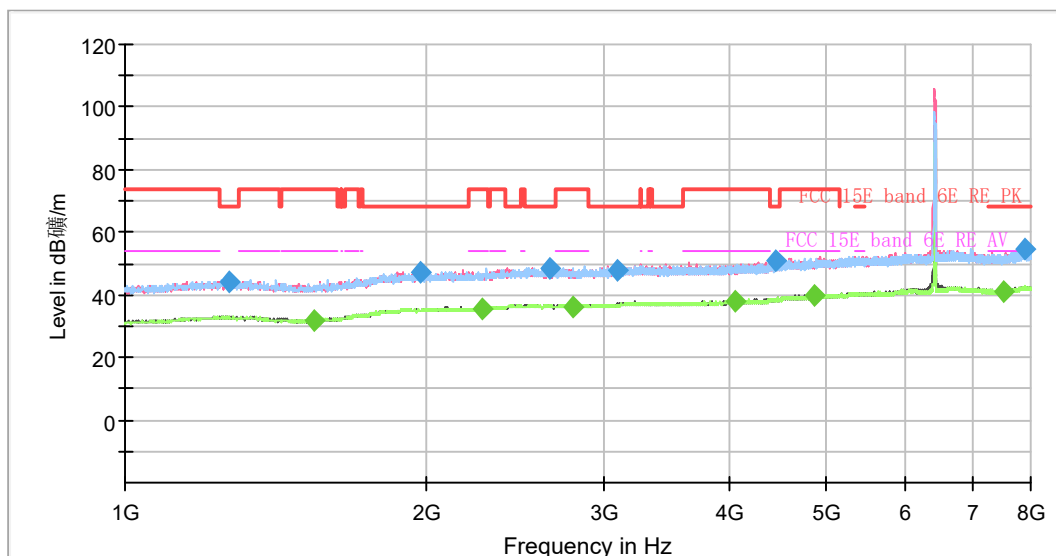
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1145.250000	---	33.18	54.00	20.82	200.0	V	113.0	-0.5
1255.500000	45.08	---	68.20	23.12	100.0	H	131.0	0.3
1558.250000	---	32.57	54.00	21.43	200.0	V	0.0	0.0
1938.000000	48.16	---	68.20	20.04	100.0	V	126.0	3.7
2573.250000	49.21	---	68.20	18.99	200.0	V	0.0	5.7
2820.000000	---	38.14	54.00	15.86	200.0	V	258.0	6.0
3053.625000	49.88	---	68.20	18.32	200.0	V	352.0	6.6
3468.375000	50.26	---	68.20	17.94	200.0	V	358.0	7.4
4004.750000	---	39.77	54.00	14.23	200.0	V	0.0	8.4
4460.625000	52.03	---	68.20	16.17	200.0	V	317.0	9.7
4851.750000	---	43.13	54.00	10.87	200.0	V	352.0	10.5
7619.375000	---	45.91	54.00	8.09	200.0	V	0.0	14.2

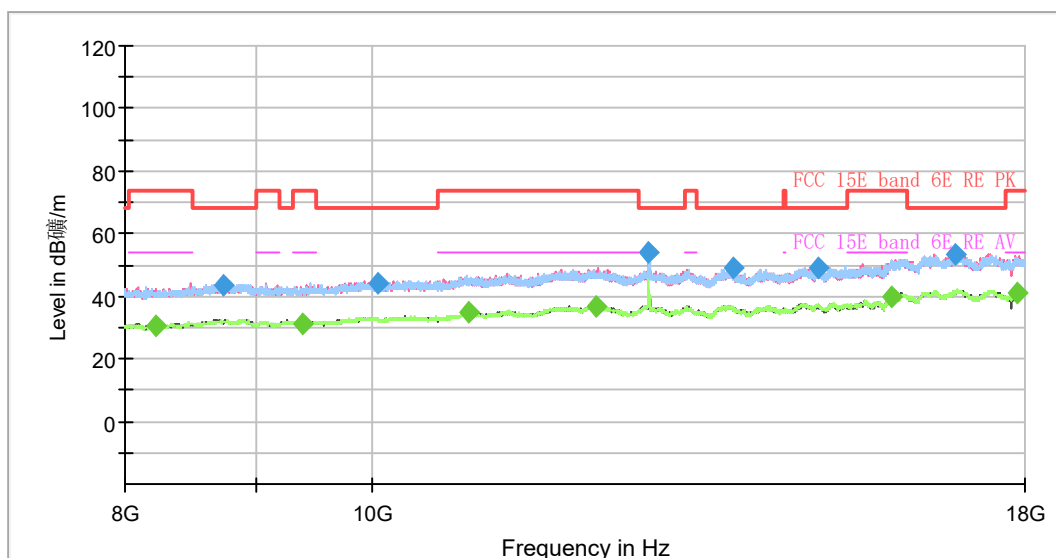
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 93



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



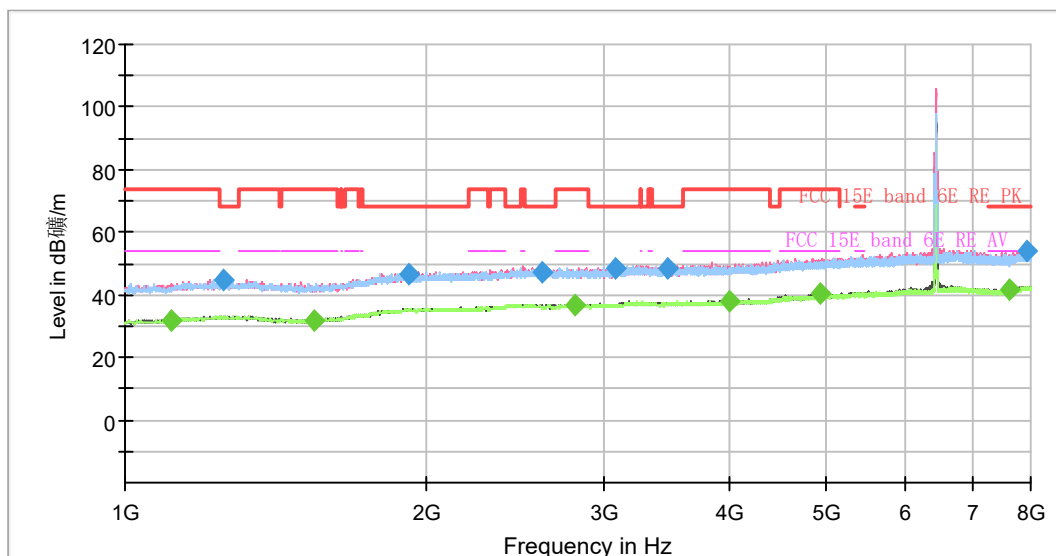
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1267.750000	43.98	---	68.20	24.22	100.0	H	150.0	0.3
1541.625000	---	31.95	54.00	22.05	200.0	V	349.0	-0.1
1969.500000	47.00	---	68.20	21.20	100.0	V	2.0	3.8
2269.625000	---	35.81	54.00	18.19	200.0	V	312.0	4.7
2647.625000	48.45	---	68.20	19.75	100.0	V	288.0	5.8
2791.125000	---	36.30	54.00	17.70	200.0	V	252.0	5.9
3094.750000	48.03	---	68.20	20.17	200.0	V	29.0	6.7
4054.625000	---	37.78	54.00	16.22	200.0	V	333.0	8.6
4458.000000	50.62	---	68.20	17.58	100.0	V	308.0	9.7
4858.750000	---	39.57	54.00	14.43	100.0	V	90.0	10.5
7524.000000	---	41.03	54.00	12.97	200.0	H	5.0	14.0
7881.000000	54.54	---	68.20	13.66	200.0	H	192.0	14.8

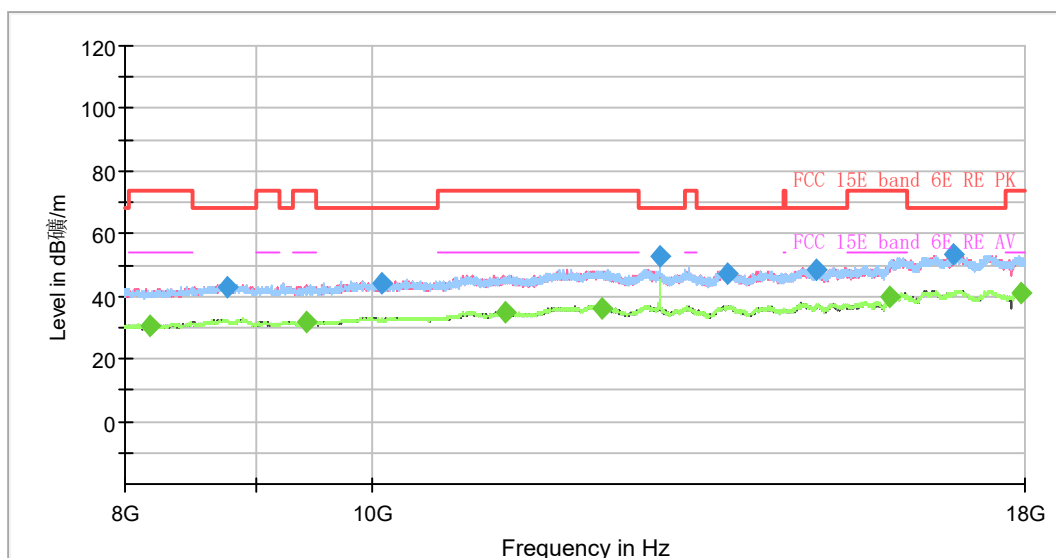
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 97



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



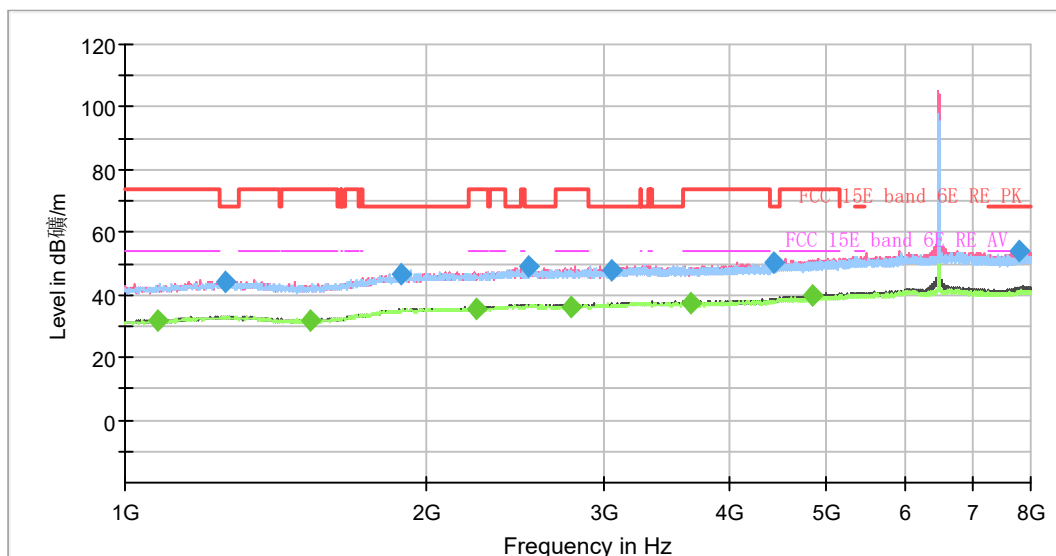
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1110.250000	---	32.03	54.00	21.97	100.0	V	132.0	-1.2
1255.500000	45.03	---	68.20	23.17	100.0	H	89.0	0.3
1544.250000	---	31.99	54.00	22.01	100.0	V	1.0	-0.1
1920.500000	46.47	---	68.20	21.73	200.0	V	0.0	3.8
2603.000000	47.30	---	68.20	20.90	100.0	V	230.0	5.6
2813.000000	---	36.73	54.00	17.27	200.0	V	50.0	5.9
3086.875000	48.47	---	68.20	19.73	100.0	V	0.0	6.7
3471.000000	48.19	---	68.20	20.01	200.0	V	325.0	7.4
3999.500000	---	38.01	54.00	15.99	100.0	V	209.0	8.4
4941.000000	---	40.15	54.00	13.85	200.0	V	0.0	10.7
7606.250000	---	41.43	54.00	12.57	100.0	V	93.0	14.1
7936.125000	54.13	---	68.20	14.07	200.0	V	0.0	14.9

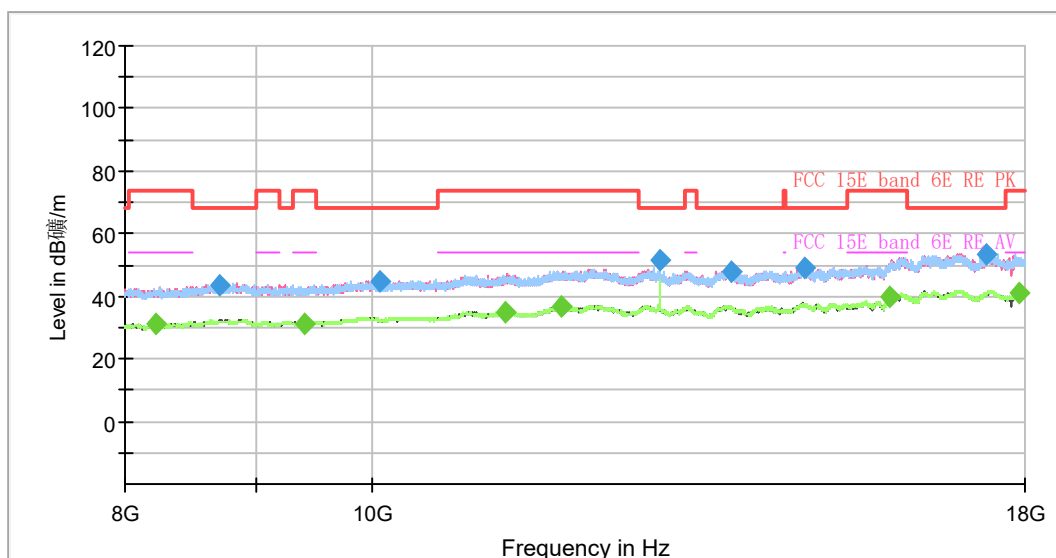
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 105



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



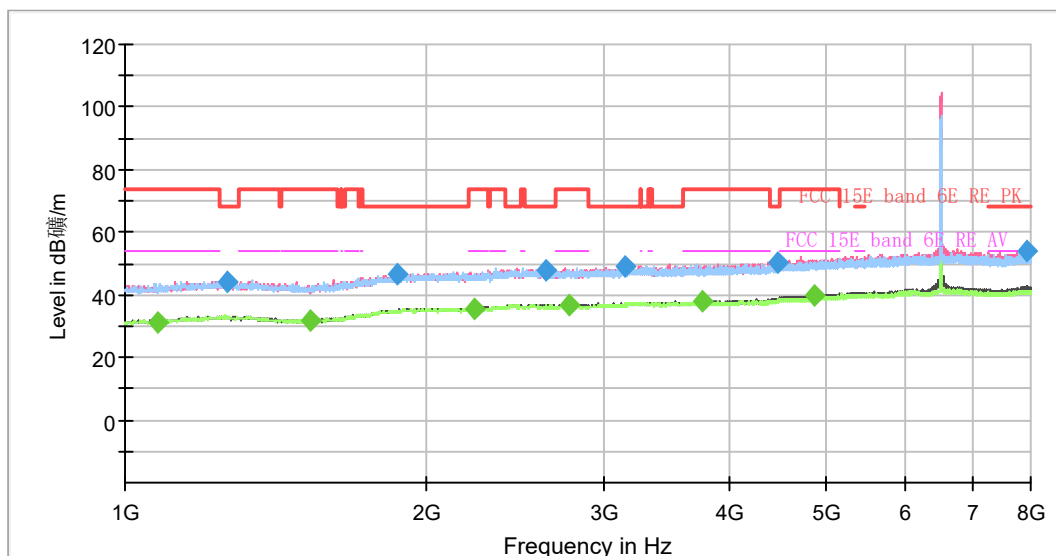
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1080.500000	---	31.54	54.00	22.46	100.0	V	77.0	-1.4
1259.875000	44.43	---	68.20	23.77	100.0	V	56.0	0.3
1533.750000	---	31.54	54.00	22.46	100.0	H	190.0	-0.1
1885.500000	46.79	---	68.20	21.41	200.0	H	1.0	3.7
2239.000000	---	35.42	54.00	18.58	200.0	V	352.0	4.5
2529.500000	49.19	---	68.20	19.01	100.0	V	0.0	5.8
2781.500000	---	36.26	54.00	17.74	100.0	V	359.0	5.9
3060.625000	47.85	---	68.20	20.35	200.0	V	0.0	6.6
3670.500000	---	37.57	54.00	16.43	200.0	V	338.0	7.8
4445.750000	50.06	---	68.20	18.14	200.0	V	0.0	9.6
4843.000000	---	39.86	54.00	14.14	200.0	V	0.0	10.5
7776.875000	54.00	---	68.20	14.20	200.0	V	236.0	14.5

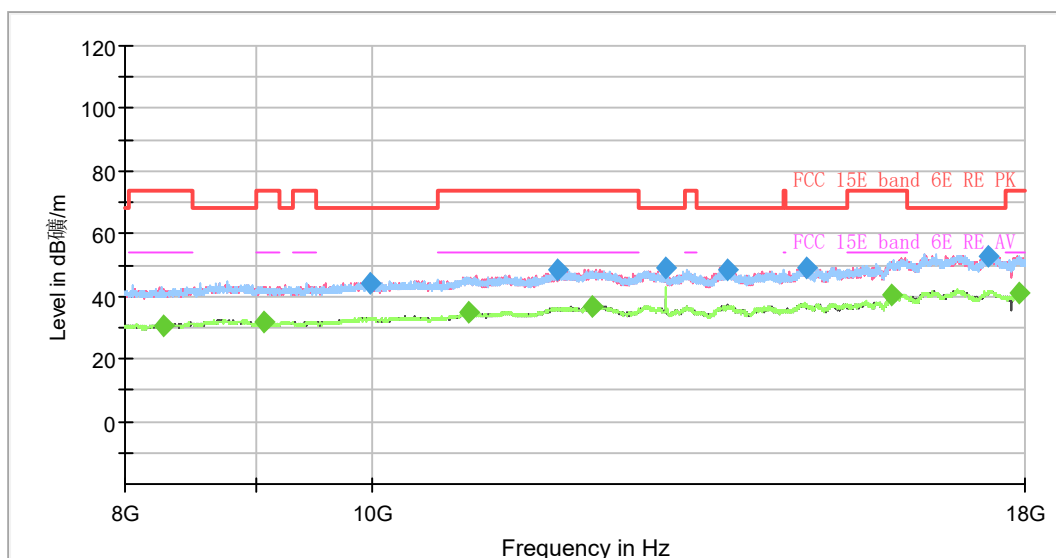
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 113



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



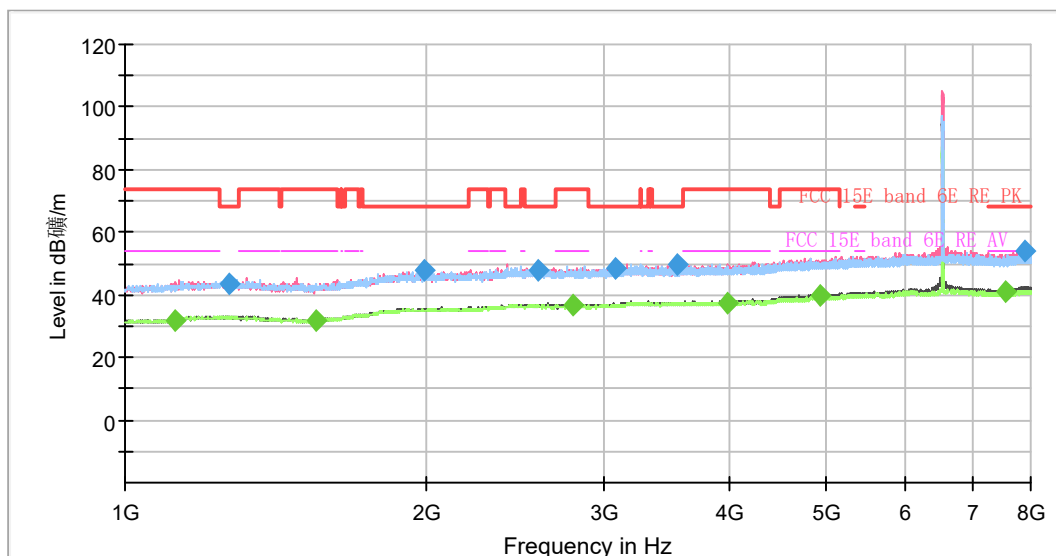
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1077.000000	---	31.40	54.00	22.60	200.0	V	91.0	-1.4
1262.500000	44.22	---	68.20	23.98	100.0	V	312.0	0.3
1531.125000	---	31.77	54.00	22.23	200.0	V	313.0	-0.1
1864.500000	46.74	---	68.20	21.46	100.0	V	17.0	3.5
2234.625000	---	35.61	54.00	18.39	100.0	V	191.0	4.5
2631.000000	48.02	---	68.20	20.18	200.0	H	89.0	5.7
2776.250000	---	36.48	54.00	17.52	100.0	V	252.0	5.9
3154.250000	49.02	---	68.20	19.18	100.0	H	356.0	6.9
3763.250000	---	37.69	54.00	16.31	200.0	V	271.0	7.9
4467.625000	50.14	---	68.20	18.06	100.0	H	270.0	9.7
4871.000000	---	39.63	54.00	14.37	200.0	V	252.0	10.5
7936.125000	53.95	---	68.20	14.25	200.0	V	292.0	14.9

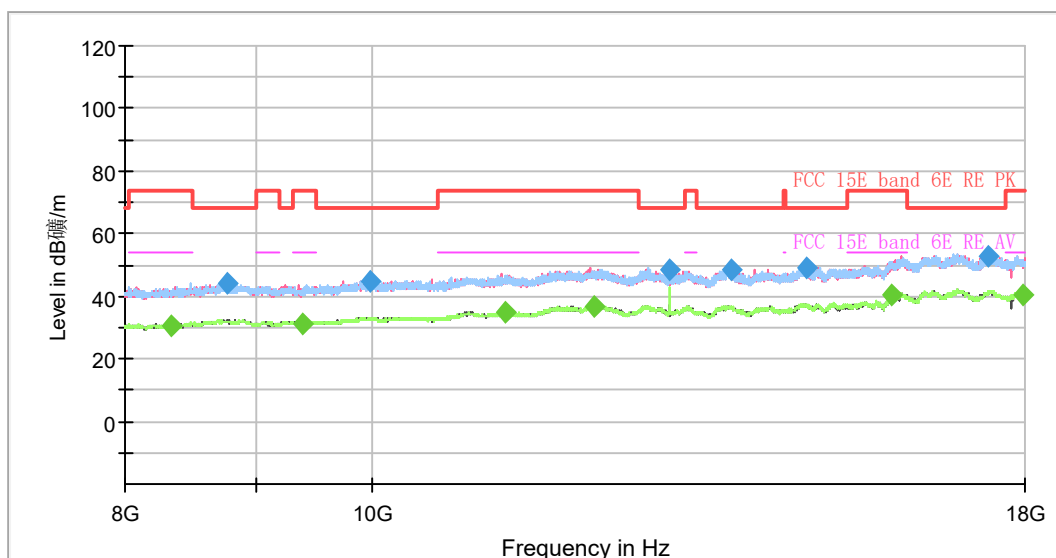
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 117



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



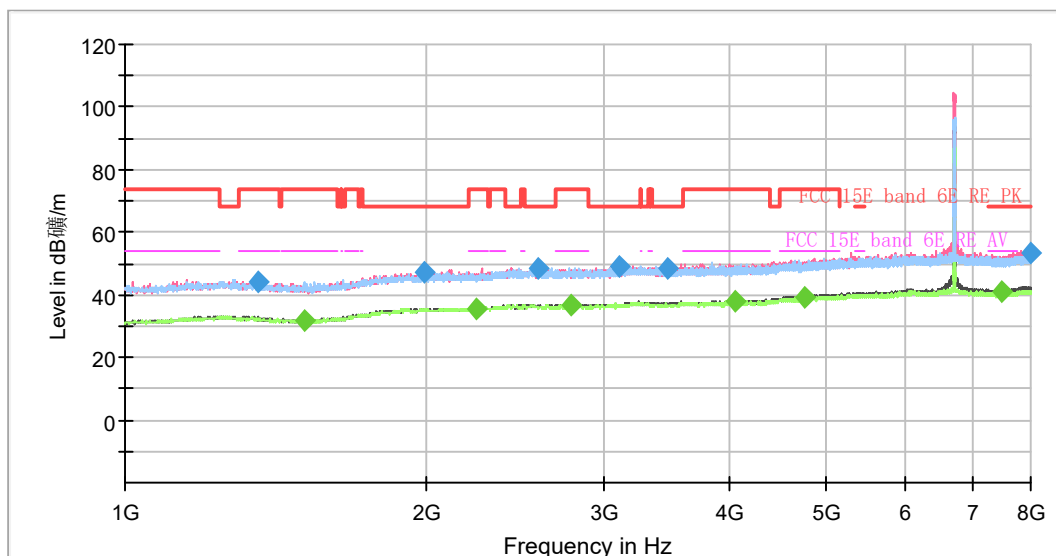
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1124.250000	---	31.92	54.00	22.08	200.0	V	0.0	-0.9
1271.250000	43.63	---	68.20	24.57	100.0	V	0.0	0.3
1553.000000	---	32.00	54.00	22.00	100.0	V	65.0	-0.1
1991.375000	47.69	---	68.20	20.51	100.0	V	248.0	4.0
2584.625000	48.13	---	68.20	20.07	100.0	V	146.0	5.7
2791.125000	---	36.60	54.00	17.40	200.0	V	323.0	5.9
3078.125000	48.35	---	68.20	19.85	100.0	V	167.0	6.6
3553.250000	49.92	---	68.20	18.28	200.0	V	0.0	7.5
3979.375000	---	37.51	54.00	16.49	200.0	V	208.0	8.3
4933.125000	---	39.73	54.00	14.27	200.0	V	0.0	10.7
7535.375000	---	41.30	54.00	12.70	200.0	V	354.0	14.0
7896.750000	54.08	---	68.20	14.12	200.0	V	72.0	14.8

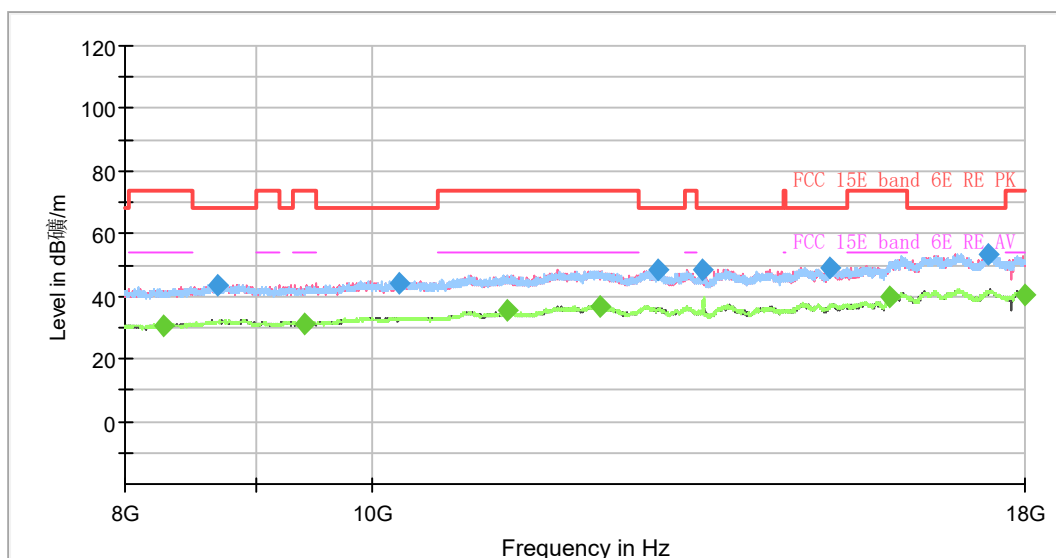
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 157



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



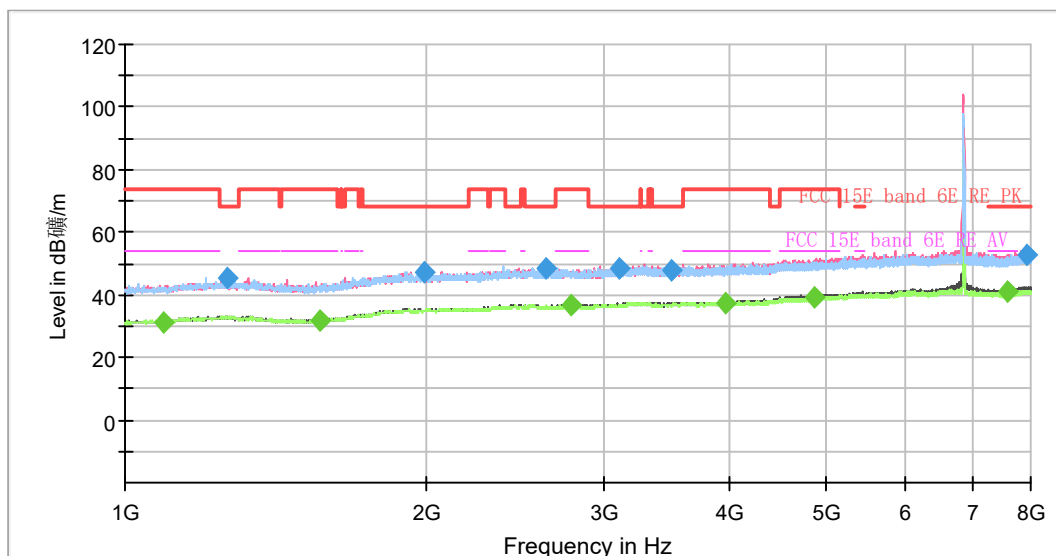
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1357.000000	43.97	---	74.00	30.03	200.0	H	14.0	0.3
1511.000000	---	31.91	54.00	22.09	100.0	V	0.0	-0.1
1984.375000	47.52	---	68.20	20.68	200.0	H	0.0	4.0
2245.125000	---	35.58	54.00	18.42	100.0	V	0.0	4.6
2577.625000	48.36	---	68.20	19.84	100.0	V	0.0	5.7
2790.250000	---	36.66	54.00	17.34	100.0	V	347.0	5.9
3109.625000	48.99	---	68.20	19.21	200.0	V	268.0	6.7
3474.500000	48.16	---	68.20	20.04	200.0	V	268.0	7.4
4059.000000	---	37.84	54.00	16.16	100.0	V	31.0	8.6
4757.250000	---	39.46	54.00	14.54	200.0	V	289.0	10.3
7473.250000	---	41.06	54.00	12.94	100.0	V	0.0	13.9
7993.875000	53.45	---	68.20	14.75	200.0	V	0.0	15.0

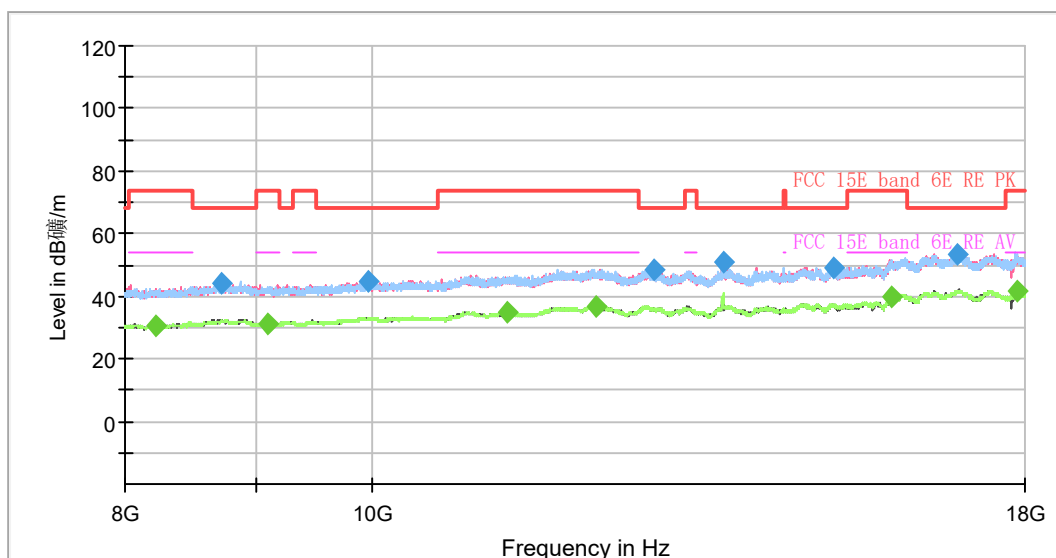
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 181



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



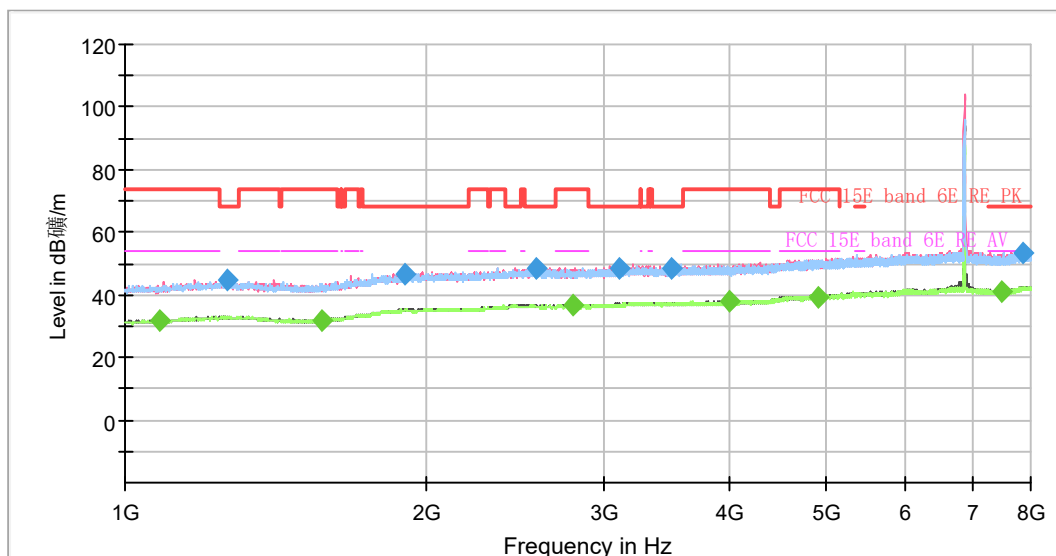
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1093.625000	---	31.15	54.00	22.85	100.0	V	0.0	-1.4
1262.500000	45.31	---	68.20	22.89	200.0	V	150.0	0.3
1561.750000	---	31.69	54.00	22.31	100.0	V	17.0	0.0
1988.750000	47.47	---	68.20	20.73	100.0	V	33.0	4.0
2634.500000	48.76	---	68.20	19.44	200.0	V	350.0	5.8
2782.375000	---	36.54	54.00	17.46	100.0	V	271.0	5.9
3106.125000	48.66	---	68.20	19.54	200.0	V	171.0	6.7
3506.875000	48.10	---	68.20	20.10	200.0	V	296.0	7.4
3972.375000	---	37.62	54.00	16.38	200.0	V	31.0	8.3
4861.375000	---	39.45	54.00	14.55	200.0	V	336.0	10.5
7572.125000	---	40.98	54.00	13.02	200.0	V	275.0	14.1
7916.000000	52.96	---	68.20	15.24	100.0	V	17.0	14.9

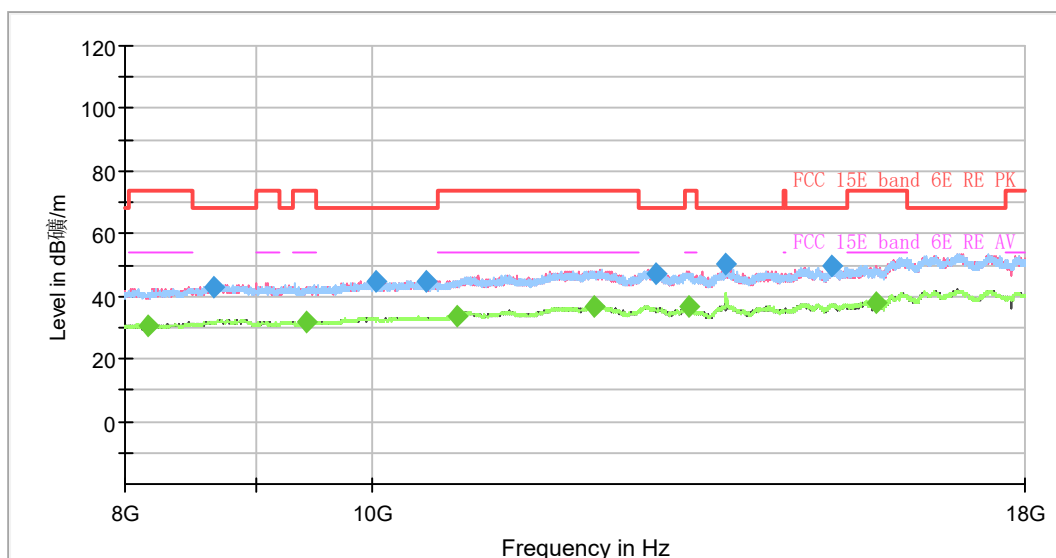
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 185



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



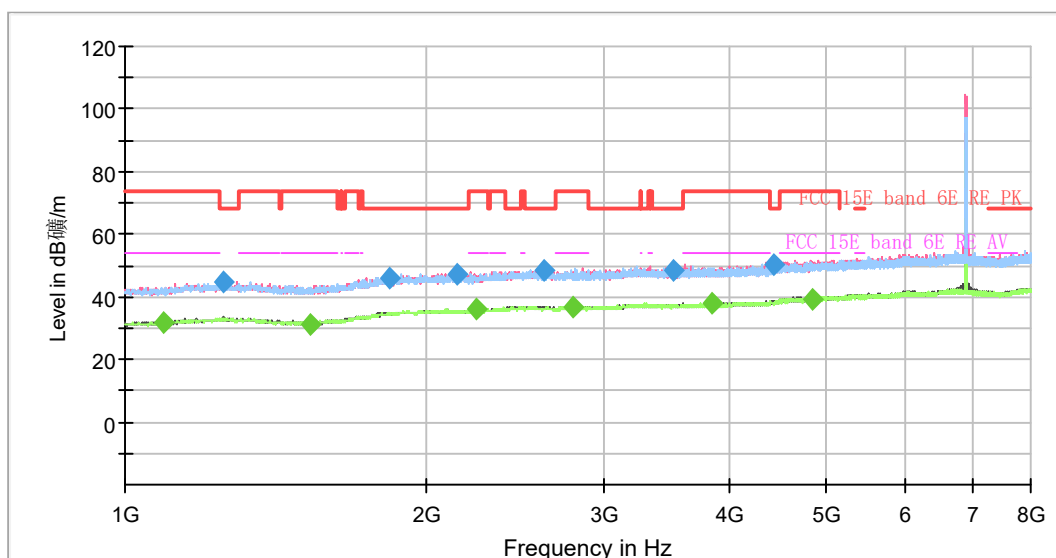
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1084.000000	---	31.78	54.00	22.22	200.0	H	47.0	-1.4
1263.375000	45.03	---	68.20	23.17	100.0	V	125.0	0.3
1574.875000	---	31.72	54.00	22.28	100.0	V	0.0	0.1
1903.875000	46.91	---	68.20	21.29	100.0	V	9.0	3.9
2576.750000	48.40	---	68.20	19.80	200.0	H	28.0	5.7
2793.750000	---	36.46	54.00	17.54	200.0	V	184.0	5.9
3114.875000	48.53	---	68.20	19.67	200.0	V	152.0	6.8
3510.375000	48.56	---	68.20	19.64	200.0	H	47.0	7.5
4006.500000	---	37.97	54.00	16.03	200.0	V	112.0	8.4
4906.875000	---	39.49	54.00	14.51	100.0	V	164.0	10.6
7493.375000	---	41.17	54.00	12.83	200.0	H	6.0	14.0
7859.125000	53.53	---	68.20	14.67	100.0	V	144.0	14.7

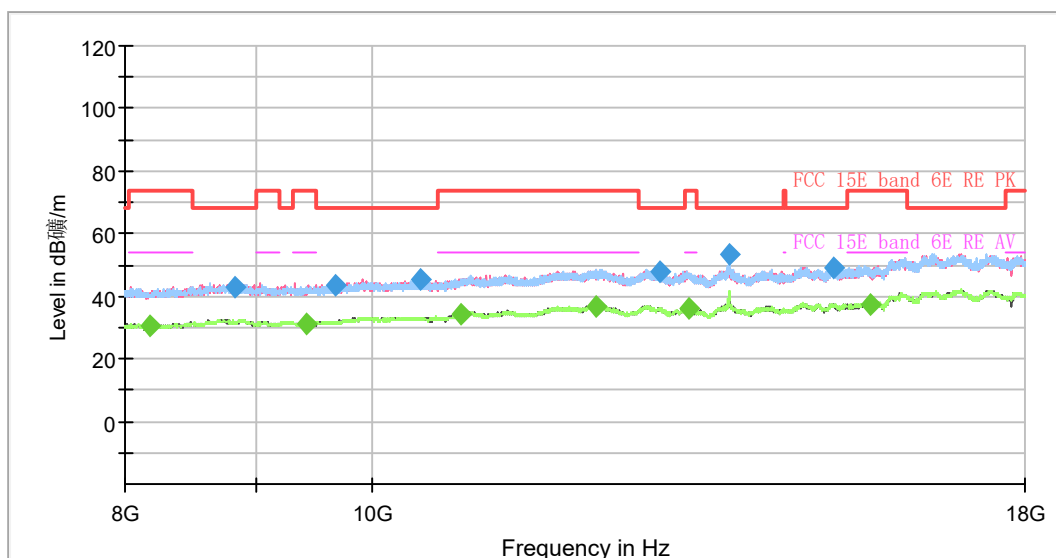
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 189



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



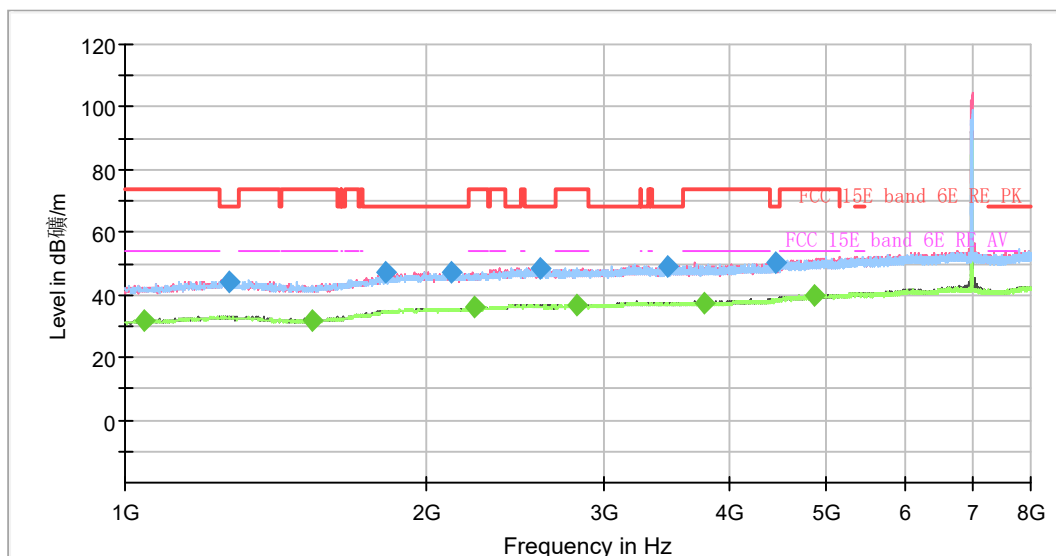
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1093.625000	---	31.75	54.00	22.25	100.0	H	288.0	-1.4
1255.500000	44.76	---	68.20	23.44	200.0	H	165.0	0.3
1532.875000	---	31.47	54.00	22.53	100.0	V	68.0	-0.1
1836.500000	46.03	---	68.20	22.17	100.0	H	269.0	3.2
2139.250000	47.45	---	68.20	20.75	100.0	H	169.0	4.2
2241.625000	---	35.83	54.00	18.17	100.0	V	49.0	4.5
2615.250000	48.45	---	68.20	19.75	100.0	V	129.0	5.6
2791.125000	---	36.51	54.00	17.49	200.0	H	146.0	5.9
3520.000000	48.68	---	68.20	19.52	200.0	V	274.0	7.5
3850.750000	---	37.84	54.00	16.16	200.0	V	253.0	8.0
4437.000000	50.34	---	68.20	17.87	200.0	V	73.0	9.6
4846.500000	---	39.48	54.00	14.52	200.0	V	30.0	10.5

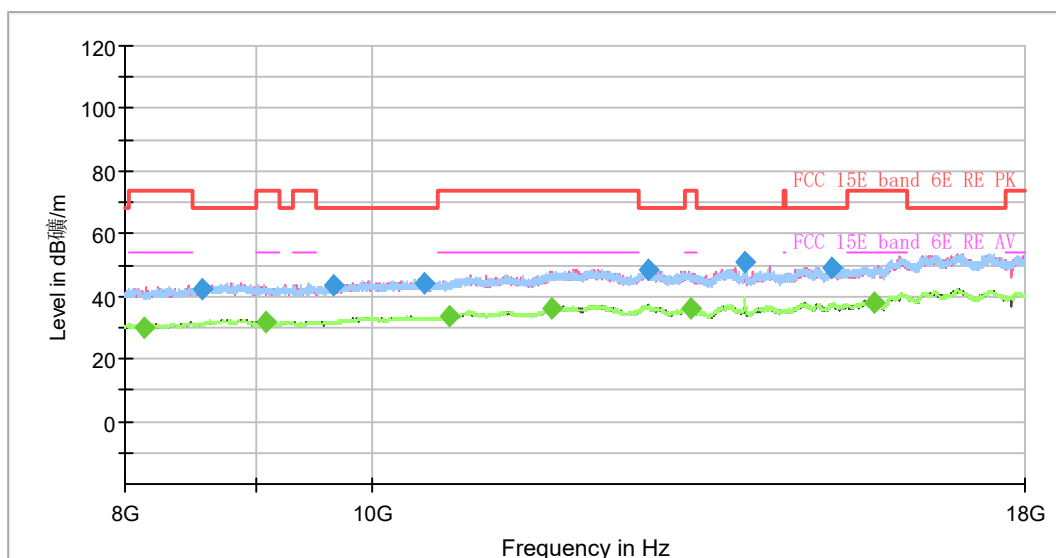
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 209



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



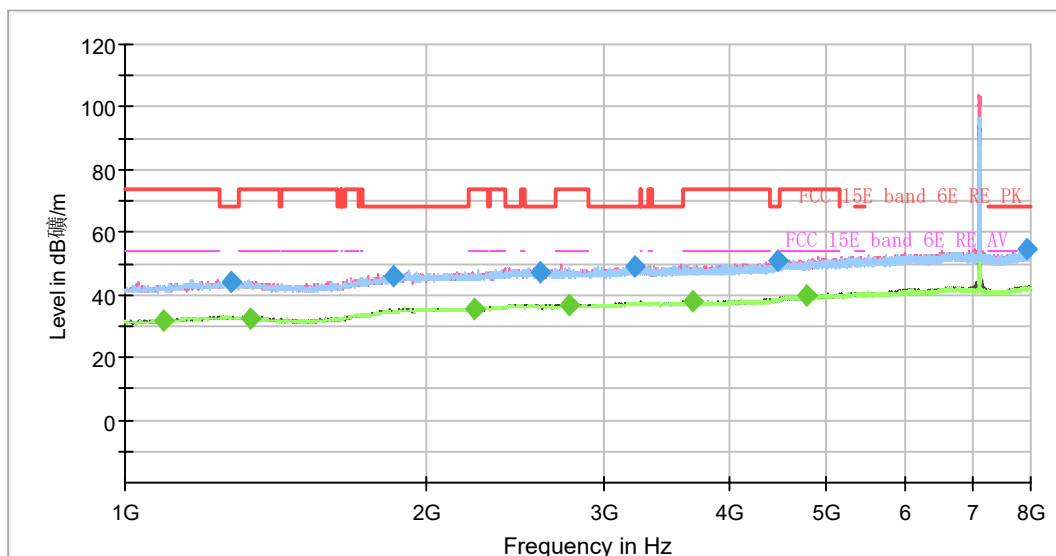
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1047.250000	---	31.97	54.00	22.03	200.0	V	92.0	-1.5
1270.375000	44.34	---	68.20	23.86	100.0	H	47.0	0.3
1538.125000	---	31.89	54.00	22.11	100.0	V	32.0	-0.1
1816.375000	46.98	---	68.20	21.22	200.0	V	347.0	3.2
2115.625000	47.19	---	68.20	21.01	200.0	H	24.0	4.3
2231.125000	---	35.87	54.00	18.13	200.0	V	230.0	4.5
2589.000000	48.68	---	68.20	19.52	200.0	H	24.0	5.7
2821.750000	---	36.46	54.00	17.54	200.0	H	103.0	6.0
3475.375000	48.79	---	68.20	19.41	100.0	H	166.0	7.4
3786.875000	---	37.44	54.00	16.56	200.0	H	103.0	7.9
4451.875000	50.14	---	68.20	18.06	100.0	V	191.0	9.7
4877.125000	---	39.78	54.00	14.22	100.0	V	171.0	10.5

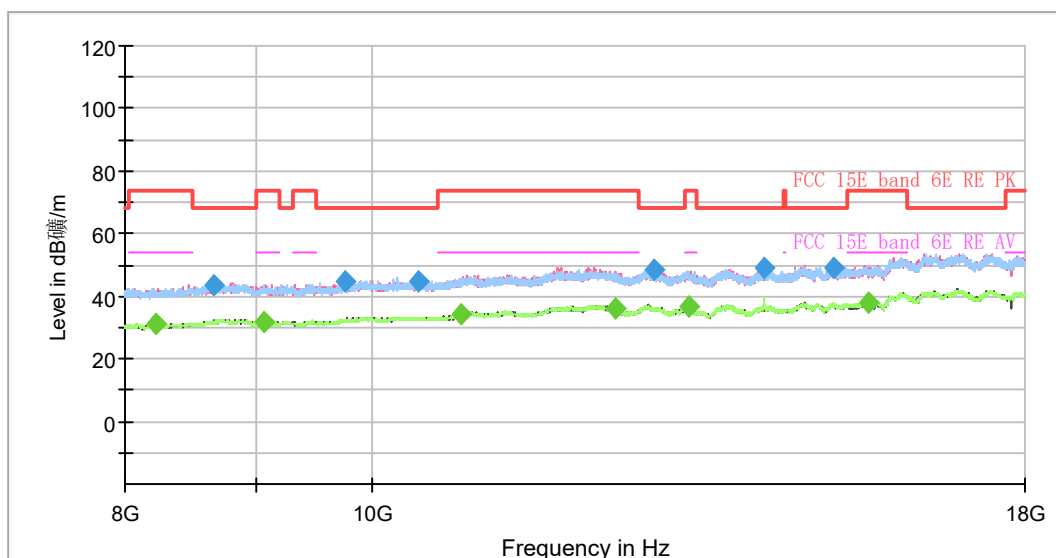
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH 233



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



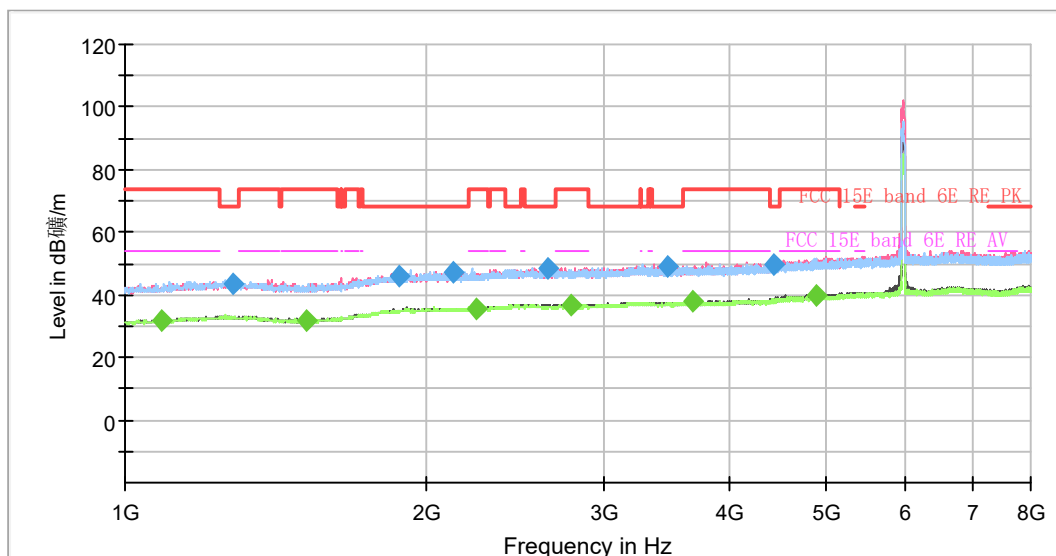
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1093.625000	---	31.82	54.00	22.18	200.0	H	210.0	-1.4
1276.500000	43.96	---	68.20	24.24	200.0	V	258.0	0.2
1334.250000	---	32.65	54.00	21.35	200.0	V	219.0	0.3
1849.625000	46.22	---	68.20	21.98	200.0	H	27.0	3.2
2232.875000	---	35.52	54.00	18.48	100.0	V	36.0	4.5
2594.250000	47.35	---	68.20	20.85	200.0	V	358.0	5.7
2774.500000	---	36.59	54.00	17.41	200.0	V	349.0	5.9
3219.875000	49.05	---	68.20	19.15	200.0	V	258.0	7.1
3681.000000	---	37.87	54.00	16.13	200.0	V	237.0	7.8
4472.875000	50.63	---	68.20	17.57	100.0	V	193.0	9.8
4789.625000	---	39.70	54.00	14.30	200.0	V	358.0	10.3
7929.125000	54.45	---	68.20	13.75	200.0	V	10.0	14.9

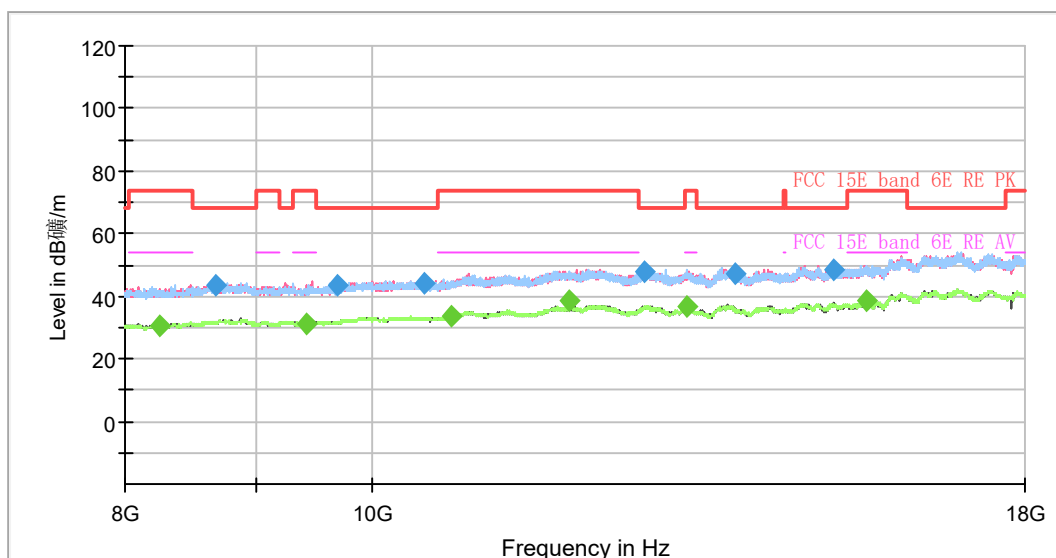
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 3



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



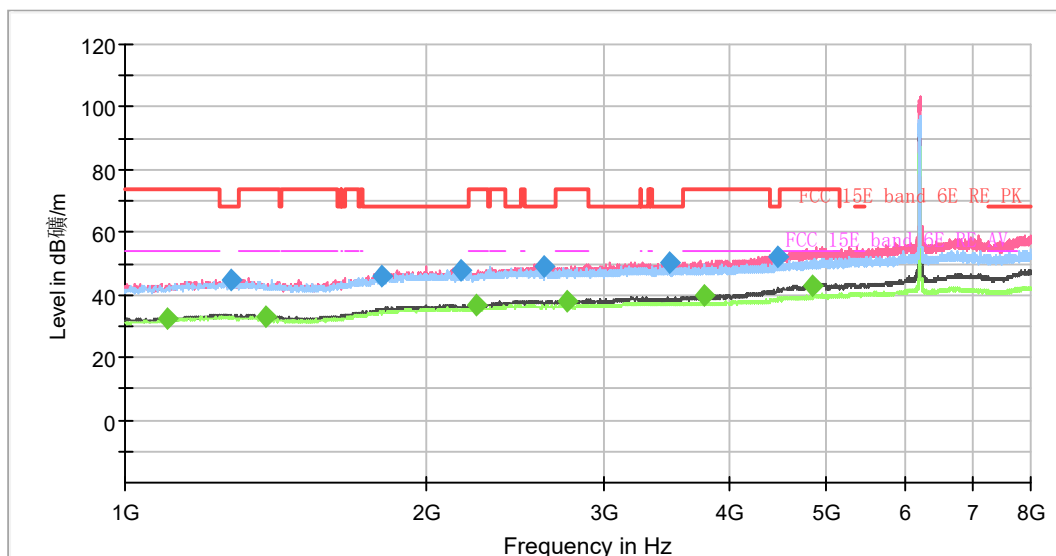
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1088.375000	---	31.78	54.00	22.22	100.0	V	353.0	-1.4
1280.875000	43.80	---	68.20	24.40	100.0	V	320.0	0.2
1516.250000	---	31.56	54.00	22.44	100.0	V	301.0	-0.1
1873.250000	45.96	---	68.20	22.24	100.0	V	301.0	3.6
2127.000000	47.04	---	68.20	21.16	200.0	H	0.0	4.3
2237.250000	---	35.60	54.00	18.40	100.0	H	53.0	4.5
2640.625000	48.20	---	68.20	20.00	200.0	H	327.0	5.8
2784.125000	---	36.59	54.00	17.41	100.0	V	0.0	5.9
3478.000000	48.92	---	68.20	19.28	100.0	H	30.0	7.4
3685.375000	---	37.84	54.00	16.16	100.0	V	143.0	7.9
4426.500000	49.82	---	68.20	18.38	100.0	V	359.0	9.5
4893.750000	---	39.93	54.00	14.07	100.0	V	183.0	10.6

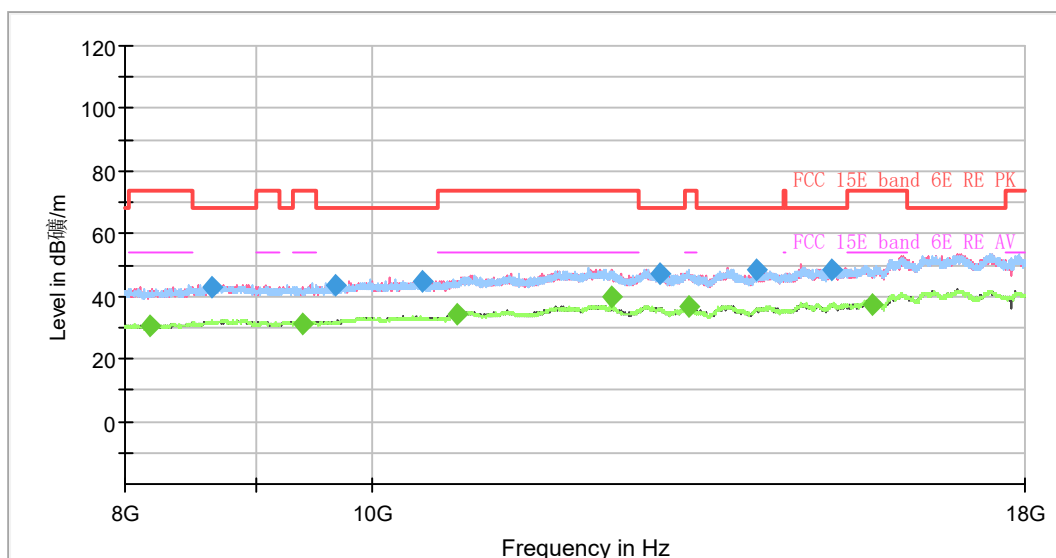
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 51



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



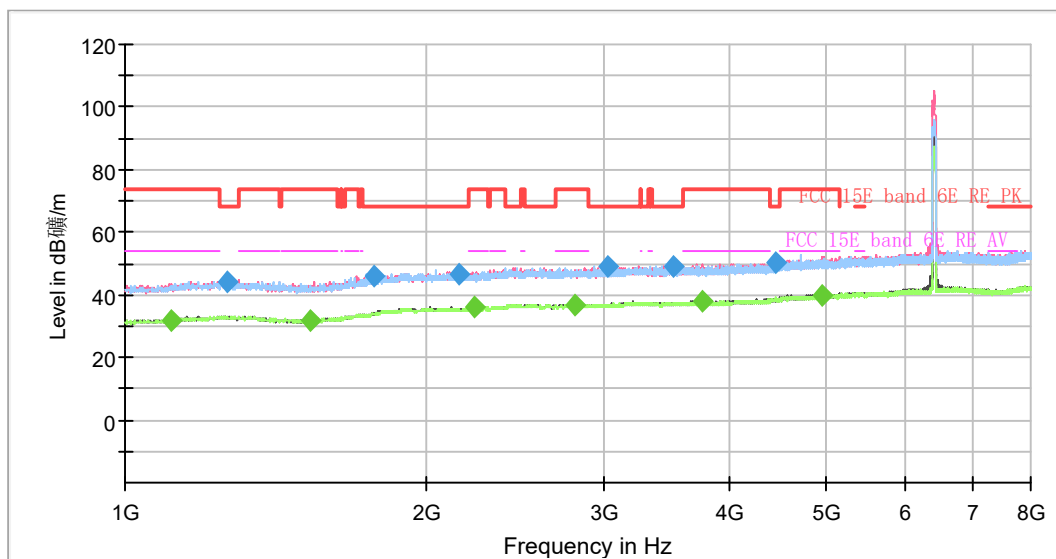
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1101.500000	---	32.53	54.00	21.47	200.0	V	0.0	-1.3
1276.500000	44.55	---	68.20	23.65	200.0	V	42.0	0.2
1382.375000	---	33.25	54.00	20.75	200.0	V	0.0	0.1
1799.750000	46.20	---	68.20	22.00	200.0	V	162.0	3.2
2160.250000	47.65	---	68.20	20.55	200.0	V	2.0	4.2
2241.625000	---	36.48	54.00	17.52	200.0	V	204.0	4.5
2622.250000	49.27	---	68.20	18.93	200.0	V	122.0	5.6
2764.875000	---	37.91	54.00	16.09	200.0	V	22.0	6.0
3488.500000	50.08	---	68.20	18.12	200.0	V	83.0	7.4
3776.375000	---	39.53	54.00	14.47	200.0	V	162.0	7.9
4471.125000	52.35	---	68.20	15.85	200.0	V	9.0	9.8
4846.500000	---	43.05	54.00	10.95	200.0	V	162.0	10.5

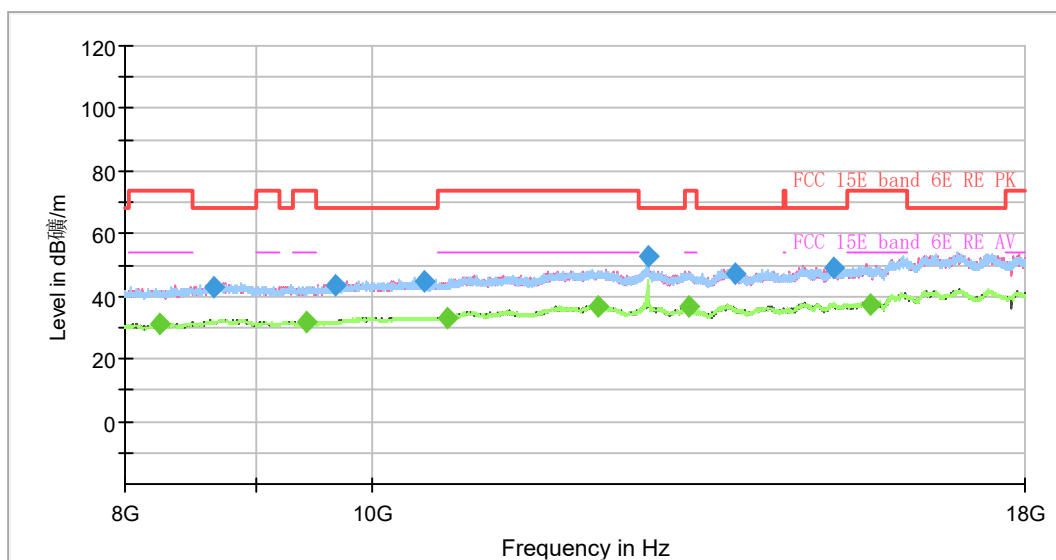
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 91



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



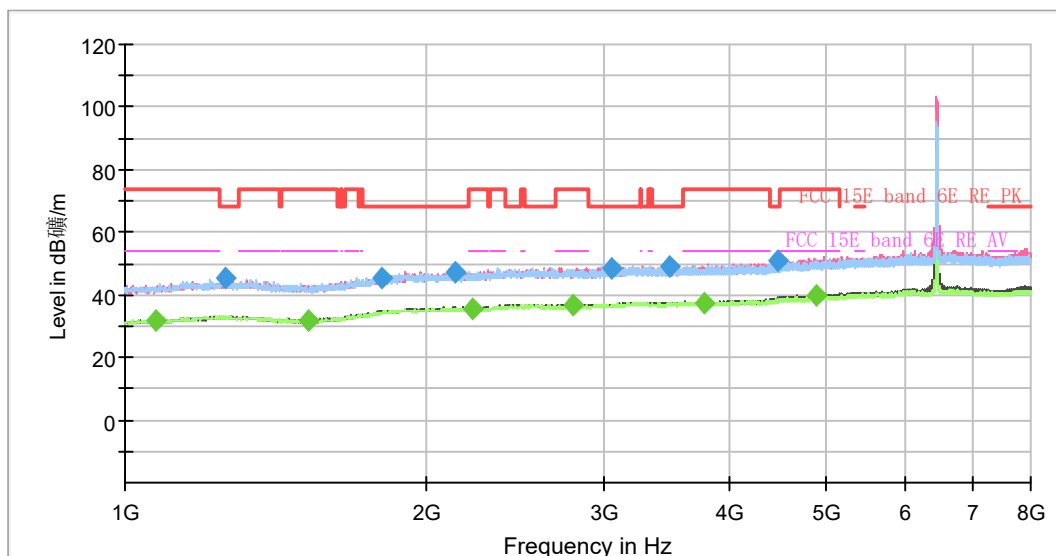
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1112.875000	---	31.98	54.00	22.02	100.0	H	118.0	-1.1
1262.500000	43.97	---	68.20	24.23	100.0	V	0.0	0.3
1532.000000	---	32.00	54.00	22.00	200.0	H	0.0	-0.1
1770.875000	46.06	---	68.20	22.14	200.0	H	7.0	2.5
2155.875000	46.76	---	68.20	21.44	100.0	V	130.0	4.2
2235.500000	---	35.83	54.00	18.17	100.0	V	110.0	4.5
2808.625000	---	36.53	54.00	17.47	100.0	V	30.0	5.9
3023.875000	49.06	---	68.20	19.14	100.0	H	214.0	6.4
3529.625000	48.77	---	68.20	19.43	200.0	H	0.0	7.5
3762.375000	---	37.74	54.00	16.26	200.0	V	331.0	7.9
4461.500000	50.17	---	68.20	18.03	100.0	V	49.0	9.7
4953.250000	---	39.90	54.00	14.10	200.0	V	271.0	10.8

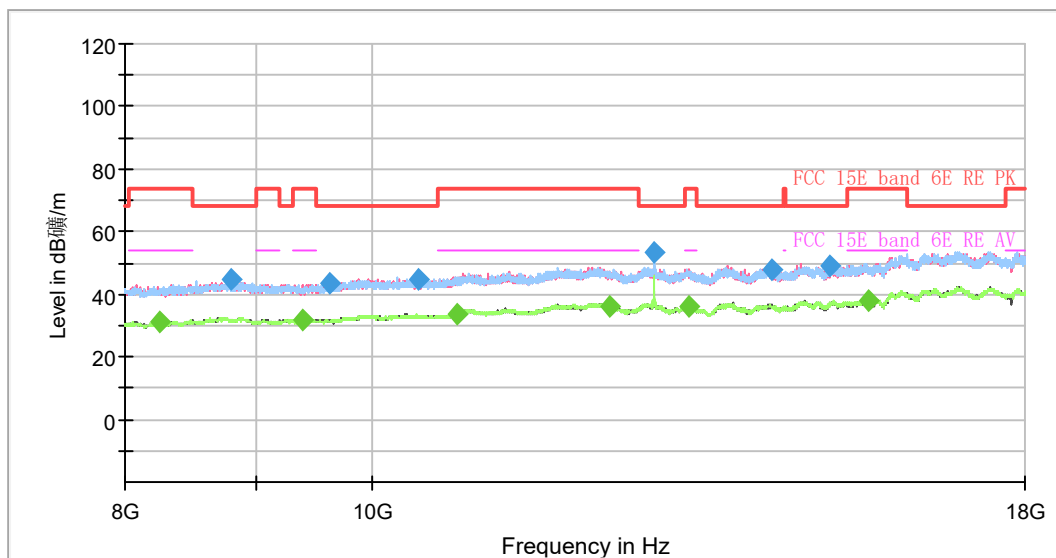
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 99



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



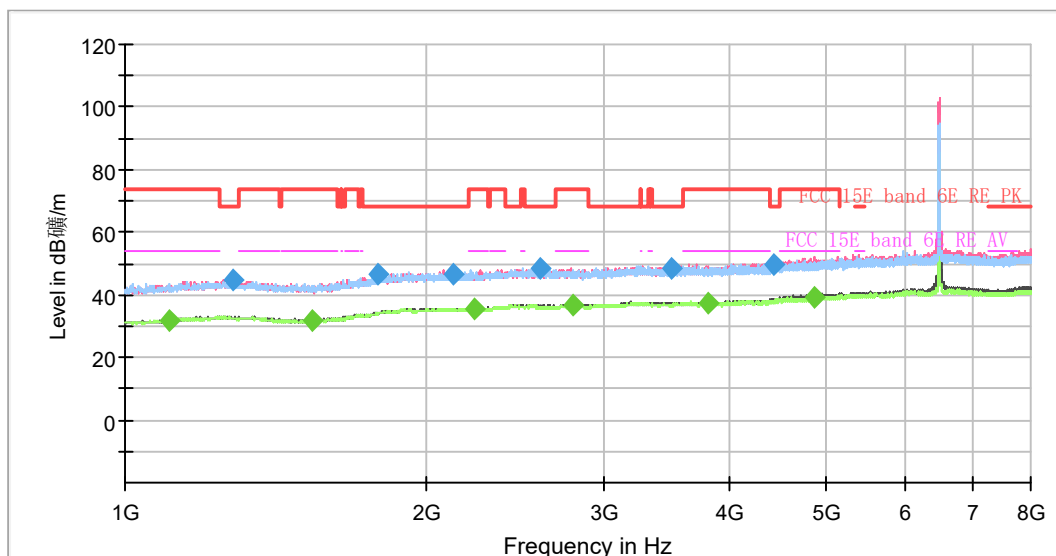
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1071.750000	---	31.65	54.00	22.35	100.0	V	108.0	-1.5
1260.750000	45.43	---	68.20	22.77	100.0	H	0.0	0.3
1522.375000	---	31.76	54.00	22.24	100.0	V	358.0	-0.1
1803.250000	45.52	---	68.20	22.68	100.0	V	128.0	3.2
2135.750000	47.00	---	68.20	21.20	200.0	V	346.0	4.2
2224.125000	---	35.57	54.00	18.43	200.0	H	0.0	4.4
2798.125000	---	36.53	54.00	17.47	200.0	V	187.0	5.9
3051.000000	48.36	---	68.20	19.84	100.0	V	13.0	6.5
3497.250000	49.31	---	68.20	18.89	100.0	V	89.0	7.4
3780.750000	---	37.66	54.00	16.34	200.0	V	291.0	7.9
4479.000000	50.70	---	68.20	17.50	200.0	V	270.0	9.8
4887.625000	---	39.70	54.00	14.30	200.0	V	250.0	10.6

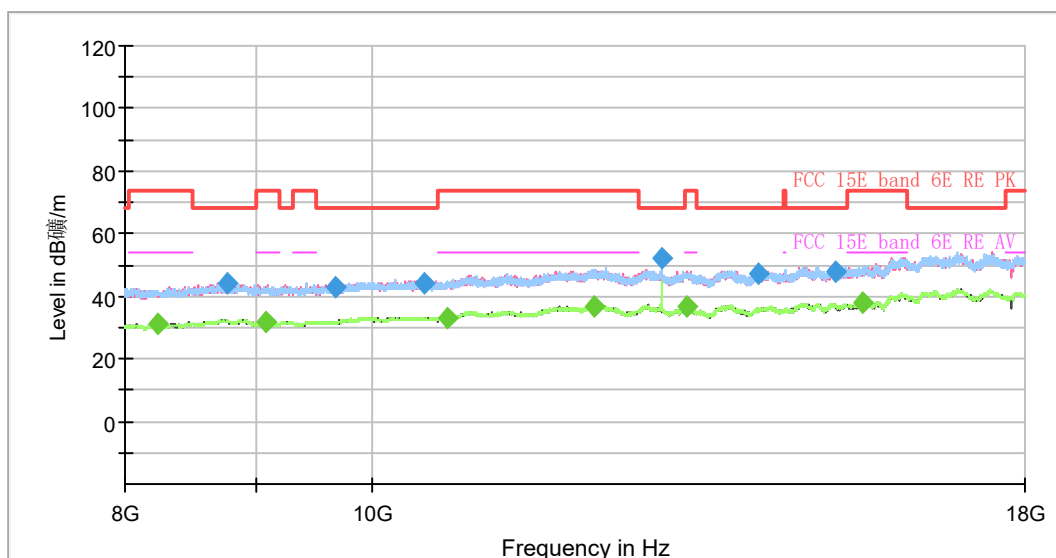
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 107



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



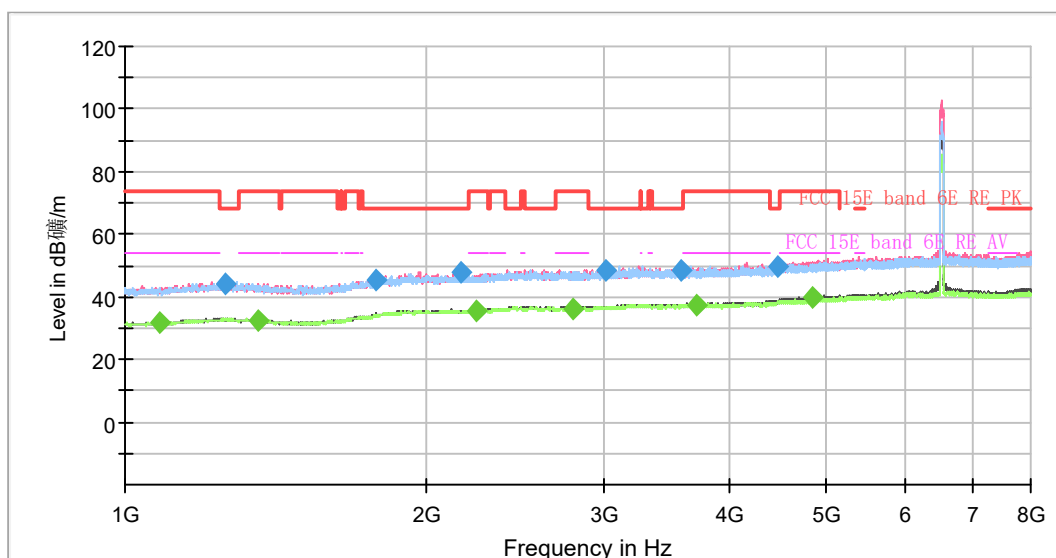
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1106.750000	---	31.82	54.00	22.18	200.0	V	290.0	-1.2
1282.625000	44.72	---	68.20	23.48	200.0	V	131.0	0.2
1536.375000	---	32.07	54.00	21.93	100.0	V	0.0	-0.1
1791.000000	46.87	---	68.20	21.33	200.0	V	251.0	2.9
2124.375000	46.84	---	68.20	21.36	200.0	V	212.0	4.3
2230.250000	---	35.58	54.00	18.42	200.0	H	107.0	4.5
2595.125000	48.18	---	68.20	20.02	200.0	H	147.0	5.7
2799.000000	---	36.52	54.00	17.48	200.0	V	0.0	5.9
3506.000000	48.51	---	68.20	19.69	200.0	V	149.0	7.4
3807.875000	---	37.66	54.00	16.34	100.0	H	298.0	8.0
4432.625000	49.99	---	68.20	18.21	200.0	V	251.0	9.5
4861.375000	---	39.37	54.00	14.63	100.0	V	0.0	10.5

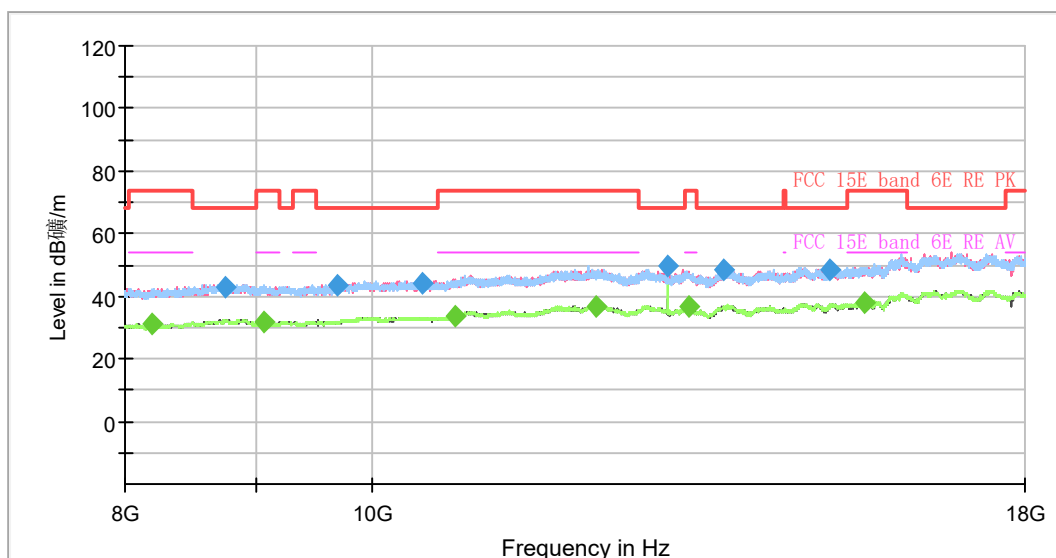
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 115



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



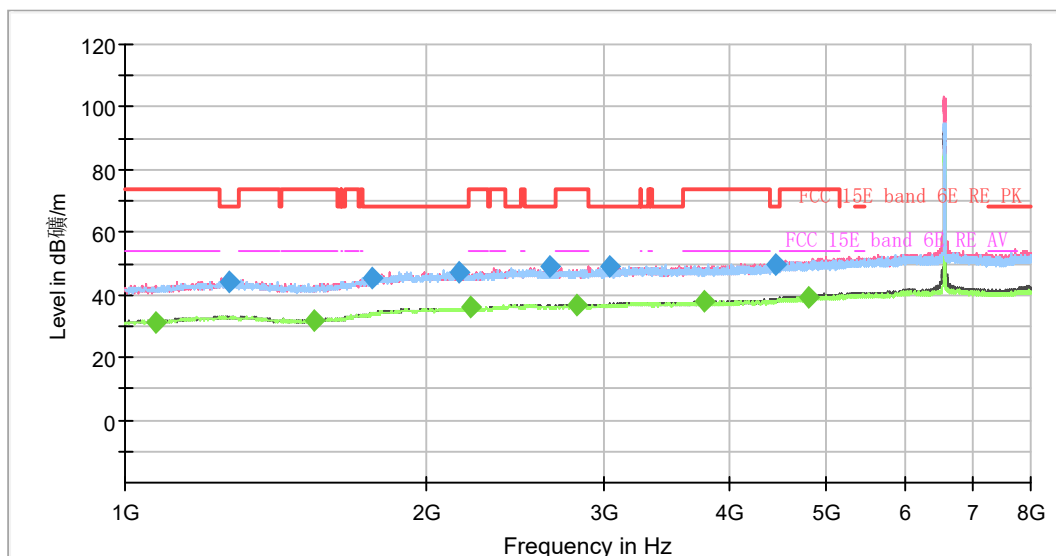
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1083.125000	---	31.64	54.00	22.36	200.0	V	247.0	-1.4
1259.875000	44.42	---	68.20	23.78	100.0	H	336.0	0.3
1358.750000	---	32.62	54.00	21.38	100.0	V	213.0	0.3
1778.750000	45.43	---	68.20	22.77	200.0	V	0.0	2.7
2158.500000	47.69	---	68.20	20.51	100.0	V	1.0	4.2
2242.500000	---	35.62	54.00	18.38	200.0	V	247.0	4.5
2799.875000	---	36.17	54.00	17.83	200.0	V	359.0	5.9
3016.875000	48.59	---	68.20	19.61	100.0	V	332.0	6.4
3586.500000	48.67	---	68.20	19.53	200.0	V	128.0	7.6
3708.125000	---	37.36	54.00	16.64	200.0	H	136.0	7.9
4479.000000	49.42	---	68.20	18.78	200.0	V	206.0	9.8
4841.250000	---	39.69	54.00	14.31	100.0	V	195.0	10.5

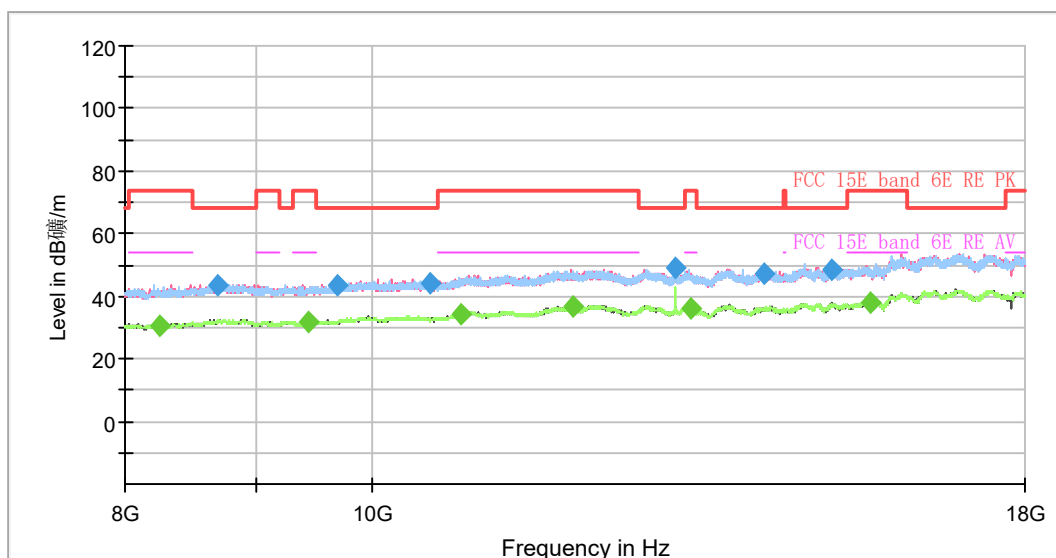
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 123



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



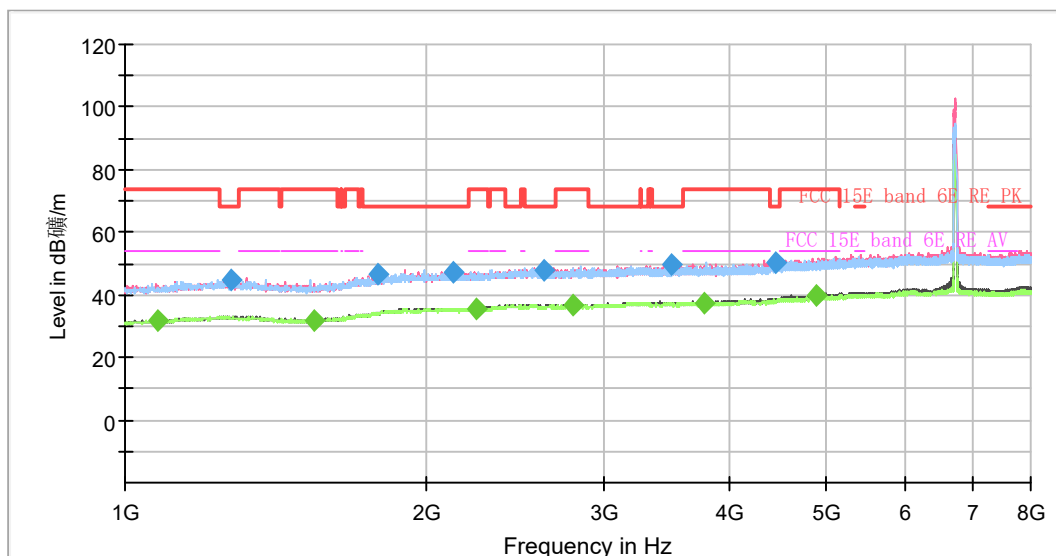
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1072.625000	---	31.41	54.00	22.59	200.0	V	337.0	-1.4
1267.750000	43.92	---	68.20	24.28	200.0	V	0.0	0.3
1544.250000	---	31.83	54.00	22.17	200.0	H	6.0	-0.1
1765.625000	45.29	---	68.20	22.91	200.0	H	36.0	2.4
2157.625000	47.06	---	68.20	21.14	100.0	V	247.0	4.2
2215.375000	---	35.95	54.00	18.05	200.0	V	132.0	4.4
2648.500000	49.38	---	68.20	18.82	100.0	V	11.0	5.8
2818.250000	---	36.57	54.00	17.43	100.0	V	0.0	6.0
3037.000000	48.95	---	68.20	19.25	100.0	V	359.0	6.5
3781.625000	---	37.71	54.00	16.29	100.0	V	247.0	7.9
4453.625000	49.79	---	68.20	18.41	200.0	V	274.0	9.7
4809.750000	---	39.37	54.00	14.63	200.0	V	174.0	10.4

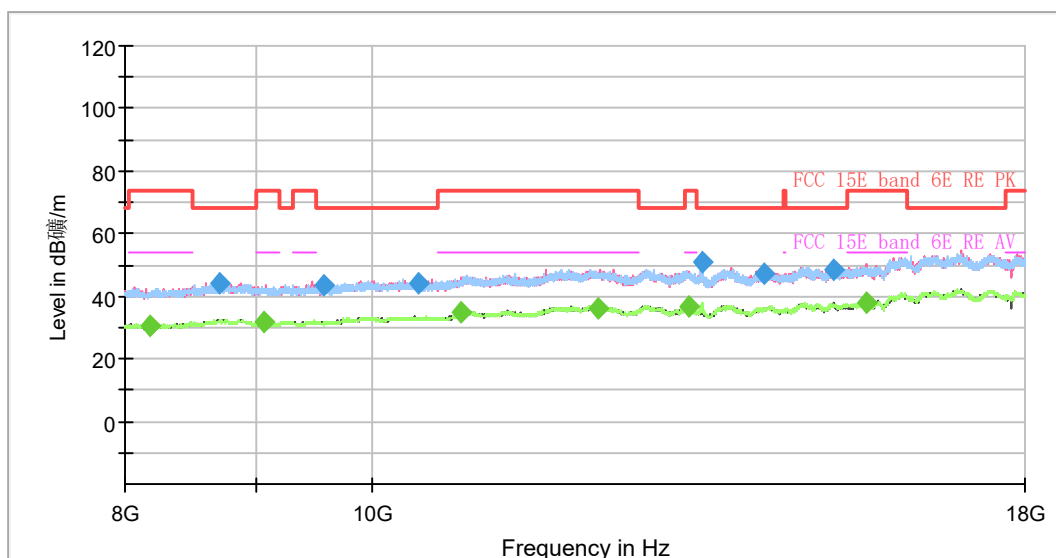
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 155



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



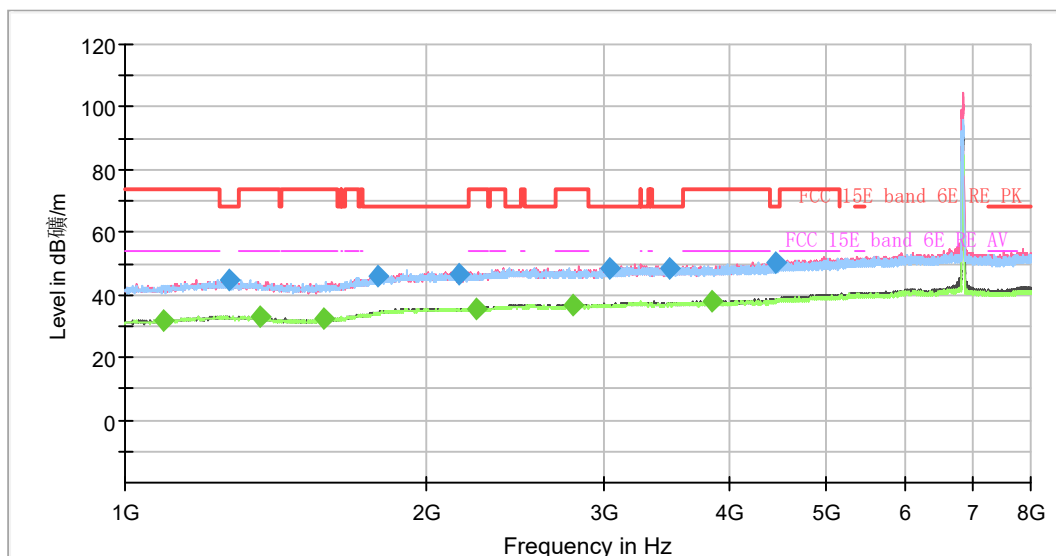
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1080.500000	---	31.60	54.00	22.40	100.0	H	331.0	-1.4
1278.250000	44.53	---	68.20	23.67	200.0	H	281.0	0.2
1543.375000	---	31.80	54.00	22.20	200.0	V	298.0	-0.1
1786.625000	46.52	---	68.20	21.68	200.0	H	220.0	2.8
2126.125000	47.41	---	68.20	20.79	100.0	V	50.0	4.3
2239.875000	---	35.57	54.00	18.43	100.0	V	71.0	4.5
2617.875000	47.89	---	68.20	20.31	100.0	V	50.0	5.6
2792.875000	---	36.58	54.00	17.42	200.0	V	0.0	5.9
3503.375000	49.79	---	68.20	18.41	100.0	H	292.0	7.4
3782.500000	---	37.32	54.00	16.68	200.0	V	0.0	7.9
4463.250000	50.46	---	68.20	17.74	200.0	V	319.0	9.7
4892.875000	---	39.65	54.00	14.35	100.0	V	150.0	10.6

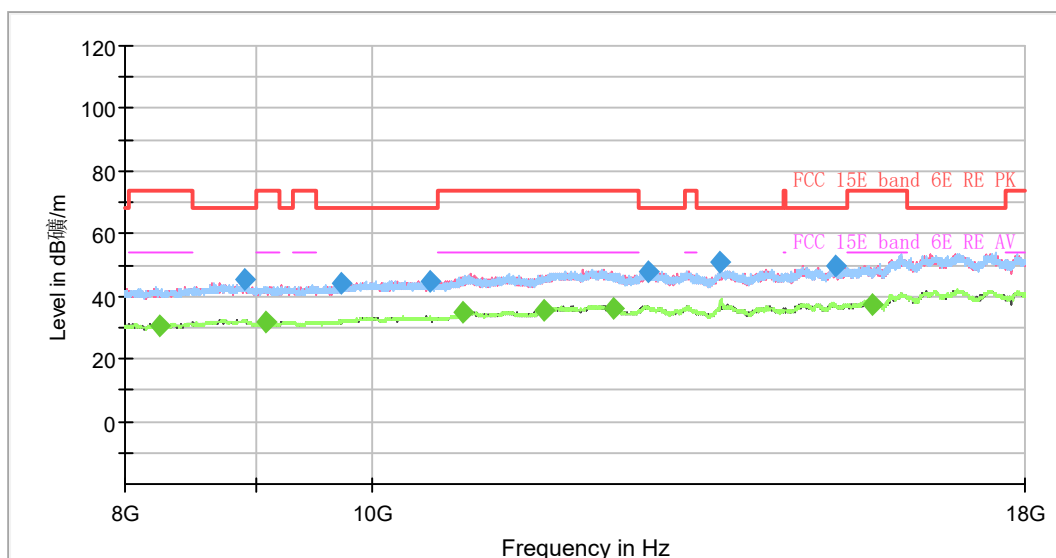
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 179



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



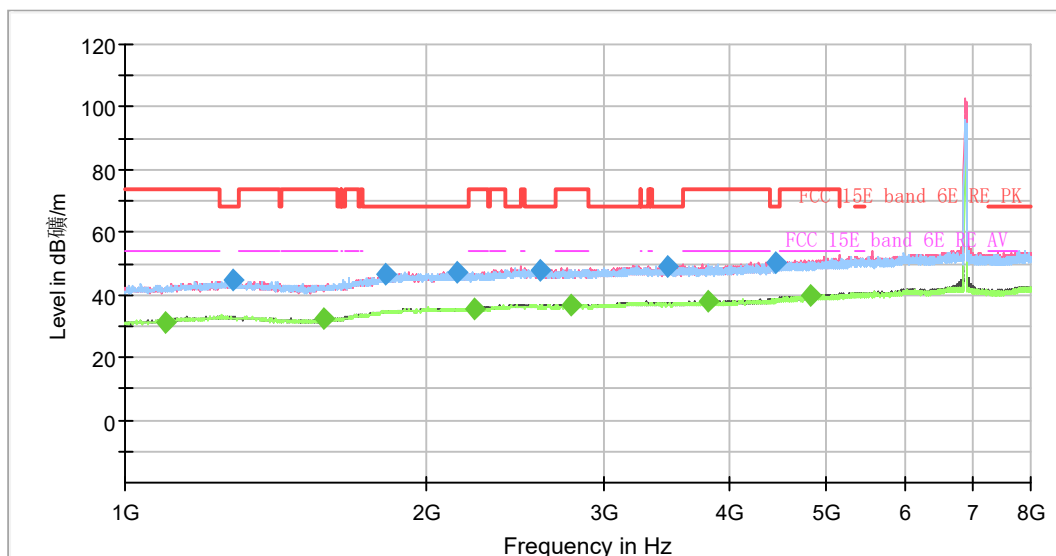
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1093.625000	---	31.67	54.00	22.33	100.0	H	291.0	-1.4
1272.125000	44.75	---	68.20	23.45	200.0	V	0.0	0.3
1362.250000	---	32.88	54.00	21.12	200.0	V	0.0	0.3
1581.000000	---	32.20	54.00	21.80	200.0	V	11.0	0.2
1786.625000	45.80	---	68.20	22.40	100.0	H	47.0	2.8
2151.500000	46.35	---	68.20	21.85	100.0	H	253.0	4.2
2240.750000	---	35.74	54.00	18.26	200.0	V	151.0	4.5
2797.250000	---	36.52	54.00	17.48	200.0	V	358.0	5.9
3044.000000	48.27	---	68.20	19.93	200.0	V	191.0	6.5
3485.875000	48.66	---	68.20	19.54	100.0	V	128.0	7.4
3848.125000	---	37.86	54.00	16.14	200.0	V	0.0	8.0
4460.625000	50.26	---	68.20	17.94	100.0	V	248.0	9.7

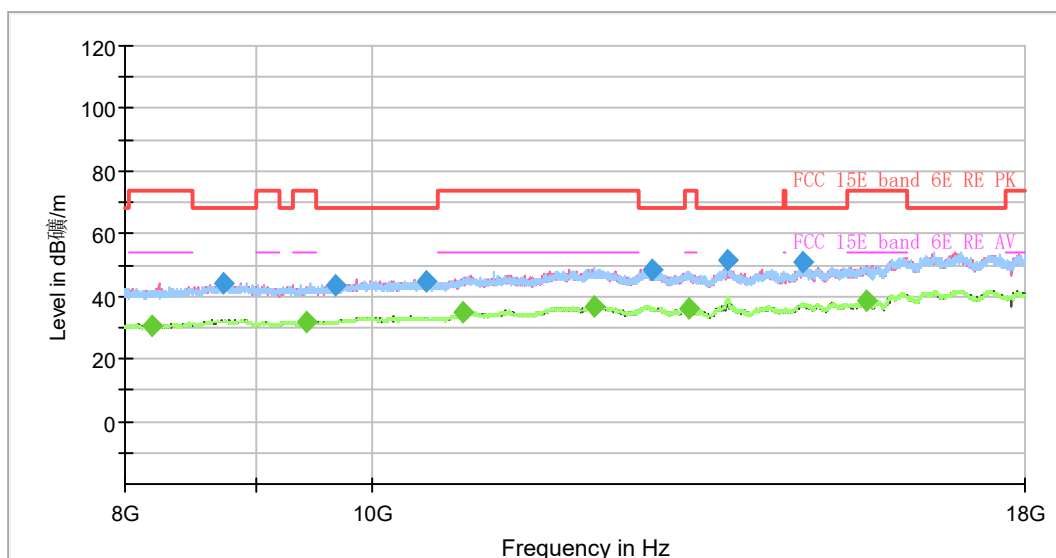
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 187



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



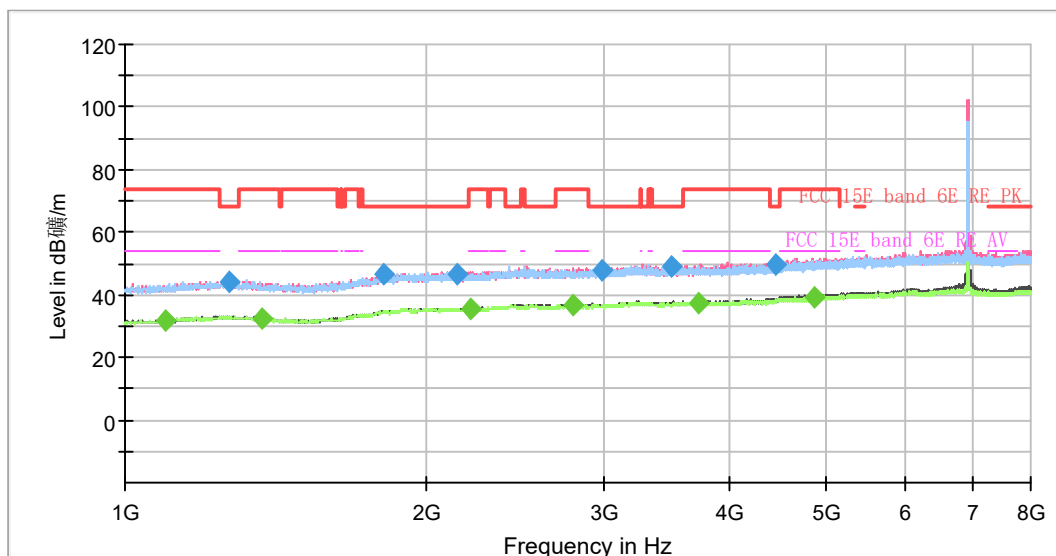
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1095.375000	---	31.36	54.00	22.64	100.0	V	279.0	-1.4
1280.875000	44.58	---	68.20	23.62	100.0	V	109.0	0.2
1577.500000	---	32.14	54.00	21.86	100.0	V	352.0	0.2
1818.125000	46.59	---	68.20	21.61	100.0	H	211.0	3.2
2147.125000	46.94	---	68.20	21.26	200.0	V	7.0	4.2
2226.750000	---	35.68	54.00	18.32	200.0	V	166.0	4.5
2596.875000	47.89	---	68.20	20.31	200.0	H	310.0	5.7
2790.250000	---	36.56	54.00	17.44	100.0	V	0.0	5.9
3473.625000	49.19	---	68.20	19.01	200.0	V	18.0	7.4
3820.125000	---	37.67	54.00	16.33	200.0	V	188.0	8.0
4449.250000	50.16	---	68.20	18.04	100.0	H	0.0	9.6
4831.625000	---	39.72	54.00	14.28	100.0	V	217.0	10.5

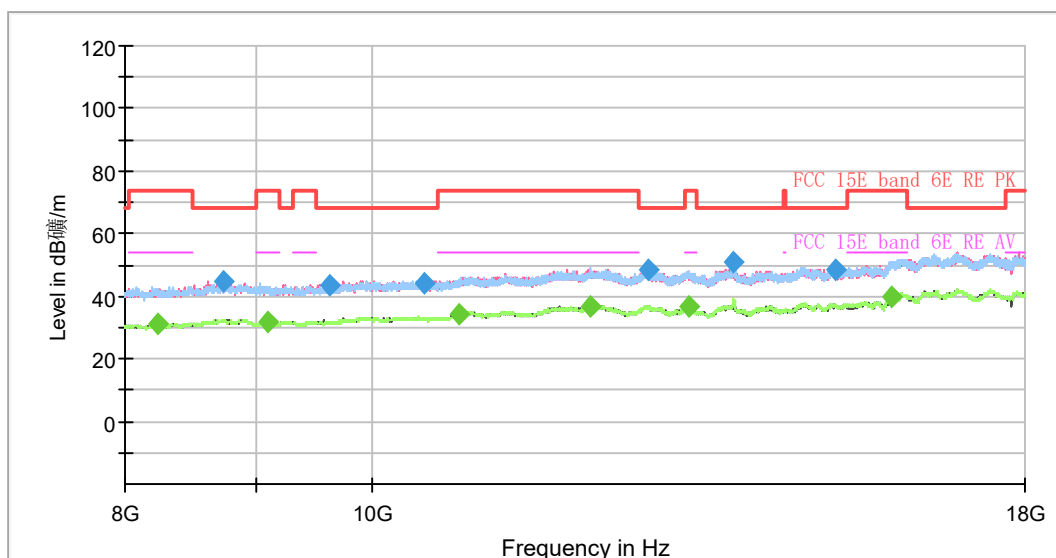
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 195



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



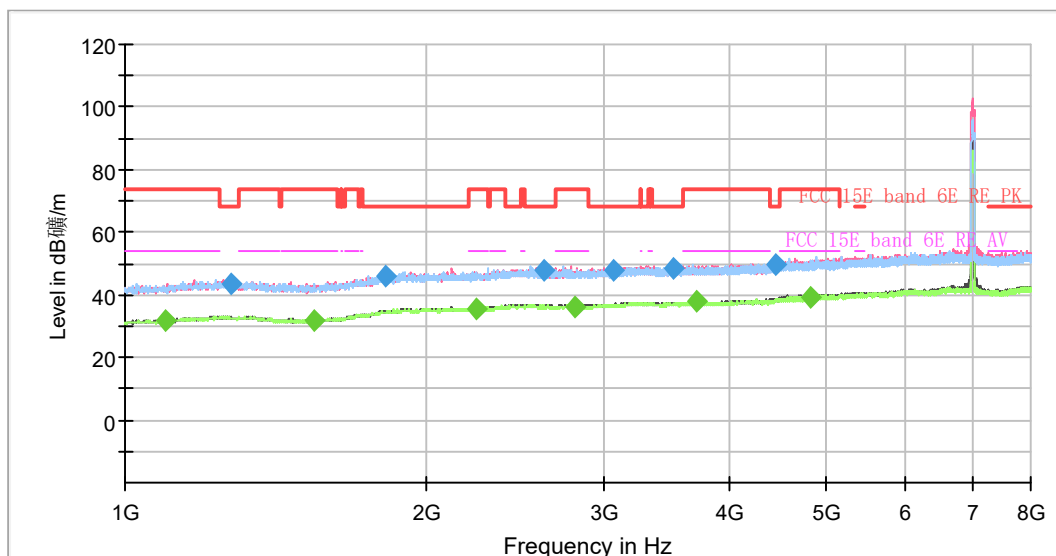
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1096.250000	---	31.62	54.00	22.38	200.0	V	3.0	-1.4
1271.250000	43.97	---	68.20	24.23	200.0	V	69.0	0.3
1370.125000	---	32.43	54.00	21.57	100.0	H	172.0	0.2
1812.875000	46.84	---	68.20	21.36	200.0	H	132.0	3.2
2143.625000	46.83	---	68.20	21.37	100.0	V	324.0	4.2
2211.000000	---	35.43	54.00	18.57	200.0	V	0.0	4.4
2796.375000	---	36.45	54.00	17.55	200.0	V	108.0	5.9
2987.125000	47.99	---	68.20	20.21	100.0	H	94.0	6.3
3502.500000	48.93	---	68.20	19.27	200.0	V	48.0	7.4
3731.750000	---	37.41	54.00	16.59	200.0	V	331.0	7.8
4451.000000	49.59	---	68.20	18.61	100.0	V	110.0	9.6
4870.125000	---	39.39	54.00	14.61	200.0	V	12.0	10.5

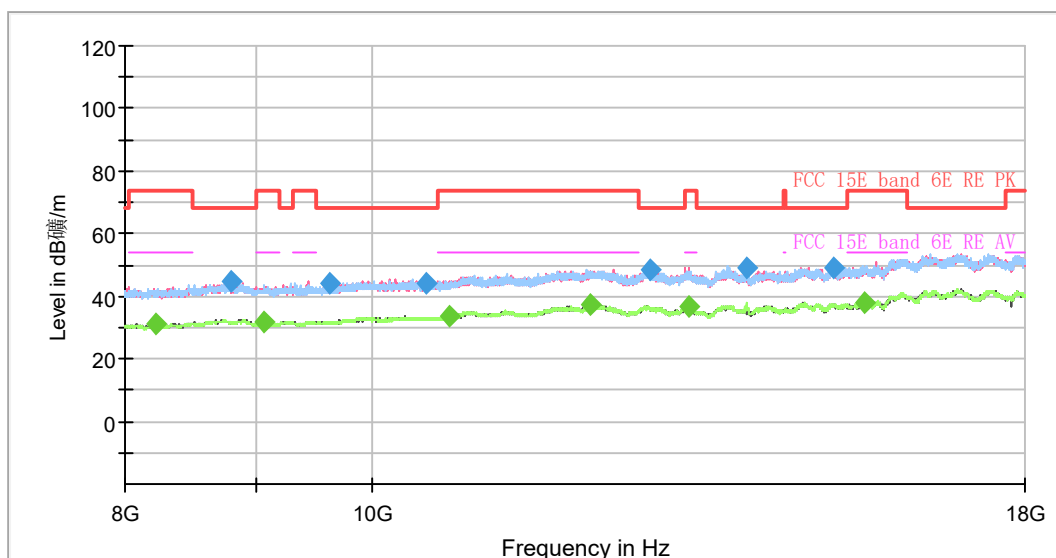
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 211



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



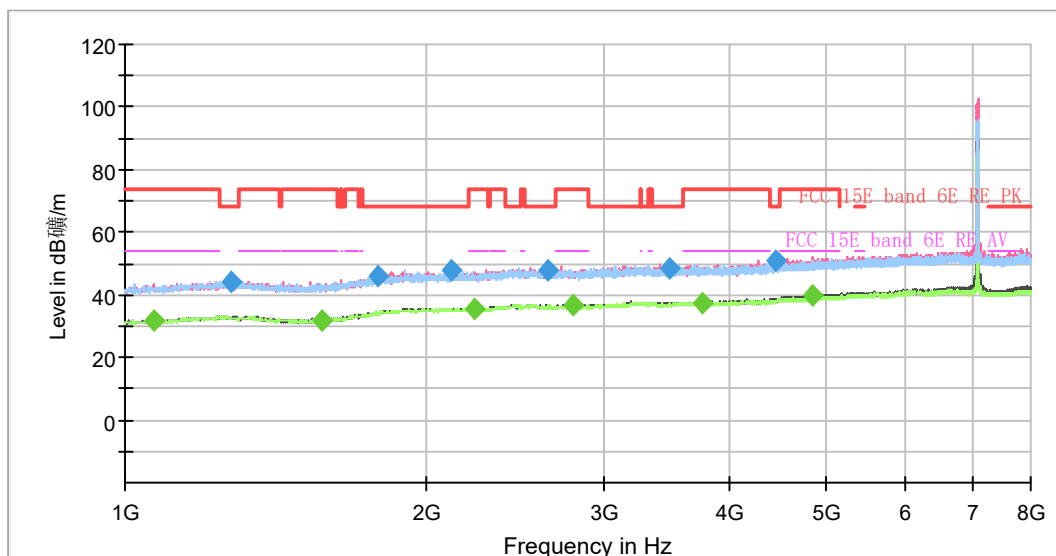
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1097.125000	---	31.85	54.00	22.15	200.0	H	0.0	-1.4
1275.625000	43.66	---	68.20	24.54	100.0	H	44.0	0.3
1545.125000	---	31.56	54.00	22.44	100.0	V	271.0	-0.1
1816.375000	45.92	---	68.20	22.28	100.0	V	0.0	3.2
2238.125000	---	35.78	54.00	18.22	100.0	H	150.0	4.5
2612.625000	47.58	---	68.20	20.62	200.0	V	1.0	5.6
2809.500000	---	36.19	54.00	17.81	100.0	V	232.0	5.9
3068.500000	48.09	---	68.20	20.11	200.0	V	39.0	6.6
3524.375000	48.63	---	68.20	19.57	200.0	V	39.0	7.5
3719.500000	---	37.67	54.00	16.33	100.0	V	333.0	7.8
4447.500000	49.84	---	68.20	18.36	100.0	V	271.0	9.6
4821.125000	---	39.40	54.00	14.60	100.0	V	311.0	10.4

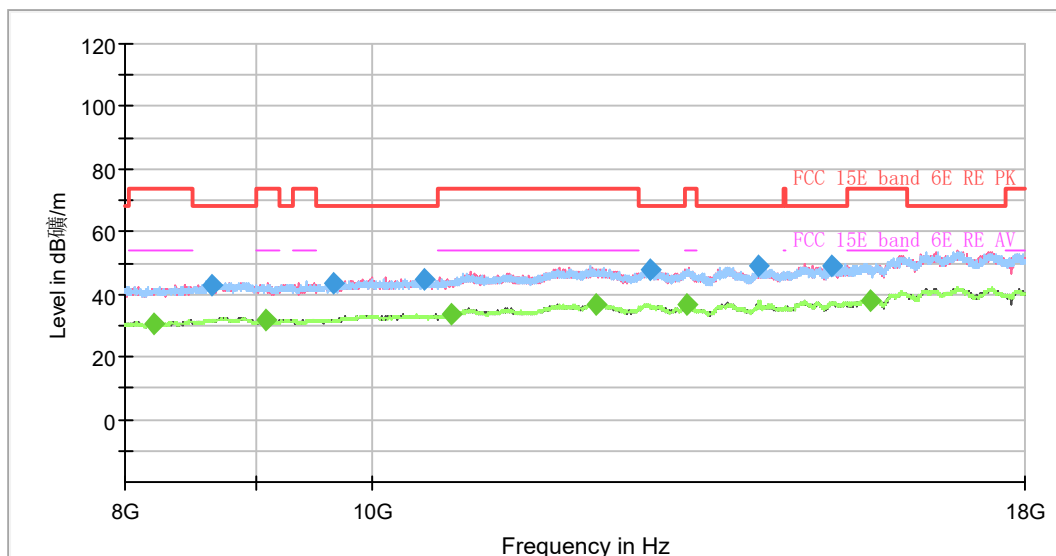
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH 227



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



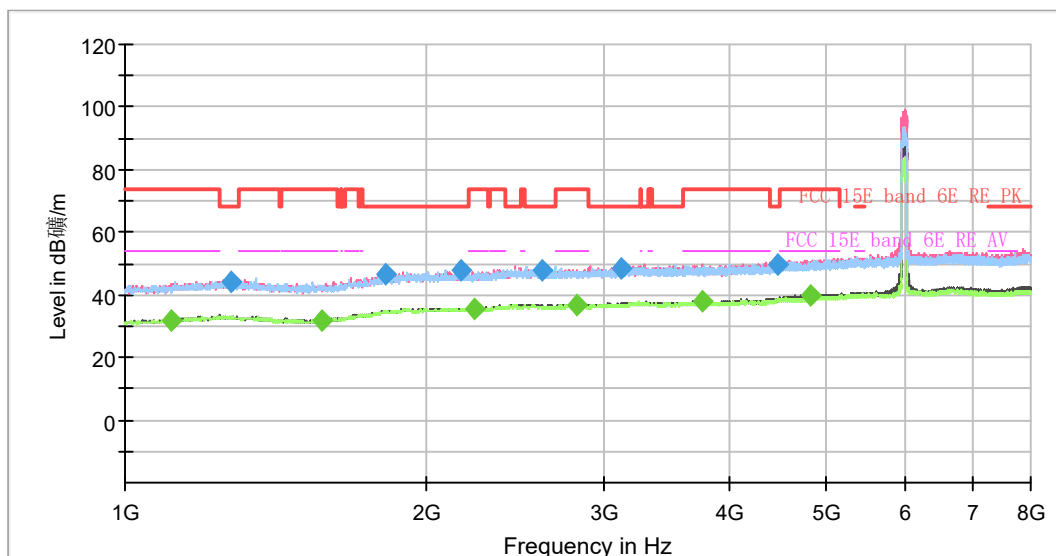
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1068.250000	---	31.56	54.00	22.44	100.0	V	0.0	-1.5
1275.625000	44.00	---	68.20	24.20	200.0	V	22.0	0.3
1569.625000	---	31.97	54.00	22.03	100.0	V	145.0	0.1
1784.875000	45.91	---	68.20	22.29	200.0	V	82.0	2.8
2113.875000	47.80	---	68.20	20.40	200.0	V	63.0	4.3
2230.250000	---	35.57	54.00	18.43	200.0	V	102.0	4.5
2644.125000	47.63	---	68.20	20.57	100.0	H	0.0	5.8
2795.500000	---	36.79	54.00	17.21	100.0	V	244.0	5.9
3492.000000	48.27	---	68.20	19.93	100.0	V	303.0	7.4
3772.875000	---	37.36	54.00	16.64	200.0	H	12.0	7.9
4455.375000	50.77	---	68.20	17.43	100.0	V	282.0	9.7
4844.750000	---	39.71	54.00	14.29	200.0	V	22.0	10.5

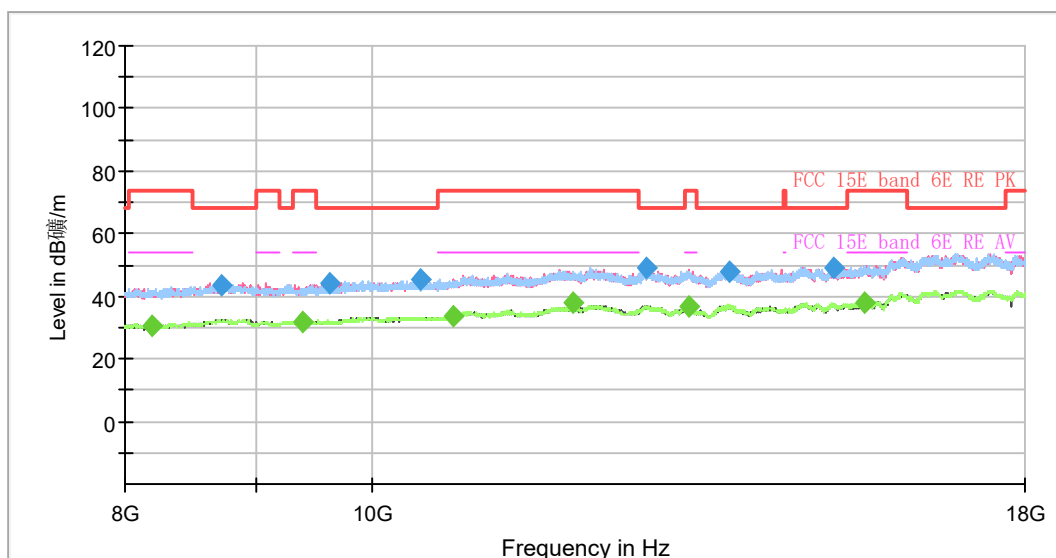
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 7



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



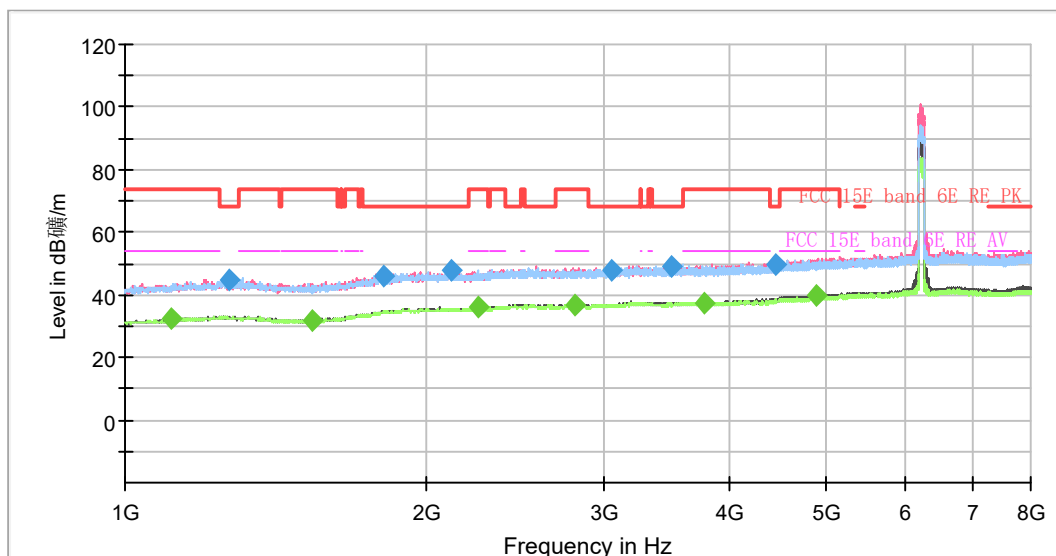
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1113.750000	---	31.94	54.00	22.07	100.0	V	171.0	-1.1
1278.250000	44.05	---	68.20	24.15	200.0	V	318.0	0.2
1572.250000	---	31.90	54.00	22.10	100.0	V	71.0	0.1
1819.000000	46.74	---	68.20	21.46	200.0	H	0.0	3.2
2162.000000	47.93	---	68.20	20.27	100.0	V	52.0	4.2
2235.500000	---	35.61	54.00	18.39	100.0	H	344.0	4.5
2608.250000	48.00	---	68.20	20.20	200.0	V	338.0	5.6
2816.500000	---	36.45	54.00	17.55	200.0	V	351.0	5.9
3125.375000	48.27	---	68.20	19.93	200.0	V	128.0	6.8
3762.375000	---	37.79	54.00	16.21	200.0	V	0.0	7.9
4468.500000	49.75	---	68.20	18.45	100.0	V	71.0	9.7
4829.000000	---	39.74	54.00	14.26	200.0	V	92.0	10.5

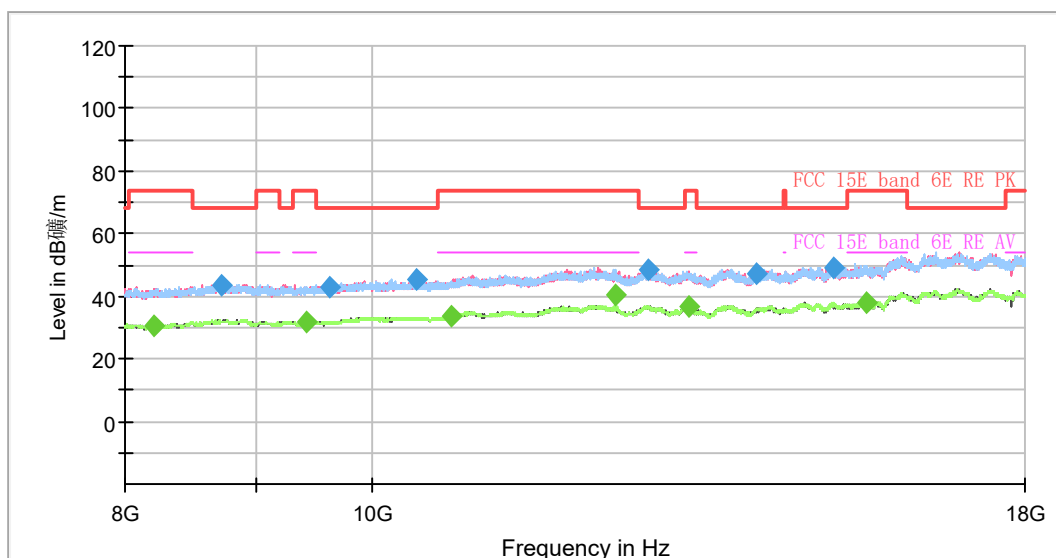
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 55



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



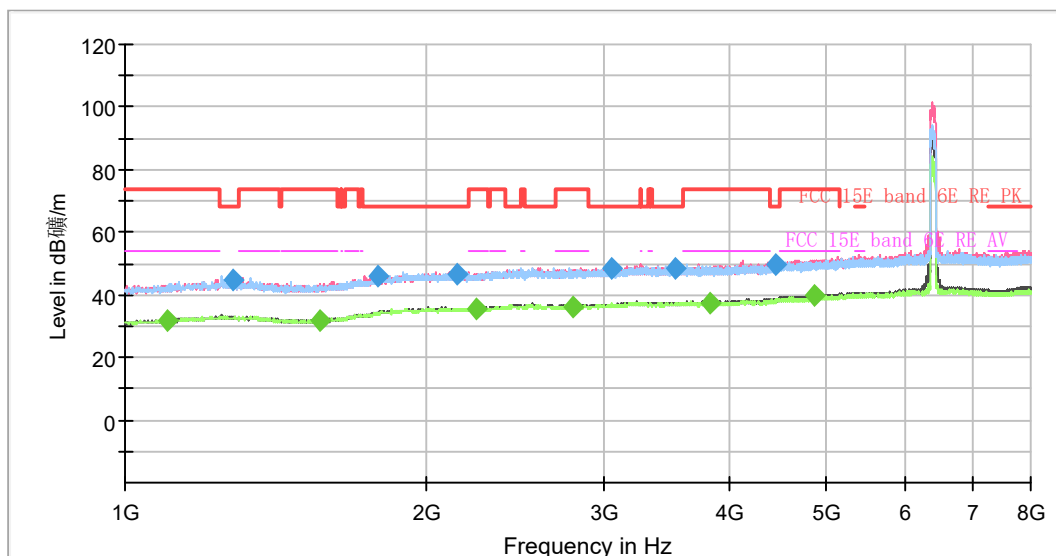
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1112.875000	---	32.12	54.00	21.88	200.0	V	349.0	-1.1
1271.250000	44.69	---	68.20	23.51	200.0	V	313.0	0.3
1538.125000	---	31.76	54.00	22.24	200.0	V	168.0	-0.1
1809.375000	45.86	---	68.20	22.34	100.0	V	64.0	3.2
2113.000000	48.02	---	68.20	20.18	100.0	V	0.0	4.3
2249.500000	---	35.91	54.00	18.09	200.0	V	349.0	4.6
2813.000000	---	36.86	54.00	17.14	100.0	V	309.0	5.9
3054.500000	48.08	---	68.20	20.12	100.0	V	64.0	6.6
3513.000000	48.87	---	68.20	19.33	100.0	H	0.0	7.5
3781.625000	---	37.60	54.00	16.40	100.0	V	10.0	7.9
4455.375000	49.78	---	68.20	18.42	200.0	V	275.0	9.7
4895.500000	---	39.82	54.00	14.18	100.0	V	0.0	10.6

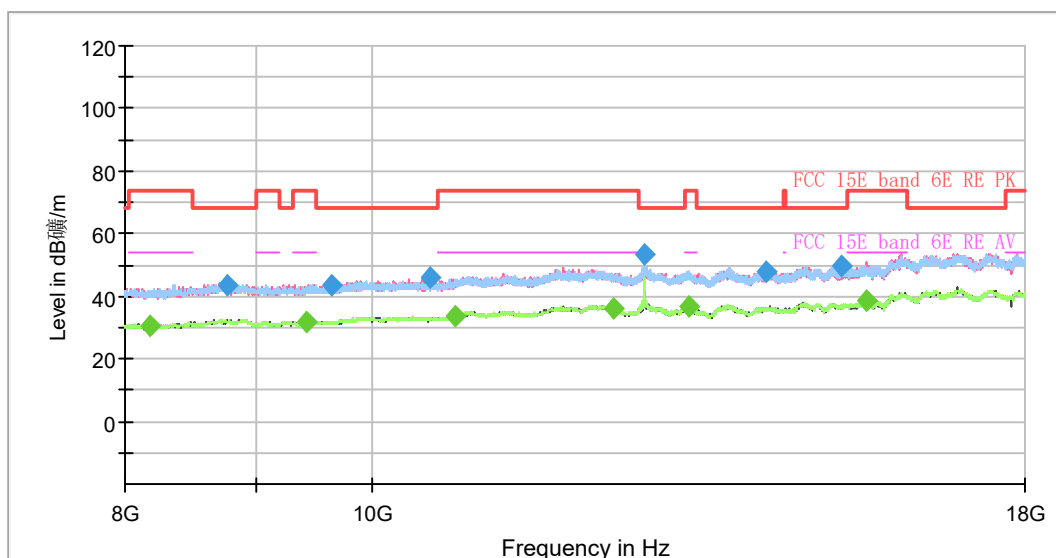
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 87



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



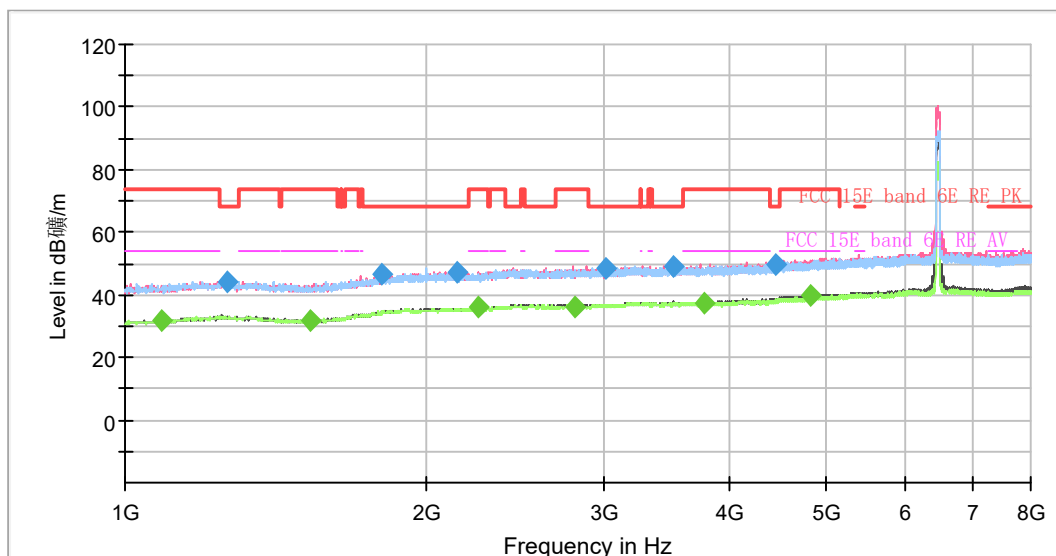
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1103.250000	---	31.95	54.00	22.05	100.0	V	0.0	-1.3
1279.125000	44.88	---	68.20	23.32	100.0	H	265.0	0.2
1567.875000	---	31.97	54.00	22.03	100.0	V	150.0	0.1
1790.125000	45.88	---	68.20	22.32	200.0	H	4.0	2.9
2142.750000	46.45	---	68.20	21.75	200.0	V	217.0	4.2
2239.000000	---	35.63	54.00	18.37	100.0	V	150.0	4.5
2801.625000	---	36.43	54.00	17.57	200.0	V	318.0	5.9
3059.750000	48.67	---	68.20	19.53	100.0	H	204.0	6.6
3536.625000	48.48	---	68.20	19.72	100.0	V	4.0	7.5
3839.375000	---	37.54	54.00	16.46	100.0	V	248.0	8.0
4462.375000	49.98	---	68.20	18.22	100.0	V	0.0	9.7
4862.250000	---	39.62	54.00	14.38	200.0	V	337.0	10.5

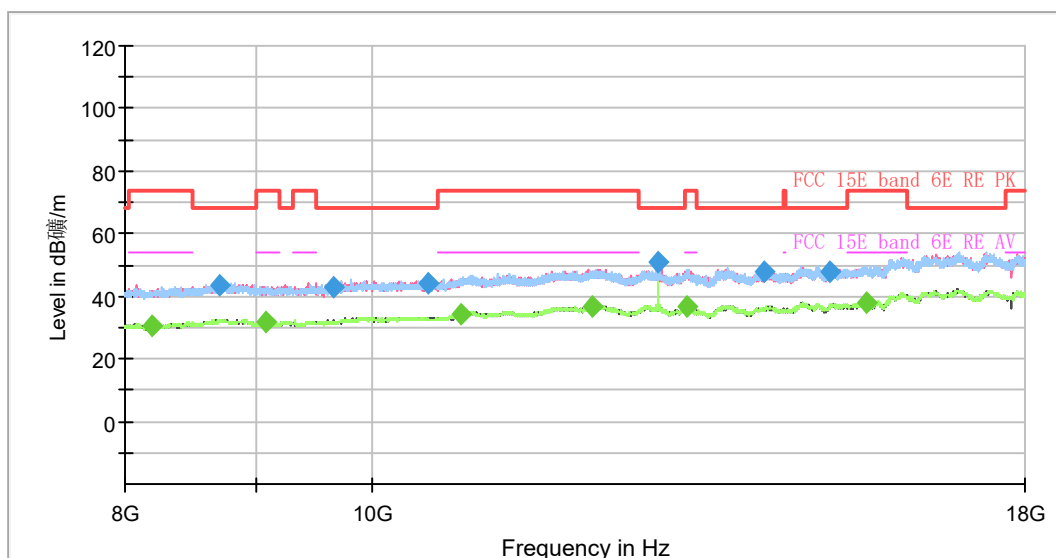
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 103



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



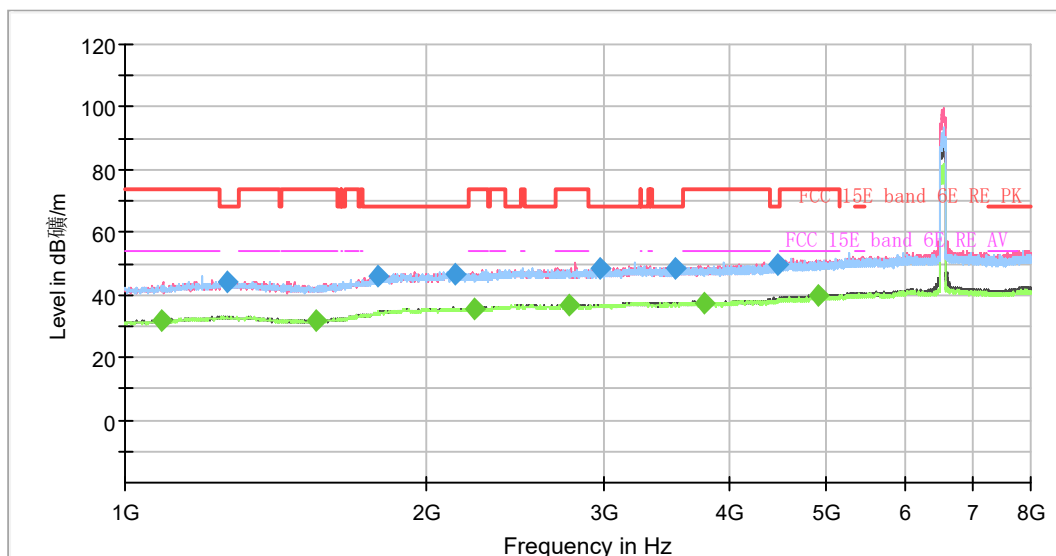
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1090.125000	---	31.60	54.00	22.40	100.0	V	165.0	-1.4
1265.125000	44.41	---	68.20	23.79	100.0	V	21.0	0.3
1533.750000	---	32.08	54.00	21.92	100.0	V	227.0	-0.1
1805.875000	46.60	---	68.20	21.60	100.0	H	0.0	3.2
2141.875000	47.13	---	68.20	21.07	100.0	V	1.0	4.2
2246.875000	---	35.89	54.00	18.11	100.0	V	79.0	4.6
2804.250000	---	36.32	54.00	17.68	200.0	V	0.0	5.9
3011.625000	48.39	---	68.20	19.81	200.0	V	229.0	6.4
3528.750000	49.05	---	68.20	19.15	200.0	V	328.0	7.5
3782.500000	---	37.37	54.00	16.63	200.0	V	350.0	7.9
4448.375000	49.93	---	68.20	18.27	100.0	H	345.0	9.6
4833.375000	---	39.87	54.00	14.13	100.0	V	227.0	10.5

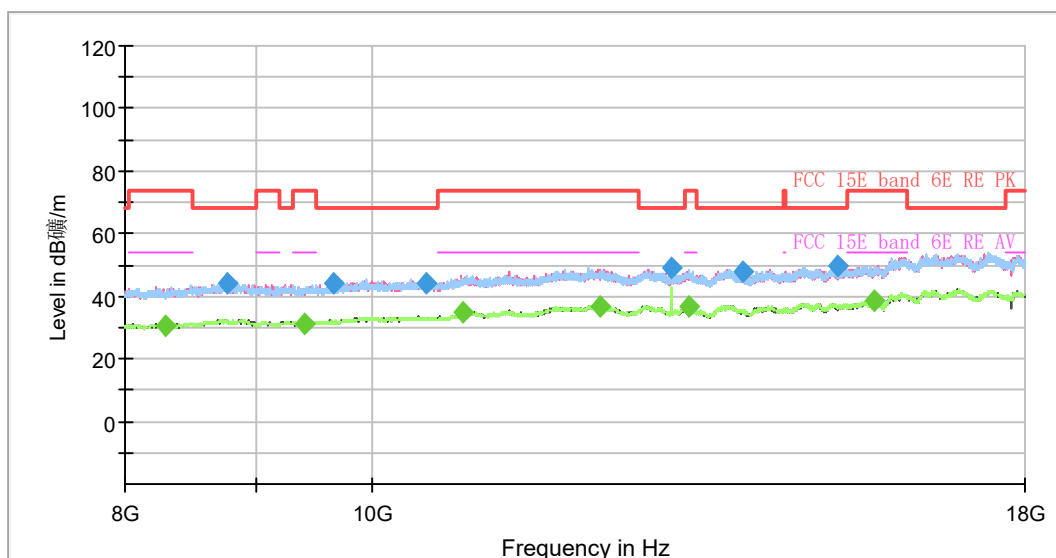
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 119



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



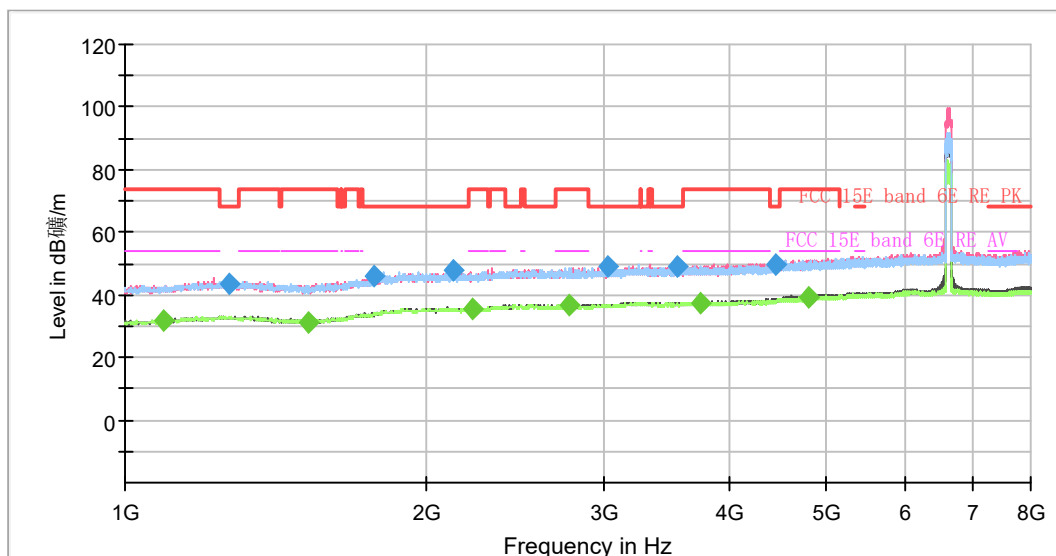
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1090.125000	---	31.54	54.00	22.46	200.0	V	348.0	-1.4
1263.375000	44.21	---	68.20	23.99	100.0	V	5.0	0.3
1549.500000	---	31.92	54.00	22.08	100.0	H	165.0	-0.1
1790.125000	45.98	---	68.20	22.22	200.0	V	30.0	2.9
2132.250000	46.63	---	68.20	21.57	200.0	H	250.0	4.2
2227.625000	---	35.56	54.00	18.44	100.0	H	0.0	4.5
2774.500000	---	36.64	54.00	17.36	200.0	V	331.0	5.9
2974.000000	48.39	---	68.20	19.81	200.0	H	0.0	6.3
3538.375000	48.37	---	68.20	19.83	100.0	V	35.0	7.5
3787.750000	---	37.49	54.00	16.51	100.0	V	152.0	7.9
4474.625000	49.67	---	68.20	18.53	200.0	V	0.0	9.8
4915.625000	---	39.90	54.00	14.10	200.0	V	309.0	10.6

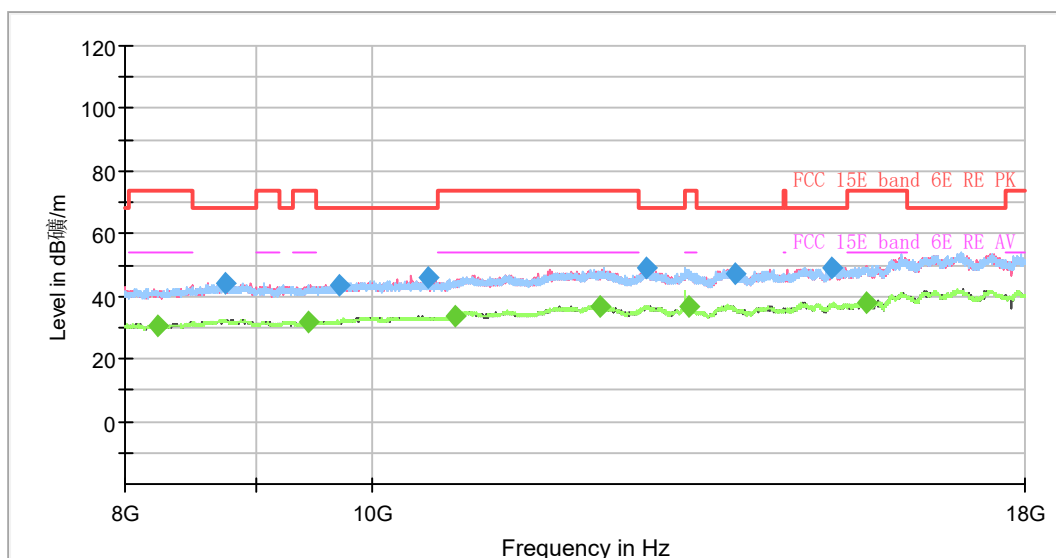
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 135



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



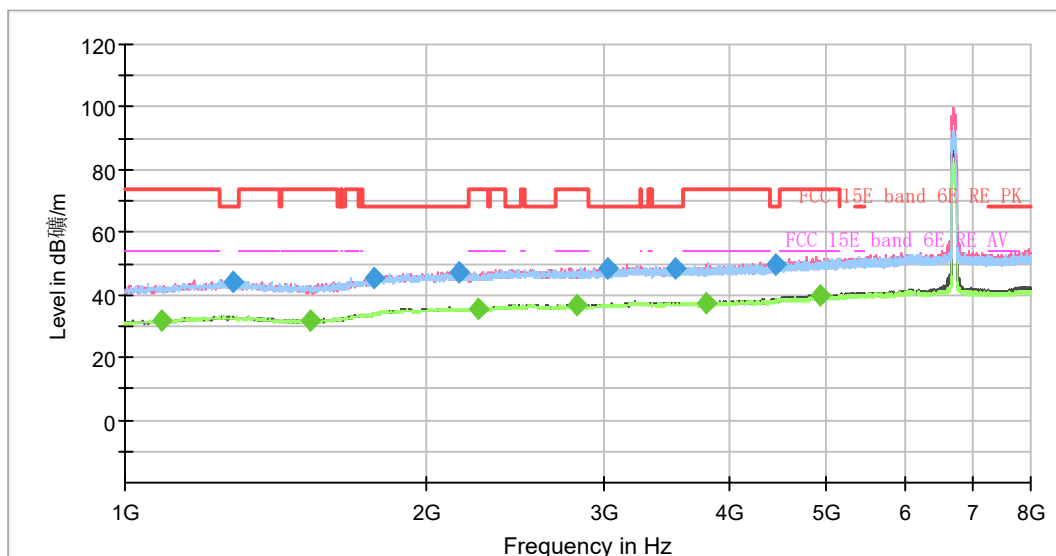
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1094.500000	---	31.60	54.00	22.40	100.0	V	306.0	-1.4
1269.500000	43.73	---	68.20	24.47	100.0	H	0.0	0.3
1526.750000	---	31.47	54.00	22.53	100.0	H	0.0	-0.1
1770.875000	45.97	---	68.20	22.23	100.0	V	355.0	2.5
2129.625000	48.05	---	68.20	20.15	200.0	V	96.0	4.3
2220.625000	---	35.41	54.00	18.59	200.0	V	16.0	4.4
2767.500000	---	36.47	54.00	17.53	200.0	V	54.0	6.0
3024.750000	49.30	---	68.20	18.90	100.0	H	358.0	6.4
3549.750000	49.17	---	68.20	19.03	100.0	H	0.0	7.5
3750.125000	---	37.37	54.00	16.63	200.0	V	75.0	7.8
4451.000000	49.79	---	68.20	18.41	100.0	V	152.0	9.6
4813.250000	---	39.31	54.00	14.69	100.0	V	248.0	10.4

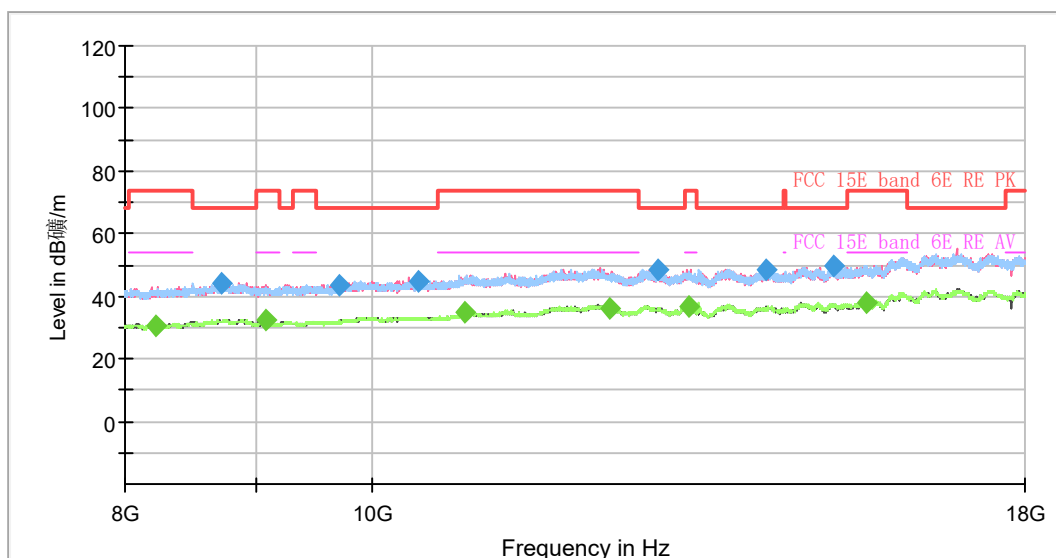
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 151



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



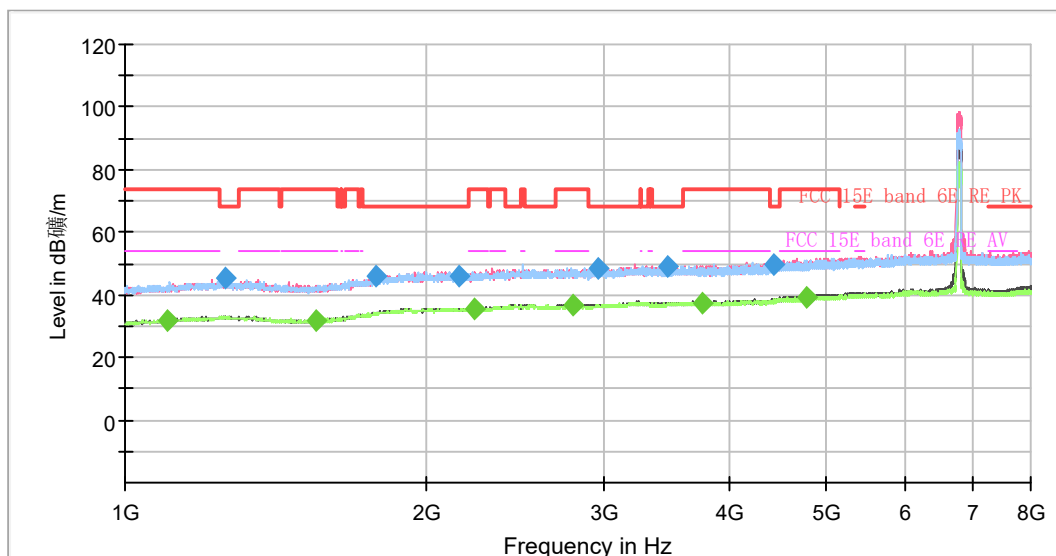
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1089.250000	---	31.53	54.00	22.47	200.0	V	44.0	-1.4
1279.125000	44.34	---	68.20	23.86	200.0	V	122.0	0.2
1531.125000	---	31.55	54.00	22.45	100.0	V	0.0	-0.1
1768.250000	45.59	---	68.20	22.61	100.0	H	70.0	2.5
2150.625000	46.94	---	68.20	21.26	200.0	H	271.0	4.2
2253.875000	---	35.38	54.00	18.62	200.0	V	103.0	4.6
2818.250000	---	36.56	54.00	17.44	100.0	V	340.0	6.0
3035.250000	48.15	---	68.20	20.05	200.0	V	23.0	6.5
3538.375000	48.55	---	68.20	19.65	200.0	H	291.0	7.5
3802.625000	---	37.36	54.00	16.64	200.0	V	2.0	8.0
4453.625000	49.42	---	68.20	18.78	100.0	V	359.0	9.7
4939.250000	---	39.66	54.00	14.34	200.0	V	23.0	10.7

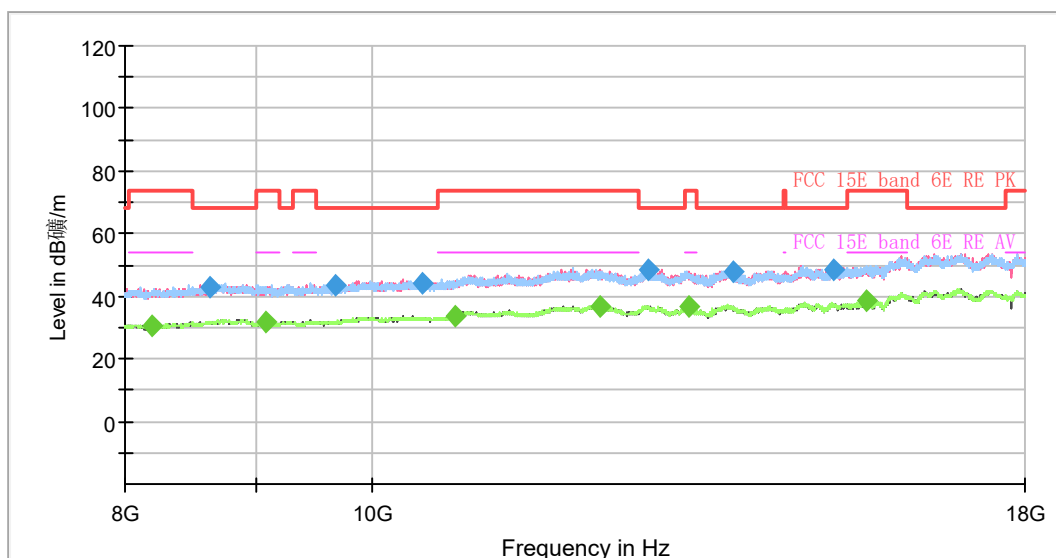
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 167



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



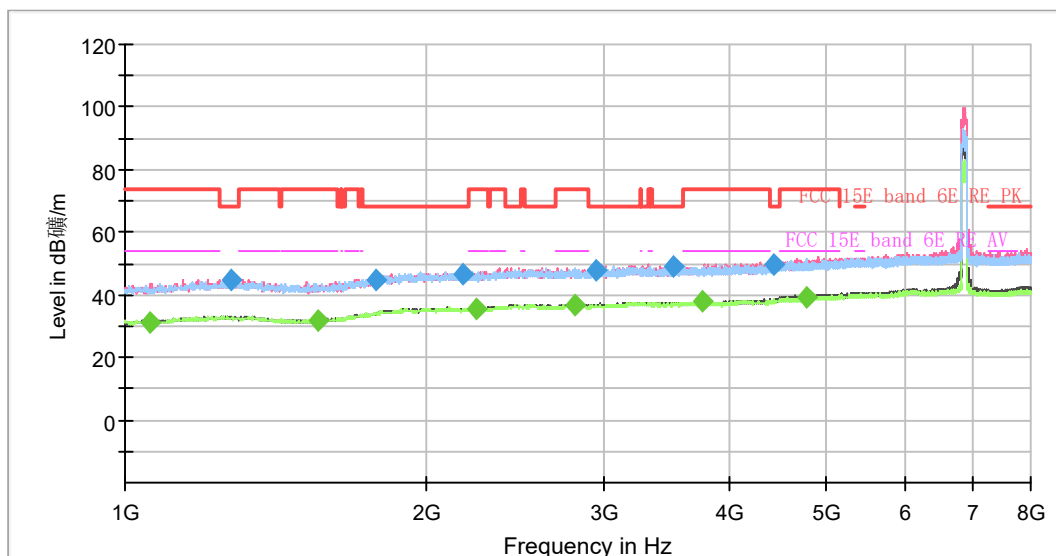
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1102.375000	---	31.84	54.00	22.16	100.0	V	0.0	-1.3
1259.875000	45.15	---	68.20	23.05	100.0	H	135.0	0.3
1548.625000	---	31.95	54.00	22.05	200.0	V	2.0	-0.1
1779.625000	45.74	---	68.20	22.46	100.0	V	232.0	2.7
2149.750000	46.05	---	68.20	22.15	100.0	V	211.0	4.2
2233.750000	---	35.37	54.00	18.63	100.0	V	232.0	4.5
2801.625000	---	36.57	54.00	17.43	100.0	V	347.0	5.9
2969.625000	48.18	---	68.20	20.02	100.0	V	0.0	6.3
3478.000000	48.90	---	68.20	19.30	200.0	H	357.0	7.4
3759.750000	---	37.48	54.00	16.52	200.0	V	45.0	7.9
4442.250000	49.67	---	68.20	18.53	200.0	V	0.0	9.6
4787.875000	---	39.11	54.00	14.89	100.0	V	331.0	10.3

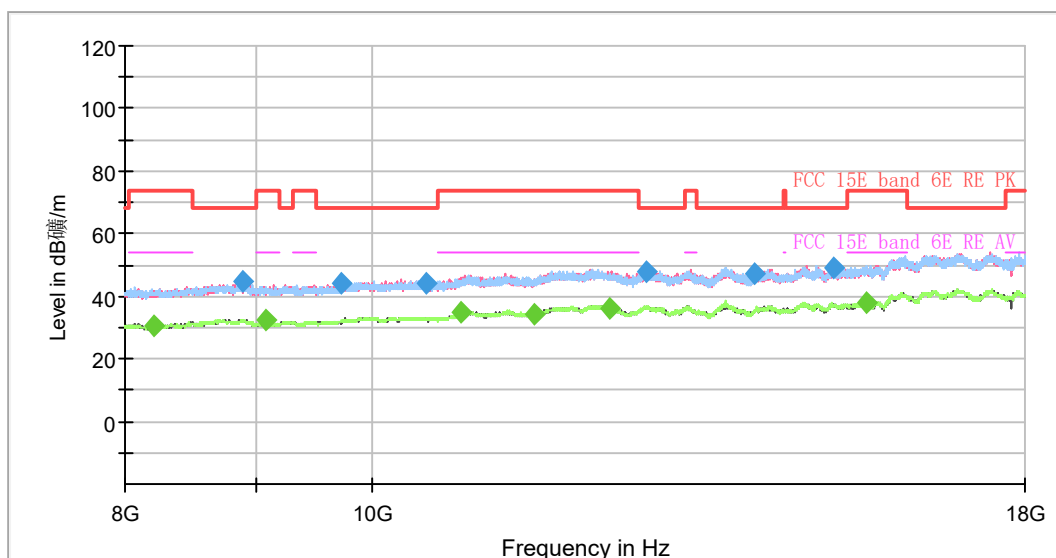
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 183



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



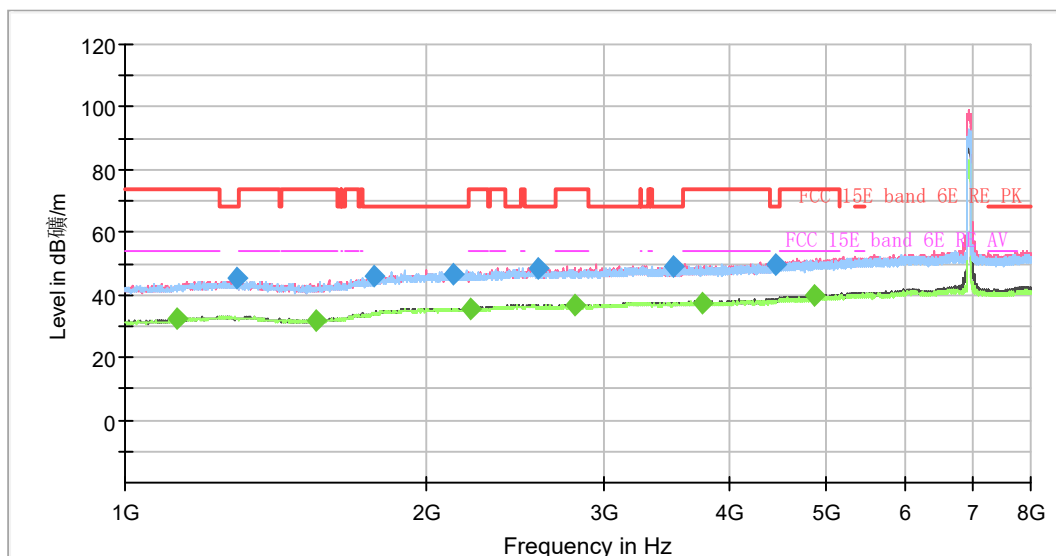
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1060.375000	---	31.43	54.00	22.57	100.0	V	233.0	-1.5
1278.250000	44.49	---	68.20	23.71	100.0	H	17.0	0.2
1554.750000	---	31.91	54.00	22.09	200.0	V	359.0	0.0
1781.375000	44.83	---	68.20	23.37	100.0	H	154.0	2.7
2172.500000	46.83	---	68.20	21.37	100.0	H	0.0	4.3
2239.000000	---	35.69	54.00	18.31	100.0	V	358.0	4.5
2813.875000	---	36.51	54.00	17.49	200.0	V	12.0	5.9
2944.250000	47.78	---	68.20	20.42	200.0	H	288.0	6.3
3517.375000	48.99	---	68.20	19.21	100.0	V	112.0	7.5
3771.125000	---	37.68	54.00	16.32	100.0	H	0.0	7.9
4441.375000	49.88	---	68.20	18.32	200.0	V	28.0	9.6
4788.750000	---	39.37	54.00	14.63	100.0	V	233.0	10.3

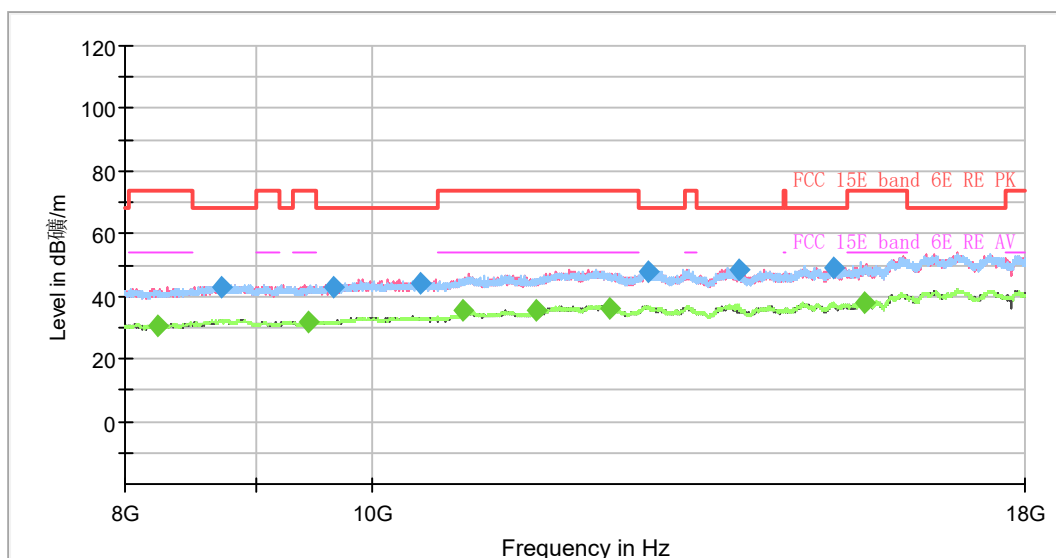
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 199



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



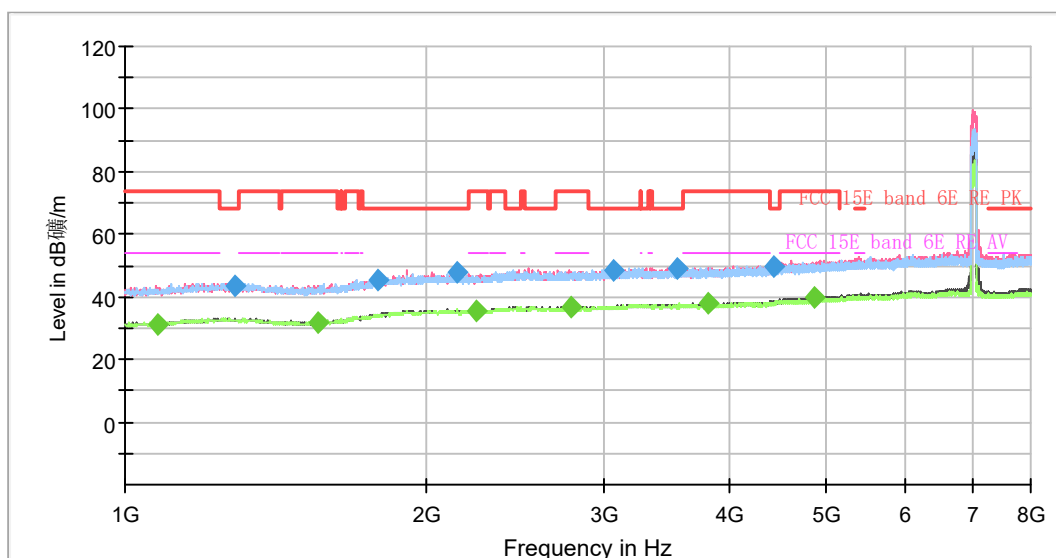
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1127.750000	---	32.36	54.00	21.64	100.0	V	228.0	-0.9
1292.250000	45.47	---	68.20	22.73	100.0	V	0.0	0.2
1550.375000	---	31.64	54.00	22.36	200.0	H	150.0	-0.1
1770.000000	46.28	---	68.20	21.92	200.0	V	132.0	2.5
2124.375000	46.34	---	68.20	21.86	200.0	V	53.0	4.3
2213.625000	---	35.78	54.00	18.22	200.0	V	252.0	4.4
2588.125000	48.33	---	68.20	19.87	100.0	V	343.0	5.7
2812.125000	---	36.50	54.00	17.50	200.0	V	4.0	5.9
3525.250000	49.01	---	68.20	19.19	100.0	V	0.0	7.5
3763.250000	---	37.44	54.00	16.56	200.0	V	0.0	7.9
4448.375000	49.67	---	68.20	18.53	200.0	V	32.0	9.6
4859.625000	---	39.67	54.00	14.33	100.0	V	0.0	10.5

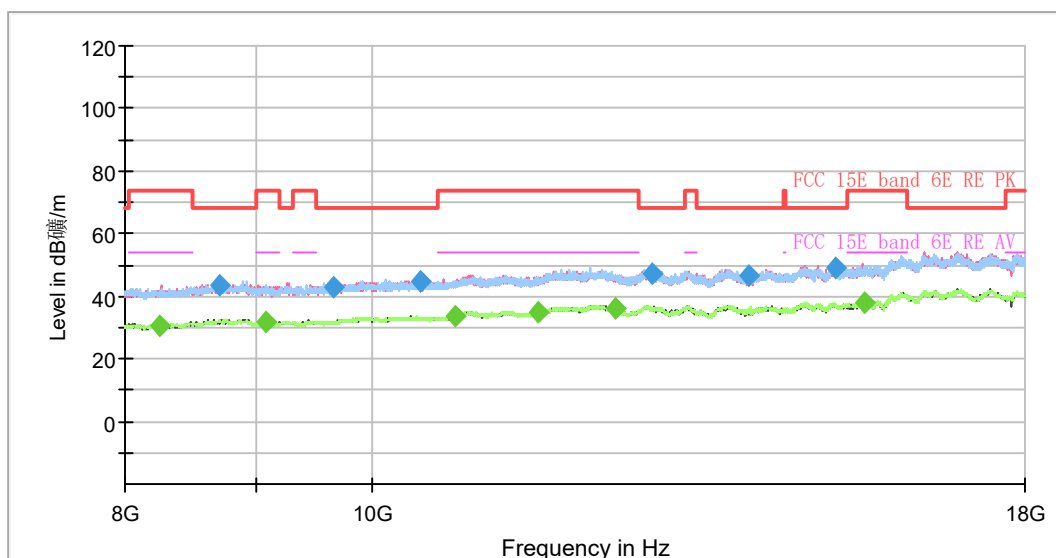
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE80 CH 215



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



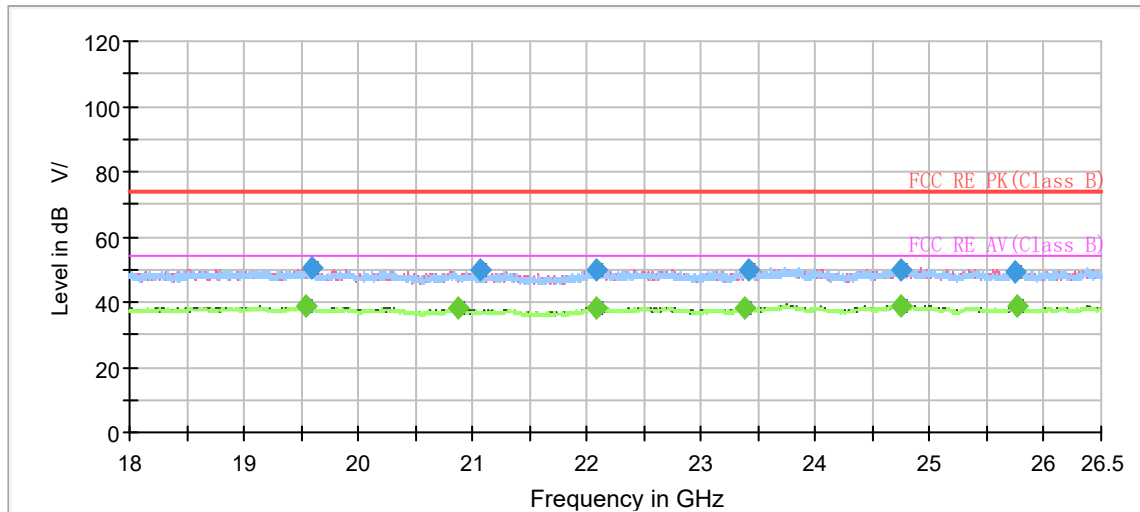
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1077.000000	---	31.33	54.00	22.67	200.0	V	13.0	-1.4
1288.750000	43.79	---	68.20	24.41	200.0	H	171.0	0.2
1559.125000	---	31.90	54.00	22.10	200.0	V	195.0	0.0
1791.000000	45.61	---	68.20	22.59	100.0	H	10.0	2.9
2145.375000	47.70	---	68.20	20.50	100.0	V	155.0	4.2
2243.375000	---	35.69	54.00	18.31	100.0	H	149.0	4.6
2779.750000	---	36.62	54.00	17.38	200.0	V	131.0	5.9
3070.250000	48.42	---	68.20	19.78	100.0	V	118.0	6.6
3548.875000	49.11	---	68.20	19.10	100.0	H	170.0	7.5
3817.500000	---	37.70	54.00	16.30	200.0	V	350.0	8.0
4431.750000	49.43	---	68.20	18.77	200.0	H	92.0	9.5
4863.125000	---	39.75	54.00	14.25	200.0	V	71.0	10.5

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 40GHz was performed in all modes with all channels, 802.11ax HE20 CH 49 is selected as the worst condition. The test data of the worst-case condition was recorded in this report.

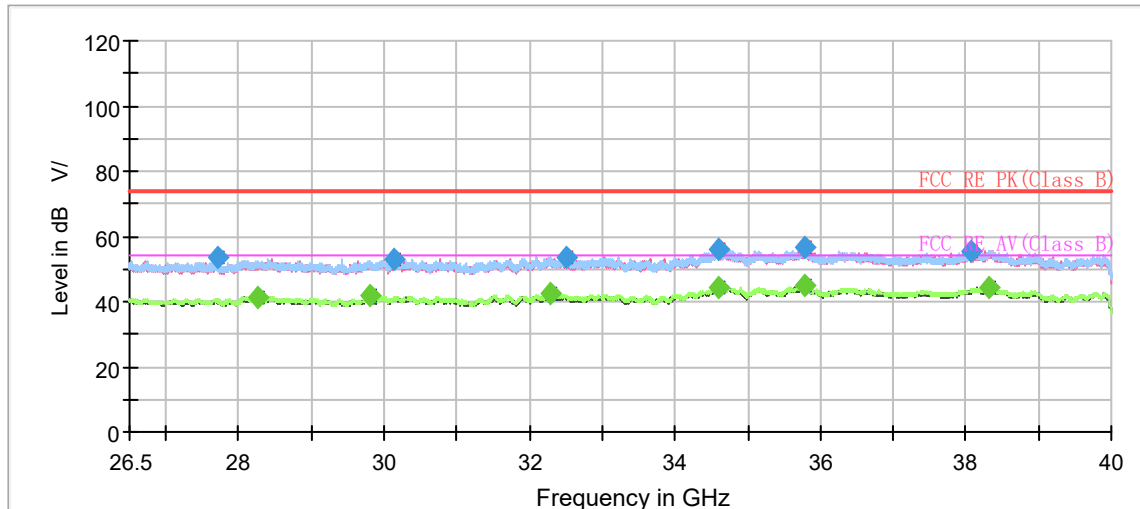


Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19544.875000	---	38.96	54.00	15.04	200.0	V	106.0	-5.3
19592.687500	50.32	---	74.00	23.68	100.0	H	40.0	-5.3
20880.437500	---	38.09	54.00	15.91	100.0	H	84.0	-5.1
21063.187500	49.58	---	74.00	24.42	100.0	V	315.0	-5.1
22077.875000	49.57	---	74.00	24.43	100.0	V	338.0	-4.1
22087.437500	---	37.97	54.00	16.03	100.0	H	16.0	-4.1
23386.875000	---	38.02	54.00	15.98	200.0	V	140.0	-3.3
23407.062500	49.64	---	74.00	24.36	200.0	V	59.0	-3.3
24749.000000	---	38.50	54.00	15.50	200.0	V	235.0	-2.1
24753.250000	50.02	---	74.00	23.98	200.0	V	64.0	-2.1
25746.687500	49.51	---	74.00	24.49	100.0	V	148.0	-2.6
25760.500000	---	38.49	54.00	15.51	100.0	H	247.0	-2.6

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit-MAX Peak/ Average



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
27718.375000	53.35	---	74.00	20.65	100.0	H	114.0	-0.9
28265.125000	---	41.46	54.00	12.54	100.0	H	15.0	0.0
29810.875000	---	41.72	54.00	12.28	100.0	H	15.0	-0.7
30146.687500	53.19	---	74.00	20.81	200.0	H	79.0	-0.2
32274.625000	---	42.24	54.00	11.76	100.0	V	0.0	-1.2
32502.437500	53.60	---	74.00	20.40	100.0	H	58.0	-1.1
34605.062500	55.99	---	74.00	18.01	100.0	H	89.0	2.9
34613.500000	---	44.37	54.00	9.63	100.0	H	325.0	2.9
35784.625000	---	44.69	54.00	9.31	100.0	H	254.0	3.2
35793.062500	56.45	---	74.00	17.55	100.0	H	109.0	3.2
38077.937500	55.62	---	74.00	18.38	200.0	V	80.0	3.8
38319.250000	---	44.44	54.00	9.56	100.0	H	154.0	3.7

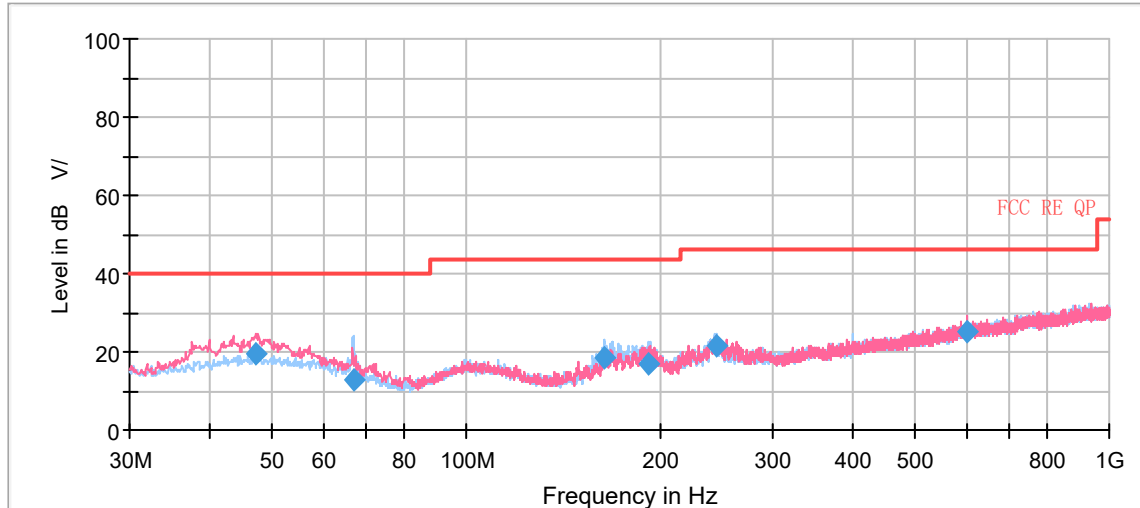
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit-MAX Peak/ Average

TB Mode

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11ax HE20 52Tone CH 1 is selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Continuous TX mode:



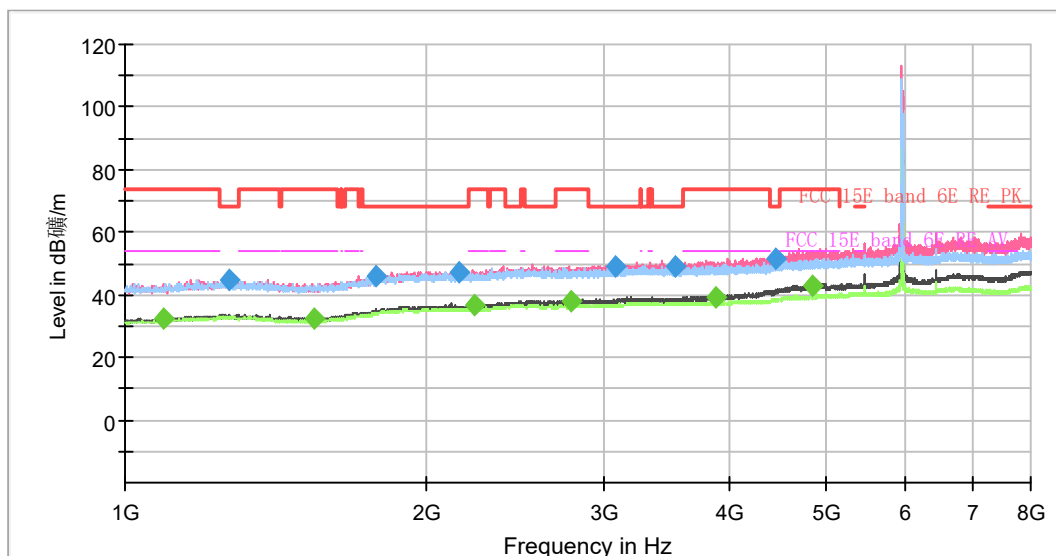
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
47.101250	19.26	40.00	20.74	109.0	V	10.0	20.5
66.778750	12.68	40.00	27.32	100.0	H	51.0	17.4
164.100000	18.58	43.50	24.92	184.0	H	263.0	15.4
192.481250	17.14	43.50	26.36	100.0	H	253.0	18.1
244.773750	21.41	46.00	24.59	125.0	H	77.0	19.7
599.996250	25.10	46.00	20.90	175.0	H	53.0	27.0

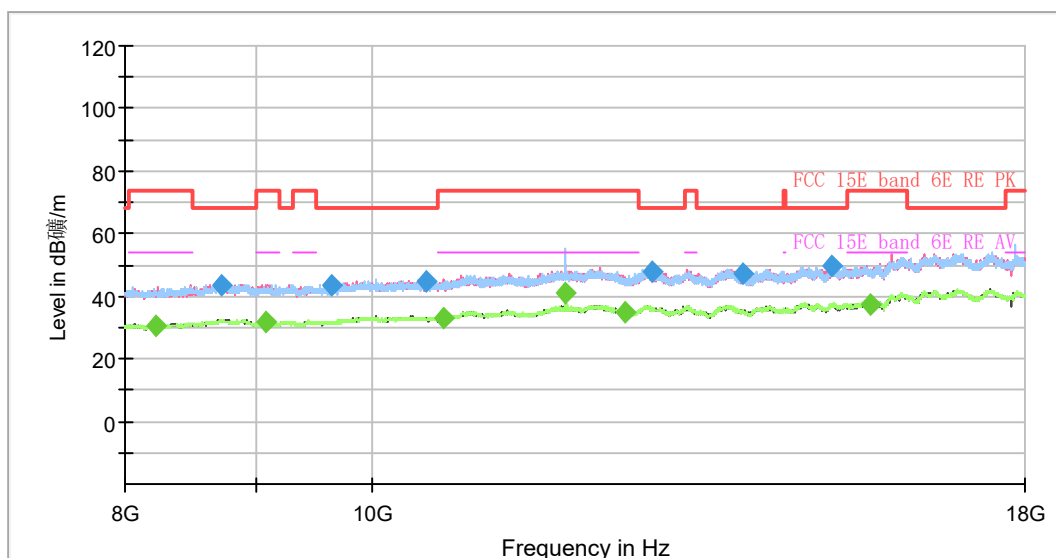
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – Quasi-Peak

802.11ax HE20 26Tone CH 1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



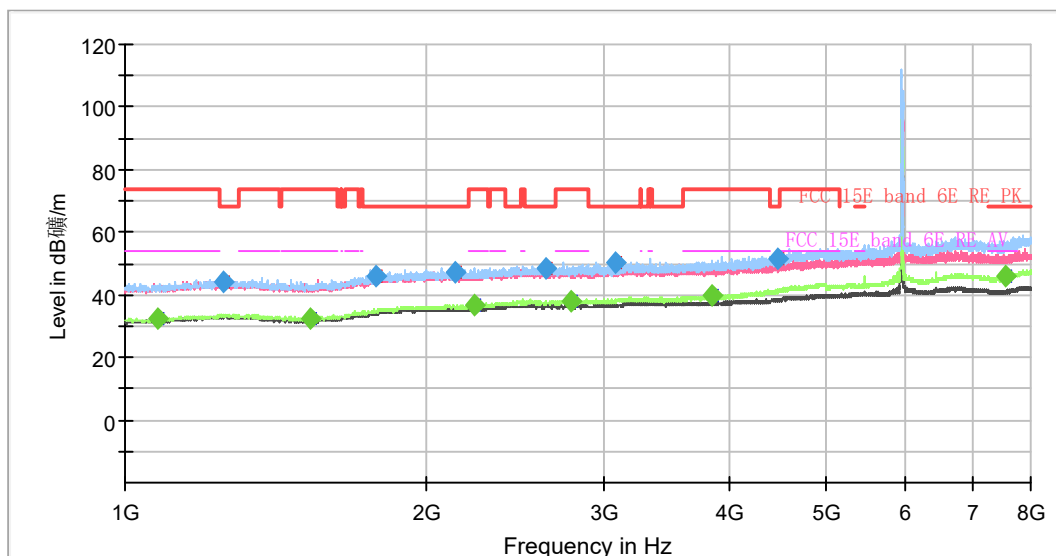
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1091.875000	---	32.32	54.00	21.68	200.0	V	354.0	-1.4
1272.125000	44.71	---	68.20	23.50	100.0	H	278.0	0.3
1541.625000	---	32.66	54.00	21.34	200.0	V	317.0	-0.1
1781.375000	45.70	---	68.20	22.50	100.0	H	134.0	2.7
2152.375000	46.97	---	68.20	21.23	200.0	V	354.0	4.2
2234.625000	---	36.96	54.00	17.04	200.0	V	0.0	4.5
2786.750000	---	38.13	54.00	15.87	200.0	V	0.0	5.9
3083.375000	49.32	---	68.20	18.88	200.0	V	317.0	6.7
3534.875000	49.35	---	68.20	18.85	200.0	V	354.0	7.5
3890.125000	---	39.38	54.00	14.62	200.0	V	0.0	8.1
4454.500000	51.84	---	68.20	16.36	200.0	V	354.0	9.7
4857.000000	---	42.95	54.00	11.05	200.0	V	341.0	10.5

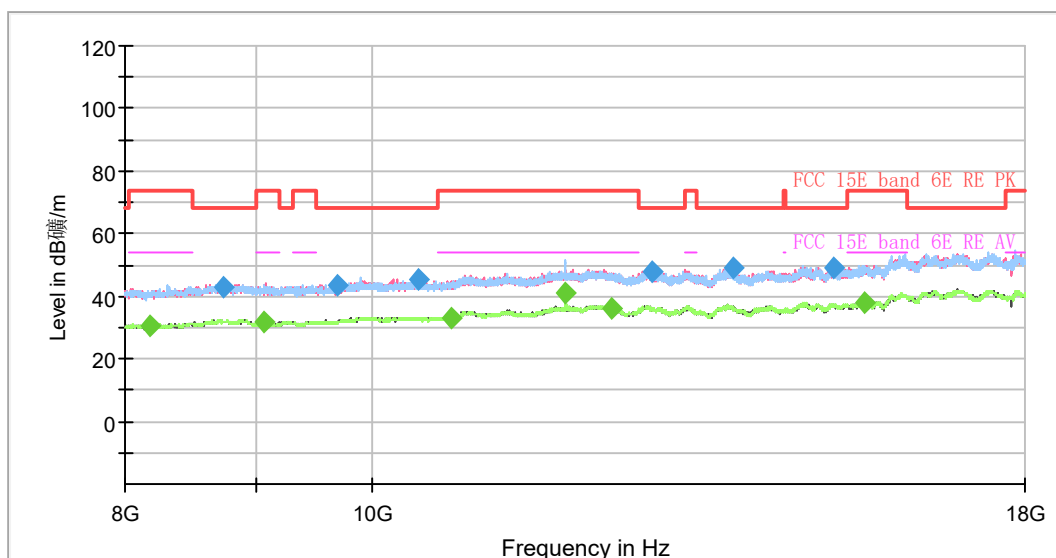
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 52Tone CH 1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



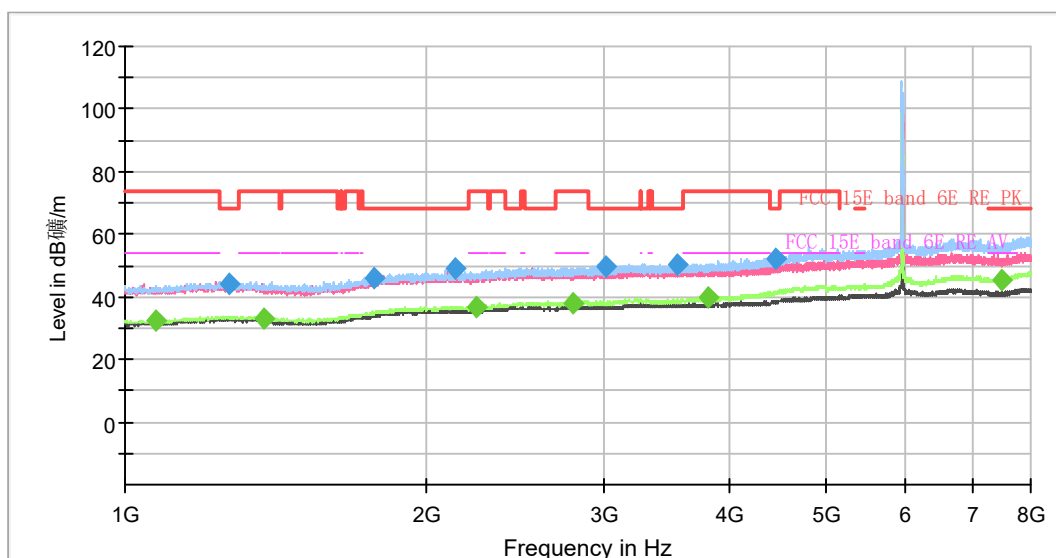
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1077.000000	---	32.15	54.00	21.85	200.0	H	352.0	-1.4
1255.500000	43.97	---	68.20	24.23	100.0	V	254.0	0.3
1532.875000	---	32.43	54.00	21.57	200.0	H	359.0	-0.1
1780.500000	45.99	---	68.20	22.21	200.0	H	337.0	2.7
2130.500000	47.08	---	68.20	21.12	200.0	H	278.0	4.2
2231.125000	---	36.90	54.00	17.10	200.0	H	352.0	4.5
2628.375000	48.73	---	68.20	19.47	200.0	H	359.0	5.7
2782.375000	---	37.93	54.00	16.07	200.0	H	0.0	5.9
3077.250000	50.10	---	68.20	18.10	200.0	H	319.0	6.6
3847.250000	---	39.73	54.00	14.27	200.0	H	359.0	8.0
4468.500000	51.72	---	68.20	16.48	200.0	H	319.0	9.7
7545.875000	---	45.69	54.00	8.31	200.0	H	278.0	14.0

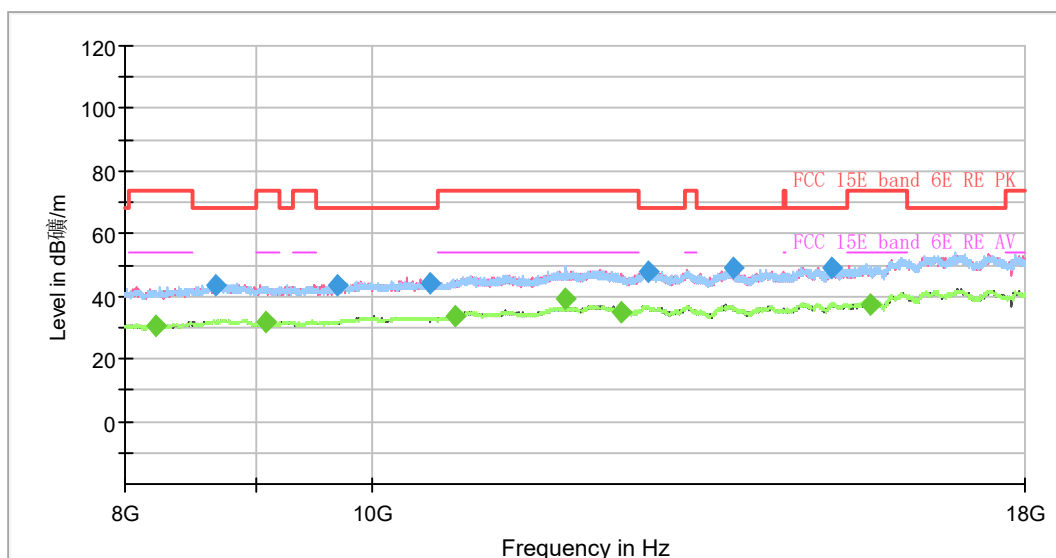
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

802.11ax HE20 106Tone CH 1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



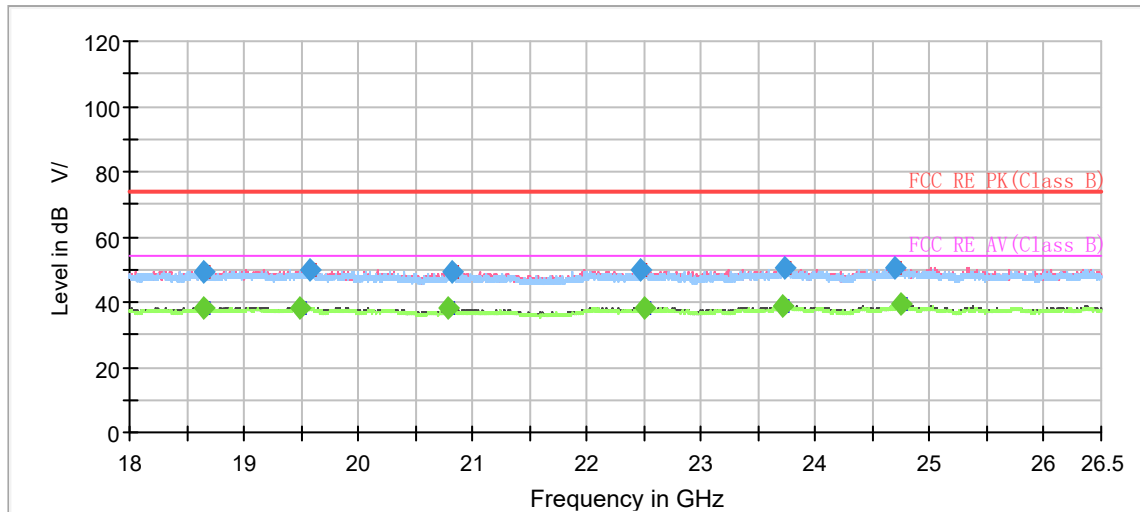
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1074.375000	---	32.42	54.00	21.58	200.0	H	217.0	-1.4
1267.750000	44.33	---	68.20	23.87	200.0	H	176.0	0.3
1377.125000	---	33.25	54.00	20.75	200.0	H	0.0	0.2
1768.250000	45.72	---	68.20	22.48	200.0	H	136.0	2.5
2130.500000	48.90	---	68.20	19.30	200.0	H	256.0	4.2
2239.875000	---	36.60	54.00	17.40	200.0	H	359.0	4.5
2796.375000	---	38.06	54.00	15.94	200.0	H	238.0	5.9
3010.750000	49.84	---	68.20	18.36	200.0	H	359.0	6.4
3558.500000	50.16	---	68.20	18.04	200.0	H	136.0	7.5
3815.750000	---	39.52	54.00	14.48	200.0	H	338.0	8.0
4463.250000	52.38	---	68.20	15.82	200.0	H	217.0	9.7
7496.875000	---	45.50	54.00	8.50	200.0	H	277.0	14.0

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Peak Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 40GHz was performed in all modes with all channels, 802.11ax HE20 52Tone CH 1 is selected as the worst condition. The test data of the worst-case condition was recorded in this report.

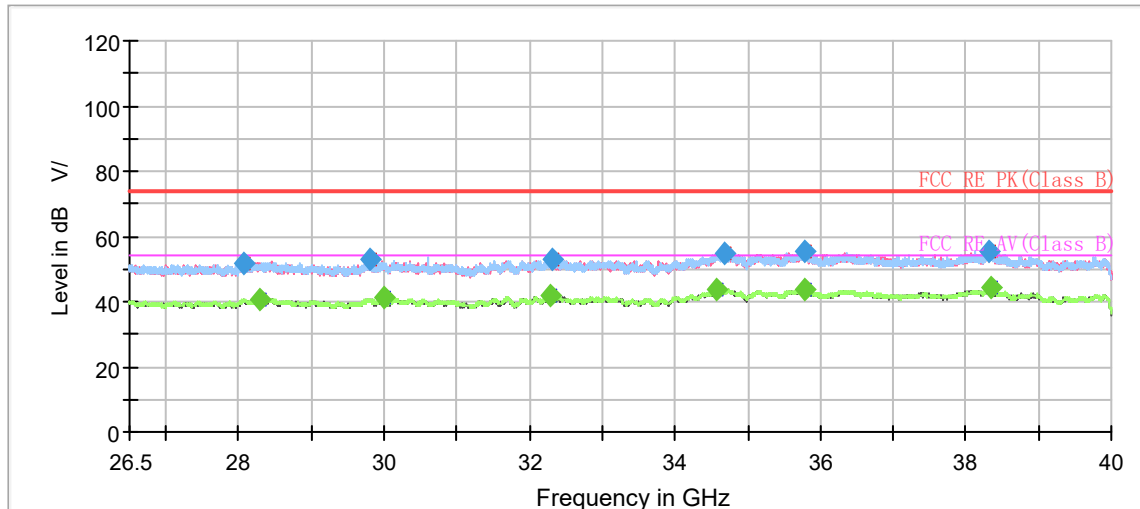


Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18640.687500	49.45	---	74.00	24.55	100.0	V	0.0	-5.6
18656.625000	---	37.90	54.00	16.10	200.0	V	171.0	-5.6
19484.312500	---	38.38	54.00	15.62	200.0	V	29.0	-5.3
19581.000000	50.04	---	74.00	23.96	100.0	H	201.0	-5.3
20788.000000	---	37.86	54.00	16.14	200.0	V	270.0	-5.1
20825.187500	49.02	---	74.00	24.98	200.0	H	225.0	-5.1
22469.937500	49.58	---	74.00	24.42	200.0	V	206.0	-3.9
22505.000000	---	38.26	54.00	15.74	100.0	V	359.0	-3.9
23718.375000	---	38.55	54.00	15.45	100.0	V	205.0	-2.4
23734.312500	50.20	---	74.00	23.80	100.0	V	124.0	-2.4
24696.937500	50.70	---	74.00	23.30	100.0	V	317.0	-2.1
24741.562500	---	39.08	54.00	14.92	100.0	V	190.0	-2.1

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit-MAX Peak/ Average



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
28074.437500	51.92	---	74.00	22.08	200.0	H	282.0	-0.4
28297.187500	---	40.88	54.00	13.12	100.0	H	203.0	0.0
29815.937500	52.65	---	74.00	21.35	200.0	V	110.0	-0.7
29989.750000	---	41.01	54.00	12.99	100.0	H	20.0	-0.4
32284.750000	---	41.54	54.00	12.46	100.0	H	6.0	-1.2
32313.437500	52.84	---	74.00	21.16	100.0	V	195.0	-1.2
34584.812500	---	43.64	54.00	10.36	200.0	V	70.0	2.8
34691.125000	54.98	---	74.00	19.02	100.0	V	315.0	2.9
35779.562500	55.11	---	74.00	18.89	200.0	V	333.0	3.2
35796.437500	---	43.73	54.00	10.27	100.0	H	0.0	3.2
38307.437500	55.58	---	74.00	18.42	100.0	H	75.0	3.7
38336.125000	---	44.21	54.00	9.79	100.0	H	80.0	3.7

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

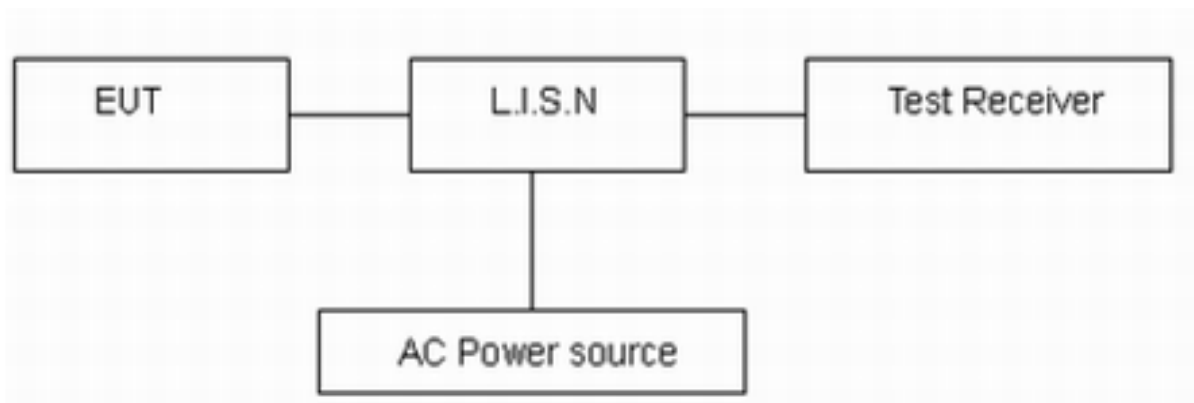
2. Margin = Limit-MAX Peak/ Average

5.8. Conducted Emission

Methods of Measurement

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10. Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line. The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

AC Power-line Conducted Emissions Limit		
Frequency Emission(MHz)	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5	56	46
5-30	60	50

Note1: *Decreases with the logarithm of the frequency.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

Test Results:

The equipment don't have standard Adapter, therefore this requirement do not apply.

5.9. U-NII devices Operational restrictions for 6 GHz

Ambient Condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Test Setup

NA

Methods of Measurement

NA

Limits

- (1) Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.
- (2) Transmitters operating under indoor client are limited to indoor locations.
- (3) In the 5.925-7.125 GHz band, client devices, except fixed client devices, must operate under the control of a standard power access point, indoor access point or subordinate devices; Subordinate devices must operate under the control of an indoor access point, In all cases, an exception exists for transmitting brief messages to an access point when attempting to join its network after detecting a signal that confirms that an access point is operating on a particular channel. Access points and subordinate devices may connect to other access points or subordinate devices. Client devices are prohibited from connecting directly to another client device.
- (4) Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

Test Results:

Device is an indoor access point, all restrictions are meet the §15.407 (d) requirements. Please refer to the Attestation letter exhibit supplied within this application.

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV40	101186	2023-05-12	2024-05-11
EMI Test Receiver	R&S	ESR	102389	2023-05-12	2024-05-11
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2023-07-14	2026-07-13
Horn Antenna	R&S	HF907	102723	2021-07-24	2024-07-23
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Standard Gain Horn	STEATITE	QSH-SL-26-40 -K-15	16779	2023-01-17	2026-01-16
Software	R&S	EMC32	9.26.01	/	/
Spectrum Analyzer	KEYSIGHT	N9020A	MY51330870	2023-05-12	2024-05-11
Temperature Chamber	ESPEC	SU-242	93000506	2022-12-10	2023-12-09
Power Meter	R&S	NRP18S	101954	2023-05-12	2024-05-11
DC Power Supply	UNI-T	UTP1306S+	2205D0517426	2022-12-10	2023-12-09
Signal Generator	KEYSIGHT	N5182B-X07	MY51350303	2022-12-10	2023-12-09

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

***** END OF REPORT *****