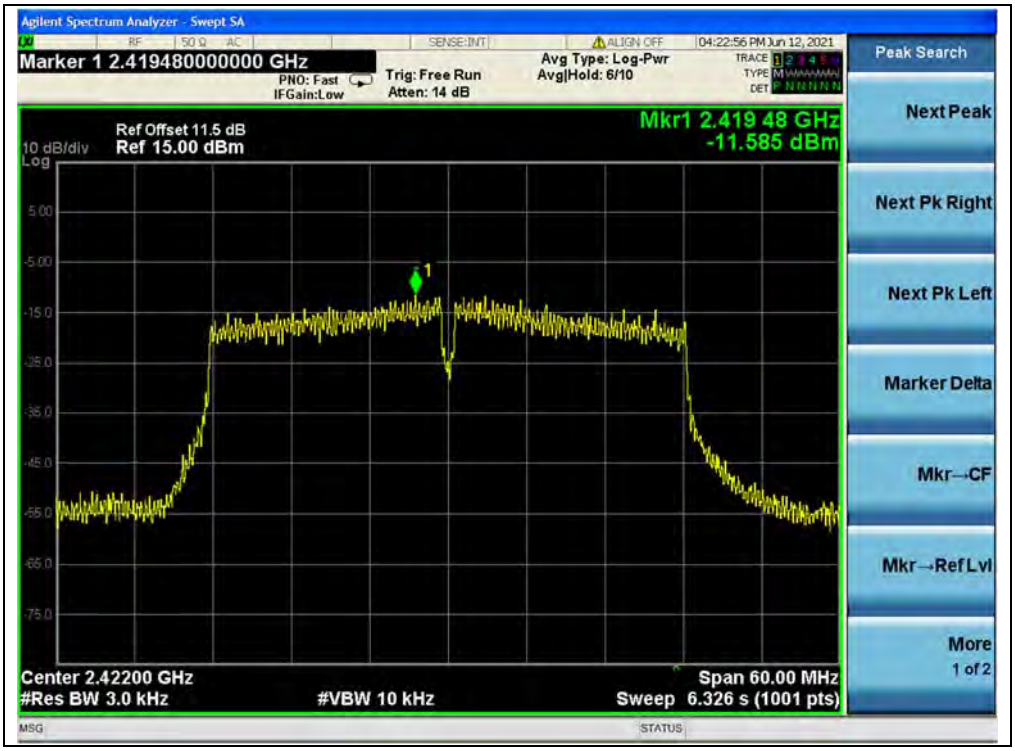


(Channel 3, 802.11n (HT40), ANT 1)

(Channel 6, 802.11n (HT40), ANT 1)

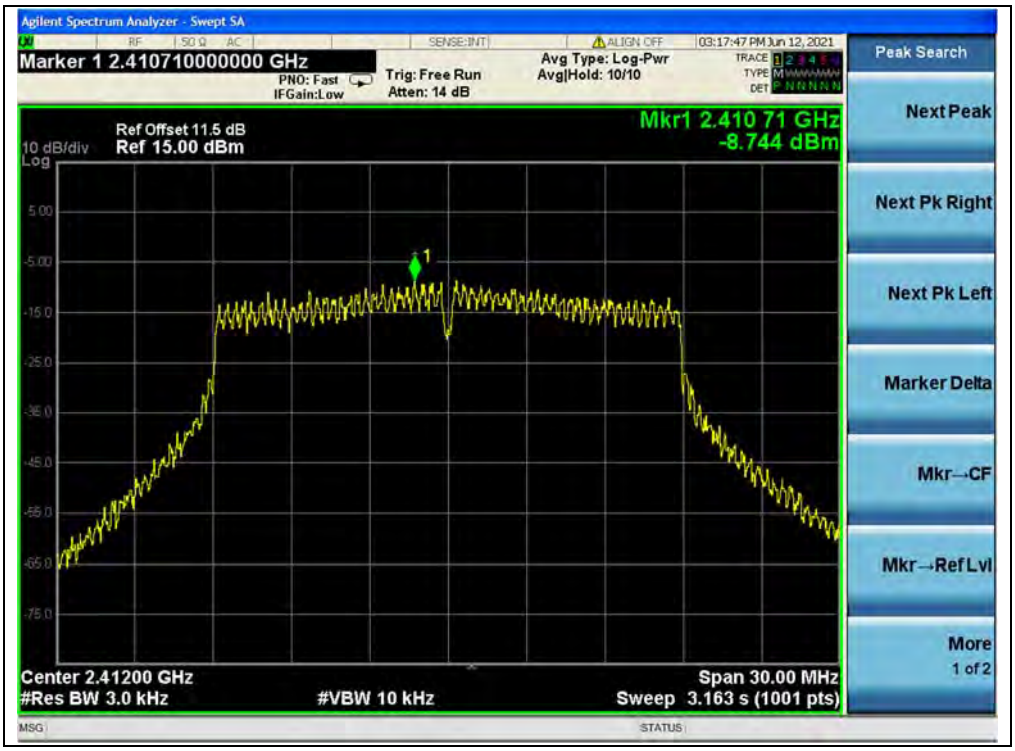
(Channel 9, 802.11n (HT40), ANT 1)

802.11ac (VHT20) Mode

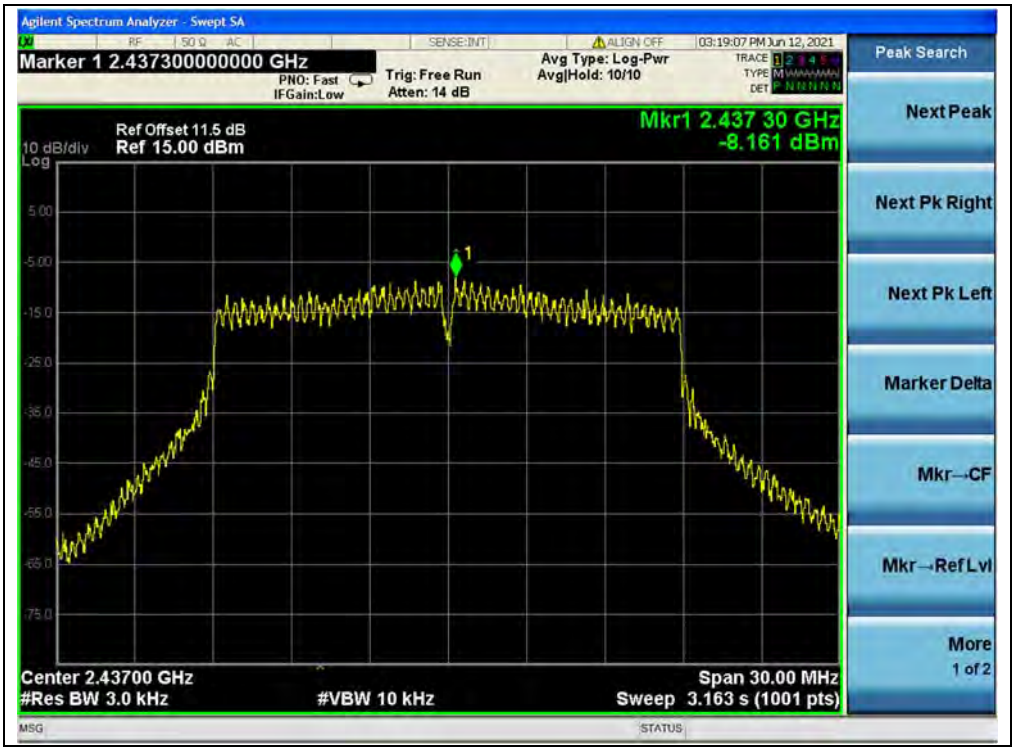
A.Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
1	2412	-8.74	-8.24	-5.47	8	PASS
6	2437	-8.16	-9.08	-5.59	8	PASS
11	2462	-7.51	-9.19	-5.26	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:

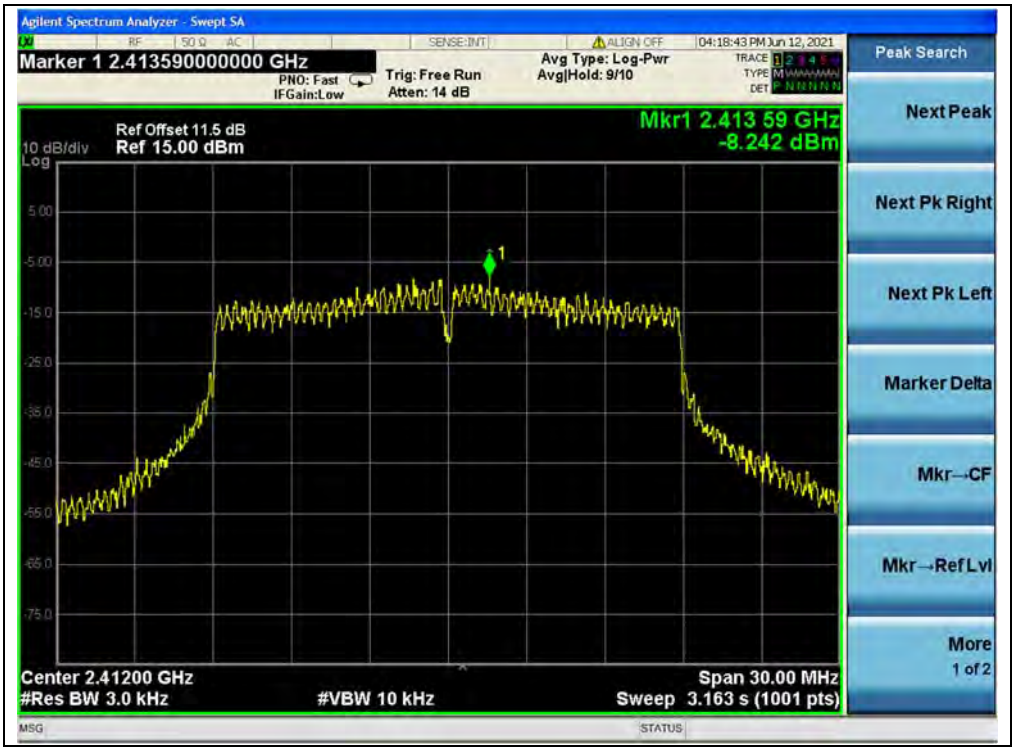


(Channel 1, 802.11ac (VHT20), ANT 0)



(Channel 6, 802.11ac (VHT20), ANT 0)

(Channel 11, 802.11ac (VHT20), ANT 0)



(Channel 1, 802.11ac (VHT20), ANT 1)

(Channel 6, 802.11ac (VHT20), ANT 1)

(Channel 11, 802.11ac (VHT20), ANT 1)

802.11ac (VHT40) Mode

A.Test Verdict:

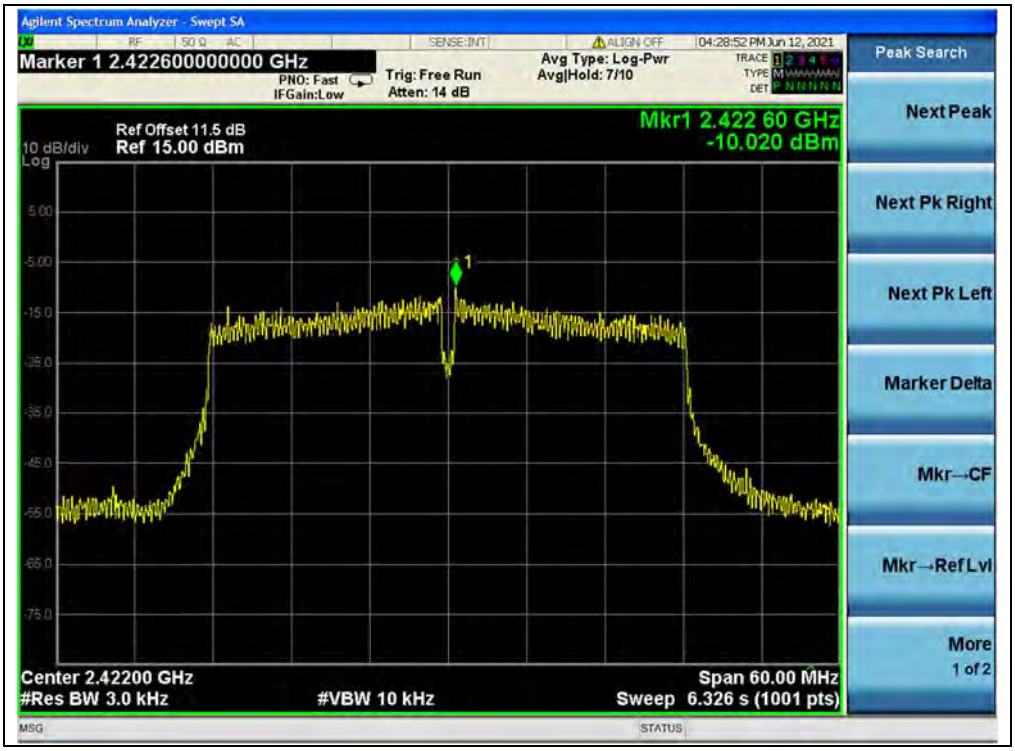
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
3	2422	-11.48	-10.02	-7.68	8	PASS
6	2437	-11.26	-12.24	-8.71	8	PASS
9	2452	-11.14	-10.62	-7.86	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:

(Channel 3, 802.11ac (VHT40), ANT 0)

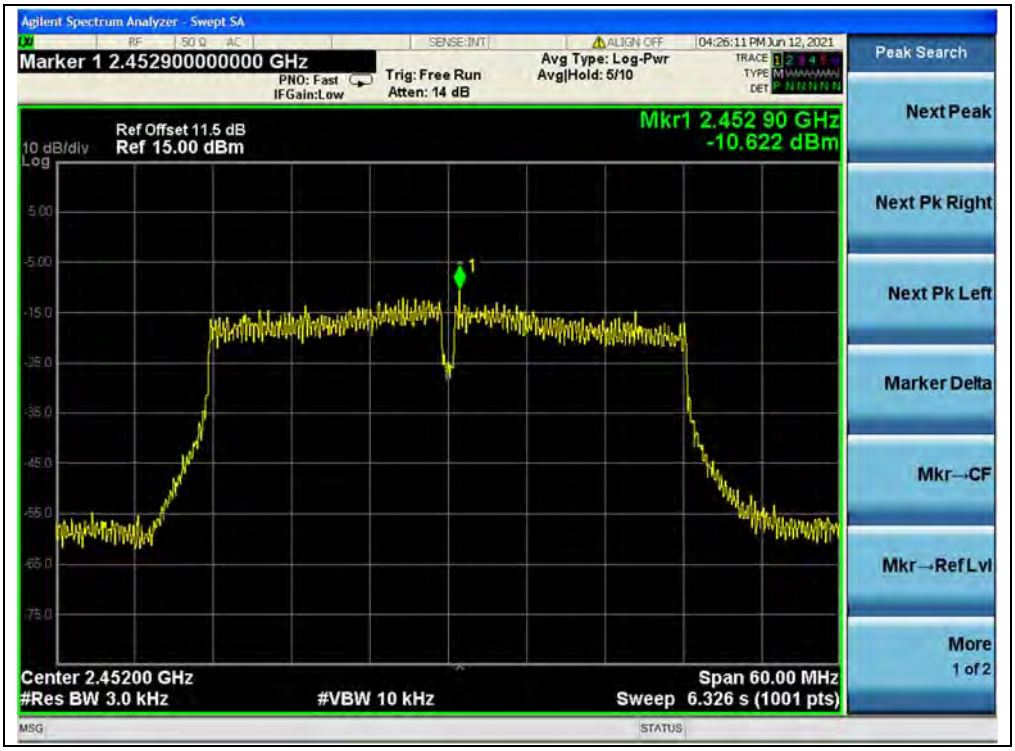
(Channel 6, 802.11ac (VHT40), ANT 0)

(Channel 9, 802.11ac (VHT40), ANT 0)



(Channel 3, 802.11ac (VHT40), ANT 1)

(Channel 6, 802.11ac (VHT40), ANT 1)



(Channel 9, 802.11ac (VHT40), ANT 1)

802.11ax (HEW20) Mode

A.Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
1	2412	-8.38	-10.07	-6.13	8	PASS
6	2437	-9.33	-9.06	-6.18	8	PASS
11	2462	-8.73	-10.31	-6.44	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:

(Channel 1, 802.11ax (HEW20), ANT 0)

(Channel 6, 802.11ax (HEW20), ANT 0)

(Channel 11, 802.11ax (HEW20), ANT 0)

(Channel 1, 802.11ax (HEW20), ANT 1)

(Channel 6, 802.11ax (HEW20), ANT 1)

(Channel 11, 802.11ax (HEW20), ANT 1)

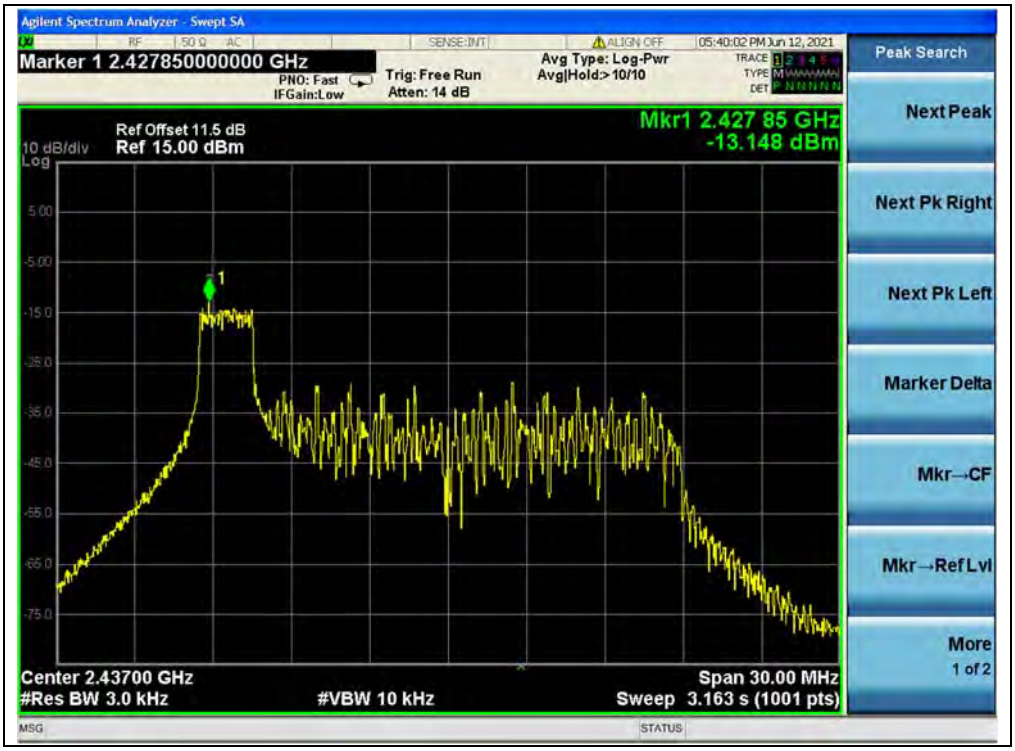
802.11ax (HEW20) RU26 Mode

A.Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
1	2412	-13.34	-14.63	-10.93	8	PASS
6	2437	-13.15	-13.07	-10.10	8	PASS
11	2462	-12.36	-15.11	-10.51	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:

(Channel 1, 802.11ax (HEW20) RU26, ANT 0)



(Channel 6, 802.11ax (HEW20) RU26, ANT 0)

(Channel 11, 802.11ax (HEW20) RU26, ANT 0)

(Channel 1, 802.11ax (HEW20) RU26, ANT 1)

(Channel 6, 802.11ax (HEW20) RU26, ANT 1)

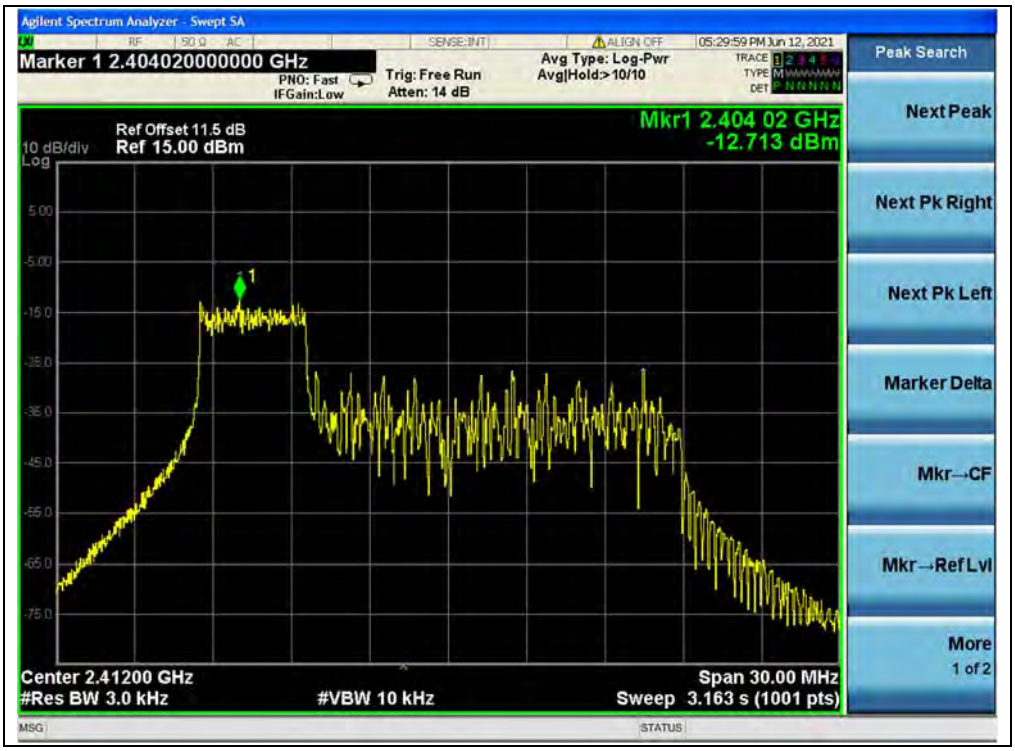
(Channel 11, 802.11ax (HEW20) RU26, ANT 1)

802.11ax (HEW20) RU52 Mode

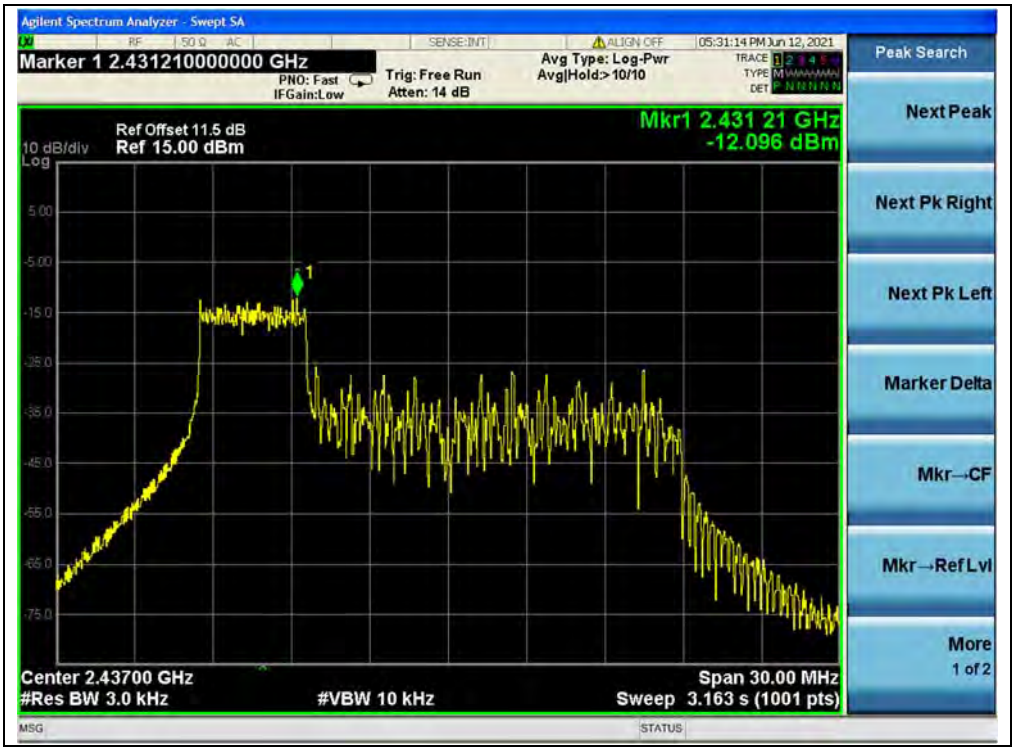
A.Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
1	2412	-12.71	-12.95	-9.82	8	PASS
6	2437	-12.10	-13.33	-9.66	8	PASS
11	2462	-12.14	-14.21	-10.04	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:



(Channel 1, 802.11ax (HEW20) RU52, ANT 0)



(Channel 6, 802.11ax (HEW20) RU52, ANT 0)

(Channel 11, 802.11ax (HEW20) RU52, ANT 0)

(Channel 1, 802.11ax (HEW20) RU52, ANT 1)

(Channel 6, 802.11ax (HEW20) RU52, ANT 1)

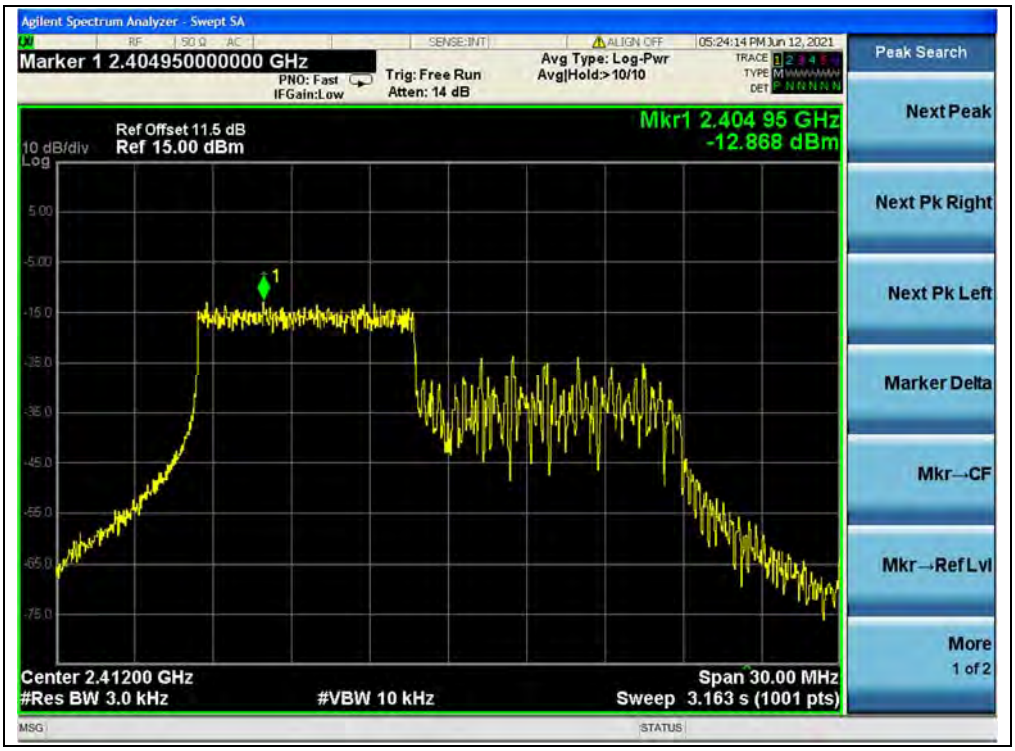
(Channel 11, 802.11ax (HEW20) RU52, ANT 1)

802.11ax (HEW20) RU106 Mode

A.Test Verdict:

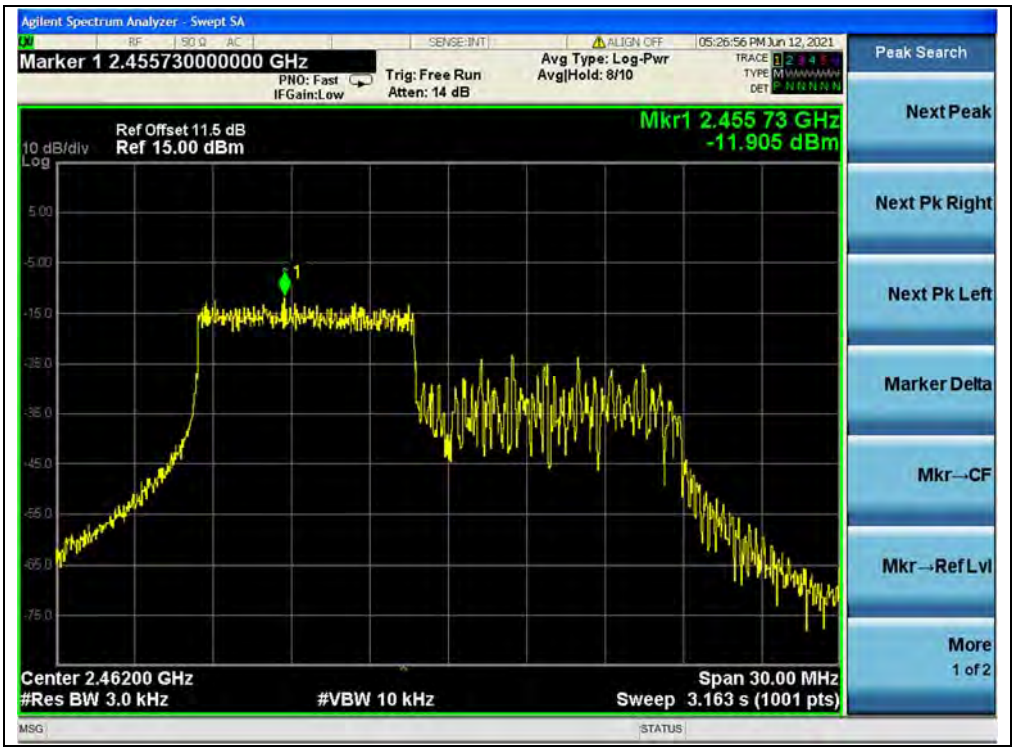
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
1	2412	-12.87	-13.52	-10.17	8	PASS
6	2437	-12.42	-13.90	-10.09	8	PASS
11	2462	-11.91	-13.67	-9.69	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:



(Channel 1, 802.11ax (HEW20) RU106, ANT 0)

(Channel 6, 802.11ax (HEW20) RU106, ANT 0)



(Channel 11, 802.11ax (HEW20) RU106, ANT 0)

(Channel 1, 802.11ax (HEW20) RU106, ANT 1)

(Channel 6, 802.11ax (HEW20) RU106, ANT 1)

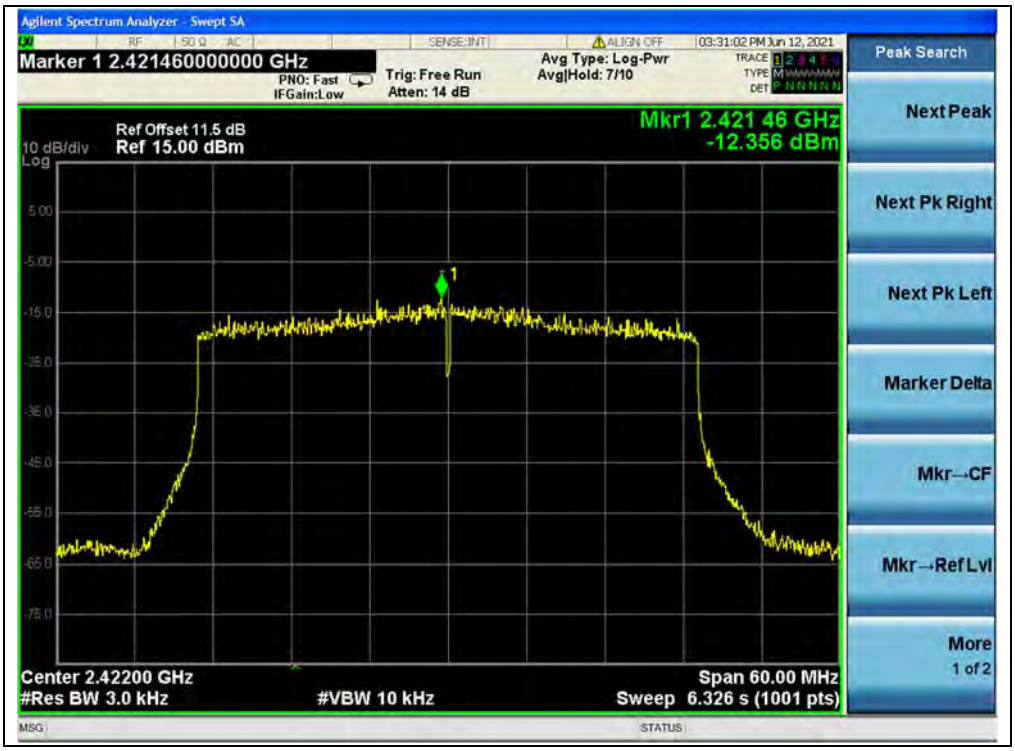
(Channel 11, 802.11ax (HEW20) RU106, ANT 1)

802.11ax (HEW40) Mode

A.Test Verdict:

Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
		ANT 0	ANT 1			
3	2422	-12.36	-12.33	-9.33	8	PASS
6	2437	-12.84	-12.23	-9.51	8	PASS
9	2452	-12.41	-12.64	-9.51	8	PASS
Note: Directional gain = -3.5dBi +10log(2) = -0.49dBi＜6dBi, so the power density limit is 8 dBm/3kHz.						

B.Test Plot:



(Channel 3, 802.11ax (HEW40), ANT 0)

(Channel 6, 802.11ax (HEW40), ANT 0)

(Channel 9, 802.11ax (HEW40), ANT 0)

(Channel 3, 802.11ax (HEW40), ANT 1)

(Channel 6, 802.11ax (HEW40), ANT 1)

(Channel 9, 802.11ax (HEW40), ANT 1)

2.7. Conducted Emission

2.7.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

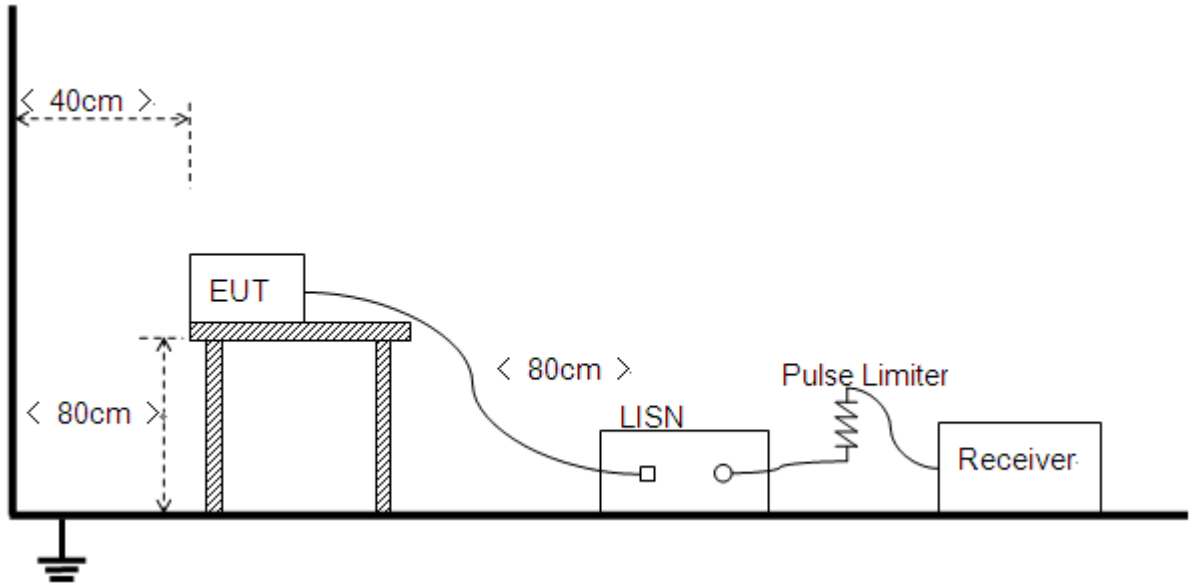
Note:

(a) The lower limit shall apply at the band edges.

(b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

2.7.2. Test Description

Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10 2013.

2.7.3. Test Result

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A.Test Setup:

Test Mode: EUT+ Adapter + Earphone + WIFI TX

Test Voltage: AC 120V/60Hz

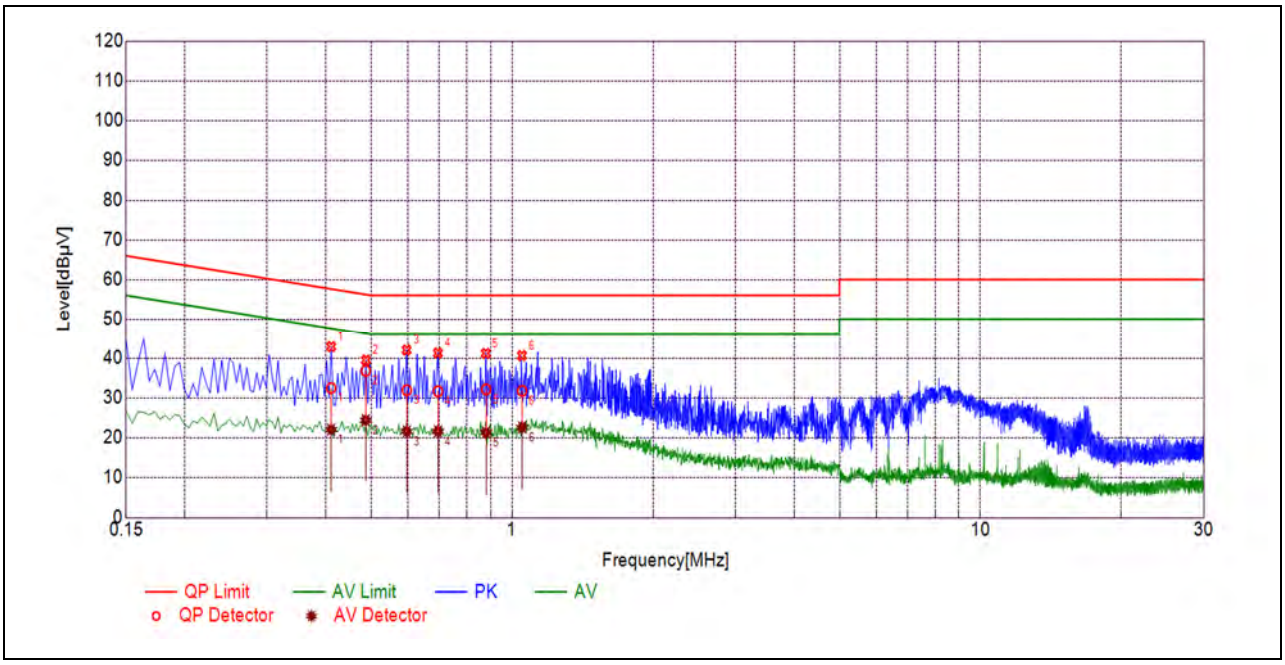
The measurement results are obtained as below:

$E\ [dB\mu V] = U_R + L_{Cable\ loss}\ [dB] + A_{Factor}$

U_R: Receiver Reading

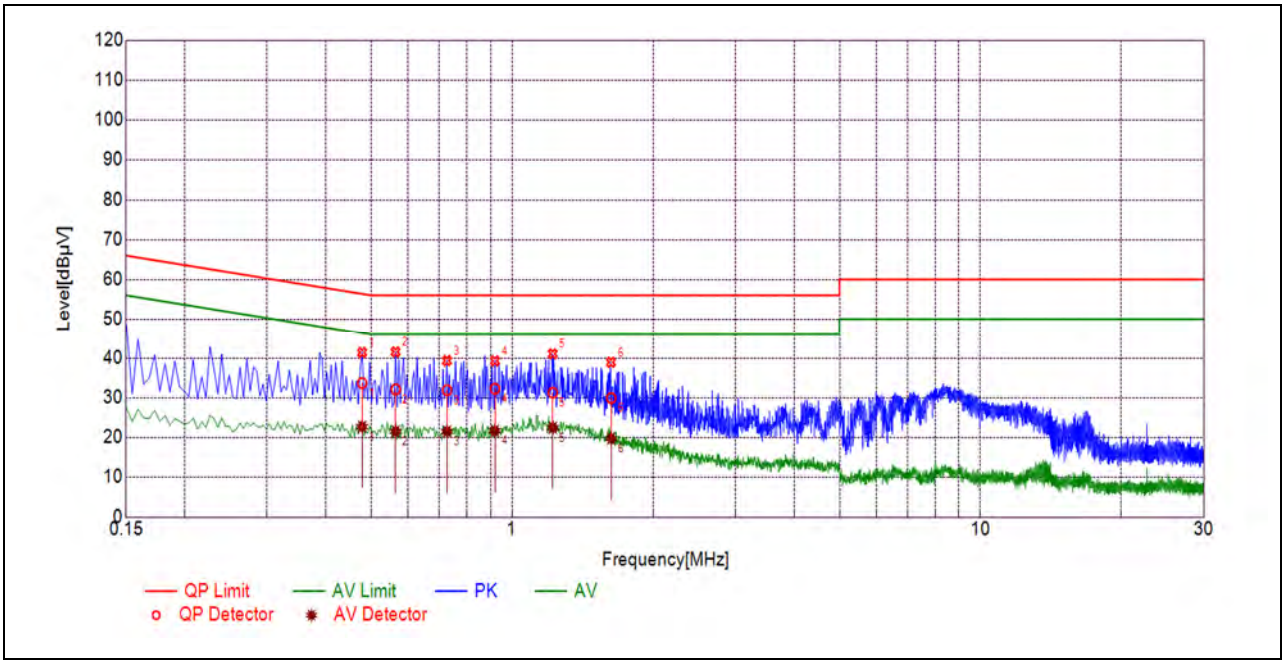
A_{Factor}: Voltage division factor of LISN

B.Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.4108	32.43	22.00	57.63	47.63	Line	PASS
2	0.4871	36.80	24.36	56.22	46.22		PASS
3	0.5959	31.91	21.55	56.00	46.00		PASS
4	0.6946	31.64	21.55	56.00	46.00		PASS
5	0.8797	32.12	21.28	56.00	46.00		PASS
6	1.0506	31.74	22.54	56.00	46.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.4785	33.67	22.66	56.37	46.37	Neutral	PASS
2	0.5641	32.08	21.48	56.00	46.00		PASS
3	0.7264	31.86	21.45	56.00	46.00		PASS
4	0.9191	32.24	21.65	56.00	46.00		PASS
5	1.2221	31.22	22.40	56.00	46.00		PASS
6	1.6274	29.87	19.68	56.00	46.00		PASS

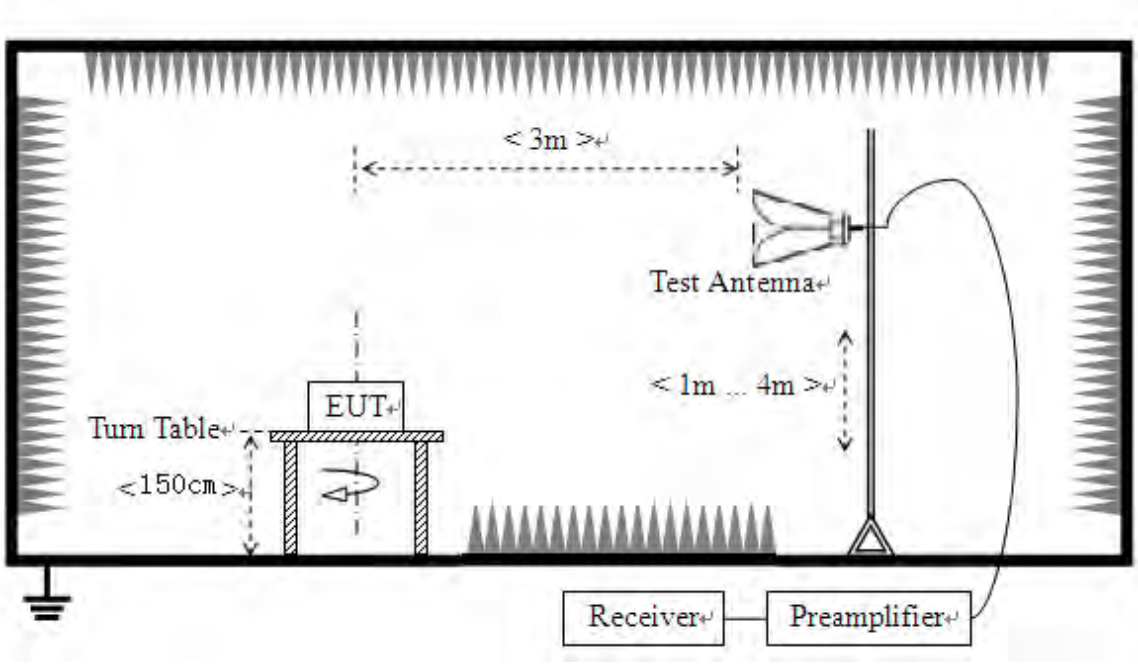
2.8. Restricted Frequency Bands

2.8.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

2.8.2. Test Description

Test Setup



The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:
Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

2.8.3. Test Procedure

KDB 558074 Section 8.6 and 8.7 was used in order to prove compliance.

2.8.4. Test Result

The lowest and highest channels are tested to verify Restricted Frequency Bands.
The measurement results are obtained as below:
E [dBμV/m] =U_R + A_T + A_{Factor} [dB]; A_T =$L_{Cable\ loss}$ [dB]-G_{preamp} [dB]
A_T: Total correction Factor except Antenna
U_R: Receiver Reading
G_{preamp}: Preamplifier Gain
A_{Factor}: Antenna Factor at 3m

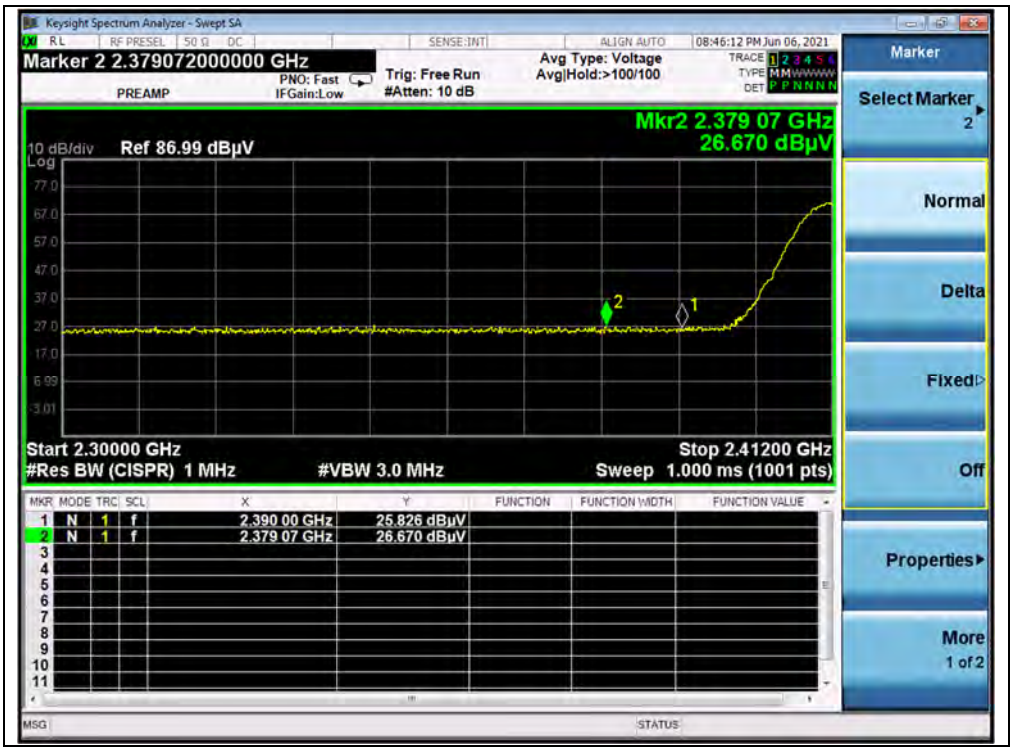
Note: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

802.11b Mode

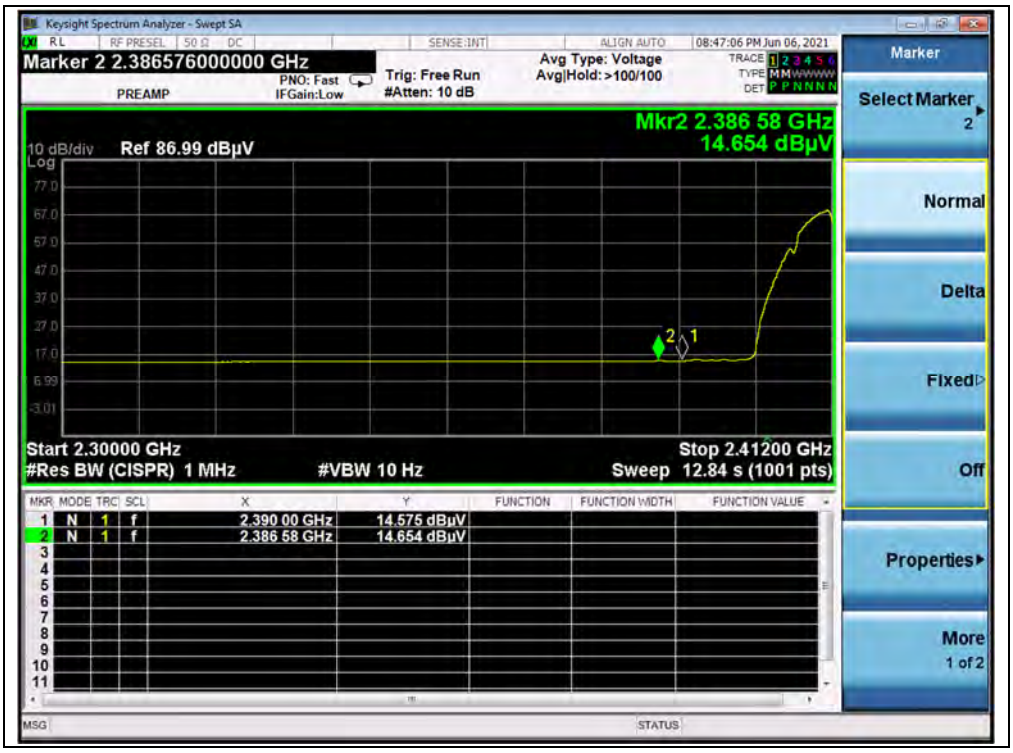
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2379.07	PK	26.67	6.74	27.20	60.61	74	PASS
1	2386.58	AV	14.65	6.74	27.20	48.59	54	PASS
11	2484.57	PK	26.92	6.74	27.20	60.86	74	PASS
11	2487.19	AV	14.57	6.74	27.20	48.51	54	PASS

B.Test Plot:



(PEAK, Channel 1, 802.11b)



(AVERAGE, Channel 1, 802.11b)

(PEAK, Channel 11, 802.11b)

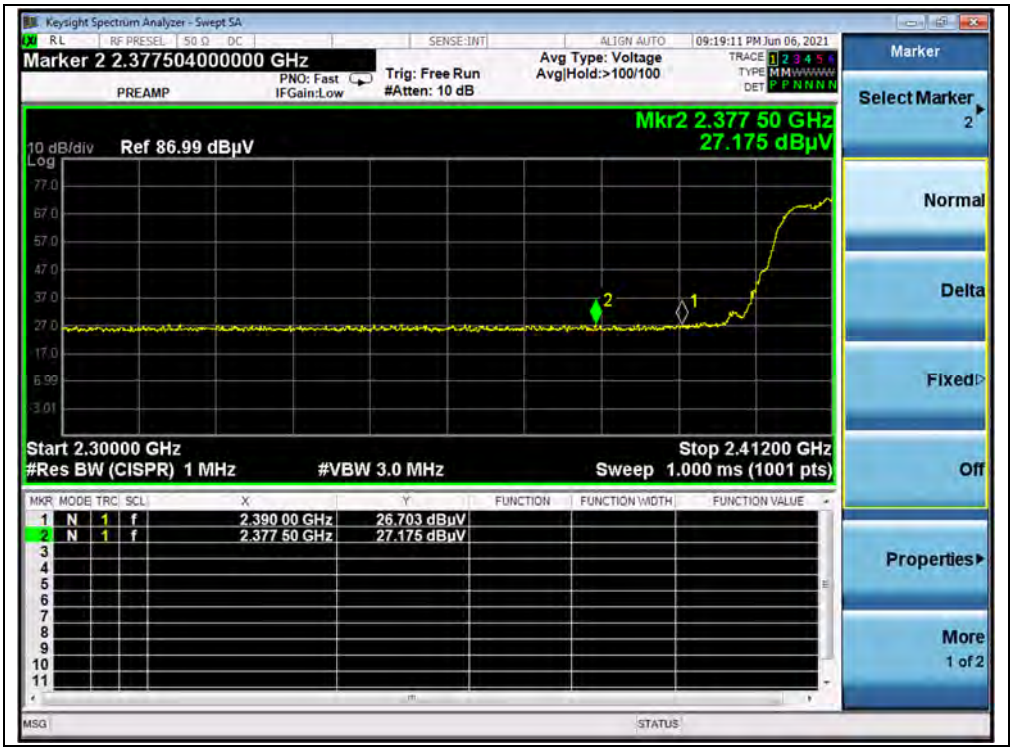
(AVERAGE, Channel 11, 802.11b)

802.11g Mode

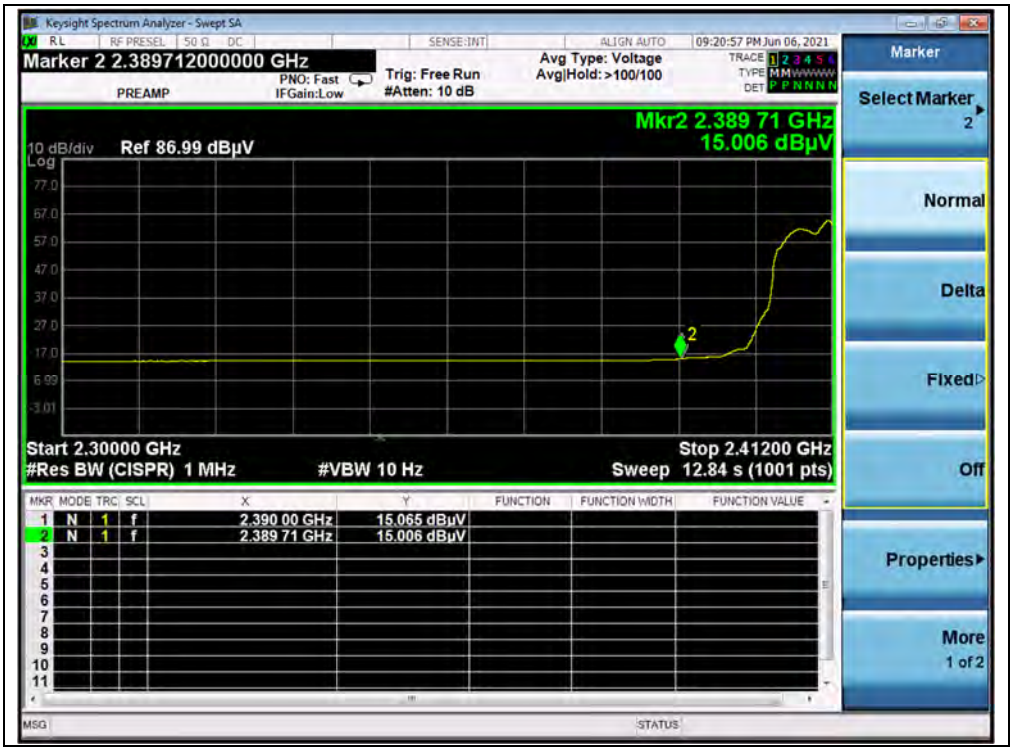
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2377.50	PK	27.18	6.74	27.20	61.12	74	PASS
1	2390.00	AV	15.07	6.74	27.20	49.01	54	PASS
11	2483.50	PK	27.31	6.74	27.20	61.25	74	PASS
11	2483.50	AV	16.16	6.74	27.20	50.10	54	PASS

B.Test Plot:

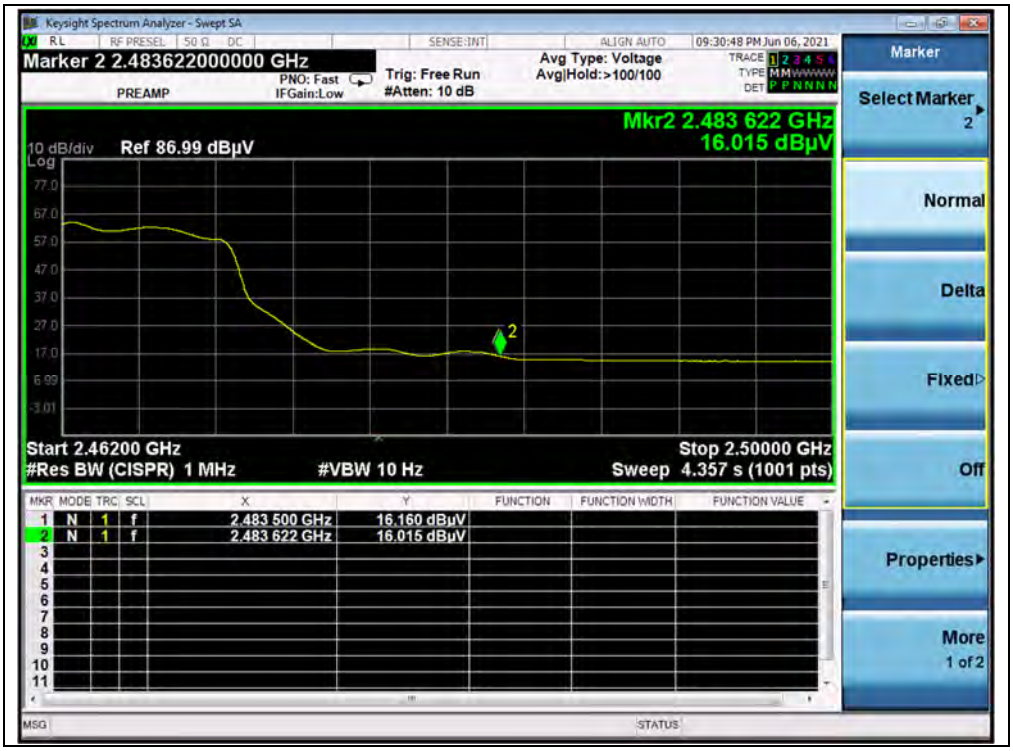


(PEAK, Channel 1, 802.11g)



(AVERAGE, Channel 1, 802.11g)

(PEAK, Channel 11, 802.11g)



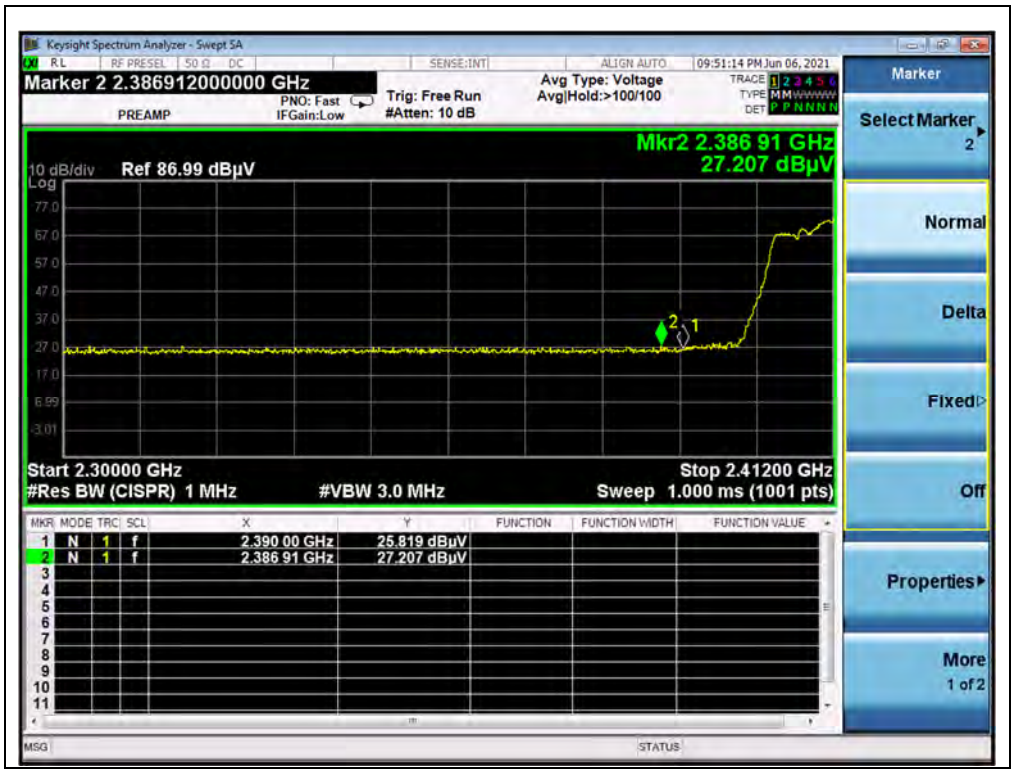
(AVERAGE, Channel 11, 802.11g)

802.11n (HT20) Mode

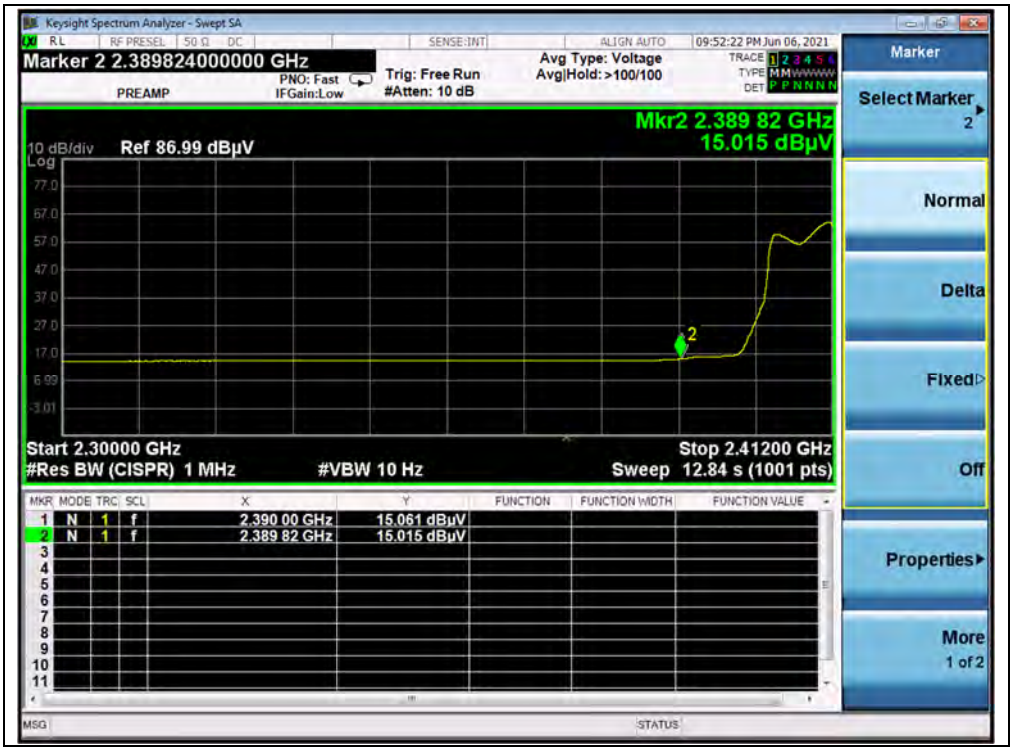
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2386.91	PK	27.21	6.74	27.20	61.15	74	PASS
1	2390.00	AV	15.06	6.74	27.20	49.00	54	PASS
11	2483.77	PK	27.23	6.74	27.20	61.17	74	PASS
11	2483.50	AV	14.85	6.74	27.20	48.79	54	PASS

B.Test Plot:

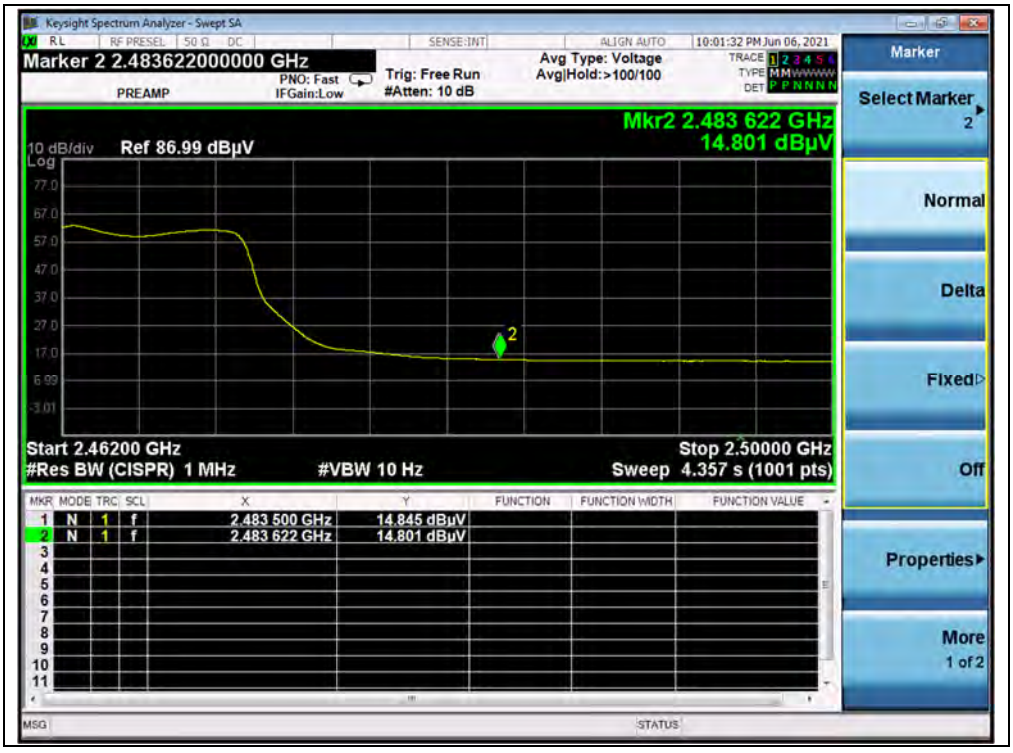


(PEAK, Channel 1, 802.11n (HT20))



(AVERAGE, Channel 1, 802.11n (HT20))

(PEAK, Channel 11, 802.11n (HT20))



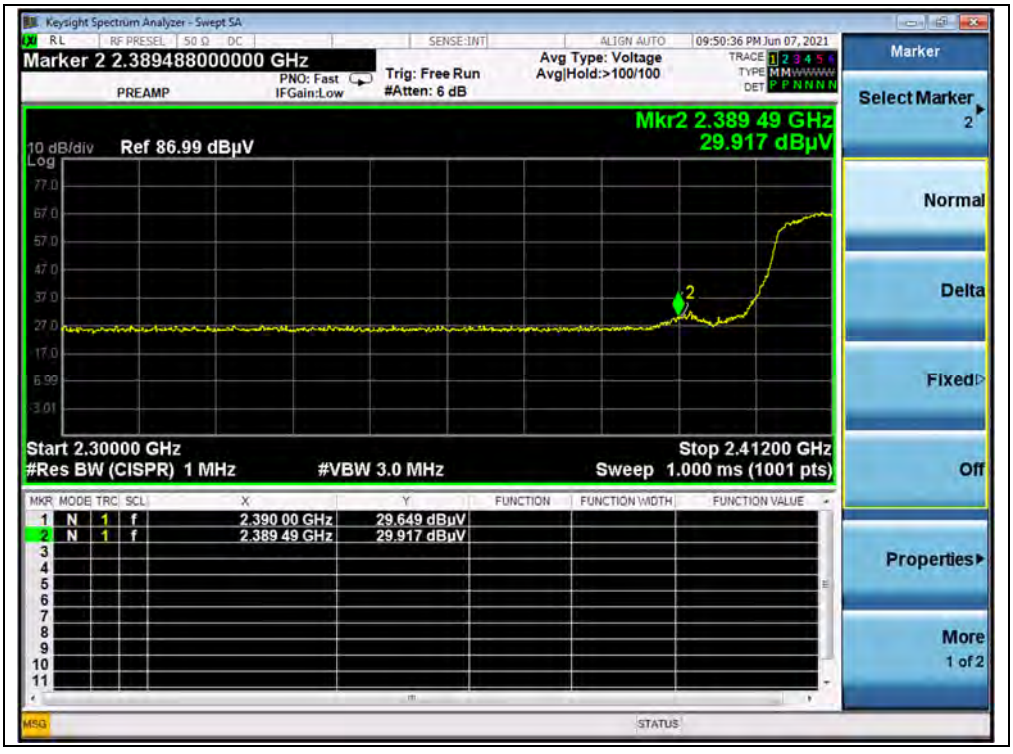
(AVERAGE, Channel 11, 802.11n (HT20))

802.11n (HT40) Mode

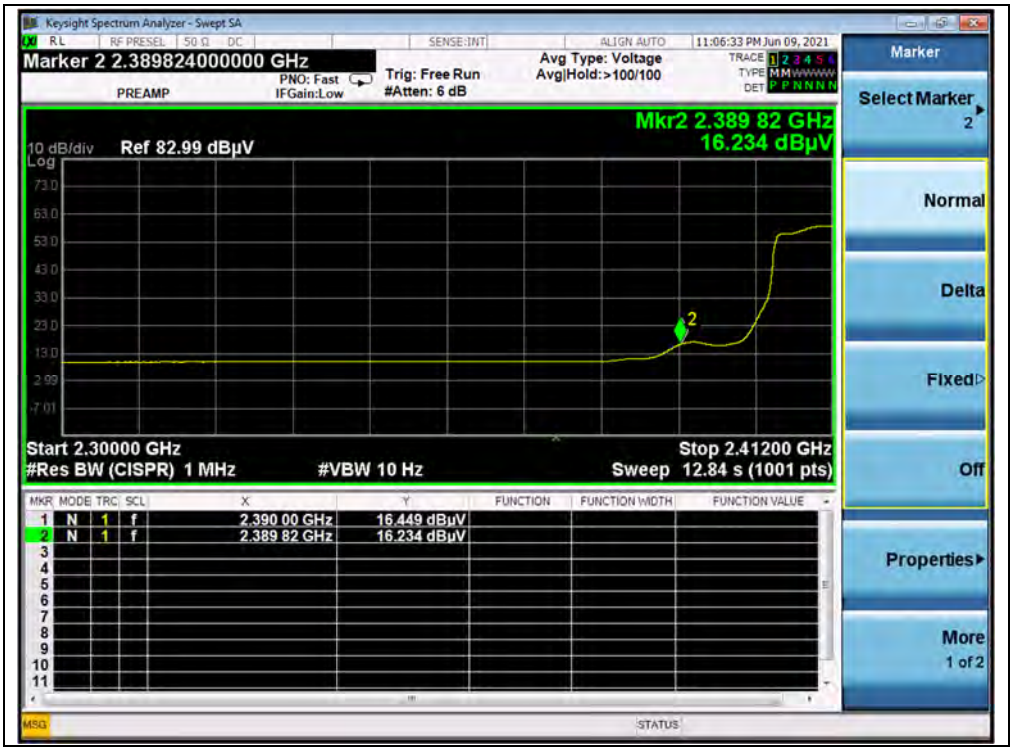
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
3	2389.49	PK	29.92	6.74	27.20	63.86	74	PASS
3	2390.00	AV	16.45	6.74	27.20	50.39	54	PASS
9	2484.12	PK	26.86	6.74	27.20	60.80	74	PASS
9	2483.50	AV	14.86	6.74	27.20	48.80	54	PASS

B.Test Plot:

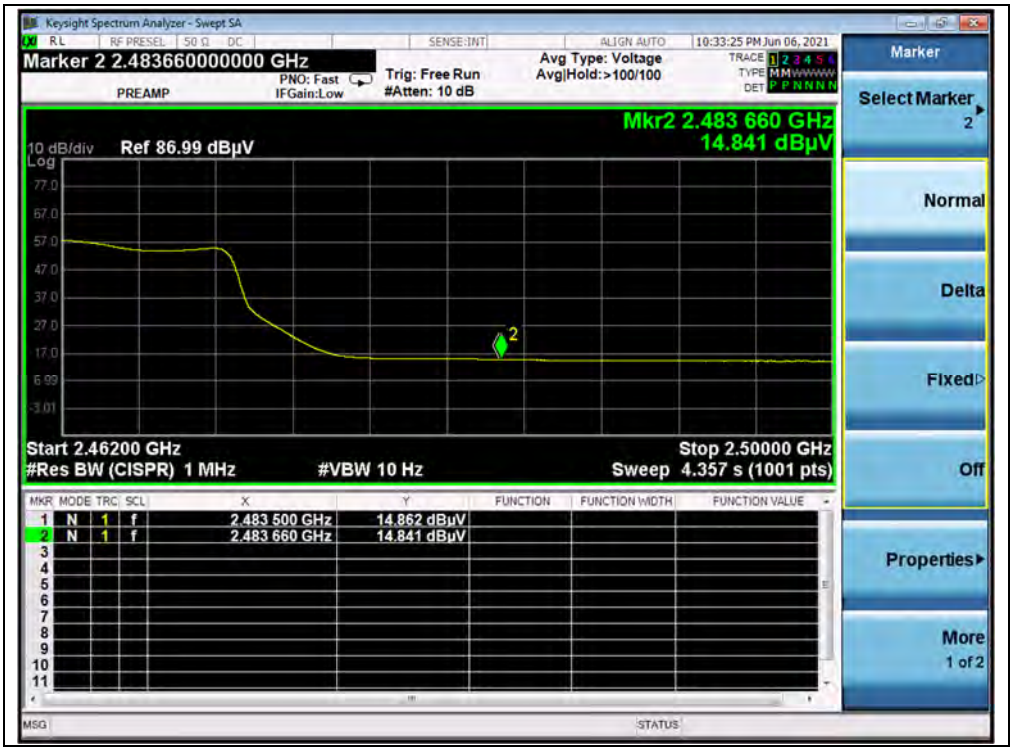


(PEAK, Channel 3, 802.11n (HT40))



(AVERAGE, Channel 3, 802.11n (HT40))

(PEAK, Channel 9, 802.11n (HT40))



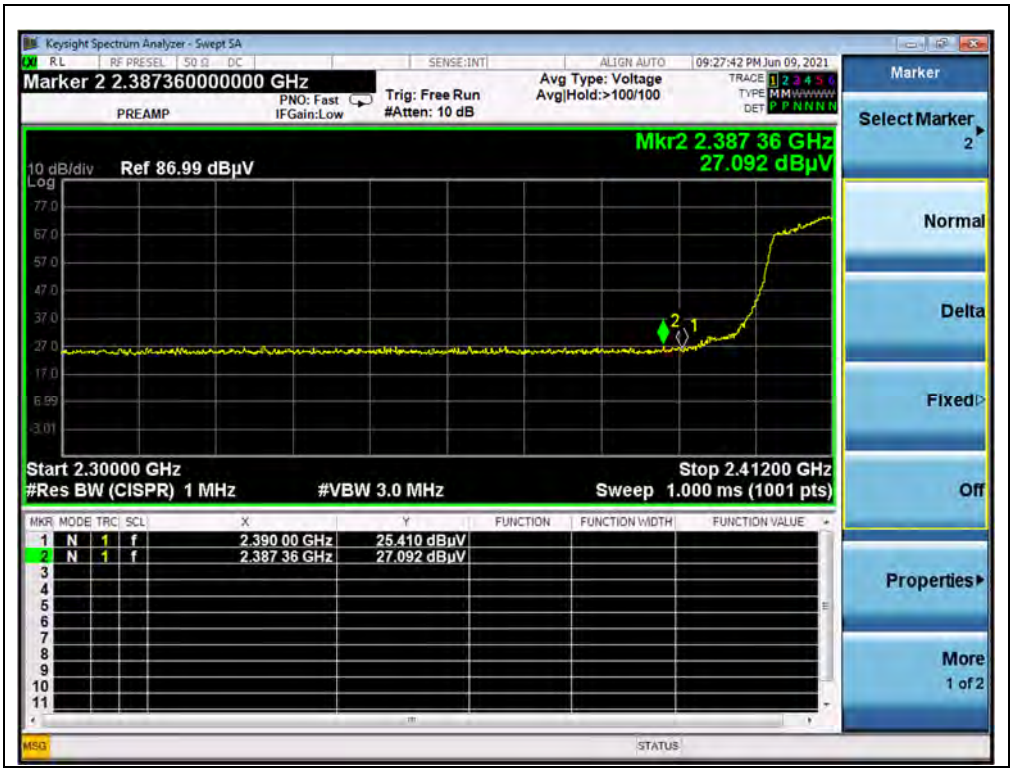
(AVERAGE, Channel 9, 802.11n (HT40))

802.11ac (VHT20) Mode

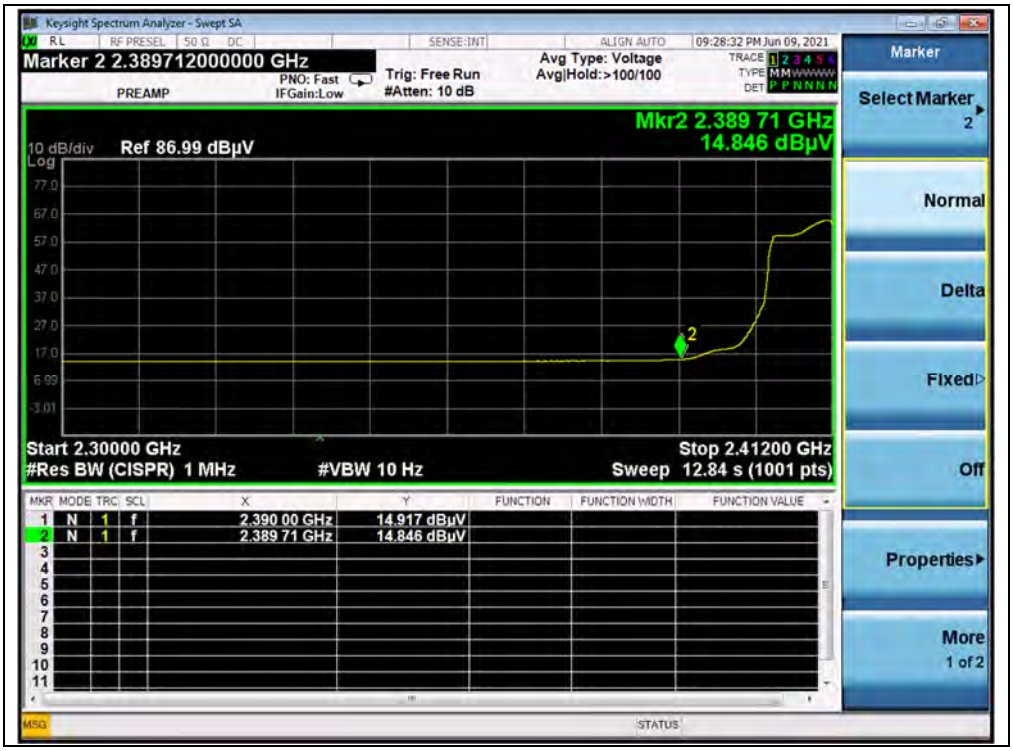
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2387.36	PK	27.09	6.74	27.20	61.03	74	PASS
1	2390.00	AV	14.92	6.74	27.20	48.86	54	PASS
11	2484.27	PK	26.70	6.74	27.20	60.64	74	PASS
11	2483.50	AV	15.41	6.74	27.20	49.35	54	PASS

B.Test Plot:

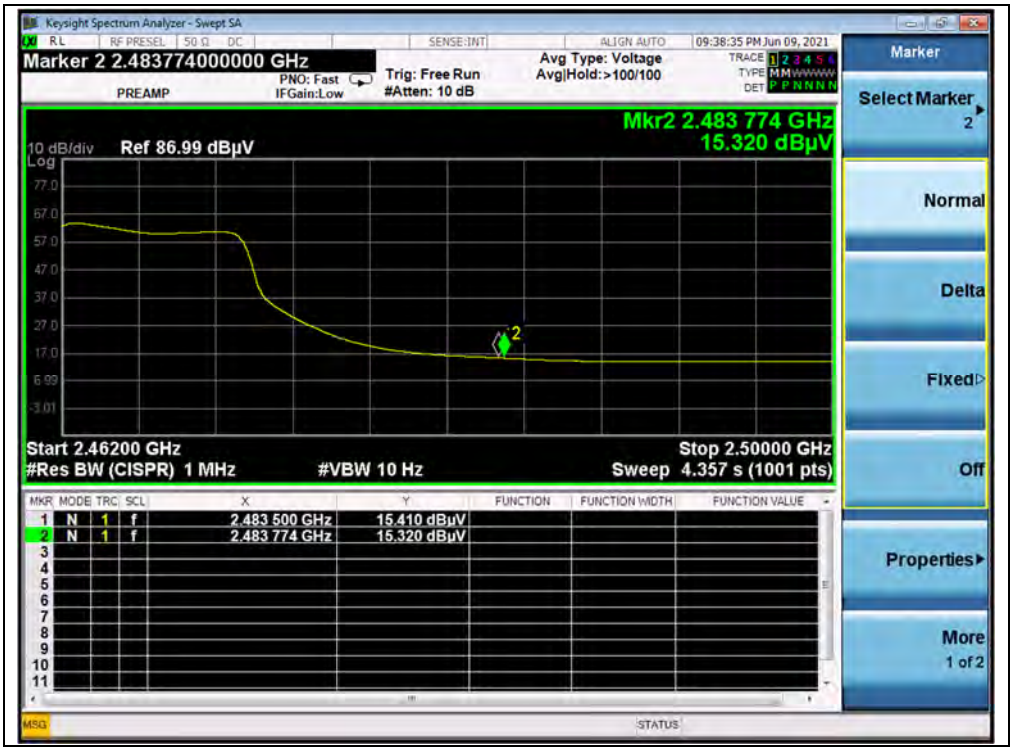


(PEAK, Channel 1, 802.11ac (VHT20))



(AVERAGE, Channel 1, 802.11ac (VHT20))

(PEAK, Channel 11, 802.11ac (VHT20))



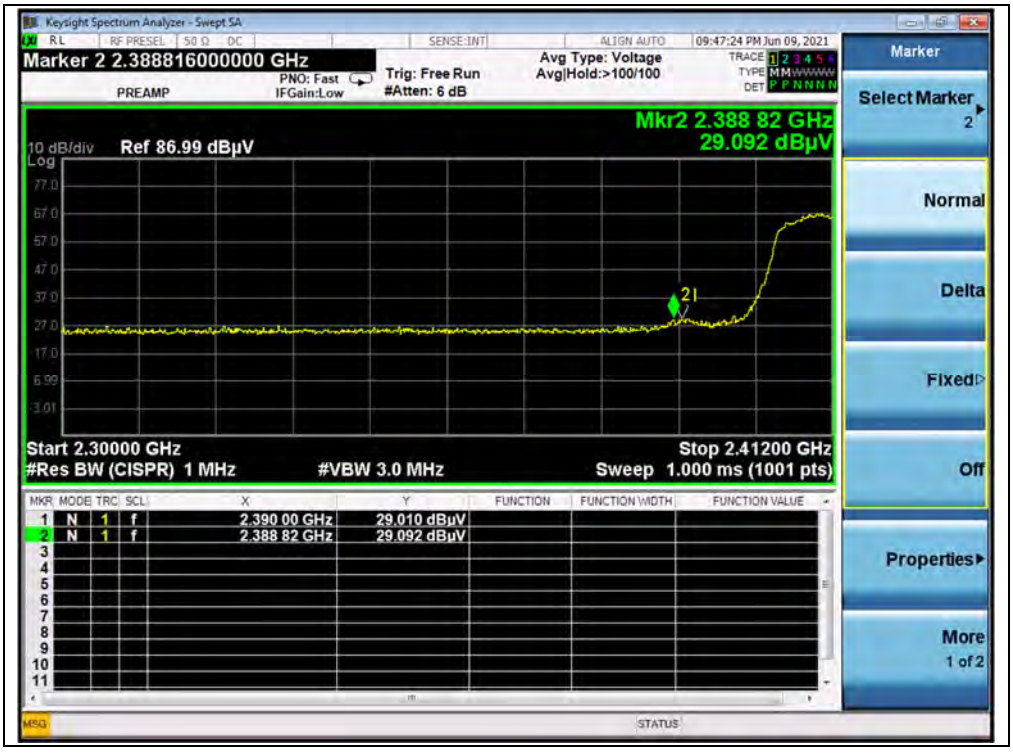
(AVERAGE, Channel 11, 802.11ac (VHT20))

802.11ac (VHT40) Mode

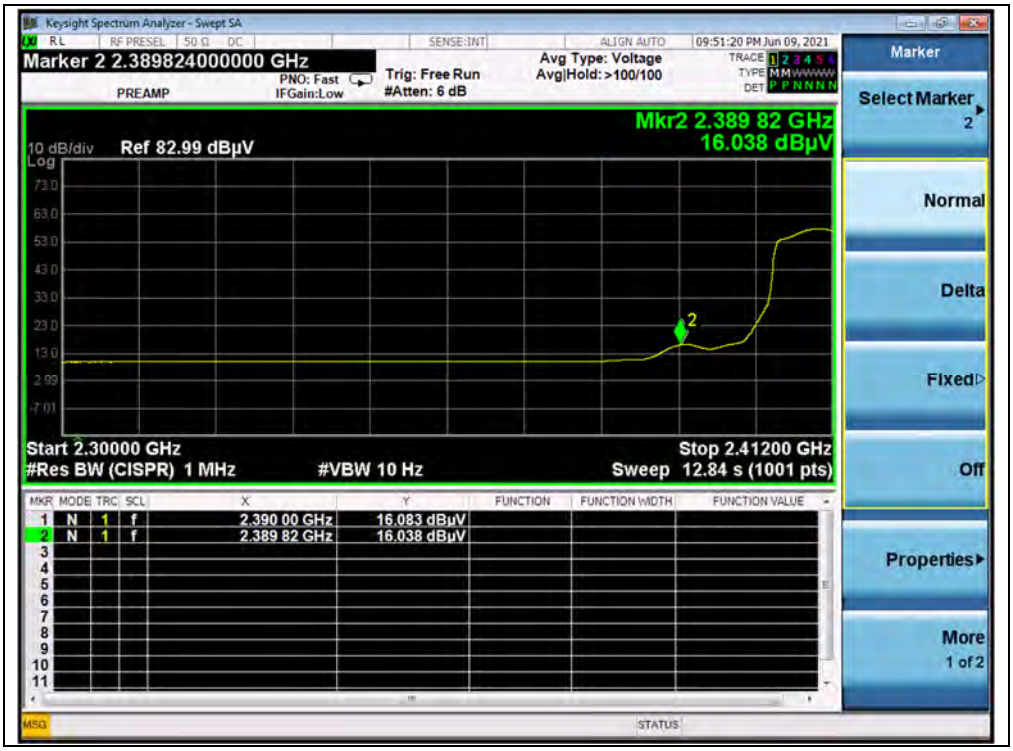
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
3	2388.82	PK	29.09	6.74	27.20	63.03	74	PASS
3	2390.00	AV	16.08	6.74	27.20	50.02	54	PASS
9	2484.46	PK	25.99	6.74	27.20	59.93	74	PASS
9	2483.50	AV	14.62	6.74	27.20	48.56	54	PASS

B.Test Plot:

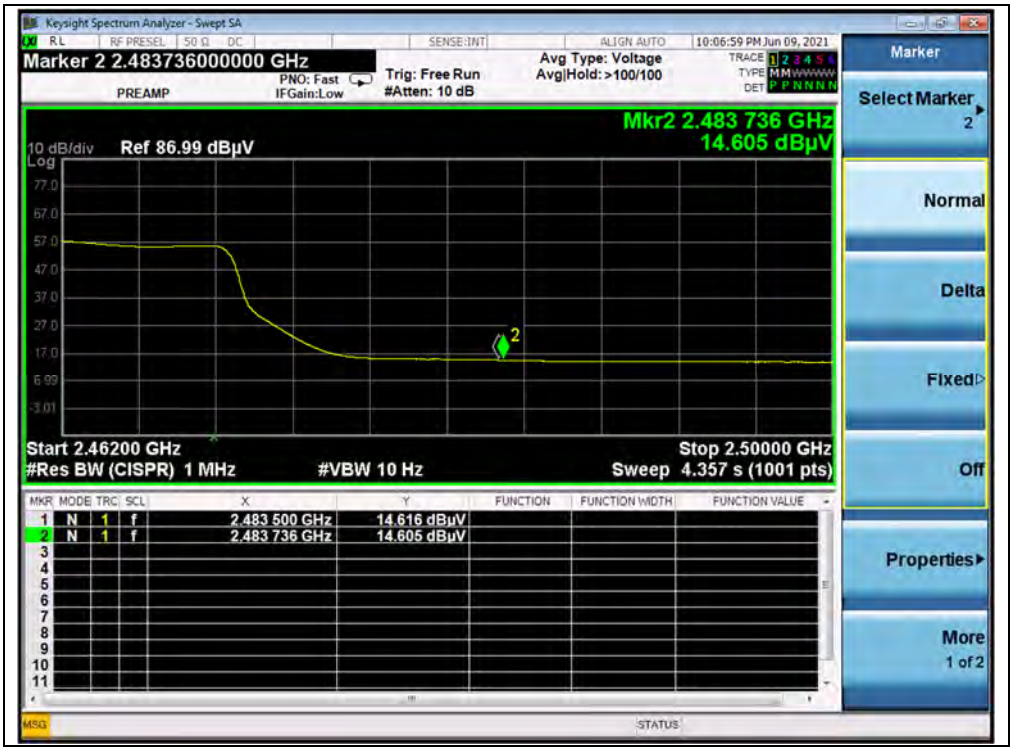


(PEAK, Channel 3, 802.11ac (VHT40))



(AVERAGE, Channel 3, 802.11ac (VHT40))

(PEAK, Channel 9, 802.11ac (VHT40))



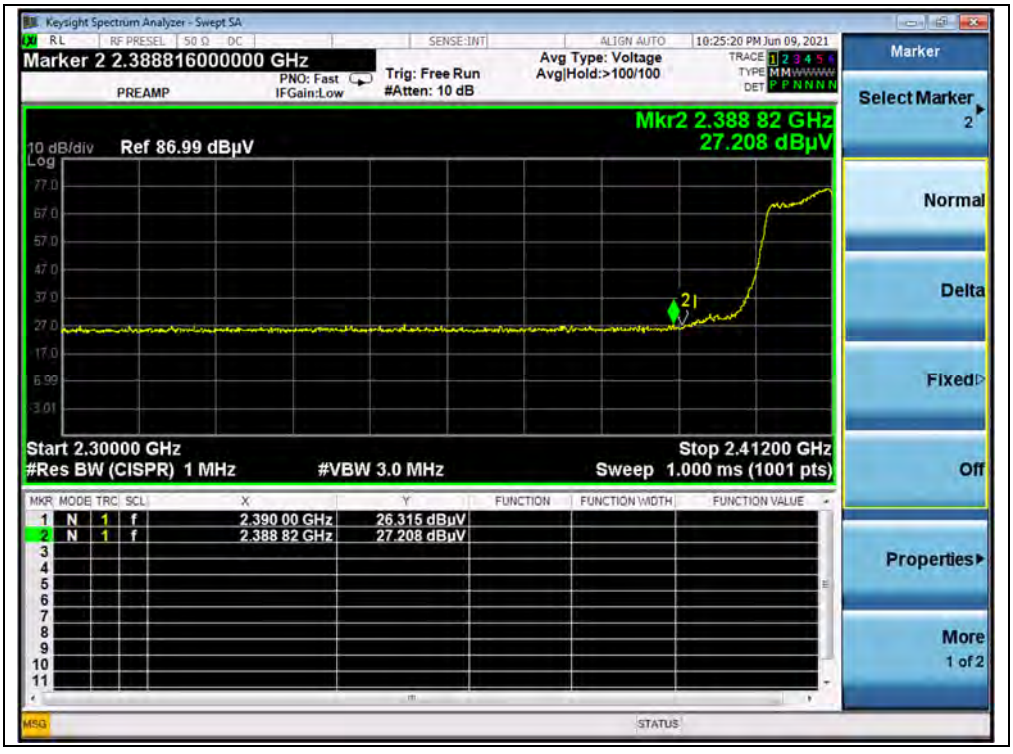
(AVERAGE, Channel 9, 802.11ac (VHT40))

802.11ax (HEW20) Mode

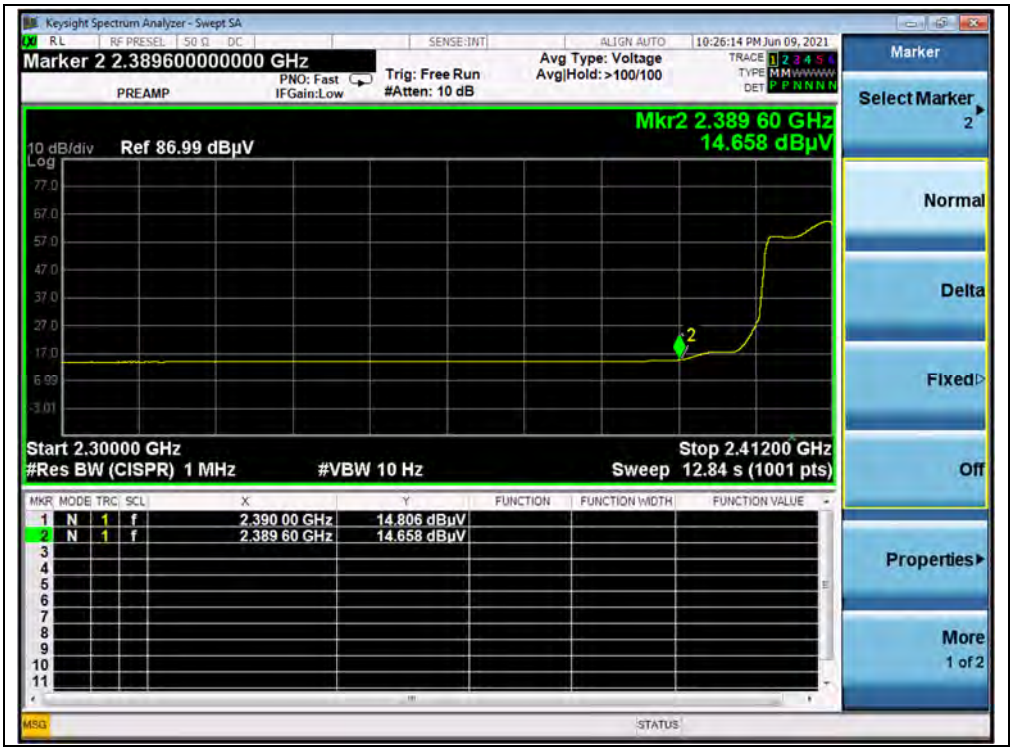
A.Test Verdict:

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2388.82	PK	27.21	6.74	27.20	61.15	74	PASS
1	2390.00	AV	14.81	6.74	27.20	48.75	54	PASS
11	2483.77	PK	28.04	6.74	27.20	61.98	74	PASS
11	2483.50	AV	15.76	6.74	27.20	49.70	54	PASS

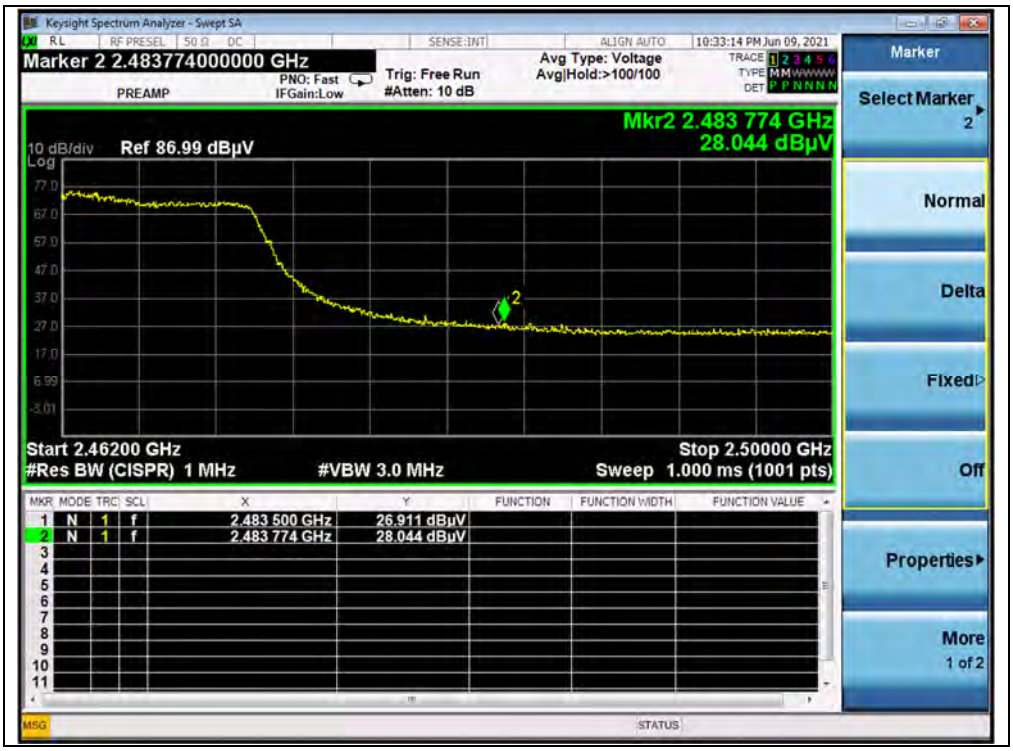
B.Test Plot:



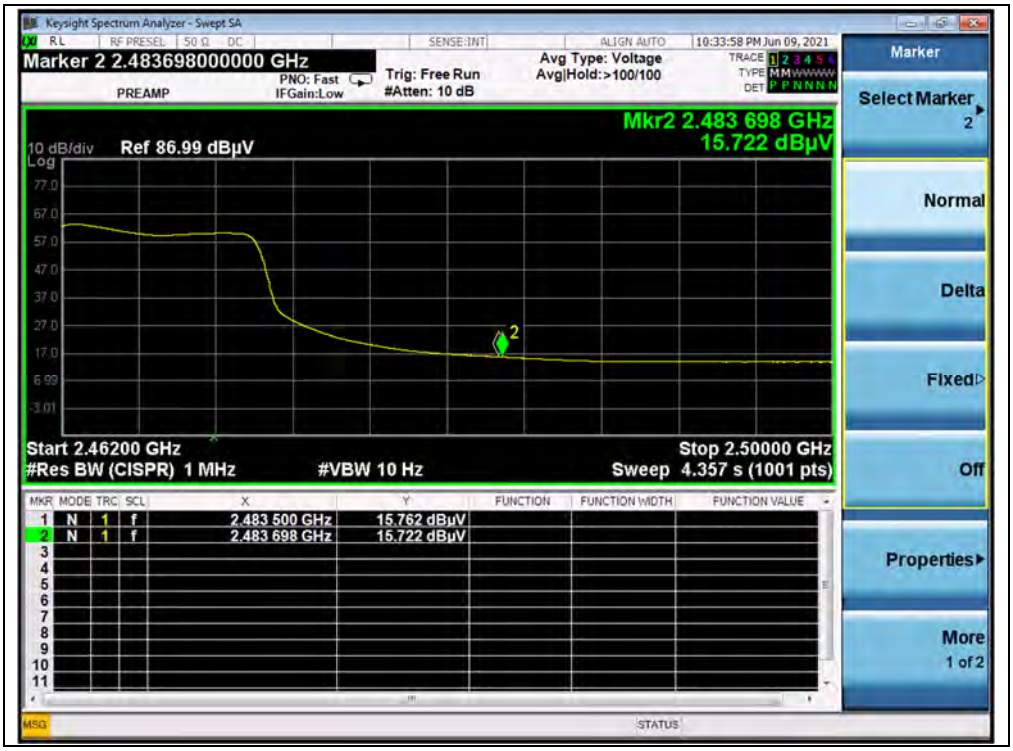
(PEAK, Channel 1, 802.11ax (HEW20))



(AVERAGE, Channel 1, 802.11ax (HEW20))



(PEAK, Channel 11, 802.11ax (HEW20))



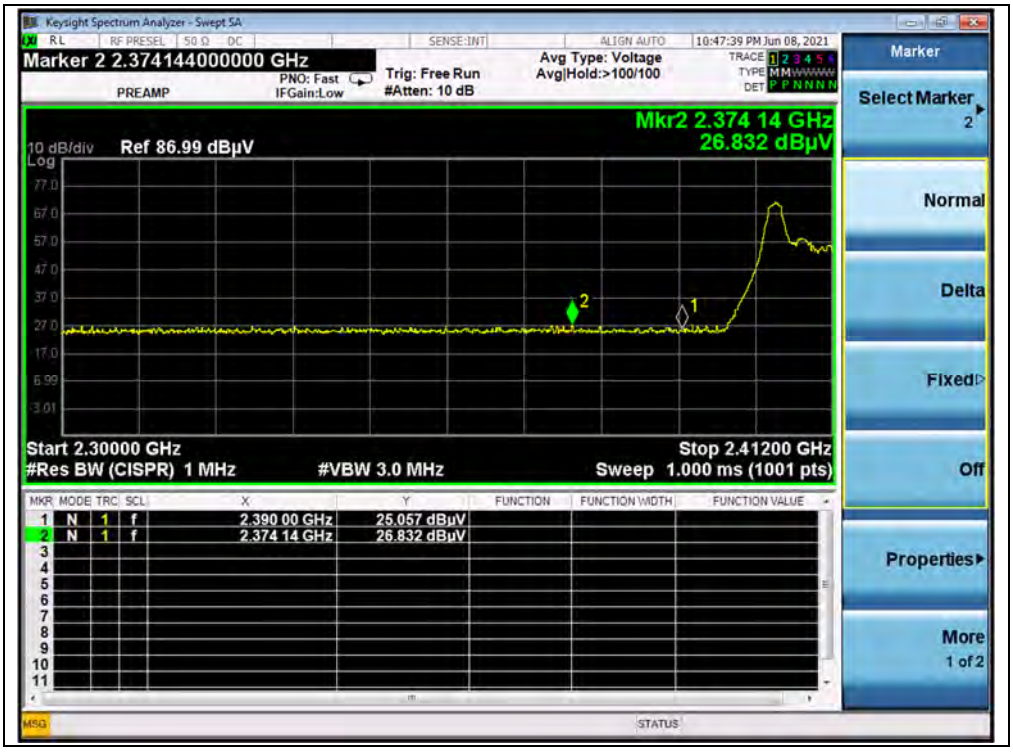
(AVERAGE, Channel 11, 802.11ax (HEW20))

802.11ax (HEW20) RU26 Mode

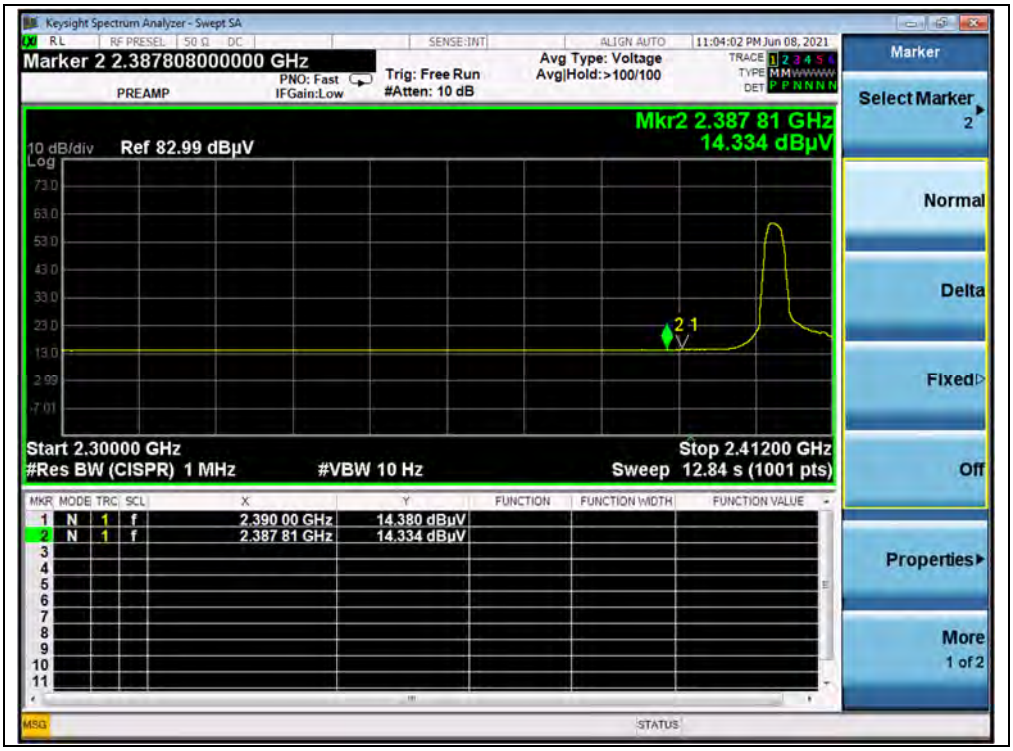
A.Test Verdict:

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2374.14	PK	26.83	6.74	27.20	60.77	74	PASS
1	2390.00	AV	14.38	6.74	27.20	48.32	54	PASS
11	2491.83	PK	27.08	6.74	27.20	61.02	74	PASS
11	2492.02	AV	14.01	6.74	27.20	47.95	54	PASS

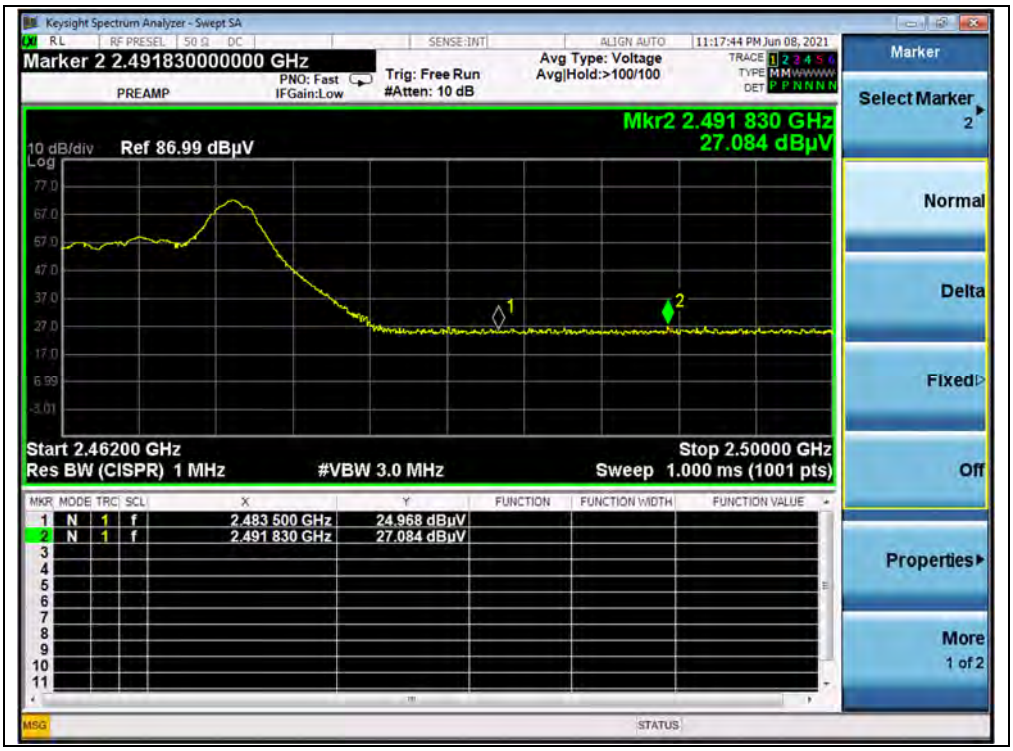
B.Test Plot:



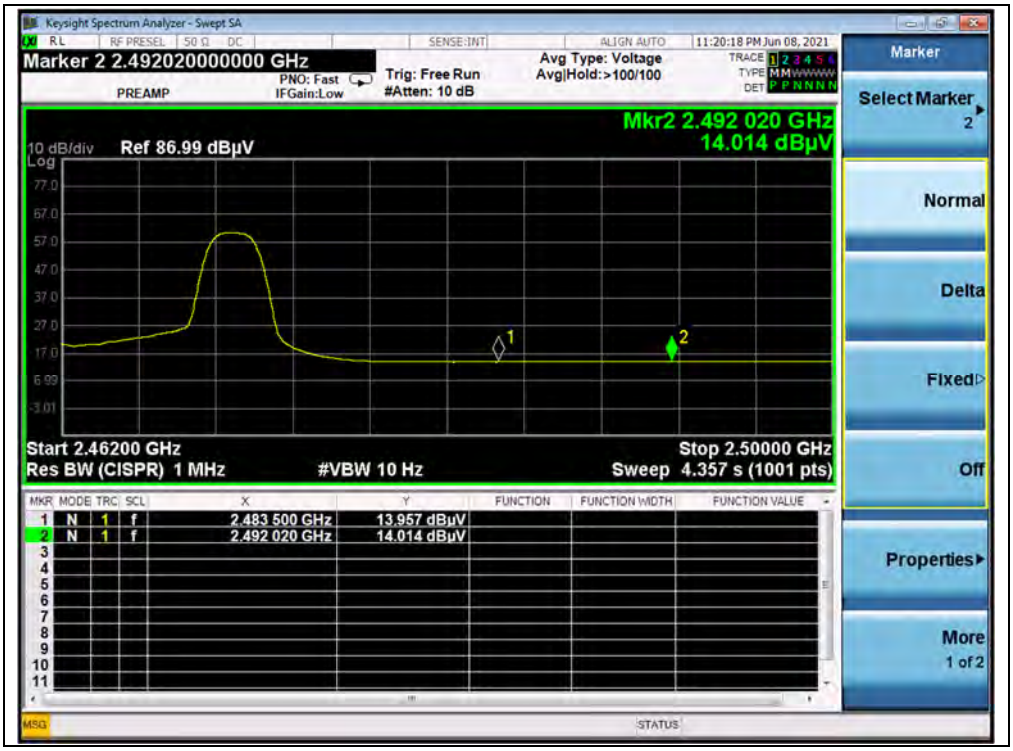
(PEAK, Channel 1, 802.11ax (HEW20) RU26)



(AVERAGE, Channel 1, 802.11ax (HEW20) RU26)



(PEAK, Channel 11, 802.11ax (HEW20) RU26)



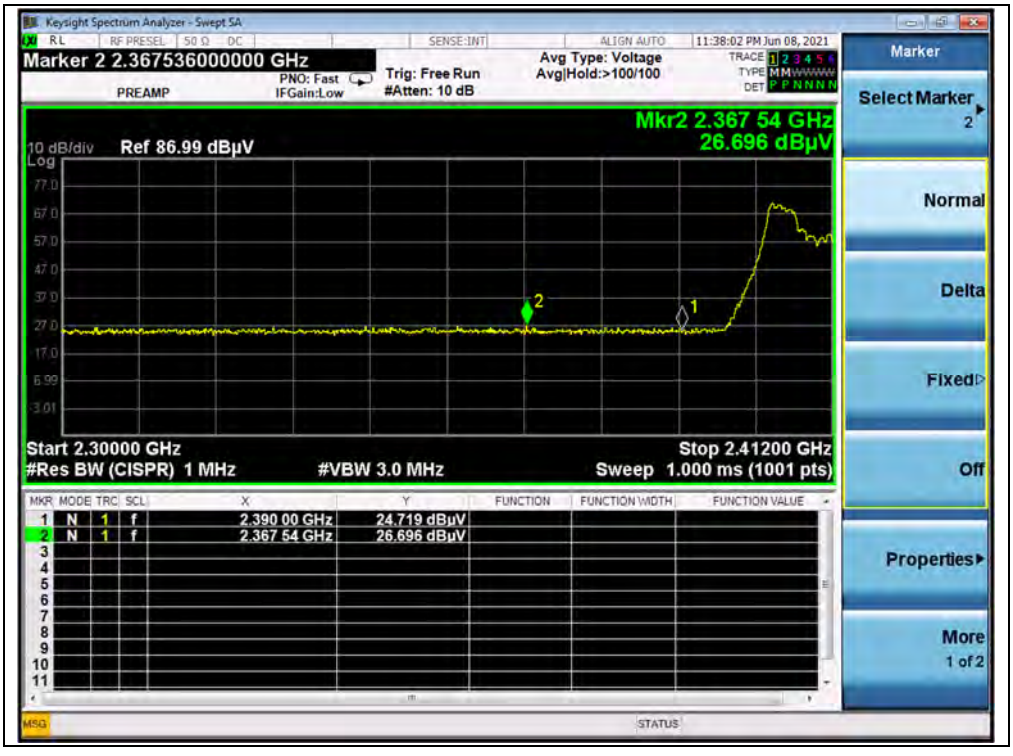
(AVERAGE, Channel 11, 802.11ax (HEW20) RU26)

802.11ax (HEW20) RU52 Mode

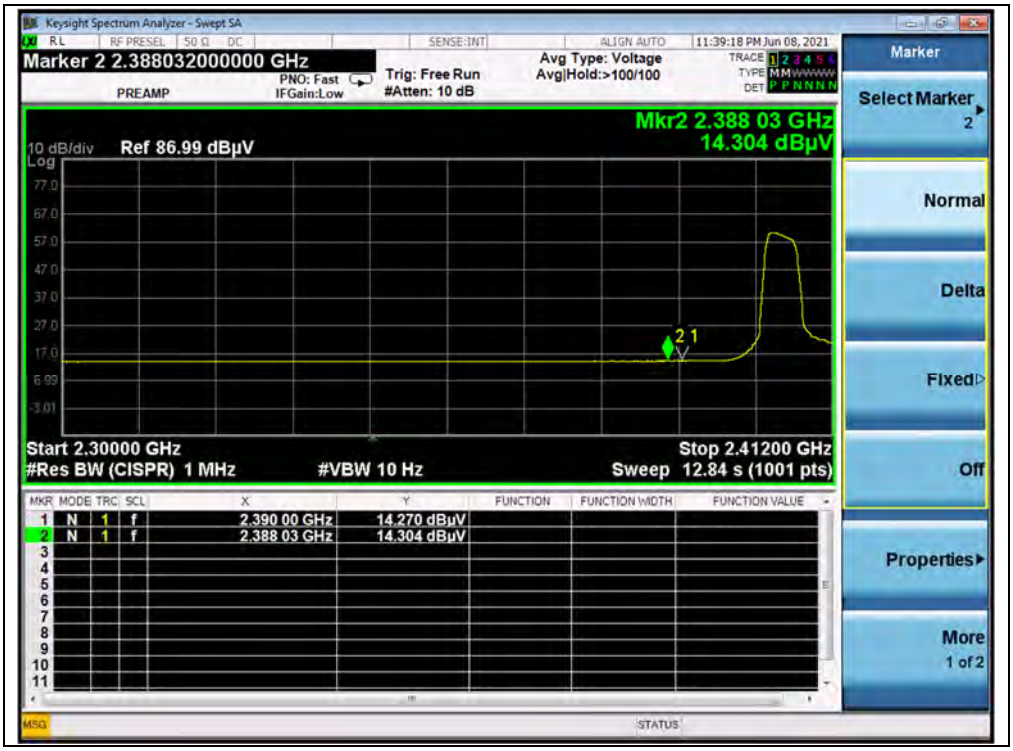
A.Test Verdict:

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2367.54	PK	26.70	6.74	27.20	60.64	74	PASS
1	2388.03	AV	14.30	6.74	27.20	48.24	54	PASS
11	2485.52	PK	26.79	6.74	27.20	60.73	74	PASS
11	2486.09	AV	14.02	6.74	27.20	47.96	54	PASS

B.Test Plot:

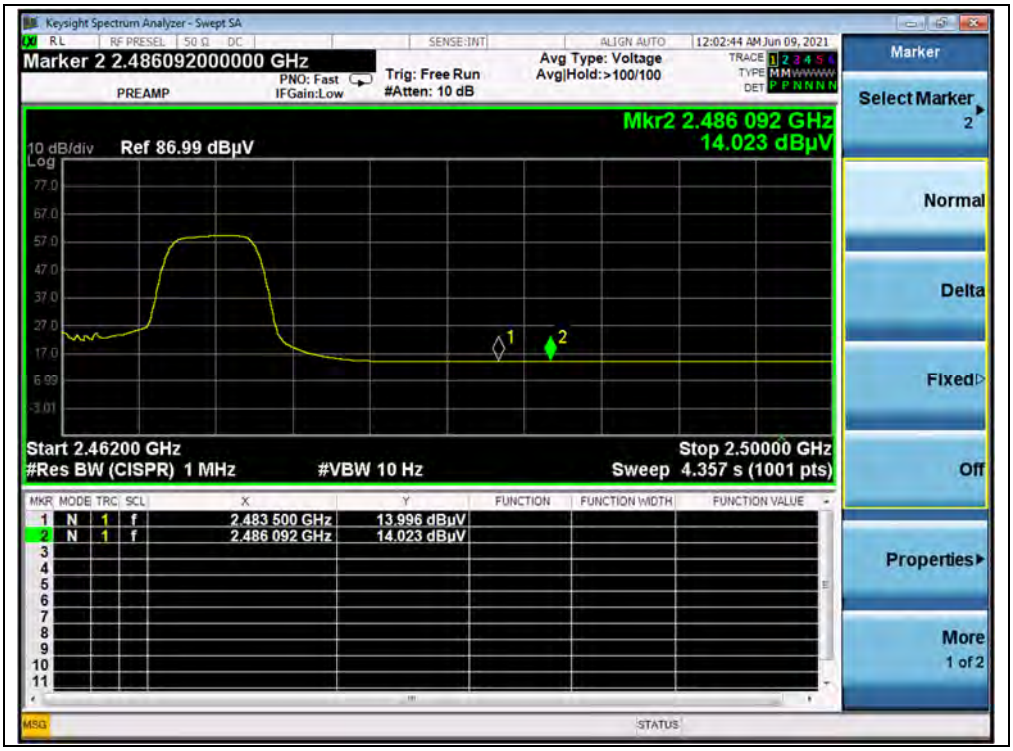


(PEAK, Channel 1, 802.11ax (HEW20) RU52)



(AVERAGE, Channel 1, 802.11ax (HEW20) RU52)

(PEAK, Channel 11, 802.11ax (HEW20) RU52)



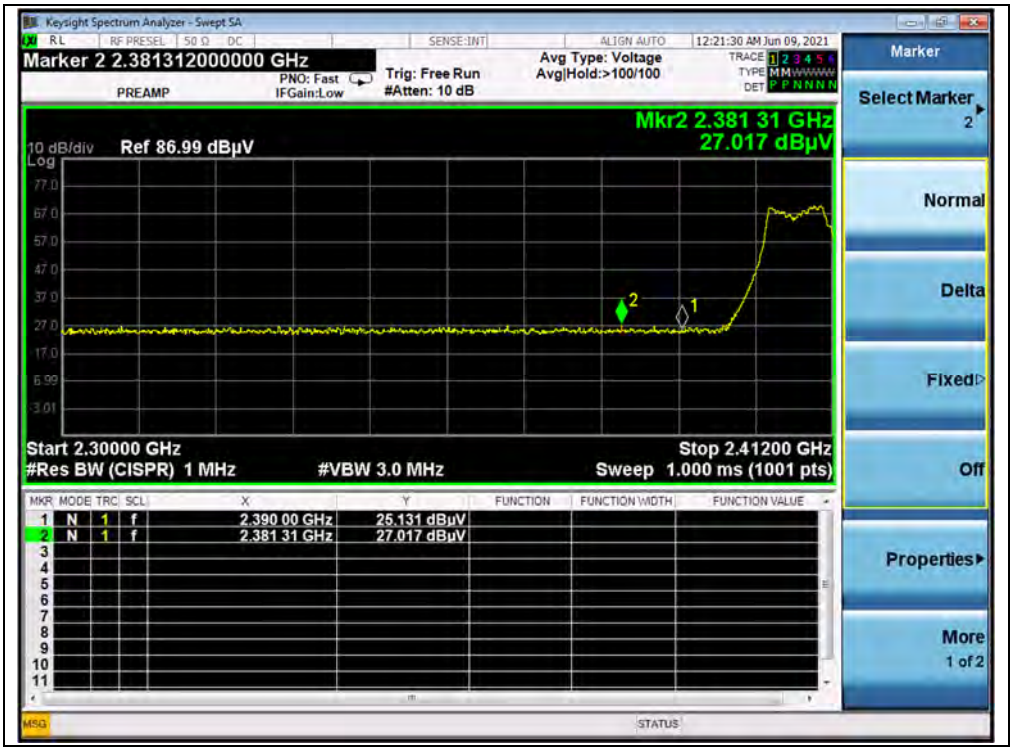
(AVERAGE, Channel 11, 802.11ax (HEW20) RU52)

802.11ax (HEW20) RU106 Mode

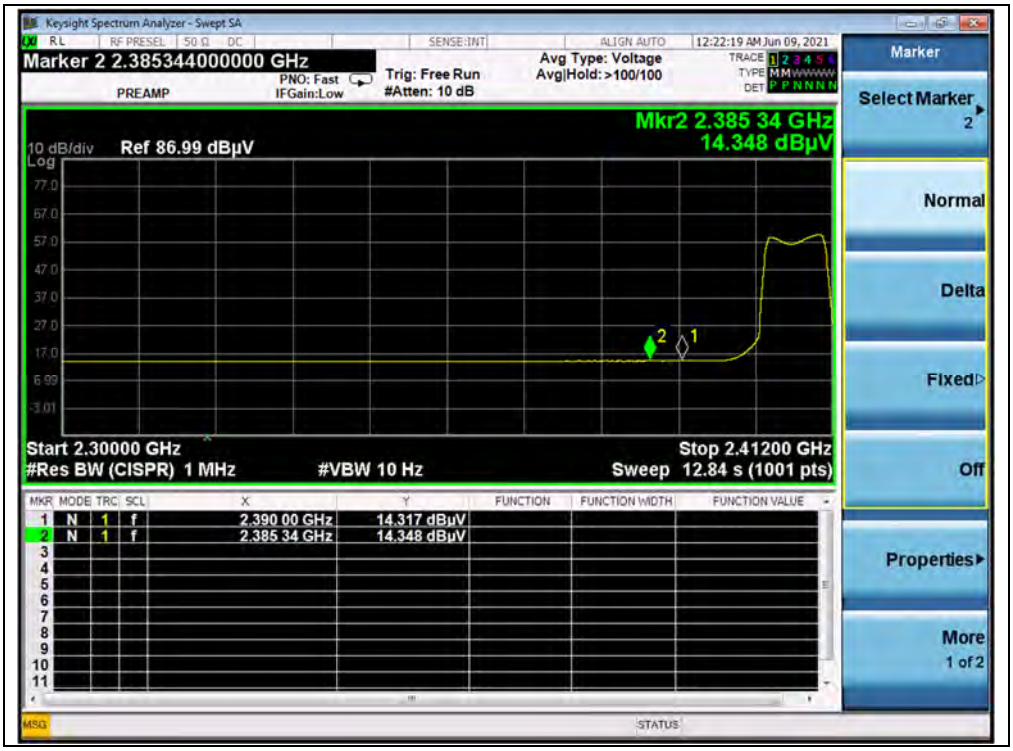
A.Test Verdict:

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2381.31	PK	27.02	6.74	27.20	60.96	74	PASS
1	2385.34	AV	14.35	6.74	27.20	48.29	54	PASS
11	2385.34	PK	14.35	6.74	27.20	48.29	74	PASS
11	2487.92	AV	14.04	6.74	27.20	47.98	54	PASS

B.Test Plot:

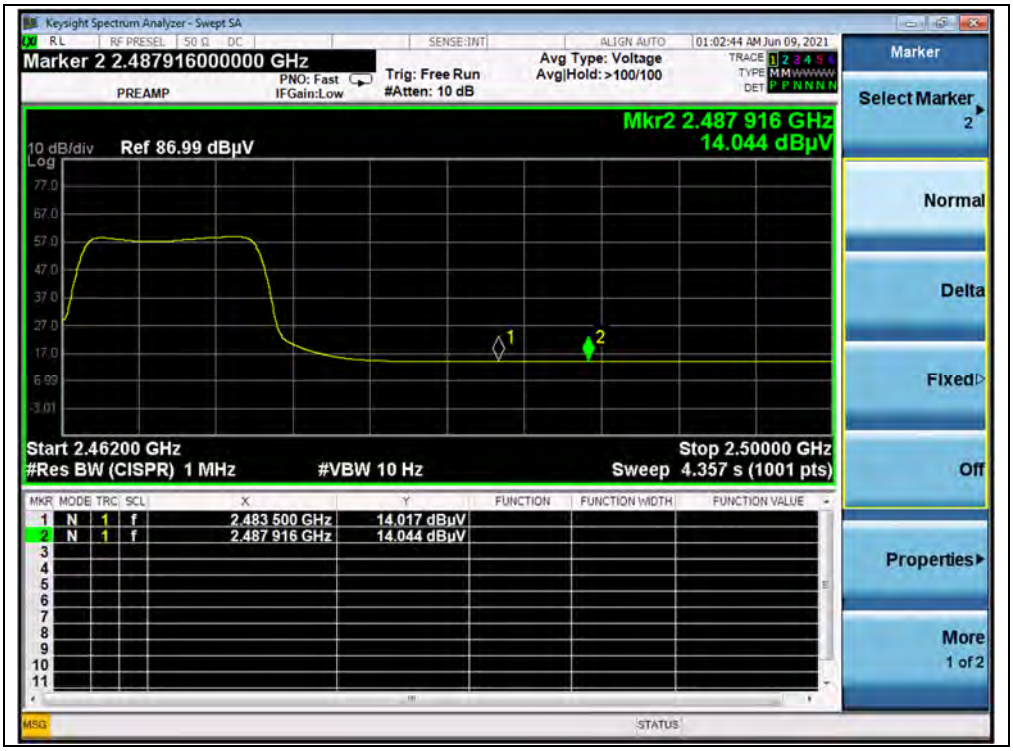


(PEAK, Channel 1, 802.11ax (HEW20) RU106)



(AVERAGE, Channel 1, 802.11ax (HEW20) RU106)

(PEAK, Channel 11, 802.11ax (HEW20) RU106)



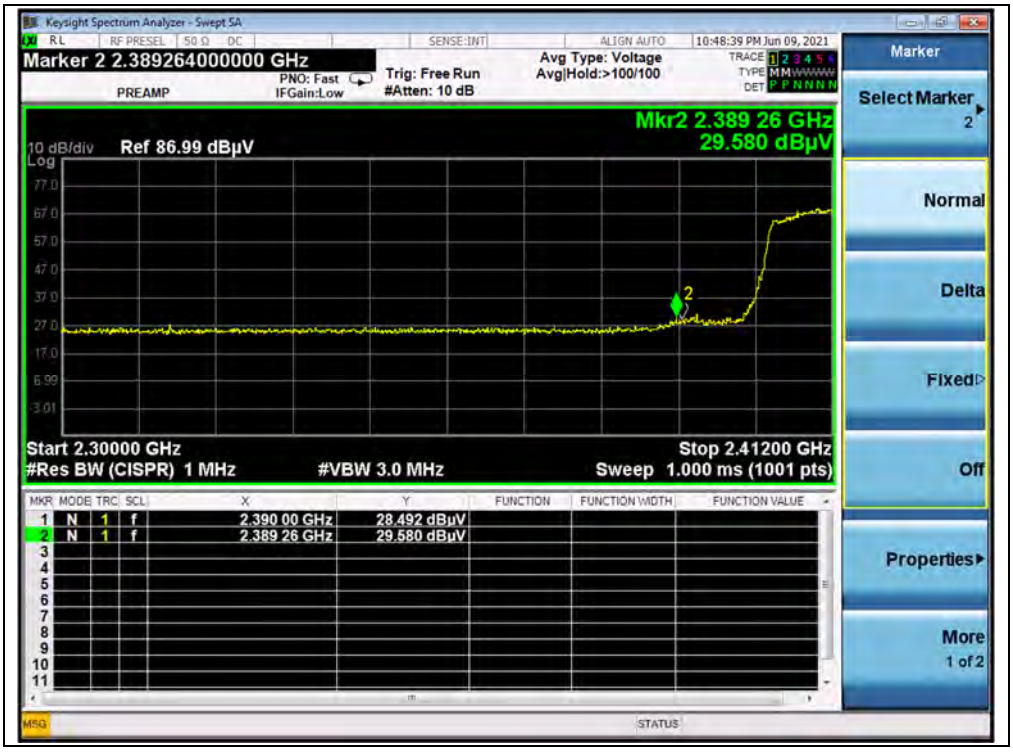
(AVERAGE, Channel 11, 802.11ax (HEW20) RU106)

802.11ax (HEW40) Mode

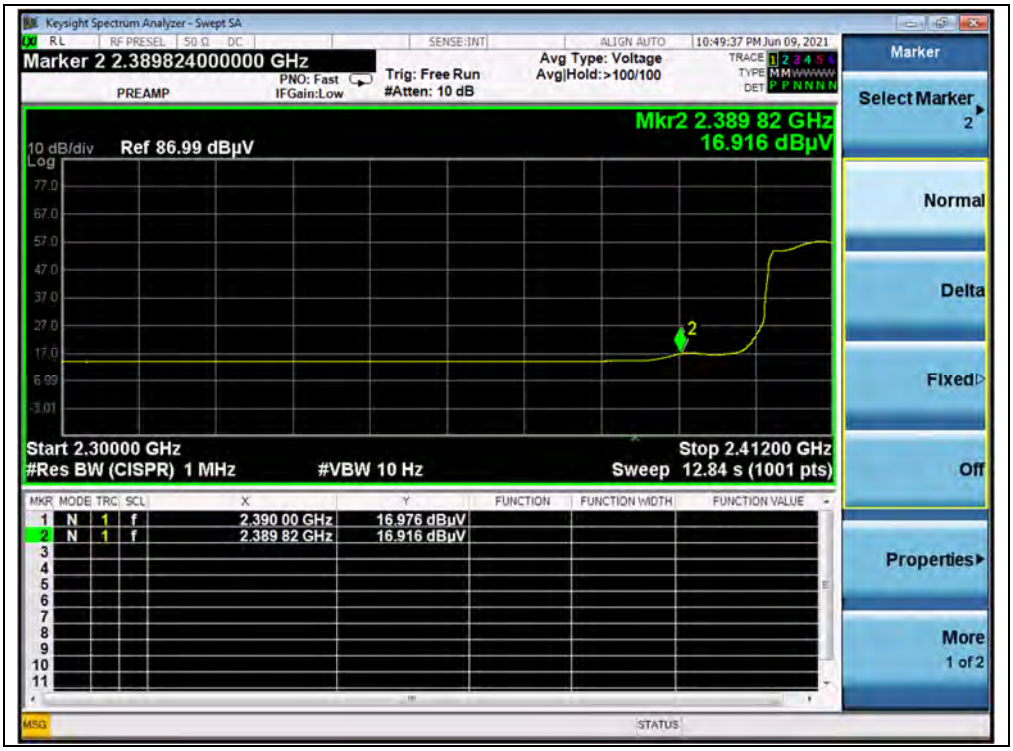
A.Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
3	2389.26	PK	29.58	6.74	27.20	63.52	74	PASS
3	2390.00	AV	16.98	6.74	27.20	50.92	54	PASS
9	2483.50	PK	26.49	6.74	27.20	60.43	74	PASS
9	2483.50	AV	14.62	6.74	27.20	48.56	54	PASS

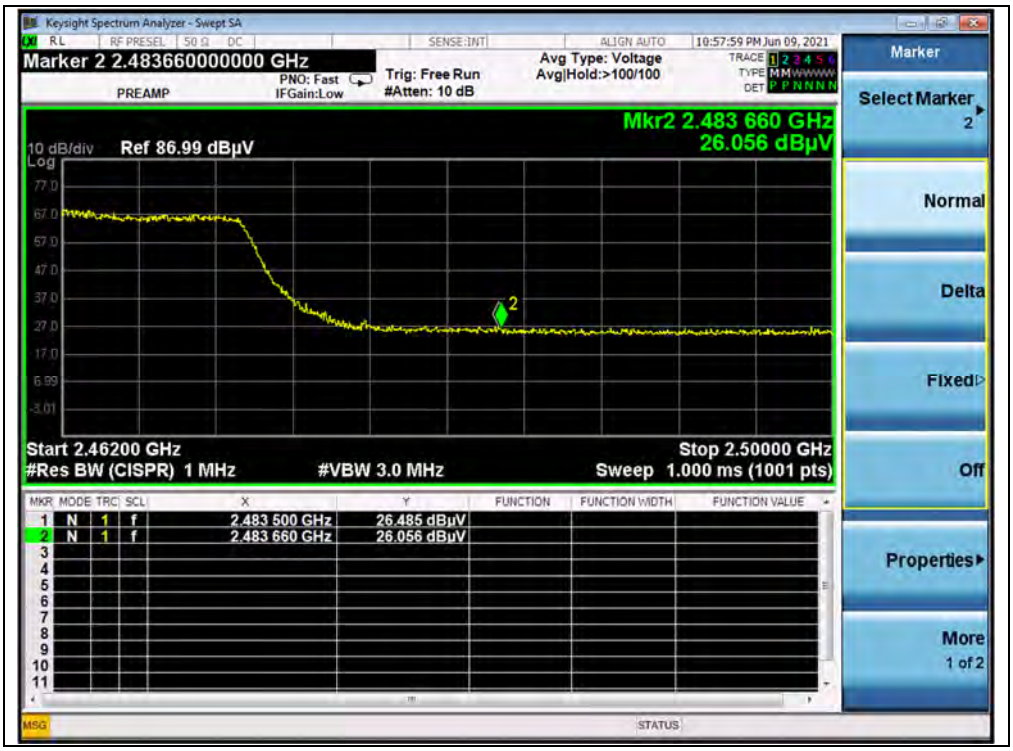
B.Test Plot:



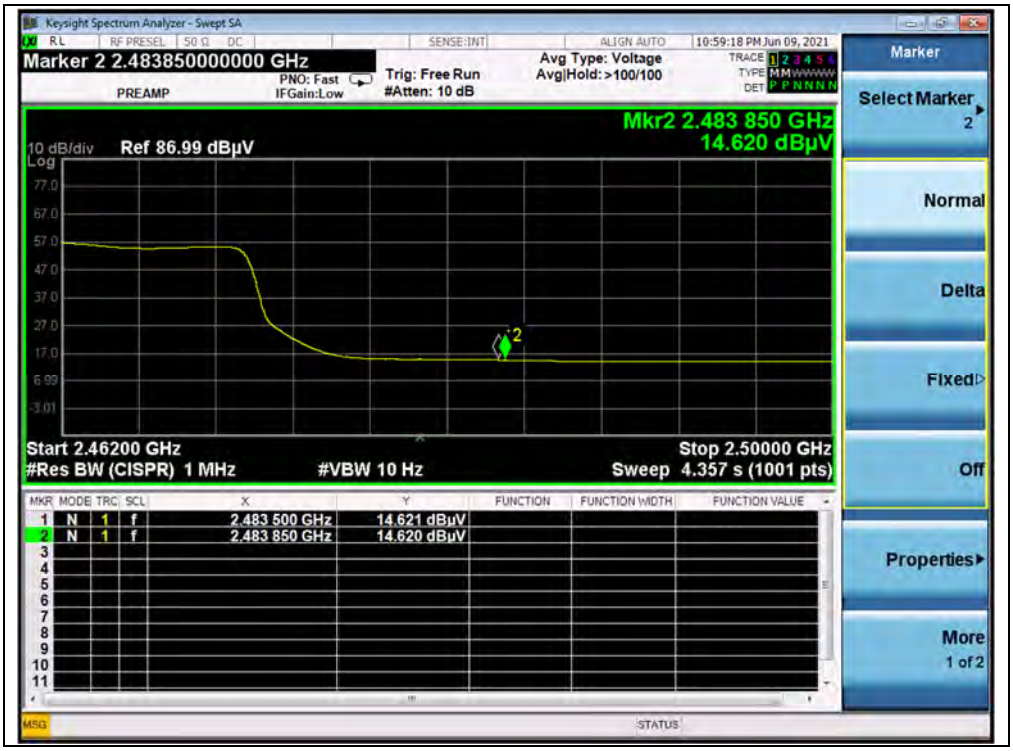
(PEAK, Channel 3, 802.11ax (HEW40))



(AVERAGE, Channel 3, 802.11ax (HEW40))



(PEAK, Channel 9, 802.11ax (HEW40))



(AVERAGE, Channel 9, 802.11ax (HEW40))

2.9. Radiated Emission

2.9.1. Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

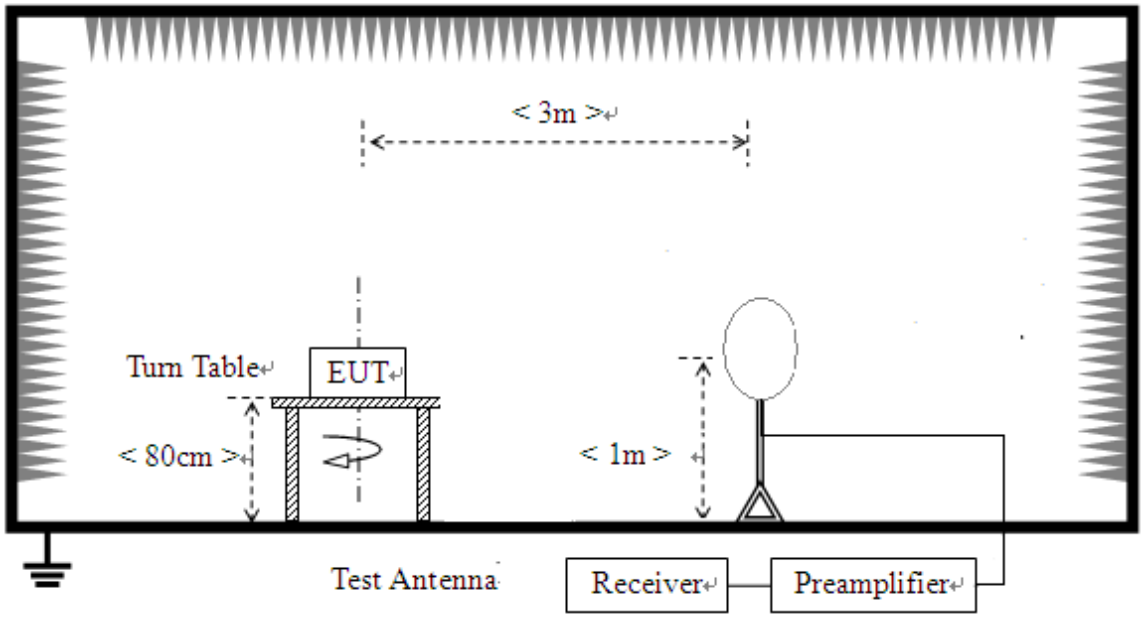
Note1: For above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

Note2: For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK). In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).

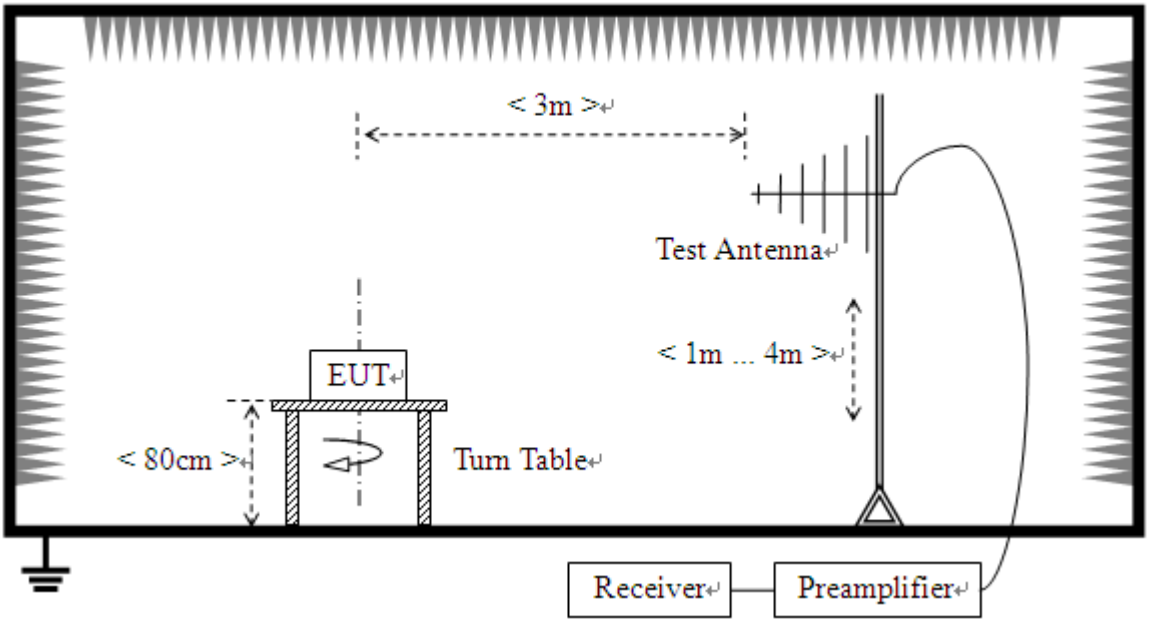
2.9.2. Test Description

Test Setup:

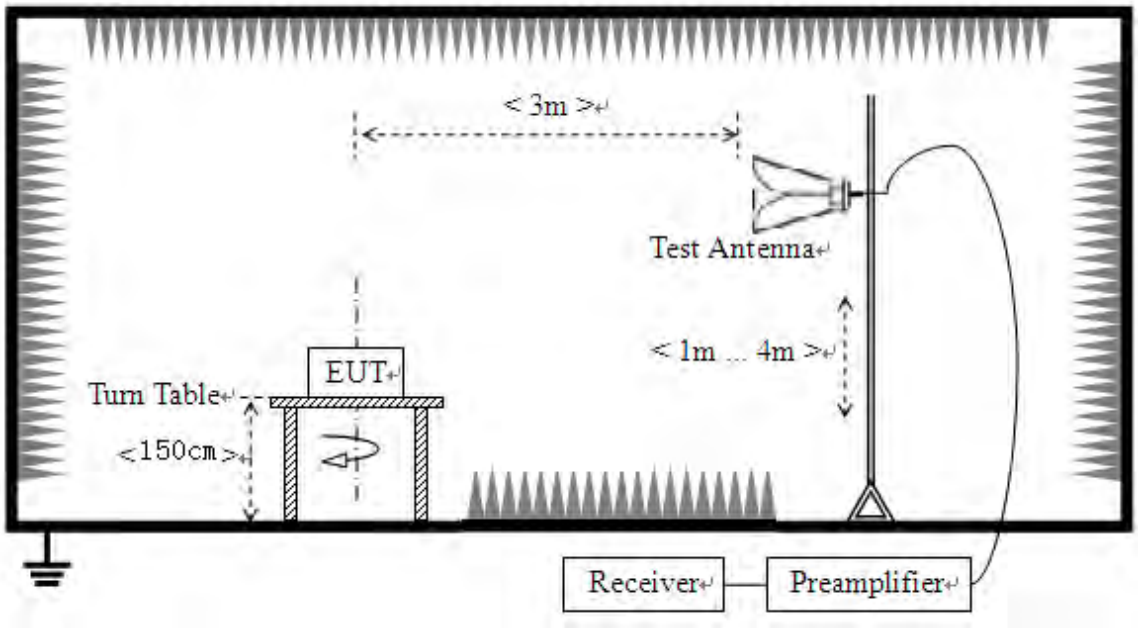
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz.The antenna to EUT distance is 3meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

2.9.3. Test Result

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

$E\ [dB\mu V/m] = U_R + A_T + A_{Factor}\ [dB]$; $A_T = L_{Cable\ loss}\ [dB] - G_{preamp}\ [dB]$

A_T: Total correction Factor except Antenna

U_R: Receiver Reading

G_{preamp}: Preamplifier Gain

A_{Factor}: Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

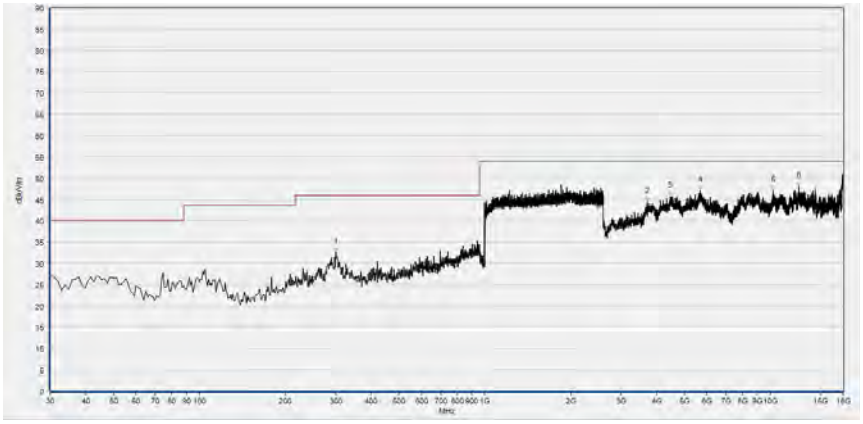
Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

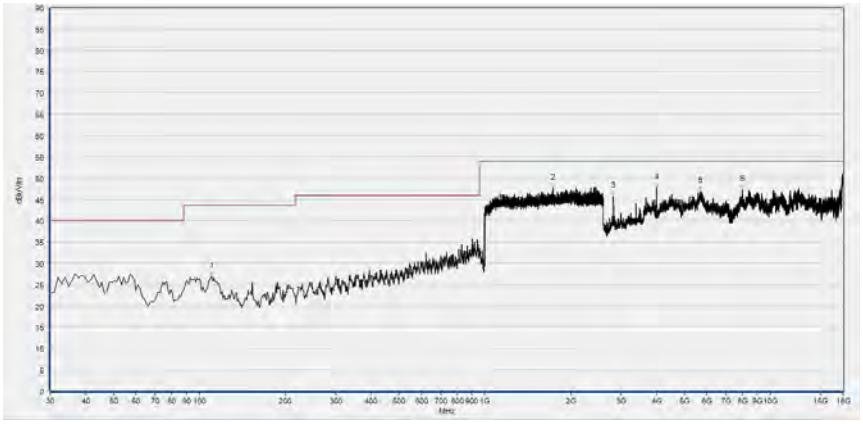
802.11b Mode

Plot for Channel 1



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
300.630	32.52	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
3714.960	44.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4460.320	45.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5689.240	47.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10223.000	47.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12576.120	48.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

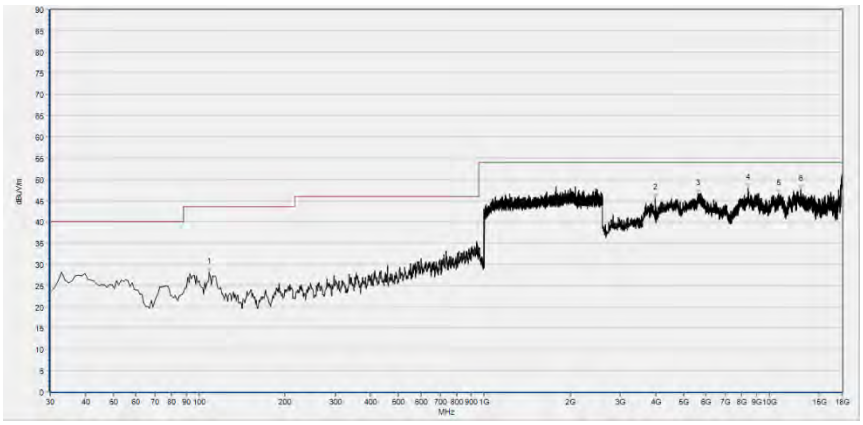
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
110.510	26.92	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1732.267	47.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2821.760	45.75	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3989.080	47.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5673.840	46.99	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7996.160	47.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

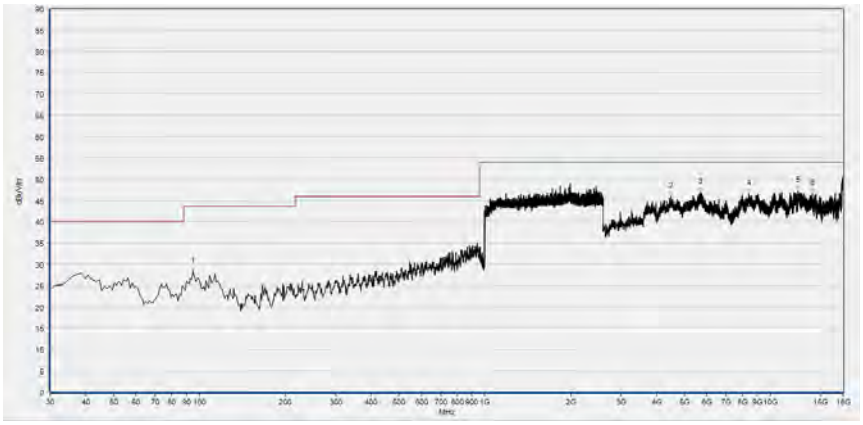
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	28.15	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
3986.000	45.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5630.720	46.51	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8433.520	47.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10795.880	46.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12881.040	47.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

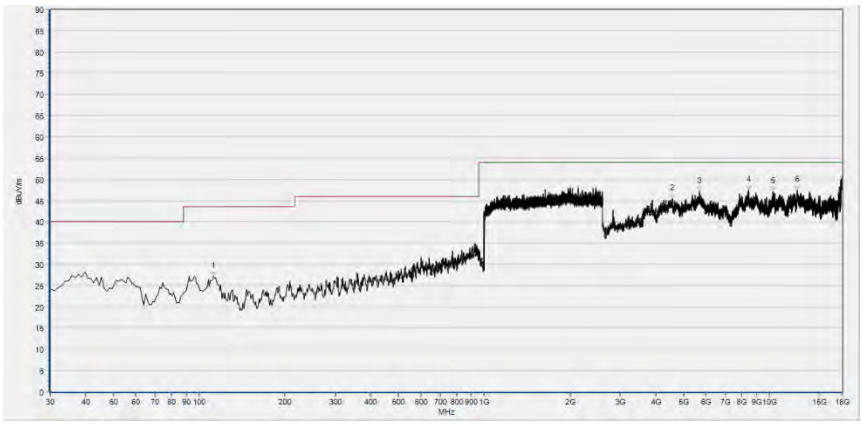
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.990	28.40	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
4491.120	45.93	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5676.920	46.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8405.800	46.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12520.680	47.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14073.000	46.65	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

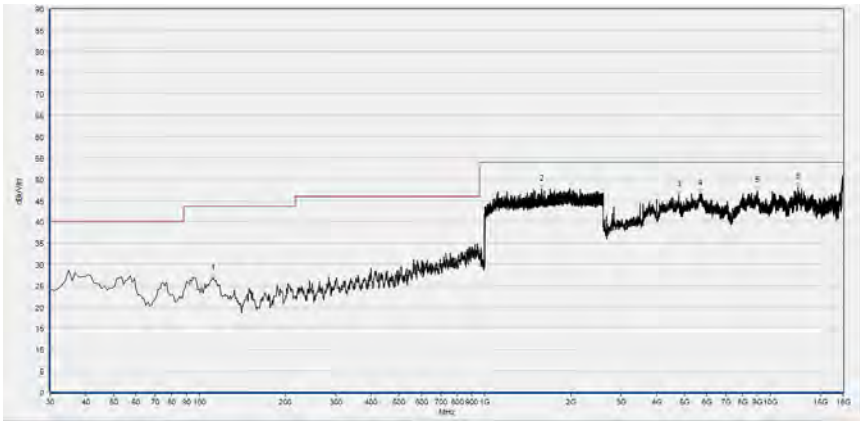
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.450	27.13	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
4558.880	45.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5673.840	47.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8436.600	47.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10318.480	47.10	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12551.480	47.36	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

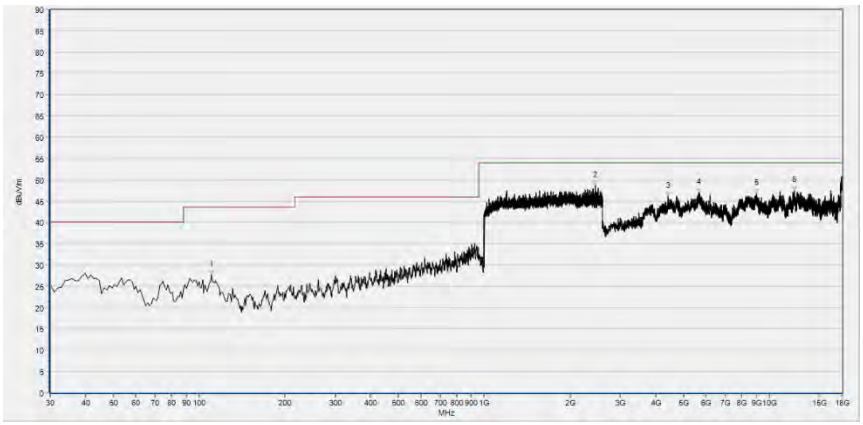


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	26.66	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1581.333	47.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4786.800	46.20	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5676.920	46.63	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9018.720	47.29	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12523.760	48.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

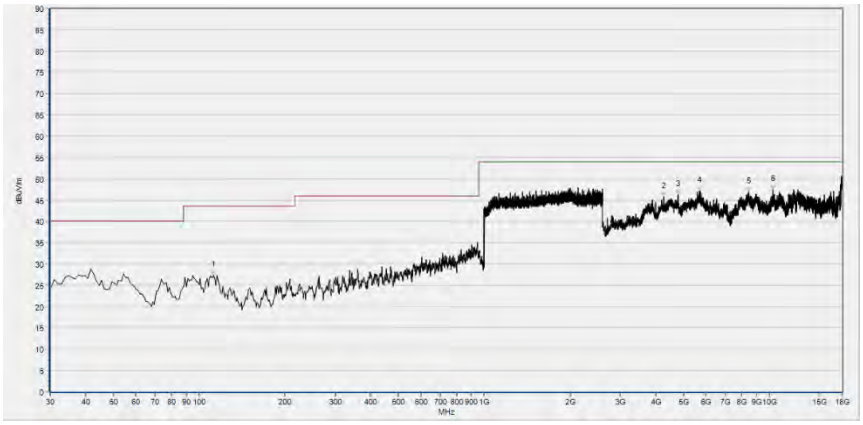
802.11g Mode

Plot for Channel 1



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	27.65	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2448.533	48.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4420.280	46.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5652.280	46.97	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8994.080	46.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12212.680	47.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

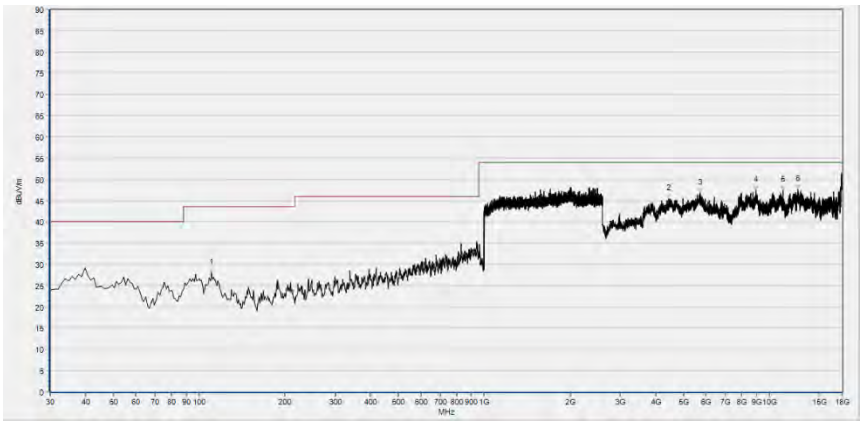
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.450	27.27	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
4257.040	45.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4792.960	46.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5680.000	47.05	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8467.400	47.01	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10303.080	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

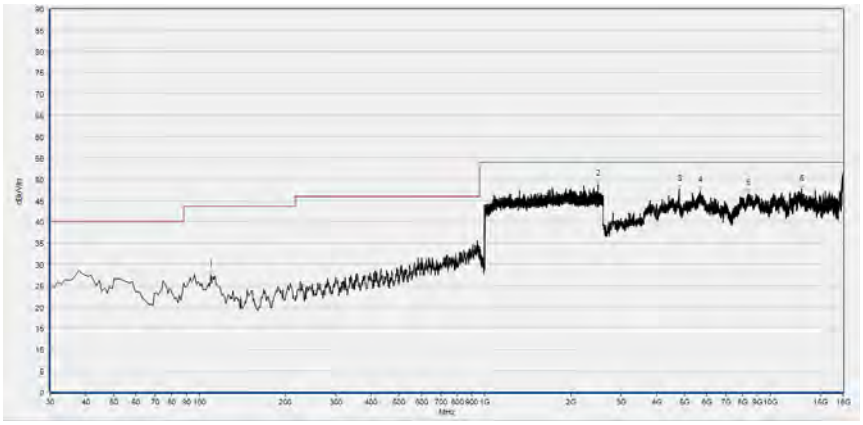
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	27.95	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
4441.840	45.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5710.800	46.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8975.600	47.49	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11159.320	47.50	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12594.600	47.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

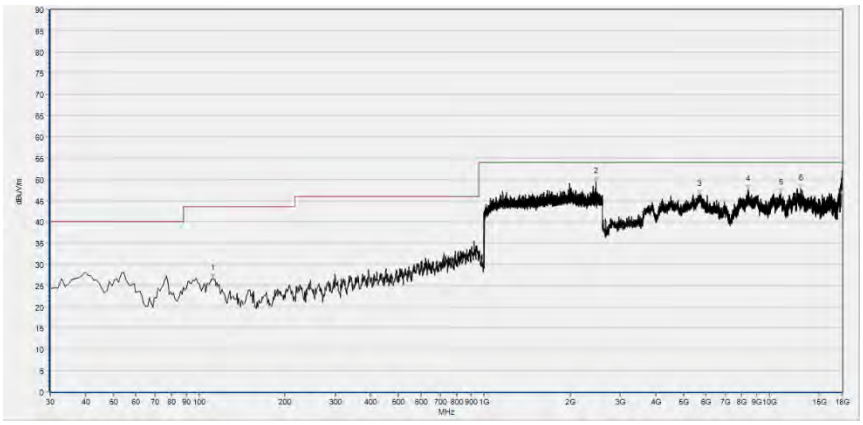
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	27.52	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2497.067	48.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4796.040	47.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5670.760	47.28	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8384.240	46.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12874.880	47.63	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

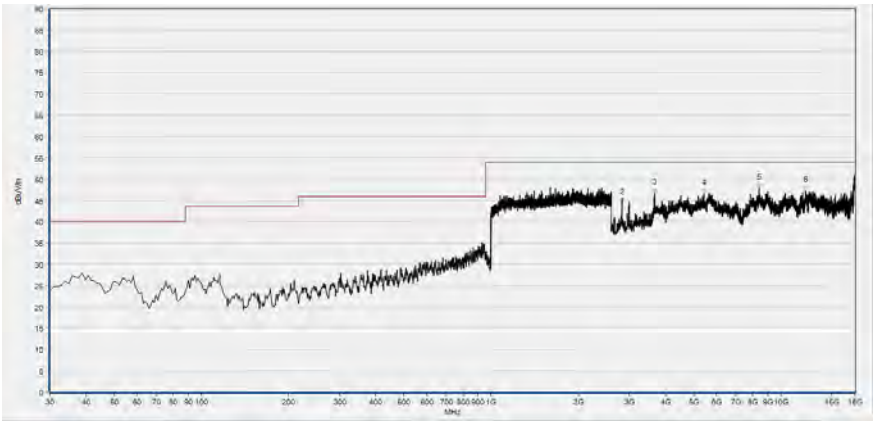
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	26.66	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2461.867	49.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5698.480	46.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8408.880	47.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10974.520	46.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12905.680	47.78	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

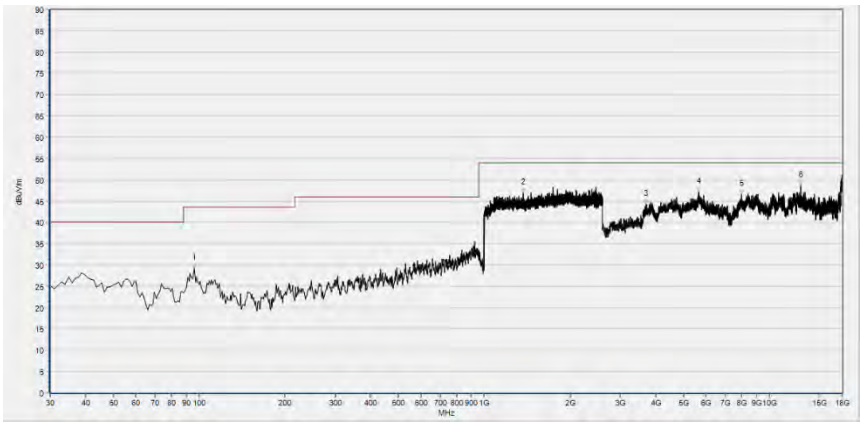


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
115.360	26.12	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2827.920	44.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3665.680	46.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5418.200	46.67	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8390.400	47.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12181.880	47.30	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

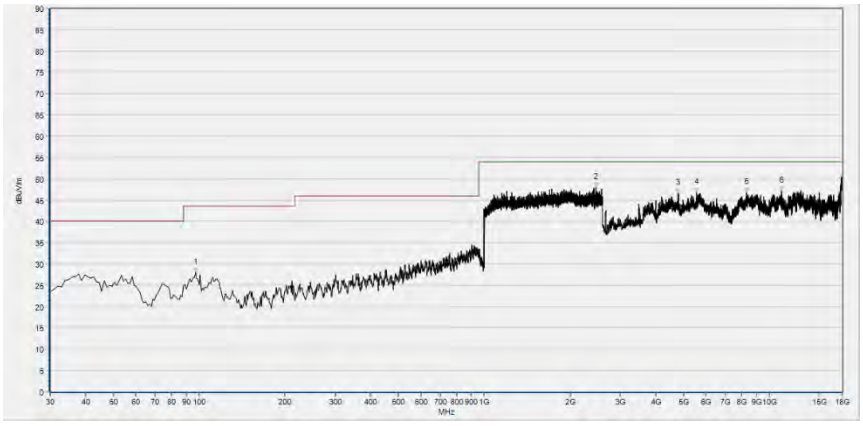
802.11n (HT20) Mode

Plot for Channel 1



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
95.960	29.24	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1366.933	46.85	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3699.560	44.25	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5667.680	47.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7993.080	46.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12899.520	48.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

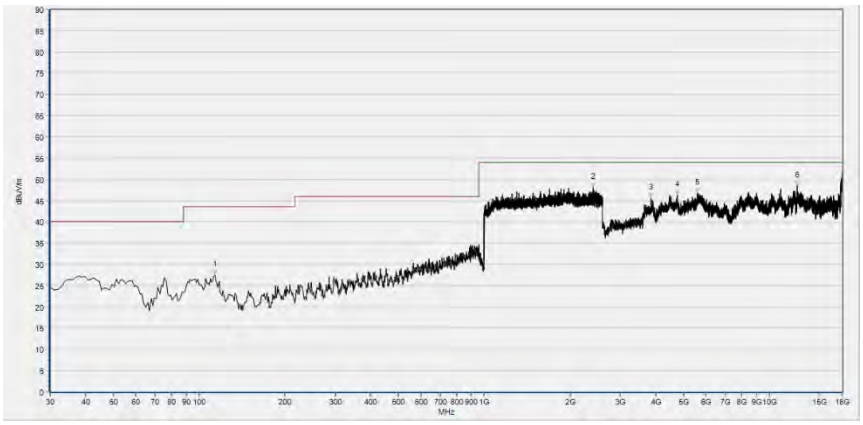
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
96.930	28.02	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2465.600	47.99	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4780.640	46.53	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5566.040	46.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8298.000	46.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11014.560	47.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

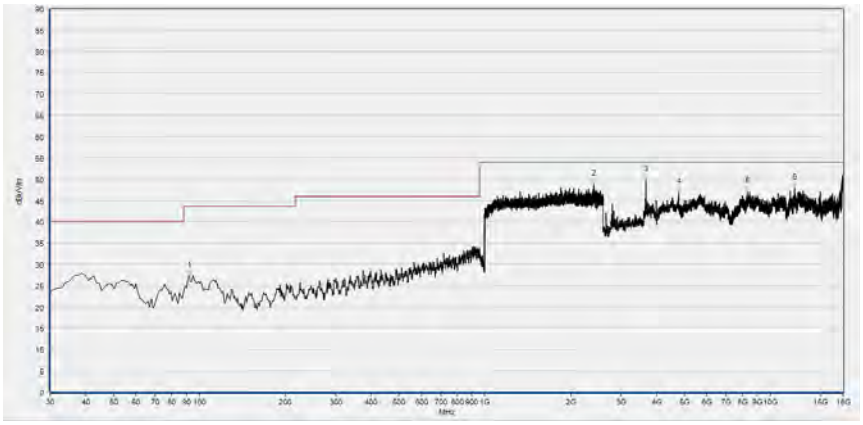
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
113.420	27.52	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2412.267	48.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3850.480	45.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4746.760	46.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5581.440	46.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12520.680	48.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

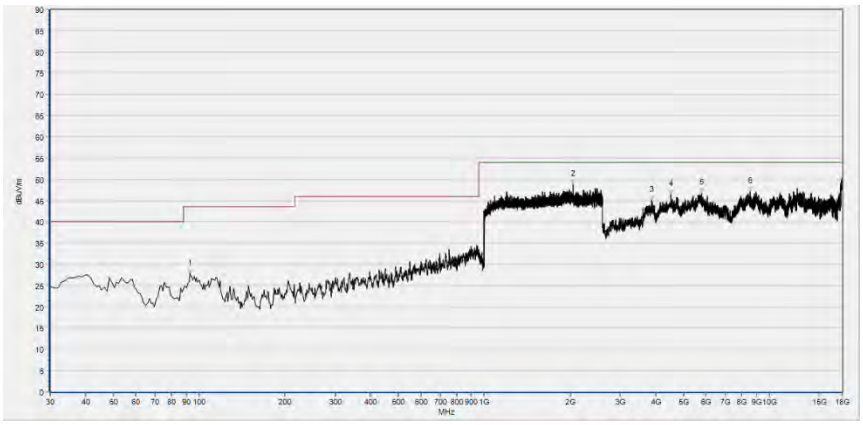
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
92.080	27.38	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2408.533	48.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3665.680	49.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4780.640	46.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8313.400	47.11	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12154.160	47.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

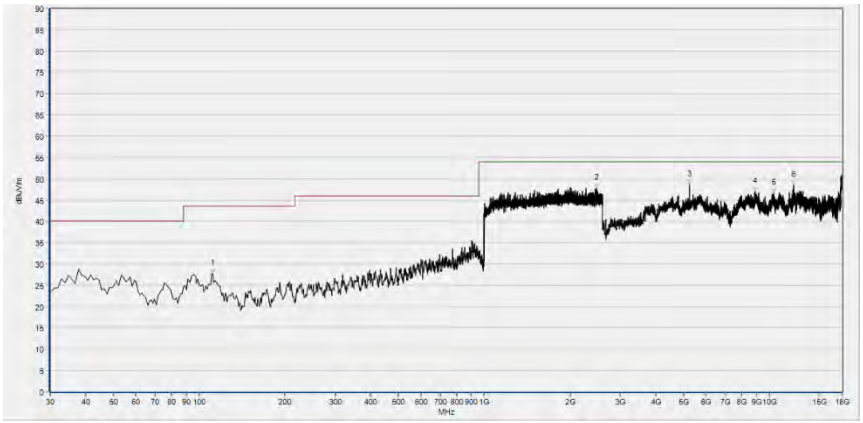
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
93.050	27.75	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2046.933	48.73	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3856.640	45.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4512.680	46.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5781.640	46.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8572.120	47.12	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

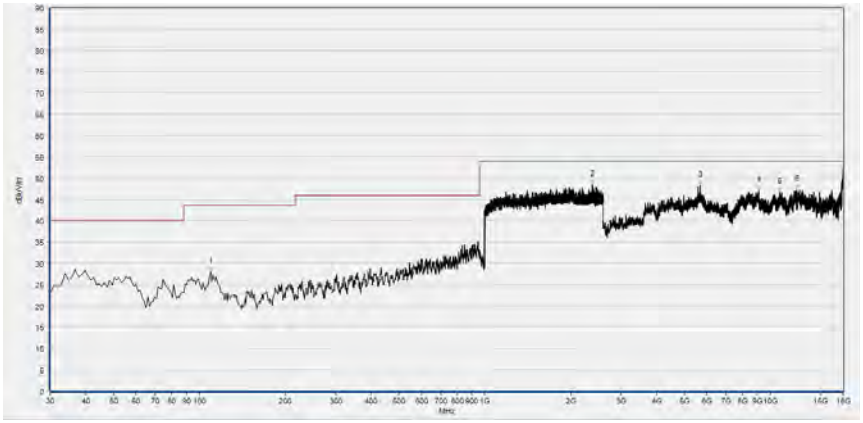


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	27.70	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2484.267	47.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5245.720	48.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8886.280	46.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10355.440	46.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12138.760	48.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

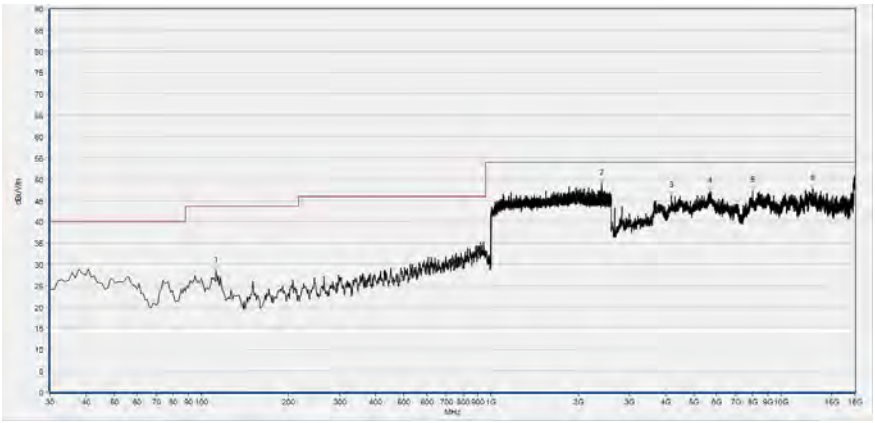
802.11n (HT40) Mode

Plot for Channel 3



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
109.540	27.98	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2387.200	48.36	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5698.480	48.20	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9120.360	47.10	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10802.040	46.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12354.360	47.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

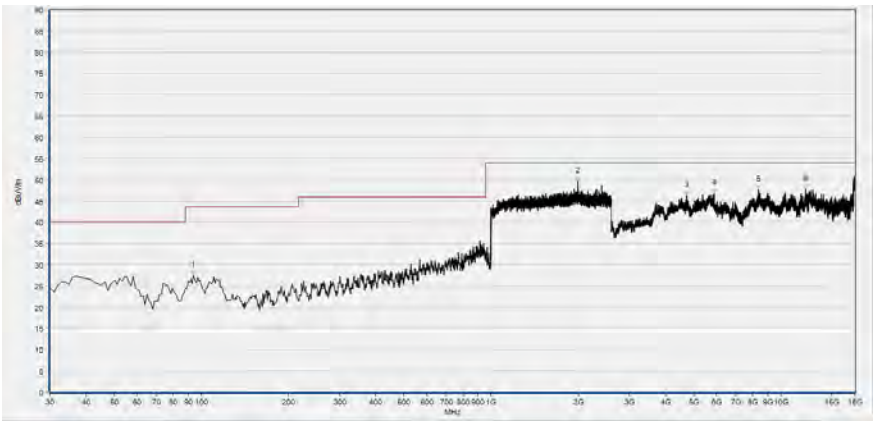
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
112.450	28.43	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2410.667	48.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4186.200	46.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5686.160	47.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7996.160	47.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12862.560	47.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

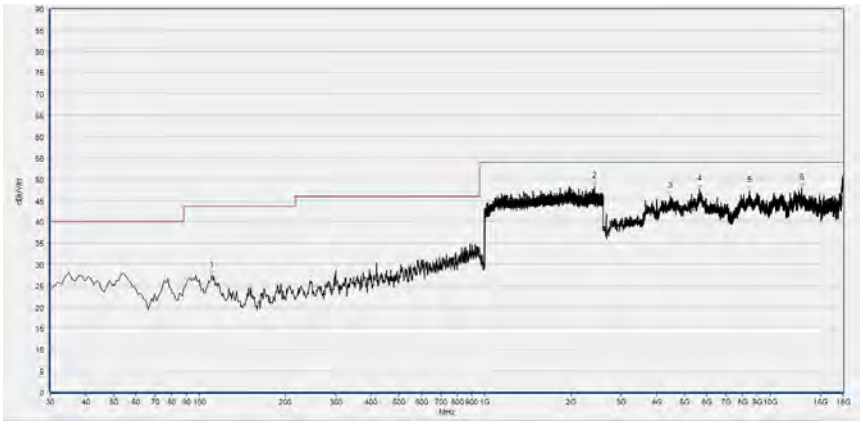
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.020	27.45	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1993.600	49.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4731.360	46.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5877.120	46.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8368.840	47.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12132.600	47.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

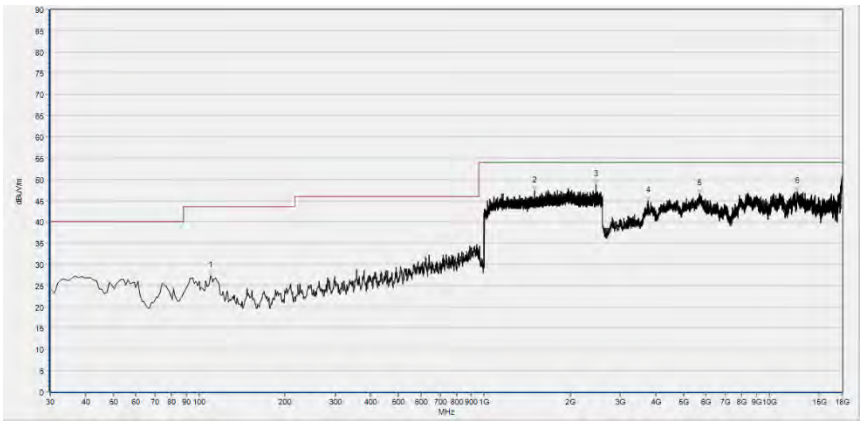
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	27.27	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2425.067	48.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4454.160	45.99	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5636.880	47.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8464.320	47.29	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12887.200	47.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

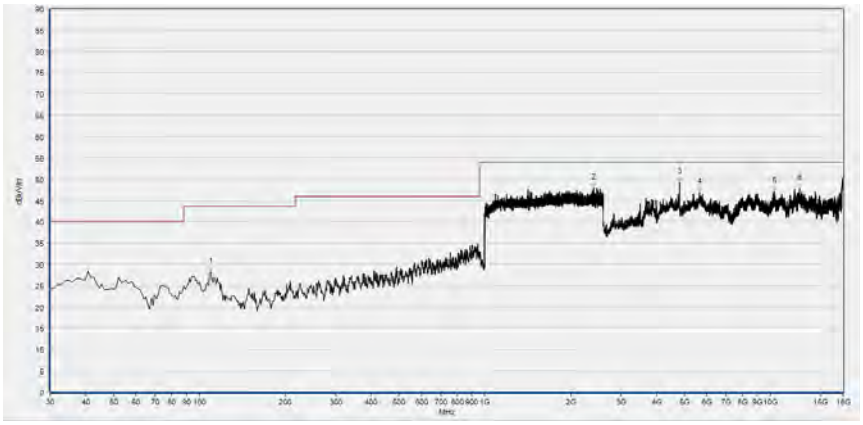
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 9



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	27.35	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1504.533	47.19	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2462.400	48.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3764.240	44.85	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5670.760	46.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12502.200	47.17	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

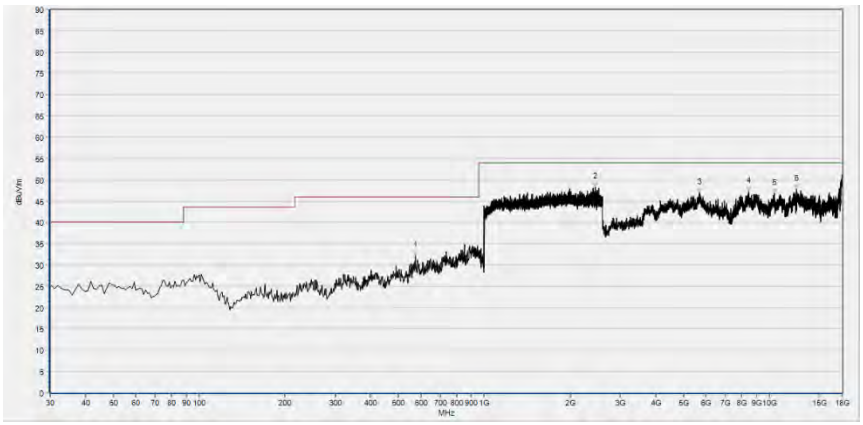


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	28.14	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2412.800	48.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4799.120	49.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5664.600	46.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10346.200	47.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12650.040	47.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

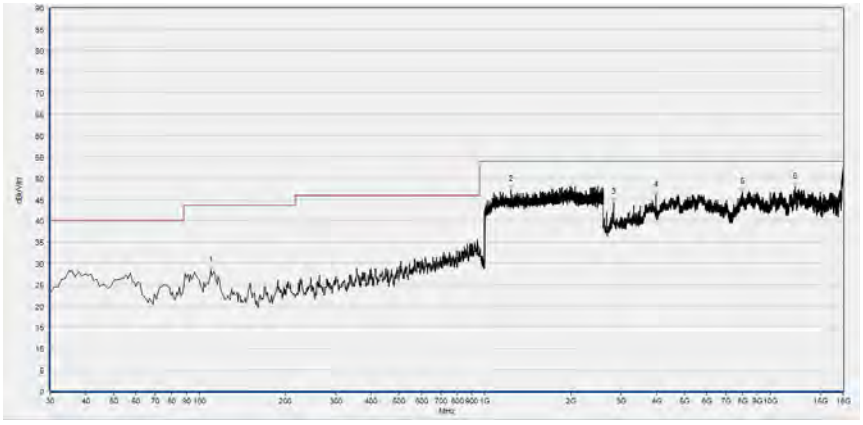
802.11ac (VHT20) Mode

Plot for Channel 1



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
574.170	32.20	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2446.400	48.22	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5692.320	46.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8436.600	47.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10398.560	46.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12465.240	47.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

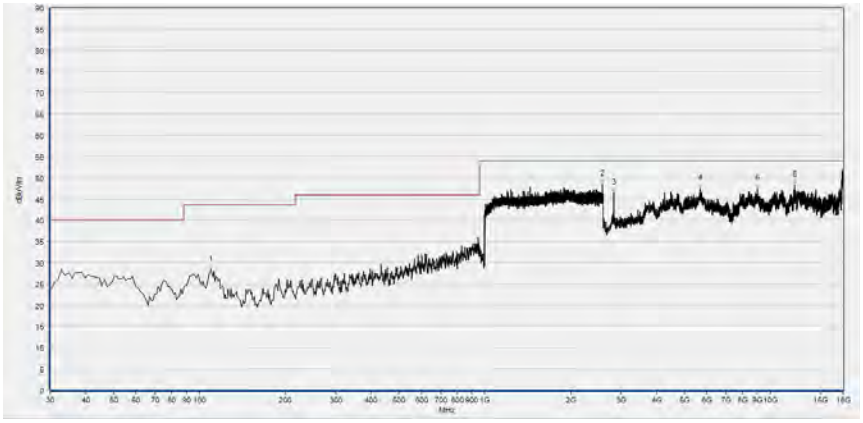
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	28.34	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1235.200	47.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2824.840	44.20	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3982.920	45.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7990.000	46.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12218.840	47.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

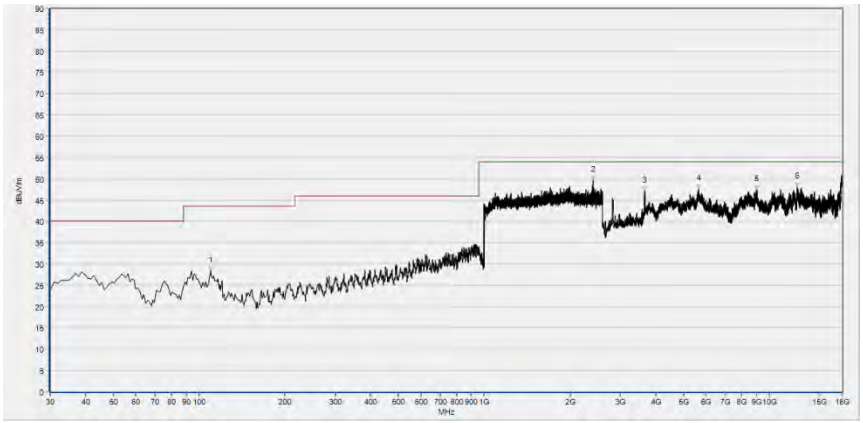
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	28.32	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2581.867	48.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2827.920	46.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5692.320	47.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9034.120	47.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12132.600	48.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

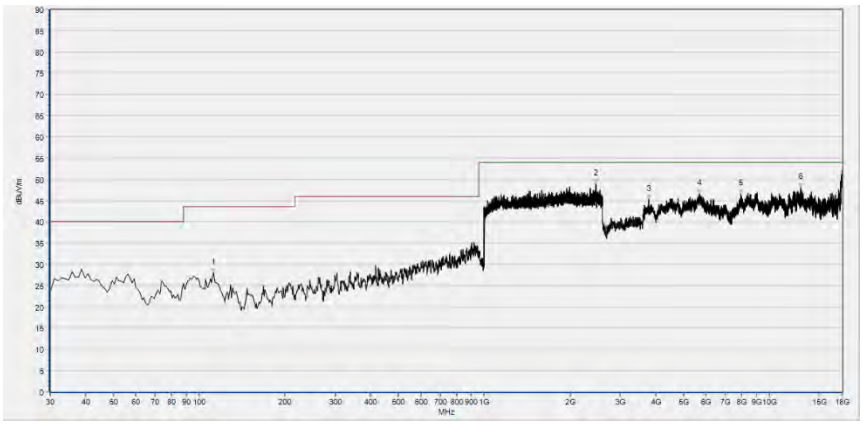
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	28.35	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2414.400	49.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3656.440	47.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5652.280	47.67	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9009.480	47.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12517.600	48.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

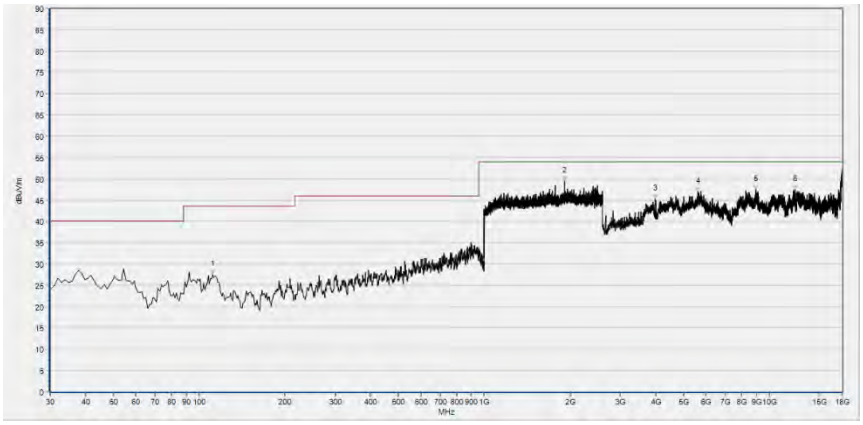
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.450	27.95	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2461.333	48.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3770.400	45.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5689.240	46.67	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7934.560	46.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12871.800	48.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

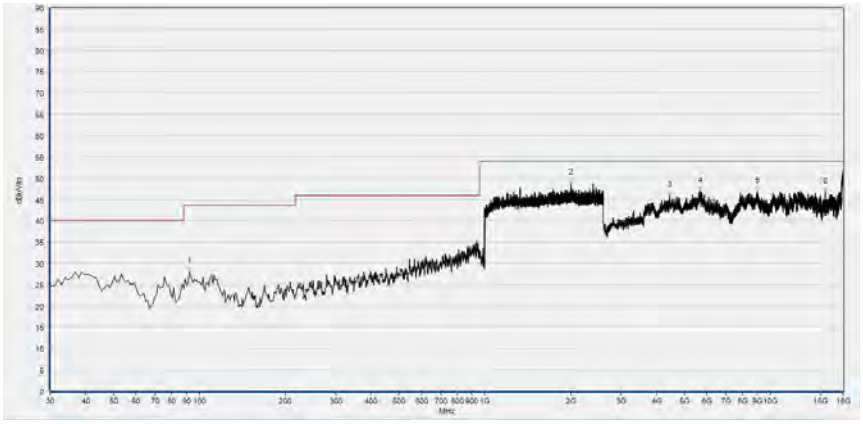


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	27.55	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1912.000	49.40	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3986.000	45.31	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5633.800	46.93	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8984.840	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12317.400	47.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

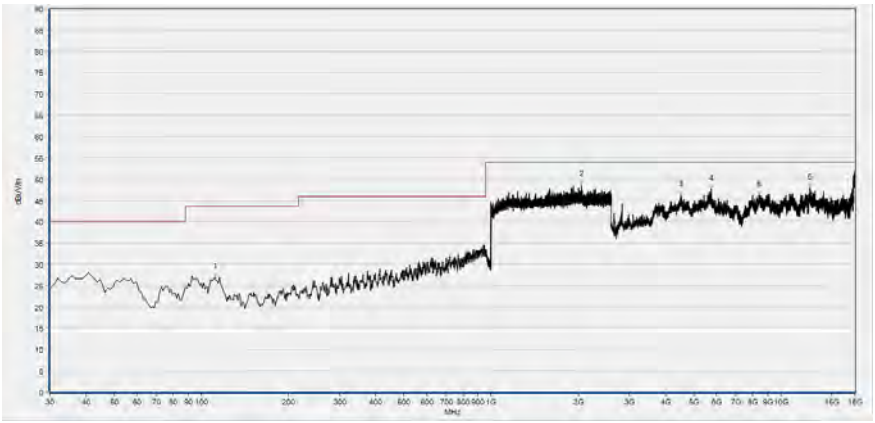
802.11ac (VHT40) Mode

Plot for Channel 3



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
92.080	27.97	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1999.467	48.70	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4444.920	46.00	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5698.480	46.97	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8994.080	46.97	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
15597.600	46.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

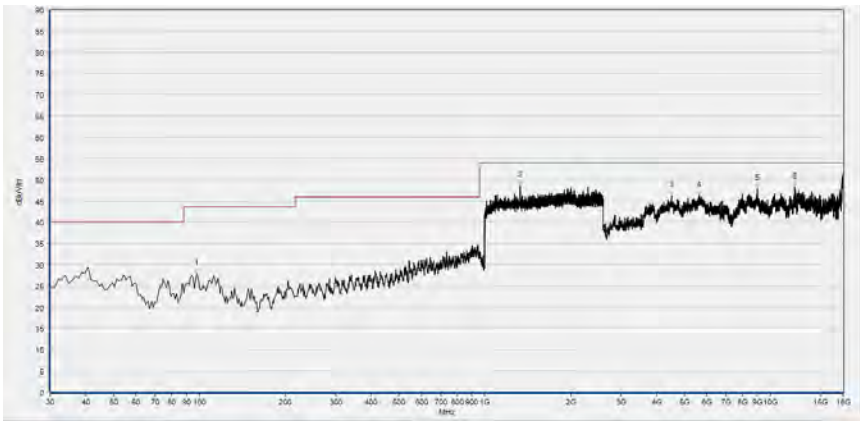
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
111.480	27.00	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2055.467	48.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4521.920	46.28	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5744.680	47.51	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8415.040	46.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12573.040	47.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

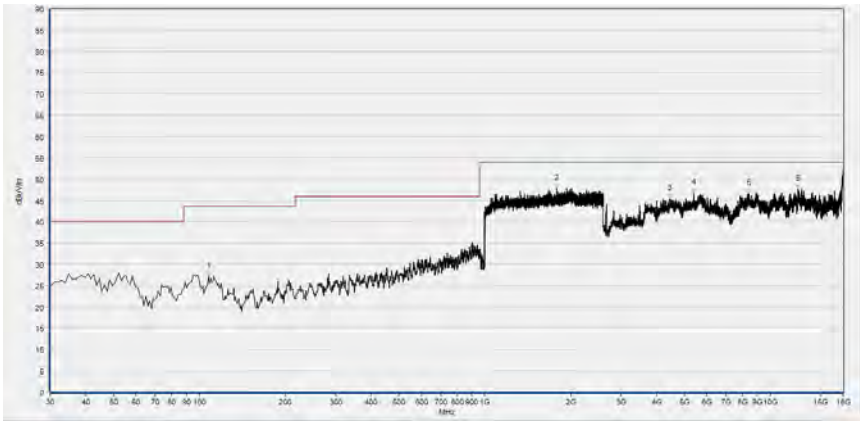
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
97.900	27.85	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1329.067	48.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4506.520	46.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5618.400	46.26	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9012.560	47.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12197.280	48.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

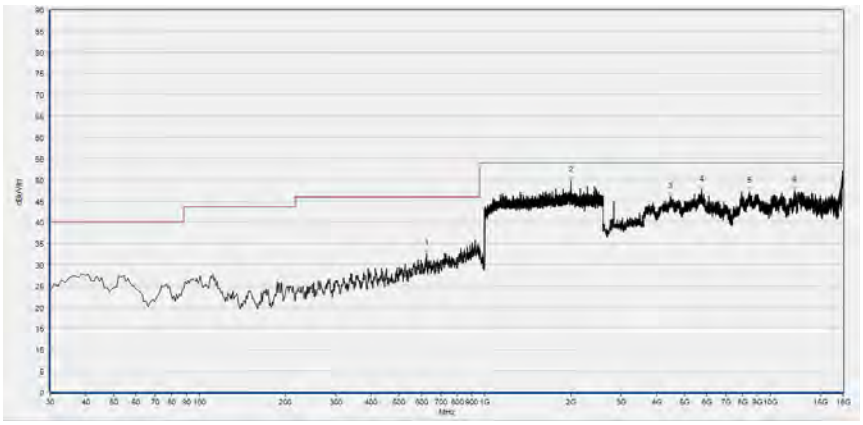
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.600	27.11	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1782.400	47.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4448.000	45.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5393.560	46.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8424.280	46.56	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12514.520	47.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

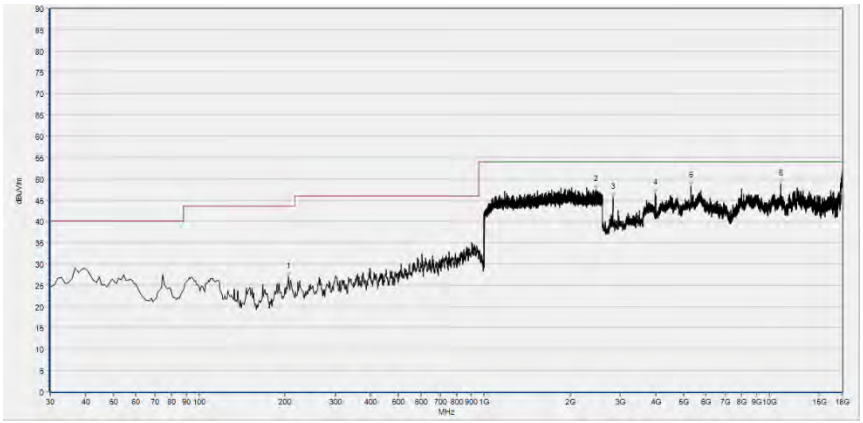
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 9



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
623.640	32.45	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2006.933	49.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4454.160	45.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5757.000	47.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8445.840	47.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12191.120	47.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

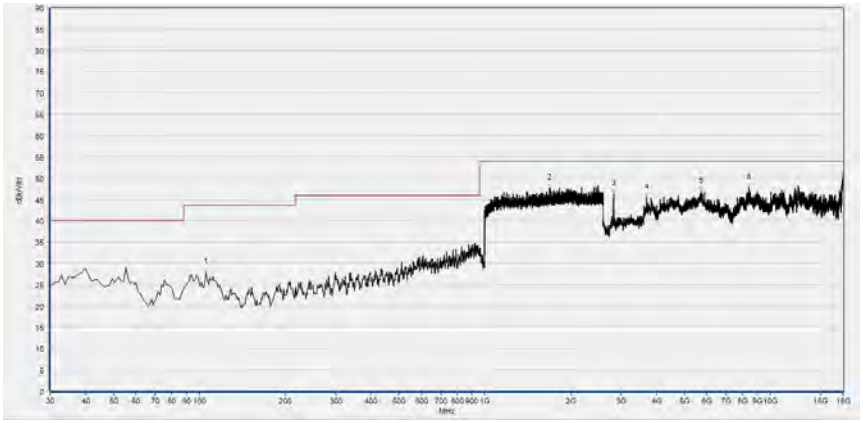


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
205.570	26.91	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2459.733	47.50	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2827.920	45.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3982.920	46.57	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5313.480	48.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10983.760	48.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

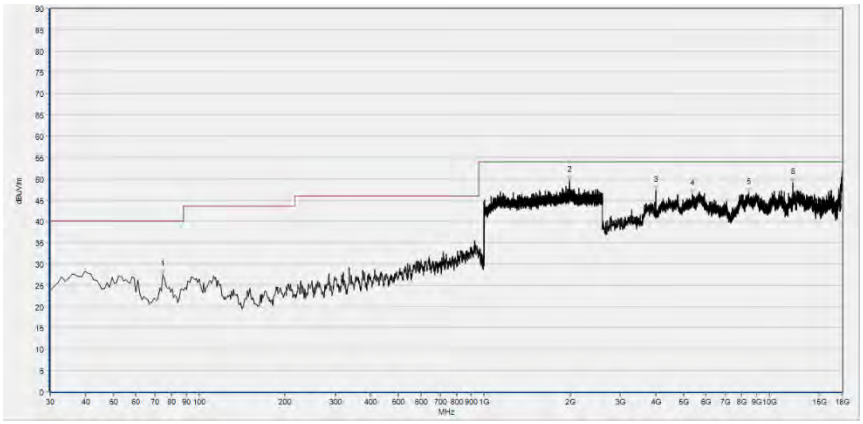
802.11ax (HEW20) Mode

Plot for Channel 1



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
105.660	27.89	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1680.533	47.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2824.840	46.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3696.480	45.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5732.360	46.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8430.440	47.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

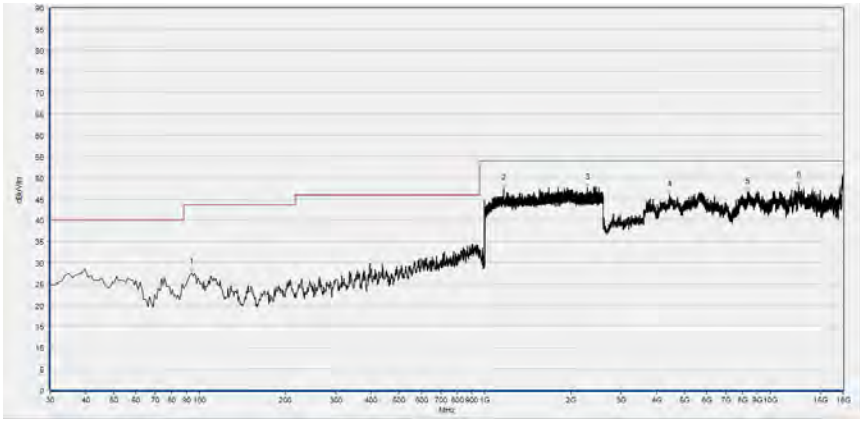
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
74.620	27.47	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
1992.000	49.62	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3995.240	47.32	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5359.680	46.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8467.400	46.68	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12123.360	49.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

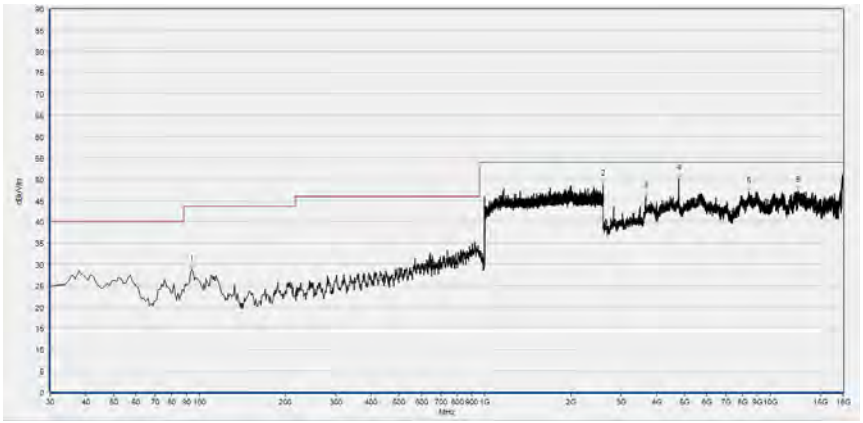
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.020	27.64	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1162.133	47.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2290.133	47.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4426.440	45.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8313.400	46.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12573.040	48.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

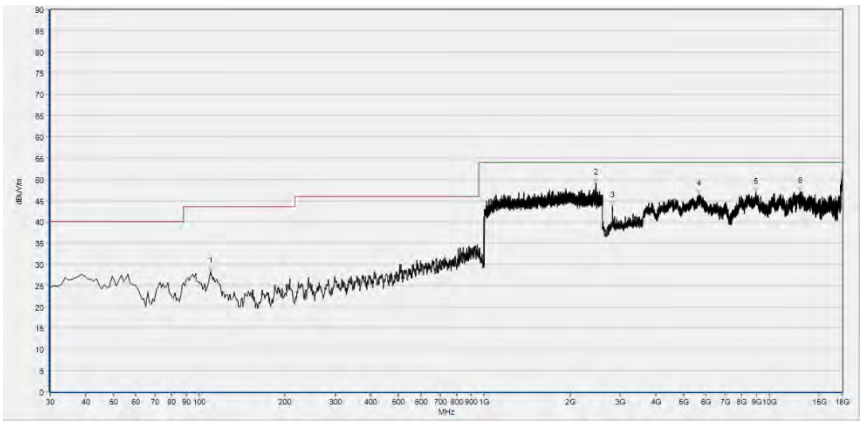
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.020	28.89	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2597.867	48.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3659.520	45.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4789.880	50.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8390.400	47.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12533.000	47.31	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

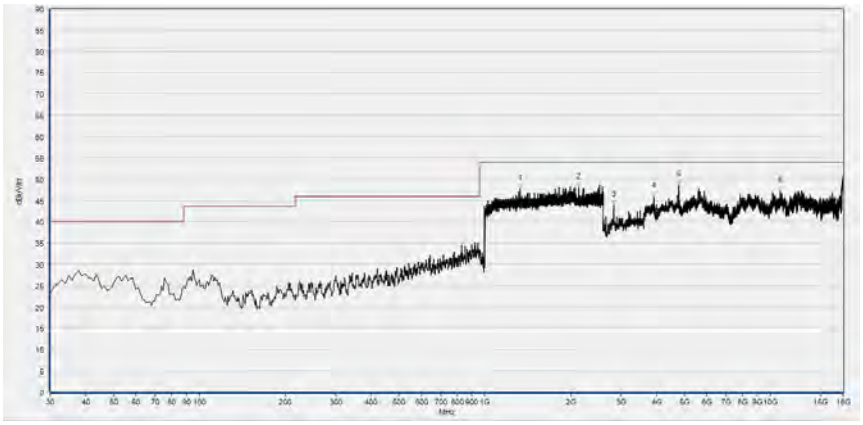
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	28.26	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2464.533	49.07	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2821.760	43.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5652.280	46.43	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8975.600	46.96	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12813.280	47.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

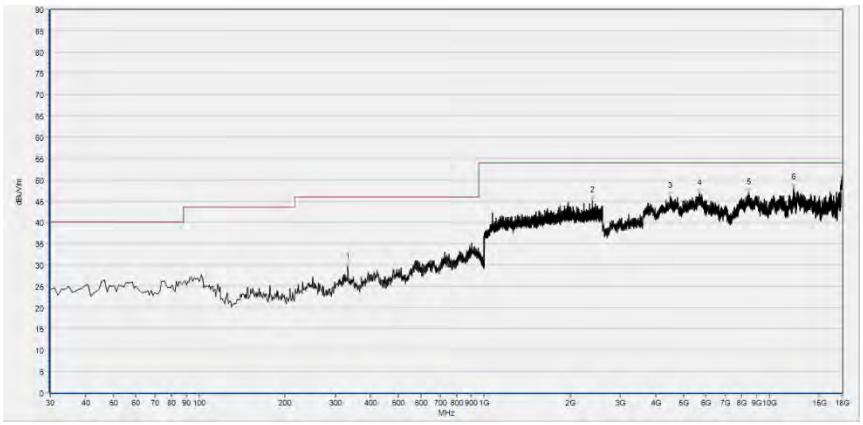


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
1332.800	47.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2128.000	48.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2824.840	43.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3918.240	45.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4783.720	48.57	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10823.600	47.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

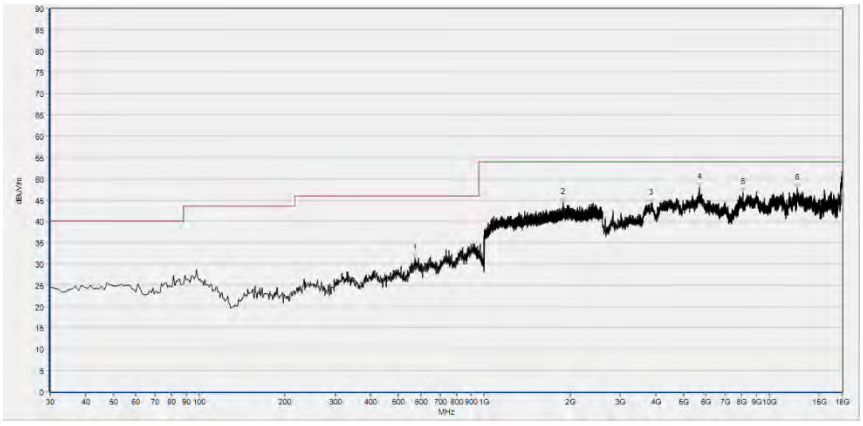
802.11ax (HEW20) RU26 Mode

Plot for Channel 1



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
332.640	29.49	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2400.000	45.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4484.960	46.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5689.240	46.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8464.320	46.96	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12141.840	48.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

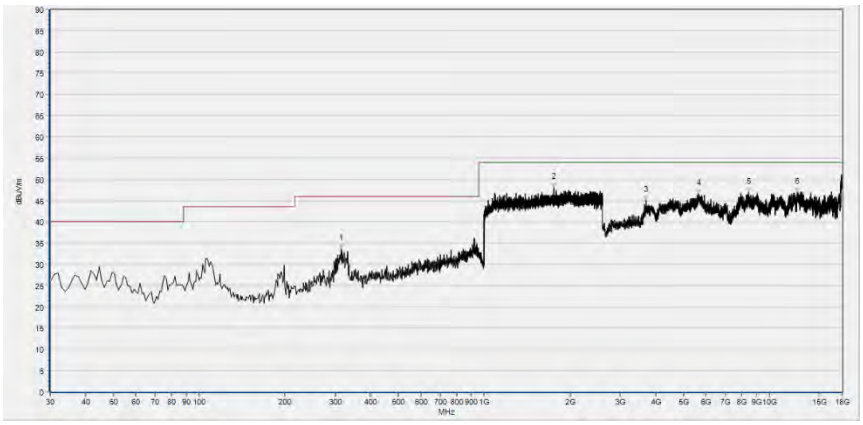
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
571.260	31.27	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1893.867	44.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3841.240	44.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5683.080	47.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8076.240	46.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12533.000	47.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

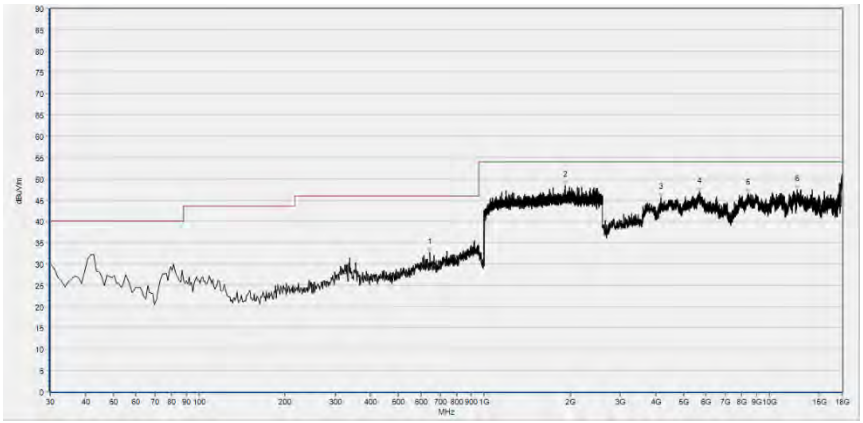
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
314.210	33.63	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1755.200	48.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3699.560	45.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5658.440	46.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8473.560	46.84	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12489.880	46.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

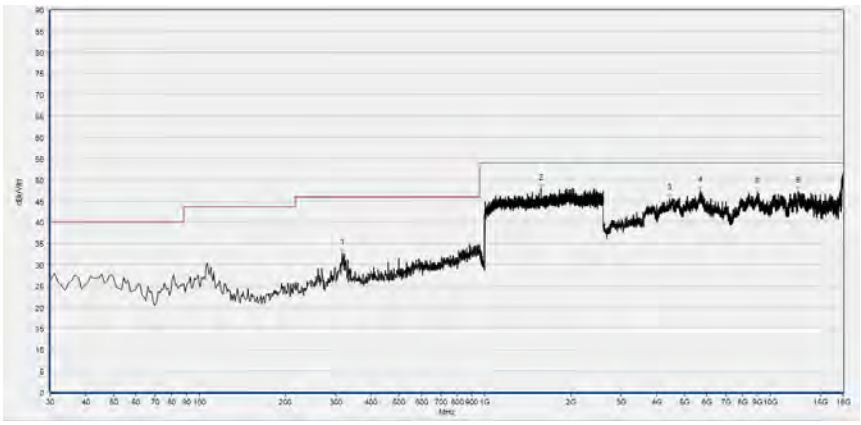
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
644.980	32.67	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1921.067	48.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4164.640	45.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5673.840	46.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8433.520	46.53	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12520.680	47.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

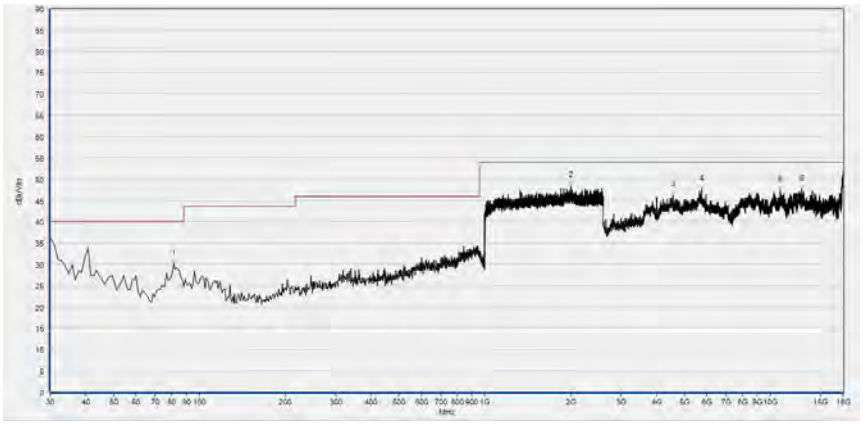
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
316.150	32.64	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1574.400	47.88	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4426.440	45.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5670.760	47.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8994.080	47.16	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12502.200	47.30	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

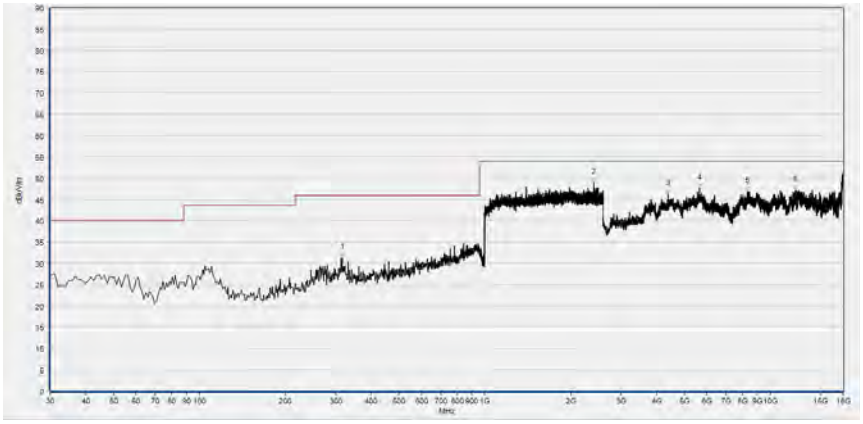


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
81.410	30.22	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
2001.600	48.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4558.880	46.17	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5747.760	47.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10851.320	47.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12921.080	47.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

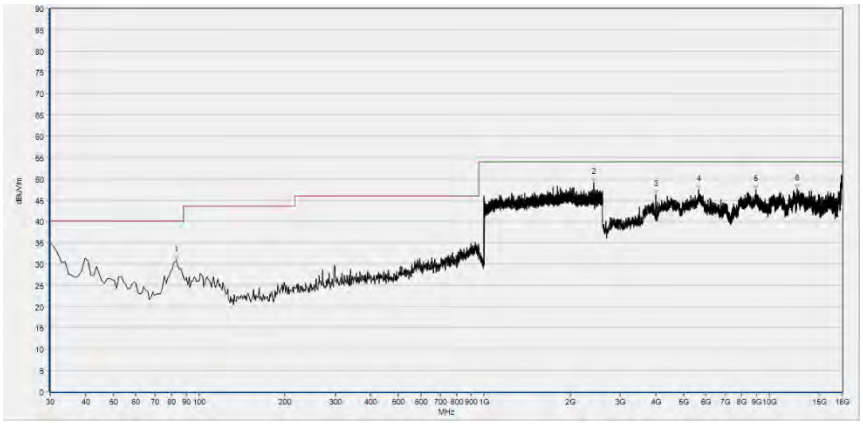
802.11ax (HEW20) RU52 Mode

Plot for Channel 1



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
316.150	31.28	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2415.467	48.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4386.400	46.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5655.360	47.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8319.560	46.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12206.520	47.04	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

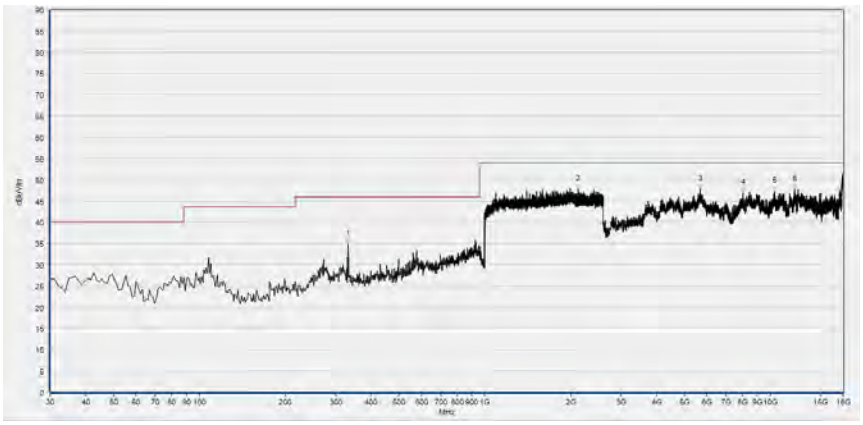
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
83.350	30.83	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
2420.267	49.17	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3989.080	46.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5639.960	47.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8978.680	47.46	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12511.440	47.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

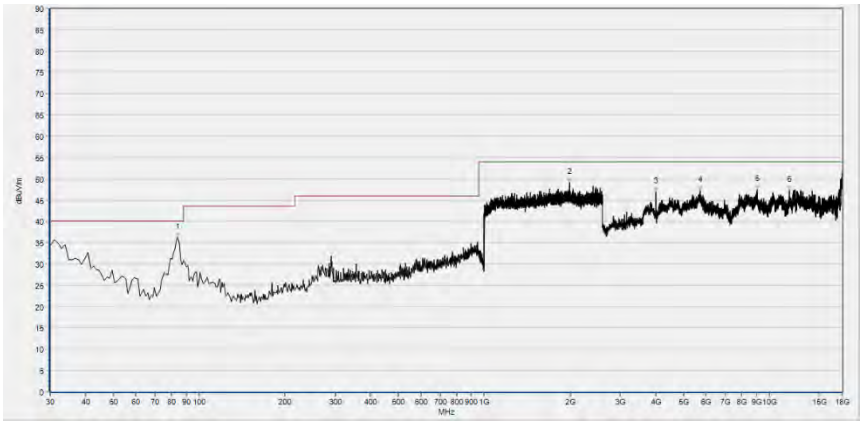
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
332.640	34.80	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2118.400	47.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5676.920	47.70	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8011.560	46.87	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10358.520	47.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12141.840	47.73	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

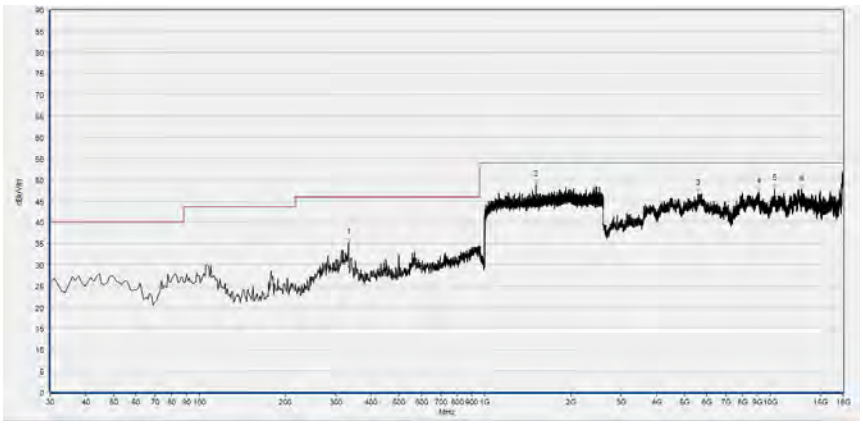
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
84.320	36.21	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
1995.200	49.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3998.320	47.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5723.120	47.20	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9083.400	47.41	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11729.120	47.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

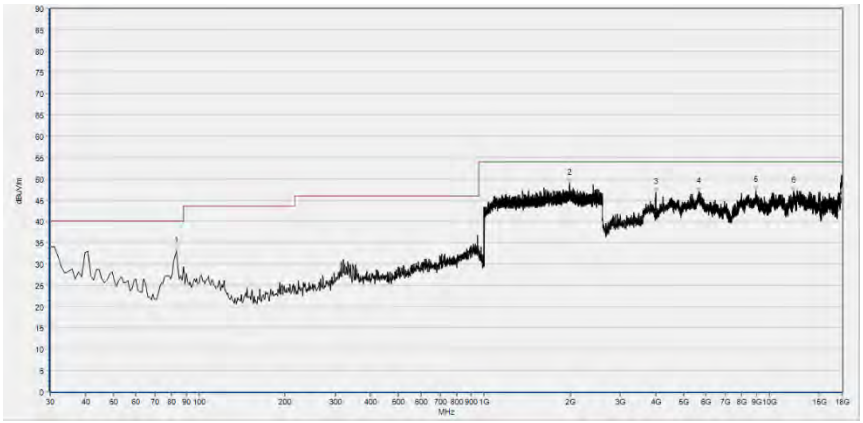
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
333.610	35.12	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1510.400	48.70	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5590.680	46.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9095.720	47.17	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10352.360	47.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12914.920	47.74	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

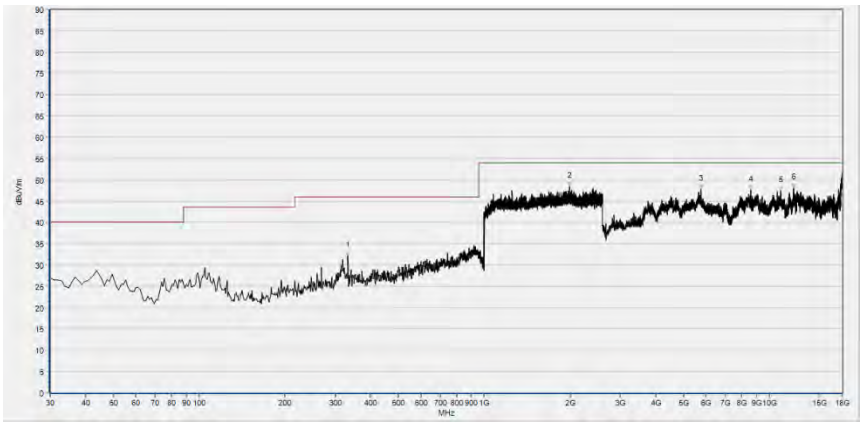


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
83.350	32.95	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
1994.667	48.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3995.240	46.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5658.440	46.95	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8950.960	47.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12166.480	47.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

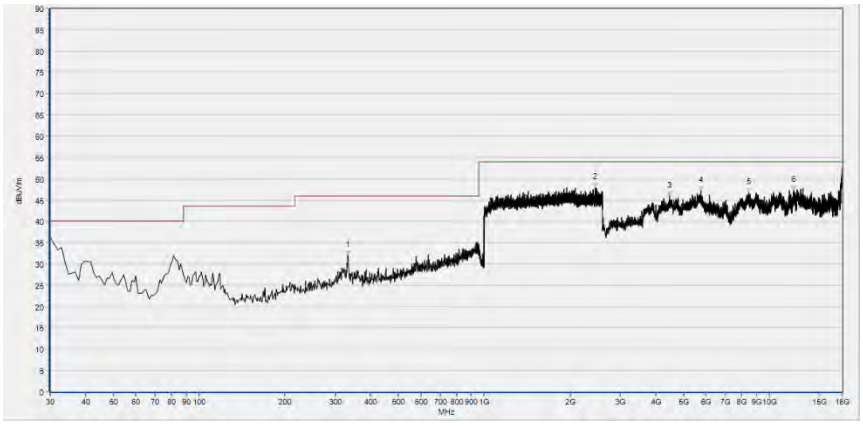
802.11ax (HEW20) RU106 Mode

Plot for Channel 1



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
332.640	32.13	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1993.600	48.43	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5763.160	47.82	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8624.480	47.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10962.200	47.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12191.120	48.07	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

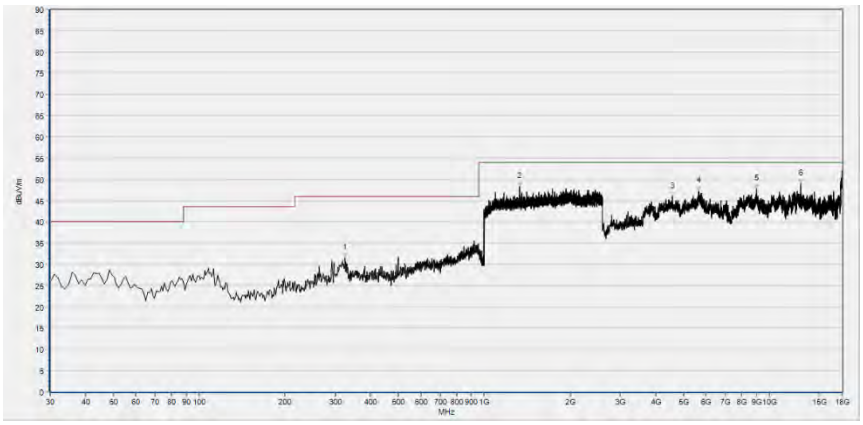
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
332.640	31.97	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2452.800	47.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4469.560	45.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5750.840	47.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8476.640	46.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12148.000	47.27	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

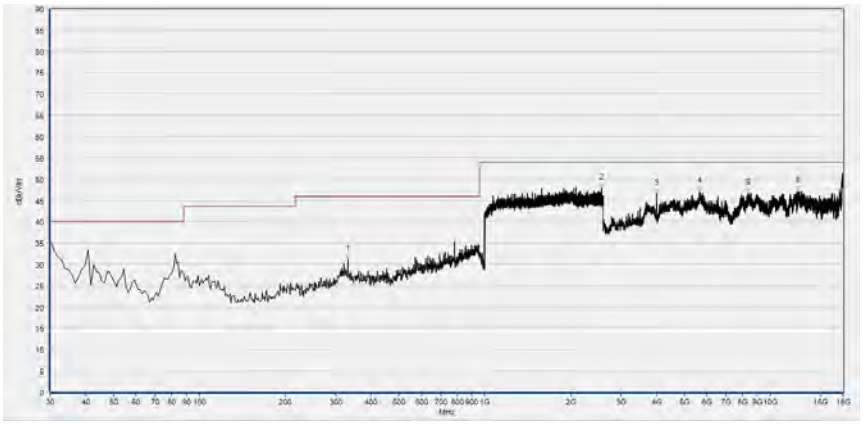
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
324.880	31.45	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1330.133	48.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4568.120	45.97	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5661.520	47.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8994.080	47.79	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12908.760	48.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

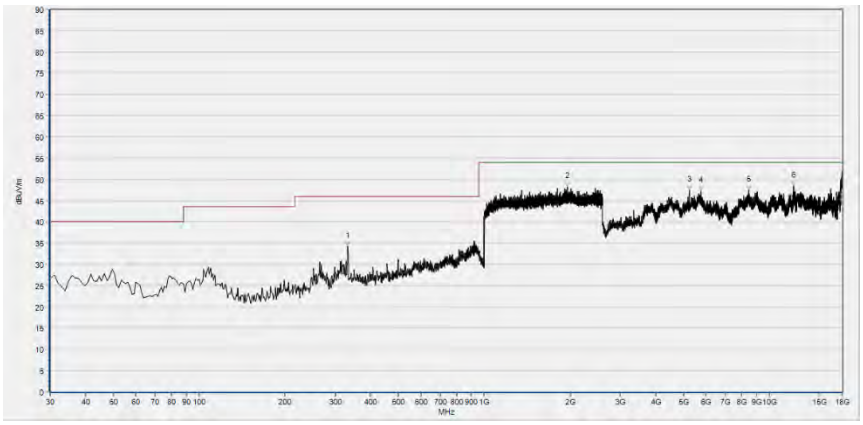
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
331.670	31.18	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2566.933	47.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3992.160	46.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5652.280	47.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8384.240	46.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12533.000	47.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

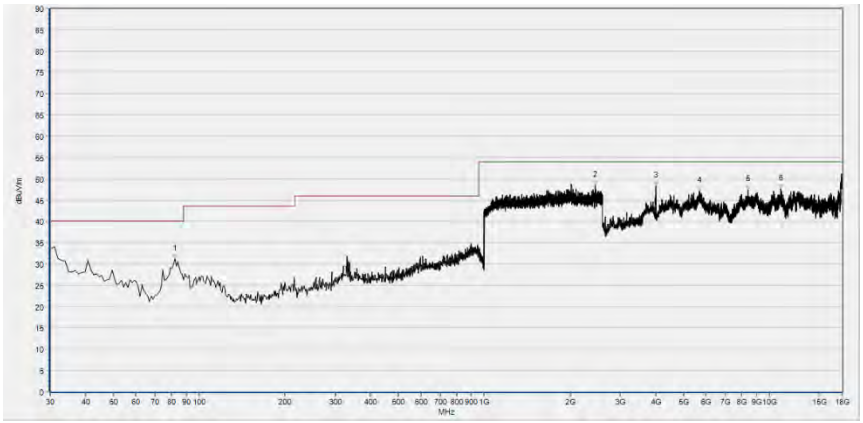
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
332.640	34.25	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1959.467	48.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5245.720	47.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5753.920	47.22	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8458.160	47.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12157.240	48.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

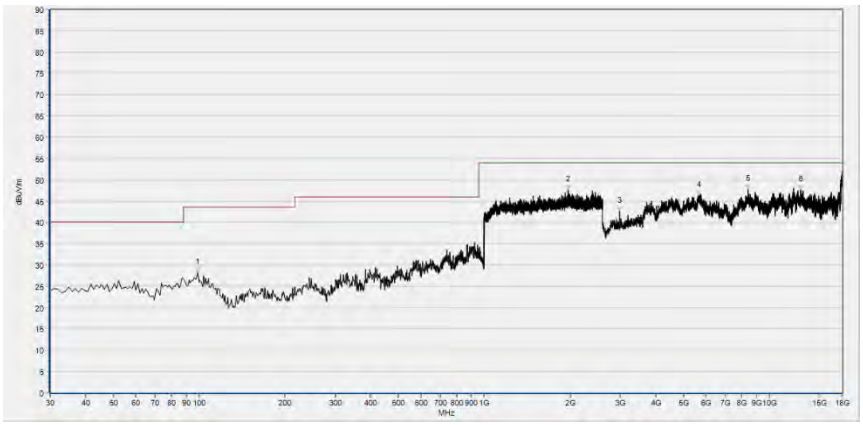


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
82.380	31.23	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
2448.533	48.41	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3995.240	48.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5689.240	47.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8418.120	47.46	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10959.120	47.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

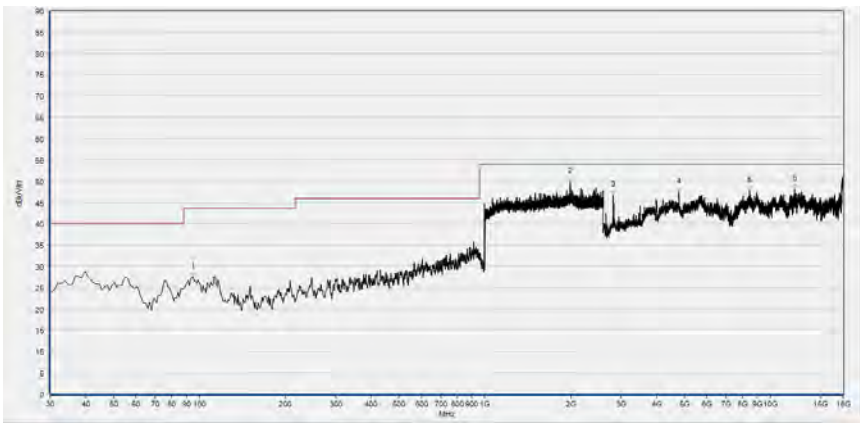
802.11ax (HEW40) Mode

Plot for Channel 3



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
98.870	28.18	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1963.733	47.55	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2988.080	42.55	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
5649.200	46.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8424.280	47.84	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12893.360	47.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

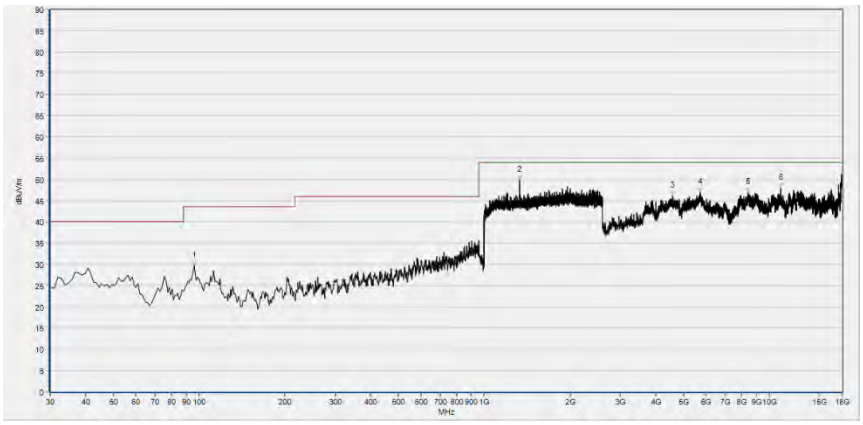
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
94.990	27.46	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1995.200	49.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2821.760	46.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4789.880	47.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8461.240	47.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12191.120	48.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

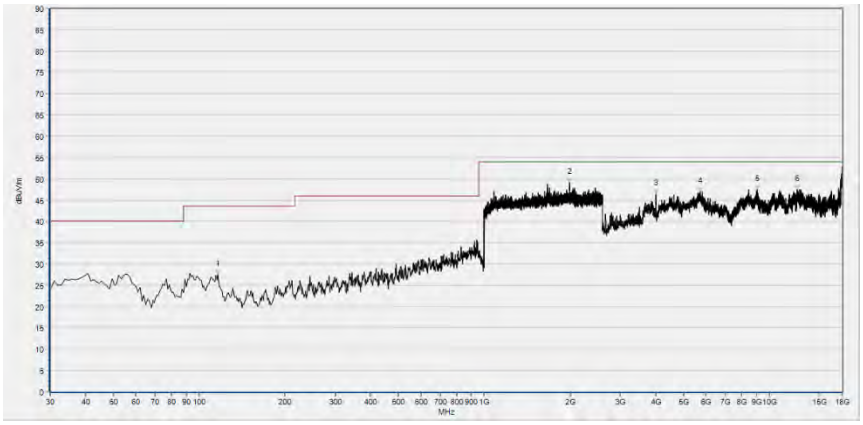
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
95.960	29.62	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1328.533	49.79	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4574.280	46.01	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5716.960	46.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8408.880	46.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10989.920	48.00	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

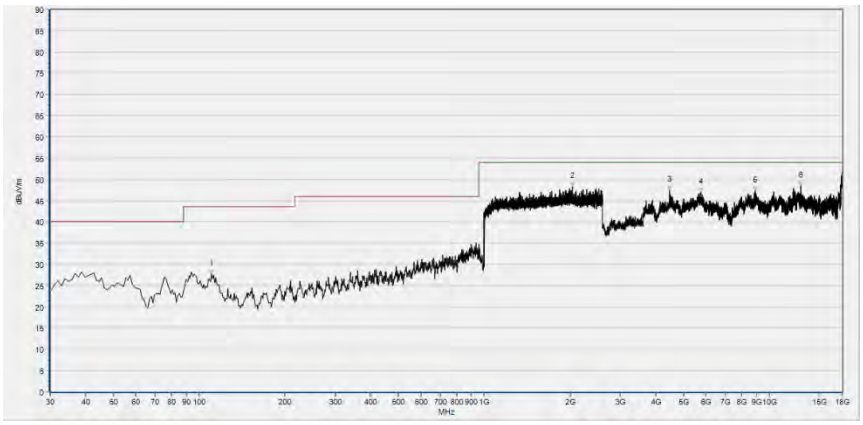
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
116.330	27.49	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1994.667	49.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3995.240	46.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5720.040	46.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9089.560	47.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12536.080	47.41	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

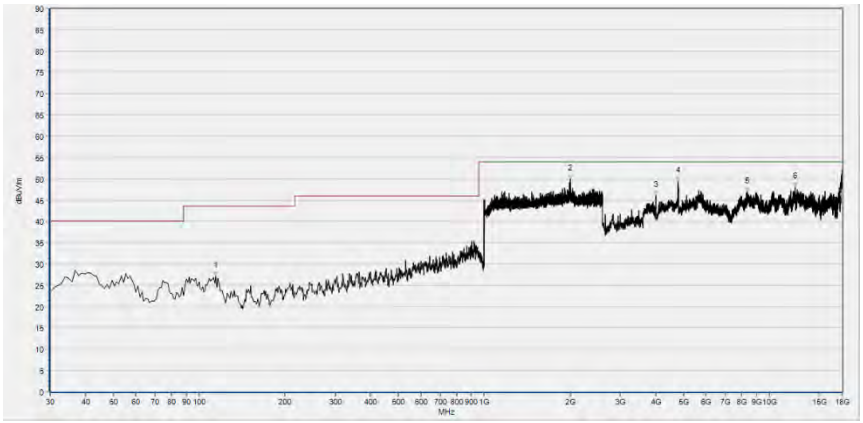
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 9



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	27.67	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2039.467	48.27	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4460.320	47.49	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5738.520	46.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8898.600	47.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12893.360	48.51	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
114.390	27.18	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2000.533	49.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3995.240	46.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4786.800	49.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8365.760	46.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12277.360	48.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test Items	Uncertainty
Peak Output Power	±2.22dB
Power Spectral Density	±2.22dB
Bandwidth	±5%
Conducted Spurious Emission	±2.77dB
Restricted Frequency Bands	±5%
Radiated Emission	±2.95dB
Conducted Emission	±2.44dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.

4. Test Equipments Utilized

4.1 Conducted Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Attenuator 1	(N/A.)	10dB	Resent	N/A	N/A
EXA Signal Analyzer	MY53470836	N9010A	Agilent	2021.03.25	2022.03.24
USB Wideband Power Sensor	MY54210011	U2021XA	Agilent	2021.03.25	2022.03.24
RF cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial cable	CB02	RF02	Morlab	N/A	N/A
SMA connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Computer	T430i	Think Pad	Lenovo	N/A	N/A

4.2 Conducted Emission Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY56400093	N9038A	KEYSIGHT	2021.03.09	2022.03.08
LISN	812744	NSLK 8127	Schwarzbeck	2021.03.09	2022.03.08
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2020.07.24	2021.07.23
Coaxial cable(BNC) (30MHz-26GHz)	CB01	EMC01	Morlab	N/A	N/A

4.3 List of Software Used

Description	Manufacturer	Software Version
Test System	Townsend	V2.5.77.0418
MORLAB EMCR V1.2	MORLAB	V1.0
TS+ -[JS32-CE]	Tonscend	V2.5.0.0

4.4 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY54130016	N9038A	Agilent	2020.07.21	2021.07.20
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2019.05.24	2022.05.23
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2019.02.14	2022.02.13
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2019.07.26	2022.07.25
Test Antenna – Horn	BBHA9170 #774	BBHA9170	Schwarzbeck	2019.07.26	2022.07.25
Coaxial cable (N male) (9kHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB02	EMC02	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB03	EMC03	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-40GHz)	CB05	EMC05	Morlab	N/A	N/A
1-18GHz pre-Amplifier	61171/61172	S020180L3203	Tonscend	2020.07.21	2021.07.20
18-26.5GHz pre-Amplifier	46732	S10M100L3802	Tonscend	2020.07.21	2021.07.20
26-40GHz pre-Amplifier	56774	S40M400L4002	Tonscend	2020.07.21	2021.07.20
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	2020.07.21	2021.07.20
Anechoic Chamber	N/A	9m*6m*6m	CRT	2020.01.06	2023.01.05

END OF REPORT