



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.

KDB 789033 Section H) 3)5)6(d)) was used in order to prove compliance

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 Result

The lowest and highest channels are tested to verify Restricted Frequency Bands.

The measurement results are obtained as below:

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

A_T : Total correction Factor except Antenna; U_R : Receiver Reading

G_{preamp} : Preamplifier Gain; A_{Factor} : Antenna Factor at 3m

Note 1: 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.

Note 2 All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

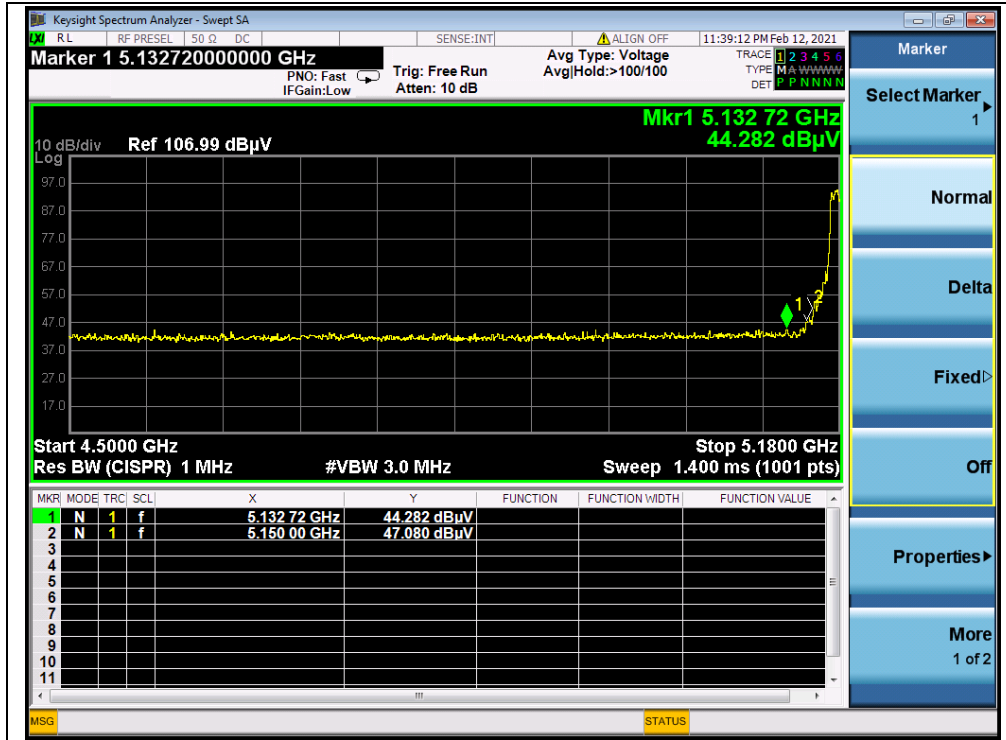
802.11a Mode

A. Test Verdict:

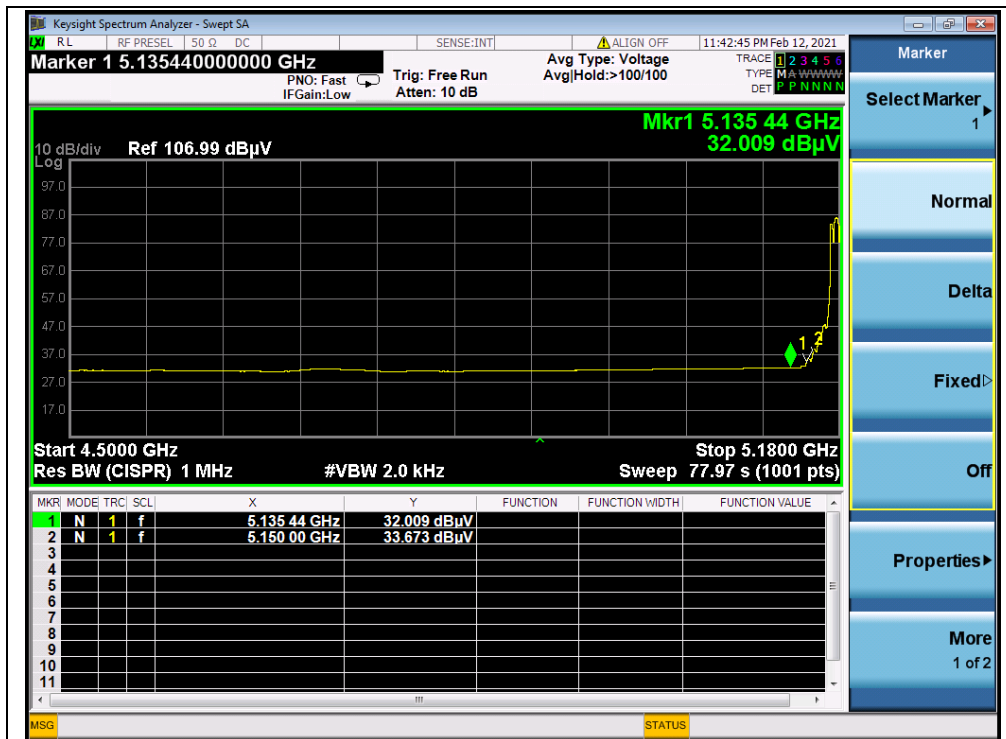
Channel	Frequency (MHz)	Detector	Receiver Reading	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)					
36	5150.00	PK	47.08	-16.92	32.20	62.36	74	PASS
36	5150.00	AV	33.67	-16.92	32.20	48.95	54	PASS
64	5353.10	PK	41.09	-16.80	32.20	56.49	74	PASS
64	5350.00	AV	31.51	-16.80	32.20	46.91	54	PASS
100	5470.00	PK	43.81	-16.64	32.20	59.37	68.23	PASS
100	5470.00	AV	33.00	-16.64	32.20	48.56	54	PASS
144	5751.60	PK	42.46	-16.64	32.20	58.02	68.23	PASS
144	5725.00	AV	32.83	-16.64	32.20	48.39	54	PASS
149	5725.00	PK	50.18	-16.23	32.20	66.15	122.23	PASS
165	5925.00	PK	42.49	-16.23	32.20	58.46	68.23	PASS



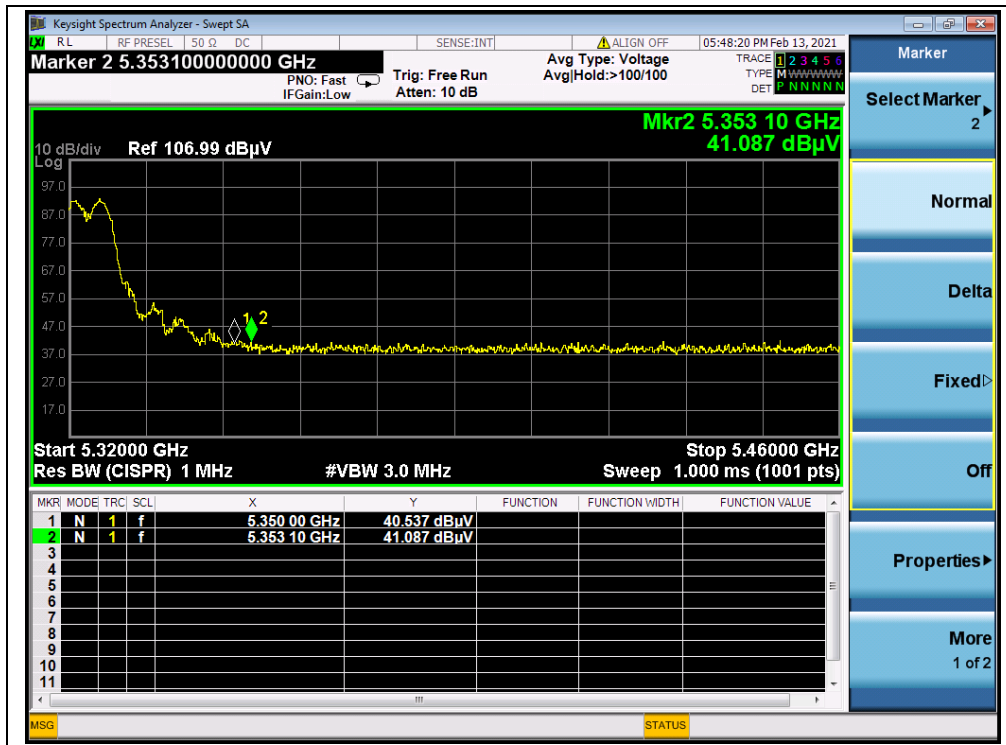
B.Test Plot:



(PEAK, Channel 36, 802.11a)



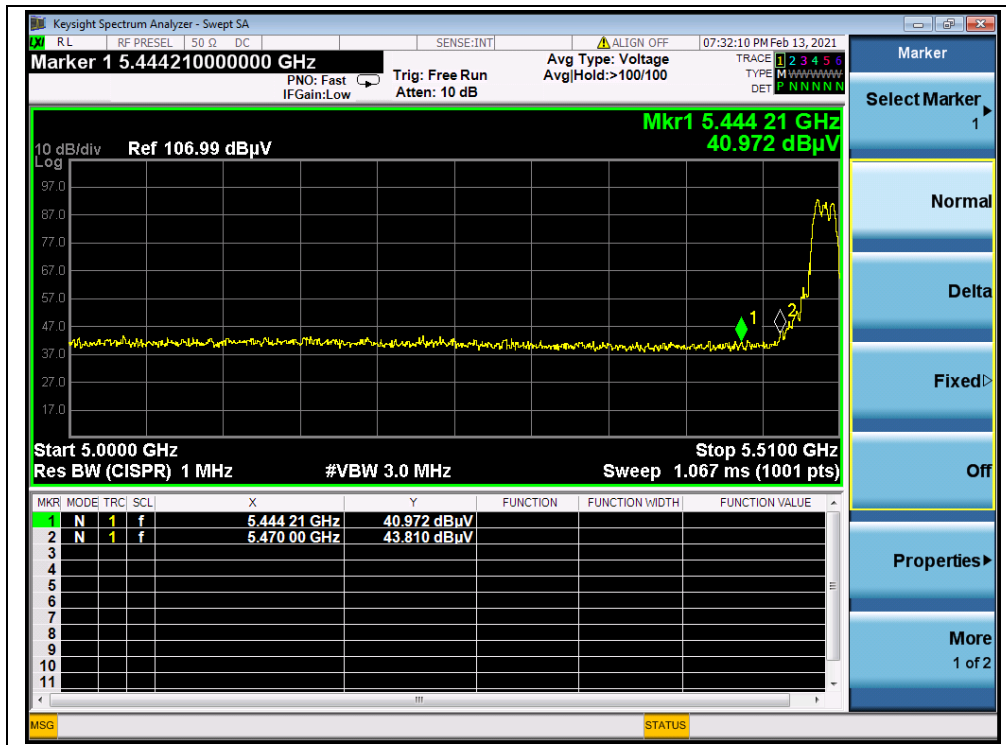
(AVERAGE, Channel 36, 802.11a)



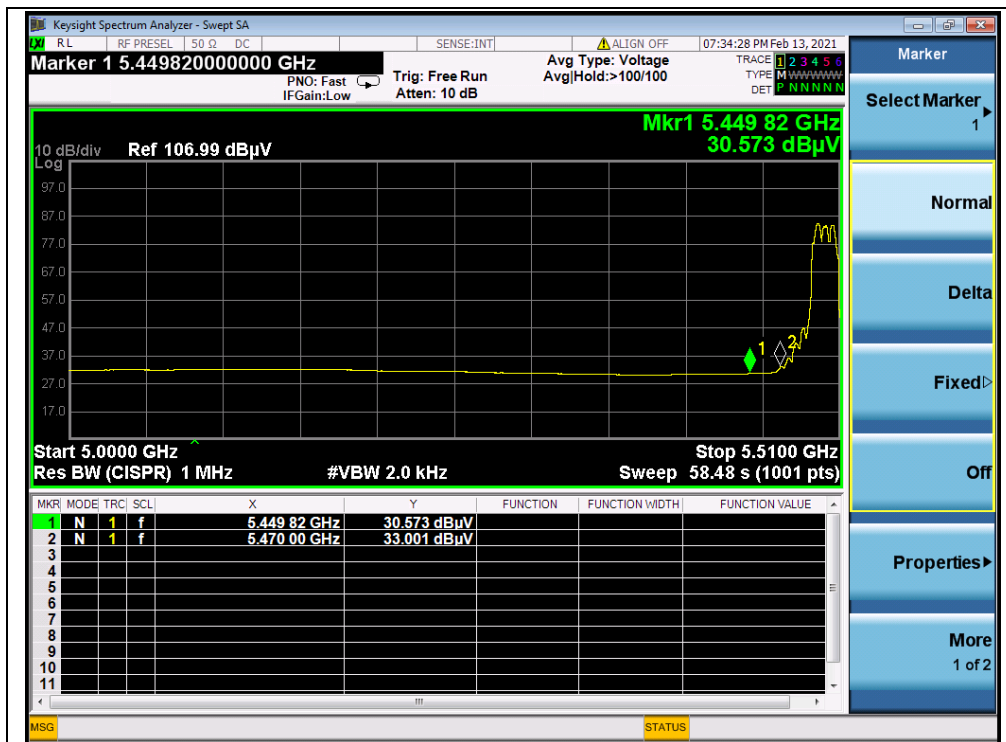
(PEAK, Channel 64, 802.11a)



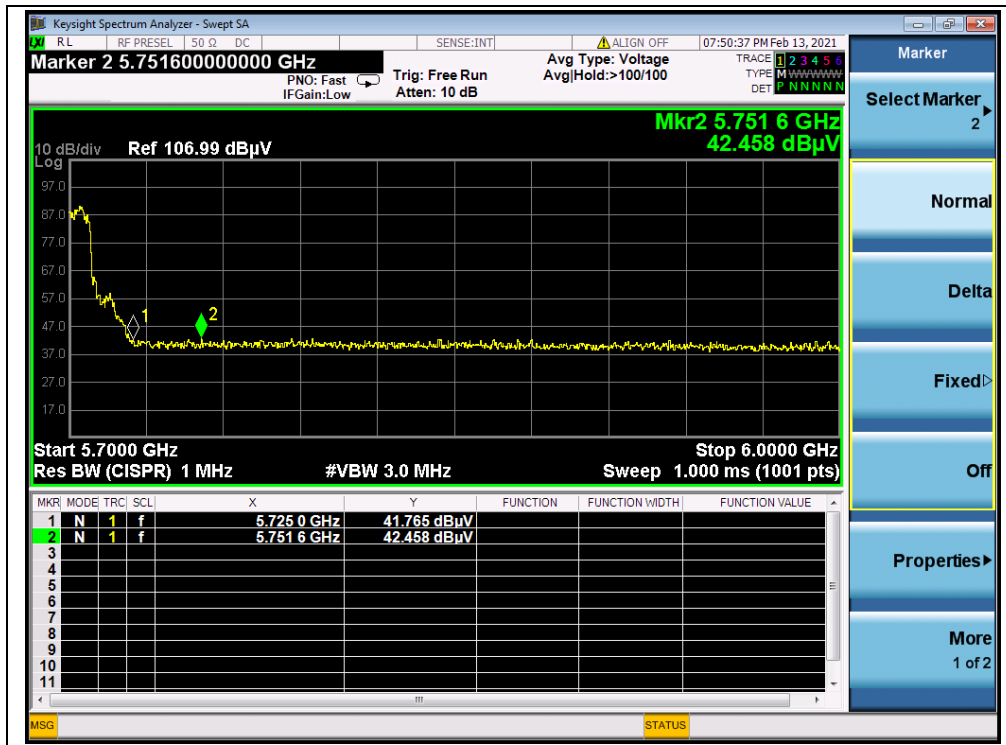
(AVERAGE, Channel 64, 802.11a)



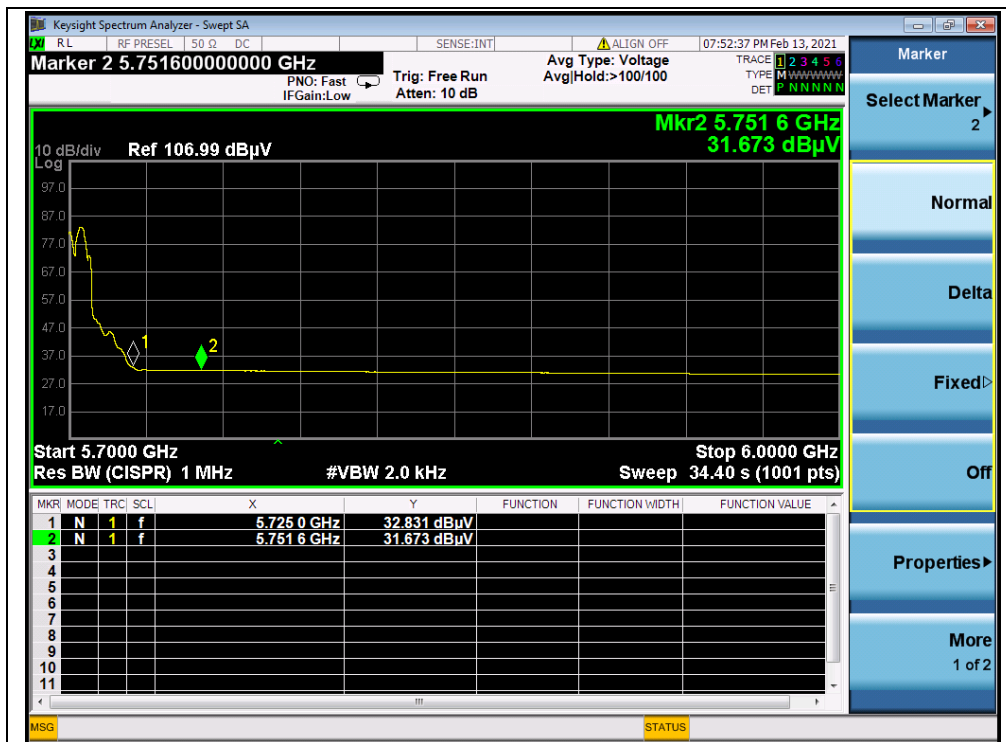
(PEAK, Channel100, 802.11a)



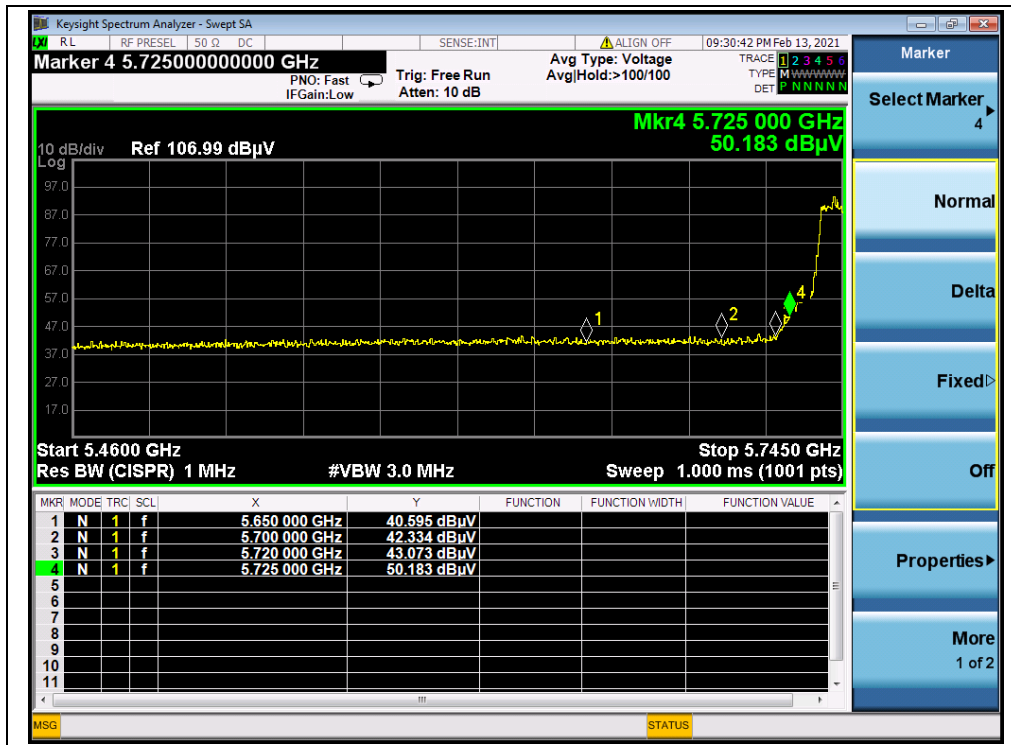
(AVERAGE, Channel 100, 802.11a)



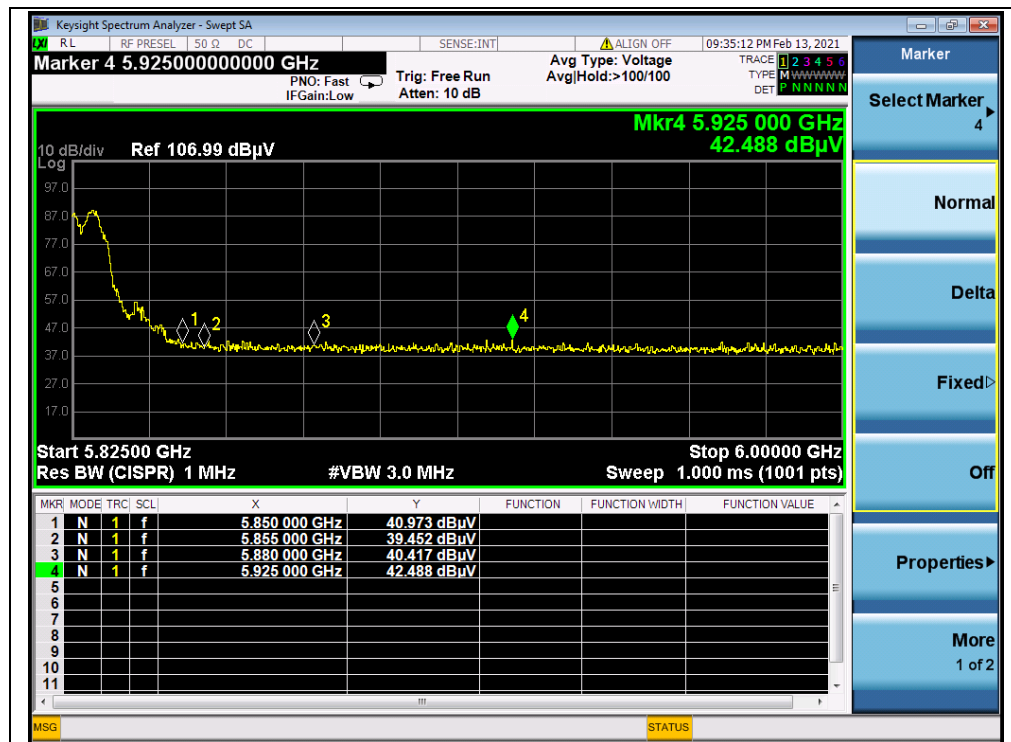
(PEAK, Channel 144, 802.11a)



(AVERAGE, Channel 144, 802.11a)



(PEAK, Channel 149, 802.11a)



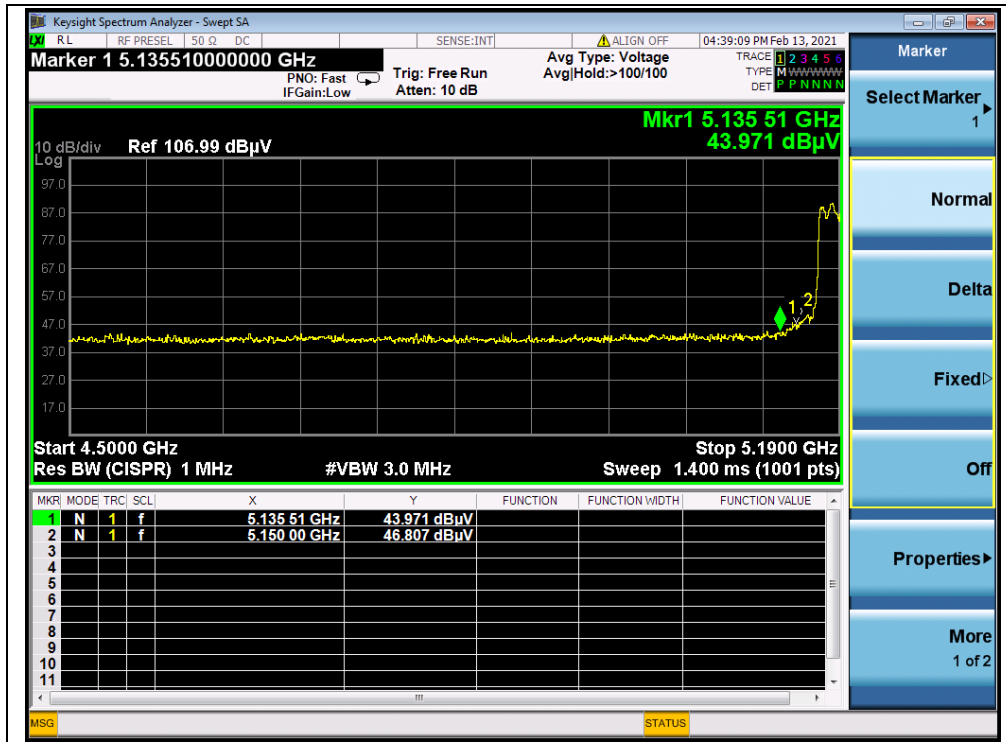
(PEAK, Channel 165, 802.11a)

**802.11n (HT40) Mode****A.Test Verdict:**

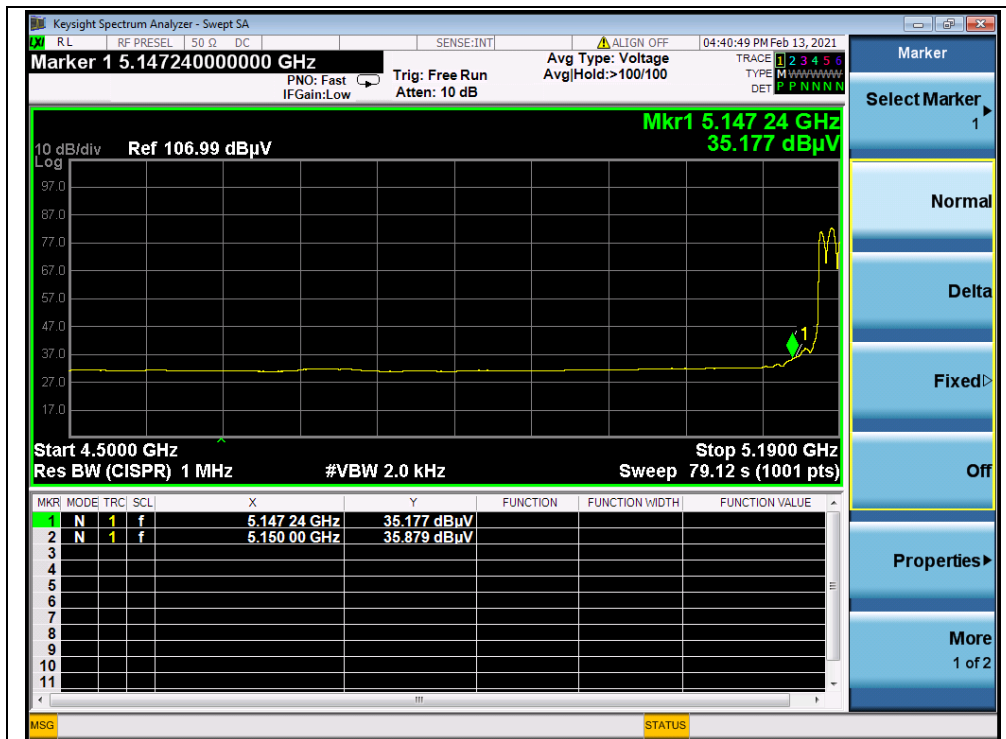
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
38	5150.00	PK	46.81	-16.92	32.20	62.09	74	PASS
38	5150.00	AV	35.88	-16.92	32.20	51.16	54	PASS
62	5351.40	PK	48.51	-16.80	32.20	63.91	74	PASS
62	5350.00	AV	37.29	-16.80	32.20	52.69	54	PASS
102	5468.69	PK	44.54	-16.64	32.20	60.10	68.23	PASS
102	5465.12	AV	32.99	-16.64	32.20	48.55	54	PASS
142	5737.32	PK	42.13	-16.64	32.20	57.69	68.23	PASS
142	5732.70	AV	31.64	-16.64	32.20	47.20	54	PASS
151	5725.00	PK	53.75	-16.23	32.20	69.72	122.23	PASS
159	5850.00	PK	40.19	-16.23	32.20	56.16	122.23	PASS



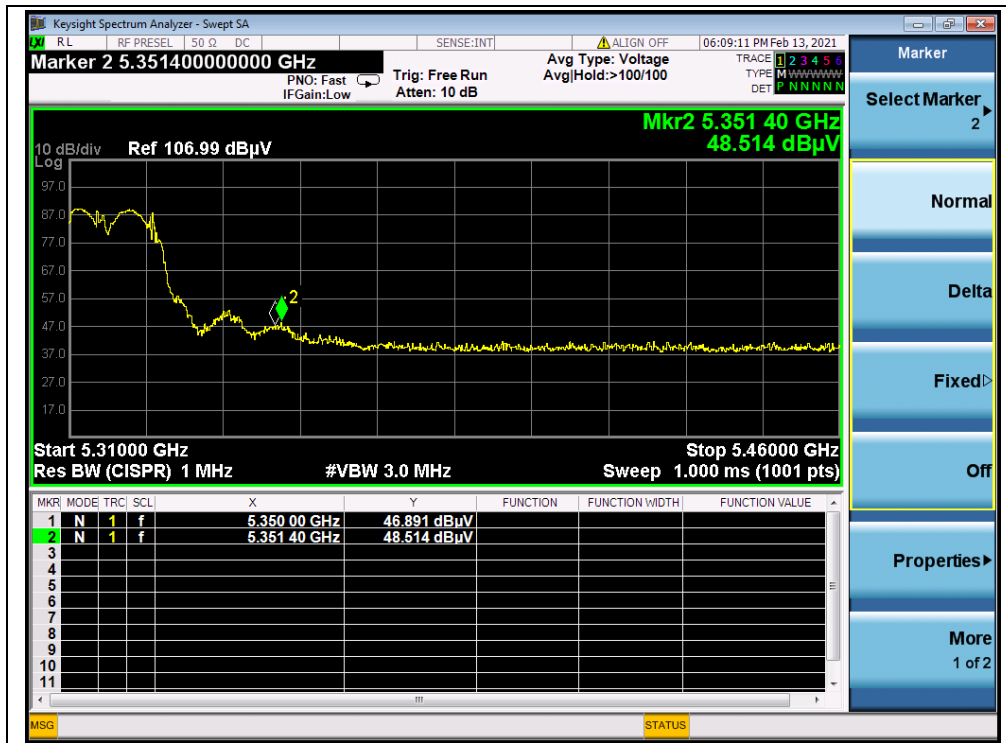
B.Test Plot:



(PEAK, Channel 38, 802.11n (HT40))



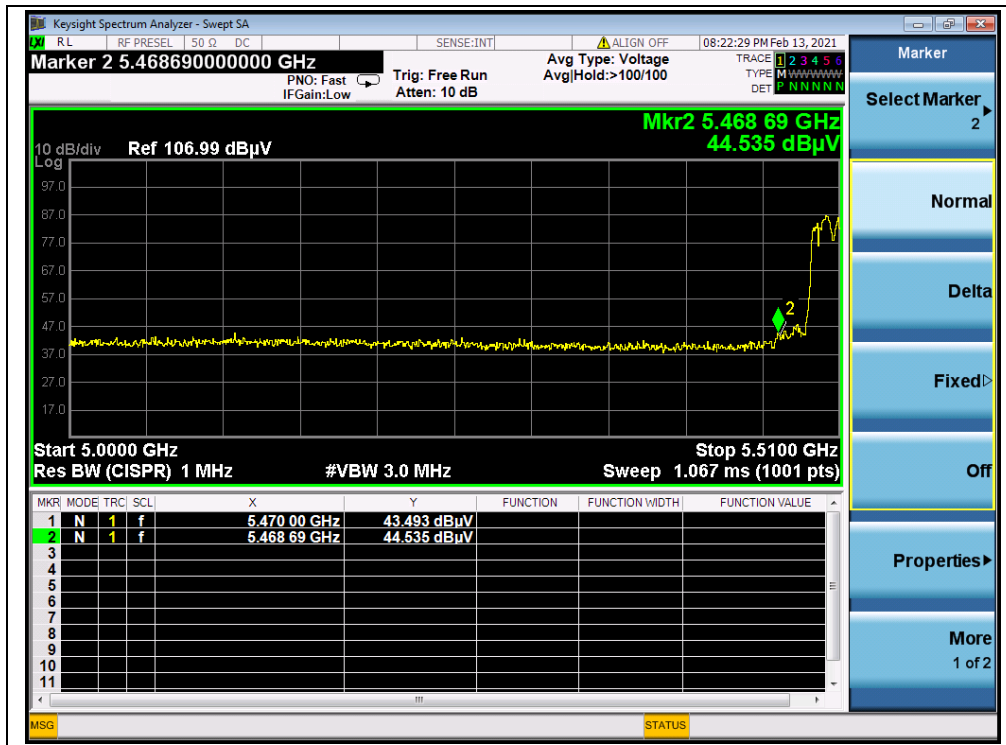
(AVERAGE, Channel 38, 802.11n (HT40))



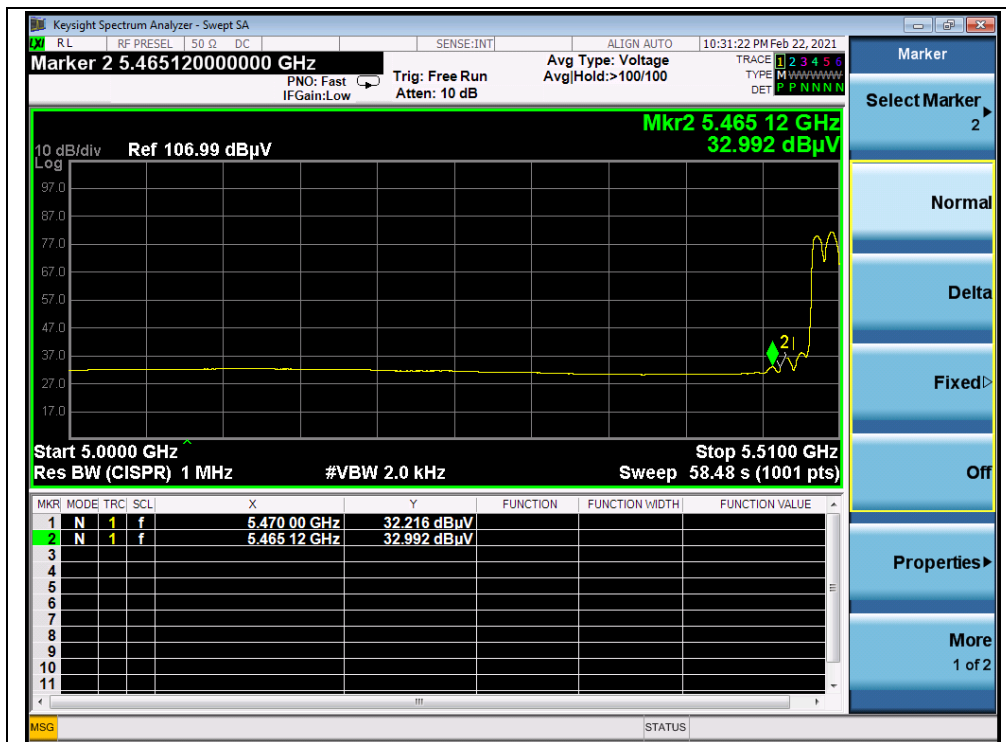
(PEAK, Channel 62, 802.11n (HT40))



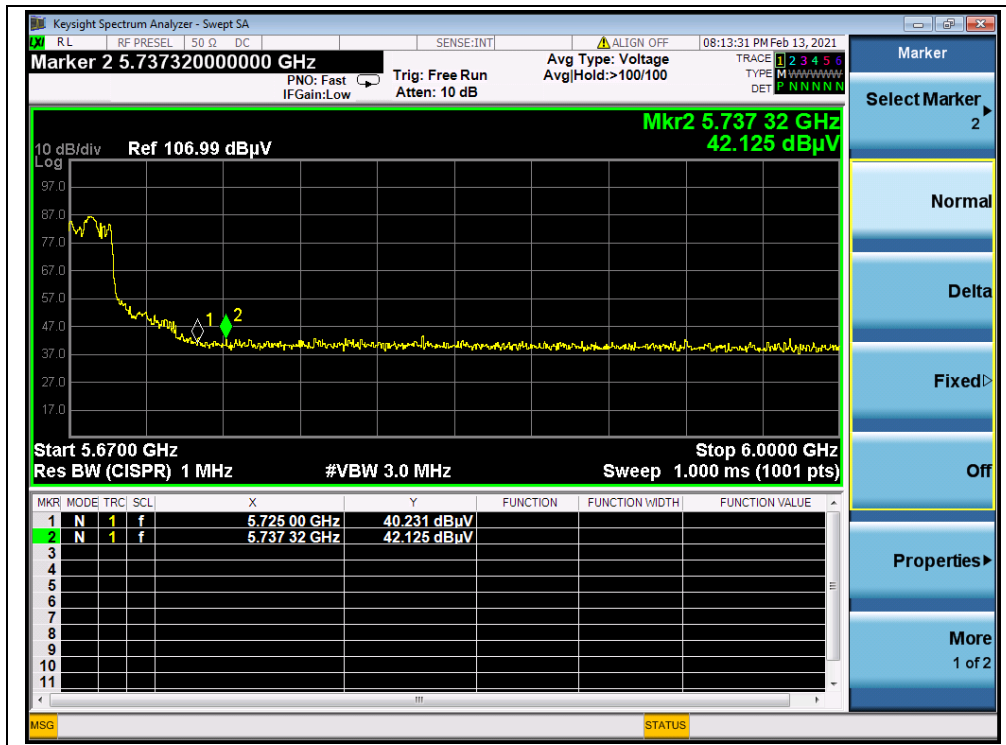
(AVERAGE, Channel 62, 802.11n (HT40))



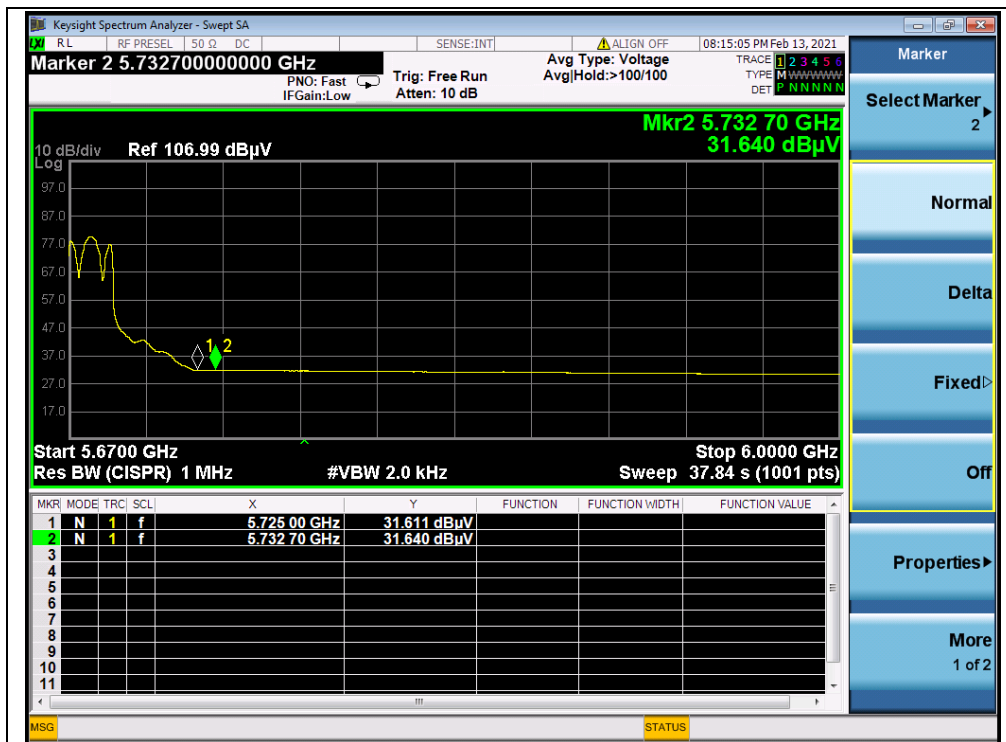
(PEAK, Channel 102, 802.11n (HT40))



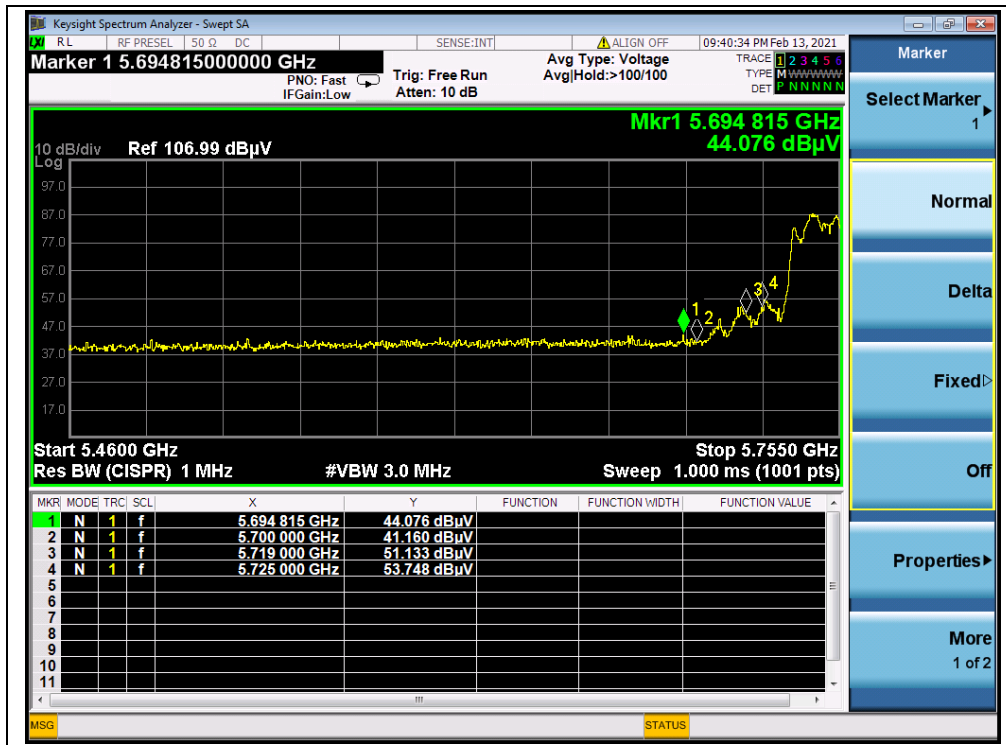
(AVERAGE, Channel 102, 802.11n (HT40))



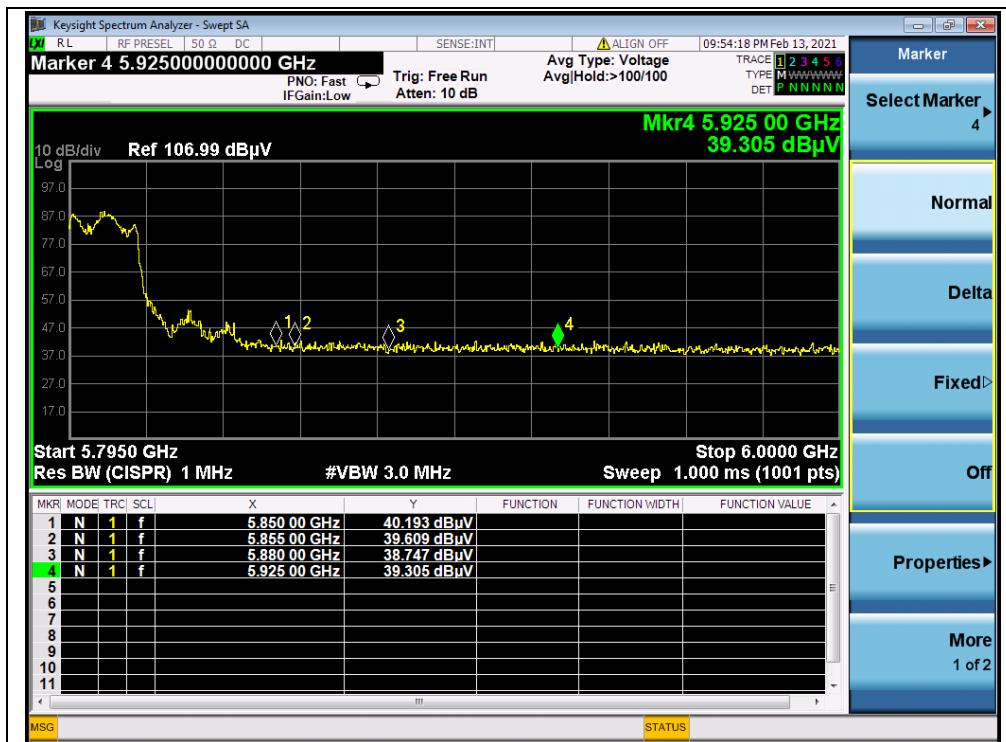
(PEAK, Channel 142, 802.11n (HT40))



(AVERAGE, Channel 142, 802.11n (HT40))



(PEAK, Channel 151, 802.11n (HT40))



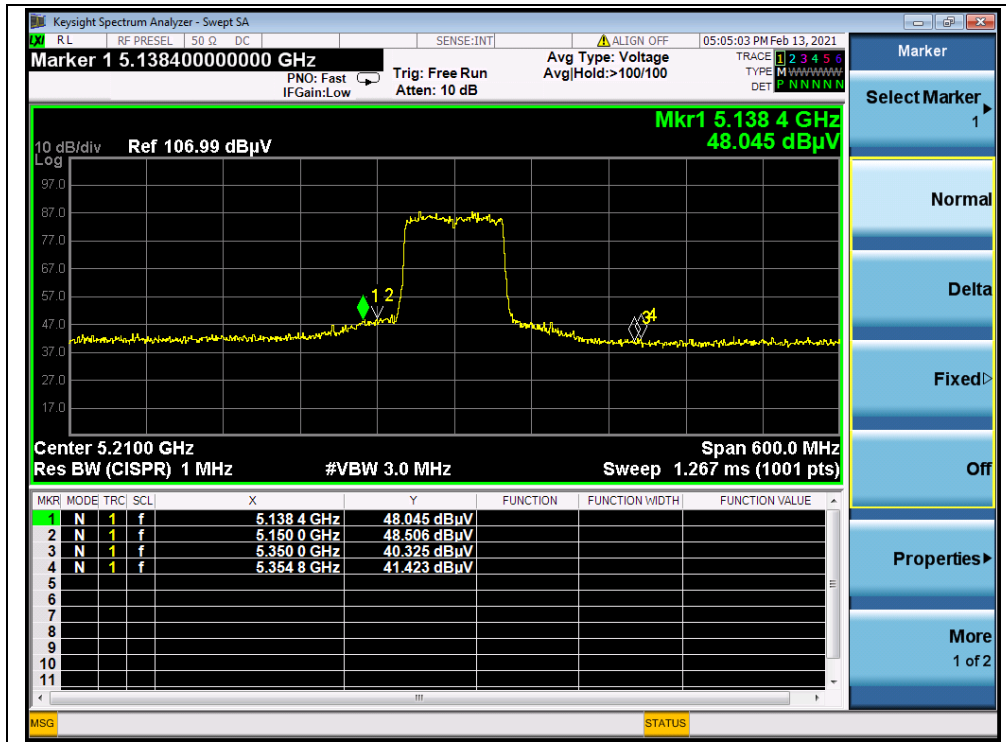
(PEAK, Channel 159, 802.11n (HT40))

**802.11ac (VHT80) Mode****A. Test Verdict:**

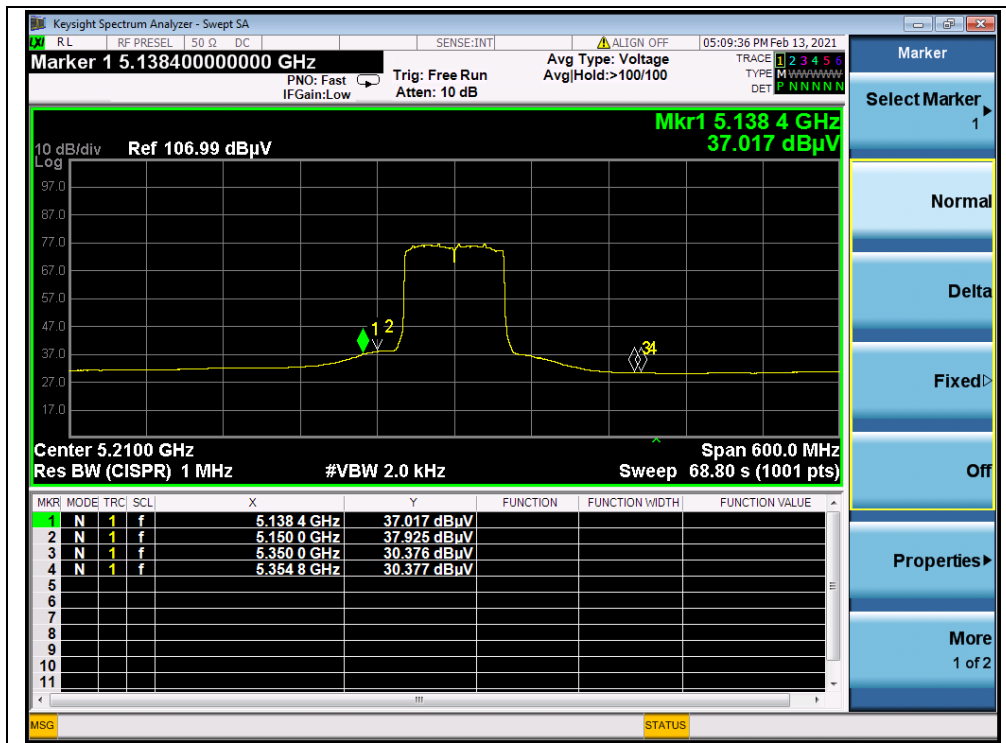
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
42	5150.00	PK	48.51	-16.92	32.20	63.79	74	PASS
42	5150.00	AV	37.93	-16.92	32.20	53.21	54	PASS
58	5355.40	PK	46.65	-16.80	32.20	62.05	74	PASS
58	5350.00	AV	35.93	-16.80	32.20	51.33	54	PASS
106	5462.16	PK	48.90	-16.64	32.20	64.46	68.23	PASS
106	5470.00	AV	37.06	-16.64	32.20	52.62	54	PASS
138	5745.46	PK	43.57	-16.64	32.20	59.13	68.23	PASS
138	5759.89	AV	32.28	-16.64	32.20	47.84	54	PASS
155	5716.65	PK	51.59	-16.23	32.20	67.56	110.15	PASS
155	5850.00	PK	45.07	-16.23	32.20	61.04	109.89	PASS



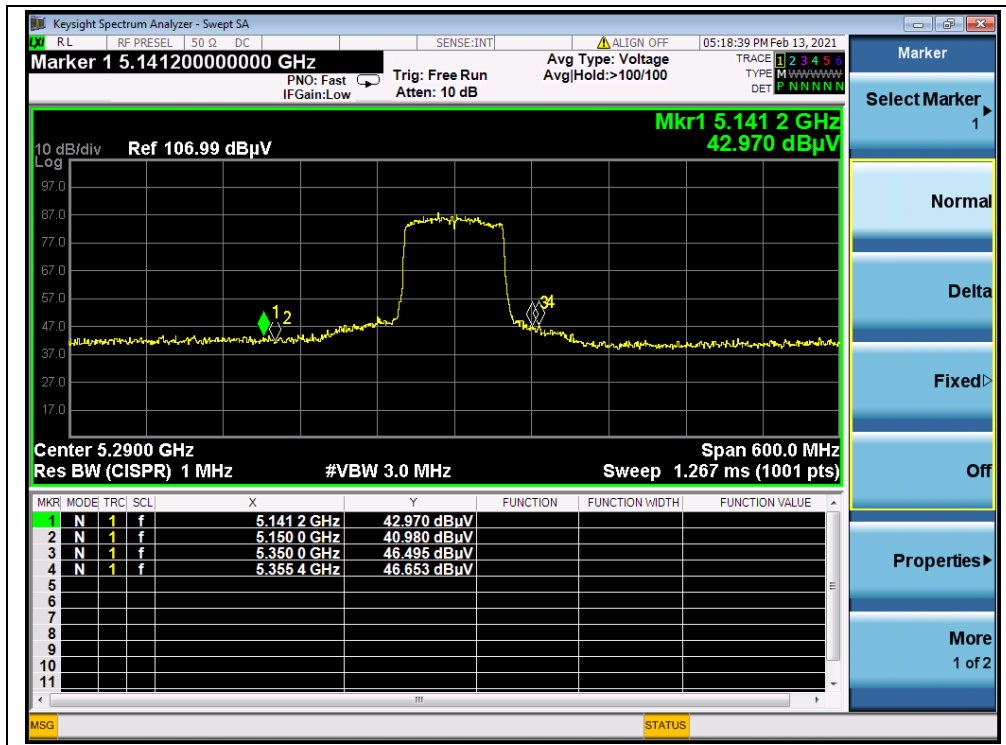
B.Test Plot:



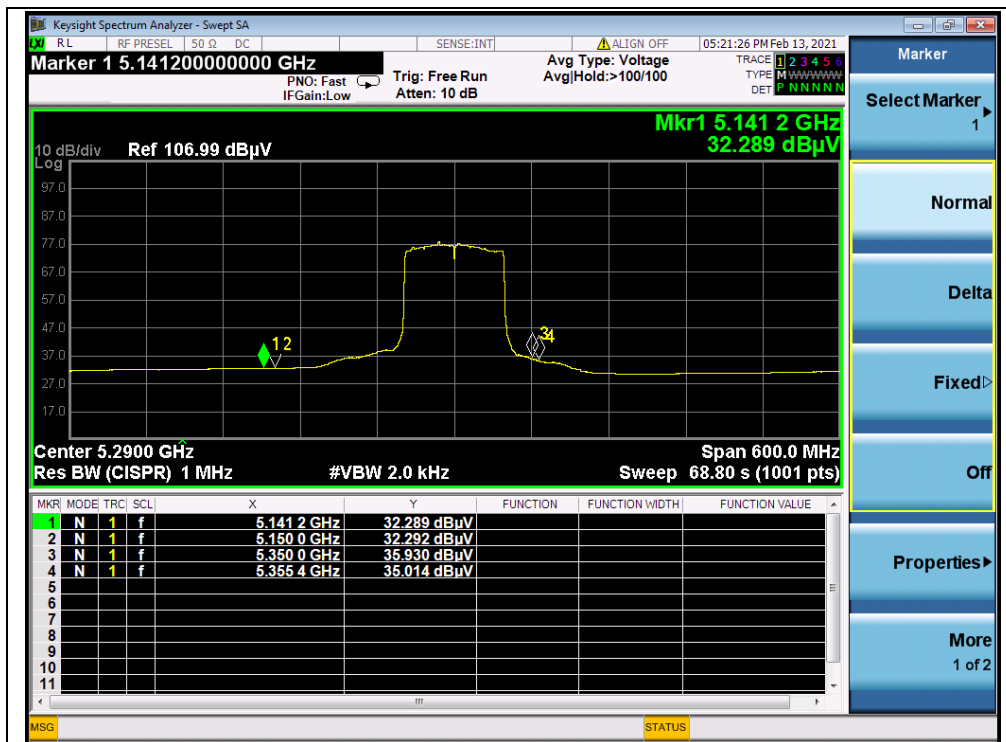
(PEAK, Channel 42, 802.11ac (VHT80))



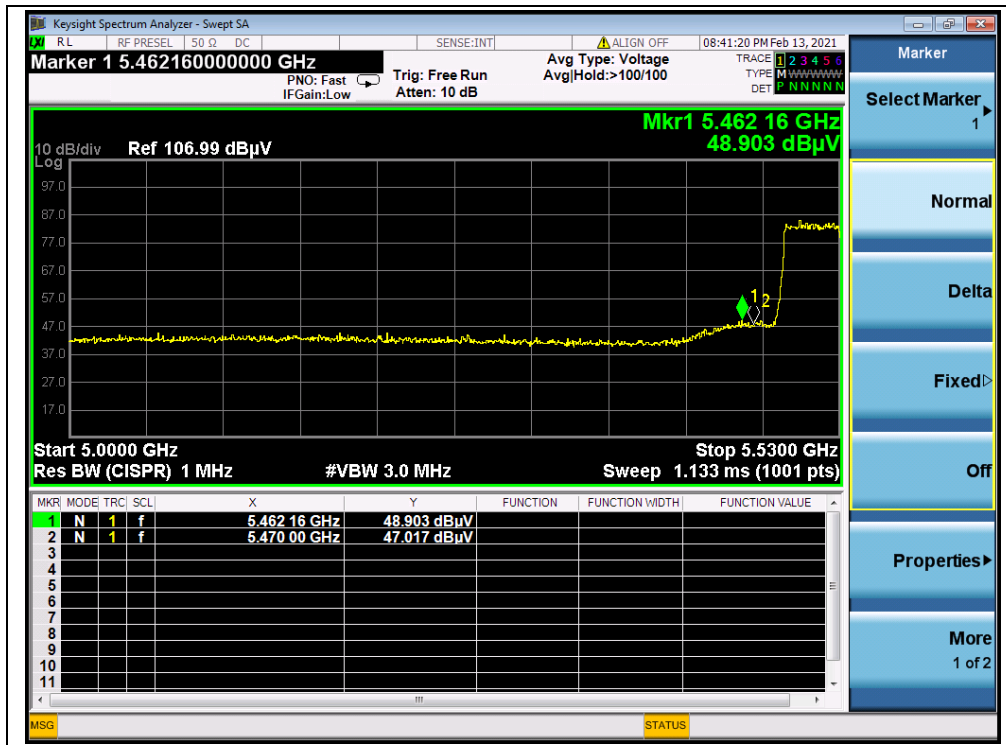
(AVERAGE, Channel 42, 802.11ac (VHT80))



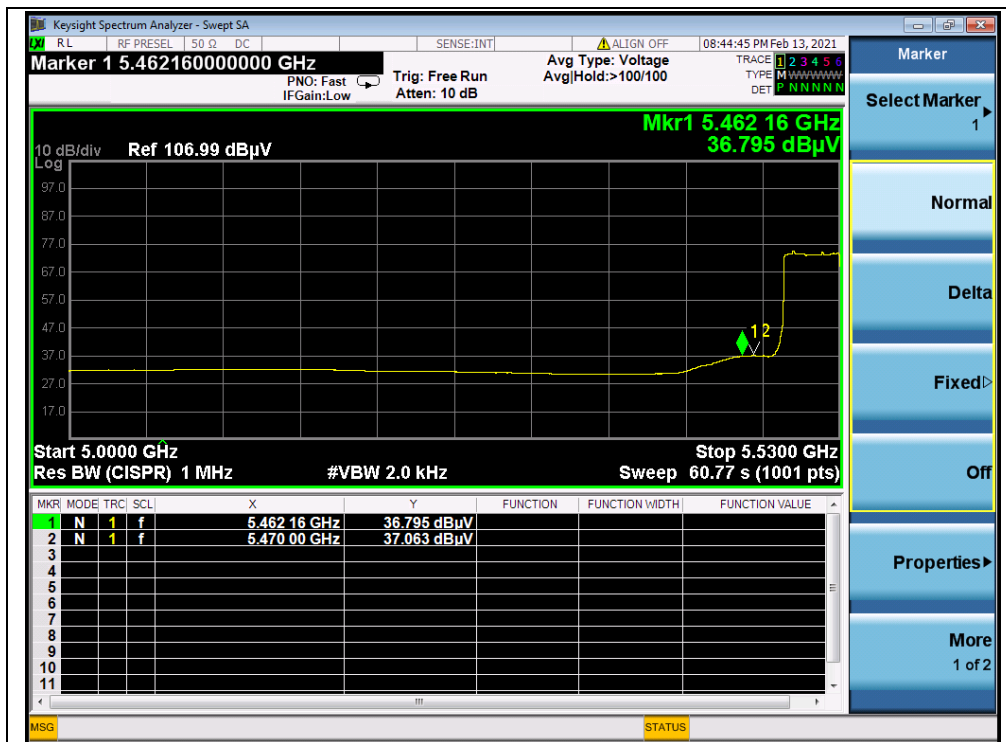
(PEAK, Channel 58, 802.11ac (VHT80))



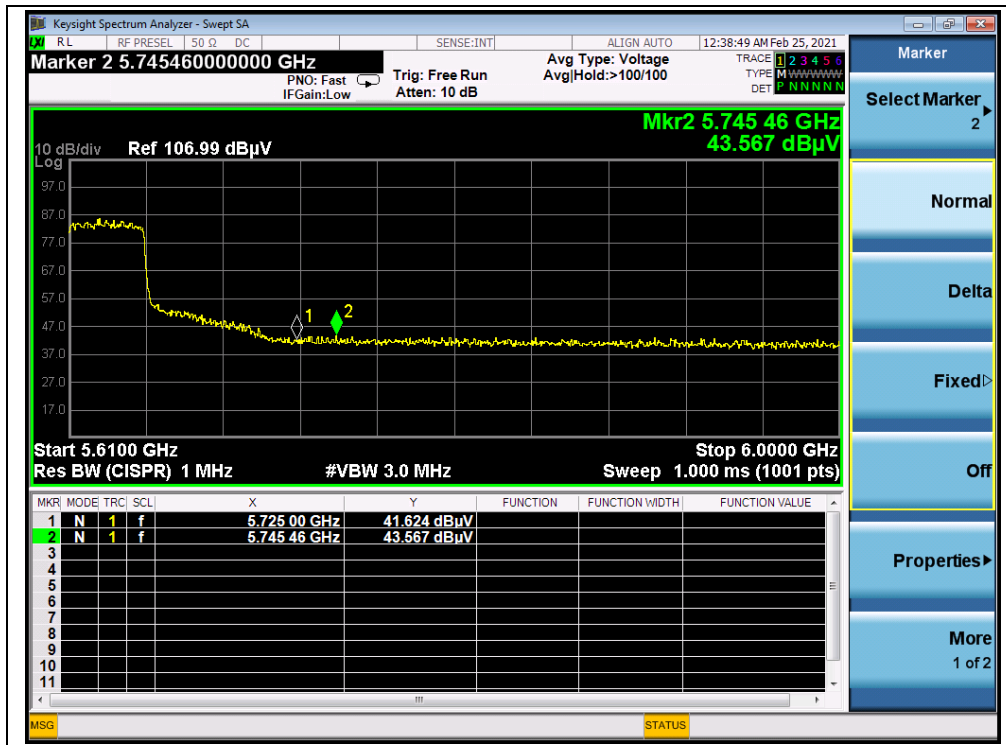
(AVERAGE, Channel 58, 802.11ac (VHT80))



(PEAK, Channel 106, 802.11ac (VHT80))



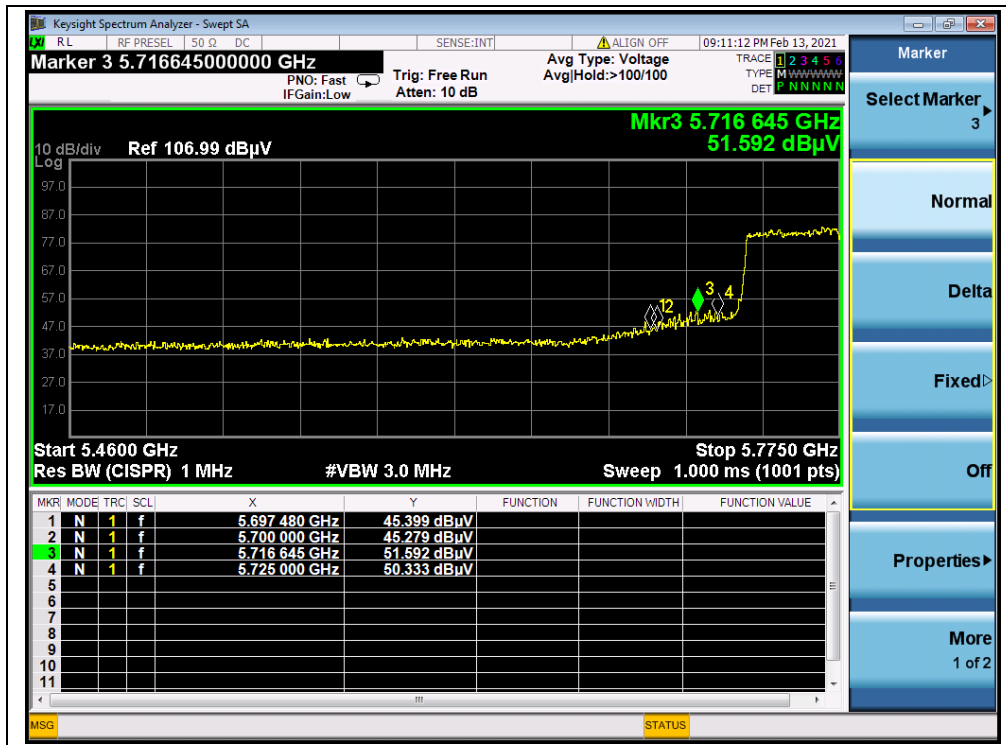
(AVERAGE, Channel 106, 802.11ac (VHT80))



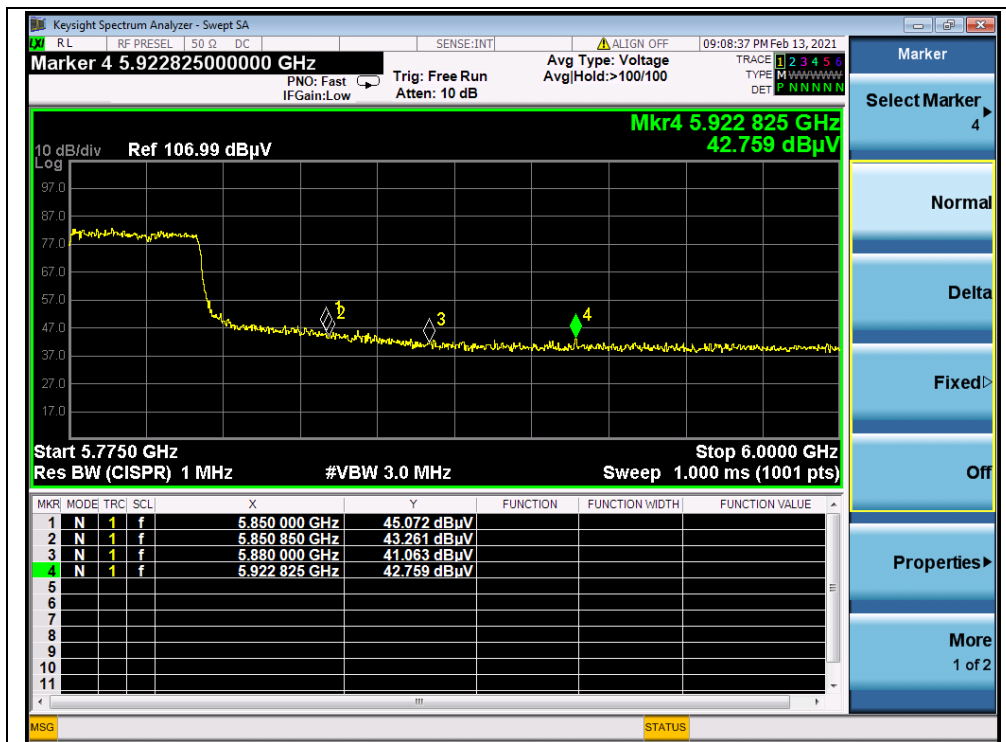
(PEAK, Channel 138, 802.11ac (VHT80))



(AVERAGE, Channel 138, 802.11ac (VHT80))



(PEAK, Channel 155, 802.11ac (VHT80))



(PEAK, Channel 155, 802.11ac (VHT80))

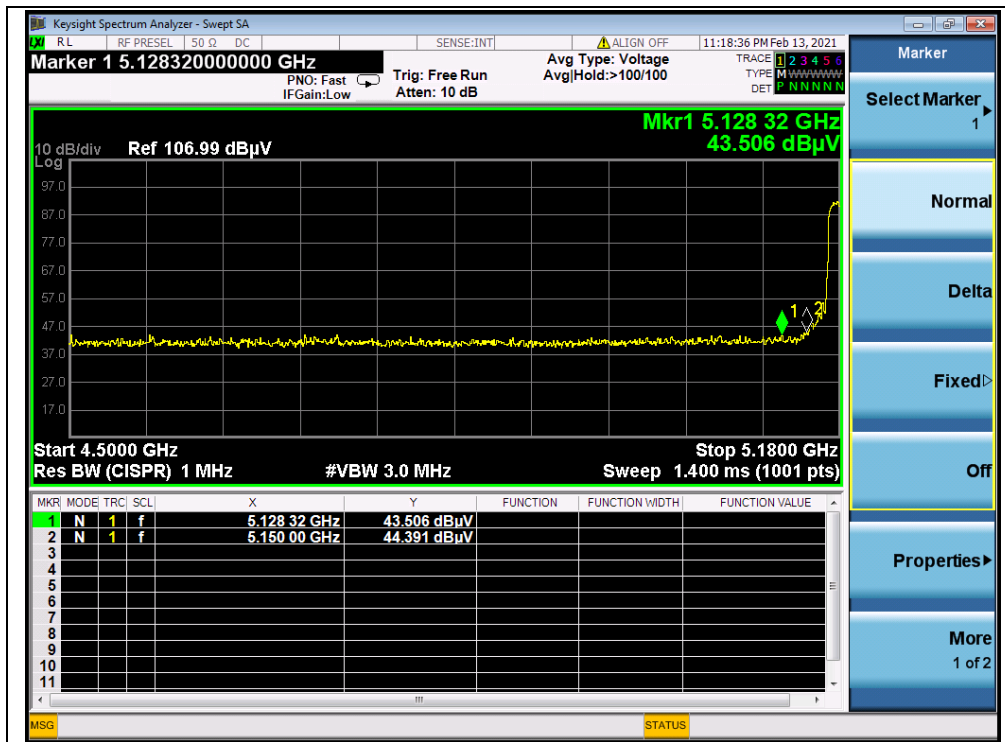


802.11ax (HEW20) Mode

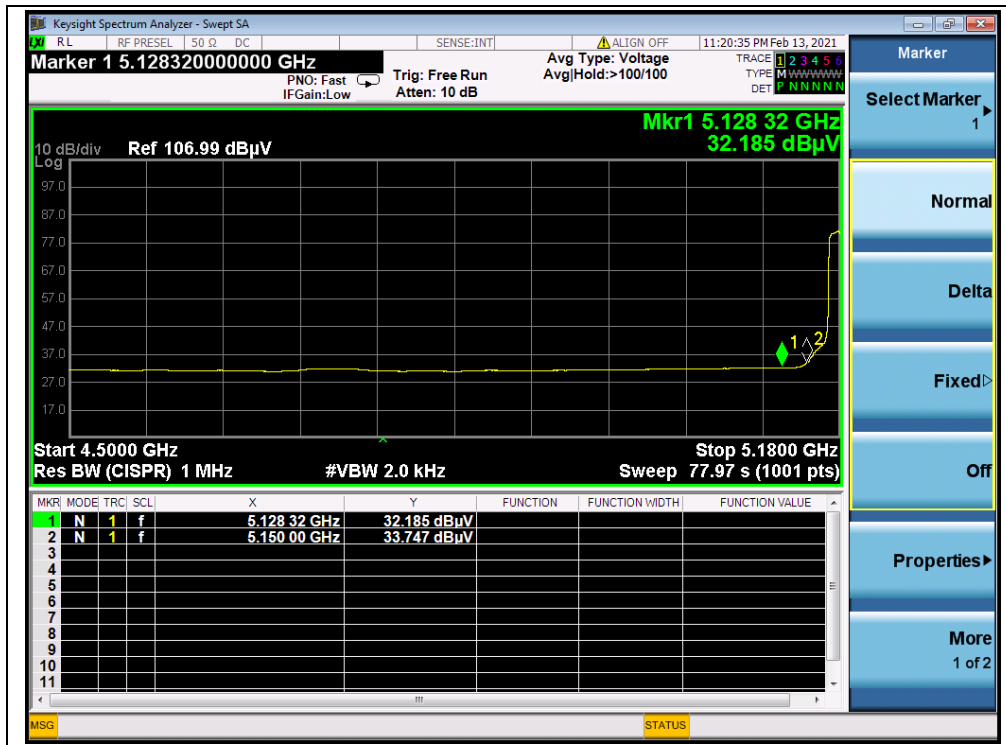
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)		
36	5150.00	PK	44.39	-16.92	32.20	59.67	74	PASS
36	5150.00	AV	33.75	-16.92	32.20	49.03	54	PASS
64	5350.00	PK	43.24	-16.80	32.20	58.64	74	PASS
64	5350.00	AV	32.74	-16.80	32.20	48.14	54	PASS
100	5470.00	PK	44.73	-16.64	32.20	60.29	68.23	PASS
100	5470.00	AV	33.54	-16.64	32.20	49.10	54	PASS
144	5725.00	PK	48.38	-16.64	32.20	63.94	68.23	PASS
144	5725.00	AV	36.82	-16.64	32.20	52.38	54	PASS
149	5725.00	PK	45.20	-16.23	32.20	61.17	122.23	PASS
165	5850.00	PK	48.53	-16.23	32.20	64.50	122.23	PASS

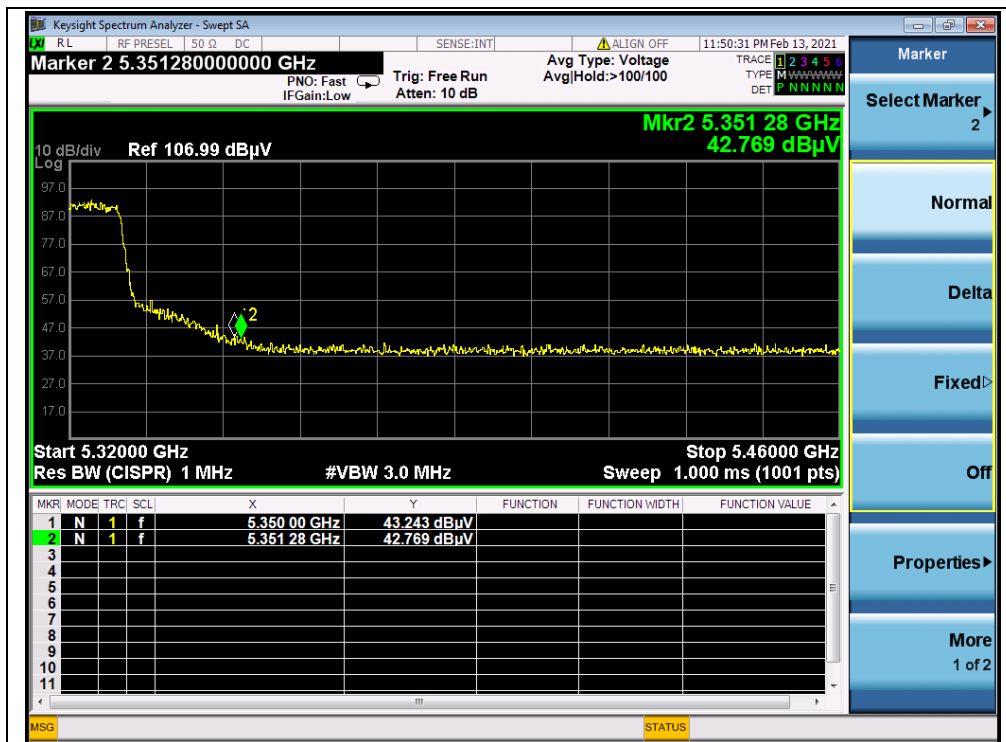
B. Test Plot:



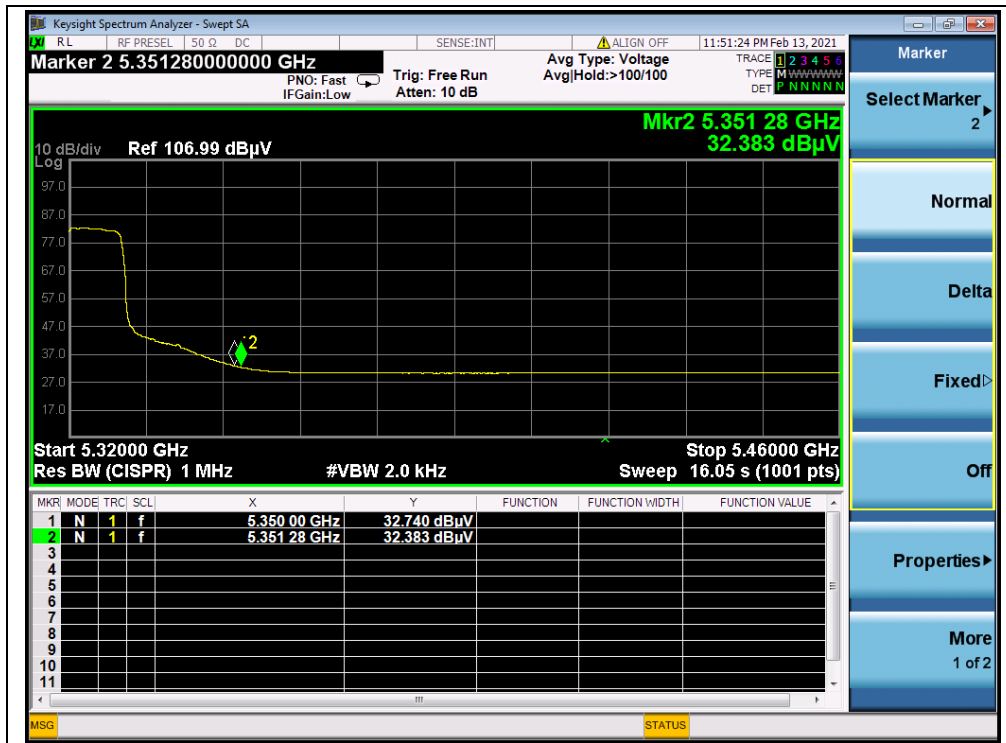
(PEAK, Channel 36, 802.11ax (HEW20))



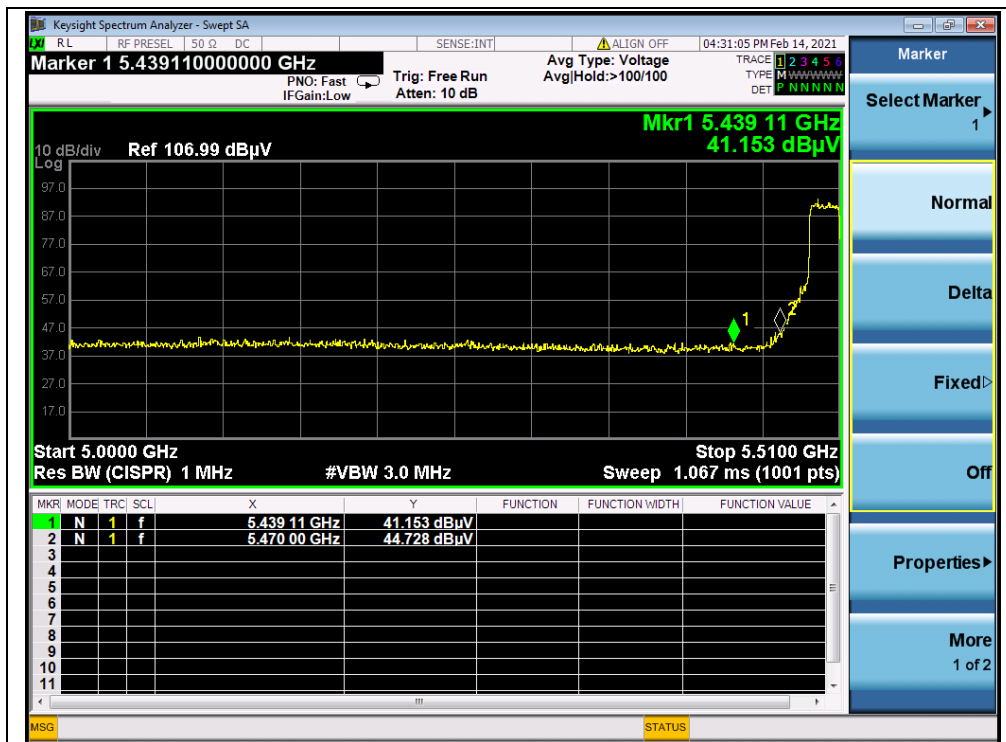
(AVERAGE, Channel 36, 802.11ax (HEW20))



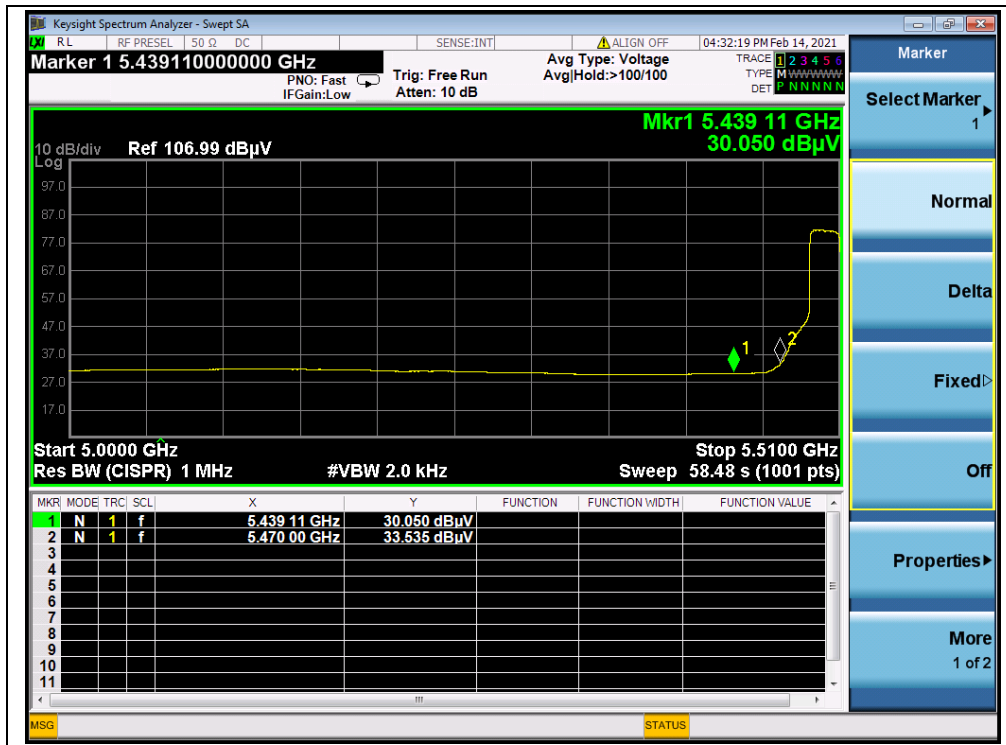
(PEAK, Channel 64, 802.11ax (HEW20))



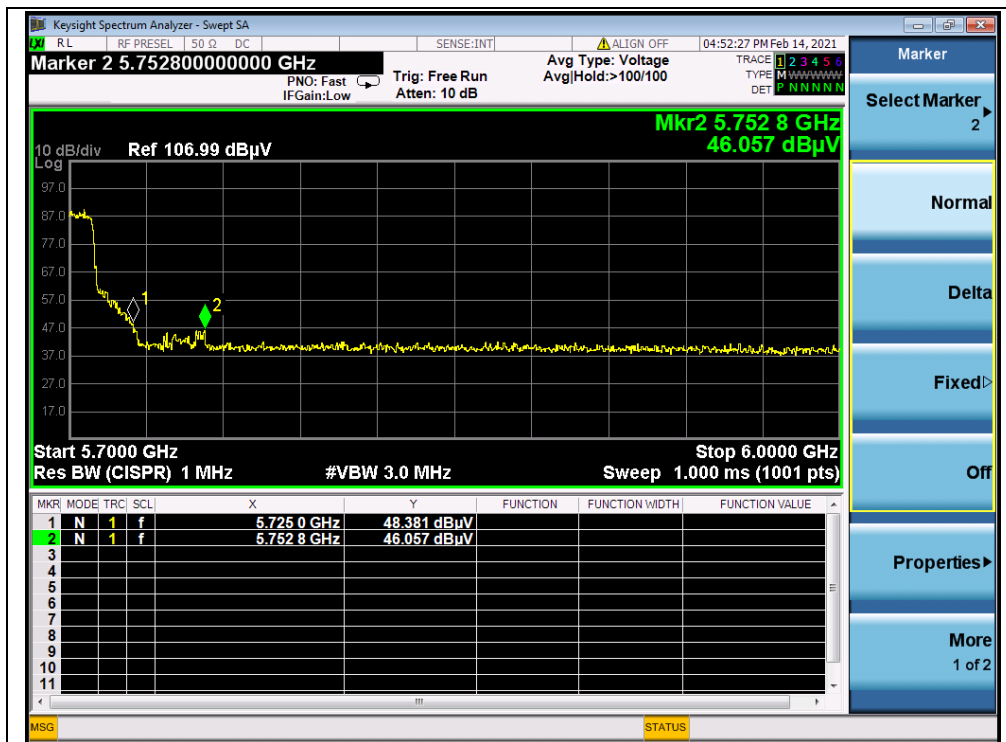
(AVERAGE, Channel 64, 802.11ax (HEW20))



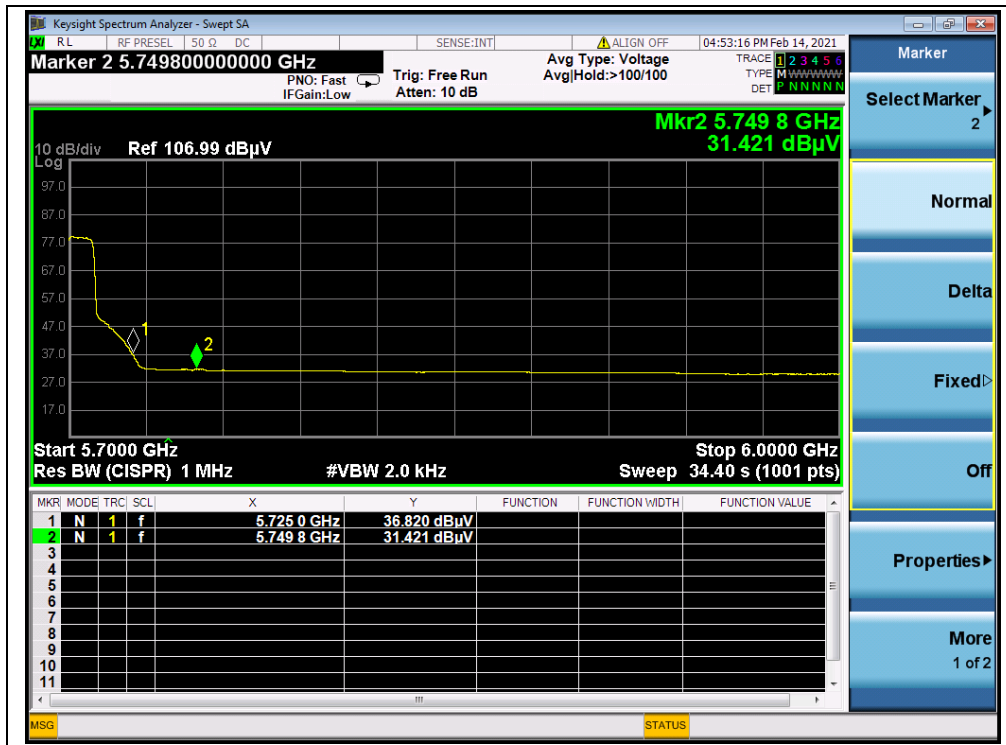
(PEAK, Channel100, 802.11ax (HEW20))



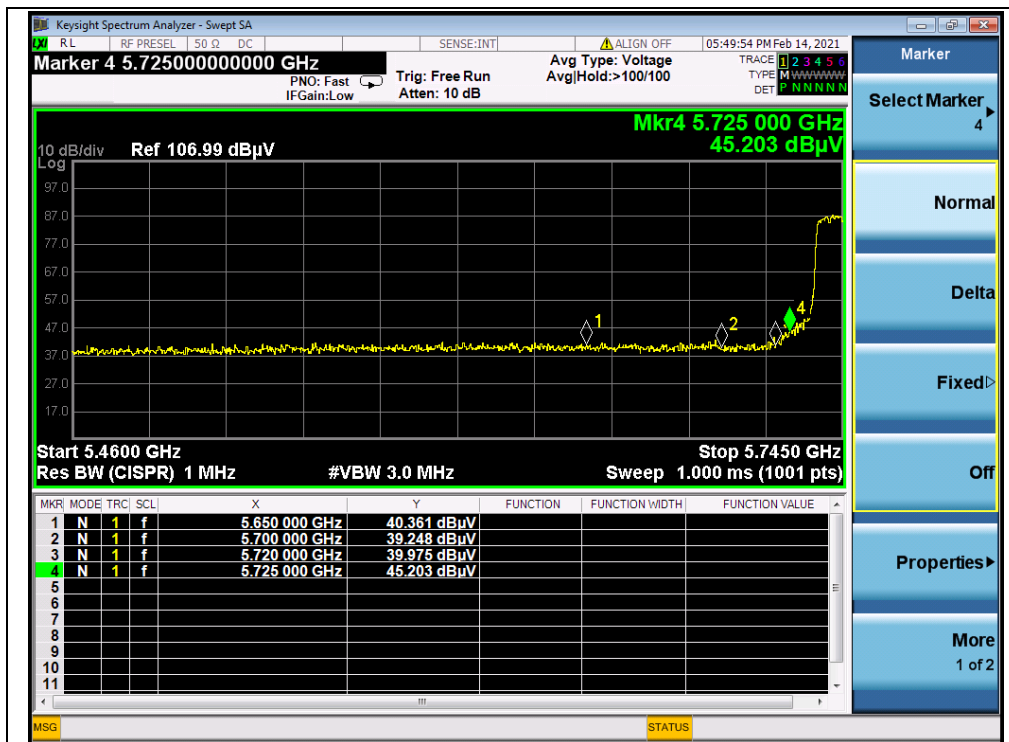
(AVERAGE, Channel 100, 802.11ax (HEW20))



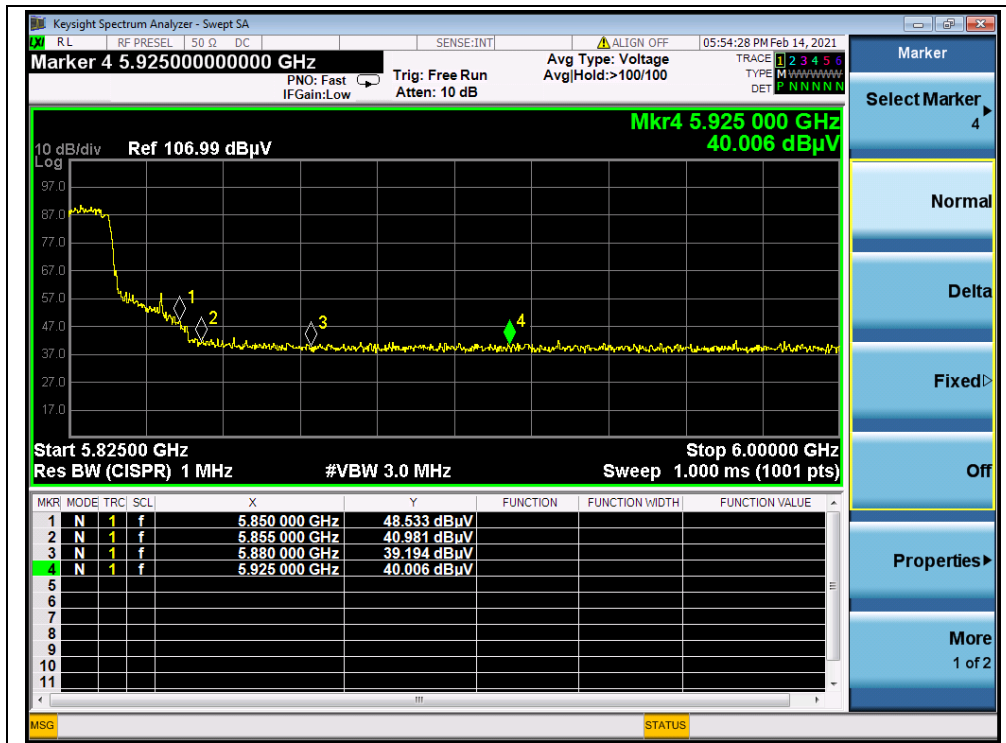
(PEAK, Channel 144, 802.11ax (HEW20))



(AVERAGE, Channel 144, 802.11ax (HEW20))



(PEAK, Channel 149, 802.11ax (HEW20))



(PEAK, Channel 165, 802.11ax (HEW20))

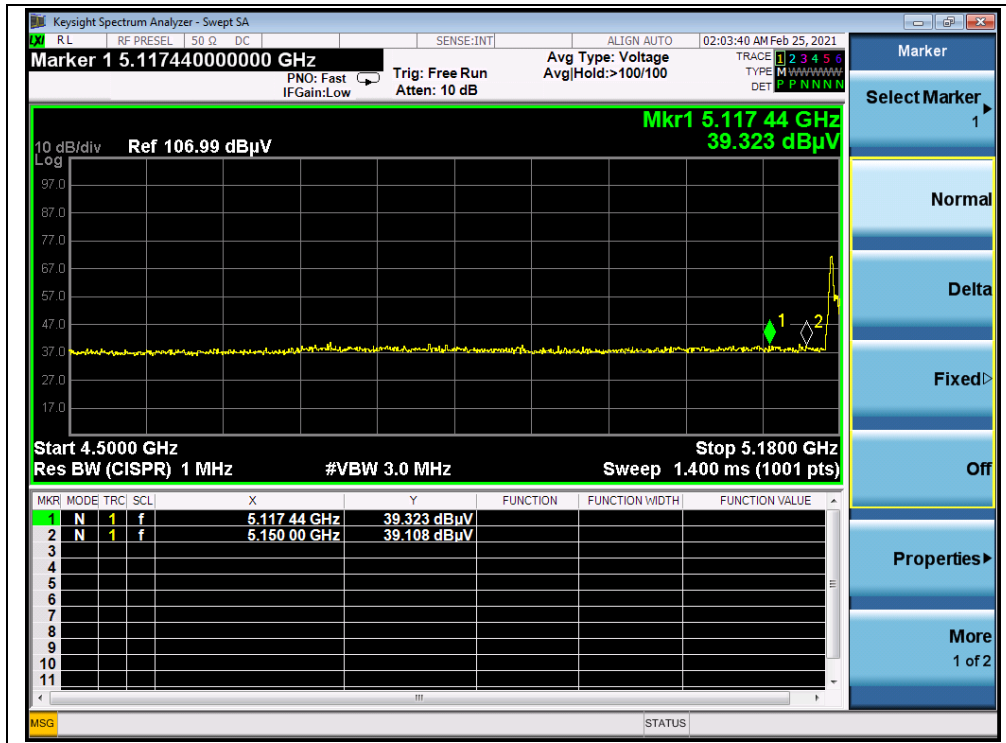


802.11ax (HEW20)(RU26) Mode

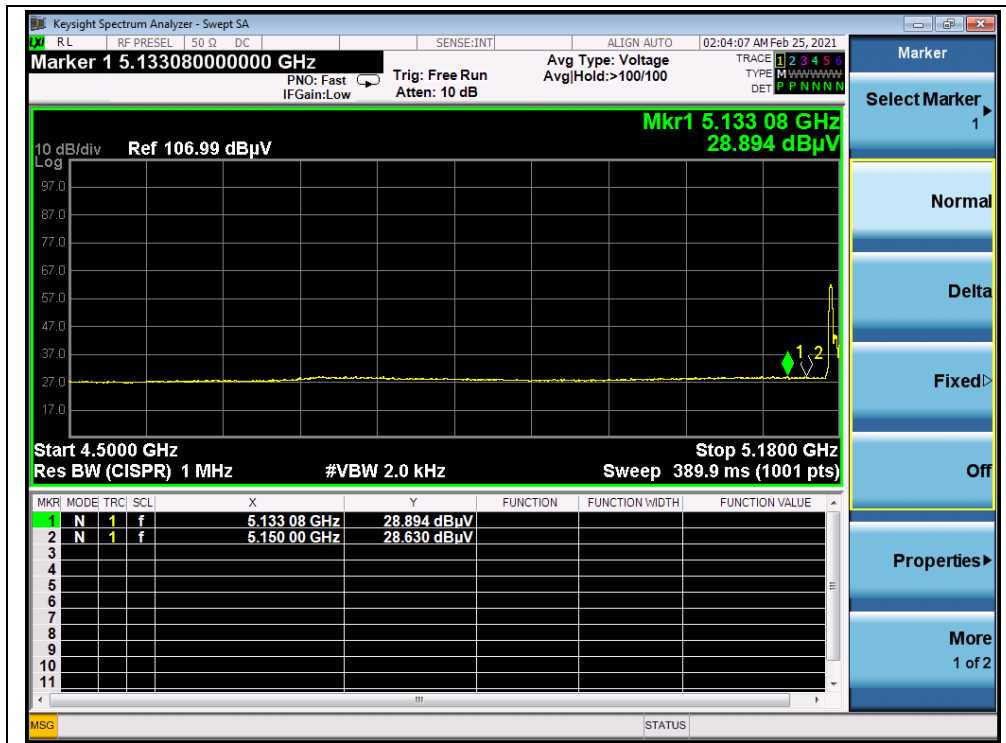
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)		
36	5117.44	PK	39.32	-16.92	32.20	54.60	74	PASS
36	5133.08	AV	28.89	-16.92	32.20	44.17	54	PASS
64	5367.50	PK	42.62	-16.80	32.20	58.02	74	PASS
64	5352.80	AV	32.32	-16.80	32.20	47.72	54	PASS
100	5386.58	PK	42.55	-16.64	32.20	58.11	74	PASS
100	5470.00	AV	32.23	-16.64	32.20	47.79	54	PASS
144	5792.70	PK	42.83	-16.64	32.20	58.39	68.23	PASS
144	5770.20	AV	35.74	-16.64	32.20	51.30	54	PASS
149	5720.00	PK	41.26	-16.23	32.20	57.23	110.83	PASS
165	5884.23	PK	41.88	-16.23	32.20	57.85	98.40	PASS

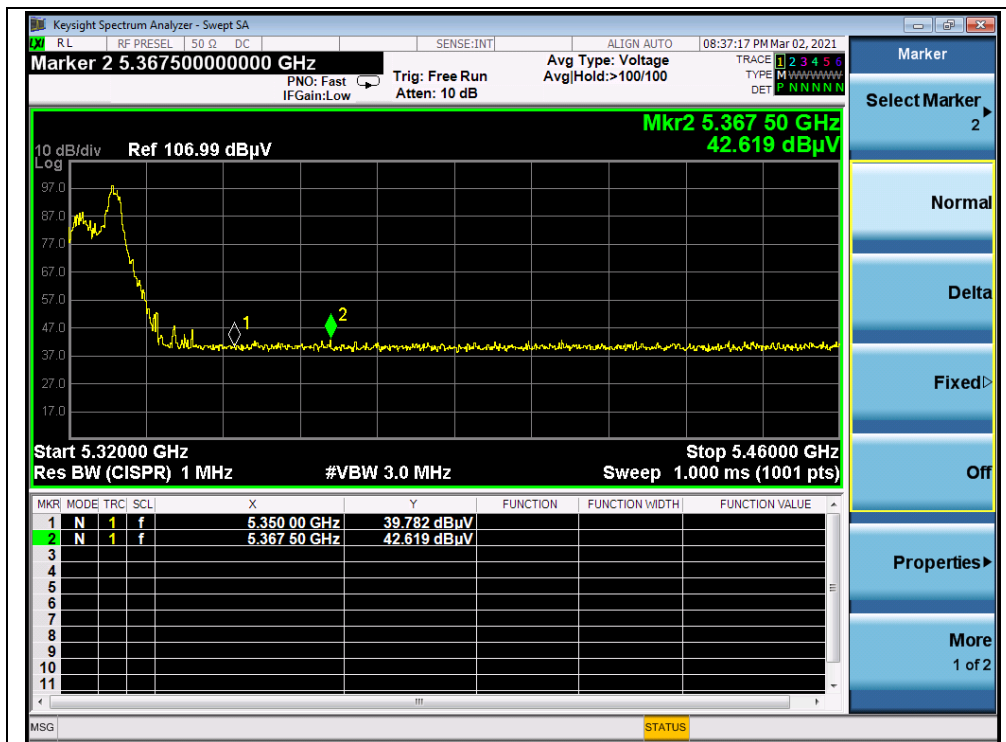
B. Test Plot:



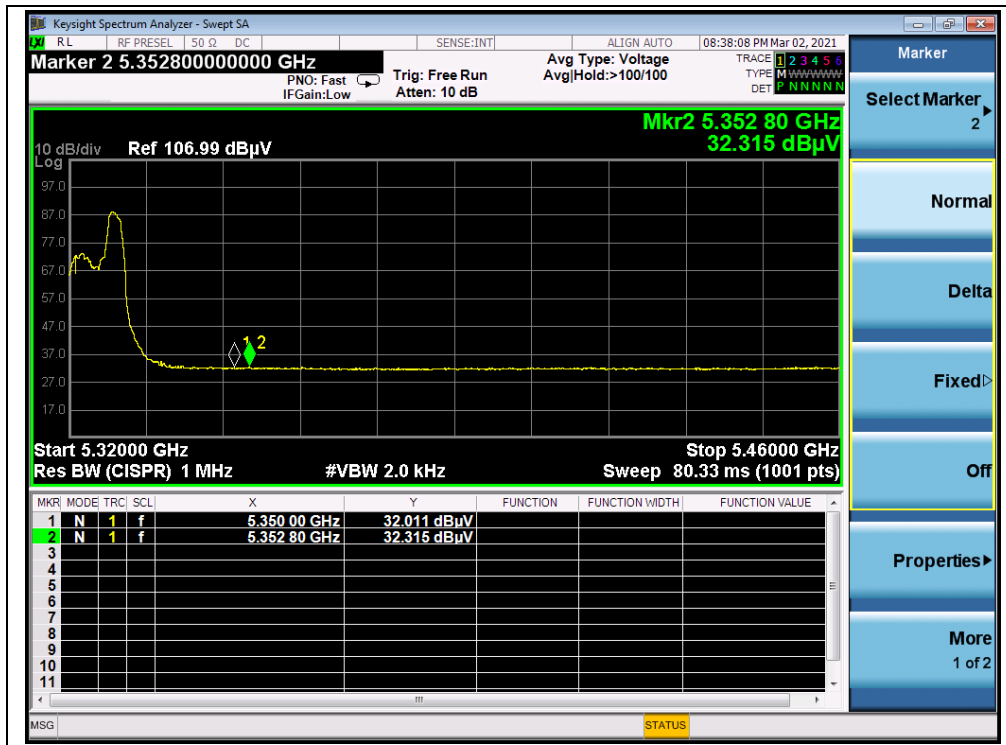
(PEAK, Channel 36, 802.11ax (HEW20)(RU26))



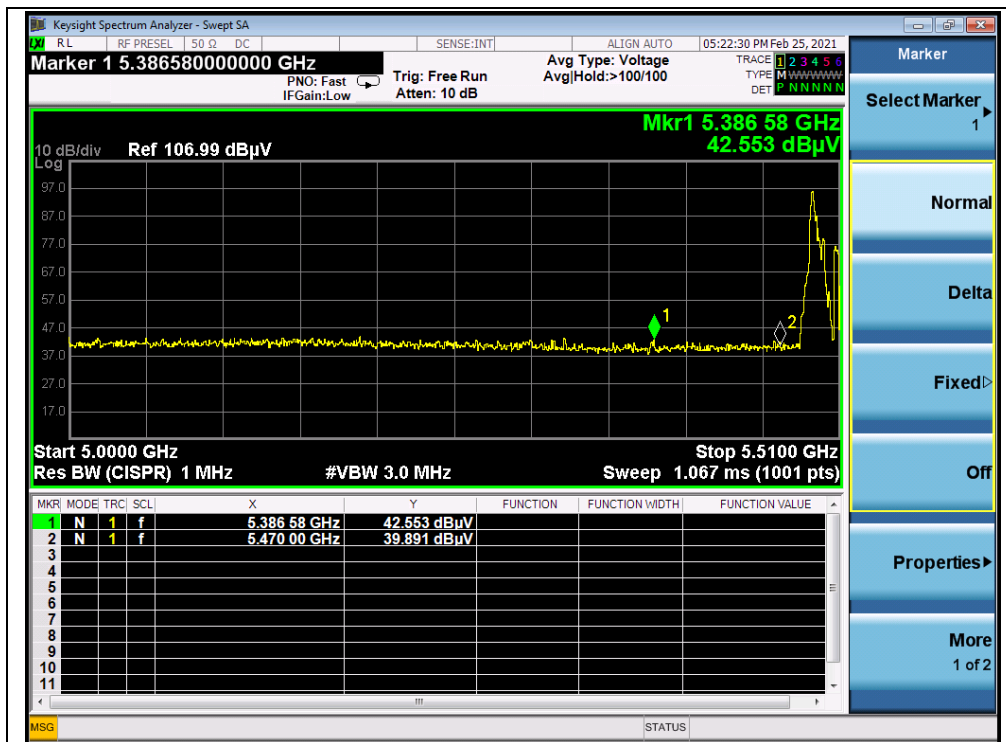
(AVERAGE, Channel 36, 802.11ax (HEW20)(RU26))



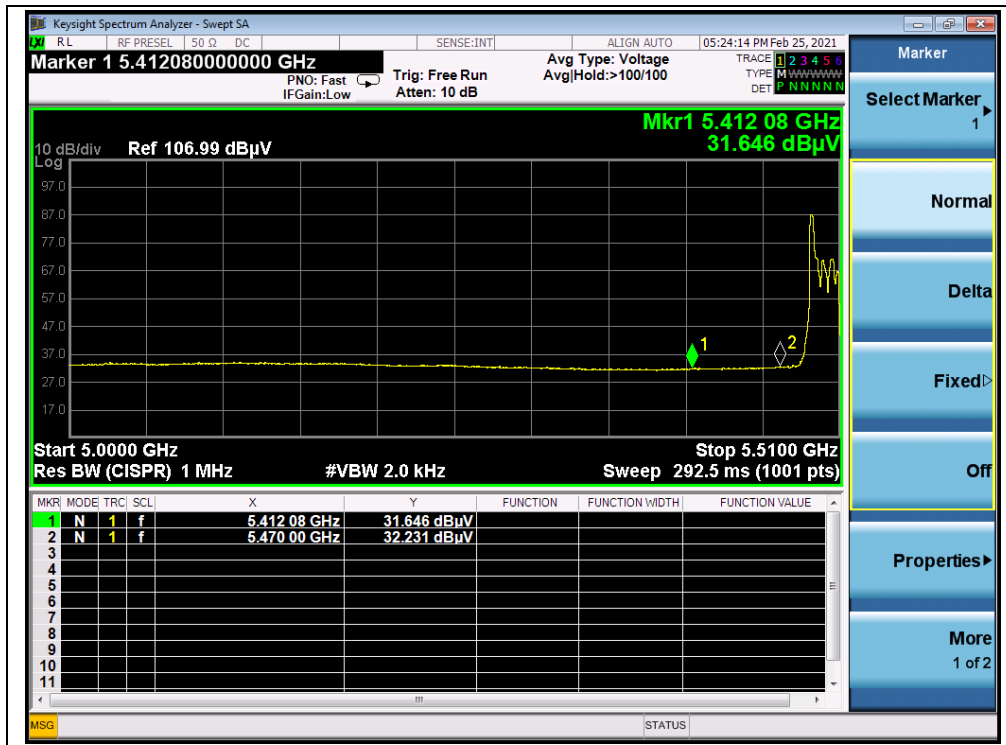
(PEAK, Channel 64, 802.11ax (HEW20)(RU26))



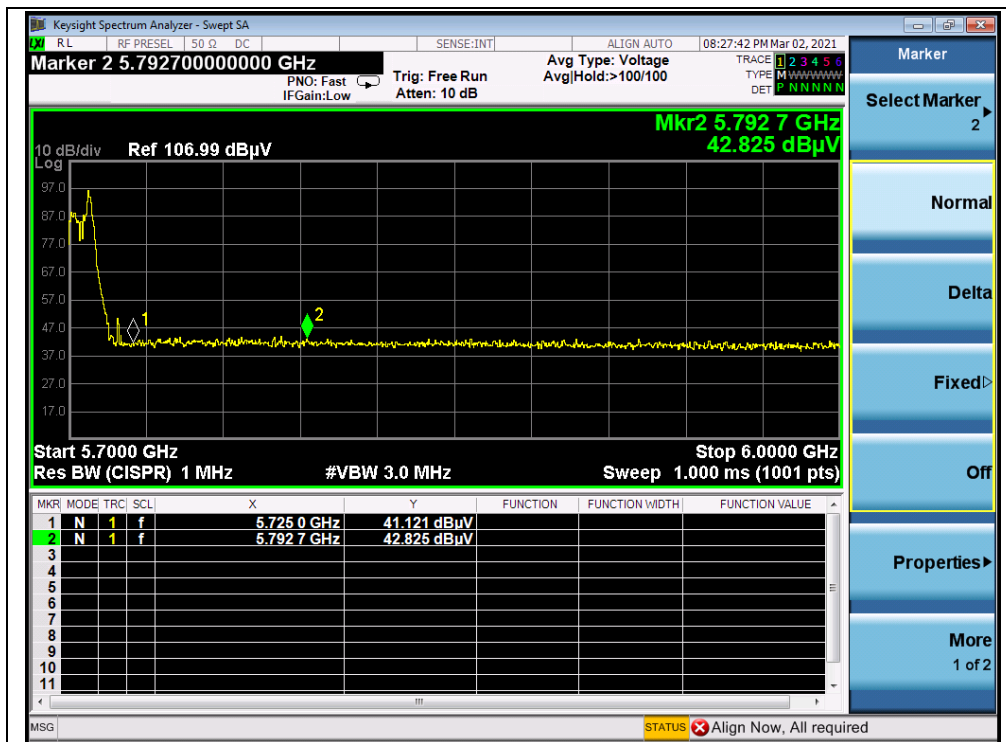
(AVERAGE, Channel 64, 802.11ax (HEW20)(RU26))



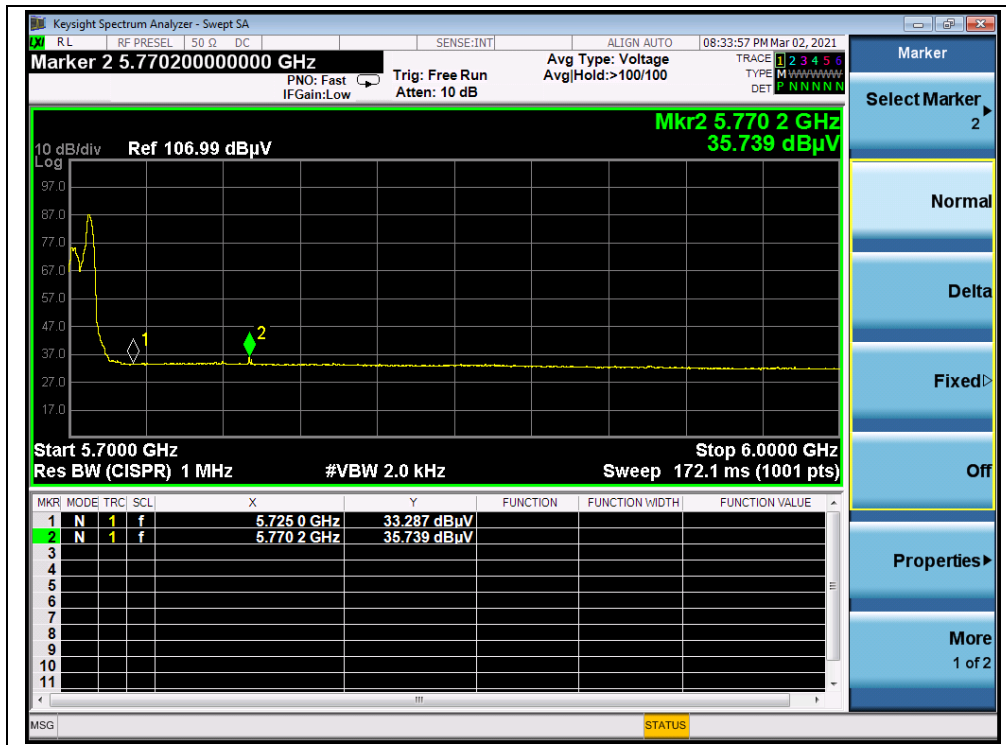
(PEAK, Channel100, 802.11ax (HEW20)(RU26))



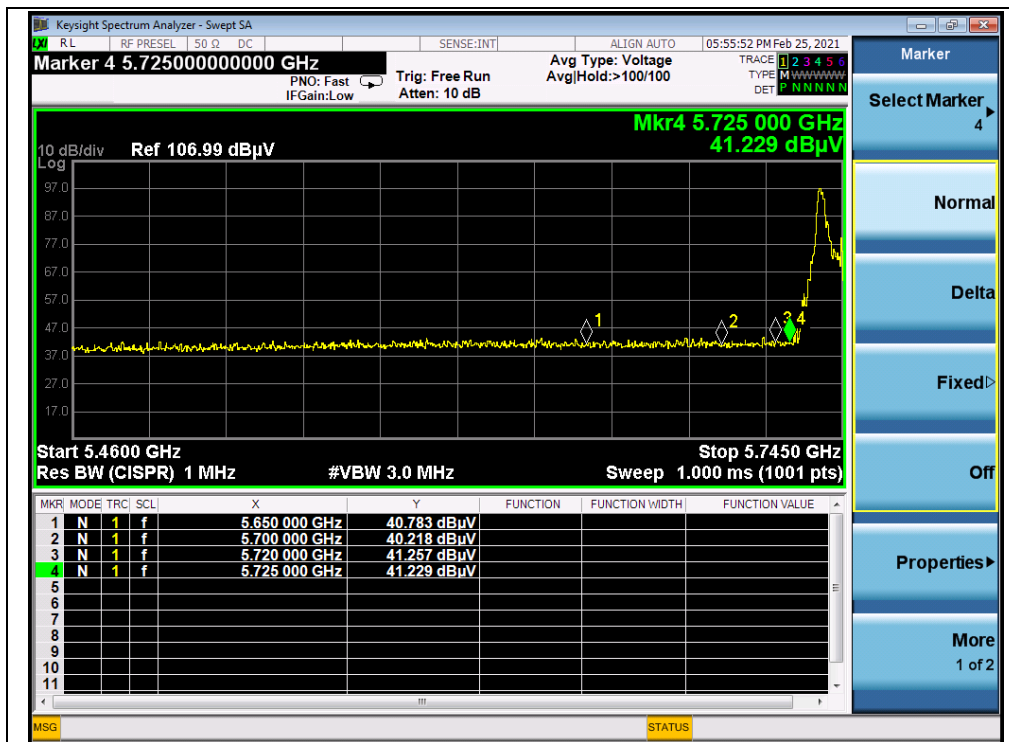
(AVERAGE, Channel 100, 802.11ax (HEW20)(RU26))



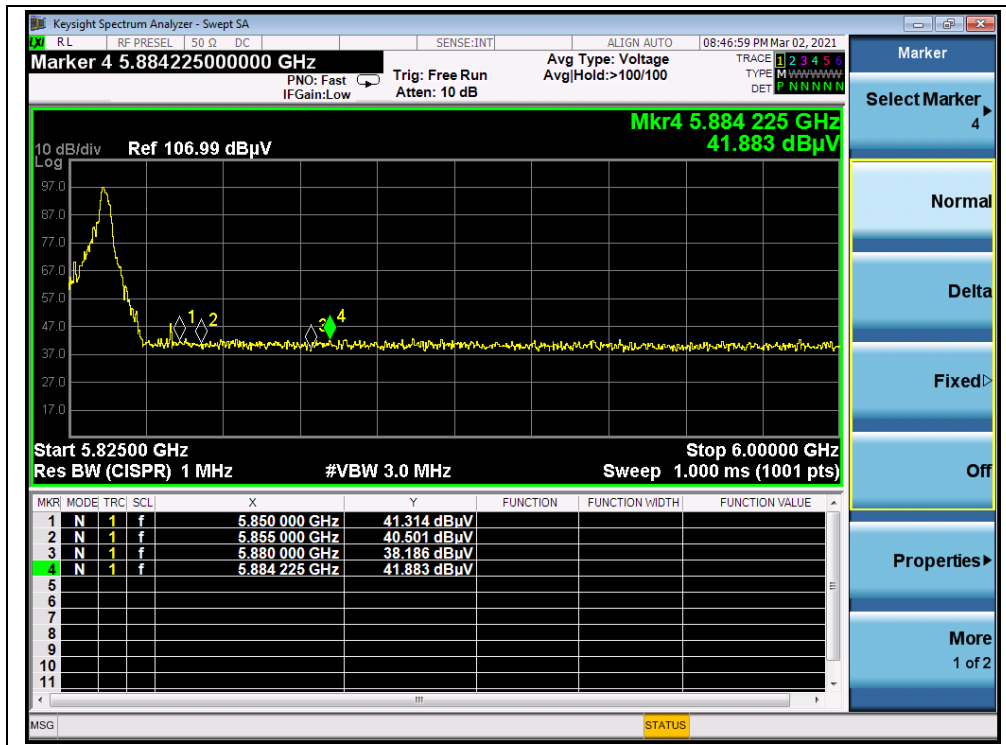
(PEAK, Channel 144, 802.11ax (HEW20)(RU26))



(AVERAGE, Channel 144, 802.11ax (HEW20)(RU26))



(PEAK, Channel 149, 802.11ax (HEW20)(RU26))



(PEAK, Channel 165, 802.11ax (HEW20)(RU26))

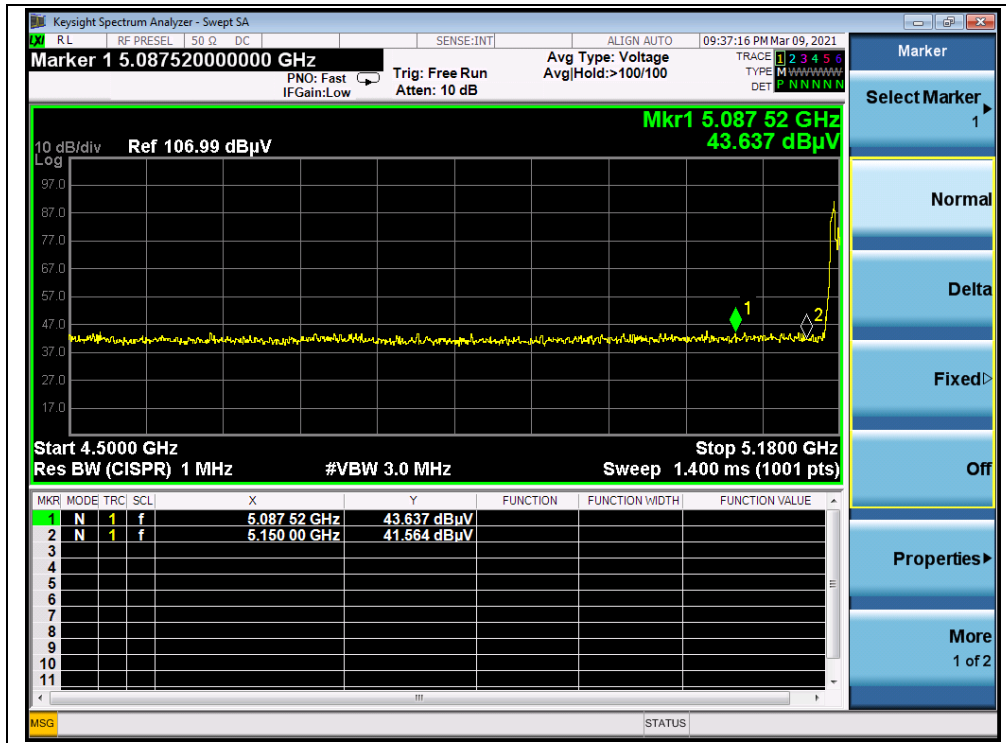


802.11ax (HEW20)(RU52) Mode

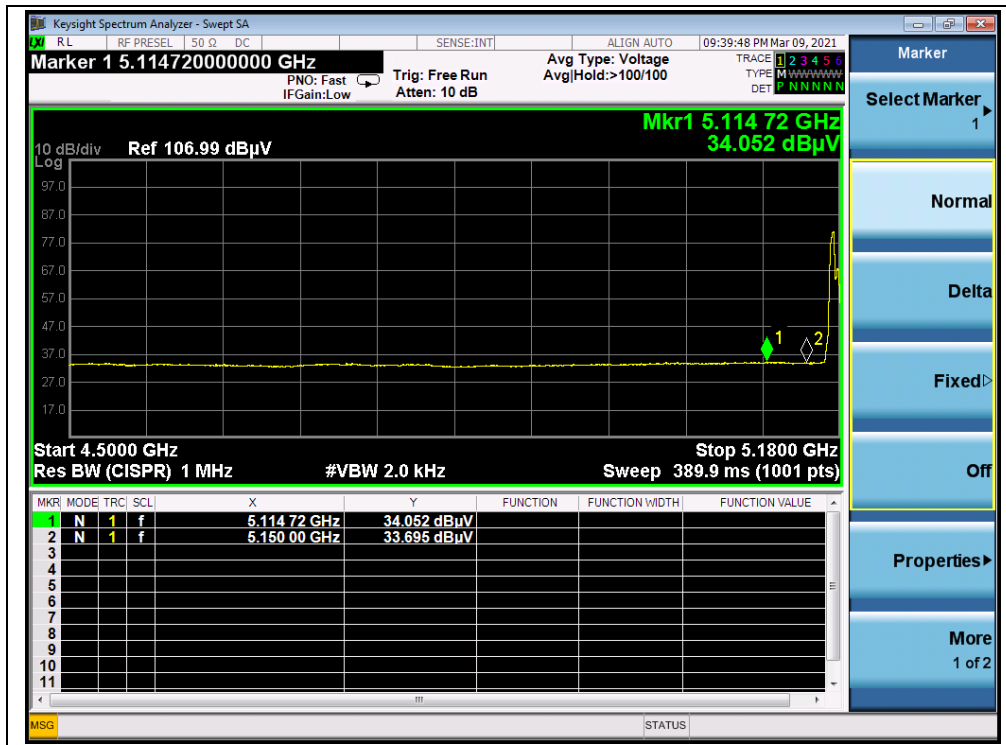
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)	(dB μ V/m)	
36	5087.52	PK	43.64	-16.92	32.20	58.92	74	PASS
36	5114.72	AV	34.05	-16.92	32.20	49.33	54	PASS
64	5366.90	PK	41.09	-16.80	32.20	56.49	74	PASS
64	5350.00	AV	32.00	-16.80	32.20	47.4	54	PASS
100	5433.50	PK	41.77	-16.64	32.20	57.33	74	PASS
100	5470.00	AV	31.96	-16.64	32.20	47.52	54	PASS
144	5736.70	PK	42.32	-16.64	32.20	57.88	68.23	PASS
144	5736.70	AV	32.94	-16.64	32.20	48.5	54	PASS
149	5725.00	PK	41.65	-16.23	32.20	57.62	122.23	PASS
165	5896.83	PK	42.55	-16.23	32.20	58.52	89.07	PASS

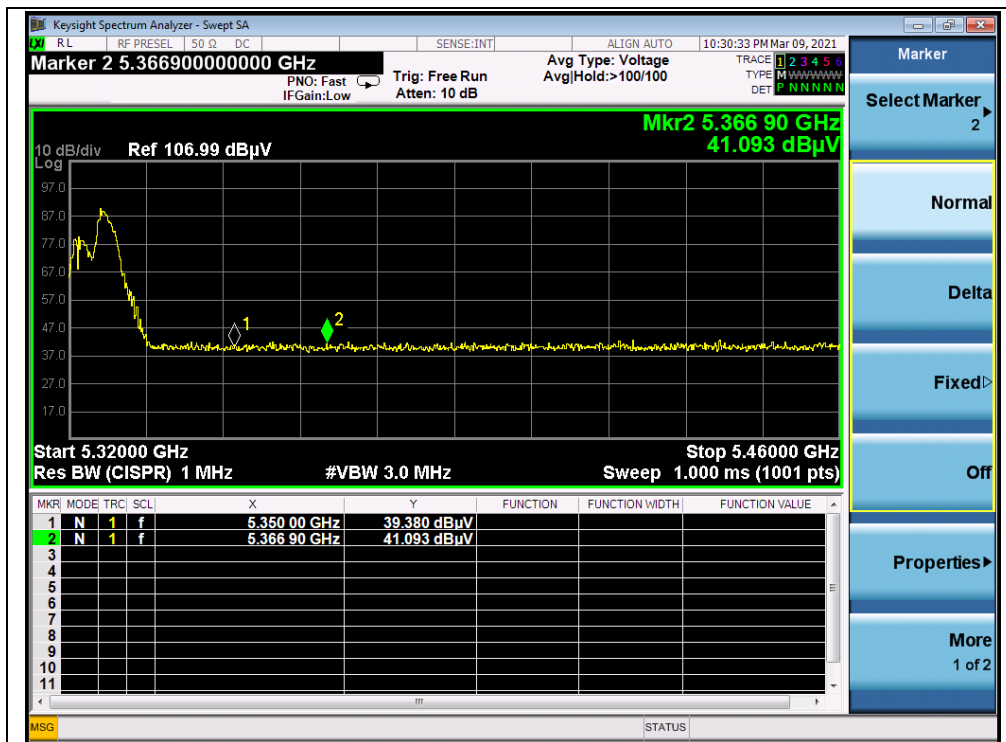
B. Test Plot:



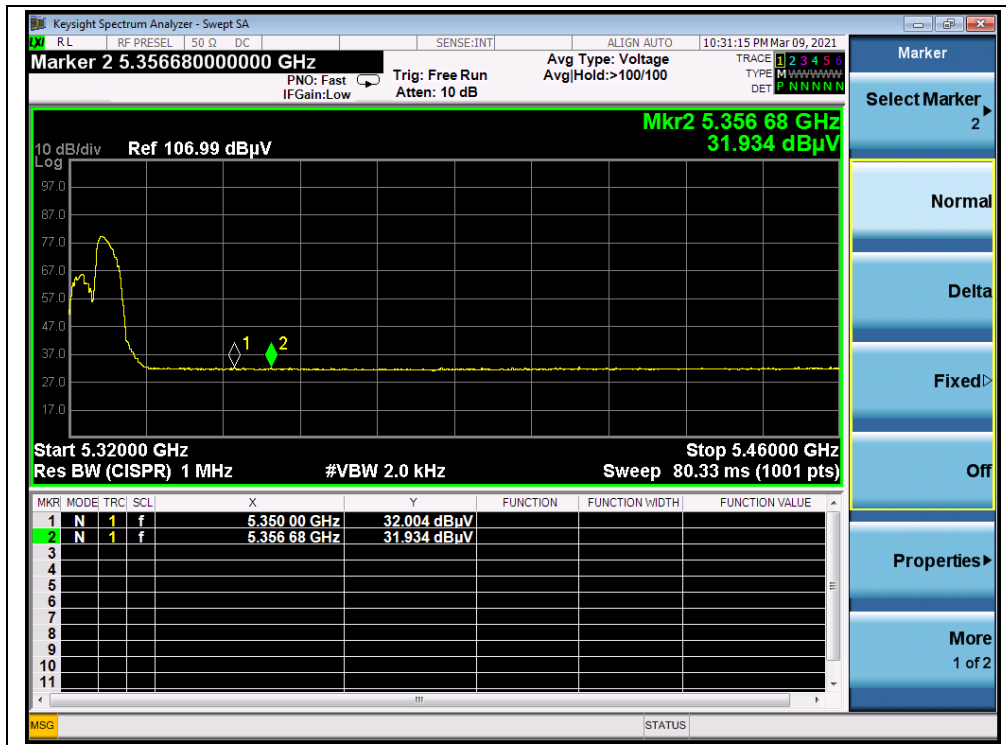
(PEAK, Channel 36, 802.11ax (HEW20)(RU52))



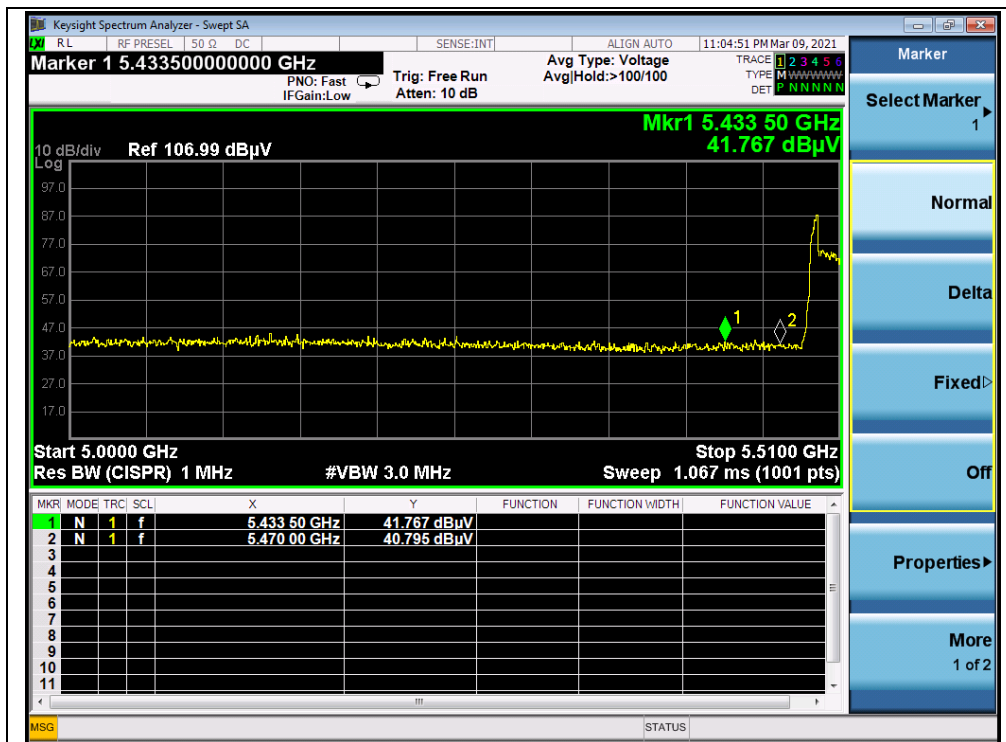
(AVERAGE, Channel 36, 802.11ax (HEW20)(RU52))



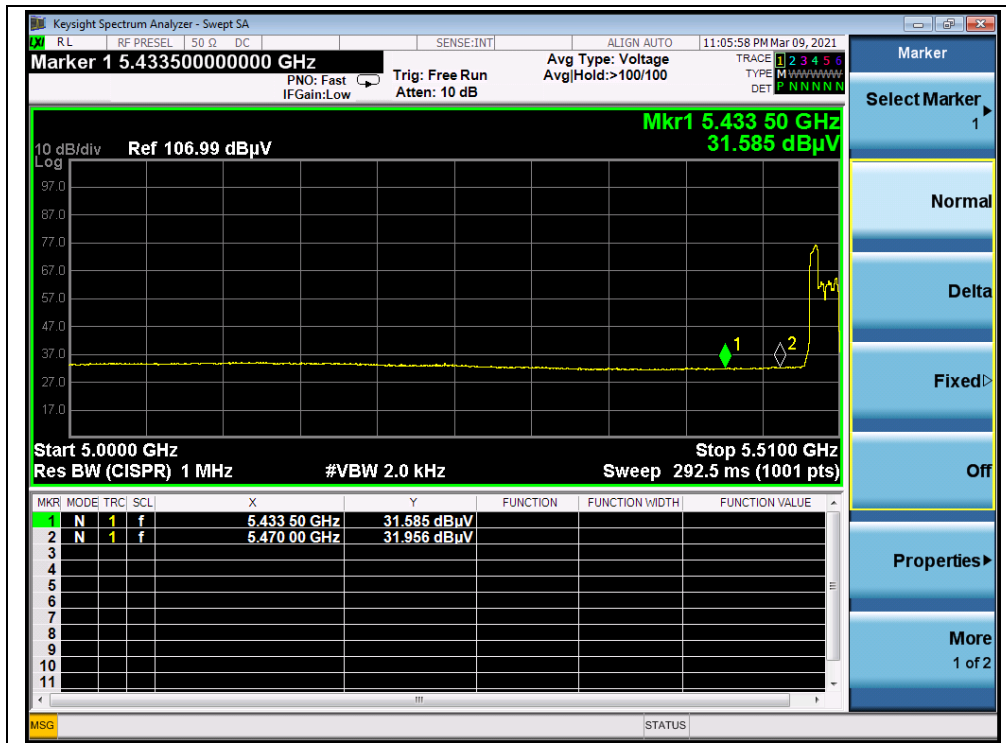
(PEAK, Channel 64, 802.11ax (HEW20)(RU52))



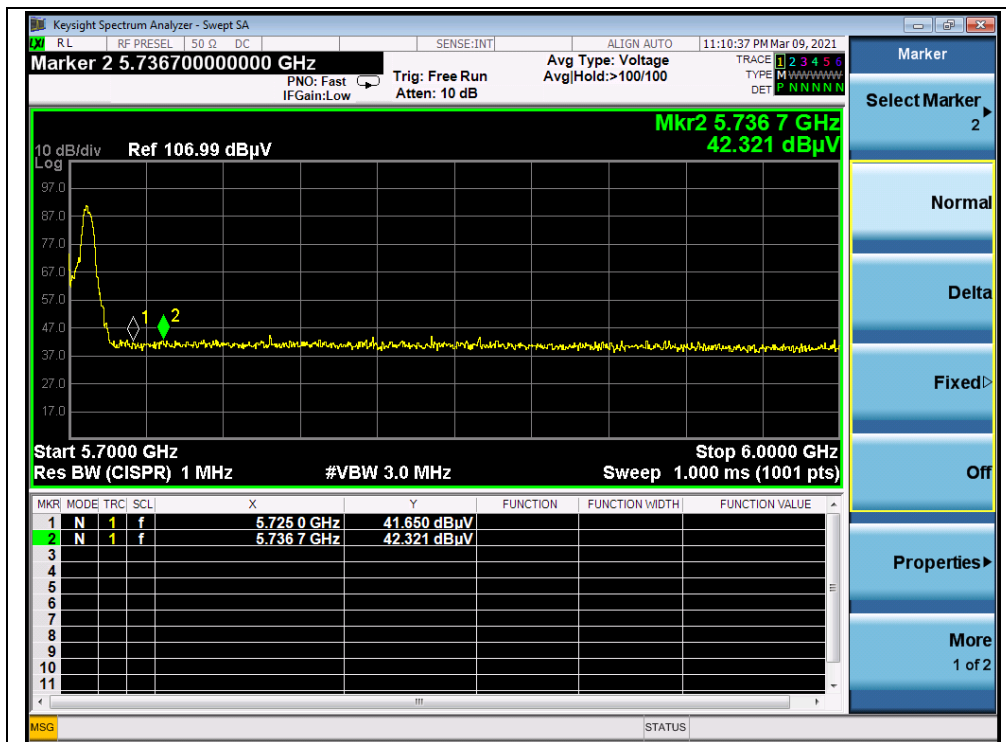
(AVERAGE, Channel 64, 802.11ax (HEW20)(RU52))



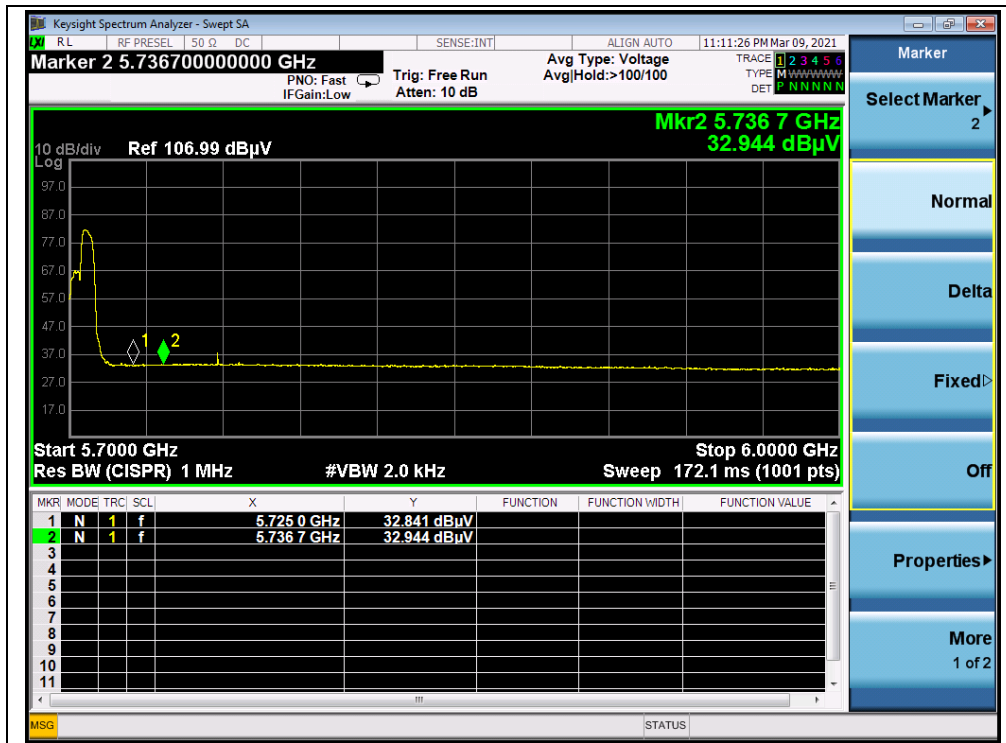
(PEAK, Channel100, 802.11ax (HEW20)(RU52))



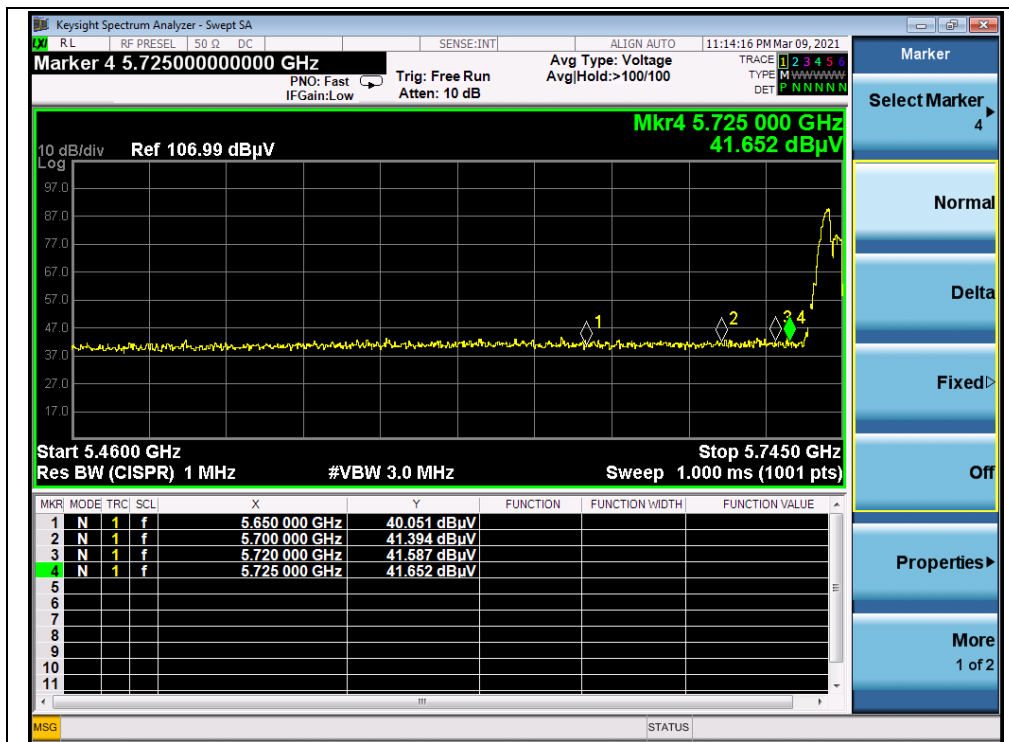
(AVERAGE, Channel 100, 802.11ax (HEW20)(RU52))



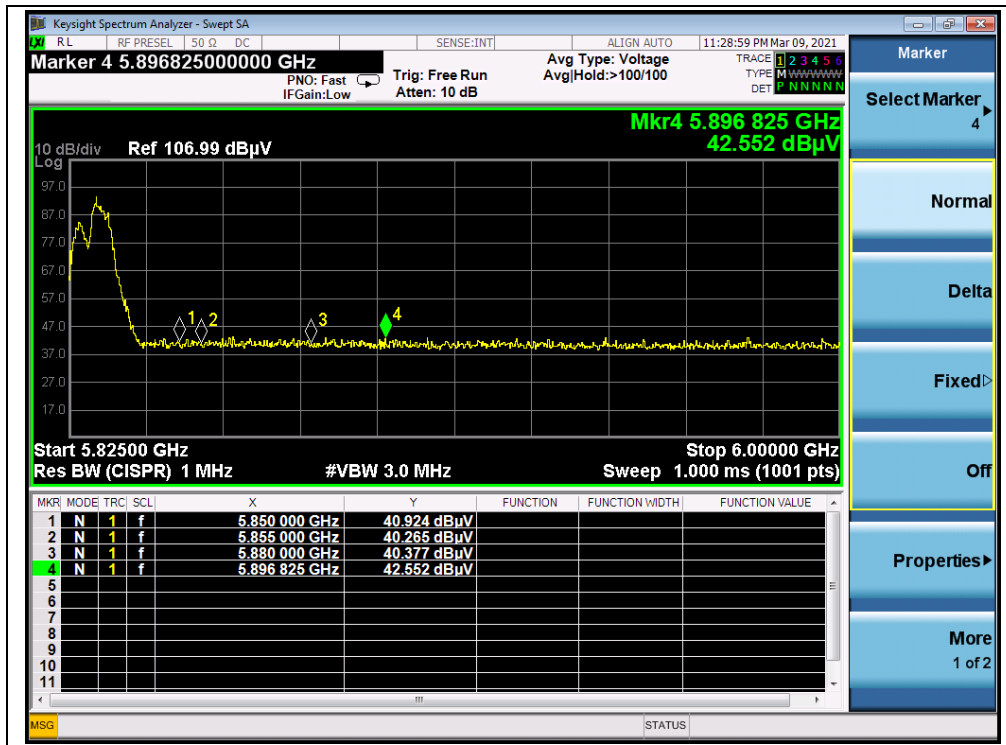
(PEAK, Channel 144, 802.11ax (HEW20)(RU52))



(AVERAGE, Channel 144, 802.11ax (HEW20)(RU52))



(PEAK, Channel 149, 802.11ax (HEW20)(RU52))



(PEAK, Channel 165, 802.11ax (HEW20)(RU52))

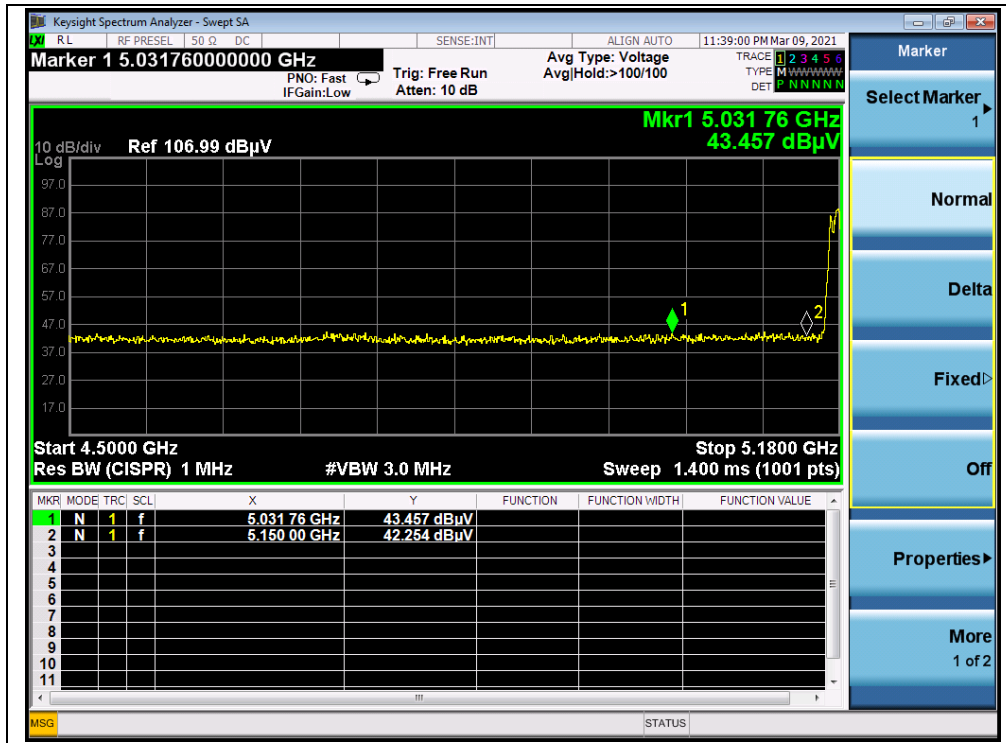


802.11ax (HEW20)(RU106) Mode

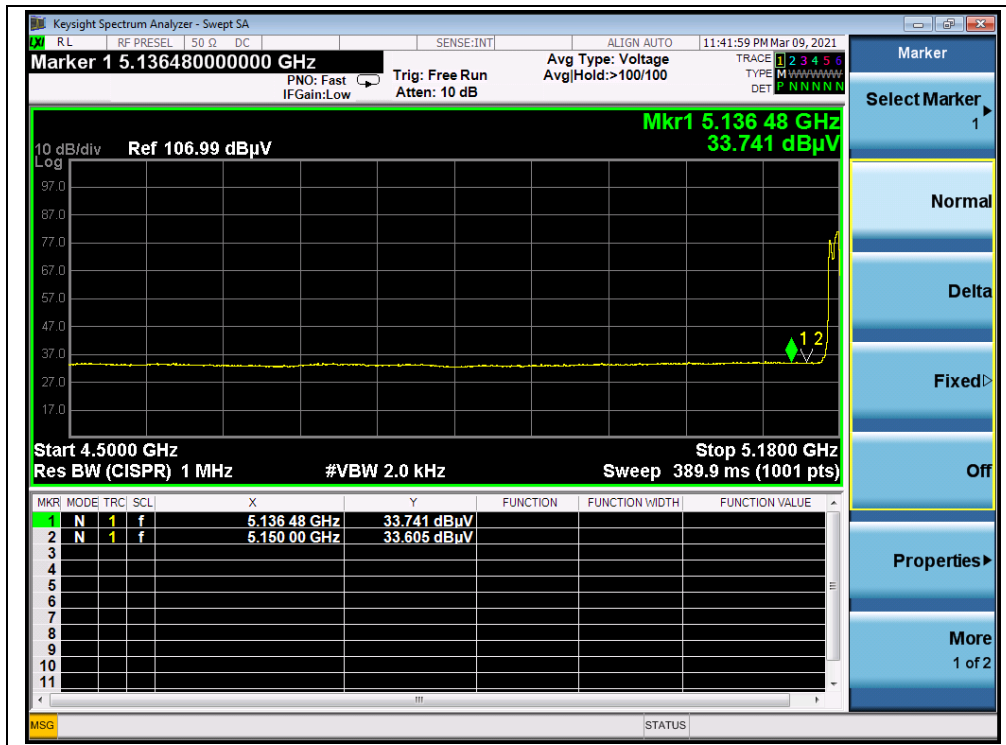
A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T	A_{Factor}	Max. Emission	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)	(dB)	(dB@3m)	E (dB μ V/m)		
36	5031.76	PK	43.46	-16.92	32.20	58.74	74	PASS
36	5136.48	AV	33.74	-16.92	32.20	49.02	54	PASS
64	5365.22	PK	41.10	-16.80	32.20	56.50	74	PASS
64	5355.70	AV	32.04	-16.80	32.20	47.44	54	PASS
100	5430.44	PK	42.02	-16.64	32.20	57.58	74	PASS
100	5470.00	AV	32.29	-16.64	32.20	47.85	54	PASS
144	5746.20	PK	43.14	-16.64	32.20	58.70	68.23	PASS
144	5746.20	AV	33.75	-16.64	32.20	49.31	54	PASS
149	5725.00	PK	41.52	-16.23	32.20	57.49	122.23	PASS
165	5883.93	PK	42.52	-16.23	32.20	58.49	98.62	PASS

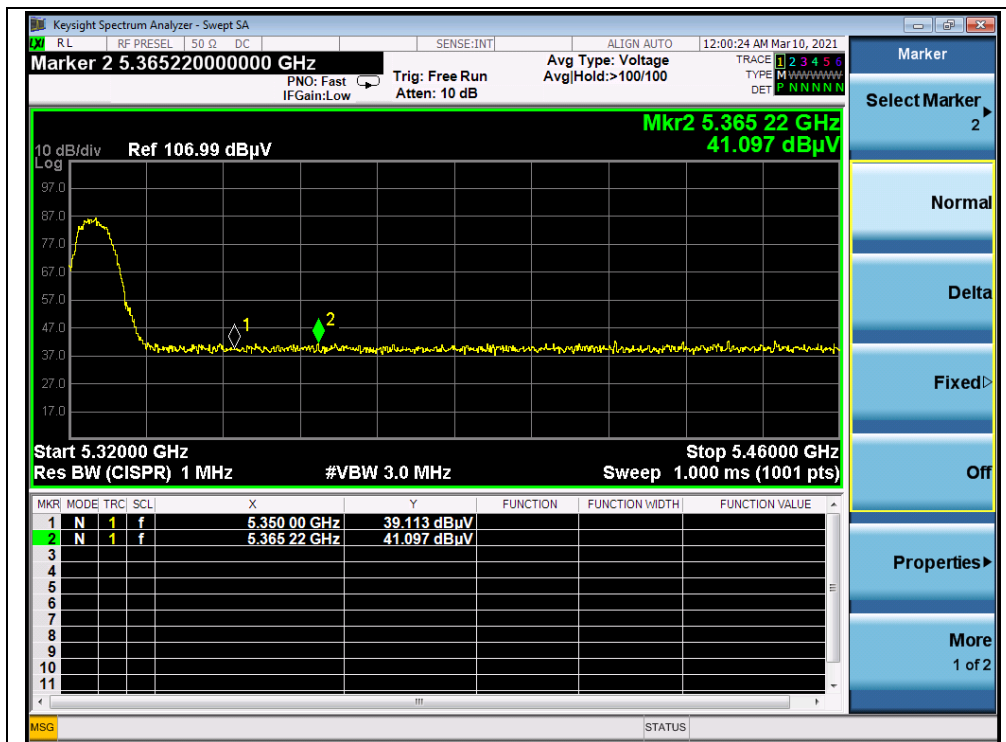
B. Test Plot:



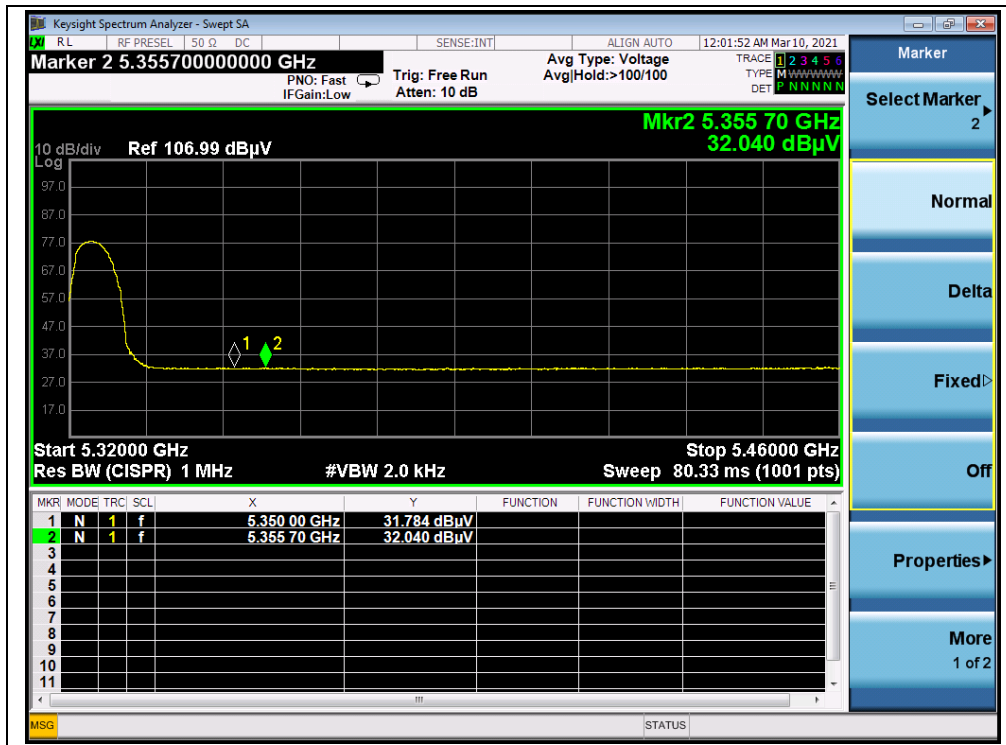
(PEAK, Channel 36, 802.11ax (HEW20)(RU106))



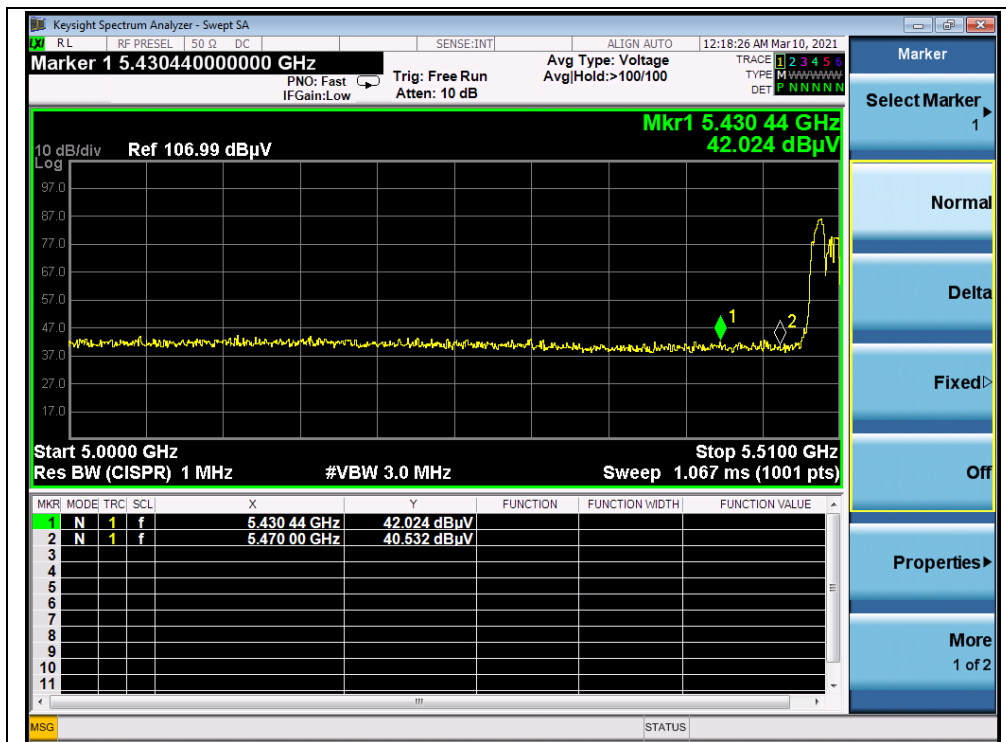
(AVERAGE, Channel 36, 802.11ax (HEW20)(RU106))



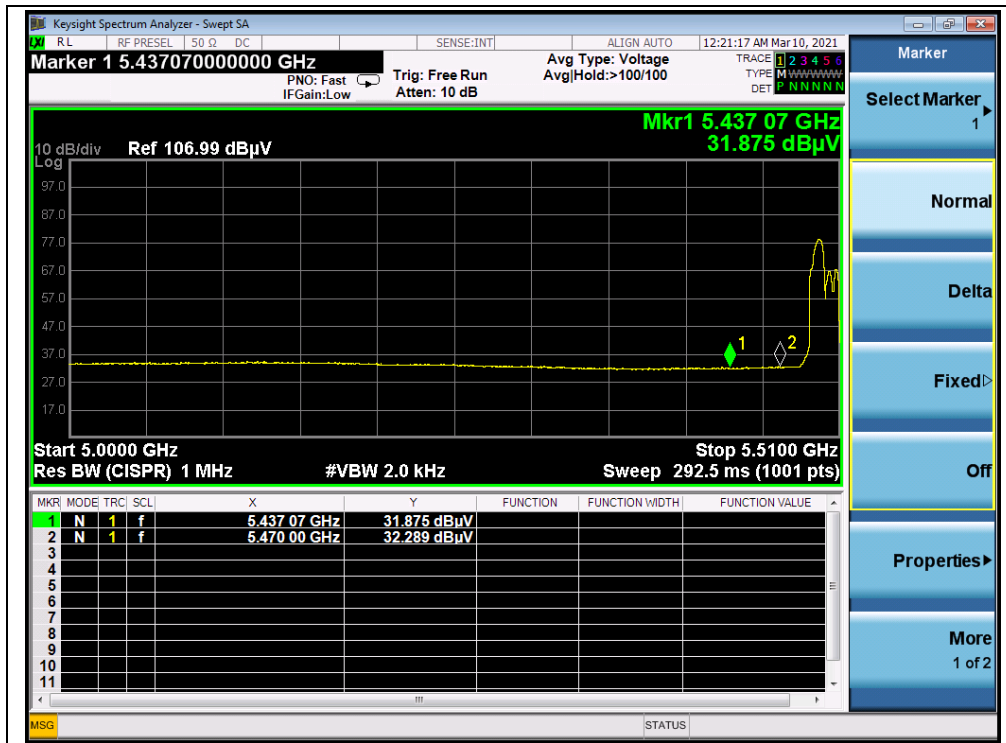
(PEAK, Channel 64, 802.11ax (HEW20)(RU106))



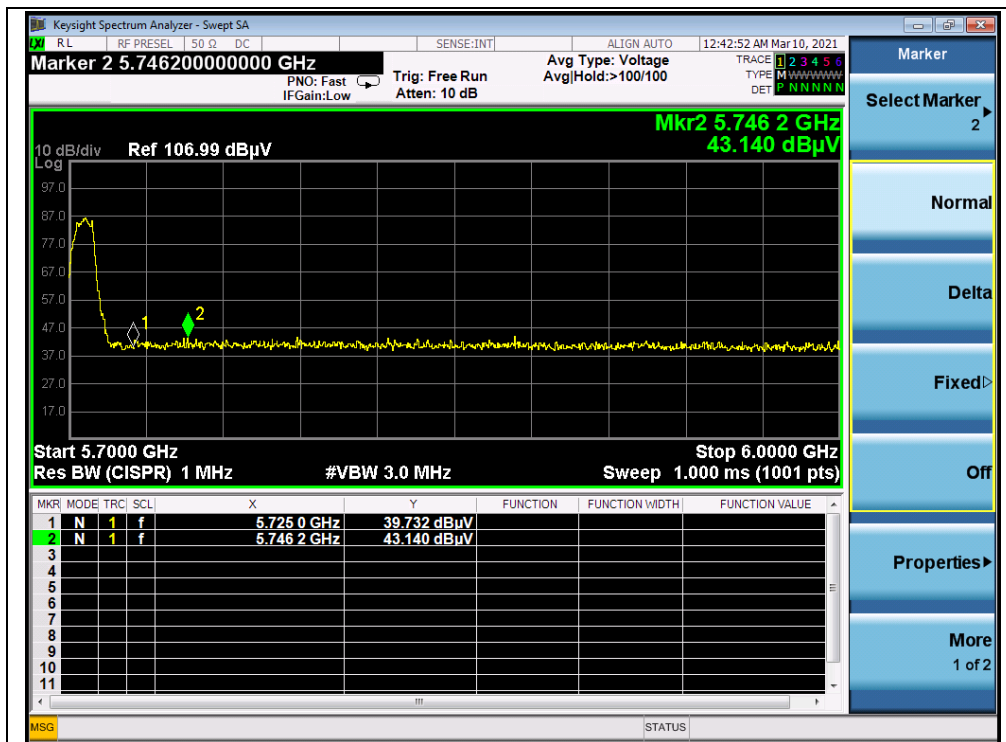
(AVERAGE, Channel 64, 802.11ax (HEW20)(RU106))



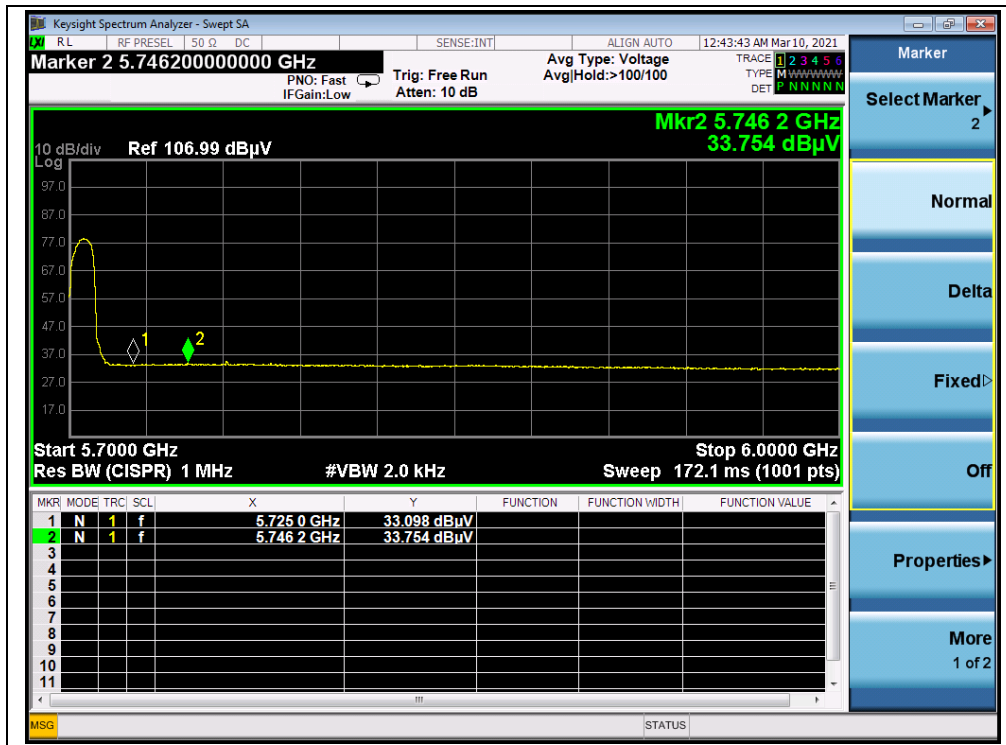
(PEAK, Channel100, 802.11ax (HEW20)(RU106))



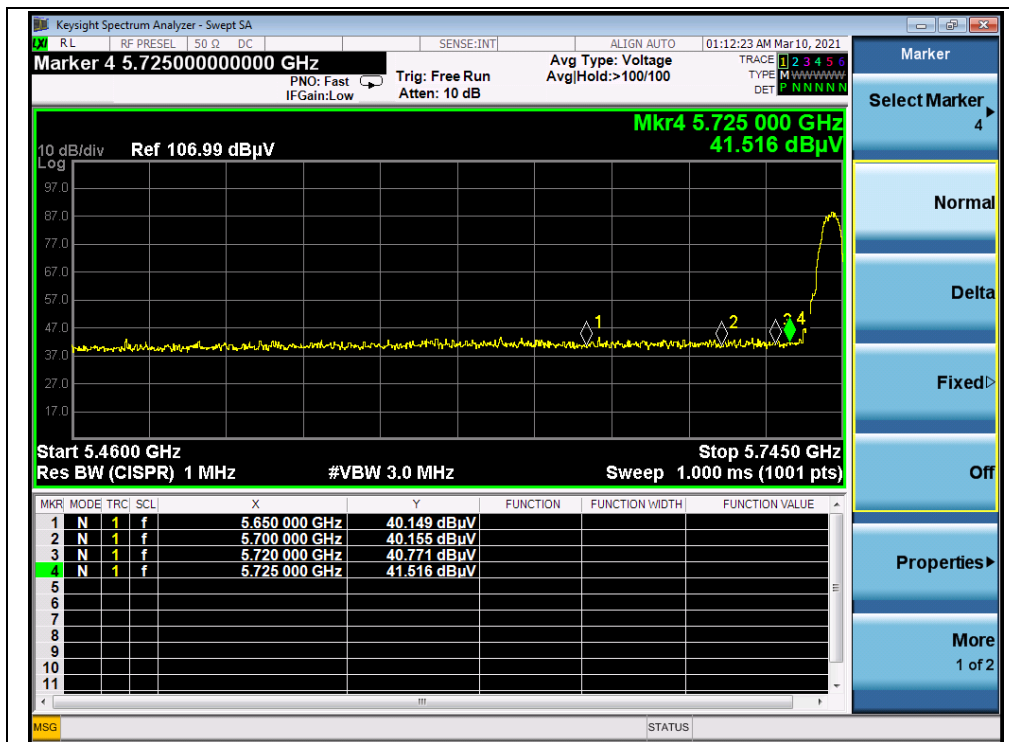
(AVERAGE, Channel 100, 802.11ax (HEW20)(RU106))



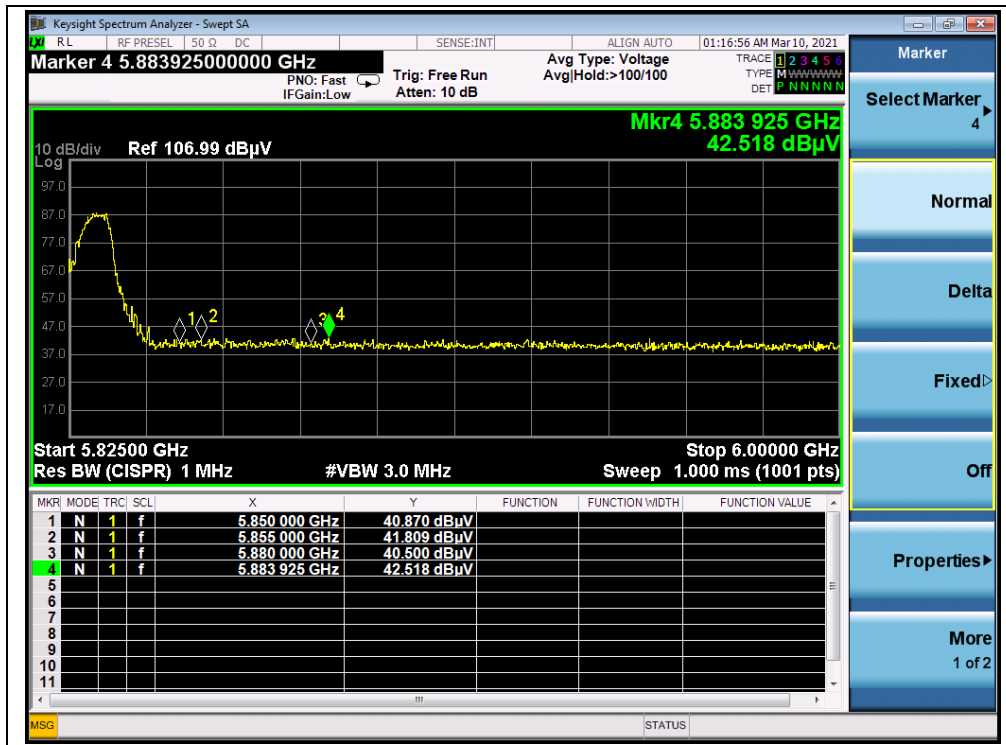
(PEAK, Channel 144, 802.11ax (HEW20)(RU106))



(AVERAGE, Channel 144, 802.11ax (HEW20)(RU106))



(PEAK, Channel 149, 802.11ax (HEW20)(RU106))



(PEAK, Channel 165, 802.11ax (HEW20)(RU106))



2.9. Radiated Emission

2.9.1. Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (2) 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 EIRP of -27dBm/MHz.
- (3) 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 EIRP of -27dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

The following formula is used to convert the equipment isotropic radiated power(e.i.r.p.) to field strength (dBμV/m);

$$E = 1000000 \times \sqrt{30P} / 3 \mu\text{V/m}$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz = 68.23 dBuV/m

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. 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:

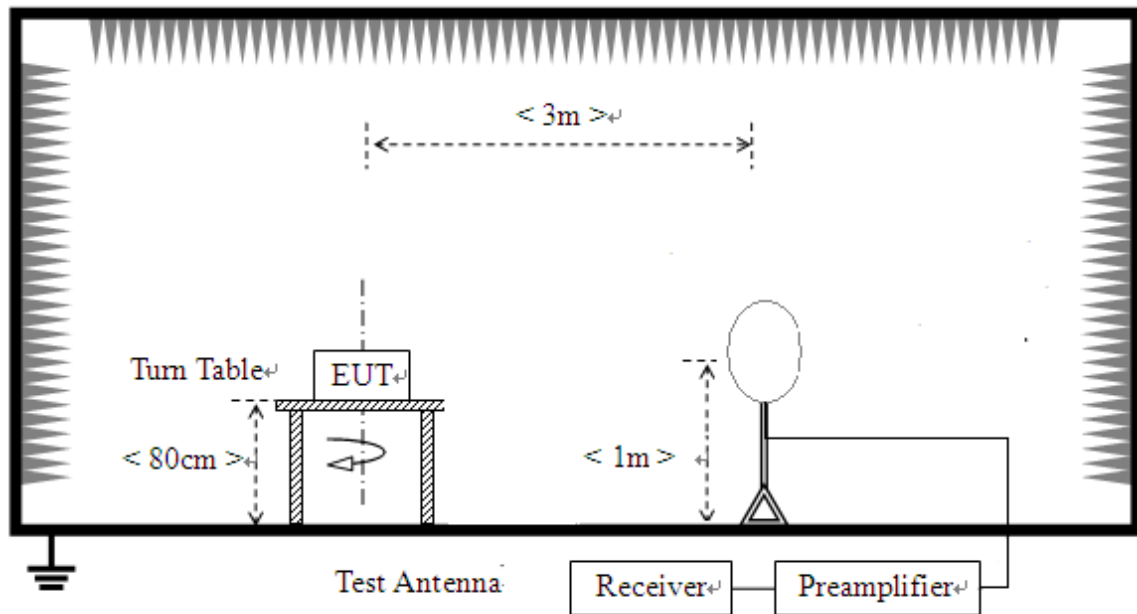
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

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. 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).

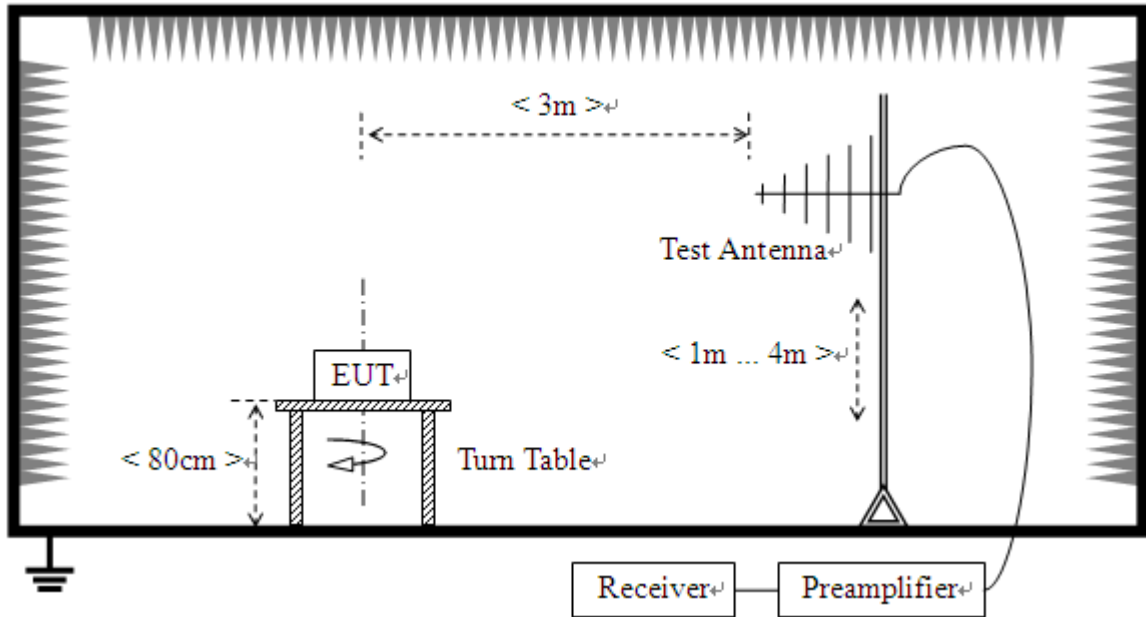
2.9.2. Test Description

Test Setup:

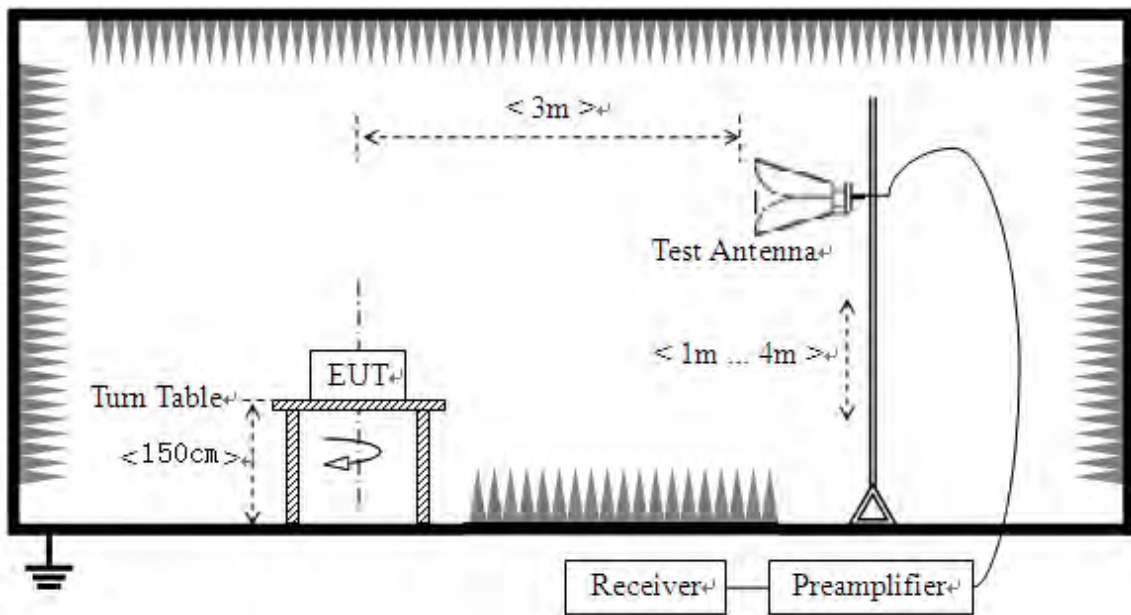
- 1) For radiated emissions from 9kHz to 30MHz



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 3 meters. 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 a quasi-peak measurement (or average).

The measurement results are obtained as below:

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

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.

Note 1: 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.

Note 2: 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.

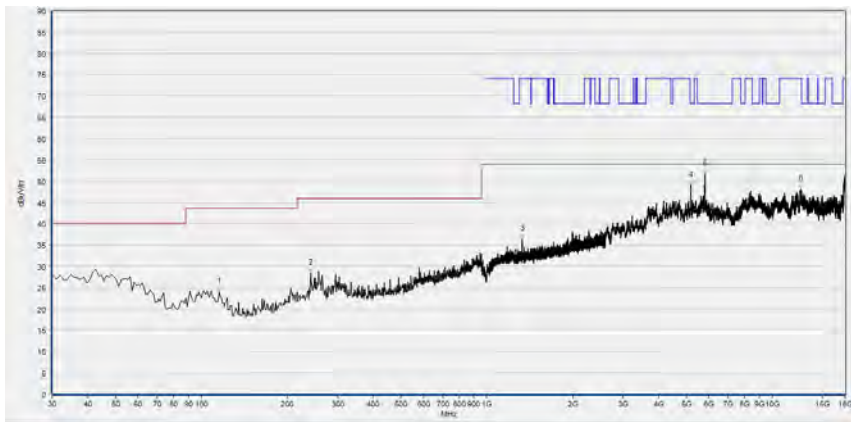
Note 3: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note 4: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.



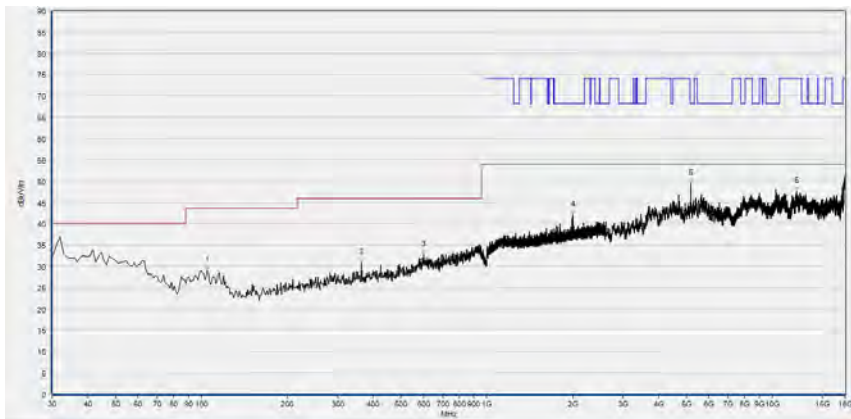
802.11a Mode

Plot for Channel 36



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
115.445	24.00	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
241.672	28.28	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1330.777	36.31	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5181.556	48.95	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5811.300	44.97	N/A	32.76	68.23	N/A	N/A	Horizontal	PASS
12624.325	48.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

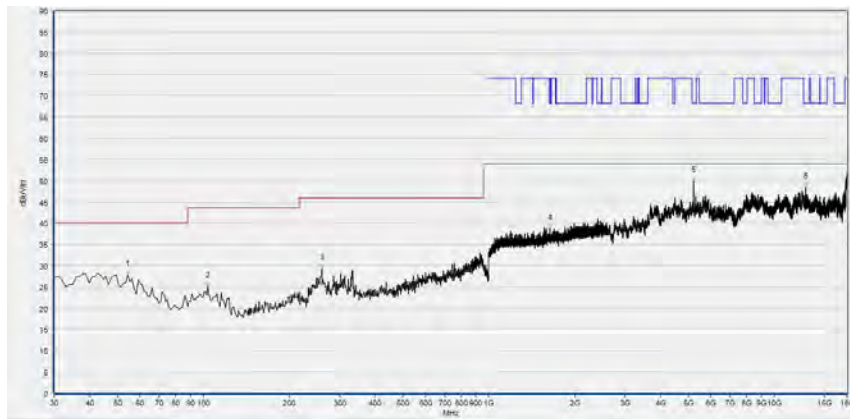
(Antenna Horizontal, 30MHz to 18GHz)



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
104.765	29.03	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
363.043	30.77	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
601.902	32.63	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1998.199	42.05	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5184.637	49.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12152.991	47.63	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

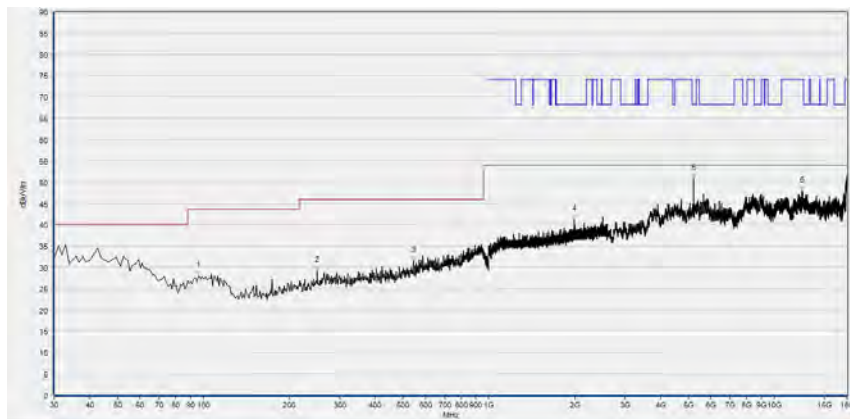
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 44



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
54.274	27.83	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
103.794	25.18	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
260.120	29.37	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1633.811	38.72	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5212.362	49.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12910.822	48.46	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

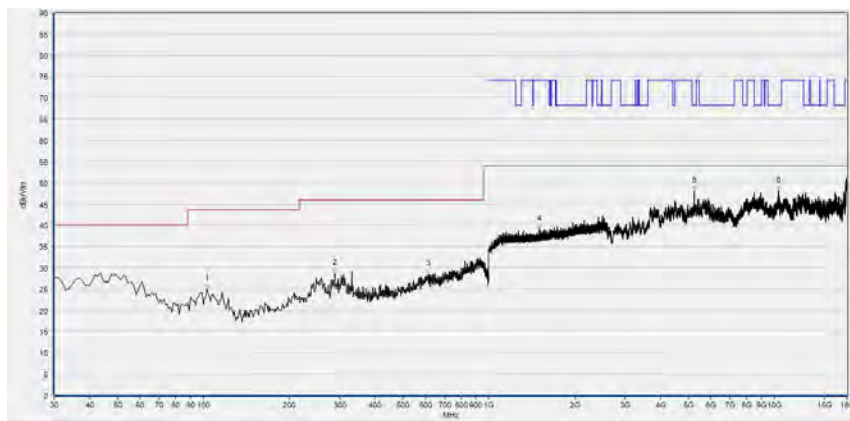
(Antenna Horizontal, 30MHz to 18GHz)



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
96.026	28.02	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
250.410	29.12	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
543.644	31.51	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1992.864	41.24	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5218.524	50.82	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12498.020	47.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

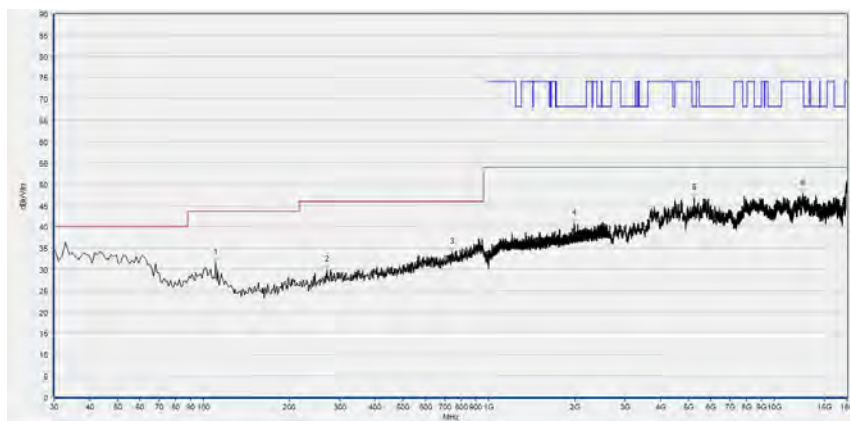
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 48



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
102.823	24.97	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
288.278	28.70	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
615.495	28.46	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1501.501	39.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5239.927	48.16	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10335.427	48.03	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

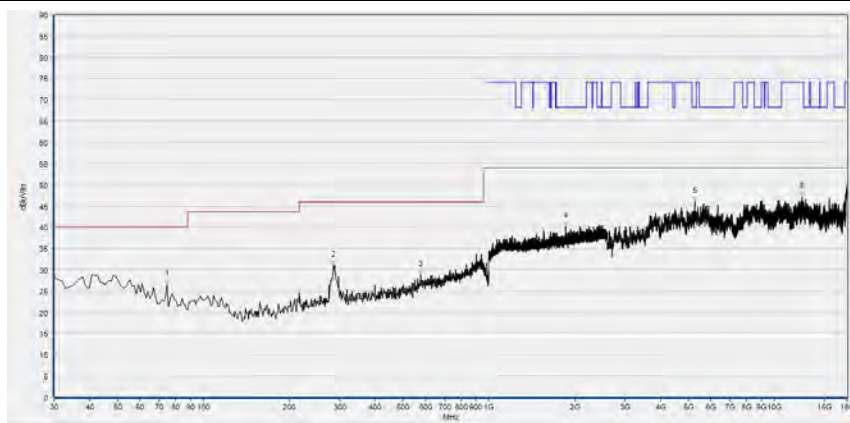
(Antenna Horizontal, 30MHz to 18GHz)



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
110.591	31.47	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
271.772	29.78	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
742.693	33.96	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1991.264	40.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5239.927	46.81	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12559.632	47.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

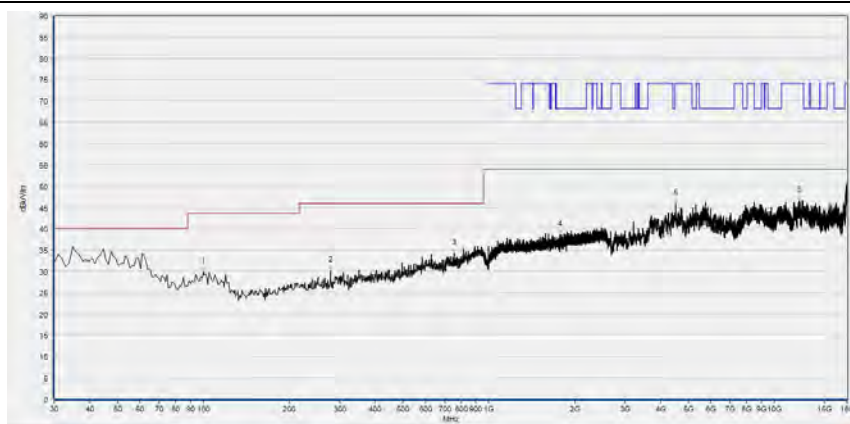
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 52



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
74.665	26.47	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
285.365	31.00	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
577.628	28.91	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1862.688	40.21	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5261.652	46.13	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12538.068	47.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

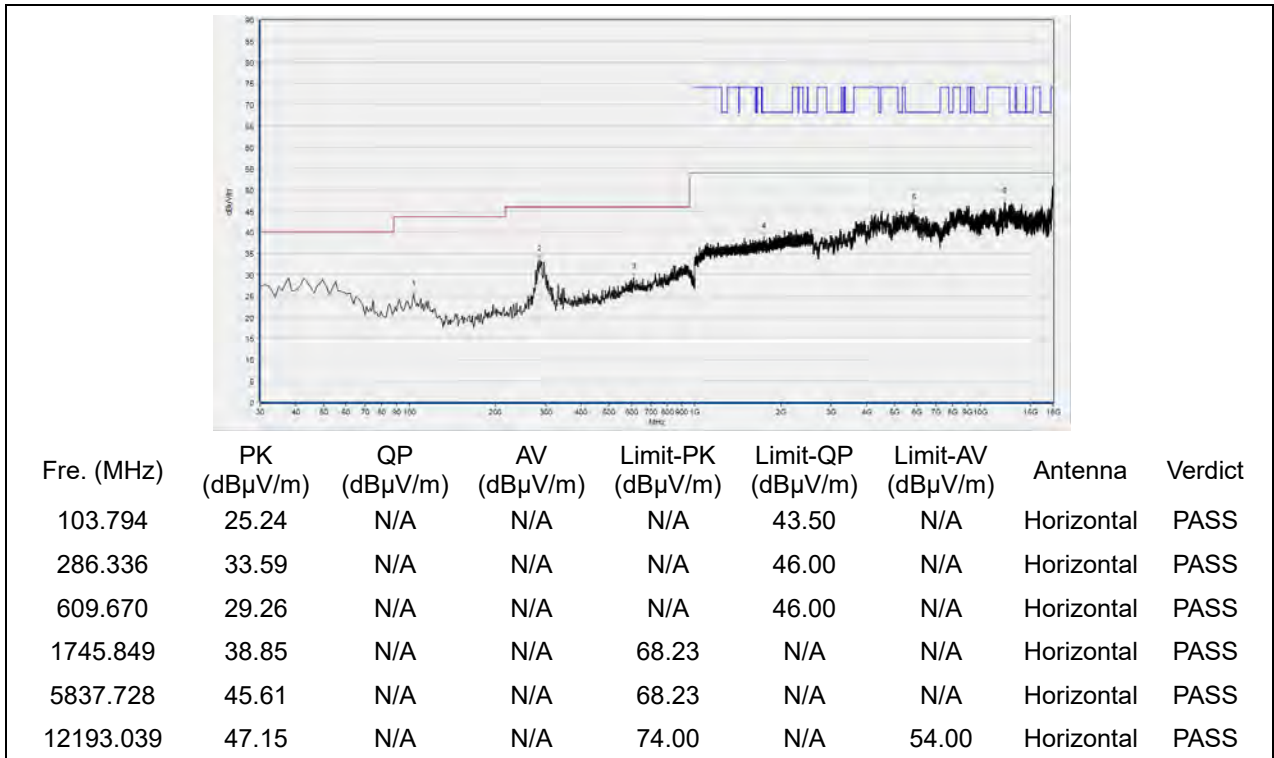
(Antenna Horizontal, 30MHz to 18GHz)



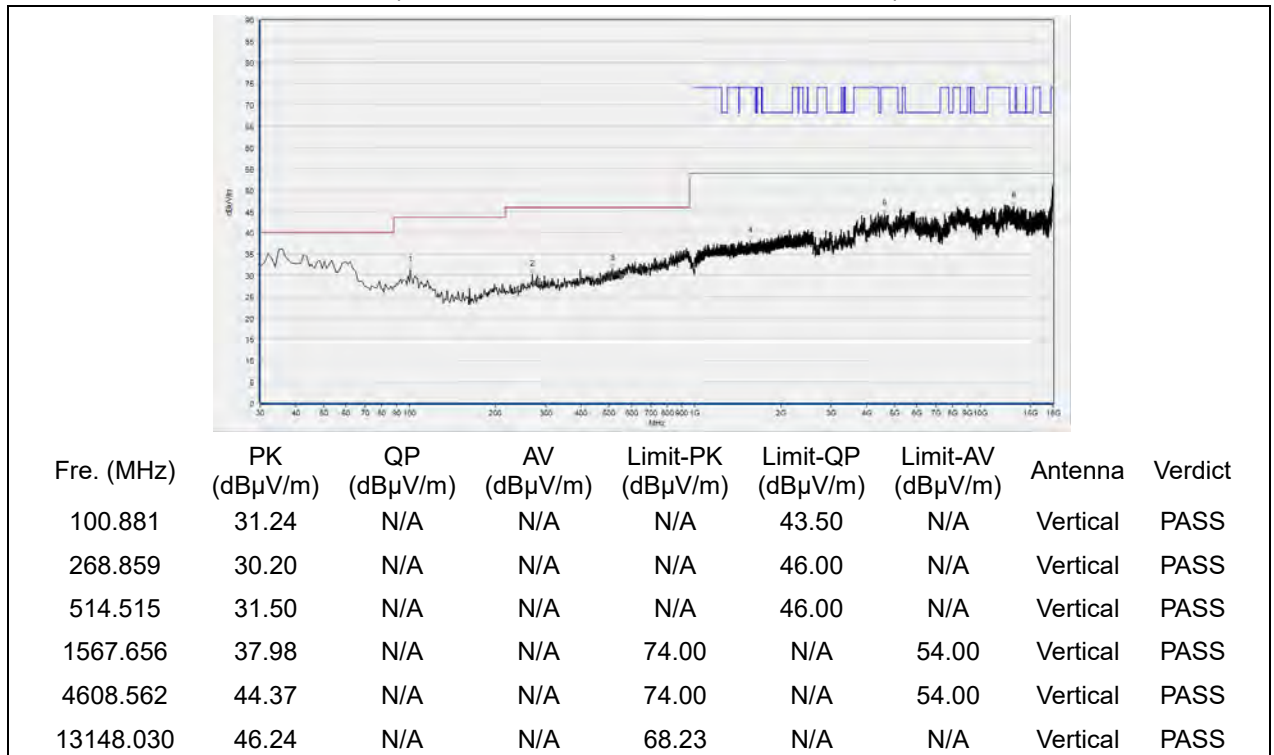
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
99.910	29.76	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
278.569	30.12	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
757.257	34.11	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1776.259	38.51	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4522.304	45.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12199.200	46.63	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 60

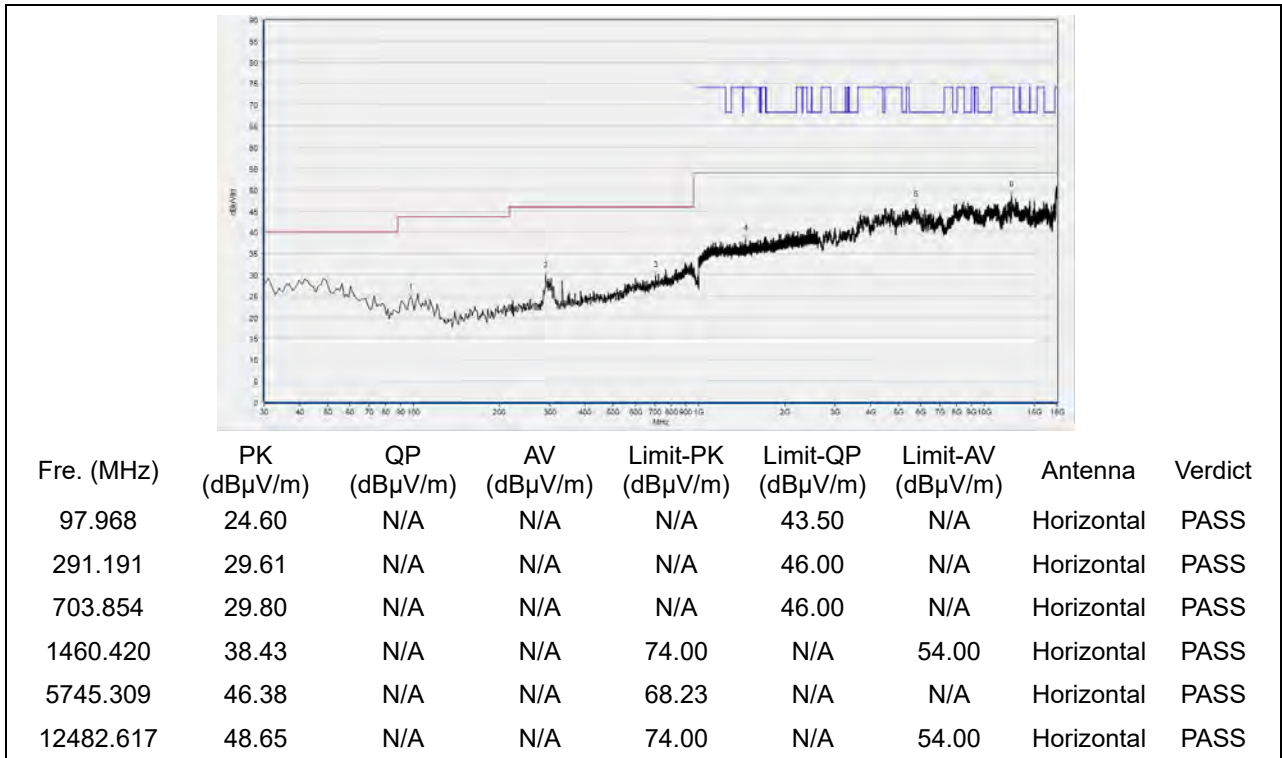


(Antenna Horizontal, 30MHz to 18GHz)

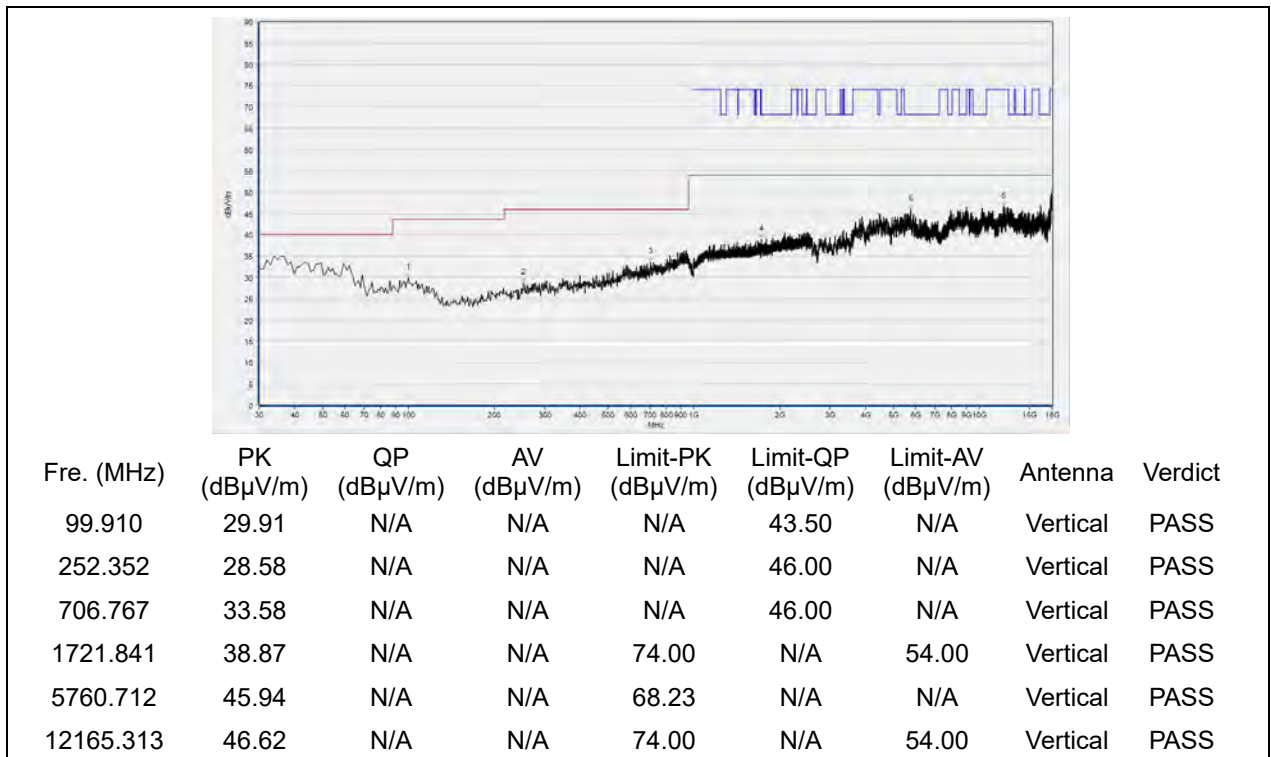


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 64

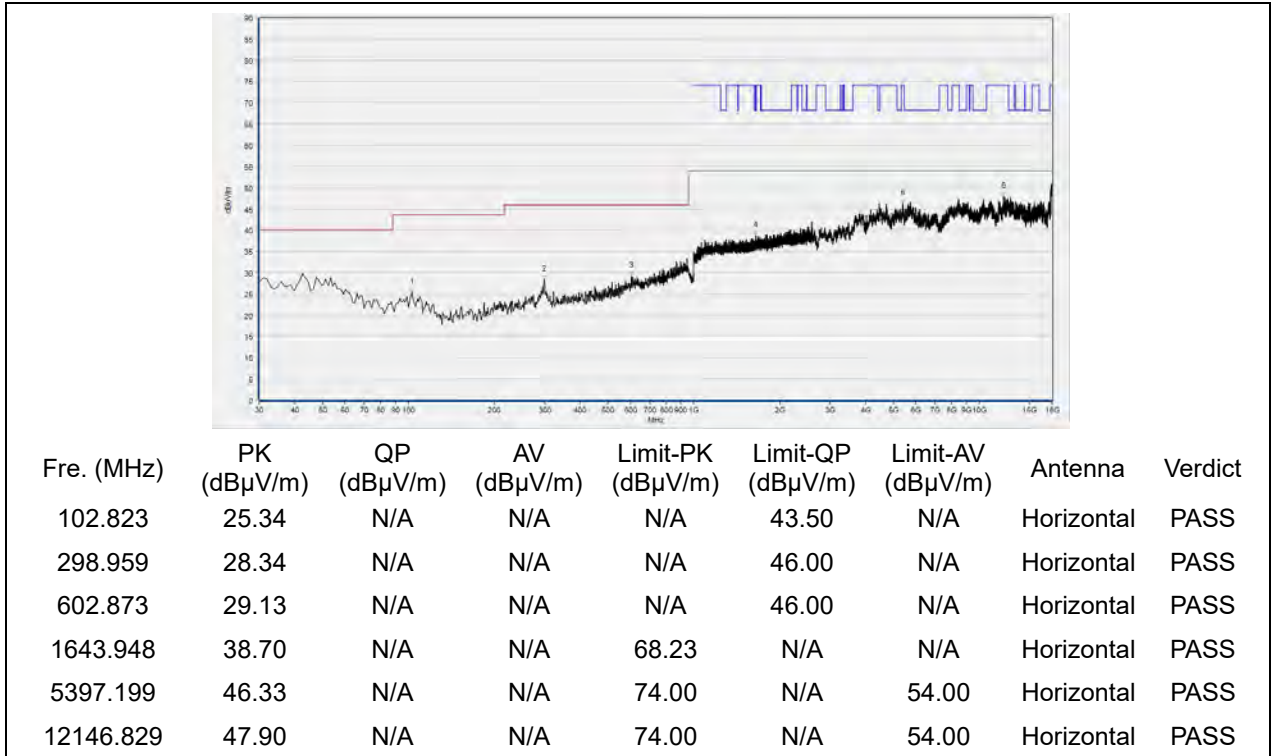


(Antenna Horizontal, 30MHz to 18GHz)

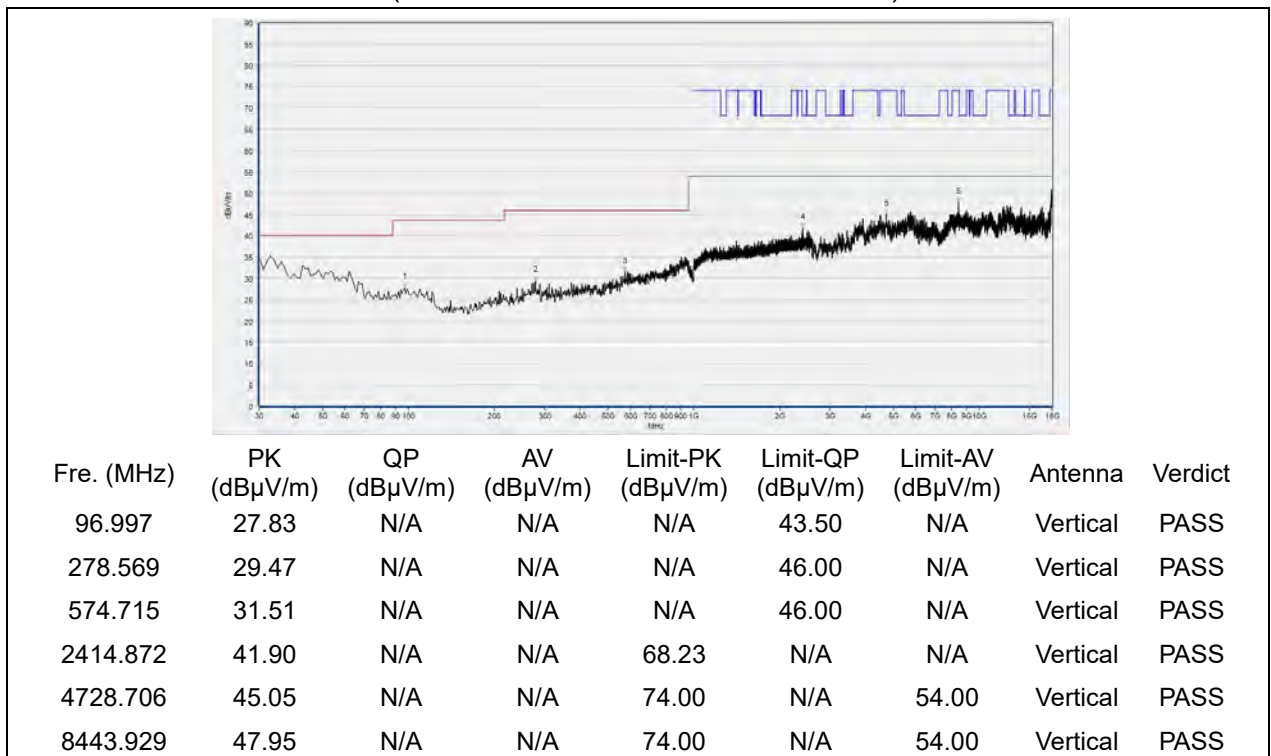


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 100

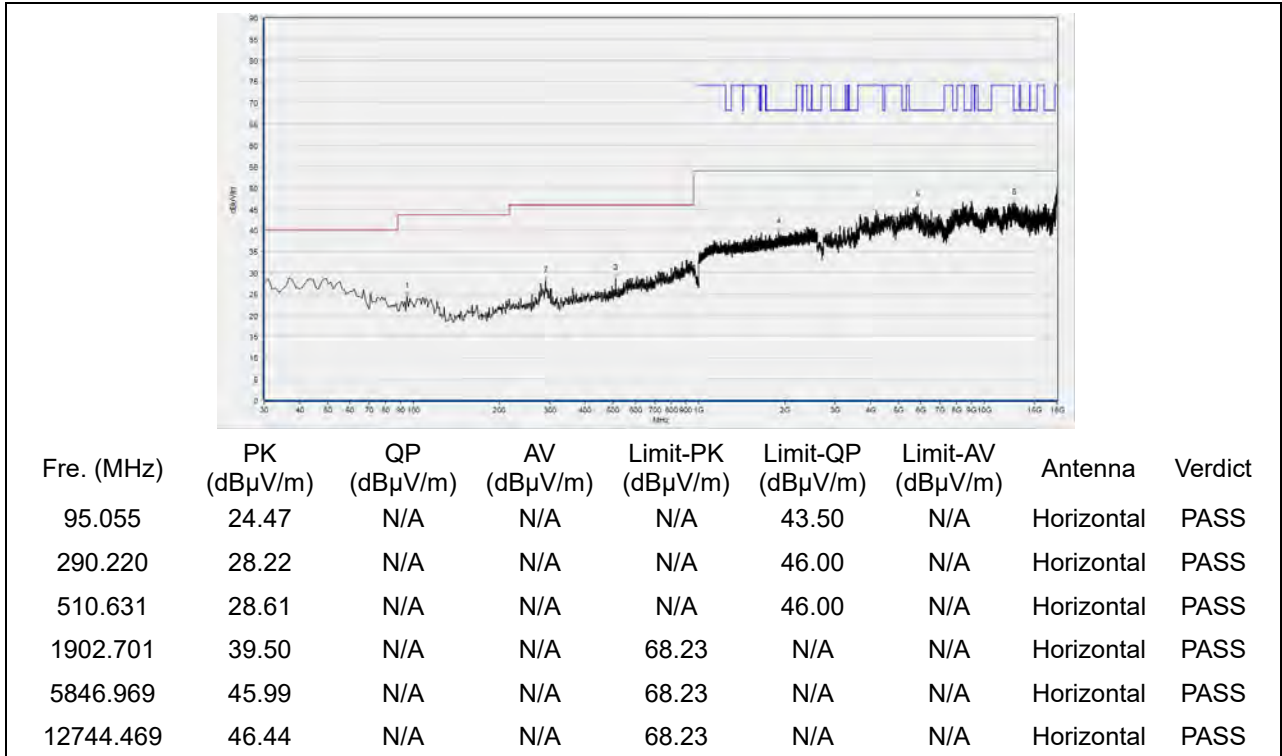


(Antenna Horizontal, 30MHz to 18GHz)

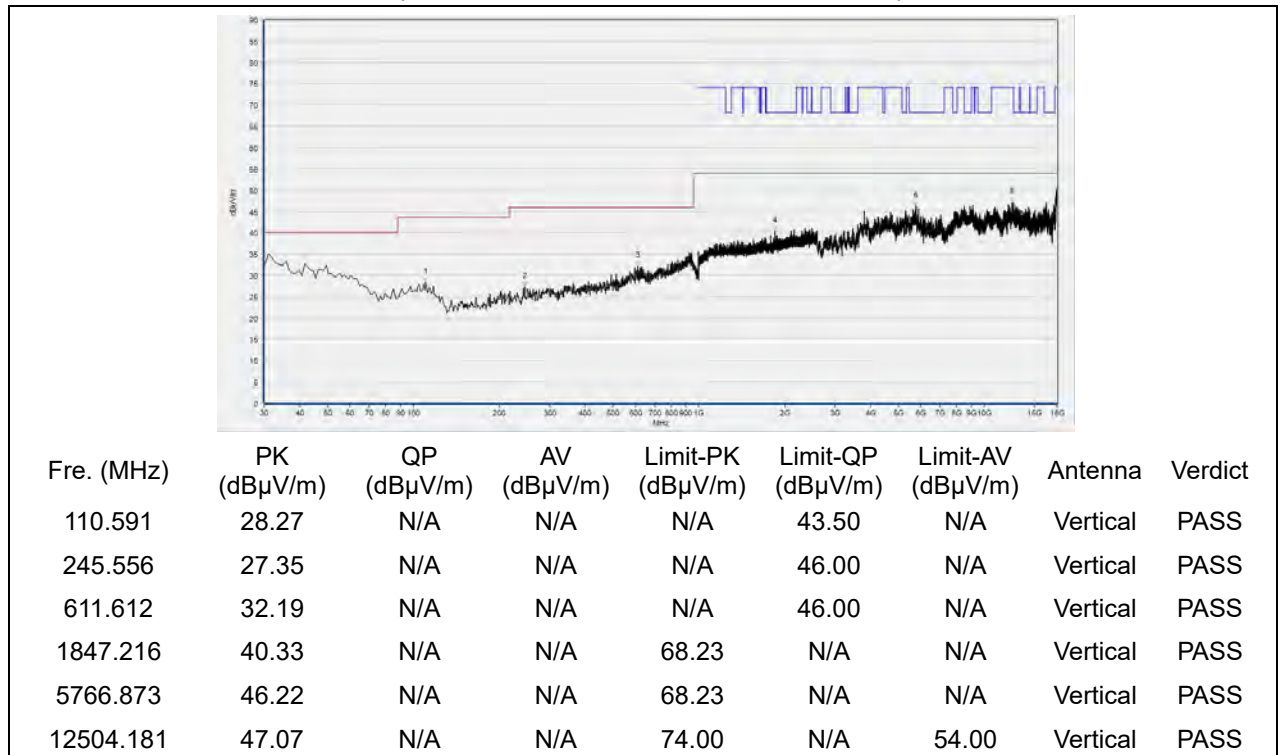


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 120

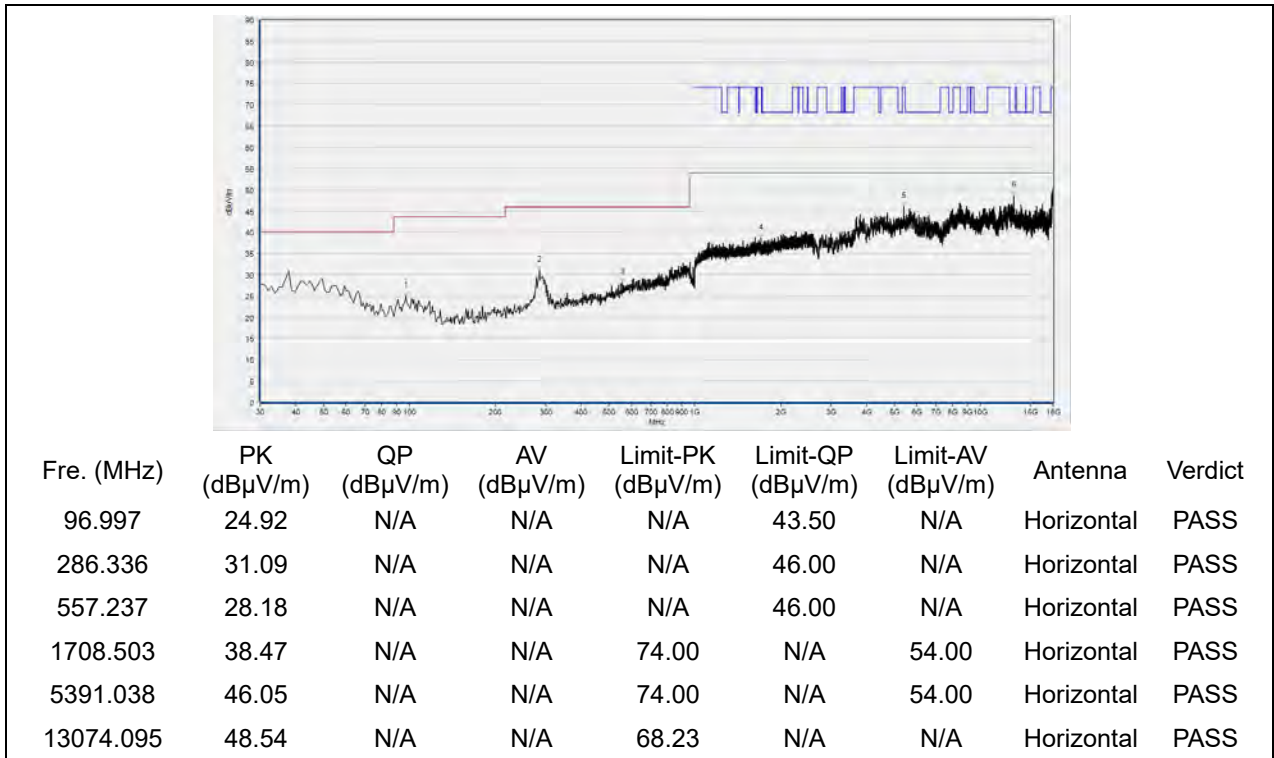


(Antenna Horizontal, 30MHz to 18GHz)

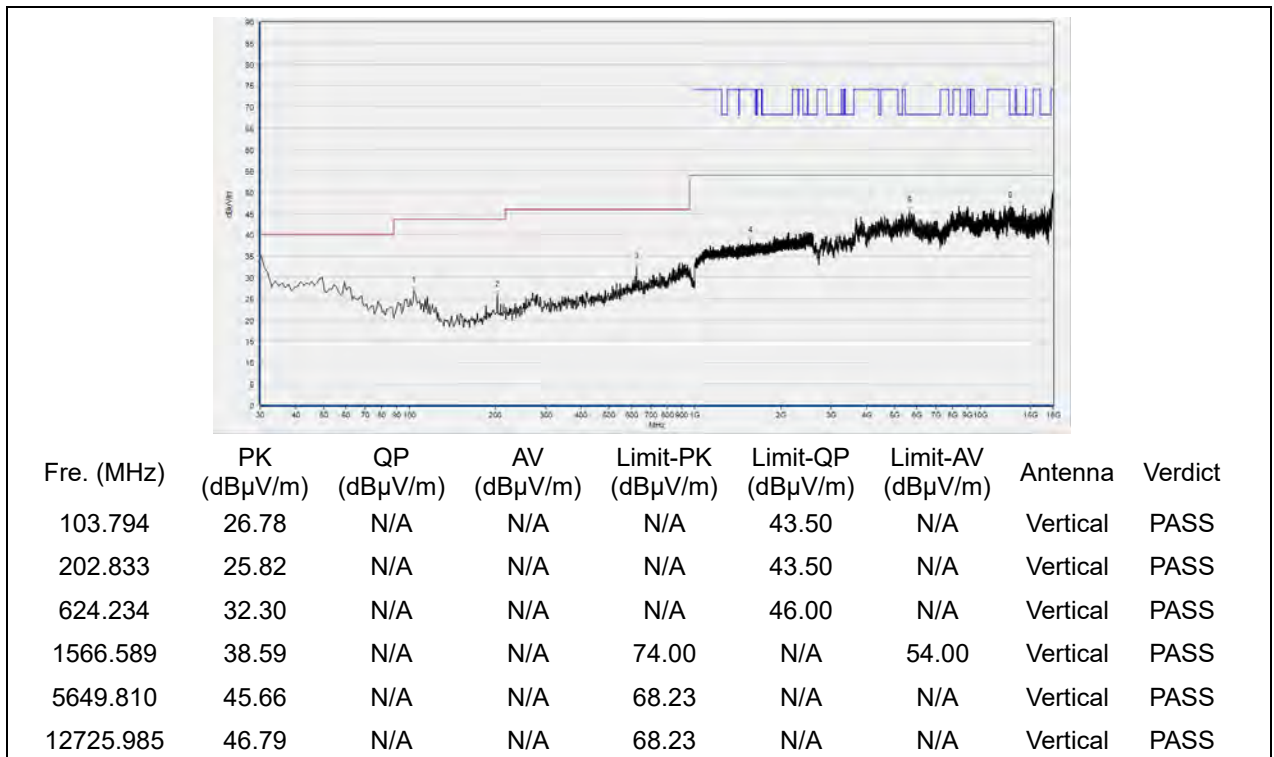


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 144

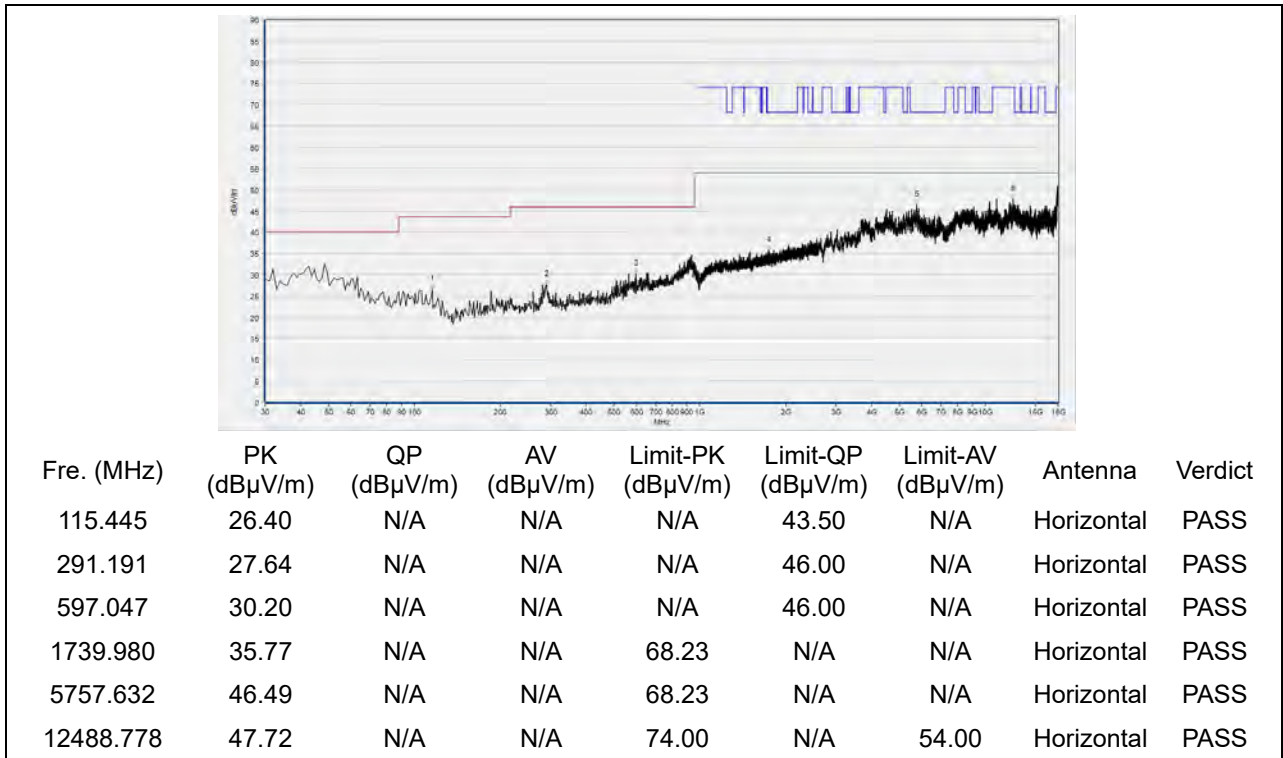


(Antenna Horizontal, 30MHz to 18GHz)

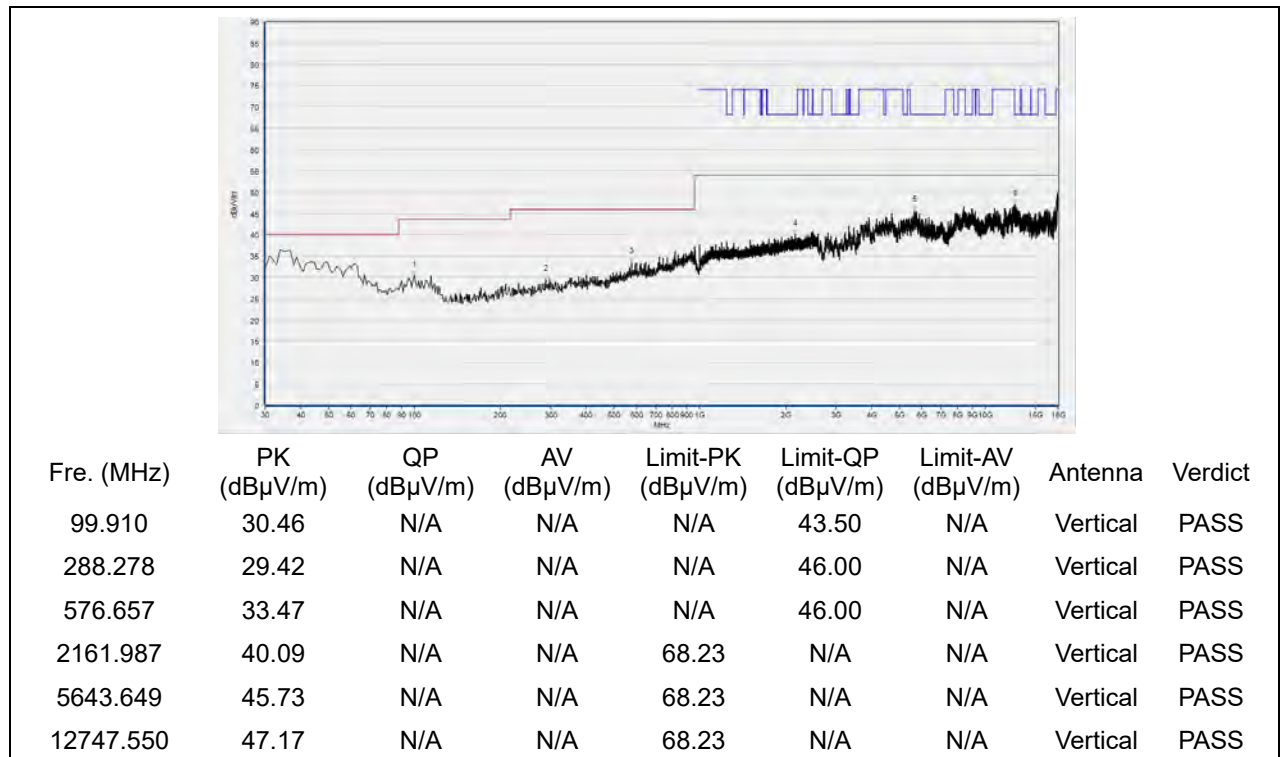


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 149

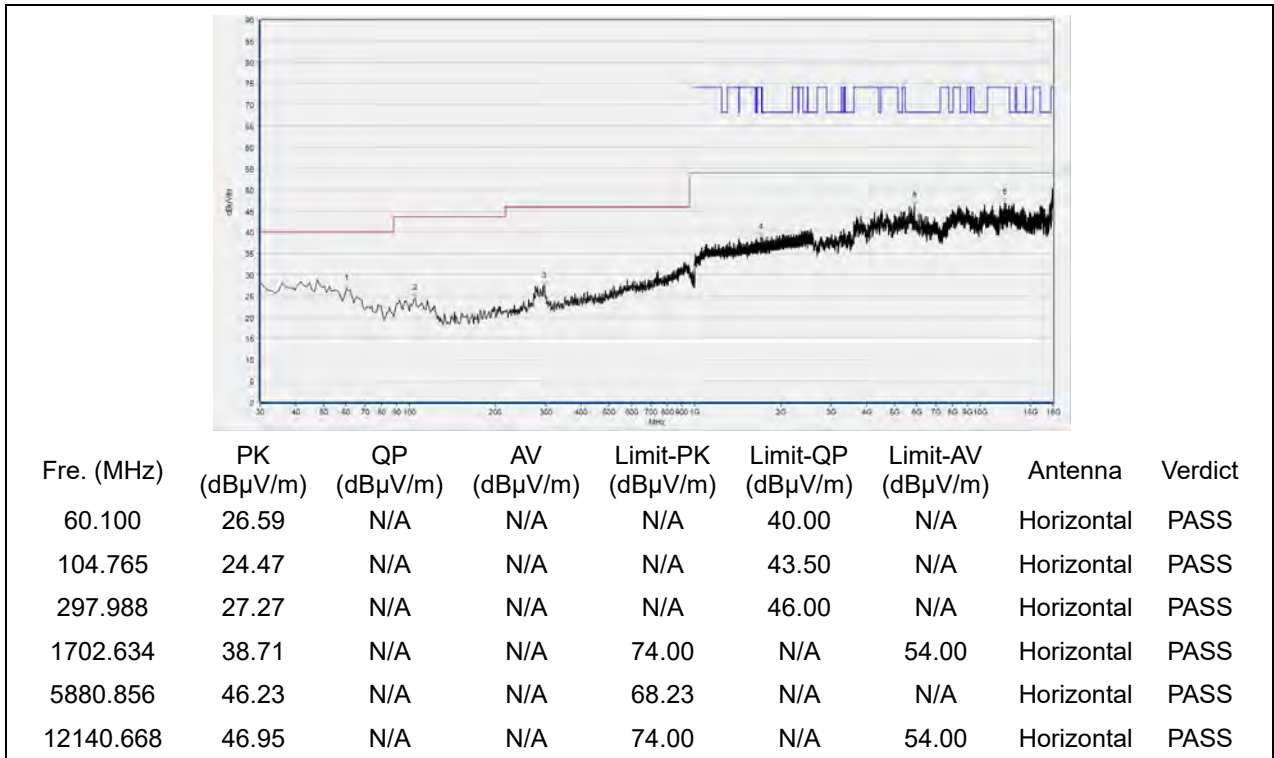


(Antenna Horizontal, 30MHz to 18GHz)

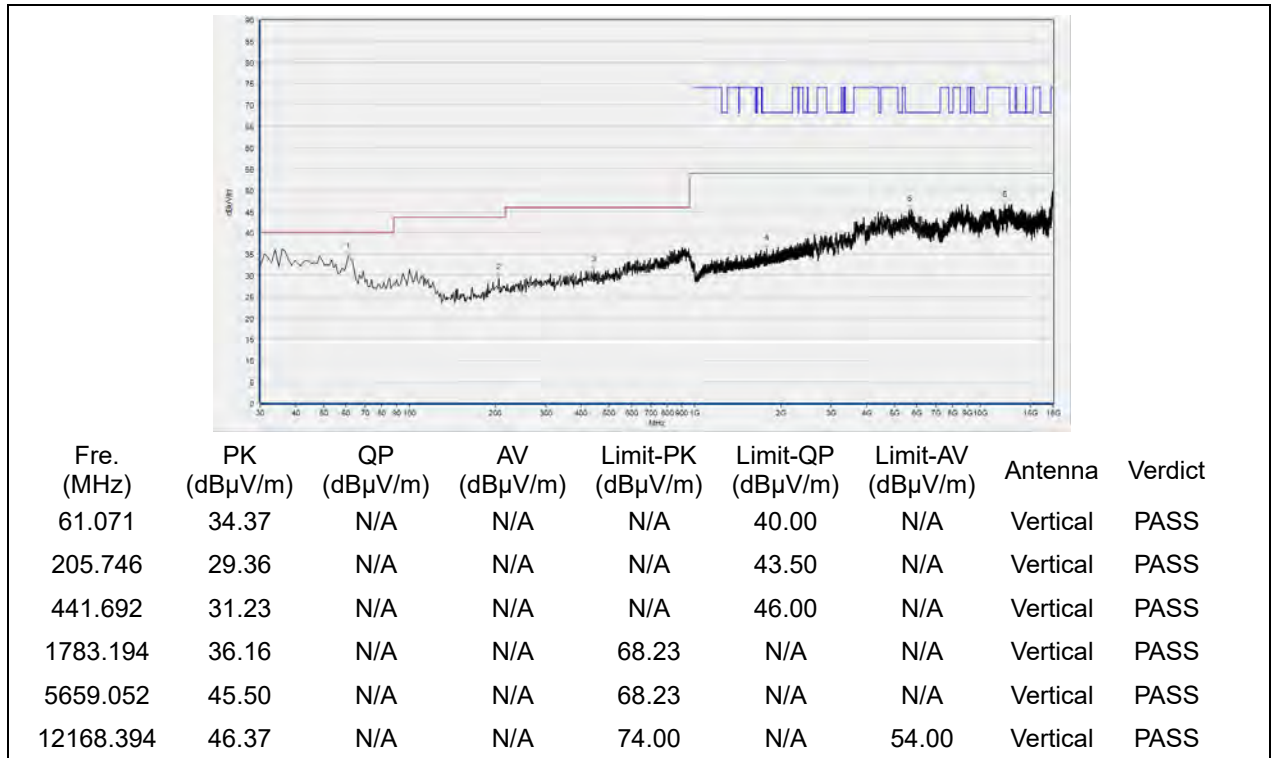


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 157

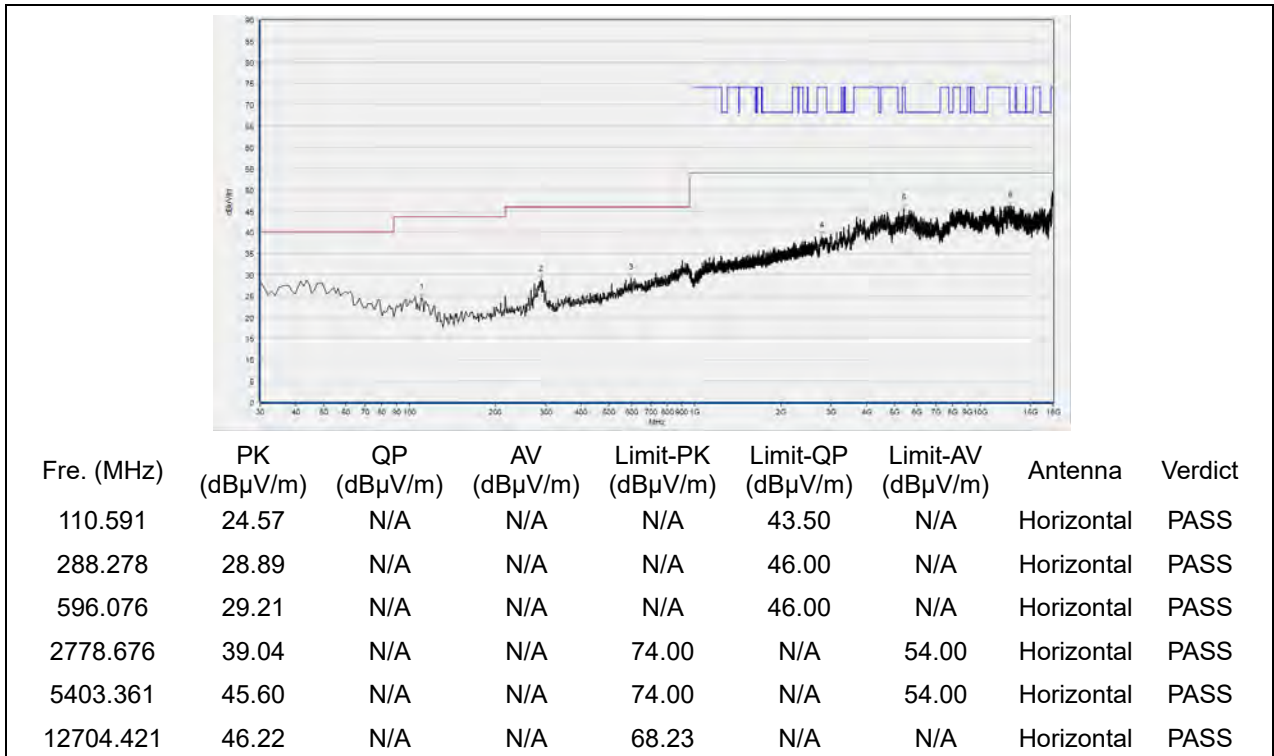


(Antenna Horizontal, 30MHz to 18GHz)

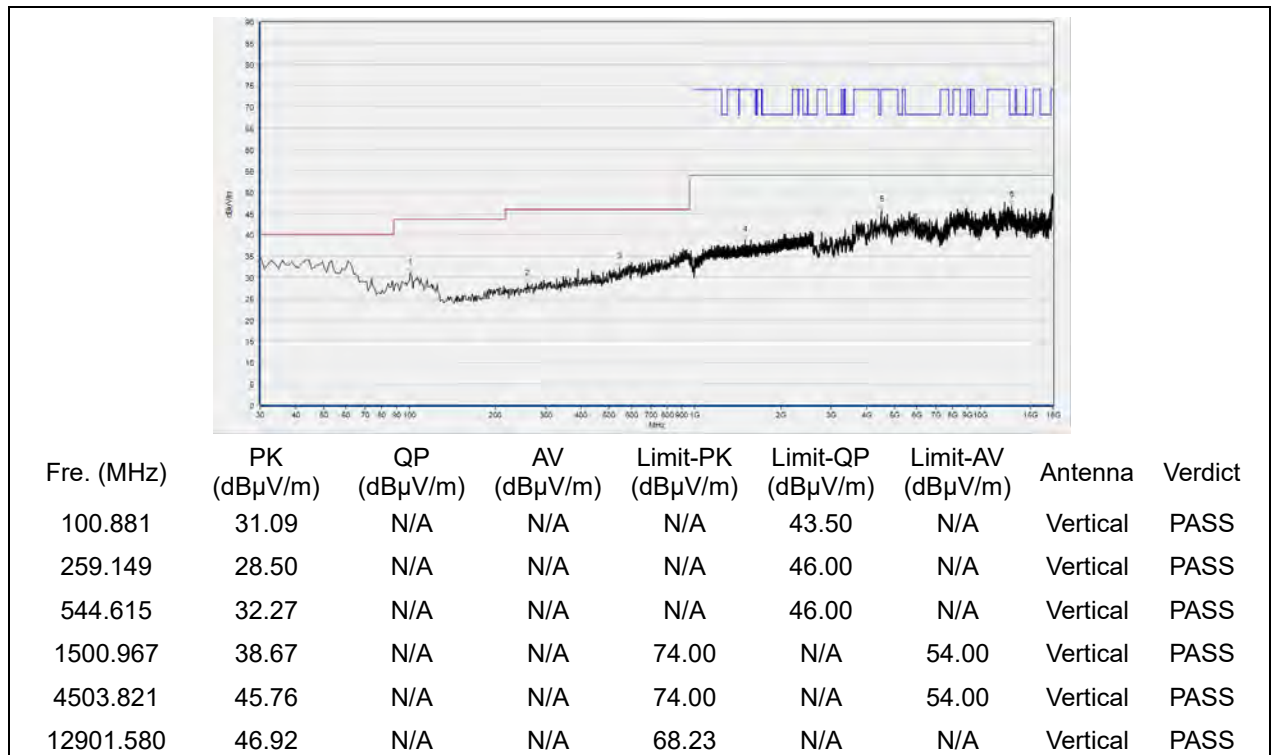


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 165



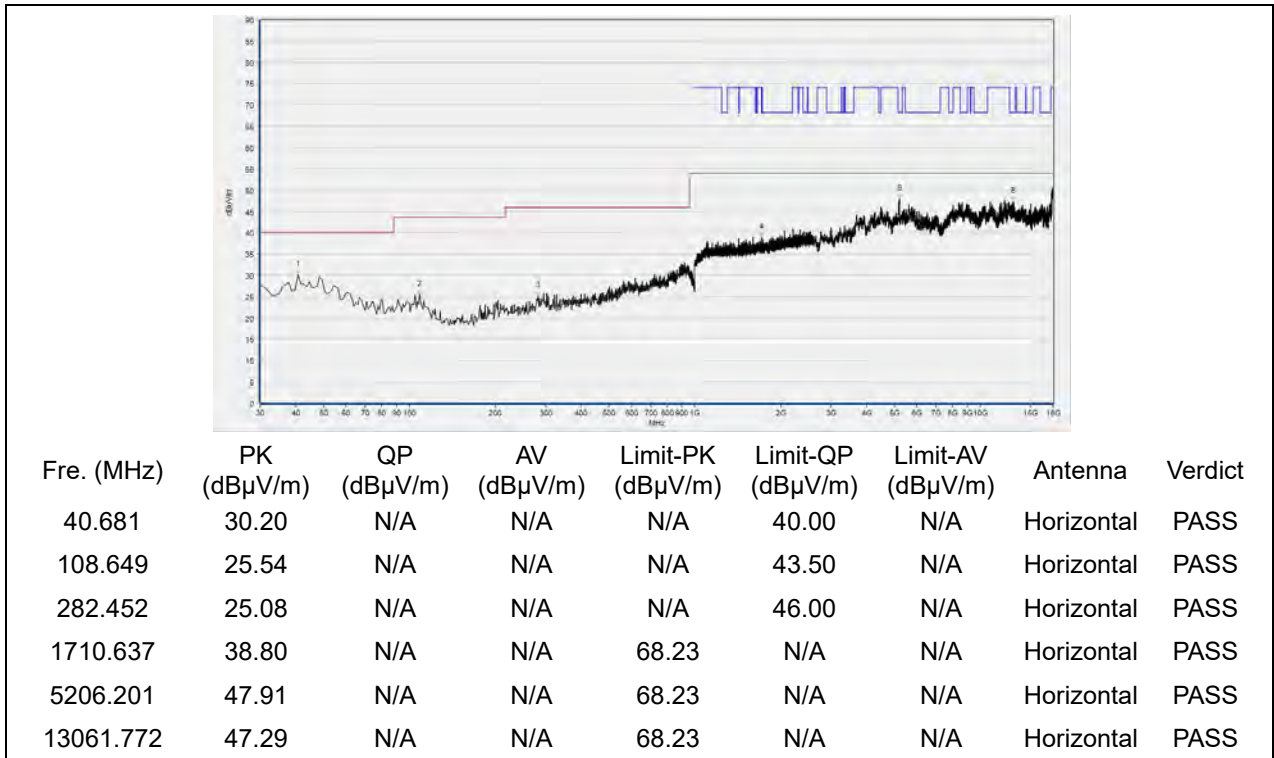
(Antenna Horizontal, 30MHz to 18GHz)



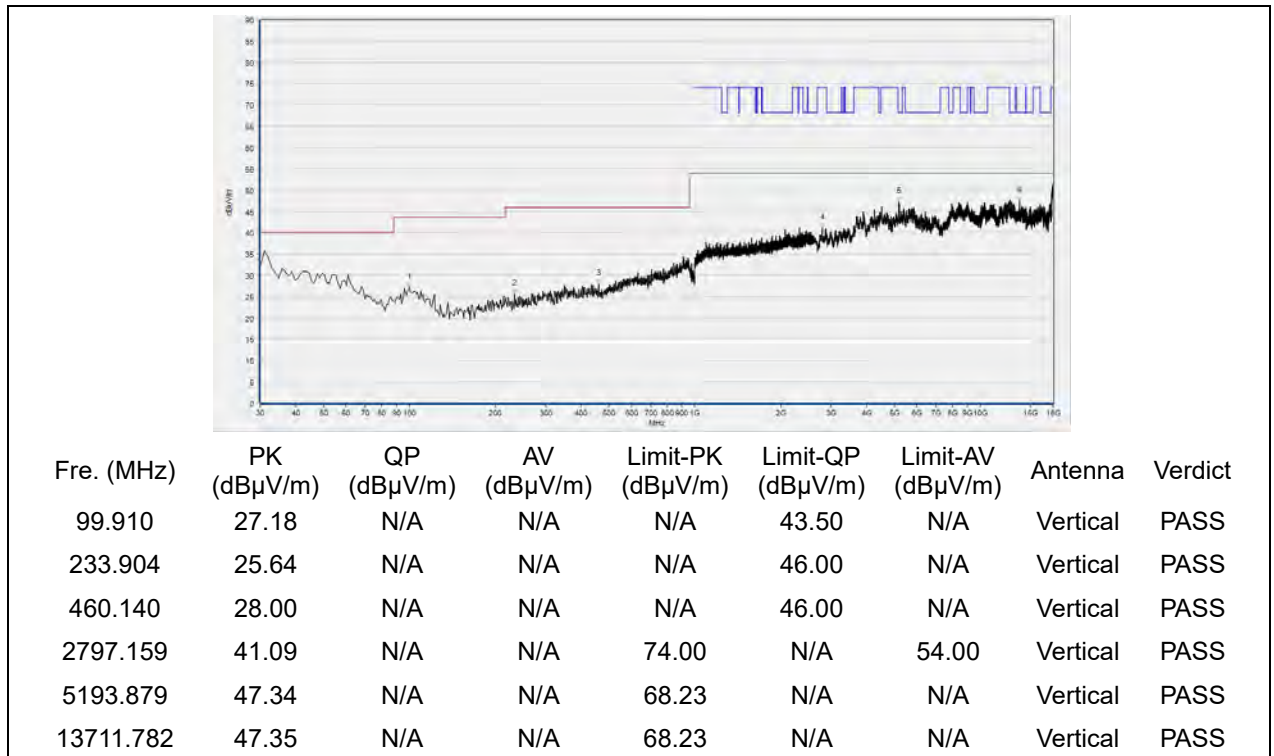
(Antenna Vertical, 30MHz to 18GHz)

802.11n (HT40) mode

Plot for Channel 38

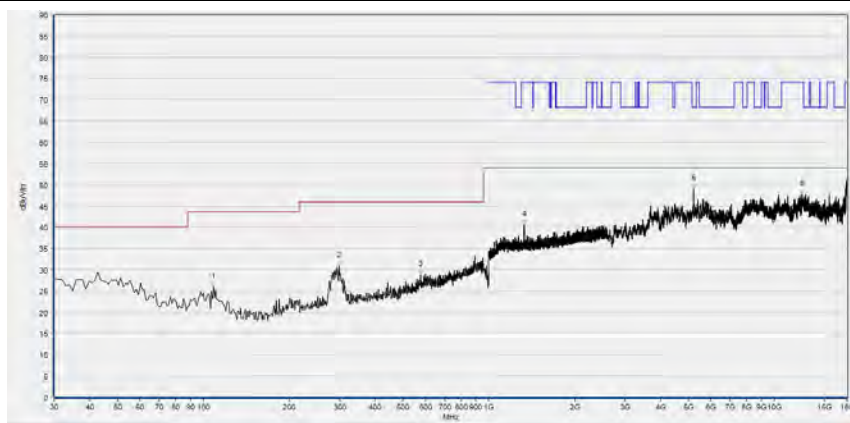


(Antenna Horizontal, 30MHz to 18GHz)



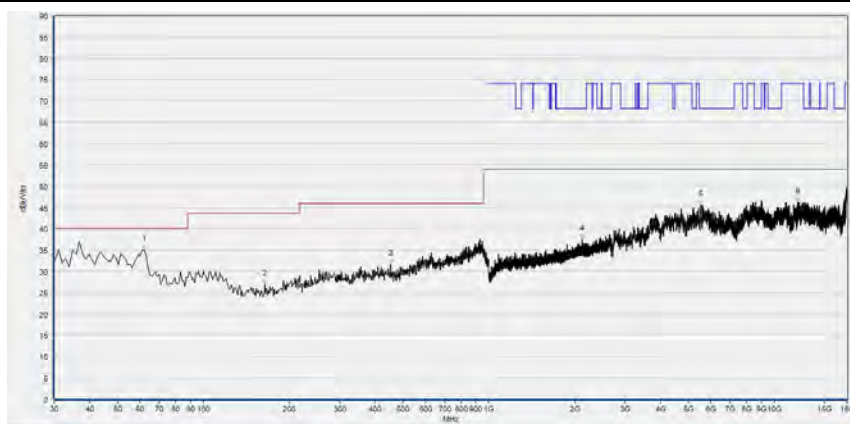
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 46



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
108.649	25.97	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
298.959	30.84	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
576.657	28.89	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1329.710	40.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5215.443	49.02	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12516.503	47.82	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

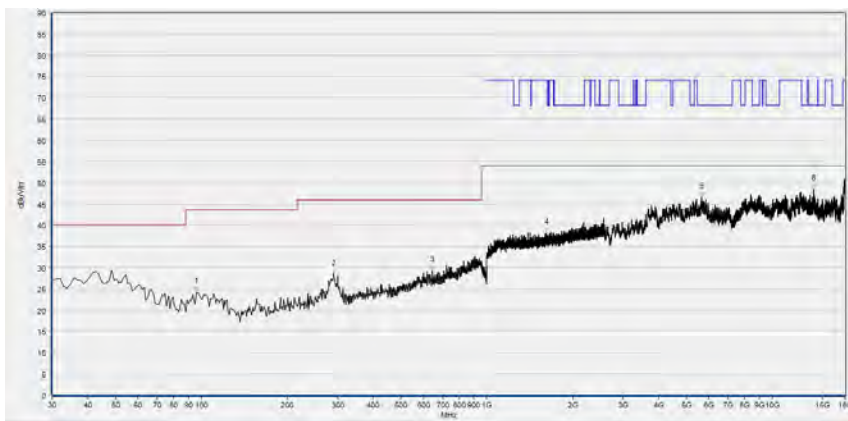
(Antenna Horizontal, 30MHz to 18GHz)



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
62.042	35.08	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
163.994	26.93	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
453.343	31.70	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2123.041	37.47	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5520.424	45.51	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
12072.895	46.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

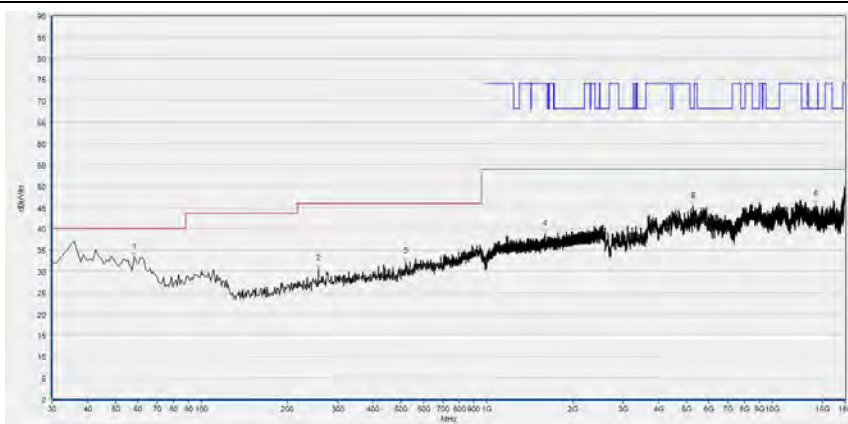
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 54



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
96.026	24.37	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
290.220	28.48	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
644.625	29.36	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1616.205	38.27	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5665.213	46.65	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13982.877	48.40	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

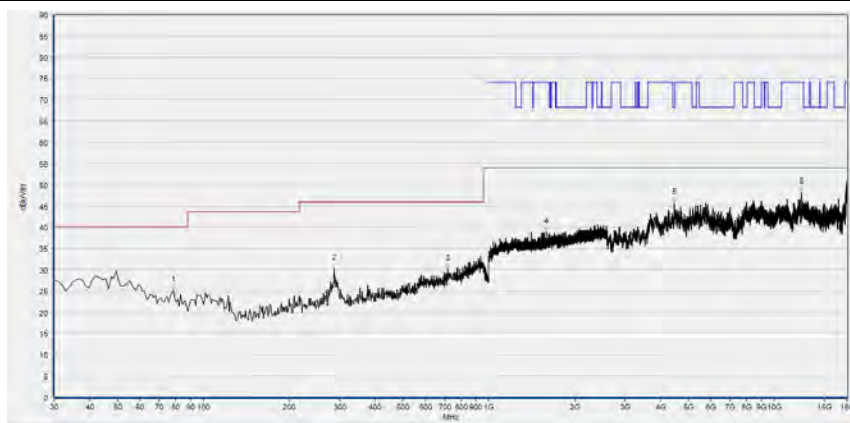
(Antenna Horizontal, 30MHz to 18GHz)



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
58.158	33.31	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
257.207	30.57	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
520.340	32.11	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1602.334	38.68	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5270.894	45.21	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
14244.729	45.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

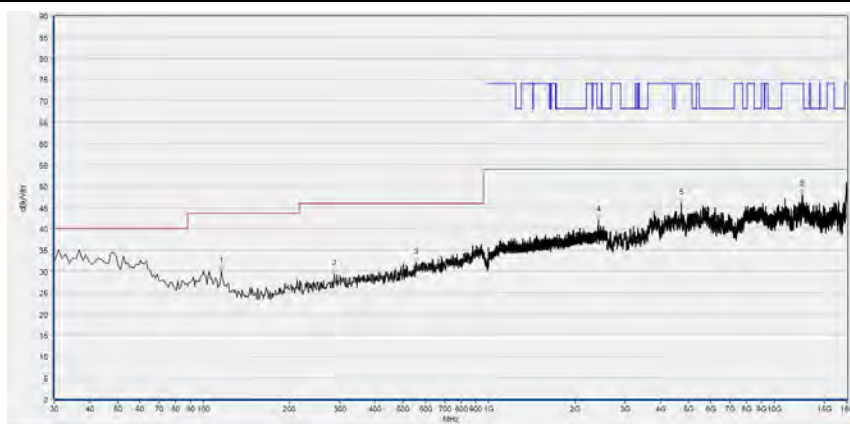
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 62



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
78.549	25.17	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
287.307	30.34	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
716.476	30.15	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1586.862	38.85	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4469.934	45.72	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
12482.617	48.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

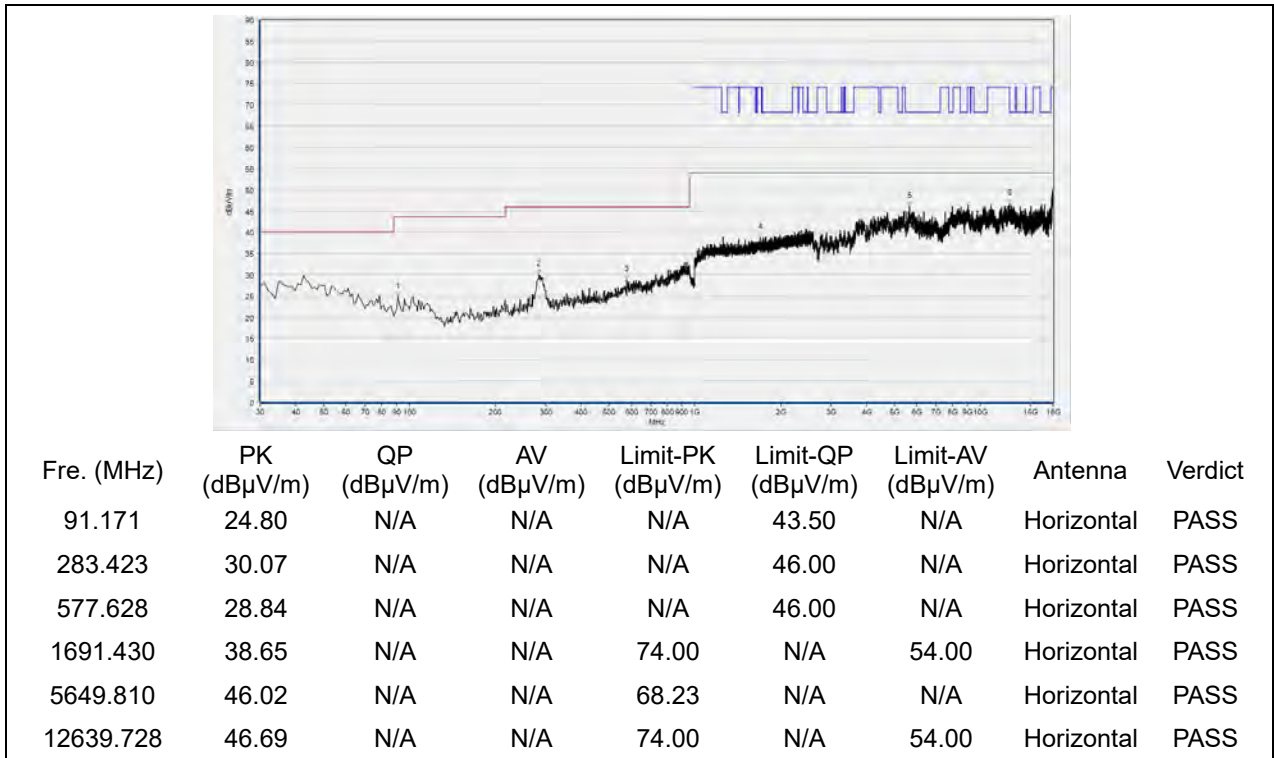
(Antenna Horizontal, 30MHz to 18GHz)



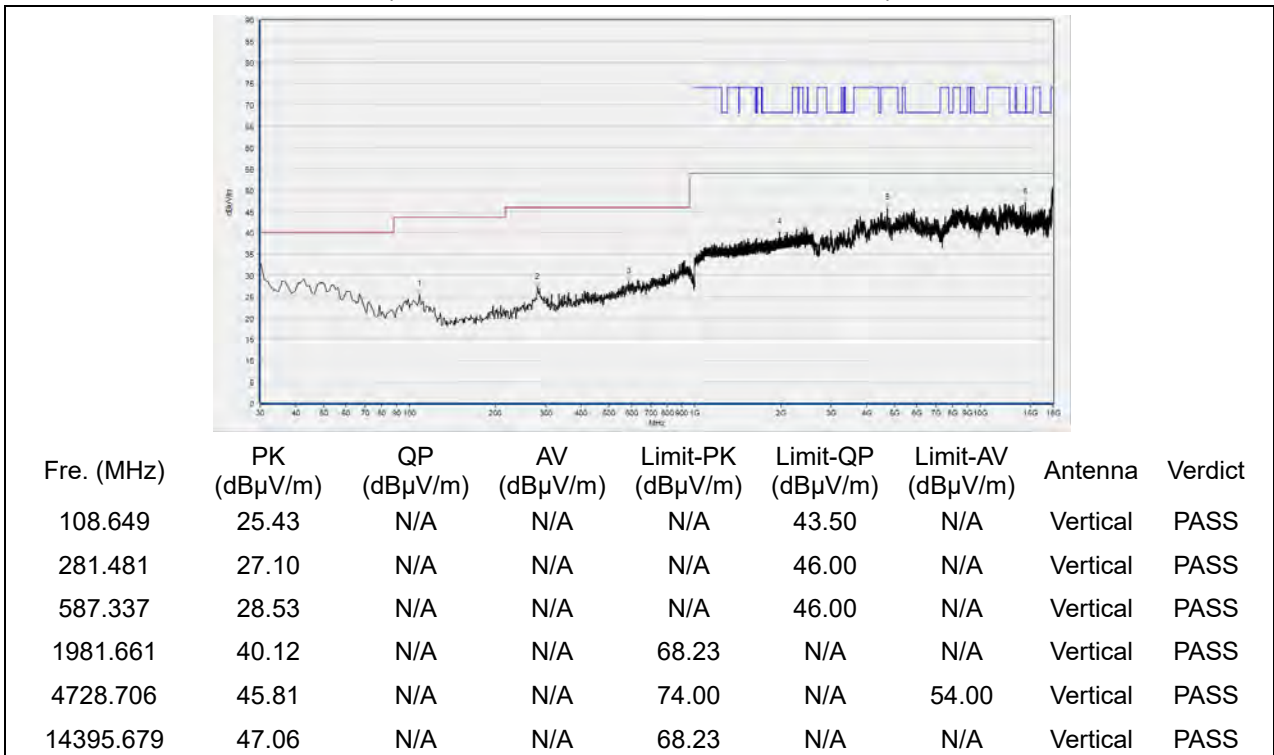
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
115.445	29.99	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
287.307	29.37	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
558.208	32.05	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2418.606	42.14	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4725.625	46.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12491.858	48.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 102

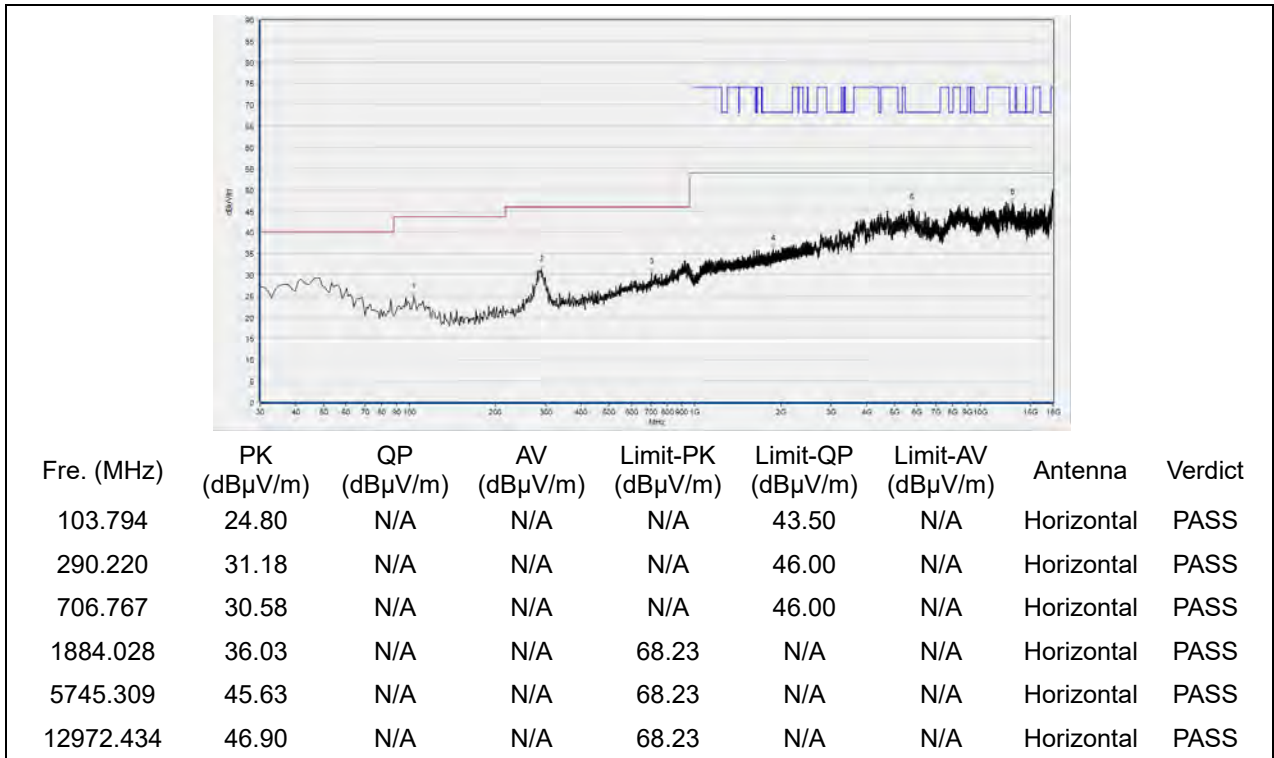


(Antenna Horizontal, 30MHz to 18GHz)

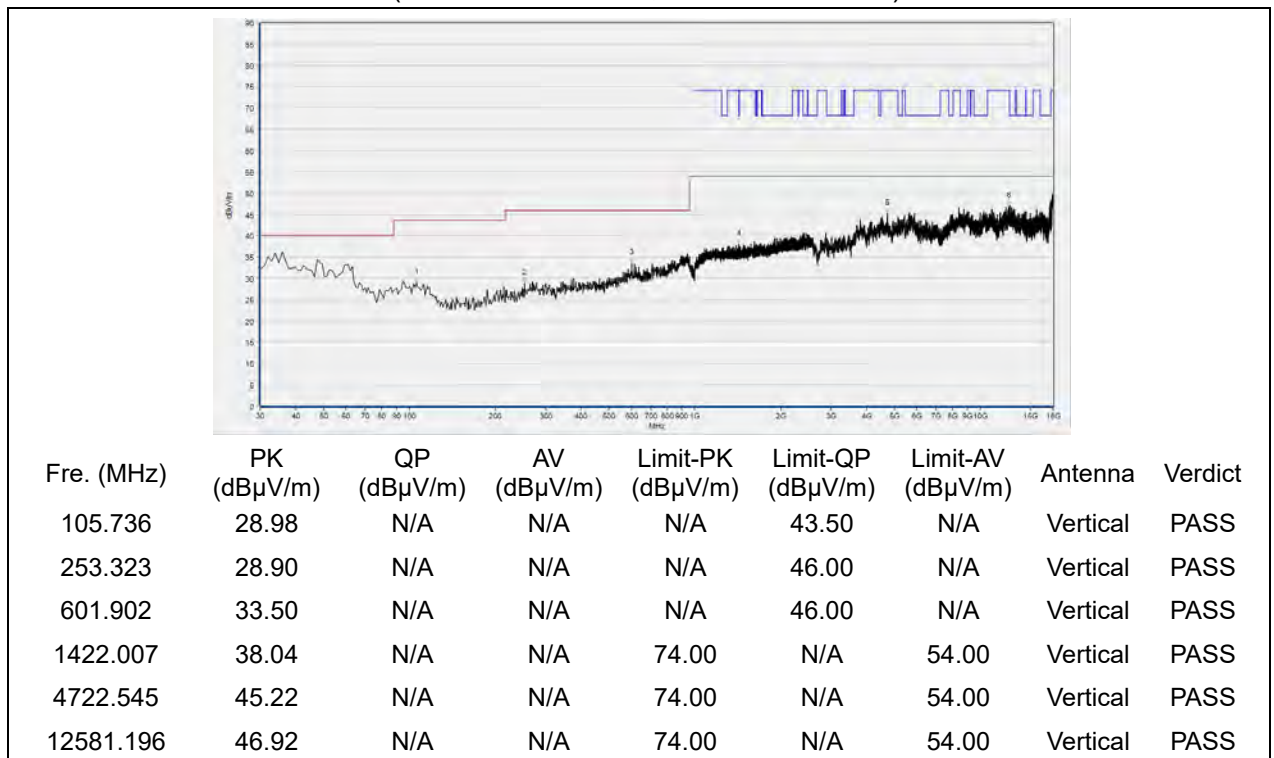


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 126

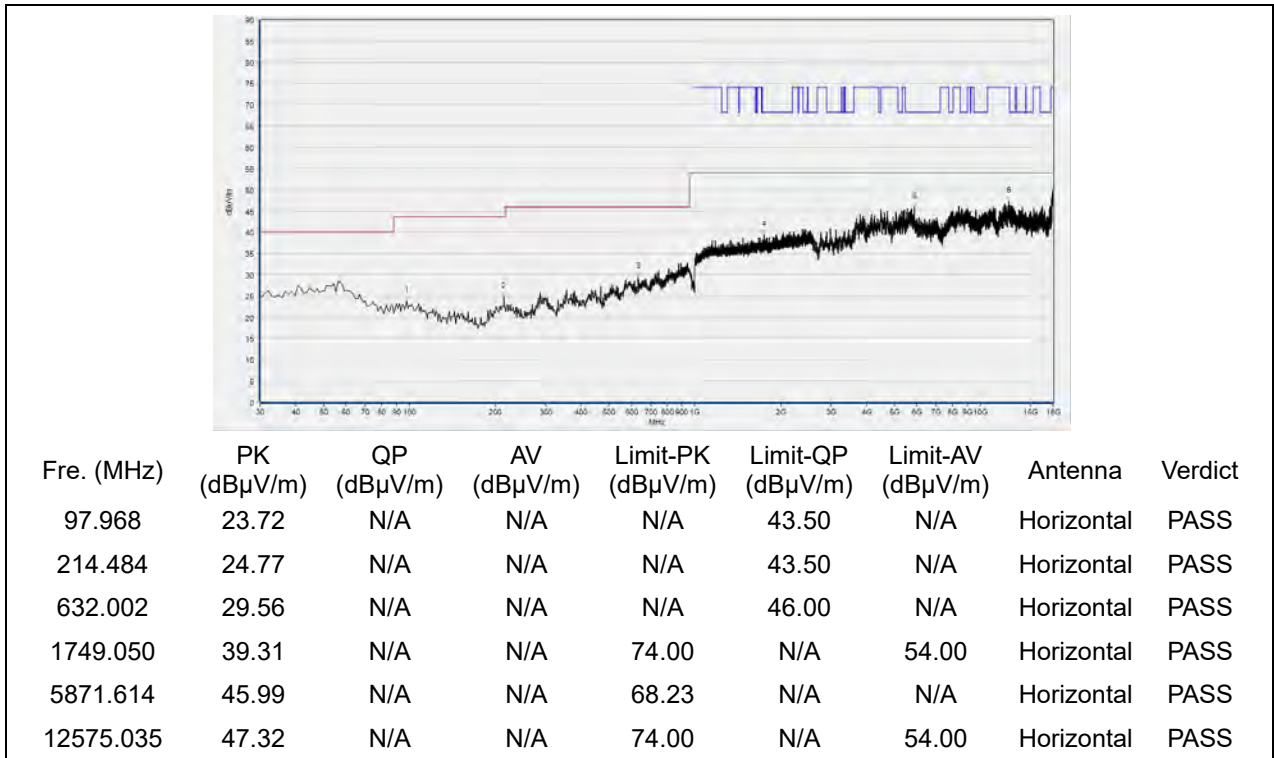


(Antenna Horizontal, 30MHz to 18GHz)

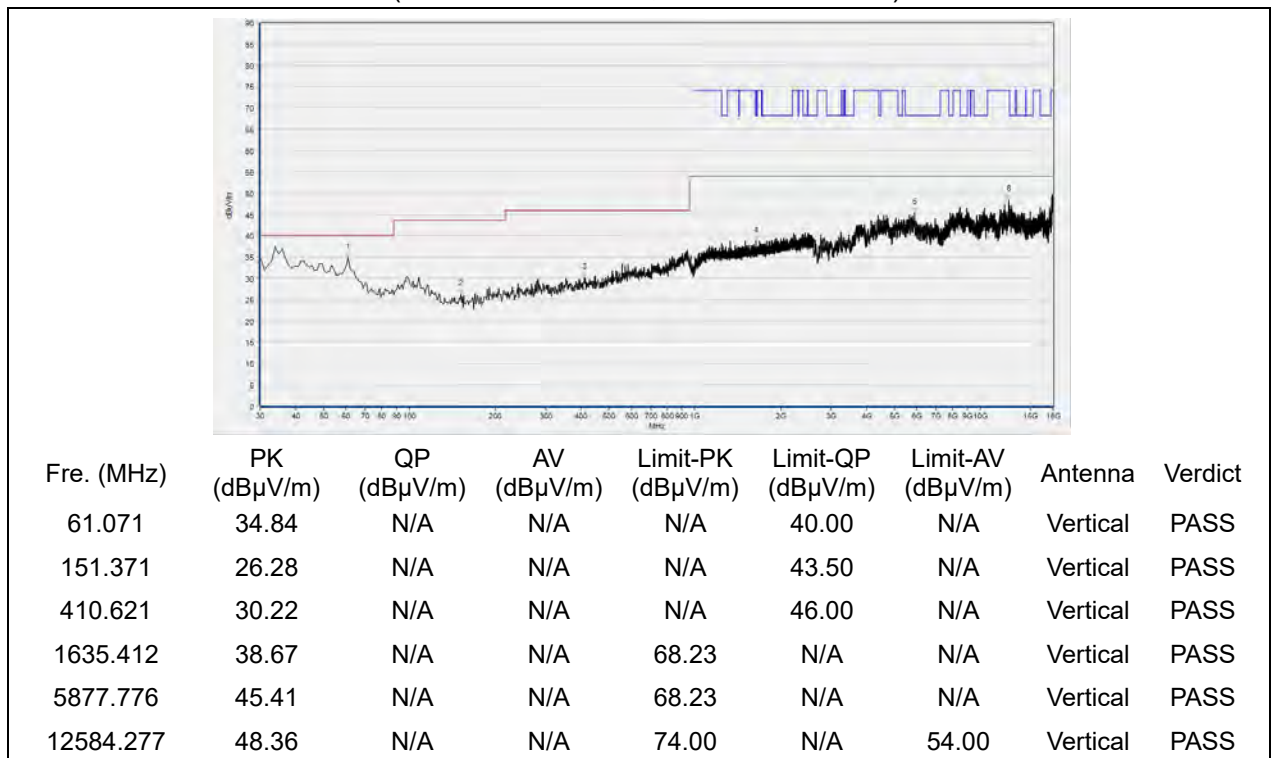


(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 142



(Antenna Horizontal, 30MHz to 18GHz)



(Antenna Vertical, 30MHz to 18GHz)