-6dB Bandwidth NVNT n40 5755MHz Ant1

-6dB Bandwidth NVNT n40 5795MHz Ant1

-6dB Bandwidth NVNT ac20 5745MHz Ant1

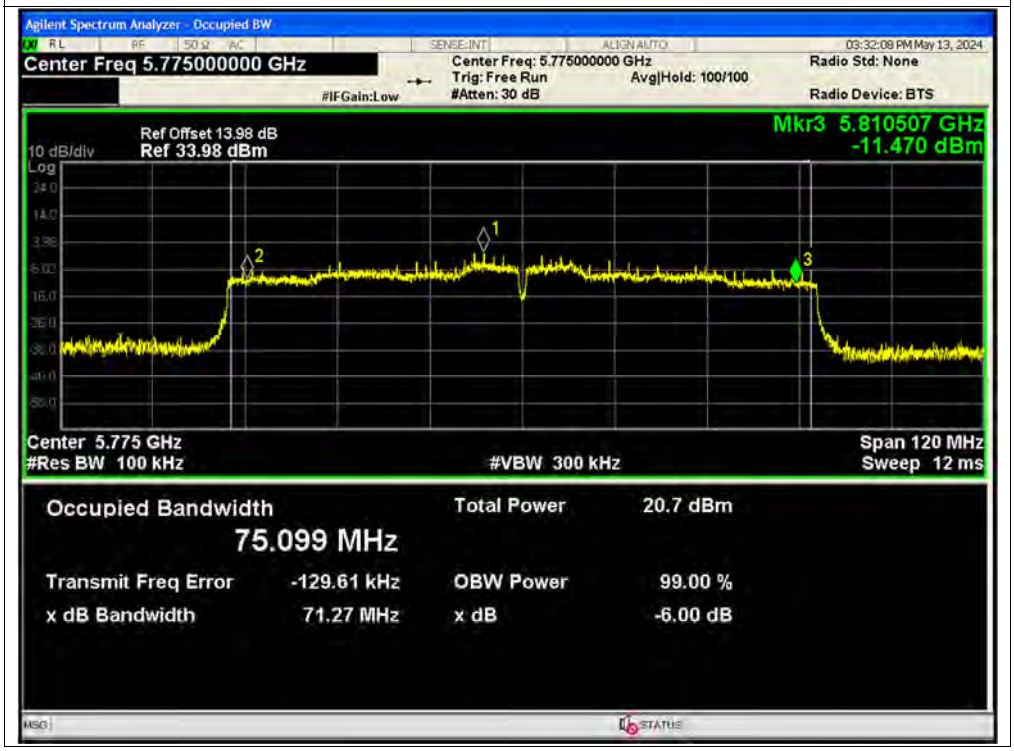
-6dB Bandwidth NVNT ac20 5785MHz Ant1

-6dB Bandwidth NVNT ac20 5825MHz Ant1

-6dB Bandwidth NVNT ac40 5755MHz Ant1

-6dB Bandwidth NVNT ac40 5795MHz Ant1

-6dB Bandwidth NVNT ac80 5775MHz Ant1



A.4. Peak Power Spectral Density

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	6.38	0.08	6.46	11	Pass
NVNT	a	5220	Ant1	8.83	0.08	8.91	11	Pass
NVNT	a	5240	Ant1	8.4	0.08	8.49	11	Pass
NVNT	a	5260	Ant1	8.38	0.06	8.44	11	Pass
NVNT	a	5300	Ant1	8.13	0.08	8.21	11	Pass
NVNT	a	5320	Ant1	6.63	0.06	6.69	11	Pass
NVNT	a	5500	Ant1	7.07	0.08	7.15	11	Pass
NVNT	a	5600	Ant1	7.29	0.06	7.35	11	Pass
NVNT	a	5700	Ant1	6.95	0.08	7.03	11	Pass
NVNT	a	5745	Ant1	4.12	0.06	4.18	30	Pass
NVNT	a	5785	Ant1	4.64	0.06	4.7	30	Pass
NVNT	a	5825	Ant1	3.68	0.08	3.76	30	Pass
NVNT	n20	5180	Ant1	5.21	0.22	5.43	11	Pass
NVNT	n20	5220	Ant1	6.13	0.22	6.35	11	Pass
NVNT	n20	5240	Ant1	6.7	0.22	6.92	11	Pass
NVNT	n20	5260	Ant1	6.45	0.22	6.67	11	Pass
NVNT	n20	5300	Ant1	6.59	0.22	6.81	11	Pass
NVNT	n20	5320	Ant1	5.3	0.26	5.56	11	Pass
NVNT	n20	5500	Ant1	4.65	0.2	4.85	11	Pass
NVNT	n20	5600	Ant1	6.28	0.11	6.39	11	Pass
NVNT	n20	5700	Ant1	6.38	0.13	6.51	11	Pass
NVNT	n20	5745	Ant1	3.42	0.22	3.64	30	Pass
NVNT	n20	5785	Ant1	3.94	0.22	4.16	30	Pass
NVNT	n20	5825	Ant1	3.18	0.13	3.31	30	Pass
NVNT	n40	5190	Ant1	-0.96	0.48	-0.48	11	Pass
NVNT	n40	5230	Ant1	2.44	0.48	2.93	11	Pass
NVNT	n40	5270	Ant1	2.37	0.32	2.69	11	Pass
NVNT	n40	5310	Ant1	-1.47	0.39	-1.08	11	Pass
NVNT	n40	5510	Ant1	-0.87	0.25	-0.62	11	Pass
NVNT	n40	5630	Ant1	2.76	0.48	3.24	11	Pass
NVNT	n40	5670	Ant1	2.8	0.48	3.28	11	Pass
NVNT	n40	5755	Ant1	-0.3	0.39	0.09	30	Pass
NVNT	n40	5795	Ant1	0.14	0.32	0.46	30	Pass
NVNT	ac20	5180	Ant1	5.28	0.2	5.48	11	Pass

NVNT	ac20	5220	Ant1	6.5	0.12	6.62	11	Pass
NVNT	ac20	5240	Ant1	6.58	0.24	6.82	11	Pass
NVNT	ac20	5260	Ant1	6.45	0.3	6.75	11	Pass
NVNT	ac20	5300	Ant1	6.54	0.22	6.76	11	Pass
NVNT	ac20	5320	Ant1	6.09	0.39	6.48	11	Pass
NVNT	ac20	5500	Ant1	4.7	0.26	4.96	11	Pass
NVNT	ac20	5600	Ant1	6.31	0.22	6.53	11	Pass
NVNT	ac20	5700	Ant1	4.64	0.2	4.84	11	Pass
NVNT	ac20	5745	Ant1	3.52	0.22	3.74	30	Pass
NVNT	ac20	5785	Ant1	4.12	0.12	4.24	30	Pass
NVNT	ac20	5825	Ant1	2.92	0.22	3.14	30	Pass
NVNT	ac40	5190	Ant1	-0.83	0.31	-0.52	11	Pass
NVNT	ac40	5230	Ant1	2.37	0.2	2.57	11	Pass
NVNT	ac40	5270	Ant1	2.42	0.48	2.9	11	Pass
NVNT	ac40	5310	Ant1	-1.46	0.43	-1.03	11	Pass
NVNT	ac40	5510	Ant1	-0.7	0.43	-0.27	11	Pass
NVNT	ac40	5630	Ant1	2.74	0.23	2.97	11	Pass
NVNT	ac40	5670	Ant1	2.69	0.34	3.03	11	Pass
NVNT	ac40	5755	Ant1	-0.16	0.39	0.23	30	Pass
NVNT	ac40	5795	Ant1	-0.17	0.25	0.08	30	Pass
NVNT	ac80	5210	Ant1	-4.77	0.64	-4.13	11	Pass
NVNT	ac80	5290	Ant1	-4.26	0.76	-3.51	11	Pass
NVNT	ac80	5530	Ant1	-3.85	0.63	-3.22	11	Pass
NVNT	ac80	5610	Ant1	-0.4	0.63	0.24	11	Pass
NVNT	ac80	5775	Ant1	-3.36	0.68	-2.68	30	Pass

Test Graphs
PSD NVNT a 5180MHz Ant1

PSD NVNT a 5220MHz Ant1

PSD NVNT a 5240MHz Ant1

PSD NVNT a 5260MHz Ant1

PSD NVNT a 5300MHz Ant1

PSD NVNT a 5320MHz Ant1

PSD NVNT a 5500MHz Ant1

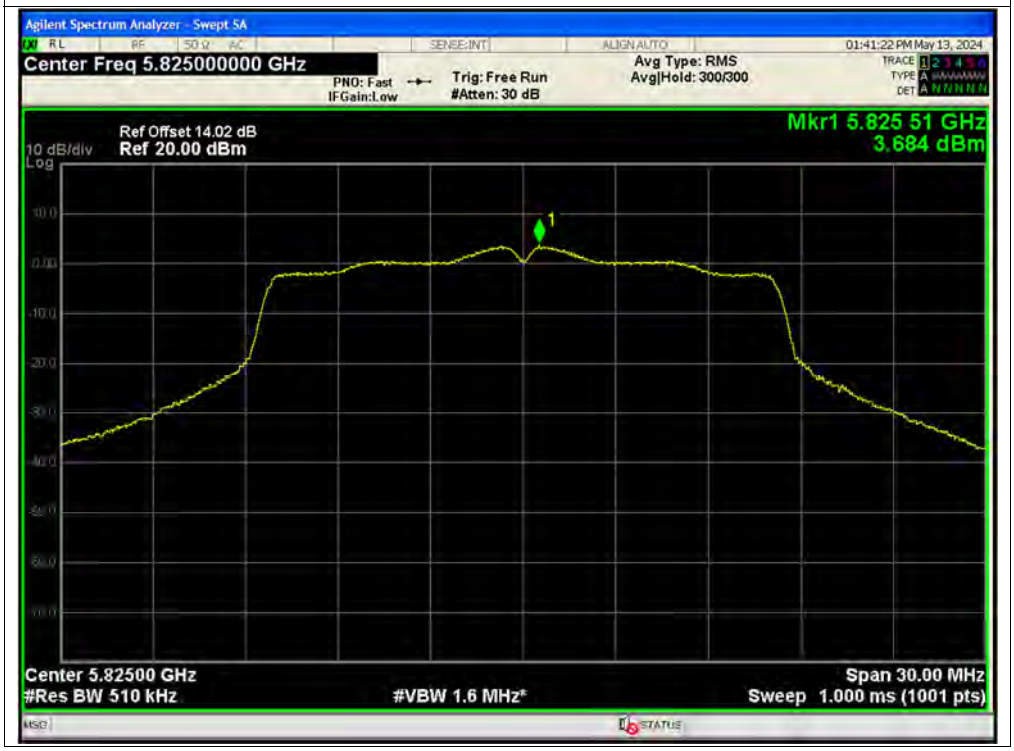
PSD NVNT a 5600MHz Ant1

PSD NVNT a 5700MHz Ant1

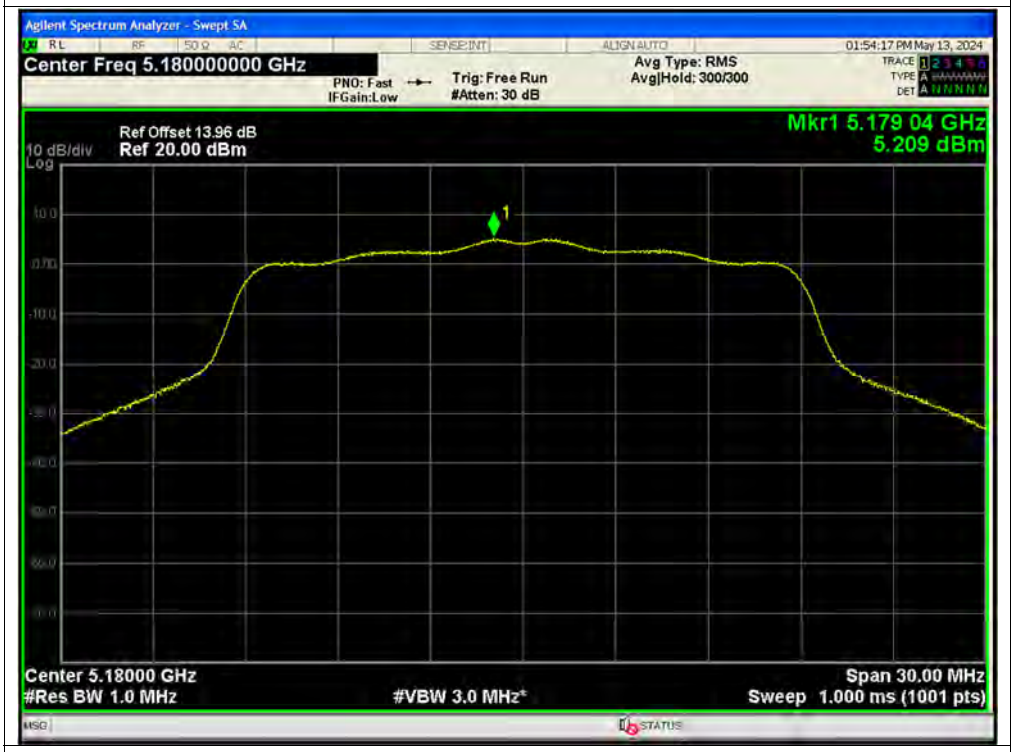
PSD NVNT a 5745MHz Ant1

PSD NVNT a 5785MHz Ant1

PSD NVNT a 5825MHz Ant1



PSD NVNT n20 5180MHz Ant1



PSD NVNT n20 5220MHz Ant1

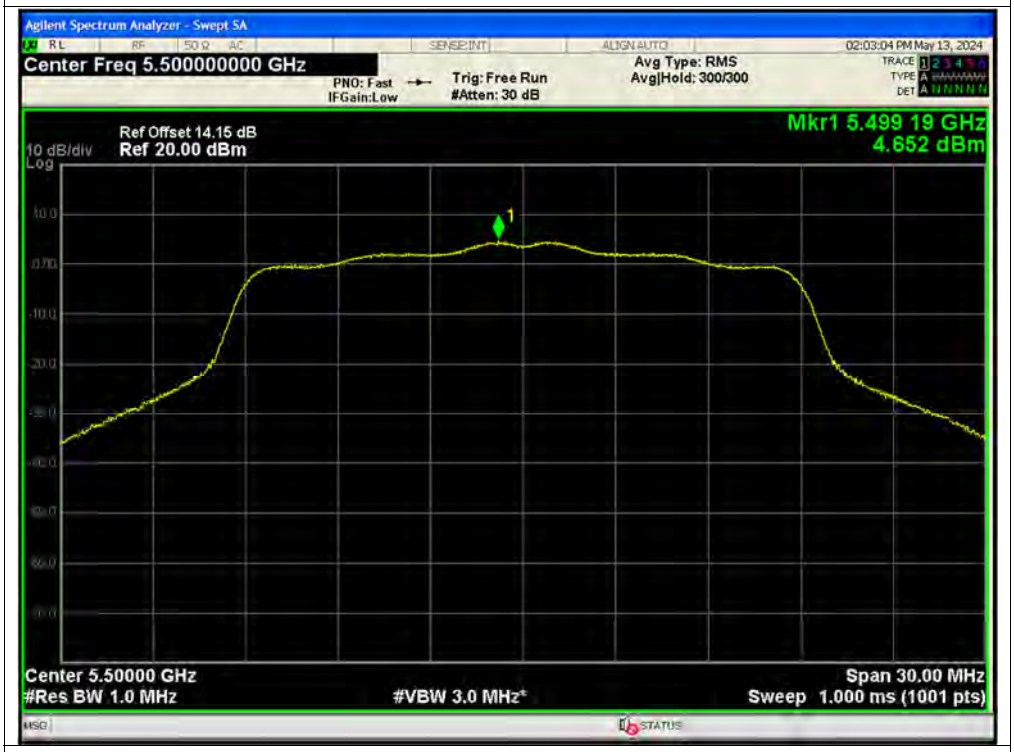
PSD NVNT n20 5240MHz Ant1

PSD NVNT n20 5260MHz Ant1

PSD NVNT n20 5300MHz Ant1

PSD NVNT n20 5320MHz Ant1

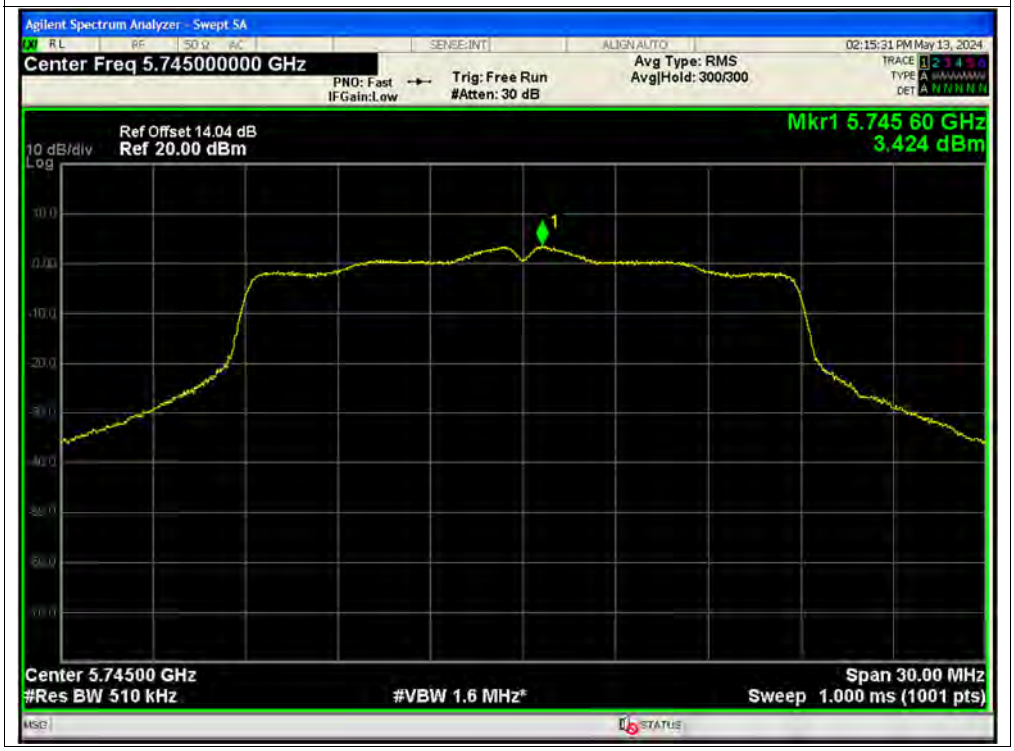
PSD NVNT n20 5500MHz Ant1



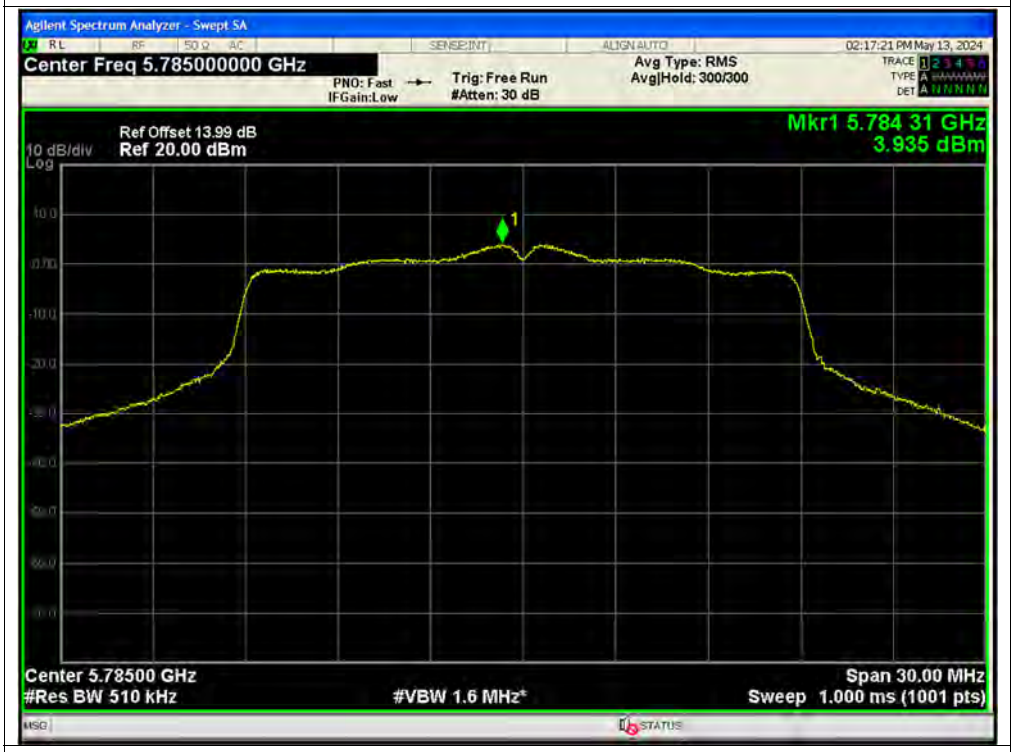
PSD NVNT n20 5600MHz Ant1

PSD NVNT n20 5700MHz Ant1

PSD NVNT n20 5745MHz Ant1



PSD NVNT n20 5785MHz Ant1



PSD NVNT n20 5825MHz Ant1

PSD NVNT n40 5190MHz Ant1

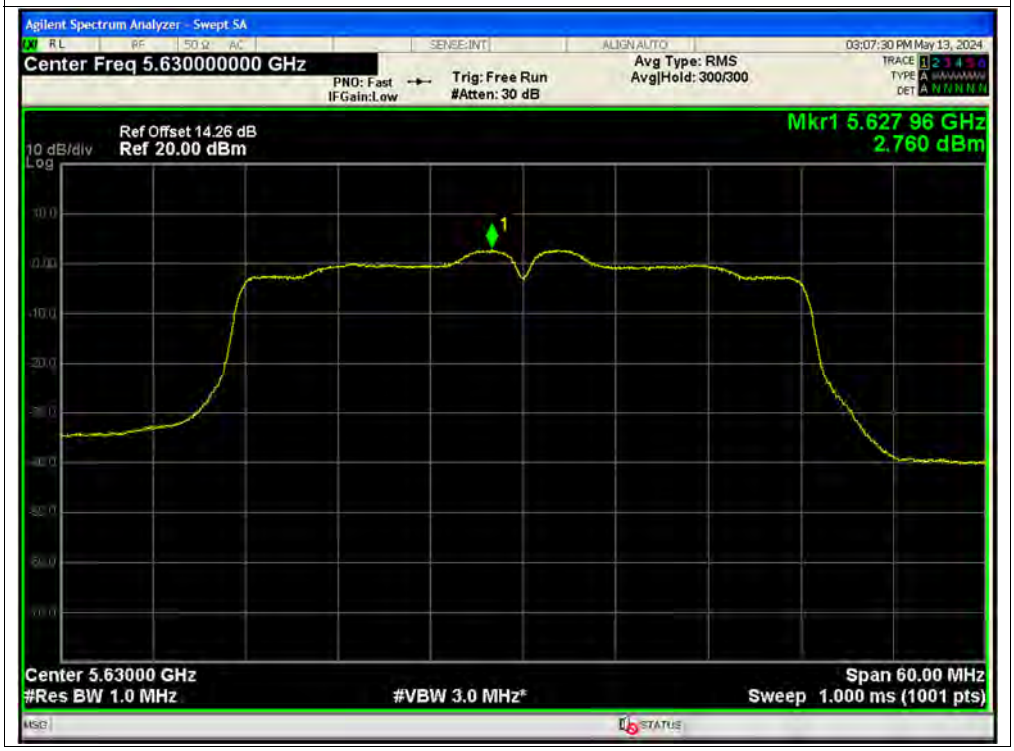
PSD NVNT n40 5230MHz Ant1

PSD NVNT n40 5270MHz Ant1

PSD NVNT n40 5310MHz Ant1

PSD NVNT n40 5510MHz Ant1

PSD NVNT n40 5630MHz Ant1

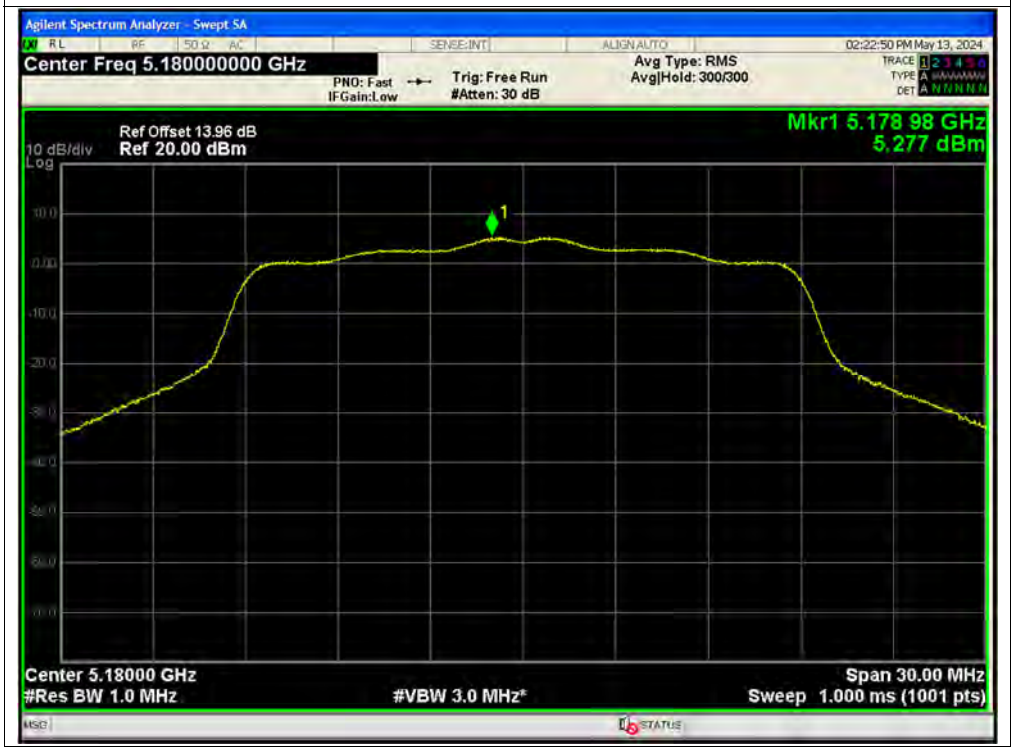


PSD NVNT n40 5670MHz Ant1

PSD NVNT n40 5755MHz Ant1

PSD NVNT n40 5795MHz Ant1

PSD NVNT ac20 5180MHz Ant1



PSD NVNT ac20 5220MHz Ant1

PSD NVNT ac20 5240MHz Ant1

PSD NVNT ac20 5260MHz Ant1

PSD NVNT ac20 5300MHz Ant1

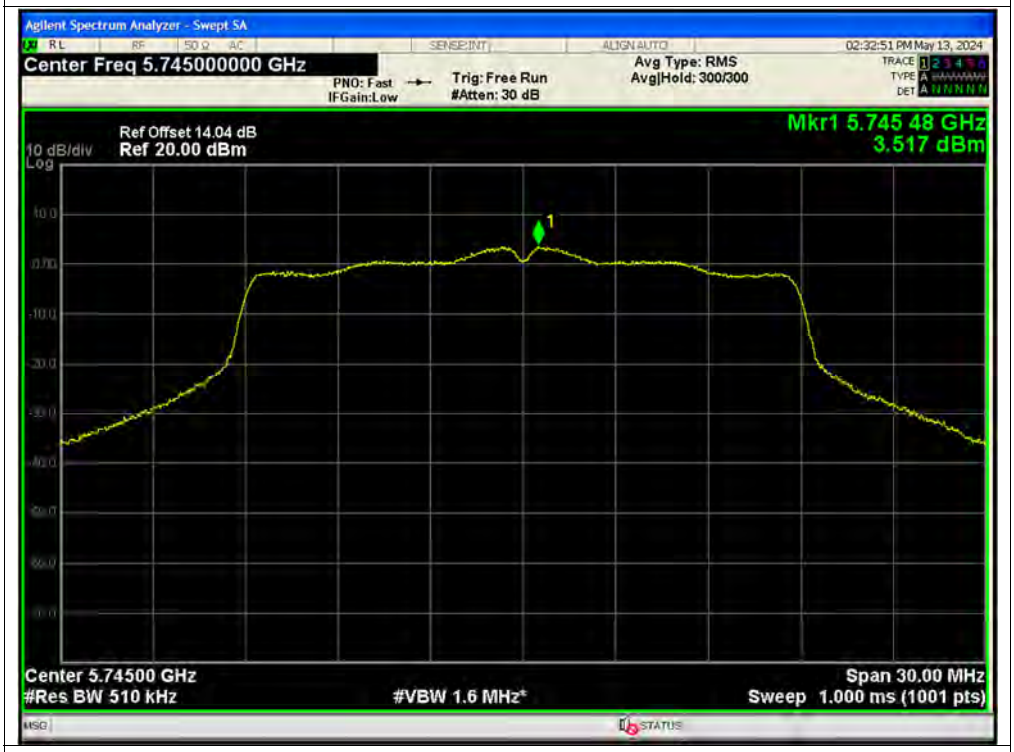
PSD NVNT ac20 5320MHz Ant1

PSD NVNT ac20 5500MHz Ant1

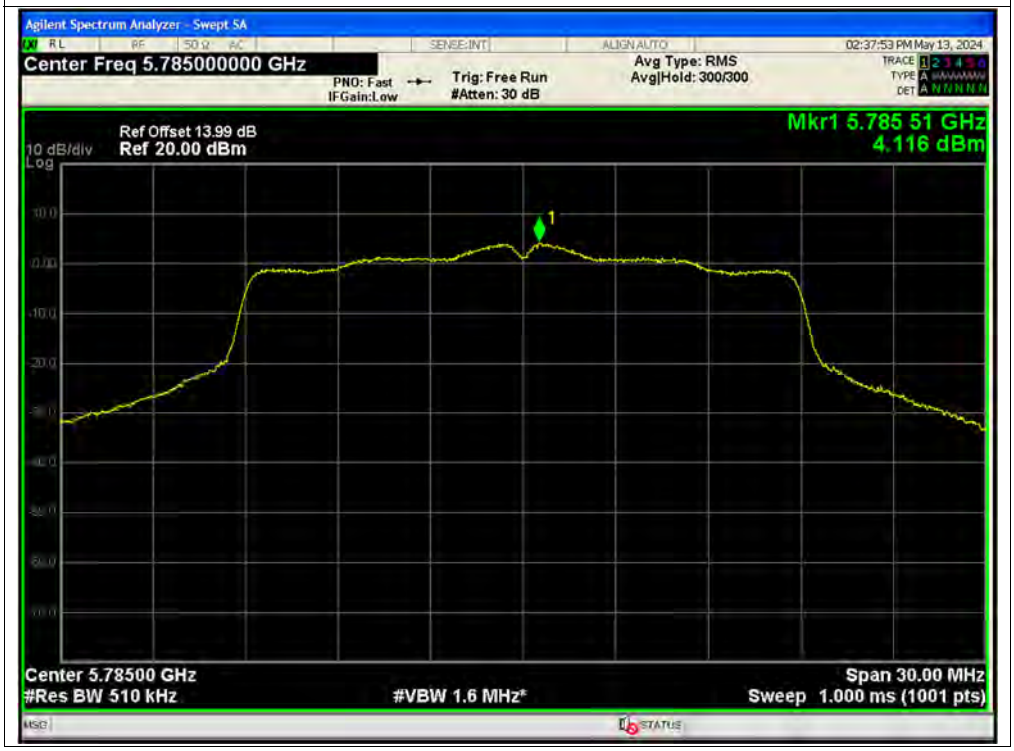
PSD NVNT ac20 5600MHz Ant1

PSD NVNT ac20 5700MHz Ant1

PSD NVNT ac20 5745MHz Ant1



PSD NVNT ac20 5785MHz Ant1



PSD NVNT ac20 5825MHz Ant1

PSD NVNT ac40 5190MHz Ant1

PSD NVNT ac40 5230MHz Ant1

PSD NVNT ac40 5270MHz Ant1

PSD NVNT ac40 5310MHz Ant1

PSD NVNT ac40 5510MHz Ant1

PSD NVNT ac40 5630MHz Ant1

PSD NVNT ac40 5670MHz Ant1

PSD NVNT ac40 5755MHz Ant1

PSD NVNT ac40 5795MHz Ant1

PSD NVNT ac80 5210MHz Ant1

PSD NVNT ac80 5290MHz Ant1

PSD NVNT ac80 5530MHz Ant1

PSD NVNT ac80 5610MHz Ant1

PSD NVNT ac80 5775MHz Ant1

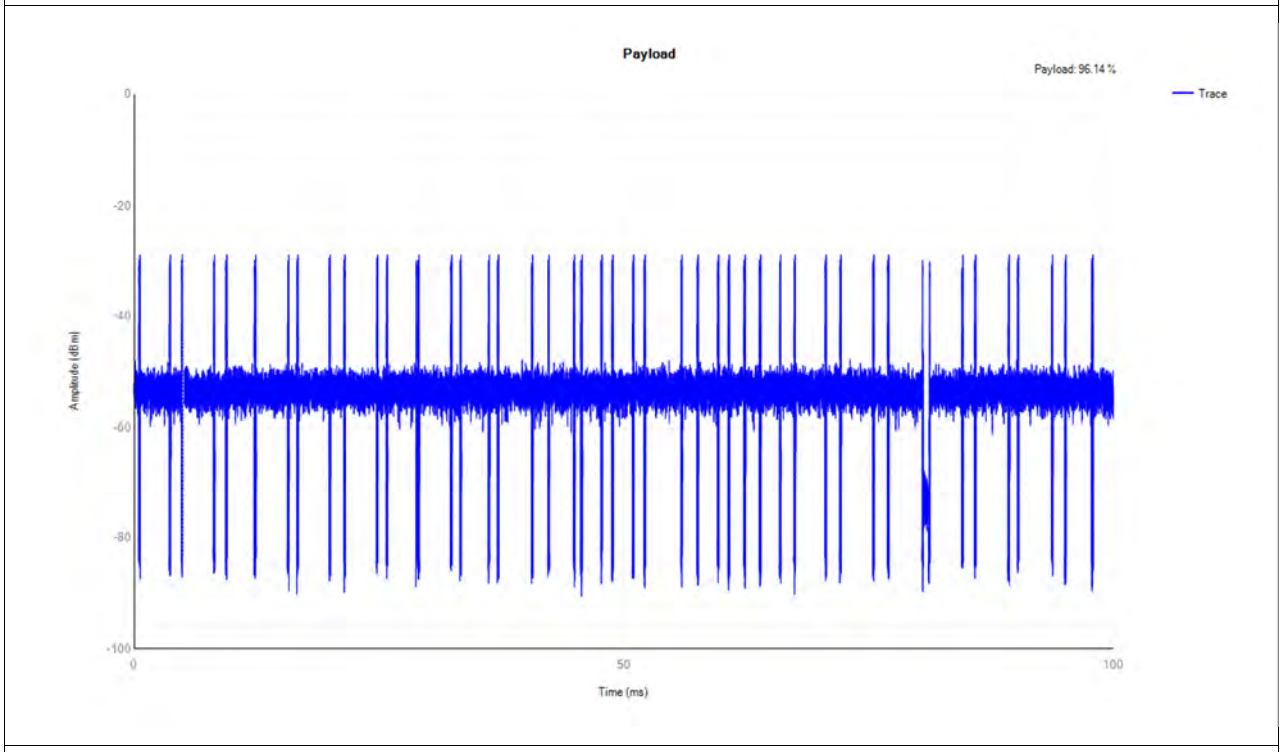
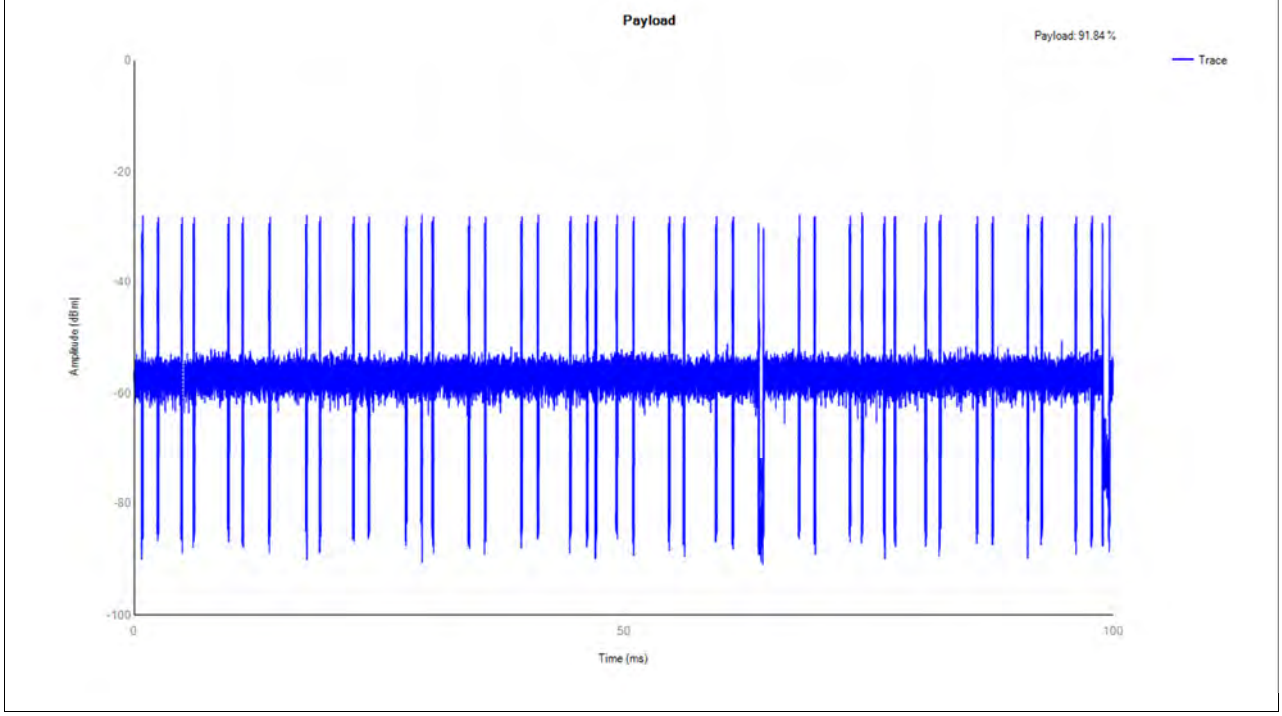
A.5. Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 3.5V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
20C 3.91V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
20C 4.5V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
0C 3.91V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
10C 3.91V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
30C 3.91V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
35C 3.91V	a	5180	Ant1	5179.997	-3000	-0.58	25	Pass
20C 3.5V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
20C 3.91V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
20C 4.5V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
0C 3.91V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
10C 3.91V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
30C 3.91V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
35C 3.91V	a	5260	Ant1	5259.997	-3000	-0.57	25	Pass
20C 3.5V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
20C 3.91V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
20C 4.5V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
0C 3.91V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
10C 3.91V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
30C 3.91V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
35C 3.91V	a	5500	Ant1	5499.997	-3000	-0.55	25	Pass
20C 3.5V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass
20C 3.91V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass
20C 4.5V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass
0C 3.91V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass
10C 3.91V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass
30C 3.91V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass
35C 3.91V	a	5745	Ant1	5744.997	-3000	-0.52	25	Pass

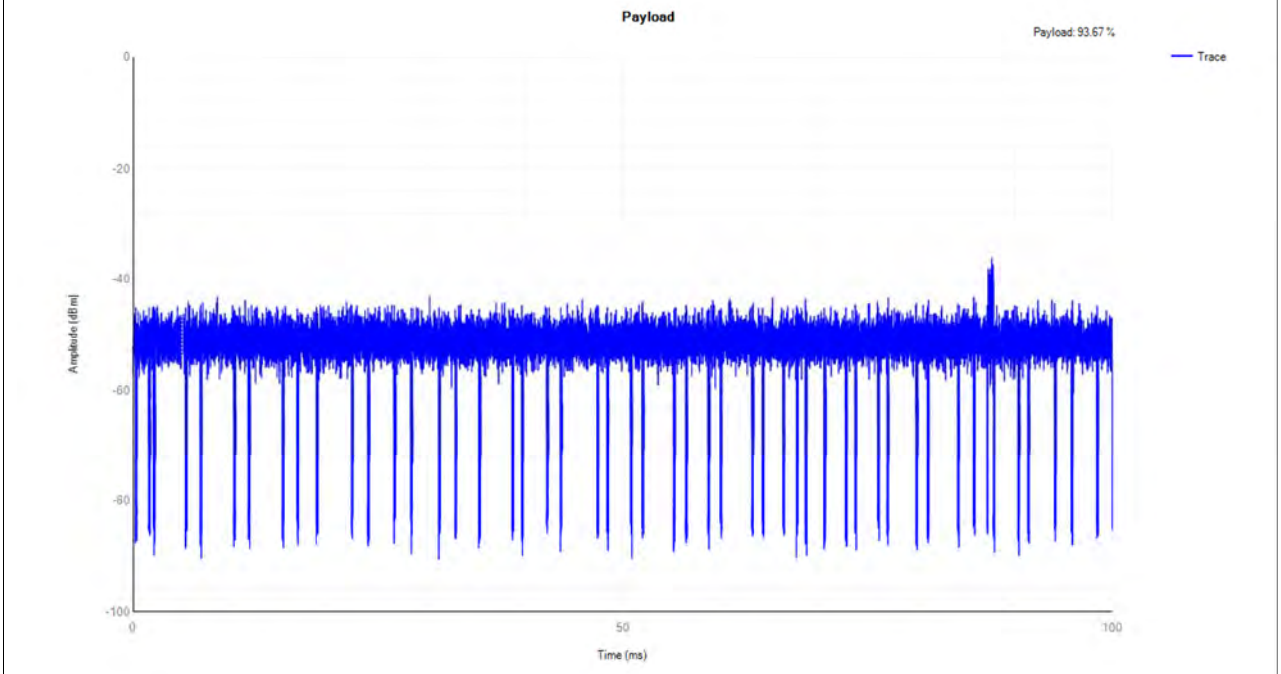
A.6. Dynamic Frequency Selection

Payload

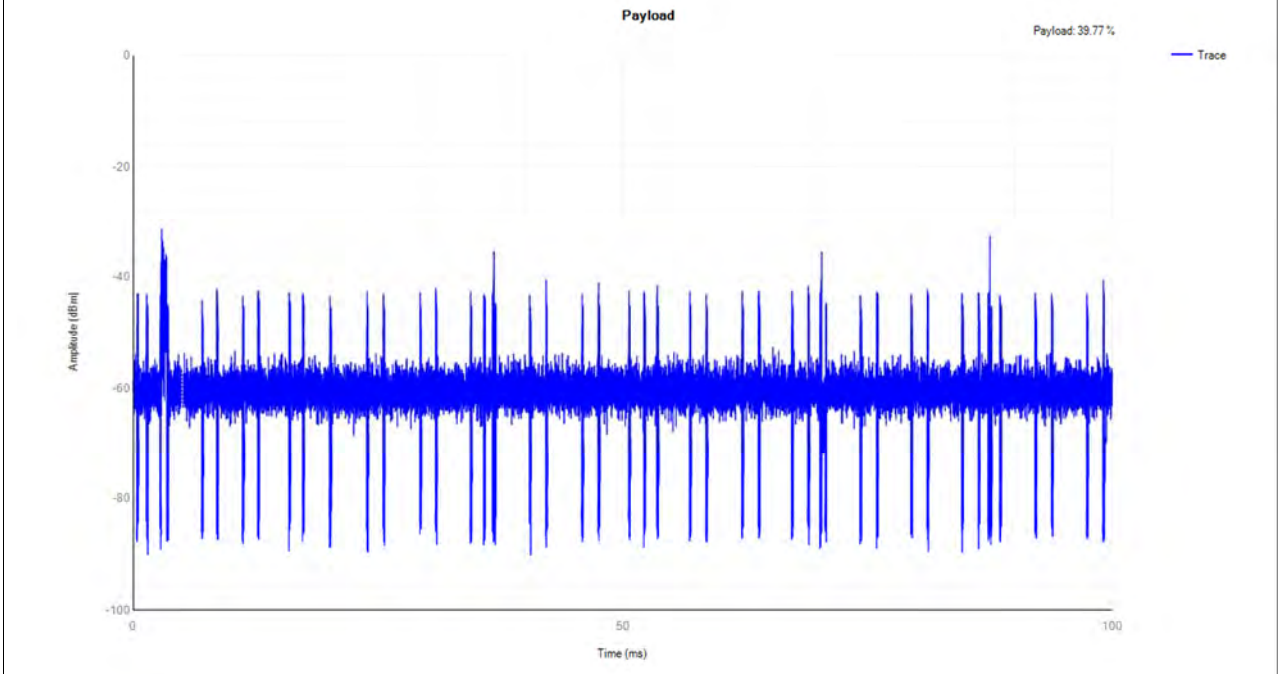
Mode	Frequency (MHz)	Result	Verdict
a	5320	96.14	Pass
a	5500	91.84	Pass
ac80	5290	93.67	Pass
ac80	5530	39.77	Pass

Test Graphs
a 5320MHz Payload

a 5500MHz Payload


ac80 5290MHz Payload



ac80 5530MHz Payload



Detection Thresholds

Mode	Frequency (MHz)	Type	Result	Verdict
a	5320	DFS_FCC_T0	See test Graph	Pass
a	5500	DFS_FCC_T0	See test Graph	Pass
ac80	5290	DFS_FCC_T0	See test Graph	Pass
ac80	5530	DFS_FCC_T0	See test Graph	Pass

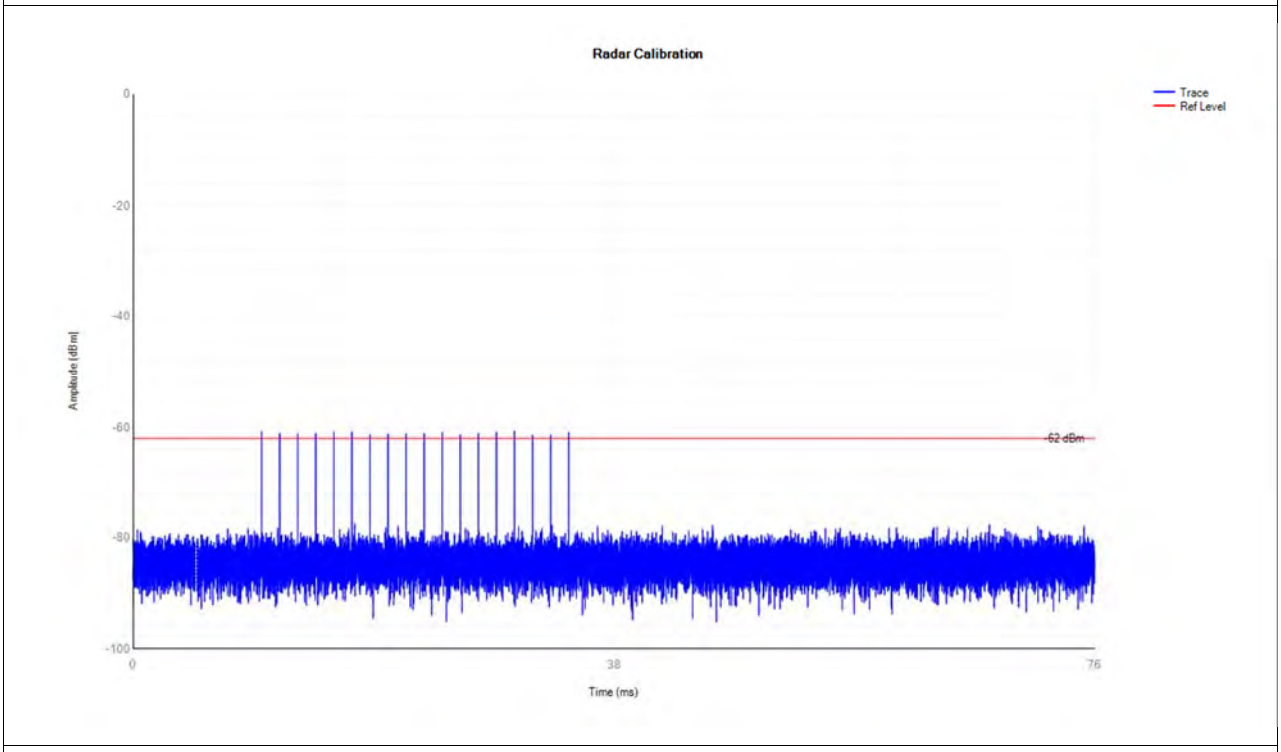
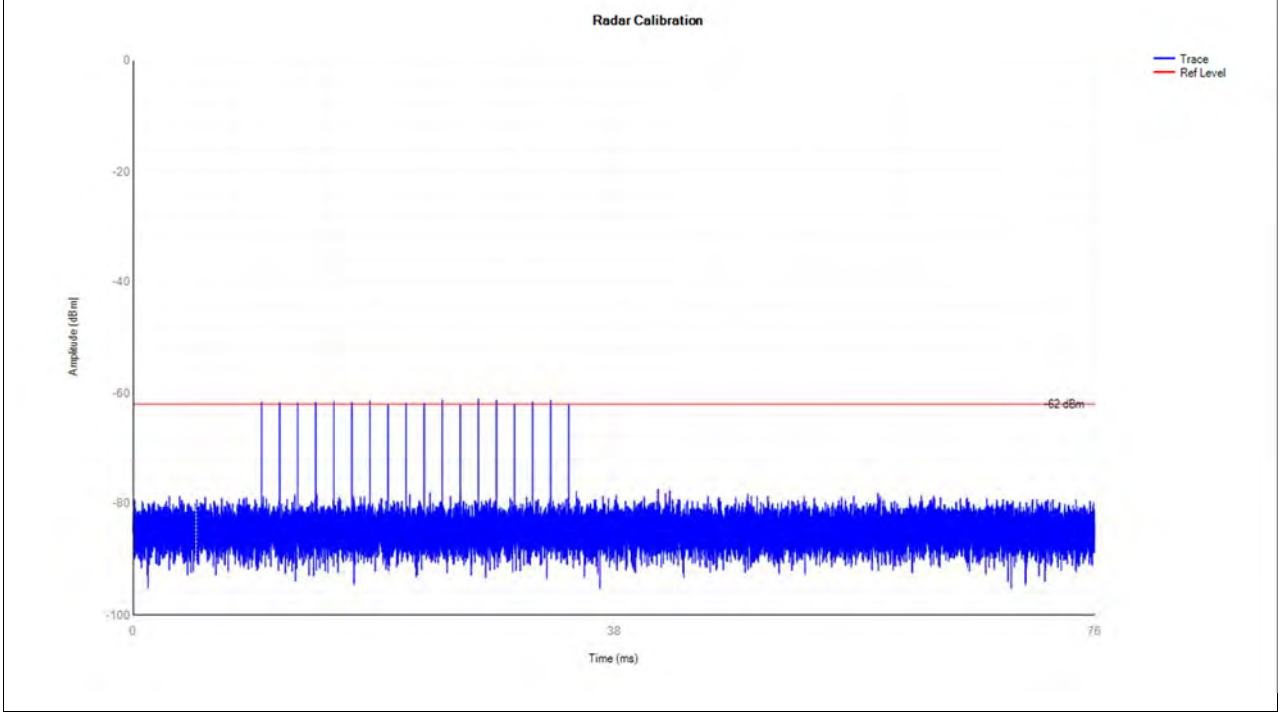
Spectrum analyzer settings:

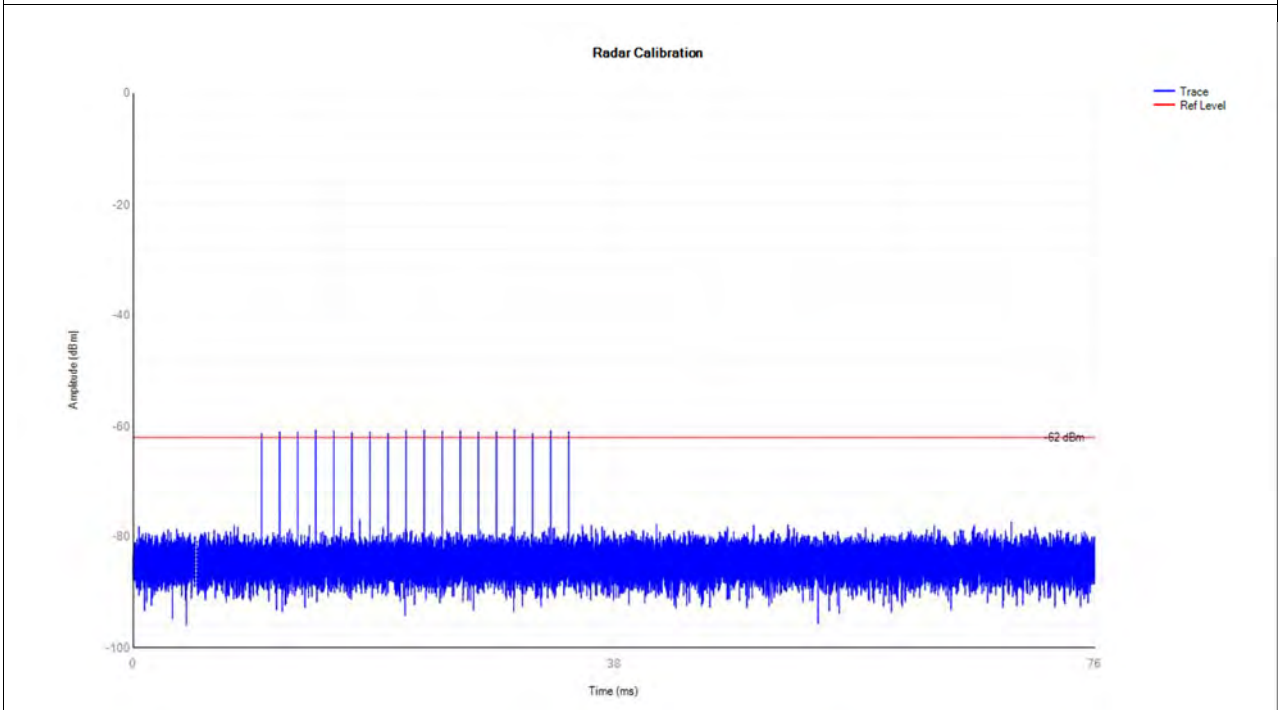
Span: Zero

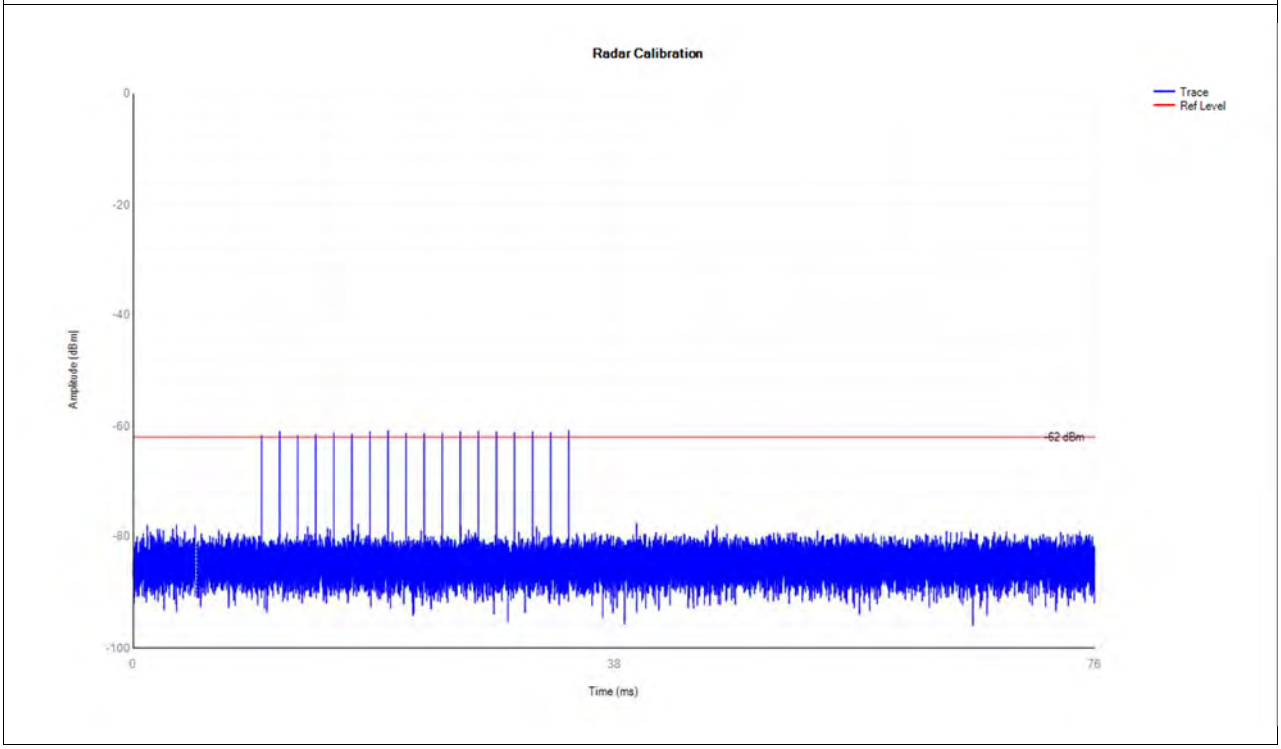
Detector Type: Peak

RBW: 3MHz

VBW: 3MHz

Test Graphs
5320MHz DFS_FCC_T0

5500MHz DFS_FCC_T0


5290MHz DFS_FCC_T0


5530MHz DFS_FCC_T0


Channel Move Time and Channel Closing Transmission Time

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
a	5320	0.9	10	0.037	0.26	0.021	0.06	Pass
a	5500	1.026	10	0.065	0.26	0.023	0.06	Pass
ac80	5290	0.876	10	0.028	0.26	0.019	0.06	Pass
ac80	5530	0.784	10	0.024	0.26	0.009	0.06	Pass

Spectrum analyzer settings:

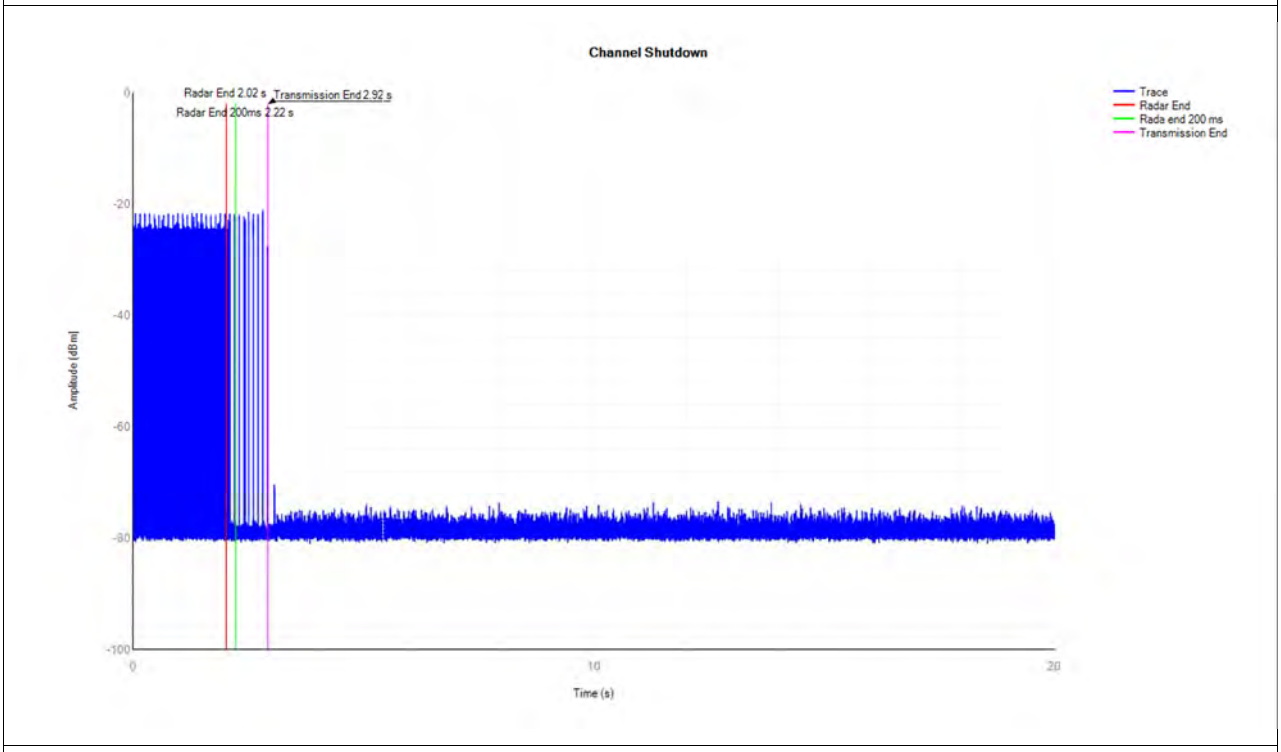
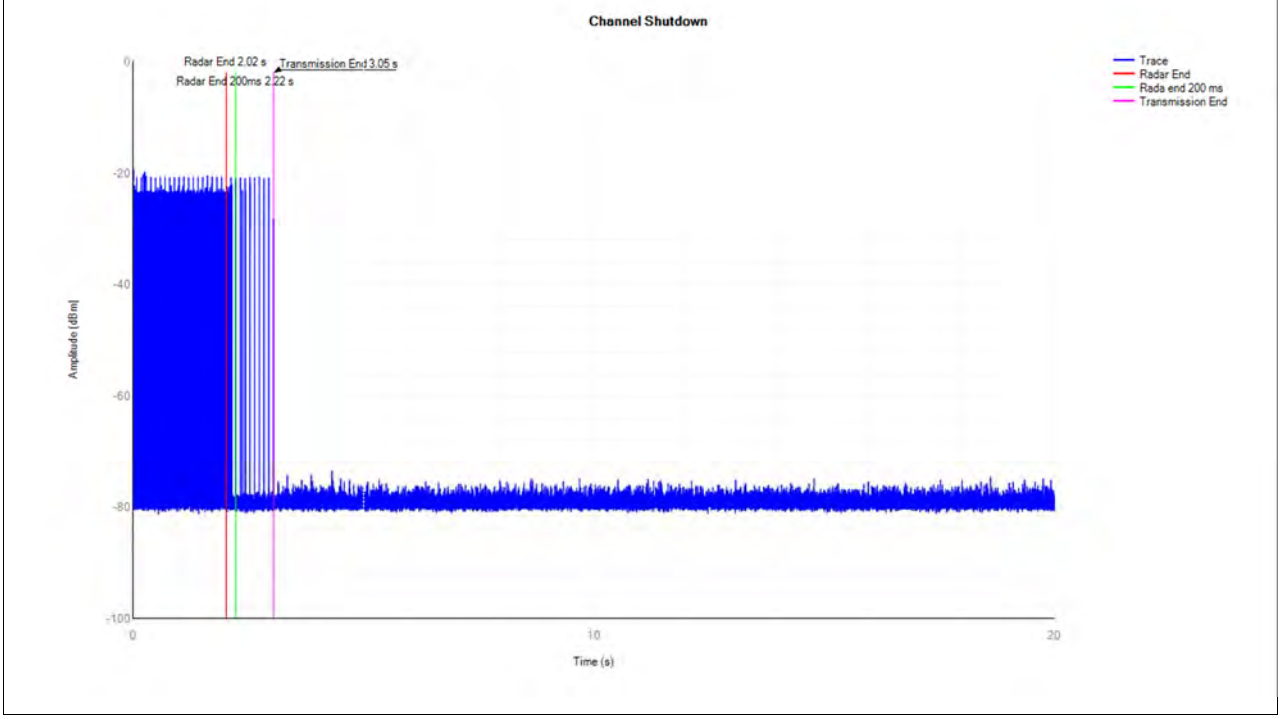
Span: Zero

Detector type: Peak

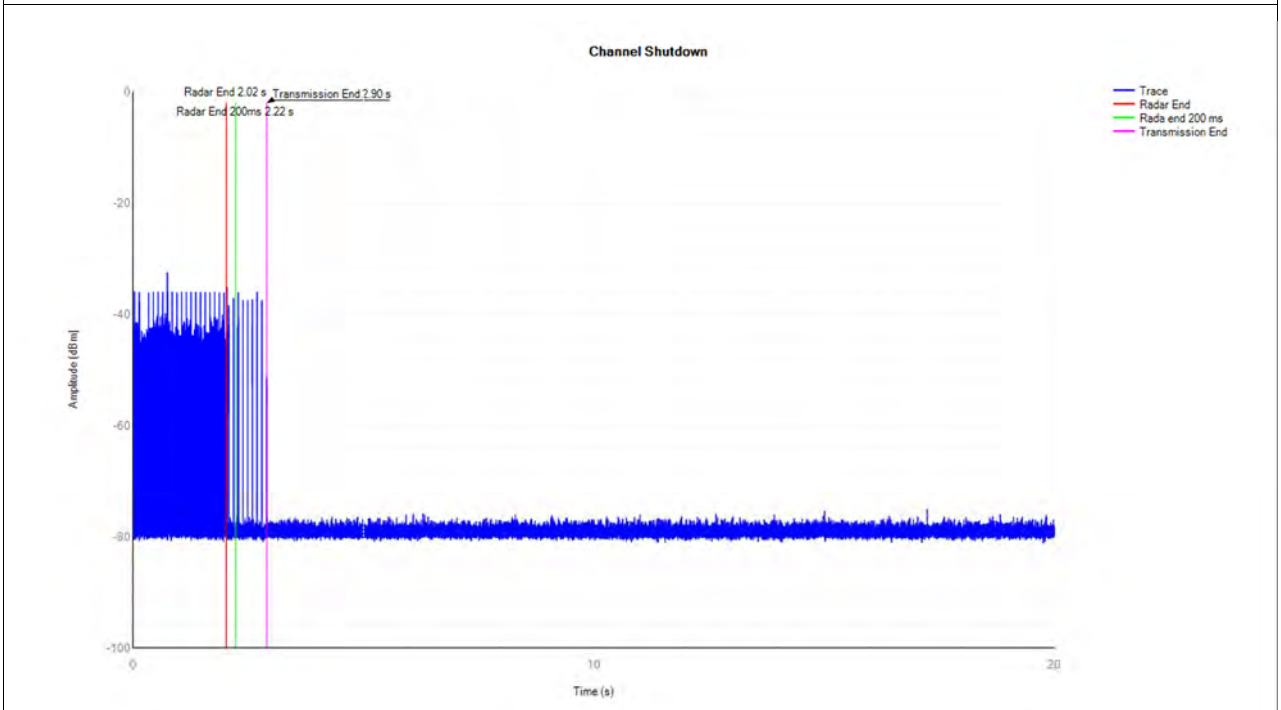
RBW: 3MHz

VBW: 3MHz

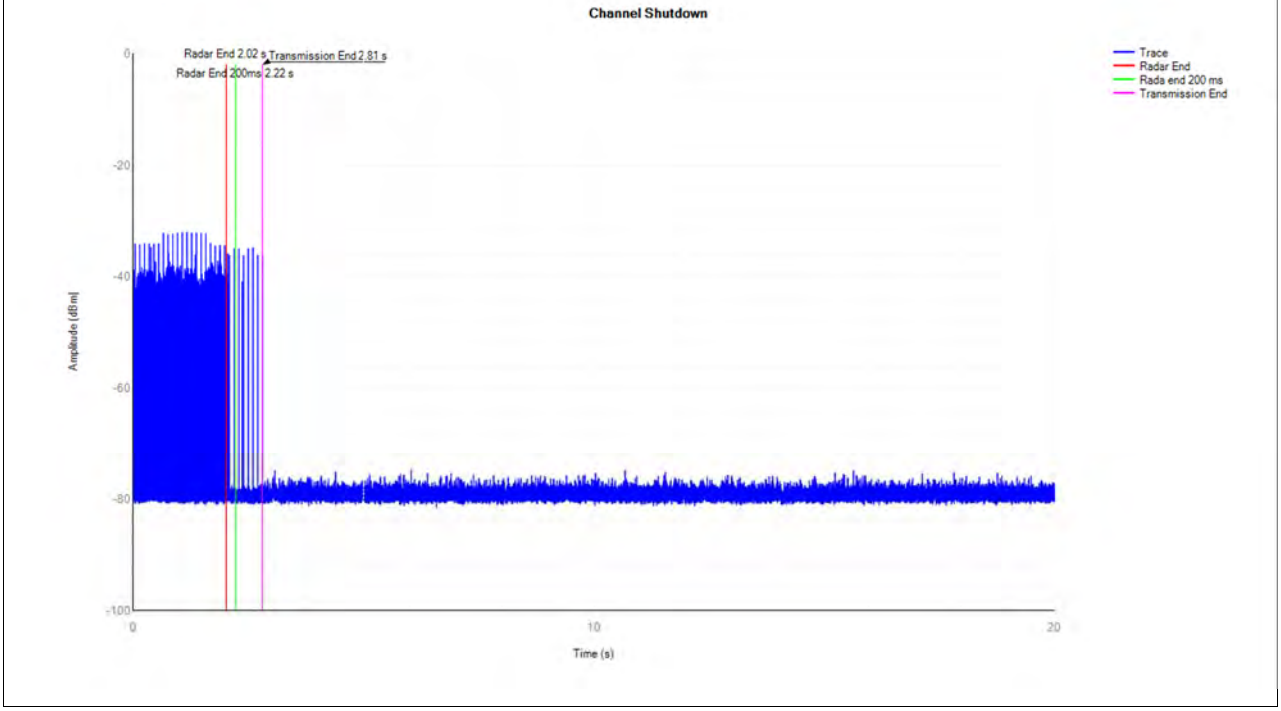
Sweep time: 20s

Test Graphs
a 5320MHz Shutdown

a 5500MHz Shutdown


ac80 5290MHz Shutdown



ac80 5530MHz Shutdown



Note：The signal above the noise floor after the radar signal ends is the signal which leaked from other channels that have been moved following the Master device.

Non-Occupancy Period

Mode	Frequency (MHz)	Result	Verdict
a	5320	See test Graph	Pass
a	5500	See test Graph	Pass

Spectrum analyzer settings:

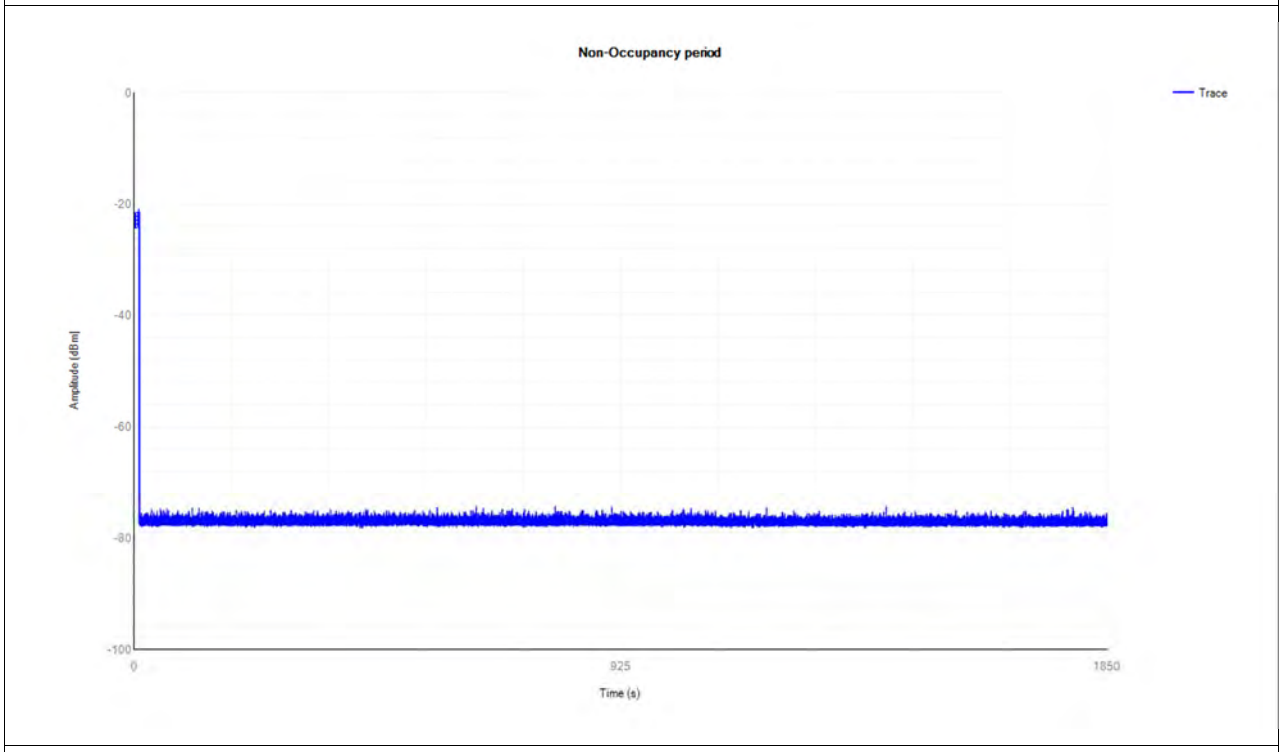
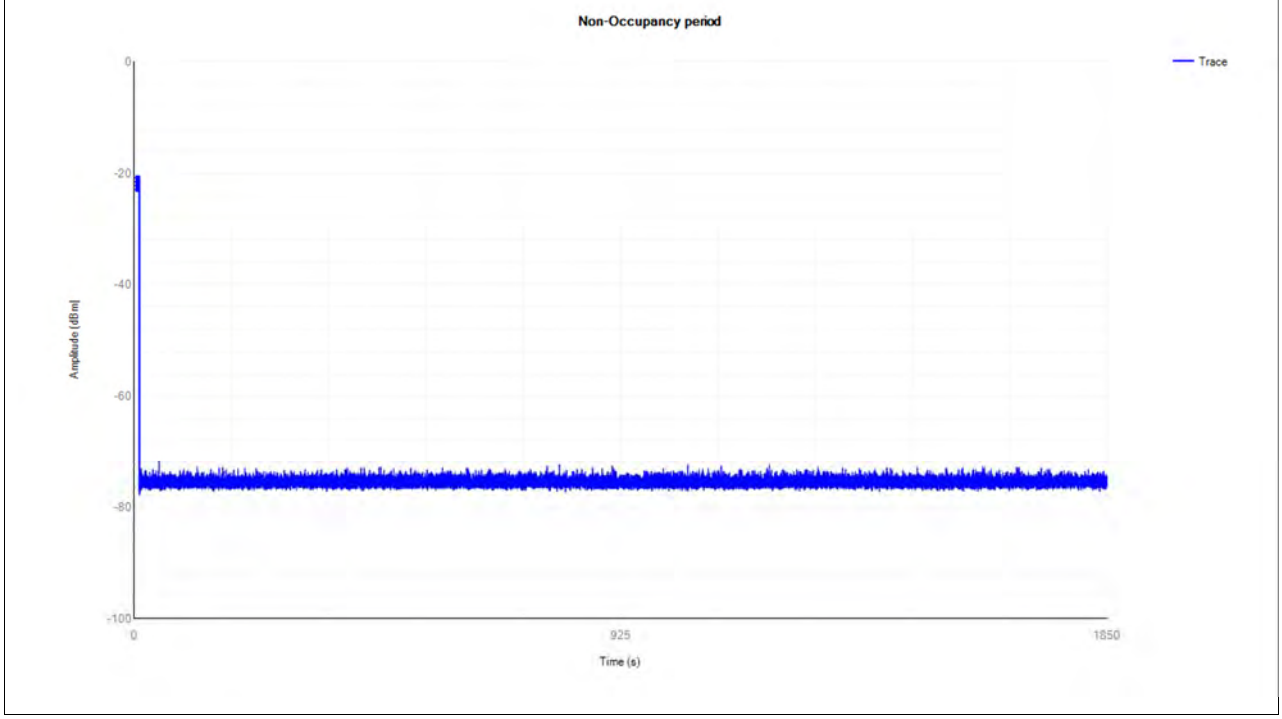
Span: Zero

Detector type: Peak

RBW: 3MHz

VBW: 3MHz

Sweep time: 1850s

Test Graphs
a 5320MHz Non-Occupancy

a 5500MHz Non-Occupancy


A.7. Conducted Emission

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 + USB Cable + WIFI TX

Test voltage: AC 120V/60Hz

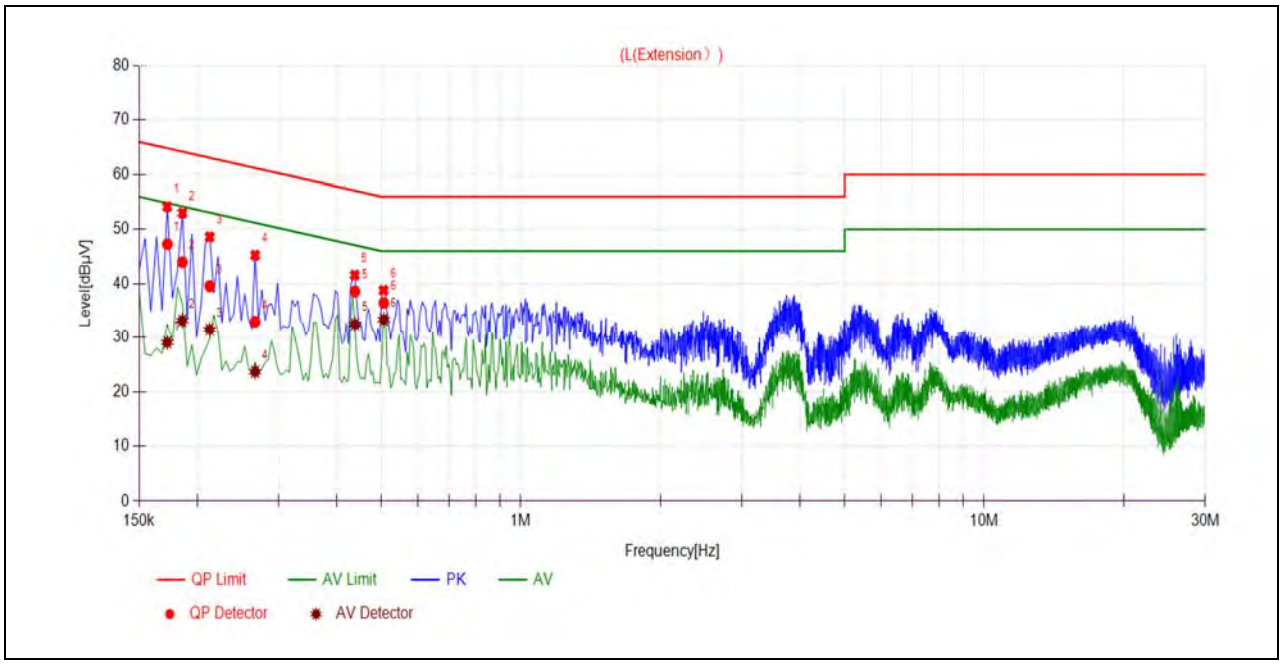
The measurement results are obtained as below:

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

U_R: Receiver Reading

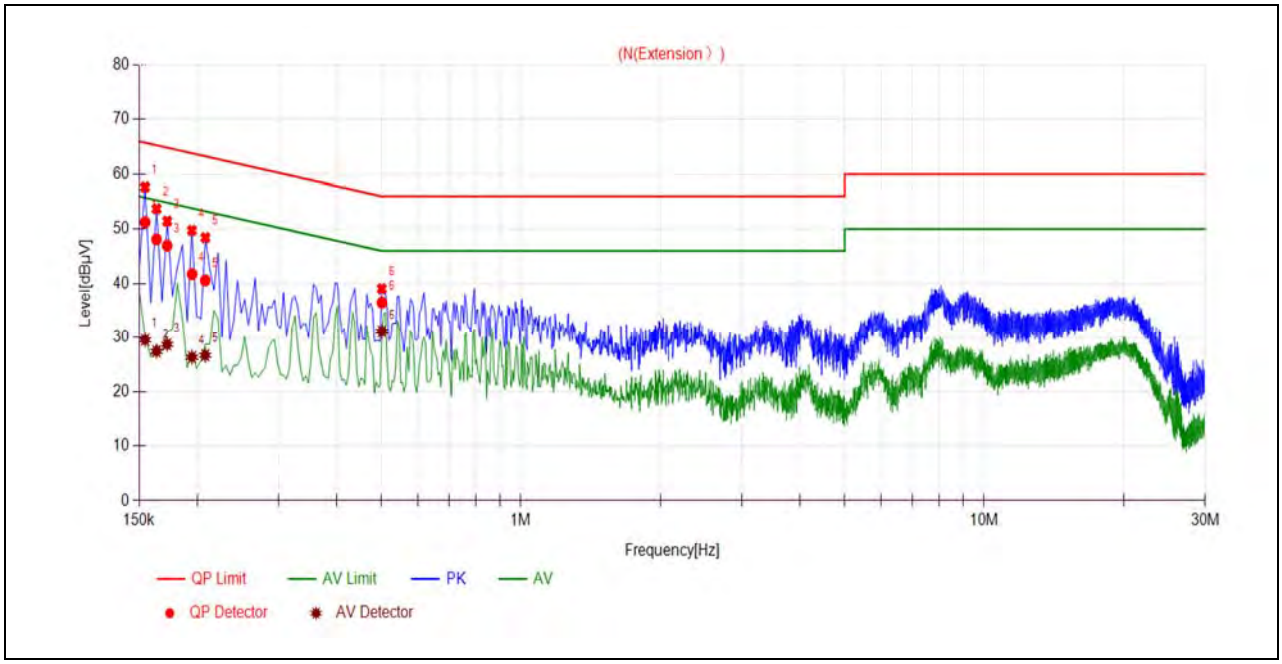
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1726	47.27	29.07	64.83	54.83	Line	PASS
2	0.1859	43.98	33.18	64.22	54.22		PASS
3	0.2129	39.54	31.50	63.09	53.09		PASS
4	0.2669	32.96	23.64	61.21	51.21		PASS
5	0.4384	38.57	32.50	57.09	47.09		PASS
6	0.5060	36.45	33.36	56.00	46.00		PASS



(N Phase)

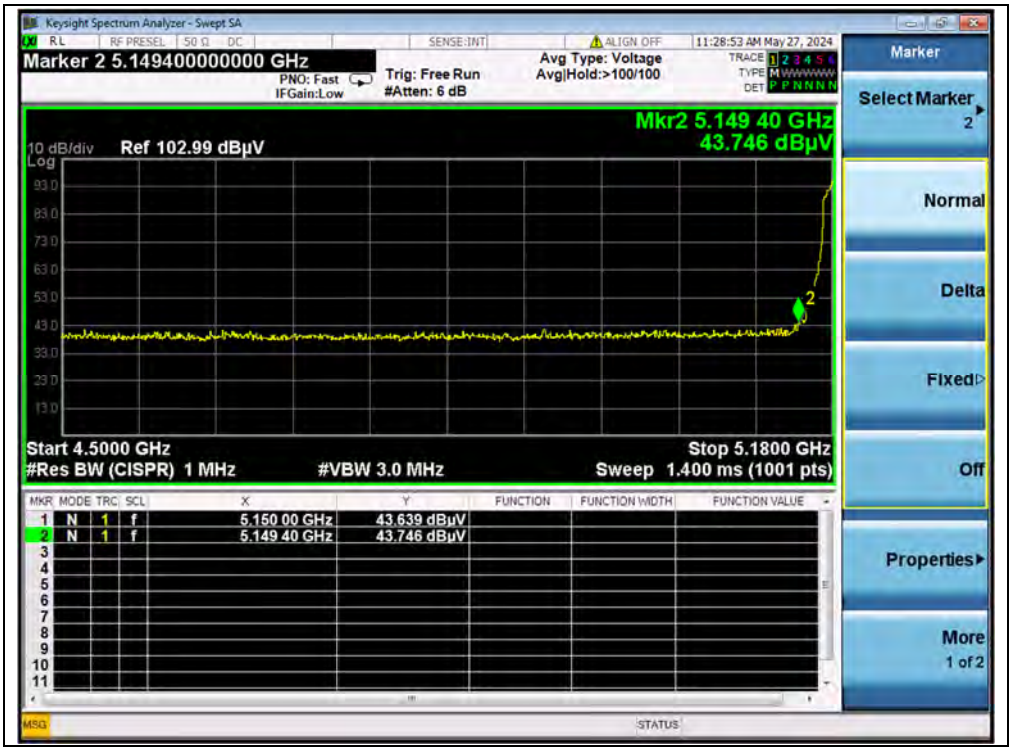
No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1545	51.26	29.53	65.76	55.76	Neutral	PASS
2	0.1635	48.13	27.41	65.29	55.29		PASS
3	0.1724	46.97	28.69	64.85	54.85		PASS
4	0.1951	41.74	26.33	63.82	53.82		PASS
5	0.2083	40.59	26.68	63.27	53.27		PASS
6	0.5013	36.51	31.15	56.00	46.00		PASS

A.8. Restricted Frequency Bands

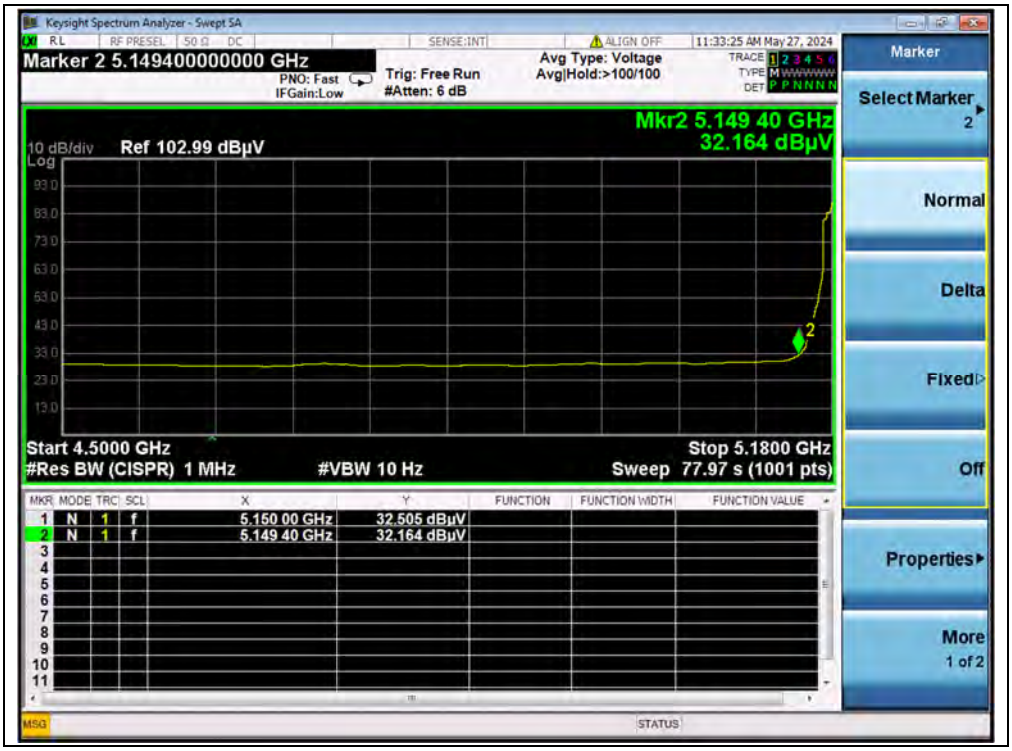
The lowest and highest channels are tested to verify the Restricted Frequency Bands.
The measurement results are obtained as below:
E [dBμV/m] =U_R + A_T + A_{Factor} [dB]; A_T =$L_{Cable\ loss}$ [dB]-G_{preamp} [dB]
A_T: Total correction Factor except Antenna
U_R: Receiver Reading
G_{preamp}: Preamplifier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

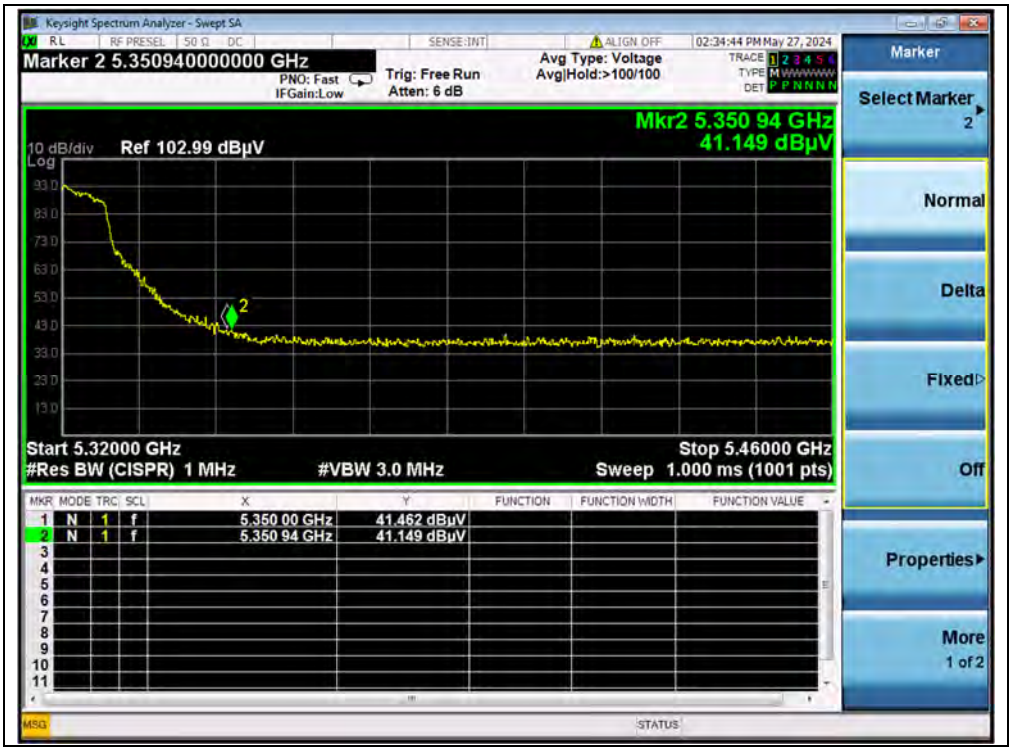
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@ 3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
36	5149.40	PK	43.75	-21.29	32.20	54.66	74	PASS
36	5150.00	AV	32.51	-21.29	32.20	43.42	54	PASS
64	5350.00	PK	41.46	-20.66	32.20	53.00	74	PASS
64	5350.00	AV	31.24	-20.66	32.20	42.78	54	PASS
100	5463.50	PK	42.49	-20.24	32.20	54.45	68.23	PASS
100	5460.00	AV	29.71	-20.24	32.20	41.67	54	PASS
140	5725.20	PK	43.03	-20.24	32.20	54.99	68.23	PASS
149	5725.00	PK	57.21	-21.11	32.20	68.30	122.23	PASS
165	5850.00	PK	47.34	-21.11	32.20	58.43	122.23	PASS



(PEAK, Channel 36, 802.11a)

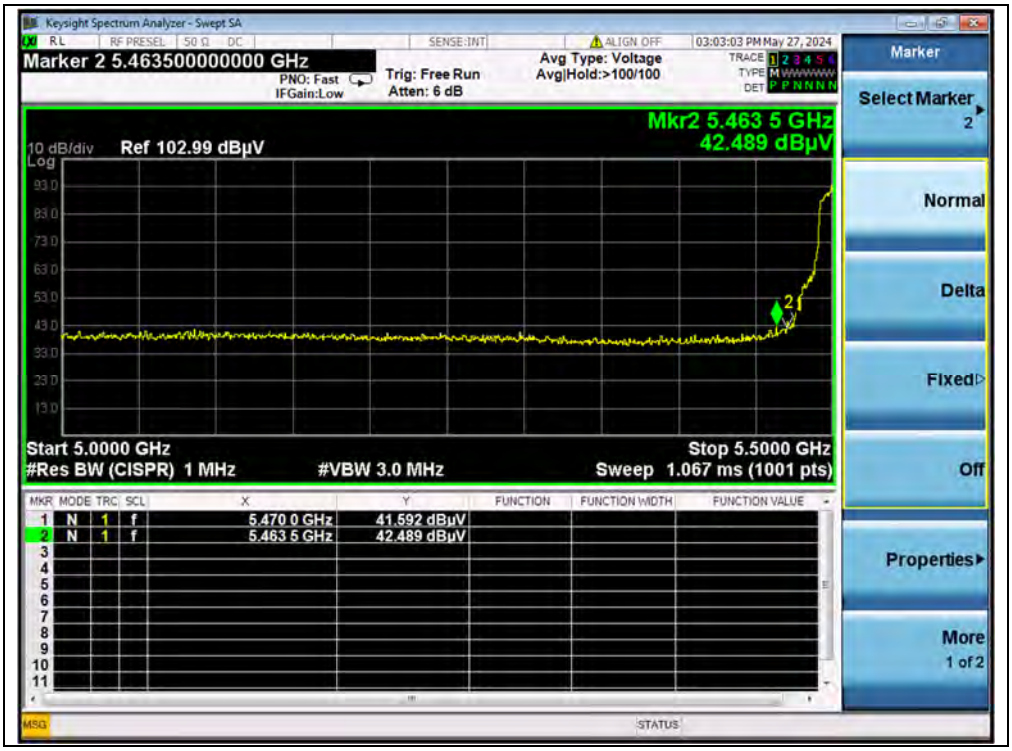


(AVERAGE, Channel 36, 802.11a)

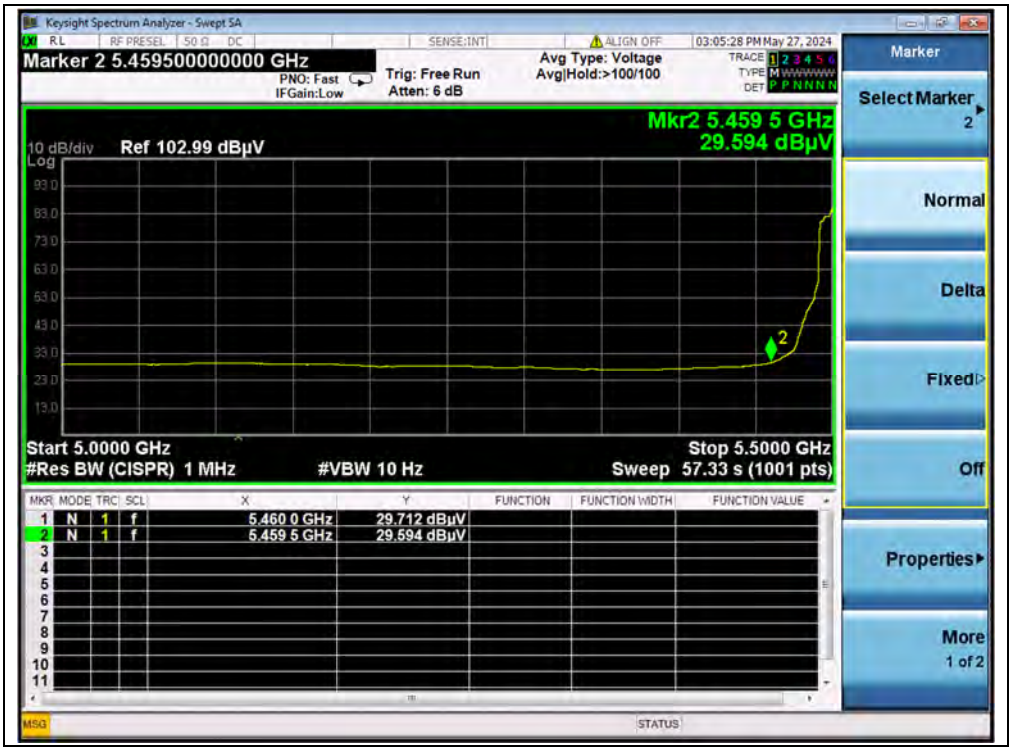


(PEAK, Channel 64, 802.11a)

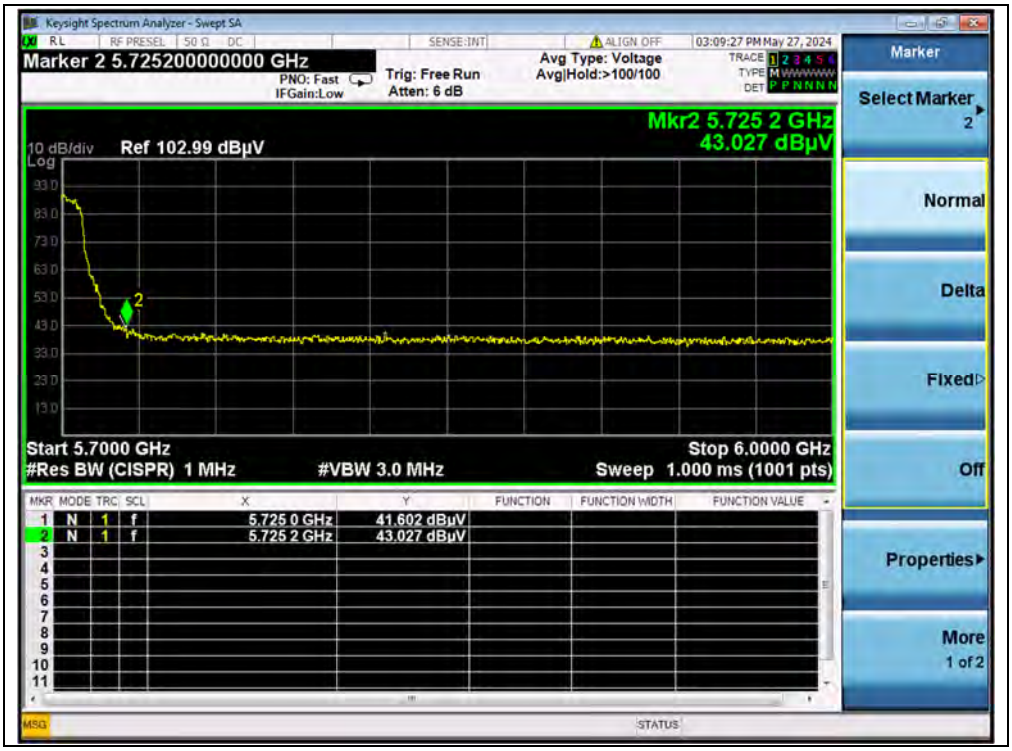
(AVERAGE, Channel 64, 802.11a)



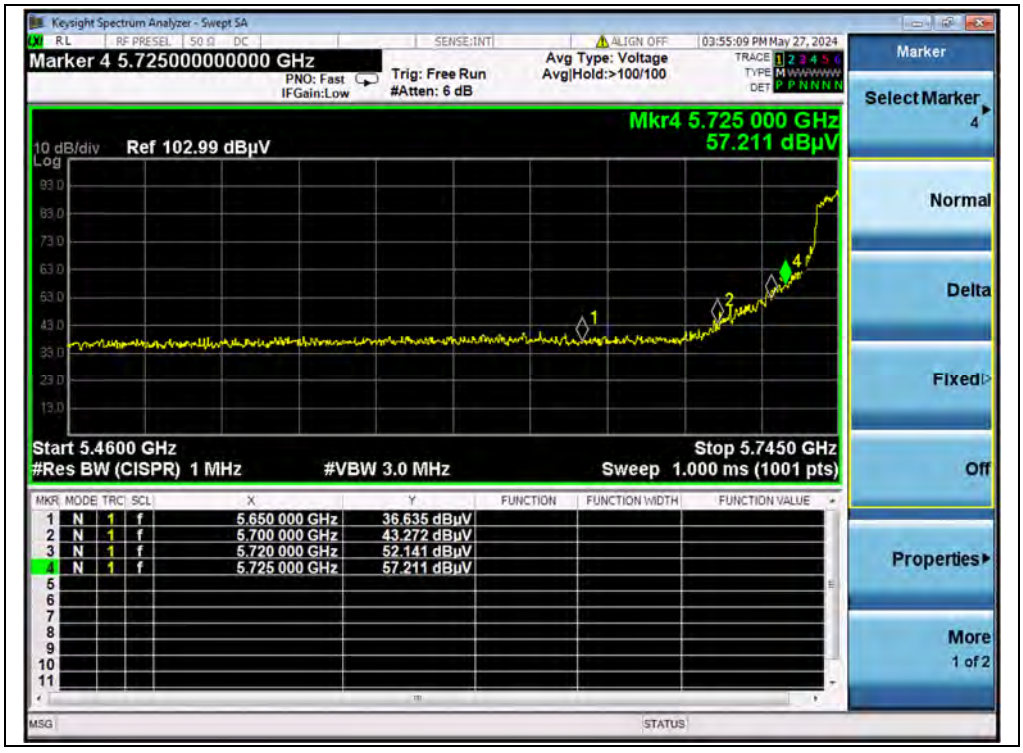
(PEAK, Channel 100, 802.11a)



(AVERAGE, Channel 100, 802.11a)



(PEAK, Channel 140, 802.11a)

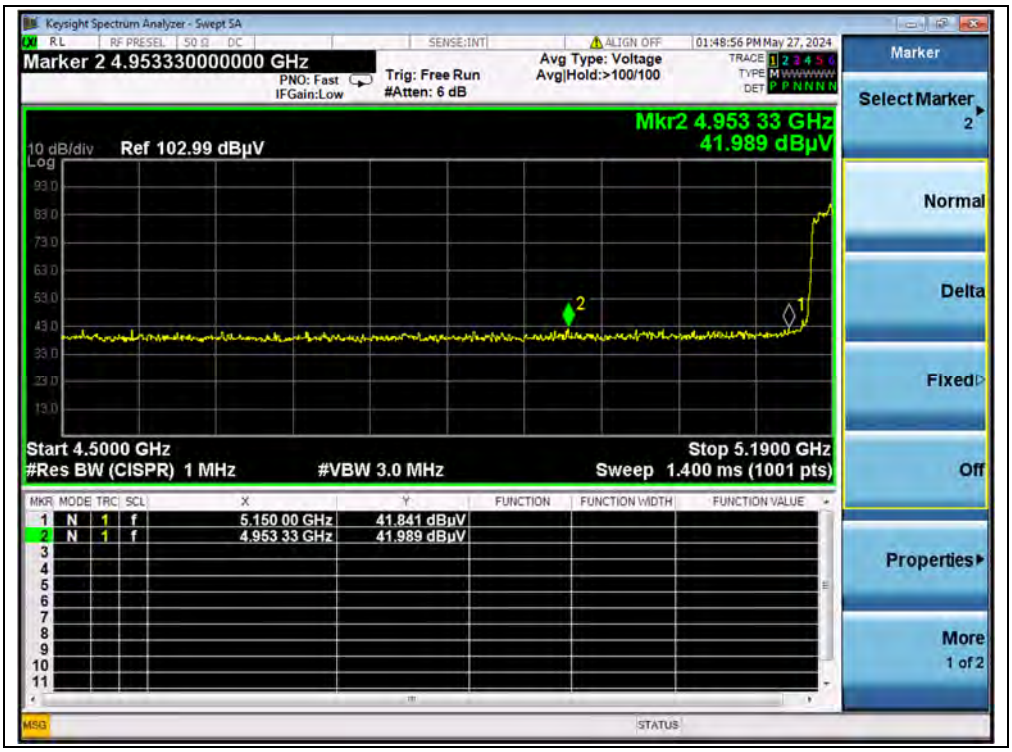


(PEAK, Channel 149, 802.11a)

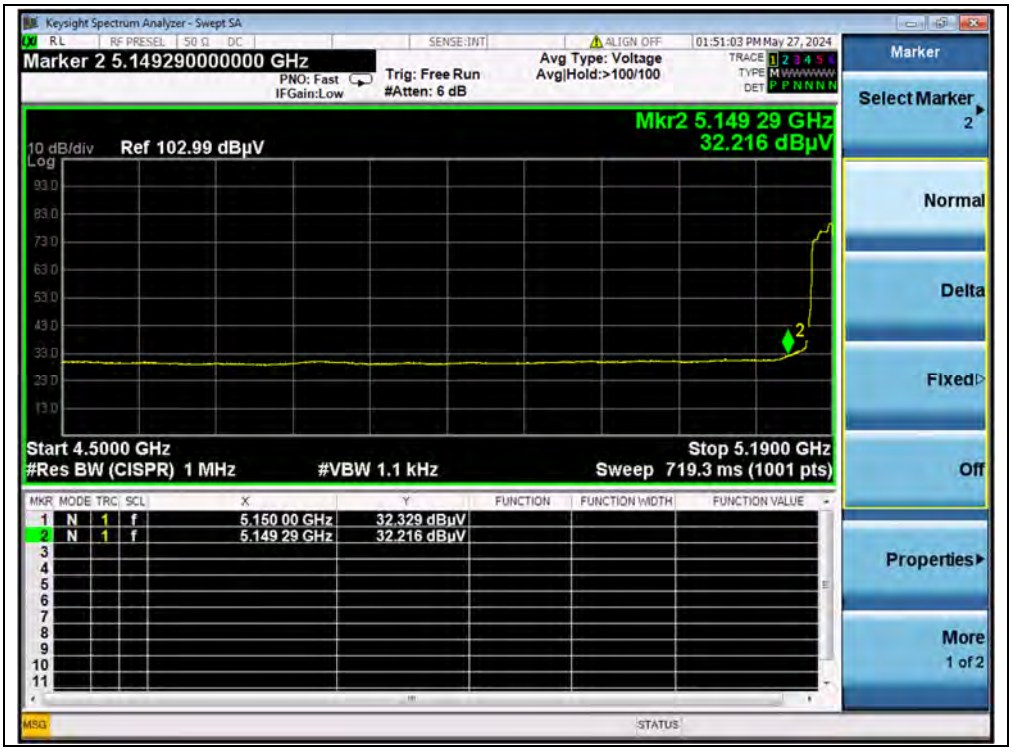
(PEAK, Channel 165, 802.11a)

802.11n (HT40) Mode

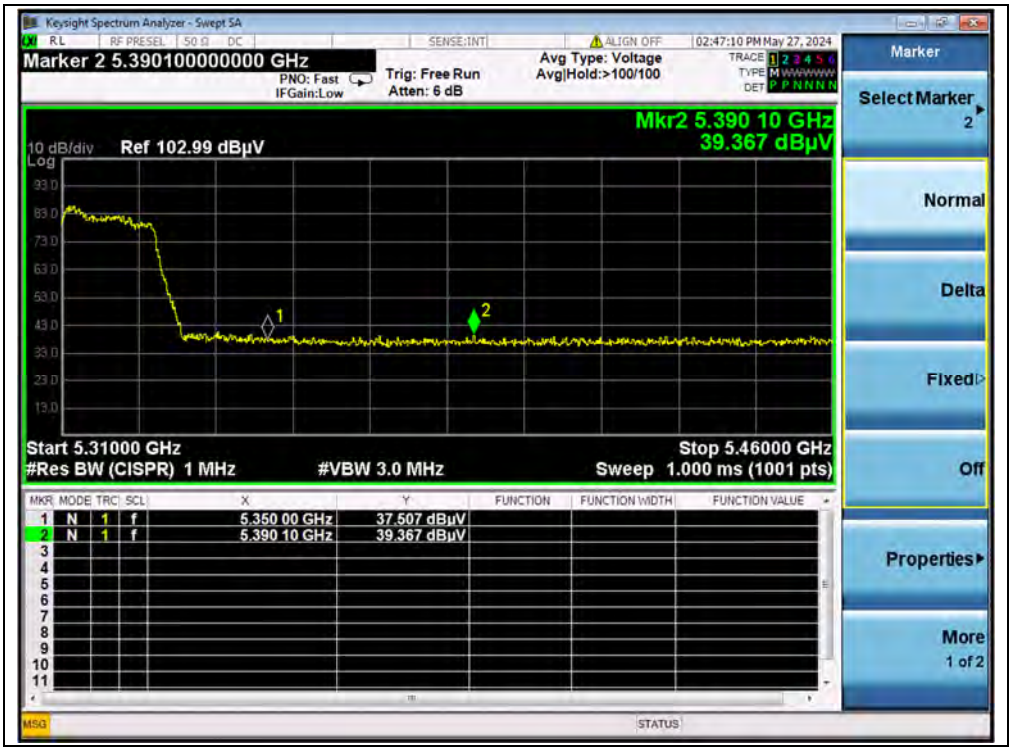
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@ 3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
38	4953.33	PK	41.99	-21.29	32.20	52.90	74	PASS
38	5150.00	AV	32.33	-21.29	32.20	43.24	54	PASS
62	5390.10	PK	39.37	-20.66	32.20	50.91	74	PASS
62	5350.35	AV	29.77	-20.66	32.20	41.31	54	PASS
102	5470.00	PK	44.08	-20.24	32.20	56.04	68.23	PASS
102	5087.72	AV	30.50	-20.24	32.20	42.46	54	PASS
142	5730.39	PK	41.12	-20.24	32.20	53.08	68.23	PASS
151	5725.00	PK	49.42	-21.11	32.20	60.51	122.23	PASS
159	5850.00	PK	38.87	-21.11	32.20	49.96	122.23	PASS



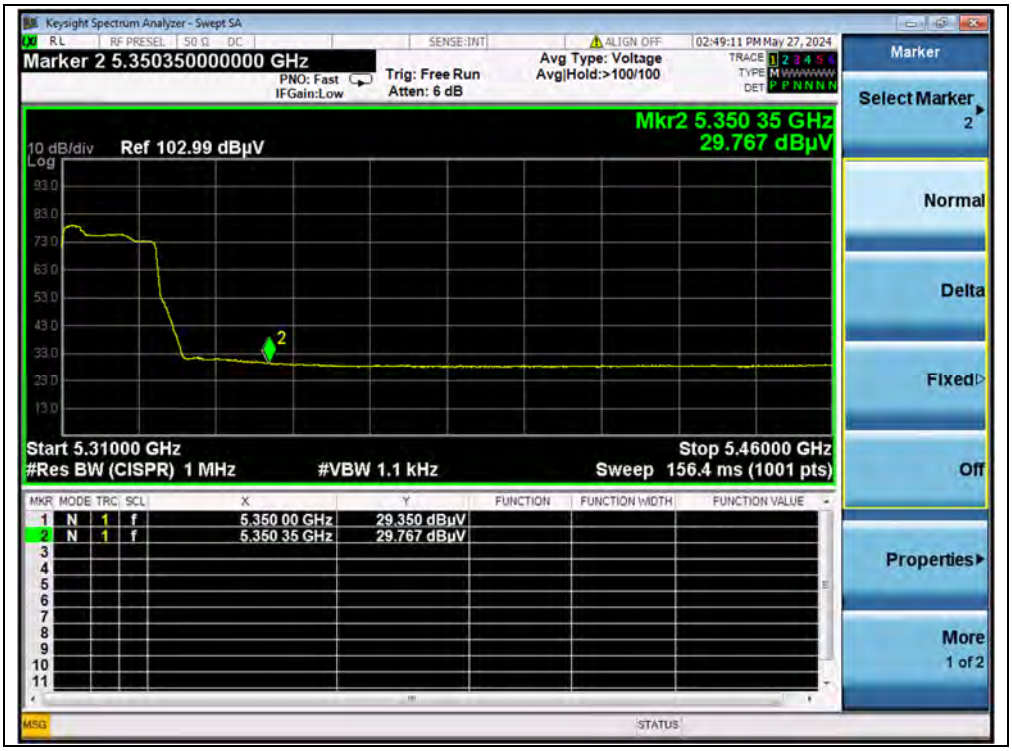
(PEAK, Channel 38, 802.11n (HT40))



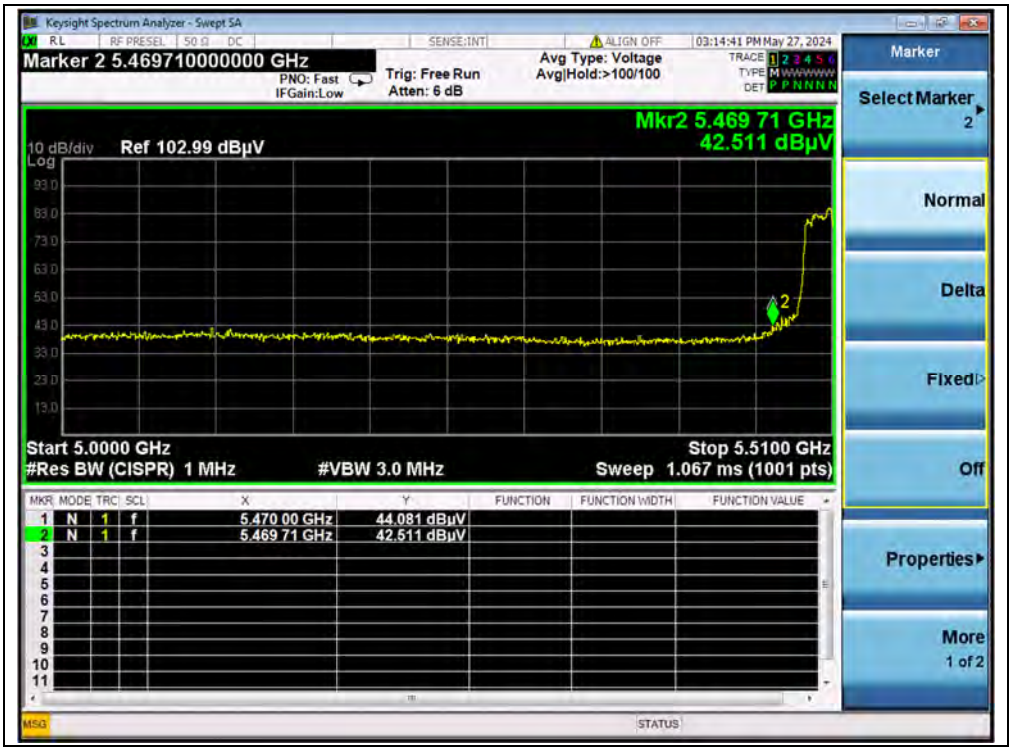
(AVERAGE, Channel 38, 802.11n (HT40))



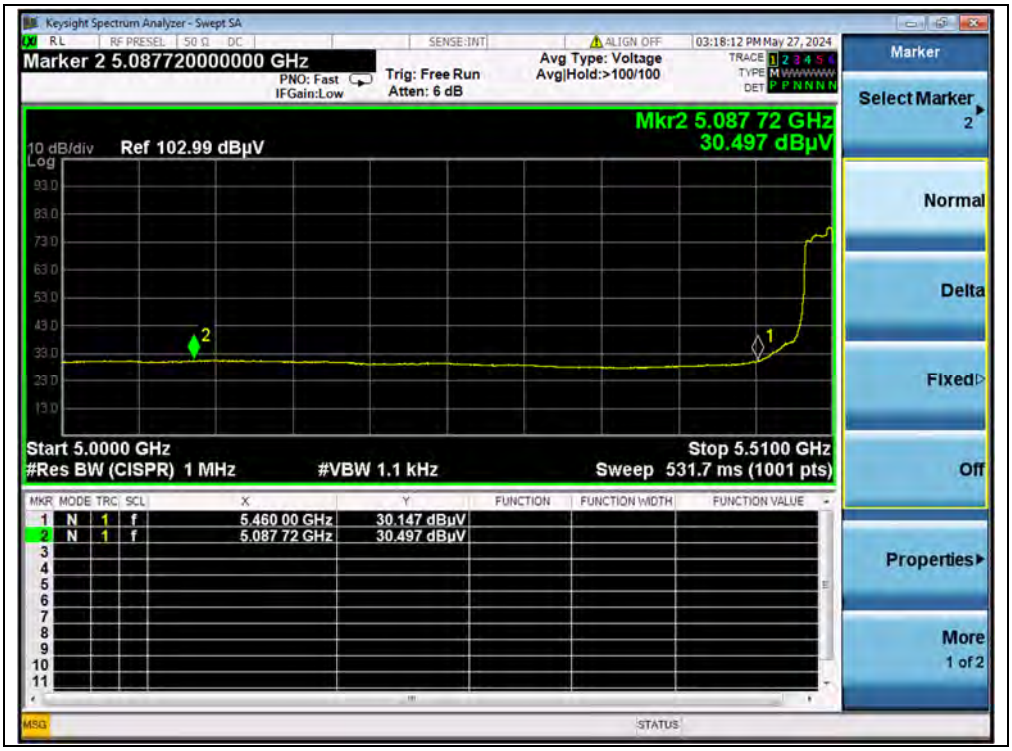
(PEAK, Channel 62, 802.11n (HT40))



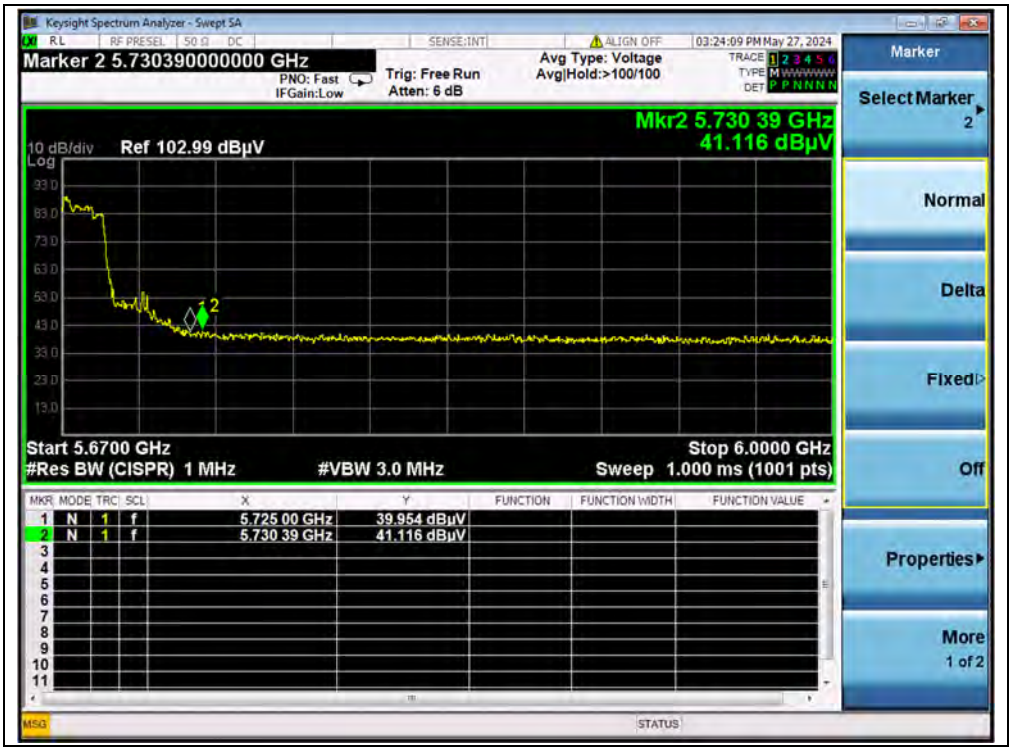
(AVERAGE, Channel 62, 802.11n (HT40))



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



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



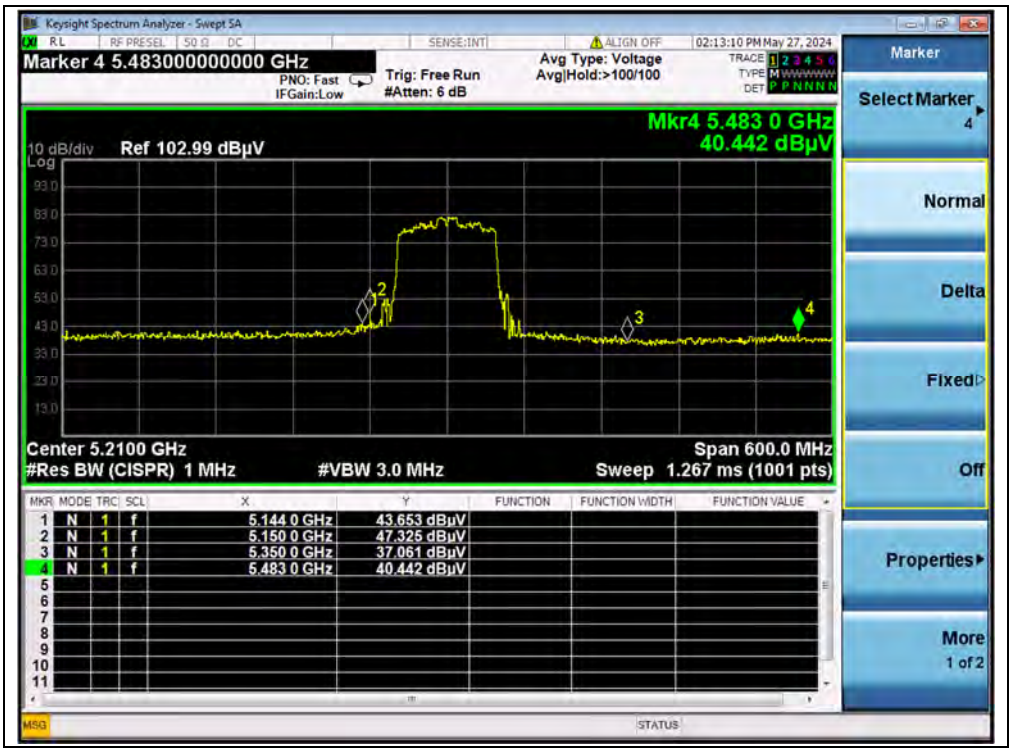
(PEAK, Channel 142, 802.11n (HT40))

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

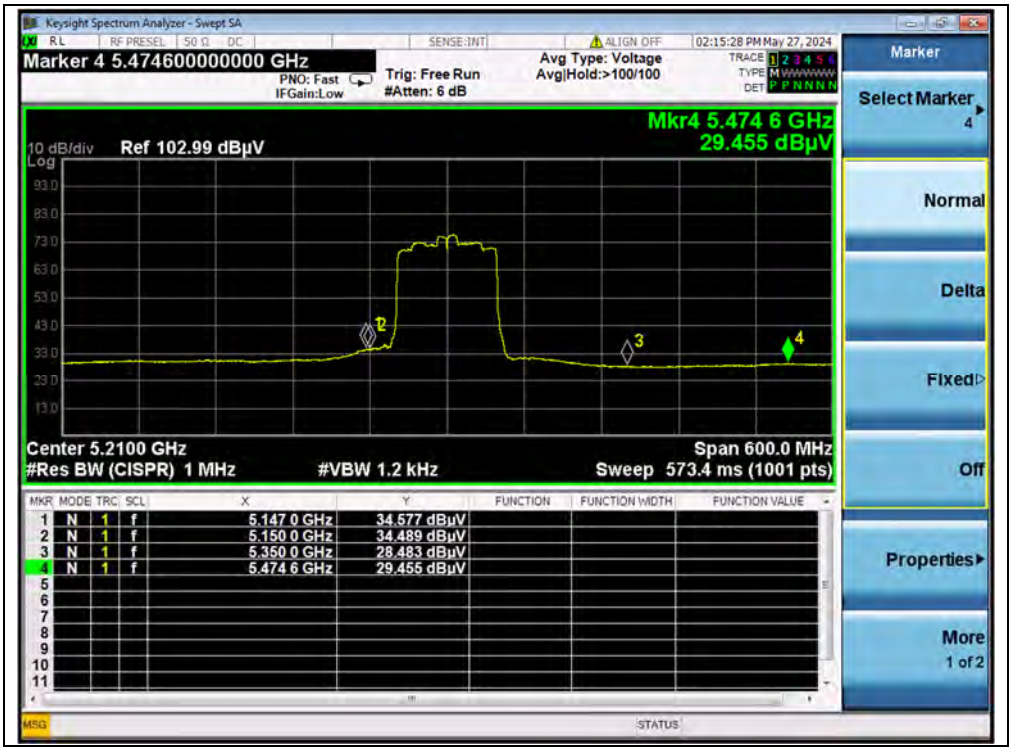
(PEAK, Channel 159, 802.11n (HT40))

802.11ac (VHT80) Mode

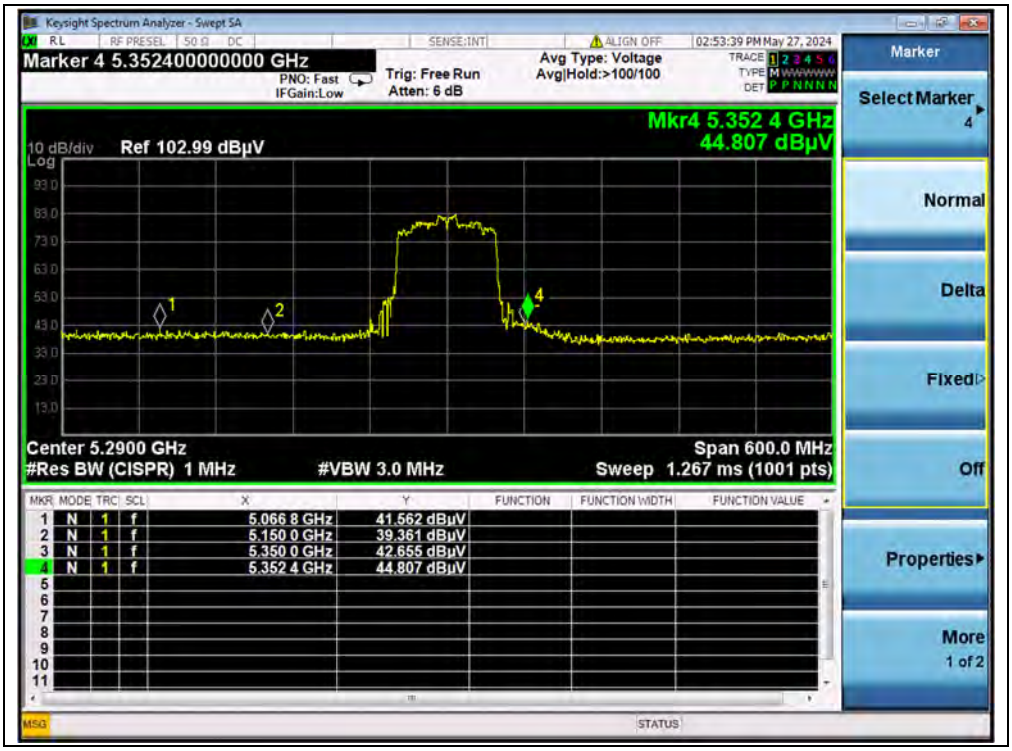
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@ 3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
42	5150.00	PK	47.33	-21.29	32.20	58.24	74	PASS
42	5147.00	AV	34.58	-21.29	32.20	45.49	54	PASS
58	5352.40	PK	44.81	-20.66	32.20	56.35	74	PASS
58	5350.00	AV	35.29	-20.66	32.20	46.83	54	PASS
106	5470.00	PK	46.99	-20.24	32.20	58.95	68.23	PASS
106	5458.45	AV	33.90	-20.24	32.20	45.86	54	PASS
138	5728.95	PK	40.59	-20.24	32.20	52.55	68.23	PASS
155	5720.00	PK	52.85	-21.11	32.20	63.94	110.83	PASS
155	5855.00	PK	48.41	-21.11	32.20	59.50	110.83	PASS



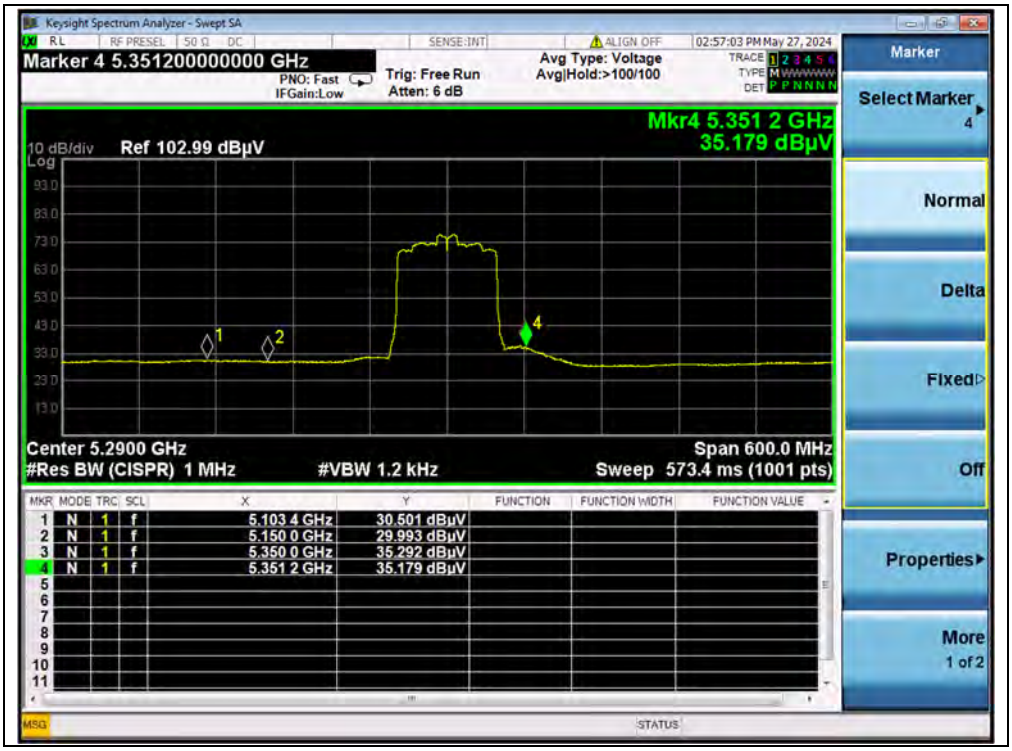
(PEAK, Channel 42, 802.11ac (VHT80))



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

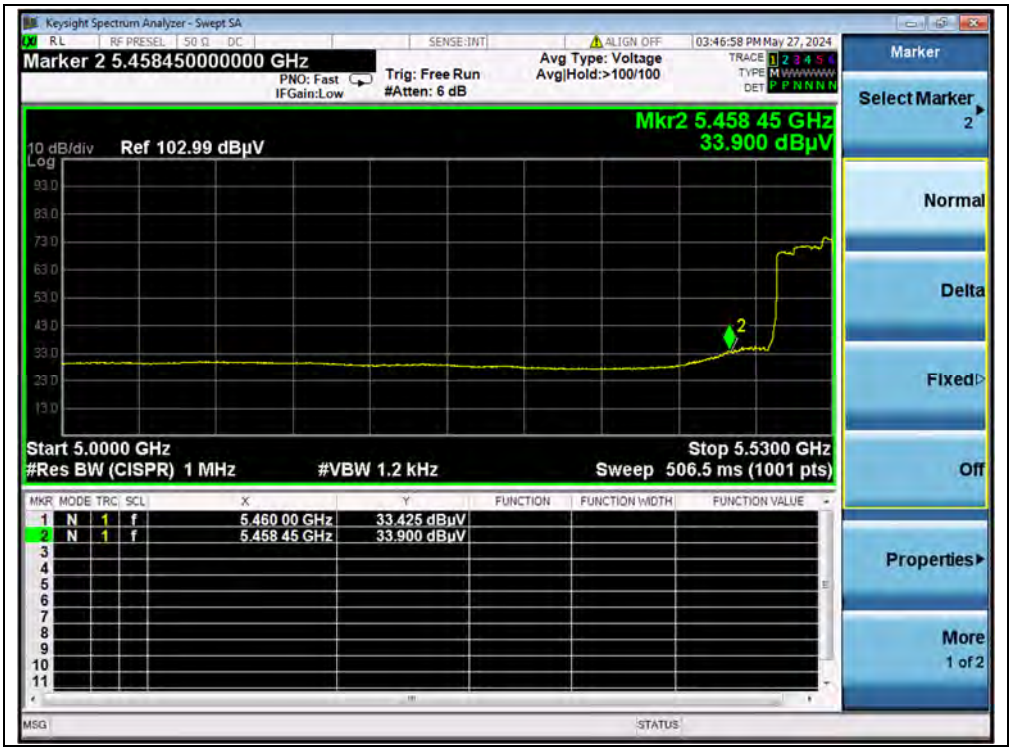


(PEAK, Channel 58, 802.11ac (VHT80))



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

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



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

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

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

A.9. Radiated Emission

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 harmonic of the highest frequency, 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.

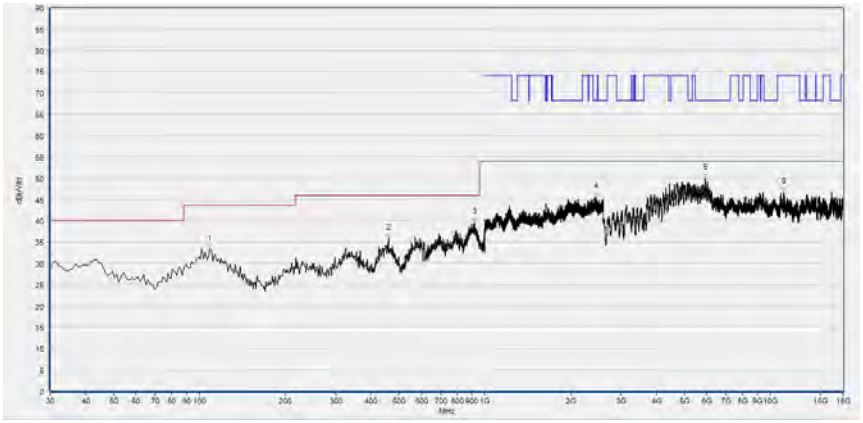
Field strength of fundamental:

Frequency (MHz)	Reading_Peak (dBμV/m)	Antenna Factor (dB)	Path Loss (dB)	Final_Peak (dBμV/m)	Antenna Polarity
5293.60	79.99	27.20	6.74	113.93	Horizontal
5284.20	82.97	27.20	6.74	116.91	Vertical

The field strength (the lowest) of fundamenta is more than 20dB higher than the unwanted emissions, in accordance with FCC part 15.215(b).

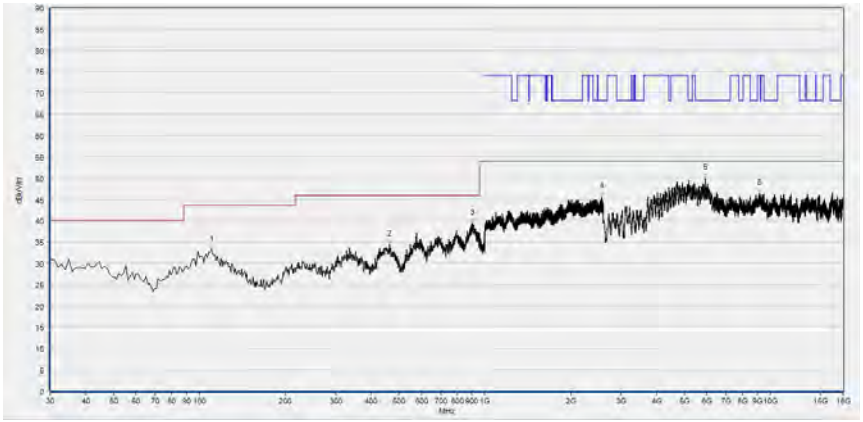
802.11a Mode

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
108.570	33.37	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
459.710	35.90	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
921.430	39.49	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2445.867	45.62	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5901.760	49.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11165.480	46.78	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

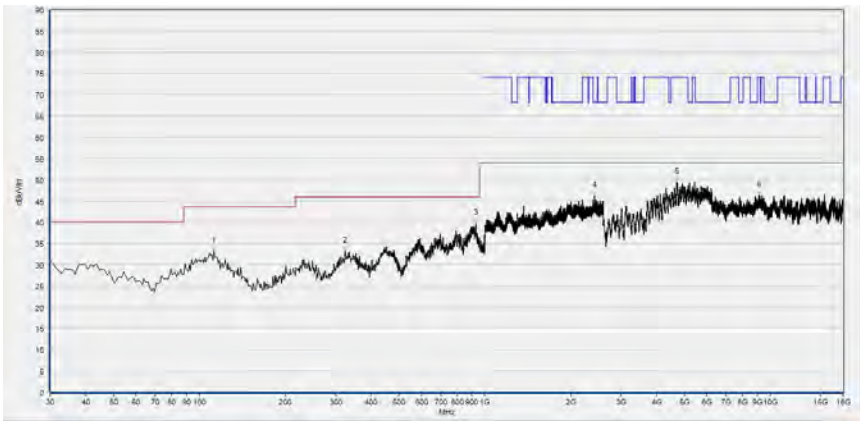
(Antenna Horizontal, 30MHz to 18GHz)



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
110.510	33.13	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
464.560	34.36	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
903.000	39.33	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2573.333	45.57	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5914.080	49.96	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9169.640	46.44	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

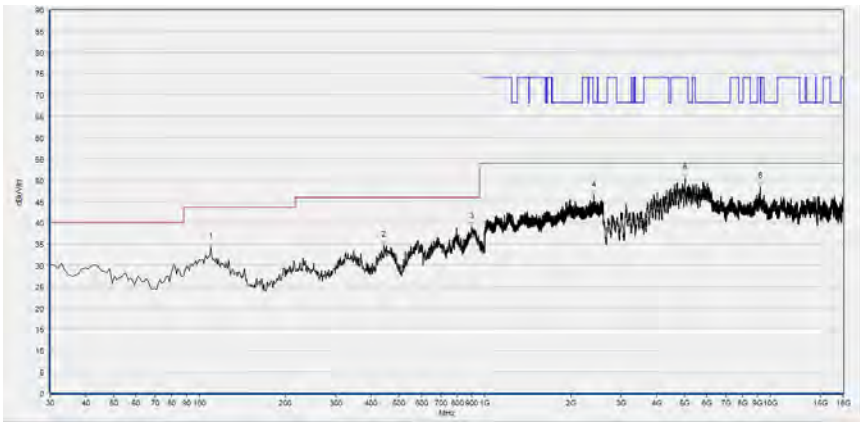
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 60



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	33.26	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
324.880	33.16	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
933.070	39.64	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2427.200	46.20	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4706.720	49.37	N/A	37.92	74.00	N/A	54.00	Horizontal	PASS
9135.760	46.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

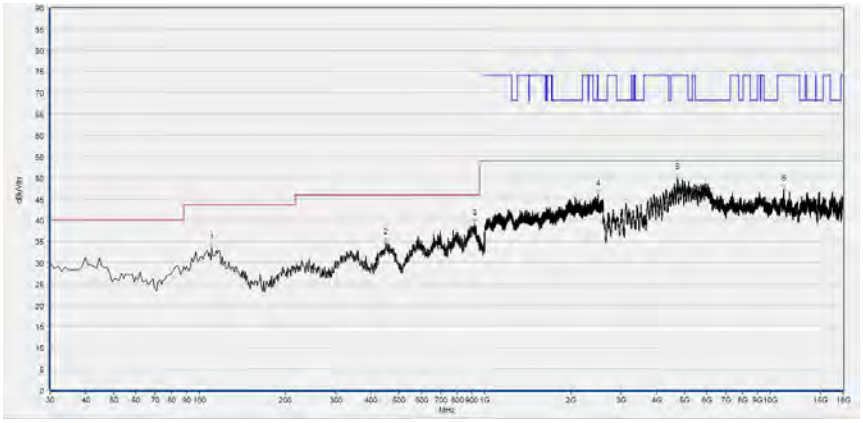
(Antenna Horizontal, 30MHz to 18GHz)



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	34.20	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
443.220	34.66	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
899.120	38.98	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2404.267	46.45	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5023.960	50.49	N/A	37.13	74.00	N/A	54.00	Vertical	PASS
9212.760	48.39	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

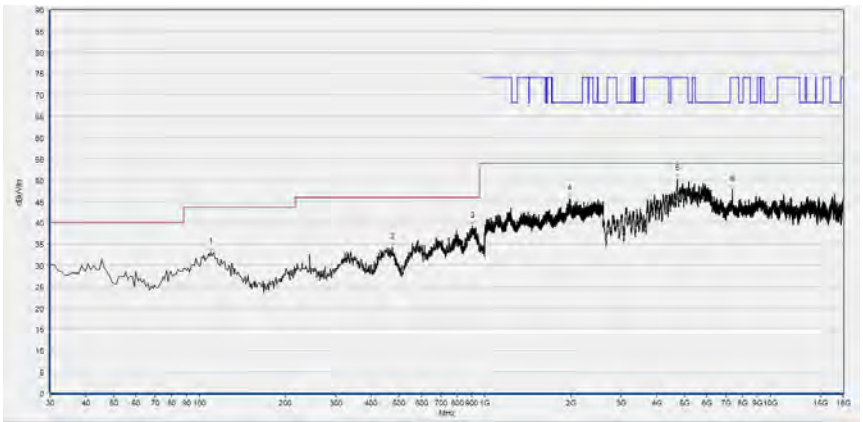
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 120



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	33.44	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
450.010	34.69	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
920.460	39.22	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2499.200	46.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4725.200	49.95	N/A	38.11	74.00	N/A	54.00	Horizontal	PASS
11174.720	47.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

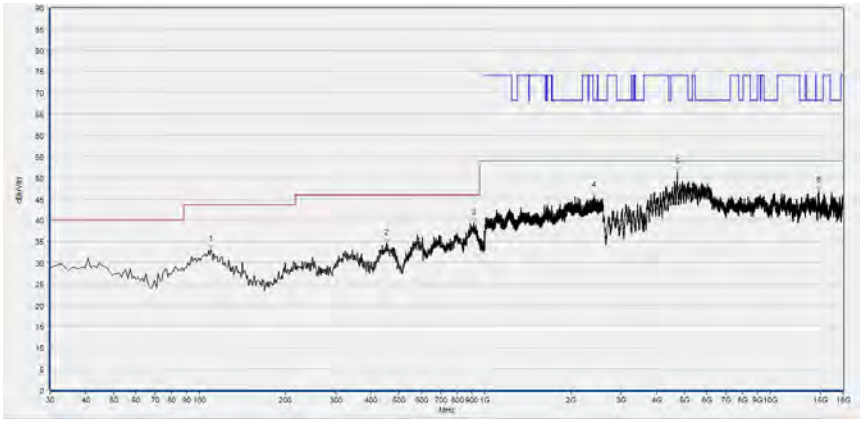
(Antenna Horizontal, 30MHz to 18GHz)



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	32.98	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
474.260	34.21	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
906.880	39.26	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1982.400	45.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4728.280	50.21	N/A	38.12	74.00	N/A	54.00	Vertical	PASS
7361.680	47.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

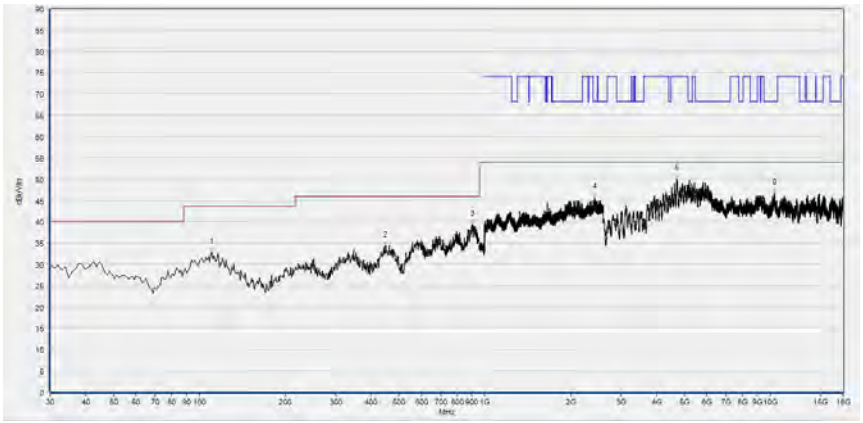
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 157



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	32.98	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
451.950	34.57	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
914.640	39.39	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2410.667	45.82	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4728.280	51.28	N/A	38.12	74.00	N/A	54.00	Horizontal	PASS
14772.160	46.90	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

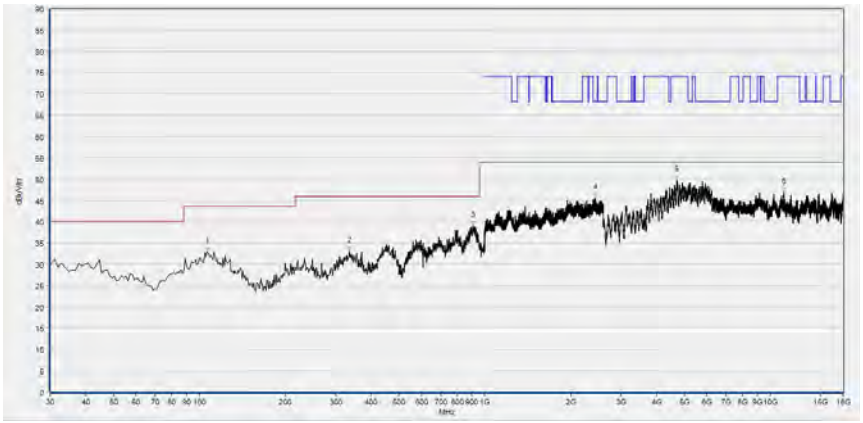


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	32.82	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
447.100	34.42	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
902.030	39.44	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2422.933	45.75	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4703.640	50.06	N/A	37.80	74.00	N/A	54.00	Vertical	PASS
10330.800	46.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

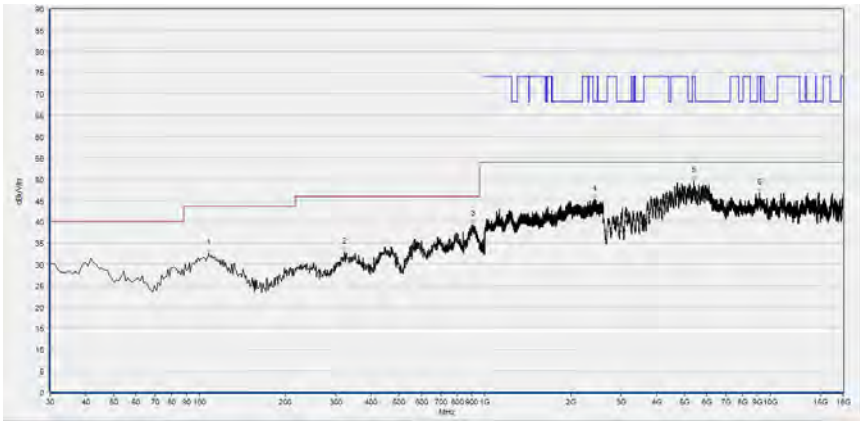
802.11n (HT40) mode

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
106.630	32.81	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
335.550	32.99	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
910.760	39.09	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2442.133	45.63	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4712.880	49.80	N/A	37.88	74.00	N/A	54.00	Horizontal	PASS
11162.400	46.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

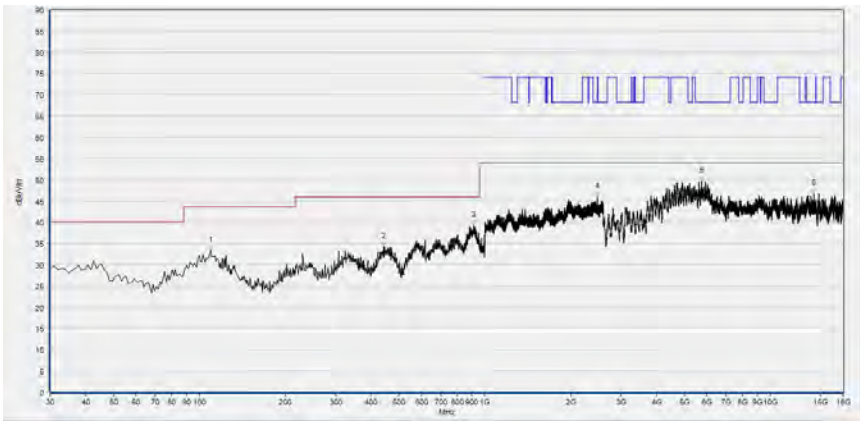
(Antenna Horizontal, 30MHz to 18GHz)



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	32.44	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
322.940	32.80	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
910.760	39.37	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2418.133	45.22	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5405.880	49.60	N/A	37.23	74.00	N/A	54.00	Vertical	PASS
9166.560	46.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

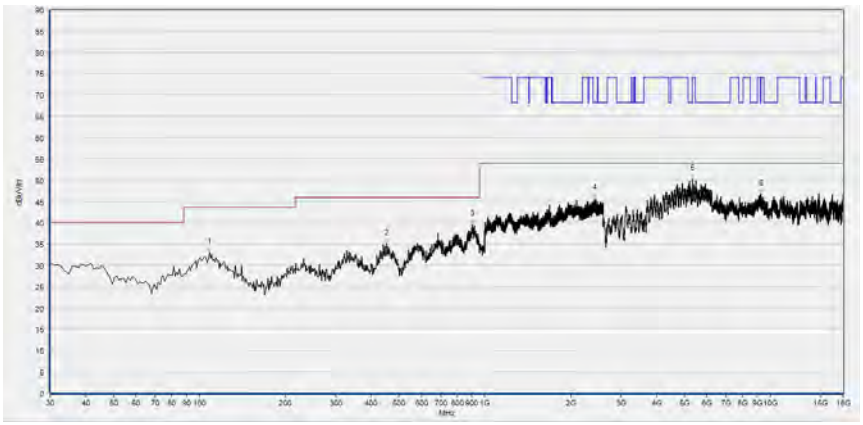
(Antenna Vertical, 30MHz to 18GHz)

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
109.540	33.42	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
442.250	34.25	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
912.700	39.29	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2482.667	45.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5738.520	49.54	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14251.640	46.74	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

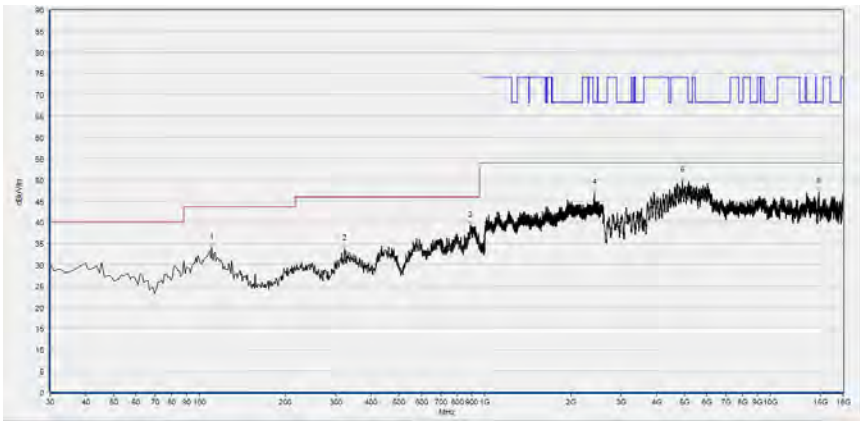
(Antenna Horizontal, 30MHz to 18GHz)



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
108.570	32.96	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
451.950	35.11	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
903.000	39.57	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2422.933	45.74	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5325.800	50.23	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9265.120	46.77	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

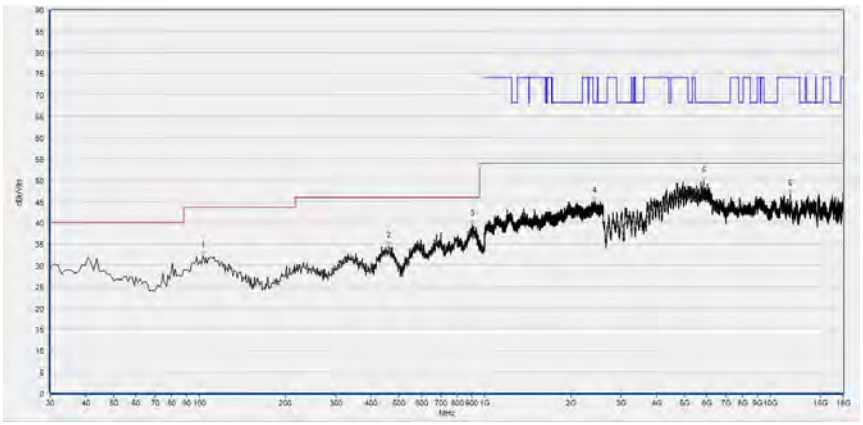
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 126



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	33.98	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
321.970	33.72	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
887.480	39.18	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2428.267	46.96	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4925.400	49.77	N/A	37.60	74.00	N/A	54.00	Horizontal	PASS
14827.600	47.04	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

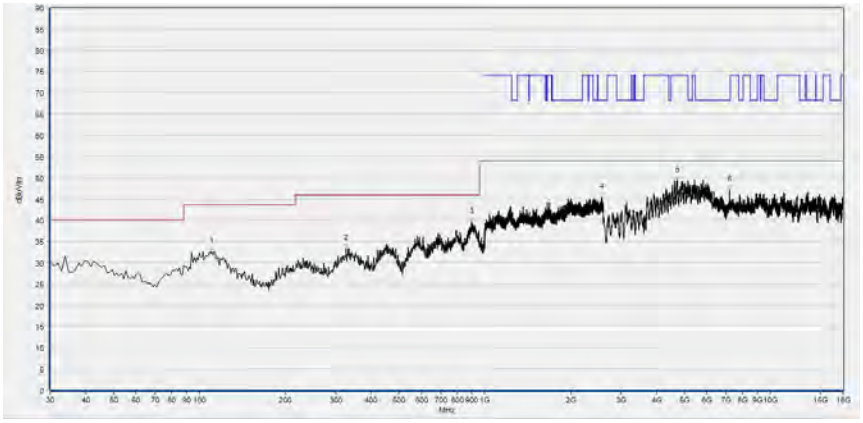
(Antenna Horizontal, 30MHz to 18GHz)



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
102.750	32.14	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
460.680	34.45	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
904.940	39.64	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2417.067	45.13	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5837.080	49.72	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11775.320	46.81	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

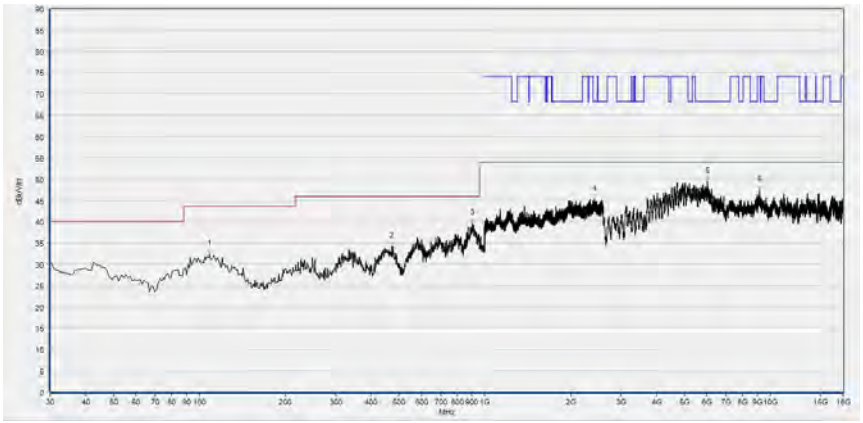
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 159



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	32.43	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
326.820	33.33	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
898.150	39.54	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2566.933	45.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4715.960	49.20	N/A	37.91	74.00	N/A	54.00	Horizontal	PASS
7210.760	47.01	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

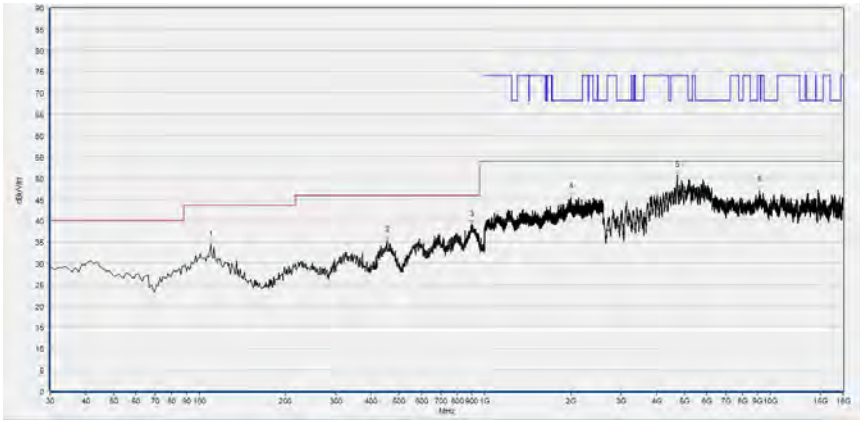


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	32.38	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
472.320	34.18	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
903.970	39.54	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2417.067	45.24	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
6015.720	49.50	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9191.200	47.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

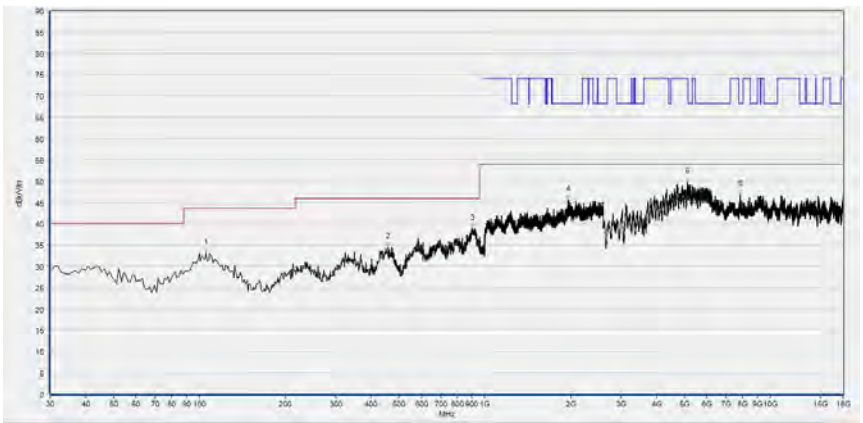
802.11ac (VHT80) Mode

Plot for Channel 42



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	34.35	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
454.860	35.38	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
898.150	39.03	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
1998.933	45.60	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4728.280	50.59	N/A	38.14	74.00	N/A	54.00	Horizontal	PASS
9172.720	47.15	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

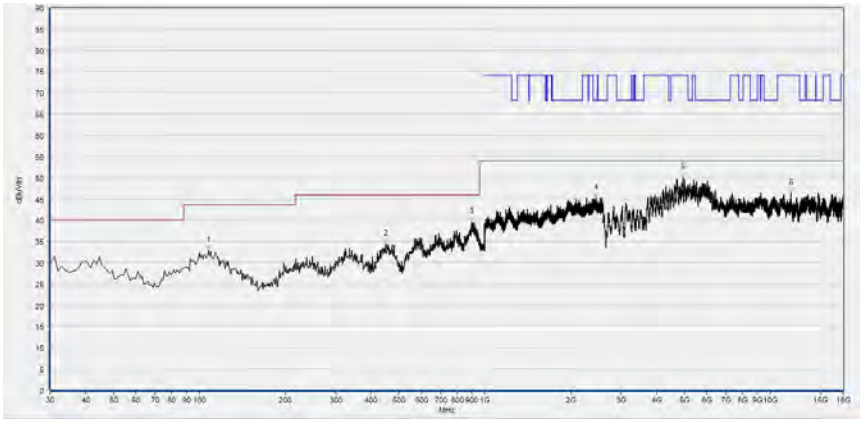
(Antenna Horizontal, 30MHz to 18GHz)



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
105.660	33.11	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
458.740	34.56	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
903.970	38.85	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
1958.933	45.57	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5128.680	49.73	N/A	36.93	74.00	N/A	54.00	Vertical	PASS
7839.080	46.86	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

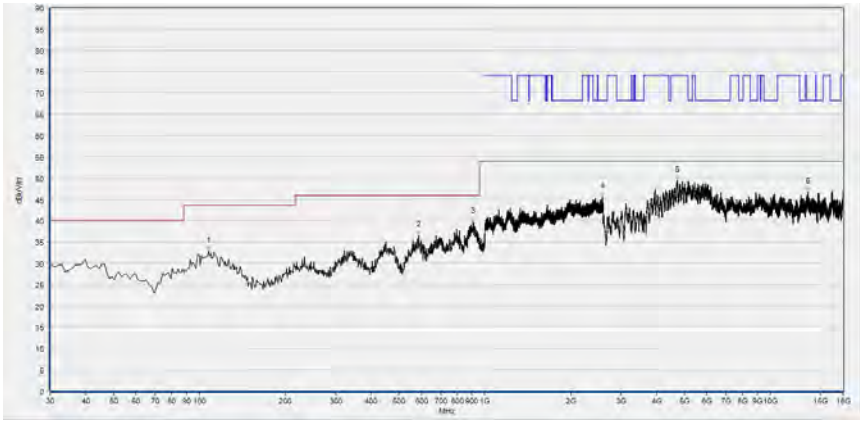
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 58



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	32.84	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
450.010	34.32	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
898.150	39.49	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2455.467	45.23	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4937.720	50.03	N/A	37.46	74.00	N/A	54.00	Horizontal	PASS
11790.720	46.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

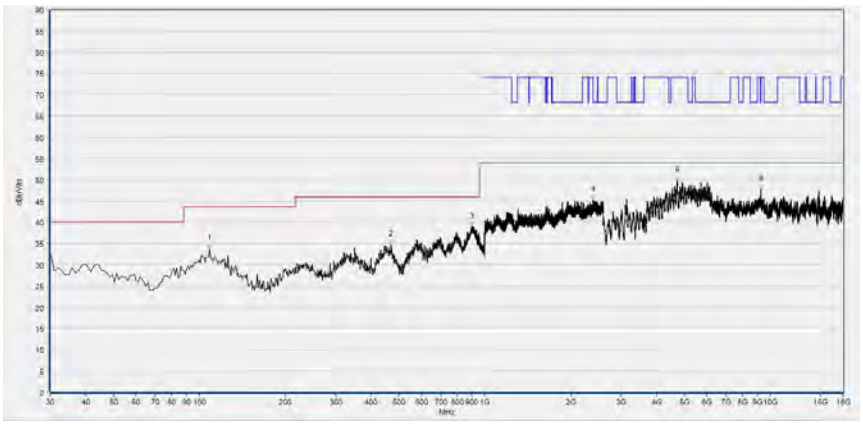
(Antenna Horizontal, 30MHz to 18GHz)



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
107.600	32.86	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
586.780	36.61	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
910.760	39.74	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2577.600	45.61	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4725.200	49.39	N/A	38.27	74.00	N/A	54.00	Vertical	PASS
13537.080	46.72	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

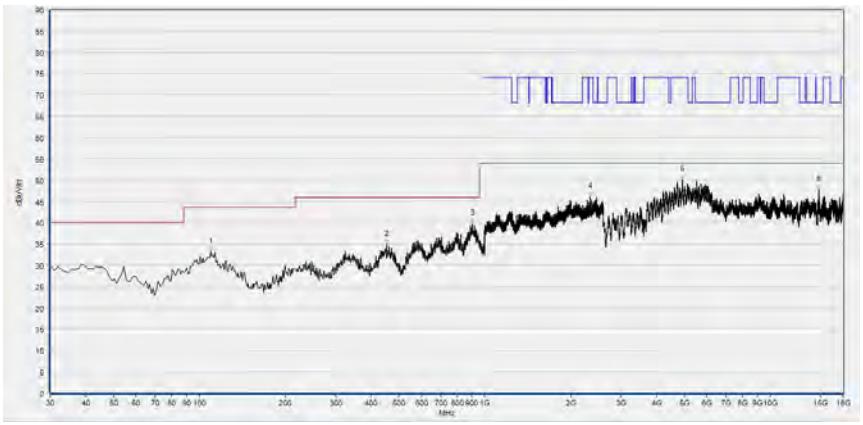
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 122



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	33.64	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
468.440	34.67	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
898.150	38.97	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2397.867	45.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4731.360	49.86	N/A	38.04	74.00	N/A	54.00	Horizontal	PASS
9280.520	47.70	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

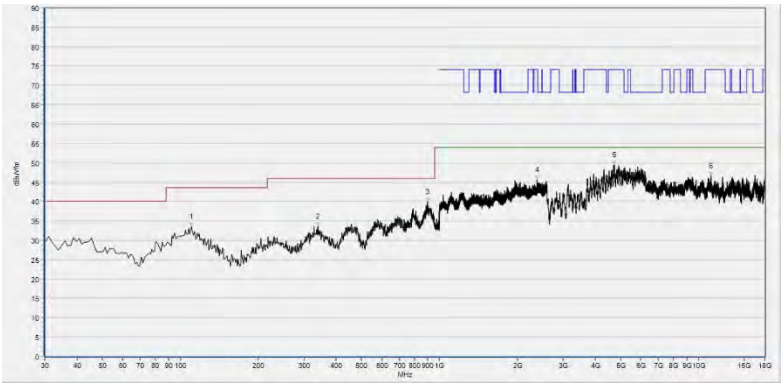
(Antenna Horizontal, 30MHz to 18GHz)



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
109.540	33.22	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
452.920	34.92	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
904.940	39.68	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2341.333	46.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4922.320	50.06	N/A	37.65	74.00	N/A	54.00	Vertical	PASS
14796.800	47.80	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

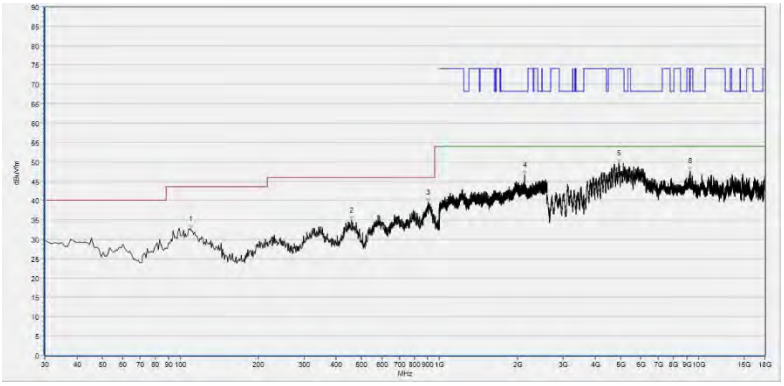
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 155



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	33.44	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
339.430	33.50	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
897.180	39.81	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2381.867	45.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4725.200	49.38	N/A	38.16	74.00	N/A	54.00	Horizontal	PASS
11171.640	46.60	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	32.71	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
457.770	34.83	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
904.940	39.51	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2130.133	46.51	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4922.320	49.54	N/A	37.68	74.00	N/A	54.00	Vertical	PASS
9255.880	47.58	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT