

PSD NVNT n40 5550MHz Ant1 MIMO



PSD NVNT n40 5550MHz Ant2 MIMO



PSD NVNT n40 5710MHz Ant1 MIMO



PSD NVNT n40 5710MHz Ant2 MIMO



PSD NVNT n40 5755MHz Ant1 MIMO



PSD NVNT n40 5755MHz Ant2 MIMO



PSD NVNT n40 5795MHz Ant1 MIMO



PSD NVNT n40 5795MHz Ant2 MIMO



PSD NVNT ac20 5180MHz Ant1 SISO



PSD NVNT ac20 5220MHz Ant1 SISO



PSD NVNT ac20 5240MHz Ant1 SISO



PSD NVNT ac20 5260MHz Ant1 SISO





PSD NVNT ac20 5300MHz Ant1 SISO



PSD NVNT ac20 5320MHz Ant1 SISO



PSD NVNT ac20 5500MHz Ant1 SISO



PSD NVNT ac20 5580MHz Ant1 SISO



PSD NVNT ac20 5720MHz Ant1 SISO



PSD NVNT ac20 5745MHz Ant1 SISO





PSD NVNT ac20 5785MHz Ant1 SISO



PSD NVNT ac20 5825MHz Ant1 SISO



PSD NVNT ac20 5180MHz Ant2 SISO



PSD NVNT ac20 5220MHz Ant2 SISO



PSD NVNT ac20 5240MHz Ant2 SISO



PSD NVNT ac20 5260MHz Ant2 SISO





PSD NVNT ac20 5300MHz Ant2 SISO



PSD NVNT ac20 5320MHz Ant2 SISO





PSD NVNT ac20 5500MHz Ant2 SISO



PSD NVNT ac20 5580MHz Ant2 SISO



PSD NVNT ac20 5720MHz Ant2 SISO



PSD NVNT ac20 5745MHz Ant2 SISO



PSD NVNT ac20 5785MHz Ant2 SISO



PSD NVNT ac20 5825MHz Ant2 SISO



PSD NVNT ac20 5180MHz Ant1 MIMO



PSD NVNT ac20 5180MHz Ant2 MIMO



PSD NVNT ac20 5220MHz Ant1 MIMO



PSD NVNT ac20 5220MHz Ant2 MIMO



PSD NVNT ac20 5240MHz Ant1 MIMO



PSD NVNT ac20 5240MHz Ant2 MIMO



PSD NVNT ac20 5260MHz Ant1 MIMO



PSD NVNT ac20 5260MHz Ant2 MIMO



PSD NVNT ac20 5300MHz Ant1 MIMO



PSD NVNT ac20 5300MHz Ant2 MIMO



PSD NVNT ac20 5320MHz Ant1 MIMO



PSD NVNT ac20 5320MHz Ant2 MIMO



PSD NVNT ac20 5500MHz Ant1 MIMO



PSD NVNT ac20 5500MHz Ant2 MIMO



PSD NVNT ac20 5580MHz Ant1 MIMO



PSD NVNT ac20 5580MHz Ant2 MIMO



PSD NVNT ac20 5720MHz Ant1 MIMO



PSD NVNT ac20 5720MHz Ant2 MIMO





PSD NVNT ac20 5745MHz Ant1 MIMO



PSD NVNT ac20 5745MHz Ant2 MIMO



PSD NVNT ac20 5785MHz Ant1 MIMO



PSD NVNT ac20 5785MHz Ant2 MIMO



PSD NVNT ac20 5825MHz Ant1 MIMO



PSD NVNT ac20 5825MHz Ant2 MIMO



PSD NVNT ac40 5190MHz Ant1 SISO



PSD NVNT ac40 5230MHz Ant1 SISO



PSD NVNT ac40 5270MHz Ant1 SISO



PSD NVNT ac40 5310MHz Ant1 SISO





PSD NVNT ac40 5510MHz Ant1 SISO



PSD NVNT ac40 5550MHz Ant1 SISO



PSD NVNT ac40 5710MHz Ant1 SISO



PSD NVNT ac40 5755MHz Ant1 SISO



PSD NVNT ac40 5795MHz Ant1 SISO



PSD NVNT ac40 5190MHz Ant2 SISO



PSD NVNT ac40 5230MHz Ant2 SISO



PSD NVNT ac40 5270MHz Ant2 SISO



PSD NVNT ac40 5310MHz Ant2 SISO



PSD NVNT ac40 5510MHz Ant2 SISO





PSD NVNT ac40 5550MHz Ant2 SISO



PSD NVNT ac40 5710MHz Ant2 SISO



PSD NVNT ac40 5755MHz Ant2 SISO



PSD NVNT ac40 5795MHz Ant2 SISO





PSD NVNT ac40 5190MHz Ant1 MIMO



PSD NVNT ac40 5190MHz Ant2 MIMO



PSD NVNT ac40 5230MHz Ant1 MIMO



PSD NVNT ac40 5230MHz Ant2 MIMO



PSD NVNT ac40 5270MHz Ant1 MIMO



PSD NVNT ac40 5270MHz Ant2 MIMO



PSD NVNT ac40 5310MHz Ant1 MIMO



PSD NVNT ac40 5310MHz Ant2 MIMO



PSD NVNT ac40 5510MHz Ant1 MIMO



PSD NVNT ac40 5510MHz Ant2 MIMO



PSD NVNT ac40 5550MHz Ant1 MIMO



PSD NVNT ac40 5550MHz Ant2 MIMO



PSD NVNT ac40 5710MHz Ant1 MIMO



PSD NVNT ac40 5710MHz Ant2 MIMO



PSD NVNT ac40 5755MHz Ant1 MIMO



PSD NVNT ac40 5755MHz Ant2 MIMO



PSD NVNT ac40 5795MHz Ant1 MIMO



PSD NVNT ac40 5795MHz Ant2 MIMO



PSD NVNT ac80 5210MHz Ant1 SISO



PSD NVNT ac80 5290MHz Ant1 SISO





PSD NVNT ac80 5530MHz Ant1 SISO



PSD NVNT ac80 5690MHz Ant1 SISO



PSD NVNT ac80 5775MHz Ant1 SISO



PSD NVNT ac80 5210MHz Ant2 SISO





PSD NVNT ac80 5290MHz Ant2 SISO



PSD NVNT ac80 5530MHz Ant2 SISO





PSD NVNT ac80 5690MHz Ant2 SISO



PSD NVNT ac80 5775MHz Ant2 SISO



PSD NVNT ac80 5210MHz Ant1 MIMO



PSD NVNT ac80 5210MHz Ant2 MIMO





PSD NVNT ac80 5290MHz Ant1 MIMO



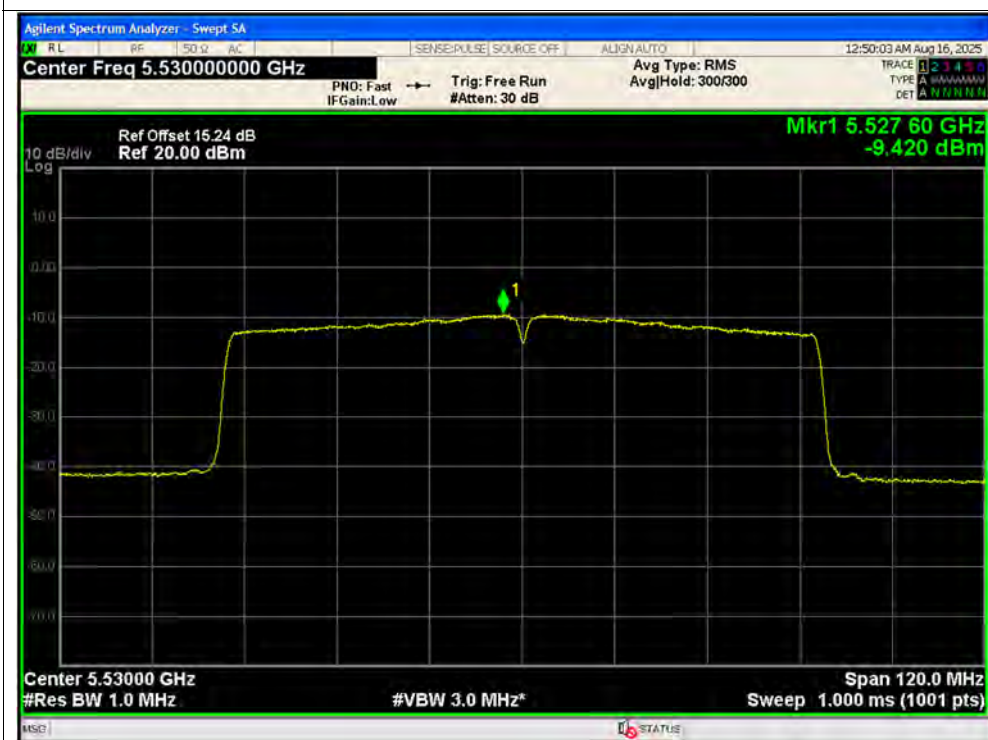
PSD NVNT ac80 5290MHz Ant2 MIMO



PSD NVNT ac80 5530MHz Ant1 MIMO



PSD NVNT ac80 5530MHz Ant2 MIMO



PSD NVNT ac80 5690MHz Ant1 MIMO



PSD NVNT ac80 5690MHz Ant2 MIMO



PSD NVNT ac80 5775MHz Ant1 MIMO



PSD NVNT ac80 5775MHz Ant2 MIMO



**A.5. Frequency Stability**

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 5V	CW SISO	5180	Ant1	5179.986	-14000	-2.7	25	Pass
20C 20V	CW SISO	5180	Ant1	5179.982	-18000	-3.47	25	Pass
20C 30V	CW SISO	5180	Ant1	5179.984	-16000	-3.09	25	Pass
0C 20V	CW SISO	5180	Ant1	5179.983	-17000	-3.28	25	Pass
10C 20V	CW SISO	5180	Ant1	5179.983	-17000	-3.28	25	Pass
30C 20V	CW SISO	5180	Ant1	5179.982	-18000	-3.47	25	Pass
35C 20V	CW SISO	5180	Ant1	5179.982	-18000	-3.47	25	Pass
20C 5V	CW SISO	5260	Ant1	5259.978	-22000	-4.18	25	Pass
20C 20V	CW SISO	5260	Ant1	5259.975	-25000	-4.75	25	Pass
20C 30V	CW SISO	5260	Ant1	5259.976	-24000	-4.56	25	Pass
0C 20V	CW SISO	5260	Ant1	5259.976	-24000	-4.56	25	Pass
10C 20V	CW SISO	5260	Ant1	5259.975	-25000	-4.75	25	Pass
30C 20V	CW SISO	5260	Ant1	5259.975	-25000	-4.75	25	Pass
35C 20V	CW SISO	5260	Ant1	5259.974	-26000	-4.94	25	Pass
20C 5V	CW SISO	5500	Ant1	5499.975	-25000	-4.55	25	Pass
20C 20V	CW SISO	5500	Ant1	5499.972	-28000	-5.09	25	Pass
20C 30V	CW SISO	5500	Ant1	5499.973	-27000	-4.91	25	Pass



REPORT No.: SZ25070423W03

0C 20V	CW SISO	5500	Ant1	5499.973	-27000	-4.91	25	Pass
10C 20V	CW SISO	5500	Ant1	5499.972	-28000	-5.09	25	Pass
30C 20V	CW SISO	5500	Ant1	5499.972	-28000	-5.09	25	Pass
35C 20V	CW SISO	5500	Ant1	5499.971	-29000	-5.27	25	Pass
20C 5V	CW SISO	5745	Ant1	5744.97	-30000	-5.22	25	Pass
20C 20V	CW SISO	5745	Ant1	5744.976	-24000	-4.18	25	Pass
20C 30V	CW SISO	5745	Ant1	5744.972	-28000	-4.87	25	Pass
0C 20V	CW SISO	5745	Ant1	5744.973	-27000	-4.7	25	Pass
10C 20V	CW SISO	5745	Ant1	5744.975	-25000	-4.35	25	Pass
30C 20V	CW SISO	5745	Ant1	5744.977	-23000	-4	25	Pass
35C 20V	CW SISO	5745	Ant1	5744.977	-23000	-4	25	Pass



REPORT No.: SZ25070423W03

A.6. Dynamic Frequency Selection

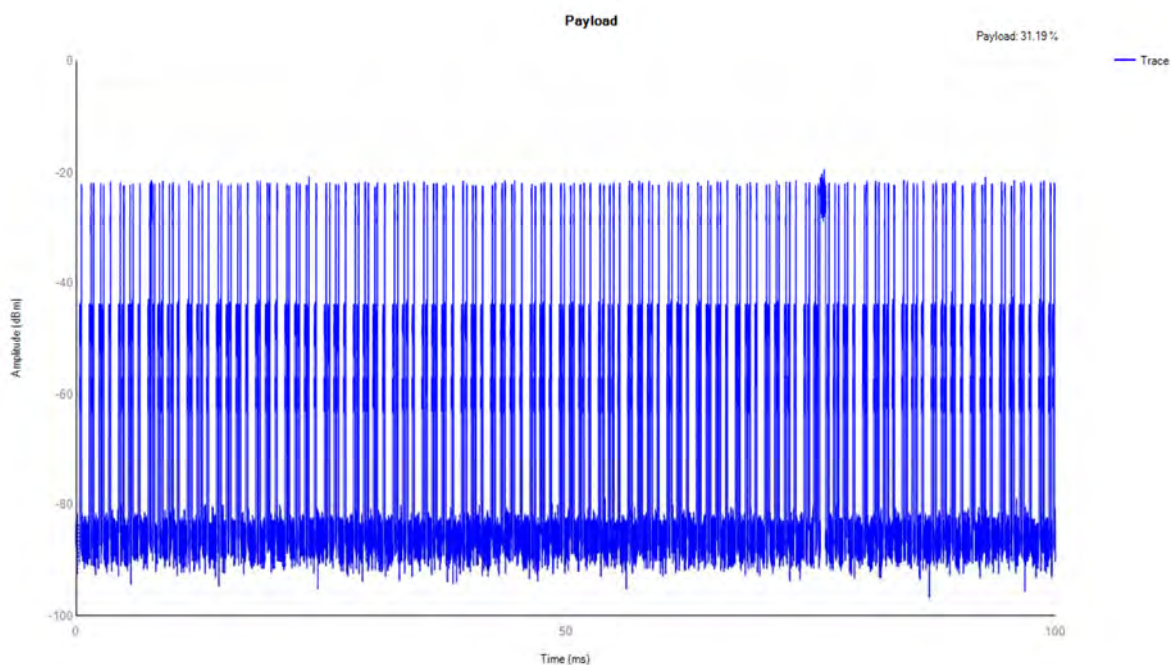
Payload

Mode	Frequency (MHz)	Result	Verdict
ac20	5320	31.19	Pass
ac20	5500	41.67	Pass
ac80	5290	79.84	Pass
ac80	5530	43.02	Pass

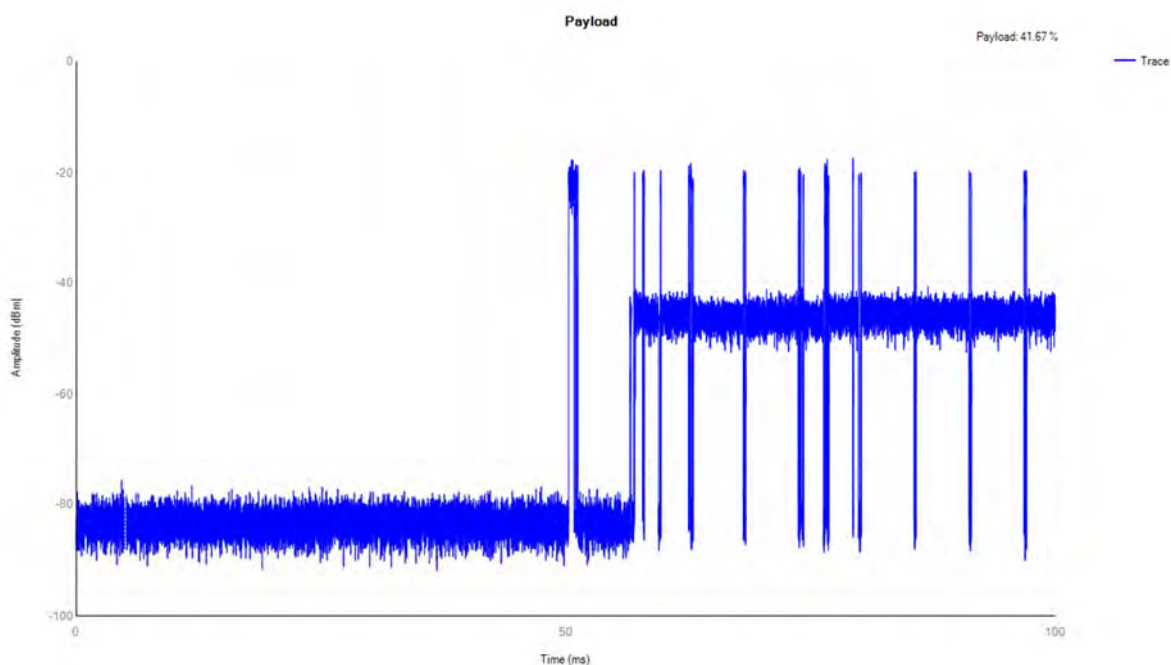


Test Graphs

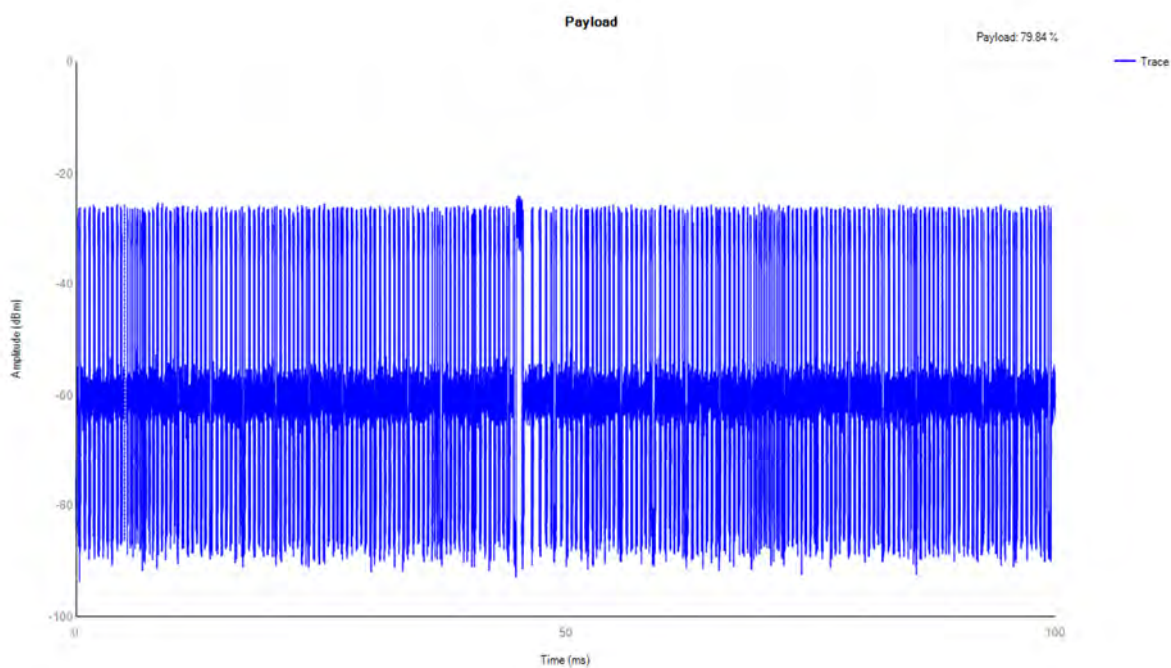
ac20 5260MHz Payload



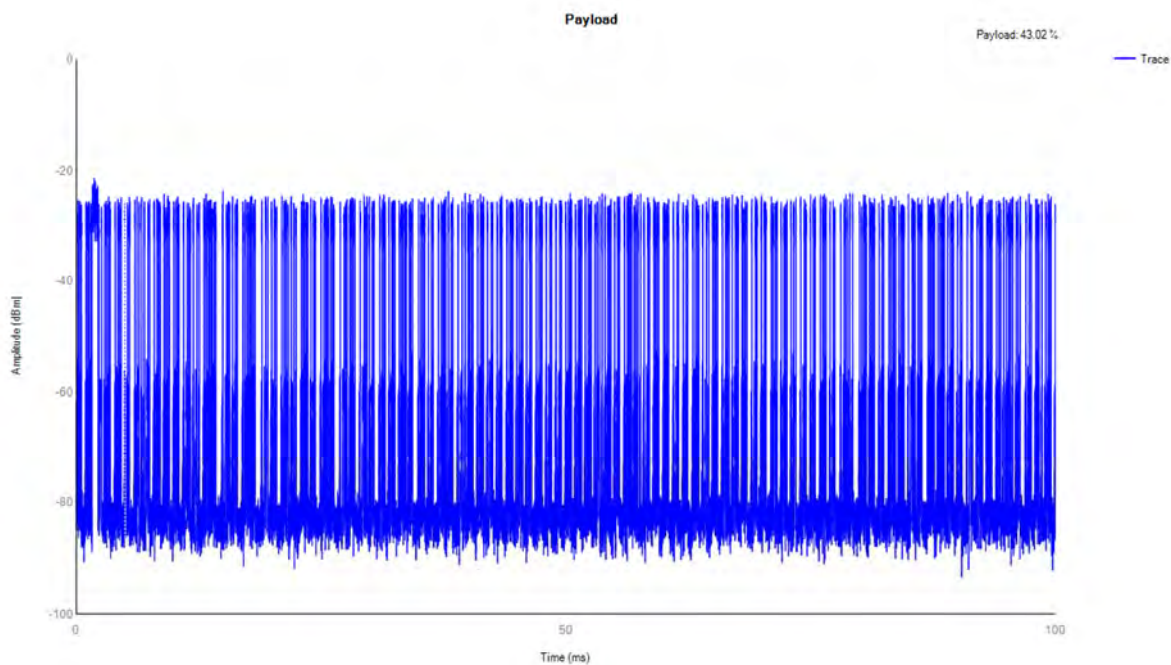
ac20 5500MHz Payload



ac80 5290MHz Payload



ac80 5530MHz Payload





Detection Thresholds

Mode	Frequency (MHz)	Type	Result	Verdict
ac20	5320	DFS_FCC_T0	See test Graph	Pass
ac20	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

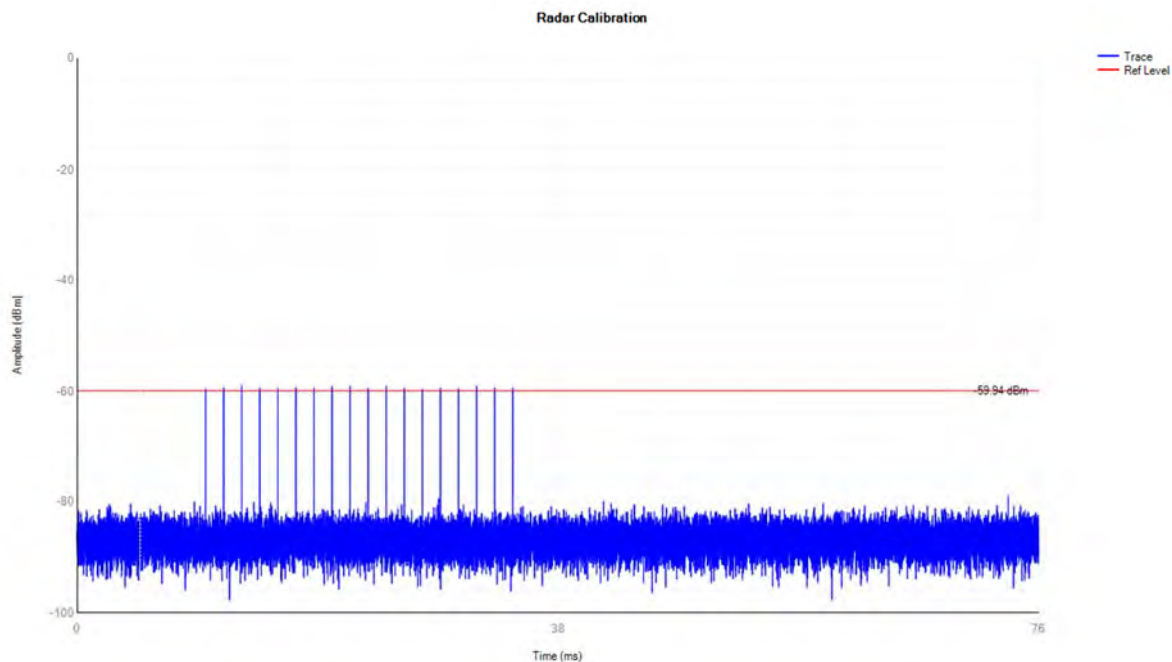
RBW: 3MHz

VBW: 3MHz

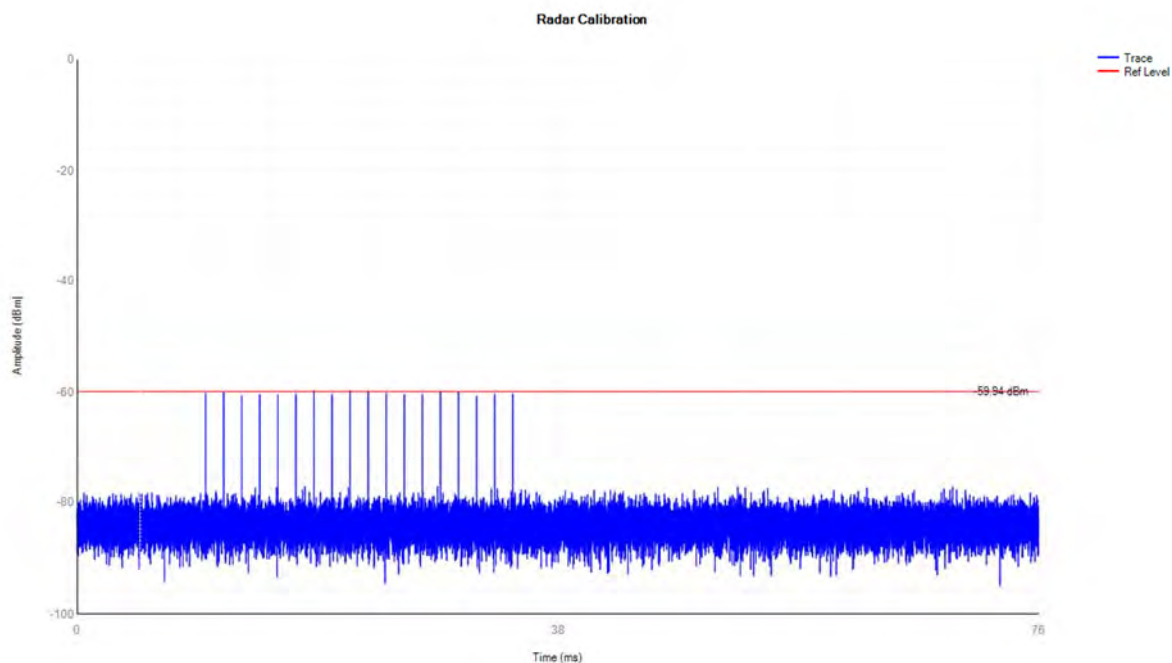


Test Graphs

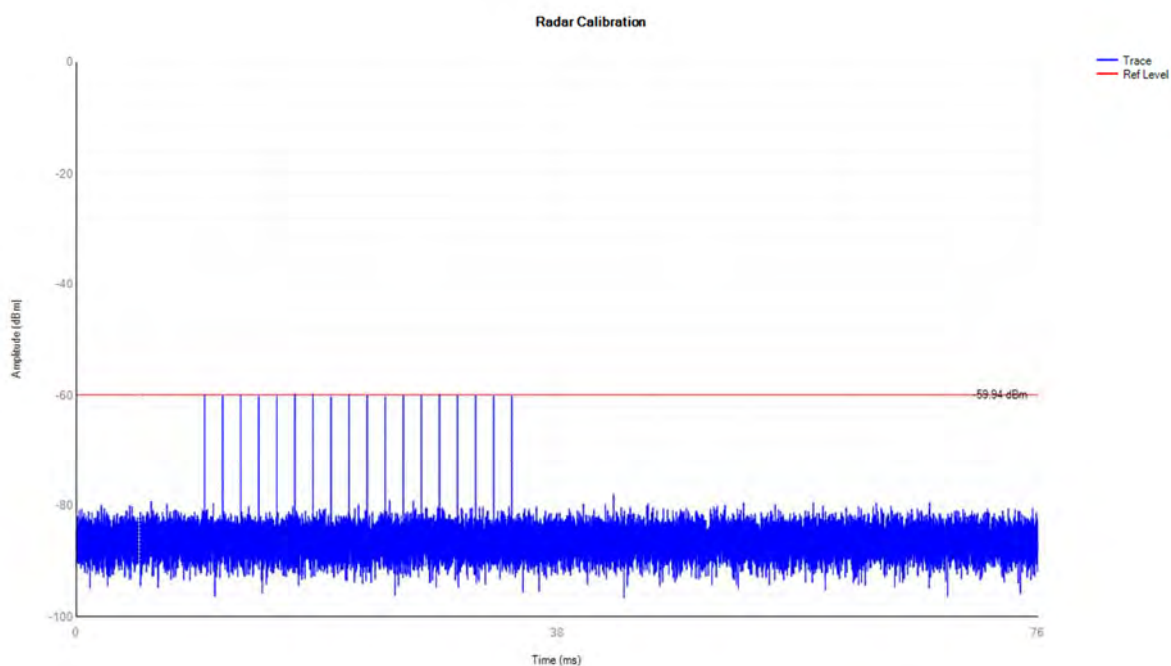
5260MHz DFS_FCC_T0



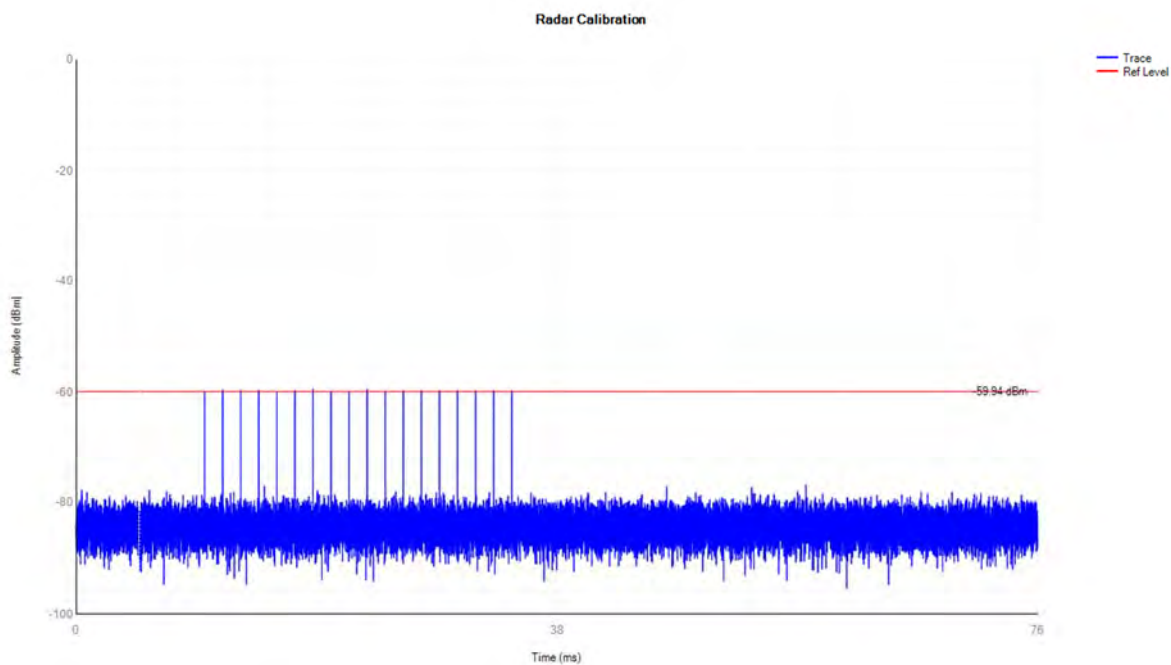
5500MHz DFS_FCC_T0



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
ac20	5320	0.77	10	0.001	0.26	0.001	0.06	Pass
ac20	5500	0.863	10	0.095	0.26	0.01	0.06	Pass
ac80	5290	0.85	10	0.051	0.26	0.009	0.06	Pass
ac80	5530	0.859	10	0.037	0.26	0.023	0.06	Pass

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

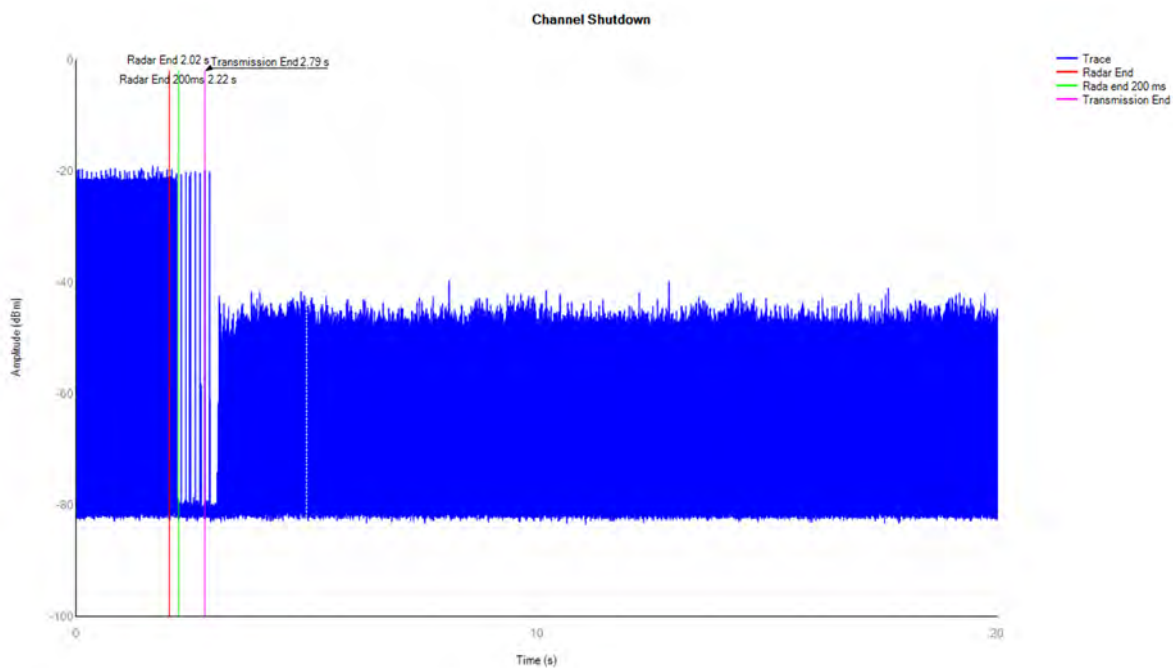
RBW: 3MHz

VBW: 3MHz

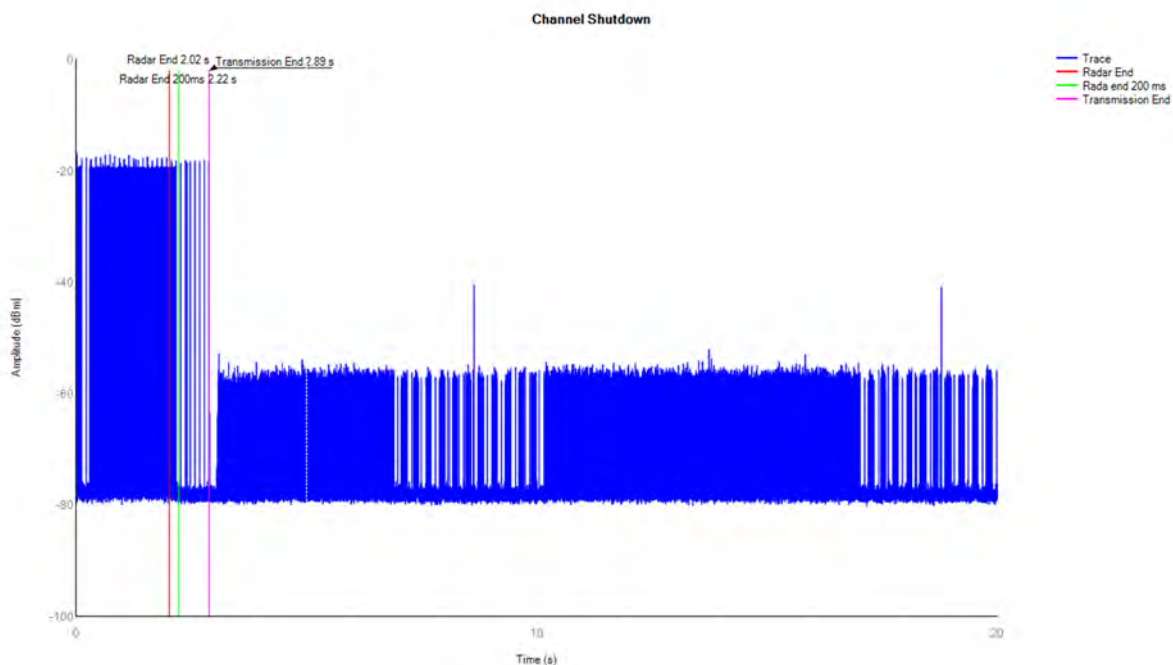
Sweep time: 20s

Test Graphs

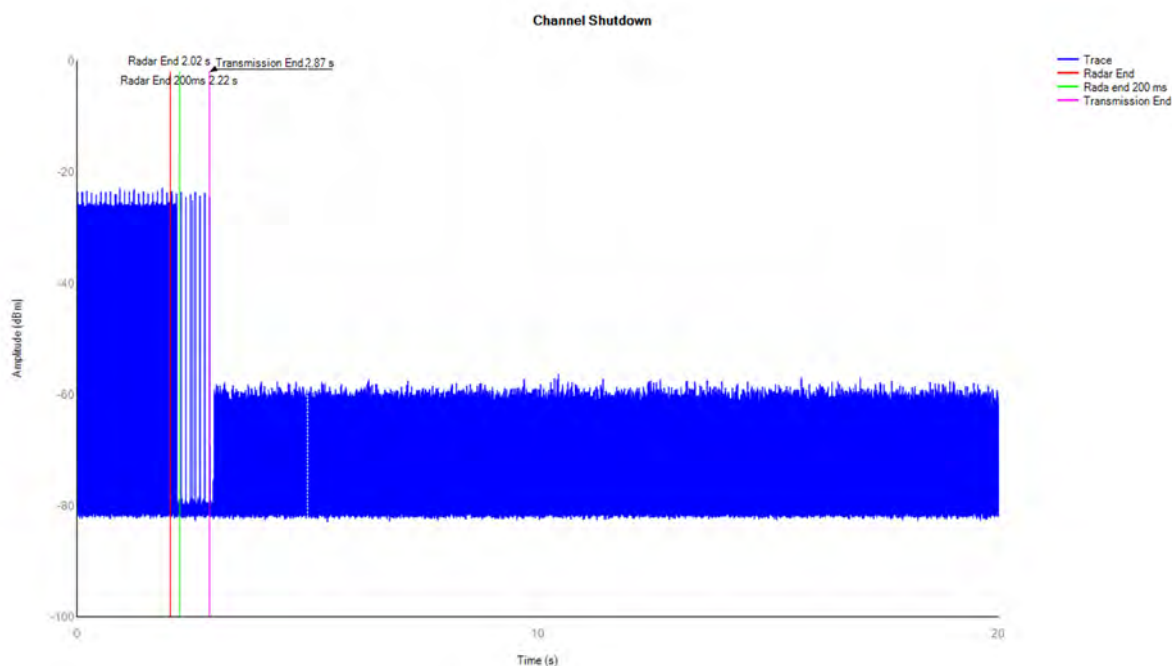
ac20 5260MHz Shutdown



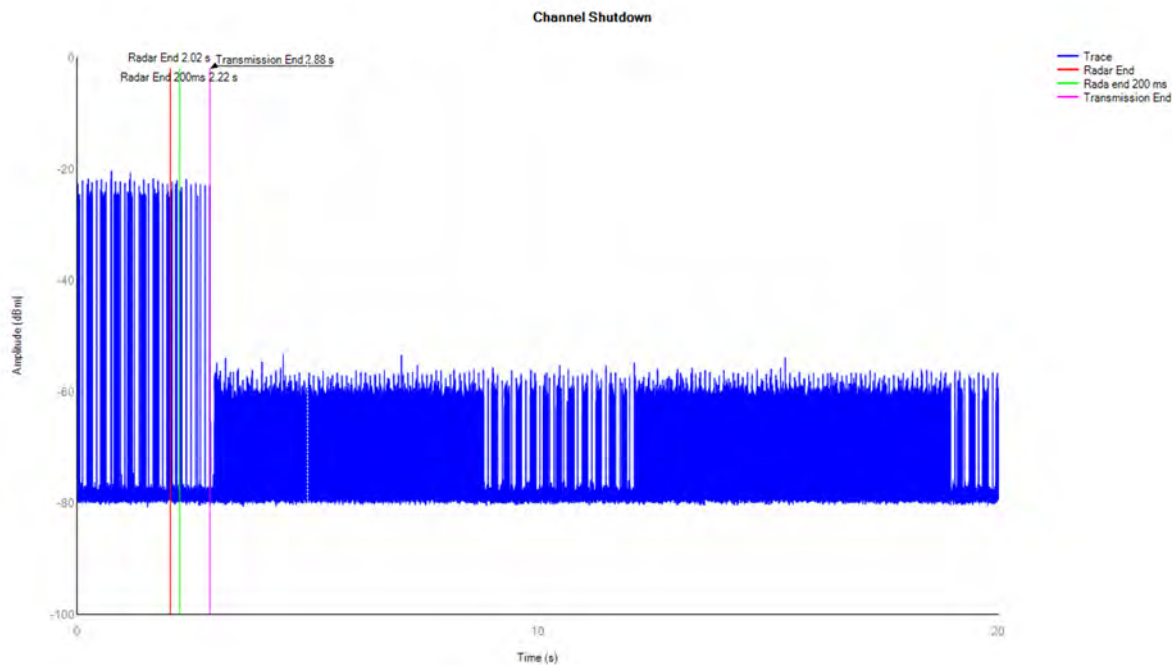
ac20 5500MHz Shutdown



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.



REPORT No.: SZ25070423W03

Non-Occupancy Period

Mode	Frequency (MHz)	Result	Verdict
ac20	5320	See test Graph	Pass
ac20	5500	See test Graph	Pass

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

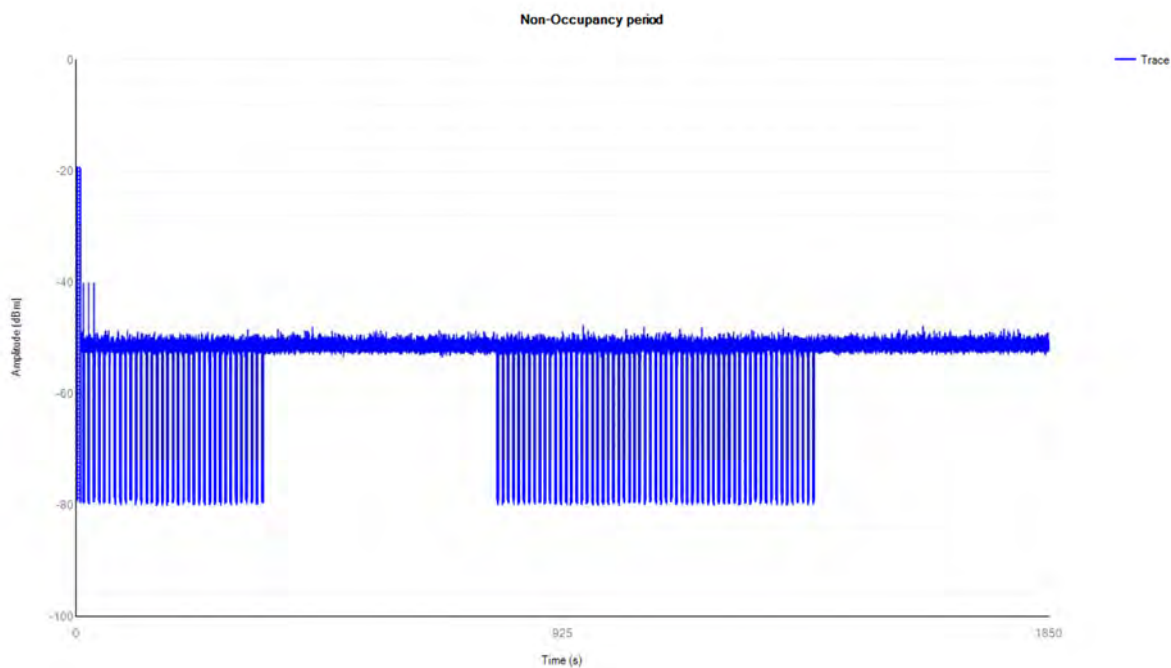
RBW: 3MHz

VBW: 3MHz

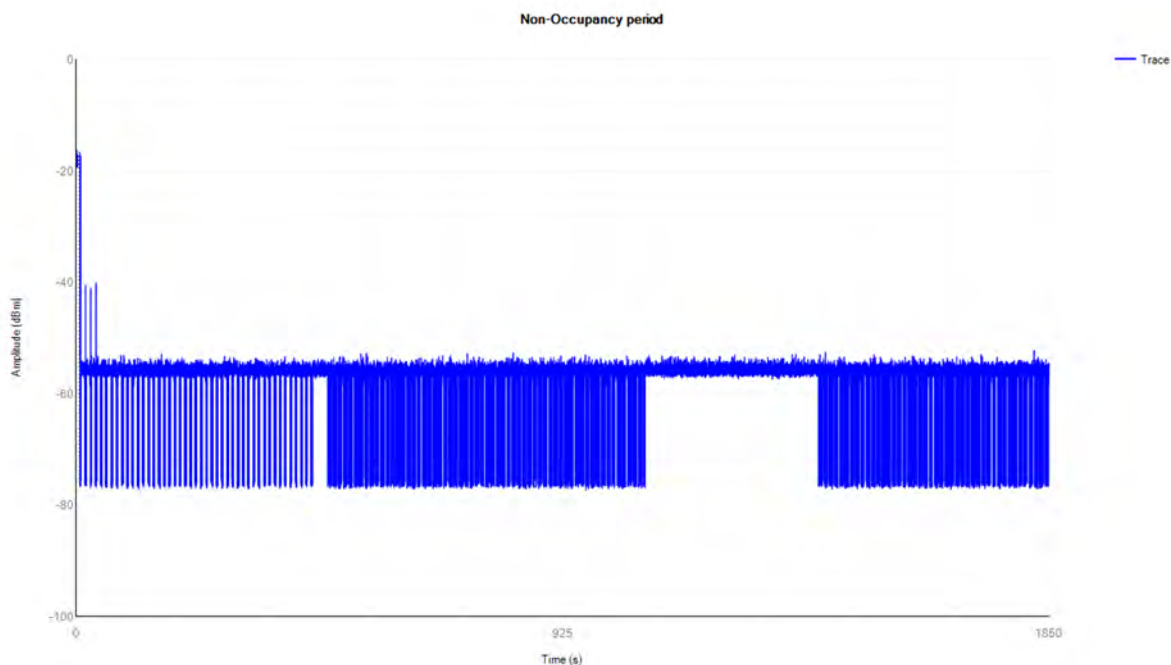
Sweep time: 1850s

Test Graphs

ac20 5320MHz Non-Occupancy



ac20 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+Data cable+Serial port board+PC+WIFI TX

Test voltage: AC 120V/60Hz

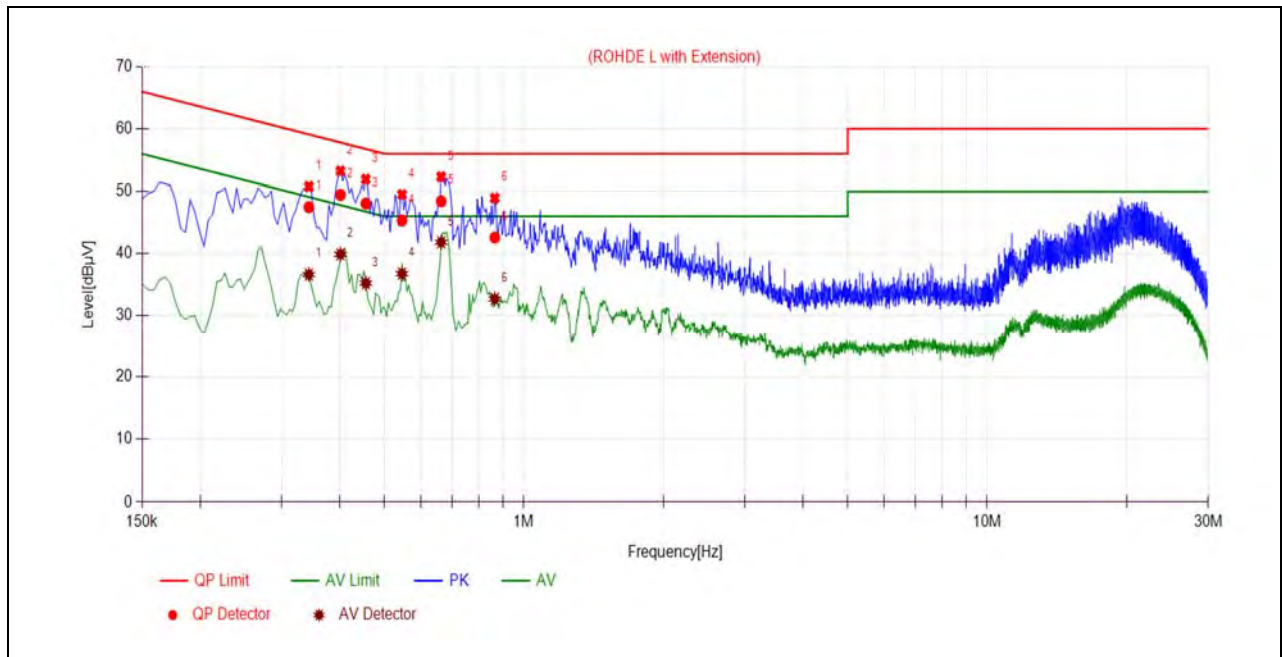
The measurement results are obtained as below:

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

U_R : Receiver Reading

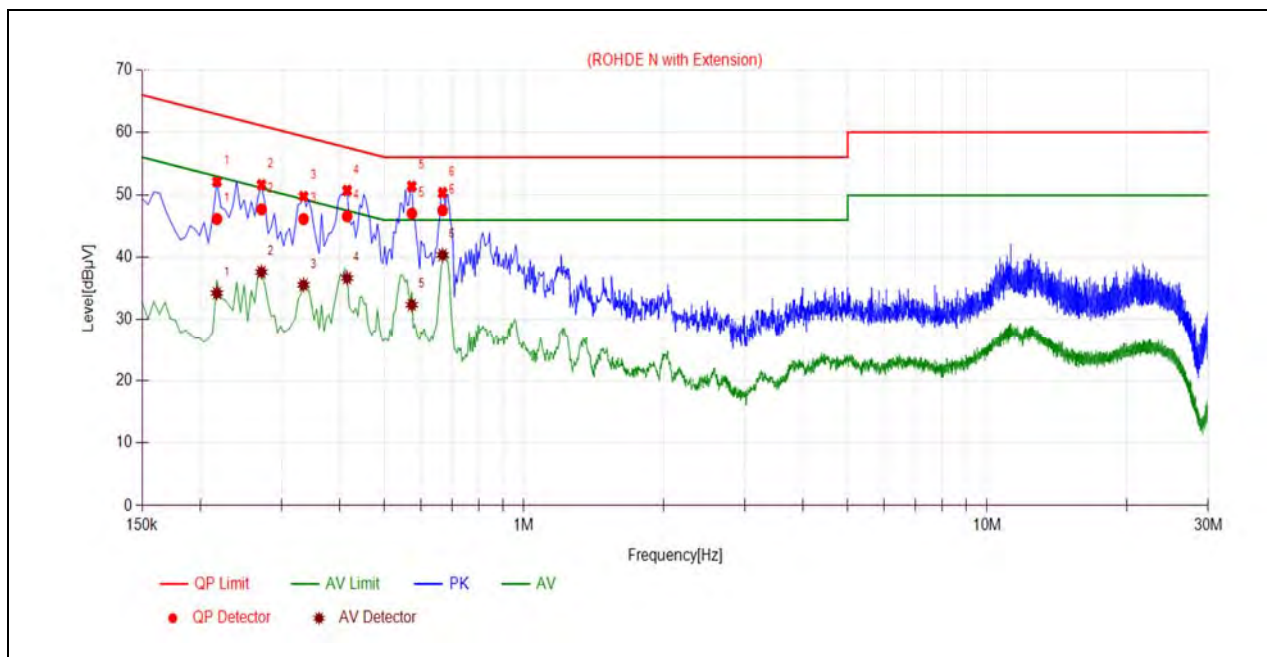
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.3435	47.49	36.65	59.12	49.12	Line	PASS
2	0.4020	49.46	39.90	57.81	47.81		PASS
3	0.4560	48.08	35.25	56.76	46.76		PASS
4	0.5459	45.37	36.79	56.00	46.00		PASS
5	0.6630	48.44	41.84	56.00	46.00		PASS
6	0.8655	42.60	32.71	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	0.2175	46.18	34.29	62.91	52.91	Neutral	PASS
2	0.2715	47.74	37.67	61.07	51.07		PASS
3	0.3345	46.18	35.61	59.34	49.34		PASS
4	0.4155	46.62	36.69	57.54	47.54		PASS
5	0.5730	47.07	32.40	56.00	46.00		PASS
6	0.6676	47.58	40.40	56.00	46.00		PASS

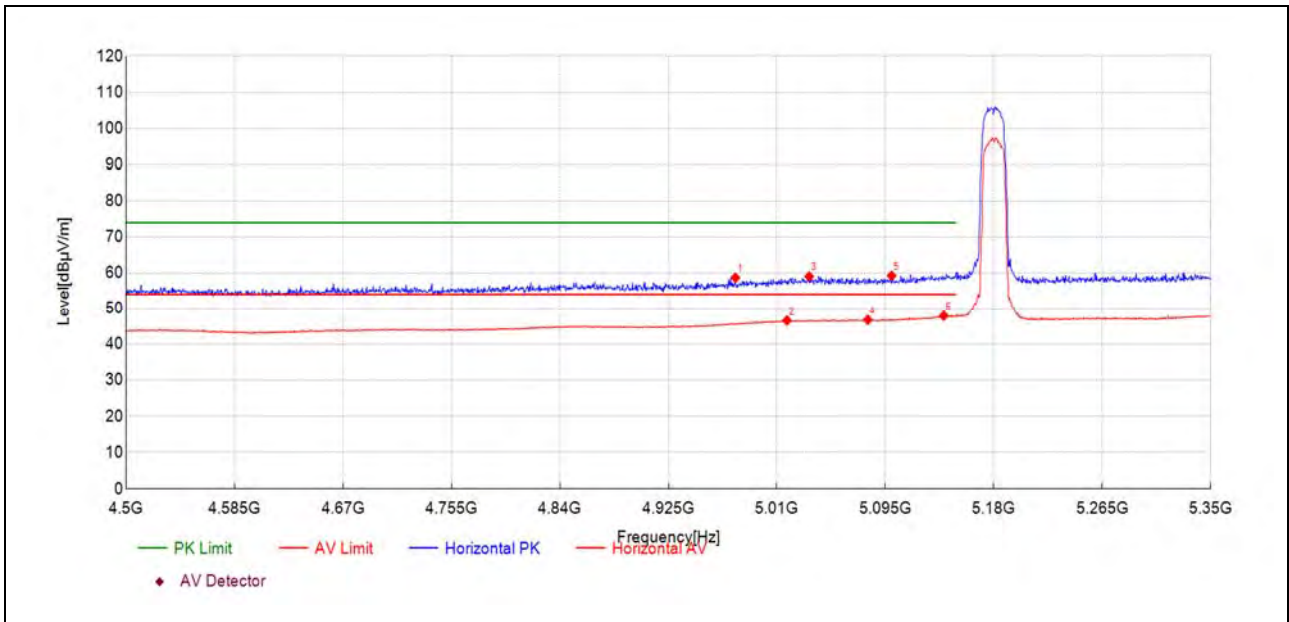
A.8. Restricted Frequency Bands

Note 1: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (Horizontal) 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

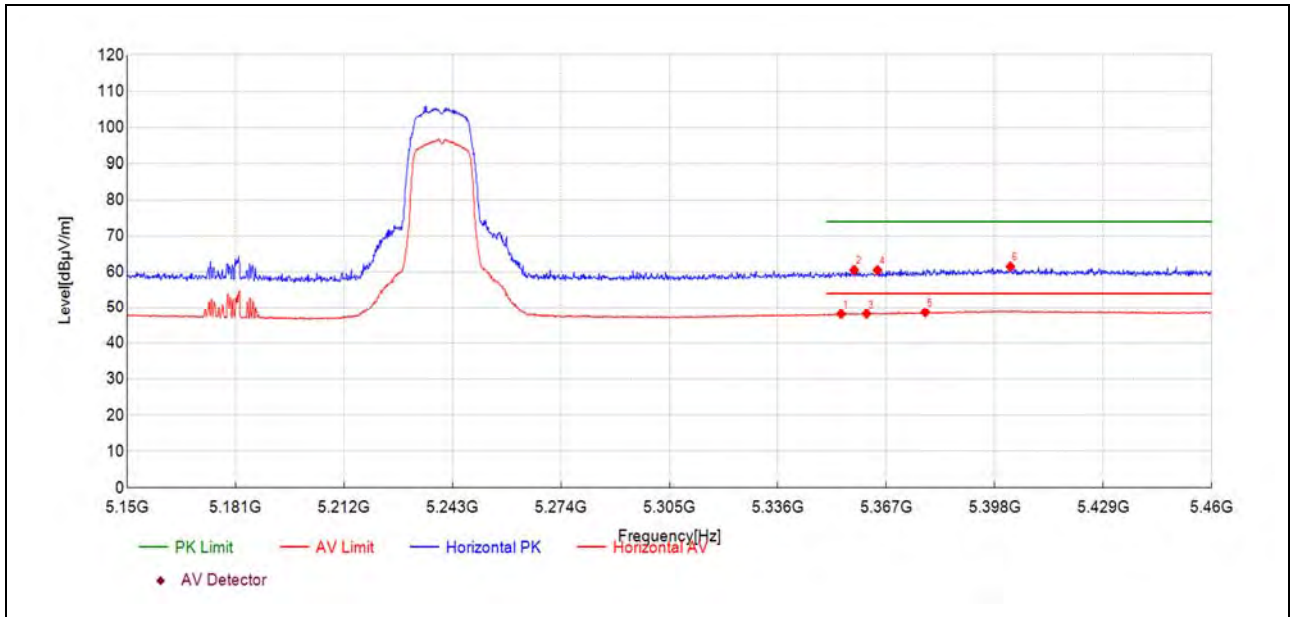
Plot for Channel 36



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
4977.51	46.0	58.70	12.660	74.00	15.30	240	PK	Horizontal	PASS
5017.91	33.5	46.62	13.150	54.00	7.38	310	AV	Horizontal	PASS
5035.34	45.8	59.05	13.300	74.00	14.95	20	PK	Horizontal	PASS
5081.27	33.2	46.83	13.590	54.00	7.17	254	AV	Horizontal	PASS
5099.97	45.6	59.26	13.680	74.00	14.74	260	PK	Horizontal	PASS
5140.80	33.5	47.94	14.420	54.00	6.06	254	AV	Horizontal	PASS



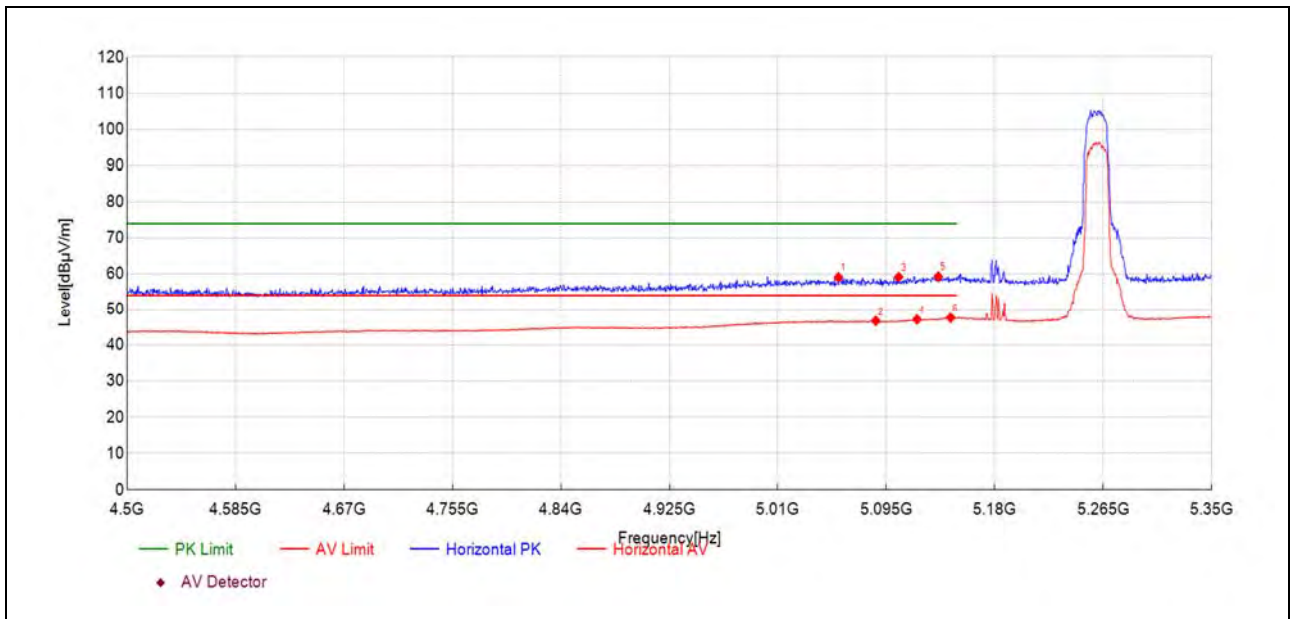
Plot for Channel 48



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5354.08	33.1	48.14	15.040	54.00	5.86	257	AV	Horizontal	PASS
5357.80	45.5	60.55	15.090	74.00	13.45	24	PK	Horizontal	PASS
5361.37	33.1	48.21	15.140	54.00	5.79	342	AV	Horizontal	PASS
5364.47	45.3	60.52	15.180	74.00	13.48	323	PK	Horizontal	PASS
5378.12	33.2	48.60	15.370	54.00	5.40	288	AV	Horizontal	PASS
5402.47	45.9	61.54	15.650	74.00	12.46	87	PK	Horizontal	PASS



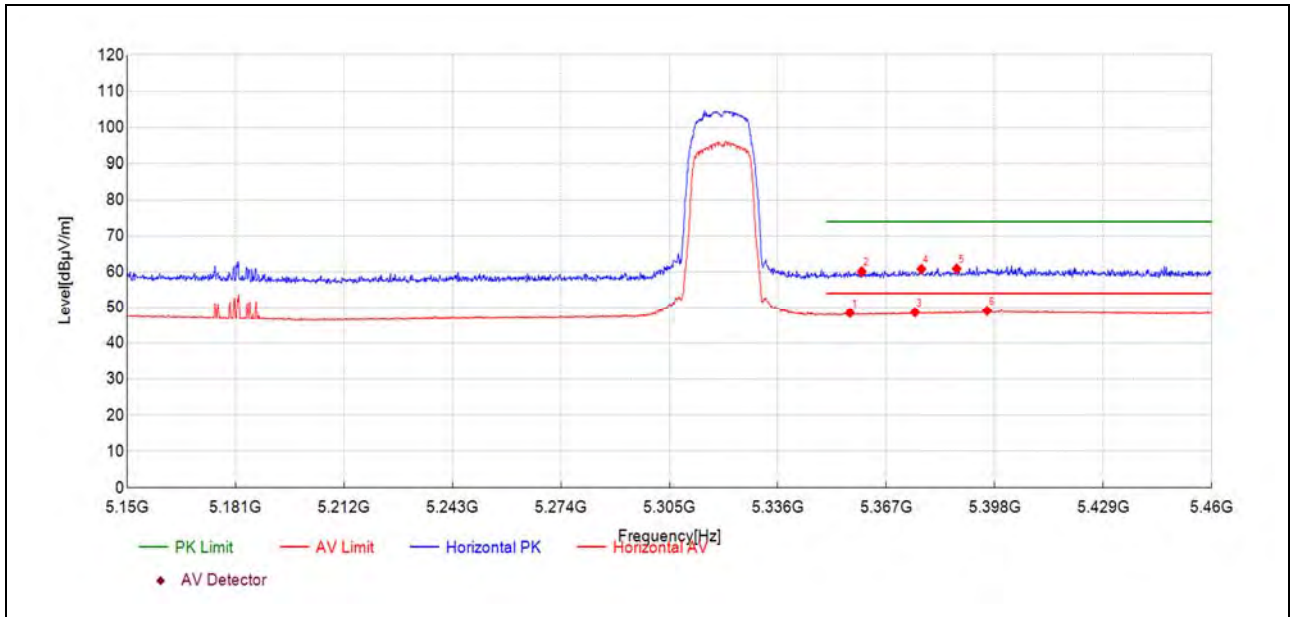
Plot for Channel 52



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5057.45	45.6	59.08	13.470	74.00	14.92	274	PK	Horizontal	PASS
5086.79	33.2	46.79	13.610	54.00	7.21	205	AV	Horizontal	PASS
5104.65	45.4	59.14	13.760	74.00	14.86	30	PK	Horizontal	PASS
5119.11	33.2	47.17	14.020	54.00	6.83	193	AV	Horizontal	PASS
5135.69	45.0	59.30	14.330	74.00	14.70	73	PK	Horizontal	PASS
5145.47	33.2	47.66	14.510	54.00	6.34	255	AV	Horizontal	PASS



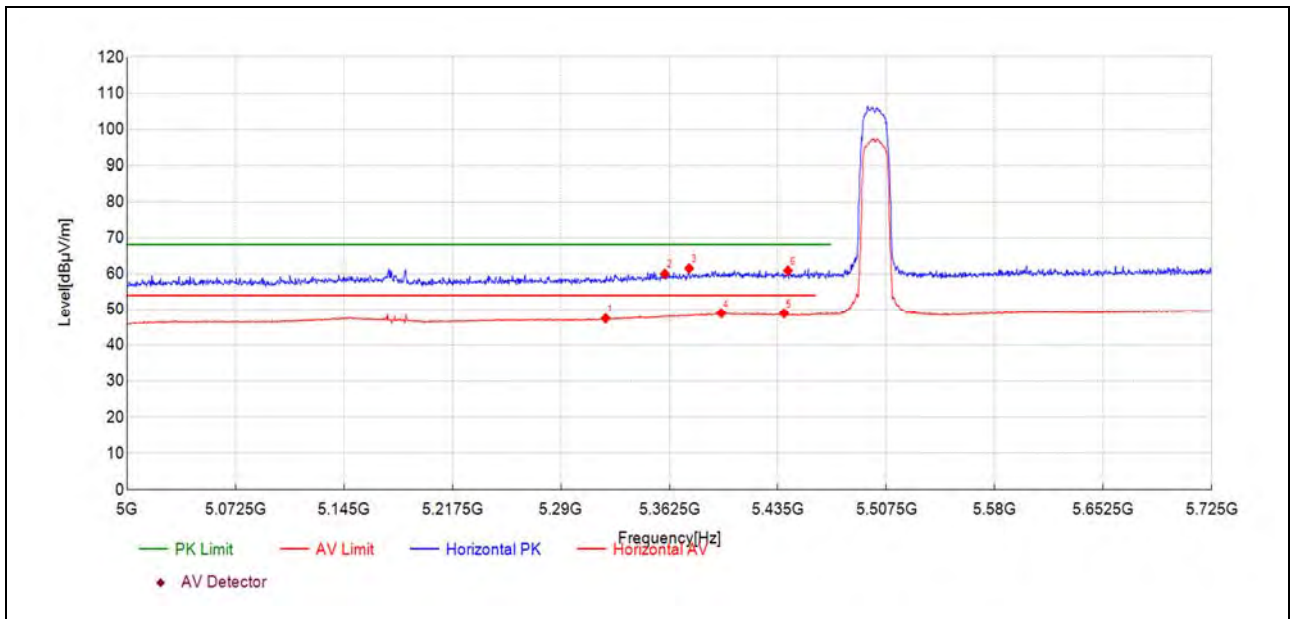
Plot for Channel 64



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5356.56	33.4	48.48	15.070	54.00	5.52	193	AV	Horizontal	PASS
5359.97	45.0	60.14	15.120	74.00	13.86	193	PK	Horizontal	PASS
5375.17	33.3	48.65	15.330	54.00	5.35	275	AV	Horizontal	PASS
5377.03	45.5	60.84	15.360	74.00	13.16	237	PK	Horizontal	PASS
5387.11	45.4	60.94	15.500	74.00	13.06	187	PK	Horizontal	PASS
5395.80	33.5	49.11	15.620	54.00	4.89	262	AV	Horizontal	PASS

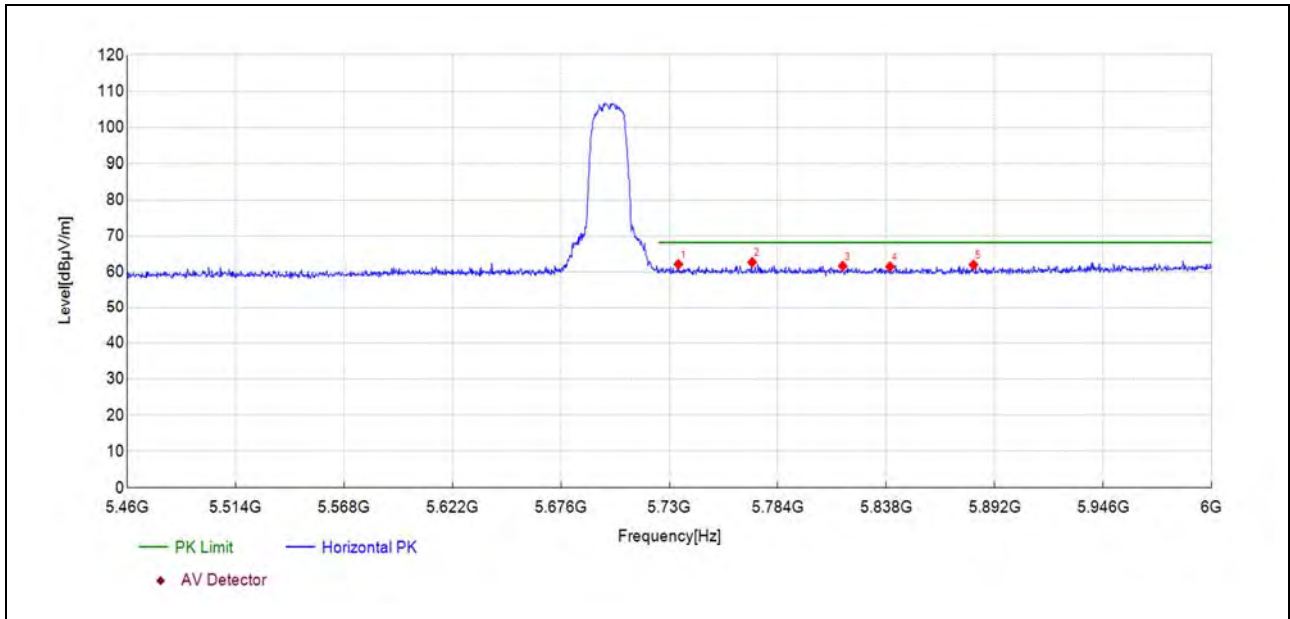


Plot for Channel 100



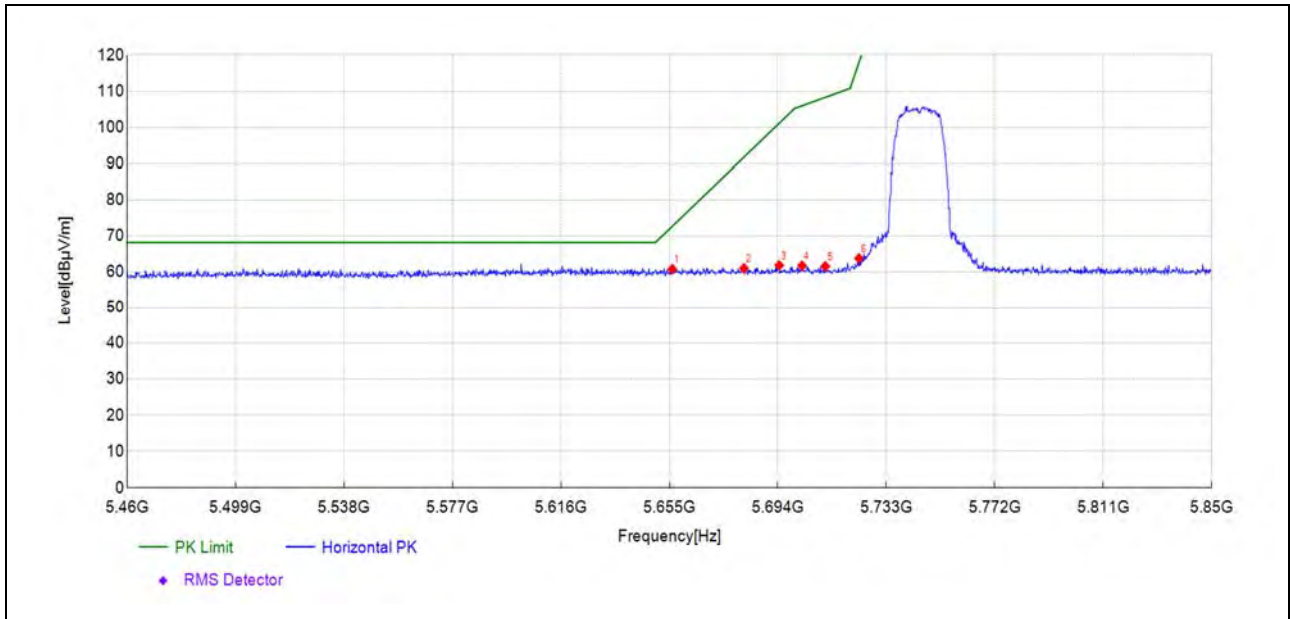
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5319.88	32.8	47.48	14.690	54.00	6.52	313	AV	Horizontal	PASS
5359.42	44.9	60.04	15.110	68.23	8.19	256	PK	Horizontal	PASS
5375.74	46.3	61.59	15.340	68.23	6.64	256	PK	Horizontal	PASS
5397.14	33.4	49.00	15.640	54.00	5.00	16	AV	Horizontal	PASS
5439.21	33.8	48.97	15.200	54.00	5.03	186	AV	Horizontal	PASS
5441.75	45.8	60.96	15.170	68.23	7.27	47	PK	Horizontal	PASS

Plot for Channel 140



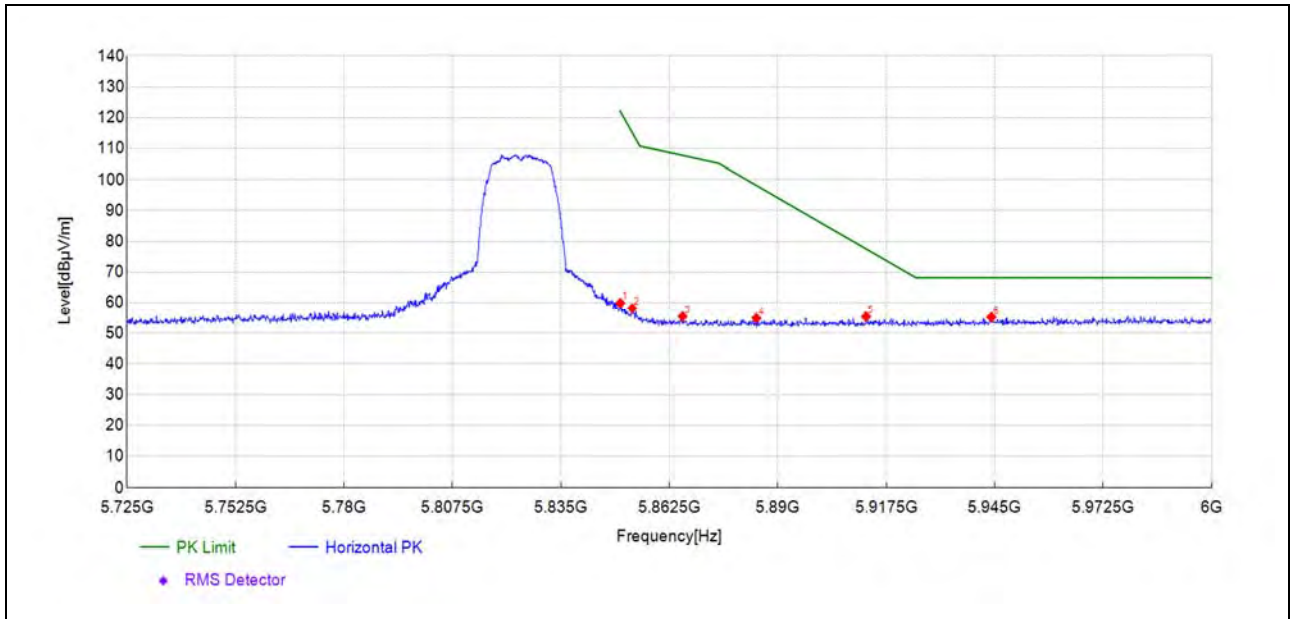
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5734.46	45.9	62.17	16.260	68.23	6.06	183	PK	Horizontal	PASS
5771.20	46.6	62.72	16.170	68.23	5.51	218	PK	Horizontal	PASS
5816.31	45.7	61.68	15.980	68.23	6.55	262	PK	Horizontal	PASS
5839.81	45.5	61.50	15.970	68.23	6.73	183	PK	Horizontal	PASS
5881.41	45.9	62.00	16.090	68.23	6.23	82	PK	Horizontal	PASS

Plot for Channel 149



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5656.07	45.0	60.82	15.860	72.72	11.90	98	PK	Horizontal	PASS
5681.83	45.0	61.05	16.060	91.78	30.73	115	PK	Horizontal	PASS
5694.51	45.7	61.88	16.160	101.17	39.29	233	PK	Horizontal	PASS
5702.70	45.6	61.78	16.200	105.99	44.21	171	PK	Horizontal	PASS
5711.09	45.4	61.58	16.220	108.34	46.76	166	PK	Horizontal	PASS
5723.19	47.6	63.80	16.240	118.10	54.30	194	PK	Horizontal	PASS

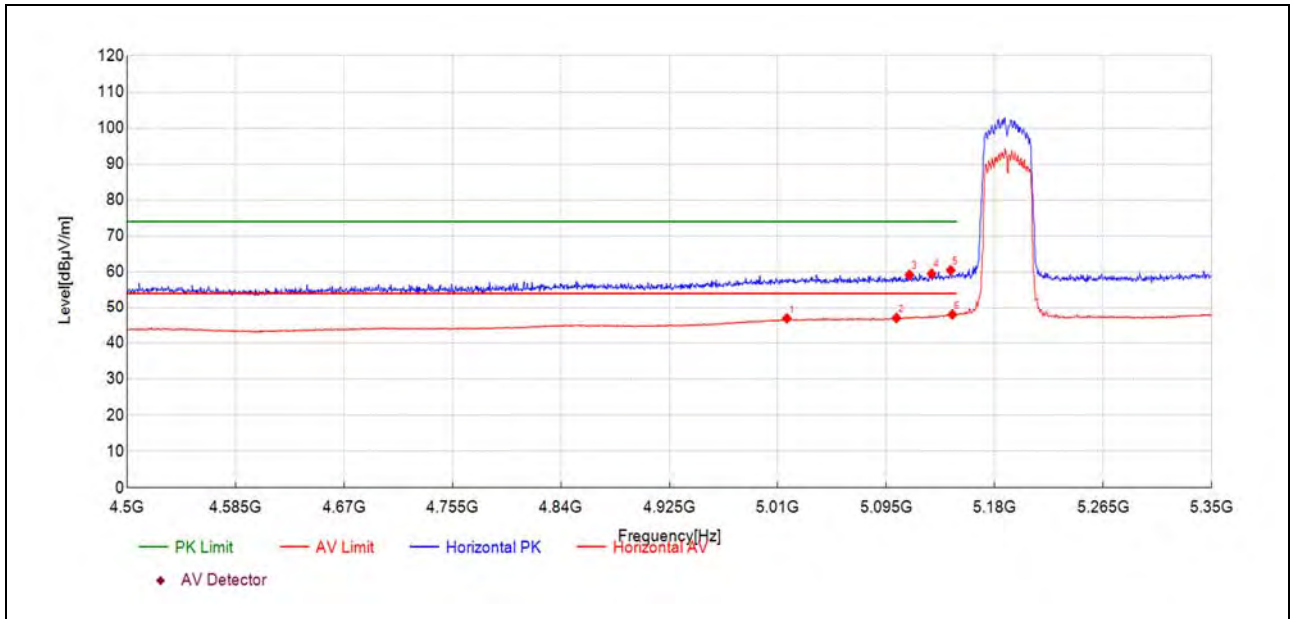
Plot for Channel 165



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5852.94	45.5	61.50	15.980	115.53	54.03	88	PK	Horizontal	PASS
5862.71	45.2	61.20	16.010	108.67	47.47	360	PK	Horizontal	PASS
5877.56	46.6	62.68	16.070	103.33	40.65	133	PK	Horizontal	PASS
5900.68	45.8	61.96	16.150	86.23	24.27	190	PK	Horizontal	PASS
5912.51	45.8	62.10	16.260	77.48	15.38	286	PK	Horizontal	PASS
5951.85	45.8	62.32	16.570	68.23	5.91	269	PK	Horizontal	PASS

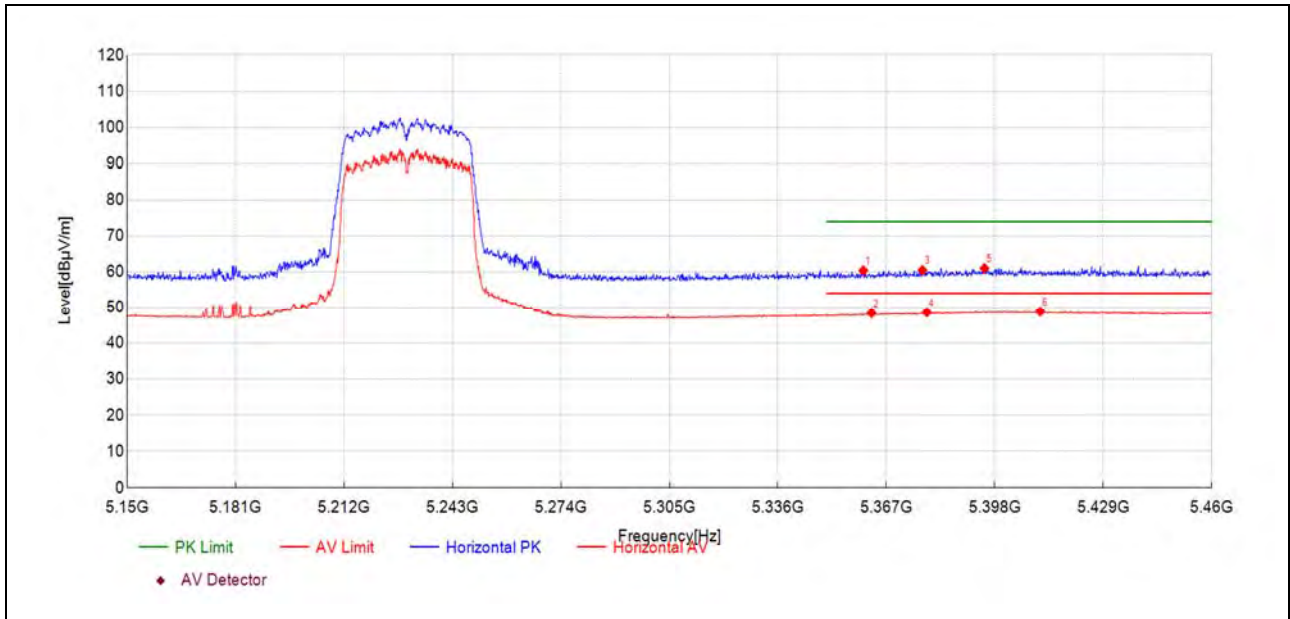
**802.11n (HT40) Mode**

Plot for Channel 38



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5017.06	33.7	46.86	13.140	54.00	7.14	281	AV	Horizontal	PASS
5102.95	33.2	46.97	13.730	54.00	7.03	275	AV	Horizontal	PASS
5113.16	45.3	59.22	13.920	74.00	14.78	287	PK	Horizontal	PASS
5130.59	45.3	59.54	14.240	74.00	14.46	48	PK	Horizontal	PASS
5145.47	46.0	60.50	14.510	74.00	13.50	355	PK	Horizontal	PASS
5146.75	33.4	47.93	14.530	54.00	6.07	350	AV	Horizontal	PASS

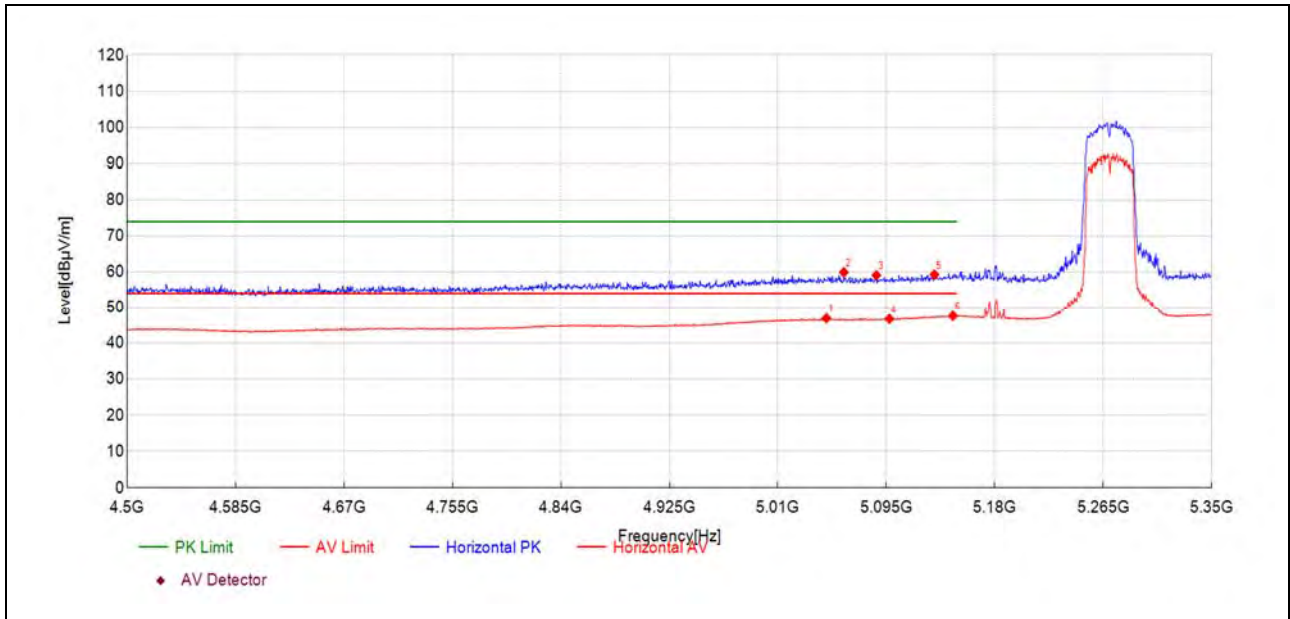
Plot for Channel 46



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5360.44	45.3	60.41	15.130	74.00	13.59	320	PK	Horizontal	PASS
5362.77	33.3	48.45	15.160	54.00	5.55	18	AV	Horizontal	PASS
5377.34	45.2	60.51	15.360	74.00	13.49	206	PK	Horizontal	PASS
5378.58	33.3	48.64	15.380	54.00	5.36	137	AV	Horizontal	PASS
5395.02	45.4	61.04	15.610	74.00	12.96	244	PK	Horizontal	PASS
5411.00	33.3	48.88	15.540	54.00	5.12	11	AV	Horizontal	PASS



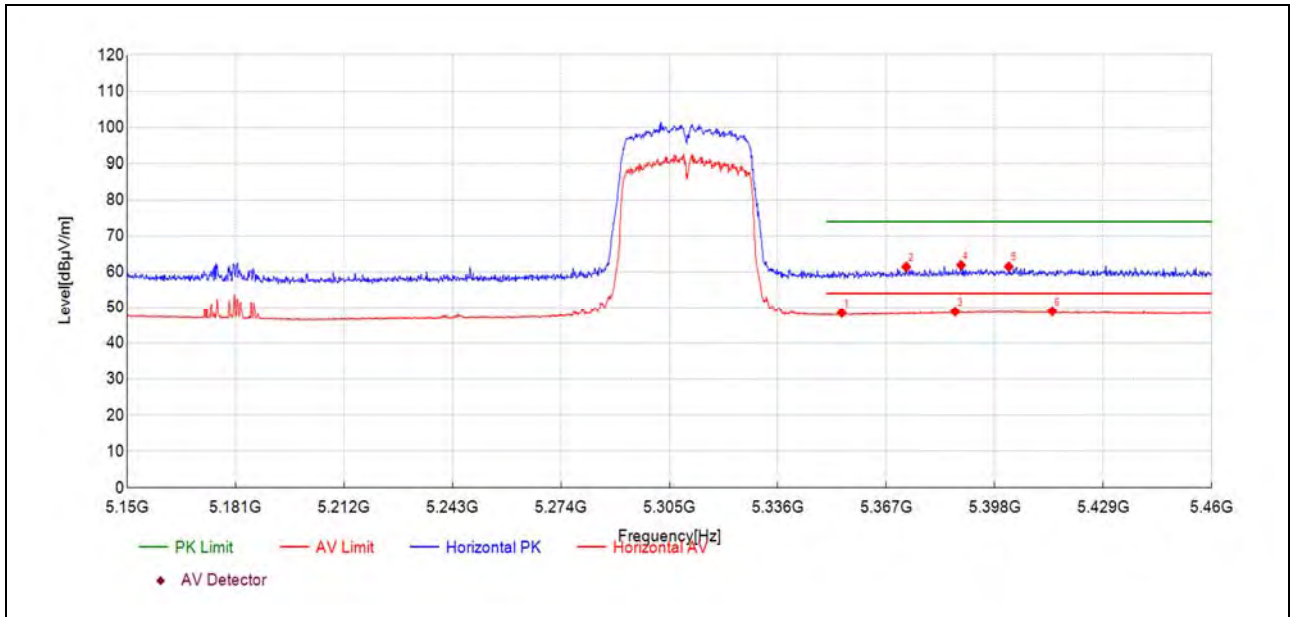
Plot for Channel 54



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5048.10	33.5	46.95	13.420	54.00	7.05	98	AV	Horizontal	PASS
5061.71	46.5	59.94	13.490	74.00	14.06	206	PK	Horizontal	PASS
5087.22	45.5	59.10	13.610	74.00	14.90	256	PK	Horizontal	PASS
5097.42	33.1	46.78	13.660	54.00	7.22	200	AV	Horizontal	PASS
5132.72	45.0	59.28	14.280	74.00	14.72	29	PK	Horizontal	PASS
5147.17	33.1	47.63	14.540	54.00	6.37	187	AV	Horizontal	PASS

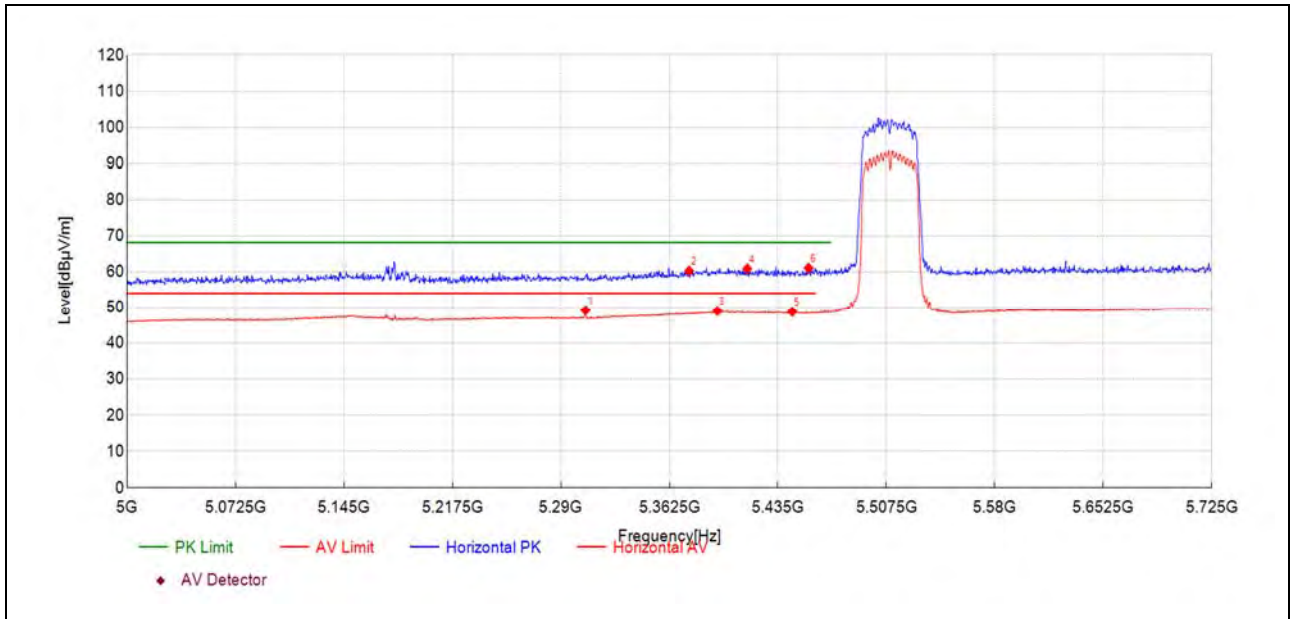


Plot for Channel 62



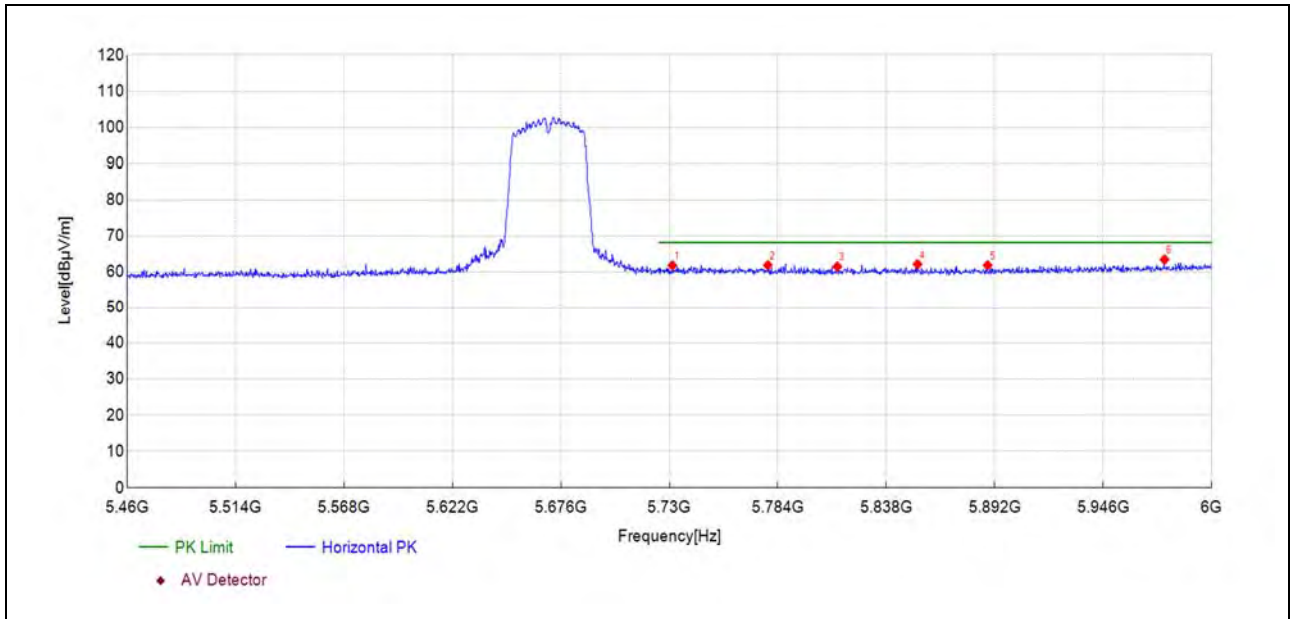
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5354.24	33.5	48.50	15.040	54.00	5.50	205	AV	Horizontal	PASS
5372.69	46.2	61.45	15.300	74.00	12.55	325	PK	Horizontal	PASS
5386.65	33.4	48.88	15.490	54.00	5.12	105	AV	Horizontal	PASS
5388.35	46.4	61.90	15.520	74.00	12.10	280	PK	Horizontal	PASS
5402.00	45.8	61.50	15.660	74.00	12.50	280	PK	Horizontal	PASS
5414.41	33.5	48.98	15.500	54.00	5.02	350	AV	Horizontal	PASS

Plot for Channel 102



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5306.47	34.7	49.24	14.550	54.00	4.76	263	AV	Horizontal	PASS
5375.74	45.0	60.32	15.340	68.23	7.91	219	PK	Horizontal	PASS
5394.60	33.5	49.07	15.600	54.00	4.93	200	AV	Horizontal	PASS
5414.54	45.4	60.92	15.510	68.23	7.31	193	PK	Horizontal	PASS
5444.65	33.7	48.84	15.140	54.00	5.16	207	AV	Horizontal	PASS
5455.53	46.0	61.10	15.090	68.23	7.13	351	PK	Horizontal	PASS

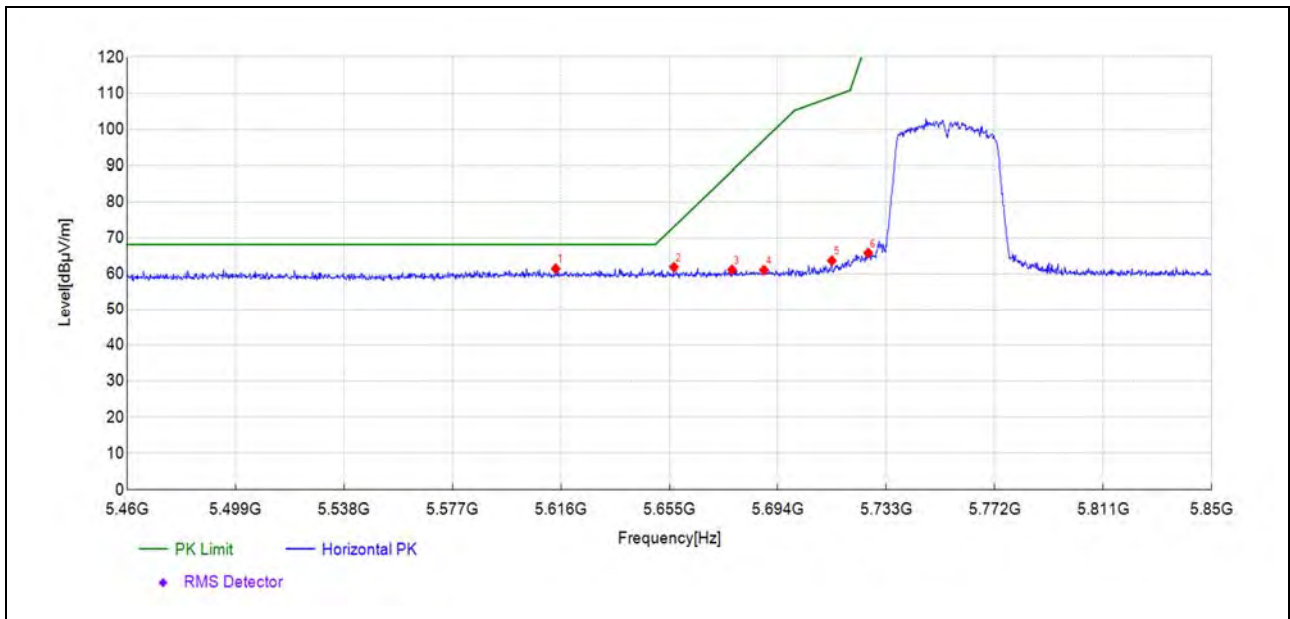
Plot for Channel 134



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5731.49	45.6	61.84	16.260	68.23	6.39	71	PK	Horizontal	PASS
5779.03	45.8	61.91	16.120	68.23	6.32	190	PK	Horizontal	PASS
5813.61	45.5	61.52	15.980	68.23	6.71	20	PK	Horizontal	PASS
5853.59	46.2	62.20	15.980	68.23	6.03	335	PK	Horizontal	PASS
5888.43	45.8	61.90	16.100	68.23	6.33	301	PK	Horizontal	PASS
5976.50	46.6	63.47	16.860	68.23	4.76	20	PK	Horizontal	PASS

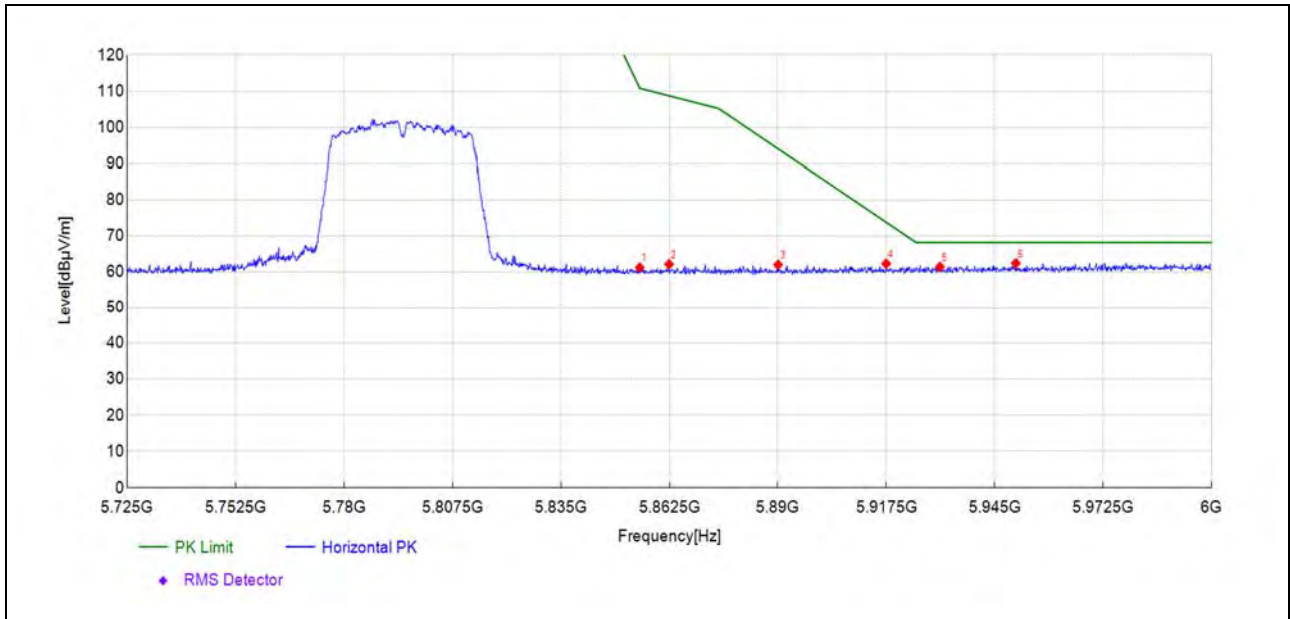


Plot for Channel 151



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5614.13	45.6	61.49	15.880	68.23	6.74	32	PK	Horizontal	PASS
5656.66	46.1	61.94	15.860	73.16	11.22	178	PK	Horizontal	PASS
5677.53	45.2	61.20	16.030	88.60	27.40	9	PK	Horizontal	PASS
5689.04	45.0	61.12	16.110	97.12	36.00	94	PK	Horizontal	PASS
5713.43	47.5	63.74	16.220	108.99	45.25	183	PK	Horizontal	PASS
5726.50	49.6	65.86	16.250	-	-	189	PK	Horizontal	PASS

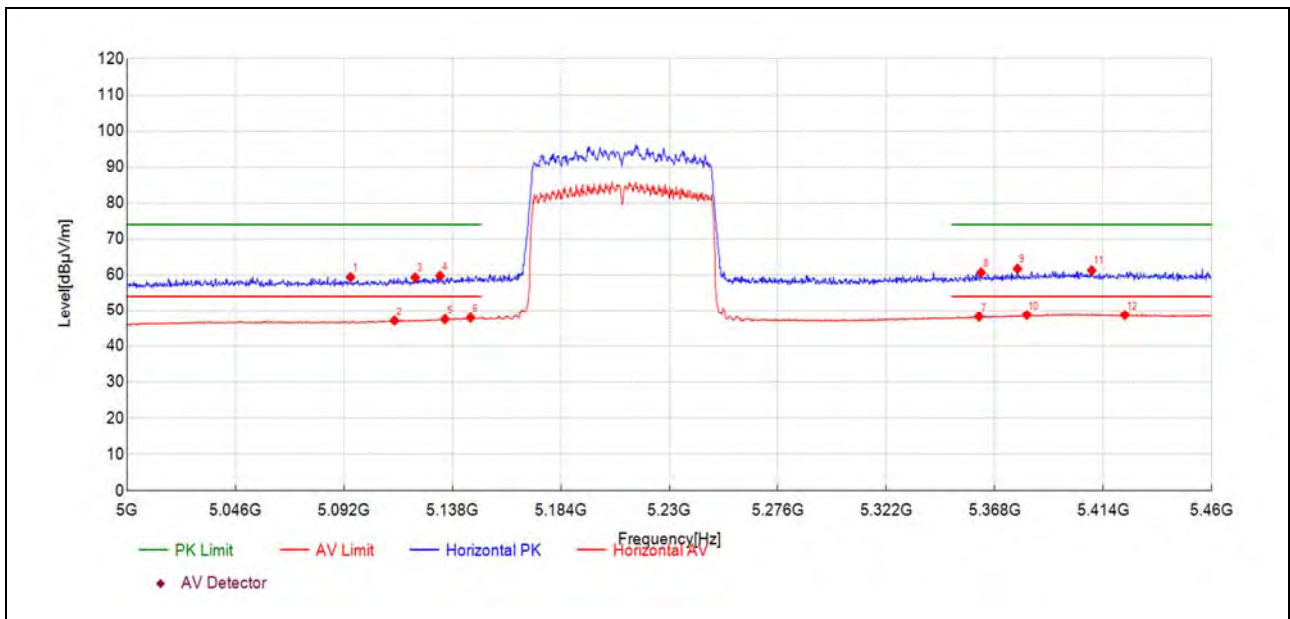
Plot for Channel 159



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5855.00	45.3	61.25	15.990	110.83	49.58	339	PK	Horizontal	PASS
5862.43	46.2	62.19	16.020	108.75	46.56	360	PK	Horizontal	PASS
5890.08	45.9	62.03	16.110	94.07	32.04	289	PK	Horizontal	PASS
5917.46	46.1	62.33	16.280	73.81	11.48	48	PK	Horizontal	PASS
5931.08	45.0	61.44	16.400	68.23	6.79	312	PK	Horizontal	PASS
5950.34	45.9	62.45	16.550	68.23	5.78	359	PK	Horizontal	PASS

**802.11ac (VHT80) Mode**

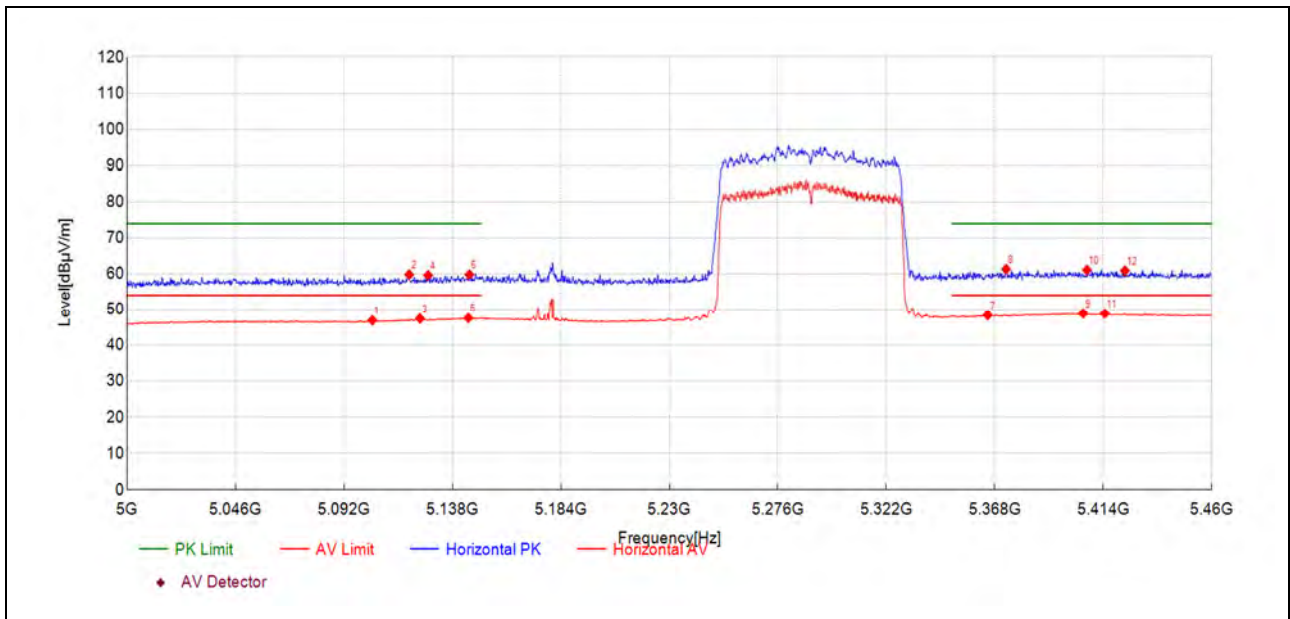
Plot for Channel 42



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5094.81	45.7	59.38	13.650	74.00	14.62	207	PK	Horizontal	PASS
5113.45	33.2	47.08	13.920	54.00	6.92	281	AV	Horizontal	PASS
5122.19	45.2	59.30	14.080	74.00	14.70	344	PK	Horizontal	PASS
5132.78	45.5	59.75	14.280	74.00	14.25	130	PK	Horizontal	PASS
5134.85	33.2	47.52	14.320	54.00	6.48	194	AV	Horizontal	PASS
5145.66	33.4	47.90	14.510	54.00	6.10	42	AV	Horizontal	PASS
5361.28	33.1	48.24	15.140	54.00	5.76	67	AV	Horizontal	PASS
5362.20	45.5	60.66	15.150	74.00	13.34	275	PK	Horizontal	PASS
5377.62	46.4	61.73	15.370	74.00	12.27	118	PK	Horizontal	PASS
5381.53	33.3	48.74	15.420	54.00	5.26	207	AV	Horizontal	PASS
5409.14	45.7	61.26	15.560	74.00	12.74	149	PK	Horizontal	PASS
5423.18	33.3	48.70	15.400	54.00	5.30	207	AV	Horizontal	PASS



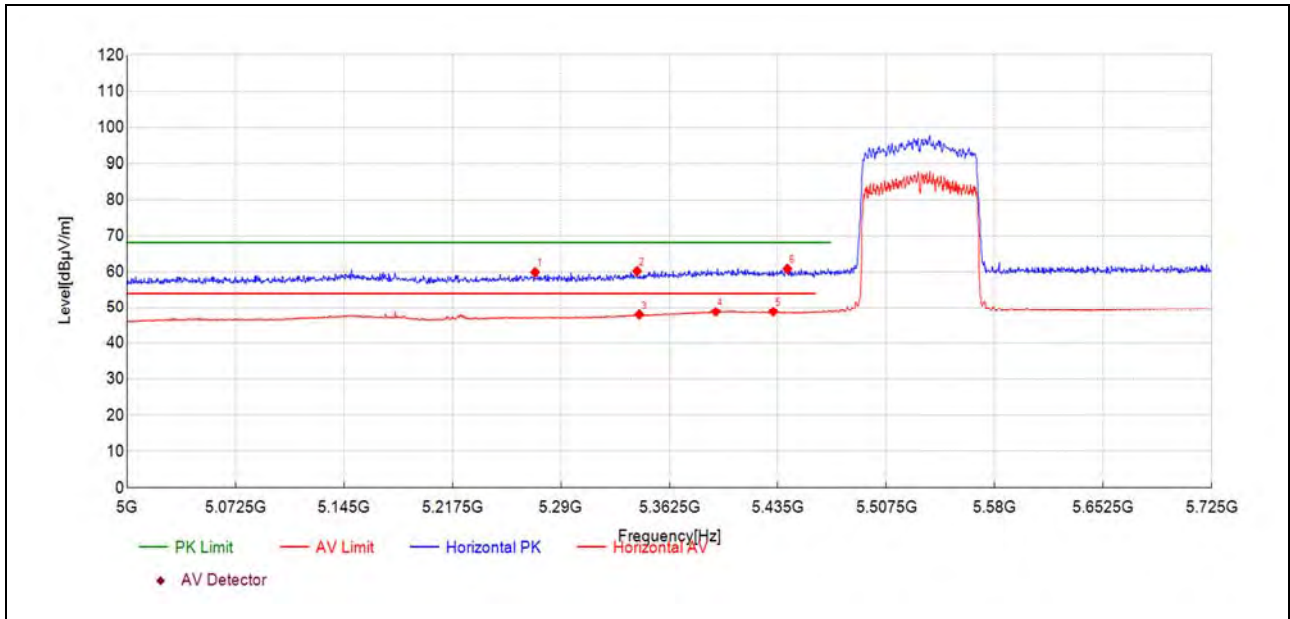
Plot for Channel 58



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5104.01	33.2	46.95	13.750	54.00	7.05	3	AV	Horizontal	PASS
5119.66	45.8	59.84	14.030	74.00	14.16	86	PK	Horizontal	PASS
5124.26	33.3	47.45	14.120	54.00	6.55	98	AV	Horizontal	PASS
5127.71	45.5	59.66	14.190	74.00	14.34	307	PK	Horizontal	PASS
5144.74	33.1	47.60	14.500	54.00	6.40	92	AV	Horizontal	PASS
5145.20	45.3	59.83	14.500	74.00	14.17	270	PK	Horizontal	PASS
5364.96	33.2	48.42	15.190	54.00	5.58	54	AV	Horizontal	PASS
5372.79	46.1	61.36	15.300	74.00	12.64	263	PK	Horizontal	PASS
5405.46	33.3	48.89	15.610	54.00	5.11	169	AV	Horizontal	PASS
5407.07	45.5	61.12	15.600	74.00	12.88	162	PK	Horizontal	PASS
5414.67	33.3	48.85	15.510	54.00	5.15	313	AV	Horizontal	PASS
5423.18	45.5	60.93	15.400	74.00	13.07	23	PK	Horizontal	PASS

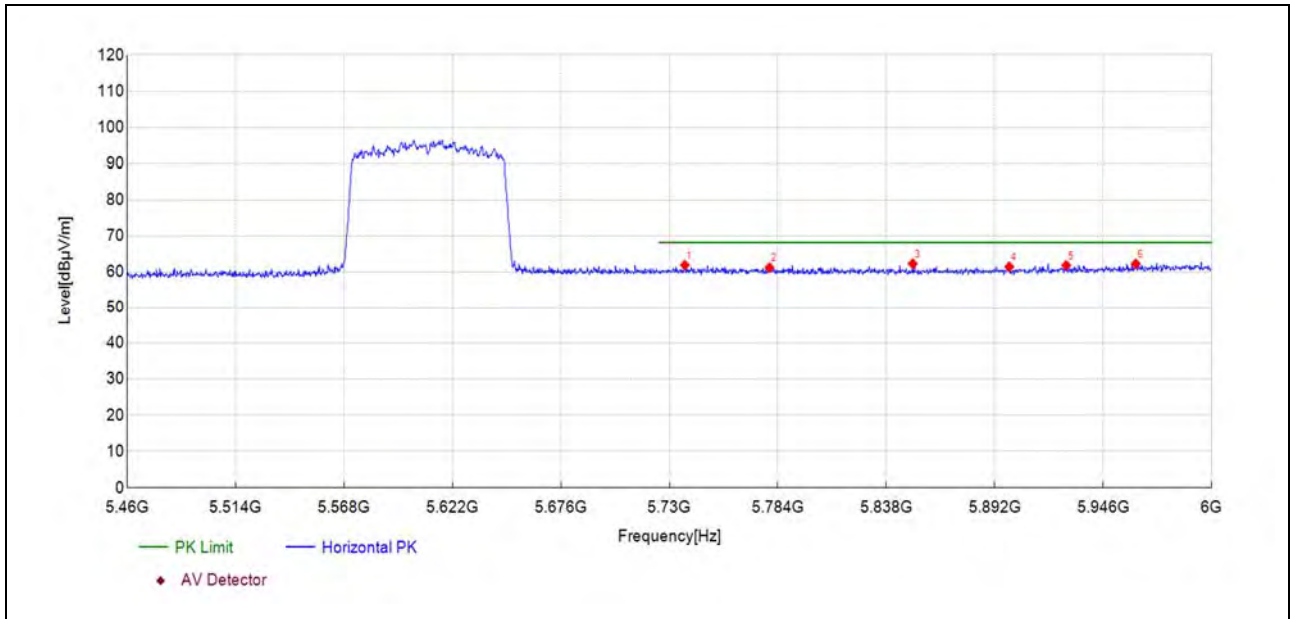


Plot for Channel 106



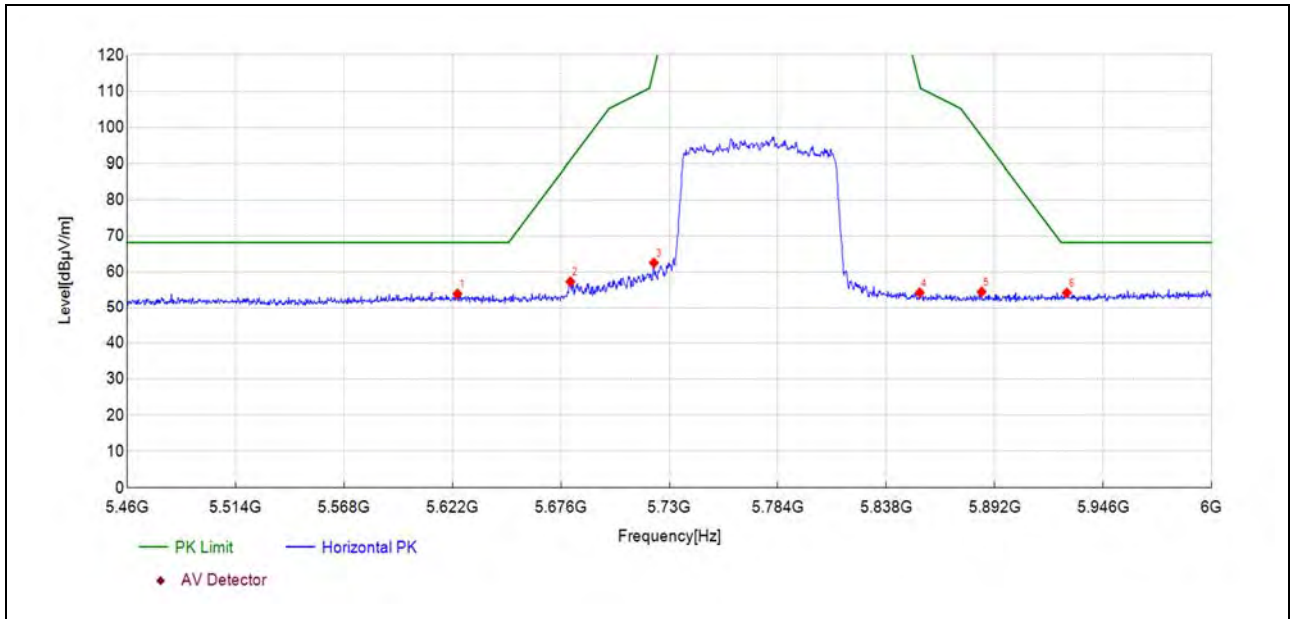
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5272.74	45.5	59.94	14.430	68.23	8.29	104	PK	Horizontal	PASS
5340.92	45.4	60.25	14.900	68.23	7.98	198	PK	Horizontal	PASS
5342.37	33.1	47.96	14.910	54.00	6.04	254	AV	Horizontal	PASS
5393.51	33.2	48.82	15.590	54.00	5.18	35	AV	Horizontal	PASS
5431.95	33.5	48.83	15.290	54.00	5.17	204	AV	Horizontal	PASS
5441.38	45.7	60.90	15.180	68.23	7.33	86	PK	Horizontal	PASS

Plot for Channel 122



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5737.70	45.7	61.93	16.270	68.23	6.30	358	PK	Horizontal	PASS
5779.84	45.1	61.25	16.110	68.23	6.98	100	PK	Horizontal	PASS
5851.16	46.4	62.34	15.970	68.23	5.89	173	PK	Horizontal	PASS
5899.24	45.3	61.48	16.150	68.23	6.75	359	PK	Horizontal	PASS
5927.60	45.5	61.88	16.380	68.23	6.35	43	PK	Horizontal	PASS
5962.18	45.6	62.29	16.690	68.23	5.94	60	PK	Horizontal	PASS

Plot for Channel 155



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5624.51	38.1	53.96	15.860	68.23	14.27	214	PK	Horizontal	PASS
5680.70	41.3	57.34	16.040	90.95	33.61	189	PK	Horizontal	PASS
5722.30	46.3	62.58	16.250	116.08	53.50	214	PK	Horizontal	PASS
5854.67	38.3	54.28	15.990	111.59	57.31	118	PK	Horizontal	PASS
5885.46	38.4	54.52	16.100	97.49	42.97	42	PK	Horizontal	PASS
5927.87	37.9	54.24	16.380	68.23	13.99	160	PK	Horizontal	PASS



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:

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

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.

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.

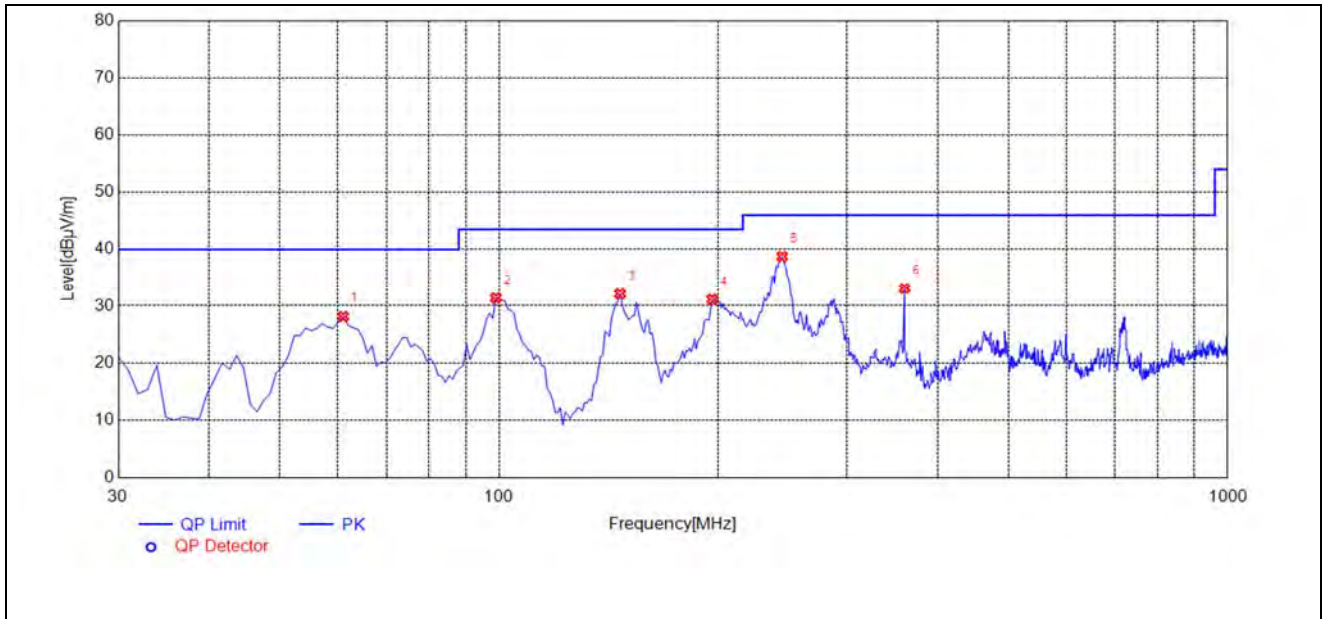
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

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.

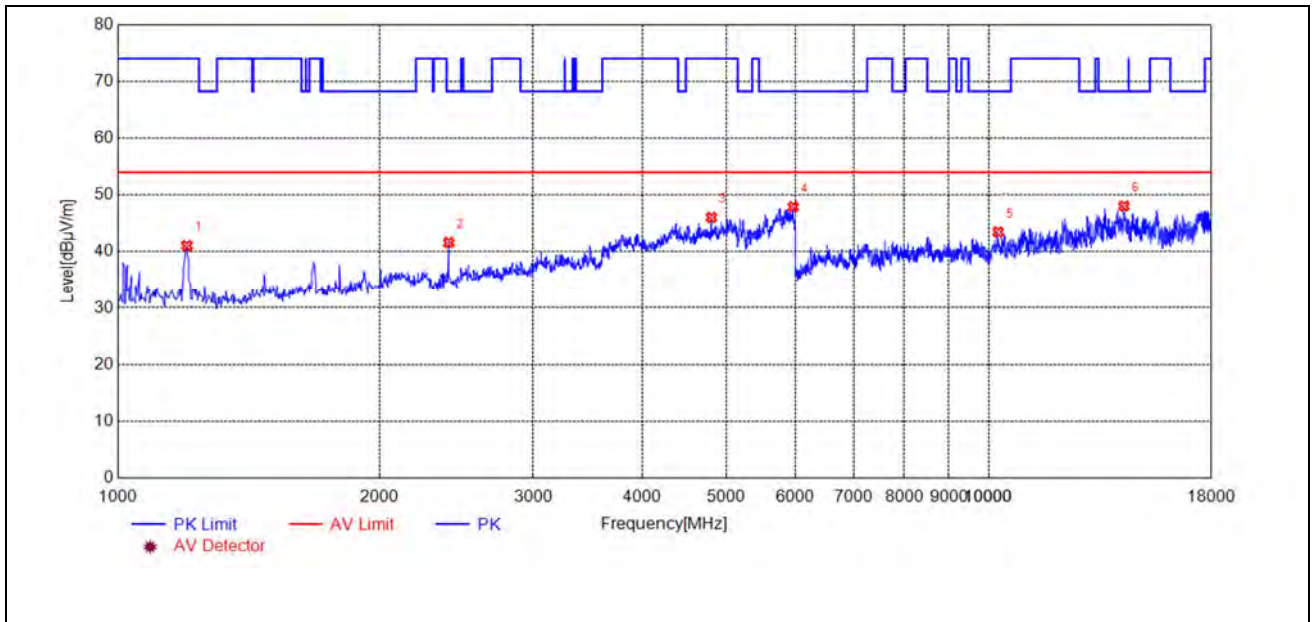
**802.11a Mode**

Plot for Channel 44



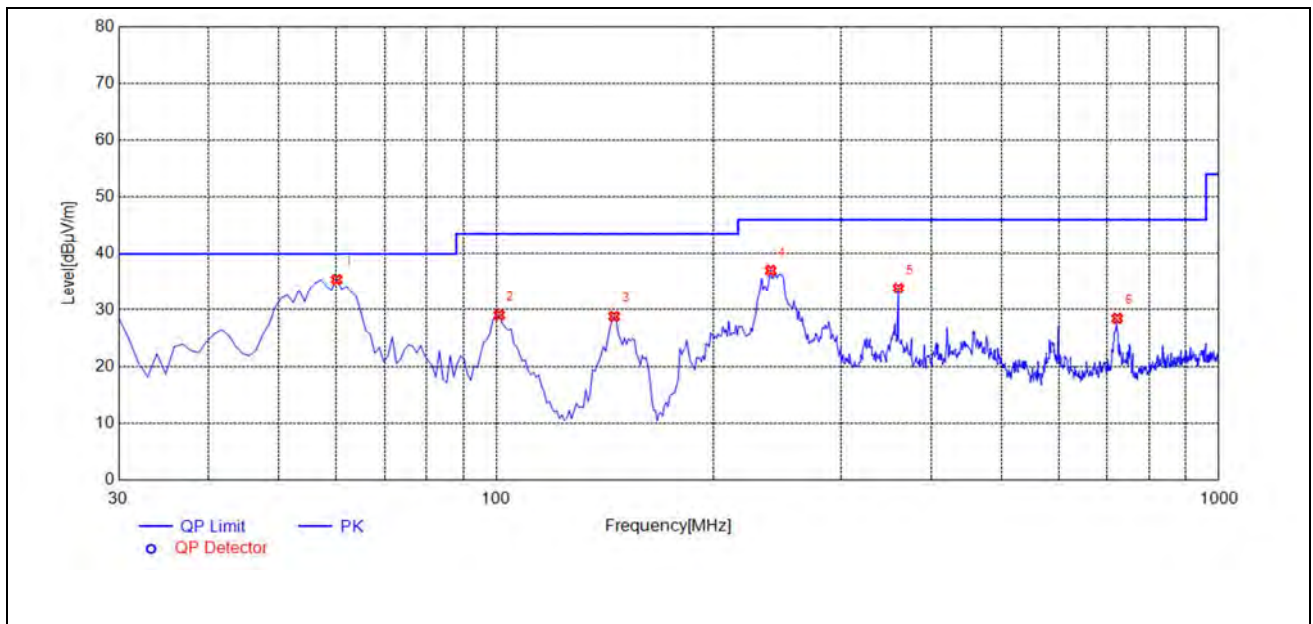
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
61.0711	28.11	-29.64	40.00	11.89	150	357	Horizontal	PASS
98.9389	31.36	-31.05	43.50	12.14	150	206	Horizontal	PASS
146.5165	32.09	-34.34	43.50	11.41	150	306	Horizontal	PASS
196.0360	31.13	-31.98	43.50	12.37	150	285	Horizontal	PASS
244.5846	38.74	-30.54	46.00	7.26	150	61	Horizontal	PASS
360.1301	33.08	-26.34	46.00	12.92	150	198	Horizontal	PASS



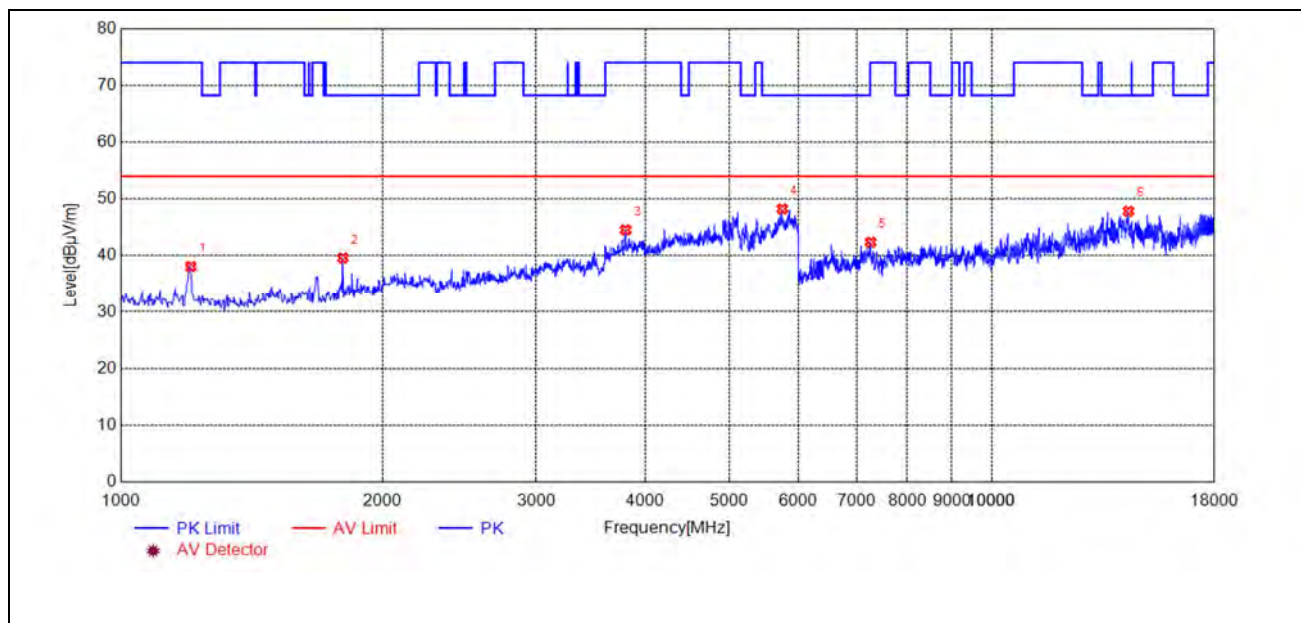
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1201.2002	41.09	-24.62	74.00	32.91	150	249	Horizontal	PASS
2399.9000	41.63	-20.12	68.23	26.60	150	178	Horizontal	PASS
4802.9672	46.06	-10.55	74.00	27.94	150	44	Horizontal	PASS
5961.9937	47.94	-6.57	68.23	20.29	150	204	Horizontal	PASS
10249.5416	43.48	2.28	68.23	24.75	150	249	Horizontal	PASS
14296.2160	48.06	7.60	68.23	20.17	150	115	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

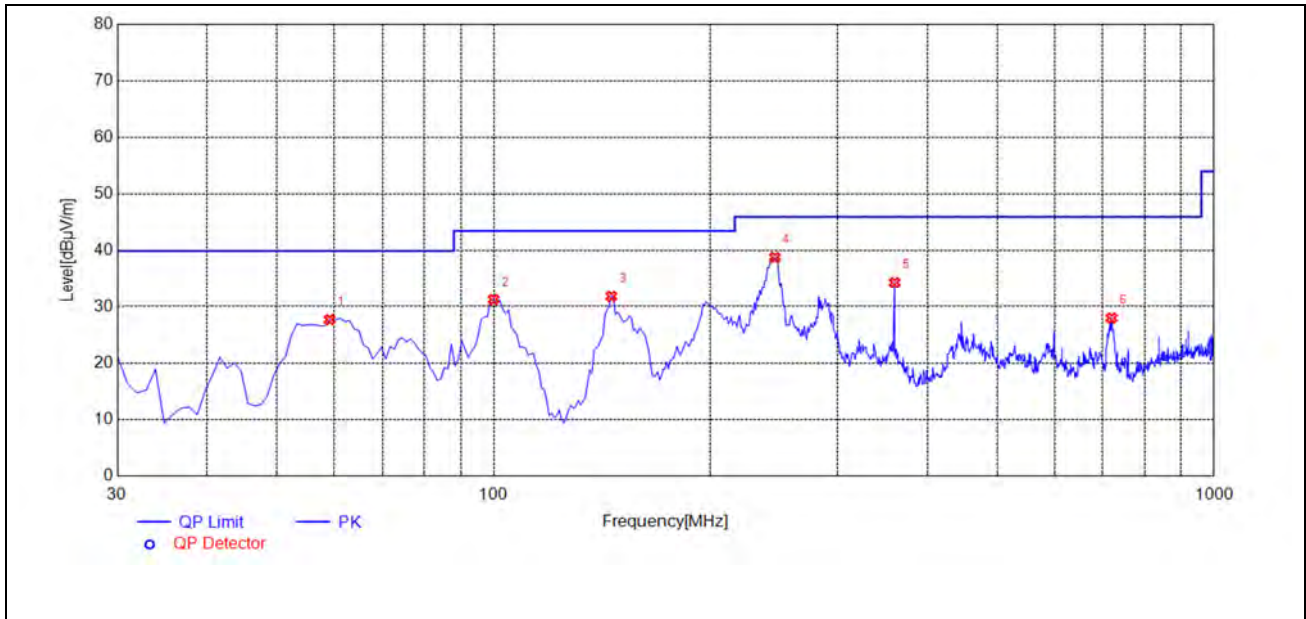
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
60.1001	35.47	-29.65	40.00	4.53	150	313	Vertical	PASS
100.8809	29.05	-31.39	43.50	14.45	150	328	Vertical	PASS
145.5455	28.80	-34.18	43.50	14.70	150	32	Vertical	PASS
239.7297	37.09	-31.02	46.00	8.91	150	68	Vertical	PASS
360.1301	33.88	-26.34	46.00	12.12	150	205	Vertical	PASS
723.2733	28.46	-21.59	46.00	17.54	150	183	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

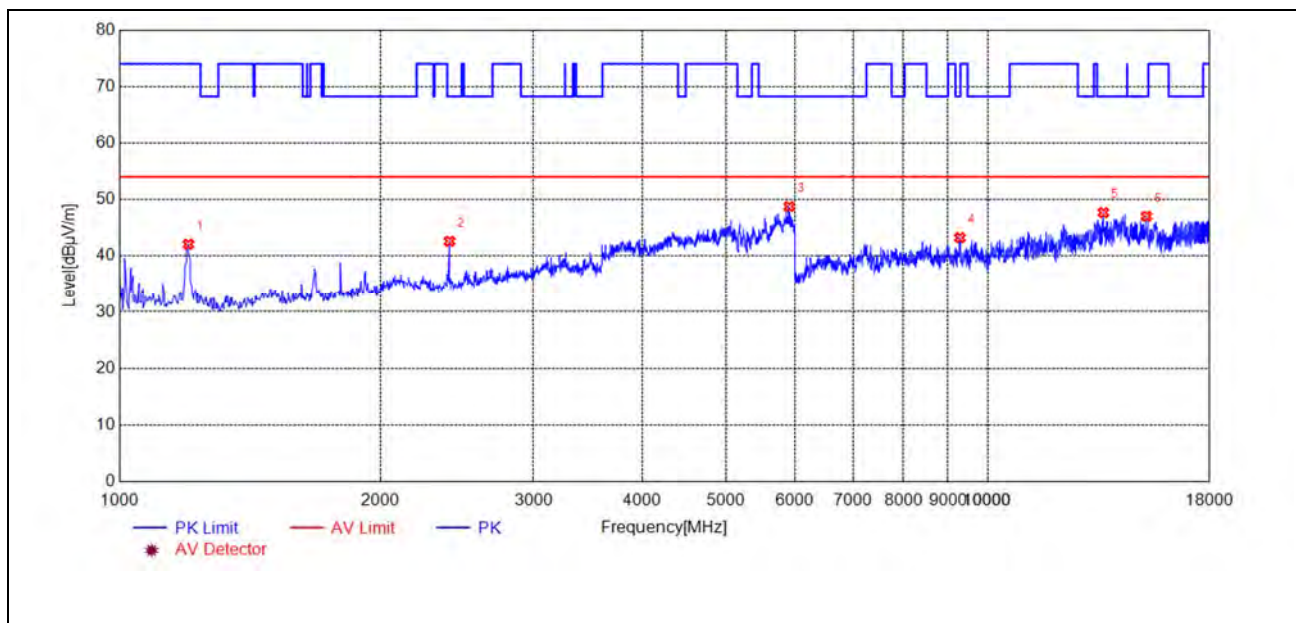
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1204.0340	38.10	-24.61	74.00	35.90	150	51	Vertical	PASS
1799.1332	39.61	-22.66	68.23	28.62	150	360	Vertical	PASS
3799.8000	44.55	-14.41	74.00	29.45	150	357	Vertical	PASS
5749.4582	48.25	-6.74	68.23	19.98	150	15	Vertical	PASS
7259.8766	42.37	-2.75	74.00	31.63	150	213	Vertical	PASS
14352.8921	47.84	7.36	68.23	20.39	150	105	Vertical	PASS

Plot for Channel 60



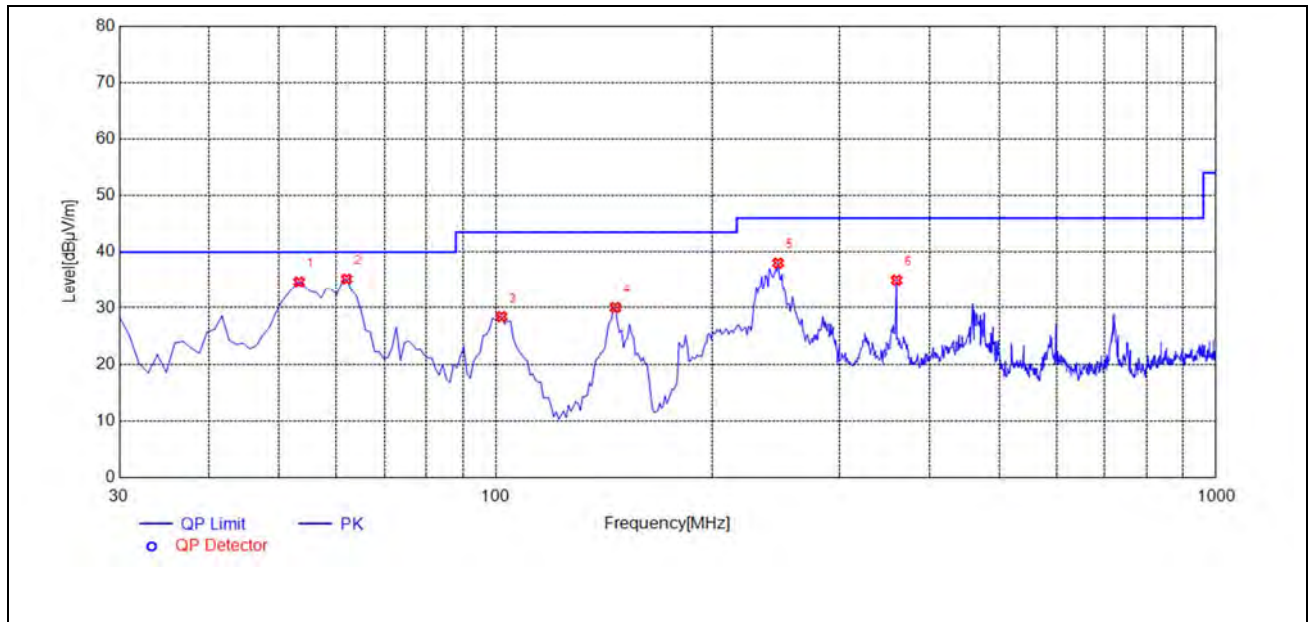
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
59.1291	27.66	-30.08	40.00	12.34	150	343	Horizontal	PASS
99.9099	31.24	-31.35	43.50	12.26	150	212	Horizontal	PASS
145.5455	31.81	-34.18	43.50	11.69	150	306	Horizontal	PASS
245.5556	38.85	-30.48	46.00	7.15	150	46	Horizontal	PASS
360.1301	34.39	-26.34	46.00	11.61	150	18	Horizontal	PASS
720.3604	27.96	-21.68	46.00	18.04	150	292	Horizontal	PASS



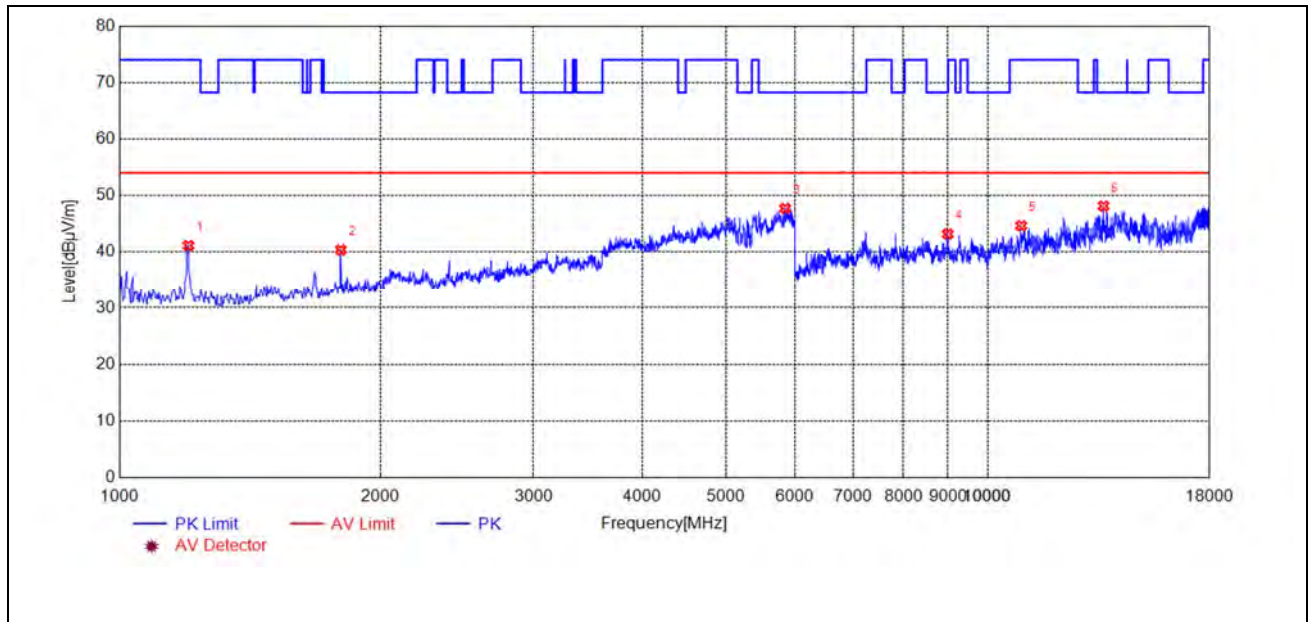
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1201.2002	42.08	-24.62	74.00	31.92	150	14	Horizontal	PASS
2399.9000	42.61	-20.12	68.23	25.62	150	175	Horizontal	PASS
5908.1514	48.76	-6.90	68.23	19.47	150	336	Horizontal	PASS
9288.8815	43.25	1.13	68.23	24.98	150	58	Horizontal	PASS
13587.7646	47.68	7.01	68.23	20.55	150	318	Horizontal	PASS
15234.2057	47.03	7.00	68.23	21.20	150	94	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

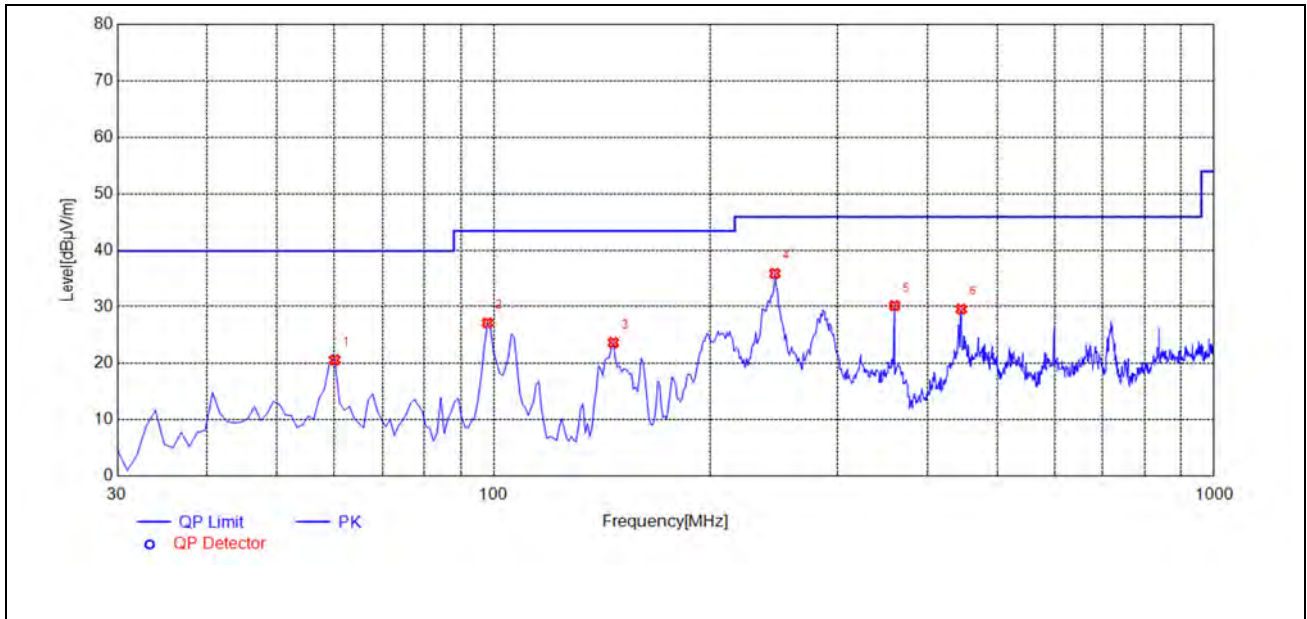
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
53.3033	34.69	-28.68	40.00	5.31	150	77	Vertical	PASS
62.0420	35.21	-29.99	40.00	4.79	150	107	Vertical	PASS
101.8519	28.41	-30.89	43.50	15.09	150	18	Vertical	PASS
146.5165	30.04	-34.34	43.50	13.46	150	18	Vertical	PASS
246.5265	38.04	-30.44	46.00	7.96	150	100	Vertical	PASS
360.1301	35.03	-26.34	46.00	10.97	150	48	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

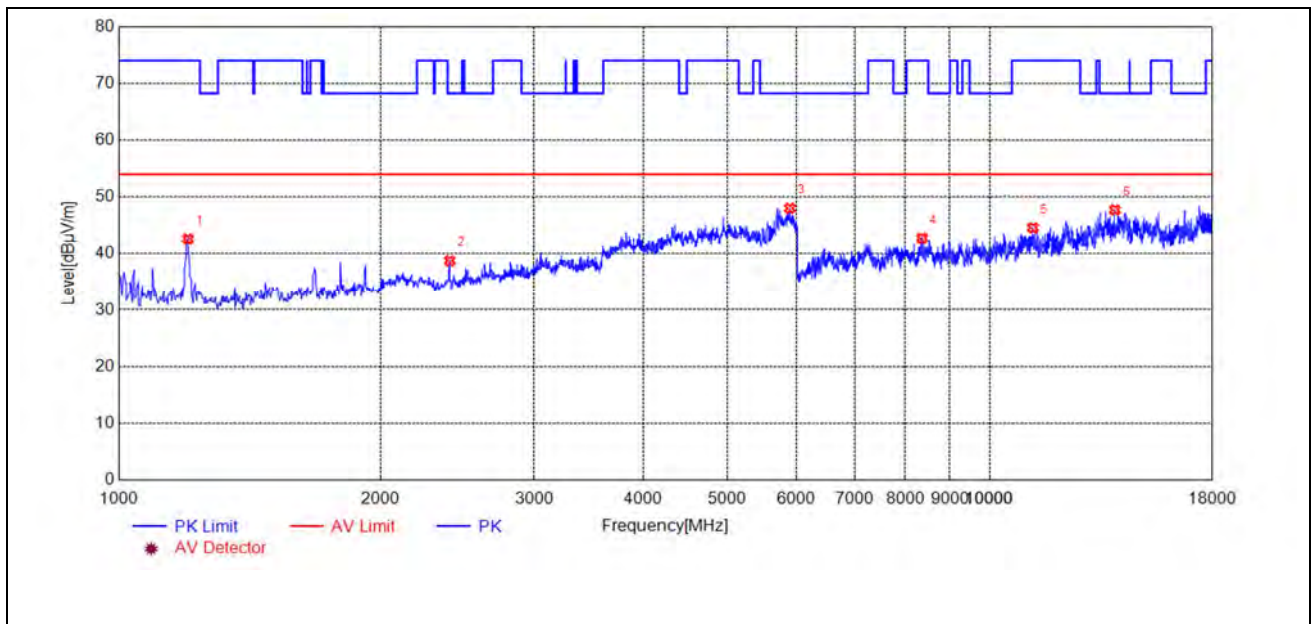
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1201.2002	41.15	-24.62	74.00	32.85	150	140	Vertical	PASS
1799.1332	40.36	-22.66	68.23	27.87	150	104	Vertical	PASS
5842.9738	47.72	-7.12	68.23	20.51	150	86	Vertical	PASS
8996.9995	43.20	-0.75	68.23	25.03	150	149	Vertical	PASS
10926.8211	44.66	2.89	74.00	29.34	150	194	Vertical	PASS
13593.4322	48.13	7.31	68.23	20.10	150	203	Vertical	PASS

Plot for Channel 120



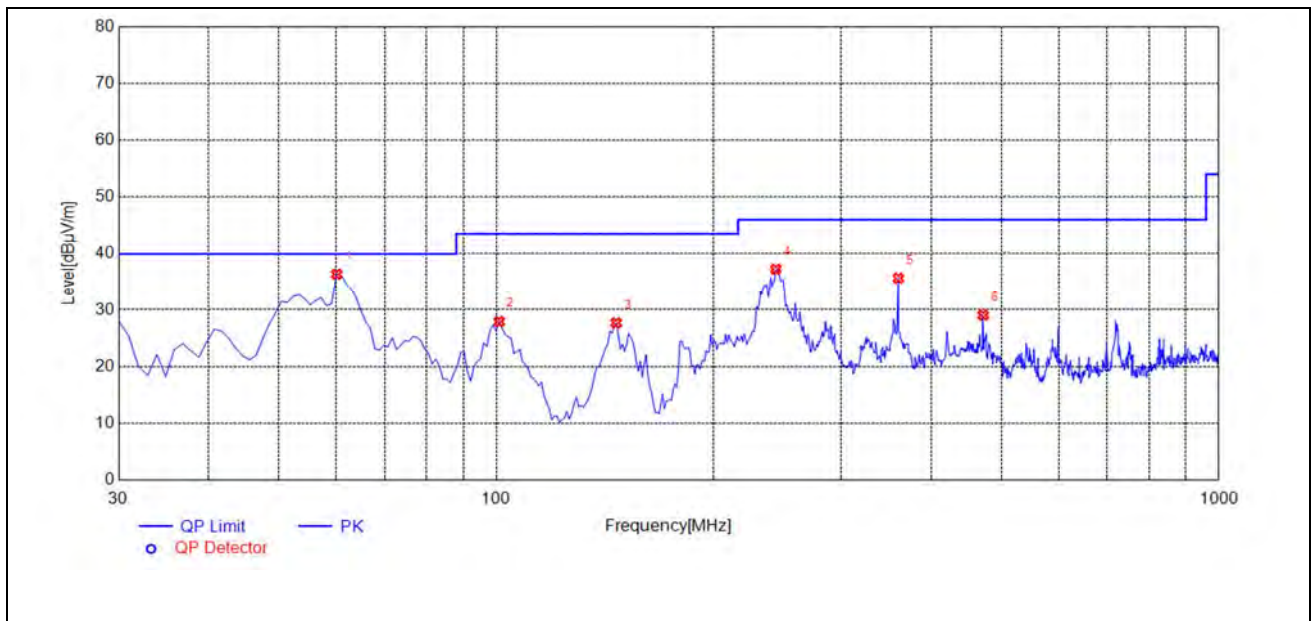
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
60.1001	20.55	-29.65	40.00	19.45	150	358	Horizontal	PASS
97.9680	27.11	-32.07	43.50	16.39	150	206	Horizontal	PASS
146.5165	23.60	-34.34	43.50	19.90	150	321	Horizontal	PASS
245.5556	36.01	-30.48	46.00	9.99	150	46	Horizontal	PASS
360.1301	30.15	-26.34	46.00	15.85	150	18	Horizontal	PASS
445.5756	29.53	-24.61	46.00	16.47	150	271	Horizontal	PASS



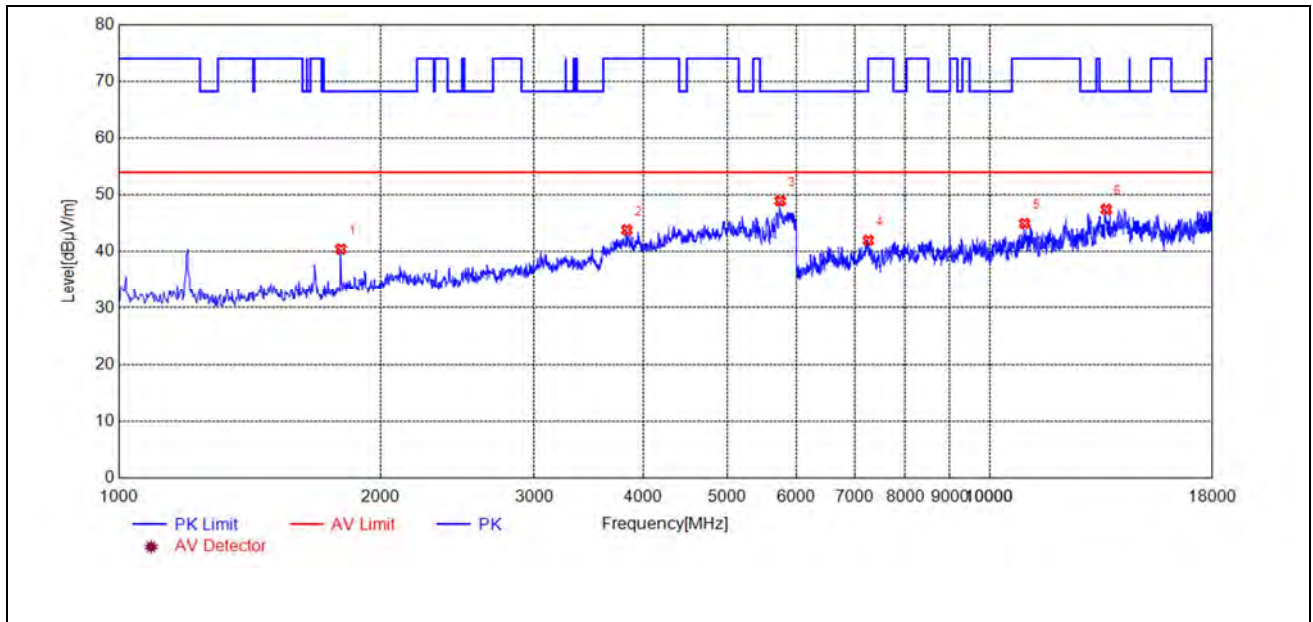
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1201.2002	42.61	-24.62	74.00	31.39	150	33	Horizontal	PASS
2399.9000	38.76	-20.12	68.23	29.47	150	212	Horizontal	PASS
5896.8161	48.01	-7.01	68.23	20.22	150	203	Horizontal	PASS
8362.2270	42.75	-1.83	74.00	31.25	150	15	Horizontal	PASS
11204.5341	44.58	3.84	74.00	29.42	150	95	Horizontal	PASS
13916.4861	47.72	6.48	68.23	20.51	150	283	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
60.1001	36.39	-29.65	40.00	3.61	150	313	Vertical	PASS
100.8809	27.91	-31.39	43.50	15.59	150	320	Vertical	PASS
146.5165	27.66	-34.34	43.50	15.84	150	23	Vertical	PASS
243.6136	37.30	-30.65	46.00	8.70	150	205	Vertical	PASS
360.1301	35.71	-26.34	46.00	10.29	150	2	Vertical	PASS
471.7918	29.05	-24.20	46.00	16.95	150	255	Vertical	PASS

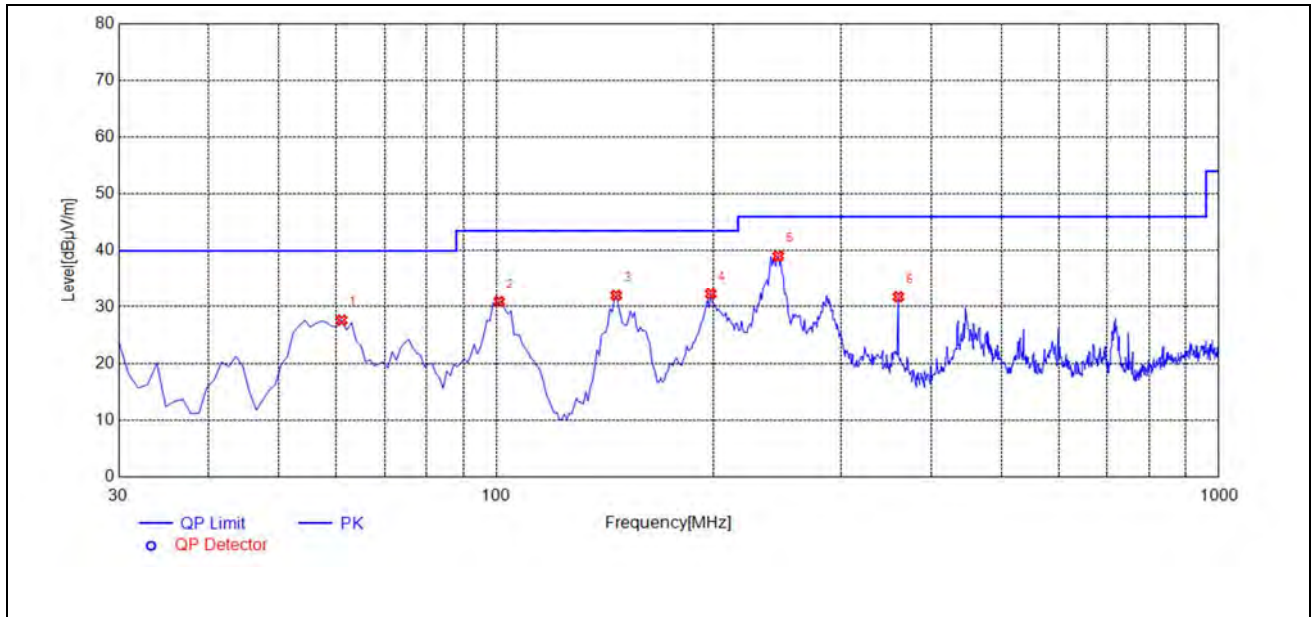


(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1799.1332	40.49	-22.66	68.23	27.74	150	97	Vertical	PASS
3830.9718	43.85	-14.42	74.00	30.15	150	79	Vertical	PASS
5746.6244	48.95	-6.78	68.23	19.28	150	8	Vertical	PASS
7254.2090	42.02	-2.65	74.00	31.98	150	160	Vertical	PASS
10963.6606	45.01	2.92	74.00	28.99	150	269	Vertical	PASS
13601.9337	47.48	7.55	68.23	20.75	150	332	Vertical	PASS

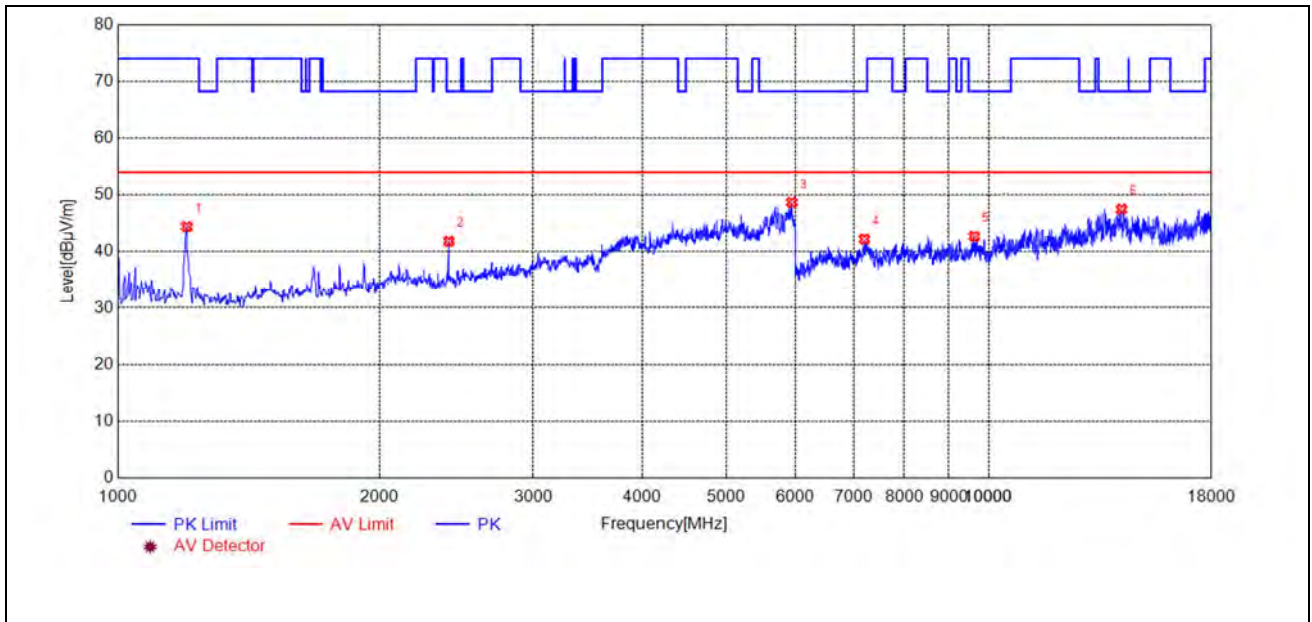


Plot for Channel 157



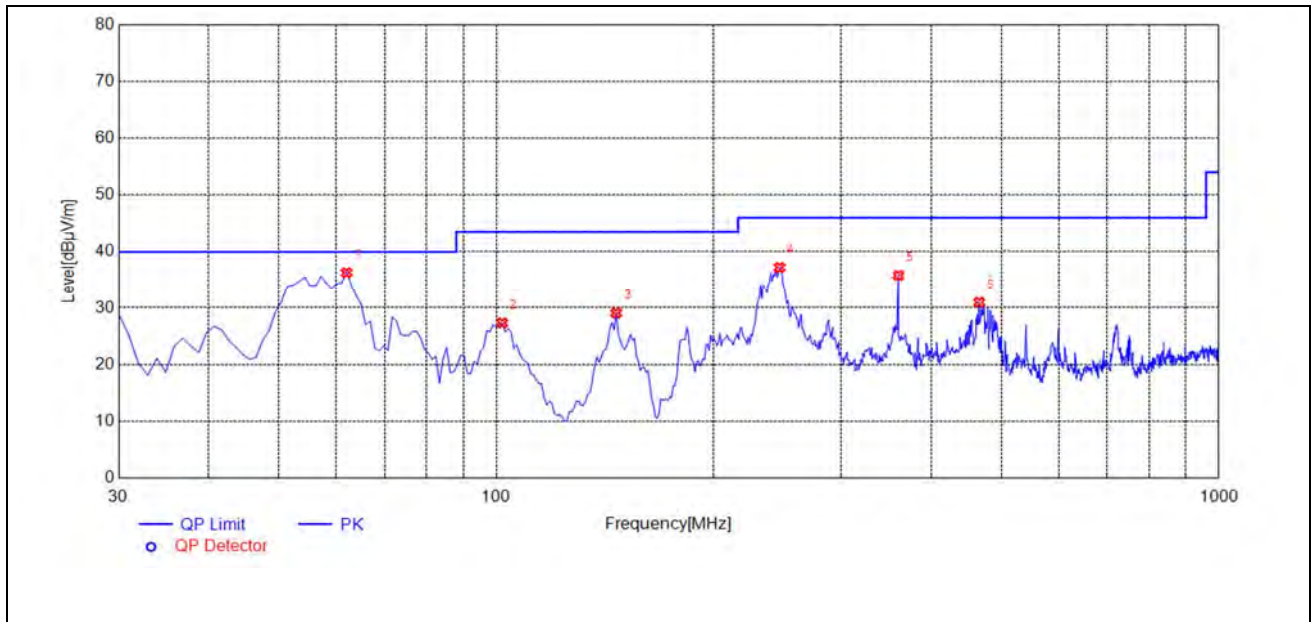
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
61.0711	27.61	-29.64	40.00	12.39	150	319	Horizontal	PASS
100.8809	30.89	-31.39	43.50	12.61	150	196	Horizontal	PASS
146.5165	31.98	-34.34	43.50	11.52	150	297	Horizontal	PASS
197.9780	32.26	-31.97	43.50	11.24	150	276	Horizontal	PASS
245.5556	39.06	-30.48	46.00	6.94	150	37	Horizontal	PASS
360.1301	31.73	-26.34	46.00	14.27	150	196	Horizontal	PASS



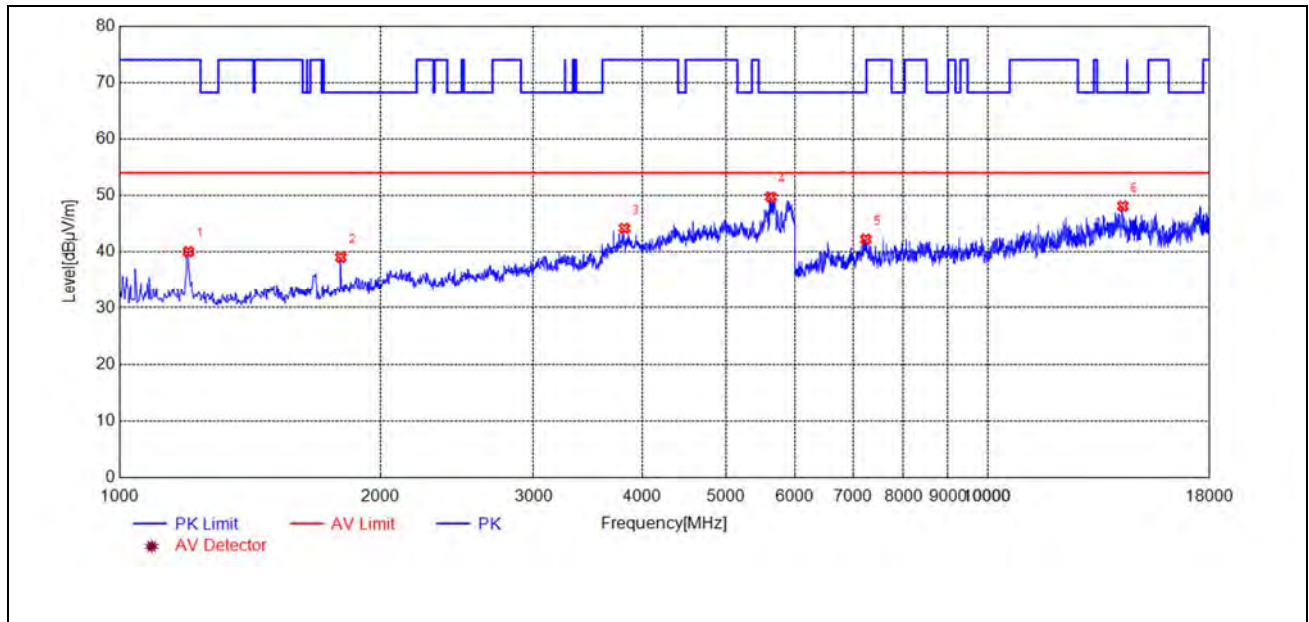
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1201.2002	44.42	-24.62	74.00	29.58	150	9	Horizontal	PASS
2399.9000	41.83	-20.12	68.23	26.40	150	181	Horizontal	PASS
5942.1570	48.71	-6.40	68.23	19.52	150	318	Horizontal	PASS
7197.5329	42.23	-3.06	68.23	26.00	150	273	Horizontal	PASS
9623.2705	42.72	0.45	68.23	25.51	150	82	Horizontal	PASS
14202.7005	47.51	6.23	68.23	20.72	150	209	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
62.0420	36.32	-29.99	40.00	3.68	150	46	Vertical	PASS
101.8519	27.30	-30.89	43.50	16.20	150	315	Vertical	PASS
146.5165	29.07	-34.34	43.50	14.43	150	46	Vertical	PASS
246.5265	37.23	-30.44	46.00	8.77	150	112	Vertical	PASS
360.1301	35.84	-26.34	46.00	10.16	150	46	Vertical	PASS
465.9660	30.94	-23.84	46.00	15.06	150	285	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1201.2002	40.07	-24.62	74.00	33.93	150	96	Vertical	PASS
1799.1332	39.05	-22.66	68.23	29.18	150	105	Vertical	PASS
3816.8028	44.21	-14.41	74.00	29.79	150	96	Vertical	PASS
5627.6046	49.76	-9.06	68.23	18.47	150	87	Vertical	PASS
7240.0400	42.27	-2.66	68.23	25.96	150	222	Vertical	PASS
14310.3851	48.12	7.73	68.23	20.11	150	168	Vertical	PASS

END OF REPORT