



NVNT	ac20	5220	Ant1	2.79	0.13	2.92	11	Pass
NVNT	ac20	5240	Ant1	2.74	0.2	2.94	11	Pass
NVNT	ac20	5260	Ant1	2.96	0.13	3.09	11	Pass
NVNT	ac20	5300	Ant1	2.87	0.13	3	11	Pass
NVNT	ac20	5320	Ant1	2.7	0.13	2.83	11	Pass
NVNT	ac20	5500	Ant1	2.96	0.13	3.09	11	Pass
NVNT	ac20	5580	Ant1	2.87	0.13	3	11	Pass
NVNT	ac20	5700	Ant1	3.12	0.2	3.32	11	Pass
NVNT	ac20	5745	Ant1	-0.06	0.2	0.14	30	Pass
NVNT	ac20	5785	Ant1	-0.23	0.13	-0.1	30	Pass
NVNT	ac20	5825	Ant1	-0.21	0.13	-0.08	30	Pass
NVNT	ac40	5190	Ant1	0.47	0.26	0.73	11	Pass
NVNT	ac40	5230	Ant1	0.63	0.26	0.89	11	Pass
NVNT	ac40	5270	Ant1	0.26	0.39	0.65	11	Pass
NVNT	ac40	5310	Ant1	0.16	0.26	0.42	11	Pass
NVNT	ac40	5510	Ant1	0.14	0.26	0.4	11	Pass
NVNT	ac40	5550	Ant1	0.29	0.26	0.55	11	Pass
NVNT	ac40	5670	Ant1	0.31	0.39	0.7	11	Pass
NVNT	ac40	5755	Ant1	-3.55	0.39	-3.16	30	Pass
NVNT	ac40	5795	Ant1	-3.65	0.26	-3.39	30	Pass
NVNT	ac80	5210	Ant1	-2.87	0.51	-2.36	11	Pass
NVNT	ac80	5290	Ant1	-2.93	0.75	-2.18	11	Pass
NVNT	ac80	5530	Ant1	-3	0.51	-2.49	11	Pass
NVNT	ac80	5610	Ant1	-3.32	0.51	-2.81	11	Pass
NVNT	ac80	5775	Ant1	-5.22	0.48	-4.74	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 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 5580MHz 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

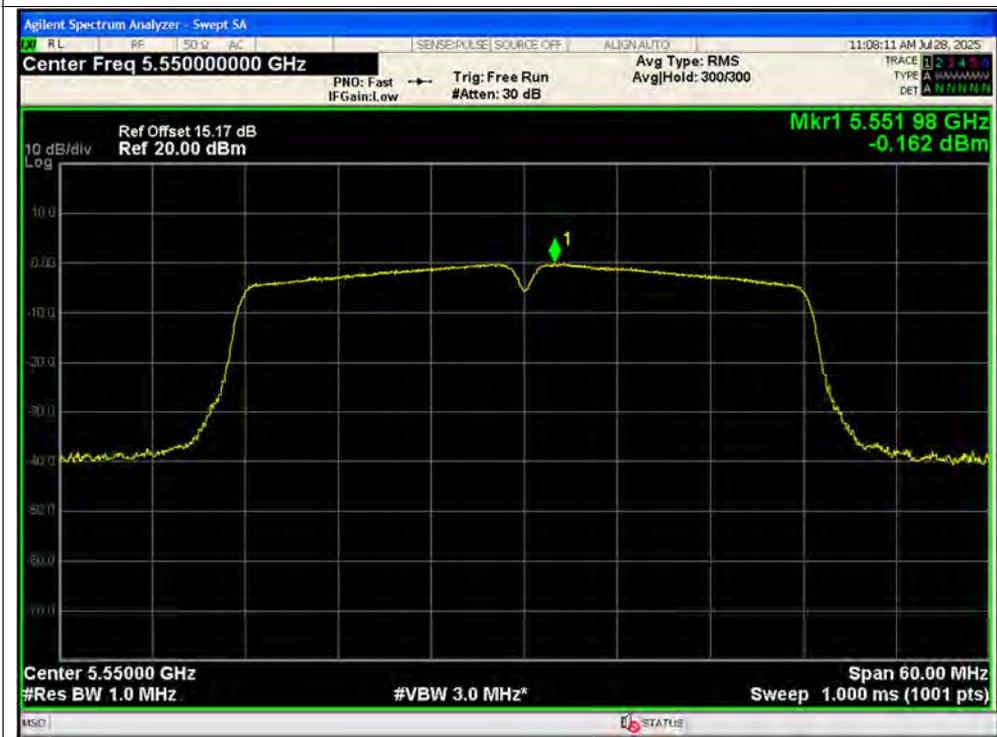




PSD NVNT n40 5510MHz Ant1



PSD NVNT n40 5550MHz 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

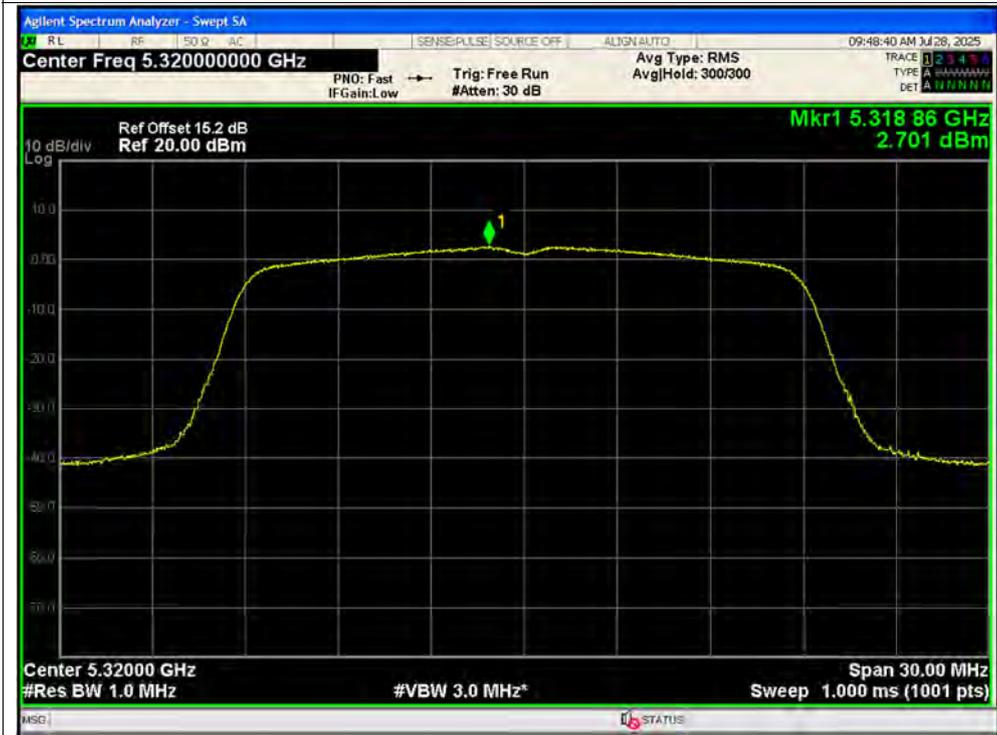


PSD NVNT ac20 5300MHz Ant1





PSD NVNT ac20 5320MHz Ant1



PSD NVNT ac20 5500MHz Ant1



PSD NVNT ac20 5580MHz 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 5550MHz 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

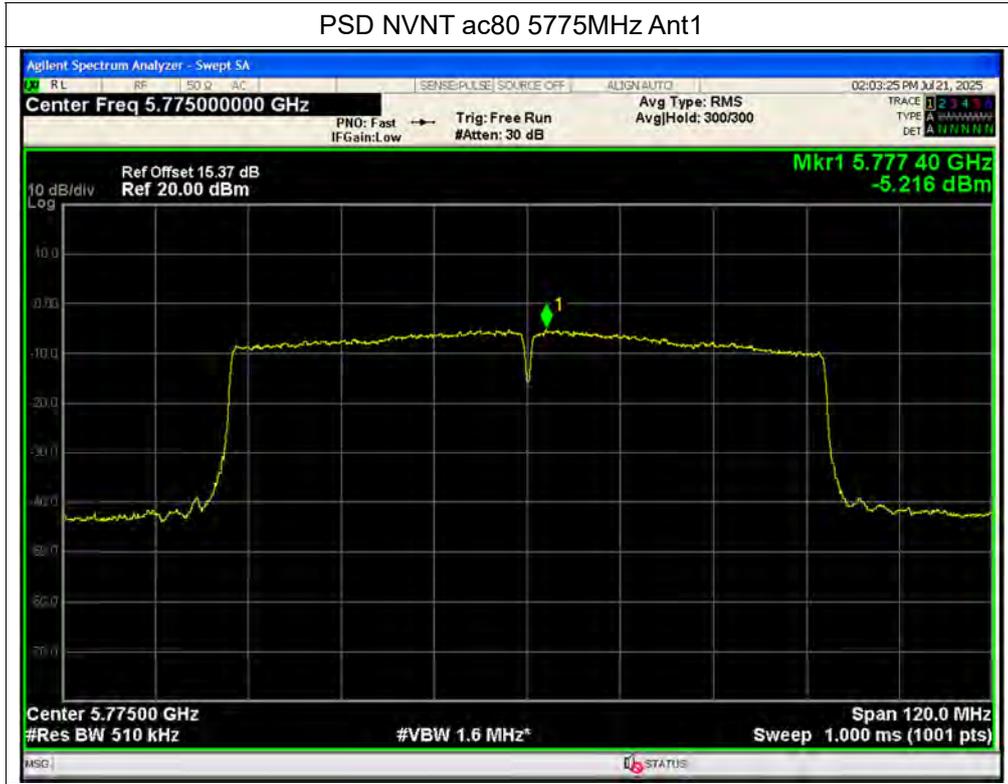


PSD NVNT ac80 5610MHz Ant1





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 3.4V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
20C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
20C 4.48V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
0C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
10C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
30C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
40C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
50C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
60C 3.89V	CW	5180	Ant1	5179.974	-26000	-5.02	25	Pass
20C 3.4V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
20C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
20C 4.48V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
0C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
10C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
30C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
40C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
50C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
60C 3.89V	CW	5260	Ant1	5259.974	-26000	-4.94	25	Pass
20C 3.4V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
20C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
20C 4.48V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
0C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
10C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
30C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
40C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
50C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
60C 3.89V	CW	5500	Ant1	5499.973	-27000	-4.91	25	Pass
20C 3.4V	CW	5745	Ant1	5744.976	-24000	-4.18	25	Pass
20C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass
20C 4.48V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass
0C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass
10C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass
30C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass
40C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass



REPORT No.: SZ25060449W06

50C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass
60C 3.89V	CW	5745	Ant1	5744.975	-25000	-4.35	25	Pass





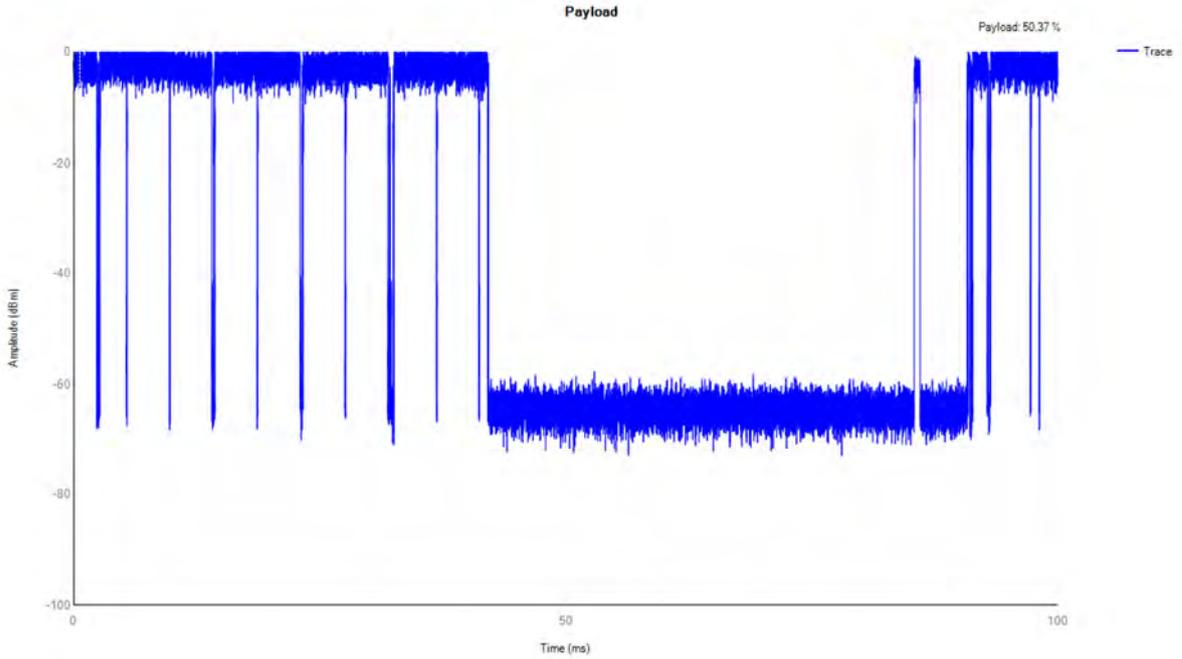
A.6. Dynamic Frequency Selection

Payload

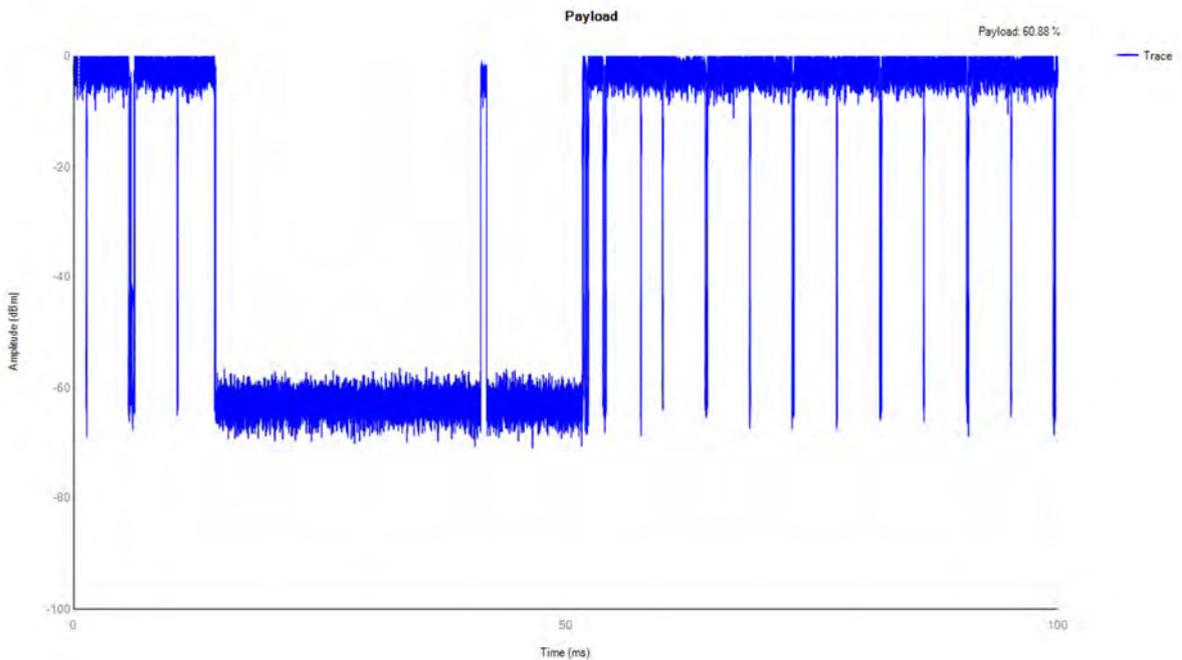
Mode	Frequency (MHz)	Result	Verdict	SISO
ac20	5320	50.37	Pass	SISO
ac20	5500	60.88	Pass	SISO
ac80	5290	36.86	Pass	SISO
ac80	5530	35.17	Pass	SISO

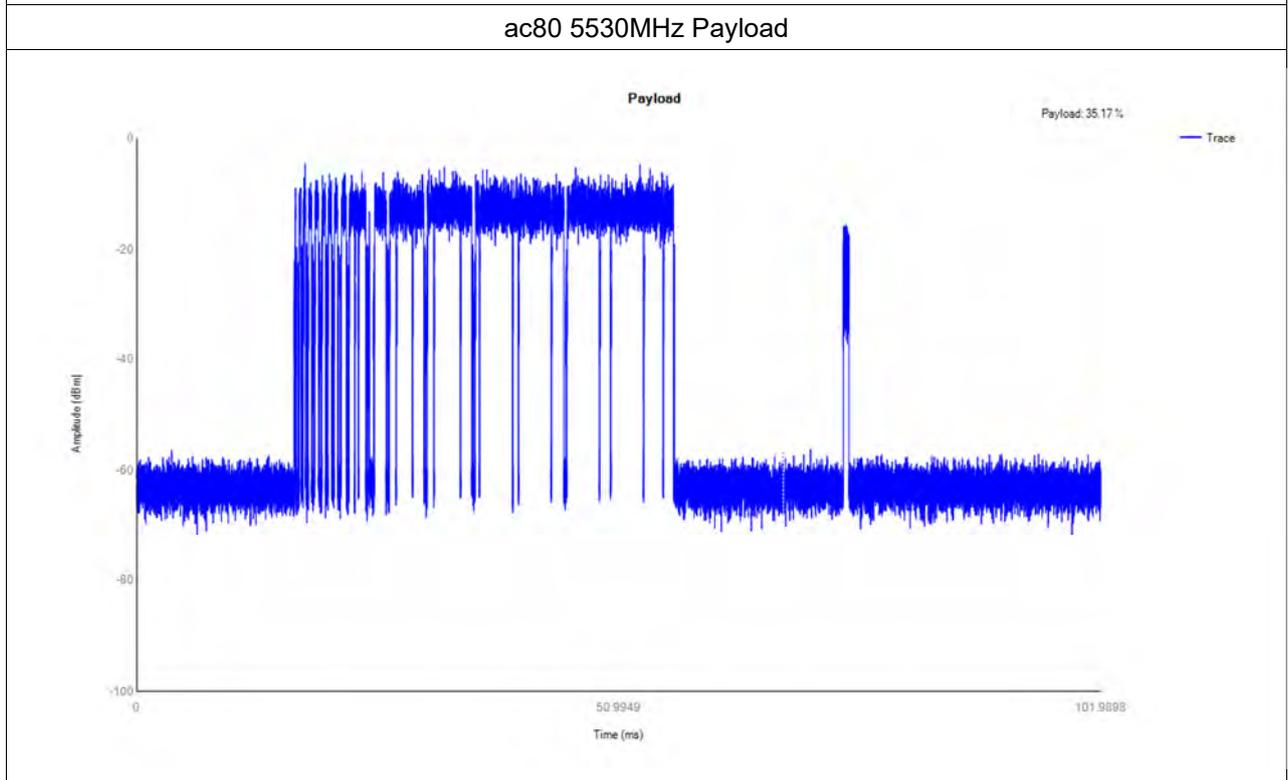
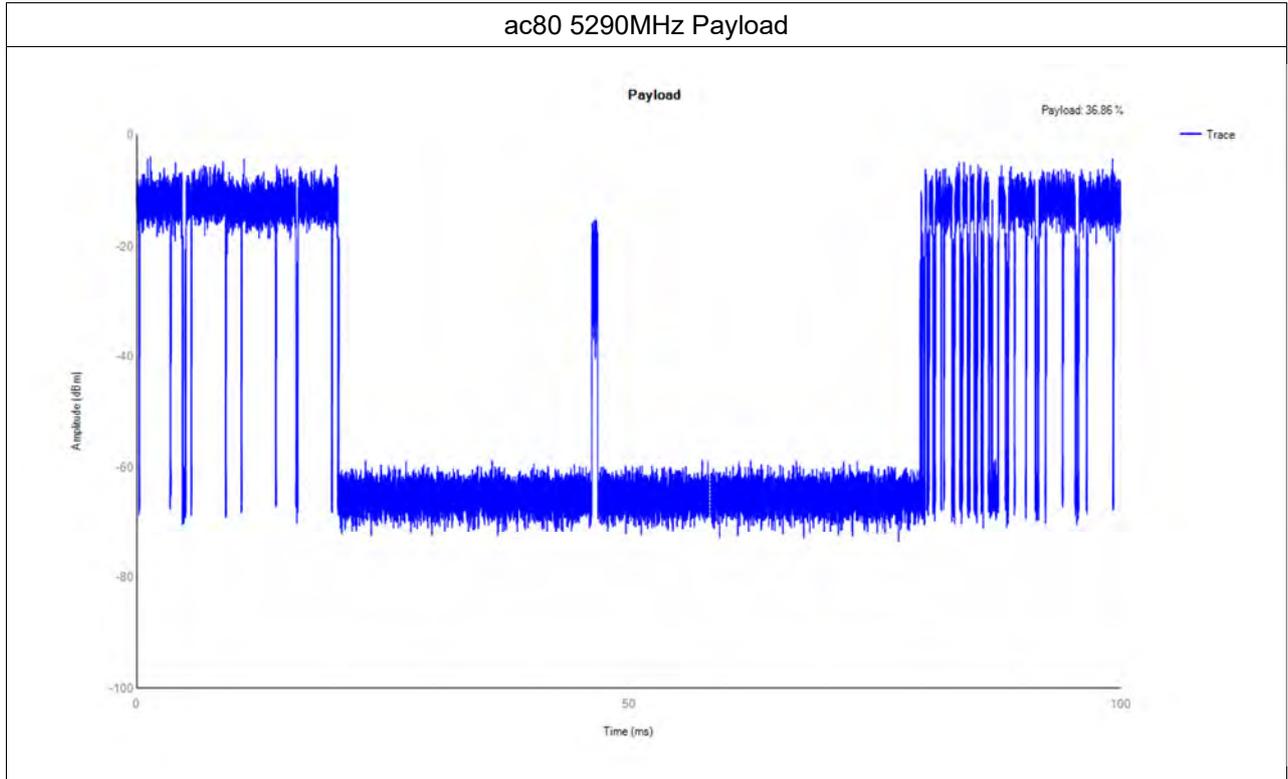
Test Graphs

ac20 5320MHz Payload



ac20 5500MHz Payload







Detection Thresholds

Mode	Frequency (MHz)	Type	Result	Verdict	SISO
ac20	5320	DFS_FCC_T0	See test Graph	Pass	SISO
ac20	5500	DFS_FCC_T0	See test Graph	Pass	SISO
ac80	5290	DFS_FCC_T0	See test Graph	Pass	SISO
ac80	5530	DFS_FCC_T0	See test Graph	Pass	SISO

Spectrum analyzer settings:

Span: Zero

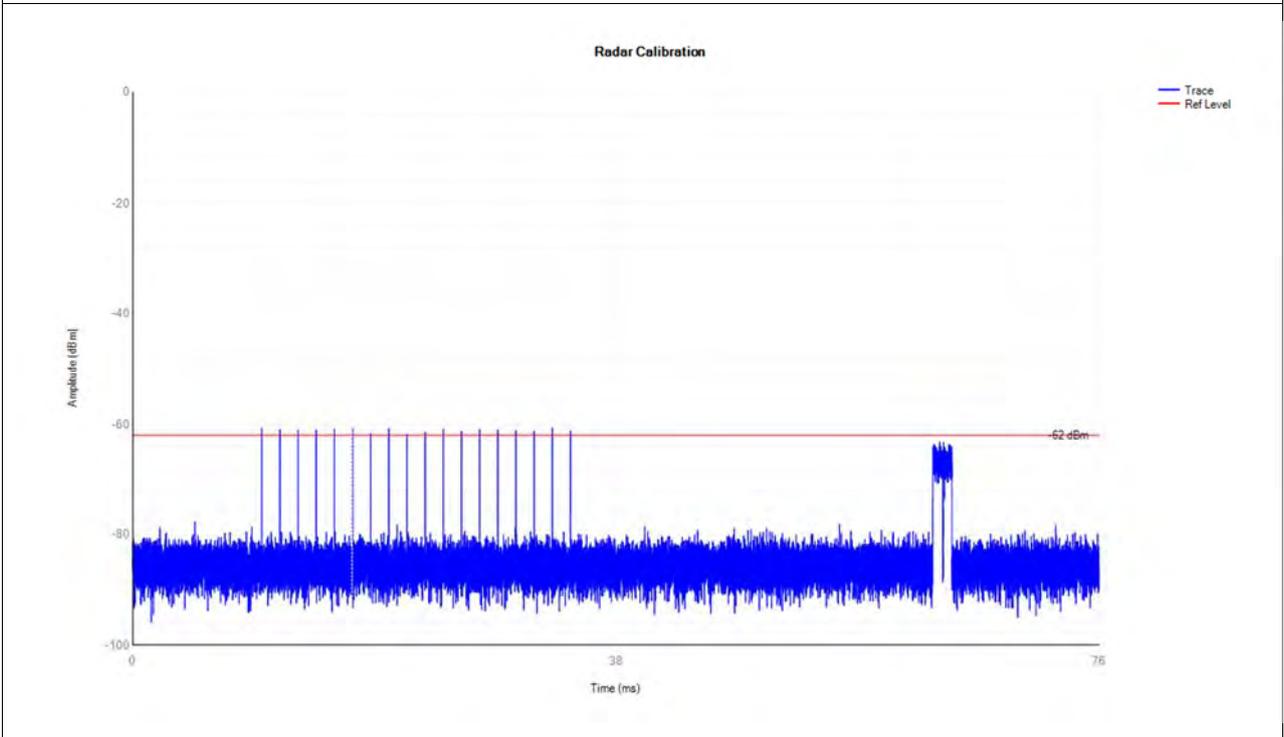
Detector Type: Peak

RBW: 3MHz

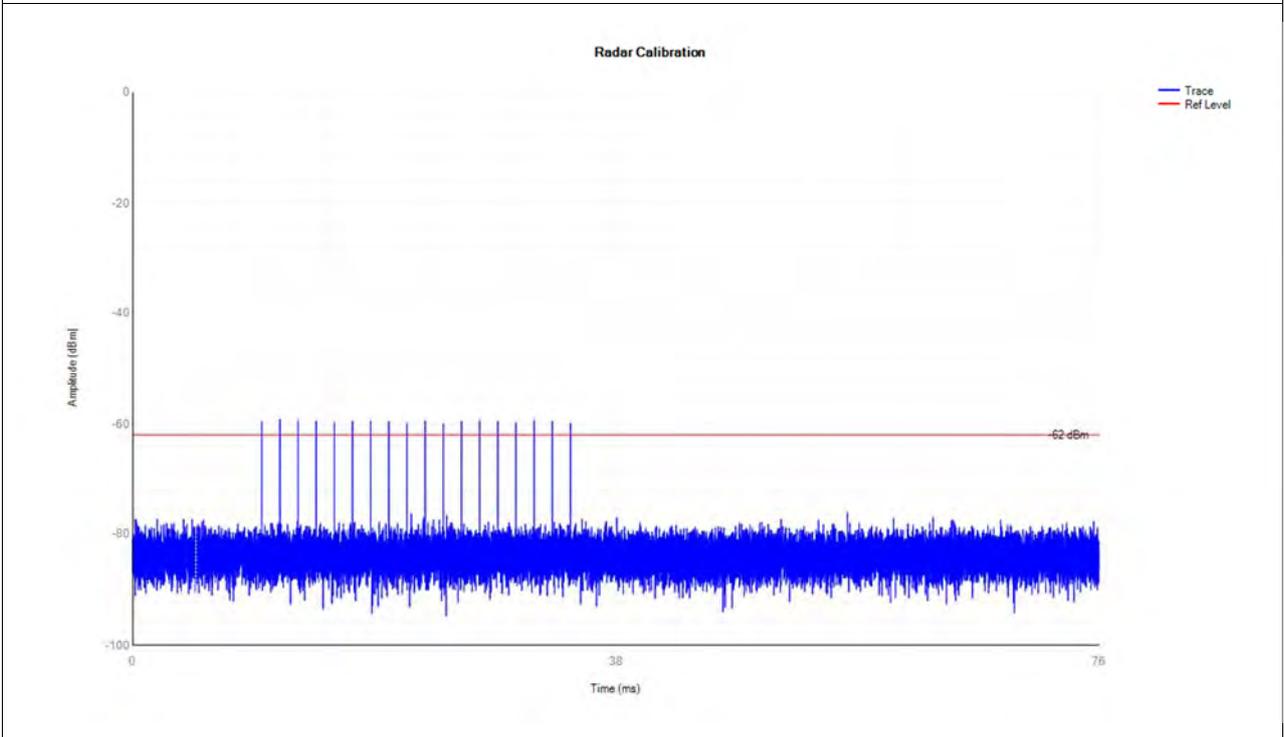
VBW: 3MHz

Test Graphs

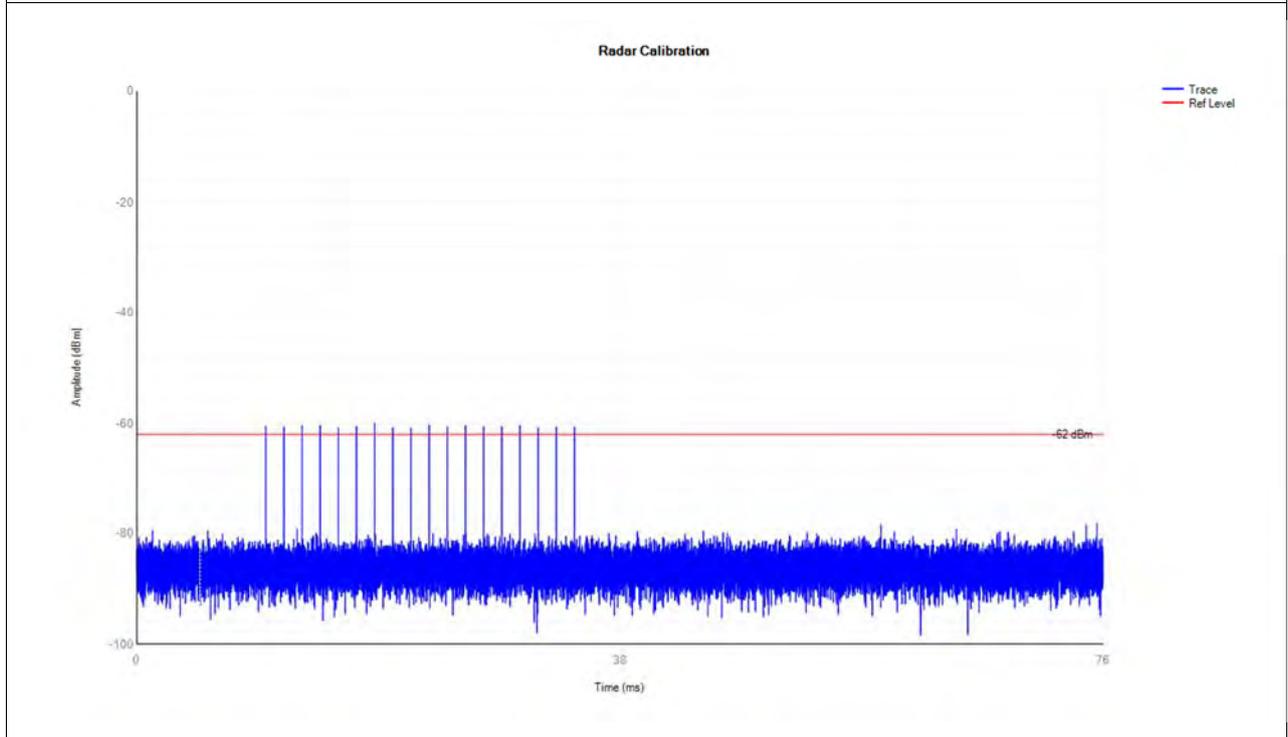
5320MHz DFS_FCC_T0



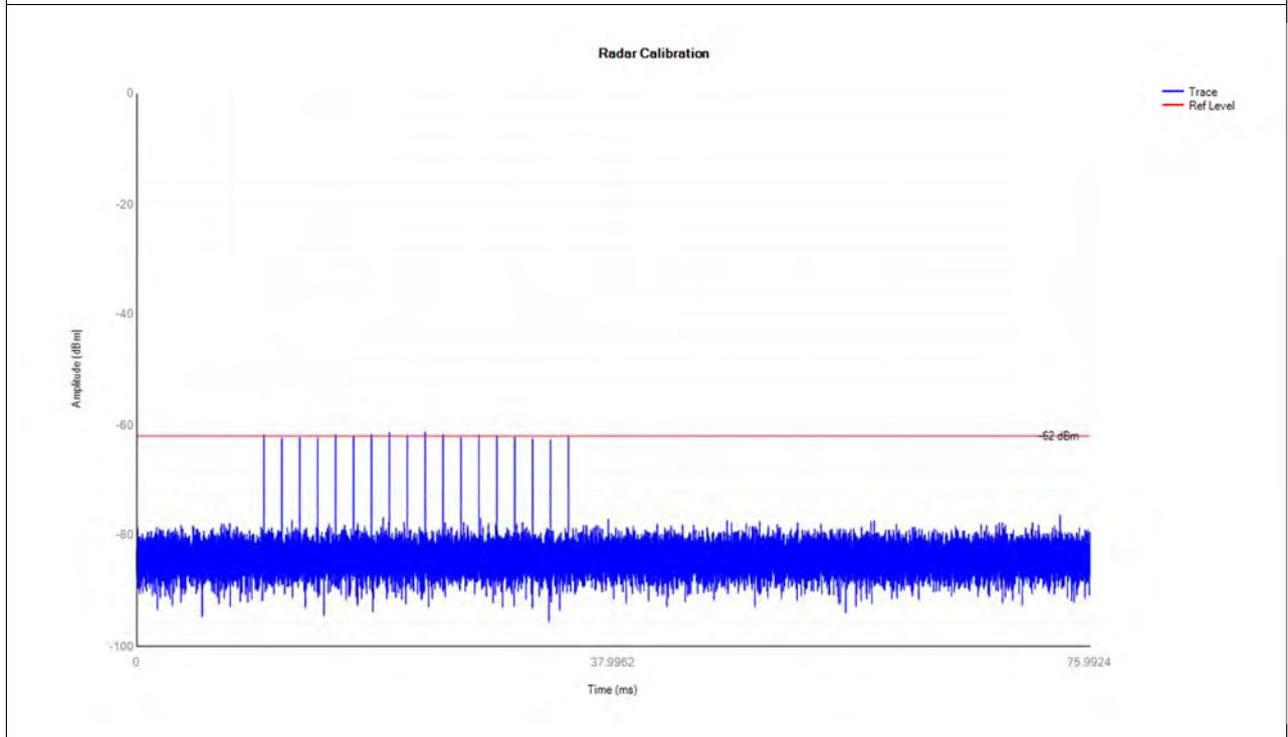
5500MHz DFS_FCC_T0



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
ac20	5320	0.848	10	0.051	0.26	0.015	0.06	Pass
ac20	5500	0.816	10	0.04	0.26	0.014	0.06	Pass
ac80	5290	0.79	10	0.043	0.26	0.014	0.06	Pass
ac80	5530	0.913	10	0.049	0.26	0.014	0.06	Pass

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

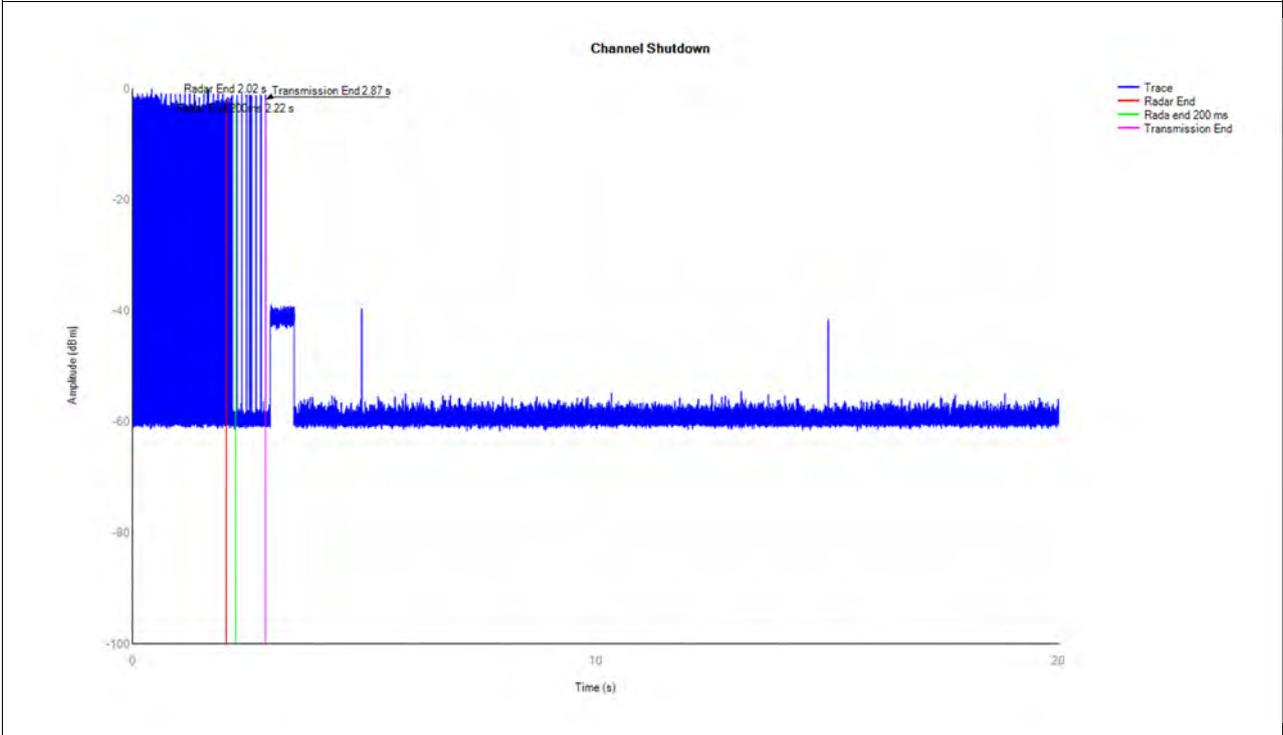
RBW: 3MHz

VBW: 3MHz

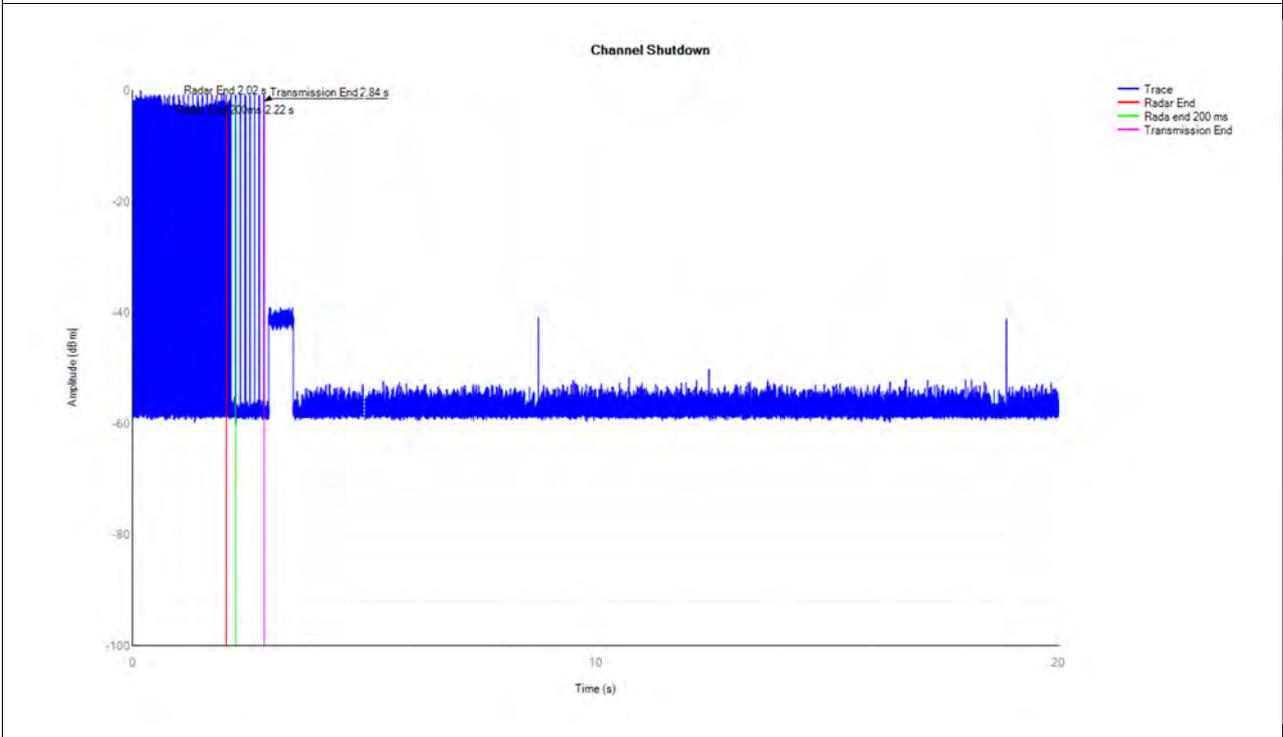
Sweep time: 20s

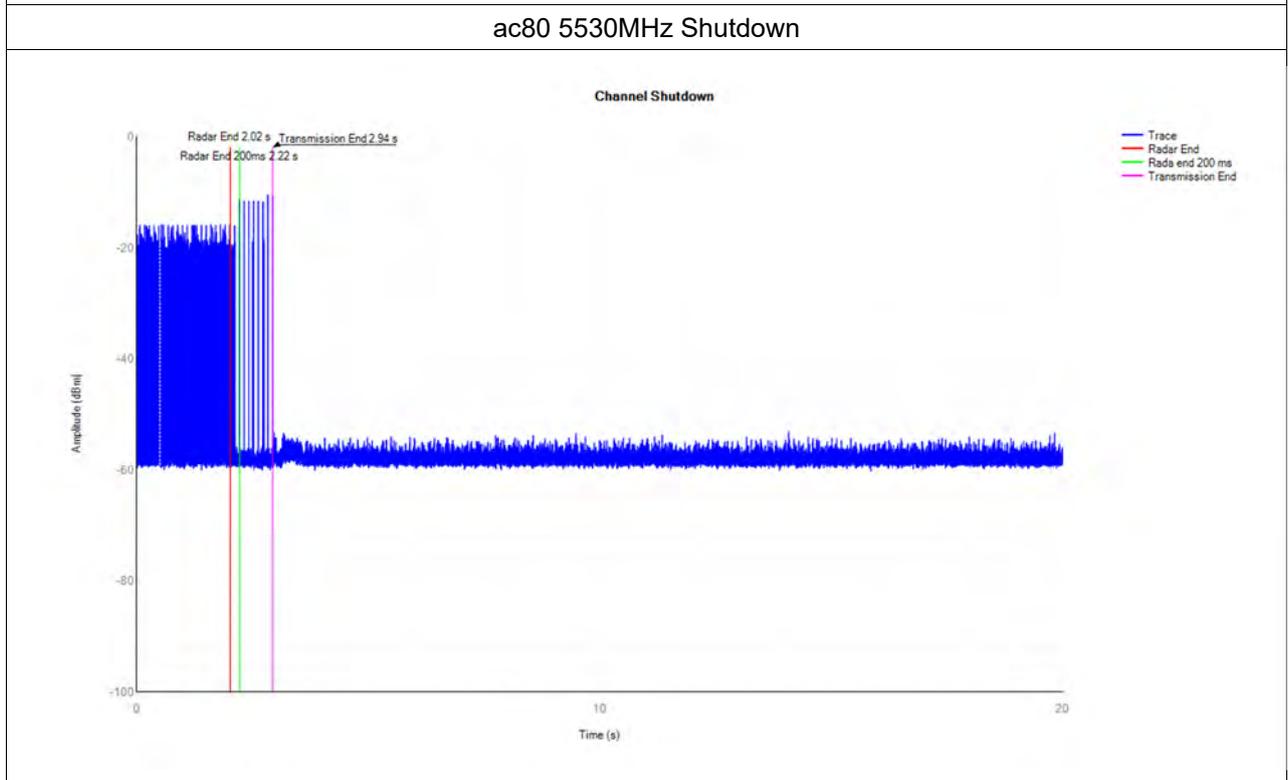
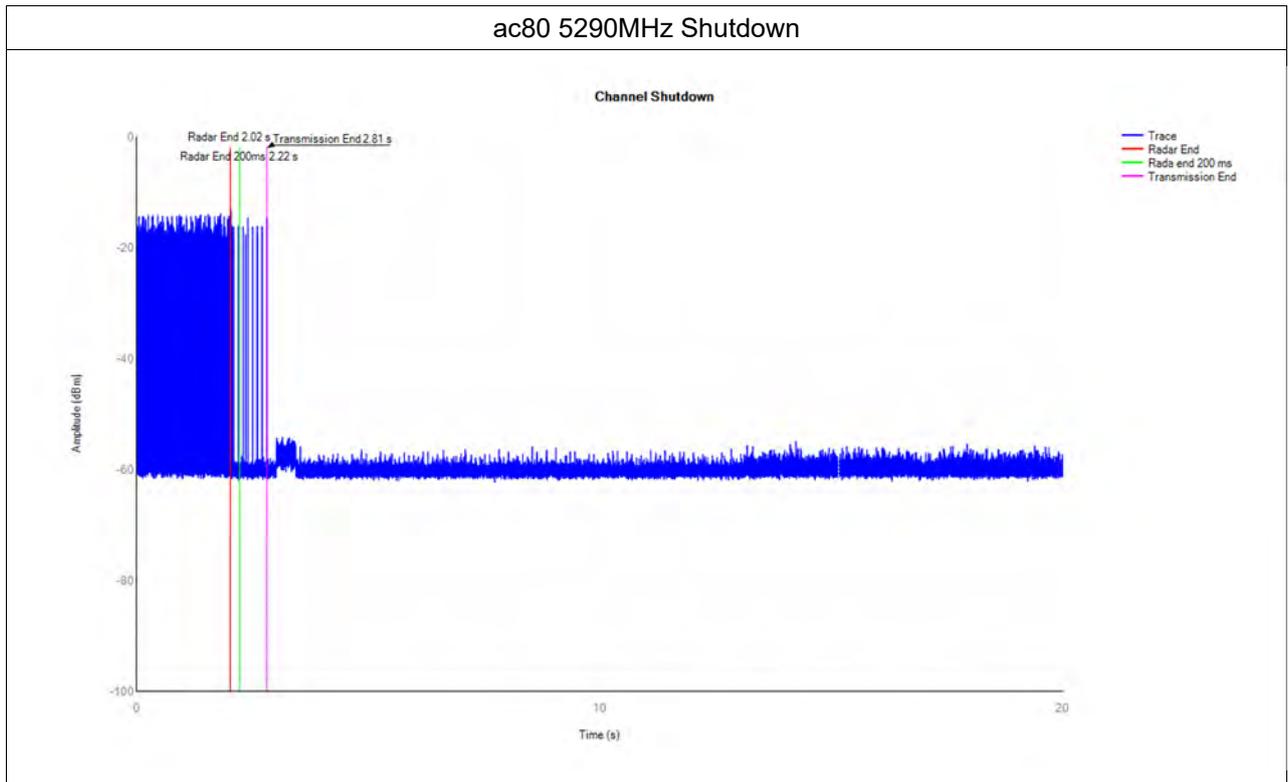
Test Graphs

ac20 5320MHz Shutdown



ac20 5500MHz 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

Test Mode	Channel	Result	Limit[s]	Verdict
11AC20SISO	5320	see test graph	≥ 1800	PASS
	5500	see test graph	≥ 1800	PASS

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

RBW: 3MHz

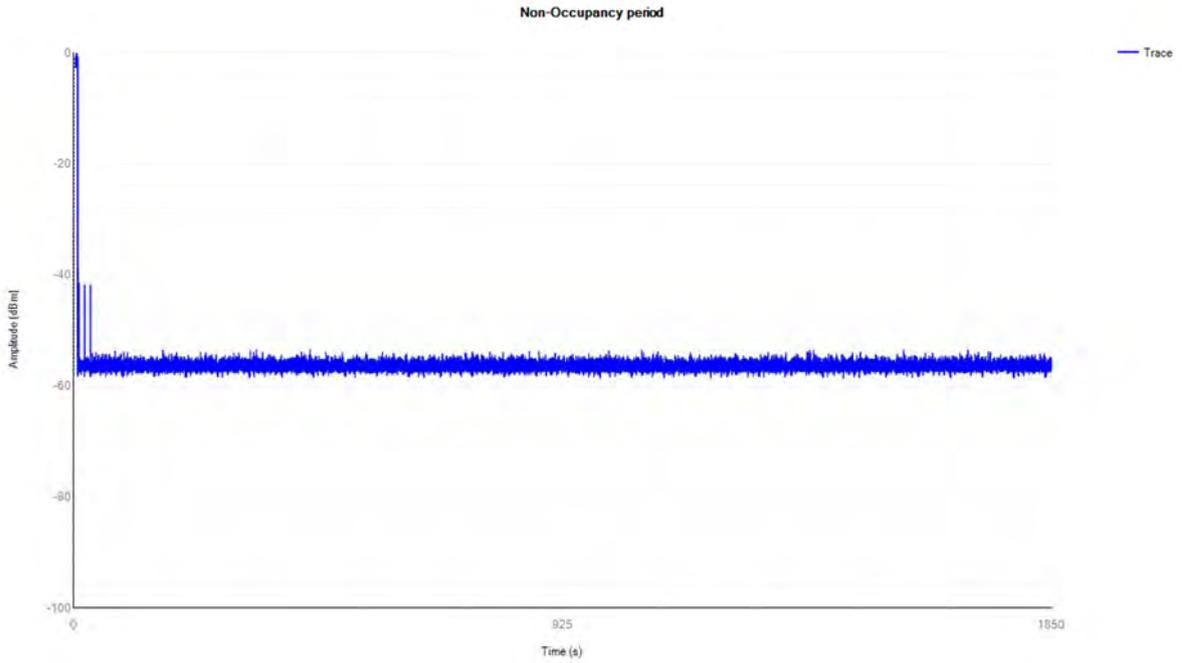
VBW: 3MHz

Sweep time: 1850s

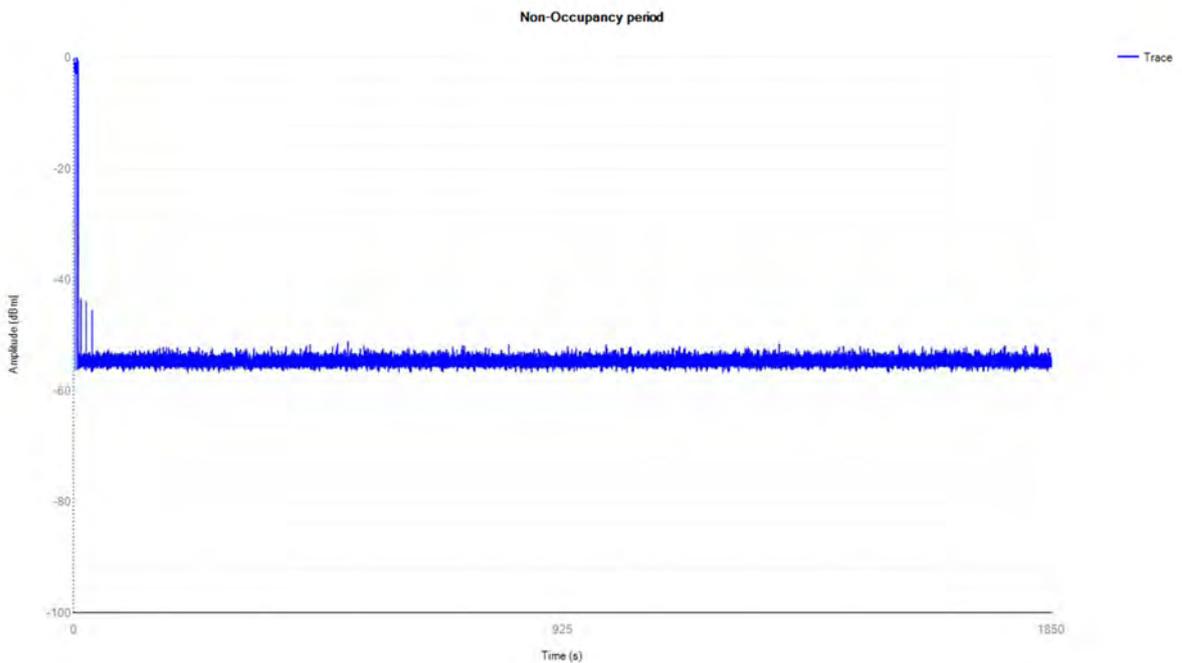


Test Graphs

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+Adapetr+Data cable +WIFI TX

Test voltage: AC 120V/60Hz

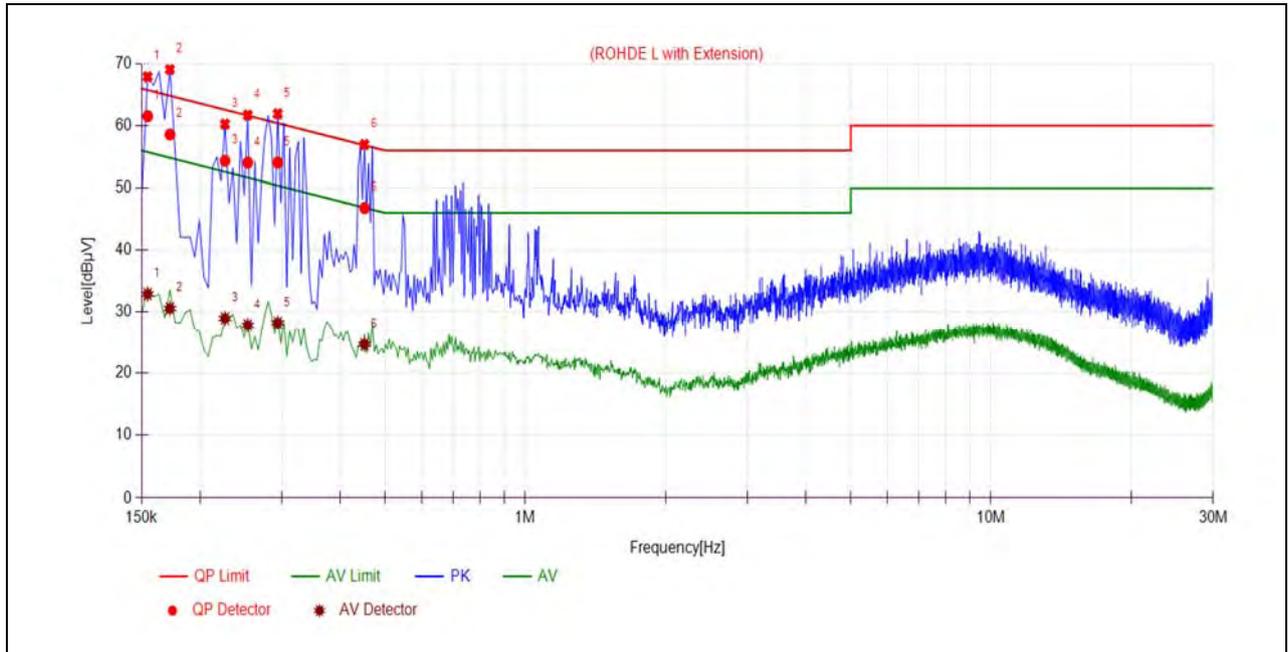
The measurement results are obtained as below:

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

U_R : Receiver Reading

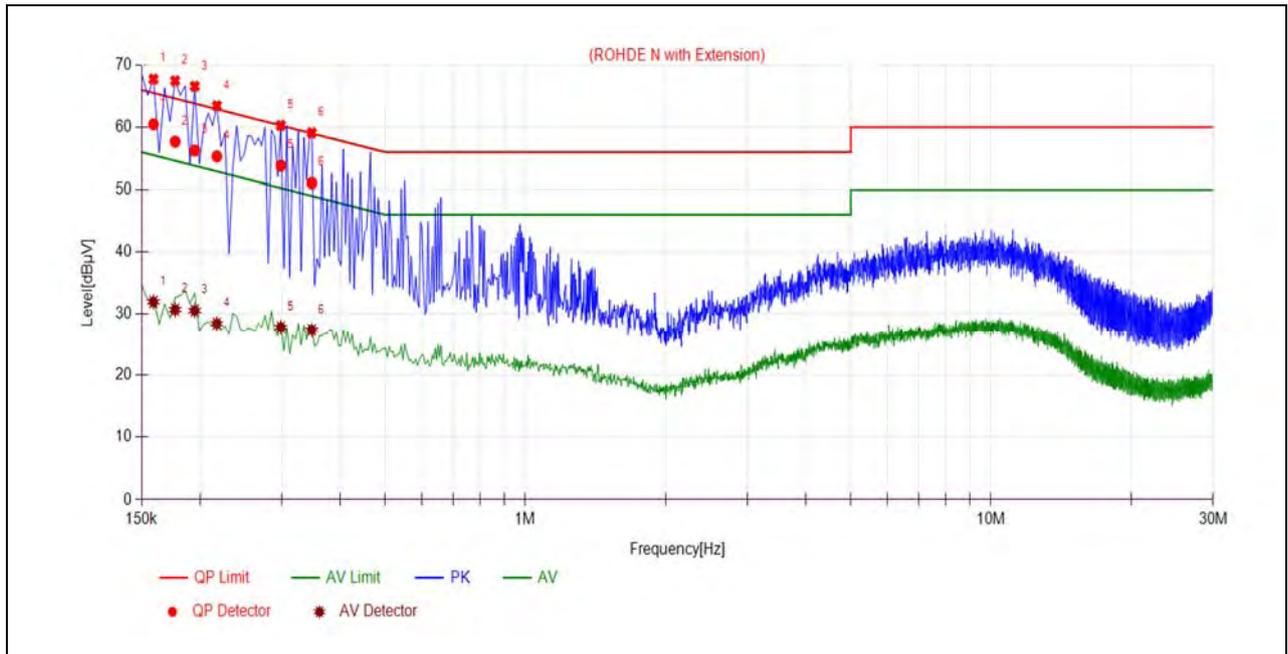
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1545	61.54	32.92	65.75	55.75	Line	PASS
2	0.1725	58.59	30.59	64.84	54.84		PASS
3	0.2265	54.35	28.97	62.58	52.58		PASS
4	0.2535	54.07	27.84	61.64	51.64		PASS
5	0.2940	54.07	28.23	60.41	50.41		PASS
6	0.4515	46.80	24.68	56.85	46.85		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1590	60.48	31.99	65.52	55.52	Neutral	PASS
2	0.1770	57.69	30.73	64.63	54.63		PASS
3	0.1950	56.27	30.58	63.82	53.82		PASS
4	0.2175	55.32	28.46	62.91	52.91		PASS
5	0.2985	53.84	27.83	60.29	50.29		PASS
6	0.3480	51.08	27.40	59.01	49.01		PASS

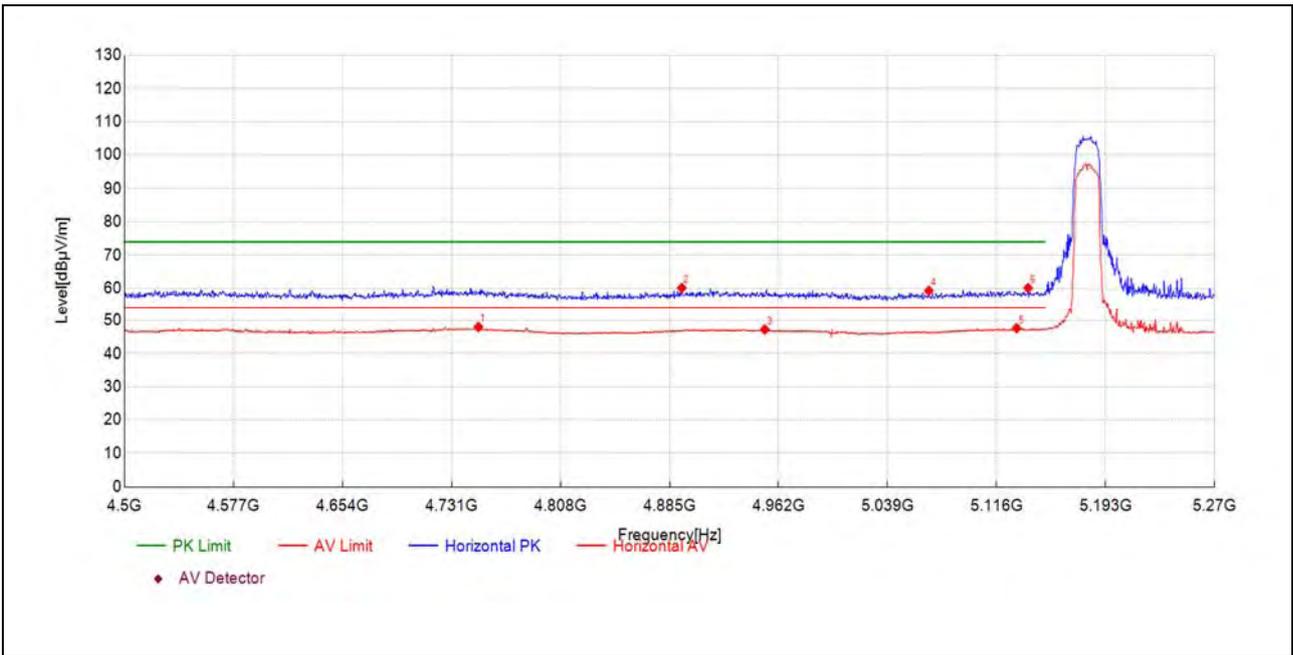
A.8. Restricted Frequency Bands

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

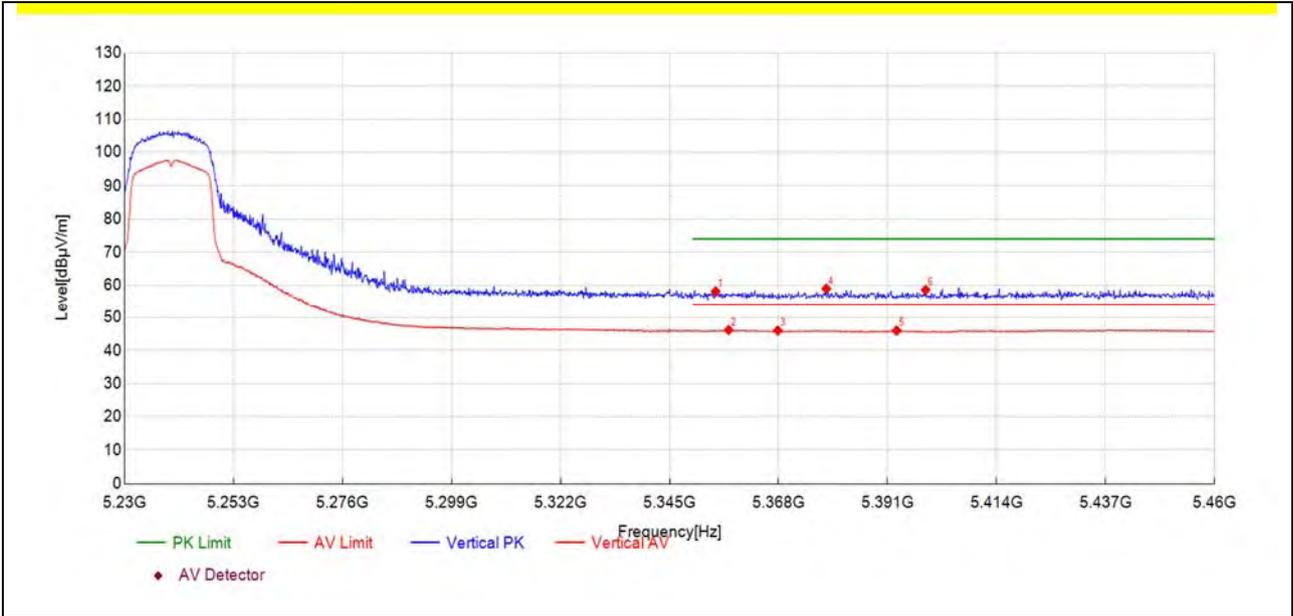
802.11a Mode

Plot for Channel 36



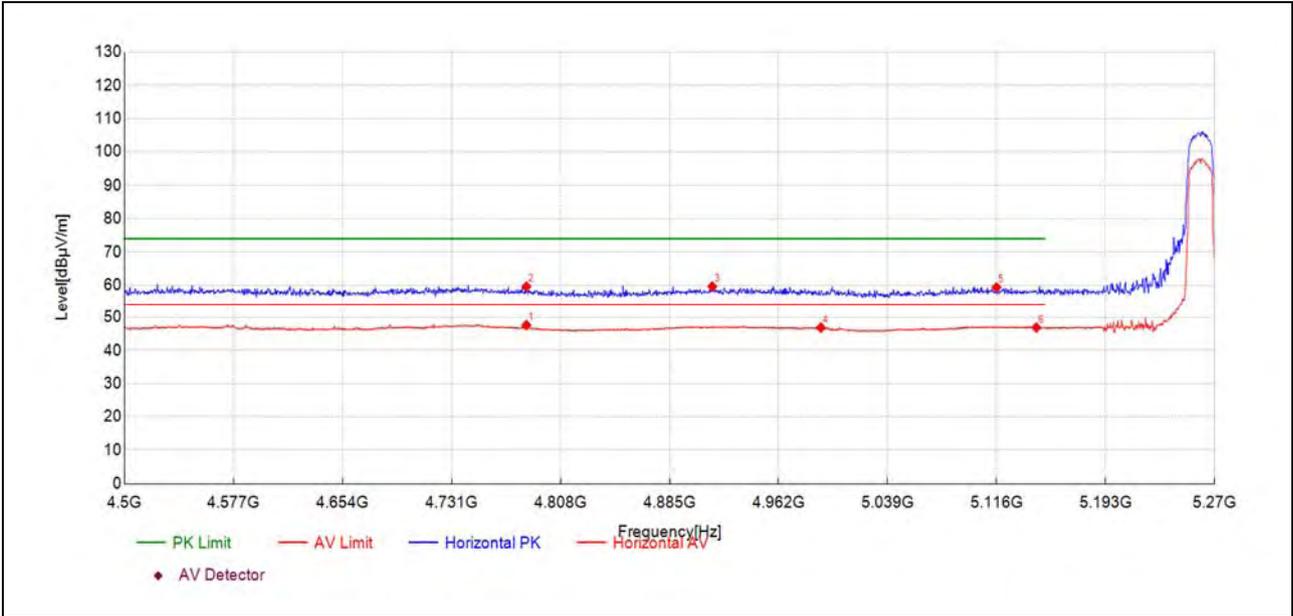
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4749.99	27.7	48.03	20.320	54.00	5.97	150	318	AV	PASS
4893.67	39.9	60.07	20.220	74.00	13.93	150	341	PK	PASS
4952.22	27.5	47.27	19.820	54.00	6.73	150	241	AV	PASS
5068.16	38.9	59.24	20.310	74.00	14.76	150	203	PK	PASS
5130.18	27.3	47.68	20.400	54.00	6.32	150	273	AV	PASS
5138.26	39.7	60.05	20.360	74.00	13.95	150	4	PK	PASS

Plot for Channel 48



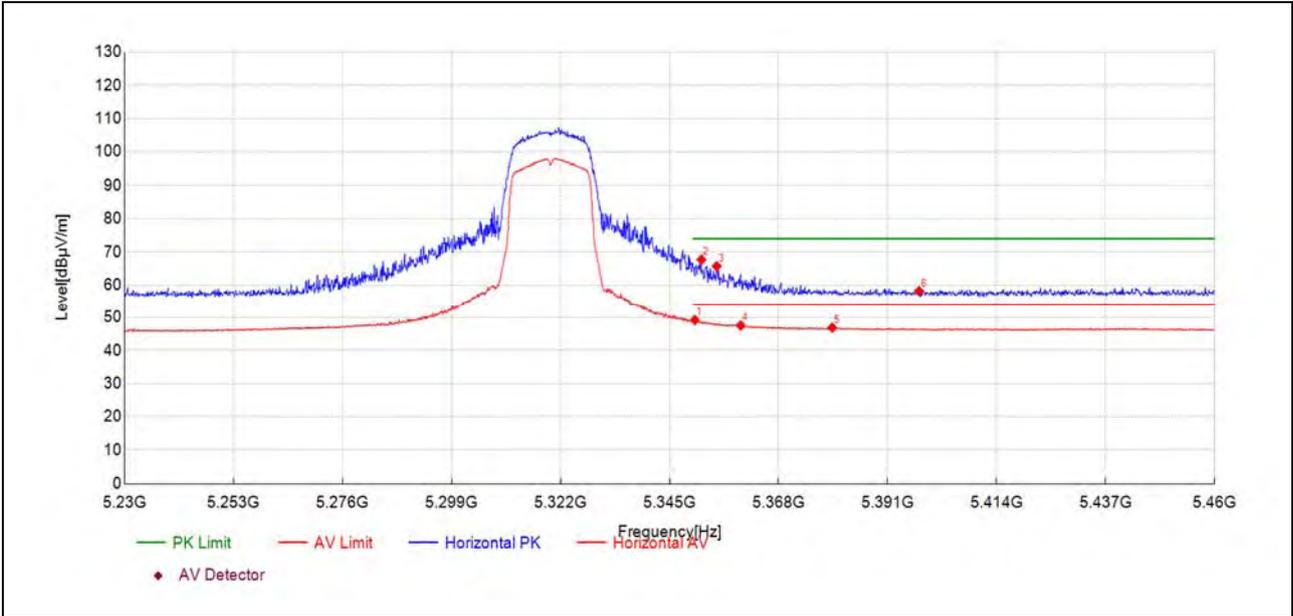
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5354.72	38.2	58.09	19.930	74.00	15.91	150	10	PK	PASS
5357.48	26.3	46.19	19.930	54.00	7.81	150	40	AV	PASS
5367.84	26.1	46.02	19.900	54.00	7.98	150	340	AV	PASS
5378.08	39.1	58.94	19.870	74.00	15.06	150	320	PK	PASS
5392.92	26.2	46.00	19.840	54.00	8.00	150	130	AV	PASS
5399.02	38.7	58.56	19.830	74.00	15.44	150	10	PK	PASS

Plot for Channel 52



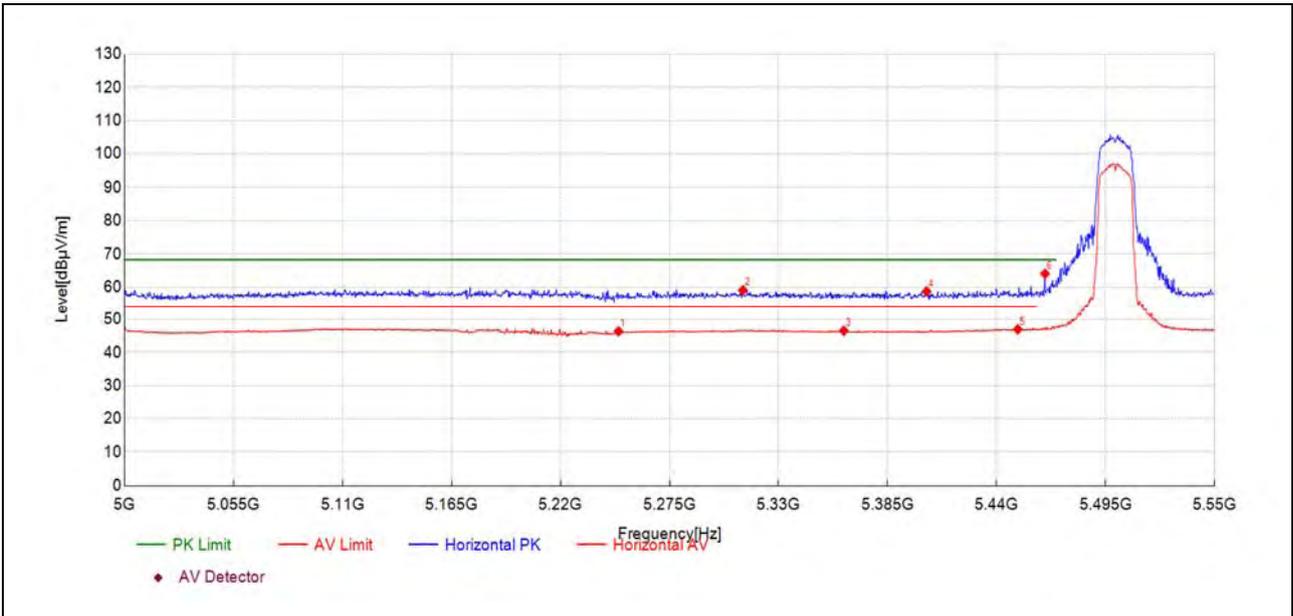
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4783.89	27.9	47.62	19.730	54.00	6.38	150	236	AV	PASS
4783.89	39.8	59.56	19.730	74.00	14.44	150	335	PK	PASS
4915.24	39.5	59.59	20.140	74.00	14.41	150	160	PK	PASS
4991.89	27.0	46.87	19.870	54.00	7.13	150	213	AV	PASS
5115.92	38.9	59.31	20.460	74.00	14.69	150	1	PK	PASS
5144.04	26.6	46.89	20.340	54.00	7.11	150	30	AV	PASS

Plot for Channel 64



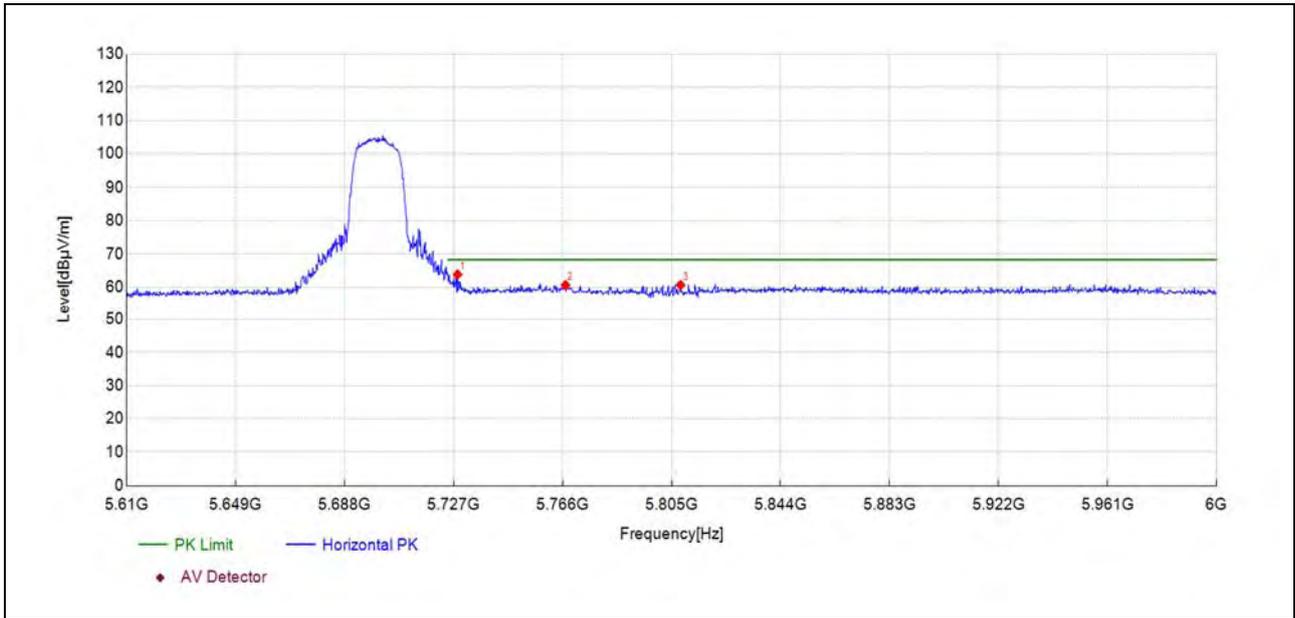
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5350.35	29.3	49.21	19.940	54.00	4.79	150	42	AV	PASS
5351.73	47.7	67.65	19.940	74.00	6.35	150	64	PK	PASS
5354.95	45.7	65.66	19.930	74.00	8.34	150	42	PK	PASS
5360.02	27.6	47.53	19.920	54.00	6.47	150	57	AV	PASS
5379.34	27.0	46.88	19.870	54.00	7.12	150	33	AV	PASS
5397.64	38.3	58.17	19.830	74.00	15.83	150	26	PK	PASS

Plot for Channel 100



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5249.27	26.5	46.37	19.840	54.00	7.63	150	268	AV	PASS
5312.01	38.9	59.05	20.180	68.23	9.18	150	40	PK	PASS
5362.91	26.6	46.55	19.910	54.00	7.45	150	3	AV	PASS
5404.73	38.8	58.70	19.890	68.23	9.53	150	360	PK	PASS
5450.68	26.5	46.96	20.470	54.00	7.04	150	40	AV	PASS
5464.43	43.6	64.02	20.390	68.23	4.21	150	70	PK	PASS

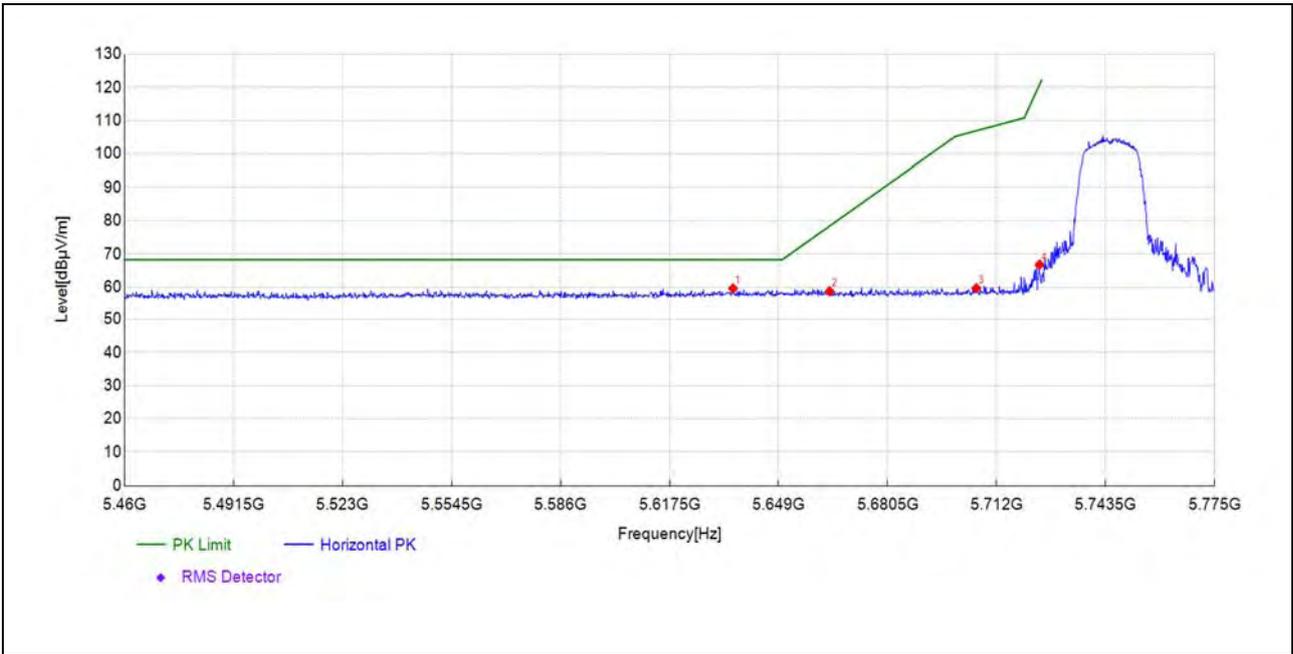
Plot for Channel 140



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5728.42	42.5	63.78	21.310	68.23	4.45	150	125	PK	PASS
5767.05	38.9	60.57	21.660	68.23	7.66	150	167	PK	PASS
5808.22	38.8	60.62	21.820	68.23	7.61	150	112	PK	PASS

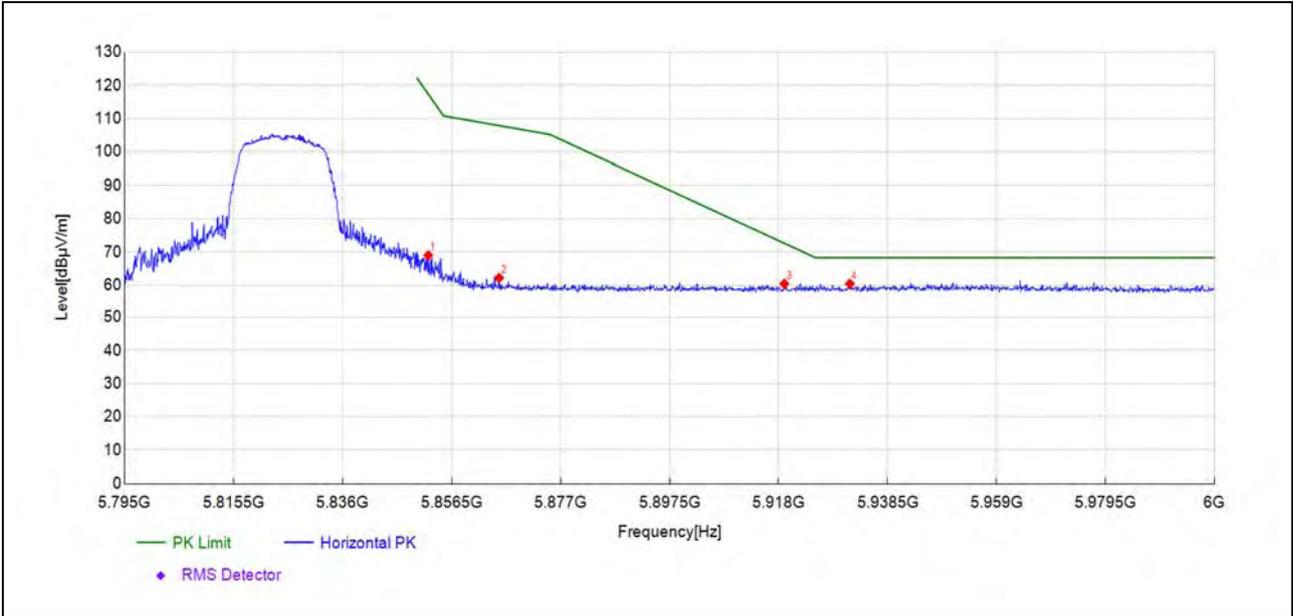


Plot for Channel 149



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5635.86	38.8	59.56	20.760	68.23	8.67	150	179	PK	PASS
5663.75	37.8	58.73	20.970	78.40	19.67	150	101	PK	PASS
5706.14	38.7	59.66	20.980	106.95	47.29	150	360	PK	PASS
5724.42	45.5	66.78	21.250	120.90	54.12	150	165	PK	PASS

Plot for Channel 165

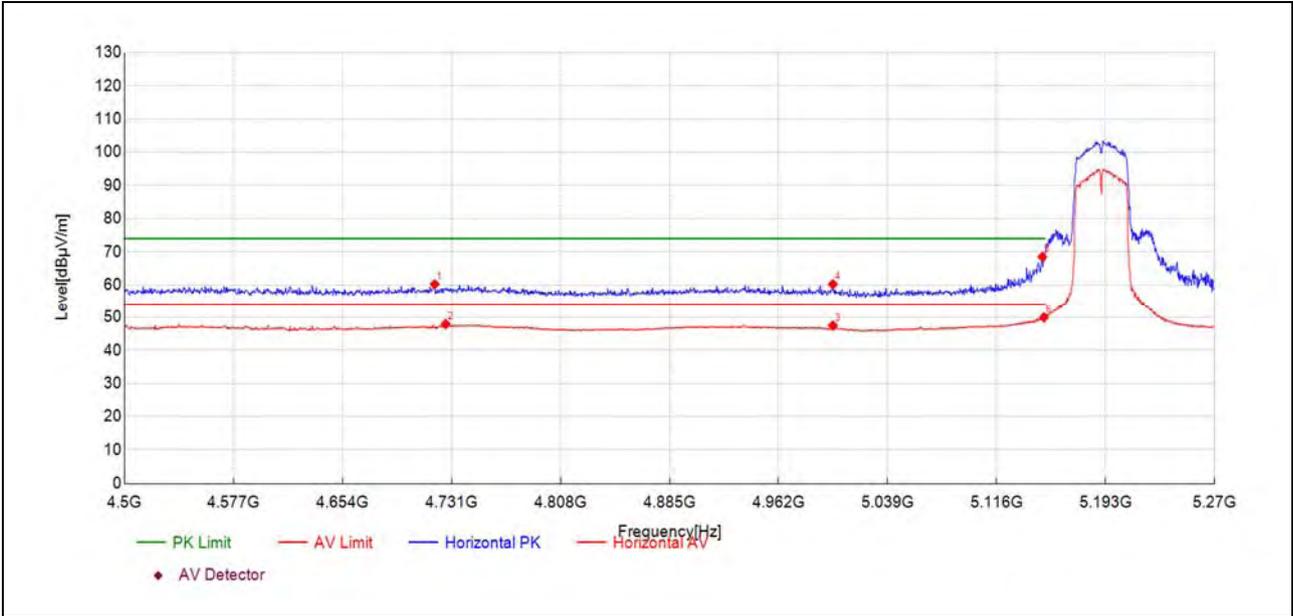


Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5852.12	46.5	68.97	22.430	117.39	48.42	150	118	PK	PASS
5865.45	40.0	62.18	22.230	107.90	45.72	150	26	PK	PASS
5919.09	38.5	60.40	21.870	72.61	12.21	150	125	PK	PASS
5931.39	38.4	60.40	21.970	68.23	7.83	150	309	PK	PASS



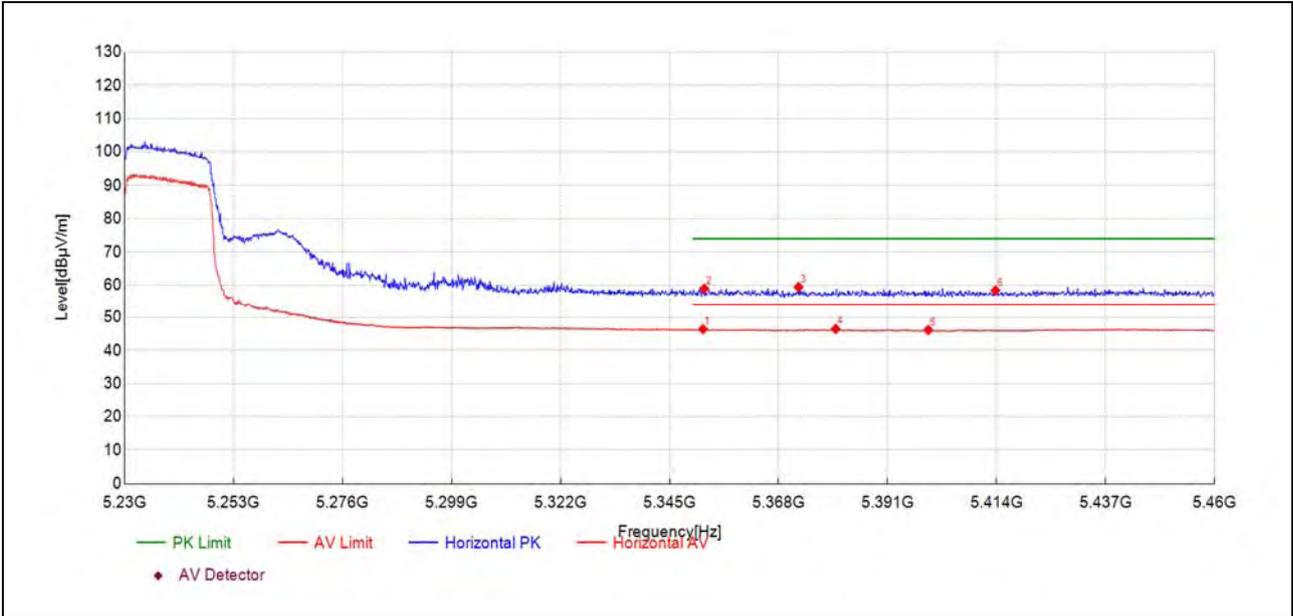
802.11n (HT40) Mode

Plot for Channel 38



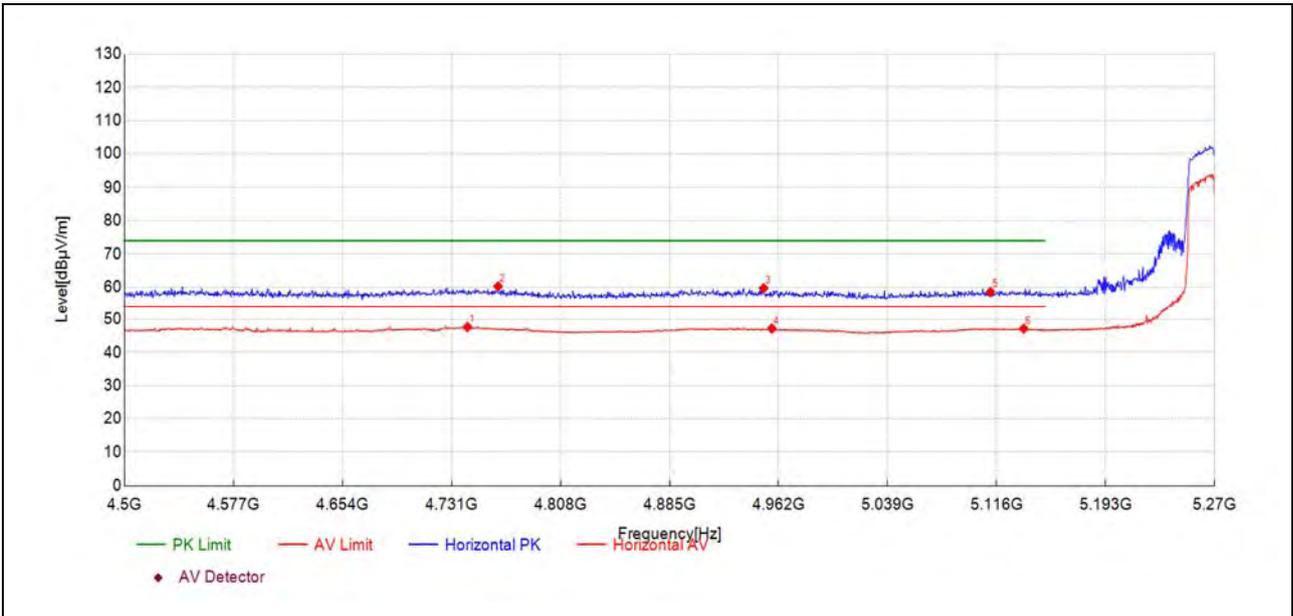
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4719.17	39.9	60.19	20.300	74.00	13.81	150	222	PK	PASS
4726.88	27.6	47.90	20.310	54.00	6.10	150	4	AV	PASS
5000.37	27.6	47.46	19.880	54.00	6.54	150	360	AV	PASS
5000.37	40.3	60.16	19.880	74.00	13.84	150	322	PK	PASS
5148.28	48.1	68.43	20.320	74.00	5.57	150	49	PK	PASS
5149.43	29.6	49.94	20.320	54.00	4.06	150	40	AV	PASS

Plot for Channel 46



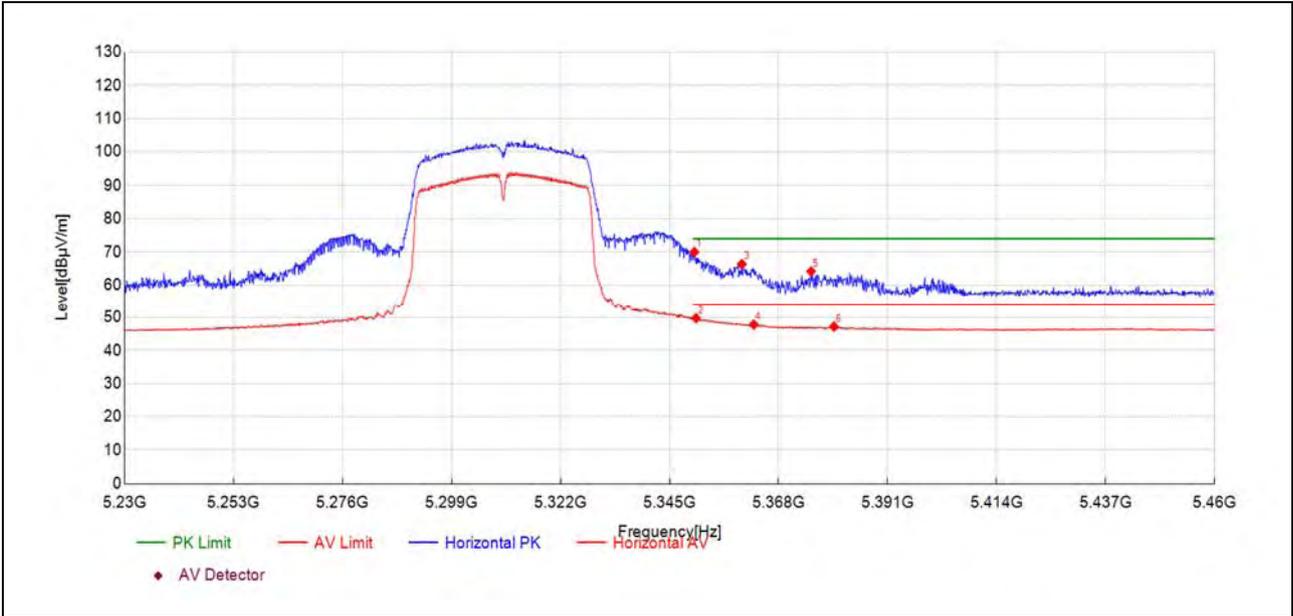
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5352.08	26.5	46.43	19.940	54.00	7.57	150	37	AV	PASS
5352.31	39.0	58.90	19.940	74.00	15.10	150	91	PK	PASS
5372.21	39.5	59.38	19.900	74.00	14.62	150	37	PK	PASS
5380.04	26.6	46.51	19.870	54.00	7.49	150	312	AV	PASS
5399.59	26.3	46.17	19.830	54.00	7.83	150	68	AV	PASS
5413.75	38.4	58.37	20.000	74.00	15.63	150	0	PK	PASS

Plot for Channel 54



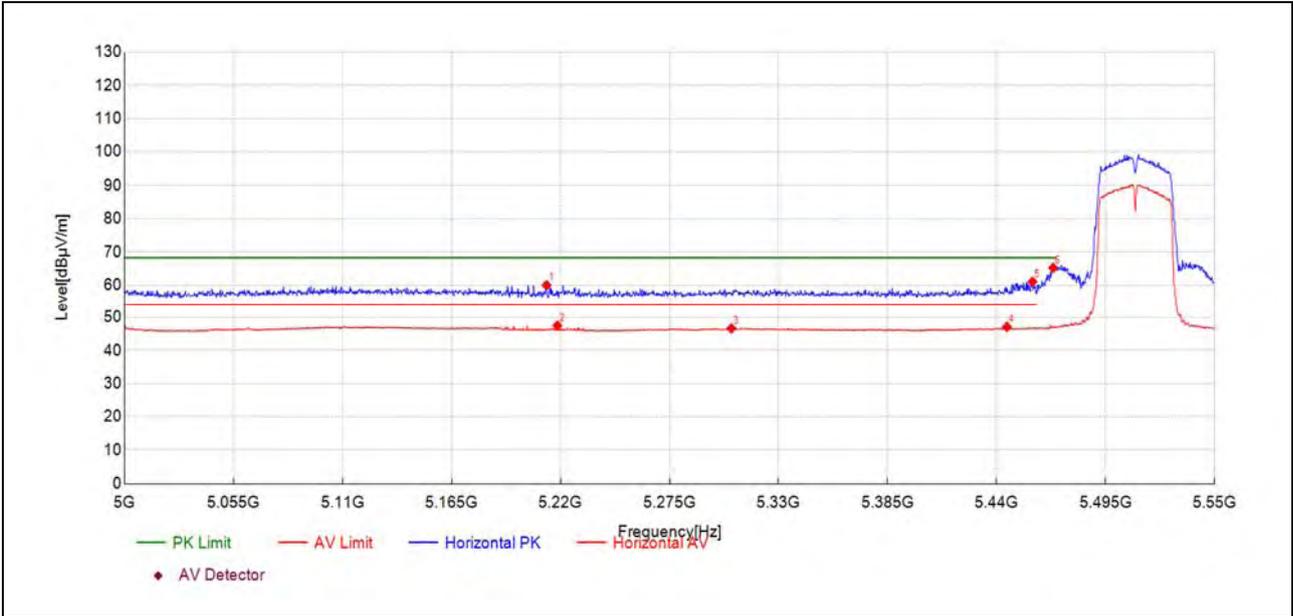
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4742.29	27.3	47.65	20.320	54.00	6.35	150	181	AV	PASS
4763.86	40.1	60.19	20.080	74.00	13.81	150	360	PK	PASS
4951.45	39.8	59.66	19.820	74.00	14.34	150	360	PK	PASS
4957.22	27.4	47.20	19.830	54.00	6.80	150	127	AV	PASS
5111.69	38.0	58.51	20.480	74.00	15.49	150	212	PK	PASS
5135.18	26.8	47.18	20.380	54.00	6.82	150	273	AV	PASS

Plot for Channel 62



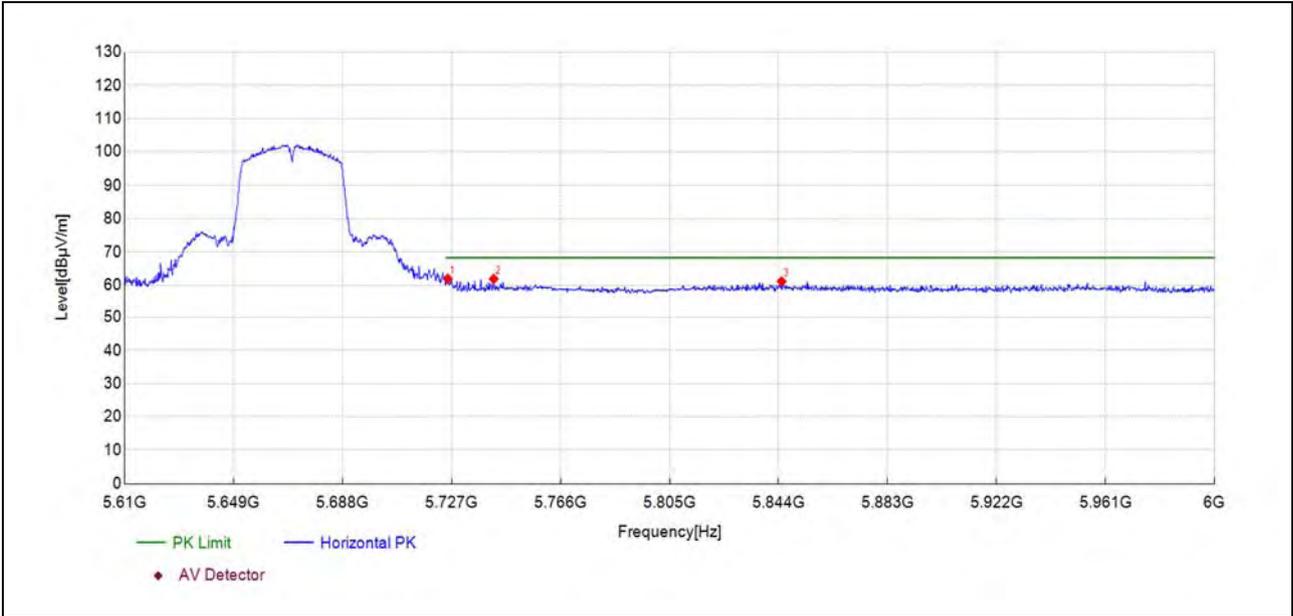
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5350.24	50.0	69.98	19.940	74.00	4.02	150	37	PK	PASS
5350.58	29.8	49.75	19.940	54.00	4.25	150	52	AV	PASS
5360.25	46.4	66.32	19.920	74.00	7.68	150	52	PK	PASS
5362.78	27.9	47.81	19.910	54.00	6.19	150	37	AV	PASS
5374.86	44.2	64.13	19.890	74.00	9.87	150	52	PK	PASS
5379.69	27.3	47.17	19.870	54.00	6.83	150	52	AV	PASS

Plot for Channel 102



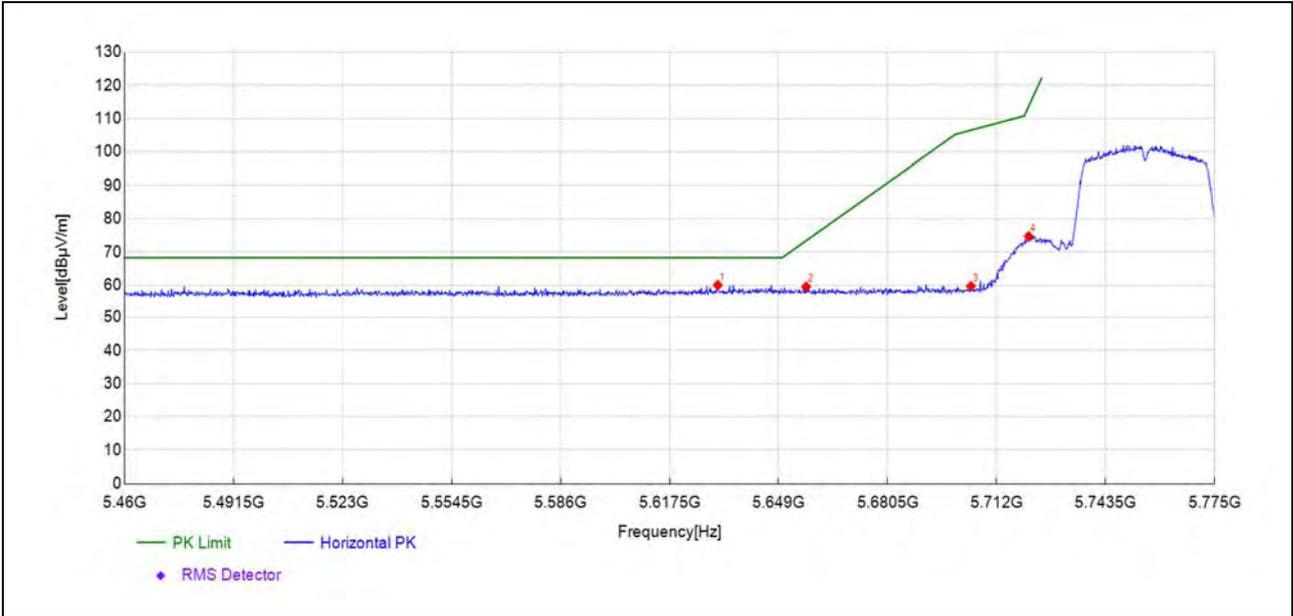
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5212.96	39.7	59.95	20.260	68.23	8.28	150	38	PK	PASS
5218.46	27.3	47.50	20.210	54.00	6.50	150	0	AV	PASS
5306.23	26.4	46.64	20.210	54.00	7.36	150	242	AV	PASS
5445.17	26.7	47.10	20.410	54.00	6.90	150	45	AV	PASS
5458.10	40.6	61.01	20.430	68.23	7.22	150	69	PK	PASS
5468.56	44.8	65.21	20.370	68.23	3.02	150	45	PK	PASS

Plot for Channel 134



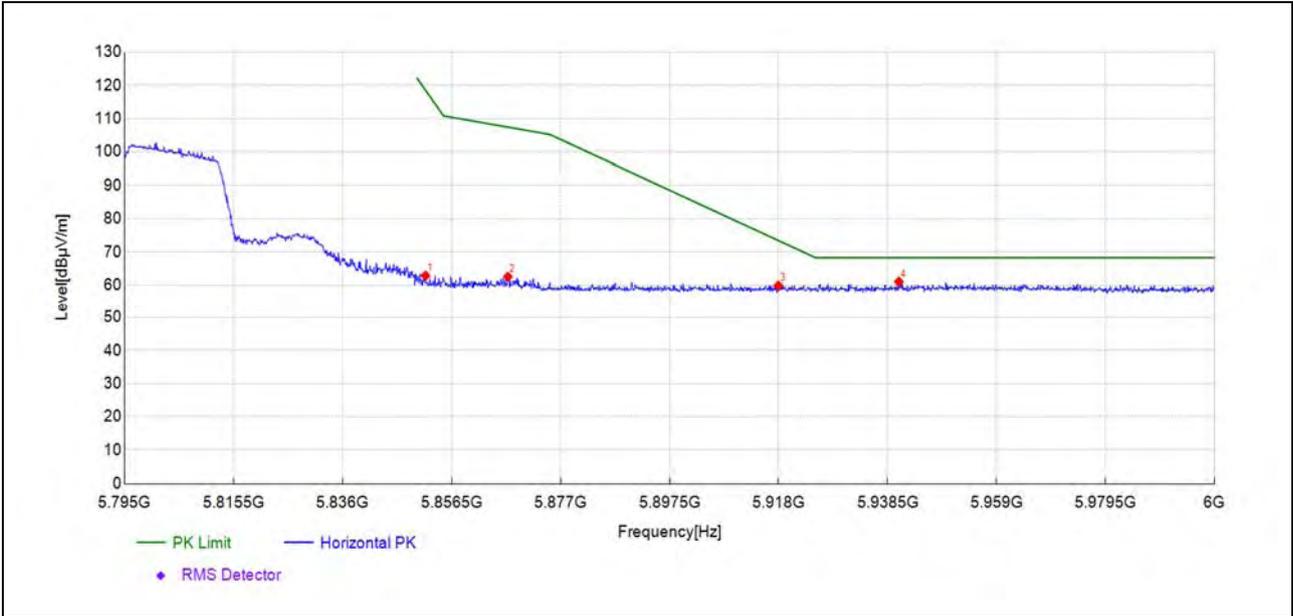
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5725.69	40.7	61.92	21.270	68.23	6.31	150	45	PK	PASS
5742.08	40.3	61.85	21.520	68.23	6.38	150	52	PK	PASS
5845.09	38.7	61.08	22.380	68.23	7.15	150	236	PK	PASS

Plot for Channel 151



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5631.45	39.3	59.98	20.680	68.23	8.25	150	52	PK	PASS
5656.97	38.5	59.52	20.990	73.39	13.87	150	187	PK	PASS
5704.56	38.7	59.66	20.950	106.51	46.85	150	299	PK	PASS
5721.27	53.5	74.72	21.210	113.72	39.00	150	52	PK	PASS

Plot for Channel 159

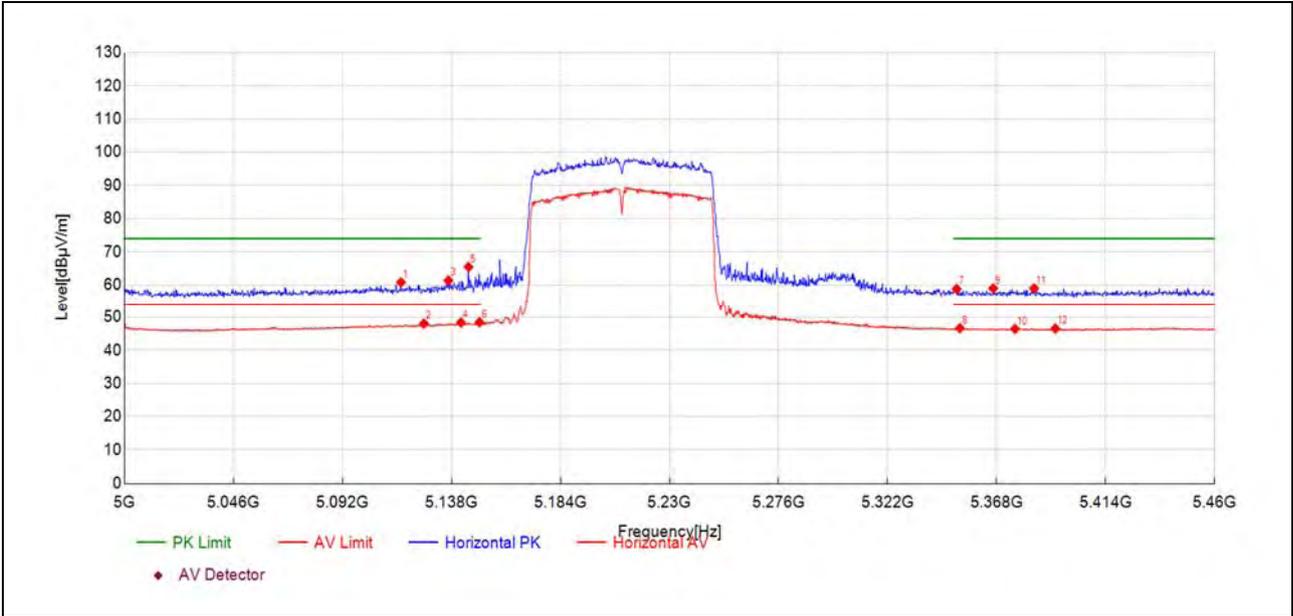


Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5851.61	40.4	62.84	22.440	118.56	55.72	150	38	PK	PASS
5867.09	40.3	62.51	22.210	107.44	44.93	150	38	PK	PASS
5917.96	38.0	59.84	21.870	73.44	13.60	150	334	PK	PASS
5940.62	39.0	61.00	22.040	68.23	7.23	150	200	PK	PASS



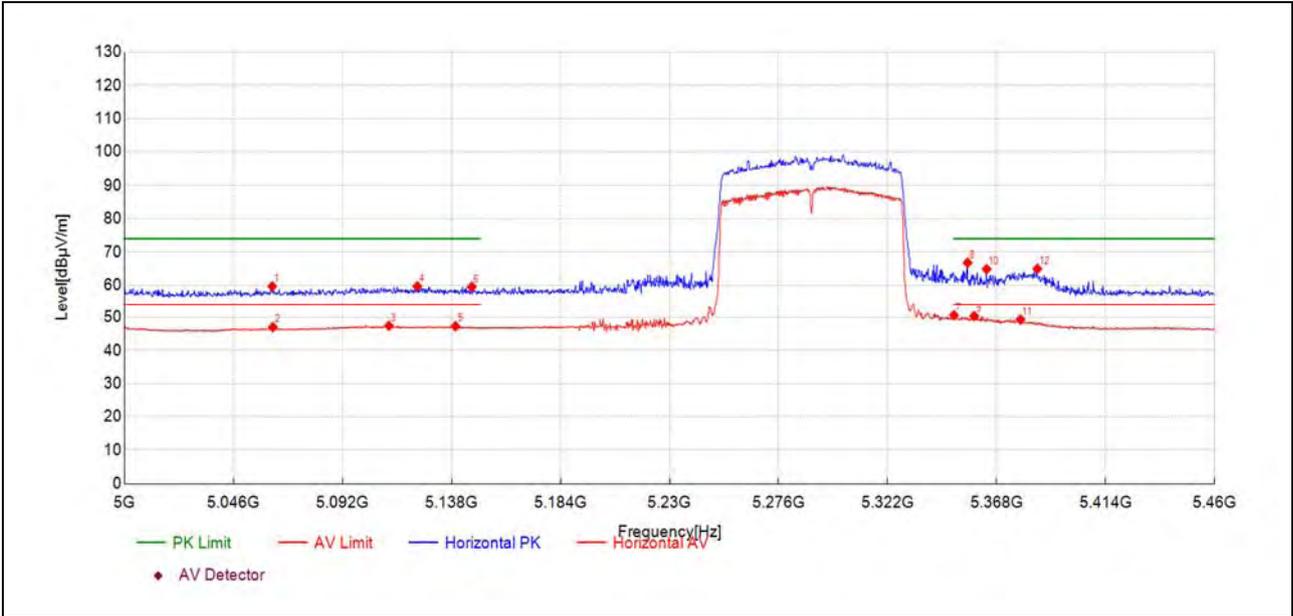
802.11ac (VHT80) Mode

Plot for Channel 42



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5116.67	40.3	60.79	20.460	74.00	13.21	150	54	PK	PASS
5126.33	27.6	48.03	20.420	54.00	5.97	150	40	AV	PASS
5136.69	41.0	61.36	20.380	74.00	12.64	150	31	PK	PASS
5141.98	28.0	48.36	20.360	54.00	5.64	150	47	AV	PASS
5145.20	45.1	65.41	20.340	74.00	8.59	150	31	PK	PASS
5149.80	28.1	48.44	20.320	54.00	5.56	150	54	AV	PASS
5351.16	38.8	58.75	19.940	74.00	15.25	150	214	PK	PASS
5352.54	26.7	46.66	19.930	54.00	7.34	150	31	AV	PASS
5366.57	39.0	58.93	19.910	74.00	15.07	150	54	PK	PASS
5375.78	26.6	46.44	19.880	54.00	7.56	150	1	AV	PASS
5383.83	39.1	58.97	19.860	74.00	15.03	150	222	PK	PASS
5392.81	26.7	46.55	19.840	54.00	7.45	150	40	AV	PASS

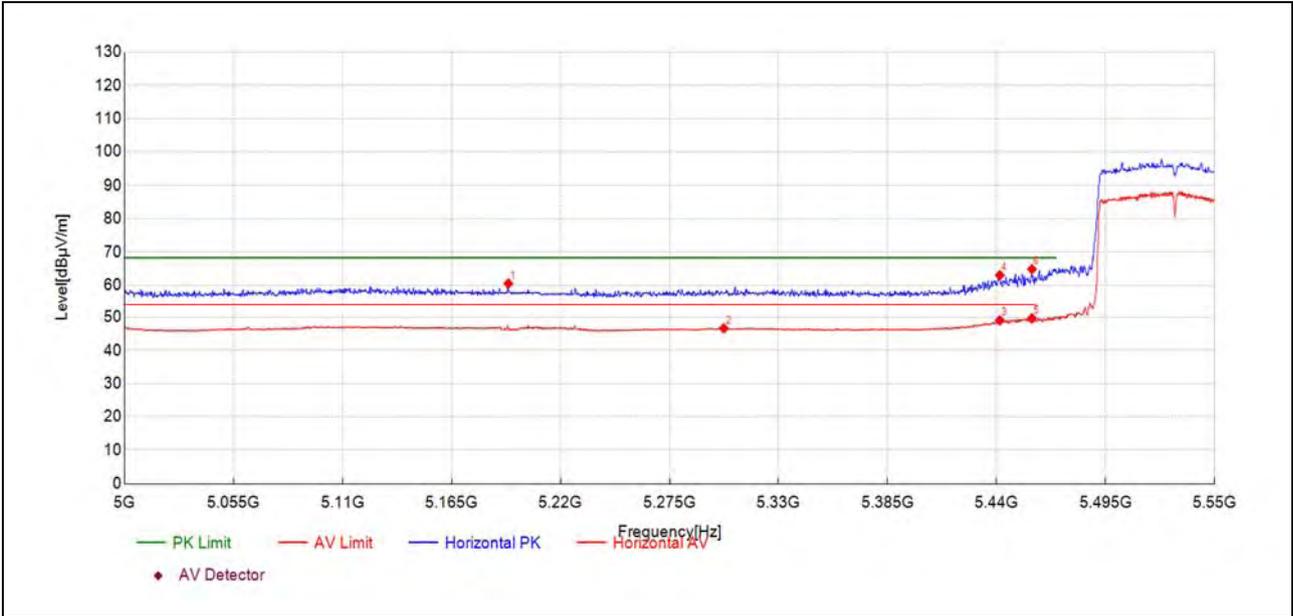
Plot for Channel 58



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5062.36	39.3	59.60	20.280	74.00	14.40	150	90	PK	PASS
5062.59	26.8	47.03	20.280	54.00	6.97	150	44	AV	PASS
5111.61	27.0	47.43	20.480	54.00	6.57	150	129	AV	PASS
5123.57	39.2	59.64	20.420	74.00	14.36	150	259	PK	PASS
5139.68	26.9	47.28	20.360	54.00	6.72	150	267	AV	PASS
5146.58	39.1	59.44	20.340	74.00	14.56	150	82	PK	PASS
5350.01	30.7	50.64	19.940	54.00	3.36	150	36	AV	PASS
5355.76	46.8	66.75	19.930	74.00	7.25	150	36	PK	PASS
5358.52	30.5	50.37	19.920	54.00	3.63	150	44	AV	PASS
5363.81	44.9	64.81	19.910	74.00	9.19	150	60	PK	PASS
5378.08	29.4	49.30	19.870	54.00	4.70	150	52	AV	PASS
5385.21	45.0	64.90	19.860	74.00	9.10	150	52	PK	PASS

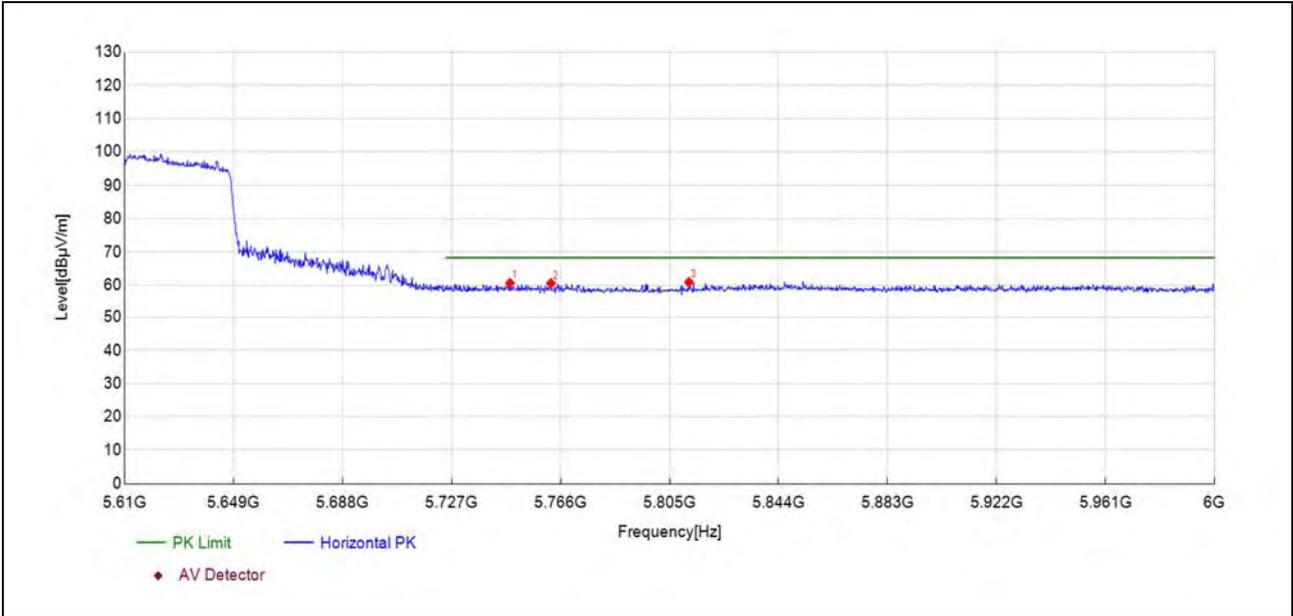


Plot for Channel 106



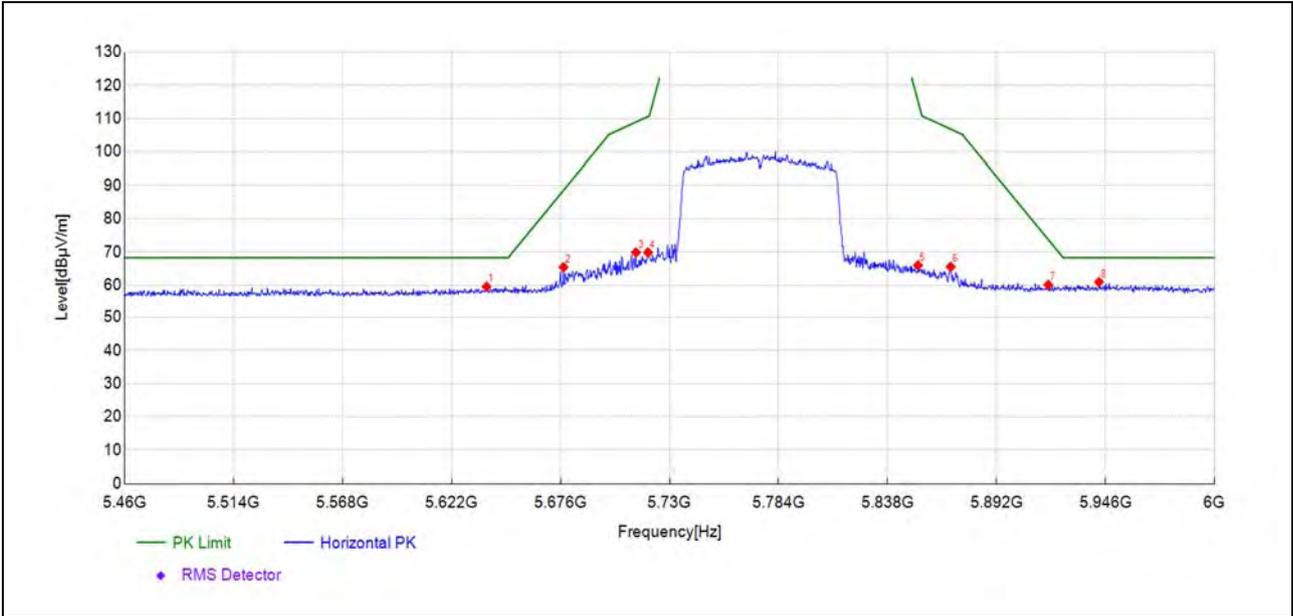
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5193.70	40.0	60.44	20.400	68.23	7.79	150	154	PK	PASS
5302.38	26.4	46.68	20.240	54.00	7.32	150	185	AV	PASS
5441.60	28.7	49.08	20.360	54.00	4.92	150	49	AV	PASS
5441.60	42.6	62.97	20.360	68.23	5.26	150	49	PK	PASS
5457.83	29.2	49.67	20.430	54.00	4.33	150	49	AV	PASS
5457.83	44.4	64.80	20.430	68.23	3.43	150	49	PK	PASS

Plot for Channel 122



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5747.93	39.0	60.58	21.610	68.23	7.65	150	76	PK	PASS
5762.57	38.9	60.54	21.660	68.23	7.69	150	224	PK	PASS
5811.93	39.0	60.89	21.880	68.23	7.34	150	125	PK	PASS

Plot for Channel 155



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5639.37	38.7	59.53	20.820	68.23	8.70	150	130	PK	PASS
5677.46	44.5	65.39	20.940	88.55	23.16	150	30	PK	PASS
5713.39	48.8	69.84	21.090	108.98	39.14	150	52	PK	PASS
5719.33	48.7	69.83	21.170	110.64	40.81	150	52	PK	PASS
5853.05	43.6	65.99	22.420	115.28	49.29	150	360	PK	PASS
5869.25	43.3	65.51	22.170	106.84	41.33	150	38	PK	PASS
5917.61	38.2	60.04	21.870	73.70	13.66	150	52	PK	PASS
5942.73	38.9	60.94	22.070	68.23	7.29	150	187	PK	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.

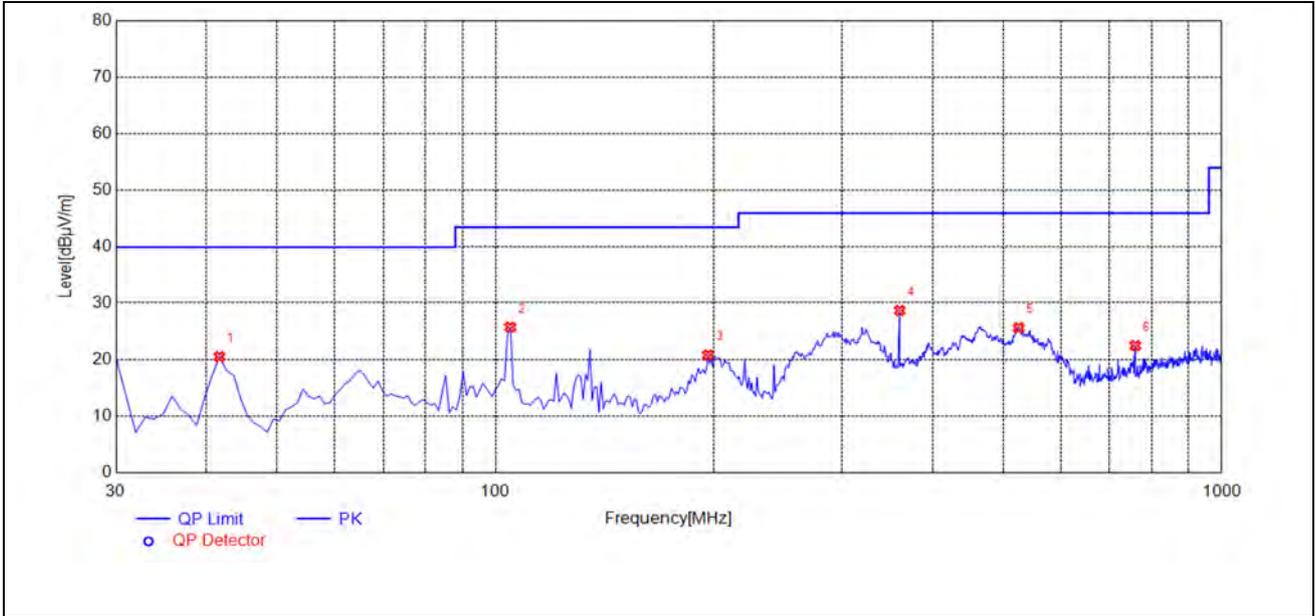
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

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.

Note4: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

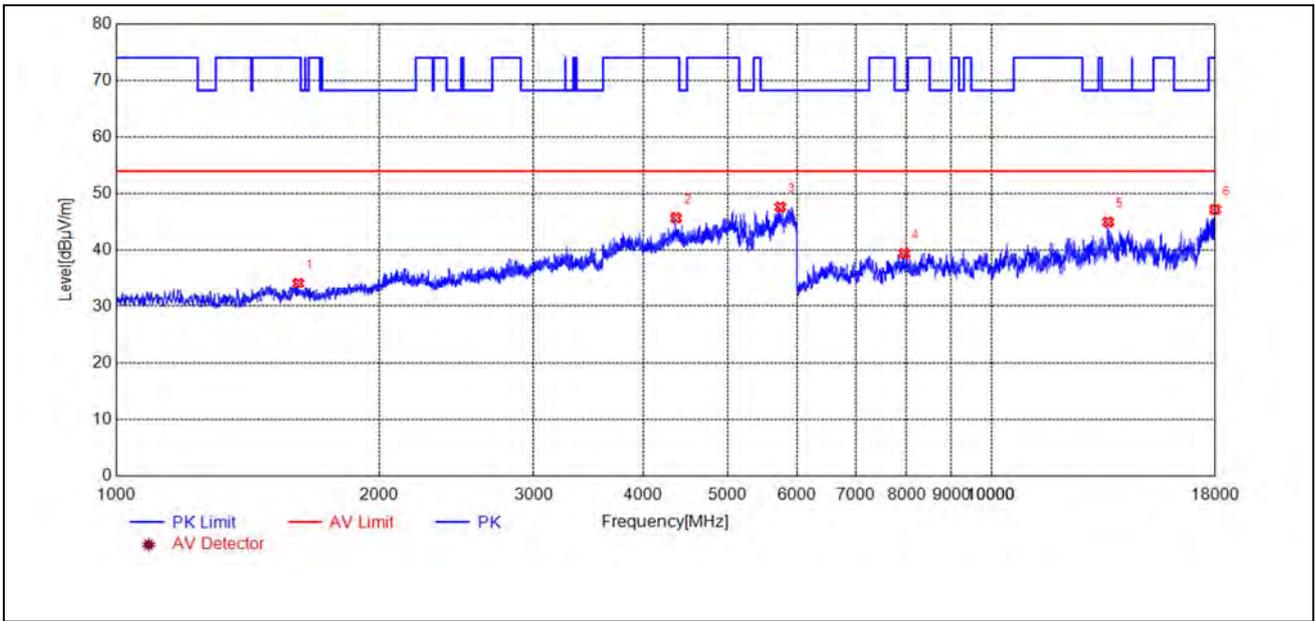
802.11a Mode

Plot for Channel 44



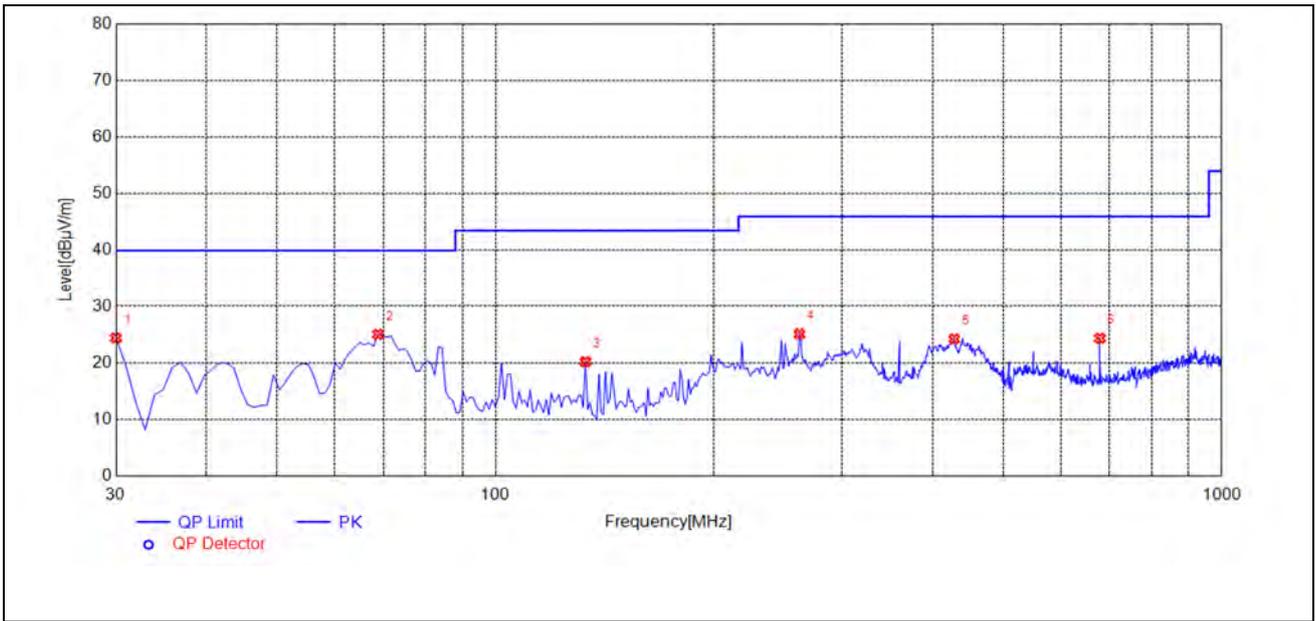
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
41.6517	20.48	-29.90	40.00	19.52	150	268	Horizontal	PASS
104.7648	25.70	-30.84	43.50	17.80	150	20	Horizontal	PASS
196.0360	20.79	-31.98	43.50	22.71	150	123	Horizontal	PASS
360.1301	28.65	-26.34	46.00	17.35	150	268	Horizontal	PASS
525.1952	25.59	-23.77	46.00	20.41	150	123	Horizontal	PASS
760.1702	22.44	-22.02	46.00	23.56	150	259	Horizontal	PASS



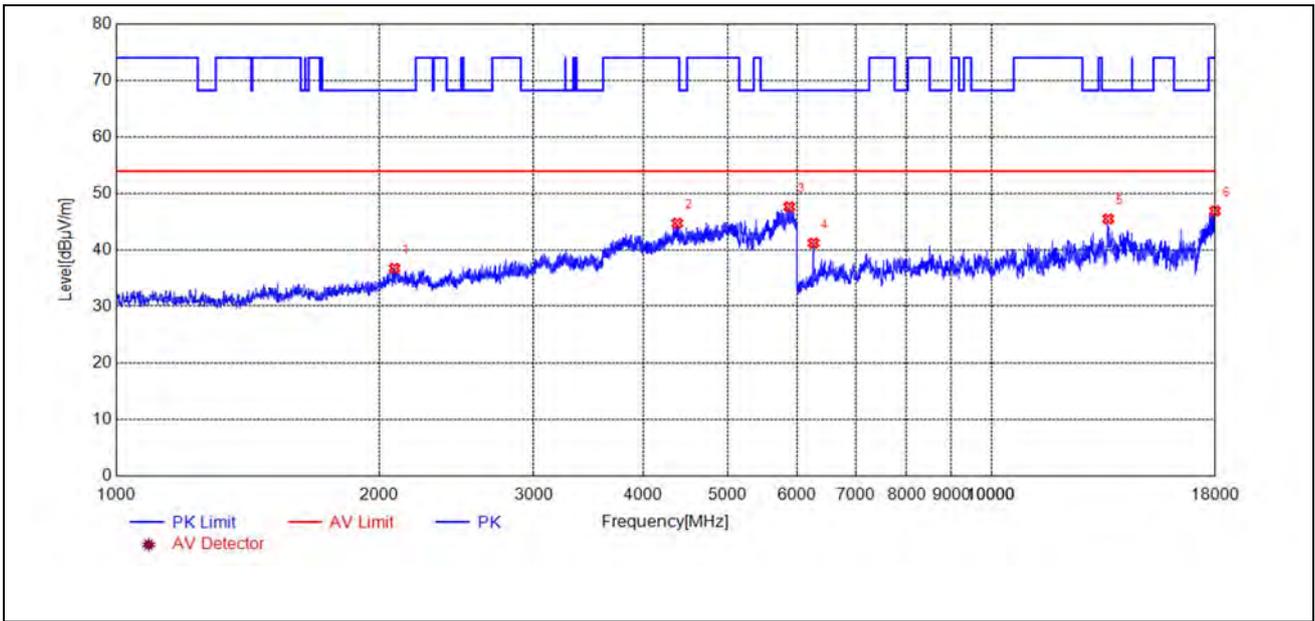
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1615.1230	34.18	-23.16	74.00	39.82	150	231	Horizontal	PASS
4361.6723	45.74	-11.97	74.00	28.26	150	332	Horizontal	PASS
5736.9474	47.67	-6.94	68.23	20.56	150	322	Horizontal	PASS
7953.9908	39.48	-2.40	68.23	28.75	150	219	Horizontal	PASS
13590.3181	45.02	7.15	68.23	23.21	150	129	Horizontal	PASS
18000.0000	47.22	13.41	74.00	26.78	150	259	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
30.0000	24.38	-31.67	40.00	15.62	150	221	Vertical	PASS
68.8388	25.03	-31.47	40.00	14.97	150	179	Vertical	PASS
132.9229	20.19	-32.93	43.50	23.31	150	93	Vertical	PASS
262.0621	25.10	-30.21	46.00	20.90	150	323	Vertical	PASS
428.0981	24.21	-25.34	46.00	21.79	150	68	Vertical	PASS
679.5796	24.34	-21.83	46.00	21.66	150	289	Vertical	PASS

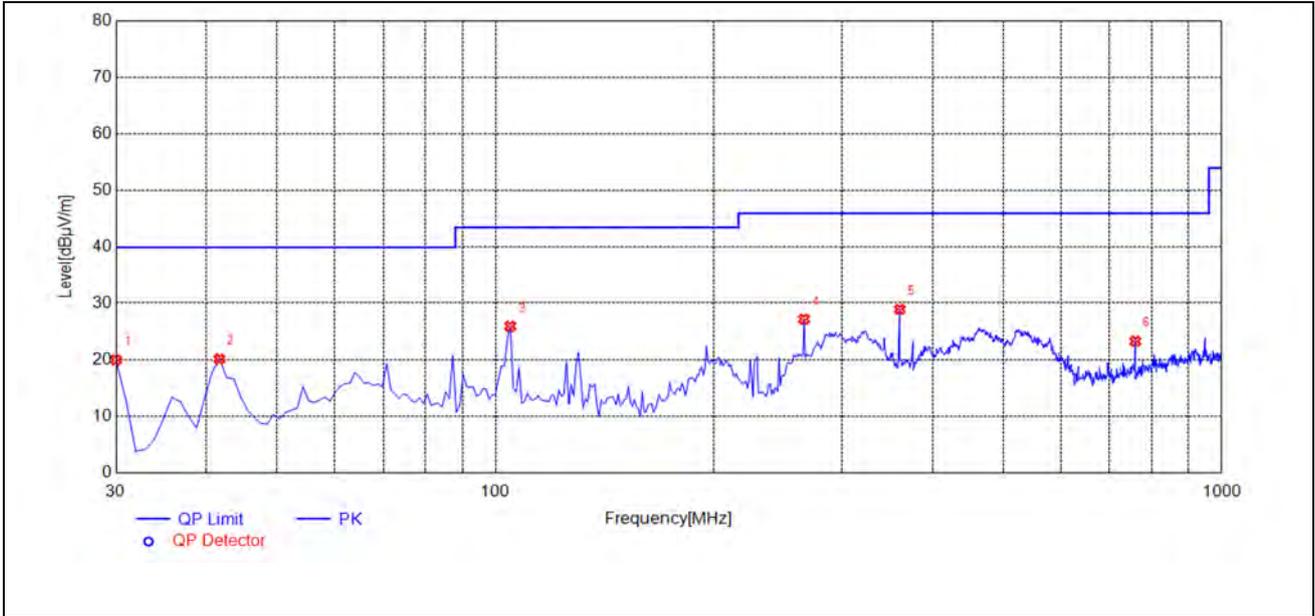


(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2080.2160	36.84	-20.37	68.23	31.39	150	70	Vertical	PASS
4375.6751	44.82	-12.00	74.00	29.18	150	80	Vertical	PASS
5873.9748	47.70	-6.97	68.23	20.53	150	70	Vertical	PASS
6261.6523	41.31	-6.74	68.23	26.92	150	69	Vertical	PASS
13592.7185	45.56	7.27	68.23	22.67	150	140	Vertical	PASS
18000.0000	46.97	13.41	74.00	27.03	150	58	Vertical	PASS

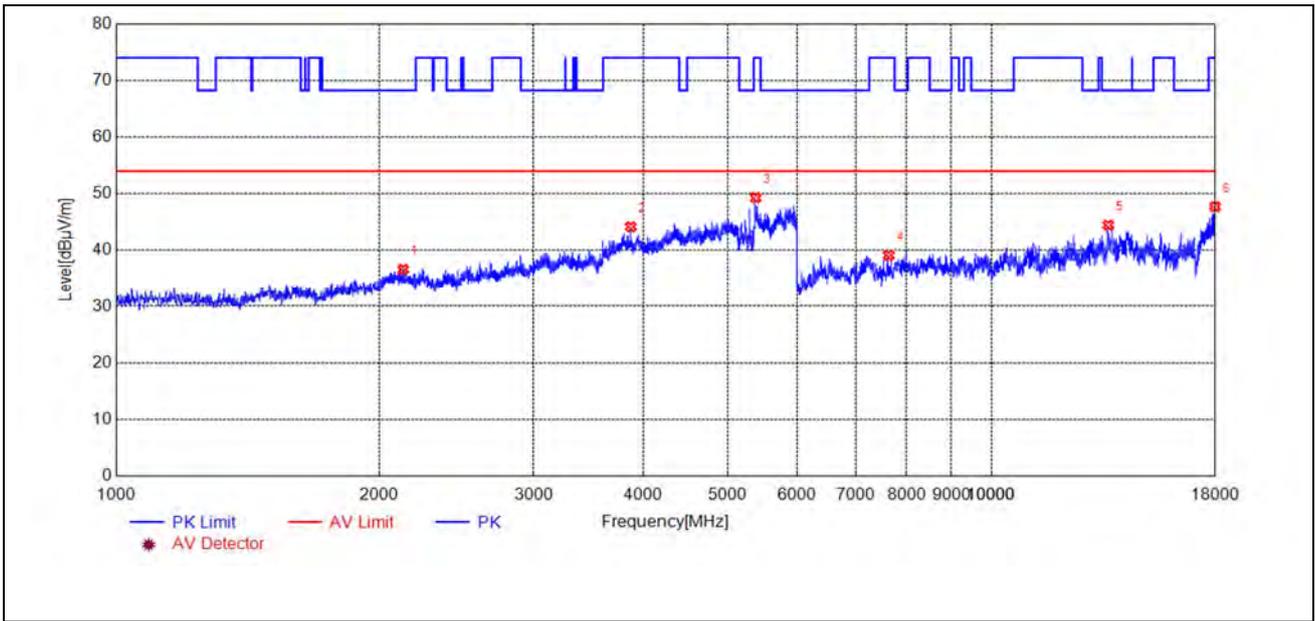


Plot for Channel 60



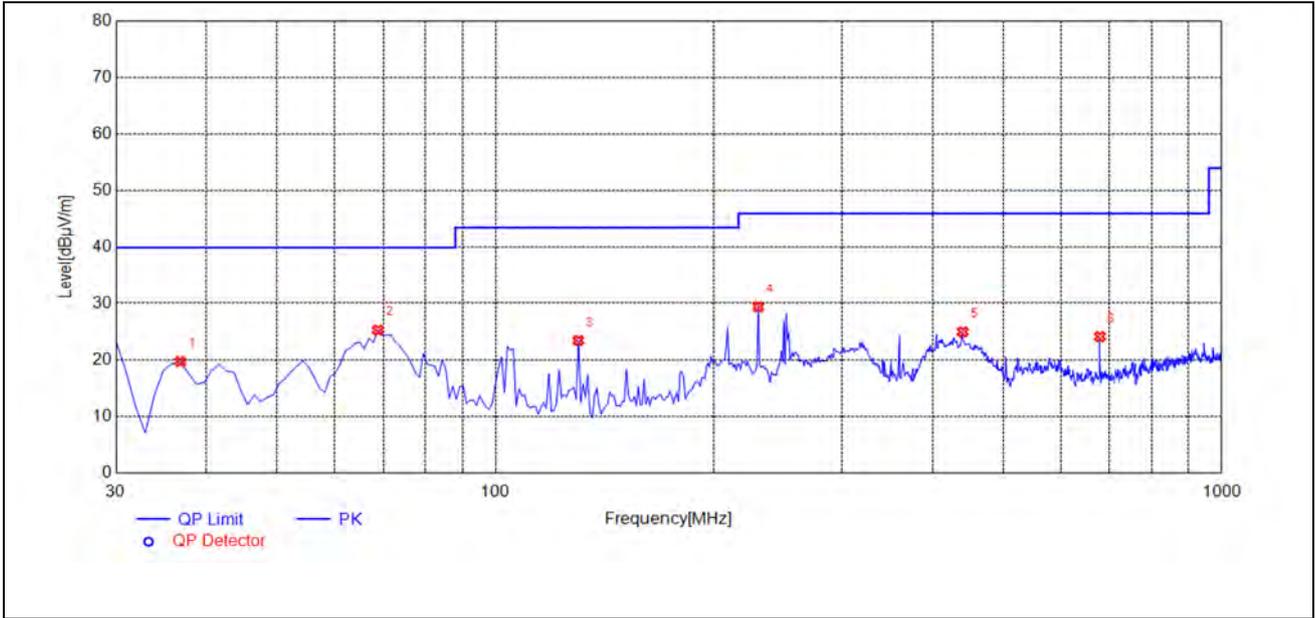
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
30.0000	19.93	-31.67	40.00	20.07	150	237	Horizontal	PASS
41.6517	20.12	-29.90	40.00	19.88	150	314	Horizontal	PASS
104.7648	25.88	-30.84	43.50	17.62	150	7	Horizontal	PASS
265.9459	27.14	-30.52	46.00	18.86	150	280	Horizontal	PASS
360.1301	28.88	-26.34	46.00	17.12	150	220	Horizontal	PASS
760.1702	23.26	-22.02	46.00	22.74	150	109	Horizontal	PASS



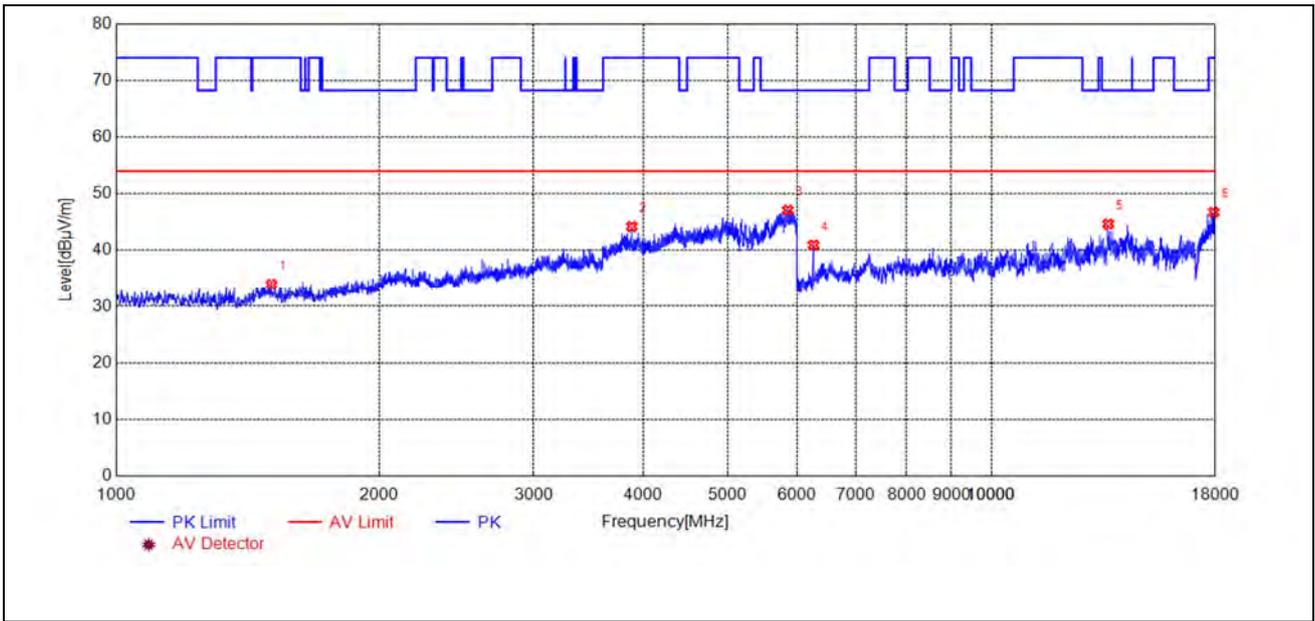
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2128.2256	36.67	-20.28	68.23	31.56	150	58	Horizontal	PASS
3872.5745	44.17	-14.68	74.00	29.83	150	79	Horizontal	PASS
5376.8754	49.32	-9.58	74.00	24.68	150	98	Horizontal	PASS
7629.9260	39.14	-2.39	74.00	34.86	150	299	Horizontal	PASS
13592.7185	44.47	7.27	68.23	23.76	150	229	Horizontal	PASS
18000.0000	47.73	13.41	74.00	26.27	150	58	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

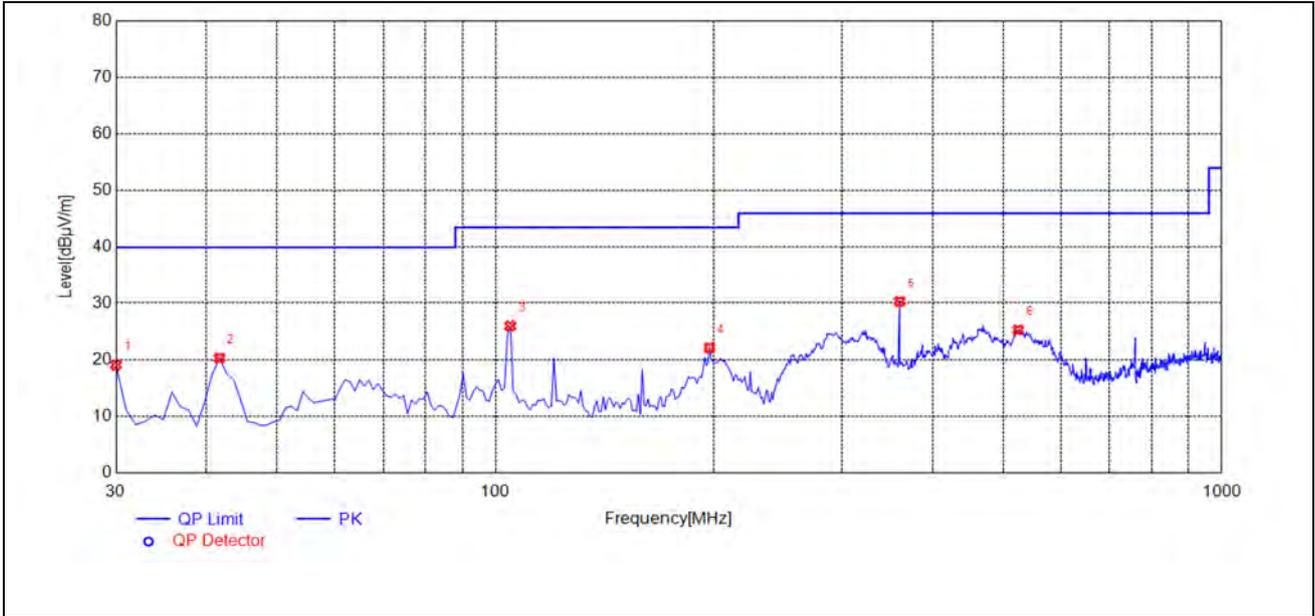
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
36.7968	19.69	-35.51	40.00	20.31	150	96	Vertical	PASS
68.8388	25.25	-31.47	40.00	14.75	150	216	Vertical	PASS
130.0100	23.40	-33.03	43.50	20.10	150	96	Vertical	PASS
230.0200	29.36	-30.71	46.00	16.64	150	131	Vertical	PASS
439.7498	24.93	-24.85	46.00	21.07	150	63	Vertical	PASS
679.5796	24.07	-21.83	46.00	21.93	150	37	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

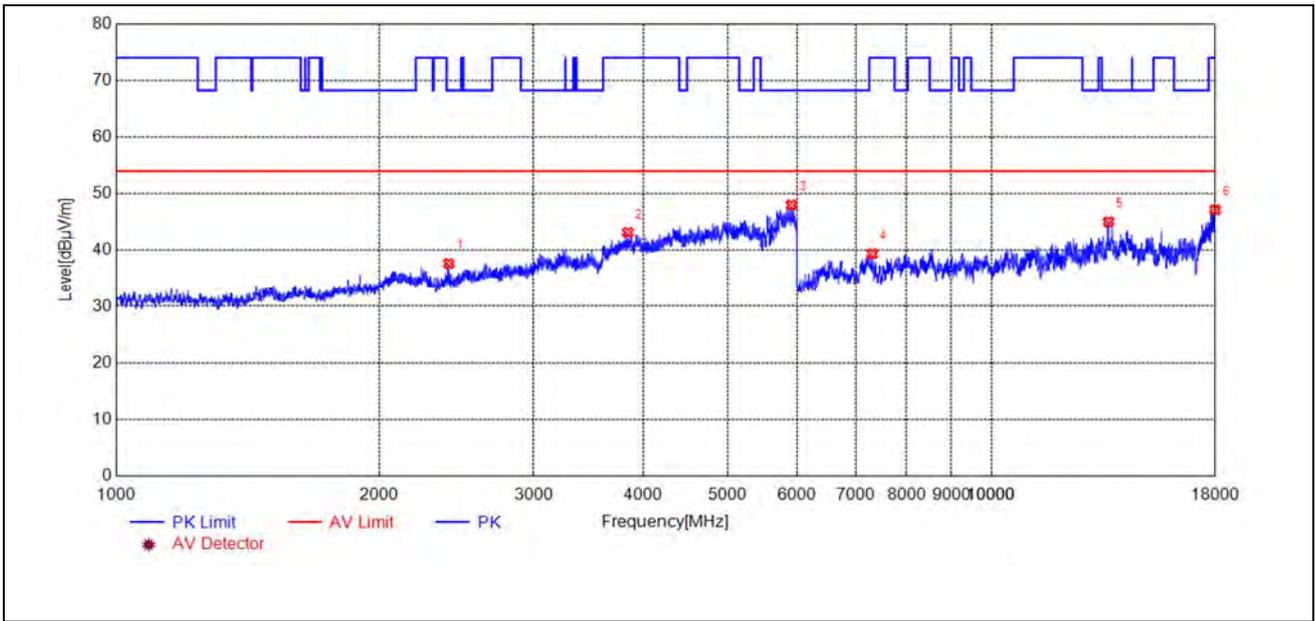
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1505.1010	33.96	-23.09	74.00	40.04	150	91	Vertical	PASS
3882.5765	44.20	-14.79	74.00	29.80	150	152	Vertical	PASS
5851.9704	47.11	-6.92	68.23	21.12	150	272	Vertical	PASS
6261.6523	40.95	-6.74	68.23	27.28	150	179	Vertical	PASS
13595.1190	44.65	7.40	68.23	23.58	150	58	Vertical	PASS
17939.9880	46.76	15.03	74.00	27.24	150	310	Vertical	PASS

Plot for Channel 120



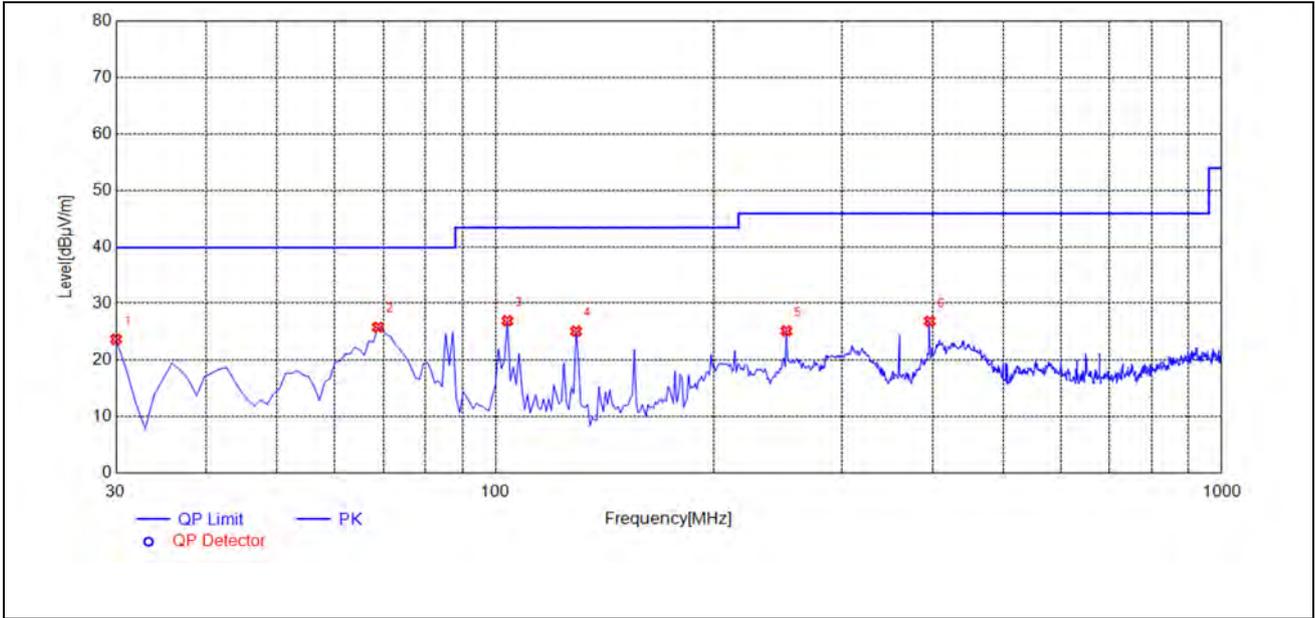
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
30.0000	19.05	-31.67	40.00	20.95	150	246	Horizontal	PASS
41.6517	20.27	-29.90	40.00	19.73	150	237	Horizontal	PASS
104.7648	25.96	-30.84	43.50	17.54	150	24	Horizontal	PASS
197.0070	22.09	-32.27	43.50	21.41	150	127	Horizontal	PASS
360.1301	30.27	-26.34	46.00	15.73	150	67	Horizontal	PASS
524.2242	25.24	-23.87	46.00	20.76	150	109	Horizontal	PASS



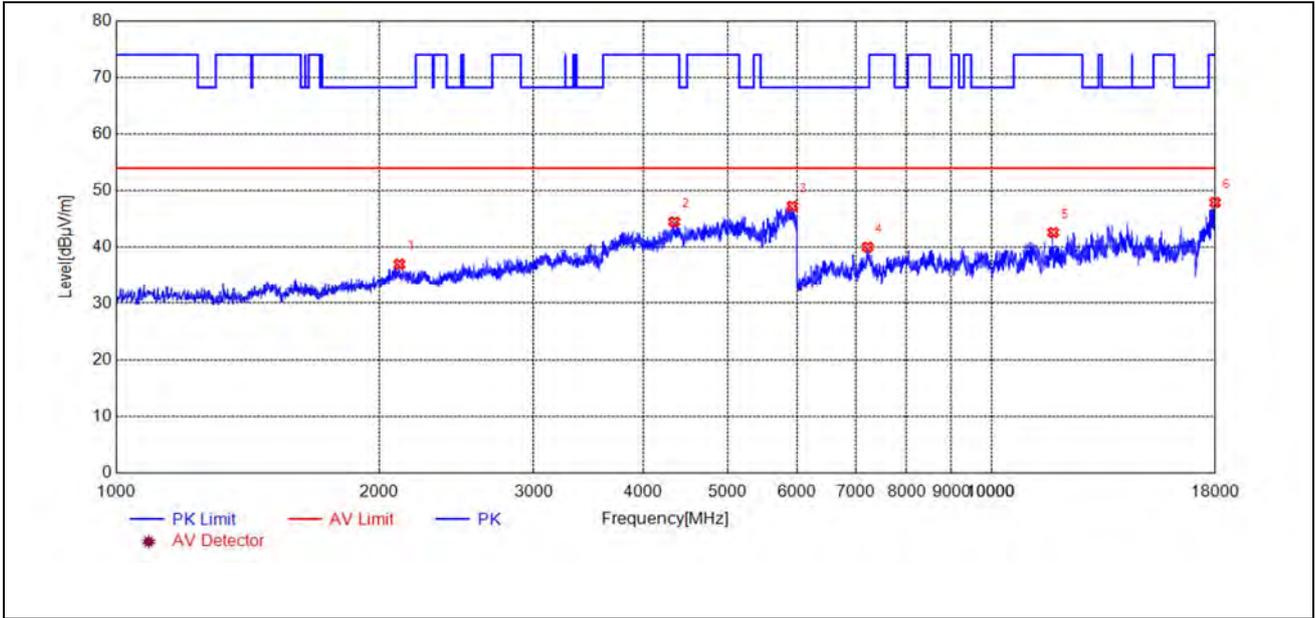
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2399.2799	37.68	-20.14	68.23	30.55	150	8	Horizontal	PASS
3841.5683	43.18	-14.42	74.00	30.82	150	198	Horizontal	PASS
5909.9820	48.04	-6.87	68.23	20.19	150	299	Horizontal	PASS
7305.8612	39.41	-3.43	74.00	34.59	150	88	Horizontal	PASS
13604.7209	45.05	7.40	68.23	23.18	150	149	Horizontal	PASS
18000.0000	47.16	13.41	74.00	26.84	150	219	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

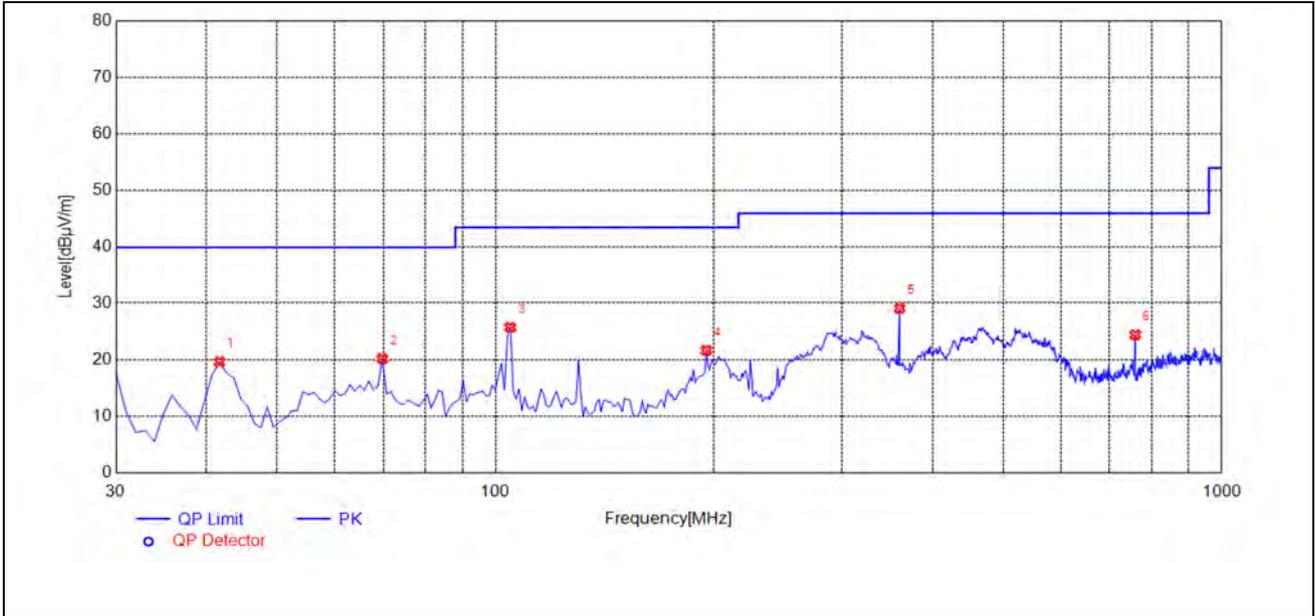
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
30.0000	23.61	-31.67	40.00	16.39	150	331	Vertical	PASS
68.8388	25.76	-31.47	40.00	14.24	150	289	Vertical	PASS
103.7938	26.90	-30.69	43.50	16.60	150	340	Vertical	PASS
129.0390	25.05	-32.25	43.50	18.45	150	93	Vertical	PASS
251.3814	25.11	-30.32	46.00	20.89	150	169	Vertical	PASS
396.0561	26.81	-25.37	46.00	19.19	150	229	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2107.2214	37.06	-20.19	68.23	31.17	150	312	Vertical	PASS
4340.6681	44.52	-12.14	74.00	29.48	150	343	Vertical	PASS
5921.9844	47.28	-6.70	68.23	20.95	150	322	Vertical	PASS
7219.4439	40.07	-2.84	68.23	28.16	150	179	Vertical	PASS
11758.7518	42.64	3.31	74.00	31.36	150	88	Vertical	PASS
18000.0000	47.95	13.41	74.00	26.05	150	339	Vertical	PASS

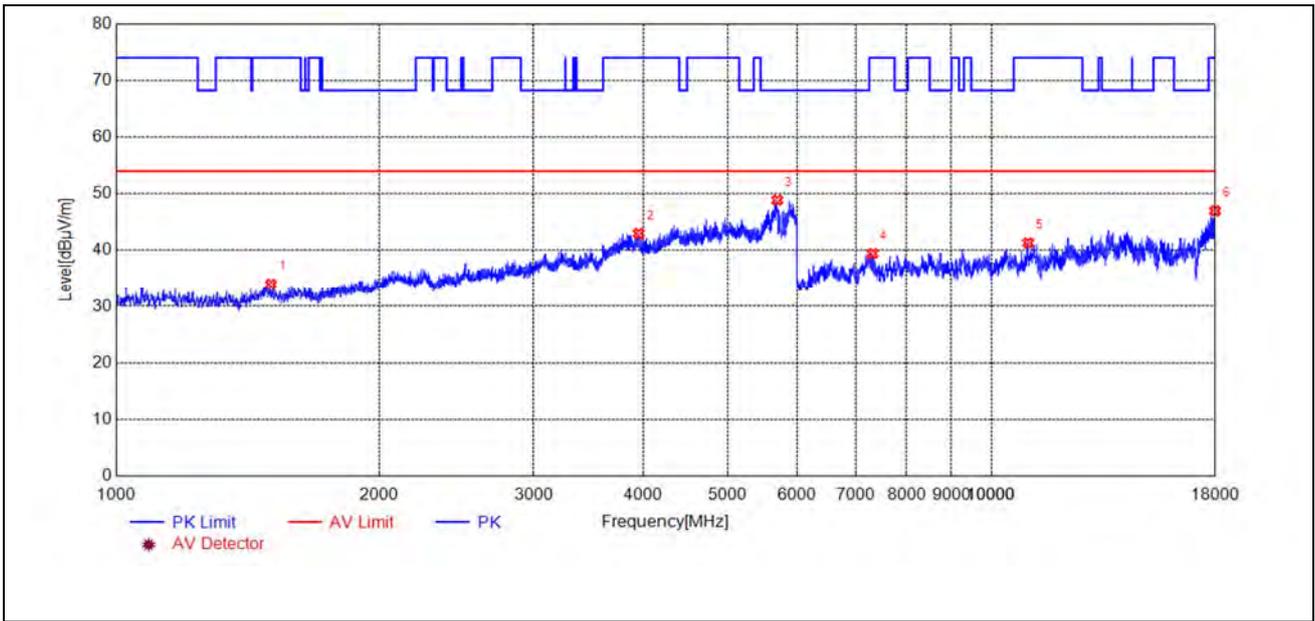
Plot for Channel 157



(Antenna Horizontal, 30MHz to 1GHz)

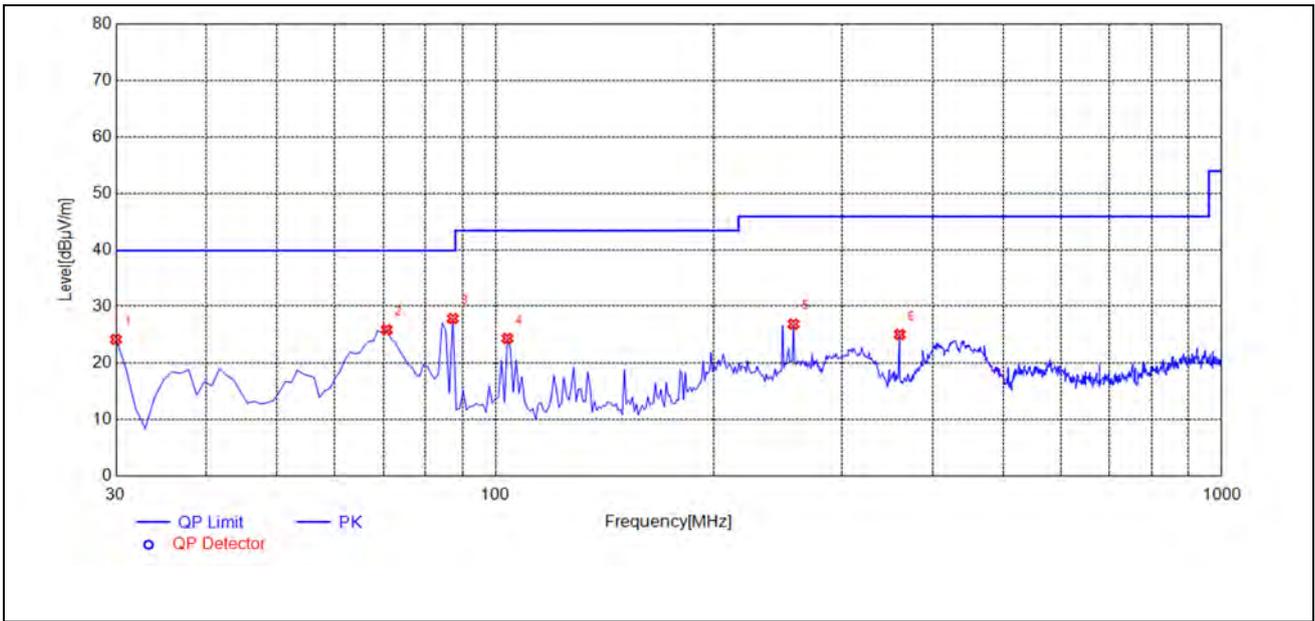
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
41.6517	19.62	-29.90	40.00	20.38	150	355	Horizontal	PASS
69.8098	20.16	-32.28	40.00	19.84	150	286	Horizontal	PASS
104.7648	25.71	-30.84	43.50	17.79	150	226	Horizontal	PASS
195.0651	21.63	-32.26	43.50	21.87	150	192	Horizontal	PASS
360.1301	29.03	-26.34	46.00	16.97	150	269	Horizontal	PASS
760.1702	24.38	-22.02	46.00	21.62	150	360	Horizontal	PASS





(Antenna Horizontal, 1GHz to 18GHz)

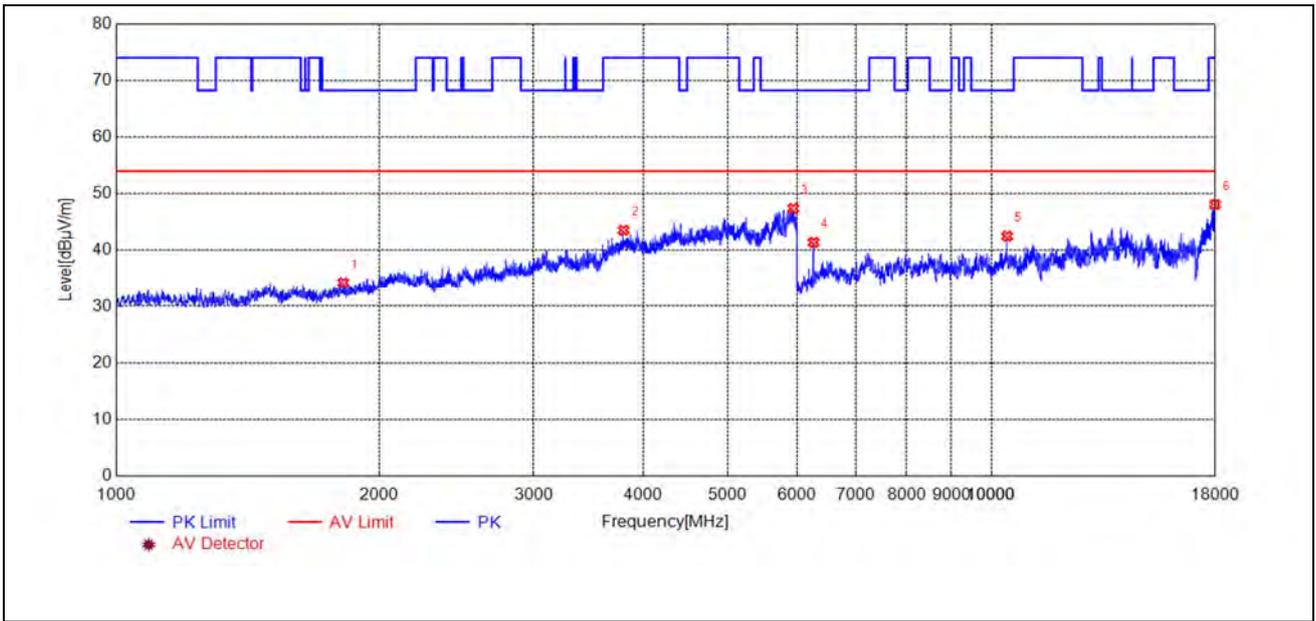
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1503.1006	33.98	-23.04	74.00	40.02	150	11	Horizontal	PASS
3953.5907	43.00	-13.76	74.00	31.00	150	131	Horizontal	PASS
5690.9382	48.88	-7.73	68.23	19.35	150	192	Horizontal	PASS
7310.6621	39.45	-3.44	74.00	34.55	150	249	Horizontal	PASS
11014.6029	41.33	3.10	74.00	32.67	150	119	Horizontal	PASS
18000.0000	47.00	13.41	74.00	27.00	150	138	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
30.0000	24.13	-31.67	40.00	15.87	150	148	Vertical	PASS
70.7808	25.83	-32.25	40.00	14.17	150	268	Vertical	PASS
87.2873	27.83	-33.84	40.00	12.17	150	191	Vertical	PASS
103.7938	24.31	-30.69	43.50	19.19	150	199	Vertical	PASS
257.2072	26.83	-30.18	46.00	19.17	150	191	Vertical	PASS
360.1301	25.00	-26.34	46.00	21.00	150	344	Vertical	PASS





(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1818.1636	34.26	-22.68	68.23	33.97	150	211	Vertical	PASS
3800.5601	43.56	-14.41	74.00	30.44	150	181	Vertical	PASS
5936.9874	47.41	-6.48	68.23	20.82	150	111	Vertical	PASS
6261.6523	41.42	-6.74	68.23	26.81	150	359	Vertical	PASS
10416.8834	42.53	2.45	68.23	25.70	150	359	Vertical	PASS
18000.0000	48.12	13.41	74.00	25.88	150	178	Vertical	PASS

— END OF REPORT —