PSD NVNT ac20 5320MHz Ant1

PSD NVNT ac20 5500MHz Ant1

PSD NVNT ac20 5580MHz Ant1

PSD NVNT ac20 5720MHz 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 5710MHz Ant1

PSD NVNT ac40 5755MHz Ant1

PSD NVNT ac40 5795MHz Ant1

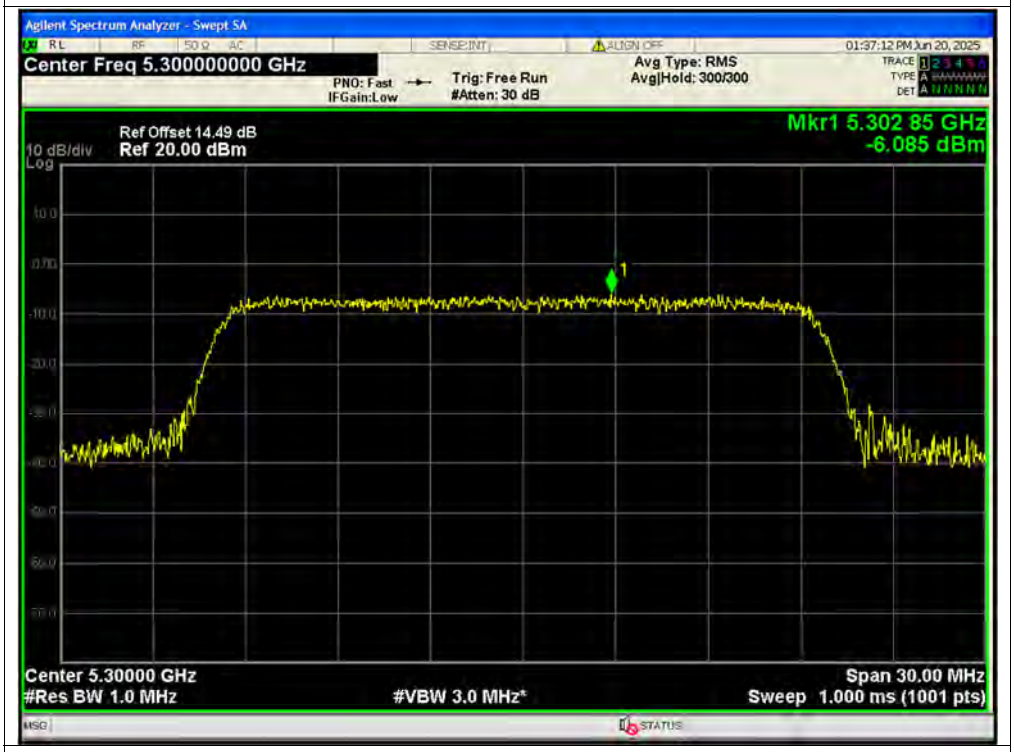
PSD NVNT ax20 5180MHz Ant1

PSD NVNT ax20 5220MHz Ant1

PSD NVNT ax20 5240MHz Ant1

PSD NVNT ax20 5260MHz Ant1

PSD NVNT ax20 5300MHz Ant1



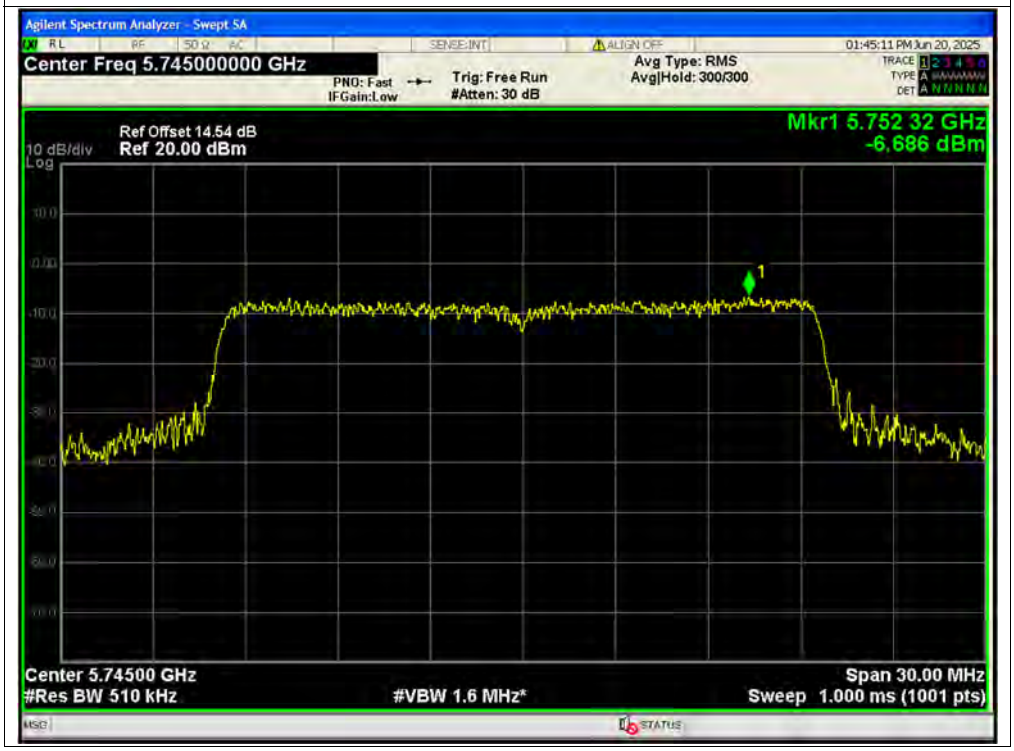
PSD NVNT ax20 5320MHz Ant1

PSD NVNT ax20 5500MHz Ant1

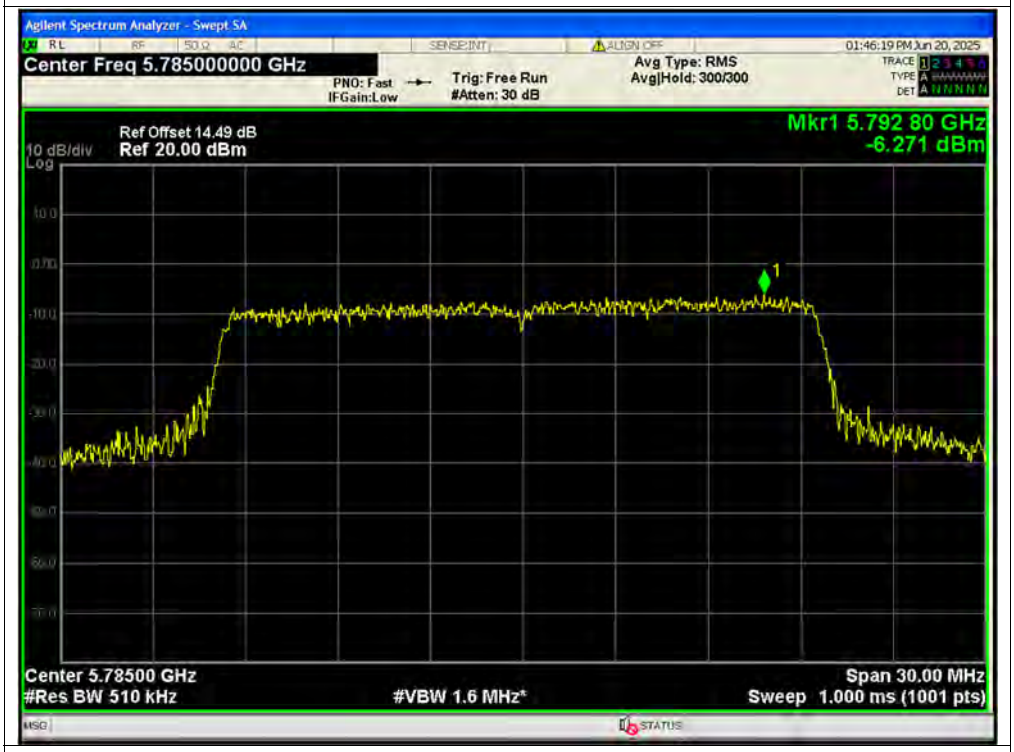
PSD NVNT ax20 5580MHz Ant1

PSD NVNT ax20 5720MHz Ant1

PSD NVNT ax20 5745MHz Ant1



PSD NVNT ax20 5785MHz Ant1



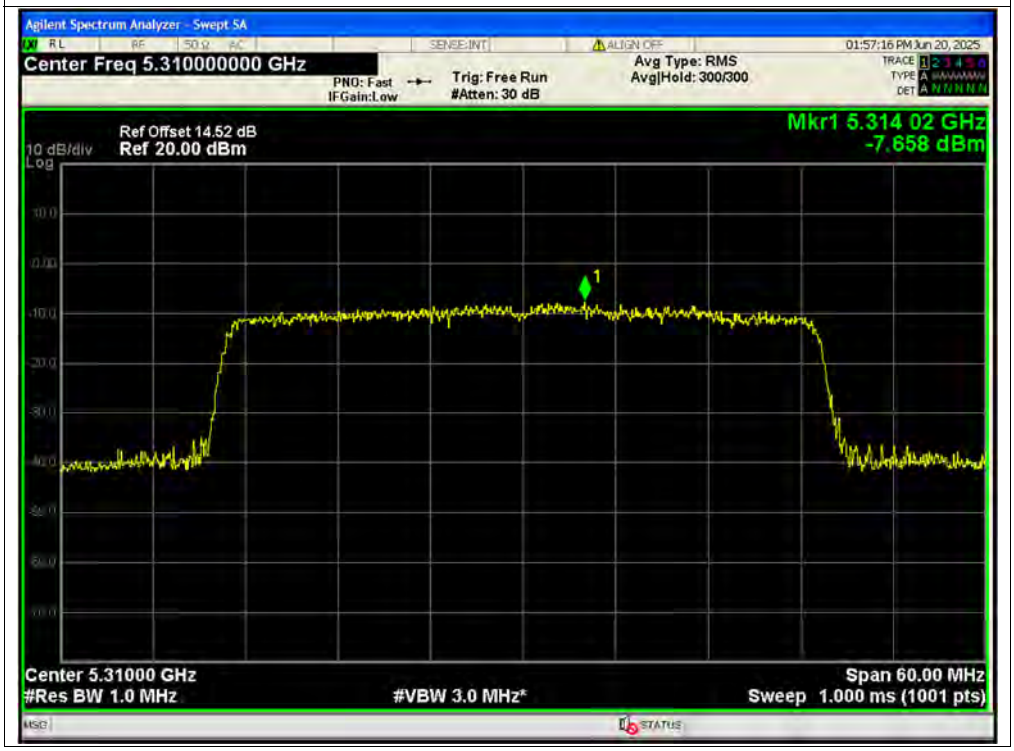
PSD NVNT ax20 5825MHz Ant1

PSD NVNT ax40 5190MHz Ant1

PSD NVNT ax40 5230MHz Ant1

PSD NVNT ax40 5270MHz Ant1

PSD NVNT ax40 5310MHz Ant1



PSD NVNT ax40 5510MHz Ant1

PSD NVNT ax40 5550MHz Ant1

PSD NVNT ax40 5710MHz Ant1

PSD NVNT ax40 5755MHz Ant1

PSD NVNT ax40 5795MHz Ant1

A.5. Frequency Stability

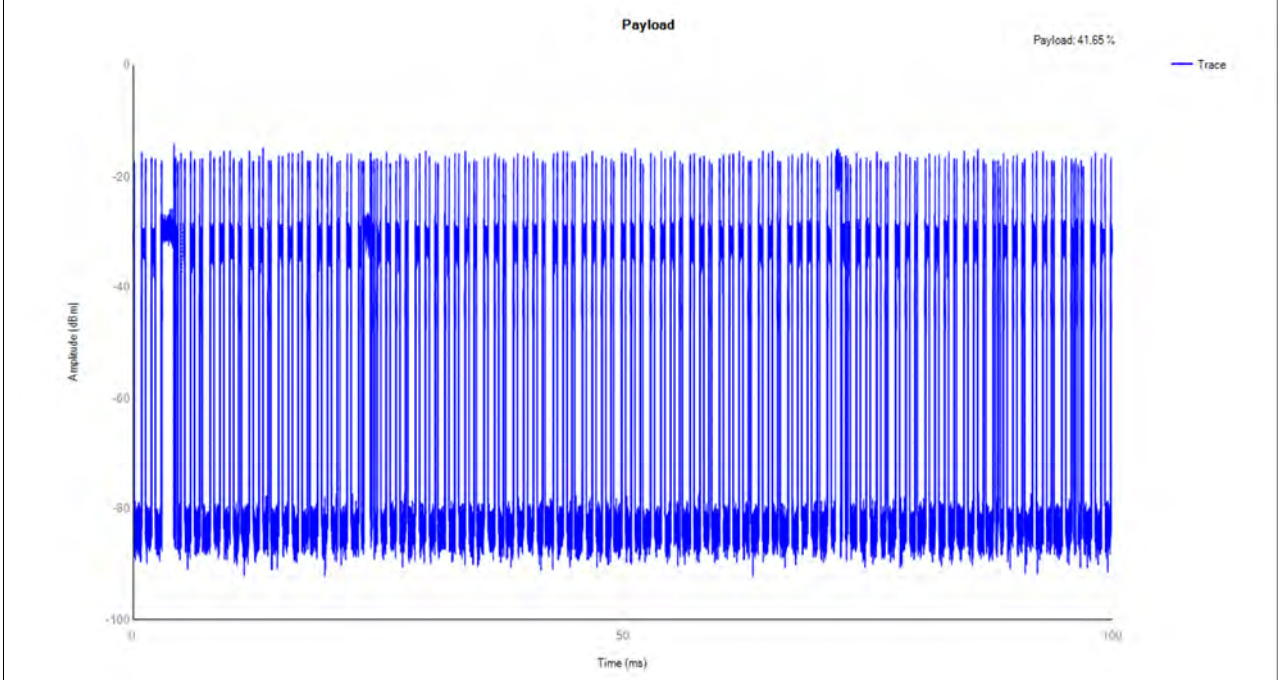
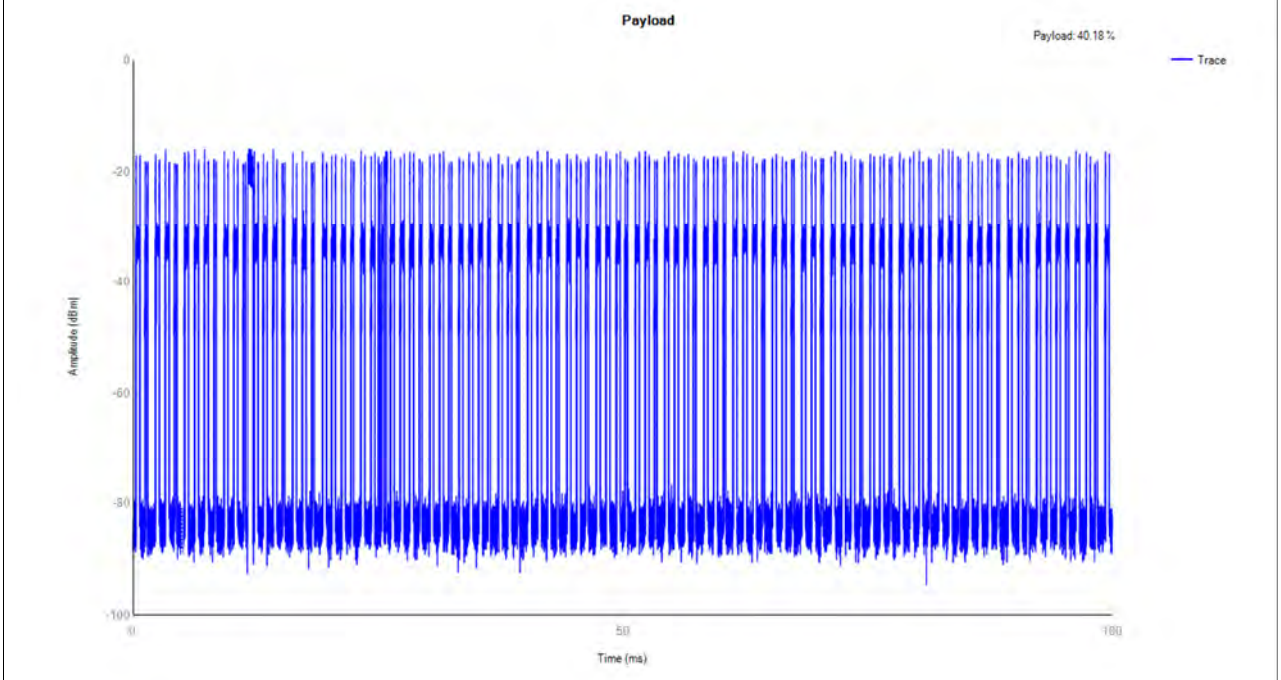
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 7V	CW	5180	Ant1	5179.92	-80000	-15.44	25	Pass
20C 12V	CW	5180	Ant1	5179.92	-80000	-15.44	25	Pass
20C 36V	CW	5180	Ant1	5179.94	-60000	-11.58	25	Pass
-20C 12V	CW	5180	Ant1	5179.96	-40000	-7.72	25	Pass
-10C 12V	CW	5180	Ant1	5179.96	-40000	-7.72	25	Pass
0C 12V	CW	5180	Ant1	5179.94	-60000	-11.58	25	Pass
10C 12V	CW	5180	Ant1	5179.96	-40000	-7.72	25	Pass
30C 12V	CW	5180	Ant1	5179.94	-60000	-11.58	25	Pass
40C 12V	CW	5180	Ant1	5179.94	-60000	-11.58	25	Pass
50C 12V	CW	5180	Ant1	5179.94	-60000	-11.58	25	Pass
20C 7V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
20C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
20C 36V	CW	5260	Ant1	5259.96	-40000	-7.6	25	Pass
-20C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
-10C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
0C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
10C 12V	CW	5260	Ant1	5259.96	-40000	-7.6	25	Pass
30C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
40C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
50C 12V	CW	5260	Ant1	5259.94	-60000	-11.41	25	Pass
20C 7V	CW	5500	Ant1	5499.96	-40000	-7.27	25	Pass
20C 12V	CW	5500	Ant1	5499.94	-60000	-10.91	25	Pass
20C 36V	CW	5500	Ant1	5499.96	-40000	-7.27	25	Pass
-20C 12V	CW	5500	Ant1	5499.94	-60000	-10.91	25	Pass
-10C 12V	CW	5500	Ant1	5499.94	-60000	-10.91	25	Pass
0C 12V	CW	5500	Ant1	5499.92	-80000	-14.55	25	Pass
10C 12V	CW	5500	Ant1	5499.92	-80000	-14.55	25	Pass
30C 12V	CW	5500	Ant1	5499.94	-60000	-10.91	25	Pass
40C 12V	CW	5500	Ant1	5499.92	-80000	-14.55	25	Pass
50C 12V	CW	5500	Ant1	5499.94	-60000	-10.91	25	Pass
20C 7V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 36V	CW	5745	Ant1	5744.92	-80000	-13.93	25	Pass
-20C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass

-10C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass
0C 12V	CW	5745	Ant1	5744.92	-80000	-13.93	25	Pass
10C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass
30C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass
40C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass
50C 12V	CW	5745	Ant1	5744.94	-60000	-10.44	25	Pass

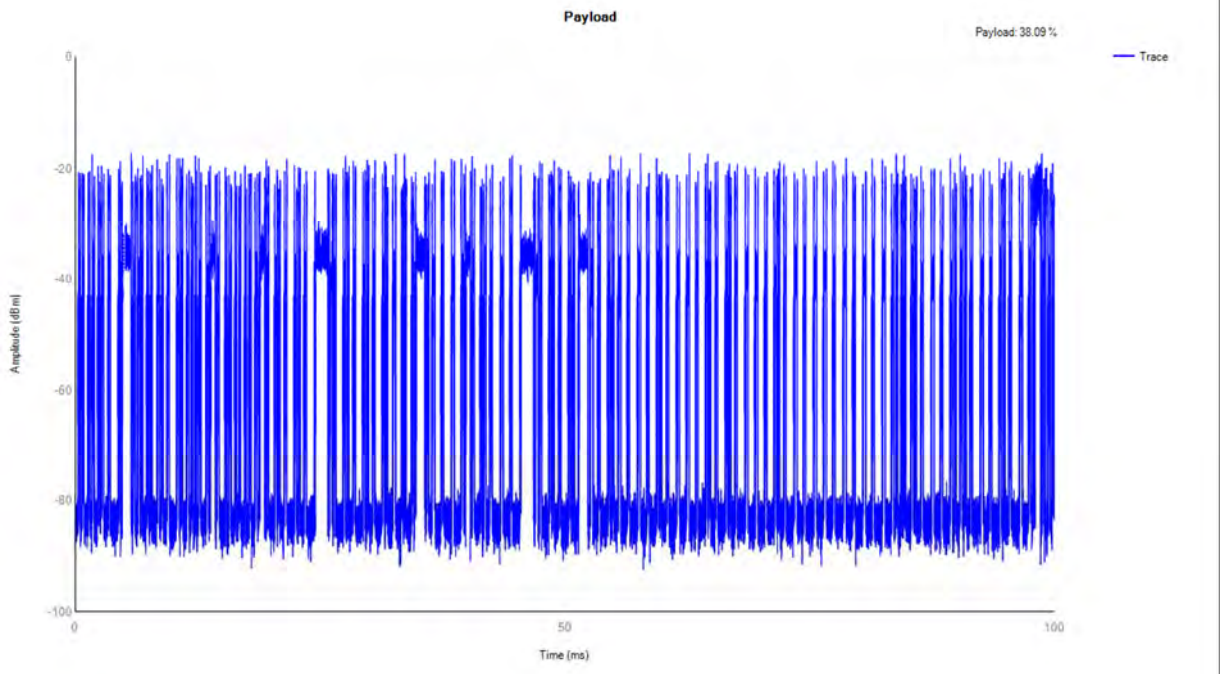
A.6. Dynamic Frequency Selection

Payload

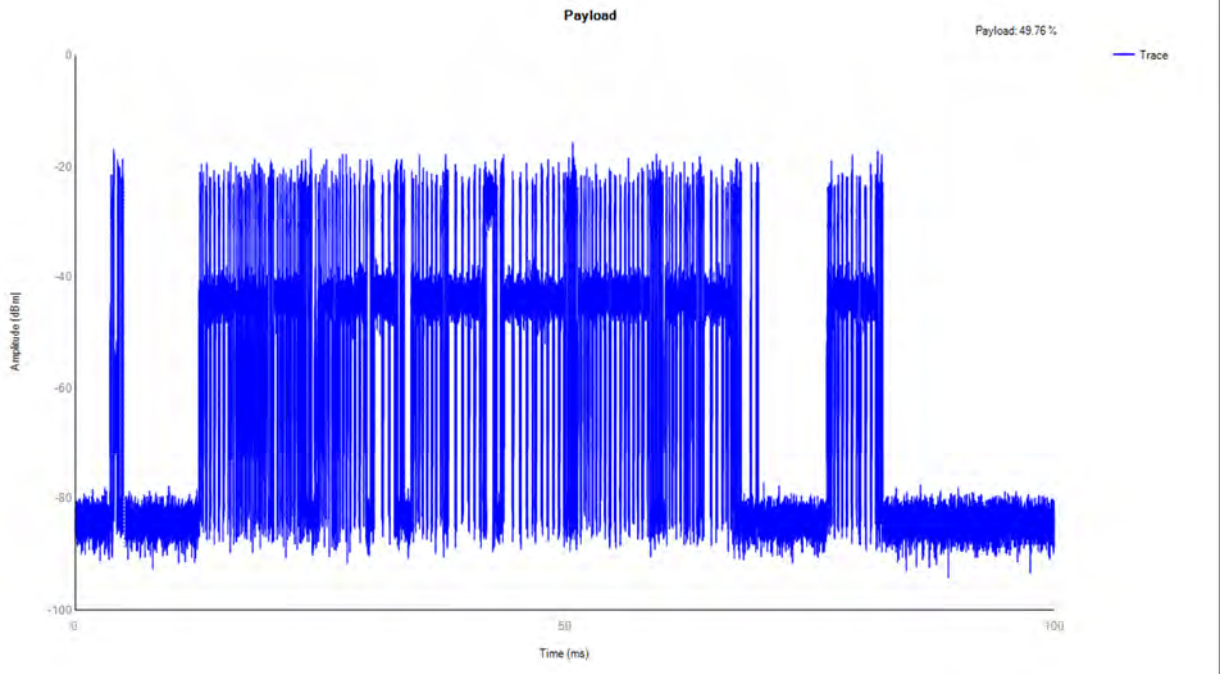
Mode	Frequency (MHz)	Result (%)	Verdict
ax20	5320	41.65	Pass
ax20	5500	40.18	Pass
ax40	5310	38.09	Pass
ax40	5510	49.76	Pass

Test Graphs
ax20 5320MHz Payload

ax20 5500MHz Payload


ax40 5310MHz Payload



ax40 5510MHz Payload



Detection Thresholds

Mode	Frequency (MHz)	Type	Result	Verdict
ax20	5320	DFS_CE_Ref	See test Graph	Pass
ax20	5500	DFS_CE_Ref	See test Graph	Pass
ax40	5310	DFS_CE_Ref	See test Graph	Pass
ax40	5510	DFS_CE_Ref	See test Graph	Pass

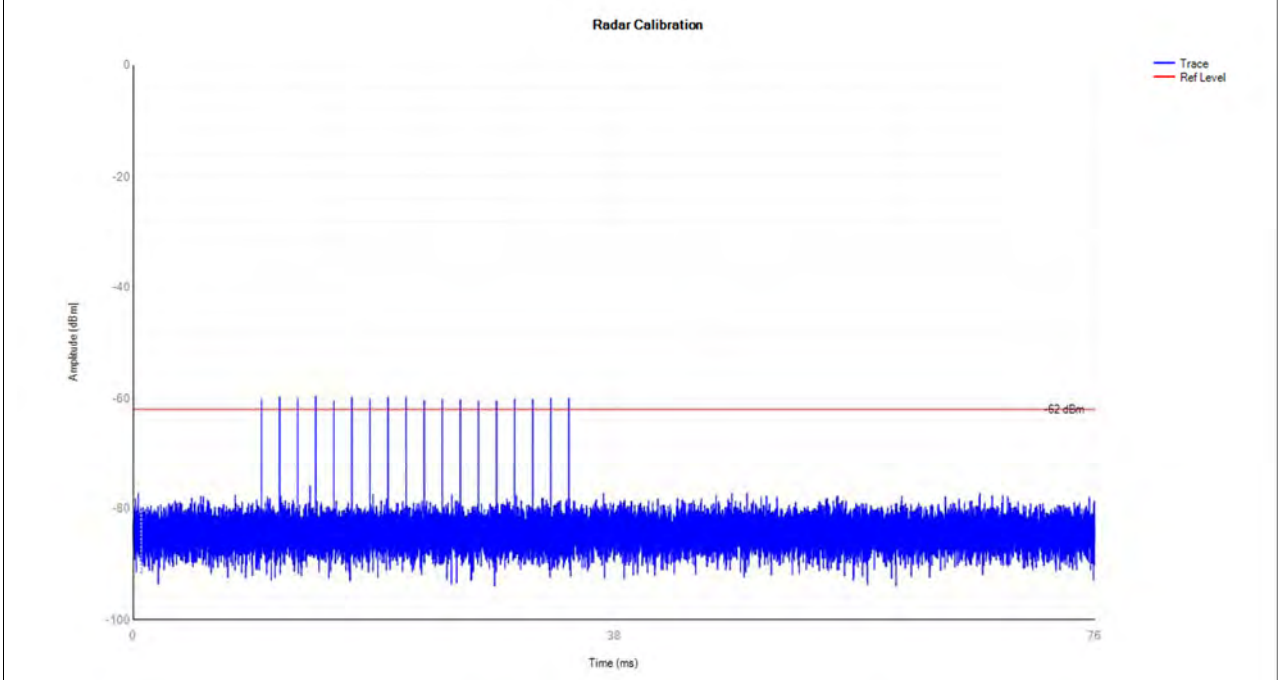
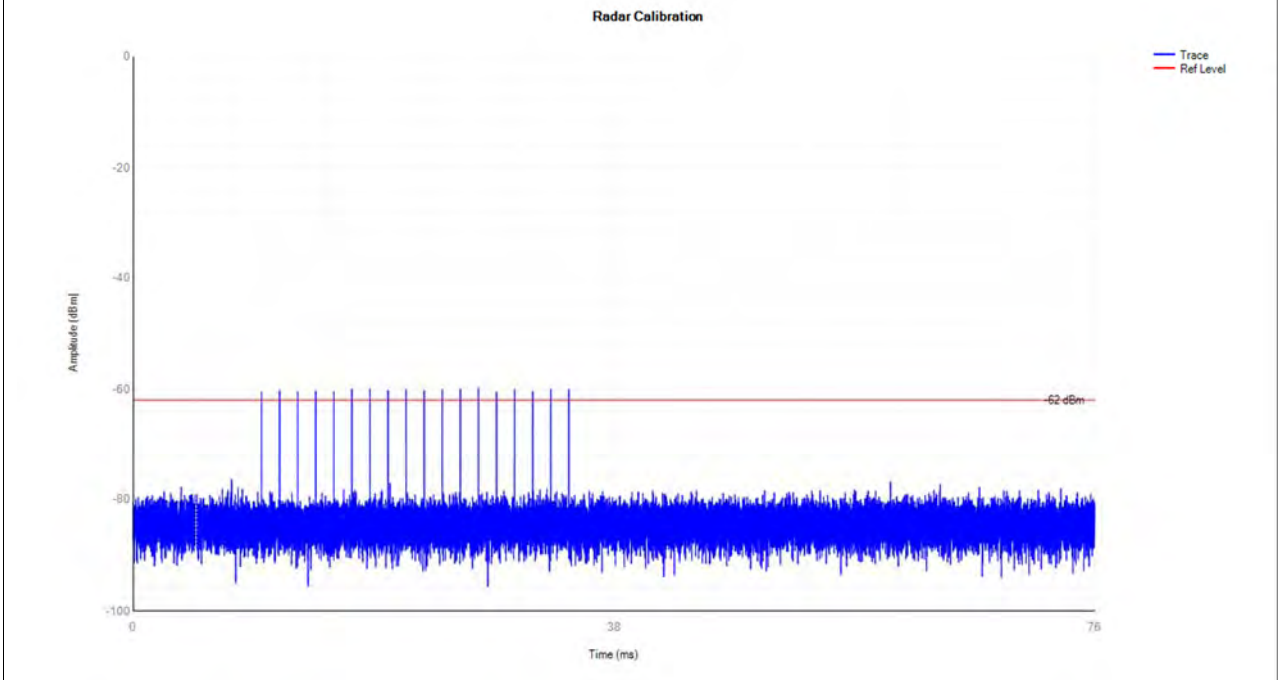
Spectrum analyzer settings:

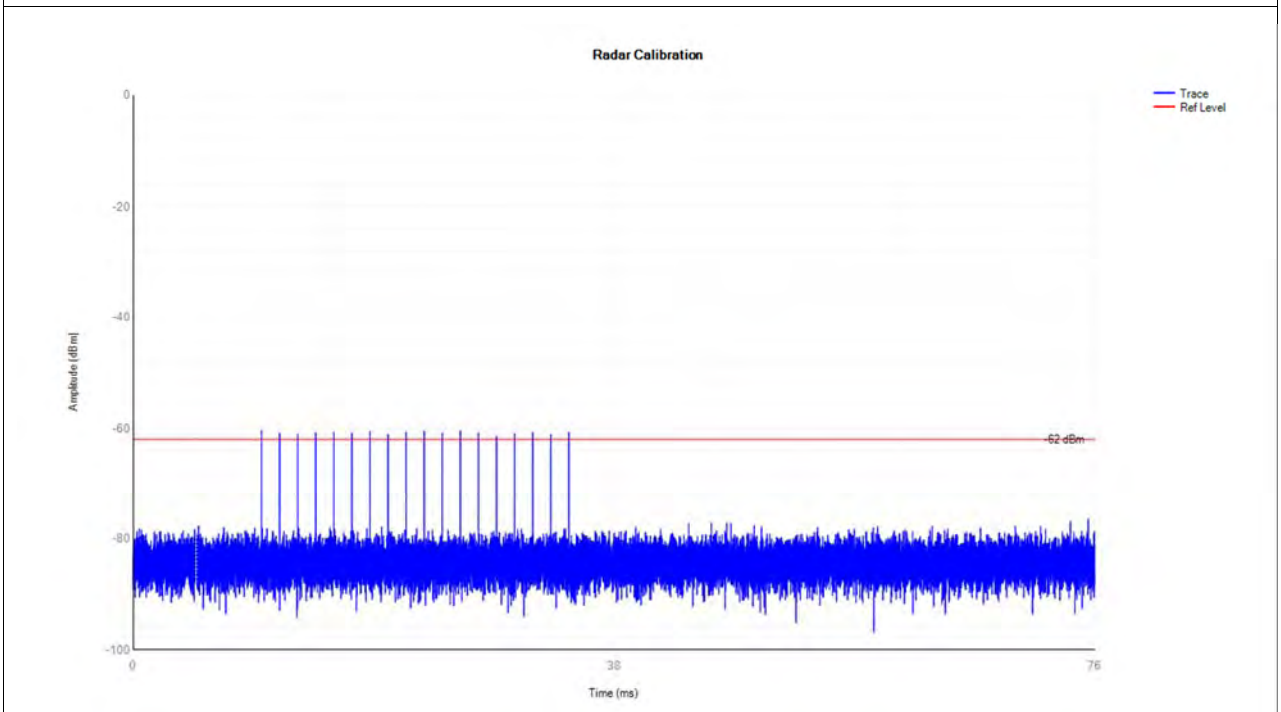
Span: Zero

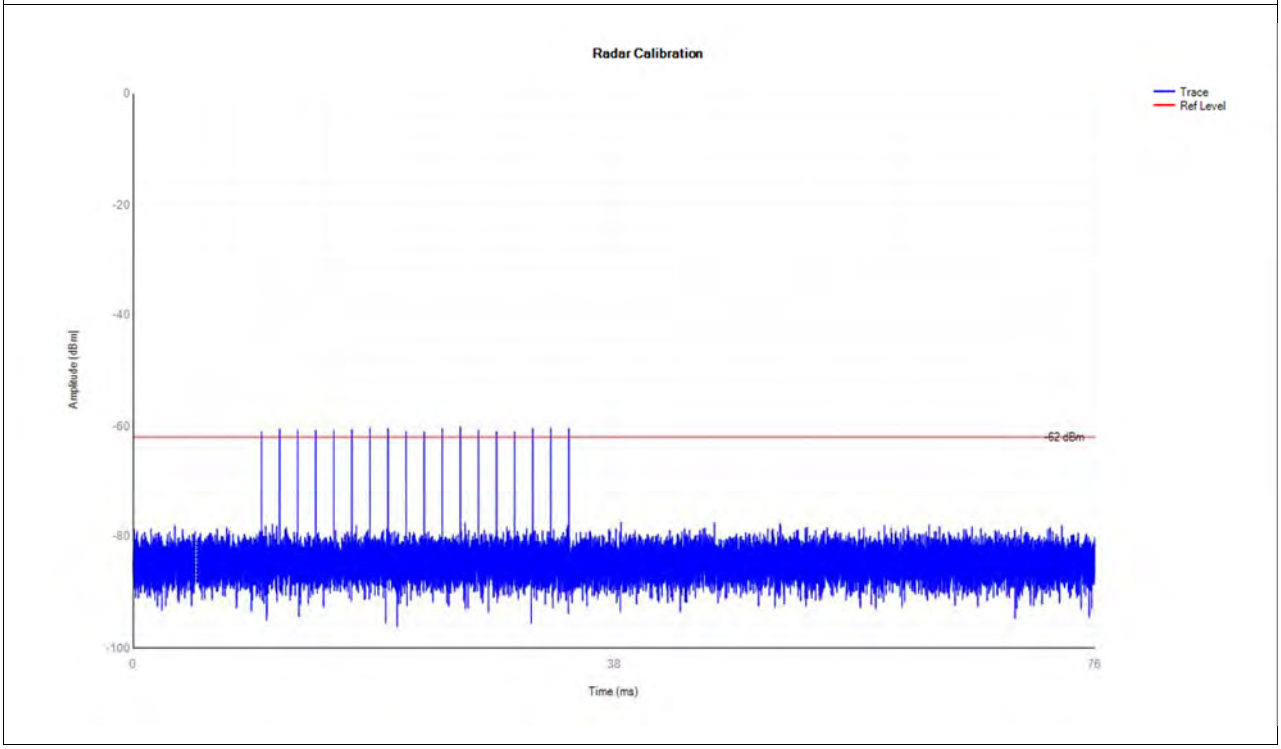
Detector Type: Peak

RBW: 3MHz

VBW: 3MHz

Test Graphs
5320MHz DFS_CE_Ref

5500MHz DFS_CE_Ref


5310MHz DFS_CE_Ref


5510MHz DFS_CE_Ref


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)	Verdict
ax20	5320	0.826	10	0.136	0.26	Pass
ax20	5500	0.842	10	0.135	0.26	Pass
ax40	5310	0.906	10	0.154	0.26	Pass
ax40	5510	0.876	10	0.159	0.26	Pass

Spectrum analyzer settings:

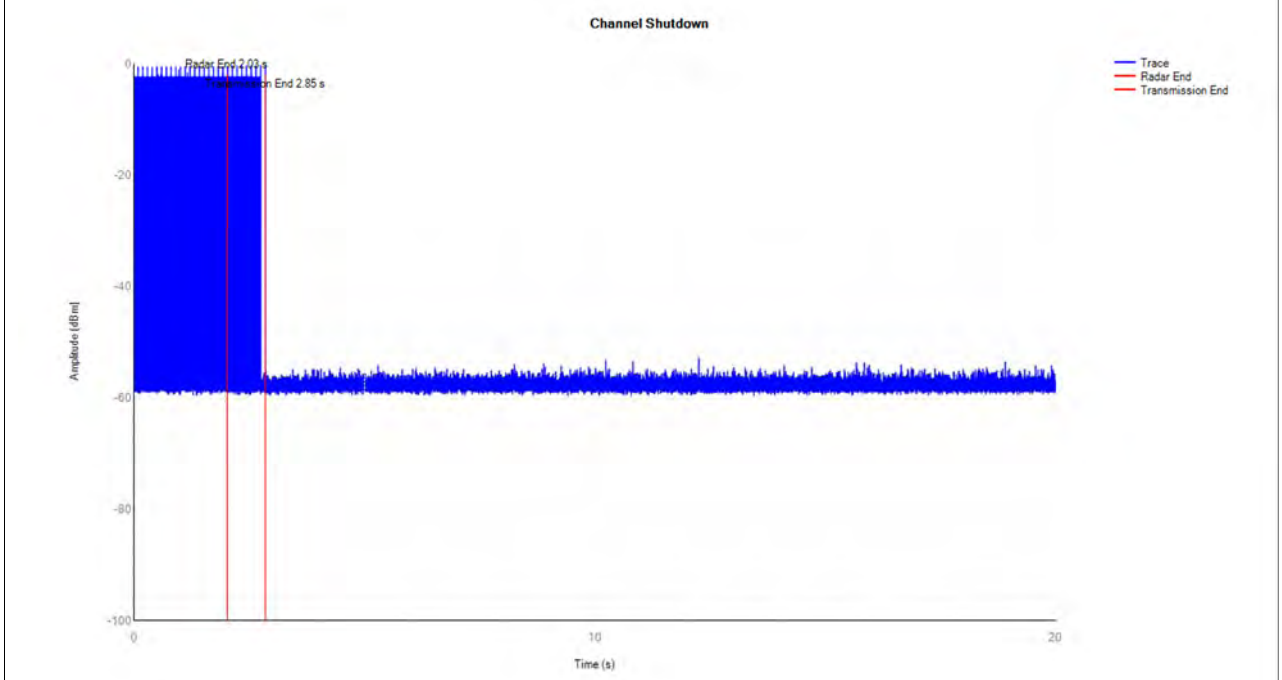
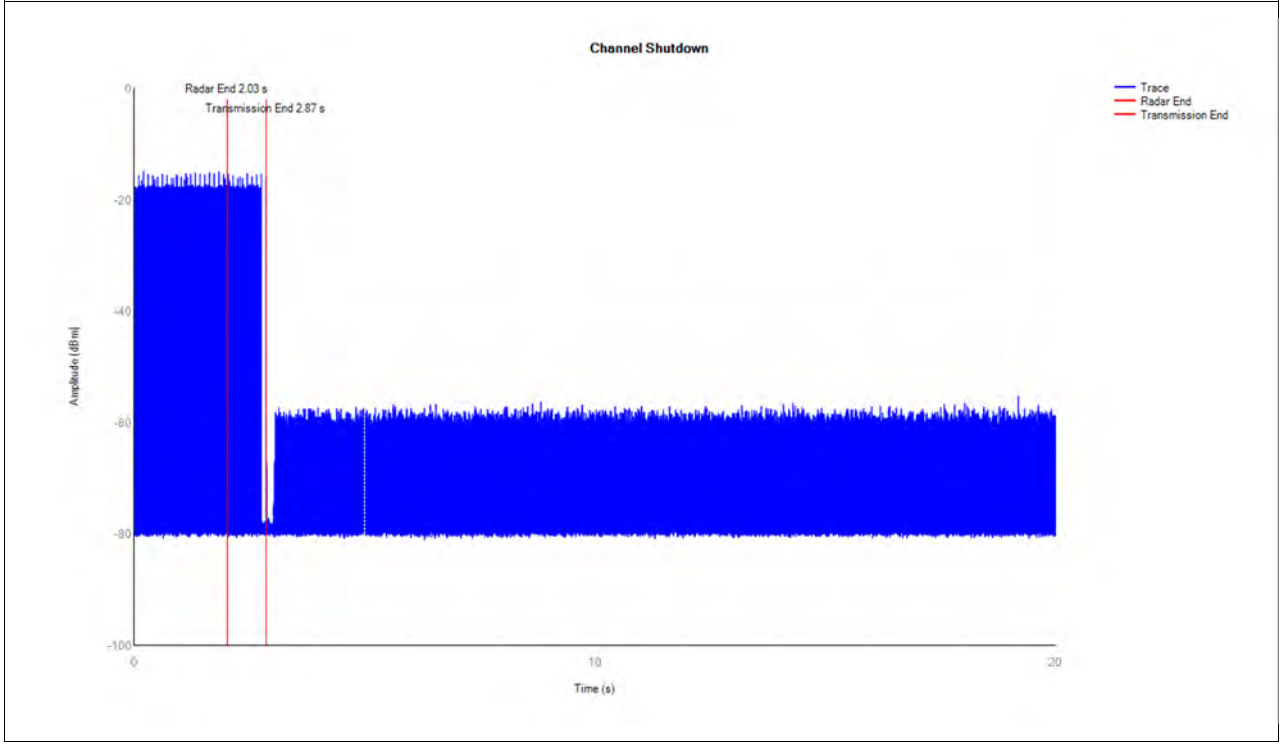
Span: Zero

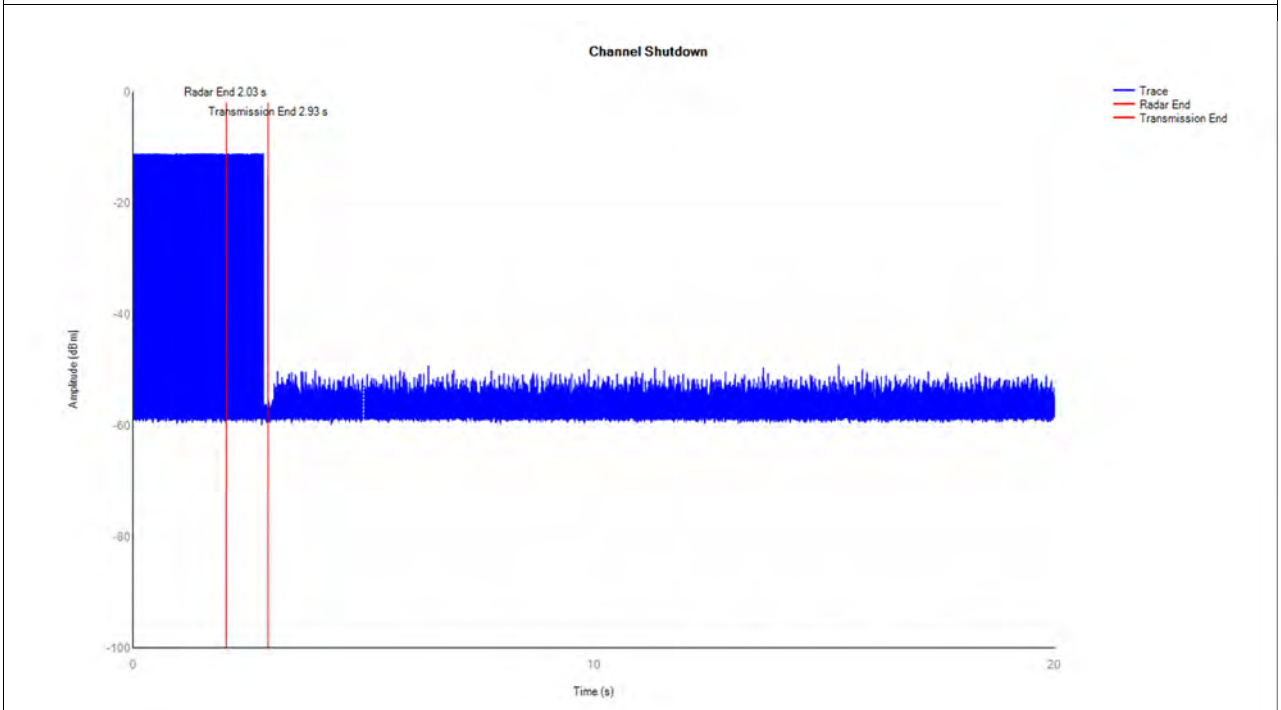
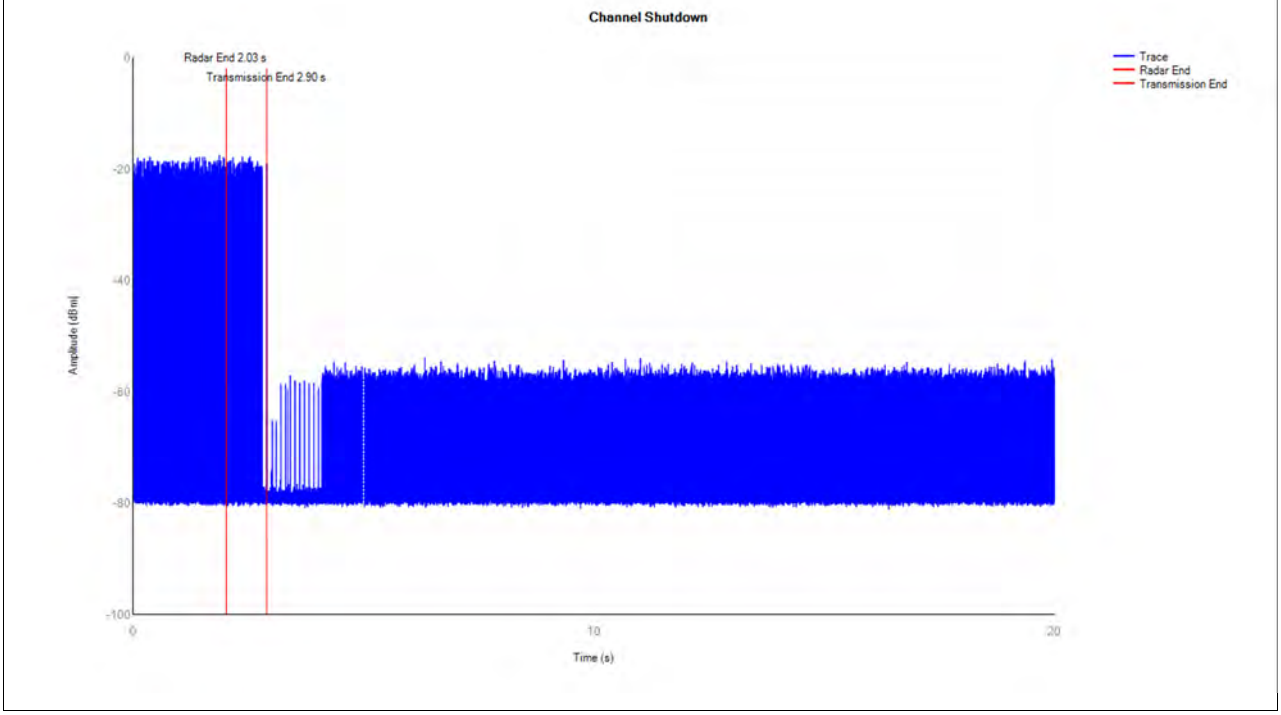
Detector type: Peak

RBW: 3MHz

VBW: 3MHz

Sweep time: 20s

Test Graphs
ax20 5320MHz Shutdown

ax20 5500MHz Shutdown


ax40 5310MHz Shutdown

ax40 5510MHz 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
ax20	5320	See test Graph	Pass
ax20	5500	See test Graph	Pass

Spectrum analyzer settings:

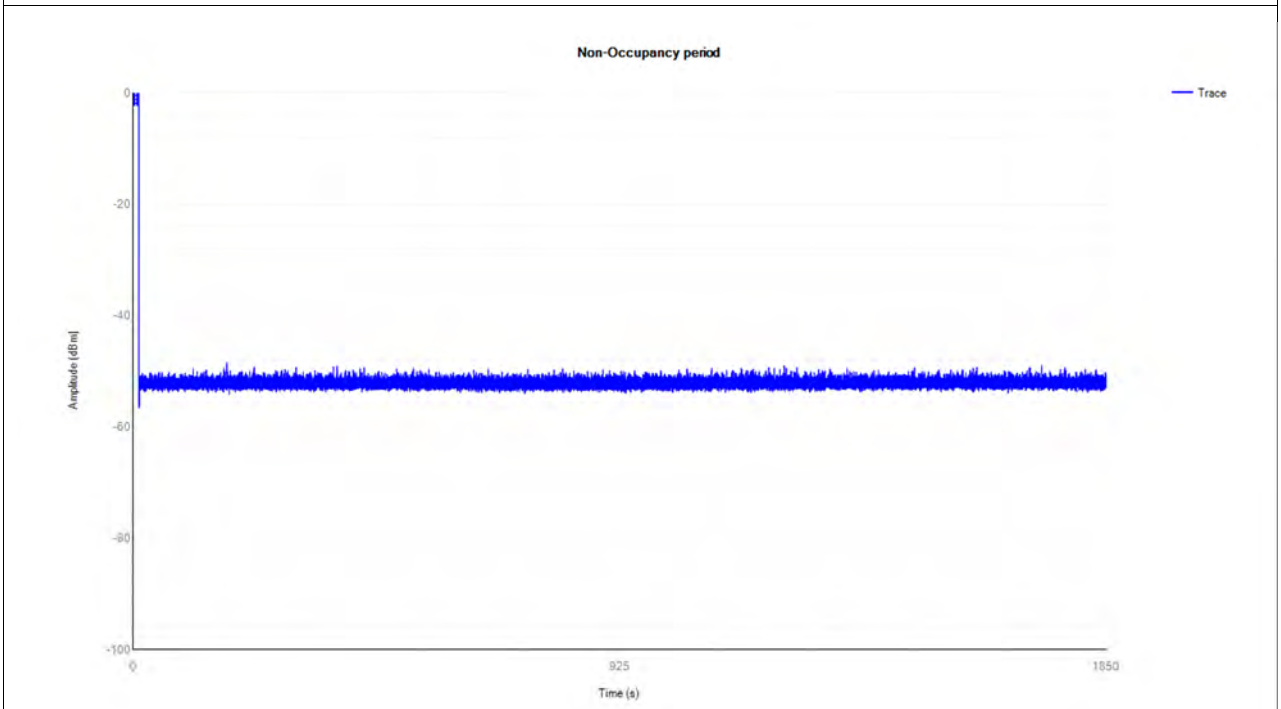
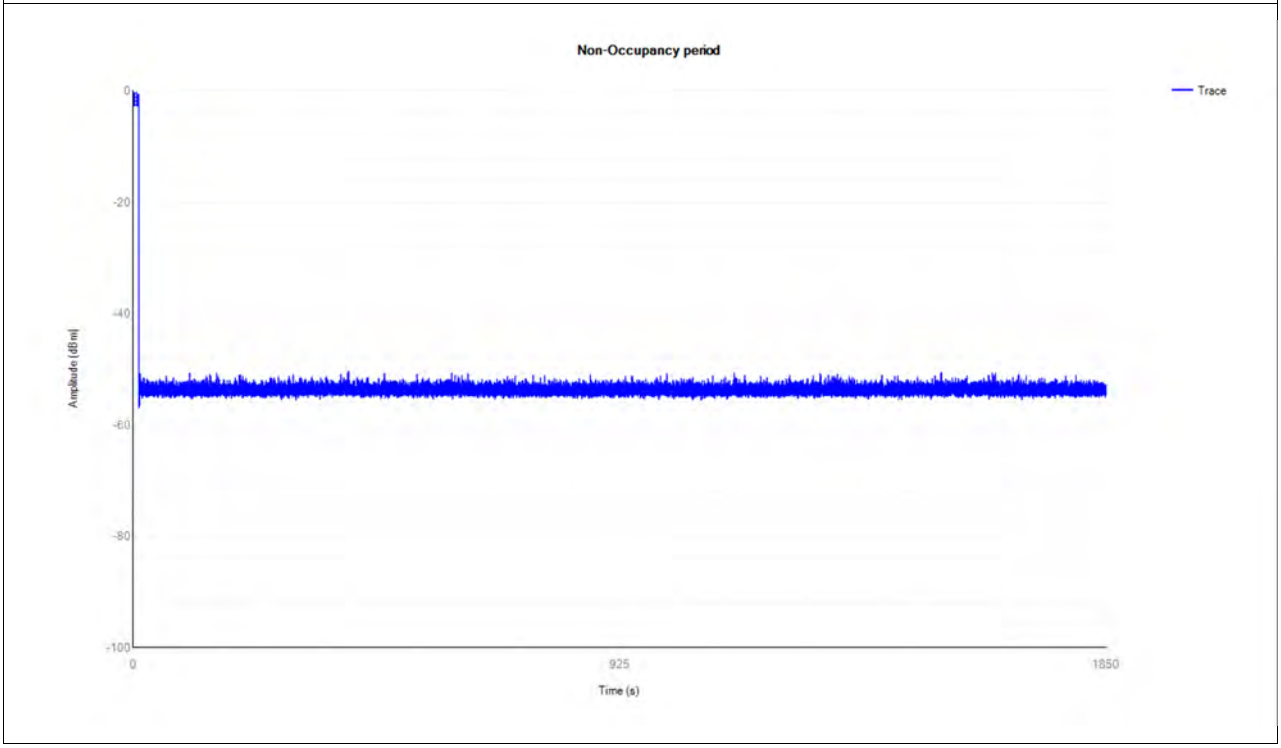
Span: Zero

Detector type: Peak

RBW: 3MHz

VBW: 3MHz

Sweep time: 1850s

Test Graphs
ax20 5320MHz Non-Occupancy

ax20 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+PC+PC adapter+DC source+Antenna+WIFI TX

Test voltage: AC 120V/60Hz

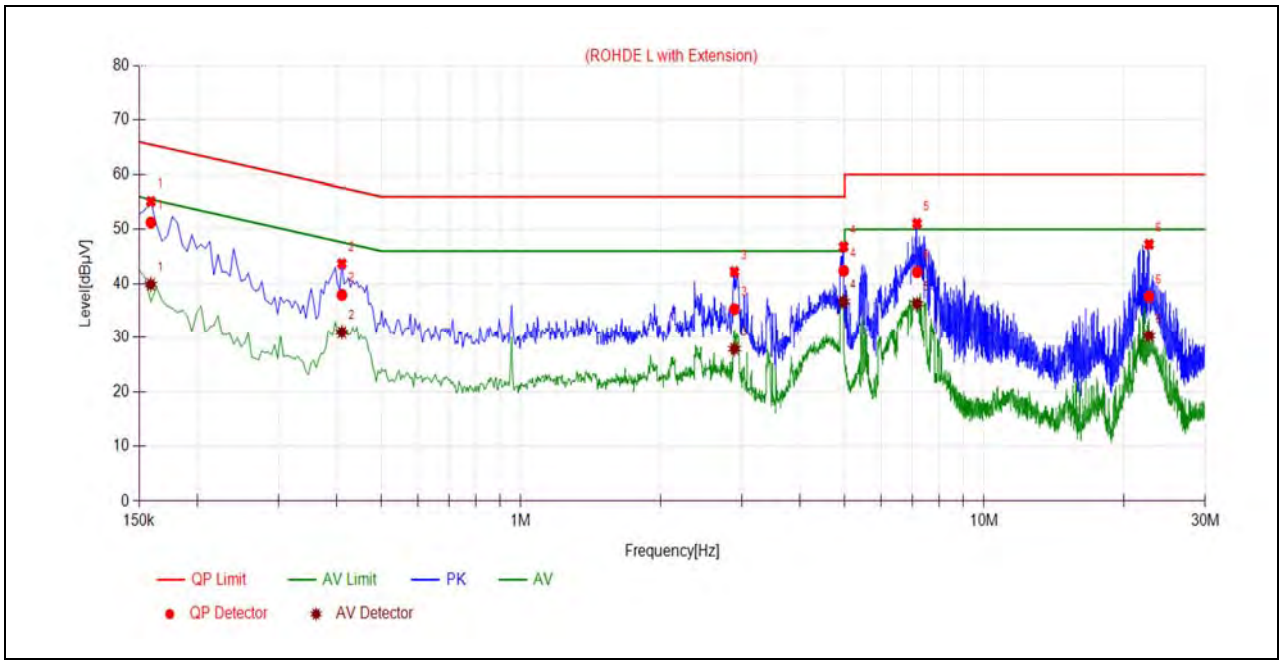
The measurement results are obtained as below:

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

U_R: Receiver Reading

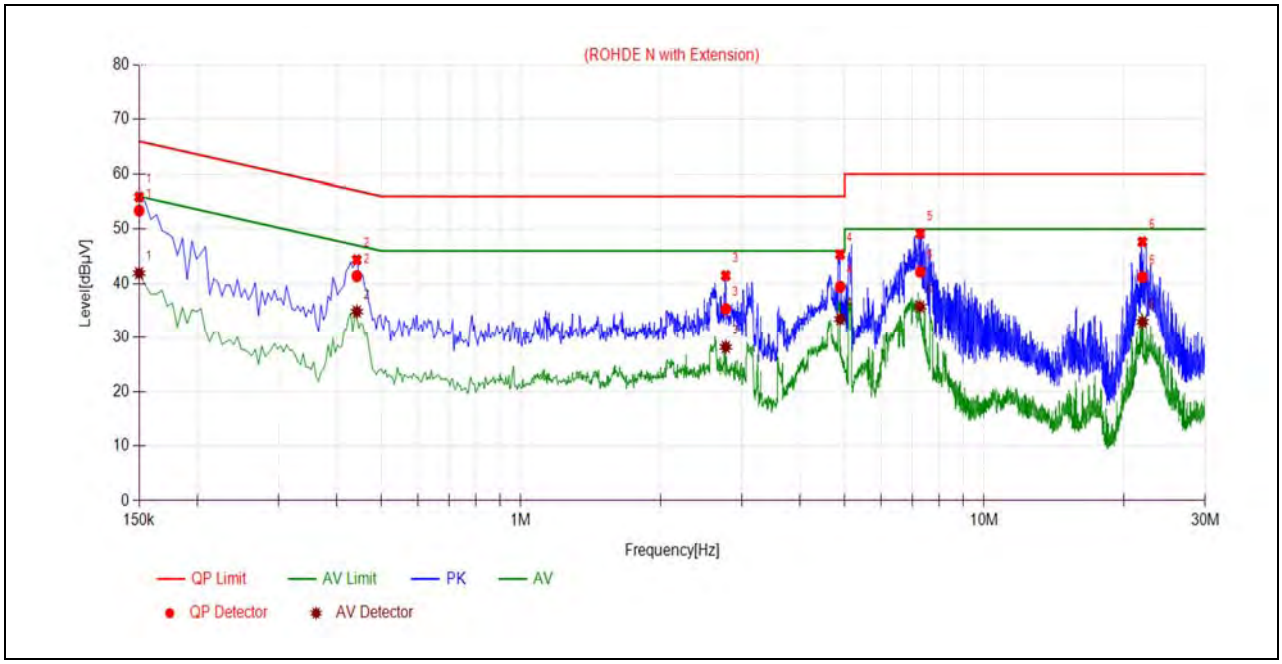
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1590	51.26	39.88	65.52	55.52	Line	PASS
2	0.4110	37.93	30.99	57.63	47.63		PASS
3	2.8902	35.30	27.87	56.00	46.00		PASS
4	4.9737	42.38	36.72	56.00	46.00		PASS
5	7.1650	42.14	36.32	60.00	50.00		PASS
6	22.6857	37.62	30.29	60.00	50.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	53.39	41.92	66.00	56.00	Neutral	PASS
2	0.4425	41.38	34.86	57.01	47.01		PASS
3	2.7691	35.34	28.20	56.00	46.00		PASS
4	4.8886	39.42	33.48	56.00	46.00		PASS
5	7.2783	42.15	35.77	60.00	50.00		PASS
6	21.9555	41.22	32.96	60.00	50.00		PASS

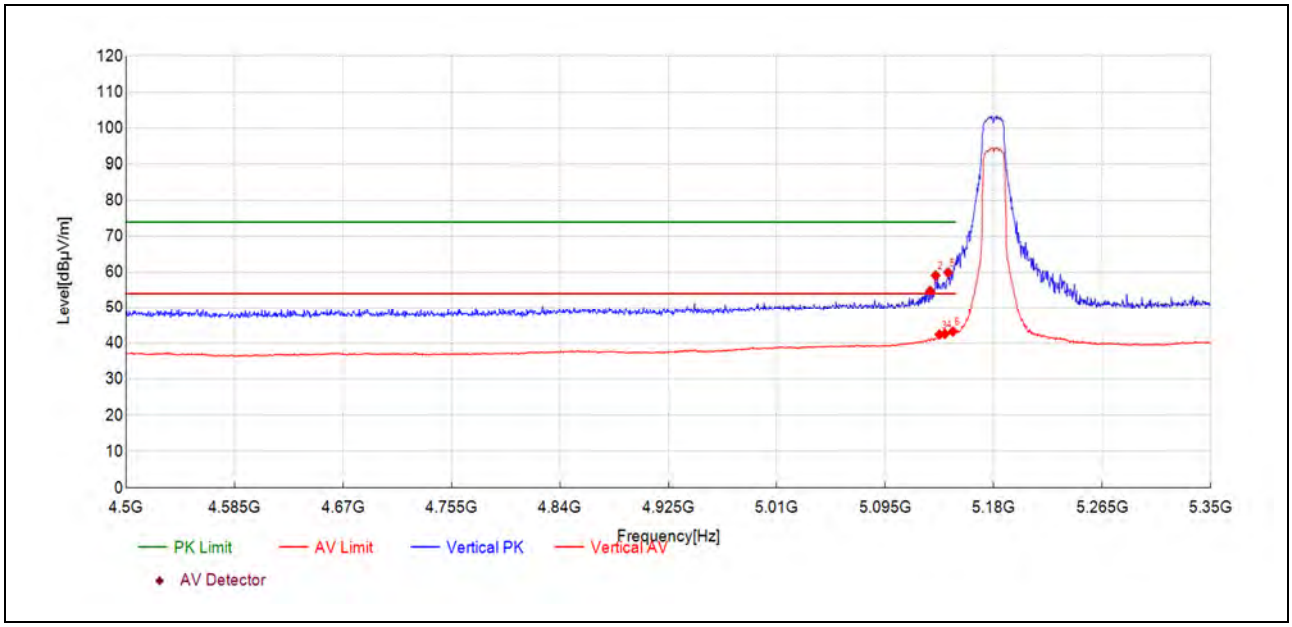
A.8. Restricted Frequency Bands

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

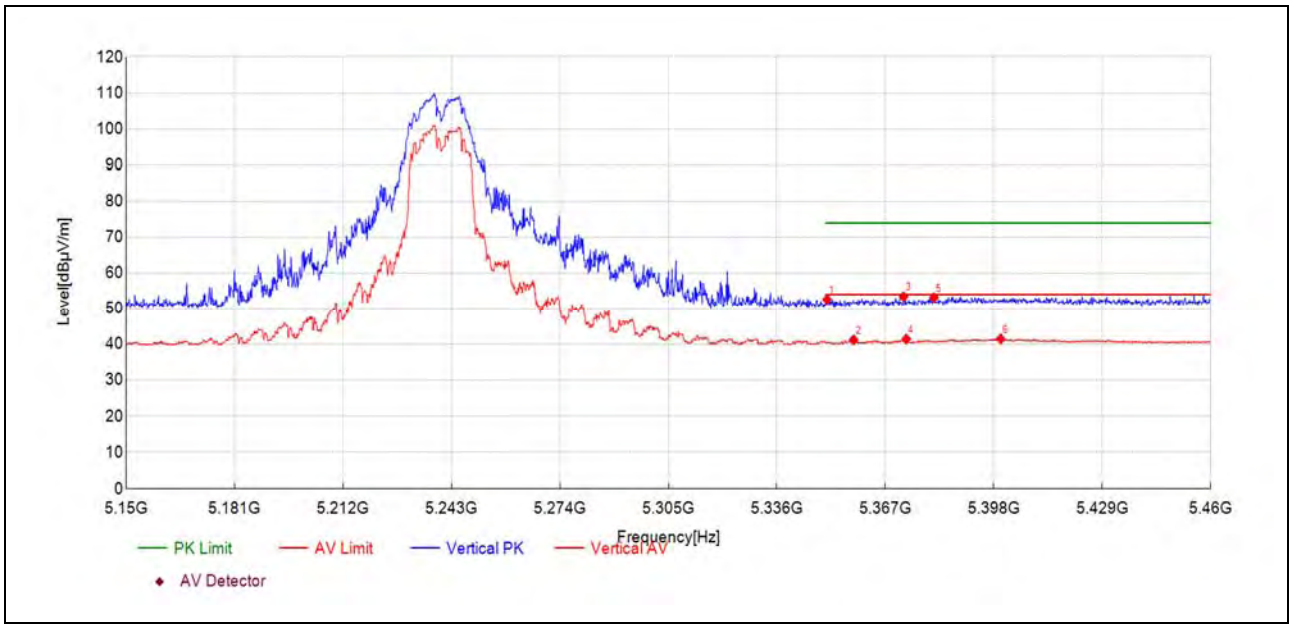
802.11a Mode

Plot for Channel 36



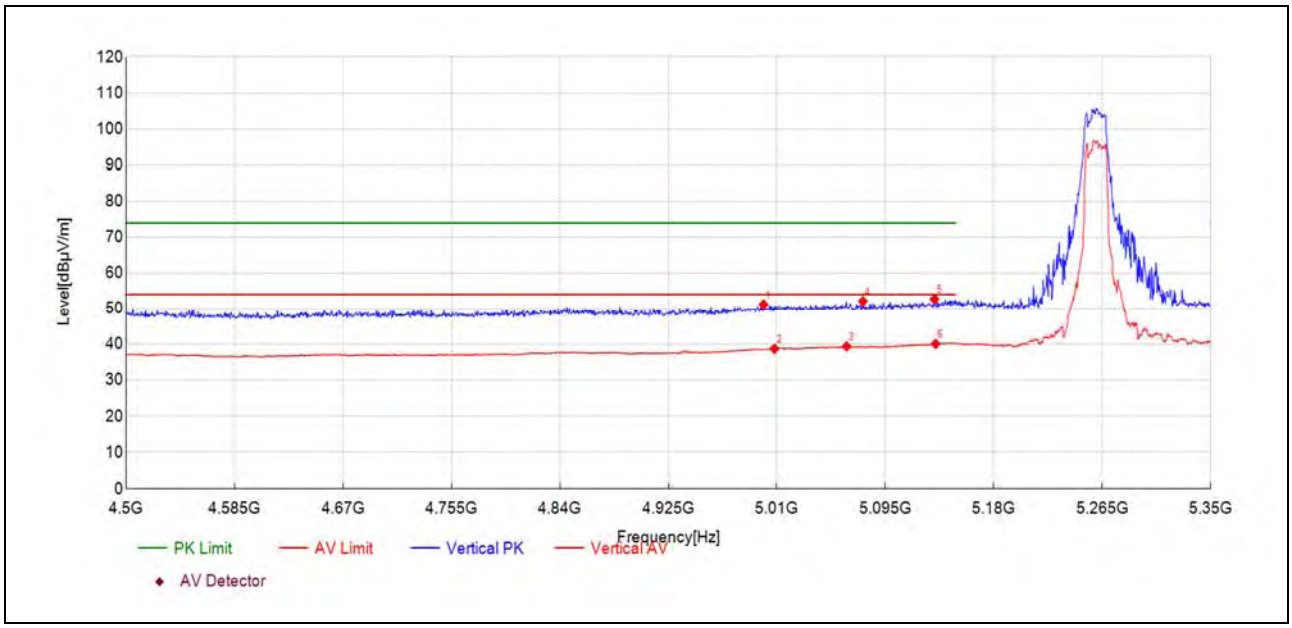
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5130.17	40.6	54.79	14.230	74.00	19.21	53	PK	Vertical	PASS
5134.42	44.8	59.10	14.310	74.00	14.90	62	PK	Vertical	PASS
5137.39	28.1	42.42	14.360	54.00	11.58	62	AV	Vertical	PASS
5141.65	28.2	42.59	14.440	54.00	11.41	62	AV	Vertical	PASS
5144.20	45.5	59.94	14.490	74.00	14.06	355	PK	Vertical	PASS
5148.02	28.7	43.26	14.550	54.00	10.74	62	AV	Vertical	PASS

Plot for Channel 48



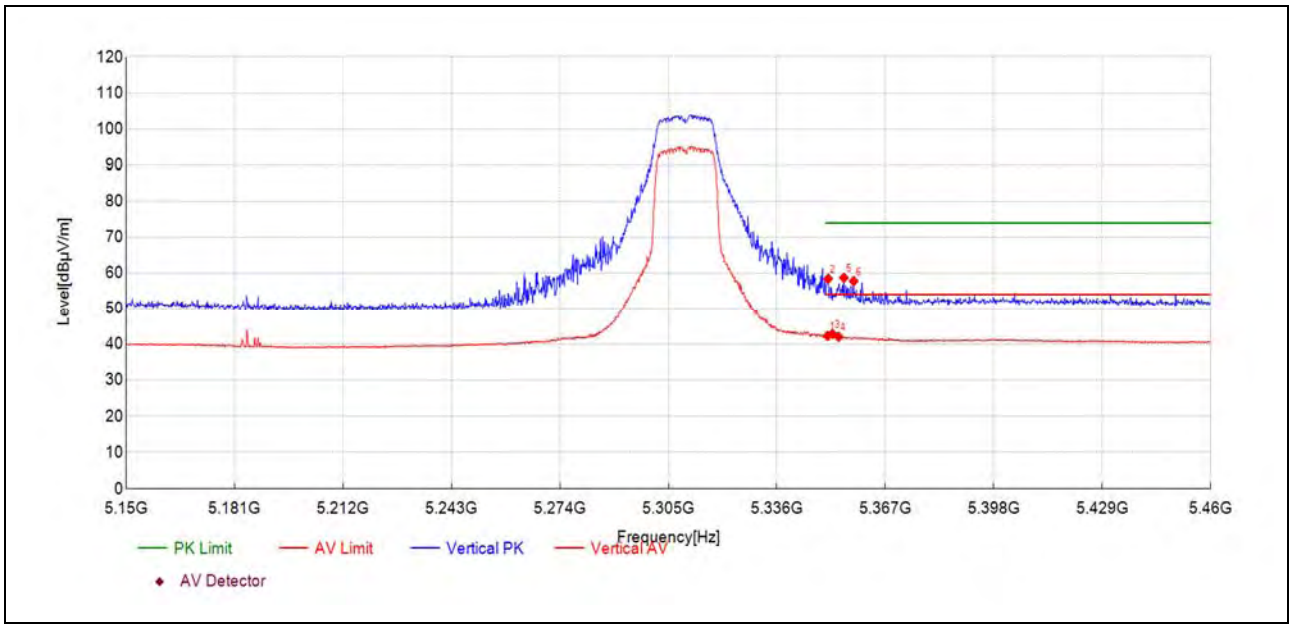
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5350.36	37.6	52.63	14.990	74.00	21.37	47	PK	Vertical	PASS
5357.96	26.1	41.20	15.090	54.00	12.80	47	AV	Vertical	PASS
5372.23	38.2	53.46	15.290	74.00	20.54	85	PK	Vertical	PASS
5373.00	26.1	41.43	15.300	54.00	12.57	50	AV	Vertical	PASS
5380.91	37.8	53.17	15.410	74.00	20.83	31	PK	Vertical	PASS
5399.98	25.8	41.43	15.680	54.00	12.57	62	AV	Vertical	PASS

Plot for Channel 52



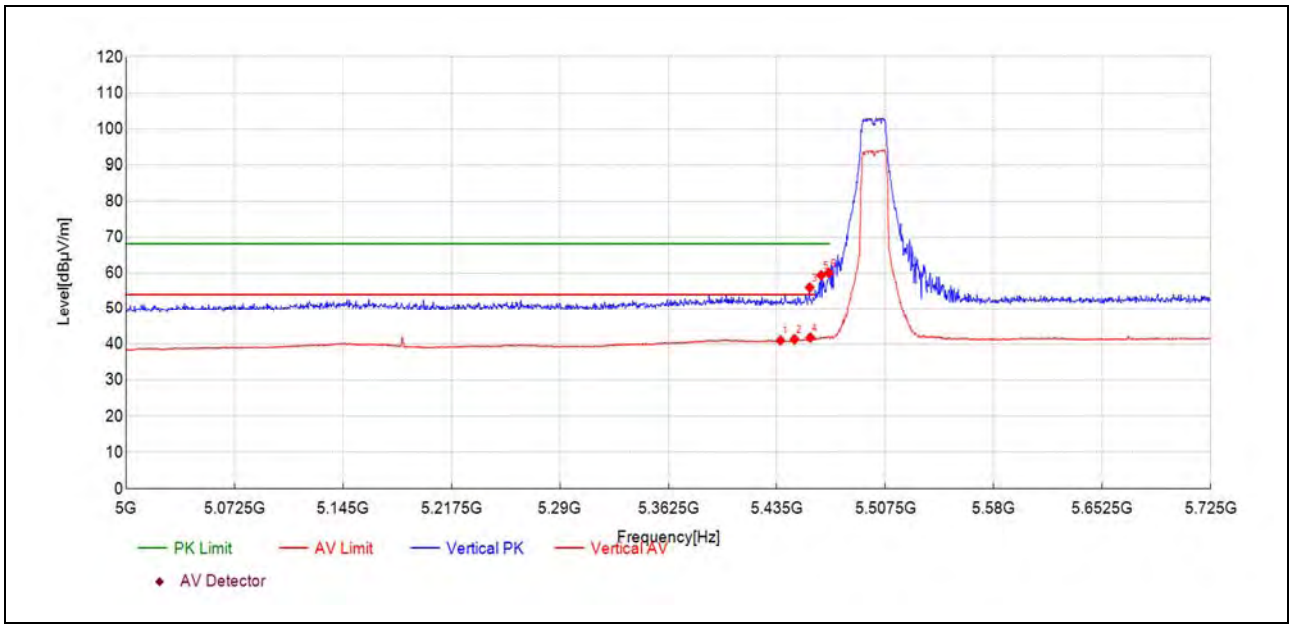
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
4999.62	38.2	51.22	12.990	74.00	22.78	60	PK	Vertical	PASS
5008.13	25.7	38.72	13.060	54.00	15.28	157	AV	Vertical	PASS
5064.68	25.9	39.39	13.510	54.00	14.61	129	AV	Vertical	PASS
5077.44	38.6	52.14	13.560	74.00	21.86	135	PK	Vertical	PASS
5133.57	38.5	52.74	14.290	74.00	21.26	157	PK	Vertical	PASS
5134.42	25.8	40.06	14.310	54.00	13.94	297	AV	Vertical	PASS

Plot for Channel 64



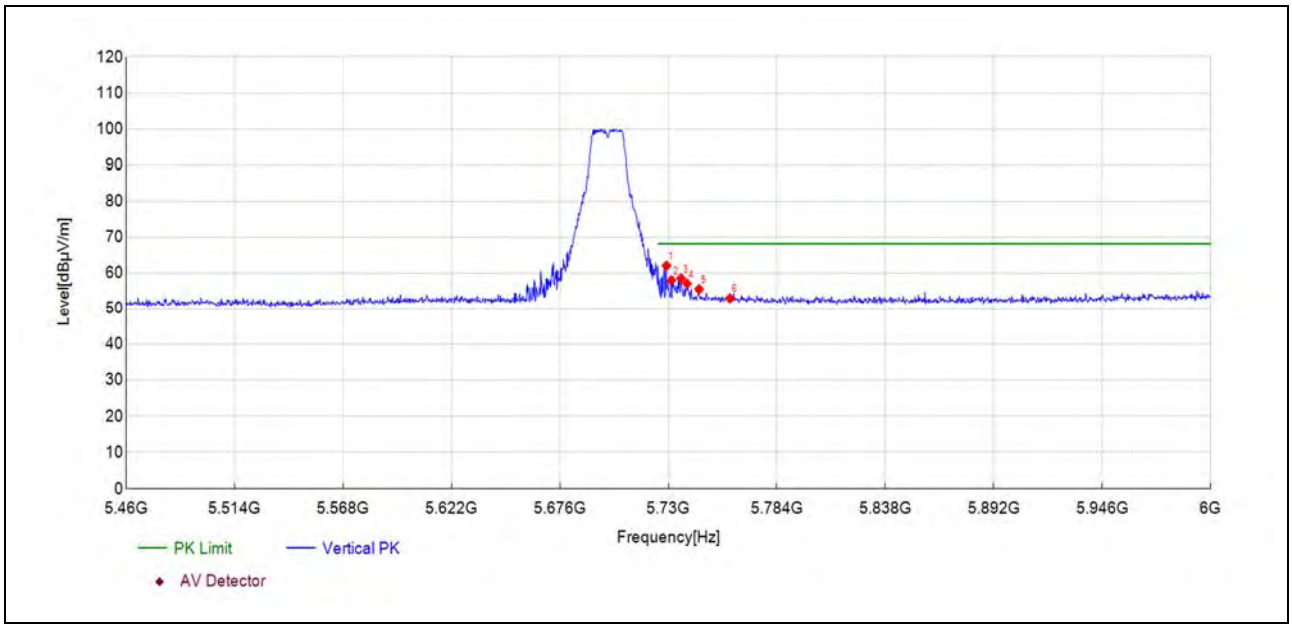
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5350.52	27.3	42.31	14.990	54.00	11.69	349	AV	Vertical	PASS
5350.67	43.5	58.46	14.990	74.00	15.54	345	PK	Vertical	PASS
5351.91	27.9	42.86	15.010	54.00	11.14	349	AV	Vertical	PASS
5353.62	27.0	42.05	15.030	54.00	11.95	349	AV	Vertical	PASS
5355.17	43.7	58.73	15.050	74.00	15.27	34	PK	Vertical	PASS
5357.96	42.7	57.80	15.090	74.00	16.20	340	PK	Vertical	PASS

Plot for Channel 100



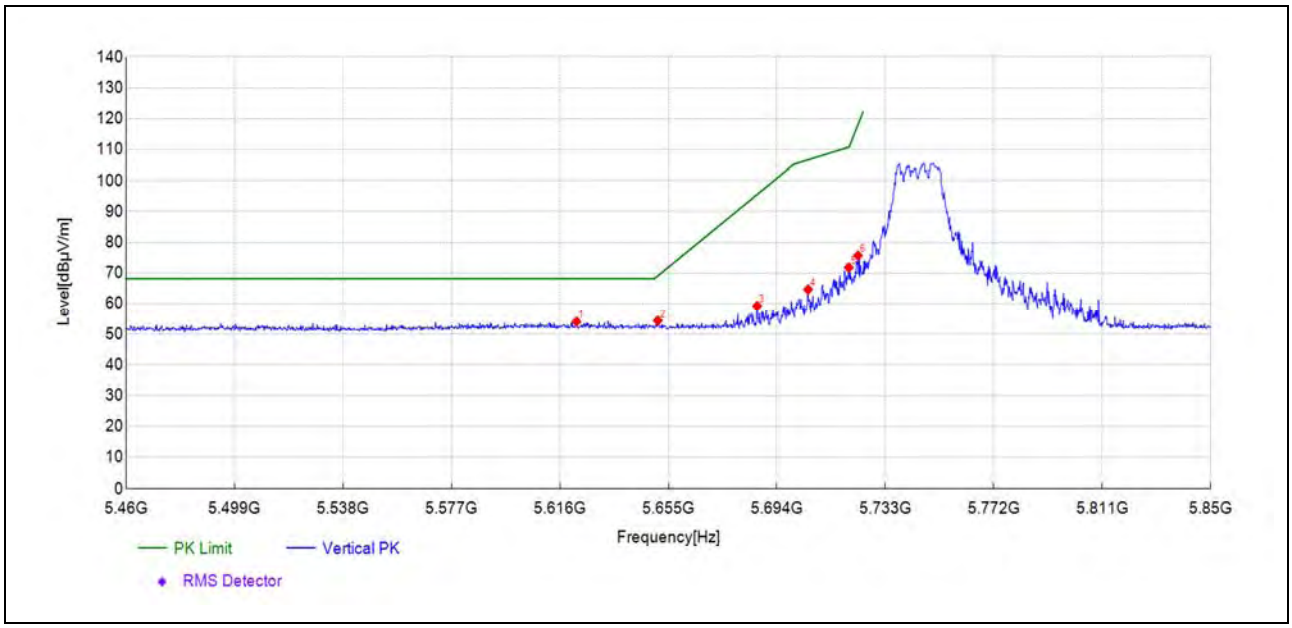
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5437.39	25.8	41.03	15.220	54.00	12.97	350	AV	Vertical	PASS
5446.82	26.3	41.36	15.110	54.00	12.64	354	AV	Vertical	PASS
5456.98	40.9	56.03	15.100	68.23	12.20	0	PK	Vertical	PASS
5457.34	26.7	41.80	15.100	54.00	12.20	350	AV	Vertical	PASS
5464.59	44.3	59.43	15.130	68.23	8.80	354	PK	Vertical	PASS
5469.67	45.0	60.11	15.140	68.23	8.12	23	PK	Vertical	PASS

Plot for Channel 140



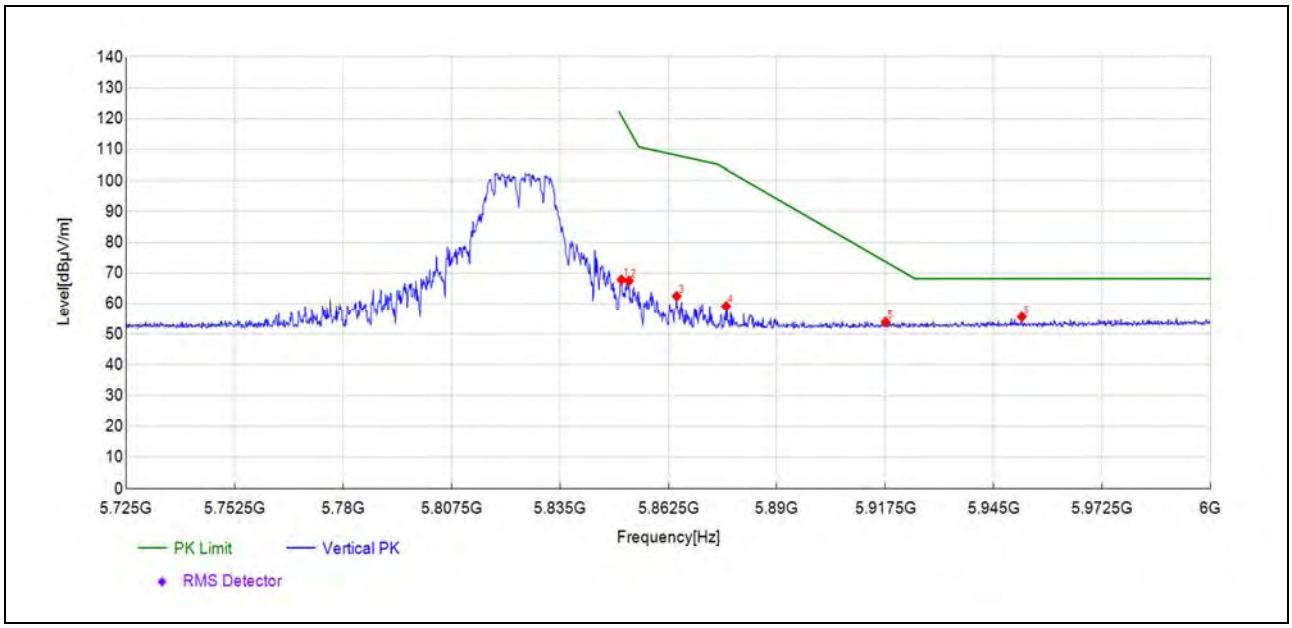
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5729.05	45.8	62.08	16.250	68.23	6.15	3	PK	Vertical	PASS
5731.49	41.8	58.02	16.260	68.23	10.21	3	PK	Vertical	PASS
5736.35	42.3	58.55	16.270	68.23	9.68	13	PK	Vertical	PASS
5739.32	40.8	57.06	16.270	68.23	11.17	22	PK	Vertical	PASS
5745.26	39.2	55.50	16.290	68.23	12.73	9	PK	Vertical	PASS
5760.66	36.8	52.98	16.230	68.23	15.25	47	PK	Vertical	PASS

Plot for Channel 149



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5621.93	38.1	53.99	15.860	68.23	14.24	214	PK	Vertical	PASS
5651.20	38.5	54.31	15.820	69.11	14.80	298	PK	Vertical	PASS
5686.90	43.2	59.27	16.100	95.53	36.26	51	PK	Vertical	PASS
5705.24	48.5	64.69	16.210	106.70	42.01	340	PK	Vertical	PASS
5719.87	55.6	71.85	16.240	110.79	38.94	14	PK	Vertical	PASS
5723.19	59.5	75.71	16.240	118.10	42.39	346	PK	Vertical	PASS

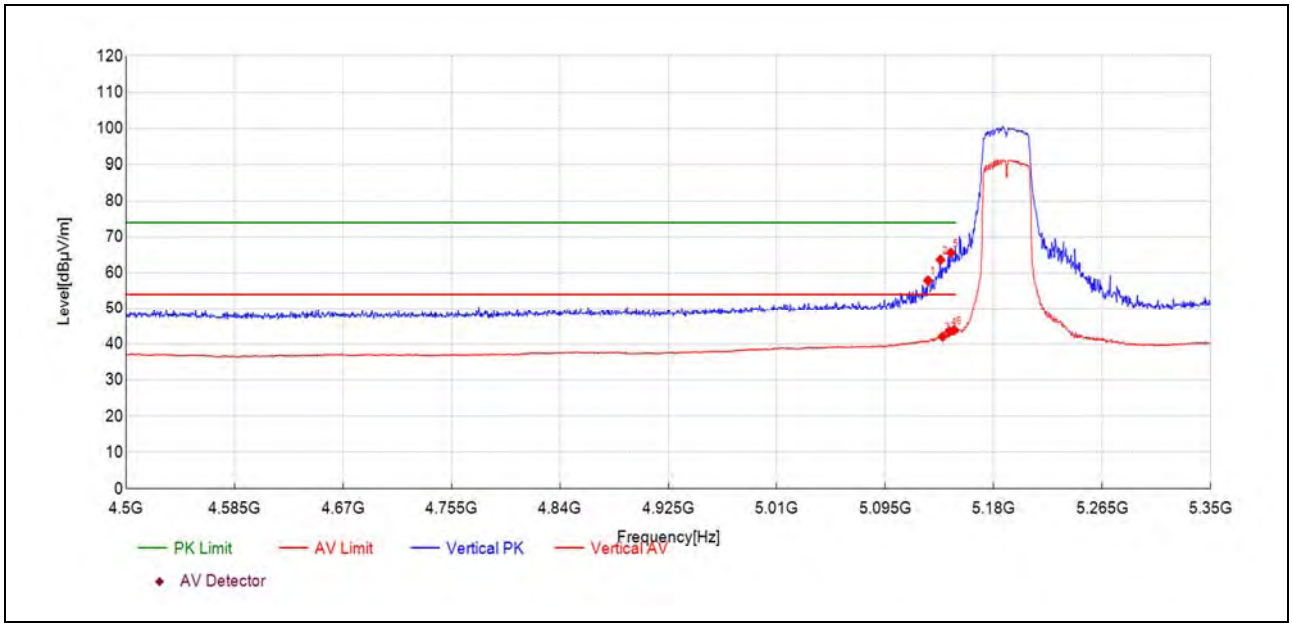
Plot for Channel 165



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5850.60	51.9	67.90	15.970	120.86	52.96	343	PK	Vertical	PASS
5852.53	51.5	67.50	15.980	116.47	48.97	114	PK	Vertical	PASS
5864.63	46.5	62.50	16.020	108.13	45.63	318	PK	Vertical	PASS
5877.15	43.1	59.21	16.070	103.64	44.43	321	PK	Vertical	PASS
5917.60	37.5	53.82	16.300	73.71	19.89	309	PK	Vertical	PASS
5952.13	39.0	55.57	16.570	68.23	12.66	2	PK	Vertical	PASS

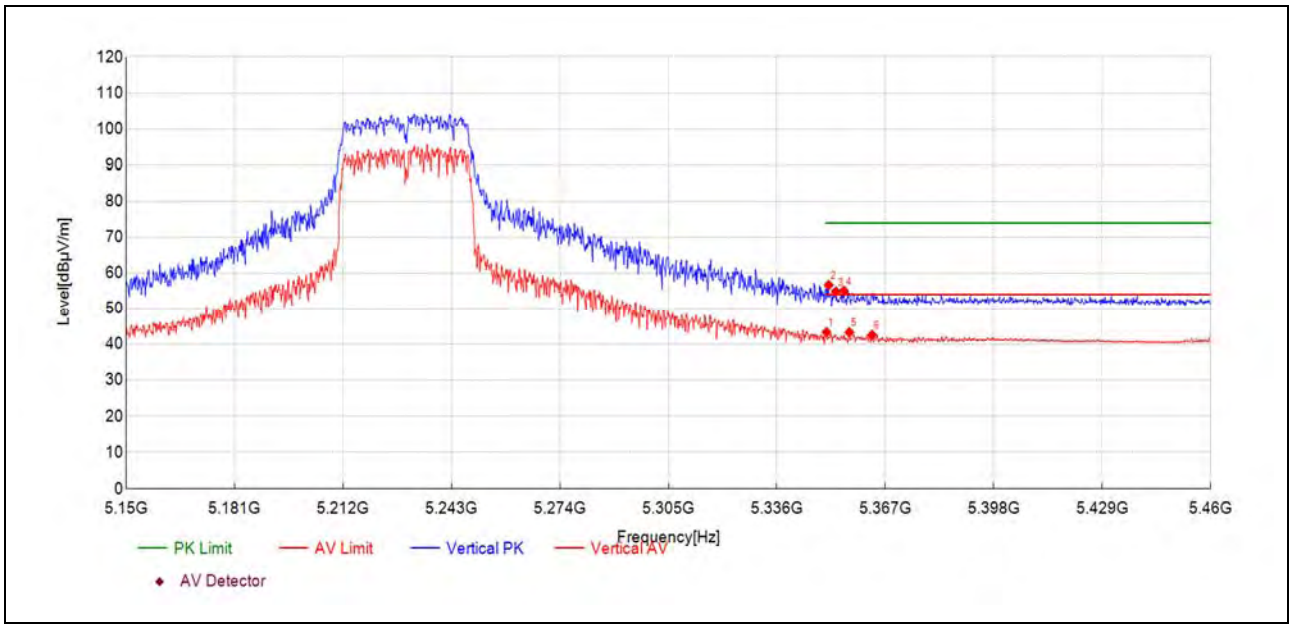
802.11n (HT40) Mode

Plot for Channel 38



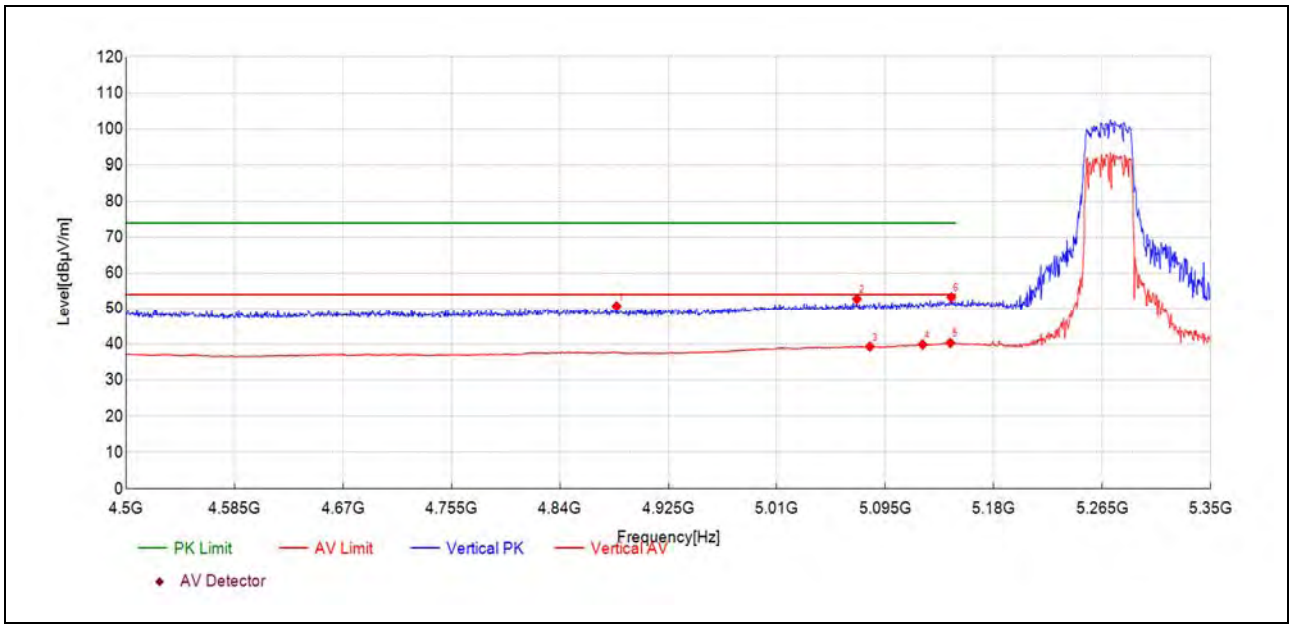
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5128.46	43.7	57.90	14.200	74.00	16.10	14	PK	Vertical	PASS
5138.24	49.3	63.67	14.380	74.00	10.33	14	PK	Vertical	PASS
5139.94	27.7	42.07	14.410	54.00	11.93	57	AV	Vertical	PASS
5145.05	29.0	43.48	14.500	54.00	10.52	57	AV	Vertical	PASS
5146.32	51.1	65.61	14.520	74.00	8.39	48	PK	Vertical	PASS
5148.87	29.3	43.91	14.570	54.00	10.09	57	AV	Vertical	PASS

Plot for Channel 46



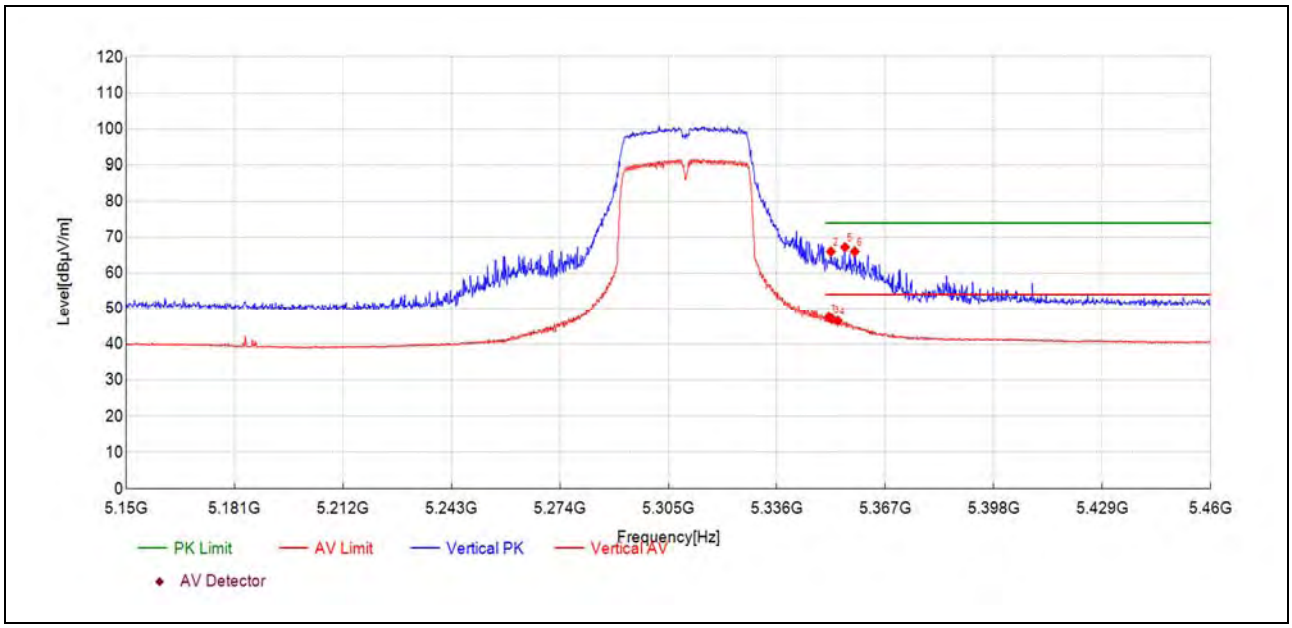
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5350.21	28.3	43.32	14.980	54.00	10.68	351	AV	Vertical	PASS
5350.83	41.7	56.70	14.990	74.00	17.30	114	PK	Vertical	PASS
5352.84	39.9	54.87	15.020	74.00	19.13	4	PK	Vertical	PASS
5355.17	40.1	55.12	15.050	74.00	18.88	348	PK	Vertical	PASS
5356.72	28.2	43.28	15.070	54.00	10.72	351	AV	Vertical	PASS
5363.23	27.4	42.55	15.170	54.00	11.45	351	AV	Vertical	PASS

Plot for Channel 54



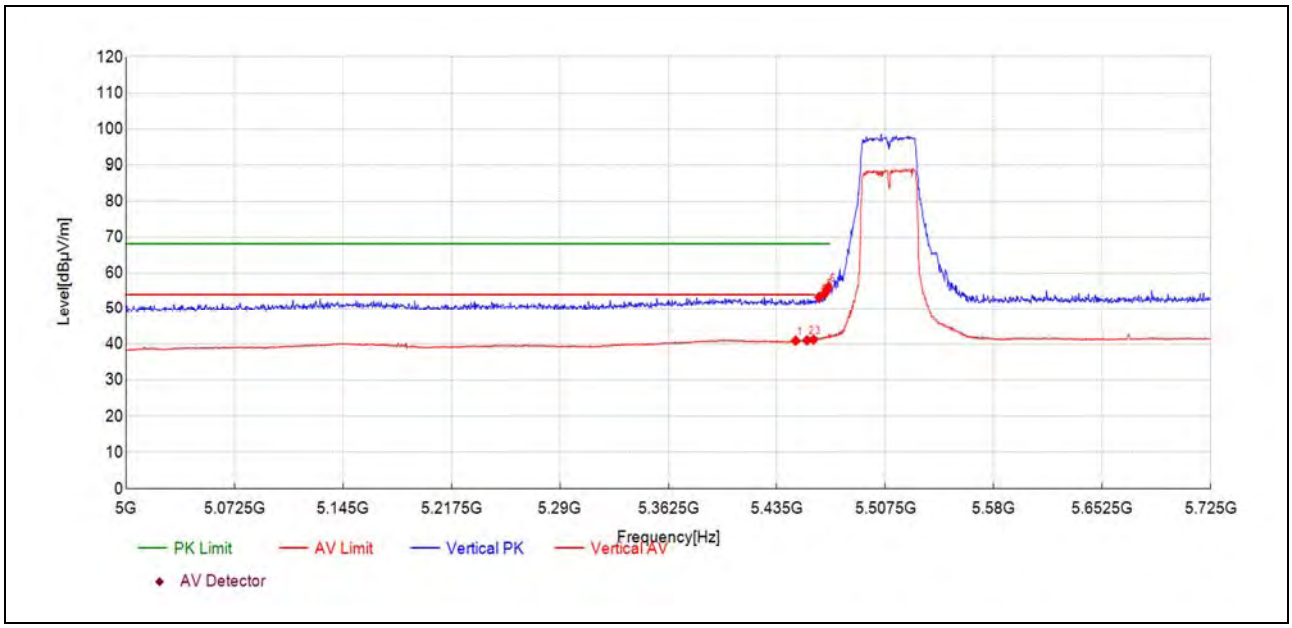
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
4884.39	38.5	50.74	12.290	74.00	23.26	320	PK	Vertical	PASS
5072.76	39.2	52.79	13.550	74.00	21.21	229	PK	Vertical	PASS
5082.97	25.7	39.31	13.600	54.00	14.69	351	AV	Vertical	PASS
5124.21	25.8	39.89	14.120	54.00	14.11	144	AV	Vertical	PASS
5145.90	25.8	40.32	14.520	54.00	13.68	217	AV	Vertical	PASS
5146.75	38.8	53.28	14.530	74.00	20.72	226	PK	Vertical	PASS

Plot for Channel 62



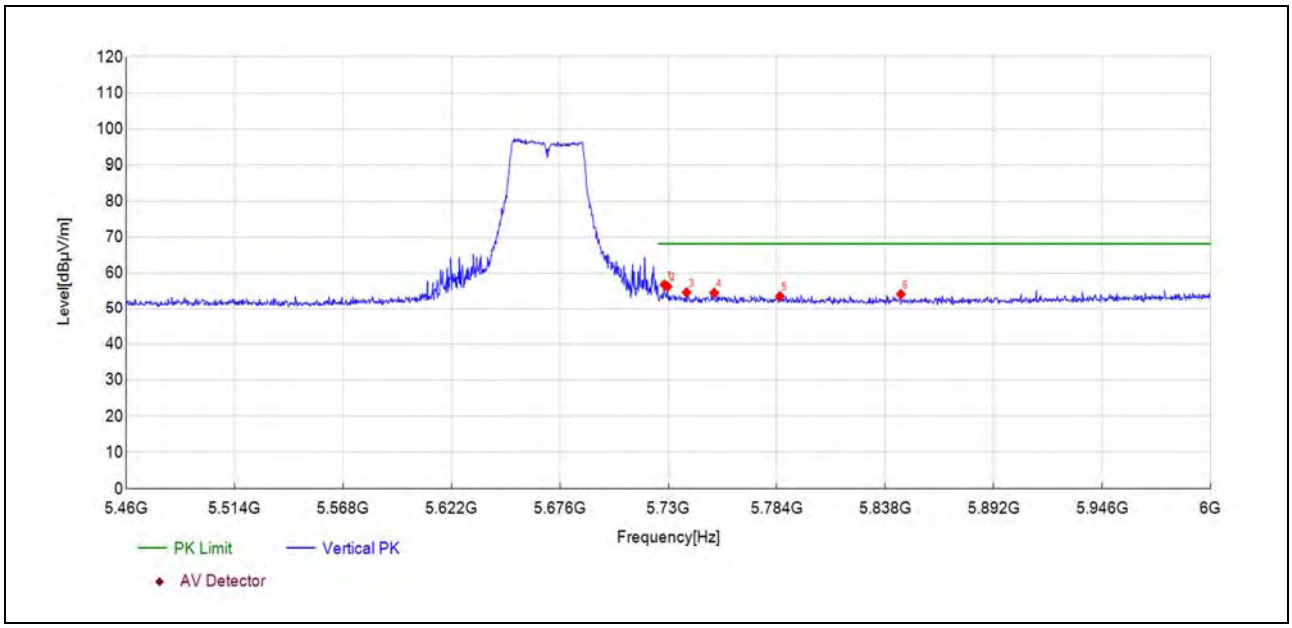
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5350.83	32.5	47.52	14.990	54.00	6.48	358	AV	Vertical	PASS
5351.45	51.0	66.01	15.000	74.00	7.99	358	PK	Vertical	PASS
5351.76	32.0	47.03	15.000	54.00	6.97	355	AV	Vertical	PASS
5353.46	31.5	46.48	15.030	54.00	7.52	358	AV	Vertical	PASS
5355.48	52.2	67.23	15.060	74.00	6.77	6	PK	Vertical	PASS
5358.27	50.9	66.01	15.100	74.00	7.99	48	PK	Vertical	PASS

Plot for Channel 102



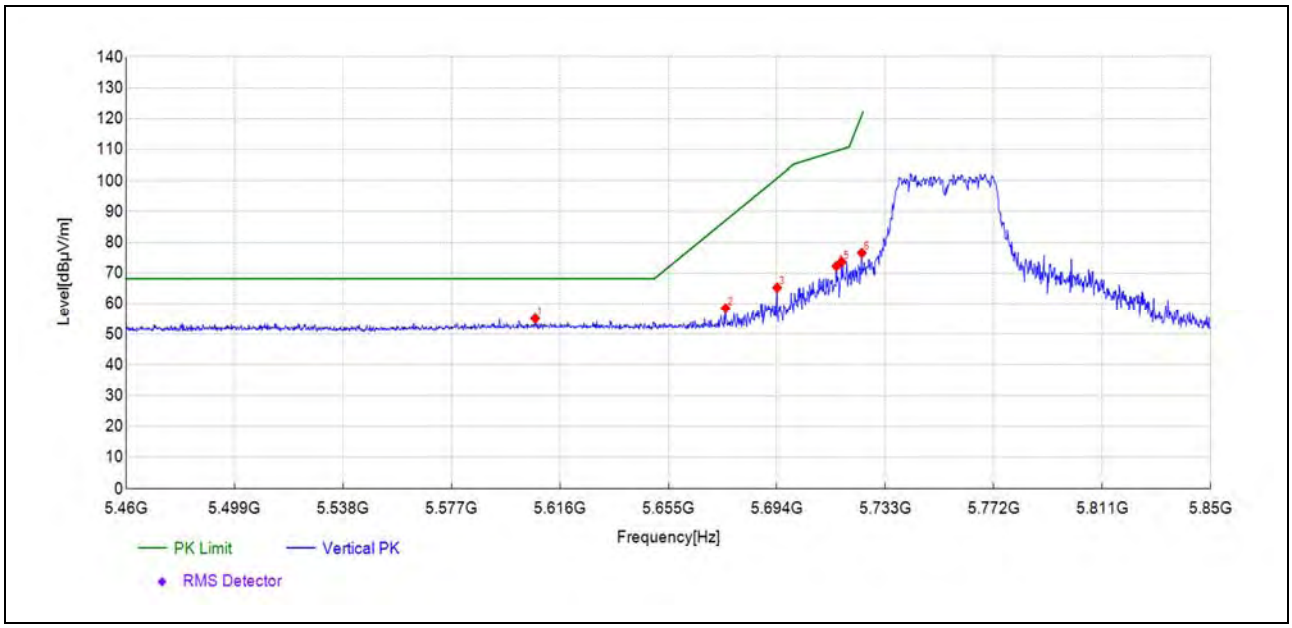
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5447.55	25.9	40.96	15.100	54.00	13.04	0	AV	Vertical	PASS
5455.17	26.0	41.04	15.090	54.00	12.96	350	AV	Vertical	PASS
5459.52	26.1	41.25	15.110	54.00	12.75	357	AV	Vertical	PASS
5463.14	38.2	53.33	15.120	68.23	14.90	357	PK	Vertical	PASS
5467.13	39.3	54.45	15.140	68.23	13.78	354	PK	Vertical	PASS
5469.31	40.9	56.02	15.140	68.23	12.21	354	PK	Vertical	PASS

Plot for Channel 134



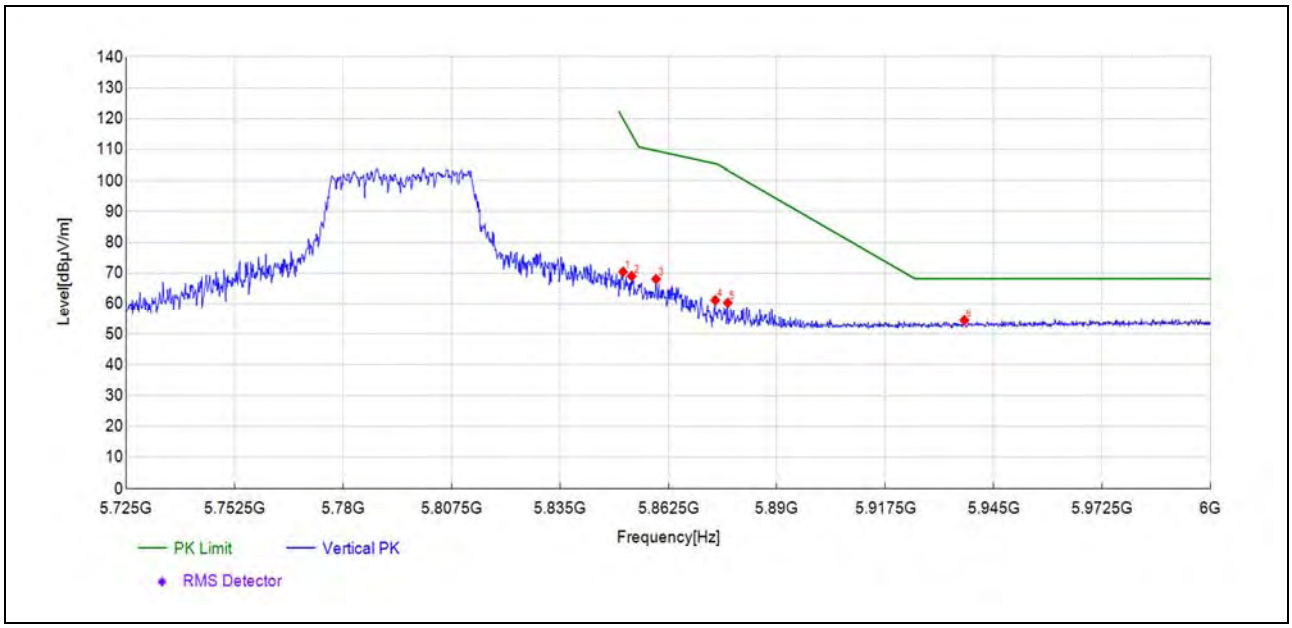
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5727.97	40.6	56.80	16.250	68.23	11.43	342	PK	Vertical	PASS
5729.59	40.0	56.26	16.260	68.23	11.97	14	PK	Vertical	PASS
5739.05	38.4	54.65	16.270	68.23	13.58	14	PK	Vertical	PASS
5752.83	38.2	54.52	16.280	68.23	13.71	140	PK	Vertical	PASS
5785.51	37.5	53.55	16.070	68.23	14.68	5	PK	Vertical	PASS
5845.75	38.2	54.15	15.970	68.23	14.08	346	PK	Vertical	PASS

Plot for Channel 151



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5607.10	39.1	55.02	15.890	68.23	13.21	50	PK	Vertical	PASS
5675.58	42.5	58.48	16.000	87.16	28.68	17	PK	Vertical	PASS
5694.12	49.1	65.29	16.150	100.88	35.59	42	PK	Vertical	PASS
5715.38	56.1	72.28	16.230	109.54	37.26	354	PK	Vertical	PASS
5717.33	57.4	73.65	16.240	110.08	36.43	17	PK	Vertical	PASS
5724.55	60.3	76.55	16.250	121.21	44.66	360	PK	Vertical	PASS

Plot for Channel 159



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5851.01	54.5	70.42	15.970	119.92	49.50	37	PK	Vertical	PASS
5853.21	53.1	69.06	15.980	114.90	45.84	13	PK	Vertical	PASS
5859.40	52.1	68.07	16.010	109.60	41.53	334	PK	Vertical	PASS
5874.40	45.2	61.21	16.060	105.40	44.19	17	PK	Vertical	PASS
5877.56	44.3	60.37	16.070	103.33	42.96	77	PK	Vertical	PASS
5937.54	38.0	54.43	16.460	68.23	13.80	310	PK	Vertical	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:

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

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.

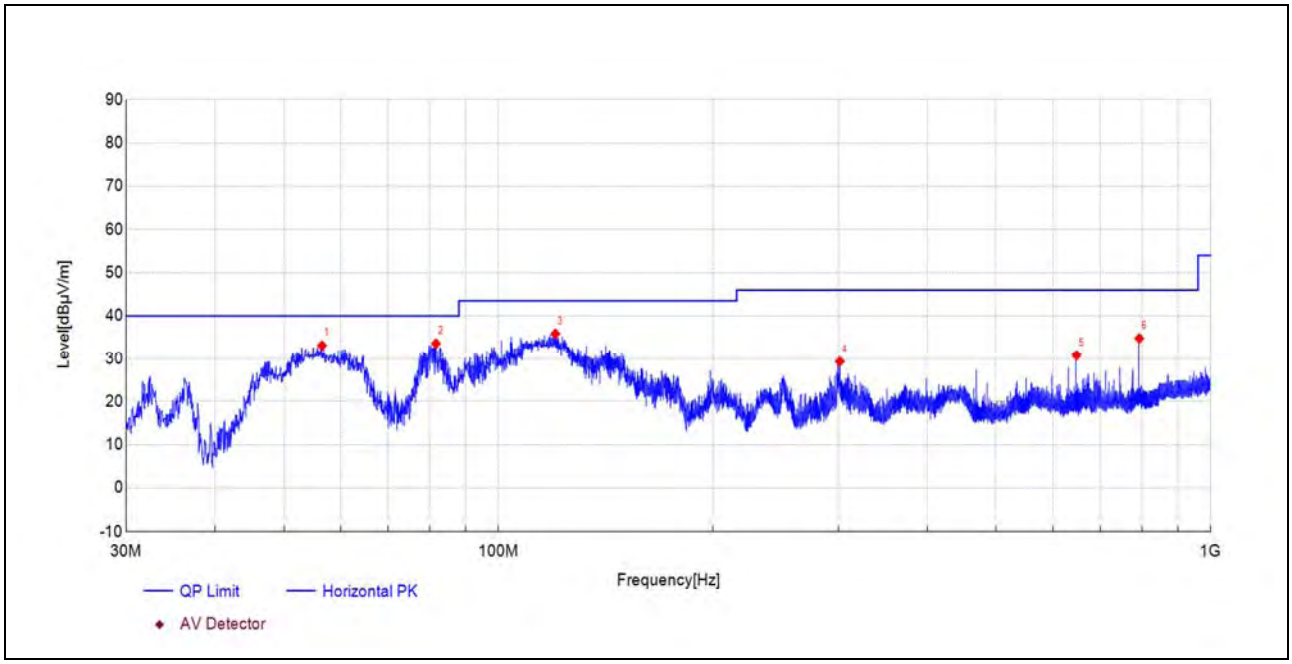
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

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.

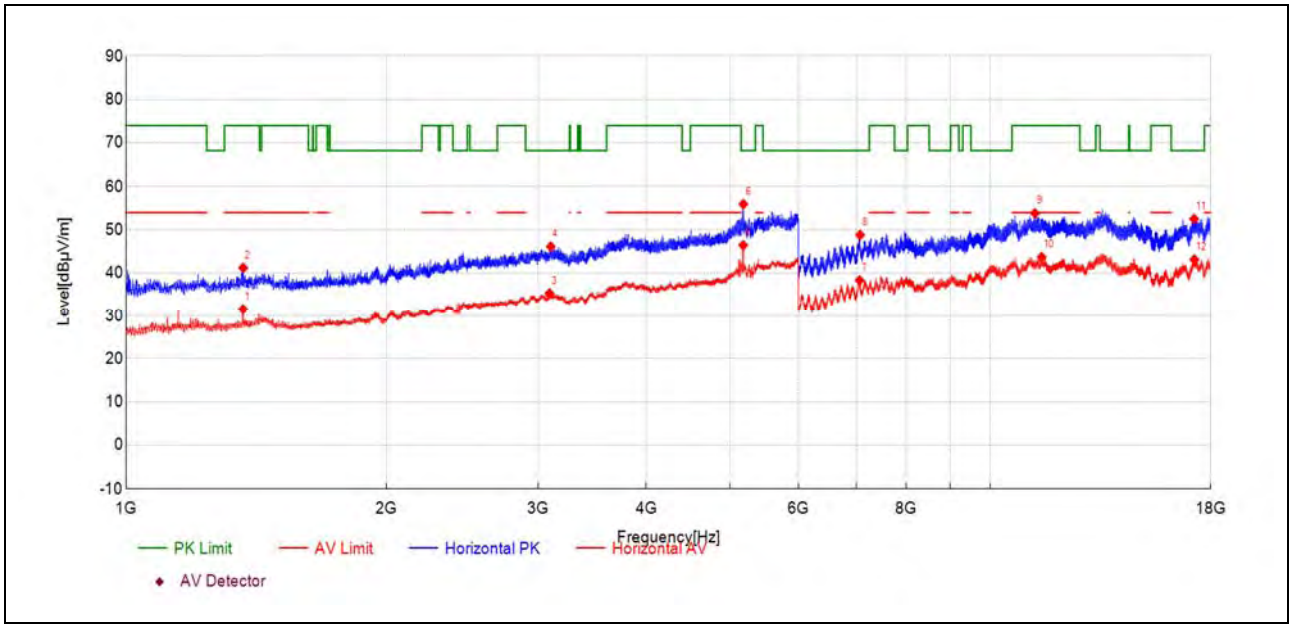
802.11a Mode

Plot for Channel 44



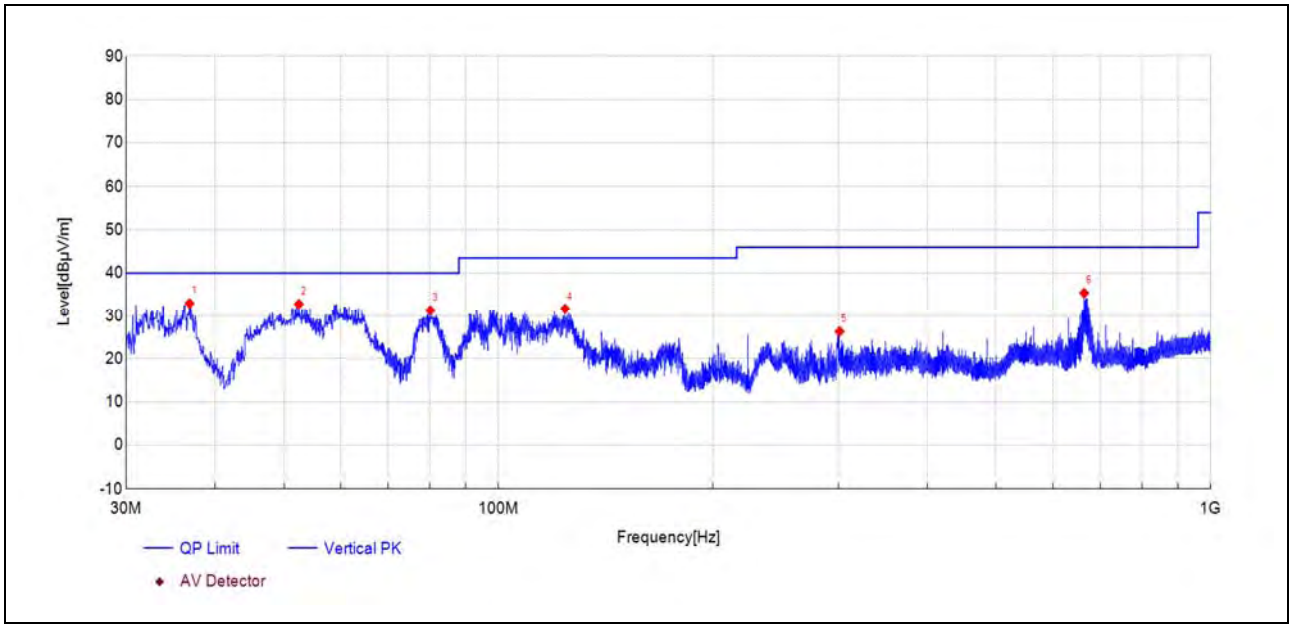
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
56.53	61.1	33.10	-28.000	40.00	6.90	212	PK	Horizontal	PASS
81.70	65.5	33.57	-31.900	40.00	6.43	97	PK	Horizontal	PASS
120.21	66.4	35.85	-30.520	43.50	7.65	165	PK	Horizontal	PASS
301.47	54.7	29.31	-25.340	46.00	16.69	104	PK	Horizontal	PASS
647.97	47.6	30.80	-16.810	46.00	15.20	110	PK	Horizontal	PASS
793.82	49.0	34.78	-14.220	46.00	11.22	359	PK	Horizontal	PASS



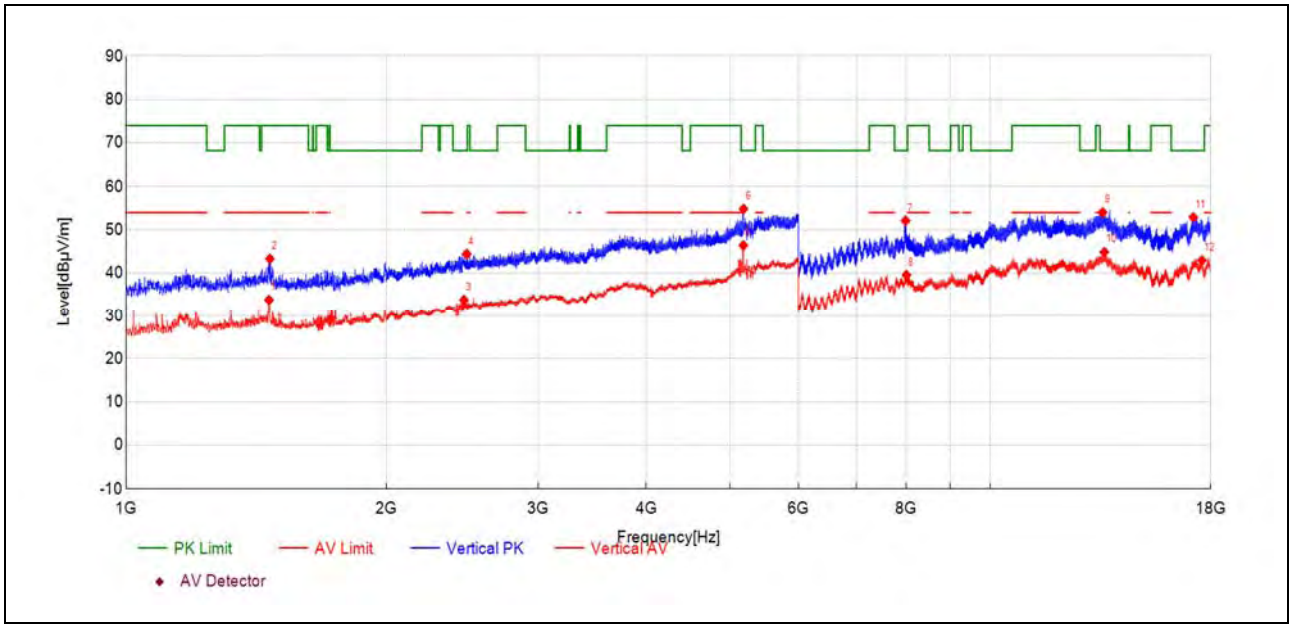
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1365.94	32.1	31.54	-0.540	54.00	22.46	153	AV	Horizontal	PASS
1366.40	41.8	41.21	-0.540	74.00	32.79	153	PK	Horizontal	PASS
3090.19	27.0	35.31	8.340	-	-	172	AV	Horizontal	NA
3101.55	37.8	46.14	8.380	68.23	22.09	359	PK	Horizontal	PASS
5179.02	29.9	46.45	16.510	-	-	359	AV	Horizontal	NA
5181.74	39.5	55.95	16.470	-	-	246	PK	Horizontal	NA
7060.84	34.0	38.33	4.380	-	-	87	AV	Horizontal	NA
7072.84	44.5	48.81	4.310	68.23	19.42	300	PK	Horizontal	PASS
11267.73	40.6	53.84	13.280	74.00	20.16	44	PK	Horizontal	PASS
11473.18	29.5	43.71	14.240	54.00	10.29	329	AV	Horizontal	PASS
17219.49	36.7	52.54	15.850	68.23	15.69	355	PK	Horizontal	PASS
17232.45	27.4	43.13	15.720	-	-	315	AV	Horizontal	NA



(Antenna Vertical, 30MHz to 1GHz)

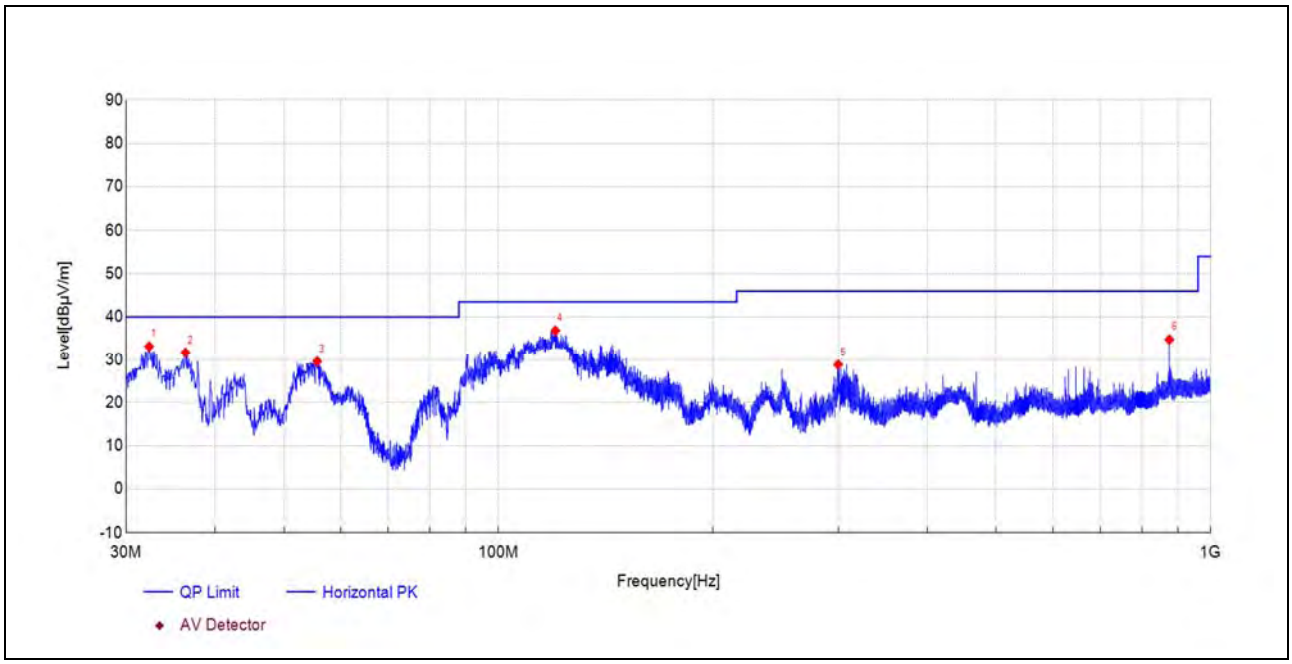
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
36.84	62.3	32.94	-29.320	40.00	7.06	351	PK	Vertical	PASS
52.46	60.6	32.76	-27.880	40.00	7.24	330	PK	Vertical	PASS
80.25	63.8	31.28	-32.530	40.00	8.72	0	PK	Vertical	PASS
124.05	62.4	31.62	-30.800	43.50	11.88	282	PK	Vertical	PASS
301.32	51.7	26.30	-25.350	46.00	19.70	208	PK	Vertical	PASS
664.17	51.5	35.36	-16.150	46.00	10.64	106	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

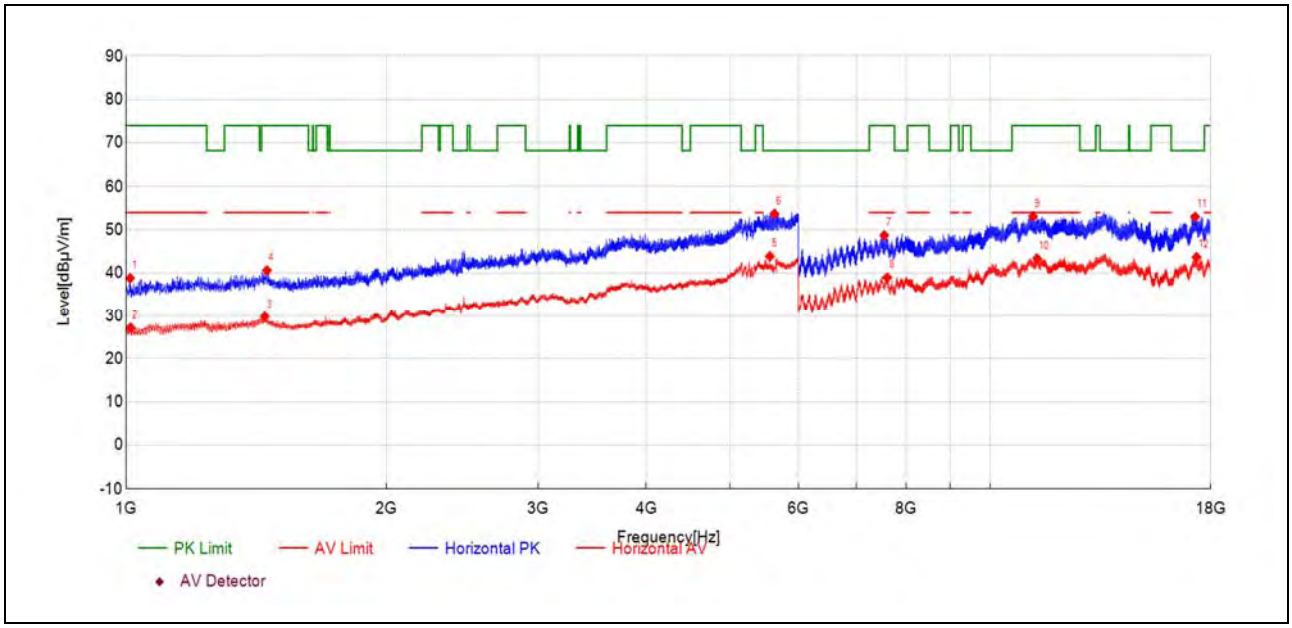
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1463.68	33.7	33.76	0.090	54.00	20.24	107	AV	Vertical	PASS
1467.32	43.3	43.30	0.030	74.00	30.70	107	PK	Vertical	PASS
2461.04	27.6	33.76	6.170	-	-	144	AV	Vertical	NA
2478.77	38.3	44.42	6.130	68.23	23.81	51	PK	Vertical	PASS
5181.29	29.9	46.41	16.470	-	-	200	AV	Vertical	NA
5183.56	38.4	54.84	16.430	68.23	13.39	200	PK	Vertical	PASS
7983.44	46.4	52.12	5.690	68.23	16.11	5	PK	Vertical	PASS
8000.24	33.6	39.58	5.940	-	-	5	AV	Vertical	NA
13496.94	37.0	54.04	17.050	68.23	14.19	315	PK	Vertical	PASS
13554.54	27.8	44.87	17.090	-	-	5	AV	Vertical	NA
17185.41	37.0	52.92	15.930	68.23	15.31	300	PK	Vertical	PASS
17586.70	25.5	42.94	17.410	-	-	300	AV	Vertical	NA

Plot for Channel 60



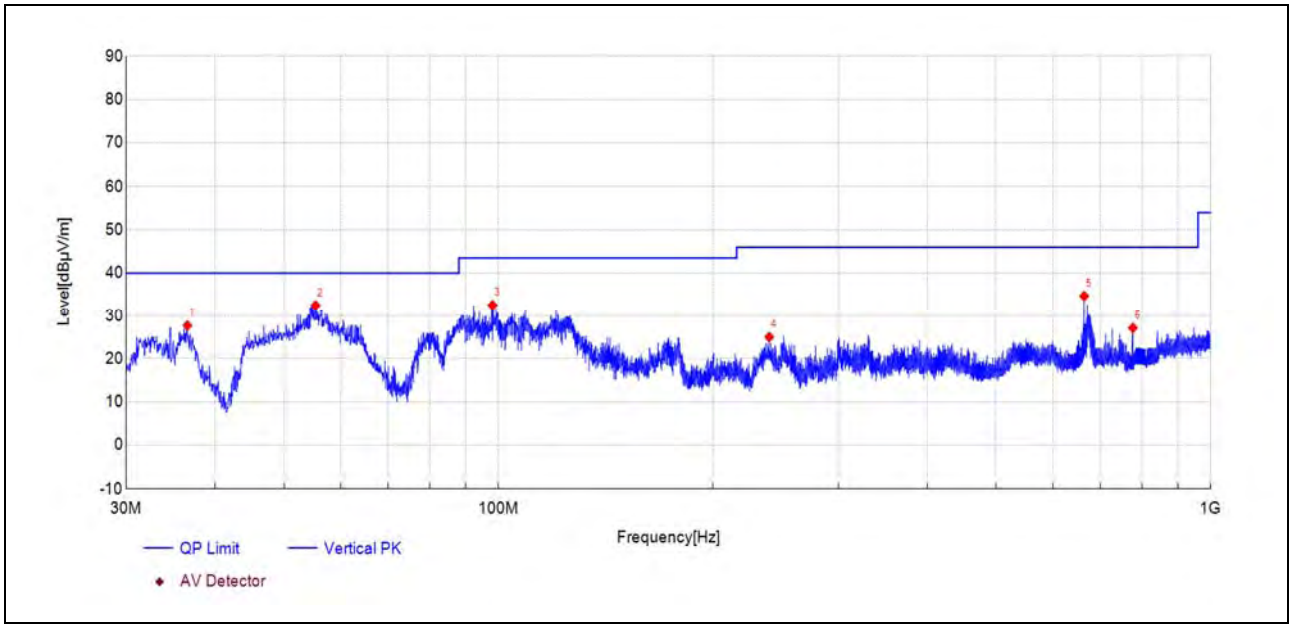
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
32.33	63.6	33.11	-30.480	40.00	6.89	226	PK	Horizontal	PASS
36.35	61.1	31.66	-29.480	40.00	8.34	281	PK	Horizontal	PASS
55.66	57.5	29.55	-27.960	40.00	10.45	220	PK	Horizontal	PASS
120.21	67.3	36.82	-30.520	43.50	6.68	344	PK	Horizontal	PASS
299.87	54.3	28.81	-25.460	46.00	17.19	111	PK	Horizontal	PASS
874.82	47.3	34.75	-12.510	46.00	11.25	9	PK	Horizontal	PASS



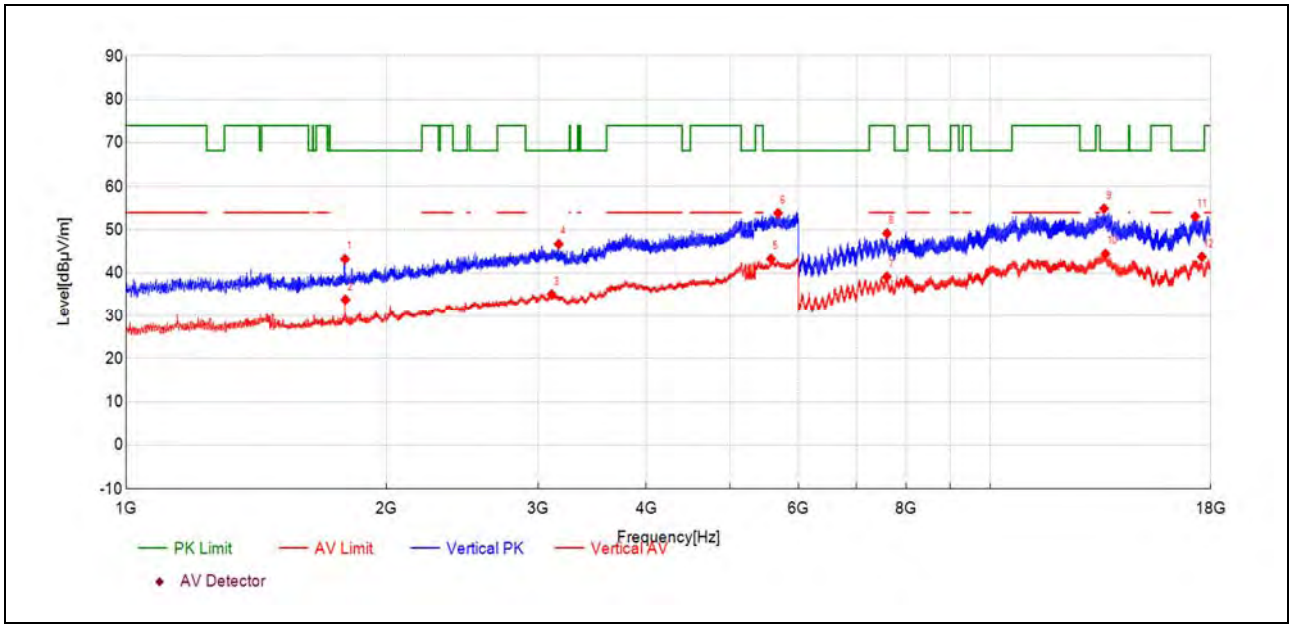
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1010.91	41.8	38.80	-2.950	74.00	35.20	93	PK	Horizontal	PASS
1011.82	30.1	27.19	-2.930	54.00	26.81	149	AV	Horizontal	PASS
1447.31	29.5	29.77	0.260	54.00	24.23	290	AV	Horizontal	PASS
1455.50	40.4	40.62	0.200	74.00	33.38	299	PK	Horizontal	PASS
5559.96	26.5	43.89	17.400	-	-	337	AV	Horizontal	NA
5627.69	35.6	53.73	18.100	68.23	14.50	253	PK	Horizontal	PASS
7542.30	43.5	48.72	5.200	74.00	25.28	178	PK	Horizontal	PASS
7602.30	33.4	38.98	5.580	54.00	15.02	5	AV	Horizontal	PASS
11211.09	39.7	53.14	13.470	74.00	20.86	149	PK	Horizontal	PASS
11333.49	29.9	43.37	13.510	54.00	10.63	340	AV	Horizontal	PASS
17268.45	37.7	53.02	15.360	68.23	15.21	325	PK	Horizontal	PASS
17334.69	28.3	43.68	15.350	-	-	18	AV	Horizontal	NA



(Antenna Vertical, 30MHz to 1GHz)

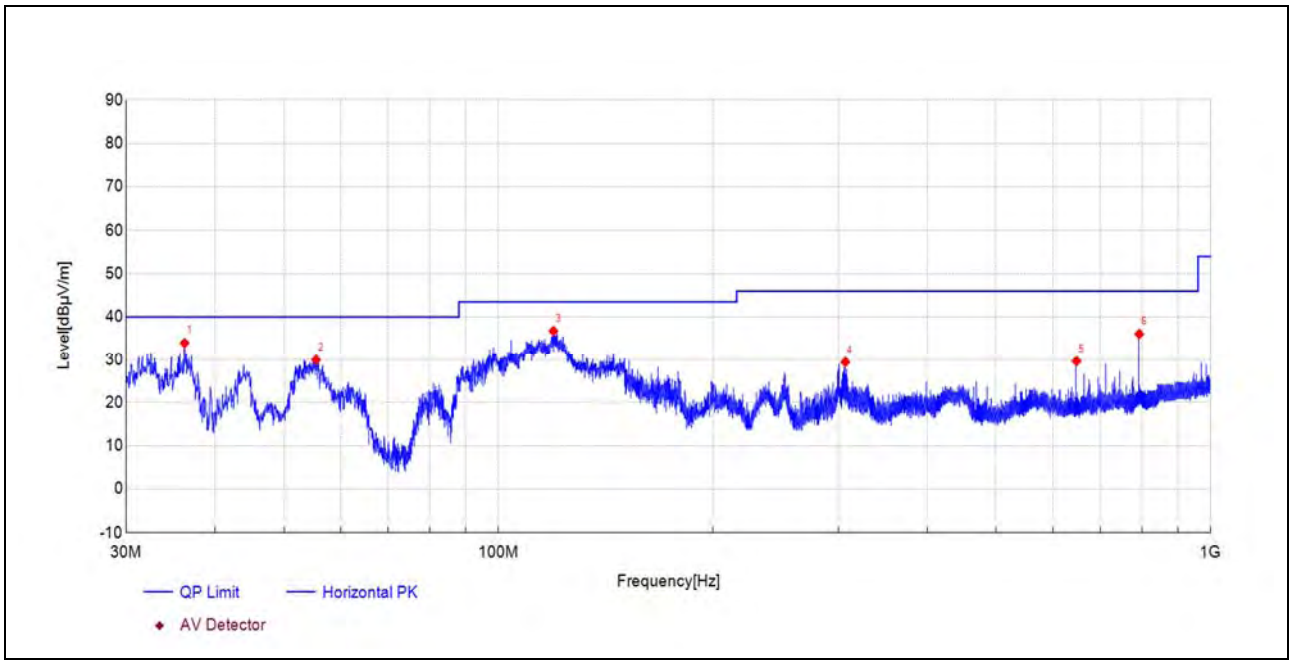
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
36.60	57.1	27.69	-29.400	40.00	12.31	166	PK	Vertical	PASS
55.37	60.3	32.45	-27.870	40.00	7.55	214	PK	Vertical	PASS
98.10	62.2	32.52	-29.720	43.50	10.98	112	PK	Vertical	PASS
240.02	52.9	24.99	-27.870	46.00	21.01	172	PK	Vertical	PASS
664.17	50.8	34.65	-16.150	46.00	11.35	37	PK	Vertical	PASS
777.57	43.0	27.12	-15.860	46.00	18.88	351	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

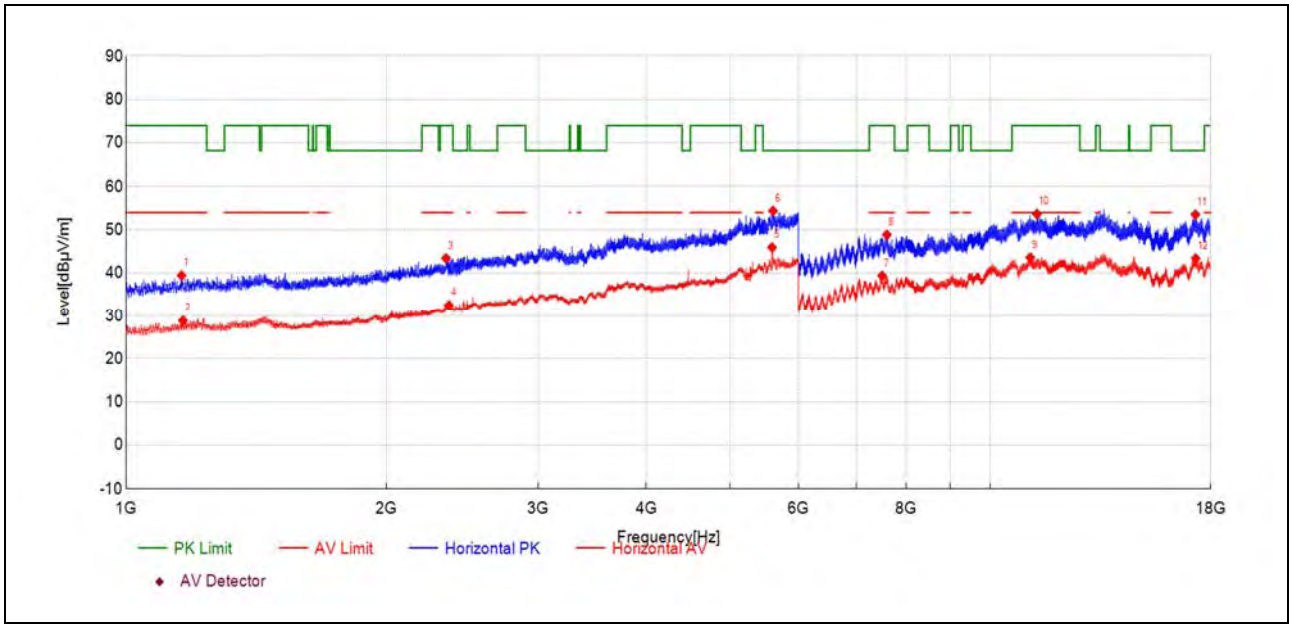
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1792.34	42.2	43.25	1.040	68.23	24.98	121	PK	Vertical	PASS
1794.62	32.8	33.82	1.060	-	-	131	AV	Vertical	NA
3108.83	26.6	35.06	8.430	-	-	309	AV	Vertical	NA
3167.92	38.2	46.72	8.570	68.23	21.51	93	PK	Vertical	PASS
5578.14	25.5	43.30	17.760	-	-	347	AV	Vertical	NA
5682.70	35.5	53.89	18.380	68.23	14.34	0	PK	Vertical	PASS
7595.10	33.6	39.16	5.550	54.00	14.84	45	AV	Vertical	PASS
7596.06	43.6	49.18	5.560	74.00	24.82	355	PK	Vertical	PASS
13548.30	37.8	54.92	17.090	68.23	13.31	342	PK	Vertical	PASS
13600.14	27.4	44.47	17.110	-	-	355	AV	Vertical	NA
17274.69	37.8	53.12	15.300	68.23	15.11	134	PK	Vertical	PASS
17582.38	26.4	43.78	17.380	-	-	268	AV	Vertical	NA

Plot for Channel 120



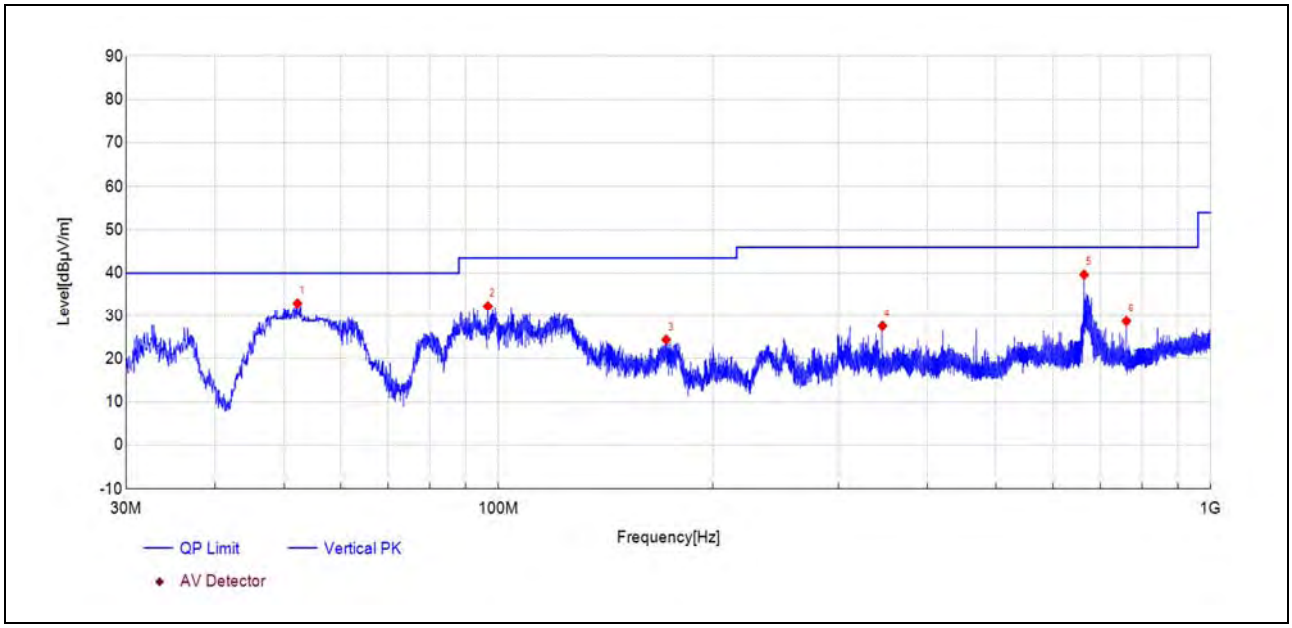
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
36.26	63.5	33.94	-29.510	40.00	6.06	266	PK	Horizontal	PASS
55.46	57.8	29.92	-27.900	40.00	10.08	186	PK	Horizontal	PASS
119.49	67.3	36.73	-30.600	43.50	6.77	172	PK	Horizontal	PASS
306.95	54.6	29.41	-25.230	46.00	16.59	123	PK	Horizontal	PASS
648.02	46.4	29.60	-16.810	46.00	16.40	143	PK	Horizontal	PASS
793.82	50.3	36.04	-14.220	46.00	9.96	117	PK	Horizontal	PASS



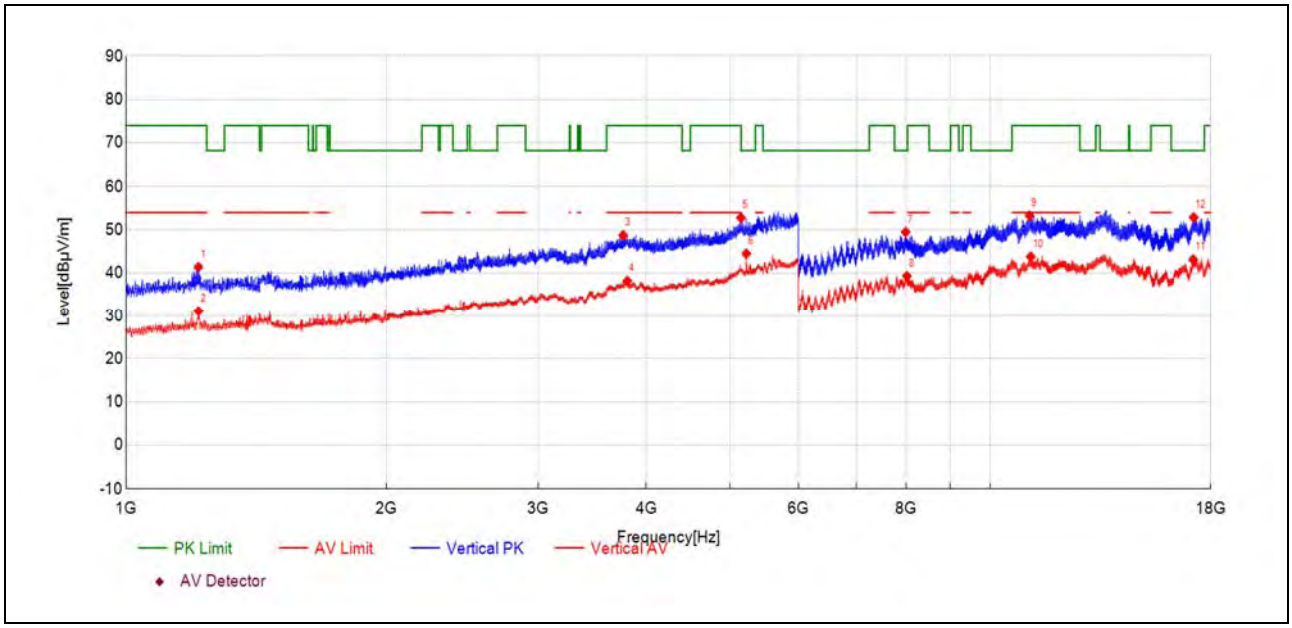
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1159.56	41.1	39.44	-1.700	74.00	34.56	2	PK	Horizontal	PASS
1164.11	30.5	28.85	-1.610	54.00	25.15	186	AV	Horizontal	PASS
2346.03	38.3	43.42	5.130	74.00	30.58	252	PK	Horizontal	PASS
2363.76	27.2	32.49	5.260	54.00	21.51	186	AV	Horizontal	PASS
5592.69	28.0	45.93	17.980	-	-	7	AV	Horizontal	NA
5606.33	36.3	54.39	18.130	68.23	13.84	0	PK	Horizontal	PASS
7497.66	33.8	39.38	5.540	54.00	14.62	5	AV	Horizontal	PASS
7593.66	43.3	48.87	5.540	74.00	25.13	210	PK	Horizontal	PASS
11128.05	30.1	43.61	13.530	54.00	10.39	360	AV	Horizontal	PASS
11327.25	40.2	53.69	13.450	74.00	20.31	94	PK	Horizontal	PASS
17279.49	38.3	53.54	15.260	68.23	14.69	19	PK	Horizontal	PASS
17294.85	28.3	43.40	15.100	-	-	136	AV	Horizontal	NA



(Antenna Vertical, 30MHz to 1GHz)

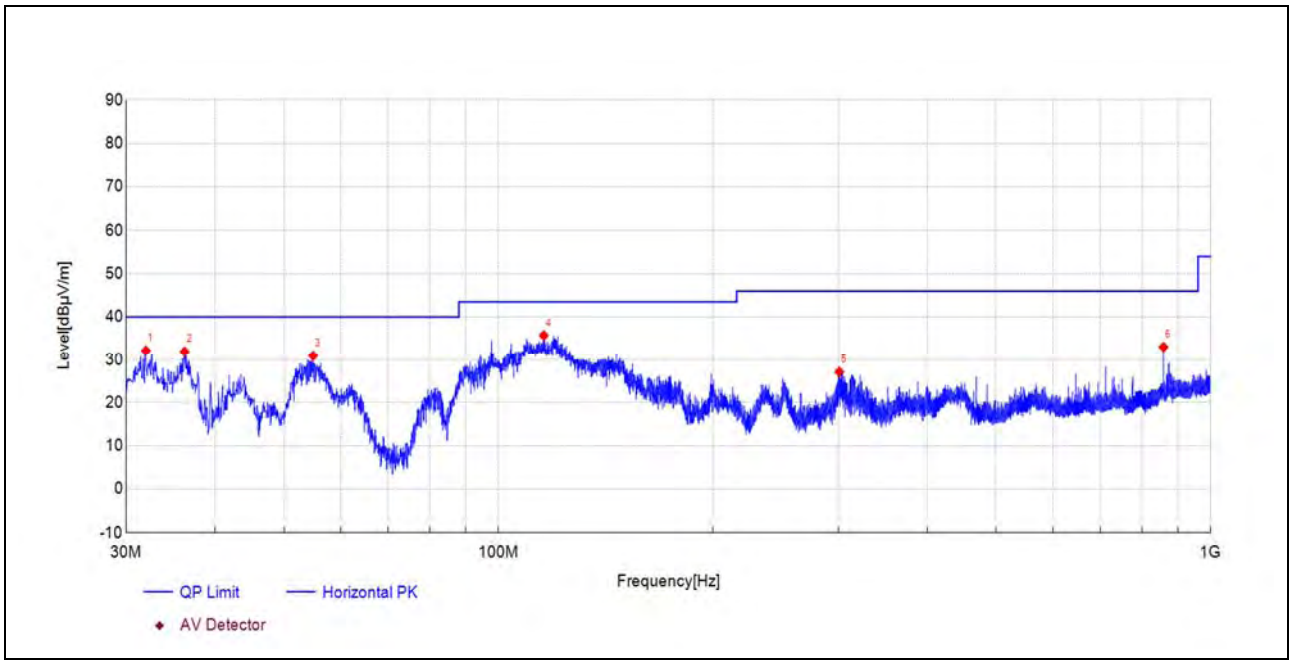
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
52.21	60.9	32.95	-27.930	40.00	7.05	11	PK	Vertical	PASS
96.64	62.4	32.29	-30.140	43.50	11.21	79	PK	Vertical	PASS
172.02	54.9	24.36	-30.560	43.50	19.14	222	PK	Vertical	PASS
346.14	51.6	27.57	-24.060	46.00	18.43	5	PK	Vertical	PASS
664.17	55.8	39.64	-16.150	46.00	6.36	59	PK	Vertical	PASS
761.37	44.8	28.67	-16.110	46.00	17.33	120	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

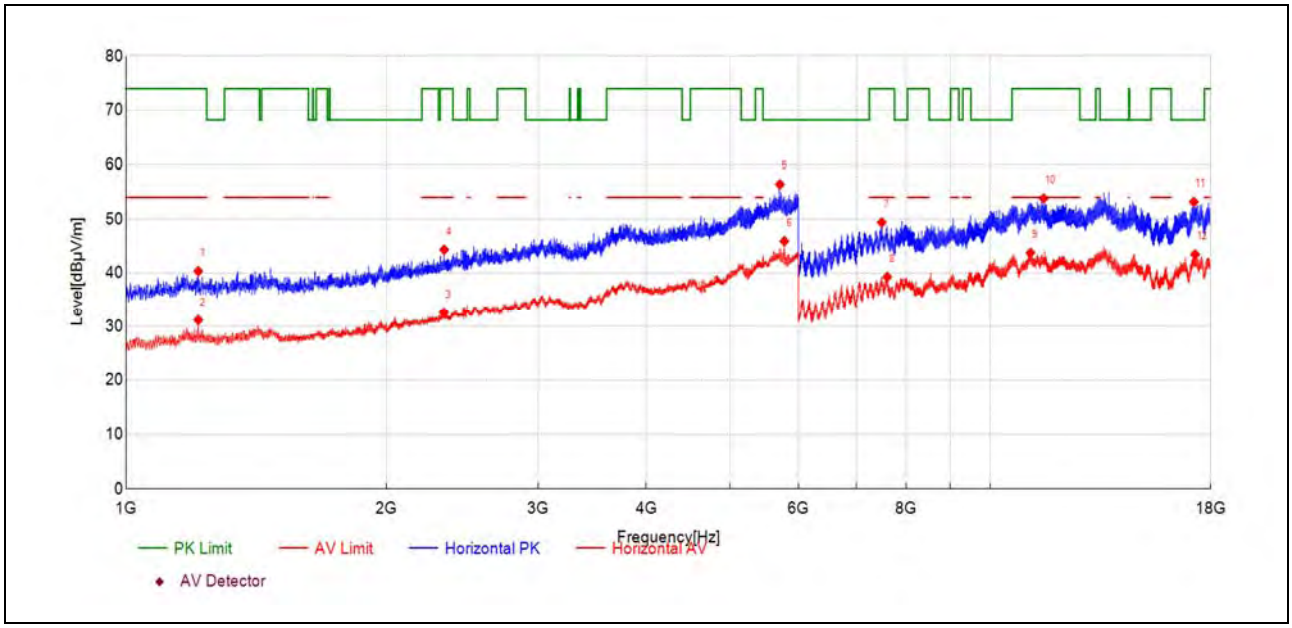
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1212.75	42.5	41.40	-1.060	74.00	32.60	101	PK	Vertical	PASS
1213.20	32.2	31.08	-1.070	54.00	22.92	111	AV	Vertical	PASS
3761.16	37.7	48.76	11.030	74.00	25.24	138	PK	Vertical	PASS
3803.44	26.9	38.17	11.310	54.00	15.83	300	AV	Vertical	PASS
5147.20	36.2	52.80	16.570	74.00	21.20	196	PK	Vertical	PASS
5222.20	28.4	44.50	16.120	-	-	234	AV	Vertical	NA
7983.92	43.8	49.49	5.690	68.23	18.74	5	PK	Vertical	PASS
8010.80	33.5	39.29	5.780	-	-	108	AV	Vertical	NA
11106.44	39.8	53.30	13.530	74.00	20.70	314	PK	Vertical	PASS
11143.41	30.3	43.80	13.530	54.00	10.20	181	AV	Vertical	PASS
17176.29	27.3	43.14	15.870	-	-	62	AV	Vertical	NA
17200.77	36.9	52.88	16.030	68.23	15.35	240	PK	Vertical	PASS

Plot for Channel 157



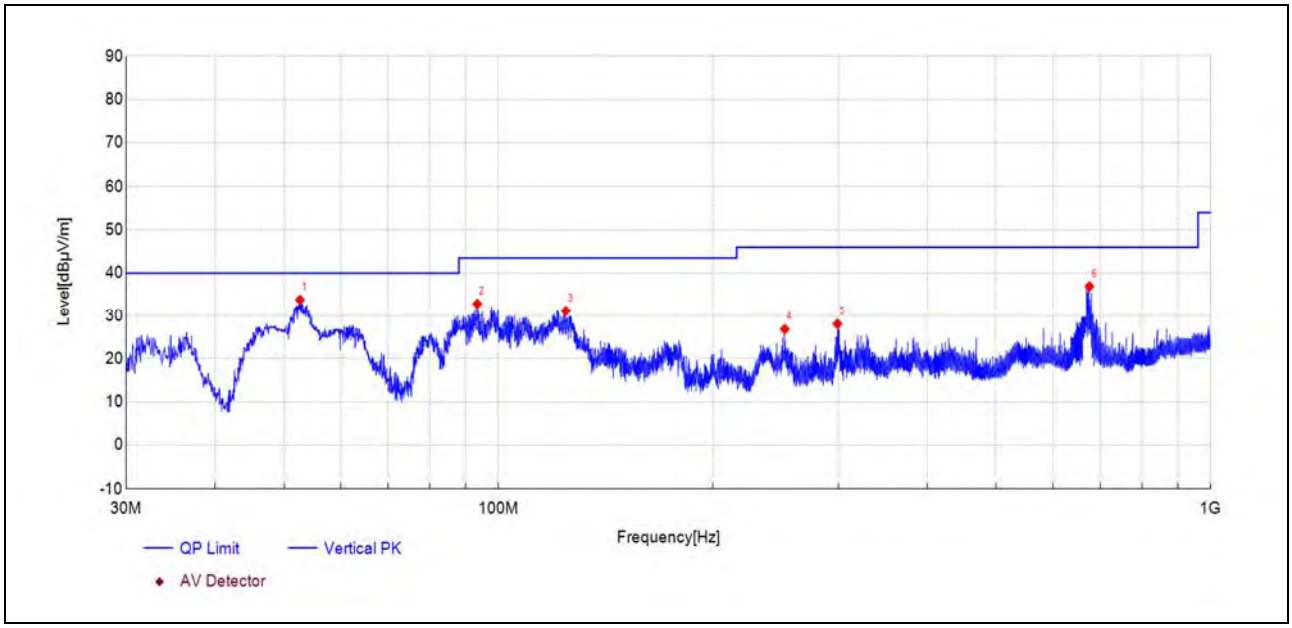
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
31.99	62.6	32.13	-30.480	40.00	7.87	213	PK	Horizontal	PASS
36.26	61.4	31.90	-29.510	40.00	8.10	294	PK	Horizontal	PASS
54.93	58.6	30.88	-27.750	40.00	9.12	178	PK	Horizontal	PASS
115.80	65.8	35.69	-30.060	43.50	7.81	138	PK	Horizontal	PASS
300.98	52.5	27.11	-25.380	46.00	18.89	91	PK	Horizontal	PASS
858.57	45.8	33.00	-12.790	46.00	13.00	36	PK	Horizontal	PASS



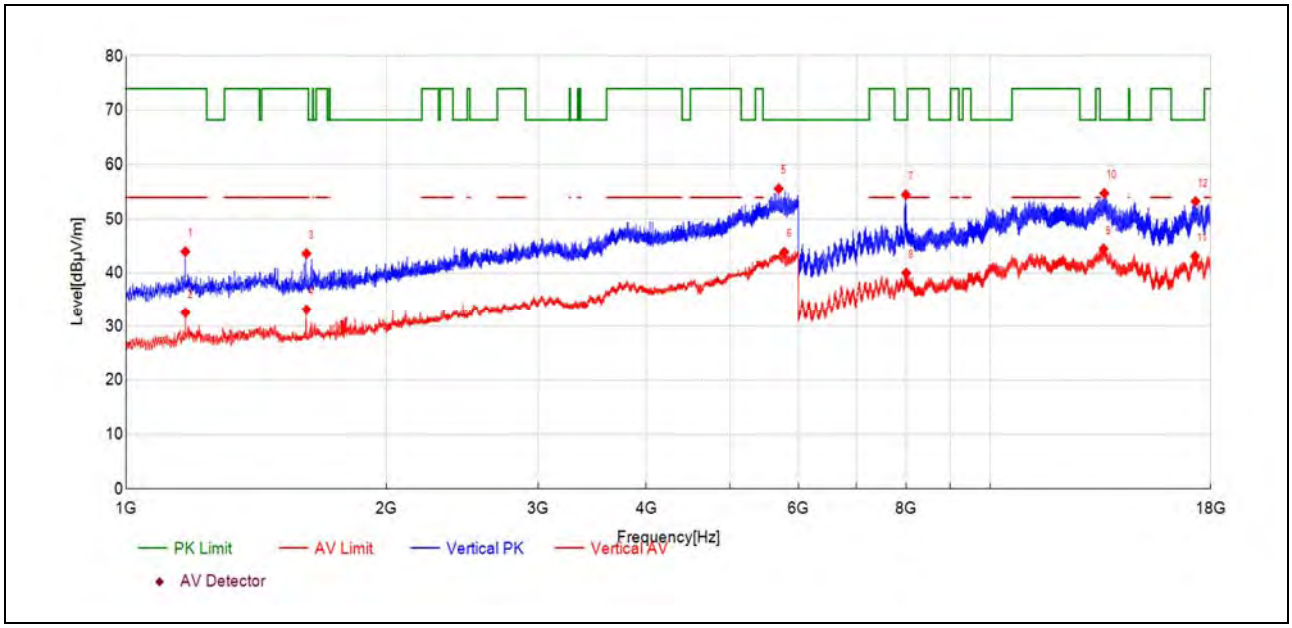
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1212.29	41.2	40.36	-0.830	74.00	33.64	204	PK	Horizontal	PASS
1212.29	32.0	31.20	-0.830	54.00	22.80	204	AV	Horizontal	PASS
2332.39	27.5	32.61	5.160	54.00	21.39	299	AV	Horizontal	PASS
2334.67	39.1	44.33	5.190	74.00	29.67	91	PK	Horizontal	PASS
5711.34	36.9	56.40	19.470	68.23	11.83	329	PK	Horizontal	PASS
5779.07	26.8	45.92	19.090	-	-	2	AV	Horizontal	NA
7490.94	43.9	49.38	5.480	74.00	24.62	62	PK	Horizontal	PASS
7603.74	33.7	39.30	5.580	54.00	14.70	136	AV	Horizontal	PASS
11133.33	30.2	43.75	13.530	54.00	10.25	136	AV	Horizontal	PASS
11531.74	39.6	53.82	14.270	74.00	20.18	120	PK	Horizontal	PASS
17205.57	37.2	53.18	15.980	68.23	15.05	90	PK	Horizontal	PASS
17265.09	28.1	43.47	15.400	-	-	33	AV	Horizontal	NA



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
52.65	61.6	33.77	-27.840	40.00	6.23	303	PK	Vertical	PASS
93.39	63.7	32.83	-30.900	43.50	10.67	79	PK	Vertical	PASS
124.34	62.1	31.15	-30.910	43.50	12.35	269	PK	Vertical	PASS
252.38	54.2	26.84	-27.350	46.00	19.16	160	PK	Vertical	PASS
299.29	53.6	28.06	-25.520	46.00	17.94	173	PK	Vertical	PASS
675.76	53.0	36.93	-16.100	46.00	9.07	65	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
1171.38	45.3	43.98	-1.270	74.00	30.02	108	PK	Vertical	PASS
1171.83	33.9	32.59	-1.270	54.00	21.41	108	AV	Vertical	PASS
1617.33	43.6	43.61	-0.010	74.00	30.39	137	PK	Vertical	PASS
1617.78	33.2	33.15	-0.010	54.00	20.85	137	AV	Vertical	PASS
5693.15	36.2	55.61	19.390	68.23	12.62	61	PK	Vertical	PASS
5779.07	24.8	43.89	19.090	-	-	336	AV	Vertical	NA
7987.28	48.8	54.50	5.740	68.23	13.73	62	PK	Vertical	PASS
7998.32	34.1	40.01	5.920	-	-	47	AV	Vertical	NA
13529.58	27.4	44.49	17.080	-	-	165	AV	Vertical	NA
13558.86	37.7	54.76	17.100	68.23	13.47	182	PK	Vertical	PASS
17263.65	27.7	43.12	15.410	-	-	344	AV	Vertical	NA
17285.25	38.1	53.26	15.200	68.23	14.97	136	PK	Vertical	PASS

END OF REPORT