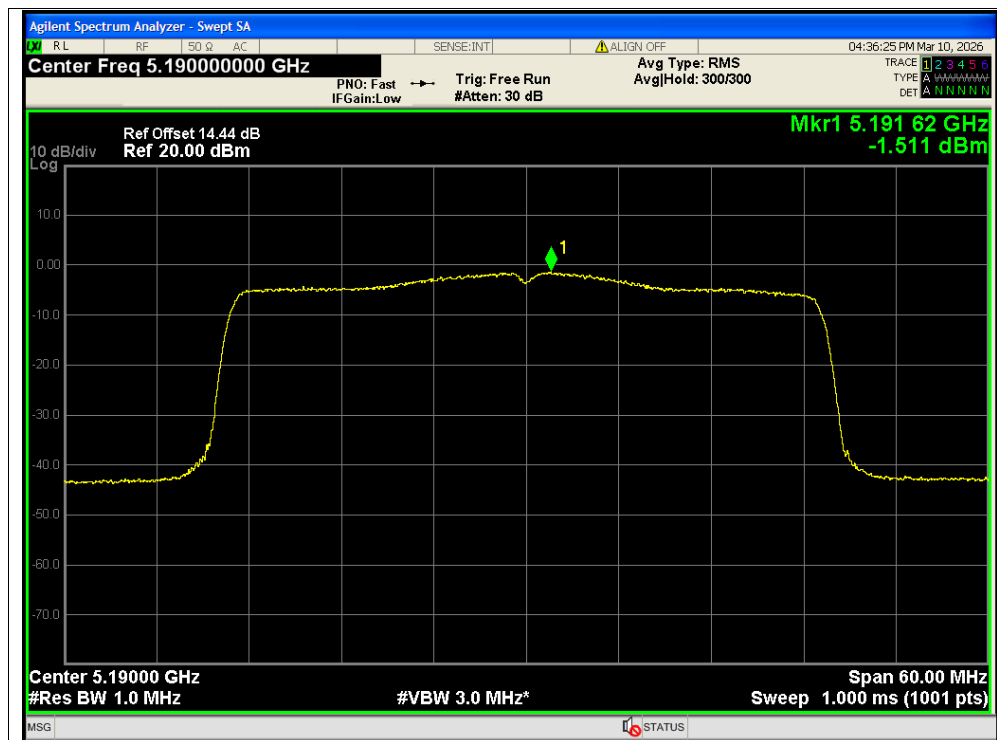
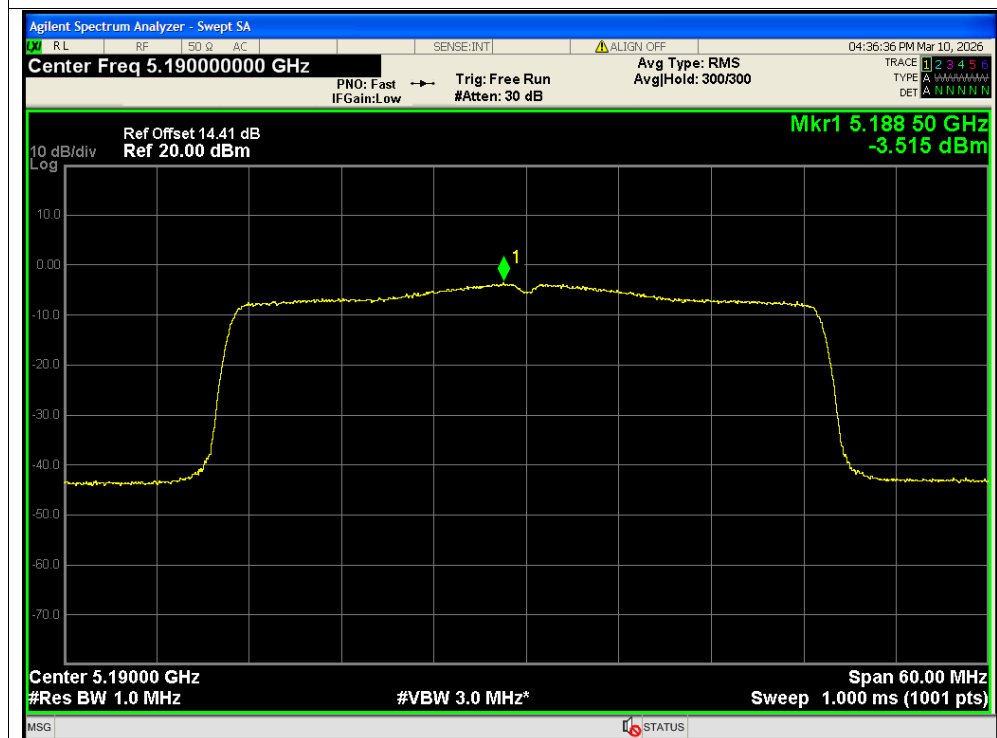
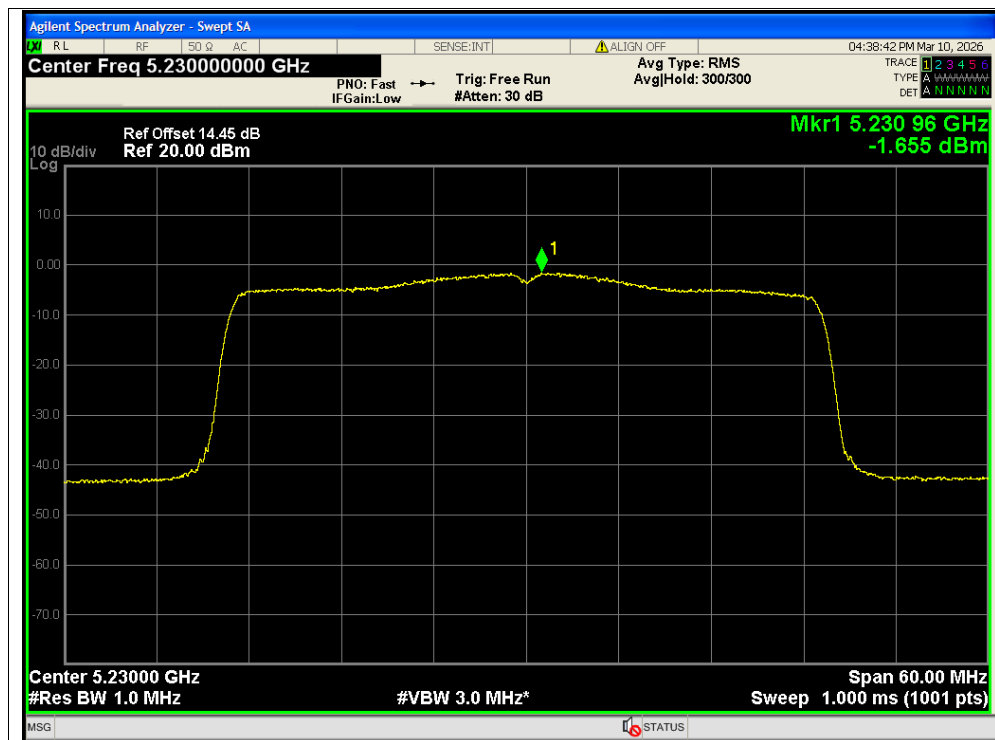




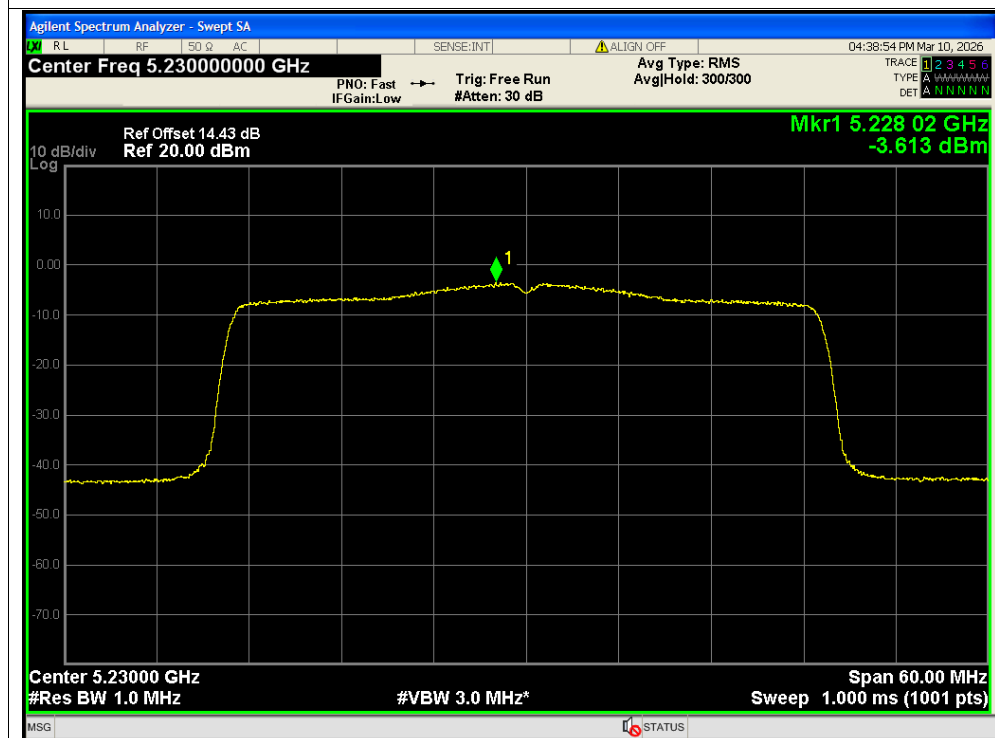
PSD NVNT ax40 5190MHz Ant1 MIMO



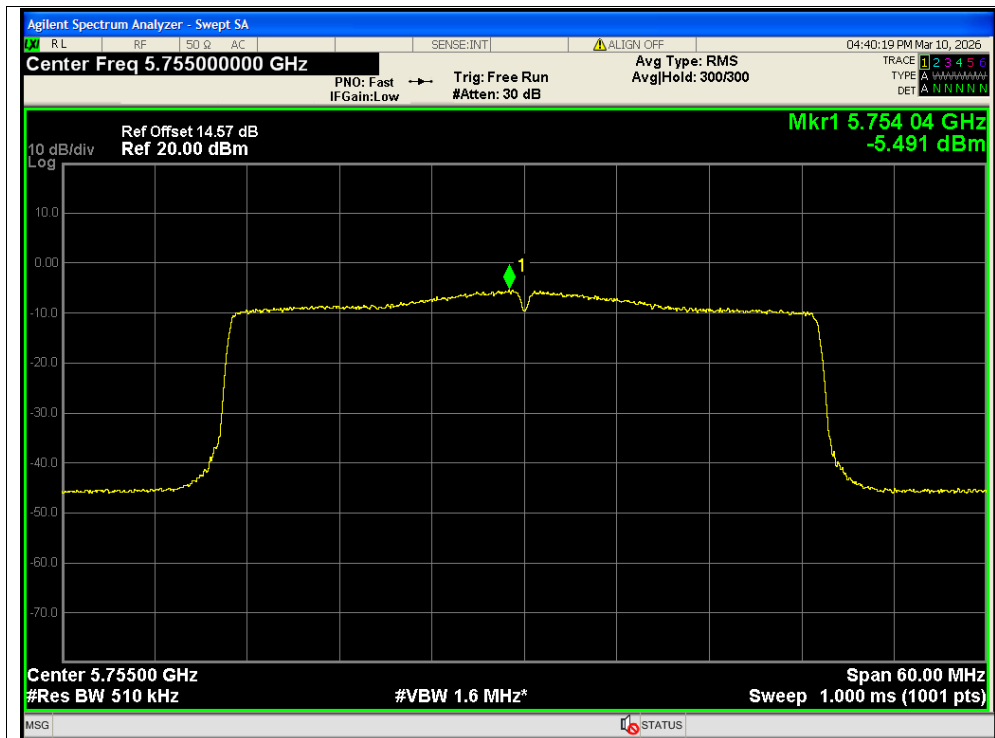
PSD NVNT ax40 5190MHz Ant2 MIMO



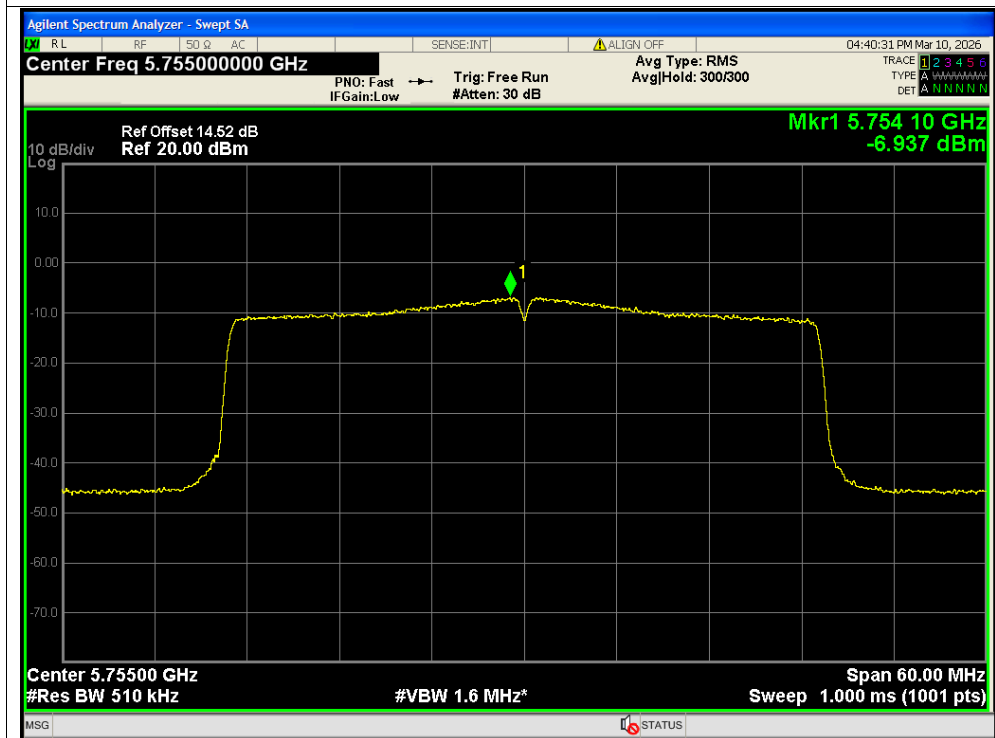
PSD NVNT ax40 5230MHz Ant1 MIMO



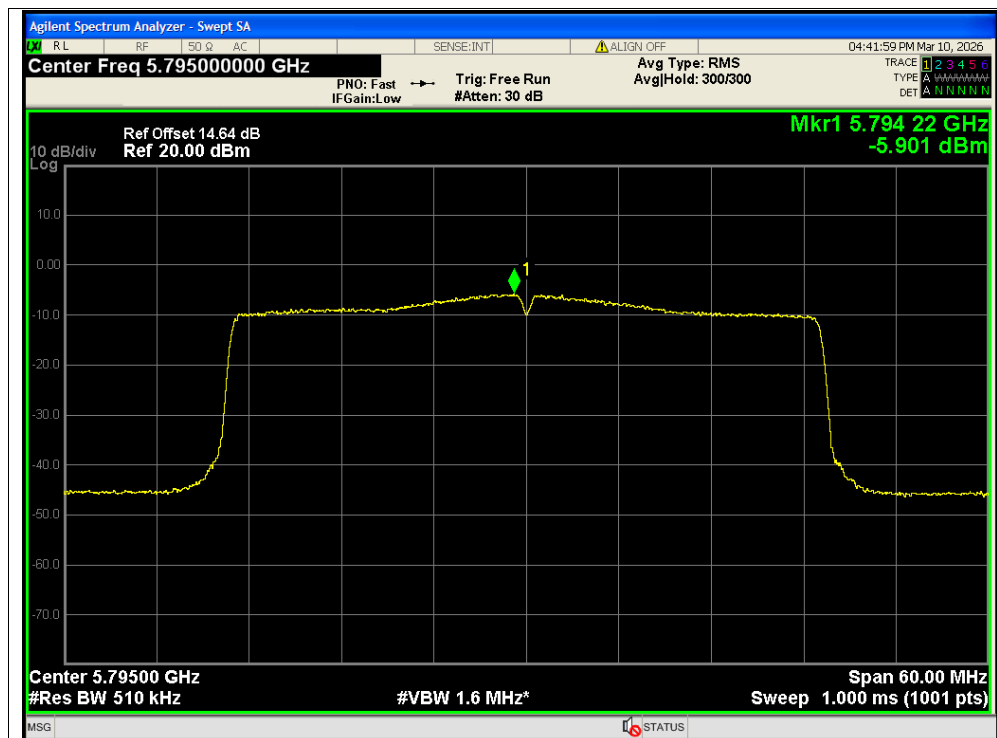
PSD NVNT ax40 5230MHz Ant2 MIMO



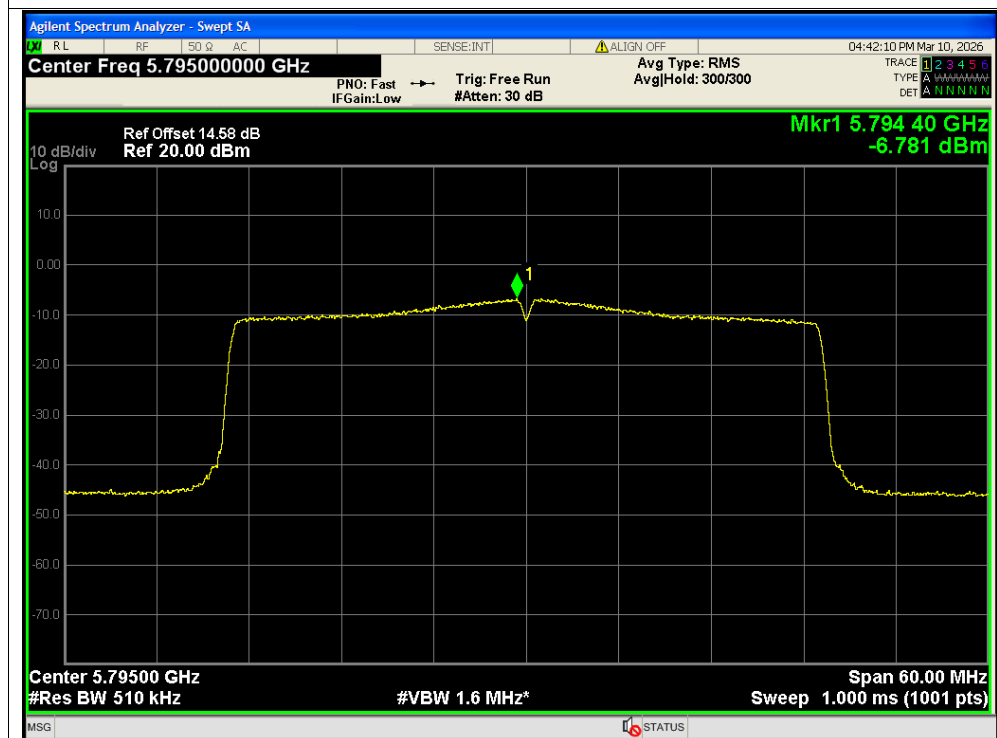
PSD NVNT ax40 5755MHz Ant1 MIMO



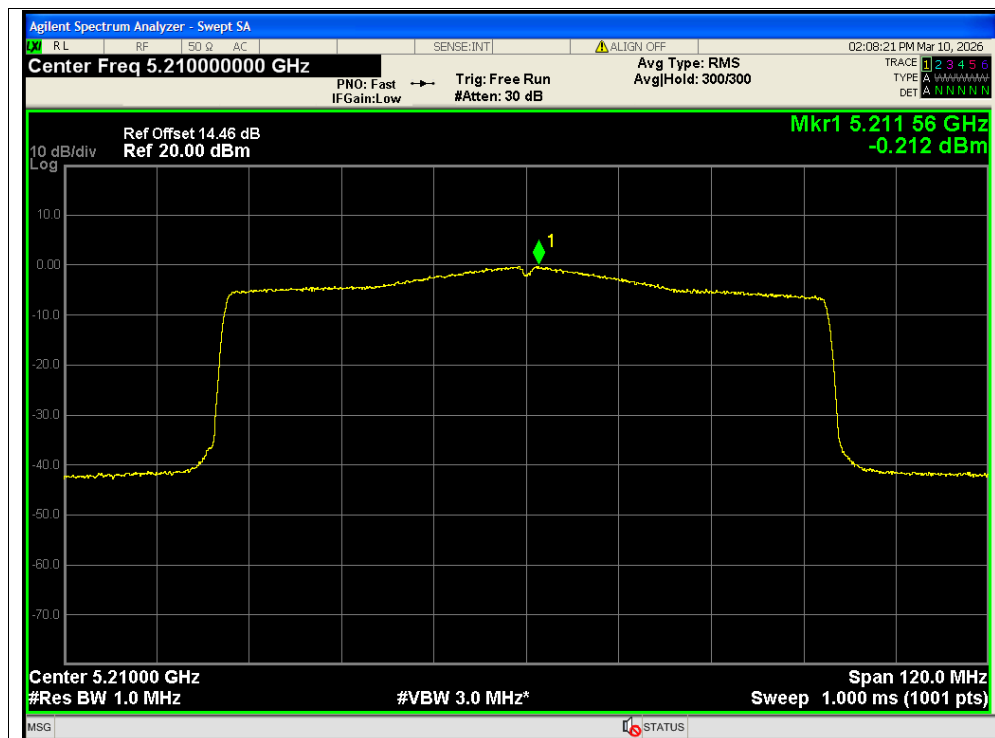
PSD NVNT ax40 5755MHz Ant2 MIMO



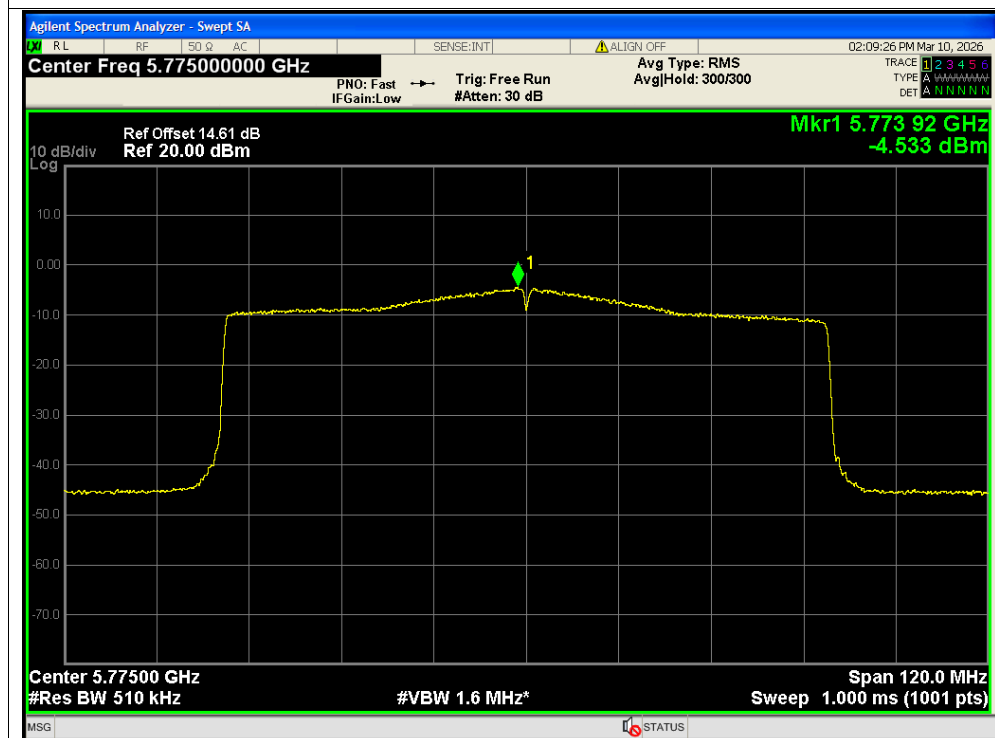
PSD NVNT ax40 5795MHz Ant1 MIMO



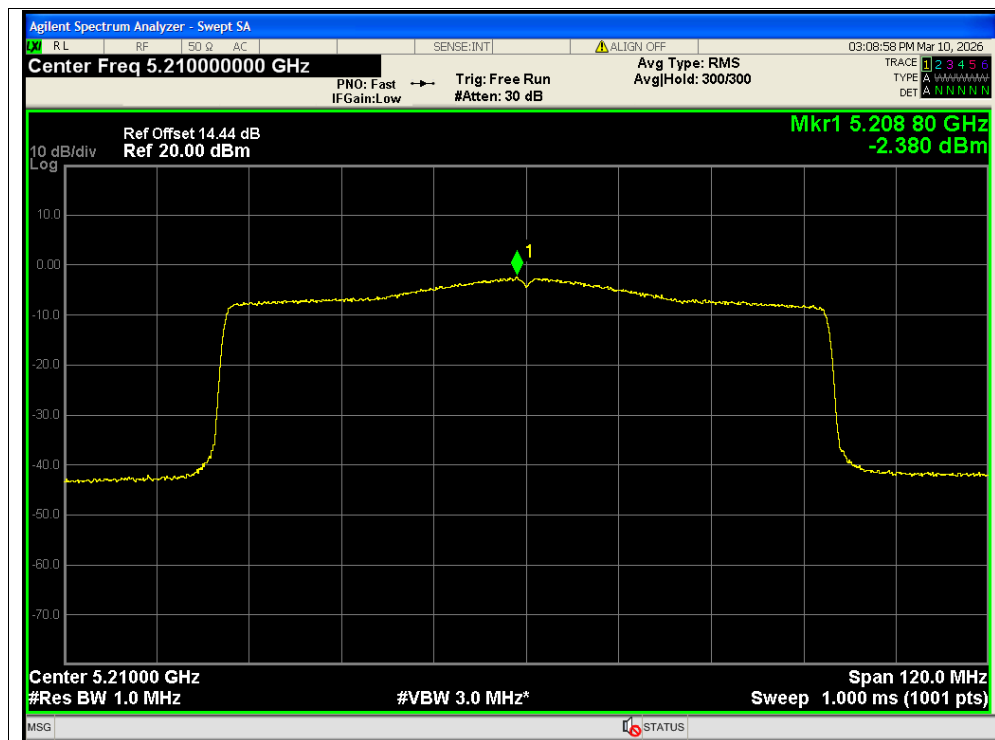
PSD NVNT ax40 5795MHz Ant2 MIMO



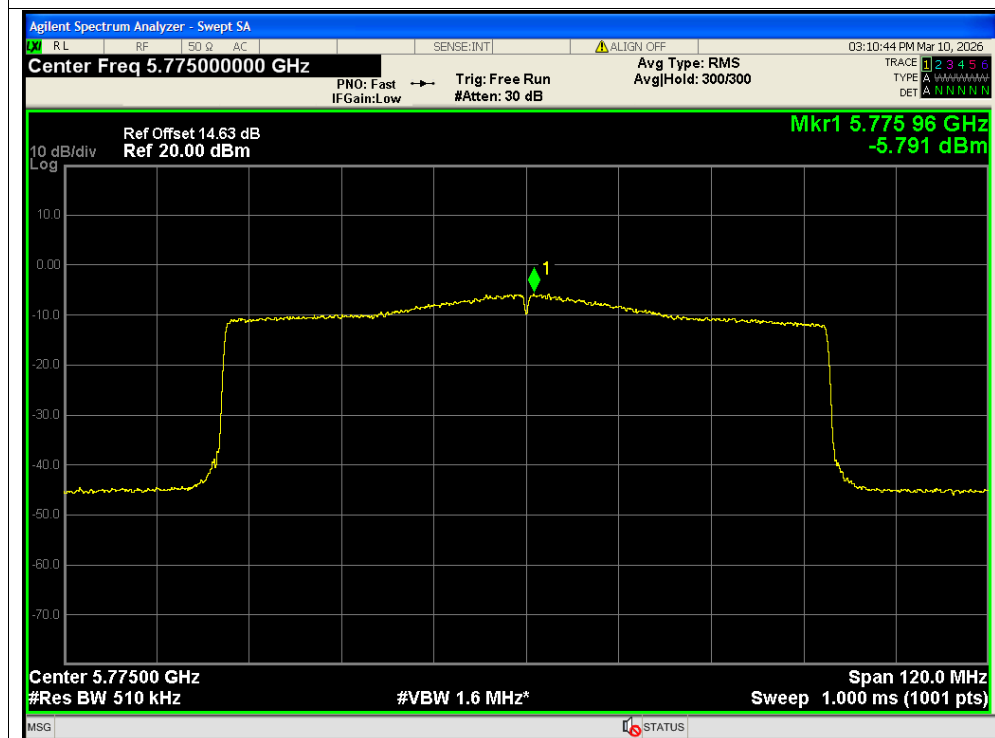
PSD NVNT ax80 5210MHz Ant1 SISO



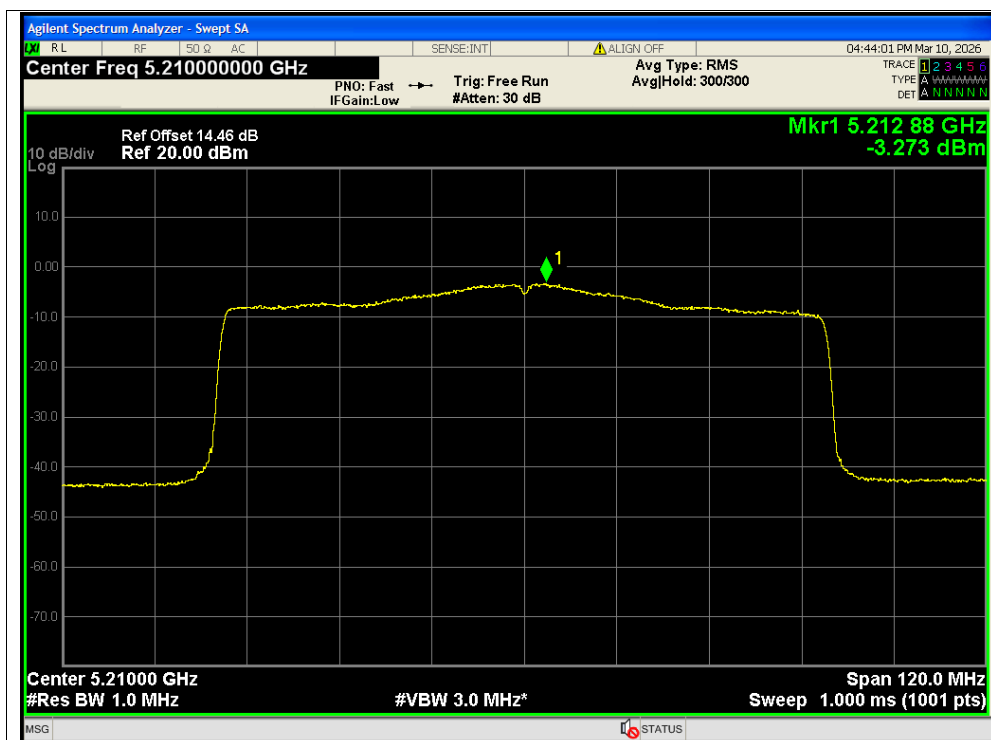
PSD NVNT ax80 5775MHz Ant1 SISO



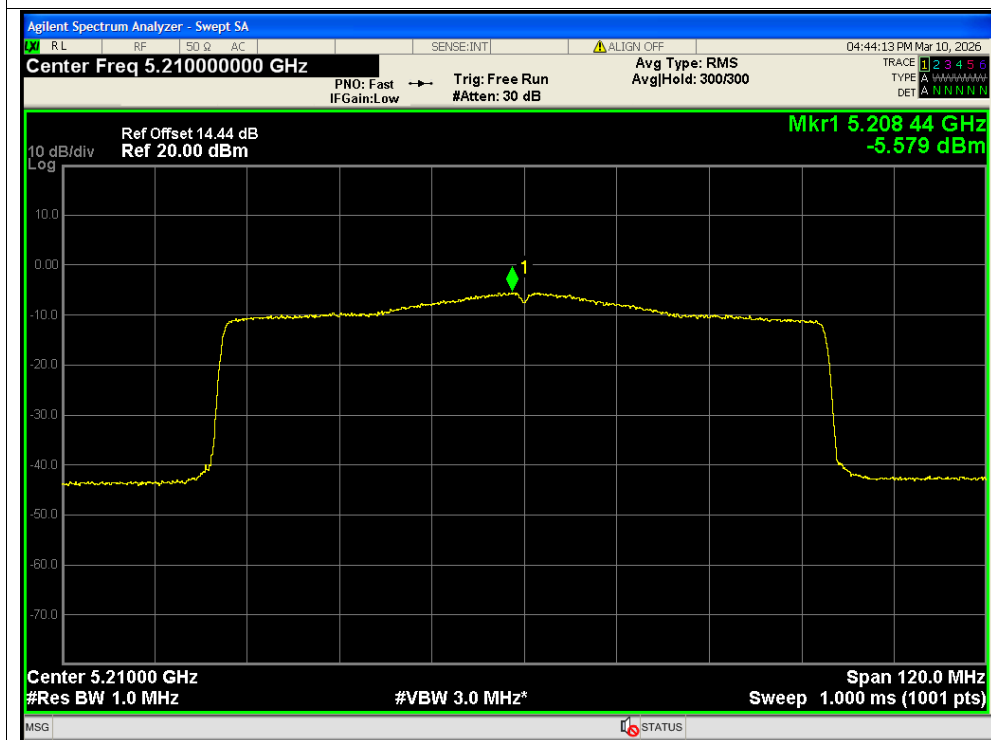
PSD NVNT ax80 5210MHz Ant2 SISO



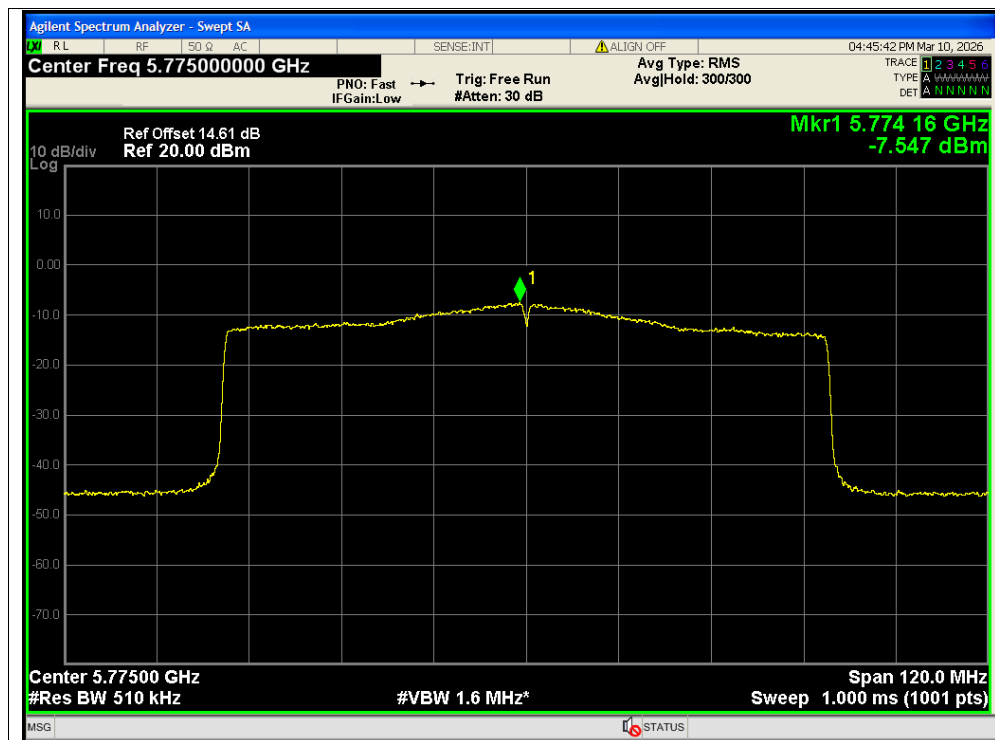
PSD NVNT ax80 5775MHz Ant2 SISO



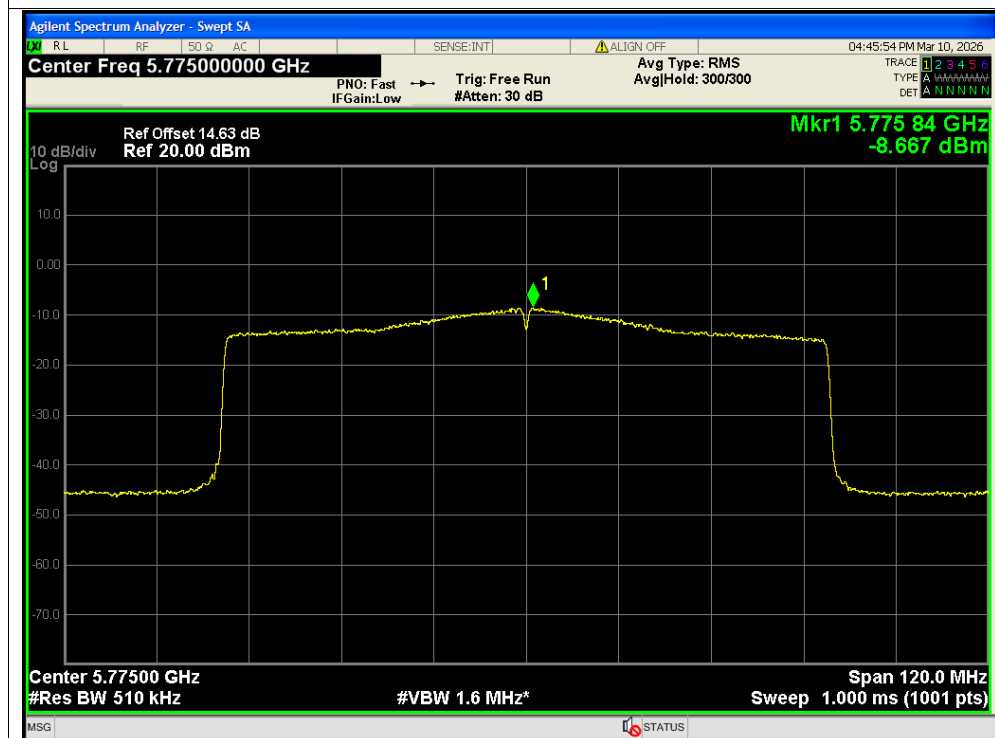
PSD NVNT ax80 5210MHz Ant1 MIMO



PSD NVNT ax80 5210MHz Ant2 MIMO



PSD NVNT ax80 5775MHz Ant1 MIMO



PSD NVNT ax80 5775MHz Ant2 MIMO

**A.5. Frequency Stability**

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 9V	CW SISO	5180	Ant1	5180	0	0	25	Pass
20C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
20C 16V	CW SISO	5180	Ant1	5180	0	0	25	Pass
-40C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
-30C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
-20C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
-10C 13.5V	CW SISO	5180	Ant1	5179.98	-20000	-3.86	25	Pass
0C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
10C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
30C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
40C 13.5V	CW SISO	5180	Ant1	5179.98	-20000	-3.86	25	Pass
50C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
-60C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
-70C 13.5V	CW SISO	5180	Ant1	5180	0	0	25	Pass
20C 9V	CW SISO	5745	Ant1	5745	0	0	25	Pass
20C 13.5V	CW SISO	5745	Ant1	5744.98	-20000	-3.48	25	Pass
20C 16V	CW SISO	5745	Ant1	5745	0	0	25	Pass



-40C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
-30C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
-20C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
-10C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
0C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
10C 13.5V	CW SISO	5745	Ant1	5744.98	-20000	-3.48	25	Pass
30C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
40C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
50C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
-60C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass
-70C 13.5V	CW SISO	5745	Ant1	5745	0	0	25	Pass

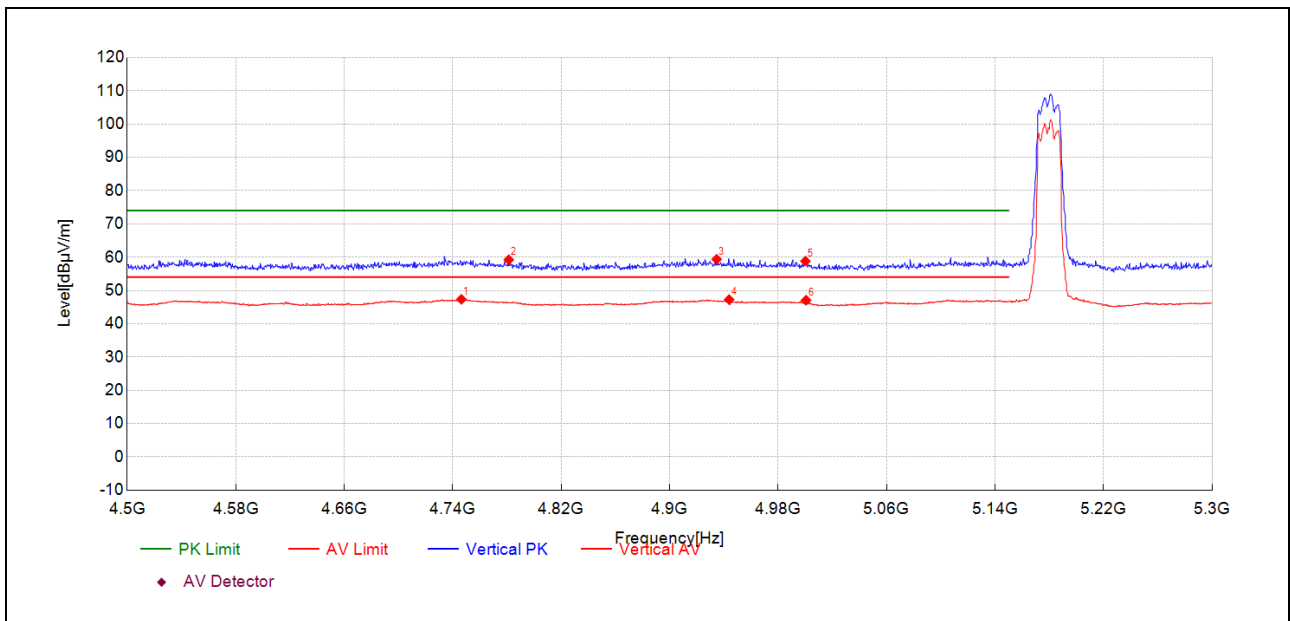
A.6. Restricted Frequency Bands

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

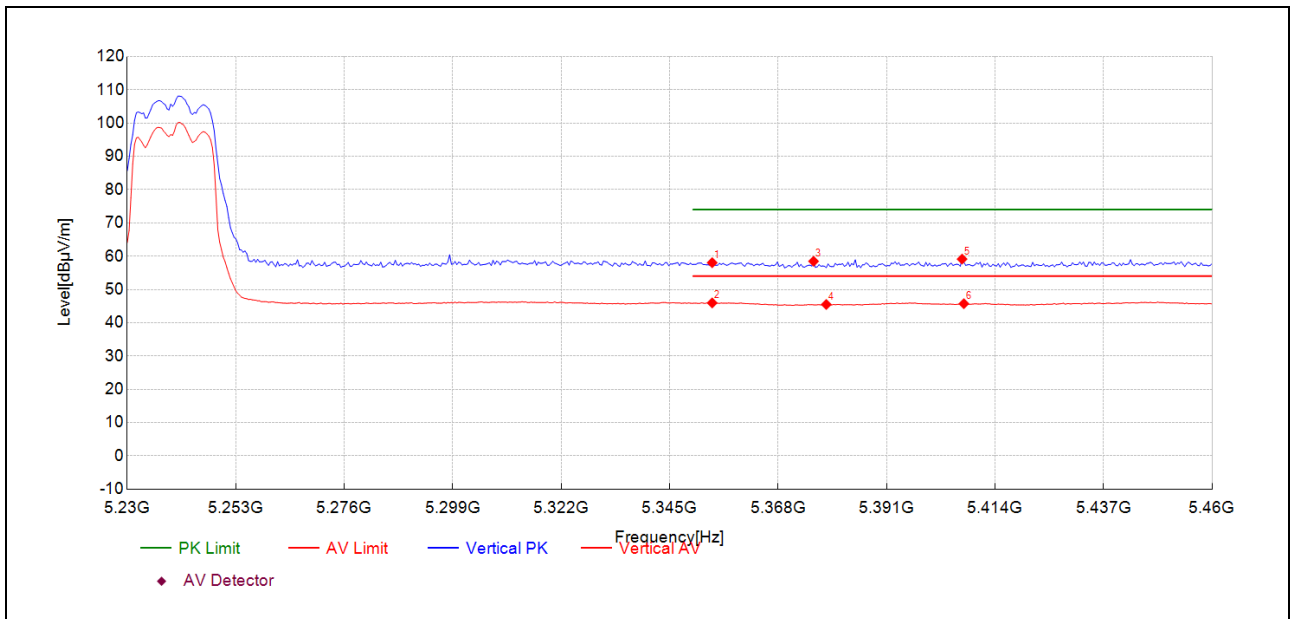
Plot for Channel 36



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4746.45	27.0	47.33	20.320	54.00	6.67	165	331	AV	PASS
4781.38	39.5	59.23	19.780	74.00	14.77	165	301	PK	PASS
4934.69	39.4	59.37	19.960	74.00	14.63	165	13	PK	PASS
4943.91	27.4	47.25	19.880	54.00	6.75	165	351	AV	PASS
5000.18	38.9	58.81	19.880	74.00	14.87	165	7	PK	PASS
5000.67	27.2	47.07	19.880	54.00	6.93	165	231	AV	PASS



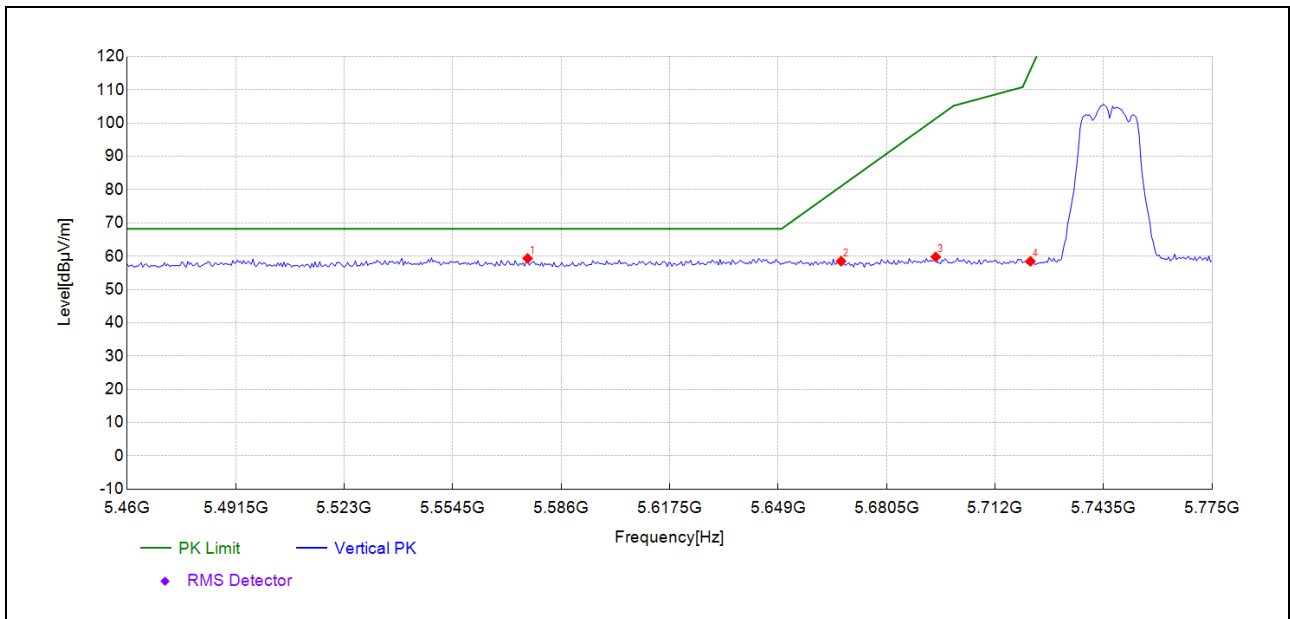
Plot for Channel 48



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5354.02	38.1	58.04	19.930	74.00	15.96	165	142	PK	PASS
5354.02	26.0	45.96	19.930	54.00	8.04	165	238	AV	PASS
5375.53	38.6	58.47	19.880	74.00	15.53	165	198	PK	PASS
5378.21	25.6	45.49	19.870	54.00	8.51	165	189	AV	PASS
5407.01	39.2	59.13	19.920	74.00	14.87	165	170	PK	PASS
5407.40	25.8	45.72	19.930	54.00	8.28	165	123	AV	PASS



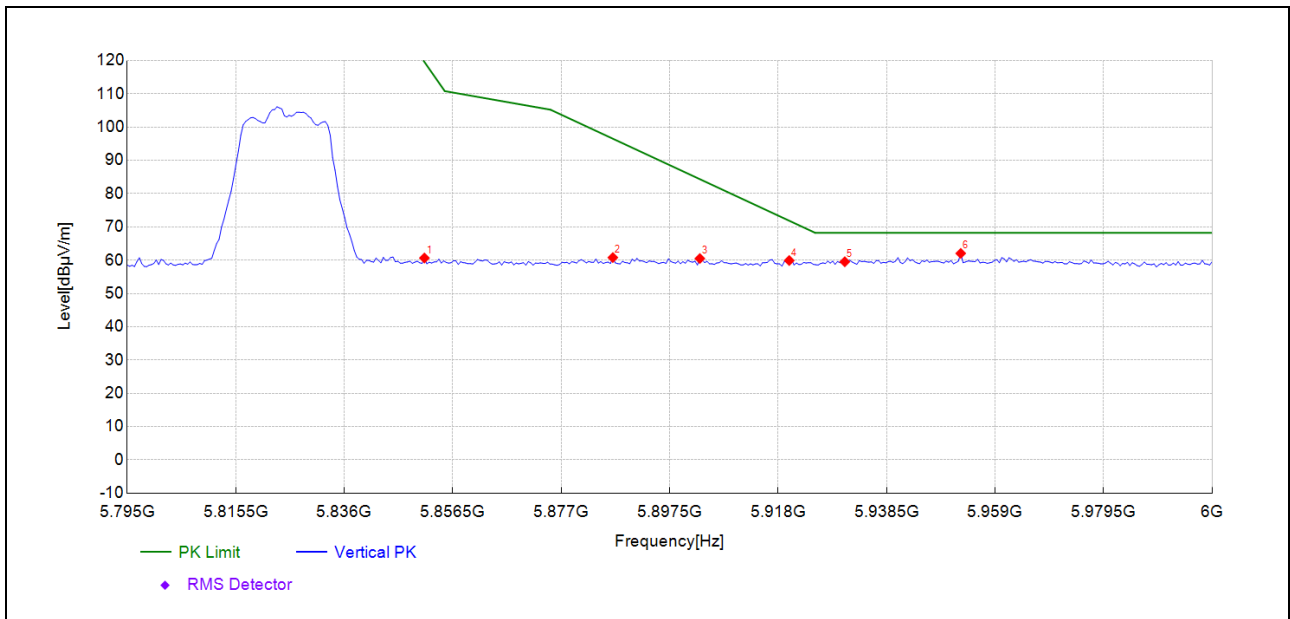
Plot for Channel 149



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5576.27	39.1	59.34	20.200	68.23	8.89	165	209	PK	PASS
5667.30	37.5	58.48	20.970	81.03	22.55	165	0	PK	PASS
5694.79	38.9	59.78	20.890	101.37	41.59	165	357	PK	PASS
5722.27	37.2	58.46	21.220	116.02	57.56	165	73	PK	PASS



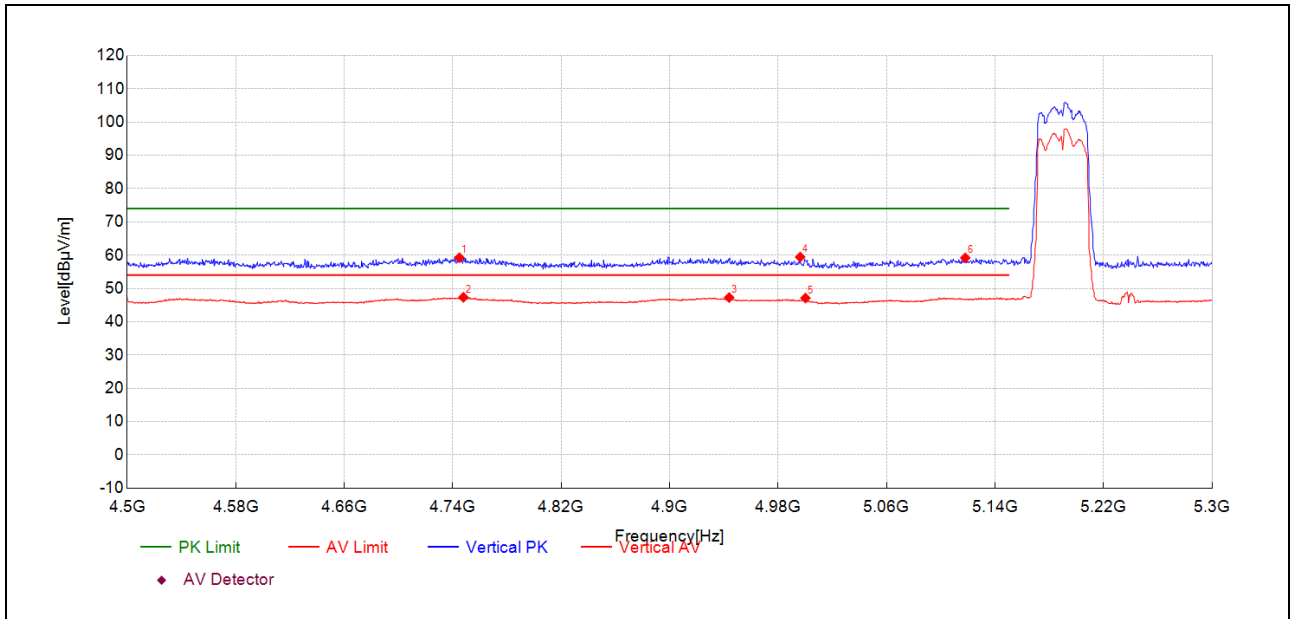
Plot for Channel 165



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5851.16	38.2	60.65	22.440	119.59	58.94	165	64	PK	PASS
5886.77	38.9	60.79	21.920	96.52	35.73	165	181	PK	PASS
5903.21	38.8	60.50	21.750	84.36	23.86	165	216	PK	PASS
5920.10	38.0	59.90	21.880	71.86	11.96	165	109	PK	PASS
5930.60	37.6	59.53	21.960	68.23	8.70	165	317	PK	PASS
5952.52	40.0	62.05	22.100	68.23	6.18	165	280	PK	PASS

**802.11n (HT40) Mode**

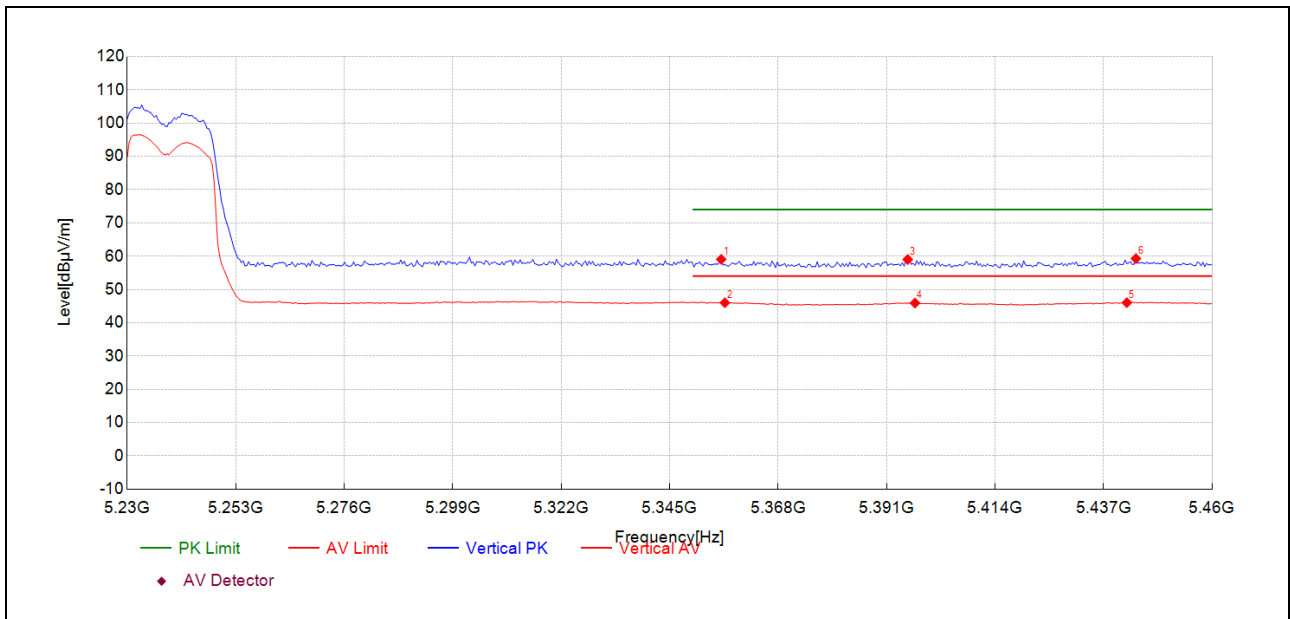
Plot for Channel 38



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4745.00	38.9	59.24	20.320	74.00	14.76	165	140	PK	PASS
4747.91	27.0	47.34	20.320	54.00	6.66	165	299	AV	PASS
4943.91	27.4	47.27	19.880	54.00	6.73	165	18	AV	PASS
4996.30	39.6	59.44	19.870	74.00	14.56	165	310	PK	PASS
5000.18	27.2	47.11	19.880	54.00	6.89	165	78	AV	PASS
5118.07	38.7	59.18	20.440	74.00	14.82	165	239	PK	PASS



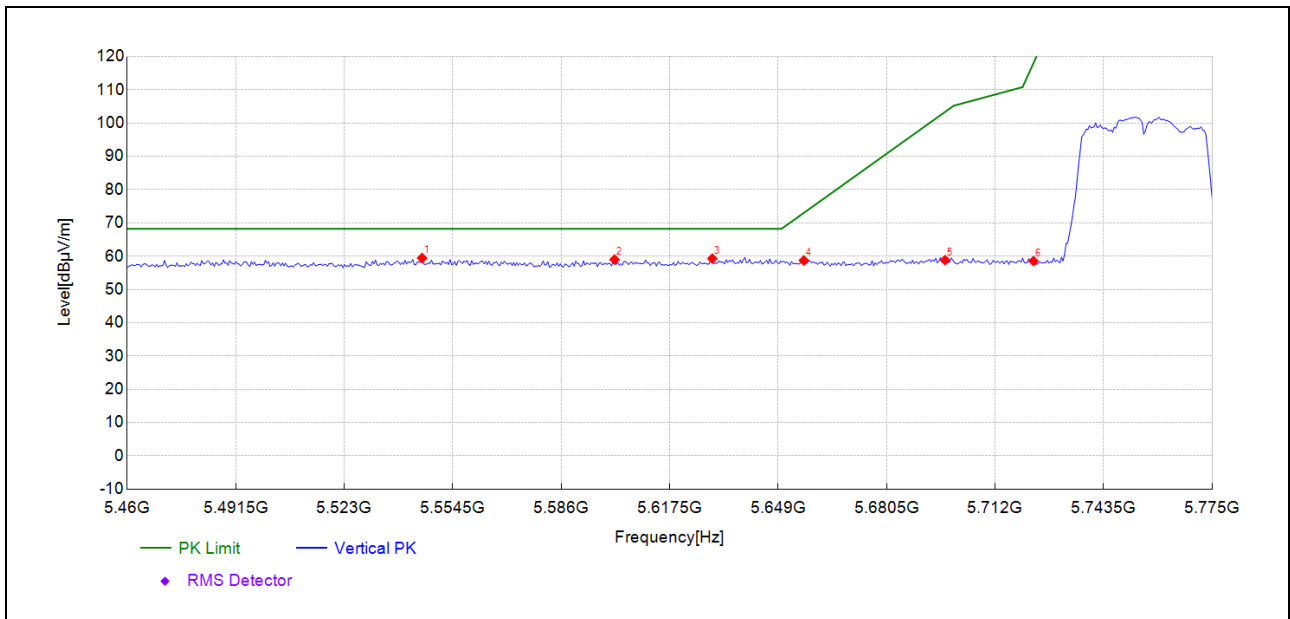
Plot for Channel 46



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5355.94	39.1	59.05	19.930	74.00	14.95	165	349	PK	PASS
5356.71	26.1	46.01	19.930	54.00	7.99	165	354	AV	PASS
5395.49	39.2	59.00	19.840	74.00	15.00	165	359	PK	PASS
5397.03	26.1	45.91	19.840	54.00	8.09	165	9	AV	PASS
5441.95	25.7	46.03	20.360	54.00	7.97	165	238	AV	PASS
5443.87	38.9	59.28	20.400	74.00	14.72	165	66	PK	PASS



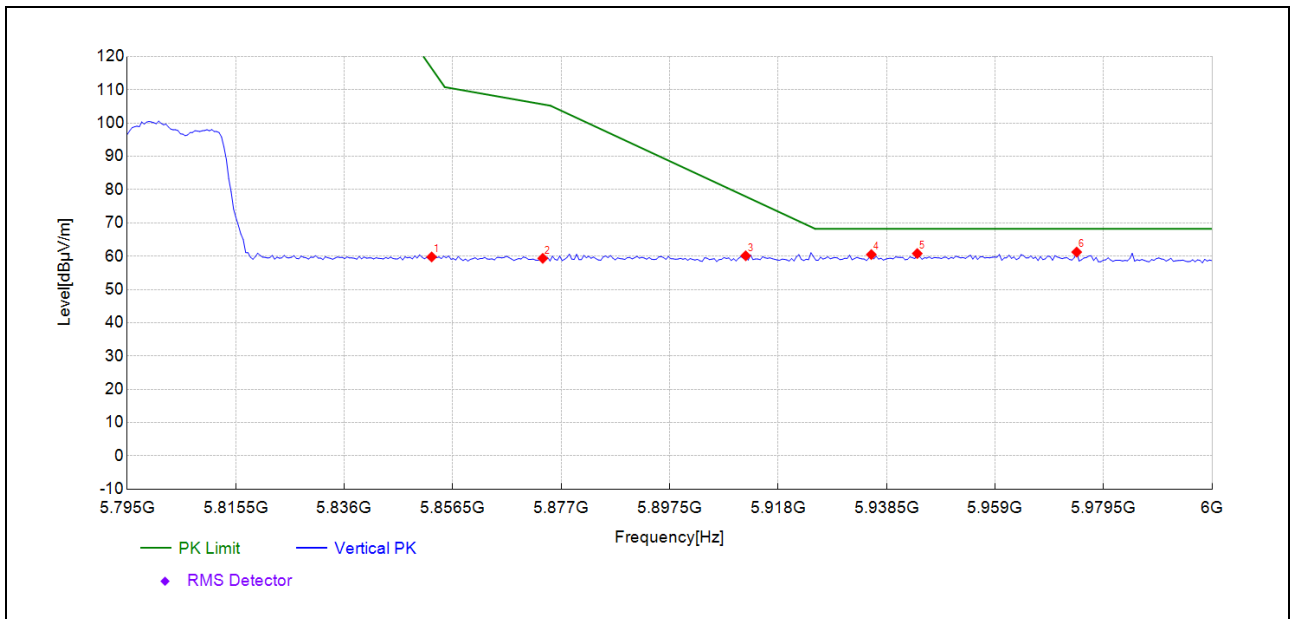
Plot for Channel 151



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5545.62	39.2	59.43	20.260	68.23	8.80	165	89	PK	PASS
5601.50	38.8	58.96	20.160	68.23	9.27	165	23	PK	PASS
5629.89	38.6	59.27	20.650	68.23	8.96	165	0	PK	PASS
5656.48	37.7	58.70	20.990	73.03	14.33	165	50	PK	PASS
5697.49	37.9	58.82	20.890	103.37	44.55	165	243	PK	PASS
5723.18	37.3	58.51	21.230	118.07	59.56	165	68	PK	PASS



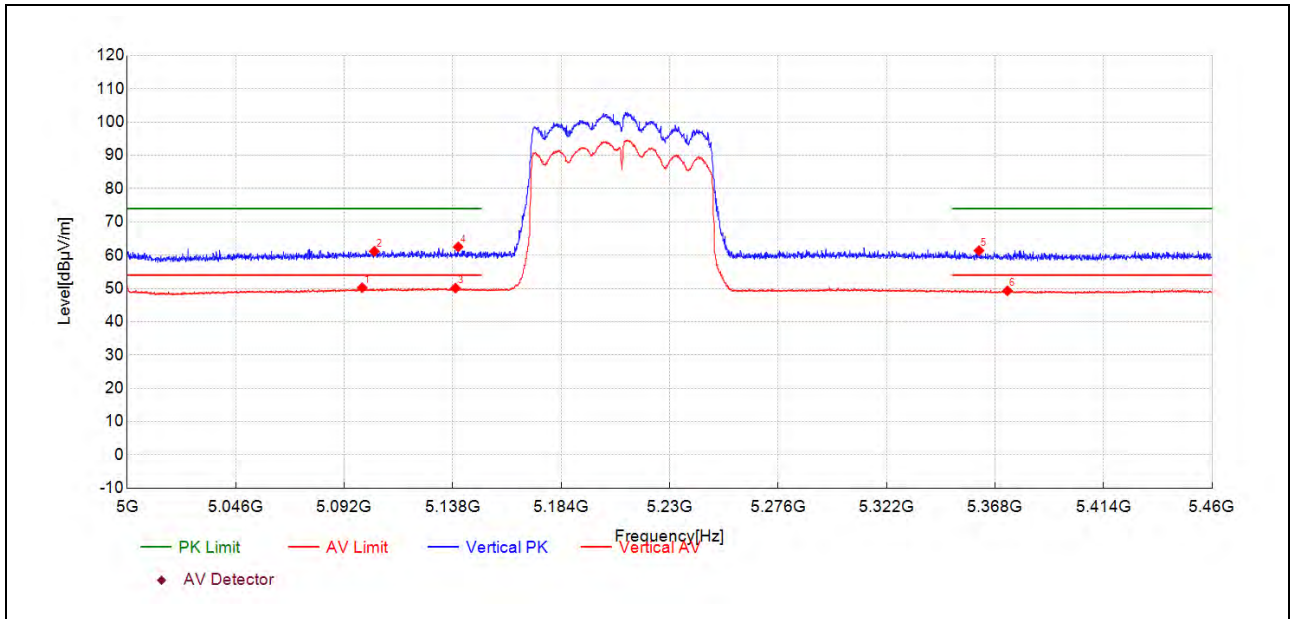
Plot for Channel 159



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5852.53	37.4	59.78	22.420	116.47	56.69	165	359	PK	PASS
5873.53	37.2	59.35	22.110	105.64	46.29	165	9	PK	PASS
5911.88	38.3	60.12	21.810	77.94	17.82	165	299	PK	PASS
5935.62	38.5	60.49	22.000	68.23	7.74	165	200	PK	PASS
5944.30	38.7	60.80	22.080	68.23	7.43	165	254	PK	PASS
5974.43	39.3	61.24	21.930	68.23	6.99	165	54	PK	PASS

**802.11ac (VHT80) Mode**

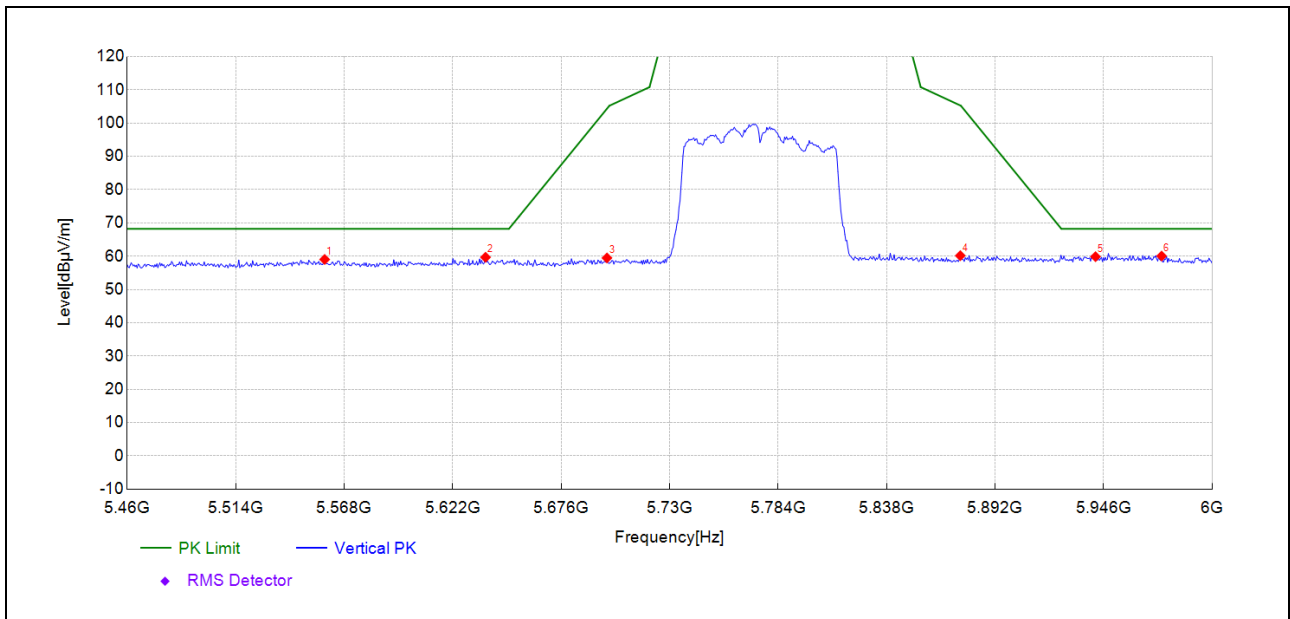
Plot for Channel 42



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5099.61	29.7	50.21	20.520	54.00	3.79	165	305	AV	PASS
5104.79	40.7	61.16	20.500	74.00	12.84	165	227	PK	PASS
5139.18	29.7	50.08	20.360	54.00	3.92	165	0	AV	PASS
5140.34	42.2	62.51	20.360	74.00	11.49	165	193	PK	PASS
5361.19	41.5	61.37	19.920	74.00	12.63	165	159	PK	PASS
5373.27	29.4	49.29	19.890	54.00	4.71	165	181	AV	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
5558.27	38.8	59.02	20.240	68.23	9.21	165	360	PK	PASS
5638.36	38.9	59.68	20.800	68.23	8.55	165	304	PK	PASS
5698.80	38.6	59.47	20.890	104.34	44.87	165	3	PK	PASS
5874.70	38.1	60.15	22.090	105.31	45.16	165	285	PK	PASS
5942.02	37.8	59.85	22.050	68.23	8.38	165	55	PK	PASS
5974.94	38.1	60.04	21.920	68.23	8.19	165	359	PK	PASS



A.7. 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.

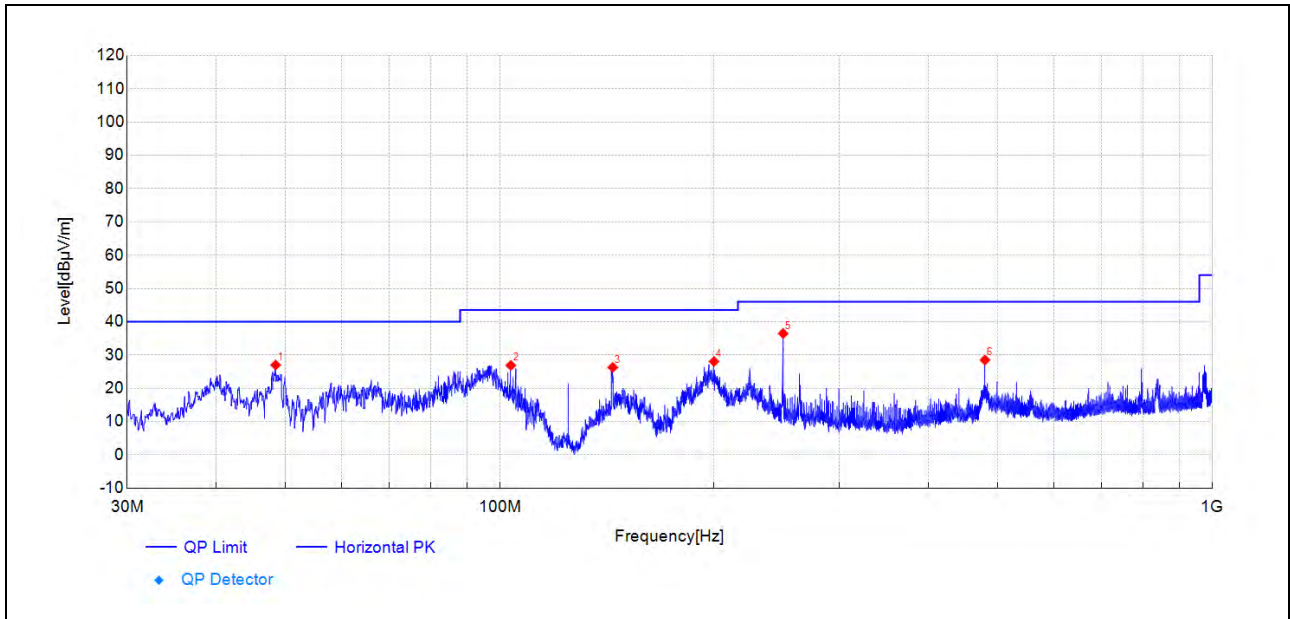
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 40GHz, 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.

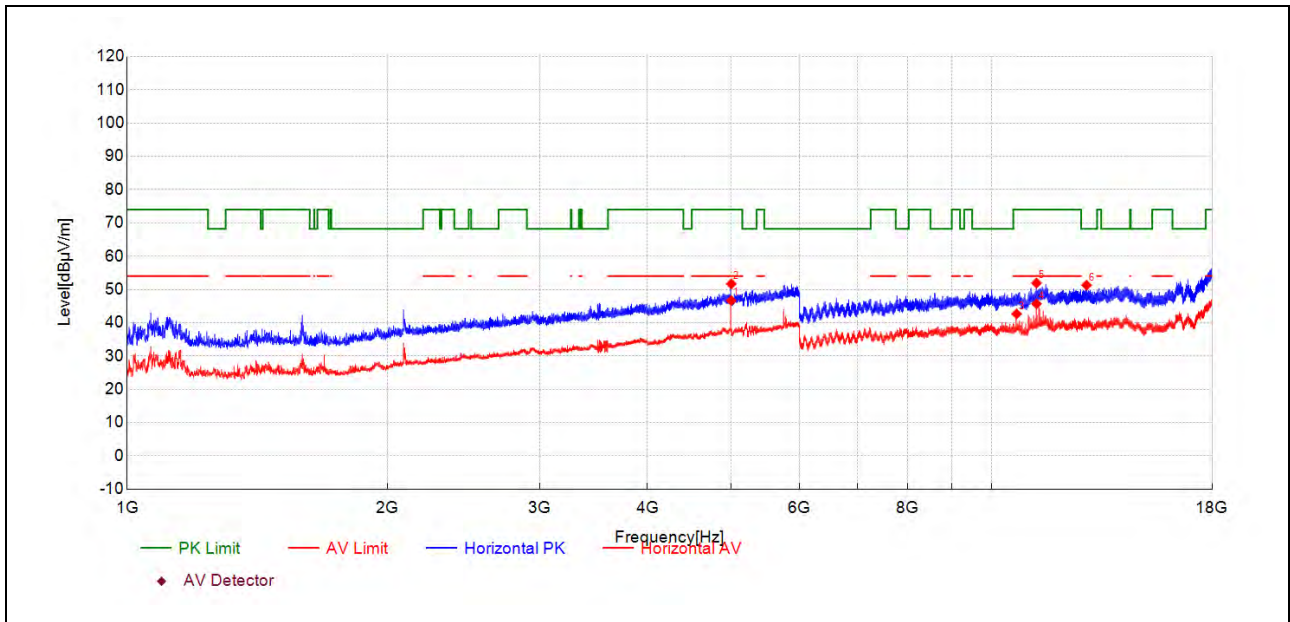
**802.11a Mode**

Plot for Channel 44



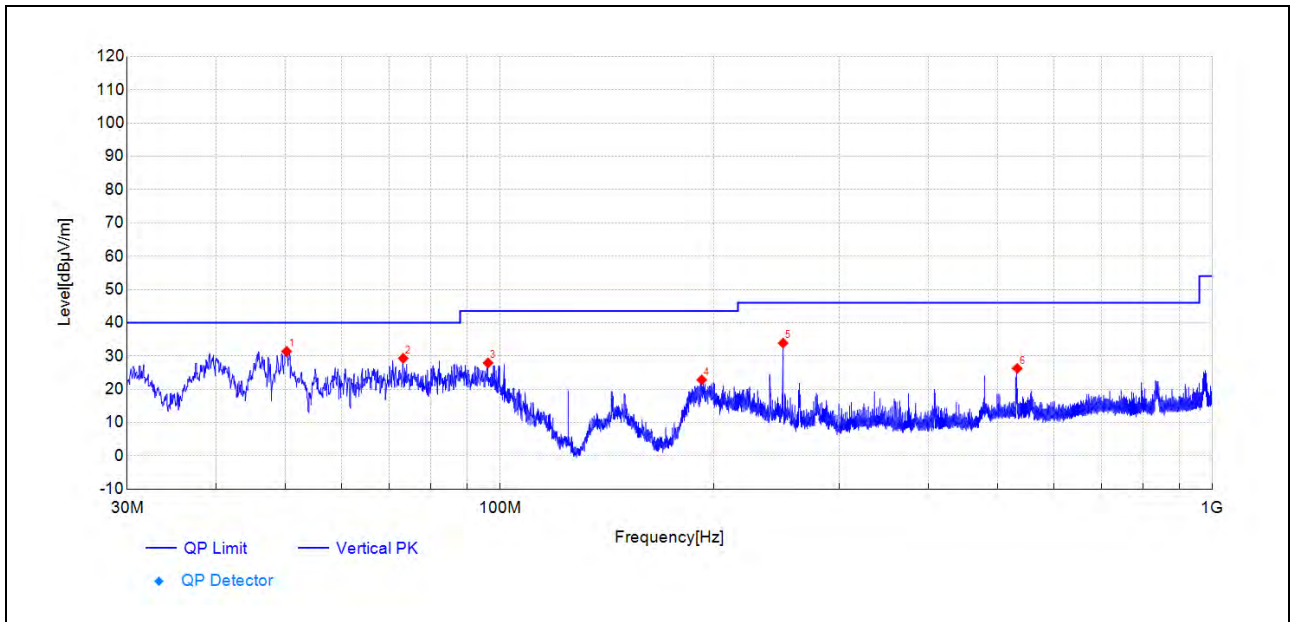
(Antenna Horizontal, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
48.46	11.7	26.99	15.290	40.00	13.01	165	349	PK	PASS
103.67	13.8	26.85	13.020	43.50	16.65	165	98	PK	PASS
144.11	16.6	26.26	9.710	43.50	17.24	165	98	PK	PASS
199.97	15.1	28.06	12.930	43.50	15.44	165	123	PK	PASS
250.00	21.8	36.46	14.700	46.00	9.54	165	337	PK	PASS
479.99	8.6	28.48	19.900	46.00	17.52	165	98	PK	PASS



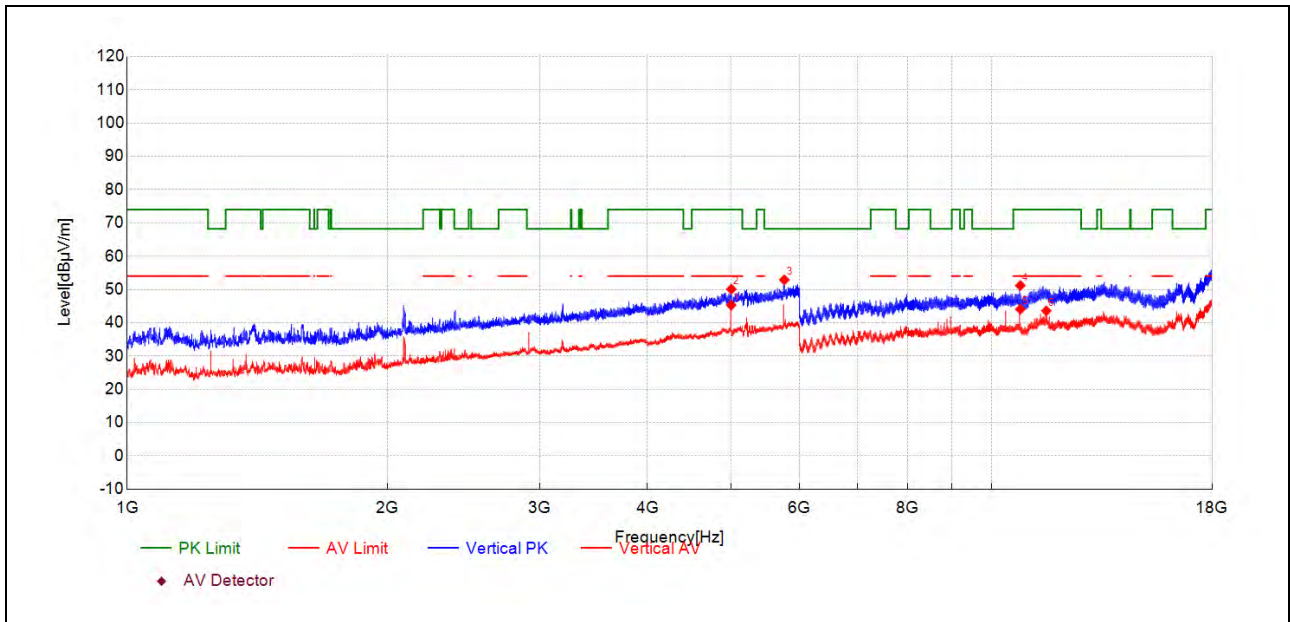
(Antenna Horizontal, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4999.90	37.4	46.66	9.230	54.00	7.34	165	144	AV	PASS
5000.38	42.4	51.67	9.230	74.00	22.33	165	144	PK	PASS
10694.89	42.0	42.66	0.620	54.00	11.34	165	153	AV	PASS
11278.75	43.7	45.68	2.000	54.00	8.32	165	172	AV	PASS
11278.75	49.9	51.92	2.000	74.00	22.08	165	153	PK	PASS
12886.81	47.2	51.29	4.100	68.23	16.94	165	4	PK	PASS



(Antenna Vertical, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
50.22	16.3	31.37	15.110	40.00	8.63	165	161	PK	PASS
73.21	20.6	29.30	8.680	40.00	10.70	165	360	PK	PASS
96.32	15.0	27.92	12.920	43.50	15.58	165	150	PK	PASS
192.21	9.3	22.83	13.490	43.50	20.67	165	226	PK	PASS
250.00	19.2	33.87	14.700	46.00	12.13	165	360	PK	PASS
532.90	5.5	26.26	20.730	46.00	19.74	165	360	PK	PASS

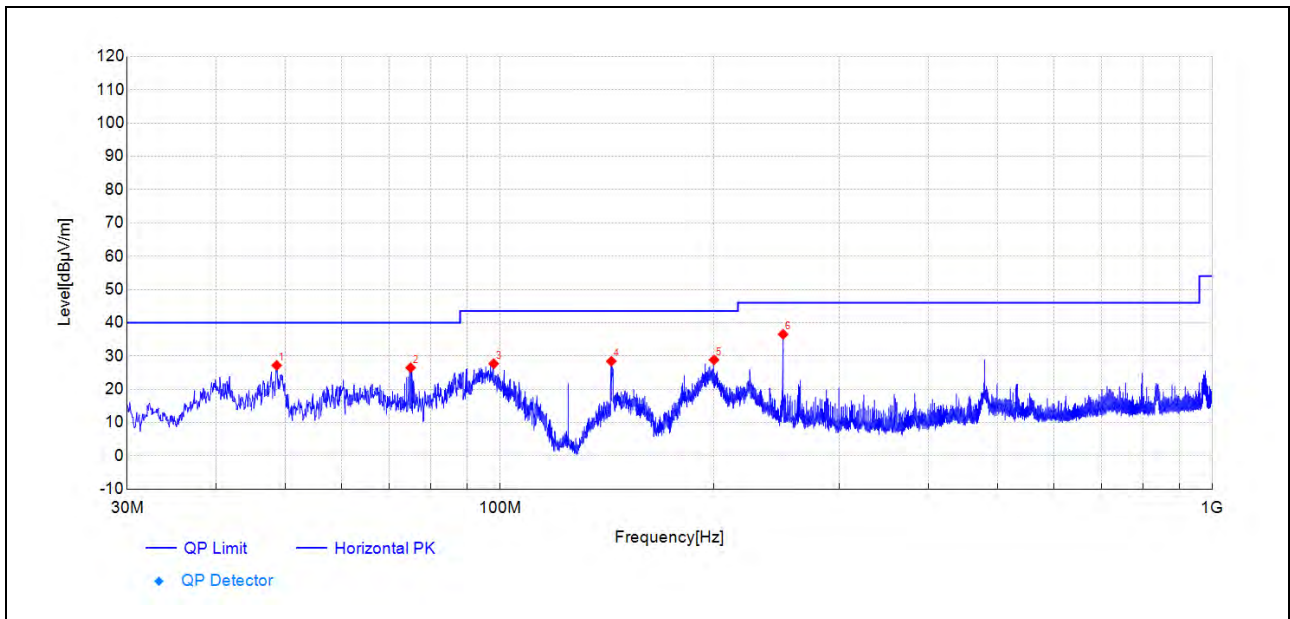


(Antenna Vertical, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4999.90	36.1	45.29	9.230	54.00	8.71	165	76	AV	PASS
5000.38	40.9	50.08	9.230	74.00	23.92	165	88	PK	PASS
5759.98	40.8	52.89	12.090	68.23	15.34	165	360	PK	PASS
10800.20	50.9	51.18	0.330	74.00	22.82	165	150	PK	PASS
10800.20	43.7	44.06	0.330	54.00	9.94	165	150	AV	PASS
11575.08	40.6	43.56	2.960	54.00	10.44	165	109	AV	PASS

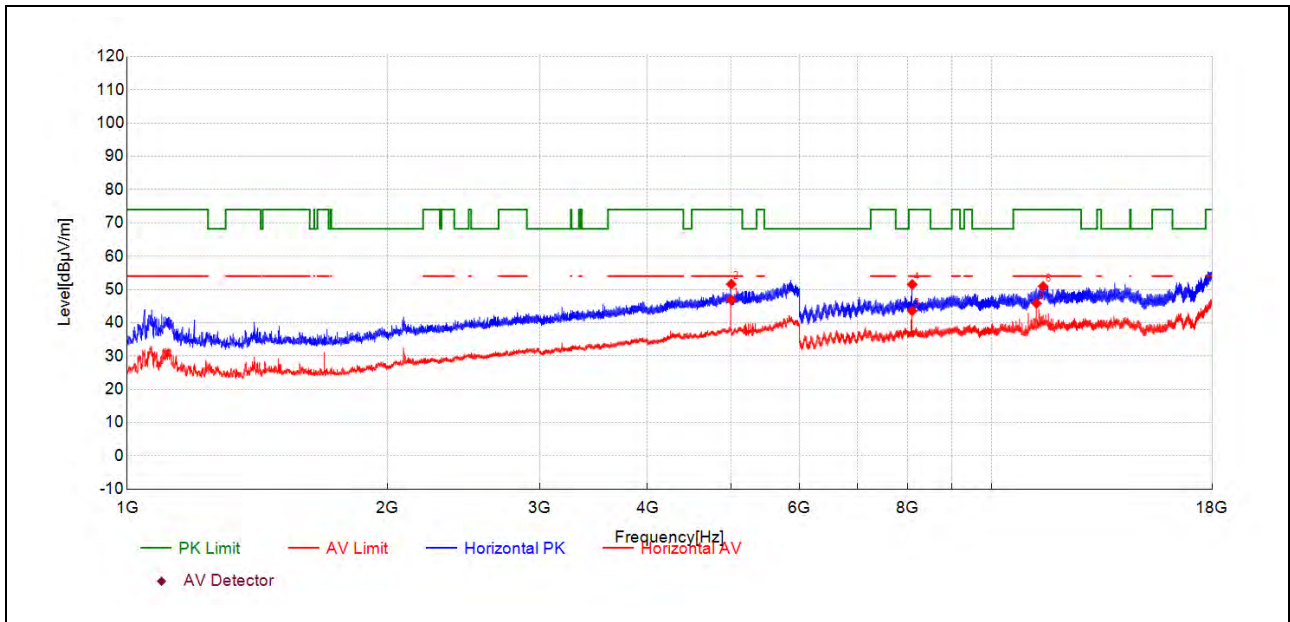


Plot for Channel 157



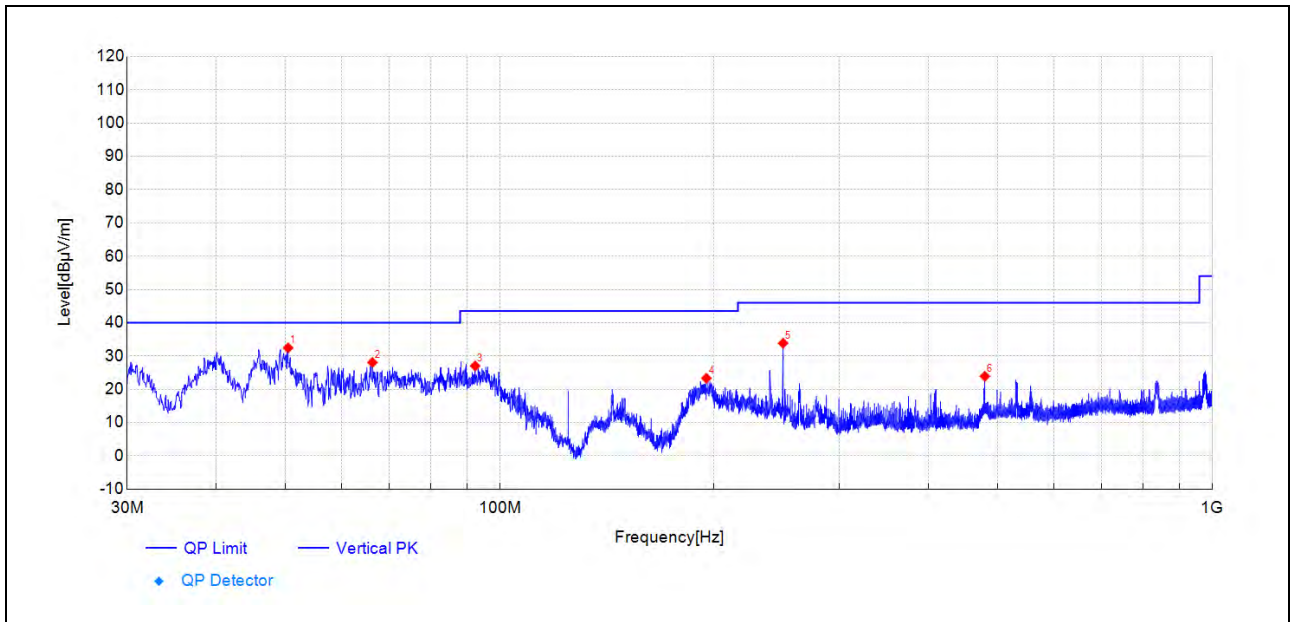
(Antenna Horizontal, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
48.64	11.9	27.16	15.280	40.00	12.84	165	0	PK	PASS
74.98	18.0	26.47	8.510	40.00	13.53	165	123	PK	PASS
98.08	14.7	27.69	13.000	43.50	15.81	165	188	PK	PASS
143.47	18.7	28.40	9.710	43.50	15.10	165	99	PK	PASS
199.97	15.9	28.84	12.930	43.50	14.66	165	123	PK	PASS
250.00	21.8	36.52	14.700	46.00	9.48	165	188	PK	PASS



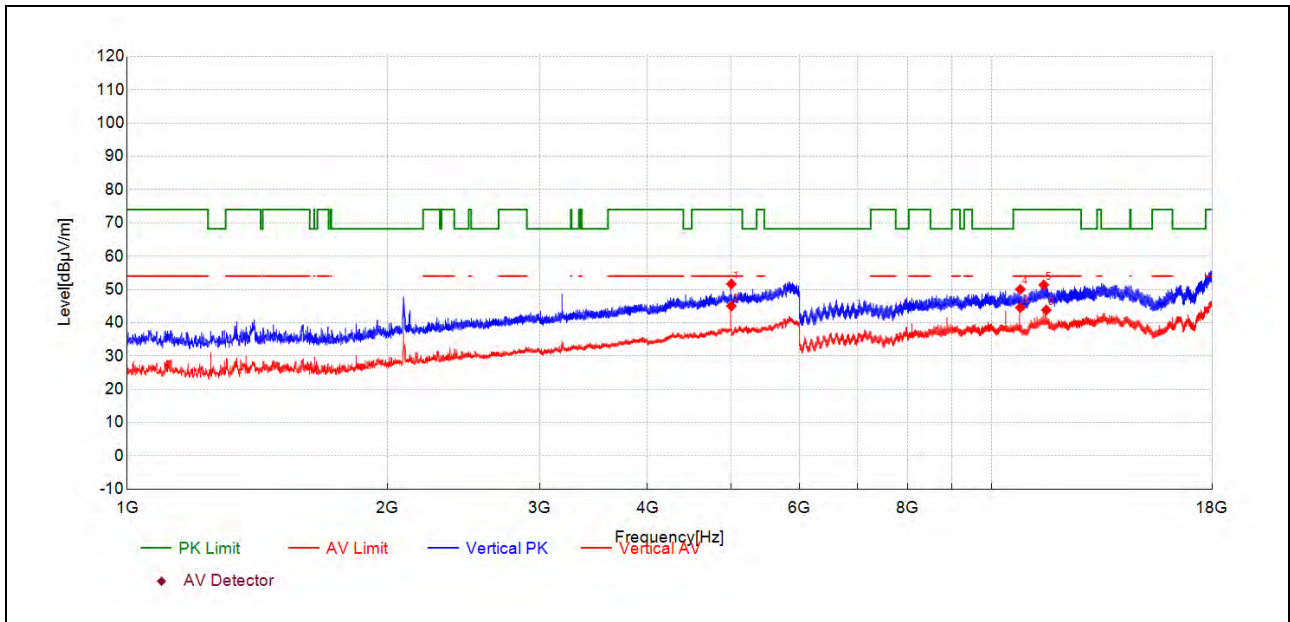
(Antenna Horizontal, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4999.90	37.4	46.85	9.430	54.00	7.15	165	145	AV	PASS
4999.90	42.2	51.61	9.430	74.00	22.39	165	117	PK	PASS
8096.41	46.3	43.54	-2.780	54.00	10.46	165	334	AV	PASS
8098.37	54.3	51.49	-2.790	74.00	22.51	165	353	PK	PASS
11278.26	43.8	45.80	2.000	54.00	8.20	165	172	AV	PASS
11479.08	48.0	50.93	2.890	74.00	23.07	165	172	PK	PASS



(Antenna Vertical, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
50.46	17.4	32.44	15.060	40.00	7.56	165	188	PK	PASS
66.27	17.5	28.06	10.540	40.00	11.94	165	274	PK	PASS
92.38	14.8	27.01	12.180	43.50	16.49	165	173	PK	PASS
195.09	9.8	23.31	13.500	43.50	20.19	165	188	PK	PASS
250.00	19.1	33.84	14.700	46.00	12.16	165	360	PK	PASS
479.99	4.0	23.91	19.900	46.00	22.09	165	124	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4999.90	42.2	51.64	9.430	74.00	22.36	165	87	PK	PASS
5000.38	35.6	45.01	9.430	54.00	8.99	165	73	AV	PASS
10800.20	44.2	44.56	0.330	54.00	9.44	165	151	AV	PASS
10800.20	49.7	50.03	0.330	74.00	23.97	165	128	PK	PASS
11497.20	48.5	51.38	2.870	74.00	22.62	165	151	PK	PASS
11575.08	40.9	43.82	2.960	54.00	10.18	165	151	AV	PASS



Notes

1. The report shall have report stamp or our company stamp.
2. The report shall be invalid without all the signatures of the editor and approver.
3. The report shall not be changed.
4. Any objections must be raised to Morlab within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.
5. Conformity declaration:
 - ☒ Morlab issues a statement of conformity based on the corresponding standards (default)
 - ☐ Morlab issues a statement of conformity based on the applicant requirement
6. Use of uncertainty of measurement for decisions on conformity (decision rule):

No decision rule is specified by the testing standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule).

————— END OF REPORT —————