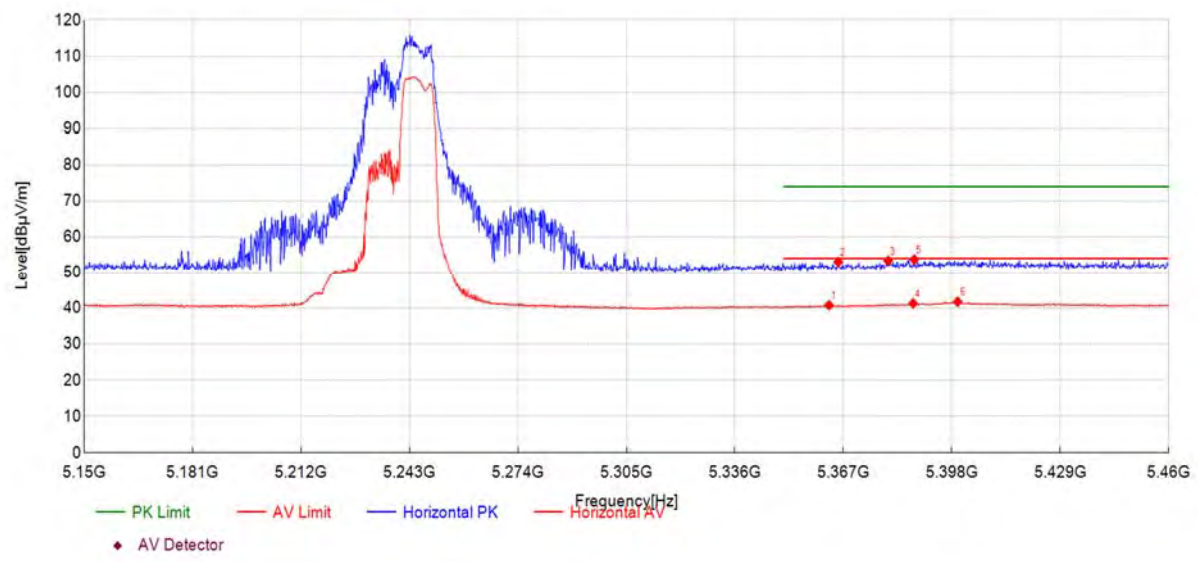
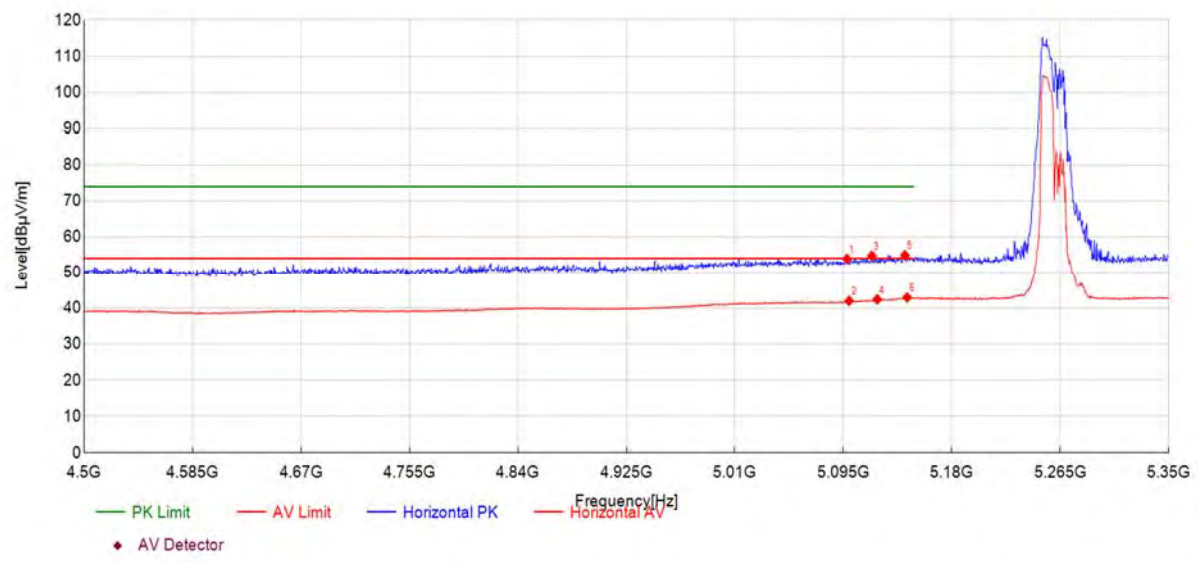
Plot for Channel 48



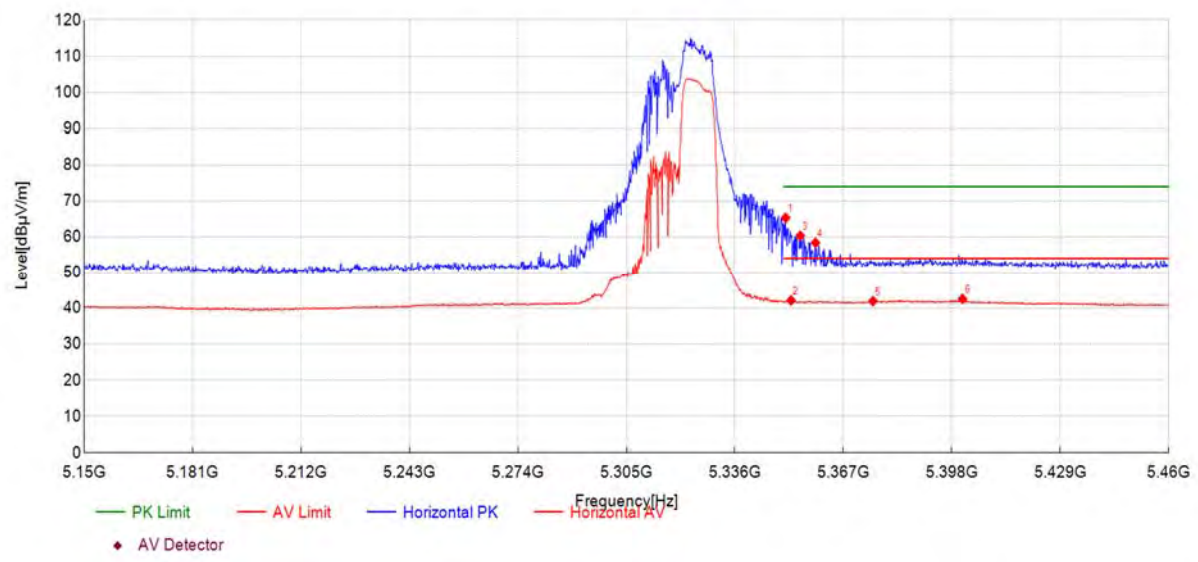
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5362.92	25.7	40.82	15.160	54.00	13.18	150	179	AV	PASS
5365.56	37.9	53.07	15.200	74.00	20.93	150	5	PK	PASS
5379.82	38.0	53.40	15.400	74.00	20.60	150	1	PK	PASS
5386.96	25.8	41.33	15.500	54.00	12.67	150	137	AV	PASS
5387.27	38.3	53.75	15.500	74.00	20.25	150	316	PK	PASS
5399.67	26.1	41.76	15.680	54.00	12.24	150	208	AV	PASS

Plot for Channel 52



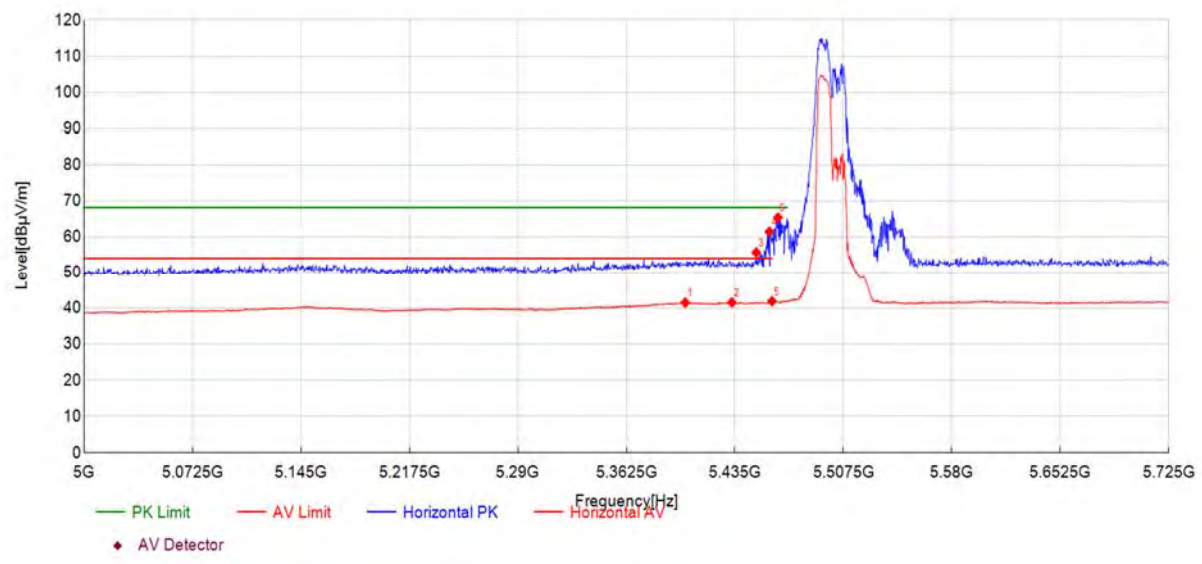
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5097.85	40.2	53.89	13.670	74.00	20.11	150	198	PK	PASS
5099.55	28.4	42.03	13.680	54.00	11.97	150	170	AV	PASS
5117.41	40.8	54.79	13.990	74.00	19.21	150	39	PK	PASS
5121.66	28.4	42.45	14.070	54.00	11.55	150	142	AV	PASS
5143.35	40.5	54.93	14.470	74.00	19.07	150	213	PK	PASS
5145.05	28.5	42.99	14.500	54.00	11.01	150	170	AV	PASS

Plot for Channel 64



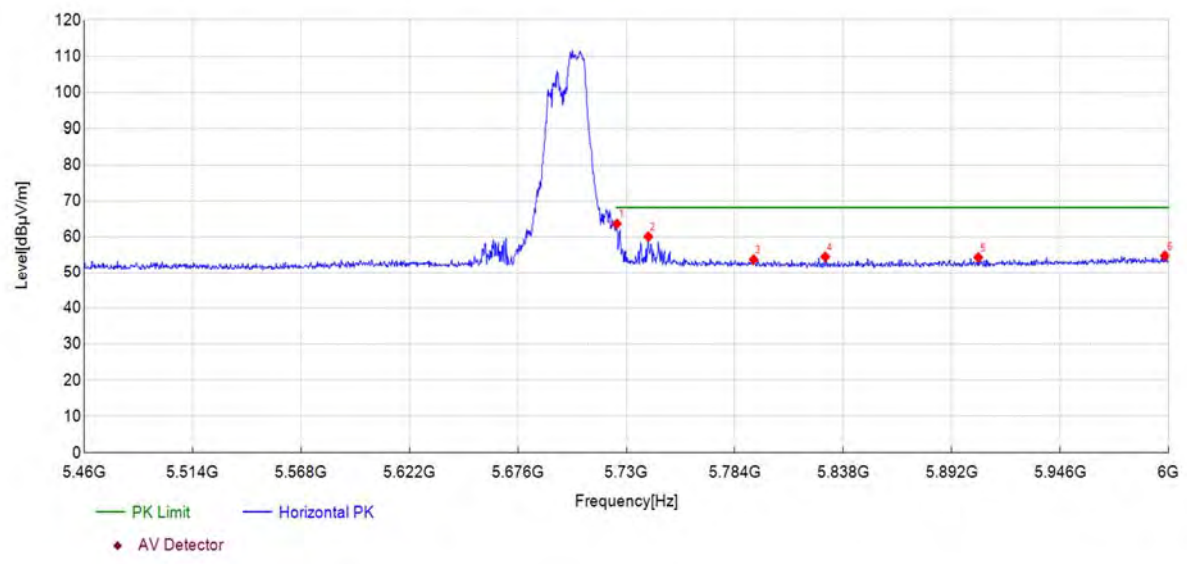
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5350.52	50.4	65.35	14.990	74.00	8.65	150	158	PK	PASS
5352.07	27.2	42.17	15.010	54.00	11.83	150	167	AV	PASS
5354.70	45.4	60.40	15.050	74.00	13.60	150	139	PK	PASS
5359.04	43.3	58.40	15.110	74.00	15.60	150	130	PK	PASS
5375.48	26.6	41.95	15.340	54.00	12.05	150	144	AV	PASS
5401.07	26.9	42.56	15.660	54.00	11.44	150	148	AV	PASS

Plot for Channel 100



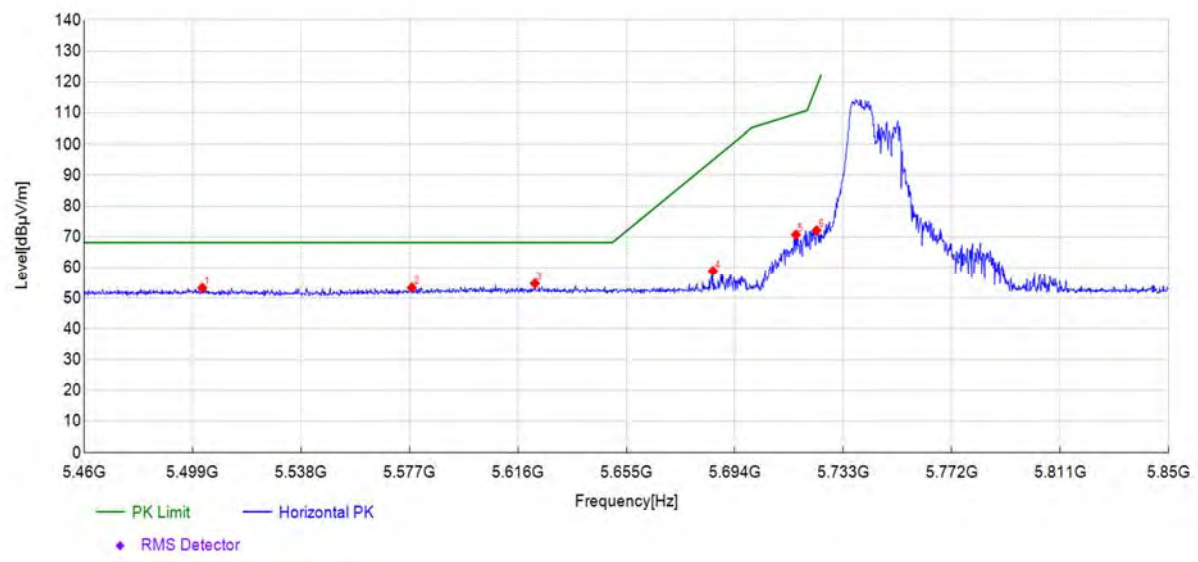
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5401.85	25.9	41.54	15.660	54.00	12.46	150	66	AV	PASS
5433.04	26.3	41.59	15.280	54.00	12.41	150	138	AV	PASS
5449.36	40.6	55.70	15.080	68.23	12.53	150	132	PK	PASS
5458.07	46.4	61.48	15.100	68.23	6.75	150	142	PK	PASS
5459.88	26.8	41.95	15.110	54.00	12.05	150	132	AV	PASS
5463.87	50.3	65.41	15.120	68.23	2.82	150	138	PK	PASS

Plot for Channel 140



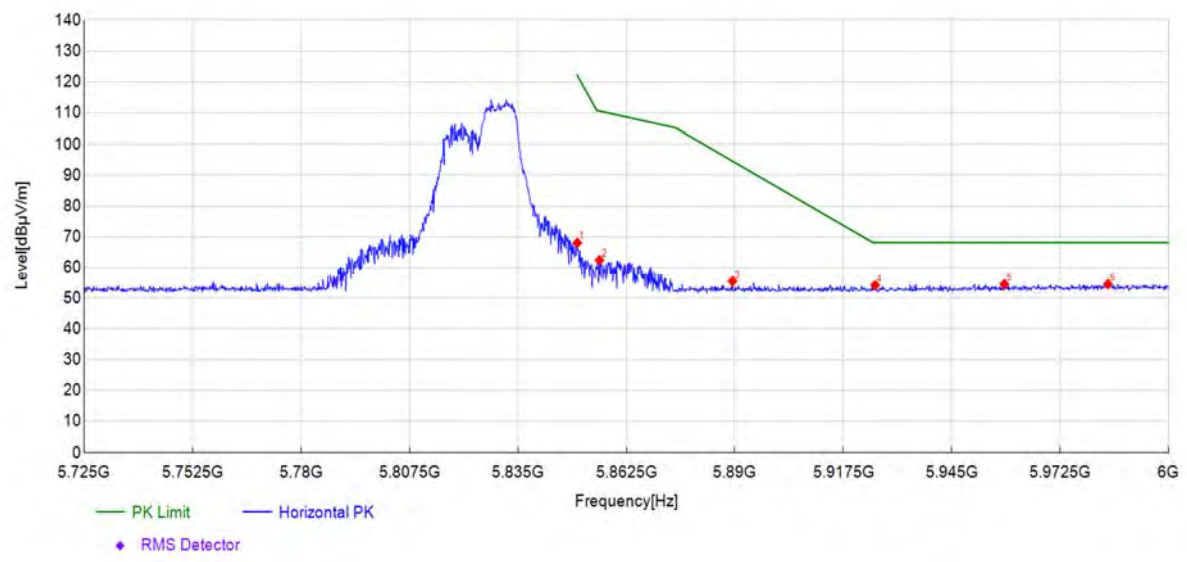
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5725.27	47.4	63.68	16.250	68.23	4.55	150	234	PK	PASS
5740.94	43.9	60.14	16.280	68.23	8.09	150	168	PK	PASS
5793.35	37.7	53.76	16.030	68.23	14.47	150	240	PK	PASS
5829.00	38.6	54.55	15.980	68.23	13.68	150	324	PK	PASS
5905.18	38.2	54.36	16.190	68.23	13.87	150	33	PK	PASS
5998.11	37.7	54.84	17.130	68.23	13.39	150	206	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
5502.53	38.0	53.23	15.240	68.23	15.00	150	10	PK	PASS
5577.84	37.8	53.32	15.480	68.23	14.91	150	141	PK	PASS
5622.13	38.8	54.69	15.860	68.23	13.54	150	153	PK	PASS
5686.12	42.8	58.89	16.090	94.96	36.07	150	137	PK	PASS
5715.97	54.5	70.76	16.230	109.70	38.94	150	137	PK	PASS
5723.38	55.9	72.13	16.240	118.54	46.41	150	1	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
5850.05	52.2	68.13	15.970	122.12	53.99	150	164	PK	PASS
5855.69	46.5	62.49	15.990	110.64	48.15	150	140	PK	PASS
5889.39	39.3	55.44	16.110	94.58	39.14	150	164	PK	PASS
5925.58	37.7	54.09	16.350	68.23	14.14	150	47	PK	PASS
5958.32	37.8	54.49	16.650	68.23	13.74	150	68	PK	PASS
5984.59	37.5	54.51	16.970	68.23	13.72	150	333	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:

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

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 (X axis) test condition was recorded in this test report.

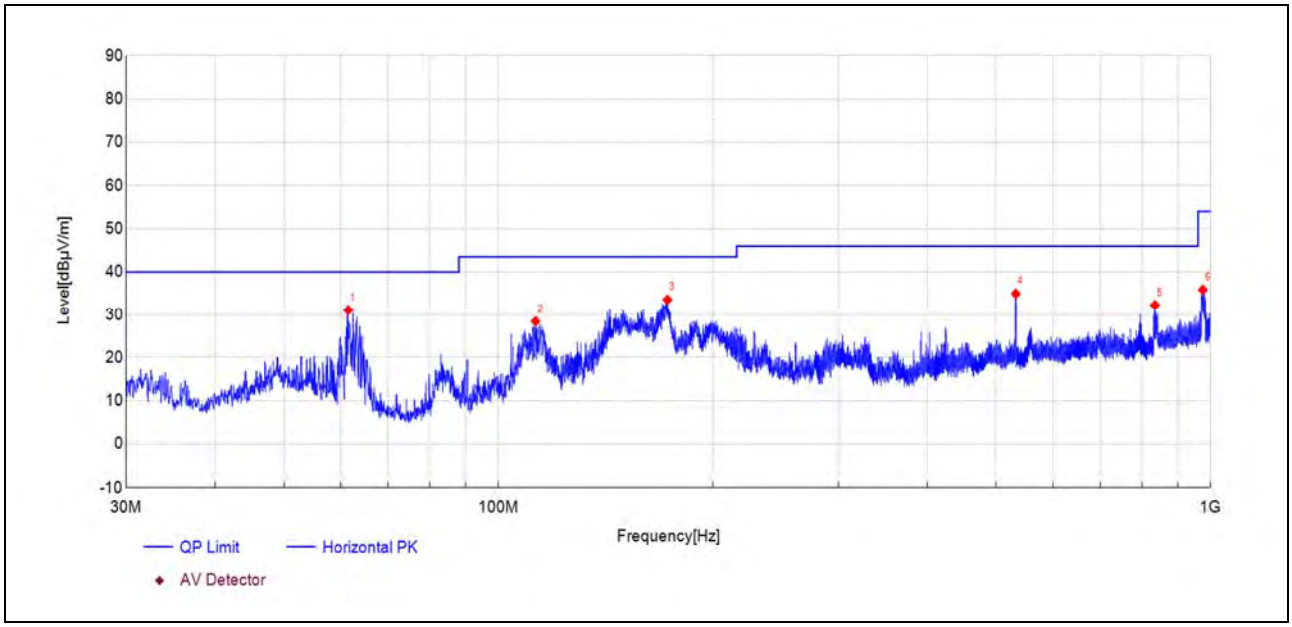
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 10th 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.

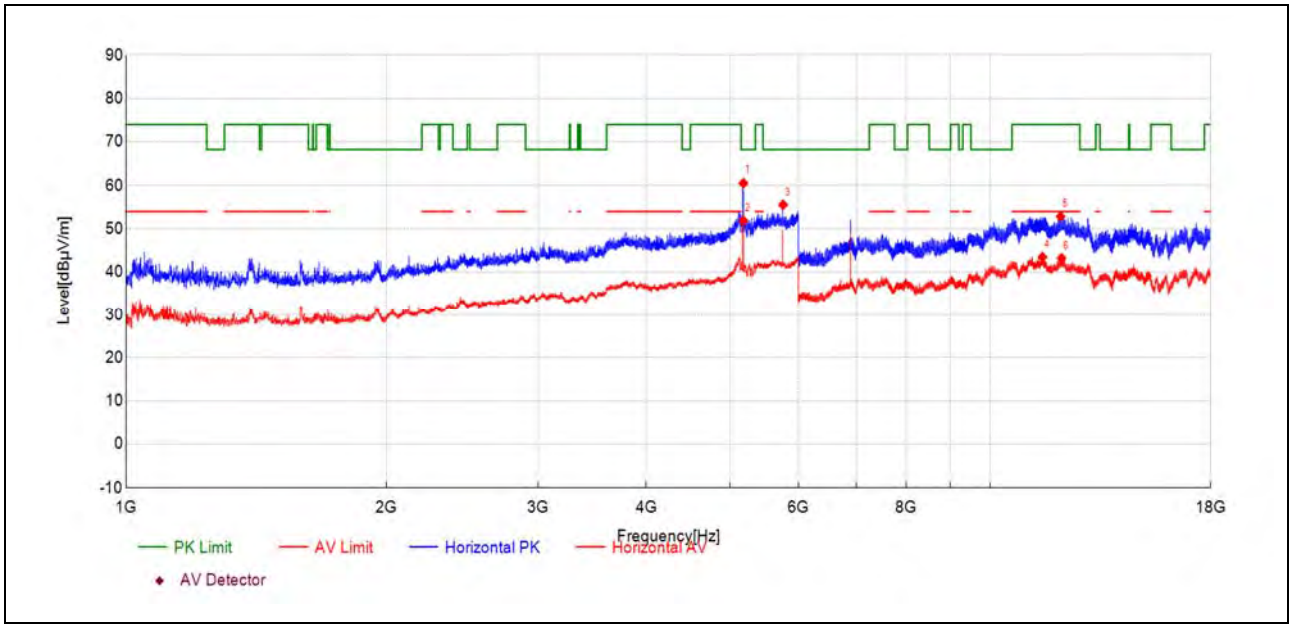
802.11a Mode

Plot for Channel 44



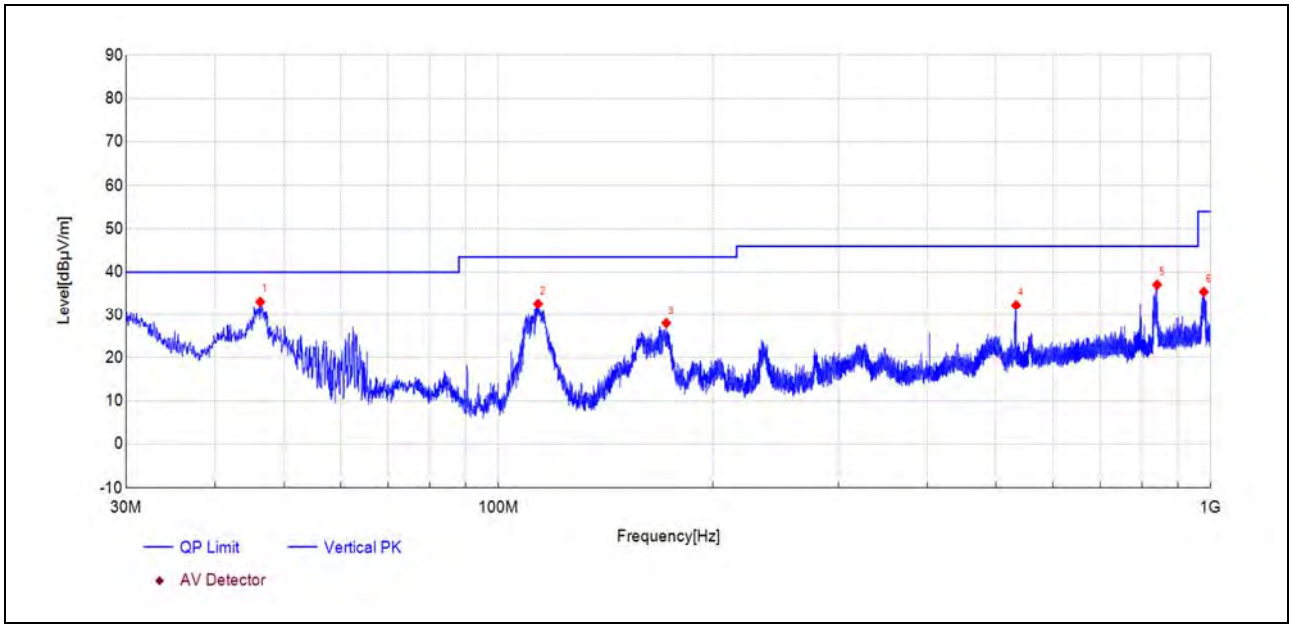
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
61.53	59.7	31.06	-28.670	40.00	8.94	150	351	PK	PASS
112.75	57.7	28.42	-29.280	43.50	15.08	150	61	PK	PASS
172.69	64.3	33.52	-30.820	43.50	9.98	150	261	PK	PASS
532.53	53.9	34.95	-18.990	46.00	11.05	150	157	PK	PASS
835.04	46.0	32.25	-13.730	46.00	13.75	150	48	PK	PASS
974.88	46.7	35.85	-10.820	54.00	18.15	150	33	PK	PASS



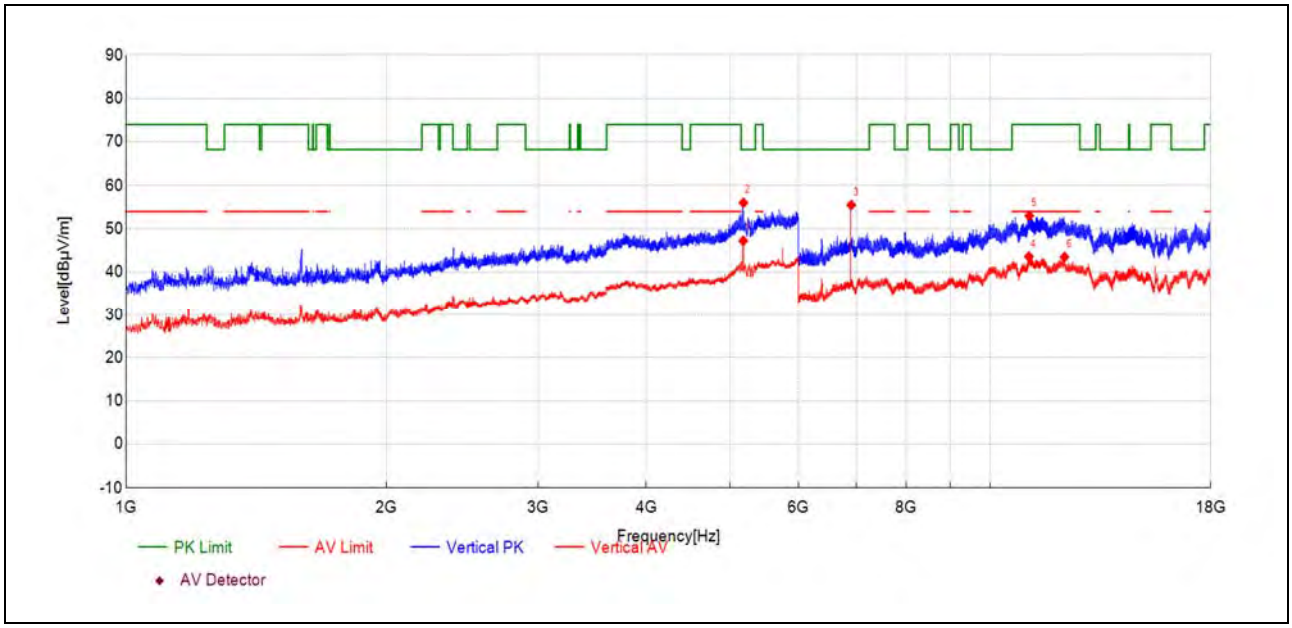
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5180.92	44.1	60.57	16.480	-	-	150	202	PK	NA
5181.42	35.5	51.92	16.470	-	-	150	212	AV	NA
5759.98	37.2	55.59	18.430	68.23	12.64	150	202	PK	PASS
11497.73	29.2	43.49	14.310	54.00	10.51	150	18	AV	PASS
12064.25	38.5	52.89	14.440	74.00	21.11	150	73	PK	PASS
12095.25	28.7	43.22	14.570	54.00	10.78	150	5	AV	PASS



(Antenna Vertical, 30MHz to 1GHz)

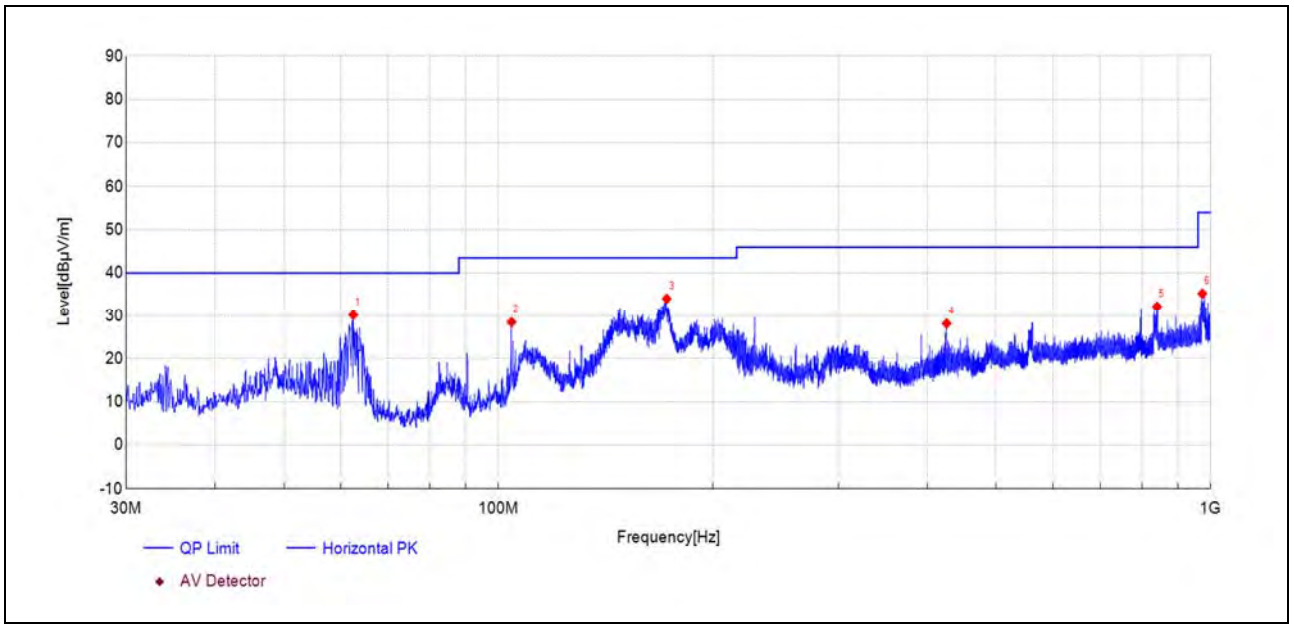
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
46.30	61.5	33.10	-28.430	40.00	6.90	150	9	PK	PASS
113.67	62.1	32.63	-29.460	43.50	10.87	150	140	PK	PASS
172.02	58.6	28.01	-30.560	43.50	15.49	150	242	PK	PASS
533.07	51.3	32.29	-19.010	46.00	13.71	150	195	PK	PASS
841.06	51.0	37.07	-13.940	46.00	8.93	150	119	PK	PASS
977.93	46.5	35.42	-11.110	54.00	18.58	150	85	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

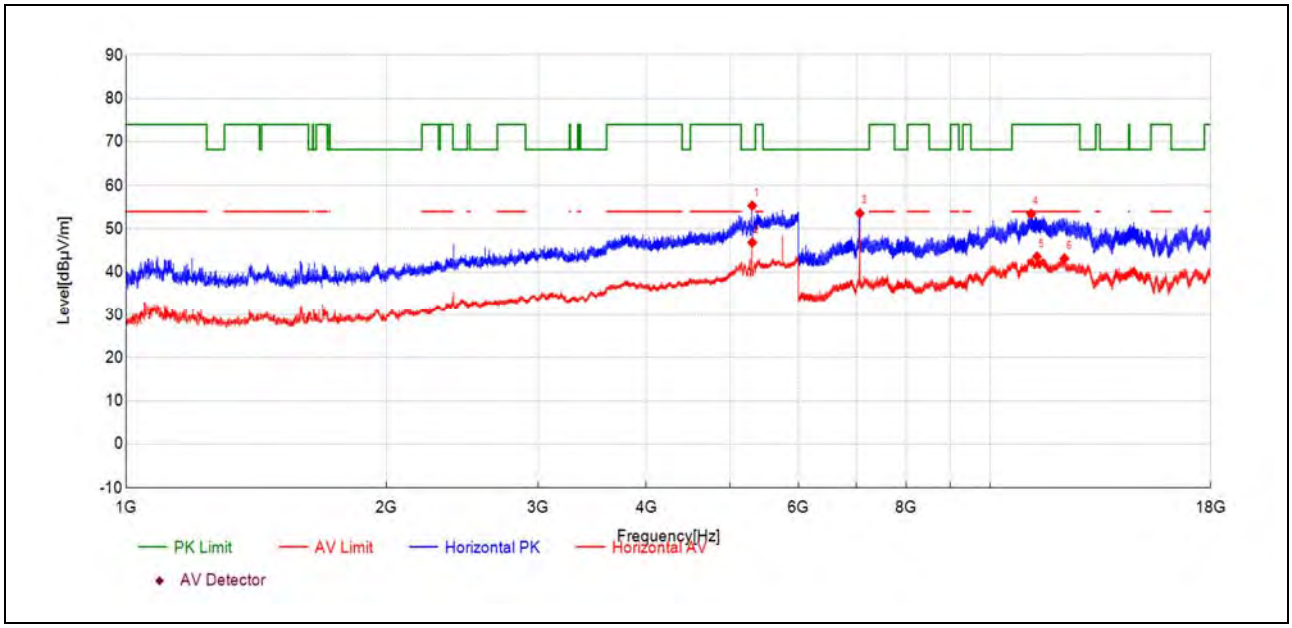
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5179.42	30.8	47.25	16.500	-	-	150	29	AV	NA
5181.42	39.6	56.04	16.470	-	-	150	47	PK	NA
6906.54	51.7	55.52	3.780	68.23	12.71	150	311	PK	PASS
11087.71	30.1	43.60	13.480	54.00	10.40	150	102	AV	PASS
11101.21	39.4	53.03	13.620	74.00	20.97	150	32	PK	PASS
12192.76	28.7	43.50	14.810	54.00	10.50	150	144	AV	PASS

Plot for Channel 60



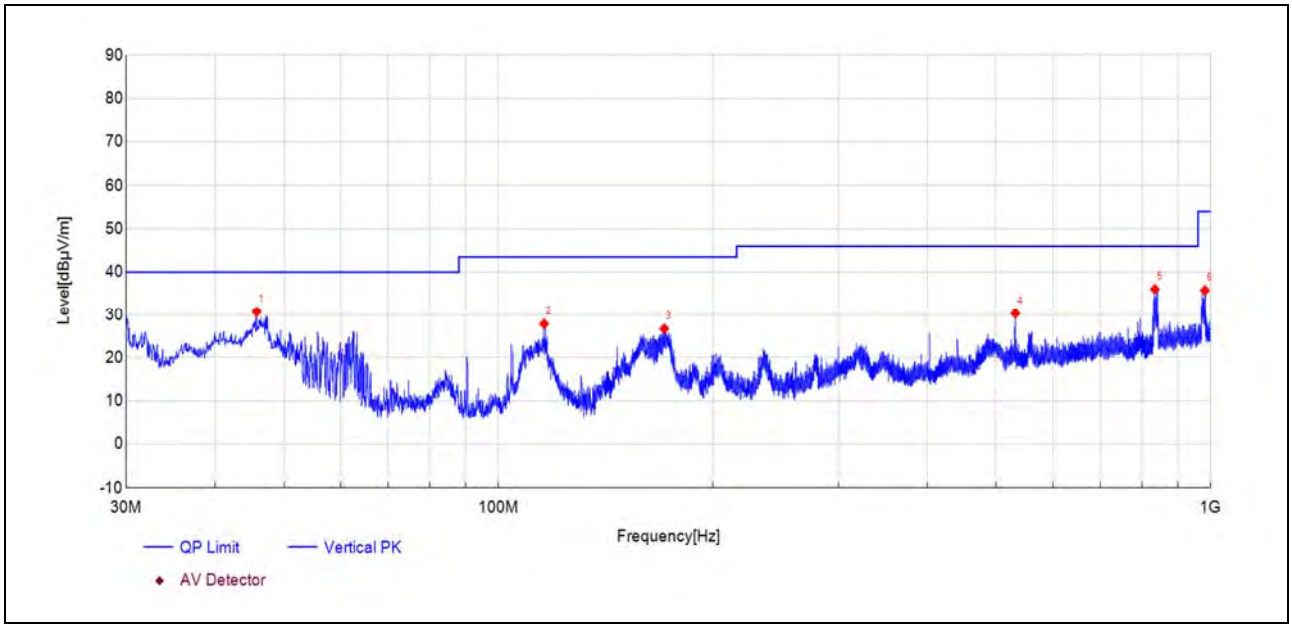
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
62.55	59.0	30.17	-28.790	40.00	9.83	150	350	PK	PASS
104.35	58.0	28.46	-29.490	43.50	15.04	150	91	PK	PASS
172.31	64.7	34.02	-30.670	43.50	9.48	150	63	PK	PASS
425.88	50.5	28.16	-22.340	46.00	17.84	150	50	PK	PASS
840.82	46.2	32.17	-13.990	46.00	13.83	150	63	PK	PASS
973.28	46.3	35.21	-11.090	54.00	18.79	150	42	PK	PASS



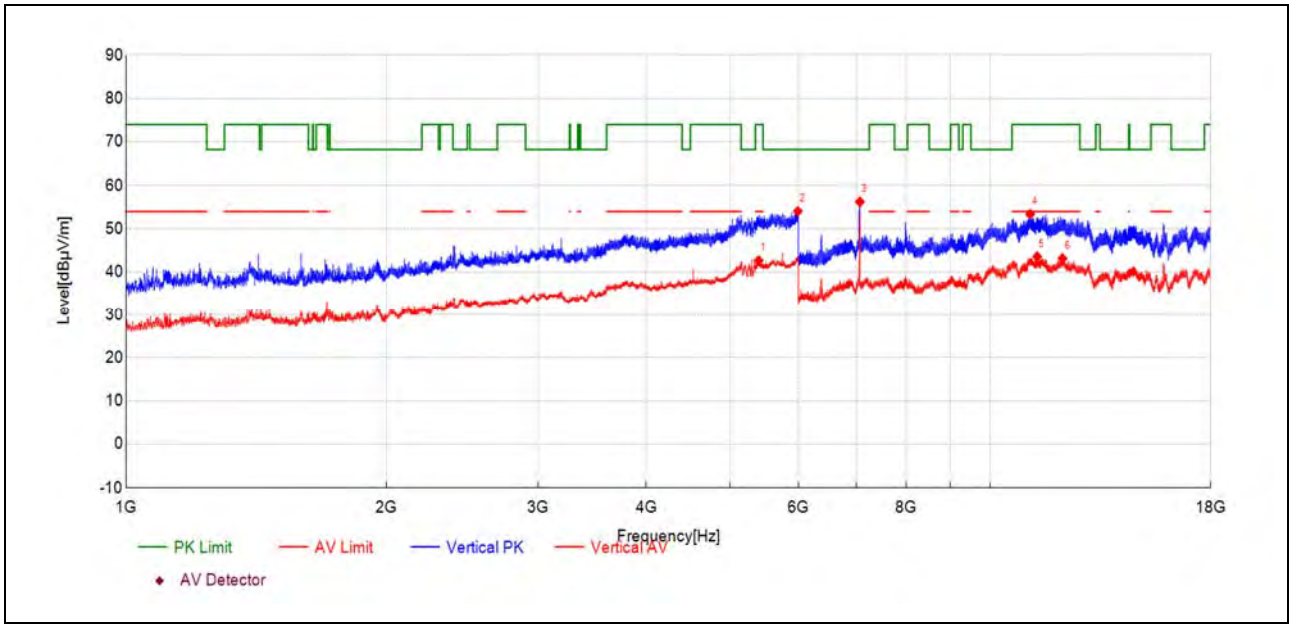
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5305.43	38.5	55.36	16.870	-	-	150	212	PK	NA
5305.93	30.0	46.86	16.880	-	-	150	212	AV	NA
7066.54	49.5	53.60	4.100	68.23	14.63	150	242	PK	PASS
11154.71	39.7	53.46	13.770	74.00	20.54	150	18	PK	PASS
11333.72	30.2	43.60	13.440	54.00	10.40	150	44	AV	PASS
12192.76	28.4	43.17	14.810	54.00	10.83	150	5	AV	PASS



(Antenna Vertical, 30MHz to 1GHz)

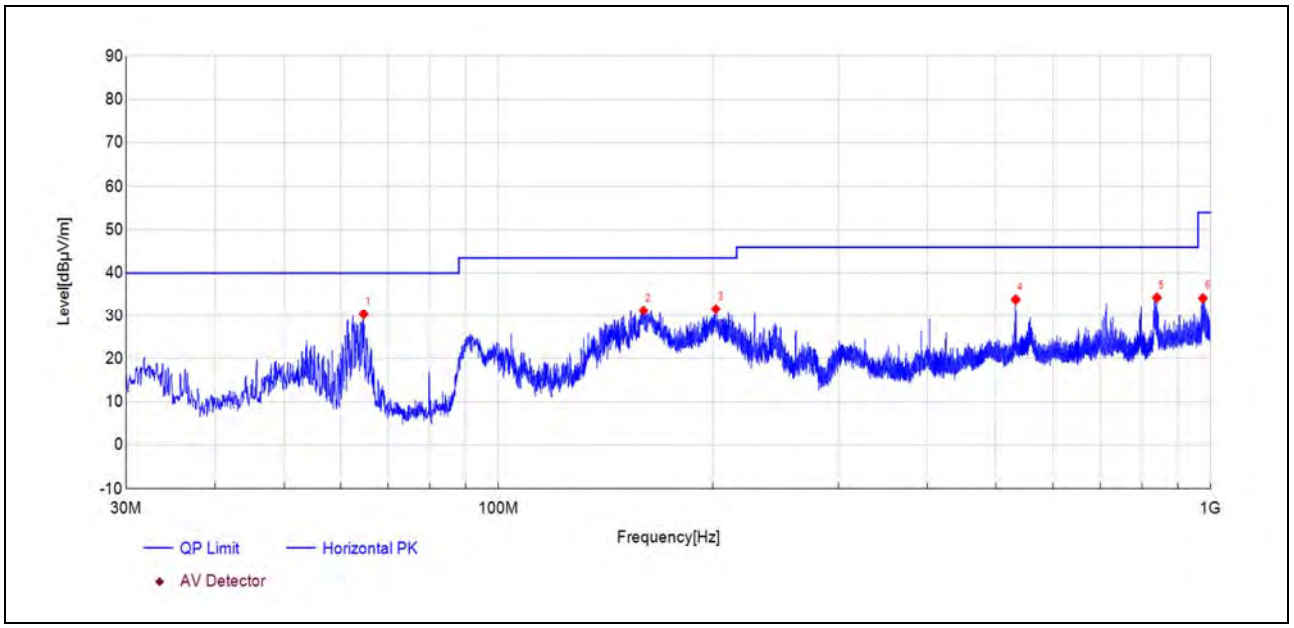
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
45.76	59.1	30.71	-28.380	40.00	9.29	150	44	PK	PASS
115.90	57.9	27.85	-30.040	43.50	15.65	150	166	PK	PASS
170.90	57.9	26.70	-31.160	43.50	16.80	150	235	PK	PASS
531.85	49.3	30.30	-18.960	46.00	15.70	150	222	PK	PASS
835.04	49.7	36.01	-13.730	46.00	9.99	150	125	PK	PASS
981.38	47.0	35.74	-11.260	54.00	18.26	150	84	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

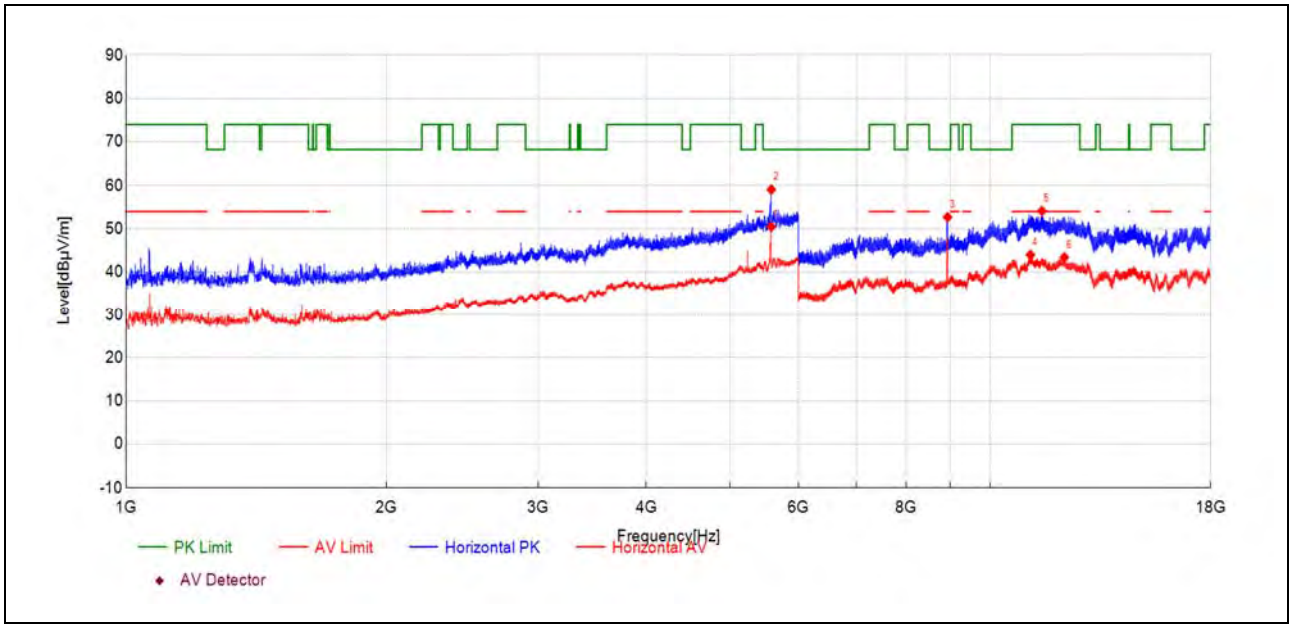
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5396.94	24.5	42.68	18.150	54.00	11.32	150	47	AV	PASS
5991.00	34.7	54.07	19.360	68.23	14.16	150	321	PK	PASS
7067.04	52.2	56.27	4.090	68.23	11.96	150	339	PK	PASS
11124.71	39.7	53.40	13.690	74.00	20.60	150	242	PK	PASS
11334.22	30.1	43.58	13.440	54.00	10.42	150	270	AV	PASS
12125.76	28.5	43.18	14.640	54.00	10.82	150	86	AV	PASS

Plot for Channel 116



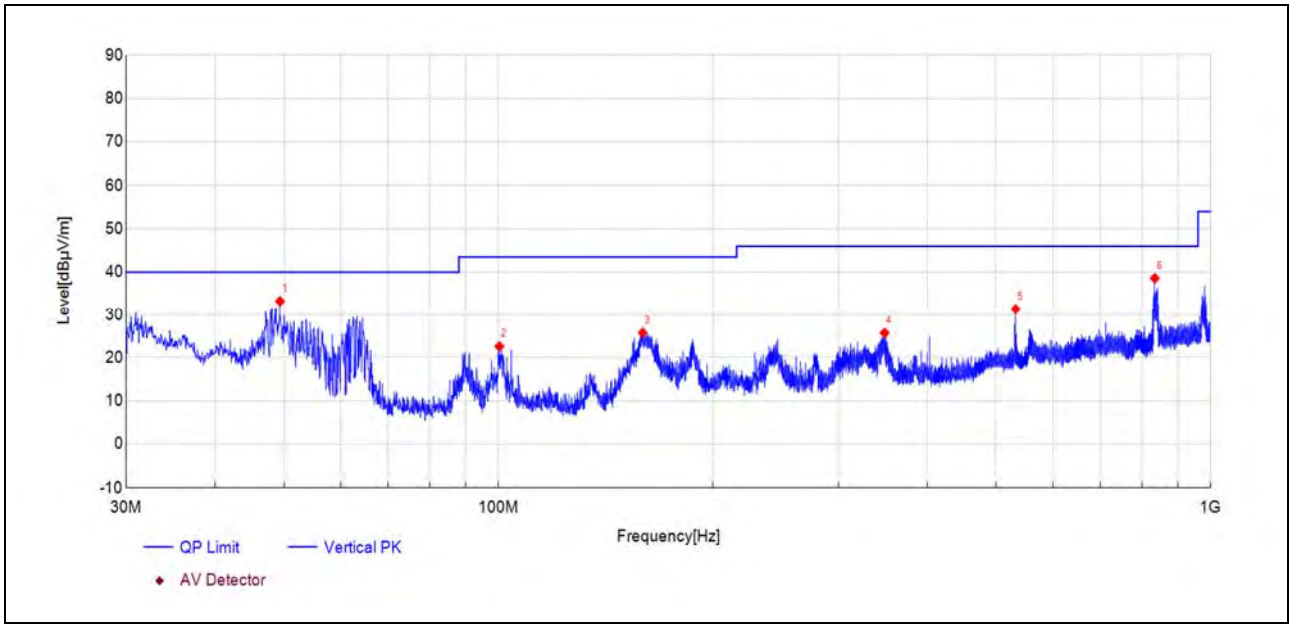
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
64.68	59.5	30.30	-29.220	40.00	9.70	150	139	PK	PASS
159.84	62.4	31.23	-31.150	43.50	12.27	150	77	PK	PASS
201.94	60.5	31.54	-29.000	43.50	11.96	150	146	PK	PASS
532.39	52.9	33.87	-18.980	46.00	12.13	150	98	PK	PASS
840.38	48.4	34.31	-14.050	46.00	11.69	150	160	PK	PASS
974.97	45.0	34.16	-10.800	54.00	19.84	150	42	PK	PASS



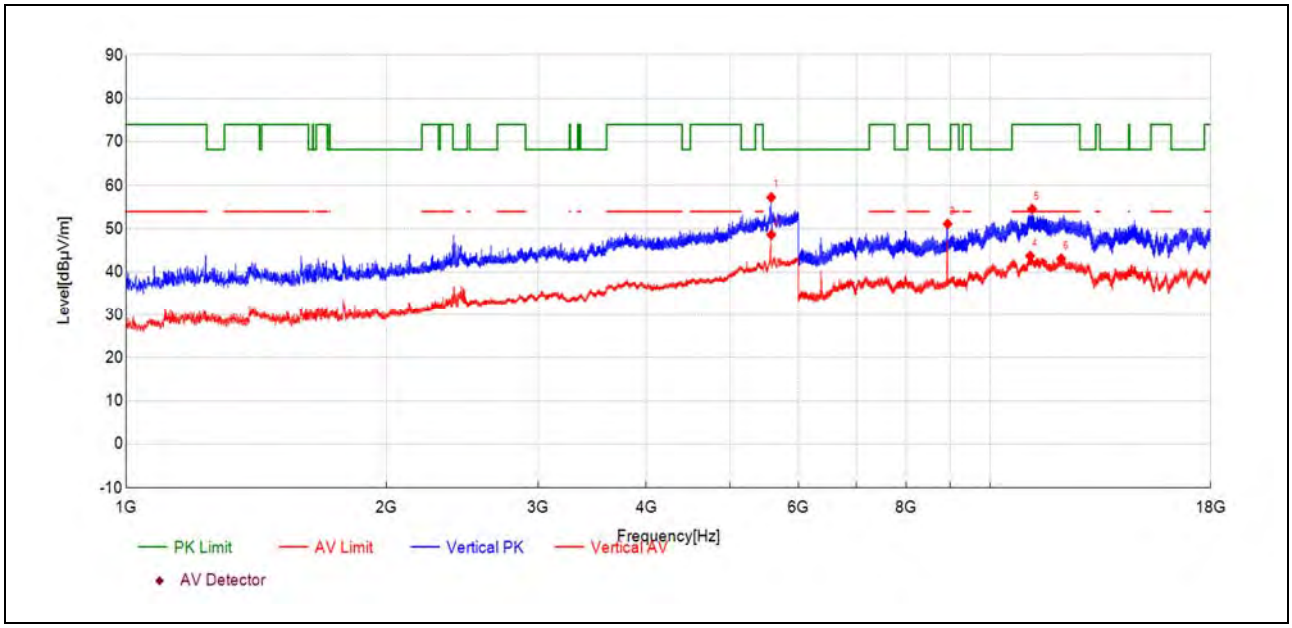
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5581.46	32.7	50.49	17.750	-	-	150	150	AV	NA
5581.46	41.4	59.10	17.750	-	-	150	168	PK	NA
8928.12	46.3	52.73	6.400	68.23	15.50	150	103	PK	PASS
11132.71	30.3	44.00	13.710	54.00	10.00	150	130	AV	PASS
11481.23	39.9	54.14	14.270	74.00	19.86	150	256	PK	PASS
12187.76	28.6	43.41	14.790	54.00	10.59	150	243	AV	PASS



(Antenna Vertical, 30MHz to 1GHz)

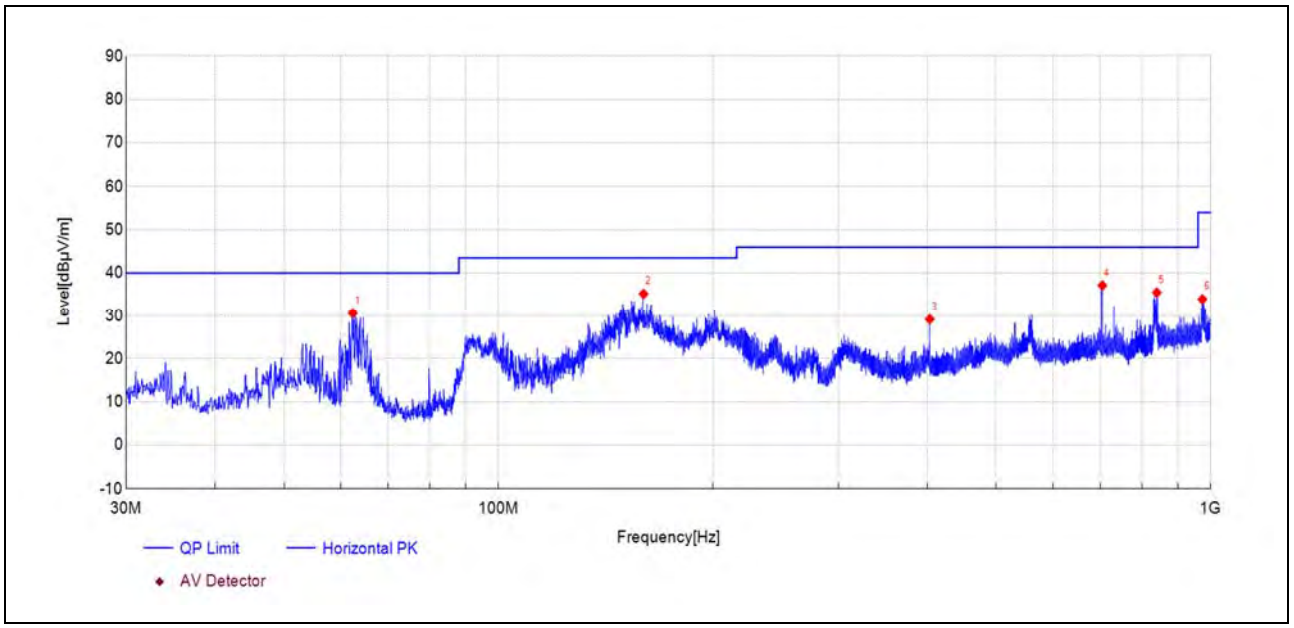
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
49.35	61.4	33.23	-28.150	40.00	6.77	150	105	PK	PASS
100.28	52.3	22.60	-29.650	43.50	20.90	150	360	PK	PASS
159.40	56.9	25.76	-31.110	43.50	17.74	150	119	PK	PASS
348.37	49.7	25.72	-23.970	46.00	20.28	150	16	PK	PASS
532.24	50.3	31.36	-18.980	46.00	14.64	150	105	PK	PASS
834.56	52.4	38.56	-13.800	46.00	7.44	150	140	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

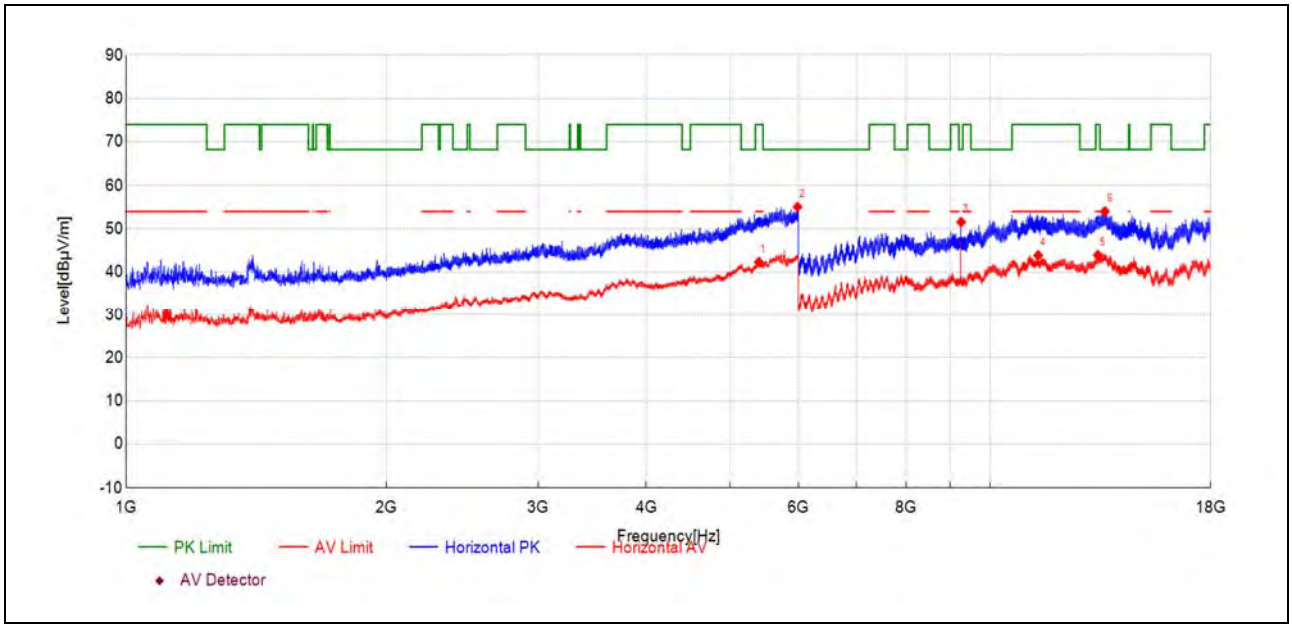
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5580.96	39.6	57.30	17.740	-	-	150	304	PK	NA
5581.46	30.9	48.64	17.750	-	-	150	304	AV	NA
8928.12	44.8	51.15	6.400	68.23	17.08	150	230	PK	PASS
11125.21	30.1	43.75	13.680	54.00	10.25	150	355	AV	PASS
11180.72	40.8	54.59	13.840	74.00	19.41	150	118	PK	PASS
12084.75	28.6	43.11	14.520	54.00	10.89	150	342	AV	PASS

Plot for Channel 157



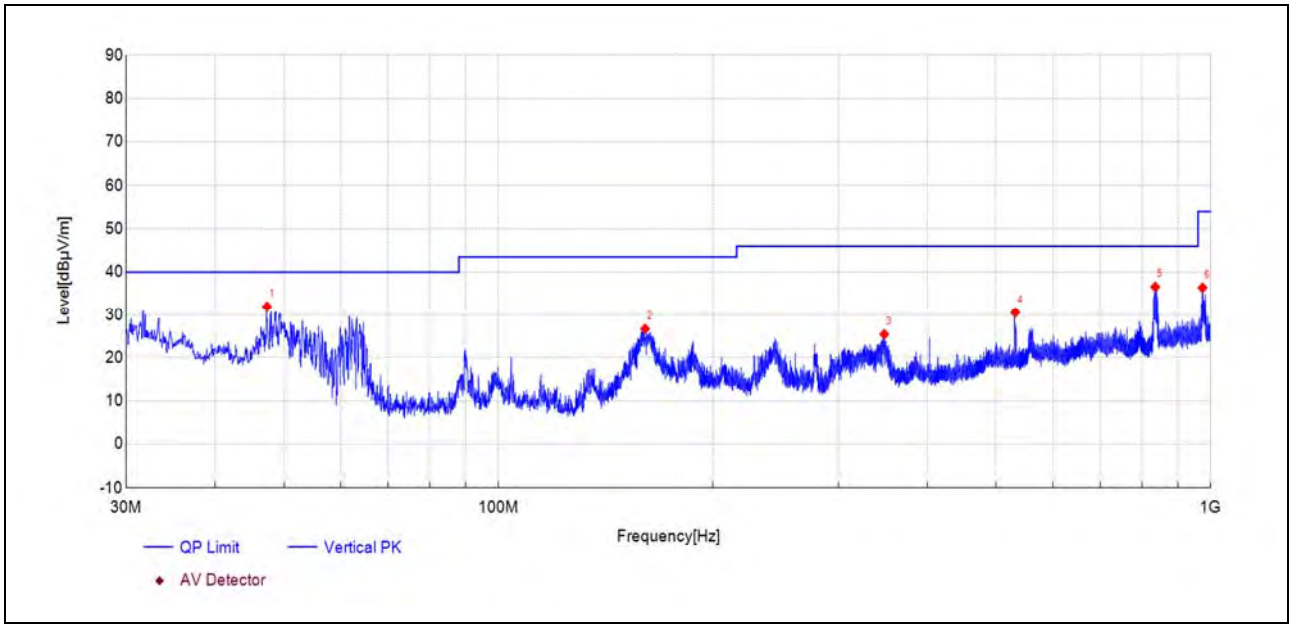
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
62.45	59.3	30.58	-28.750	40.00	9.42	150	131	PK	PASS
159.84	66.3	35.15	-31.150	43.50	8.35	150	97	PK	PASS
403.18	52.0	29.15	-22.860	46.00	16.85	150	358	PK	PASS
704.57	52.7	37.13	-15.600	46.00	8.87	150	165	PK	PASS
840.28	49.5	35.47	-14.060	46.00	10.53	150	165	PK	PASS
973.52	45.0	33.91	-11.050	54.00	20.09	150	42	PK	PASS



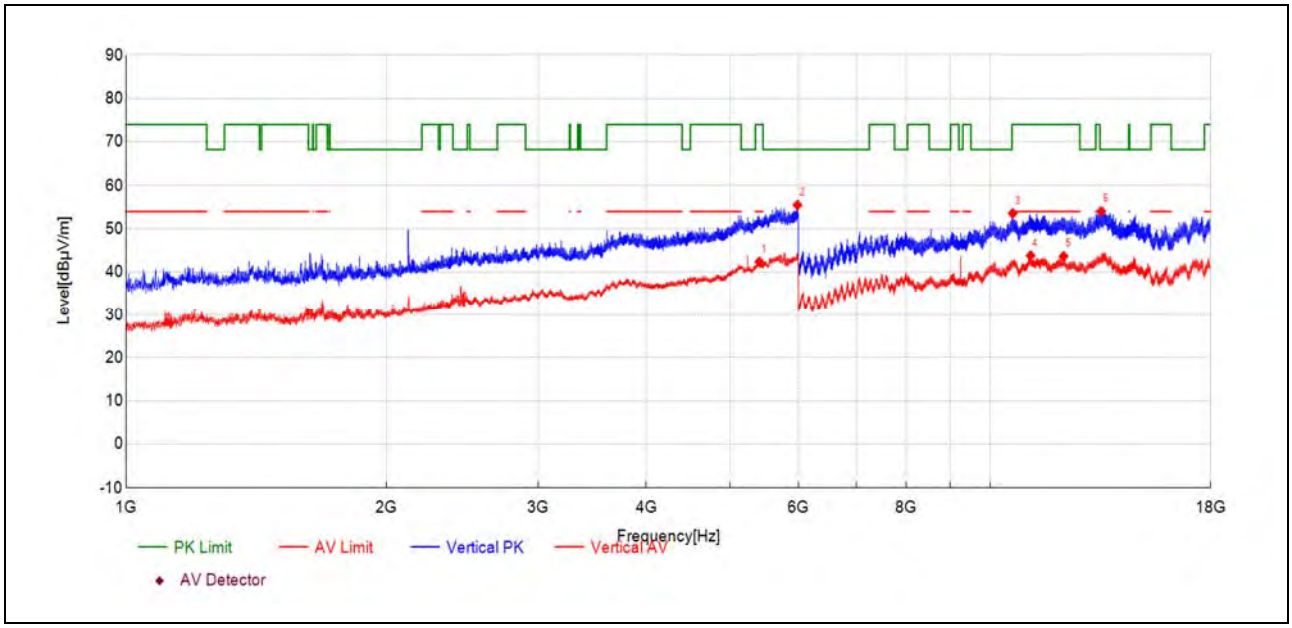
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5399.44	24.3	42.33	18.000	54.00	11.67	150	30	AV	PASS
5986.00	35.4	55.09	19.650	68.23	13.14	150	248	PK	PASS
9256.14	43.8	51.57	7.760	68.23	16.66	150	159	PK	PASS
11364.72	30.1	43.89	13.810	54.00	10.11	150	258	AV	PASS
13324.31	27.5	43.94	16.490	54.00	10.06	150	300	AV	PASS
13577.32	37.0	54.06	17.100	68.23	14.17	150	215	PK	PASS



(Antenna Vertical, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
47.32	60.3	31.91	-28.400	40.00	8.09	150	50	PK	PASS
160.67	57.8	26.68	-31.160	43.50	16.82	150	43	PK	PASS
348.03	49.4	25.44	-23.980	46.00	20.56	150	9	PK	PASS
531.61	49.5	30.50	-18.960	46.00	15.50	150	192	PK	PASS
835.96	50.4	36.56	-13.800	46.00	9.44	150	131	PK	PASS
973.95	47.3	36.36	-10.980	54.00	17.64	150	82	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5406.94	24.5	42.39	17.940	54.00	11.61	150	355	AV	PASS
5985.00	35.9	55.51	19.640	68.23	12.72	150	140	PK	PASS
10619.69	41.4	53.59	12.180	74.00	20.41	150	58	PK	PASS
11138.71	30.3	43.84	13.520	54.00	10.16	150	328	AV	PASS
12164.76	28.9	43.66	14.720	54.00	10.34	150	244	AV	PASS
13447.31	37.4	54.10	16.710	68.23	14.13	150	45	PK	PASS

END OF REPORT