-6dB Bandwidth NVNT ac20 5825MHz Ant1 SISO

-6dB Bandwidth NVNT ac20 5745MHz Ant2 SISO

-6dB Bandwidth NVNT ac20 5785MHz Ant2 SISO

-6dB Bandwidth NVNT ac20 5825MHz Ant2 SISO

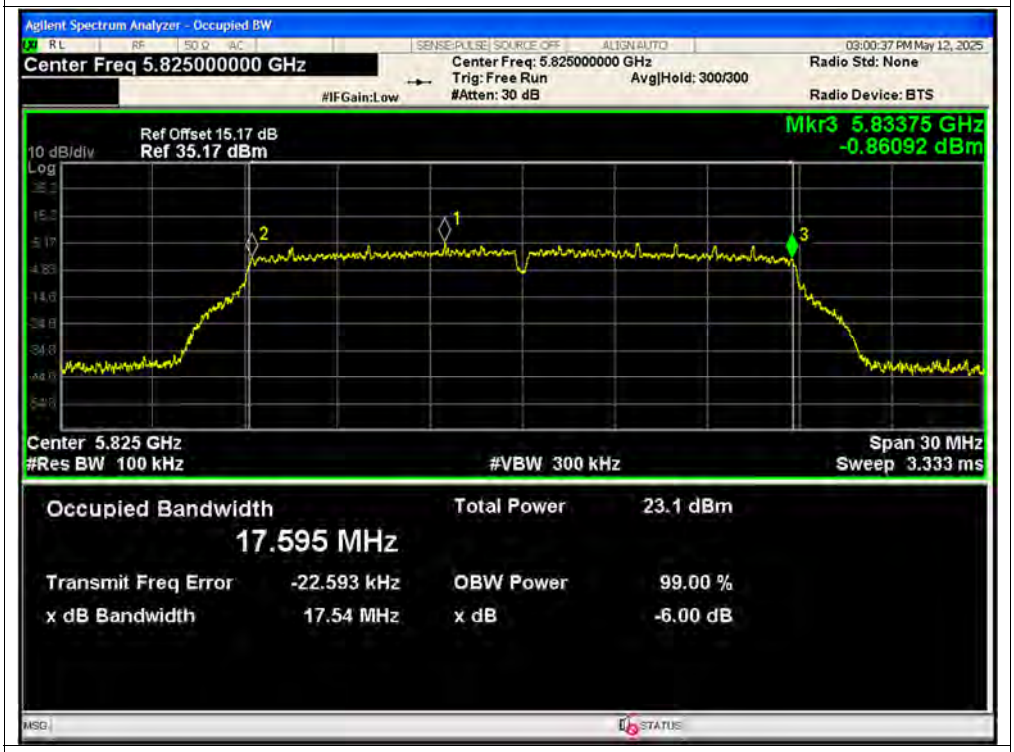
-6dB Bandwidth NVNT ac20 5745MHz Ant1 MIMO

-6dB Bandwidth NVNT ac20 5745MHz Ant2 MIMO

-6dB Bandwidth NVNT ac20 5785MHz Ant1 MIMO

-6dB Bandwidth NVNT ac20 5785MHz Ant2 MIMO

-6dB Bandwidth NVNT ac20 5825MHz Ant1 MIMO



-6dB Bandwidth NVNT ac20 5825MHz Ant2 MIMO

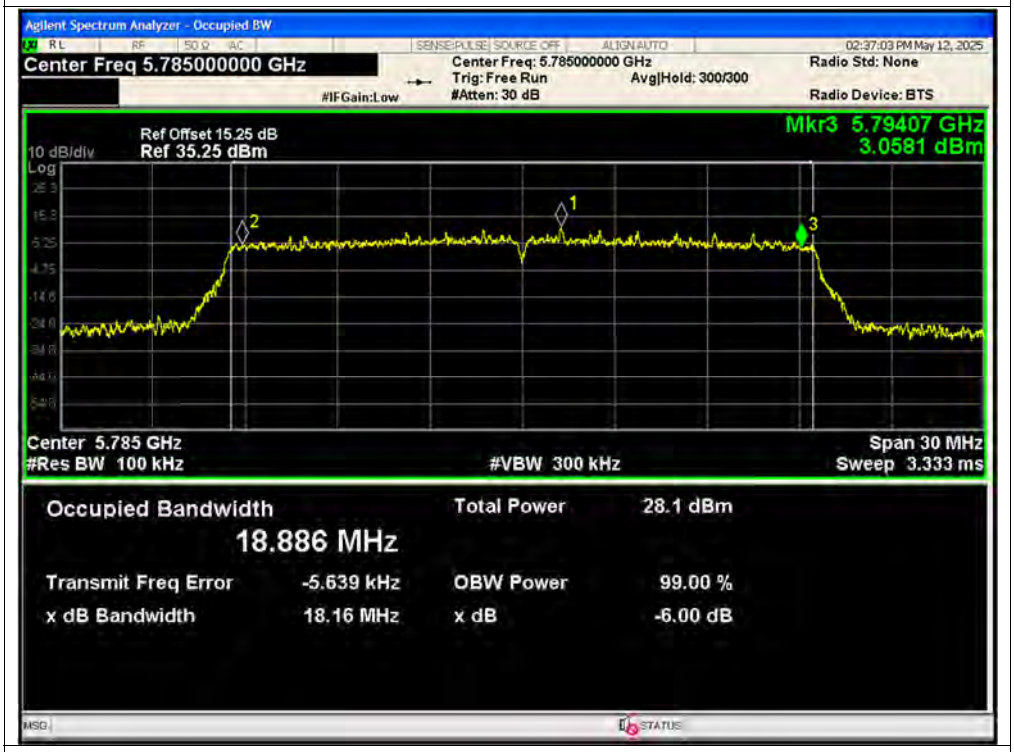
-6dB Bandwidth NVNT ax20 5745MHz Ant1 SISO

-6dB Bandwidth NVNT ax20 5785MHz Ant1 SISO

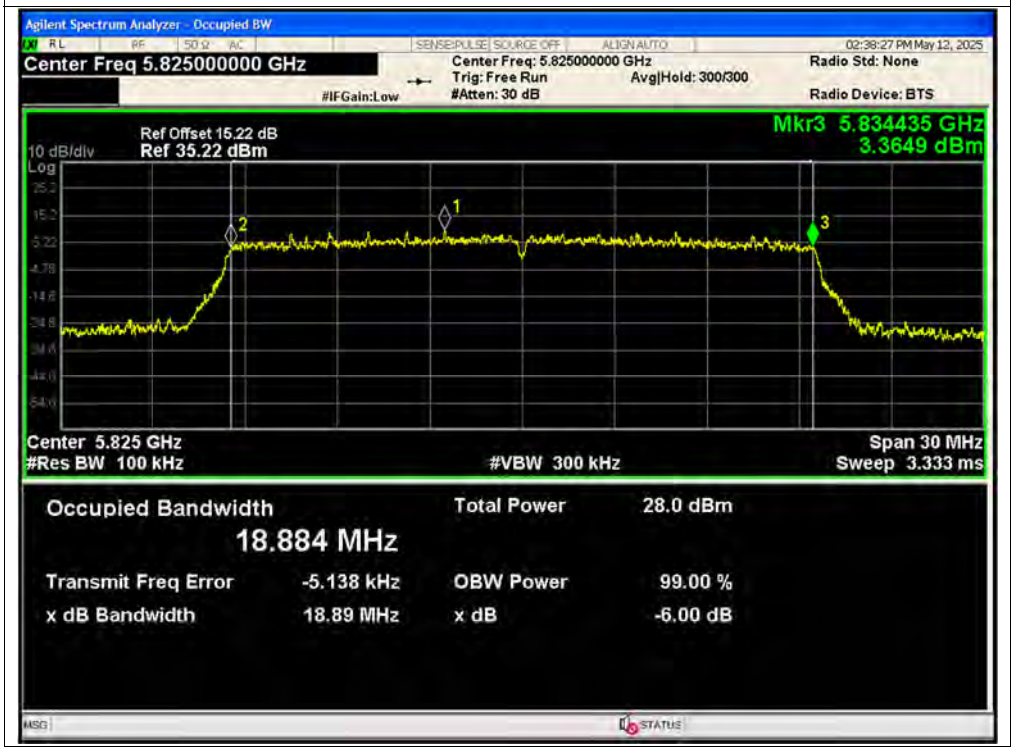
-6dB Bandwidth NVNT ax20 5825MHz Ant1 SISO

-6dB Bandwidth NVNT ax20 5745MHz Ant2 SISO

-6dB Bandwidth NVNT ax20 5785MHz Ant2 SISO



-6dB Bandwidth NVNT ax20 5825MHz Ant2 SISO



-6dB Bandwidth NVNT ax20 5745MHz Ant1 MIMO

-6dB Bandwidth NVNT ax20 5745MHz Ant2 MIMO

-6dB Bandwidth NVNT ax20 5785MHz Ant1 MIMO

-6dB Bandwidth NVNT ax20 5785MHz Ant2 MIMO

-6dB Bandwidth NVNT ax20 5825MHz Ant1 MIMO

-6dB Bandwidth NVNT ax20 5825MHz Ant2 MIMO

A.4. Peak Power Spectral Density

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz) (dBm/500kHz @U-NII-3)	Duty Factor (dB)	Total Conducted PSD (dBm/MHz) (dBm/500kHz @ U-NII-3)	Total Conducted PSD (dBm/MHz) (dBm/500kHz @ U-NII-3)	Verdict
NVNT	a SISO	5180	Ant1	5.1	0.12	5.22	11	Pass
NVNT	a SISO	5220	Ant1	5.15	0.12	5.27	11	Pass
NVNT	a SISO	5240	Ant1	5.34	0.12	5.46	11	Pass
NVNT	a SISO	5745	Ant1	6.77	0.12	6.89	30	Pass
NVNT	a SISO	5785	Ant1	6.65	0.14	6.79	30	Pass
NVNT	a SISO	5825	Ant1	6.73	0.12	6.85	30	Pass
NVNT	a SISO	5180	Ant2	3.4	0.12	3.52	11	Pass
NVNT	a SISO	5220	Ant2	2.68	0.12	2.8	11	Pass
NVNT	a SISO	5240	Ant2	2.91	0.14	3.05	11	Pass
NVNT	a SISO	5745	Ant2	7.62	0.12	7.74	30	Pass
NVNT	a SISO	5785	Ant2	8.19	0.12	8.31	30	Pass
NVNT	a SISO	5825	Ant2	8.07	0.12	8.19	30	Pass
NVNT	n20 SISO	5180	Ant1	5.07	0.15	5.22	11	Pass
NVNT	n20 SISO	5220	Ant1	4.97	0.13	5.1	11	Pass
NVNT	n20 SISO	5240	Ant1	4.93	0.13	5.06	11	Pass
NVNT	n20 SISO	5745	Ant1	7.07	0.13	7.2	30	Pass
NVNT	n20 SISO	5785	Ant1	6.43	0.13	6.56	30	Pass
NVNT	n20 SISO	5825	Ant1	6.59	0.13	6.72	30	Pass
NVNT	n20 SISO	5180	Ant2	3.56	0.15	3.71	11	Pass
NVNT	n20 SISO	5220	Ant2	3.19	0.15	3.34	11	Pass
NVNT	n20 SISO	5240	Ant2	3.79	0.13	3.92	11	Pass
NVNT	n20	5745	Ant2	7.3	0.13	7.43	30	Pass

	SISO							
NVNT	n20 SISO	5785	Ant2	7.37	0.13	7.5	30	Pass
NVNT	n20 SISO	5825	Ant2	7.74	0.13	7.87	30	Pass
NVNT	n20 MIMO	5180	Ant1	0.42	0.13	0.55	11	Pass
NVNT	n20 MIMO	5180	Ant2	0.41	0.13	0.54	11	Pass
NVNT	n20 MIMO	5180	Sum	NaN	NaN	3.56	8.82	Pass
NVNT	n20 MIMO	5220	Ant1	0.67	0.13	0.8	11	Pass
NVNT	n20 MIMO	5220	Ant2	0.12	0.13	0.25	11	Pass
NVNT	n20 MIMO	5220	Sum	NaN	NaN	3.54	8.82	Pass
NVNT	n20 MIMO	5240	Ant1	1.31	0.13	1.44	11	Pass
NVNT	n20 MIMO	5240	Ant2	0.45	0.13	0.58	11	Pass
NVNT	n20 MIMO	5240	Sum	NaN	NaN	4.03	8.82	Pass
NVNT	n20 MIMO	5745	Ant1	3.56	0.13	3.69	30	Pass
NVNT	n20 MIMO	5745	Ant2	3.69	0.13	3.82	30	Pass
NVNT	n20 MIMO	5745	Sum	NaN	NaN	6.77	27.82	Pass
NVNT	n20 MIMO	5785	Ant1	3.33	0.13	3.46	30	Pass
NVNT	n20 MIMO	5785	Ant2	4.24	0.13	4.37	30	Pass
NVNT	n20 MIMO	5785	Sum	NaN	NaN	6.95	27.82	Pass
NVNT	n20 MIMO	5825	Ant1	3.02	0.13	3.15	30	Pass
NVNT	n20 MIMO	5825	Ant2	4.57	0.13	4.7	30	Pass

NVNT	n20 MIMO	5825	Sum	NaN	NaN	7.01	27.82	Pass
NVNT	ac20 SISO	5180	Ant1	4.76	0.15	4.91	11	Pass
NVNT	ac20 SISO	5220	Ant1	5.39	0.13	5.52	11	Pass
NVNT	ac20 SISO	5240	Ant1	4.95	0.13	5.08	11	Pass
NVNT	ac20 SISO	5745	Ant1	6.64	0.13	6.77	30	Pass
NVNT	ac20 SISO	5785	Ant1	6.36	0.13	6.49	30	Pass
NVNT	ac20 SISO	5825	Ant1	6.59	0.13	6.72	30	Pass
NVNT	ac20 SISO	5180	Ant2	3.16	0.13	3.29	11	Pass
NVNT	ac20 SISO	5220	Ant2	3.81	0.15	3.96	11	Pass
NVNT	ac20 SISO	5240	Ant2	3.74	0.21	3.95	11	Pass
NVNT	ac20 SISO	5745	Ant2	7.37	0.13	7.5	30	Pass
NVNT	ac20 SISO	5785	Ant2	7.75	0.13	7.88	30	Pass
NVNT	ac20 SISO	5825	Ant2	7.79	0.15	7.94	30	Pass
NVNT	ac20 MIMO	5180	Ant1	0.37	0.13	0.5	11	Pass
NVNT	ac20 MIMO	5180	Ant2	-0.17	0.13	-0.04	11	Pass
NVNT	ac20 MIMO	5180	Sum	NaN	NaN	3.24	8.82	Pass
NVNT	ac20 MIMO	5220	Ant1	0.66	0.13	0.79	11	Pass
NVNT	ac20 MIMO	5220	Ant2	0.58	0.13	0.71	11	Pass
NVNT	ac20 MIMO	5220	Sum	NaN	NaN	3.77	8.82	Pass
NVNT	ac20	5240	Ant1	1.21	0.13	1.34	11	Pass

	MIMO							
NVNT	ac20 MIMO	5240	Ant2	0.52	0.13	0.65	11	Pass
NVNT	ac20 MIMO	5240	Sum	NaN	NaN	4.01	8.82	Pass
NVNT	ac20 MIMO	5745	Ant1	3.63	0.15	3.78	30	Pass
NVNT	ac20 MIMO	5745	Ant2	4.35	0.15	4.5	30	Pass
NVNT	ac20 MIMO	5745	Sum	NaN	NaN	7.16	27.82	Pass
NVNT	ac20 MIMO	5785	Ant1	3.48	0.13	3.61	30	Pass
NVNT	ac20 MIMO	5785	Ant2	4.19	0.13	4.32	30	Pass
NVNT	ac20 MIMO	5785	Sum	NaN	NaN	6.99	27.82	Pass
NVNT	ac20 MIMO	5825	Ant1	3.18	0.13	3.31	30	Pass
NVNT	ac20 MIMO	5825	Ant2	1.89	0.13	2.02	30	Pass
NVNT	ac20 MIMO	5825	Sum	NaN	NaN	5.73	27.82	Pass
NVNT	ax20 SISO	5180	Ant1	4.7	0.13	4.83	11	Pass
NVNT	ax20 SISO	5220	Ant1	5.31	0.15	5.46	11	Pass
NVNT	ax20 SISO	5240	Ant1	5.45	0.13	5.58	11	Pass
NVNT	ax20 SISO	5745	Ant1	7.03	0.13	7.16	30	Pass
NVNT	ax20 SISO	5785	Ant1	5.69	0.13	5.82	30	Pass
NVNT	ax20 SISO	5825	Ant1	6.81	0.13	6.94	30	Pass
NVNT	ax20 SISO	5180	Ant2	3.01	0.13	3.14	11	Pass
NVNT	ax20 SISO	5220	Ant2	3.78	0.13	3.91	11	Pass

NVNT	ax20 SISO	5240	Ant2	3.77	0.15	3.92	11	Pass
NVNT	ax20 SISO	5745	Ant2	7.34	0.13	7.47	30	Pass
NVNT	ax20 SISO	5785	Ant2	7.51	0.17	7.68	30	Pass
NVNT	ax20 SISO	5825	Ant2	7.46	0.17	7.63	30	Pass
NVNT	ax20 MIMO	5180	Ant1	0.26	0.17	0.43	11	Pass
NVNT	ax20 MIMO	5180	Ant2	-0.38	0.17	-0.21	11	Pass
NVNT	ax20 MIMO	5180	Sum	NaN	NaN	3.14	8.82	Pass
NVNT	ax20 MIMO	5220	Ant1	1.02	0.17	1.19	11	Pass
NVNT	ax20 MIMO	5220	Ant2	0.3	0.17	0.47	11	Pass
NVNT	ax20 MIMO	5220	Sum	NaN	NaN	3.86	8.82	Pass
NVNT	ax20 MIMO	5240	Ant1	0.99	0.17	1.16	11	Pass
NVNT	ax20 MIMO	5240	Ant2	0.11	0.17	0.28	11	Pass
NVNT	ax20 MIMO	5240	Sum	NaN	NaN	3.75	8.82	Pass
NVNT	ax20 MIMO	5745	Ant1	3.35	0.17	3.52	30	Pass
NVNT	ax20 MIMO	5745	Ant2	3.36	0.17	3.53	30	Pass
NVNT	ax20 MIMO	5745	Sum	NaN	NaN	6.53	27.82	Pass
NVNT	ax20 MIMO	5785	Ant1	3.07	0.17	3.24	30	Pass
NVNT	ax20 MIMO	5785	Ant2	3.85	0.17	4.02	30	Pass
NVNT	ax20 MIMO	5785	Sum	NaN	NaN	6.66	27.82	Pass
NVNT	ax20	5825	Ant1	2.73	0.17	2.9	30	Pass

	MIMO							
NVNT	ax20 MIMO	5825	Ant2	4.26	0.17	4.43	30	Pass
NVNT	ax20 MIMO	5825	Sum	NaN	NaN	6.74	27.82	Pass

Note: Directional gain = $10\log[(10^{G0/20}+10^{G1/20})^2/2$ = 8.18dBi＞6dBi, so the power spectral density limit shall be reduced to 11-(8.18-6) =8.82dBm/MHz for 5.18-5.24GHz band and reduced to 30-(8.18-6) = 27.82dBm/500kHz for 5.745-5.825GHz band.

Test Graphs
PSD NVNT a 5180MHz Ant1 SISO

PSD NVNT a 5220MHz Ant1 SISO

PSD NVNT a 5240MHz Ant1 SISO

PSD NVNT a 5745MHz Ant1 SISO

PSD NVNT a 5785MHz Ant1 SISO

PSD NVNT a 5825MHz Ant1 SISO

PSD NVNT a 5180MHz Ant2 SISO

PSD NVNT a 5220MHz Ant2 SISO

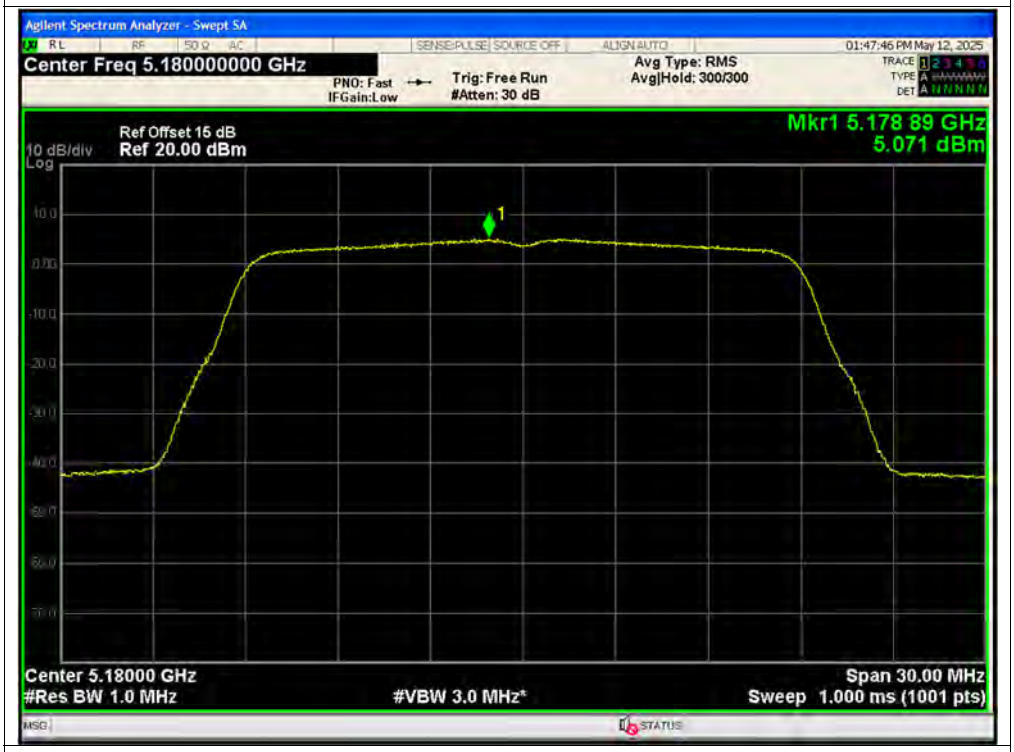
PSD NVNT a 5240MHz Ant2 SISO

PSD NVNT a 5745MHz Ant2 SISO

PSD NVNT a 5785MHz Ant2 SISO

PSD NVNT a 5825MHz Ant2 SISO

PSD NVNT n20 5180MHz Ant1 SISO



PSD NVNT n20 5220MHz Ant1 SISO

PSD NVNT n20 5240MHz Ant1 SISO

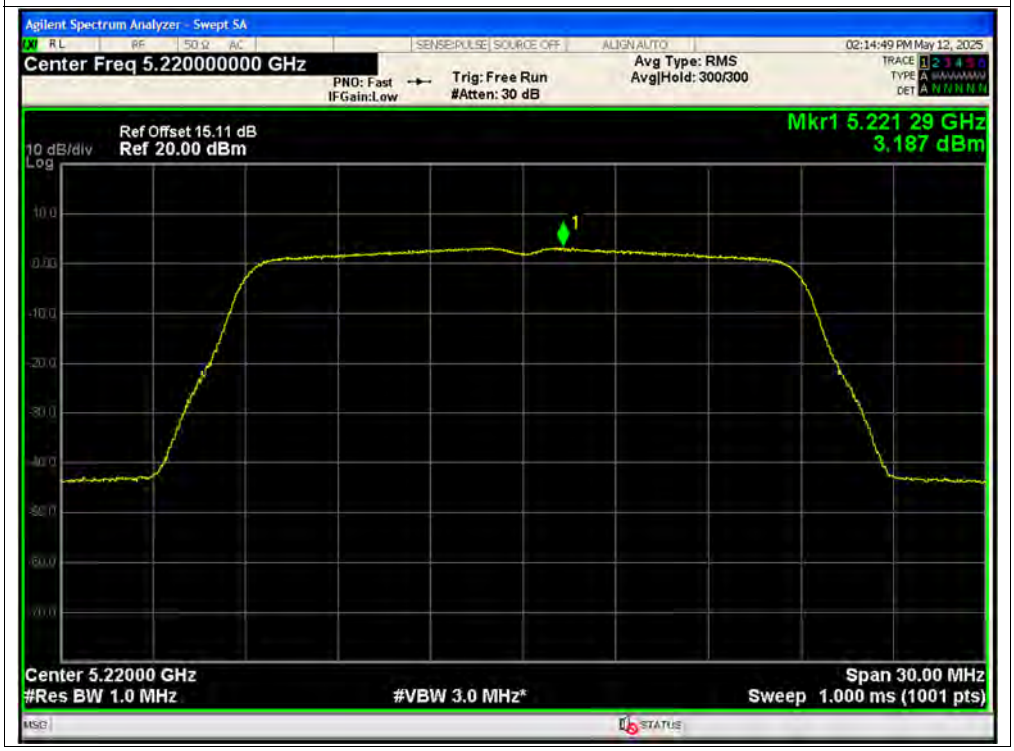
PSD NVNT n20 5745MHz Ant1 SISO

PSD NVNT n20 5785MHz Ant1 SISO

PSD NVNT n20 5825MHz Ant1 SISO

PSD NVNT n20 5180MHz Ant2 SISO

PSD NVNT n20 5220MHz Ant2 SISO



PSD NVNT n20 5240MHz Ant2 SISO

PSD NVNT n20 5745MHz Ant2 SISO

PSD NVNT n20 5785MHz Ant2 SISO

PSD NVNT n20 5825MHz Ant2 SISO

PSD NVNT n20 5180MHz Ant1 MIMO

PSD NVNT n20 5180MHz Ant2 MIMO

PSD NVNT n20 5220MHz Ant1 MIMO

PSD NVNT n20 5220MHz Ant2 MIMO

PSD NVNT n20 5240MHz Ant1 MIMO

PSD NVNT n20 5240MHz Ant2 MIMO

PSD NVNT n20 5745MHz Ant1 MIMO

PSD NVNT n20 5745MHz Ant2 MIMO

PSD NVNT n20 5785MHz Ant1 MIMO

PSD NVNT n20 5785MHz Ant2 MIMO

PSD NVNT n20 5825MHz Ant1 MIMO

PSD NVNT n20 5825MHz Ant2 MIMO

PSD NVNT ac20 5180MHz Ant1 SISO

PSD NVNT ac20 5220MHz Ant1 SISO

PSD NVNT ac20 5240MHz Ant1 SISO

PSD NVNT ac20 5745MHz Ant1 SISO

PSD NVNT ac20 5785MHz Ant1 SISO

PSD NVNT ac20 5825MHz Ant1 SISO

PSD NVNT ac20 5180MHz Ant2 SISO

PSD NVNT ac20 5220MHz Ant2 SISO

PSD NVNT ac20 5240MHz Ant2 SISO

PSD NVNT ac20 5745MHz Ant2 SISO

PSD NVNT ac20 5785MHz Ant2 SISO

PSD NVNT ac20 5825MHz Ant2 SISO

PSD NVNT ac20 5180MHz Ant1 MIMO

PSD NVNT ac20 5180MHz Ant2 MIMO

PSD NVNT ac20 5220MHz Ant1 MIMO

PSD NVNT ac20 5220MHz Ant2 MIMO

PSD NVNT ac20 5240MHz Ant1 MIMO

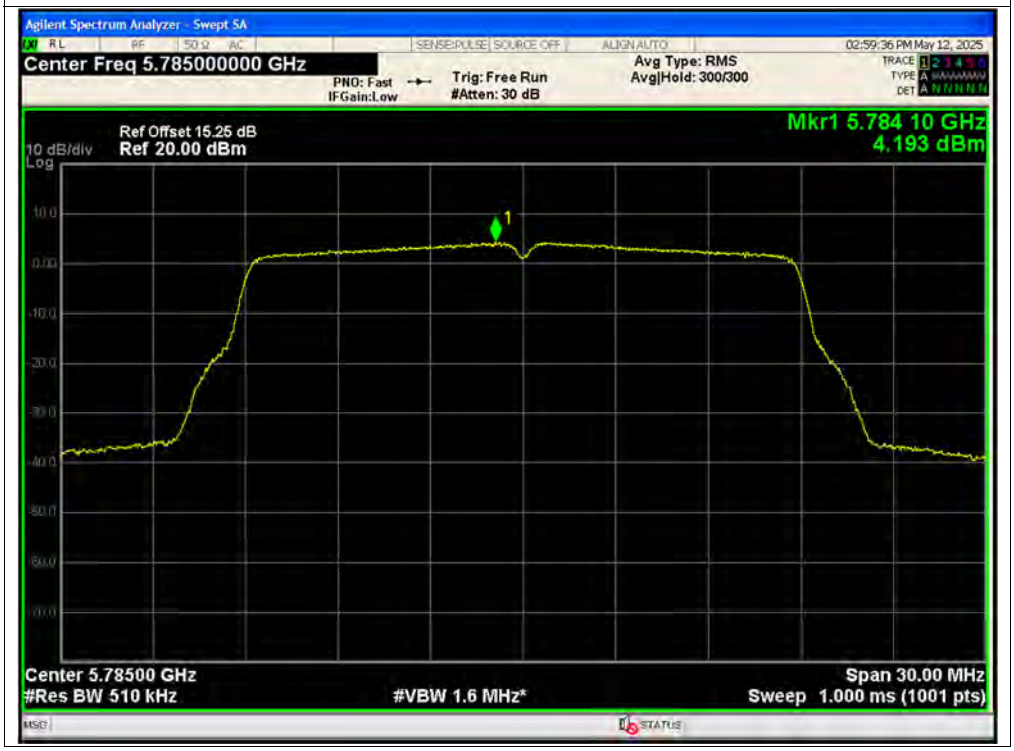
PSD NVNT ac20 5240MHz Ant2 MIMO

PSD NVNT ac20 5745MHz Ant1 MIMO

PSD NVNT ac20 5745MHz Ant2 MIMO

PSD NVNT ac20 5785MHz Ant1 MIMO

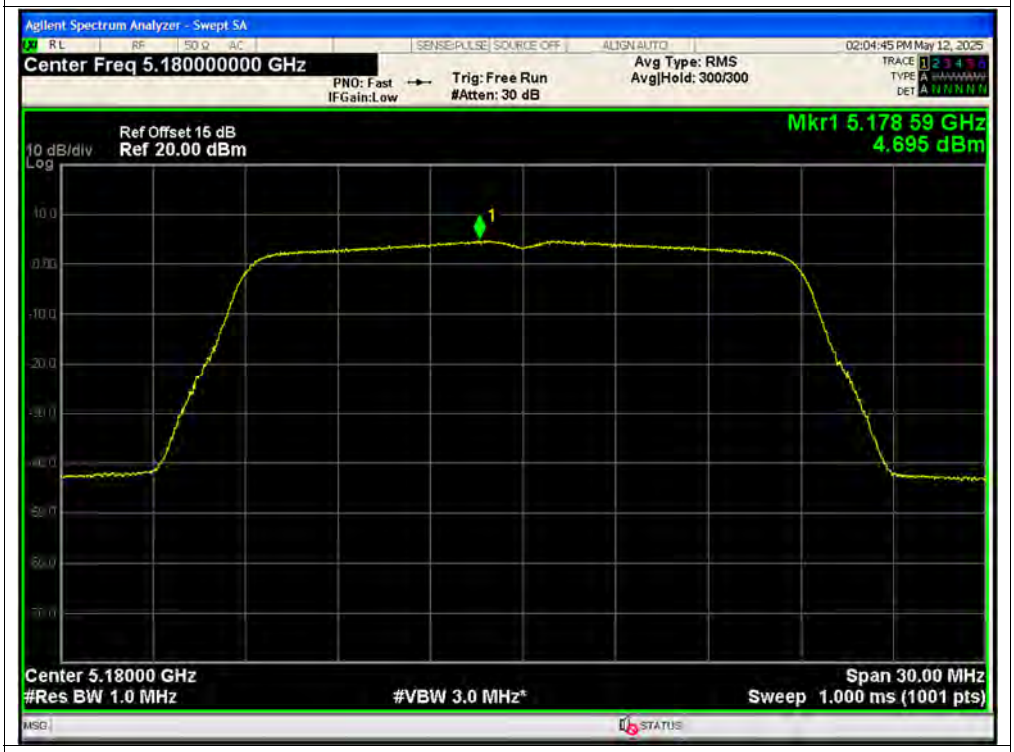
PSD NVNT ac20 5785MHz Ant2 MIMO



PSD NVNT ac20 5825MHz Ant1 MIMO

PSD NVNT ac20 5825MHz Ant2 MIMO

PSD NVNT ax20 5180MHz Ant1 SISO



PSD NVNT ax20 5220MHz Ant1 SISO

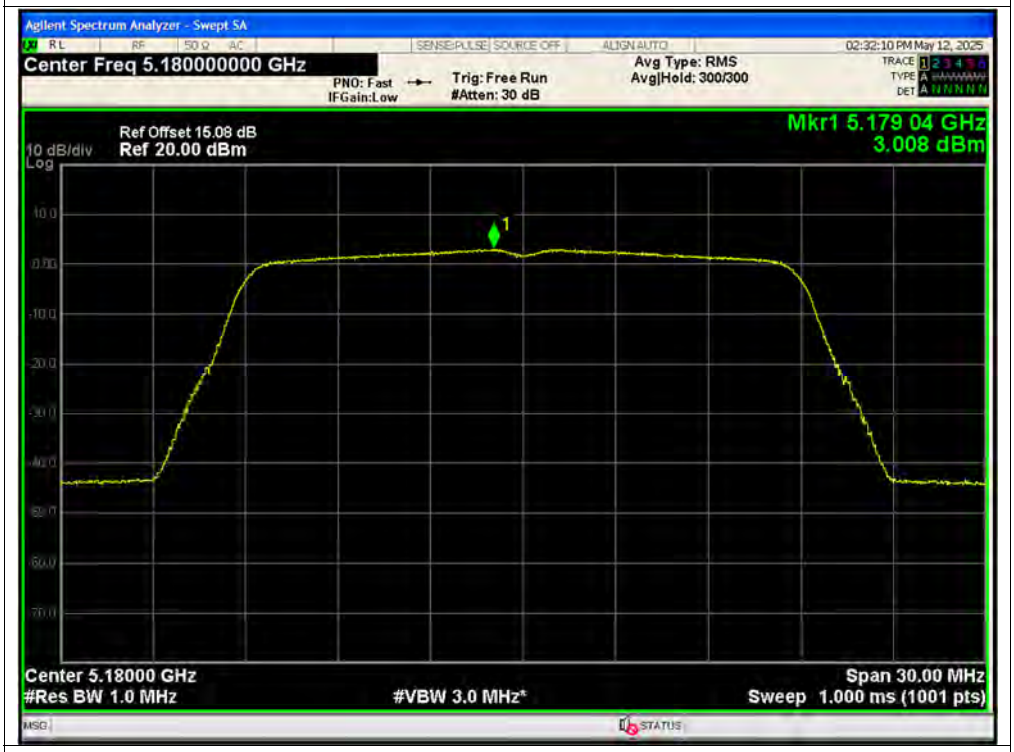
PSD NVNT ax20 5240MHz Ant1 SISO

PSD NVNT ax20 5745MHz Ant1 SISO

PSD NVNT ax20 5785MHz Ant1 SISO

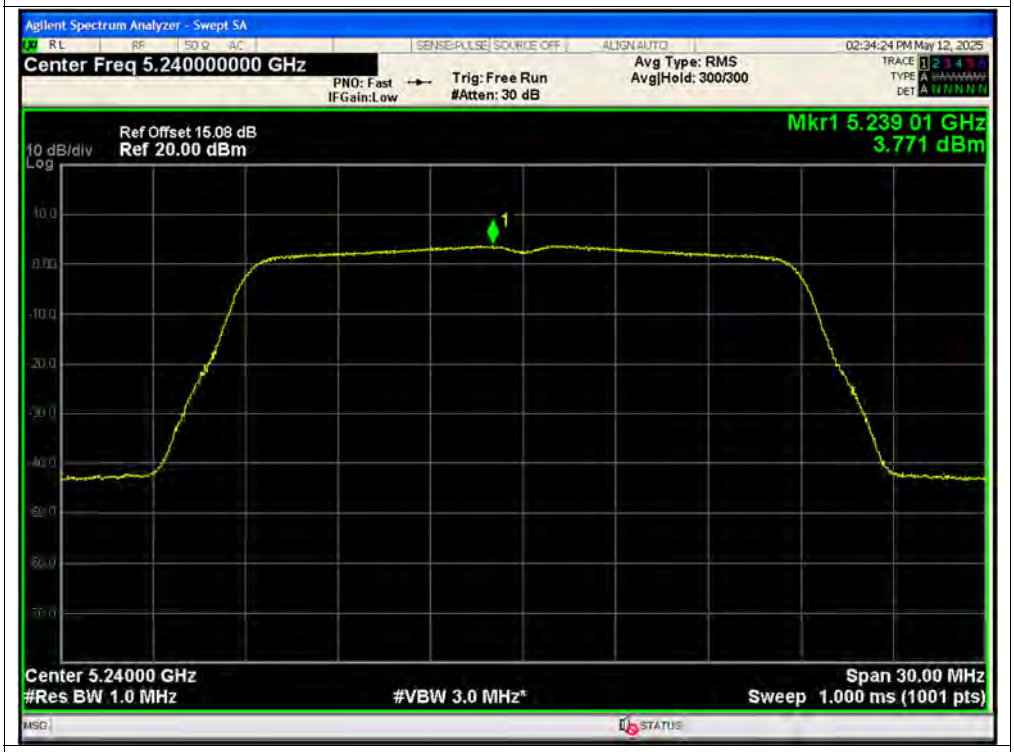
PSD NVNT ax20 5825MHz Ant1 SISO

PSD NVNT ax20 5180MHz Ant2 SISO



PSD NVNT ax20 5220MHz Ant2 SISO

PSD NVNT ax20 5240MHz Ant2 SISO



PSD NVNT ax20 5745MHz Ant2 SISO

PSD NVNT ax20 5785MHz Ant2 SISO

PSD NVNT ax20 5825MHz Ant2 SISO

PSD NVNT ax20 5180MHz Ant1 MIMO

PSD NVNT ax20 5180MHz Ant2 MIMO

PSD NVNT ax20 5220MHz Ant1 MIMO

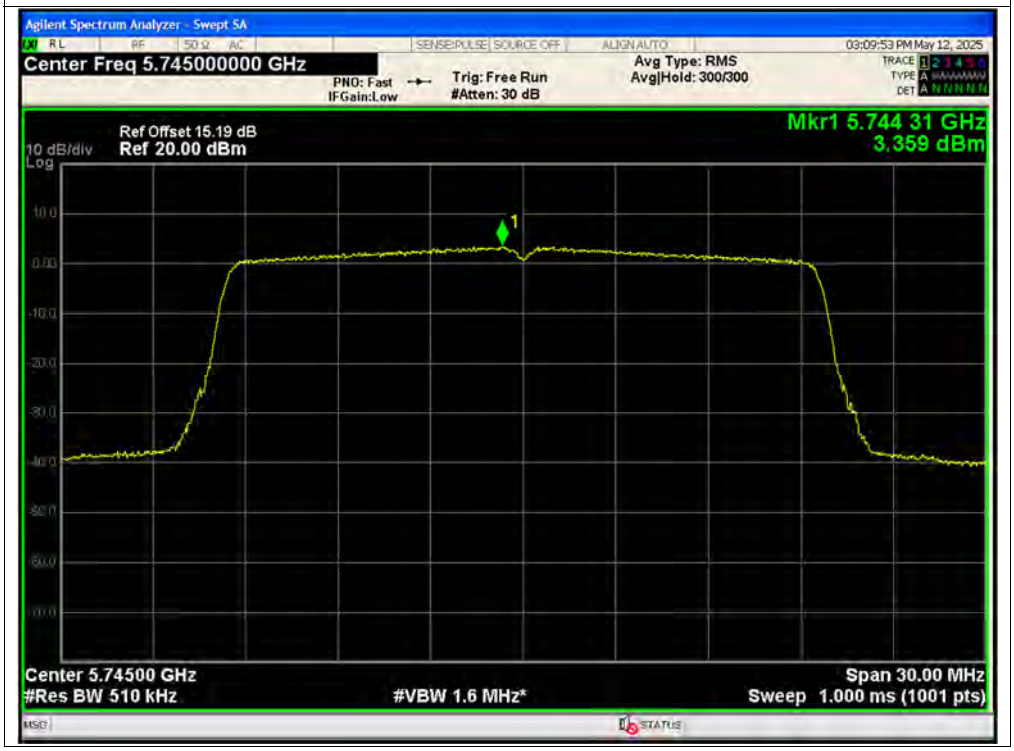
PSD NVNT ax20 5220MHz Ant2 MIMO

PSD NVNT ax20 5240MHz Ant1 MIMO

PSD NVNT ax20 5240MHz Ant2 MIMO

PSD NVNT ax20 5745MHz Ant1 MIMO

PSD NVNT ax20 5745MHz Ant2 MIMO

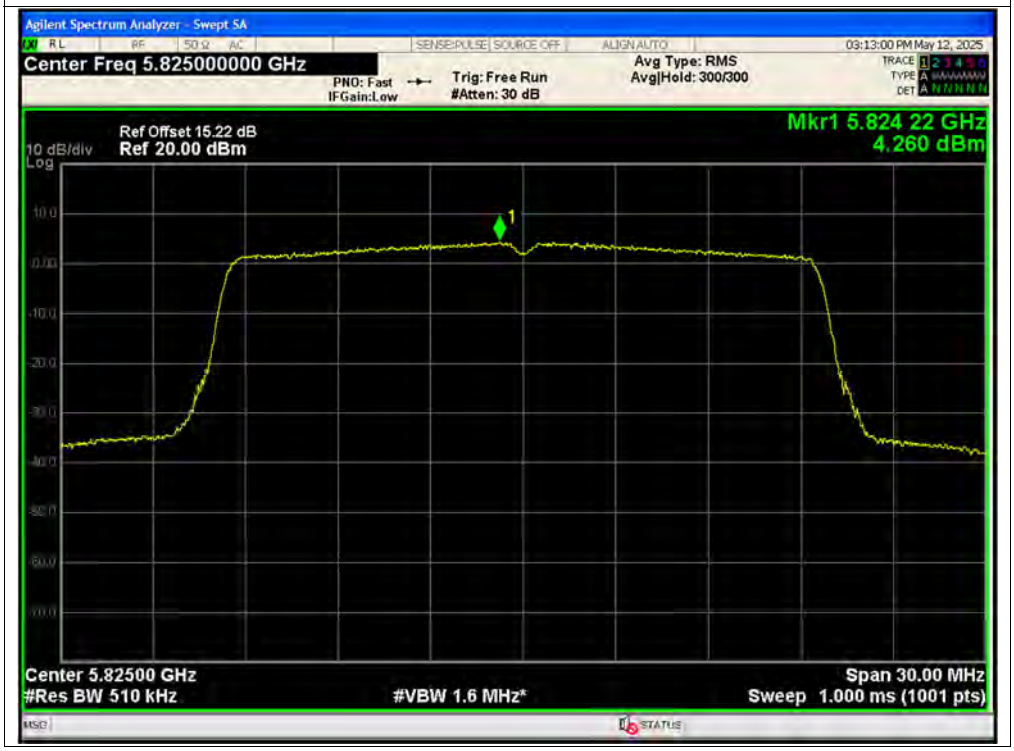


PSD NVNT ax20 5785MHz Ant1 MIMO

PSD NVNT ax20 5785MHz Ant2 MIMO

PSD NVNT ax20 5825MHz Ant1 MIMO

PSD NVNT ax20 5825MHz Ant2 MIMO



A.5. Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 6.9V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
20C 9.6V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
20C 10.95V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
-10C 9.6V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
0C 9.6V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
10C 9.6V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
30C 9.6V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
40C 9.6V	Carrier	5180	Ant1	5179.981	-19000	-3.67	25	Pass
20C 6.9V	Carrier	5260	Ant1	5259.98	-20000	-3.8	25	Pass
20C 9.6V	Carrier	5260	Ant1	5259.98	-20000	-3.8	25	Pass
20C 10.95V	Carrier	5260	Ant1	5259.98	-20000	-3.8	25	Pass
-10C 9.6V	Carrier	5260	Ant1	5259.98	-20000	-3.8	25	Pass
0C 9.6V	Carrier	5260	Ant1	5259.98	-20000	-3.8	25	Pass
10C 9.6V	Carrier	5260	Ant1	5259.98	-20000	-3.8	25	Pass
30C 9.6V	Carrier	5260	Ant1	5259.979	-21000	-3.99	25	Pass
40C 9.6V	Carrier	5260	Ant1	5259.979	-21000	-3.99	25	Pass
20C 6.9V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
20C 9.6V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
20C 10.95V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
-10C 9.6V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
0C 9.6V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
10C 9.6V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
30C 9.6V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
40C 9.6V	Carrier	5500	Ant1	5499.978	-22000	-4	25	Pass
20C 6.9V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
20C 9.6V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
20C 10.95V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
-10C 9.6V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
0C 9.6V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
10C 9.6V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
30C 9.6V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass
40C 9.6V	Carrier	5745	Ant1	5744.978	-22000	-3.83	25	Pass

A.6. Conducted Emission

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test Setup:

Test Mode: EUT+Adapter+Router+RJ45+Camera1+Camera2+Camera3+Camera4+Mobile phone+WIFI TX

Test voltage: AC 120V/60Hz

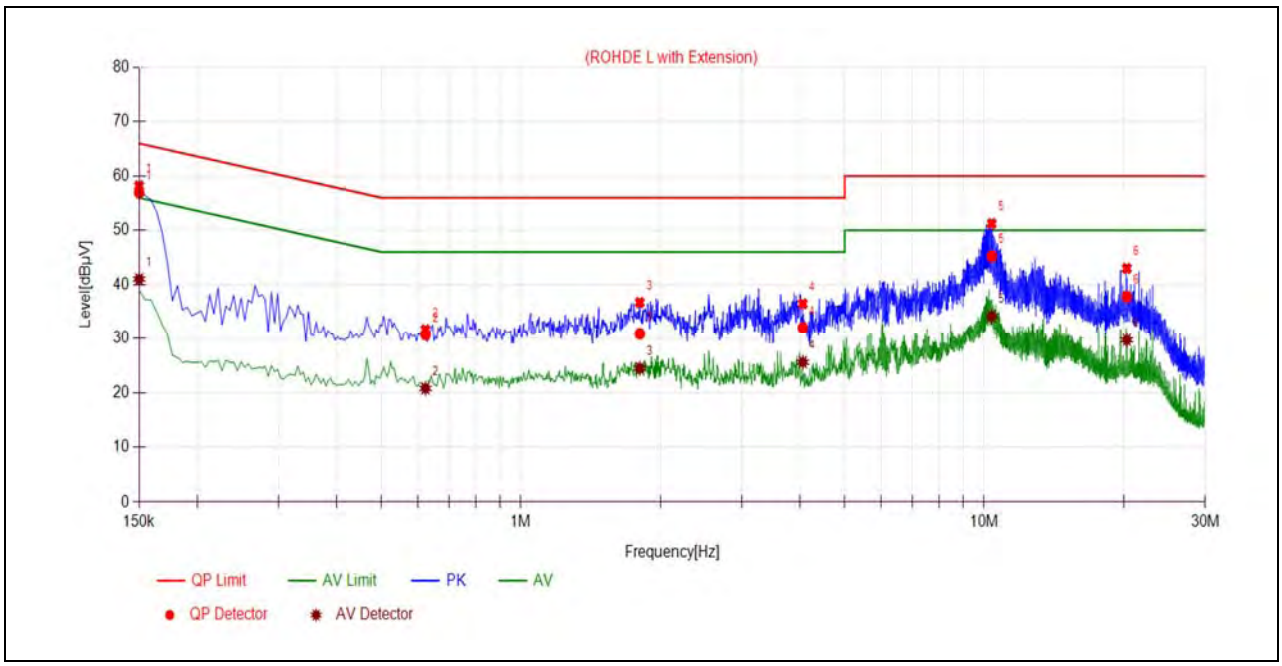
The measurement results are obtained as below:

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

U_R: Receiver Reading

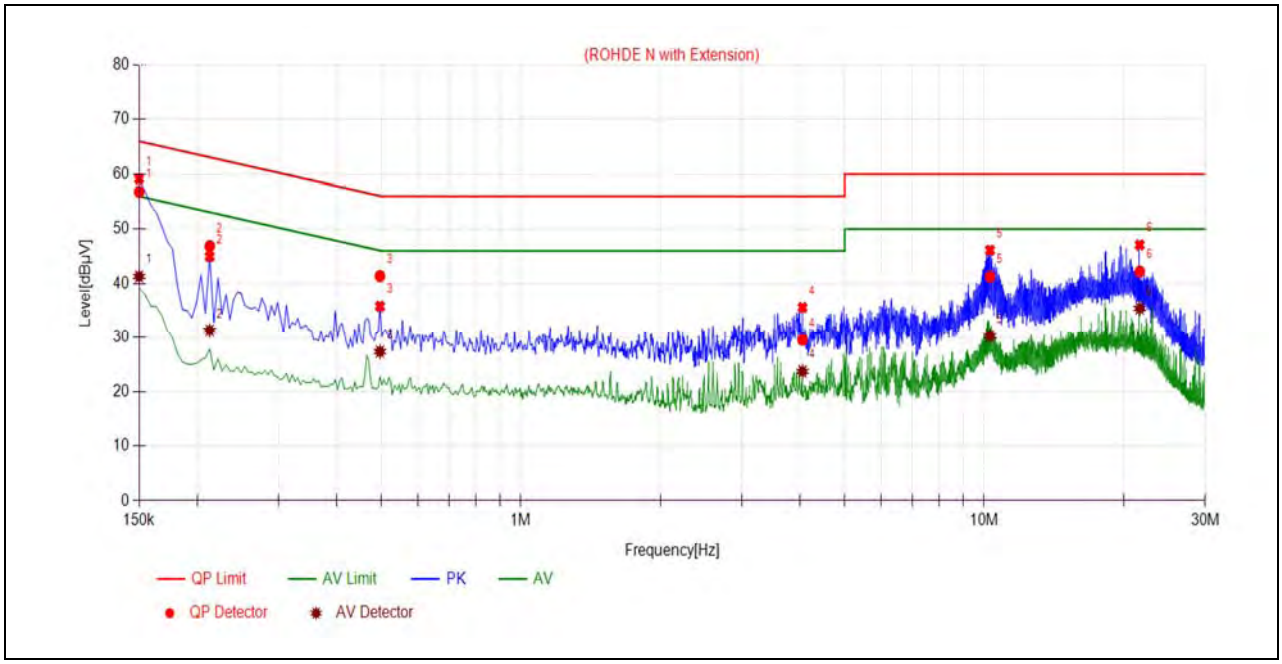
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	56.93	41.02	66.00	56.00	Line	PASS
2	0.6225	30.71	20.77	56.00	46.00		PASS
3	1.8060	30.87	24.45	56.00	46.00		PASS
4	4.0602	32.00	25.59	56.00	46.00		PASS
5	10.3823	45.22	34.17	60.00	50.00		PASS
6	20.3185	37.80	29.69	60.00	50.00		PASS



(N Phase)

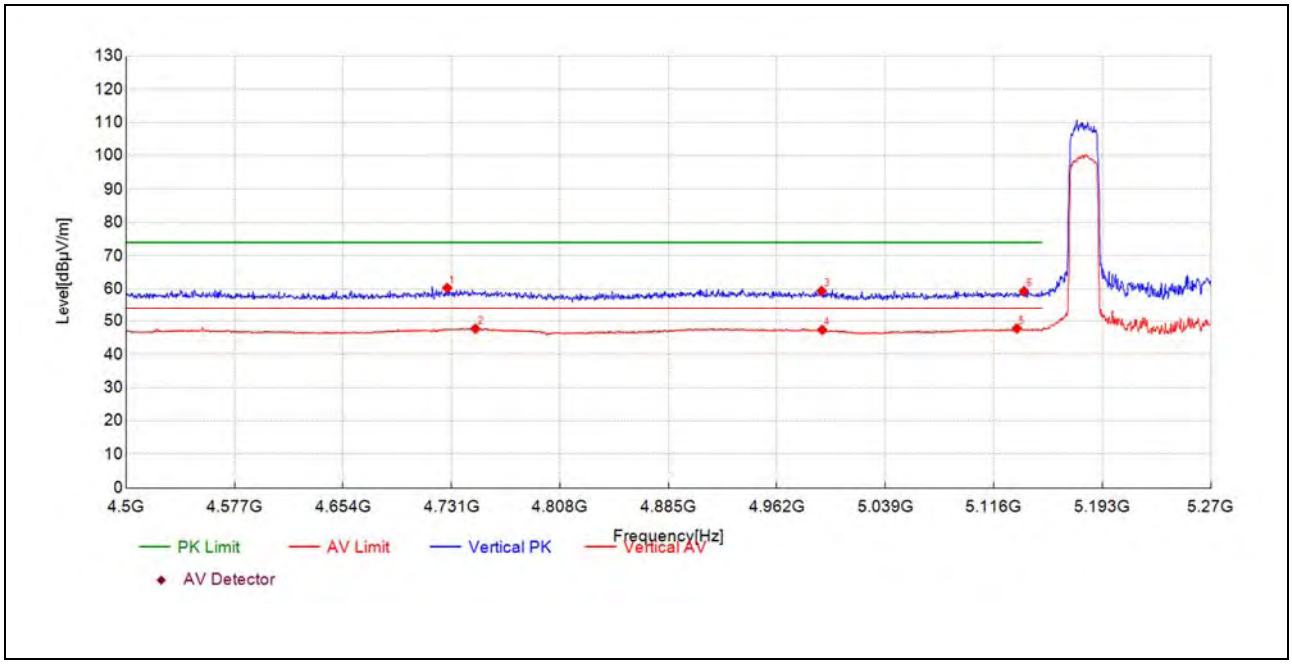
No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	56.81	41.31	66.00	56.00	Neutral	PASS
2	0.2130	46.87	31.33	63.09	53.09		PASS
3	0.4965	41.38	27.35	56.06	46.06		PASS
4	4.0560	29.52	23.69	56.00	46.00		PASS
5	10.2936	41.27	30.26	60.00	50.00		PASS
6	21.6622	42.21	35.44	60.00	50.00		PASS

A.7. 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.

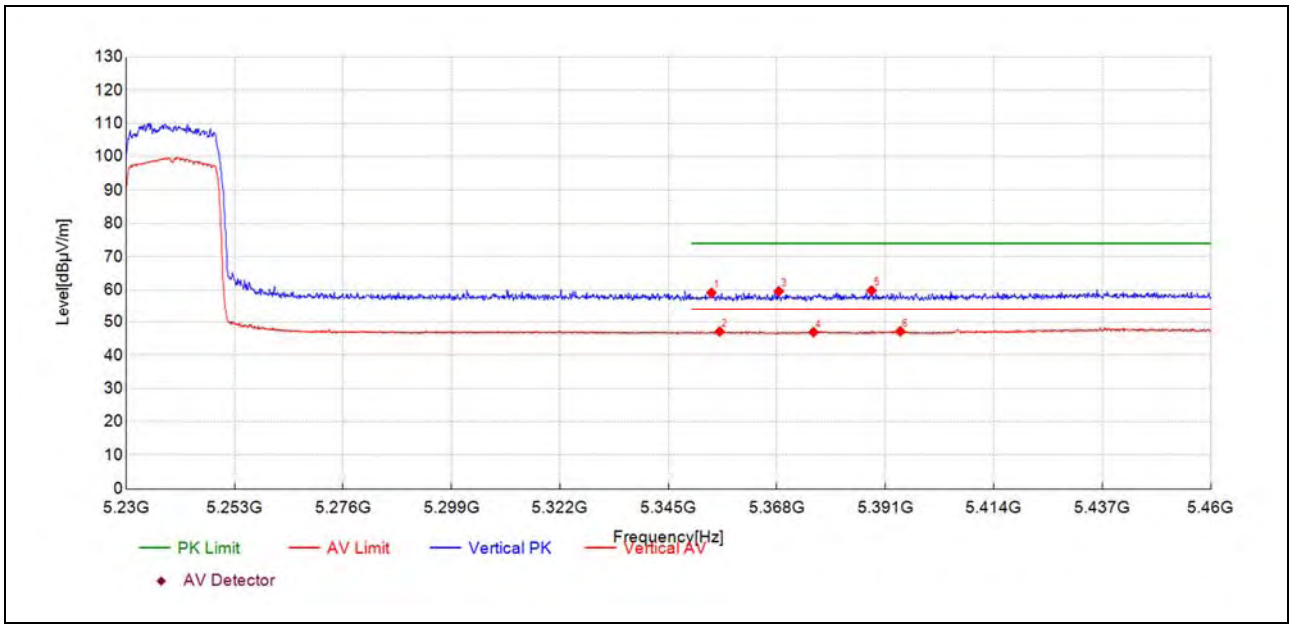
802.11a Mode

Plot for Channel 36



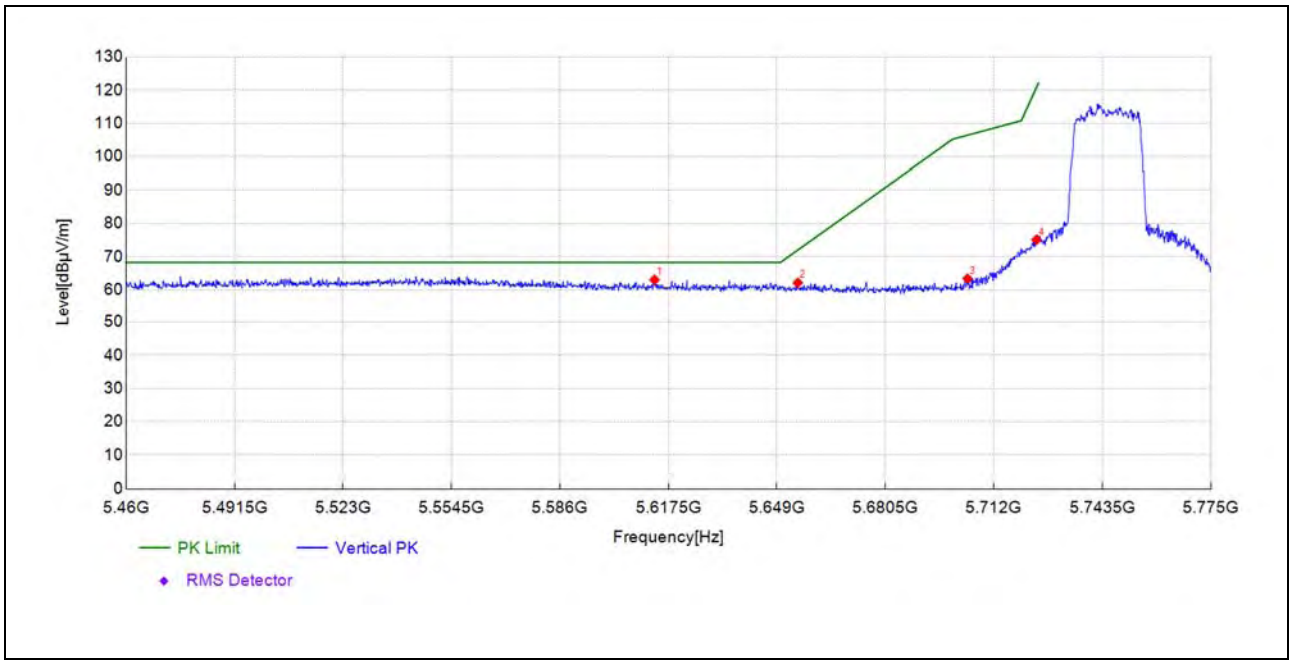
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4728.03	40.0	60.26	20.300	74.00	13.74	150	184	PK	PASS
4748.06	27.4	47.69	20.310	54.00	6.31	150	194	AV	PASS
4993.82	39.5	59.36	19.880	74.00	14.64	150	307	PK	PASS
4994.20	27.5	47.33	19.880	54.00	6.67	150	317	AV	PASS
5132.49	27.4	47.76	20.400	54.00	6.24	150	163	AV	PASS
5137.49	38.9	59.26	20.380	74.00	14.74	150	194	PK	PASS

Plot for Channel 48



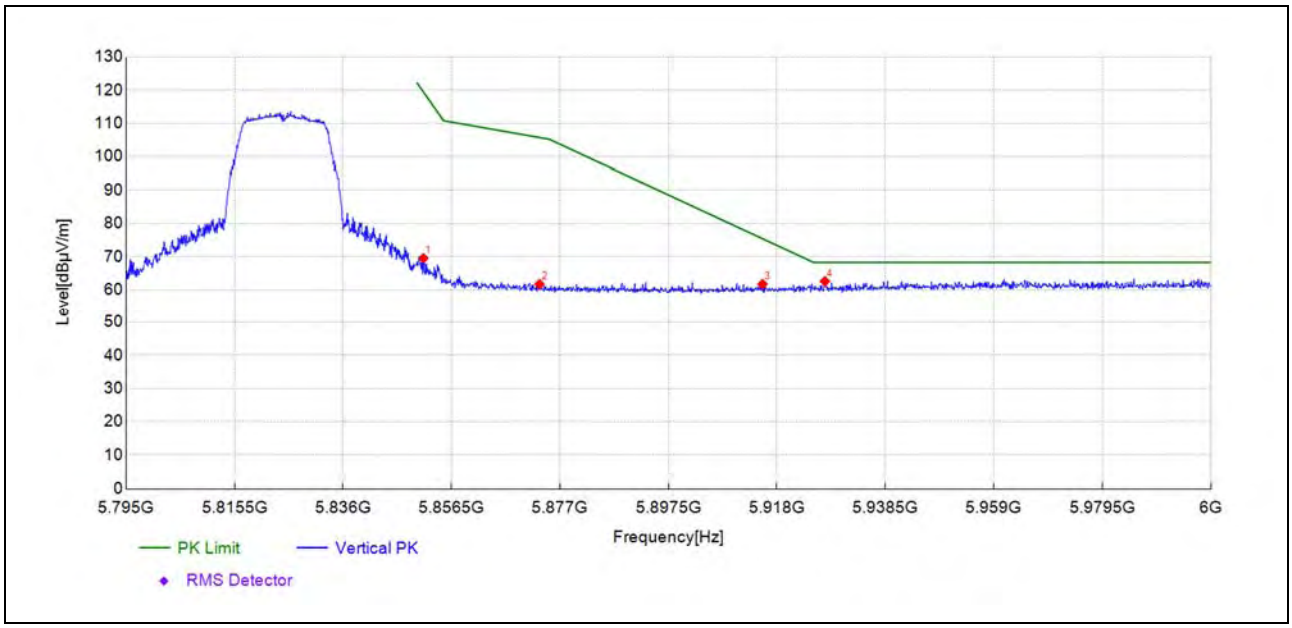
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5354.15	39.2	59.08	19.930	74.00	14.92	150	168	PK	PASS
5355.87	27.2	47.11	19.930	54.00	6.89	150	281	AV	PASS
5368.41	39.6	59.54	19.900	74.00	14.46	150	178	PK	PASS
5375.78	27.1	46.93	19.880	54.00	7.07	150	281	AV	PASS
5388.09	39.9	59.77	19.850	74.00	14.23	150	0	PK	PASS
5394.19	27.3	47.18	19.840	54.00	6.82	150	291	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
5613.48	42.6	63.01	20.370	68.23	5.22	150	314	PK	PASS
5655.08	41.1	62.12	20.990	71.99	9.87	150	220	PK	PASS
5704.40	42.4	63.34	20.950	106.46	43.12	150	144	PK	PASS
5724.42	53.9	75.12	21.250	120.90	45.78	150	295	PK	PASS

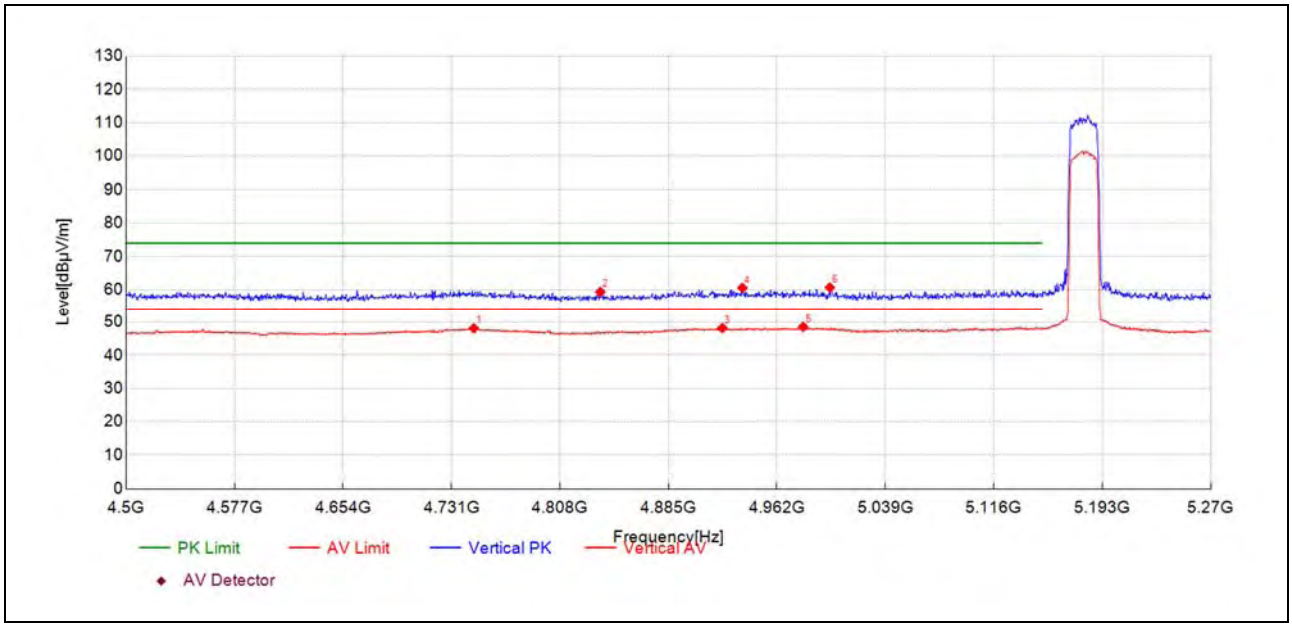
Plot for Channel 165



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5851.20	47.1	69.52	22.440	119.50	49.98	150	304	PK	PASS
5873.14	39.6	61.67	22.120	105.75	44.08	150	304	PK	PASS
5915.29	39.9	61.70	21.840	75.41	13.71	150	304	PK	PASS
5927.09	40.6	62.53	21.930	68.23	5.70	150	304	PK	PASS

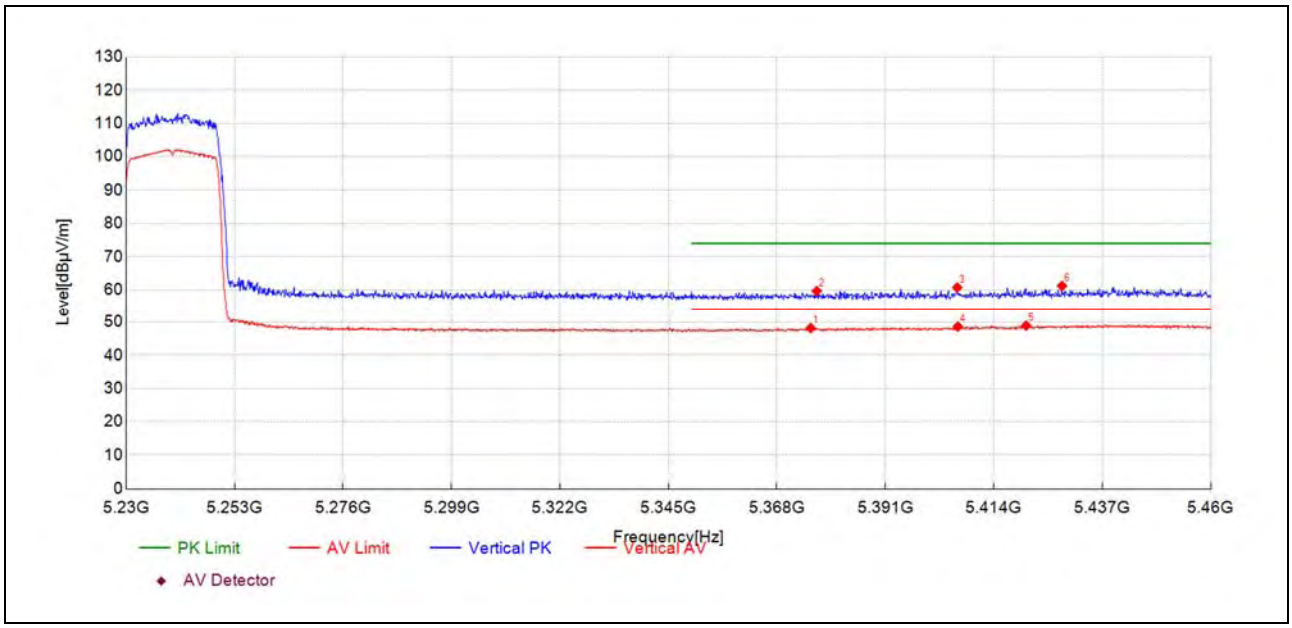
802.11ax (HEW20) Mode

Plot for Channel 36



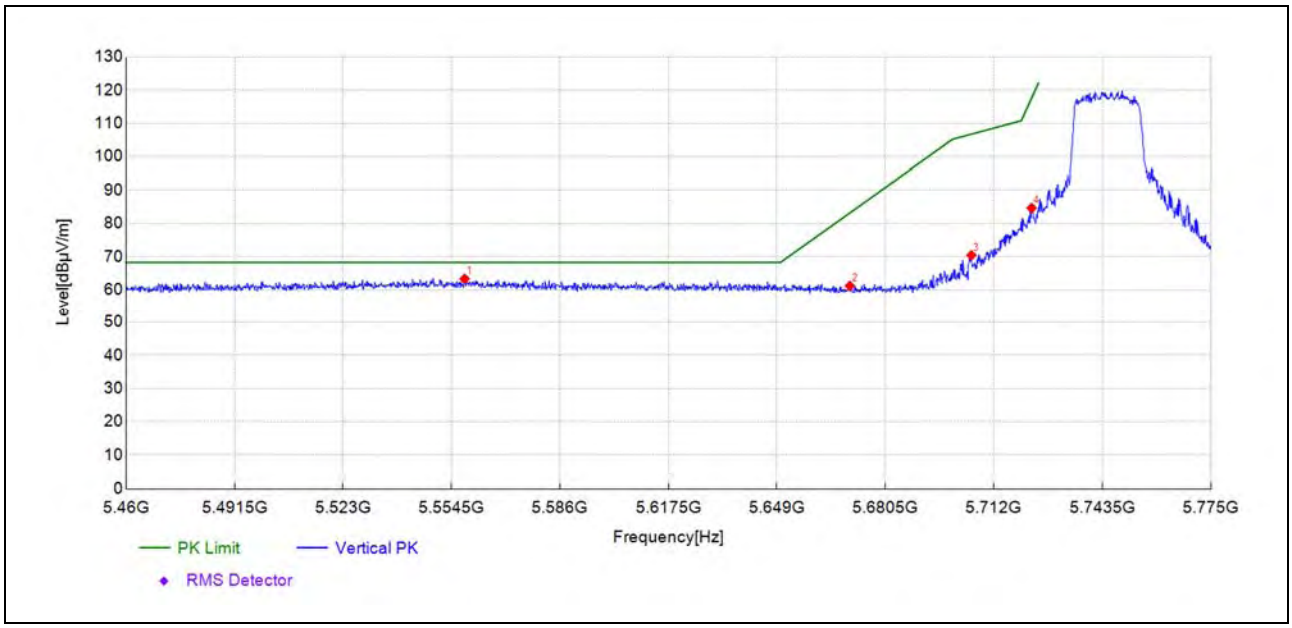
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4746.91	27.8	48.08	20.320	54.00	5.92	150	316	AV	PASS
4836.66	39.6	59.29	19.710	74.00	14.71	150	295	PK	PASS
4923.33	28.1	48.17	20.060	54.00	5.83	150	163	AV	PASS
4937.58	40.6	60.51	19.940	74.00	13.49	150	234	PK	PASS
4980.72	28.7	48.51	19.860	54.00	5.49	150	172	AV	PASS
4999.59	40.8	60.64	19.880	74.00	13.36	150	172	PK	PASS

Plot for Channel 48



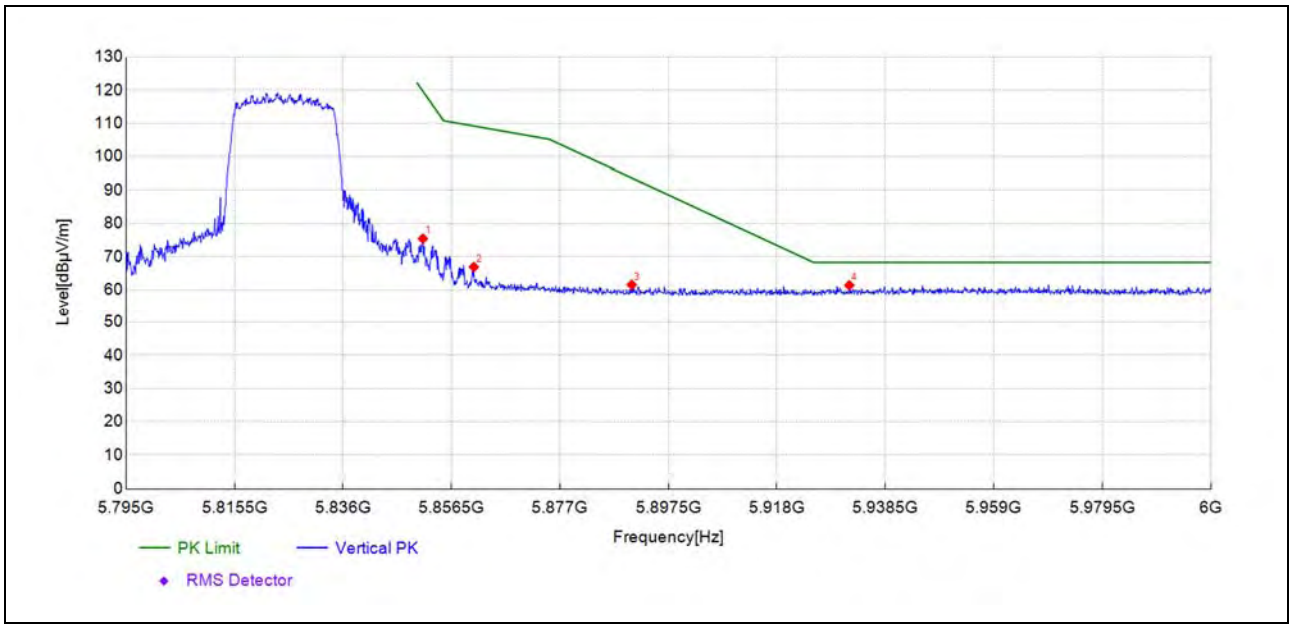
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5375.20	28.3	48.16	19.880	54.00	5.84	150	180	AV	PASS
5376.47	39.7	59.61	19.880	74.00	14.39	150	180	PK	PASS
5406.27	40.8	60.70	19.920	74.00	13.30	150	168	PK	PASS
5406.38	28.7	48.61	19.920	54.00	5.39	150	168	AV	PASS
5420.88	28.8	48.90	20.100	54.00	5.10	150	157	AV	PASS
5428.47	41.0	61.15	20.190	74.00	12.85	150	168	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
5558.33	43.1	63.29	20.240	68.23	4.94	150	168	PK	PASS
5670.21	40.2	61.16	20.960	83.19	22.03	150	149	PK	PASS
5705.51	49.5	70.42	20.970	106.77	36.35	150	159	PK	PASS
5723.00	63.4	84.67	21.230	117.67	33.00	150	168	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
5851.10	53.0	75.41	22.440	119.73	44.32	150	162	PK	PASS
5860.74	44.6	66.88	22.300	109.22	42.34	150	153	PK	PASS
5890.58	39.7	61.52	21.860	93.70	32.18	150	296	PK	PASS
5931.70	39.4	61.36	21.970	68.23	6.87	150	153	PK	PASS

A.8. 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.

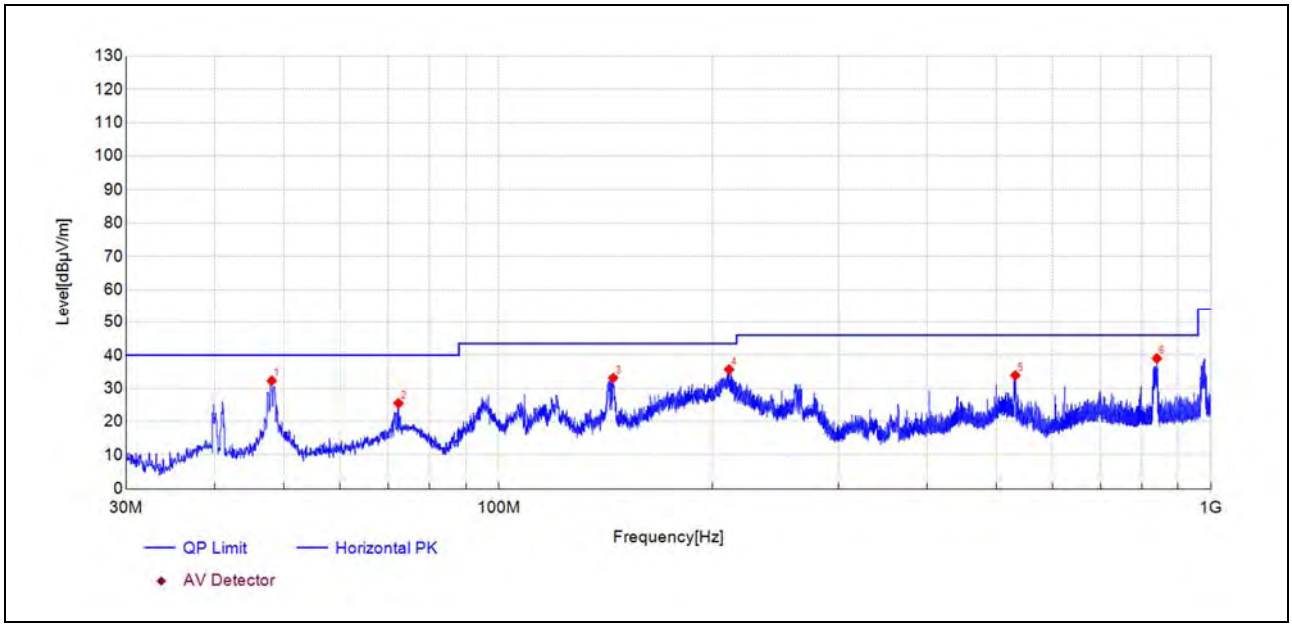
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

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

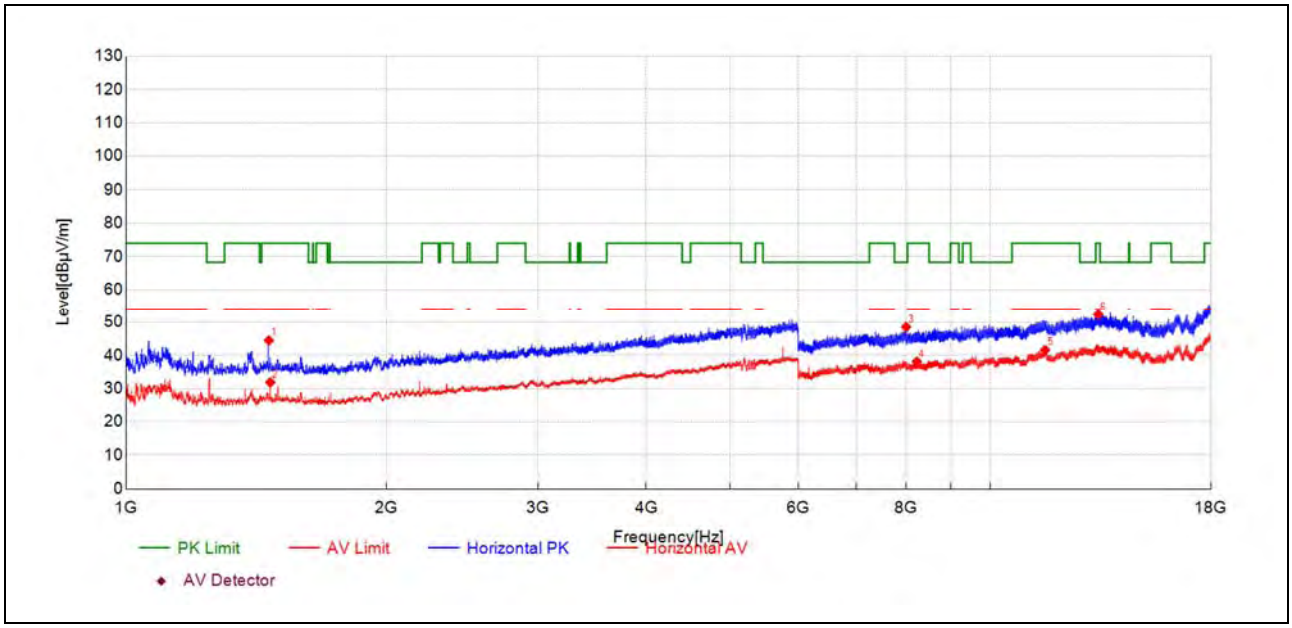
802.11a Mode

Plot for Channel 44



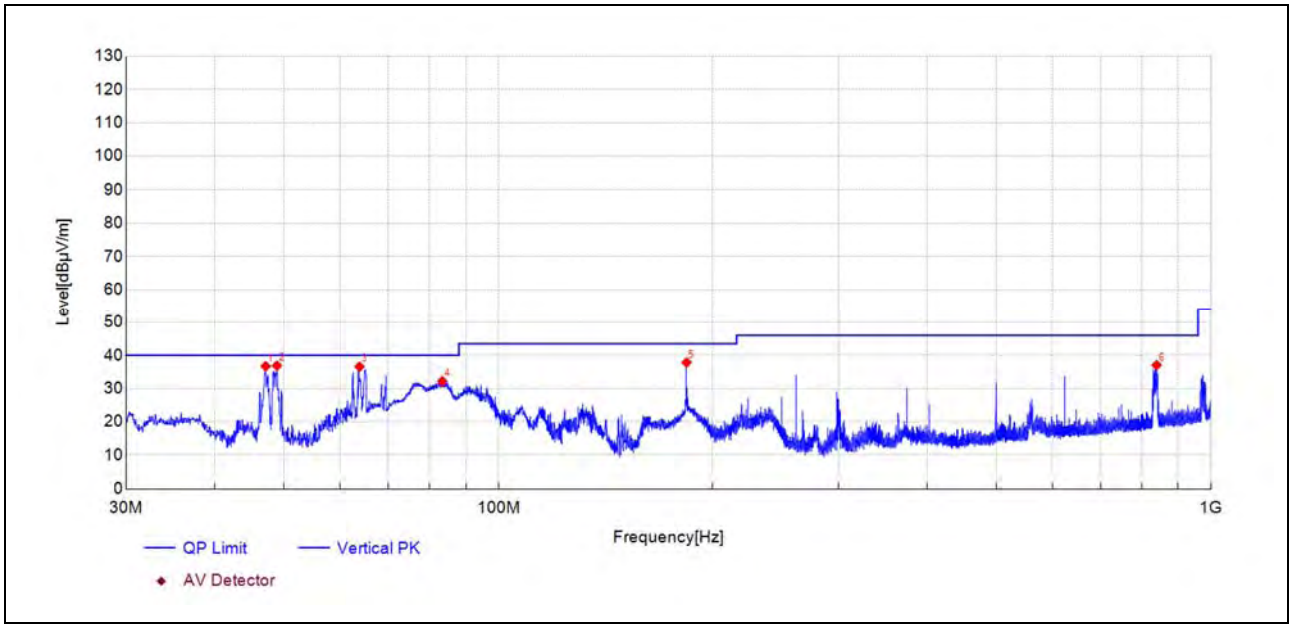
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
48.04	60.6	32.29	-28.290	40.00	7.71	150	350	PK	PASS
72.39	60.4	25.54	-34.900	40.00	14.46	150	284	PK	PASS
144.90	66.7	33.14	-33.540	43.50	10.36	150	202	PK	PASS
210.77	65.5	35.69	-29.780	43.50	7.81	150	189	PK	PASS
531.66	55.3	33.91	-21.400	46.00	12.09	150	243	PK	PASS
840.43	54.8	39.03	-15.790	46.00	6.97	150	256	PK	PASS



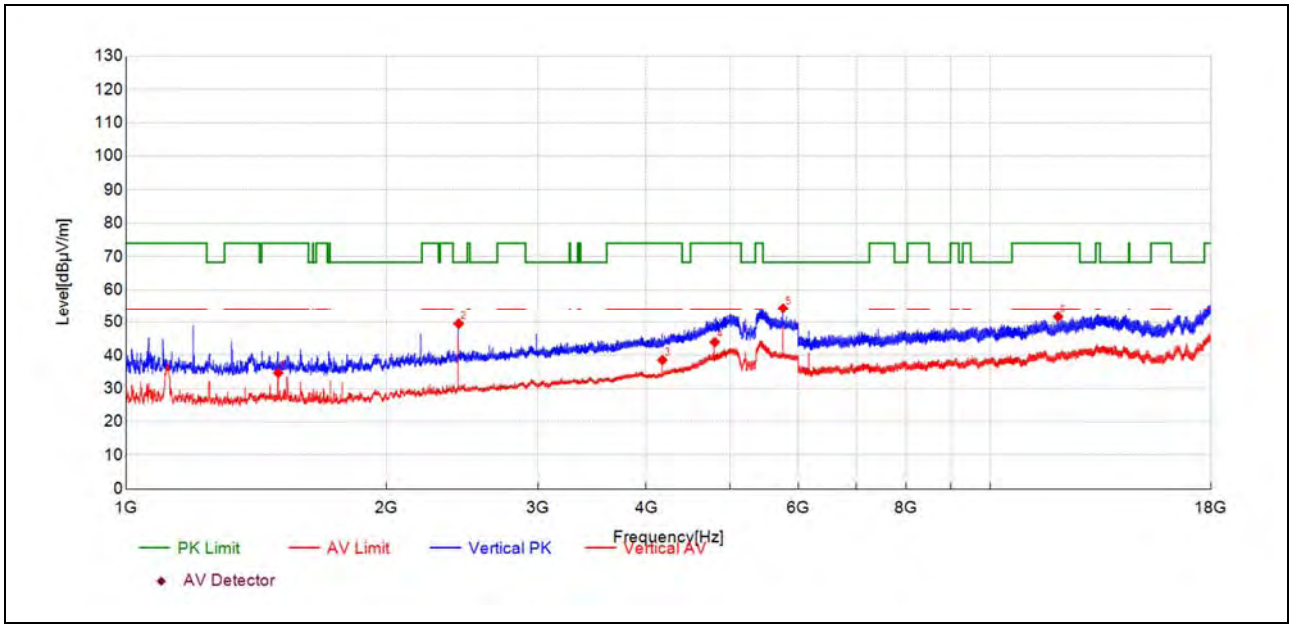
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1463.05	48.5	44.47	-4.060	74.00	29.53	150	360	PK	PASS
1468.55	35.9	31.86	-4.060	54.00	22.14	150	299	AV	PASS
7995.08	51.4	48.52	-2.920	68.23	19.71	150	317	PK	PASS
8226.59	41.4	38.10	-3.280	54.00	15.90	150	0	AV	PASS
11578.73	38.6	41.59	3.010	54.00	12.41	150	3	AV	PASS
13339.31	47.1	52.32	5.180	74.00	21.68	150	254	PK	PASS



(AntenN/A Vertical, 30MHz to 1GHz)

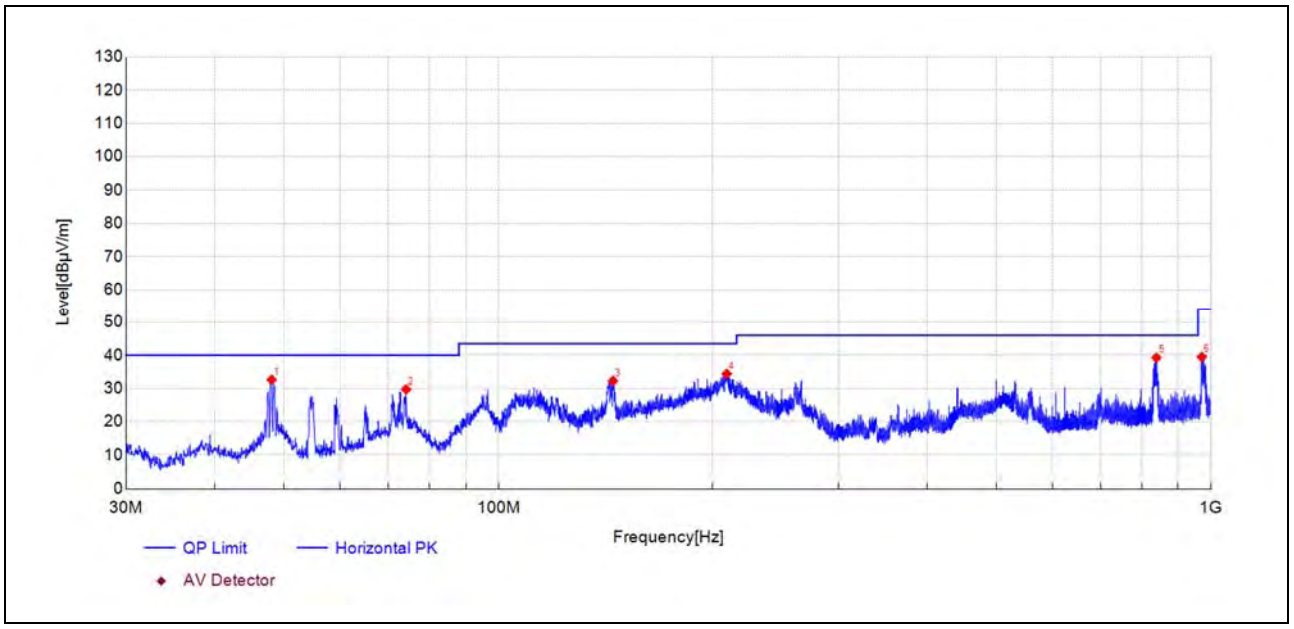
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
47.12	65.0	36.70	-28.300	40.00	3.30	150	322	PK	PASS
48.87	65.2	36.85	-28.370	40.00	3.15	150	322	PK	PASS
63.81	68.8	36.57	-32.240	40.00	3.43	150	335	PK	PASS
83.40	66.7	32.18	-34.490	40.00	7.82	150	162	PK	PASS
183.70	69.0	37.82	-31.190	43.50	5.68	150	349	PK	PASS
839.65	52.8	37.01	-15.820	46.00	8.99	150	175	PK	PASS



(AntenN/A Vertical, 1GHz to 18GHz)

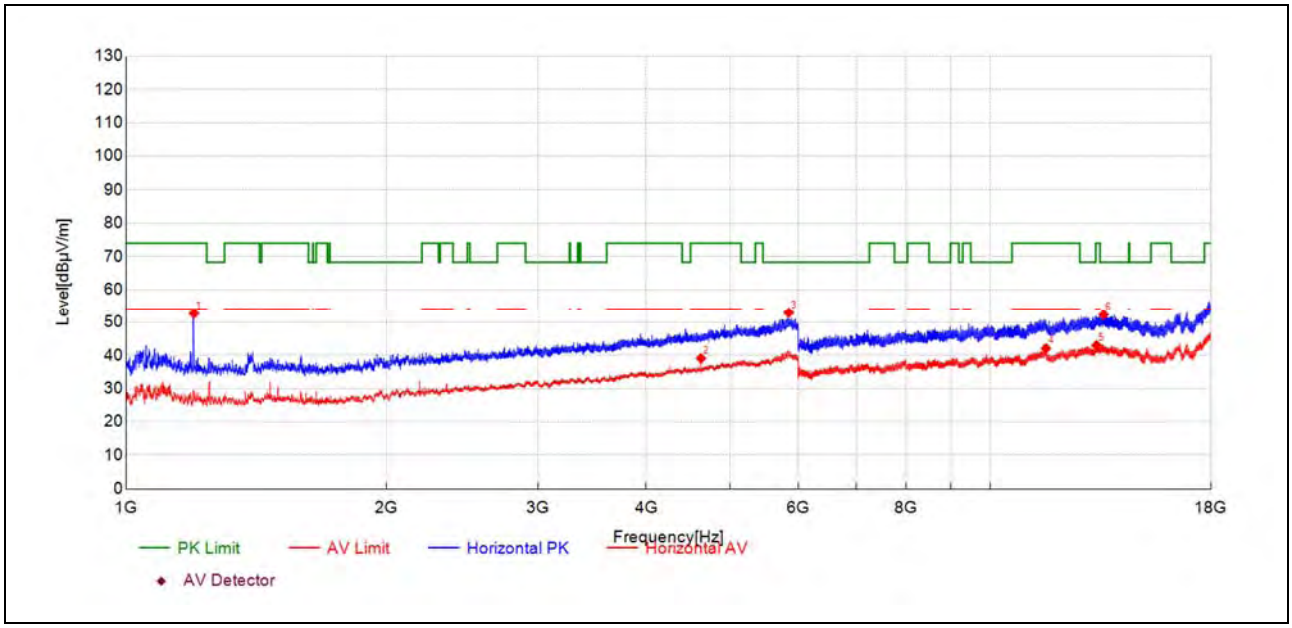
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1500.05	38.8	34.69	-4.070	54.00	19.31	150	60	AV	PASS
2426.14	49.3	49.49	0.180	68.23	18.74	150	60	PK	PASS
4175.82	32.4	38.55	6.180	54.00	15.45	150	283	AV	PASS
4800.38	35.7	43.95	8.300	54.00	10.05	150	311	AV	PASS
5759.98	42.2	54.26	12.090	68.23	13.97	150	296	PK	PASS
11986.25	49.3	51.63	2.330	74.00	22.37	150	150	PK	PASS

Plot for Channel 157



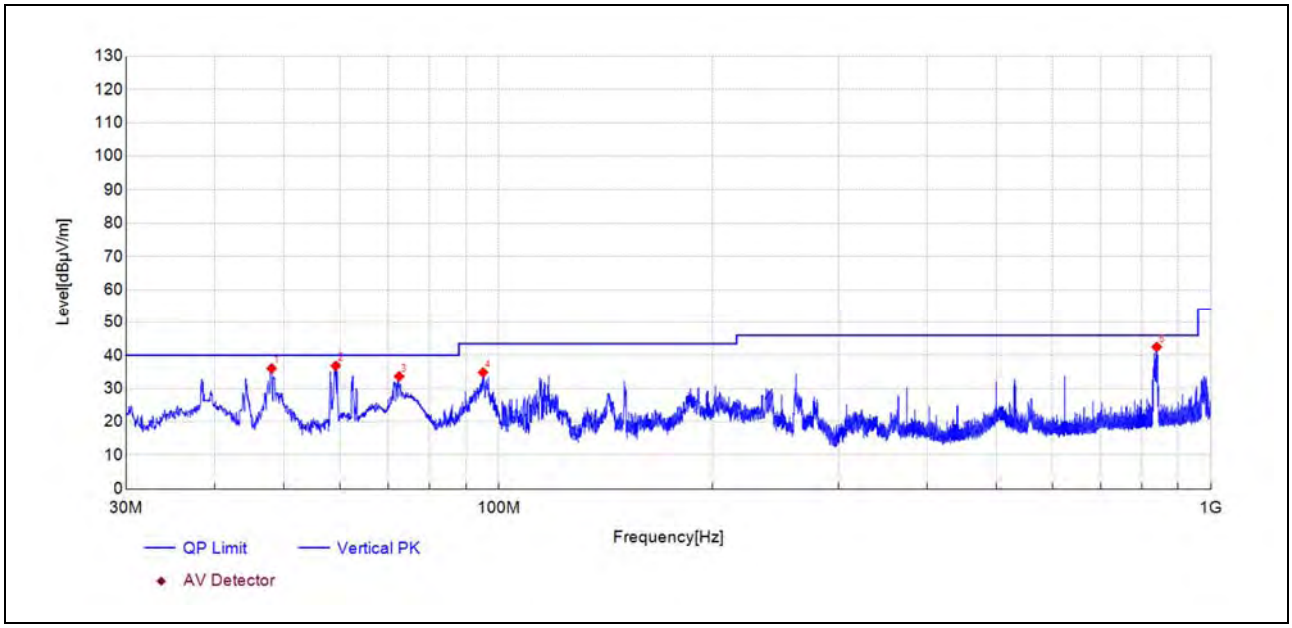
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
48.04	60.9	32.61	-28.290	40.00	7.39	150	336	PK	PASS
74.19	64.8	29.73	-35.070	40.00	10.27	150	92	PK	PASS
144.81	65.8	32.28	-33.540	43.50	11.22	150	174	PK	PASS
209.17	64.3	34.39	-29.880	43.50	9.11	150	268	PK	PASS
839.02	55.1	39.26	-15.830	46.00	6.74	150	213	PK	PASS
971.77	53.2	39.48	-13.750	54.00	14.52	150	254	PK	PASS



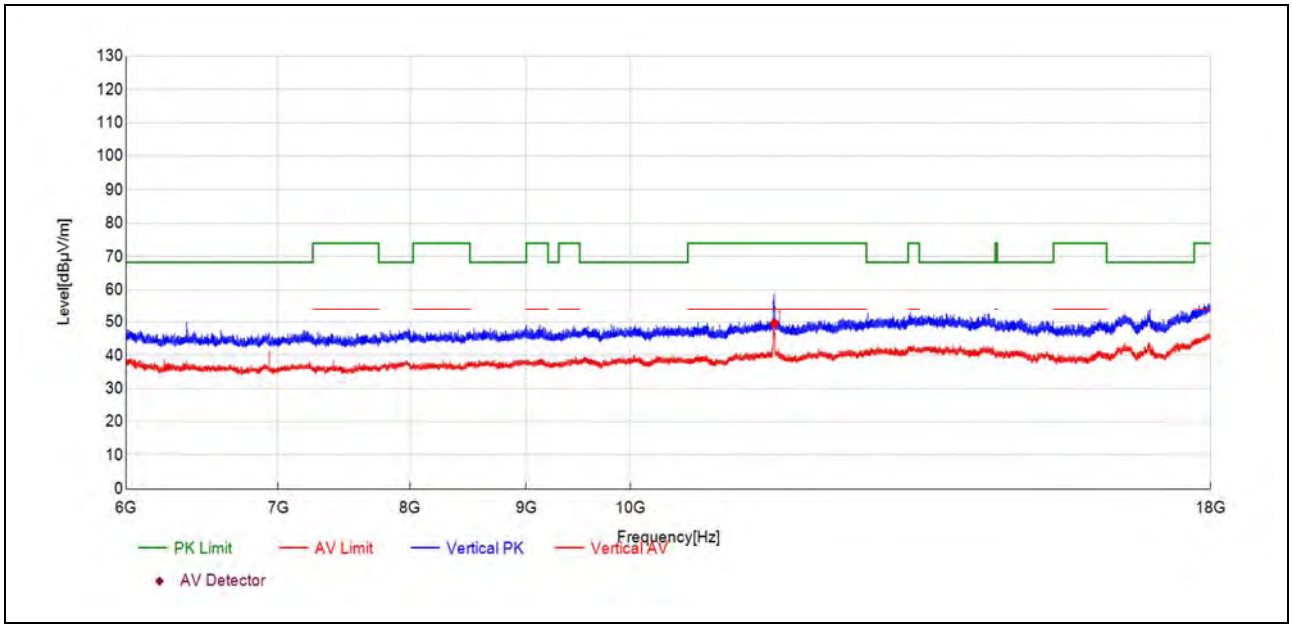
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1198.52	57.9	52.63	-5.270	74.00	21.37	150	273	PK	PASS
4627.86	30.9	39.10	8.250	54.00	14.90	150	353	AV	PASS
5848.48	38.9	52.90	14.030	68.23	15.33	150	77	PK	PASS
11605.23	39.0	42.09	3.100	54.00	11.91	150	209	AV	PASS
13279.30	37.7	43.00	5.350	54.00	11.00	150	252	AV	PASS
13529.81	47.4	52.27	4.900	68.23	15.96	150	191	PK	PASS



(AntenN/A Vertical, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
48.04	64.4	36.06	-28.290	40.00	3.94	150	171	PK	PASS
59.10	67.5	36.82	-30.650	40.00	3.18	150	352	PK	PASS
72.54	68.6	33.68	-34.910	40.00	6.32	150	359	PK	PASS
95.14	65.5	34.83	-30.690	43.50	8.67	150	277	PK	PASS
839.84	58.3	42.49	-15.810	46.00	3.51	150	225	PK	PASS



(AntenN/A Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
11571.23	46.7	49.62	2.960	54.00	4.38	150	316	AV	PASS

END OF REPORT