NVNT	n40	5755	Ant1	2.68	0.18	2.86	30	Pass
NVNT	n40	5795	Ant1	0.78	0.18	0.96	30	Pass
NVNT	ac20	5180	Ant1	6.25	0.09	6.34	11	Pass
NVNT	ac20	5220	Ant1	6.71	0.09	6.8	11	Pass
NVNT	ac20	5240	Ant1	6.81	0.09	6.9	11	Pass
NVNT	ac20	5260	Ant1	7.36	0.09	7.45	11	Pass
NVNT	ac20	5300	Ant1	8.14	0.09	8.23	11	Pass
NVNT	ac20	5320	Ant1	8.34	0.09	8.43	11	Pass
NVNT	ac20	5500	Ant1	6.38	0.09	6.47	11	Pass
NVNT	ac20	5580	Ant1	6.79	0.09	6.88	11	Pass
NVNT	ac20	5720	Ant1	8.07	0.09	8.16	11	Pass
NVNT	ac20	5745	Ant1	4.1	0.09	4.19	30	Pass
NVNT	ac20	5785	Ant1	3.29	0.09	3.38	30	Pass
NVNT	ac20	5825	Ant1	2.47	0.09	2.56	30	Pass
NVNT	ac40	5190	Ant1	3.02	0.18	3.2	11	Pass
NVNT	ac40	5230	Ant1	3.64	0.18	3.82	11	Pass
NVNT	ac40	5270	Ant1	4.4	0.18	4.58	11	Pass
NVNT	ac40	5310	Ant1	4.61	0.18	4.79	11	Pass
NVNT	ac40	5510	Ant1	4.05	0.18	4.23	11	Pass
NVNT	ac40	5550	Ant1	4	0.18	4.18	11	Pass
NVNT	ac40	5710	Ant1	5.69	0.18	5.87	11	Pass
NVNT	ac40	5755	Ant1	1.47	0.18	1.65	30	Pass
NVNT	ac40	5795	Ant1	0.69	0.18	0.87	30	Pass
NVNT	ac80	5210	Ant1	0.69	0.36	1.05	11	Pass
NVNT	ac80	5290	Ant1	1.88	0.36	2.24	11	Pass
NVNT	ac80	5530	Ant1	1.51	0.36	1.87	11	Pass
NVNT	ac80	5610	Ant1	1.52	0.36	1.88	11	Pass
NVNT	ac80	5690	Ant1	2.58	0.36	2.94	11	Pass
NVNT	ac80	5775	Ant1	-0.79	0.36	-0.43	30	Pass

Test Graphs
PSD NVNT a 5180MHz Ant1

PSD NVNT a 5220MHz Ant1

PSD NVNT a 5240MHz Ant1

PSD NVNT a 5260MHz Ant1

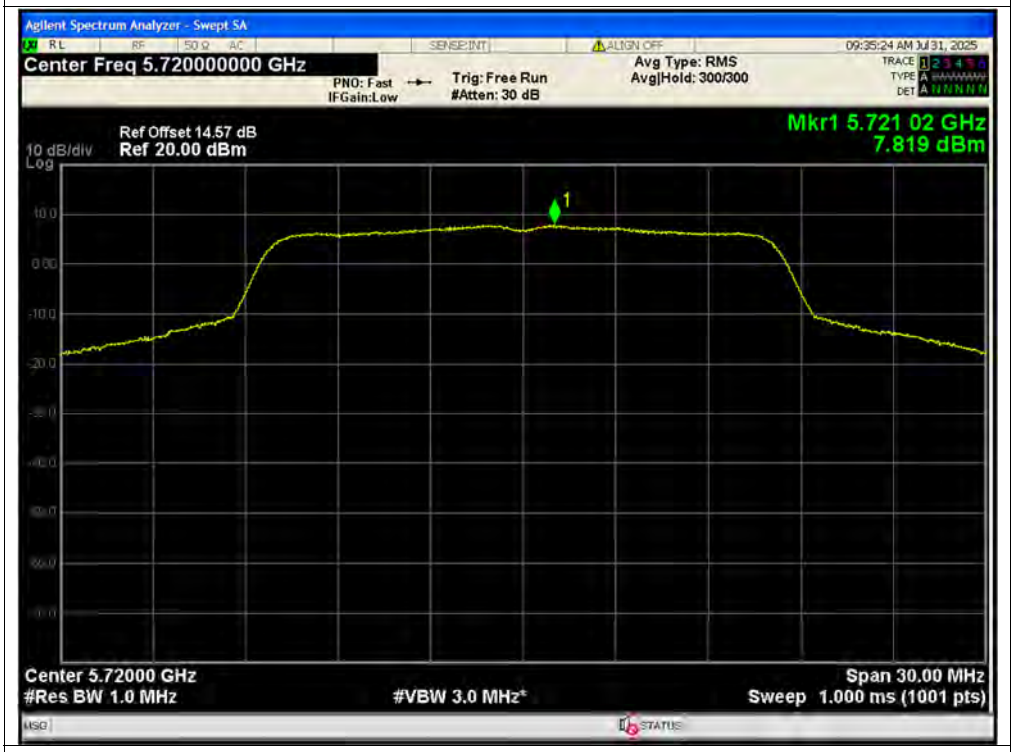
PSD NVNT a 5300MHz Ant1

PSD NVNT a 5320MHz Ant1

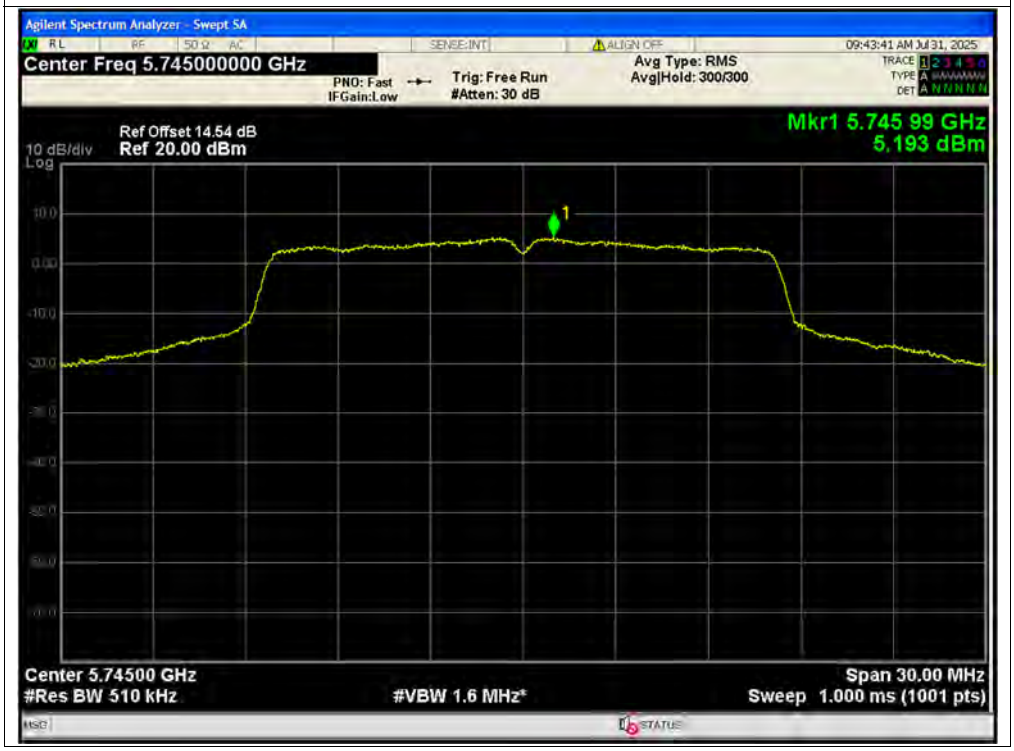
PSD NVNT a 5500MHz Ant1

PSD NVNT a 5580MHz Ant1

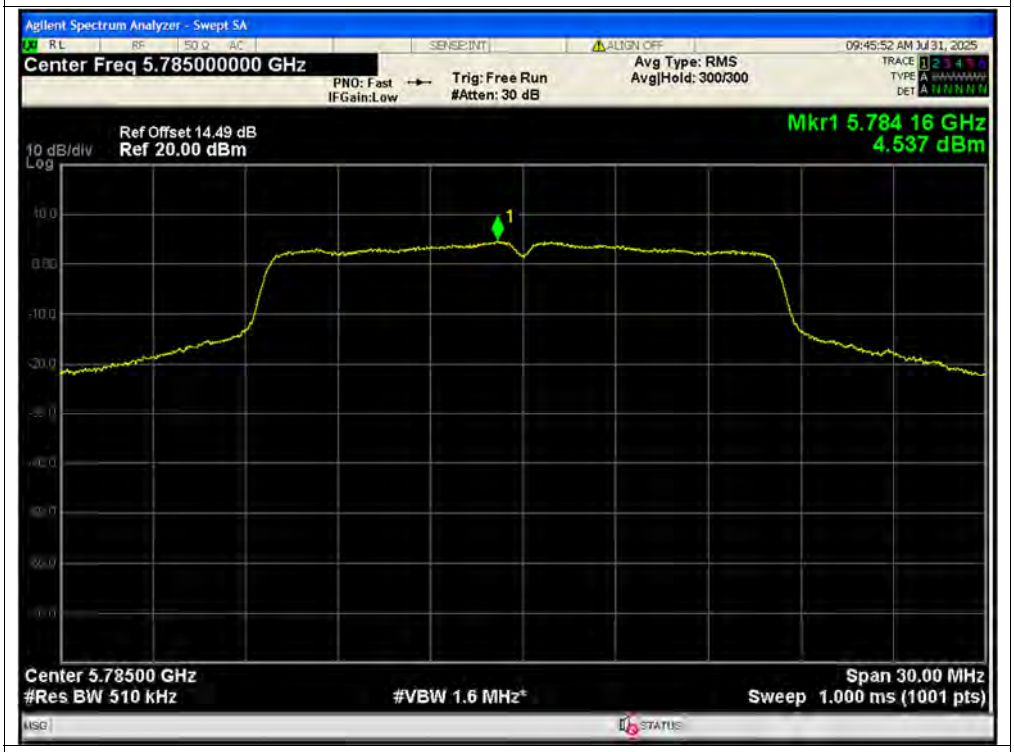
PSD NVNT a 5720MHz Ant1



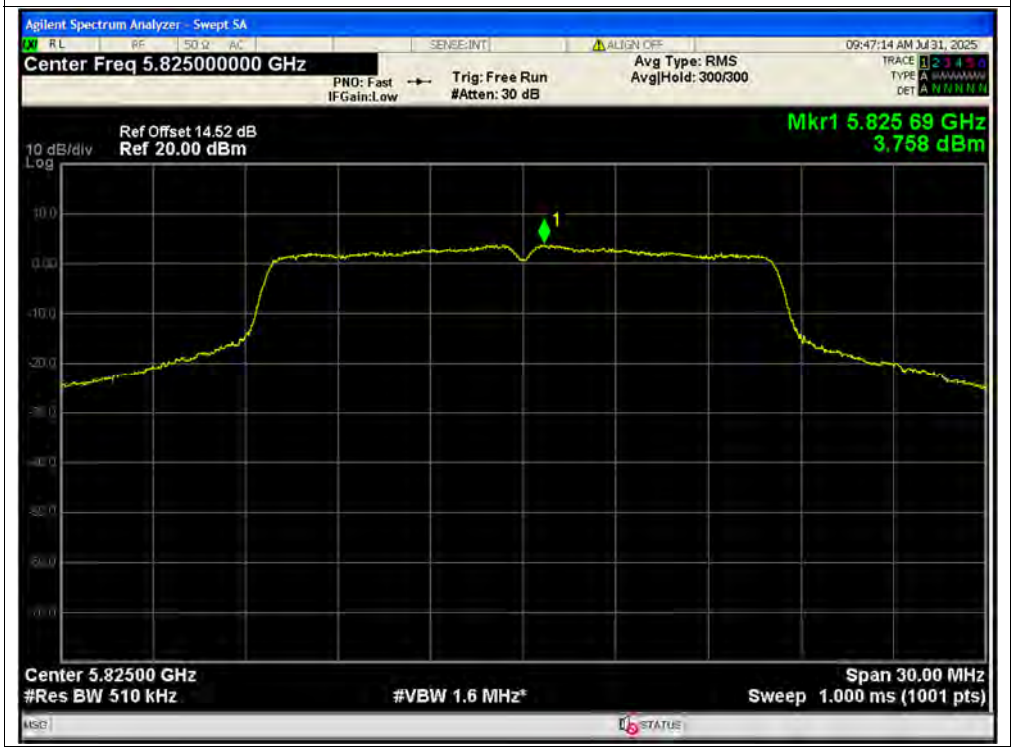
PSD NVNT a 5745MHz Ant1



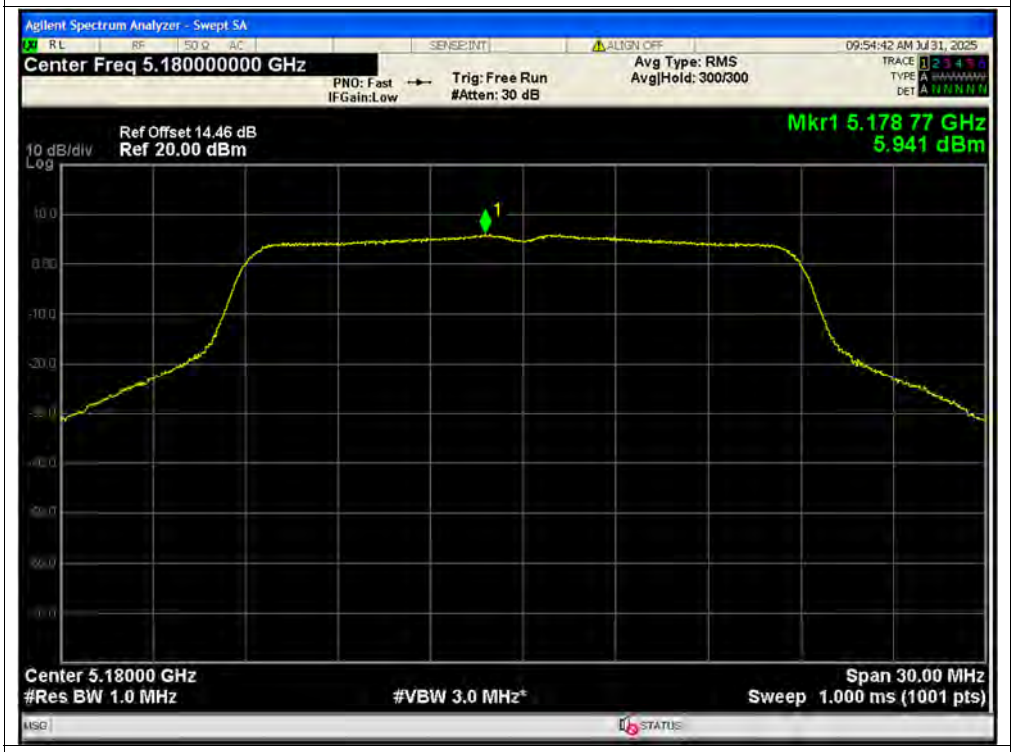
PSD NVNT a 5785MHz Ant1



PSD NVNT a 5825MHz Ant1



PSD NVNT n20 5180MHz Ant1



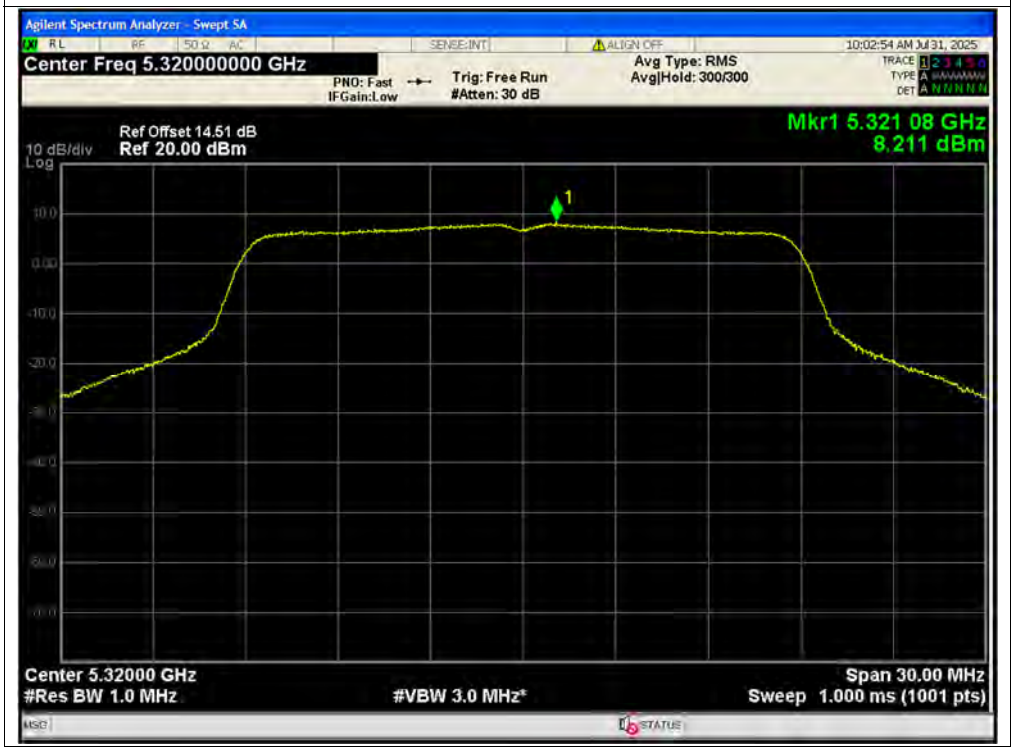
PSD NVNT n20 5220MHz Ant1

PSD NVNT n20 5240MHz Ant1

PSD NVNT n20 5260MHz Ant1

PSD NVNT n20 5300MHz Ant1

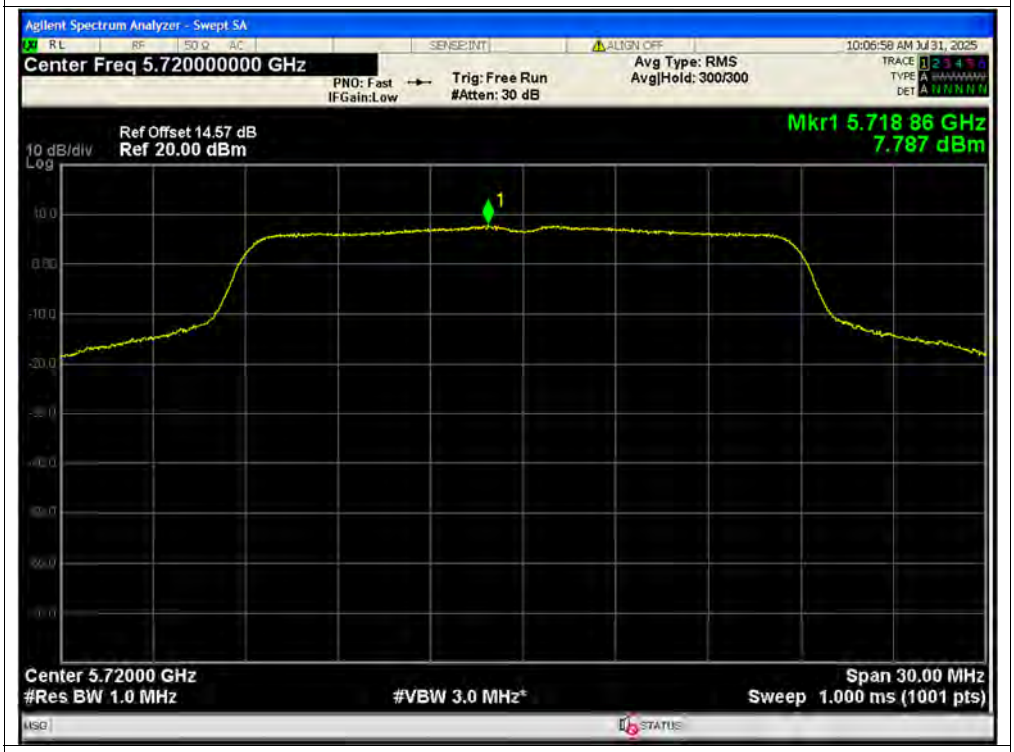
PSD NVNT n20 5320MHz Ant1



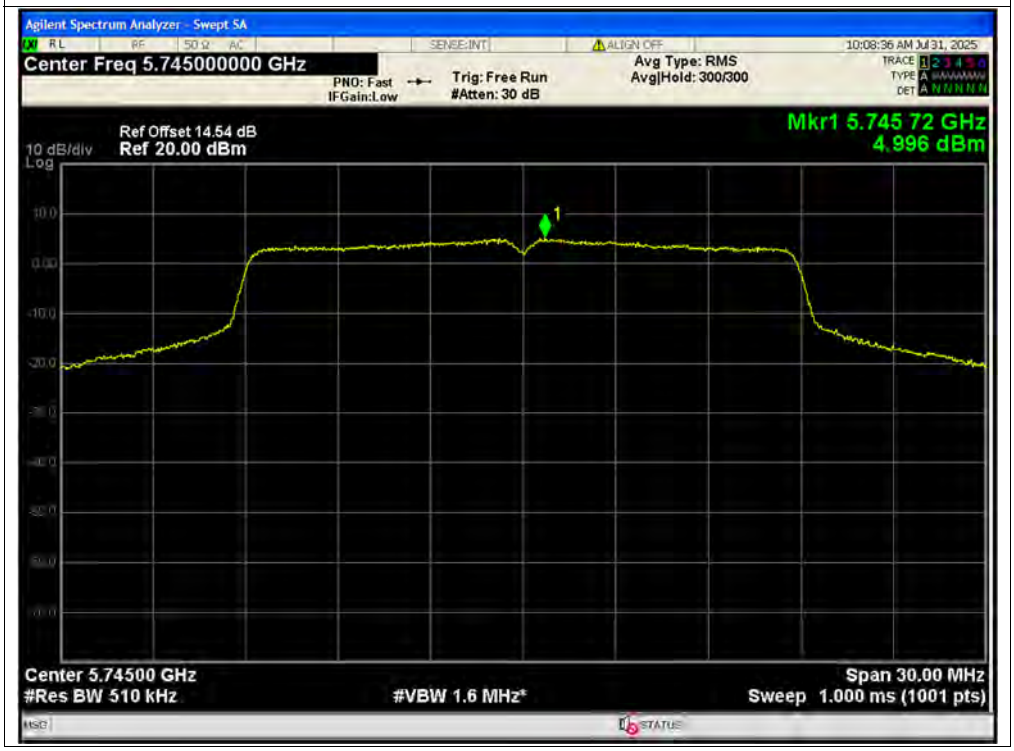
PSD NVNT n20 5500MHz Ant1

PSD NVNT n20 5580MHz Ant1

PSD NVNT n20 5720MHz Ant1

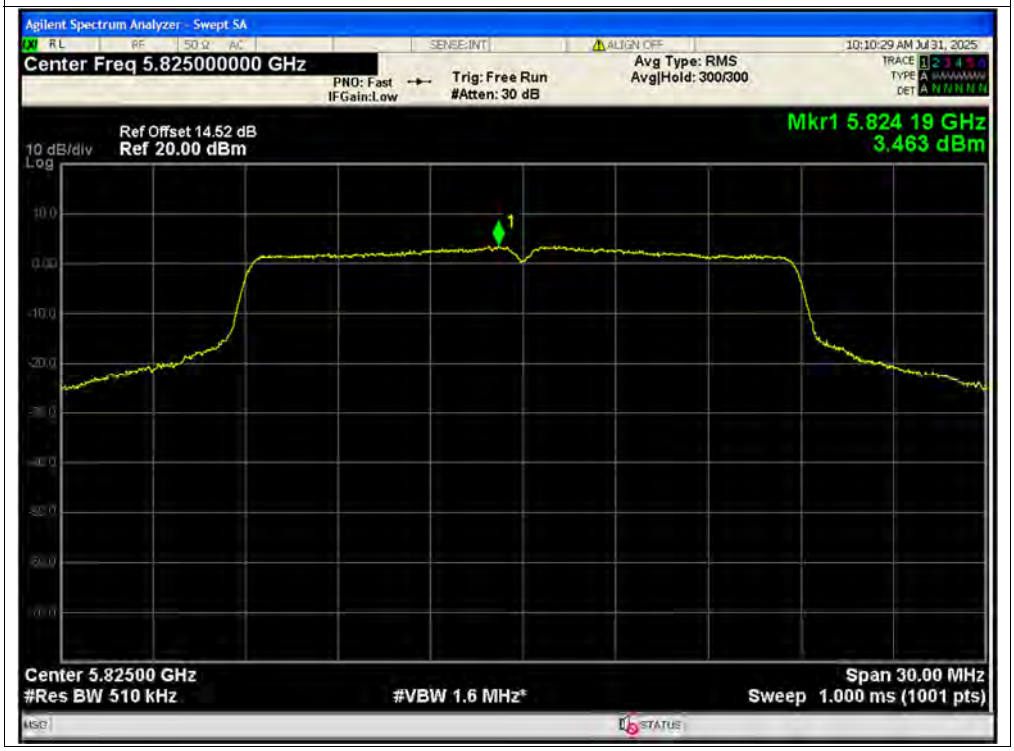


PSD NVNT n20 5745MHz Ant1

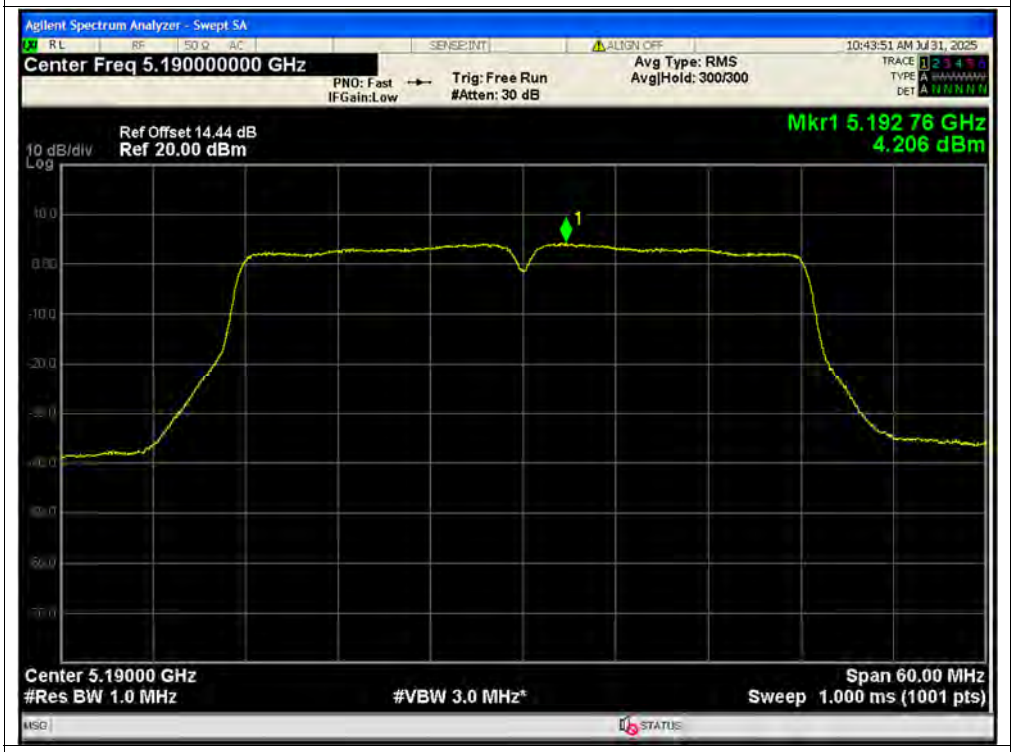


PSD NVNT n20 5785MHz Ant1

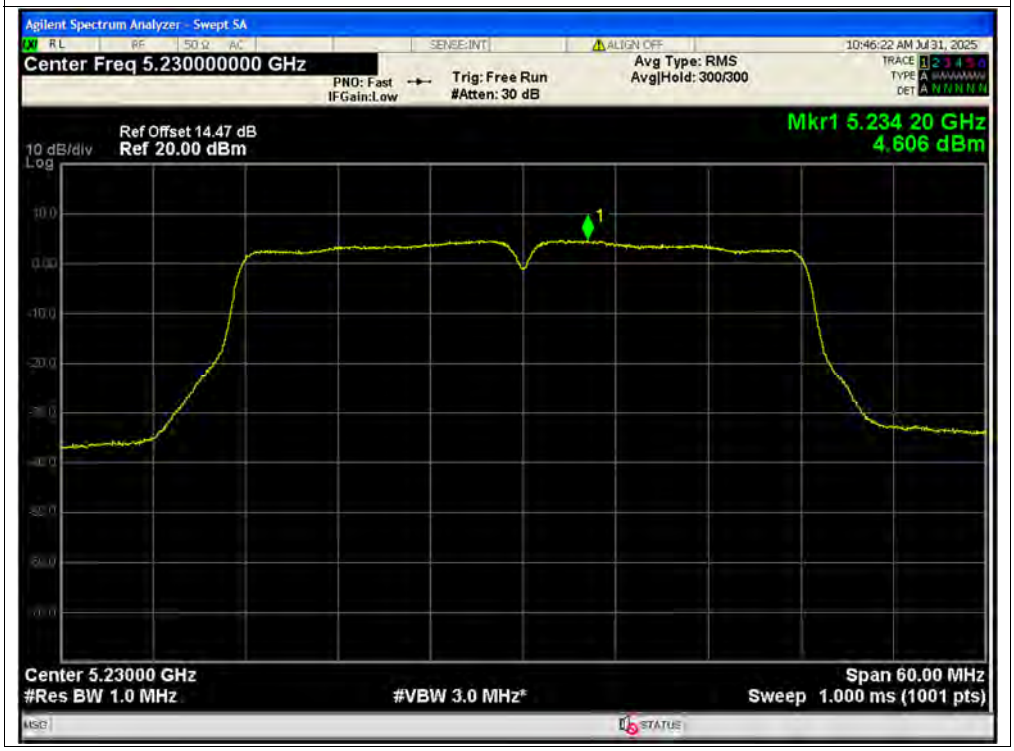
PSD NVNT n20 5825MHz Ant1



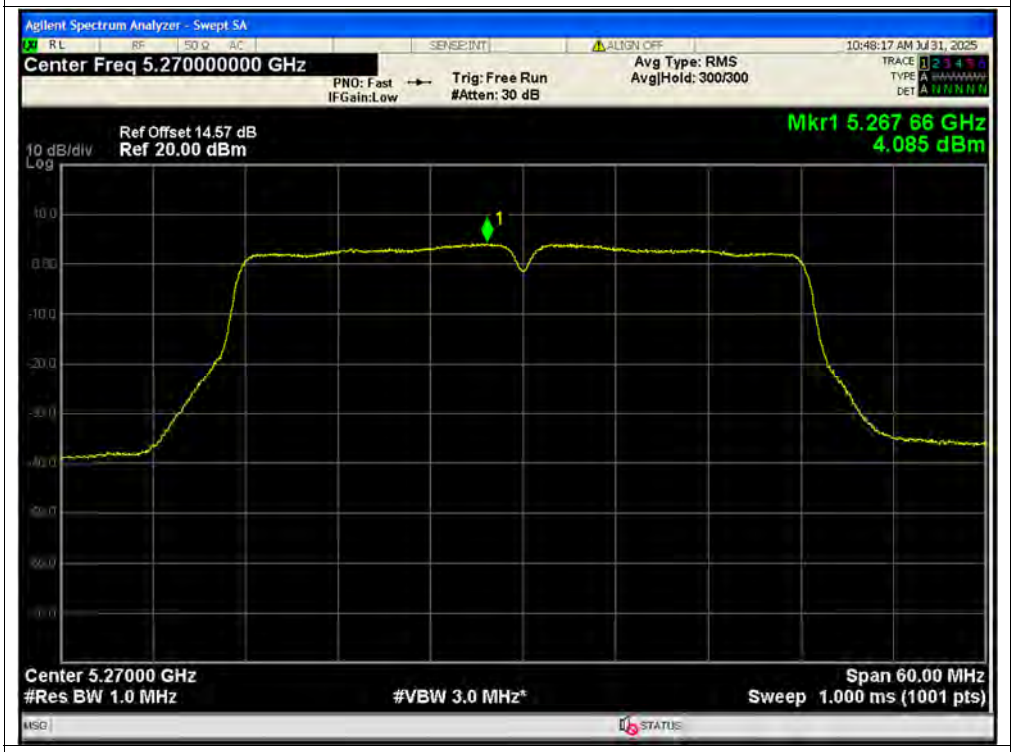
PSD NVNT n40 5190MHz Ant1



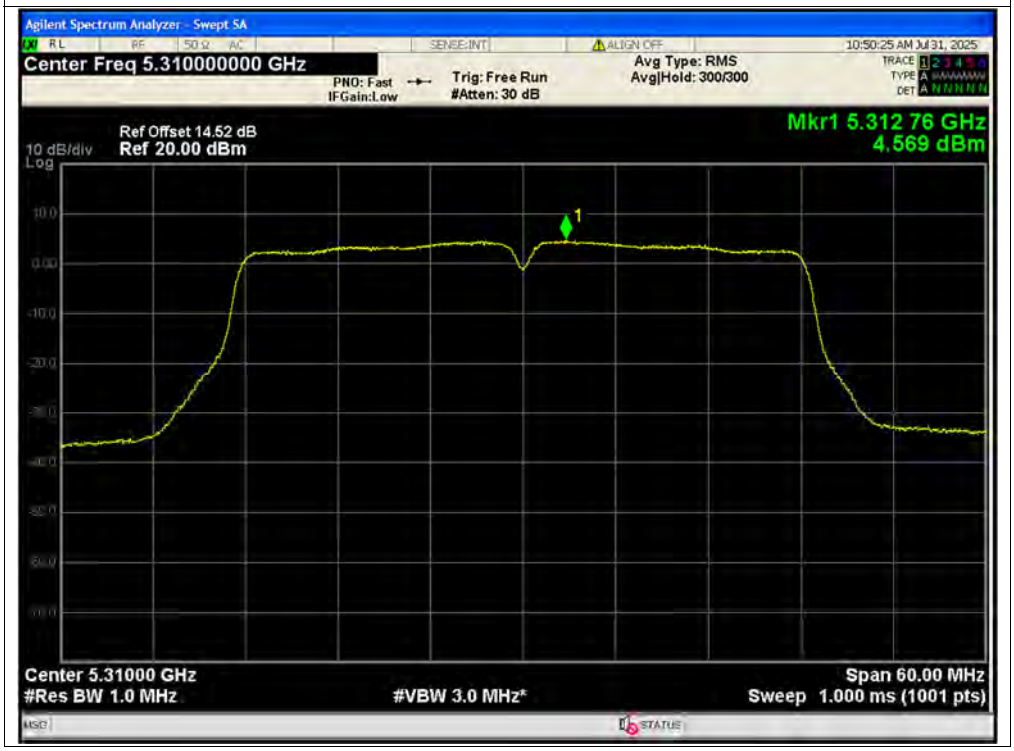
PSD NVNT n40 5230MHz Ant1



PSD NVNT n40 5270MHz Ant1

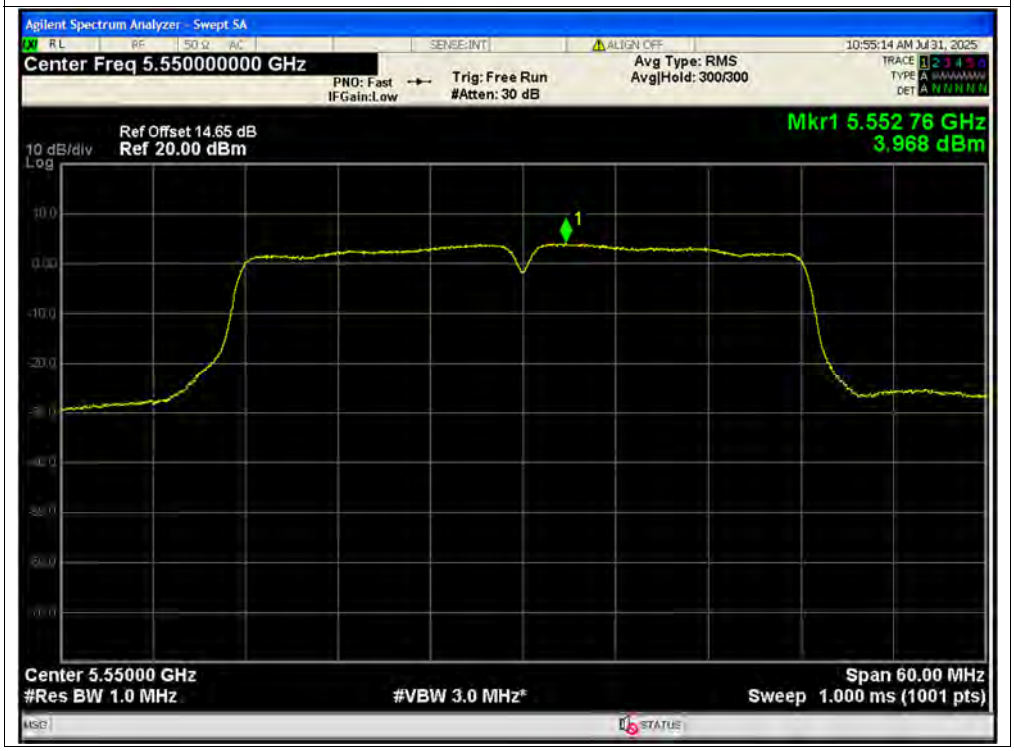


PSD NVNT n40 5310MHz Ant1

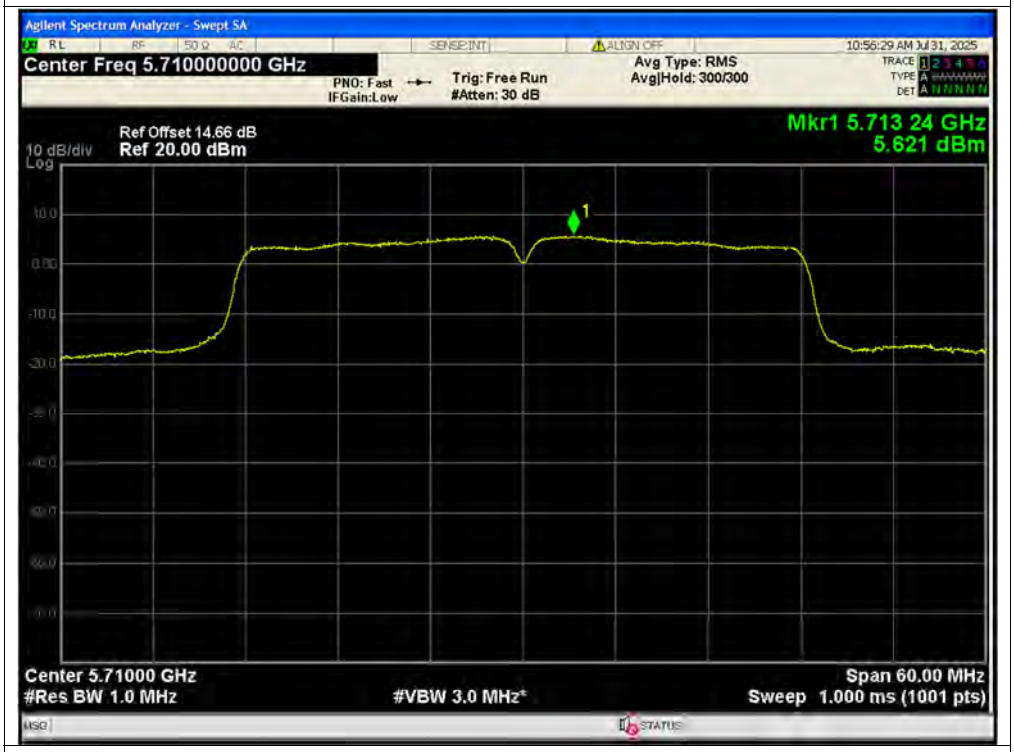


PSD NVNT n40 5510MHz Ant1

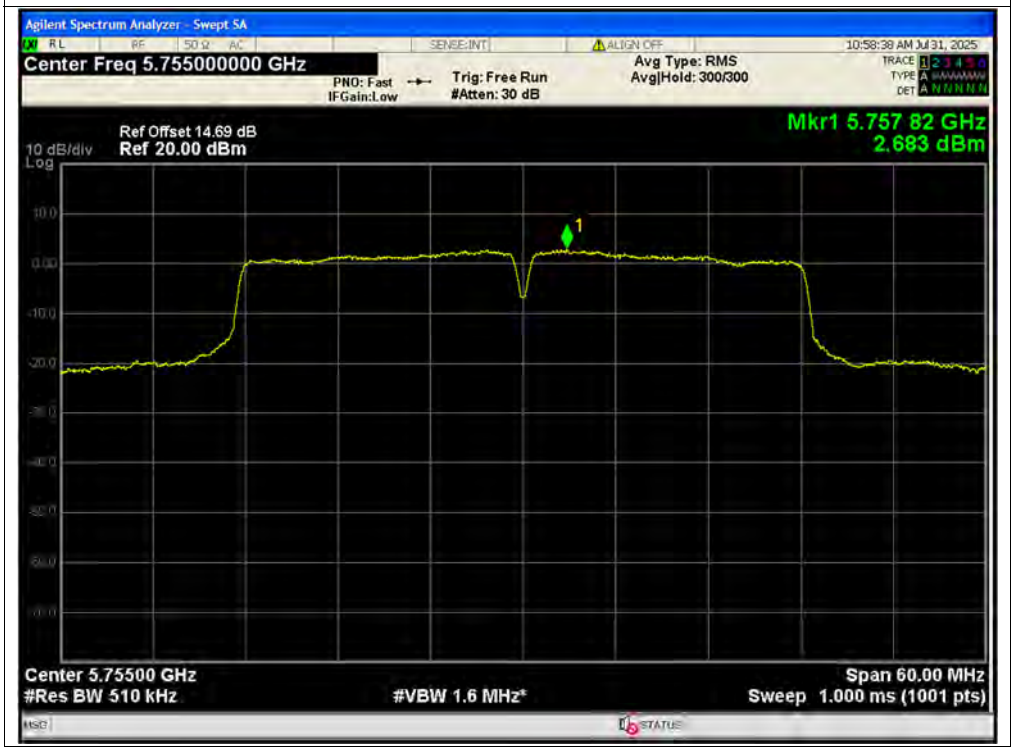
PSD NVNT n40 5550MHz Ant1



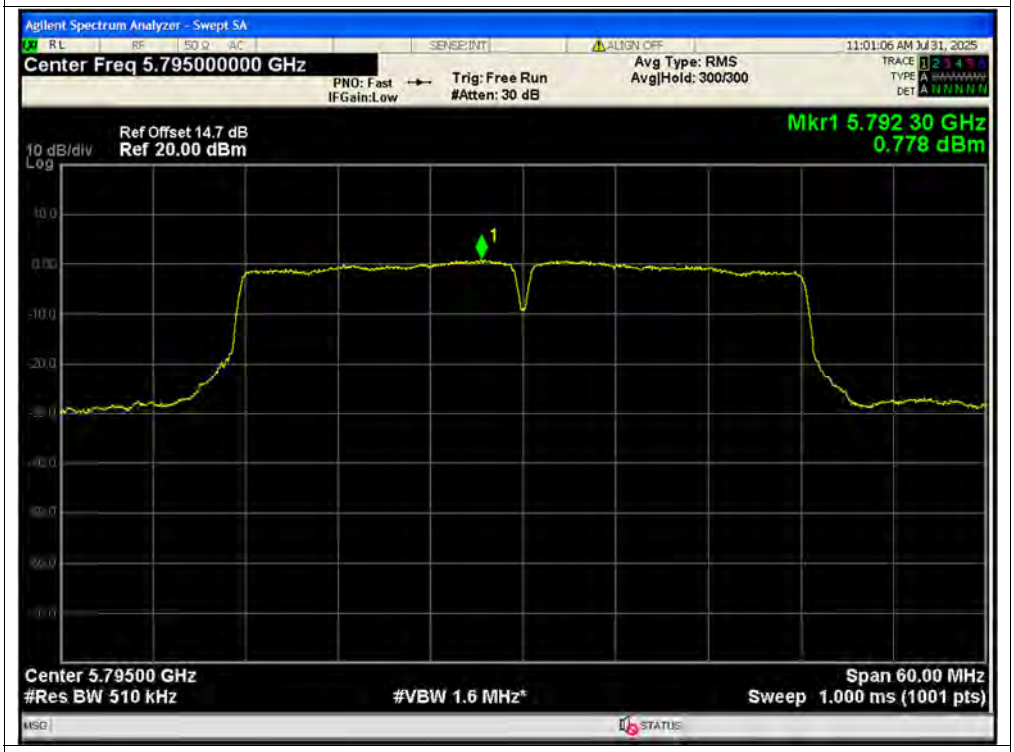
PSD NVNT n40 5710MHz Ant1



PSD NVNT n40 5755MHz Ant1



PSD NVNT n40 5795MHz Ant1



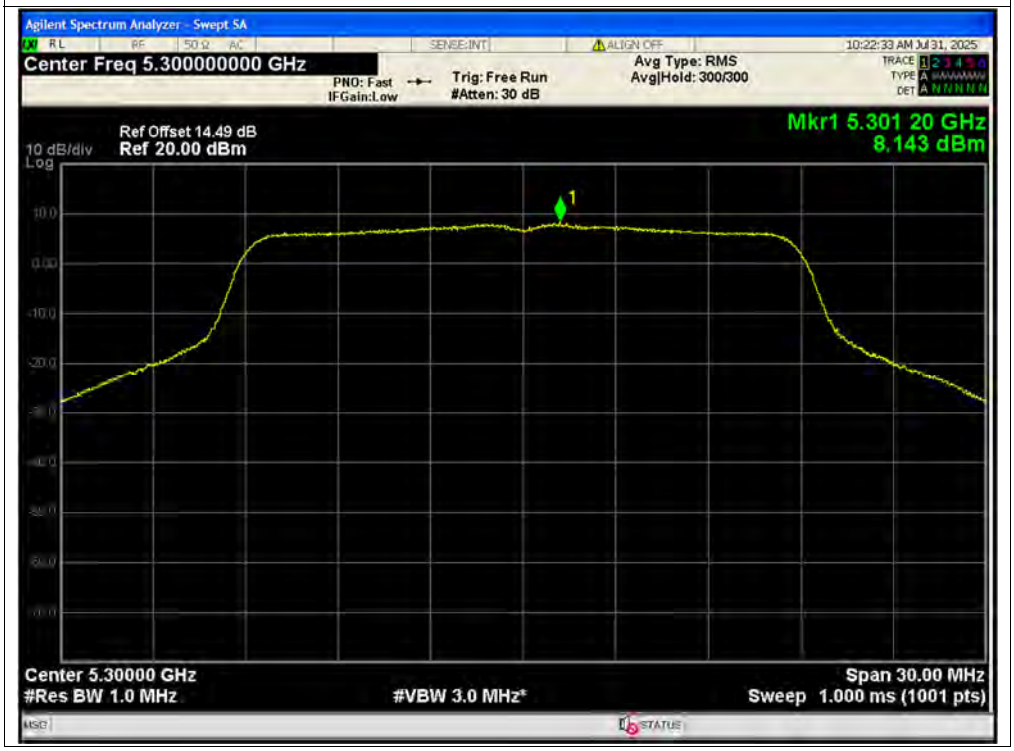
PSD NVNT ac20 5180MHz Ant1

PSD NVNT ac20 5220MHz Ant1

PSD NVNT ac20 5240MHz Ant1

PSD NVNT ac20 5260MHz Ant1

PSD NVNT ac20 5300MHz Ant1

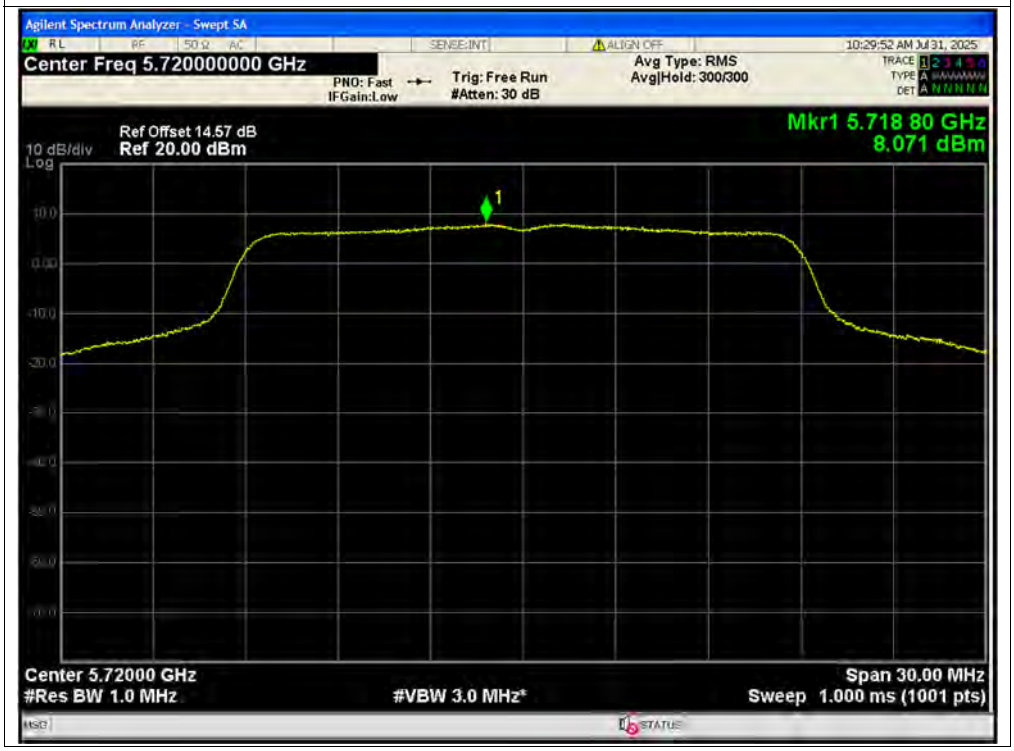


PSD NVNT ac20 5320MHz Ant1

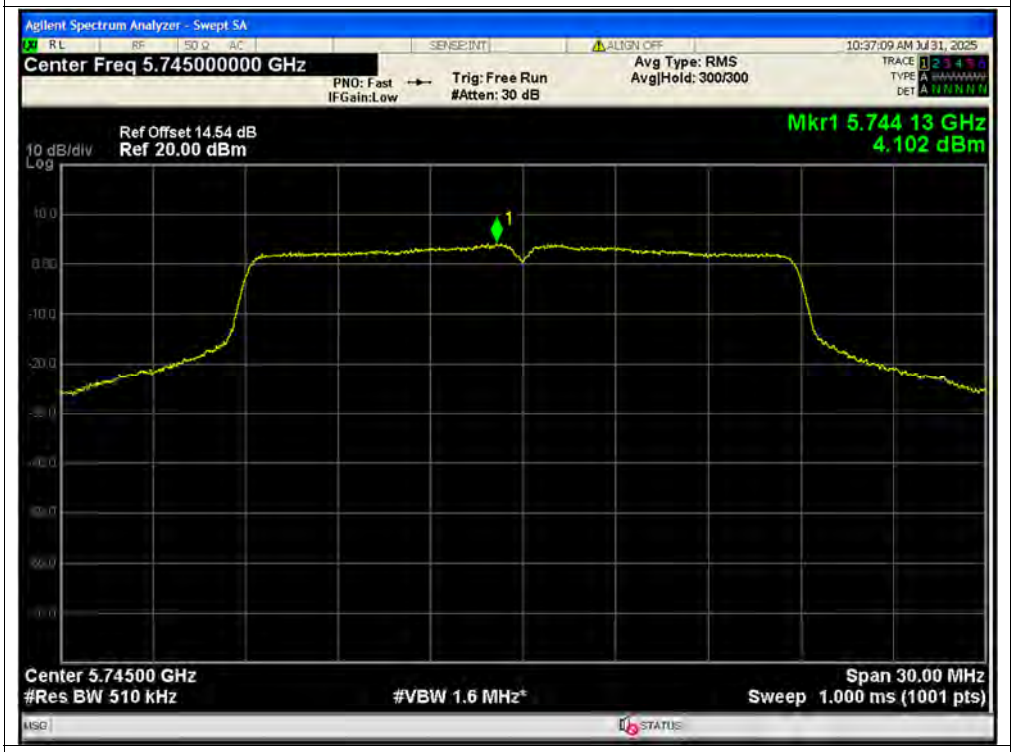
PSD NVNT ac20 5500MHz Ant1

PSD NVNT ac20 5580MHz Ant1

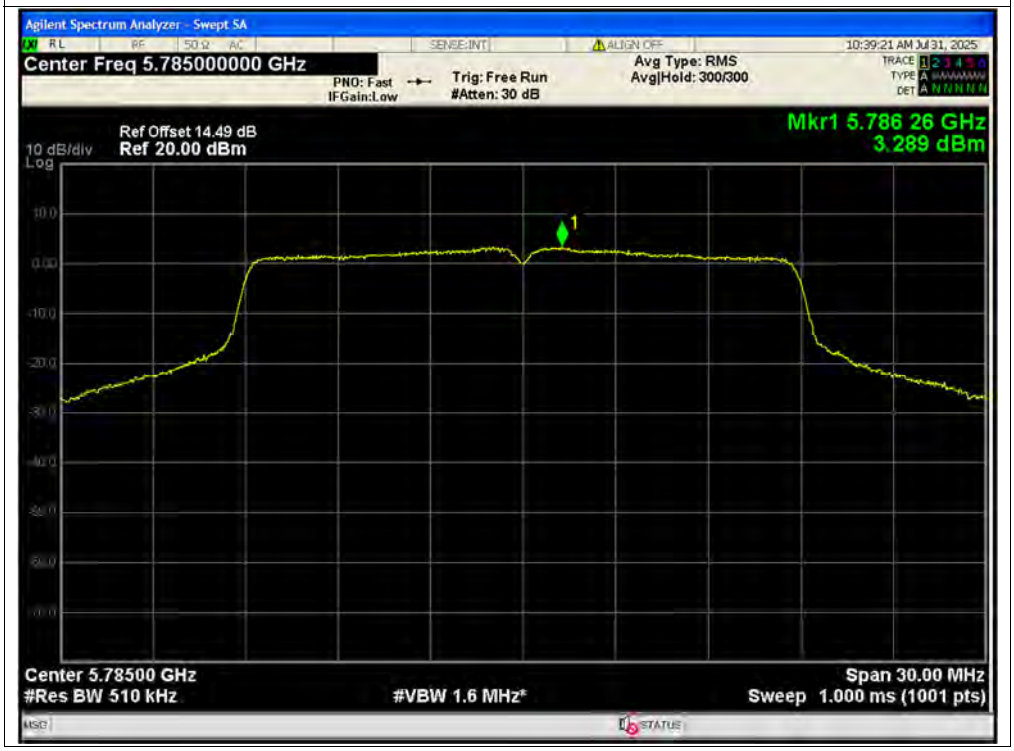
PSD NVNT ac20 5720MHz Ant1



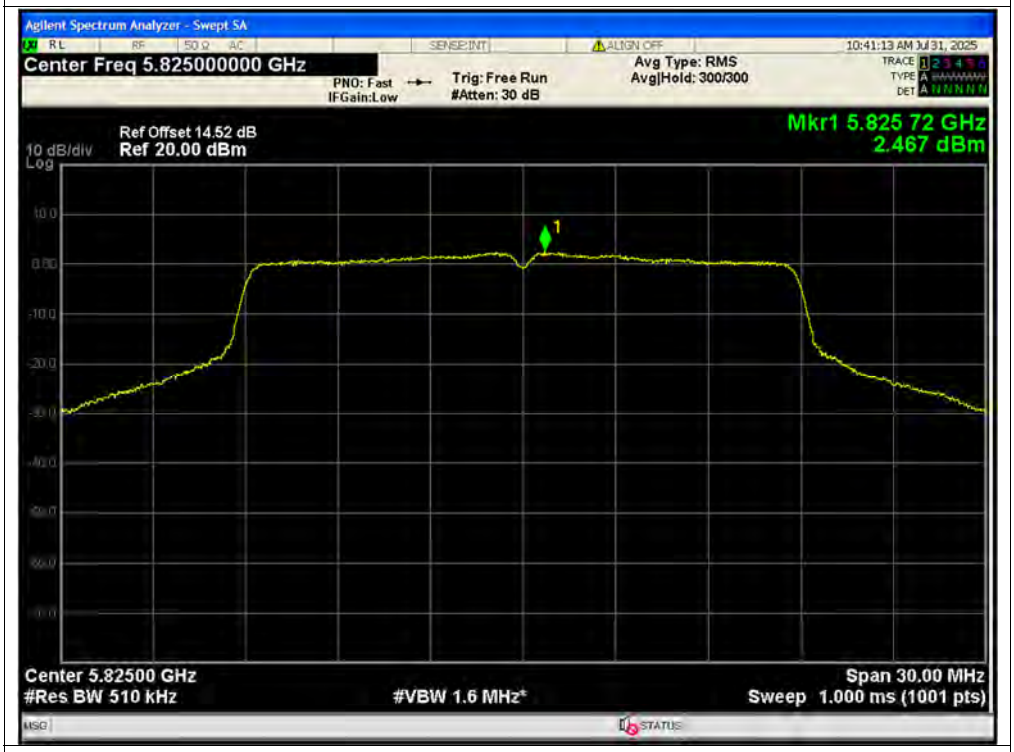
PSD NVNT ac20 5745MHz Ant1



PSD NVNT ac20 5785MHz Ant1



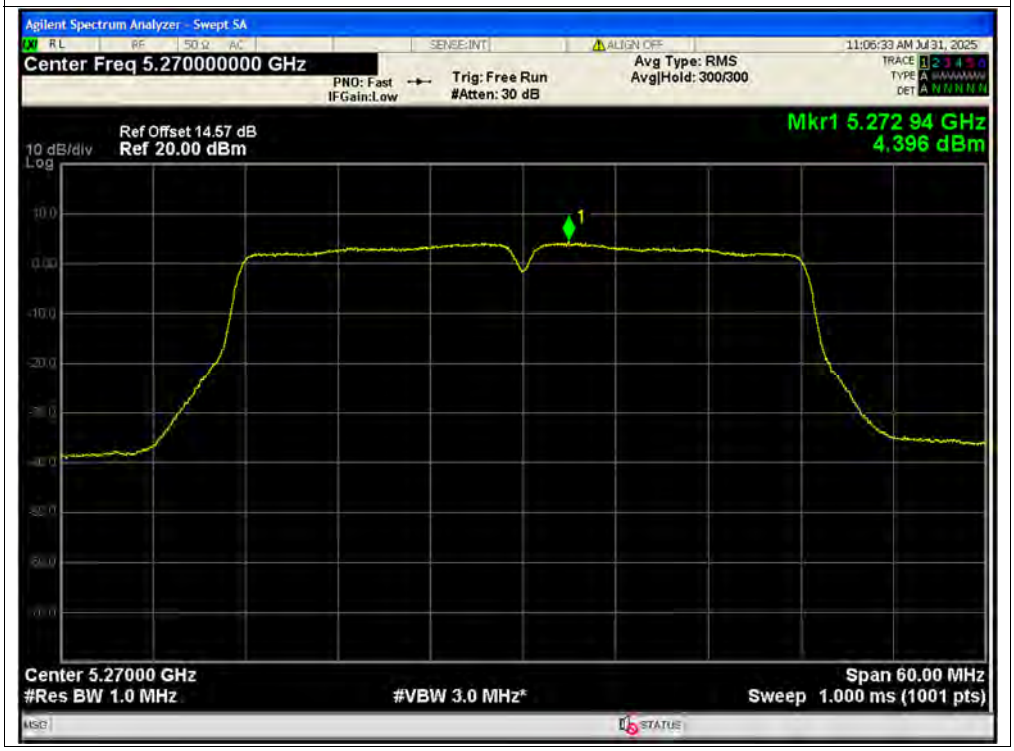
PSD NVNT ac20 5825MHz Ant1



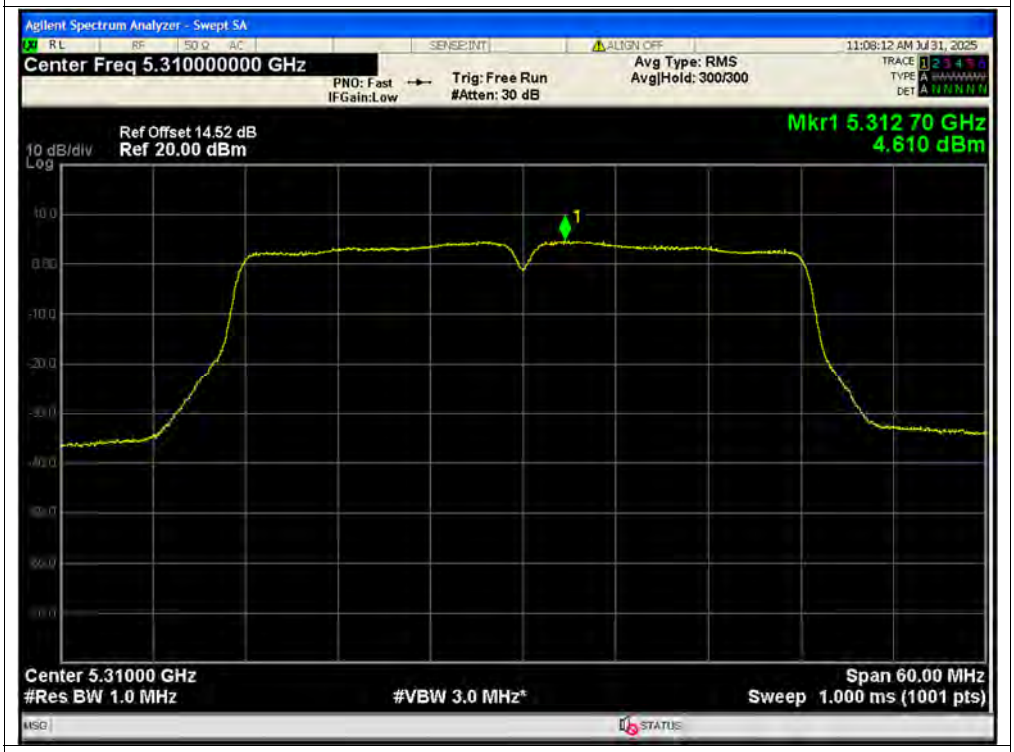
PSD NVNT ac40 5190MHz Ant1

PSD NVNT ac40 5230MHz Ant1

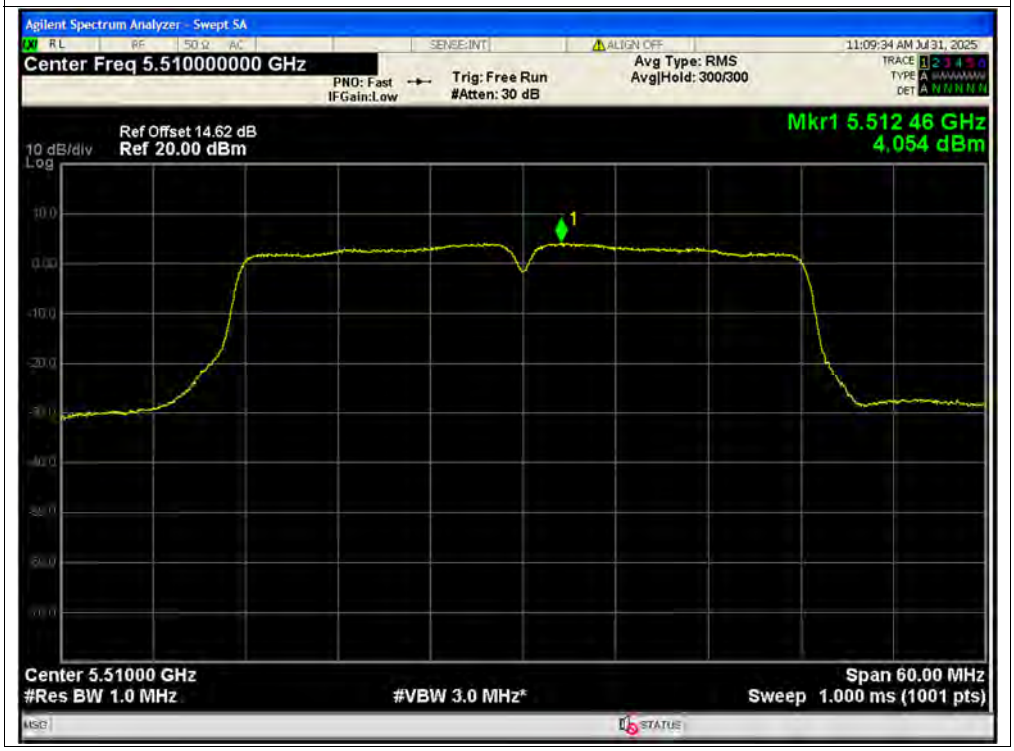
PSD NVNT ac40 5270MHz Ant1



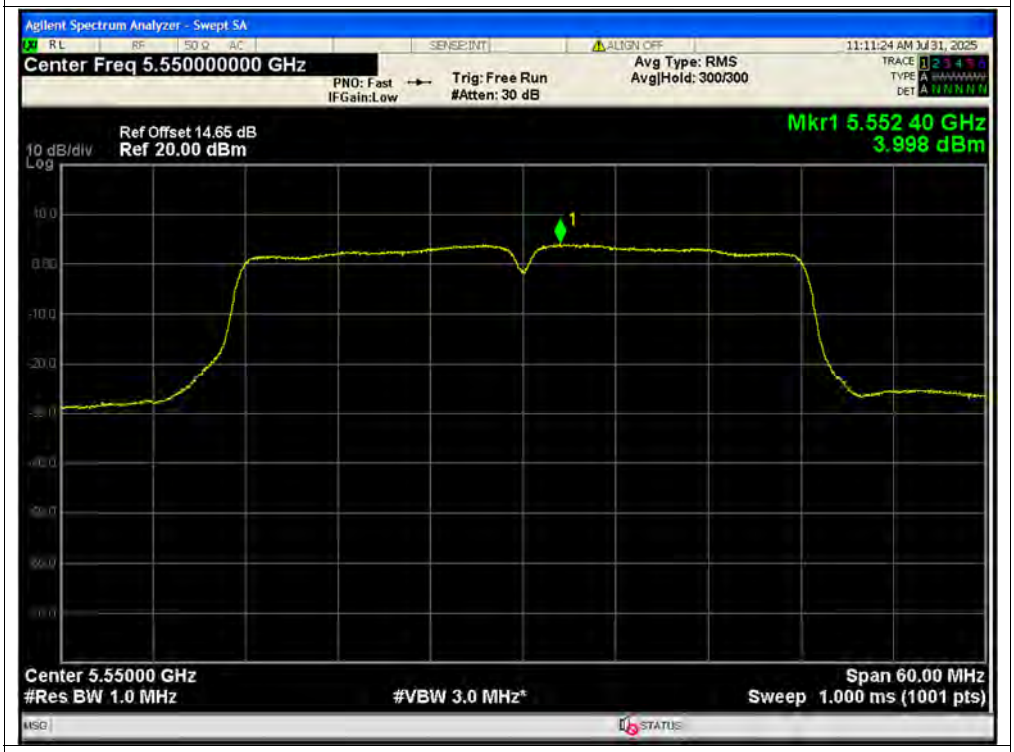
PSD NVNT ac40 5310MHz Ant1



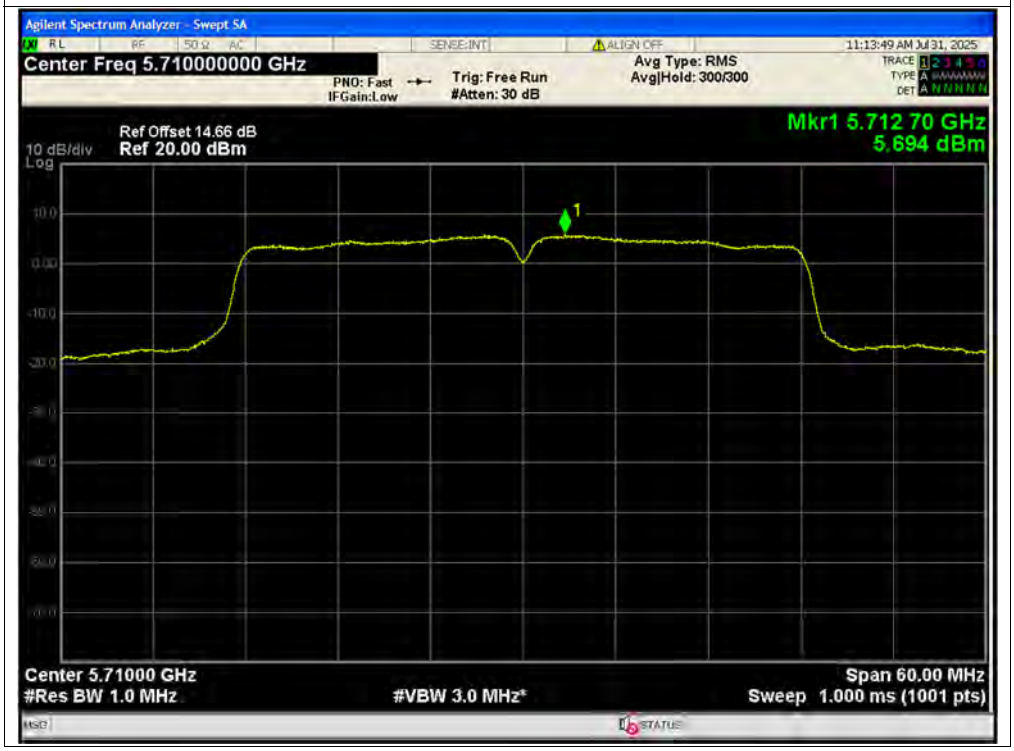
PSD NVNT ac40 5510MHz Ant1



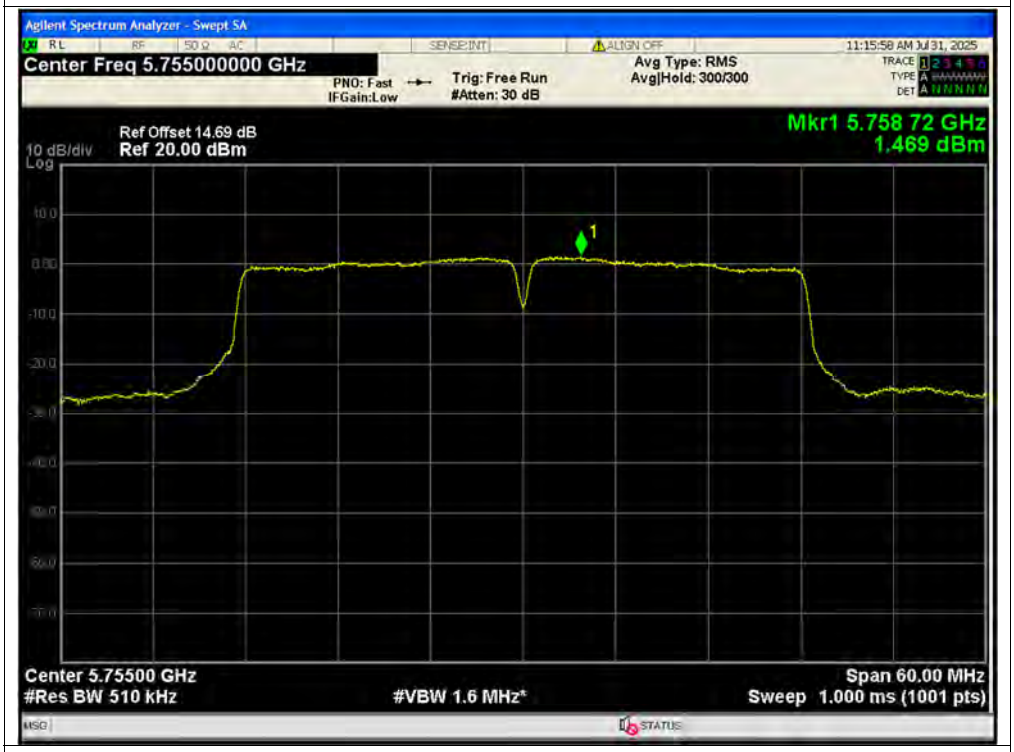
PSD NVNT ac40 5550MHz Ant1



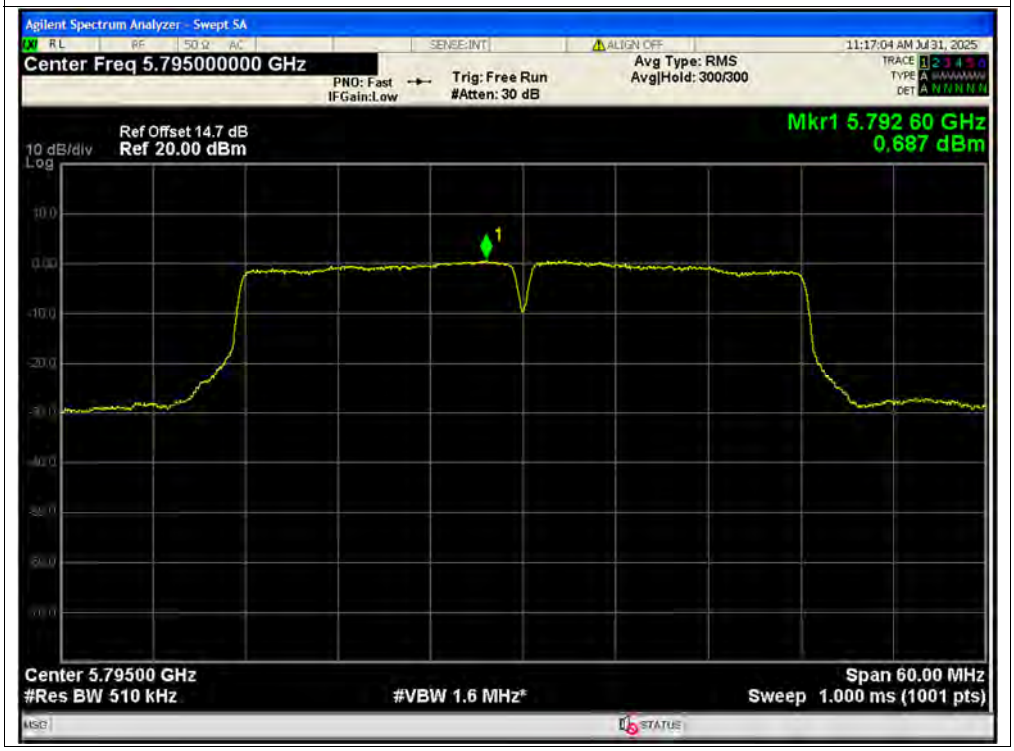
PSD NVNT ac40 5710MHz Ant1



PSD NVNT ac40 5755MHz Ant1

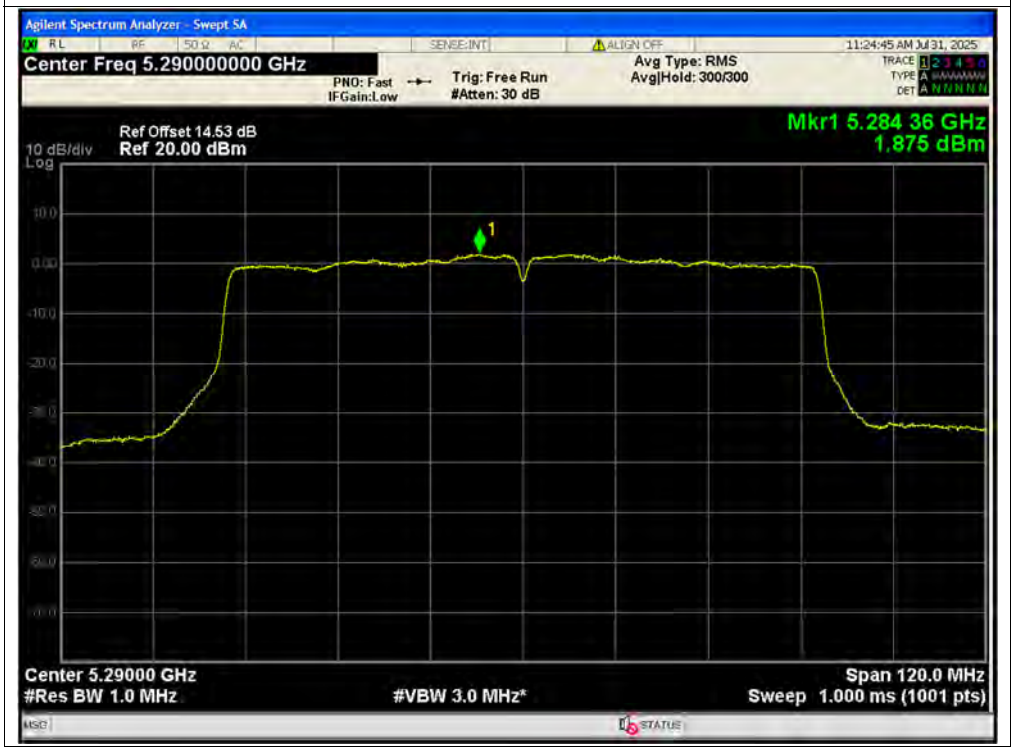


PSD NVNT ac40 5795MHz Ant1

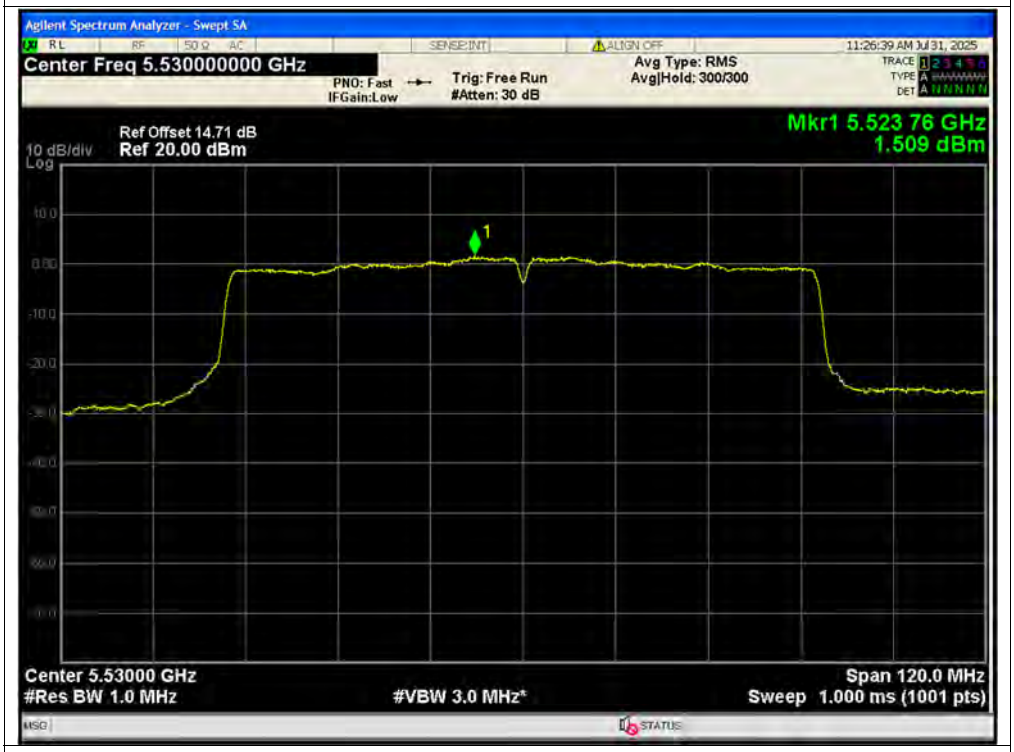


PSD NVNT ac80 5210MHz Ant1

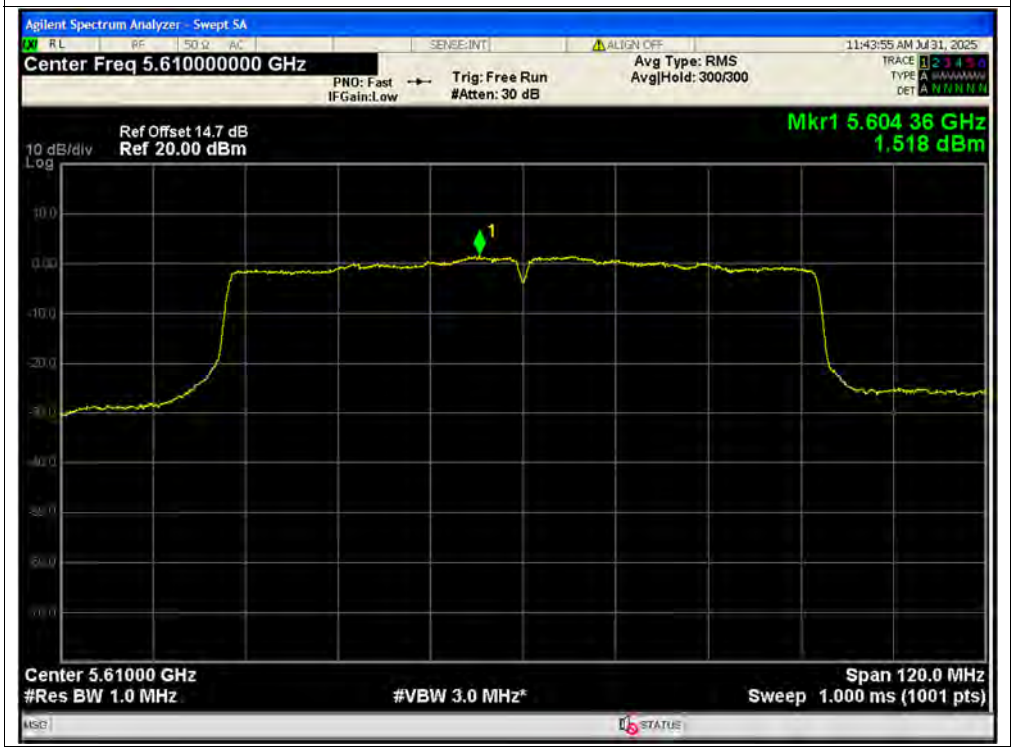
PSD NVNT ac80 5290MHz Ant1



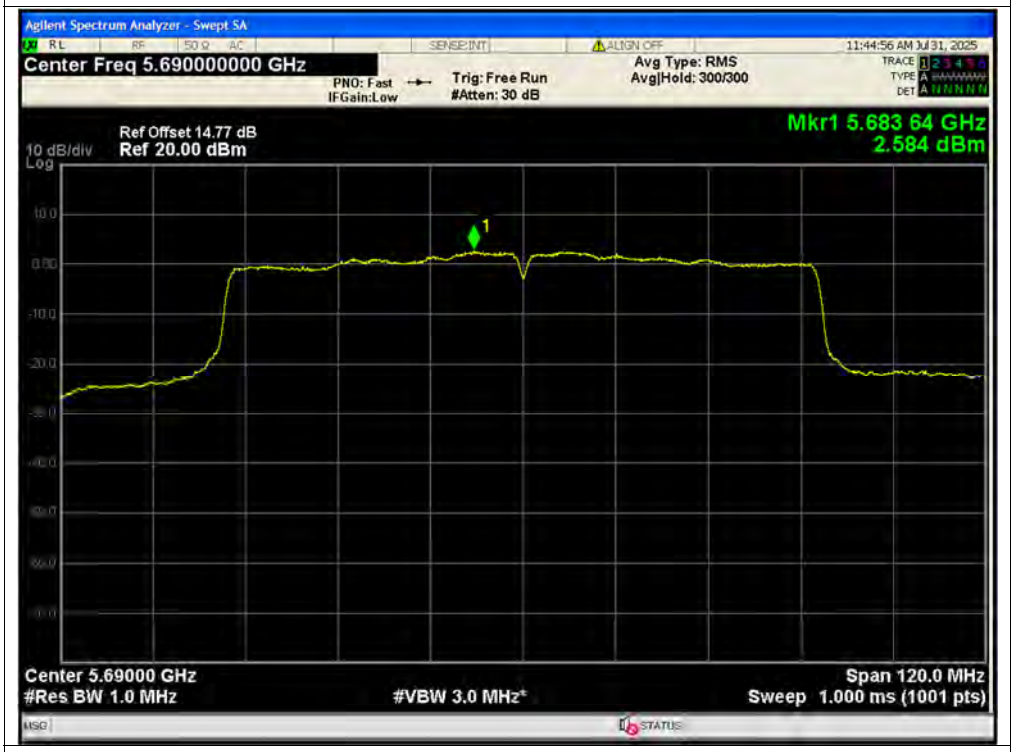
PSD NVNT ac80 5530MHz Ant1



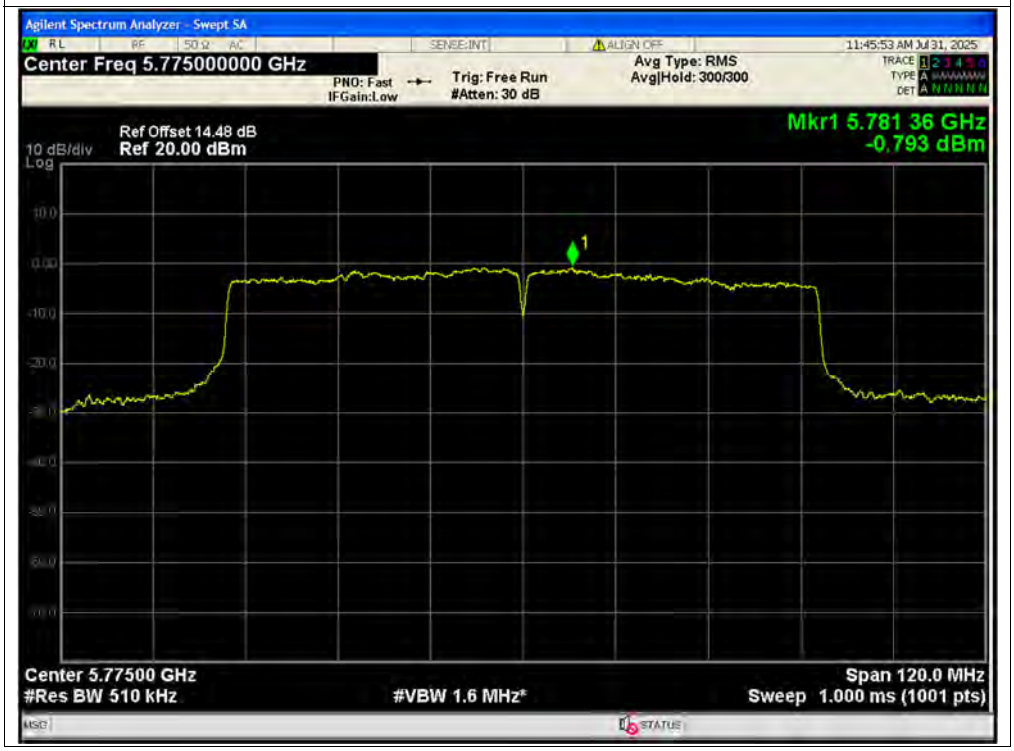
PSD NVNT ac80 5610MHz Ant1



PSD NVNT ac80 5690MHz Ant1



PSD NVNT ac80 5775MHz Ant1



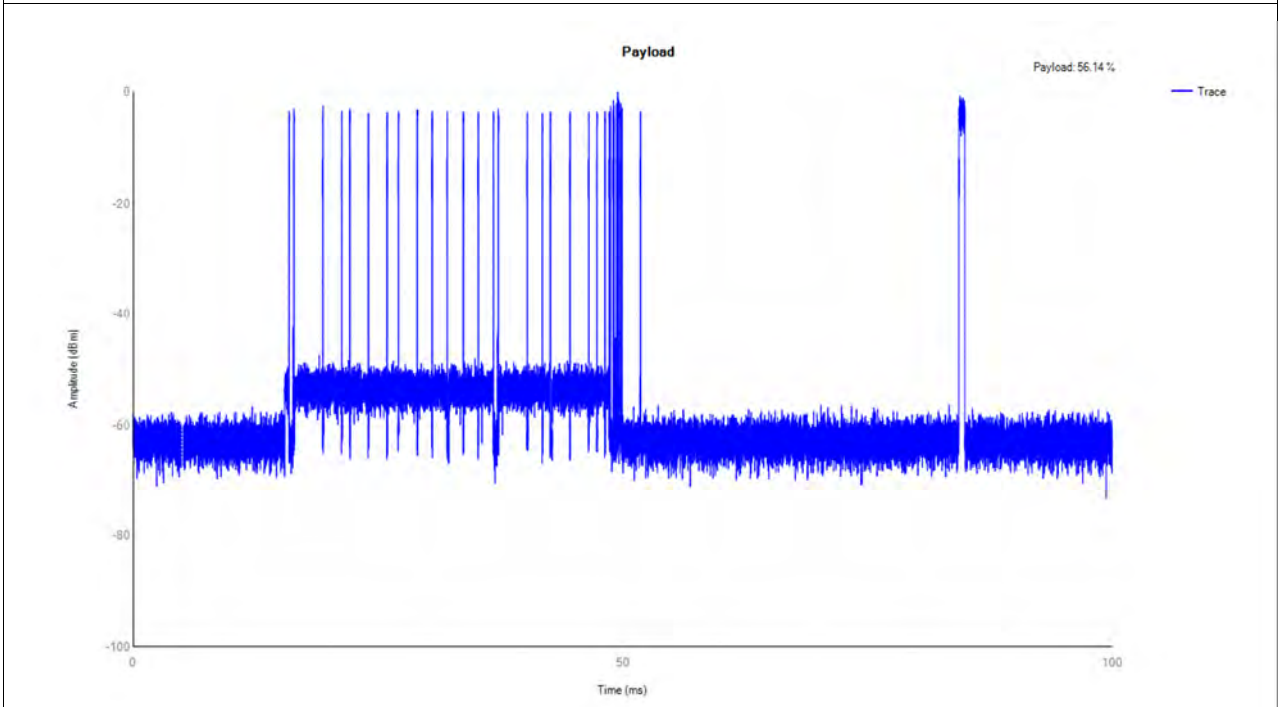
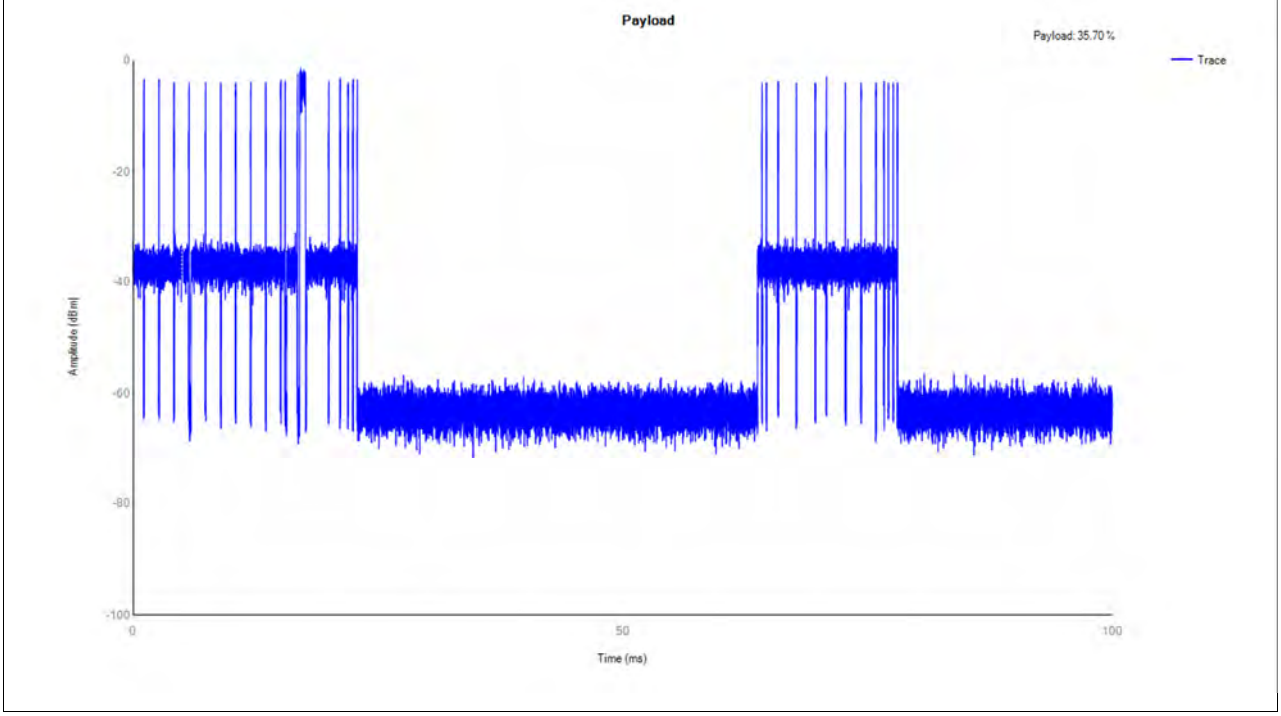
A.5. Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 3.65V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
20C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
20C 4.45V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
-20C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
-10C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
0C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
10C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
30C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
40C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
50C 3.87V	CW	5180	Ant1	5179.995	-5000	-0.97	25	Pass
20C 3.65V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
20C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
20C 4.45V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
-20C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
-10C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
0C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
10C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
30C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
40C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
50C 3.87V	CW	5260	Ant1	5259.993	-7000	-1.33	25	Pass
20C 3.65V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
20C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
20C 4.45V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
-20C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
-10C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
0C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
10C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
30C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
40C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
50C 3.87V	CW	5500	Ant1	5499.992	-8000	-1.45	25	Pass
20C 3.87V	CW	5745	Ant1	5744.992	-8000	-1.39	25	Pass

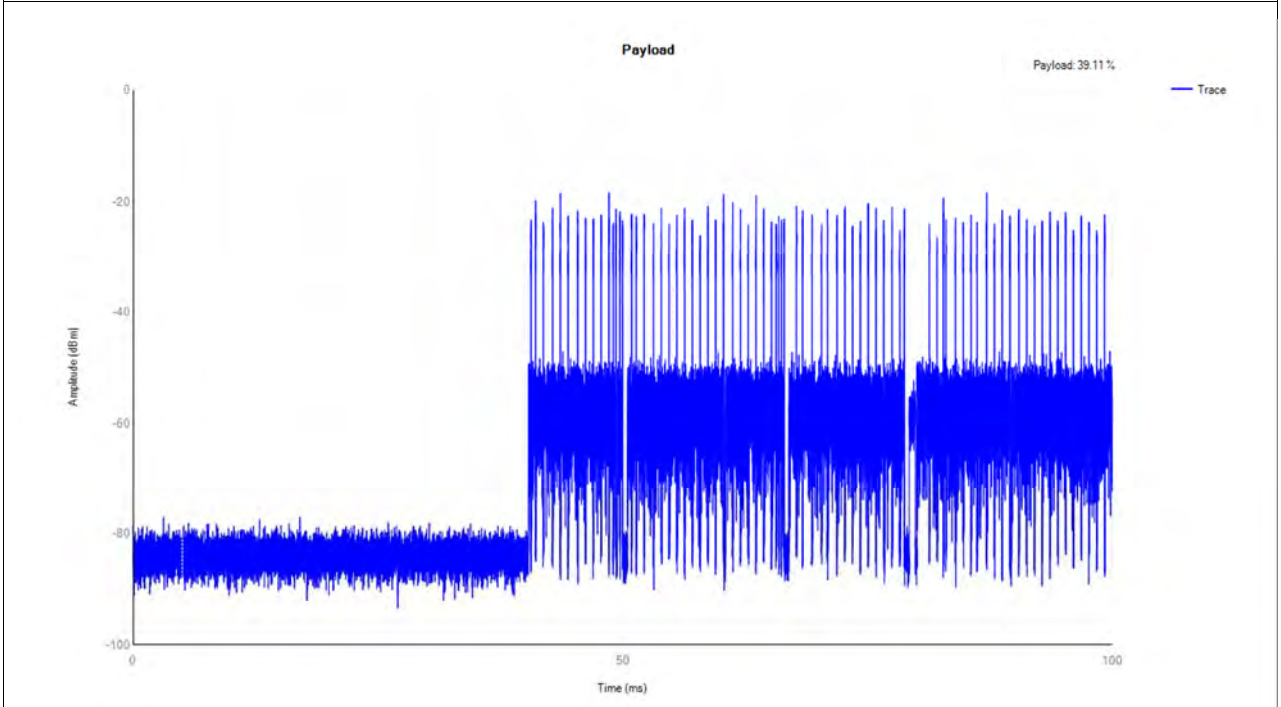
A.6. Dynamic Frequency Selection

Payload

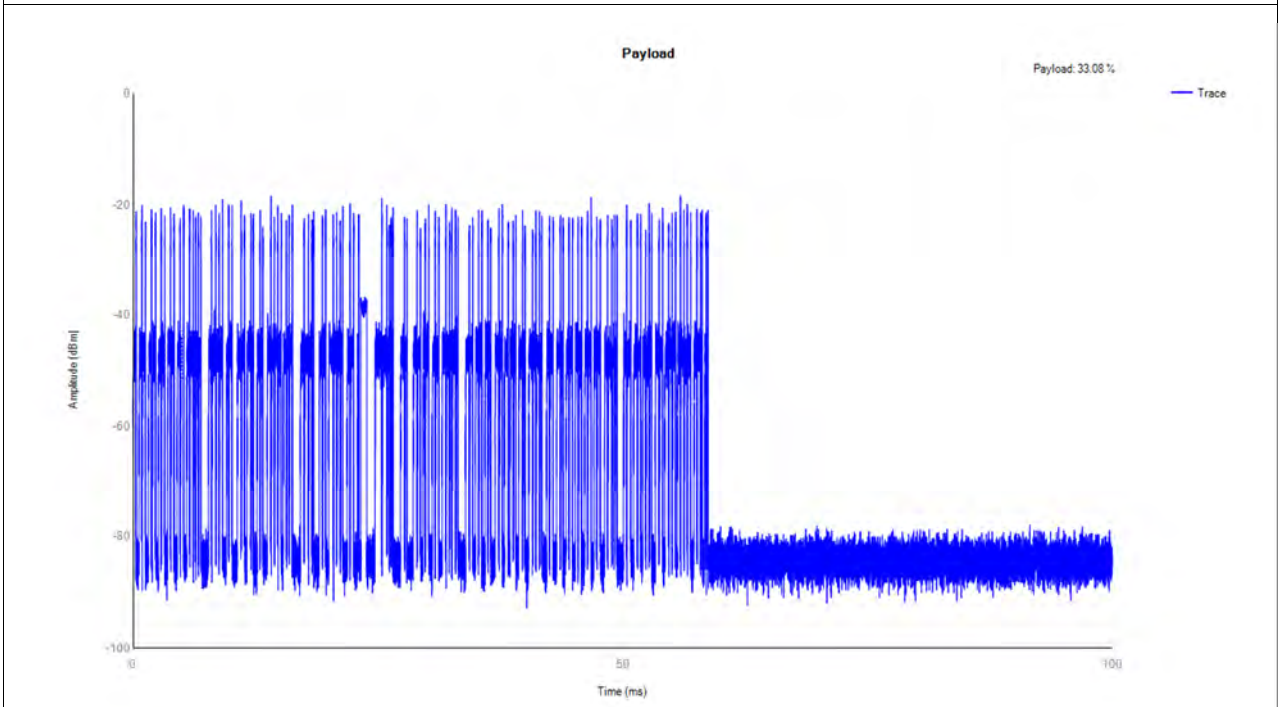
Mode	Frequency (MHz)	Result	Verdict
ac20	5320	56.14	Pass
ac20	5500	35.7	Pass
ac80	5290	39.11	Pass
ac80	5530	33.08	Pass

Test Graphs
ac20 5320MHz Payload

ac20 5500MHz Payload


ac80 5290MHz Payload



ac80 5530MHz Payload



Detection Thresholds

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

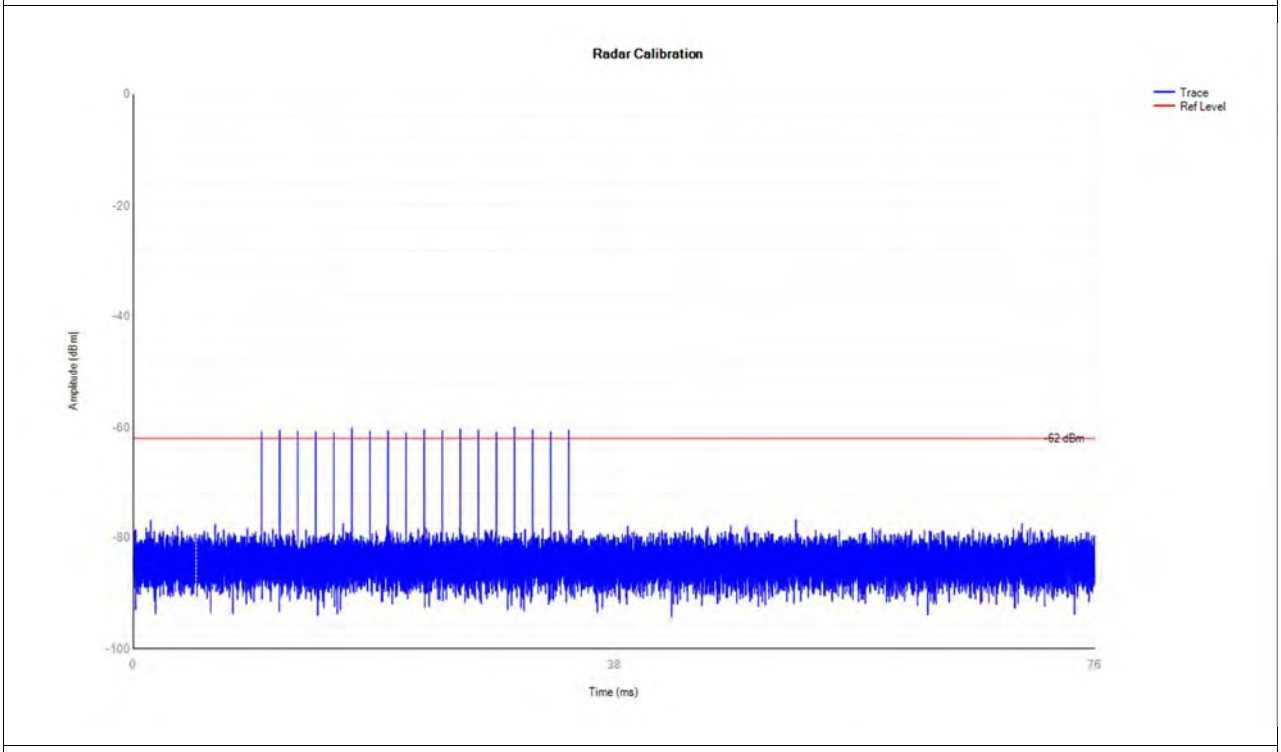
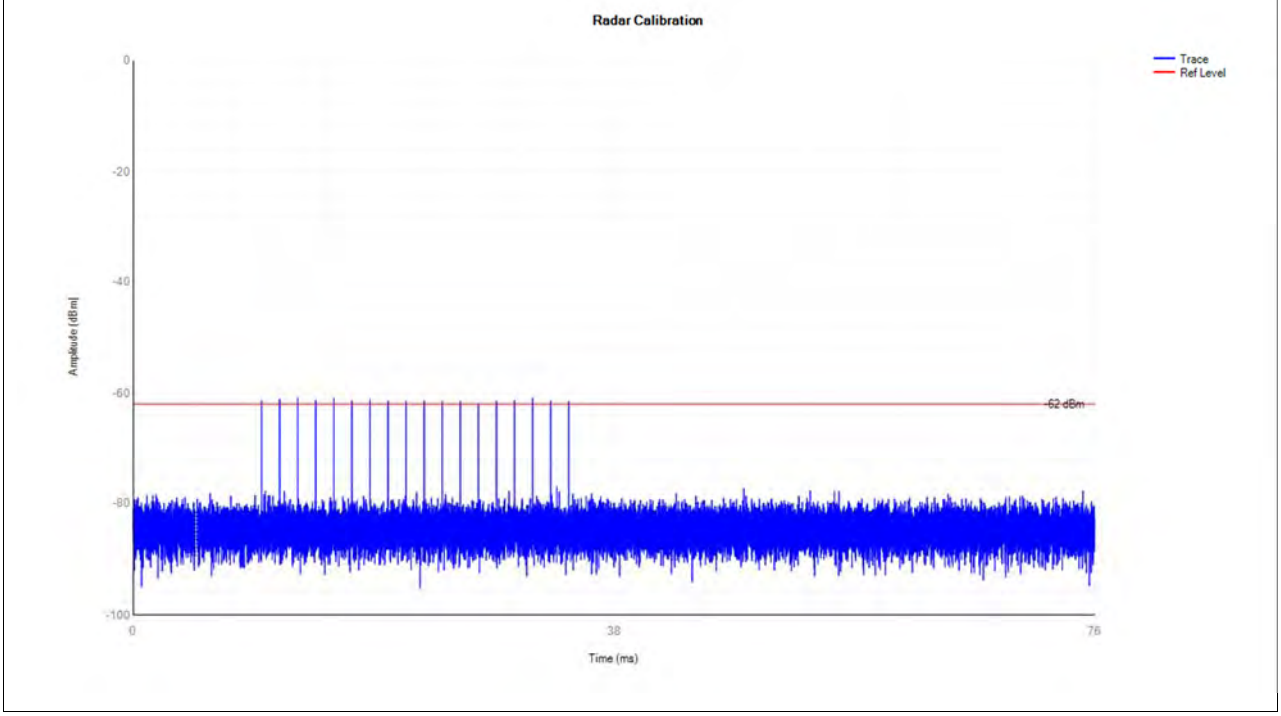
Spectrum analyzer settings:

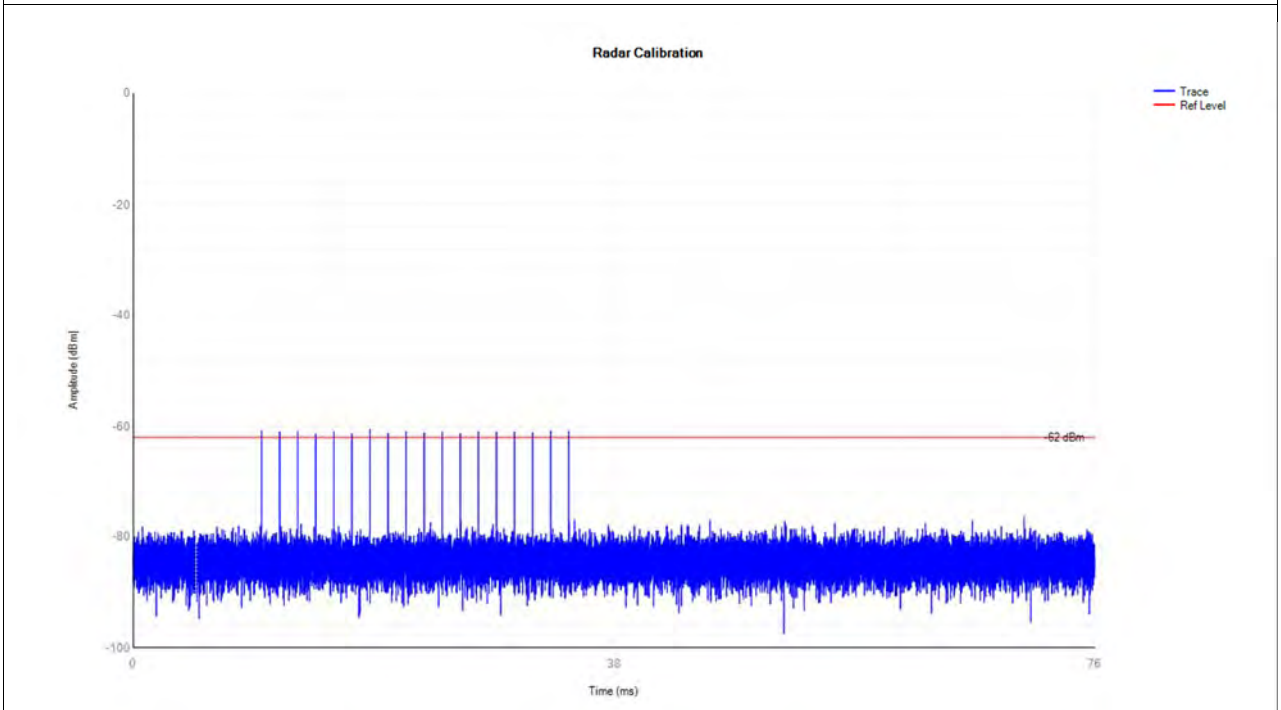
Span: Zero

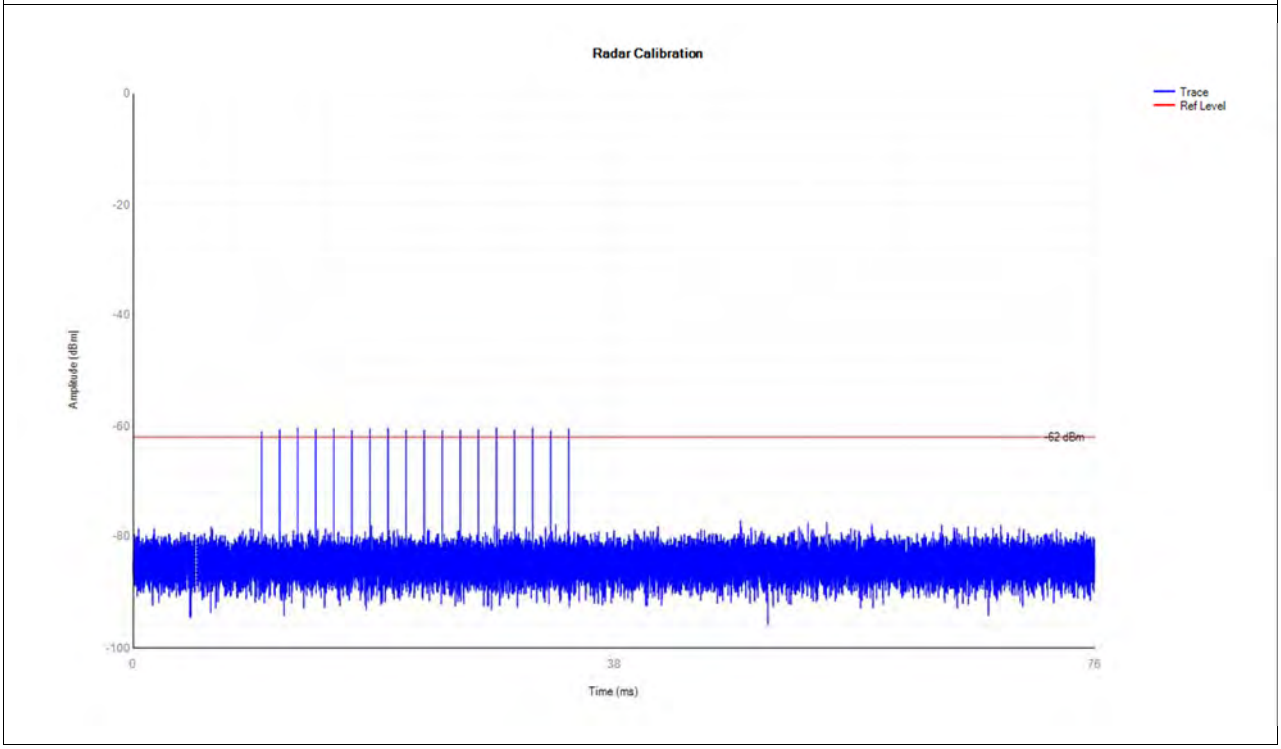
Detector Type: Peak

RBW: 3MHz

VBW: 3MHz

Test Graphs
5320MHz DFS_FCC_T0

5500MHz DFS_FCC_T0


5290MHz DFS_FCC_T0


5530MHz DFS_FCC_T0


Channel Move Time and Channel Closing Transmission Time

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
ac20	5320	0.84	10	0.033	0.26	0.009	0.06	Pass
ac20	5500	0.874	10	0.027	0.26	0.009	0.06	Pass
ac80	5290	0.873	10	0.017	0.26	0.009	0.06	Pass
ac80	5530	0.802	10	0.015	0.26	0.008	0.06	Pass

Spectrum analyzer settings:

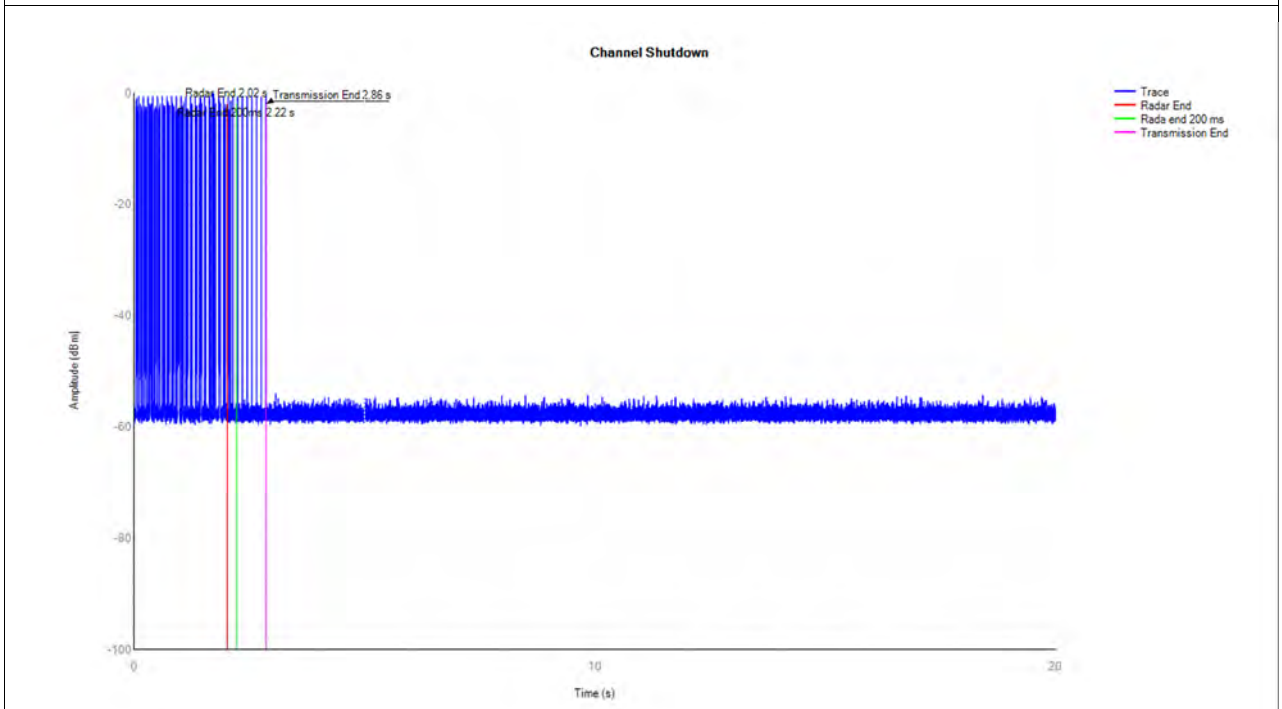
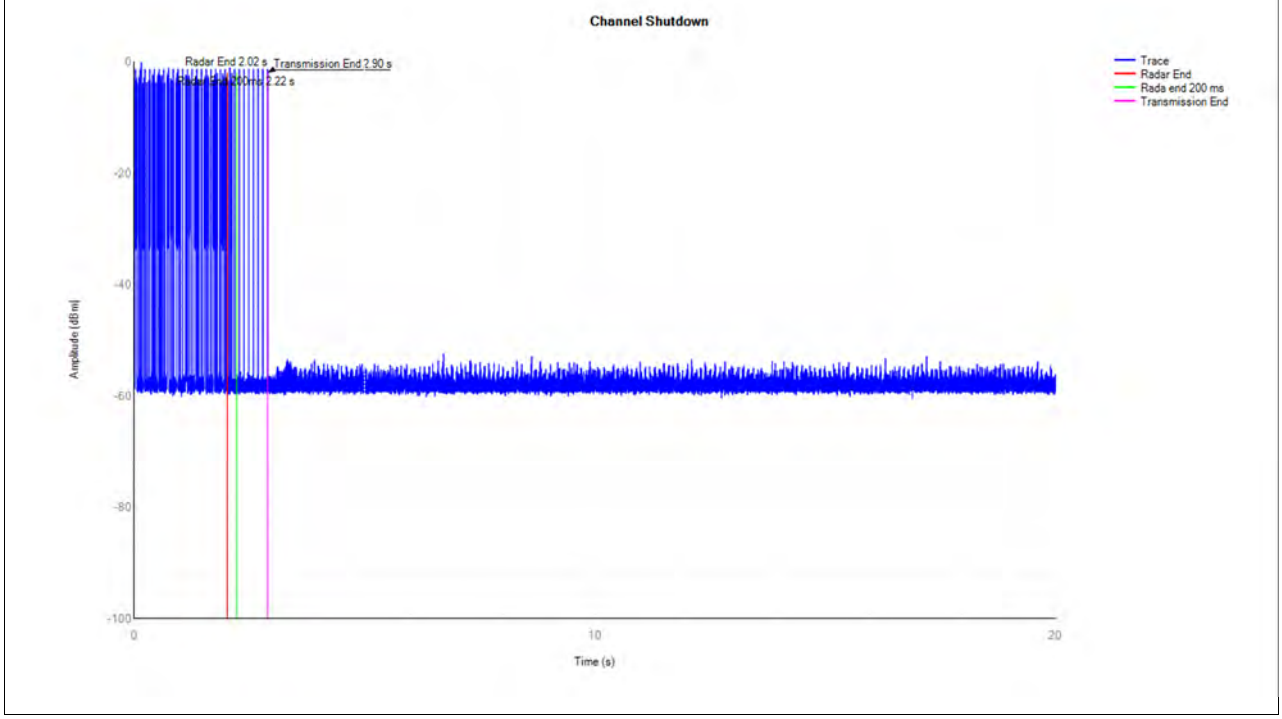
Span: Zero

Detector type: Peak

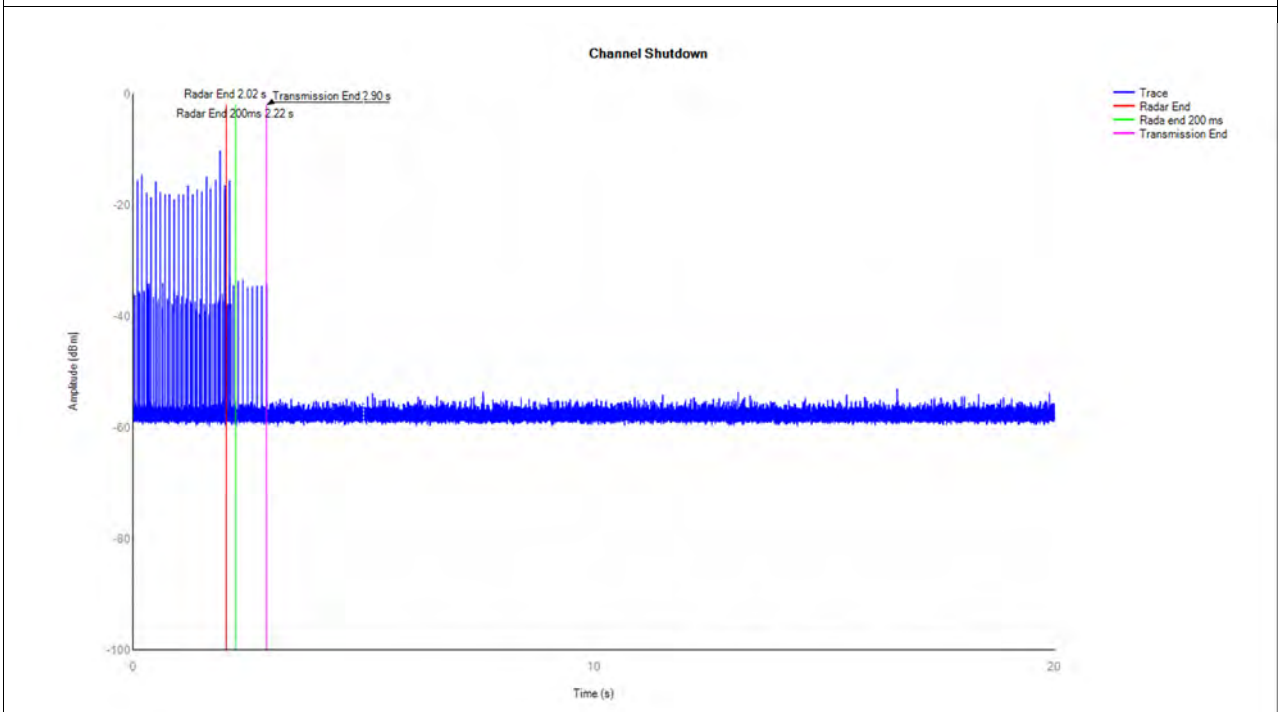
RBW: 3MHz

VBW: 3MHz

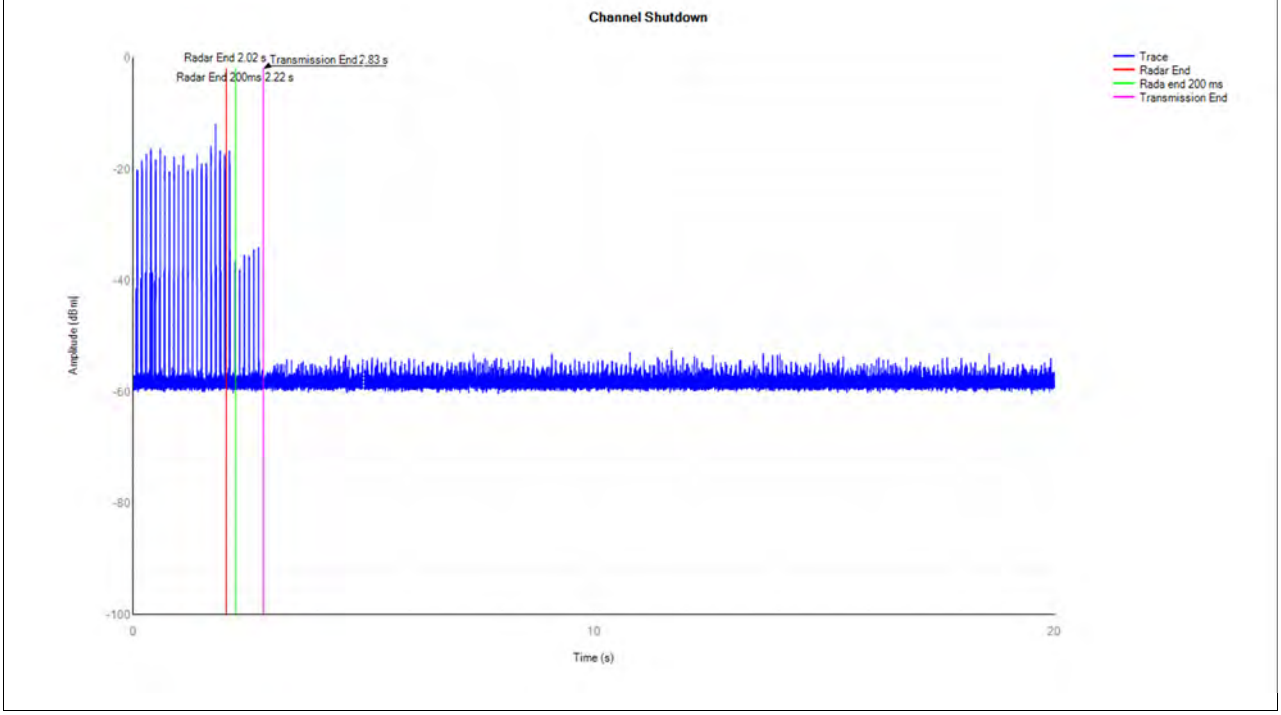
Sweep time: 20s

Test Graphs
ac20 5320MHz Shutdown

ac20 5500MHz Shutdown


ac80 5290MHz Shutdown



ac80 5530MHz 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
ac20	5320	See test Graph	Pass
ac20	5500	See test Graph	Pass

Spectrum analyzer settings:

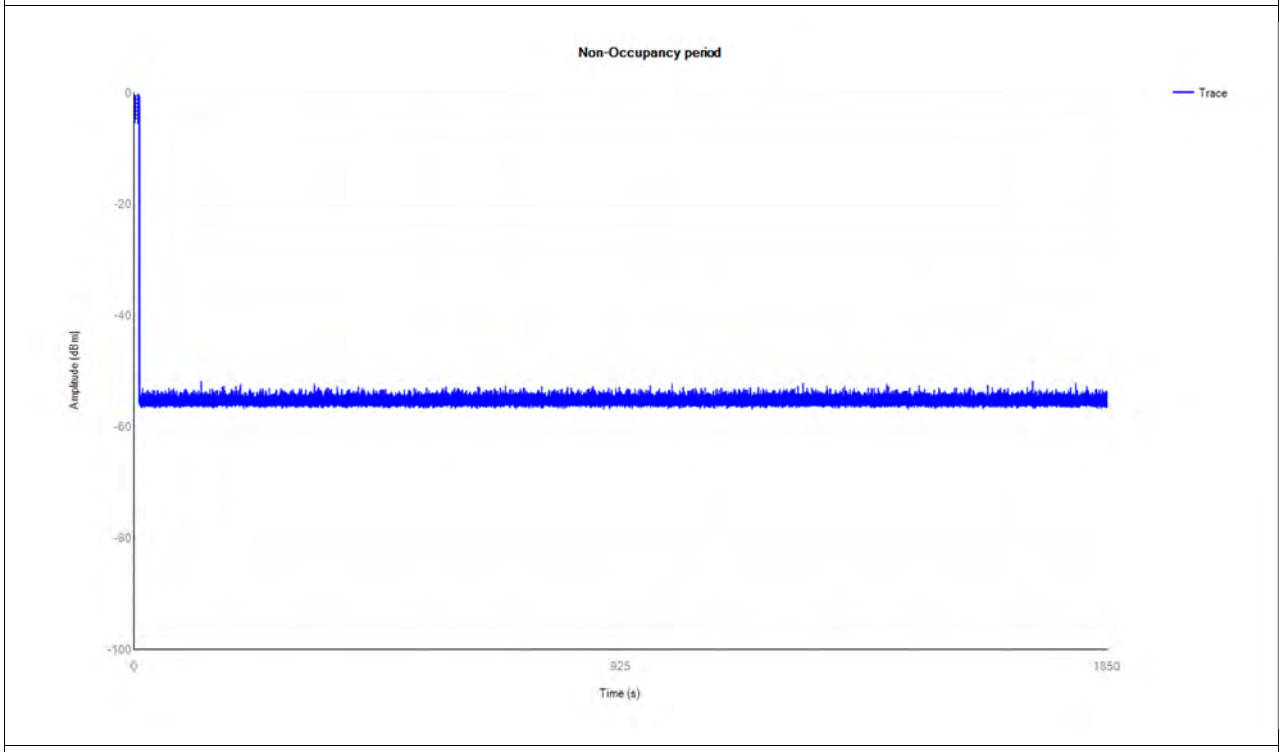
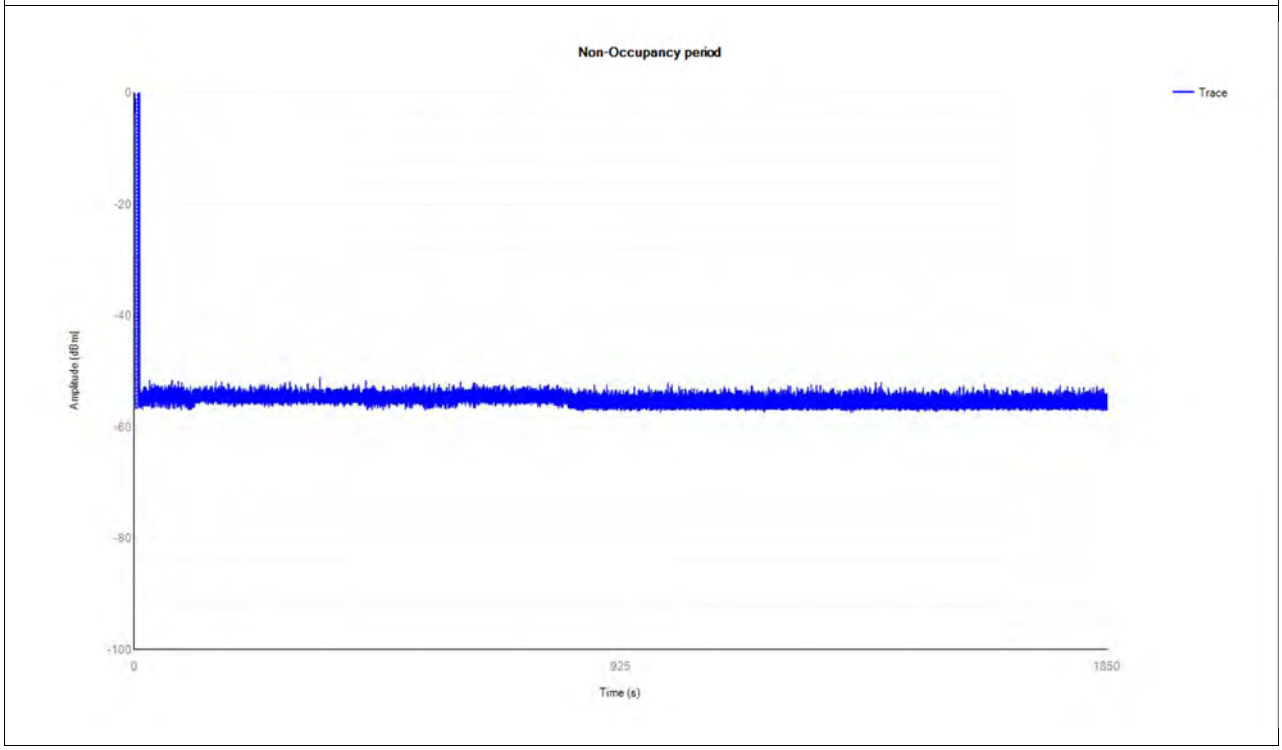
Span: Zero

Detector type: Peak

RBW: 3MHz

VBW: 3MHz

Sweep time: 1850s

Test Graphs
ac20 5320MHz Non-Occupancy

ac20 5500MHz Non-Occupancy


A.7. Conducted Emission

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

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

A. Test Setup:

Test Mode: EUT+Adapter+DATA Cable+Earphone+WIFI TX

Test voltage: AC 120V/60Hz

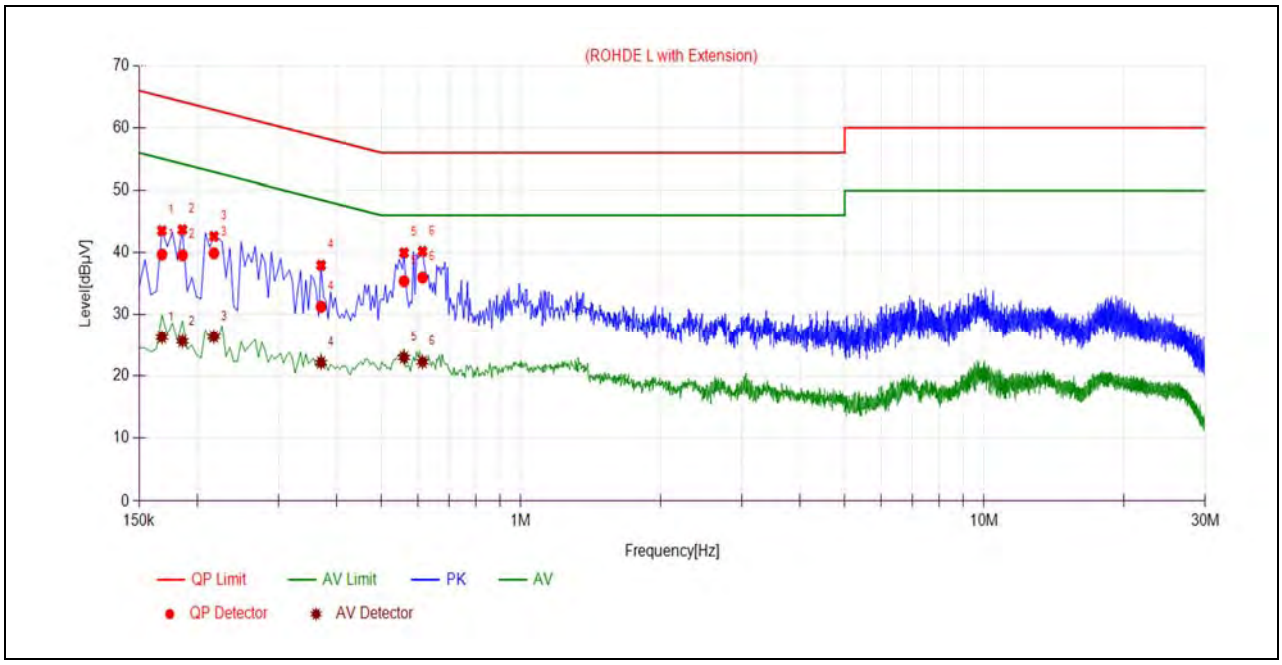
The measurement results are obtained as below:

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

U_R: Receiver Reading

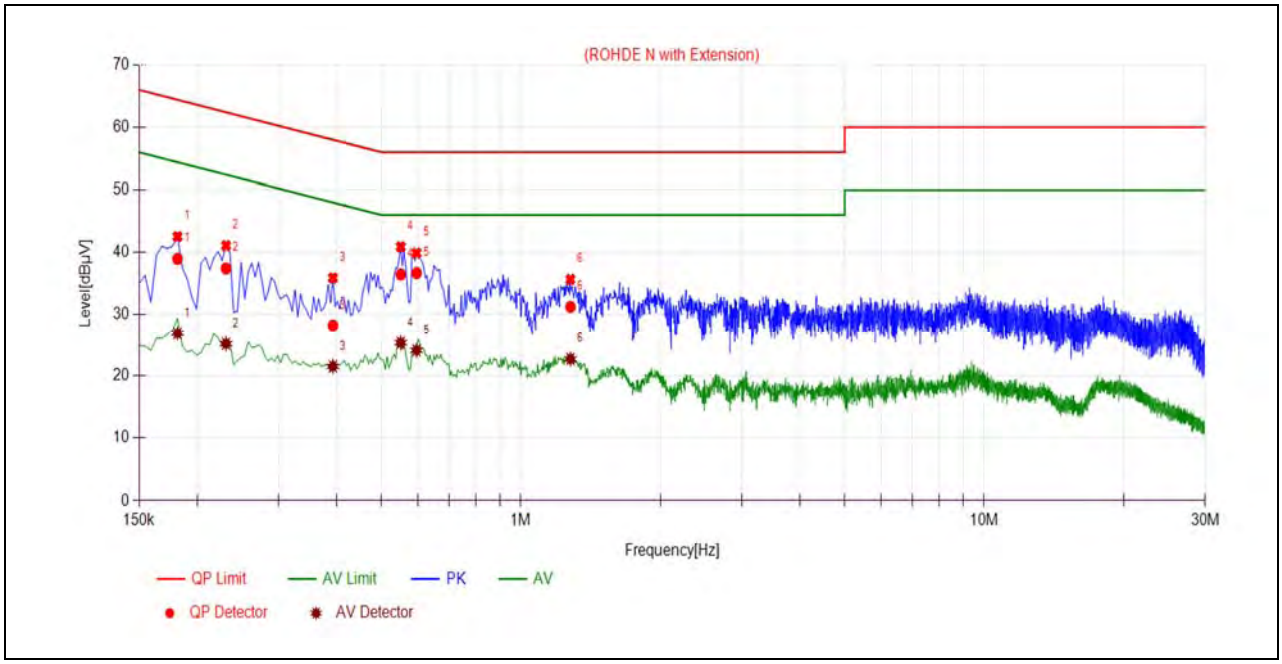
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1680	39.69	26.28	65.06	55.06	Line	PASS
2	0.1860	39.58	25.65	64.21	54.21		PASS
3	0.2175	39.91	26.39	62.91	52.91		PASS
4	0.3705	31.30	22.16	58.49	48.49		PASS
5	0.5595	35.40	22.99	56.00	46.00		PASS
6	0.6135	35.99	22.27	56.00	46.00		PASS



(N Phase)

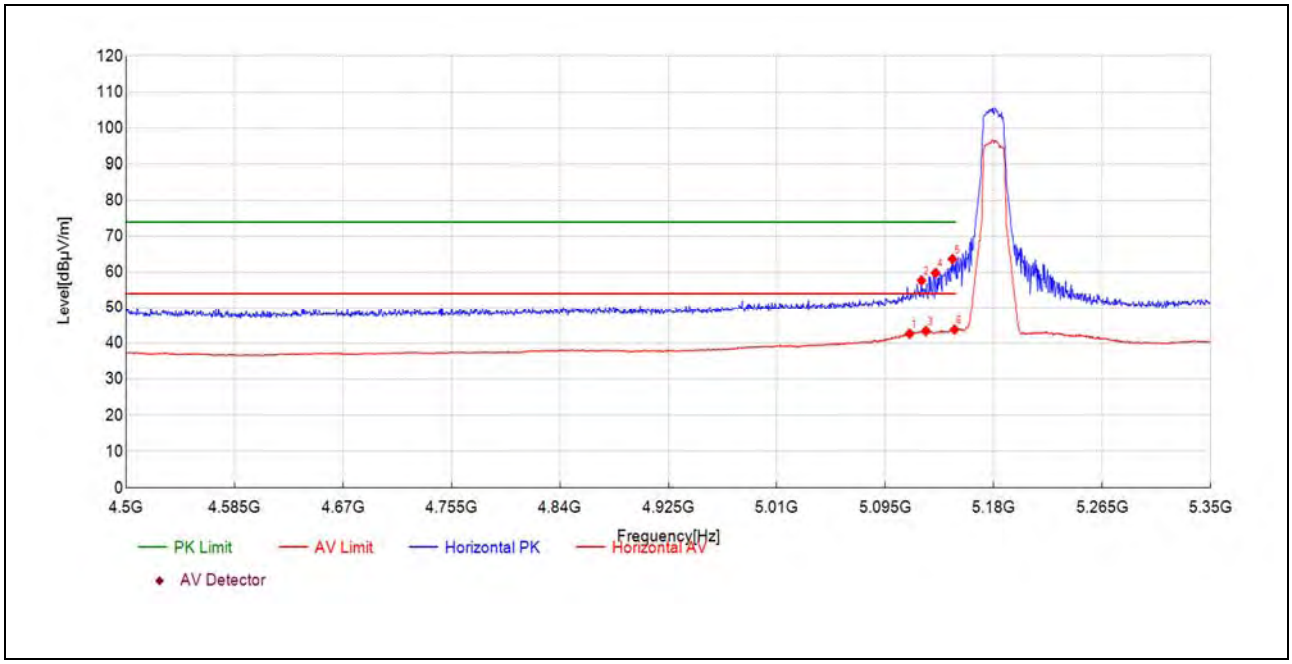
No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1815	38.97	26.92	64.42	54.42	Neutral	PASS
2	0.2310	37.44	25.20	62.41	52.41		PASS
3	0.3930	28.25	21.54	58.00	48.00		PASS
4	0.5505	36.47	25.37	56.00	46.00		PASS
5	0.5955	36.69	24.14	56.00	46.00		PASS
6	1.2795	31.27	22.74	56.00	46.00		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 (Horizontal) 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.

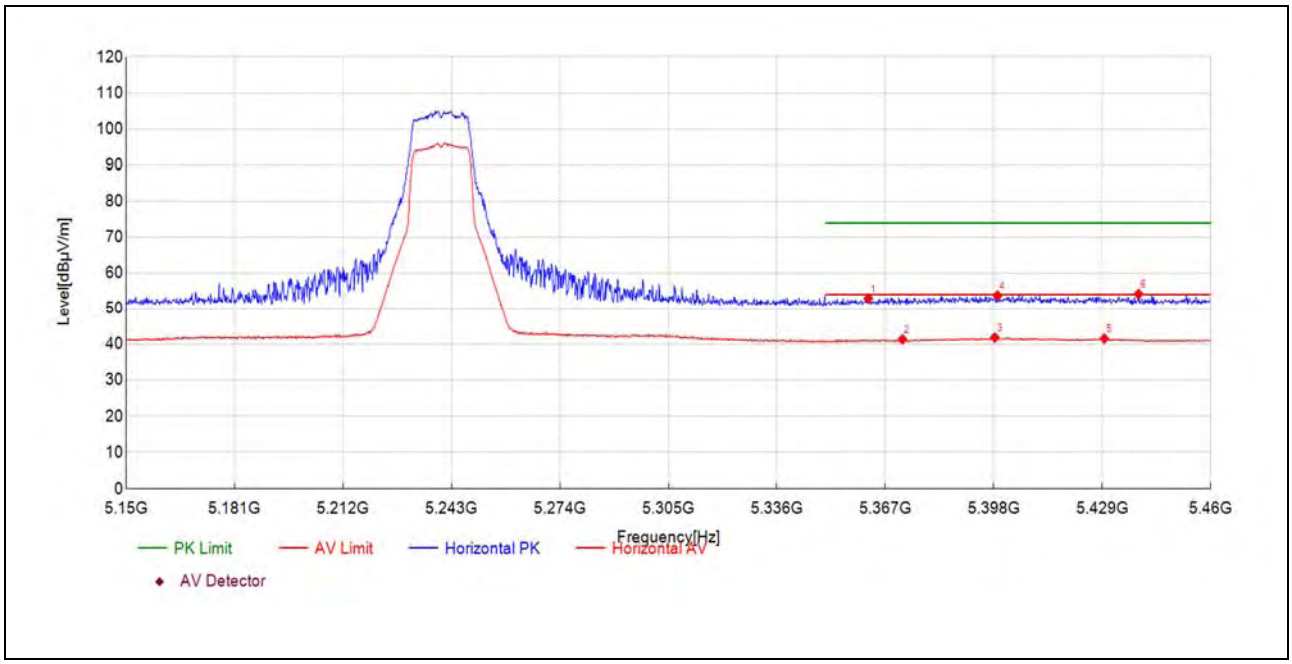
802.11a Mode

Plot for Channel 36



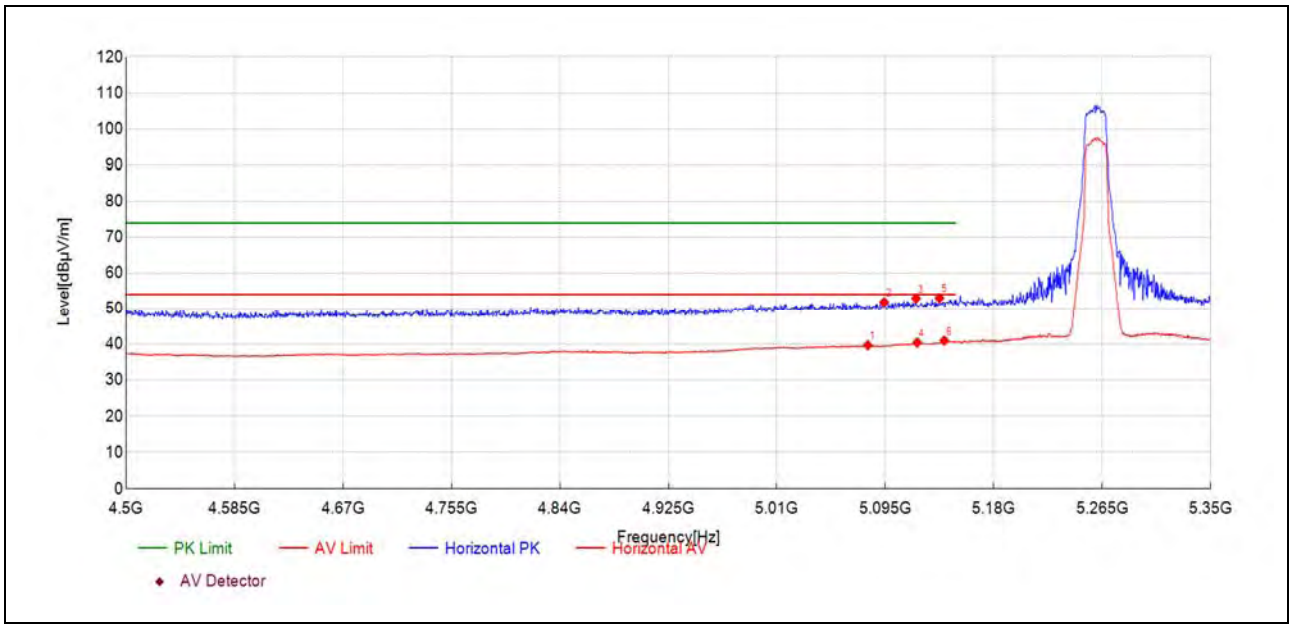
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5114.01	28.7	42.63	13.930	54.00	11.37	161	AV	Horizontal	PASS
5123.36	43.6	57.69	14.100	74.00	16.31	161	PK	Horizontal	PASS
5126.76	29.2	43.39	14.170	54.00	10.61	180	AV	Horizontal	PASS
5134.42	45.5	59.80	14.310	74.00	14.20	161	PK	Horizontal	PASS
5147.60	49.1	63.67	14.550	74.00	10.33	170	PK	Horizontal	PASS
5149.30	29.2	43.79	14.580	54.00	10.21	161	AV	Horizontal	PASS

Plot for Channel 48



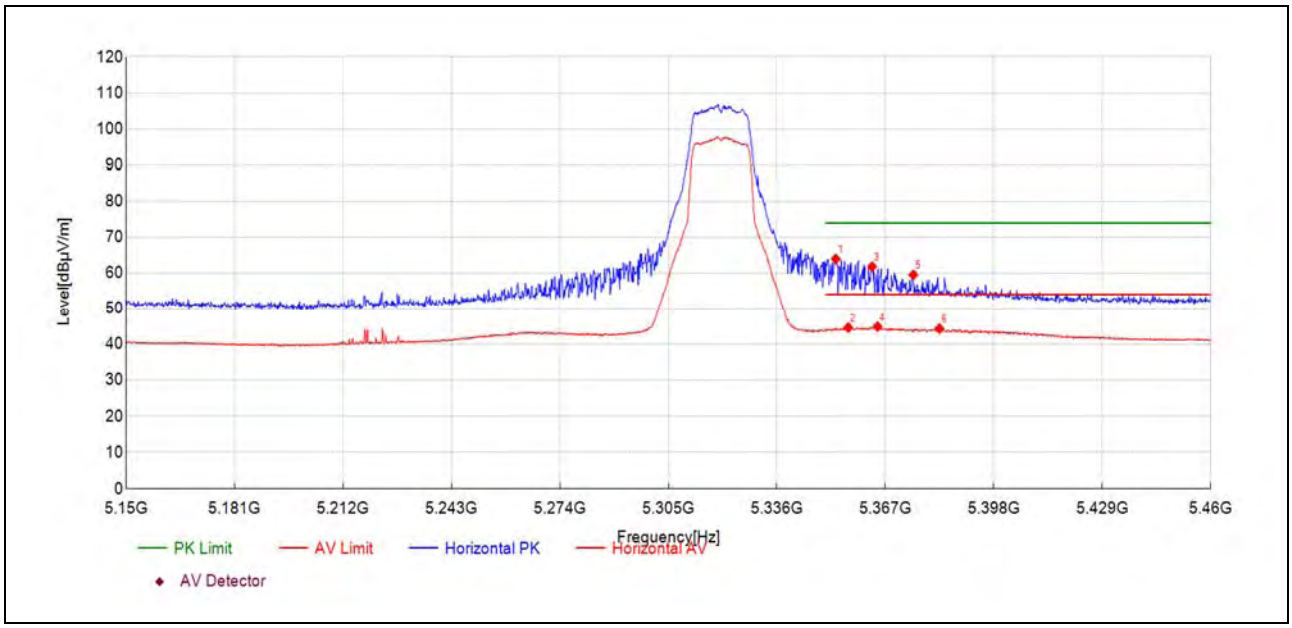
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5362.15	37.8	52.95	15.150	74.00	21.05	241	PK	Horizontal	PASS
5371.92	26.0	41.29	15.290	54.00	12.71	47	AV	Horizontal	PASS
5398.28	26.2	41.81	15.660	54.00	12.19	23	AV	Horizontal	PASS
5399.05	38.1	53.80	15.670	74.00	20.20	5	PK	Horizontal	PASS
5429.60	26.2	41.54	15.320	54.00	12.46	42	AV	Horizontal	PASS
5439.37	39.0	54.19	15.200	74.00	19.81	2	PK	Horizontal	PASS

Plot for Channel 52



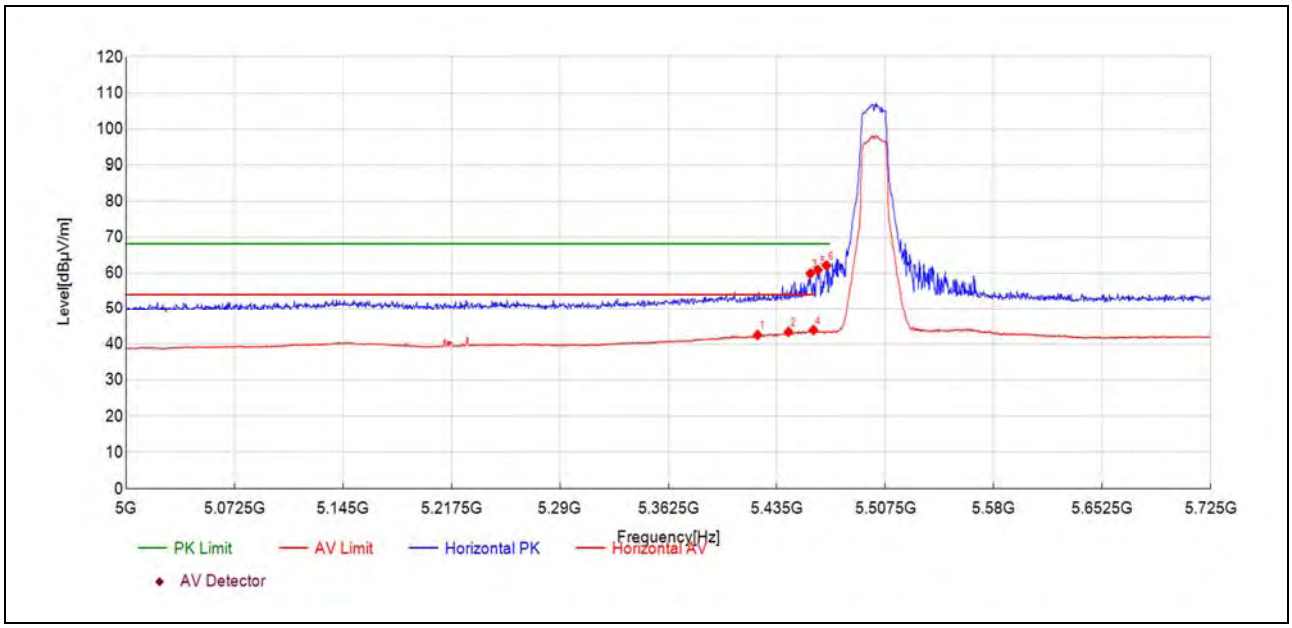
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5081.27	26.1	39.70	13.590	54.00	14.30	171	AV	Horizontal	PASS
5094.02	38.2	51.87	13.650	74.00	22.13	29	PK	Horizontal	PASS
5119.11	38.9	52.94	14.020	74.00	21.06	185	PK	Horizontal	PASS
5119.96	26.4	40.44	14.040	54.00	13.56	143	AV	Horizontal	PASS
5137.39	38.7	53.03	14.360	74.00	20.97	199	PK	Horizontal	PASS
5141.22	26.6	40.98	14.430	54.00	13.02	166	AV	Horizontal	PASS

Plot for Channel 64



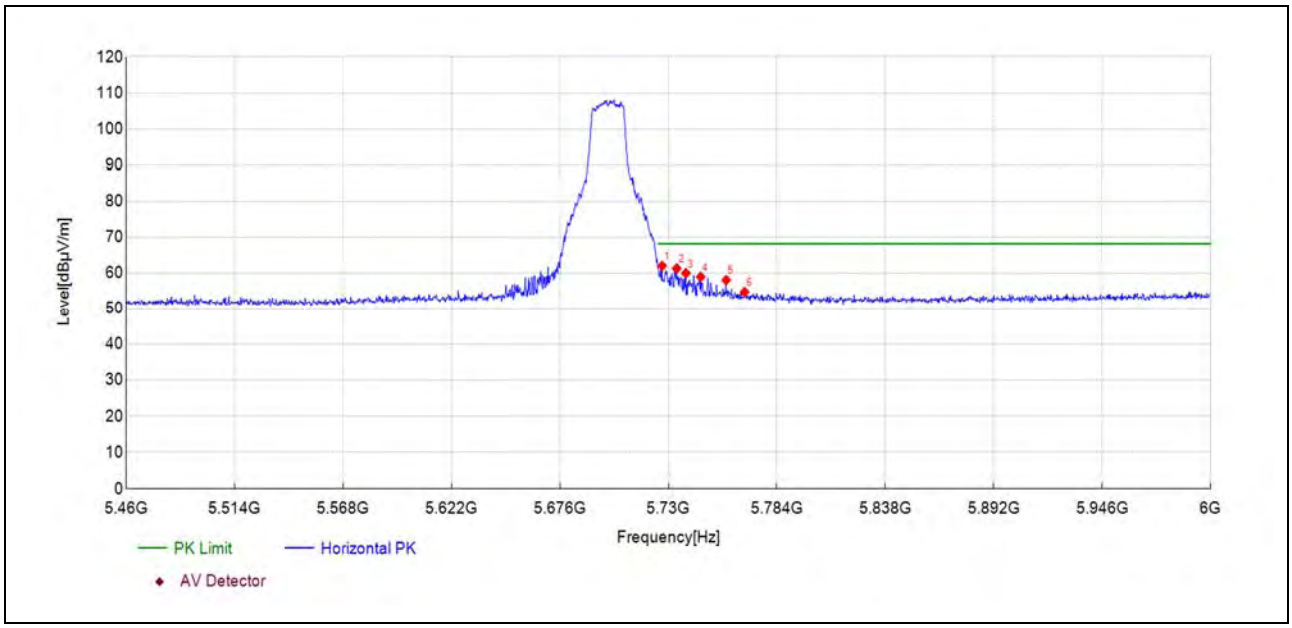
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5352.84	49.0	63.98	15.020	74.00	10.02	47	PK	Horizontal	PASS
5356.41	29.5	44.60	15.070	54.00	9.40	47	AV	Horizontal	PASS
5363.23	46.7	61.83	15.170	74.00	12.17	47	PK	Horizontal	PASS
5364.78	29.7	44.88	15.190	54.00	9.12	47	AV	Horizontal	PASS
5375.02	44.2	59.54	15.330	74.00	14.46	47	PK	Horizontal	PASS
5382.46	28.9	44.33	15.430	54.00	9.67	47	AV	Horizontal	PASS

Plot for Channel 100



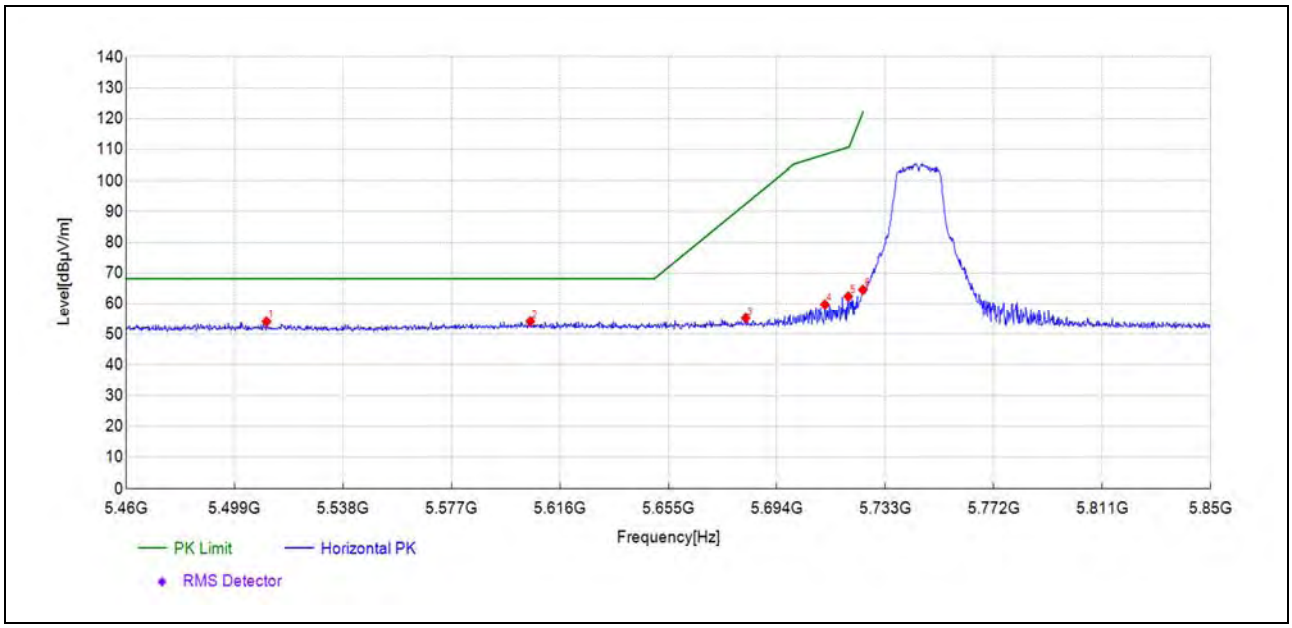
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5422.16	27.1	42.55	15.410	54.00	11.45	43	AV	Horizontal	PASS
5442.83	28.2	43.39	15.150	54.00	10.61	47	AV	Horizontal	PASS
5457.34	44.8	59.91	15.100	68.23	8.32	47	PK	Horizontal	PASS
5459.52	28.8	43.91	15.110	54.00	10.09	47	AV	Horizontal	PASS
5462.42	45.7	60.85	15.120	68.23	7.38	170	PK	Horizontal	PASS
5468.22	47.0	62.15	15.140	68.23	6.08	170	PK	Horizontal	PASS

Plot for Channel 140



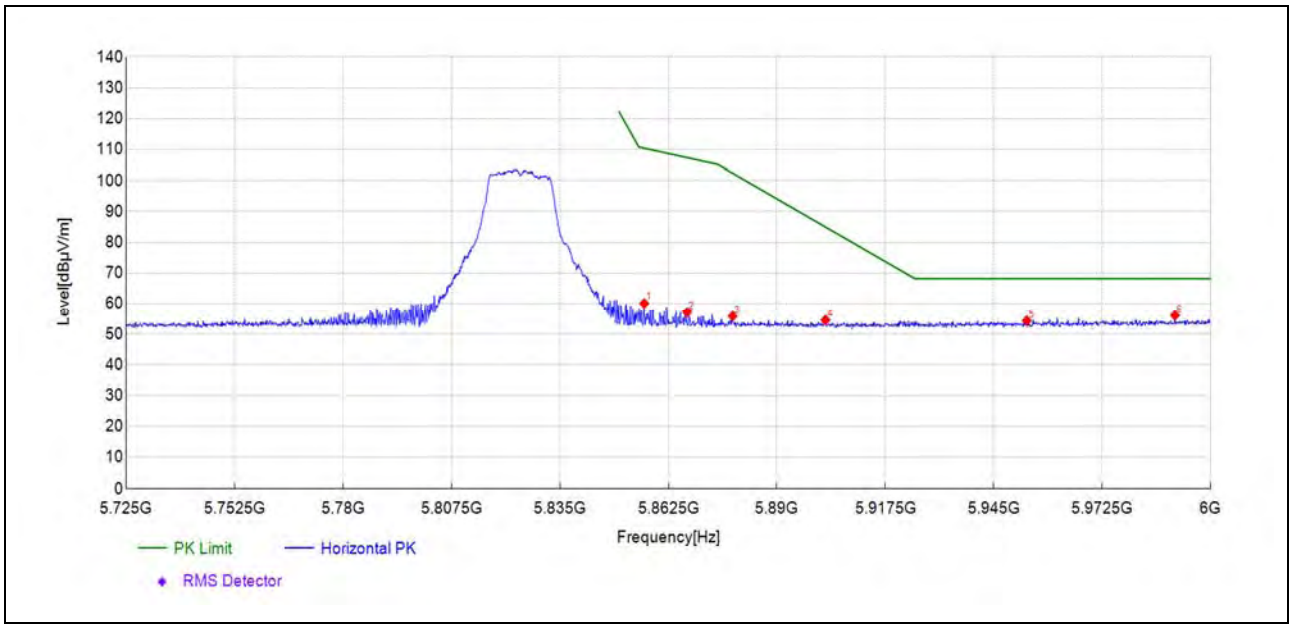
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5726.89	45.8	62.05	16.250	68.23	6.18	178	PK	Horizontal	PASS
5734.19	45.1	61.32	16.260	68.23	6.91	47	PK	Horizontal	PASS
5738.78	43.7	59.99	16.270	68.23	8.24	47	PK	Horizontal	PASS
5746.07	42.7	58.97	16.290	68.23	9.26	186	PK	Horizontal	PASS
5758.77	41.8	58.07	16.240	68.23	10.16	174	PK	Horizontal	PASS
5767.95	38.6	54.75	16.190	68.23	13.48	186	PK	Horizontal	PASS

Plot for Channel 149



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5510.53	38.8	53.95	15.200	68.23	14.28	174	PK	Horizontal	PASS
5605.35	38.1	54.02	15.900	68.23	14.21	174	PK	Horizontal	PASS
5682.80	39.1	55.13	16.070	92.50	37.37	39	PK	Horizontal	PASS
5711.29	43.6	59.78	16.220	108.39	48.61	186	PK	Horizontal	PASS
5719.67	46.2	62.43	16.240	110.74	48.31	178	PK	Horizontal	PASS
5724.94	48.4	64.62	16.250	122.10	57.48	186	PK	Horizontal	PASS

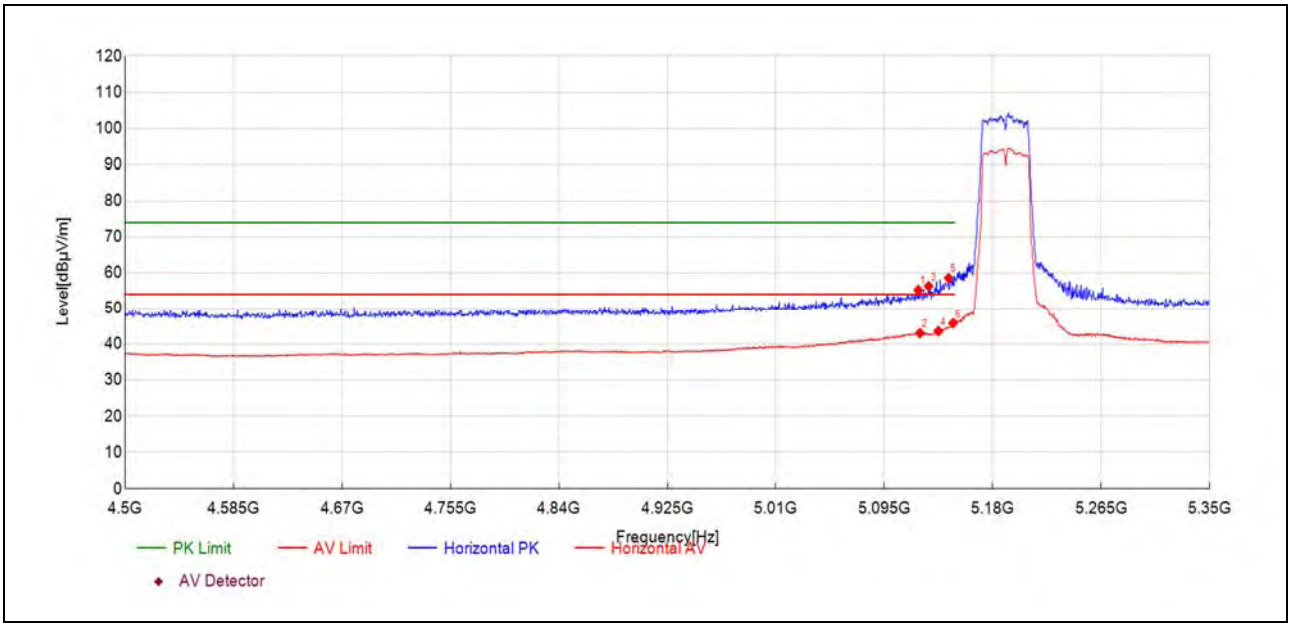
Plot for Channel 165



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5856.38	44.1	60.11	16.000	110.44	50.33	176	PK	Horizontal	PASS
5867.25	41.1	57.14	16.030	107.40	50.26	46	PK	Horizontal	PASS
5878.80	39.7	55.79	16.080	102.42	46.63	46	PK	Horizontal	PASS
5902.33	38.4	54.53	16.160	85.01	30.48	37	PK	Horizontal	PASS
5953.36	37.7	54.31	16.590	68.23	13.92	287	PK	Horizontal	PASS
5990.92	39.0	56.02	17.040	68.23	12.21	109	PK	Horizontal	PASS

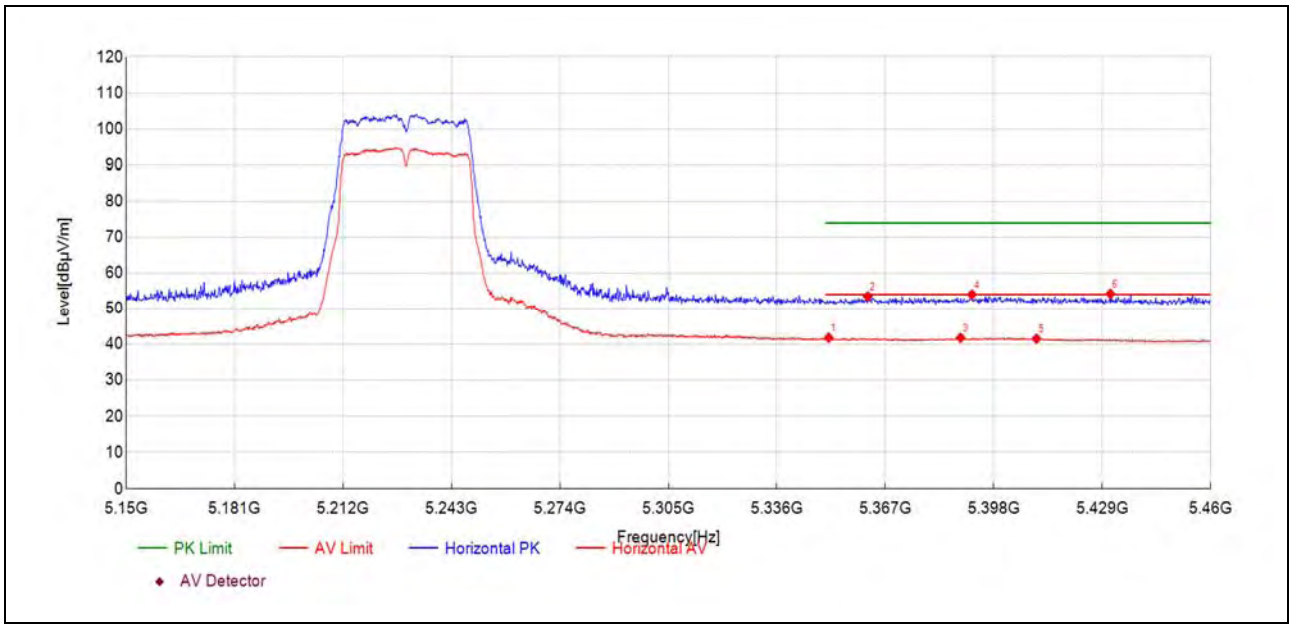
802.11n (HT40) Mode

Plot for Channel 38



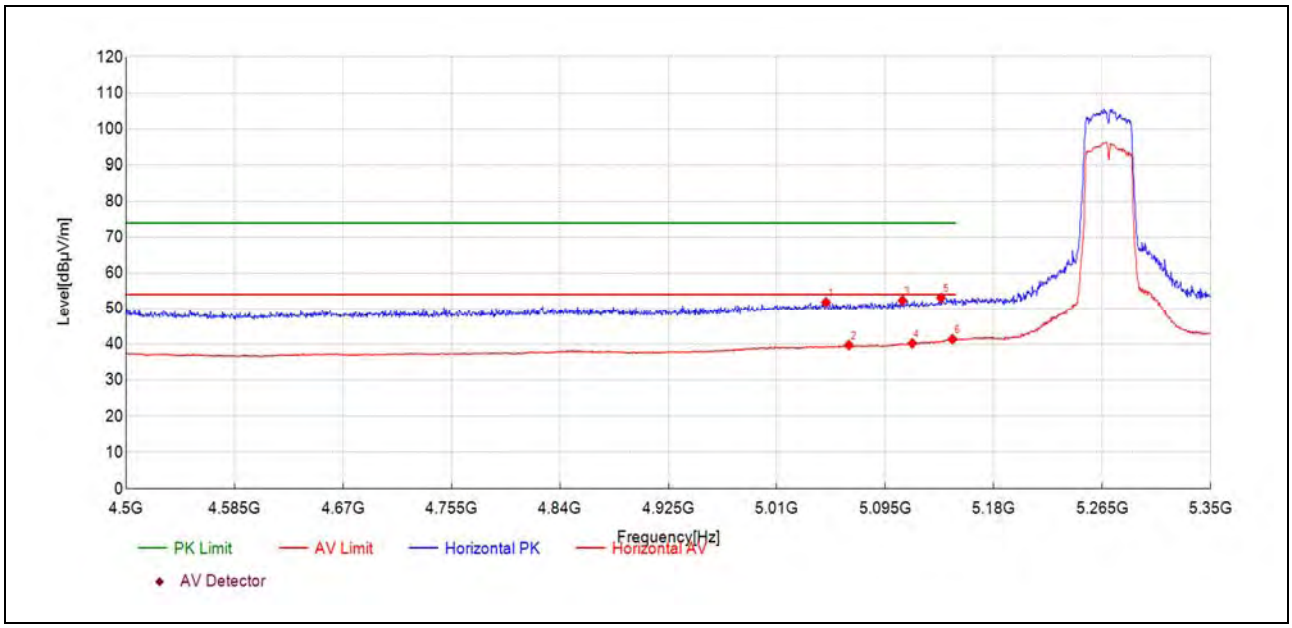
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5121.66	41.2	55.23	14.070	74.00	18.77	43	PK	Horizontal	PASS
5122.94	29.0	43.08	14.090	54.00	10.92	160	AV	Horizontal	PASS
5129.74	42.1	56.29	14.230	74.00	17.71	170	PK	Horizontal	PASS
5137.39	29.3	43.61	14.360	54.00	10.39	156	AV	Horizontal	PASS
5145.47	44.1	58.56	14.510	74.00	15.44	151	PK	Horizontal	PASS
5148.87	31.3	45.83	14.570	54.00	8.17	160	AV	Horizontal	PASS

Plot for Channel 46



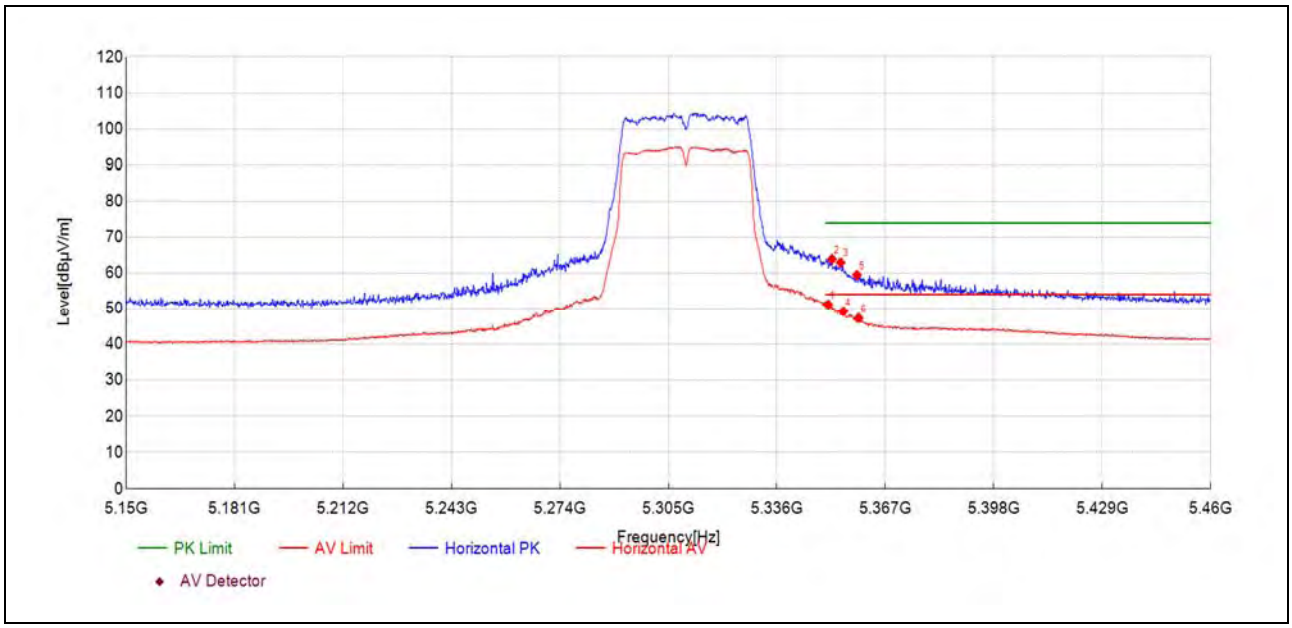
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5350.83	26.8	41.80	14.990	54.00	12.20	48	AV	Horizontal	PASS
5361.99	38.4	53.51	15.150	74.00	20.49	48	PK	Horizontal	PASS
5388.51	26.2	41.76	15.520	54.00	12.24	48	AV	Horizontal	PASS
5391.77	38.5	54.04	15.560	74.00	19.96	48	PK	Horizontal	PASS
5410.22	26.0	41.51	15.560	54.00	12.49	48	AV	Horizontal	PASS
5431.31	38.9	54.23	15.300	74.00	19.77	148	PK	Horizontal	PASS

Plot for Channel 54



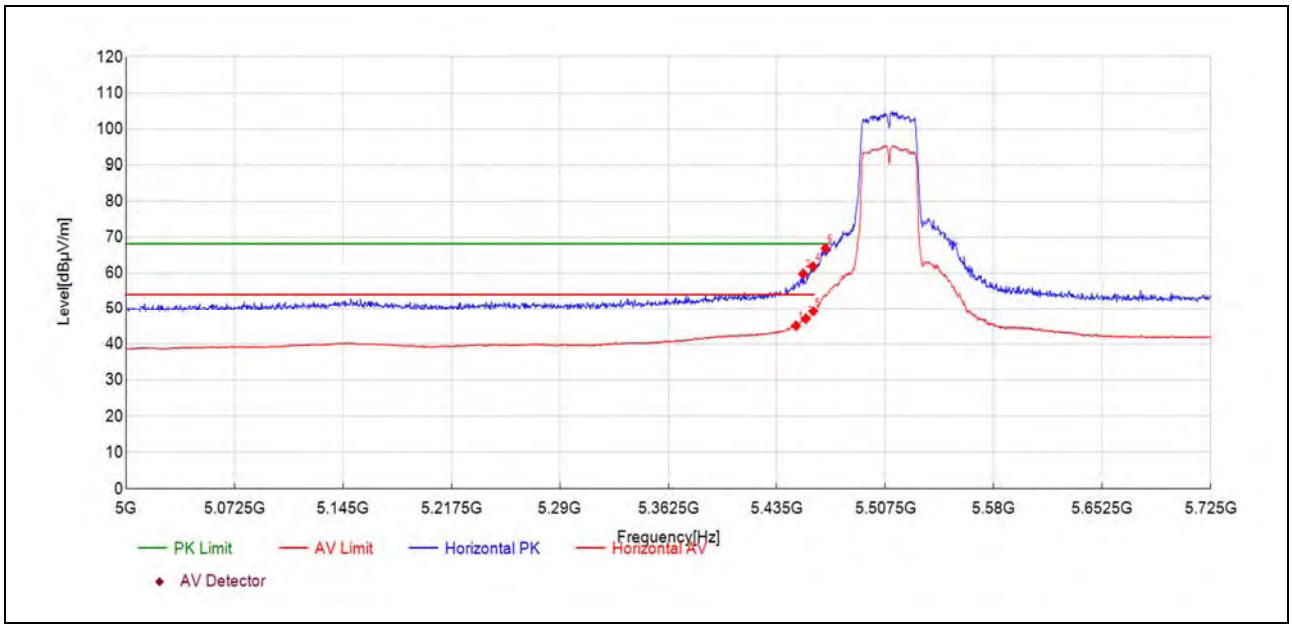
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5048.52	38.5	51.87	13.420	74.00	22.13	312	PK	Horizontal	PASS
5066.38	26.2	39.72	13.510	54.00	14.28	198	AV	Horizontal	PASS
5108.48	38.6	52.38	13.830	74.00	21.62	284	PK	Horizontal	PASS
5116.13	26.3	40.22	13.970	54.00	13.78	165	AV	Horizontal	PASS
5138.67	38.7	53.13	14.390	74.00	20.87	179	PK	Horizontal	PASS
5147.60	26.8	41.36	14.550	54.00	12.64	51	AV	Horizontal	PASS

Plot for Channel 62



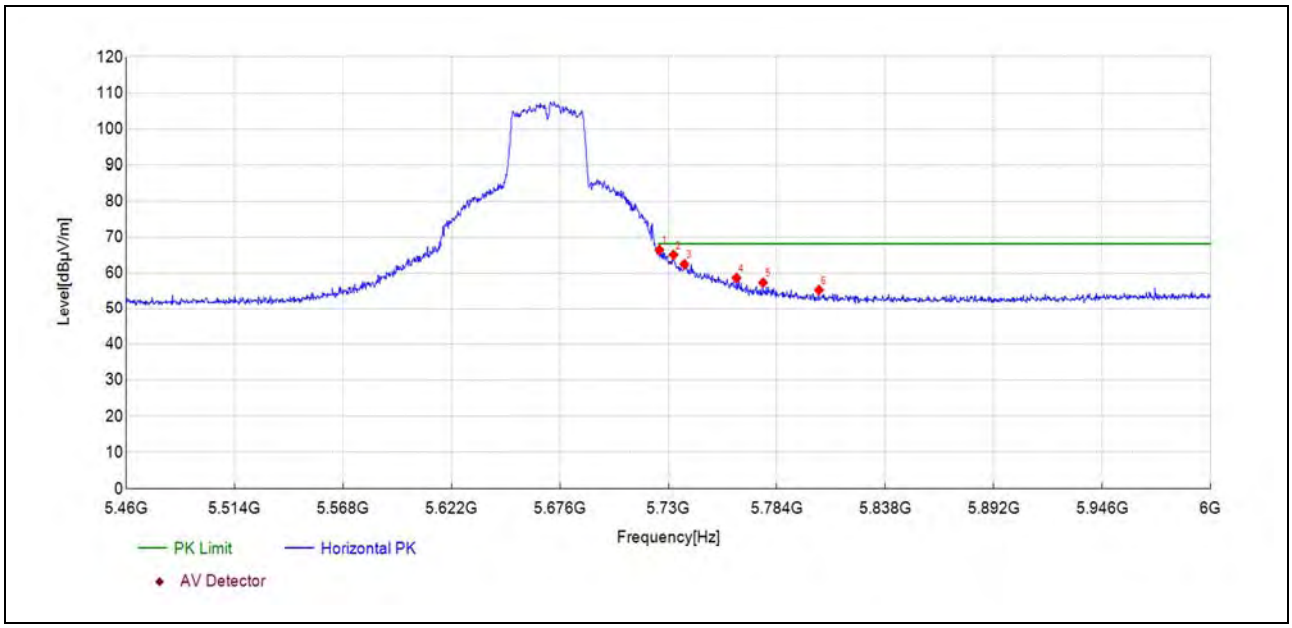
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5350.67	36.2	51.20	14.990	54.00	2.80	187	AV	Horizontal	PASS
5351.76	48.9	63.91	15.000	74.00	10.09	182	PK	Horizontal	PASS
5354.24	47.9	62.95	15.040	74.00	11.05	182	PK	Horizontal	PASS
5355.01	34.2	49.25	15.050	54.00	4.75	182	AV	Horizontal	PASS
5358.89	44.4	59.48	15.100	74.00	14.52	187	PK	Horizontal	PASS
5359.35	32.2	47.34	15.110	54.00	6.66	192	AV	Horizontal	PASS

Plot for Channel 102



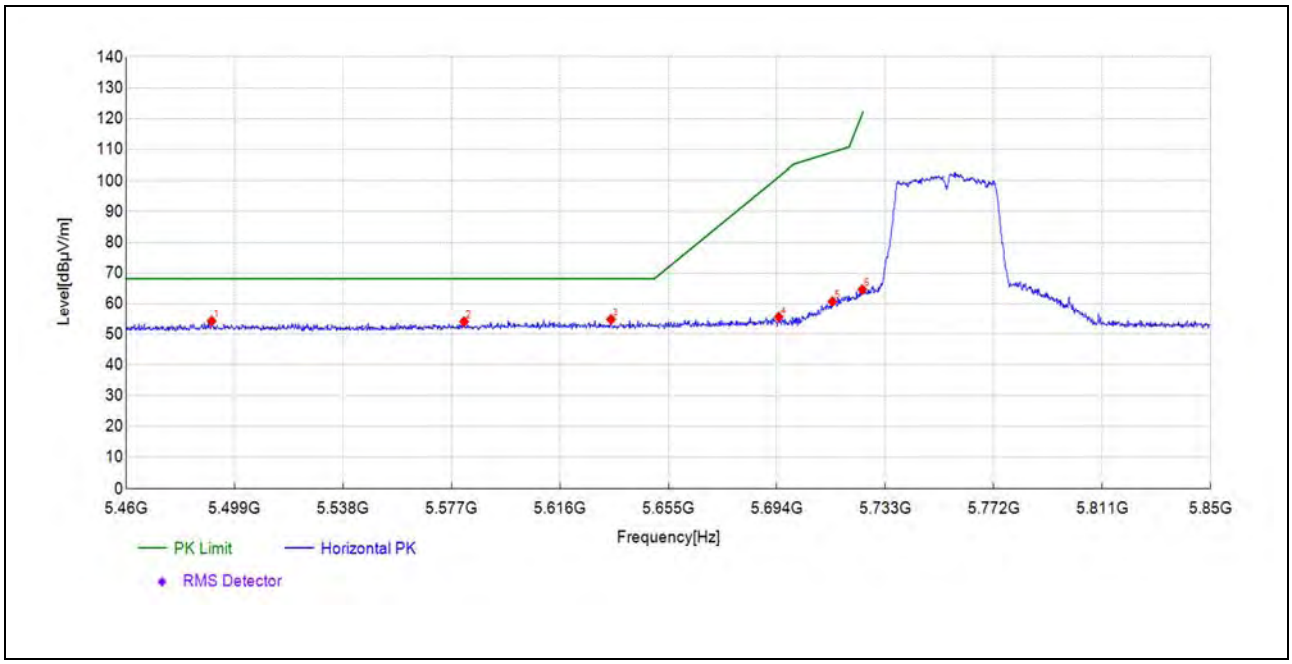
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5447.91	30.0	45.09	15.090	54.00	8.91	173	AV	Horizontal	PASS
5452.63	44.7	59.82	15.080	68.23	8.41	187	PK	Horizontal	PASS
5454.44	32.0	47.05	15.090	54.00	6.95	182	AV	Horizontal	PASS
5459.15	46.8	61.87	15.100	68.23	6.36	192	PK	Horizontal	PASS
5459.52	34.1	49.25	15.110	54.00	4.75	182	AV	Horizontal	PASS
5467.50	51.8	66.92	15.140	68.23	1.31	192	PK	Horizontal	PASS

Plot for Channel 134



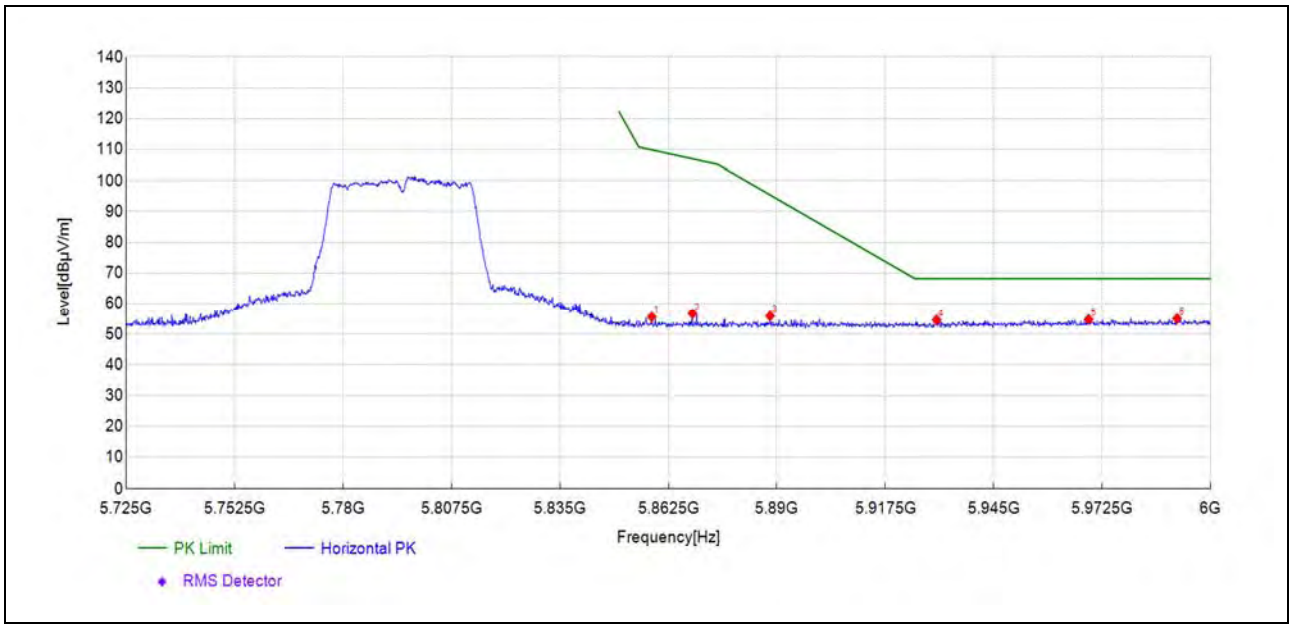
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5725.54	50.2	66.47	16.250	68.23	1.76	182	PK	Horizontal	PASS
5732.57	48.9	65.12	16.260	68.23	3.11	182	PK	Horizontal	PASS
5737.97	46.2	62.48	16.270	68.23	5.75	182	PK	Horizontal	PASS
5763.90	42.5	58.69	16.210	68.23	9.54	165	PK	Horizontal	PASS
5777.14	41.2	57.36	16.130	68.23	10.87	43	PK	Horizontal	PASS
5804.96	39.3	55.32	15.990	68.23	12.91	165	PK	Horizontal	PASS

Plot for Channel 151



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5490.83	38.9	54.17	15.230	68.23	14.06	18	PK	Horizontal	PASS
5581.55	38.4	53.95	15.550	68.23	14.28	43	PK	Horizontal	PASS
5634.42	38.9	54.69	15.840	68.23	13.54	30	PK	Horizontal	PASS
5694.70	39.3	55.46	16.160	101.31	45.85	174	PK	Horizontal	PASS
5714.02	44.6	60.79	16.220	109.15	48.36	170	PK	Horizontal	PASS
5724.75	48.4	64.68	16.250	121.65	56.97	187	PK	Horizontal	PASS

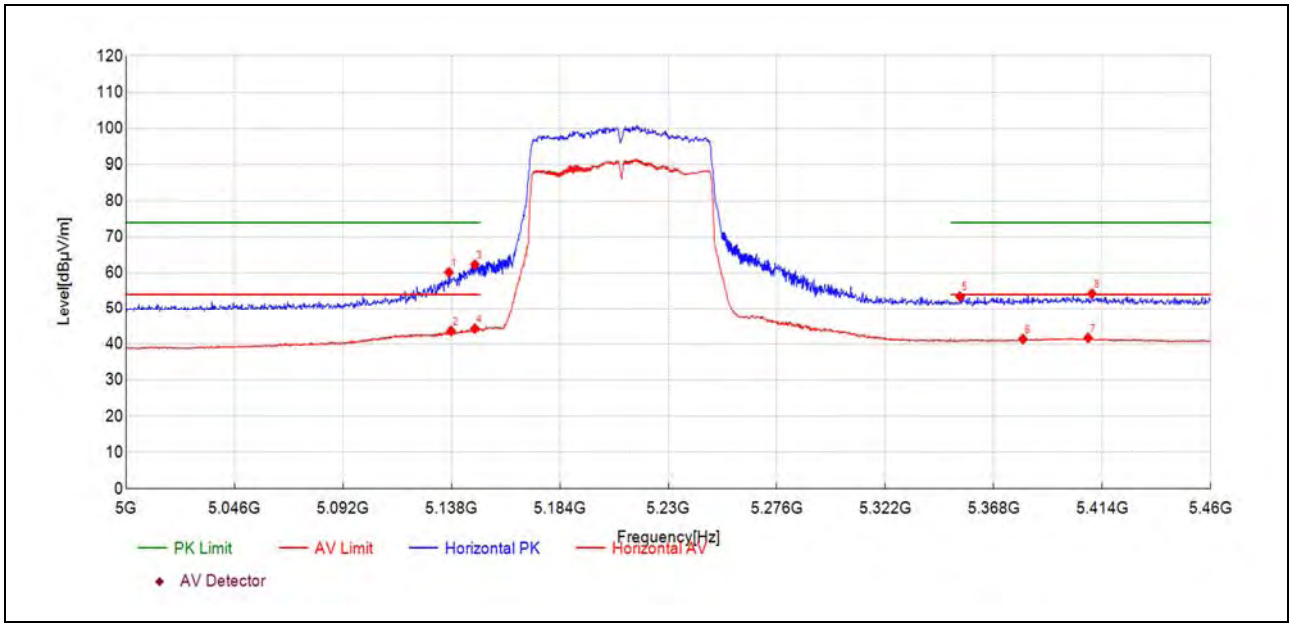
Plot for Channel 159



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5858.30	39.5	55.52	16.000	109.90	54.38	178	PK	Horizontal	PASS
5868.62	40.6	56.62	16.030	107.02	50.40	178	PK	Horizontal	PASS
5888.29	39.8	55.88	16.100	95.39	39.51	23	PK	Horizontal	PASS
5930.53	38.2	54.57	16.390	68.23	13.66	200	PK	Horizontal	PASS
5969.05	38.0	54.75	16.780	68.23	13.48	200	PK	Horizontal	PASS
5991.47	38.0	55.03	17.040	68.23	13.20	170	PK	Horizontal	PASS

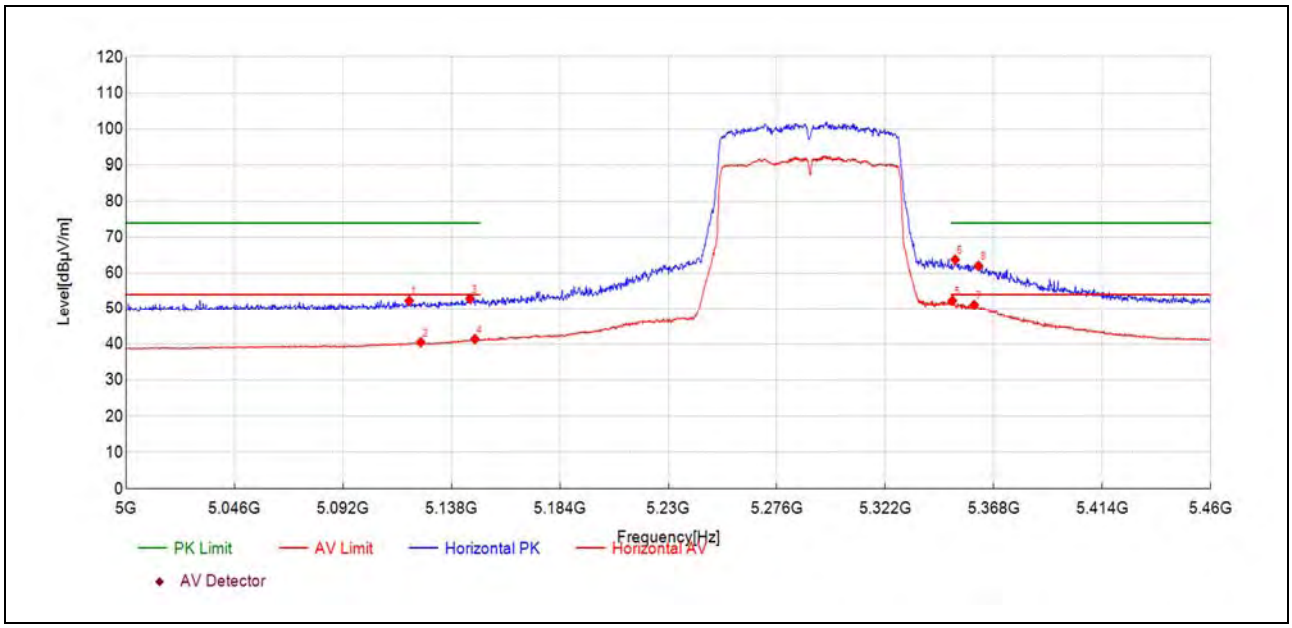
802.11ac (VHT80) Mode

Plot for Channel 42



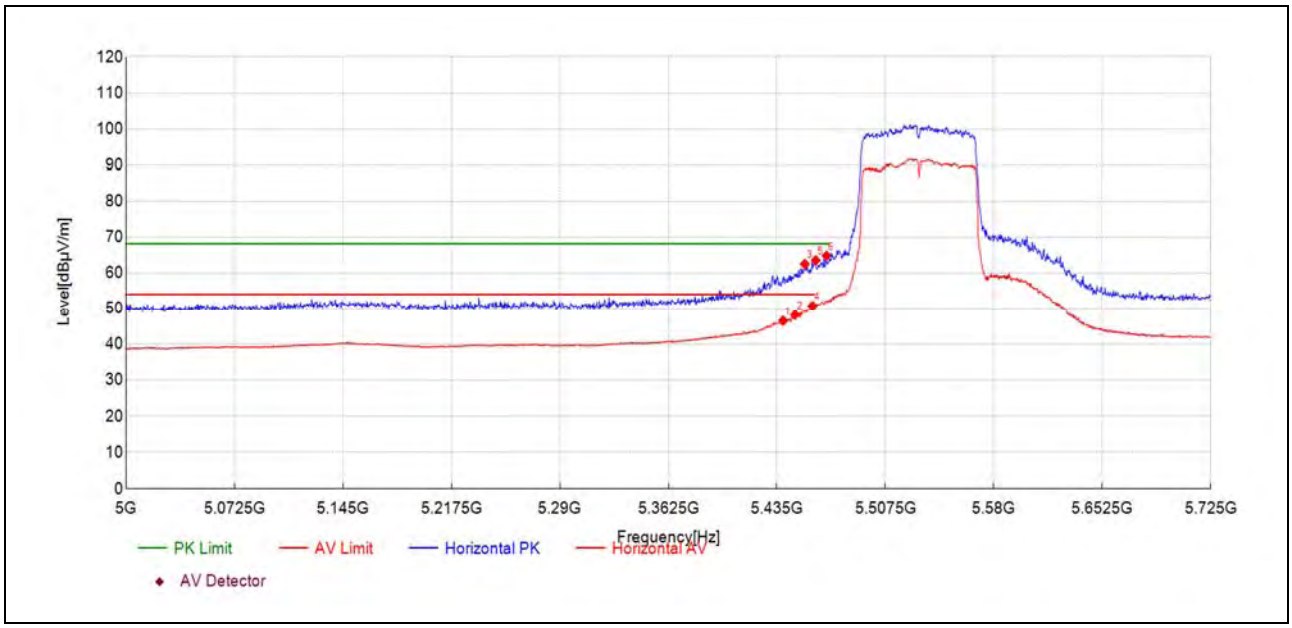
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5136.92	45.9	60.20	14.350	74.00	13.80	156	PK	Horizontal	PASS
5137.84	29.3	43.64	14.370	54.00	10.36	156	AV	Horizontal	PASS
5147.96	47.8	62.34	14.550	74.00	11.66	156	PK	Horizontal	PASS
5147.96	29.8	44.31	14.550	54.00	9.69	156	AV	Horizontal	PASS
5353.69	38.5	53.48	15.030	74.00	20.52	42	PK	Horizontal	PASS
5380.38	26.0	41.38	15.410	54.00	12.62	185	AV	Horizontal	PASS
5407.99	26.1	41.71	15.580	54.00	12.29	42	AV	Horizontal	PASS
5409.60	38.7	54.27	15.570	74.00	19.73	14	PK	Horizontal	PASS

Plot for Channel 58



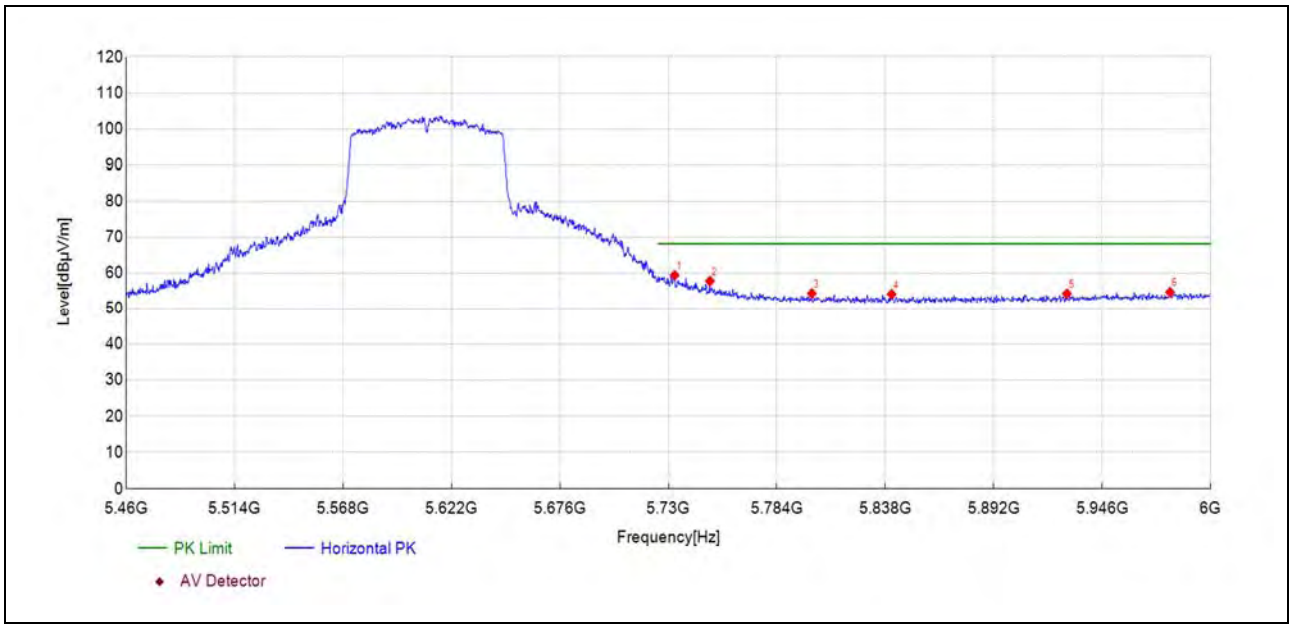
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5120.12	38.3	52.32	14.040	74.00	21.68	114	PK	Horizontal	PASS
5124.95	26.4	40.50	14.130	54.00	13.50	157	AV	Horizontal	PASS
5145.89	38.4	52.94	14.520	74.00	21.06	29	PK	Horizontal	PASS
5147.96	26.9	41.40	14.550	54.00	12.60	52	AV	Horizontal	PASS
5350.47	37.4	52.38	14.990	54.00	1.62	47	AV	Horizontal	PASS
5351.62	48.8	63.77	15.000	74.00	10.23	47	PK	Horizontal	PASS
5359.67	36.0	51.14	15.120	54.00	2.86	47	AV	Horizontal	PASS
5361.51	46.9	62.04	15.140	74.00	11.96	175	PK	Horizontal	PASS

Plot for Channel 106



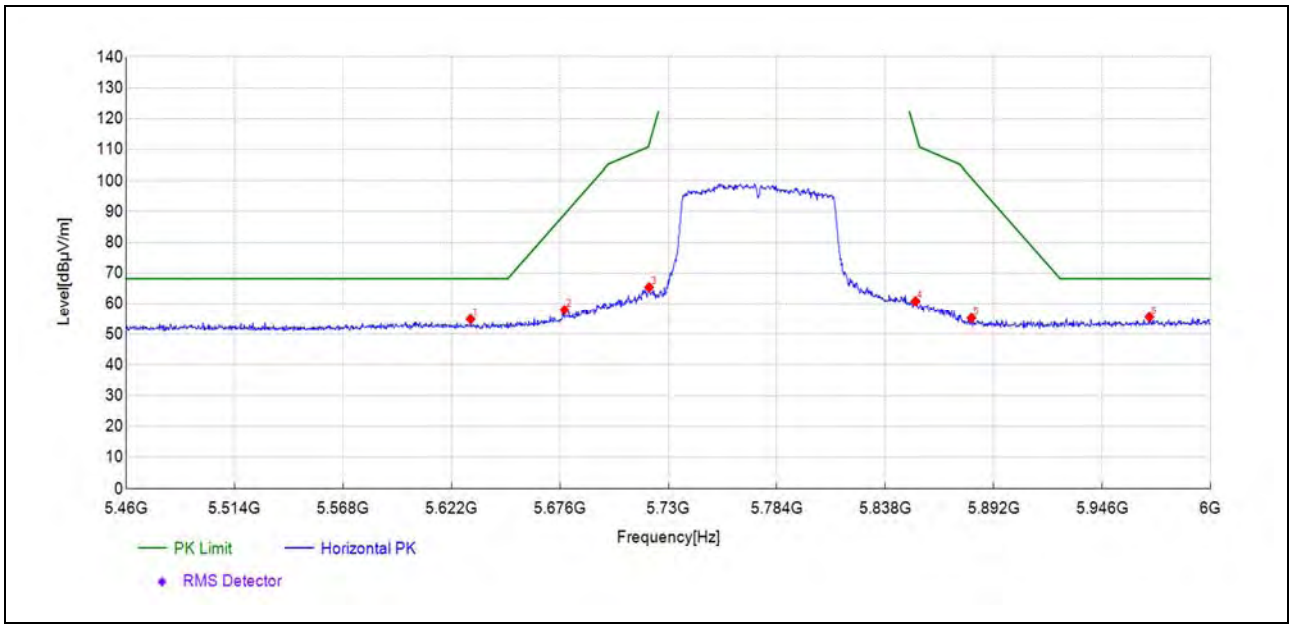
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5439.21	31.4	46.55	15.200	54.00	7.45	40	AV	Horizontal	PASS
5447.19	33.1	48.23	15.110	54.00	5.77	183	AV	Horizontal	PASS
5453.71	47.5	62.54	15.080	68.23	5.69	183	PK	Horizontal	PASS
5458.79	35.7	50.78	15.100	54.00	3.22	183	AV	Horizontal	PASS
5460.97	48.5	63.57	15.110	68.23	4.66	183	PK	Horizontal	PASS
5468.22	49.7	64.86	15.140	68.23	3.37	188	PK	Horizontal	PASS

Plot for Channel 122



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5733.11	43.2	59.42	16.260	68.23	8.81	182	PK	Horizontal	PASS
5750.67	41.5	57.80	16.290	68.23	10.43	169	PK	Horizontal	PASS
5801.45	38.4	54.35	15.990	68.23	13.88	262	PK	Horizontal	PASS
5841.16	38.2	54.15	15.970	68.23	14.08	257	PK	Horizontal	PASS
5928.41	37.9	54.28	16.380	68.23	13.95	232	PK	Horizontal	PASS
5979.74	37.8	54.72	16.910	68.23	13.51	220	PK	Horizontal	PASS

Plot for Channel 155



Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5631.54	39.0	54.81	15.840	68.23	13.42	42	PK	Horizontal	PASS
5678.27	41.9	57.92	16.030	89.15	31.23	182	PK	Horizontal	PASS
5720.41	49.1	65.38	16.240	111.77	46.39	182	PK	Horizontal	PASS
5853.05	44.9	60.87	15.980	115.28	54.41	173	PK	Horizontal	PASS
5880.87	39.1	55.18	16.080	100.89	45.71	164	PK	Horizontal	PASS
5969.47	38.7	55.48	16.780	68.23	12.75	190	PK	Horizontal	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.

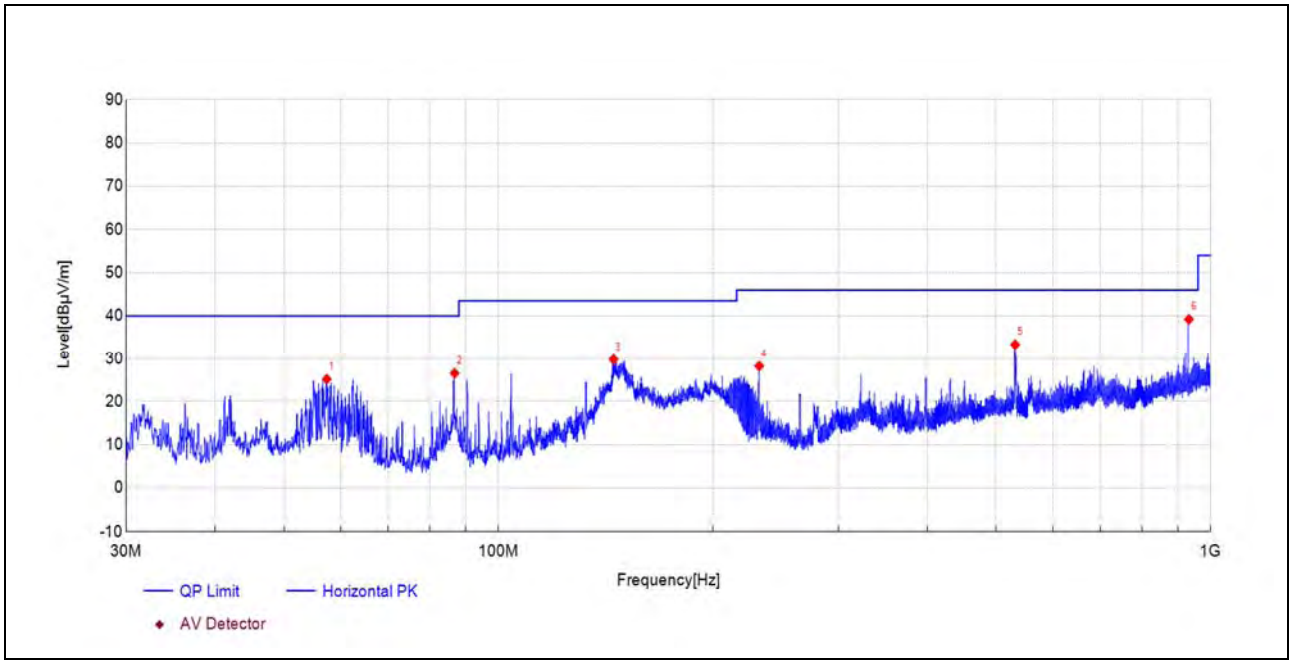
Field strength of fundamental:

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Detector	Polarity
5786.28	86.2	102.31	16.080	PK	Vertical

The field strength (the lowest) of fundamental is more than 20dB higher than the unwanted emissions, in accordance with FCC part 15.215(b).

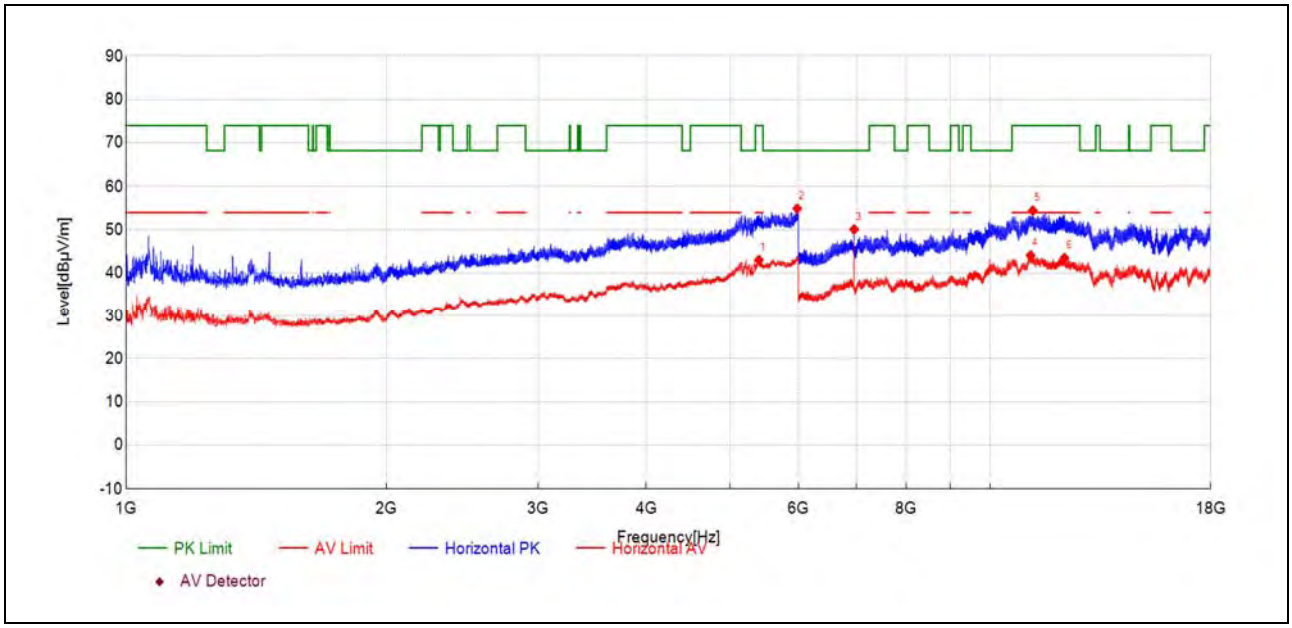
802.11a Mode

Plot for Channel 44



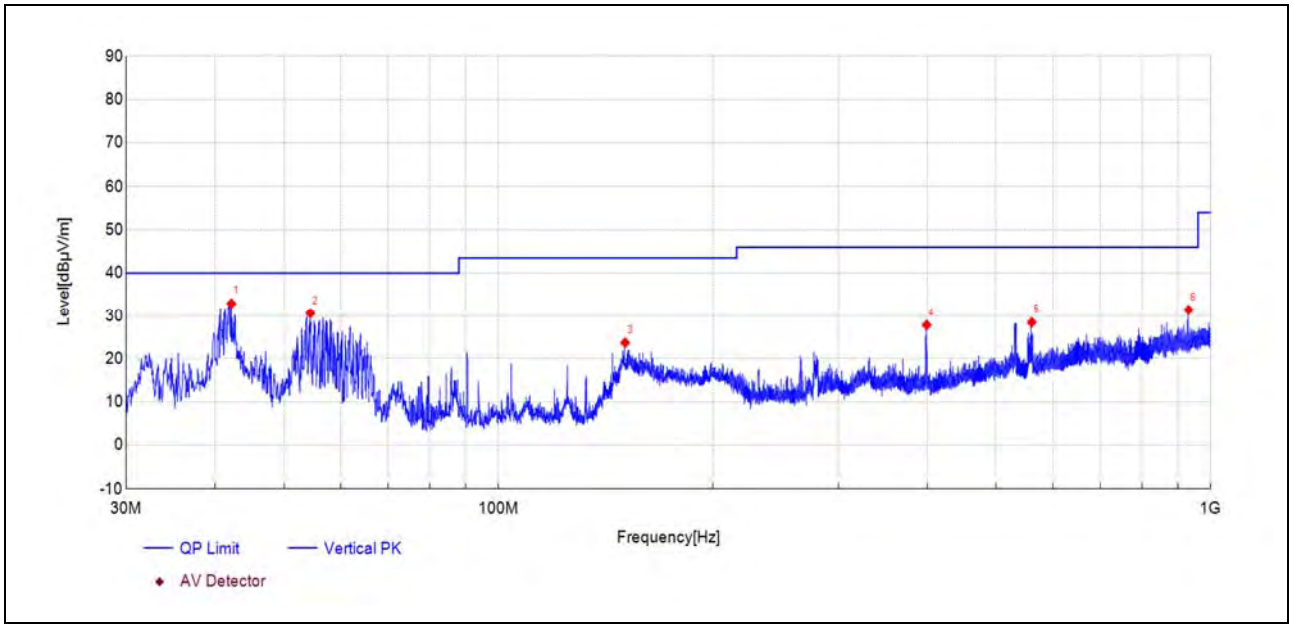
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
57.40	53.2	25.17	-27.990	40.00	14.83	275	PK	Horizontal	PASS
86.80	58.8	26.55	-32.240	40.00	13.45	34	PK	Horizontal	PASS
145.10	61.3	29.77	-31.480	43.50	13.73	254	PK	Horizontal	PASS
232.30	56.2	28.22	-27.940	46.00	17.78	344	PK	Horizontal	PASS
531.42	52.3	33.32	-18.950	46.00	12.68	124	PK	Horizontal	PASS
932.00	50.9	39.21	-11.710	46.00	6.79	34	PK	Horizontal	PASS



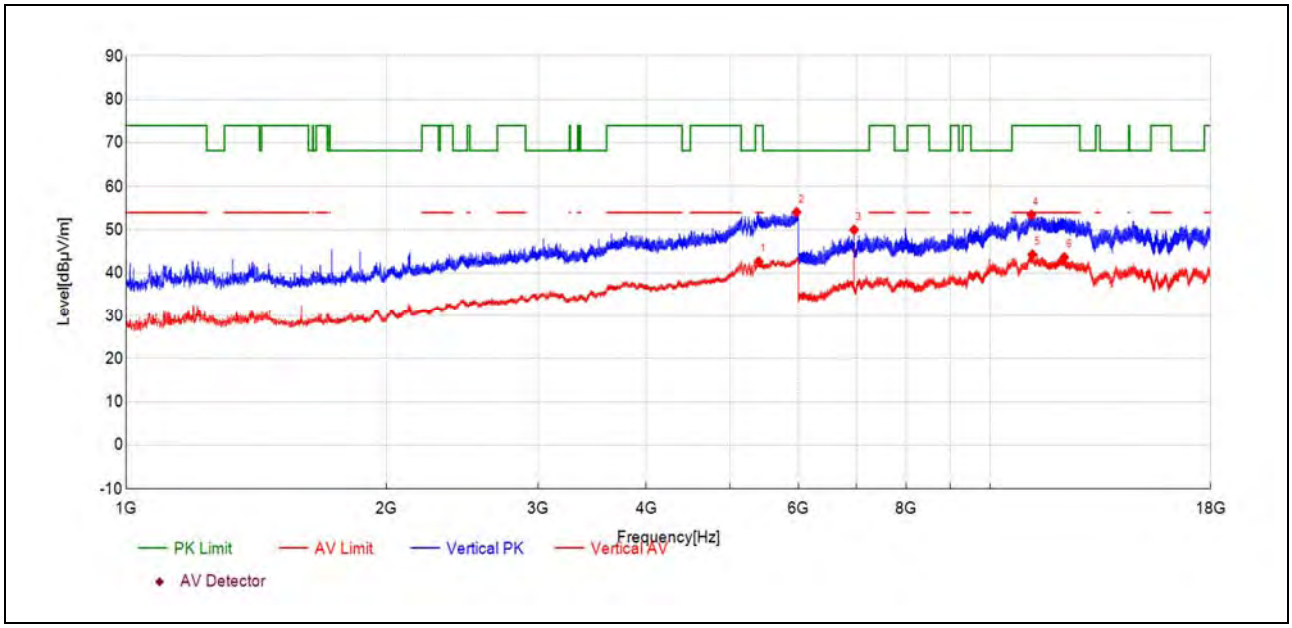
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5399.49	24.9	43.03	18.180	54.00	10.97	0	AV	Horizontal	PASS
5980.00	35.6	54.93	19.290	68.23	13.30	306	PK	Horizontal	PASS
6960.04	47.0	50.11	3.150	68.23	18.12	199	PK	Horizontal	PASS
11137.17	30.4	44.10	13.720	54.00	9.90	231	AV	Horizontal	PASS
11205.33	40.6	54.46	13.850	74.00	19.54	328	PK	Horizontal	PASS
12188.41	28.7	43.47	14.790	54.00	10.53	188	AV	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

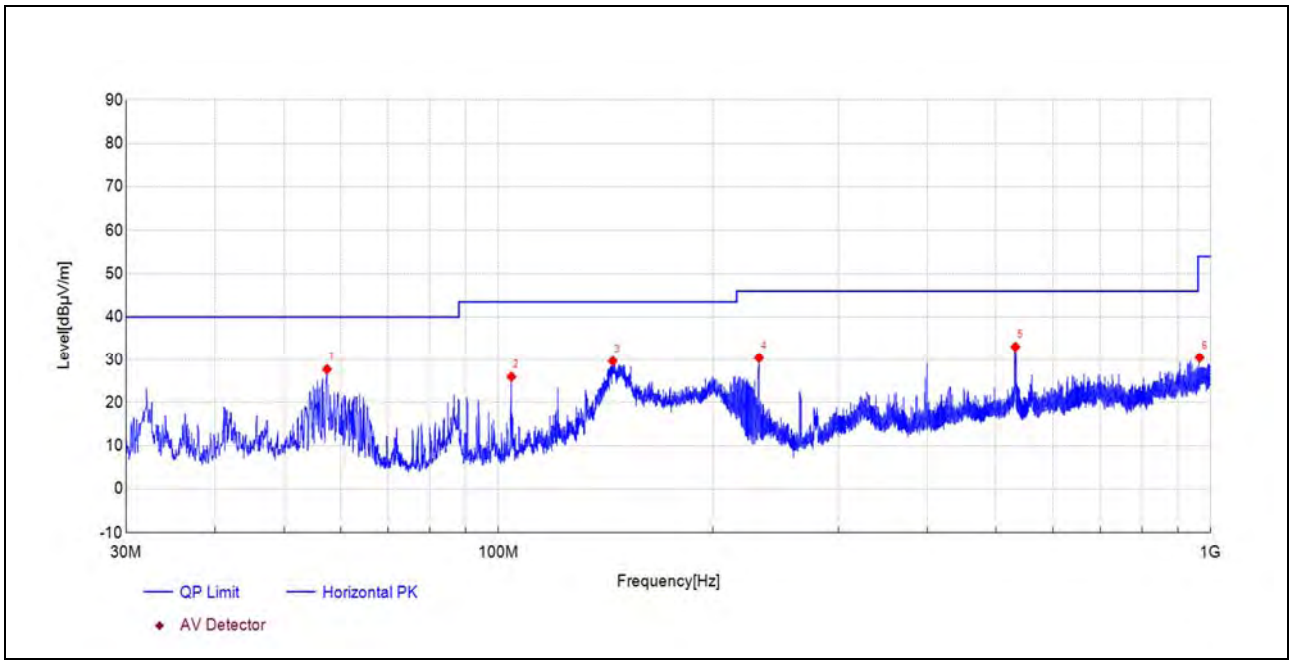
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
42.17	61.5	32.90	-28.560	40.00	7.10	22	PK	Vertical	PASS
54.45	58.2	30.56	-27.650	40.00	9.44	146	PK	Vertical	PASS
150.63	55.5	23.66	-31.830	43.50	19.84	255	PK	Vertical	PASS
399.25	50.2	27.81	-22.370	46.00	18.19	64	PK	Vertical	PASS
560.62	47.0	28.43	-18.590	46.00	17.57	111	PK	Vertical	PASS
931.03	43.1	31.36	-11.700	46.00	14.64	276	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

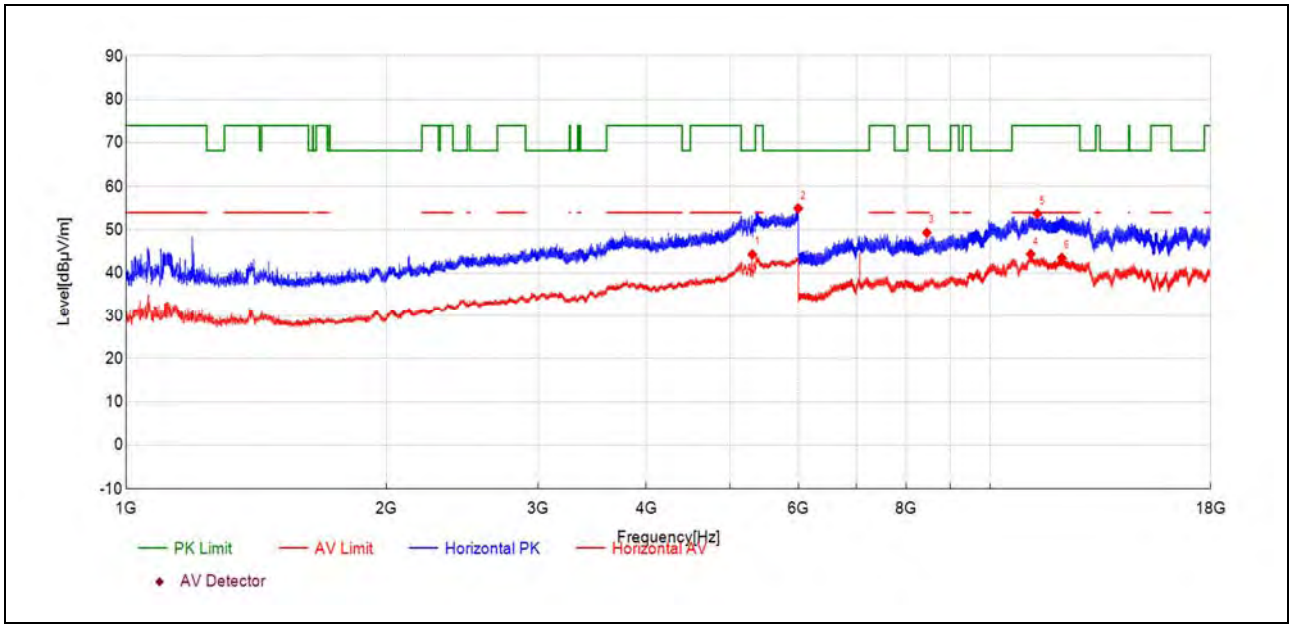
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5397.67	24.5	42.68	18.160	54.00	11.32	67	AV	Vertical	PASS
5970.91	34.9	54.10	19.230	68.23	14.13	306	PK	Vertical	PASS
6959.56	46.9	50.00	3.150	68.23	18.23	114	PK	Vertical	PASS
11160.69	39.7	53.46	13.780	74.00	20.54	358	PK	Vertical	PASS
11193.33	30.4	44.29	13.880	54.00	9.71	284	AV	Vertical	PASS
12185.53	28.9	43.66	14.780	54.00	10.34	350	AV	Vertical	PASS

Plot for Channel 60



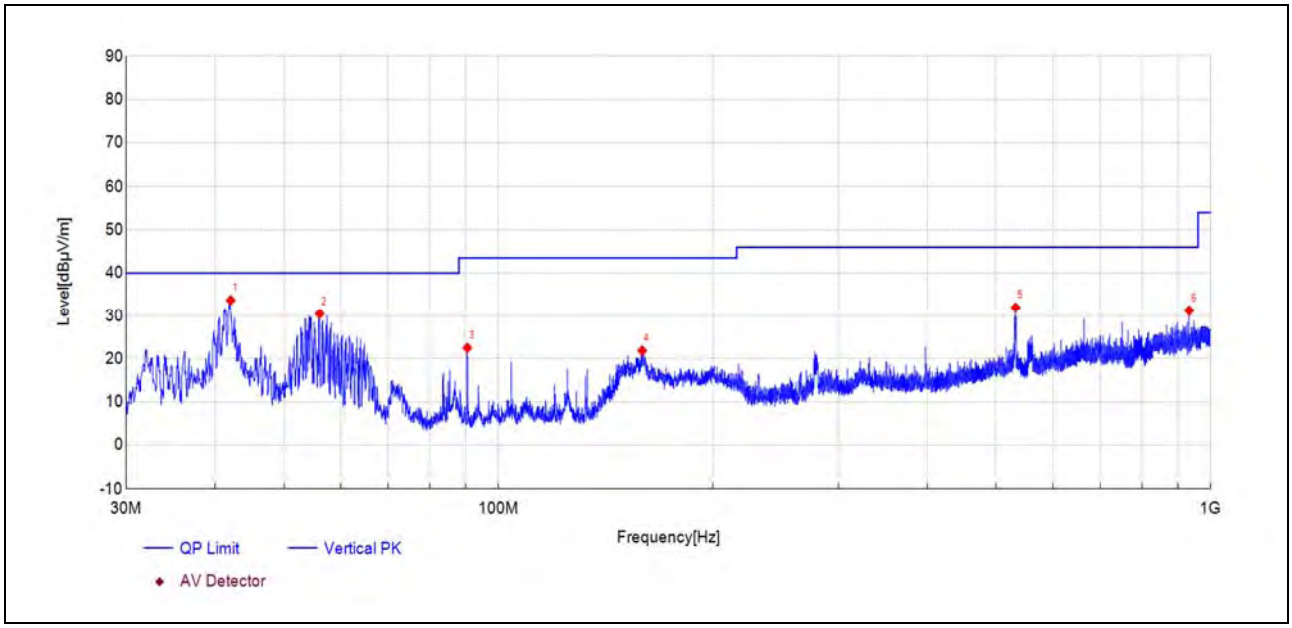
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
57.45	55.7	27.72	-28.000	40.00	12.28	269	PK	Horizontal	PASS
104.31	55.5	25.98	-29.520	43.50	17.52	200	PK	Horizontal	PASS
144.66	61.0	29.62	-31.380	43.50	13.88	43	PK	Horizontal	PASS
232.21	58.3	30.37	-27.940	46.00	15.63	331	PK	Horizontal	PASS
531.85	52.0	33.04	-18.960	46.00	12.96	132	PK	Horizontal	PASS
964.79	41.5	30.45	-11.000	54.00	23.55	337	PK	Horizontal	PASS



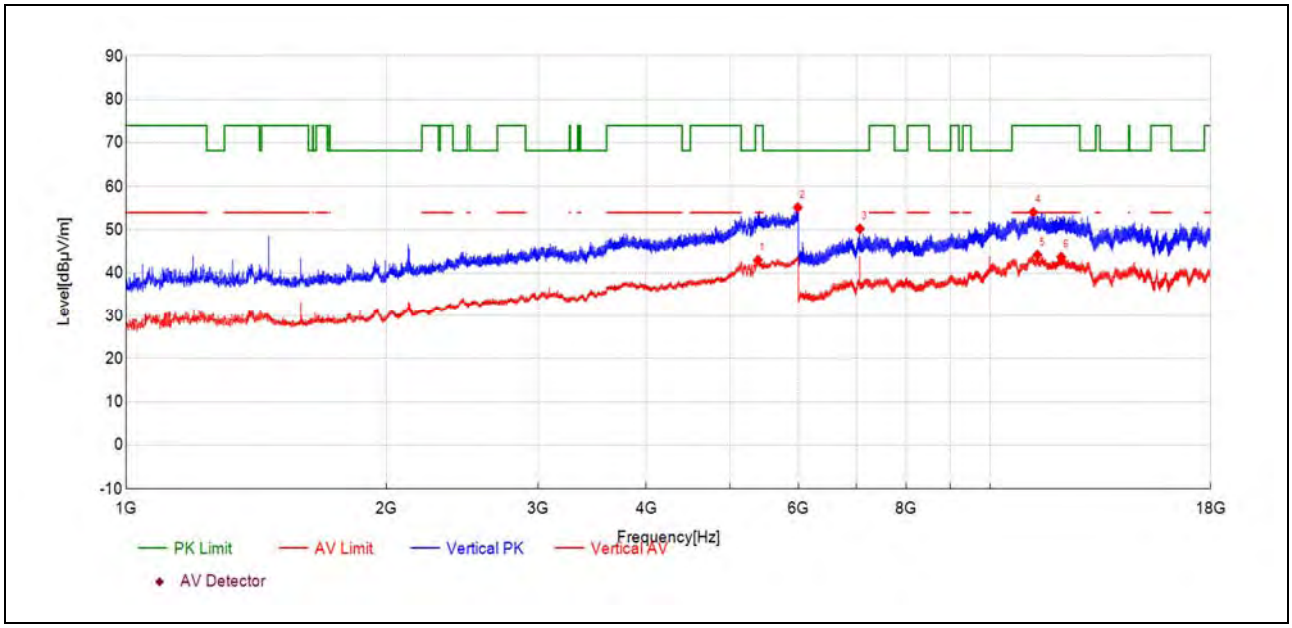
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5307.21	27.4	44.32	16.900	-	-	46	AV	Horizontal	NA
5996.82	35.6	54.98	19.400	68.23	13.25	243	PK	Horizontal	PASS
8449.06	43.8	49.33	5.500	74.00	24.67	134	PK	Horizontal	PASS
11143.89	30.7	44.42	13.740	54.00	9.58	100	AV	Horizontal	PASS
11337.33	40.3	53.75	13.480	74.00	20.25	123	PK	Horizontal	PASS
12103.92	28.9	43.52	14.600	54.00	10.48	134	AV	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

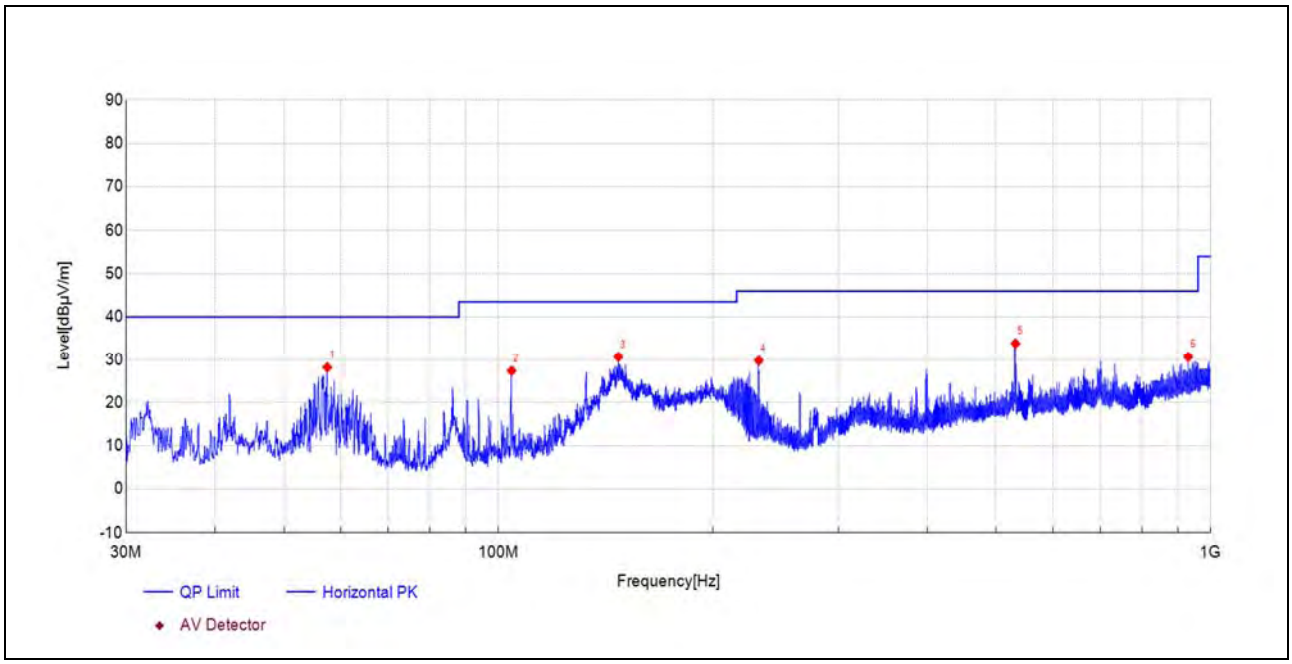
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
42.08	62.3	33.68	-28.610	40.00	6.32	292	PK	Vertical	PASS
56.09	58.5	30.43	-28.040	40.00	9.57	147	PK	Vertical	PASS
90.43	54.0	22.50	-31.480	43.50	21.00	9	PK	Vertical	PASS
159.16	53.0	21.87	-31.090	43.50	21.63	168	PK	Vertical	PASS
532.29	50.9	31.93	-18.980	46.00	14.07	284	PK	Vertical	PASS
932.82	43.0	31.24	-11.730	46.00	14.76	202	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

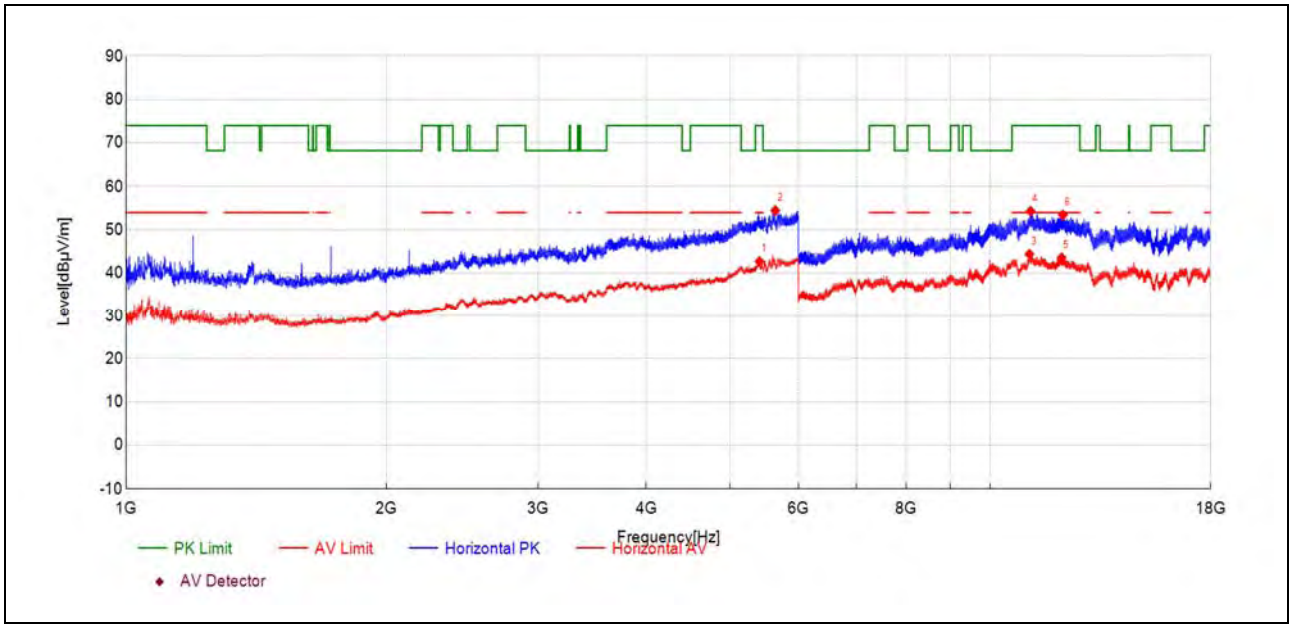
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5385.85	25.0	43.01	17.970	54.00	10.99	174	AV	Vertical	PASS
5990.00	35.8	55.17	19.350	68.23	13.06	348	PK	Vertical	PASS
7066.60	46.2	50.26	4.100	68.23	17.97	134	PK	Vertical	PASS
11220.21	40.4	54.09	13.730	74.00	19.91	229	PK	Vertical	PASS
11342.61	30.7	44.21	13.520	54.00	9.79	360	AV	Vertical	PASS
12084.24	29.2	43.75	14.520	54.00	10.25	90	AV	Vertical	PASS

Plot for Channel 120



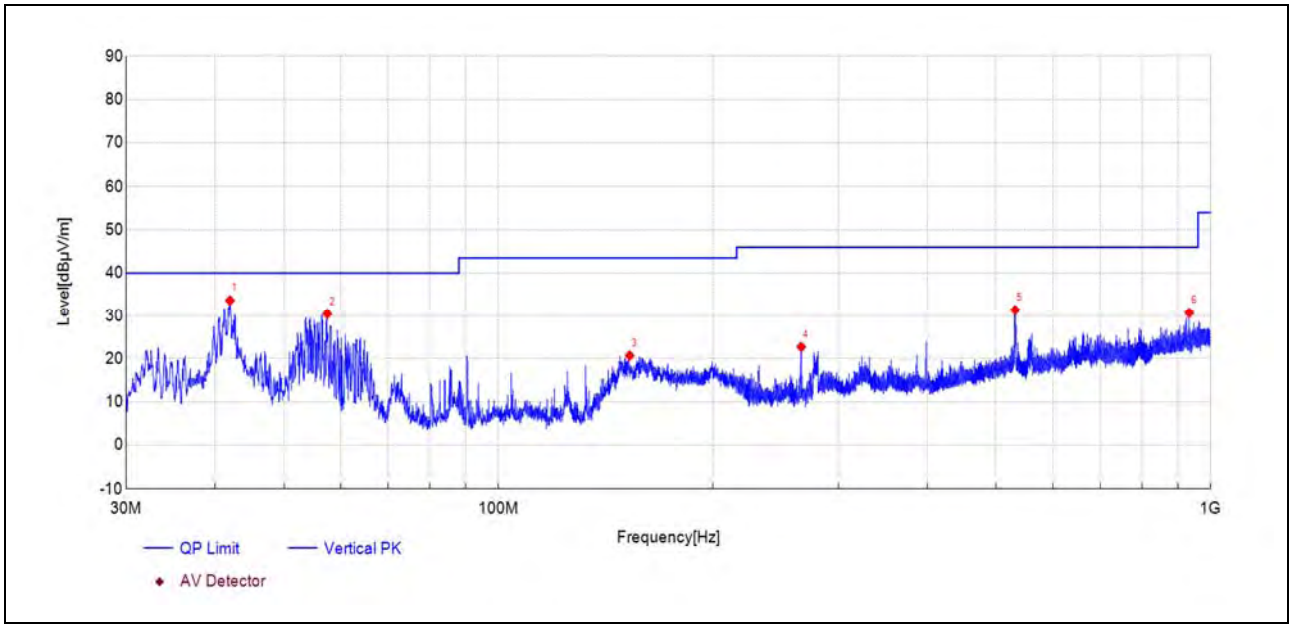
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
57.50	56.2	28.17	-28.000	40.00	11.83	262	PK	Horizontal	PASS
104.35	56.9	27.38	-29.490	43.50	16.12	22	PK	Horizontal	PASS
147.38	62.4	30.65	-31.780	43.50	12.85	241	PK	Horizontal	PASS
232.06	57.7	29.73	-27.940	46.00	16.27	159	PK	Horizontal	PASS
532.00	52.8	33.81	-18.970	46.00	12.19	146	PK	Horizontal	PASS
929.91	42.4	30.66	-11.690	46.00	15.34	276	PK	Horizontal	PASS



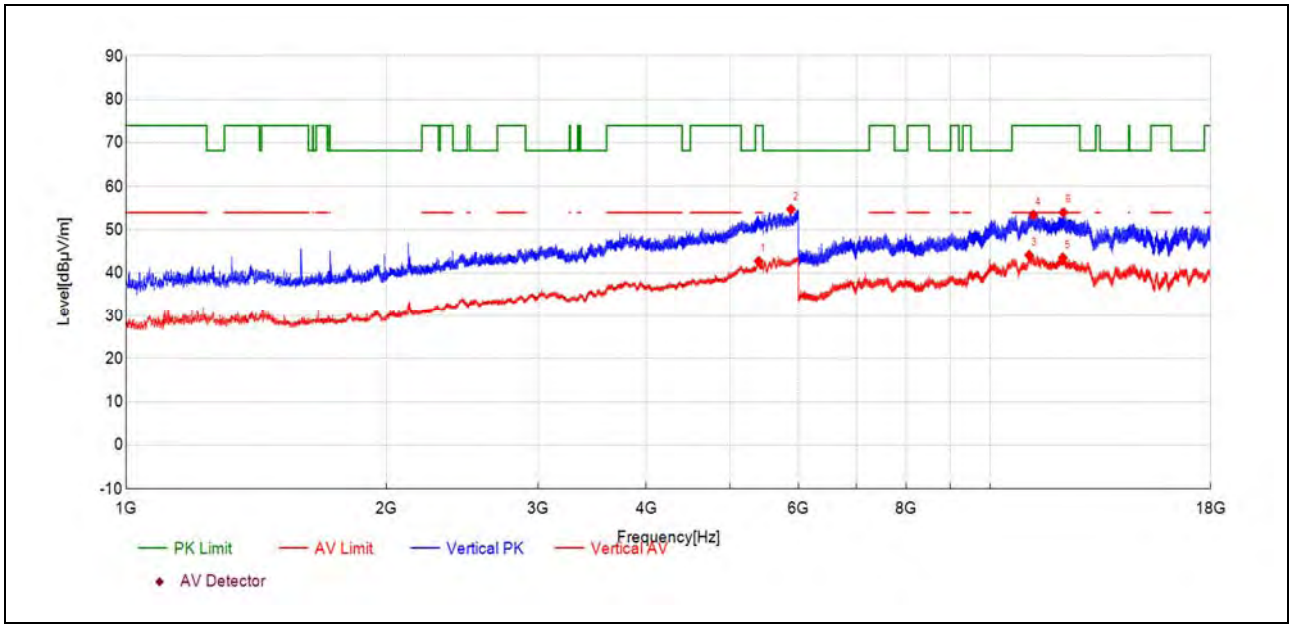
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5408.58	25.0	42.70	17.680	54.00	11.30	38	AV	Horizontal	PASS
5642.24	36.4	54.50	18.100	68.23	13.73	208	PK	Horizontal	PASS
11102.12	30.8	44.40	13.630	54.00	9.60	348	AV	Horizontal	PASS
11137.65	40.6	54.34	13.720	74.00	19.66	219	PK	Horizontal	PASS
12092.40	29.0	43.57	14.560	54.00	10.43	58	AV	Horizontal	PASS
12138.01	38.8	53.47	14.680	74.00	20.53	26	PK	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

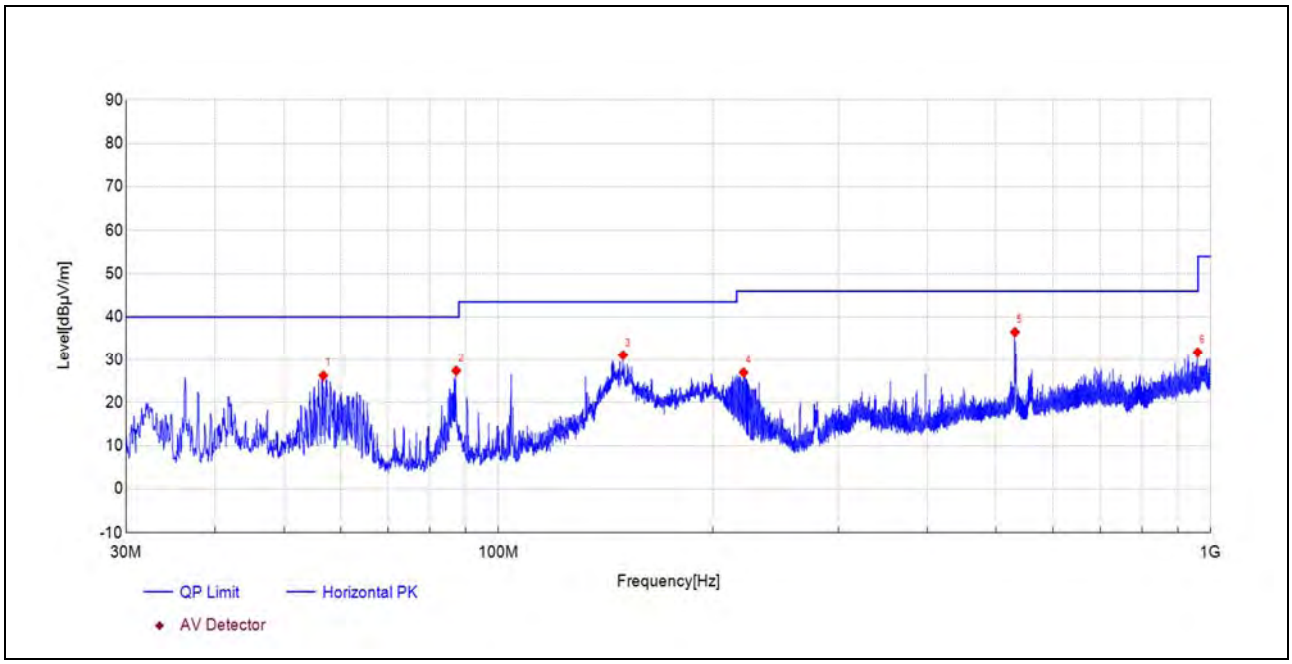
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
41.98	62.3	33.64	-28.670	40.00	6.36	310	PK	Vertical	PASS
57.50	58.5	30.45	-28.000	40.00	9.55	228	PK	Vertical	PASS
152.81	53.0	20.69	-32.270	43.50	22.81	193	PK	Vertical	PASS
266.16	50.1	22.72	-27.340	46.00	23.28	344	PK	Vertical	PASS
531.32	50.3	31.35	-18.940	46.00	14.65	256	PK	Vertical	PASS
932.92	42.4	30.69	-11.730	46.00	15.31	63	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

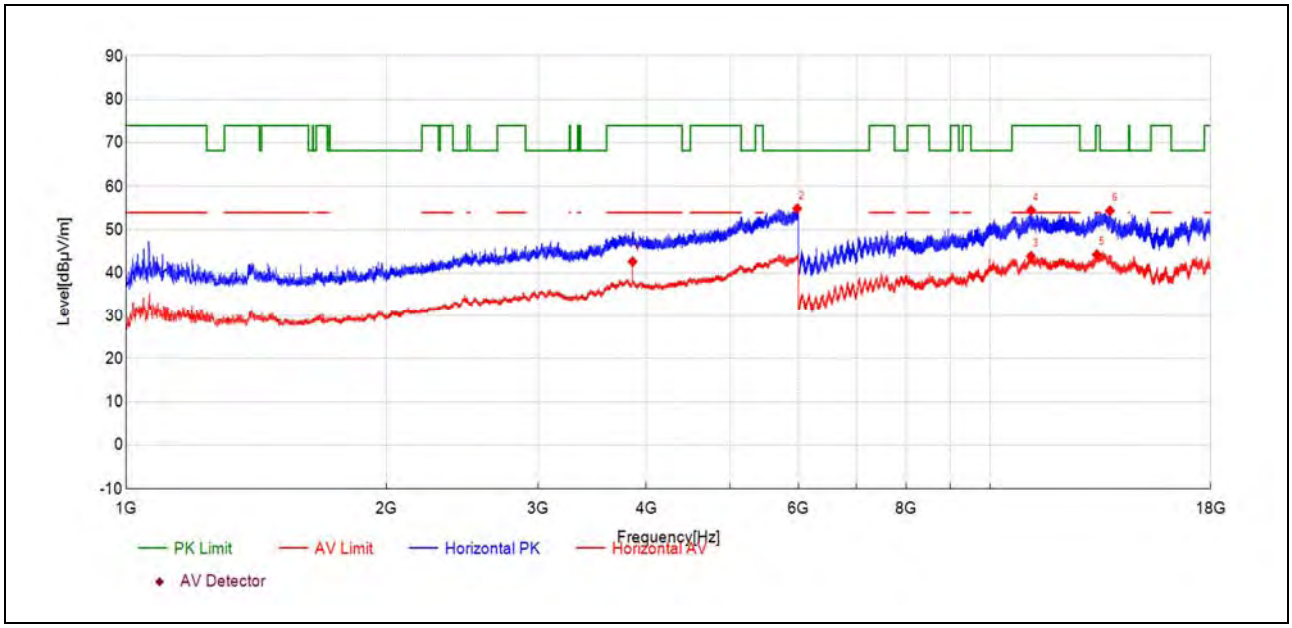
Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5397.67	25.0	42.76	17.760	54.00	11.24	62	AV	Vertical	PASS
5883.17	36.2	54.75	18.550	68.23	13.48	0	PK	Vertical	PASS
11097.80	30.6	44.14	13.590	54.00	9.86	264	AV	Vertical	PASS
11221.17	39.7	53.46	13.720	74.00	20.54	243	PK	Vertical	PASS
12138.01	28.9	43.55	14.680	54.00	10.45	296	AV	Vertical	PASS
12155.77	39.3	54.03	14.710	74.00	19.97	232	PK	Vertical	PASS

Plot for Channel 157



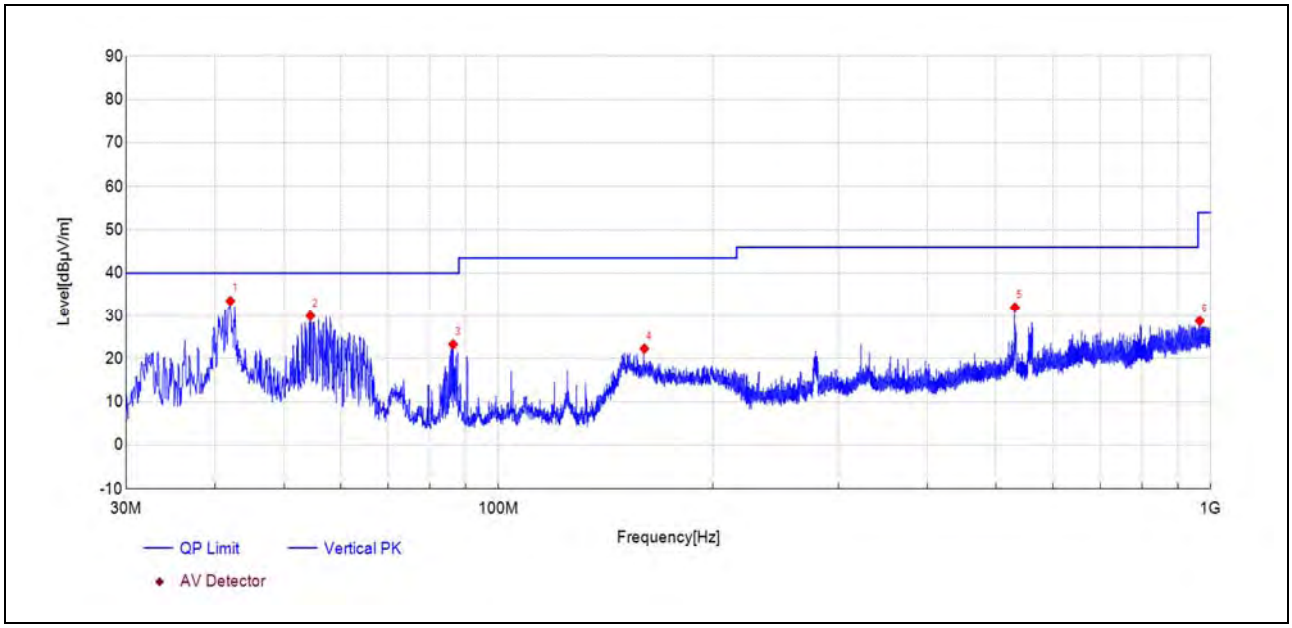
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
56.77	54.2	26.22	-27.970	40.00	13.78	310	PK	Horizontal	PASS
87.23	59.5	27.36	-32.140	40.00	12.64	104	PK	Horizontal	PASS
149.61	62.6	31.04	-31.590	43.50	12.46	275	PK	Horizontal	PASS
220.86	55.9	26.94	-28.940	46.00	19.06	1	PK	Horizontal	PASS
531.08	55.4	36.49	-18.930	46.00	9.51	48	PK	Horizontal	PASS
958.63	43.1	31.71	-11.420	46.00	14.29	34	PK	Horizontal	PASS



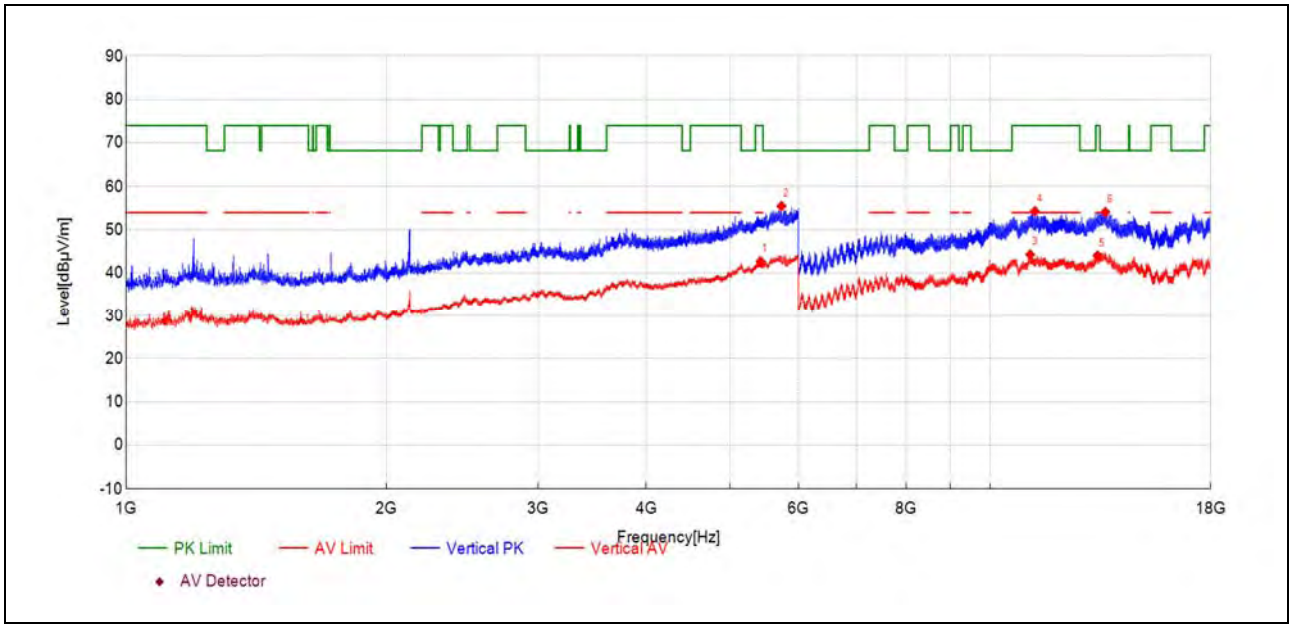
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
3857.08	31.0	42.66	11.620	54.00	11.34	136	AV	Horizontal	PASS
5980.45	35.4	54.94	19.590	68.23	13.29	144	PK	Horizontal	PASS
11149.17	30.4	43.91	13.520	54.00	10.09	327	AV	Horizontal	PASS
11153.49	41.0	54.53	13.520	74.00	19.47	146	PK	Horizontal	PASS
13288.13	27.9	44.28	16.410	54.00	9.72	5	AV	Horizontal	PASS
13759.99	37.7	54.44	16.730	68.23	13.79	166	PK	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
42.03	62.2	33.51	-28.640	40.00	6.49	298	PK	Vertical	PASS
54.45	57.6	29.96	-27.650	40.00	10.04	140	PK	Vertical	PASS
86.36	55.6	23.30	-32.340	40.00	16.70	147	PK	Vertical	PASS
160.28	53.5	22.30	-31.160	43.50	21.20	161	PK	Vertical	PASS
531.03	50.9	31.97	-18.930	46.00	14.03	208	PK	Vertical	PASS
965.13	39.8	28.75	-11.000	54.00	25.25	29	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
5423.58	25.0	42.72	17.760	54.00	11.28	229	AV	Vertical	PASS
5733.61	36.1	55.49	19.410	68.23	12.74	194	PK	Vertical	PASS
11126.13	30.8	44.28	13.530	54.00	9.72	48	AV	Vertical	PASS
11265.81	41.0	54.32	13.290	74.00	19.68	219	PK	Vertical	PASS
13311.65	27.5	44.05	16.510	54.00	9.95	294	AV	Vertical	PASS
13595.34	37.0	54.11	17.110	68.23	14.12	26	PK	Vertical	PASS

END OF REPORT