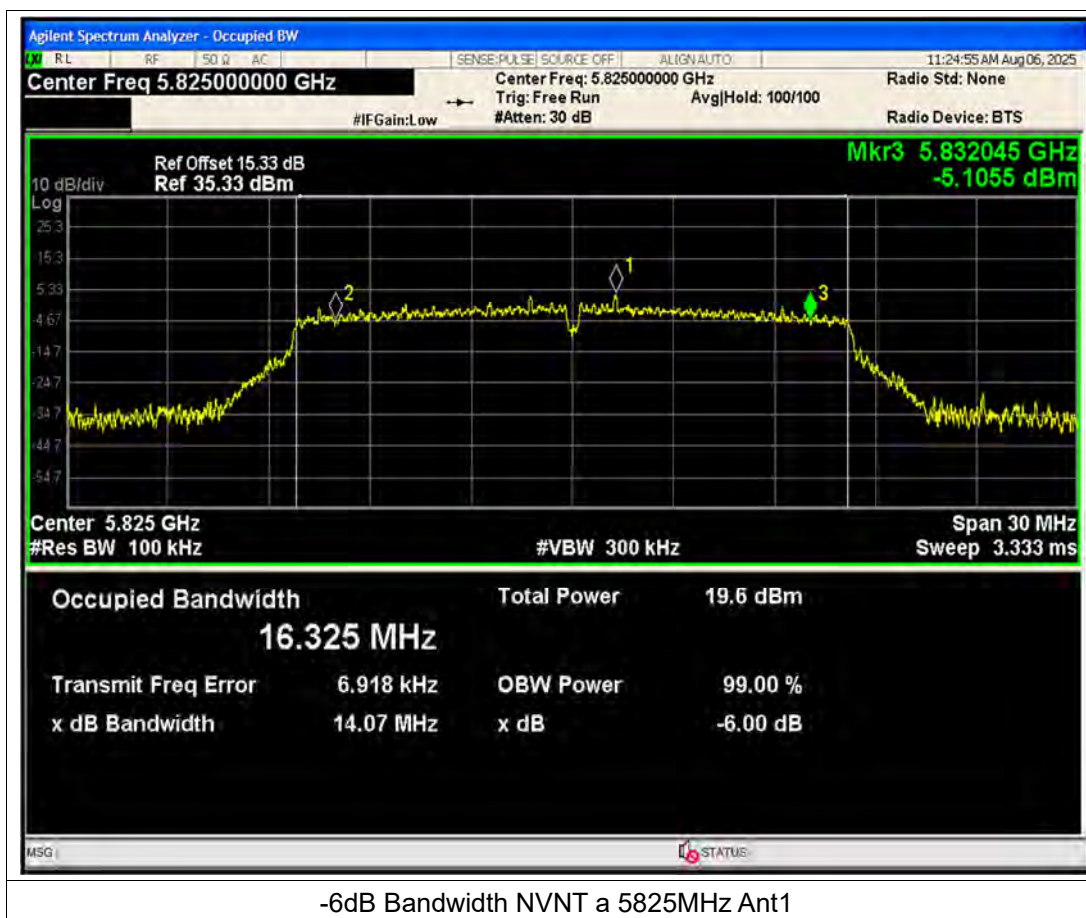
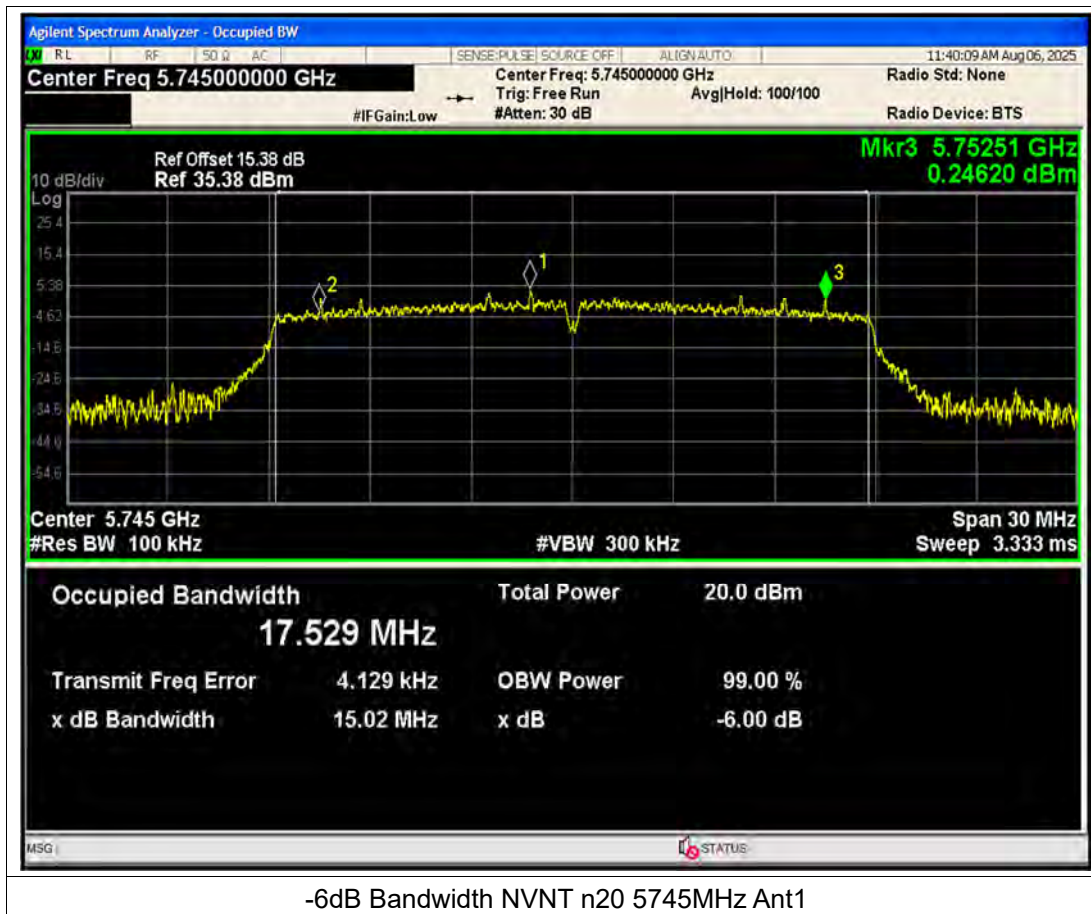
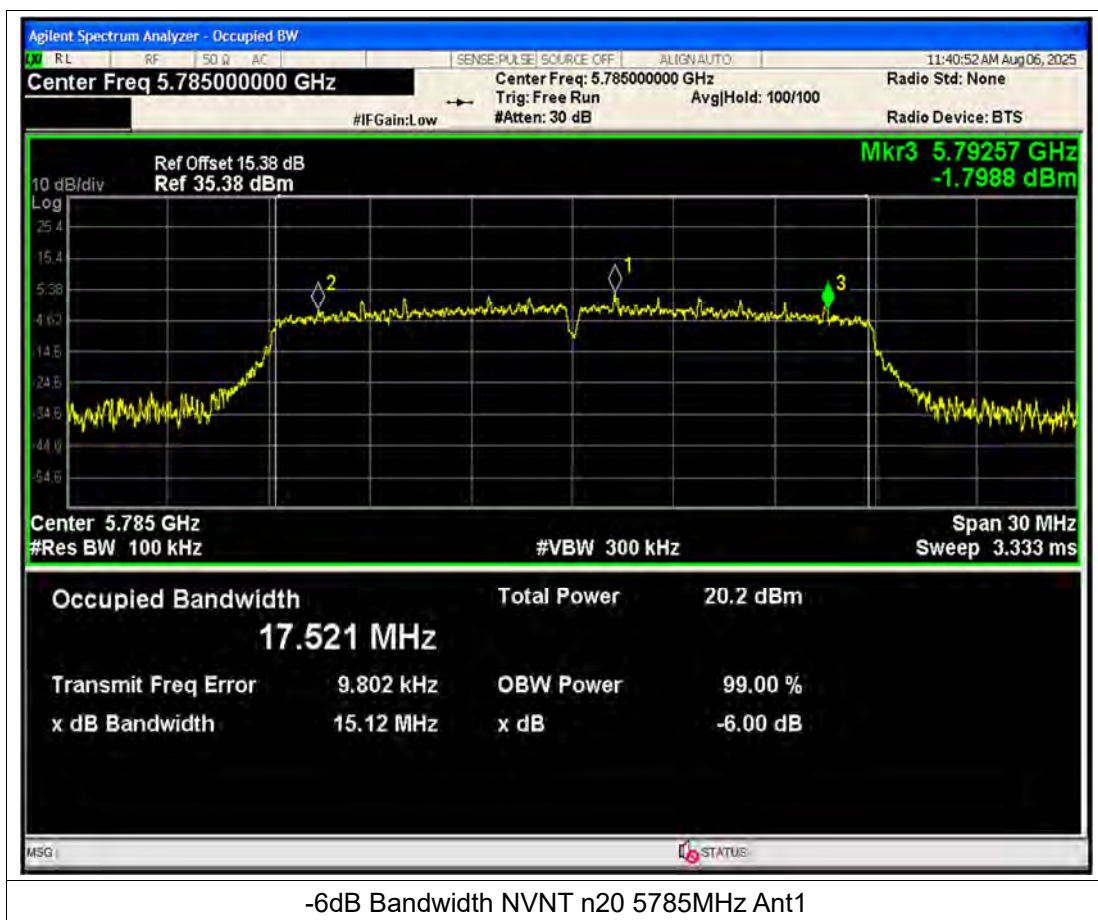
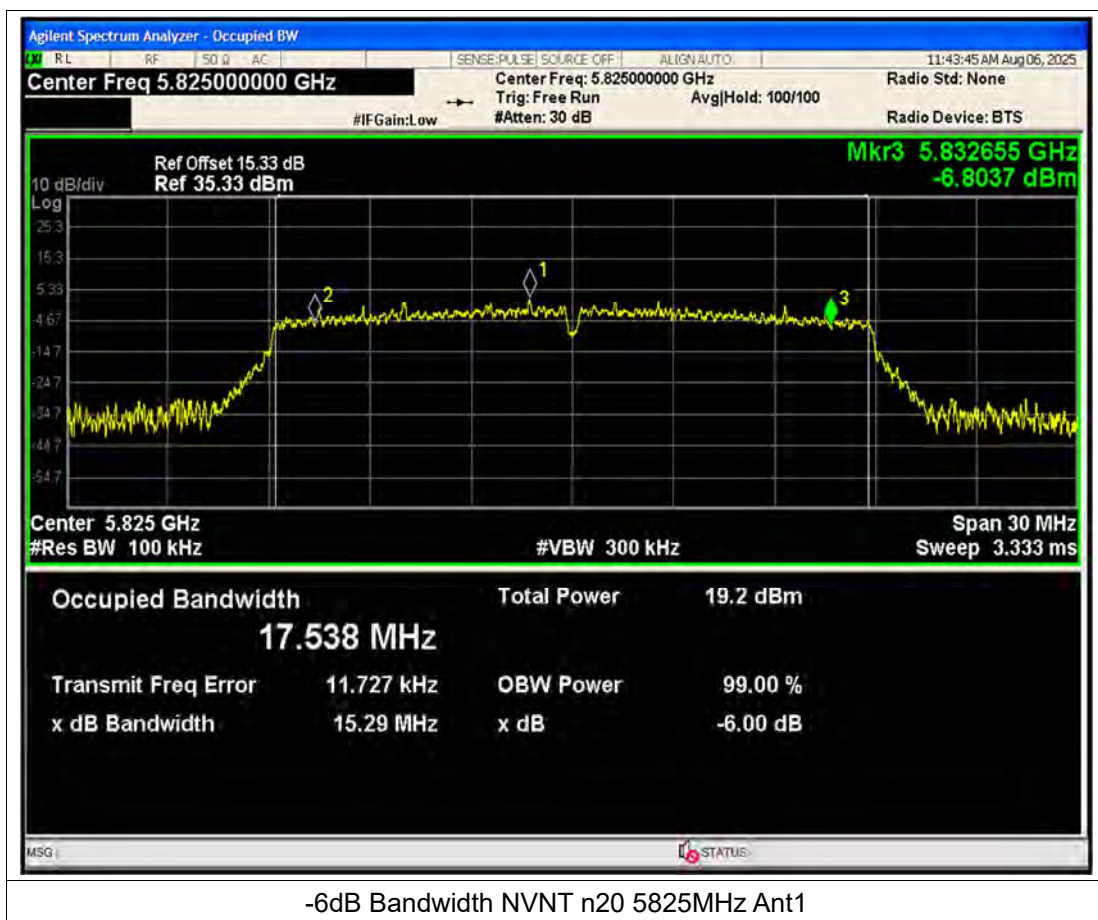
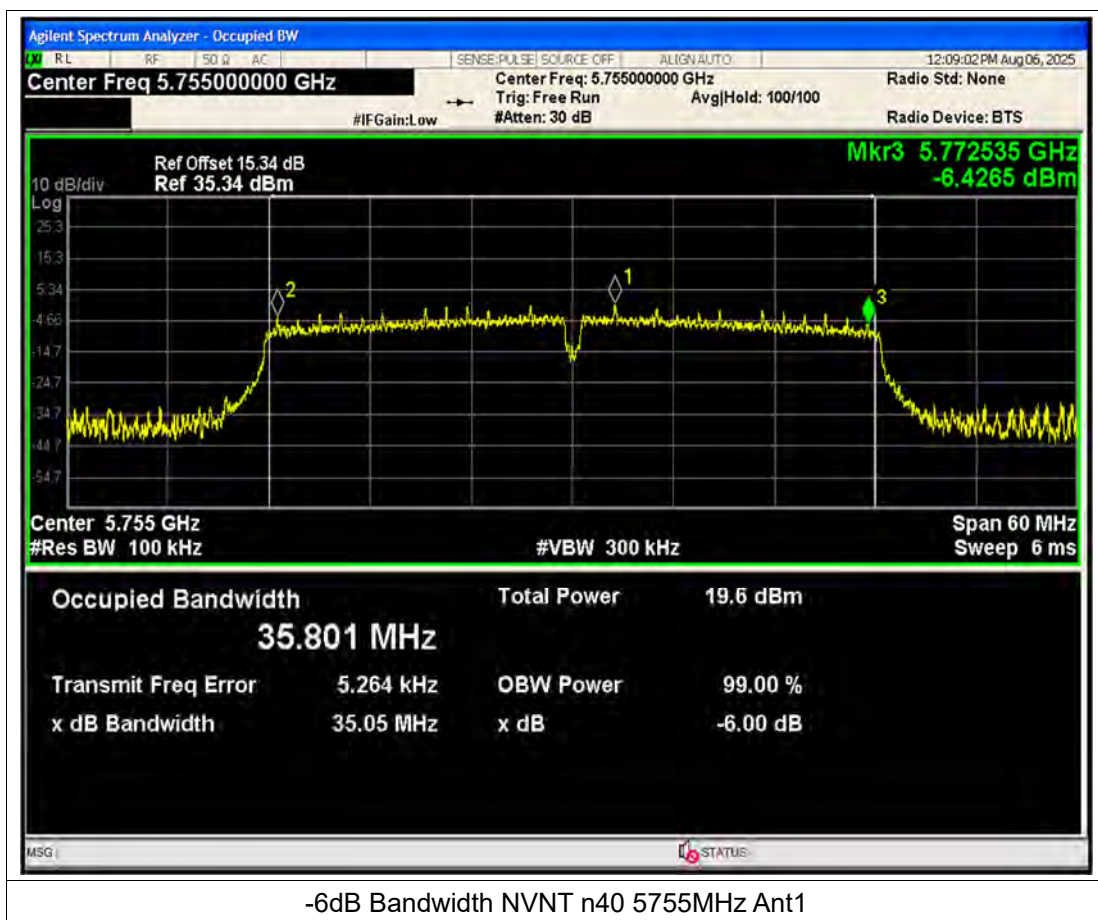


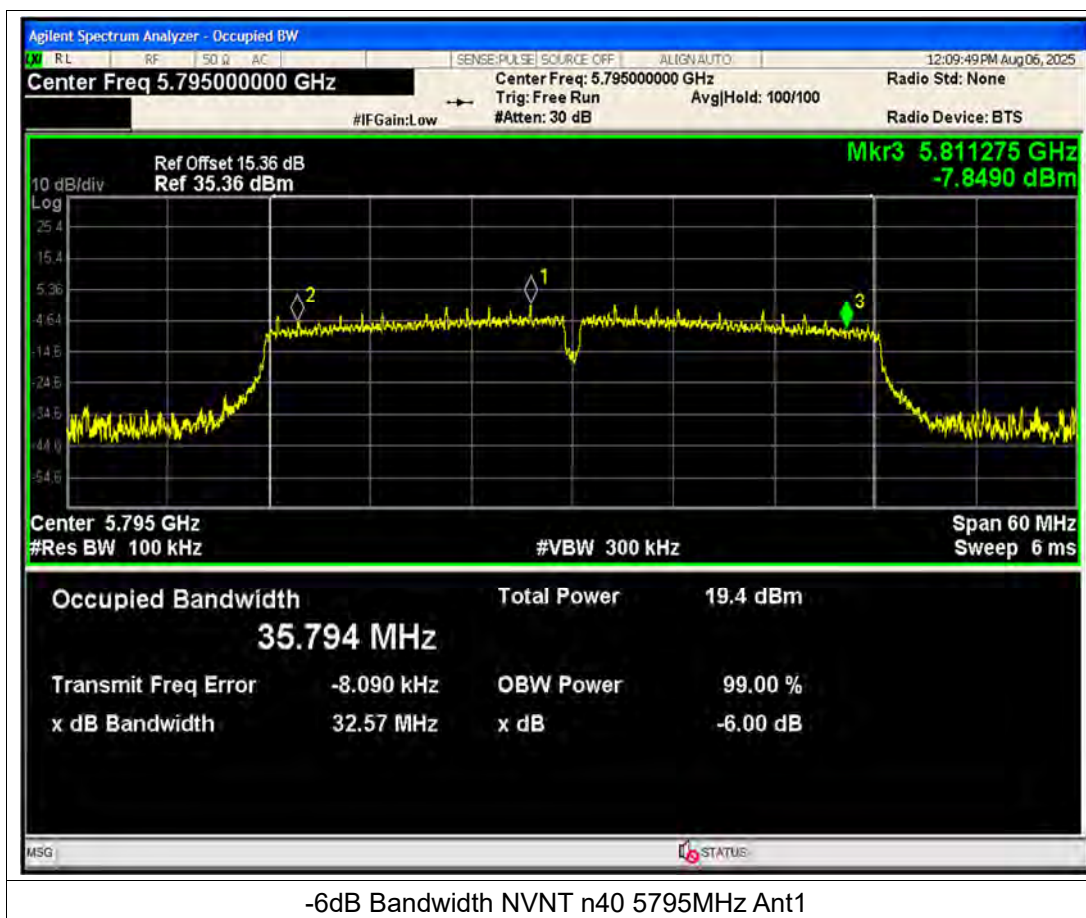


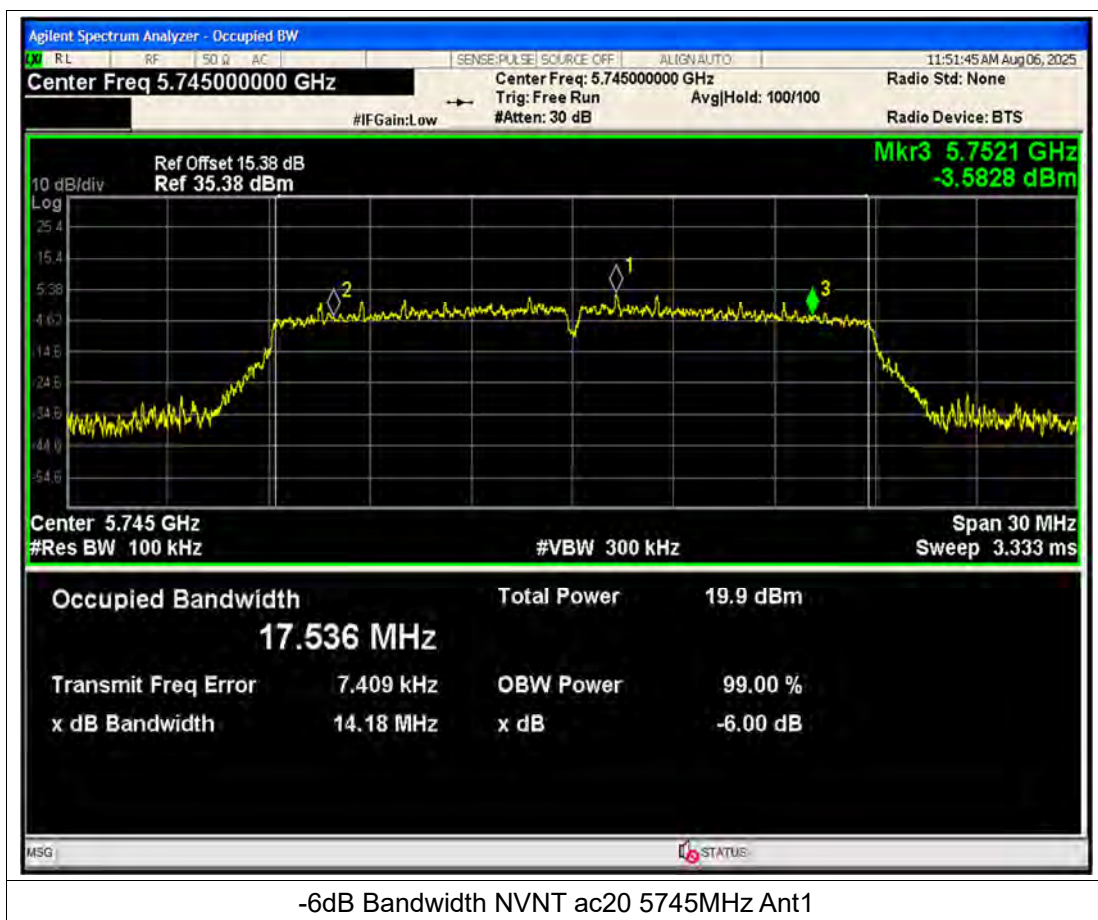


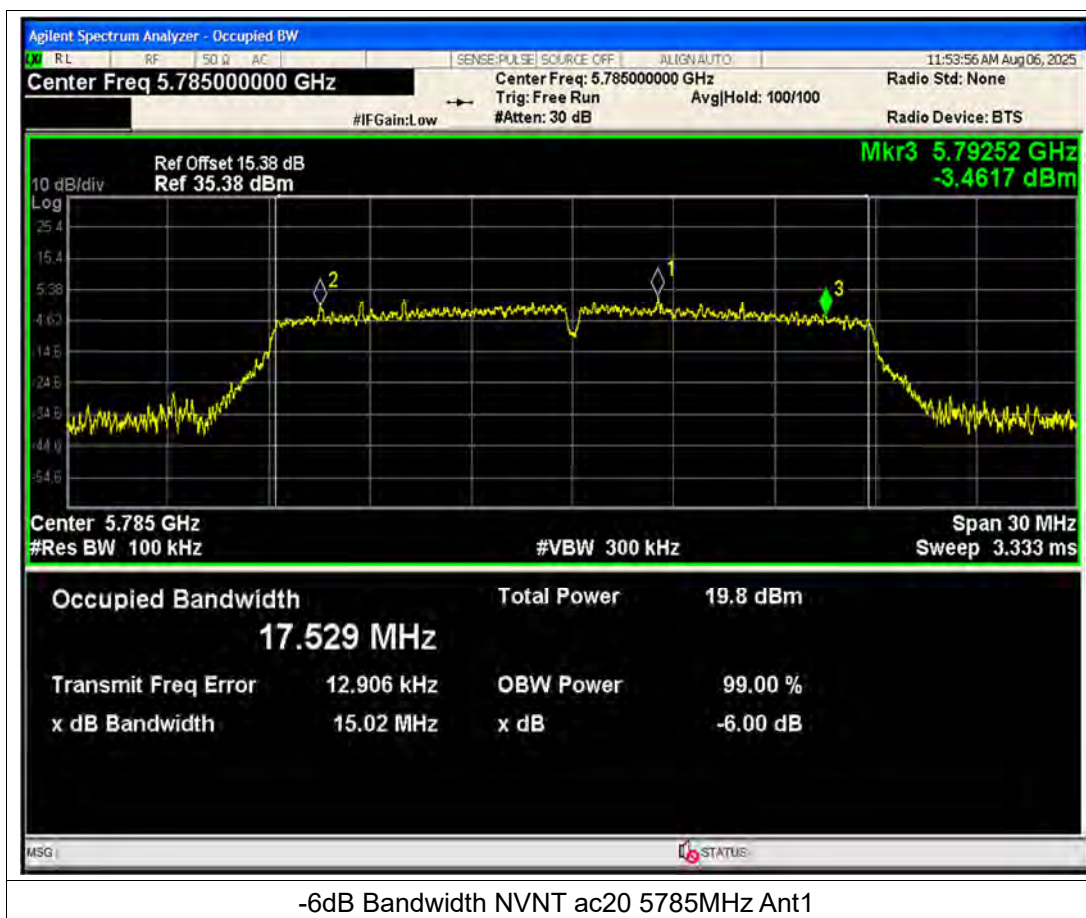


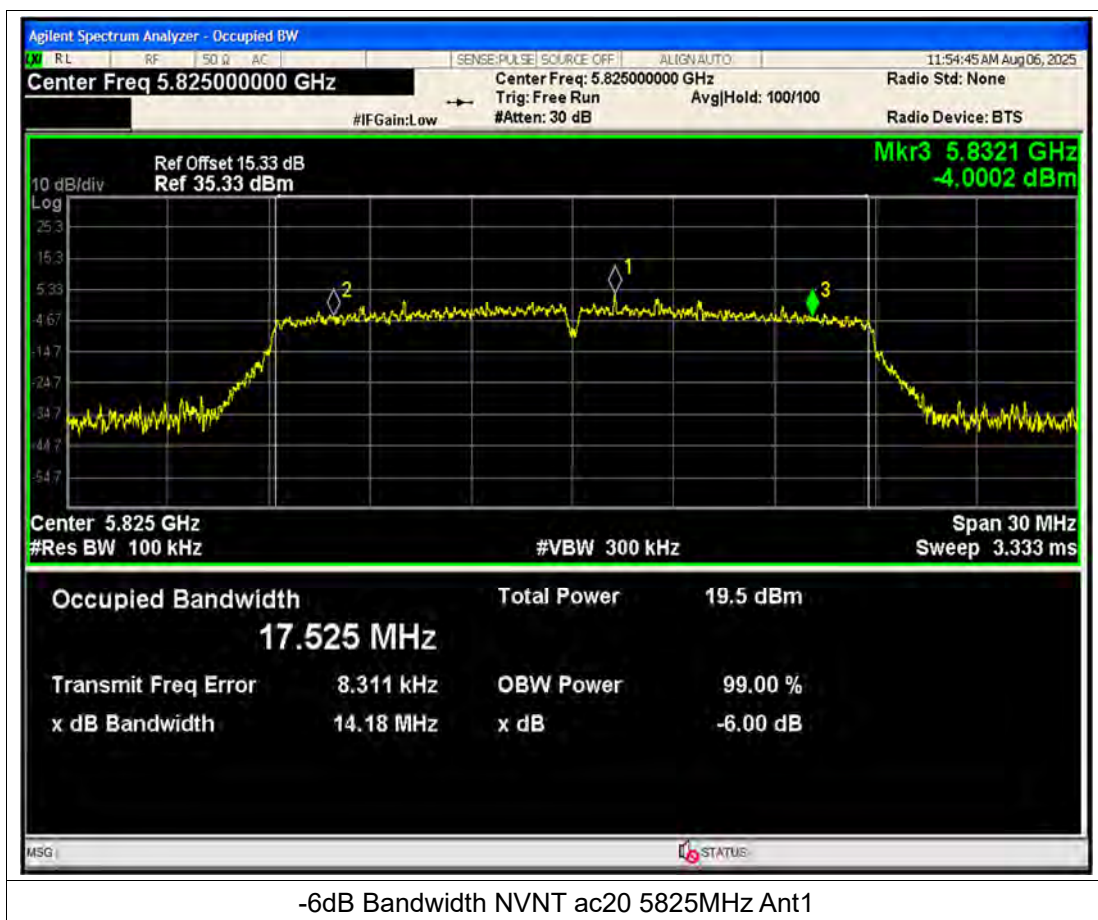


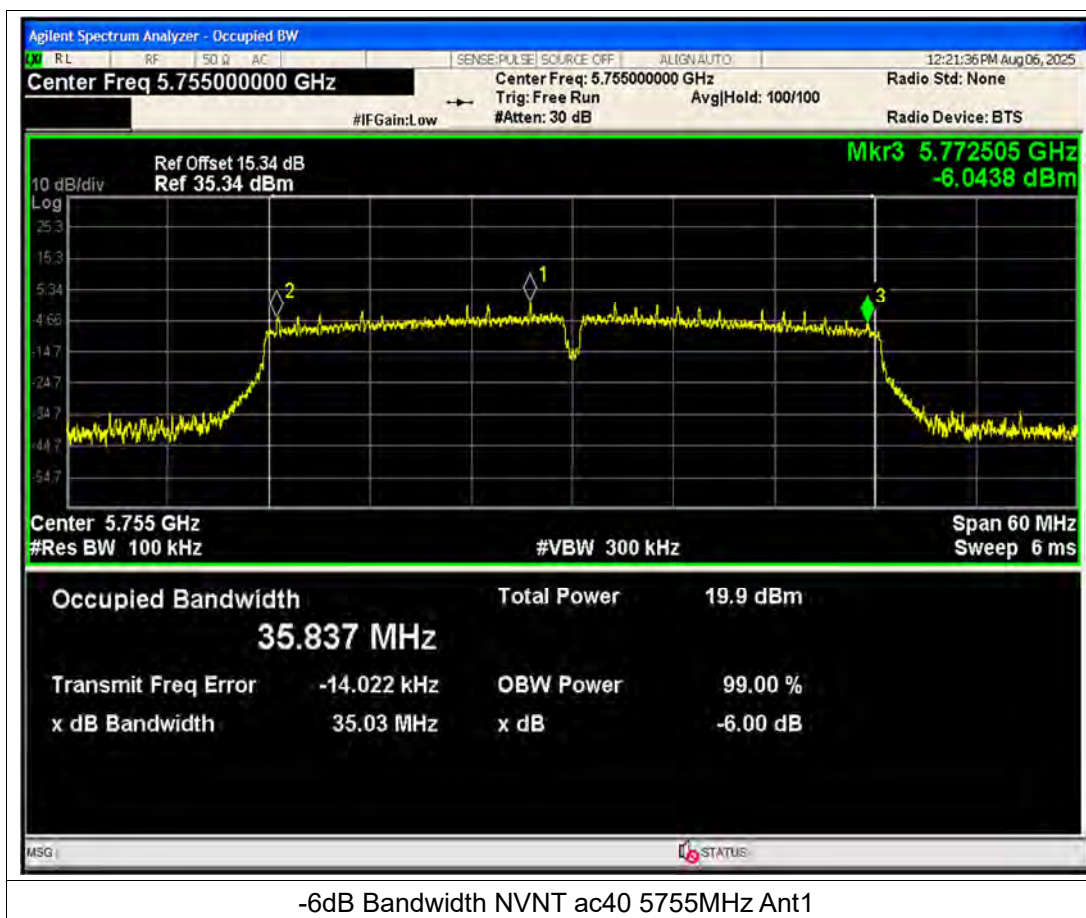


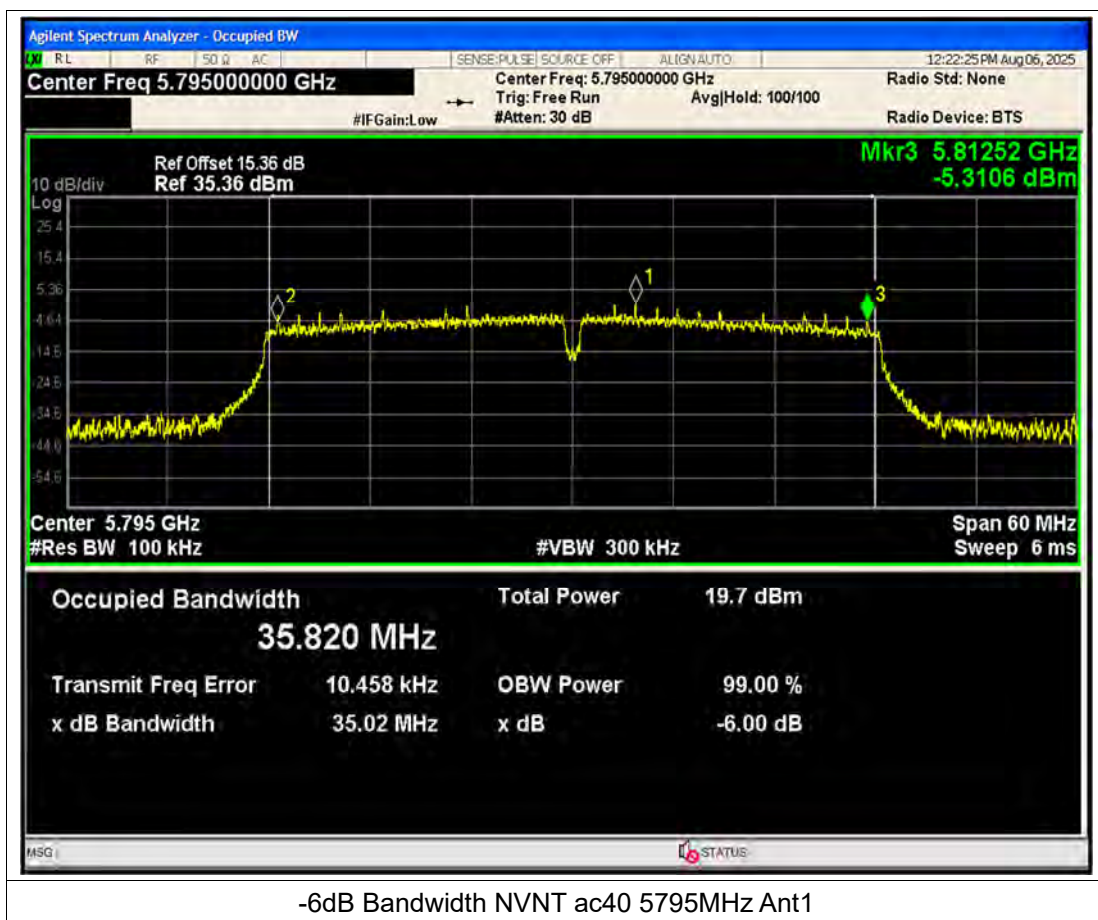


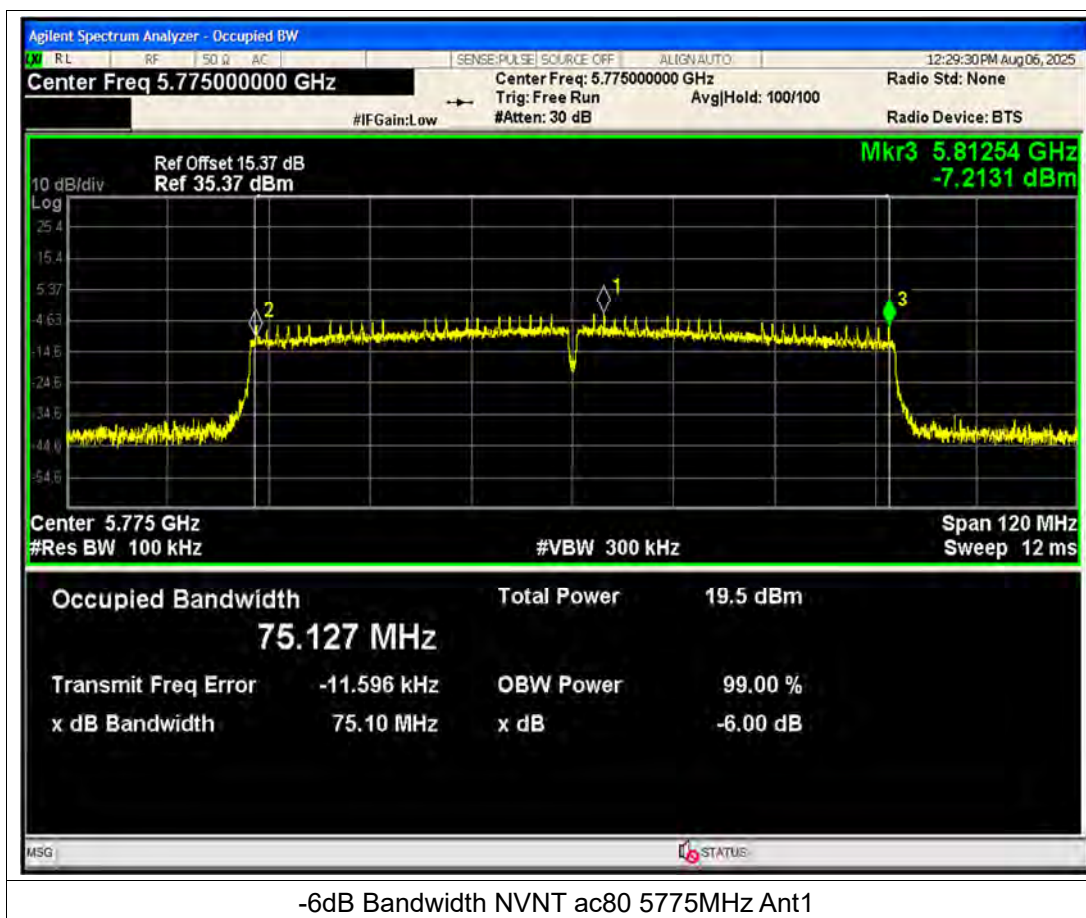










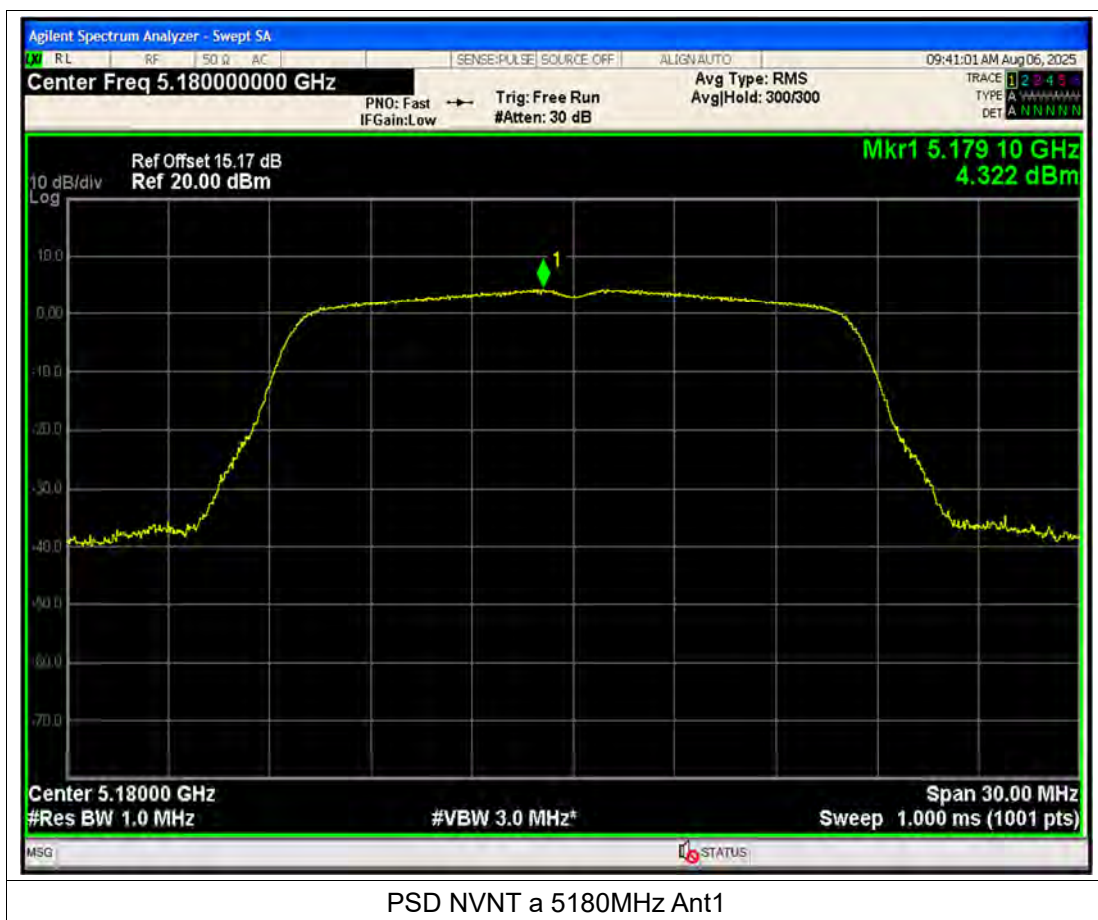


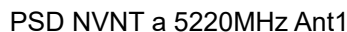
**A.4. Peak Power Spectral Density**

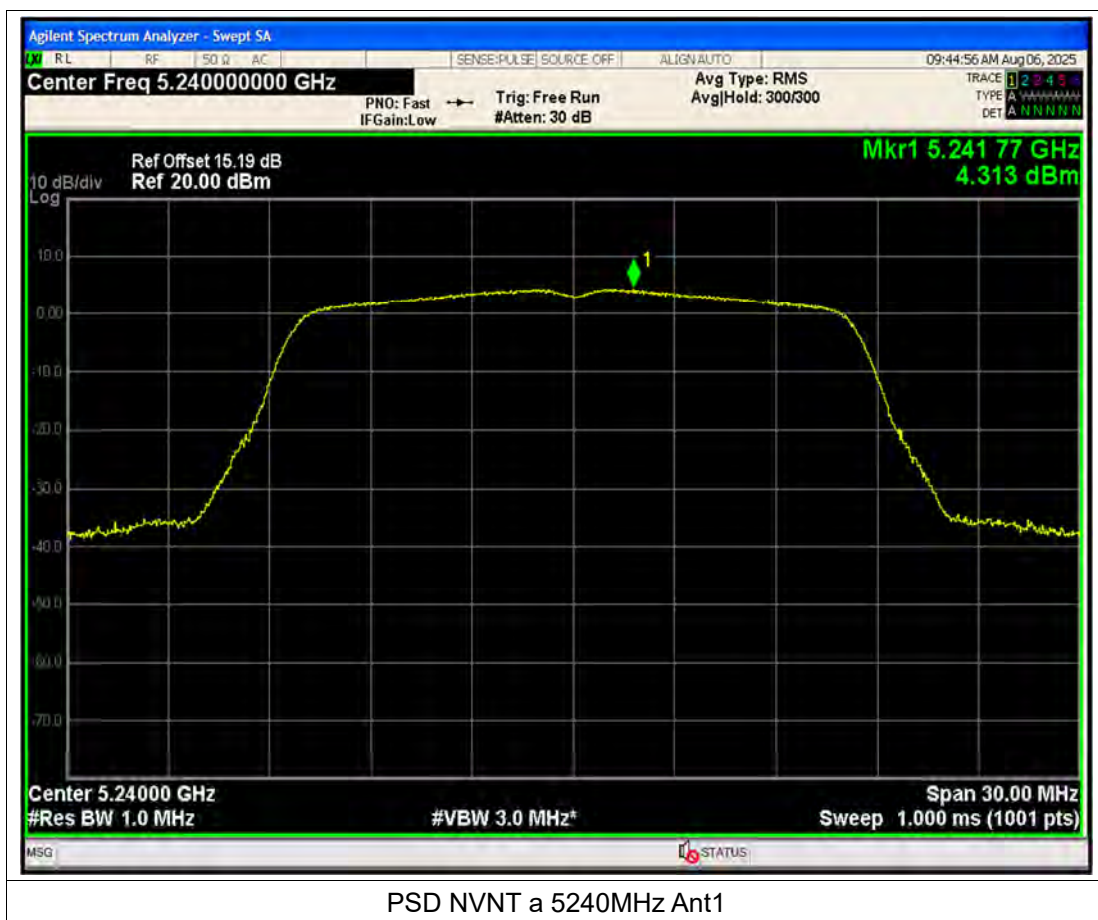
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Limit Conducted (dBm)	Verdict
NVNT	a	5180	Ant1	4.32	0.18	4.5	11	Pass
NVNT	a	5220	Ant1	4.28	0.12	4.4	11	Pass
NVNT	a	5240	Ant1	4.31	0.12	4.43	11	Pass
NVNT	a	5260	Ant1	4.04	0.12	4.16	11	Pass
NVNT	a	5300	Ant1	3.49	0.12	3.61	11	Pass
NVNT	a	5320	Ant1	3.56	0.12	3.68	11	Pass
NVNT	a	5500	Ant1	3.54	0.12	3.66	11	Pass
NVNT	a	5580	Ant1	3.44	0.12	3.56	11	Pass
NVNT	a	5720	Ant1	3.4	0.12	3.52	11	Pass
NVNT	a	5745	Ant1	1.31	0.12	1.43	30	Pass
NVNT	a	5785	Ant1	0.98	0.12	1.1	30	Pass
NVNT	a	5825	Ant1	0.7	0.12	0.82	30	Pass
NVNT	n20	5180	Ant1	4.35	0.13	4.48	11	Pass
NVNT	n20	5220	Ant1	4	0.13	4.13	11	Pass
NVNT	n20	5240	Ant1	4.18	0.2	4.38	11	Pass
NVNT	n20	5260	Ant1	4.44	0.13	4.57	11	Pass
NVNT	n20	5300	Ant1	4.03	0.13	4.16	11	Pass
NVNT	n20	5320	Ant1	4.11	0.2	4.31	11	Pass
NVNT	n20	5500	Ant1	3.84	0.13	3.97	11	Pass
NVNT	n20	5580	Ant1	3.76	0.13	3.89	11	Pass
NVNT	n20	5720	Ant1	3.79	0.13	3.92	11	Pass
NVNT	n20	5745	Ant1	0.93	0.13	1.06	30	Pass
NVNT	n20	5785	Ant1	0.78	0.13	0.91	30	Pass
NVNT	n20	5825	Ant1	0.16	0.13	0.29	30	Pass
NVNT	n40	5190	Ant1	0.77	0.26	1.03	11	Pass
NVNT	n40	5230	Ant1	0.13	0.26	0.39	11	Pass
NVNT	n40	5270	Ant1	0.04	0.26	0.3	11	Pass
NVNT	n40	5310	Ant1	0.18	0.26	0.44	11	Pass
NVNT	n40	5510	Ant1	-0.11	0.26	0.15	11	Pass
NVNT	n40	5550	Ant1	-0.02	0.26	0.24	11	Pass
NVNT	n40	5710	Ant1	0.09	0.26	0.35	11	Pass
NVNT	n40	5755	Ant1	-2.68	0.26	-2.42	30	Pass
NVNT	n40	5795	Ant1	-2.91	0.26	-2.65	30	Pass
NVNT	ac20	5180	Ant1	3.75	0.2	3.95	11	Pass



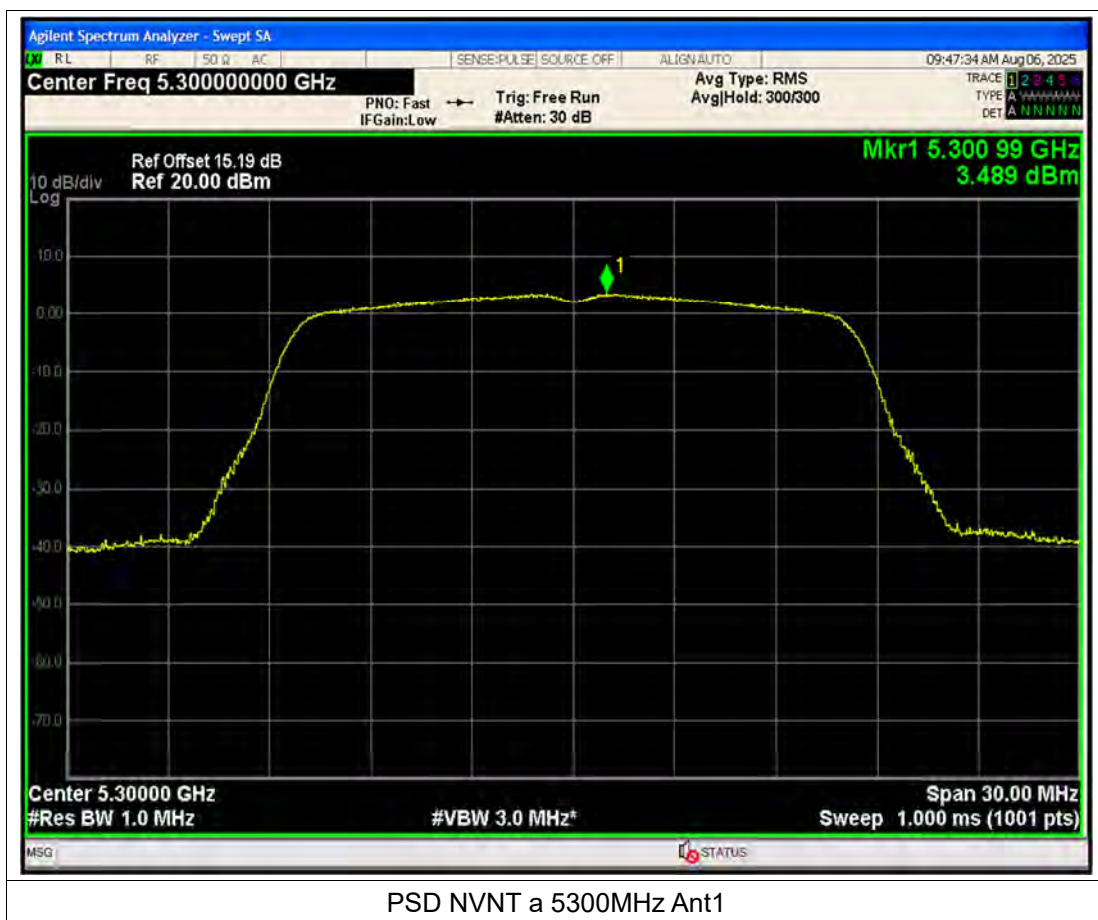
NVNT	ac20	5220	Ant1	3.75	0.13	3.88	11	Pass
NVNT	ac20	5240	Ant1	3.77	0.13	3.9	11	Pass
NVNT	ac20	5260	Ant1	3.91	0.2	4.1	11	Pass
NVNT	ac20	5300	Ant1	3.77	0.2	3.97	11	Pass
NVNT	ac20	5320	Ant1	3.62	0.13	3.75	11	Pass
NVNT	ac20	5500	Ant1	3.69	0.13	3.82	11	Pass
NVNT	ac20	5580	Ant1	3.5	0.13	3.63	11	Pass
NVNT	ac20	5720	Ant1	3.69	0.2	3.89	11	Pass
NVNT	ac20	5745	Ant1	0.84	0.13	0.97	30	Pass
NVNT	ac20	5785	Ant1	0.69	0.13	0.82	30	Pass
NVNT	ac20	5825	Ant1	0.45	0.13	0.58	30	Pass
NVNT	ac40	5190	Ant1	0.49	0.26	0.75	11	Pass
NVNT	ac40	5230	Ant1	0.56	0.39	0.95	11	Pass
NVNT	ac40	5270	Ant1	0.58	0.26	0.84	11	Pass
NVNT	ac40	5310	Ant1	0.6	0.26	0.86	11	Pass
NVNT	ac40	5510	Ant1	0.55	0.39	0.94	11	Pass
NVNT	ac40	5550	Ant1	0.28	0.26	0.54	11	Pass
NVNT	ac40	5710	Ant1	0.4	0.26	0.66	11	Pass
NVNT	ac40	5755	Ant1	-2.51	0.26	-2.25	30	Pass
NVNT	ac40	5795	Ant1	-2.48	0.26	-2.22	30	Pass
NVNT	ac80	5210	Ant1	-3.16	0.51	-2.65	11	Pass
NVNT	ac80	5290	Ant1	-2.87	0.51	-2.36	11	Pass
NVNT	ac80	5530	Ant1	-3.23	0.75	-2.48	11	Pass
NVNT	ac80	5610	Ant1	-3.65	0.75	-2.9	11	Pass
NVNT	ac80	5690	Ant1	-3.38	0.48	-2.9	11	Pass
NVNT	ac80	5775	Ant1	-6.13	0.51	-5.62	30	Pass



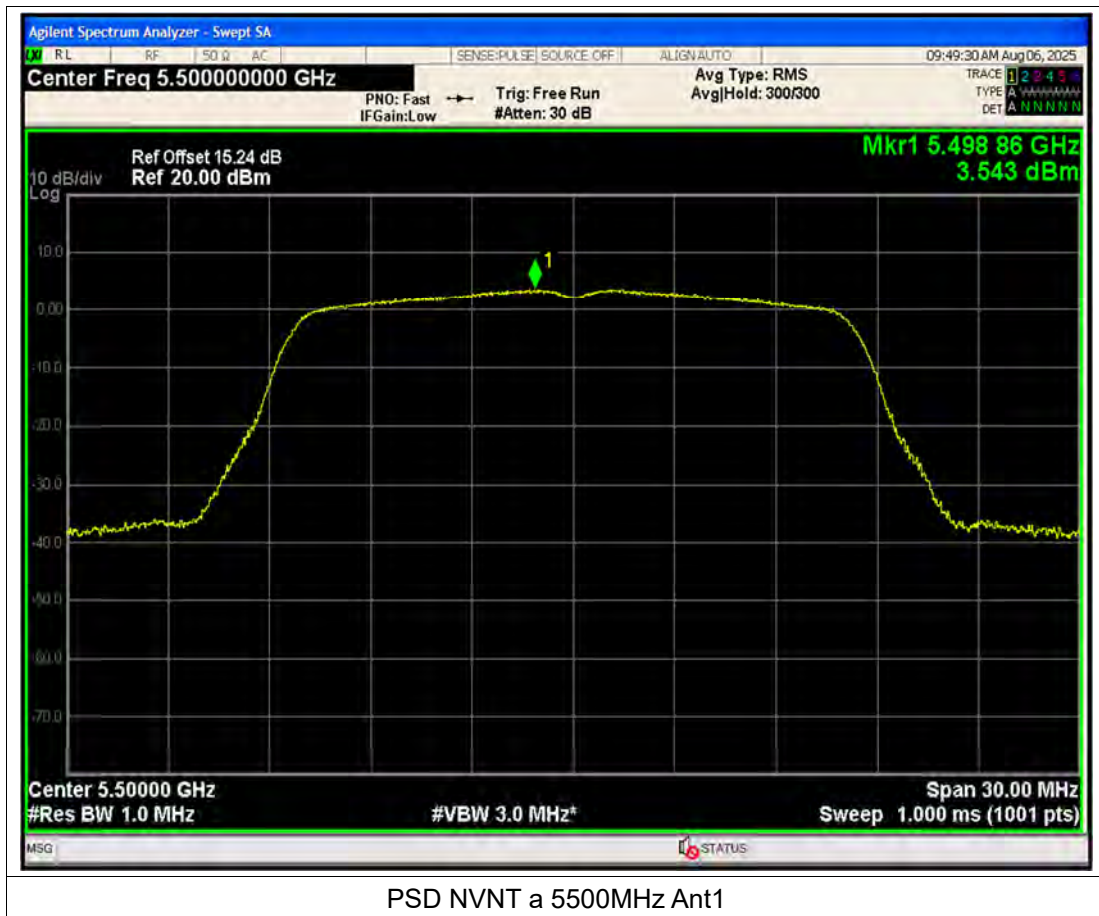


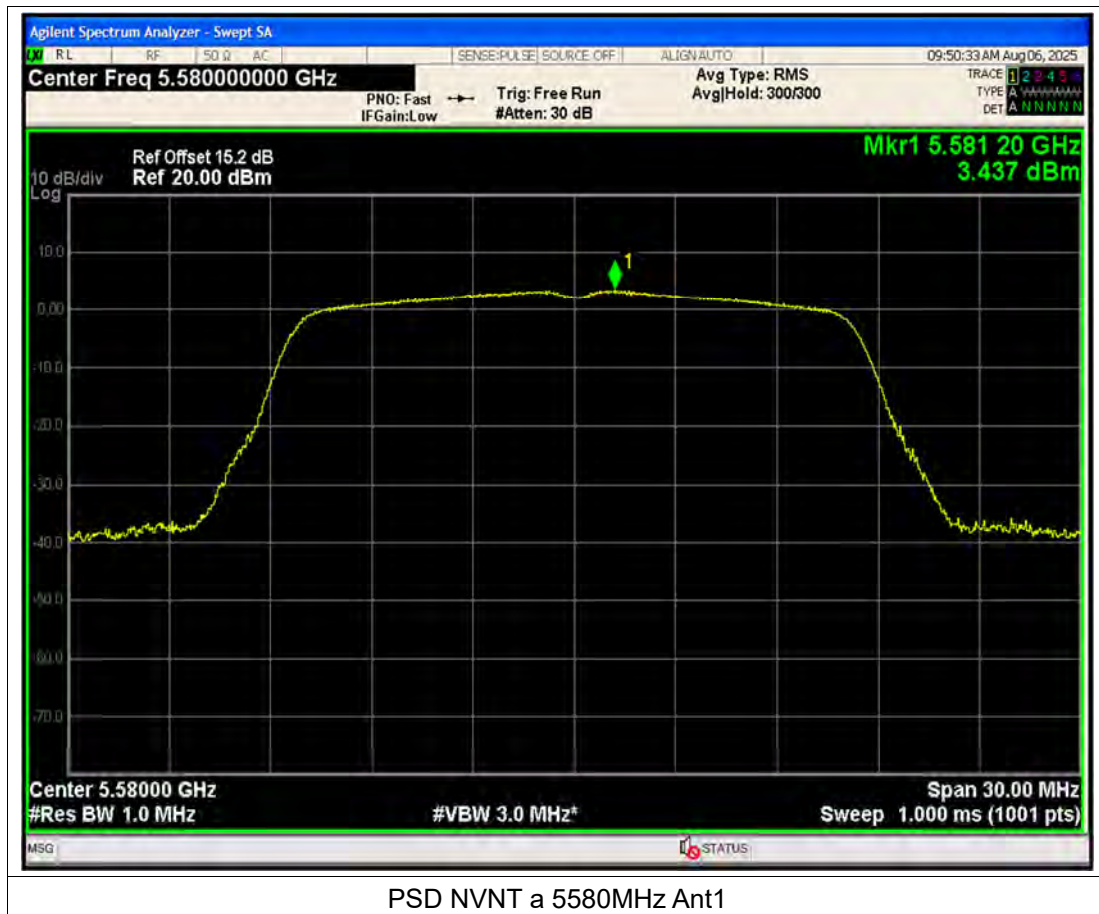


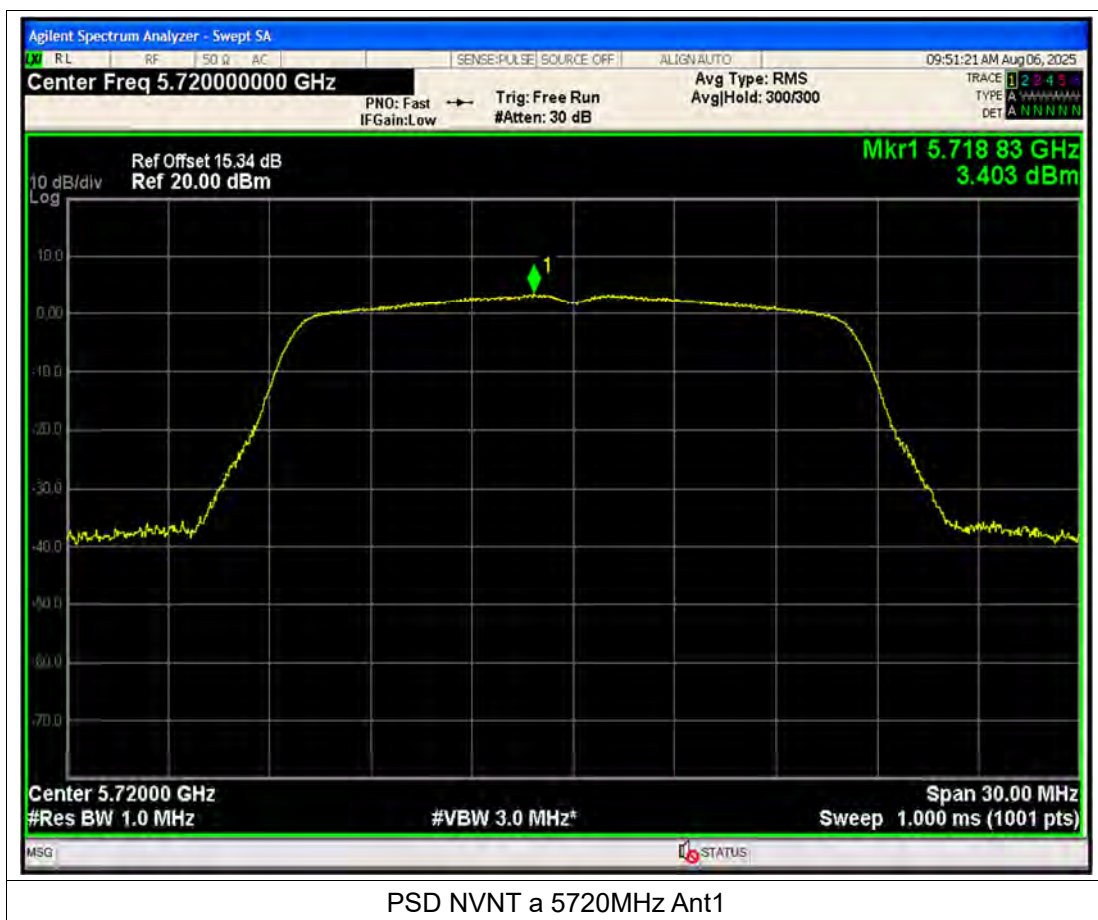


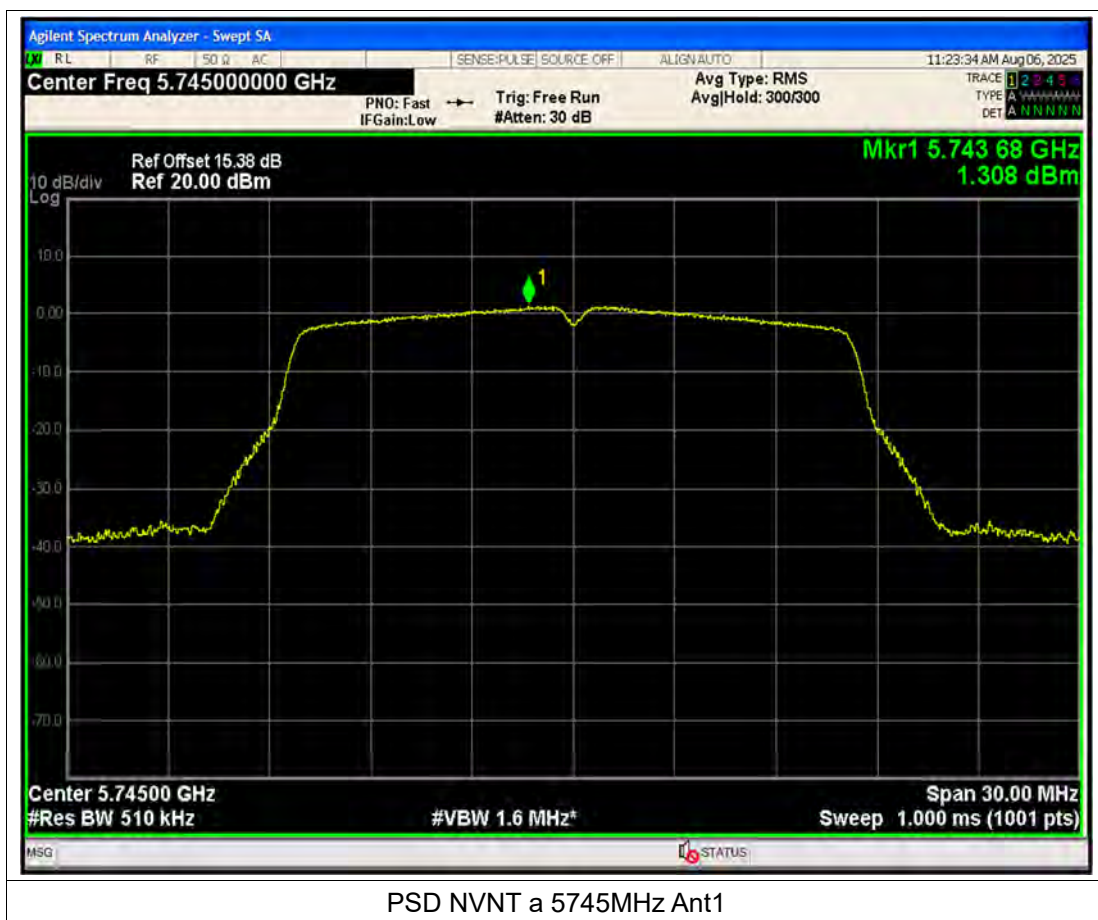


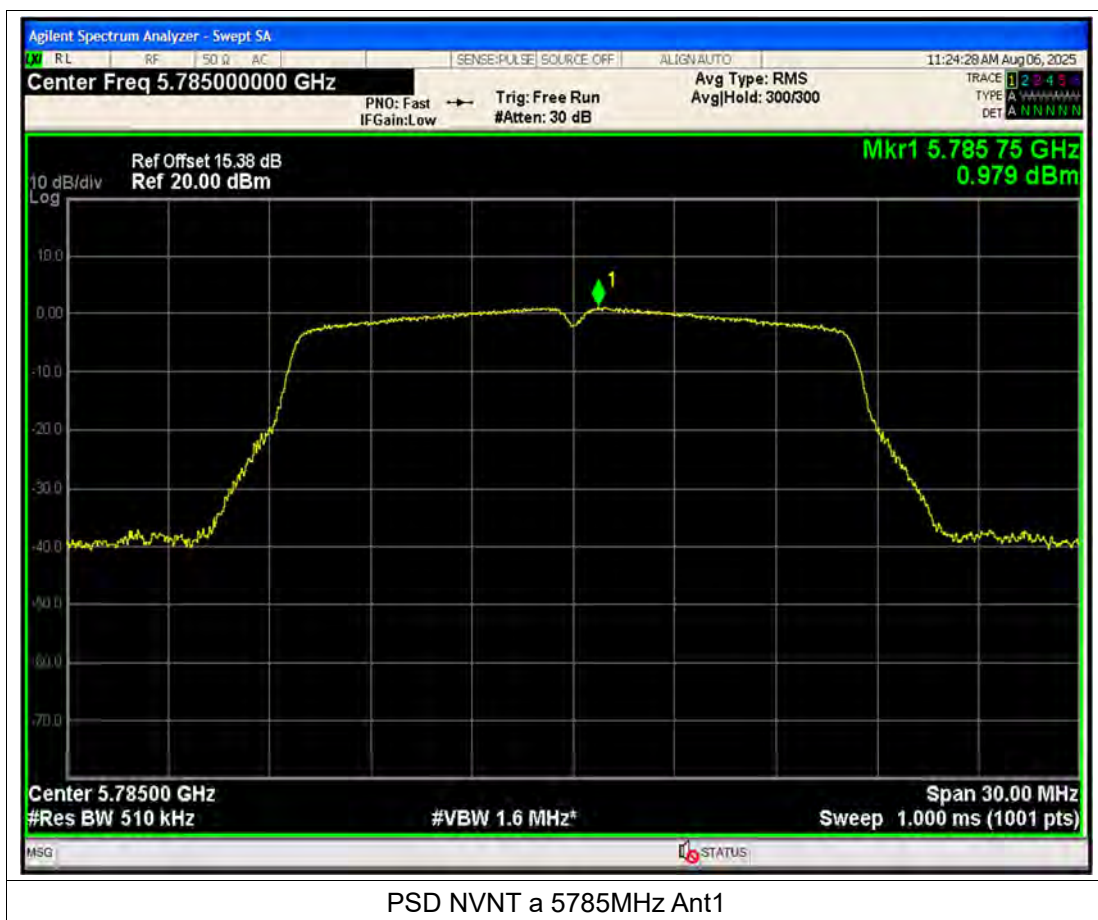


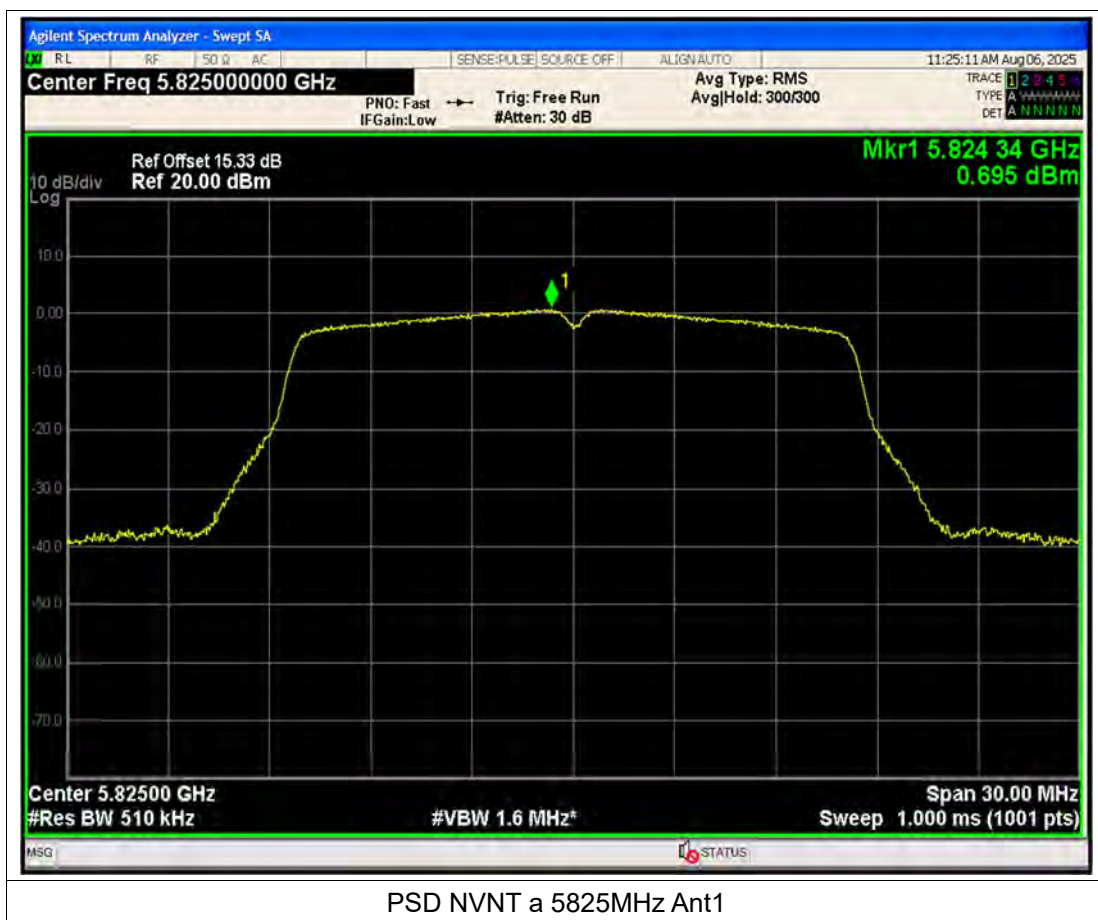




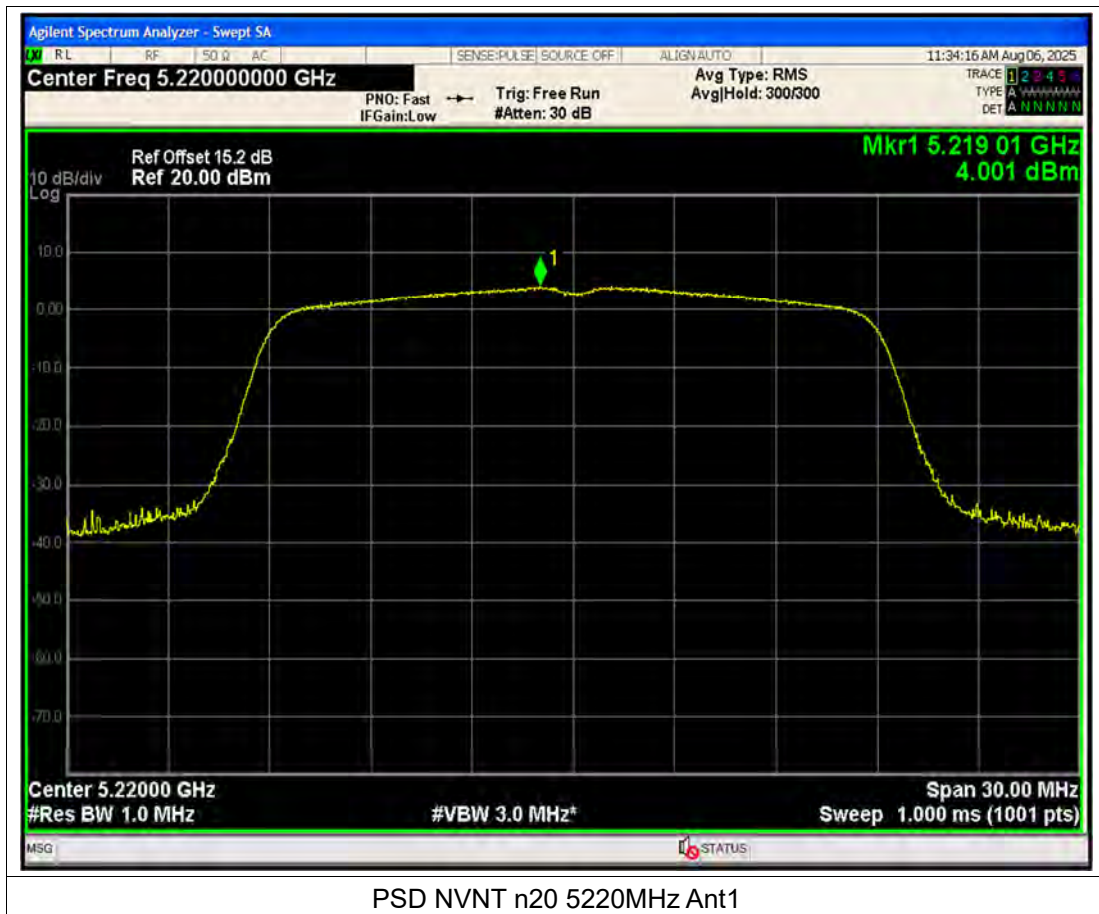










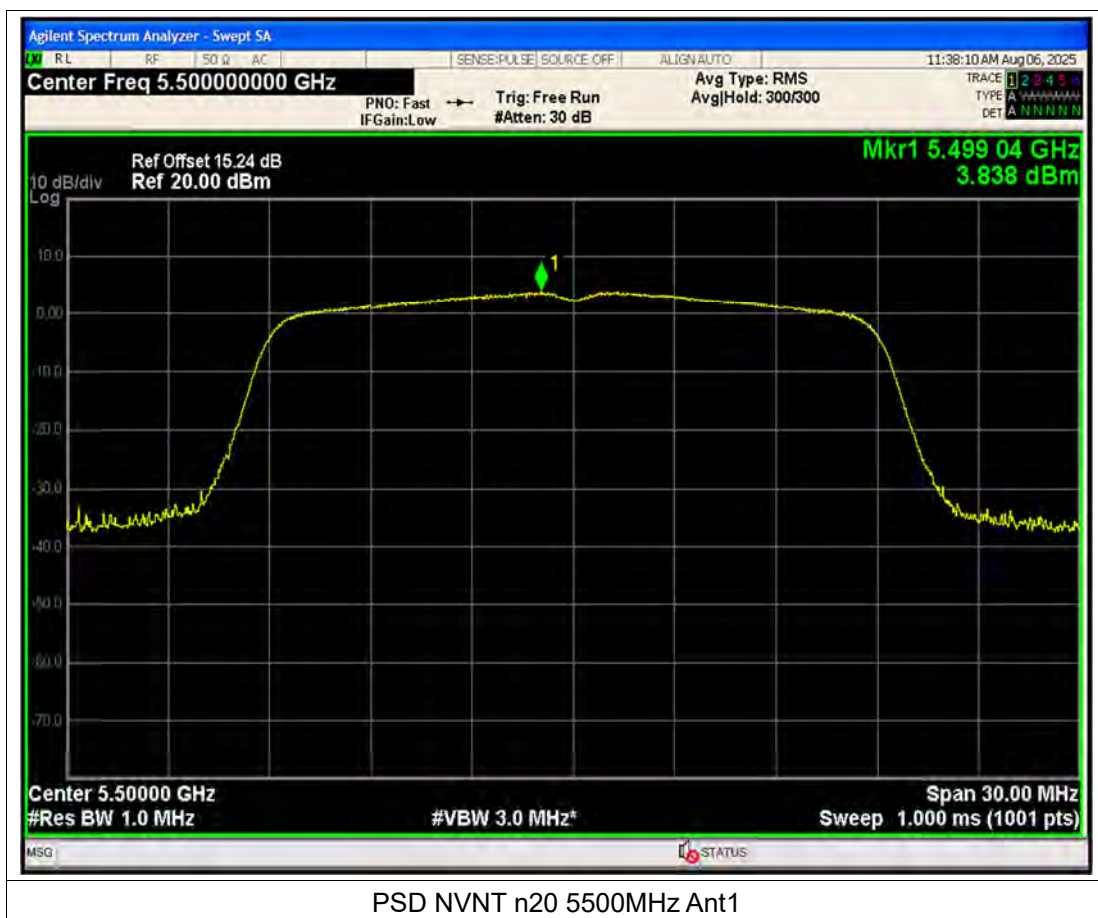


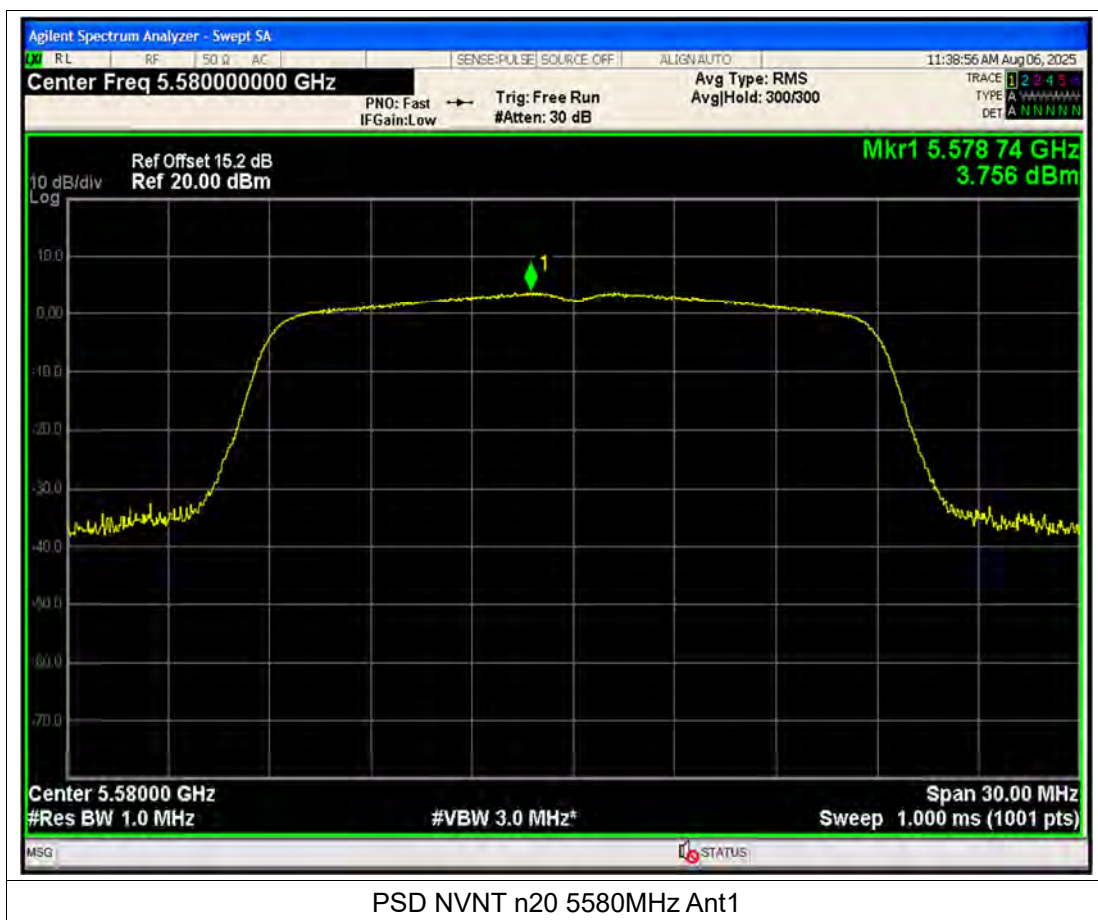


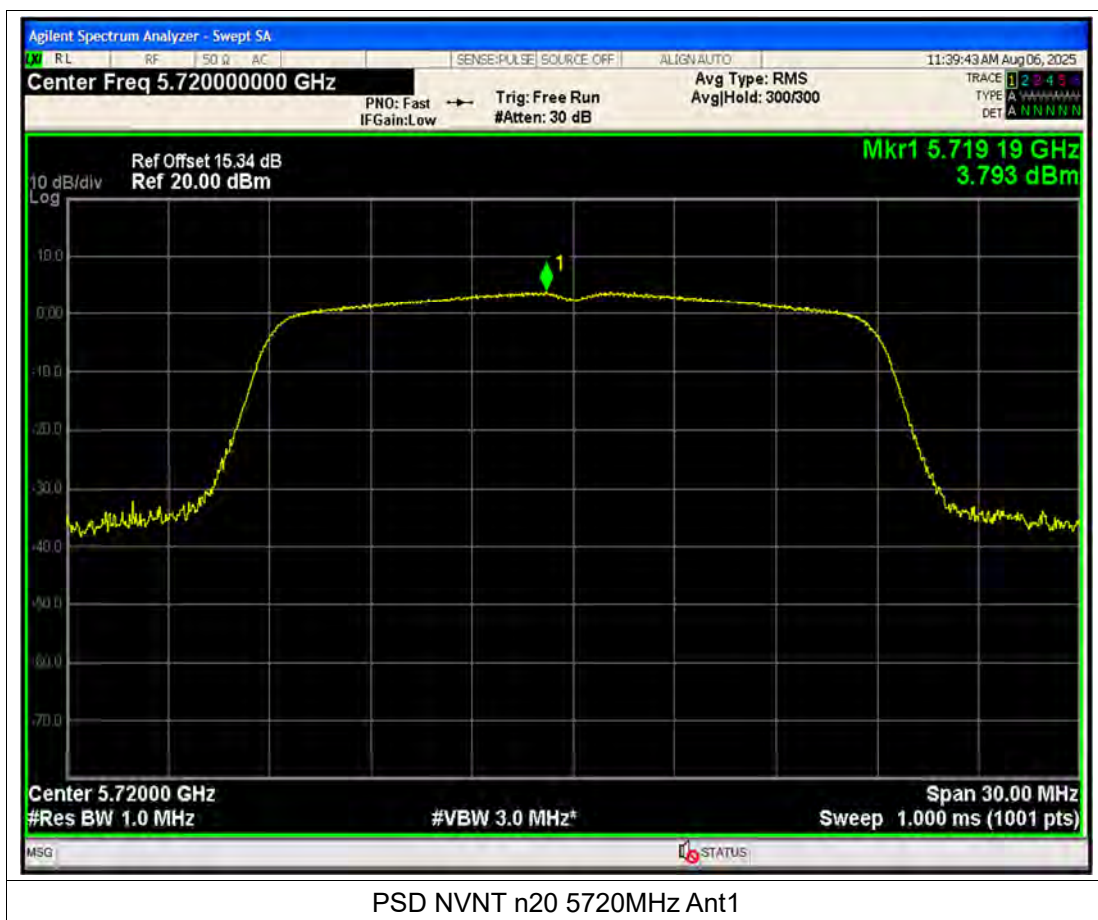






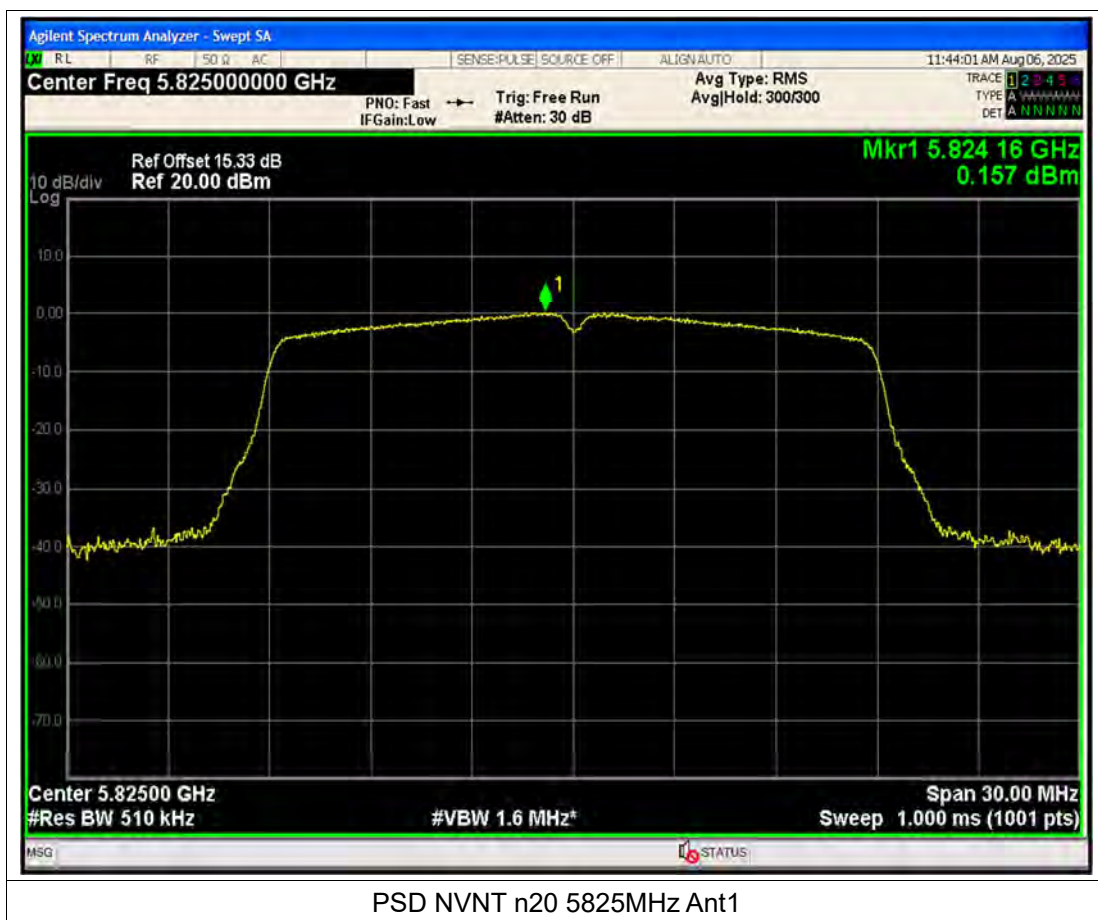


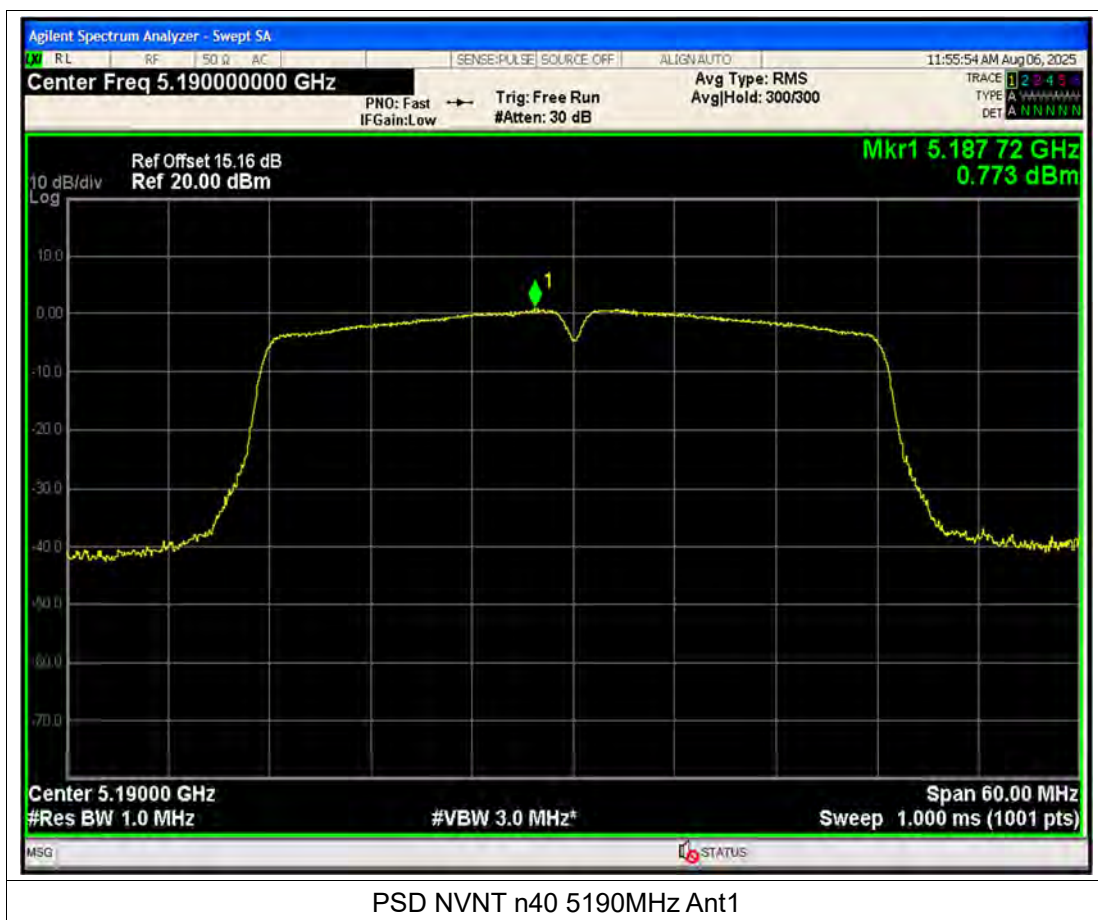


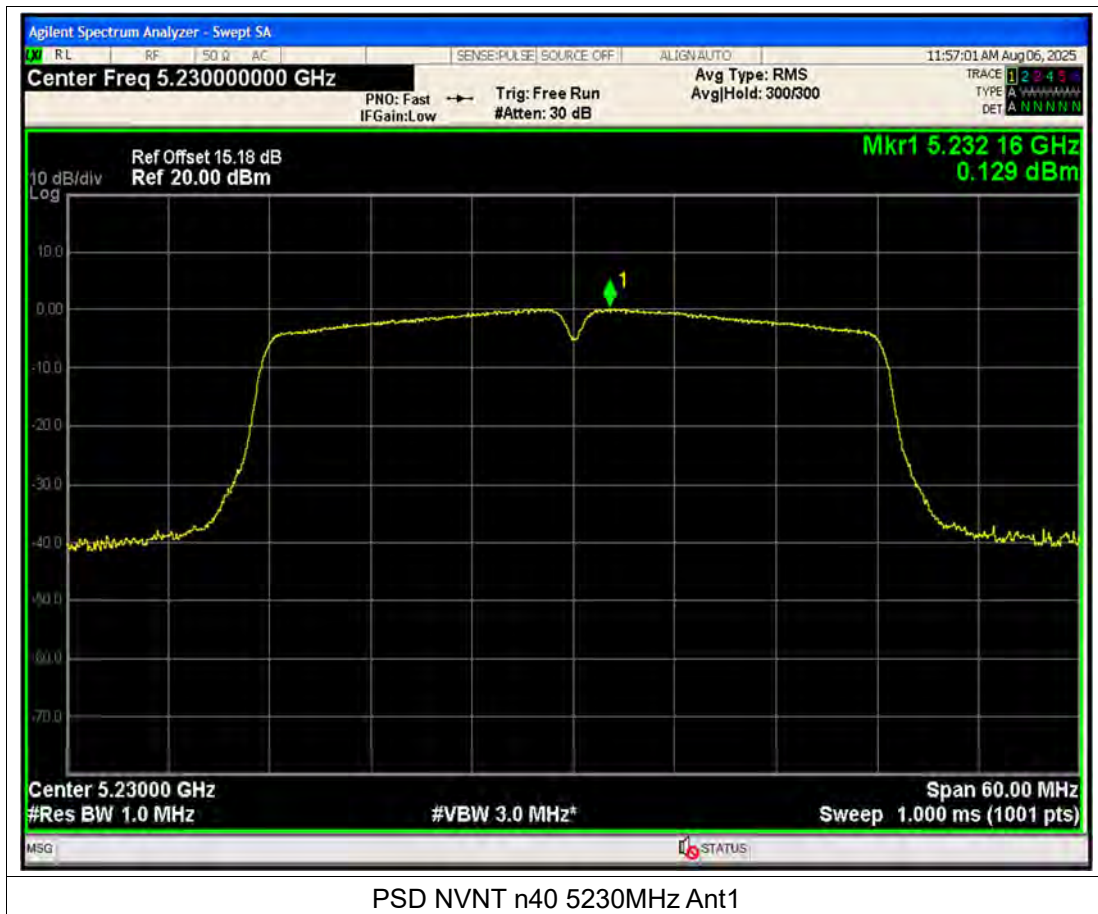


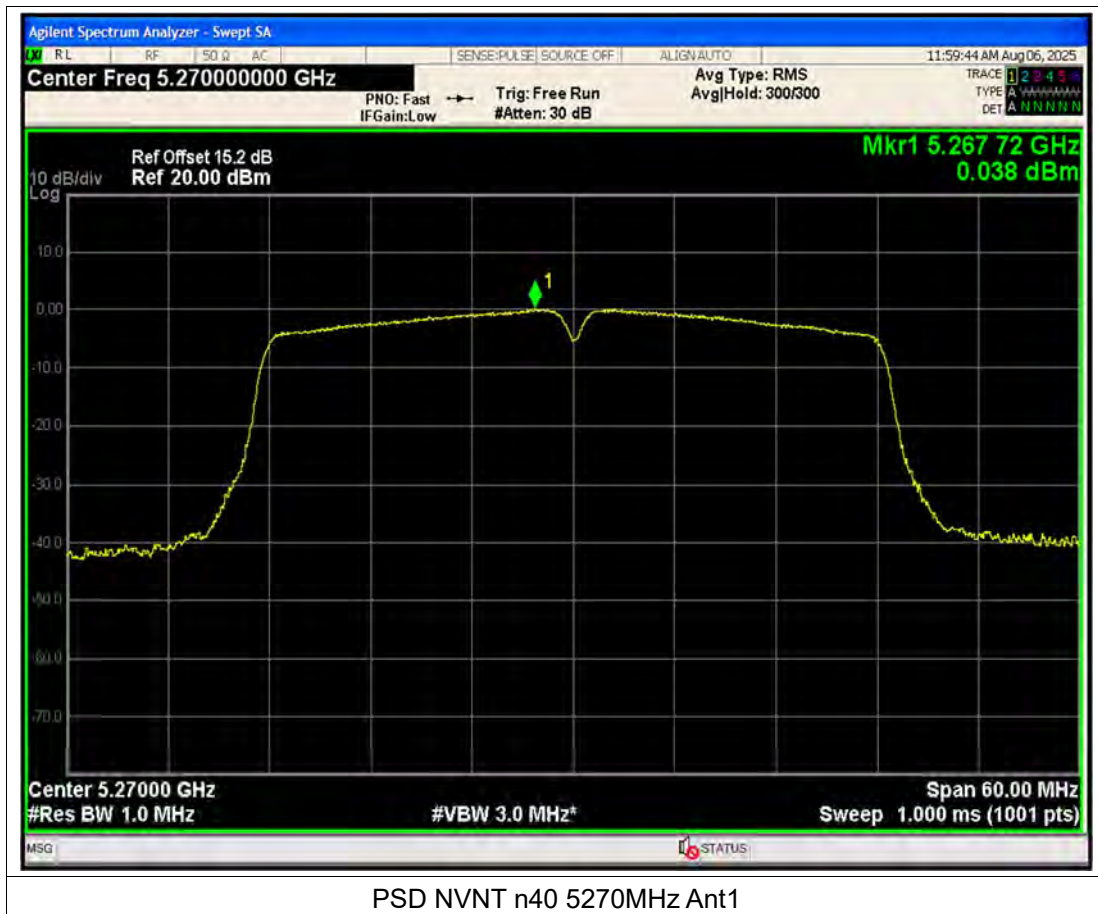


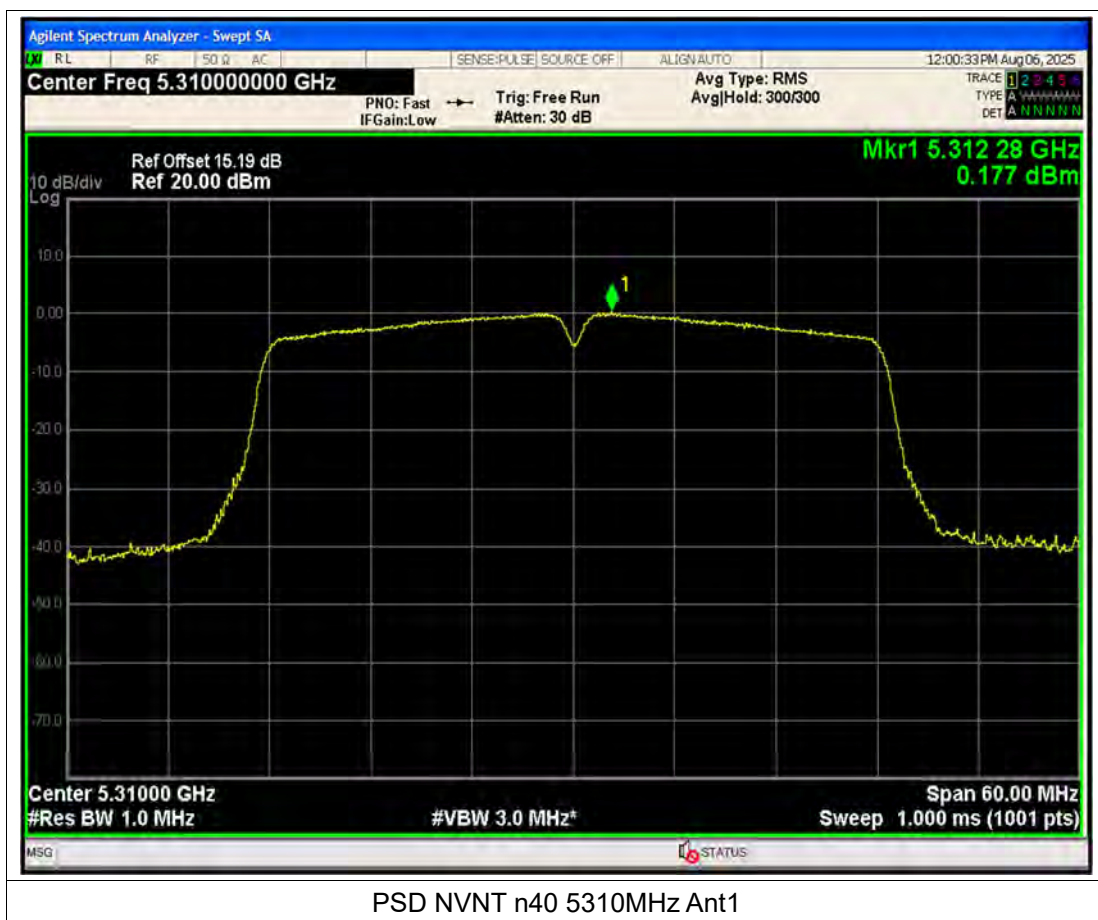


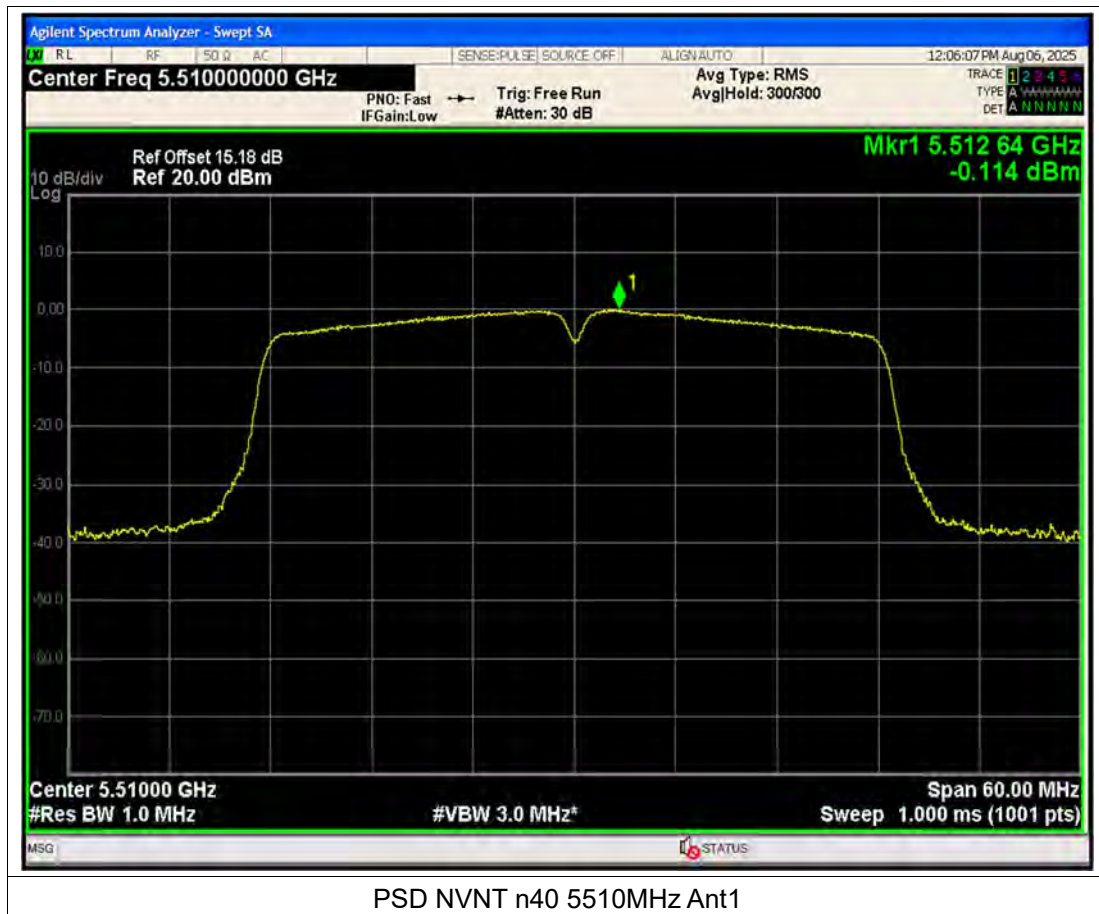


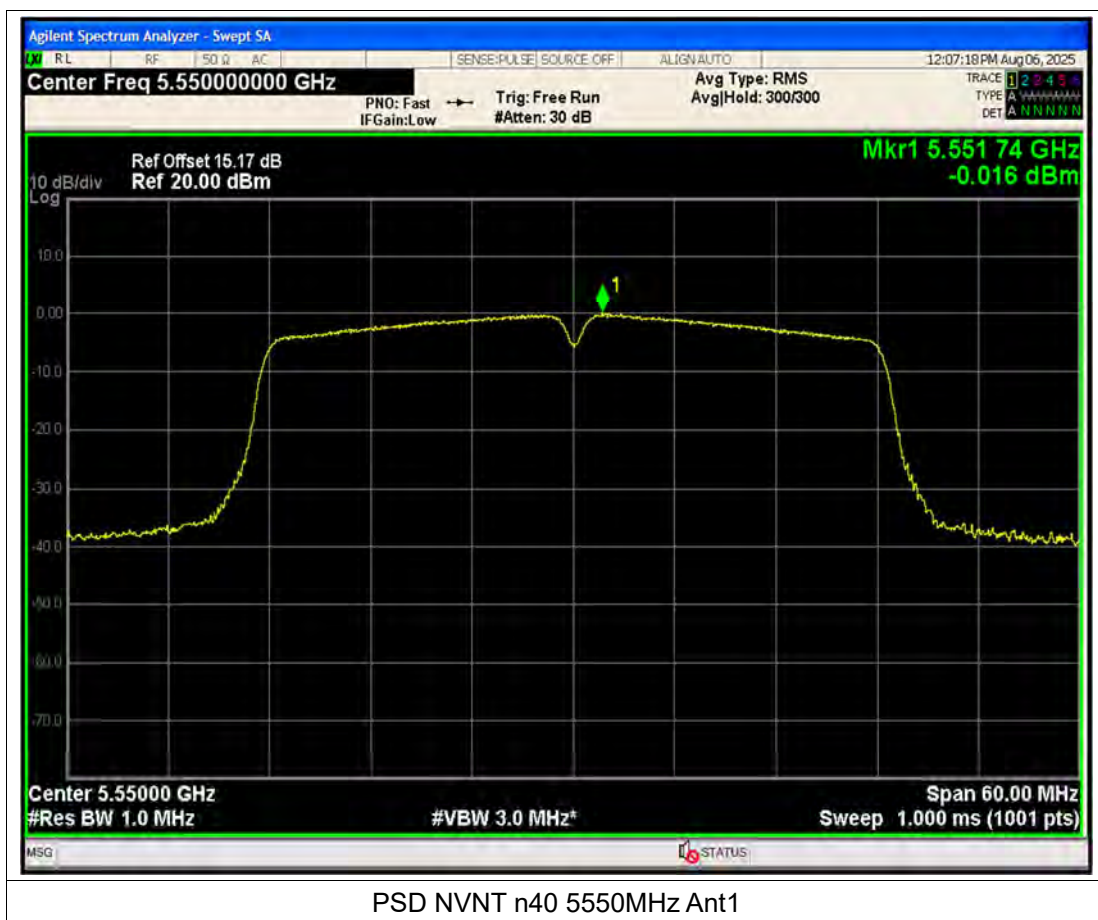


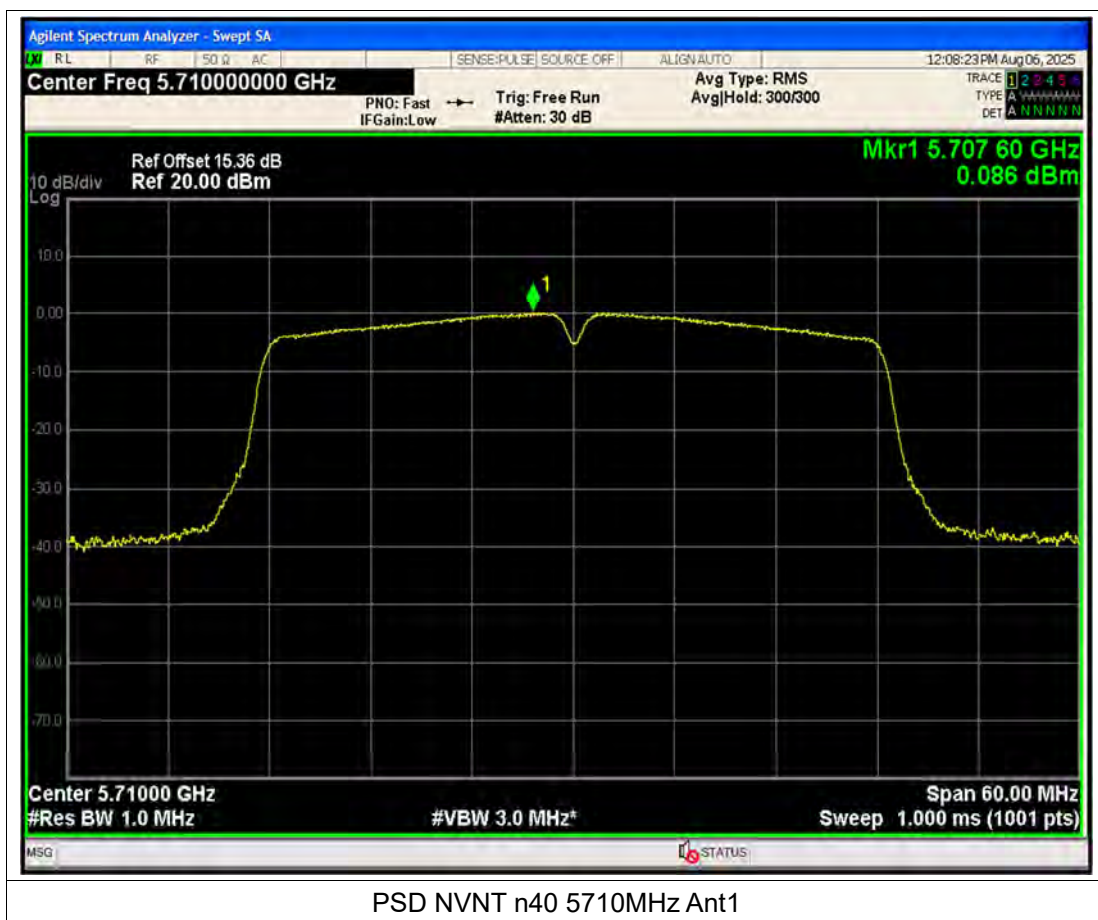














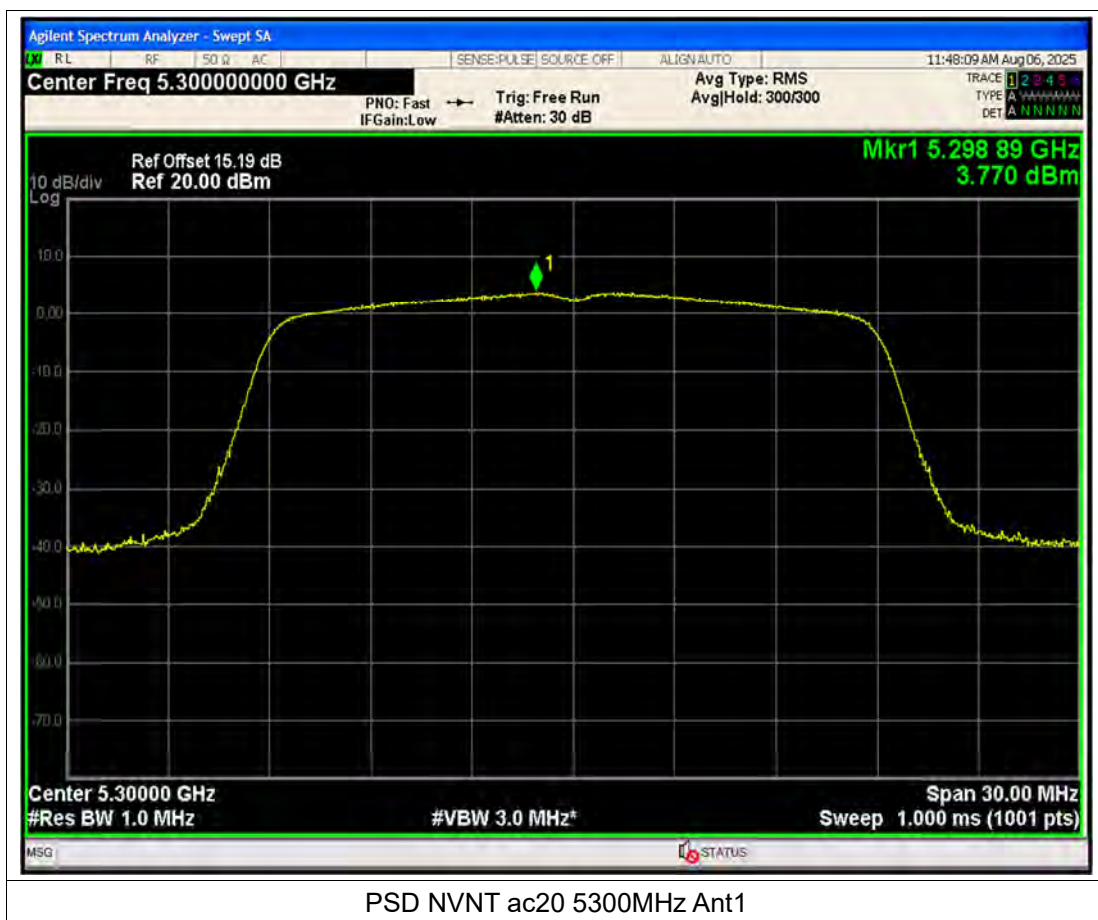


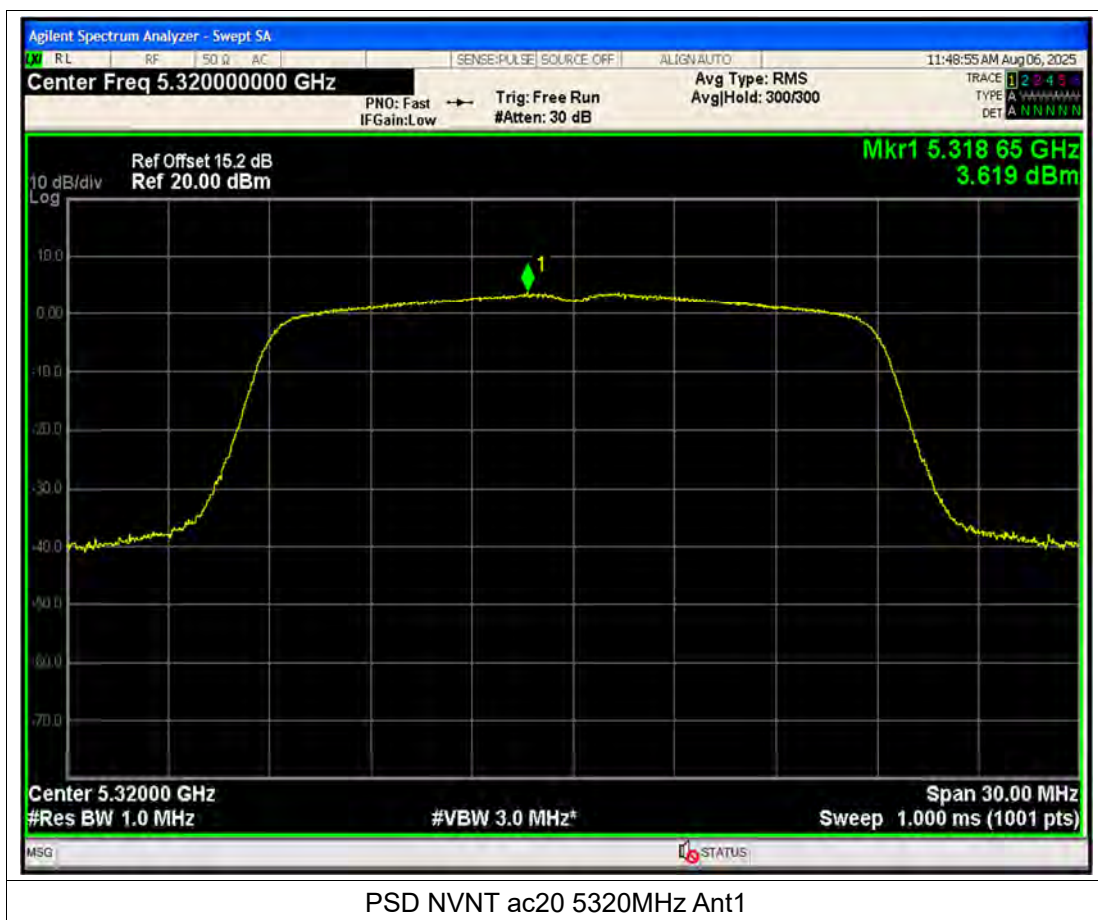






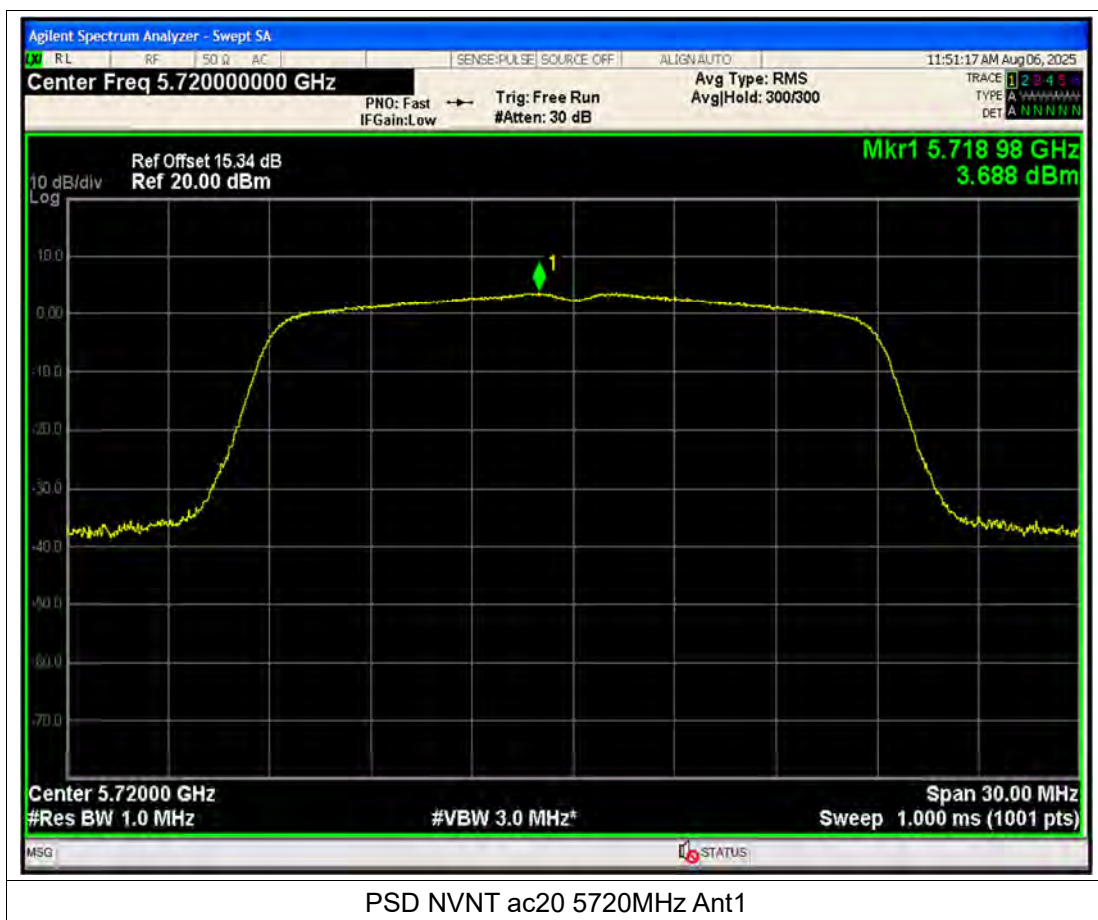




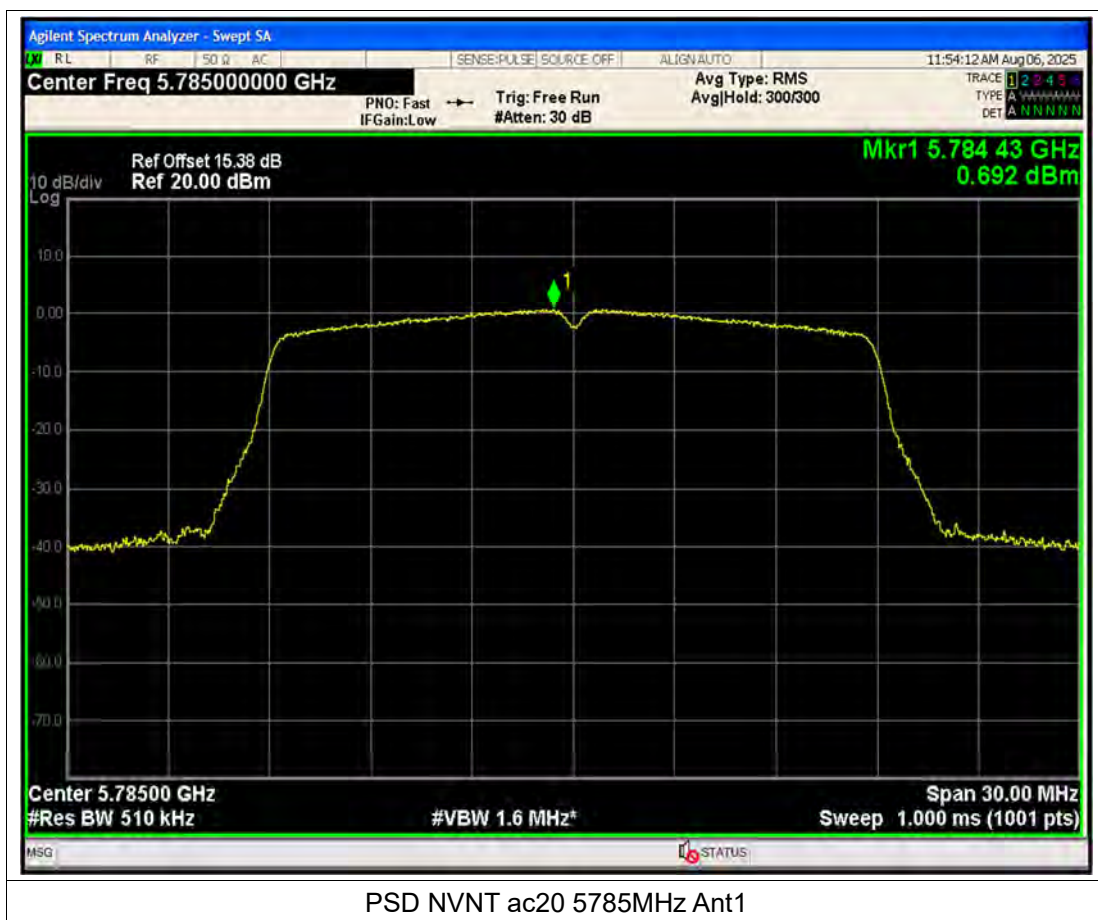


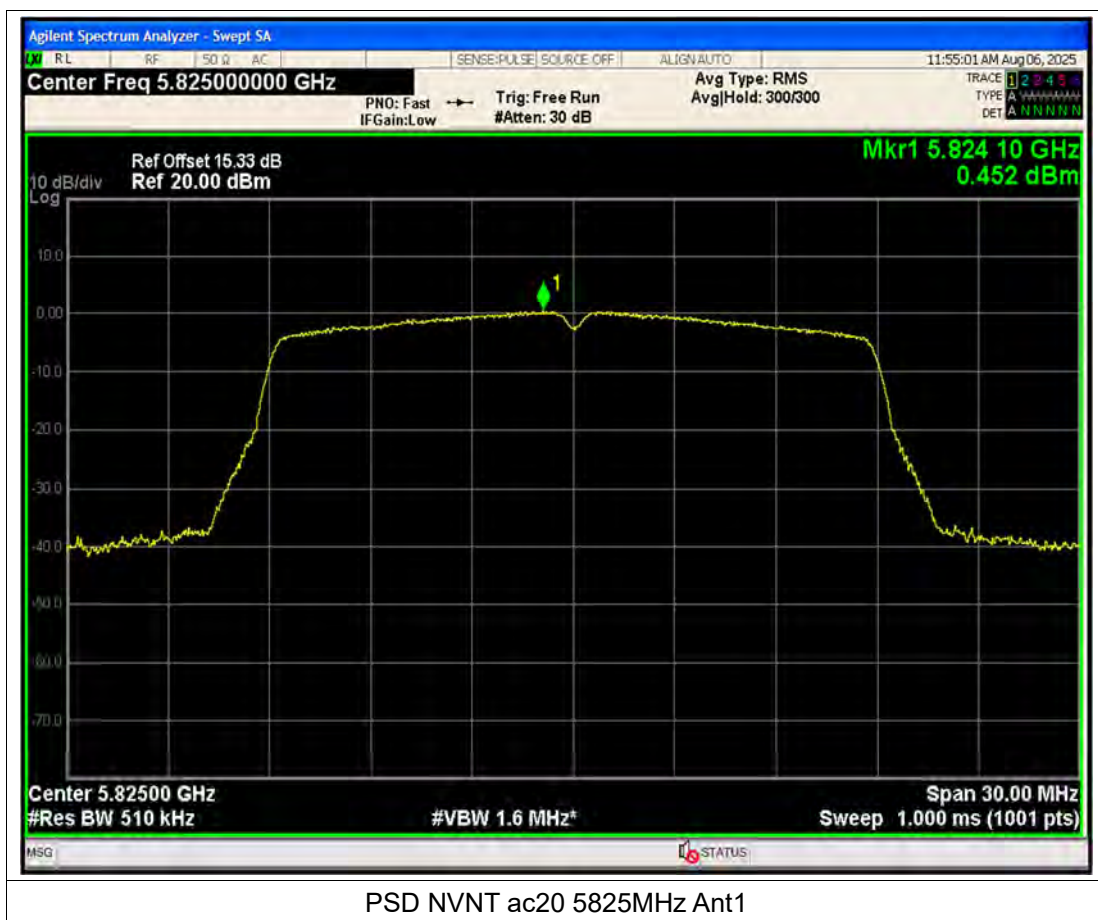




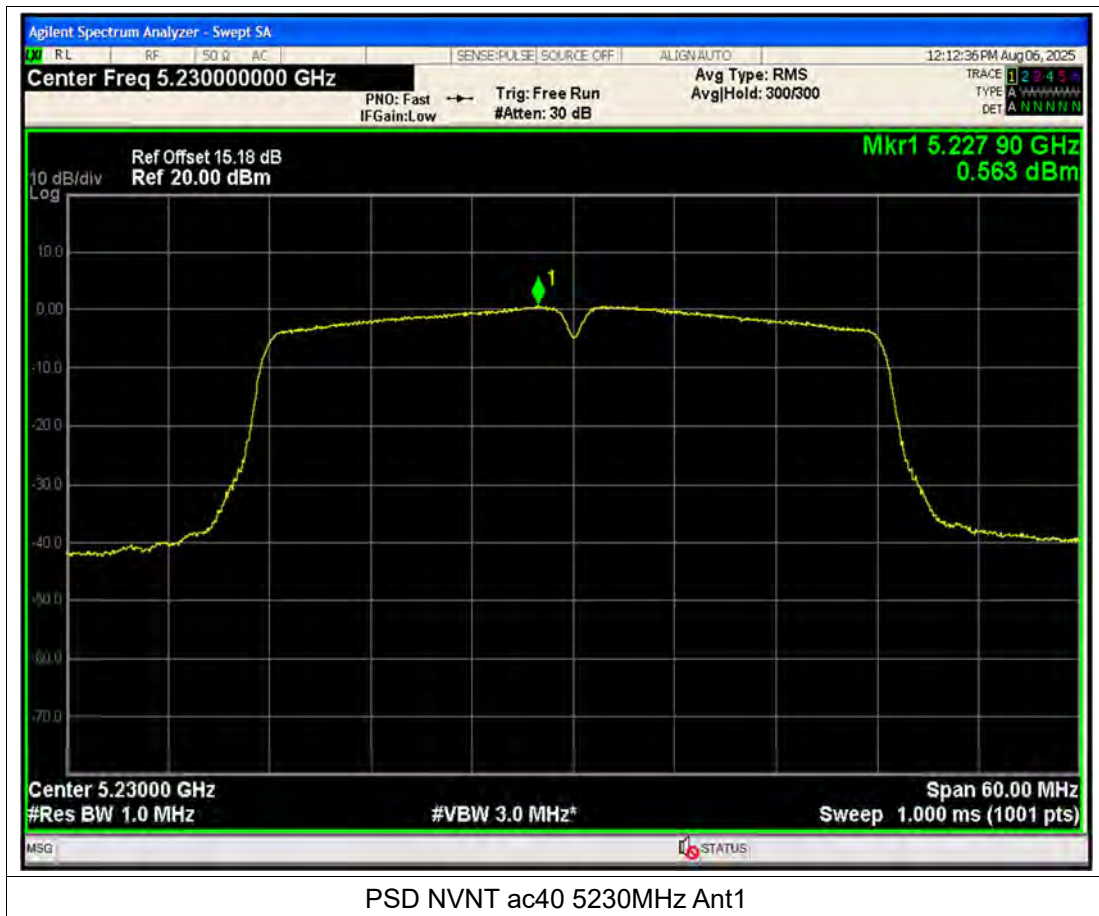






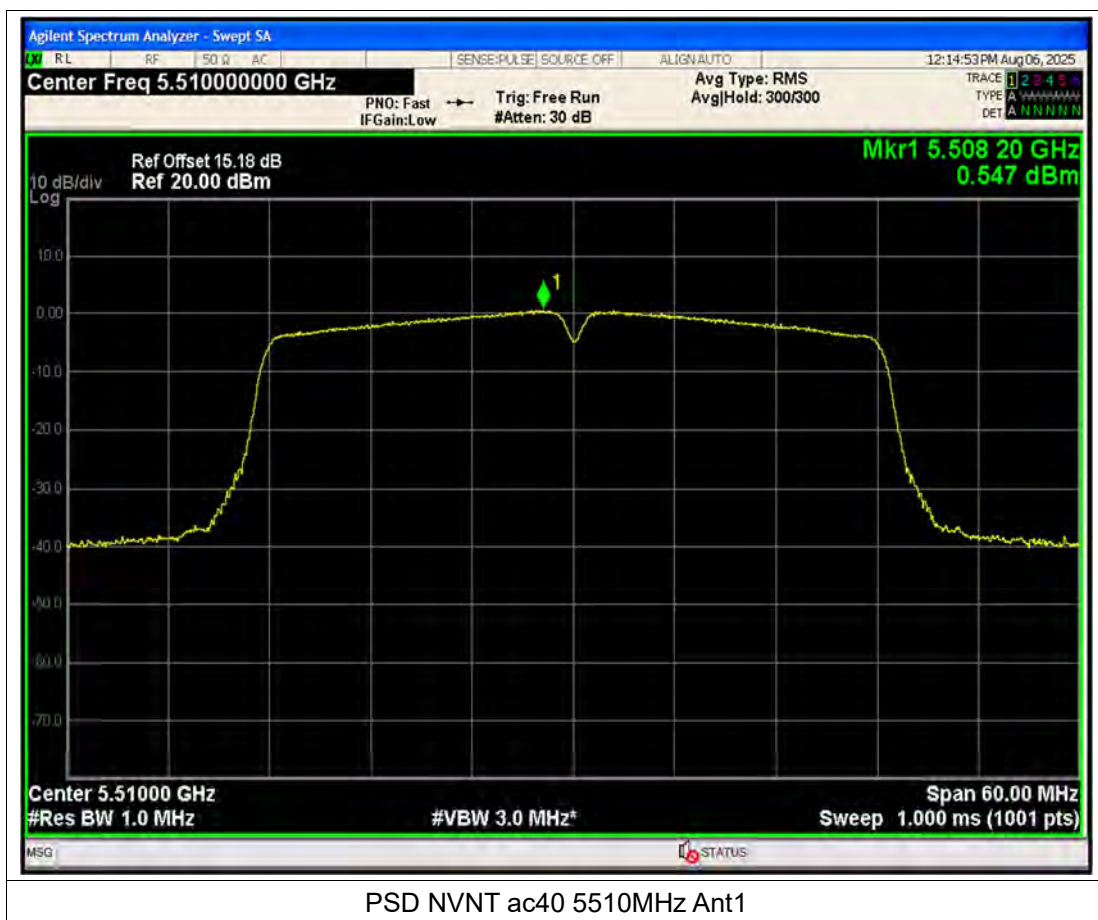


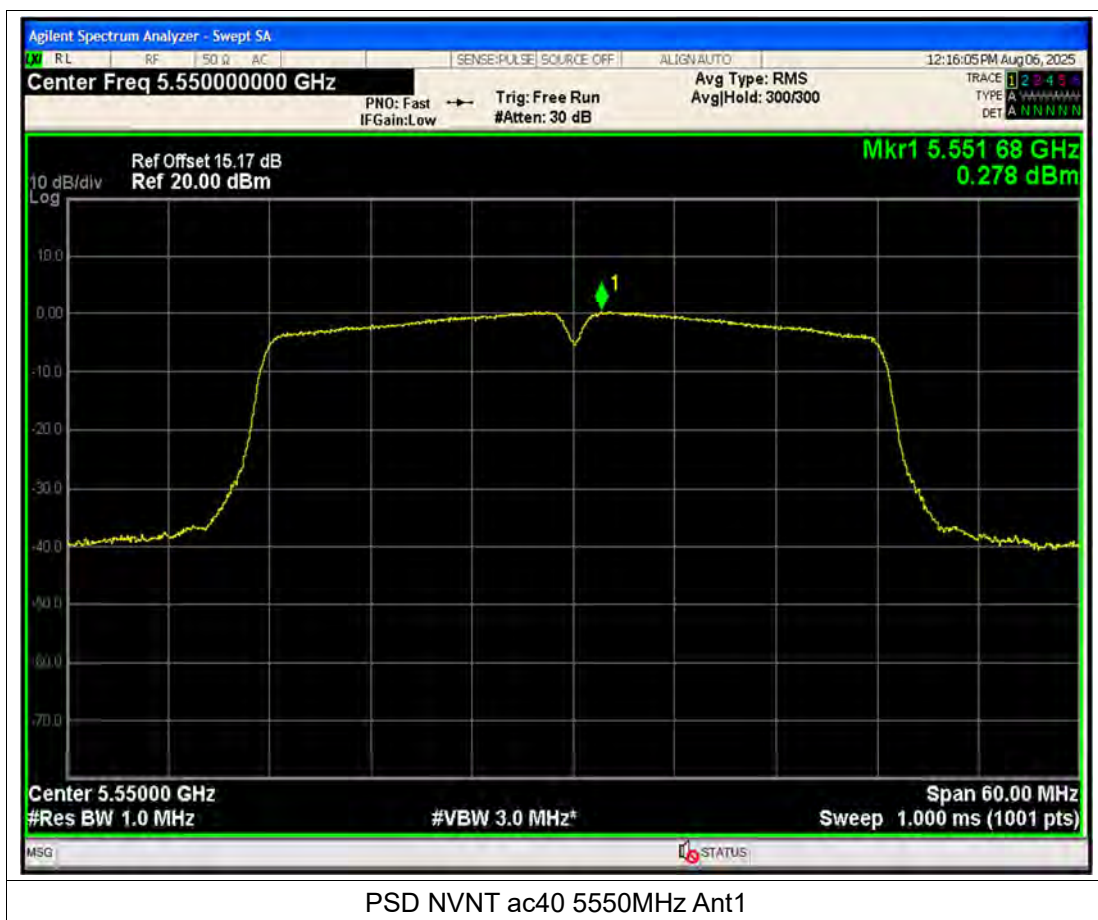


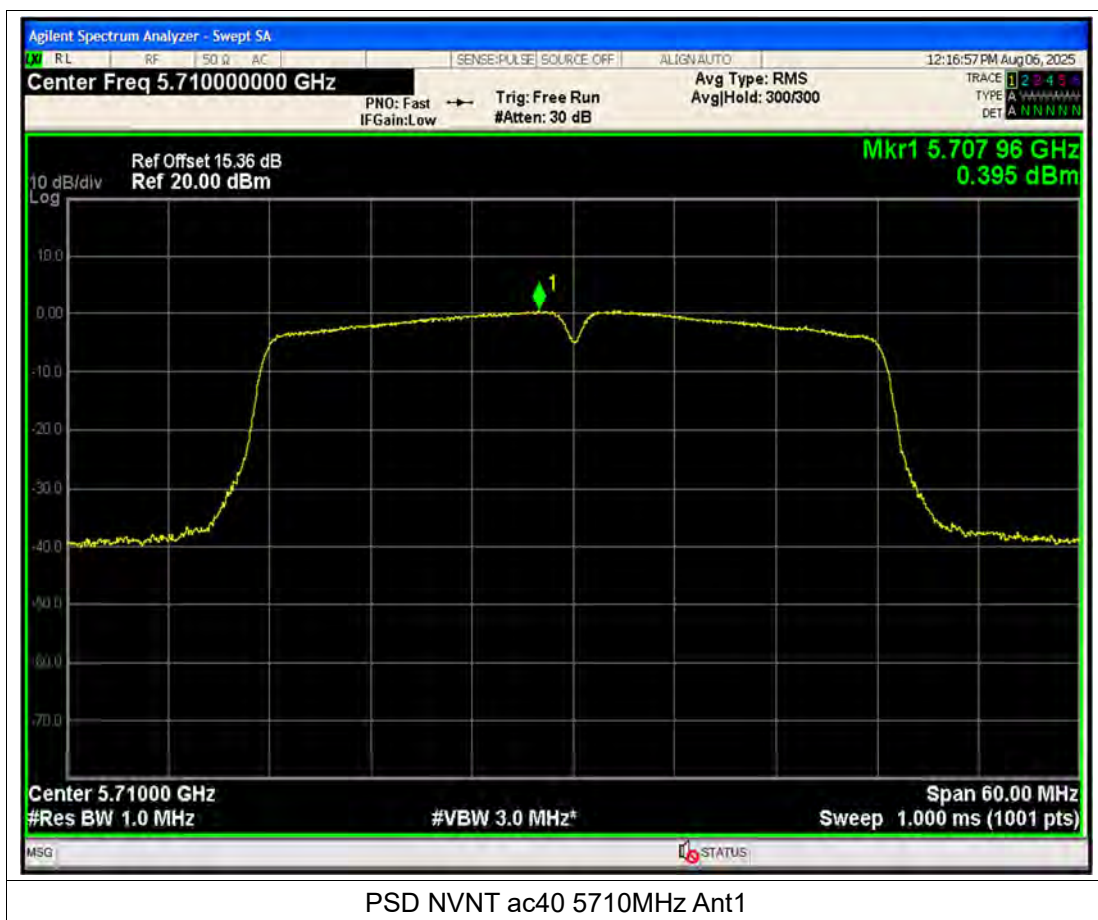




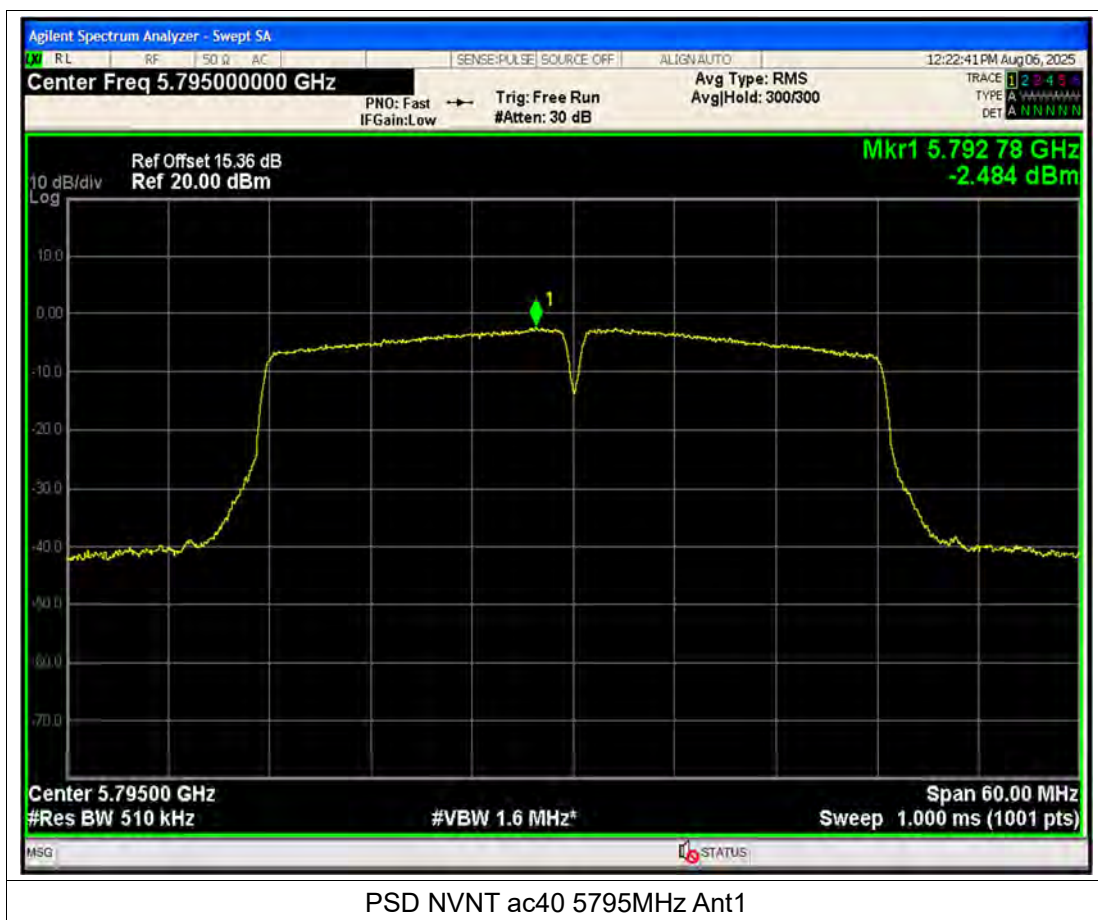
























**A.5. Frequency Stability**

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 3V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
20C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
20C 4.35V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
-20C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
-10C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
0C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
10C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
30C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
40C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
50C 3.8V	CW	5180	Ant1	5180.001	1000	0.19	25	Pass
20C 3V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
20C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
20C 4.35V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
-20C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
-10C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
0C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
10C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
30C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
40C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
50C 3.8V	CW	5260	Ant1	5260.001	1000	0.19	25	Pass
20C 3V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
20C 3.8V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
20C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
-20C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
-10C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
0C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
10C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
30C	CW	5500	Ant1	5500.001	1000	0.18	25	Pass



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4.35V								
40C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
50C 4.35V	CW	5500	Ant1	5500.001	1000	0.18	25	Pass
20C 3V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
20C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
20C 4.35V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
-20C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
-10C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
0C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
10C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
30C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
40C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass
50C 3.8V	CW	5745	Ant1	5745.001	1000	0.17	25	Pass



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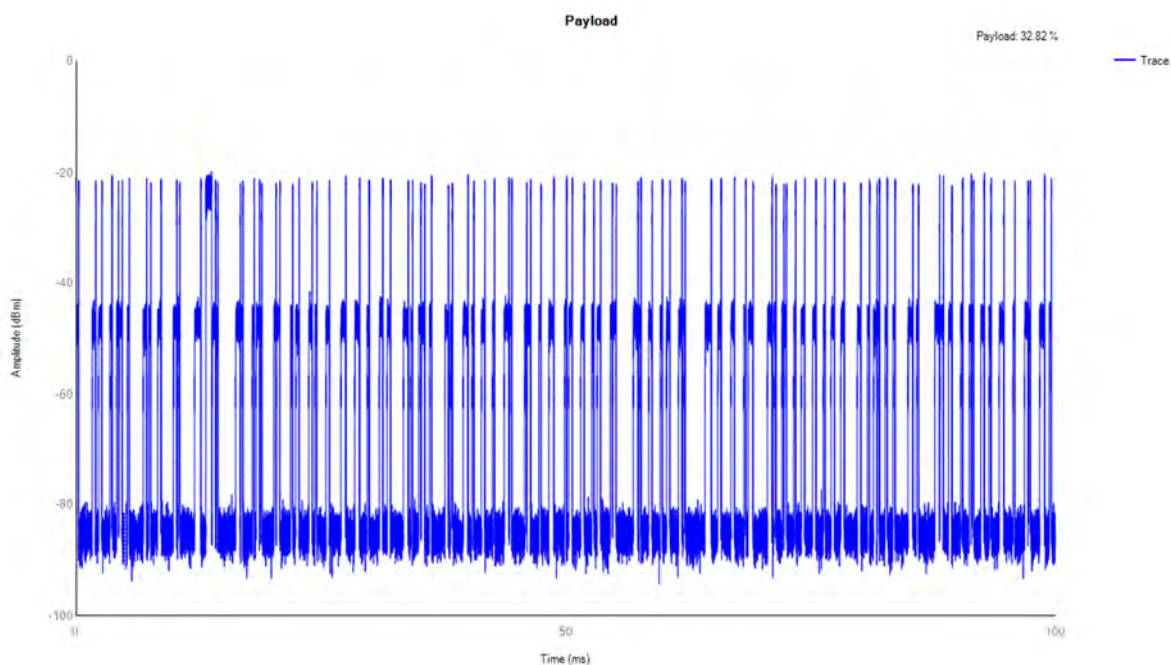
A.6. Dynamic Frequency Selection

Payload

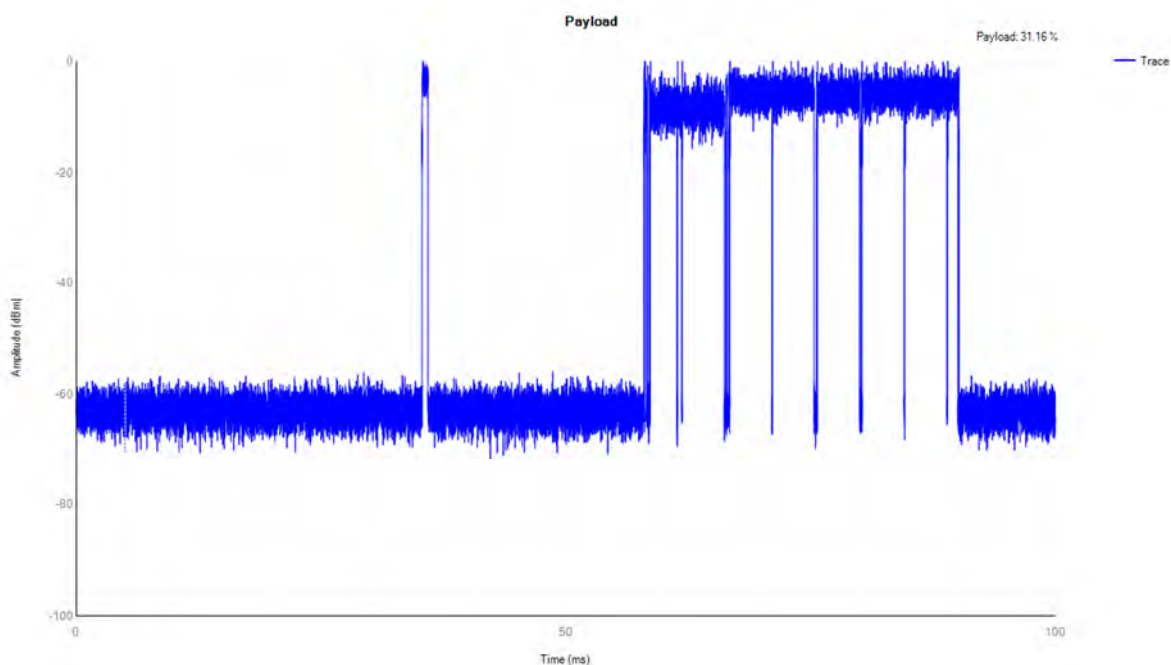
Mode	Frequency (MHz)	Result	Verdict
ac20	5320	32.82	Pass
ac20	5500	31.16	Pass
ac80	5290	31.28	Pass
ac80	5530	32.25	Pass

Test Graphs

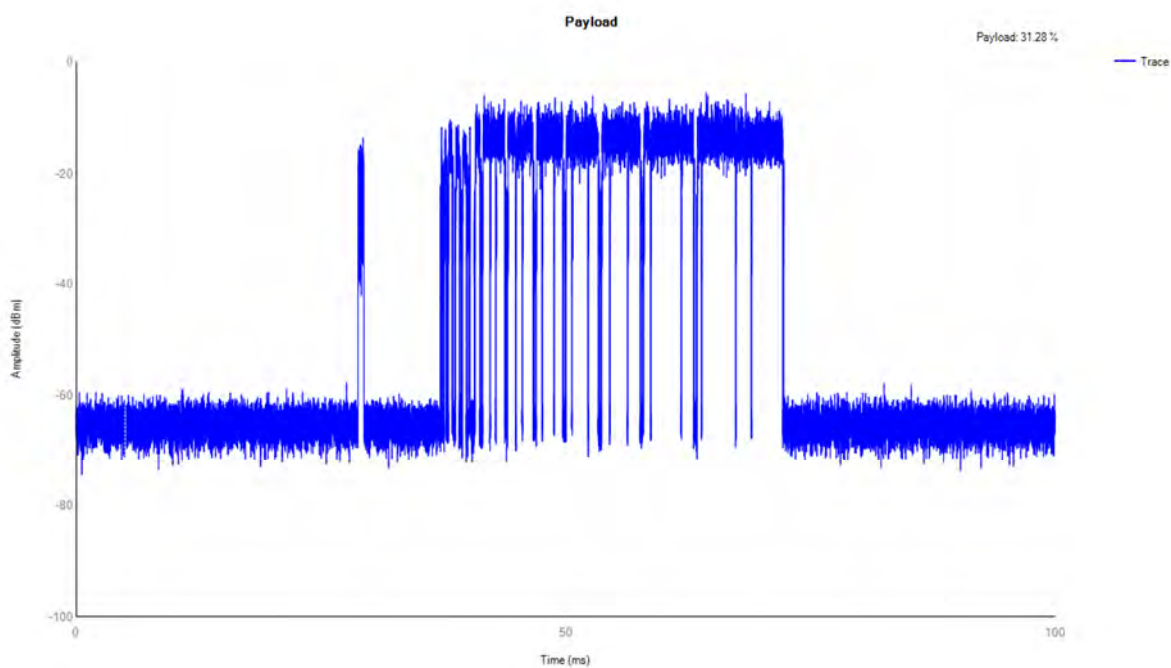
ac20 5320MHz Payload



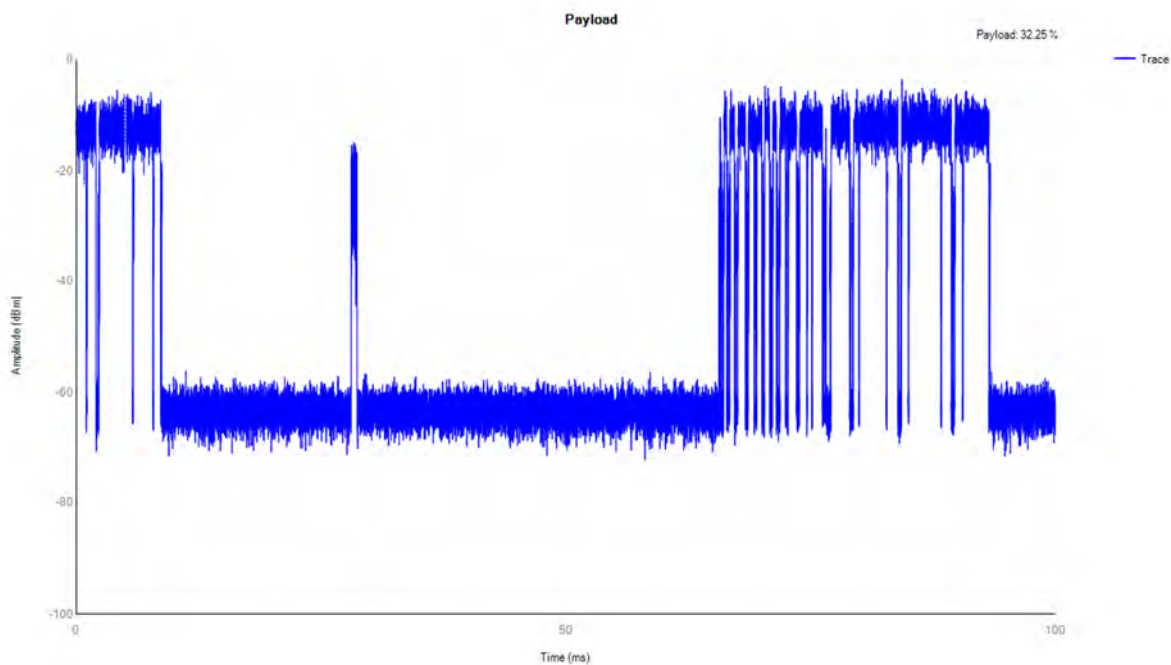
ac20 5500MHz Payload



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

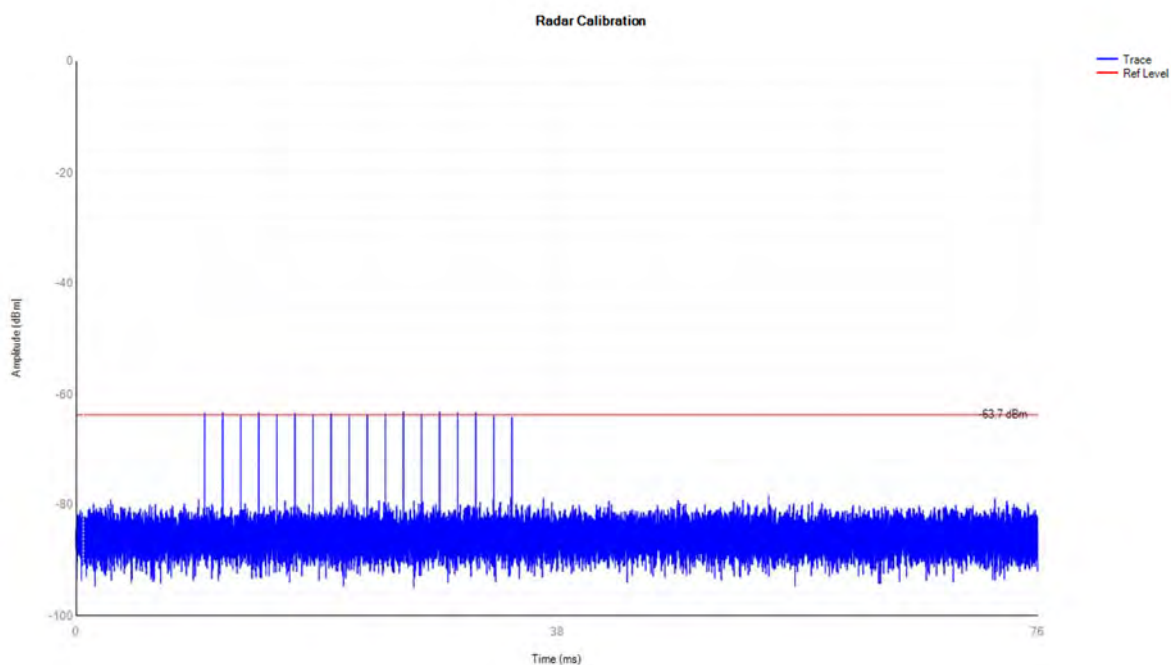
Detector Type: Peak

RBW: 3MHz

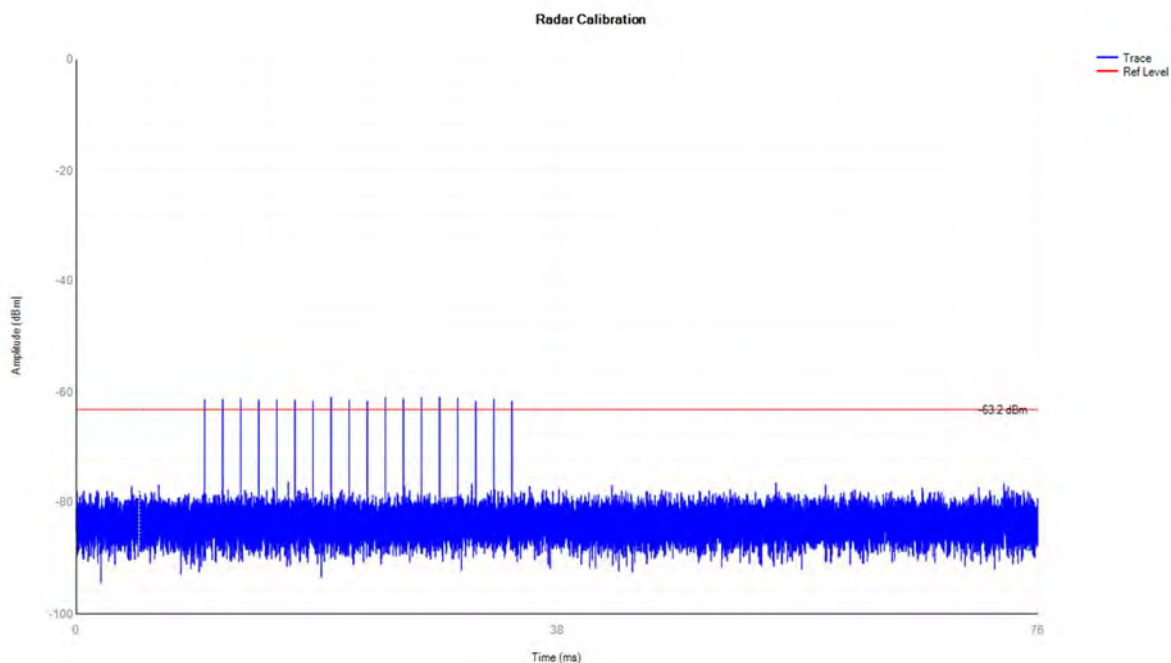
VBW: 3MHz

Test Graphs

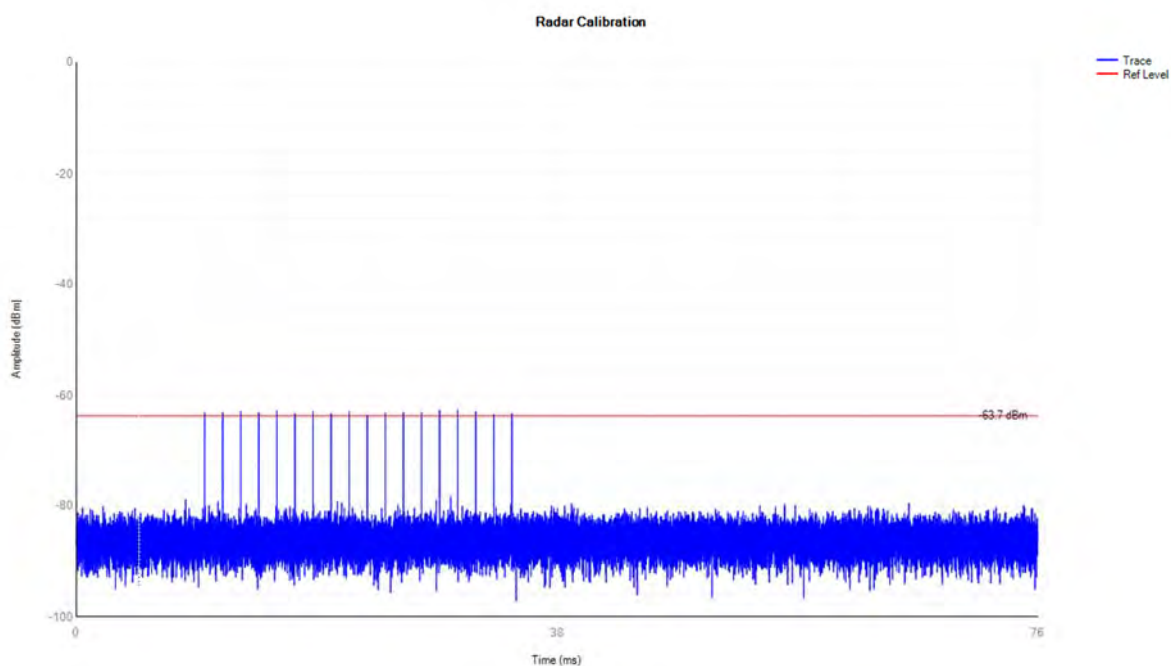
5320MHz DFS_FCC_T0



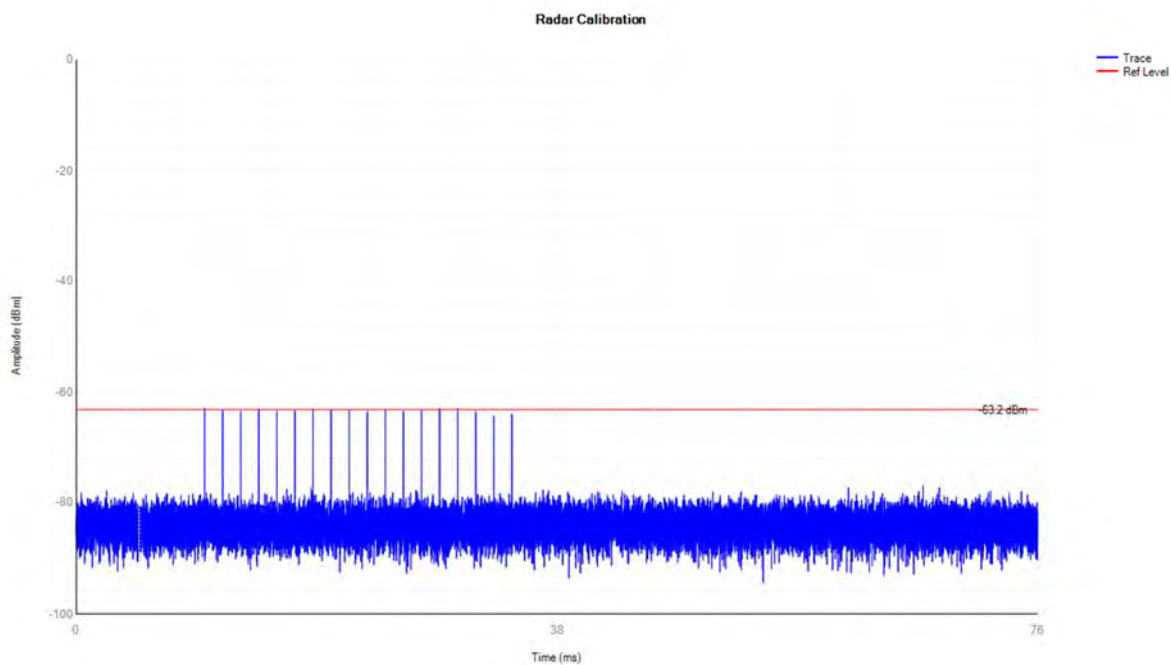
5500MHz DFS_FCC_T0



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)	Verdict	SISO
ac20	5320	0.872	10	0.038	1	Pass	SISO
ac20	5500	0.846	10	0.041	1	Pass	SISO
ac80	5290	0.821	10	0.041	1	Pass	SISO
ac80	5530	0.787	10	0.019	1	Pass	SISO

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

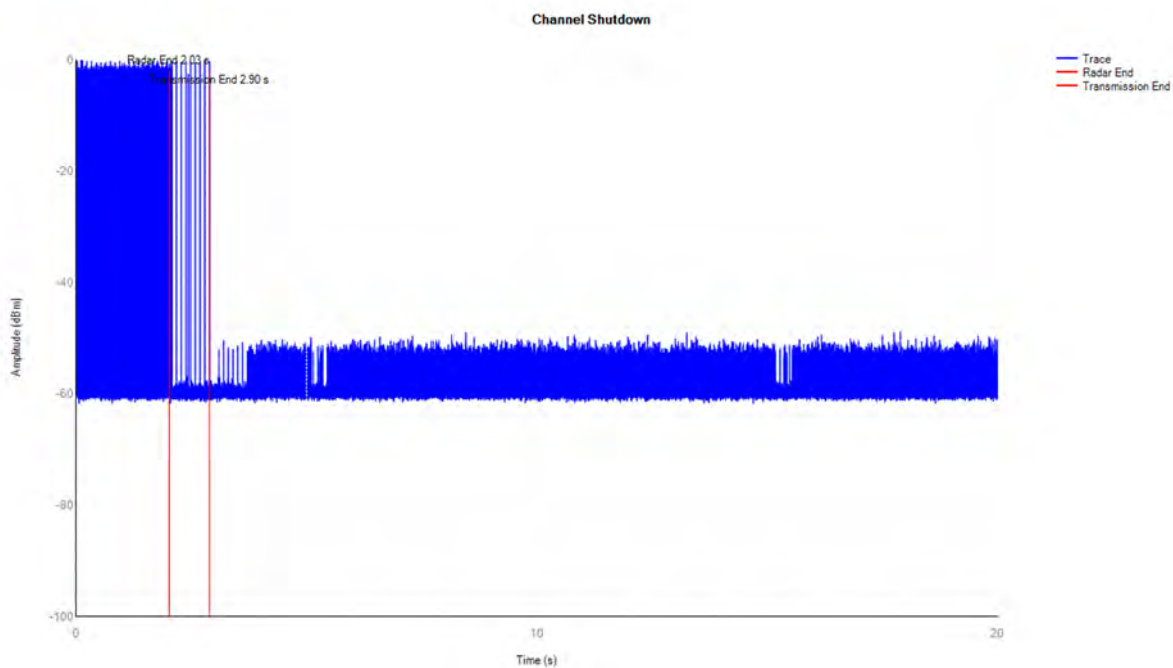
RBW: 3MHz

VBW: 3MHz

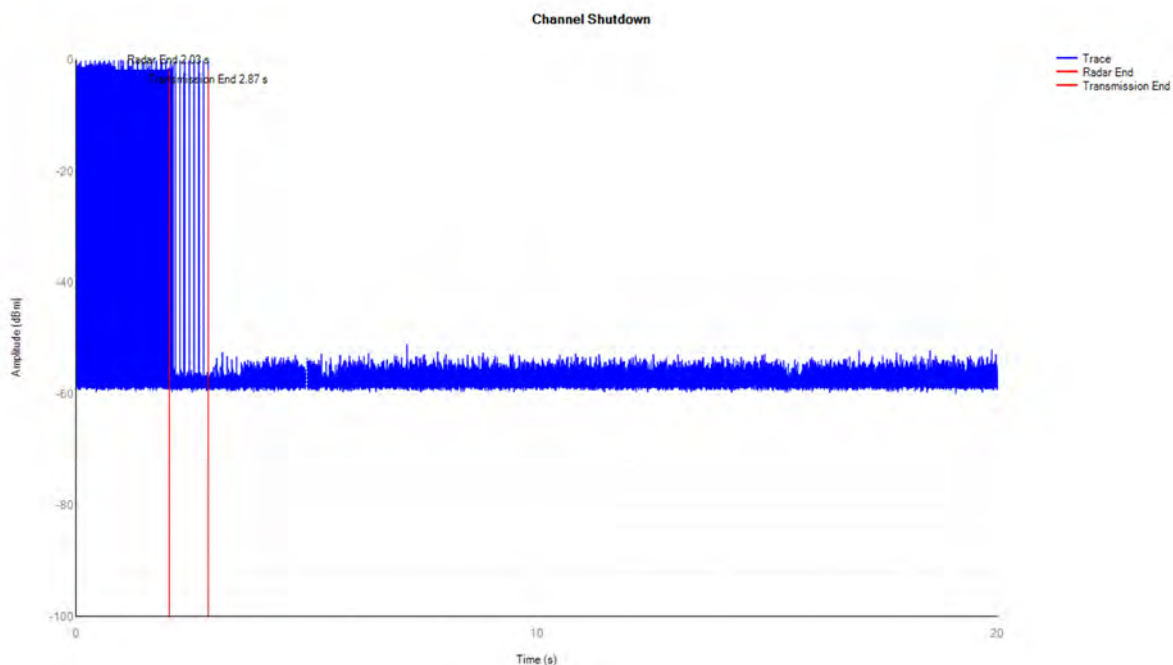
Sweep time: 20s

Test Graphs

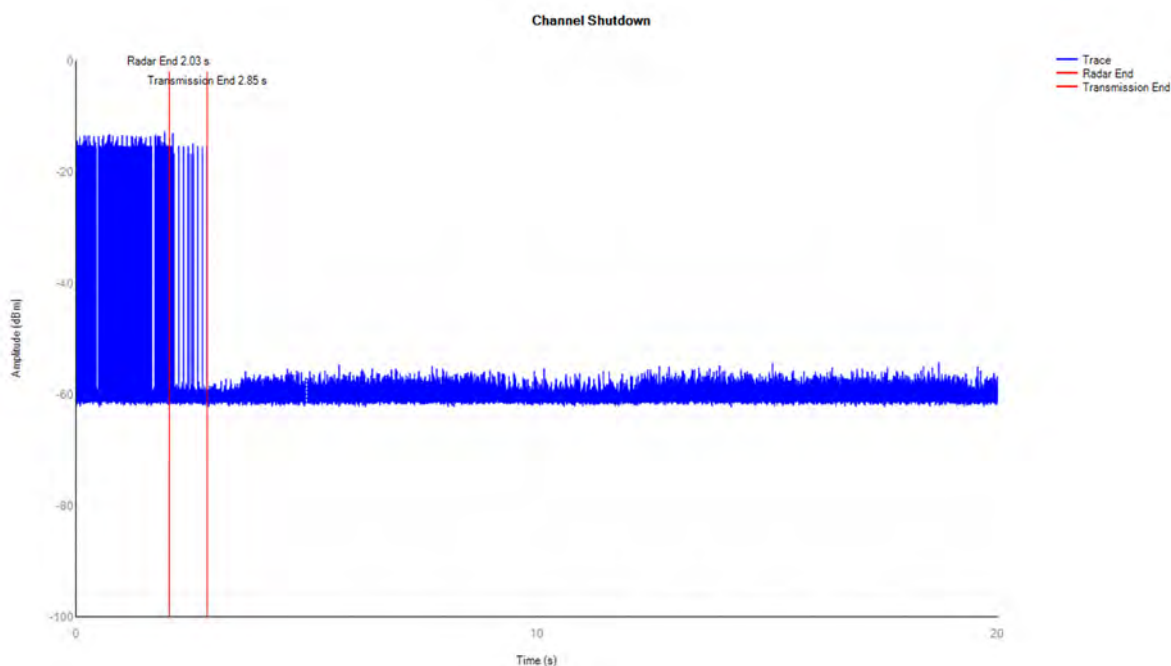
ac20 5320MHz Shutdown



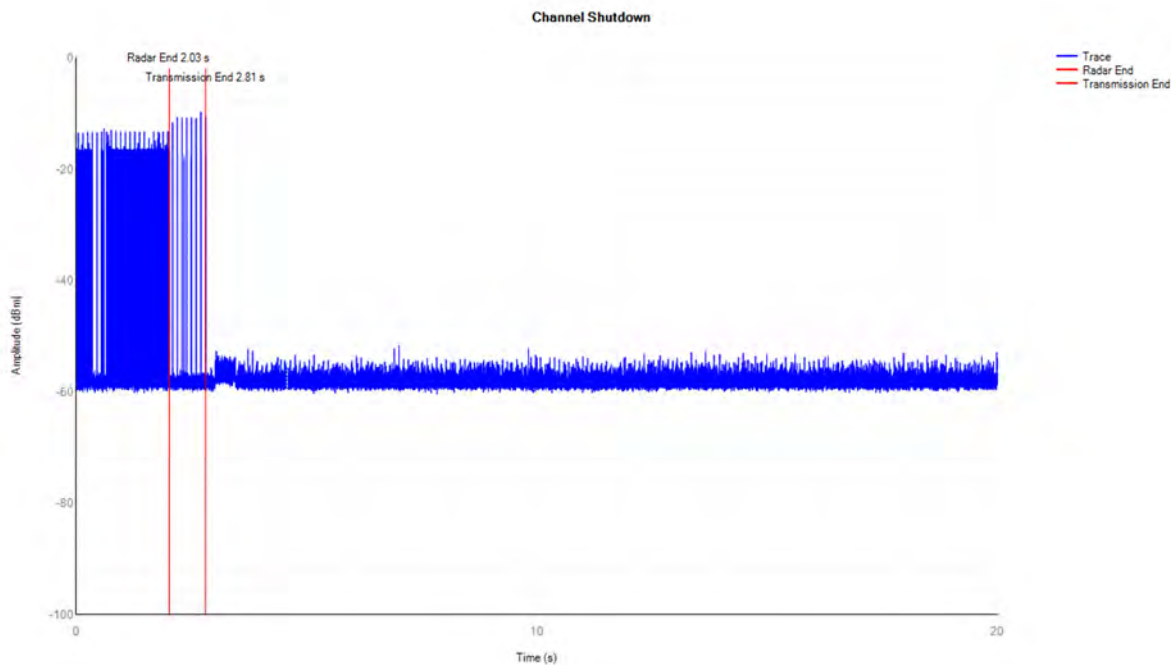
ac20 5500MHz Shutdown



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.



REPORT No.: SZ25060347W04

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

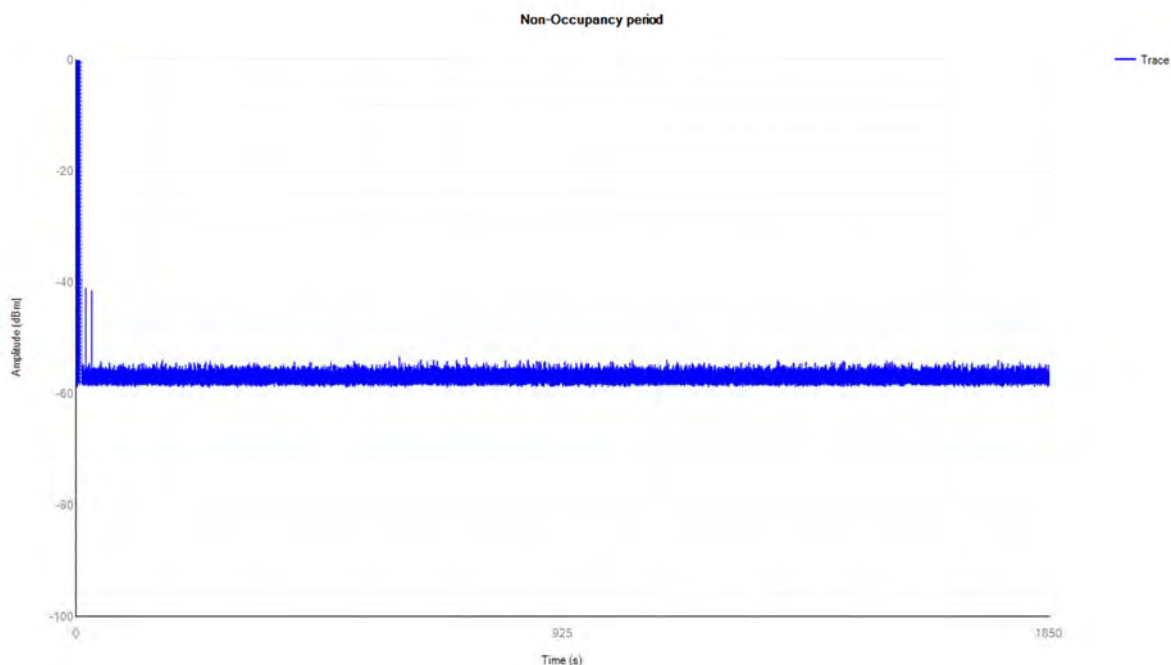
RBW: 3MHz

VBW: 3MHz

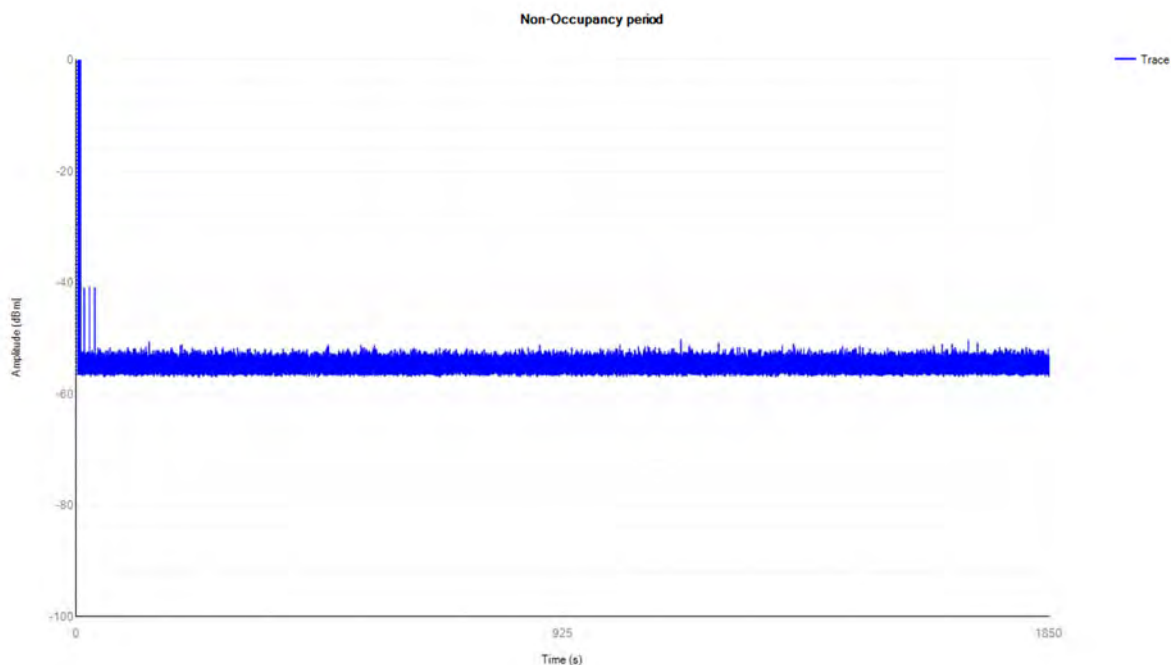
Sweep time: 1850s

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 +WIFI TX

Test voltage: AC 120V/60Hz

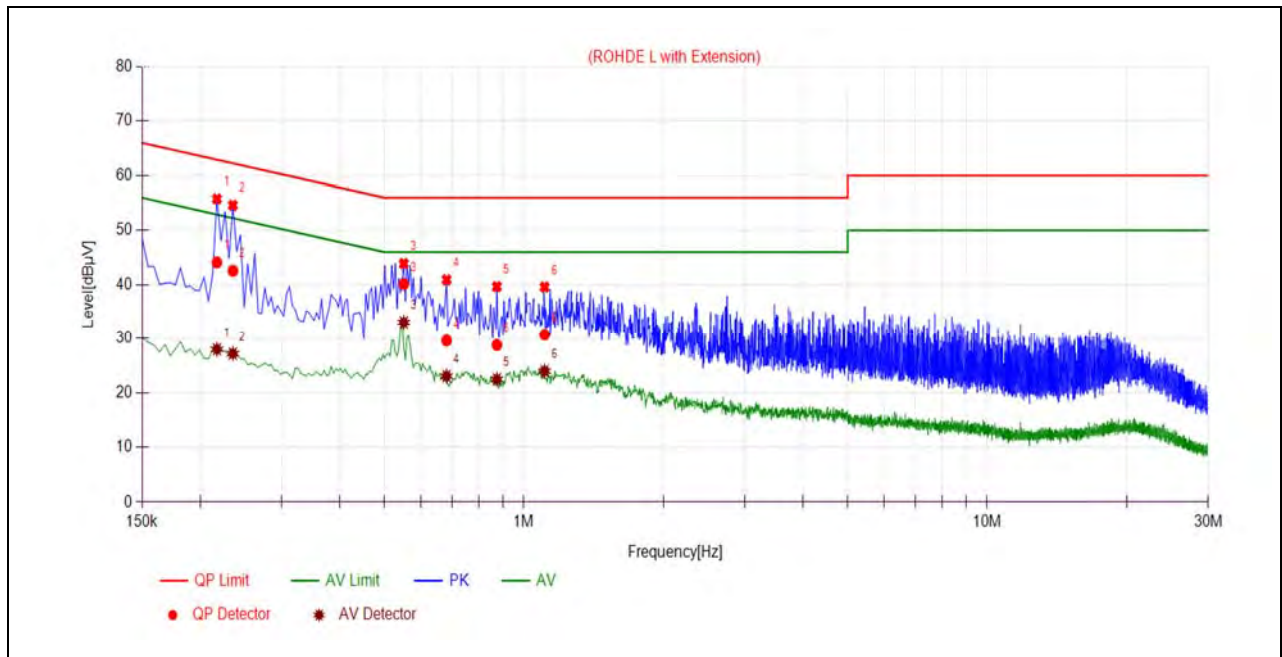
The measurement results are obtained as below:

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

U_R : Receiver Reading

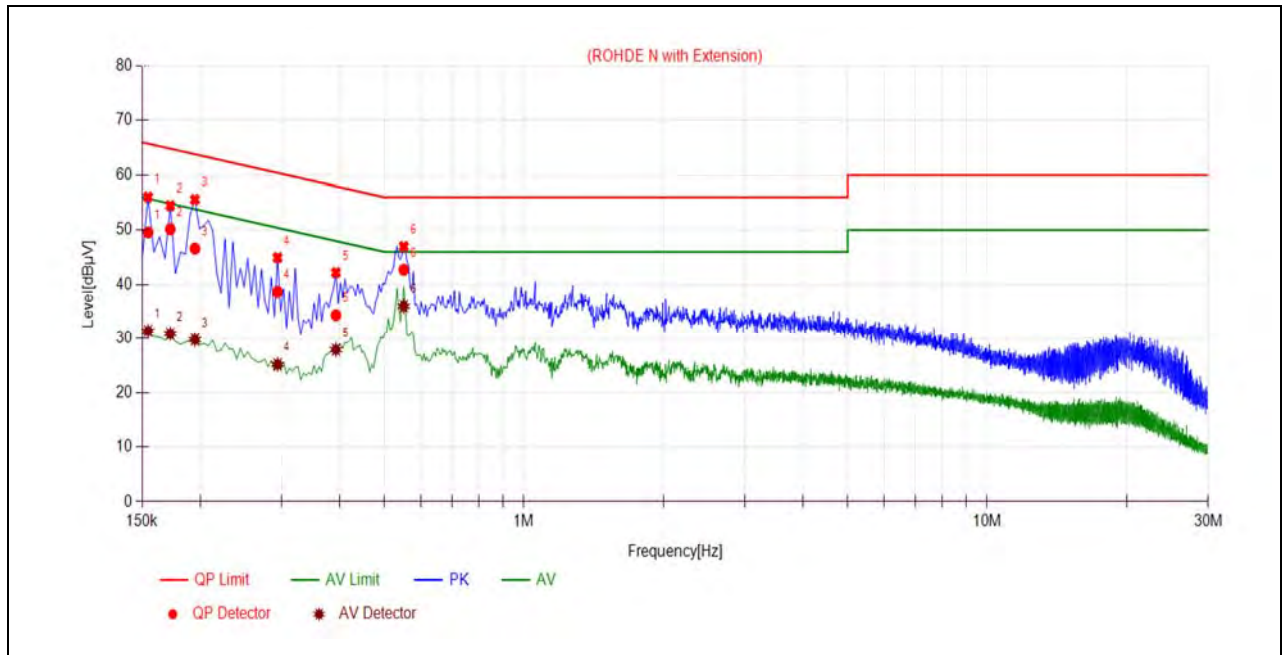
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.2175	44.12	27.95	62.91	52.91	Line	PASS
2	0.2355	42.57	27.16	62.25	52.25		PASS
3	0.5505	40.13	33.05	56.00	46.00		PASS
4	0.6810	29.60	23.02	56.00	46.00		PASS
5	0.8745	28.77	22.44	56.00	46.00		PASS
6	1.1085	30.72	23.95	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	0.1545	49.58	31.41	65.75	55.75	Neutral	PASS
2	0.1725	50.19	30.91	64.84	54.84		PASS
3	0.1950	46.62	29.77	63.82	53.82		PASS
4	0.2940	38.68	25.18	60.41	50.41		PASS
5	0.3930	34.37	27.90	58.00	48.00		PASS
6	0.5505	42.73	36.03	56.00	46.00		PASS

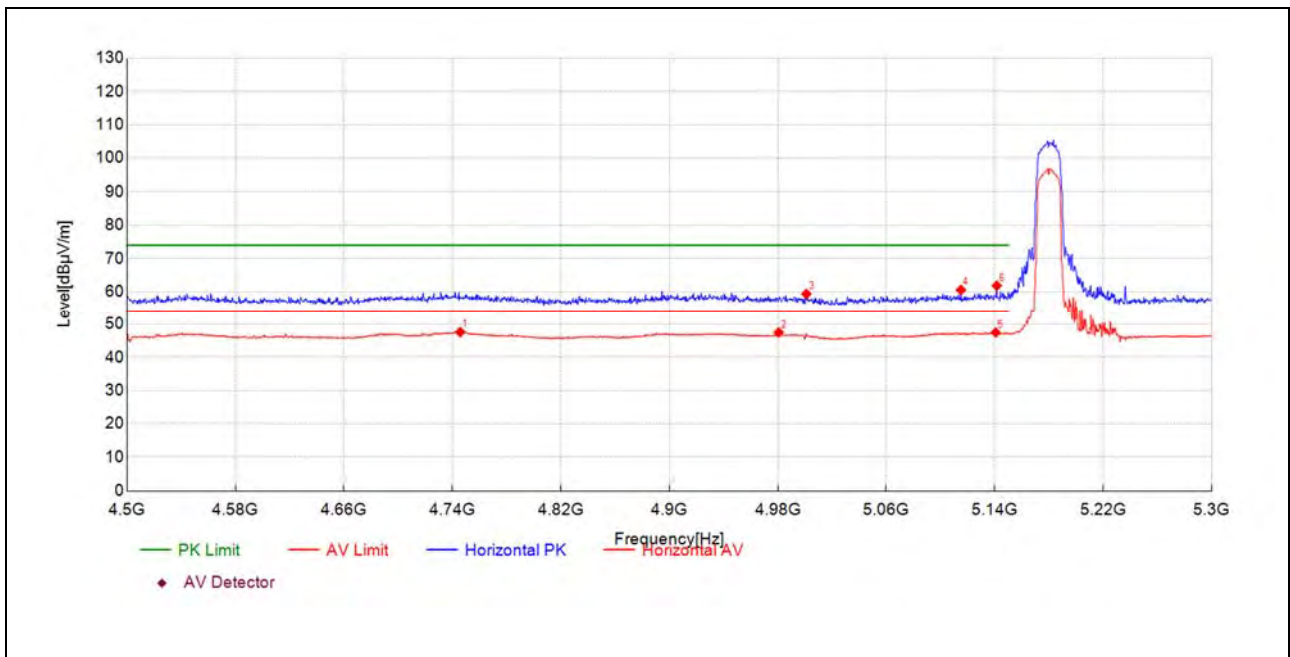
A.8. Restricted Frequency Bands

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.

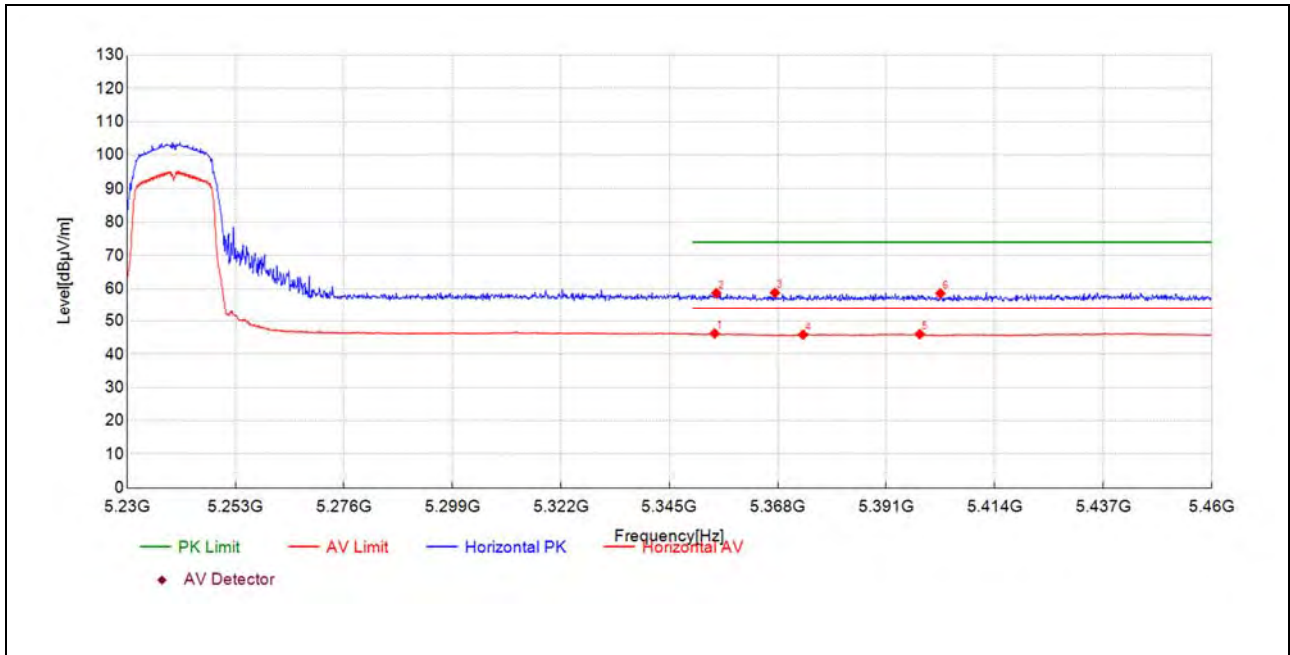
802.11a Mode

Plot for Channel 36



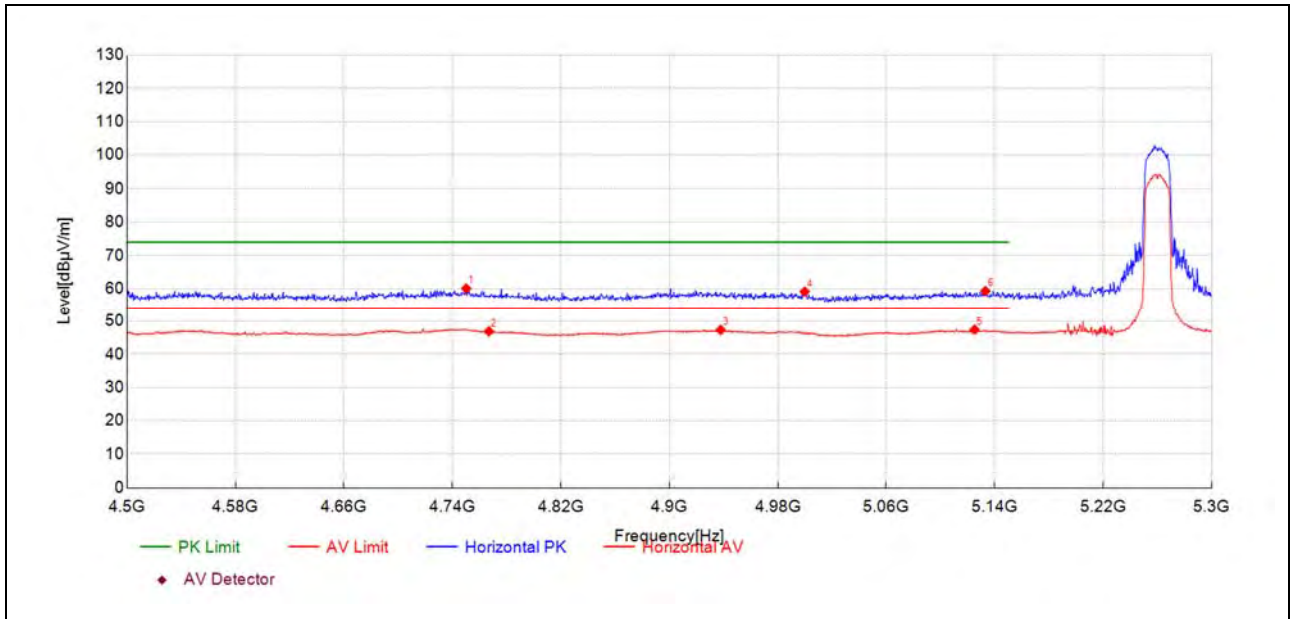
Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4745.72	27.3	47.59	20.320	54.00	6.41	150	6	AV	PASS
4980.64	27.6	47.48	19.860	54.00	6.52	150	167	AV	PASS
5001.05	39.5	59.34	19.880	74.00	14.66	150	206	PK	PASS
5115.11	40.1	60.55	20.460	74.00	13.45	150	268	PK	PASS
5140.72	27.1	47.46	20.360	54.00	6.54	150	160	AV	PASS
5141.52	41.5	61.82	20.360	74.00	12.18	150	160	PK	PASS

Plot for Channel 48



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5354.61	26.3	46.24	19.930	54.00	7.76	150	60	AV	PASS
5354.95	38.7	58.66	19.930	74.00	15.34	150	37	PK	PASS
5367.38	38.9	58.76	19.910	74.00	15.24	150	212	PK	PASS
5373.36	26.0	45.88	19.890	54.00	8.12	150	130	AV	PASS
5398.10	26.2	46.02	19.830	54.00	7.98	150	342	AV	PASS
5402.47	38.7	58.60	19.860	74.00	15.40	150	250	PK	PASS

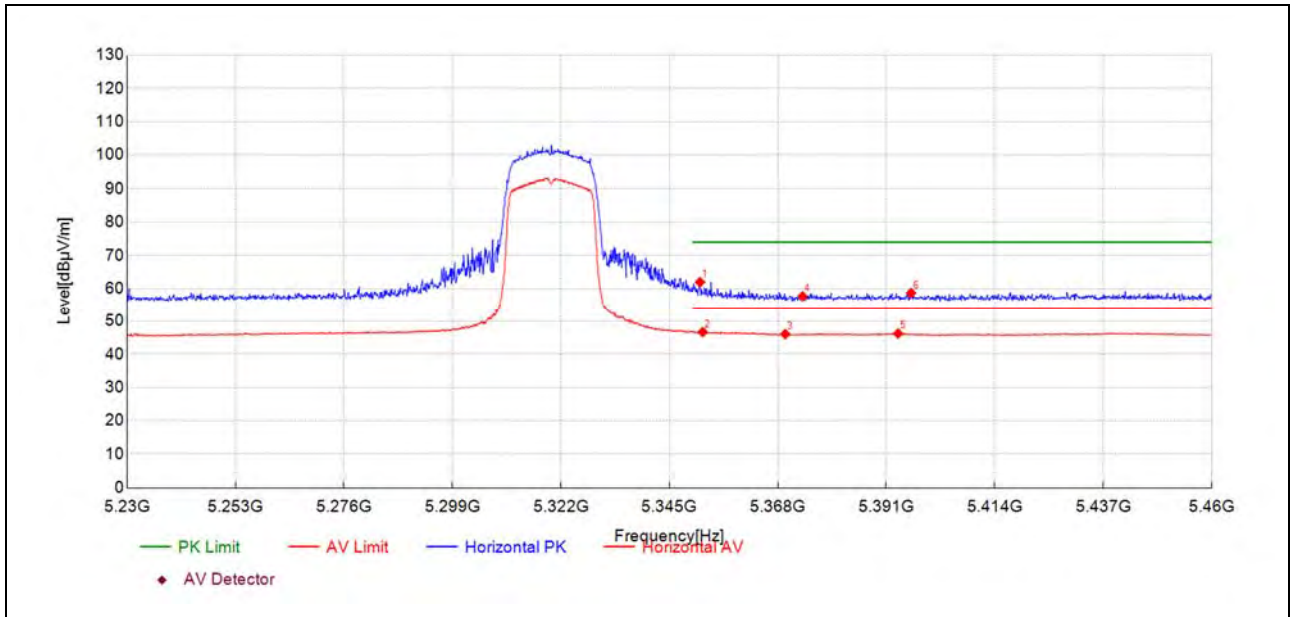
Plot for Channel 52



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4750.13	39.7	60.05	20.320	74.00	13.95	150	151	PK	PASS
4766.93	26.9	46.88	20.020	54.00	7.12	150	335	AV	PASS
4937.82	27.4	47.32	19.940	54.00	6.68	150	205	AV	PASS
4999.85	39.3	59.13	19.880	74.00	14.87	150	350	PK	PASS
5125.11	27.0	47.37	20.420	54.00	6.63	150	319	AV	PASS
5133.12	38.9	59.29	20.380	74.00	14.71	150	112	PK	PASS

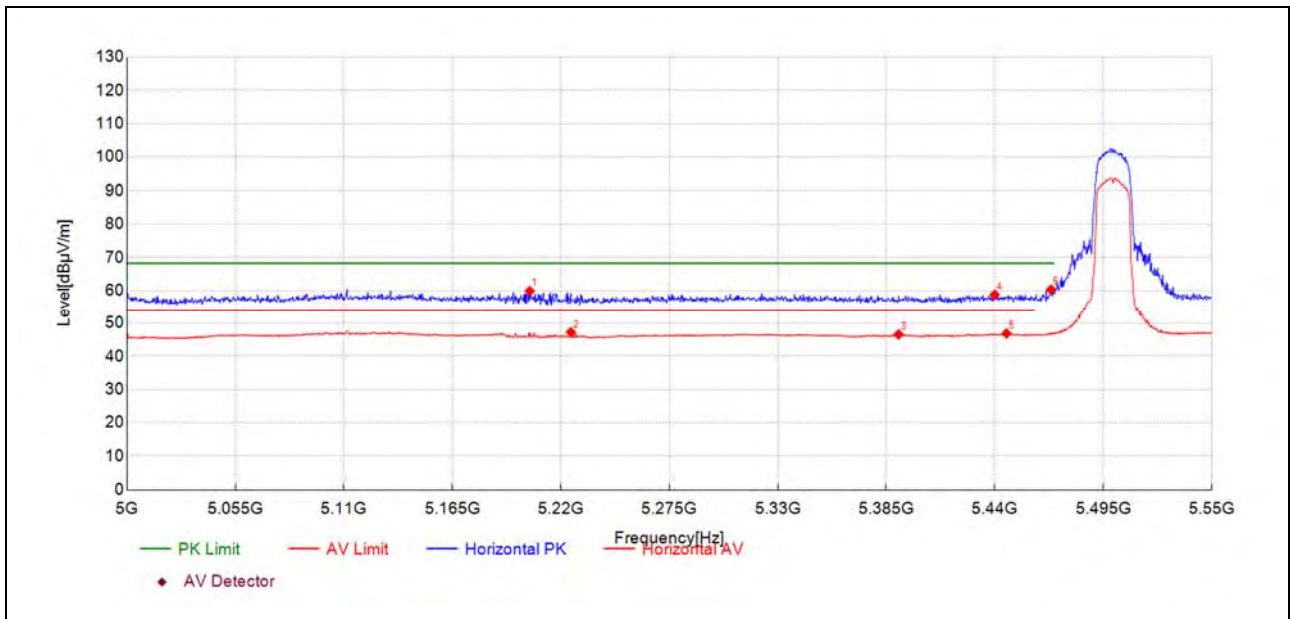


Plot for Channel 64



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5351.50	42.1	61.99	19.940	74.00	12.01	150	163	PK	PASS
5352.08	26.7	46.67	19.940	54.00	7.33	150	33	AV	PASS
5369.56	26.2	46.05	19.900	54.00	7.95	150	156	AV	PASS
5373.25	37.8	57.68	19.890	74.00	16.32	150	333	PK	PASS
5393.50	26.4	46.23	19.840	54.00	7.77	150	48	AV	PASS
5396.26	38.8	58.68	19.840	74.00	15.32	150	210	PK	PASS

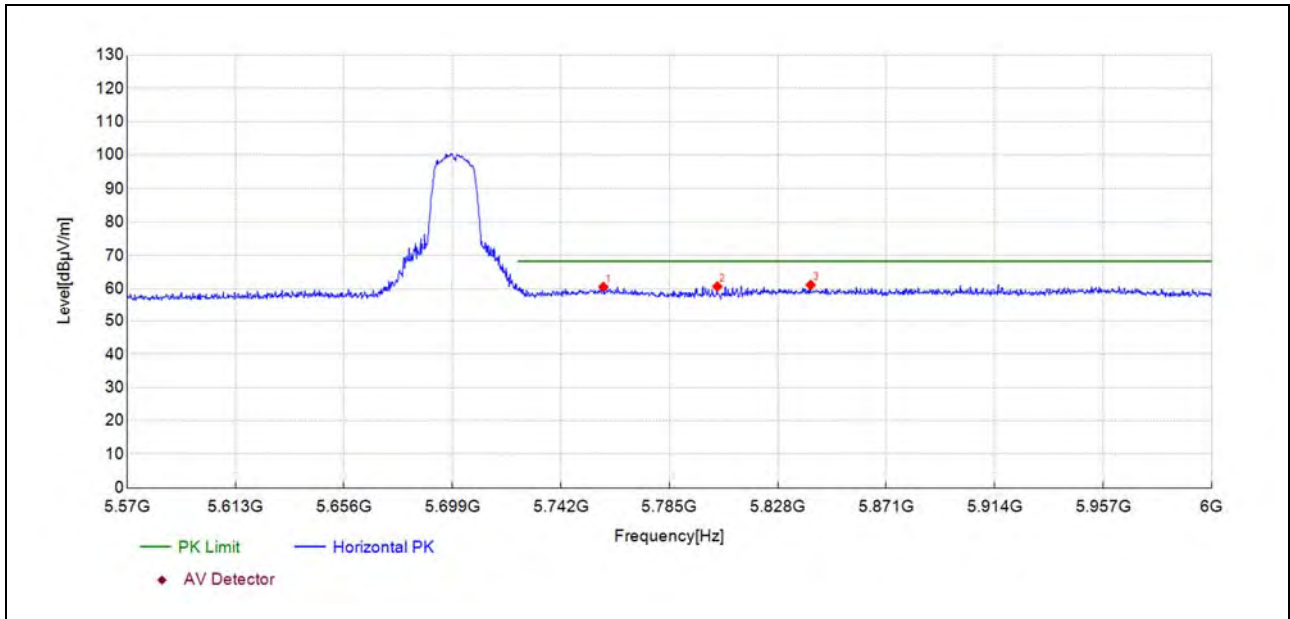
Plot for Channel 100



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5204.15	39.5	59.86	20.370	68.23	8.37	150	27	PK	PASS
5225.06	27.1	47.24	20.130	54.00	6.76	150	14	AV	PASS
5391.25	26.7	46.57	19.850	54.00	7.43	150	150	AV	PASS
5439.94	38.4	58.78	20.340	68.23	9.45	150	302	PK	PASS
5446.00	26.4	46.85	20.420	54.00	7.15	150	250	AV	PASS
5468.56	39.9	60.30	20.370	68.23	7.93	150	58	PK	PASS

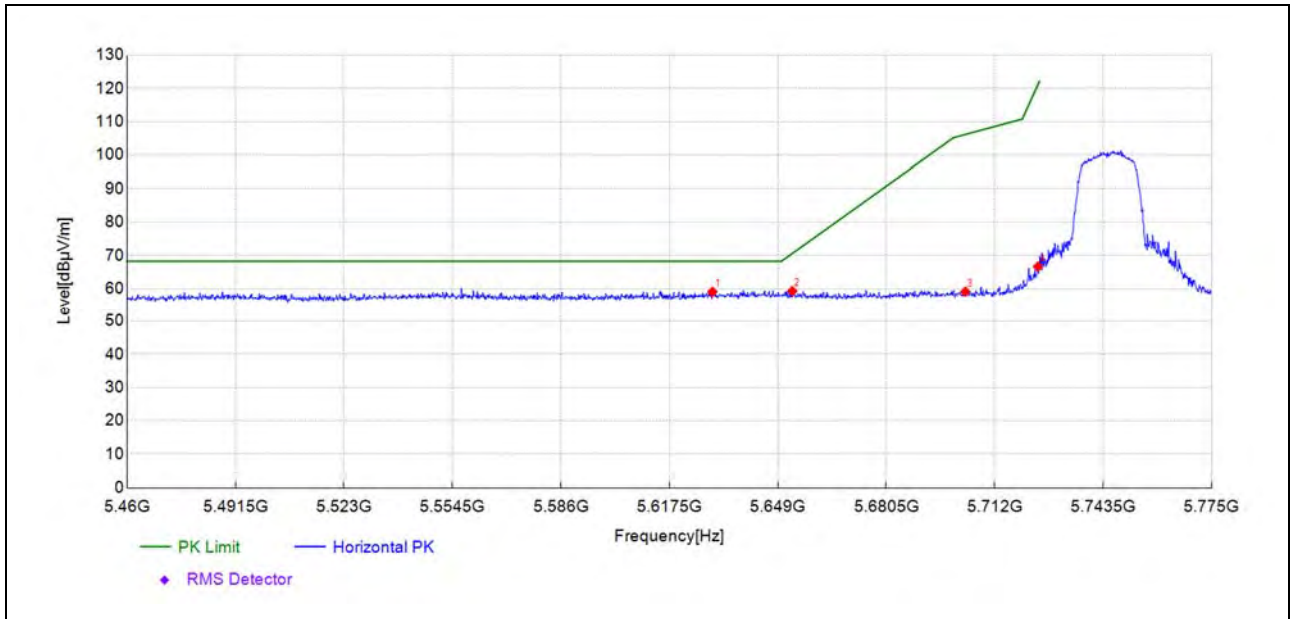


Plot for Channel 140



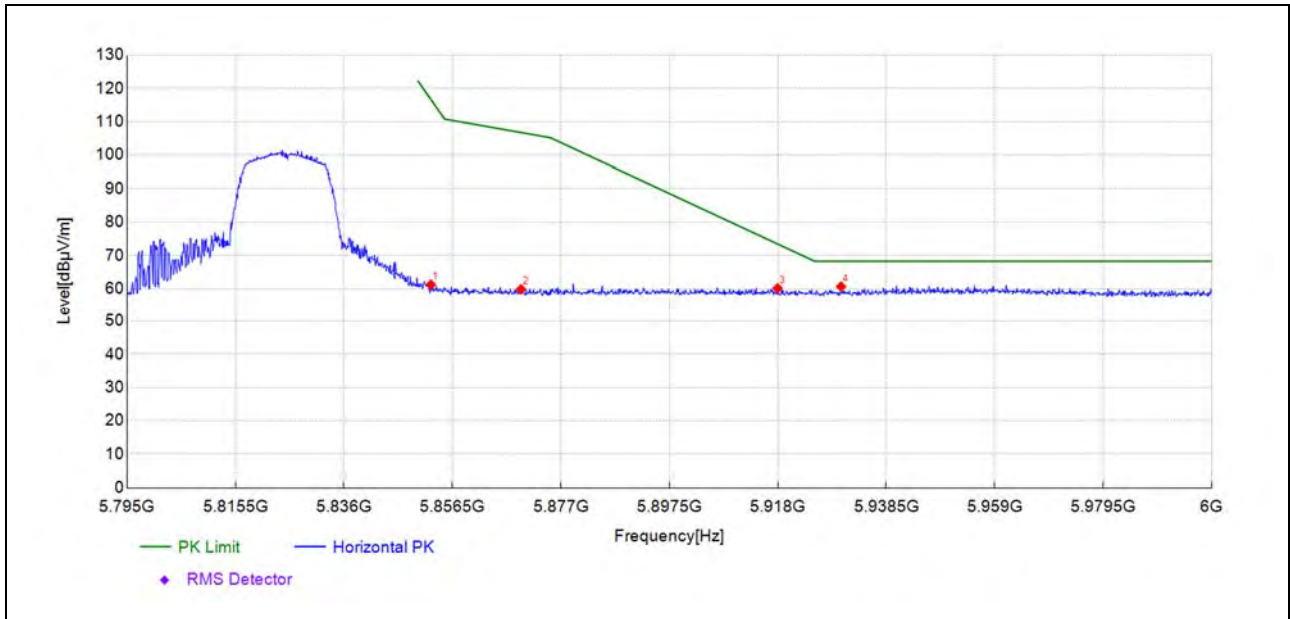
Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5758.86	38.9	60.51	21.650	68.23	7.72	150	121	PK	PASS
5804.04	38.9	60.65	21.760	68.23	7.58	150	79	PK	PASS
5841.04	38.8	61.11	22.330	68.23	7.12	150	270	PK	PASS

Plot for Channel 149



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5630.03	38.4	59.06	20.660	68.23	9.17	150	237	PK	PASS
5653.19	38.3	59.28	21.000	70.59	11.31	150	314	PK	PASS
5703.46	38.2	59.11	20.930	106.20	47.09	150	187	PK	PASS
5724.57	45.4	66.66	21.250	121.26	54.60	150	350	PK	PASS

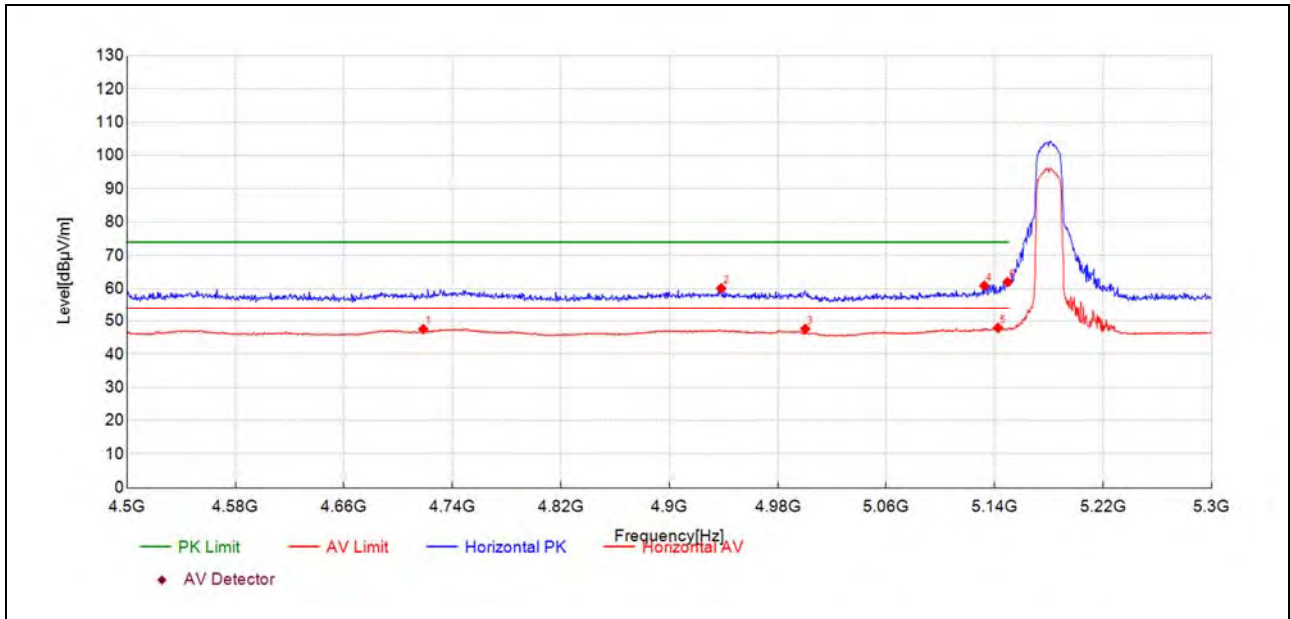
Plot for Channel 165



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5852.43	38.8	61.21	22.430	116.69	55.48	150	206	PK	PASS
5869.45	37.7	59.82	22.170	106.78	46.96	150	30	PK	PASS
5917.96	38.2	60.09	21.870	73.44	13.35	150	360	PK	PASS
5929.96	38.7	60.65	21.960	68.23	7.58	150	128	PK	PASS

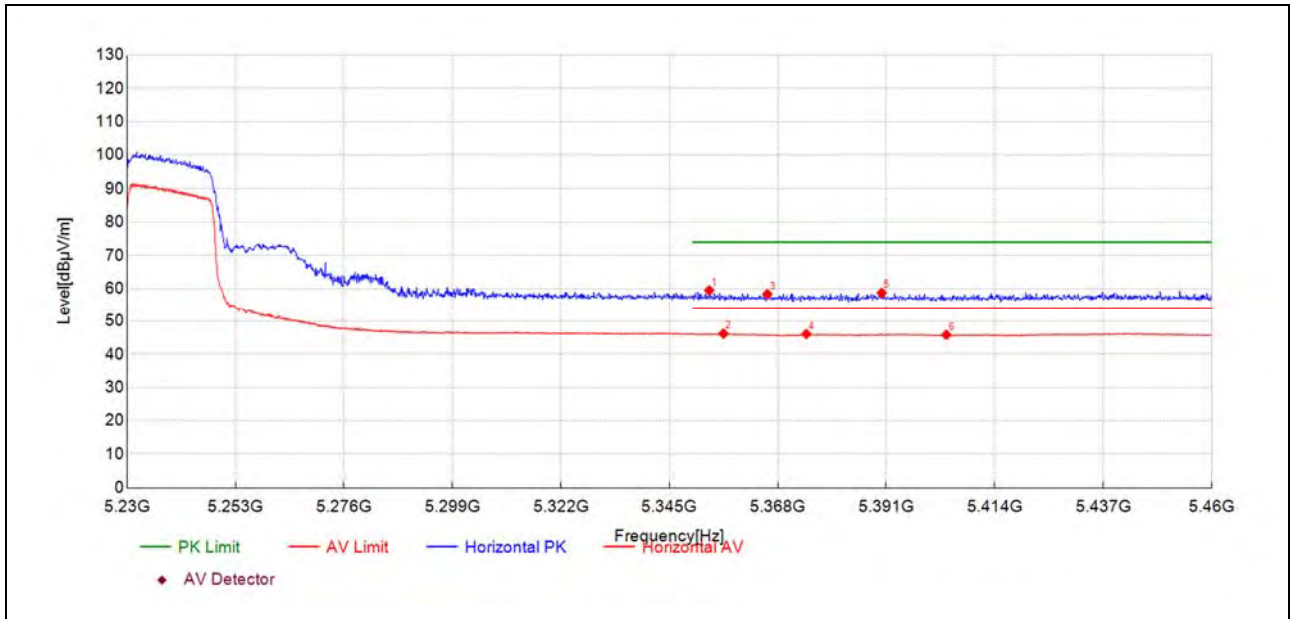
**802.11n (HT40) Mode**

Plot for Channel 38



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4718.51	27.3	47.55	20.300	54.00	6.45	150	220	AV	PASS
4938.22	40.2	60.08	19.930	74.00	13.92	150	52	PK	PASS
5000.25	27.7	47.61	19.880	54.00	6.39	150	158	AV	PASS
5132.32	40.5	60.89	20.400	74.00	13.11	150	136	PK	PASS
5142.32	27.5	47.90	20.360	54.00	6.10	150	59	AV	PASS
5149.52	41.7	61.97	20.320	74.00	12.03	150	152	PK	PASS

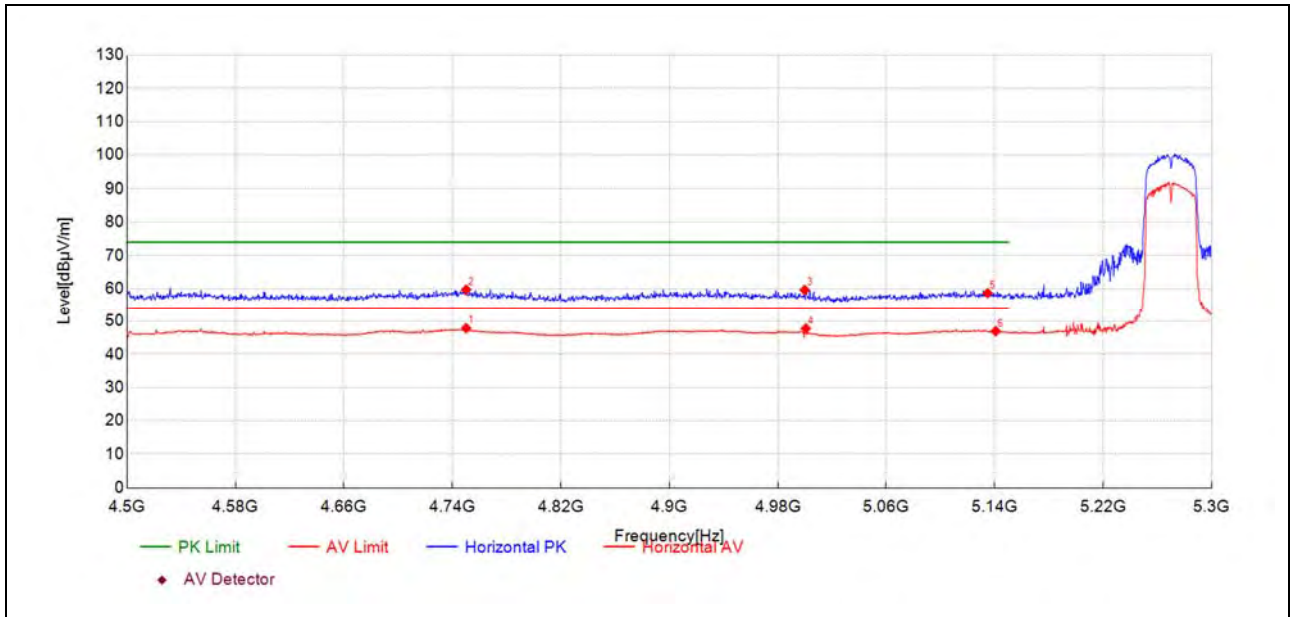
Plot for Channel 46



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5353.46	39.6	59.48	19.930	74.00	14.52	150	311	PK	PASS
5356.45	26.3	46.21	19.930	54.00	7.79	150	234	AV	PASS
5365.77	38.5	58.36	19.910	74.00	15.64	150	288	PK	PASS
5374.05	26.2	46.10	19.890	54.00	7.90	150	44	AV	PASS
5390.05	38.9	58.72	19.850	74.00	15.28	150	250	PK	PASS
5403.74	26.0	45.84	19.870	54.00	8.16	150	259	AV	PASS



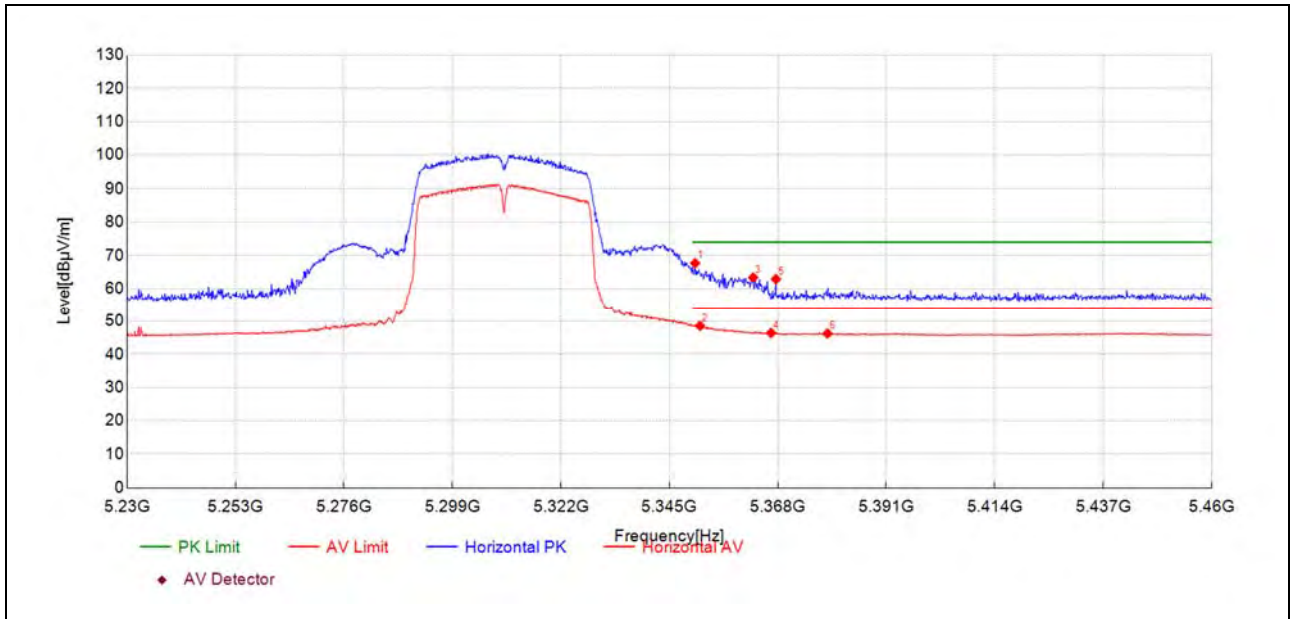
Plot for Channel 54



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4750.13	27.5	47.85	20.320	54.00	6.15	150	278	AV	PASS
4750.13	39.4	59.69	20.320	74.00	14.31	150	316	PK	PASS
4999.85	39.7	59.59	19.880	74.00	14.41	150	360	PK	PASS
5000.65	27.9	47.74	19.880	54.00	6.26	150	110	AV	PASS
5134.72	38.3	58.64	20.380	74.00	15.36	150	360	PK	PASS
5140.72	26.6	46.92	20.360	54.00	7.08	150	56	AV	PASS



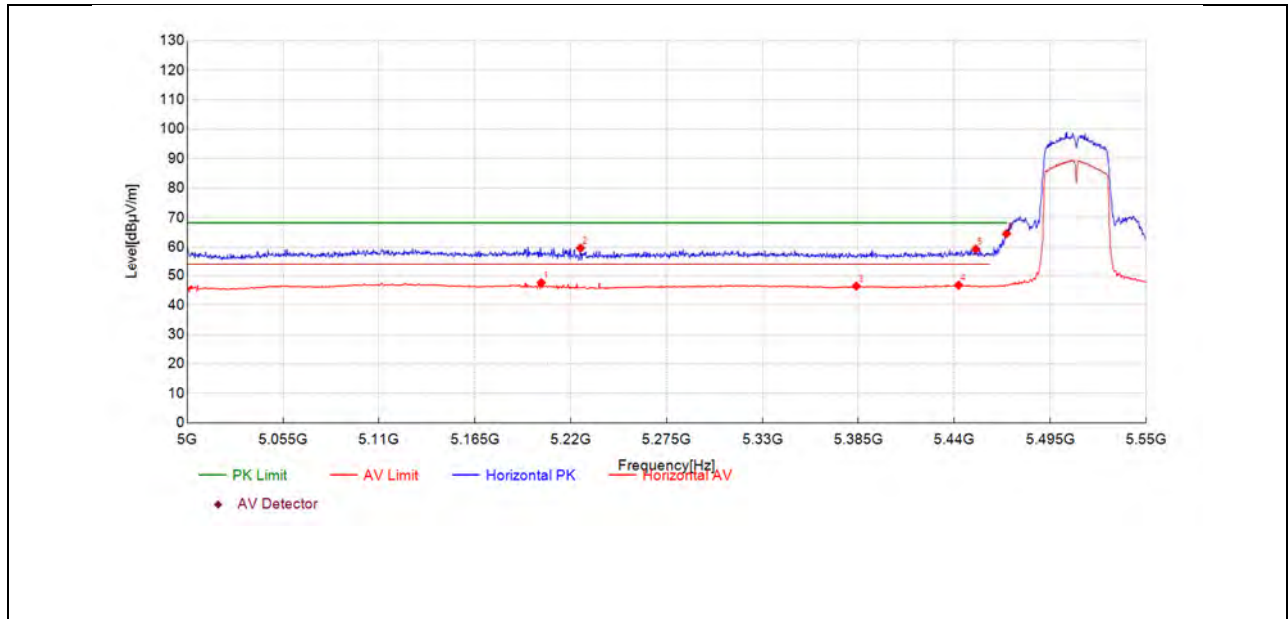
Plot for Channel 62



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5350.47	47.8	67.69	19.940	74.00	6.31	150	44	PK	PASS
5351.50	28.6	48.54	19.940	54.00	5.46	150	44	AV	PASS
5362.78	43.4	63.33	19.910	74.00	10.67	150	44	PK	PASS
5366.57	26.5	46.40	19.910	54.00	7.60	150	52	AV	PASS
5367.61	43.0	62.87	19.900	74.00	11.13	150	52	PK	PASS
5378.54	26.4	46.23	19.870	54.00	7.77	150	284	AV	PASS



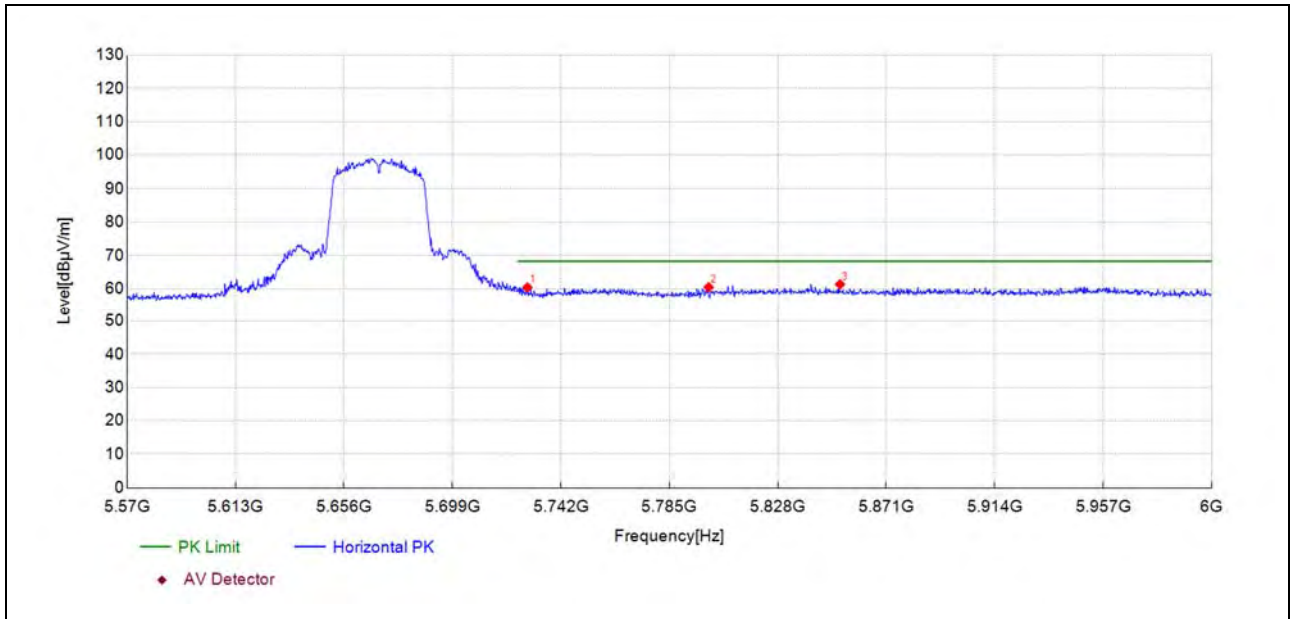
Plot for Channel 102



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5203.05	27.2	47.54	20.380	54.00	6.46	150	52	AV	PASS
5225.61	39.5	59.63	20.120	68.23	8.60	150	105	PK	PASS
5383.82	26.6	46.42	19.860	54.00	7.58	150	319	AV	PASS
5442.42	26.4	46.73	20.370	54.00	7.27	150	341	AV	PASS
5452.33	38.9	59.31	20.460	68.23	8.92	150	273	PK	PASS
5469.93	44.2	64.54	20.370	68.23	3.69	150	280	PK	PASS

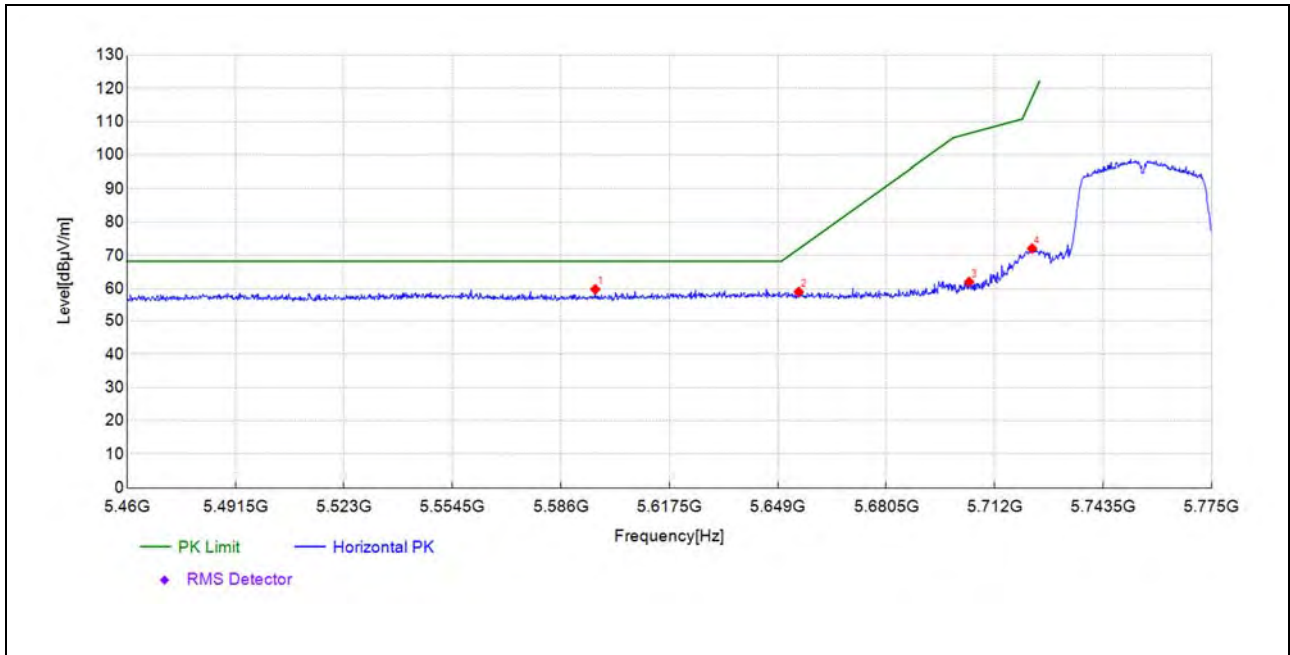


Plot for Channel 134



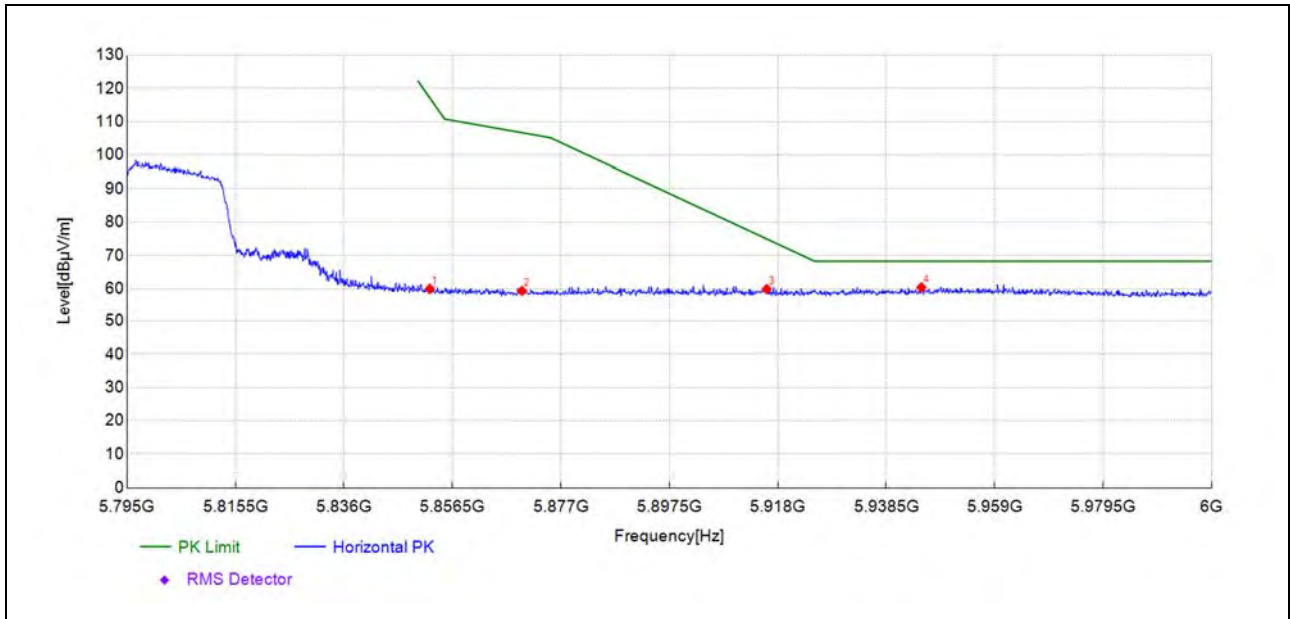
Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5728.75	39.1	60.38	21.310	68.23	7.85	150	360	PK	PASS
5800.60	38.7	60.45	21.710	68.23	7.78	150	179	PK	PASS
5852.65	38.9	61.30	22.420	68.23	6.93	150	347	PK	PASS

Plot for Channel 151



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5595.99	39.7	59.84	20.140	68.23	8.39	150	8	PK	PASS
5655.08	38.1	59.04	20.990	71.99	12.95	150	153	PK	PASS
5704.56	41.1	62.06	20.950	106.51	44.45	150	301	PK	PASS
5722.84	50.9	72.09	21.230	117.31	45.22	150	225	PK	PASS

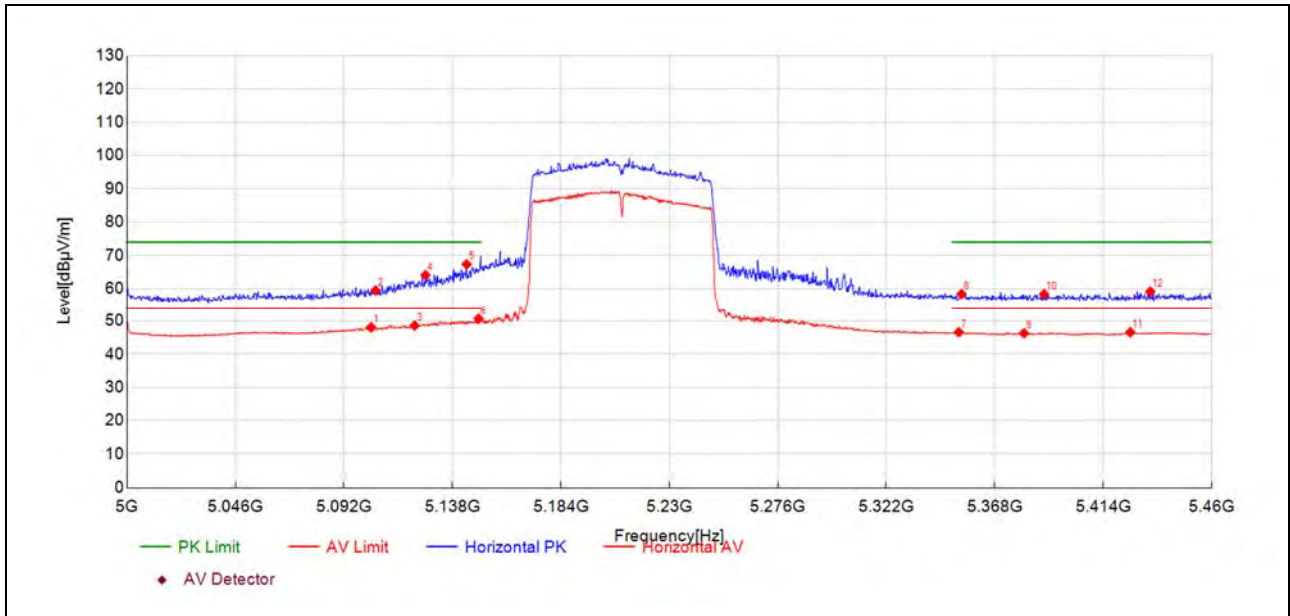
Plot for Channel 159



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5852.22	37.5	59.97	22.430	117.16	57.19	150	207	PK	PASS
5869.66	37.2	59.34	22.160	106.73	47.39	150	164	PK	PASS
5915.91	38.0	59.87	21.850	74.96	15.09	150	157	PK	PASS
5945.14	38.3	60.40	22.080	68.23	7.83	150	292	PK	PASS

**802.11ac (VHT80) Mode**

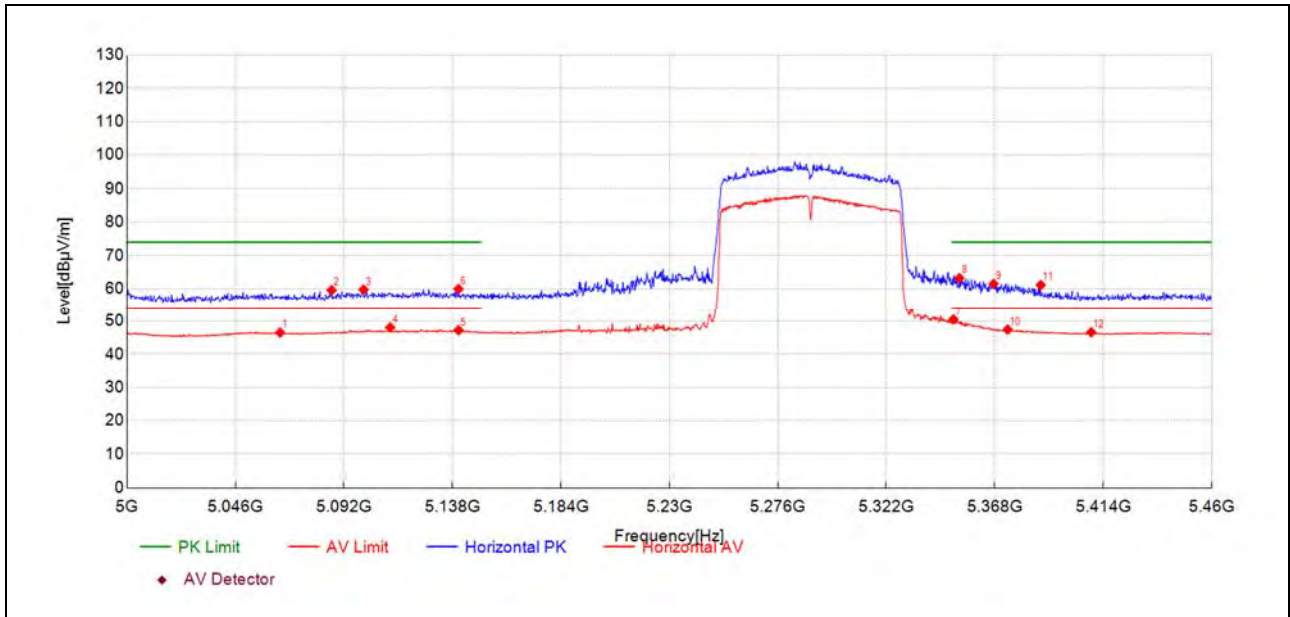
Plot for Channel 42



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5103.55	27.6	48.07	20.500	54.00	5.93	150	151	AV	PASS
5105.39	39.0	59.46	20.500	74.00	14.54	150	158	PK	PASS
5121.96	28.2	48.59	20.440	54.00	5.41	150	167	AV	PASS
5126.56	43.7	64.11	20.420	74.00	9.89	150	167	PK	PASS
5144.05	47.0	67.34	20.340	74.00	6.66	150	67	PK	PASS
5149.11	30.4	50.67	20.320	54.00	3.33	150	158	AV	PASS
5352.77	26.7	46.62	19.930	54.00	7.38	150	2	AV	PASS
5353.92	38.4	58.35	19.930	74.00	15.65	150	174	PK	PASS
5380.38	26.4	46.30	19.870	54.00	7.70	150	52	AV	PASS
5388.89	38.5	58.34	19.850	74.00	15.66	150	296	PK	PASS
5425.48	26.5	46.61	20.160	54.00	7.39	150	128	AV	PASS
5434.00	38.8	59.10	20.270	74.00	14.90	150	227	PK	PASS

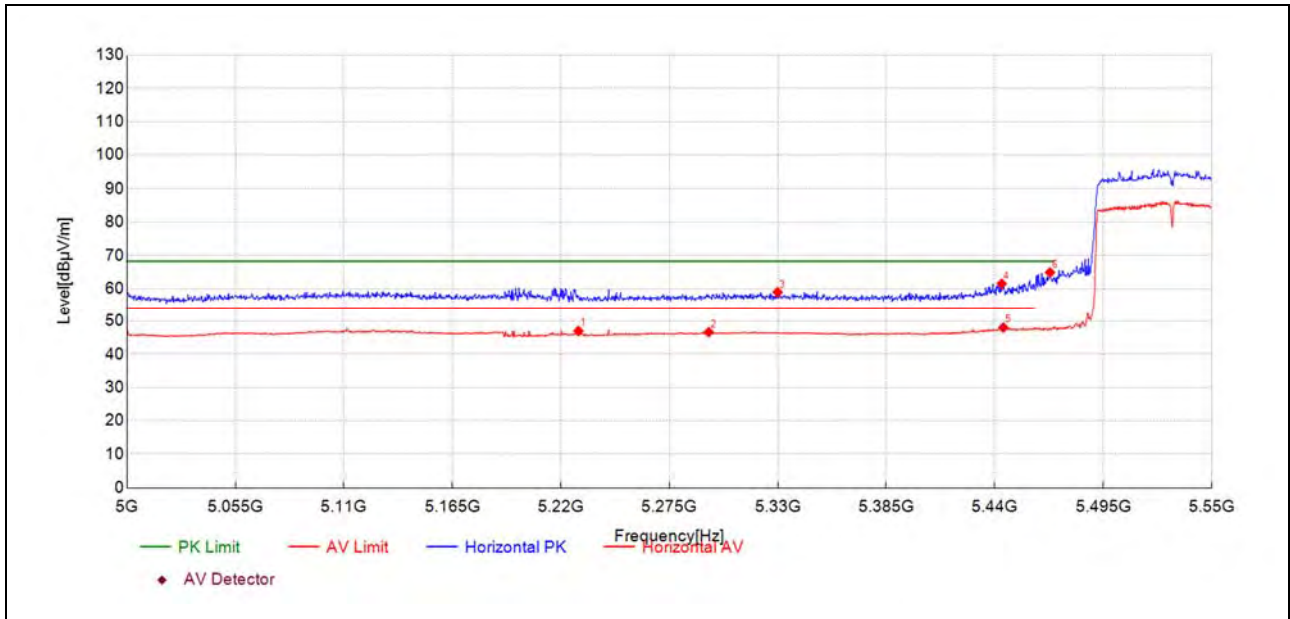


Plot for Channel 58



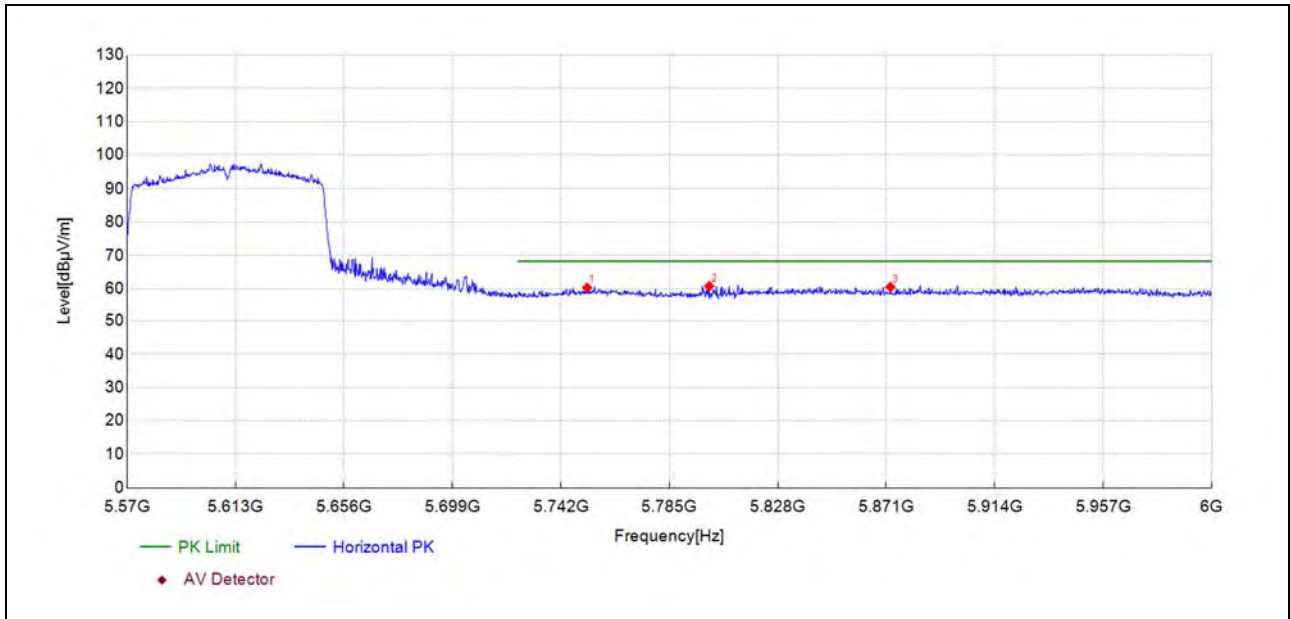
Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5064.89	26.2	46.52	20.300	54.00	7.48	150	316	AV	PASS
5086.75	39.1	59.52	20.440	74.00	14.48	150	359	PK	PASS
5100.33	39.2	59.73	20.520	74.00	14.27	150	324	PK	PASS
5111.61	27.6	48.07	20.480	54.00	5.93	150	194	AV	PASS
5140.60	26.9	47.23	20.360	54.00	6.77	150	49	AV	PASS
5140.60	39.5	59.90	20.360	74.00	14.10	150	263	PK	PASS
5350.47	30.5	50.48	19.940	54.00	3.52	150	41	AV	PASS
5353.00	43.2	63.17	19.930	74.00	10.83	150	155	PK	PASS
5367.49	41.5	61.45	19.910	74.00	12.55	150	41	PK	PASS
5373.48	27.5	47.42	19.890	54.00	6.58	150	64	AV	PASS
5387.51	41.3	61.10	19.850	74.00	12.90	150	271	PK	PASS
5408.91	26.7	46.62	19.950	54.00	7.38	150	351	AV	PASS

Plot for Channel 106



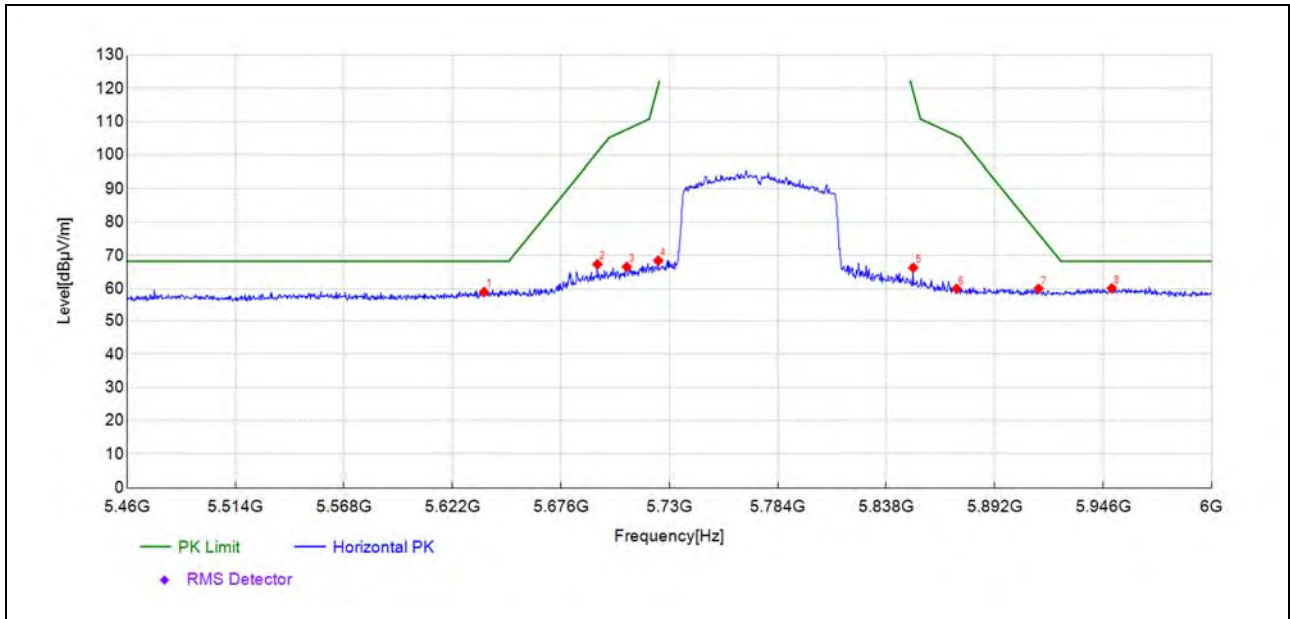
Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5228.91	26.9	47.01	20.080	54.00	6.99	150	87	AV	PASS
5294.95	26.4	46.64	20.210	54.00	7.36	150	34	AV	PASS
5329.89	38.9	58.96	20.060	68.23	9.27	150	57	PK	PASS
5443.52	41.1	61.49	20.380	68.23	6.74	150	57	PK	PASS
5444.35	27.6	48.03	20.400	54.00	5.97	150	51	AV	PASS
5468.01	44.5	64.86	20.370	68.23	3.37	150	65	PK	PASS

Plot for Channel 122



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5752.41	38.7	60.31	21.640	68.23	7.92	150	191	PK	PASS
5800.81	39.1	60.78	21.710	68.23	7.45	150	316	PK	PASS
5872.66	38.4	60.48	22.120	68.23	7.75	150	323	PK	PASS

Plot for Channel 155



Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5637.75	38.2	58.98	20.790	68.23	9.25	150	71	PK	PASS
5694.21	46.5	67.35	20.890	100.94	33.59	150	239	PK	PASS
5708.79	45.6	66.56	21.010	107.69	41.13	150	357	PK	PASS
5724.46	47.2	68.42	21.250	121.00	52.58	150	226	PK	PASS
5851.43	43.9	66.30	22.440	118.98	52.68	150	357	PK	PASS
5873.04	37.9	59.97	22.120	105.78	45.81	150	246	PK	PASS
5913.83	38.2	59.99	21.830	76.50	16.51	150	309	PK	PASS
5950.30	38.0	60.14	22.120	68.23	8.09	150	169	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:

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

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

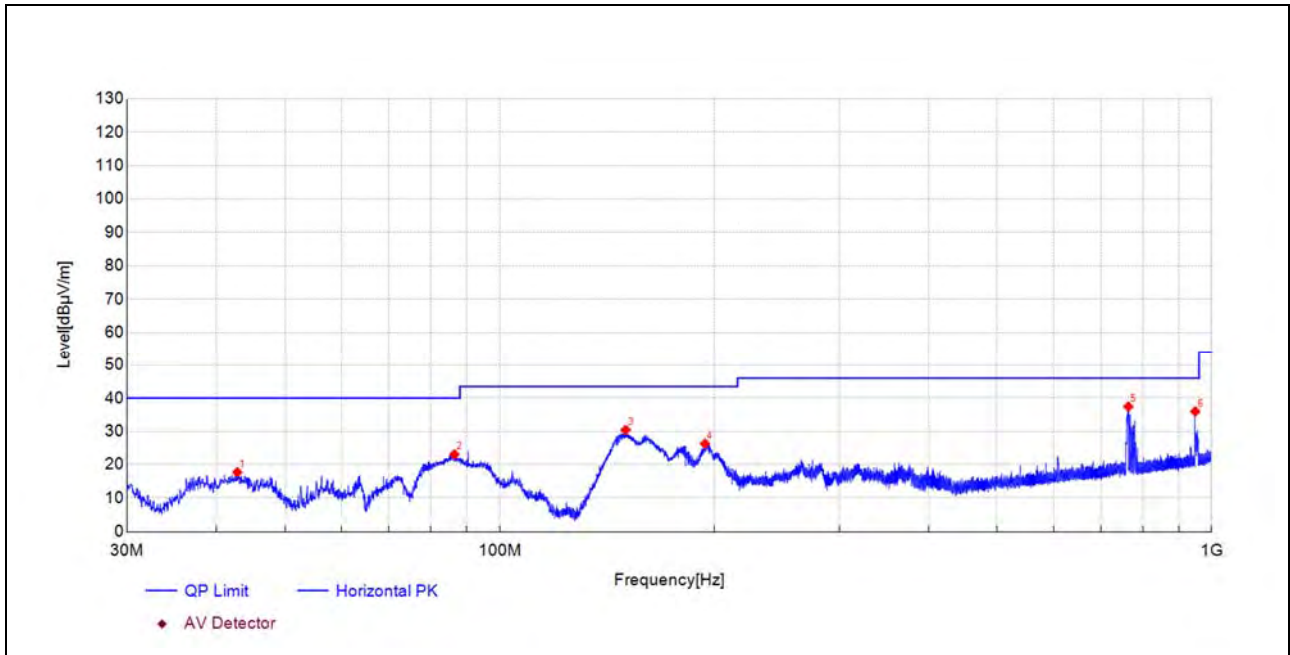
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 40GHz harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note4: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

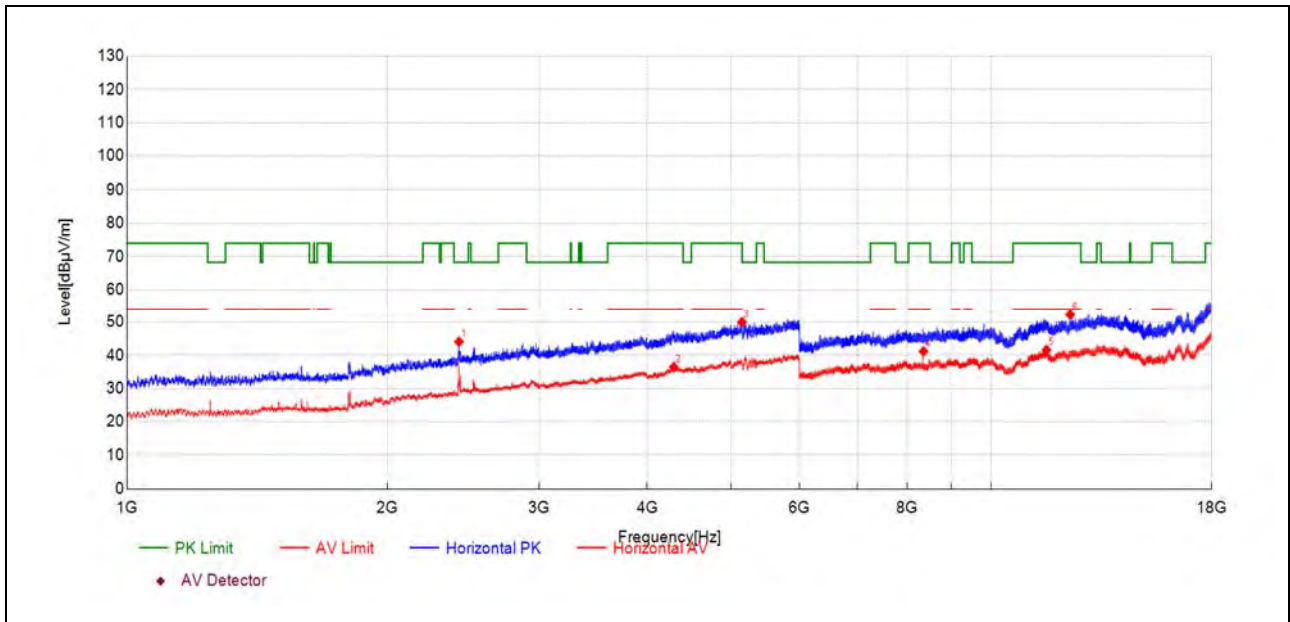
**802.11a Mode**

Plot for Channel 44



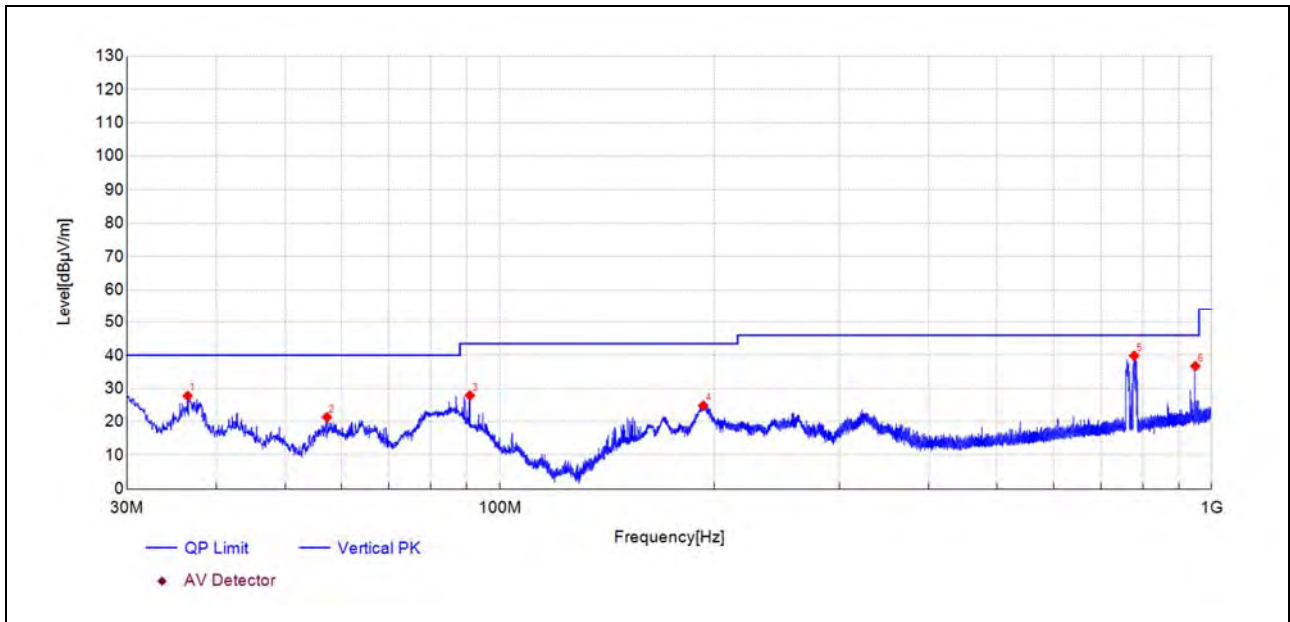
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
42.85	46.2	17.69	-28.470	40.00	22.31	150	213	PK	PASS
86.46	56.5	23.08	-33.380	40.00	16.92	150	360	PK	PASS
150.38	63.8	30.45	-33.340	43.50	13.05	150	213	PK	PASS
194.33	55.8	26.30	-29.540	43.50	17.20	150	37	PK	PASS
763.94	54.4	37.45	-16.980	46.00	8.55	150	359	PK	PASS
948.39	50.3	35.99	-14.320	46.00	10.01	150	268	PK	PASS



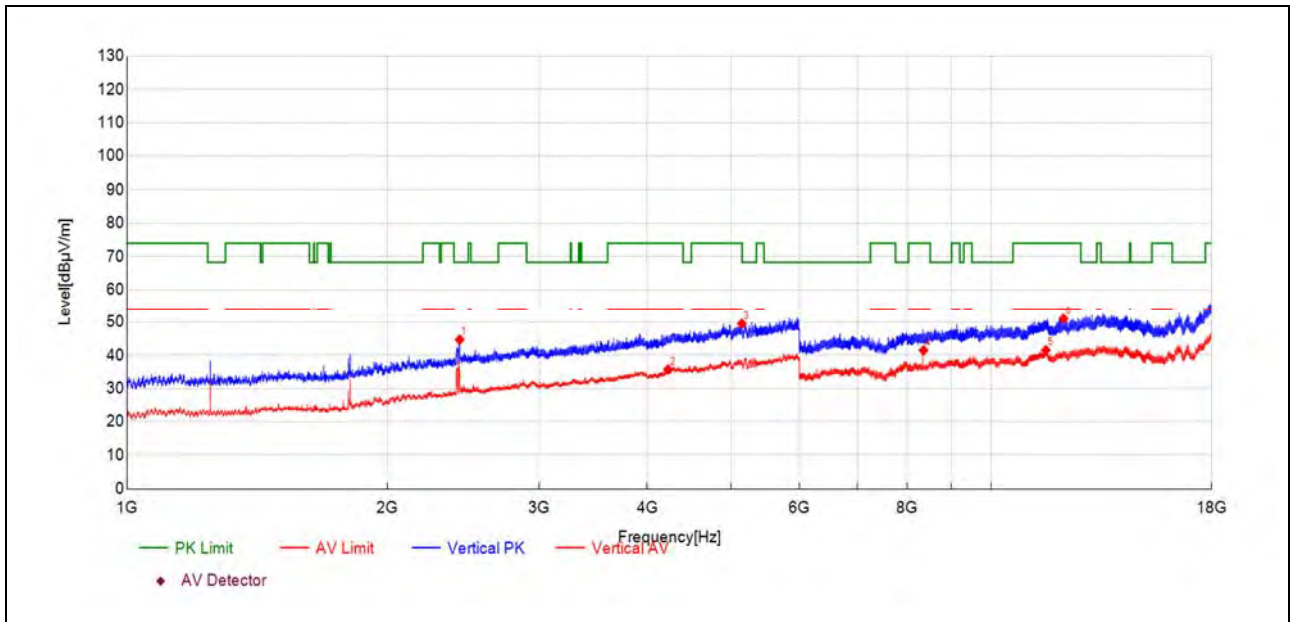
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2422.14	43.9	44.08	0.140	68.23	24.15	150	30	PK	PASS
4291.83	29.4	36.46	7.080	54.00	17.54	150	20	AV	PASS
5146.91	39.9	50.00	10.060	74.00	24.00	150	260	PK	PASS
8352.10	44.5	41.18	-3.350	54.00	12.82	150	350	AV	PASS
11588.73	38.5	41.63	3.090	54.00	12.37	150	40	AV	PASS
12343.76	49.4	52.25	2.860	74.00	21.75	150	40	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
36.50	58.1	27.79	-30.300	40.00	12.21	150	200	PK	PASS
57.26	51.4	21.39	-30.010	40.00	18.61	150	172	PK	PASS
90.87	59.6	27.90	-31.720	43.50	15.60	150	310	PK	PASS
193.31	54.4	24.85	-29.570	43.50	18.65	150	295	PK	PASS
778.30	56.8	39.88	-16.880	46.00	6.12	150	239	PK	PASS
948.44	51.1	36.74	-14.320	46.00	9.26	150	104	PK	PASS

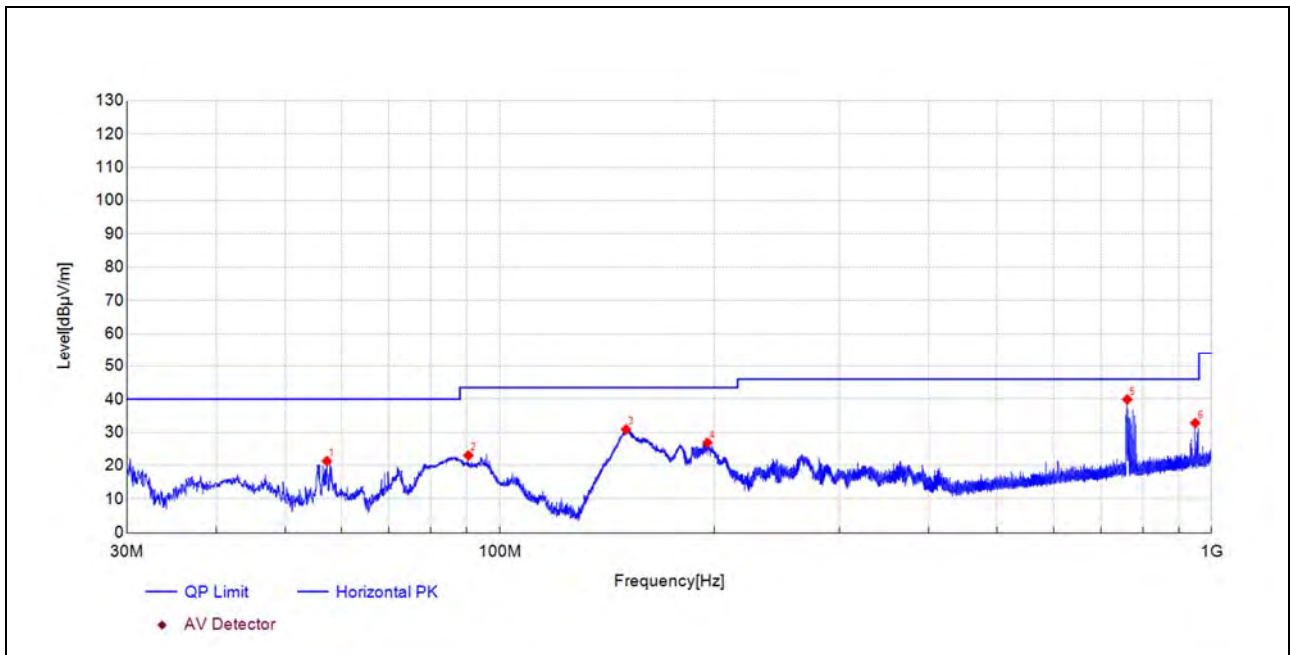


(Antenna Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2426.14	44.5	44.70	0.180	68.23	23.53	150	20	PK	PASS
4227.82	29.1	35.77	6.720	54.00	18.23	150	210	AV	PASS
5145.91	39.4	49.48	10.060	74.00	24.52	150	190	PK	PASS
8352.10	44.9	41.50	-3.350	54.00	12.50	150	150	AV	PASS
11569.23	38.6	41.54	2.940	54.00	12.46	150	150	AV	PASS
12128.26	48.1	51.02	2.940	74.00	22.98	150	340	PK	PASS

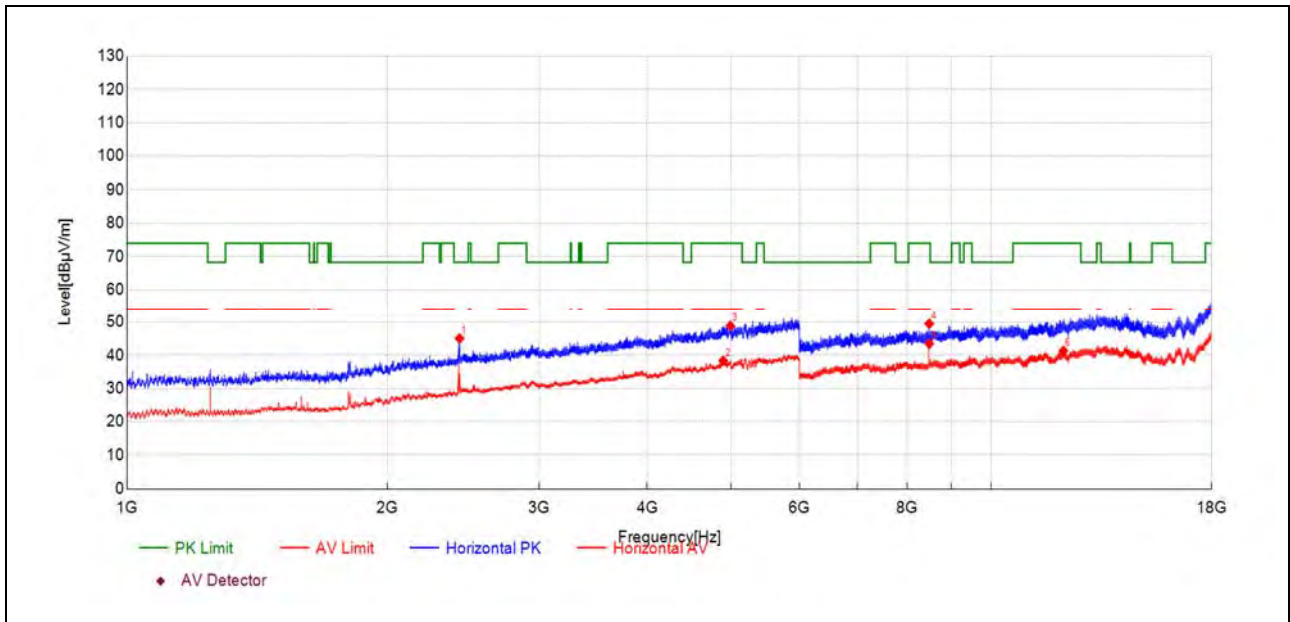


Plot for Channel 60



(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
57.26	51.4	21.38	-30.010	40.00	18.62	150	1	PK	PASS
90.43	54.9	23.07	-31.810	43.50	20.43	150	0	PK	PASS
150.58	64.2	30.88	-33.320	43.50	12.62	150	213	PK	PASS
195.88	56.5	26.89	-29.610	43.50	16.61	150	213	PK	PASS
761.03	56.9	39.92	-16.970	46.00	6.08	150	6	PK	PASS
948.49	47.2	32.84	-14.320	46.00	13.16	150	350	PK	PASS



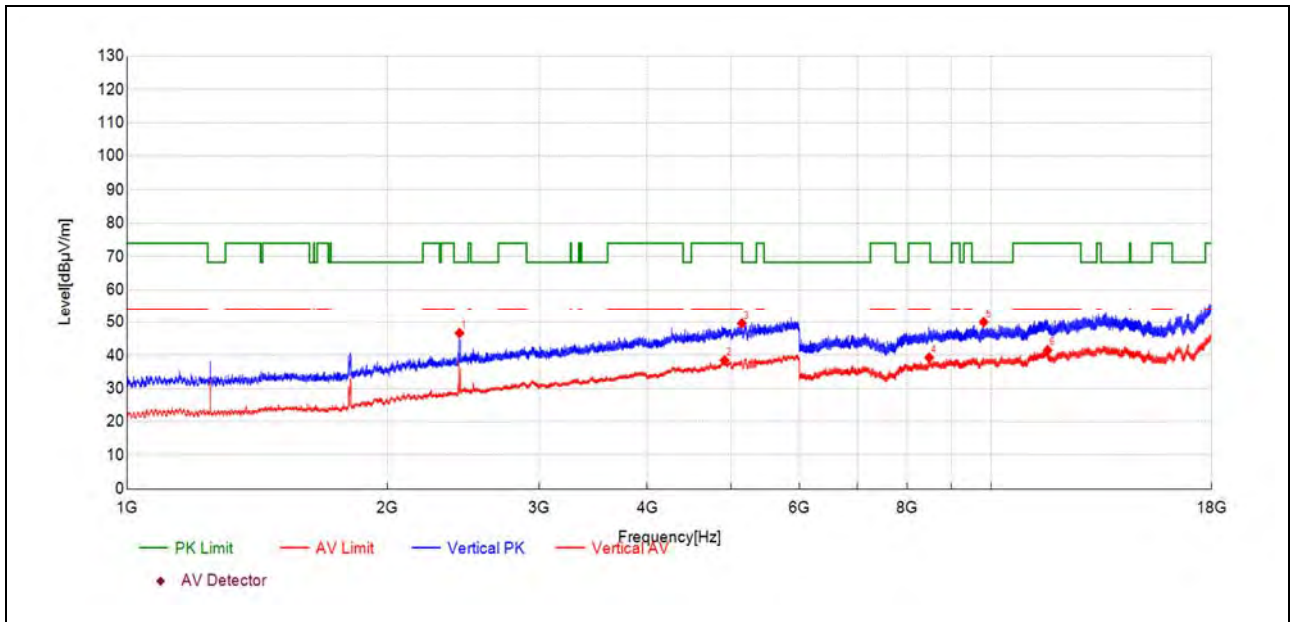
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2425.64	44.9	45.06	0.180	68.23	23.17	150	230	PK	PASS
4897.39	29.1	38.36	9.230	54.00	15.64	150	130	AV	PASS
4990.90	39.6	48.82	9.190	74.00	25.18	150	190	PK	PASS
8480.10	52.2	49.50	-2.650	74.00	24.50	150	120	PK	PASS
8480.10	46.1	43.48	-2.650	54.00	10.52	150	100	AV	PASS
12122.76	38.4	41.35	2.940	54.00	12.65	150	130	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
37.32	53.8	23.81	-29.940	40.00	16.19	150	294	PK	PASS
88.88	62.4	30.03	-32.370	43.50	13.47	150	214	PK	PASS
192.43	53.5	23.90	-29.600	43.50	19.60	150	353	PK	PASS
334.93	48.5	23.10	-25.360	46.00	22.90	150	359	PK	PASS
763.99	56.3	39.32	-16.980	46.00	6.68	150	242	PK	PASS
948.44	52.5	38.21	-14.320	46.00	7.79	150	359	PK	PASS

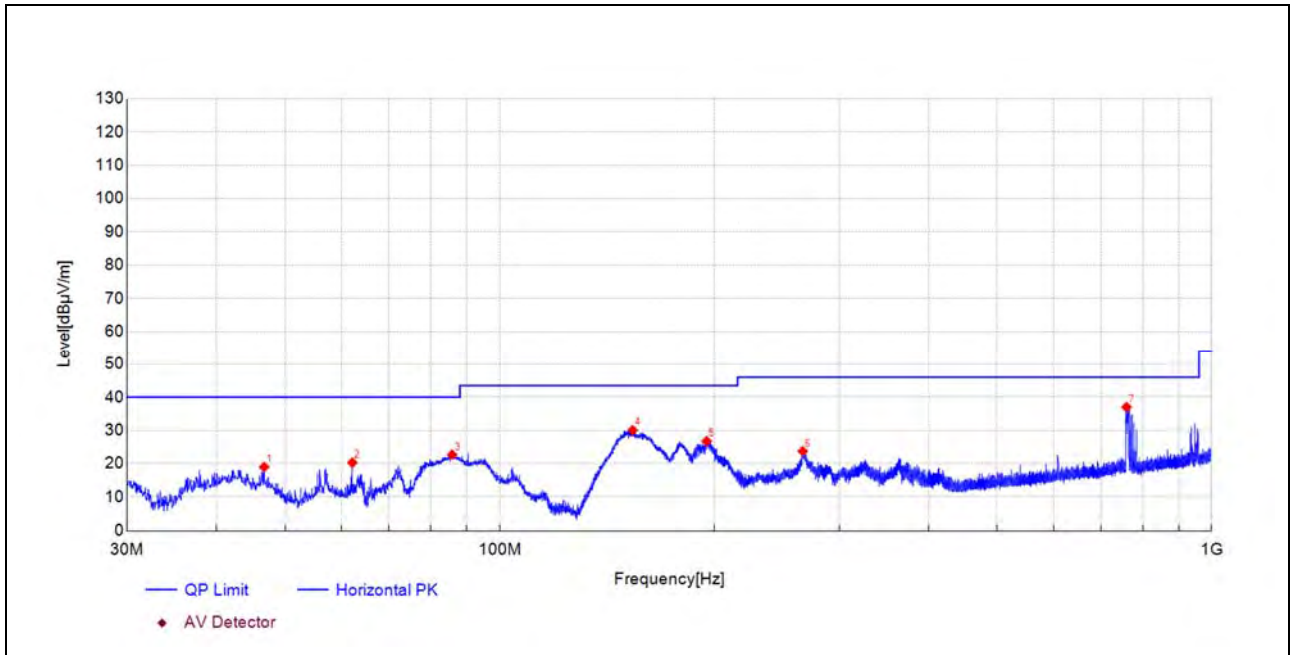


(Antenna Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2425.14	46.5	46.69	0.170	68.23	21.54	150	50	PK	PASS
4914.39	29.3	38.49	9.180	54.00	15.51	150	140	AV	PASS
5145.41	39.5	49.58	10.060	74.00	24.42	150	200	PK	PASS
8480.10	42.0	39.32	-2.650	54.00	14.68	150	170	AV	PASS
9803.16	51.3	49.99	-1.340	68.23	18.24	150	350	PK	PASS
11624.73	38.8	41.54	2.780	54.00	12.46	150	270	AV	PASS

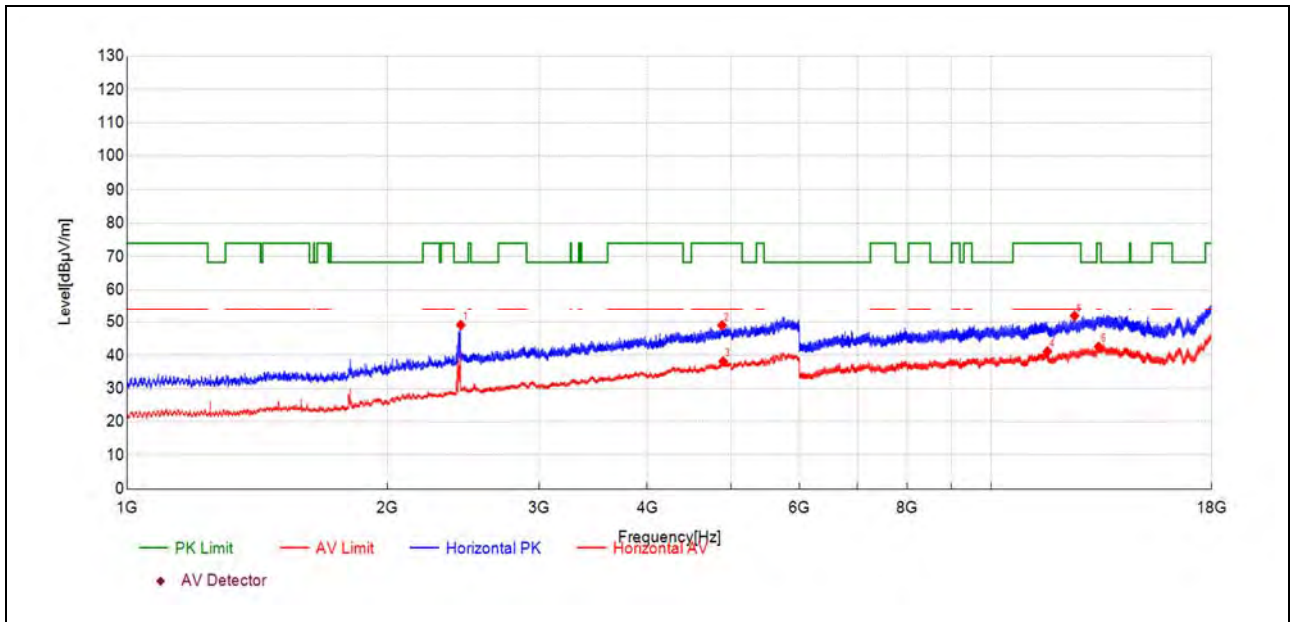


Plot for Channel 120



(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
46.73	47.3	19.00	-28.310	40.00	21.00	150	185	PK	PASS
62.16	52.0	20.32	-31.670	40.00	19.68	150	360	PK	PASS
85.83	56.3	22.70	-33.640	40.00	17.30	150	359	PK	PASS
153.83	63.2	30.07	-33.130	43.50	13.43	150	240	PK	PASS
195.39	56.4	26.75	-29.610	43.50	16.75	150	226	PK	PASS
266.55	51.6	23.77	-27.840	46.00	22.23	150	37	PK	PASS
759.28	54.0	37.03	-16.970	46.00	8.97	150	105	PK	PASS



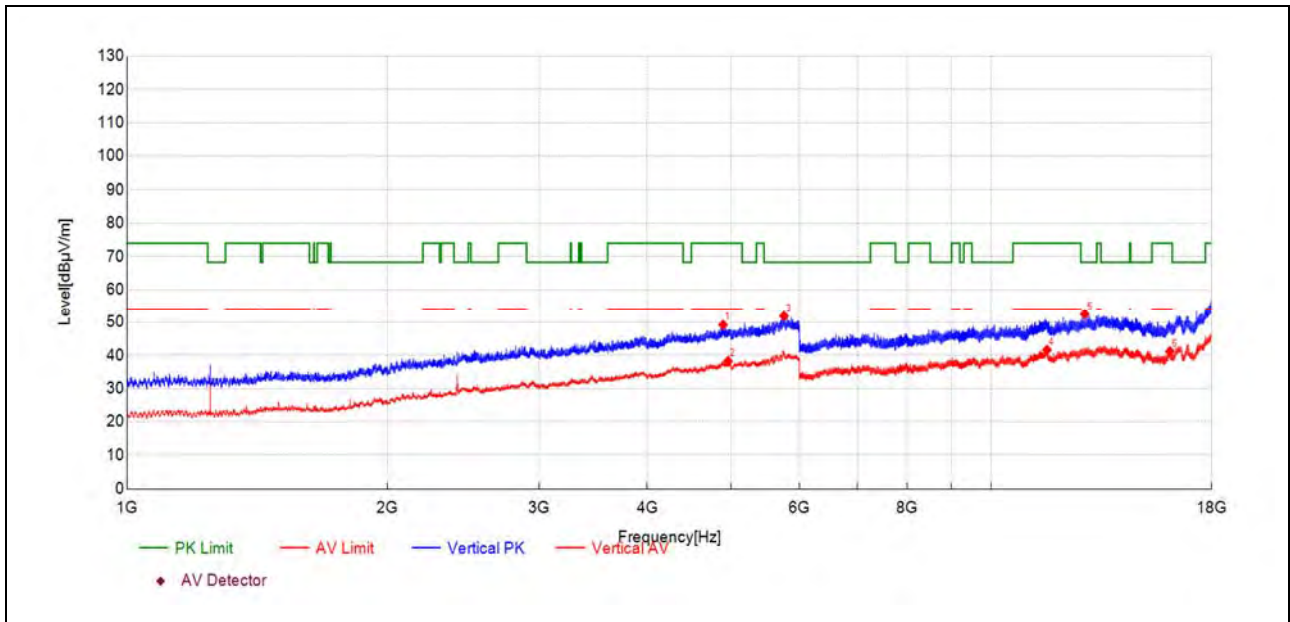
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2434.14	48.6	49.10	0.500	68.23	19.13	150	10	PK	PASS
4880.89	40.0	48.99	8.990	74.00	25.01	150	170	PK	PASS
4895.89	29.0	38.15	9.130	54.00	15.85	150	80	AV	PASS
11619.73	38.3	41.16	2.860	54.00	12.84	150	270	AV	PASS
12489.27	48.3	51.87	3.540	74.00	22.13	150	20	PK	PASS
13317.30	37.2	42.58	5.400	54.00	11.42	150	220	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
37.08	58.3	28.48	-29.790	40.00	11.52	100	359	PK	PASS
56.63	58.5	28.95	-29.560	40.00	11.05	100	11	PK	PASS
90.77	63.2	31.74	-31.430	43.50	11.76	100	147	PK	PASS
151.94	57.2	24.15	-33.010	43.50	19.35	100	120	PK	PASS
195.64	52.4	23.22	-29.190	43.50	20.28	100	295	PK	PASS
760.54	56.0	39.34	-16.670	46.00	6.66	100	37	PK	PASS

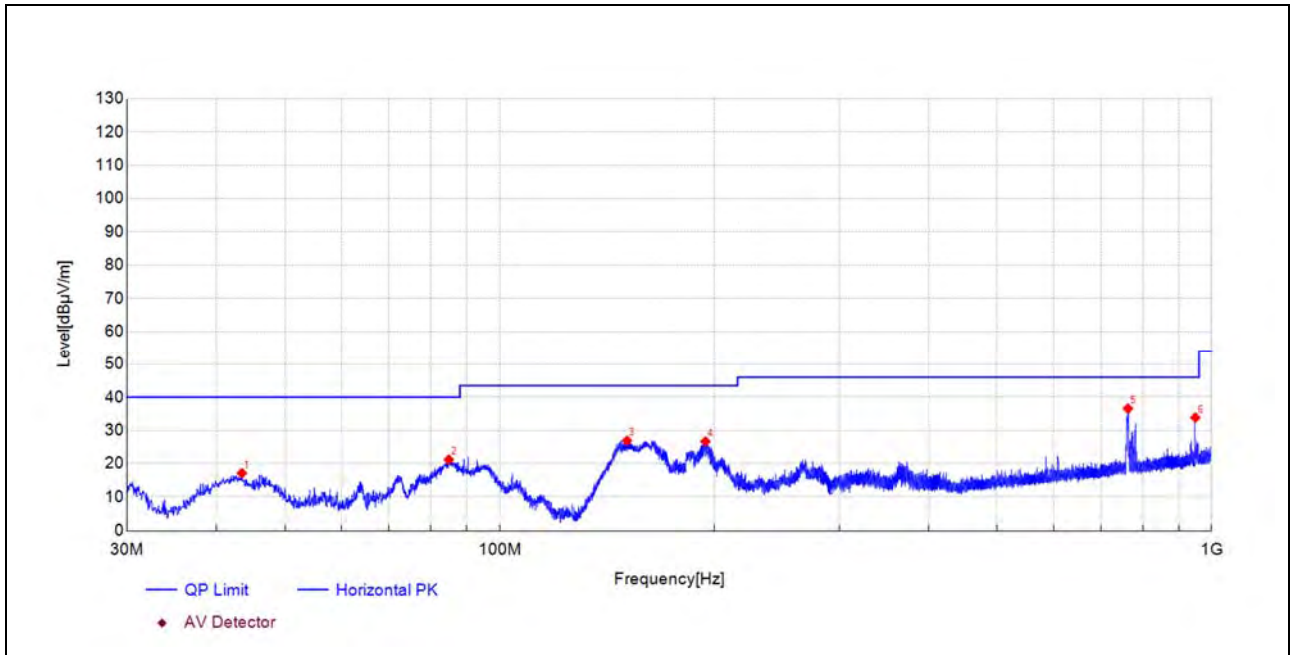


(Antenna Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4894.89	40.1	49.20	9.120	74.00	24.80	150	20	PK	PASS
4960.90	29.3	38.22	8.920	54.00	15.78	150	300	AV	PASS
5758.48	39.1	51.84	12.710	68.23	16.39	150	140	PK	PASS
11605.23	38.5	41.61	3.100	54.00	12.39	150	250	AV	PASS
12833.78	48.4	52.44	4.060	68.23	15.79	150	270	PK	PASS
16100.92	36.4	41.19	4.830	54.00	12.81	150	170	AV	PASS

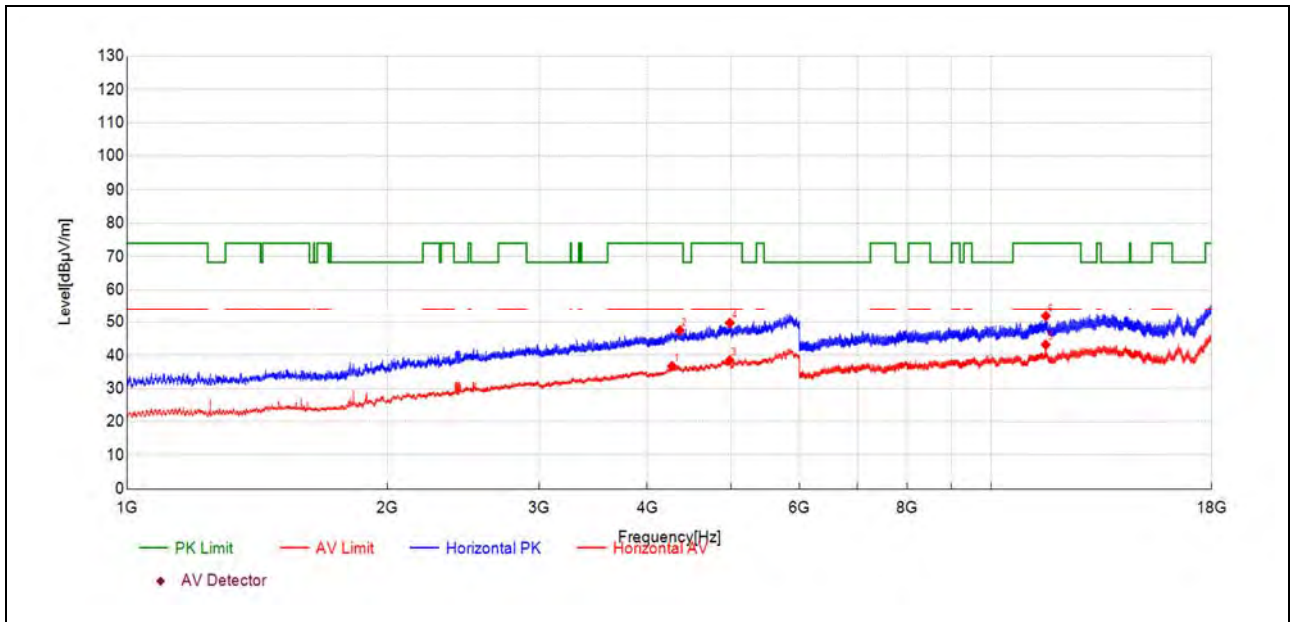


Plot for Channel 157



(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
43.48	45.6	17.16	-28.400	40.00	22.84	150	187	PK	PASS
84.90	55.3	21.23	-34.020	40.00	18.77	150	1	PK	PASS
151.06	60.2	26.92	-33.270	43.50	16.58	150	200	PK	PASS
194.67	56.3	26.68	-29.580	43.50	16.82	150	213	PK	PASS
762.87	53.6	36.58	-16.980	46.00	9.42	150	25	PK	PASS
948.44	48.2	33.87	-14.320	46.00	12.13	150	91	PK	PASS



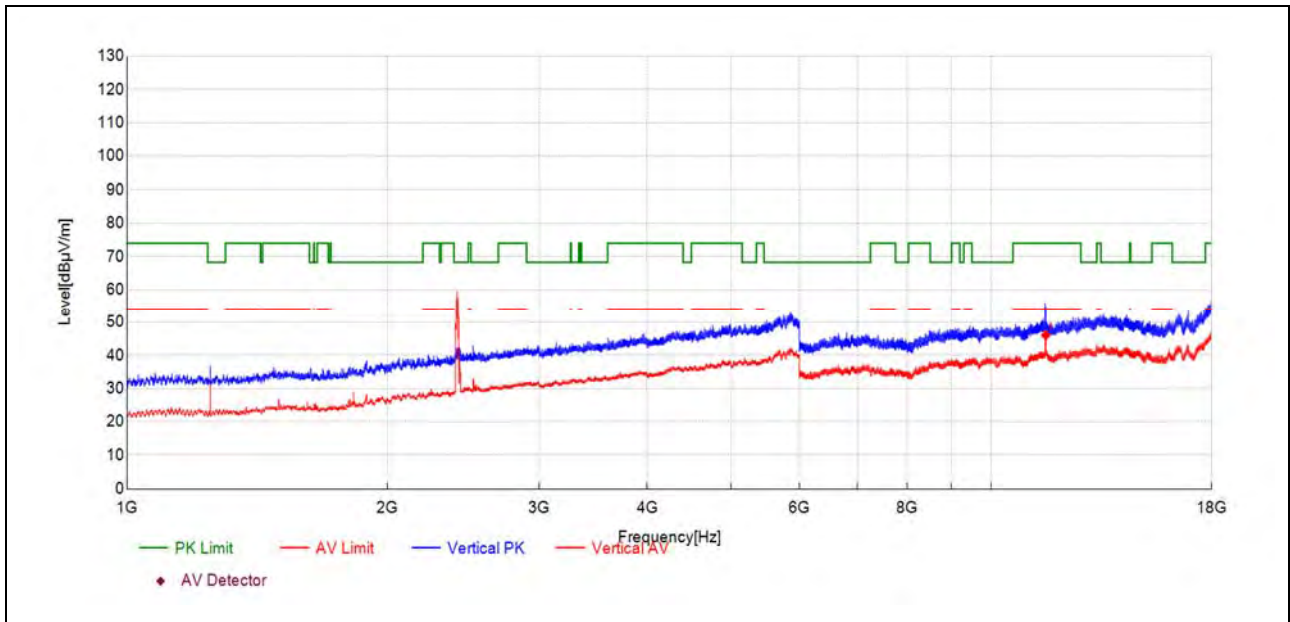
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4272.33	29.6	36.78	7.180	54.00	17.22	150	242	AV	PASS
4363.84	40.1	47.48	7.410	74.00	26.52	150	160	PK	PASS
4982.40	29.2	38.48	9.330	54.00	15.52	150	312	AV	PASS
4984.40	40.4	49.74	9.350	74.00	24.26	150	333	PK	PASS
11565.23	40.3	43.17	2.900	54.00	10.83	150	50	AV	PASS
11569.73	48.9	51.80	2.940	74.00	22.20	150	66	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
86.94	61.7	28.54	-33.170	40.00	11.46	150	227	PK	PASS
153.54	55.0	21.83	-33.140	43.50	21.67	150	360	PK	PASS
195.20	53.0	23.37	-29.610	43.50	20.13	150	335	PK	PASS
331.83	47.6	21.98	-25.630	46.00	24.02	150	360	PK	PASS
782.56	55.1	38.26	-16.820	46.00	7.74	150	11	PK	PASS
948.44	53.3	38.95	-14.320	46.00	7.05	150	240	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
11569.73	43.1	46.06	2.940	54.00	7.94	150	308	AV	PASS

END OF REPORT