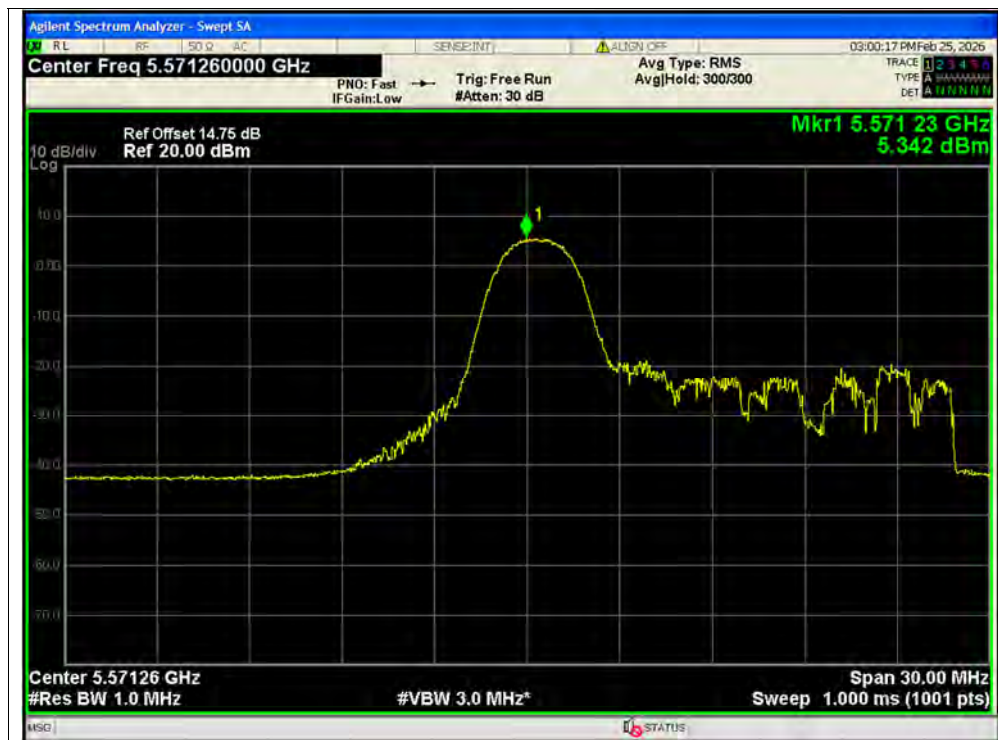




PSD NVNT ax20 26@1 5580MHz Ant1 MIMO



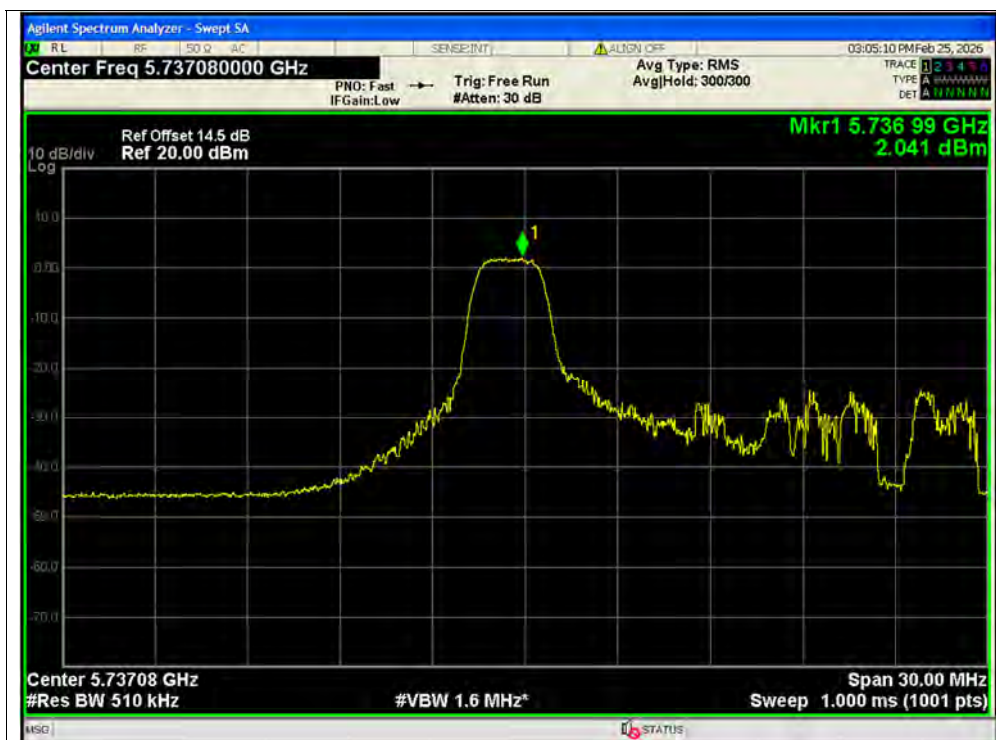
PSD NVNT ax20 26@1 5580MHz Ant2 MIMO



PSD NVNT ax20 26@1 5720MHz Ant1 MIMO



PSD NVNT ax20 26@1 5720MHz Ant2 MIMO

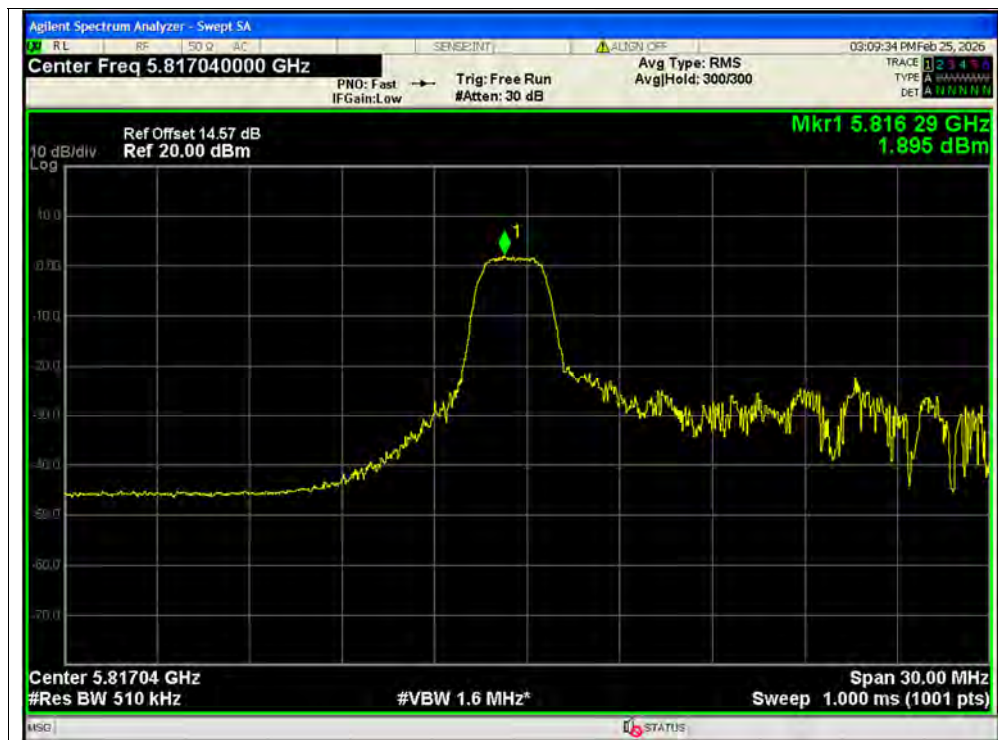


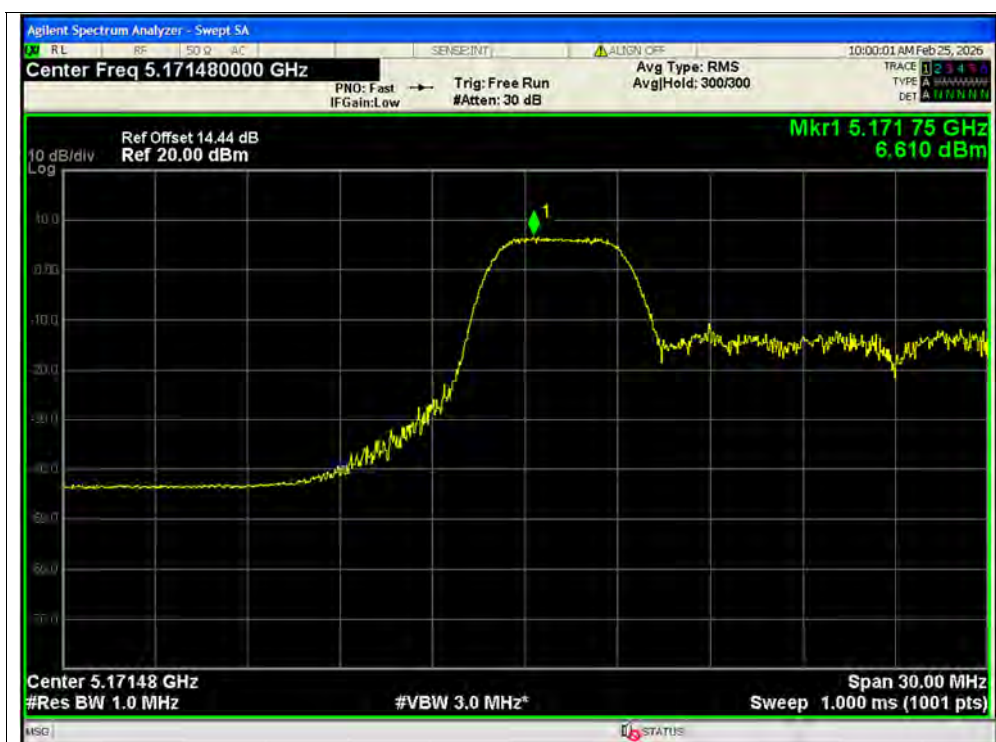
PSD NVNT ax20 26@1 5745MHz Ant1 MIMO

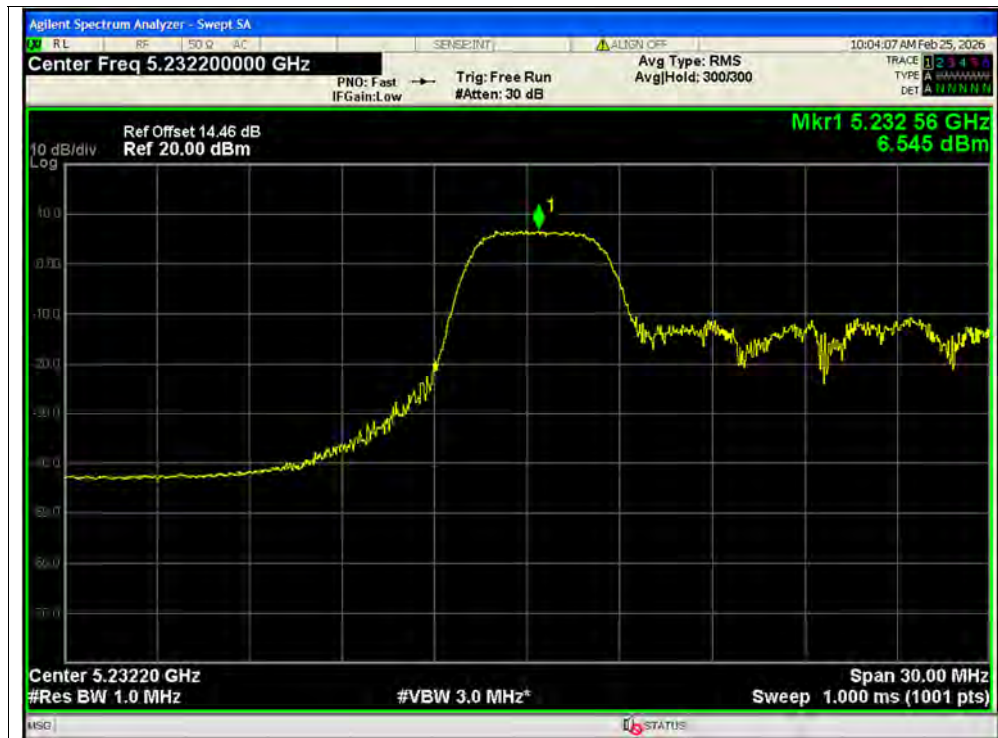


PSD NVNT ax20 26@1 5745MHz Ant2 MIMO









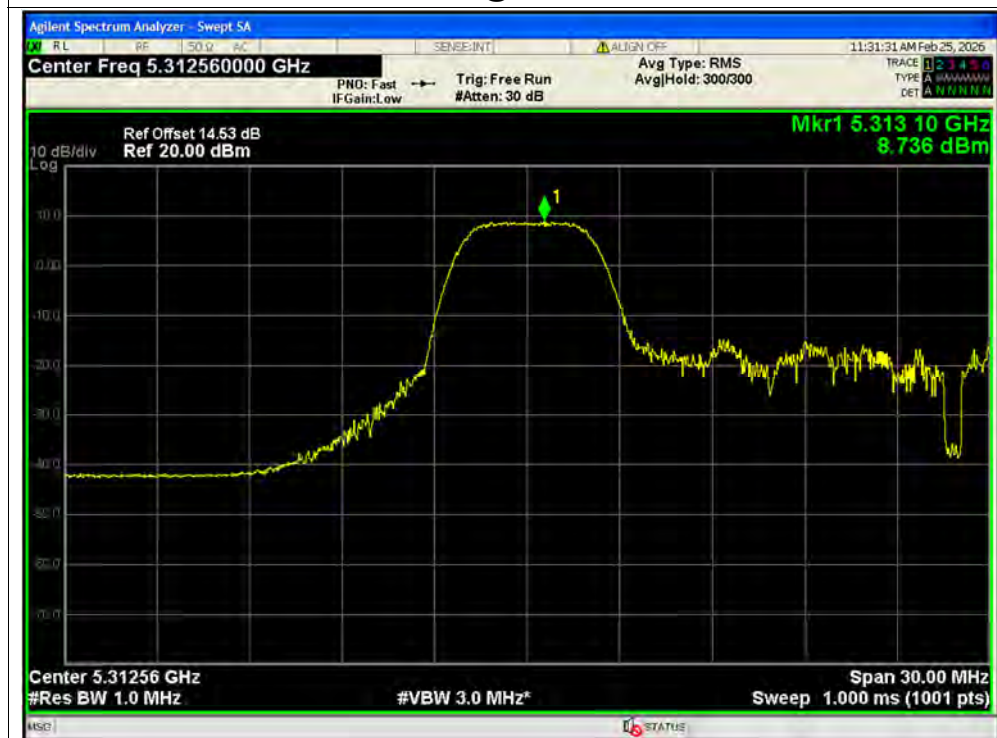
PSD NVNT ax20 52@1 5240MHz Ant1 SISO



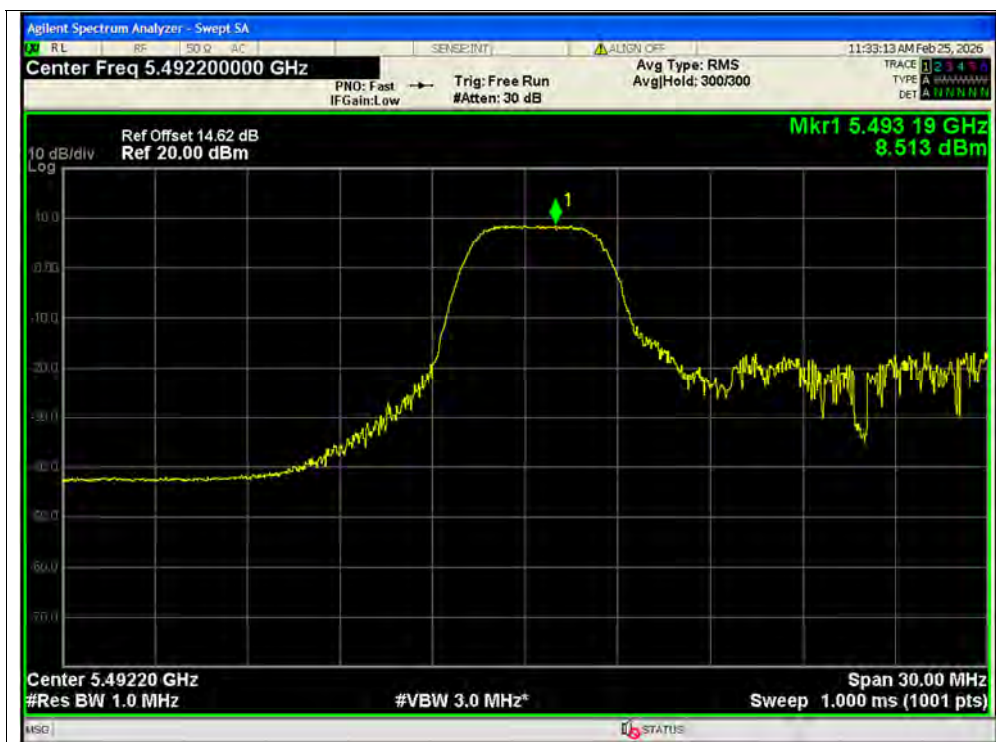
PSD NVNT ax20 52@1 5260MHz Ant1 SISO



PSD NVNT ax20 52@1 5300MHz Ant1 SISO



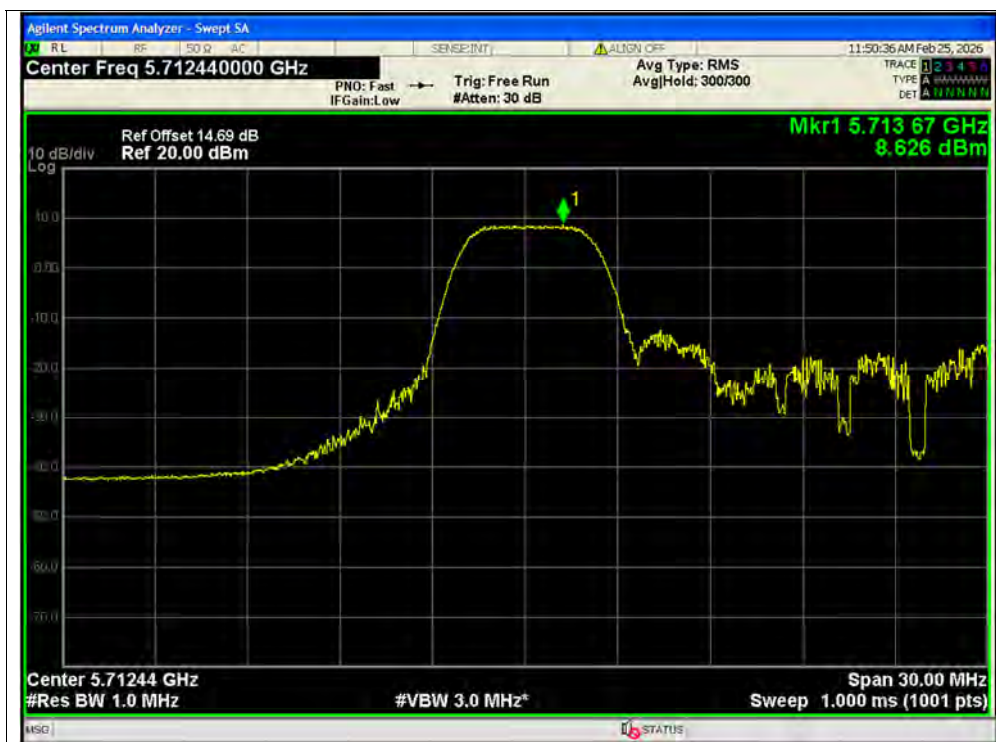
PSD NVNT ax20 52@1 5320MHz Ant1 SISO



PSD NVNT ax20 52@1 5500MHz Ant1 SISO



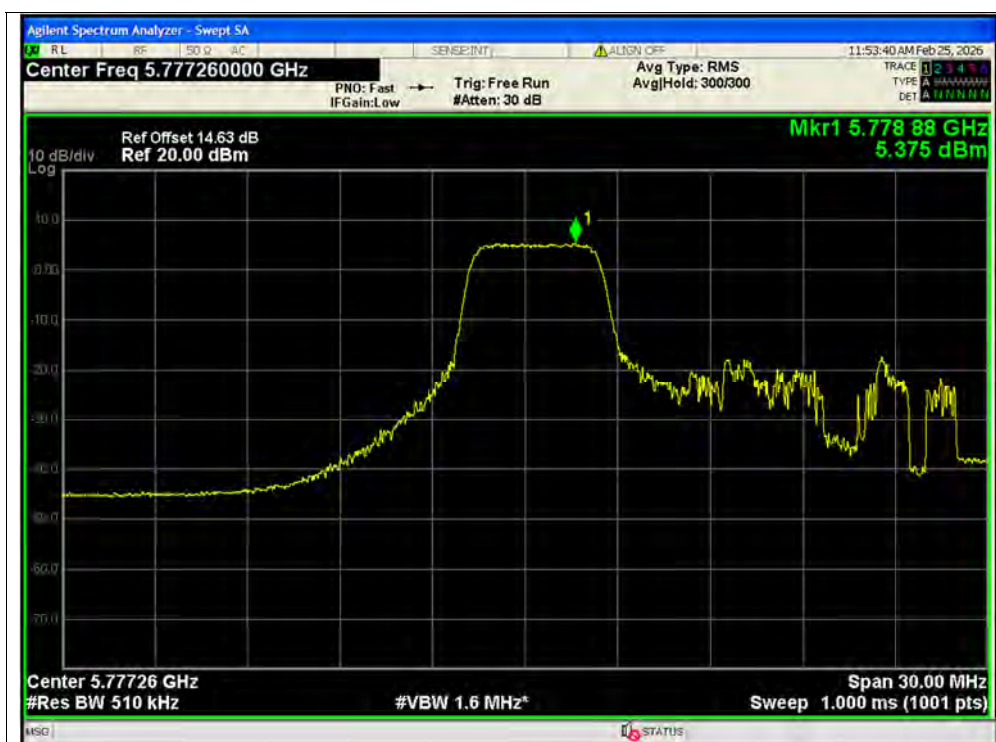
PSD NVNT ax20 52@1 5580MHz Ant1 SISO



PSD NVNT ax20 52@1 5720MHz Ant1 SISO



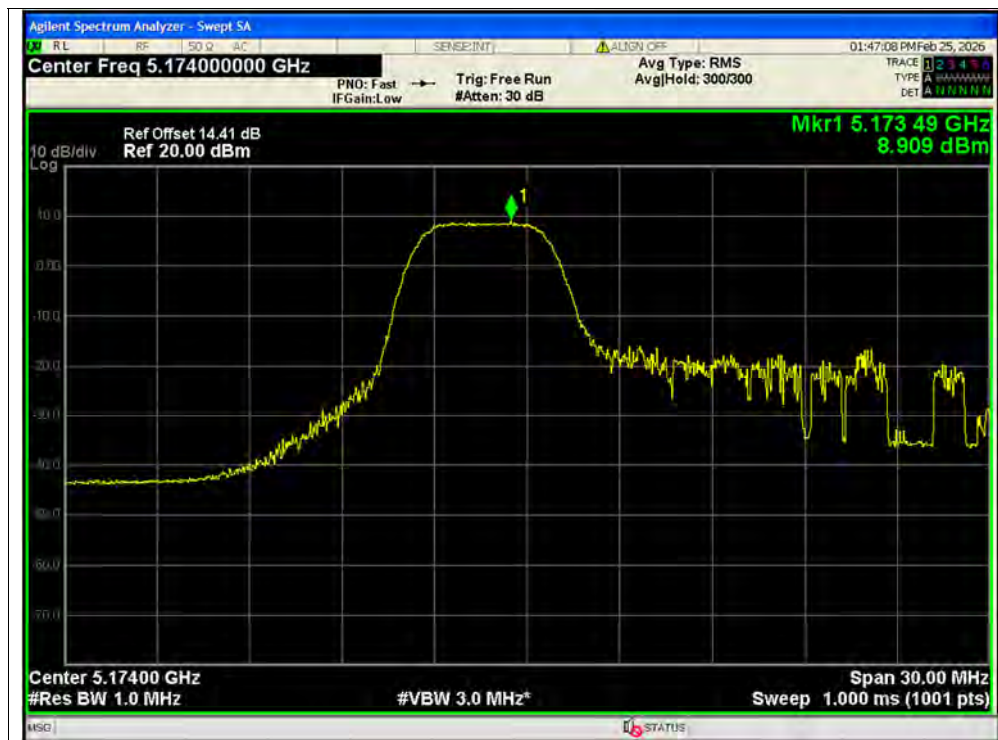
PSD NVNT ax20 52@1 5745MHz Ant1 SISO



PSD NVNT ax20 52@1 5785MHz Ant1 SISO



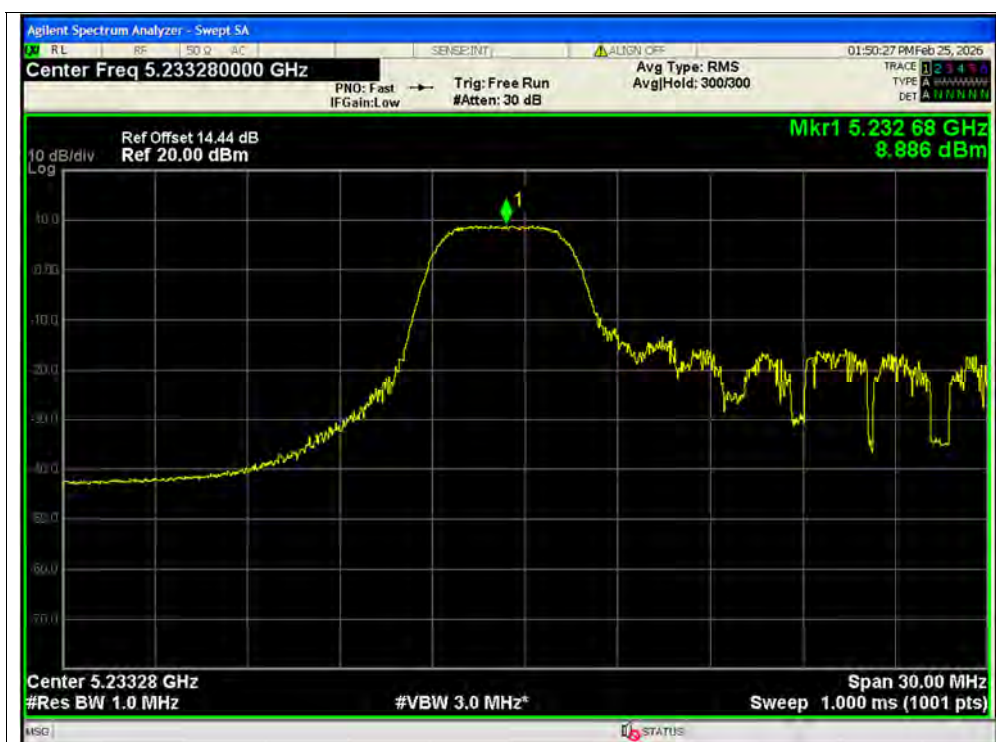
PSD NVNT ax20 52@1 5825MHz Ant1 SISO



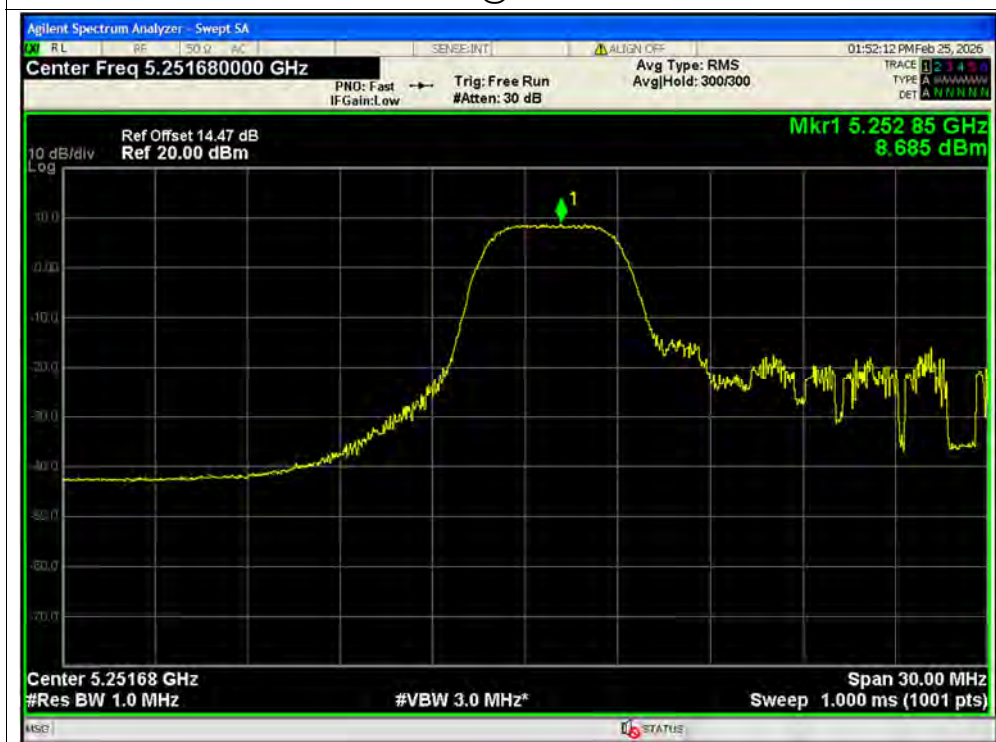
PSD NVNT ax20 52@1 5180MHz Ant2 SISO



PSD NVNT ax20 52@1 5220MHz Ant2 SISO



PSD NVNT ax20 52@1 5240MHz Ant2 SISO



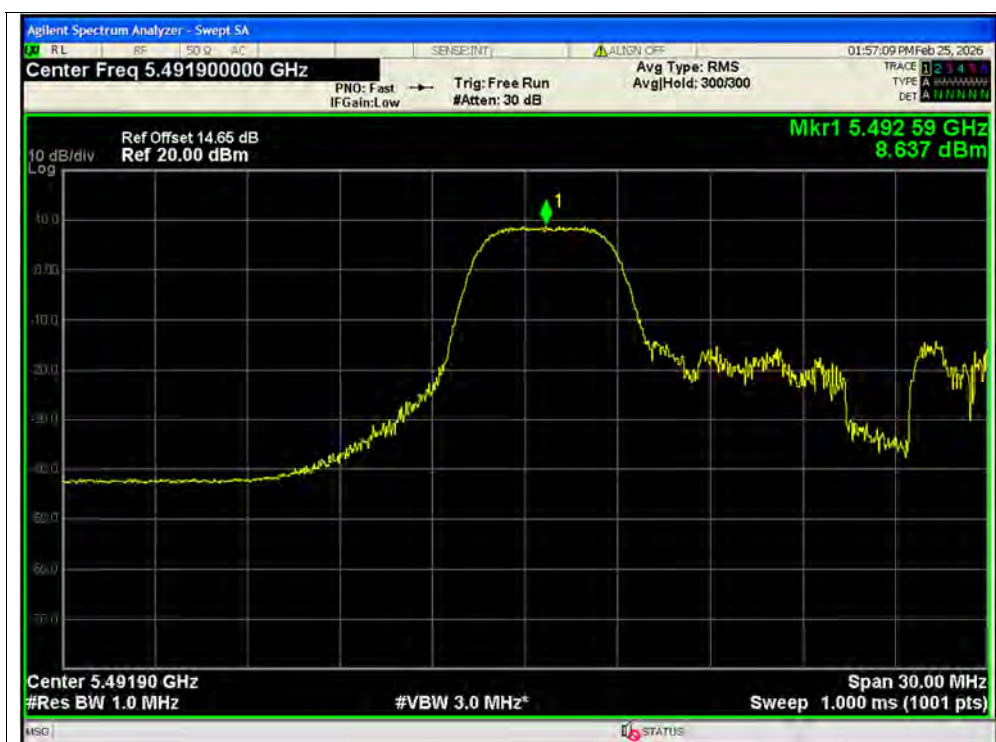
PSD NVNT ax20 52@1 5260MHz Ant2 SISO



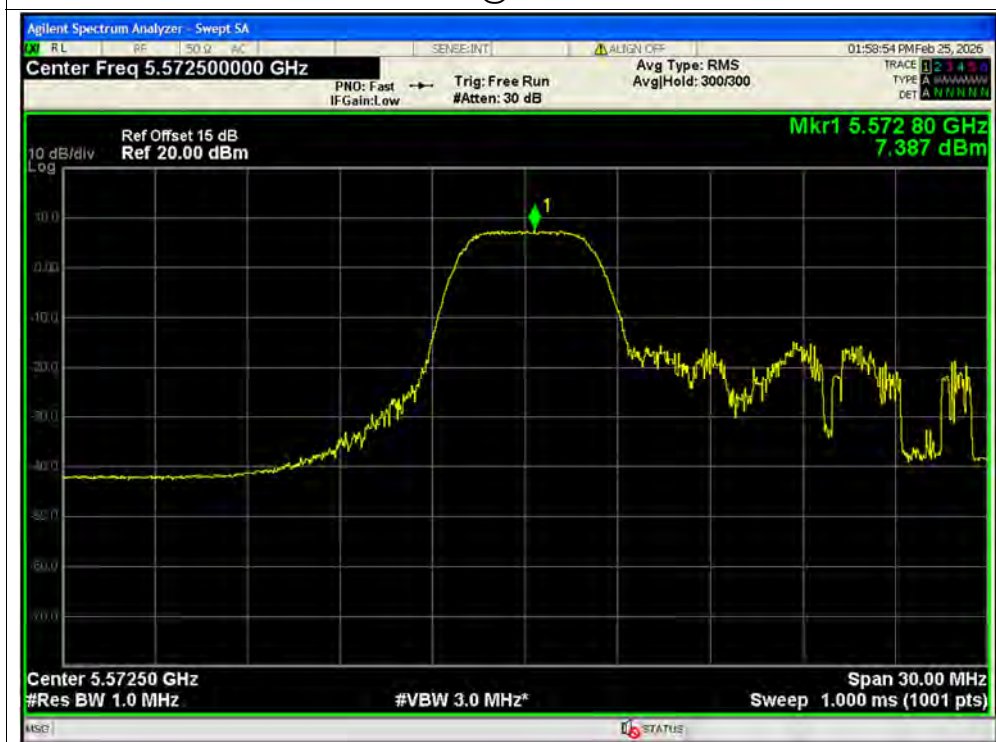
PSD NVNT ax20 52@1 5300MHz Ant2 SISO



PSD NVNT ax20 52@1 5320MHz Ant2 SISO



PSD NVNT ax20 52@1 5500MHz Ant2 SISO



PSD NVNT ax20 52@1 5580MHz Ant2 SISO



PSD NVNT ax20 52@1 5720MHz Ant2 SISO



PSD NVNT ax20 52@1 5745MHz Ant2 SISO



PSD NVNT ax20 52@1 5785MHz Ant2 SISO



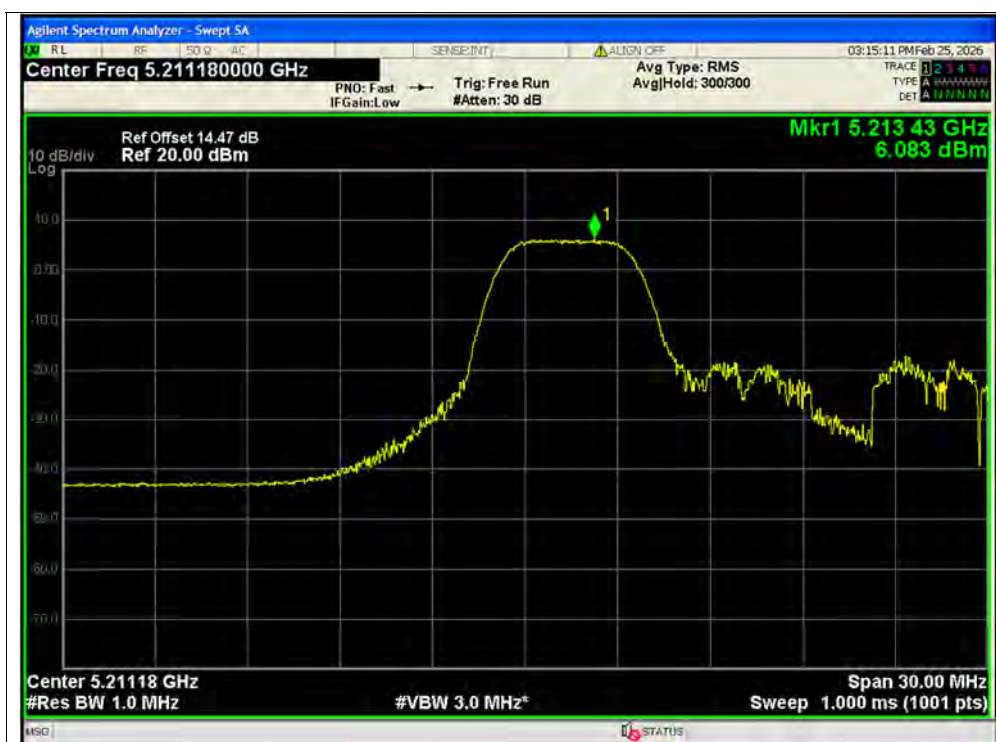
PSD NVNT ax20 52@1 5825MHz Ant2 SISO



PSD NVNT ax20 52@1 5180MHz Ant1 MIMO



PSD NVNT ax20 52@1 5180MHz Ant2 MIMO



PSD NVNT ax20 52@1 5220MHz Ant1 MIMO



PSD NVNT ax20 52@1 5220MHz Ant2 MIMO



PSD NVNT ax20 52@1 5240MHz Ant1 MIMO



PSD NVNT ax20 52@1 5240MHz Ant2 MIMO



PSD NVNT ax20 52@1 5260MHz Ant1 MIMO



PSD NVNT ax20 52@1 5260MHz Ant2 MIMO



PSD NVNT ax20 52@1 5300MHz Ant1 MIMO



PSD NVNT ax20 52@1 5300MHz Ant2 MIMO



PSD NVNT ax20 52@1 5320MHz Ant1 MIMO



PSD NVNT ax20 52@1 5320MHz Ant2 MIMO

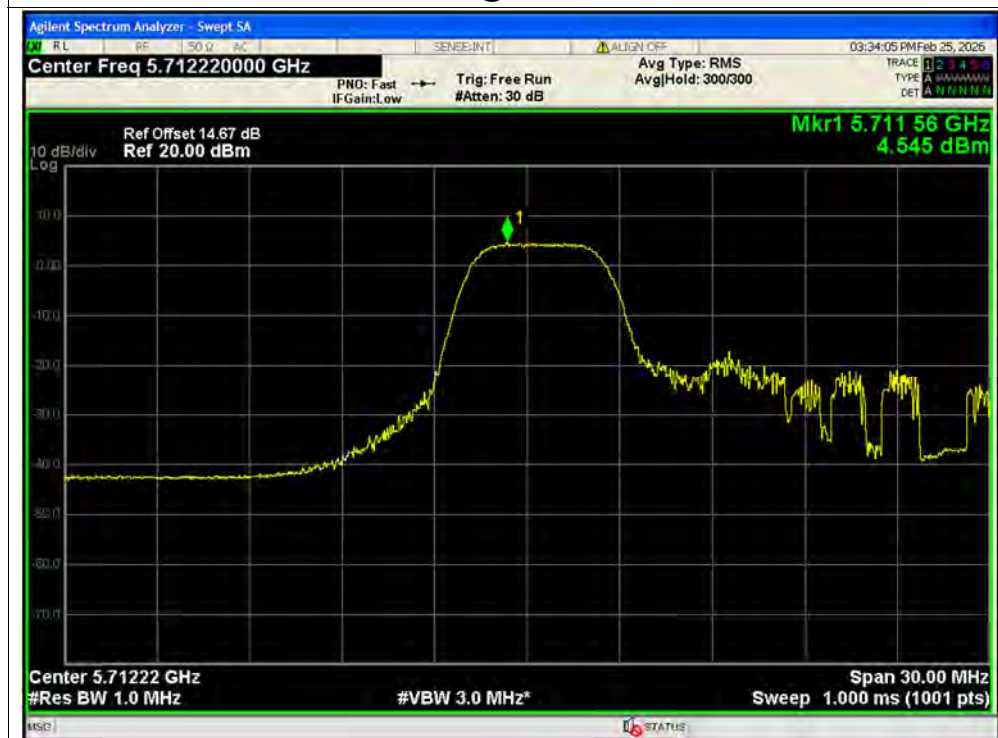


PSD NVNT ax20 52@1 5500MHz Ant1 MIMO



PSD NVNT ax20 52@1 5500MHz Ant2 MIMO



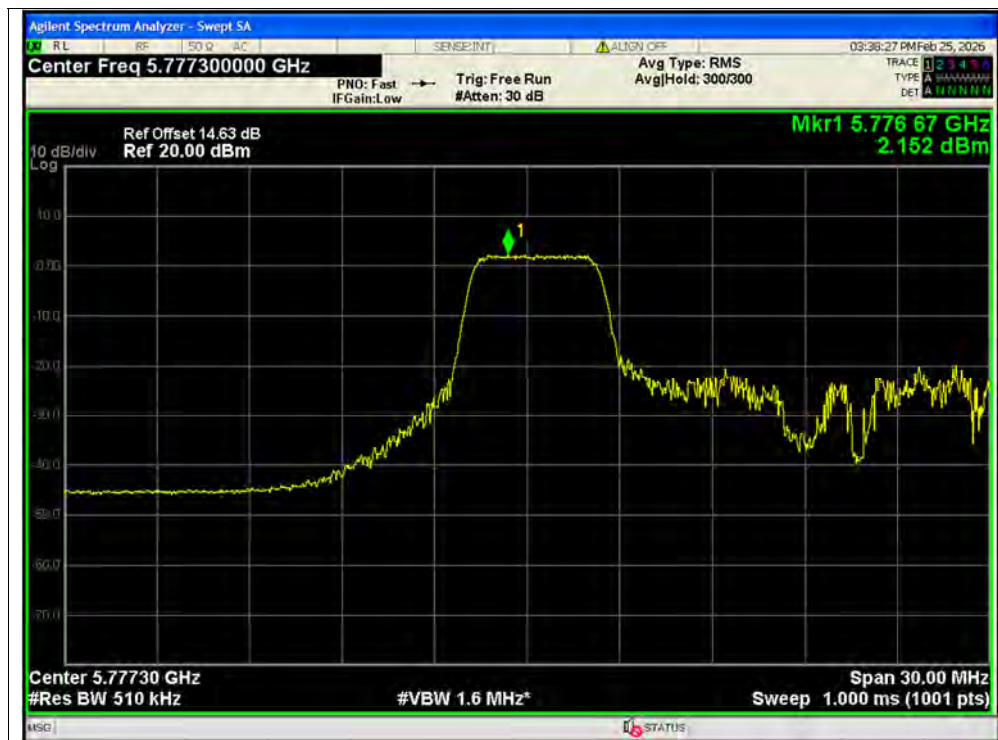




PSD NVNT ax20 52@1 5745MHz Ant1 MIMO



PSD NVNT ax20 52@1 5745MHz Ant2 MIMO





PSD NVNT ax20 52@1 5825MHz Ant1 MIMO



PSD NVNT ax20 52@1 5825MHz Ant2 MIMO



PSD NVNT ax20 106@1 5180MHz Ant1 SISO



PSD NVNT ax20 106@1 5220MHz Ant1 SISO



PSD NVNT ax20 106@1 5240MHz Ant1 SISO



PSD NVNT ax20 106@1 5260MHz Ant1 SISO



PSD NVNT ax20 106@1 5300MHz Ant1 SISO



PSD NVNT ax20 106@1 5320MHz Ant1 SISO



PSD NVNT ax20 106@1 5500MHz Ant1 SISO



PSD NVNT ax20 106@1 5580MHz Ant1 SISO







PSD NVNT ax20 106@1 5180MHz Ant2 SISO



PSD NVNT ax20 106@1 5220MHz Ant2 SISO



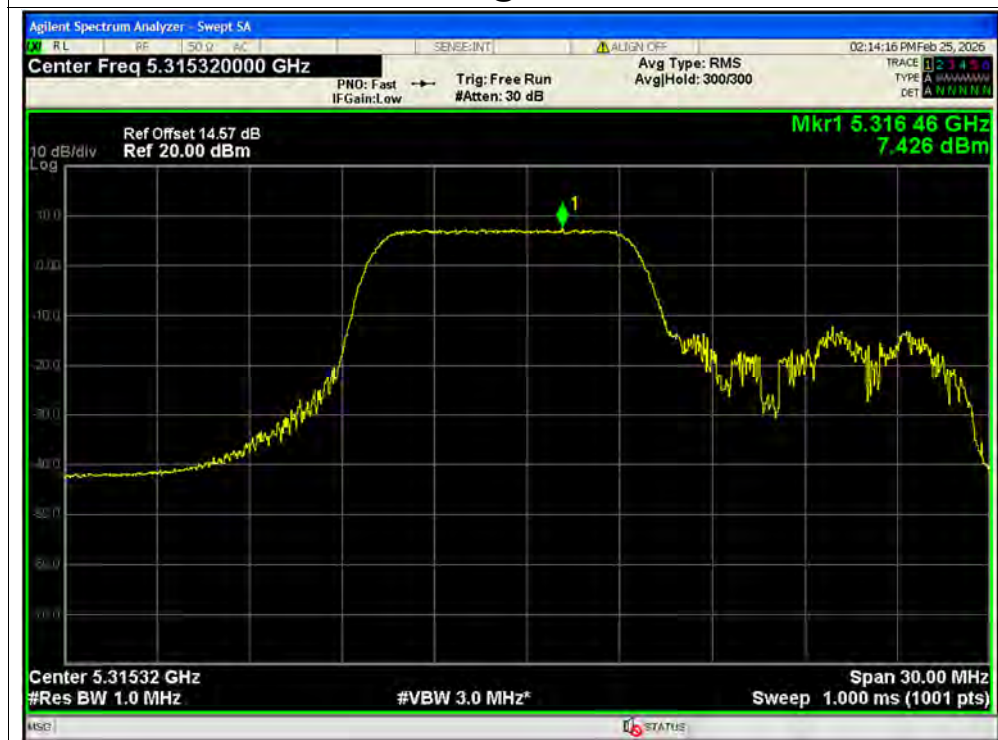
PSD NVNT ax20 106@1 5240MHz Ant2 SISO



PSD NVNT ax20 106@1 5260MHz Ant2 SISO



PSD NVNT ax20 106@1 5300MHz Ant2 SISO



PSD NVNT ax20 106@1 5320MHz Ant2 SISO



PSD NVNT ax20 106@1 5500MHz Ant2 SISO



PSD NVNT ax20 106@1 5580MHz Ant2 SISO



PSD NVNT ax20 106@1 5720MHz Ant2 SISO



PSD NVNT ax20 106@1 5745MHz Ant2 SISO



PSD NVNT ax20 106@1 5785MHz Ant2 SISO



PSD NVNT ax20 106@1 5825MHz Ant2 SISO



PSD NVNT ax20 106@1 5180MHz Ant1 MIMO



PSD NVNT ax20 106@1 5180MHz Ant2 MIMO



PSD NVNT ax20 106@1 5220MHz Ant1 MIMO



PSD NVNT ax20 106@1 5220MHz Ant2 MIMO



PSD NVNT ax20 106@1 5240MHz Ant1 MIMO



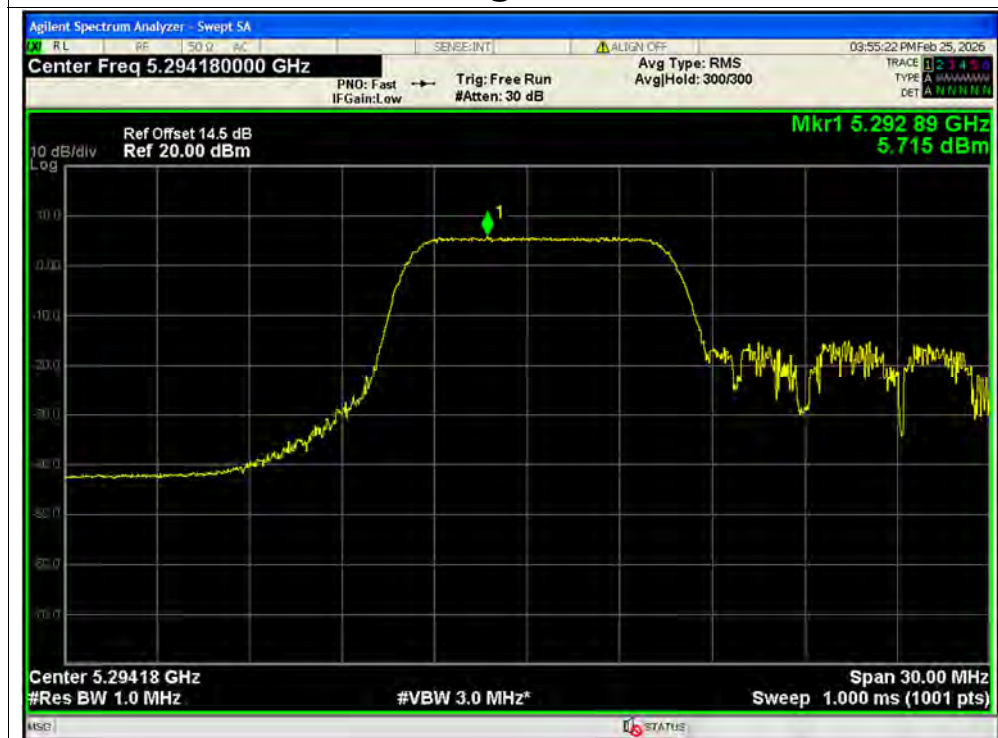
PSD NVNT ax20 106@1 5240MHz Ant2 MIMO



PSD NVNT ax20 106@1 5260MHz Ant1 MIMO

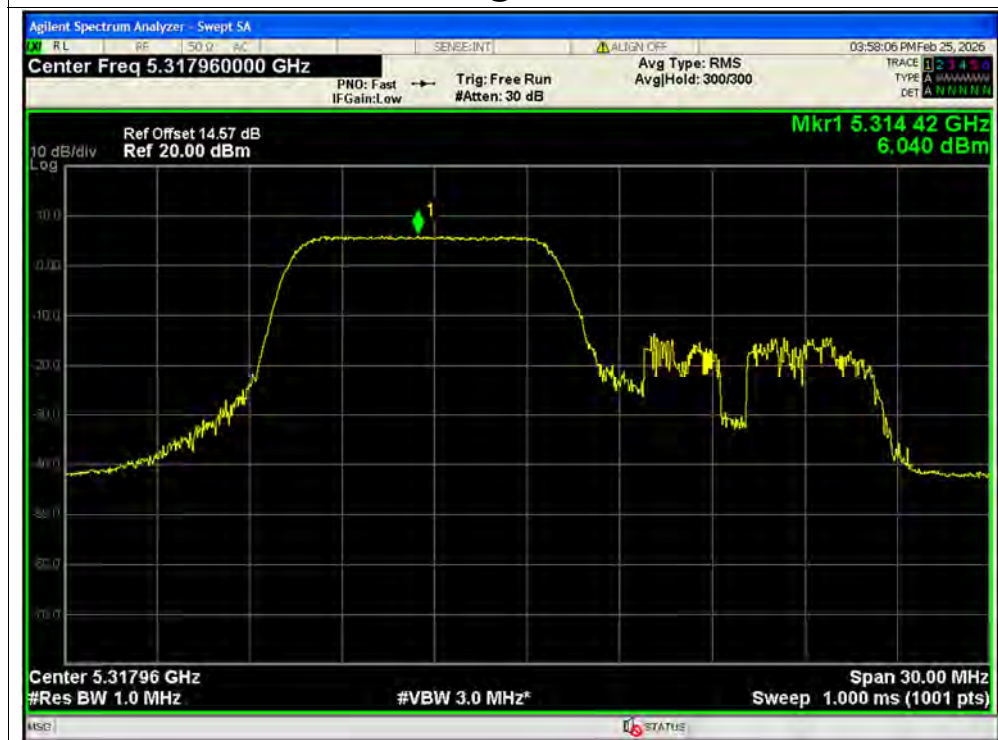


PSD NVNT ax20 106@1 5260MHz Ant2 MIMO





PSD NVNT ax20 106@1 5320MHz Ant1 MIMO



PSD NVNT ax20 106@1 5320MHz Ant2 MIMO





PSD NVNT ax20 106@1 5580MHz Ant1 MIMO



PSD NVNT ax20 106@1 5580MHz Ant2 MIMO



PSD NVNT ax20 106@1 5720MHz Ant1 MIMO



PSD NVNT ax20 106@1 5720MHz Ant2 MIMO



PSD NVNT ax20 106@1 5745MHz Ant1 MIMO



PSD NVNT ax20 106@1 5745MHz Ant2 MIMO



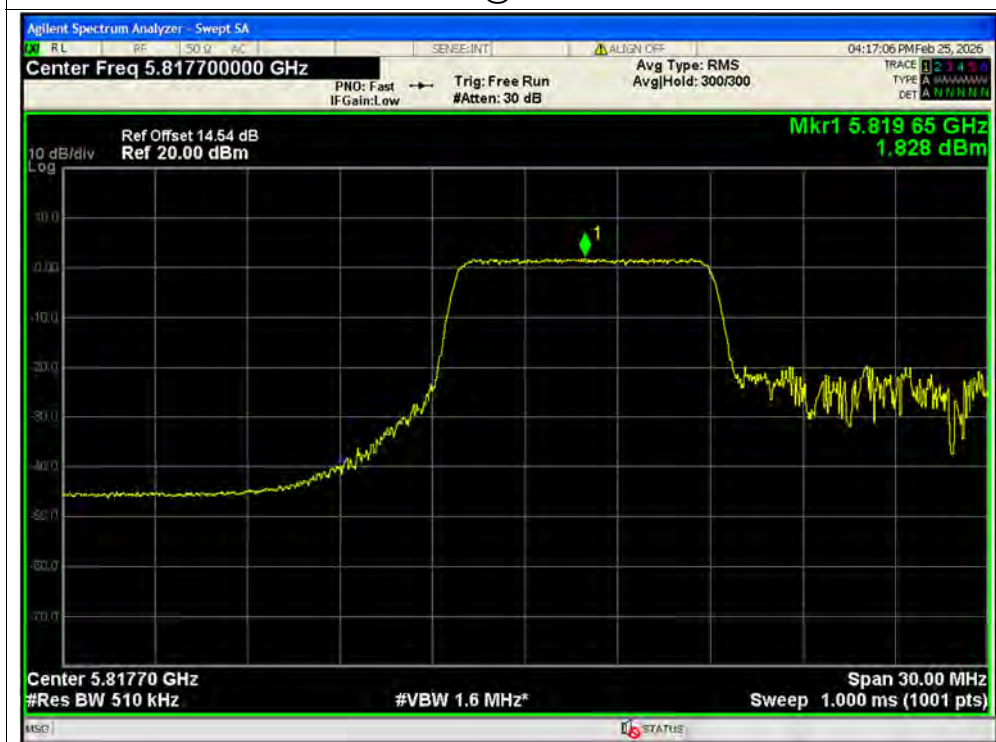
PSD NVNT ax20 106@1 5785MHz Ant1 MIMO



PSD NVNT ax20 106@1 5785MHz Ant2 MIMO



PSD NVNT ax20 106@1 5825MHz Ant1 MIMO



PSD NVNT ax20 106@1 5825MHz Ant2 MIMO



PSD NVNT ax40 26@1 5190MHz Ant1 SISO



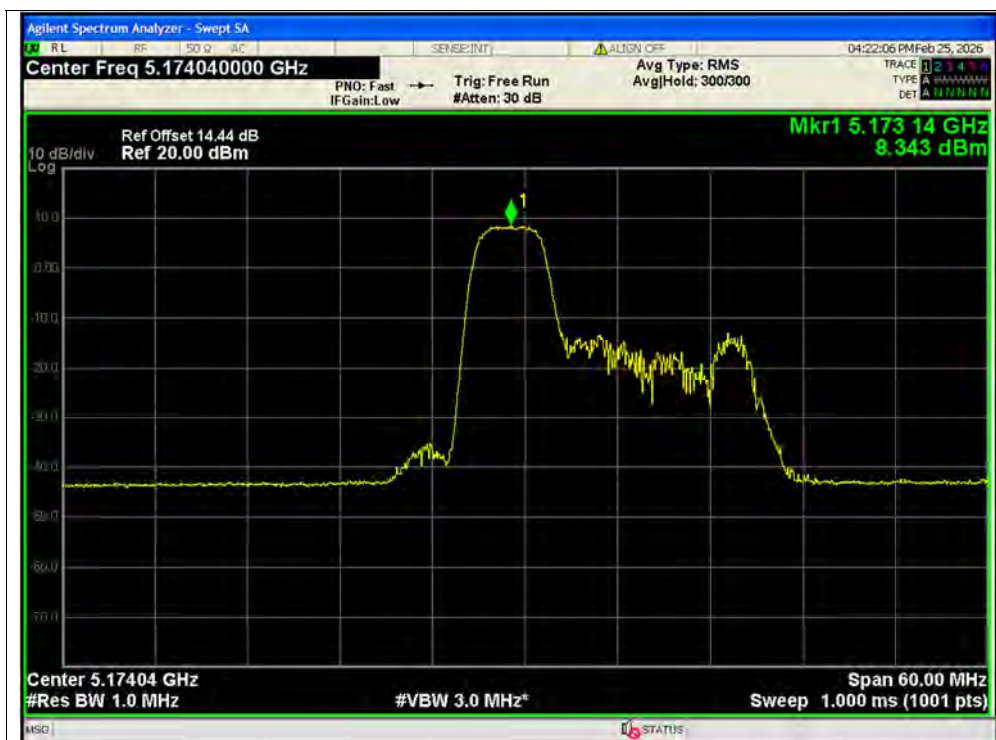
PSD NVNT ax40 26@1 5190MHz Ant2 SISO



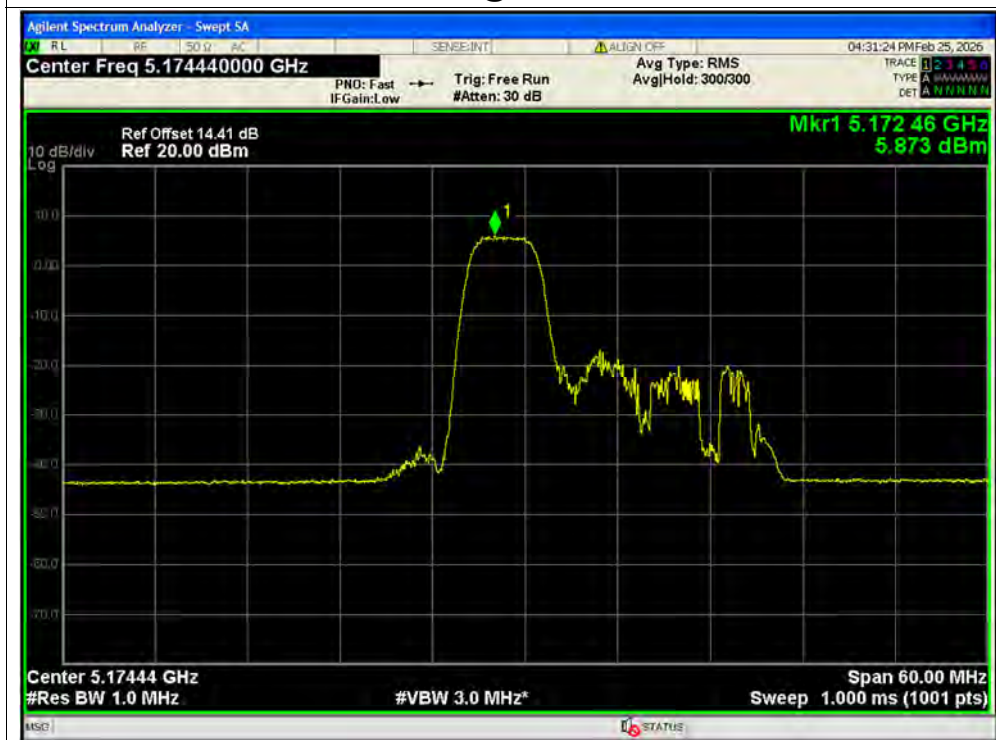
PSD NVNT ax40 26@1 5190MHz Ant1 MIMO



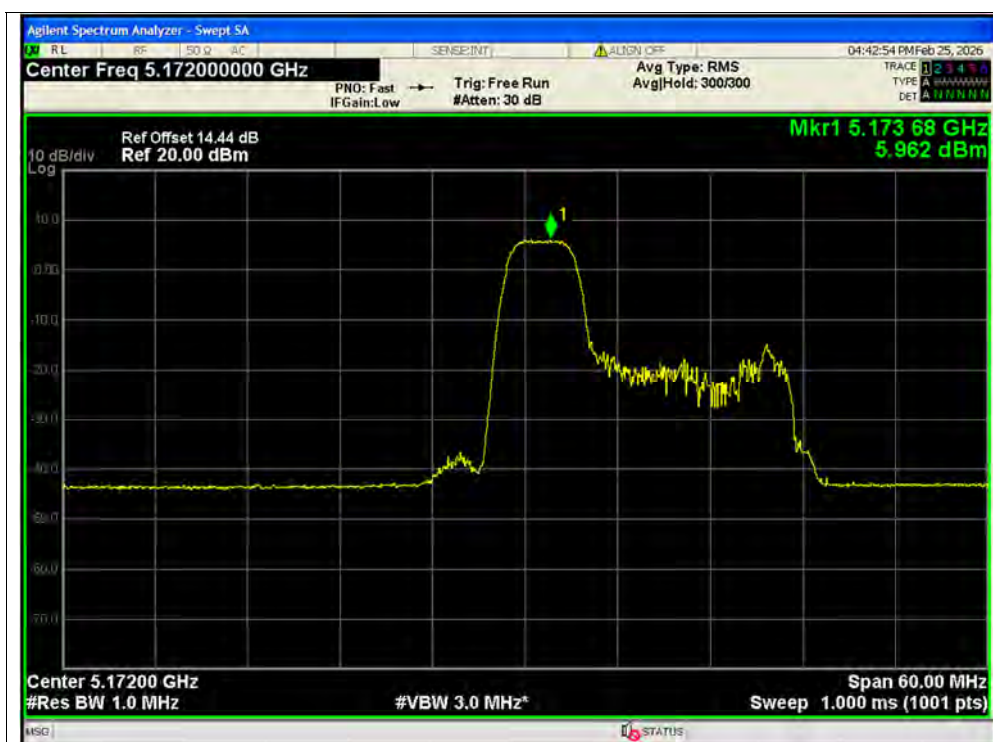
PSD NVNT ax40 26@1 5190MHz Ant2 MIMO



PSD NVNT ax40 52@1 5190MHz Ant1 SISO



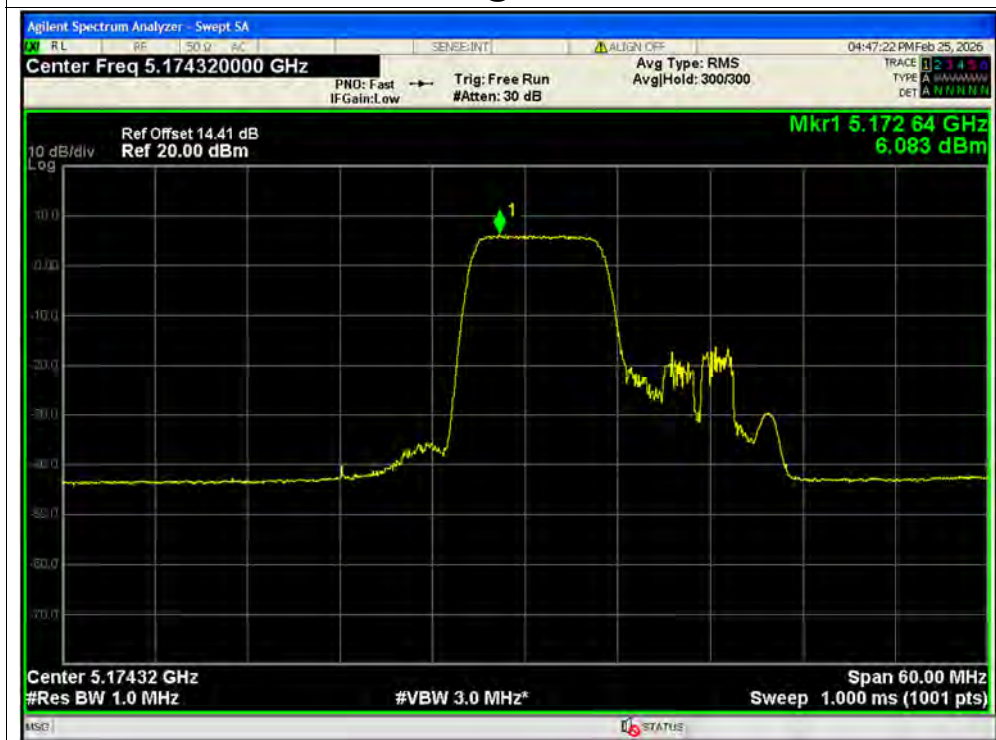
PSD NVNT ax40 52@1 5190MHz Ant2 SISO







PSD NVNT ax40 106@1 5190MHz Ant1 MIMO



PSD NVNT ax40 106@1 5190MHz Ant2 MIMO



PSD NVNT ax40 242@1 5190MHz Ant1 SISO



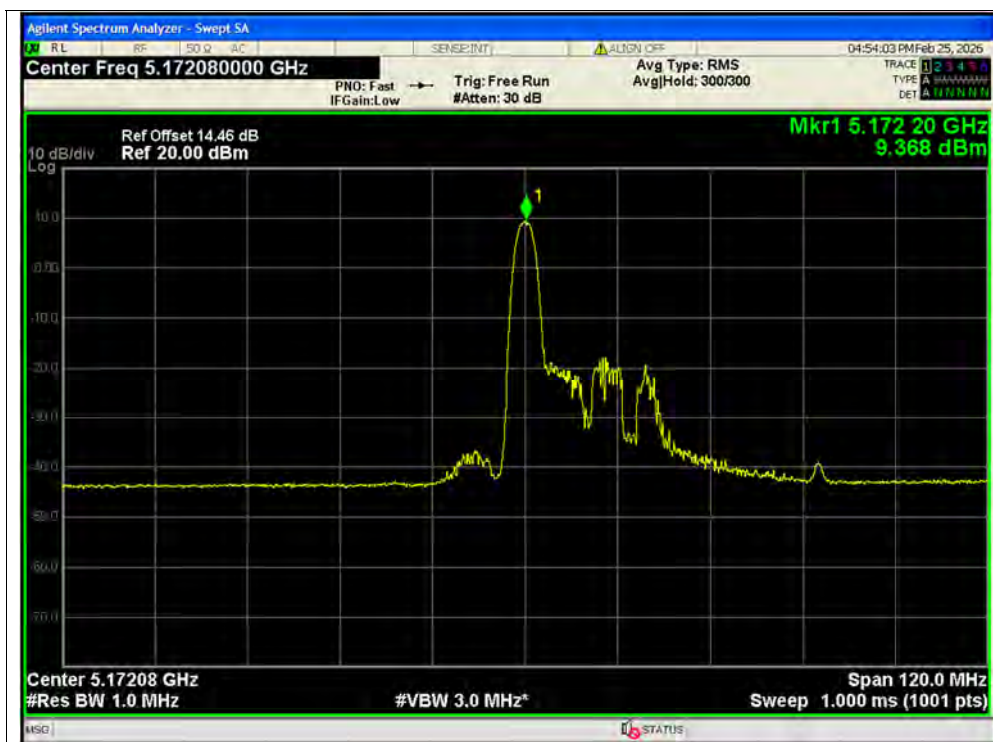
PSD NVNT ax40 242@1 5190MHz Ant2 SISO



PSD NVNT ax40 242@1 5190MHz Ant1 MIMO



PSD NVNT ax40 242@1 5190MHz Ant2 MIMO



PSD NVNT ax80 26@1 5210MHz Ant1 SISO



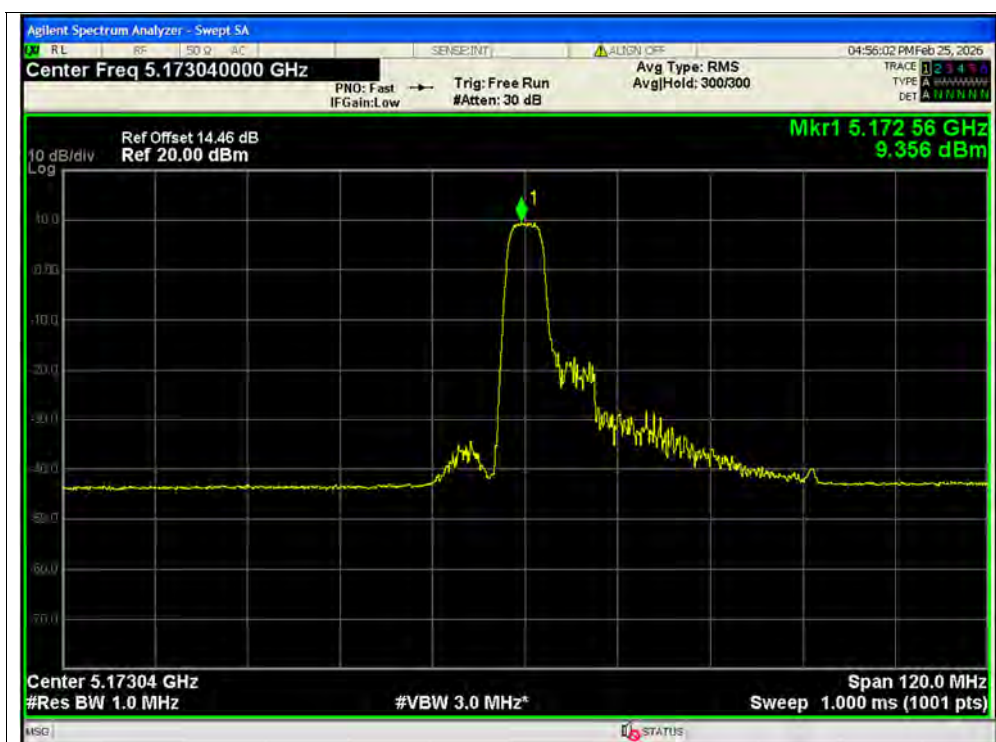
PSD NVNT ax80 26@1 5210MHz Ant2 SISO



PSD NVNT ax80 26@1 5210MHz Ant1 MIMO



PSD NVNT ax80 26@1 5210MHz Ant2 MIMO

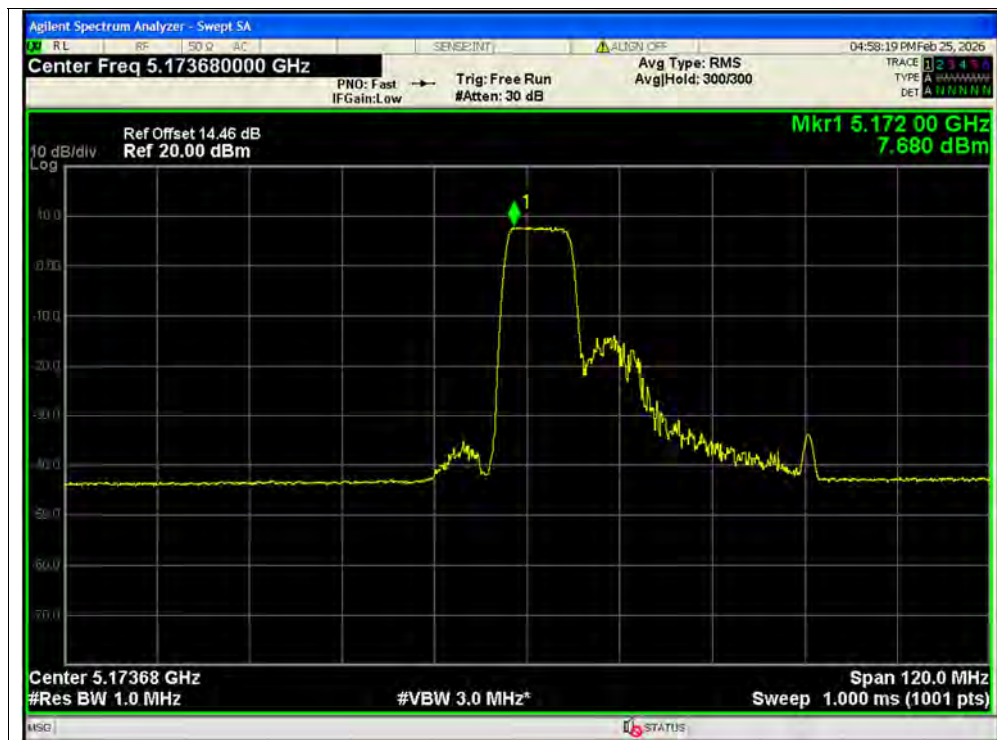




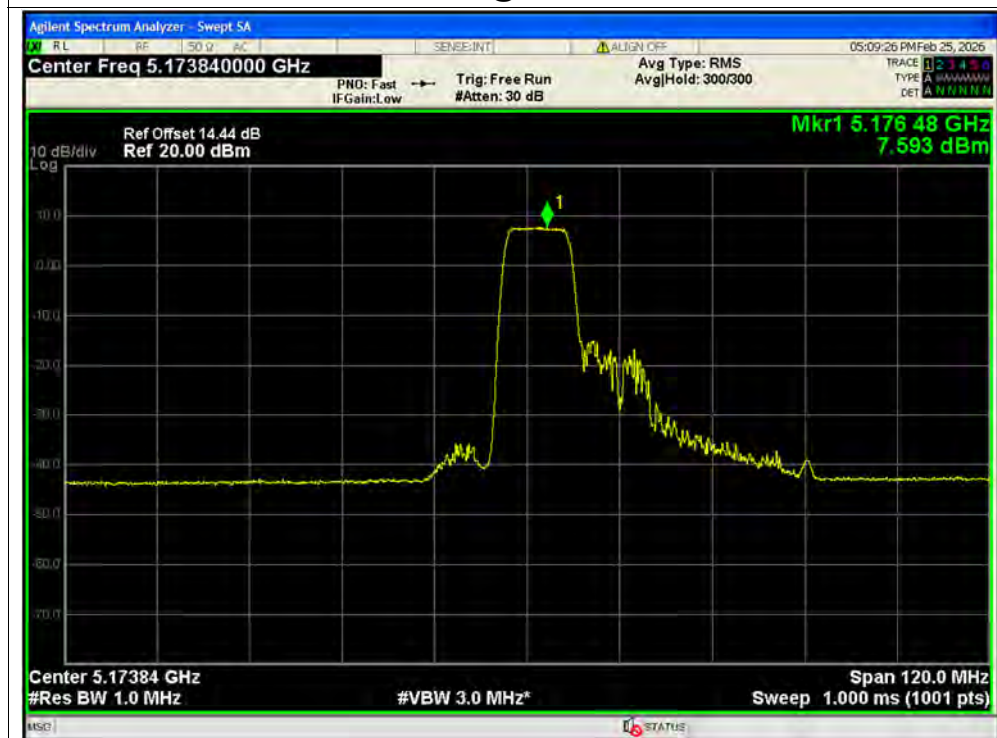
PSD NVNT ax80 52@1 5210MHz Ant1 MIMO



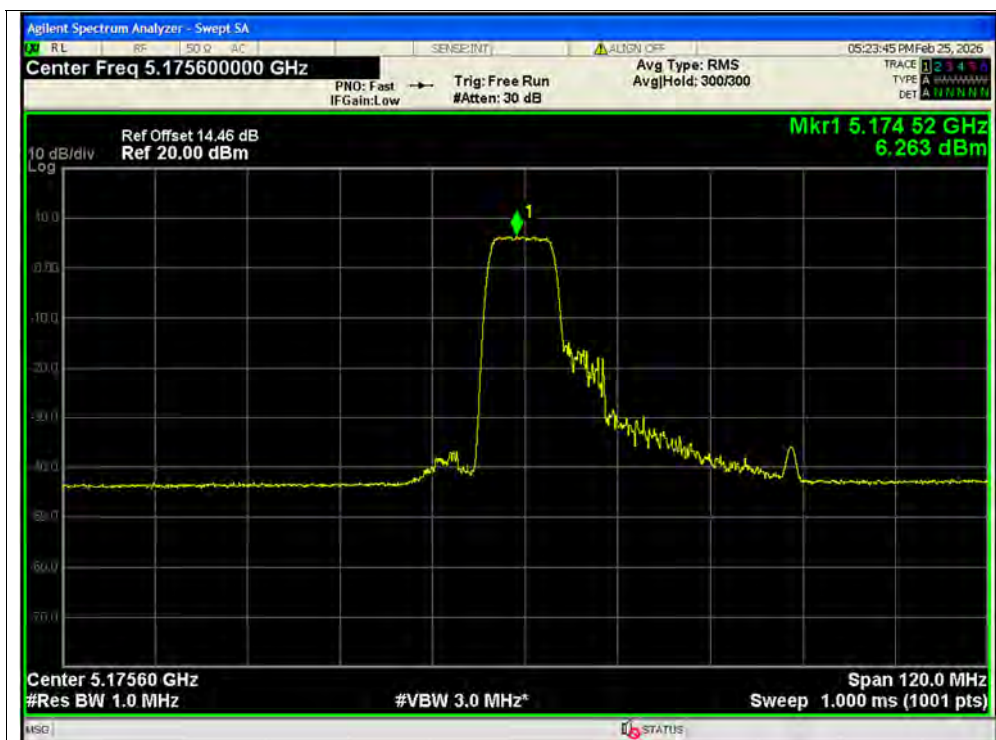
PSD NVNT ax80 52@1 5210MHz Ant2 MIMO



PSD NVNT ax80 106@1 5210MHz Ant1 SISO



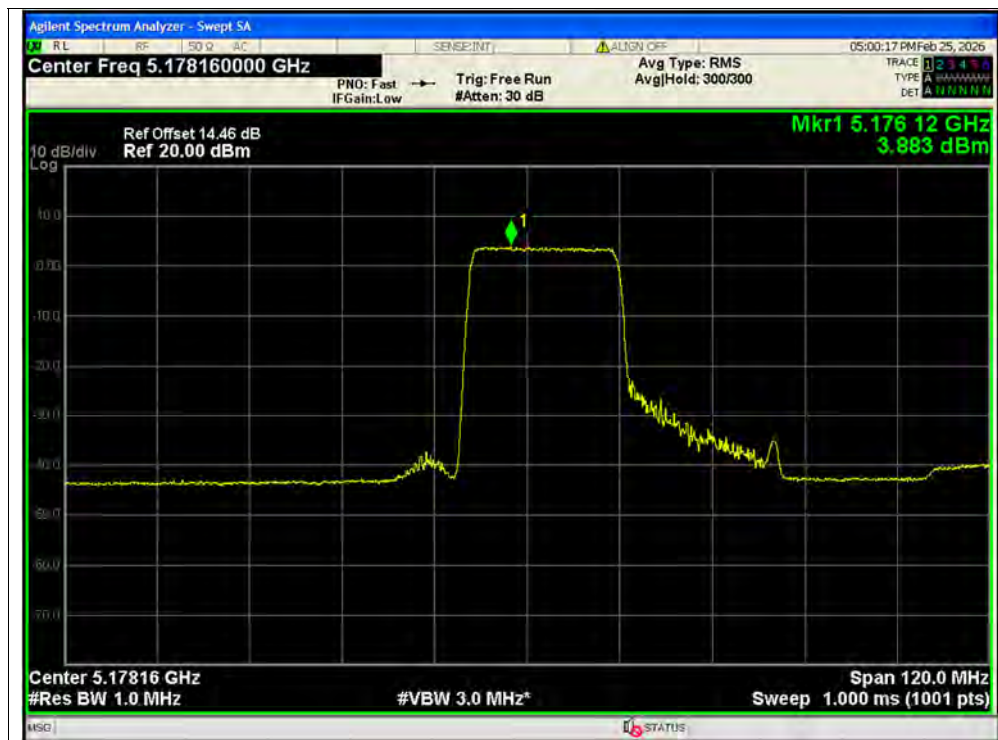
PSD NVNT ax80 106@1 5210MHz Ant2 SISO



PSD NVNT ax80 106@1 5210MHz Ant1 MIMO



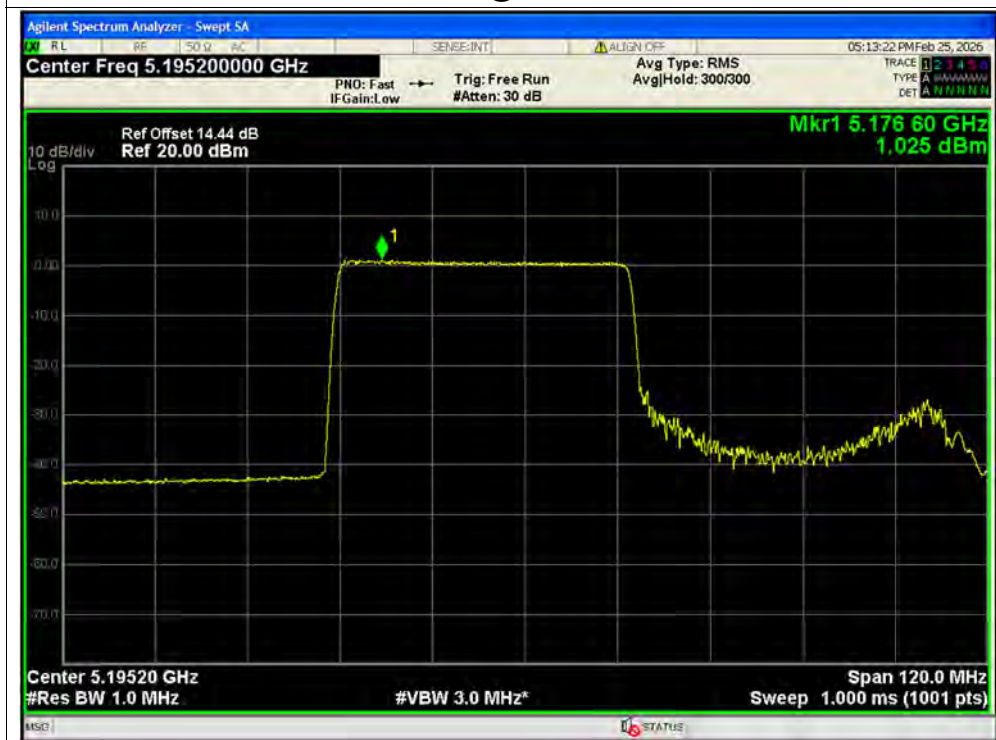
PSD NVNT ax80 106@1 5210MHz Ant2 MIMO







PSD NVNT ax80 484@1 5210MHz Ant1 SISO



PSD NVNT ax80 484@1 5210MHz Ant2 SISO



**A.5. Frequency Stability**

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 3.4V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
20C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
20C 4.2V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
-20C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
-10C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
0C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
10C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
30C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
40C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
50C 3.6V	CW SISO	5180	Ant1	5180.059	59000	11.39	25	Pass
20C 3.4V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
20C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
20C 4.2V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
-20C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
-10C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
0C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
10C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
30C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
40C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
50C 3.6V	CW SISO	5260	Ant1	5260.059	59000	11.22	25	Pass
20C 3.4V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
20C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
20C 4.2V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
-20C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
-10C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
0C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
10C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
30C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
40C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
50C 3.6V	CW SISO	5500	Ant1	5500.06	60000	10.91	25	Pass
20C 3.4V	CW SISO	5745	Ant1	5745.062	62000	10.79	25	Pass
20C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass
20C 4.2V	CW SISO	5745	Ant1	5745.062	62000	10.79	25	Pass
-20C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass



REPORT No.: SZ25120367W04

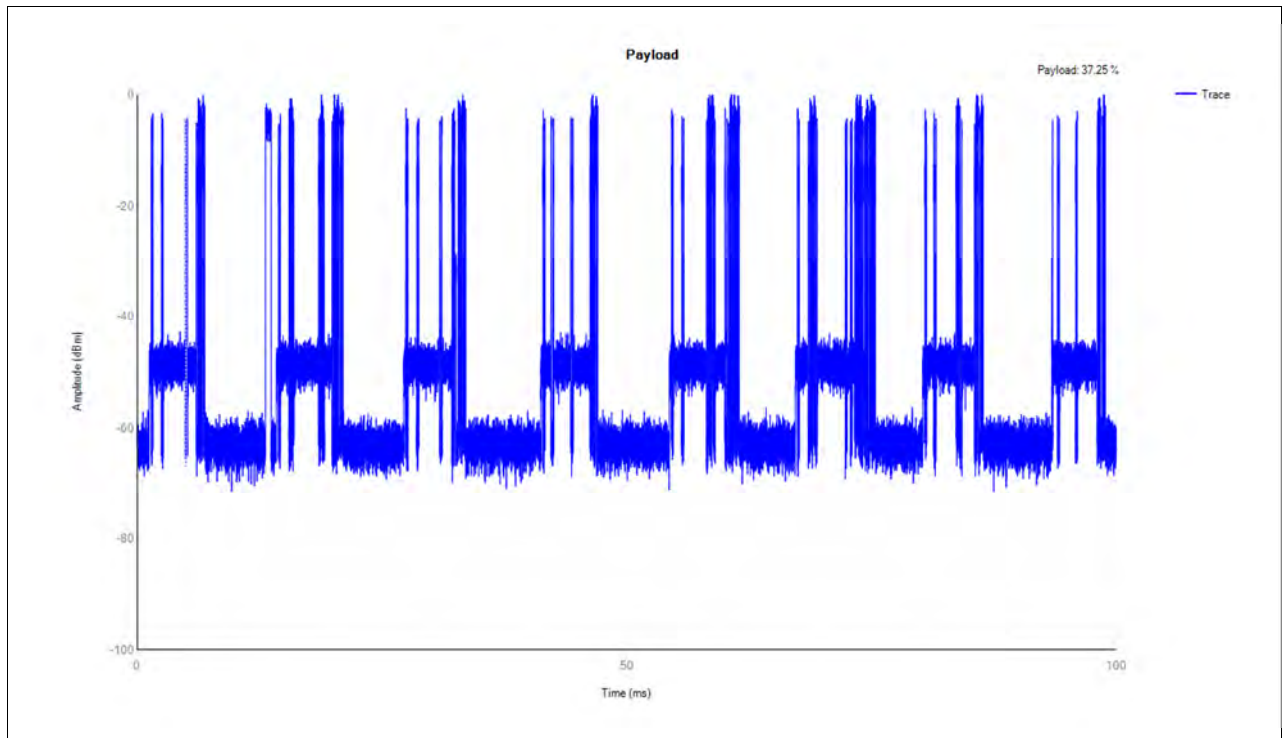
-10C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass
0C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass
10C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass
30C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass
40C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass
50C 3.6V	CW SISO	5745	Ant1	5745.061	61000	10.62	25	Pass



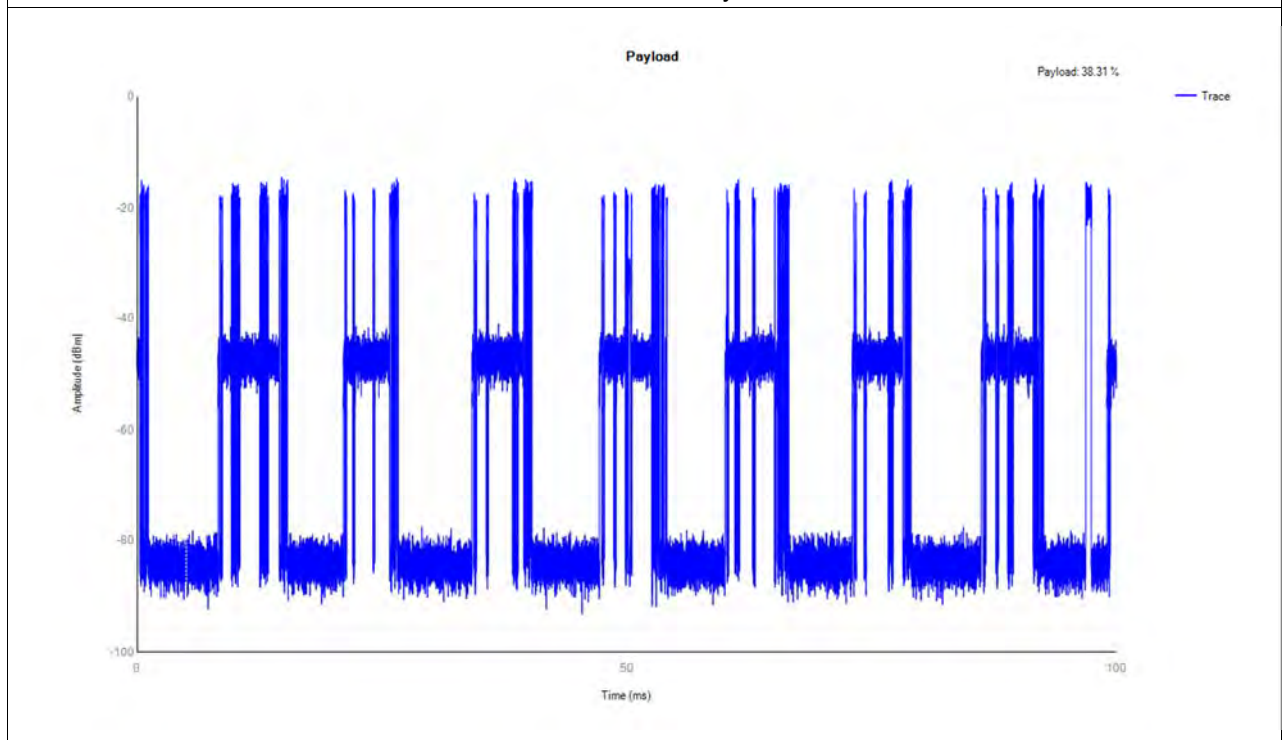
**A.6. Dynamic Frequency Selection**

Payload

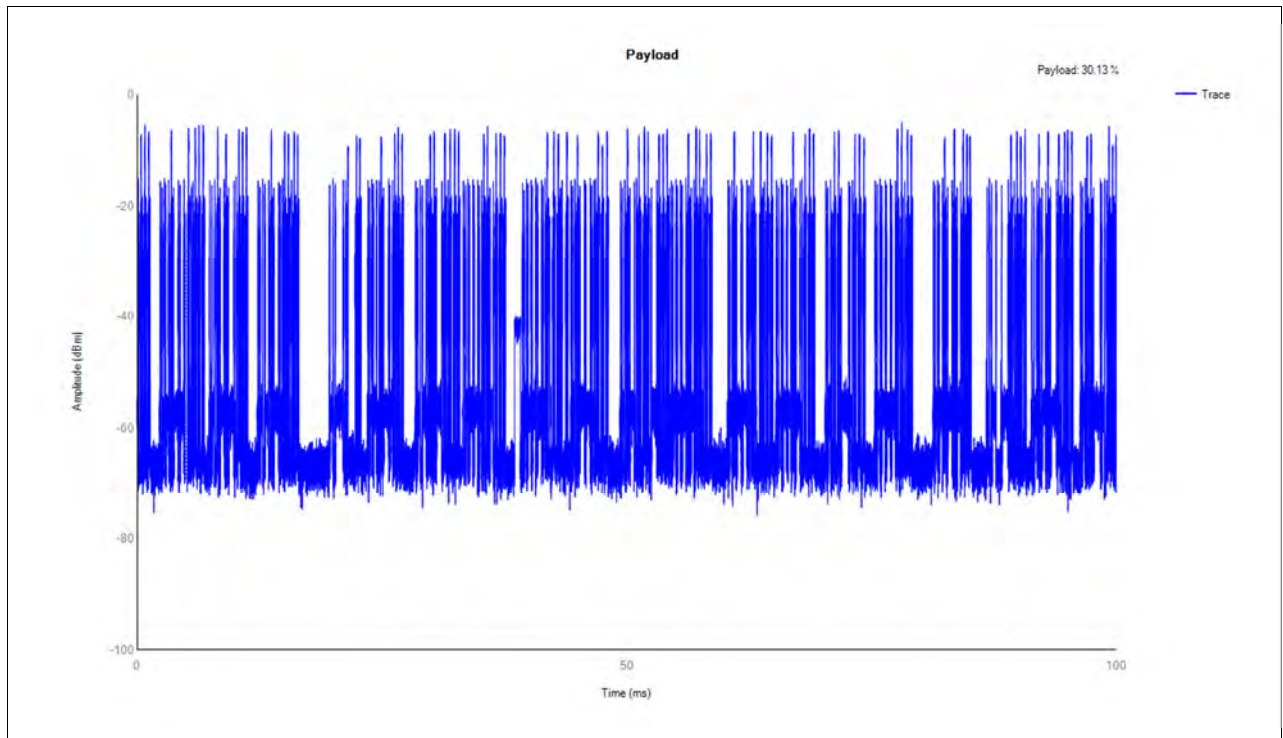
Mode	Frequency (MHz)	Result	Verdict	SISO
ax20	5320	37.25	Pass	SISO
ax20	5500	38.31	Pass	SISO
ax80	5290	30.13	Pass	SISO
ax80	5530	48.51	Pass	SISO



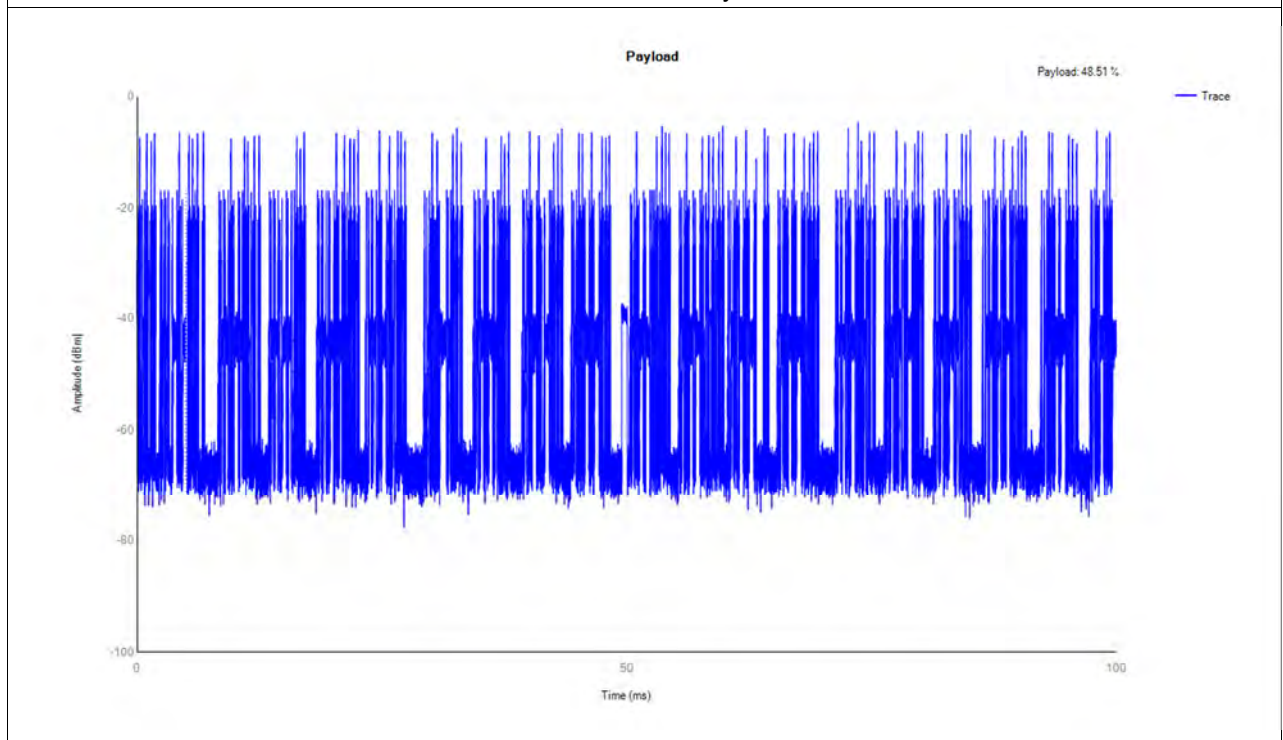
ax20 5320MHz Payload



ax20 5500MHz Payload



ax80 5290MHz Payload



ax80 5530MHz Payload



Detection Thresholds

Mode	Frequency (MHz)	Type	Result	Verdict
ax20	5320	DFS_FCC_T0	See test Graph	Pass
ax20	5500	DFS_FCC_T0	See test Graph	Pass
ax80	5290	DFS_FCC_T0	See test Graph	Pass
ax80	5530	DFS_FCC_T0	See test Graph	Pass

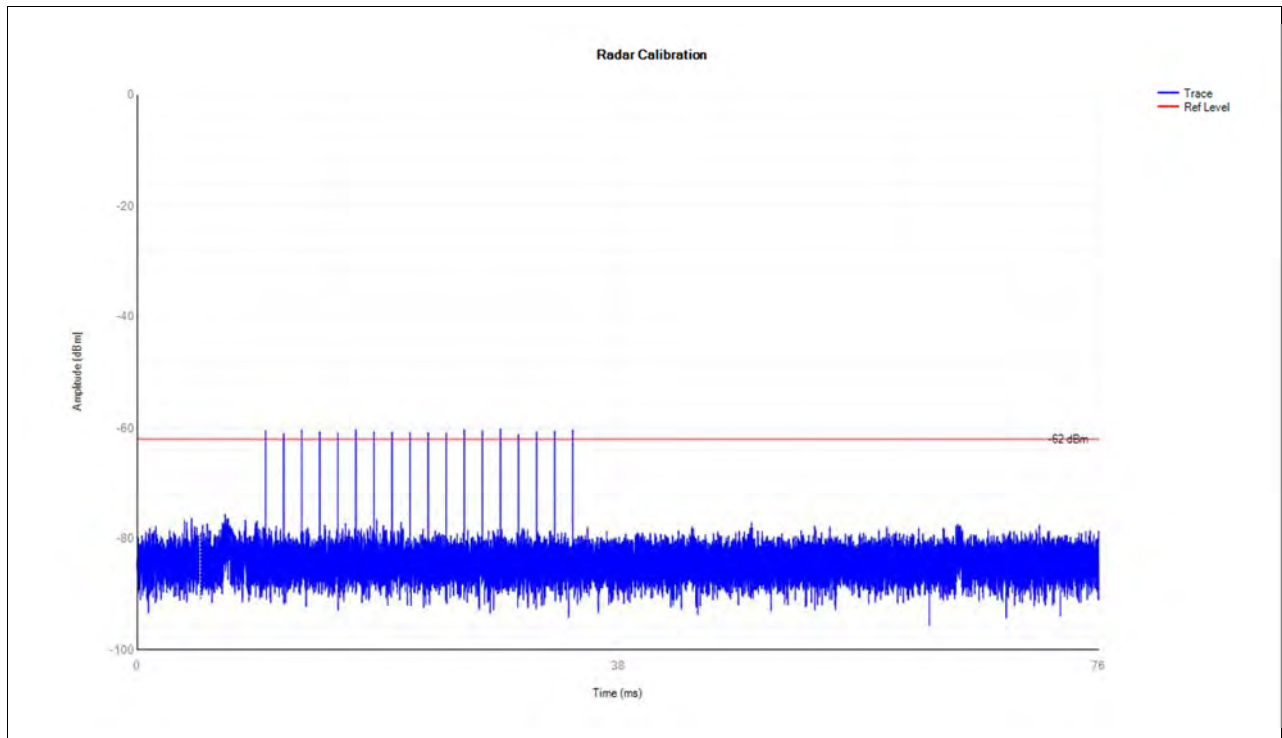
Spectrum analyzer settings:

Span: Zero

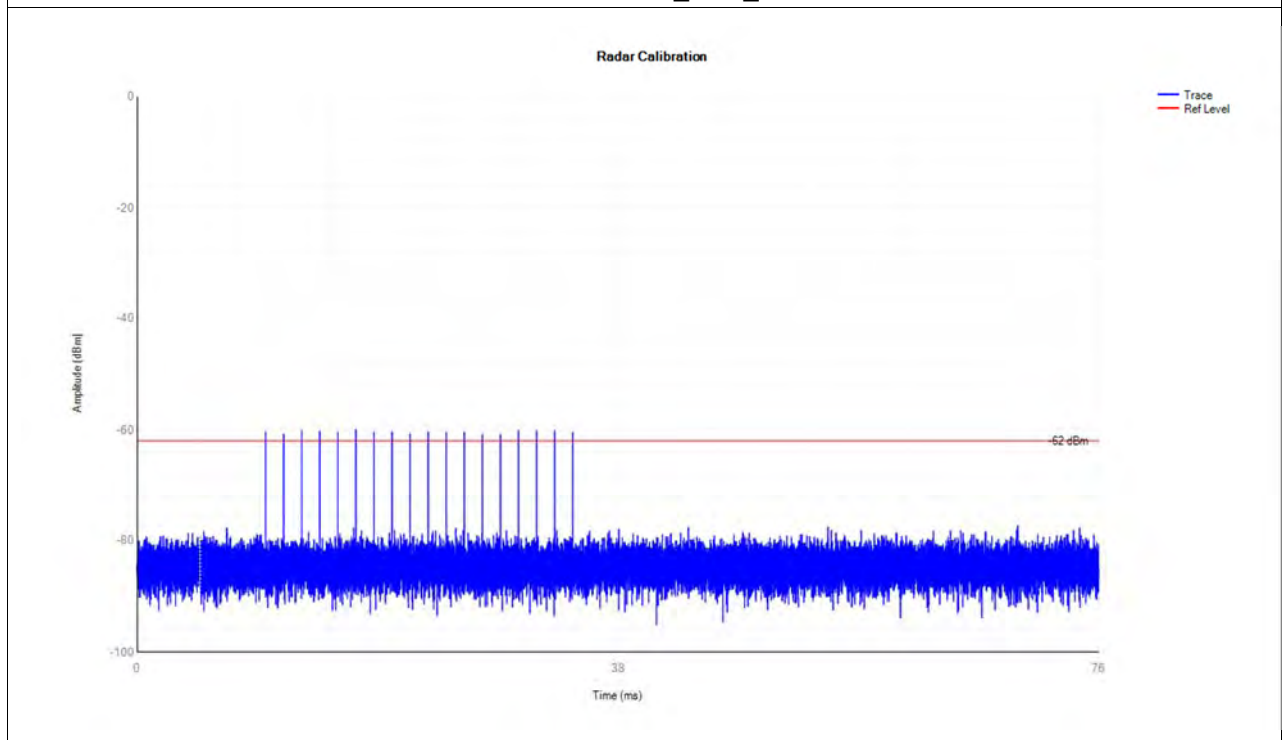
Detector Type: Peak

RBW: 3MHz

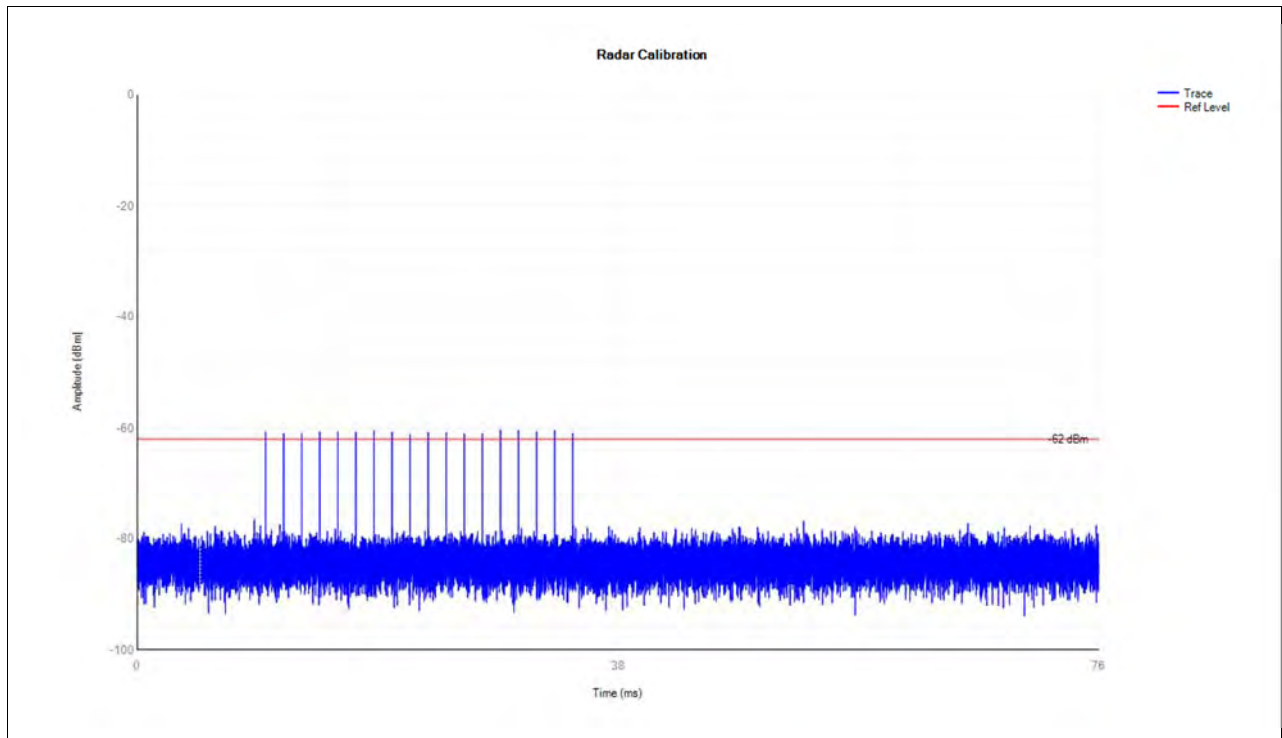
VBW: 3MHz



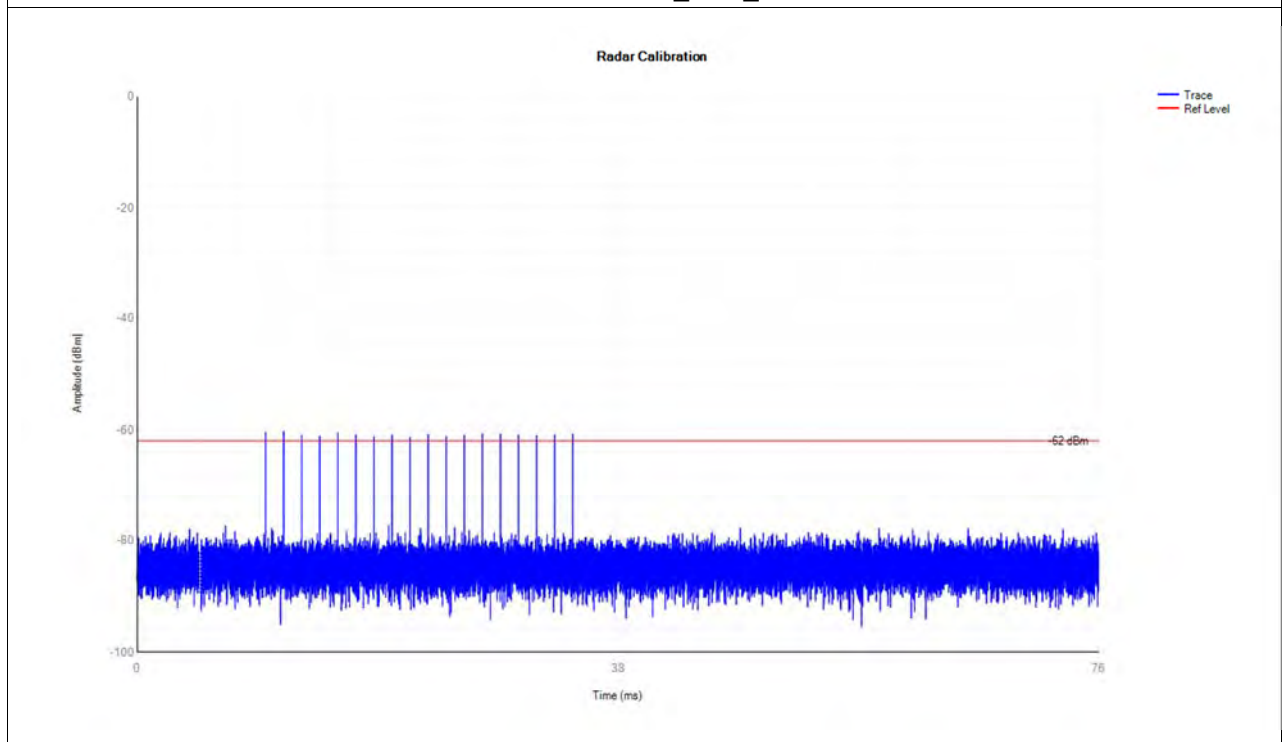
5320MHz DFS_FCC_T0



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
ax20	5320	0.896	10	0.026	0.26	0.011	0.06	Pass
ax20	5500	0.82	10	0.029	0.26	0.011	0.06	Pass
ax80	5290	0.904	10	0.05	0.26	0.015	0.06	Pass
ax80	5530	1.05	10	0.06	0.26	0.03	0.06	Pass

Spectrum analyzer settings:

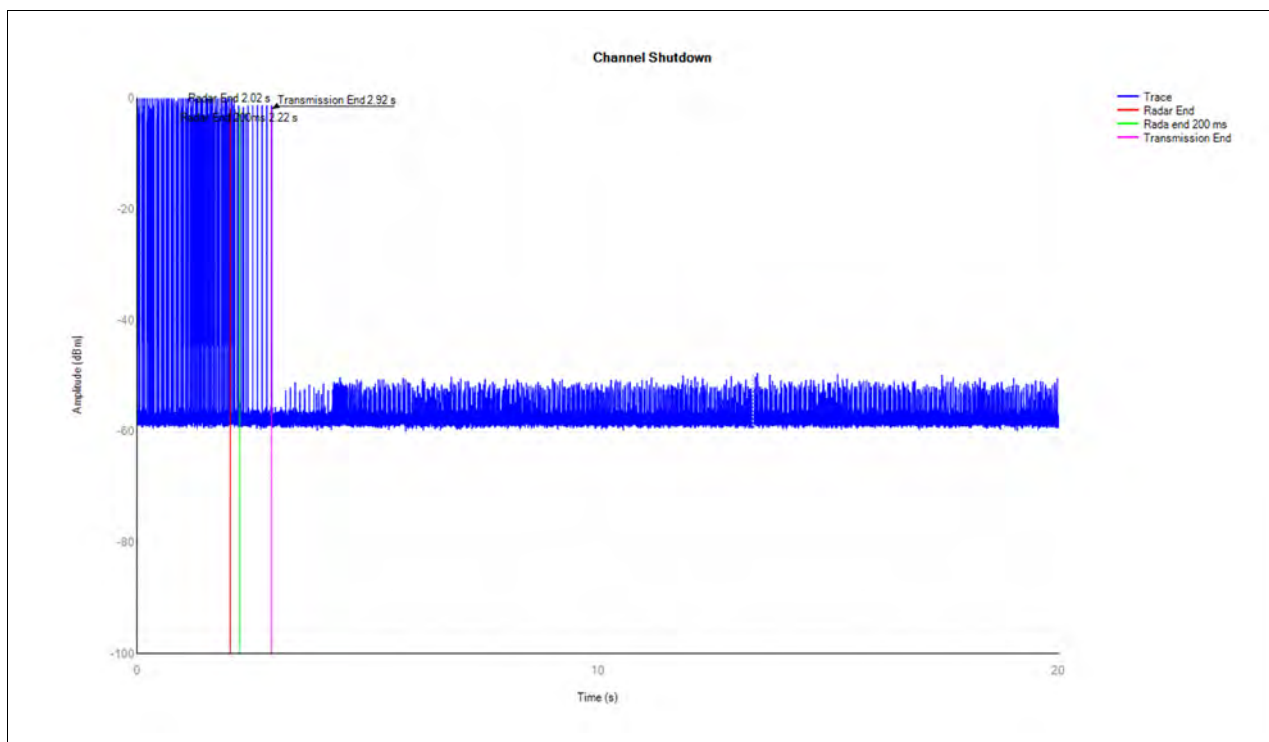
Span: Zero

Detector type: Peak

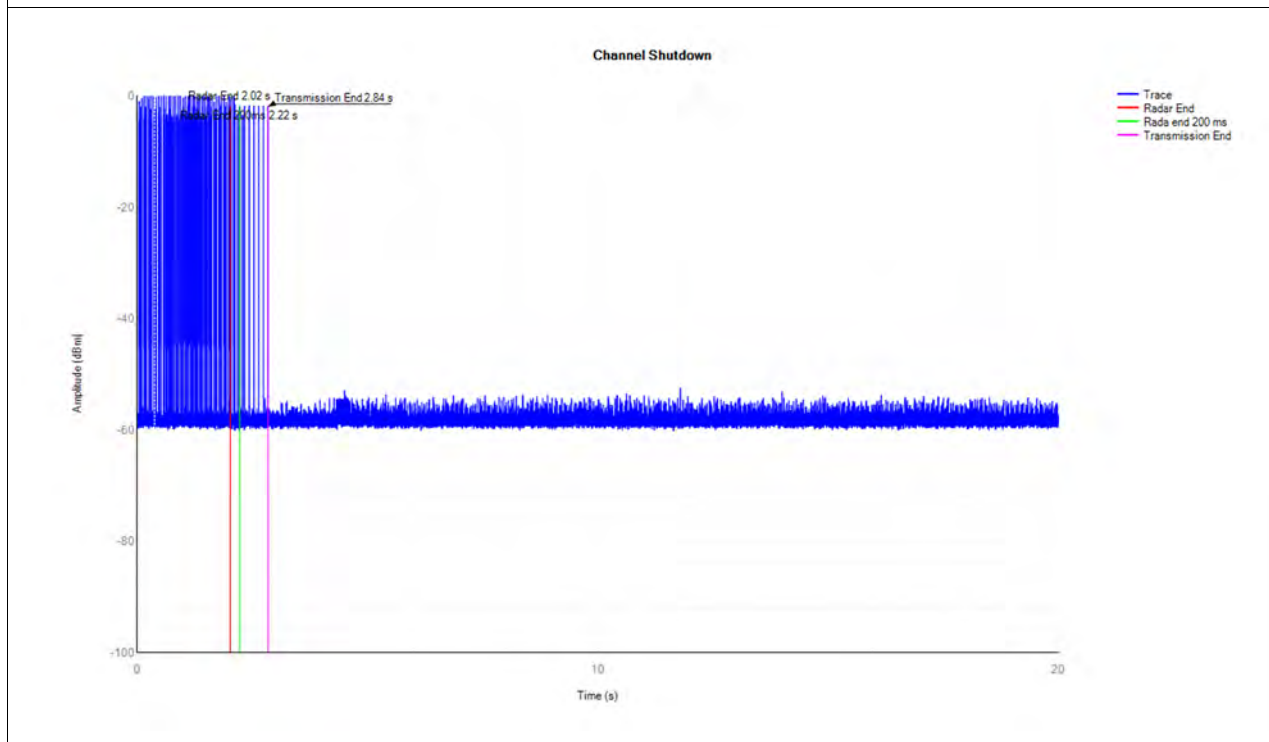
RBW: 3MHz

VBW: 3MHz

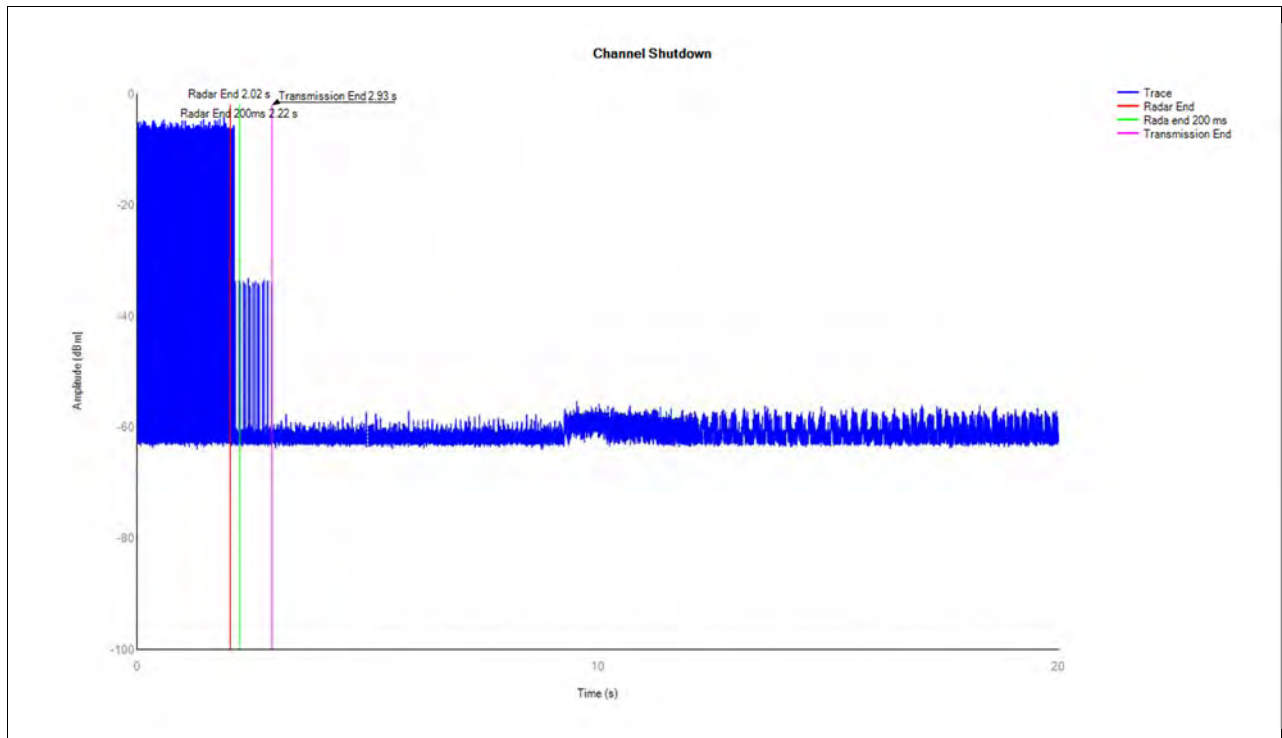
Sweep time: 20s



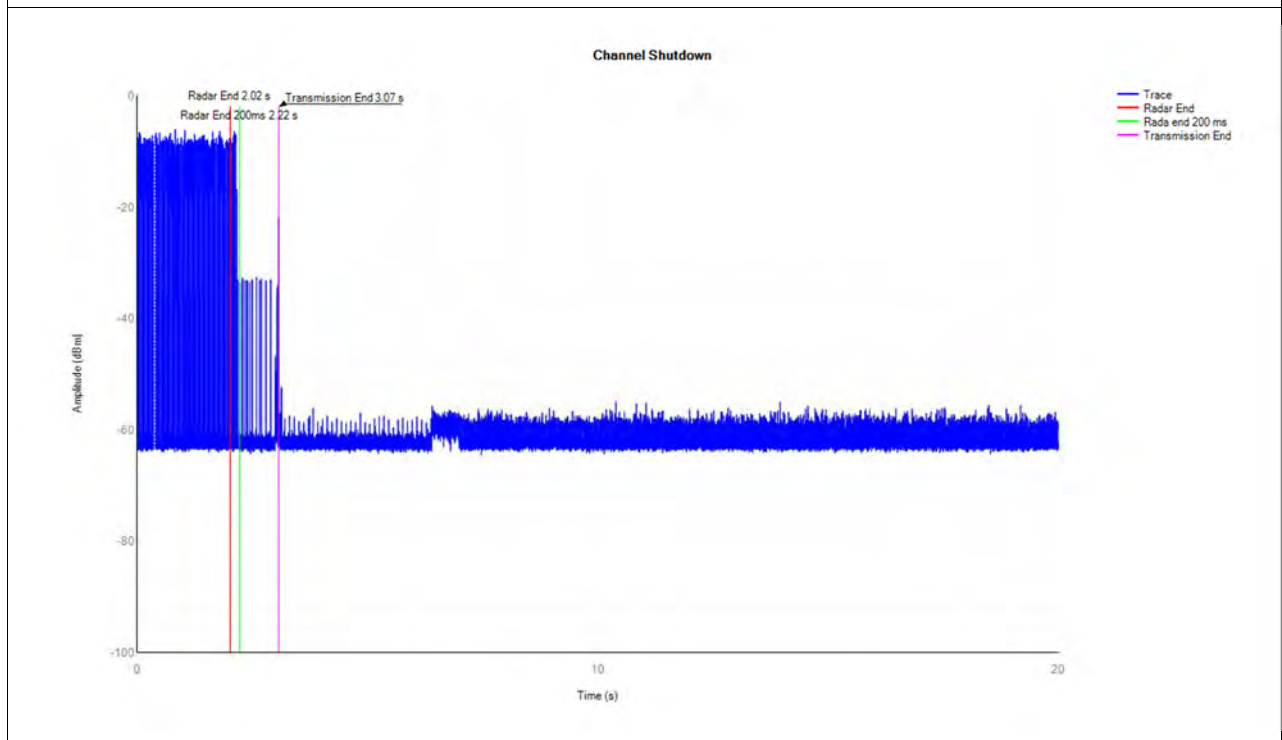
ax20 5320MHz Shutdown



ax20 5500MHz Shutdown



ax80 5290MHz Shutdown



ax80 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
ax20	5320	See test Graph	Pass
ax20	5500	See test Graph	Pass

Spectrum analyzer settings:

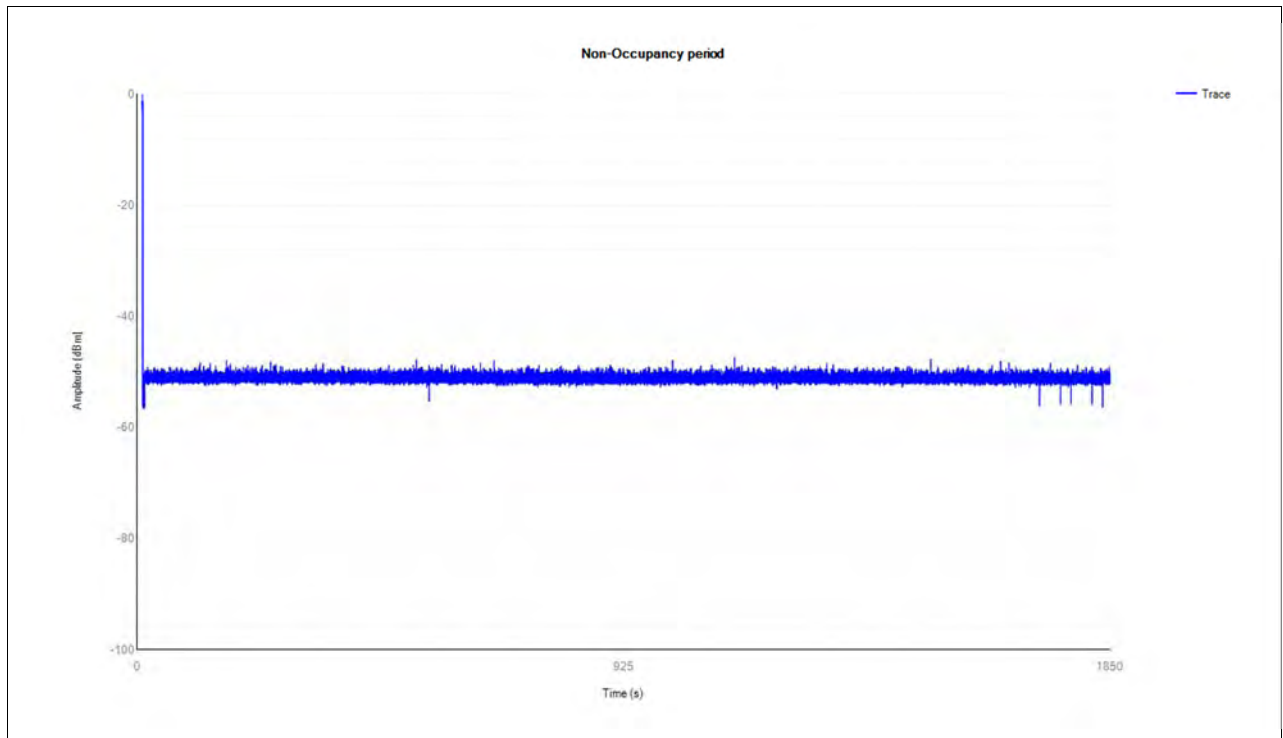
Span: Zero

Detector type: Peak

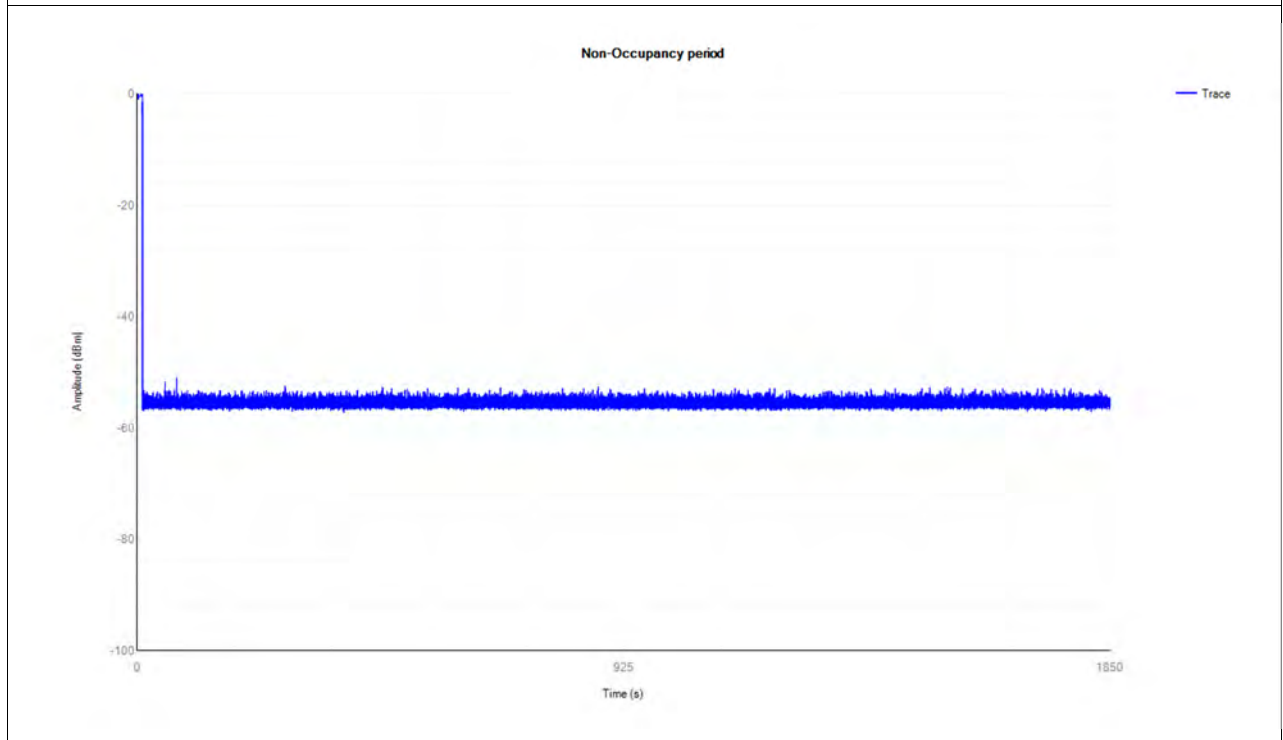
RBW: 3MHz

VBW: 3MHz

Sweep time: 1850s



ax20 5320MHz Non-Occupancy



ax20 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+USB cable +WIFI TX

Test voltage: AC 120V/60Hz

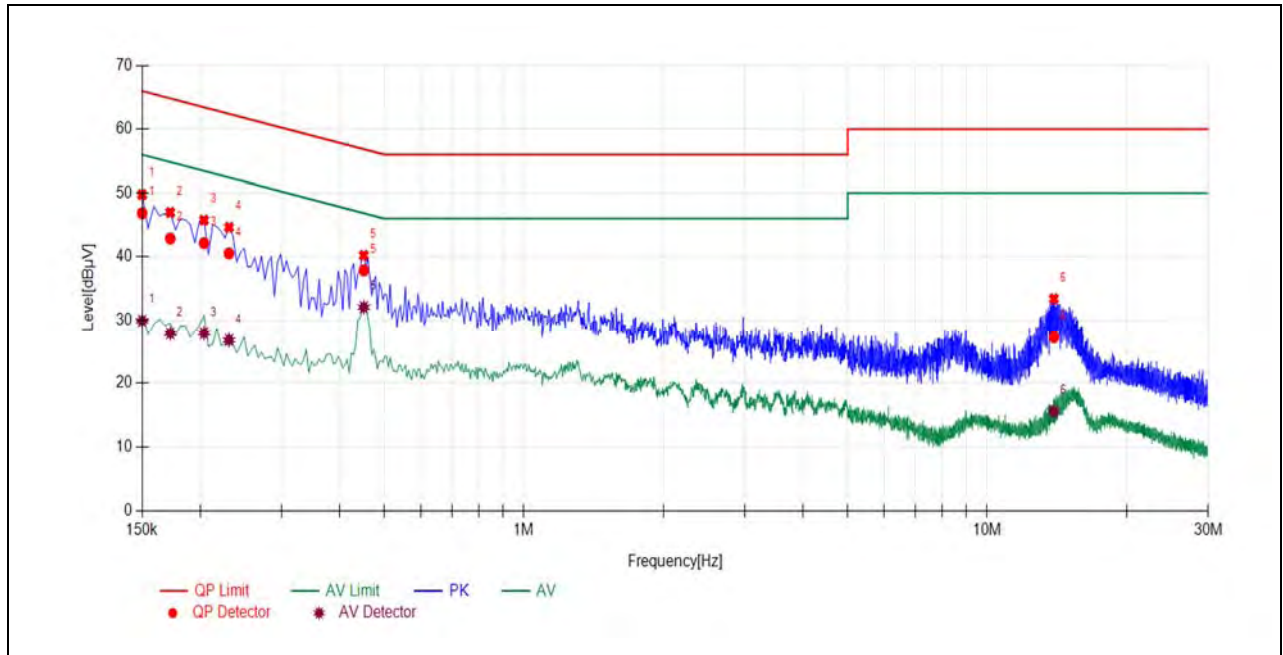
The measurement results are obtained as below:

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

U_R : Receiver Reading

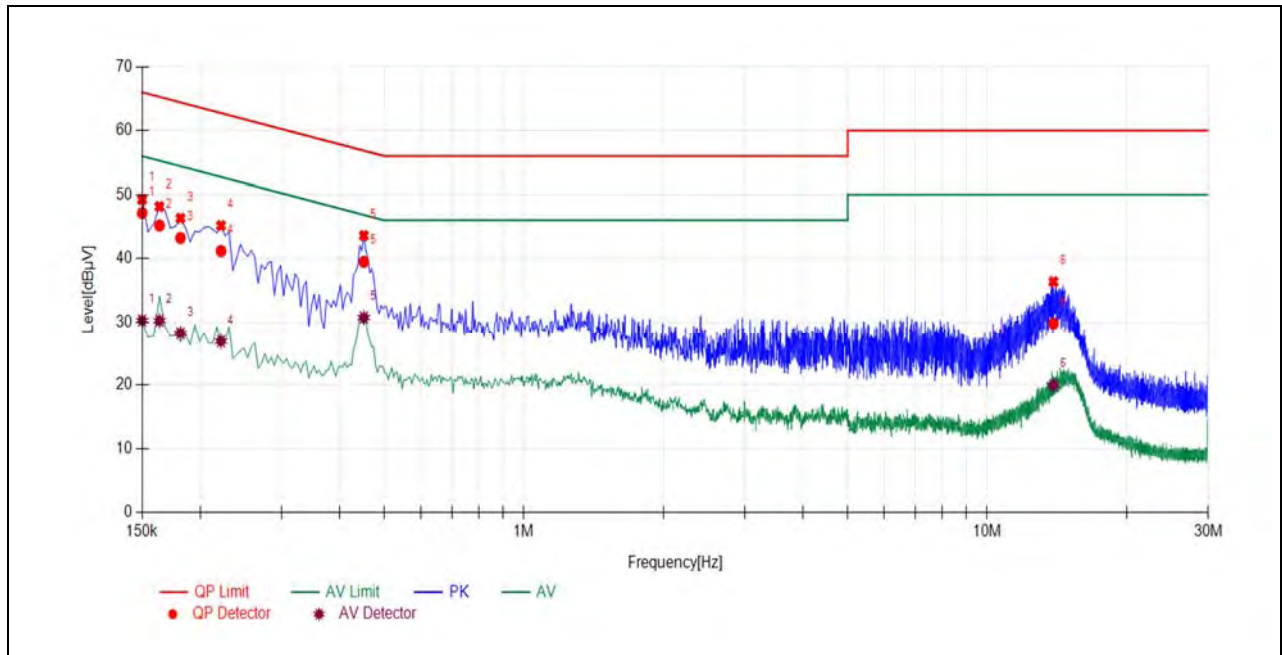
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	46.86	29.89	66.00	56.00	Line	PASS
2	0.1725	42.87	27.86	64.84	54.84		PASS
3	0.2040	42.16	27.89	63.45	53.45		PASS
4	0.2310	40.54	26.76	62.41	52.41		PASS
5	0.4515	37.85	32.05	56.85	46.85		PASS
6	13.9325	27.21	15.51	60.00	50.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	47.15	30.27	66.00	56.00	Neutral	PASS
2	0.1635	45.20	30.24	65.28	55.28		PASS
3	0.1815	43.24	28.22	64.42	54.42		PASS
4	0.2220	41.19	26.89	62.74	52.74		PASS
5	0.4515	39.50	30.74	56.85	46.85		PASS
6	13.9016	29.76	19.95	60.00	50.00		PASS

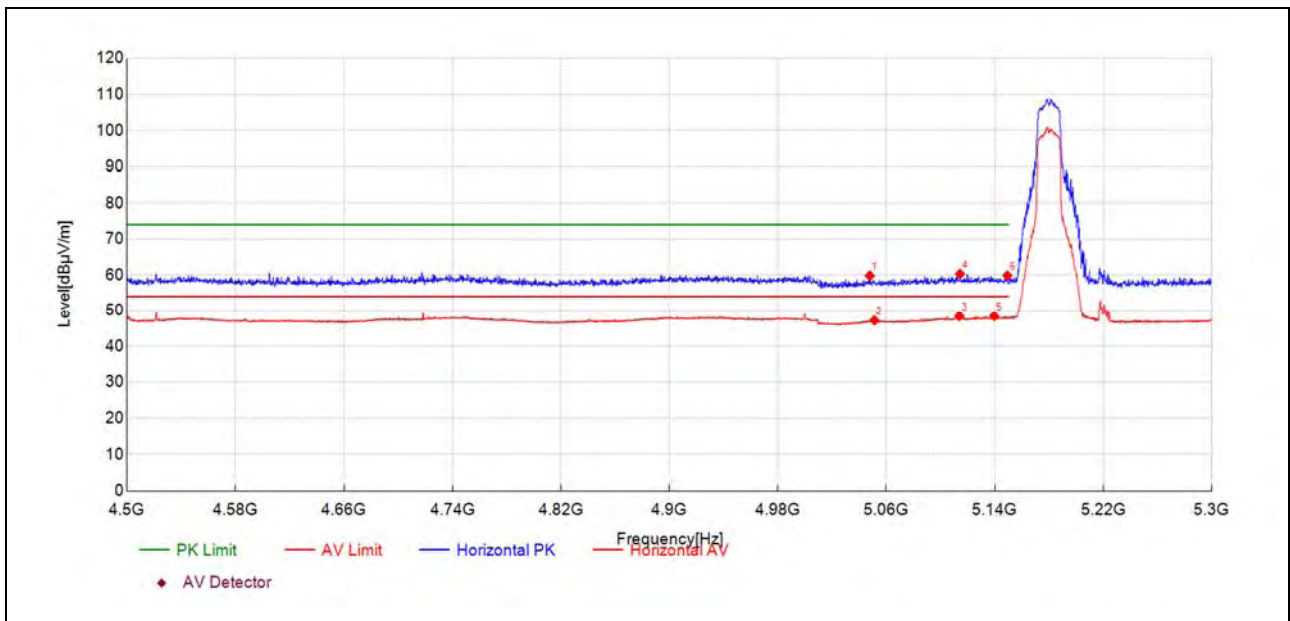
A.8. Restricted Frequency Bands

Note 1: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition was recorded in this test report.

Note 2 All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

802.11a Mode

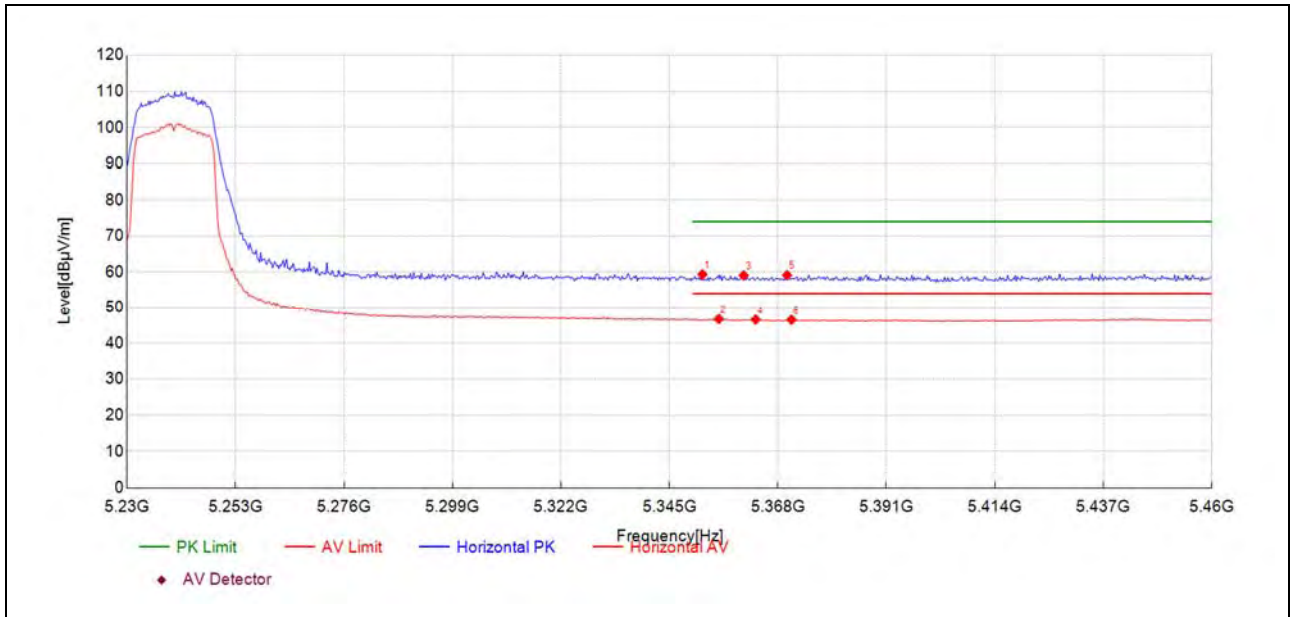
Plot for Channel 36



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5047.81	39.6	59.82	20.180	74.00	14.18	165	303	PK	PASS
5051.24	27.0	47.19	20.200	54.00	6.81	165	195	AV	PASS
5113.89	28.0	48.44	20.460	54.00	5.56	165	146	AV	PASS
5114.35	39.9	60.31	20.460	74.00	13.69	165	111	PK	PASS
5139.50	28.1	48.42	20.360	54.00	5.58	165	181	AV	PASS
5149.33	39.5	59.83	20.320	74.00	14.17	165	298	PK	PASS



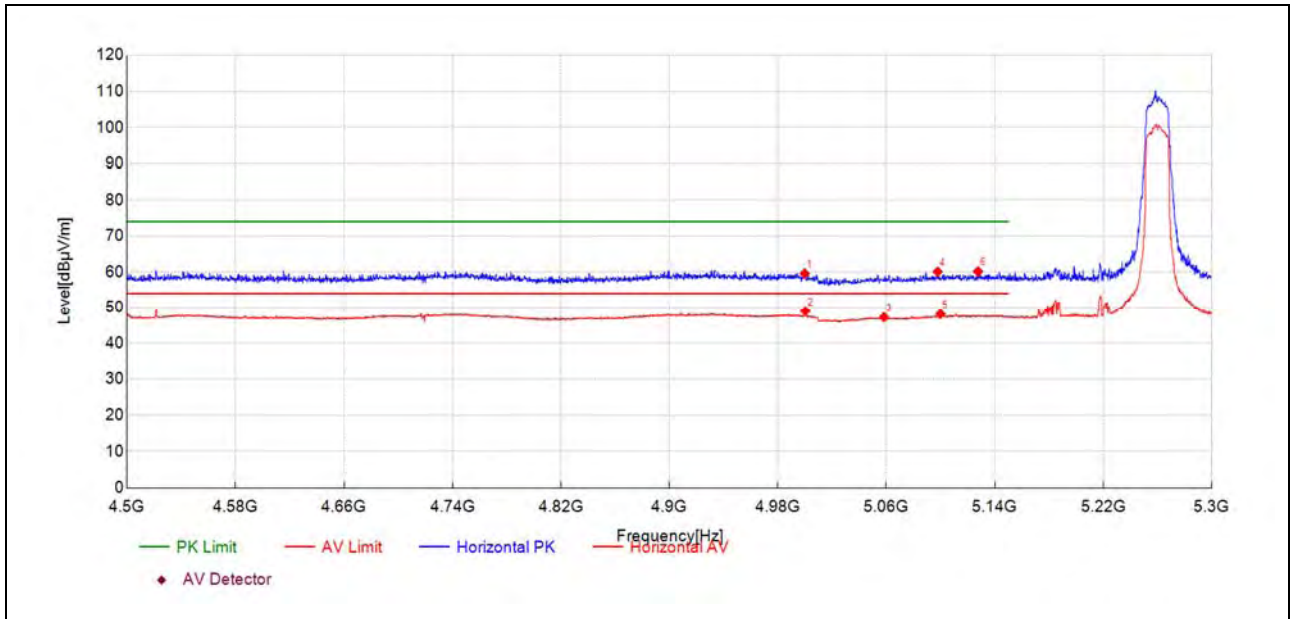
Plot for Channel 48



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5352.02	39.4	59.35	19.940	74.00	14.65	165	160	PK	PASS
5355.48	26.8	46.71	19.930	54.00	7.29	165	179	AV	PASS
5360.77	39.1	59.05	19.920	74.00	14.95	165	349	PK	PASS
5363.30	26.7	46.56	19.910	54.00	7.44	165	179	AV	PASS
5369.98	39.2	59.13	19.900	74.00	14.87	165	238	PK	PASS
5370.90	26.6	46.51	19.900	54.00	7.49	165	204	AV	PASS



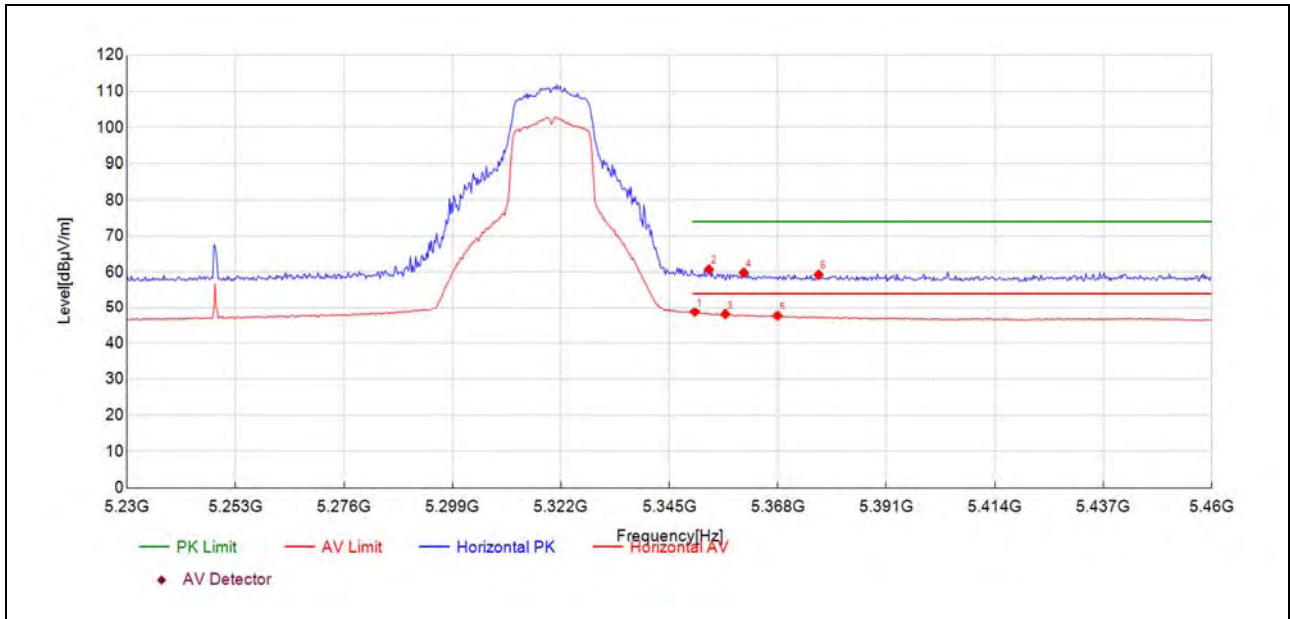
Plot for Channel 52



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4999.80	39.7	59.58	19.880	74.00	14.42	165	48	PK	PASS
5000.26	29.1	48.98	19.880	54.00	5.02	165	86	AV	PASS
5058.33	27.0	47.26	20.250	54.00	6.74	165	159	AV	PASS
5097.89	39.6	60.07	20.500	74.00	13.93	165	108	PK	PASS
5099.94	27.6	48.15	20.520	54.00	5.85	165	344	AV	PASS
5127.61	39.8	60.15	20.400	74.00	13.85	165	194	PK	PASS



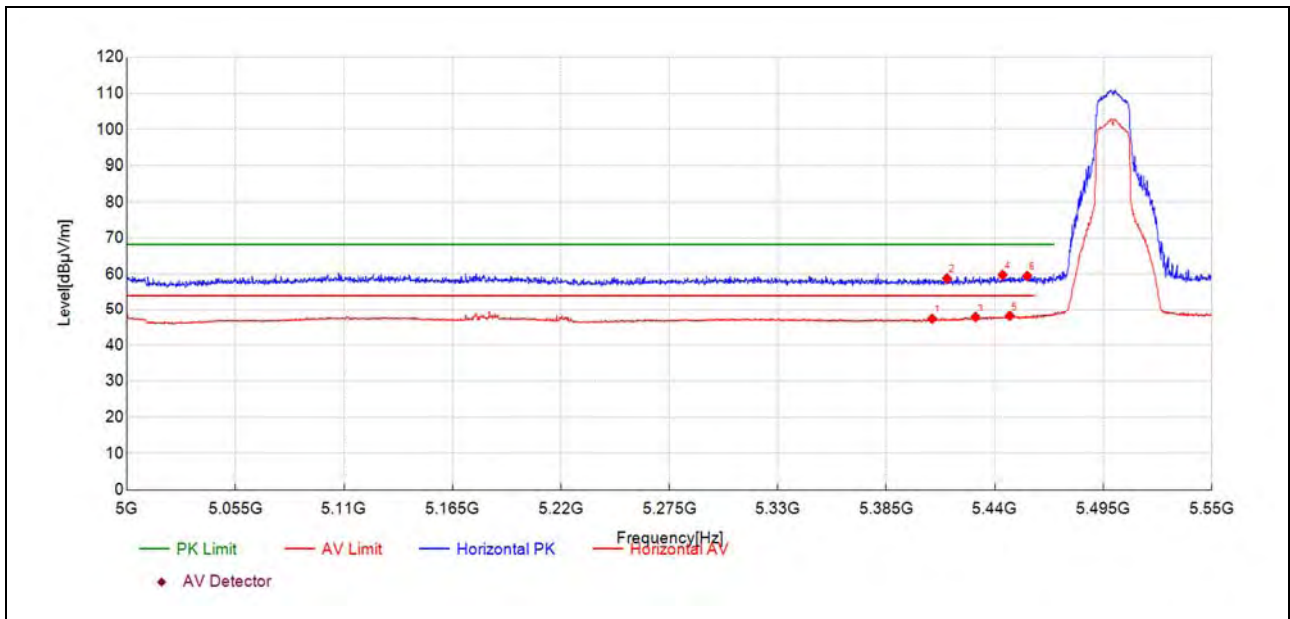
Plot for Channel 64



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5350.41	28.8	48.75	19.940	54.00	5.25	165	164	AV	PASS
5353.40	40.8	60.72	19.930	74.00	13.28	165	160	PK	PASS
5356.86	28.1	48.04	19.930	54.00	5.96	165	179	AV	PASS
5360.77	39.9	59.83	19.920	74.00	14.17	165	167	PK	PASS
5367.91	27.7	47.62	19.900	54.00	6.38	165	177	AV	PASS
5376.66	39.4	59.28	19.880	74.00	14.72	165	182	PK	PASS



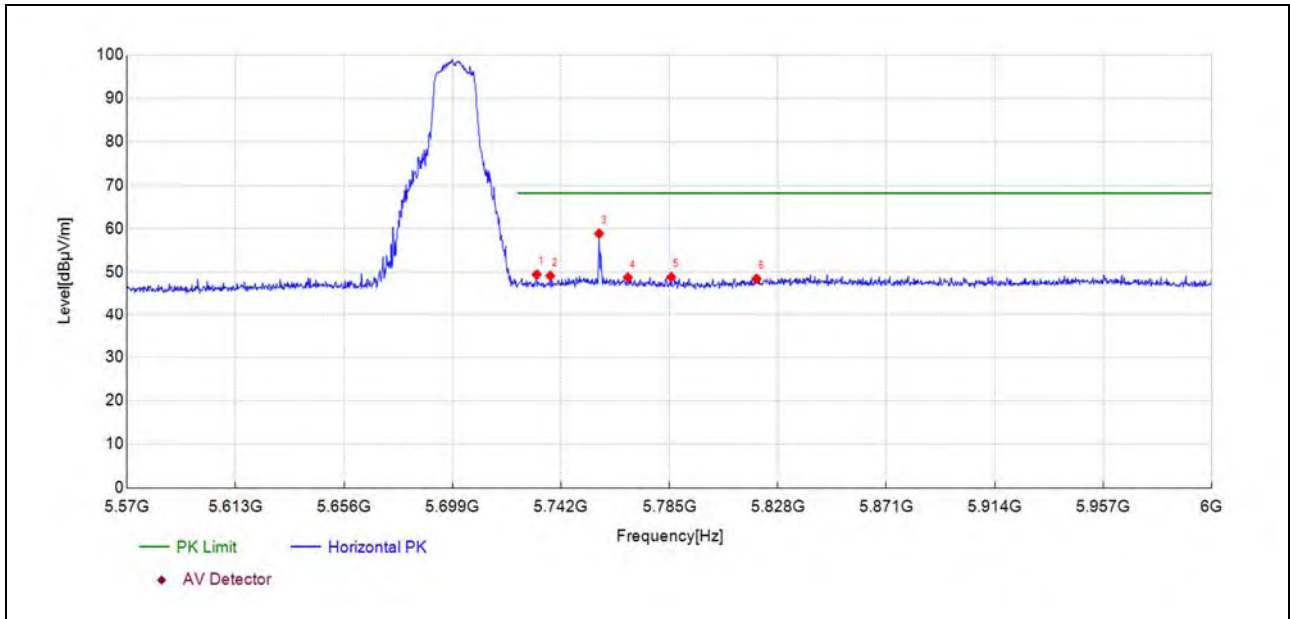
Plot for Channel 100



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5408.24	27.4	47.32	19.940	54.00	6.68	165	183	AV	PASS
5415.76	38.8	58.80	20.030	68.23	9.43	165	172	PK	PASS
5430.24	27.6	47.78	20.210	54.00	6.22	165	183	AV	PASS
5444.00	39.3	59.74	20.400	68.23	8.49	165	161	PK	PASS
5447.67	27.7	48.13	20.440	54.00	5.87	165	172	AV	PASS
5456.47	39.0	59.48	20.440	68.23	8.75	165	339	PK	PASS



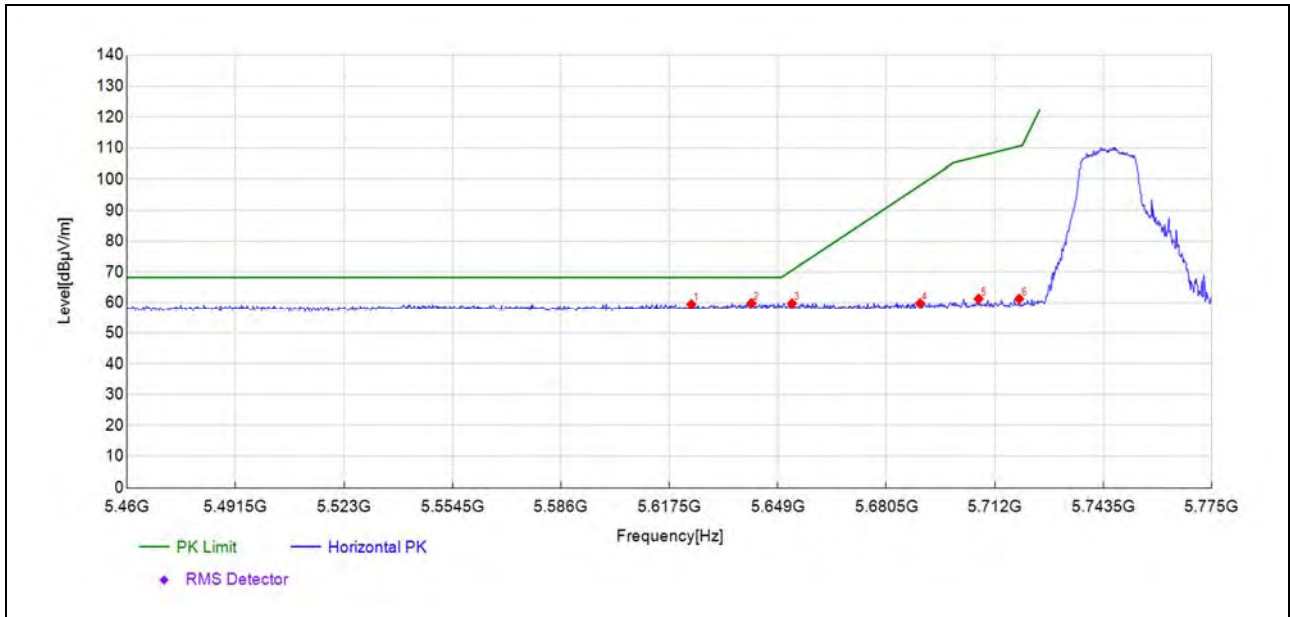
Plot for Channel 140



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5732.41	40.1	49.43	9.370	68.23	18.80	165	166	PK	PASS
5737.78	39.7	49.14	9.460	68.23	19.09	165	190	PK	PASS
5757.14	49.2	58.88	9.650	68.23	9.35	165	185	PK	PASS
5768.54	39.1	48.75	9.660	68.23	19.48	165	192	PK	PASS
5785.75	39.2	48.84	9.680	68.23	19.39	165	288	PK	PASS
5819.52	38.5	48.47	9.990	68.23	19.76	165	68	PK	PASS

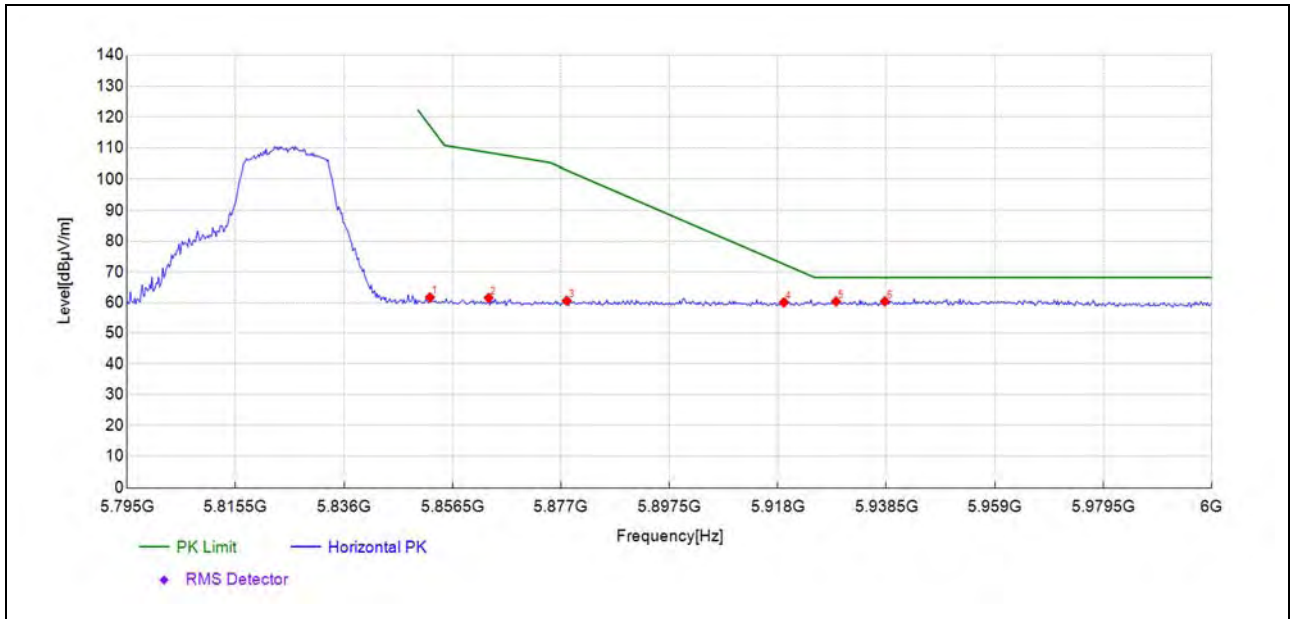


Plot for Channel 149



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5623.91	39.0	59.50	20.540	68.23	8.73	165	17	PK	PASS
5641.35	39.0	59.85	20.850	68.23	8.38	165	166	PK	PASS
5653.12	38.8	59.76	21.000	70.54	10.78	165	64	PK	PASS
5690.31	38.9	59.84	20.910	98.06	38.22	165	43	PK	PASS
5707.33	40.3	61.33	20.990	107.28	45.95	165	185	PK	PASS
5719.10	40.1	61.29	21.170	110.58	49.29	165	187	PK	PASS

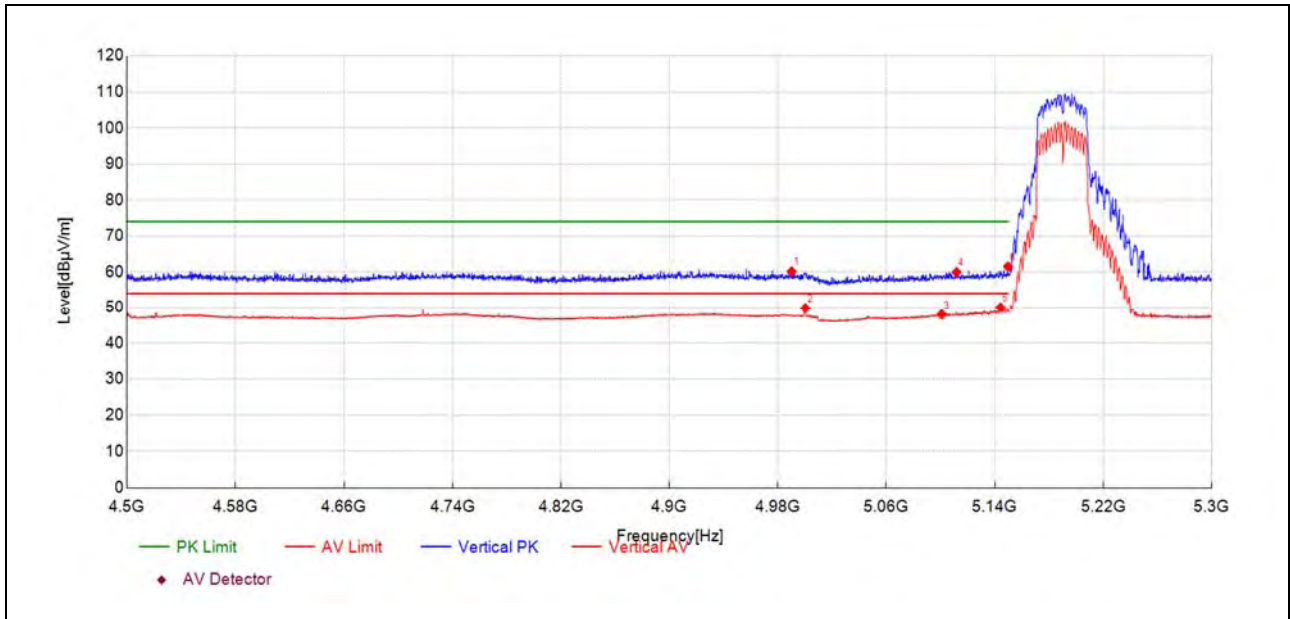
Plot for Channel 165



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5852.25	39.4	61.79	22.430	117.09	55.30	165	195	PK	PASS
5863.33	39.4	61.61	22.260	108.50	46.89	165	188	PK	PASS
5878.11	38.6	60.69	22.050	102.93	42.24	165	188	PK	PASS
5919.15	38.3	60.19	21.870	72.56	12.37	165	183	PK	PASS
5929.00	38.5	60.46	21.950	68.23	7.77	165	122	PK	PASS
5938.23	38.5	60.51	22.030	68.23	7.72	165	231	PK	PASS

**802.11n (HT40) Mode**

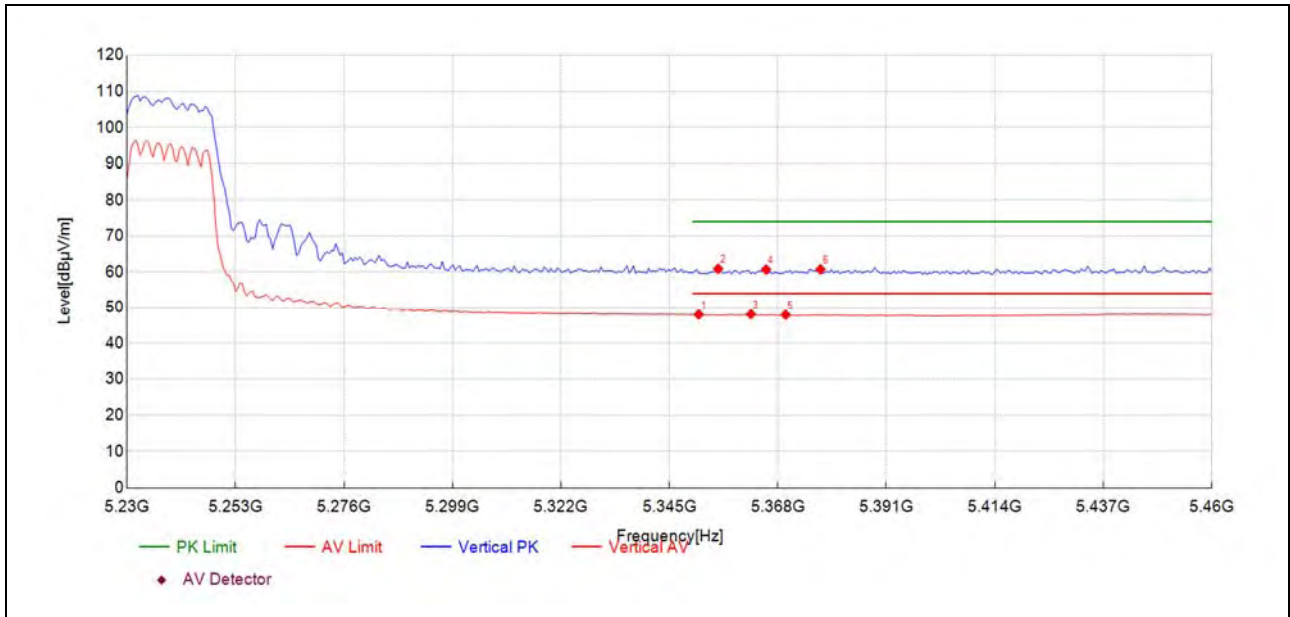
Plot for Channel 38



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4990.20	40.3	60.14	19.870	74.00	13.86	165	54	PK	PASS
5000.26	30.0	49.86	19.880	54.00	4.14	165	332	AV	PASS
5100.86	27.5	48.00	20.520	54.00	6.00	165	158	AV	PASS
5111.83	39.4	59.92	20.480	74.00	14.08	165	14	PK	PASS
5144.30	29.7	50.04	20.340	54.00	3.96	165	162	AV	PASS
5149.79	41.2	61.49	20.320	74.00	12.51	165	167	PK	PASS



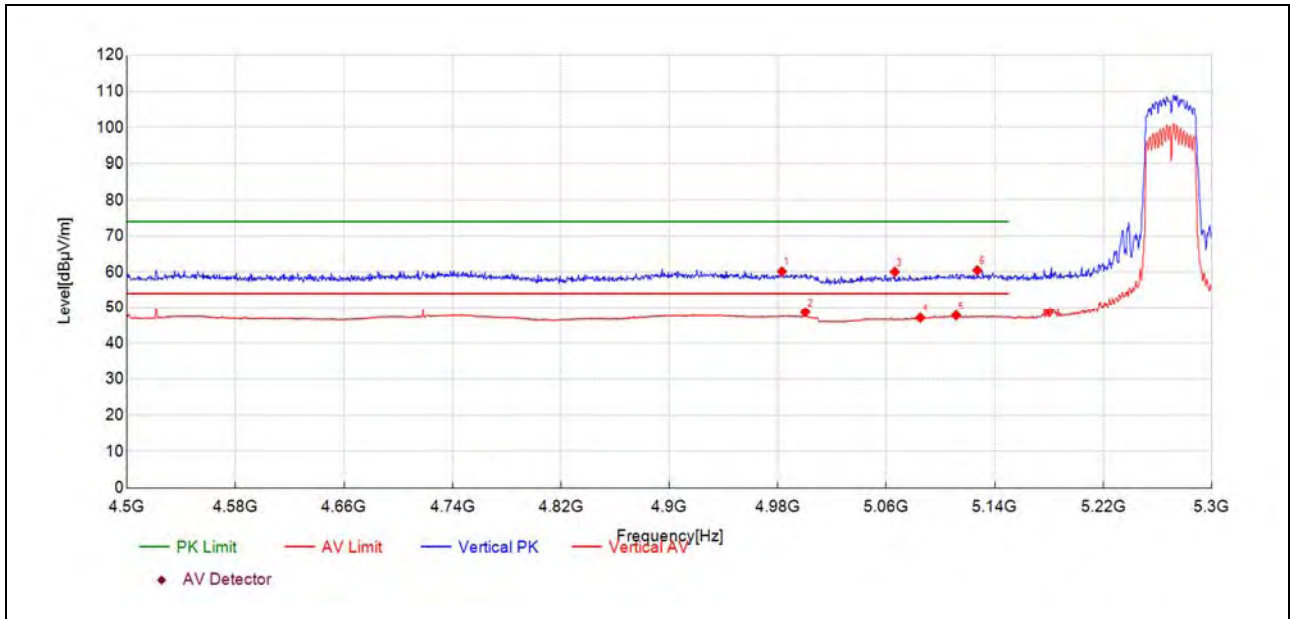
Plot for Channel 46



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5351.22	28.1	47.99	19.940	54.00	6.01	165	322	AV	PASS
5355.37	41.0	60.90	19.930	74.00	13.10	165	98	PK	PASS
5362.28	28.2	48.08	19.920	54.00	5.92	165	193	AV	PASS
5365.51	40.8	60.69	19.910	74.00	13.31	165	358	PK	PASS
5369.66	28.0	47.90	19.900	54.00	6.10	165	155	AV	PASS
5377.03	40.9	60.75	19.880	74.00	13.25	165	141	PK	PASS



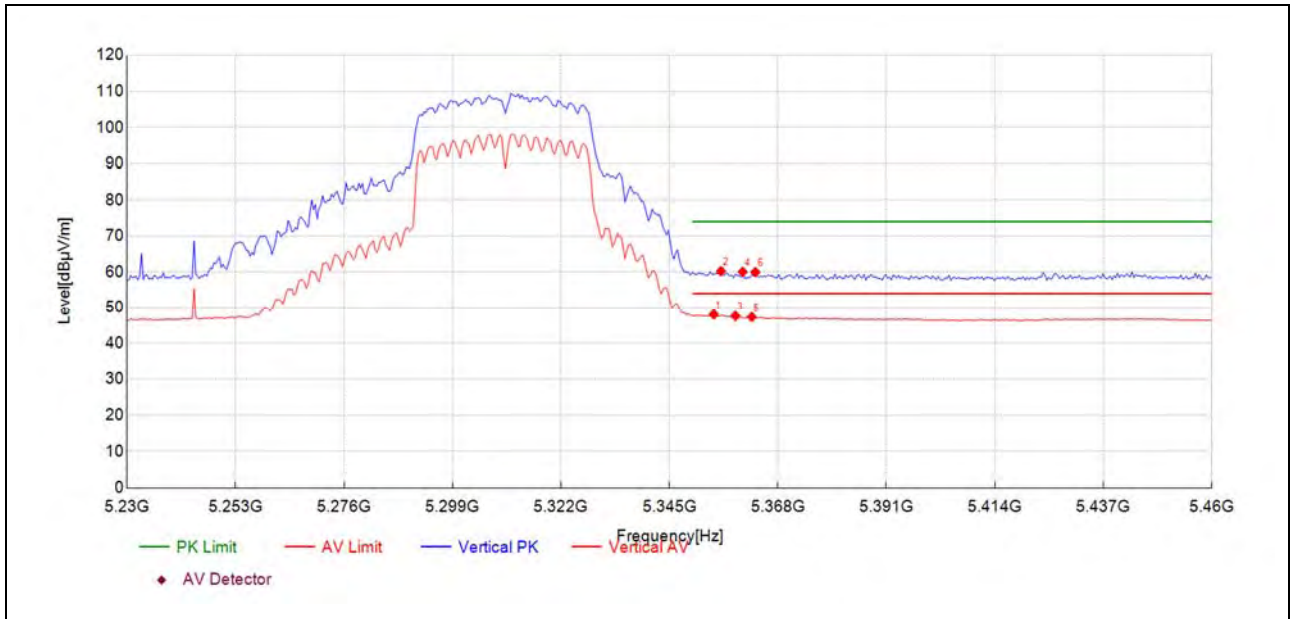
Plot for Channel 54



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
4983.04	40.3	60.14	19.870	74.00	13.86	165	70	PK	PASS
5000.25	28.8	48.66	19.880	54.00	5.34	165	27	AV	PASS
5066.28	39.7	60.04	20.310	74.00	13.96	165	264	PK	PASS
5085.09	26.7	47.09	20.420	54.00	6.91	165	88	AV	PASS
5111.51	27.3	47.78	20.480	54.00	6.22	165	347	AV	PASS
5127.11	40.1	60.47	20.420	74.00	13.53	165	2	PK	PASS



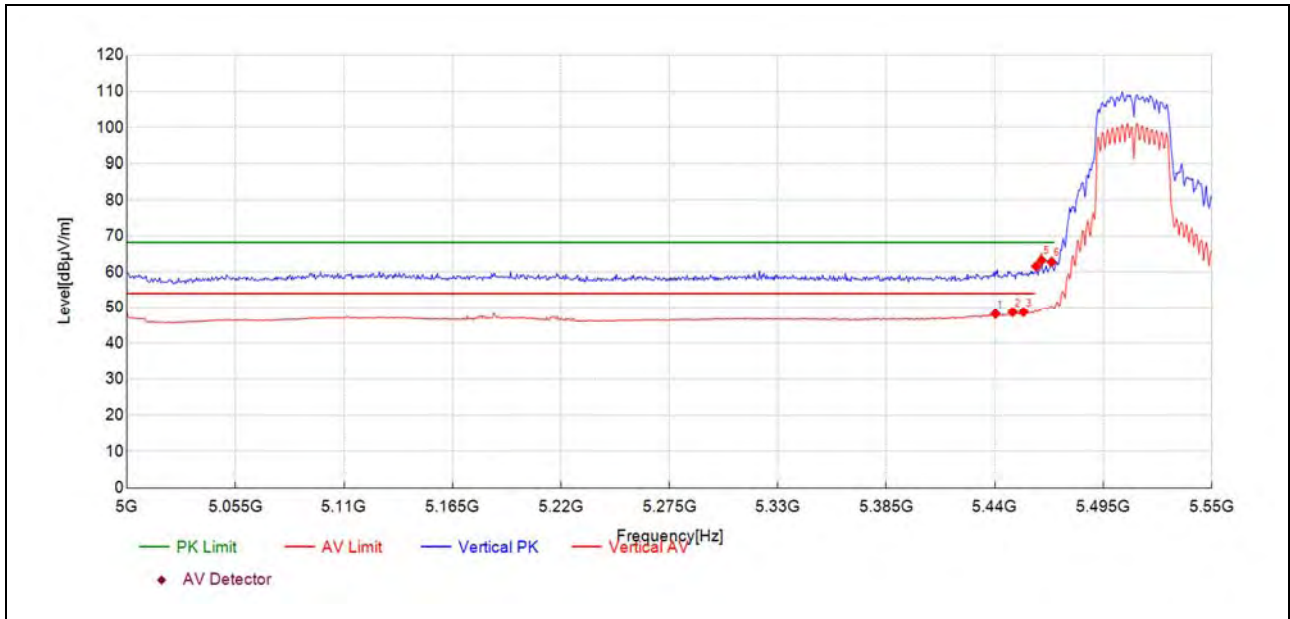
Plot for Channel 62



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5354.41	28.1	48.02	19.930	54.00	5.98	165	167	AV	PASS
5355.94	40.3	60.24	19.930	74.00	13.76	165	165	PK	PASS
5359.02	27.7	47.59	19.920	54.00	6.41	165	134	AV	PASS
5360.55	40.1	60.05	19.920	74.00	13.95	165	167	PK	PASS
5362.47	27.4	47.28	19.920	54.00	6.72	165	114	AV	PASS
5363.24	40.1	59.96	19.910	74.00	14.04	165	165	PK	PASS

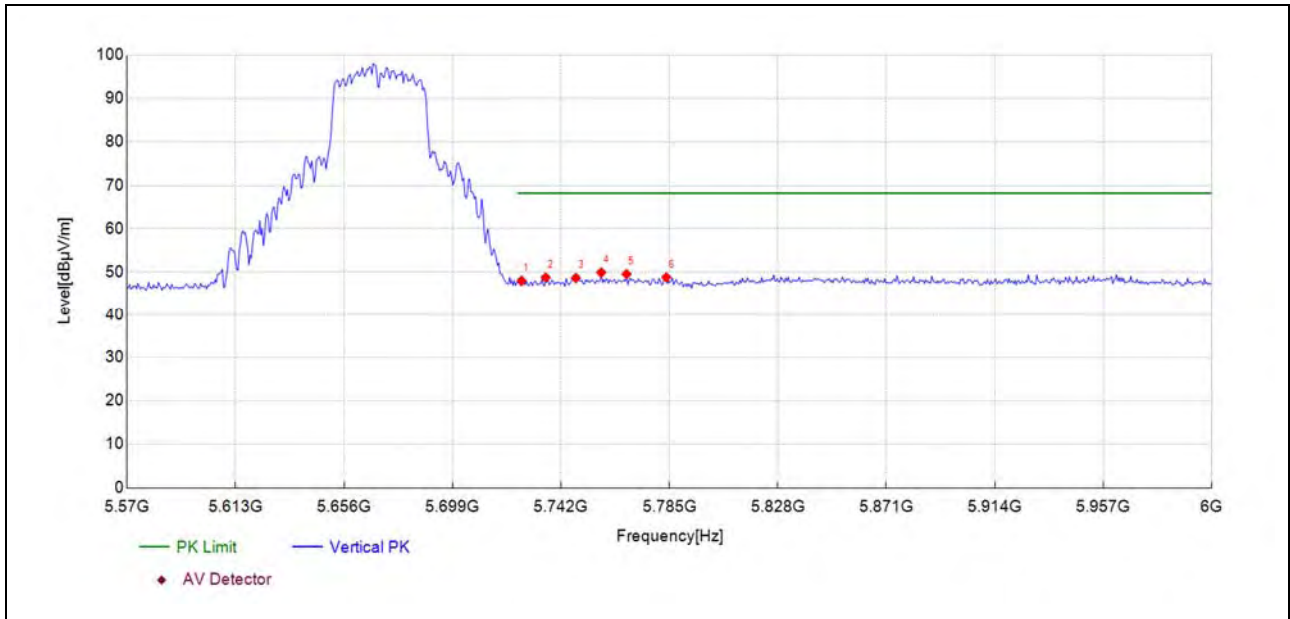


Plot for Channel 102



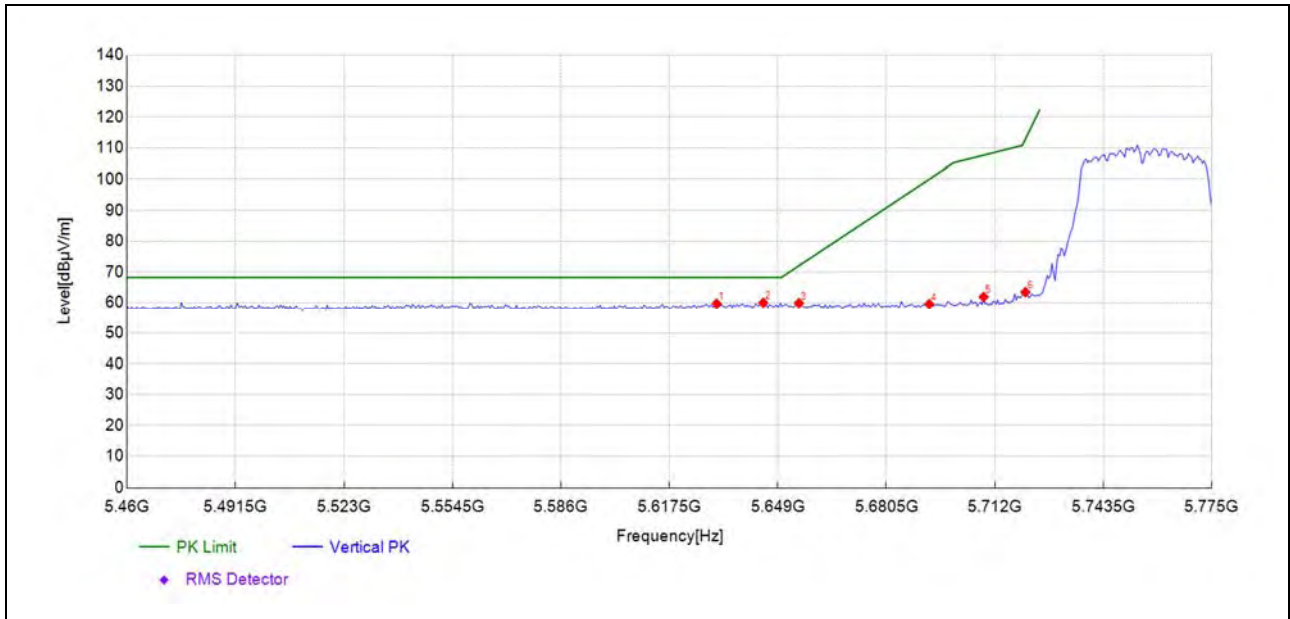
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5440.37	27.9	48.21	20.340	54.00	5.79	165	135	AV	PASS
5449.08	28.3	48.72	20.460	54.00	5.28	165	172	AV	PASS
5454.59	28.3	48.73	20.440	54.00	5.27	165	174	AV	PASS
5461.01	41.2	61.59	20.410	68.23	6.64	165	147	PK	PASS
5463.76	42.8	63.23	20.400	68.23	5.00	165	142	PK	PASS
5468.81	42.4	62.79	20.380	68.23	5.44	165	142	PK	PASS

Plot for Channel 134



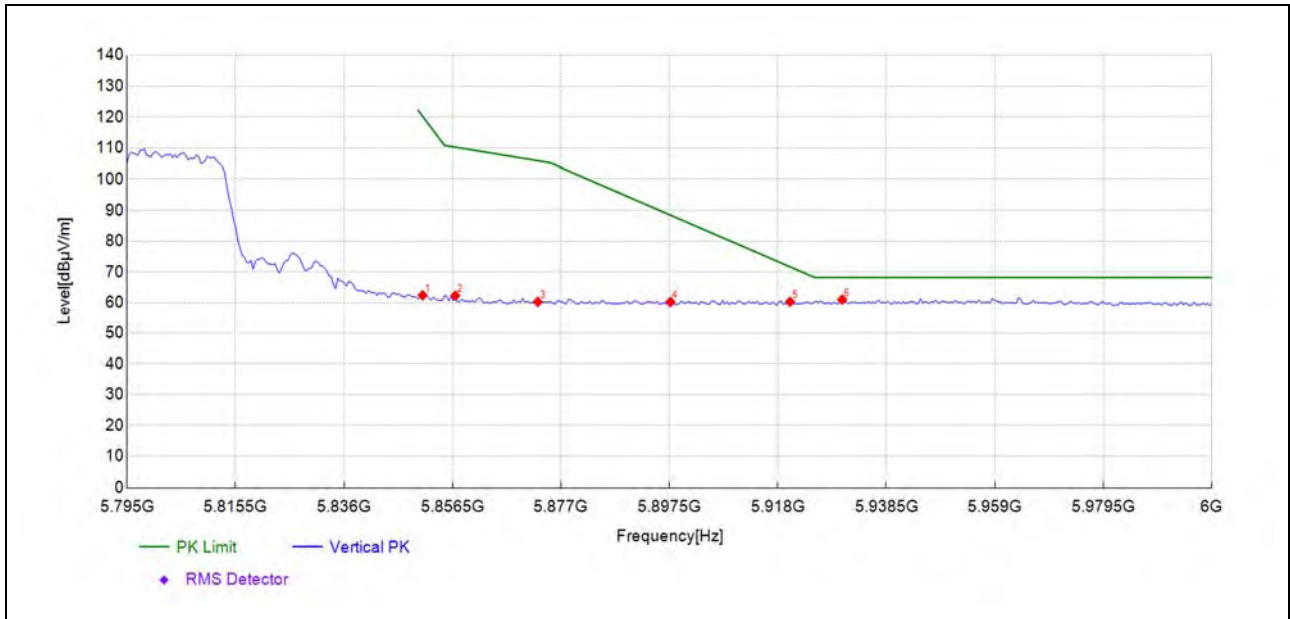
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5726.41	38.7	47.98	9.280	68.23	20.25	165	81	PK	PASS
5735.97	39.3	48.73	9.420	68.23	19.50	165	26	PK	PASS
5747.93	39.0	48.63	9.610	68.23	19.60	165	184	PK	PASS
5757.98	40.3	49.90	9.650	68.23	18.33	165	216	PK	PASS
5768.02	39.9	49.52	9.660	68.23	18.71	165	147	PK	PASS
5783.80	39.1	48.78	9.680	68.23	19.45	165	65	PK	PASS

Plot for Channel 151



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5631.24	39.0	59.71	20.680	68.23	8.52	165	330	PK	PASS
5644.76	39.1	60.02	20.920	68.23	8.21	165	168	PK	PASS
5655.13	38.9	59.90	20.990	72.03	12.13	165	137	PK	PASS
5692.98	38.7	59.60	20.900	100.04	40.44	165	141	PK	PASS
5708.76	40.9	61.95	21.010	107.68	45.73	165	132	PK	PASS
5720.92	42.3	63.50	21.200	112.93	49.43	165	166	PK	PASS

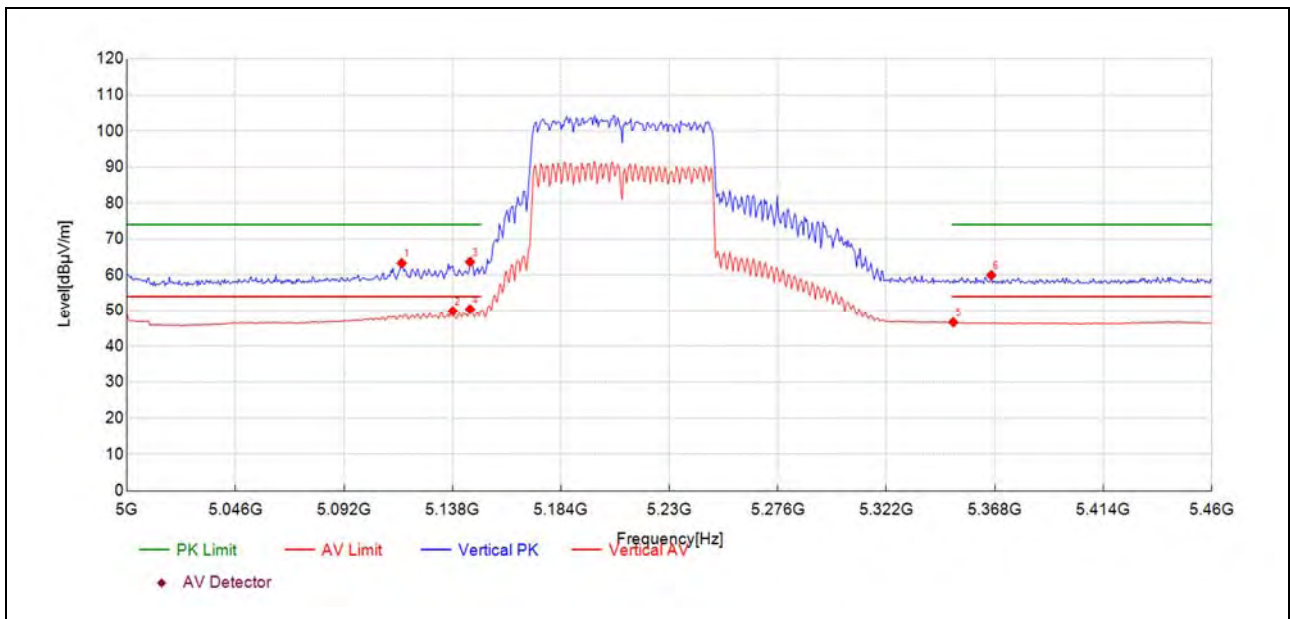
Plot for Channel 159



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5850.87	40.0	62.48	22.450	120.24	57.76	165	152	PK	PASS
5857.03	40.0	62.35	22.350	110.26	47.91	165	148	PK	PASS
5872.65	38.2	60.35	22.120	105.89	45.54	165	186	PK	PASS
5897.71	38.6	60.31	21.750	88.43	28.12	165	165	PK	PASS
5920.30	38.5	60.37	21.880	71.71	11.34	165	360	PK	PASS
5930.16	39.1	61.08	21.960	68.23	7.15	165	184	PK	PASS

**802.11ac (VHT80) Mode**

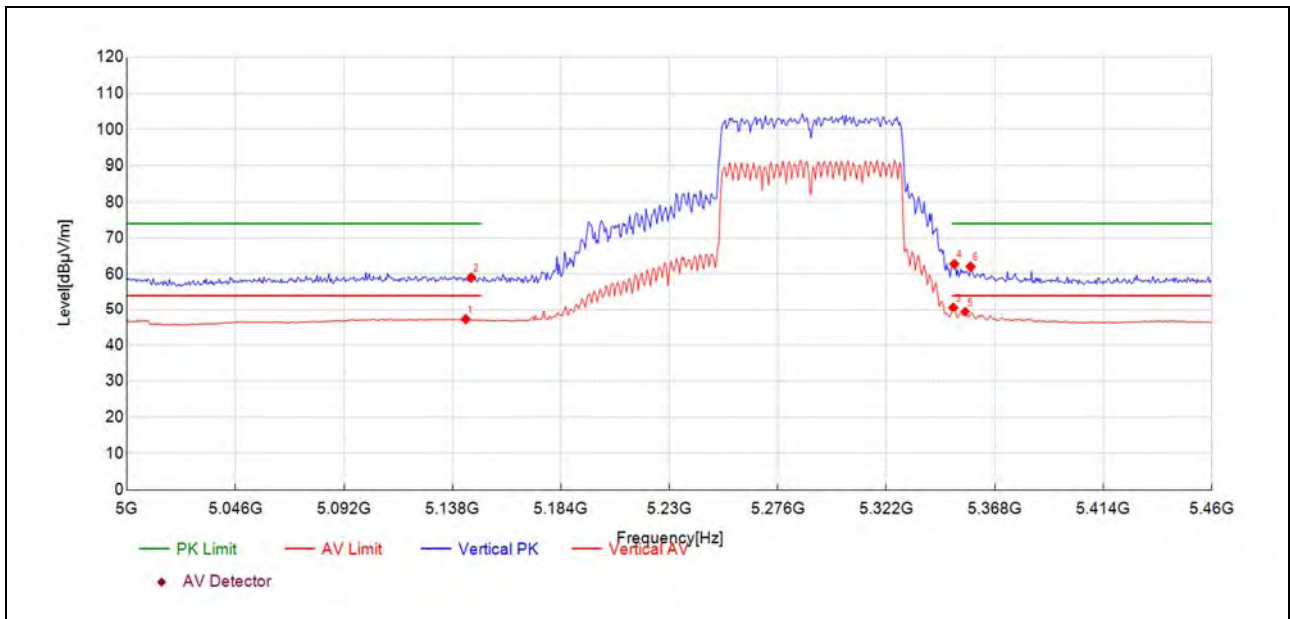
Plot for Channel 42



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5116.50	42.8	63.26	20.460	74.00	10.74	165	158	PK	PASS
5138.14	29.5	49.84	20.360	54.00	4.16	165	158	AV	PASS
5145.51	43.3	63.66	20.340	74.00	10.34	165	182	PK	PASS
5145.51	30.1	50.42	20.340	54.00	3.58	165	165	AV	PASS
5350.41	26.7	46.63	19.940	54.00	7.37	165	192	AV	PASS
5366.53	40.0	59.94	19.910	74.00	14.06	165	162	PK	PASS



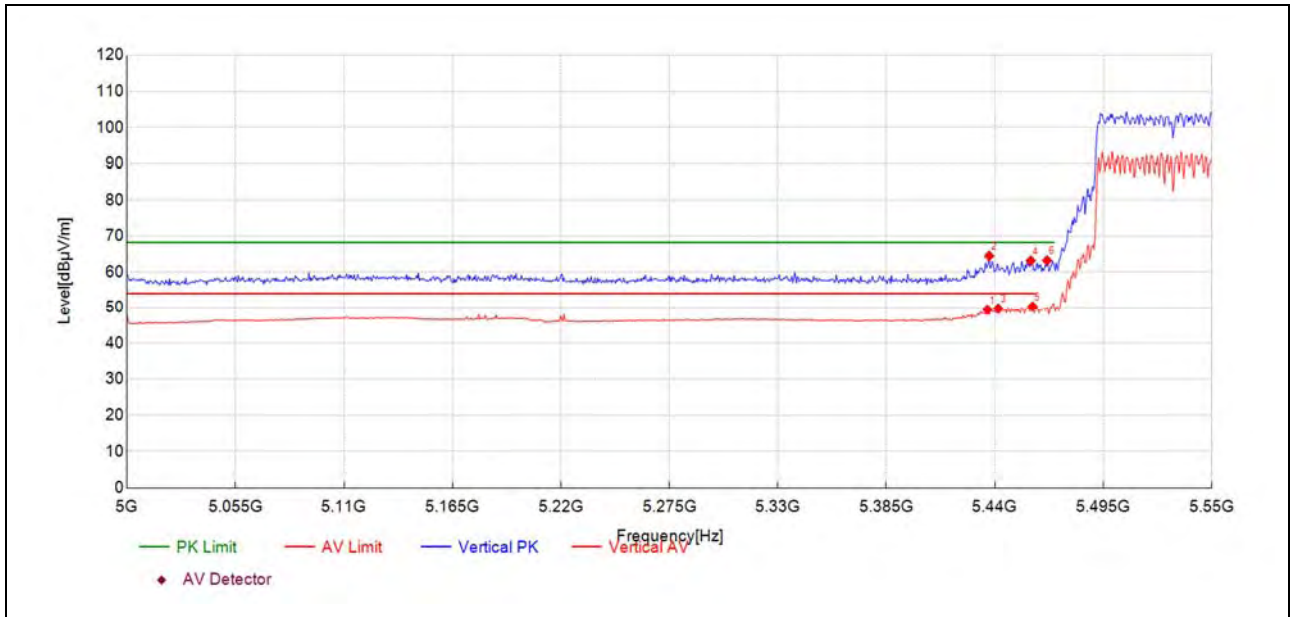
Plot for Channel 58



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5143.66	26.8	47.17	20.340	54.00	6.83	165	135	AV	PASS
5145.97	38.7	59.03	20.340	74.00	14.97	165	241	PK	PASS
5350.41	30.7	50.63	19.940	54.00	3.37	165	164	AV	PASS
5350.87	42.8	62.75	19.940	74.00	11.25	165	188	PK	PASS
5355.48	29.5	49.45	19.930	54.00	4.55	165	121	AV	PASS
5357.78	42.1	62.05	19.920	74.00	11.95	165	174	PK	PASS

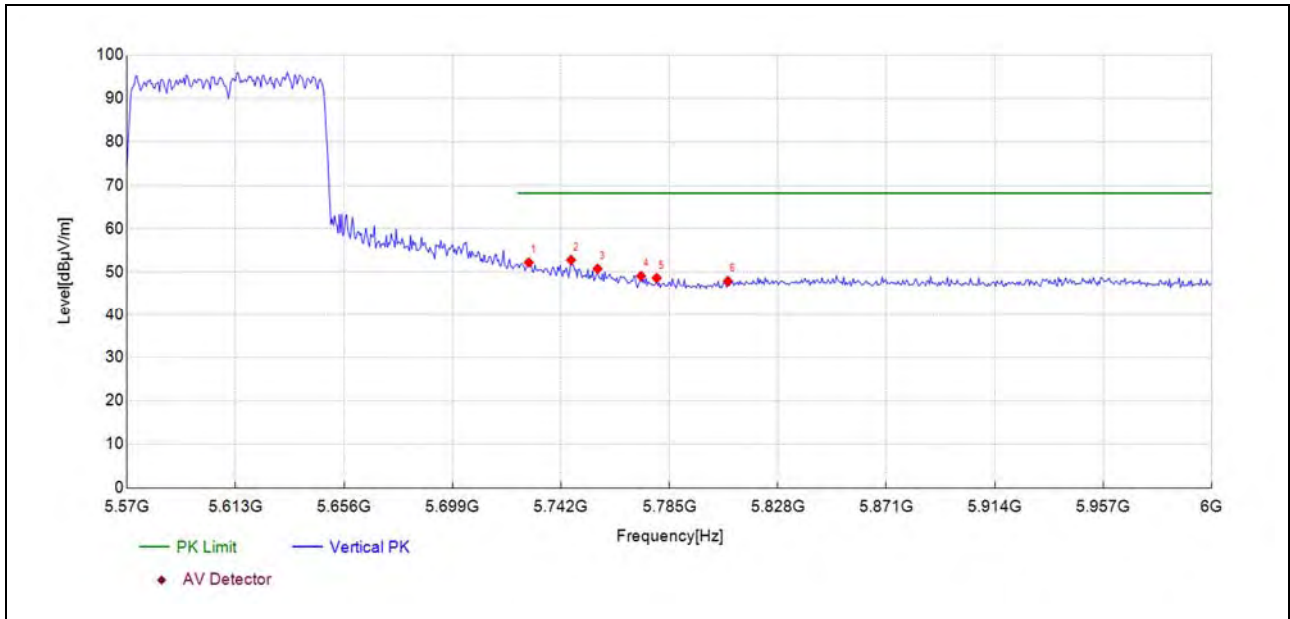


Plot for Channel 106



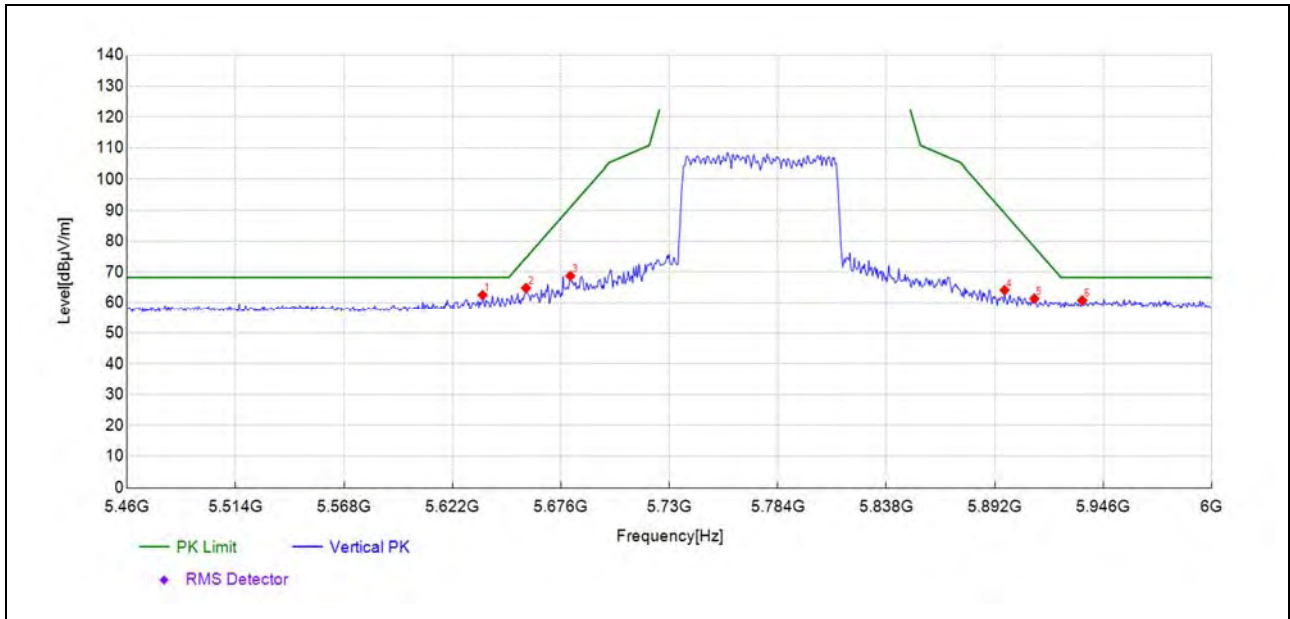
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5436.24	29.2	49.48	20.290	54.00	4.52	165	133	AV	PASS
5437.16	44.2	64.48	20.310	68.23	3.75	165	123	PK	PASS
5441.74	29.4	49.79	20.360	54.00	4.21	165	163	AV	PASS
5458.26	42.7	63.16	20.430	68.23	5.07	165	123	PK	PASS
5459.17	29.9	50.35	20.420	54.00	3.65	165	133	AV	PASS
5466.51	42.8	63.21	20.380	68.23	5.02	165	163	PK	PASS

Plot for Channel 122



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5729.28	42.9	52.20	9.330	68.23	16.03	165	160	PK	NA
5746.02	43.2	52.79	9.580	68.23	15.44	165	174	PK	PASS
5756.54	41.1	50.76	9.650	68.23	17.47	165	174	PK	PASS
5773.76	39.4	49.08	9.670	68.23	19.15	165	140	PK	PASS
5779.98	38.9	48.62	9.680	68.23	19.61	165	127	PK	PASS
5808.20	38.1	47.89	9.820	68.23	20.34	165	354	PK	PASS

Plot for Channel 155



Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5637.00	41.8	62.53	20.780	68.23	5.70	165	200	PK	PASS
5658.62	43.8	64.83	20.990	74.61	9.78	165	151	PK	PASS
5680.68	47.8	68.74	20.930	90.94	22.20	165	185	PK	PASS
5896.86	42.4	64.14	21.760	89.05	24.91	165	185	PK	PASS
5911.73	39.6	61.38	21.810	78.05	16.67	165	158	PK	PASS
5935.60	38.8	60.82	22.000	68.23	7.41	165	0	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, 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.

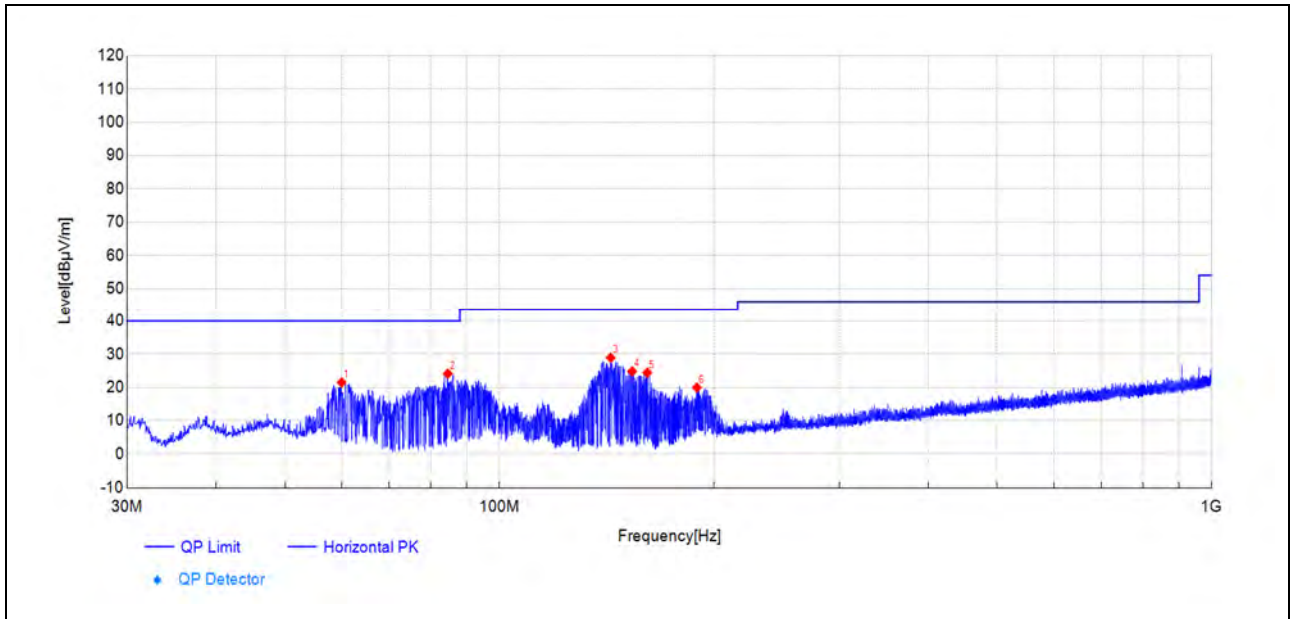
Field strength of fundamental:

Frequency [MHz]	Reading [dB μ V]	Level [dB μ V/m]	Factor [dB/m]	Detector	Polarity
5178.85	80.7	89.08	8.380	PK	Horizontal

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

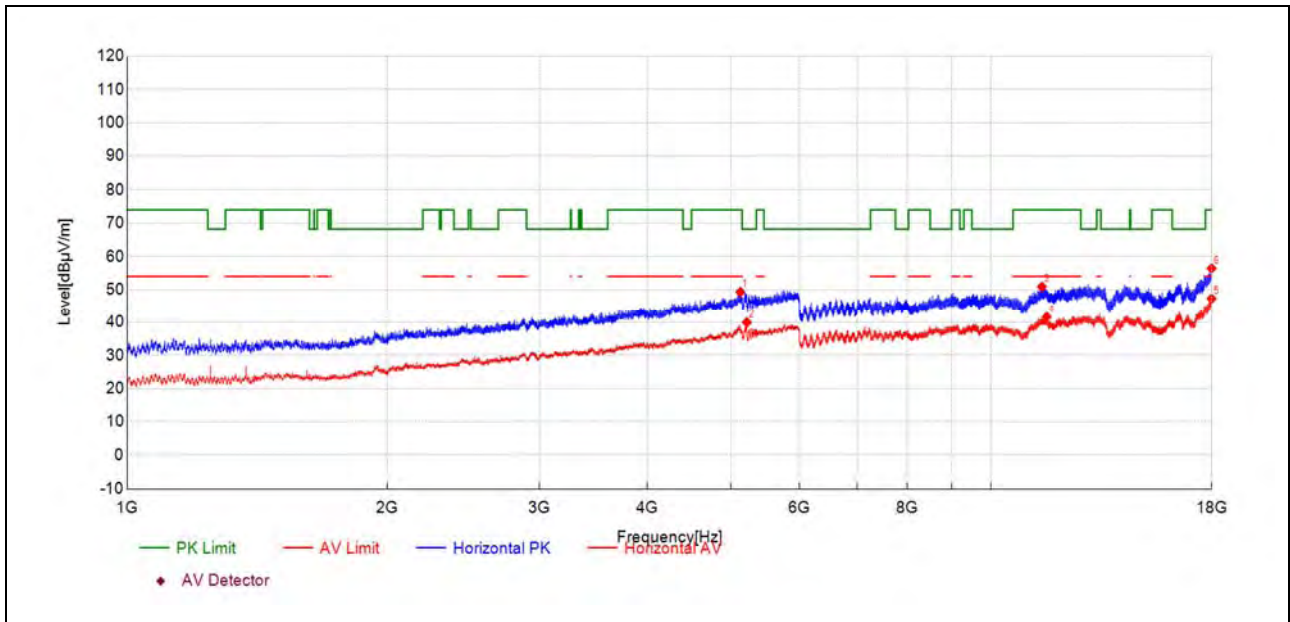
**802.11a Mode**

Plot for Channel 44



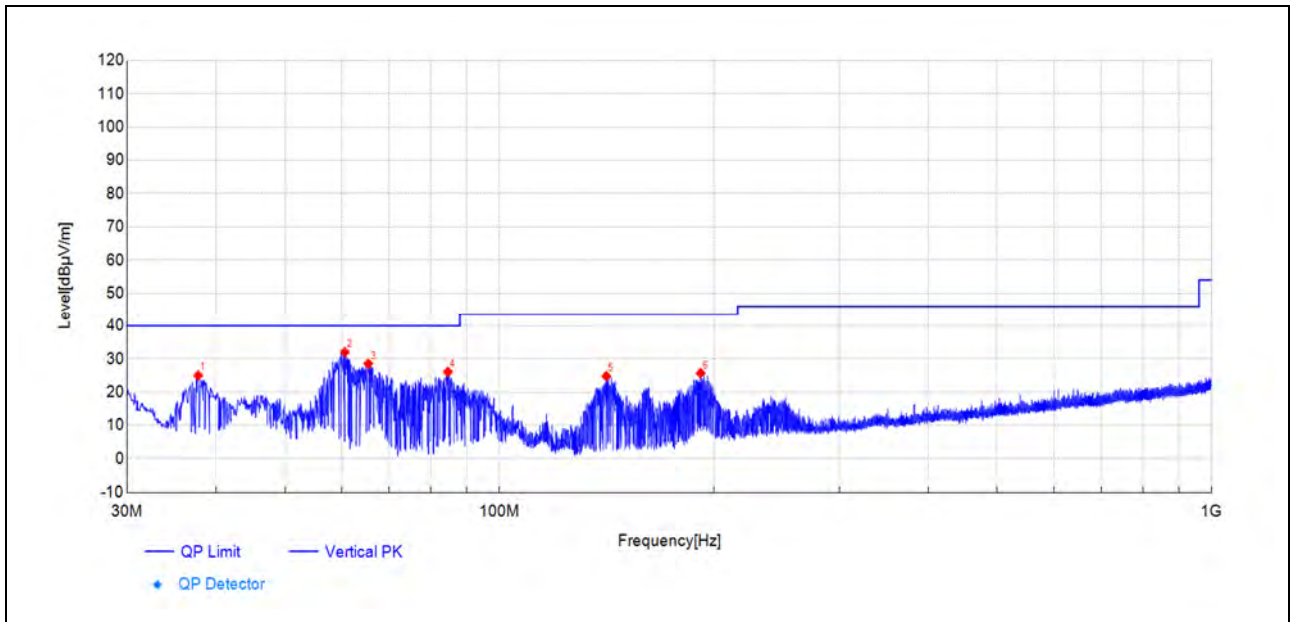
(Antenna Horizontal, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
60.04	52.4	21.49	-30.930	40.00	18.51	165	114	PK	PASS
84.62	58.2	24.14	-34.100	40.00	15.86	165	11	PK	PASS
143.29	62.5	28.93	-33.550	43.50	14.57	165	248	PK	PASS
153.58	58.0	24.83	-33.140	43.50	18.67	165	257	PK	PASS
161.28	57.1	24.47	-32.630	43.50	19.03	165	266	PK	PASS
189.32	50.0	19.96	-30.030	43.50	23.54	165	218	PK	PASS



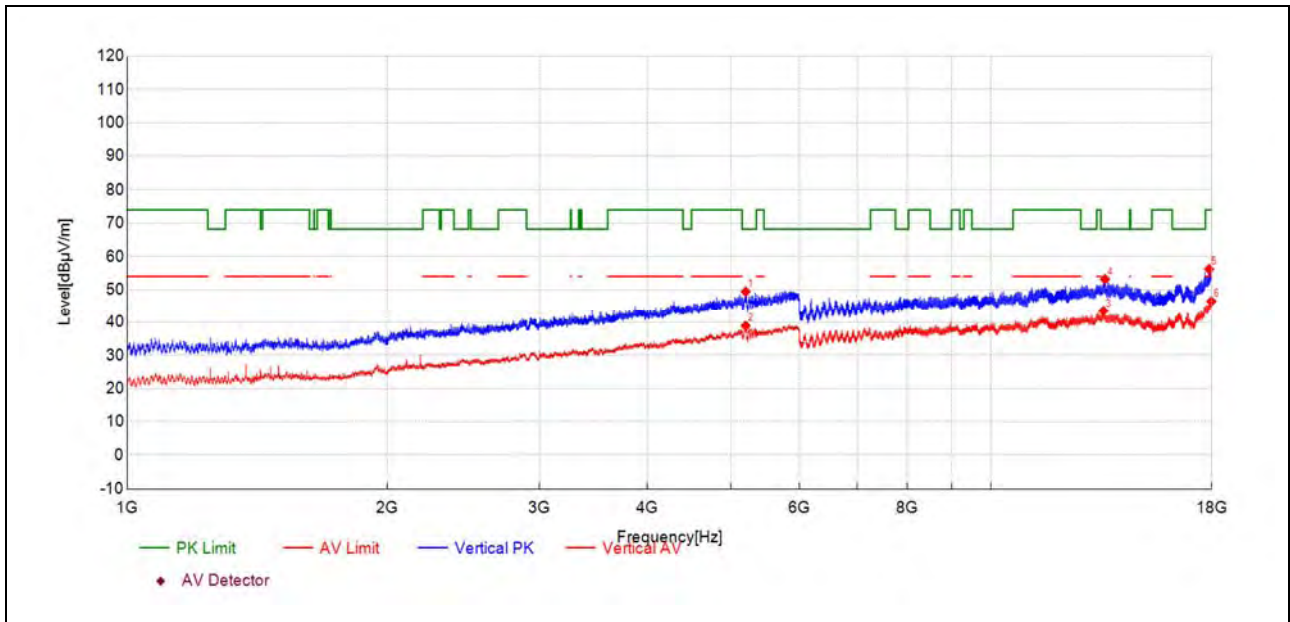
(Antenna Horizontal, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5126.58	39.2	49.28	10.070	74.00	24.72	165	49	PK	PASS
5215.16	29.7	39.92	10.180	-	-	165	60	AV	NA
11450.14	48.0	50.88	2.920	74.00	23.12	165	86	PK	PASS
11596.06	38.6	41.58	2.990	54.00	12.42	165	0	AV	PASS
17995.68	34.9	47.27	12.420	54.00	6.73	165	118	AV	PASS
17995.68	44.0	56.41	12.420	74.00	17.59	165	118	PK	PASS



(Antenna Vertical, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
37.76	54.8	25.01	-29.800	40.00	14.99	165	0	PK	PASS
60.69	63.2	32.08	-31.120	40.00	7.92	165	150	PK	PASS
65.45	61.4	28.54	-32.830	40.00	11.46	165	179	PK	PASS
84.62	60.2	26.10	-34.100	40.00	13.90	165	207	PK	PASS
141.29	58.4	24.80	-33.570	43.50	18.70	165	20	PK	PASS
191.62	55.4	25.72	-29.640	43.50	17.78	165	198	PK	PASS

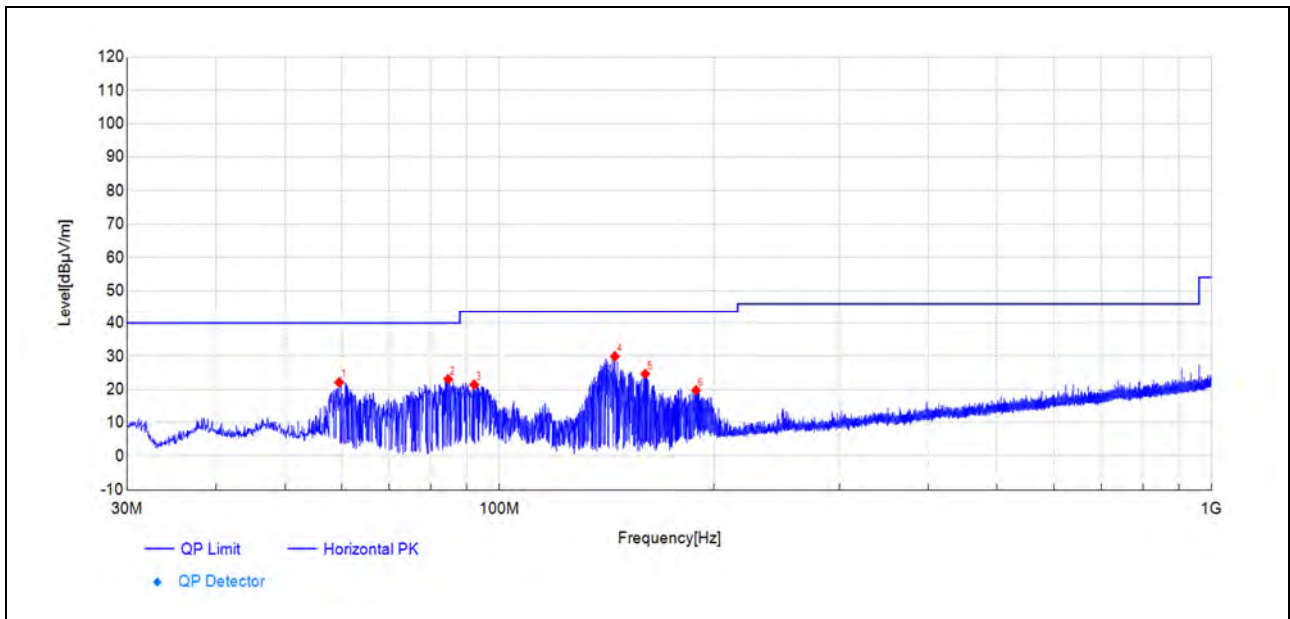


(Antenna Vertical, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5198.97	39.1	49.41	10.330	68.23	18.82	165	112	PK	PASS
5198.97	28.6	38.88	10.330	-	-	165	186	AV	NA
13491.66	38.4	43.50	5.100	-	-	165	53	AV	NA
13547.34	48.0	53.14	5.100	68.23	15.09	165	148	PK	PASS
17880.00	45.2	56.19	11.040	74.00	17.81	165	305	PK	PASS
17984.64	34.2	46.44	12.280	54.00	7.56	165	1	AV	PASS

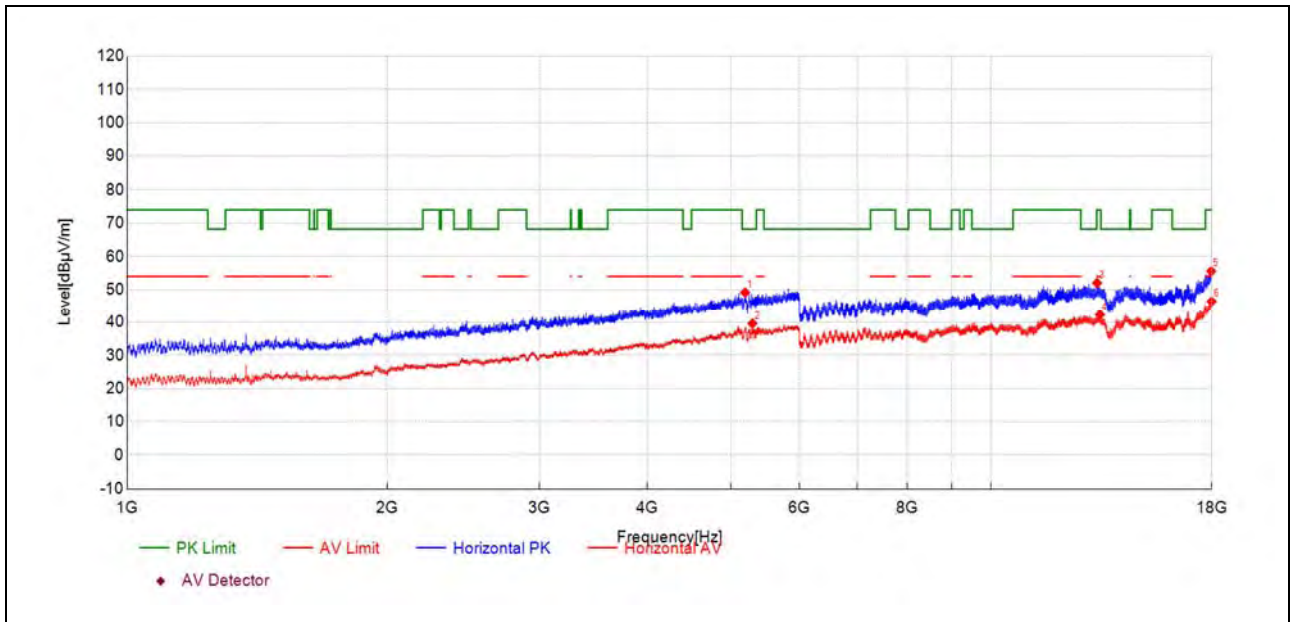


Plot for Channel 60



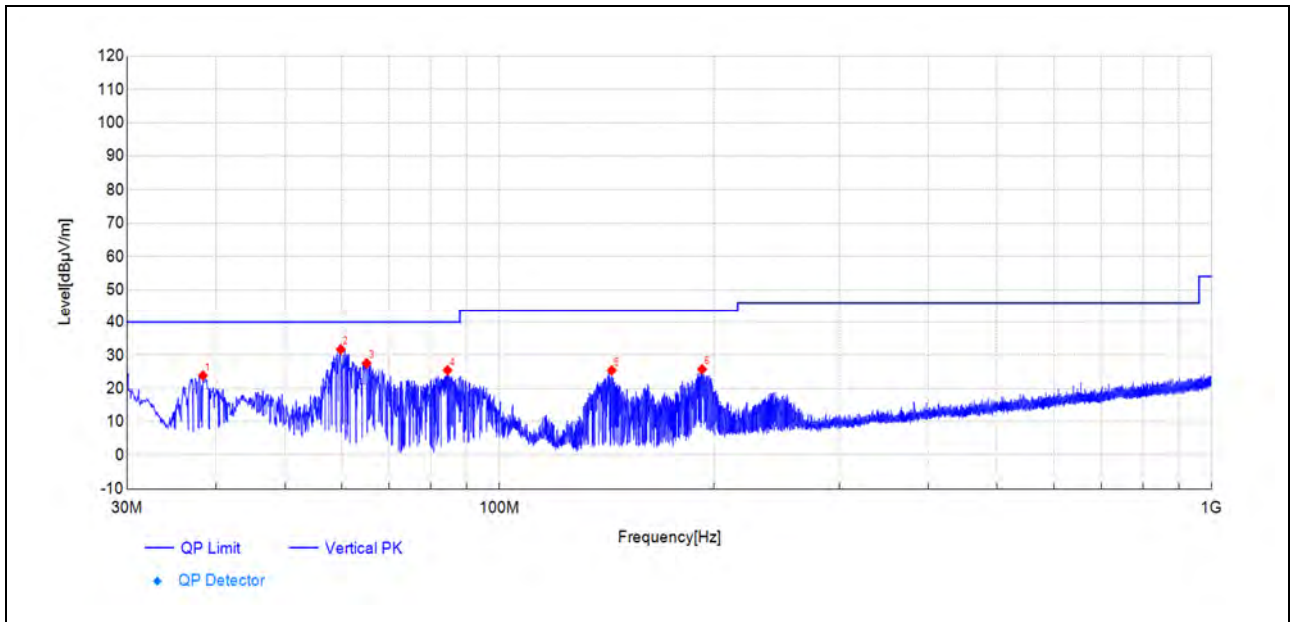
(Antenna Horizontal, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
59.57	53.0	22.17	-30.790	40.00	17.83	165	123	PK	PASS
84.73	57.2	23.08	-34.070	40.00	16.92	165	161	PK	PASS
92.14	52.8	21.45	-31.330	43.50	22.05	165	10	PK	PASS
145.23	63.5	29.96	-33.540	43.50	13.54	165	264	PK	PASS
160.22	57.4	24.67	-32.720	43.50	18.83	165	274	PK	PASS
188.80	49.9	19.74	-30.150	43.50	23.76	165	227	PK	PASS



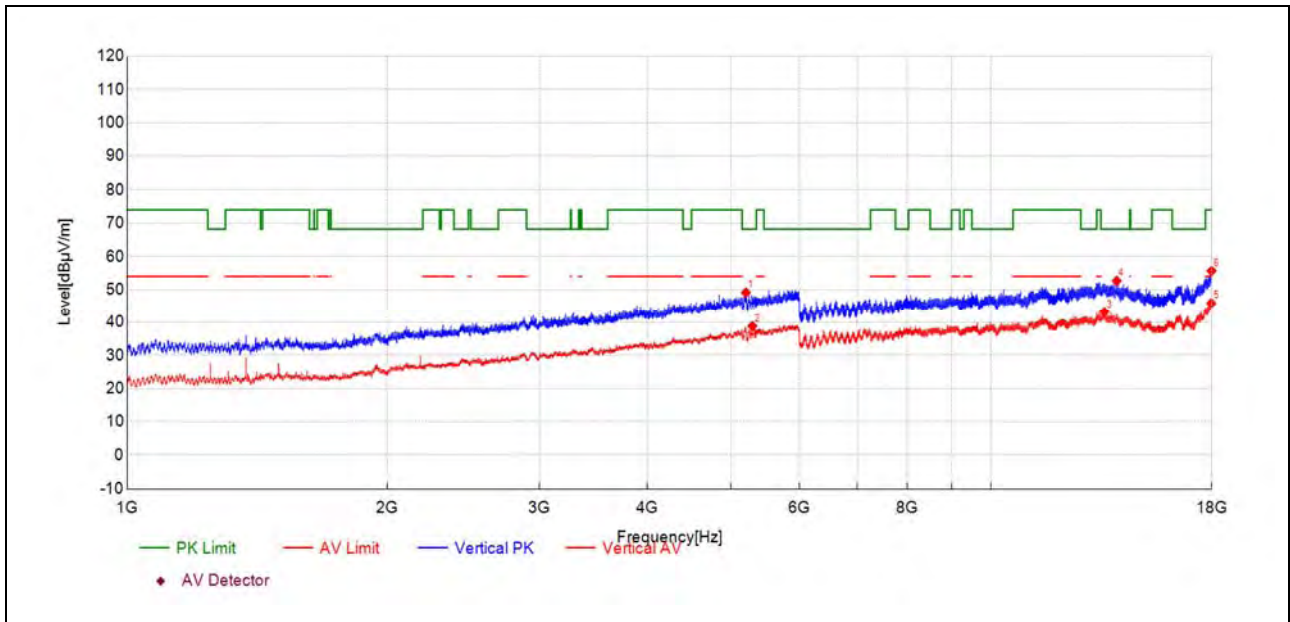
(Antenna Horizontal, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5191.83	38.9	49.14	10.290	68.23	19.09	165	52	PK	PASS
5293.27	29.3	39.56	10.230	-	-	165	52	AV	NA
13262.69	46.8	52.01	5.240	74.00	21.99	165	38	PK	PASS
13364.45	37.2	42.26	5.080	54.00	11.74	165	0	AV	PASS
17976.96	43.4	55.57	12.190	74.00	18.43	165	133	PK	PASS
17994.72	34.0	46.41	12.400	54.00	7.59	165	260	AV	PASS



(Antenna Vertical, 30MHz to 1GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
38.35	53.5	23.91	-29.620	40.00	16.09	165	38	PK	PASS
59.87	62.7	31.78	-30.880	40.00	8.22	165	143	PK	PASS
65.10	60.3	27.60	-32.720	40.00	12.40	165	170	PK	PASS
84.56	59.6	25.50	-34.120	40.00	14.50	165	198	PK	PASS
143.76	59.0	25.46	-33.550	43.50	18.04	165	14	PK	PASS
192.62	55.4	25.78	-29.600	43.50	17.72	165	198	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
5202.30	38.8	49.12	10.310	68.23	19.11	165	26	PK	PASS
5293.27	28.6	38.78	10.230	-	-	165	359	AV	NA
13521.90	38.0	43.15	5.120	-	-	165	1	AV	NA
13974.08	47.4	52.65	5.240	68.23	15.58	165	338	PK	PASS
17977.92	33.7	45.89	12.200	54.00	8.11	165	72	AV	PASS
17992.80	43.3	55.68	12.390	74.00	18.32	165	213	PK	PASS