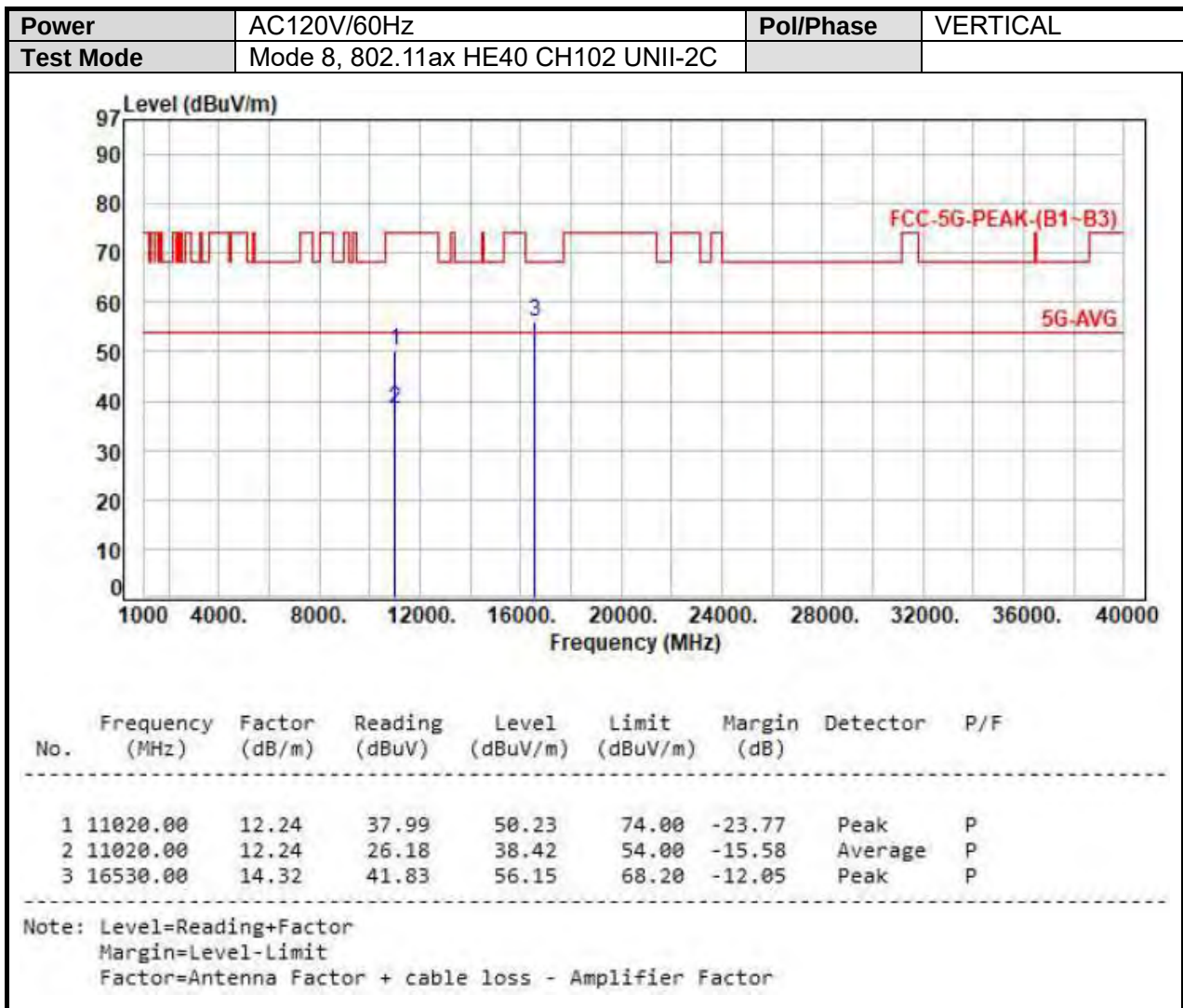
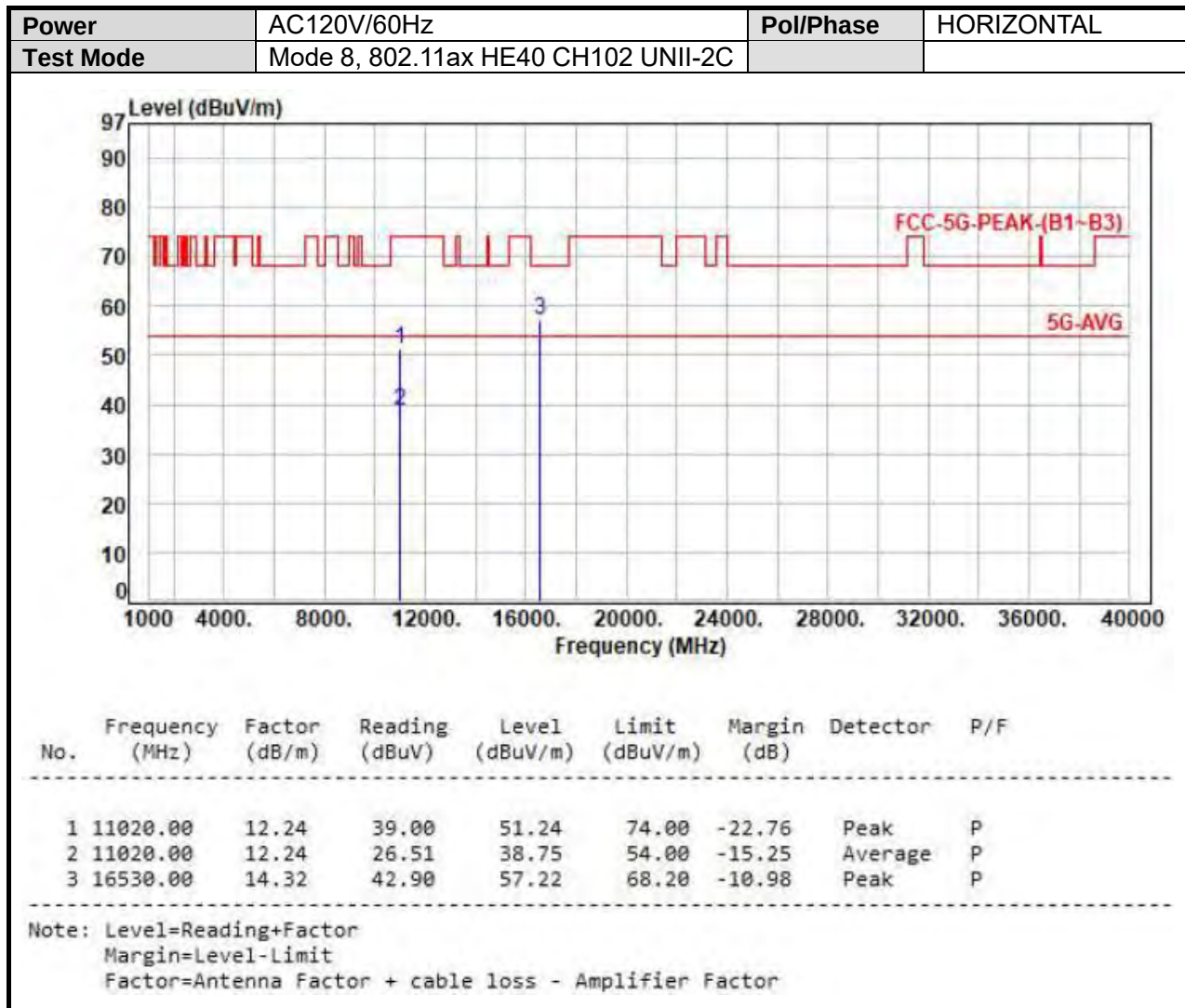
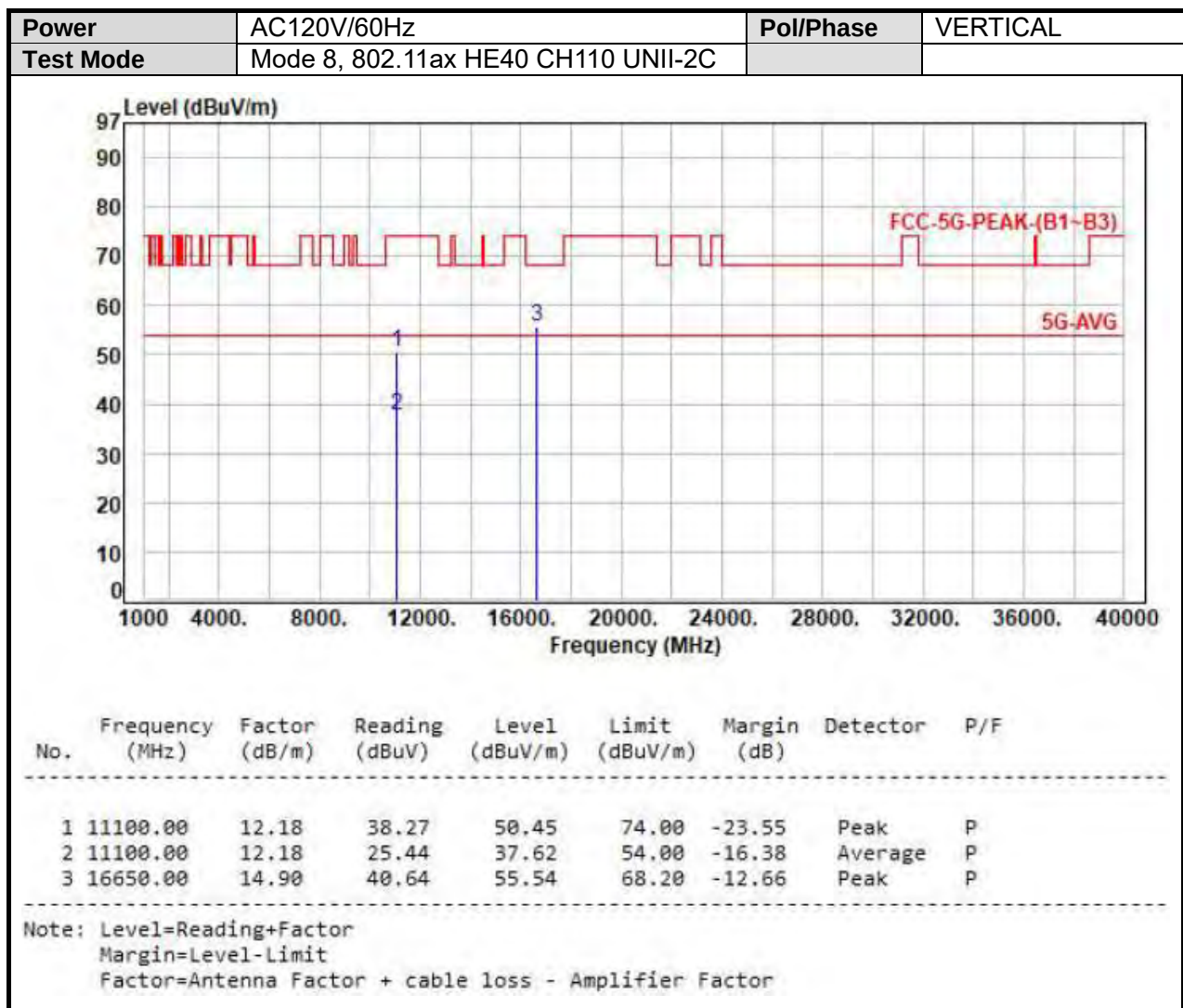
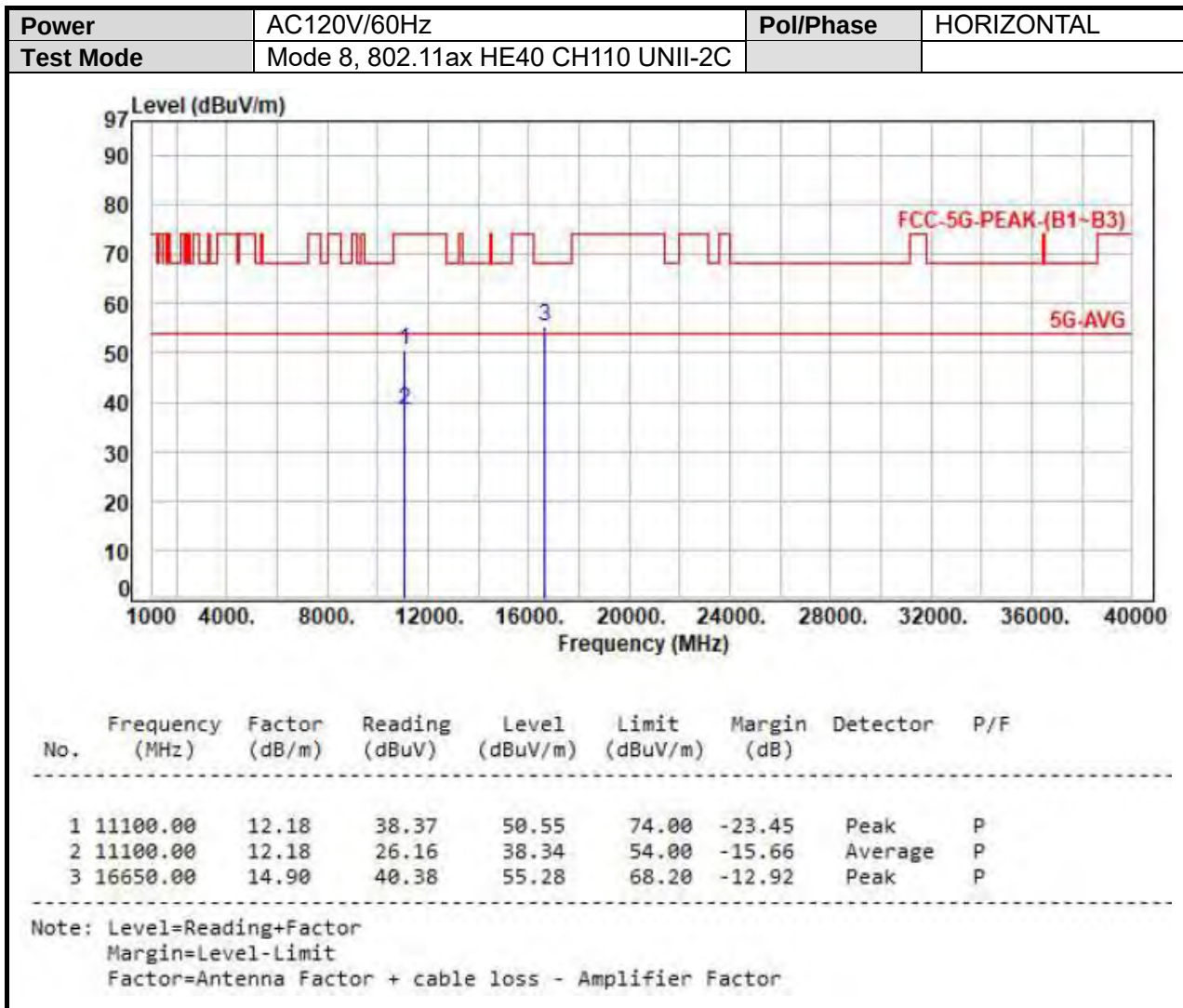
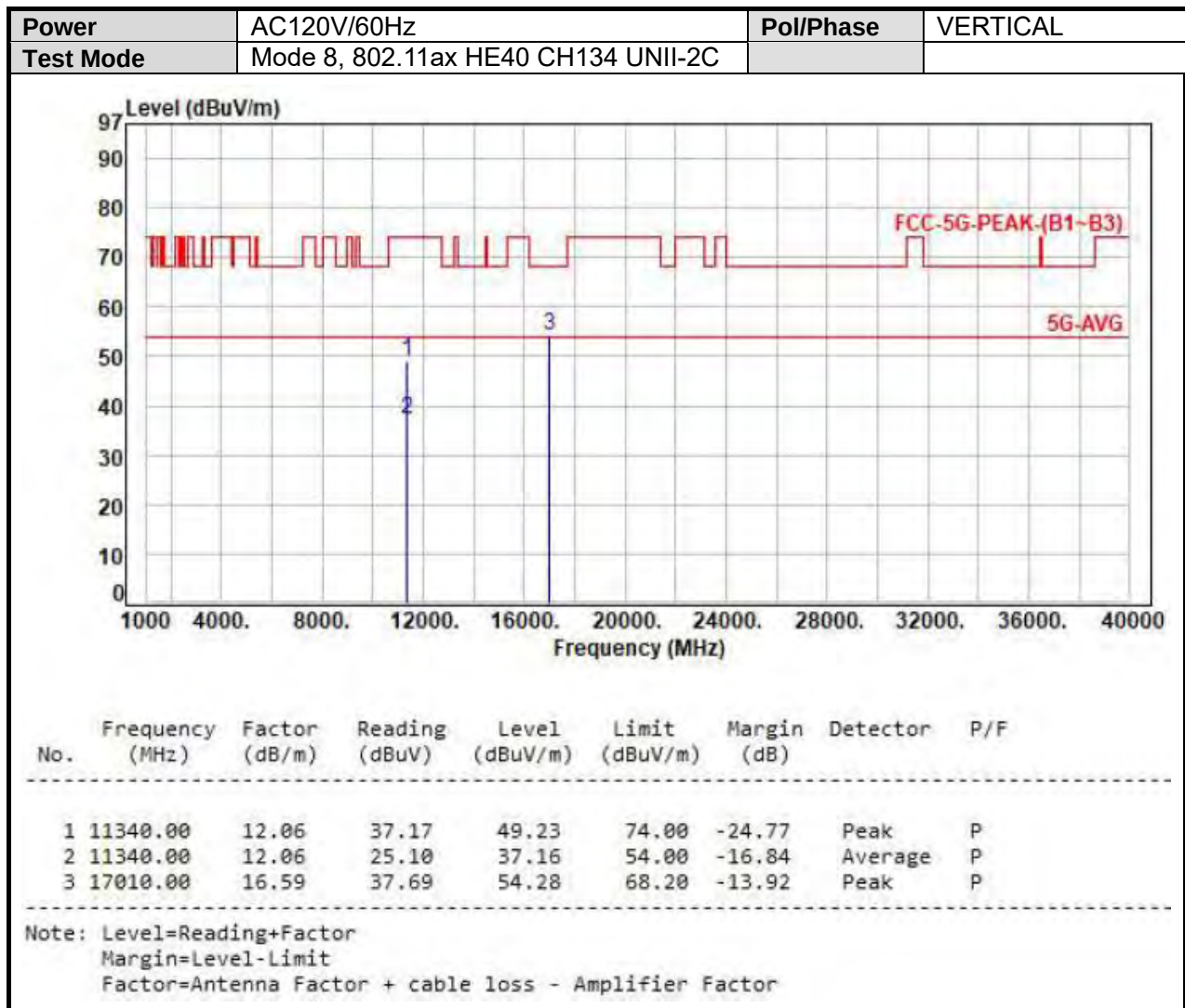


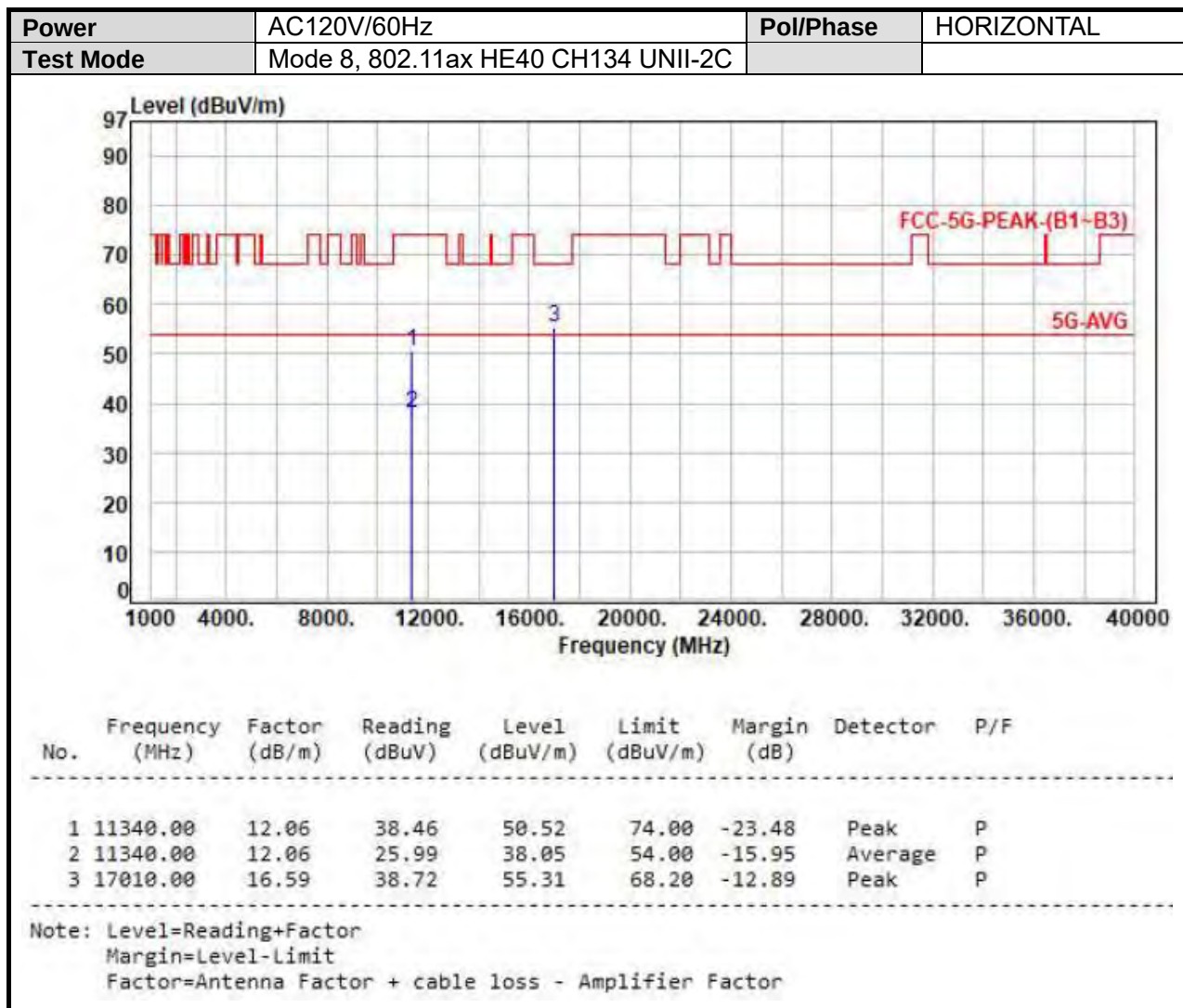


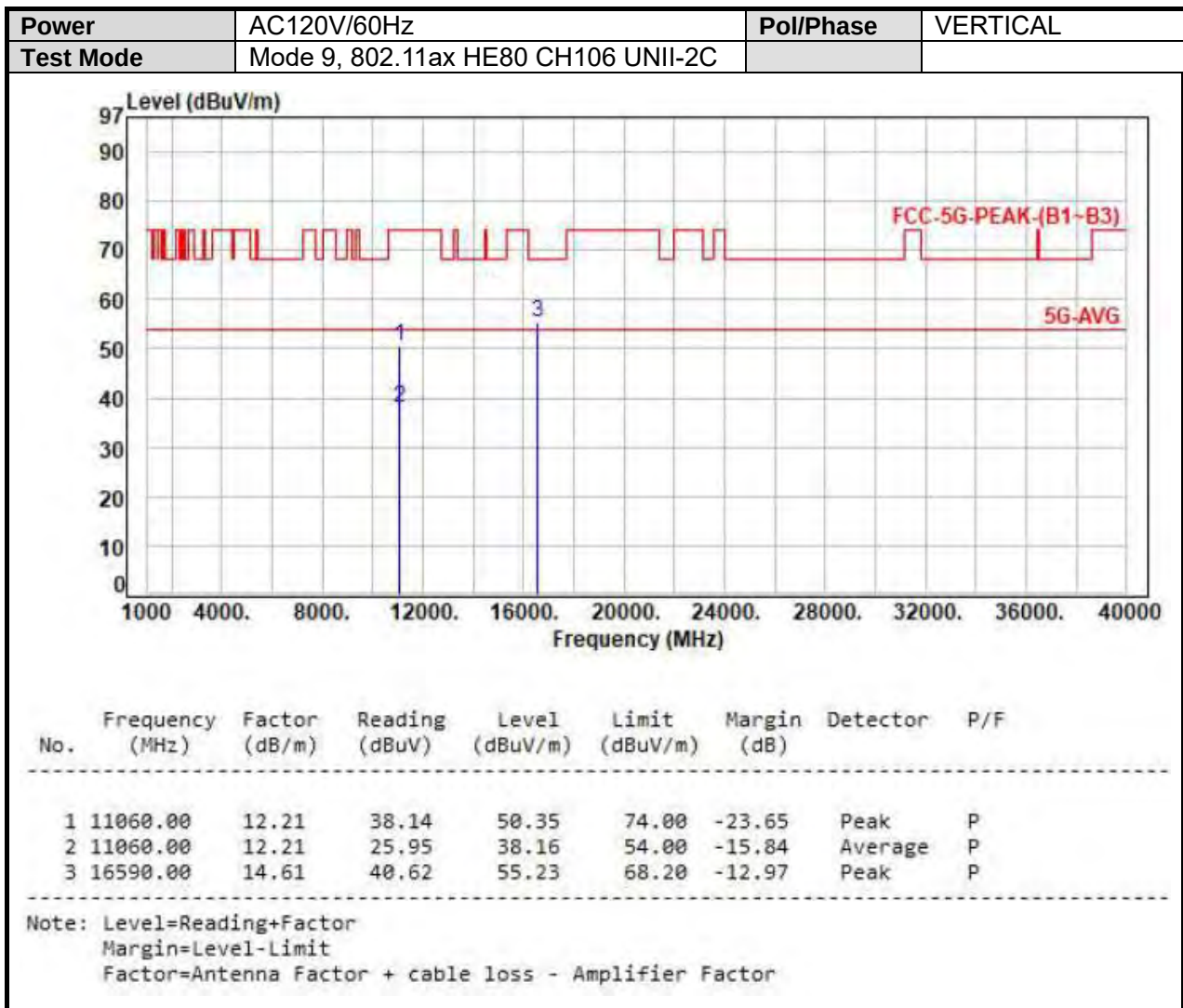


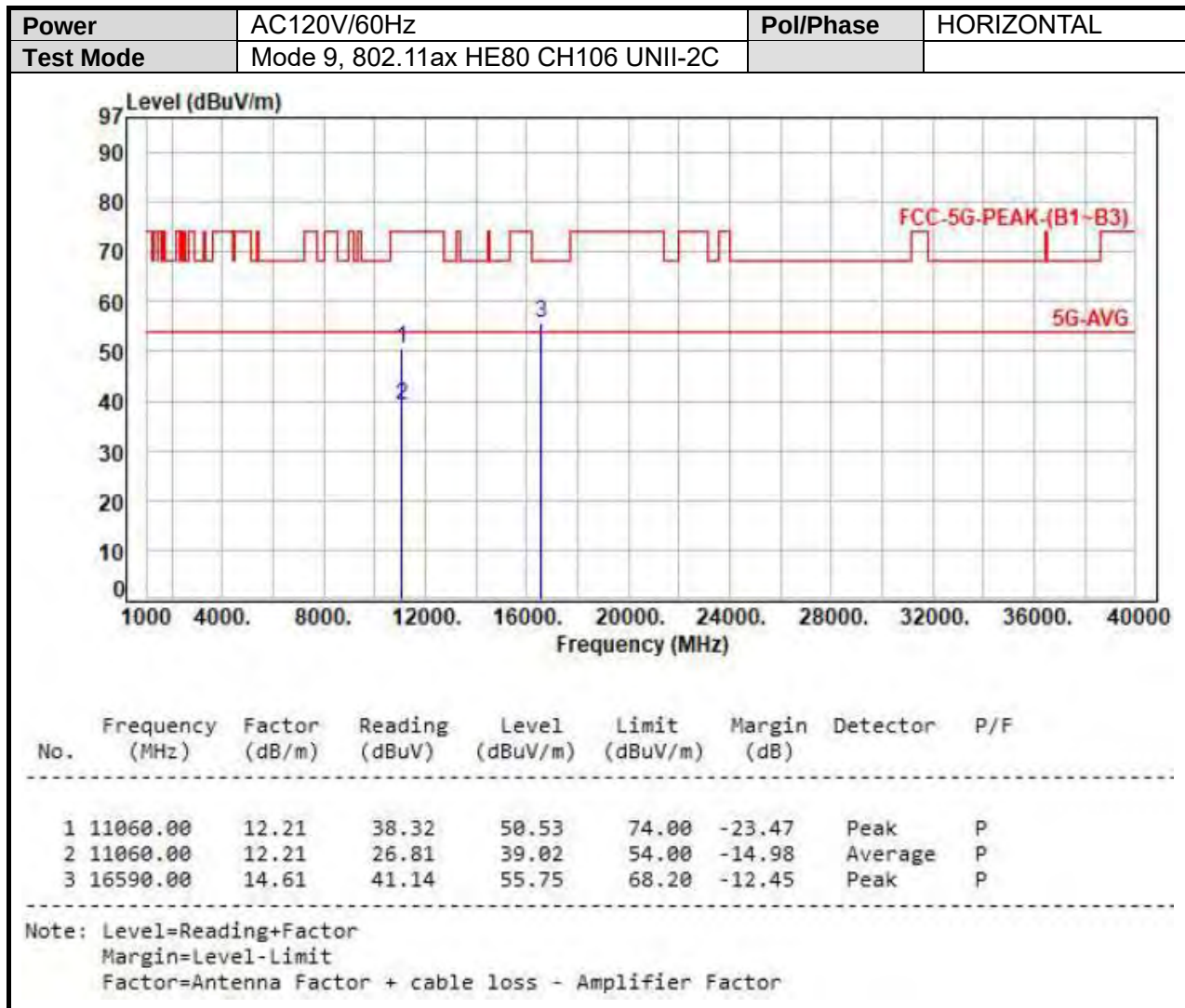


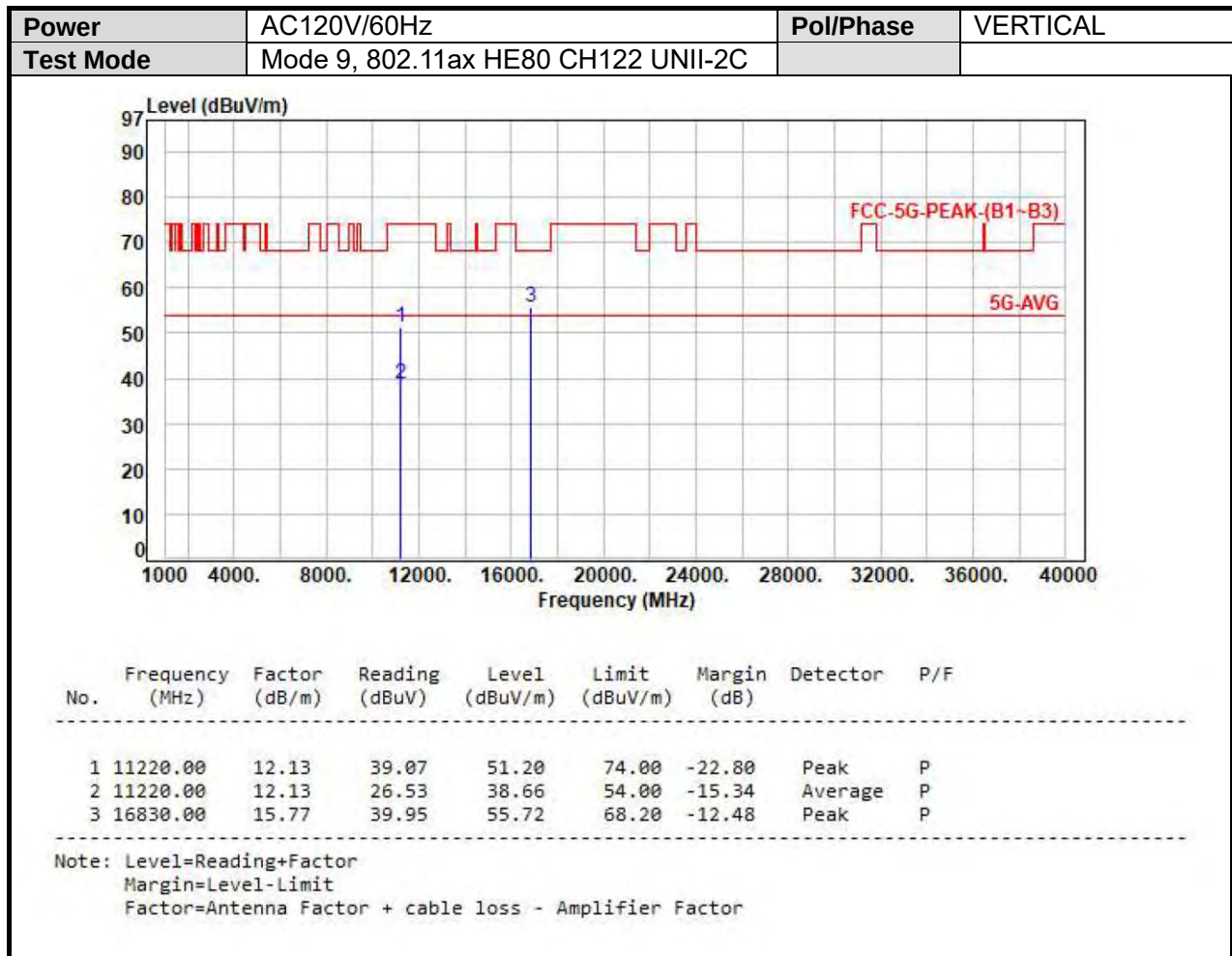


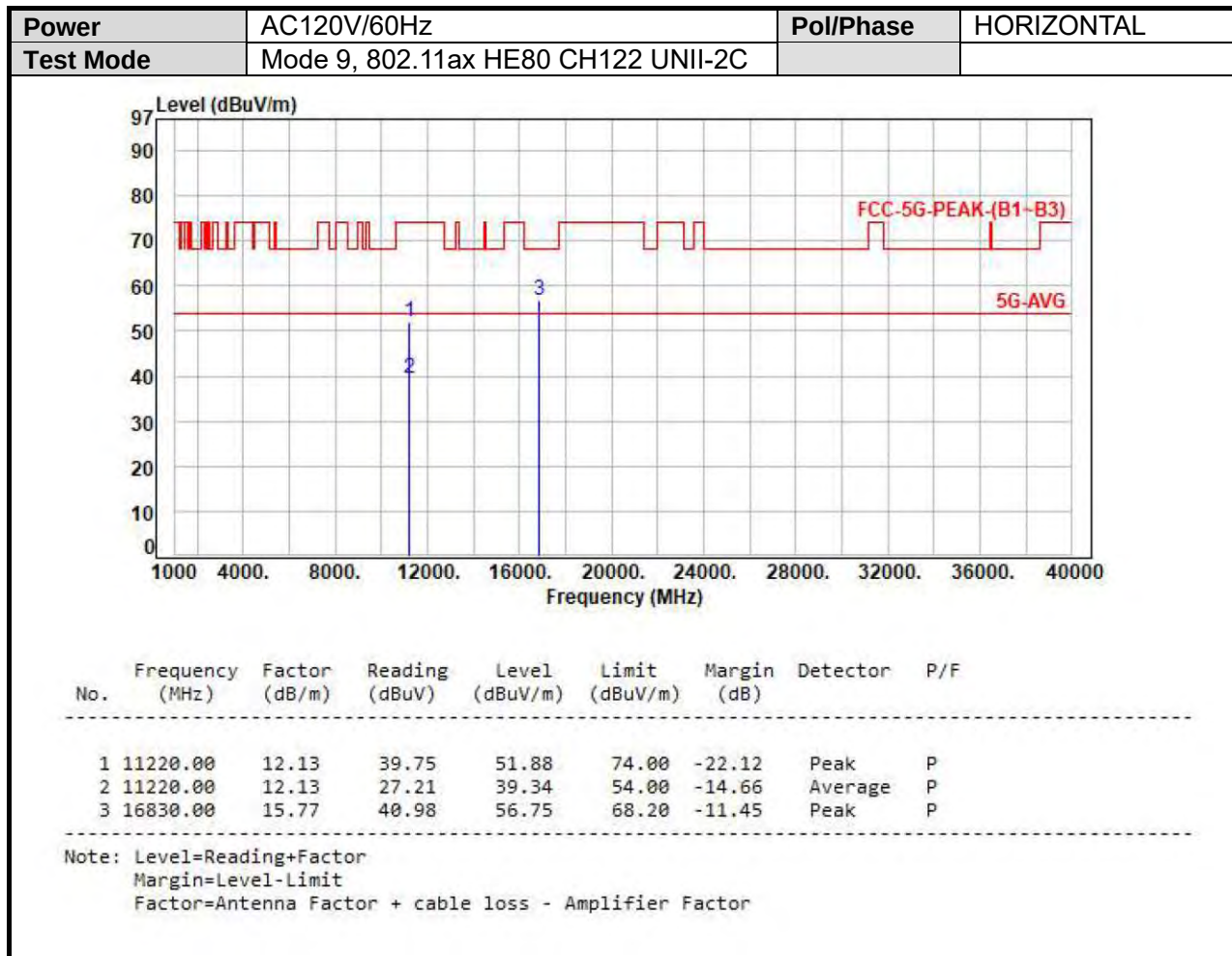






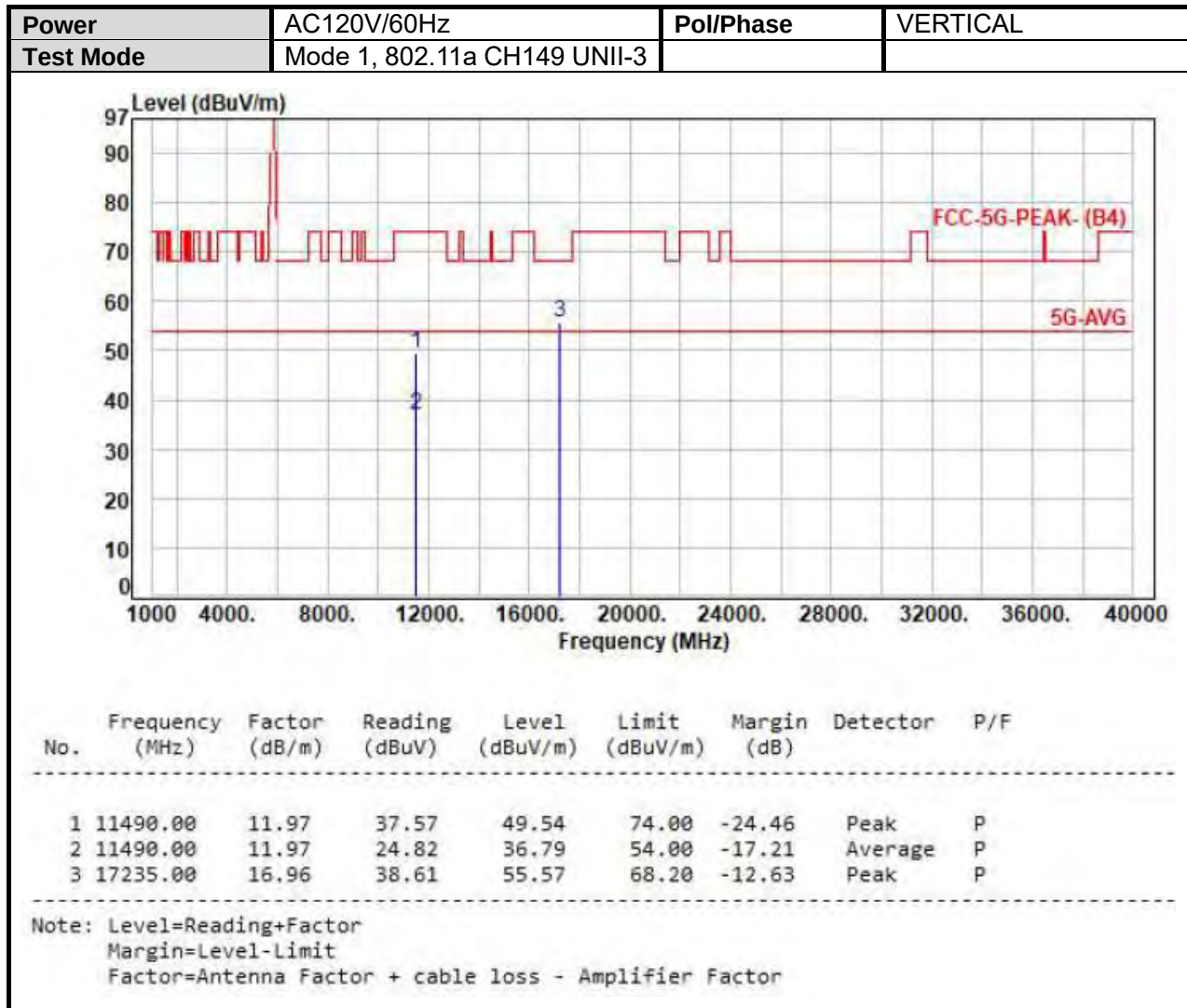


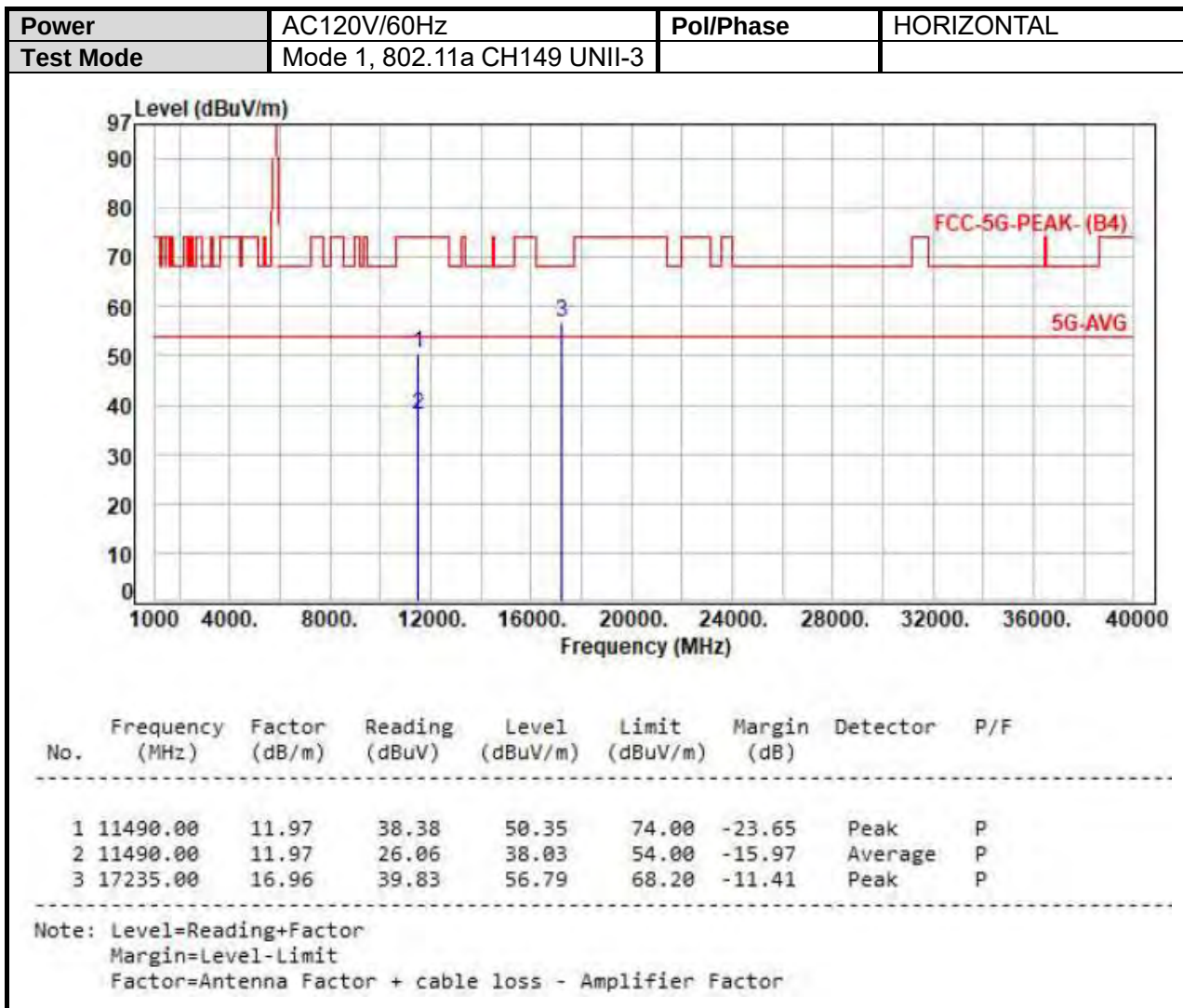


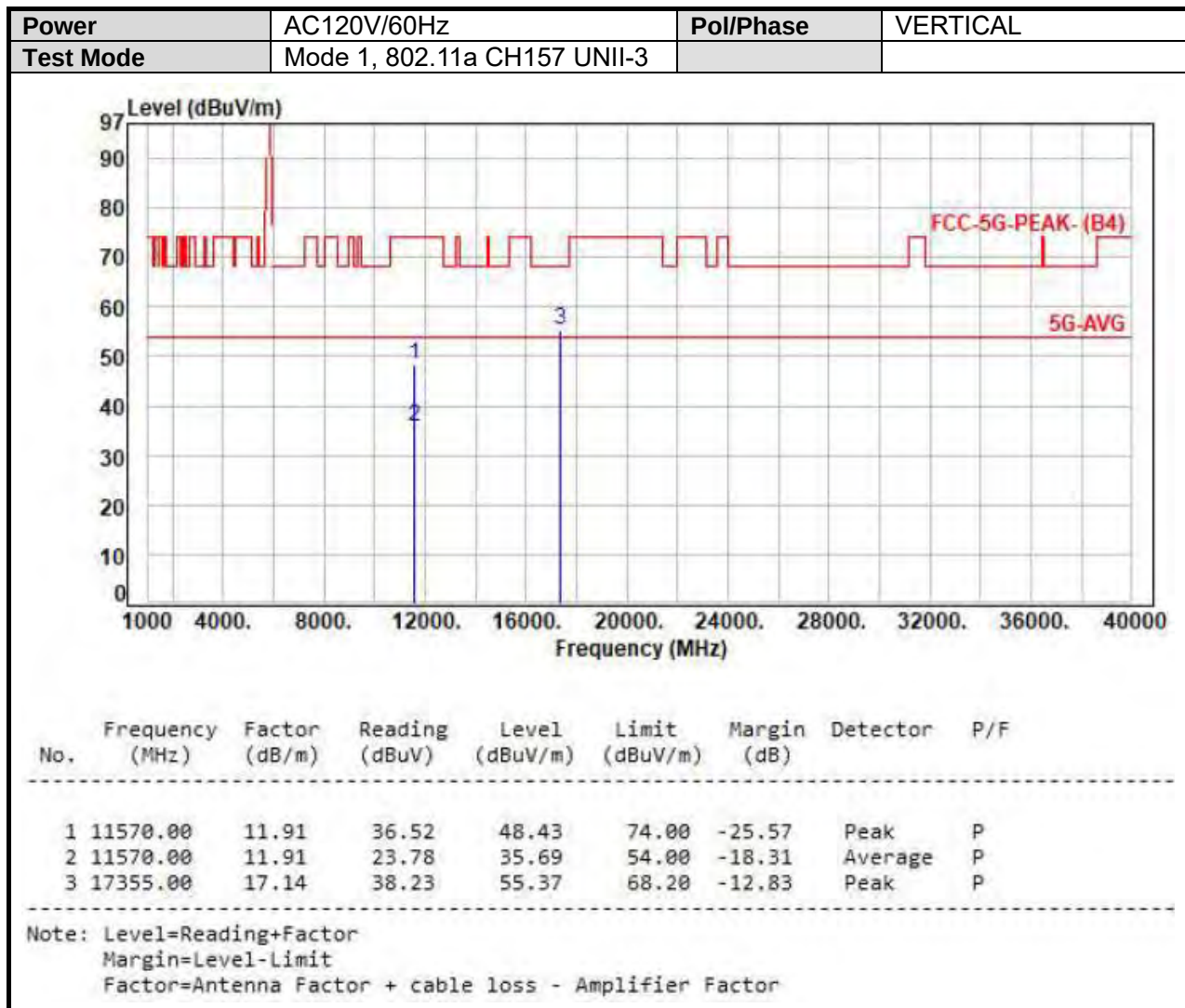


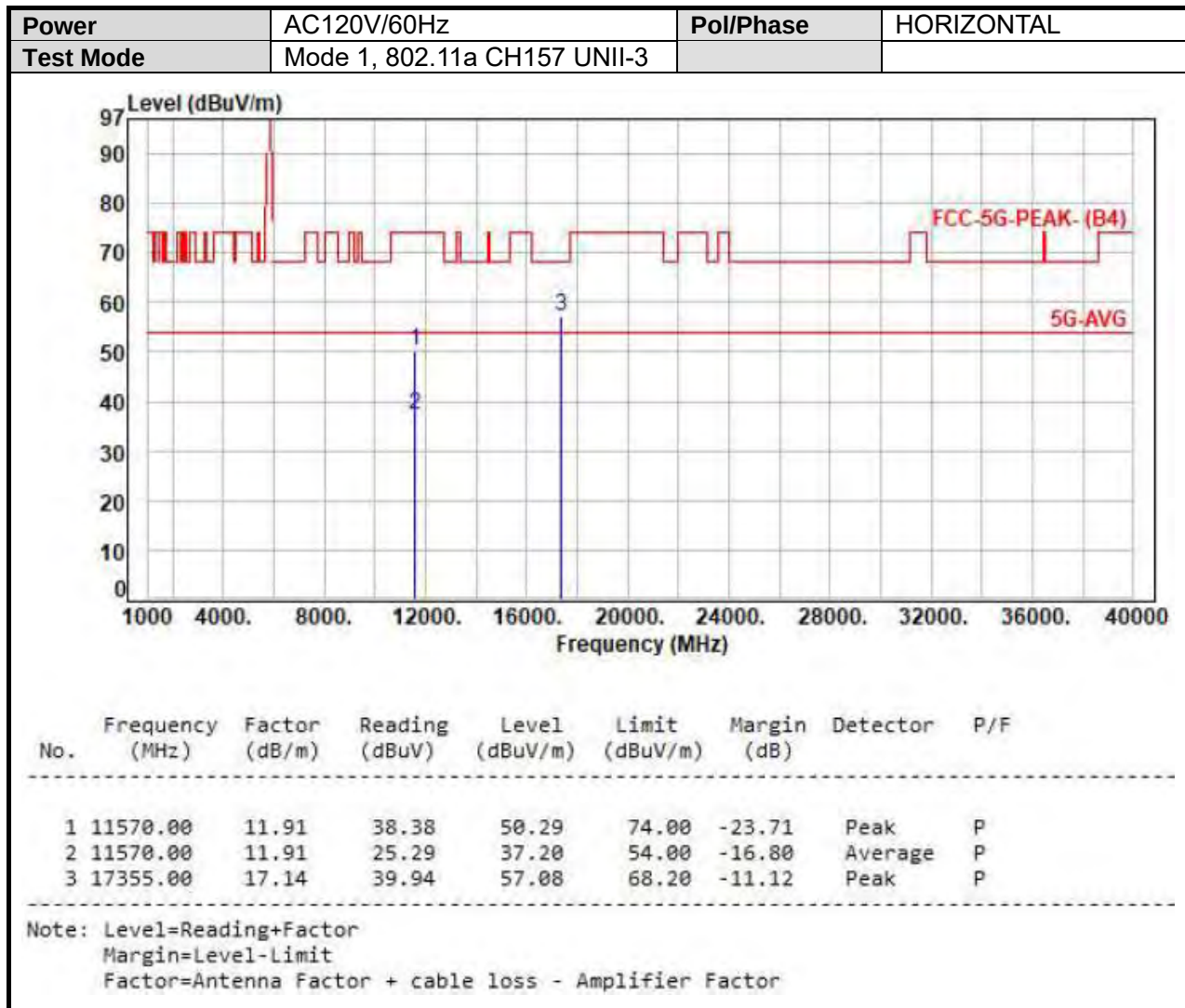


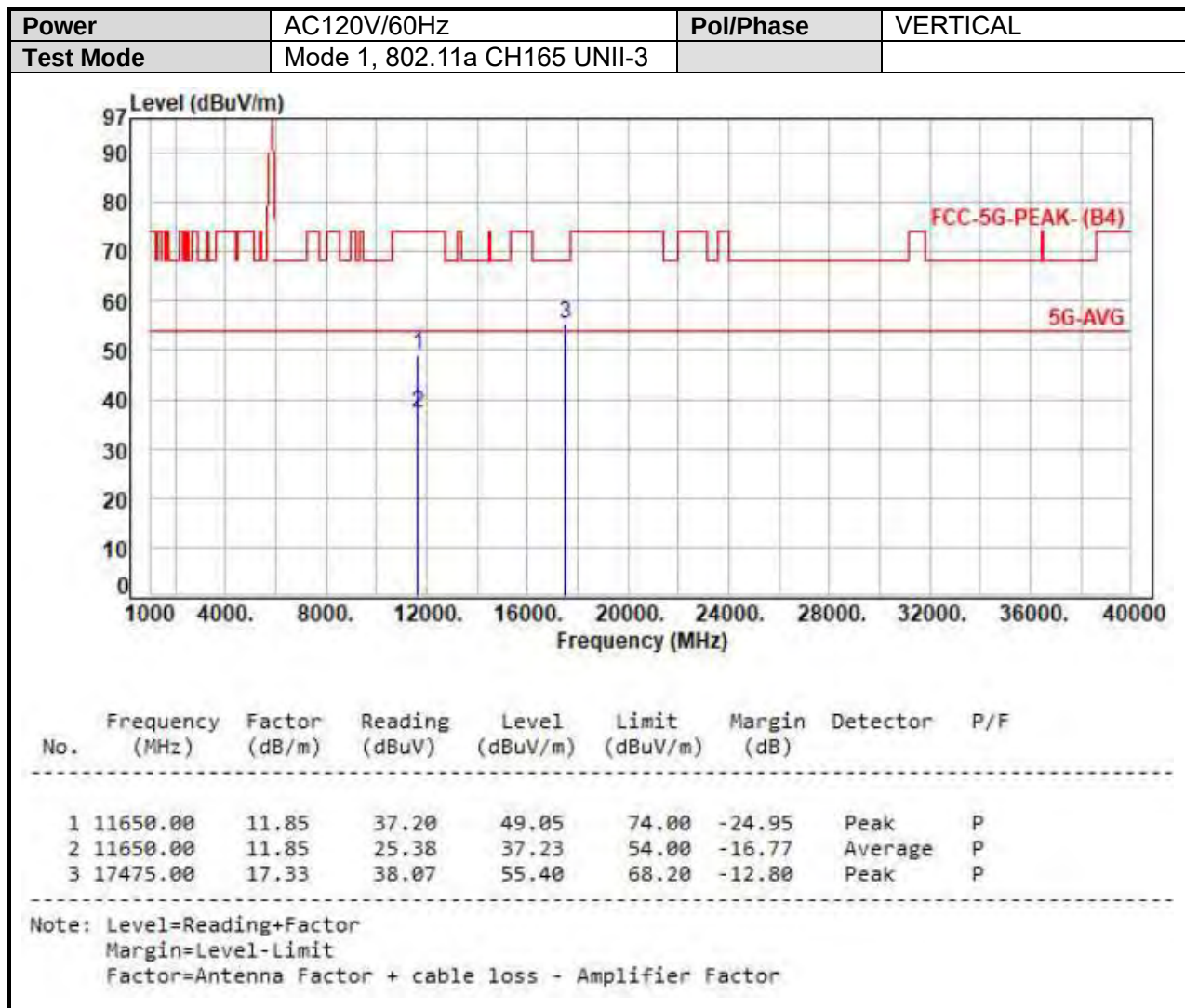
UNII-3

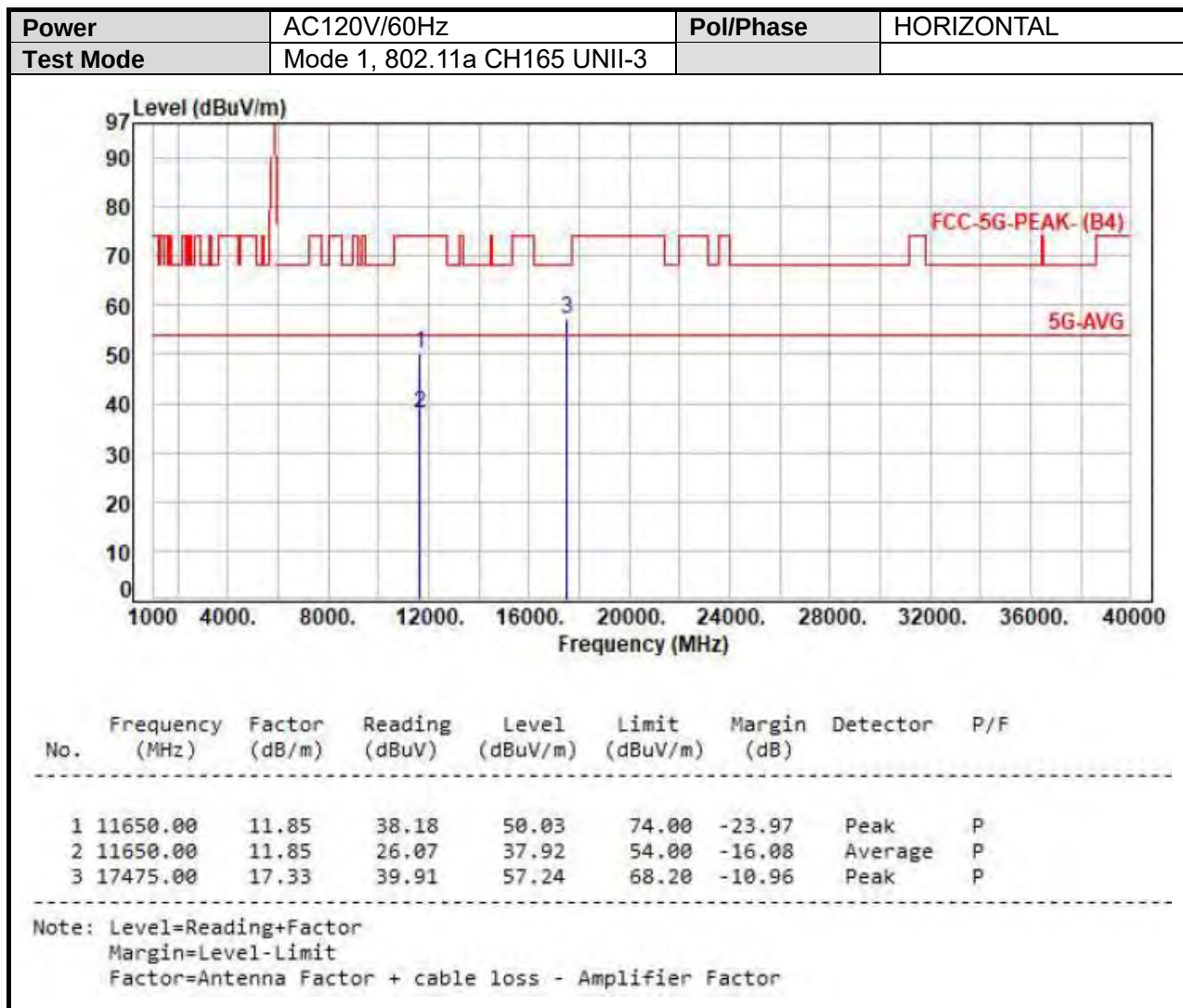


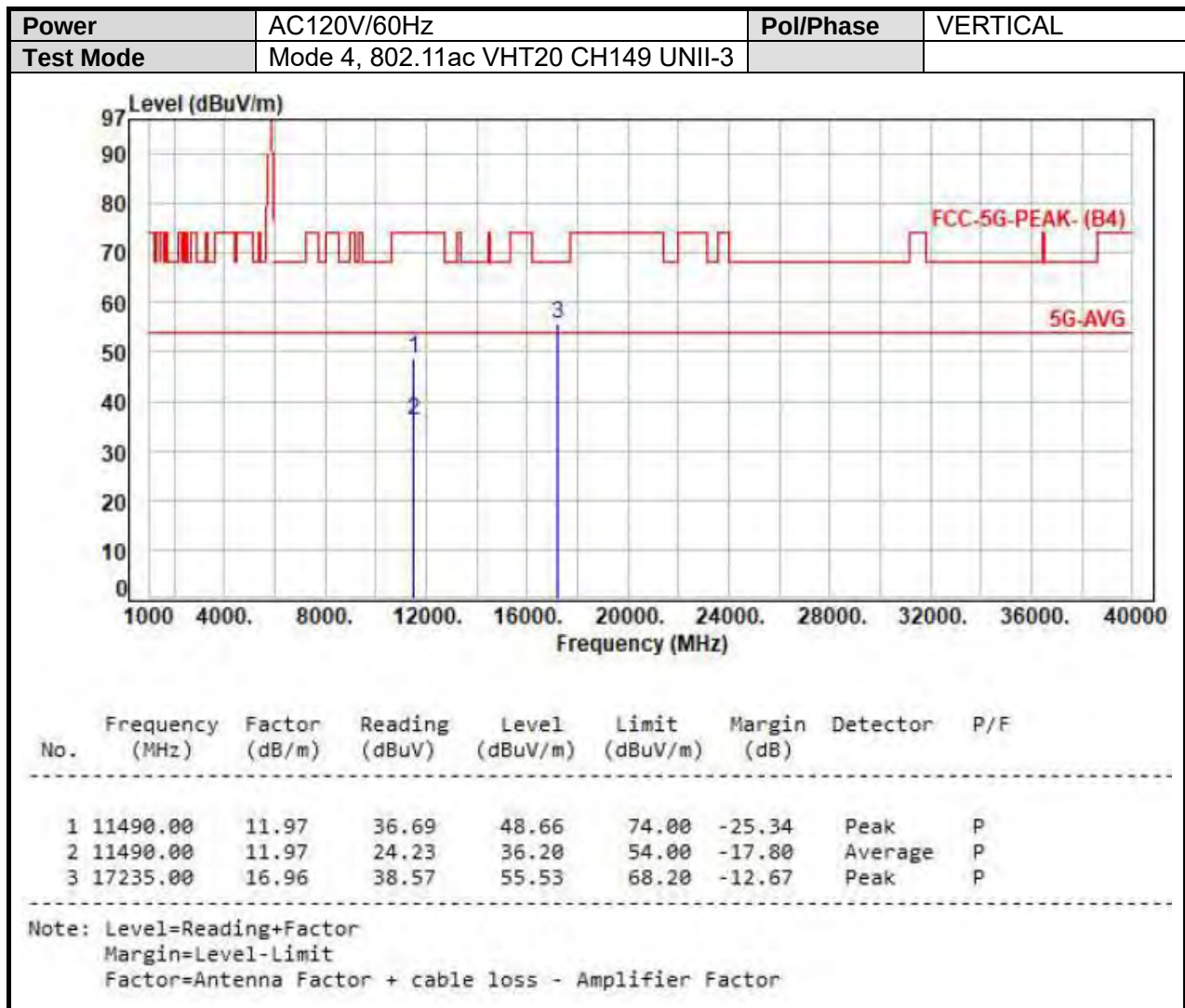


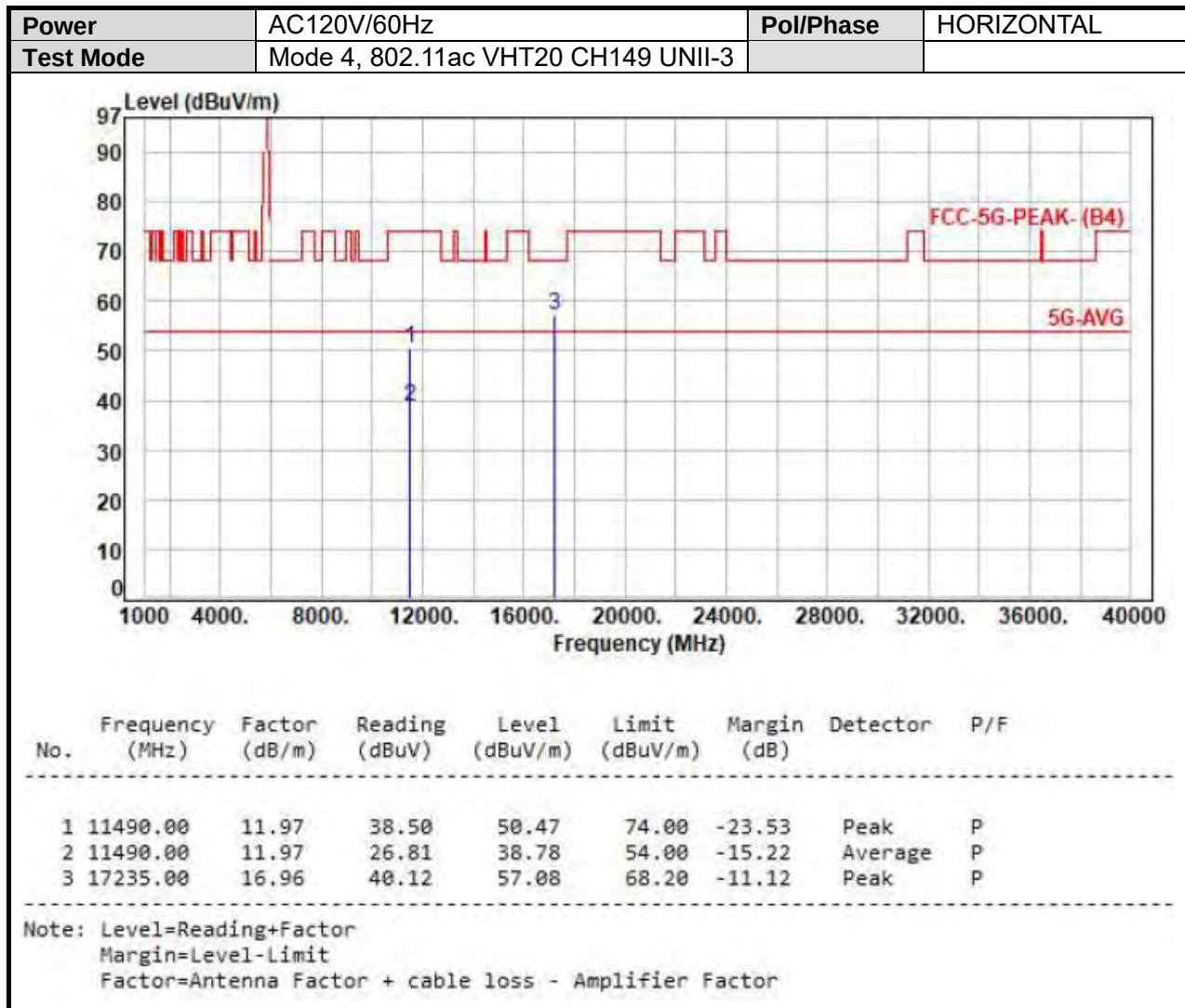


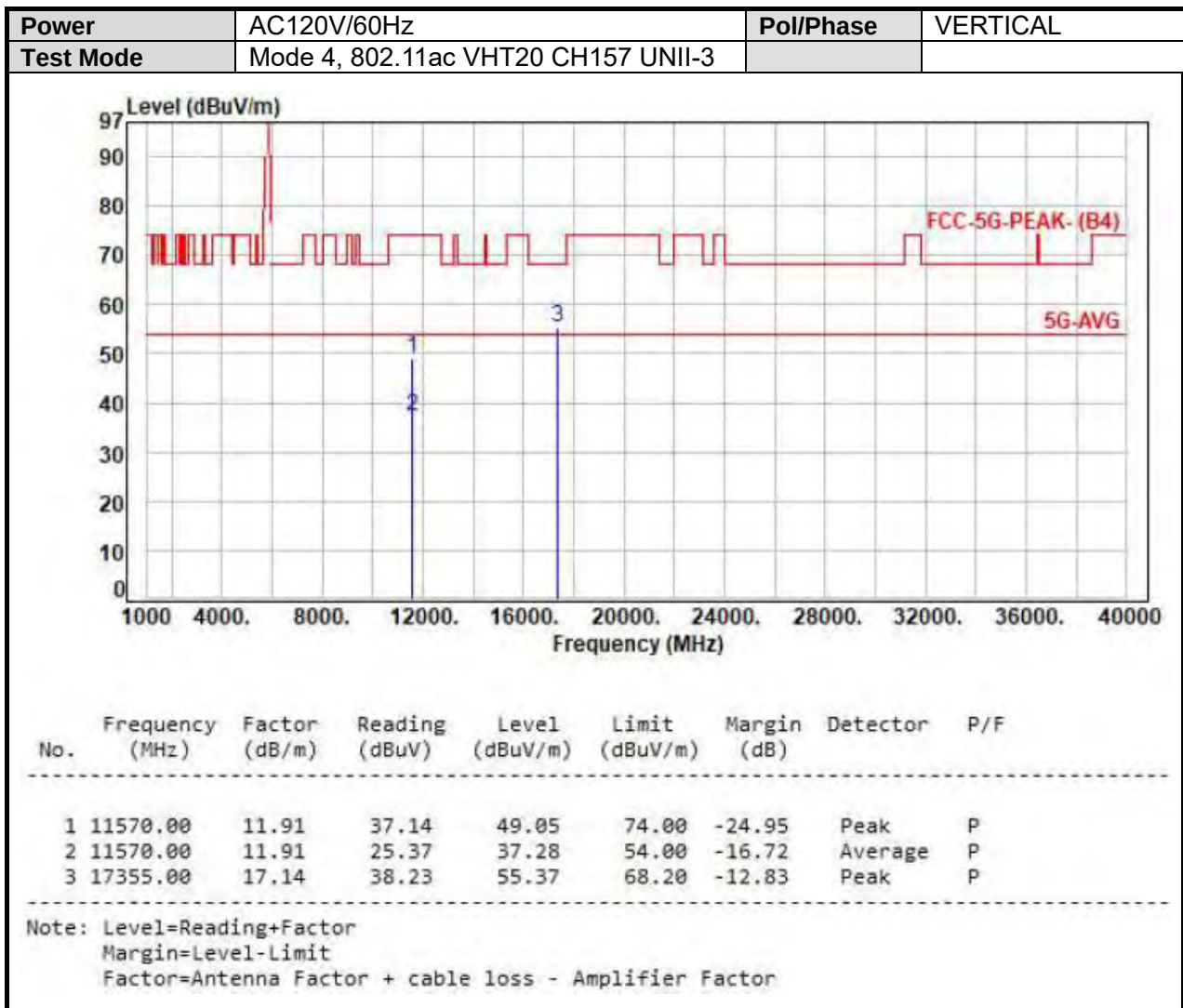


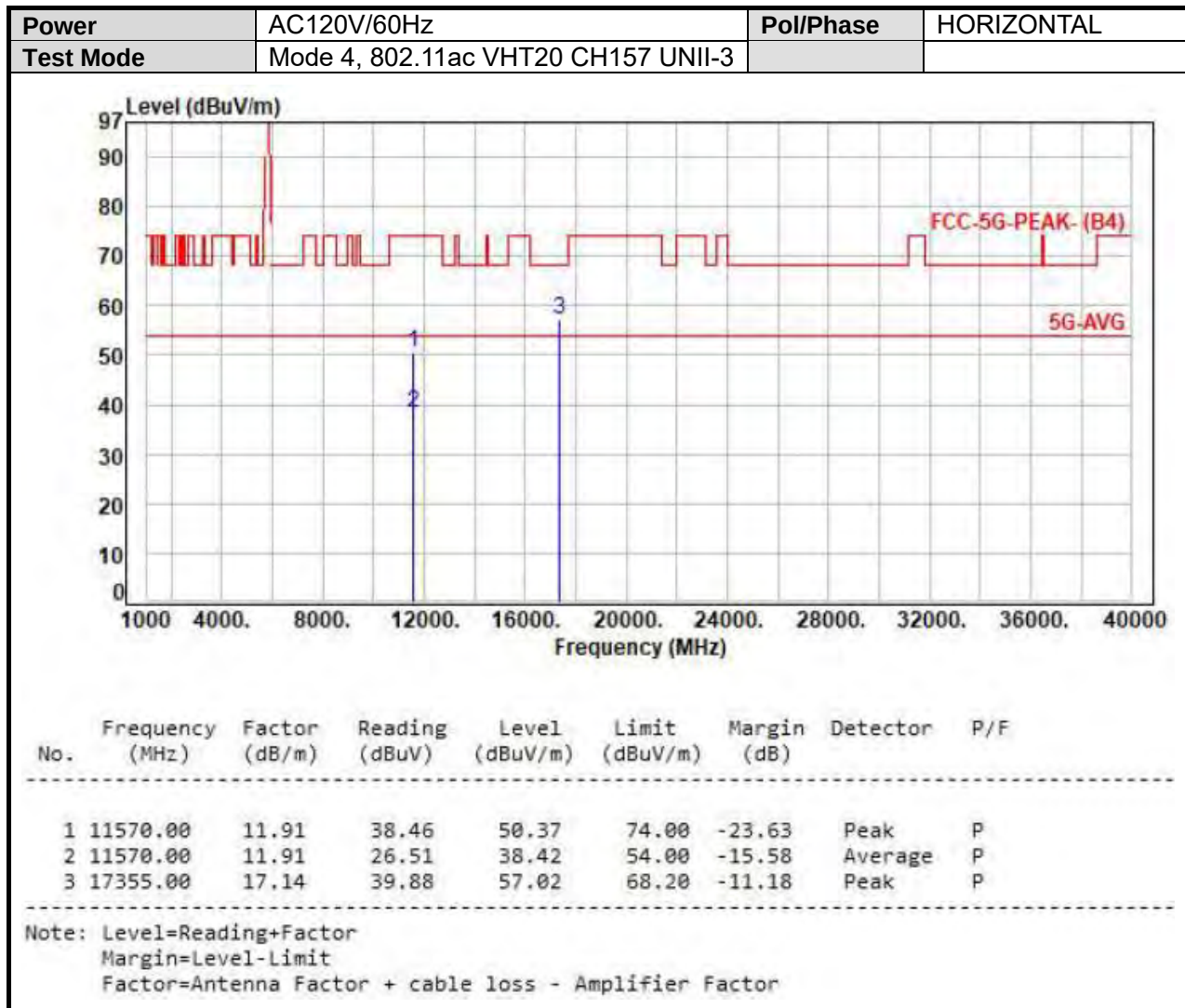


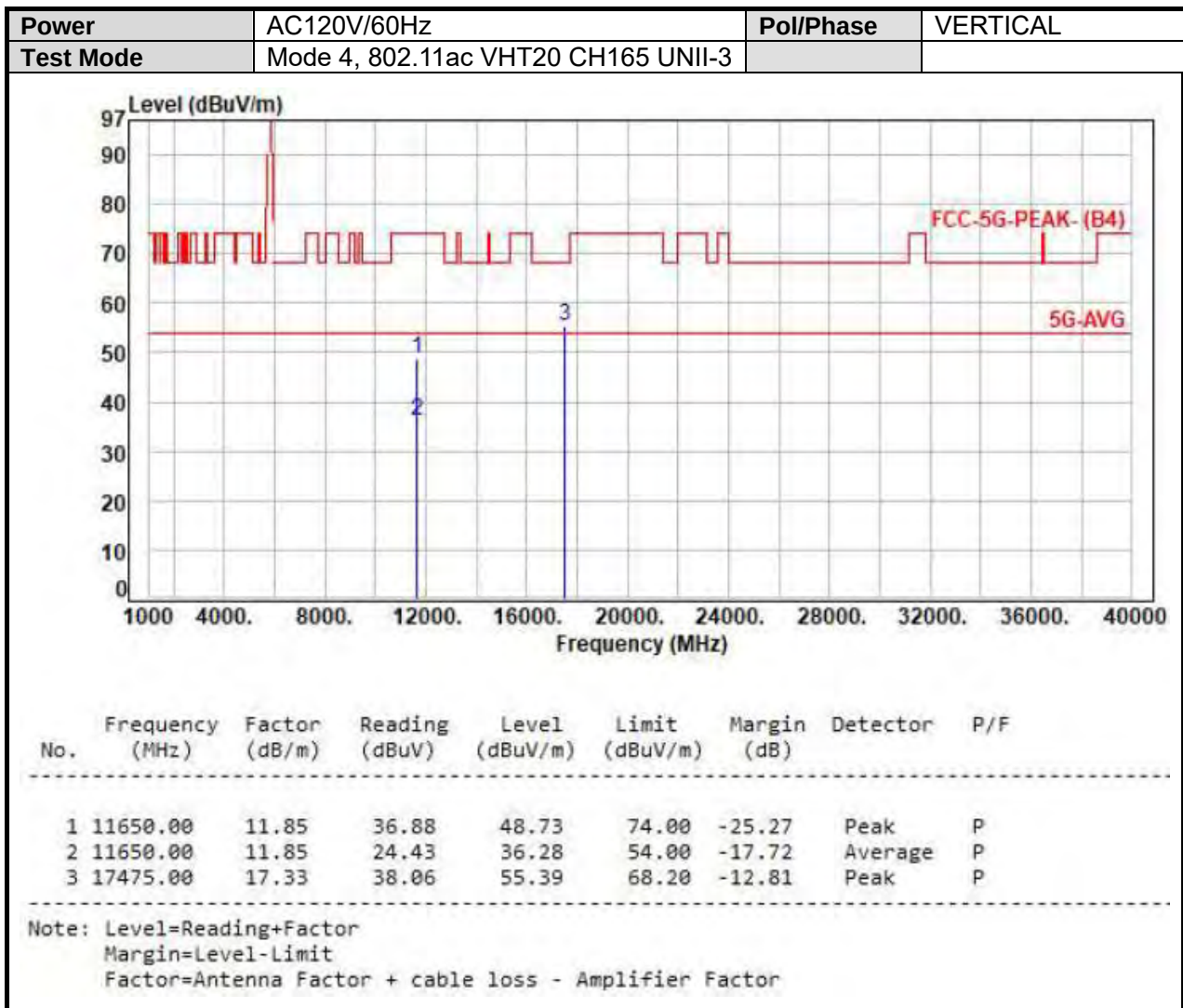


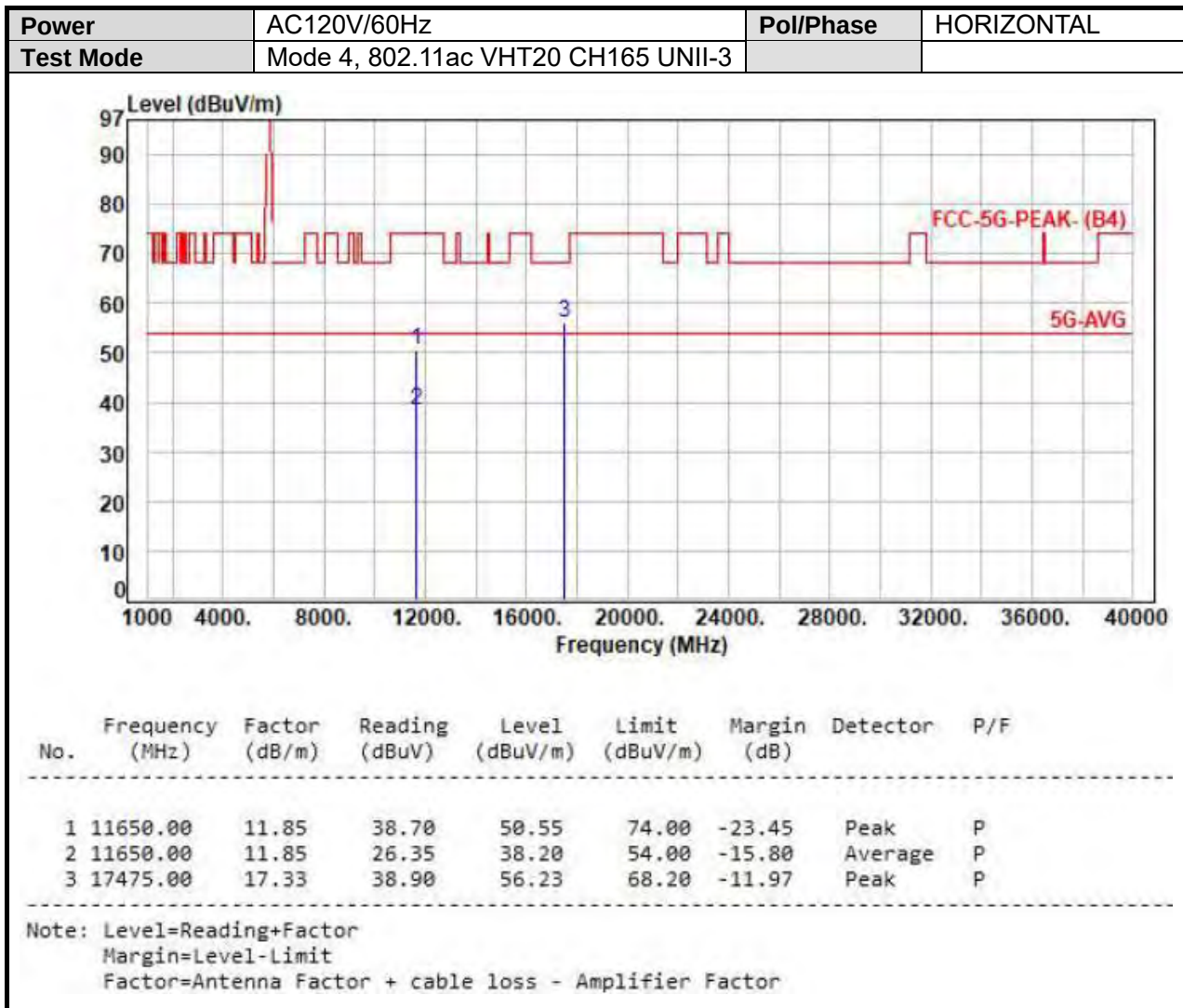


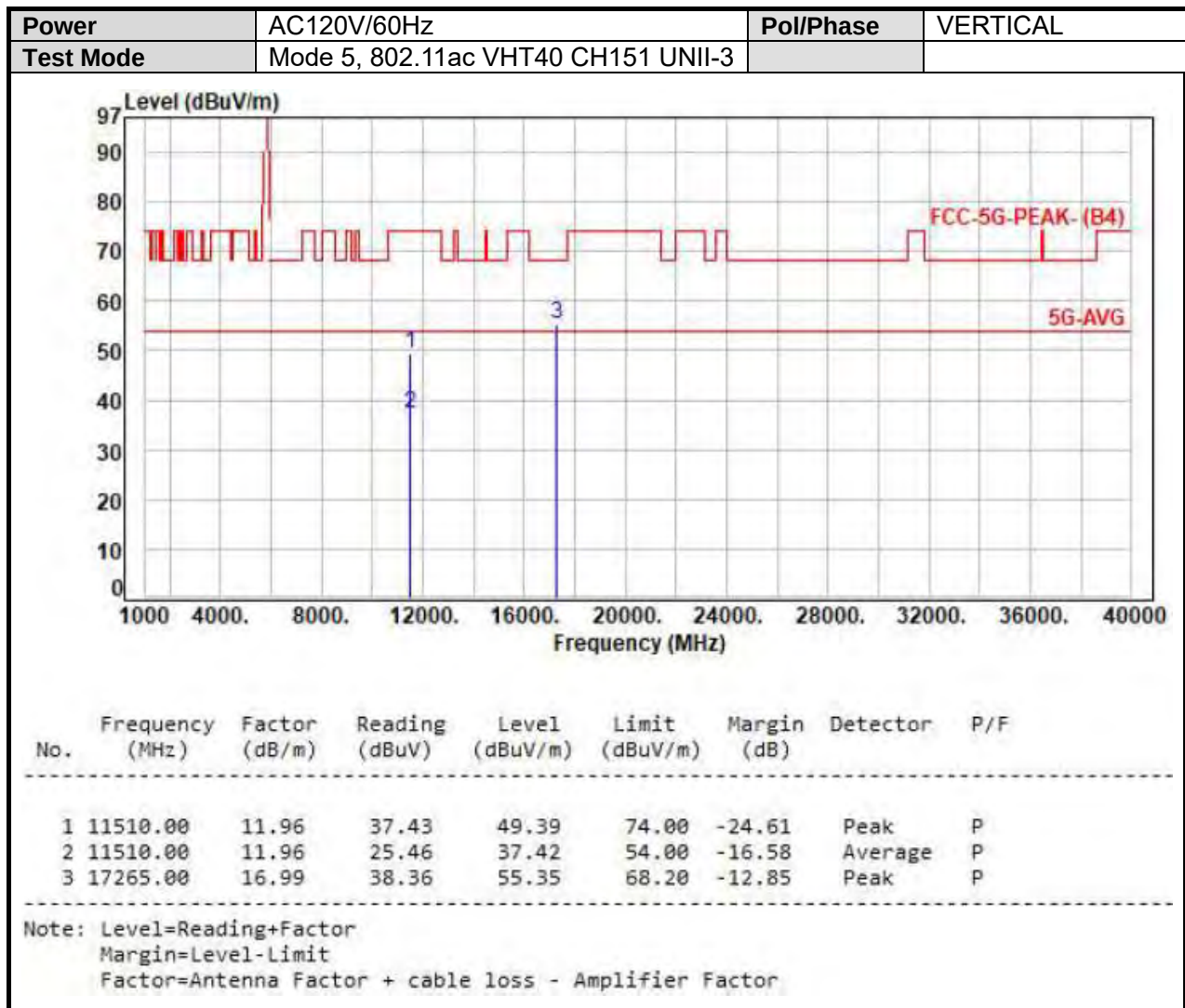


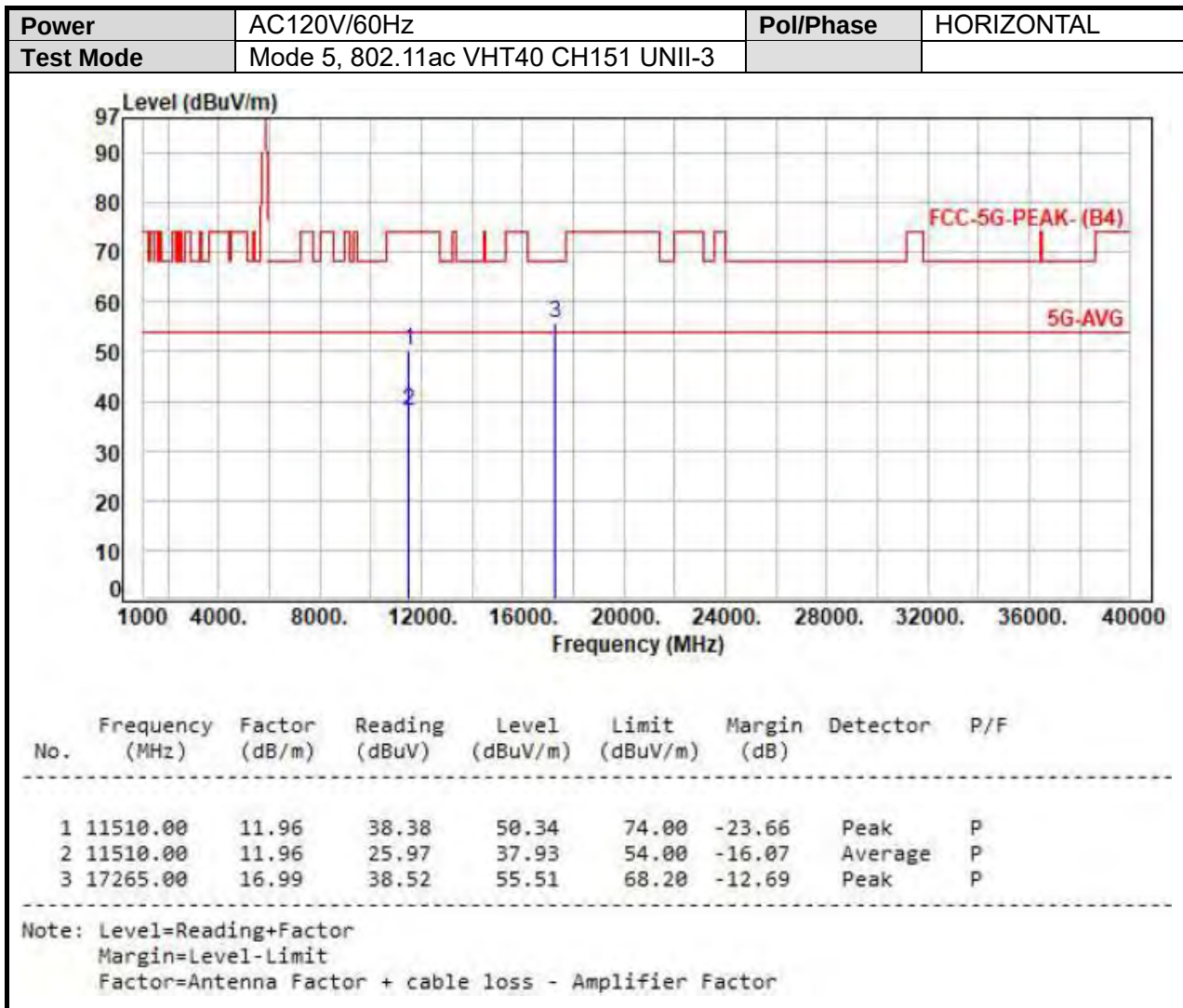


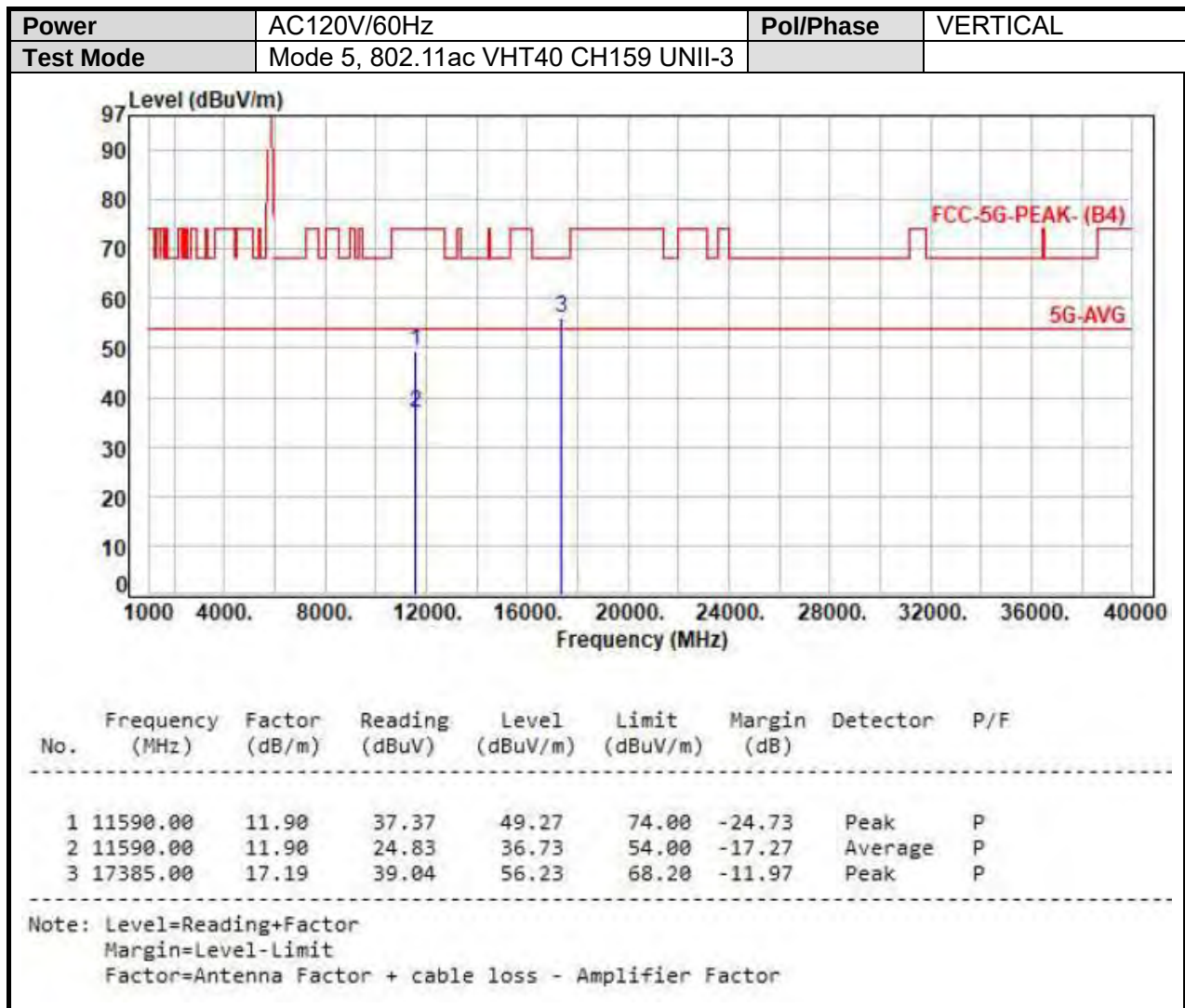


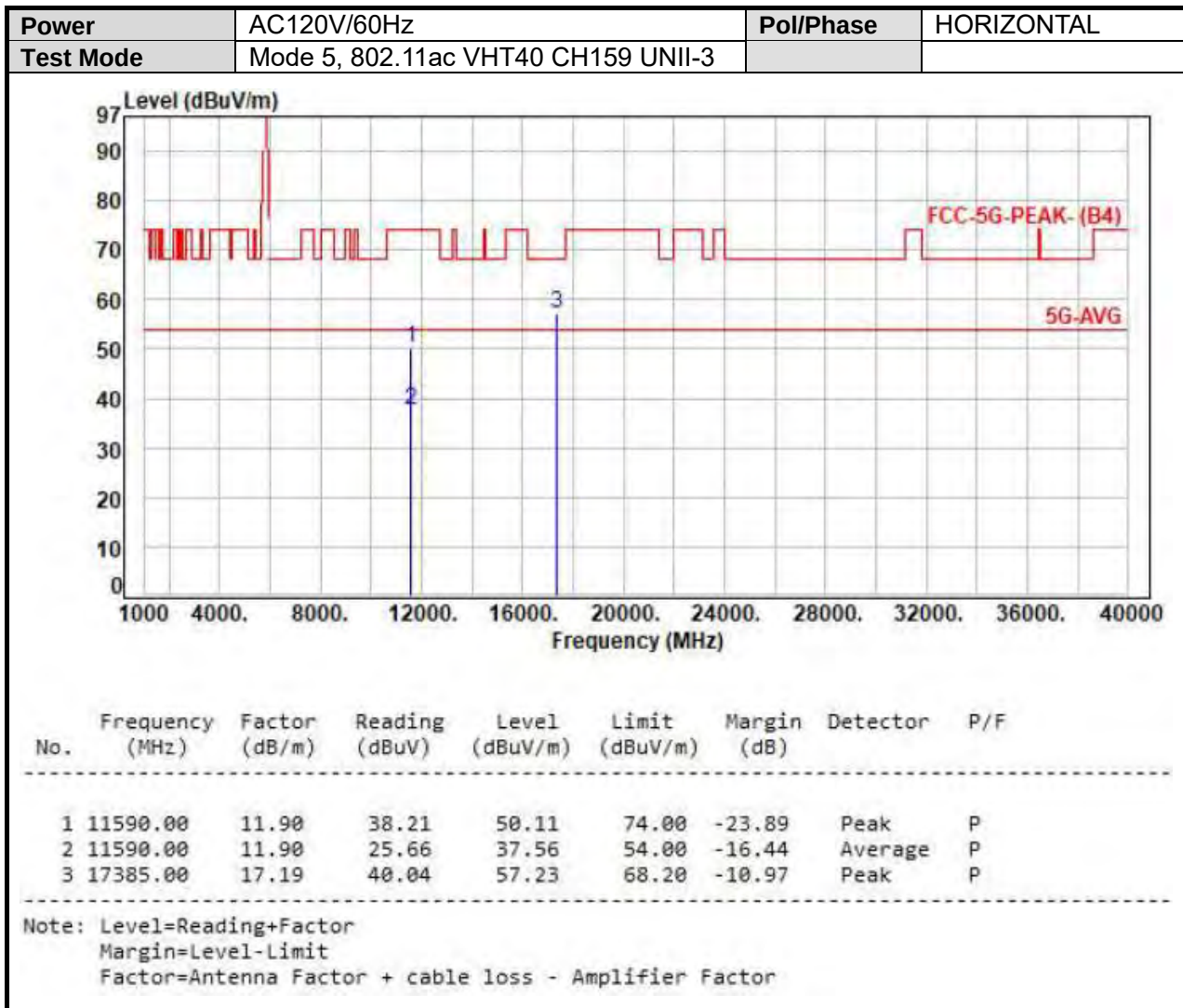


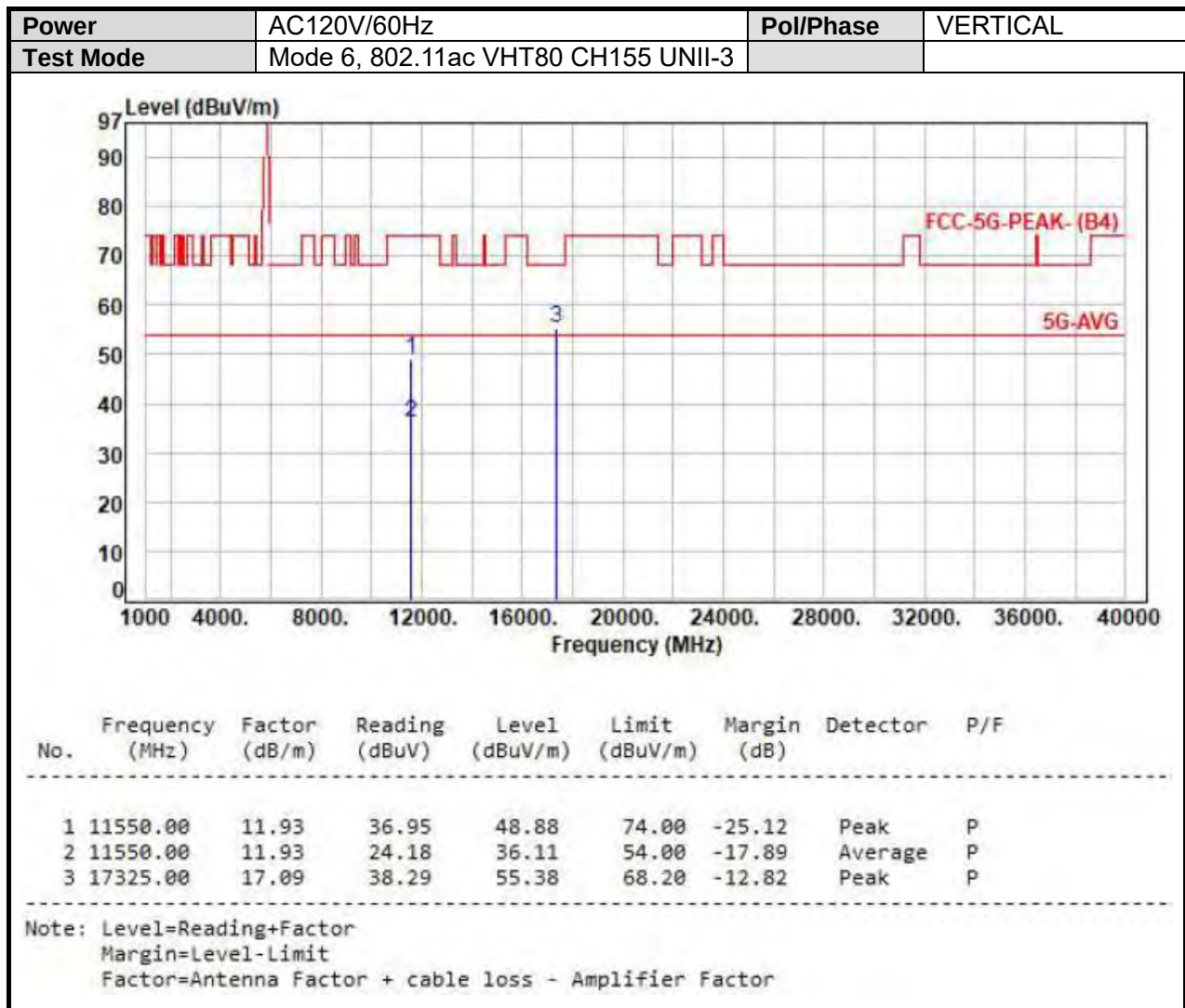


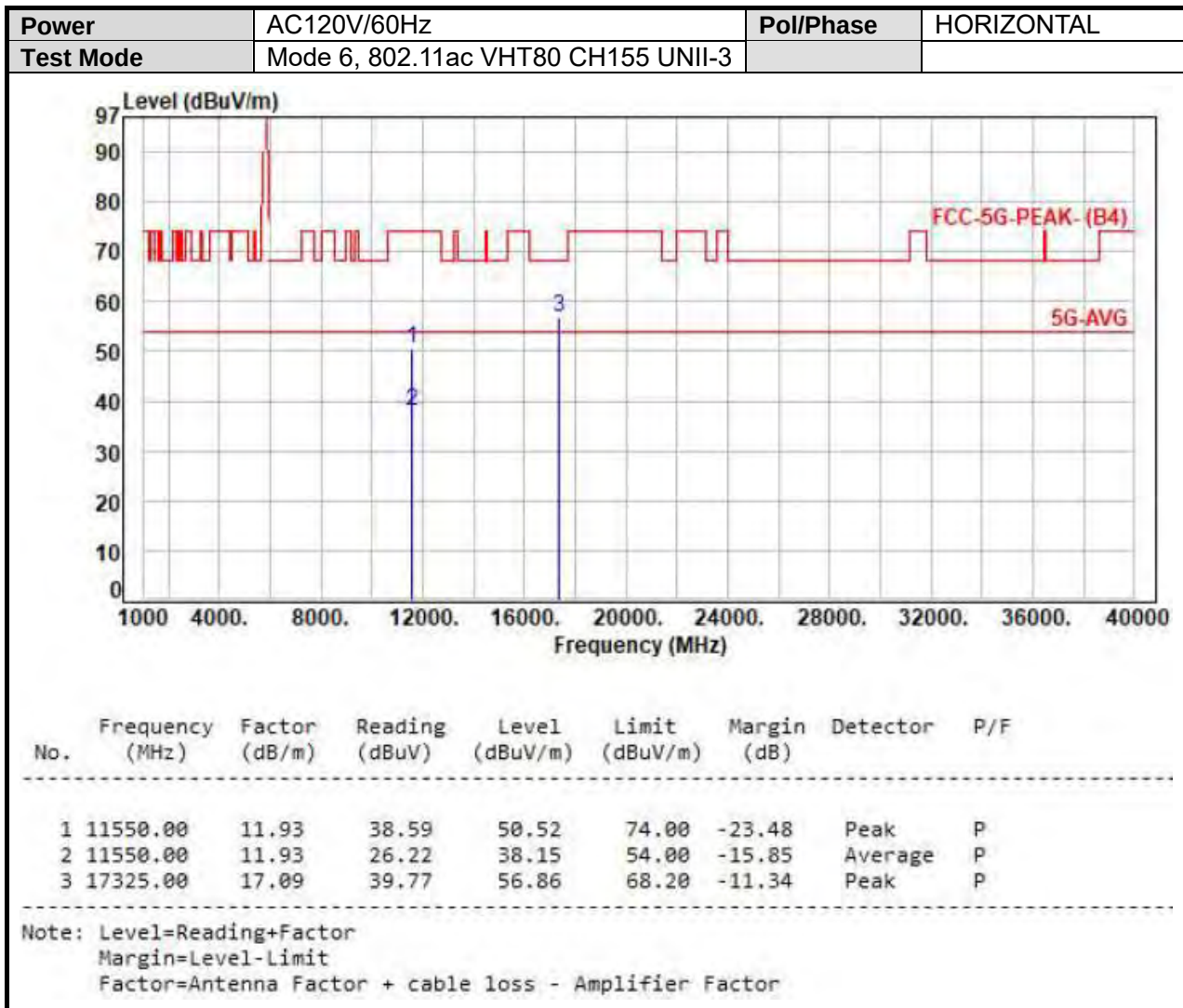


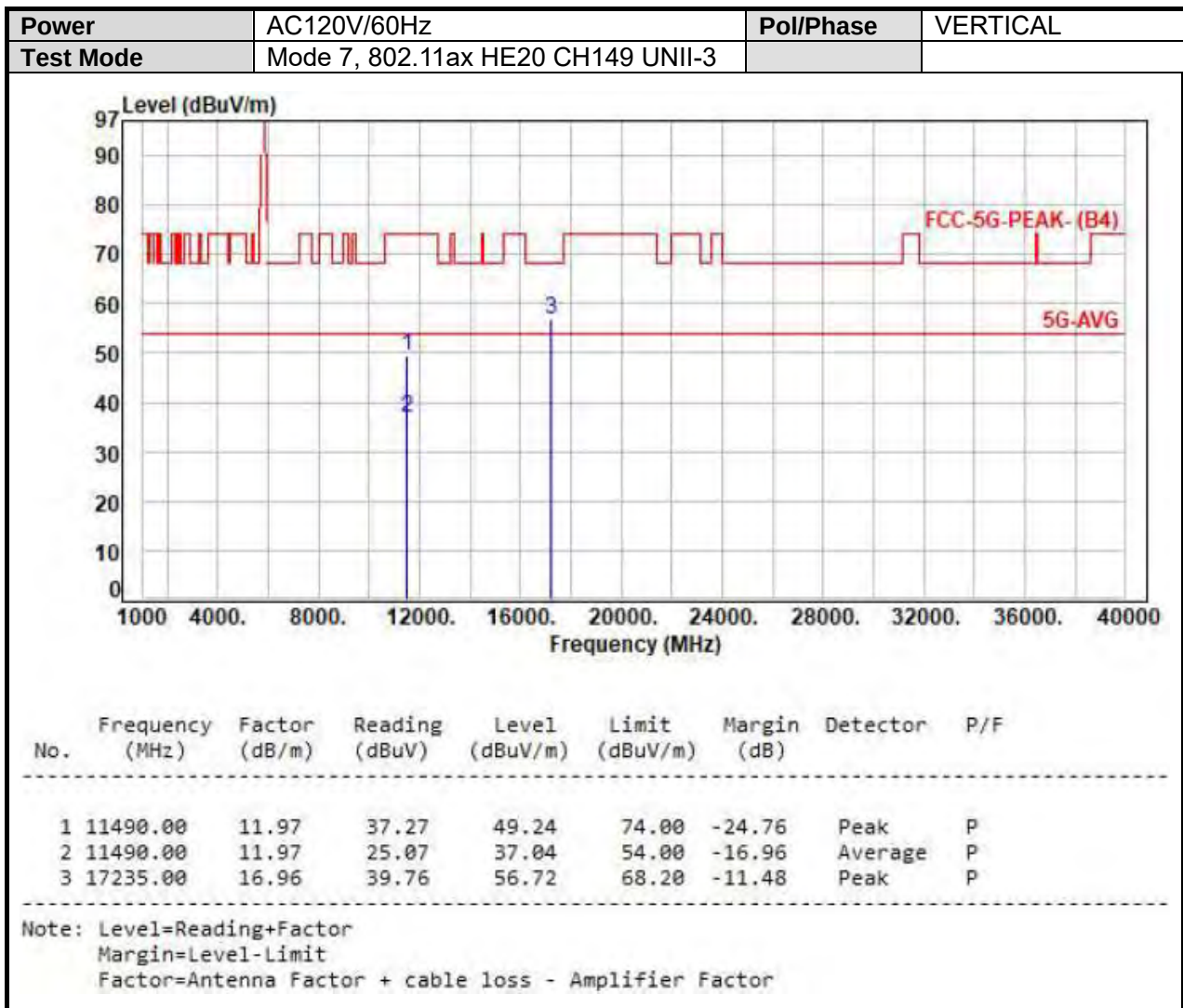


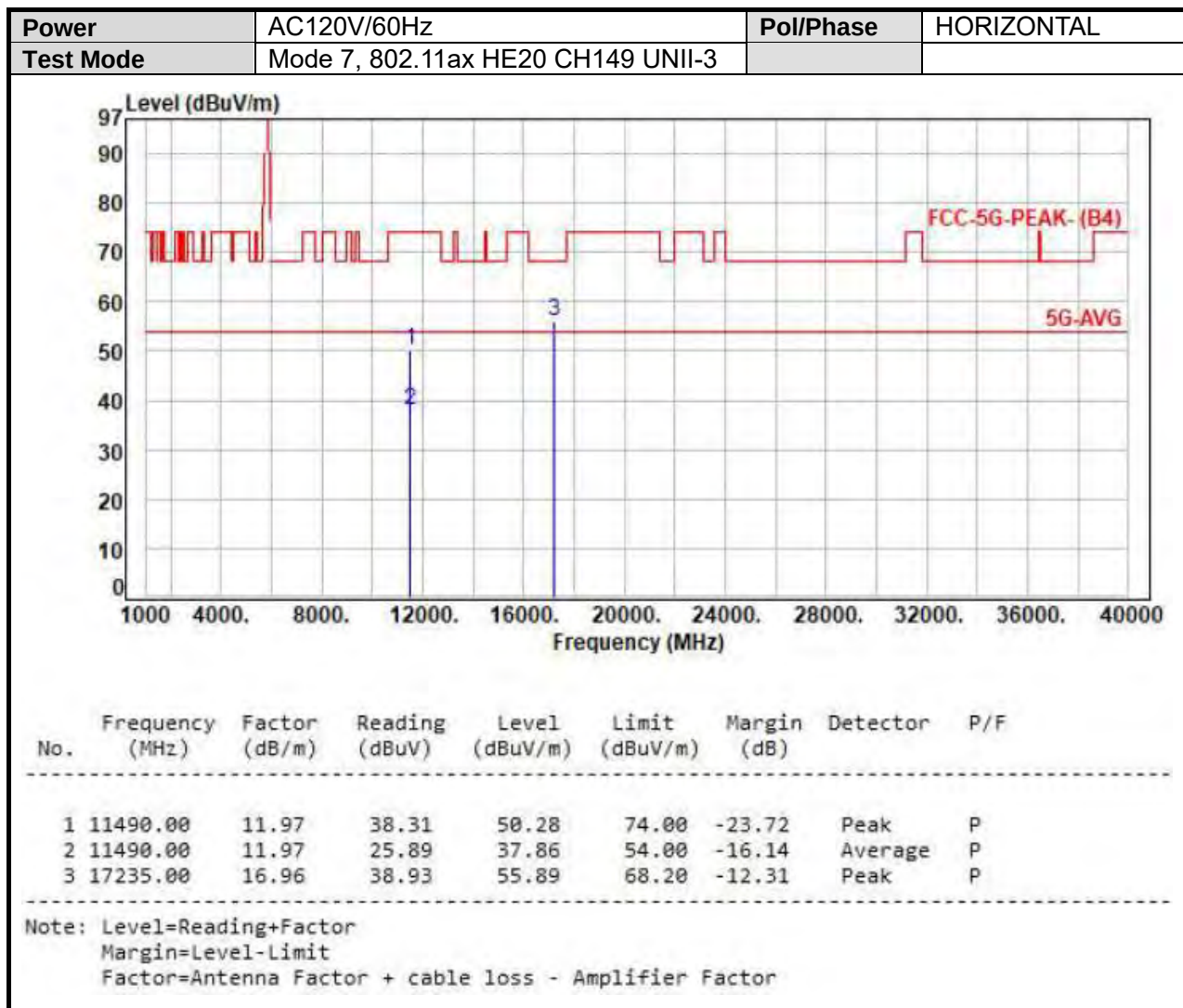


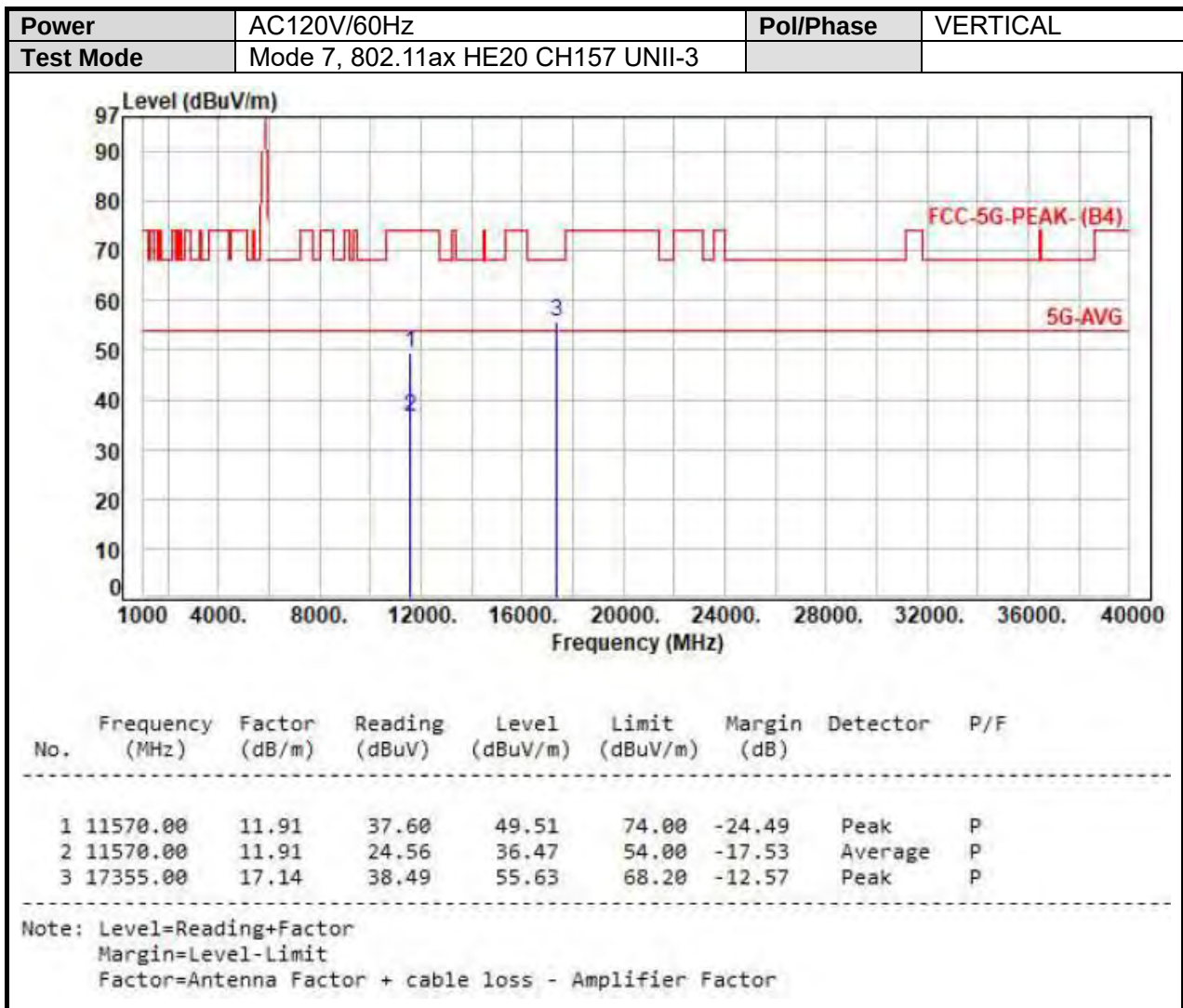


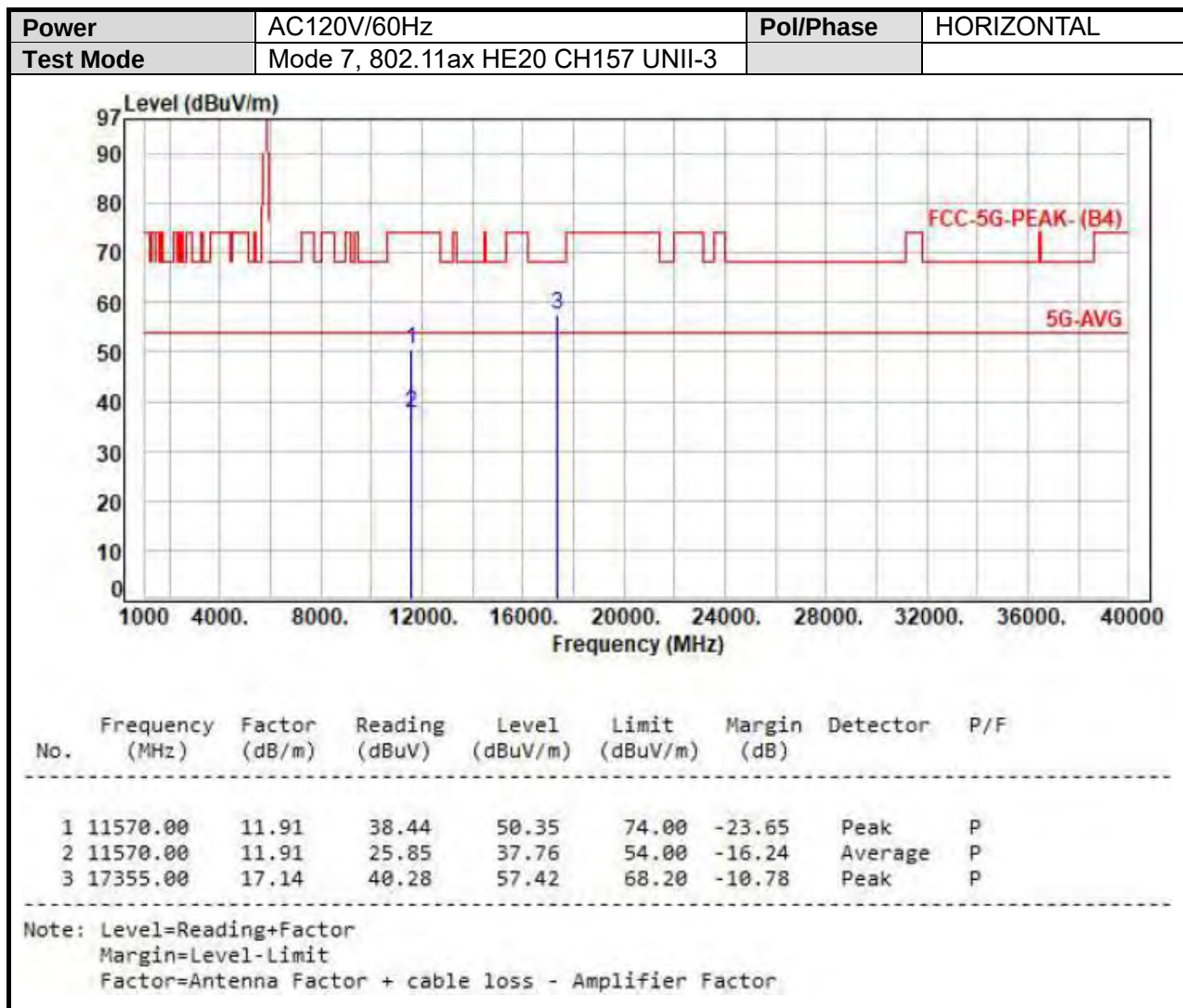


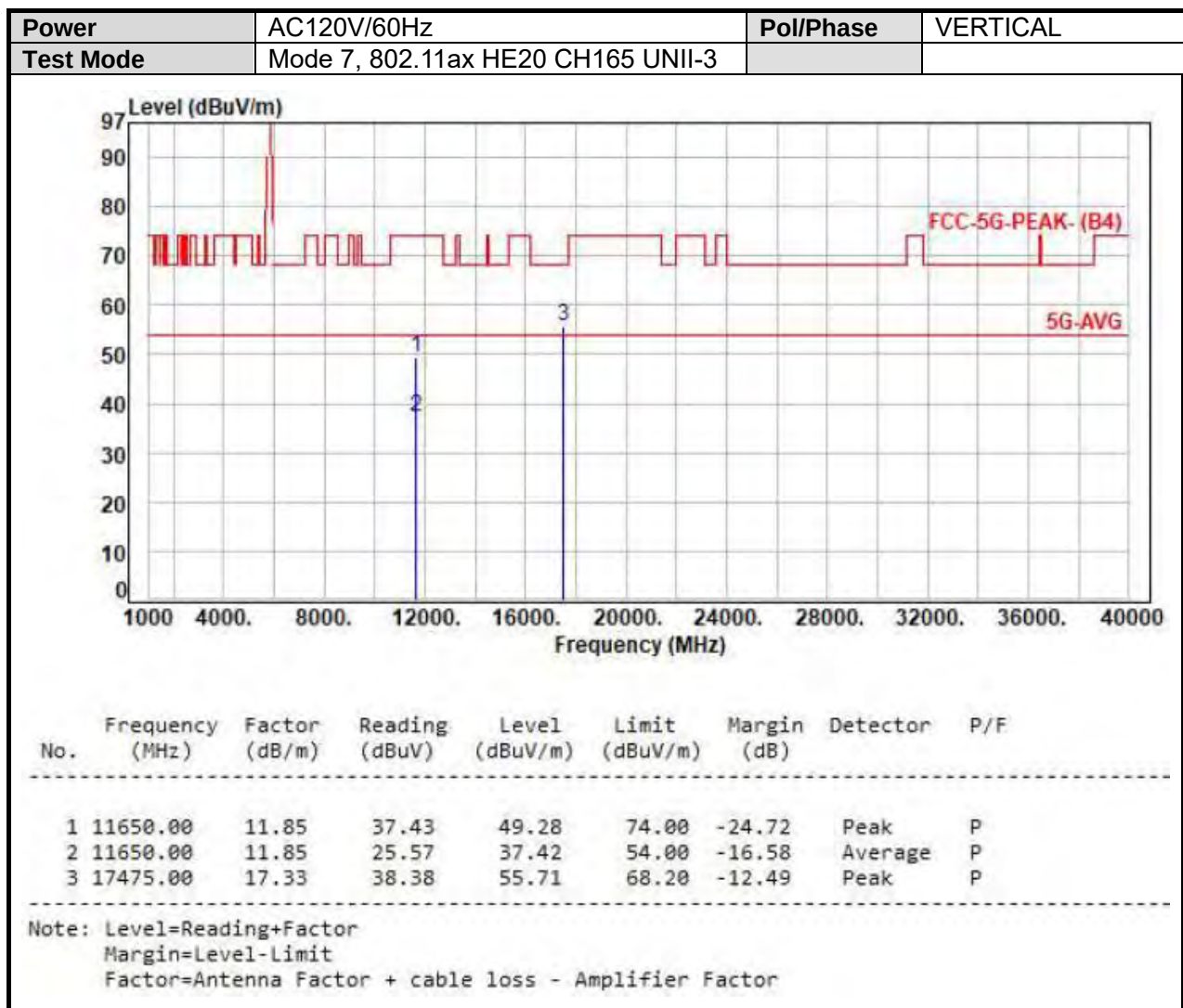


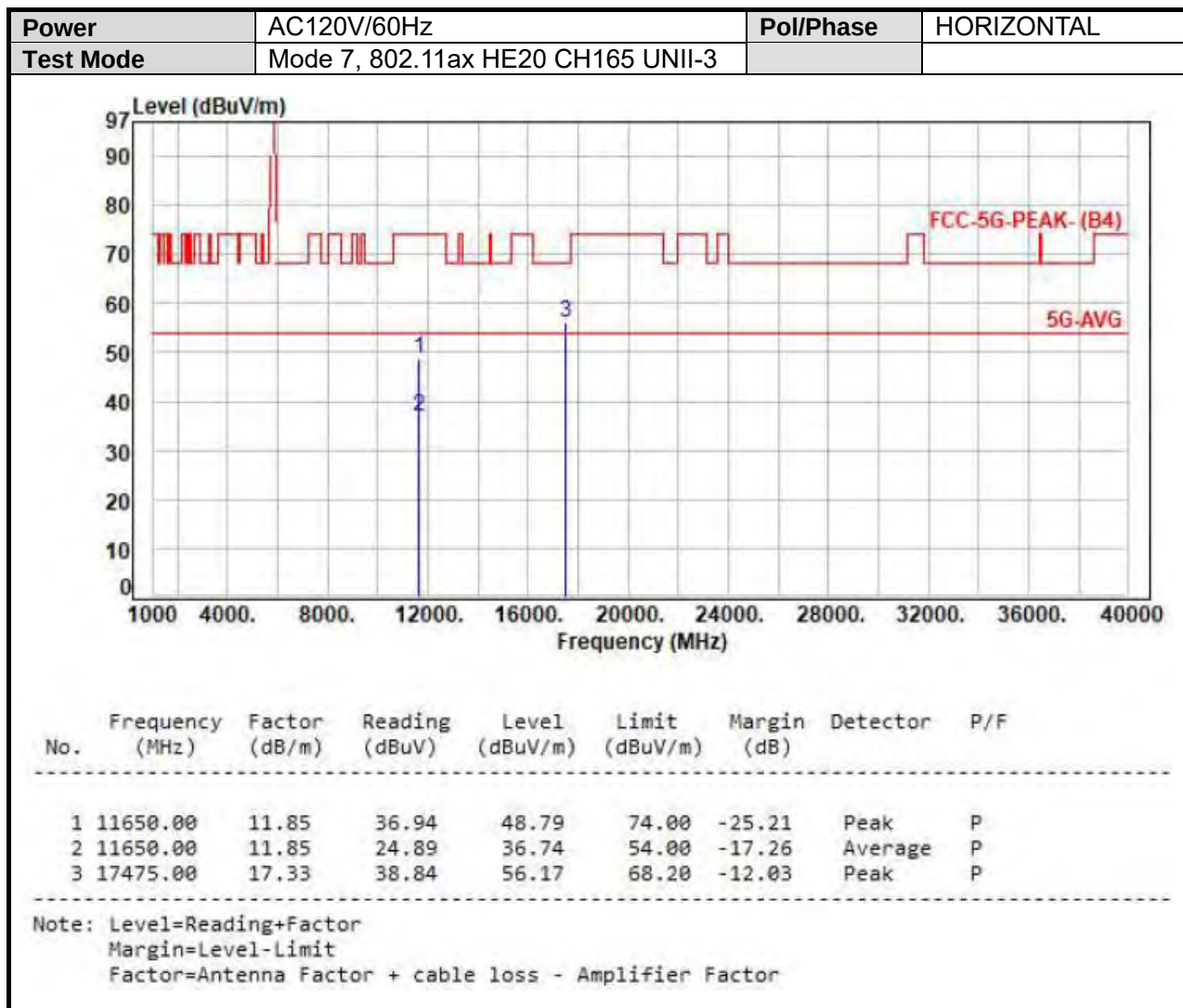


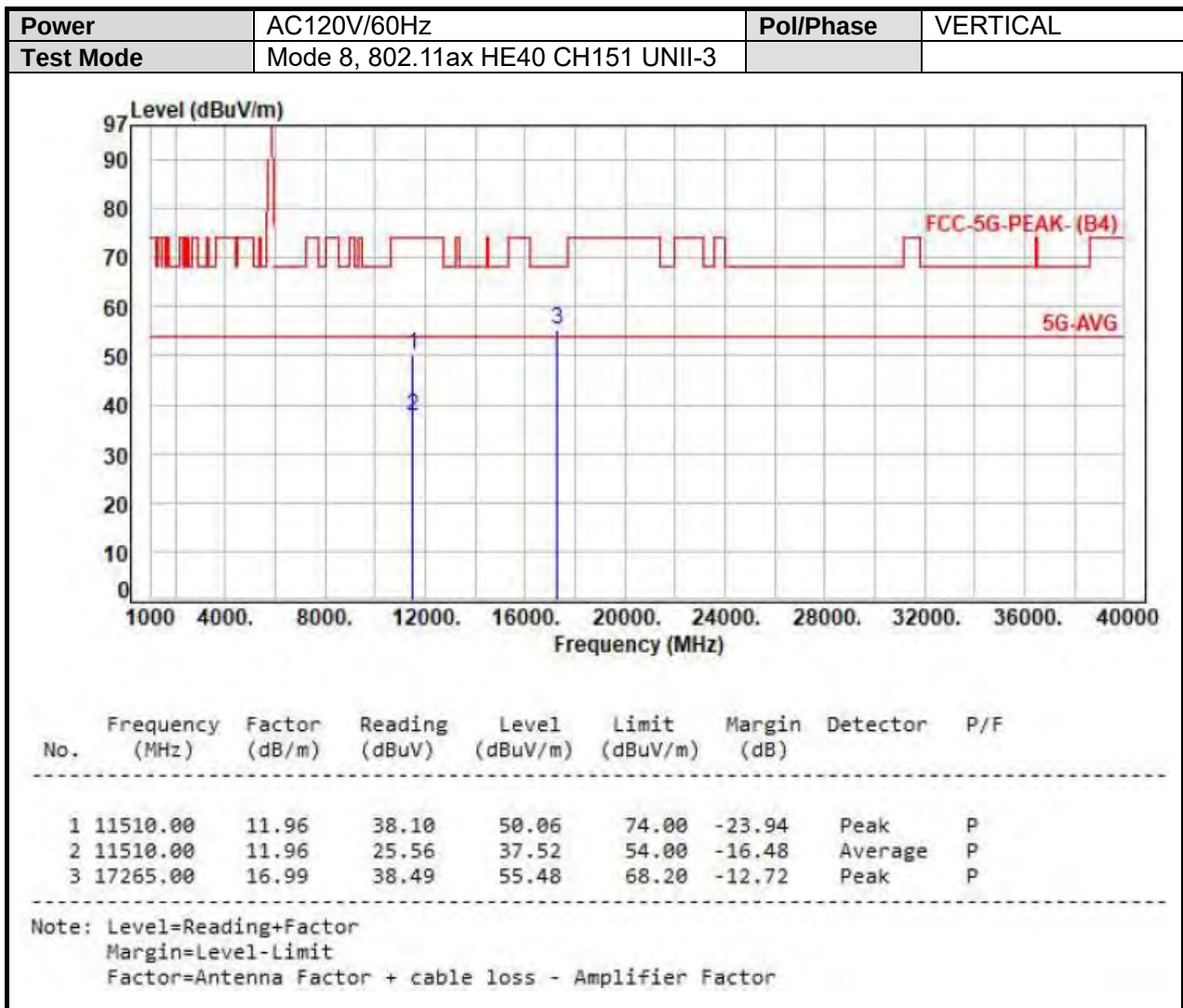


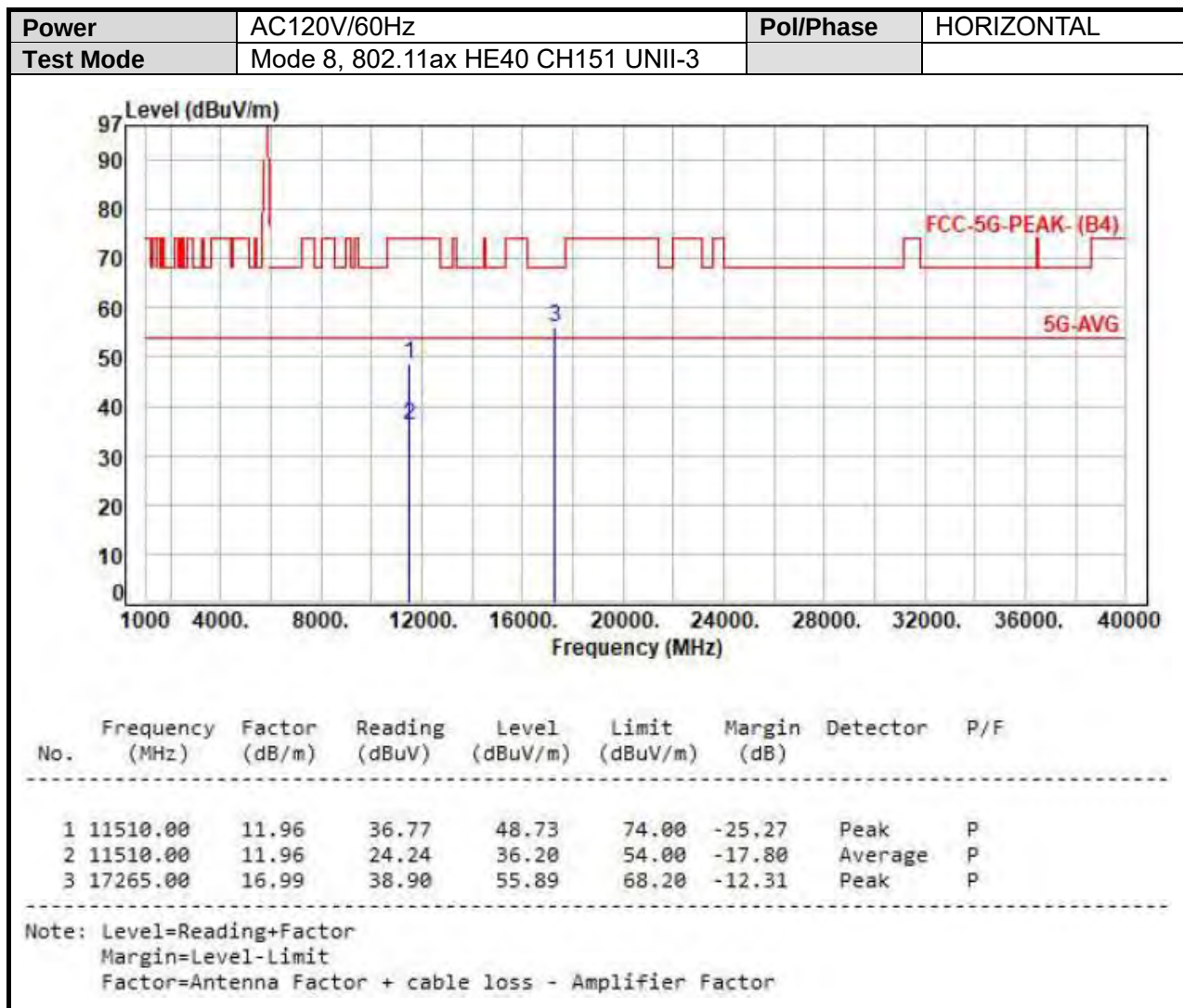


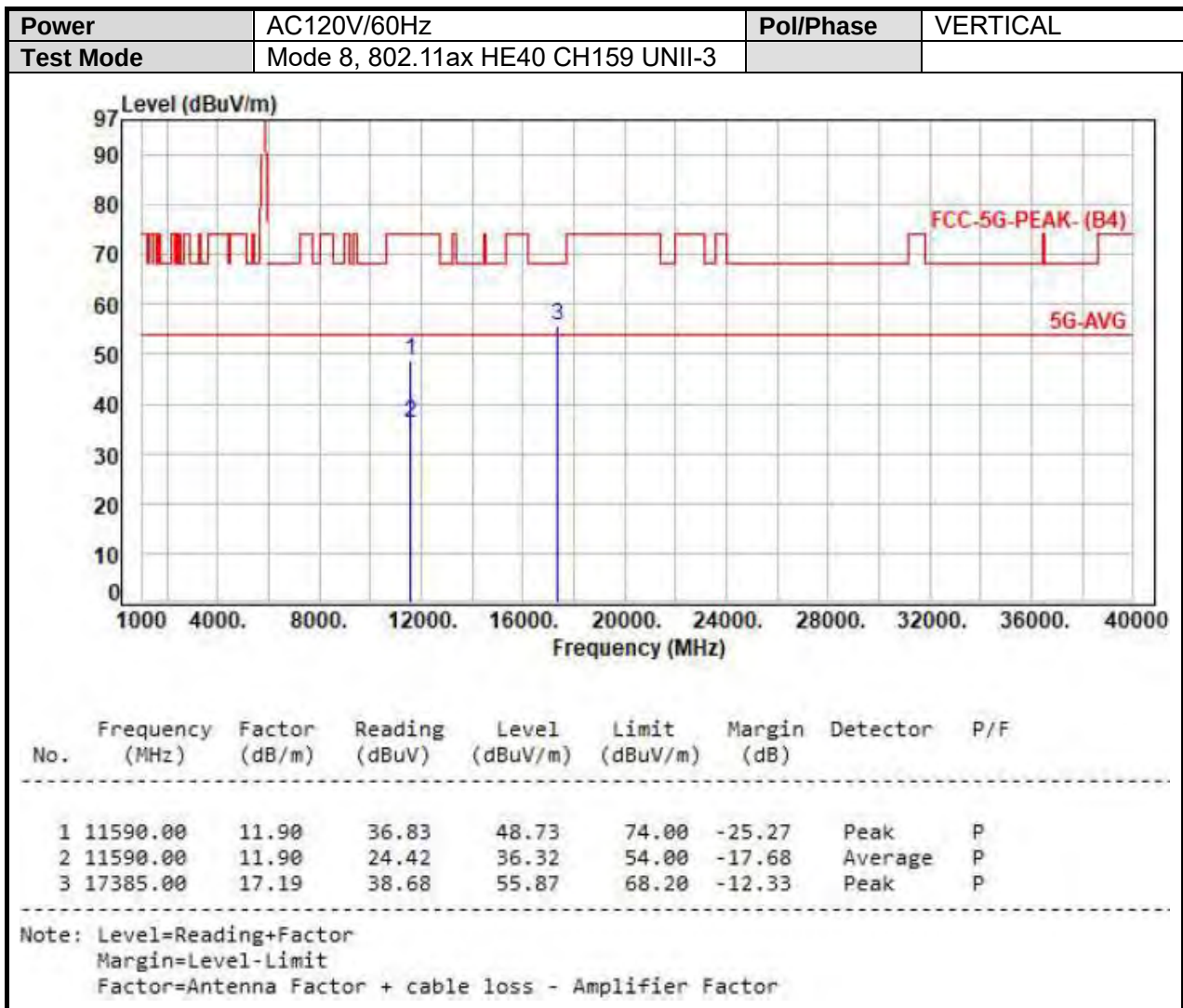


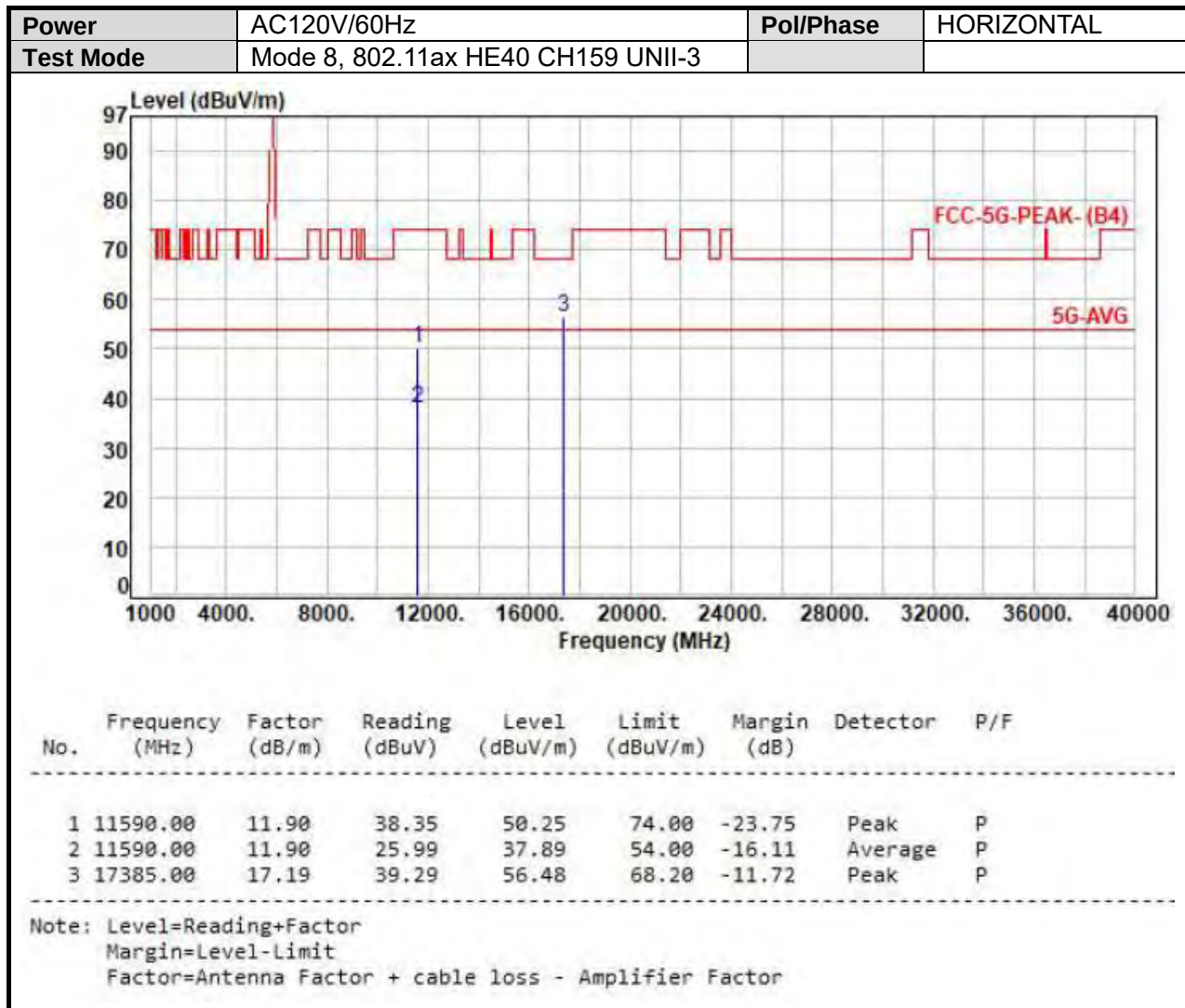


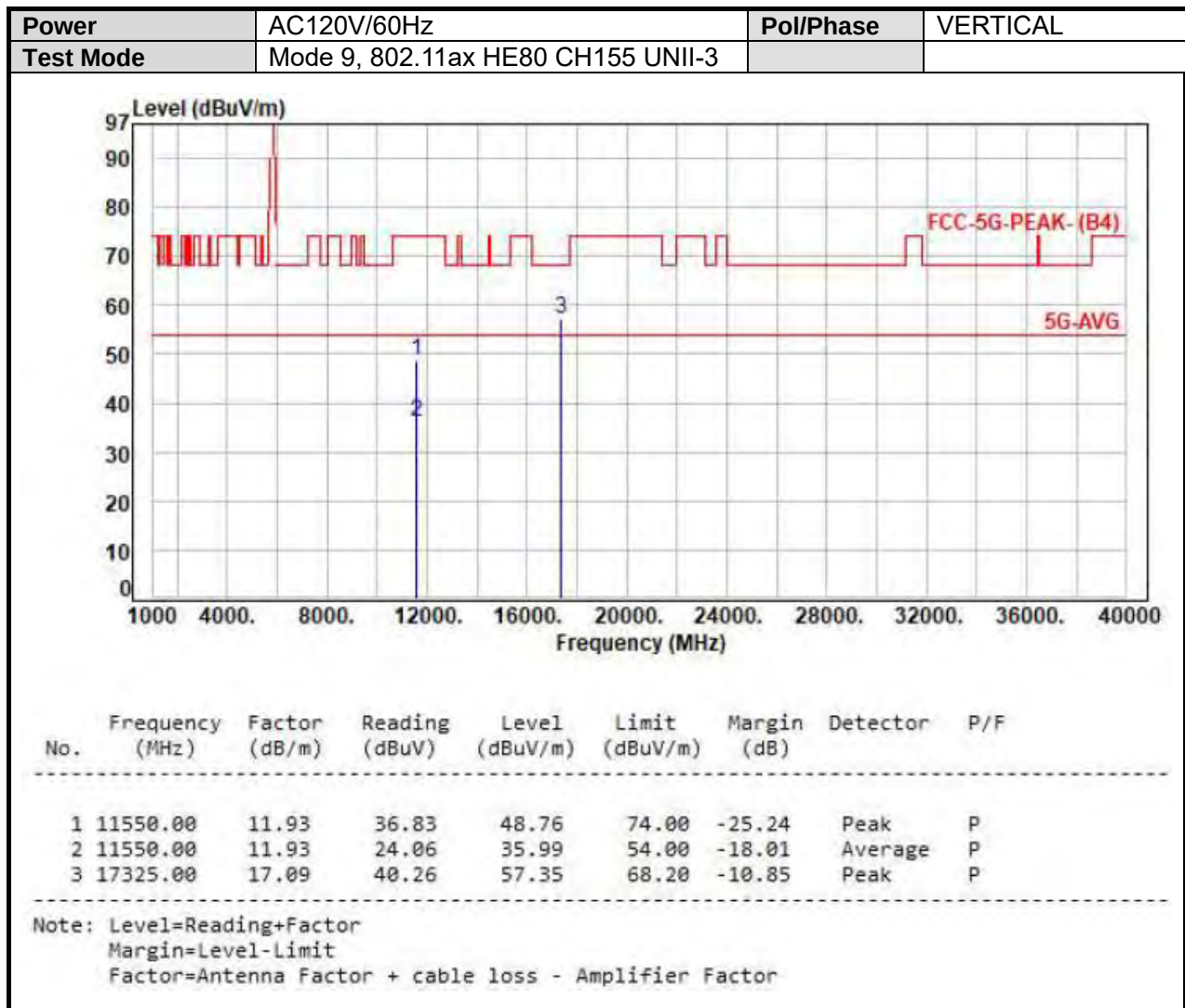


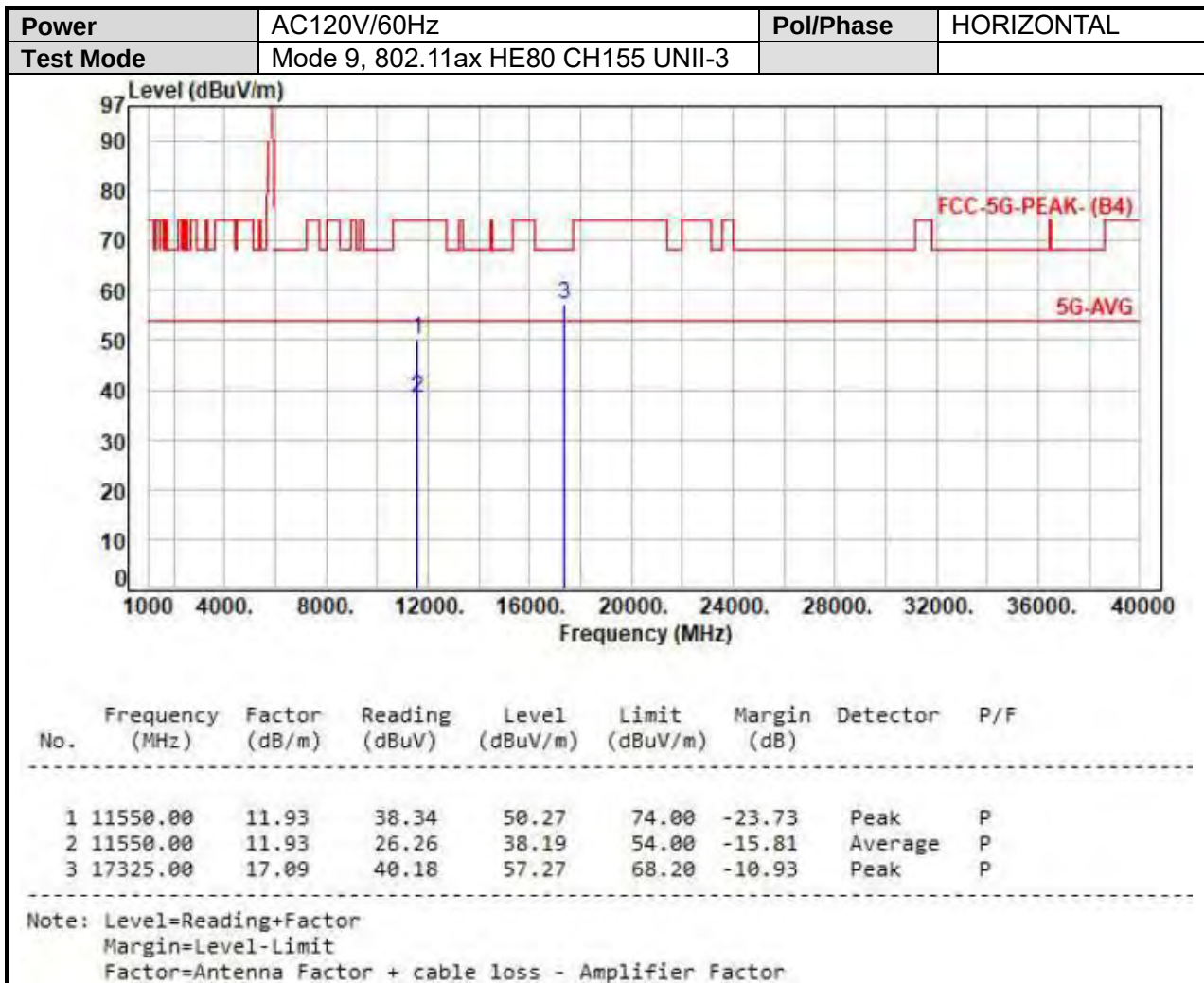














6.7. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

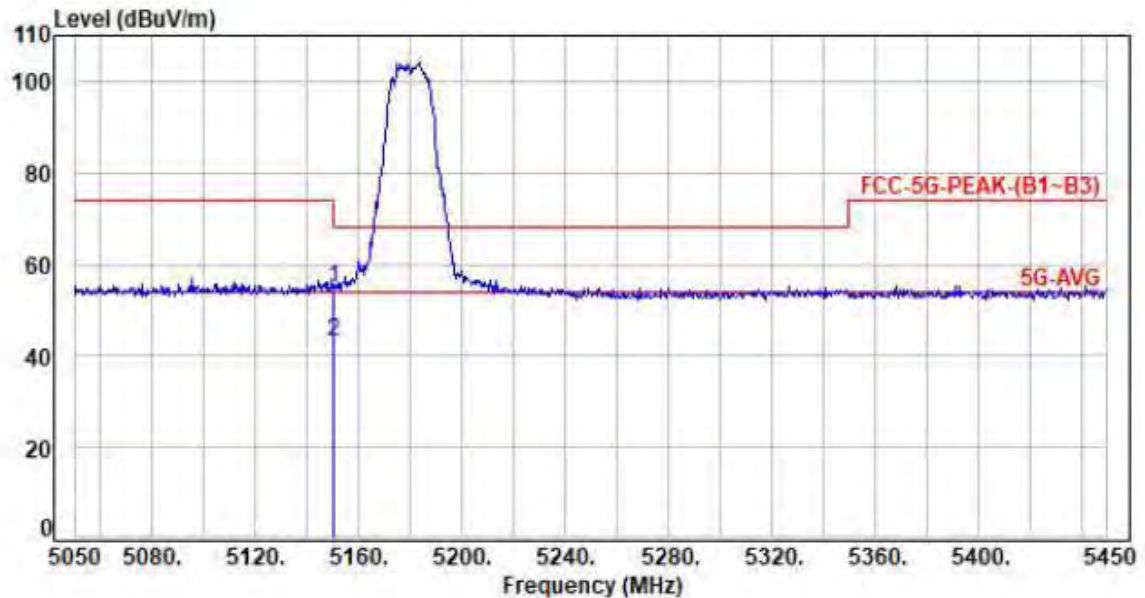
MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.150
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz



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Power	AC120V/60Hz	Pol/Phase	VERTICAL
Test Mode	Mode 1, 802.11a CH36 UNII-1		

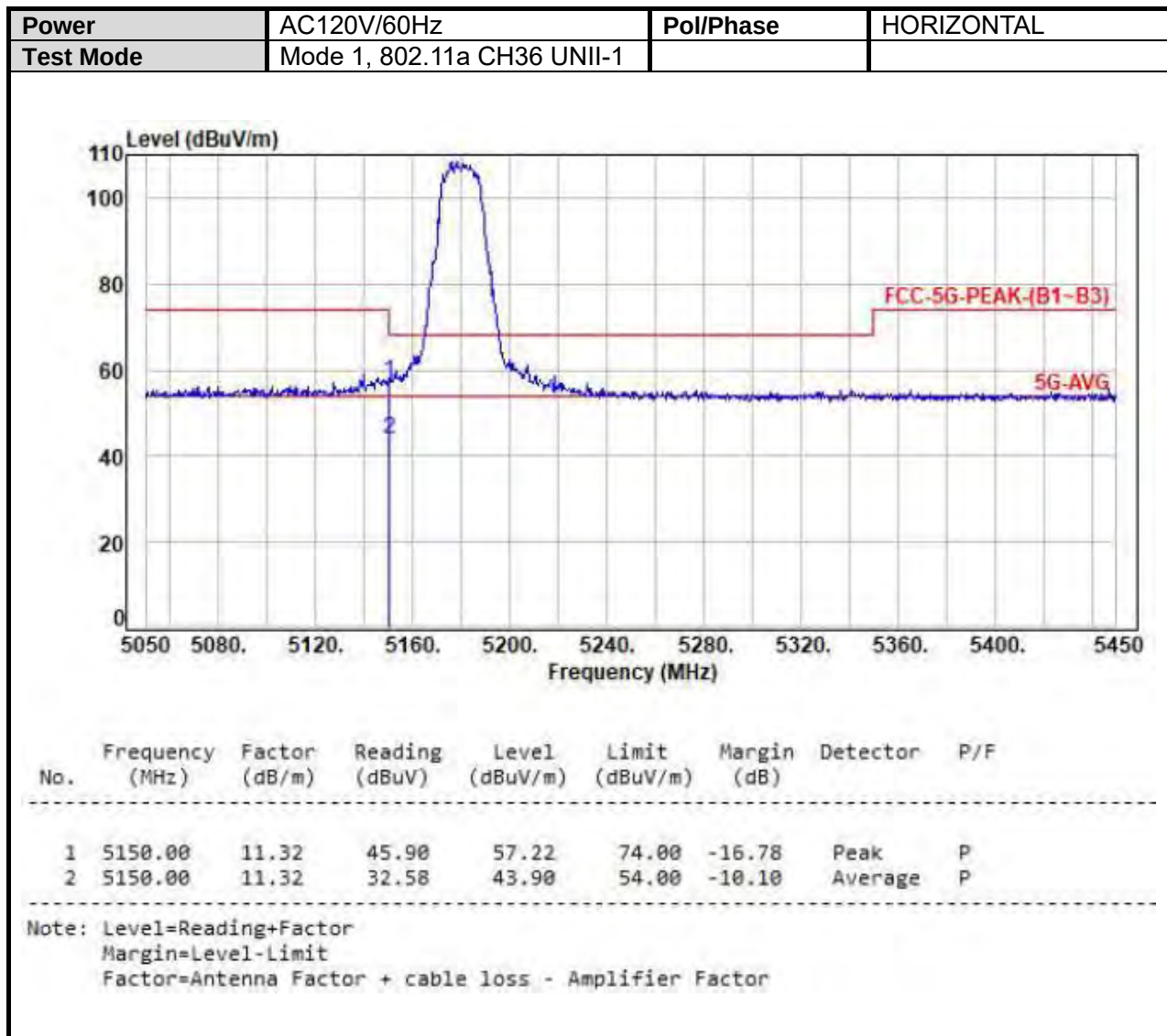


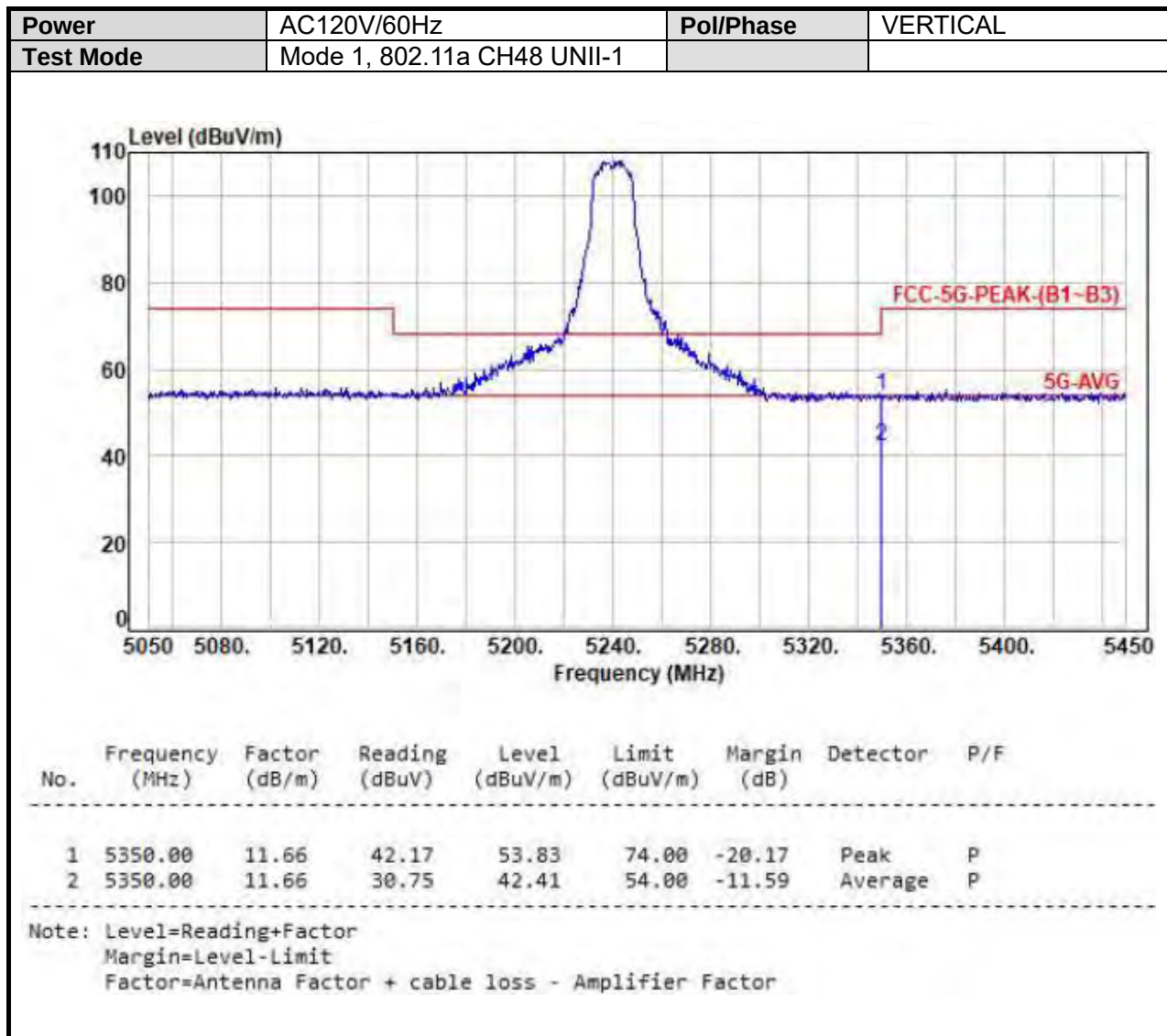
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	5150.00	11.32	43.58	54.90	74.00	-19.10	Peak	P
2	5150.00	11.32	31.83	43.15	54.00	-10.85	Average	P

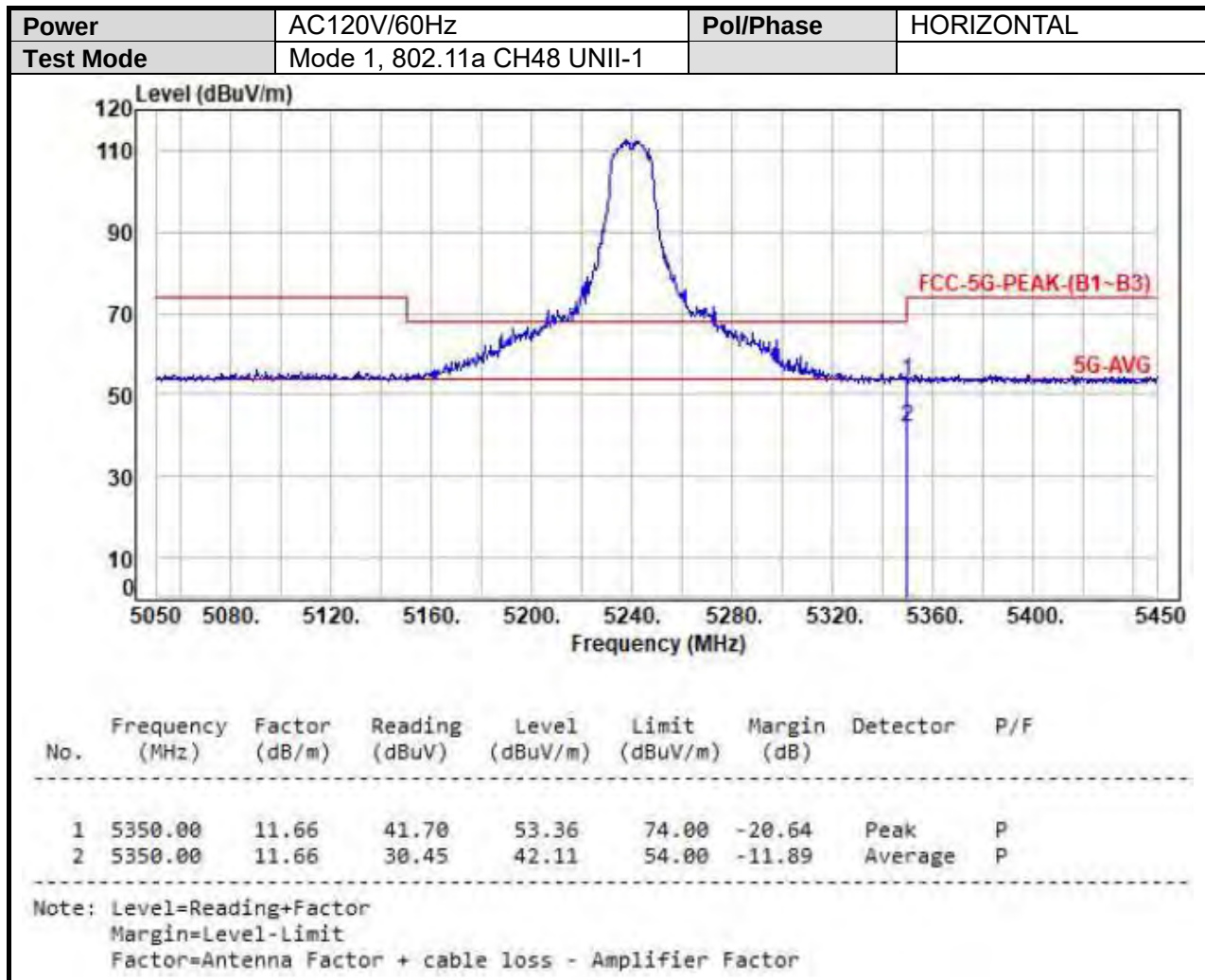
Note: Level=Reading+Factor

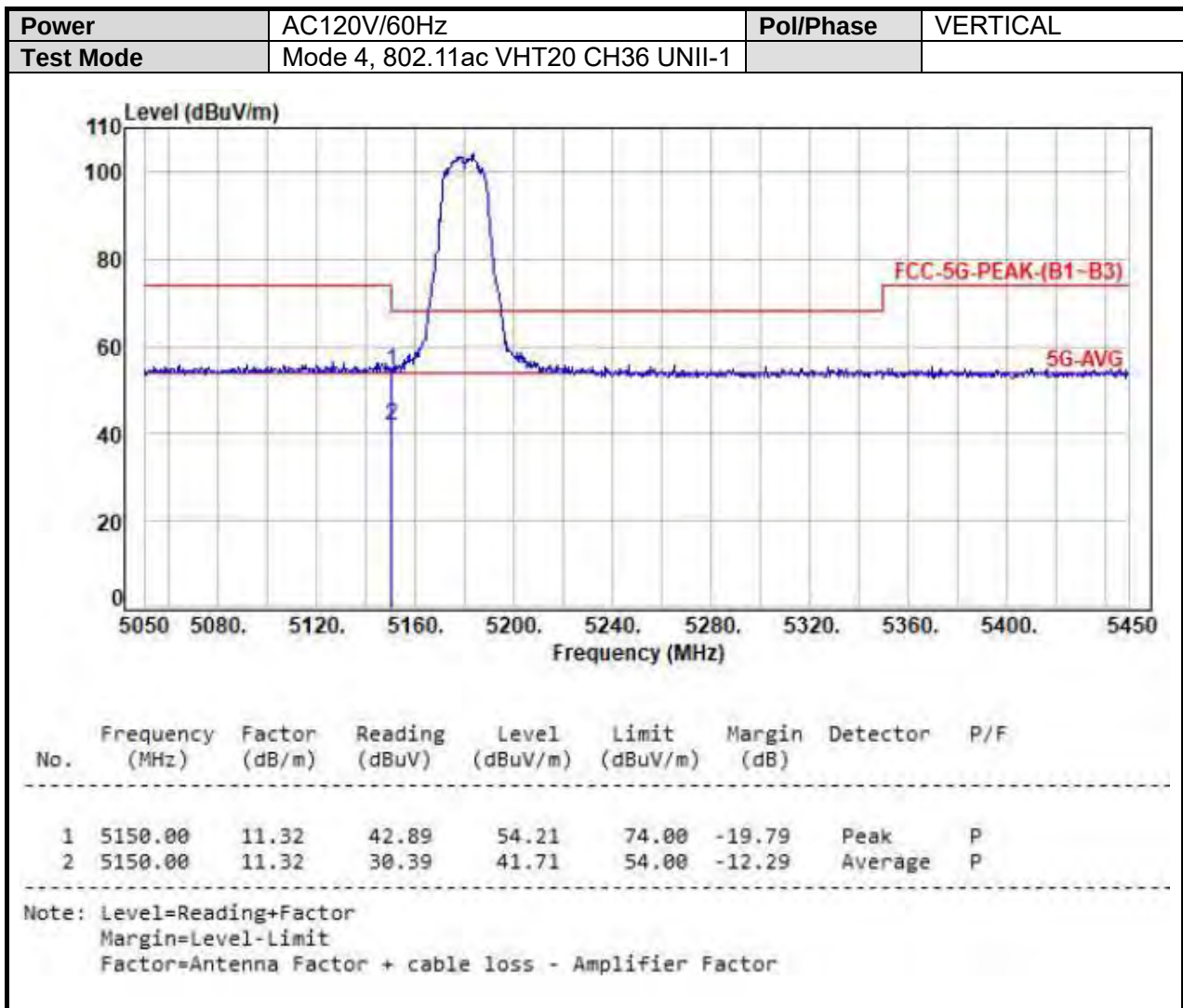
Margin=Level-Limit

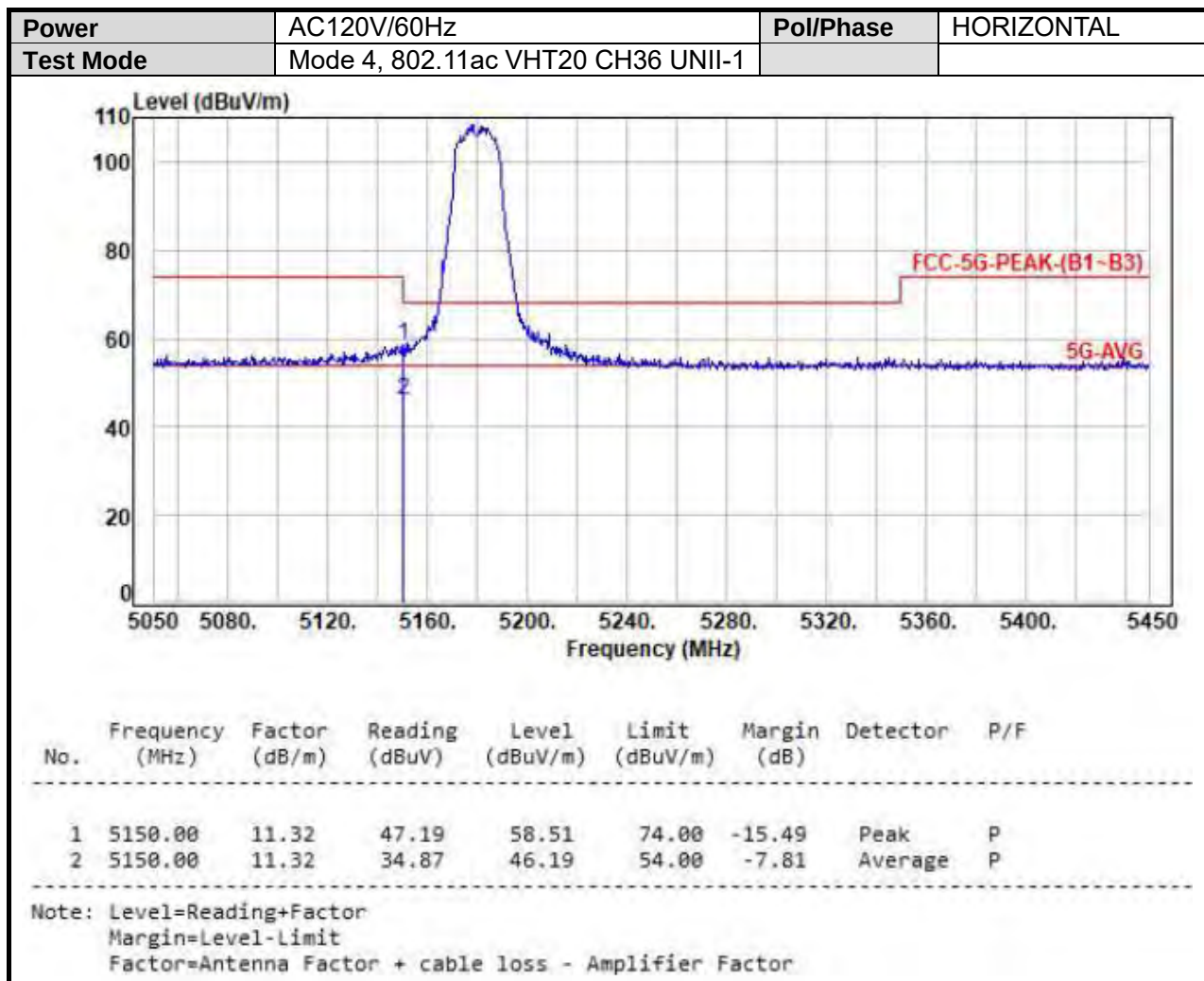
Factor=Antenna Factor + cable loss - Amplifier Factor

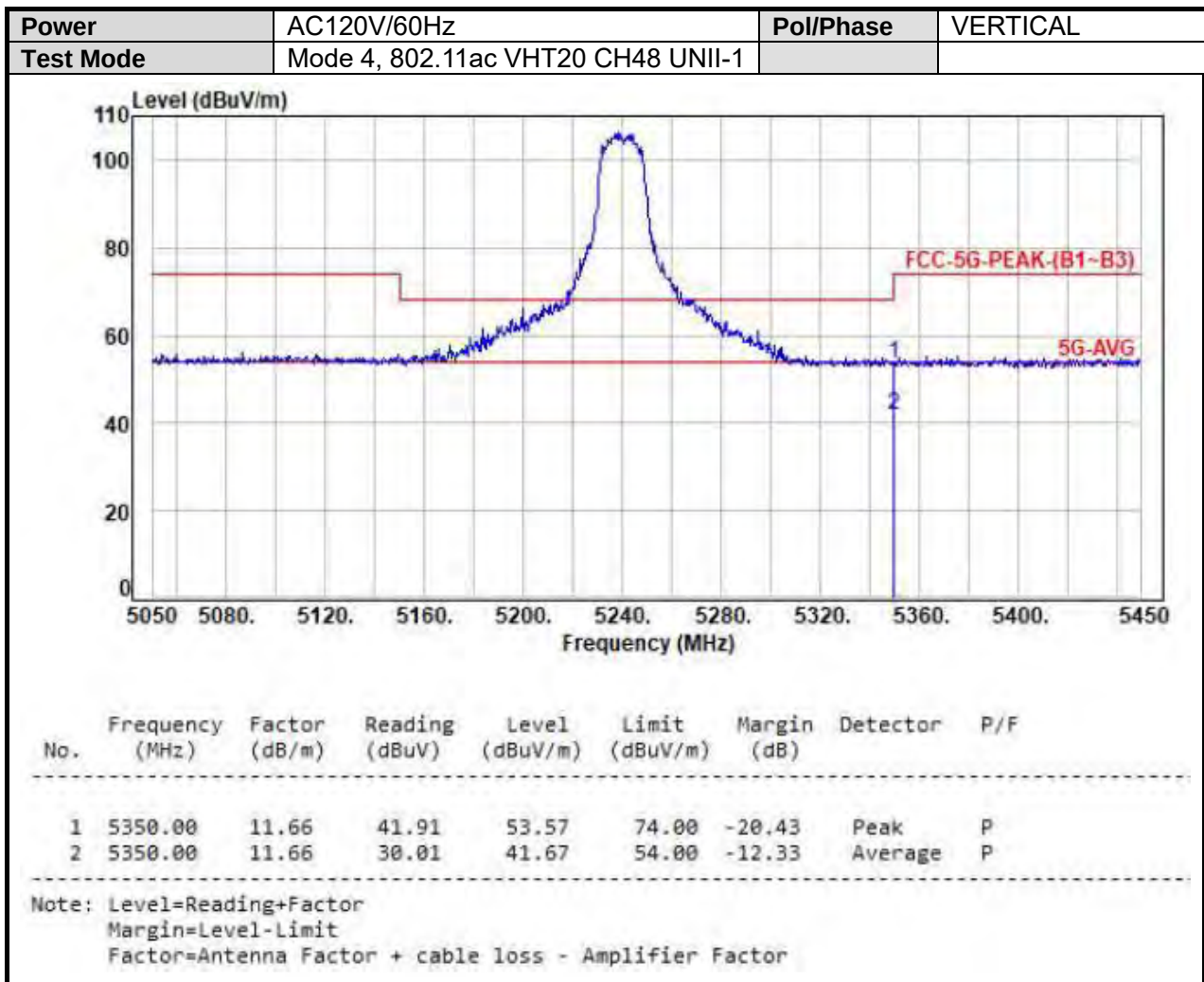


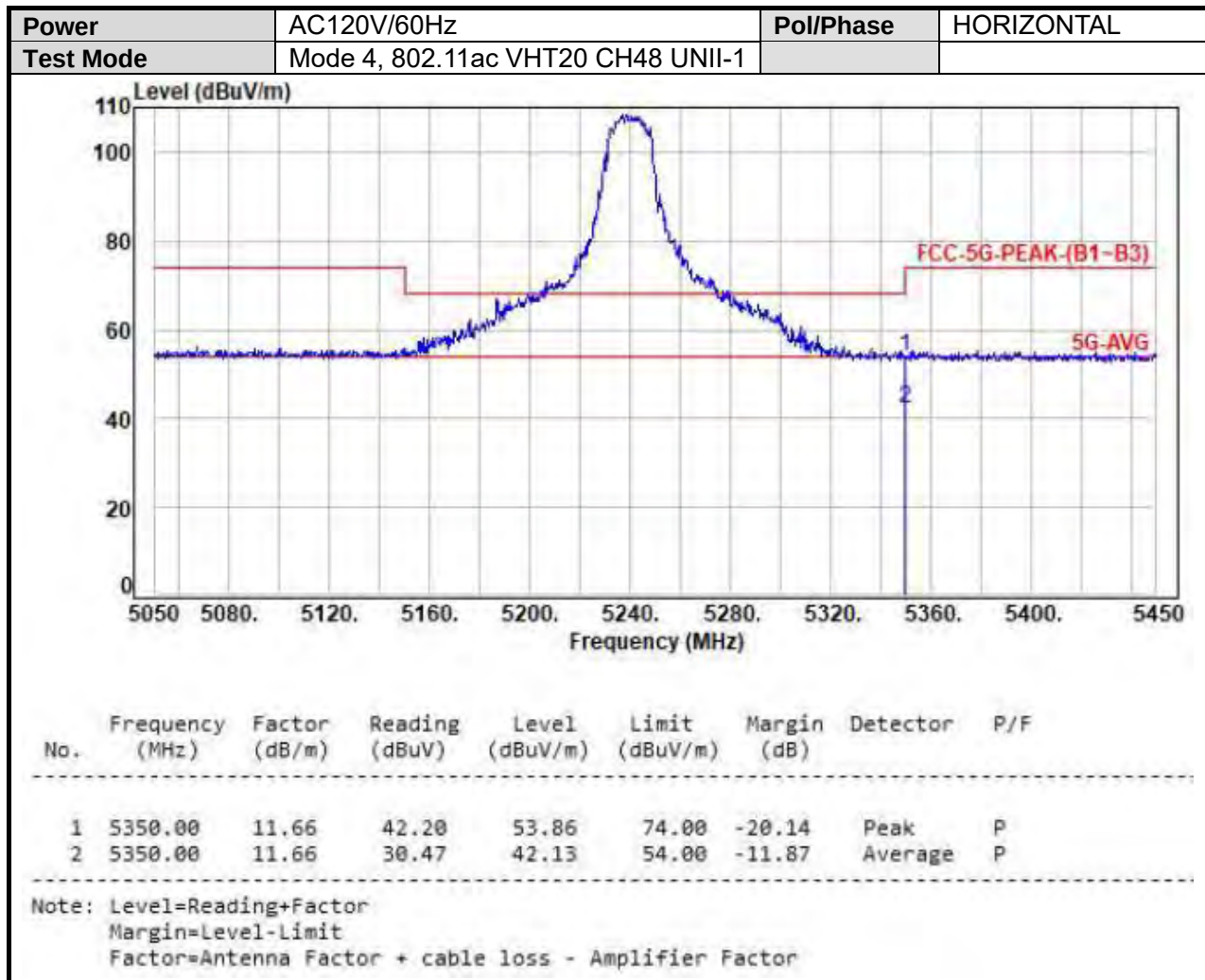


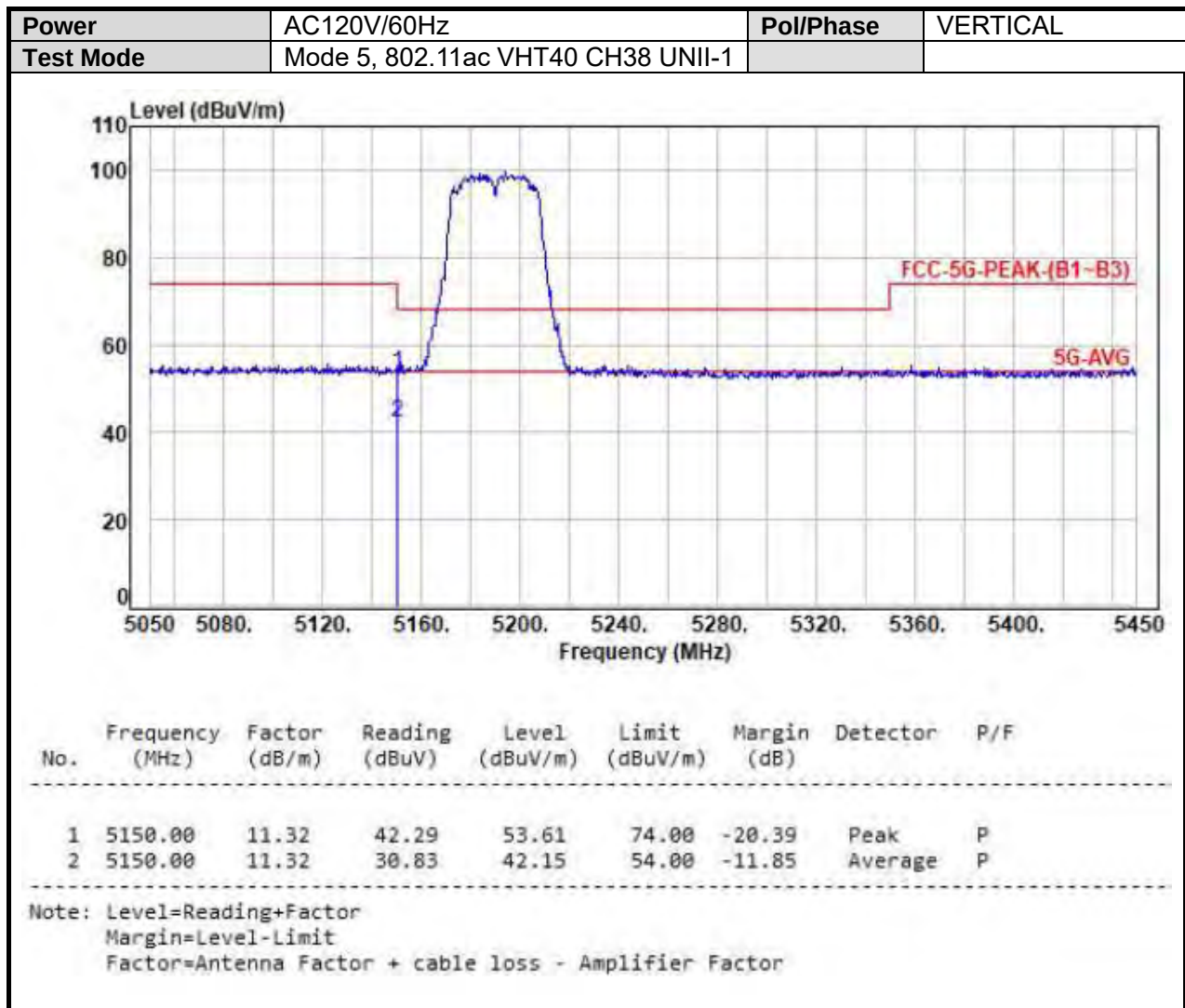


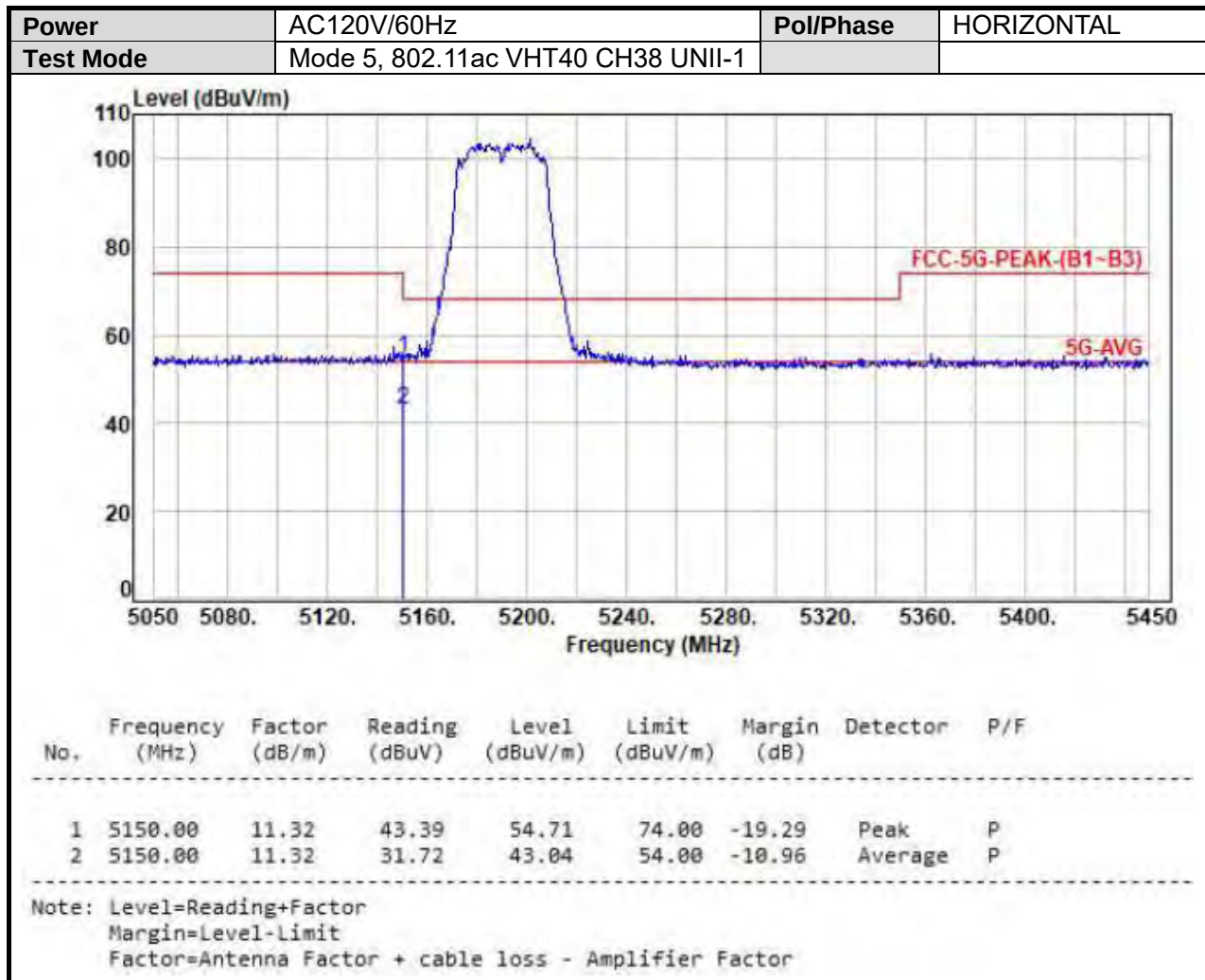


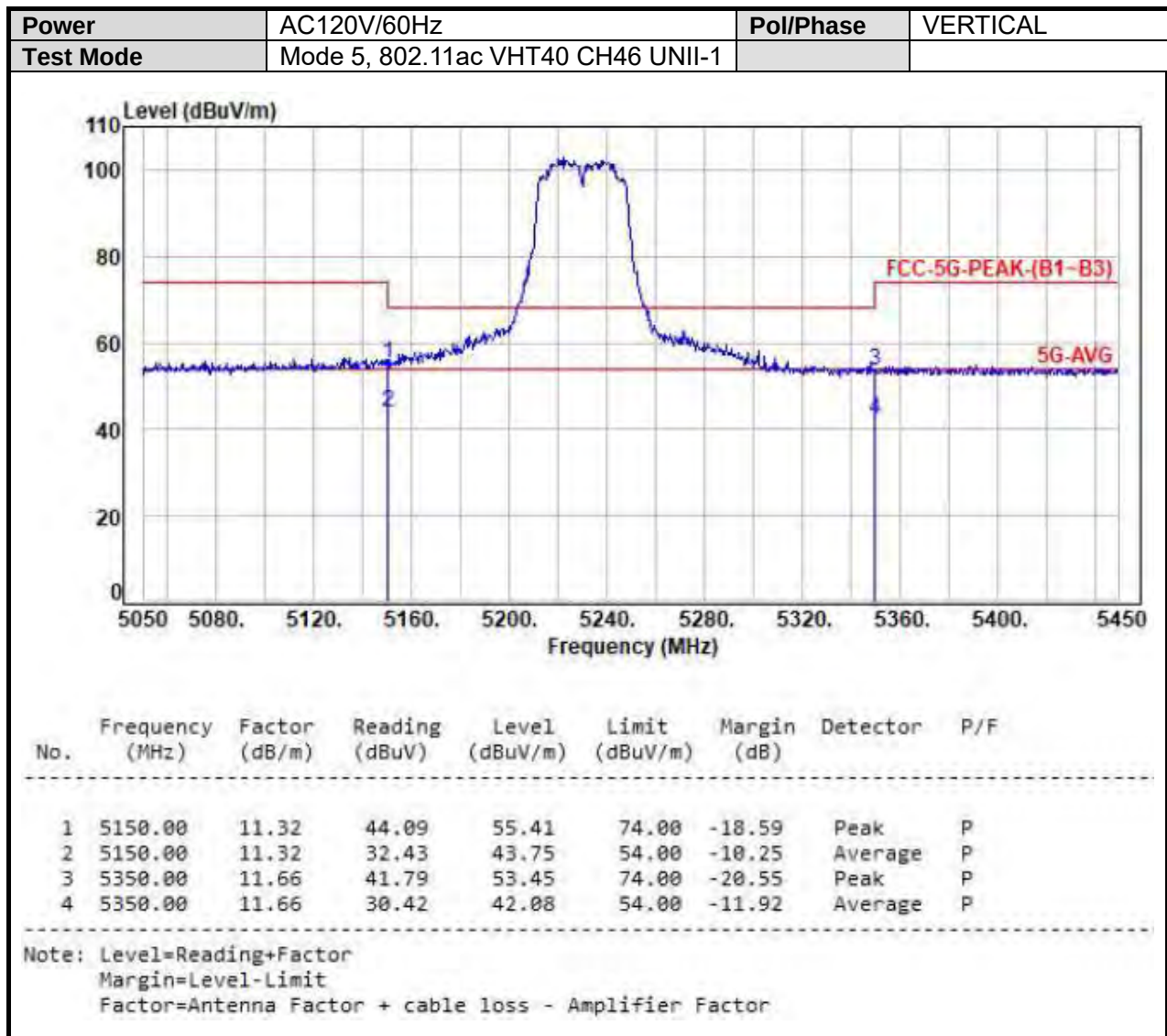


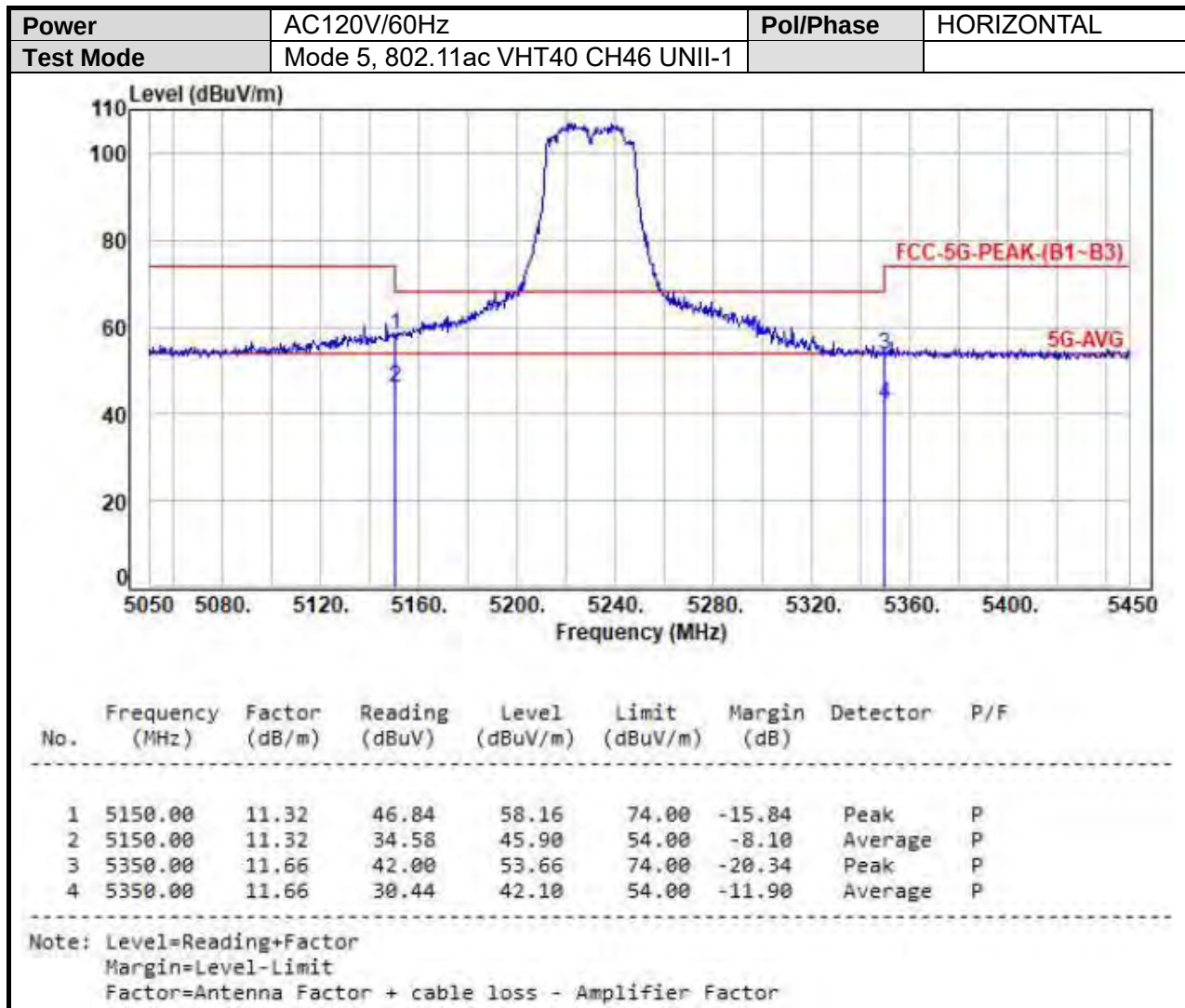


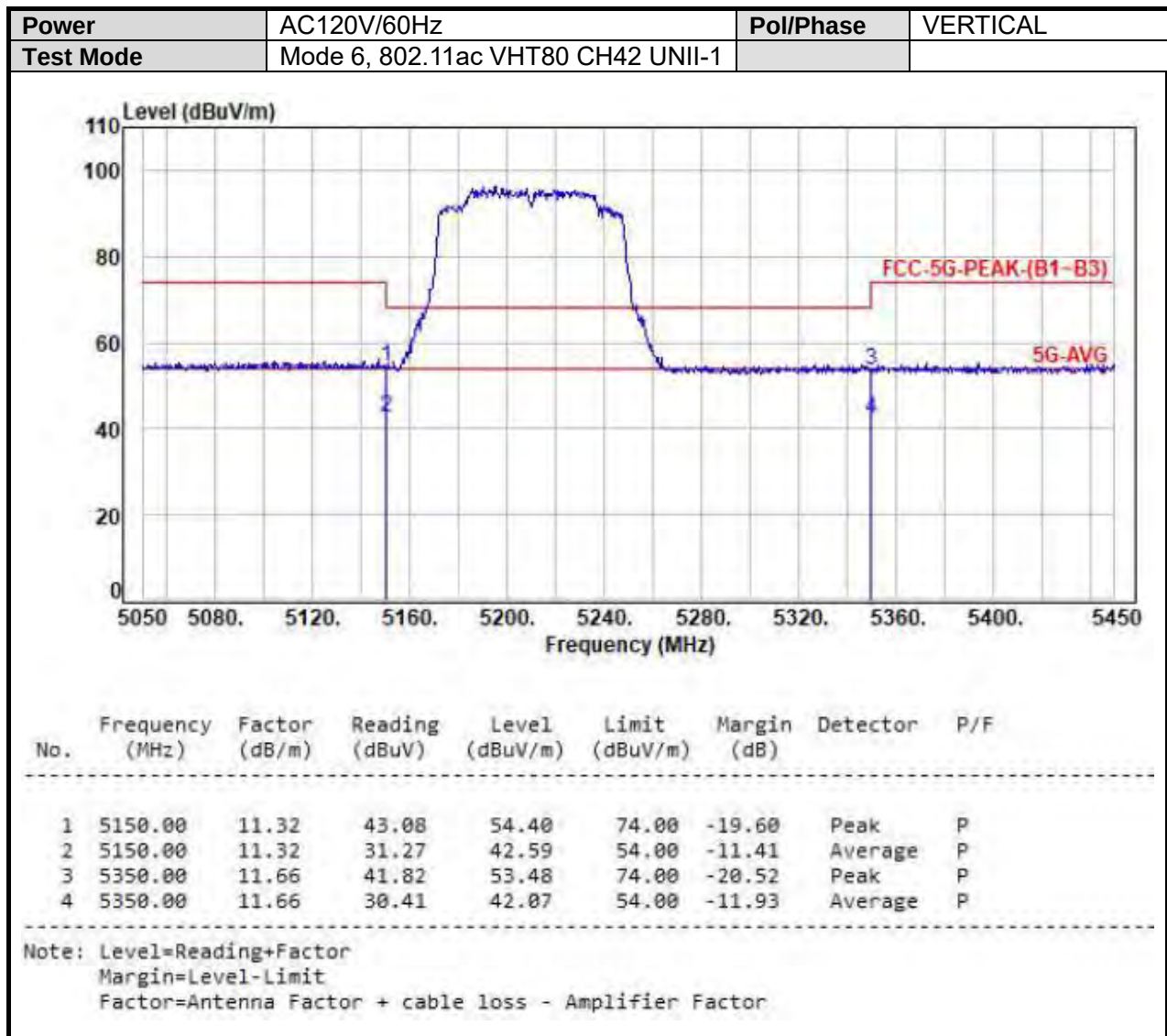


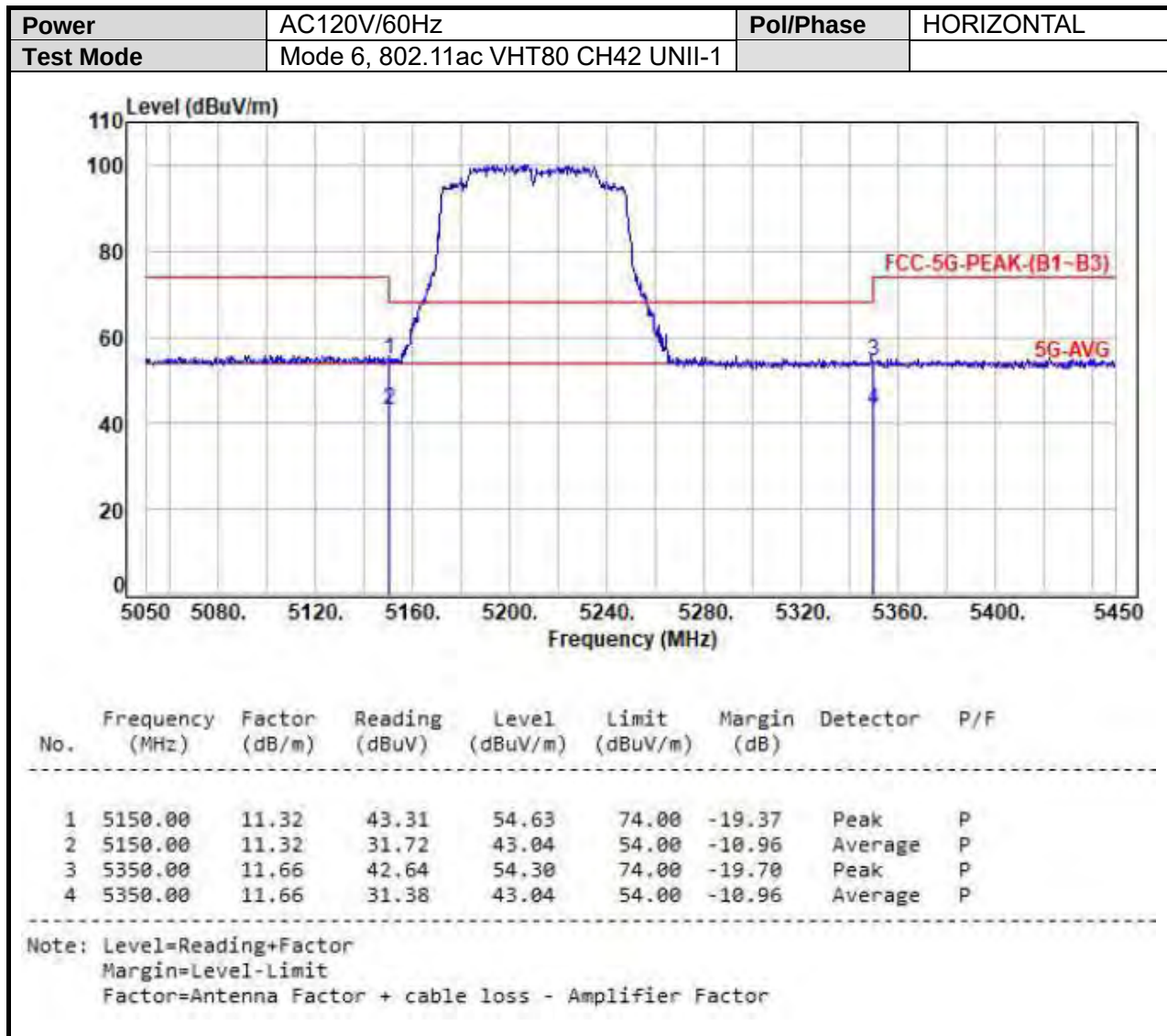


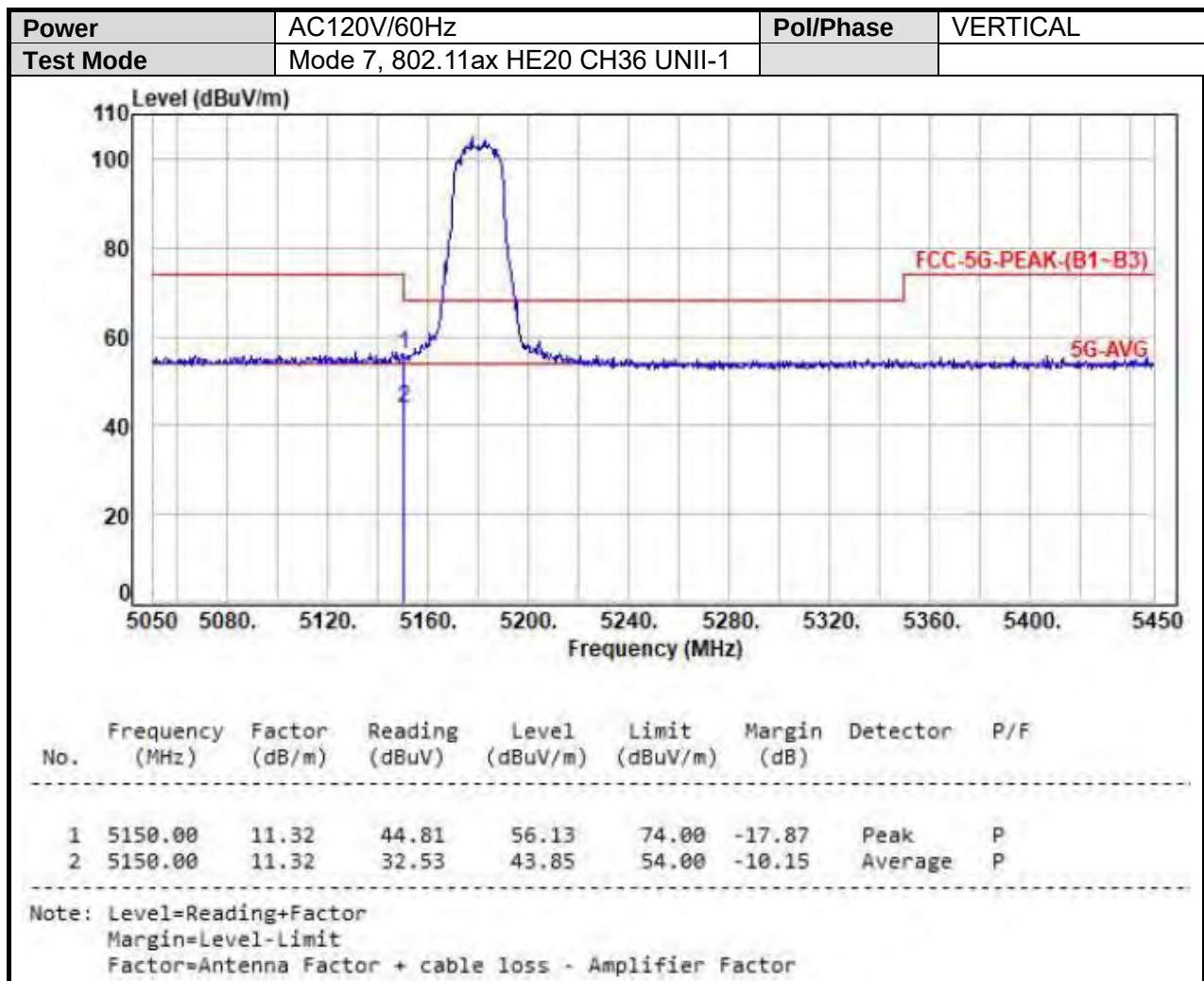


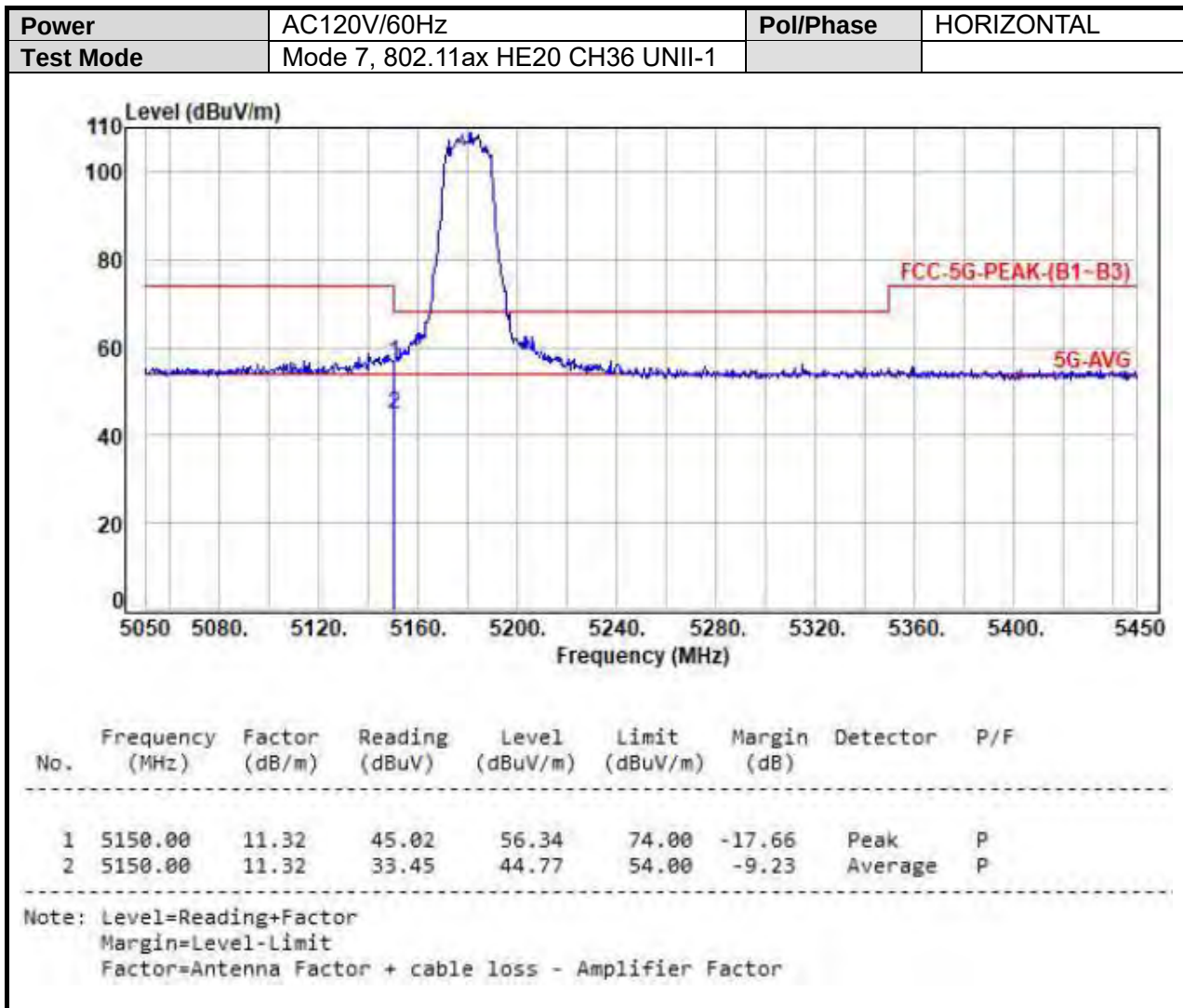


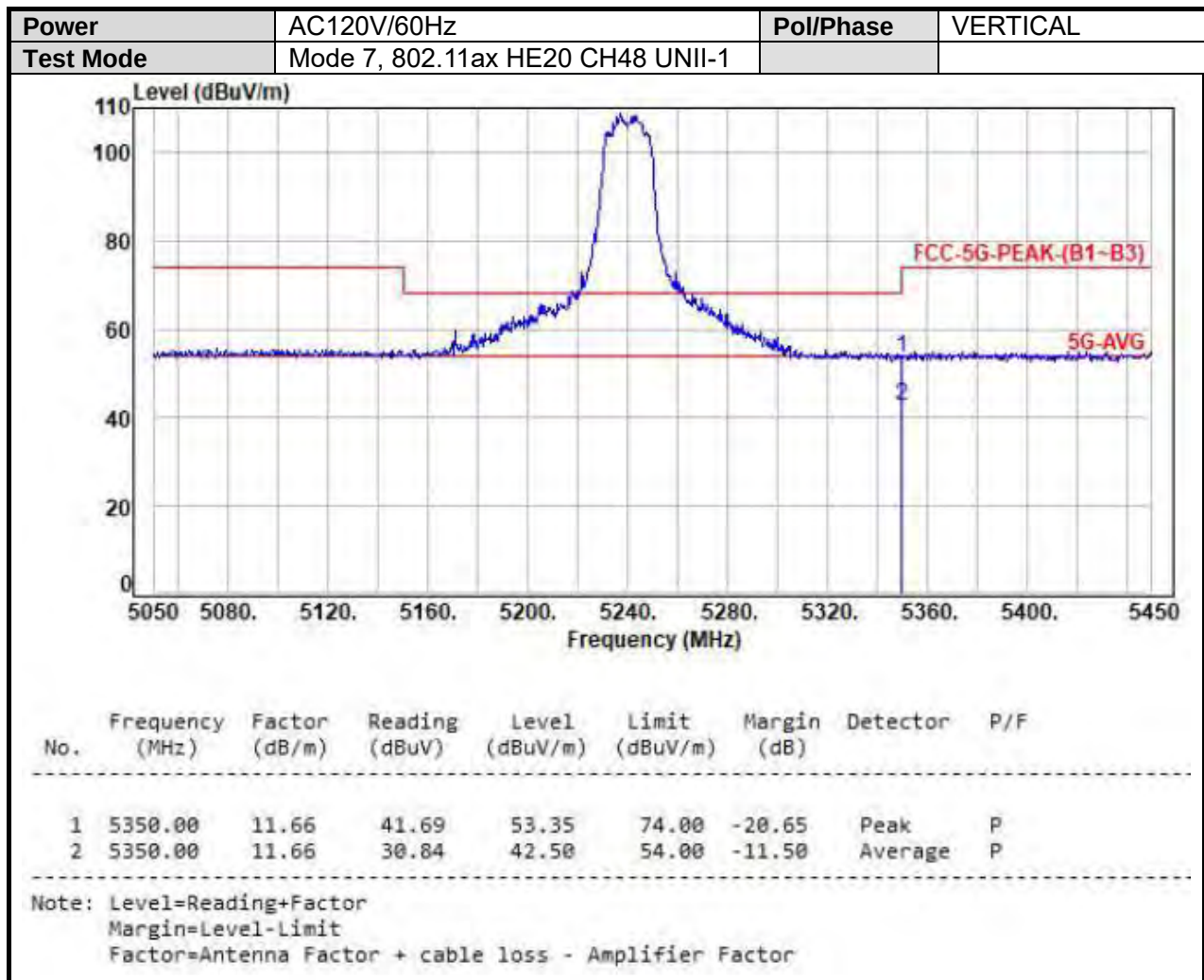


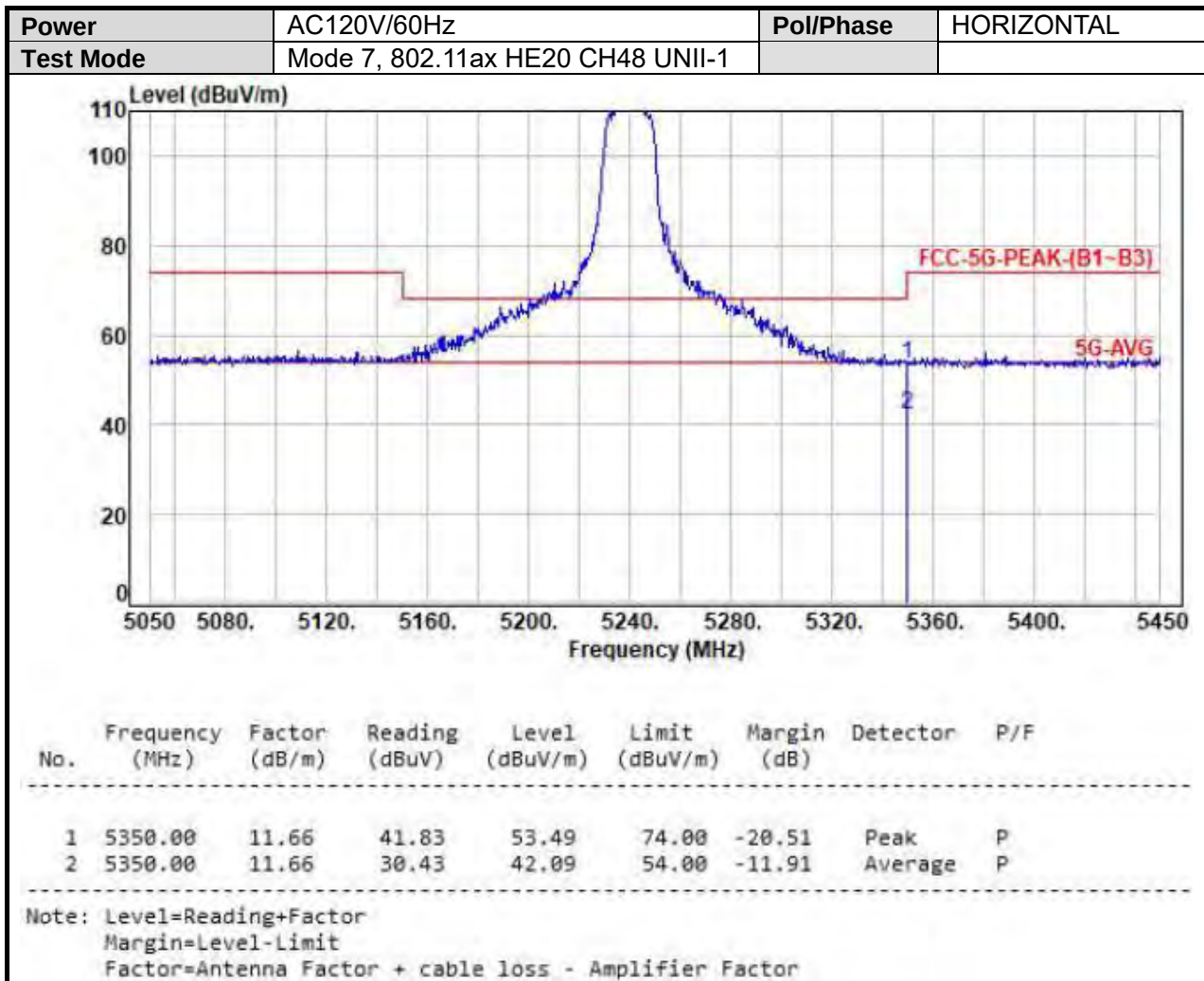


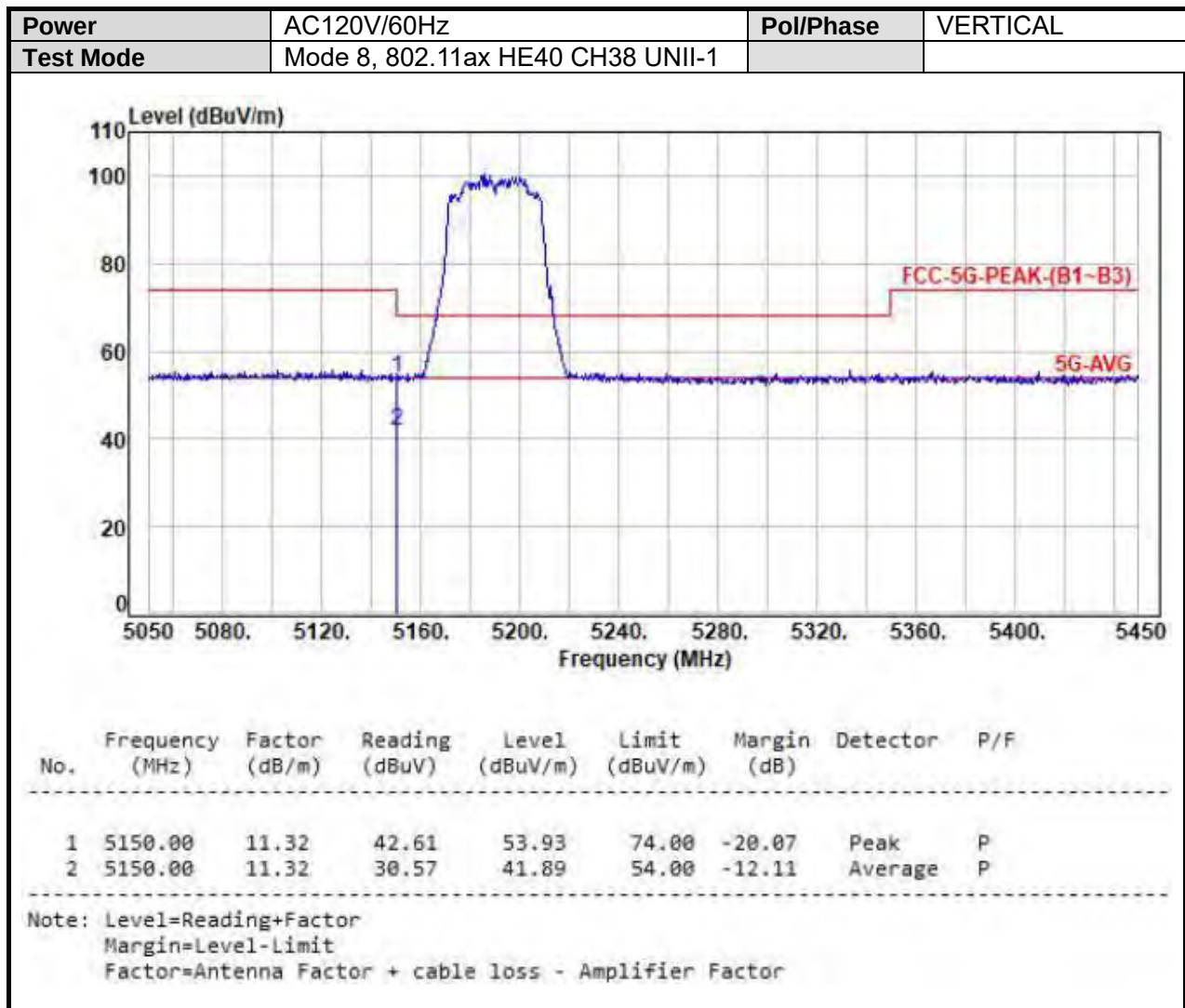


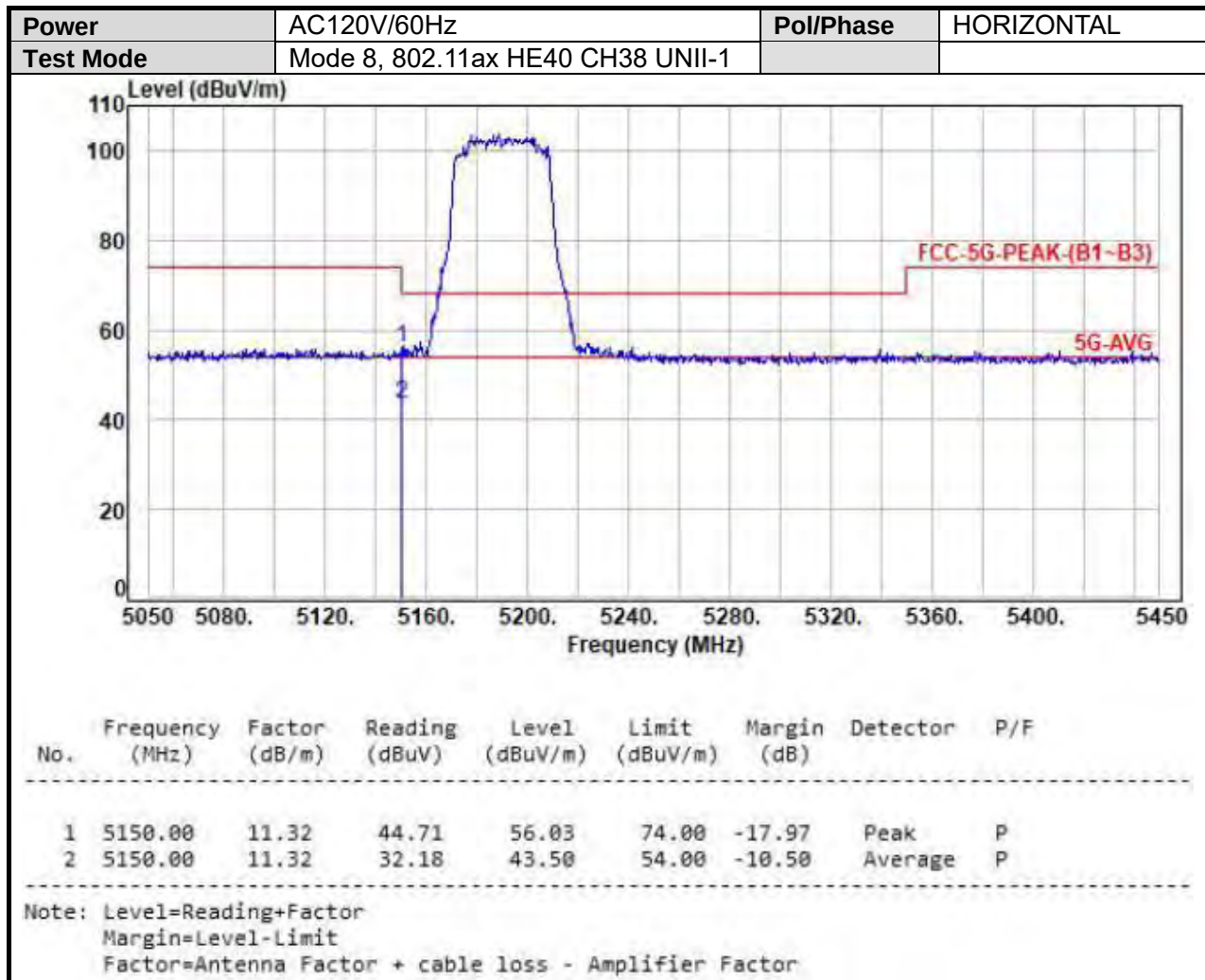


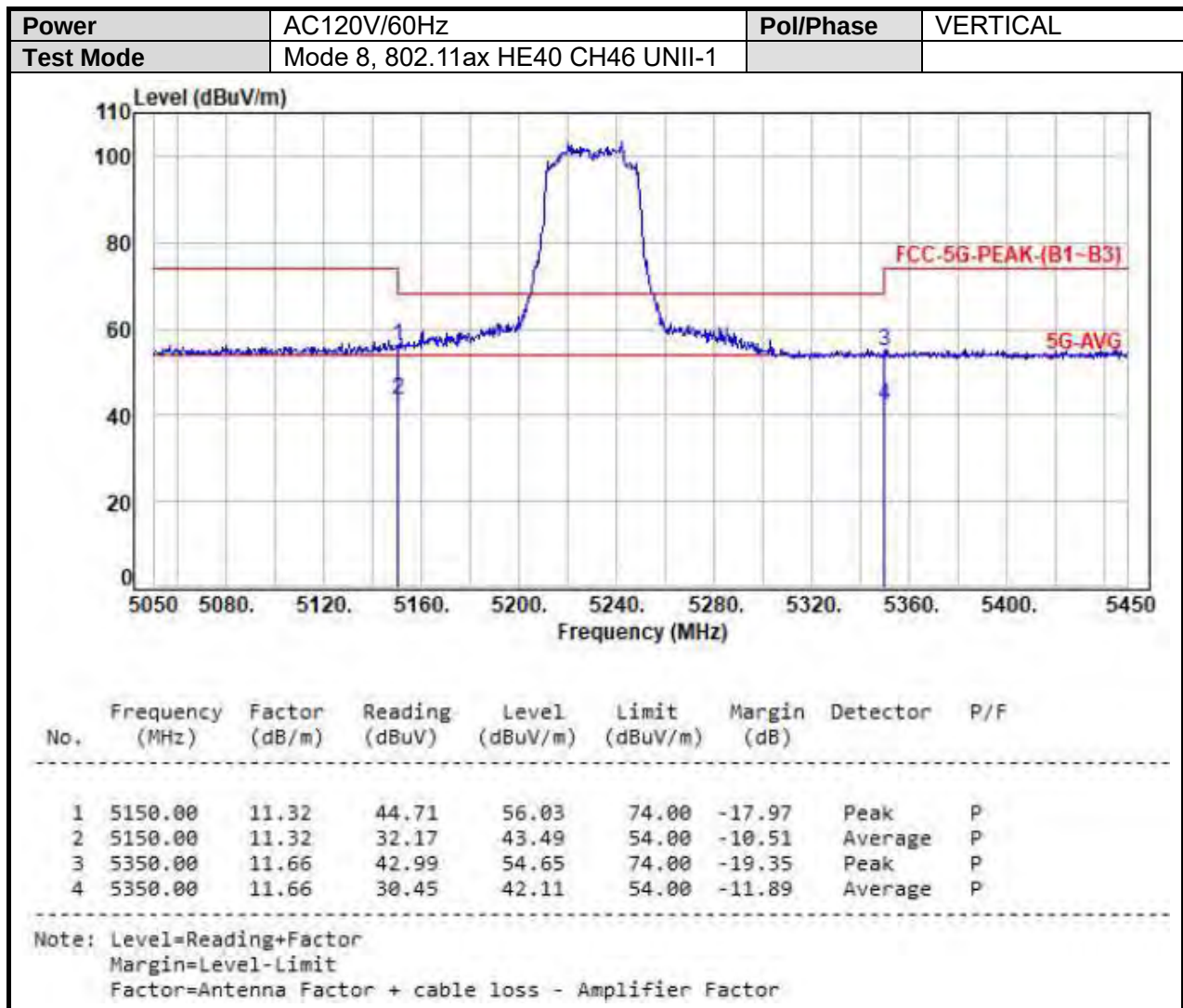


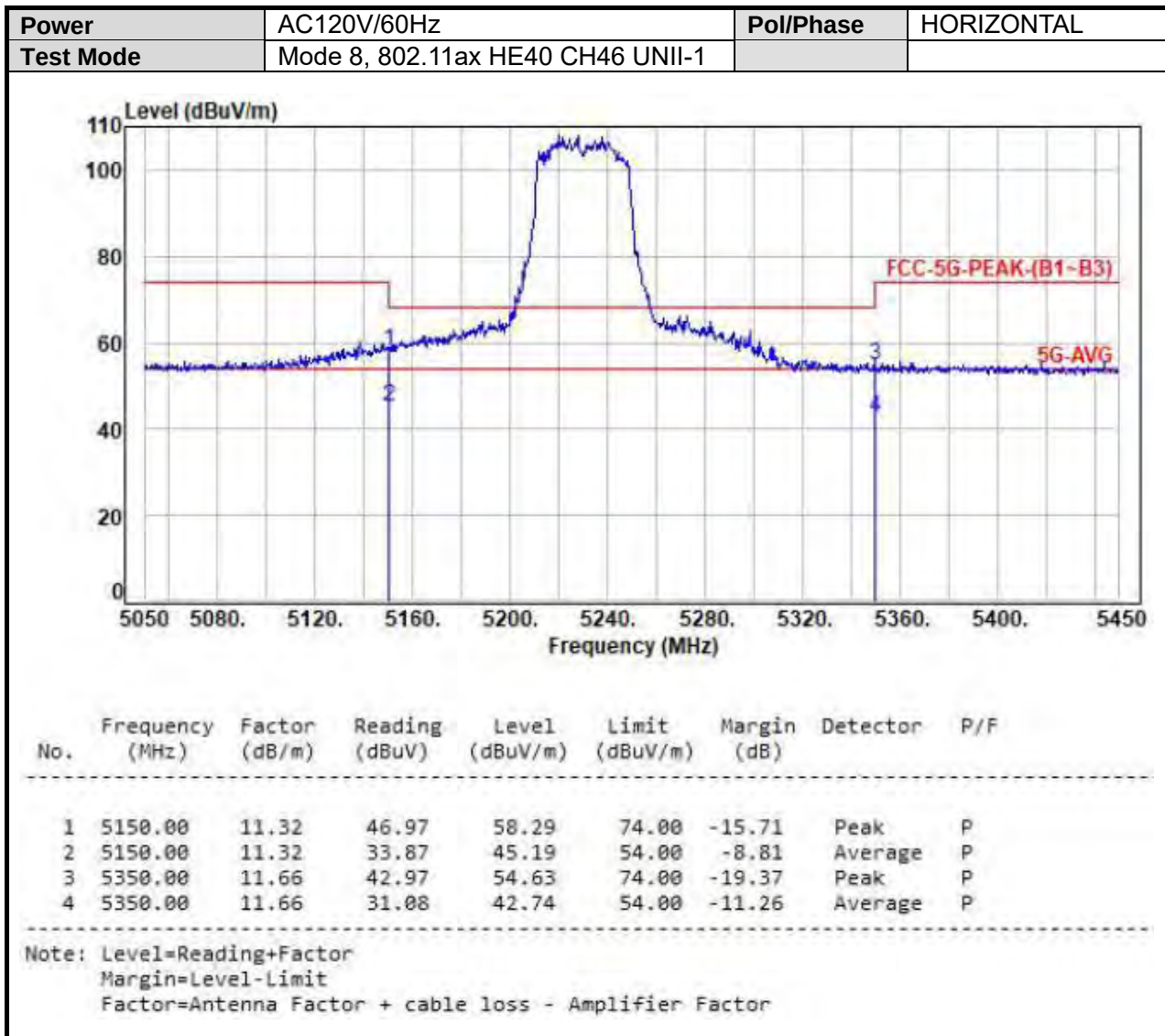


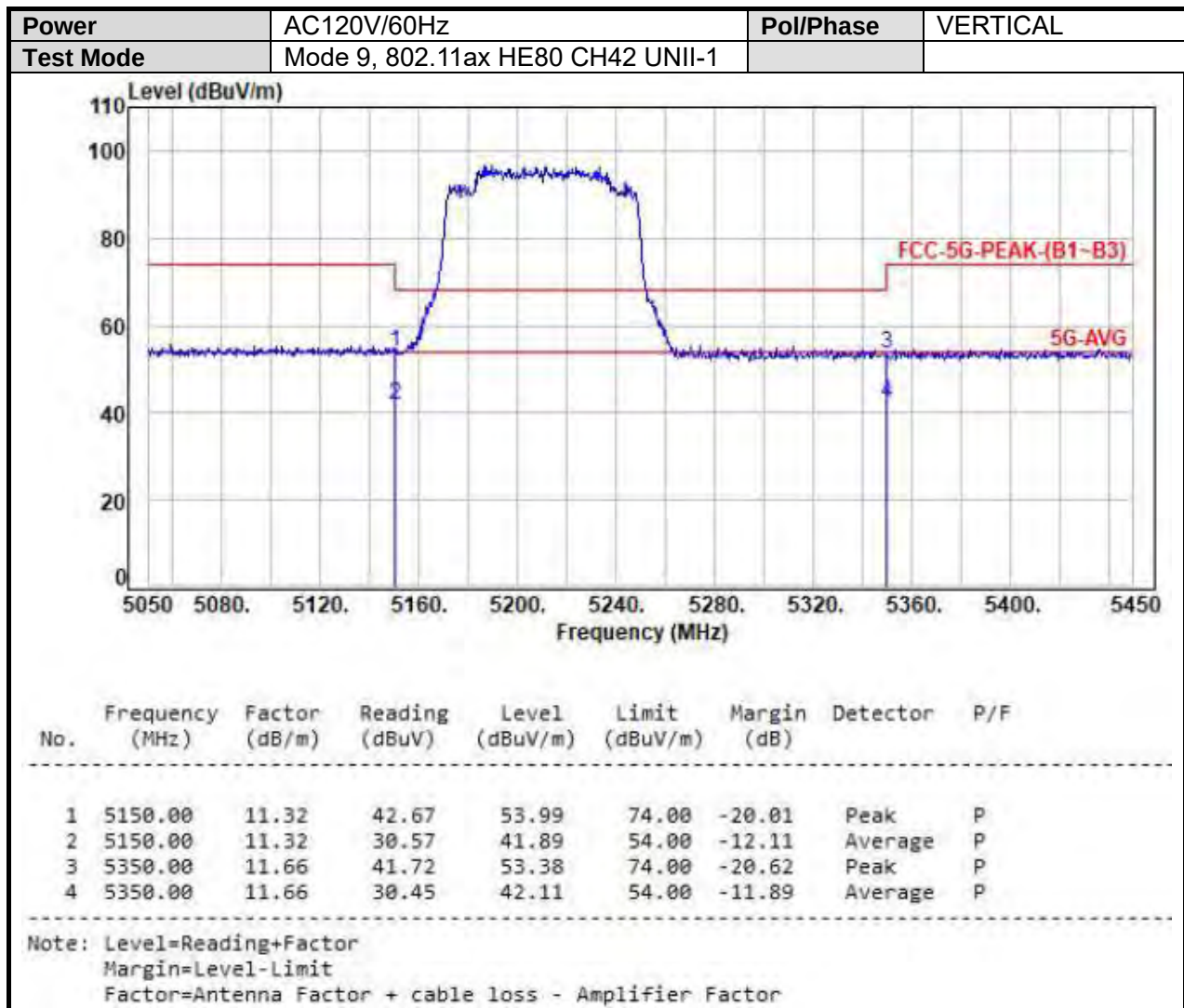


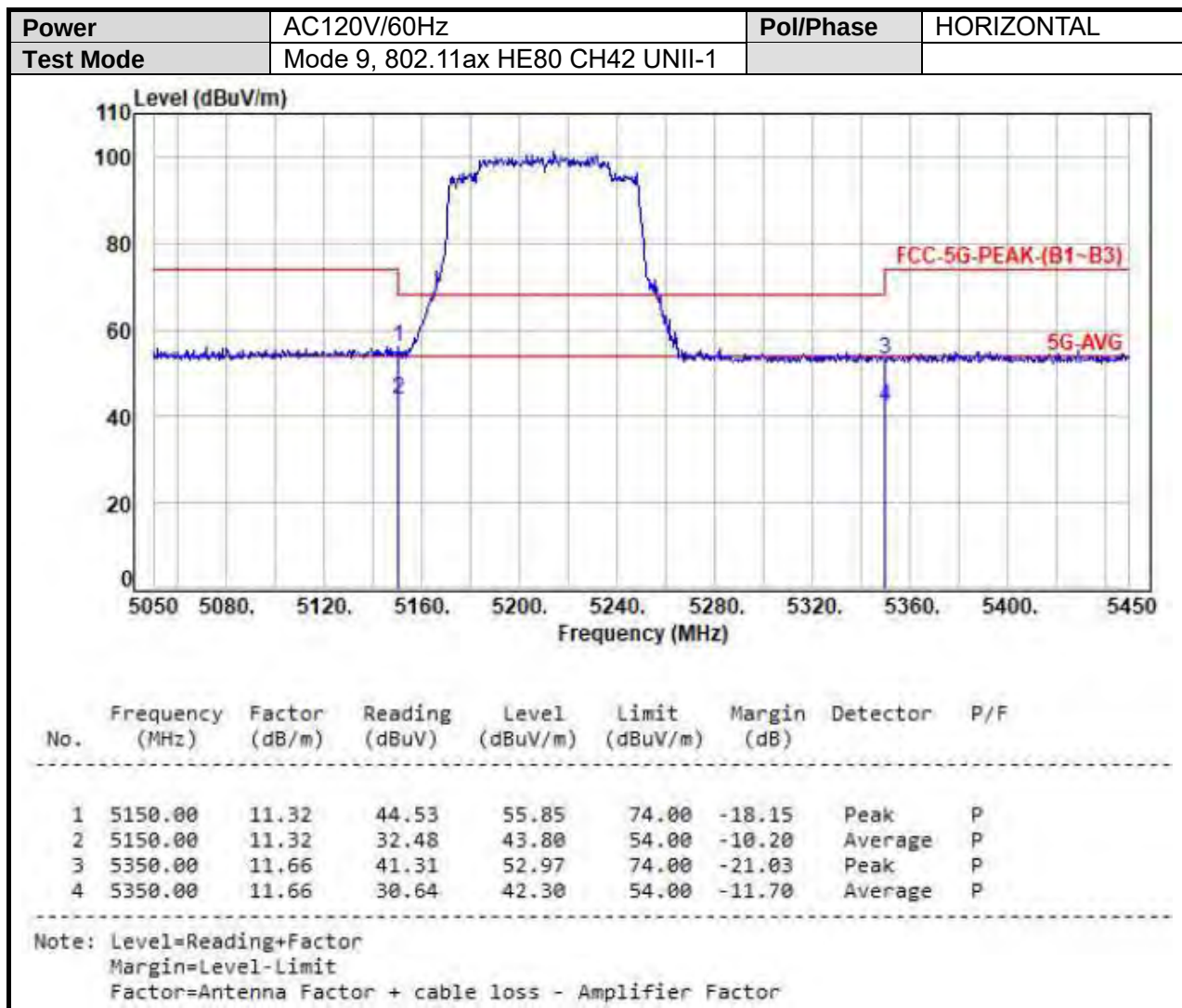






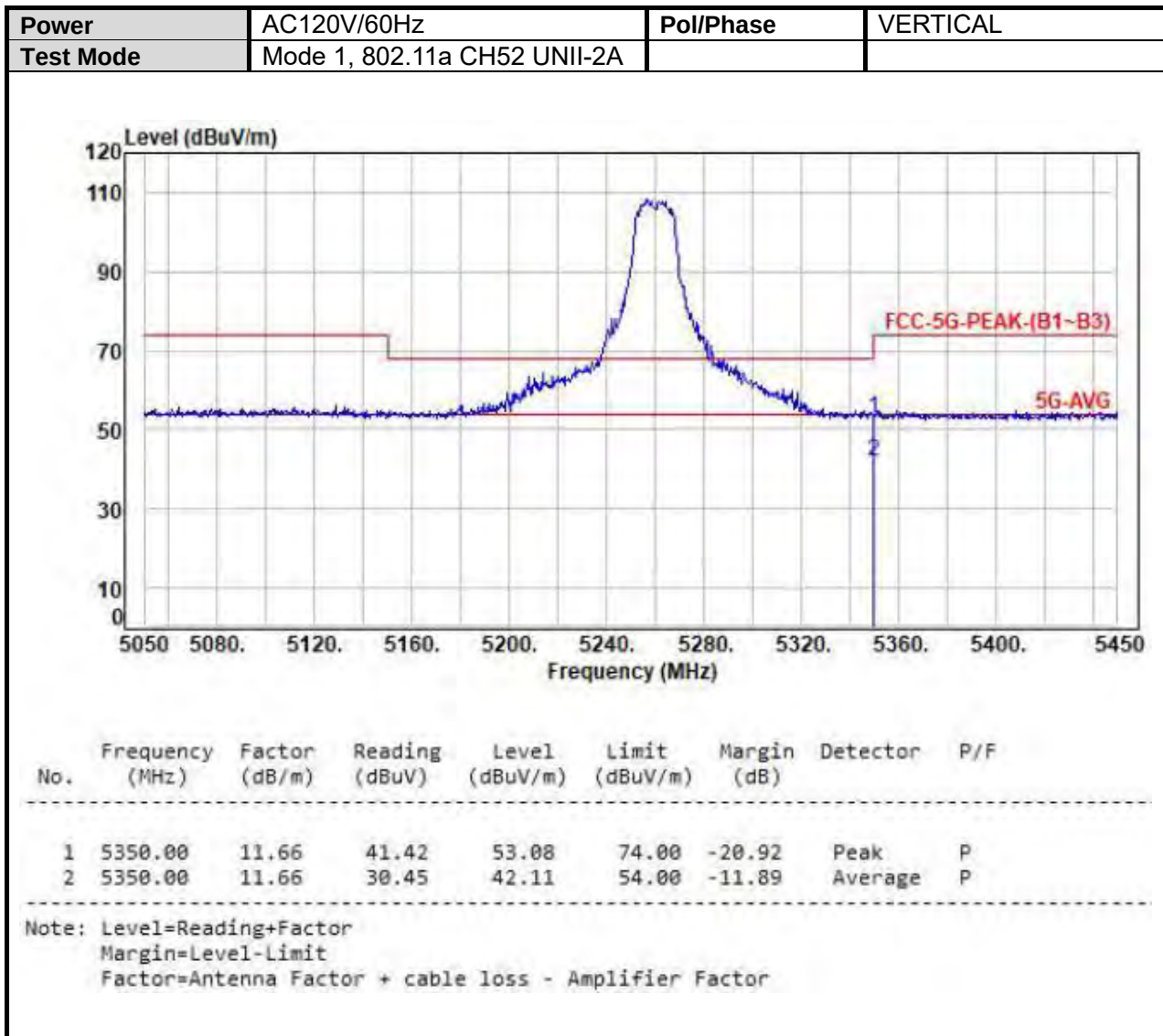


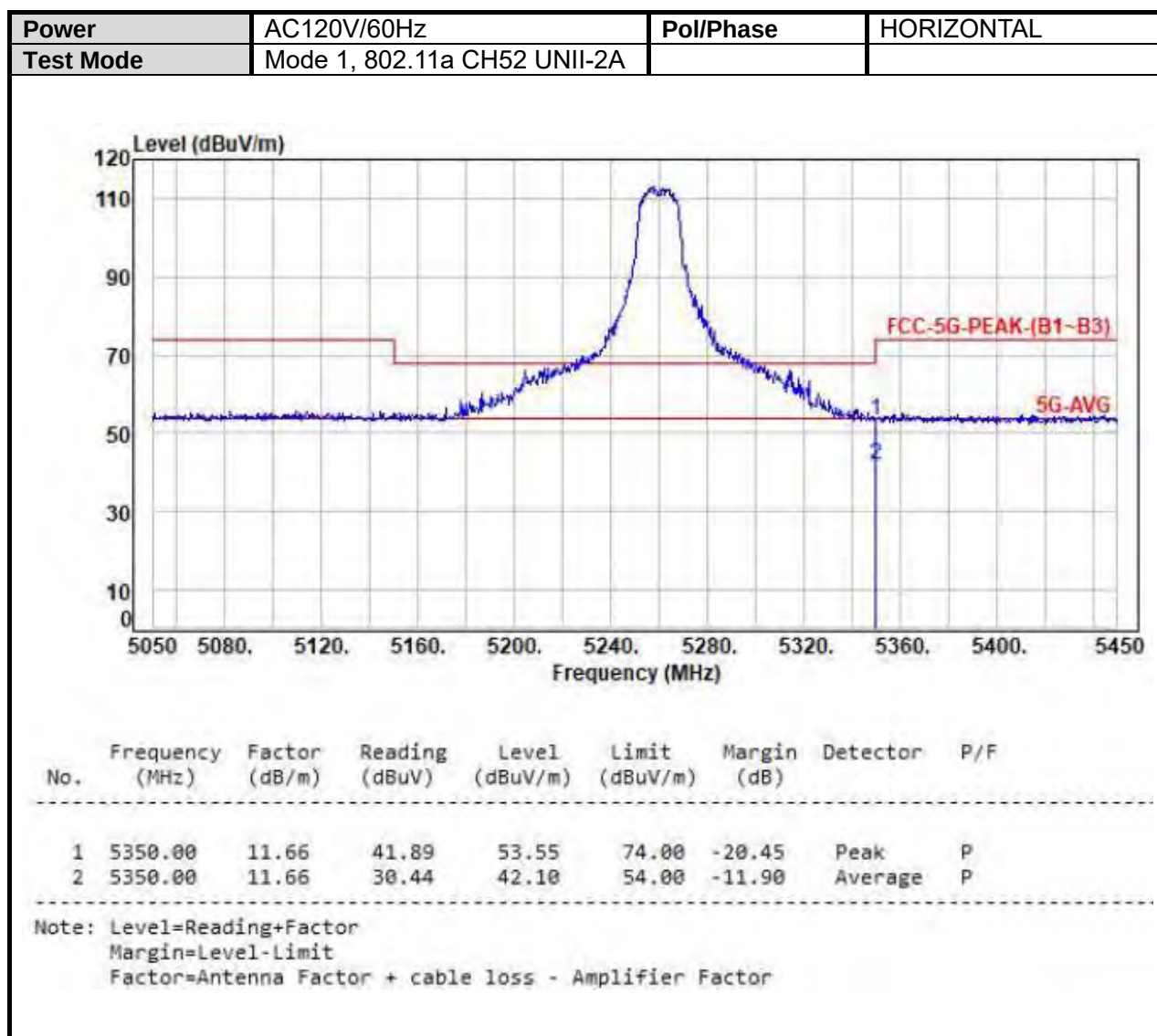


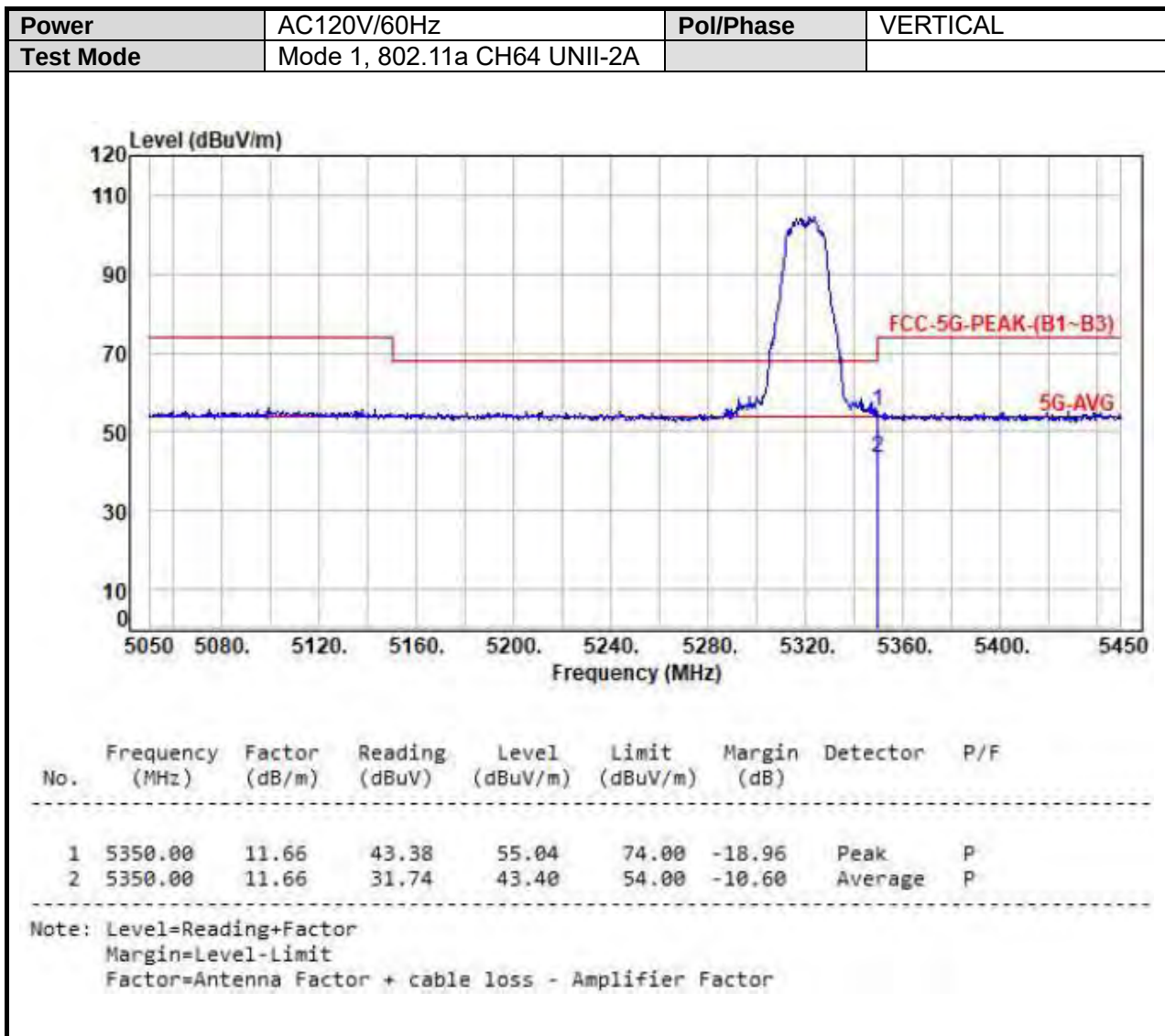


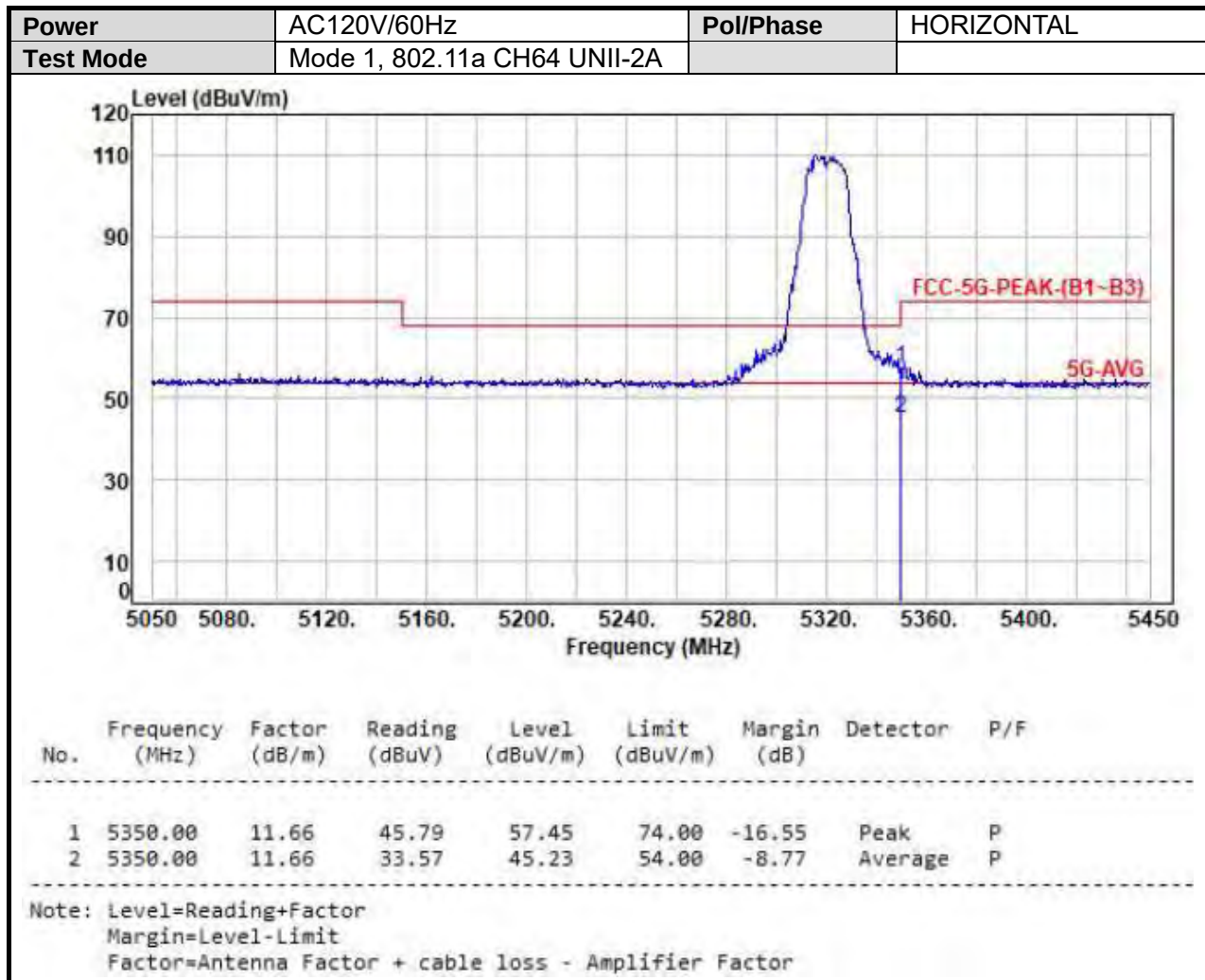


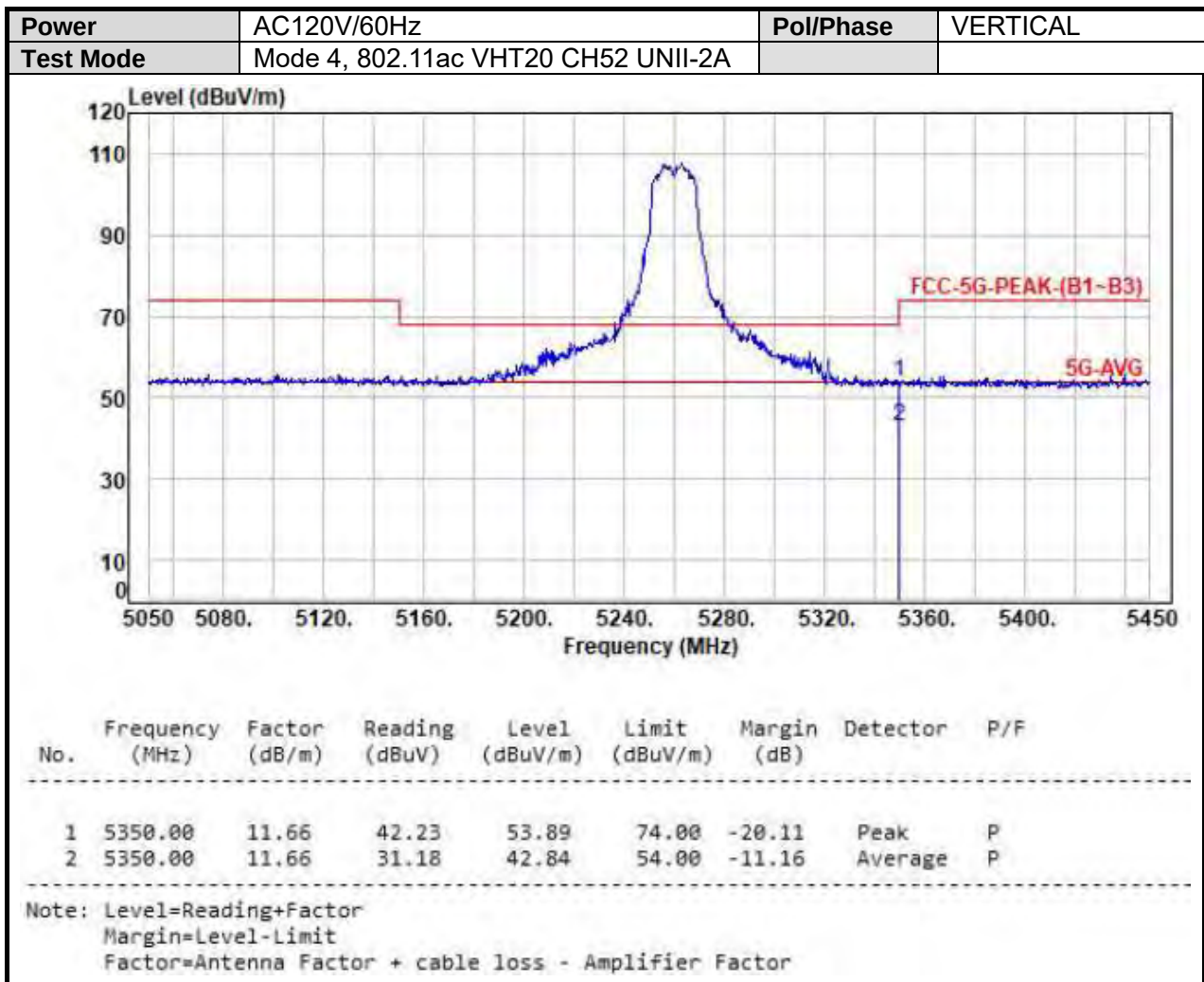
UNII-2A

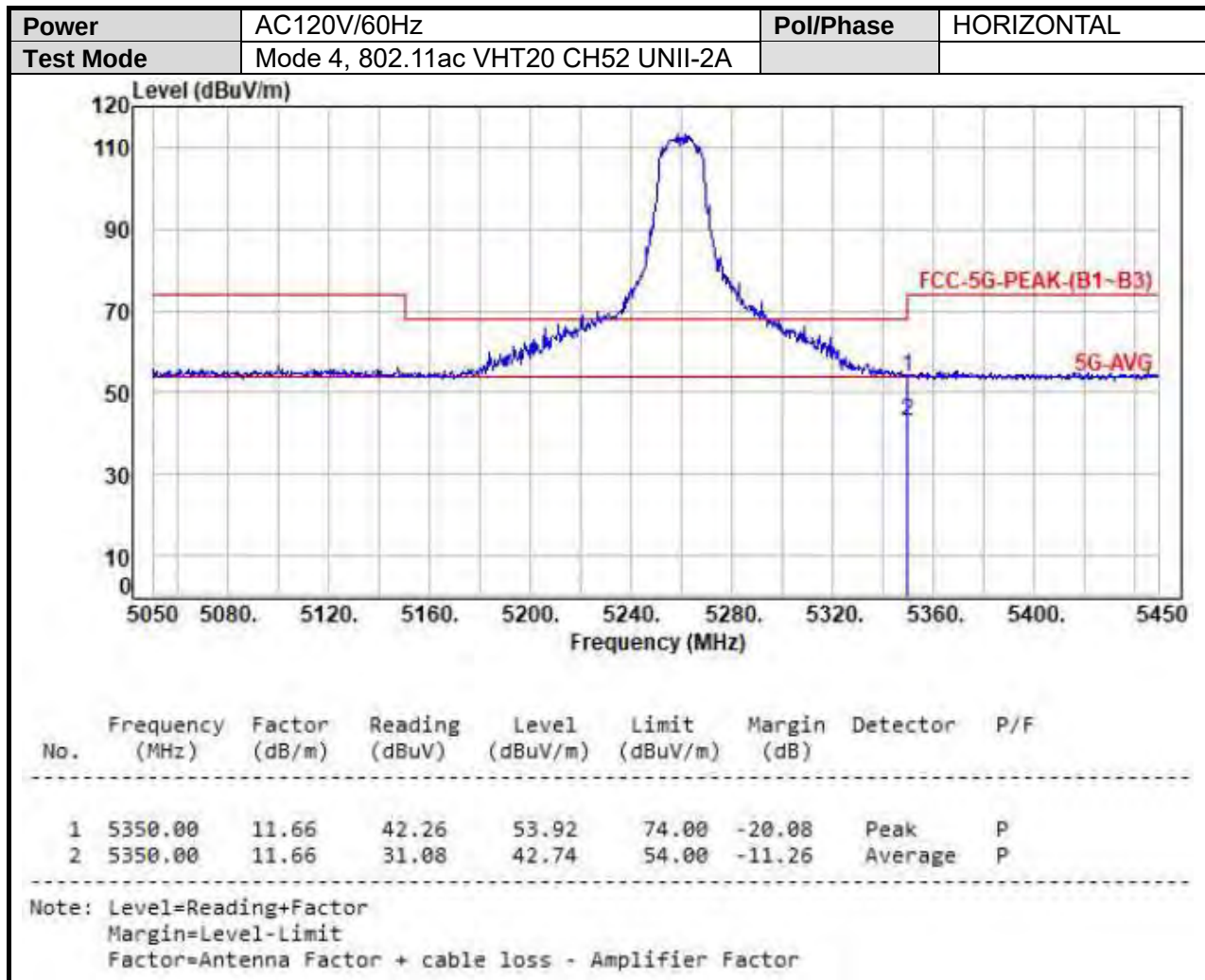


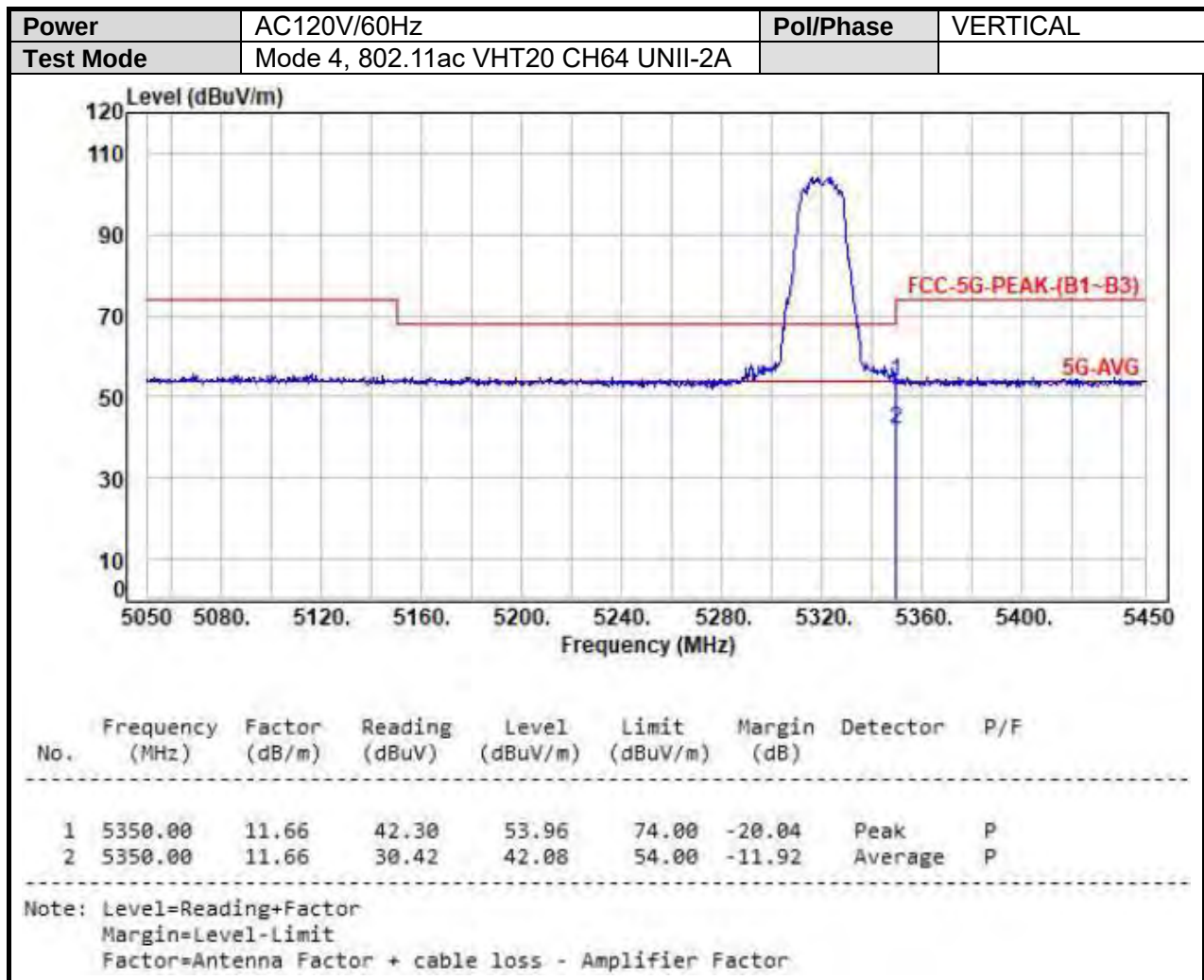


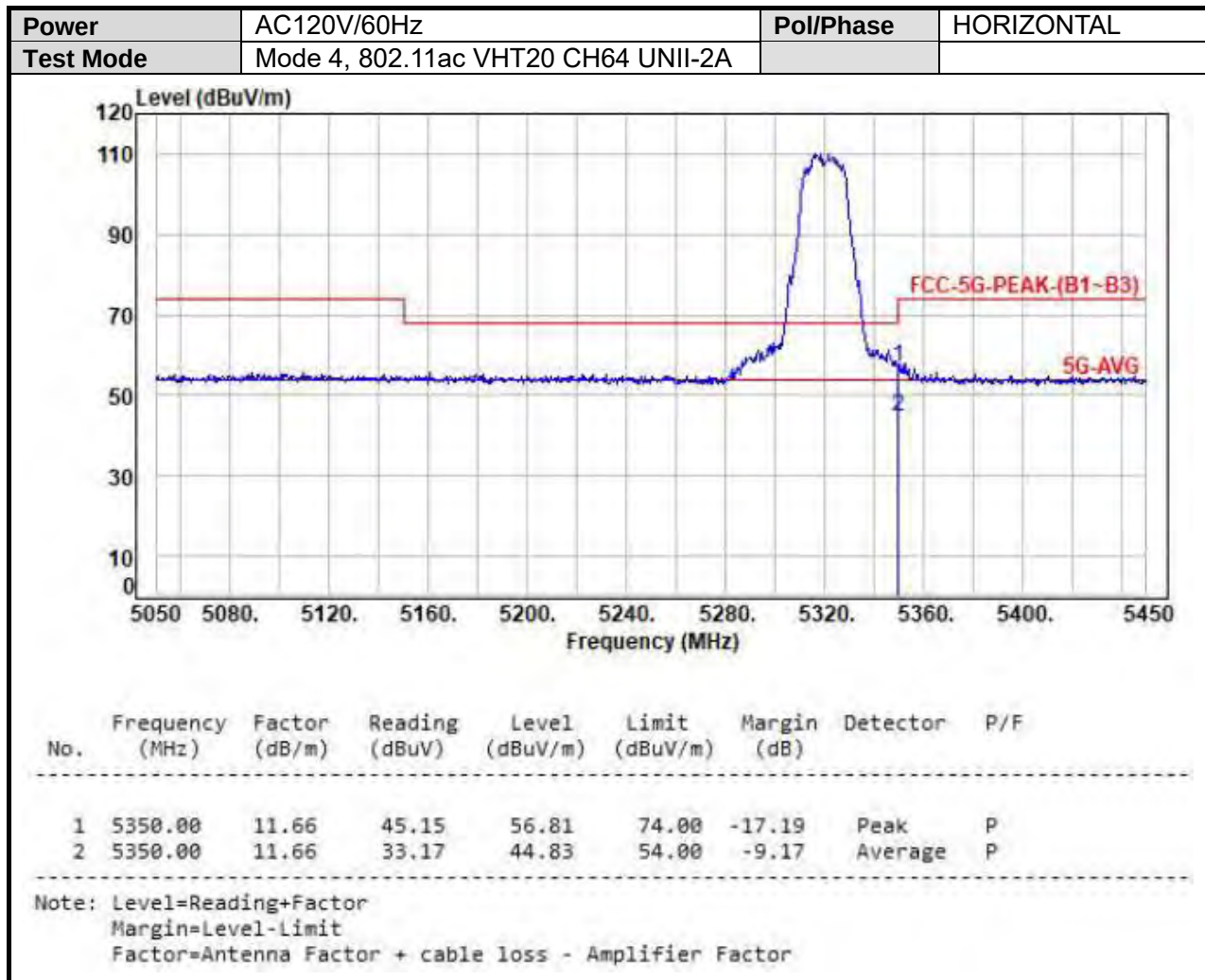


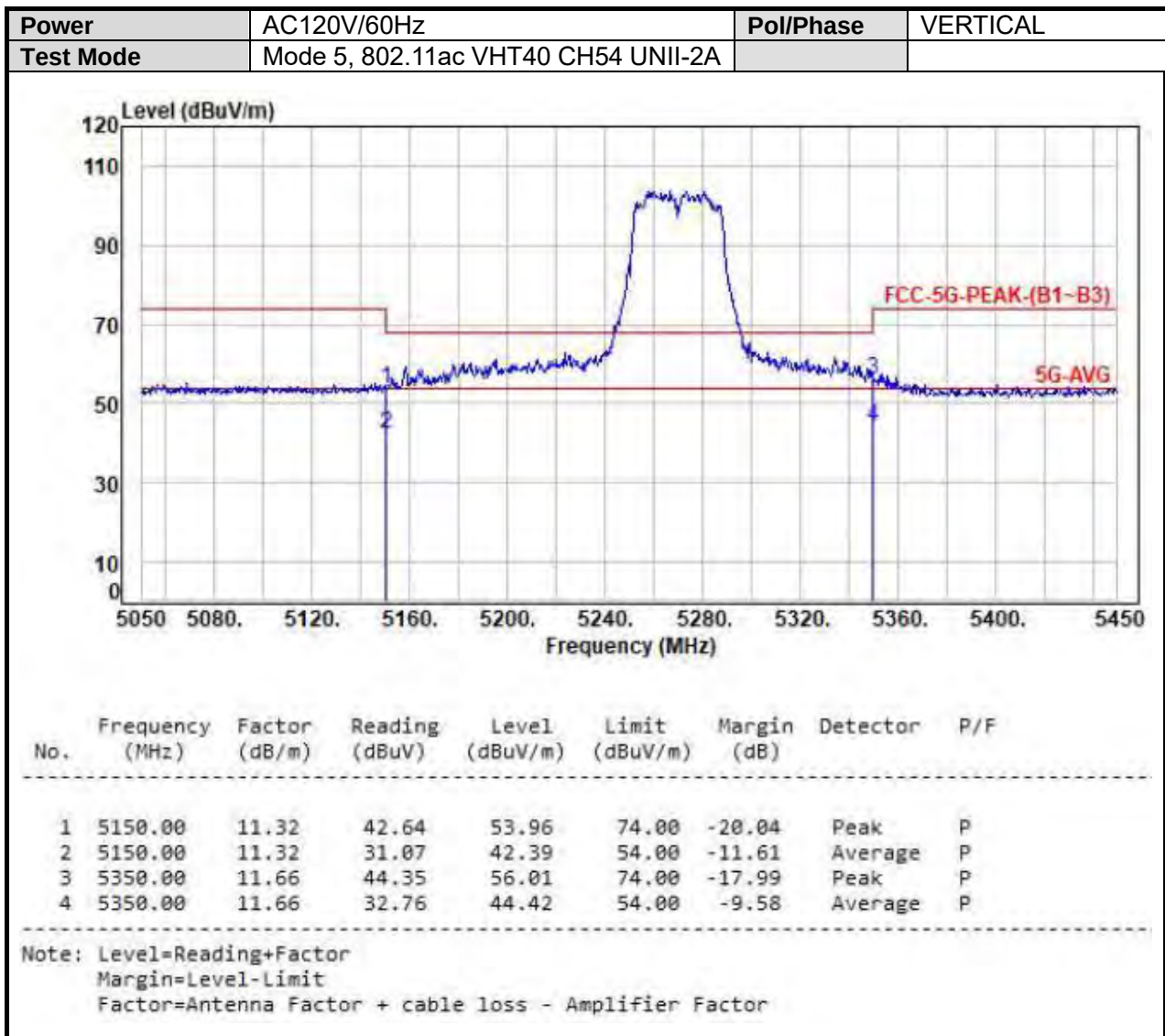


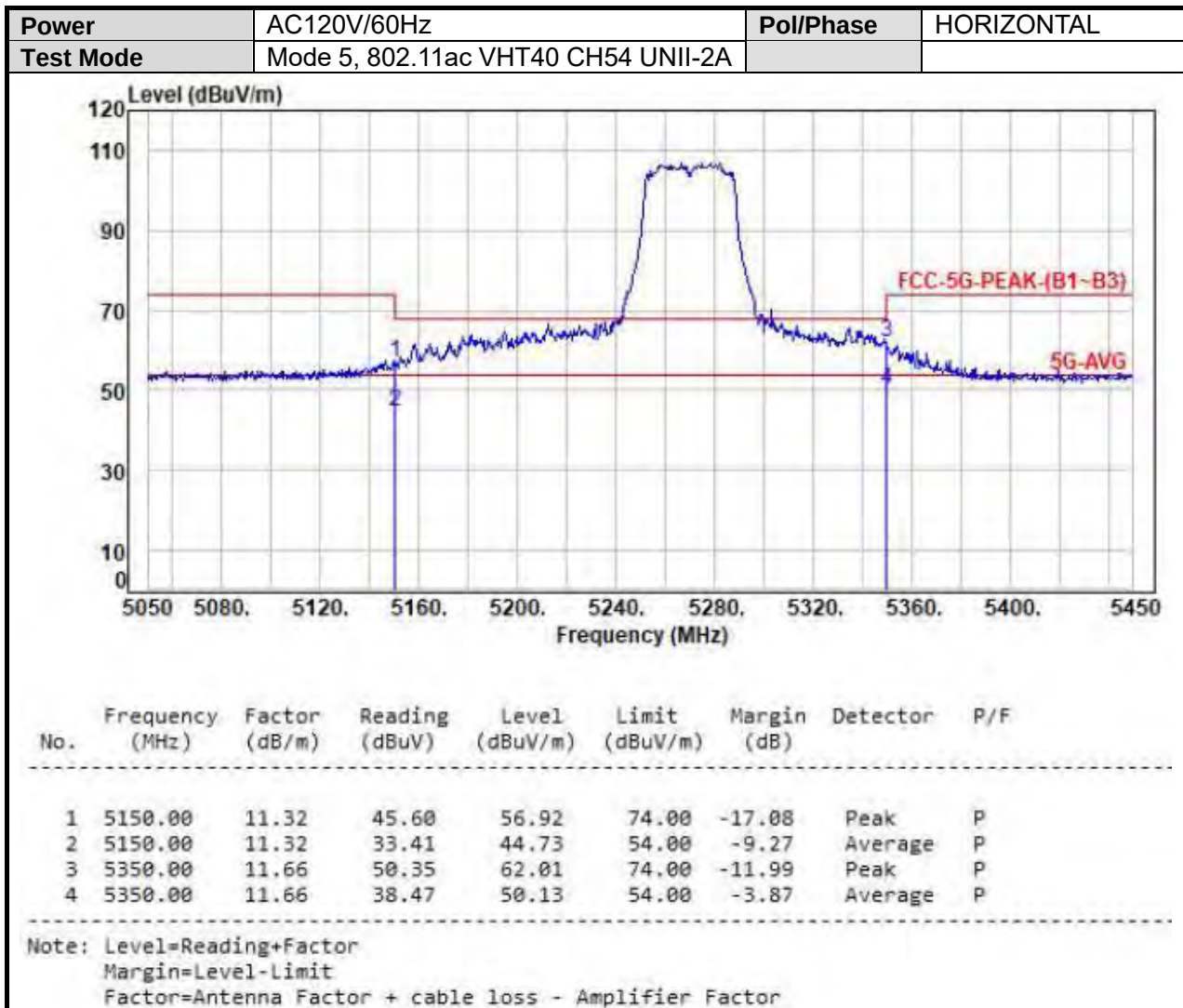


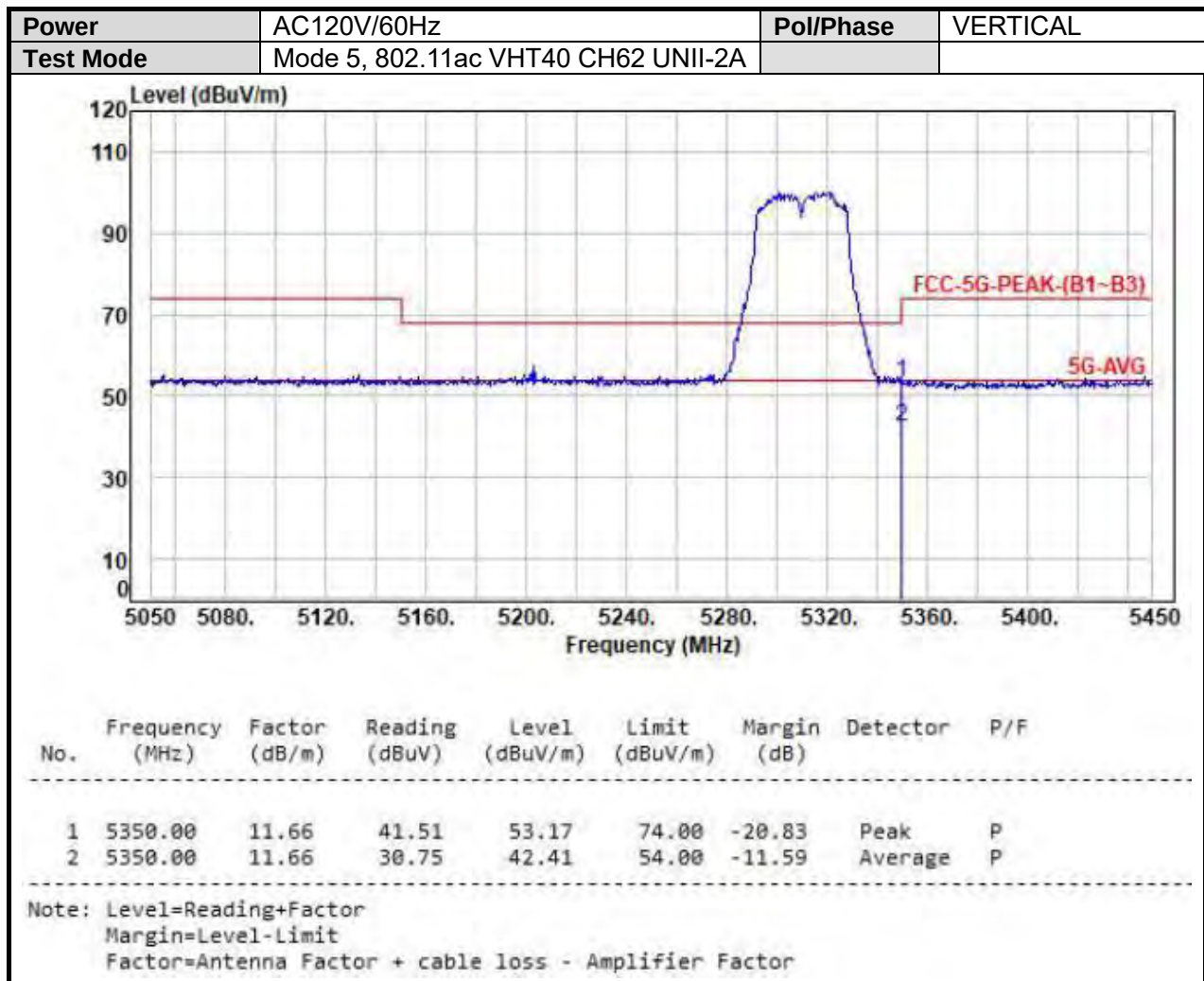


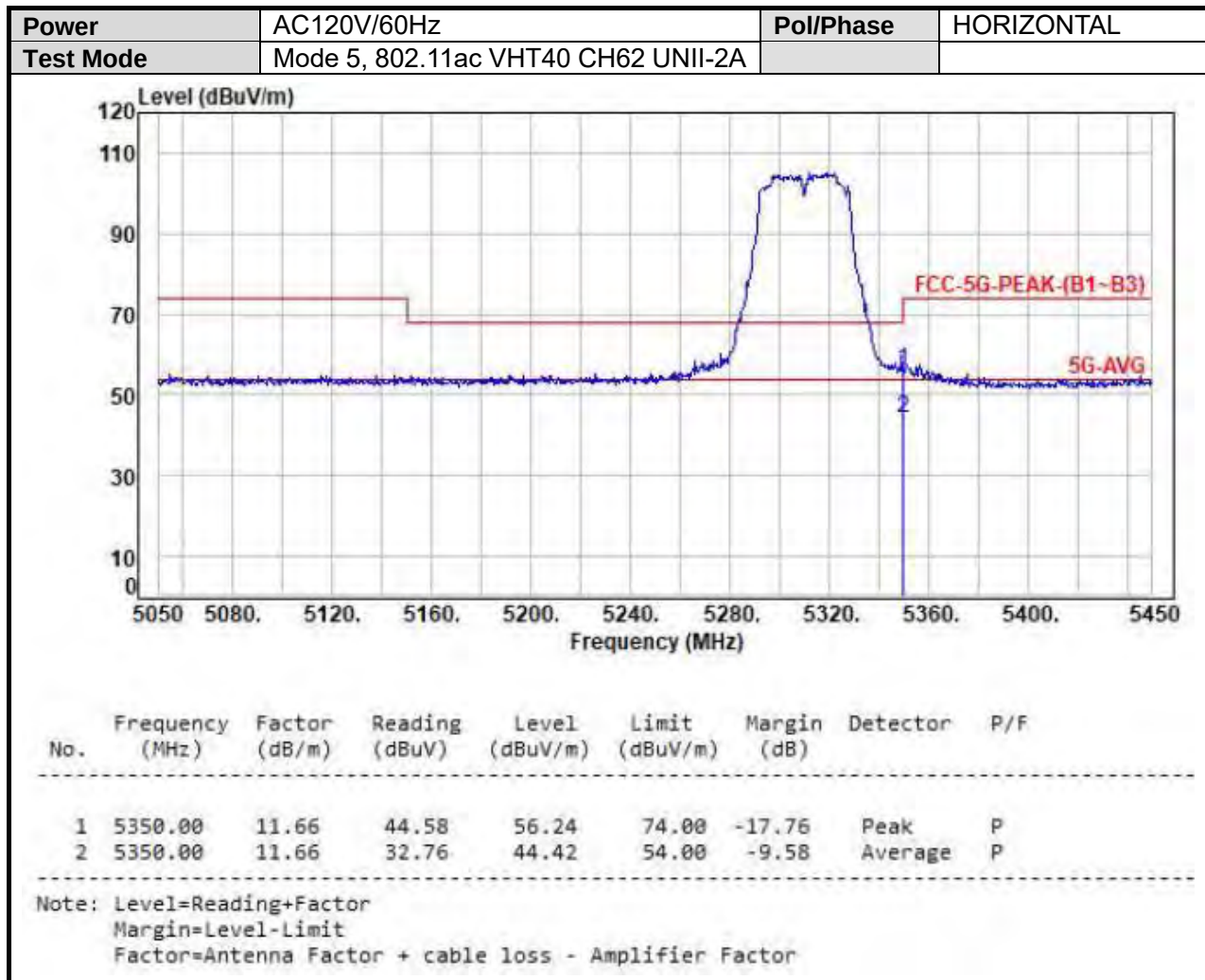


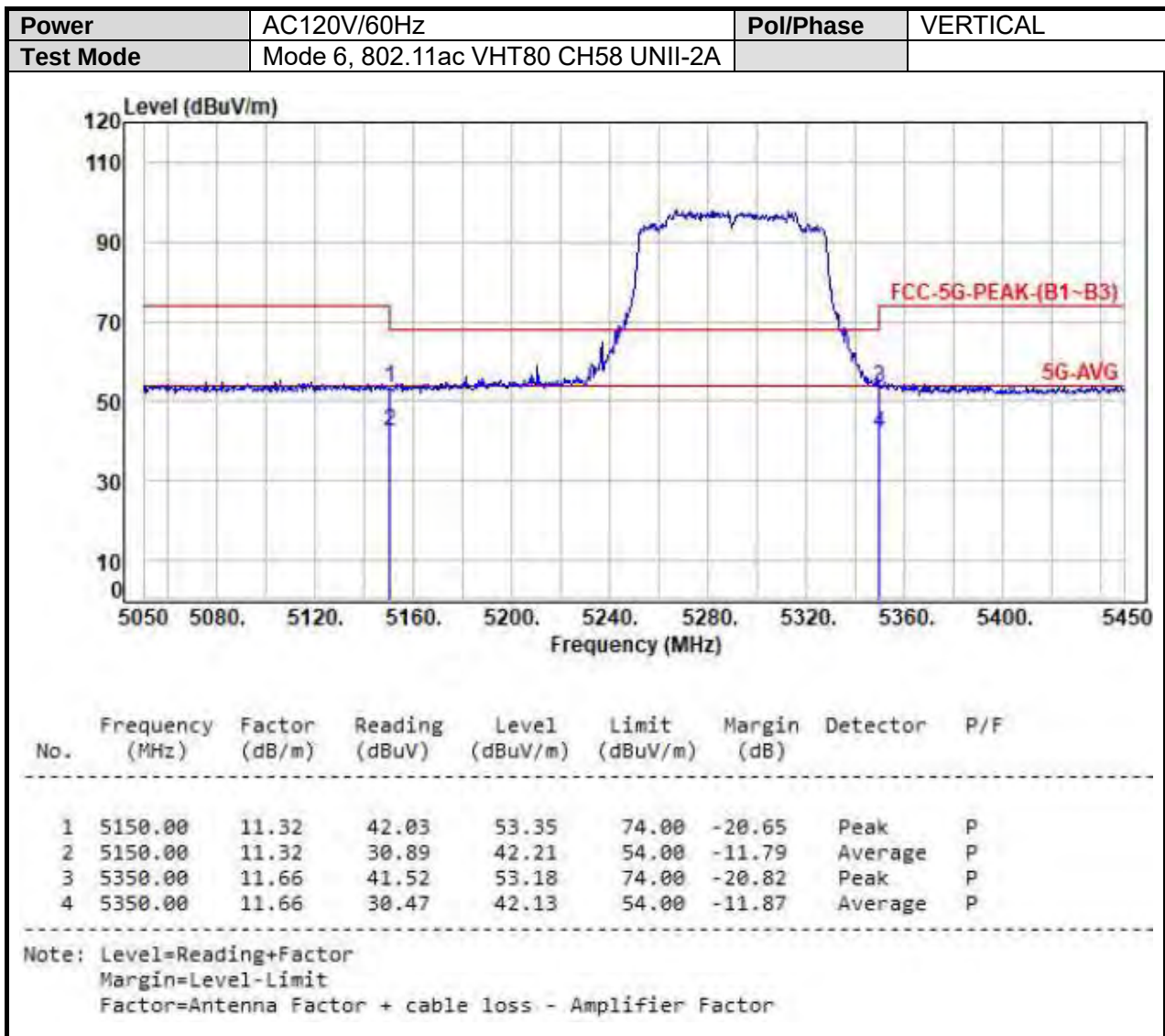


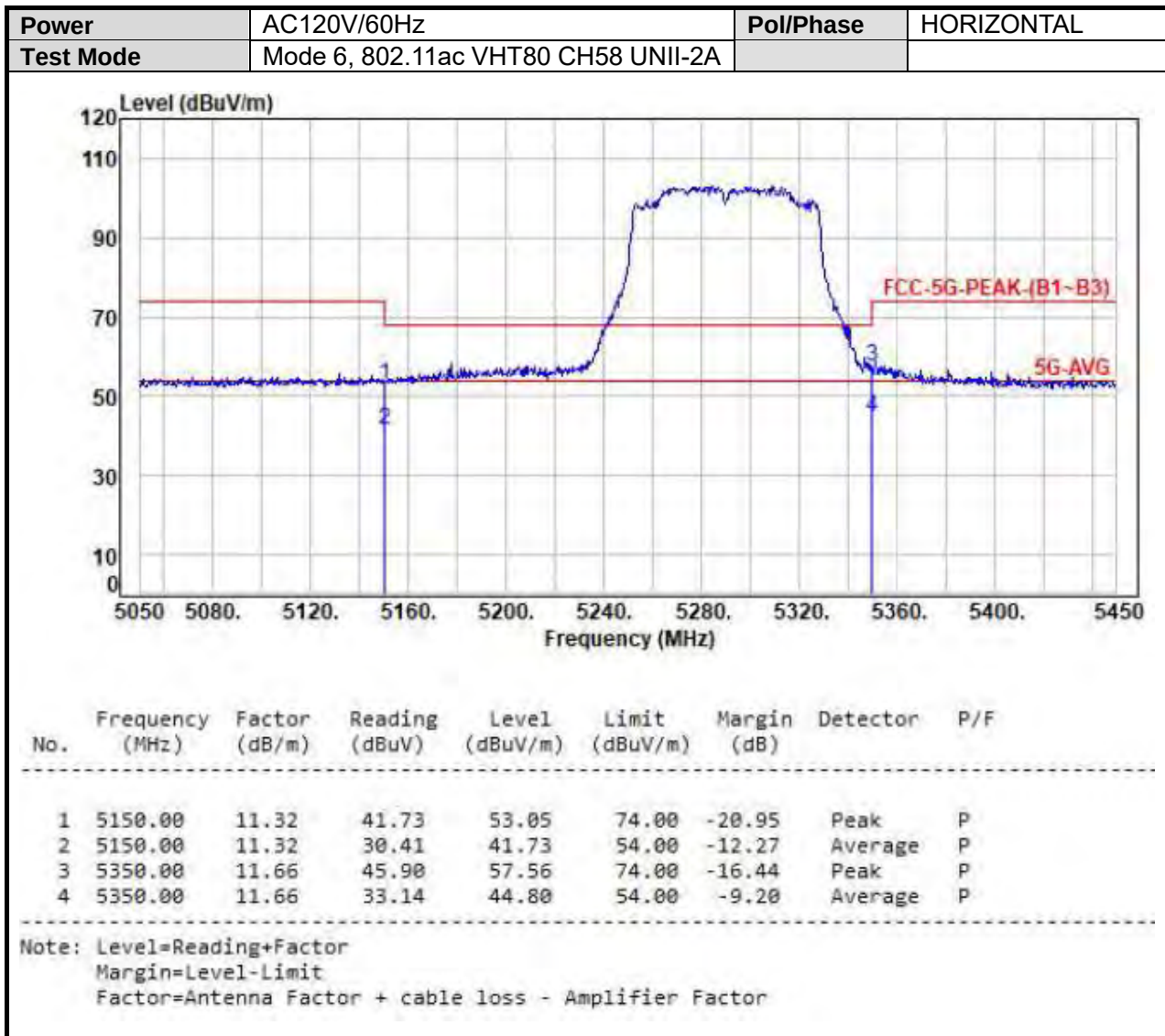


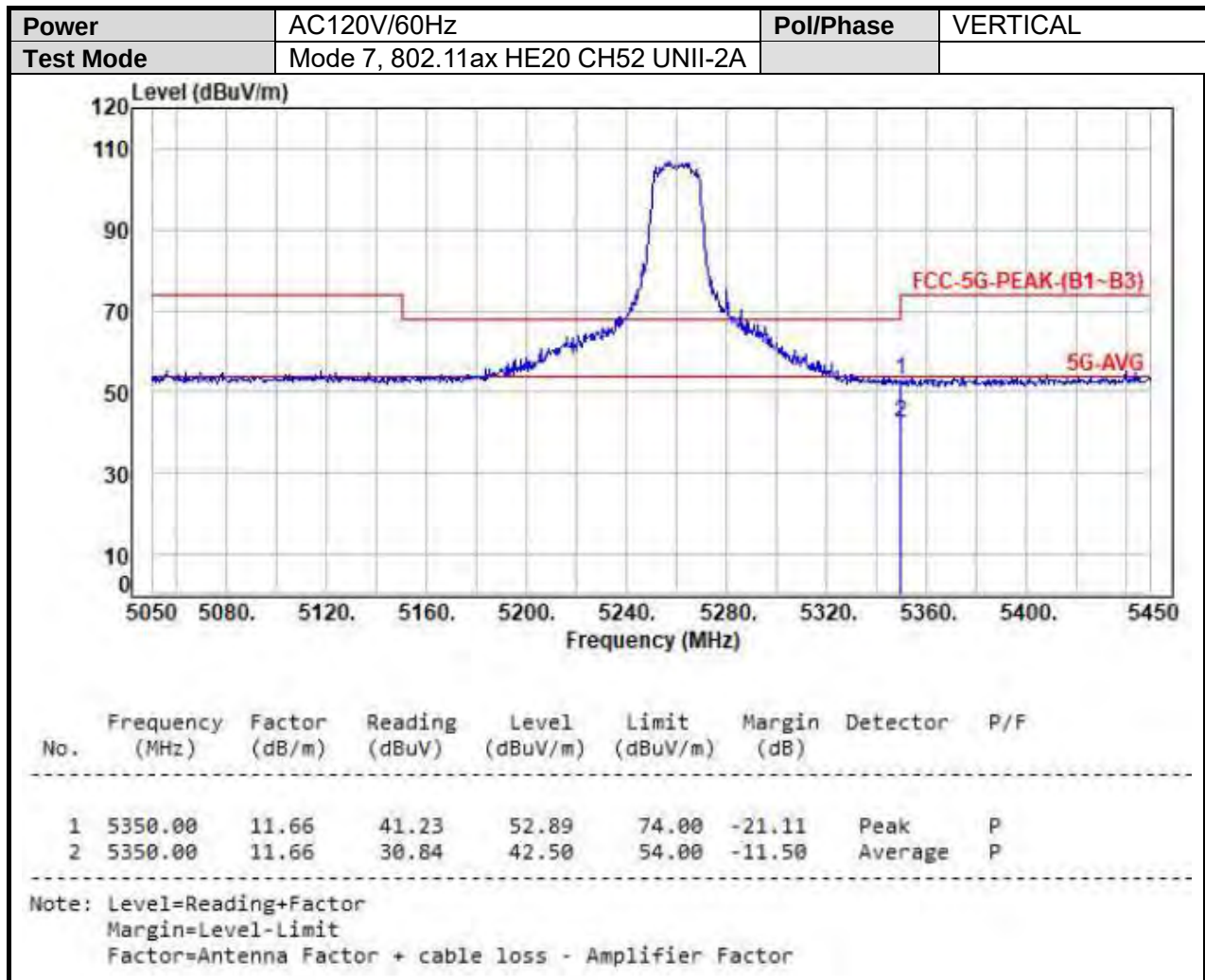


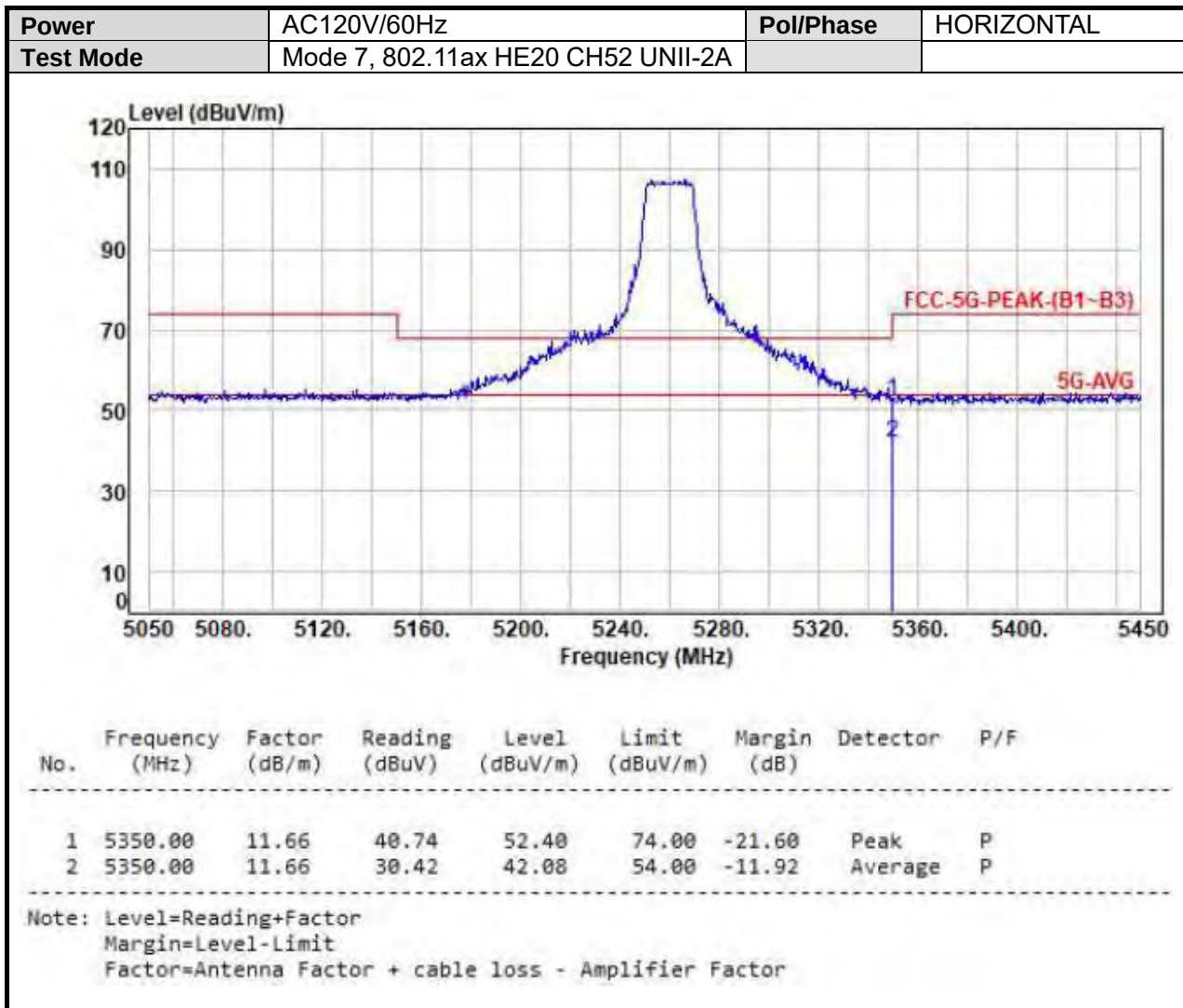


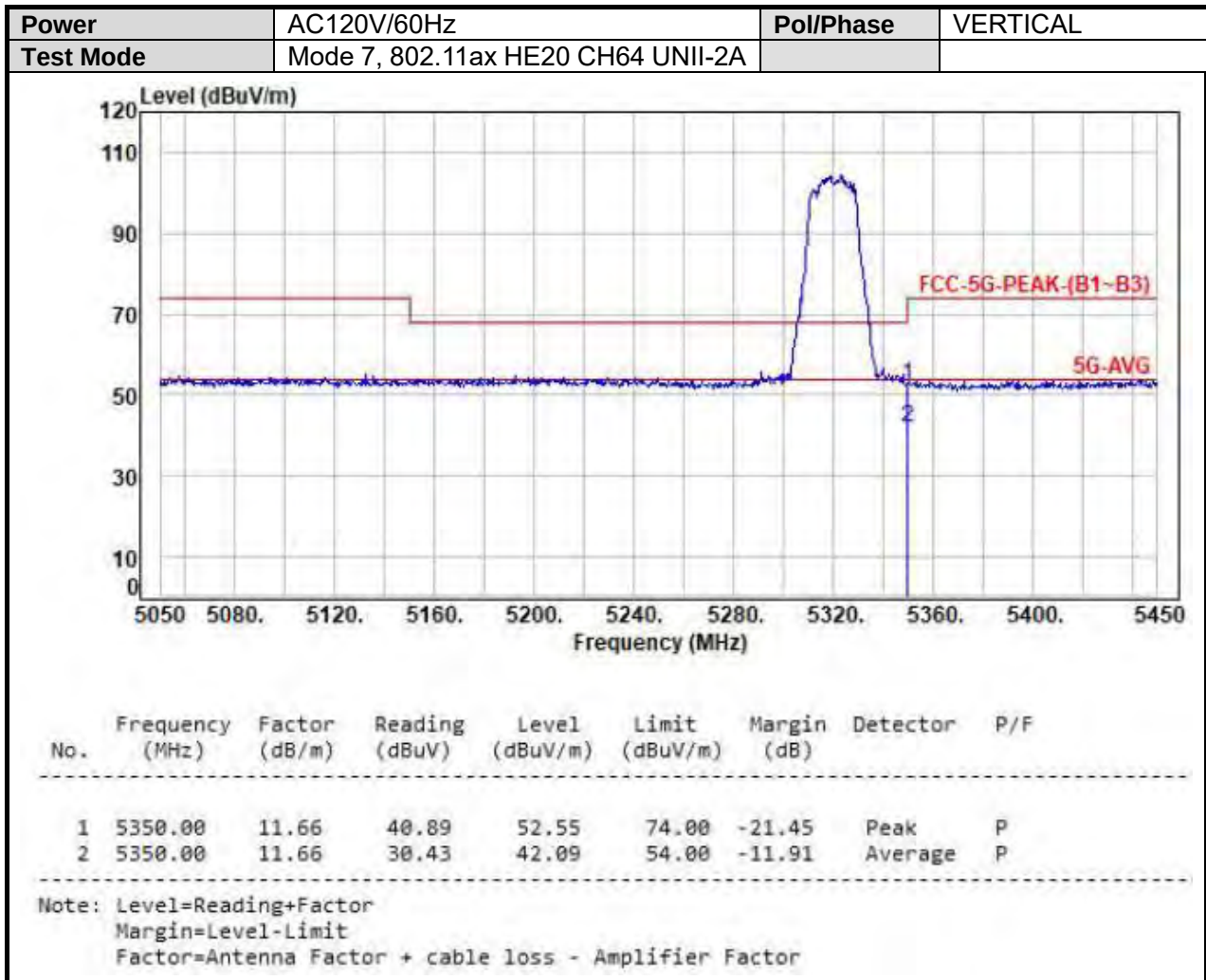


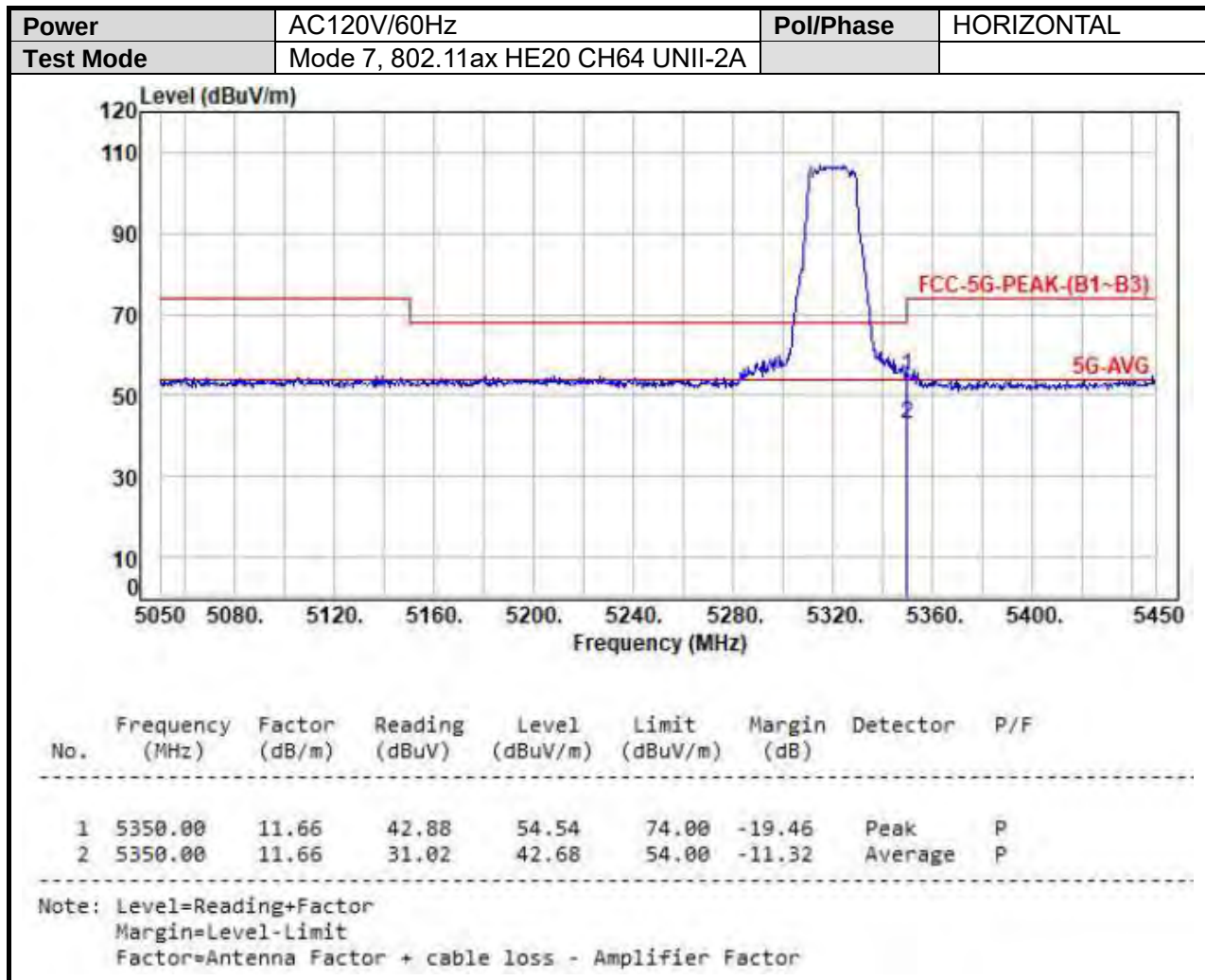


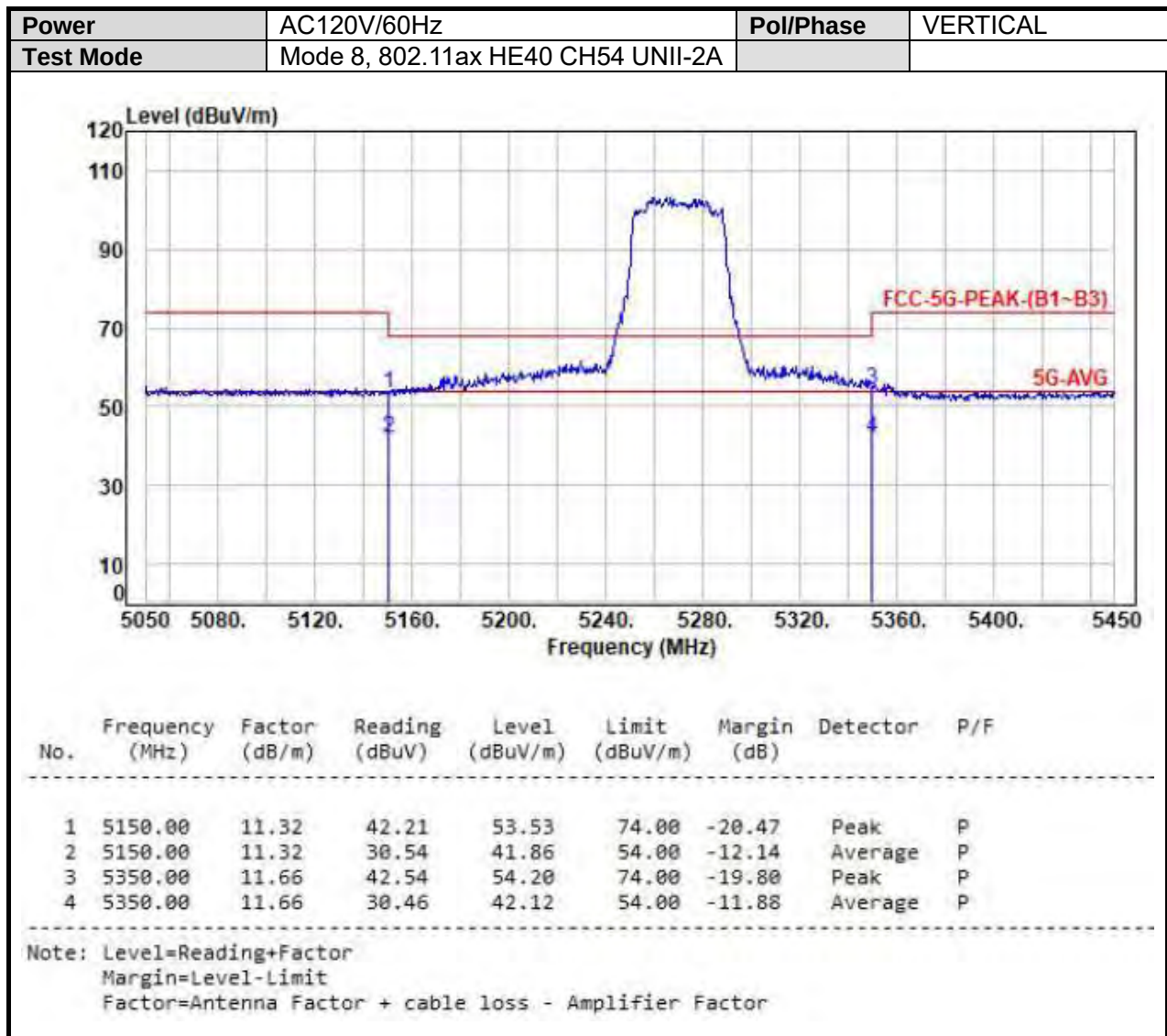


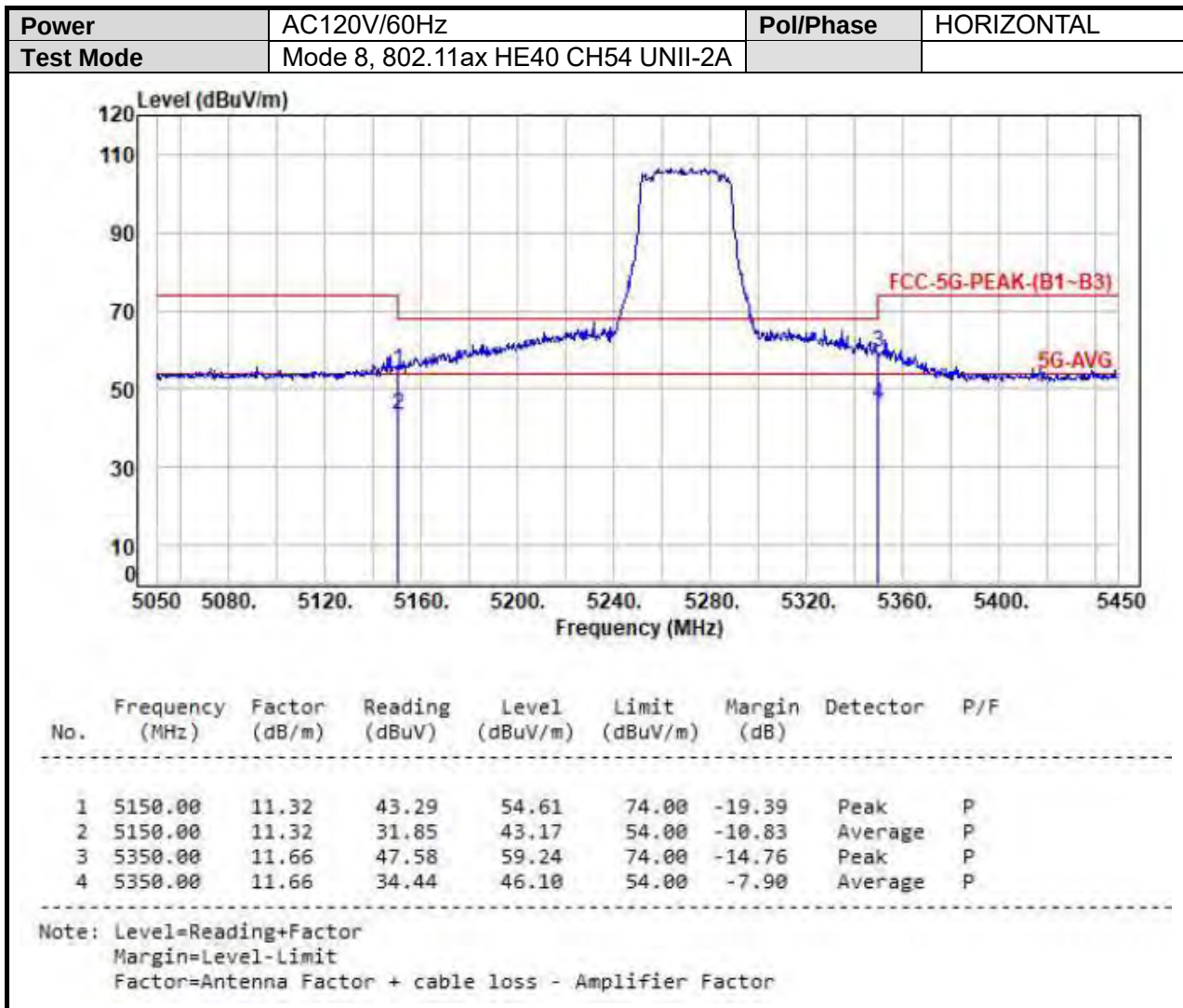


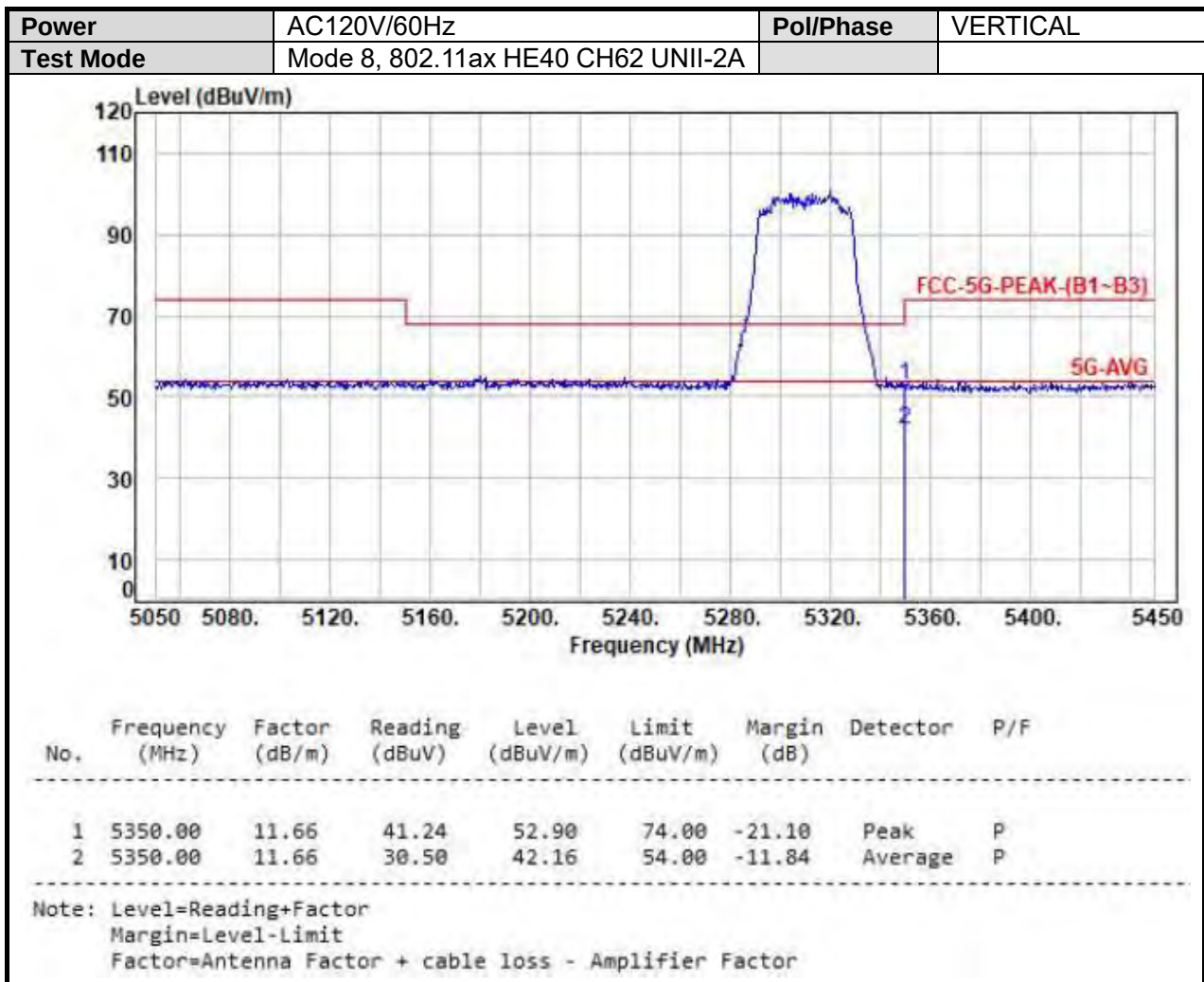


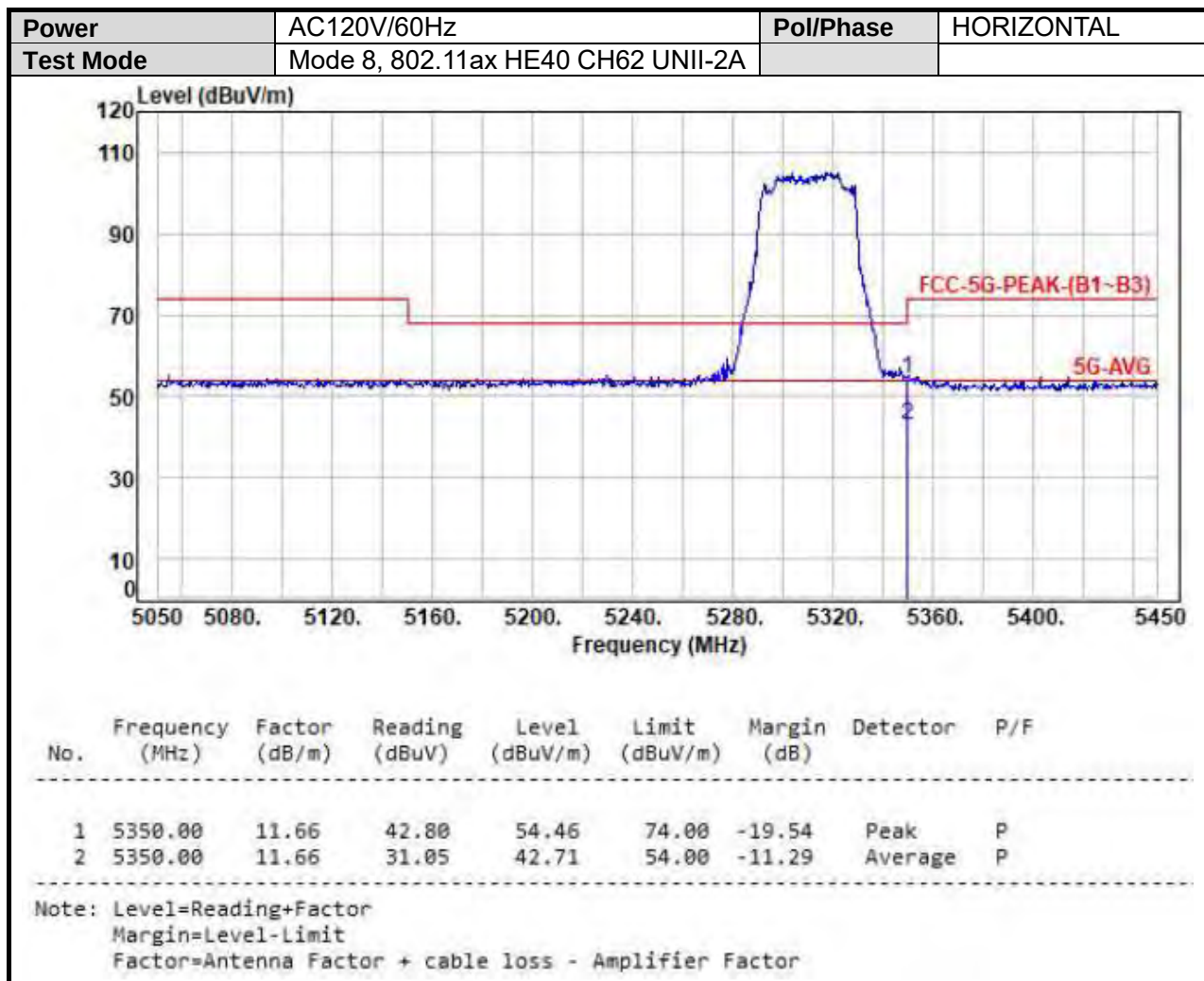


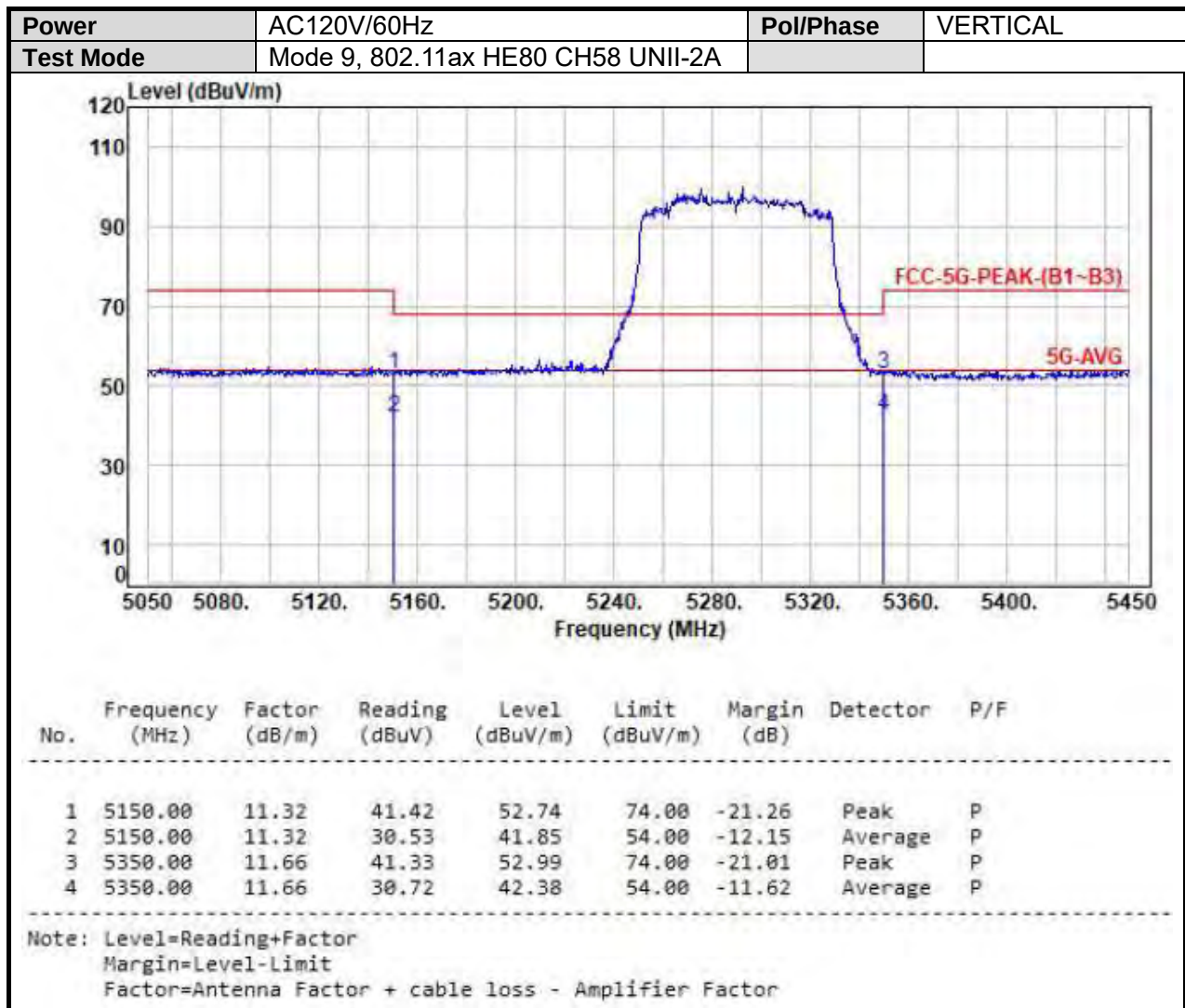


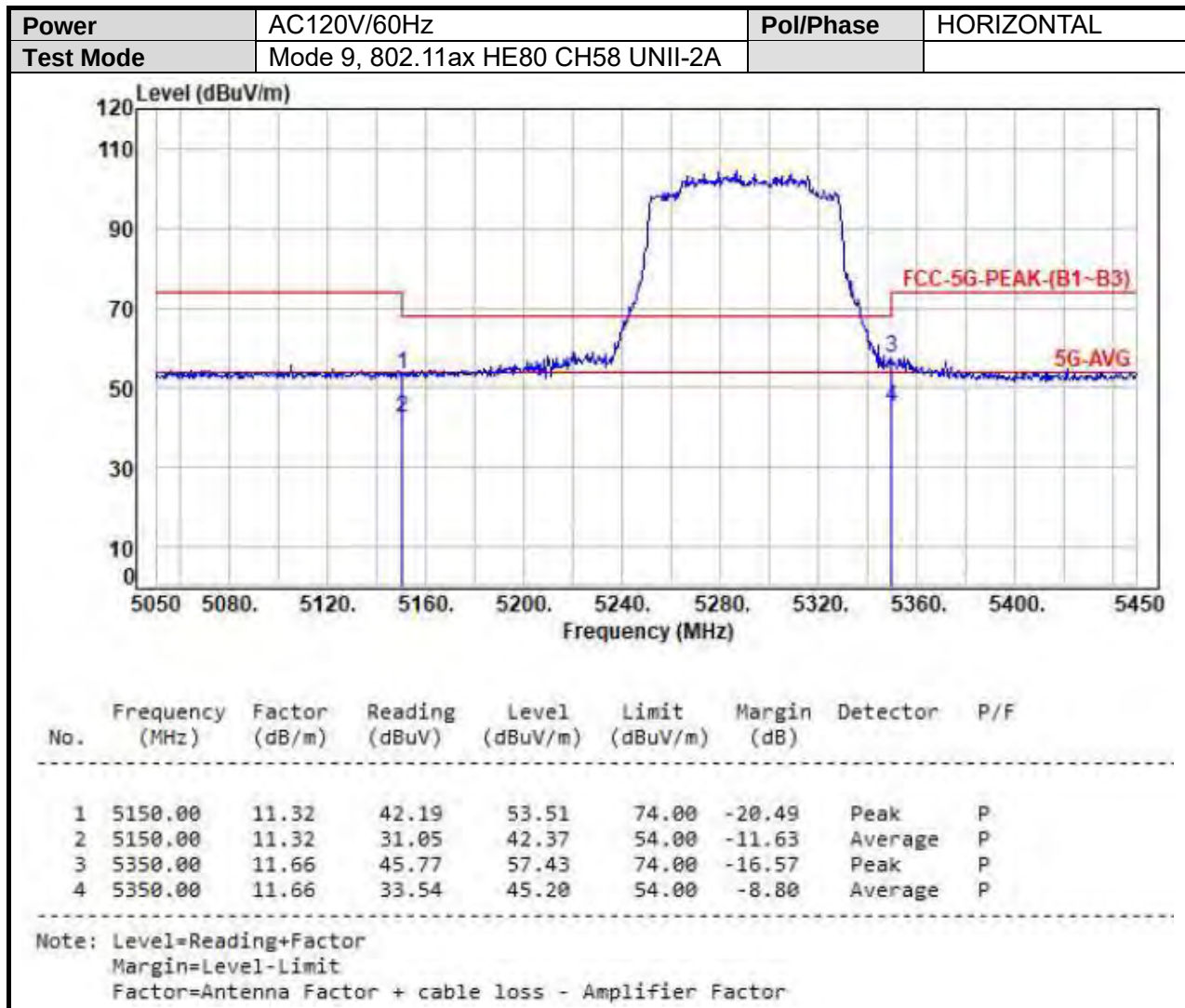






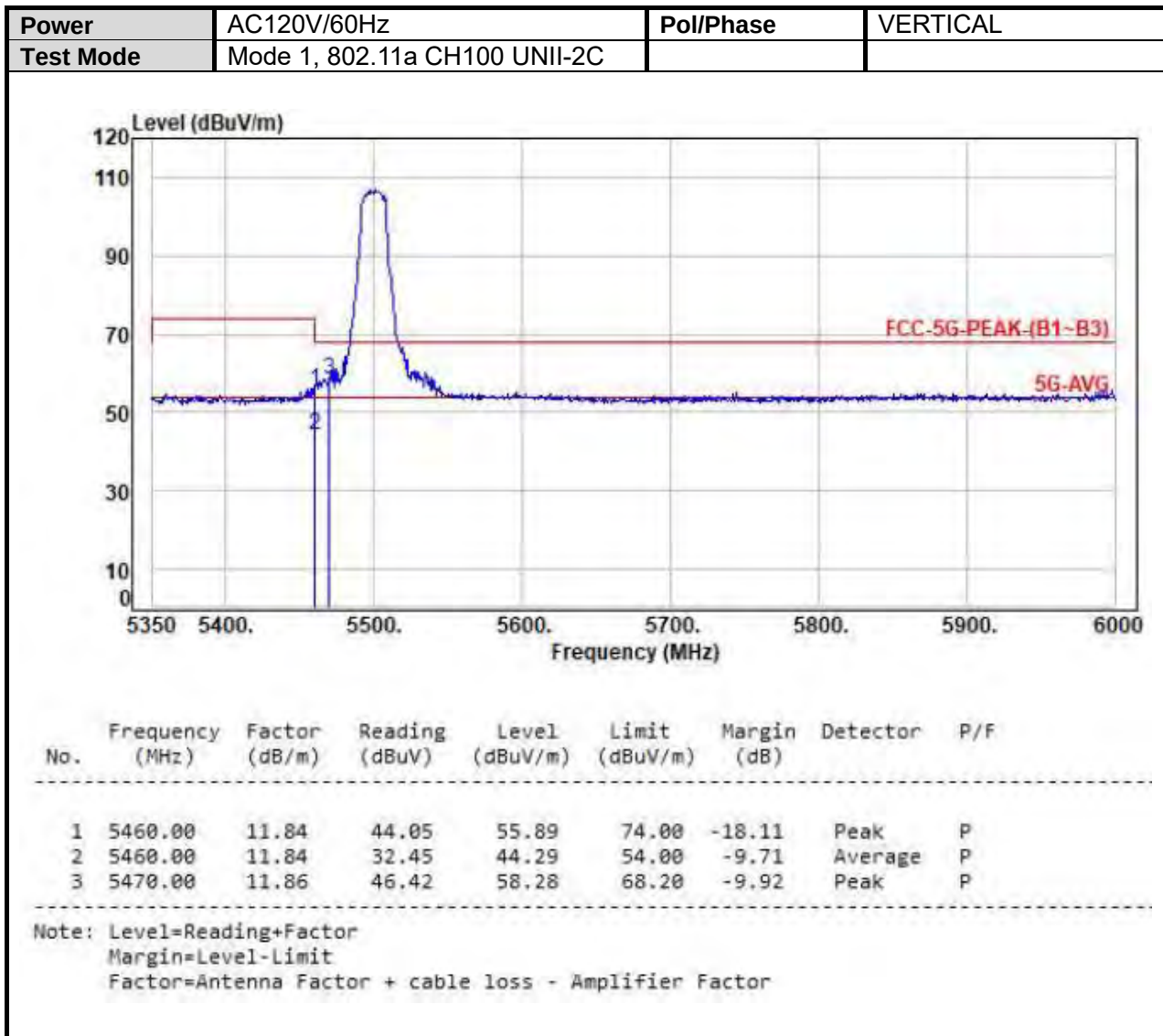


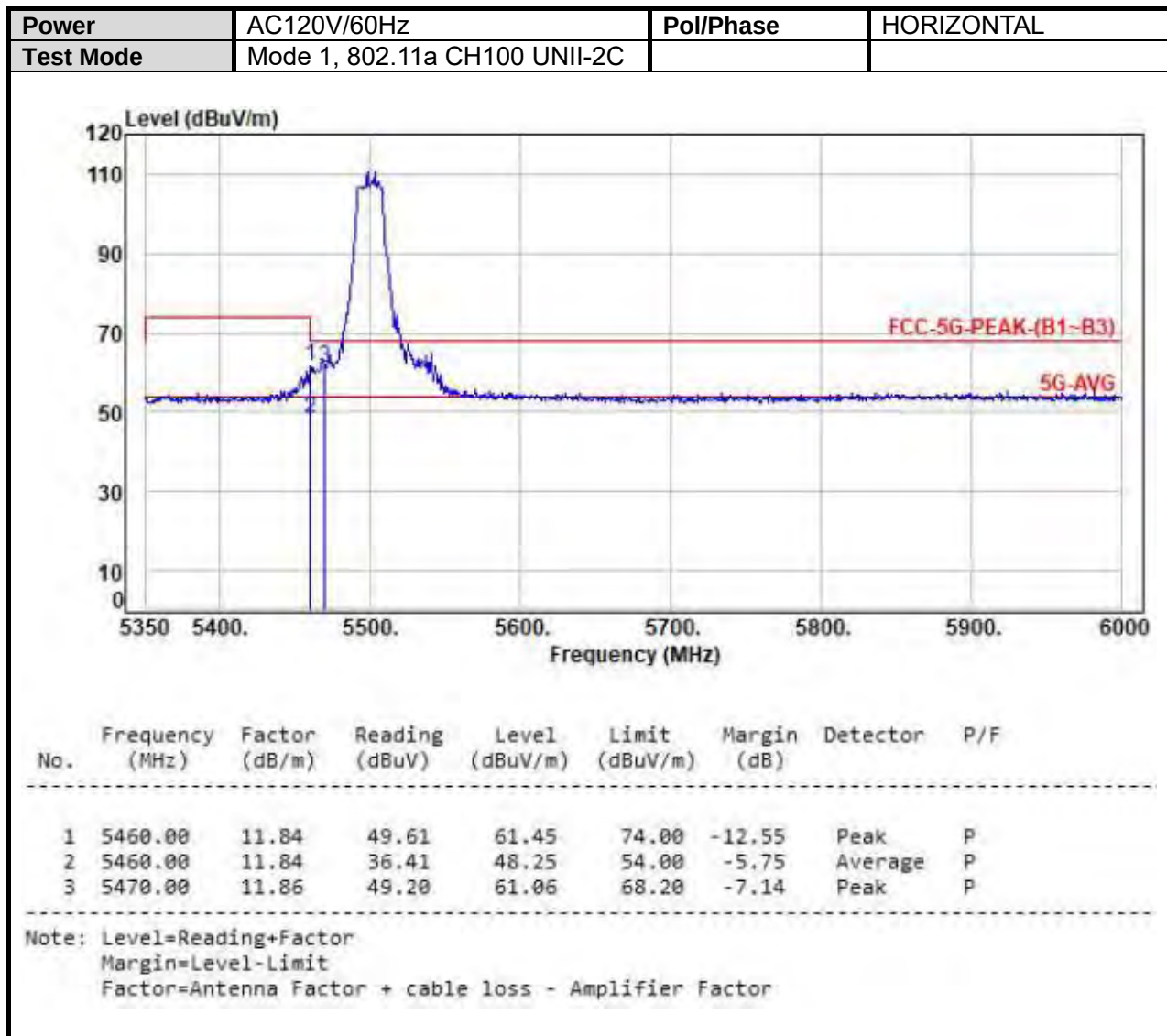


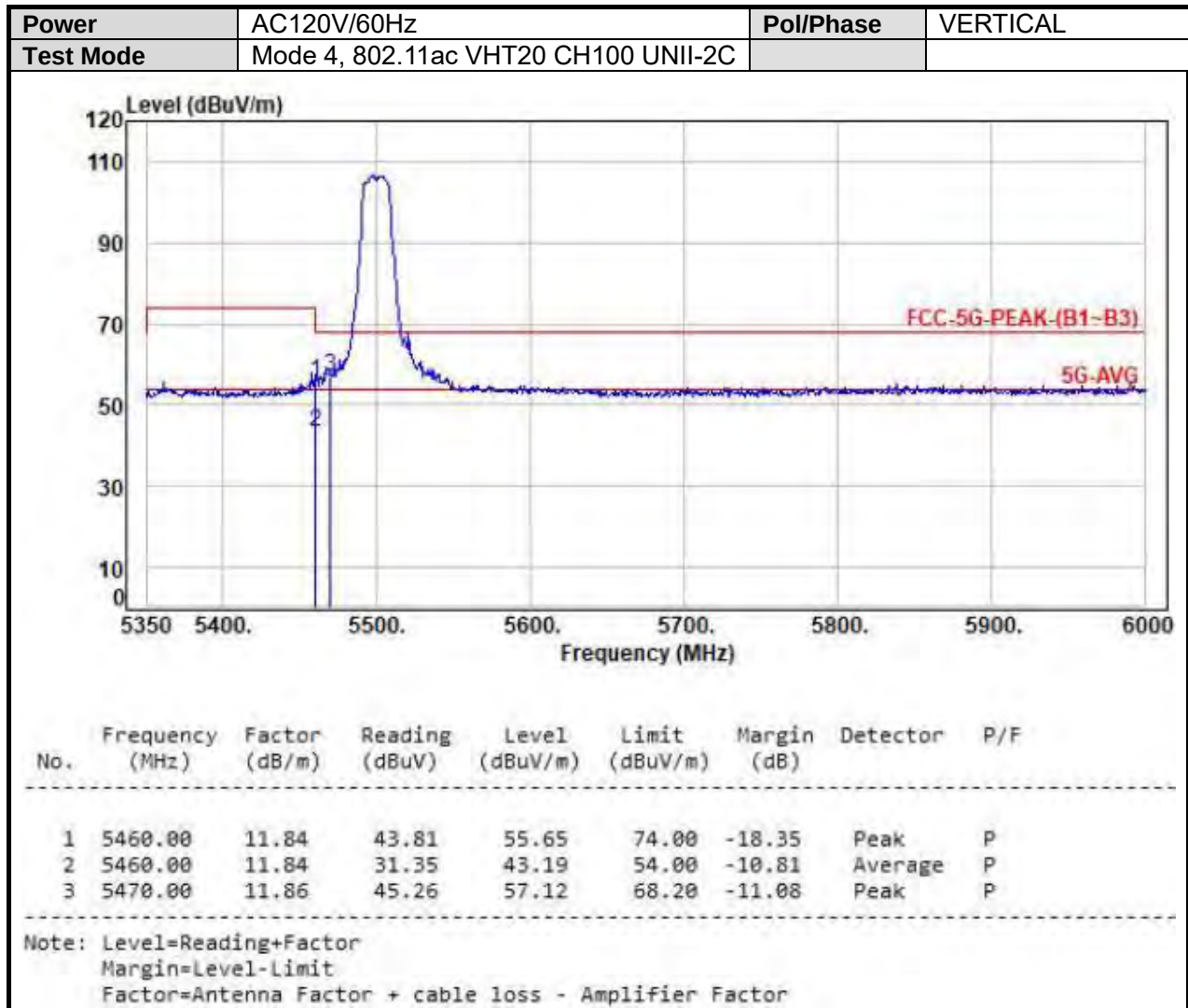


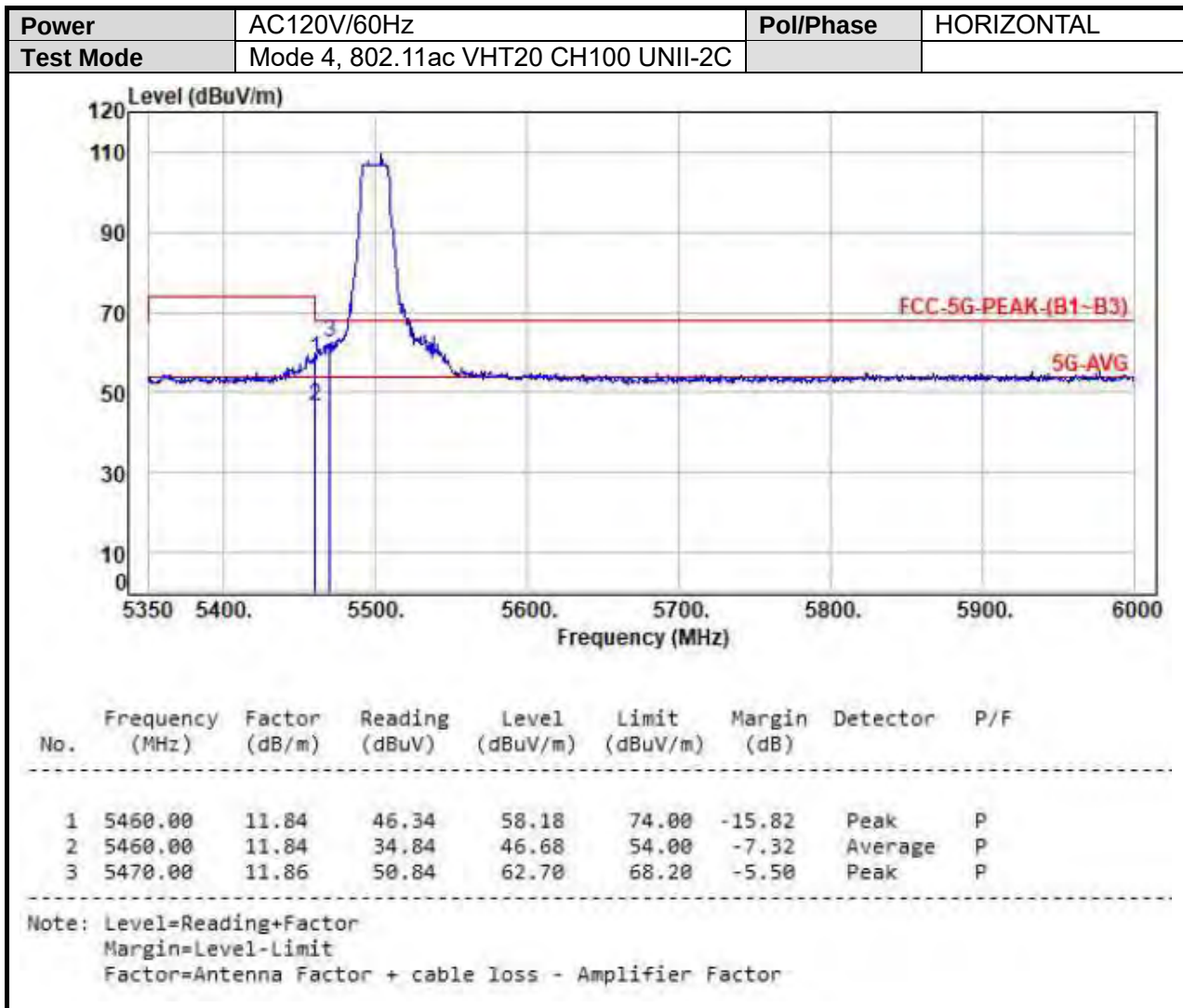


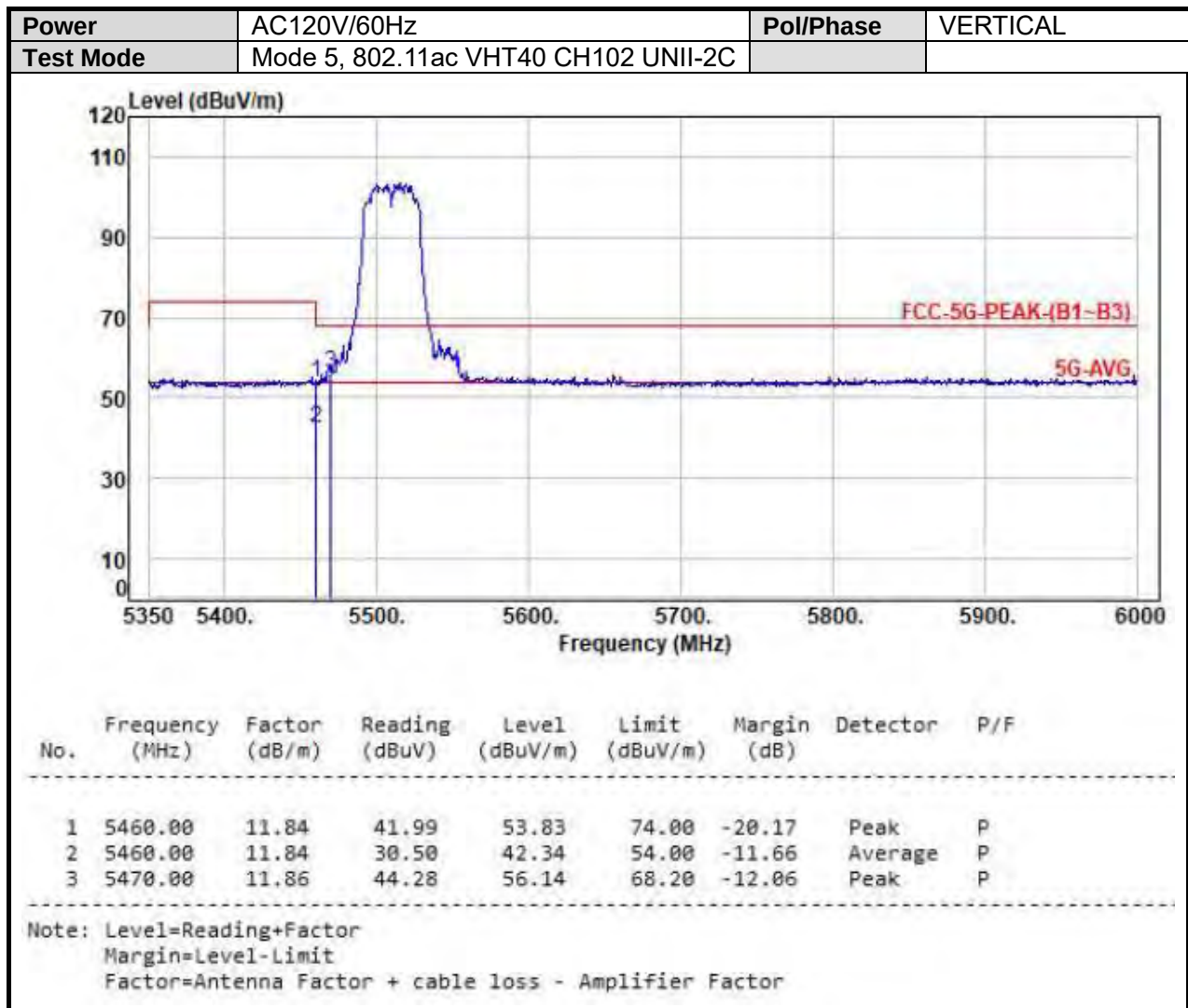
UNII-2C

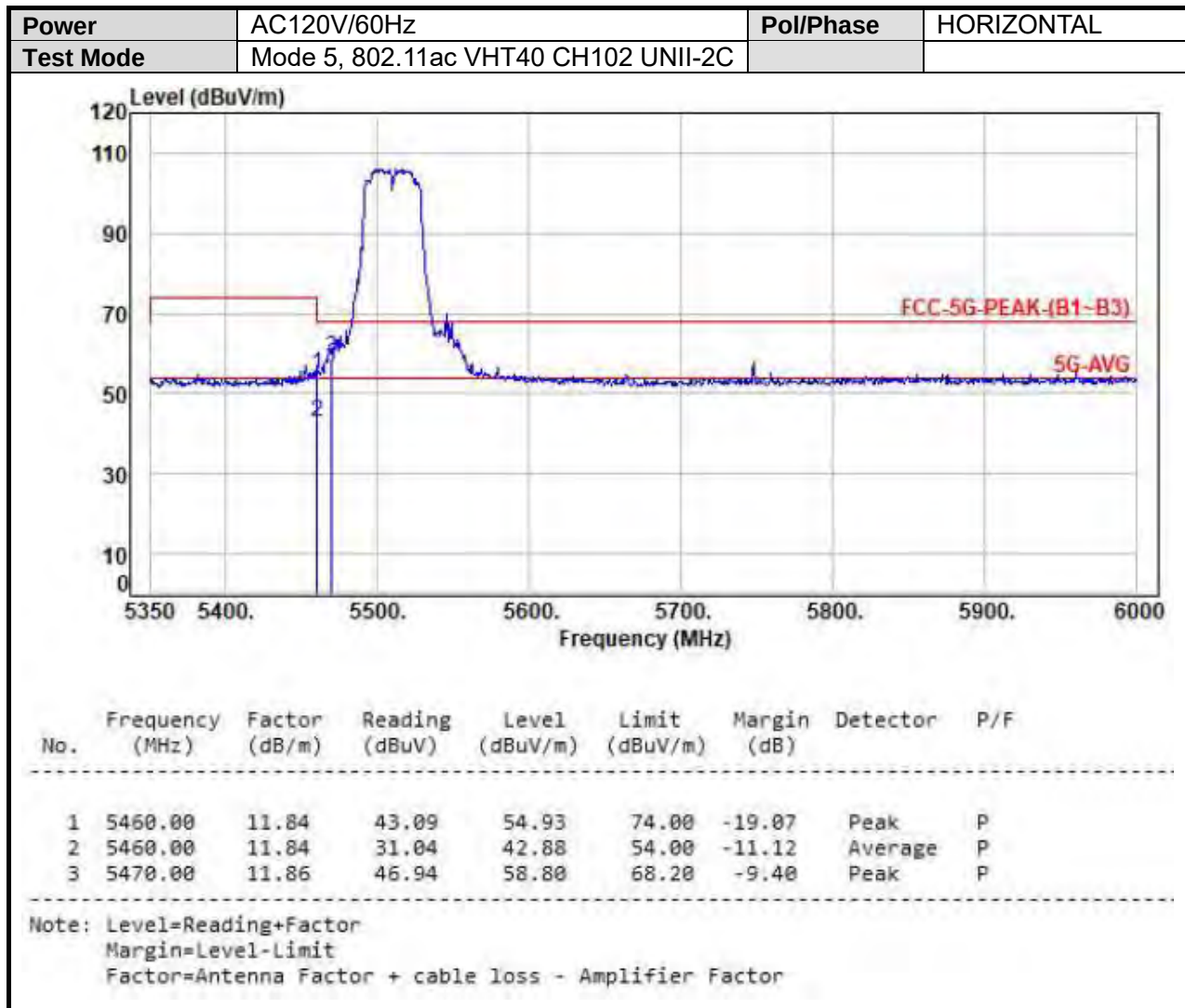


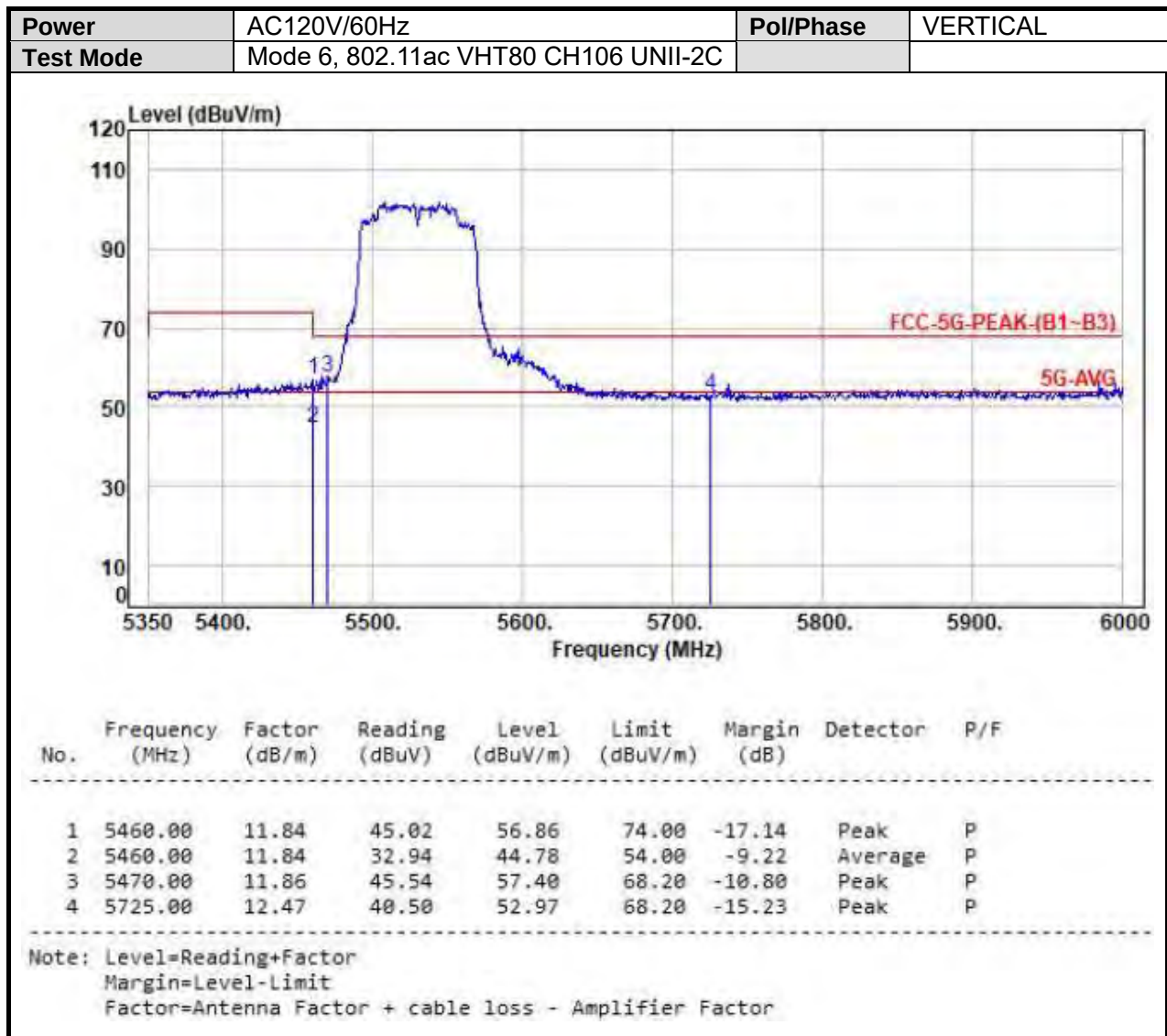


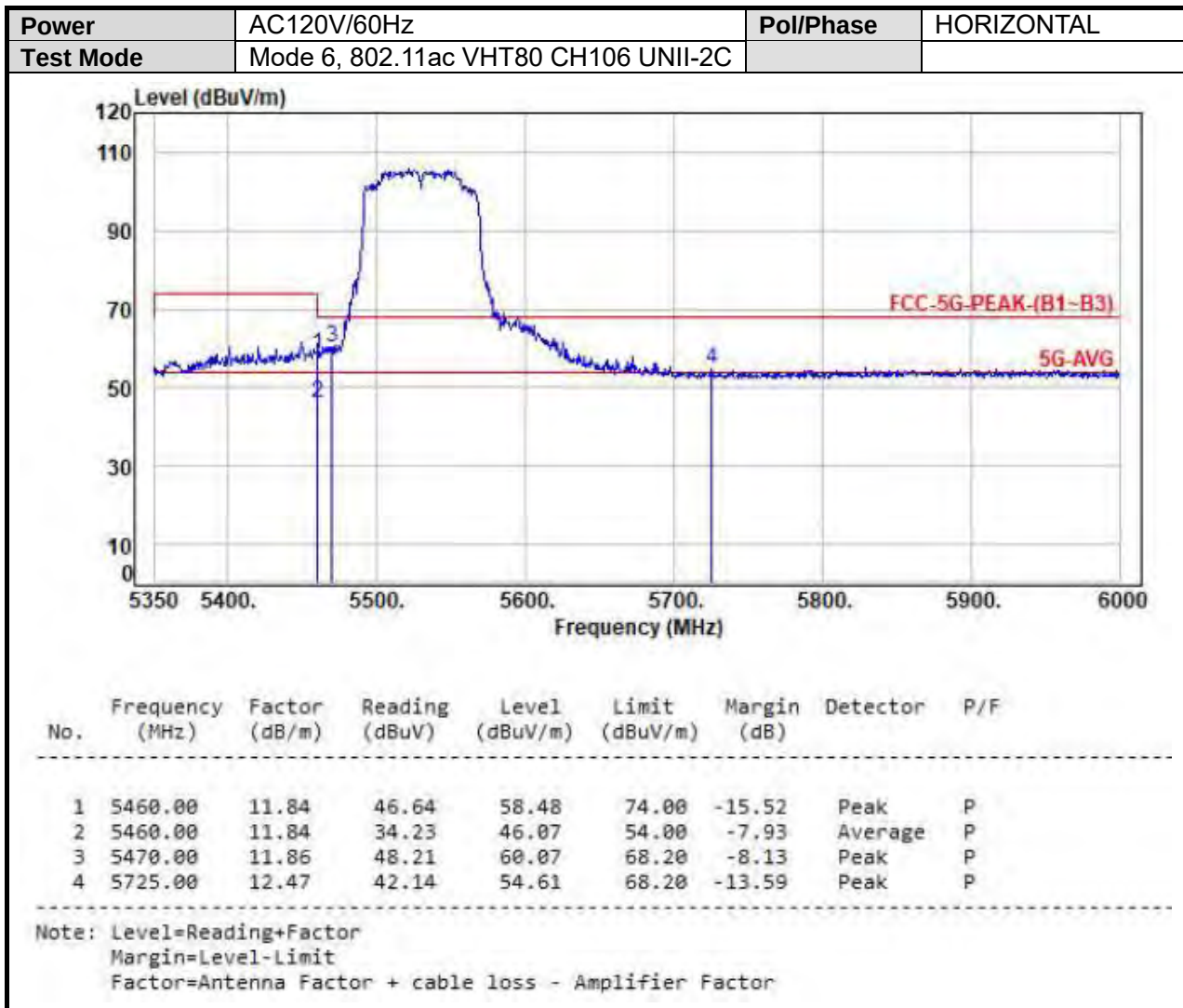


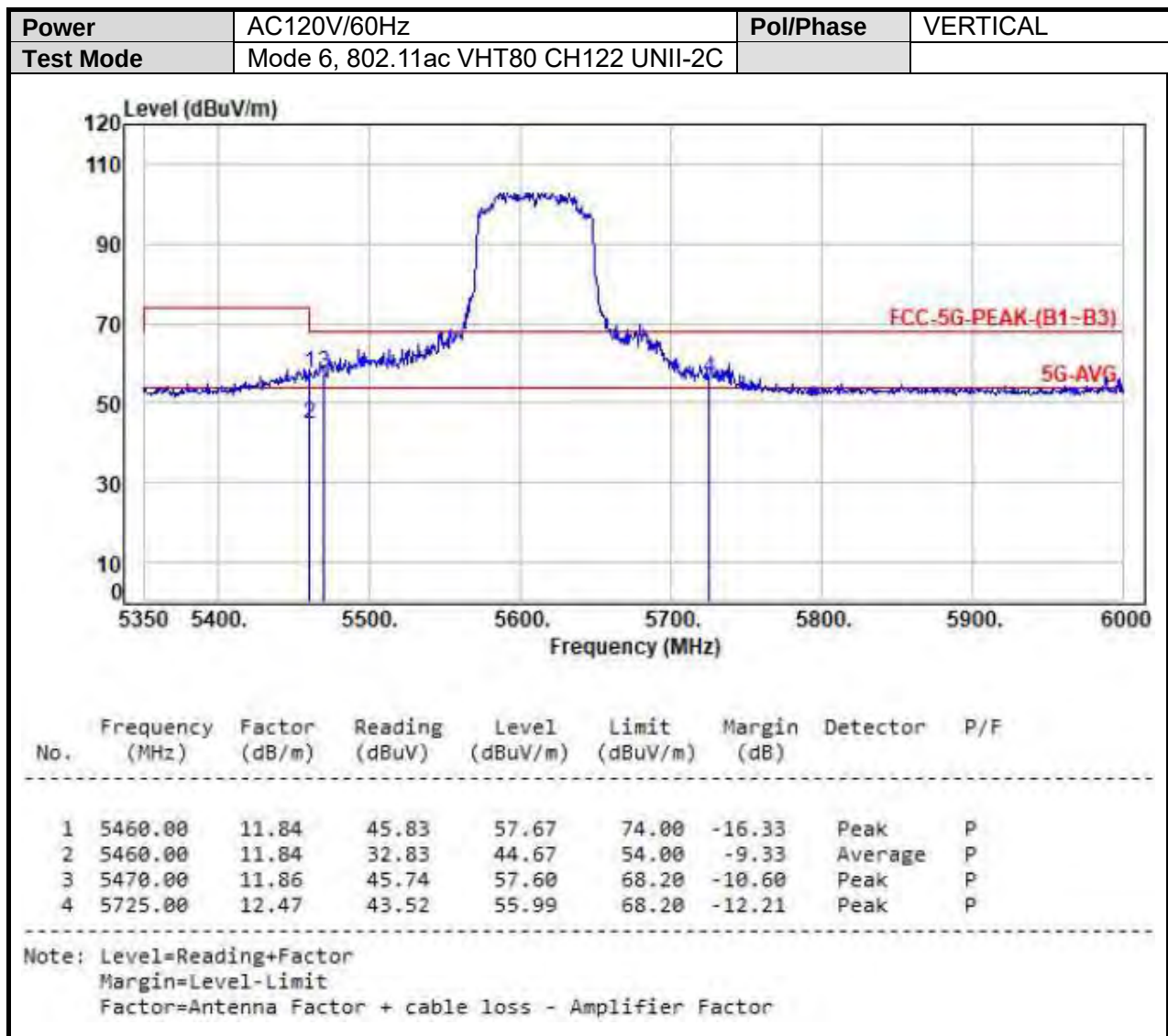


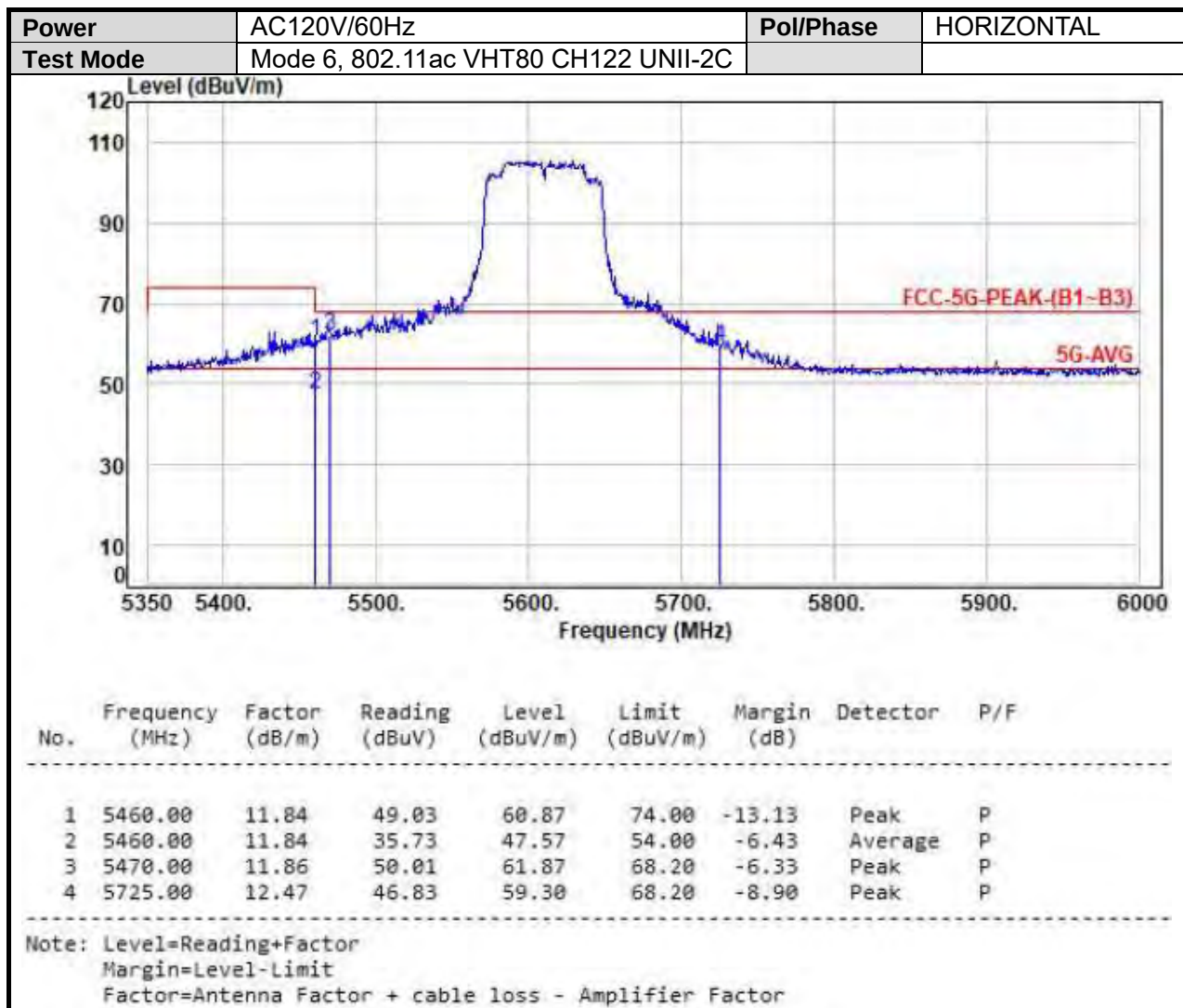


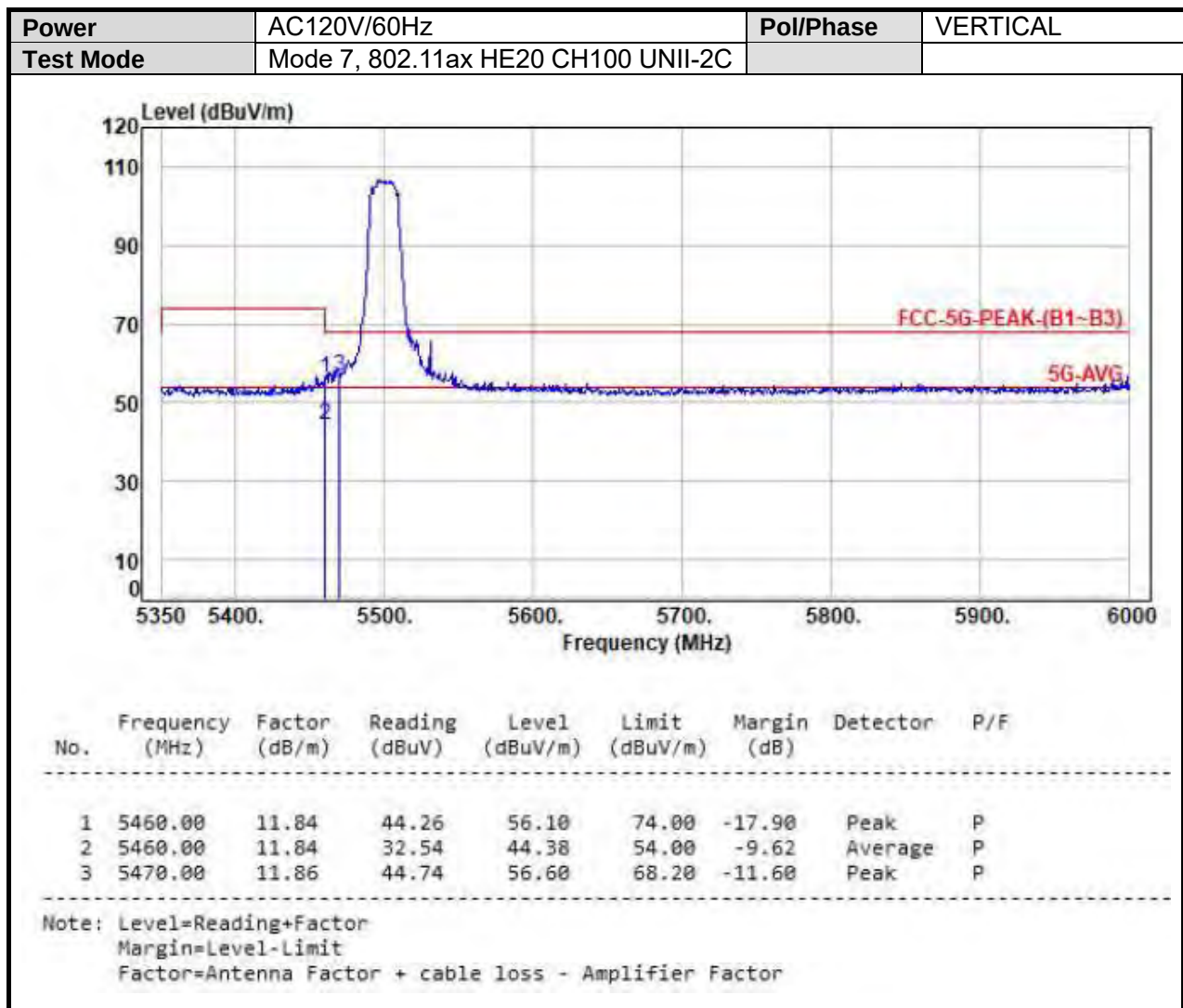


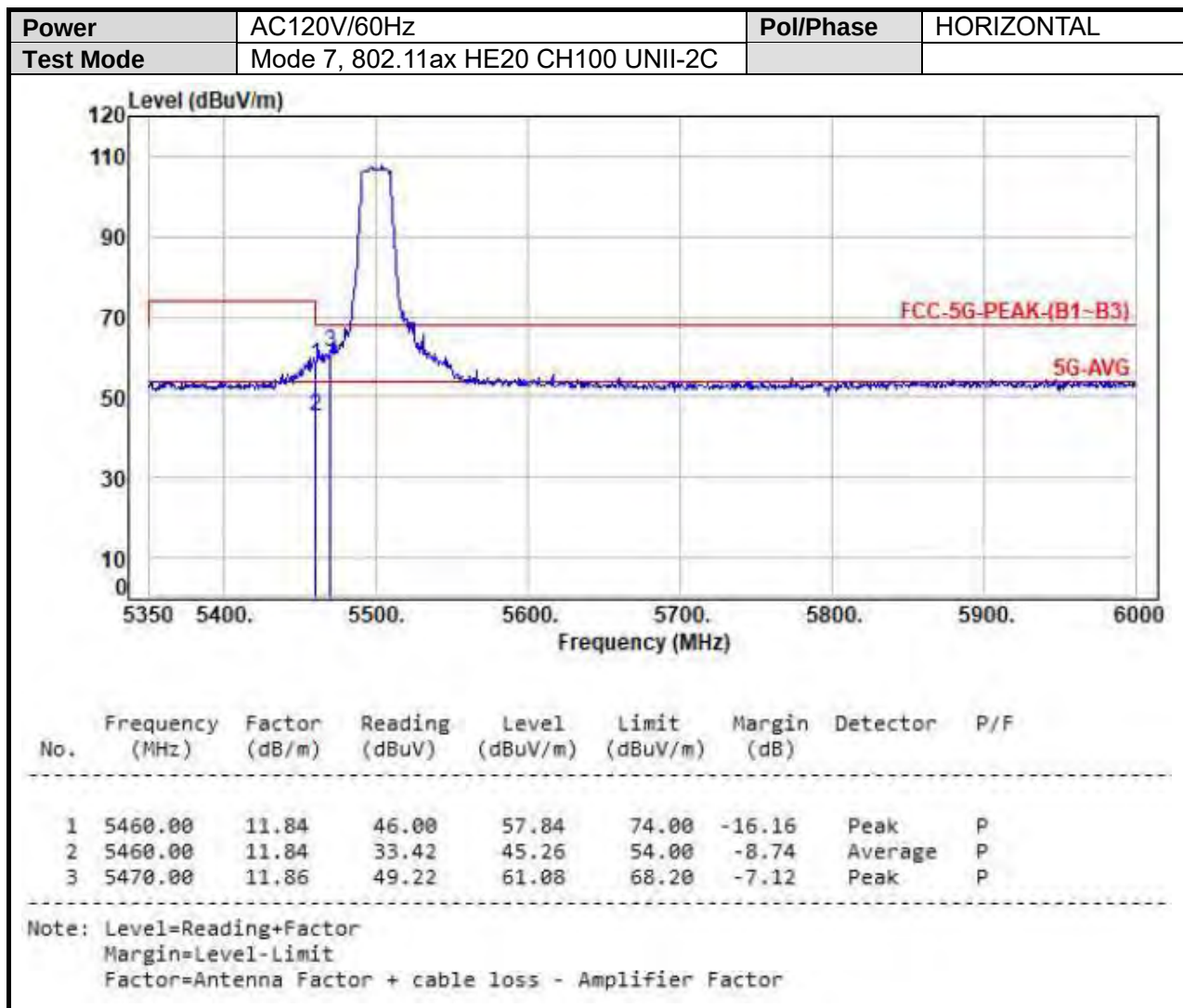


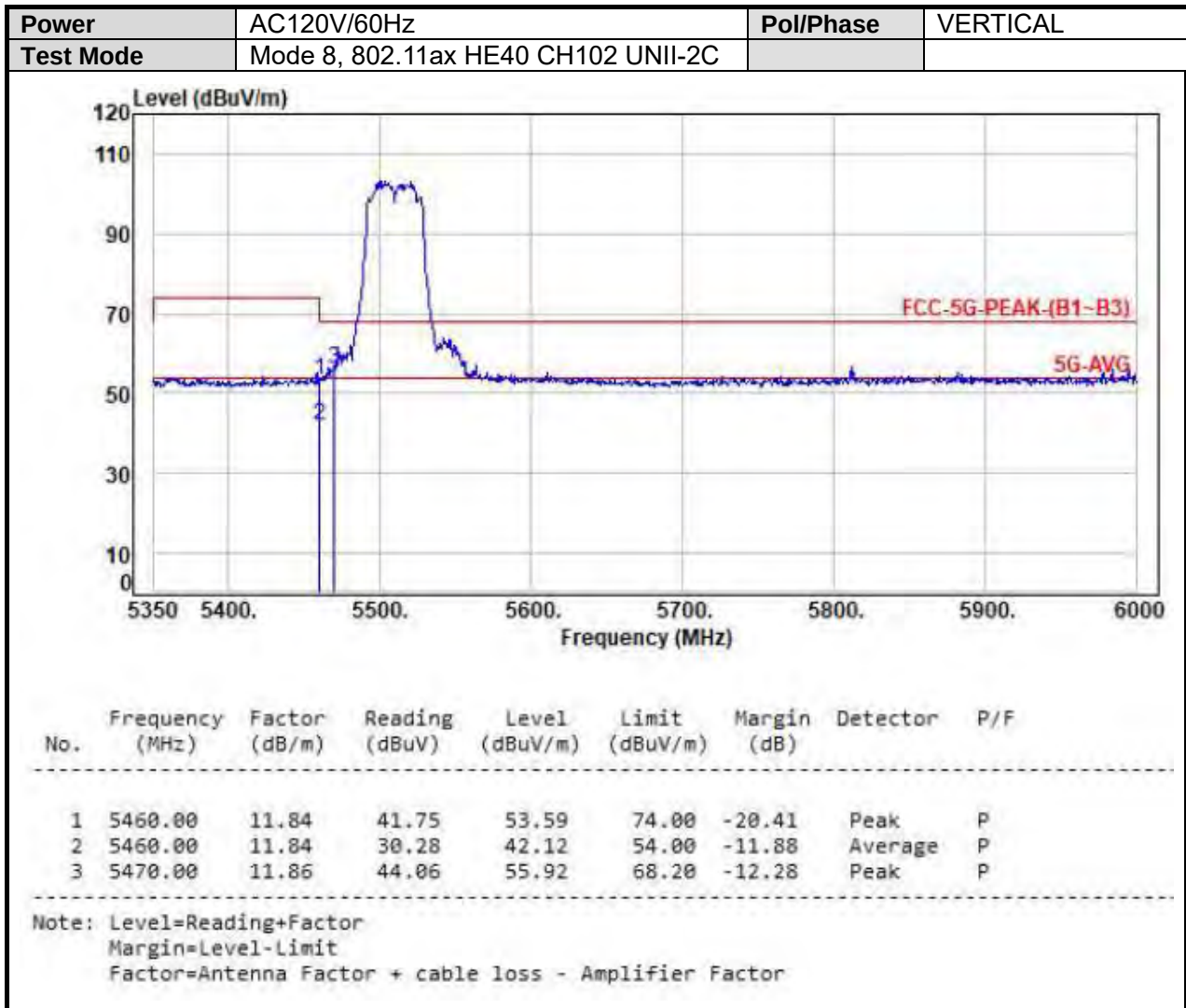


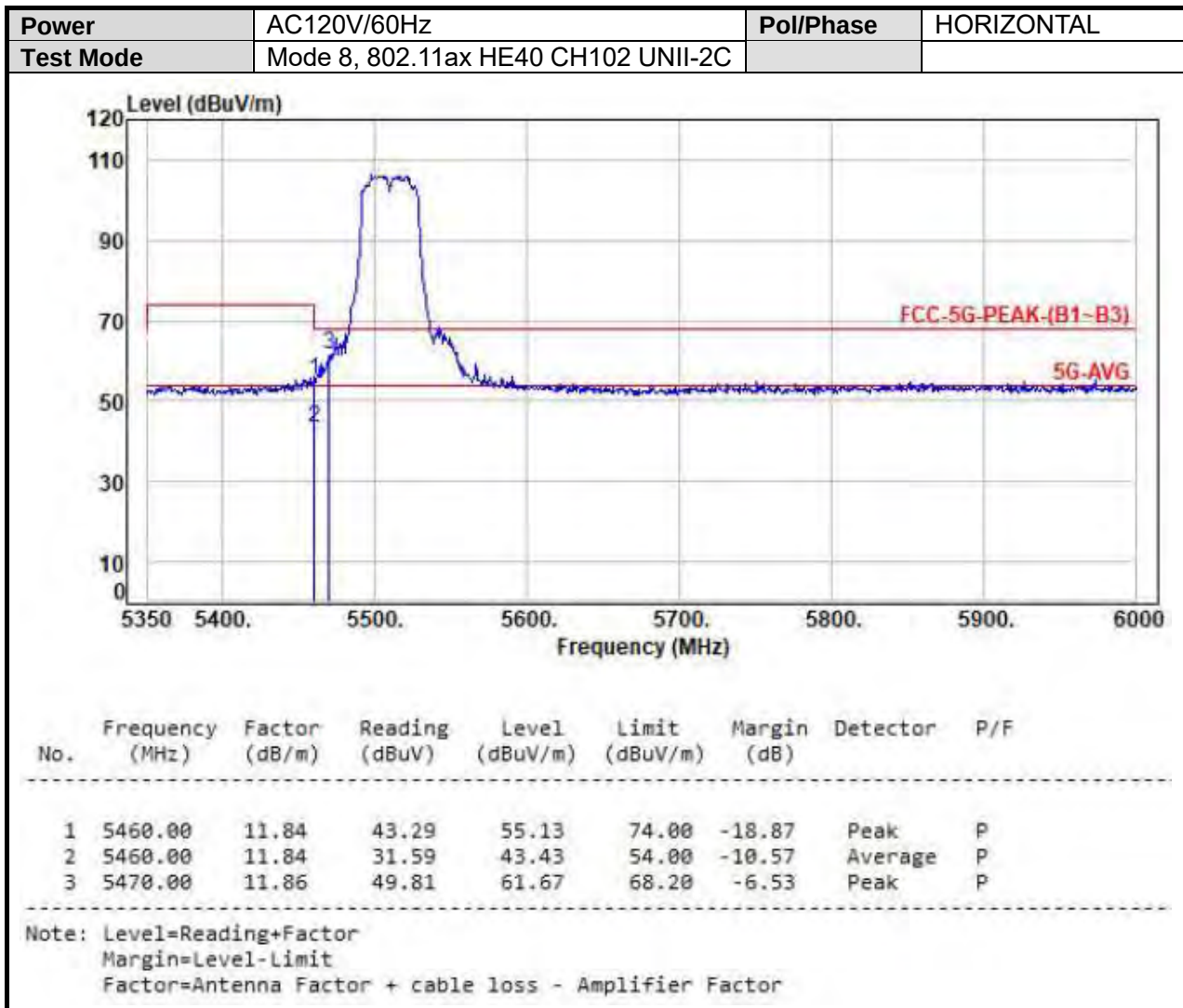


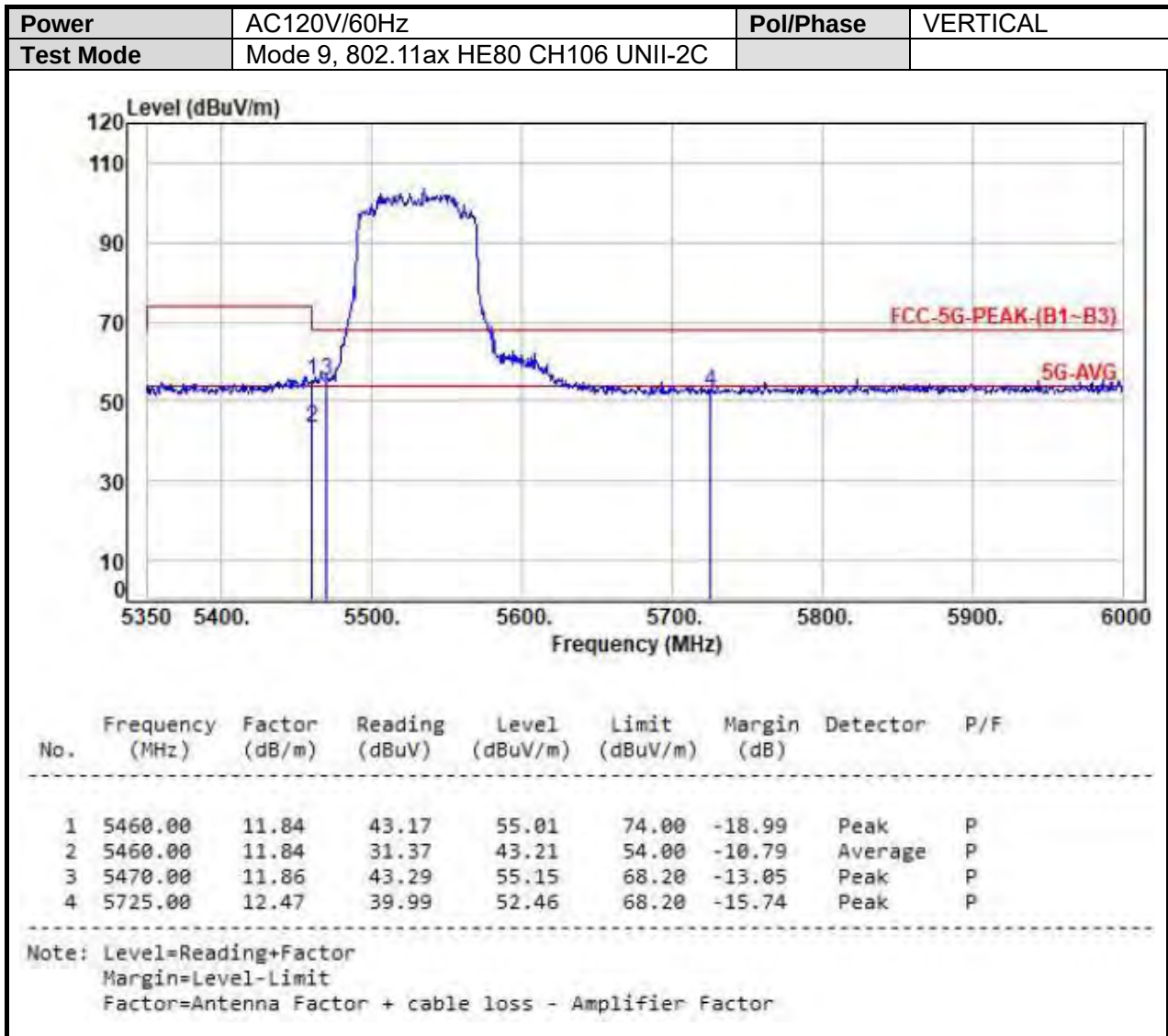


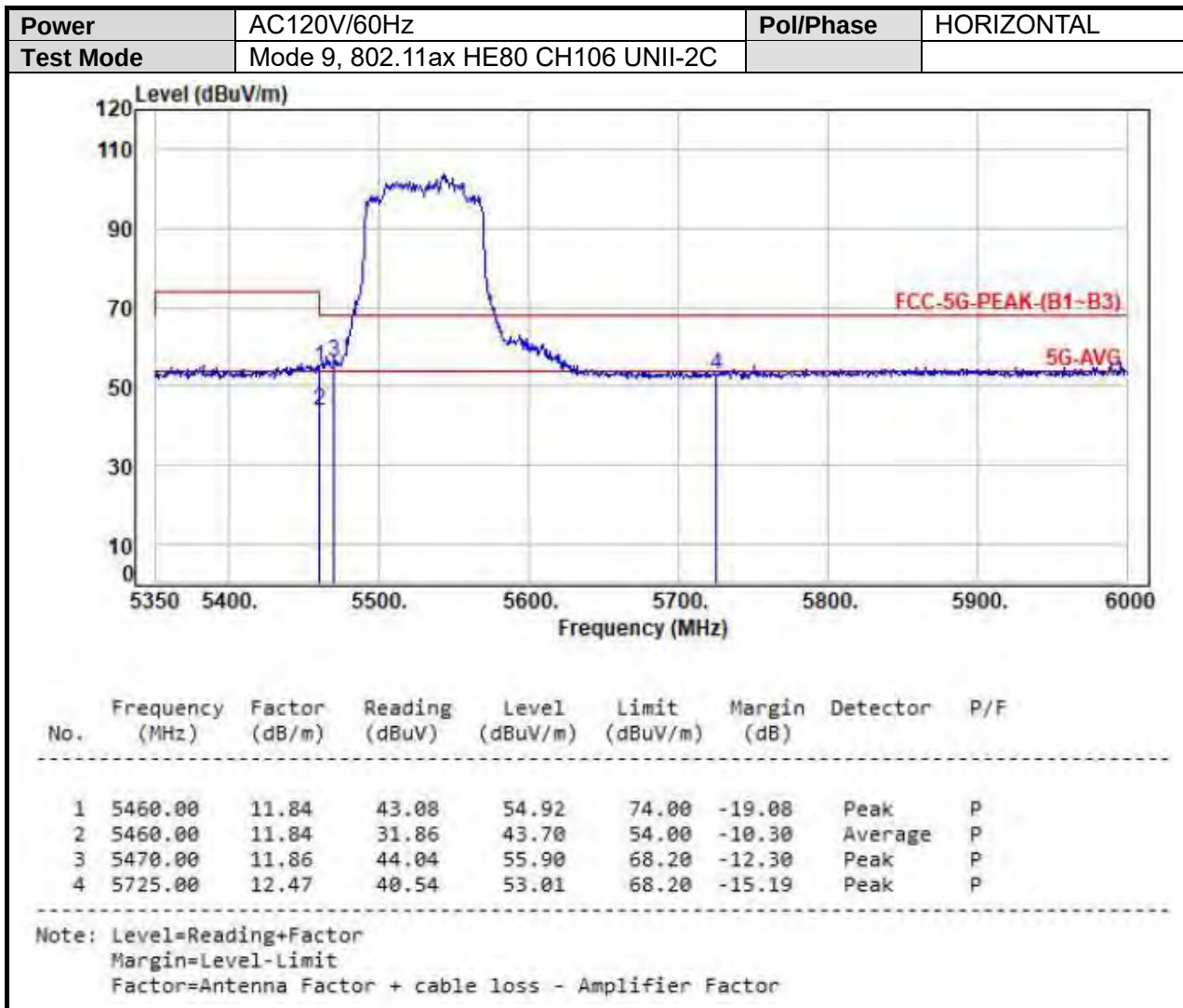


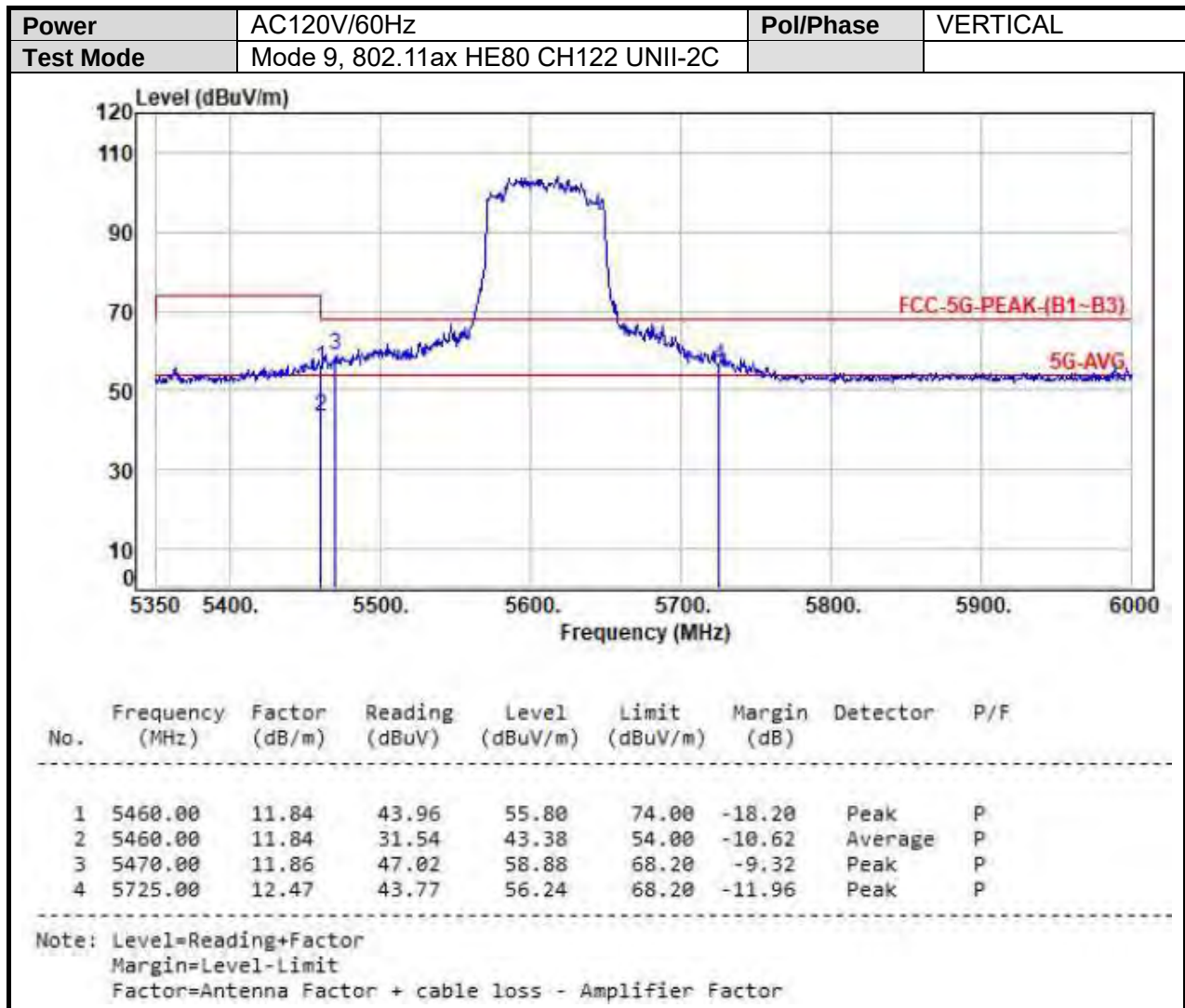


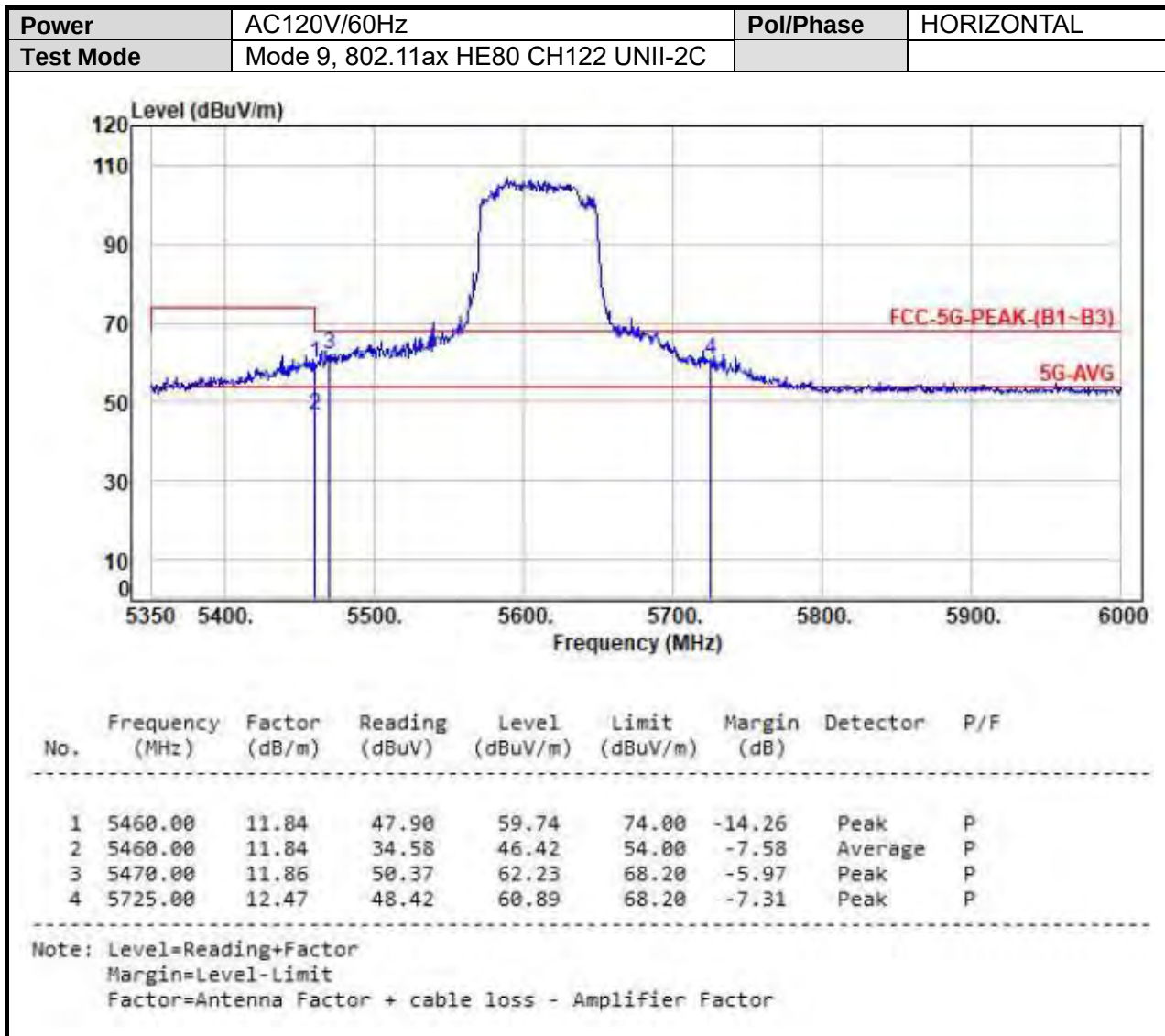






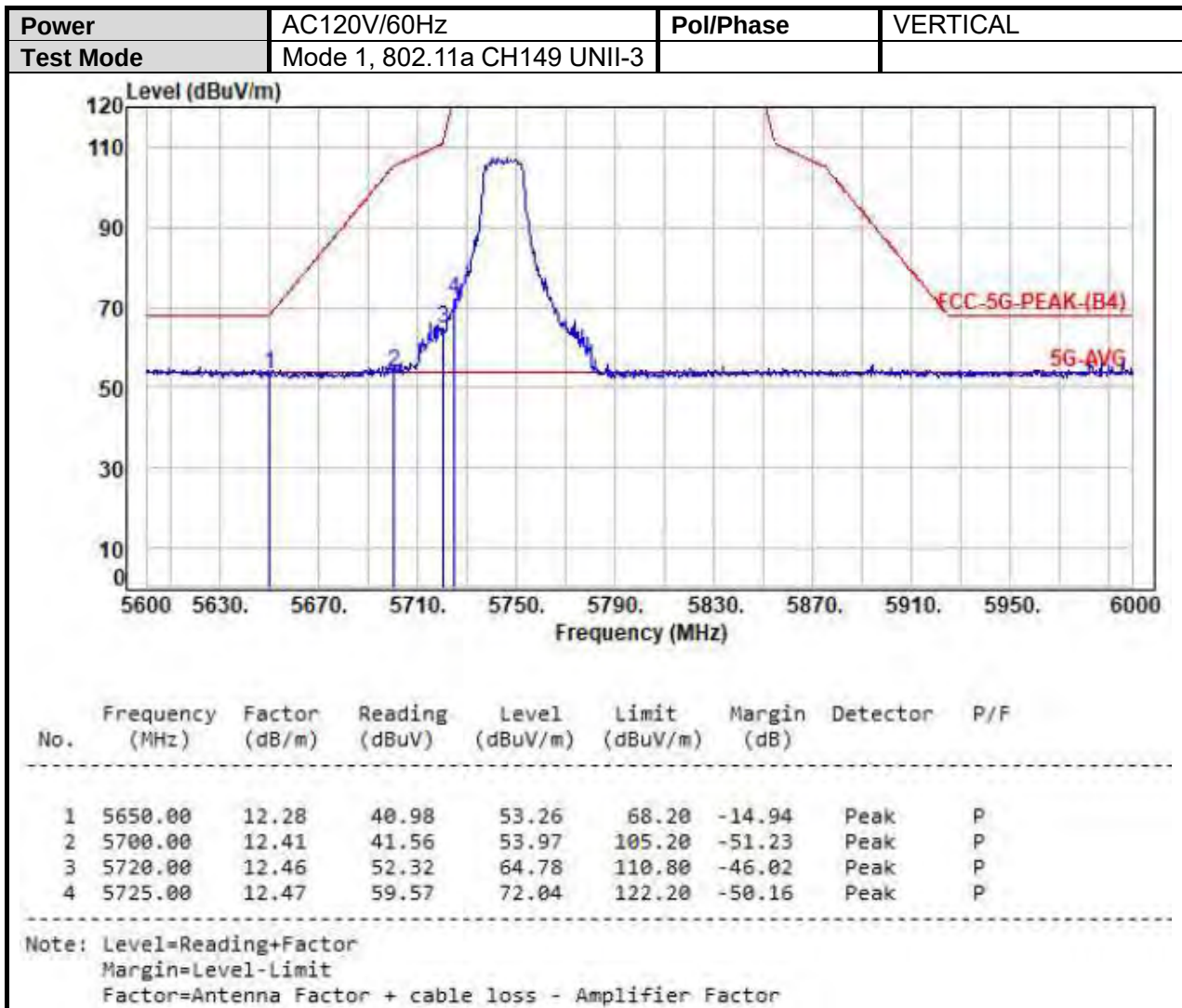


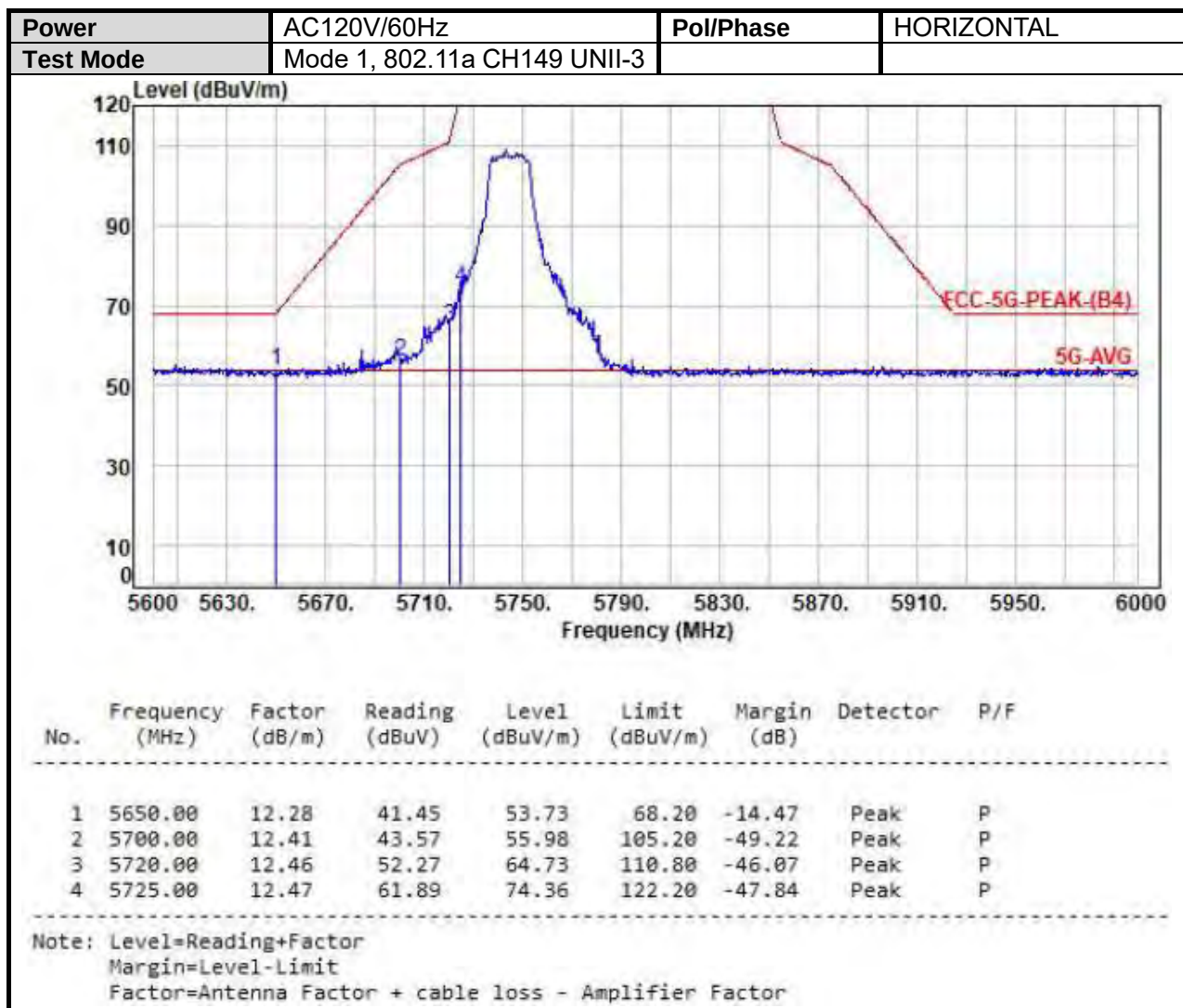


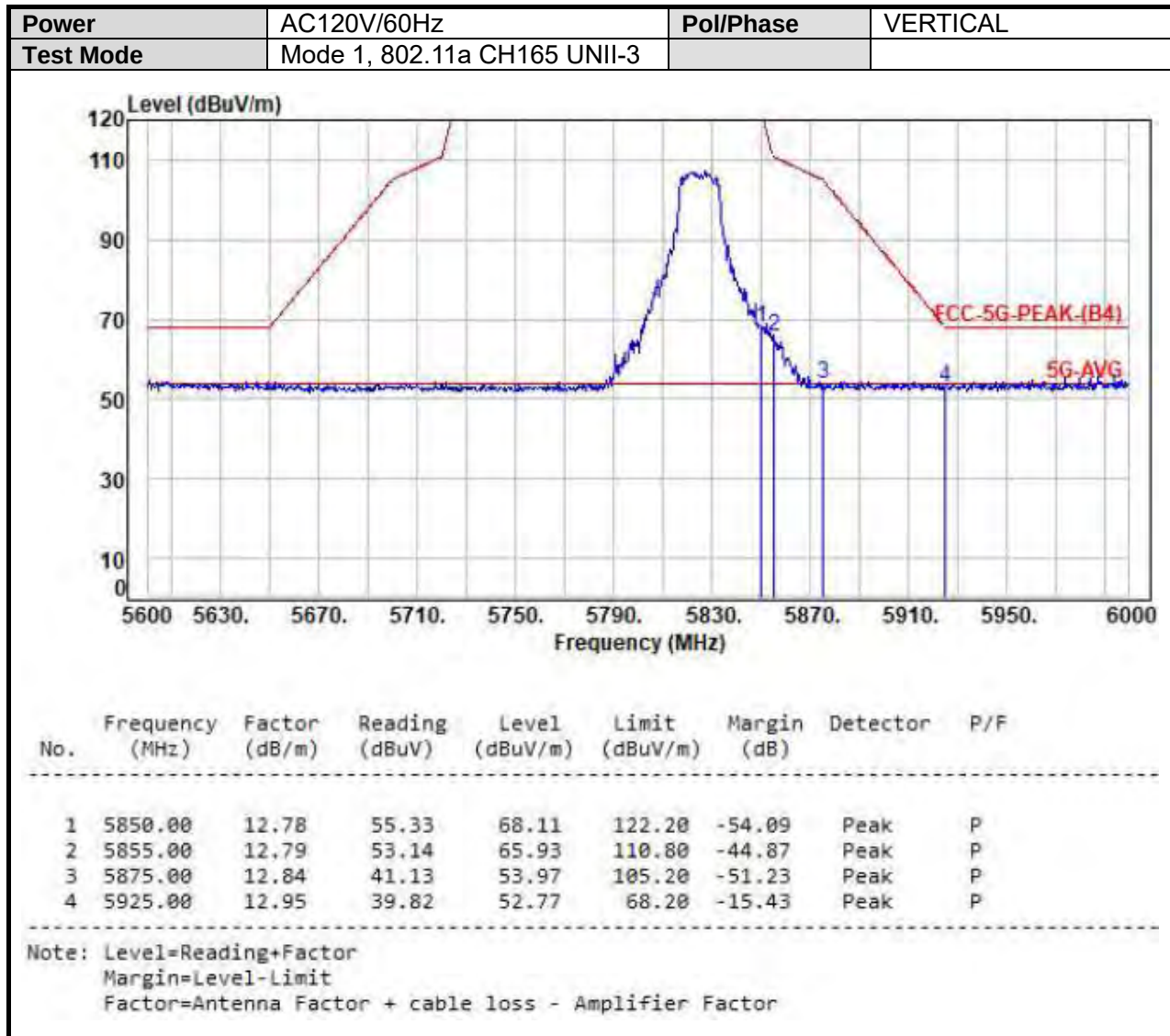


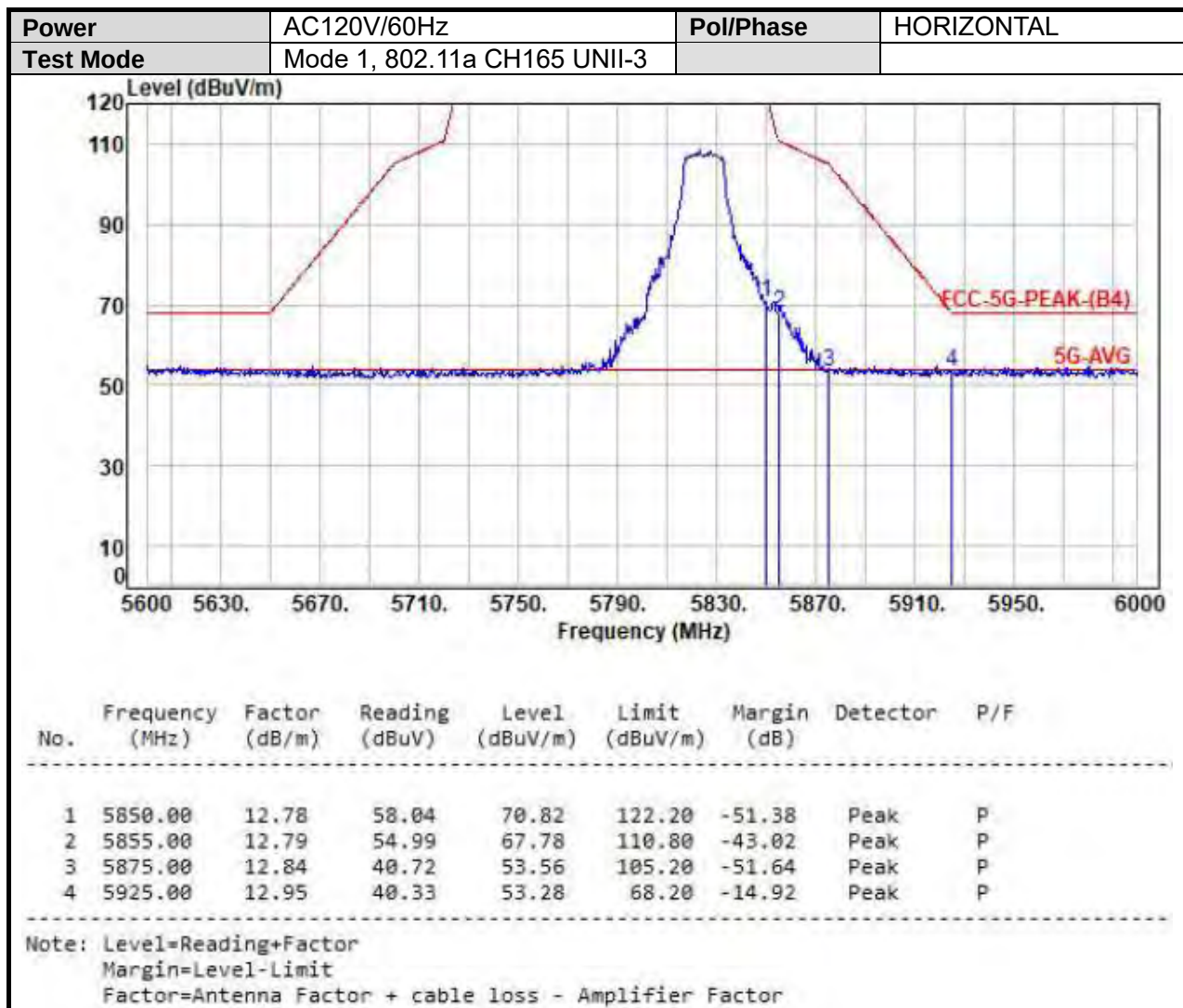


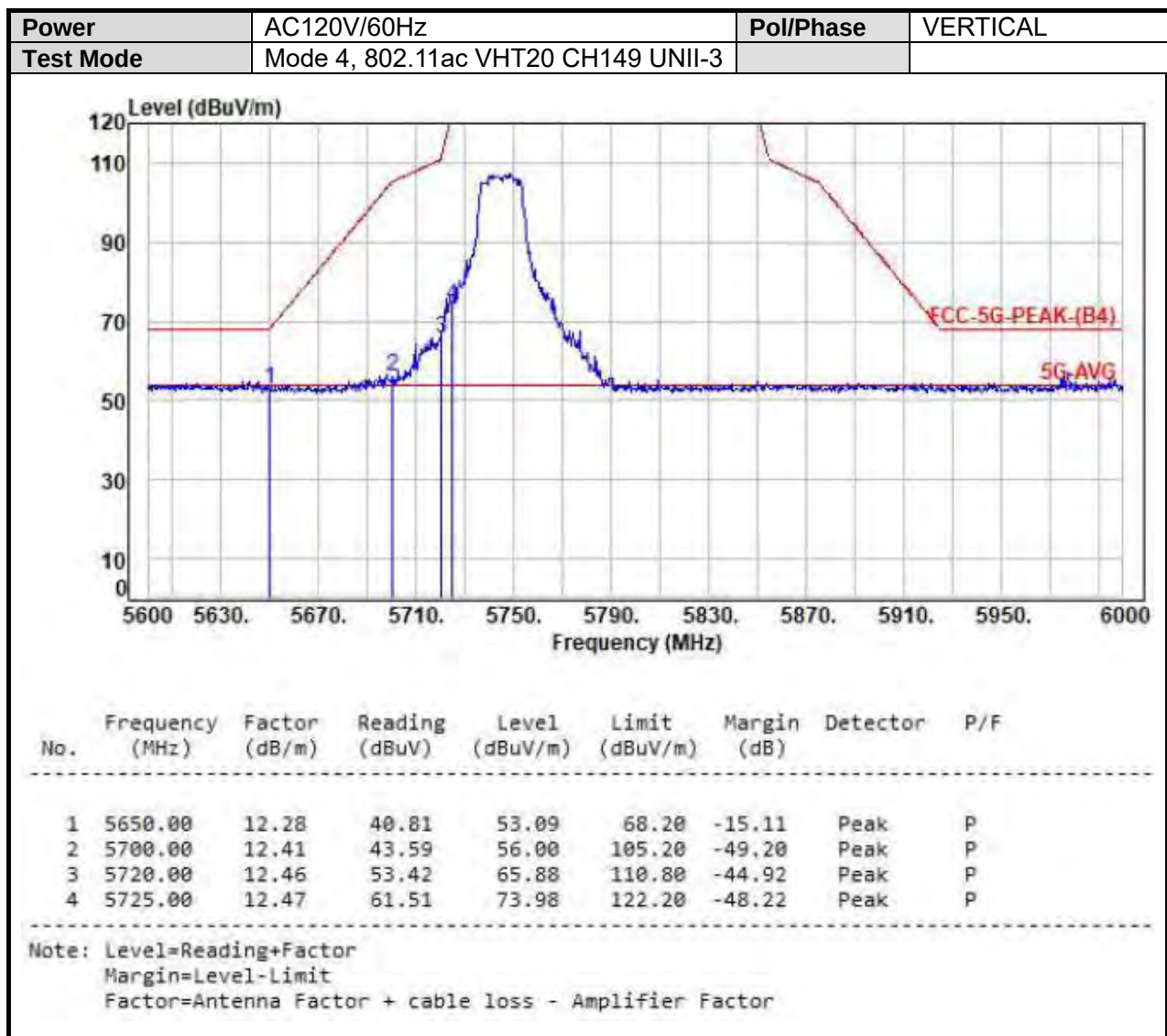
UNII-3

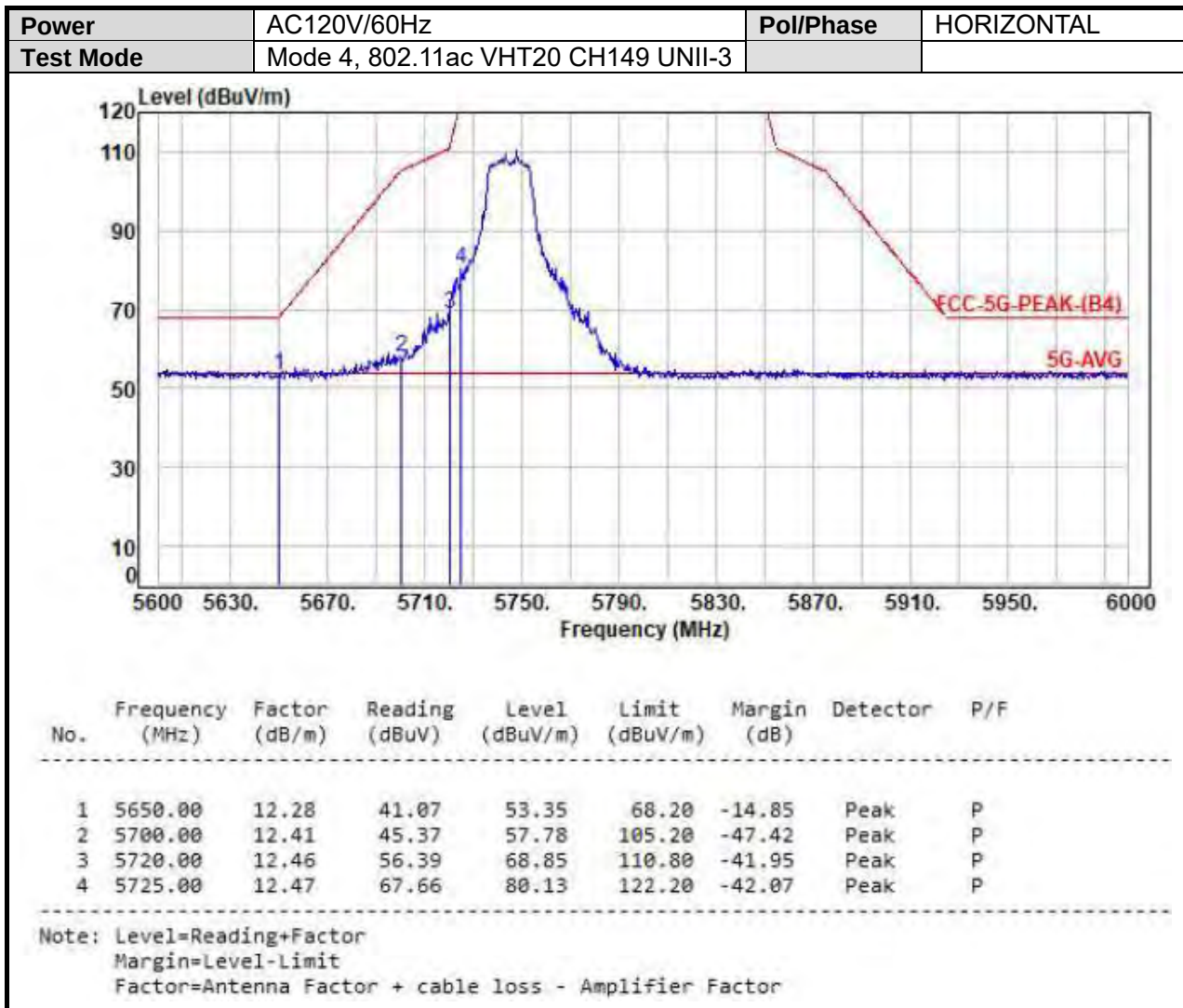


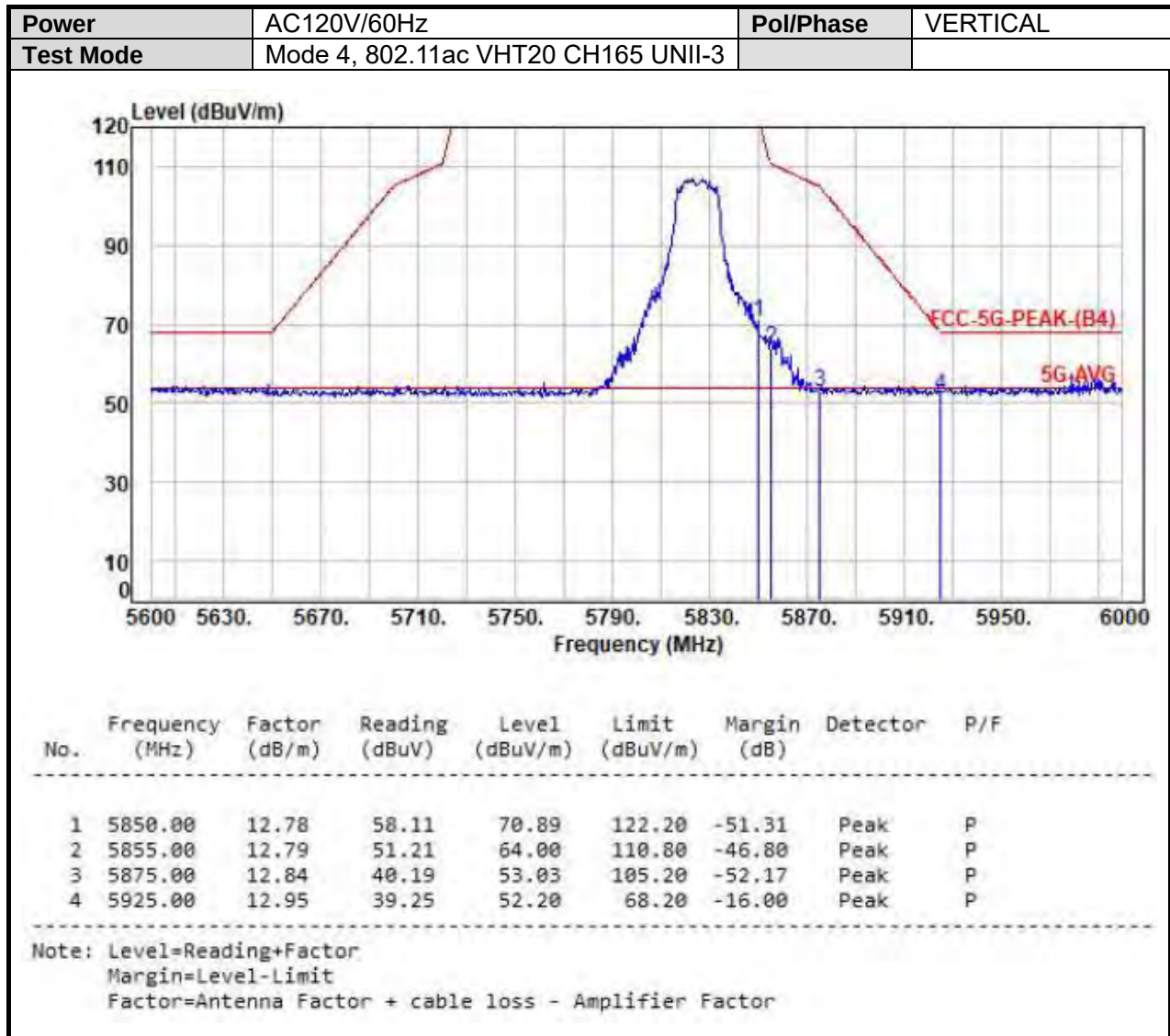


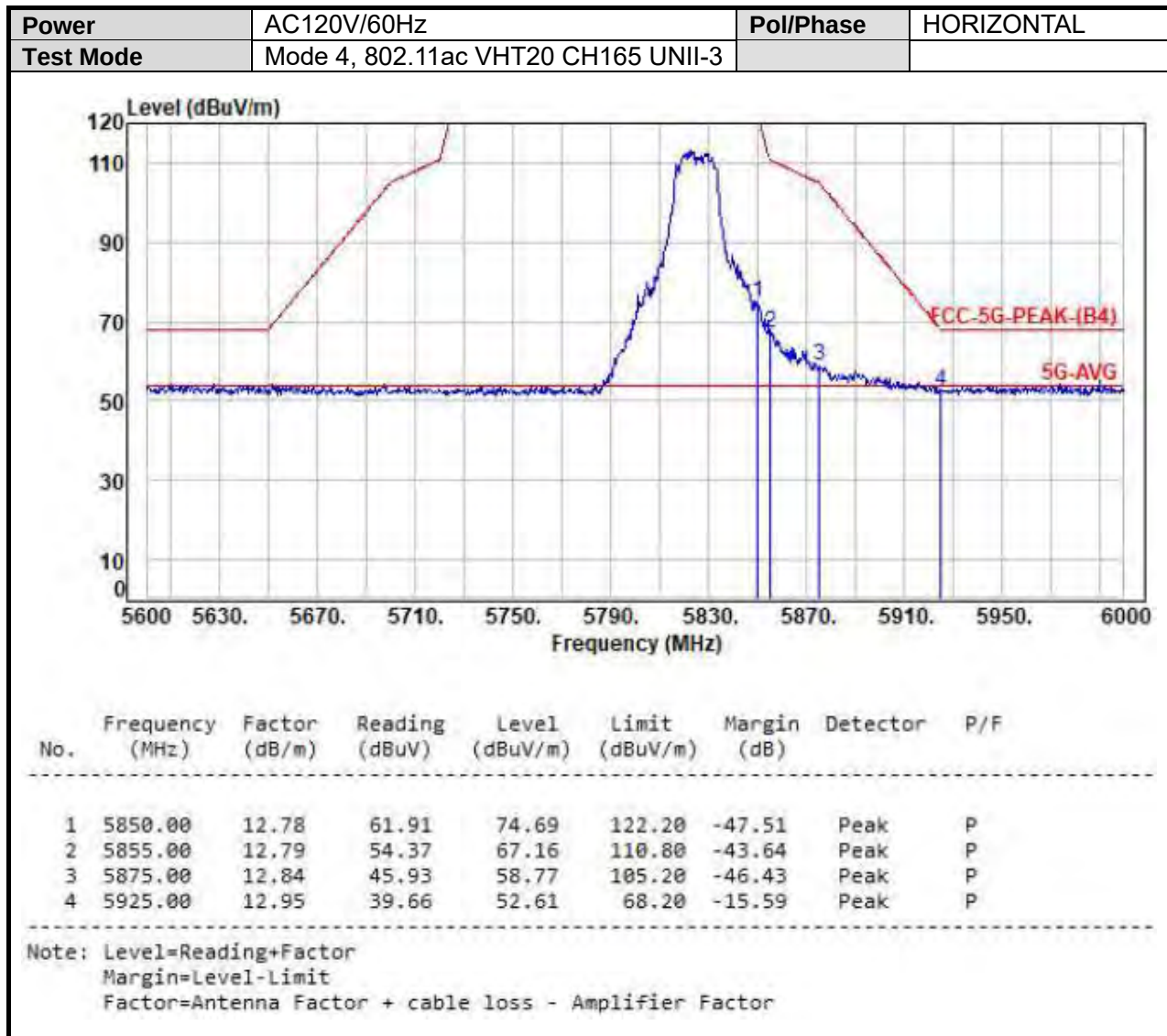


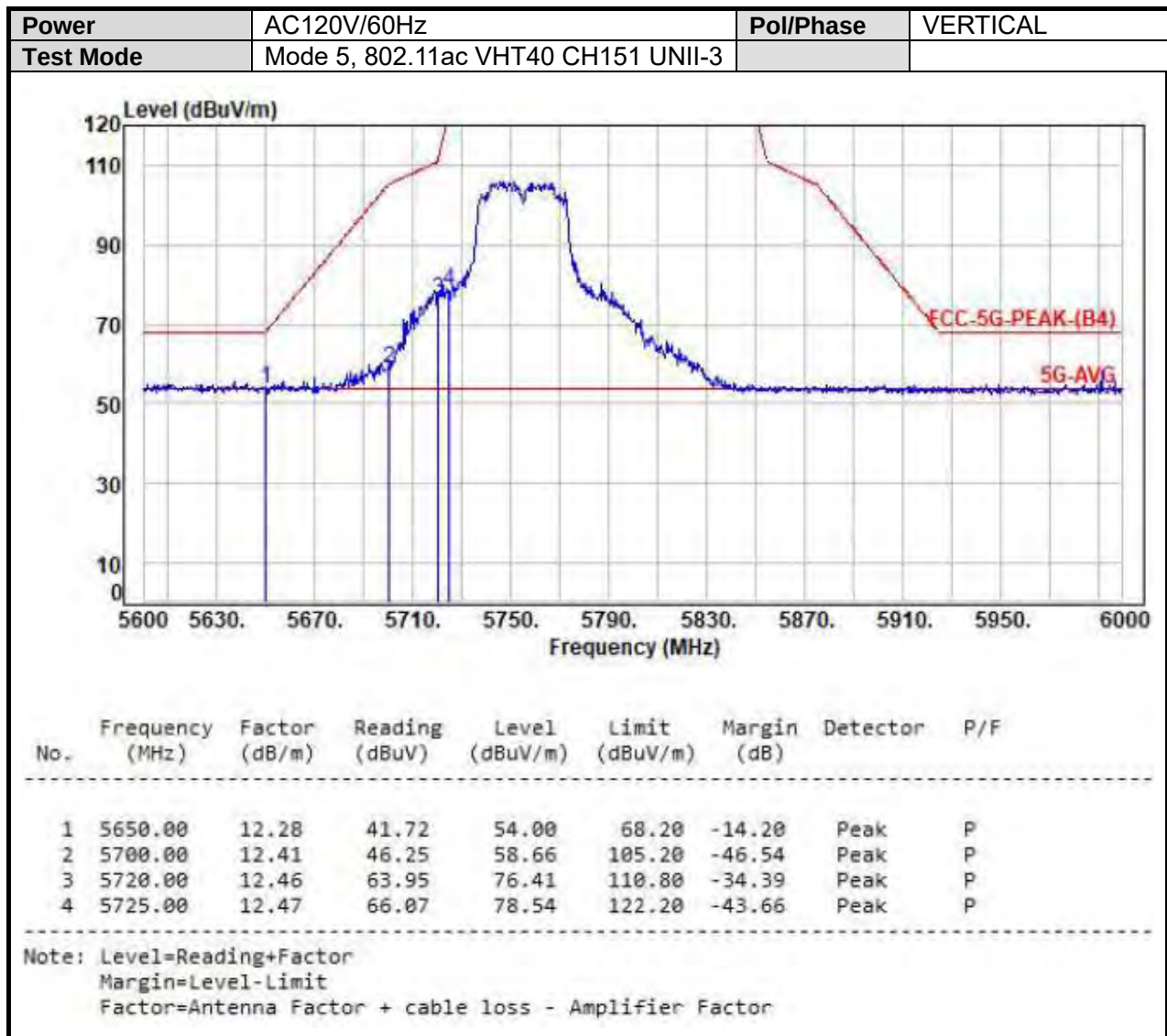


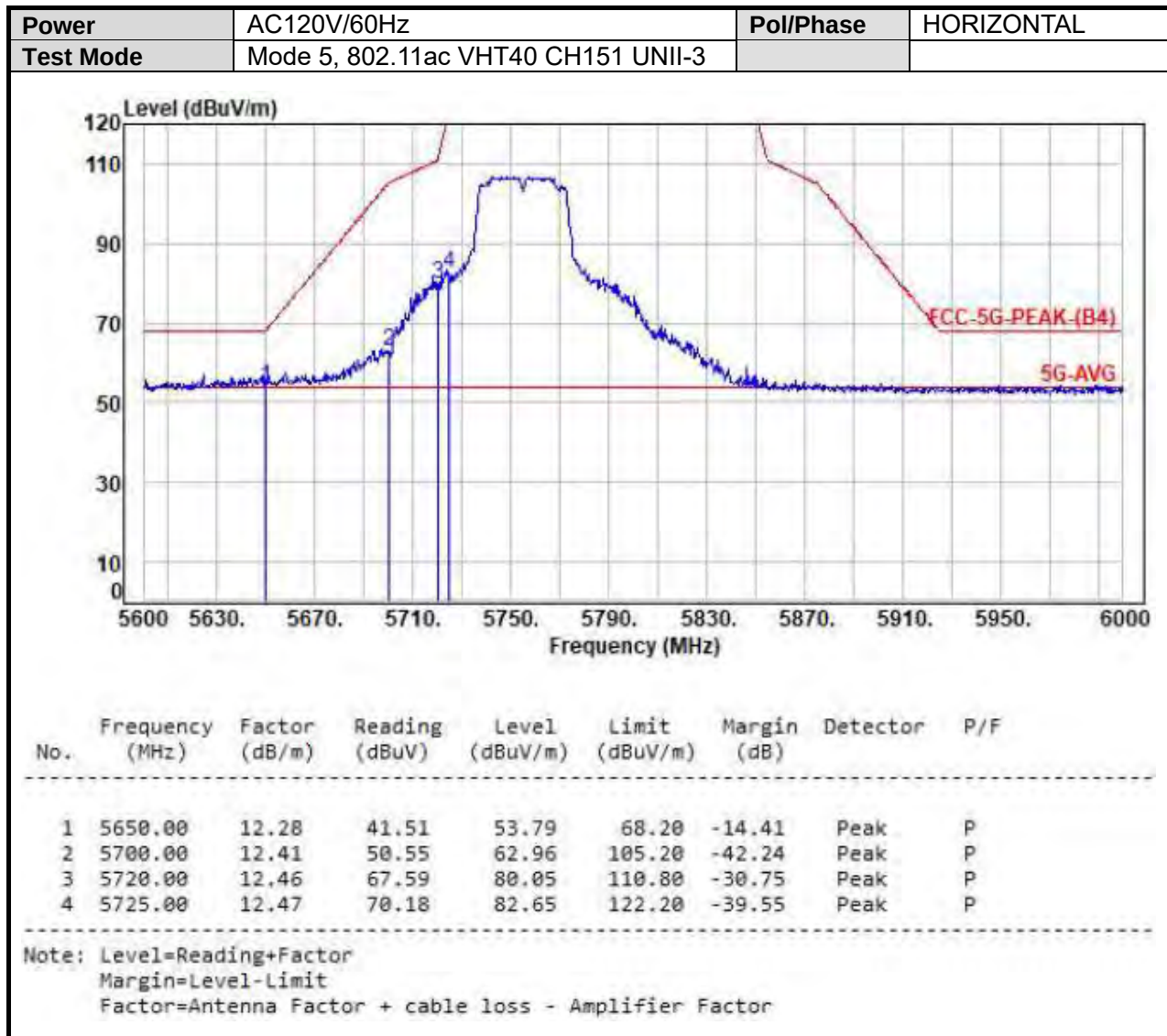


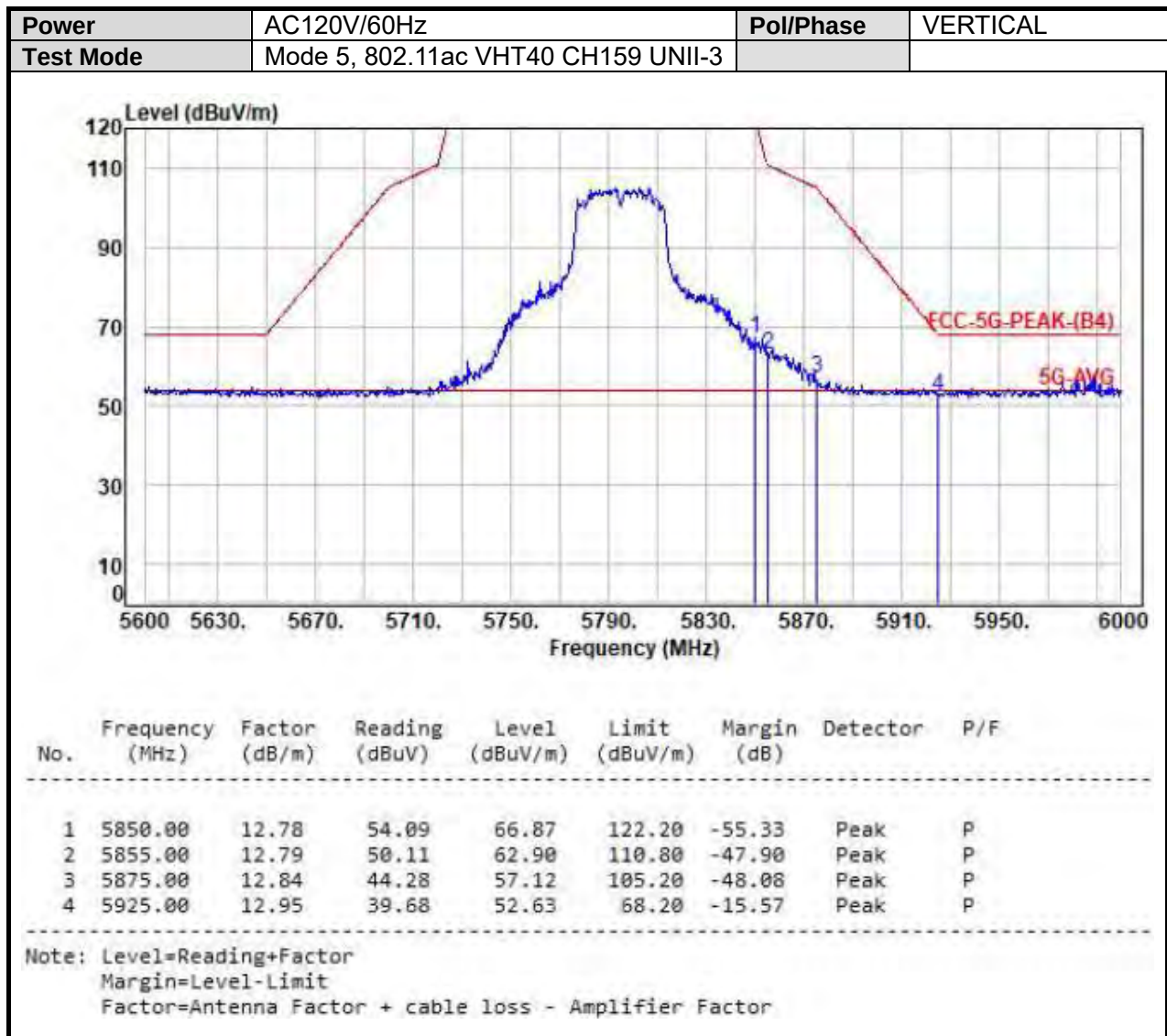


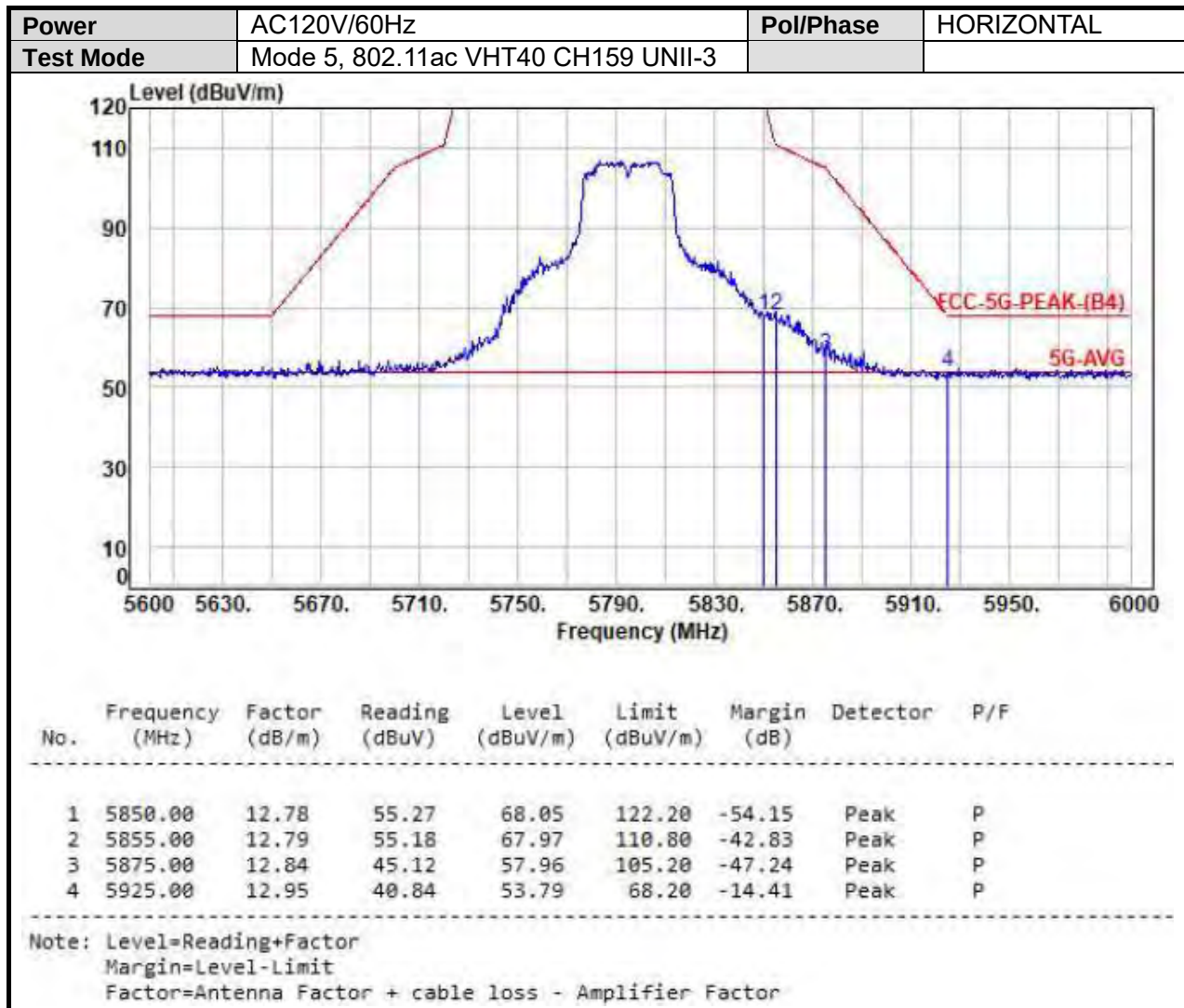


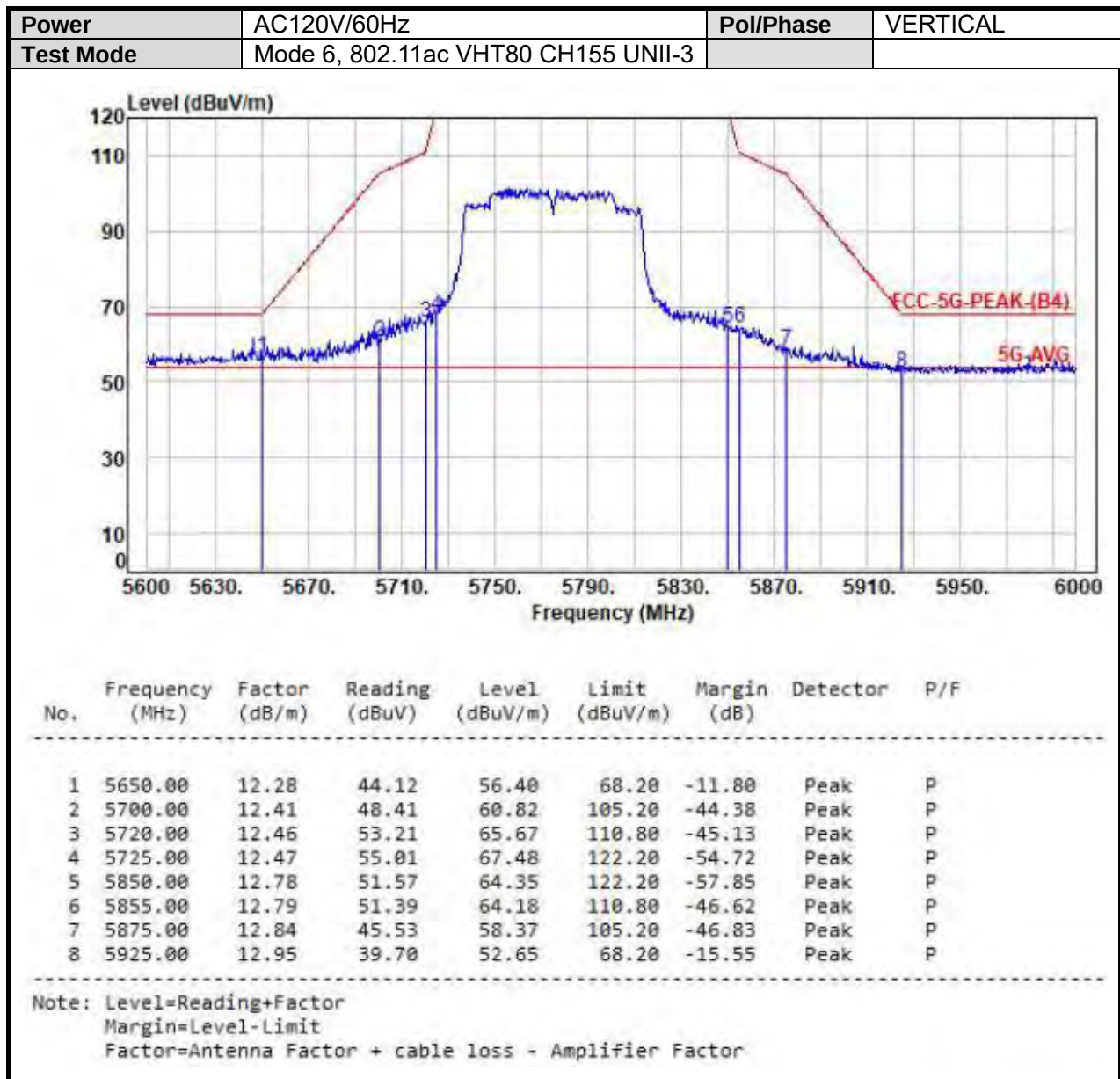


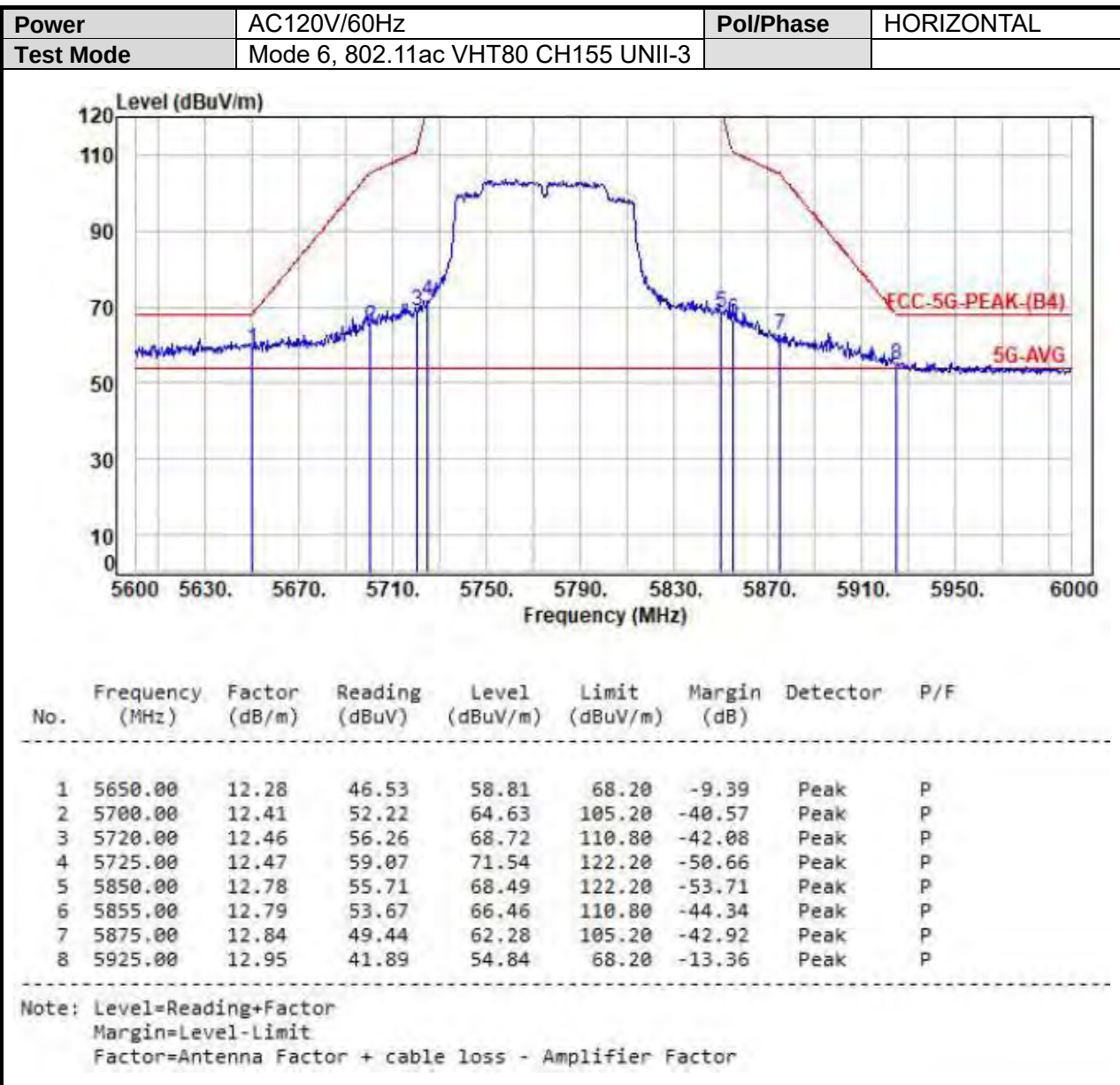


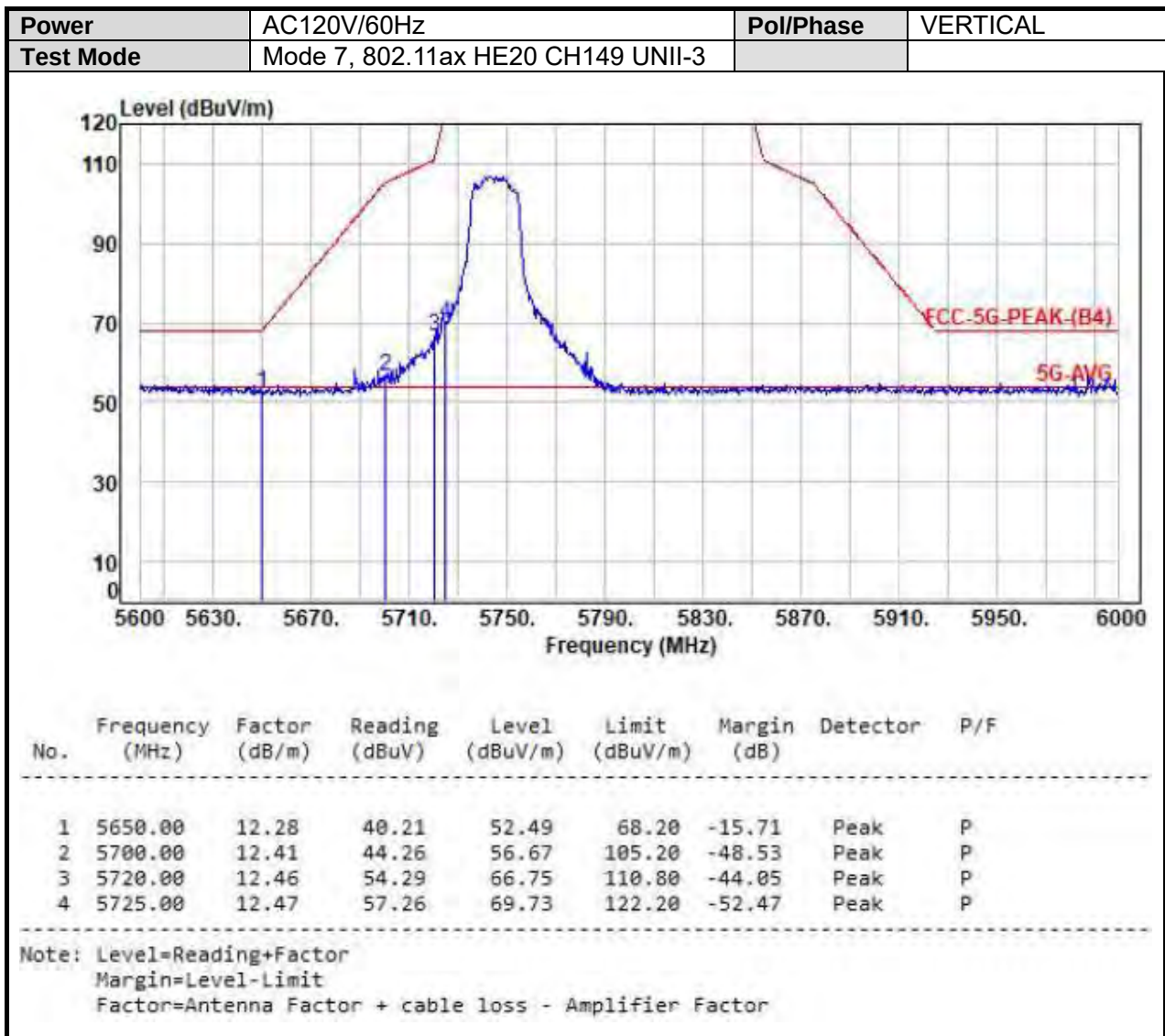


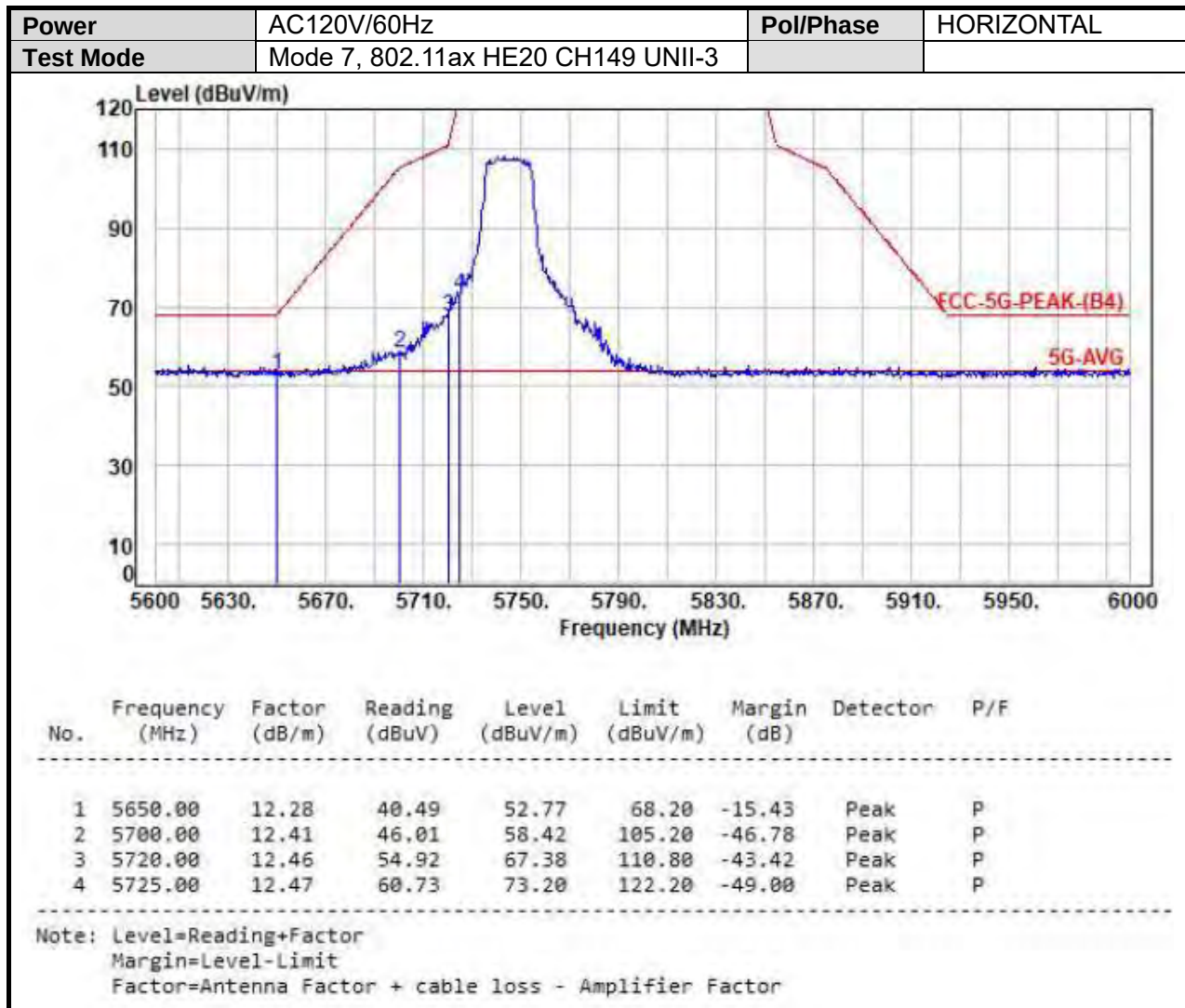


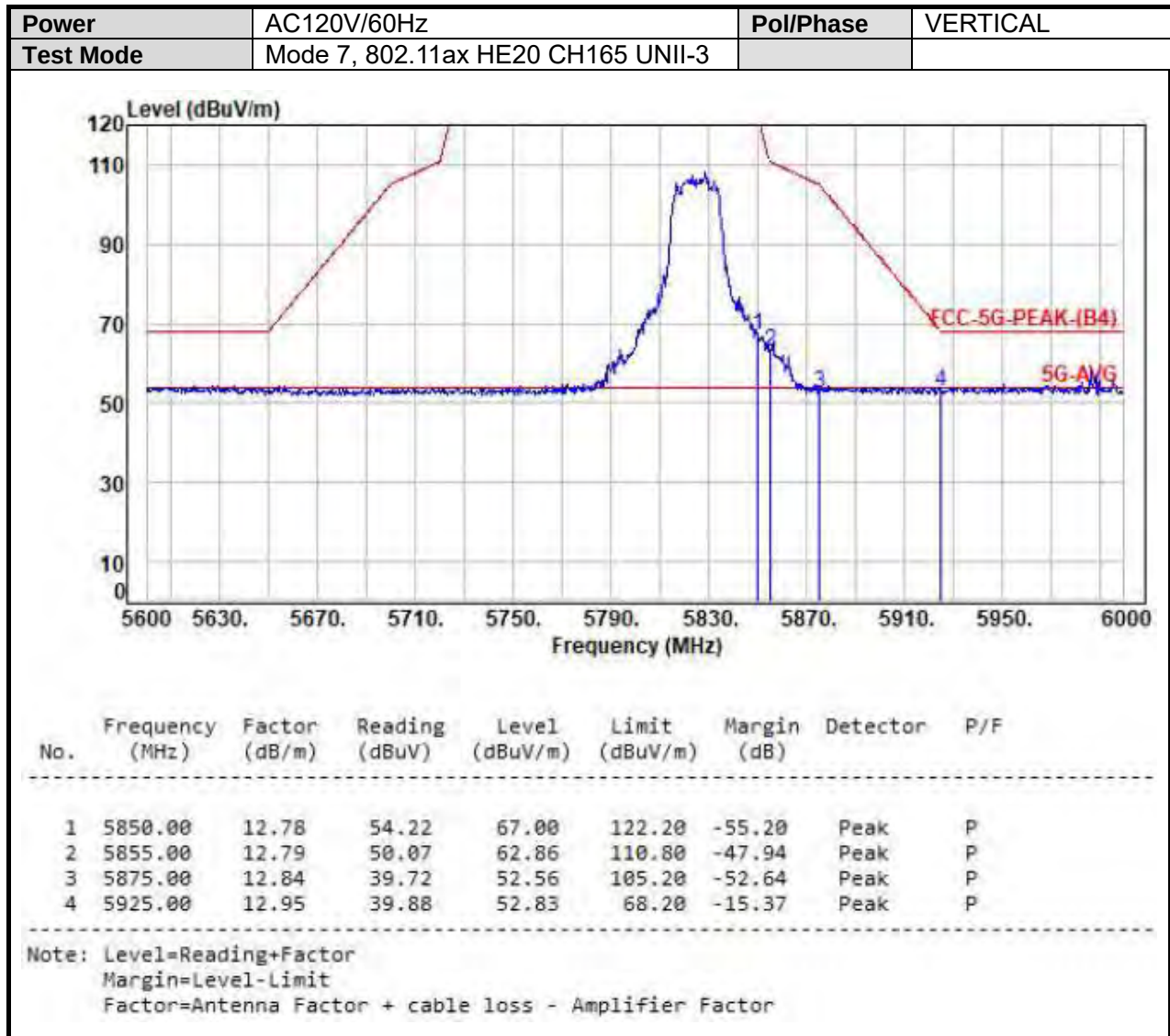


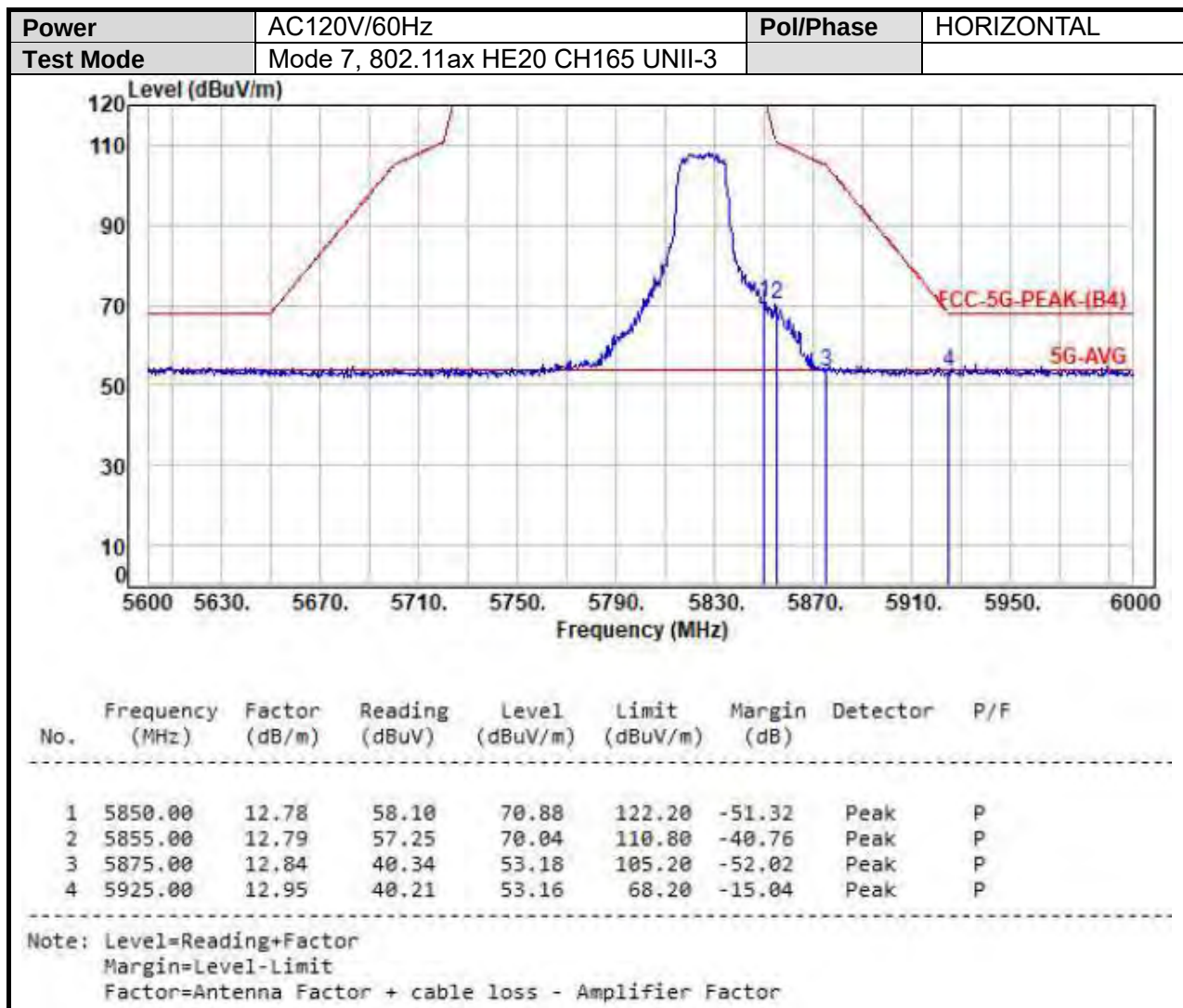


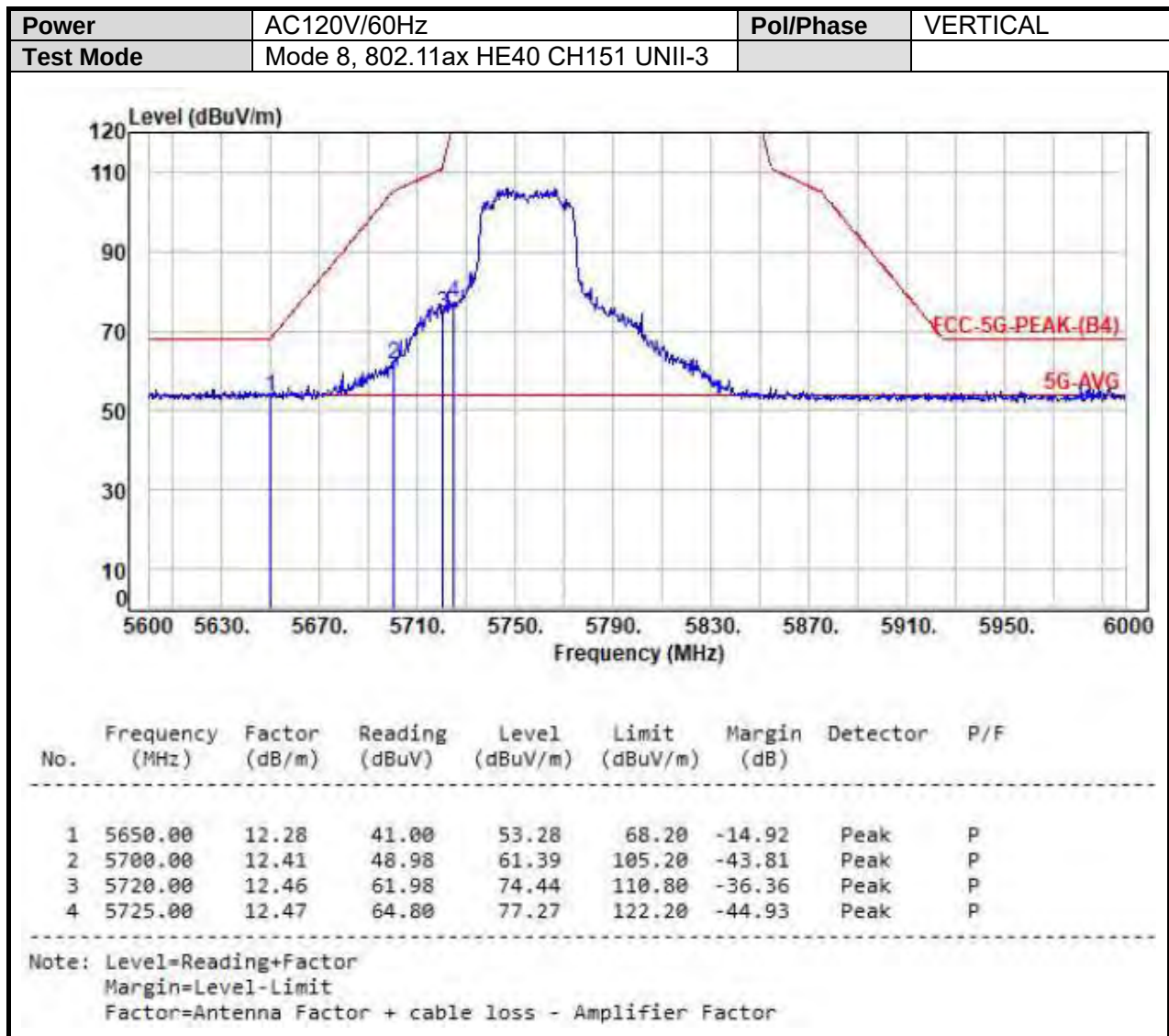


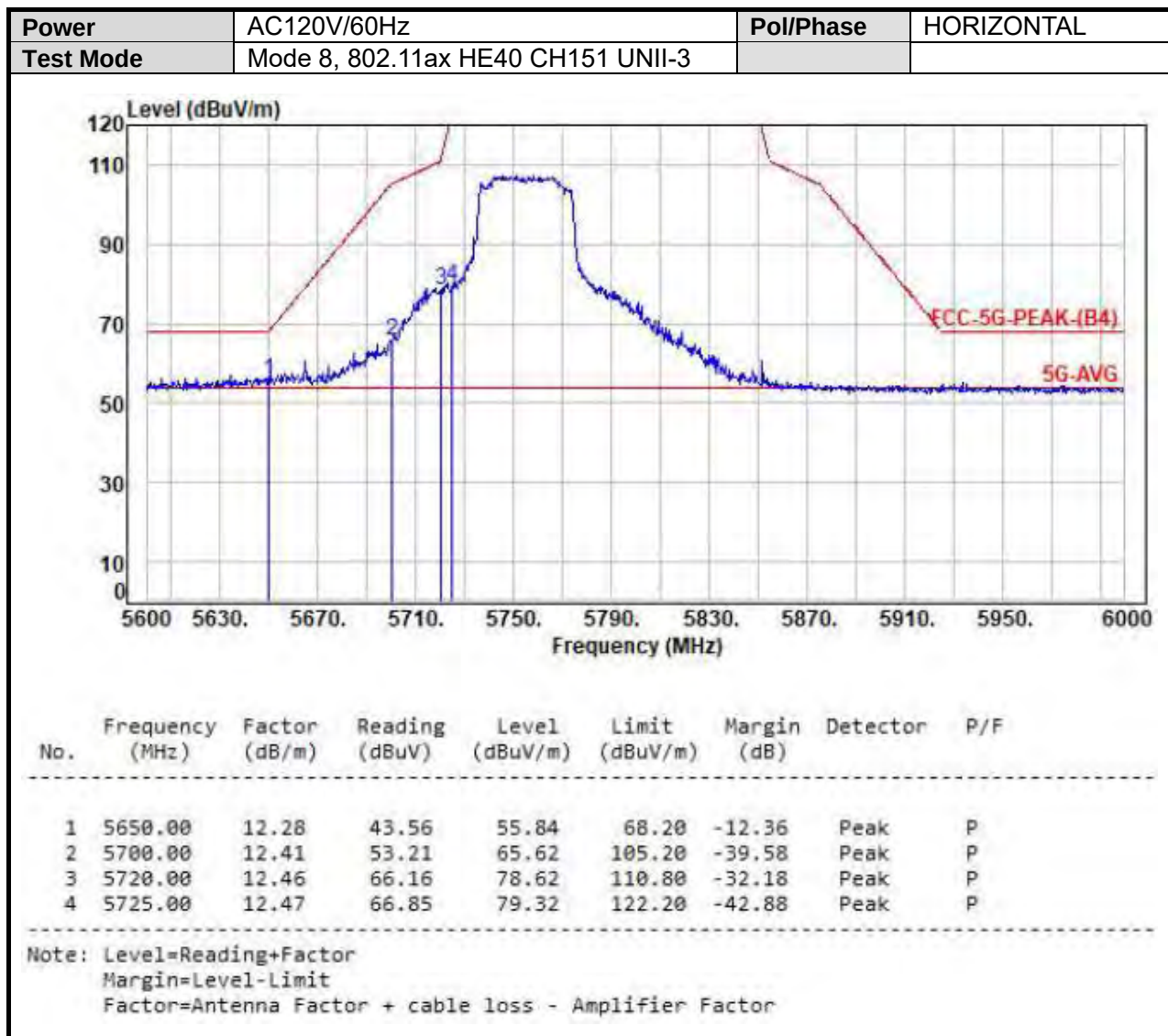


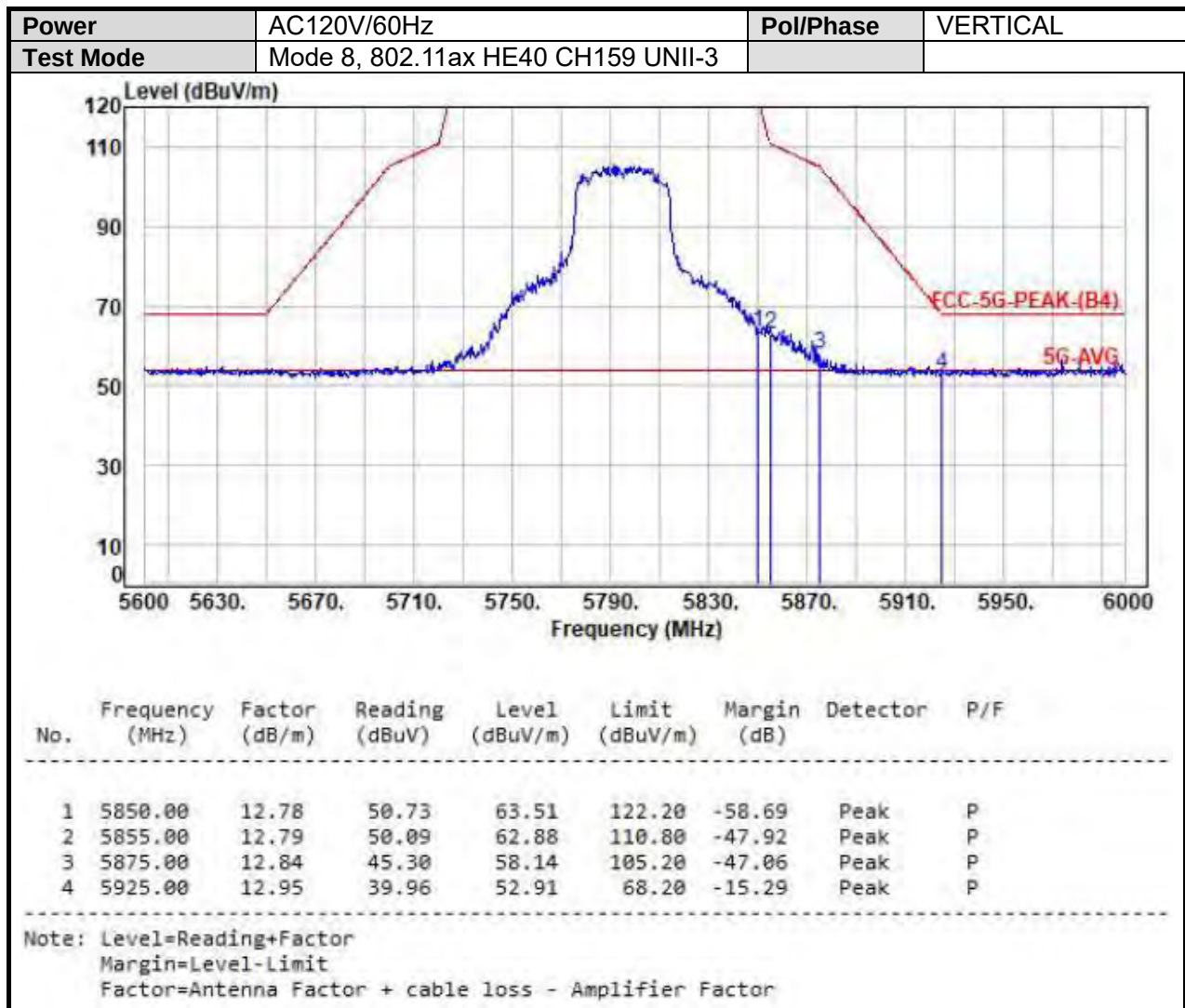


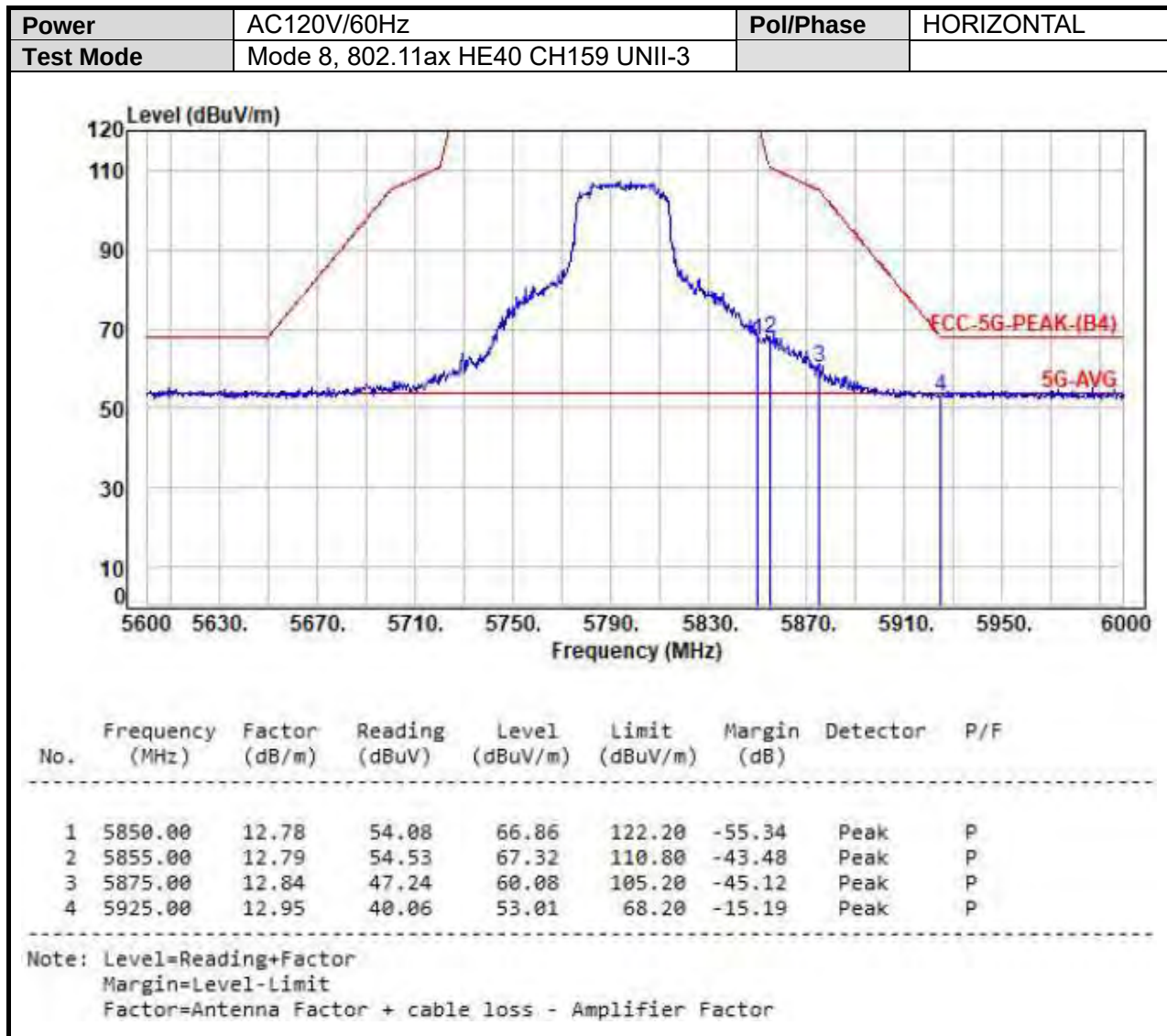


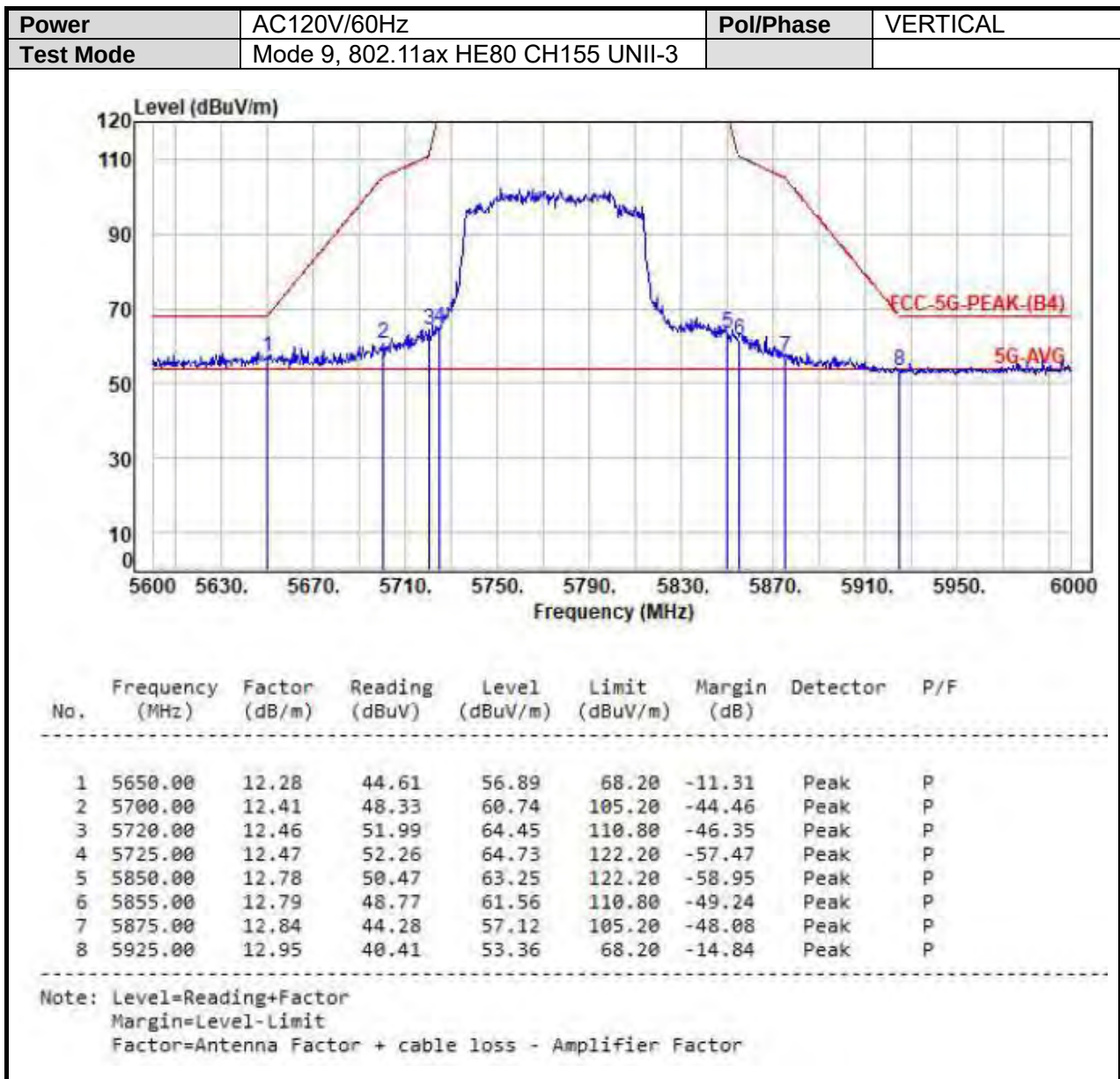


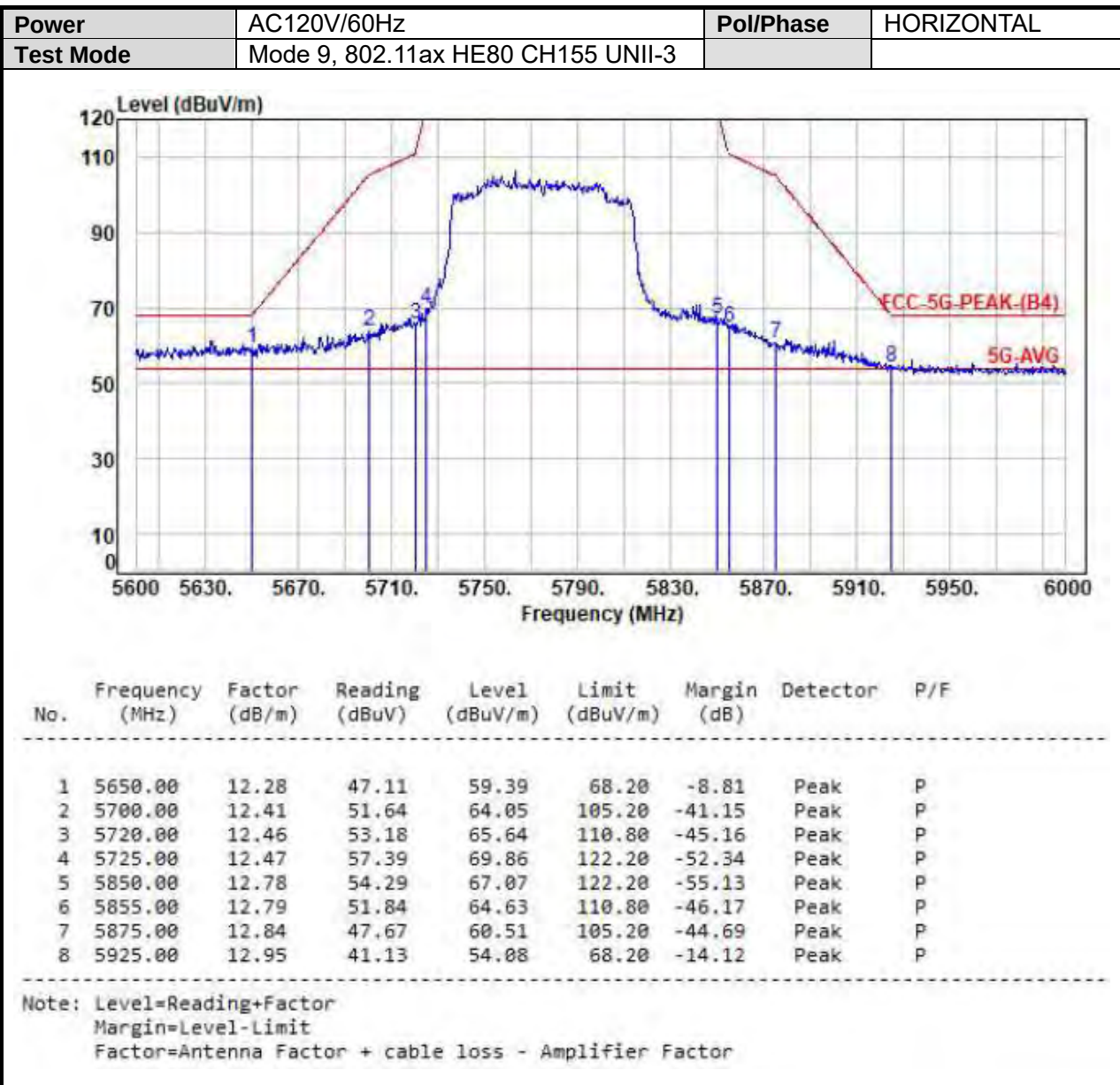














7. On Time, Duty Cycle and Measurement methods

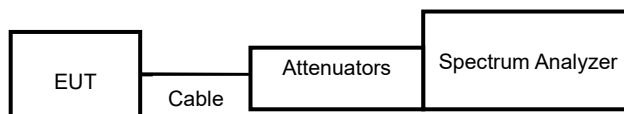
7.1. Test Limit

None; for reporting purposes only.

7.2. Test Procedure

KDB 789033 Zero-Span Spectrum Analyzer Method.

7.3. Test Setup Layout



7.4. Test Result and Data

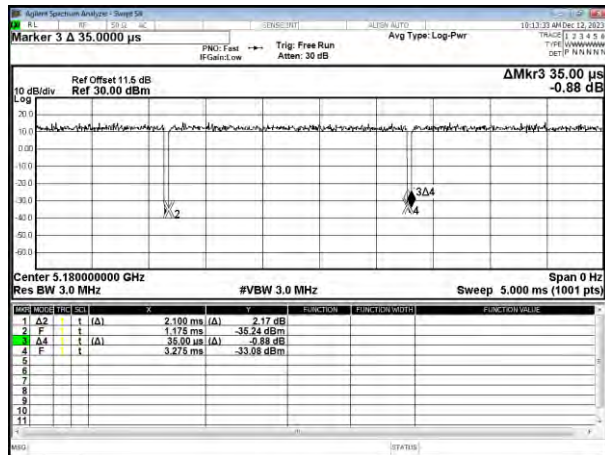
Modulation Mode	On Time (msec)	Period Time (msec)	Duty Cycle (%)
802.11a	2.100	2.135	98.36%
802.11ac VHT20	3.955	3.990	99.12%
802.11ac VHT40	3.980	4.015	99.13%
802.11ac VHT80	3.980	4.015	99.13%
802.11ax HE20	3.995	4.030	99.13%
802.11ax HE40	3.995	4.030	99.13%
802.11ax HE80	3.990	4.030	99.01%

7.5. Measurement Methods

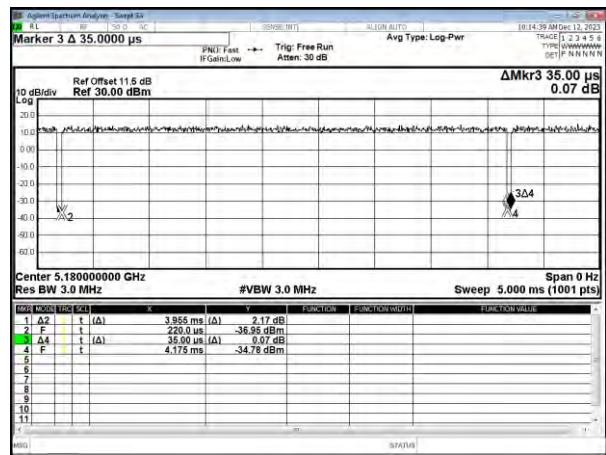
26 dB and 6dB Emission BW	KDB 789033 v02r01, Section C
99% Occupied BW	KDB 789033 v02r01, Section D
Conducted Output Power	KDB 789033 v02r01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 v02r01, Section F
Unwanted emissions in restricted bands	KDB 789033 v02r01, Sections G and H
Unwanted emissions in non-restricted bands	KDB 789033 v02r01, Sections G and H



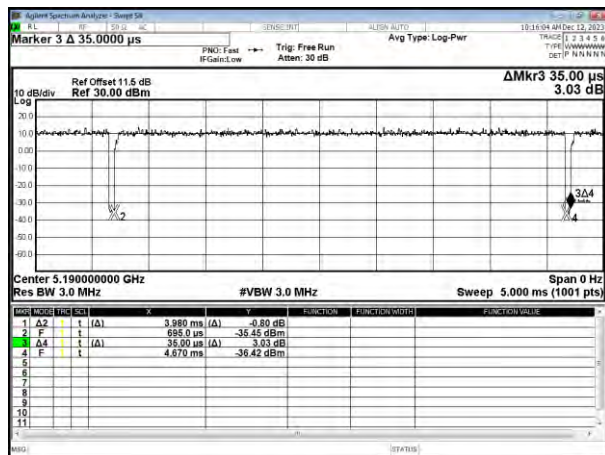
Modulation Type: 802.11a



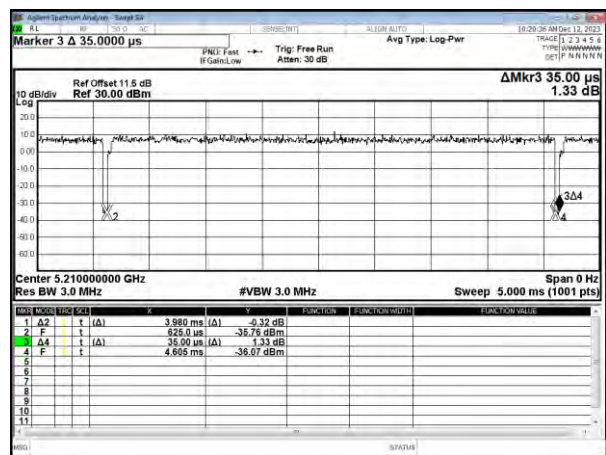
Modulation Type: 802.11ac VHT20



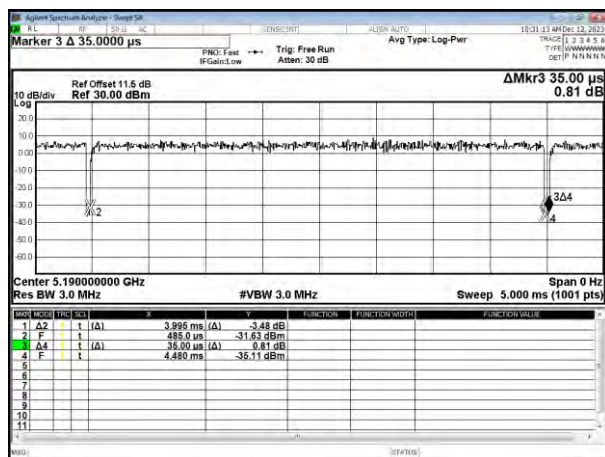
Modulation Type: 802.11ac VHT40



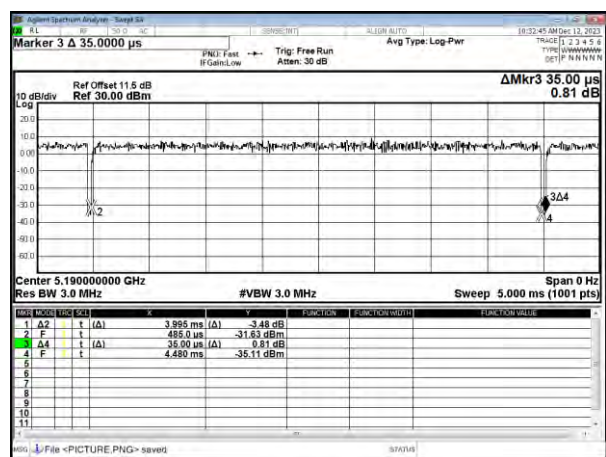
Modulation Type: 802.11ac VHT80



Modulation Type: 802.11ax HE20

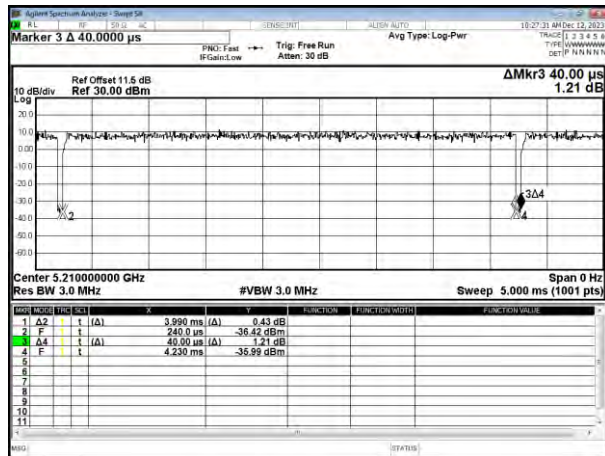


Modulation Type: 802.11ax HE40





Modulation Type: 802.11ax HE80





8. 6dB Bandwidth & 99% Occupied Bandwidth

8.1. Test Limit

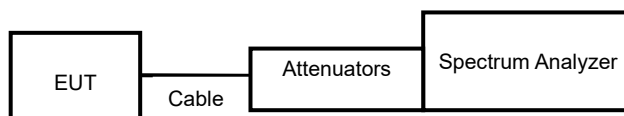
FCC §15.407

The minimum 6 dB bandwidth shall be at least 500 kHz.

8.2. Test Procedure

Reference to 789033 v02r01 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to 100KHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

8.3. Test Setup Layout





8.4. Test Result and Data (6dB Bandwidth)

In the 5.8GHz Band

SISO

Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)
			ANT A	
802.11a	149	5745	15.18	0.50
	157	5785	15.17	0.50
	165	5825	15.18	0.50
802.11ac VHT20	149	5745	15.18	0.50
	157	5785	15.16	0.50
	165	5825	15.17	0.50
802.11ac VHT40	155	5755	35.12	0.50
	159	5795	35.12	0.50
802.11ac VHT80	155	5775	75.14	0.50
802.11ax HE20	149	5745	15.33	0.50
	157	5785	15.14	0.50
	165	5825	15.18	0.50
802.11ax HE40	155	5755	35.13	0.50
	159	5795	35.15	0.50
802.11ax HE80	155	5775	75.17	0.50

UNII Emission Bandwidth Result (Extends across 5725MHz band)

Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)
			ANT A	
11a	144	5720	2.72	0.50
11ac VHT20	144	5720	3.39	0.50
11ac VHT40	142	5710	2.80	0.50
11ac VHT80	138	5690	2.82	0.50
11ax HE20	144	5720	4.01	0.50
11ax HE40	142	5710	3.65	0.50
11ax HE80	138	5690	3.59	0.50

**8.5. Test Result and Data (99% Occupied Bandwidth)****In the 5.8GHz Band**

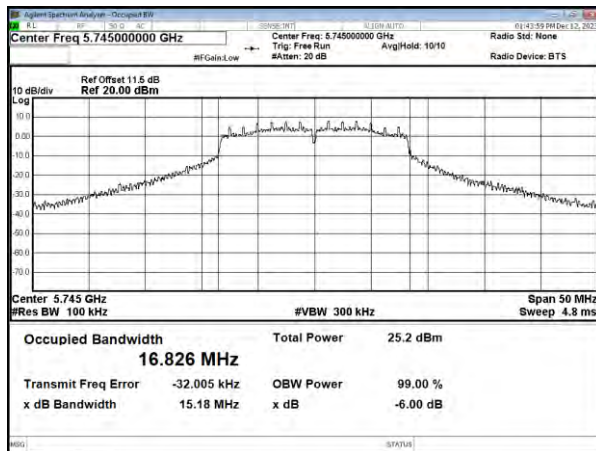
Mode	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
802.11a	149	5745	17.325
	157	5785	17.144
	165	5825	16.741
802.11ac VHT20	149	5745	18.071
	157	5785	18.061
	165	5825	17.845
802.11ac VHT40	155	5755	36.356
	159	5795	36.124
802.11ac VHT80	155	5775	74.946
802.11ax HE20	149	5745	18.984
	157	5785	19.002
	165	5825	18.937
802.11ax HE40	155	5755	37.580
	159	5795	36.112
802.11ax HE80	155	5775	76.428

UNII Emission Bandwidth Result (Extends across 5725MHz band)

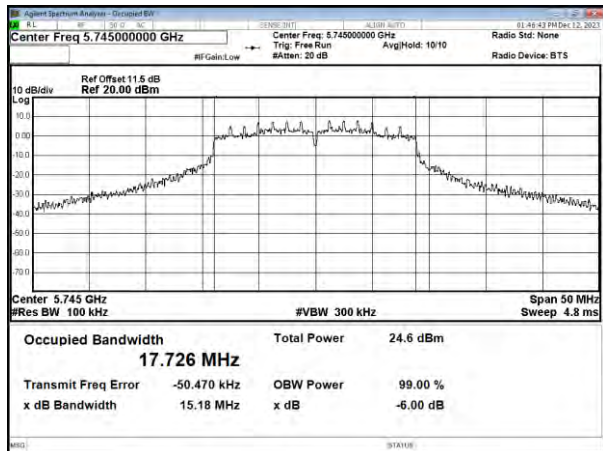
Mode	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	144	5720	6.07
11ac VHT20	144	5720	5.74
11ac VHT40	142	5710	21.50
11ac VHT80	138	5690	55.37
11ax HE20	144	5720	5.76
11ax HE40	142	5710	12.68
11ax HE80	138	5690	45.90



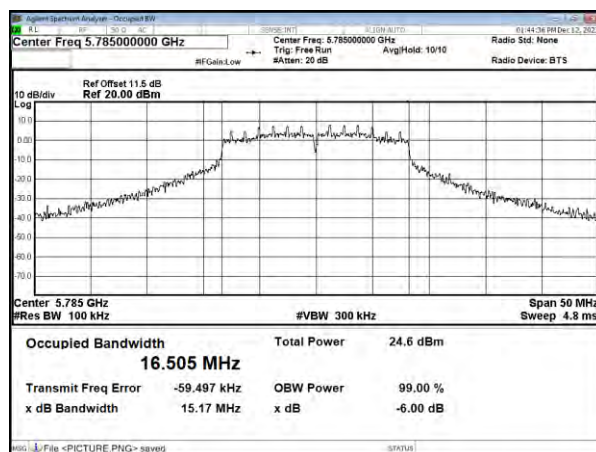
SISO (ANT A)
6dB Bandwidth
Modulation Type: 802.11a
CH149



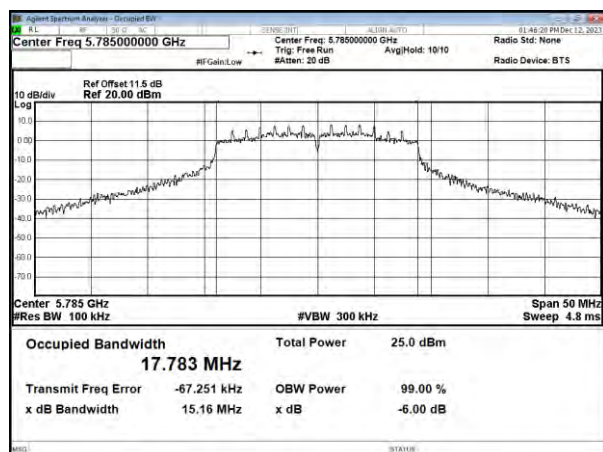
Modulation Type: 802.11ac, VHT20
CH149



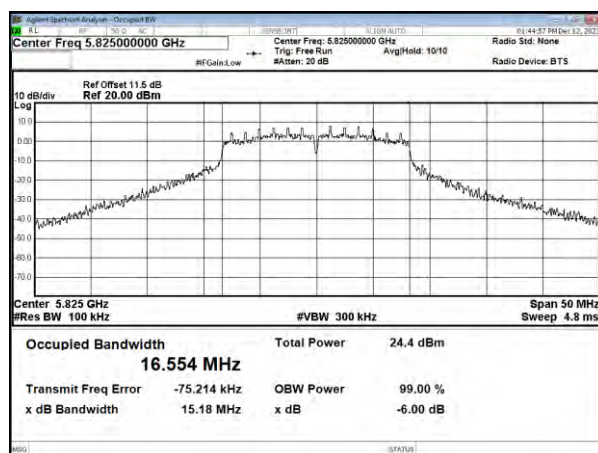
CH157



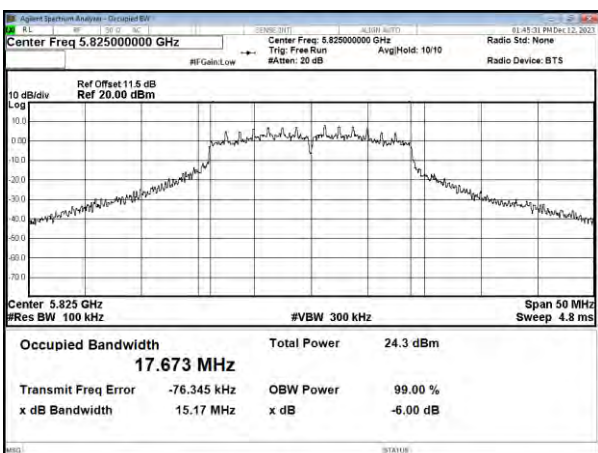
CH157



CH165

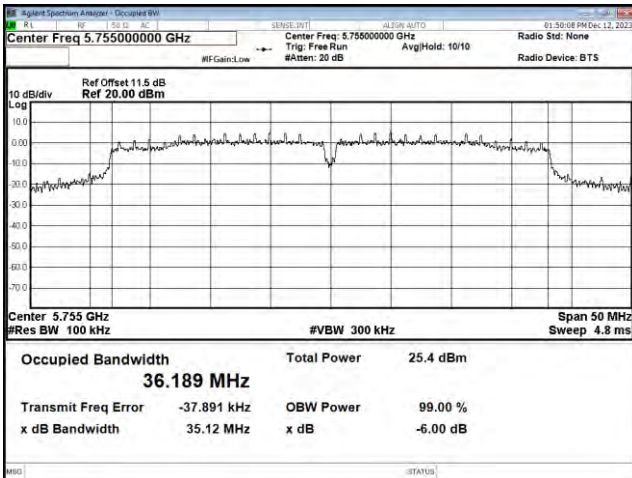
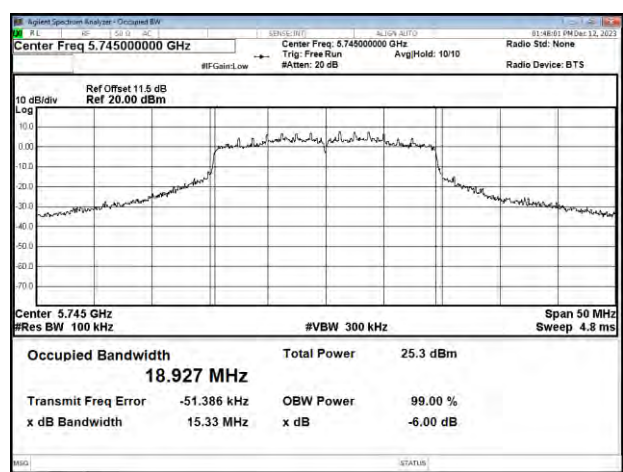


CH165

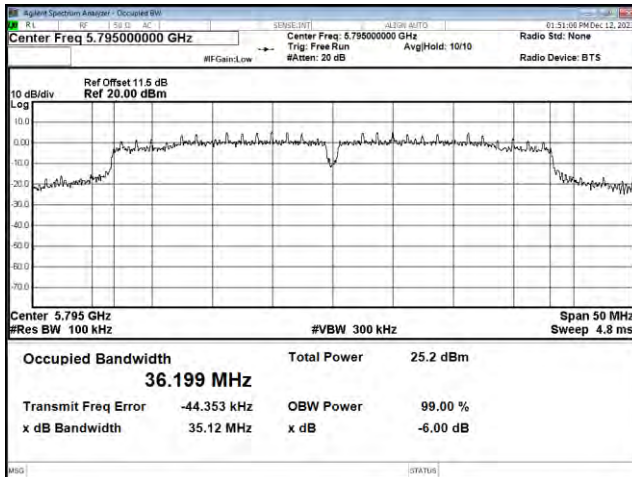




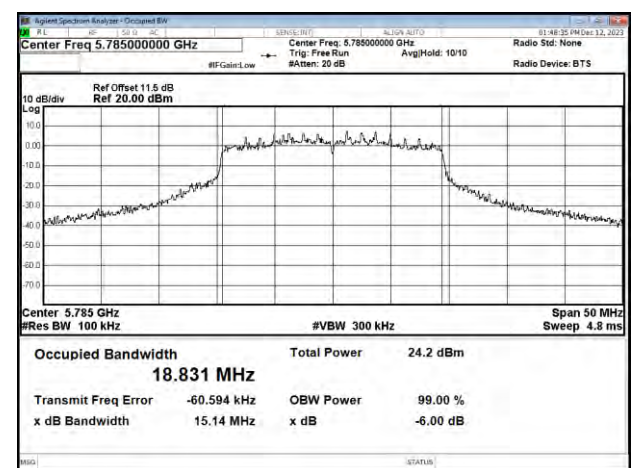
6dB Bandwidth

Modulation Type: 802.11ac, VHT40
CH151Modulation Type: 802.1111ax HE20
CH149

CH159

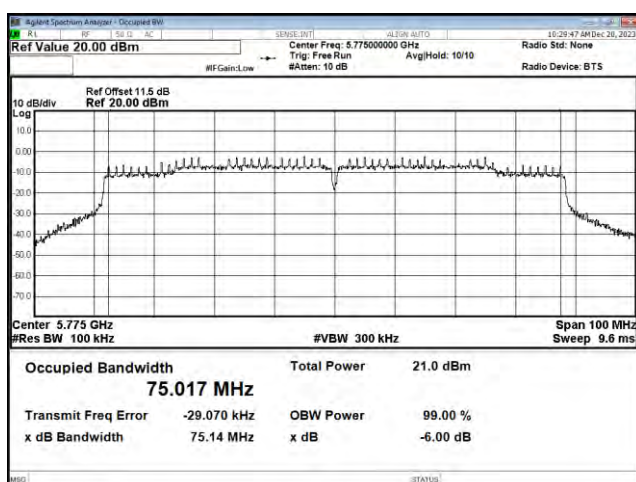


CH157

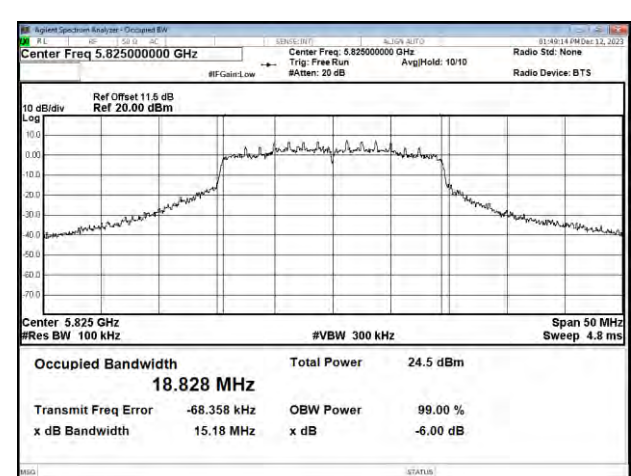


Modulation Type: 802.11ac, VHT80

CH155



CH165

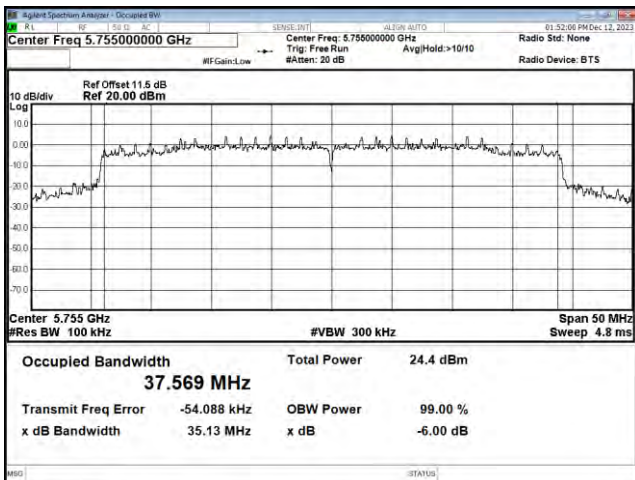




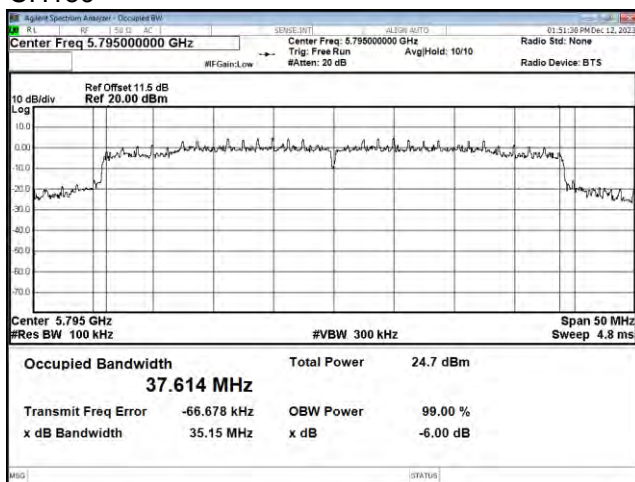
6dB Bandwidth

Modulation Type: 802.11 ax HE40

CH151



CH159



Modulation Type: 802.11ax HE80

CH155

