



FCC RADIO TEST REPORT

Applicant : XAC Automation Corporation

Address : 4F., NO.30, INDUSTRY E. RD. IX, SCIENCE-BASED
INDUSTRIAL PARK, HSIN-CHU, Taiwan

Equipment : Unattended Android Payment Terminal

Model No. : xCL_AT-100-U-14

Trade Name : XAC

FCC ID : MQT-AT100U14

I HEREBY CERTIFY THAT :

The sample was received on Jun. 05, 2026 and the testing was completed on Jul. 07, 2026 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Supervisor

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory





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History of this test report

Report No.	Issued Date	Description
26050490-TRDFCC04	Jul. 15, 2026	Original



1. Summary of Test Procedure and Test Results

1.1. Applicable Standards

ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024

FCC Rules and Regulations Part 15 Subpart E § 15.407

KDB 789033

FCC Rule	Description of Test	Result
15.203	Antenna Requirement	PASS
15.207(a)	AC Power Line Conducted Emission	PASS
15.407(b) 15.209	Radiated Spurious Emission	PASS
15.407(a)	26 dB & Occupied Bandwidth	PASS
15.407	6 dB Bandwidth	PASS
15.407 (a) & (a)(3)	Average Power	PASS
15.407(a)	Power Spectral Density	PASS

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement, measurement uncertainty evaluation is not considered.



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Equipment	Unattended Android Payment Terminal
Model Name	xCL_AT-100-U-14
Model Discrepancy	N/A
Frequency Range	BT / BLE/ Wi-Fi 2.4GHz: 2400MHz-2483.5MHz Wi-Fi 5GHz: 5150MHz-5250MHz, 5725MHz -5850MHz NFC: 13.56MHz
Modulation Type	BT: GFSK, $\pi/4$ -DQPSK, 8DPSK BLE: GFSK Wi-Fi 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM Wi-Fi 5GHz: 802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM NFC: Type-A: OOK, Type-B: ASK
Data Rate	BT: GFSK: 1Mbps, $\pi/4$ -DQPSK: 2Mbps, 8DPSK: 3Mbps BLE: GFSK: 1Mbps, 2Mbps, 125kbps, 500kbps Wi-Fi 2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0-MCS7, HT20/HT40 Wi-Fi 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0-MCS7, HT20/HT40 802.11ac: MCS0-MCS9, VHT20/40/80
Working Temperature	-30°C to 70°C
EUT Power Rating:	INPUT: 12V $\pm$ 2A (by adapter) or 20-42.5V DC (by MDB)

Note: For more details, please refer to the User's manual of the EUT.



2.2. Carrier Frequency of Channels

Band: 5150MHz-5250MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*36	5180	*44	5220
40	5200	*48	5240

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*38	5190	*46	5230

802.11ac VHT80

Channel	Frequency(MHz)
*42	5210

Band: 5725MHz-5850MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*149	5745	161	5805
153	5765	*165	5825
*157	5785		

802.11n HT40, 802.11ac VHT40

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*151	5755	*159	5795

802.11ac VHT80

Channel	Frequency(MHz)
*42	5210

Note: Channels remarked * are selected to perform test.



2.3. Test Mode and Test Software

- During testing, the interface cables and equipment positions were varied according to ANSI C63.10.
- The complete test system included support units and EUT for RF test.
- An executive program, "EngineerMode.app (Ver.: 4.4.104)" under Android system was executed to transmit and receive data via Wireless.
- The following test modes were performed for the test:

Conducted Emissions from the AC mains power ports	
Test Mode	Operating Description
1	802.11a (6Mbps) for 120V by adapter
2	802.11n HT20 (6.5Mbps) for AC120V by adapter
3	802.11n HT40 (13.5Mbps) for AC120V by adapter
4	802.11ac VHT20 (6.5Mbps) for AC120V by adapter
5	802.11ac VHT40 (13.5Mbps) for AC120V by adapter
6	802.11ac VHT80 (29.3Mbps) for AC120V by adapter
7	802.11a (6Mbps) for 120V by MDB
8	802.11a (6Mbps) for AC240V by adapter
caused "Test Mode 1,7 at CH48:5240MHz" generated the worst case, it was reported as the final data.	
Radiation Emissions (Below 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) by adapter
2	802.11n HT20 (6.5Mbps) by adapter
3	802.11n HT20 (13.5Mbps) by adapter
4	802.11ac VHT20 (6.5Mbps) by adapter
5	802.11ac VHT40 (13.5Mbps) by adapter
6	802.11ac VHT80 (29.3Mbps) by adapter
7	802.11a (6Mbps) by MDB
caused "Test Mode 1,7 at CH48:5240MHz" generated the worst case, it was reported as the final data.	
Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps)
2	802.11n HT20 (6.5Mbps)
3	802.11n HT20 (13.5Mbps)
4	802.11ac VHT20 (6.5Mbps)
5	802.11ac VHT40 (13.5Mbps)
6	802.11ac VHT80 (29.3Mbps)
caused "Test Mode 1, 4~6" generated the worst case, it was reported as the final data.	

Modulation Type	TX CONFIGURATION
802.11a	1TX
802.11n HT20	1TX
802.11n HT40	1TX
802.11ac VHT20	1TX
802.11ac VHT40	1TX
802.11ac VHT80	1TX
* VHT20/VHT40 covers HT20/HT40, due to same modulation. 802.11ac mode is the worst case for final tests except RF output power test after pretesting all modulation type.	



(For Above 1GHz)

Below test Channel generated the worst case, they were reported as the final data.

WIFI 5GHz	Channel	Frequency (MHz)	Bandedge	1GHz ~ 7GHz	7GHz ~ 18GHz	18GHz ~ 40GHz
20MHz	36	5180	v	v	v	
	44	5220	v	v	v	
	48	5240	v	v	v	v
	149	5745	v	v	v	
	157	5785	v	v	v	
	165	5825	v	v	v	
40MHz	38	5190	v	v	v	
	46	5230	v	v	v	
	151	5755	v	v	v	
	159	5795	v	v	v	
80MHz	42	5210	v	v	v	
	155	5775	v	v	v	

**2.4. Description of Test System**

AC Power Line Conducted Emission& Radiated Emissions (Below 1G)					
Equipment	Brand	Model	Serial No	Length/Type	Power cord/Length/Type
Adapter	CWT	2AAF042F	332-10622-01	N/A	N/A
MDB-Transverter	Waferstar	MDB-RS232	N/A	0.3m/NS	N/A
Adapter	DELTA	ADP-120XH B	N/A	1.5m/NS	N/A
Radiated Emissions (Above 1G) / RF Conducted					
Adapter	CWT	2AAF042F	332-10622-01	N/A	N/A



2.5. General Information of Test

Organization	Cerpass Technology Corp.		
☒ Test Site	Cerpass Technology Corporation Test Laboratory Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel: +886-3-3226-888 Fax: +886-3-3226-881		
	FCC	TW1439, TW1079	
	IC	4934E-1, 4934E-2	
Frequency Range Investigated	Conducted: from 150kHz to 30 MHz Radiation: from 9 kHz to 40,000MHz		
Test Distance	The test distance of radiated emission from antenna to EUT is 3 M.		

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2026/07/07	27.4°C / 48%	Leon Huang
Radiated Emissions	3M03-NK	2026/06/20~2026/06/30	23.6~24.6°C / 54~58%	Leon Huang
AC Power Line Conducted Emission	CON02-NK	2026/06/26	20.9°C / 68%	Leon Huang



2.6. Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Measurement Item	Uncertainty
AC Power Line Conduction(150kHz~30MHz)	$\pm 3.2\text{dB}$
Radiated Spurious Emission(9kHz~30MHz)	$\pm 3.4\text{dB}$
Radiated Spurious Emission(30MHz~1GHz)	$\pm 5.2\text{dB}$
Radiated Spurious Emission(1GHz~40GHz)	$\pm 5.2\text{dB}$
6dB Bandwidth	$\pm 4.4\%$
26dB Bandwidth	$\pm 4.5\%$
Occupied Bandwidth	$\pm 4.4\%$
Peak Output Power(Conducted Power Meter)	$\pm 1.4\text{dB}$
Power Spectral Density	$\pm 2.0\text{dB}$
Duty Cycle	$\pm 3.5\%$
Frequency Stability	$\pm 223.073\text{Hz}$



3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M03-NK)				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Bilog Antenna	Sunol	JB1	A020514-1	2025/09/08	2026/09/07
Active Loop Antenna	Schwarzbeck	FMZB 1513	00414	2026/02/04	2027/02/03
Horn Antenna	EMCO	3116	31974	2025/10/07	2026/10/06
Horn Antenna	EMCO	3115	00031589	2026/03/11	2027/03/10
Spectrum Analyzer 44GHz	ROHDE & SCHWARZ	FSV3044	101744	2026/04/01	2027/03/31
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2025/07/10	2026/07/09
Preamplifier	EMC INSTRUMENTS	EMC118A45V1S EE	981070	2026/04/02	2027/04/01
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2025/10/13	2026/10/12
Preamplifier	EM Electronics corp.	EM330	060611	2026/03/17	2027/03/16
Cable-4m(9k-3G)	EMEC	RG-223	18274M	2025/07/02	2026/07/01
Cable-0.5m(1G-18G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2026/03/09	2027/03/08
Cable-3m(1G-18G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2026/03/09	2027/03/08
Cable-3m(10M-40G)	HUBER SUHNER	SF102	804619/2	2025/10/13	2026/10/12
Cable-1m(10M-40G)	HUBER SUHNER	SF102	804398/2	2025/10/13	2026/10/12
Cable-8m(1G-26.5G)	WOKEN	WCBA-WCA203 SM	CCE1374	2026/03/09	2027/03/08
Cable-4m(30M-1G)	HUBER SUHNER	RG-214	02953M	2025/07/11	2026/07/10
Cable-1m(30M-1G)	HUBER SUHNER	RG-214	05094M	2025/07/11	2026/07/10
Cable-9m(30M-1G)	HUBER SUHNER	RG-214	00402M	2025/07/11	2026/07/10
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA
High Pass Filter	Warison	WFIL-H3000-18 000F-03	WR377WC2B1	2025/10/15	2026/10/14
Highpass Filter	WOKEN	WFIL-H7000-18 000F-01	WR377WC2B2	2025/10/15	2026/10/14

Test Item	RF Conducted				
Test Site	RFCON01-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200207	2026/04/01	2027/03/30
Attenuator	AGILENT	8491B	MY39250703	2026/01/29	2027/01/28
Power Meter	Anritsu	ML2495A	1224005	2026/01/27	2027/01/26
Power Sensor	Anritsu	MA2411B	1207295	2026/01/27	2027/01/26

Test Item	AC Power Line Conducted Emission				
Test Site	CON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2025/07/10	2026/07/09
Two-Line V-Network	ROHDE & SCHWARZ	ENV216	102185	2025/08/28	2026/08/27
Two-Line V-Network	ROHDE & SCHWARZ	ENV216	101584	2026/01/15	2027/01/14
Cable-4m(9k-3G)	EMEC	RG-223	18274M	2025/07/02	2026/07/01
E3	AUDIX	v8.2014-8-6	RK-000536	NA	NA



4. Antenna Requirements

4.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.2. Antenna Construction and Directional Gain

Antenna Type	FPC Antenna
Antenna Gain	5150MHz - 5250MHz: 1.84dBi 5725MHz - 5850MHz: 1.93dBi



5. Test of AC Power Line Conducted Emission

5.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 kHz, according to the methods defined in ANSI C63.10-2020+Cor.1-2023 and ANSI C63.10a-2024. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

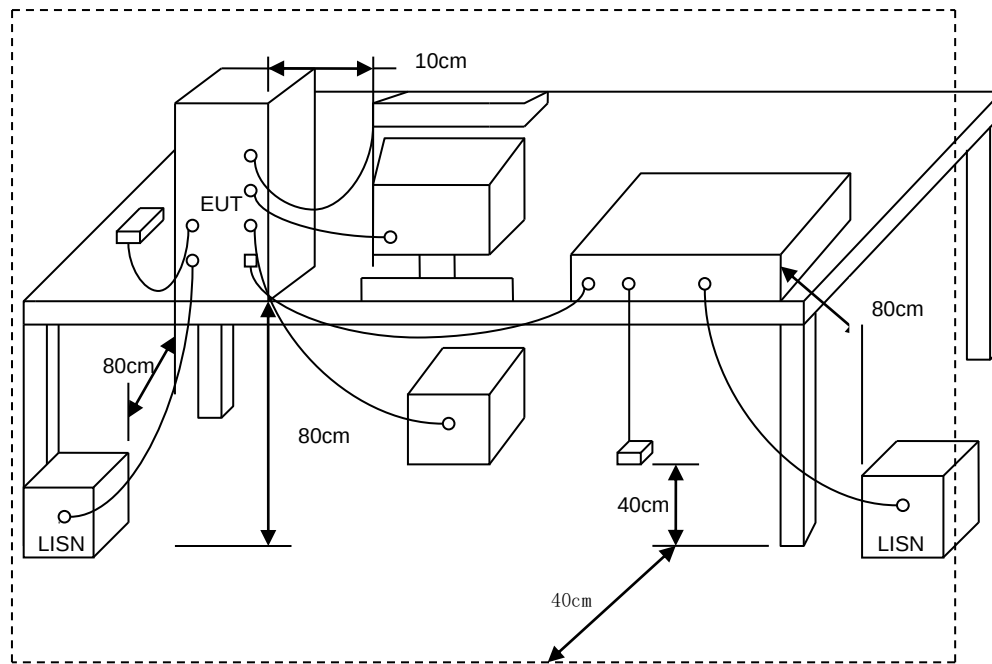
*Decreases with the logarithm of the frequency.

5.2. Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



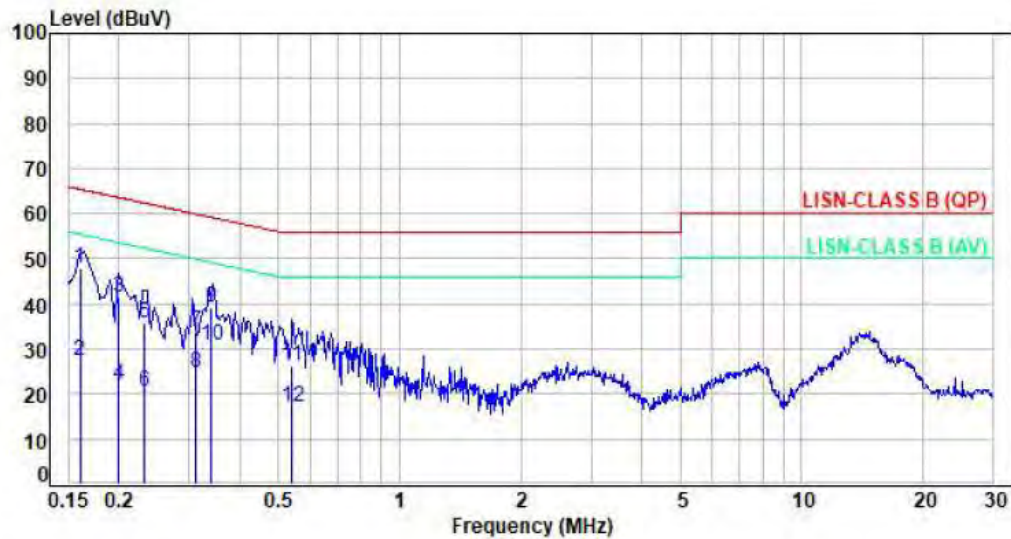
5.3. Typical Test Setup





5.4. Test Result and Data

Power	:	DC 12V From Adapter (AC 120V/60Hz)	Pol/Phase	:	LINE
Test Mode	:	Mode 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	P/F
1	0.1603	9.78	38.15	47.93	65.45	-17.52	QP	P
2	0.1603	9.78	17.63	27.41	55.45	-28.04	Average	P
3	0.2007	9.79	31.84	41.63	63.58	-21.95	QP	P
4	0.2007	9.79	12.30	22.09	53.58	-31.49	Average	P
5	0.2309	9.79	25.99	35.78	62.42	-26.64	QP	P
6	0.2309	9.79	10.77	20.56	52.42	-31.86	Average	P
7	0.3112	9.78	24.13	33.91	59.94	-26.03	QP	P
8	0.3112	9.78	15.10	24.88	49.94	-25.06	Average	P
9	0.3404	9.79	29.56	39.35	59.19	-19.84	QP	P
10	0.3404	9.79	20.85	30.64	49.19	-18.55	Average	P
11	0.5397	9.79	16.63	26.42	56.00	-29.58	QP	P
12	0.5397	9.79	7.29	17.08	46.00	-28.92	Average	P

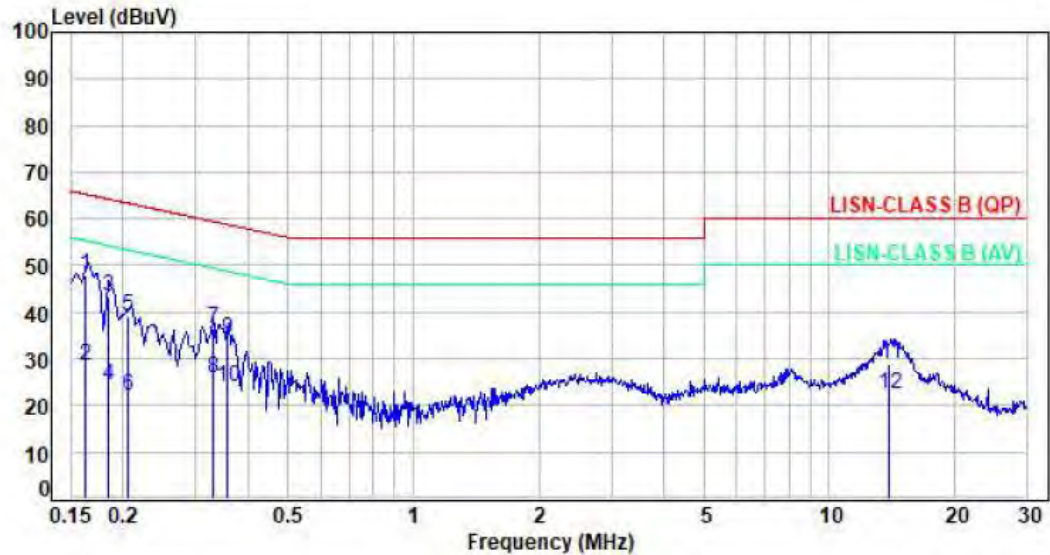
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



Power	:	DC 12V From Adapter (AC 120V/60Hz)	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1633	9.79	37.99	47.78	65.30	-17.52	QP	P
2	0.1633	9.79	18.72	28.51	55.30	-26.79	Average	P
3	0.1844	9.80	33.61	43.41	64.29	-20.88	QP	P
4	0.1844	9.80	14.37	24.17	54.29	-30.12	Average	P
5	0.2064	9.80	29.28	39.08	63.35	-24.27	QP	P
6	0.2064	9.80	12.35	22.15	53.35	-31.20	Average	P
7	0.3295	9.79	26.89	36.68	59.46	-22.78	QP	P
8	0.3295	9.79	16.17	25.96	49.46	-23.50	Average	P
9	0.3569	9.80	24.51	34.31	58.80	-24.49	QP	P
10	0.3569	9.80	14.29	24.09	48.80	-24.71	Average	P
11	13.9645	10.13	18.69	28.82	60.00	-31.18	QP	P
12	13.9645	10.13	12.27	22.40	50.00	-27.60	Average	P

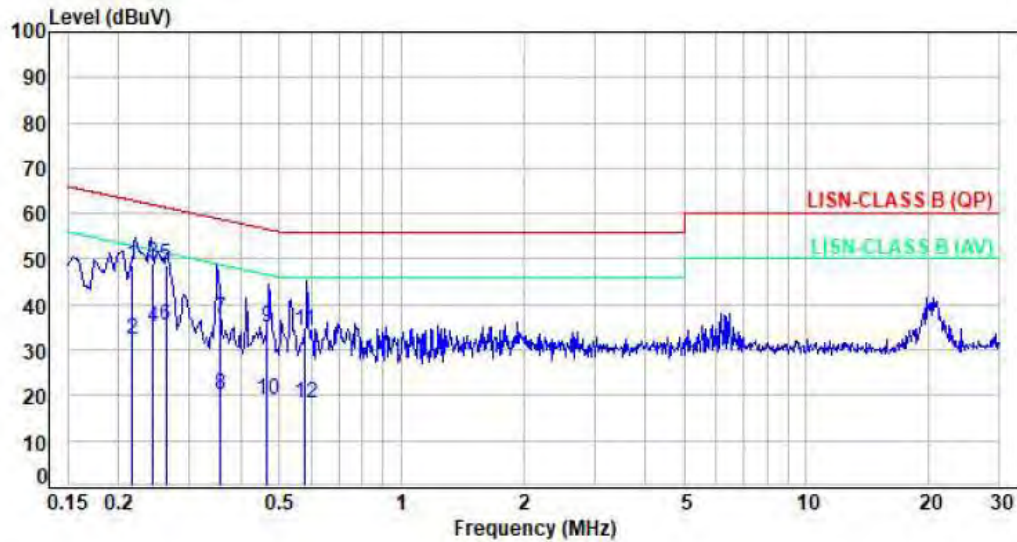
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



Power	:	DC 24V by MDB From Adapter (AC 120V/60Hz)	Pol/Phase	:	LINE
Test Mode	:	Mode 7, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2157	9.79	38.74	48.53	62.98	-14.45	QP	P
2	0.2157	9.79	22.62	32.41	52.98	-20.57	Average	P
3	0.2443	9.79	39.13	48.92	61.95	-13.03	QP	P
4	0.2443	9.79	25.24	35.03	51.95	-16.92	Average	P
5	0.2619	9.79	39.02	48.81	61.37	-12.56	QP	P
6	0.2619	9.79	25.61	35.40	51.37	-15.97	Average	P
7	0.3567	9.79	26.92	36.71	58.80	-22.09	QP	P
8	0.3567	9.79	10.40	20.19	48.80	-28.61	Average	P
9	0.4661	9.79	25.34	35.13	56.58	-21.45	QP	P
10	0.4661	9.79	9.25	19.04	46.58	-27.54	Average	P
11	0.5775	9.79	24.60	34.39	56.00	-21.61	QP	P
12	0.5775	9.79	8.61	18.40	46.00	-27.60	Average	P

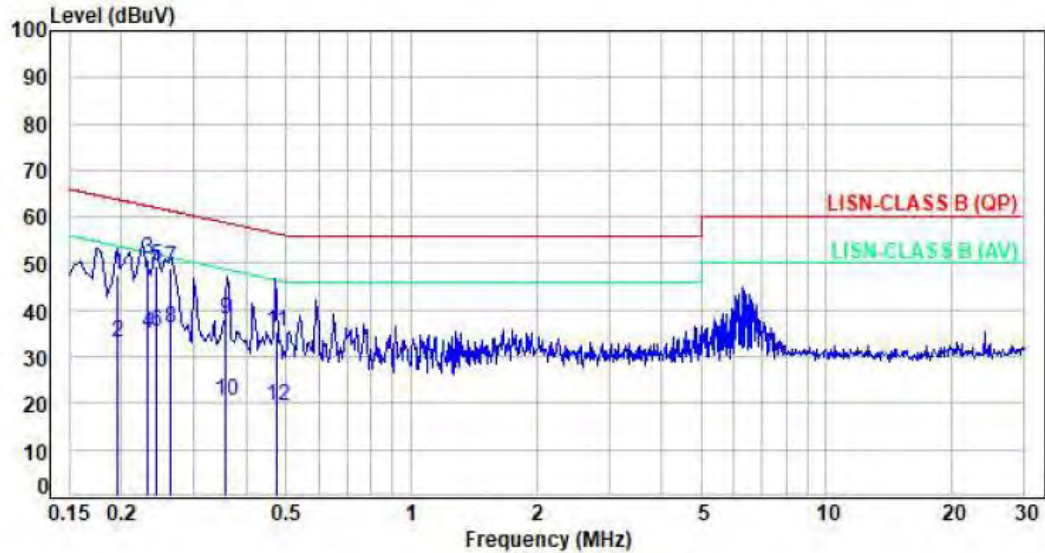
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



Power	:	DC 24V by MDB From Adapter (AC 120V/60Hz)	Pol/Phase	:	NEUTRAL
Test Mode	:	Mode 7, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	P/F
1	0.1966	9.80	37.71	47.51	63.75	-16.24	QP	P
2	0.1966	9.80	23.17	32.97	53.75	-20.78	Average	P
3	0.2312	9.80	41.27	51.07	62.41	-11.34	QP	P
4	0.2312	9.80	25.35	35.15	52.41	-17.26	Average	P
5	0.2427	9.80	39.71	49.51	62.01	-12.50	QP	P
6	0.2427	9.80	25.59	35.39	52.01	-16.62	Average	P
7	0.2633	9.80	39.11	48.91	61.33	-12.42	QP	P
8	0.2633	9.80	26.16	35.96	51.33	-15.37	Average	P
9	0.3561	9.80	28.31	38.11	58.82	-20.71	QP	P
10	0.3561	9.80	10.61	20.41	48.82	-28.41	Average	P
11	0.4726	9.80	25.38	35.18	56.47	-21.29	QP	P
12	0.4726	9.80	9.46	19.26	46.47	-27.21	Average	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



6. Test of Spurious Emission (Radiated)

6.1. Test Limit

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.



6.2. Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- i. "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

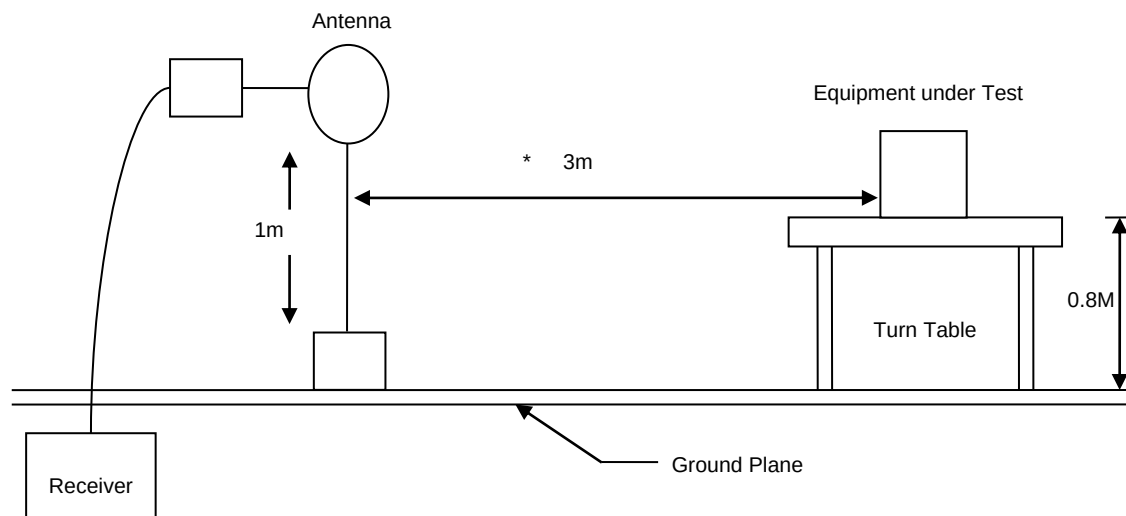
Note:

1. The supporting fixture shall permit orientation of the EUT in each of three orthogonal axis positions such that emissions from the EUT are maximized.
(X-AXIS is the worst.)

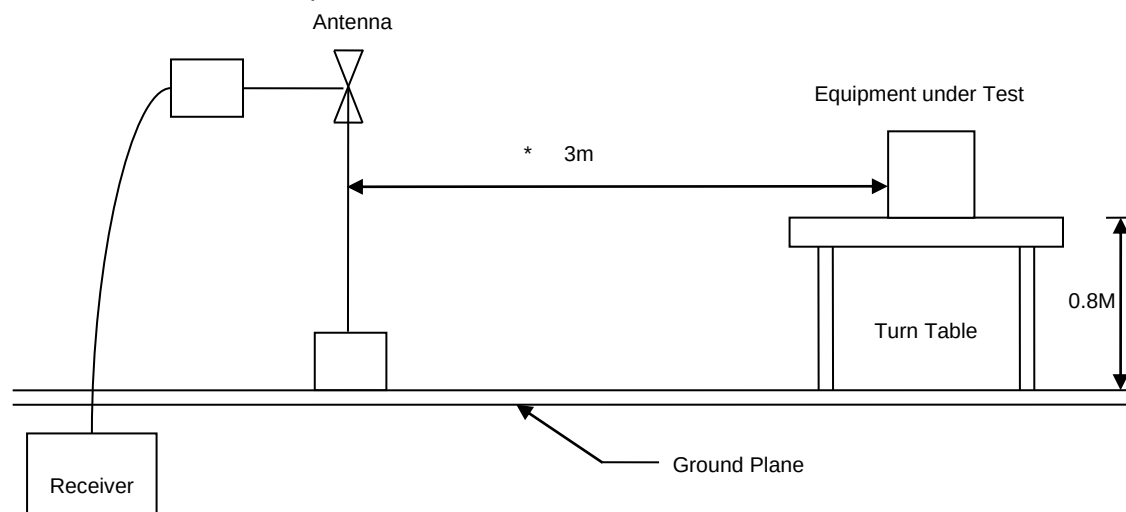


6.3. Typical Test Setup

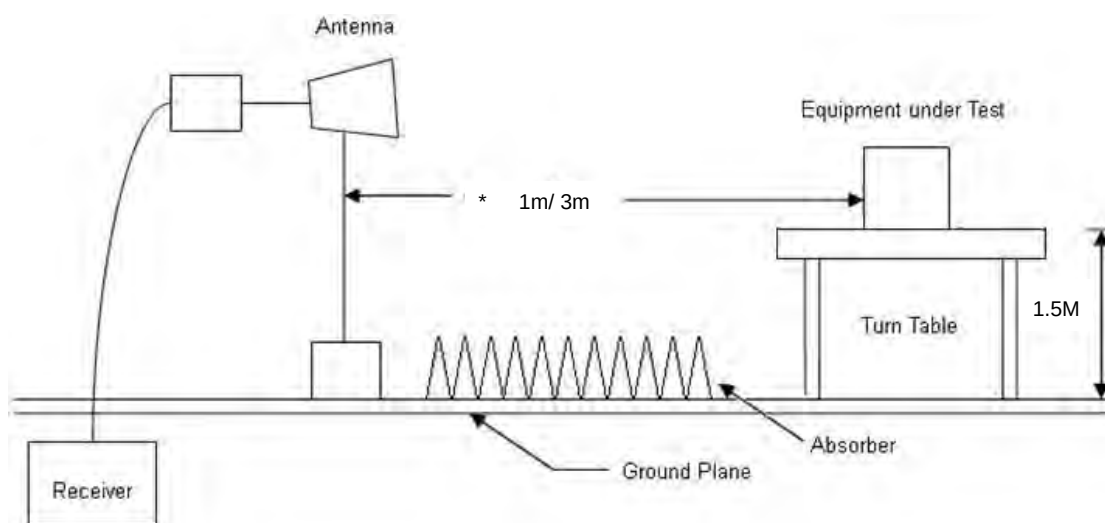
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



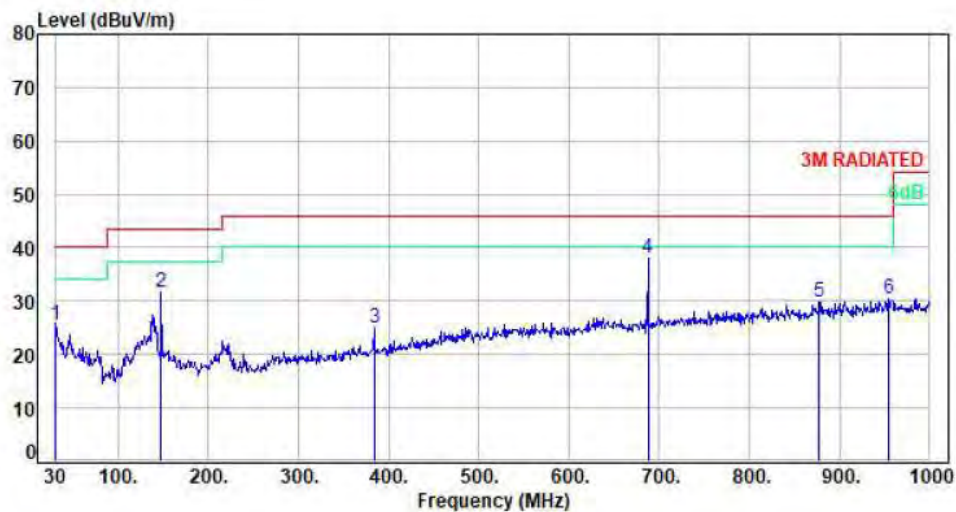


6.4. Test Result and Data (9kHz ~ 30MHz)

The 9kHz - 30MHz spurious emission is under limit 20dB more.

6.5. Test Result and Data (30MHz ~ 1GHz)

Power	:	DC 12V From Adapter (AC 120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, CH48		:	

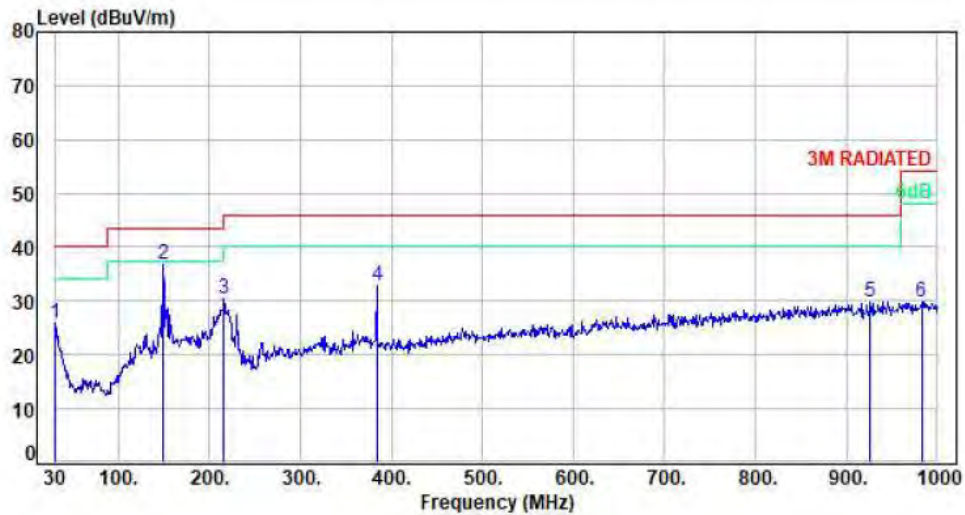


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.97	-3.59	29.10	25.51	40.00	-14.49	Peak	100	146	P
2	147.37	-9.40	41.09	31.69	43.50	-11.81	Peak	100	66	P
3	384.05	-6.36	31.18	24.82	46.00	-21.18	Peak	100	26	P
4	687.66	-0.57	38.64	38.07	46.00	-7.93	Peak	100	170	P
5	877.78	2.42	27.37	29.79	46.00	-16.21	Peak	100	173	P
6	954.41	3.33	27.03	30.36	46.00	-15.64	Peak	100	181	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	DC 12V From Adapter (AC 120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.97	-3.59	29.34	25.75	40.00	-14.25	Peak	100	31	P
2	149.31	-9.59	46.49	36.90	43.50	-6.60	Peak	100	88	P
3	216.24	-11.36	41.65	30.29	46.00	-15.71	Peak	100	277	P
4	384.05	-6.36	39.20	32.84	46.00	-13.16	Peak	100	104	P
5	926.28	2.67	27.13	29.80	46.00	-16.20	Peak	100	360	P
6	982.54	3.66	26.17	29.83	54.00	-24.17	Peak	100	348	P

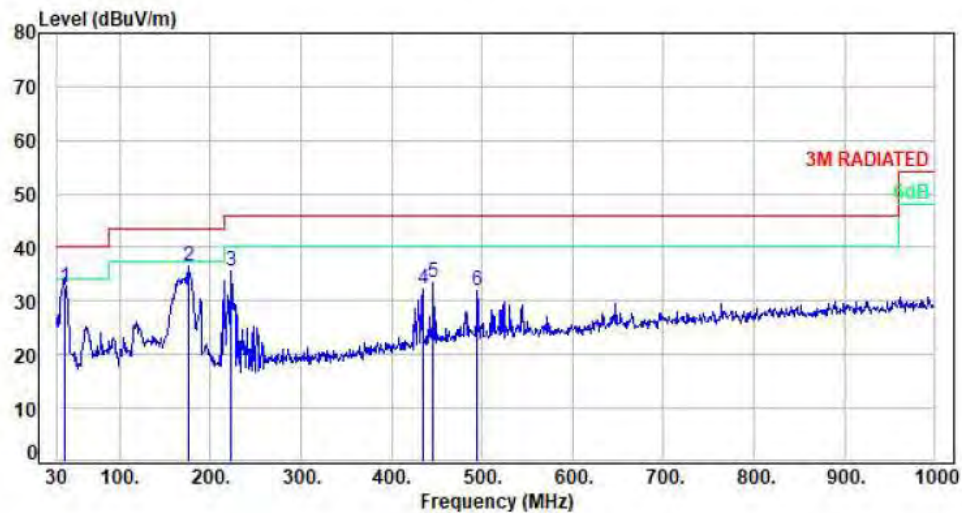
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	DC 24V by MDB From Adapter (AC 120V/60Hz)	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 7, CH48		:	

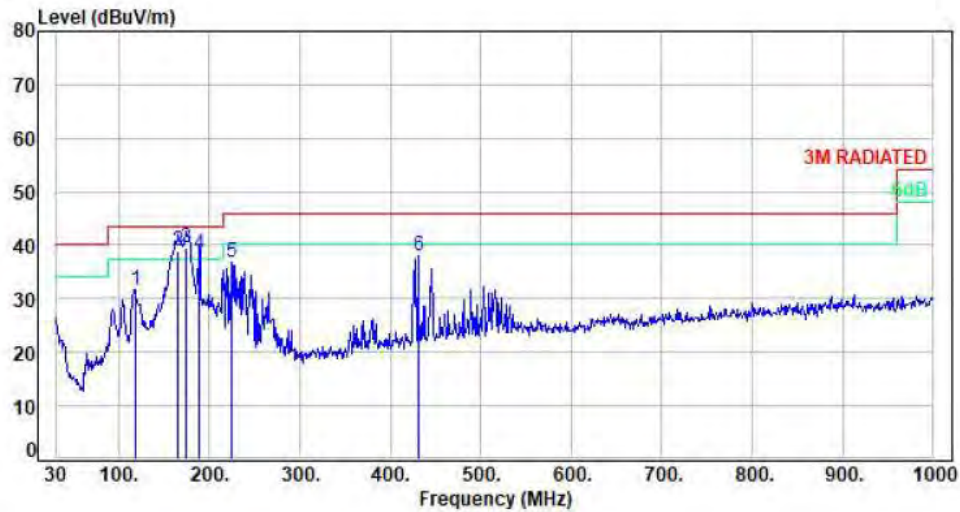


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	38.73	-9.18	41.62	32.44	40.00	-7.56	QP	100	123	P
2	176.47	-10.78	47.35	36.57	43.50	-6.93	Peak	100	154	P
3	223.03	-11.20	46.64	35.44	46.00	-10.56	Peak	100	99	P
4	434.49	-4.69	36.86	32.17	46.00	-13.83	Peak	100	171	P
5	446.13	-4.26	37.87	33.61	46.00	-12.39	Peak	100	176	P
6	494.63	-3.28	35.15	31.87	46.00	-14.13	Peak	100	165	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	DC 24V by MDB From Adapter (AC 120V/60Hz)	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 7, CH48		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	118.27	-8.57	40.32	31.75	43.50	-11.75	Peak	100	235	P
2	165.80	-10.16	49.04	38.88	43.50	-4.62	QP	100	180	P
3	174.53	-10.64	50.26	39.62	43.50	-3.88	QP	100	271	P
4	189.08	-10.76	48.98	38.22	43.50	-5.28	QP	100	196	P
5	224.97	-11.16	47.96	36.80	46.00	-9.20	Peak	100	105	P
6	430.61	-4.86	42.93	38.07	46.00	-7.93	Peak	100	149	P

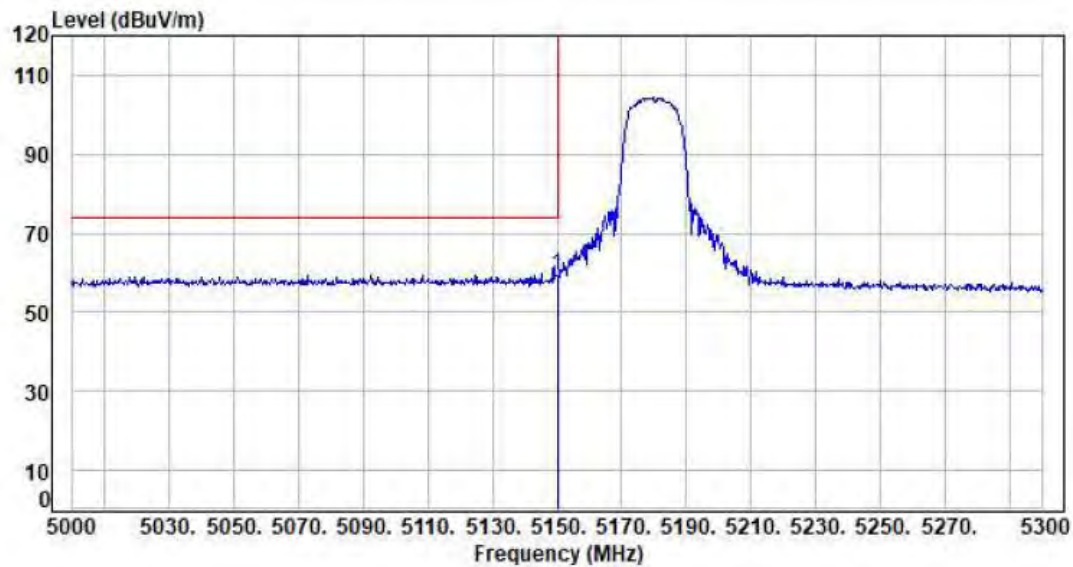
Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor



6.6. Test Result and Data (Bandedge)

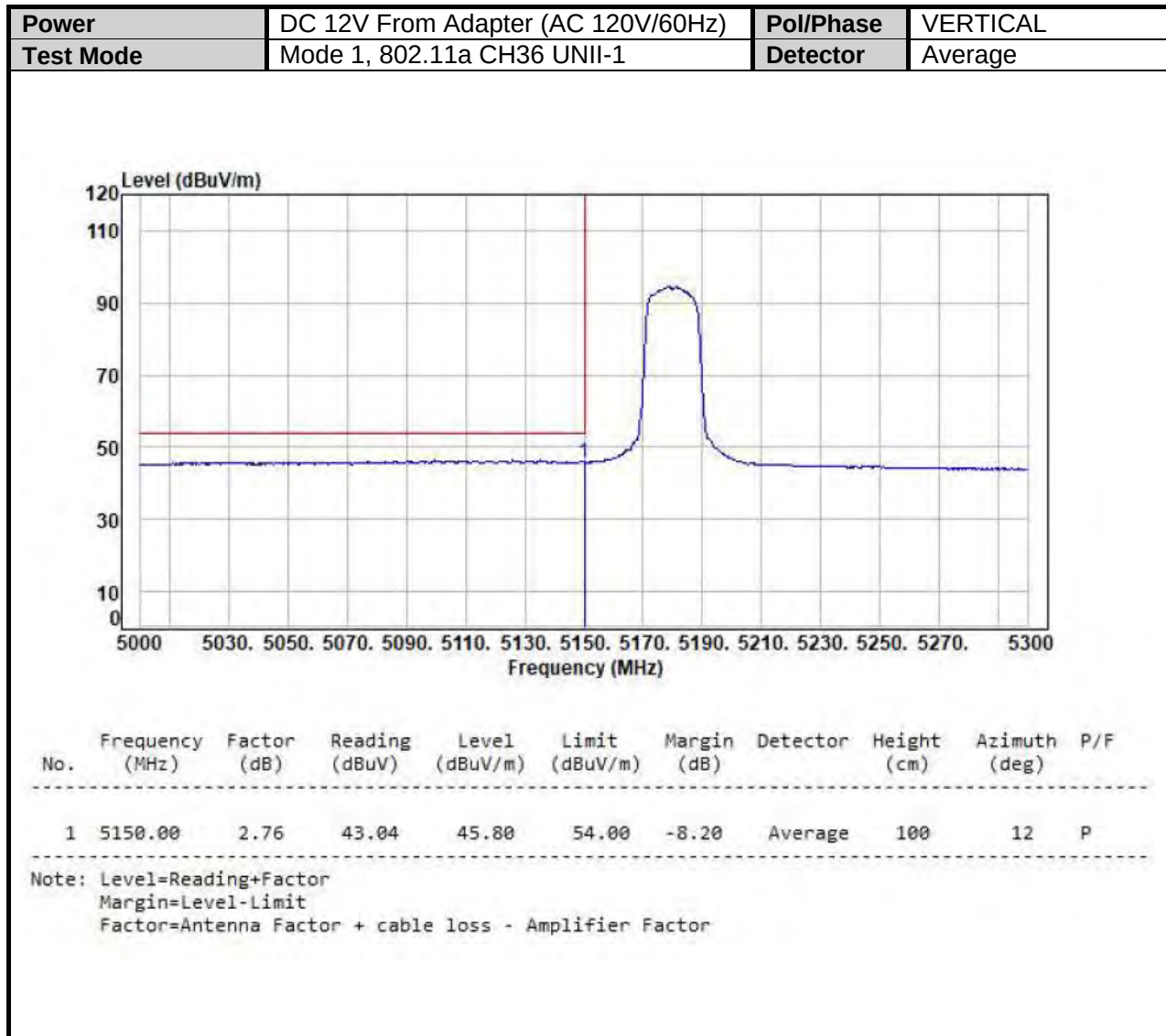
UNII-1

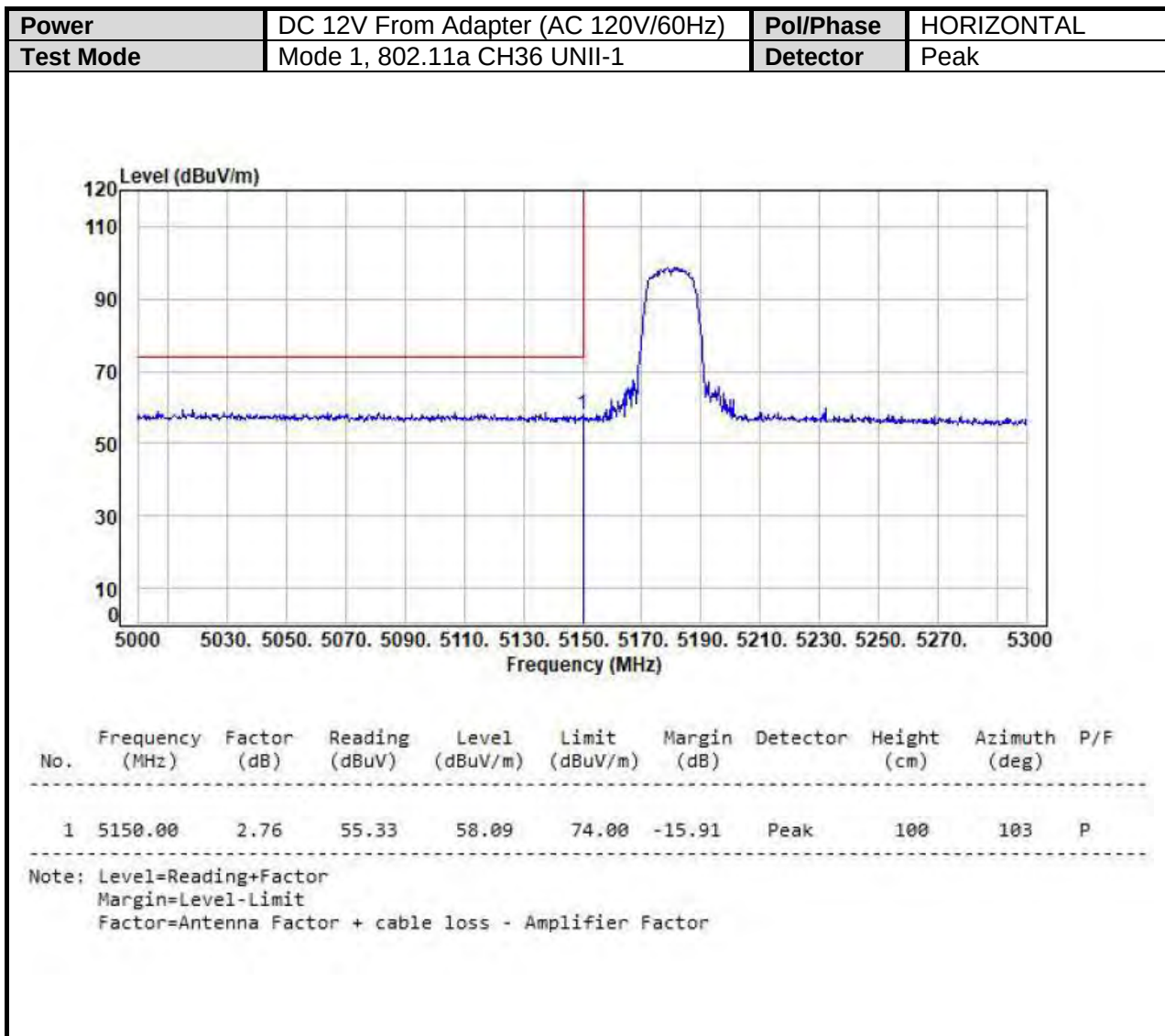
Power	DC 12V From Adapter (AC 120V/60Hz)	Pol/Phase	VERTICAL
Test Mode	Mode 1, 802.11a CH36 UNII-1	Detector	Peak

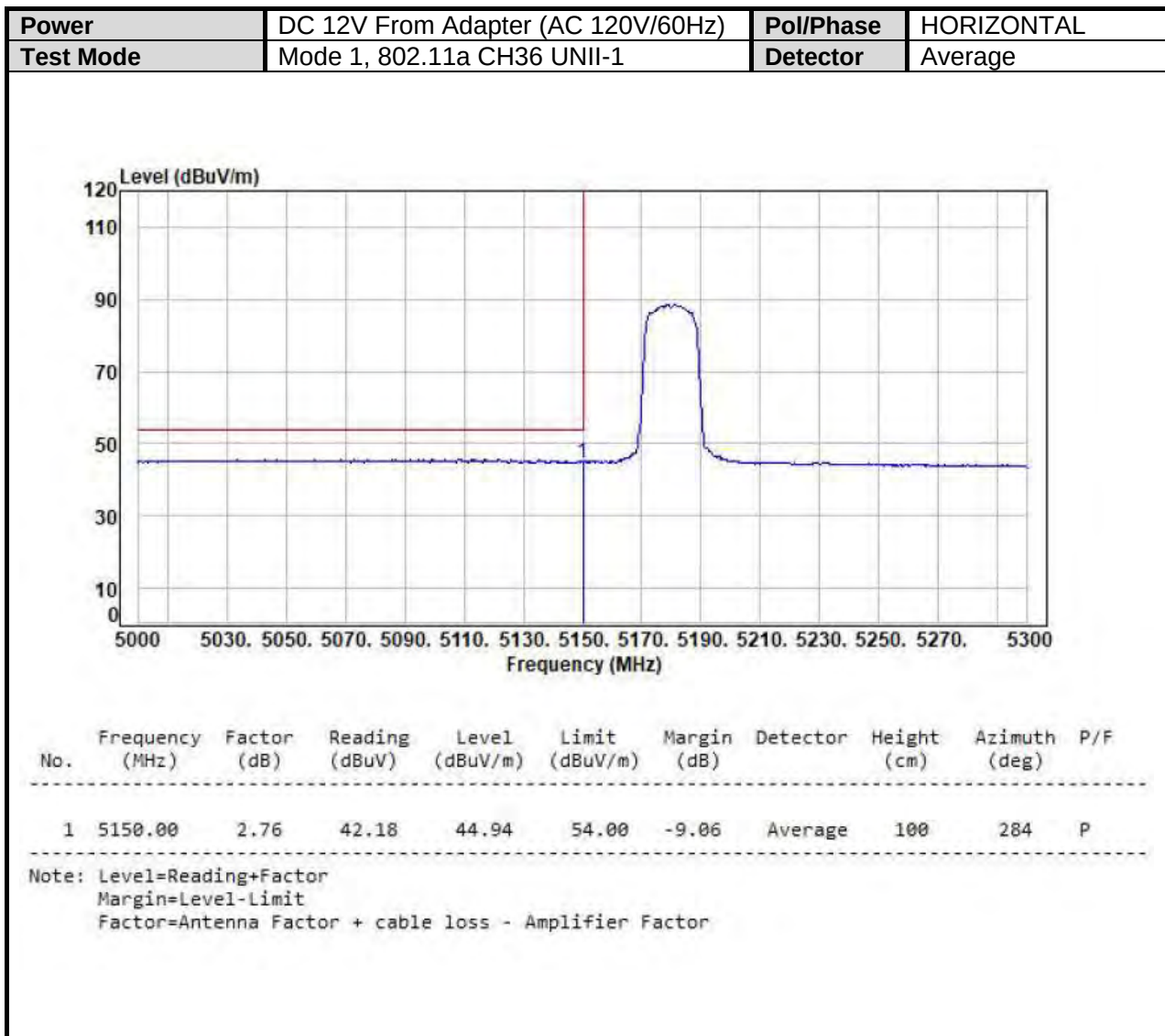


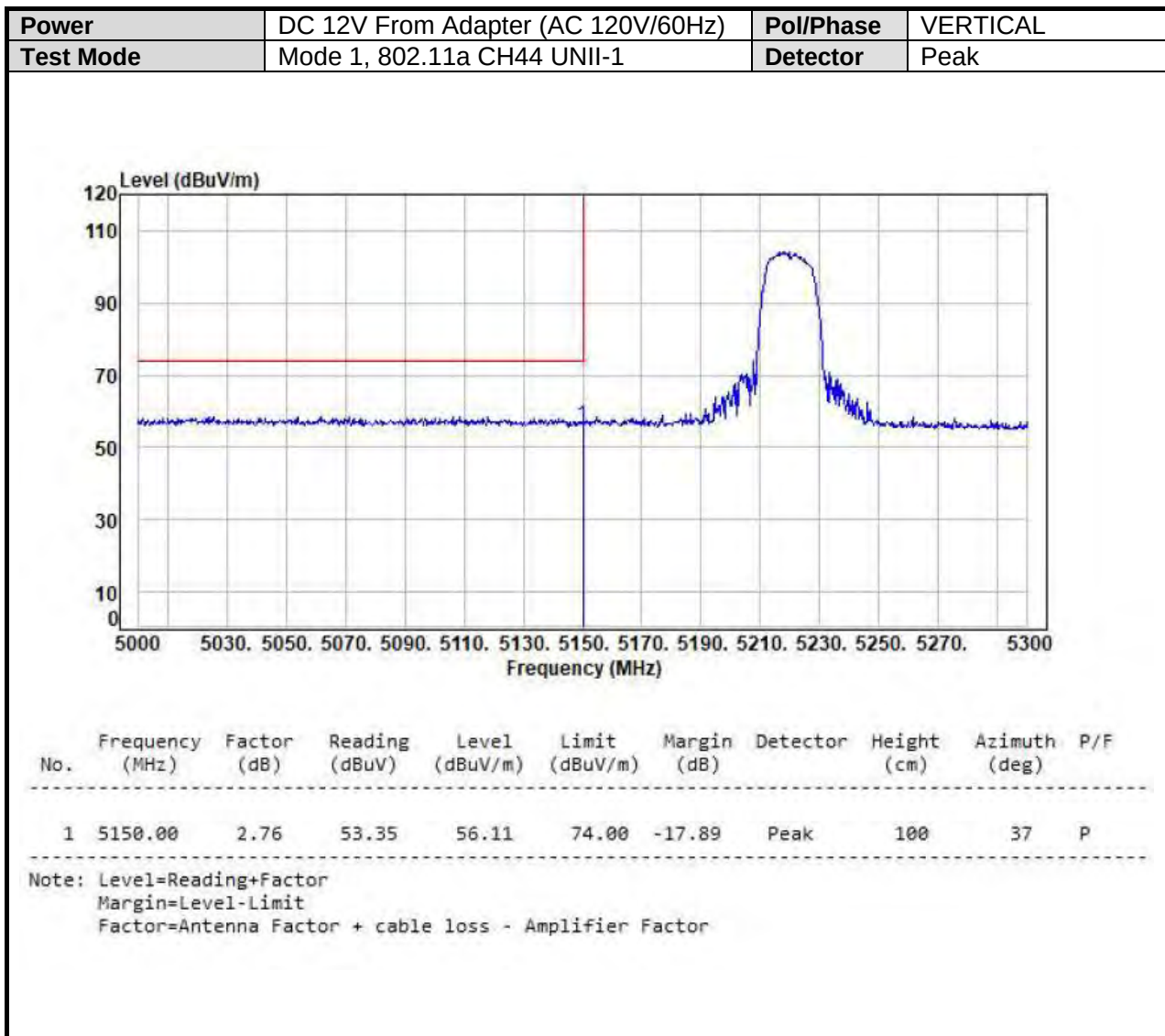
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	2.76	56.56	59.32	74.00	-14.68	Peak	100	44	P

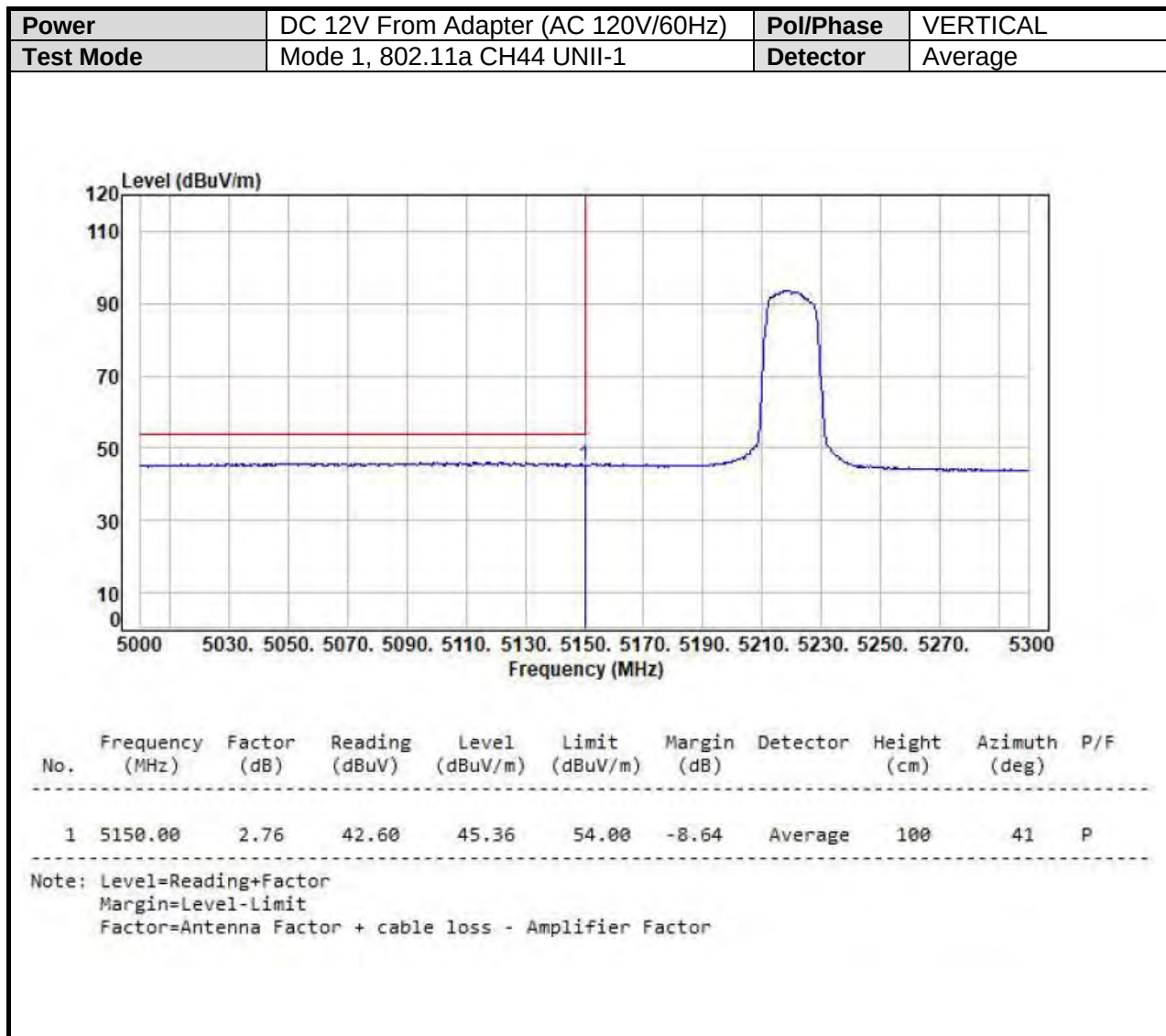
Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

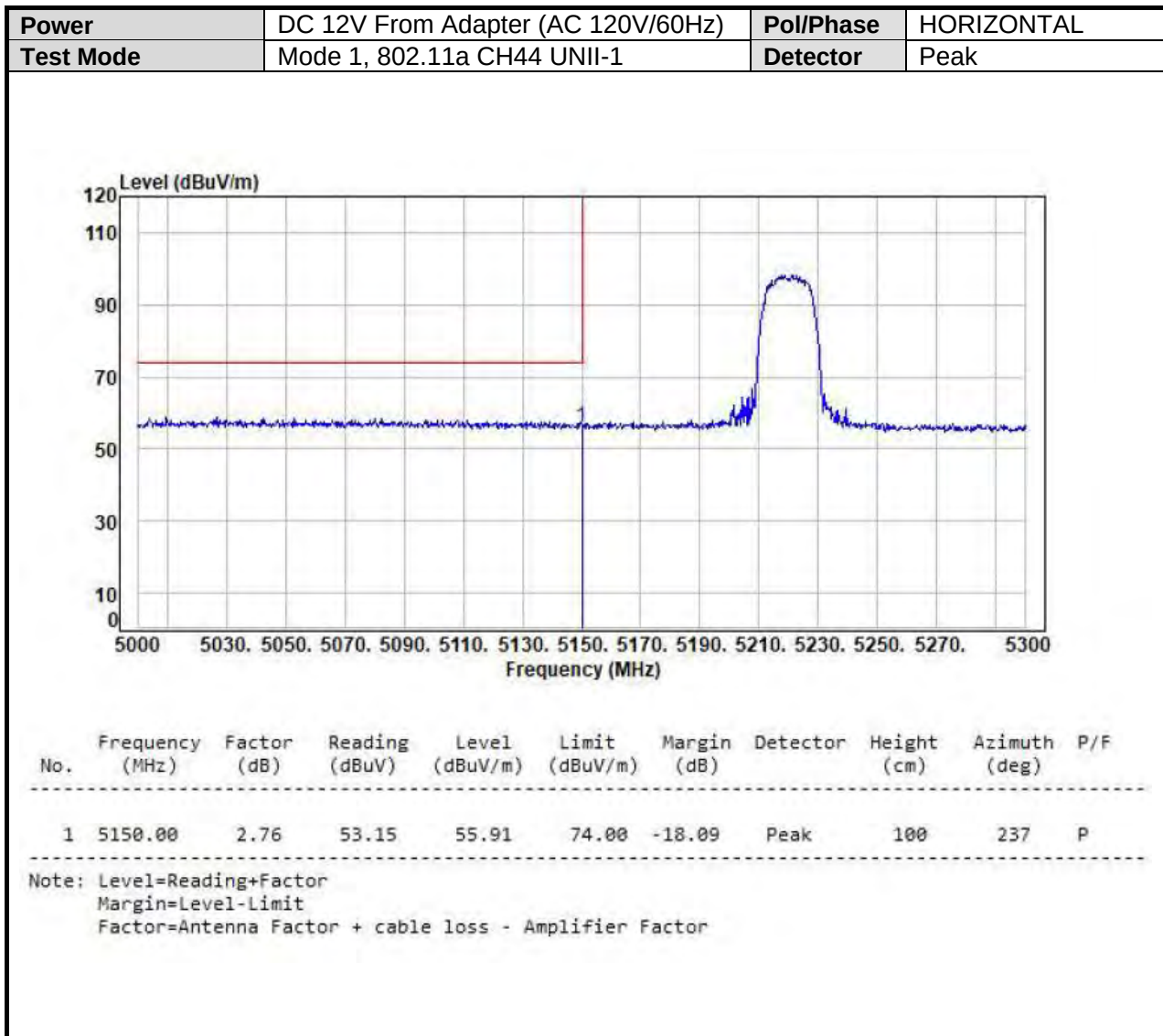


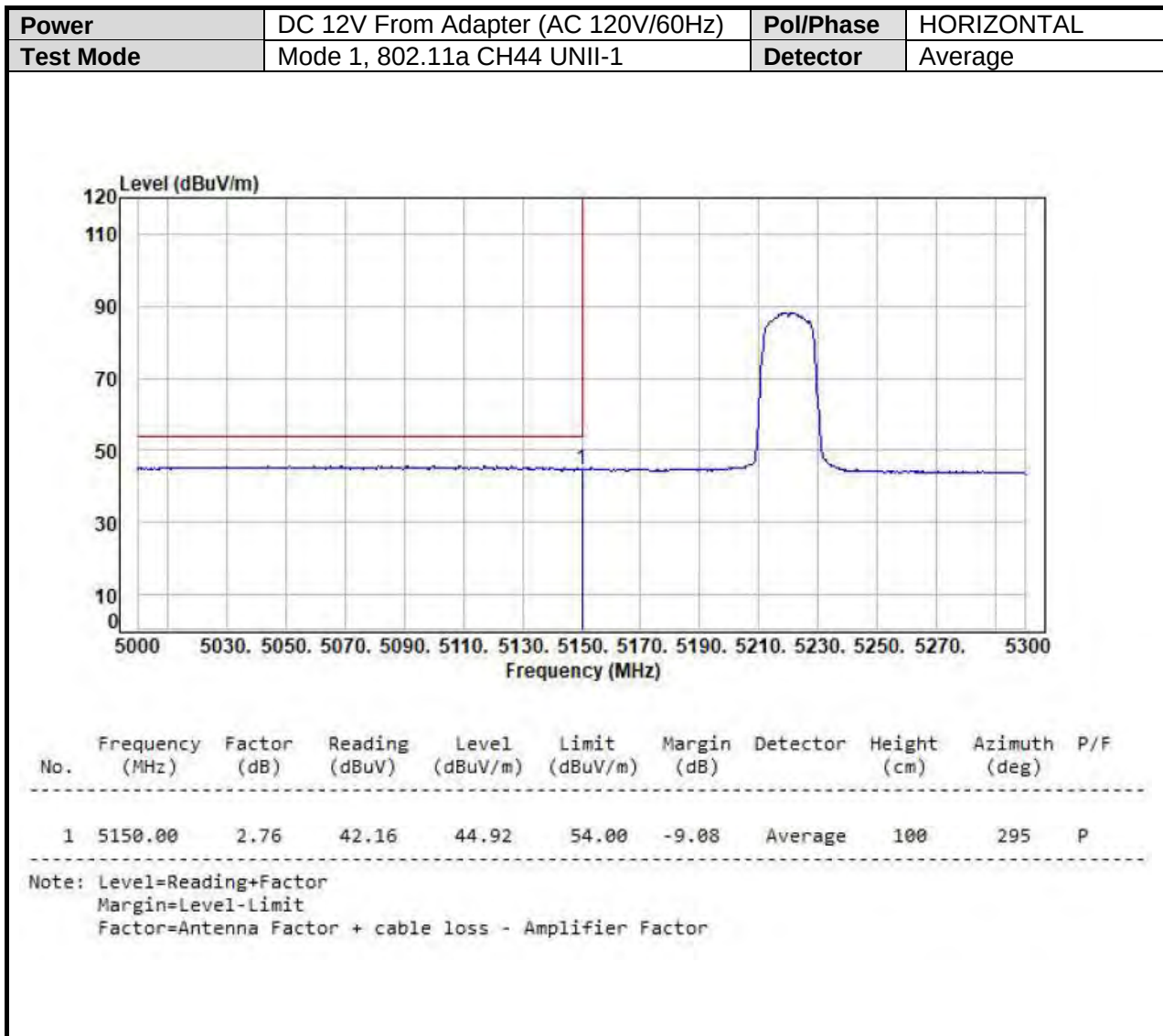


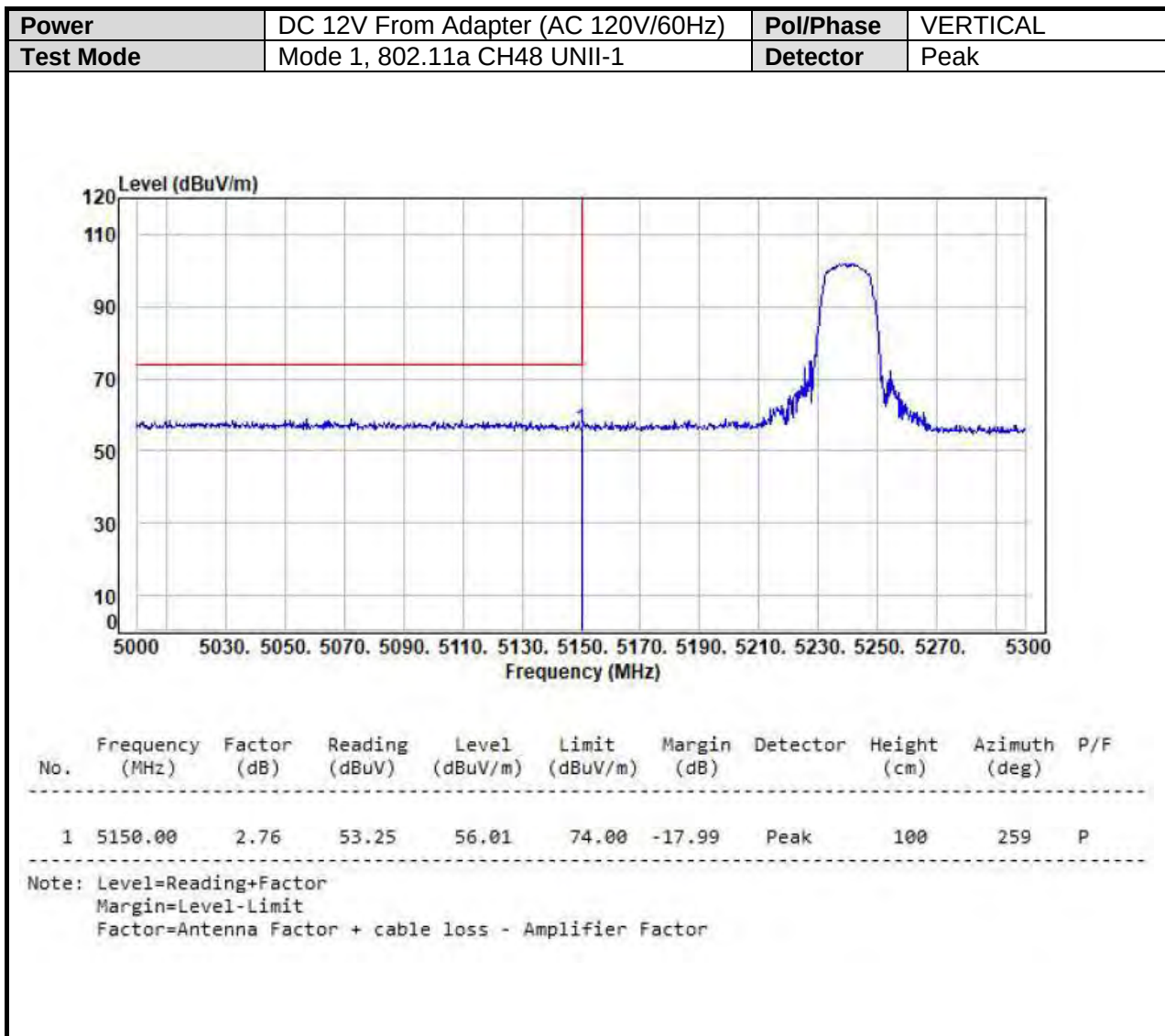


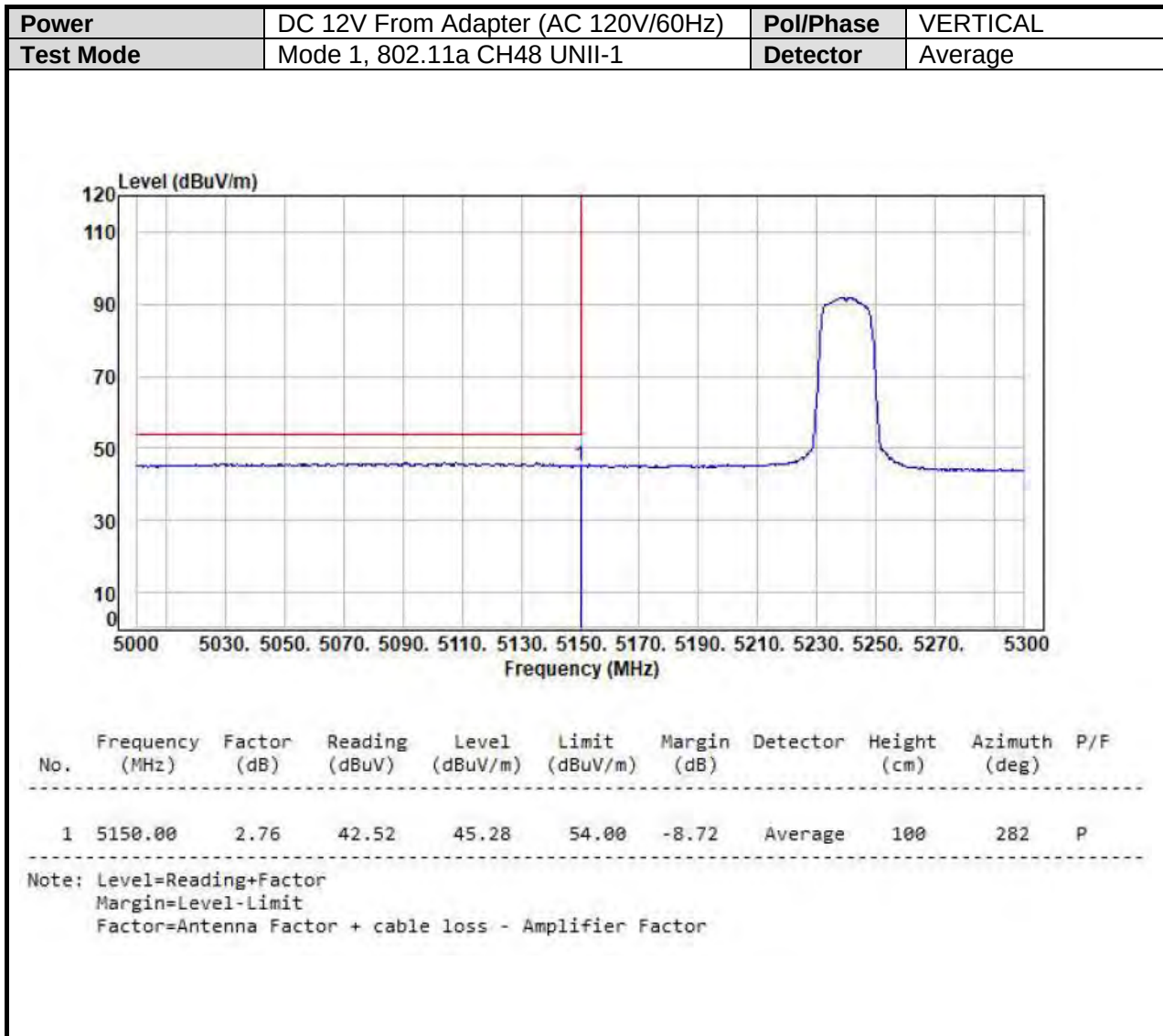


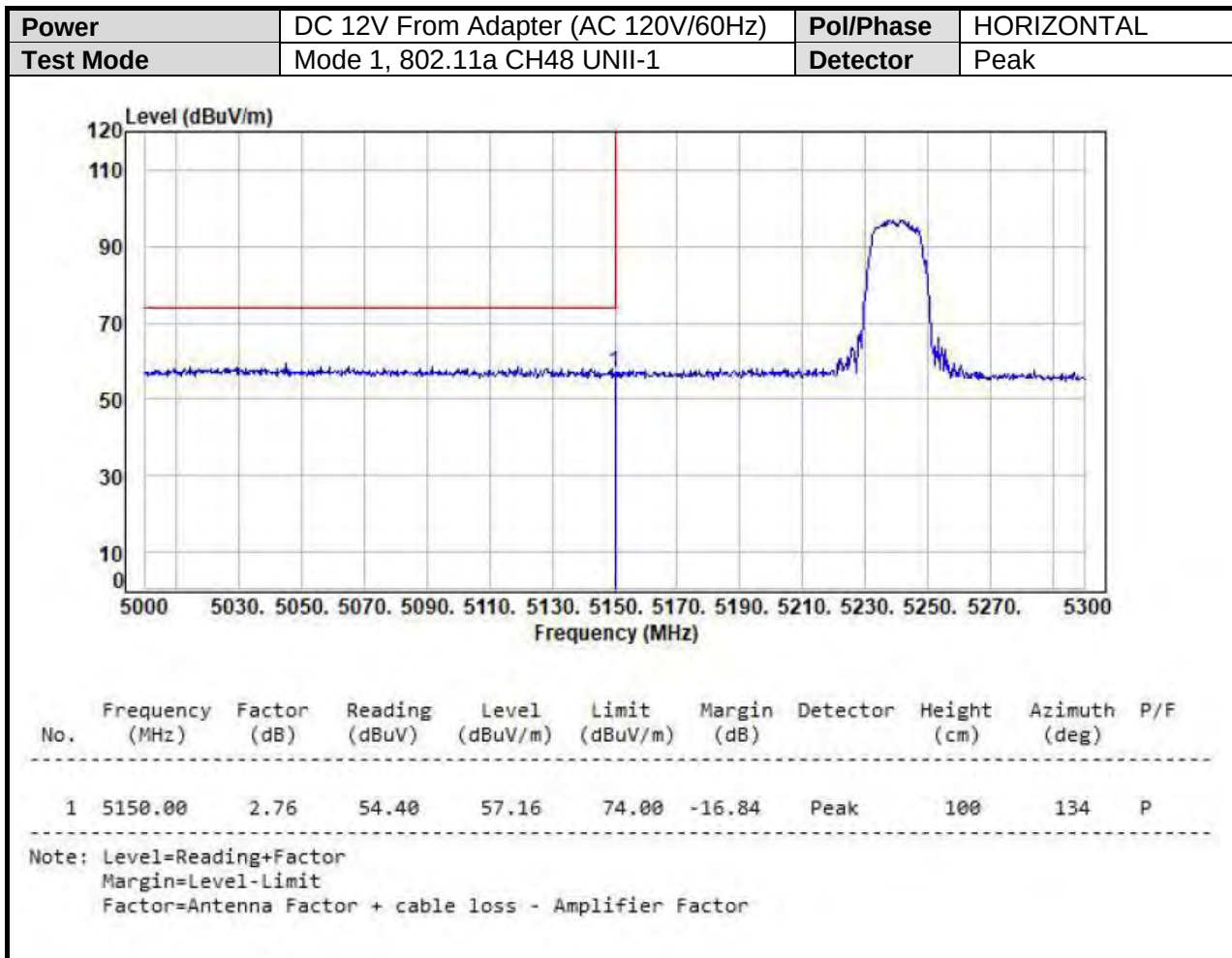


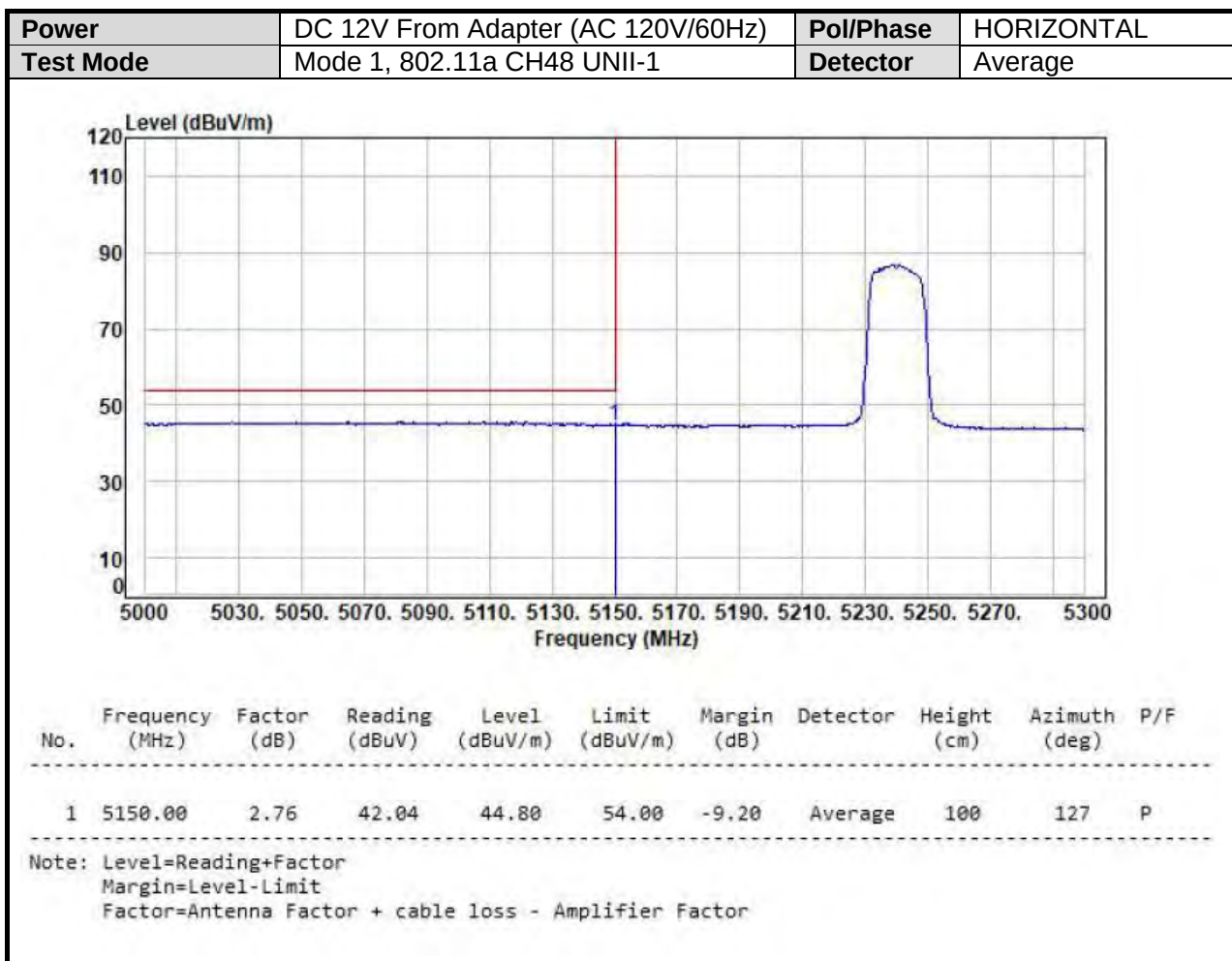


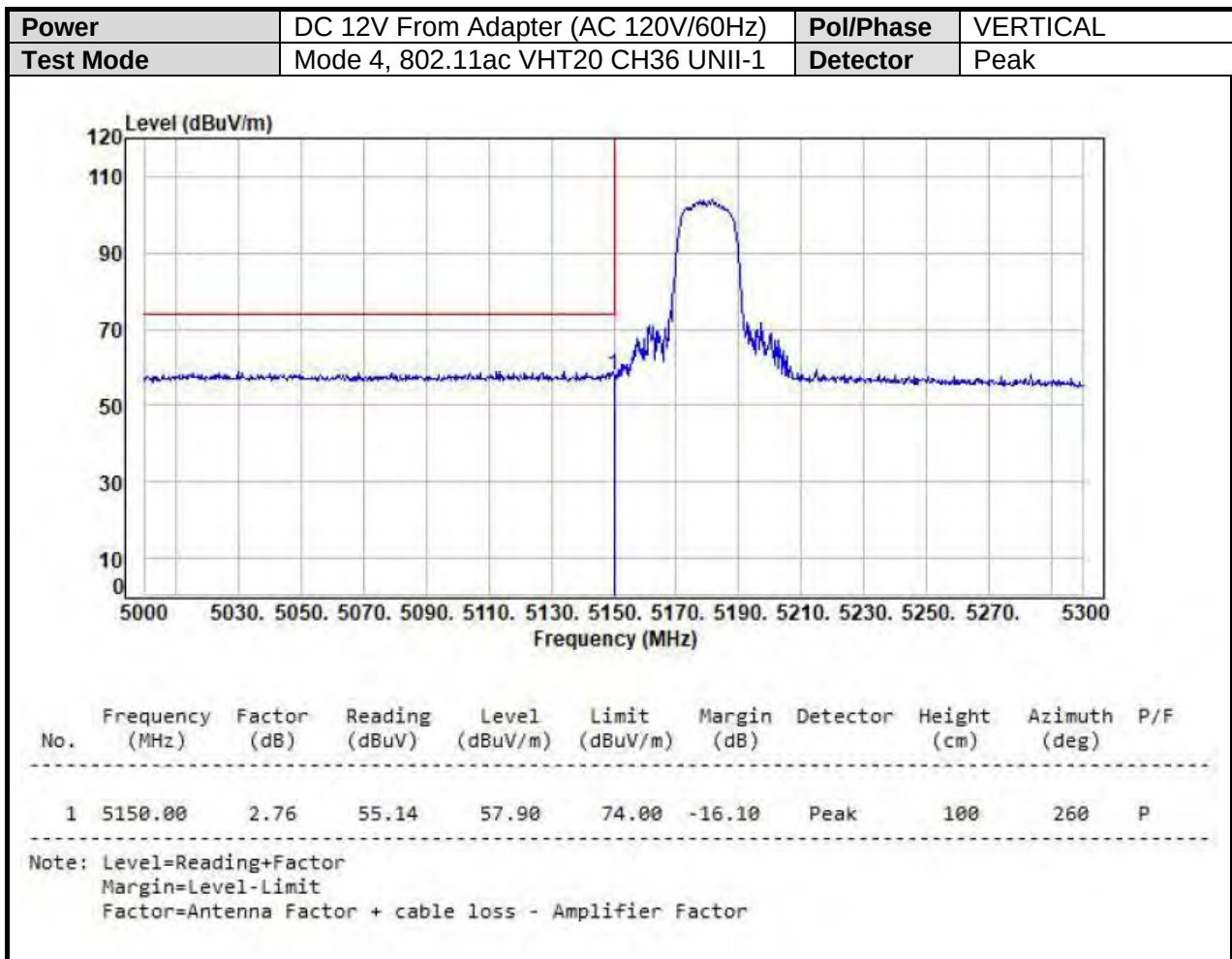


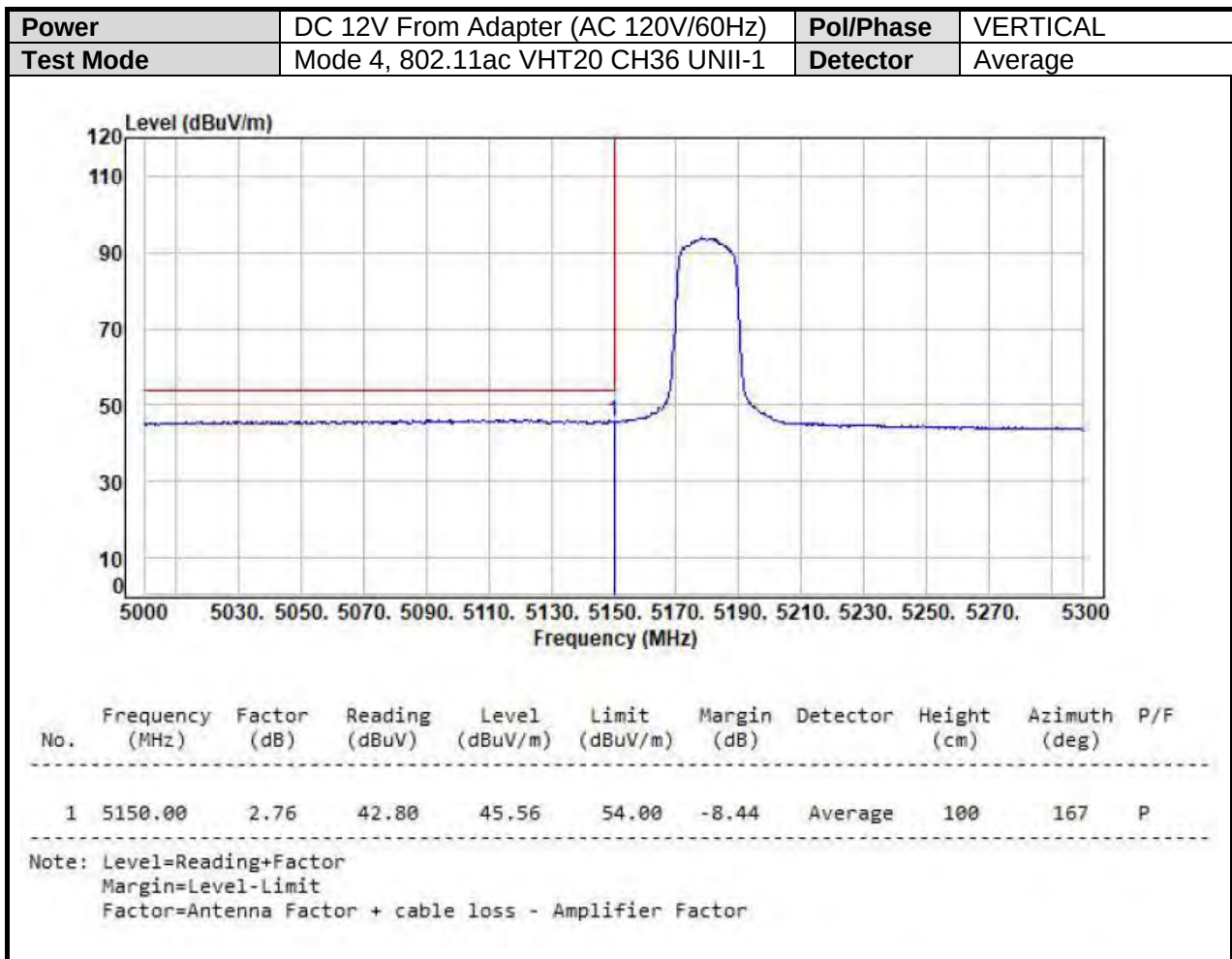


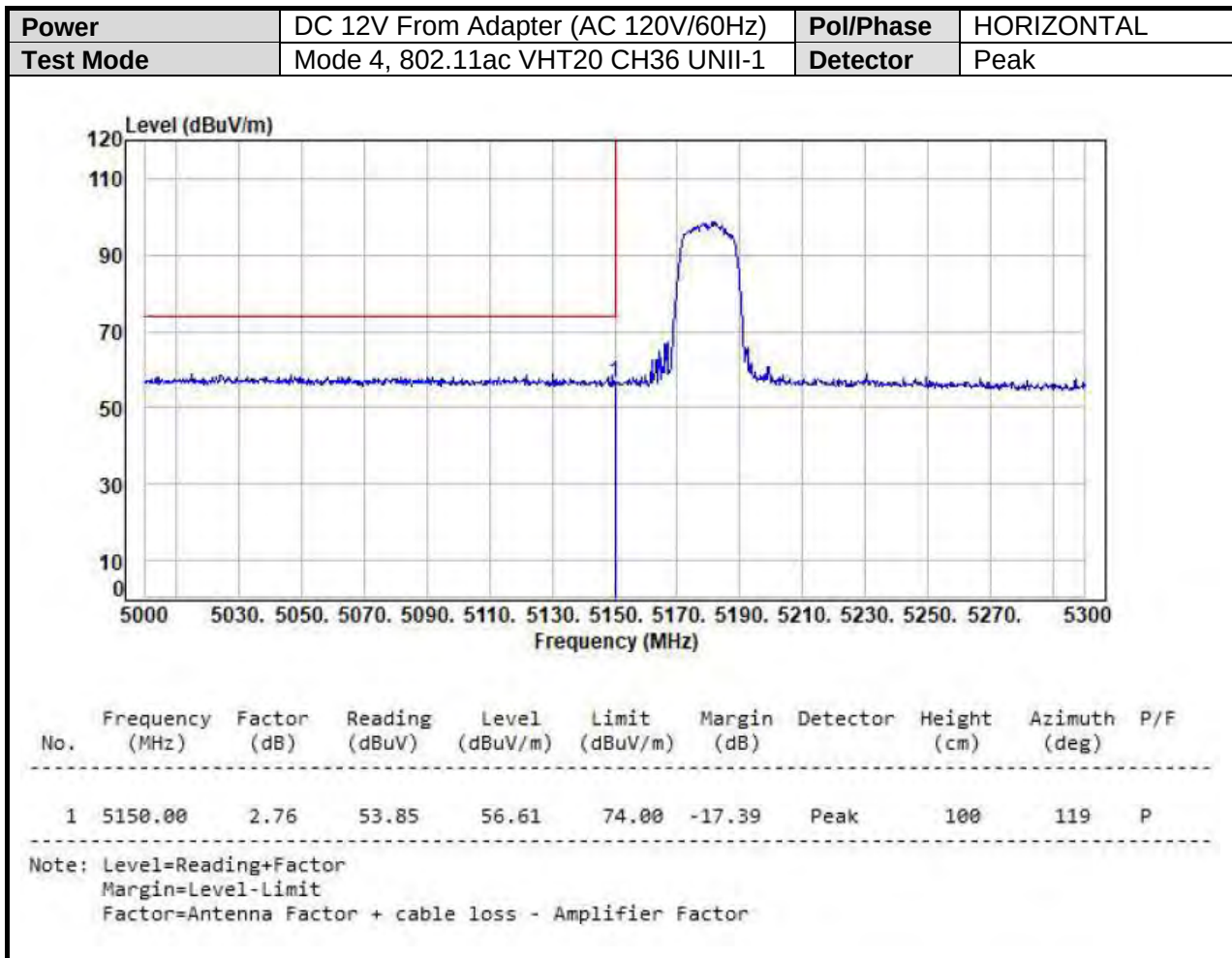


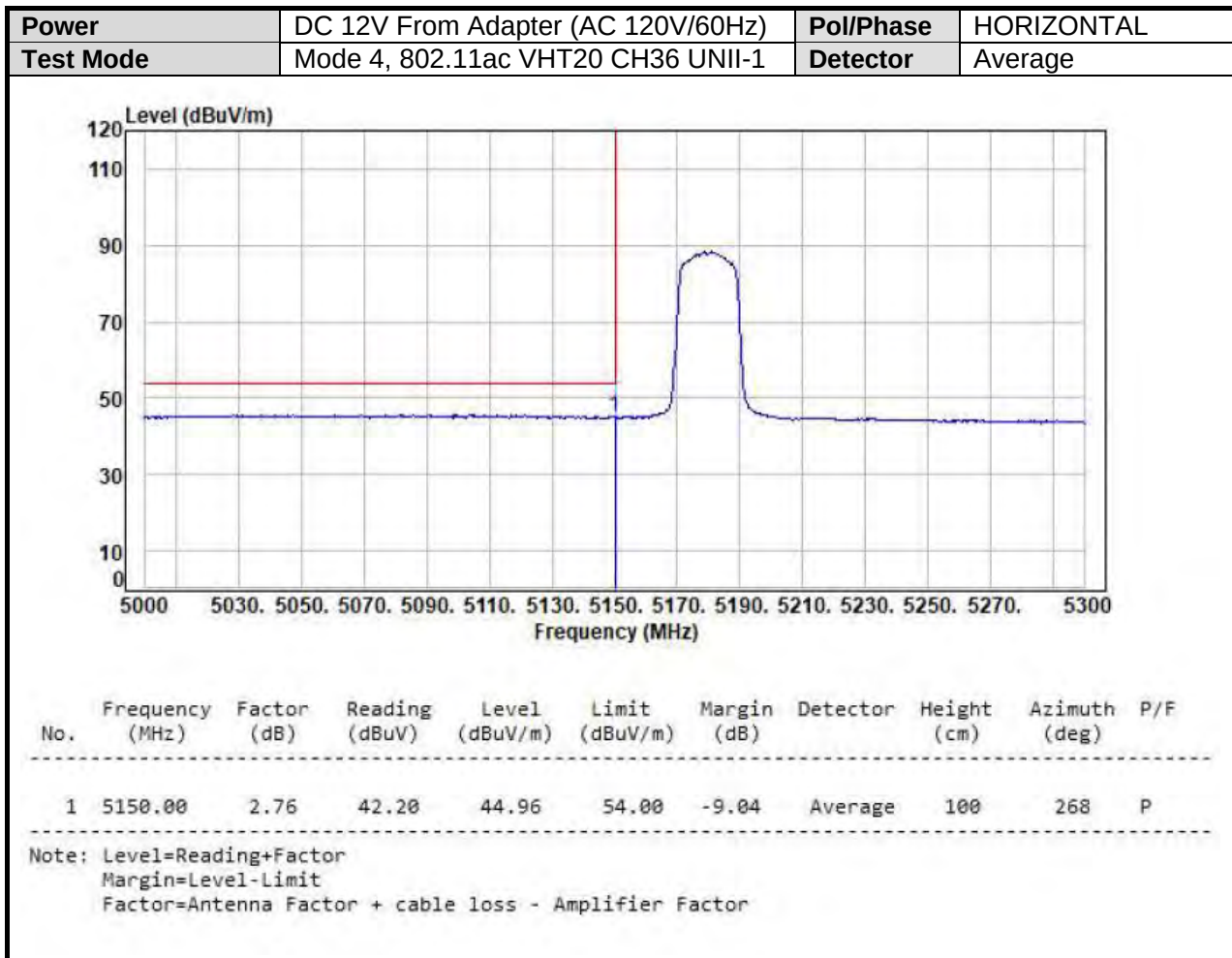


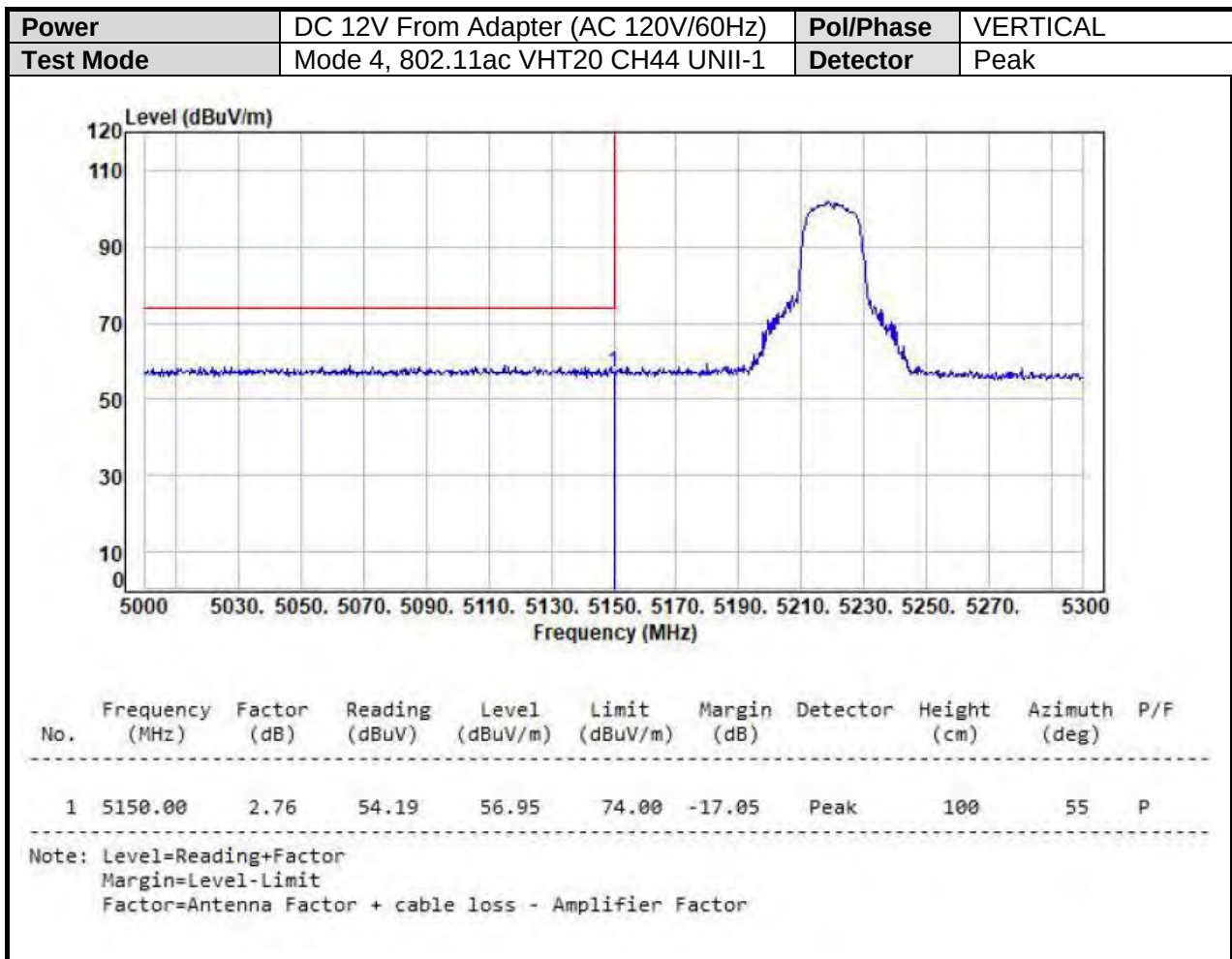


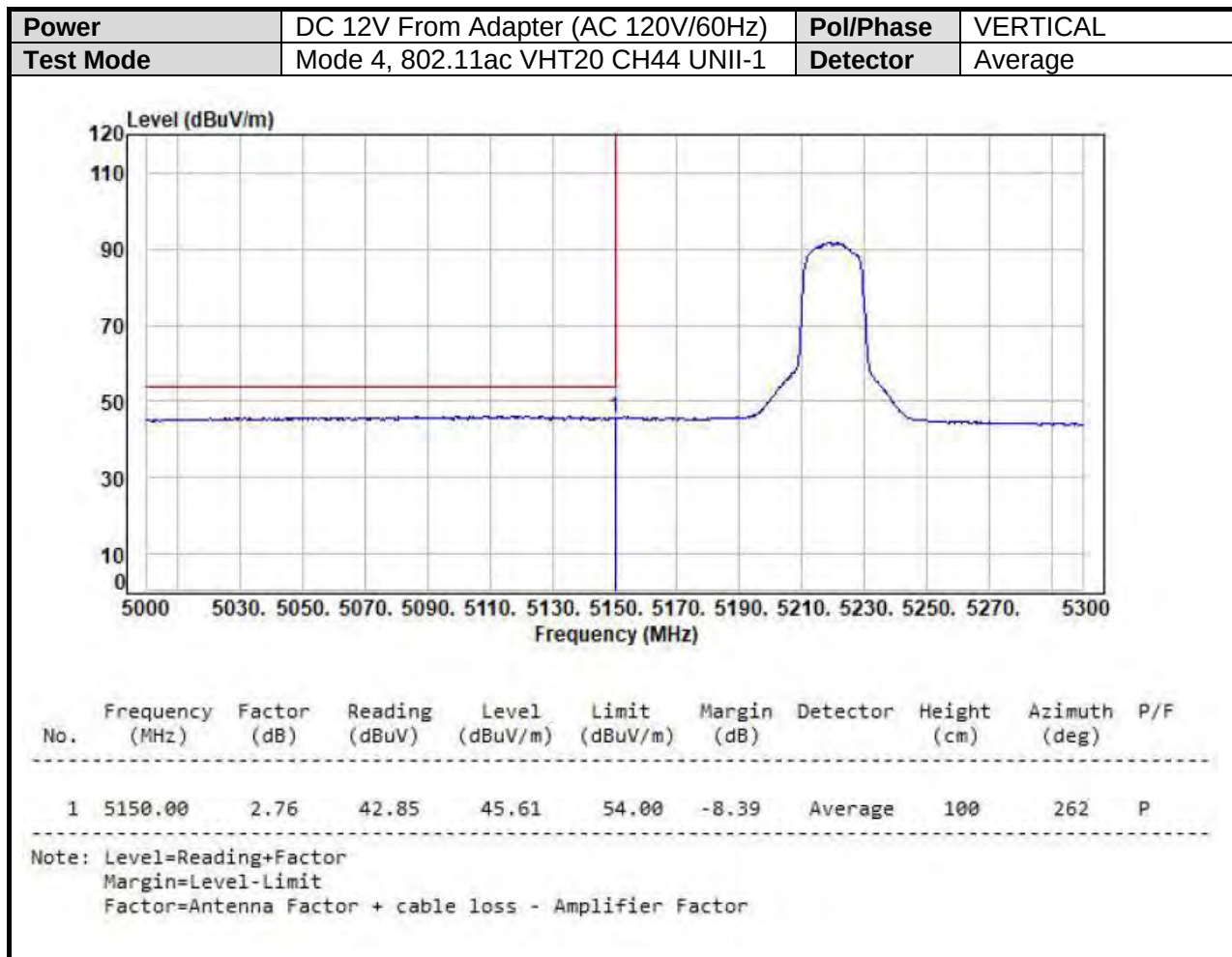


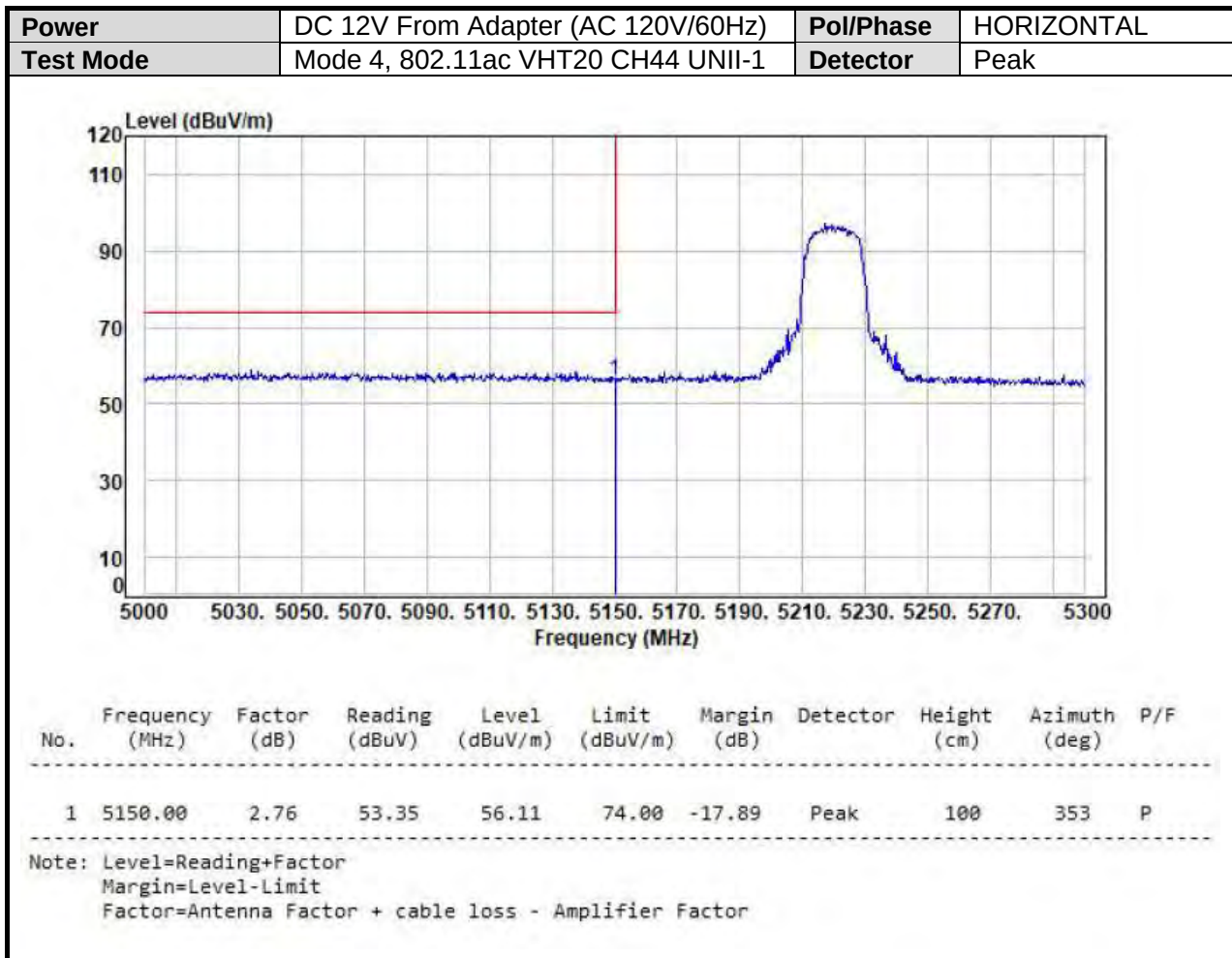


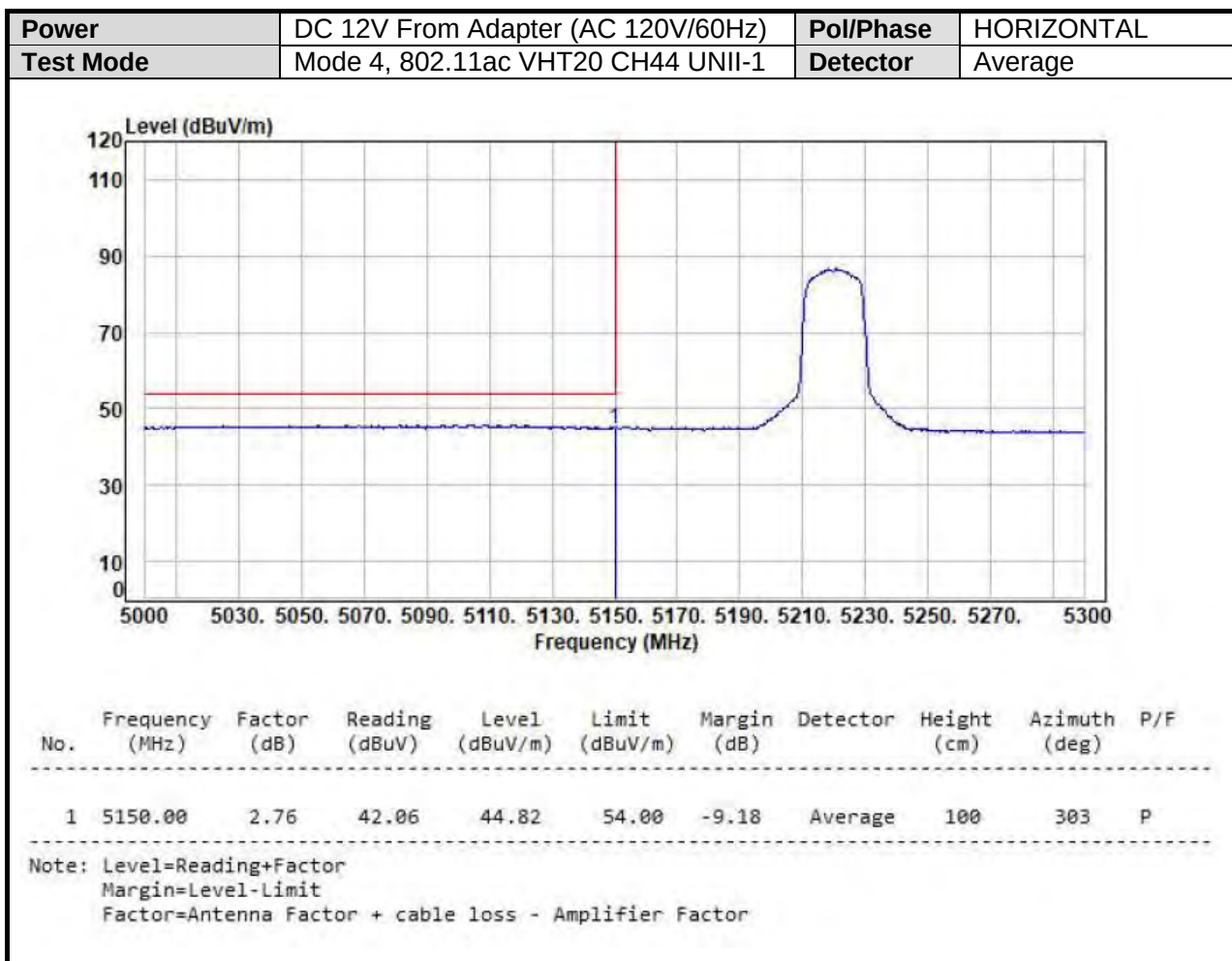


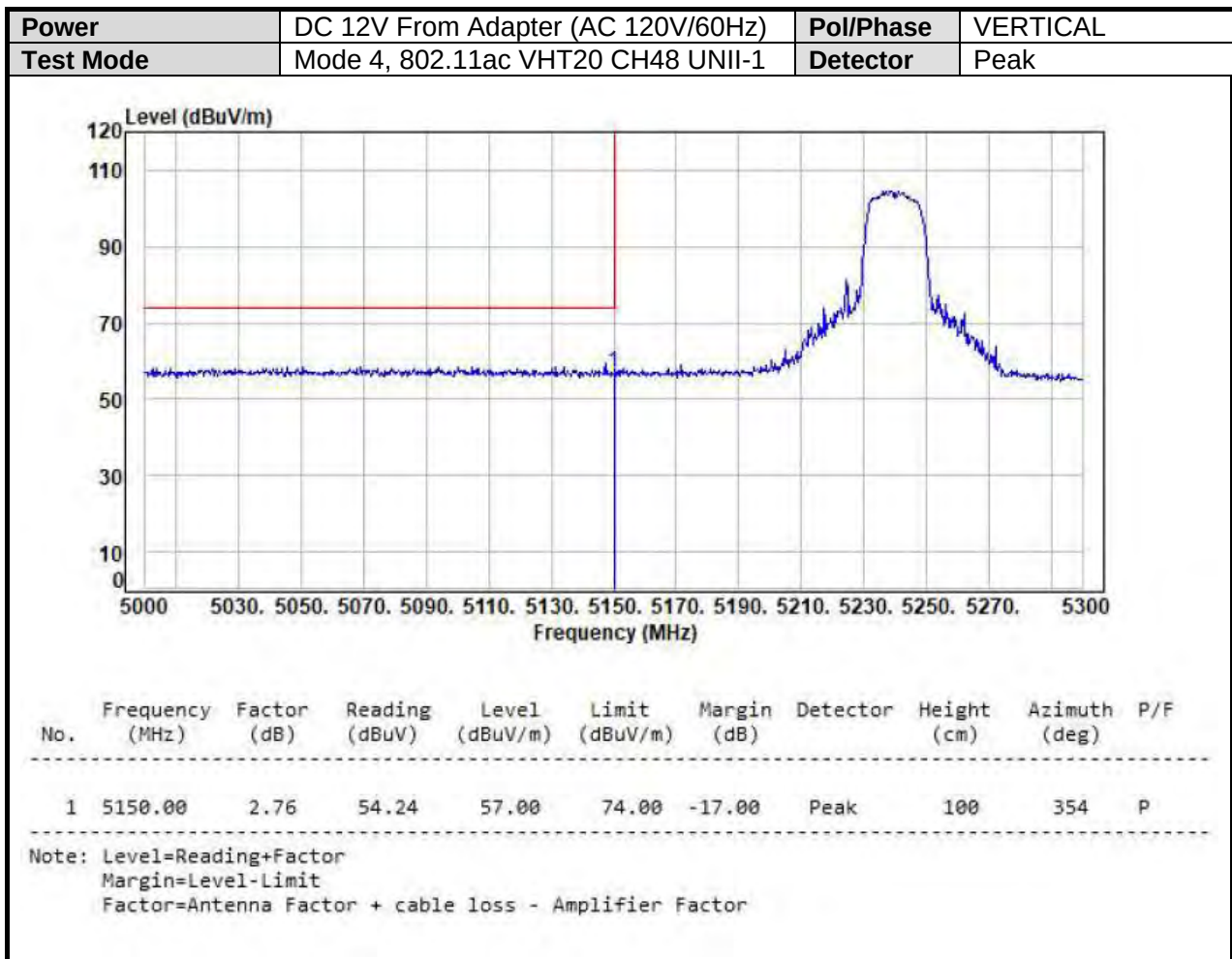


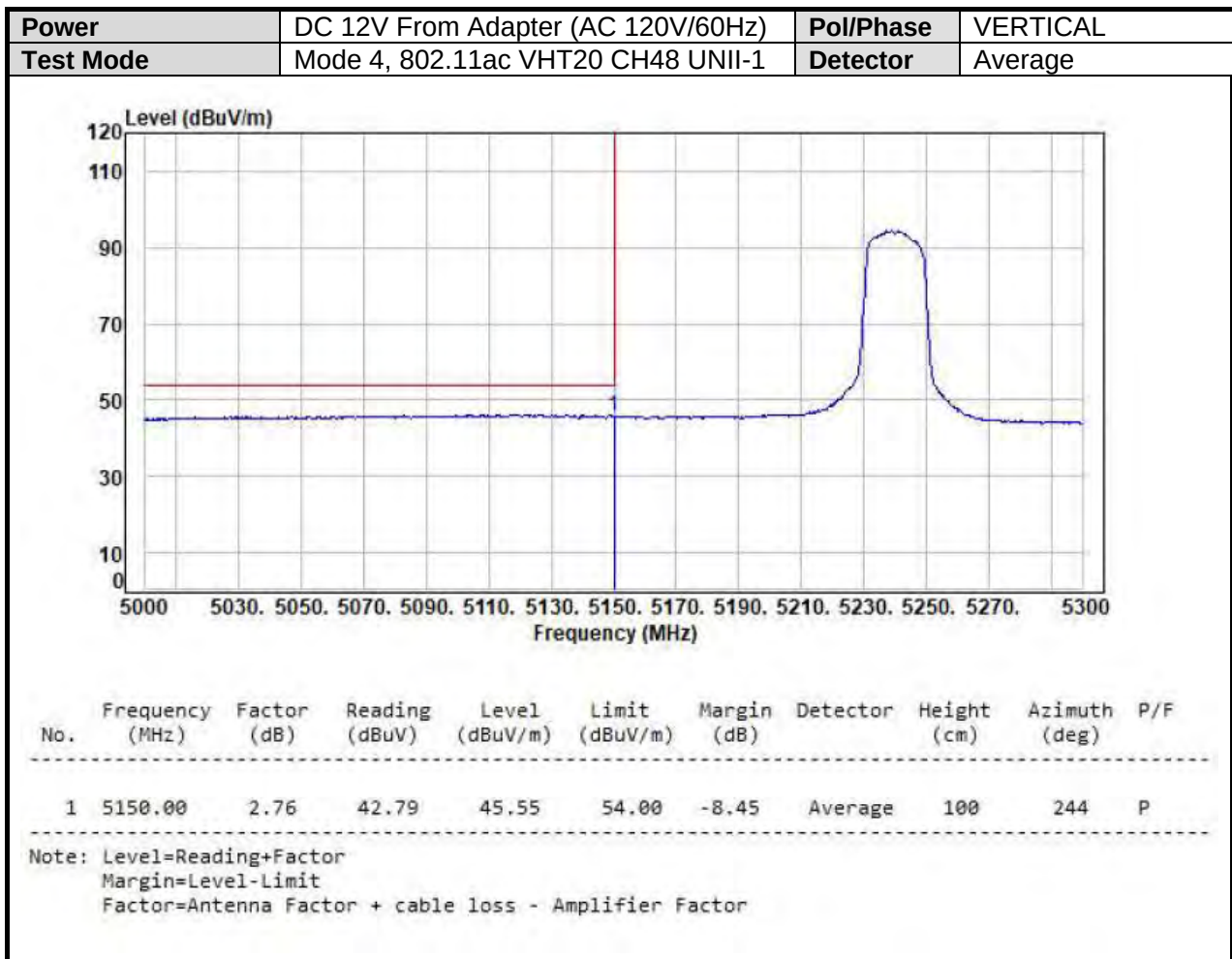


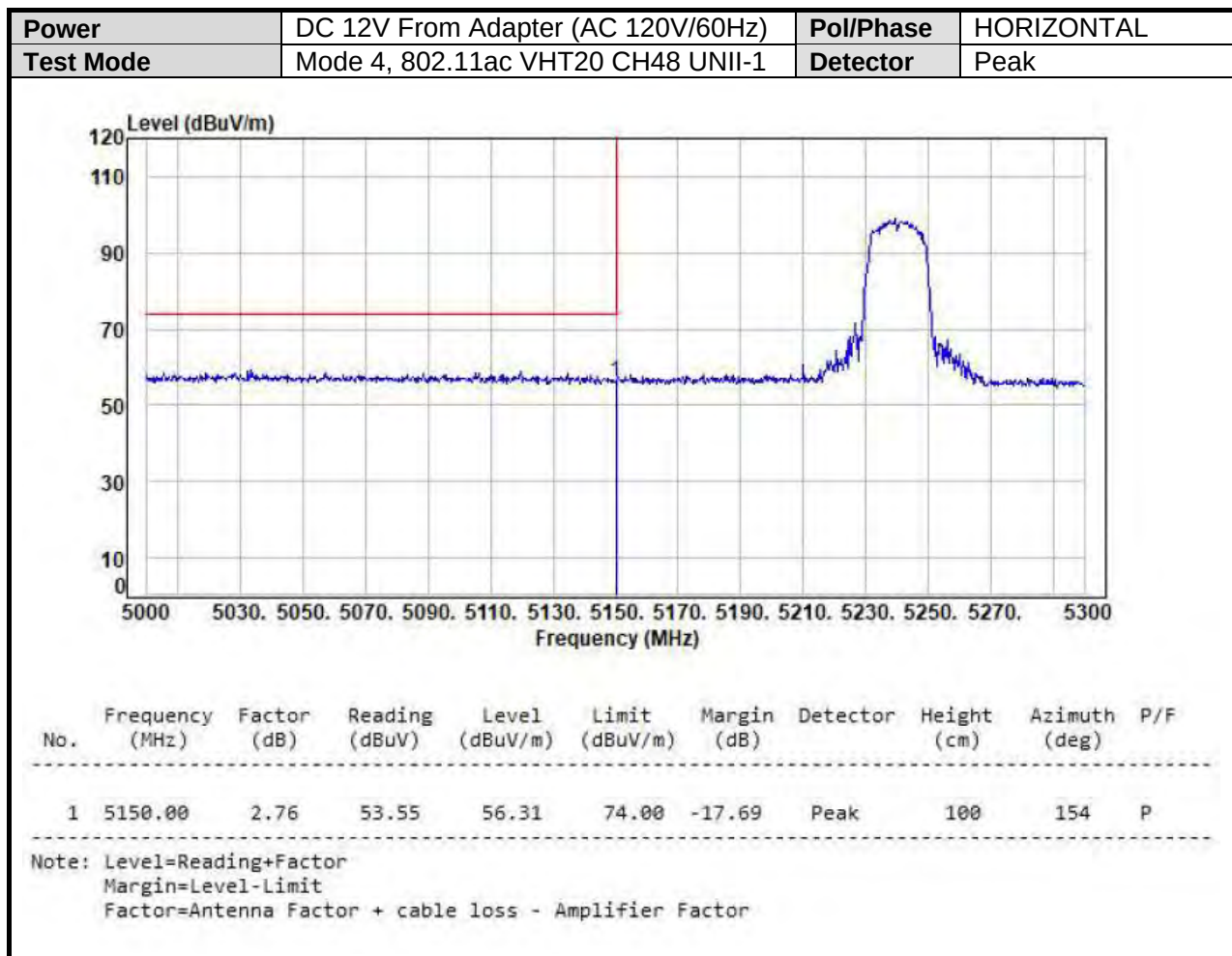


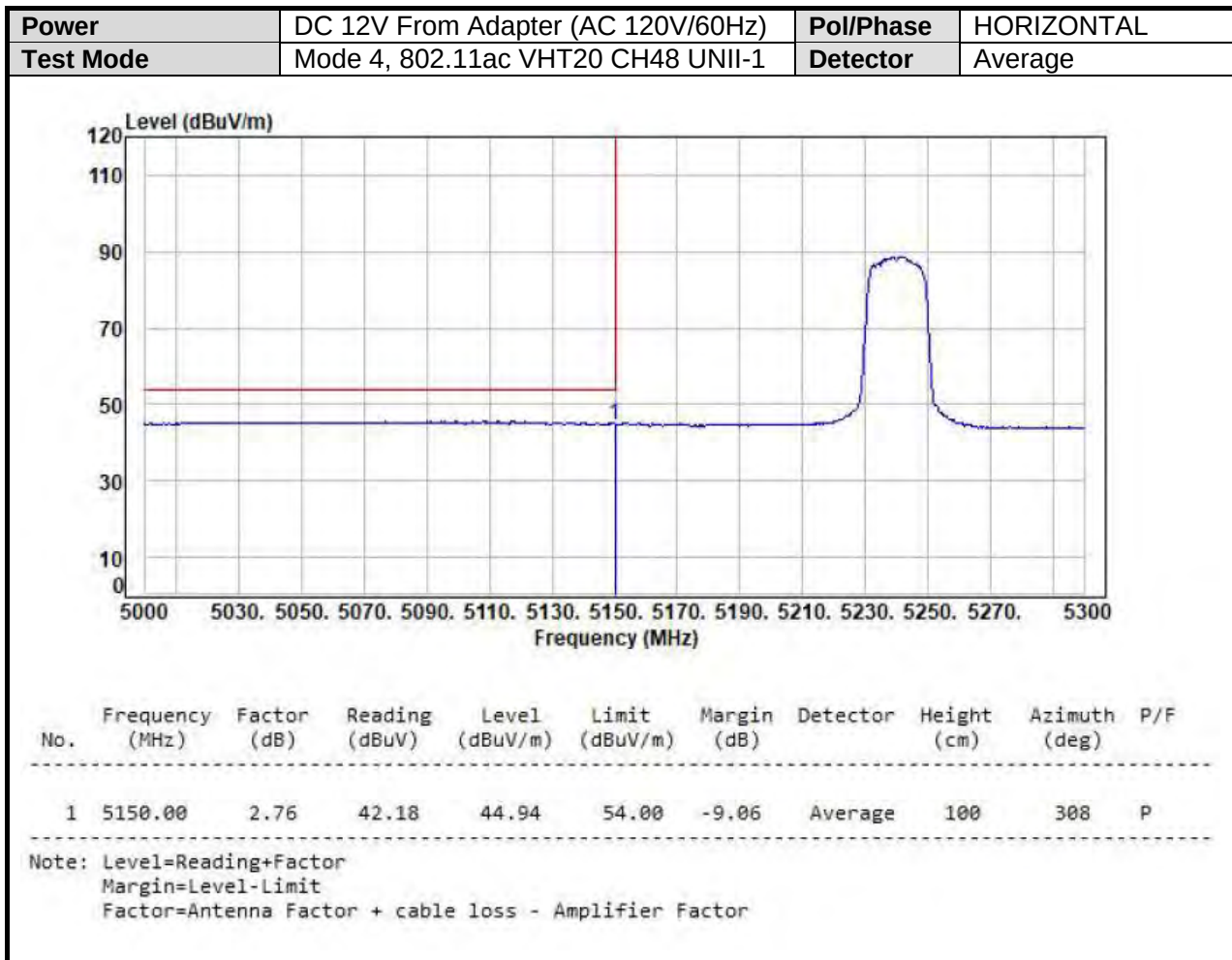


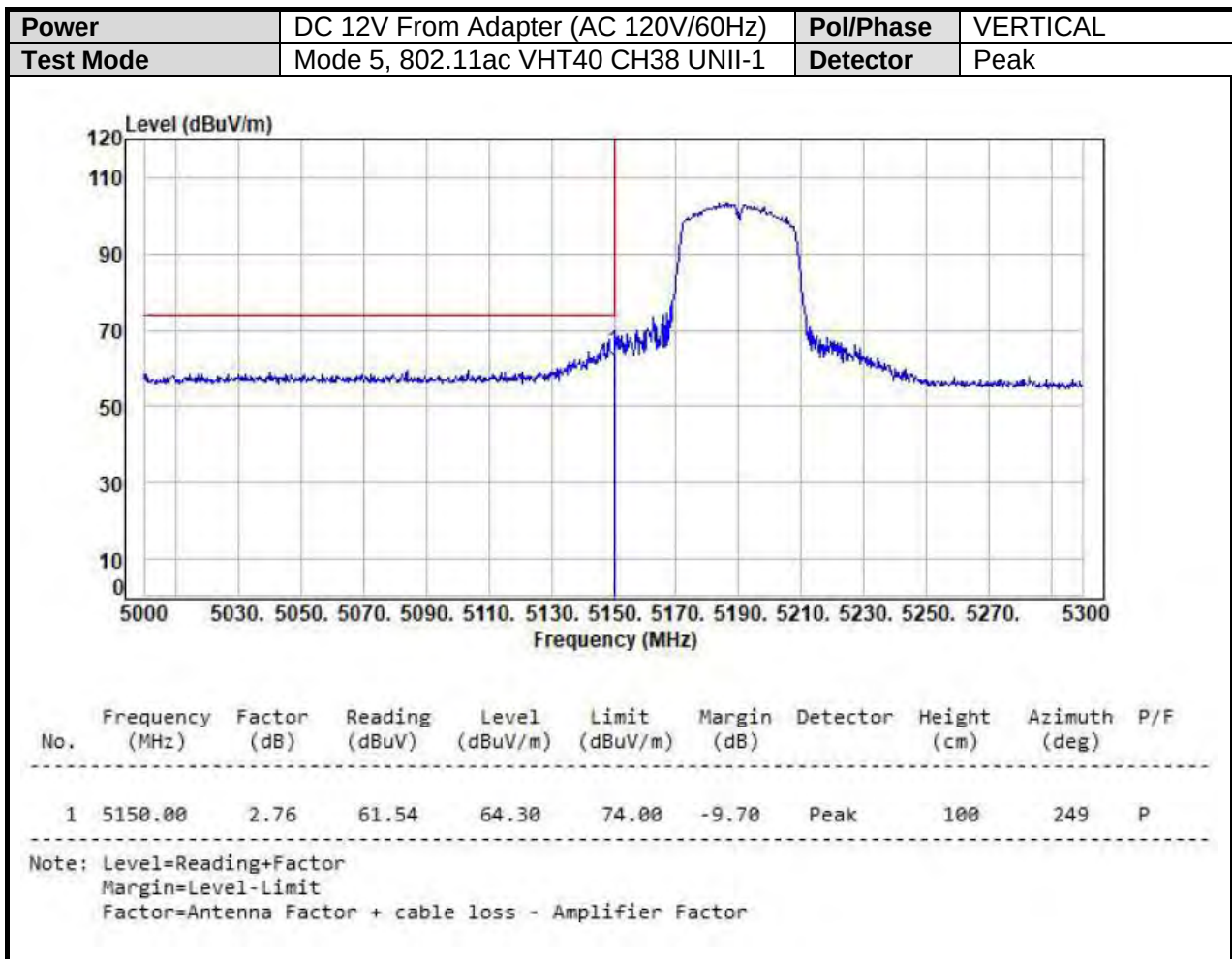


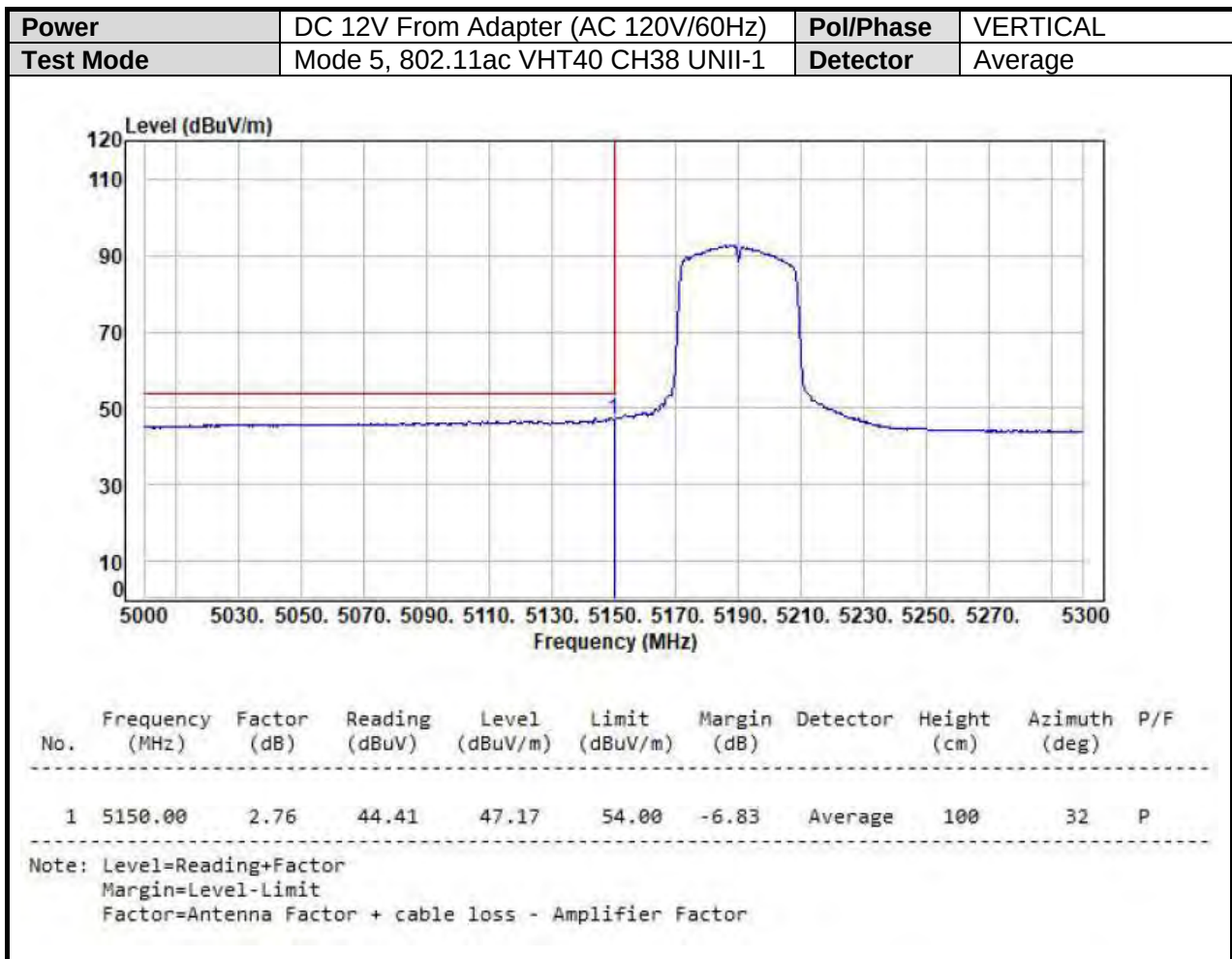


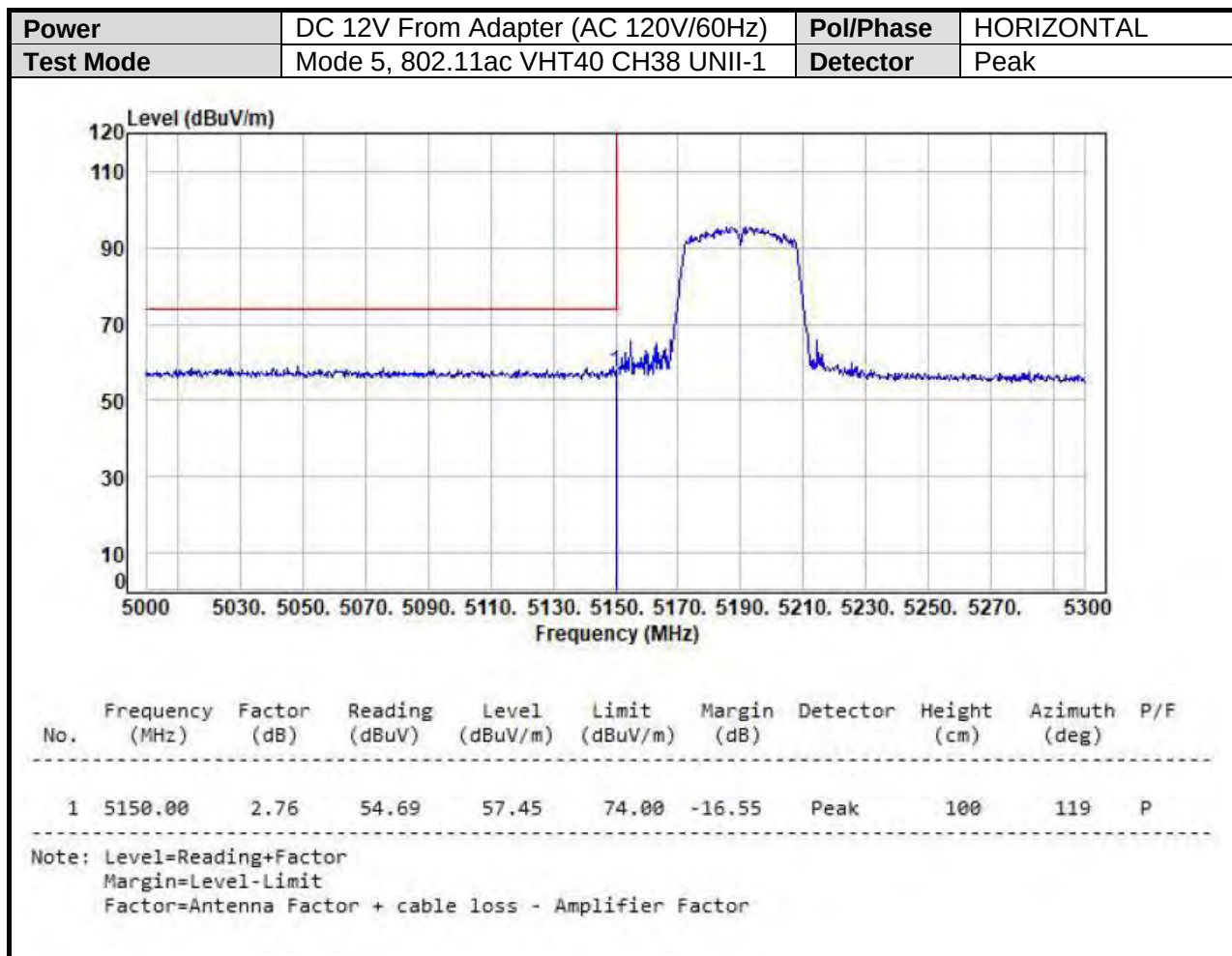


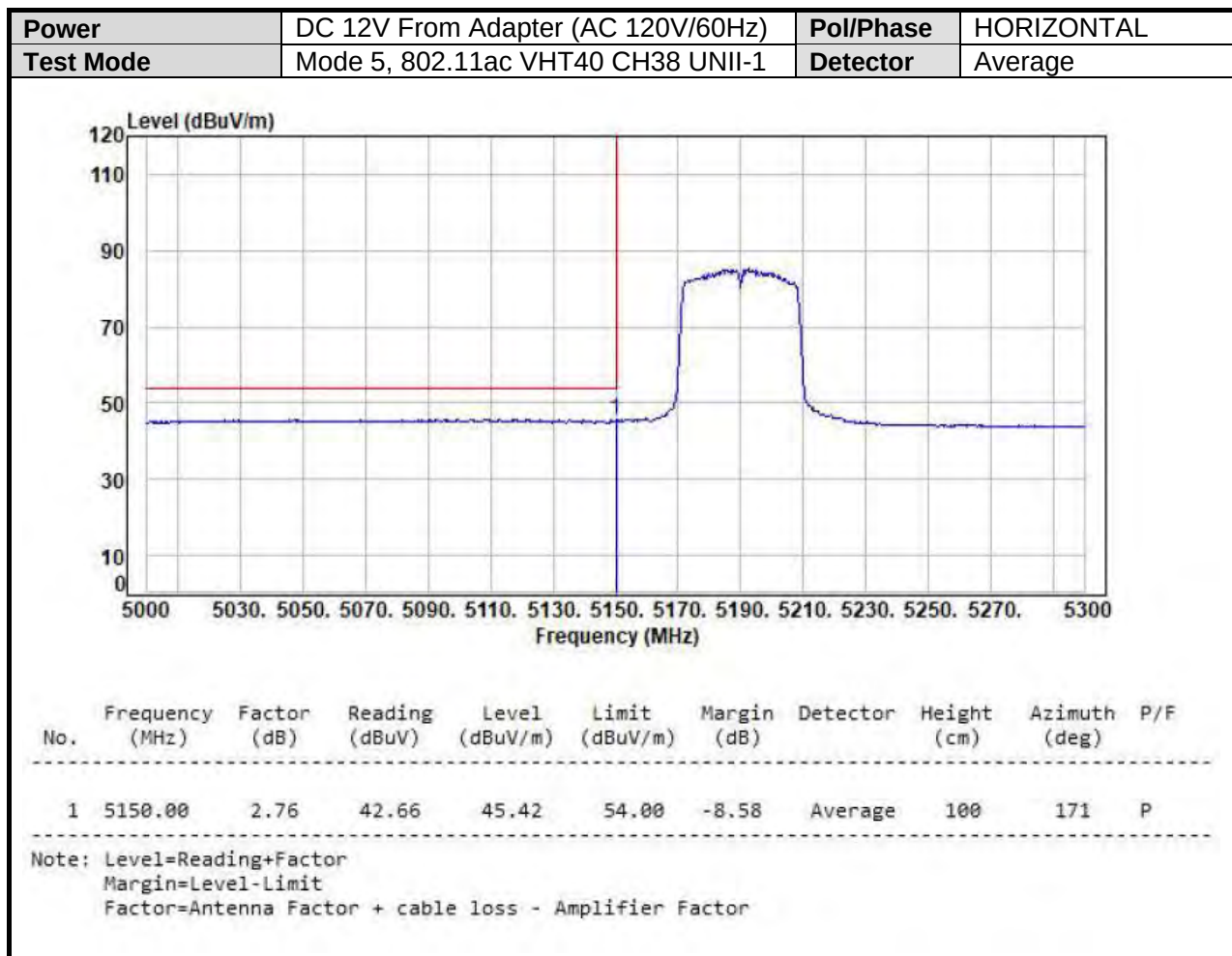


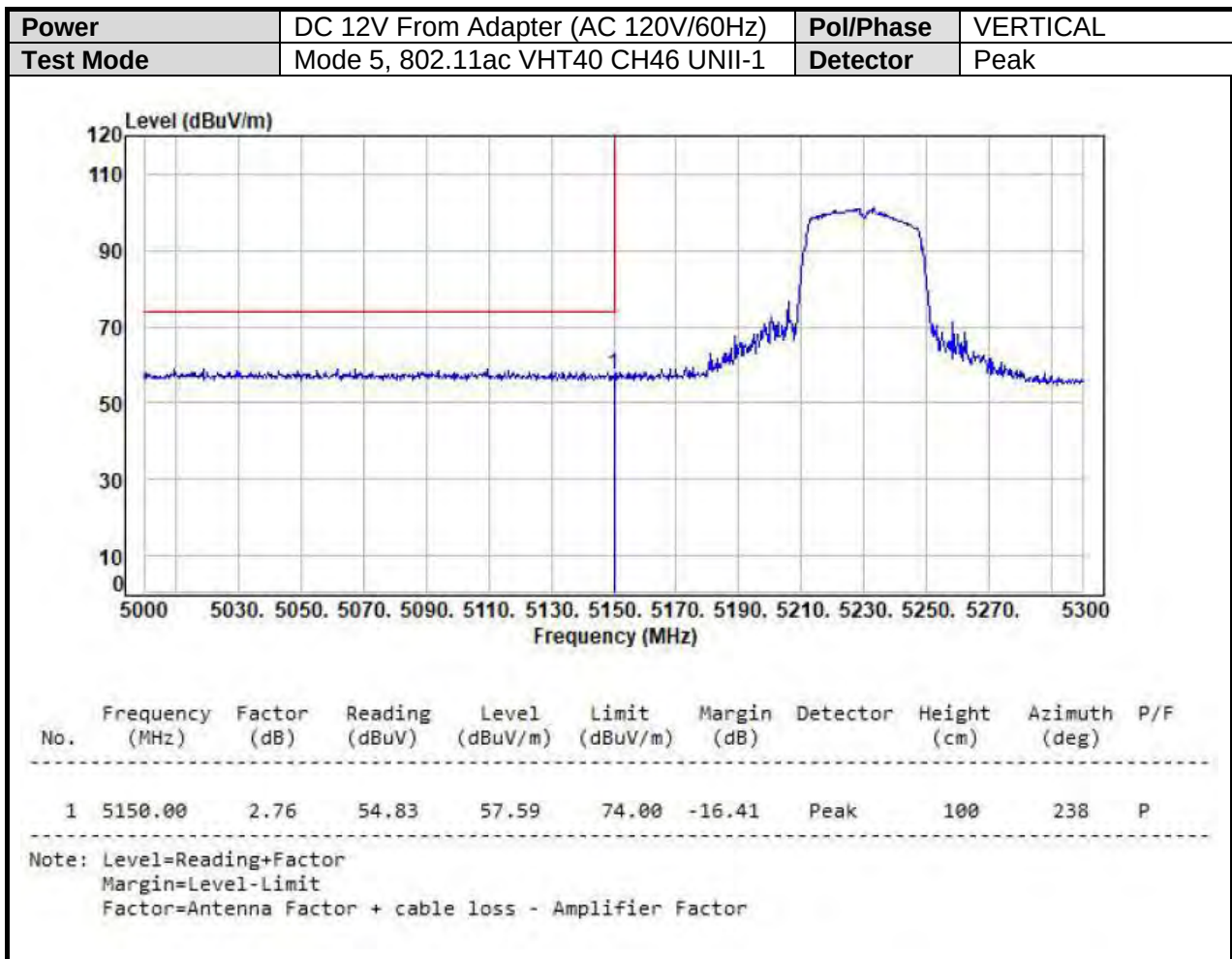


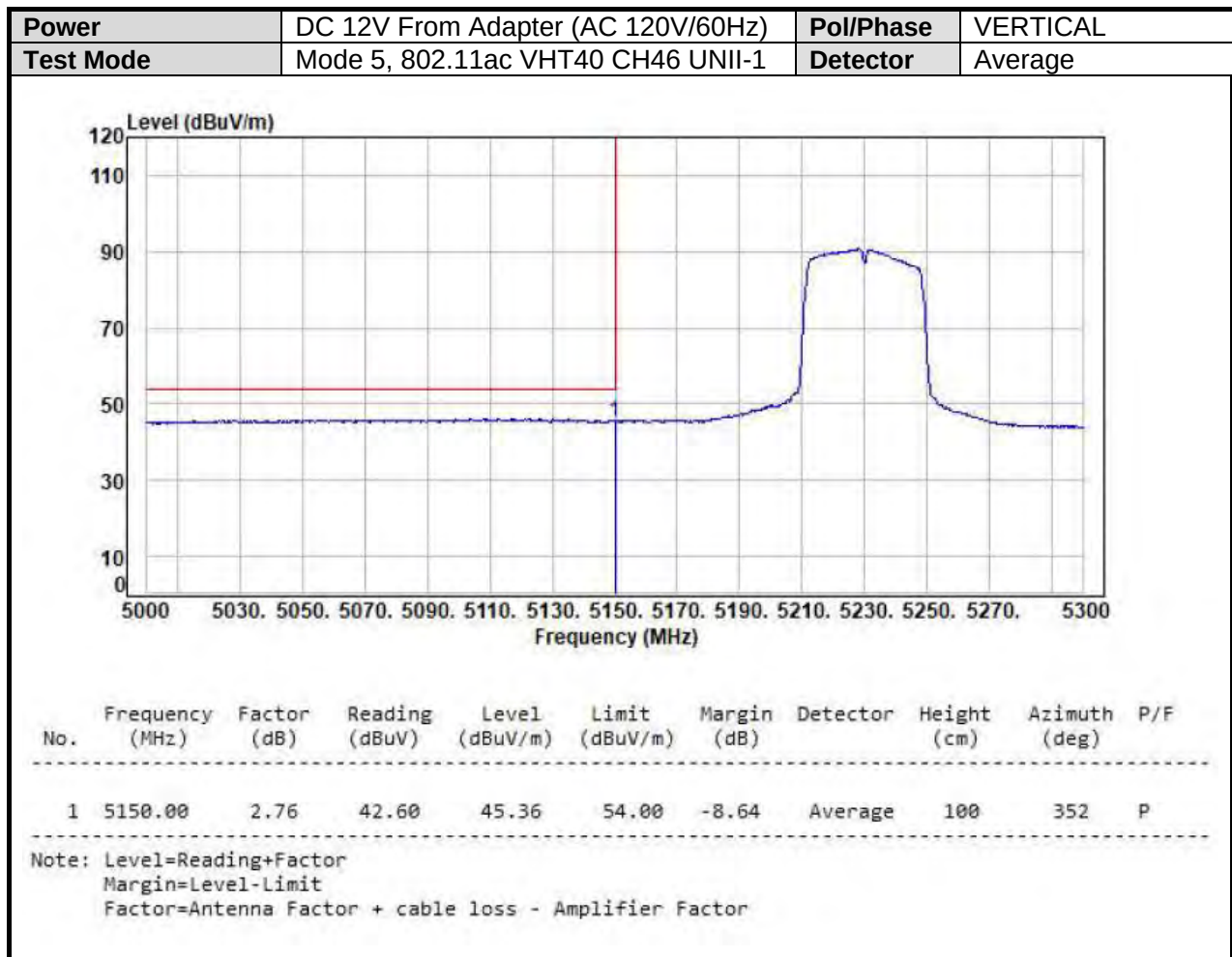


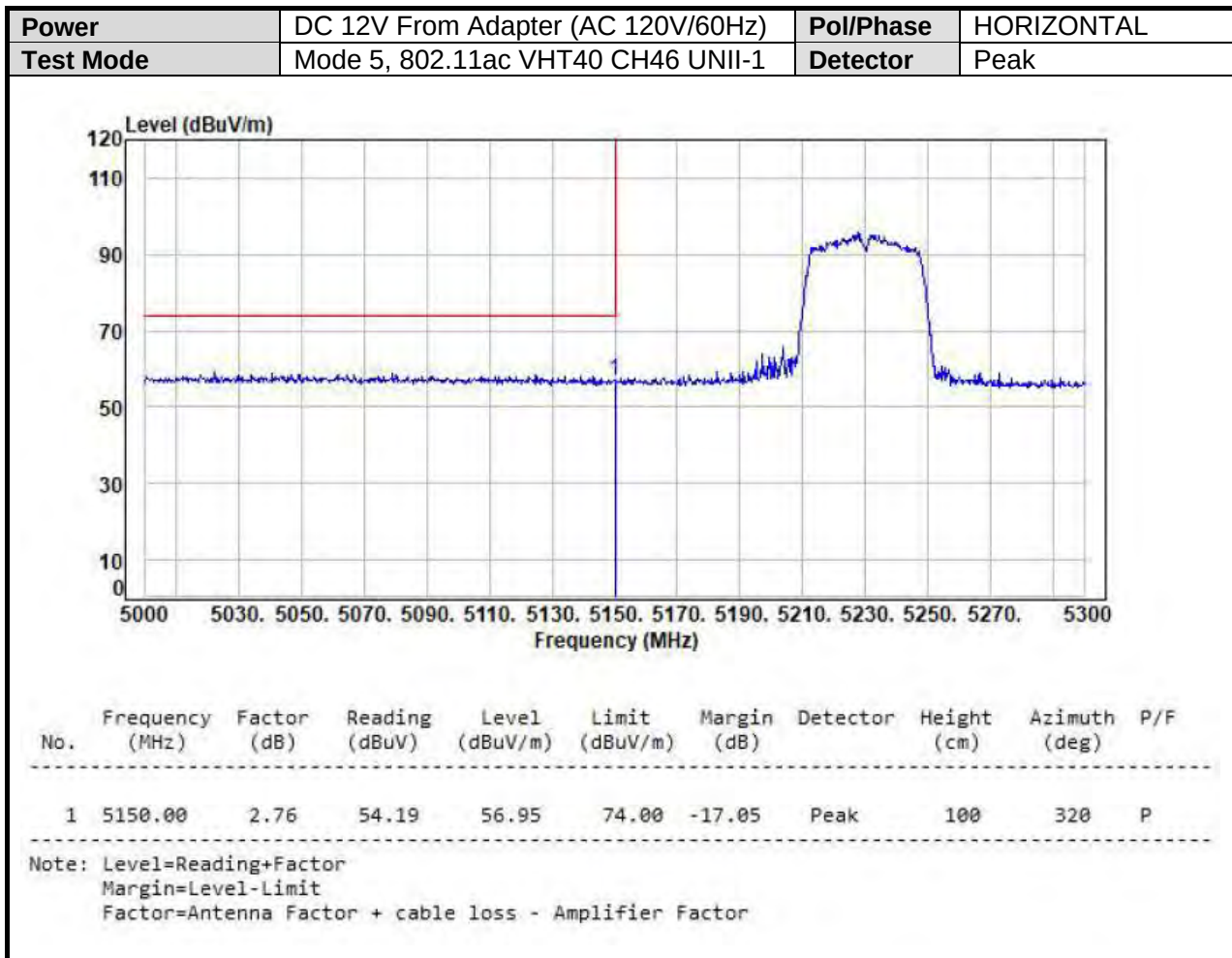


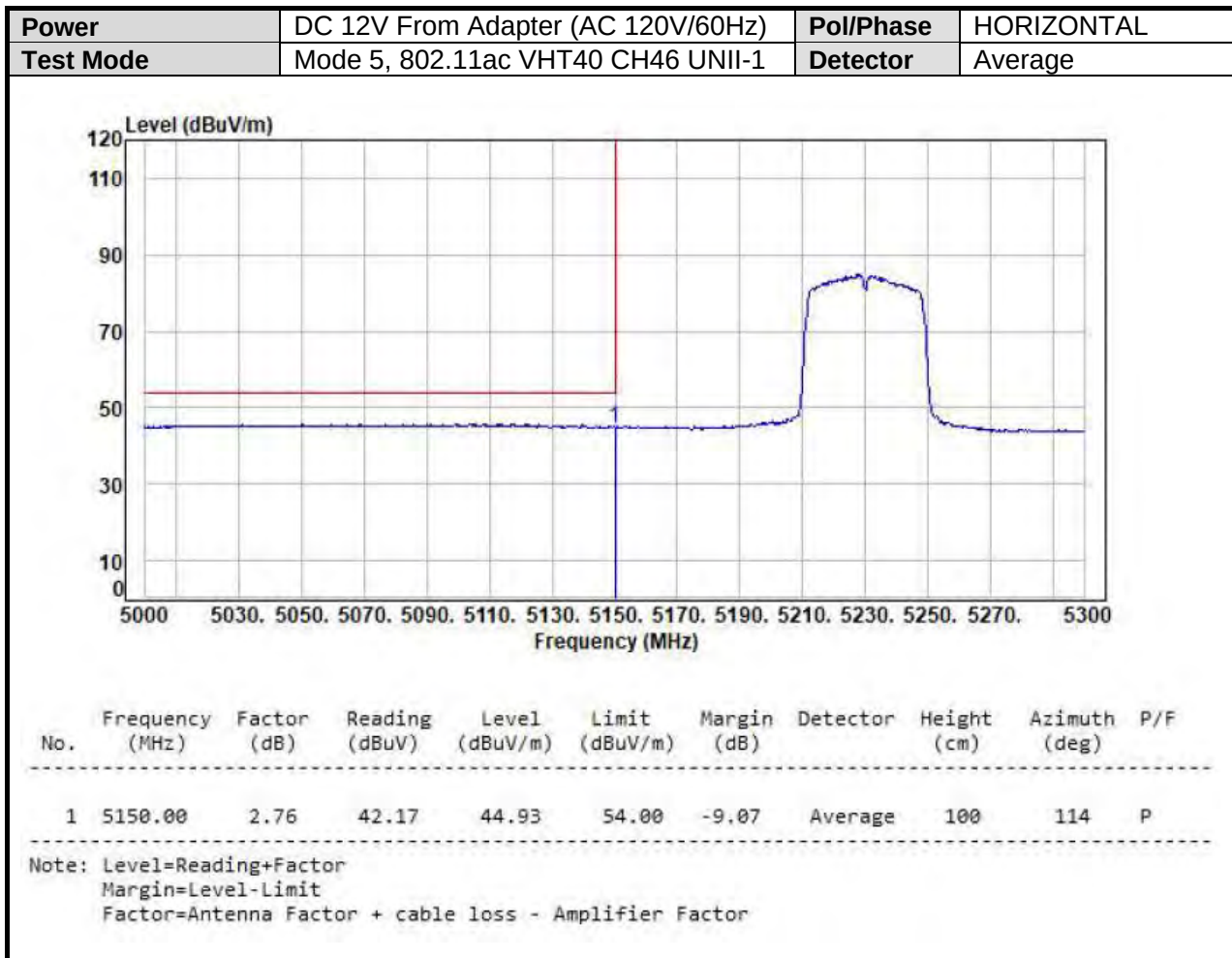




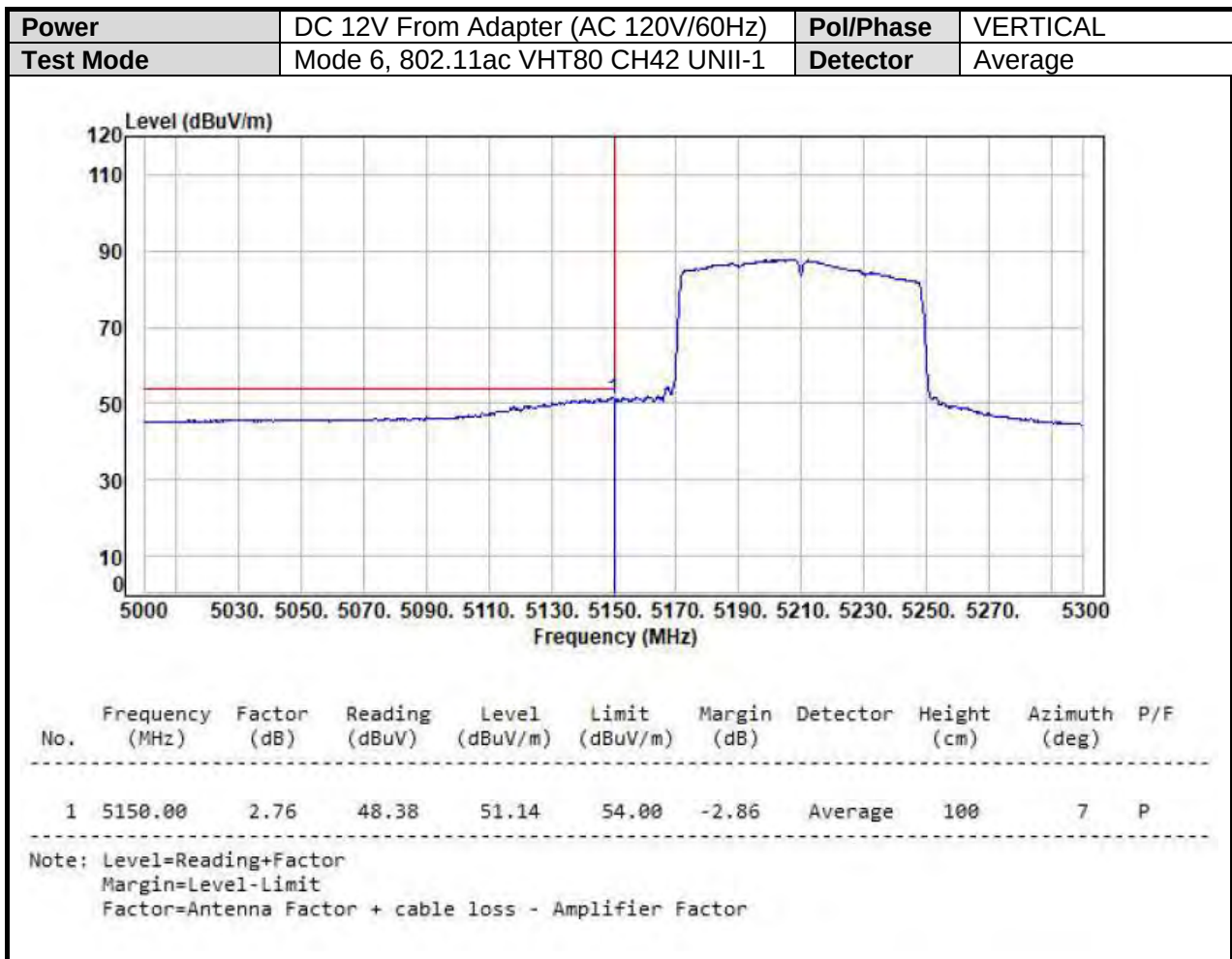


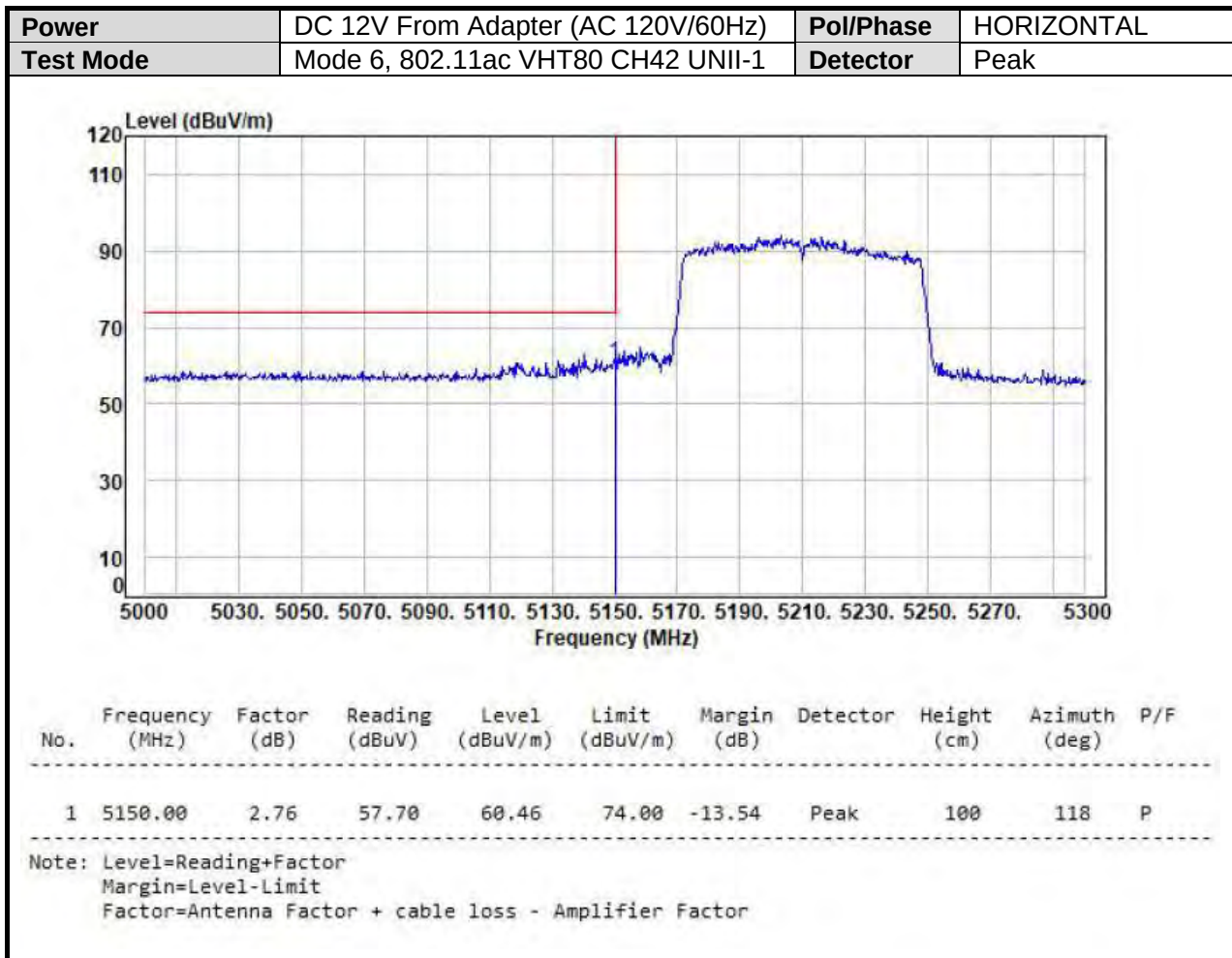


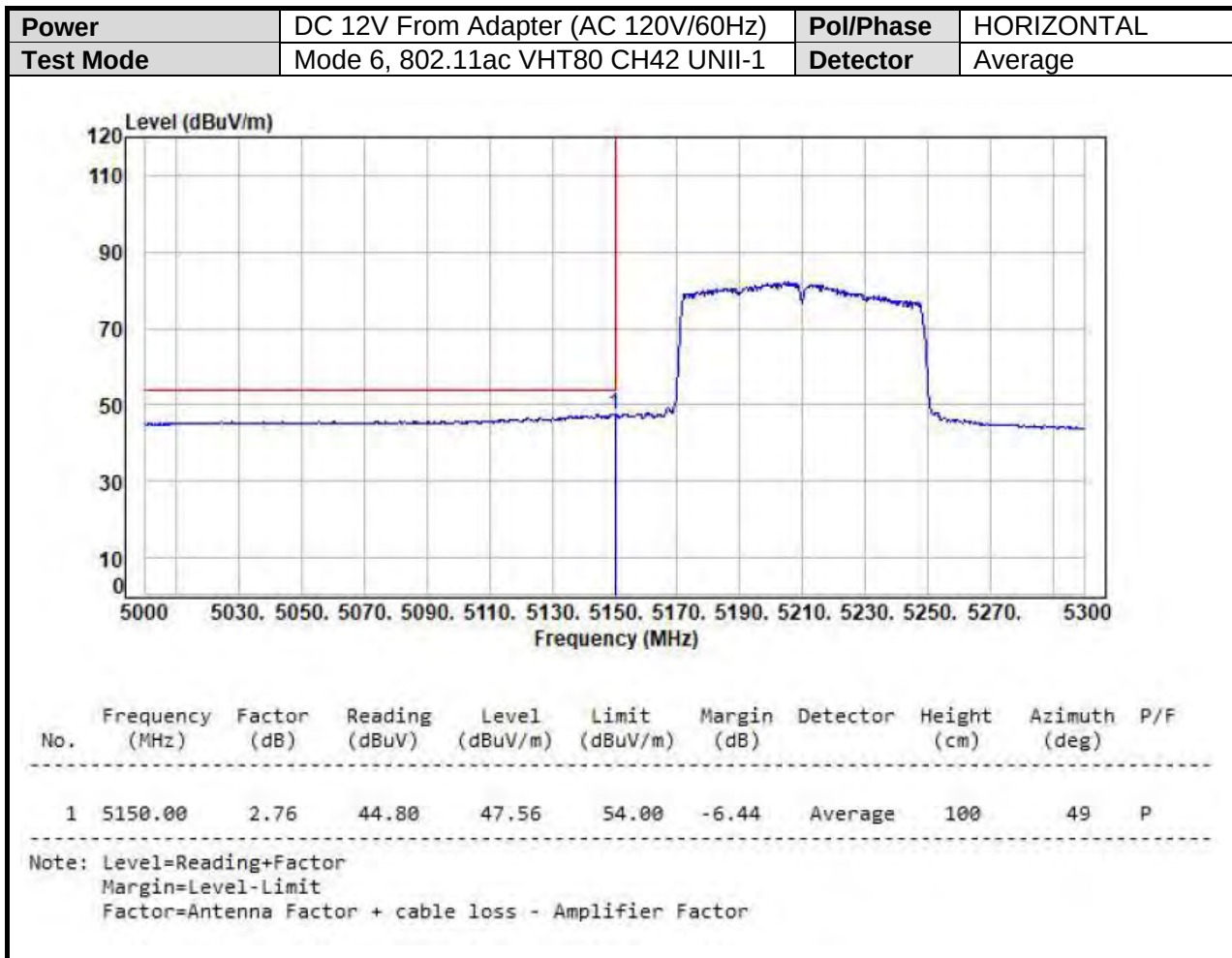






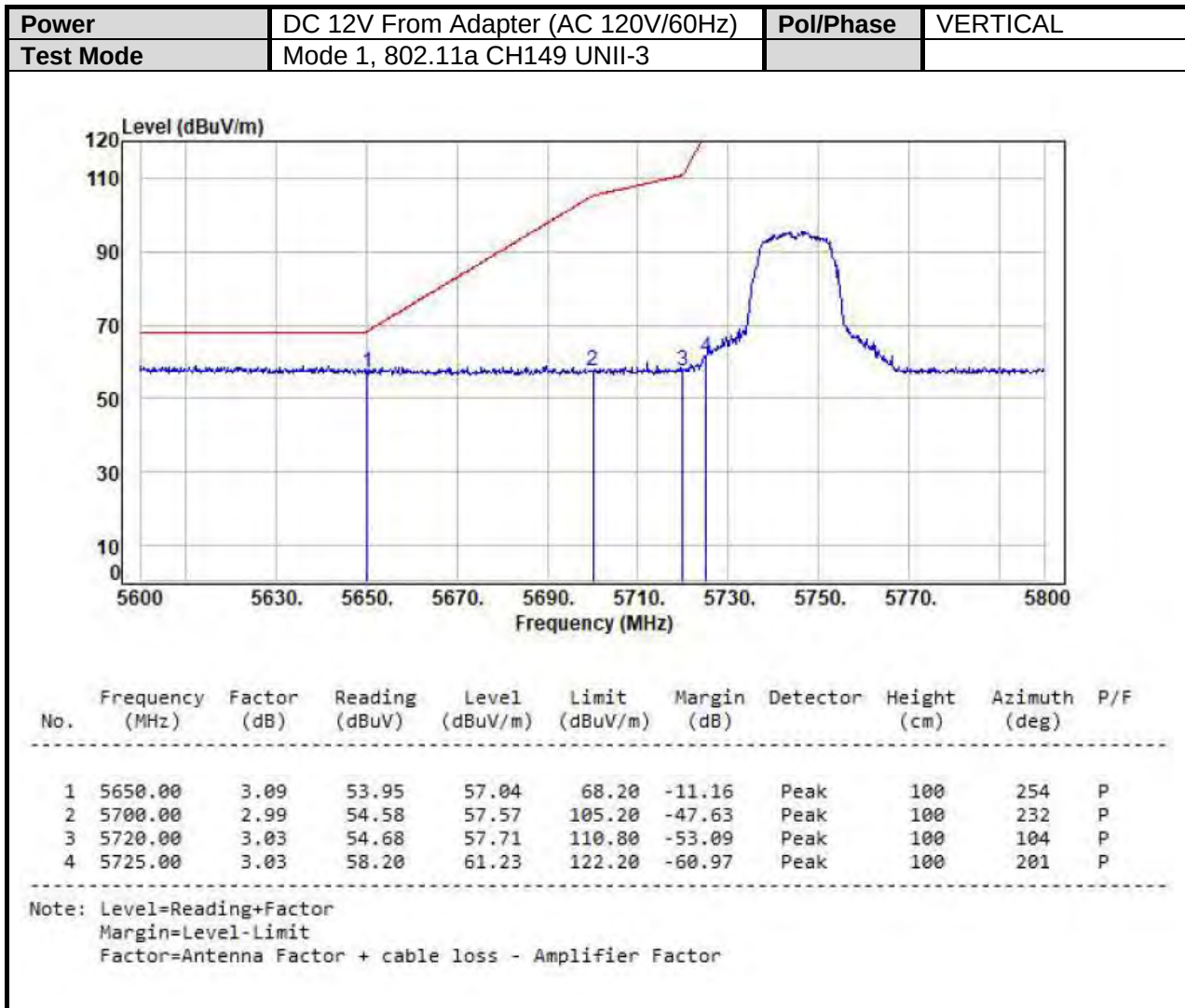


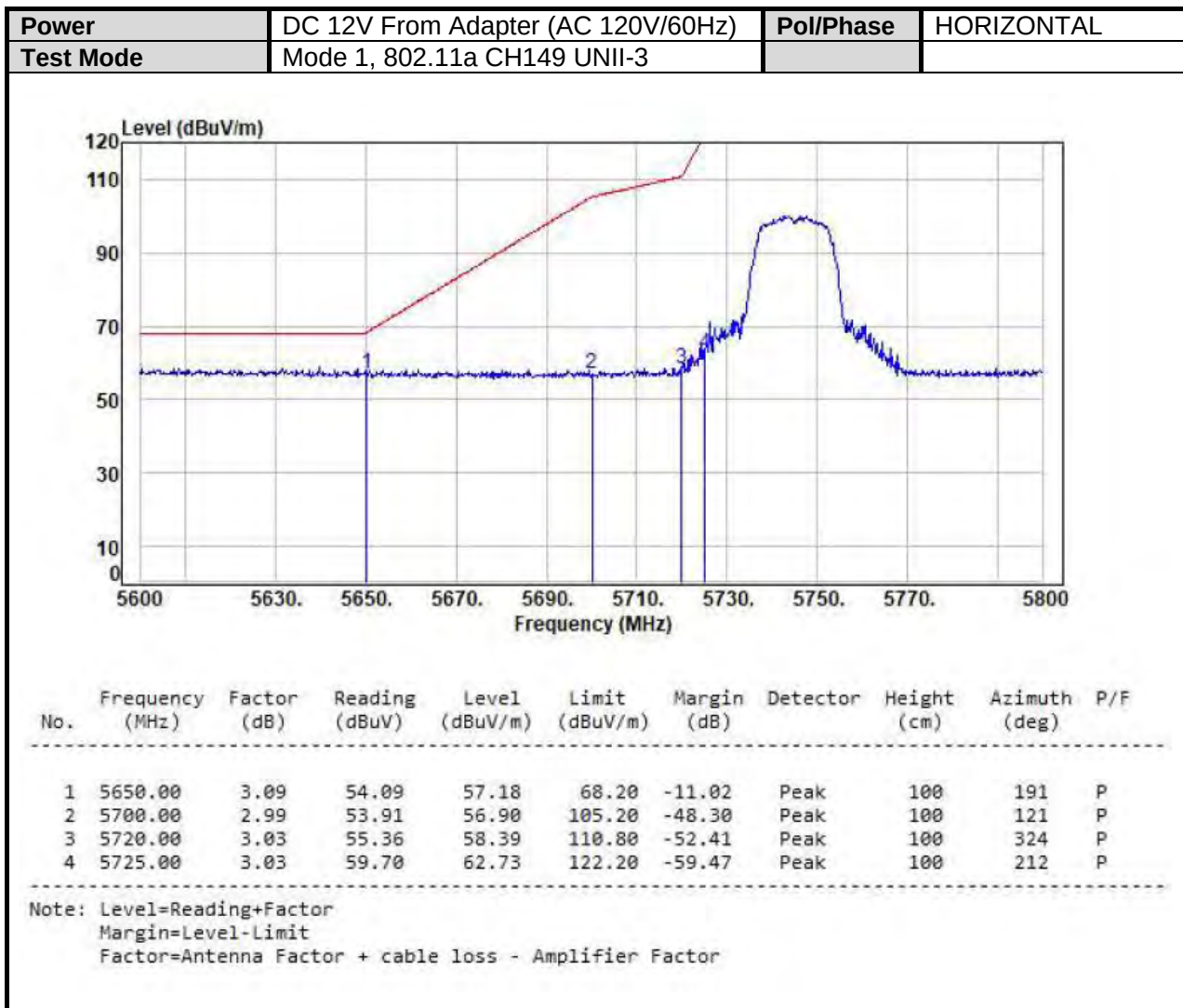


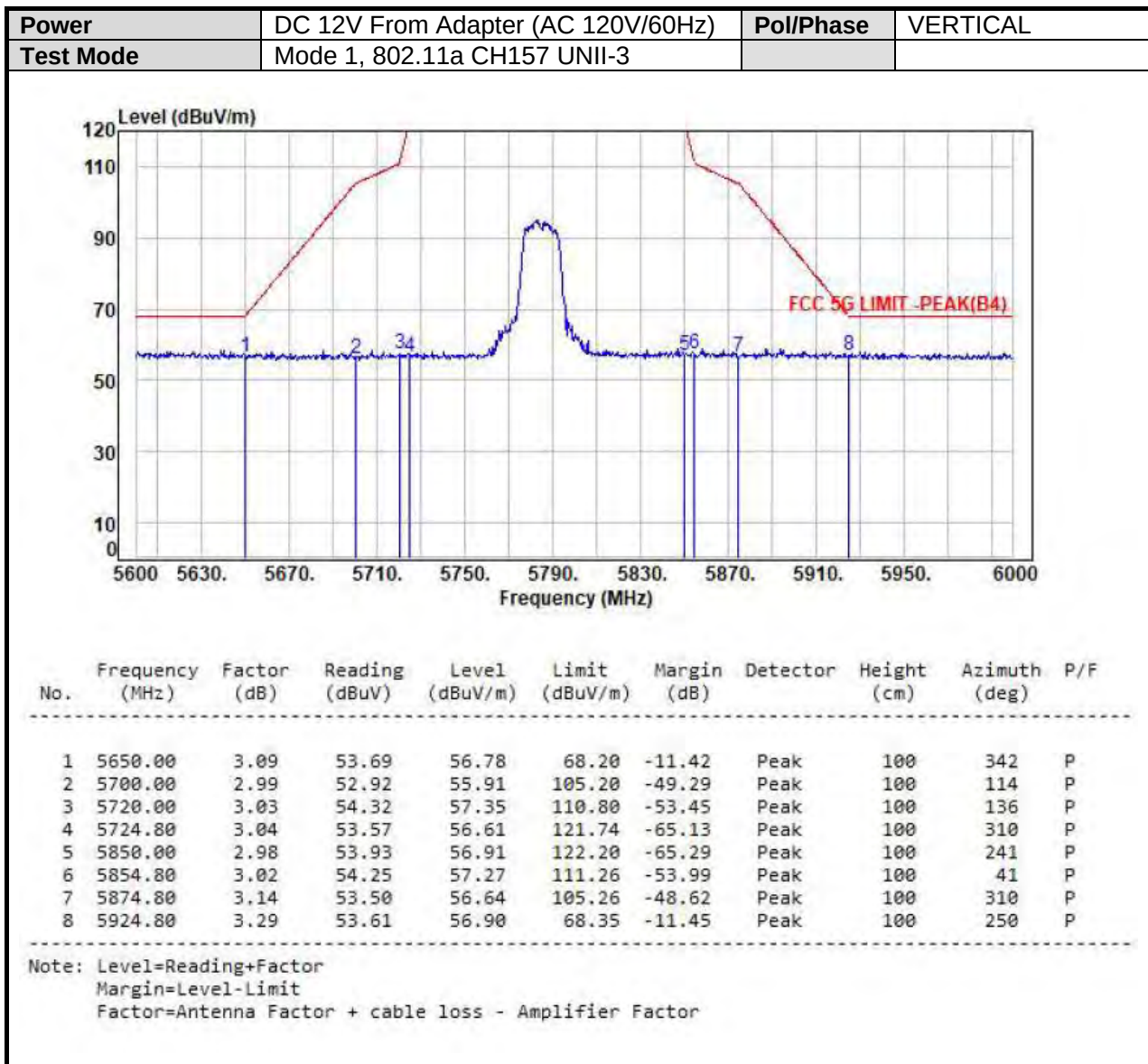


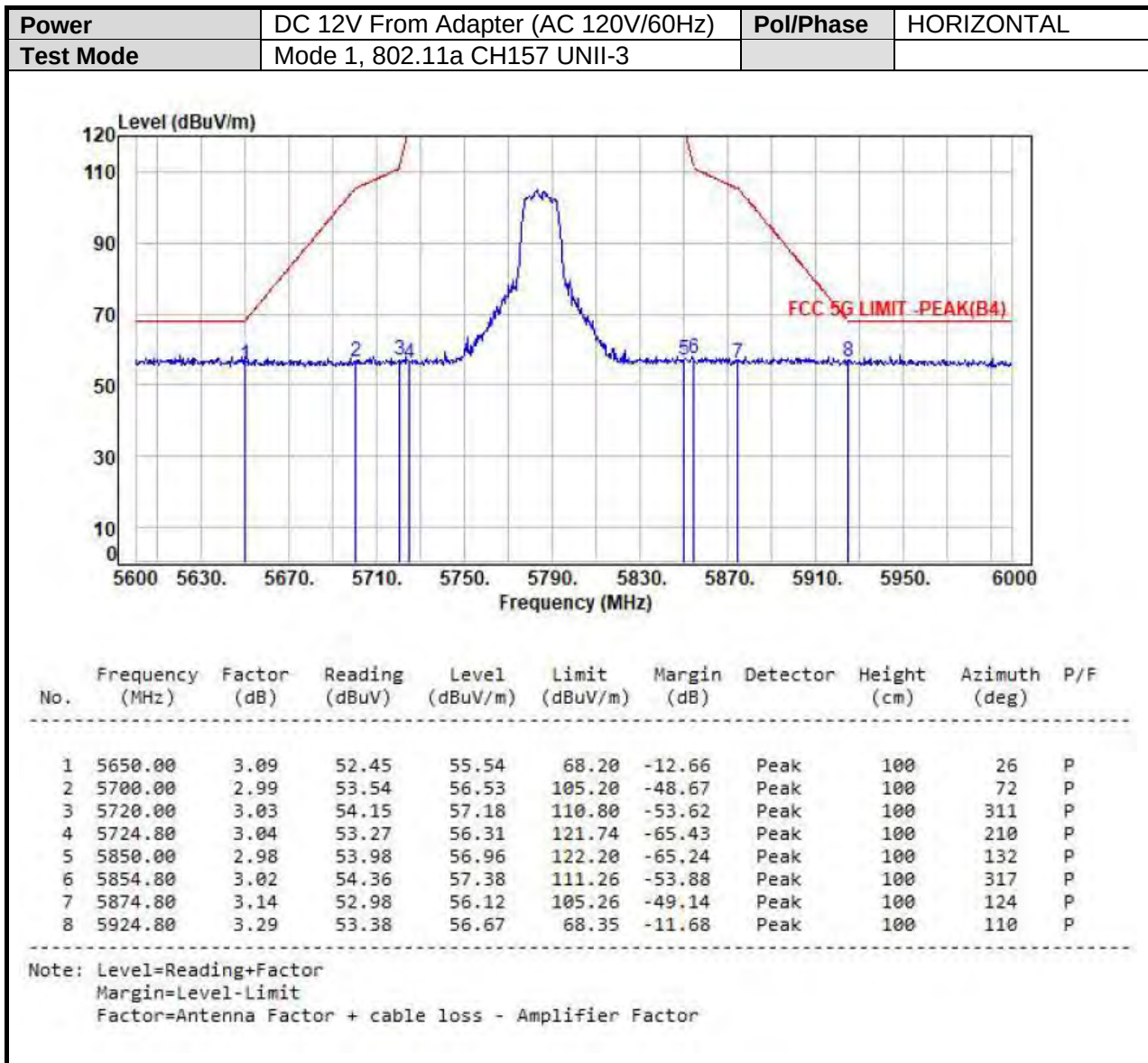


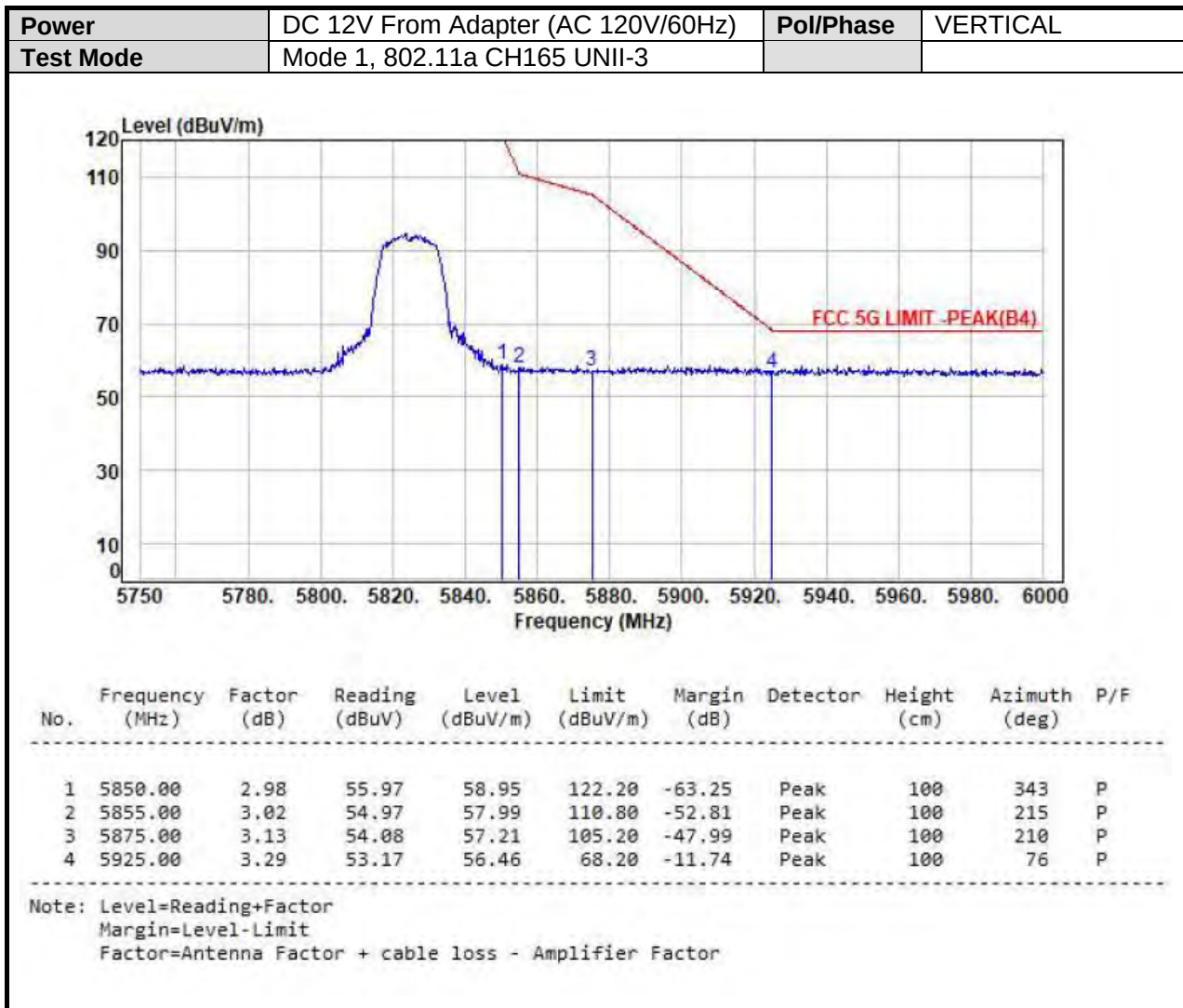
UNII-3

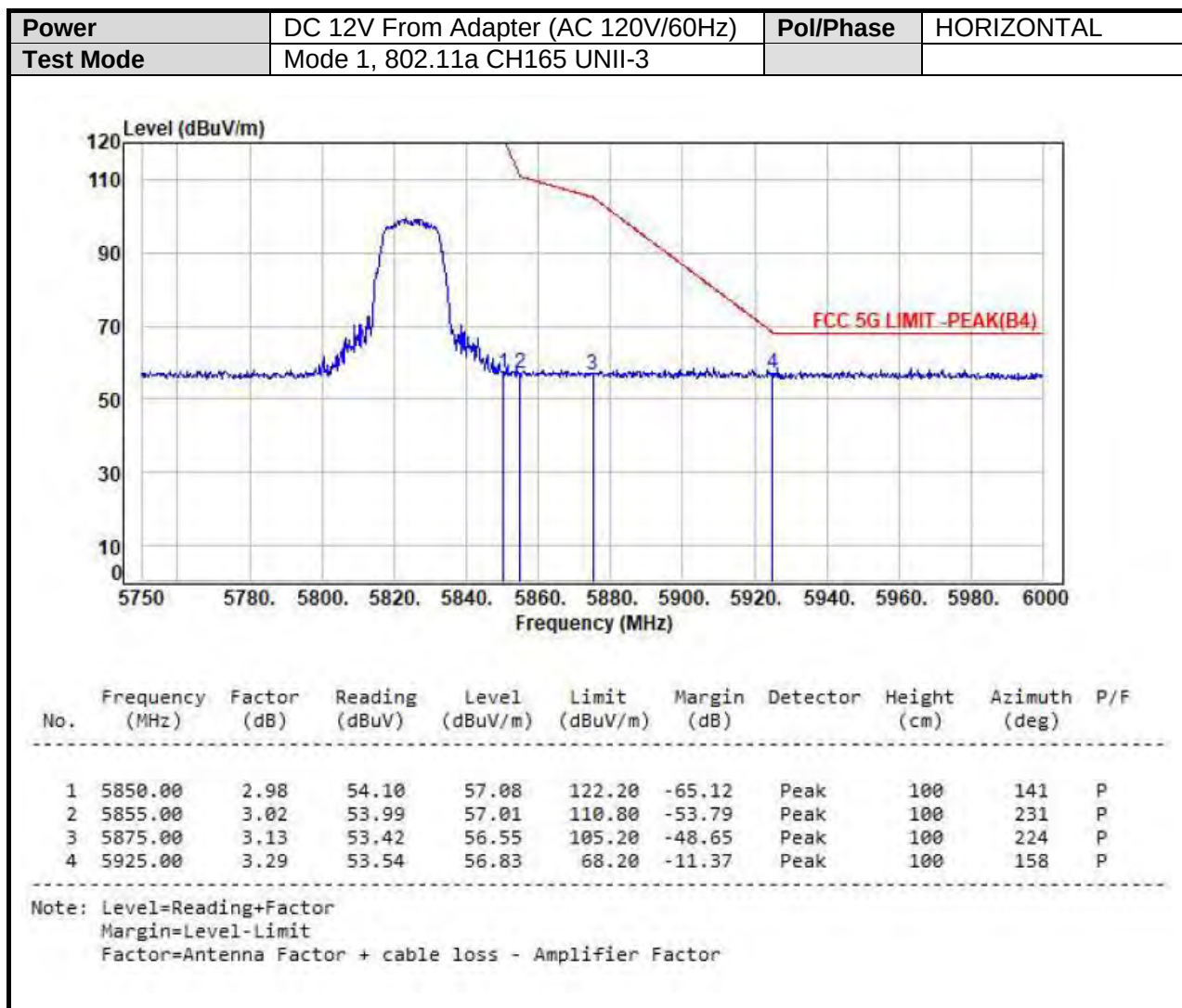


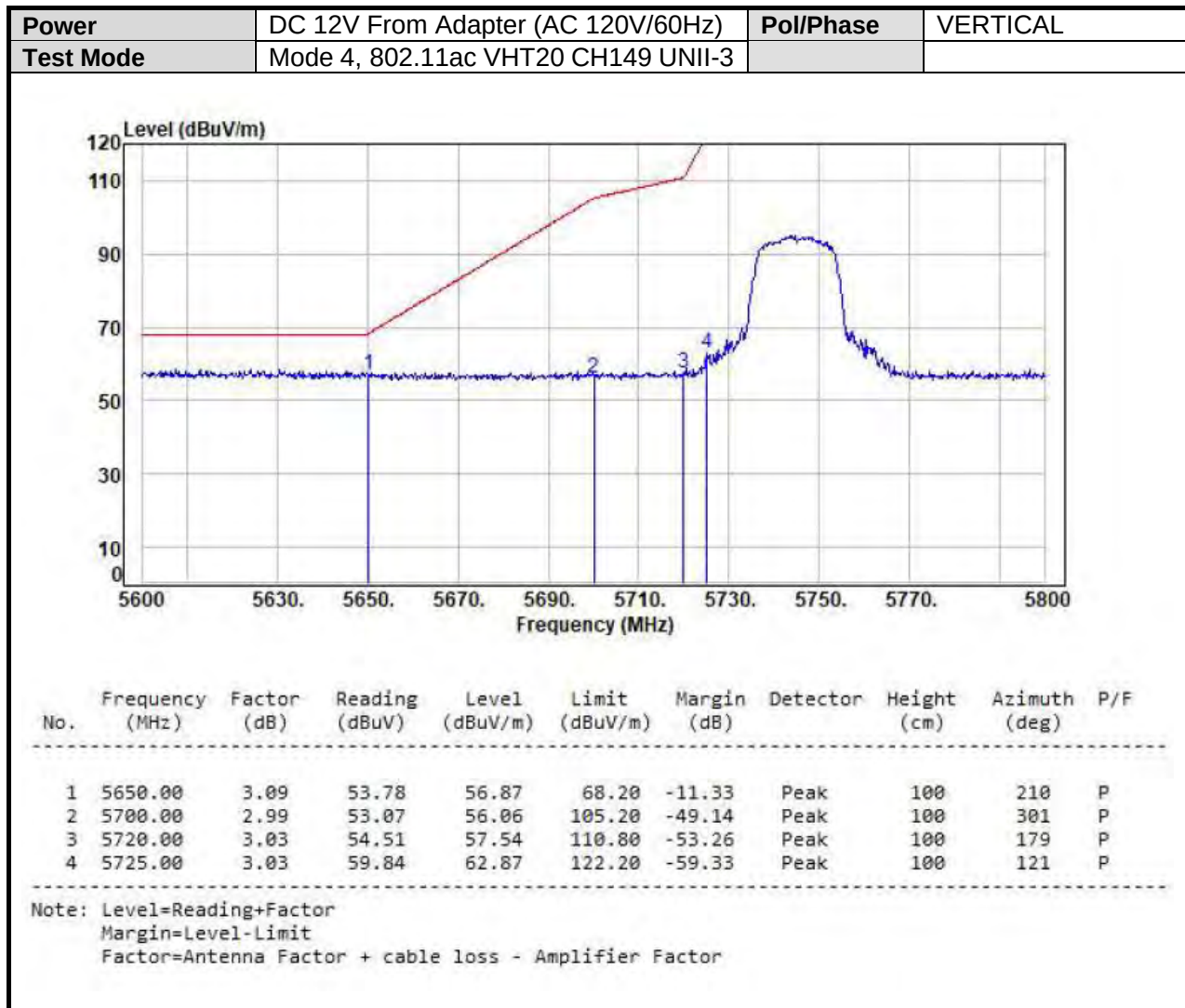


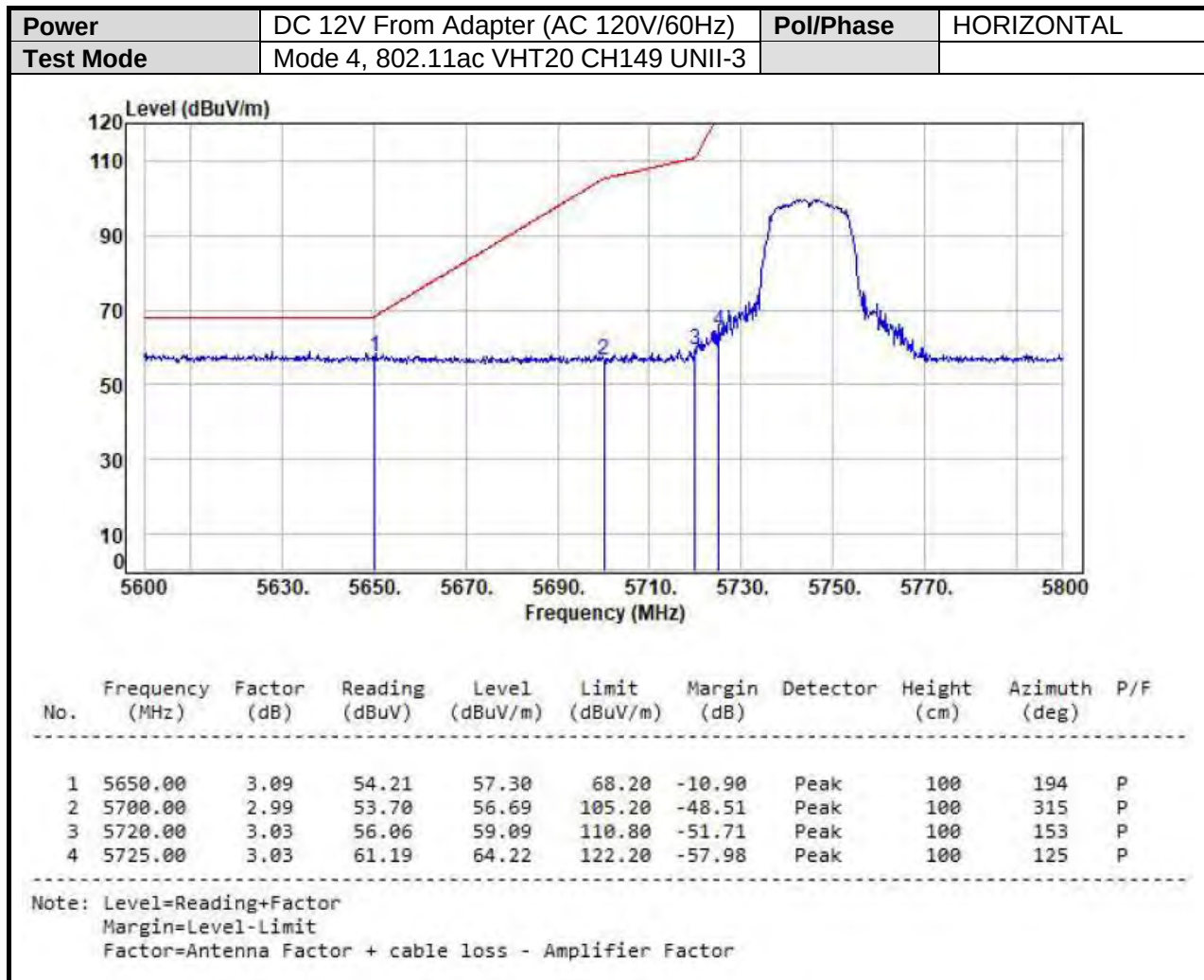


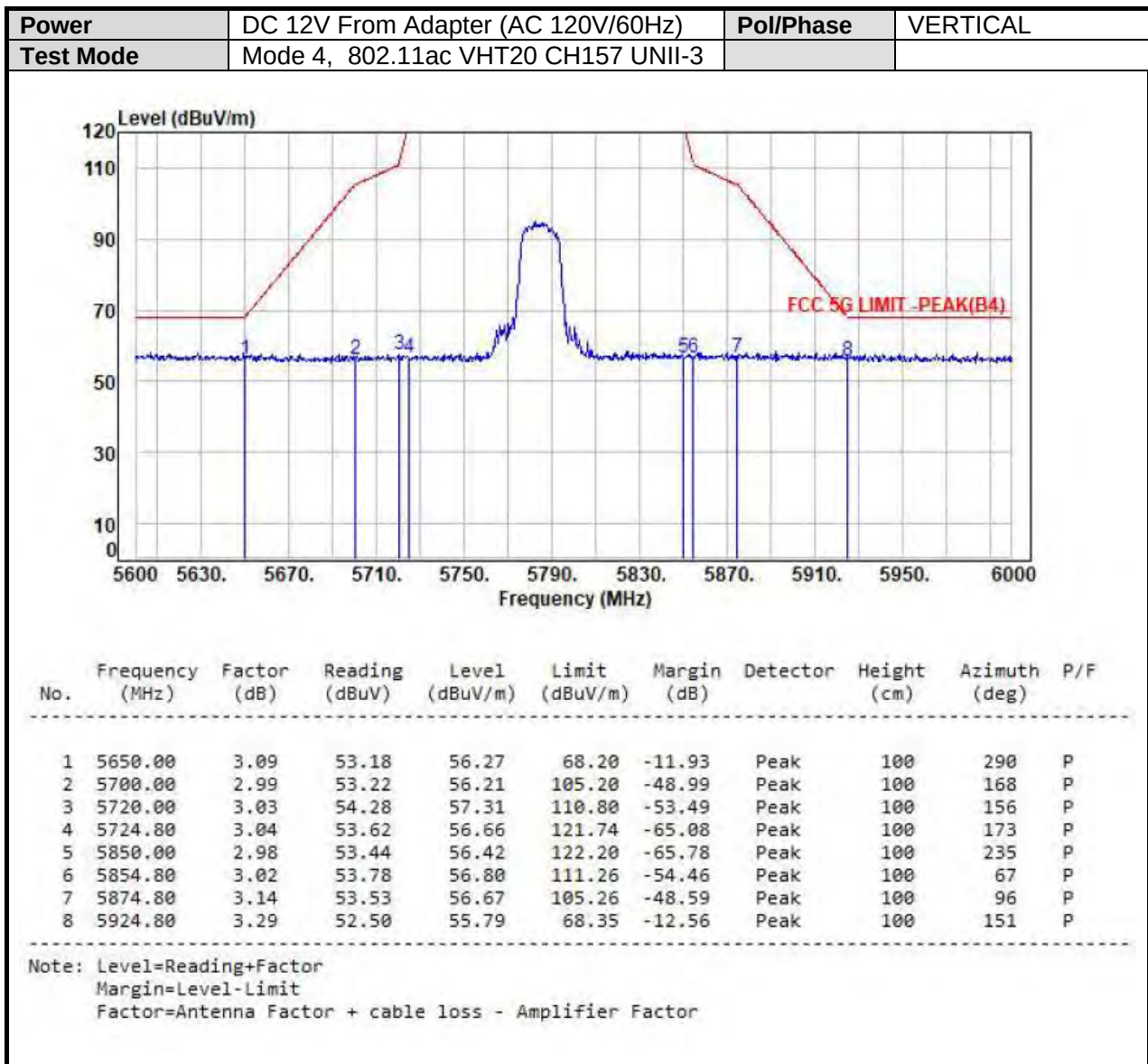


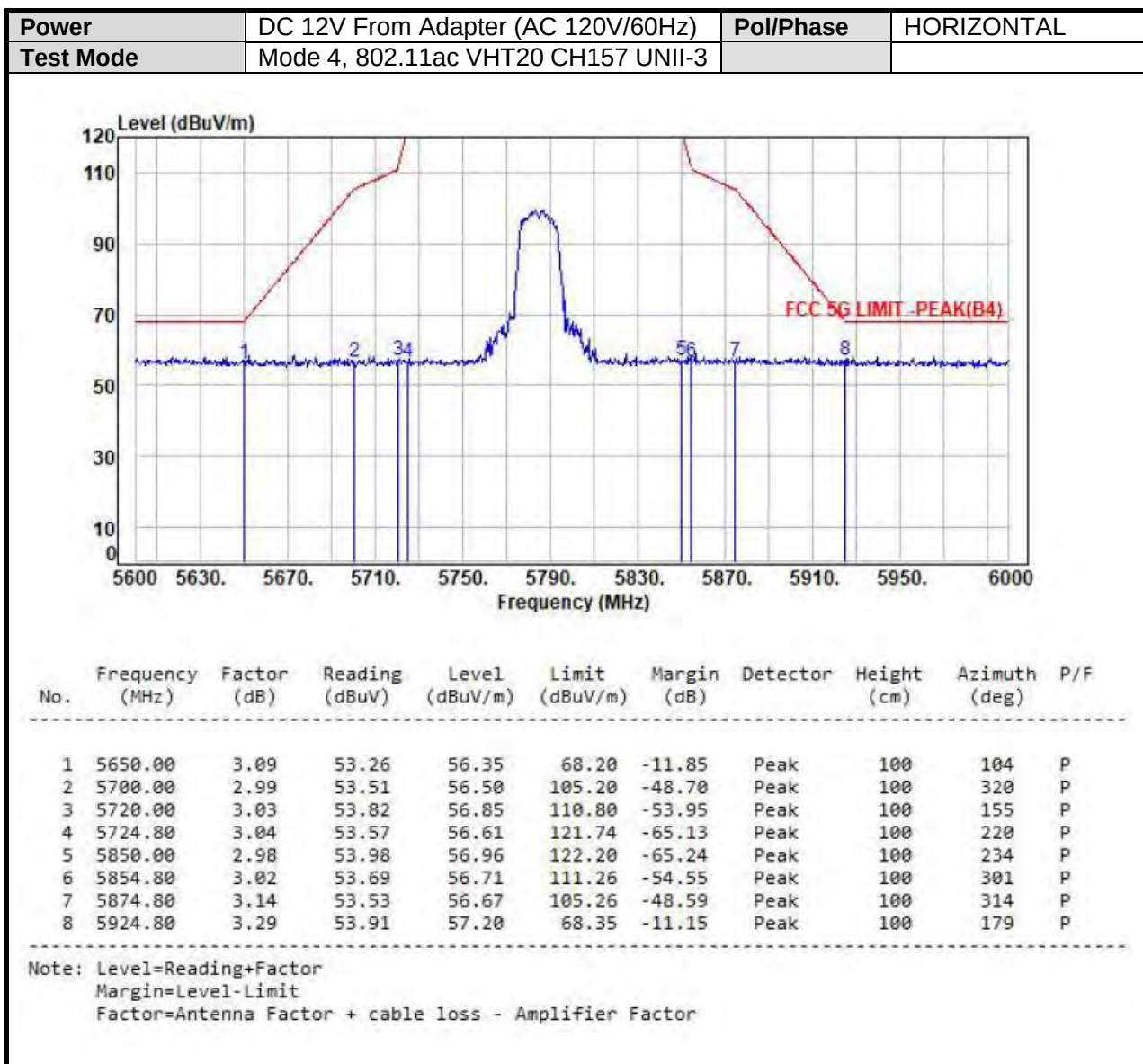


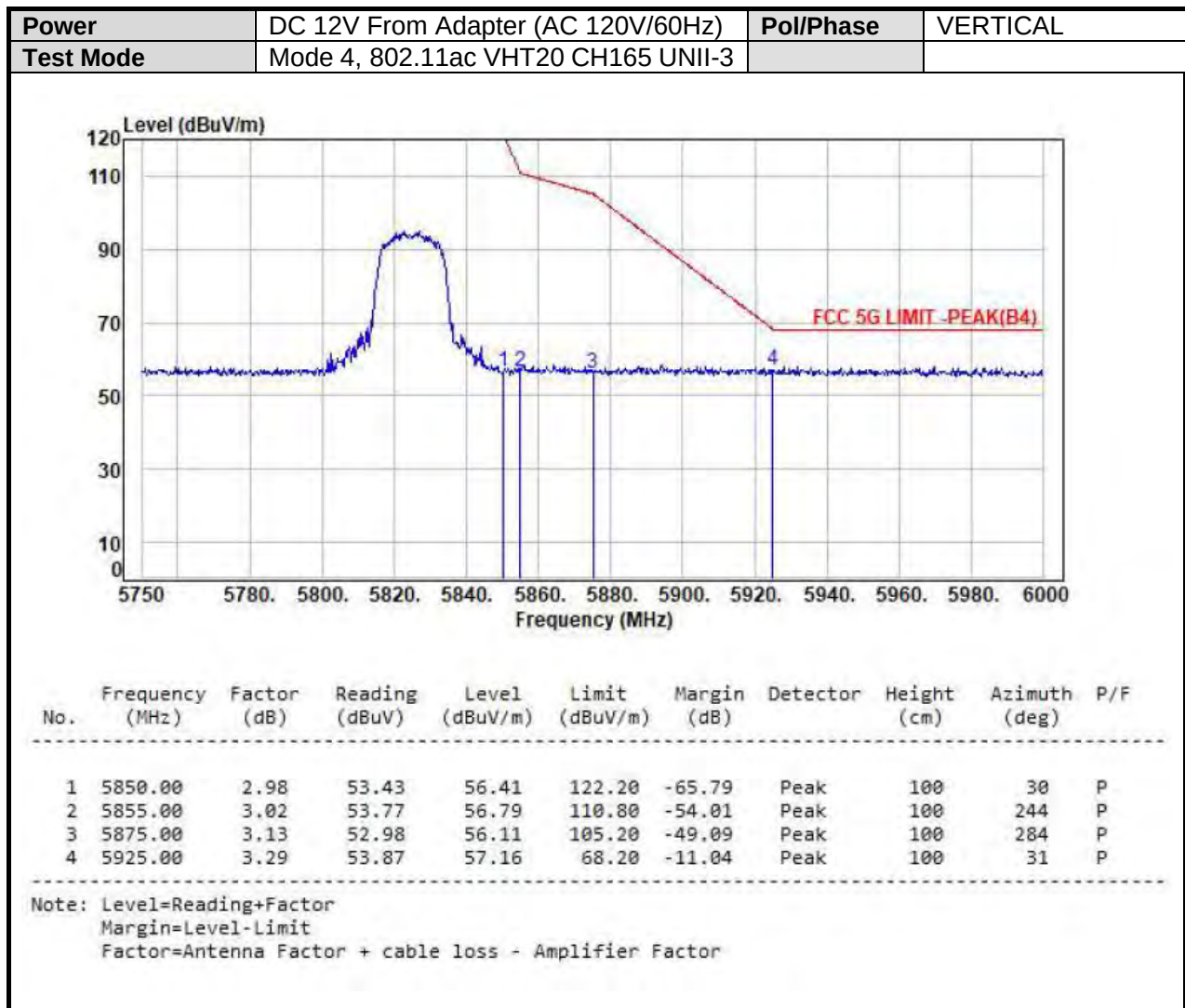


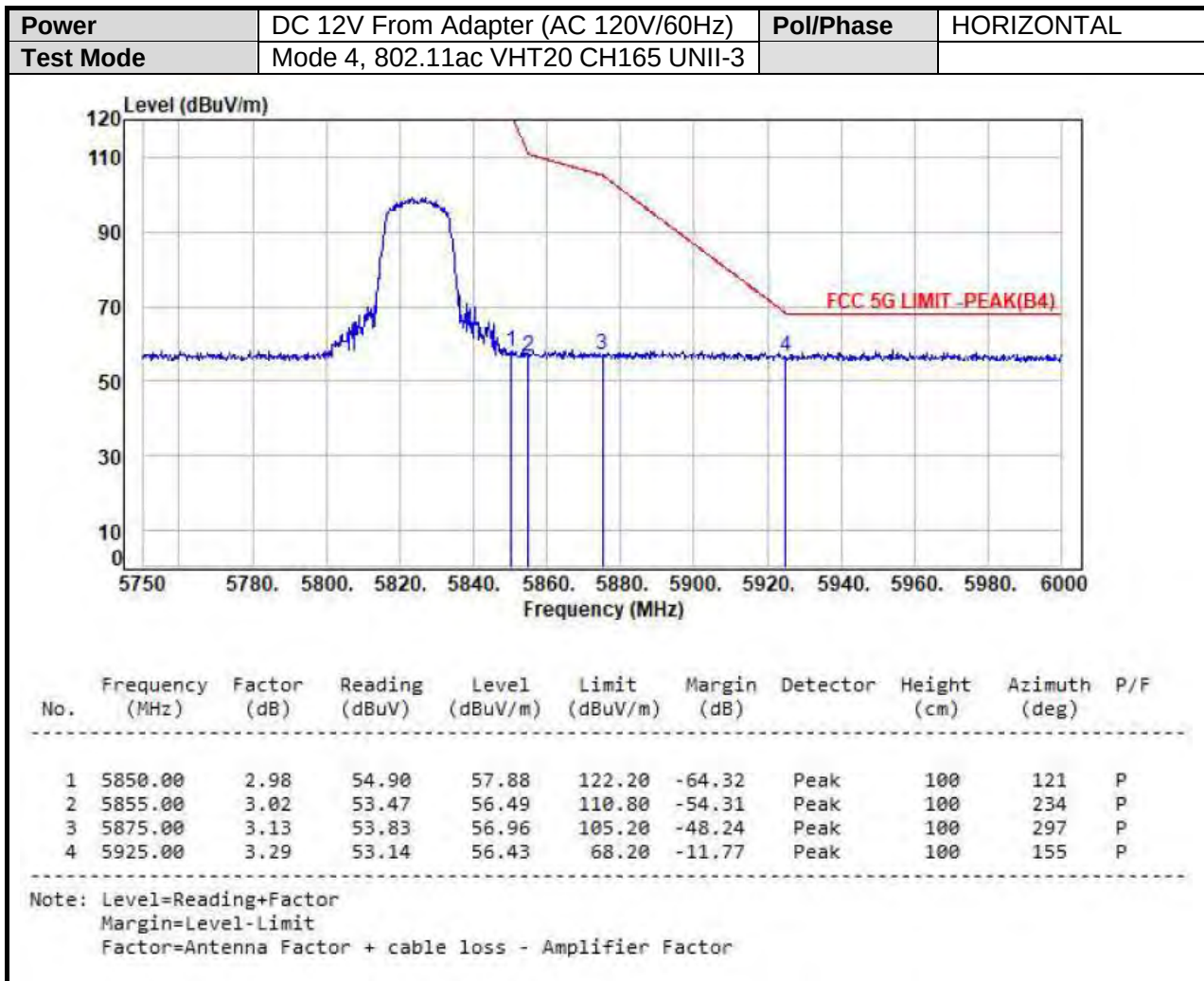


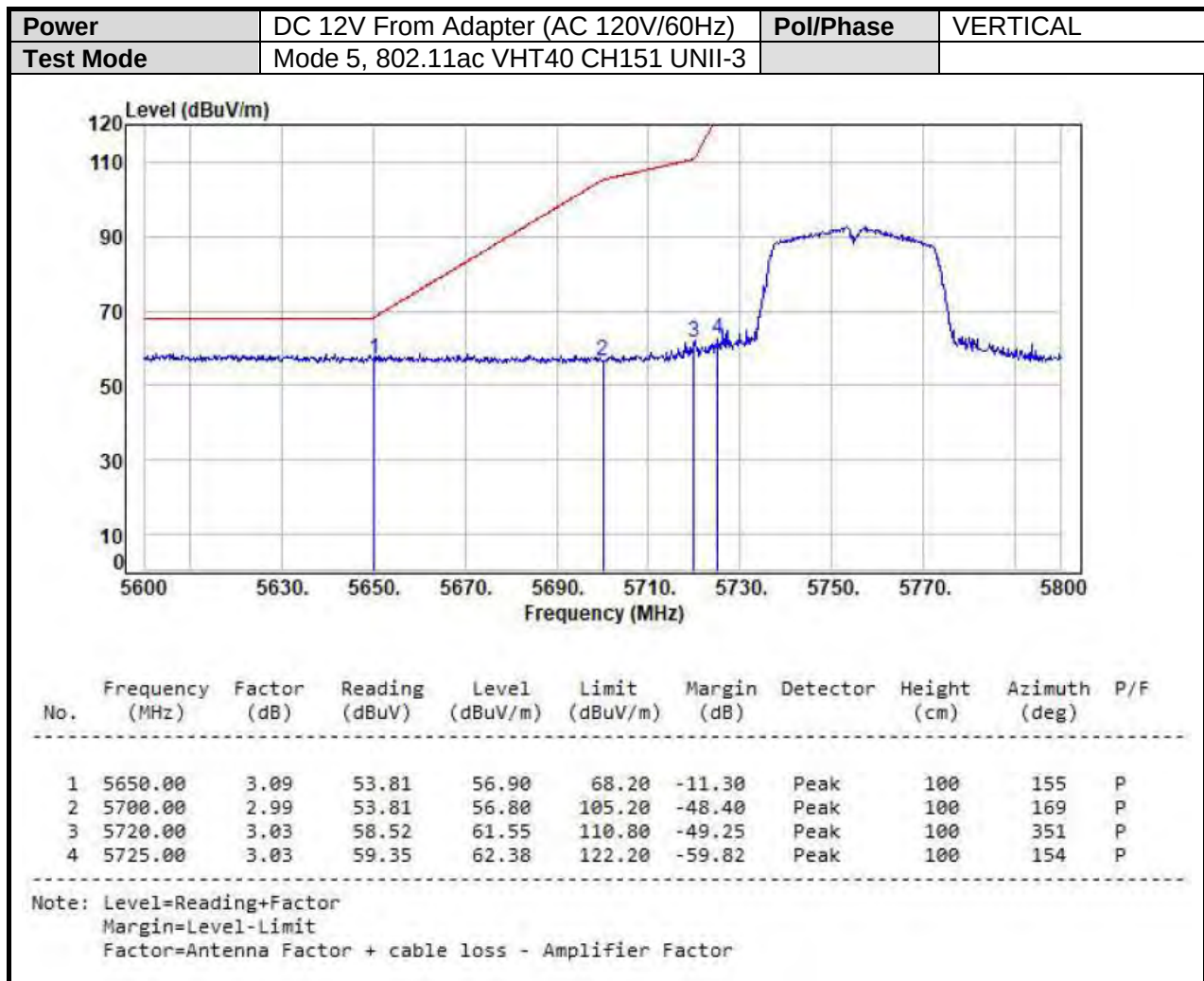


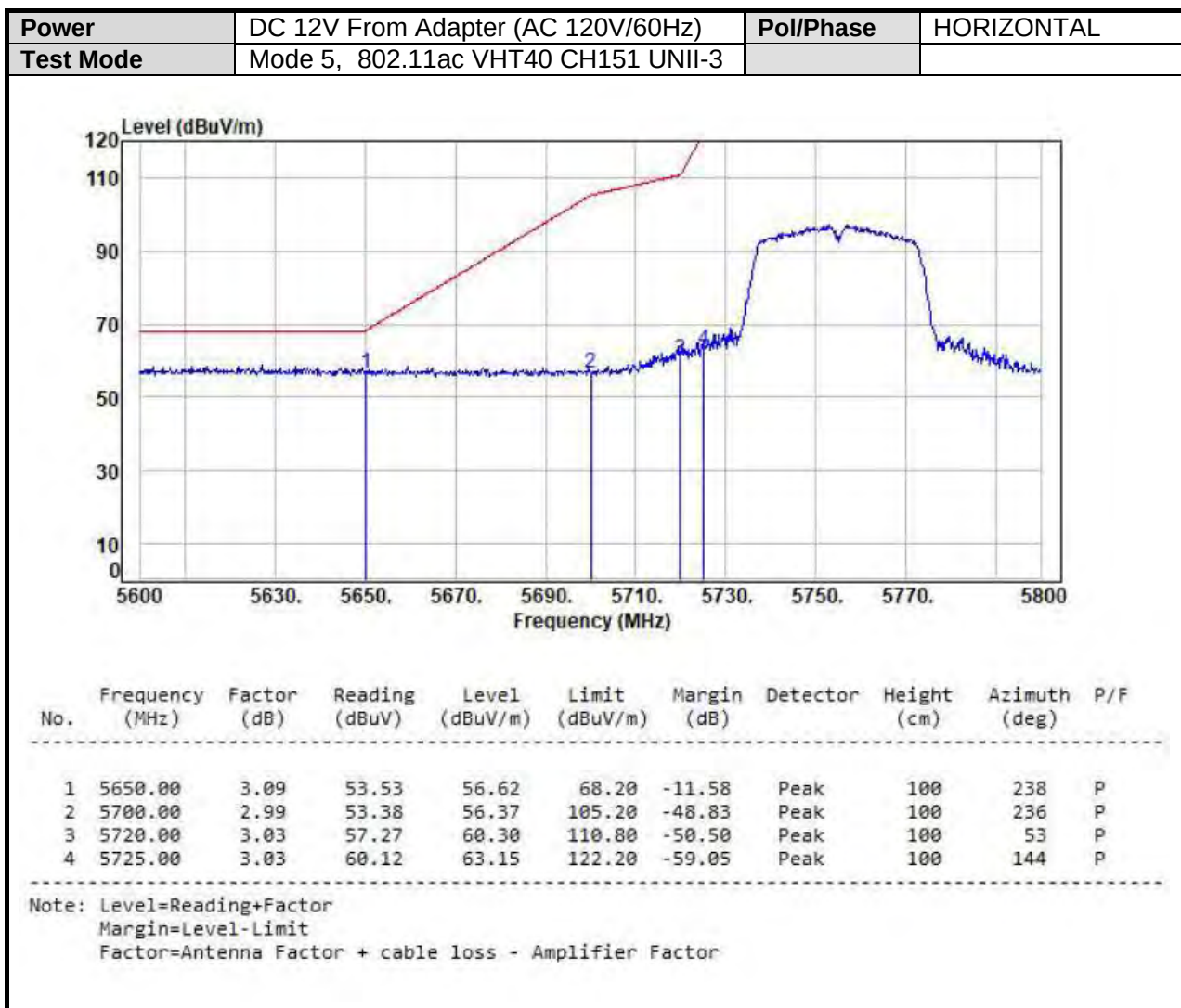


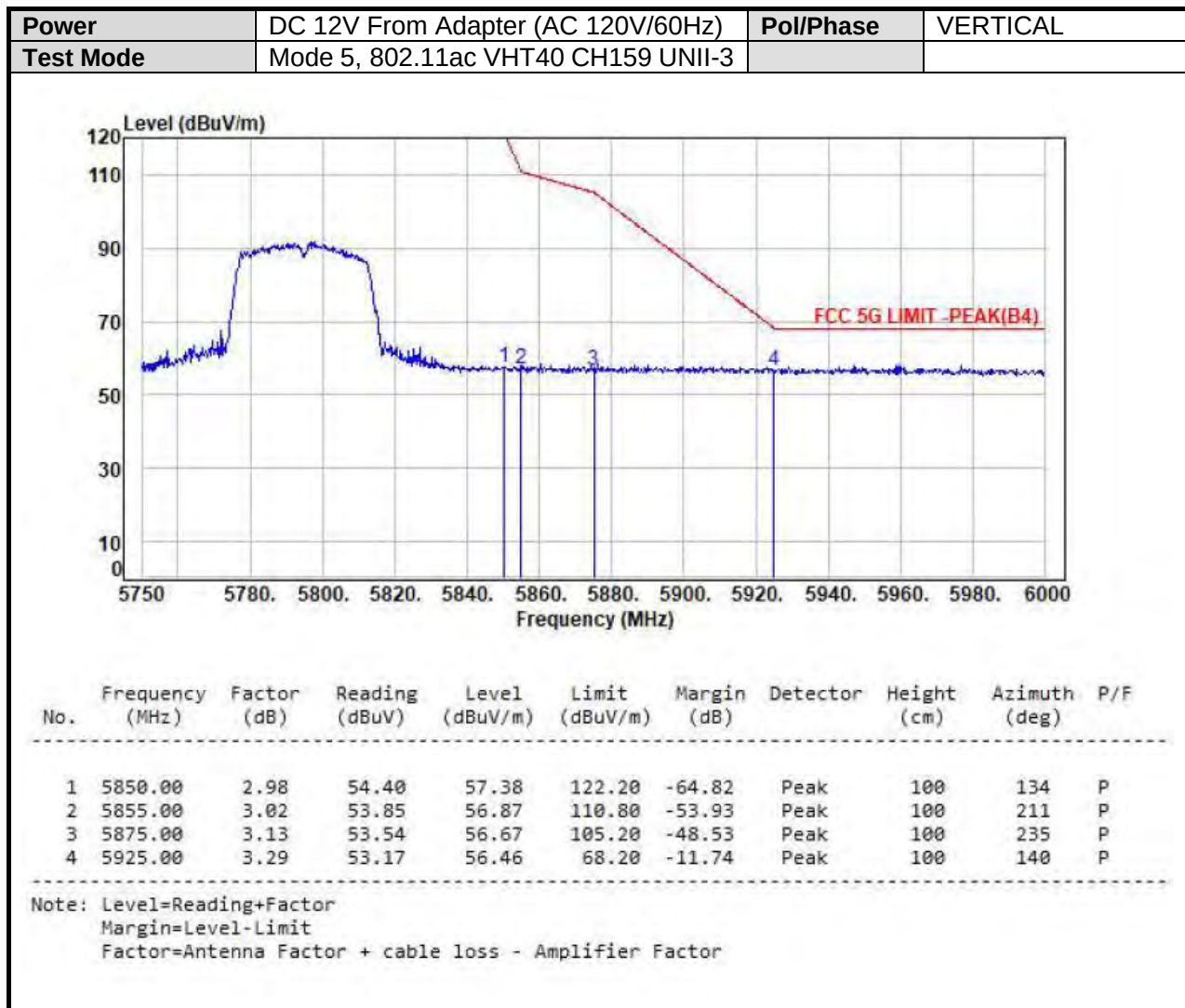


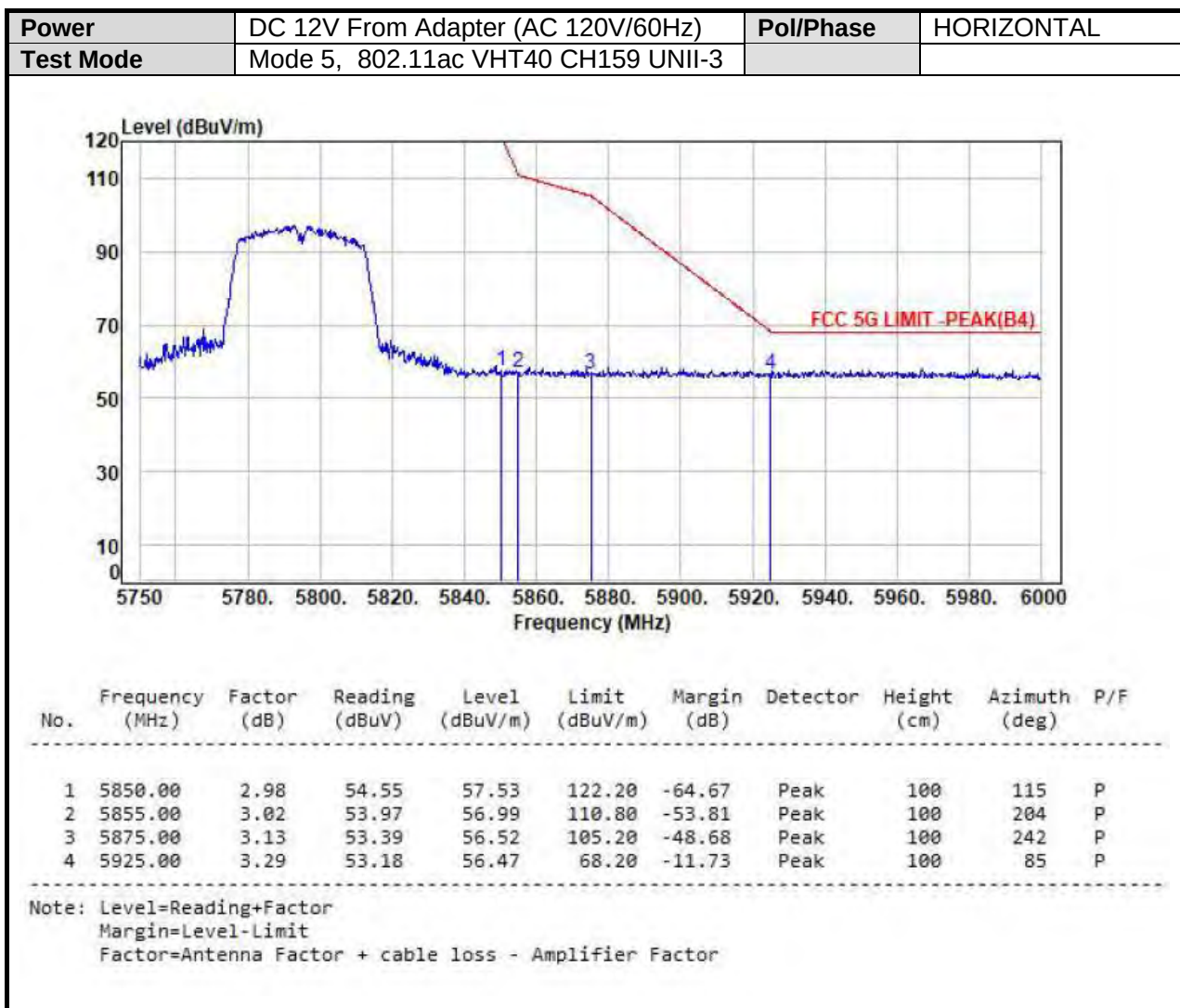


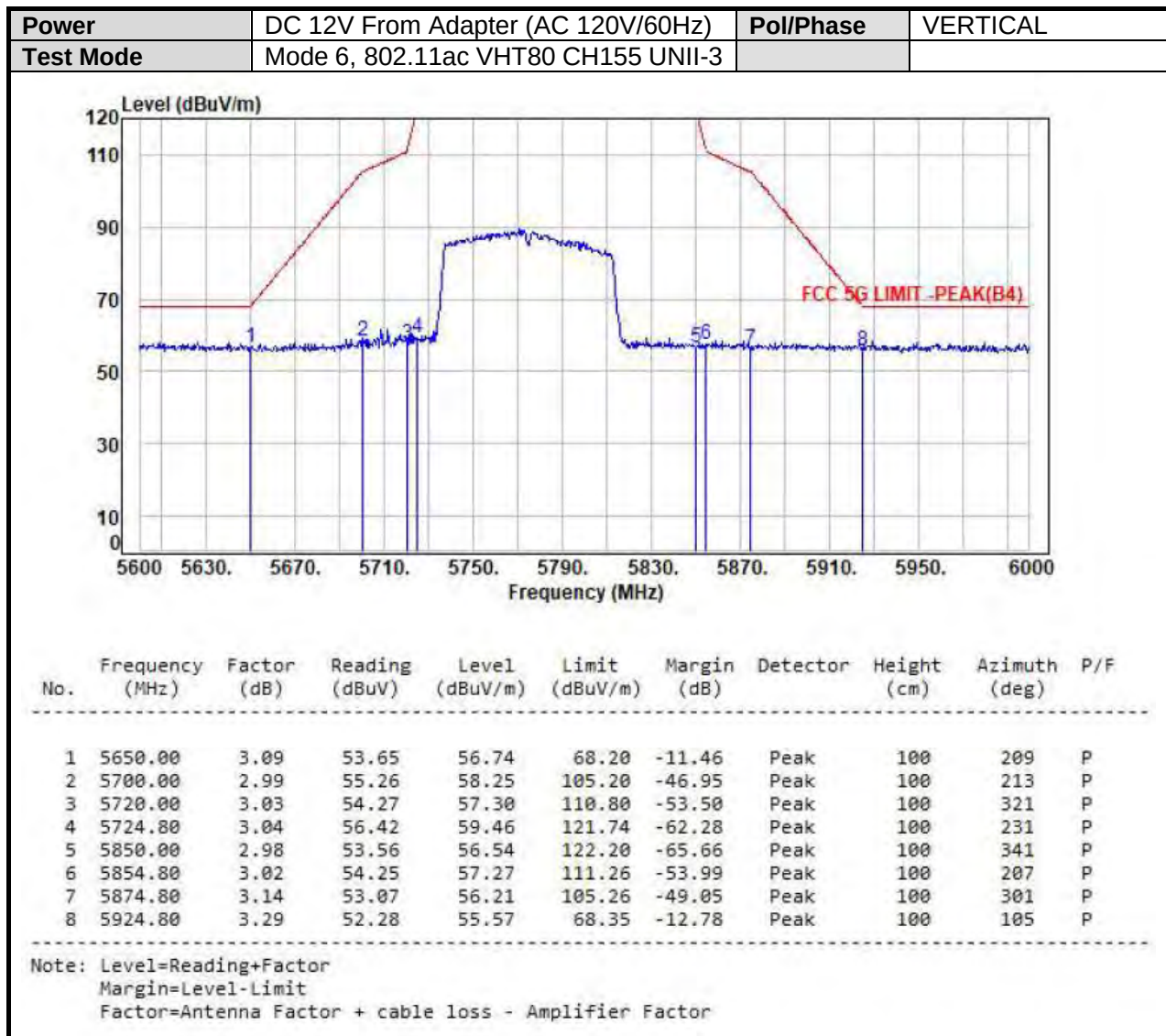


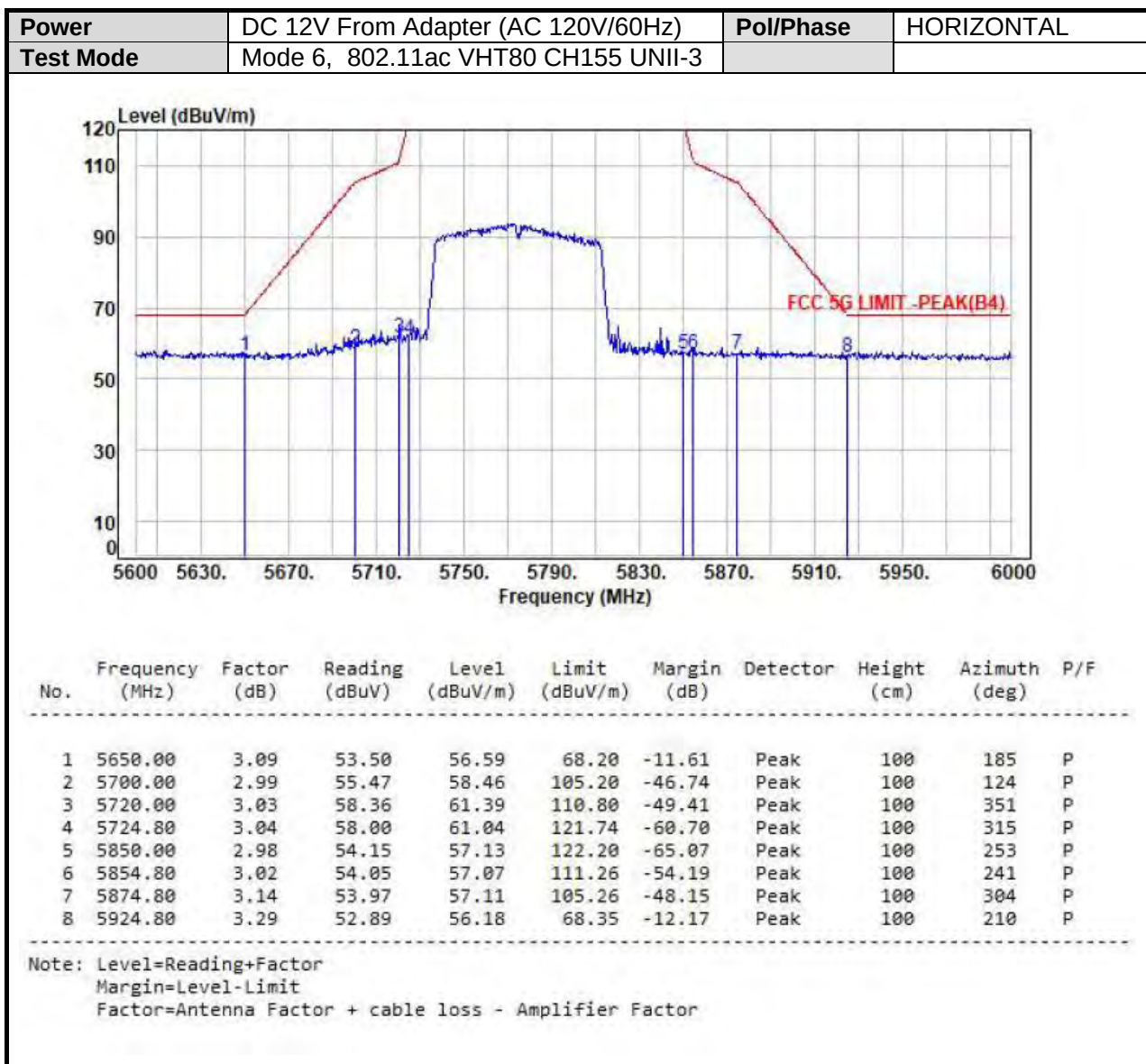










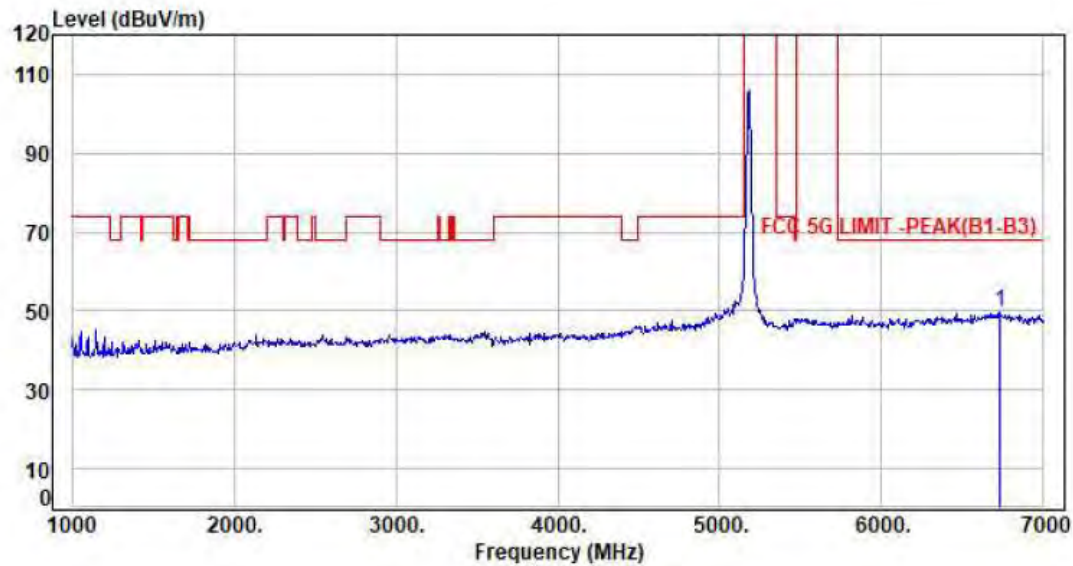




6.7. Test Result and Data (1GHz ~ 7GHz)

UNII-1

Power	DC 12V From Adapter (AC 120V/60Hz)	Pol/Phase	VERTICAL
Test Mode	Mode 1, 802.11a CH36 UNII-1	Detector	Peak

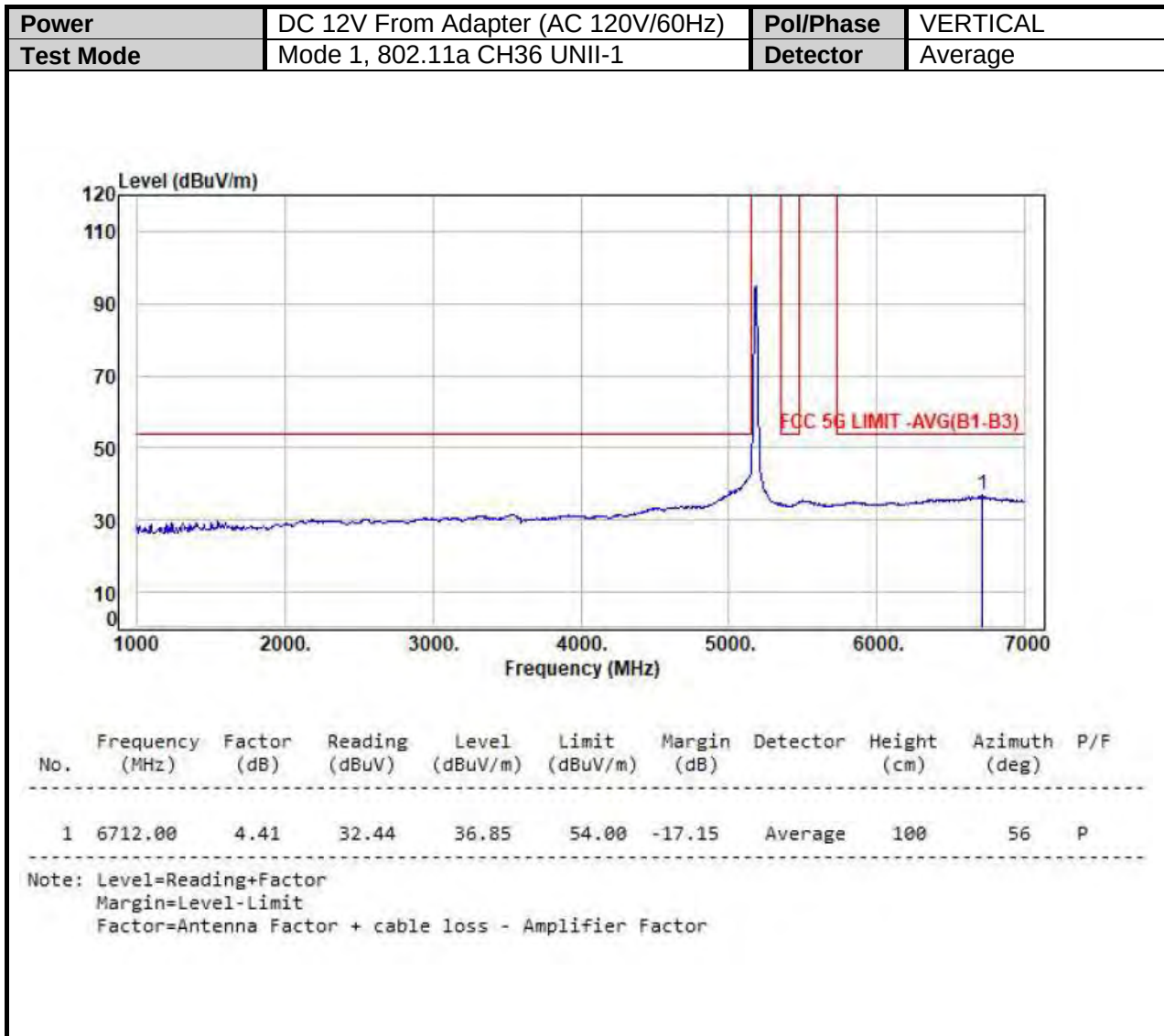


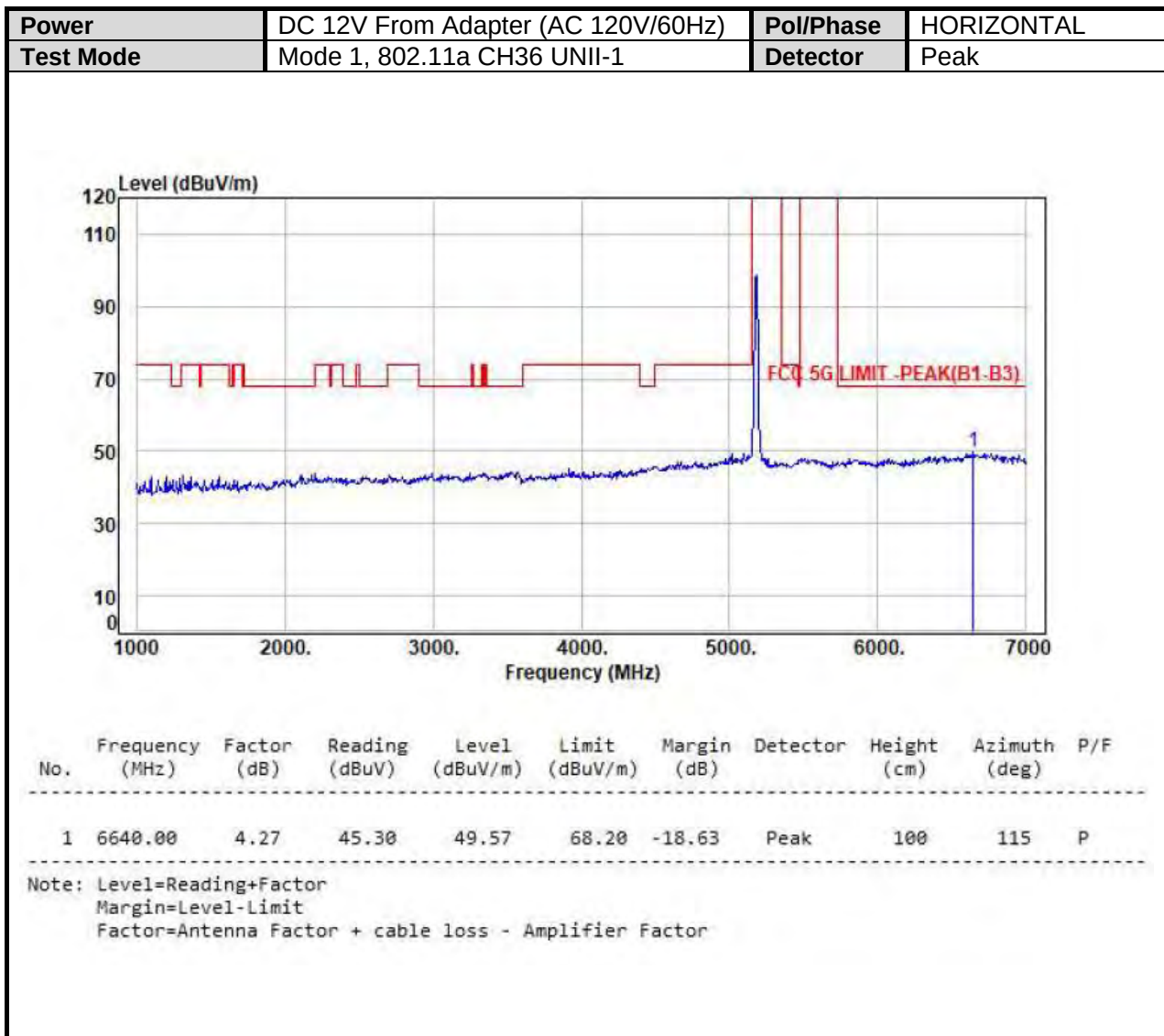
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	6736.00	4.39	45.26	49.65	68.20	-18.55	Peak	100	12	P

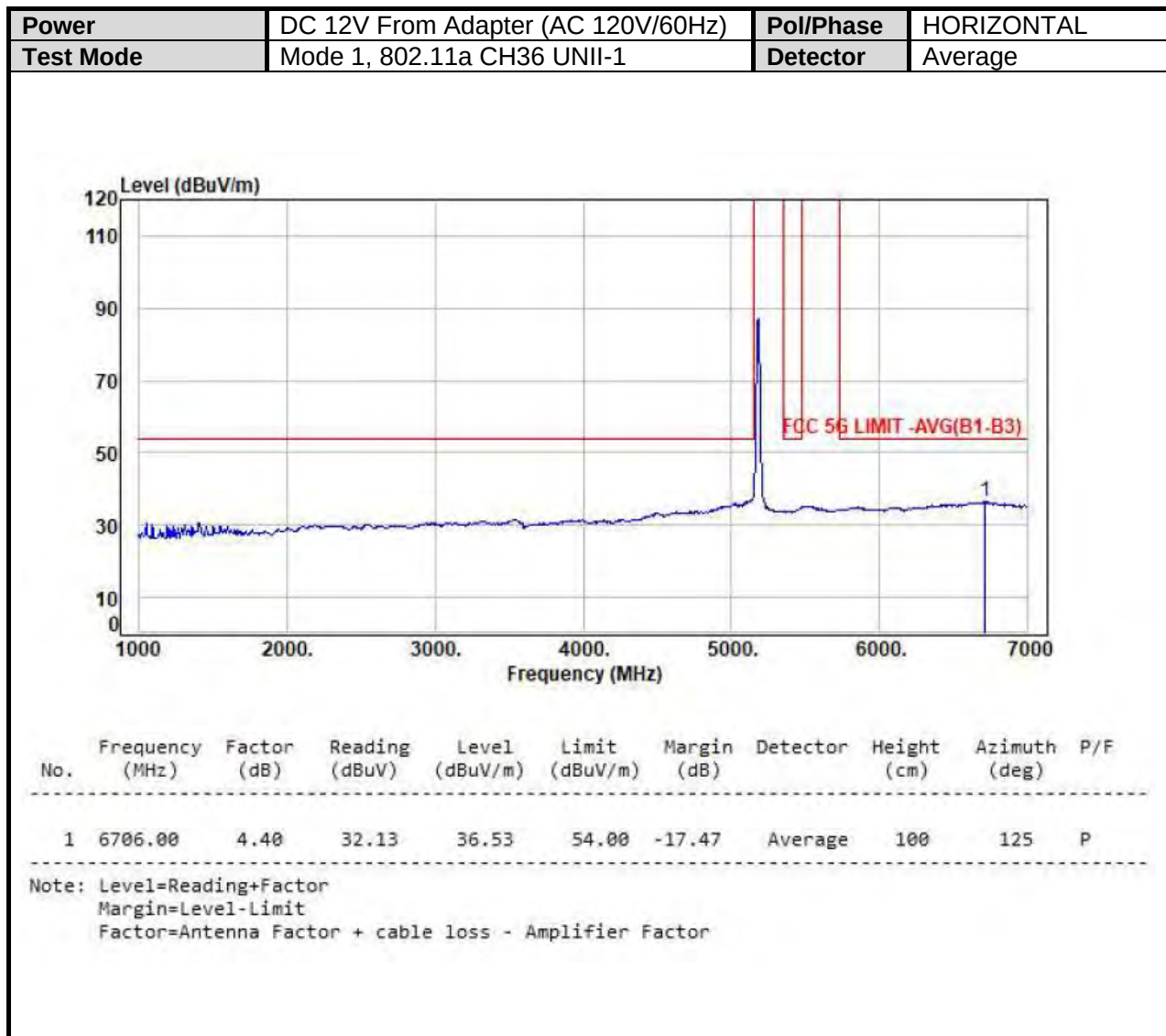
Note: Level=Reading+Factor

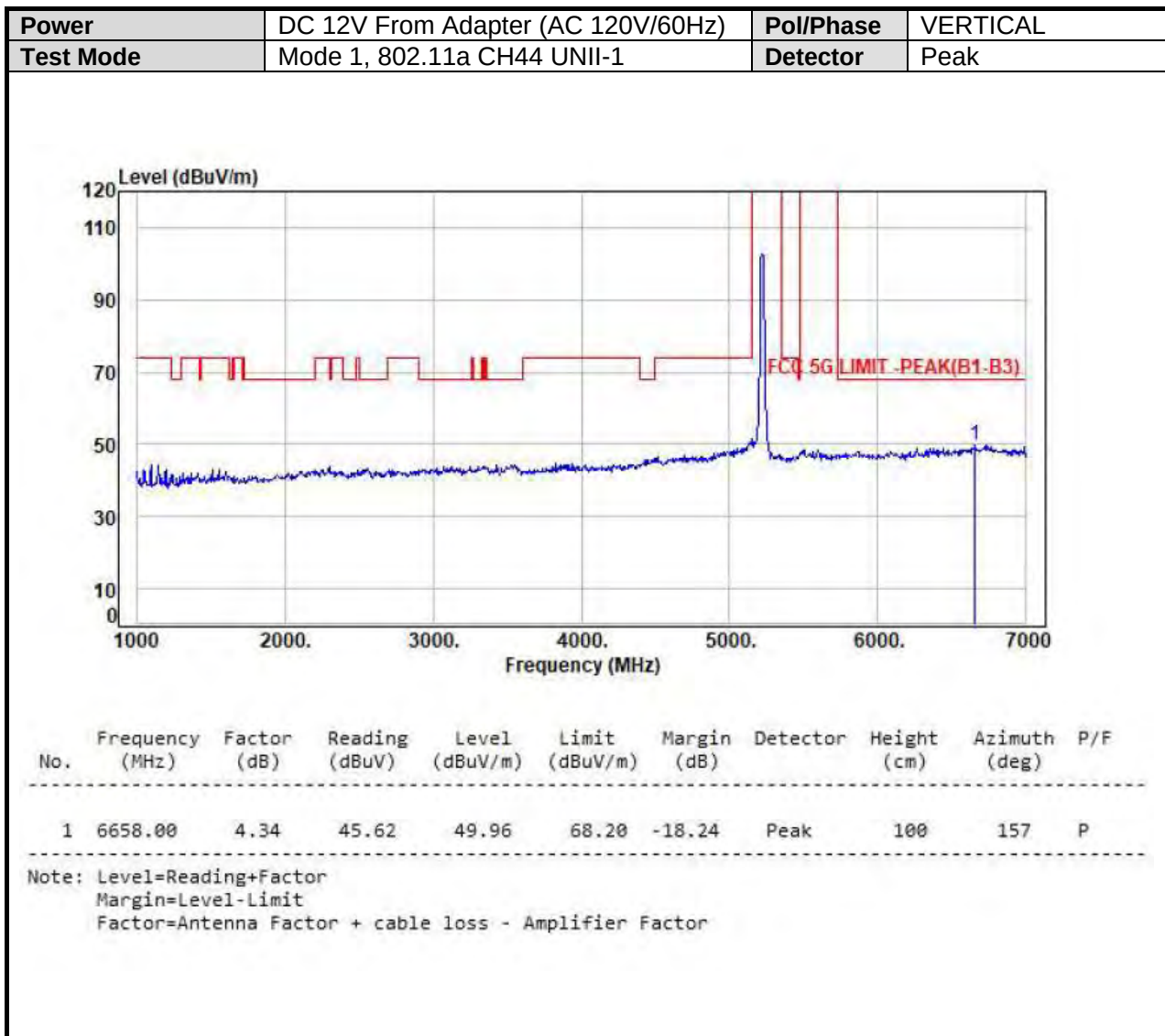
Margin=Level-Limit

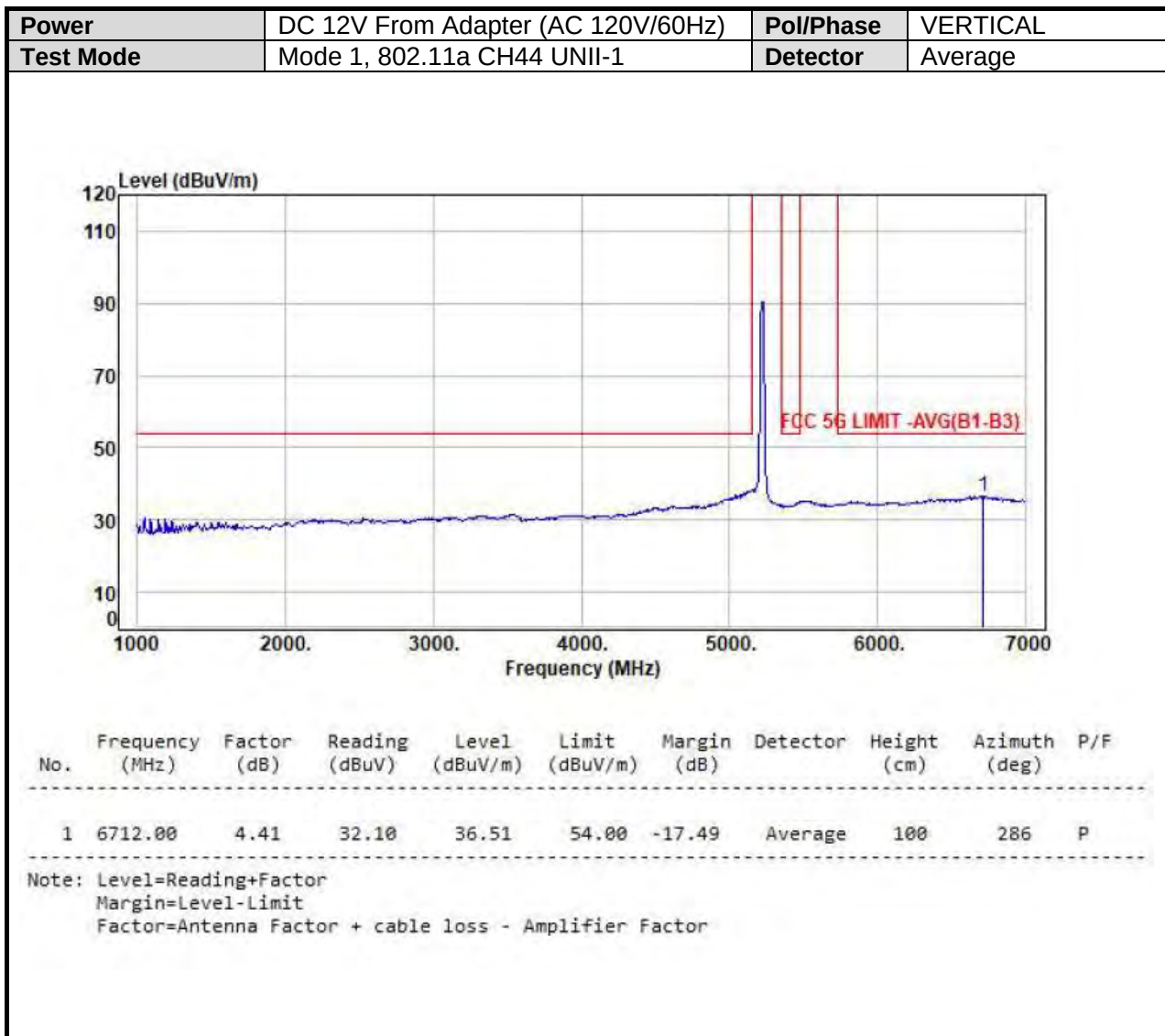
Factor=Antenna Factor + cable loss - Amplifier Factor

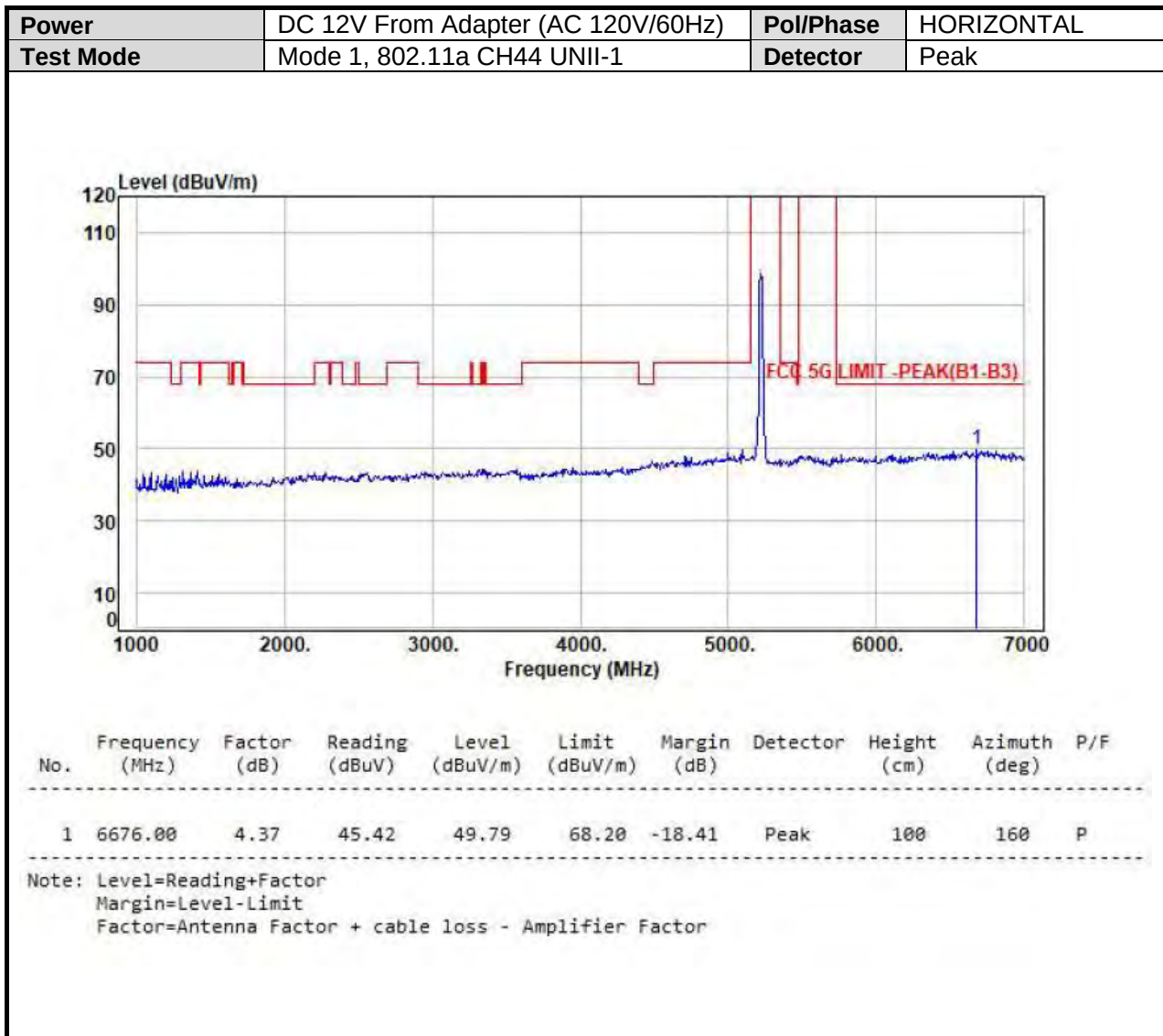


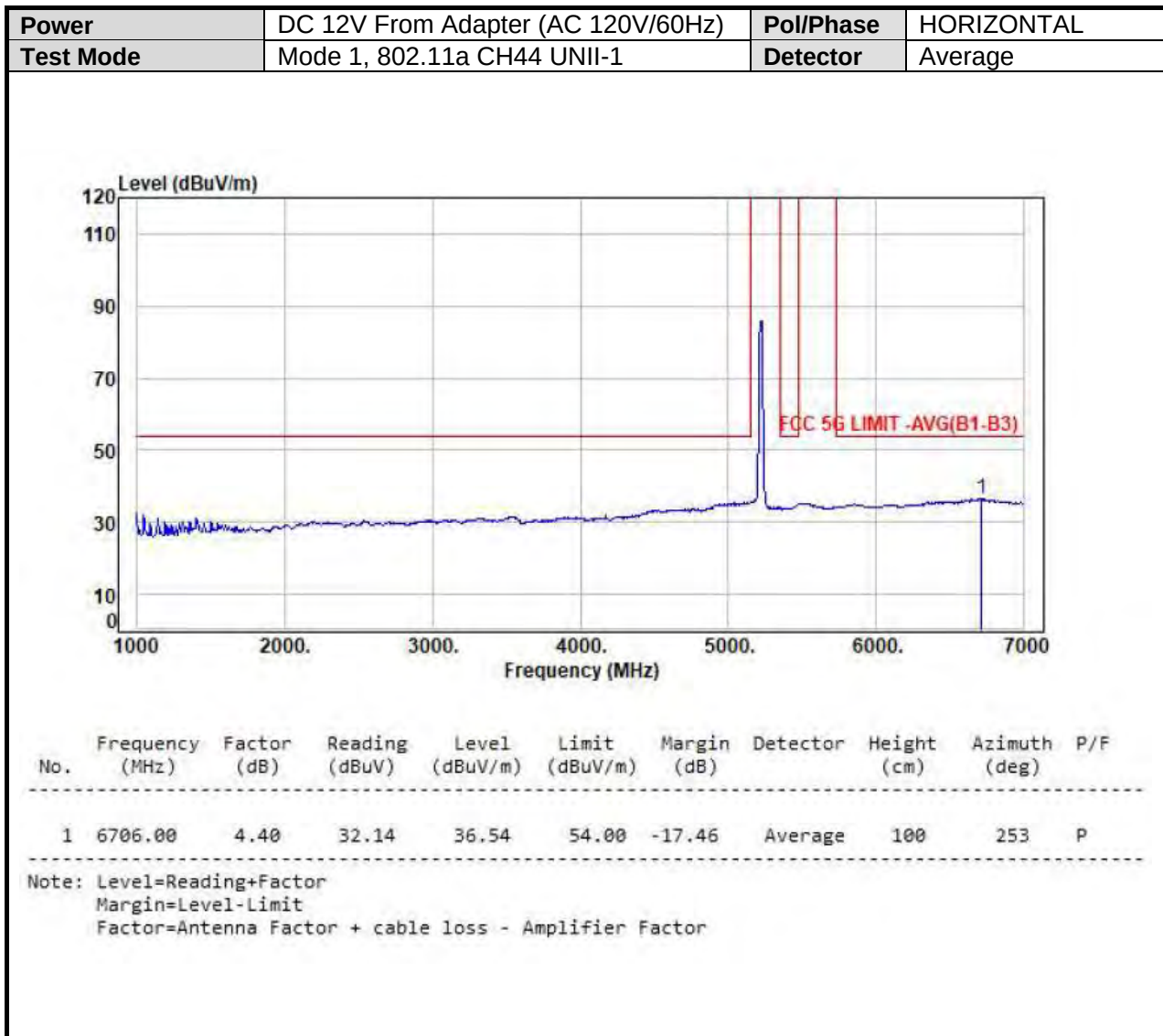


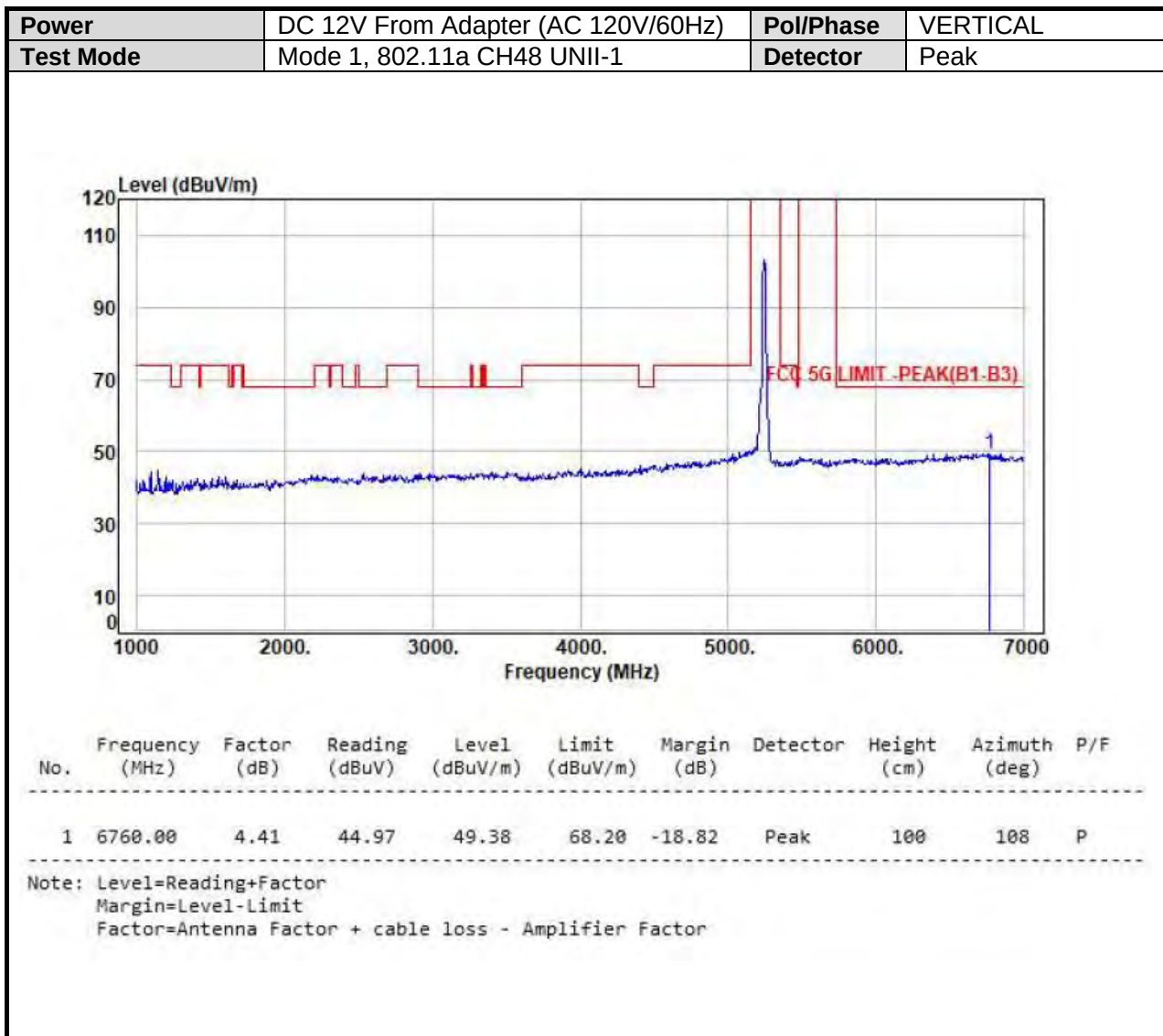


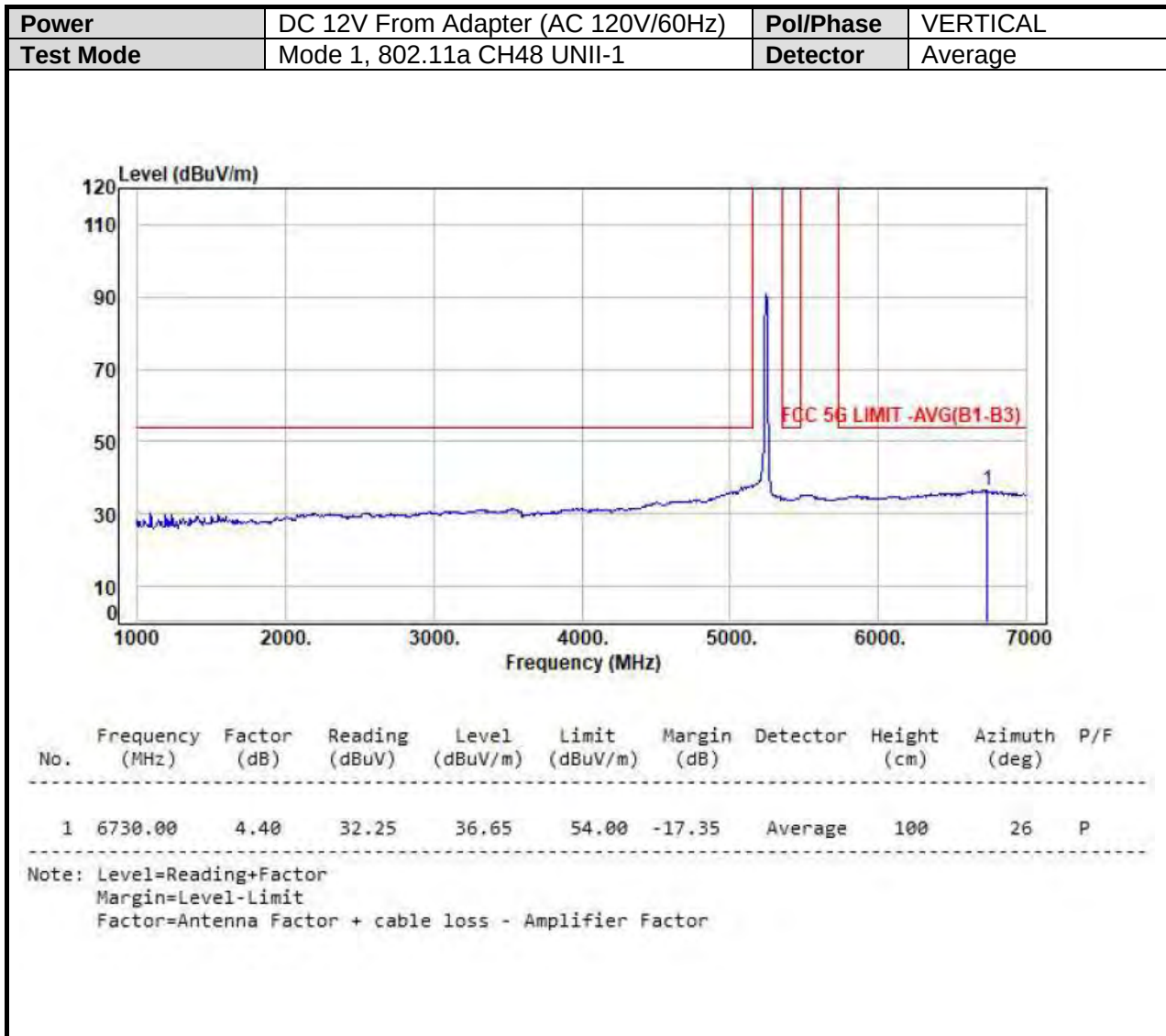


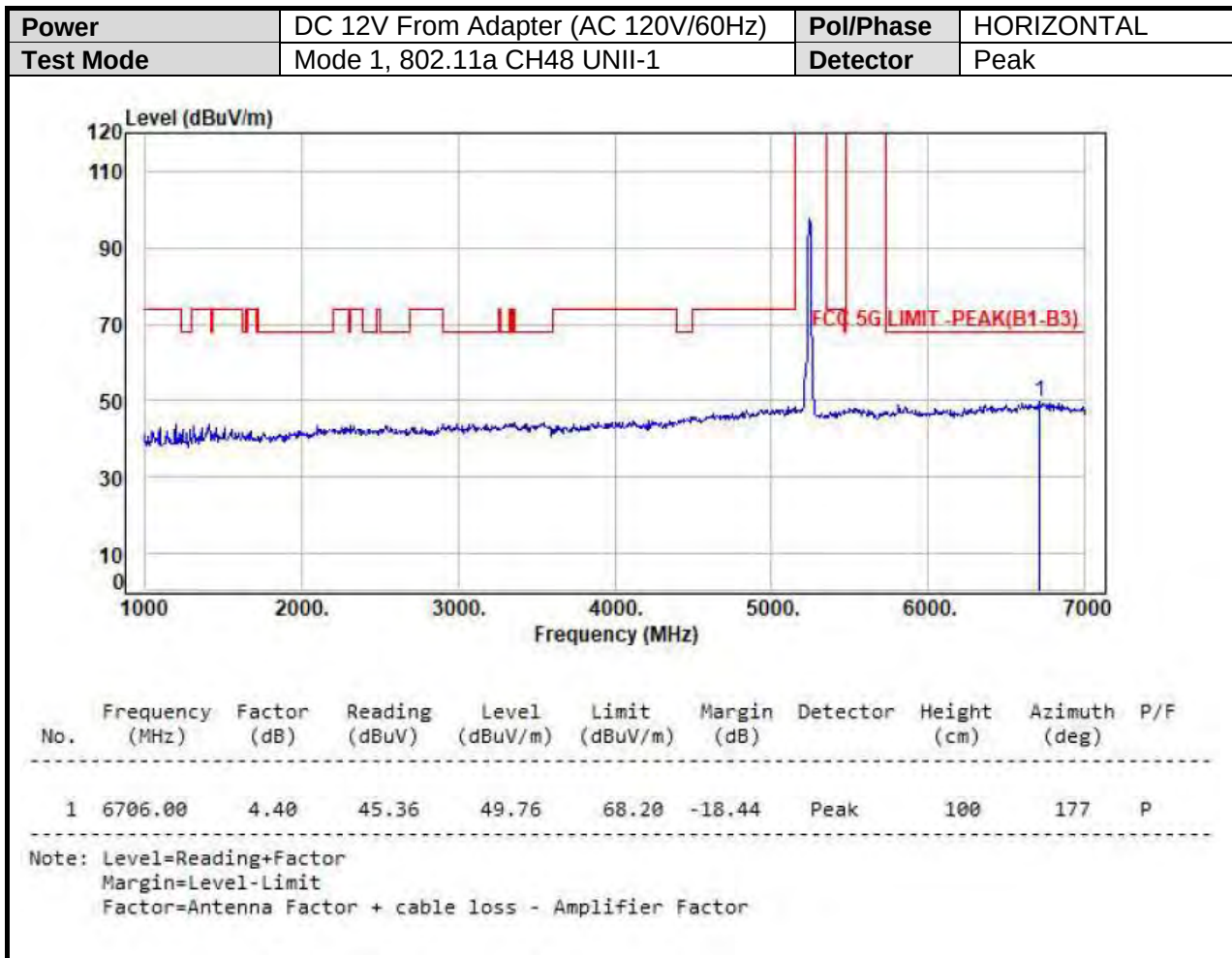


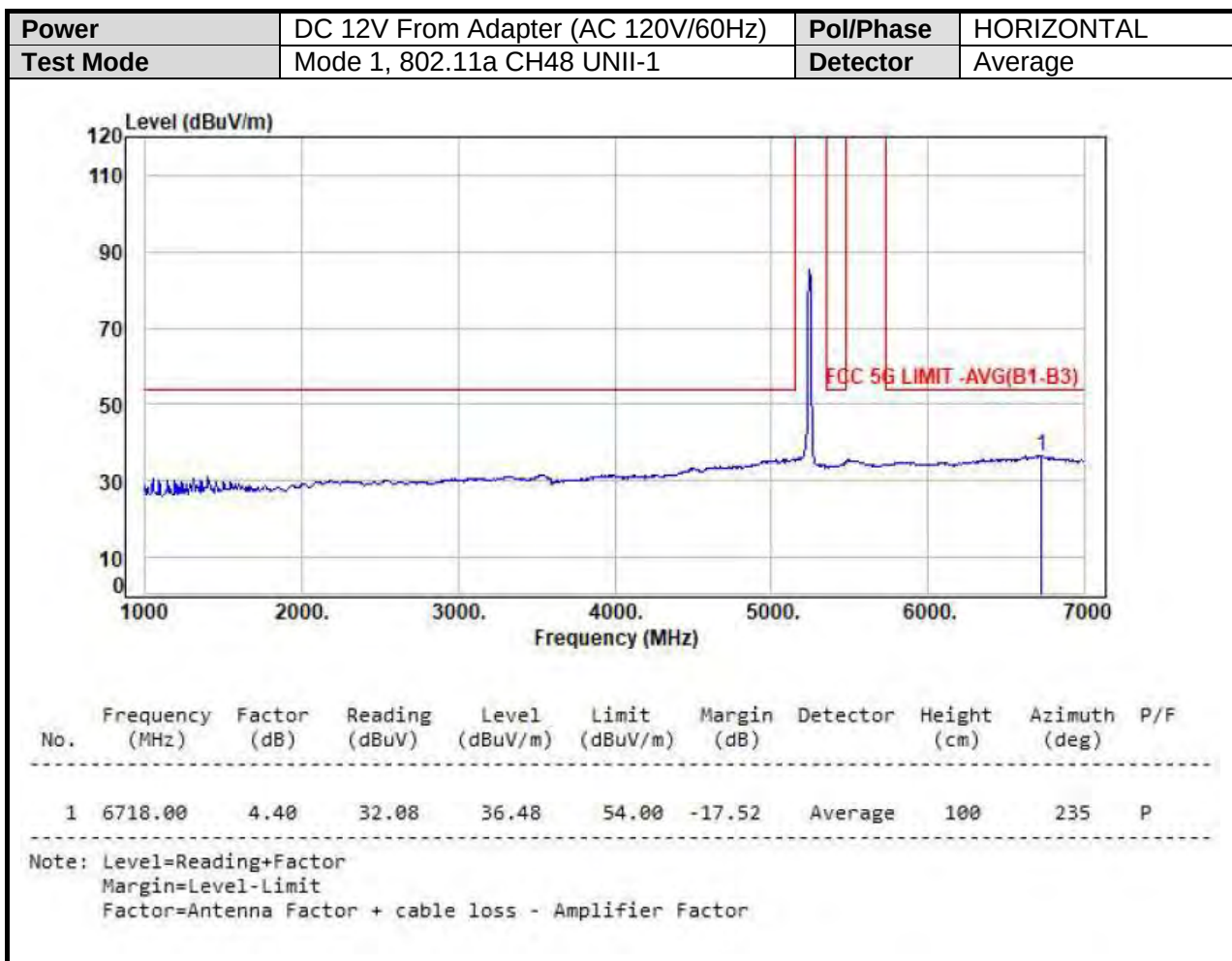


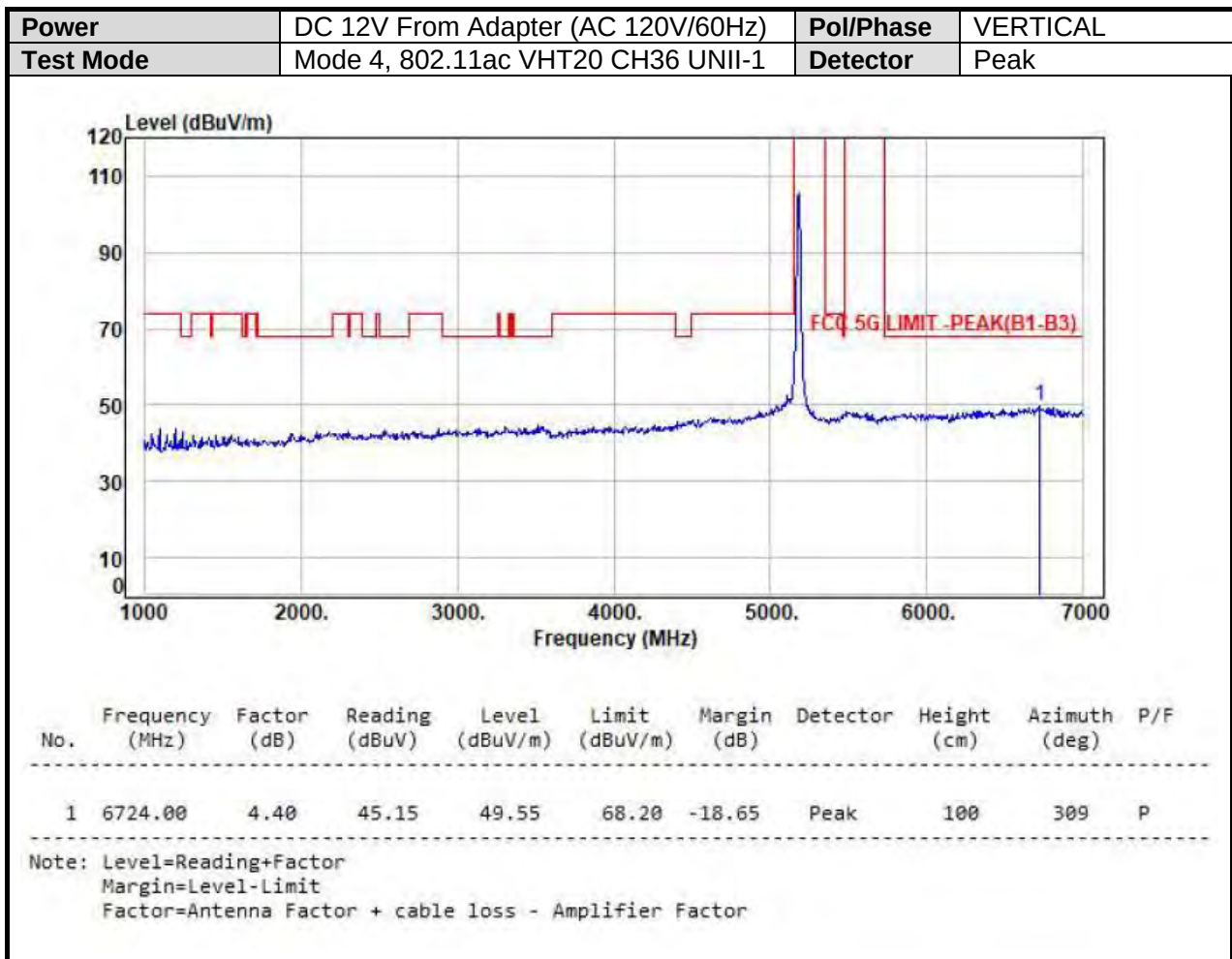


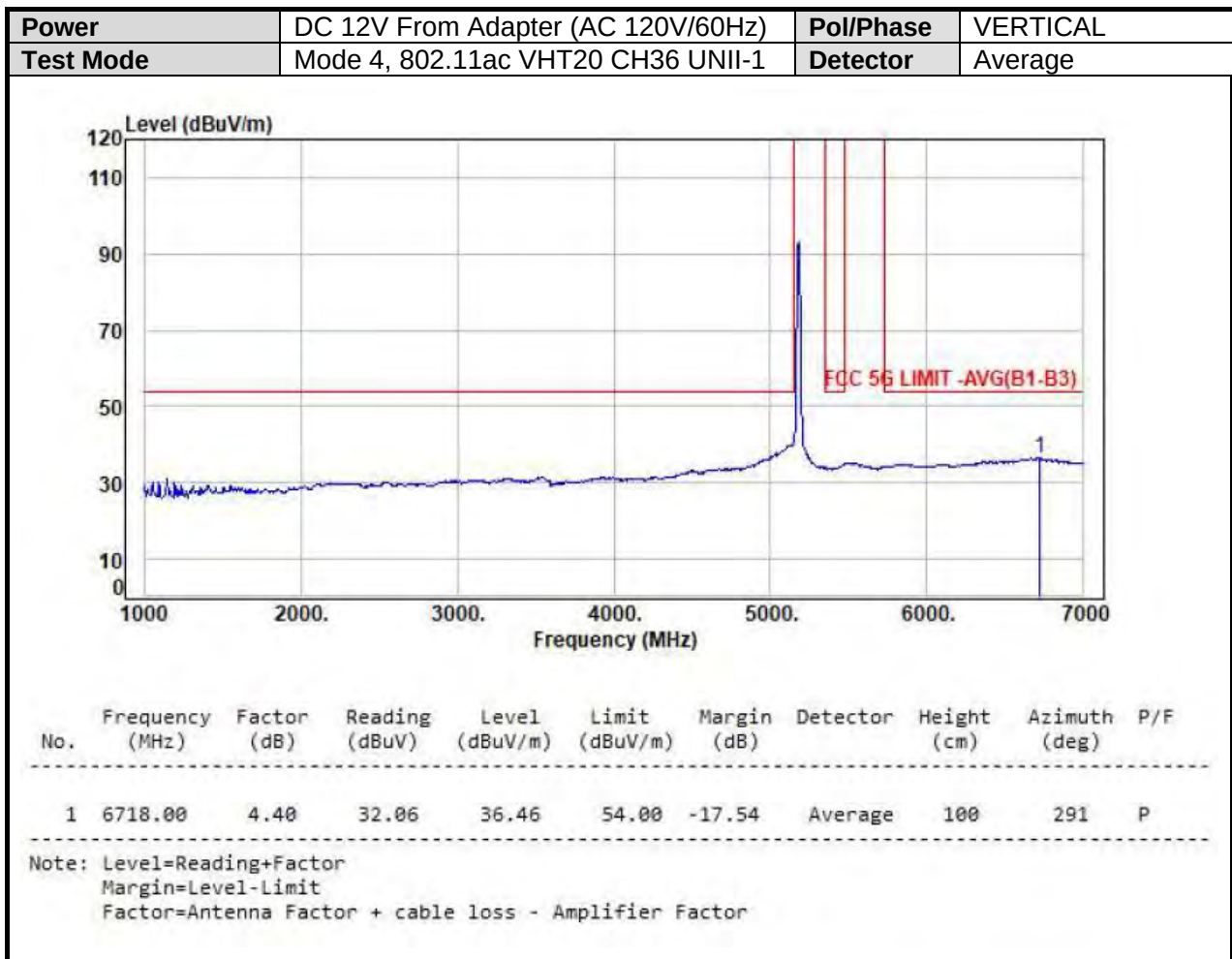


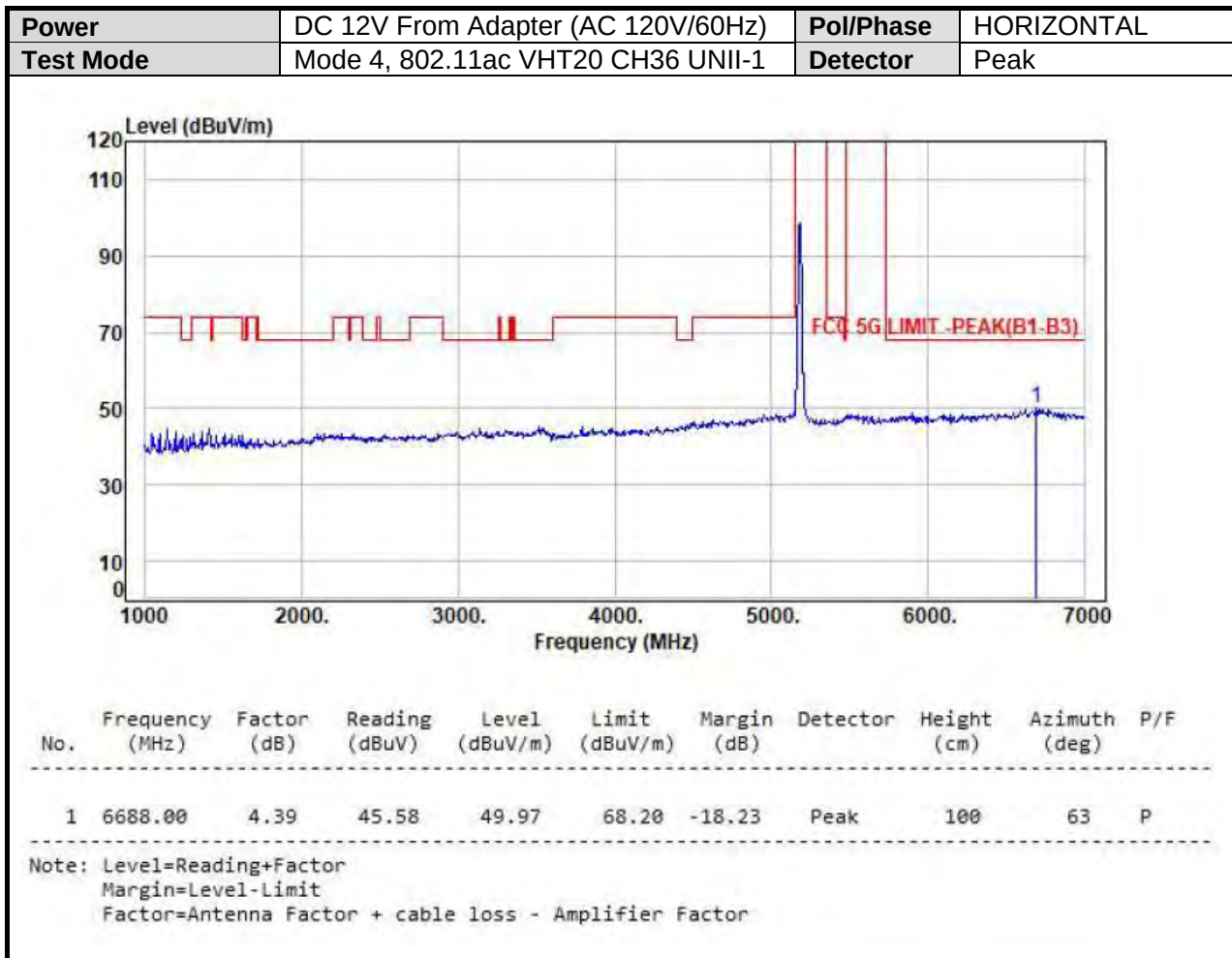


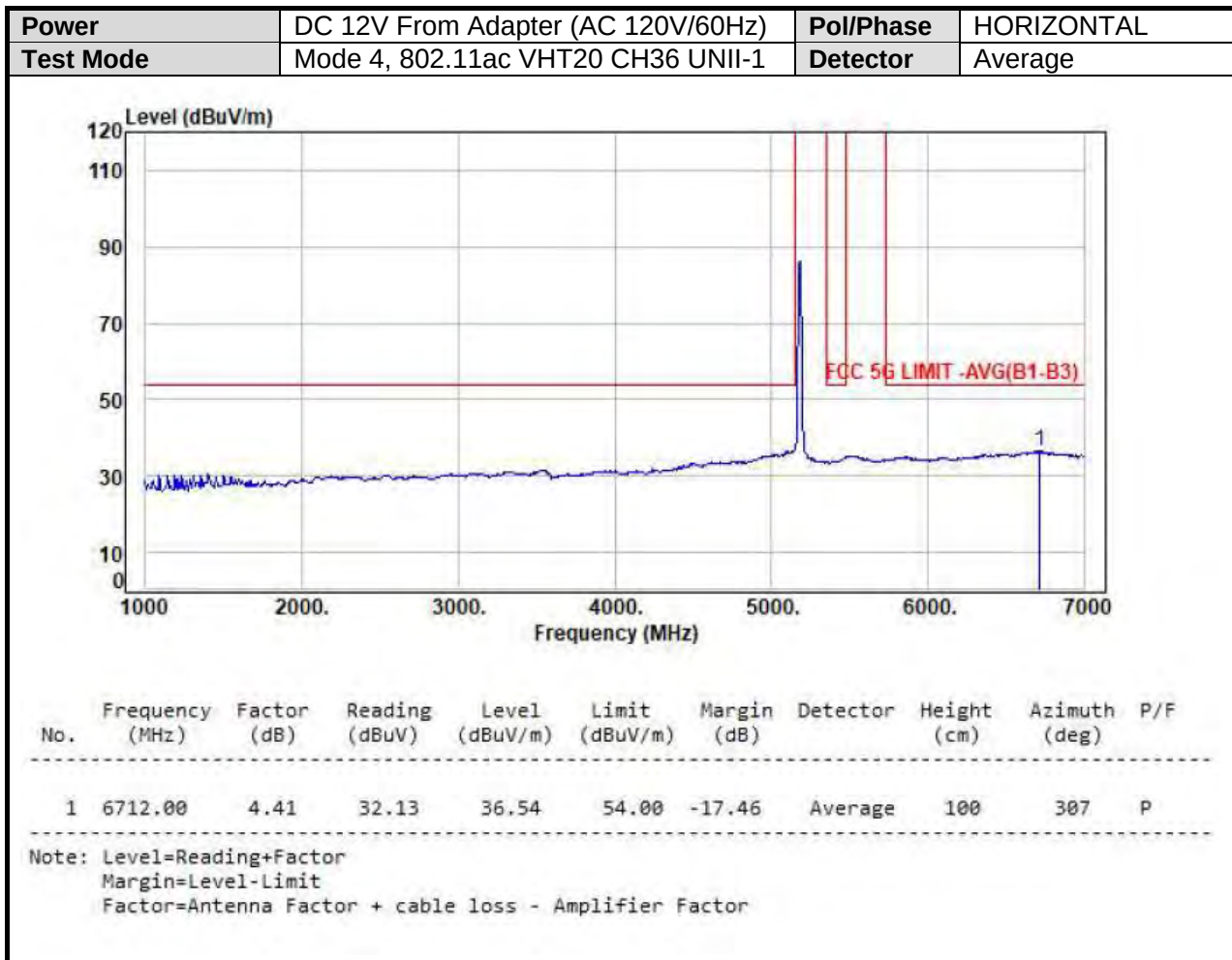


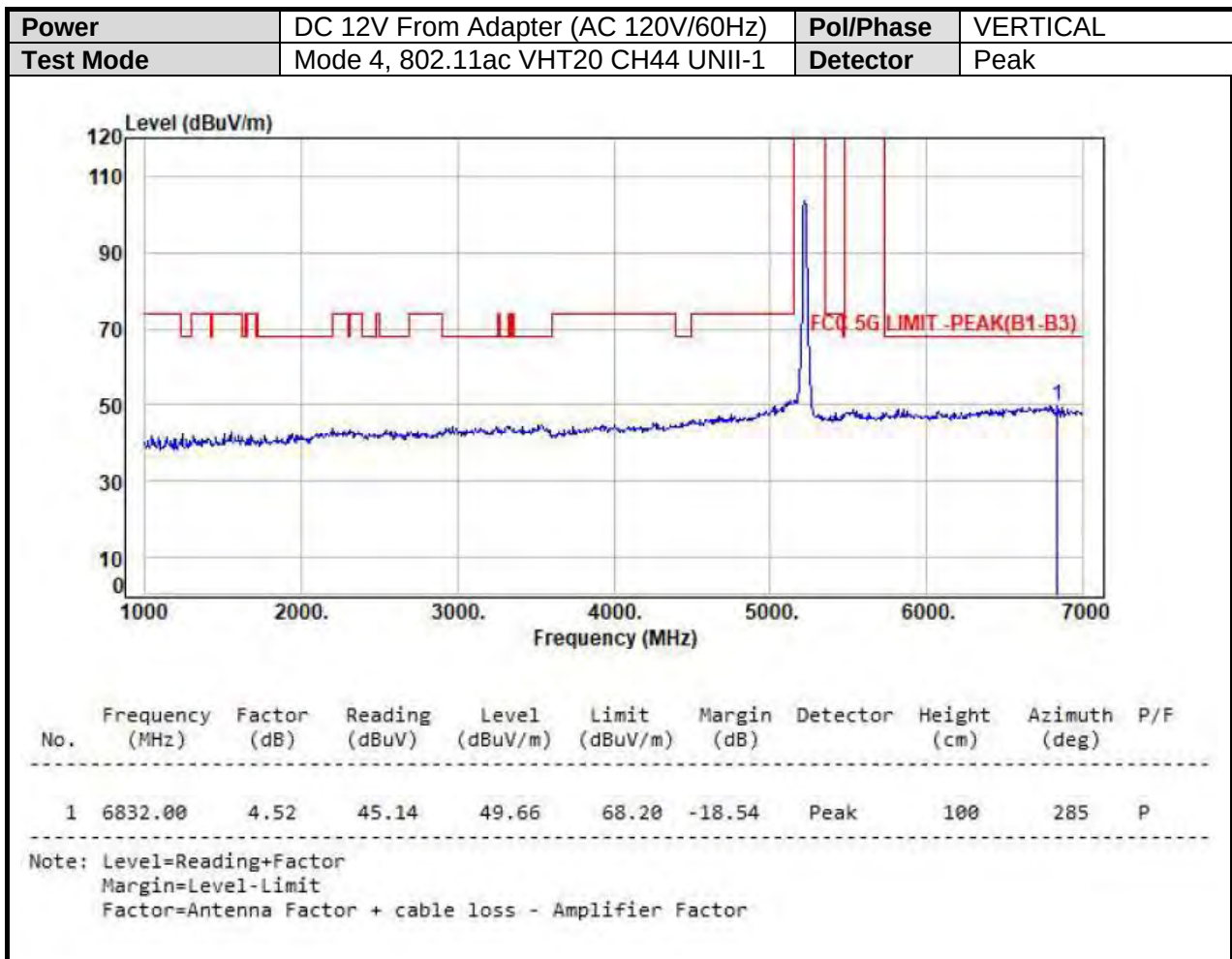


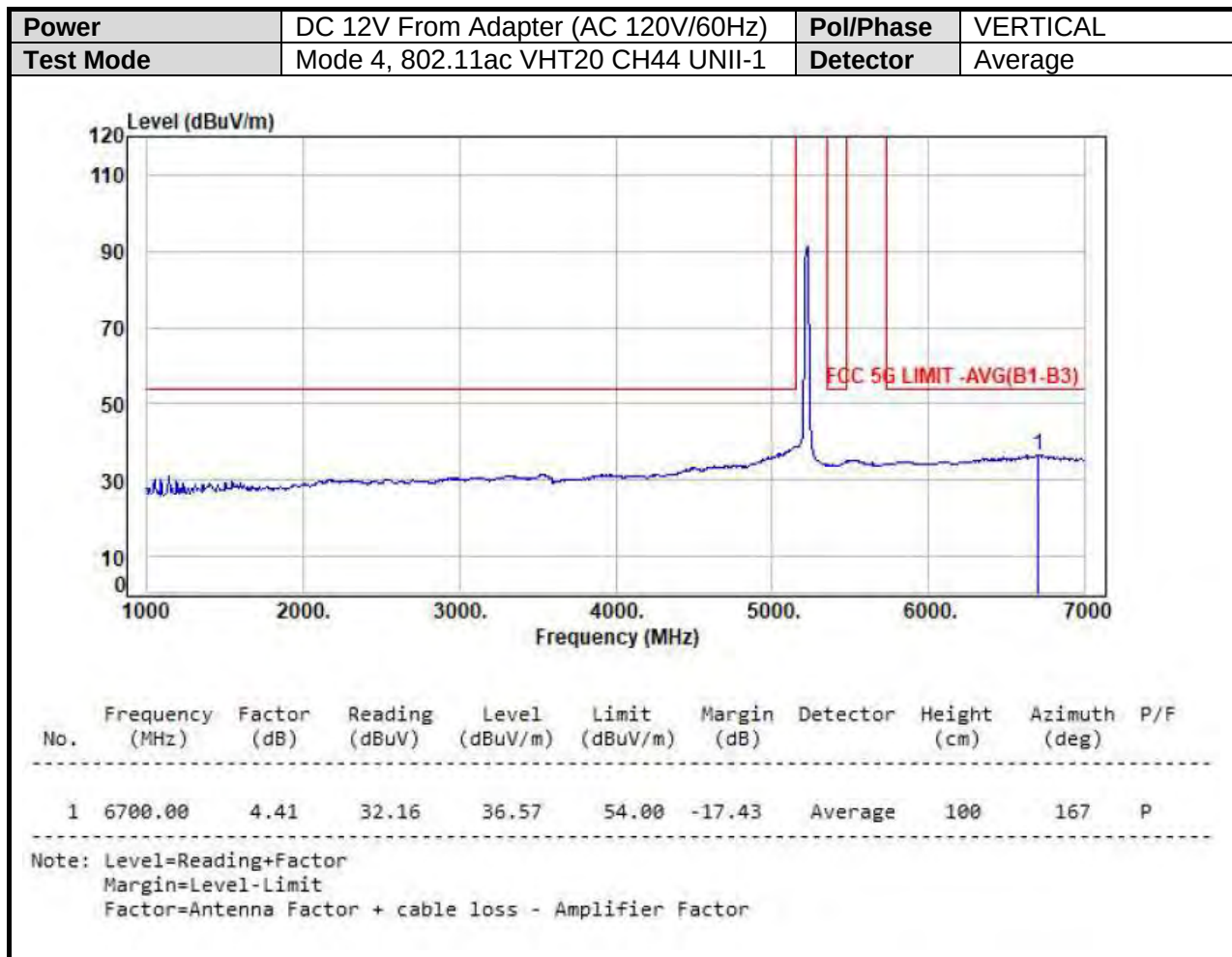


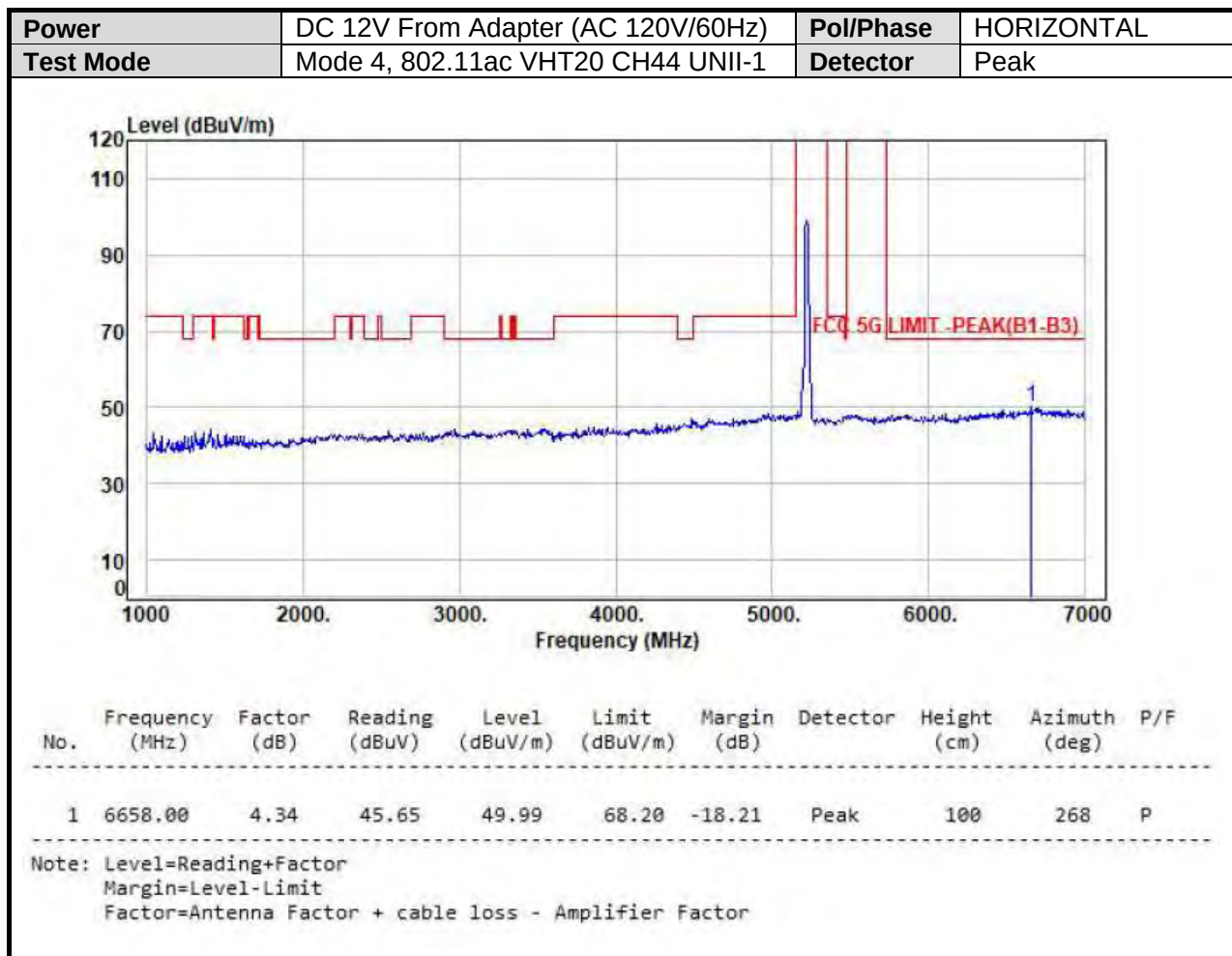


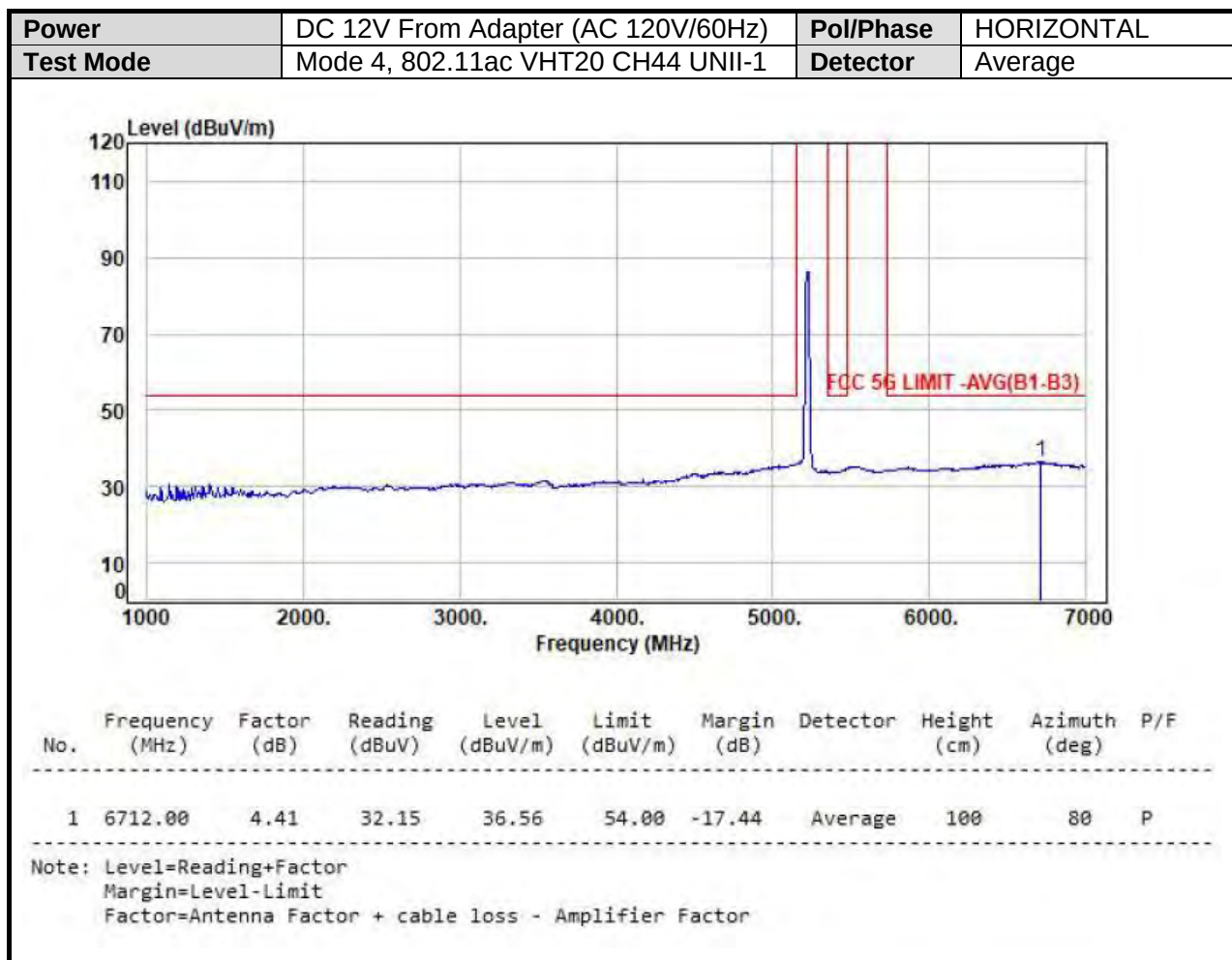


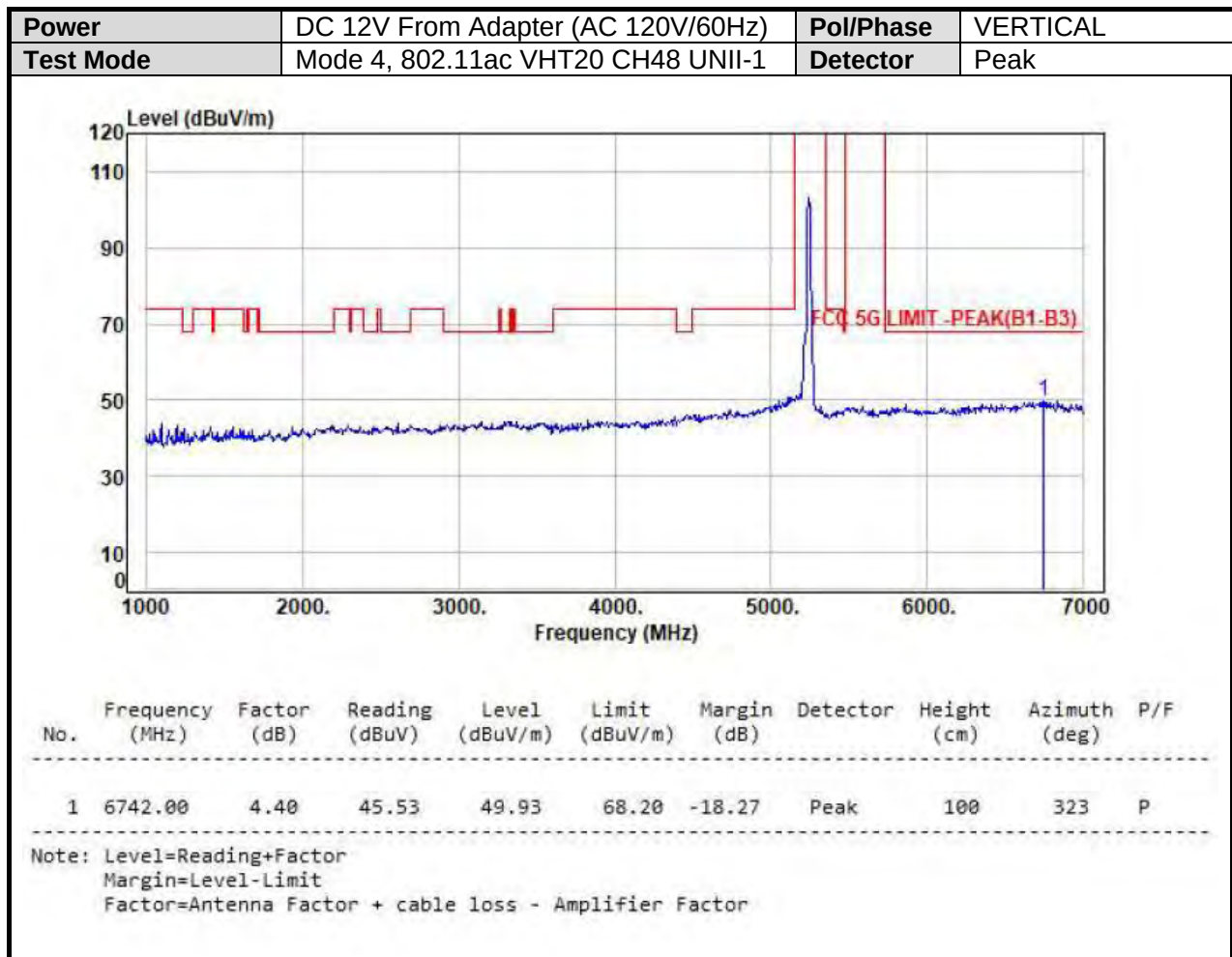


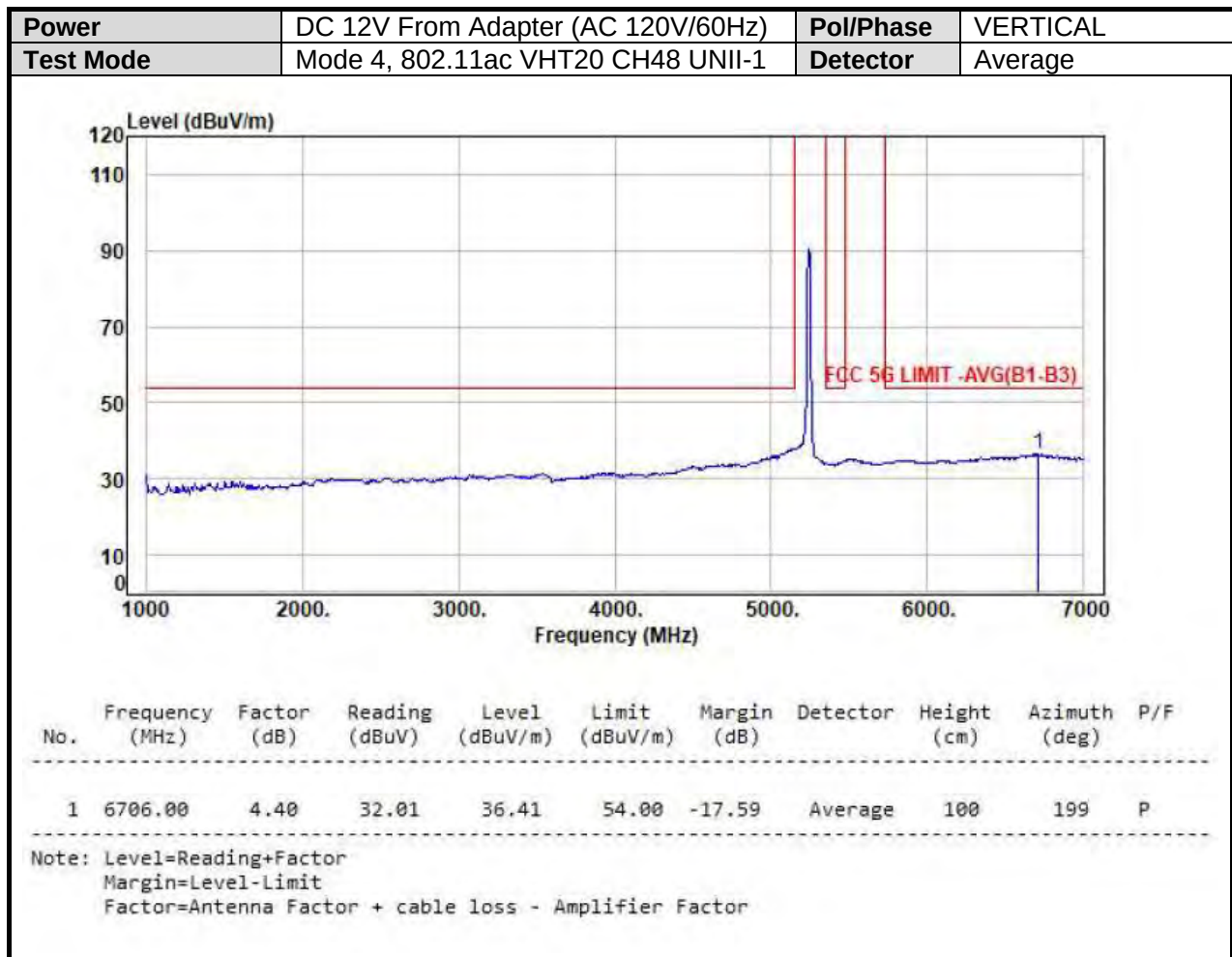


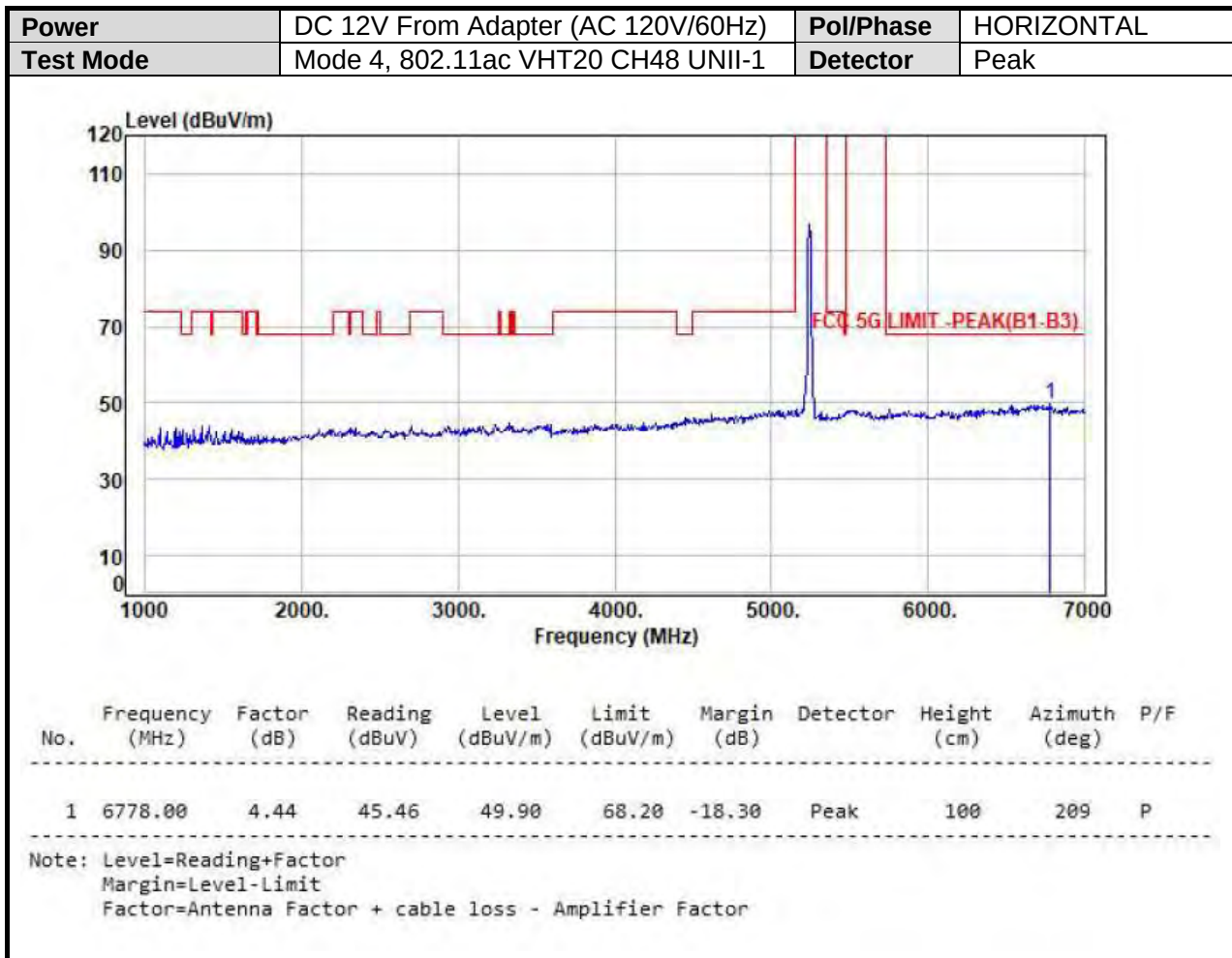


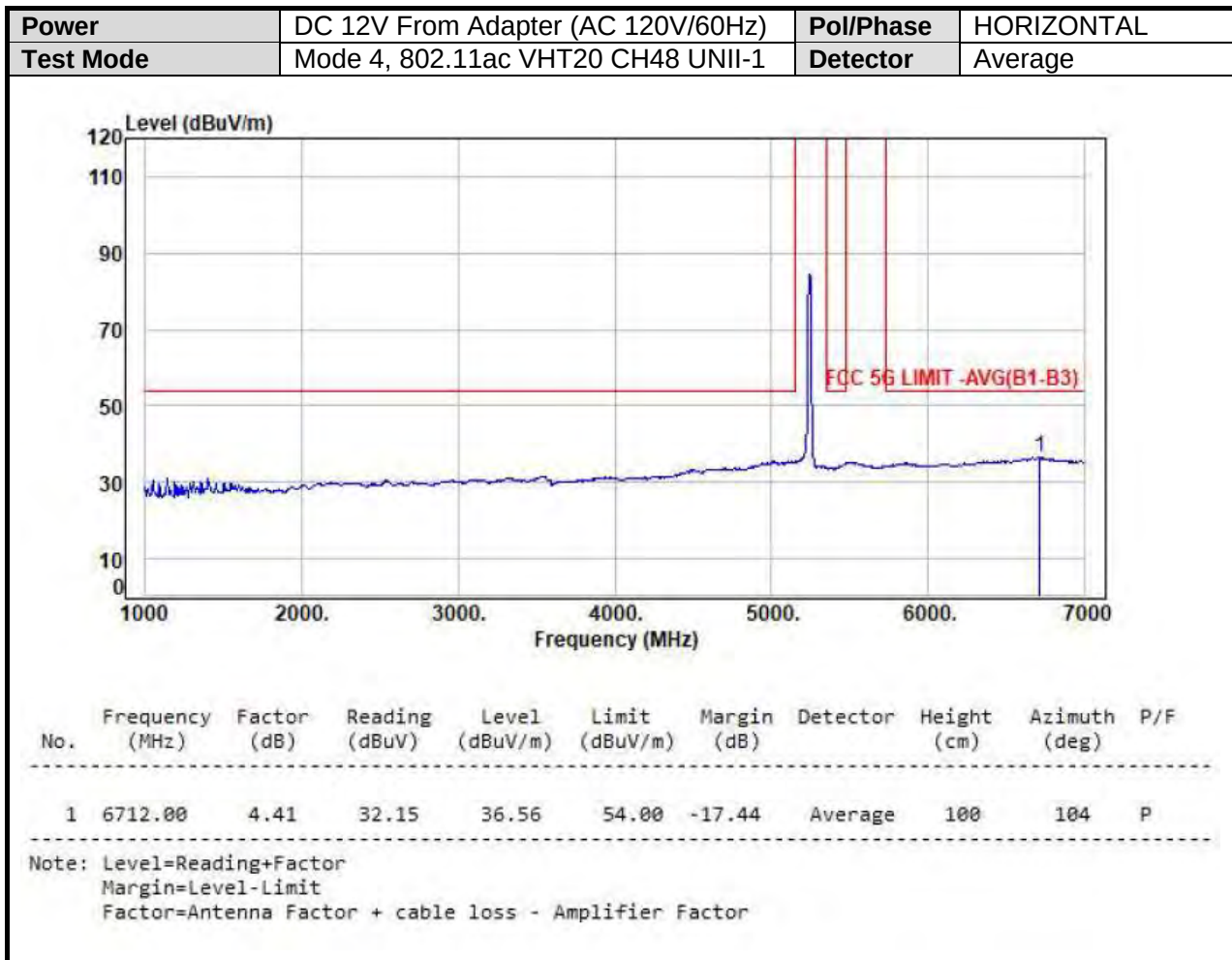


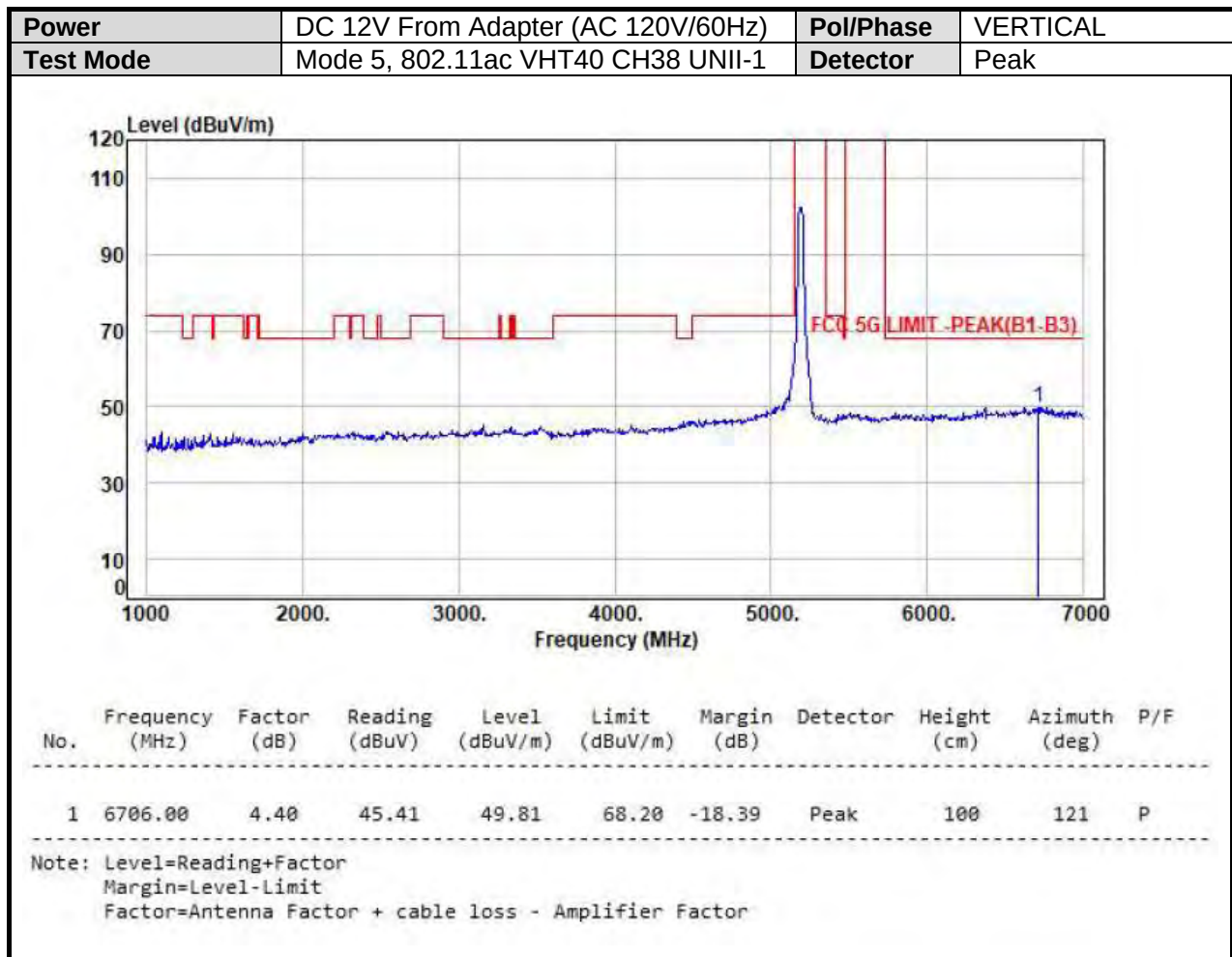


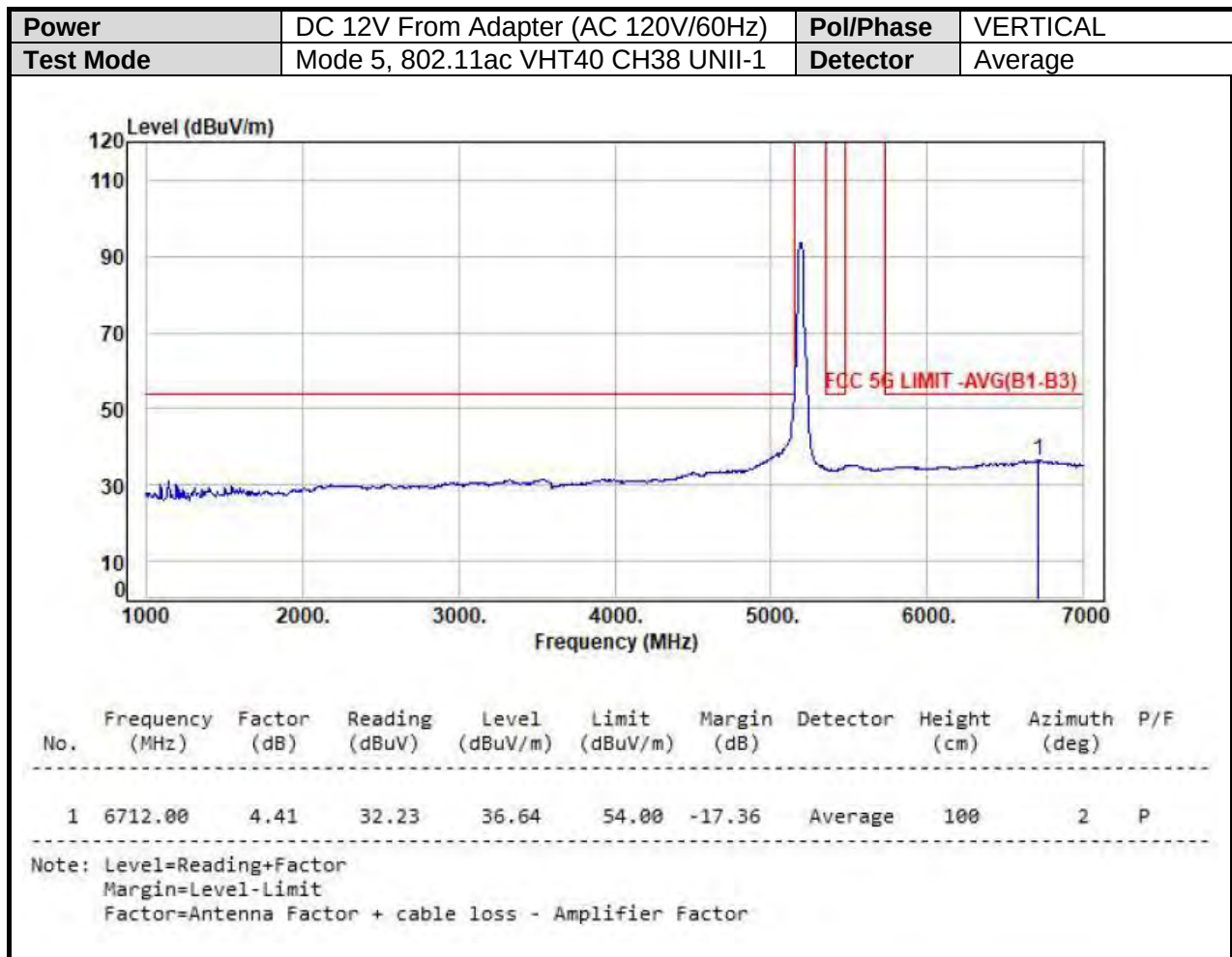


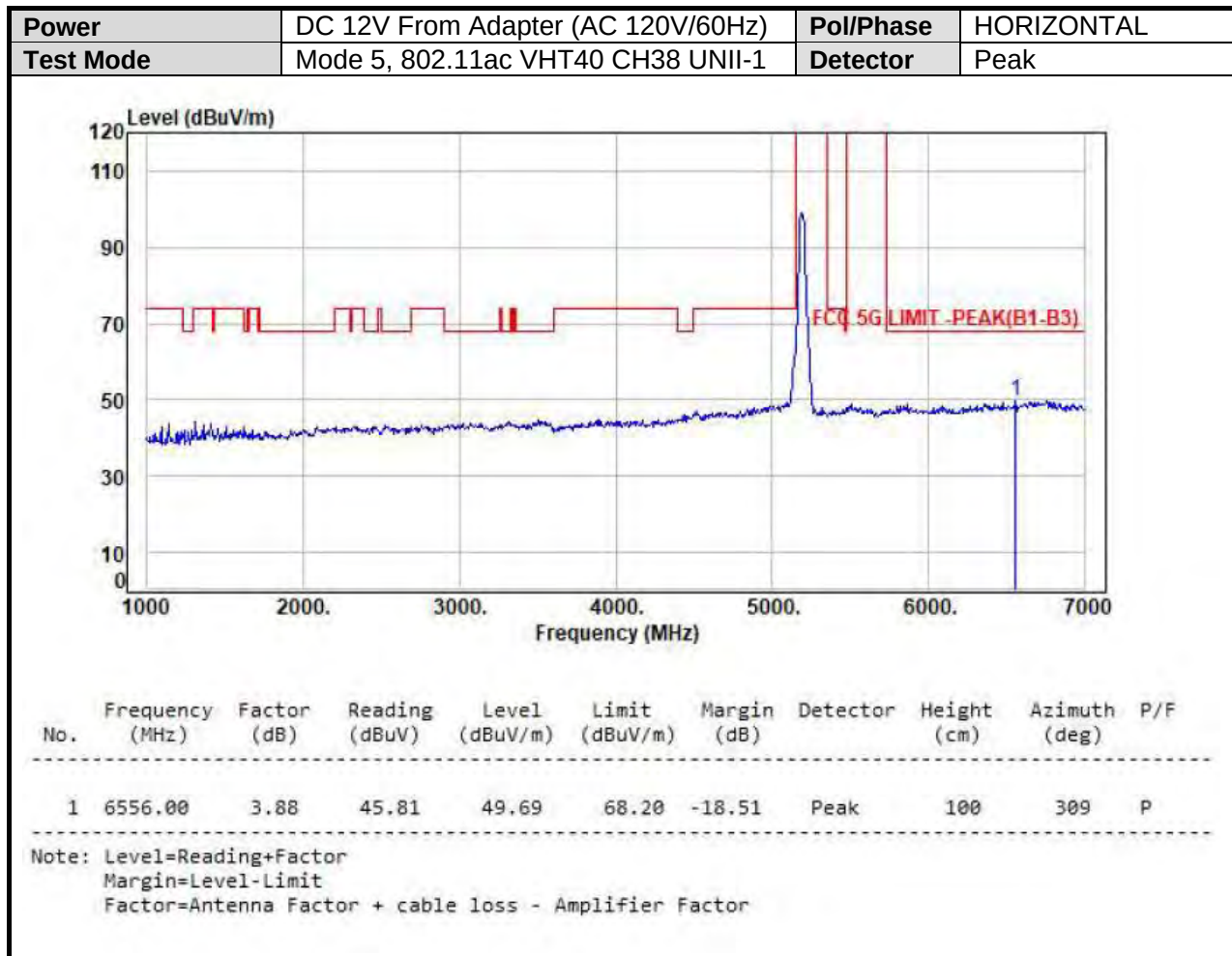


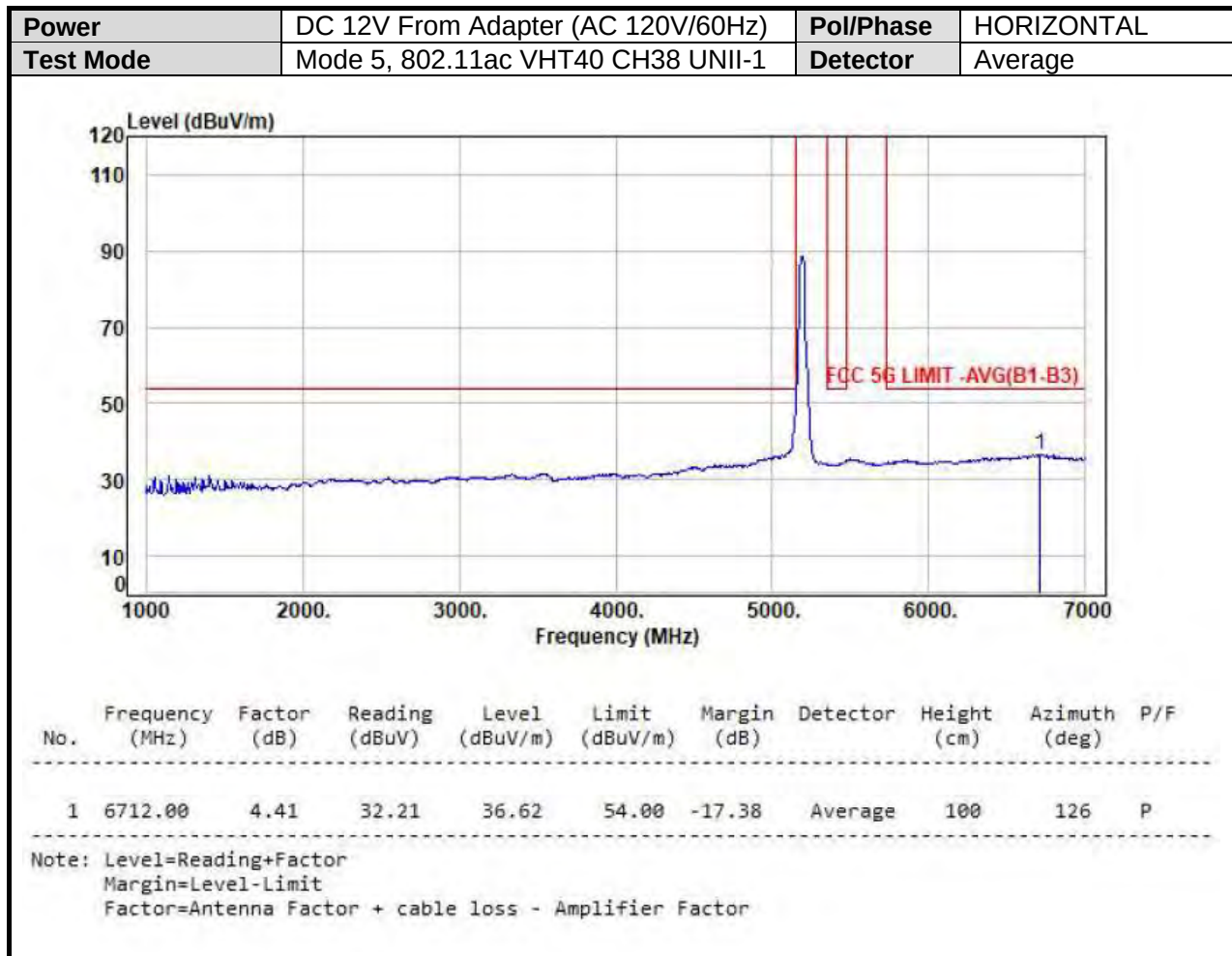


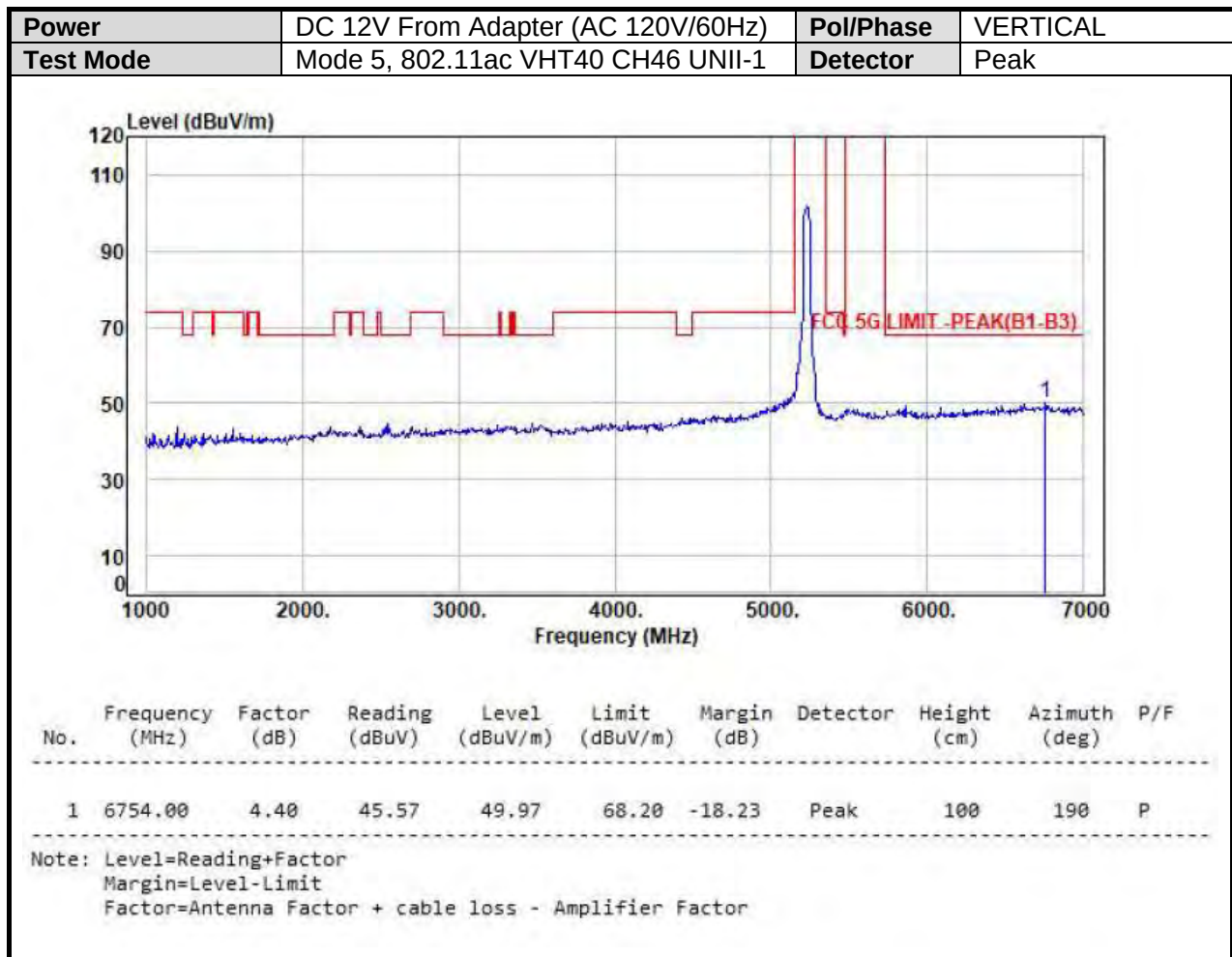


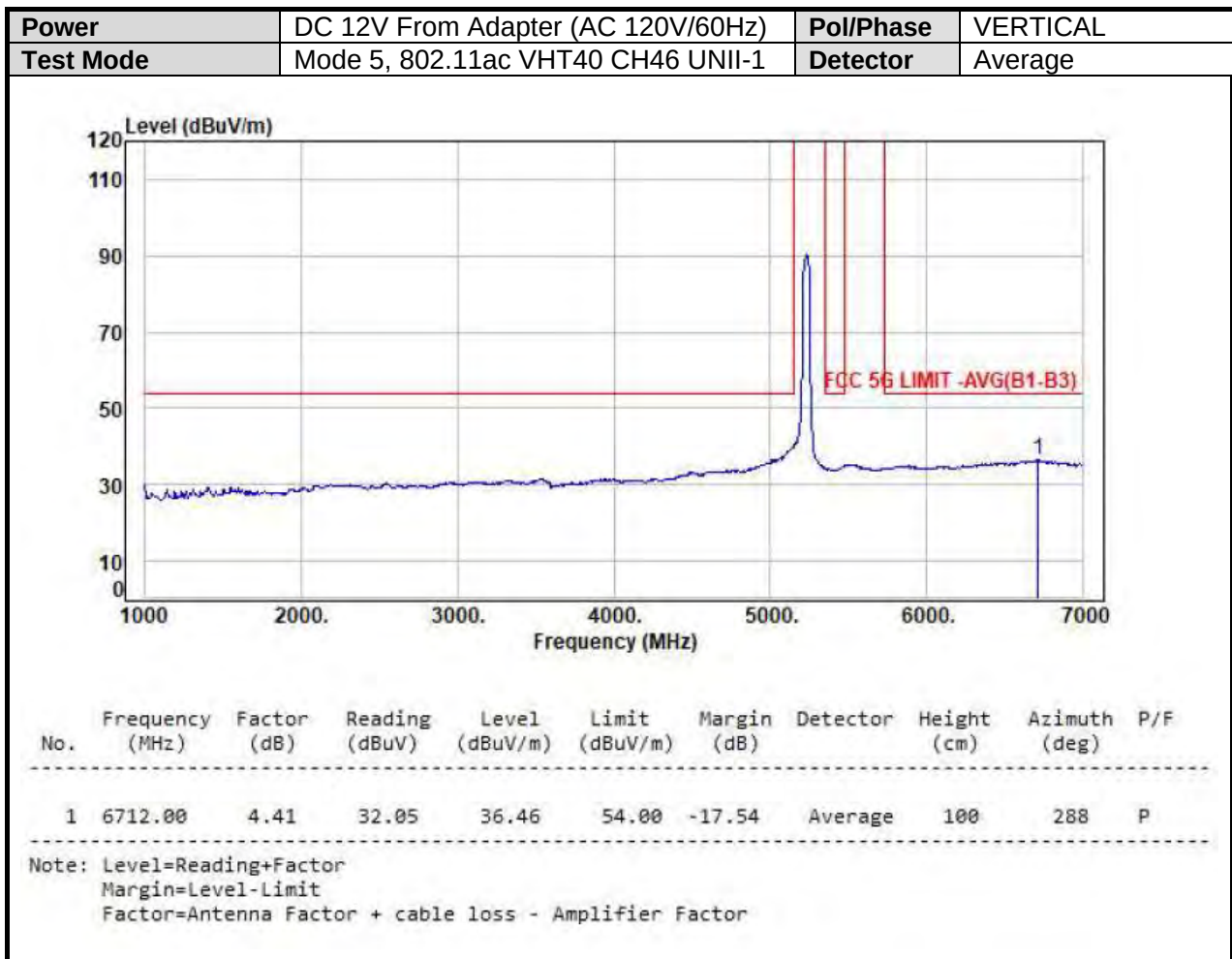


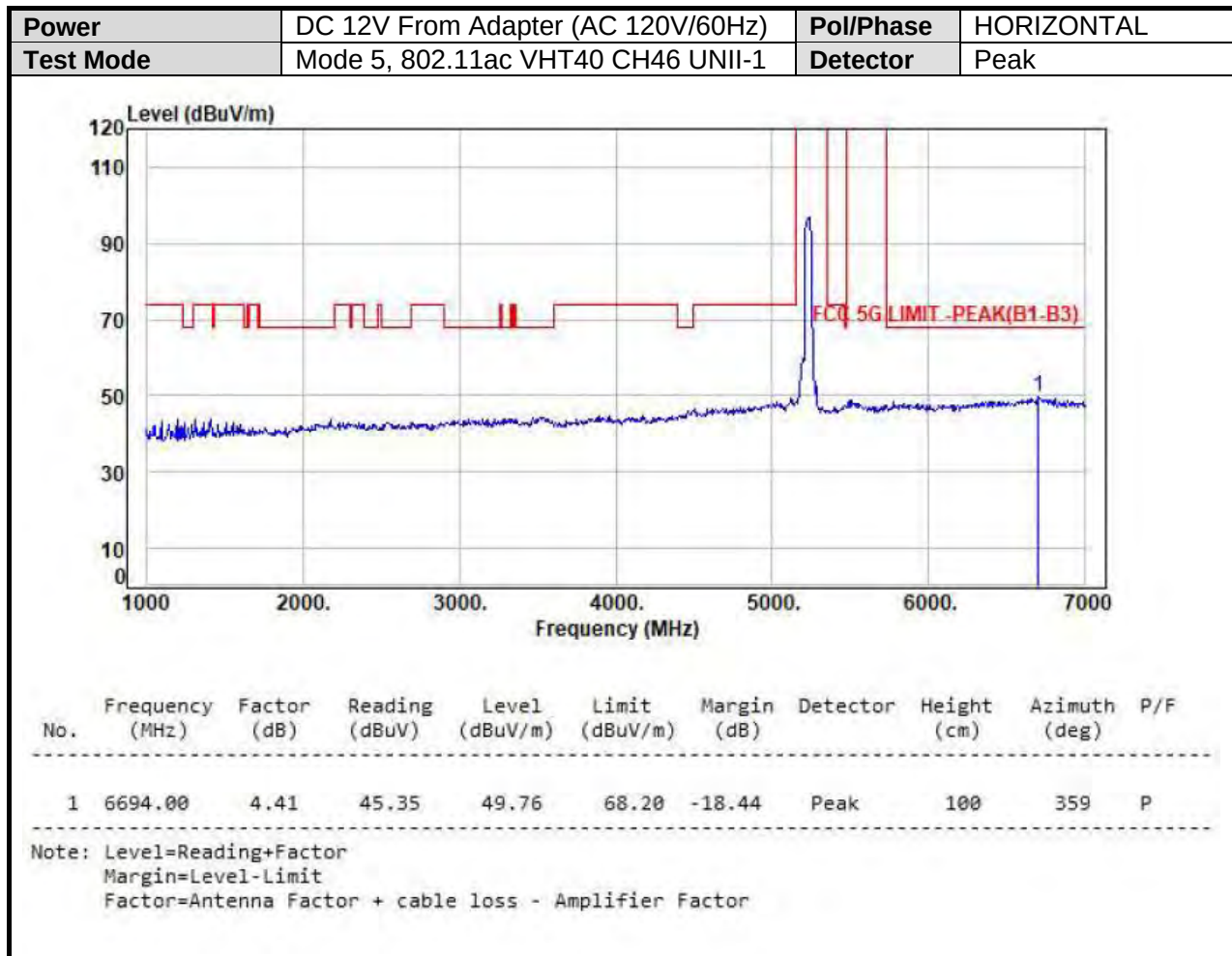


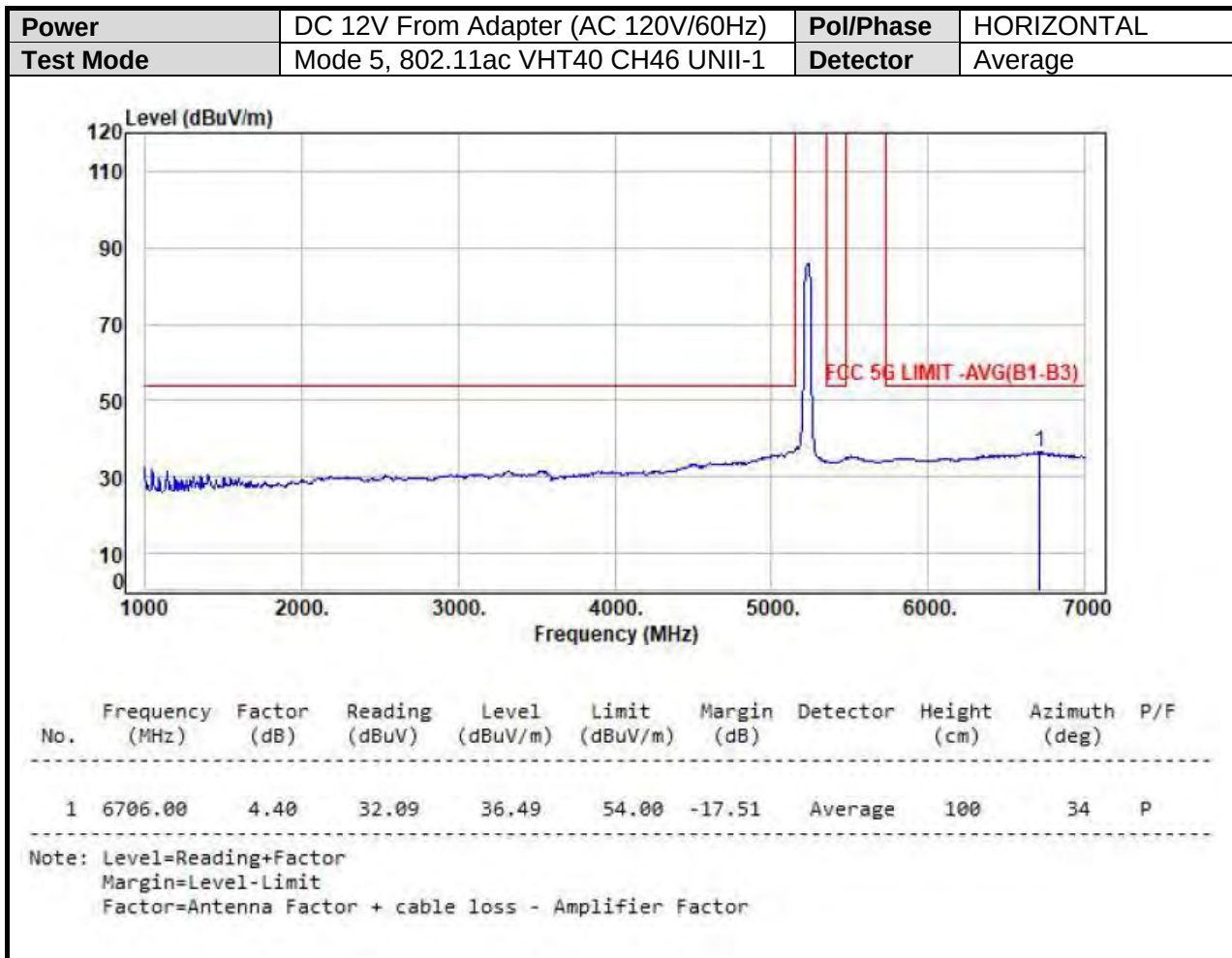


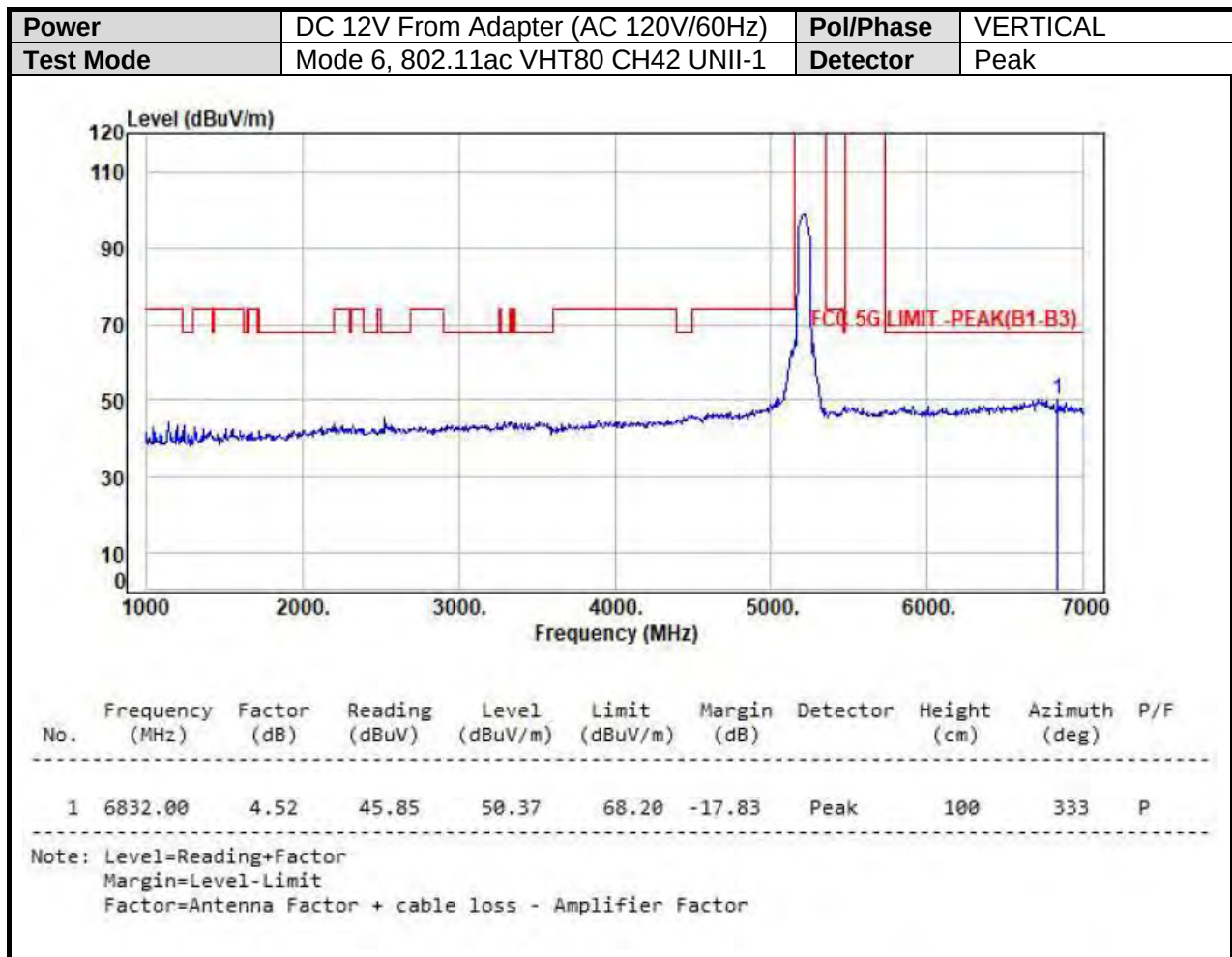


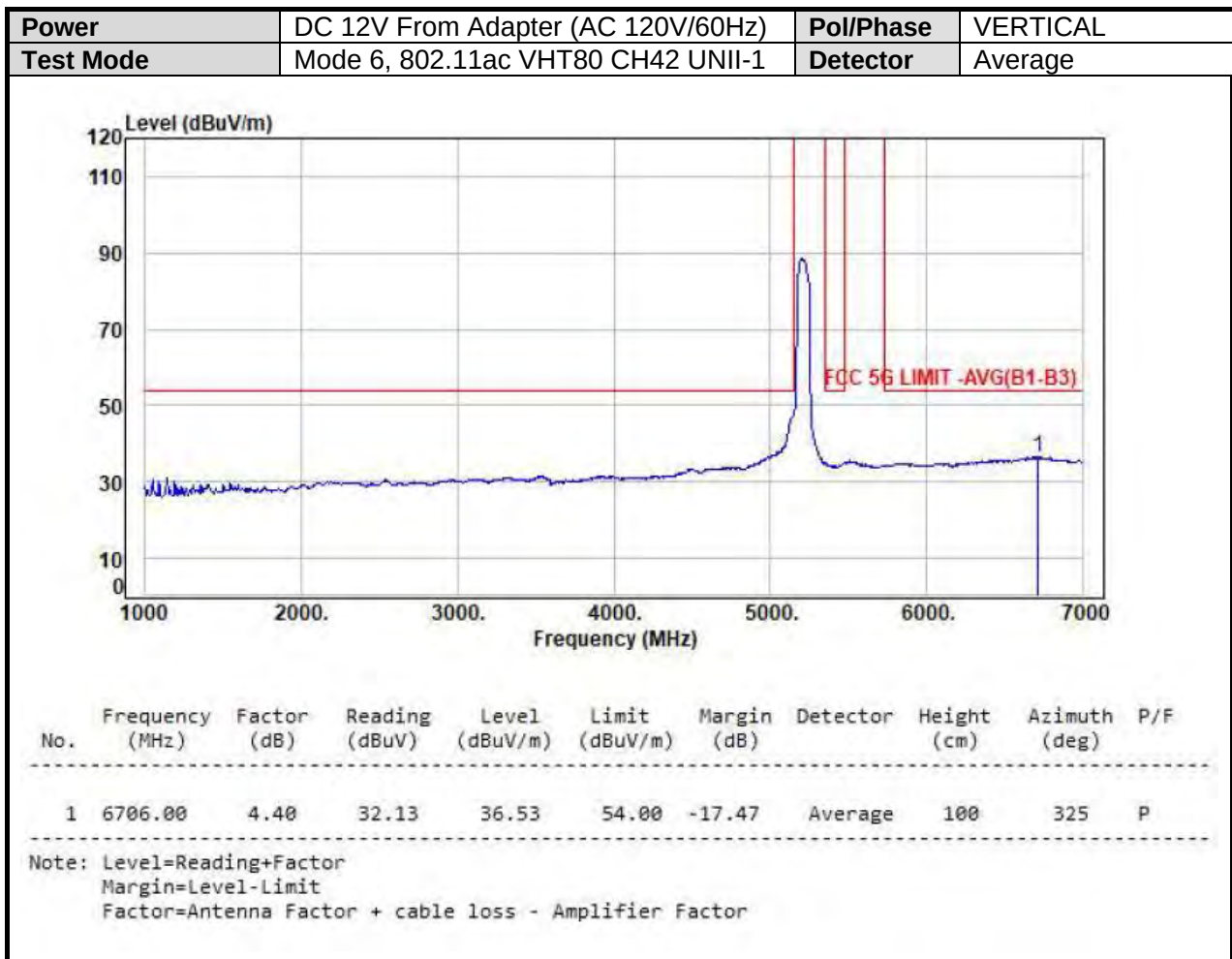


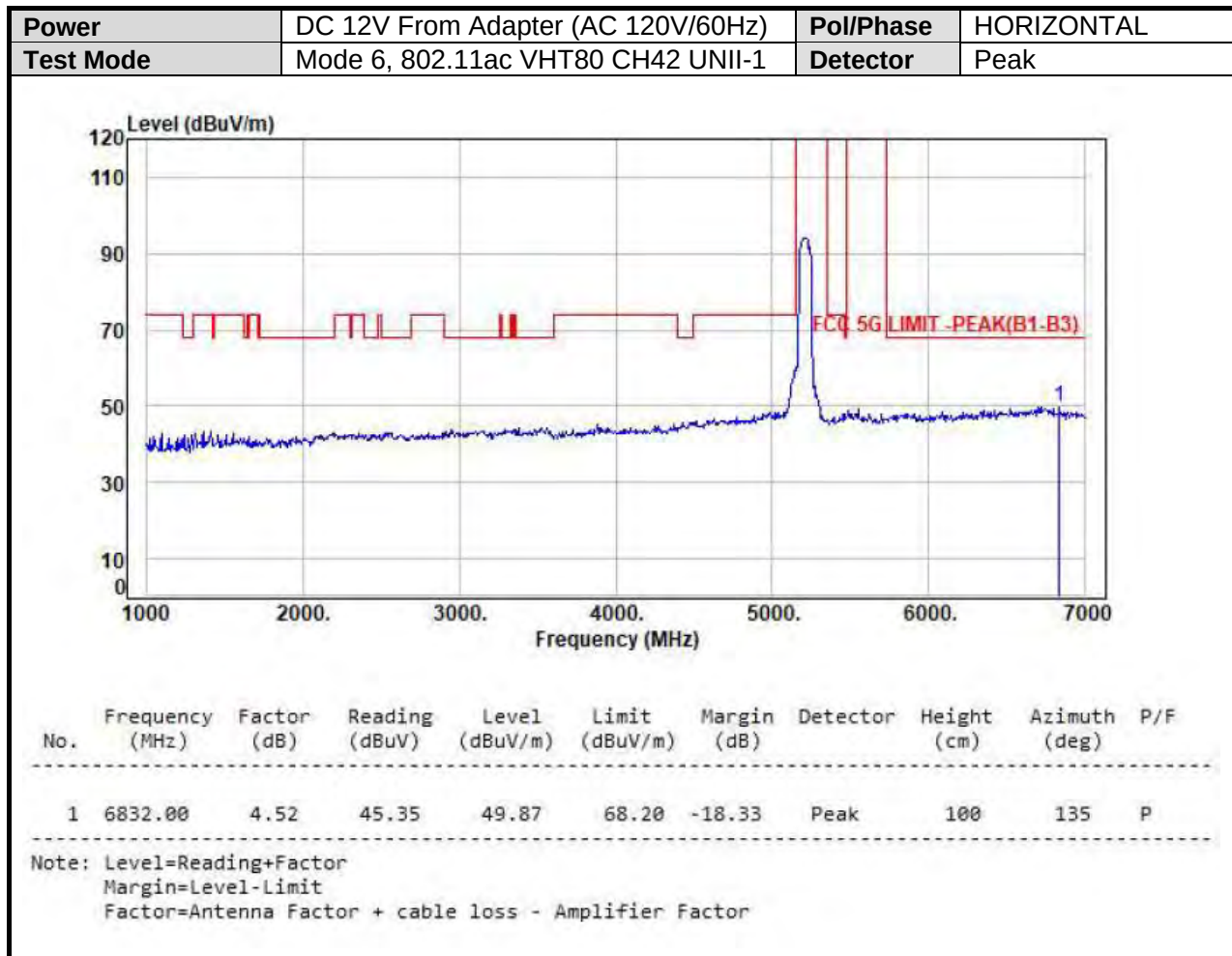


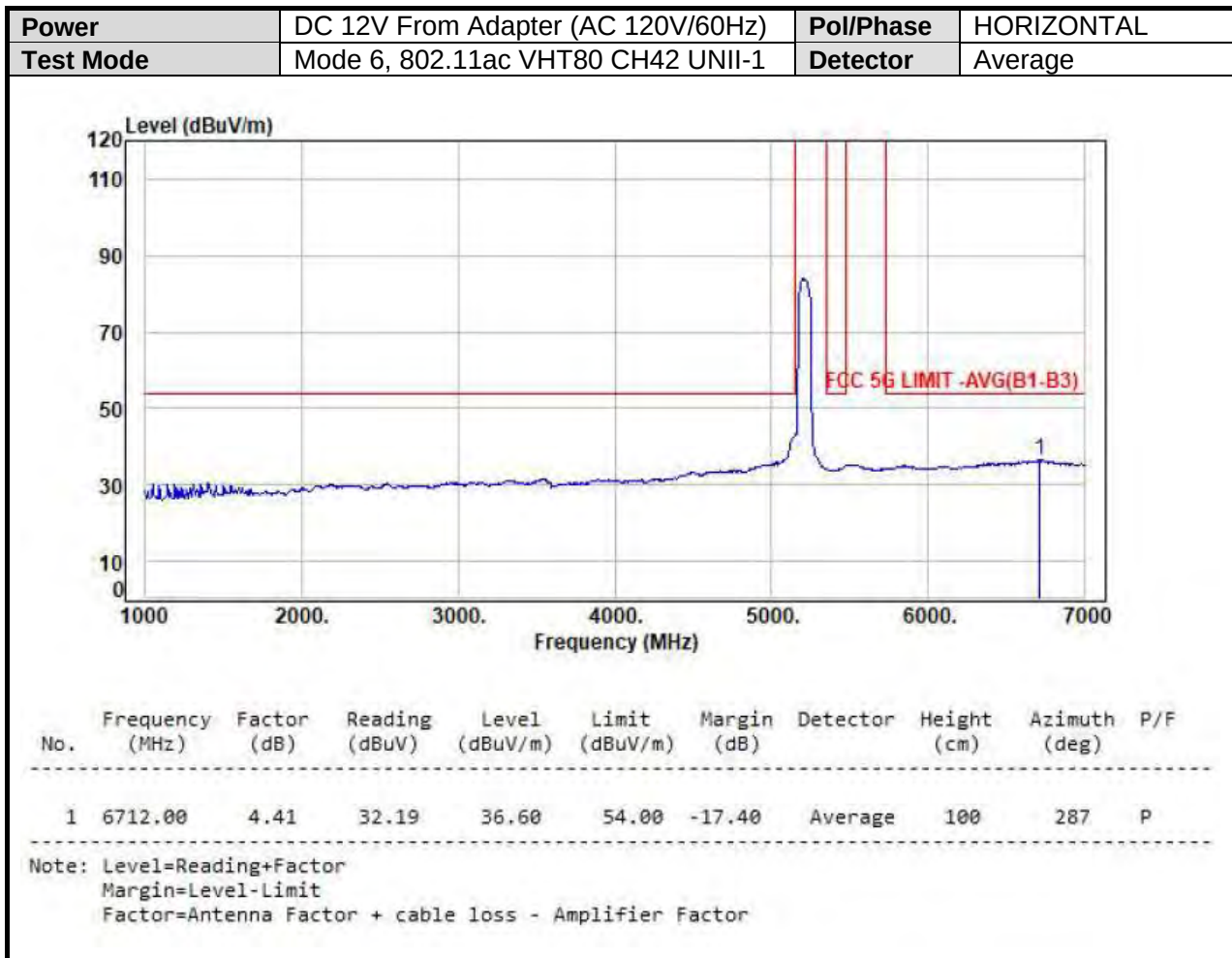














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