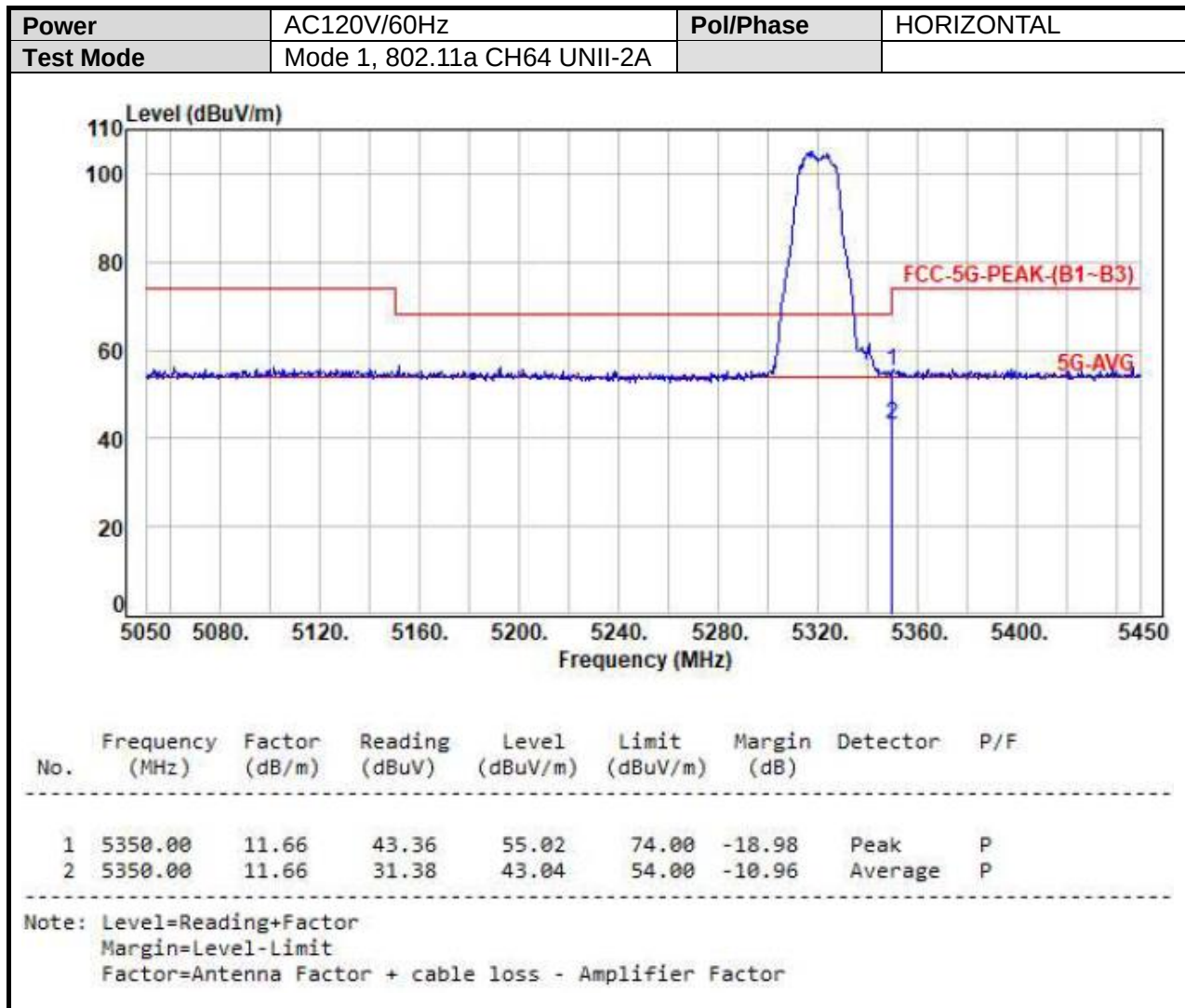
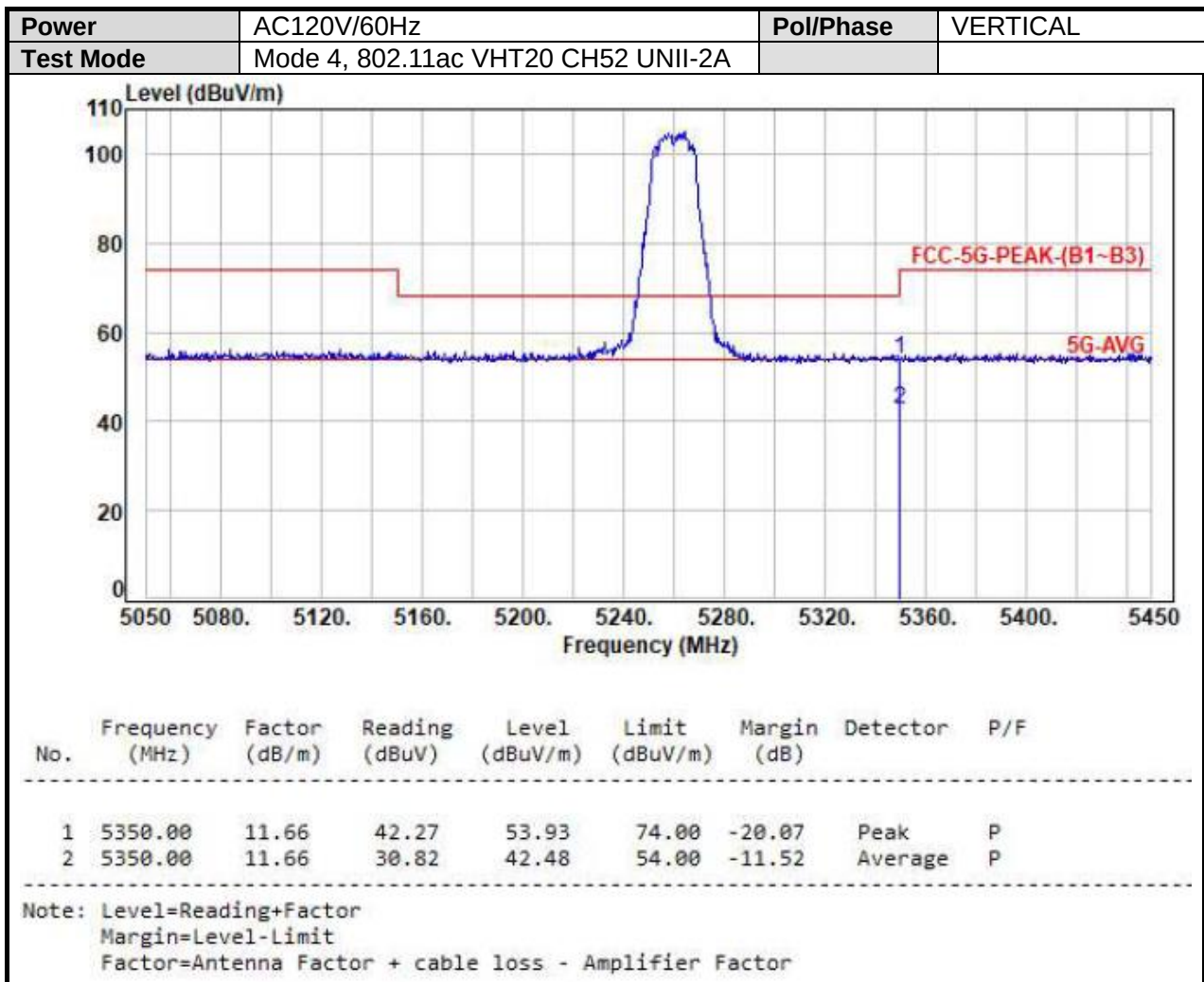
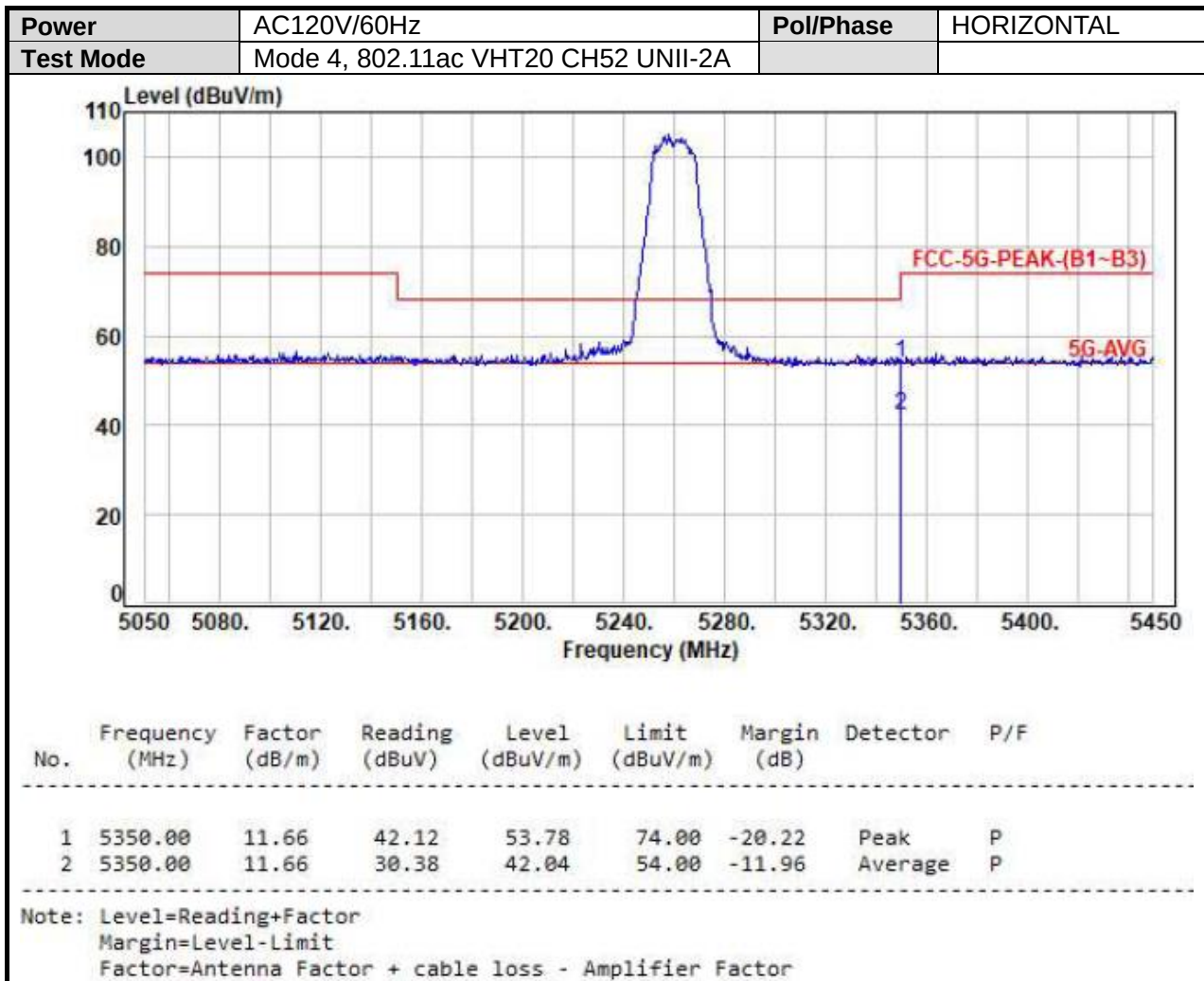
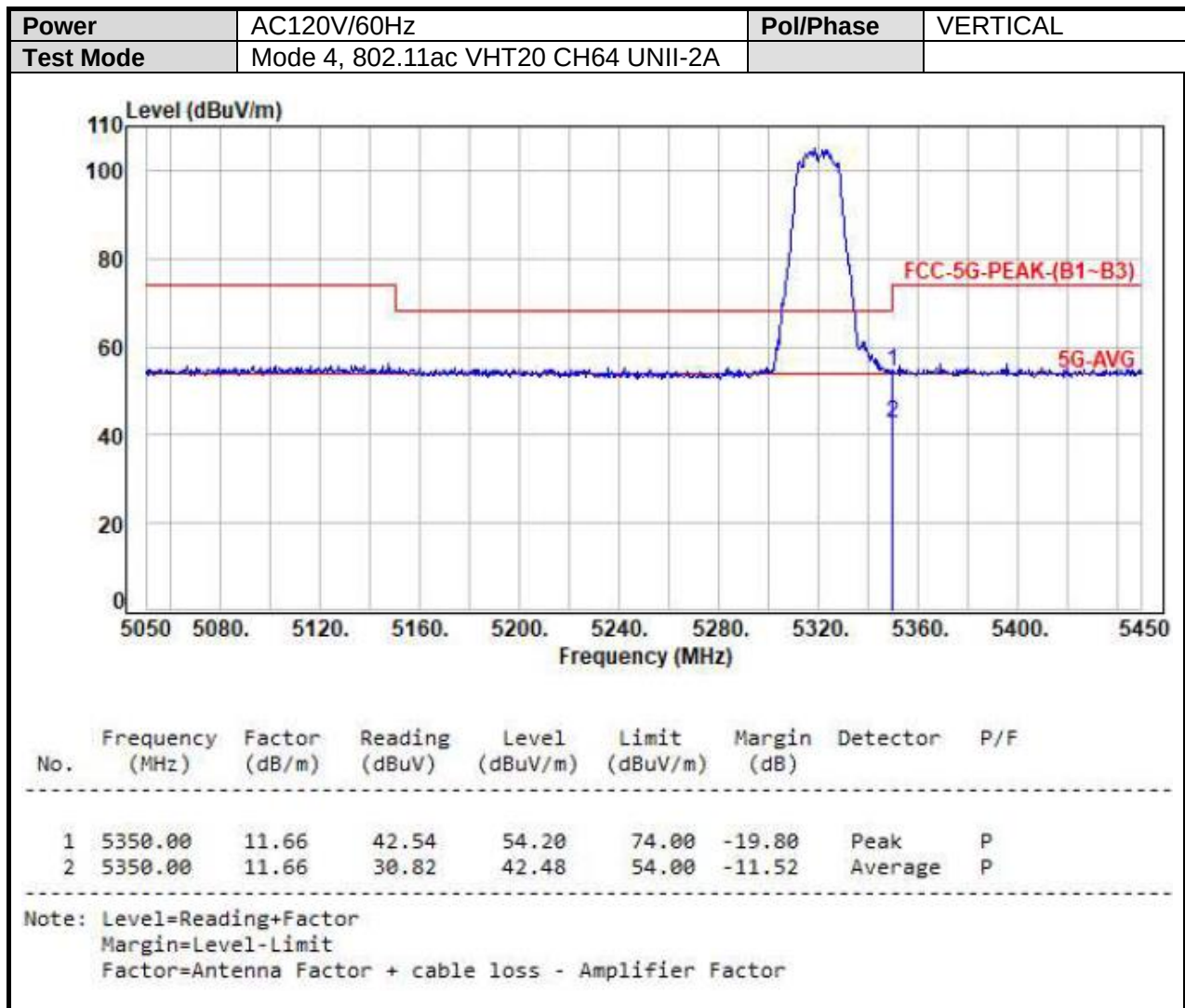
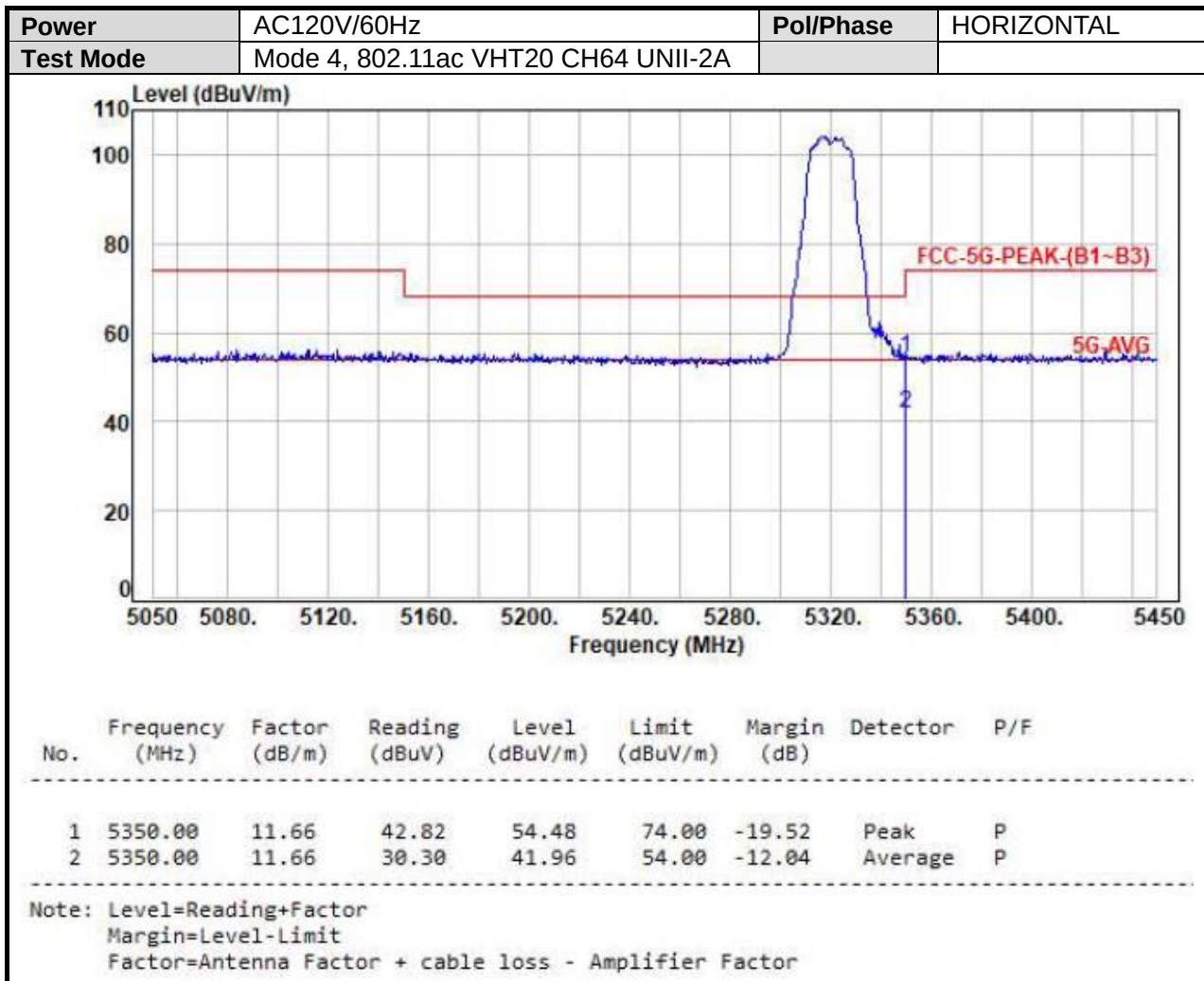


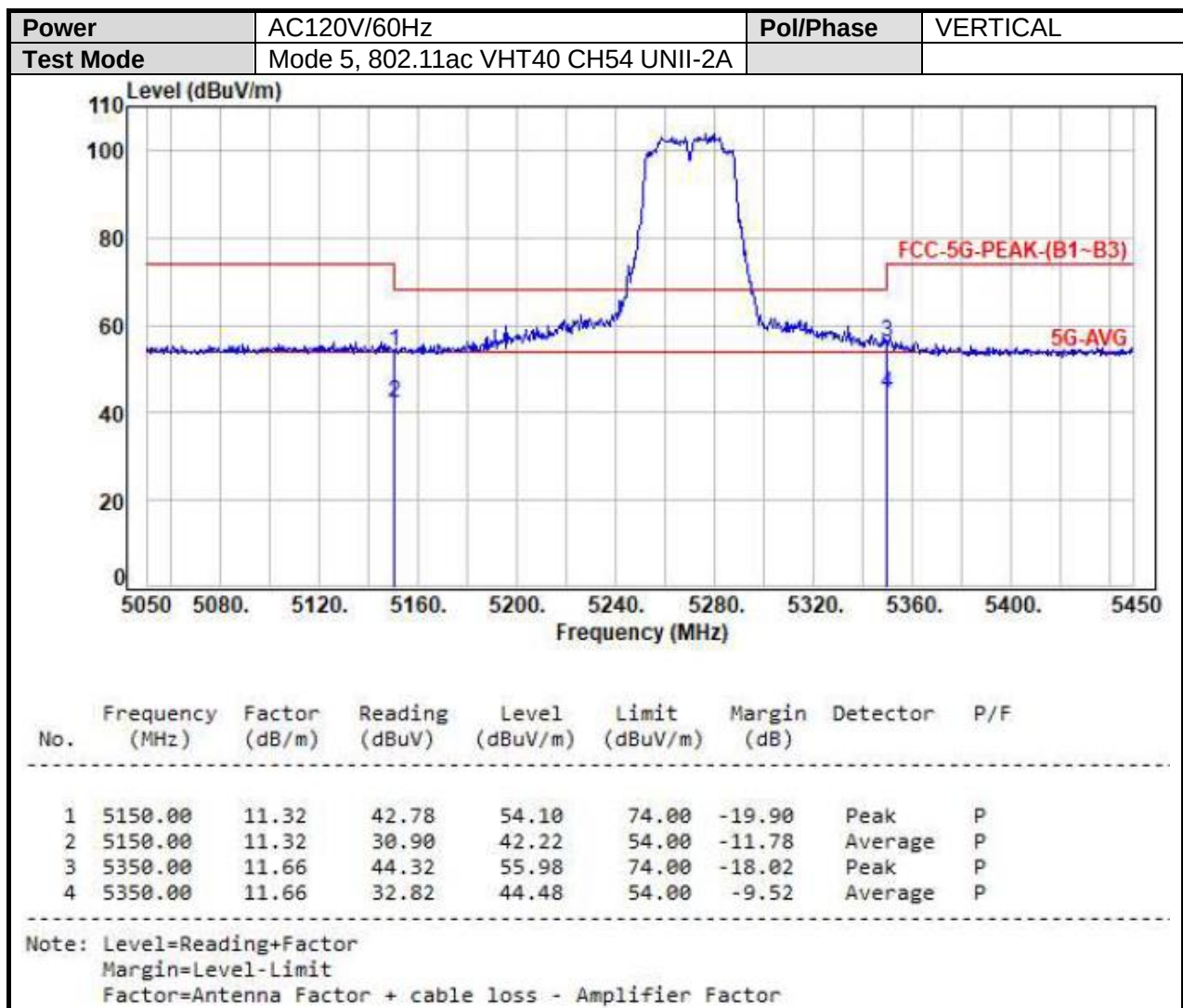


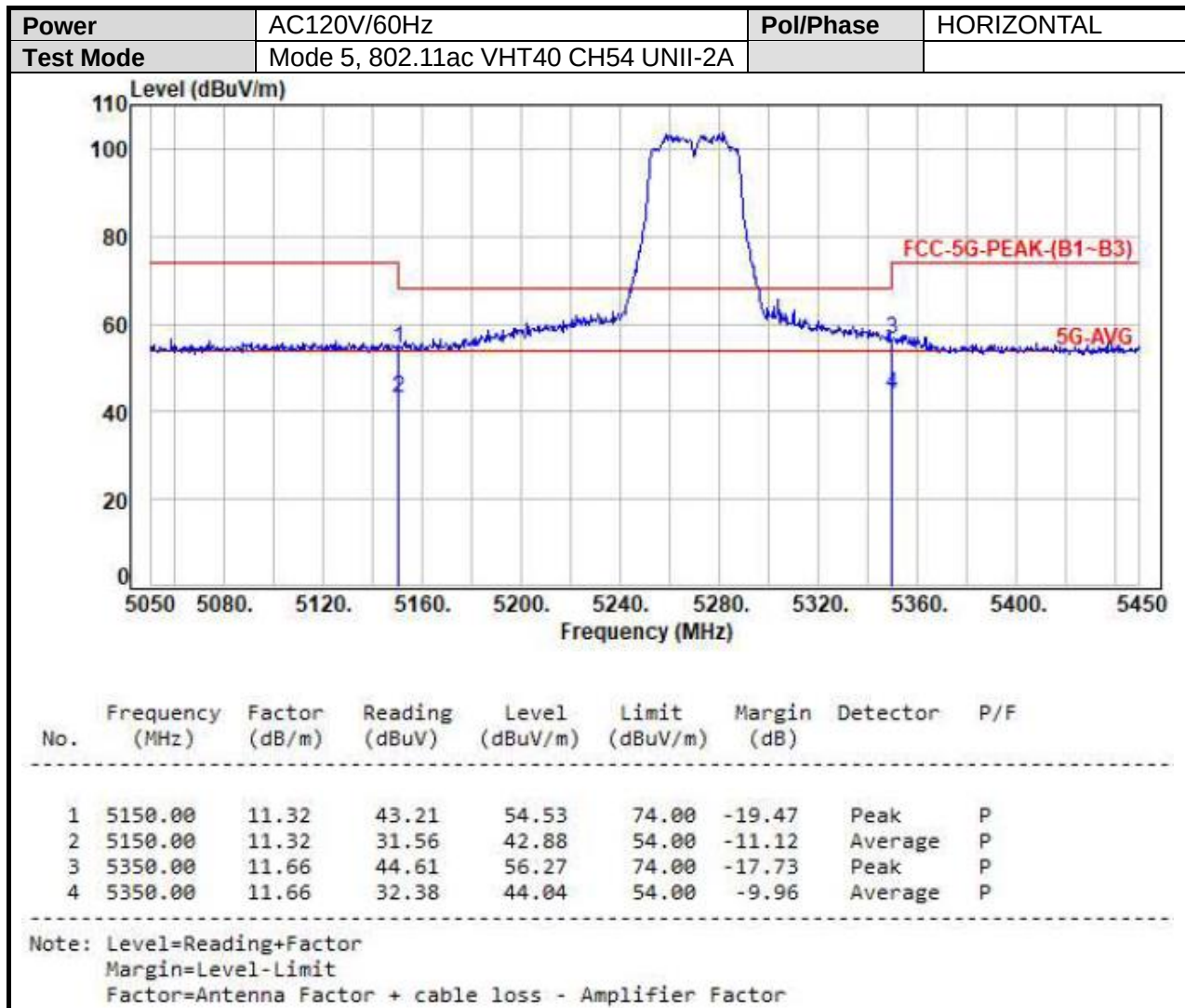


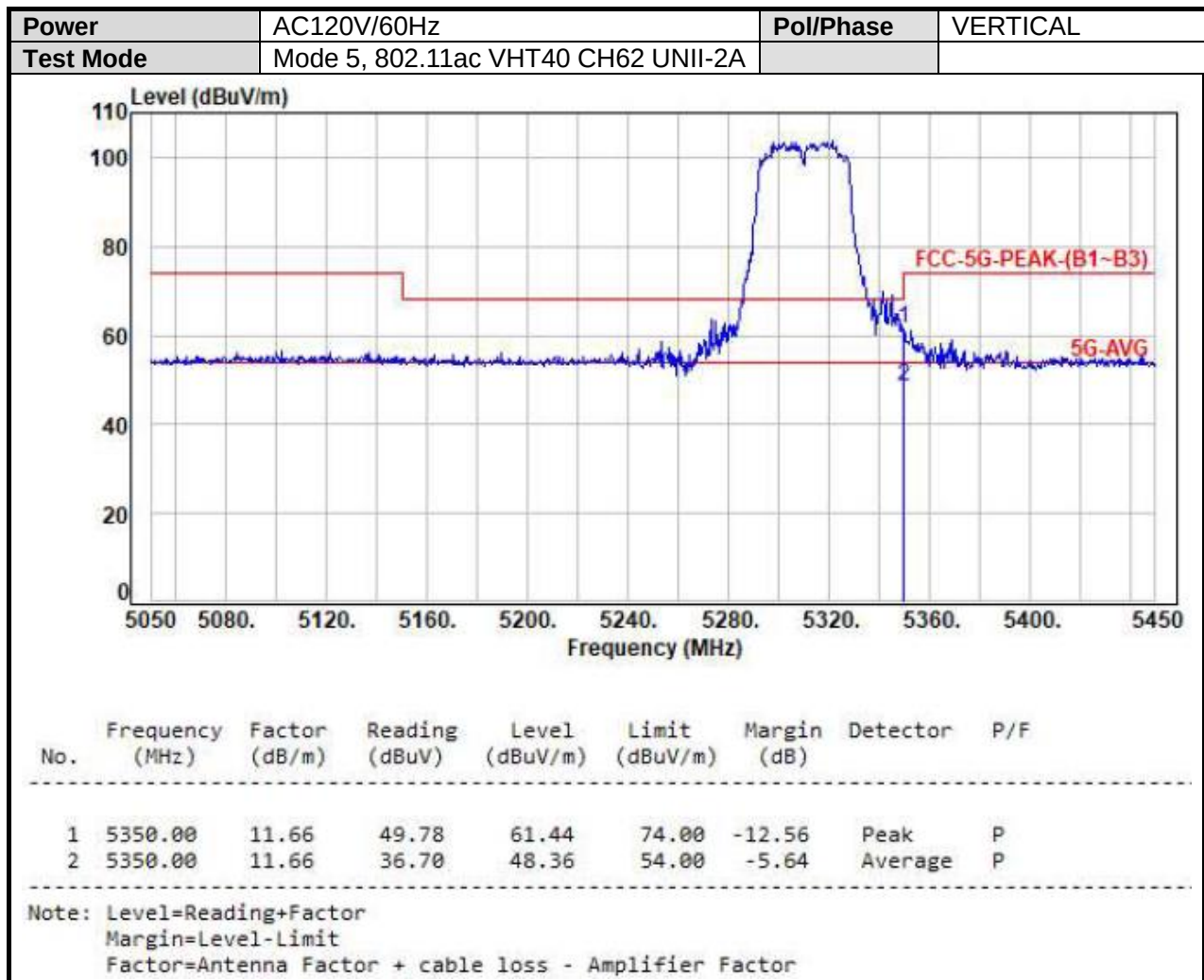


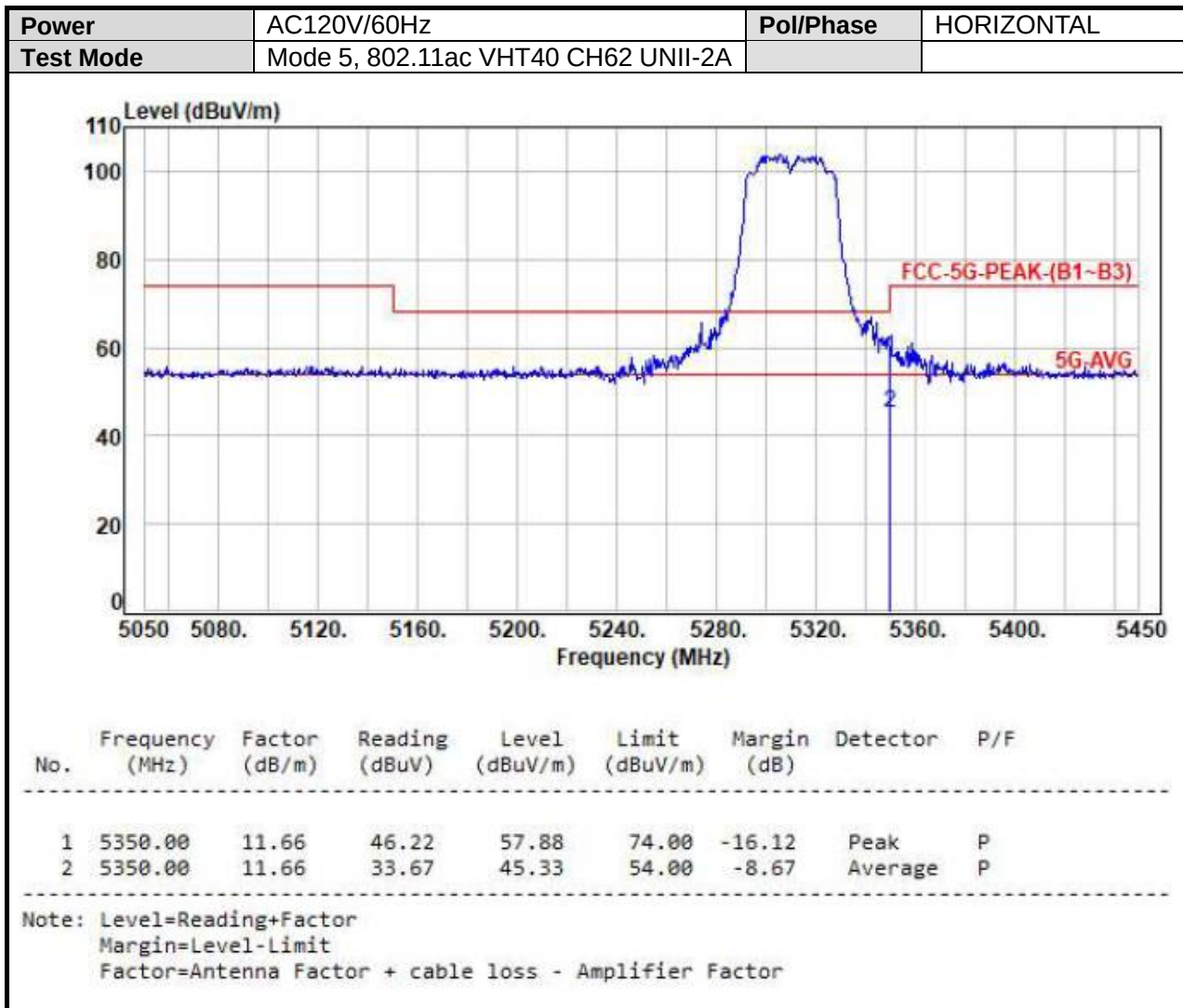


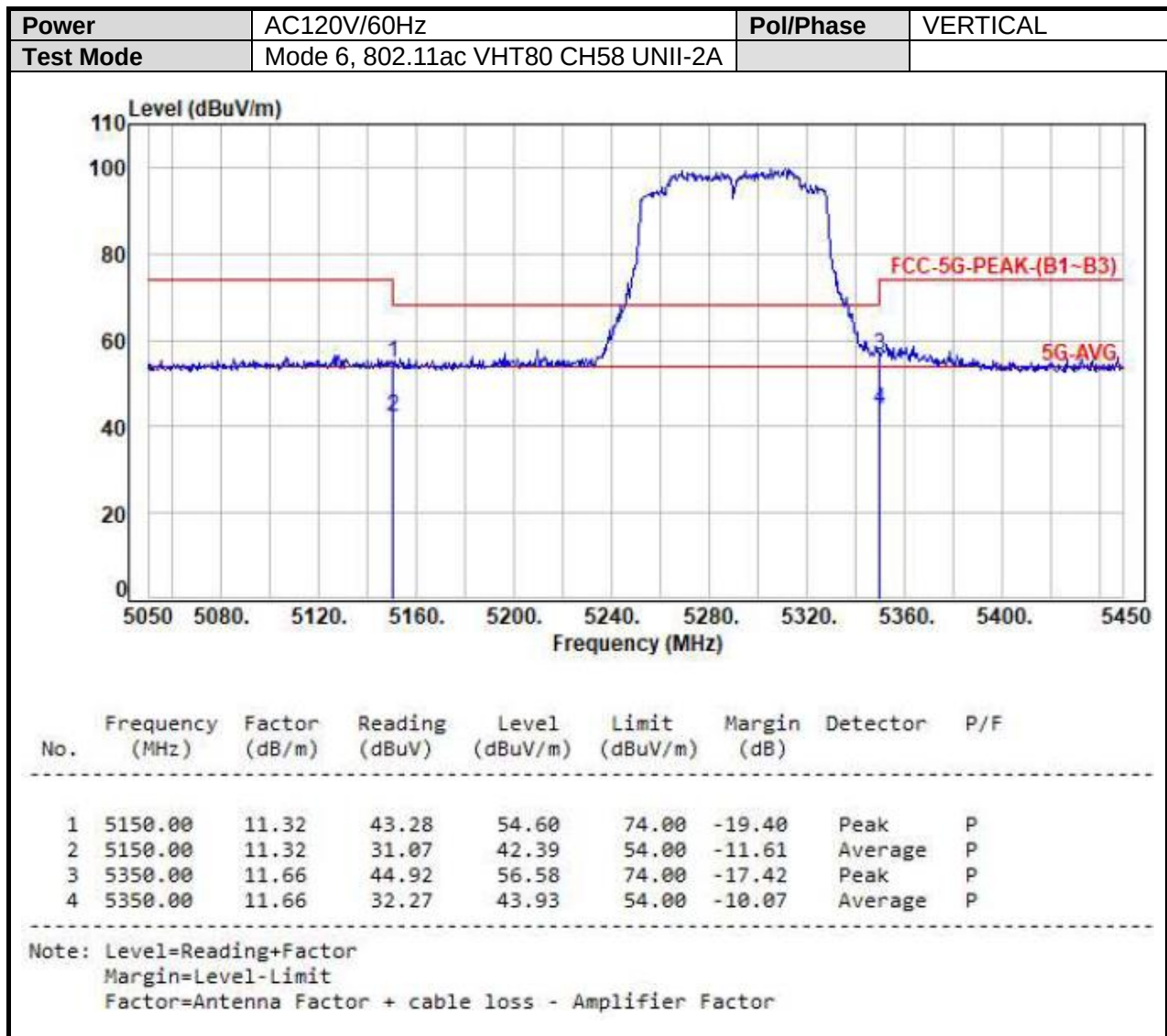


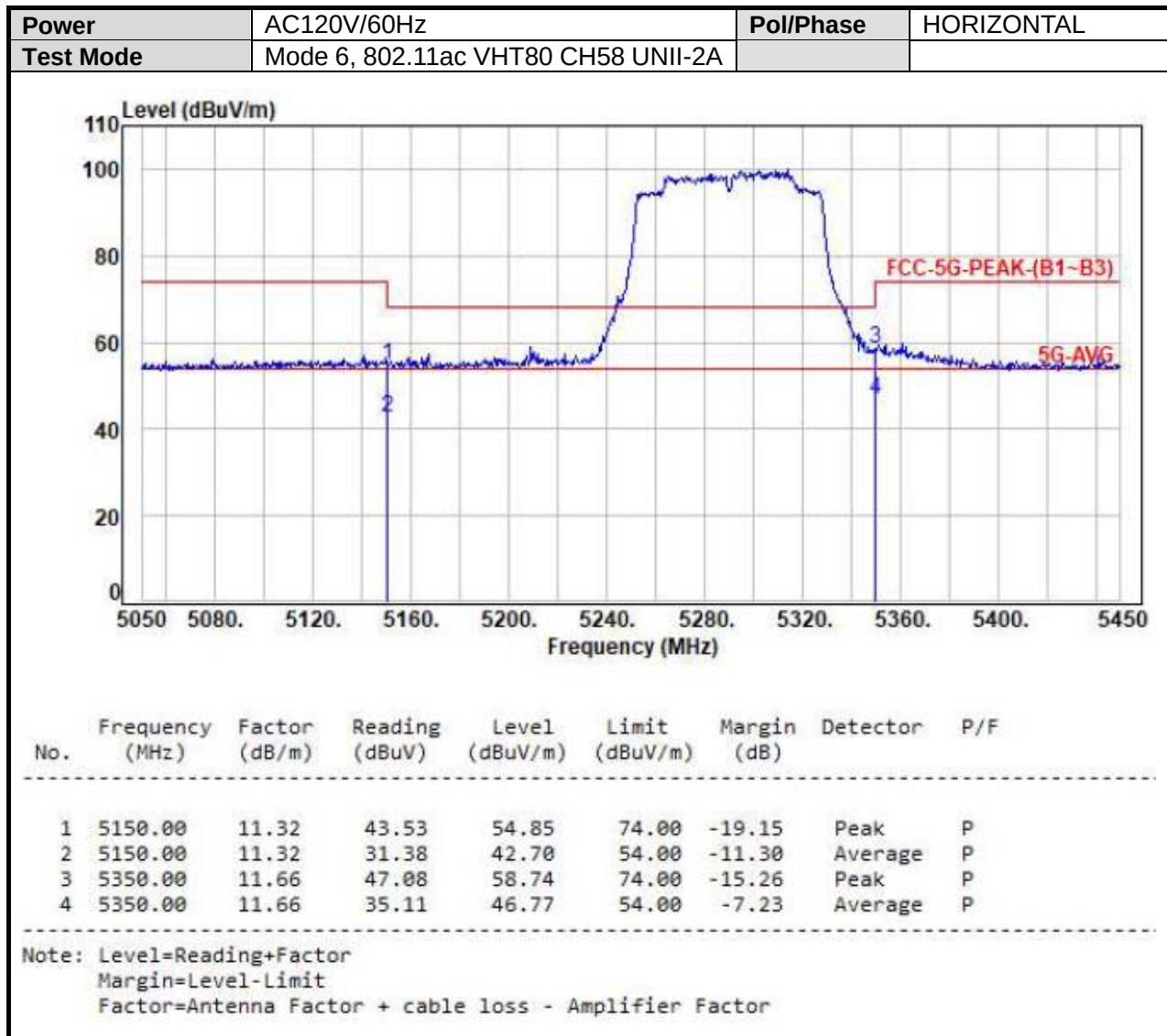


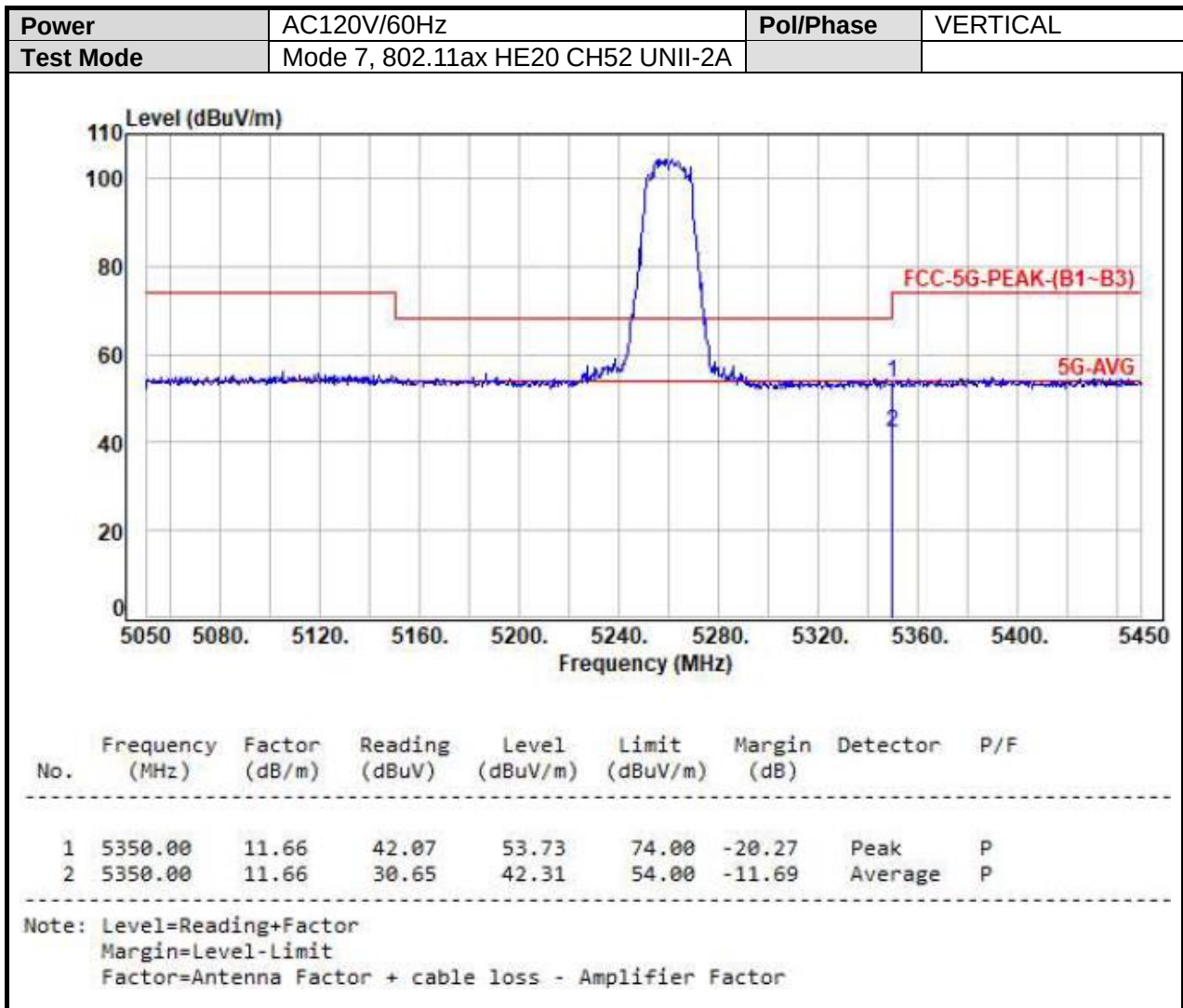


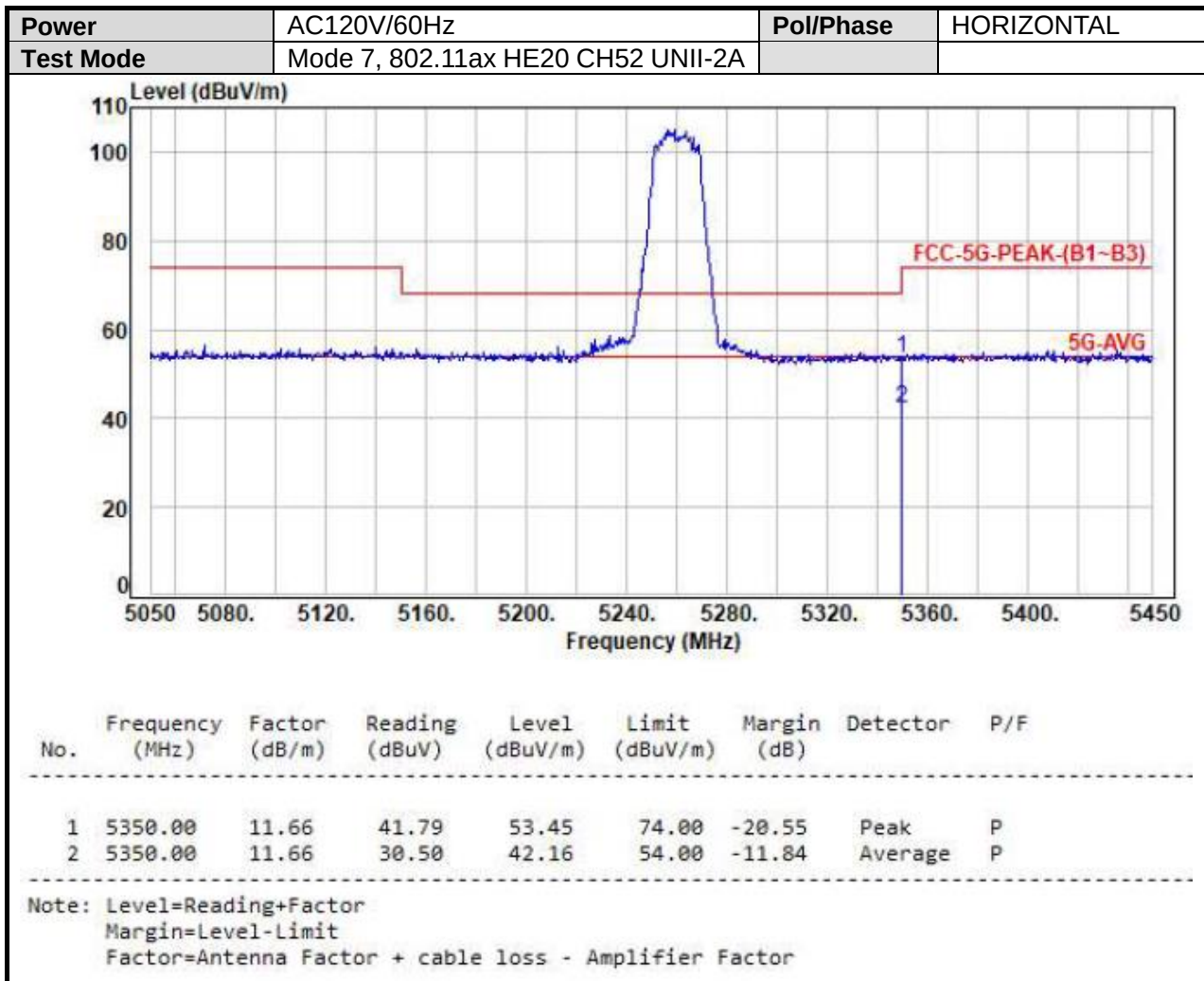


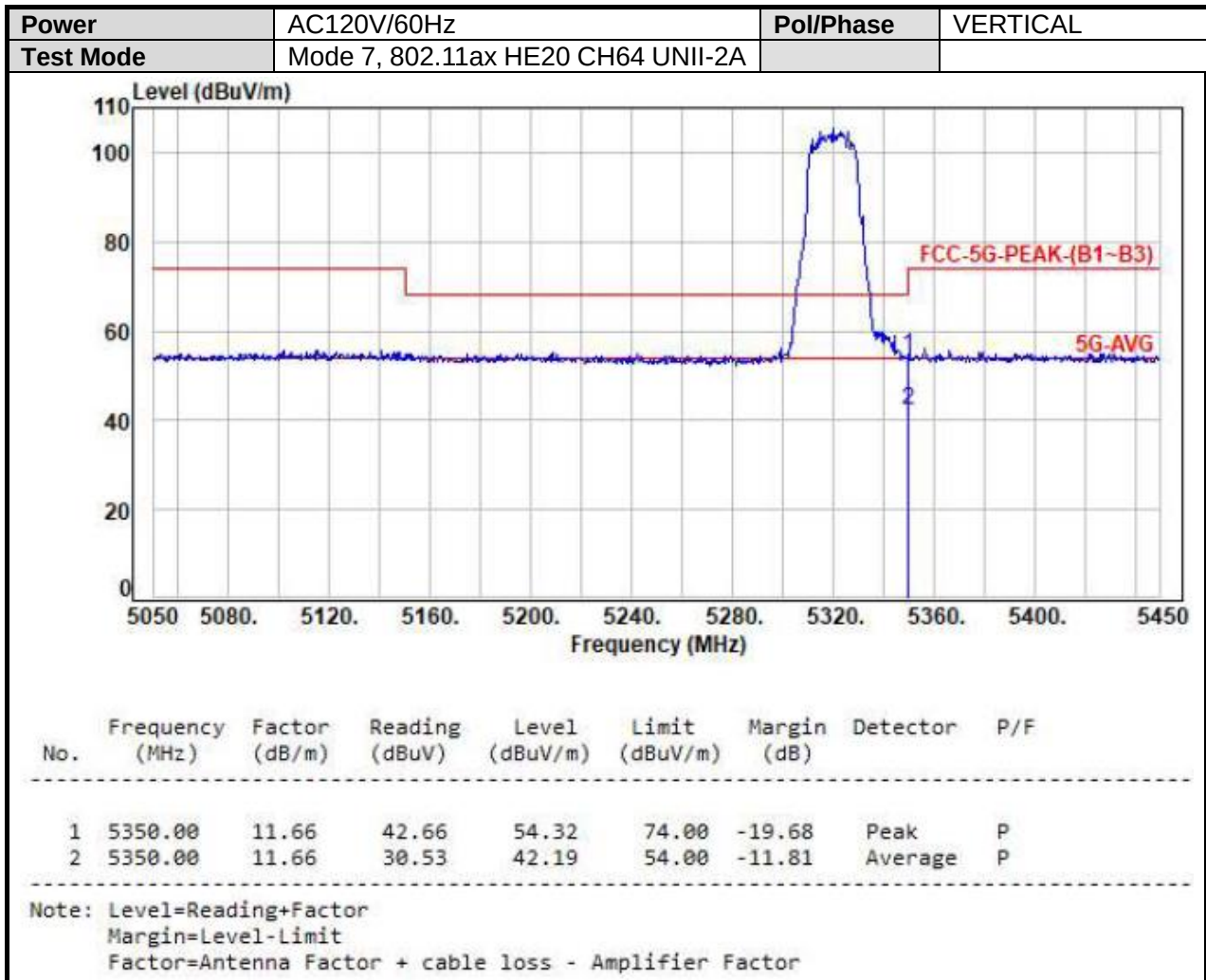


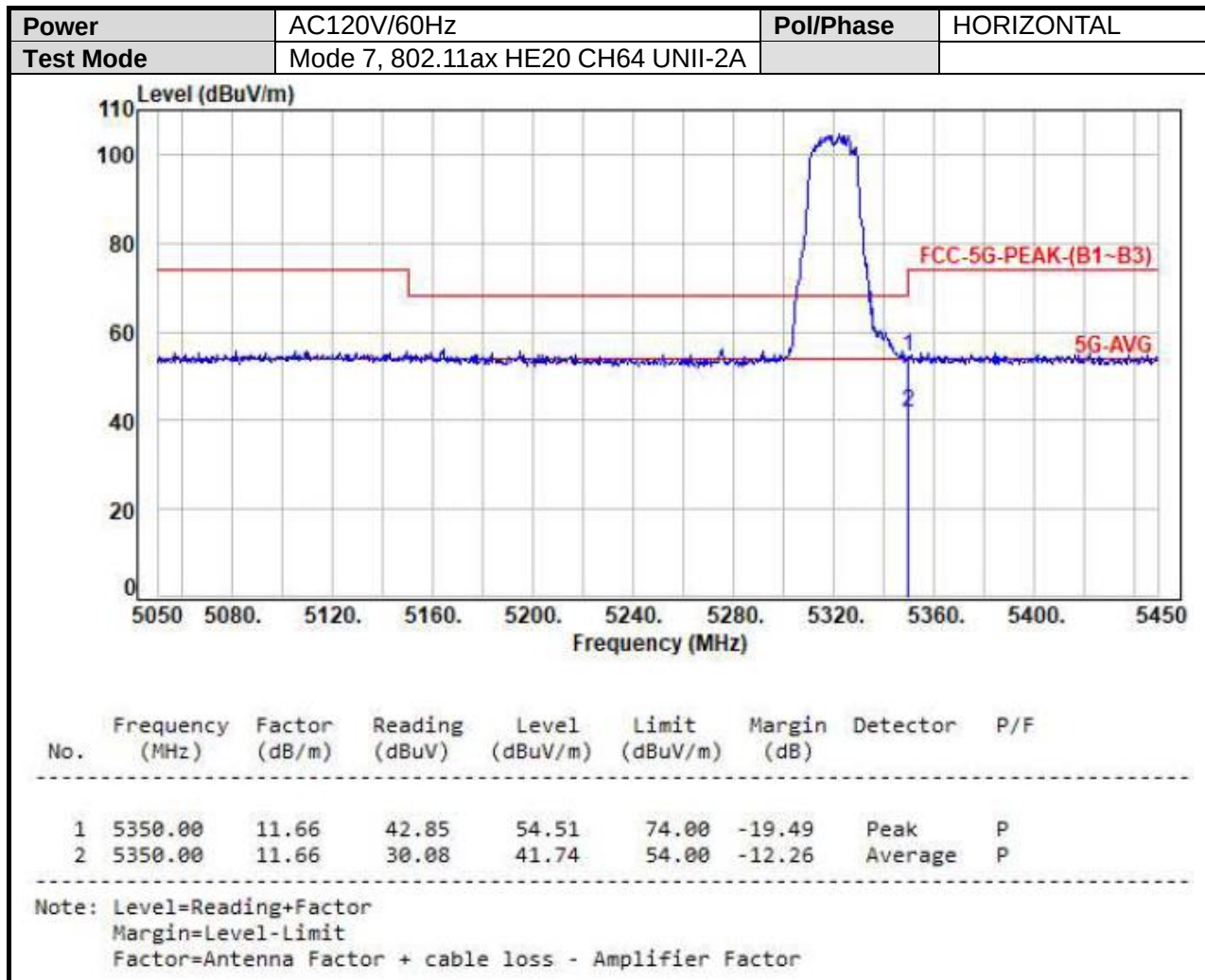


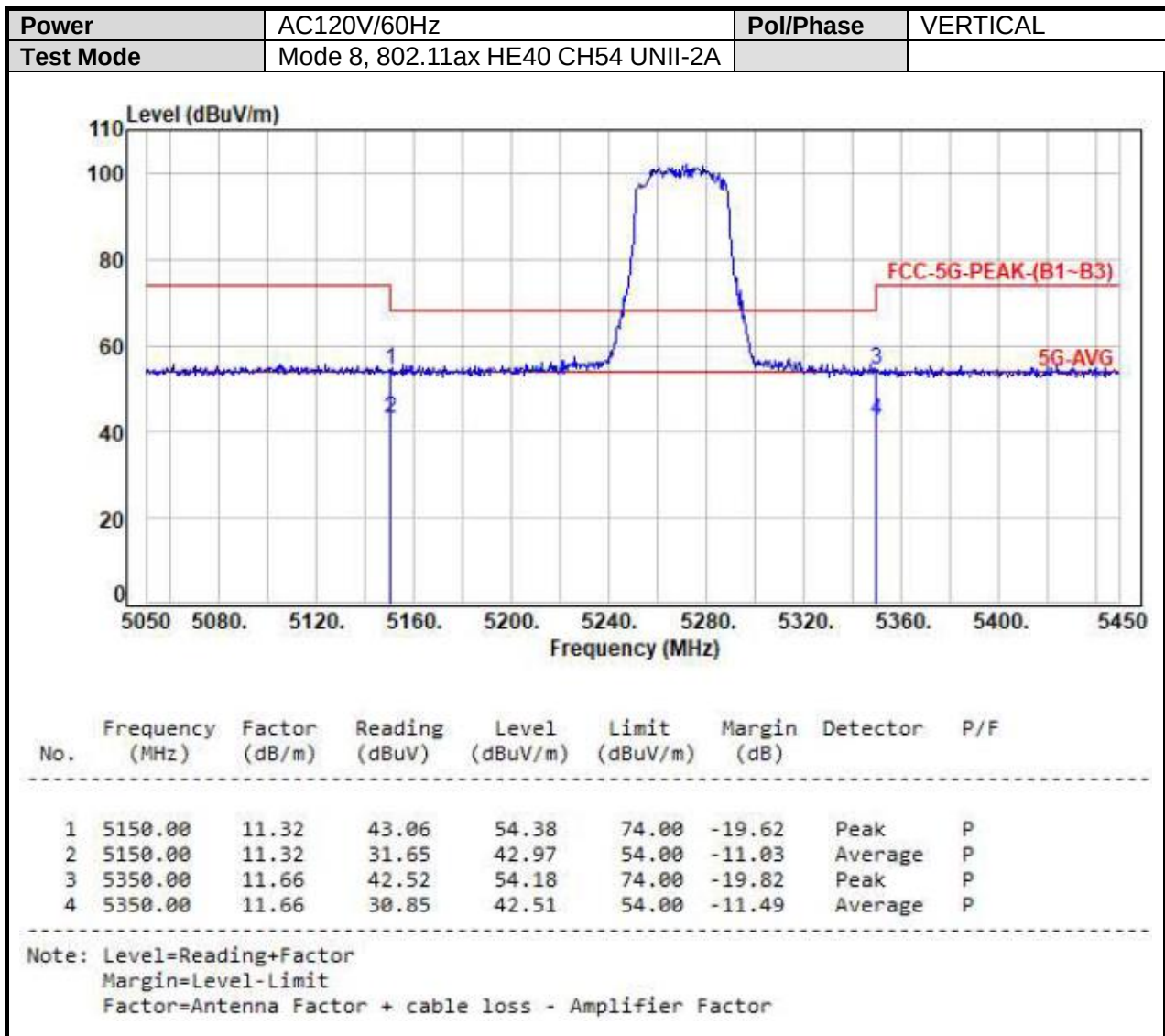


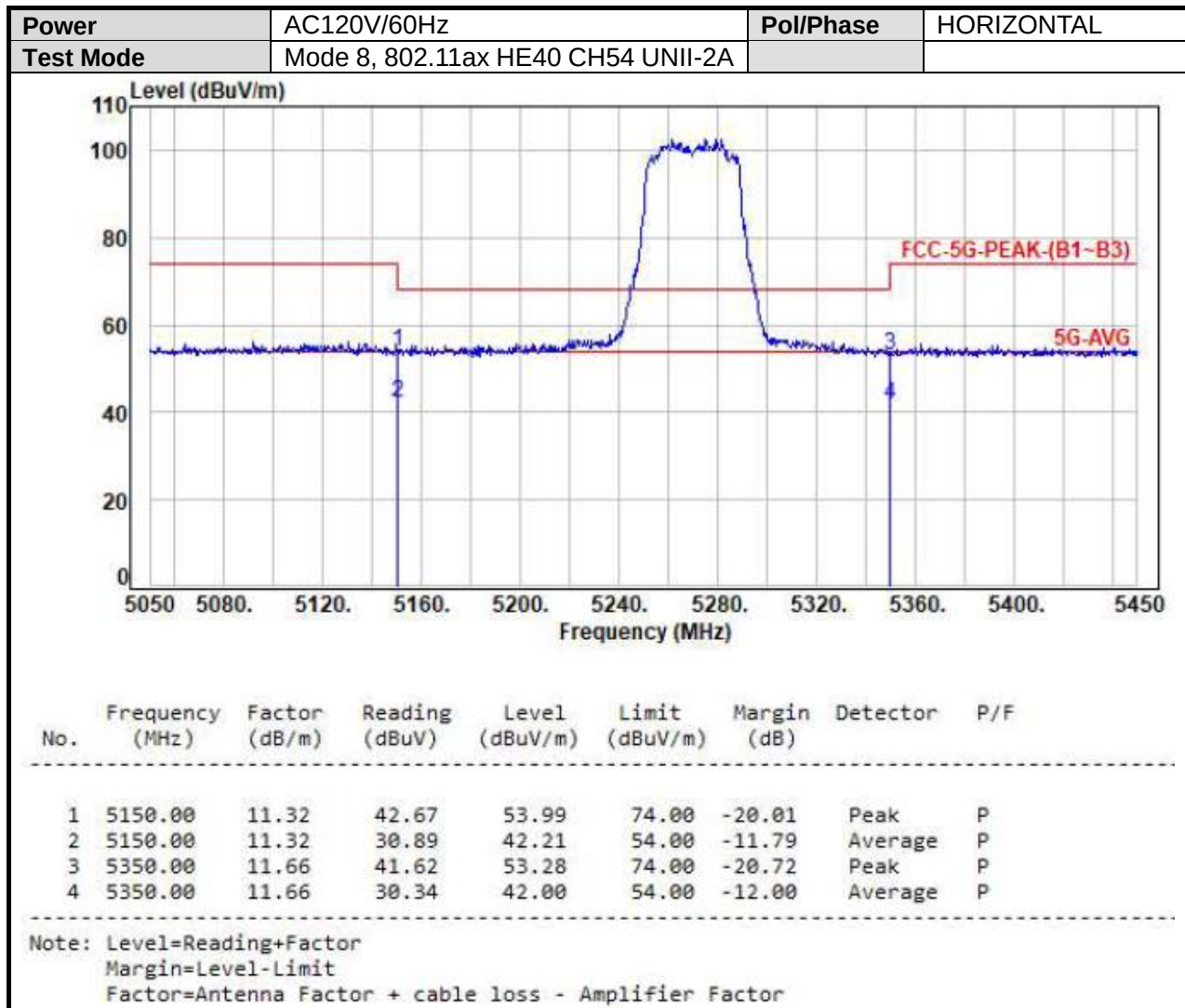


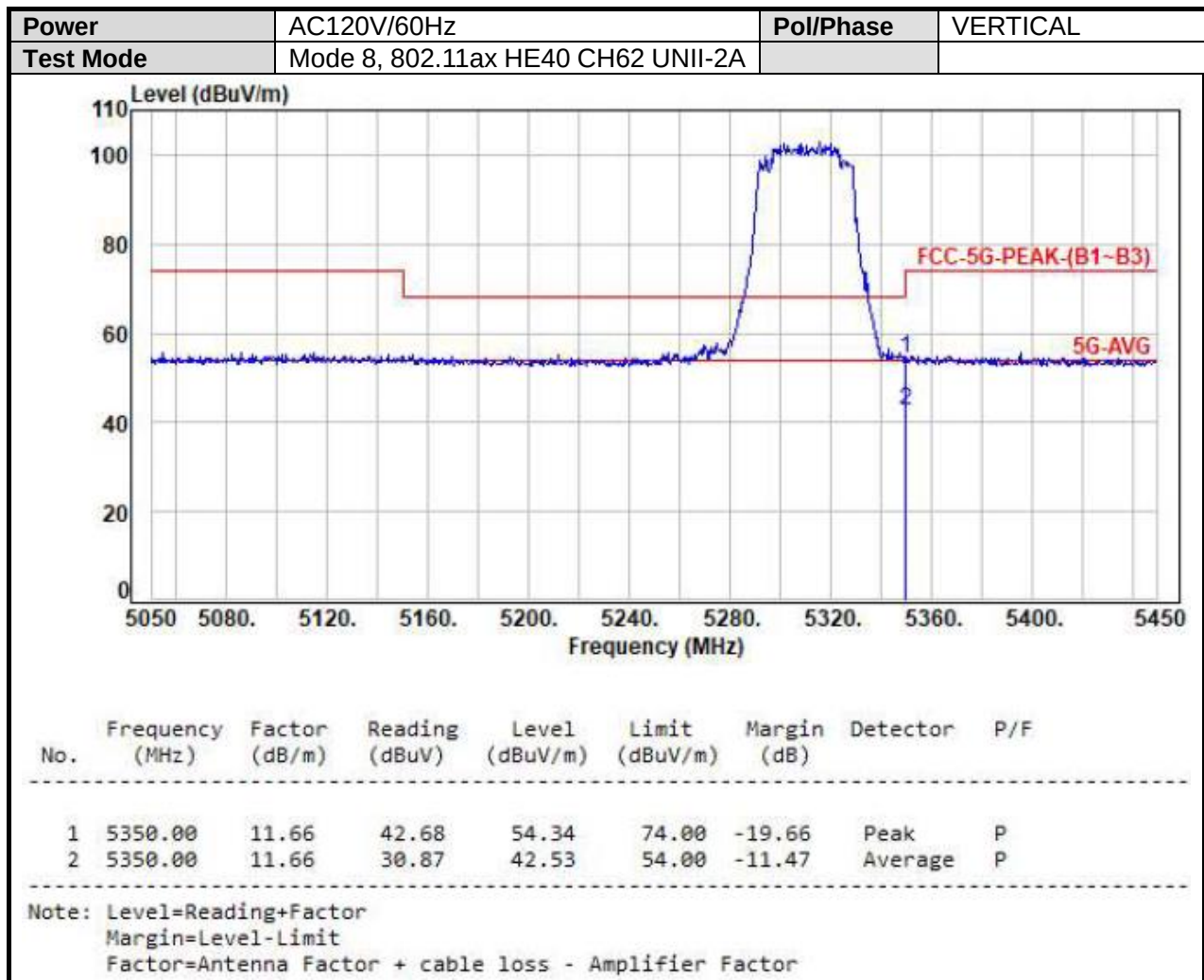


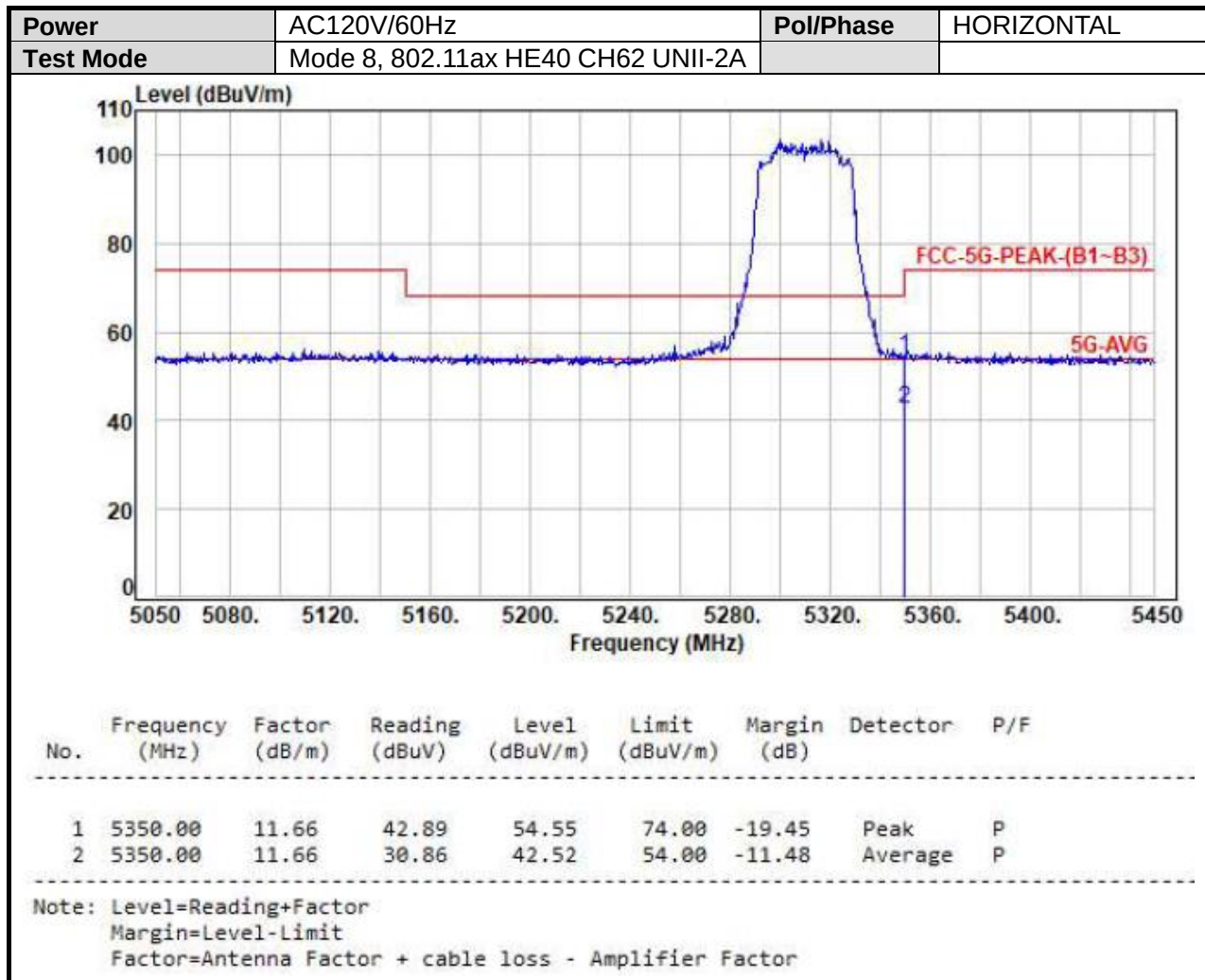


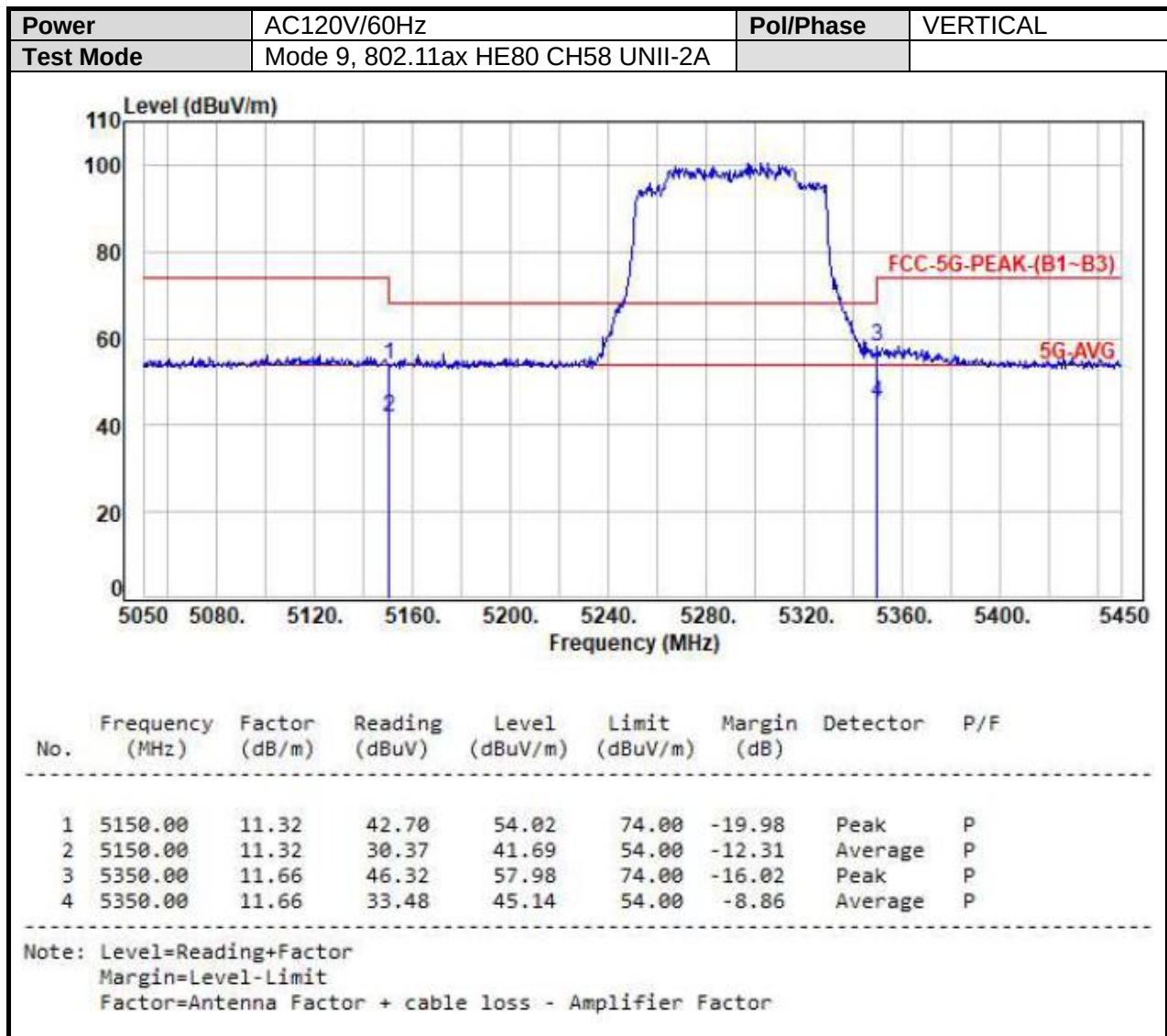


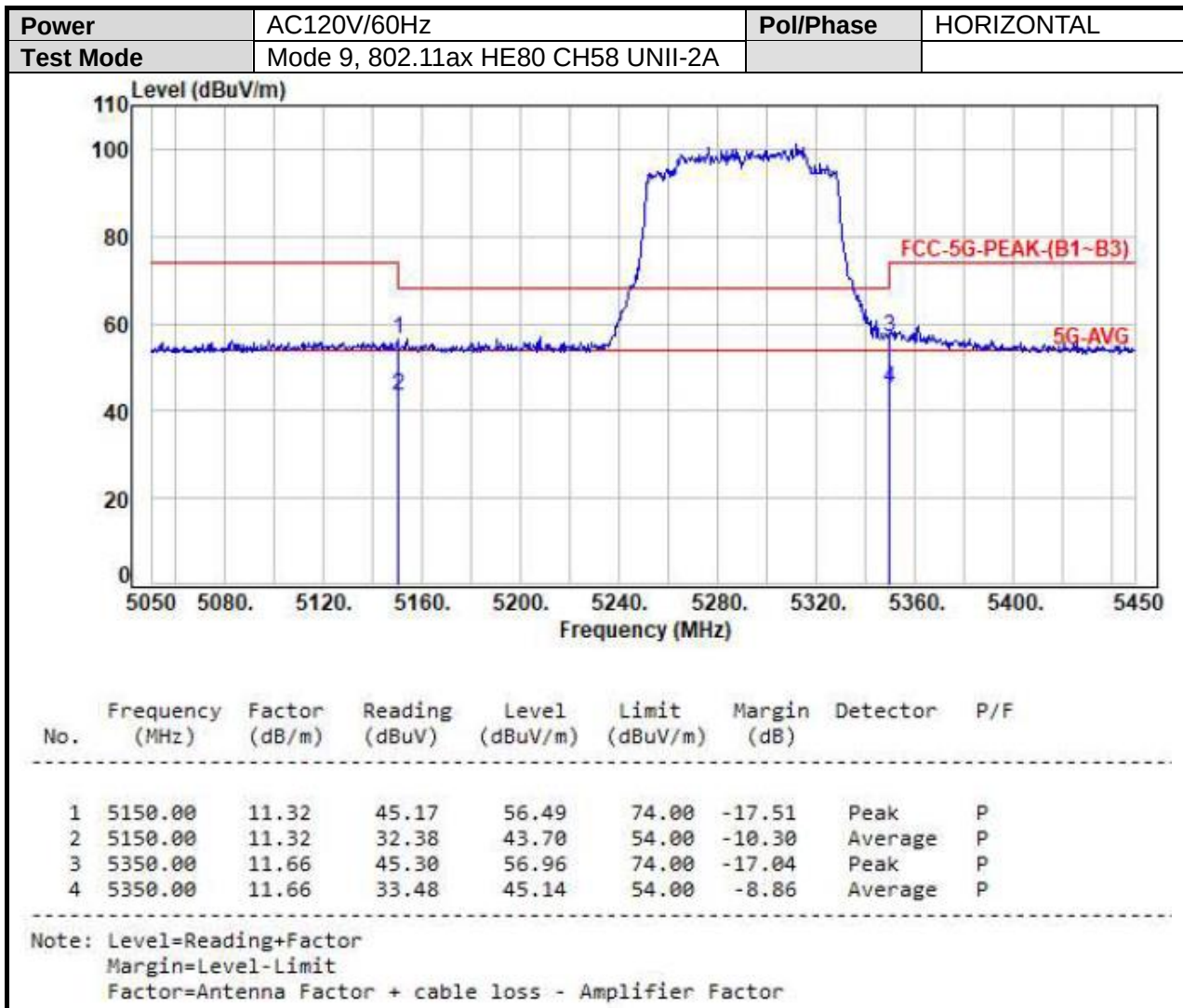






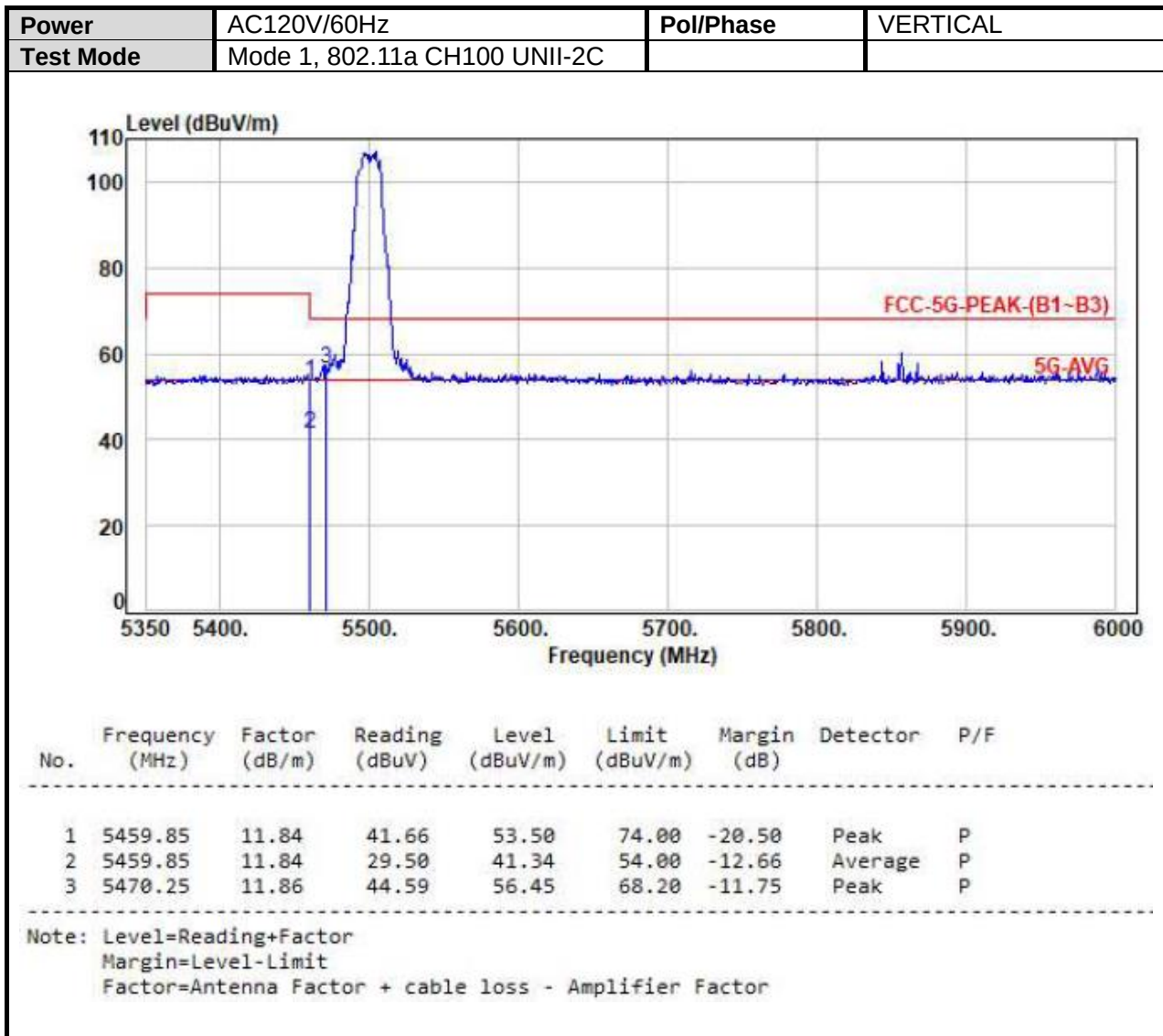


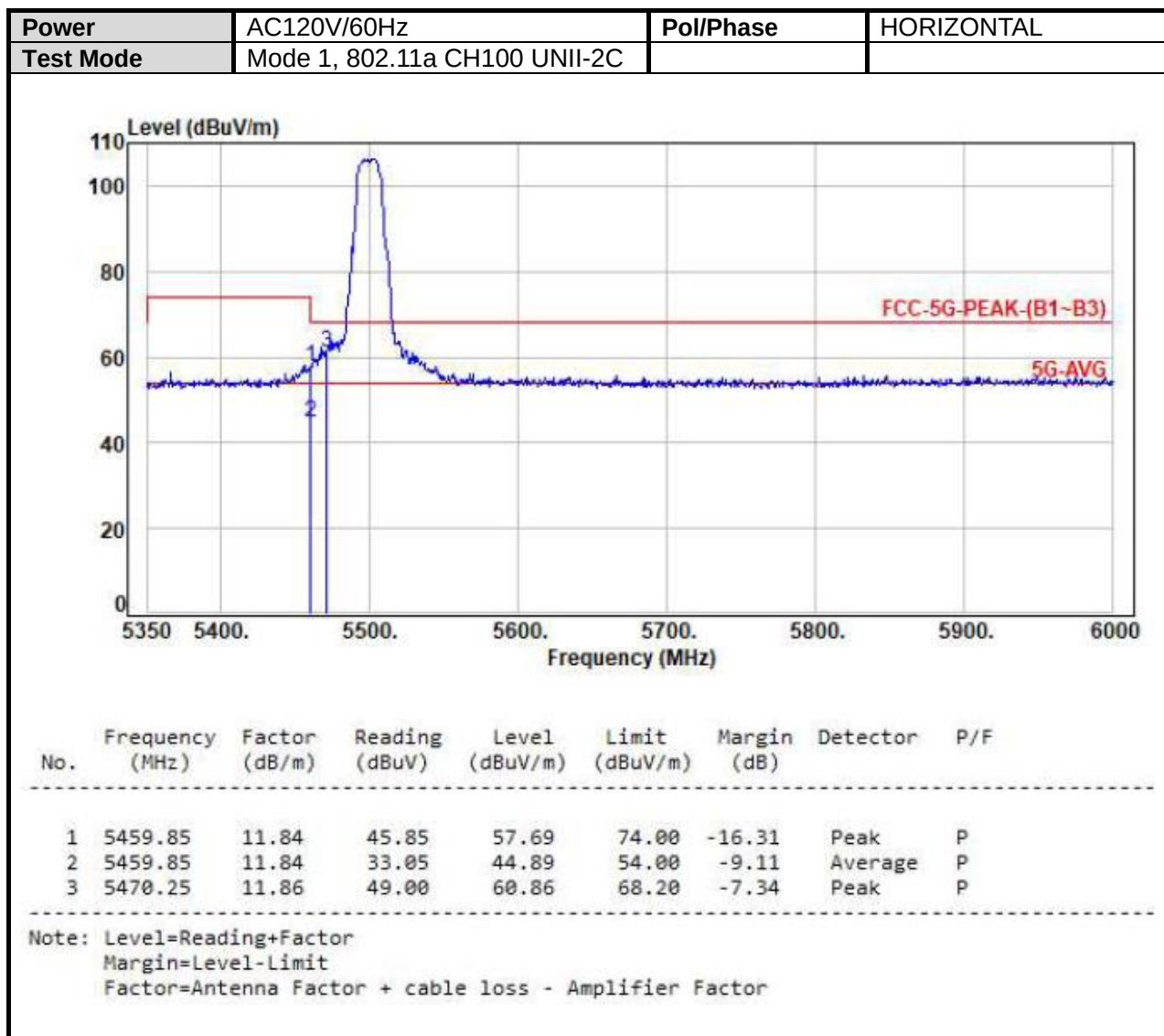


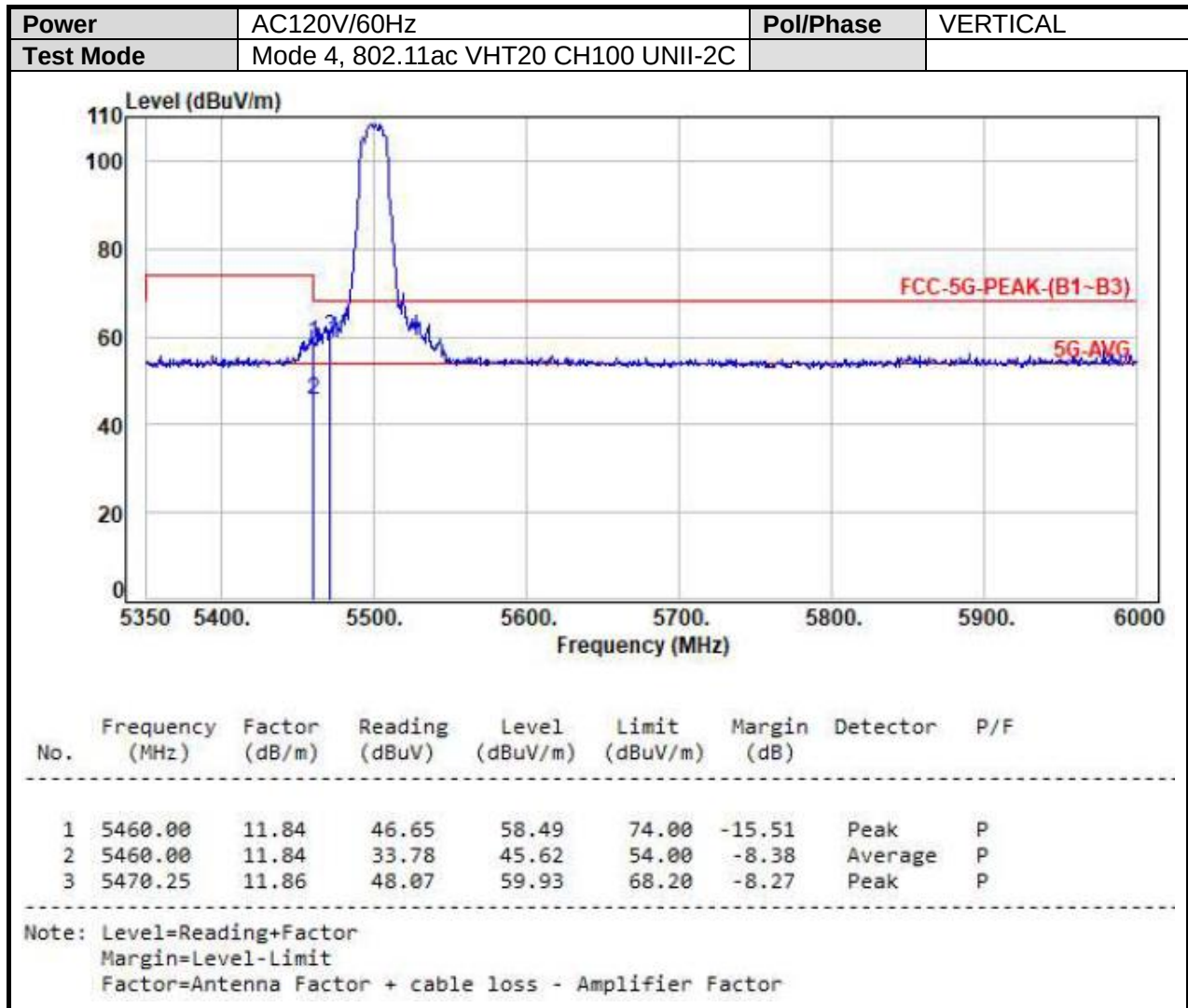


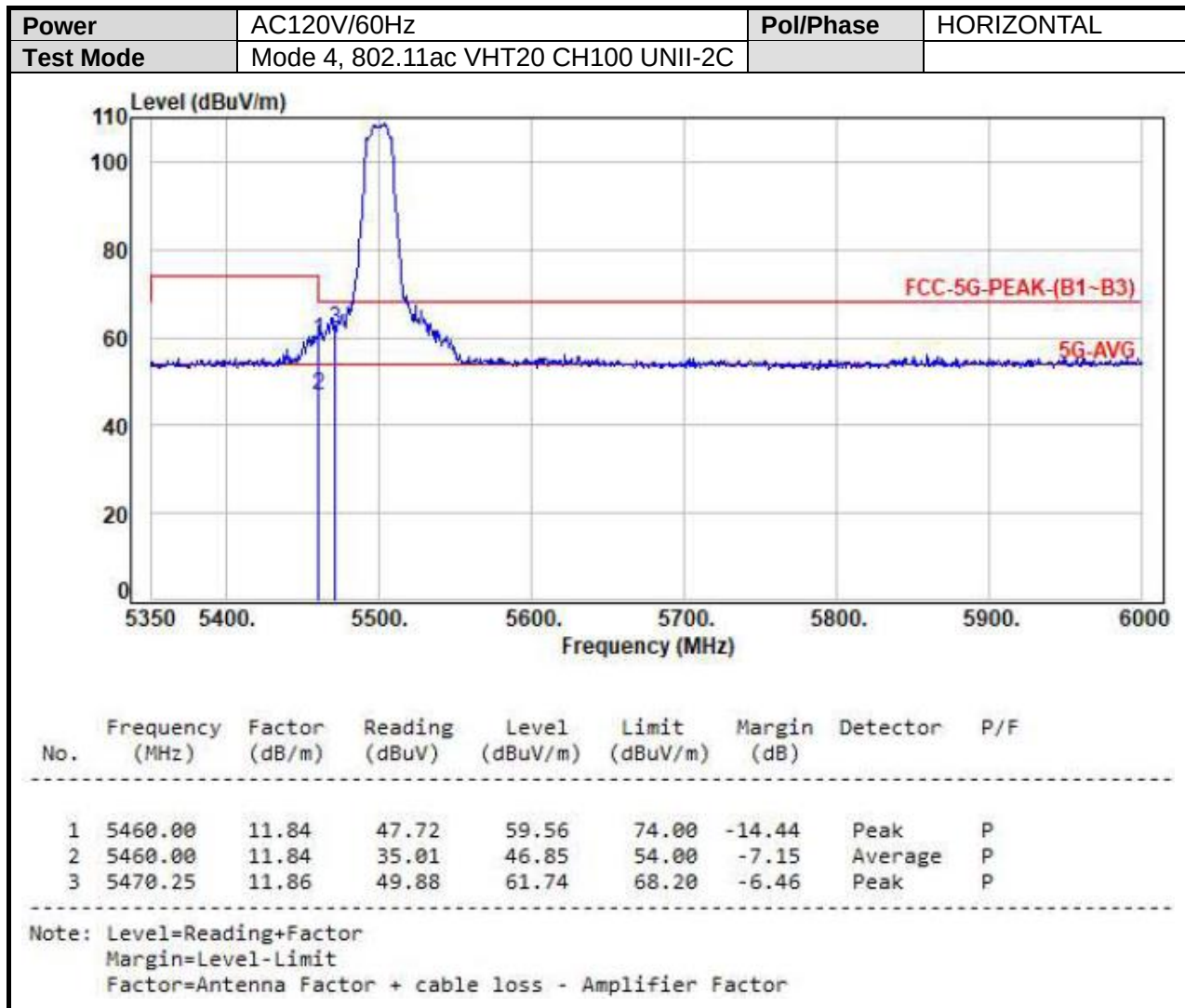


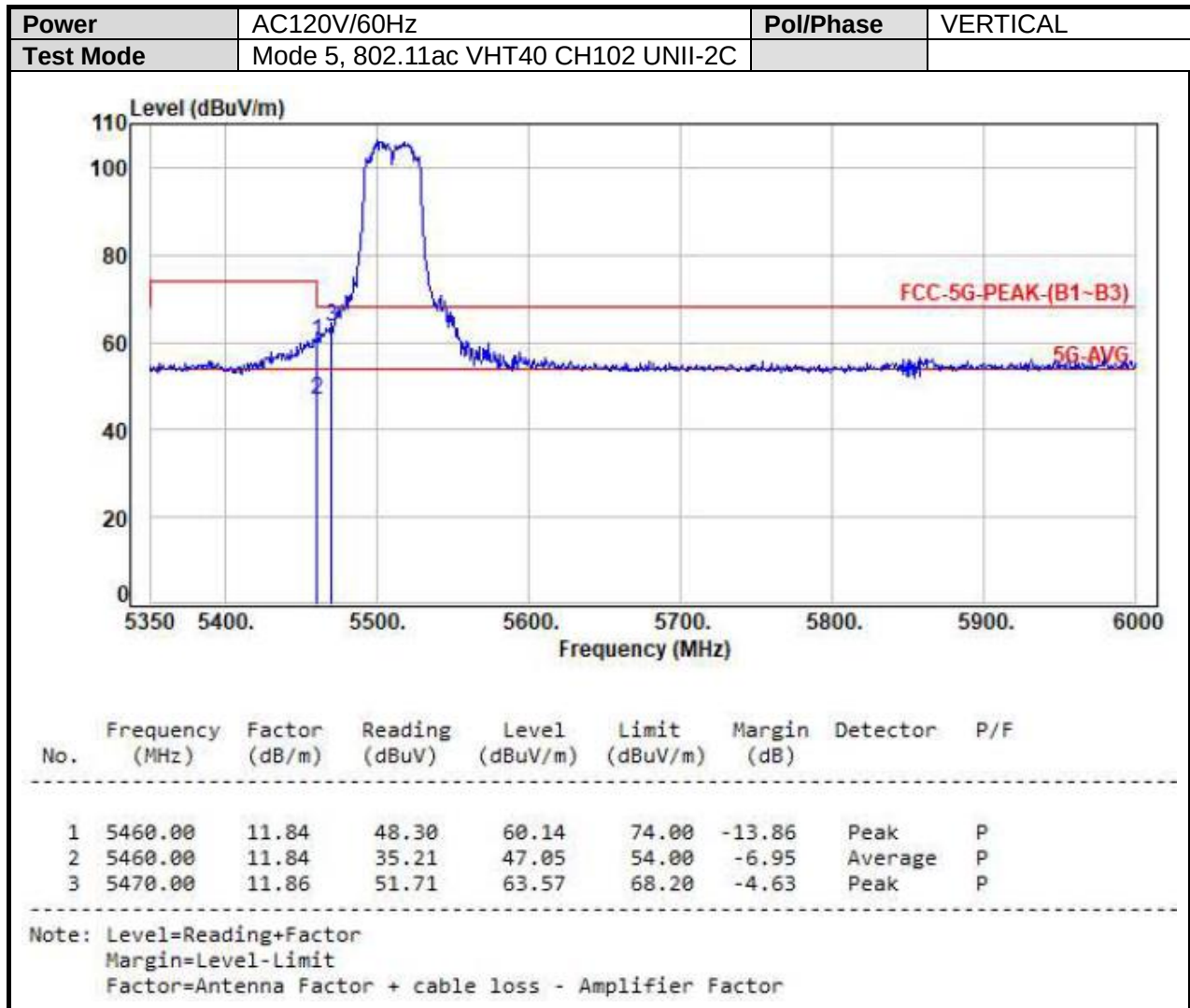
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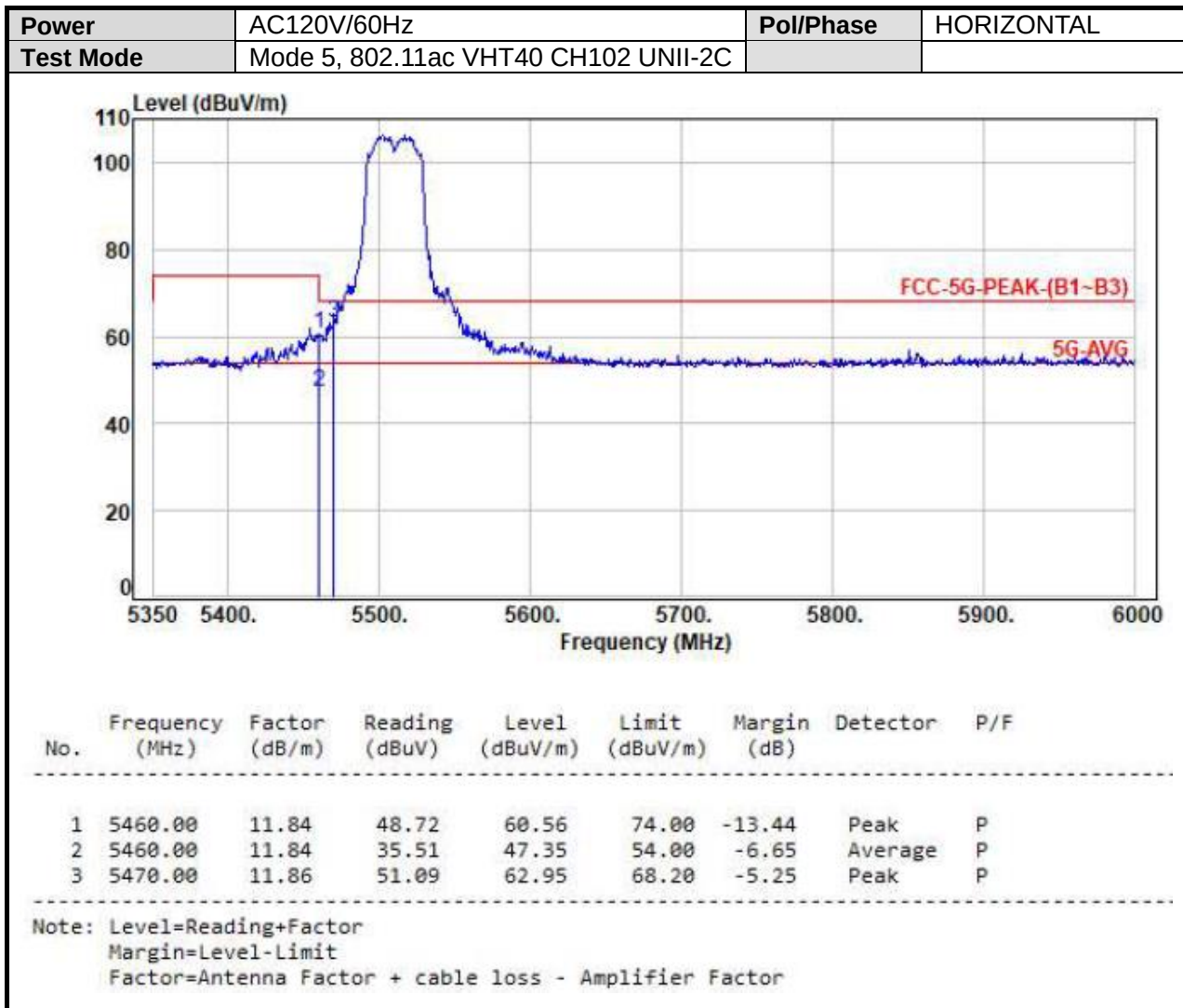


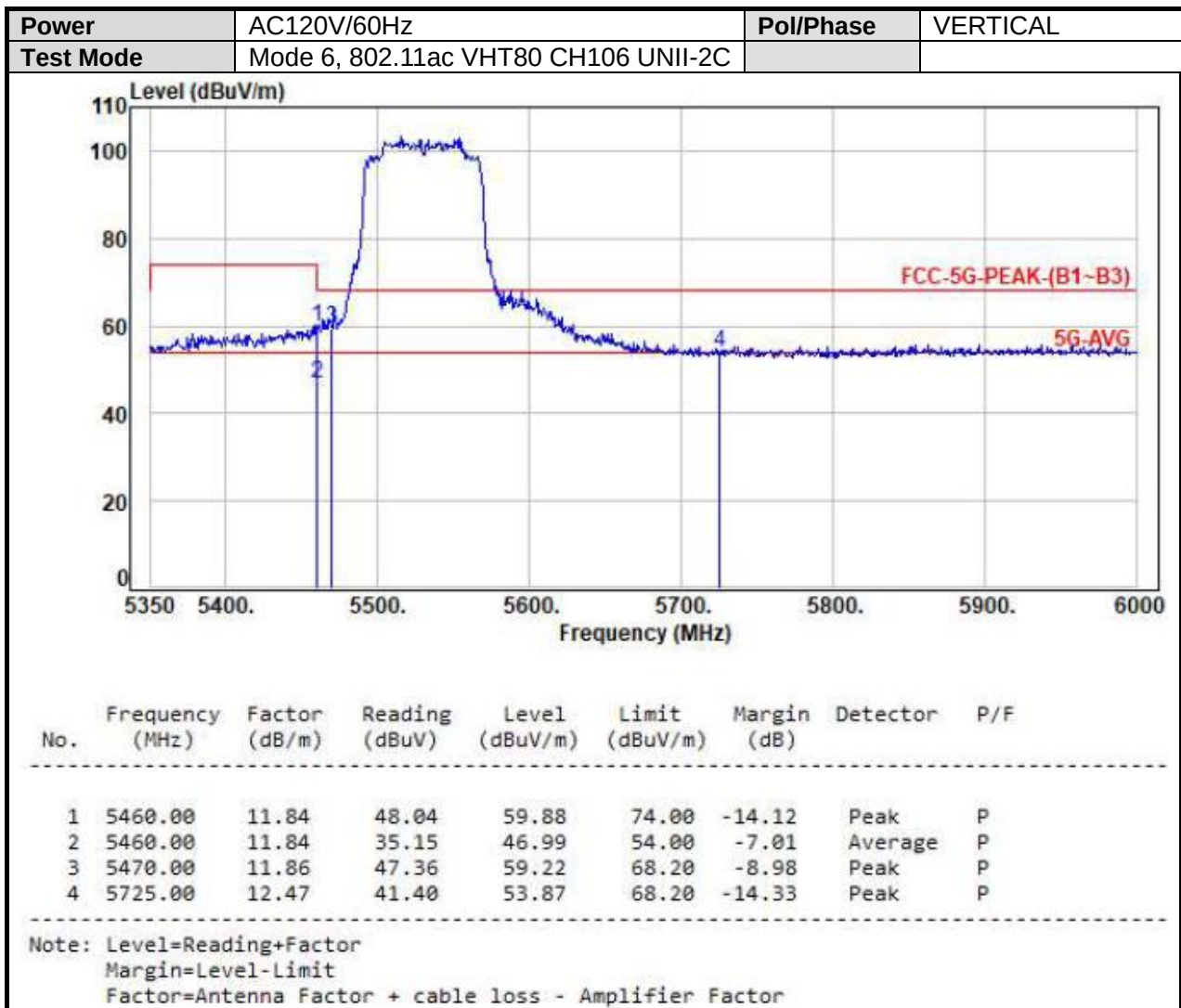


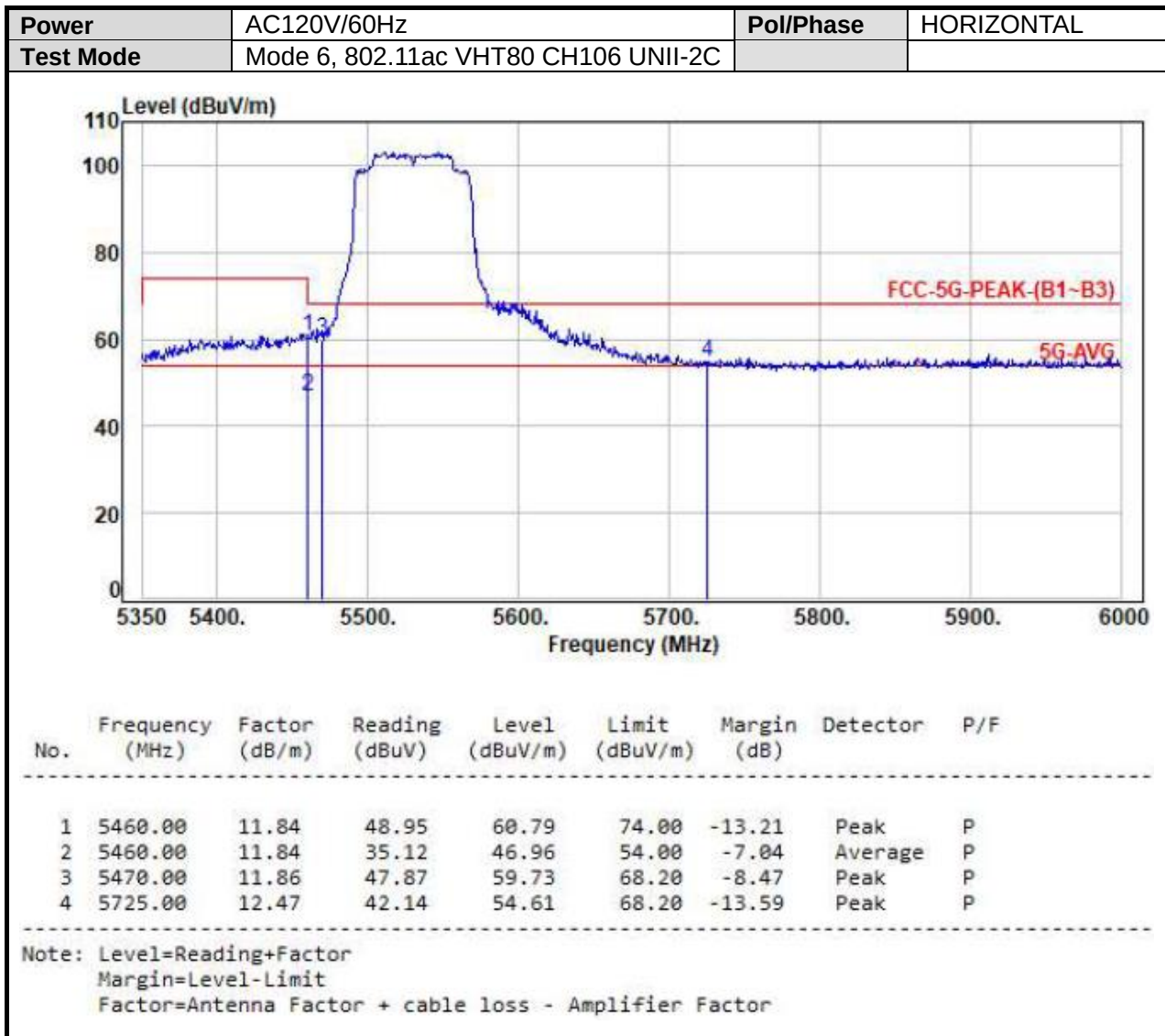


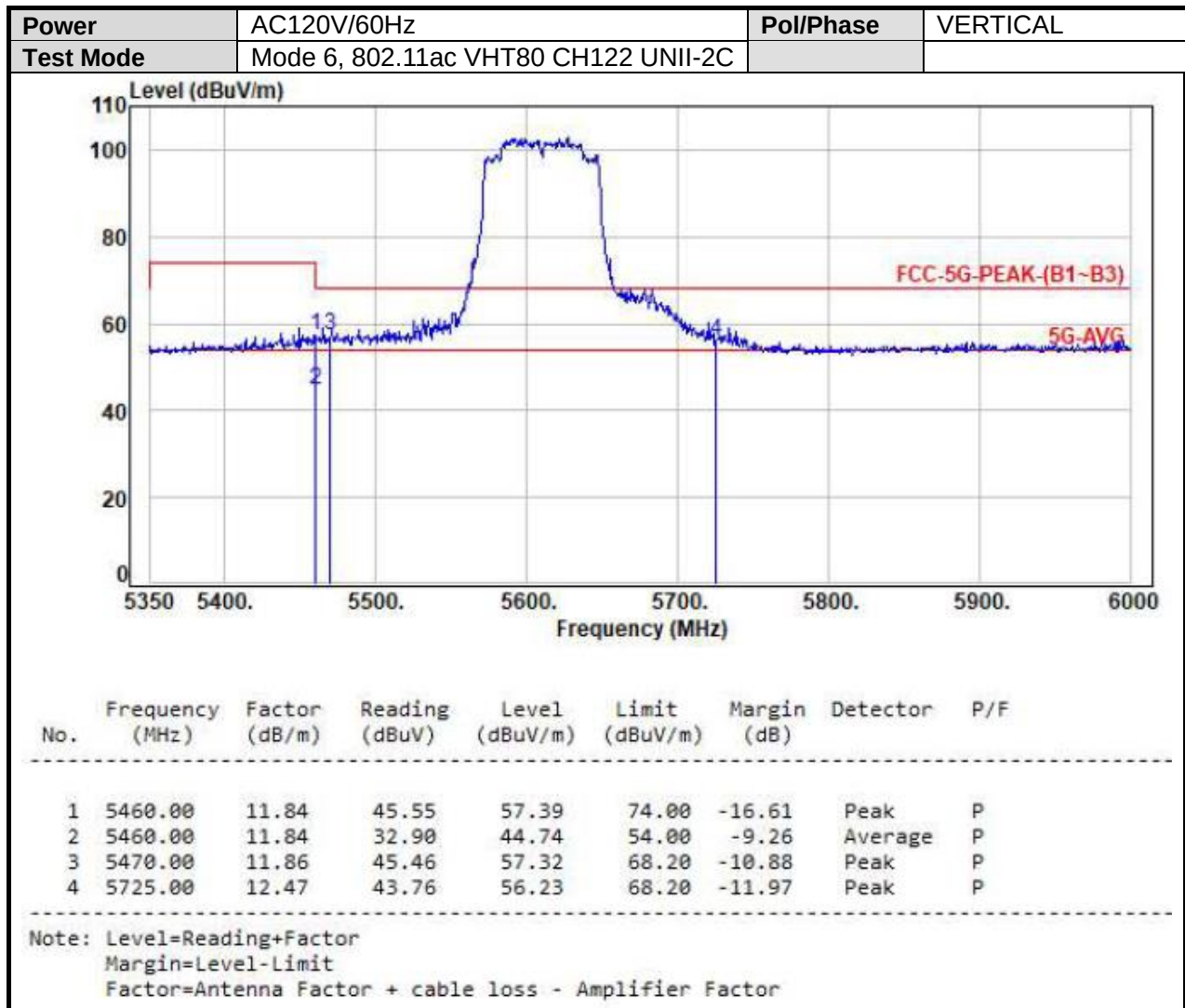


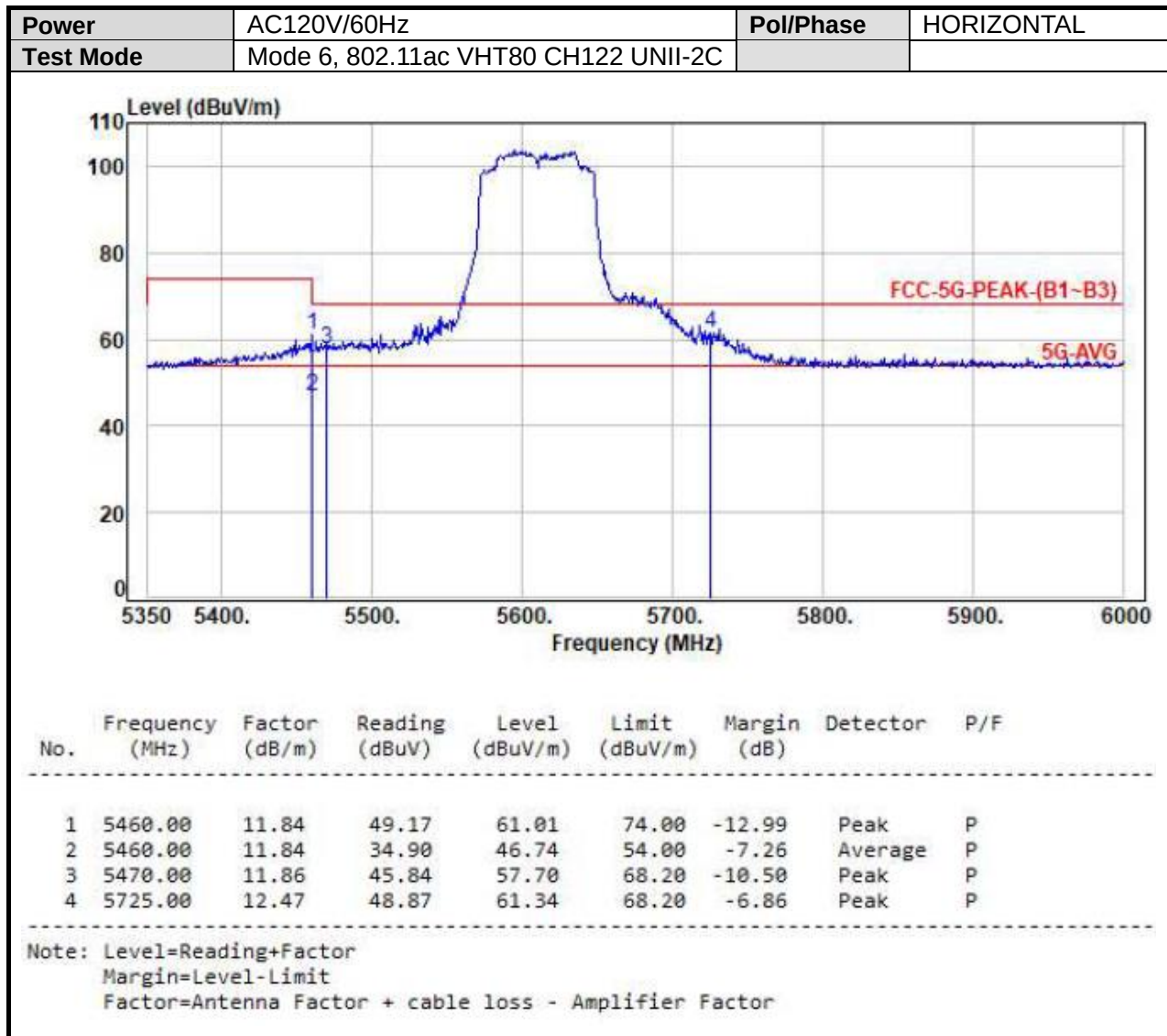


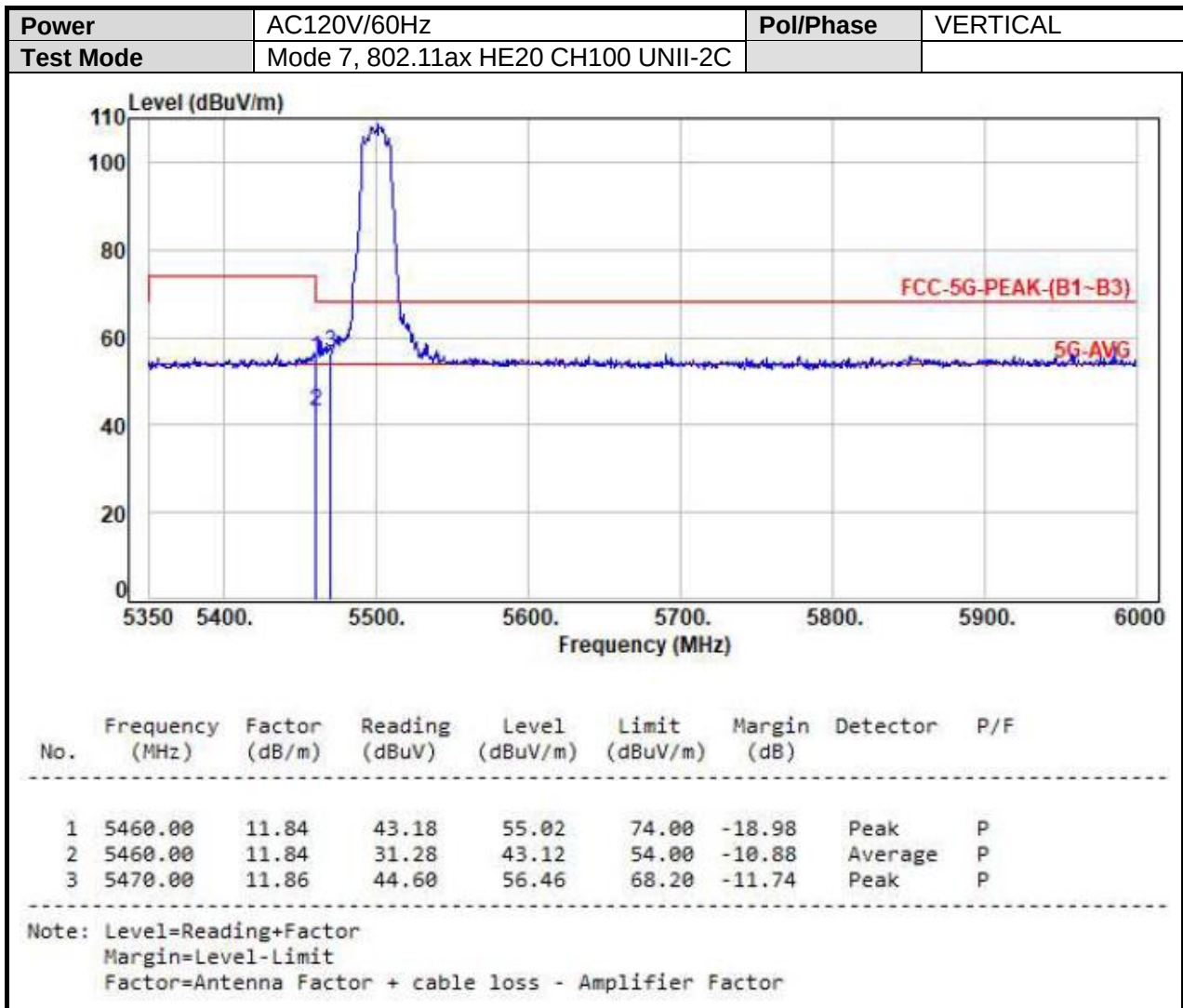


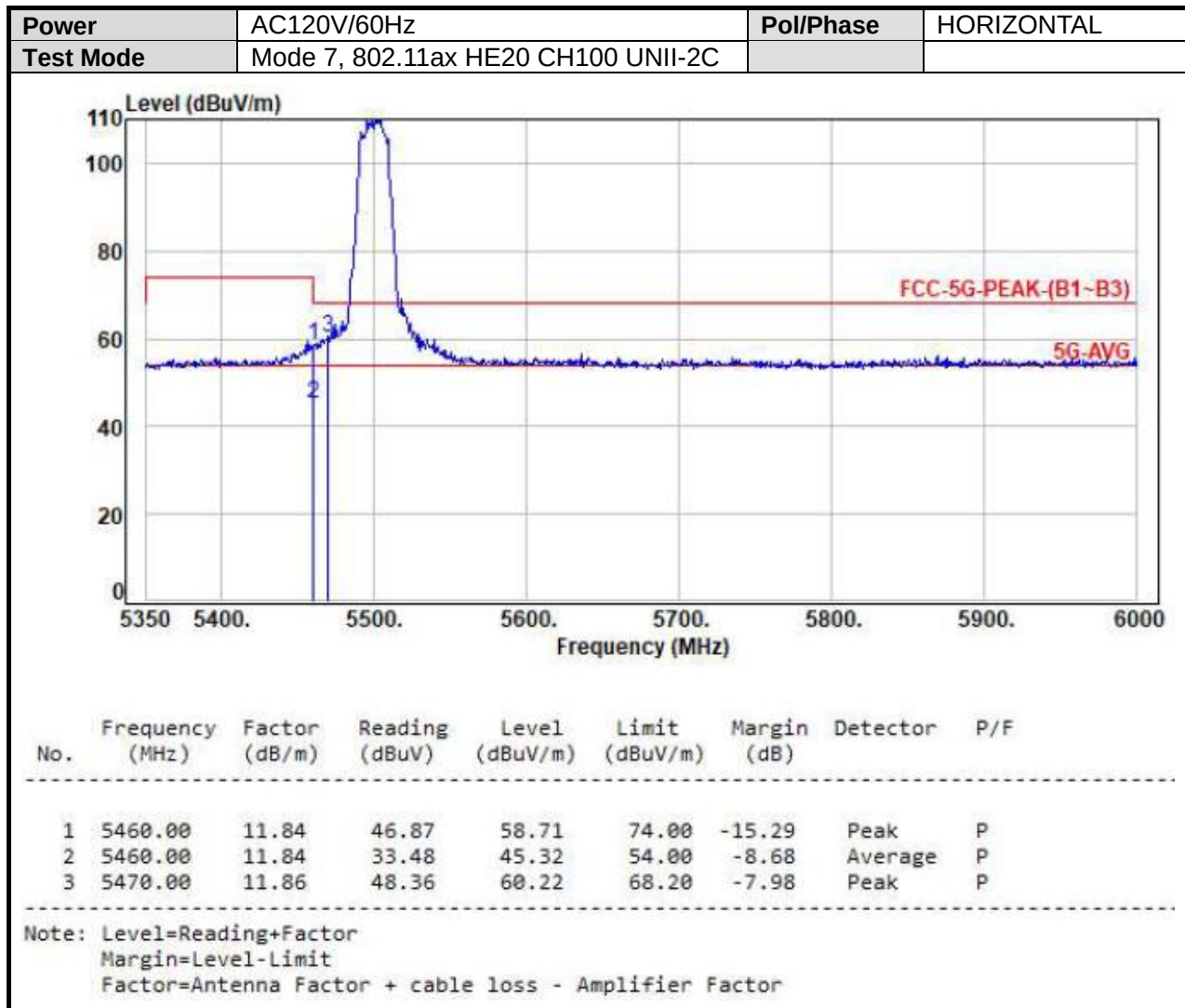


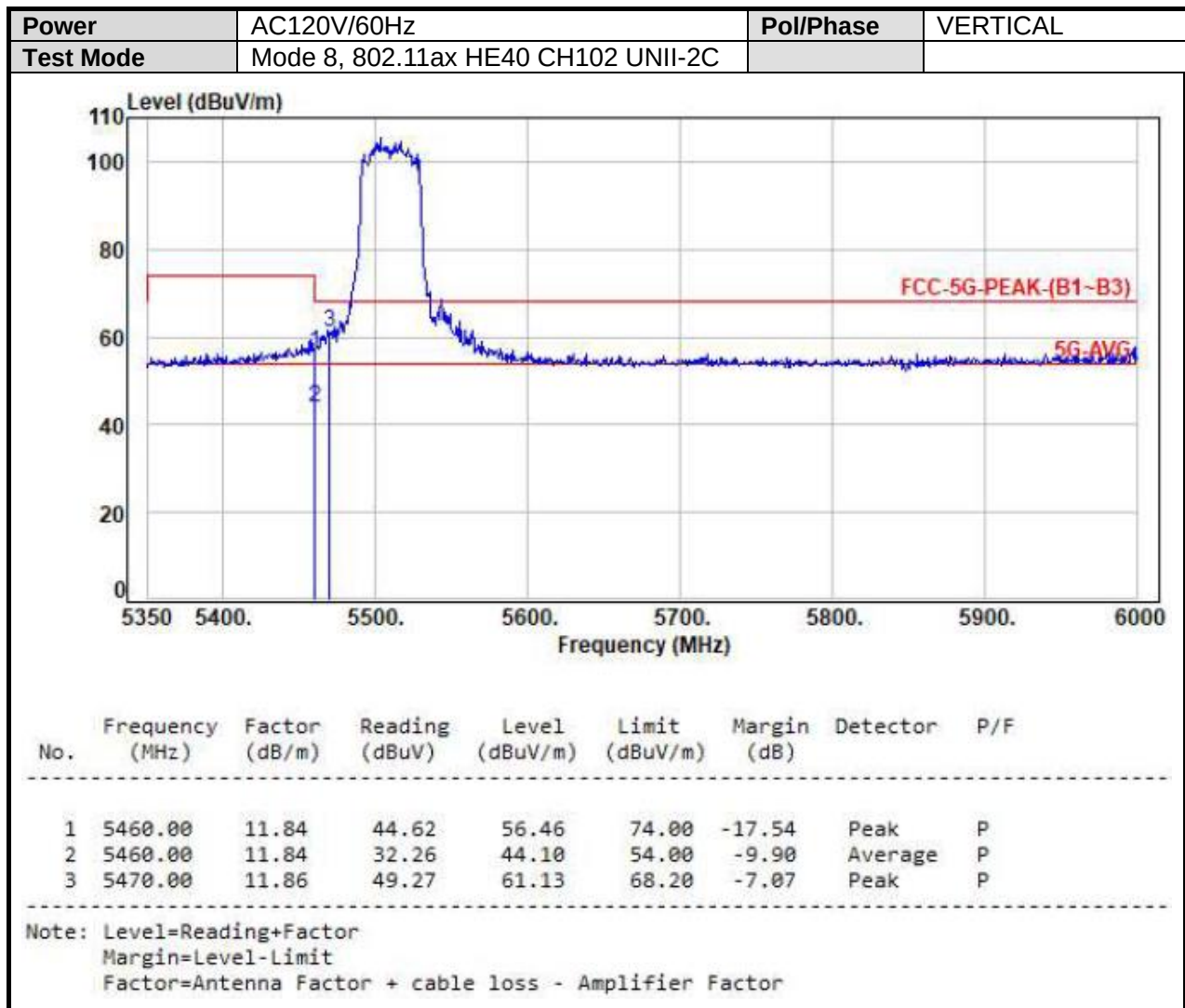


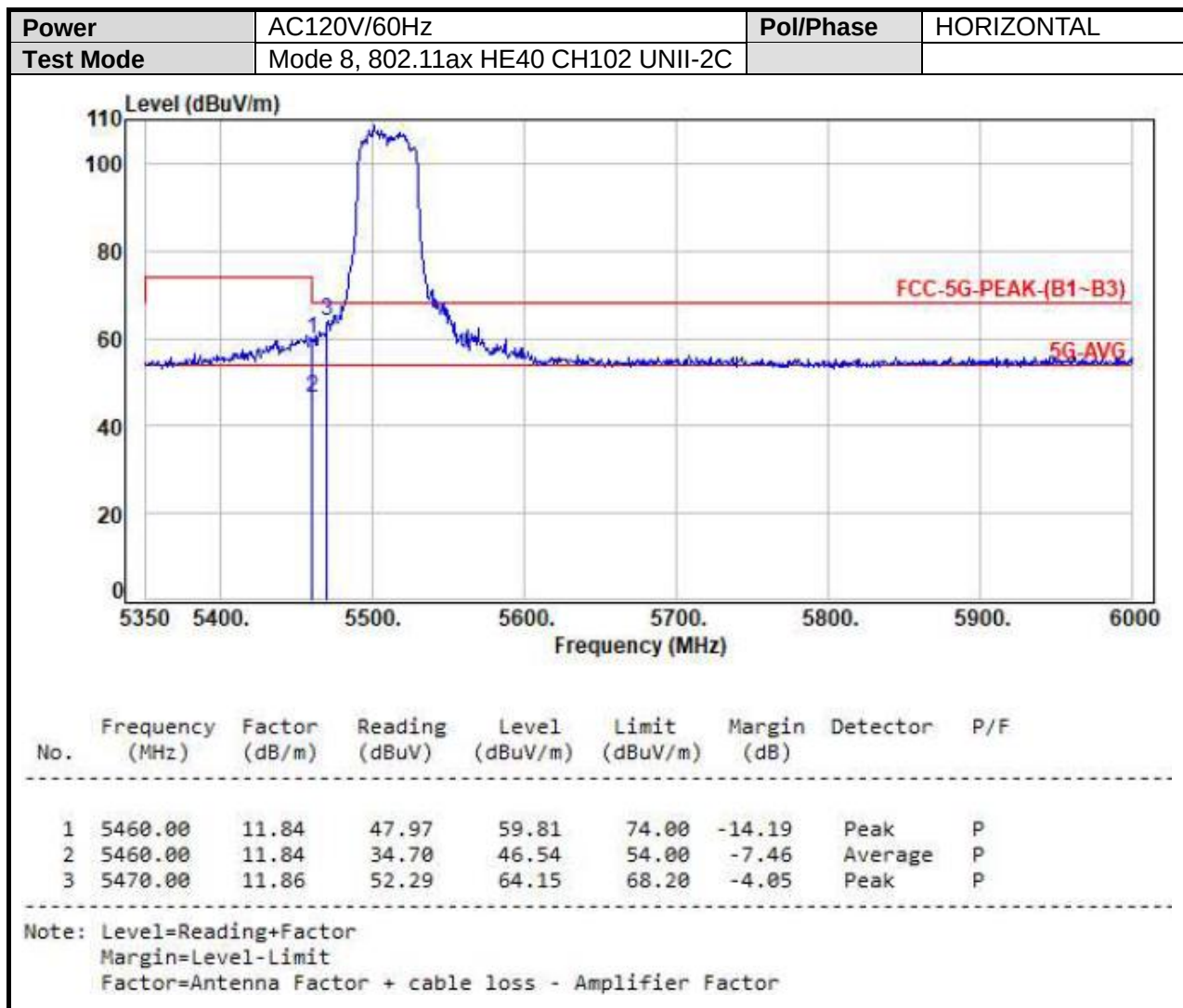


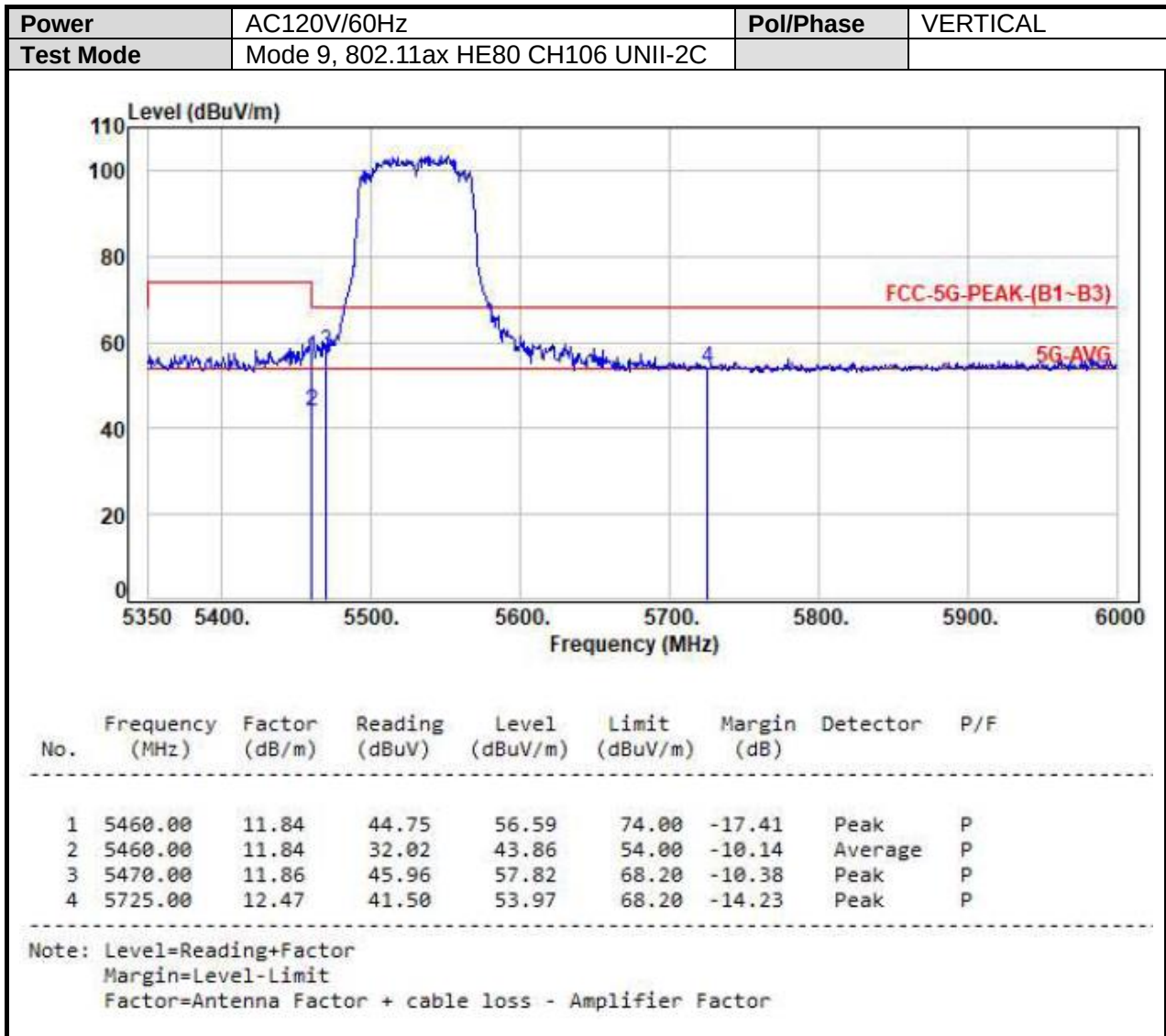


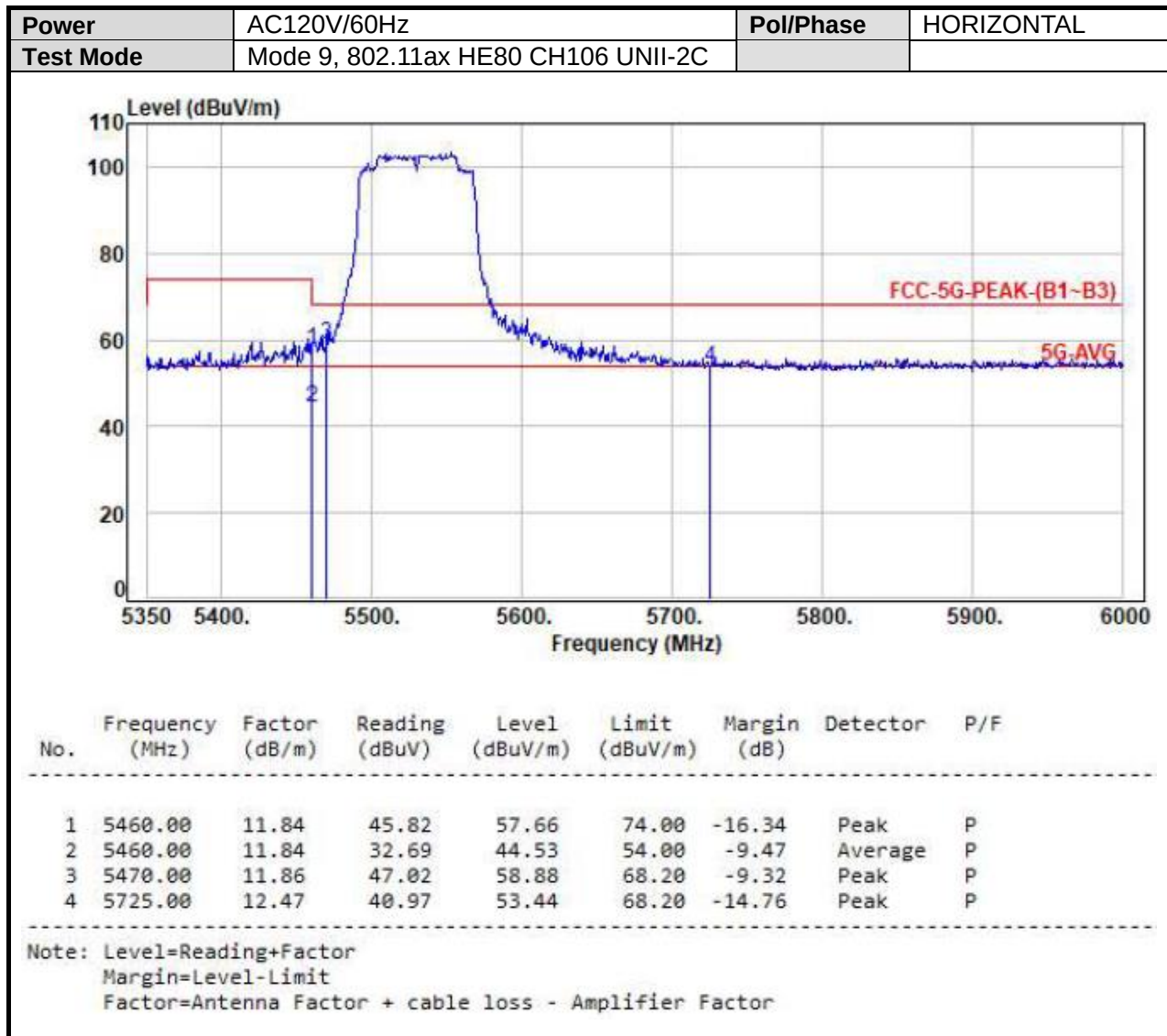


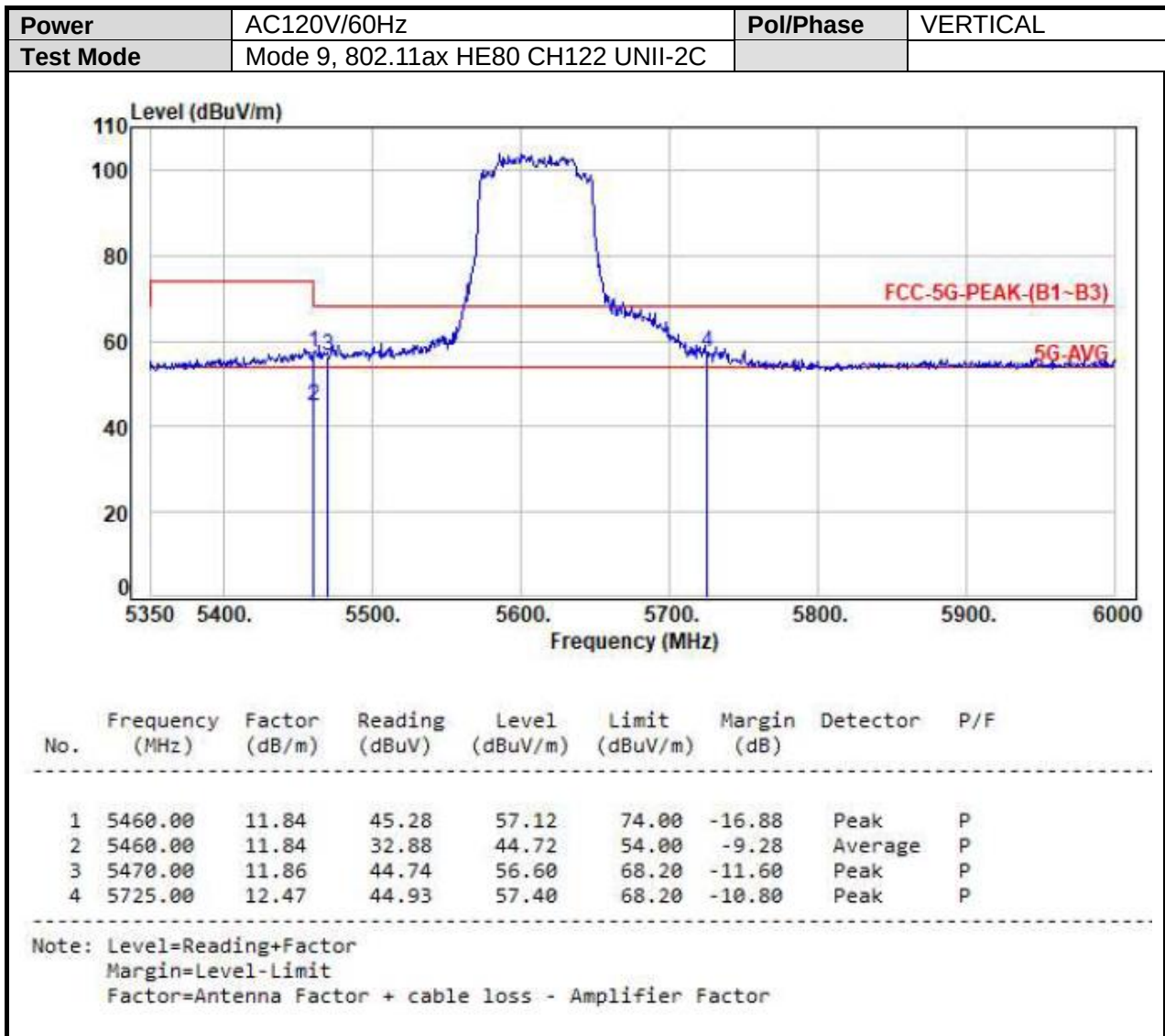


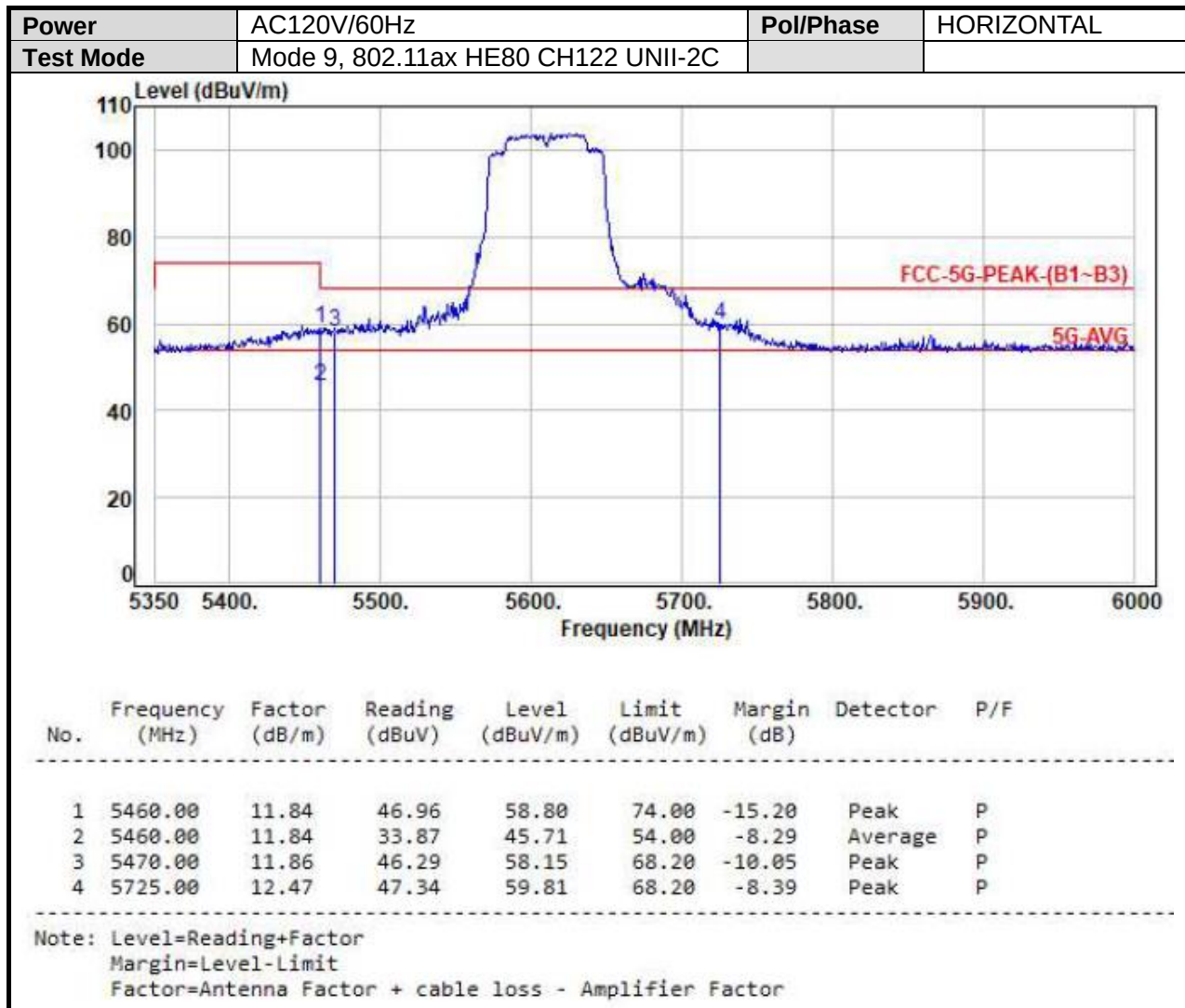






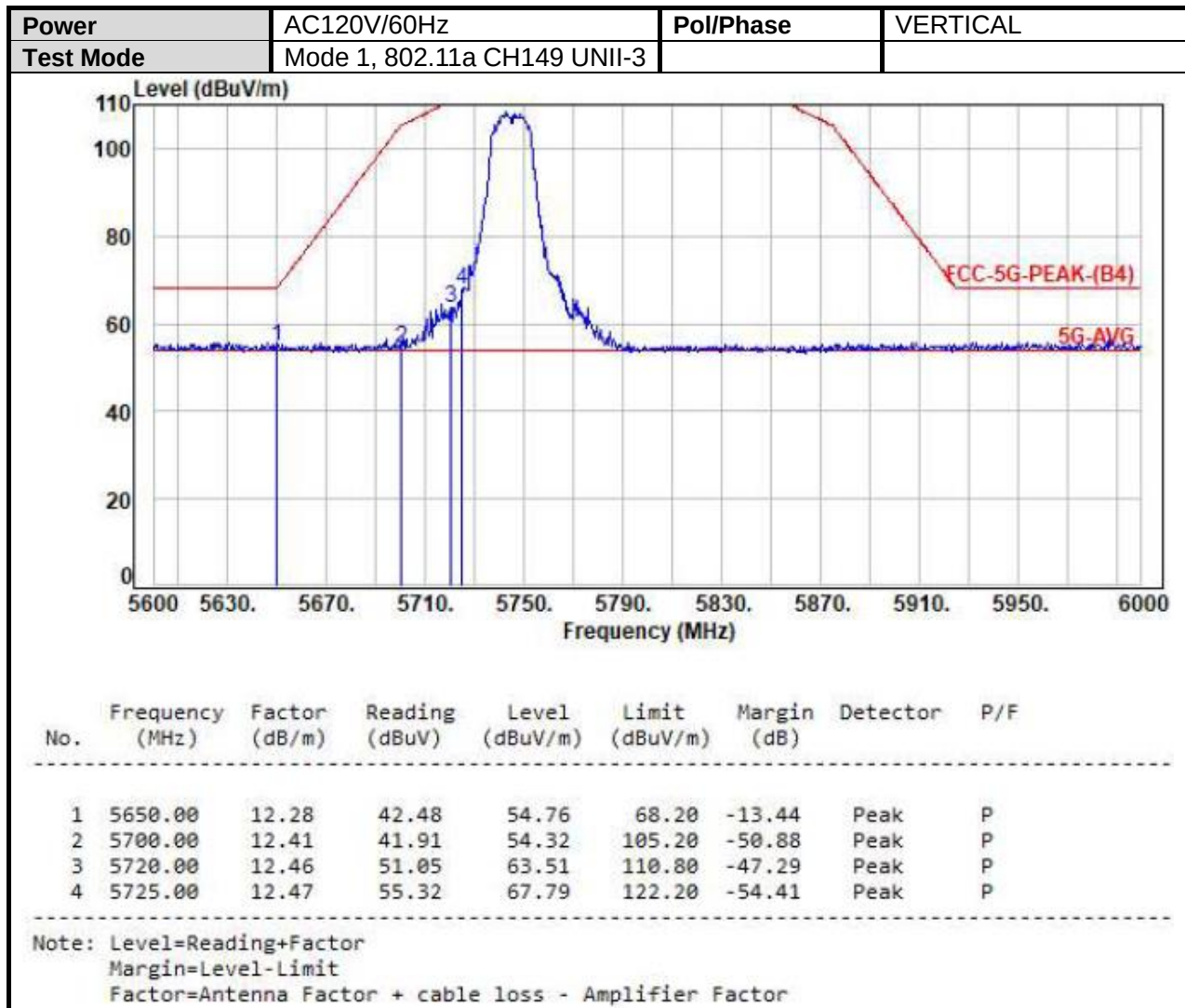


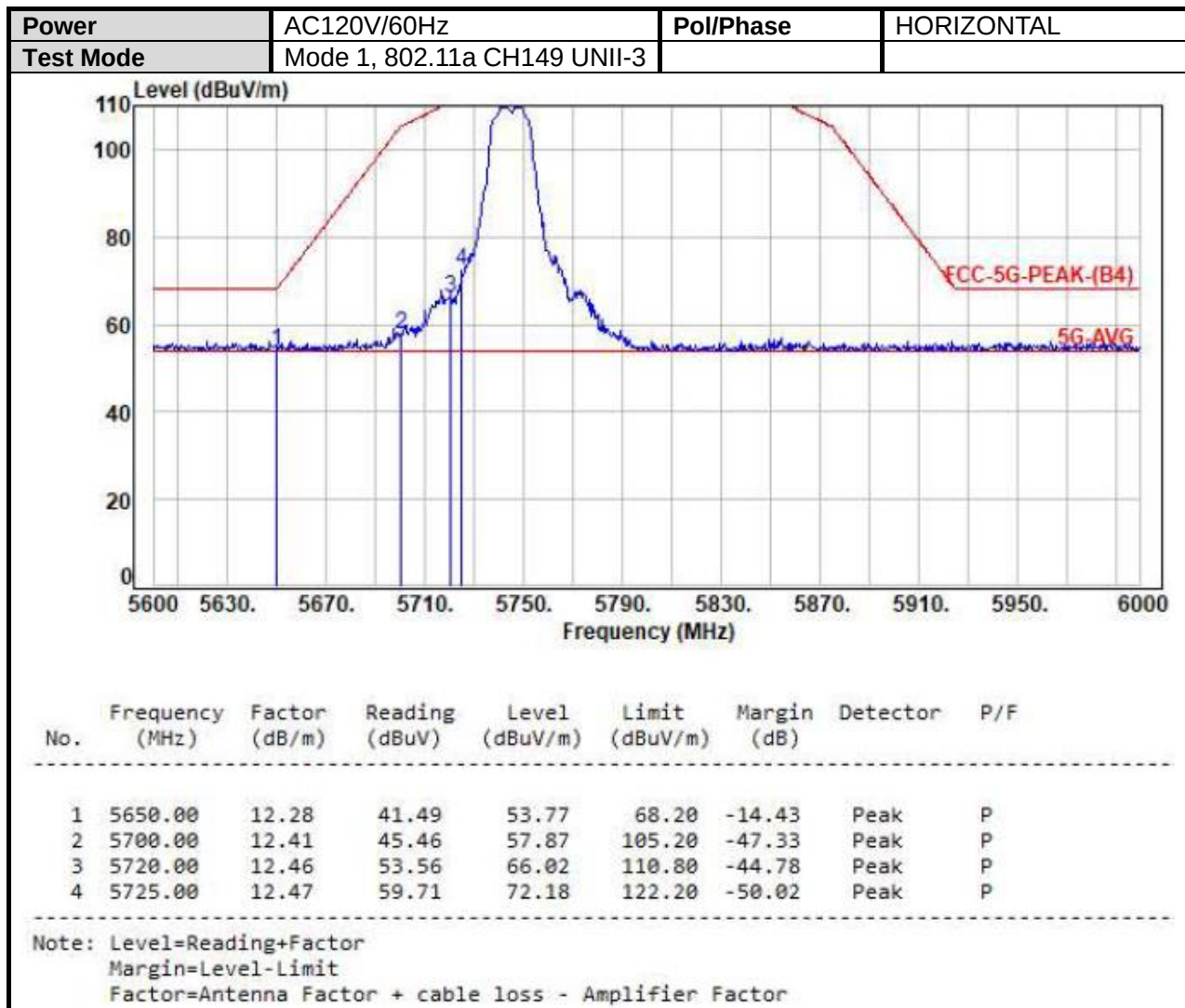


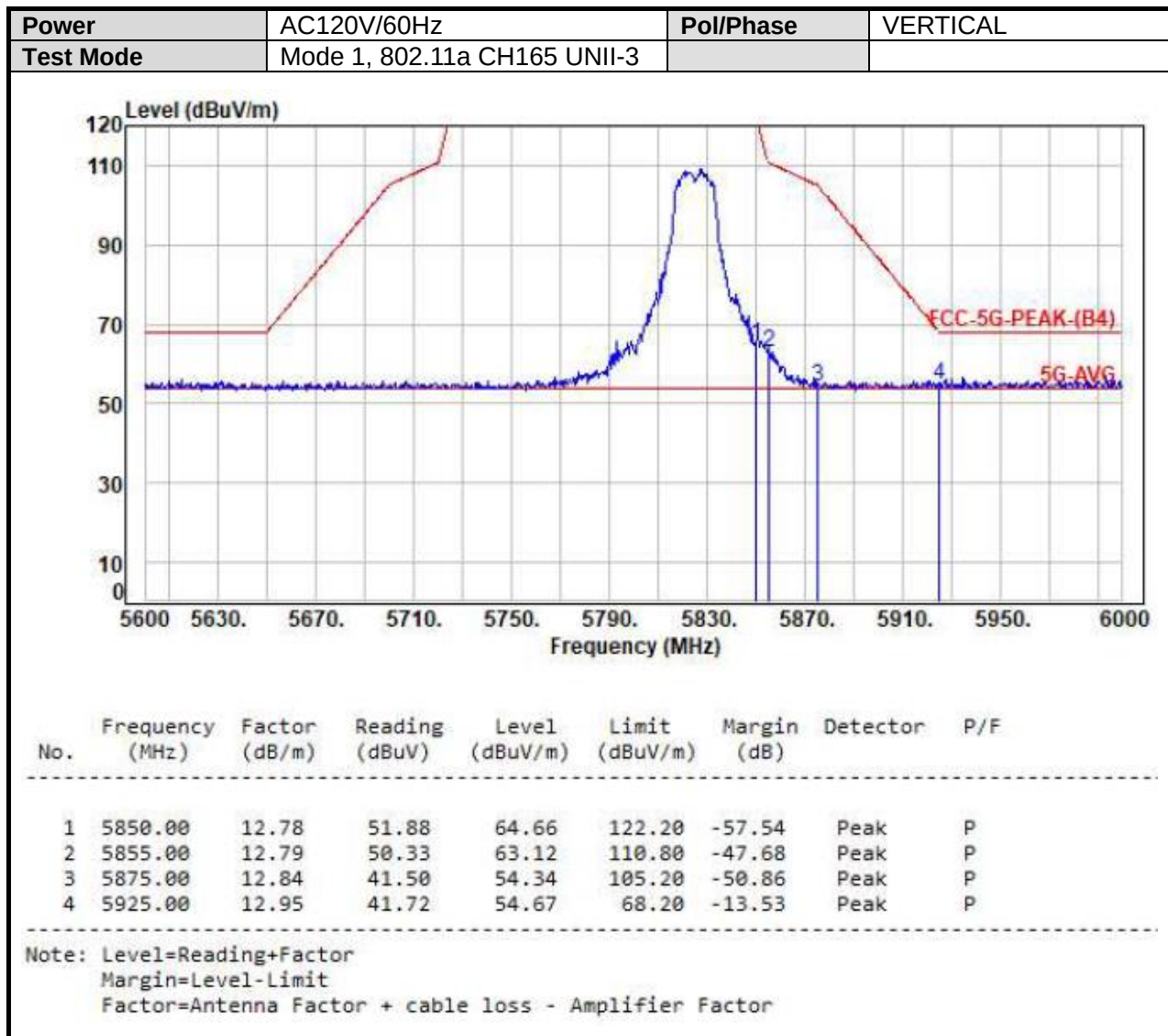


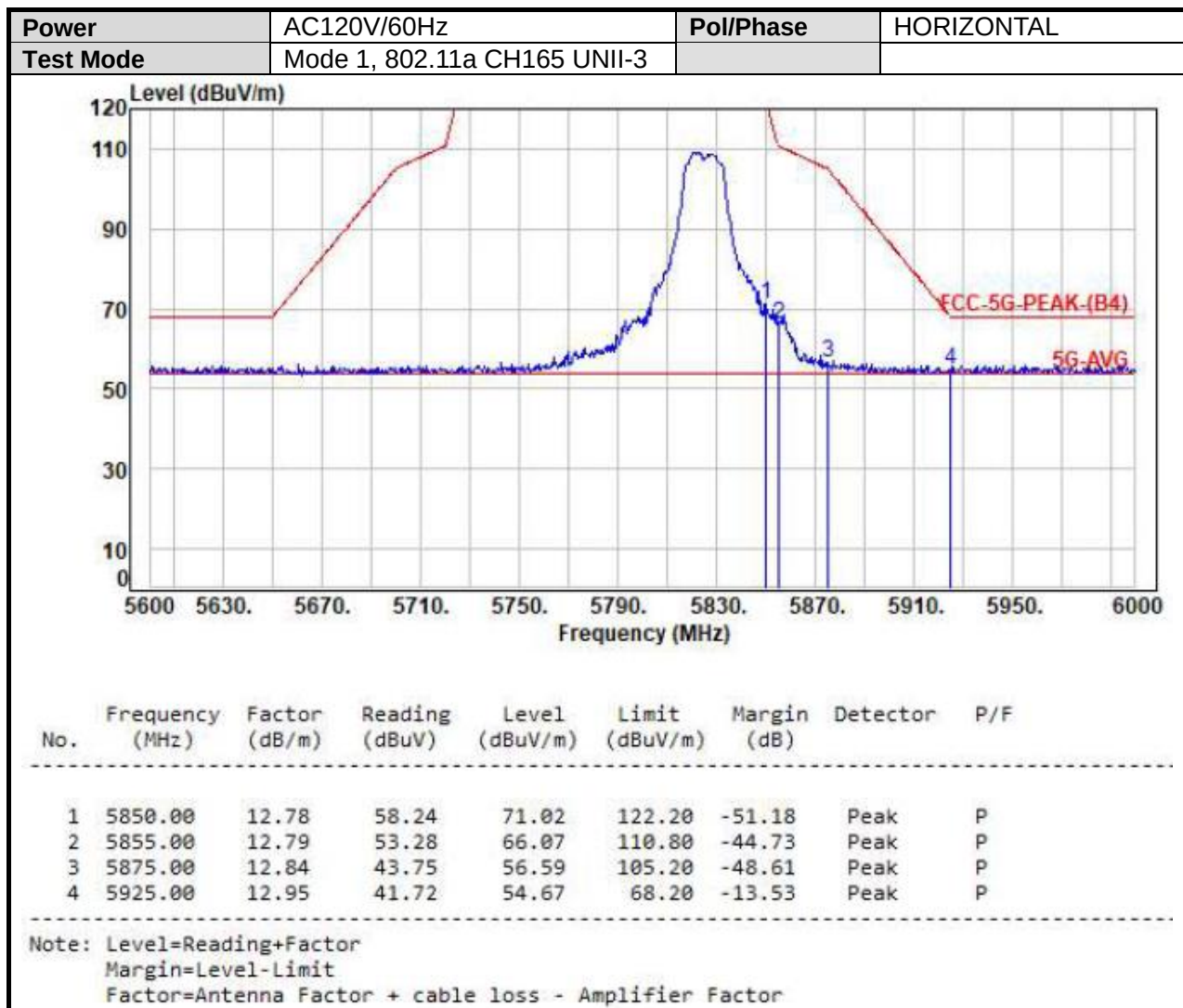


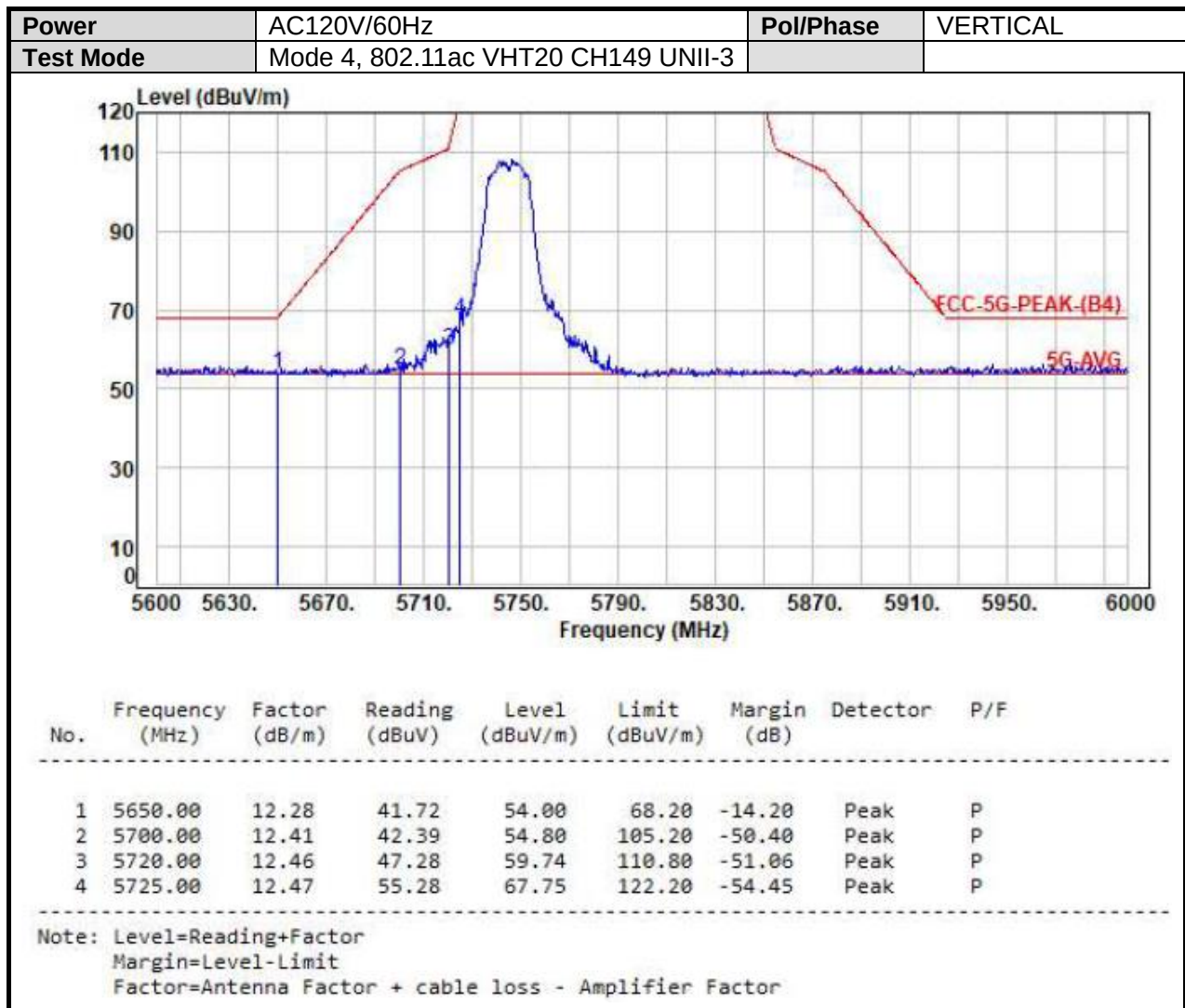
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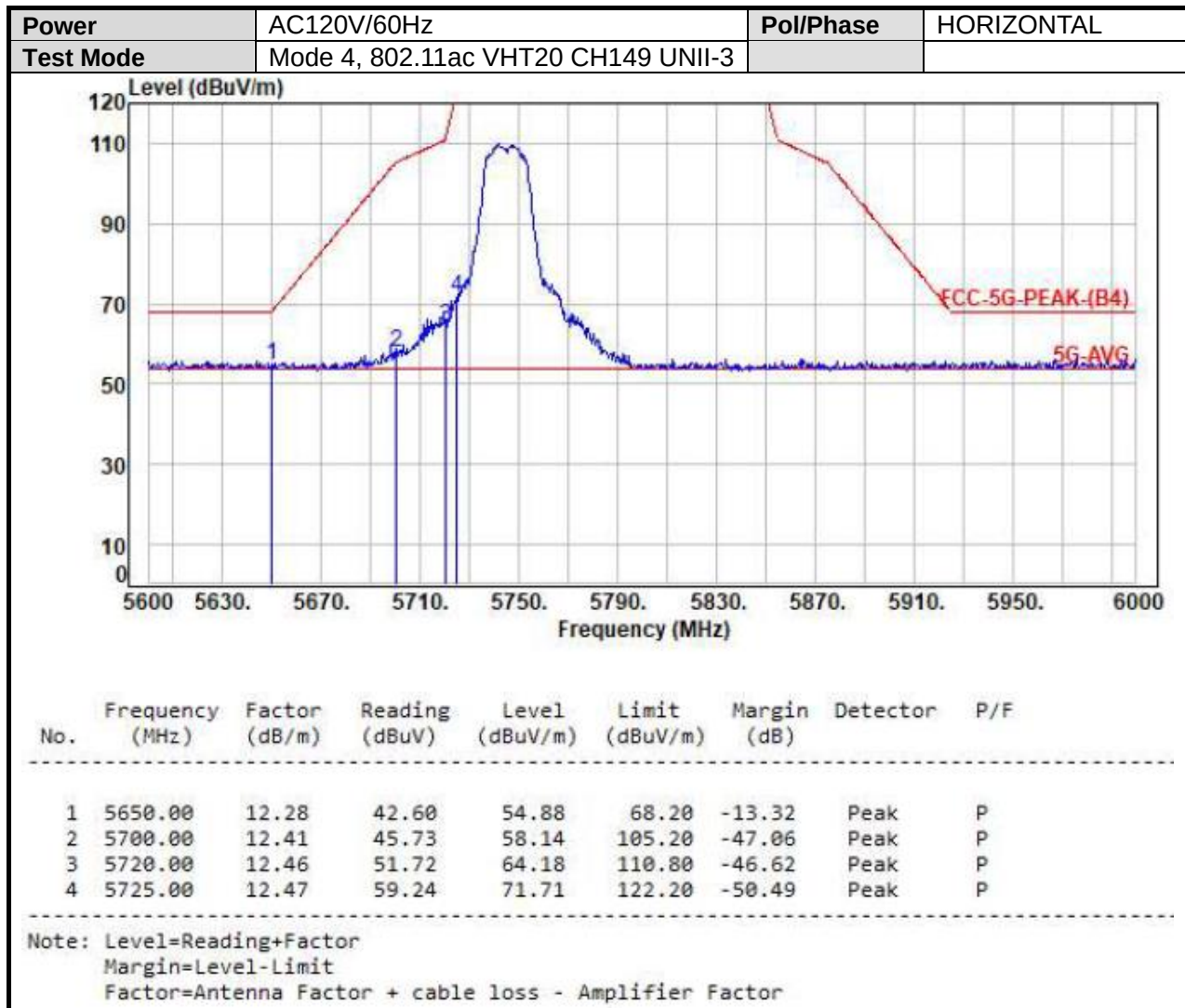


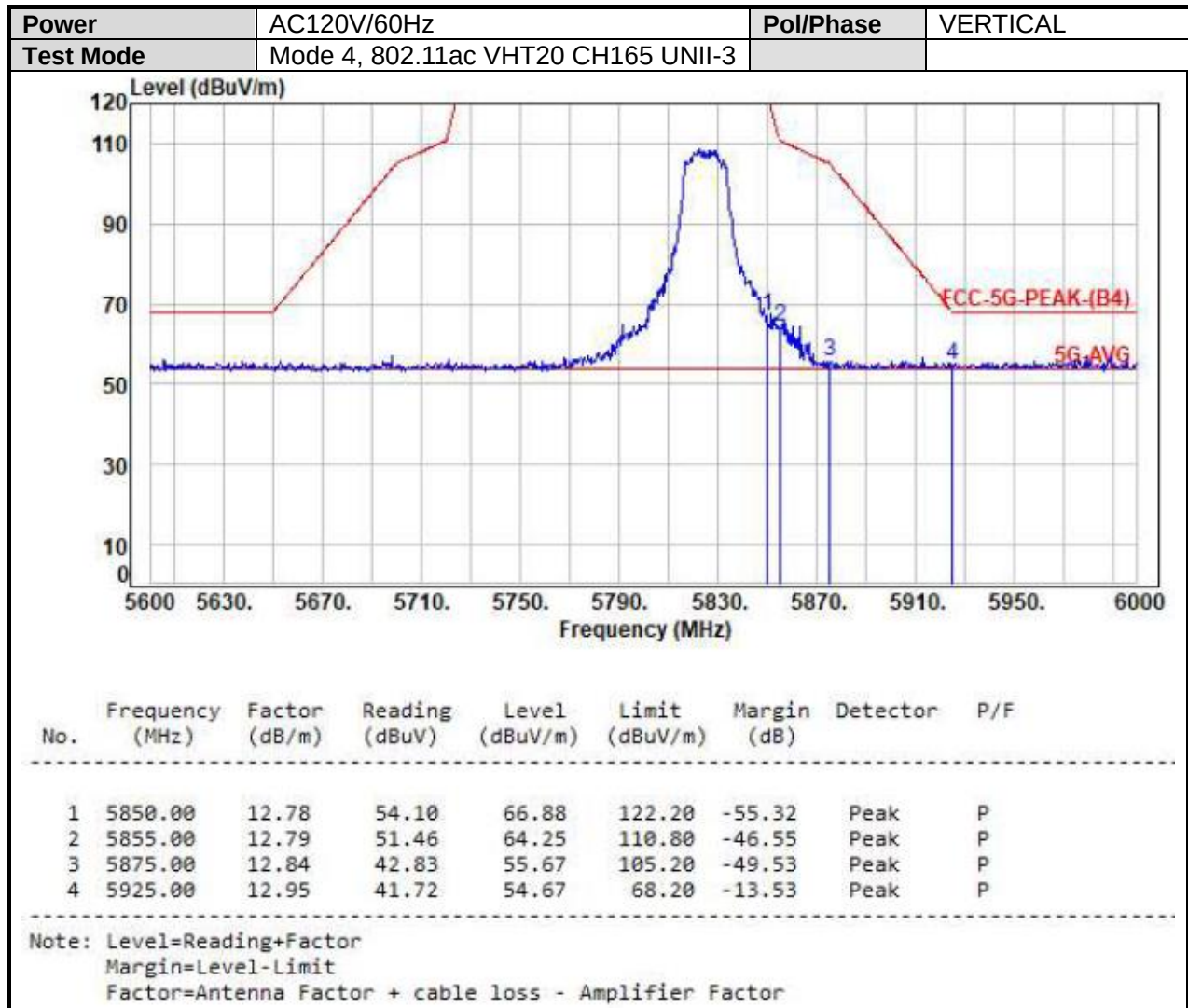


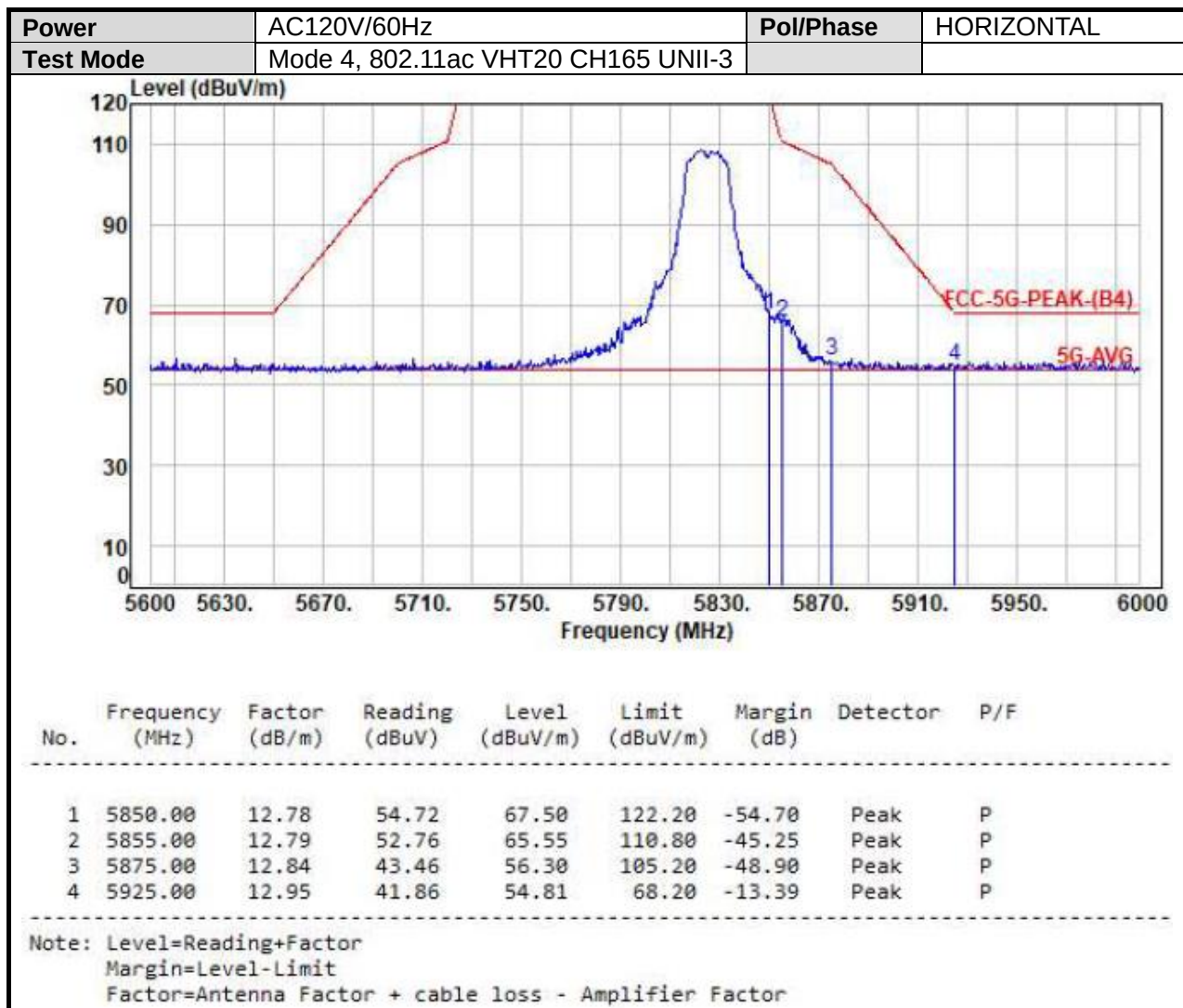


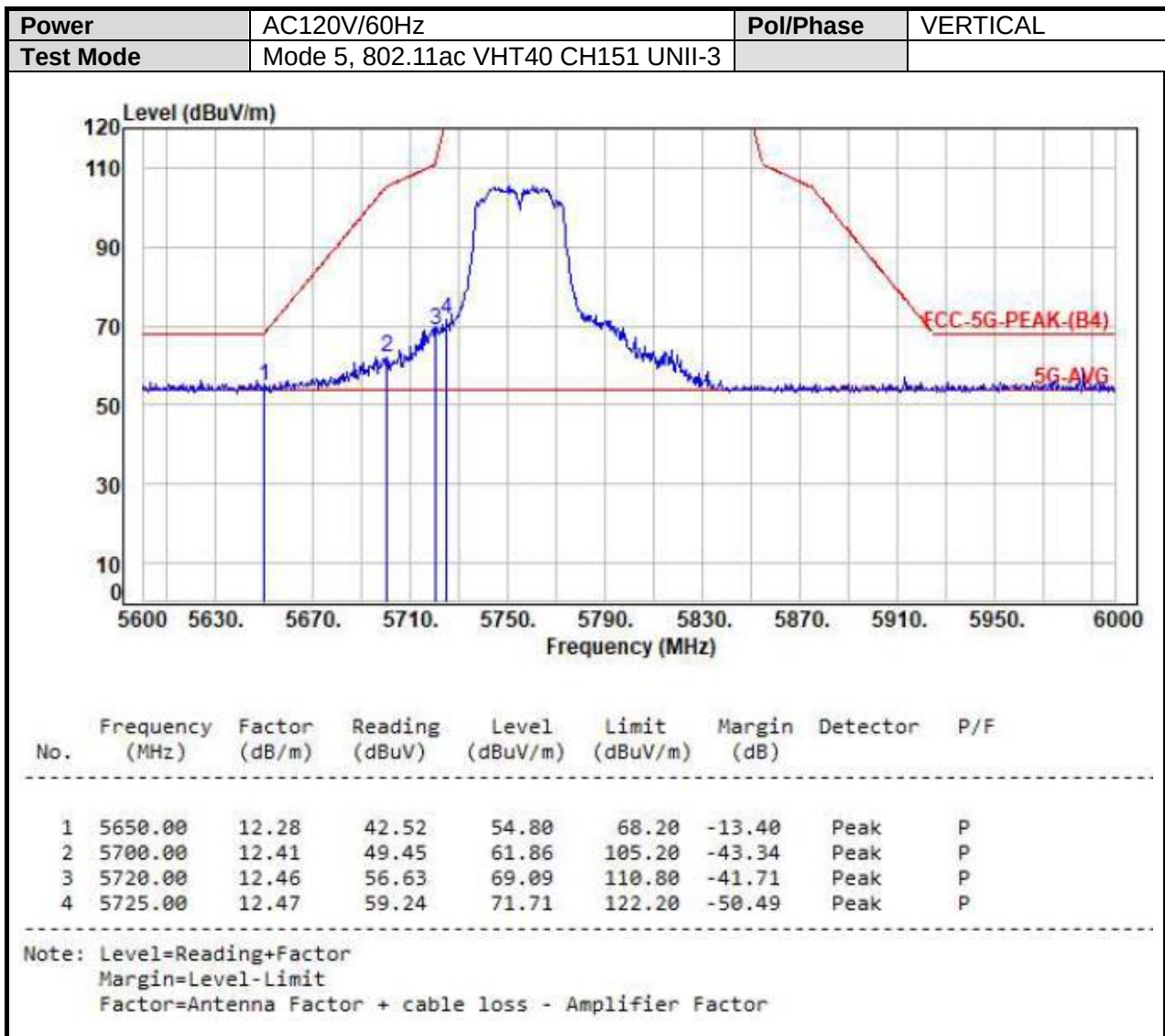


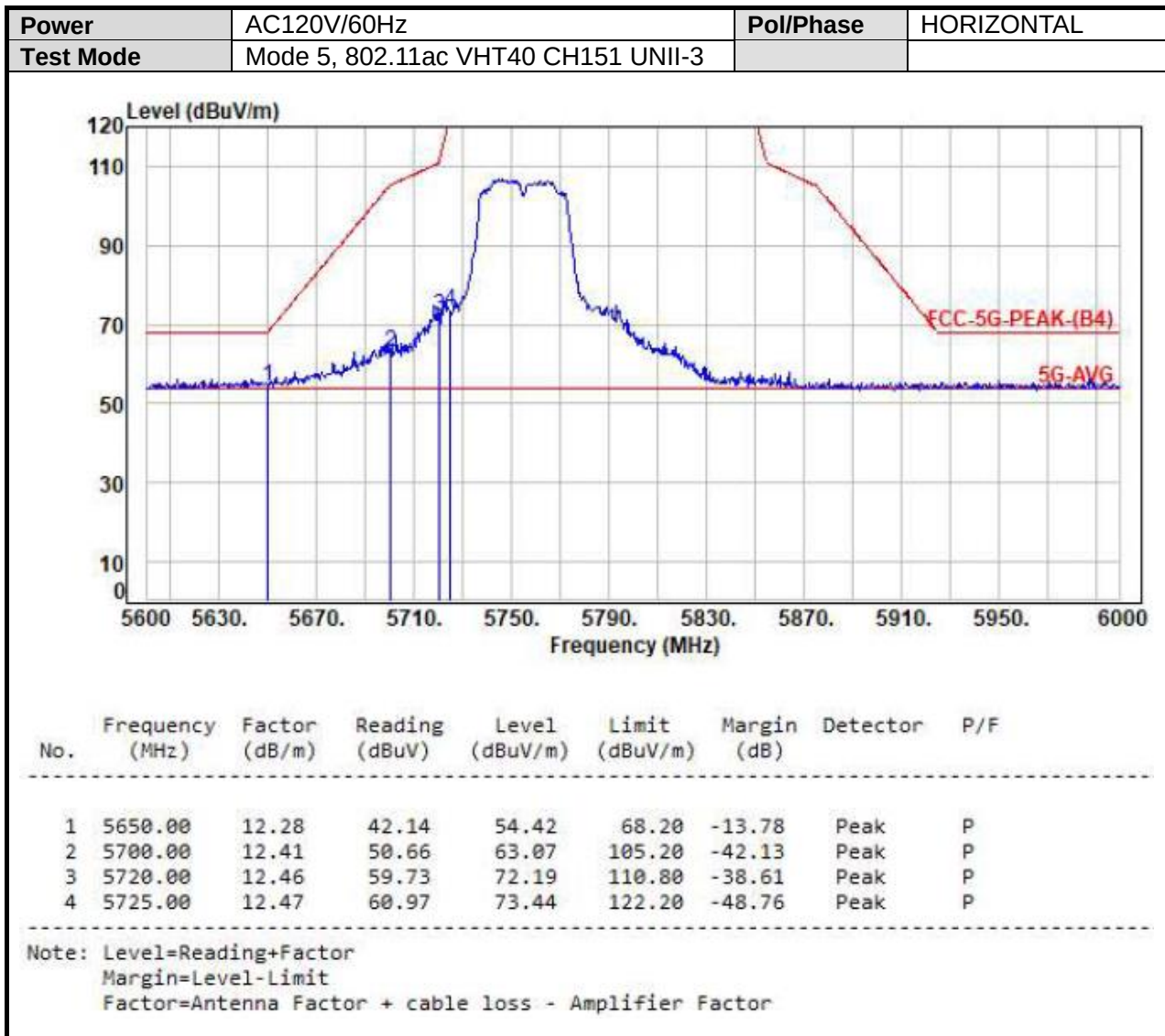


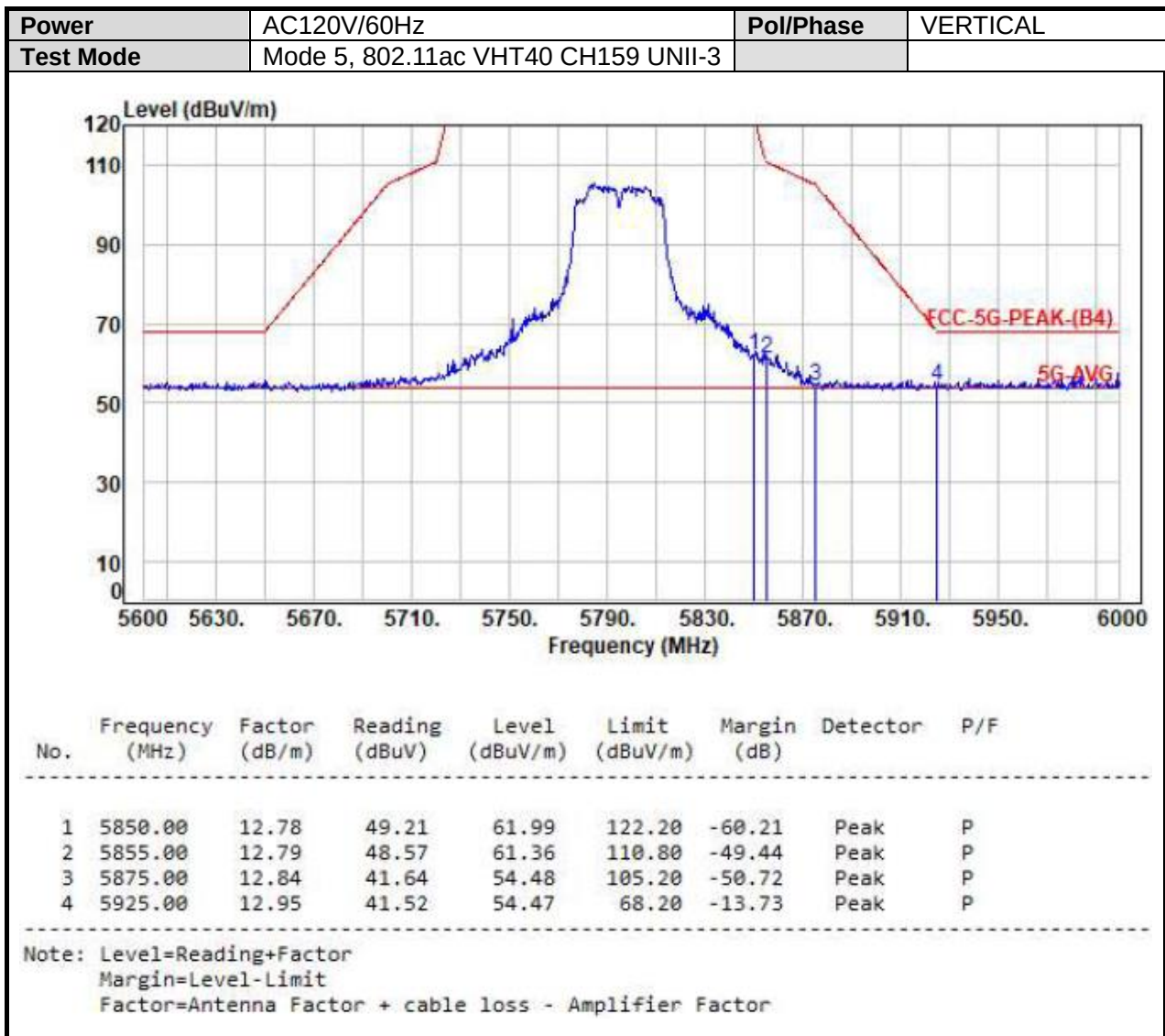


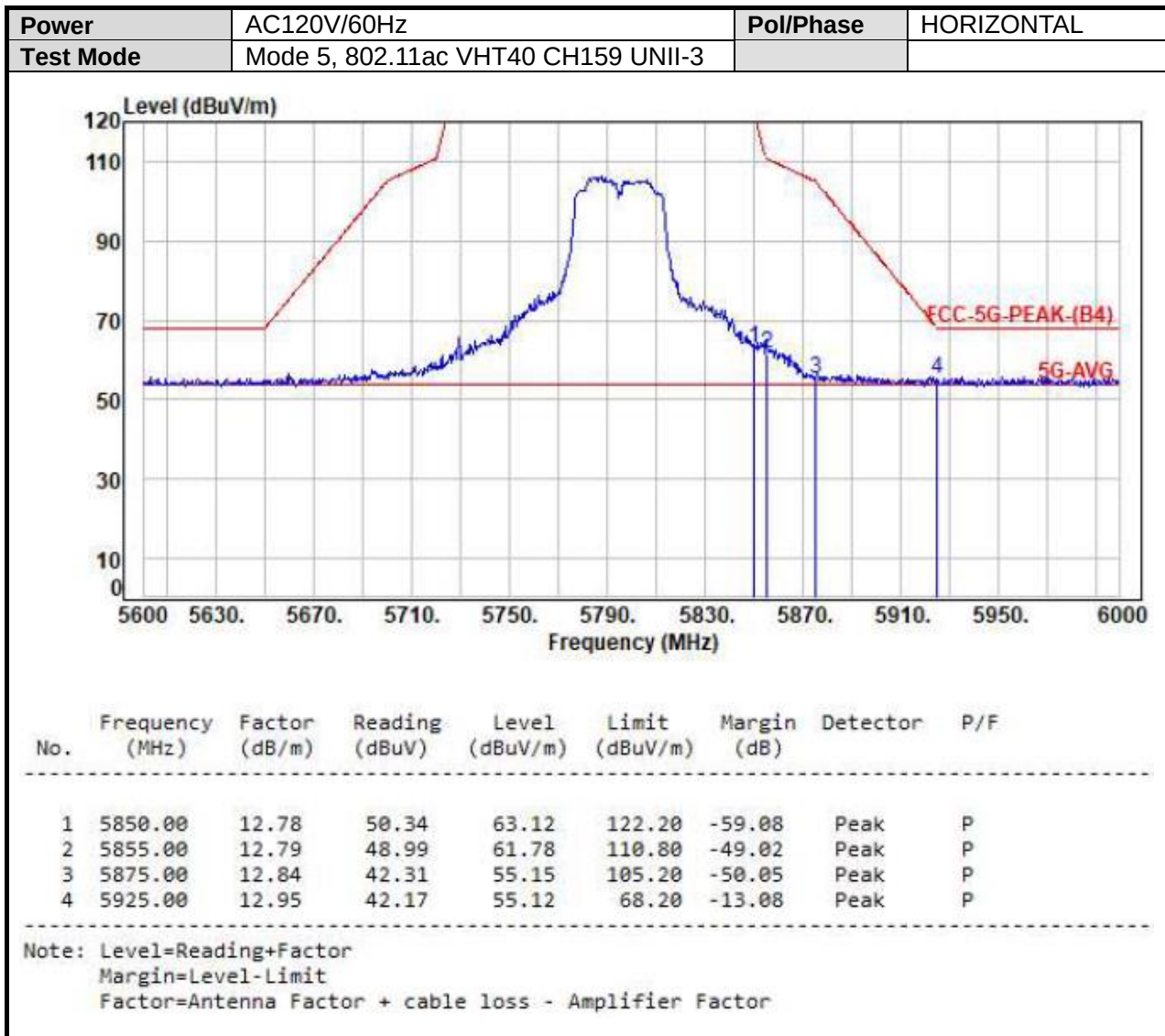


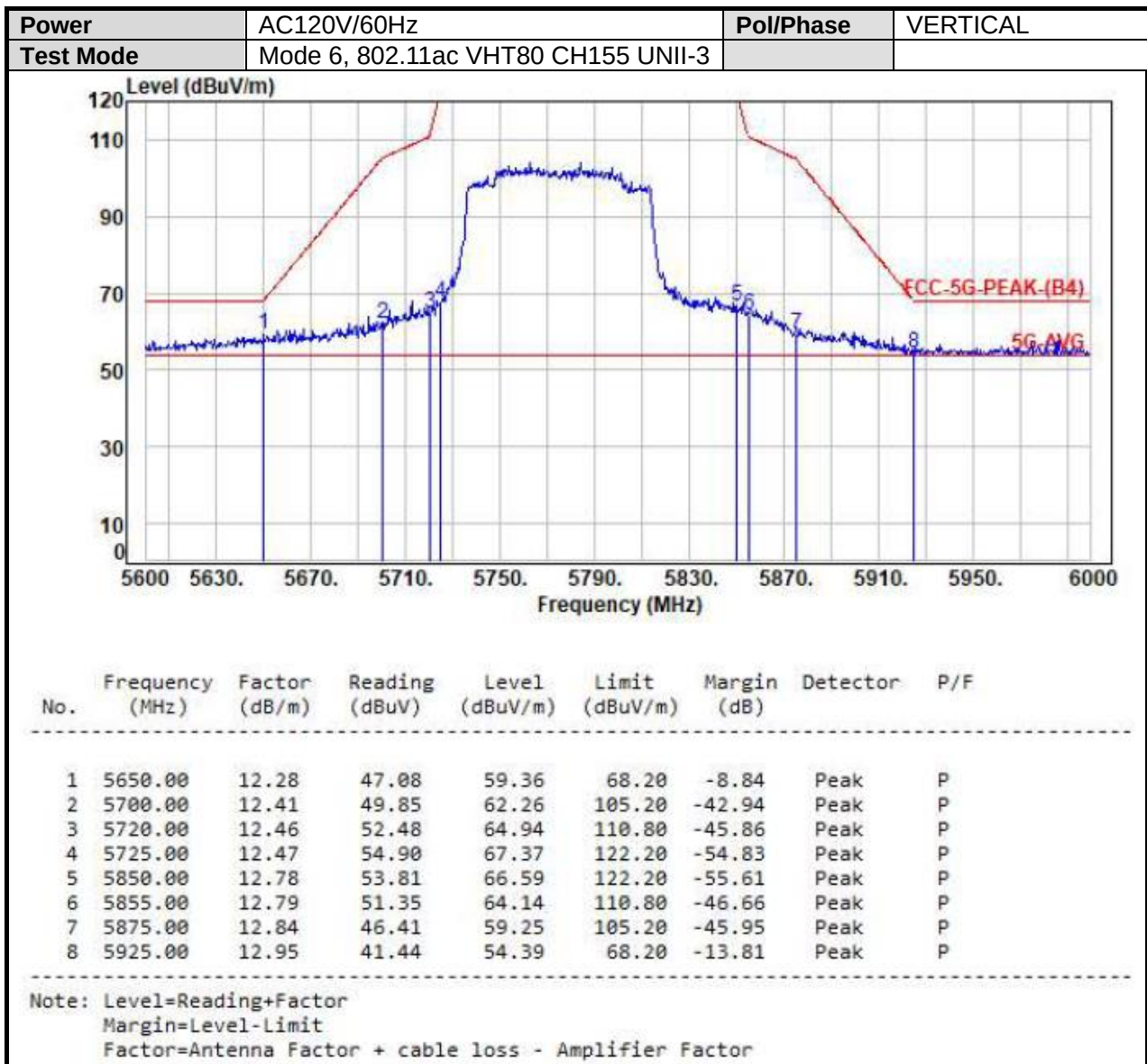


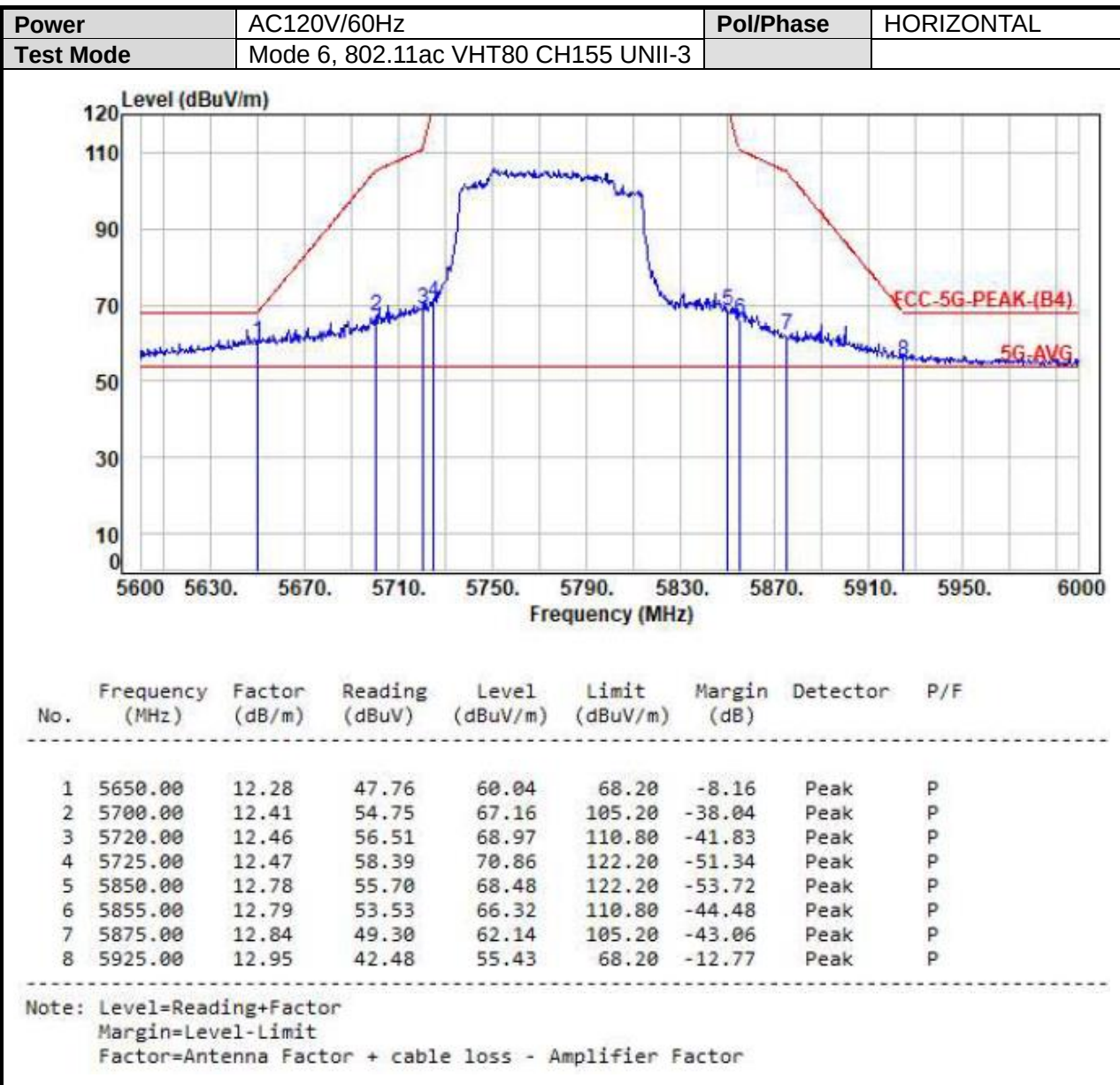


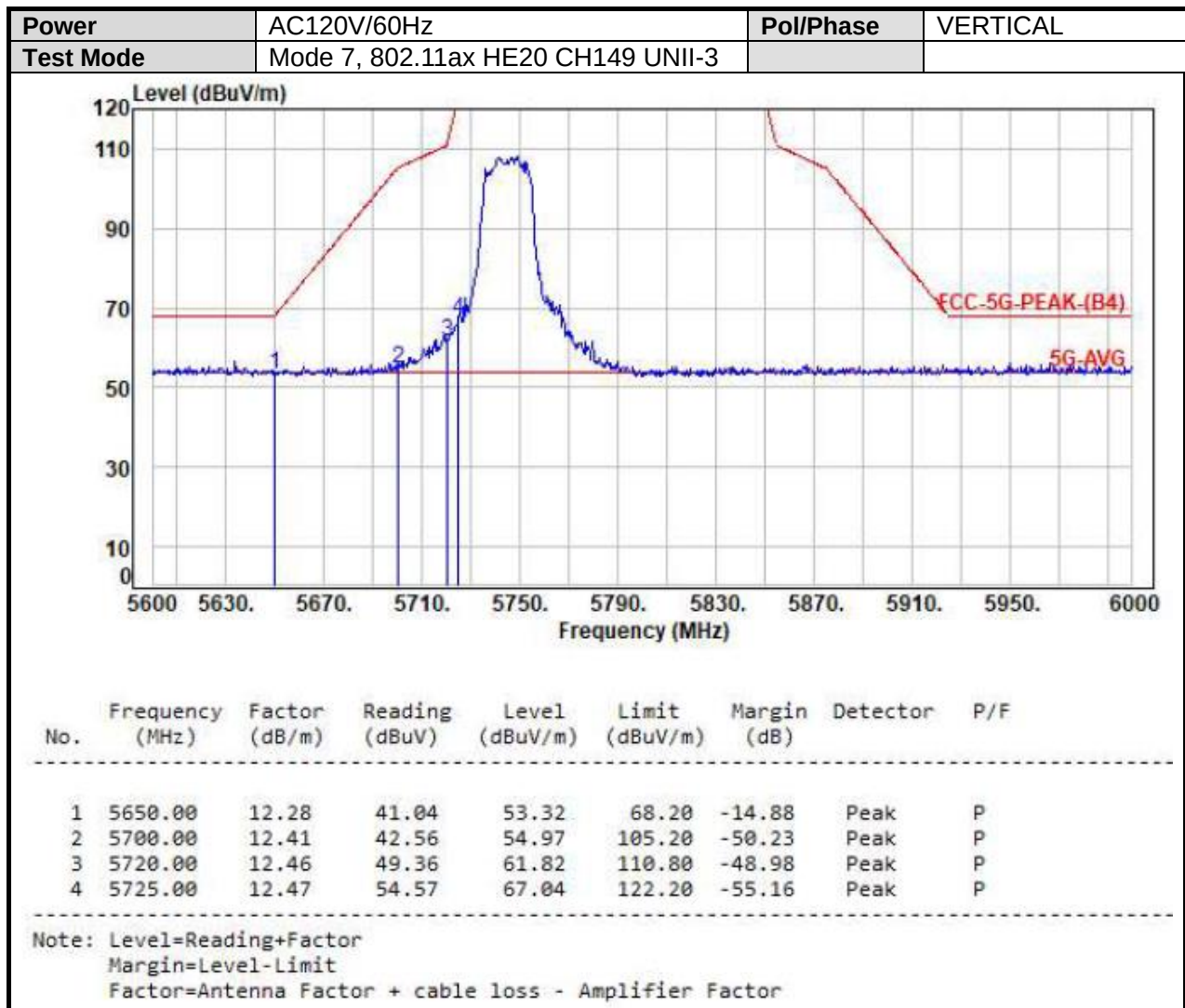


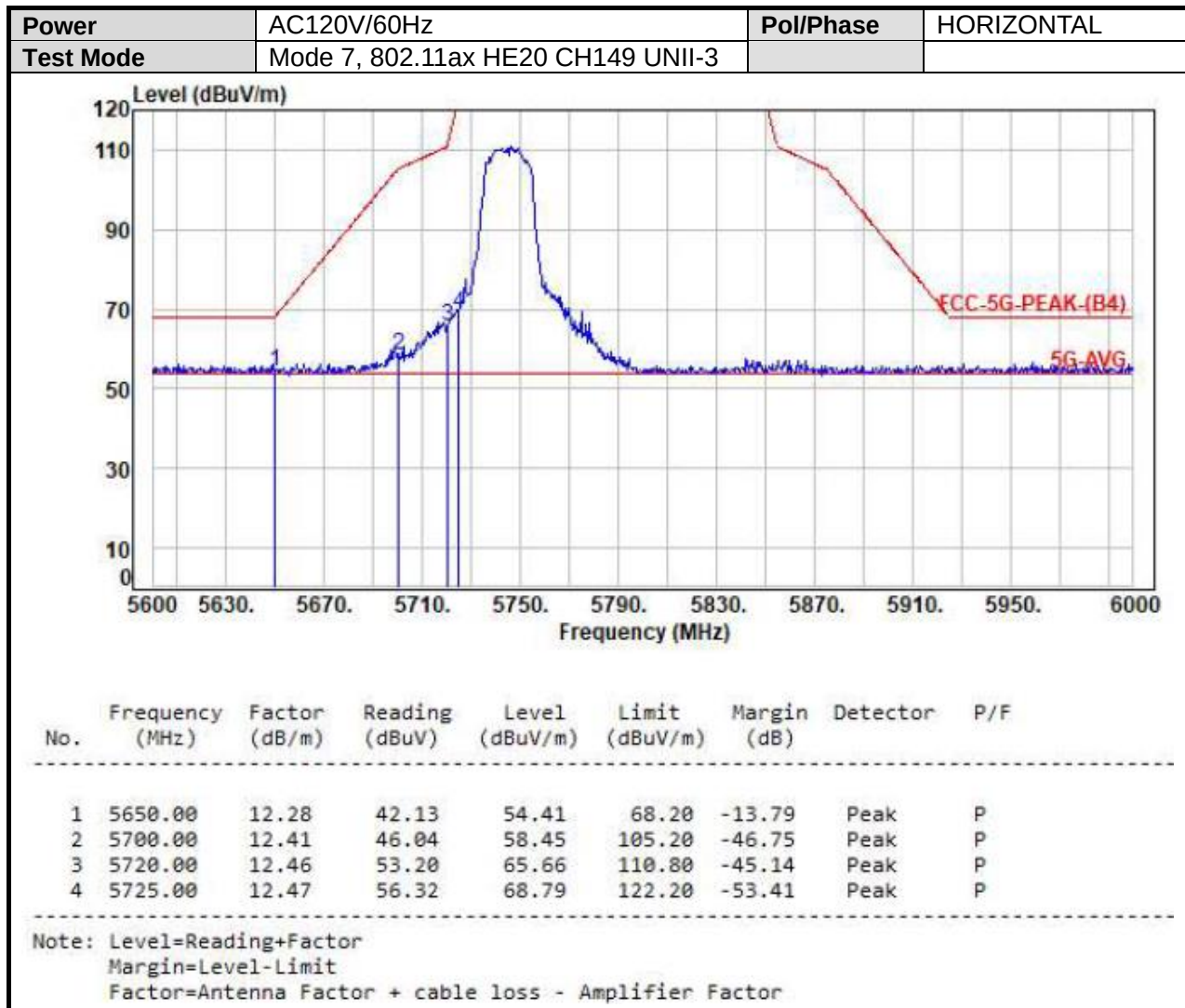


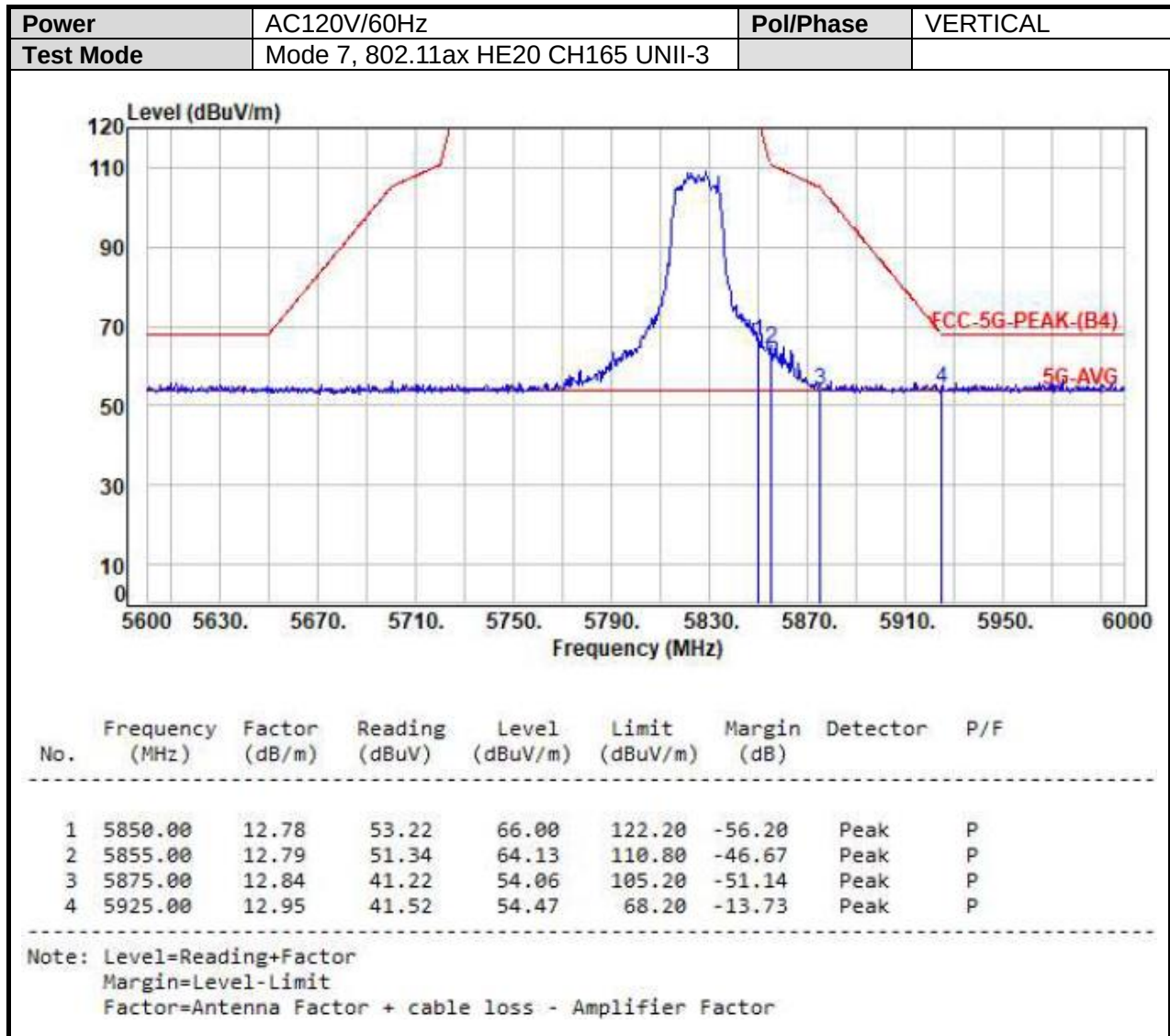


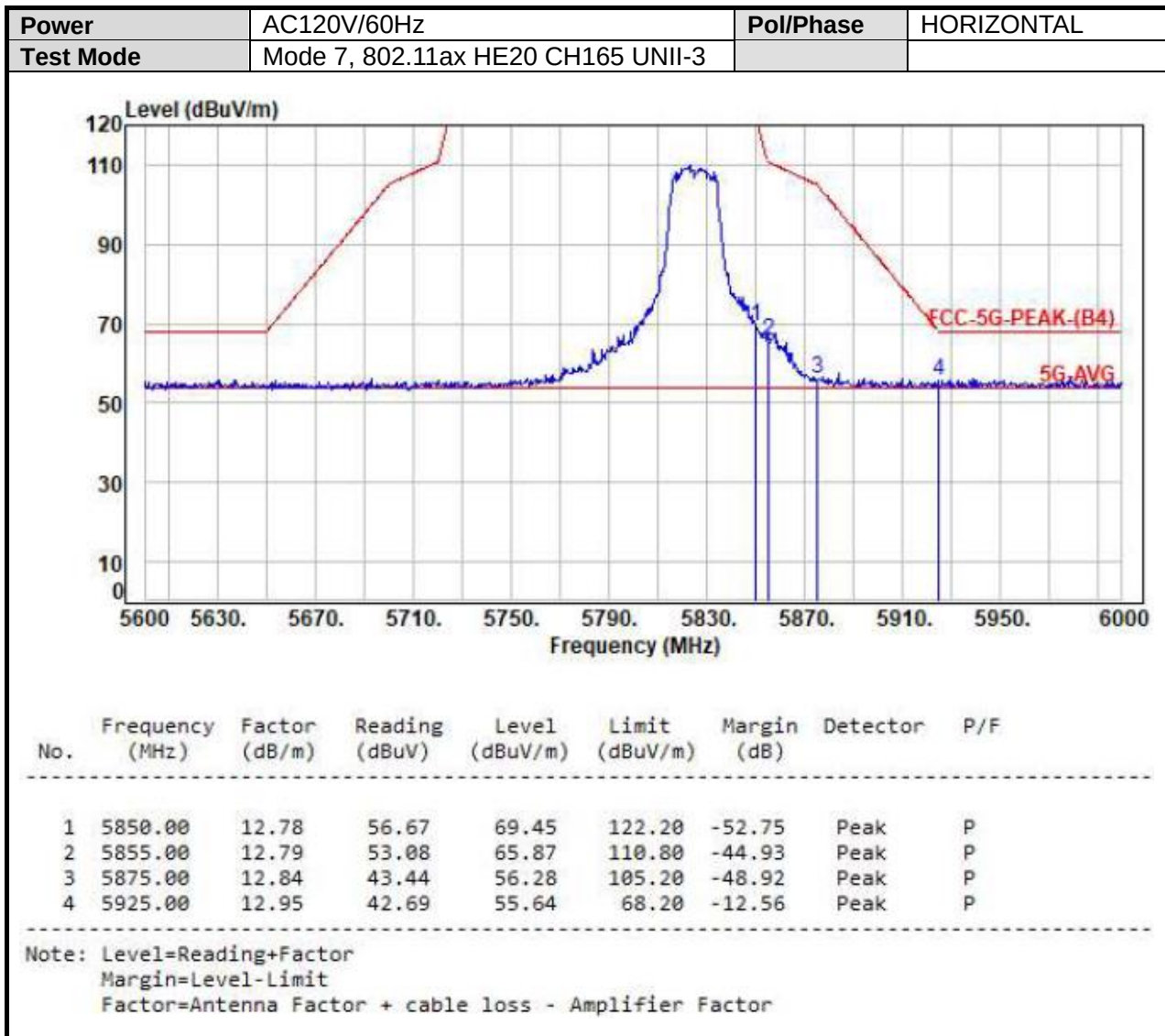


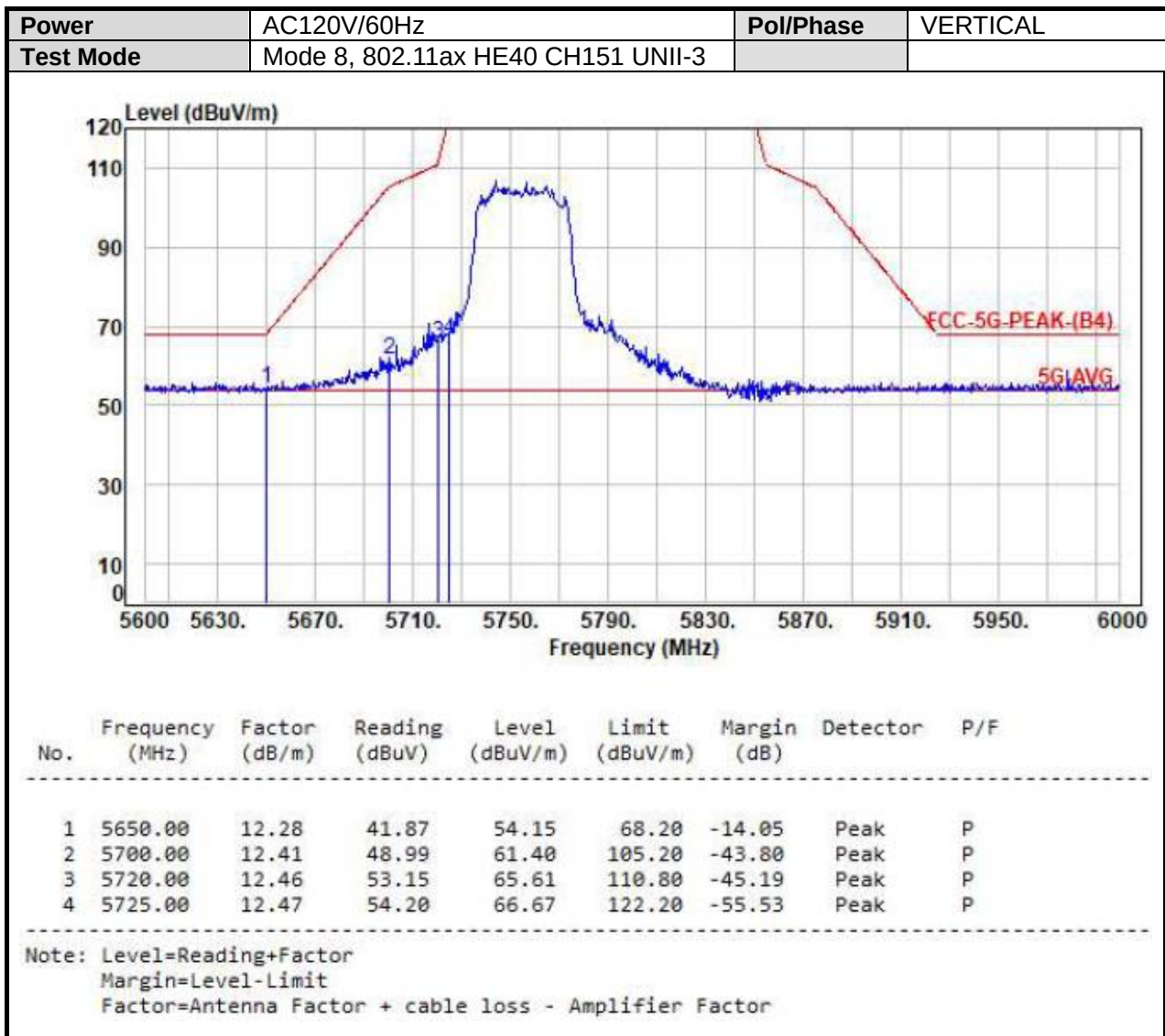


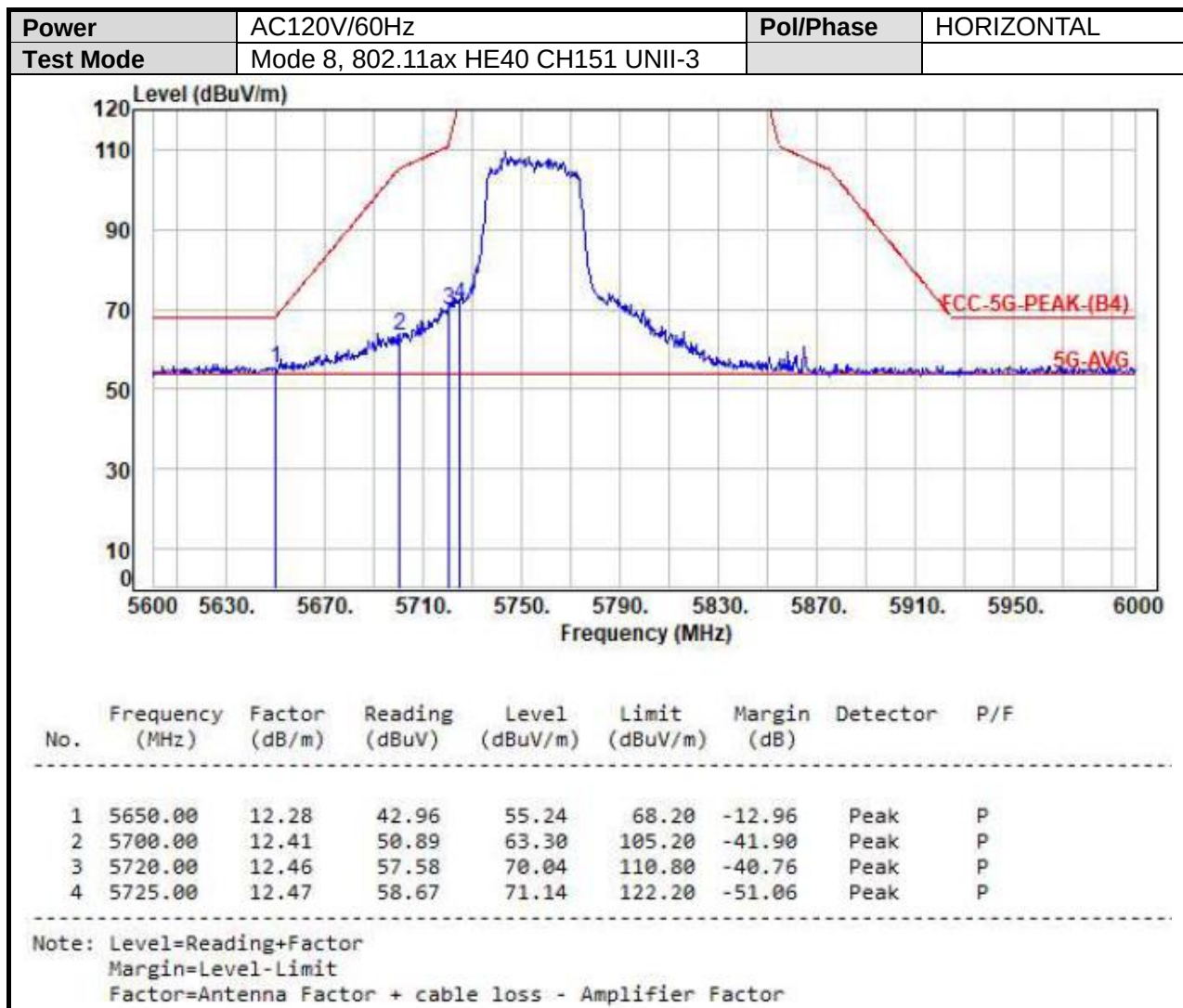


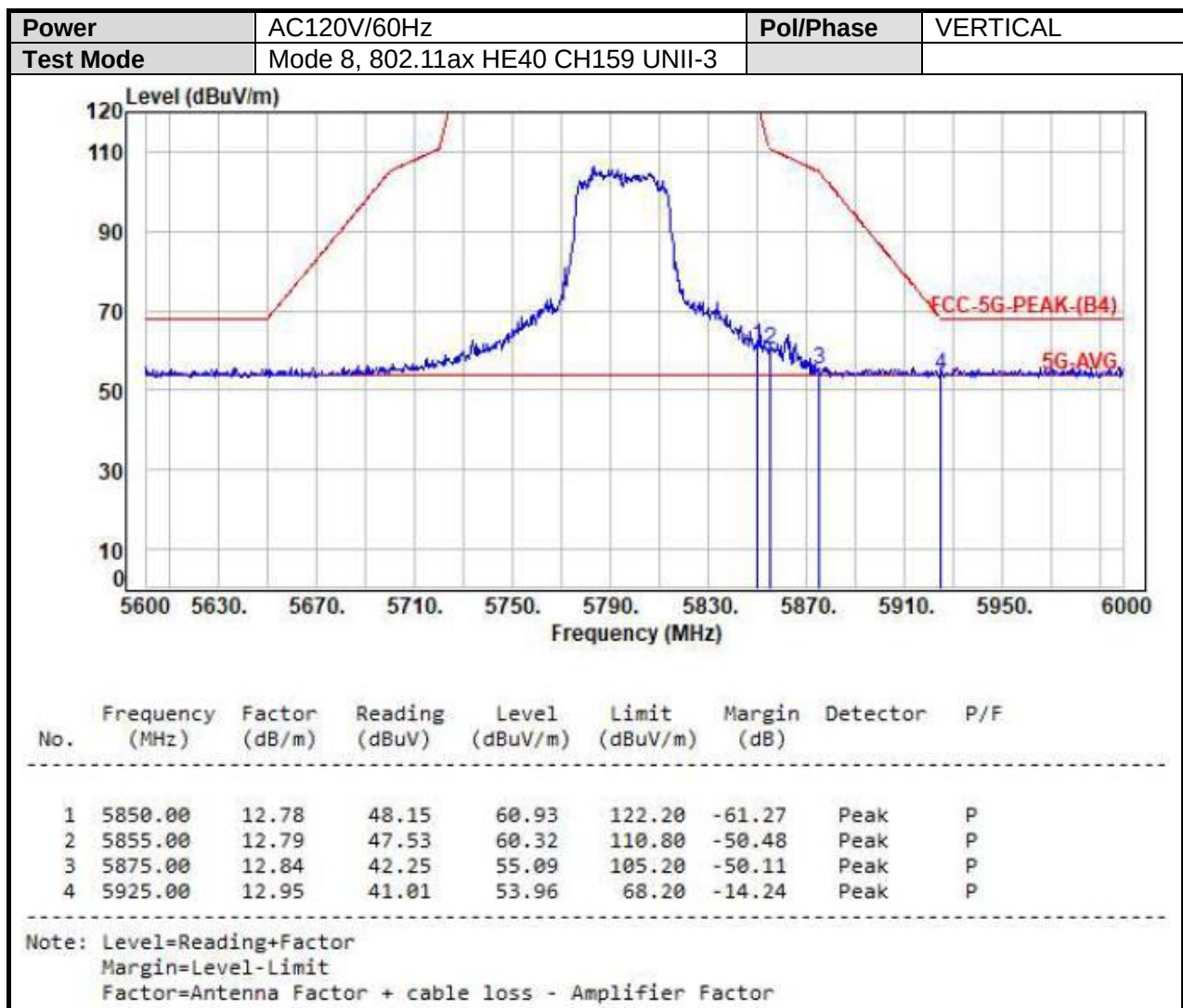


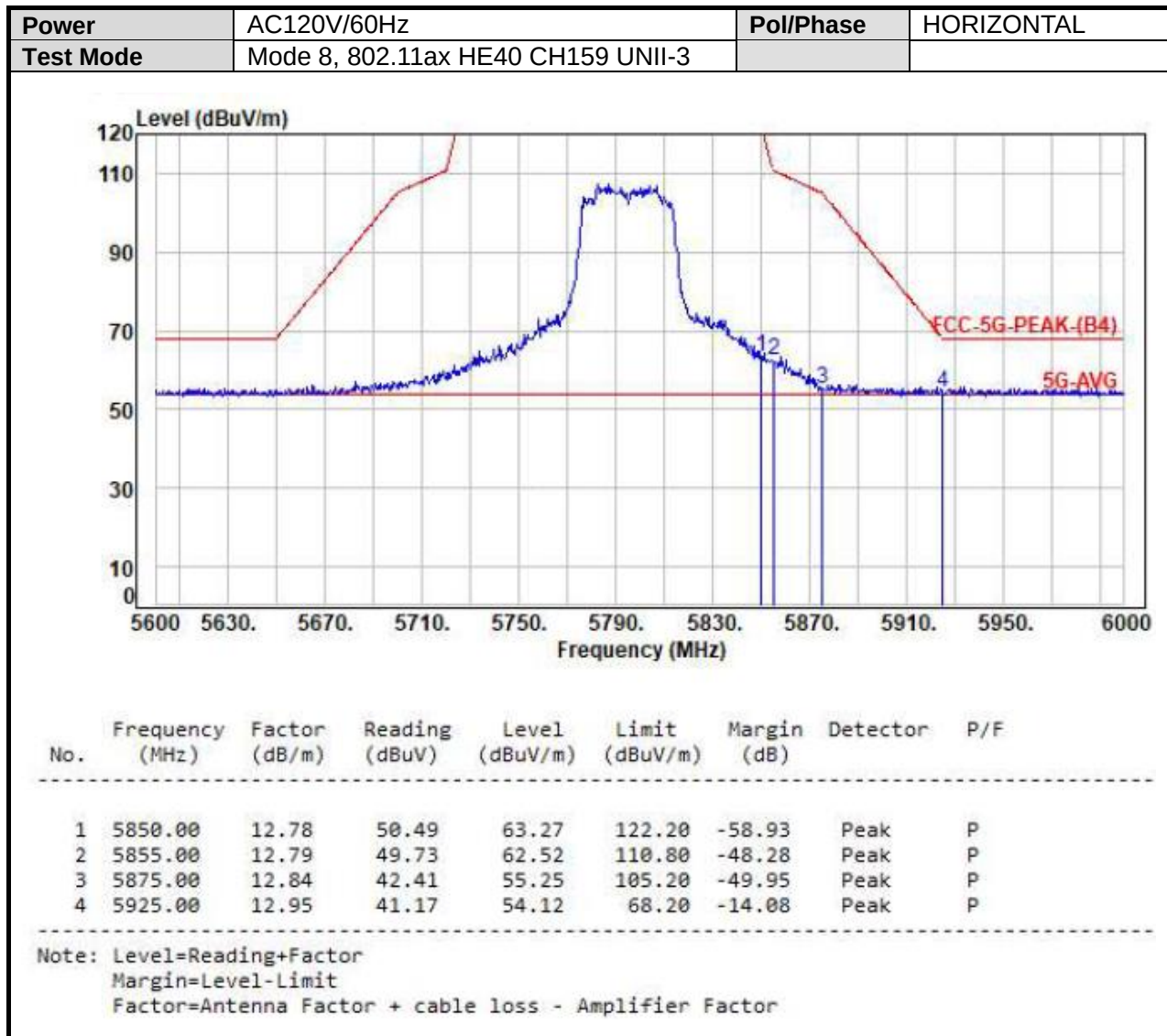


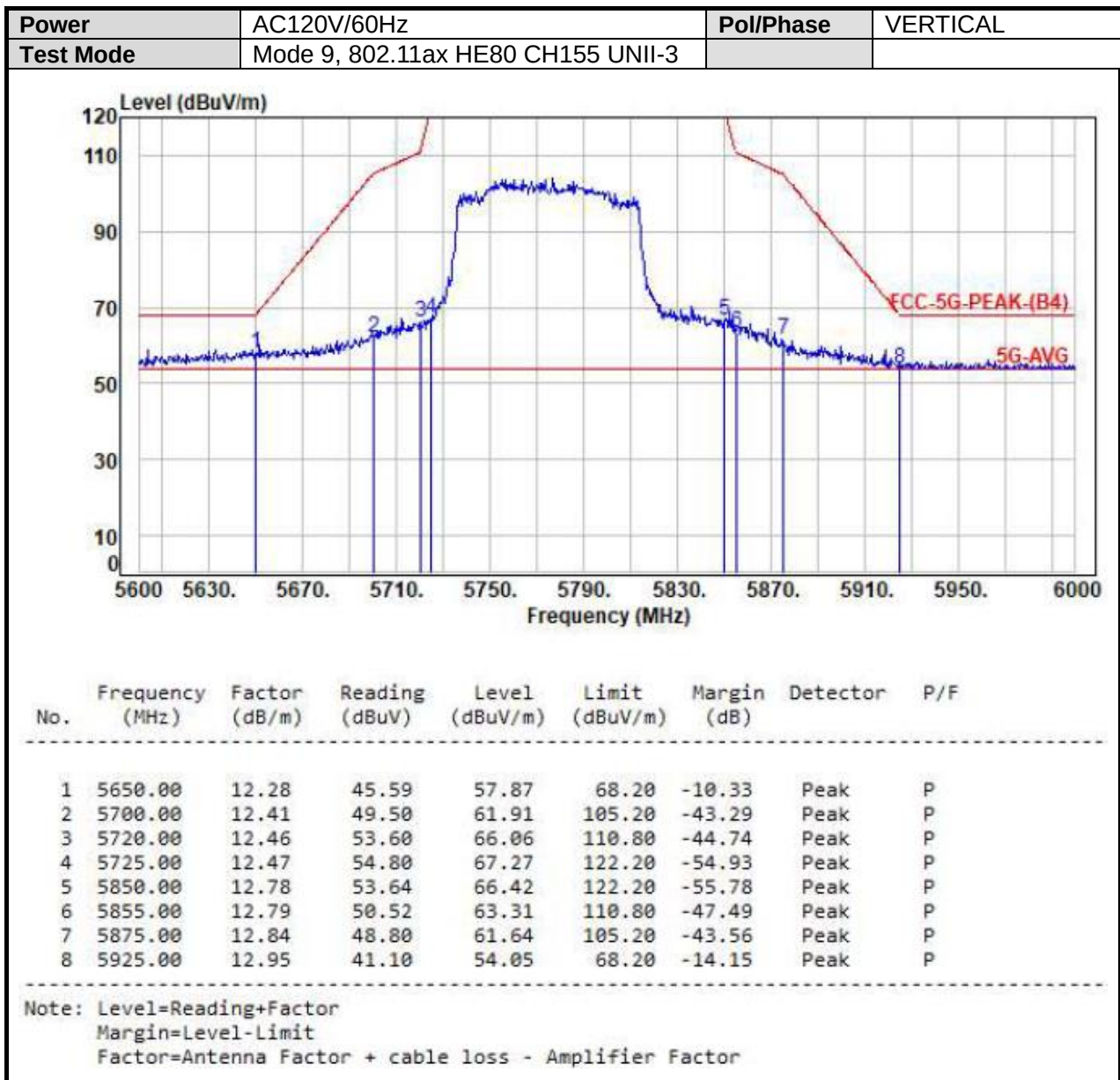


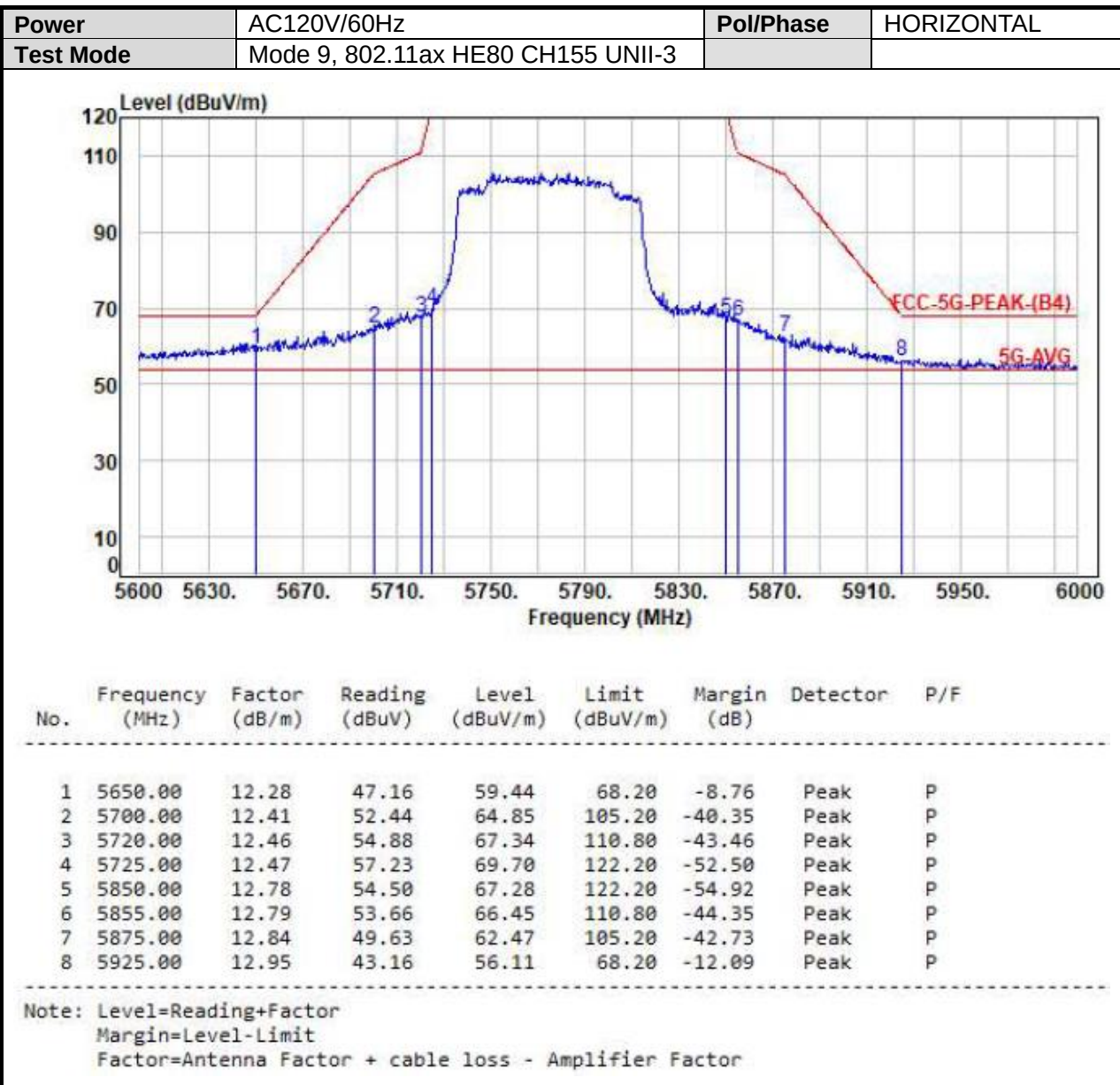














## 7. On Time, Duty Cycle and Measurement methods

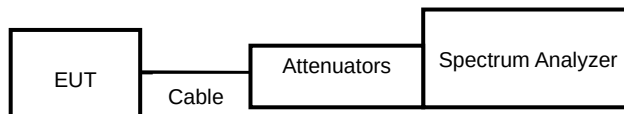
### 7.1. Test Limit

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

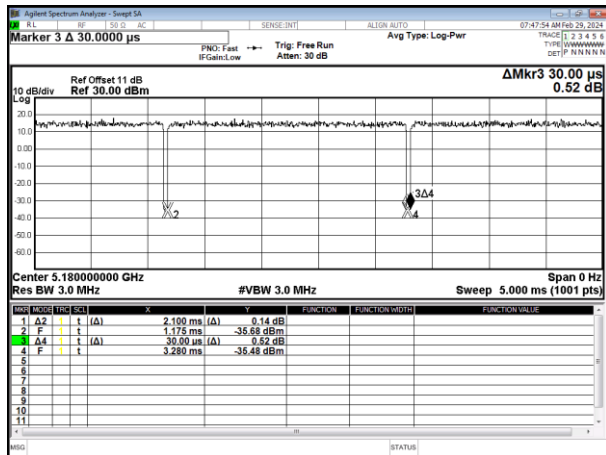
| Modulation Mode | On Time (msec) | Period Time (msec) | Duty Cycle (%) |
|-----------------|----------------|--------------------|----------------|
| 802.11a         | 2.100          | 2.130              | 98.59%         |
| 802.11ac VHT20  | 3.955          | 3.990              | 99.12%         |
| 802.11ac VHT40  | 3.970          | 4.010              | 99.00%         |
| 802.11ac VHT80  | 3.980          | 4.015              | 99.13%         |
| 802.11ax HE20   | 3.990          | 4.030              | 99.01%         |
| 802.11ax HE40   | 3.990          | 4.030              | 99.01%         |
| 802.11ax HE80   | 3.990          | 4.030              | 99.01%         |

### 7.5. Measurement Methods

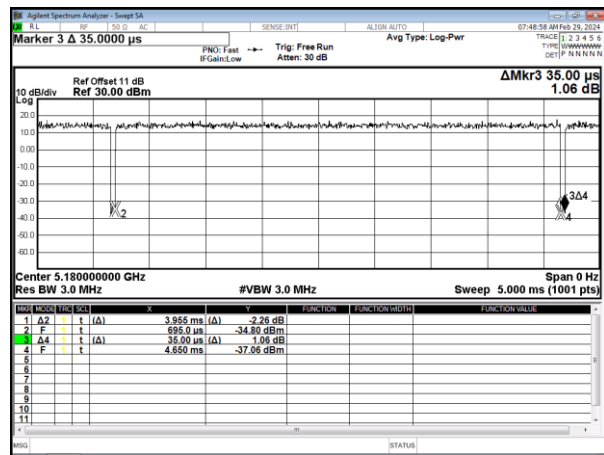
|                                            |                                                          |
|--------------------------------------------|----------------------------------------------------------|
| 26 dB and 6dB Emission BW                  | KDB 789033 v02r01, Section C                             |
| 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                      |



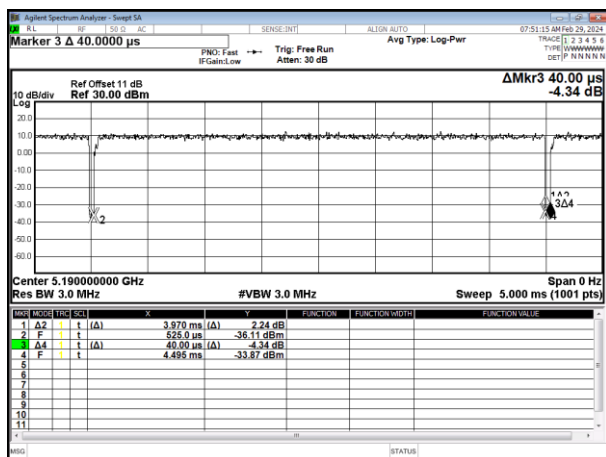
## Modulation Type: 802.11a



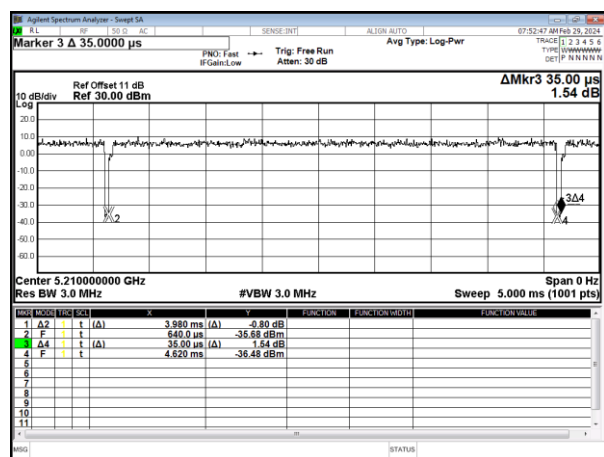
## Modulation Type: 802.11ac VHT20



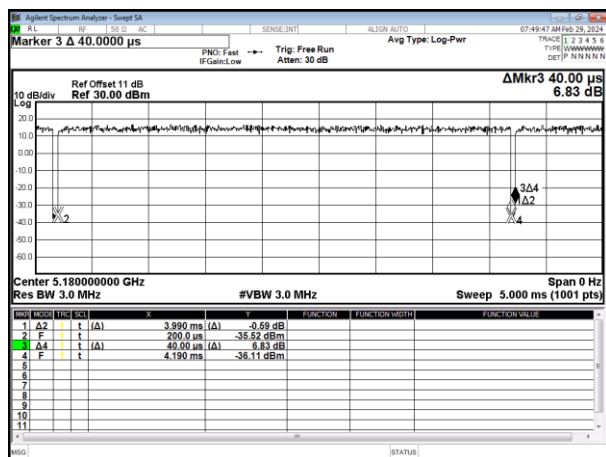
## Modulation Type: 802.11ac VHT40



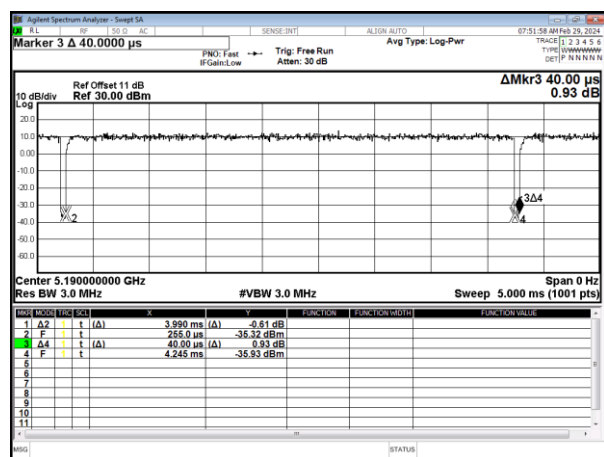
## Modulation Type: 802.11ac VHT80



## Modulation Type: 802.11ax HE20

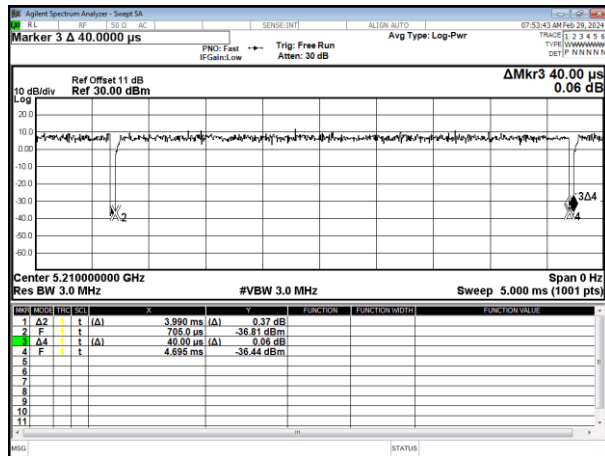


## Modulation Type: 802.11ax HE40





Modulation Type: 802.11ax HE80





## 8. 6dB Bandwidth & 99% Occupied Bandwidth

### 8.1. Test Limit

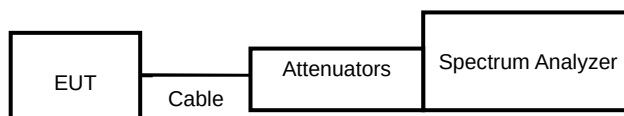
FCC §15.407

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<br>(MHz) | 6dB<br>Bandwidth<br>(MHz) | Minimum Limit<br>(MHz) |
|----------------|---------|--------------------|---------------------------|------------------------|
|                |         |                    | ANT A                     |                        |
| 802.11a        | 149     | 5745               | 15.51                     | 0.50                   |
|                | 157     | 5785               | 13.92                     | 0.50                   |
|                | 165     | 5825               | 14.75                     | 0.50                   |
| 802.11ac VHT20 | 149     | 5745               | 16.34                     | 0.50                   |
|                | 157     | 5785               | 13.90                     | 0.50                   |
|                | 165     | 5825               | 13.79                     | 0.50                   |
| 802.11ac VHT40 | 155     | 5755               | 34.15                     | 0.50                   |
|                | 159     | 5795               | 30.78                     | 0.50                   |
| 802.11ac VHT80 | 155     | 5775               | 68.84                     | 0.50                   |
| 802.11ax HE20  | 149     | 5745               | 15.98                     | 0.50                   |
|                | 157     | 5785               | 18.37                     | 0.50                   |
|                | 165     | 5825               | 15.82                     | 0.50                   |
| 802.11ax HE40  | 155     | 5755               | 32.42                     | 0.50                   |
|                | 159     | 5795               | 35.34                     | 0.50                   |
| 802.11ax HE80  | 155     | 5775               | 62.62                     | 0.50                   |

UNII Emission Bandwidth Result (Extends across 5725MHz band)

| Mode       | Channel | Frequency<br>(MHz) | 6dB<br>Bandwidth<br>(MHz) | Minimum Limit<br>(MHz) |
|------------|---------|--------------------|---------------------------|------------------------|
|            |         |                    | ANT A                     |                        |
| 11a        | 144     | 5720               | 2.73                      | 0.50                   |
| 11ac VHT20 | 144     | 5720               | 3.35                      | 0.50                   |
| 11ac VHT40 | 142     | 5710               | 2.83                      | 0.50                   |
| 11ac VHT80 | 138     | 5690               | 2.73                      | 0.50                   |
| 11ax HE20  | 144     | 5720               | 4.06                      | 0.50                   |
| 11ax HE40  | 142     | 5710               | 3.64                      | 0.50                   |
| 11ax HE80  | 138     | 5690               | 3.67                      | 0.50                   |

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

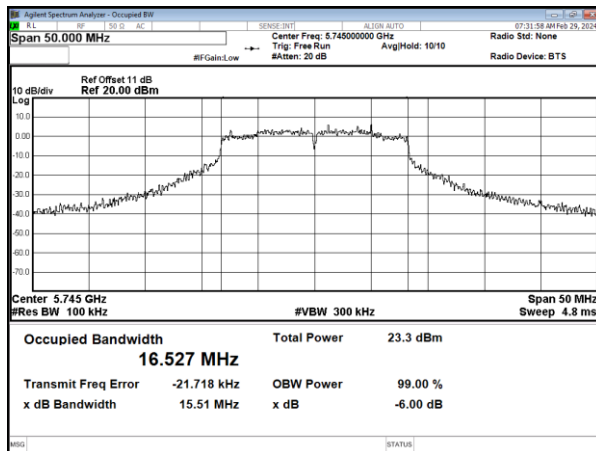
| Mode           | Channel | Frequency<br>(MHz) | 99%<br>Bandwidth(MHz) |
|----------------|---------|--------------------|-----------------------|
|                |         |                    | ANT A                 |
| 802.11a        | 149     | 5745               | 16.825                |
|                | 157     | 5785               | 16.905                |
|                | 165     | 5825               | 17.564                |
| 802.11ac VHT20 | 149     | 5745               | 17.817                |
|                | 157     | 5785               | 17.895                |
|                | 165     | 5825               | 18.137                |
| 802.11ac VHT40 | 155     | 5755               | 36.514                |
|                | 159     | 5795               | 36.650                |
| 802.11ac VHT80 | 155     | 5775               | 75.284                |
| 802.11ax HE20  | 149     | 5745               | 18.946                |
|                | 157     | 5785               | 18.956                |
|                | 165     | 5825               | 18.911                |
| 802.11ax HE40  | 155     | 5755               | 37.682                |
|                | 159     | 5795               | 37.705                |
| 802.11ax HE80  | 155     | 5775               | 76.780                |

**UNII Emission Bandwidth Result (Extends across 5725MHz band)**

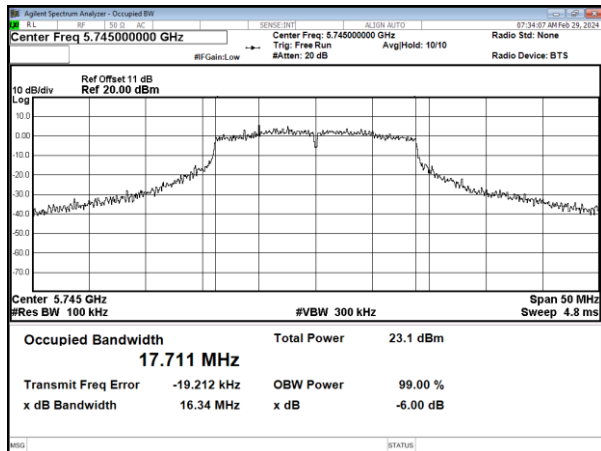
| Mode       | Channel | Frequency<br>(MHz) | 99%<br>Bandwidth(MHz) |
|------------|---------|--------------------|-----------------------|
|            |         |                    | ANT A                 |
| 11a        | 144     | 5720               | 10.82                 |
| 11ac VHT20 | 144     | 5720               | 11.66                 |
| 11ac VHT40 | 142     | 5710               | 30.35                 |
| 11ac VHT80 | 138     | 5690               | 57.17                 |
| 11ax HE20  | 144     | 5720               | 9.15                  |
| 11ax HE40  | 142     | 5710               | 25.91                 |
| 11ax HE80  | 138     | 5690               | 52.22                 |



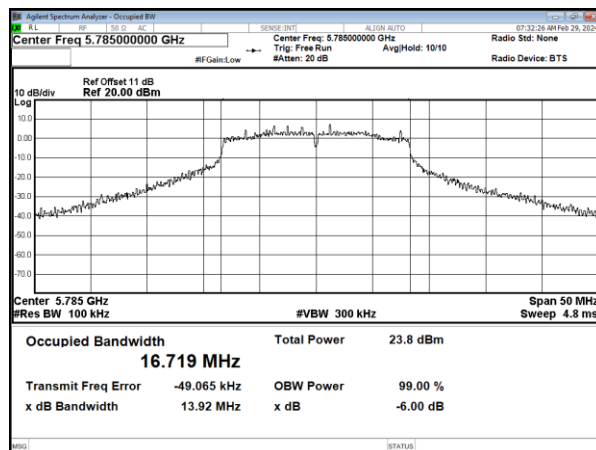
SISO (ANT A)  
6dB Bandwidth  
Modulation Type: 802.11a  
CH149



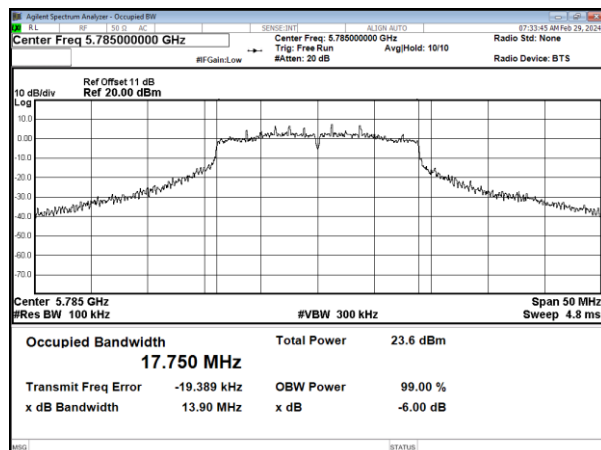
Modulation Type: 802.11ac, VHT20  
CH149



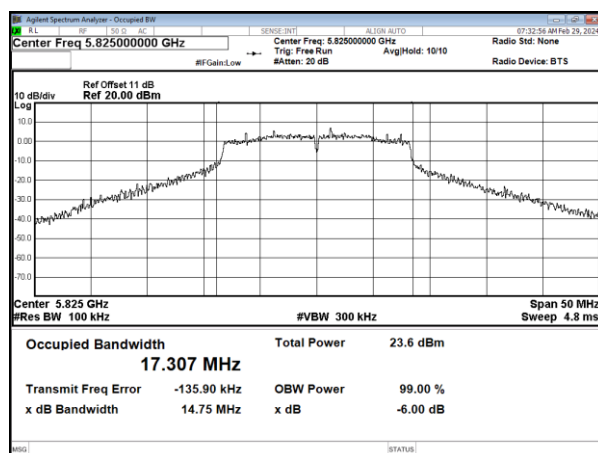
CH157



CH157



CH165



CH165

