

## ANNEX F TEST DATA

For

|                |                       |
|----------------|-----------------------|
| Project No.:   | 8229EU010601W         |
| Client:        | TZUMI Electronics,LLC |
| Product Name:  | Projector             |
| Model No.:     | 9520                  |
| FCC ID:        | 2AON7-9520            |
| Technology:    | WiFi 5G               |
| Test Engineer: | <i>Mikoy zhu</i>      |
| Test Date:     | 2024-05-13            |

## Test Summary

| Item                                             | Result |
|--------------------------------------------------|--------|
| Duty Cycle                                       | Pass   |
| Bandwidth                                        | Pass   |
| Maximum Conducted Output Power                   | Pass   |
| Maximum Power Spectral Density                   | Pass   |
| Unwanted Emissions In Restricted Frequency Bands | Pass   |
| Frequency Stability                              | Pass   |

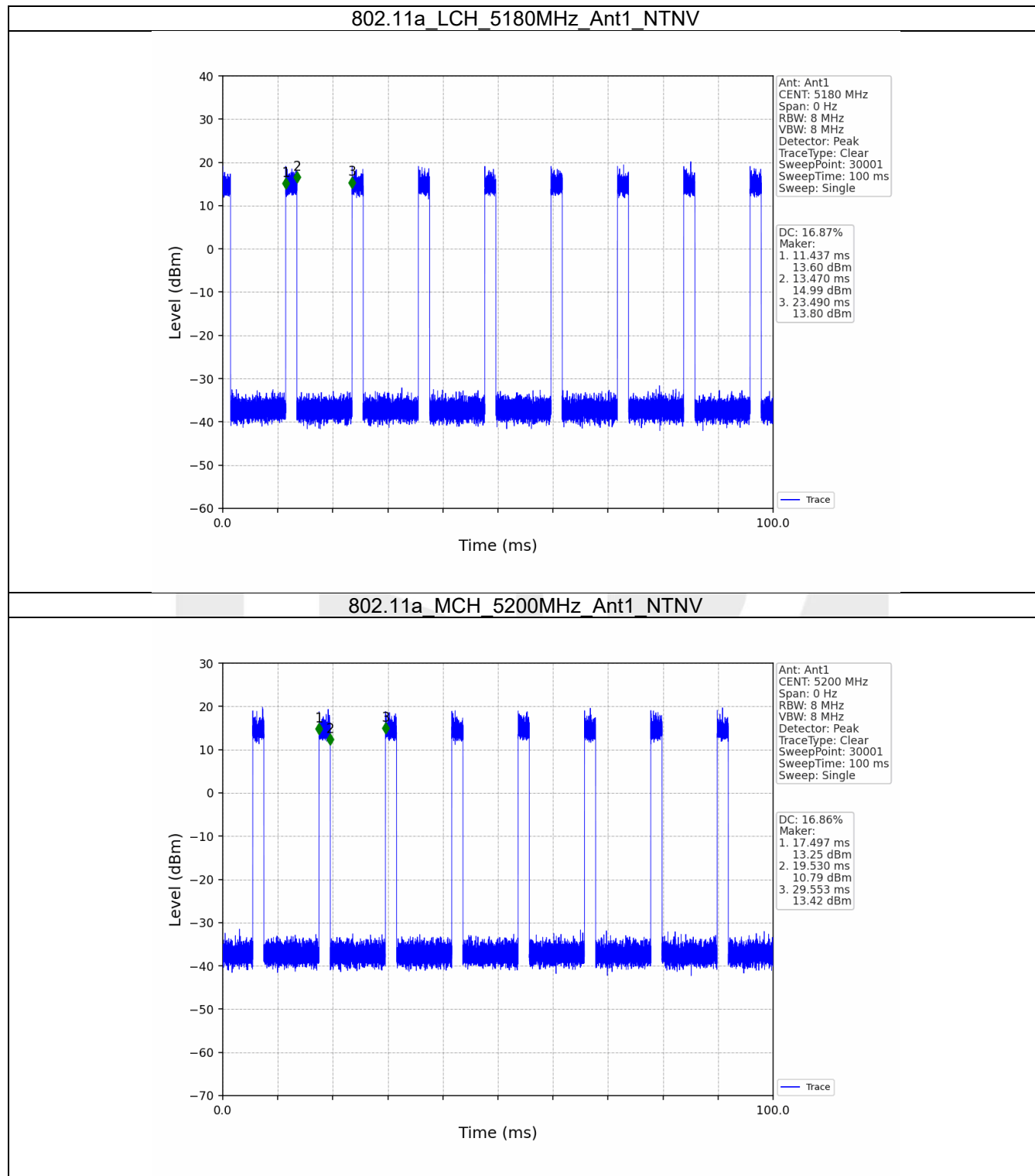
## 1. Duty Cycle

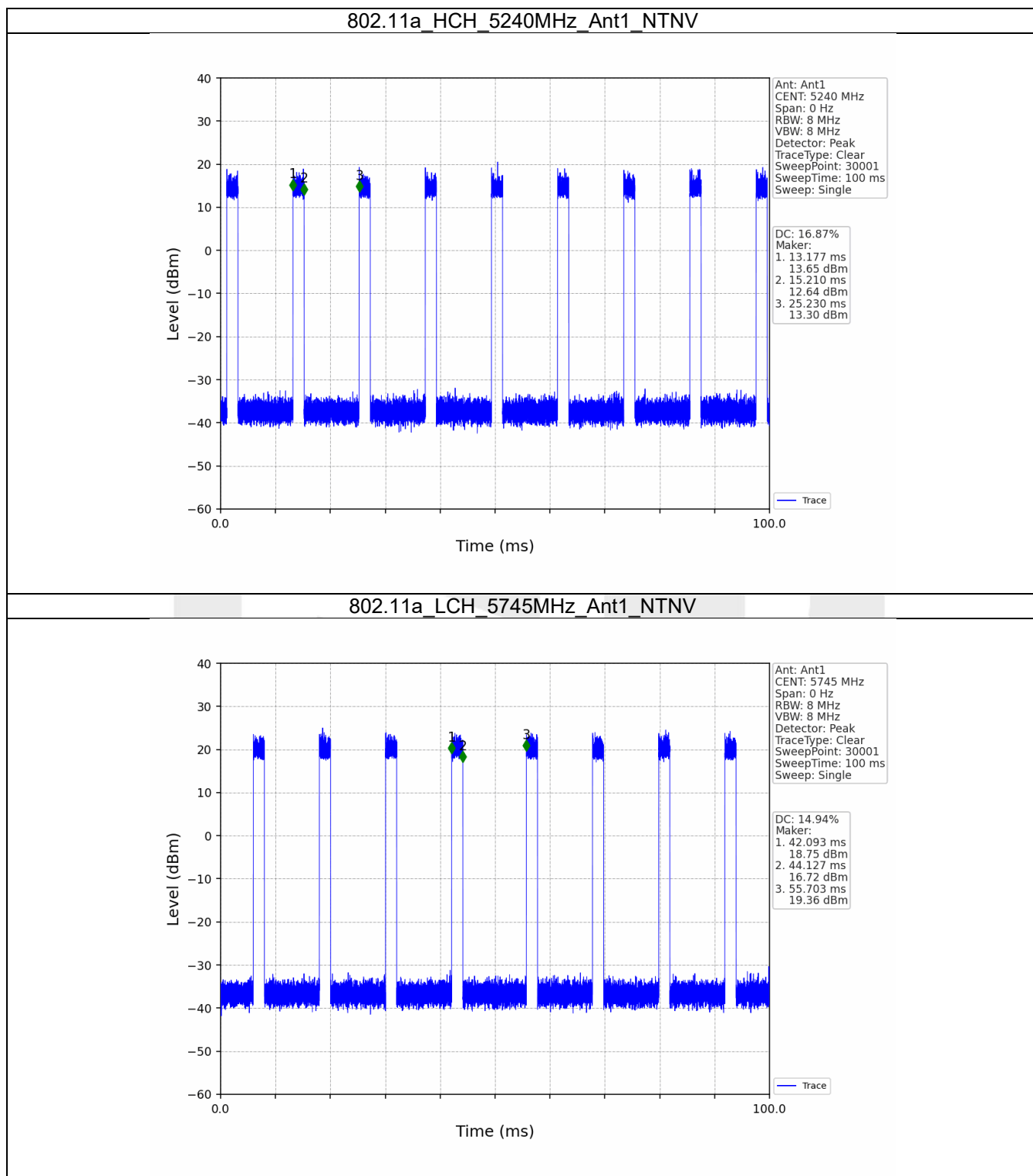
### 1.1 Ant1

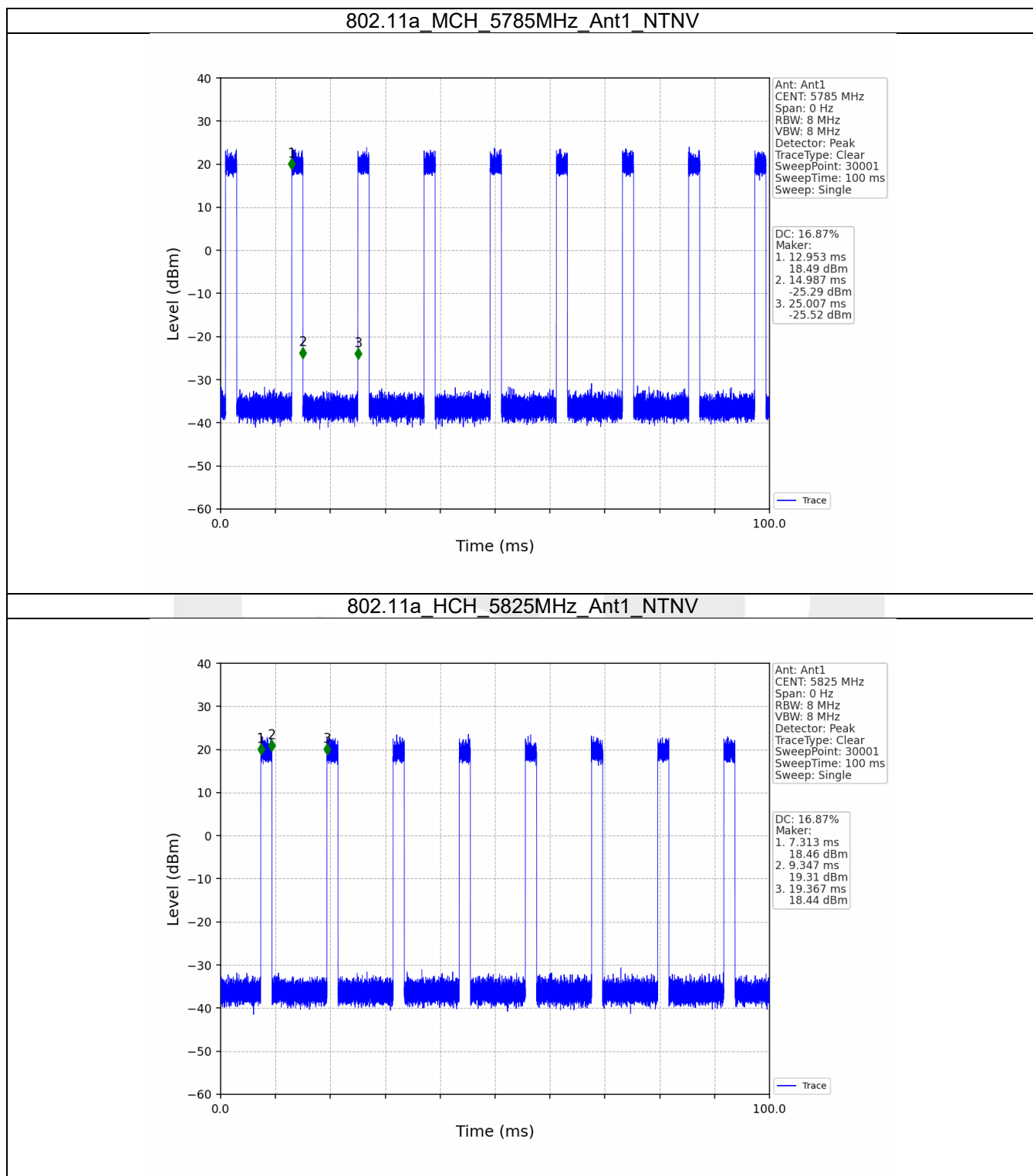
#### 1.1.1 Test Result

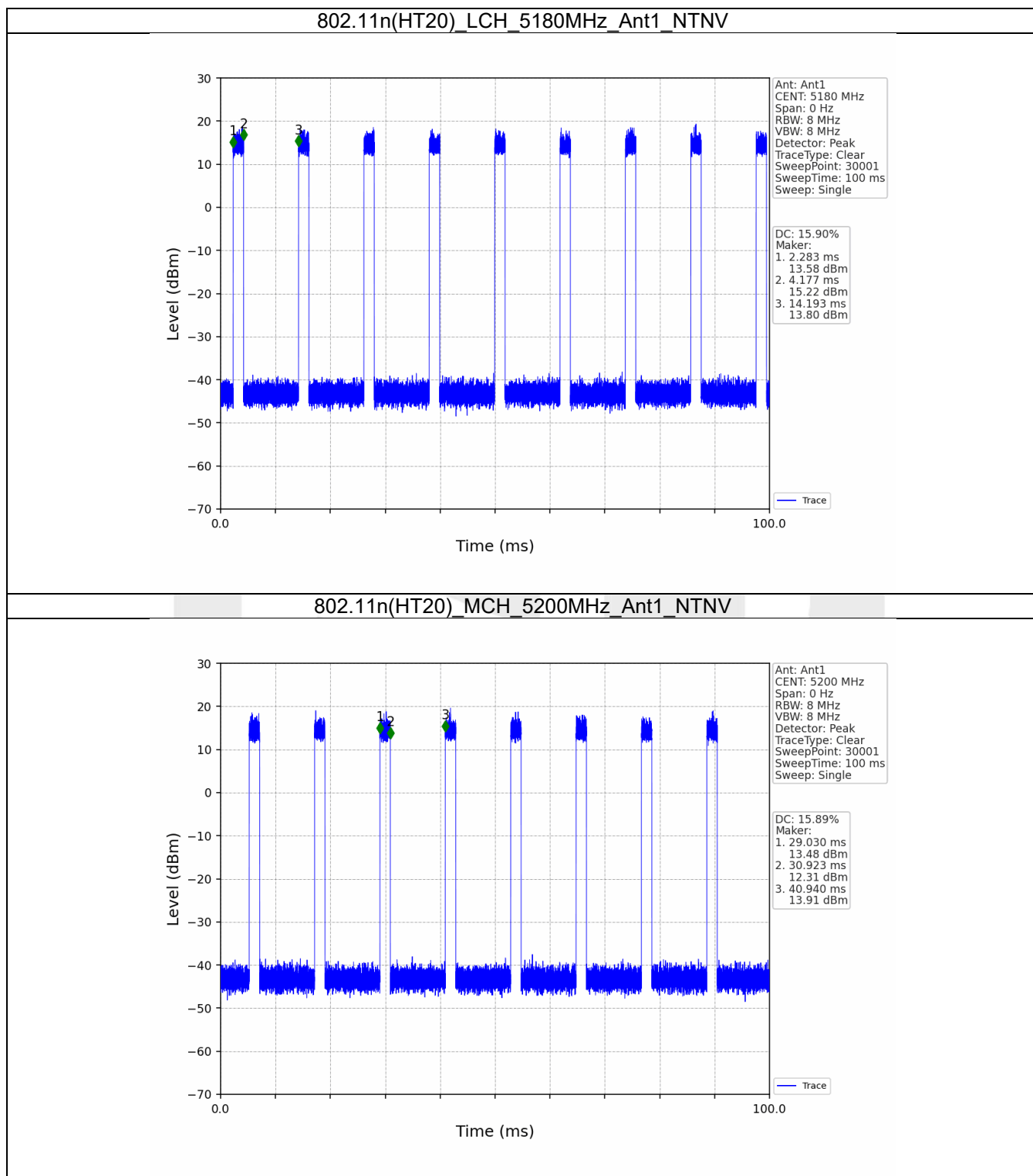
| Ant1           |         |                 |           |             |                |                                   |                       |
|----------------|---------|-----------------|-----------|-------------|----------------|-----------------------------------|-----------------------|
| Mode           | TX Type | Frequency (MHz) | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | Max. DC Variation (%) |
| 802.11a        | SISO    | 5180            | 2.033     | 12.053      | 16.87          | 7.73                              | 0.00                  |
|                |         | 5200            | 2.033     | 12.056      | 16.86          | 7.73                              | 0.03                  |
|                |         | 5240            | 2.033     | 12.053      | 16.87          | 7.73                              | 0.03                  |
|                |         | 5745            | 2.034     | 13.610      | 14.94          | 8.26                              | 1.96                  |
|                |         | 5785            | 2.034     | 12.054      | 16.87          | 7.73                              | 0.03                  |
|                |         | 5825            | 2.034     | 12.054      | 16.87          | 7.73                              | 0.00                  |
| 802.11n (HT20) | SISO    | 5180            | 1.894     | 11.910      | 15.90          | 7.99                              | 0.03                  |
|                |         | 5200            | 1.893     | 11.910      | 15.89          | 7.99                              | 0.03                  |
|                |         | 5240            | 1.893     | 11.913      | 15.89          | 7.99                              | 0.03                  |
|                |         | 5745            | 0.227     | 12.847      | 1.77           | 17.53                             | 0.46                  |
|                |         | 5785            | 0.227     | 10.687      | 2.12           | 16.73                             | 0.09                  |
|                |         | 5825            | 0.227     | 10.247      | 2.22           | 16.55                             | 0.00                  |
| 802.11n (HT40) | SISO    | 5190            | 0.933     | 10.950      | 8.52           | 10.70                             | 0.03                  |
|                |         | 5230            | 0.934     | 10.950      | 8.53           | 10.69                             | 0.03                  |
|                |         | 5755            | 0.933     | 10.956      | 8.52           | 10.70                             | 0.01                  |
|                |         | 5795            | 0.934     | 10.954      | 8.53           | 10.69                             | 0.03                  |

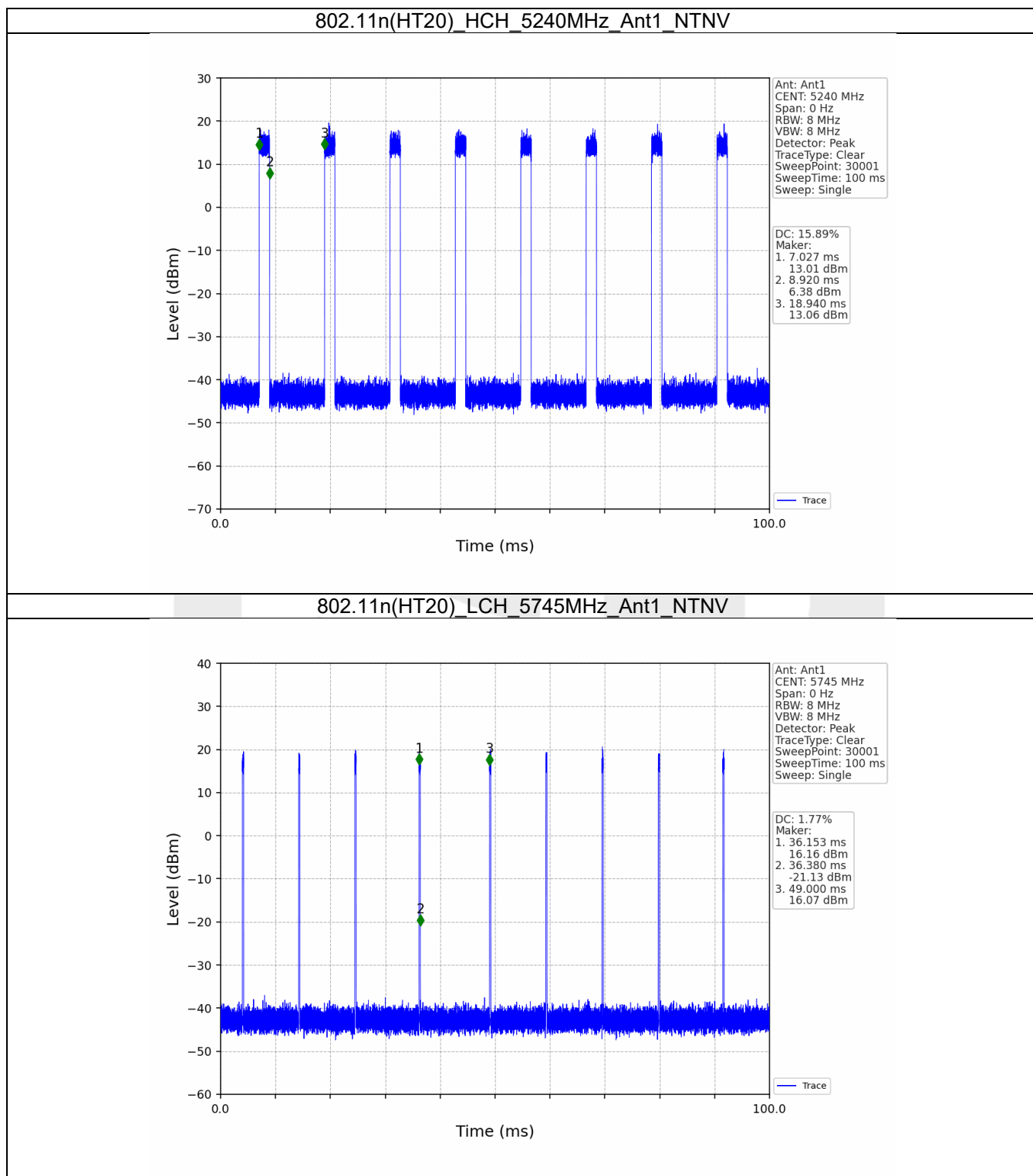
### 1.1.2 Test Graph

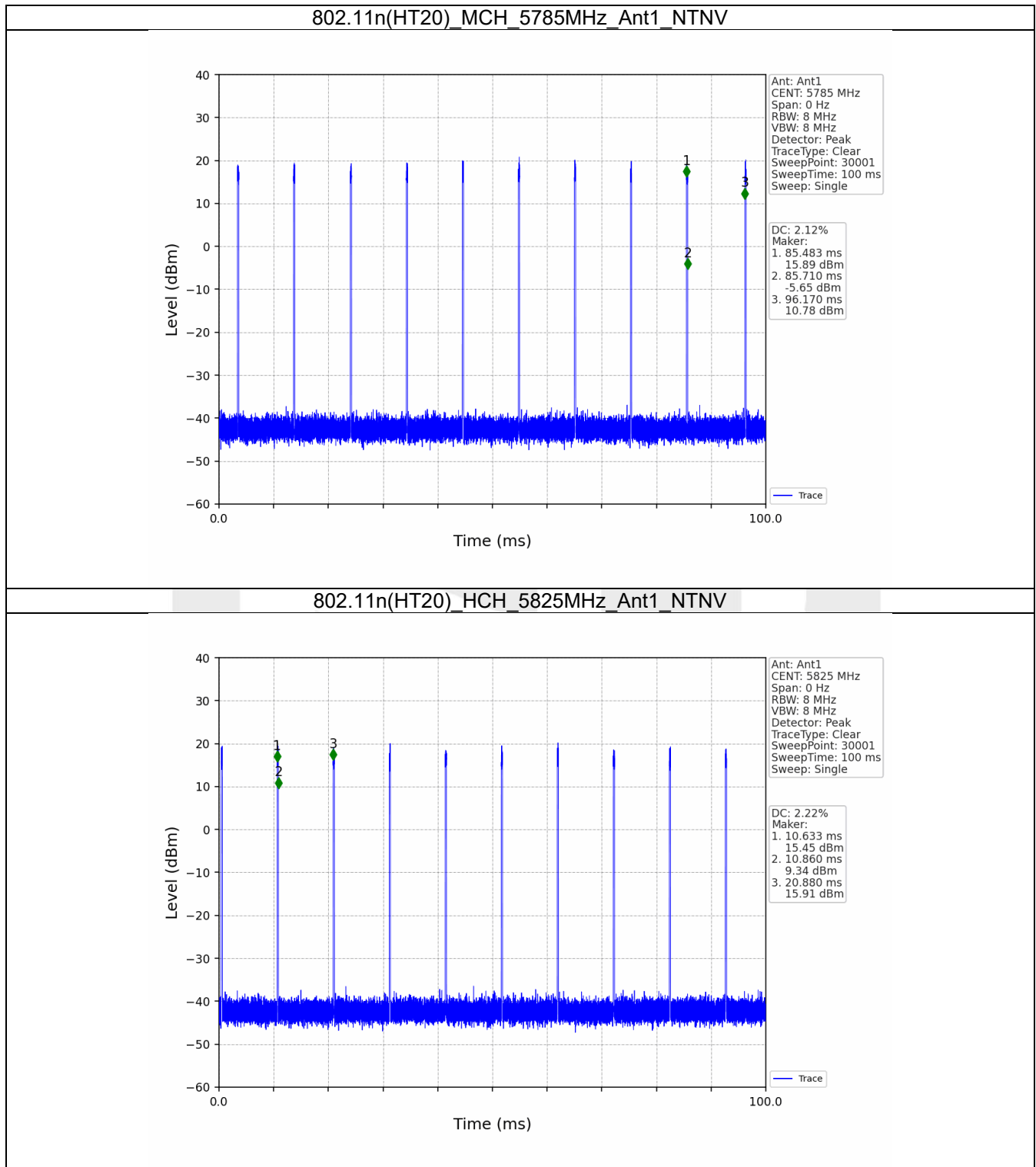


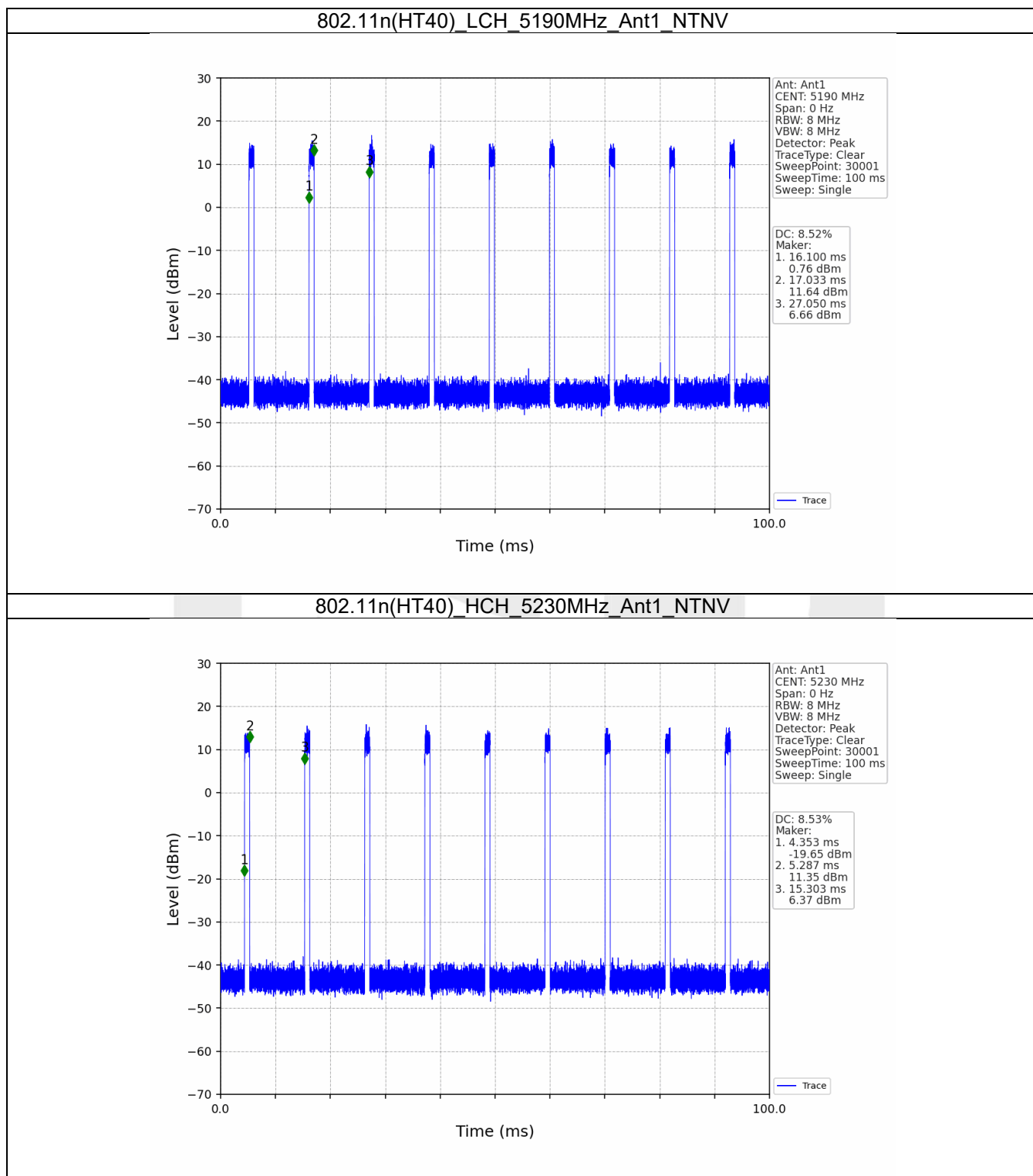


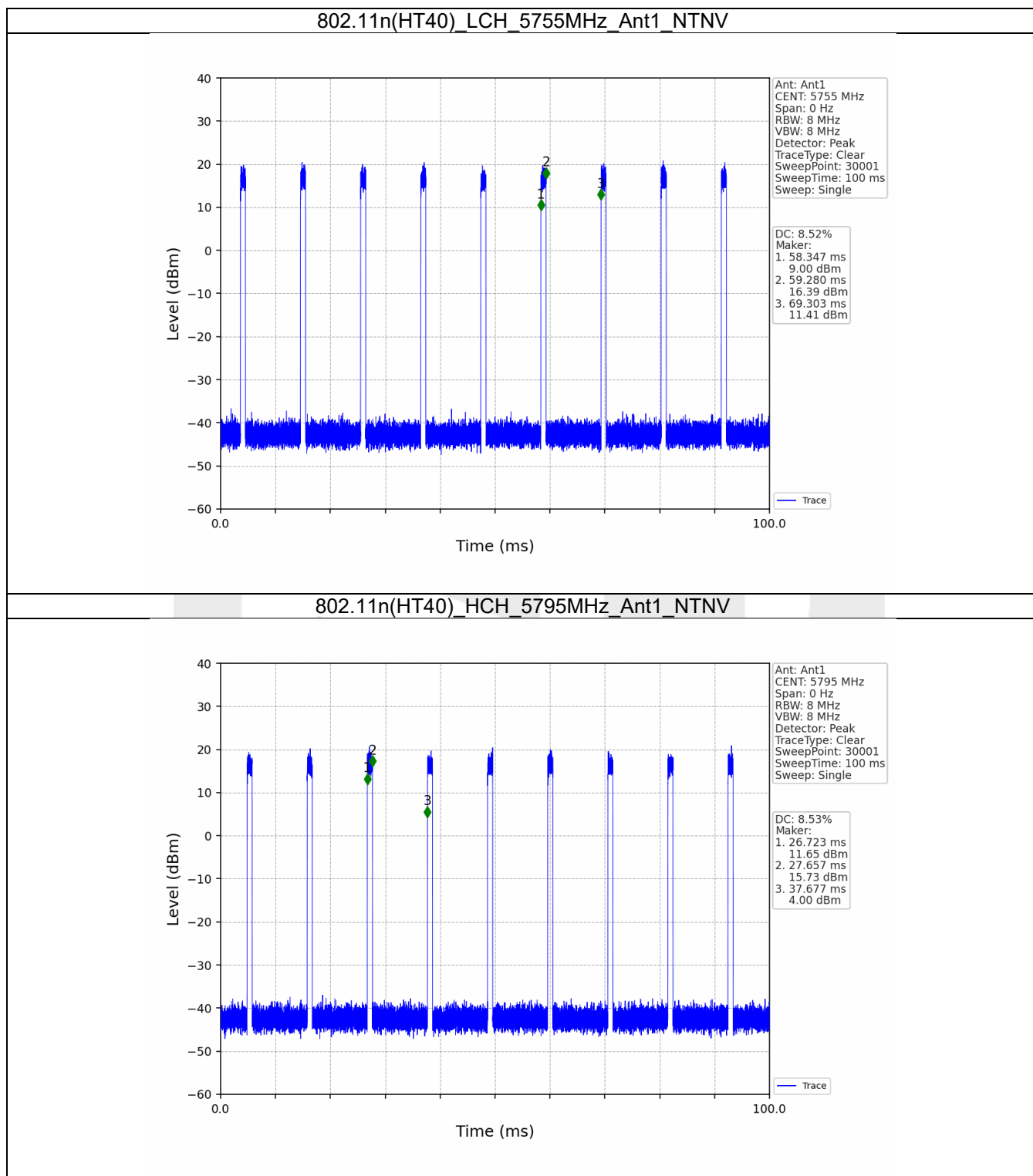












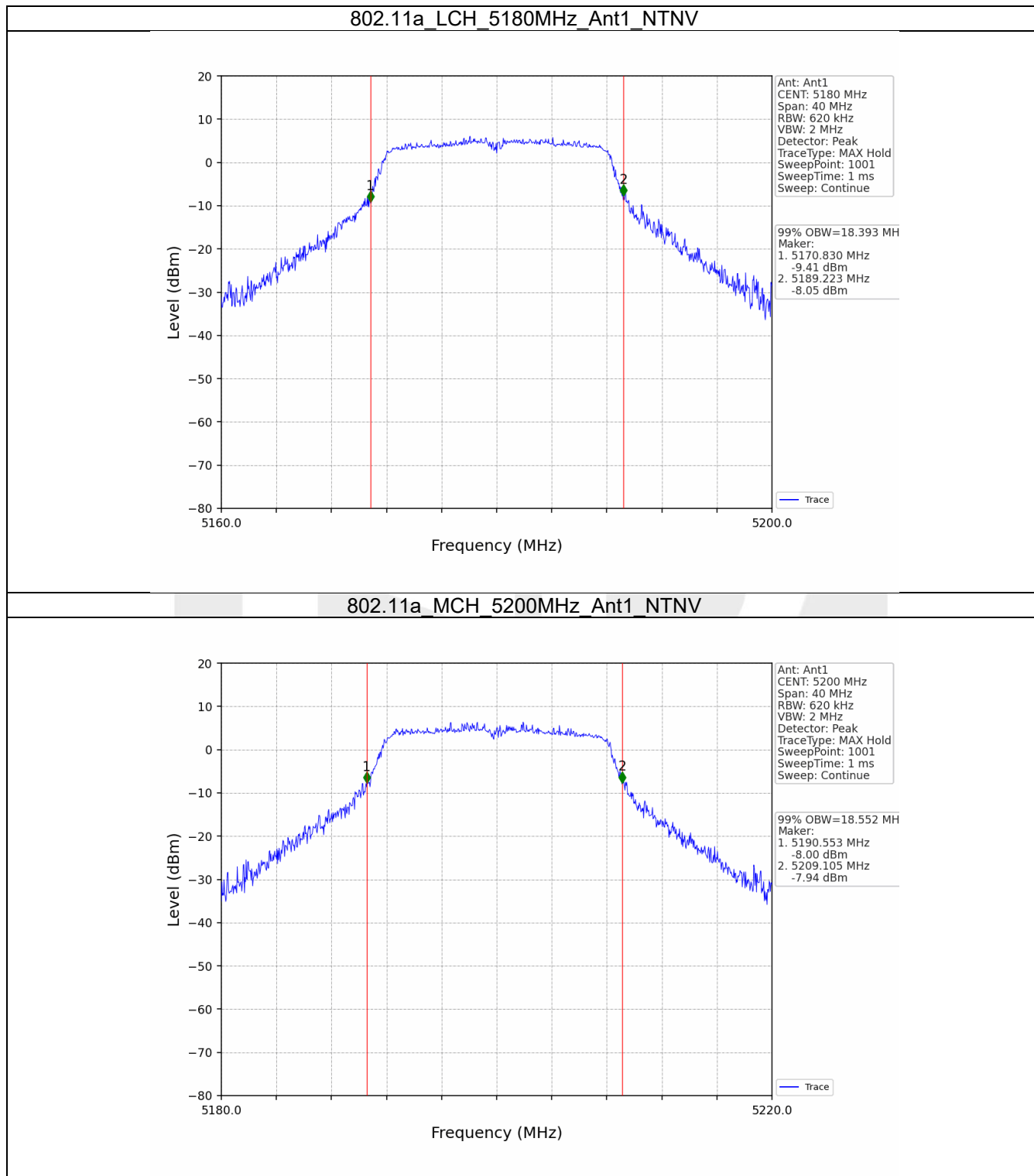
## 2. Bandwidth

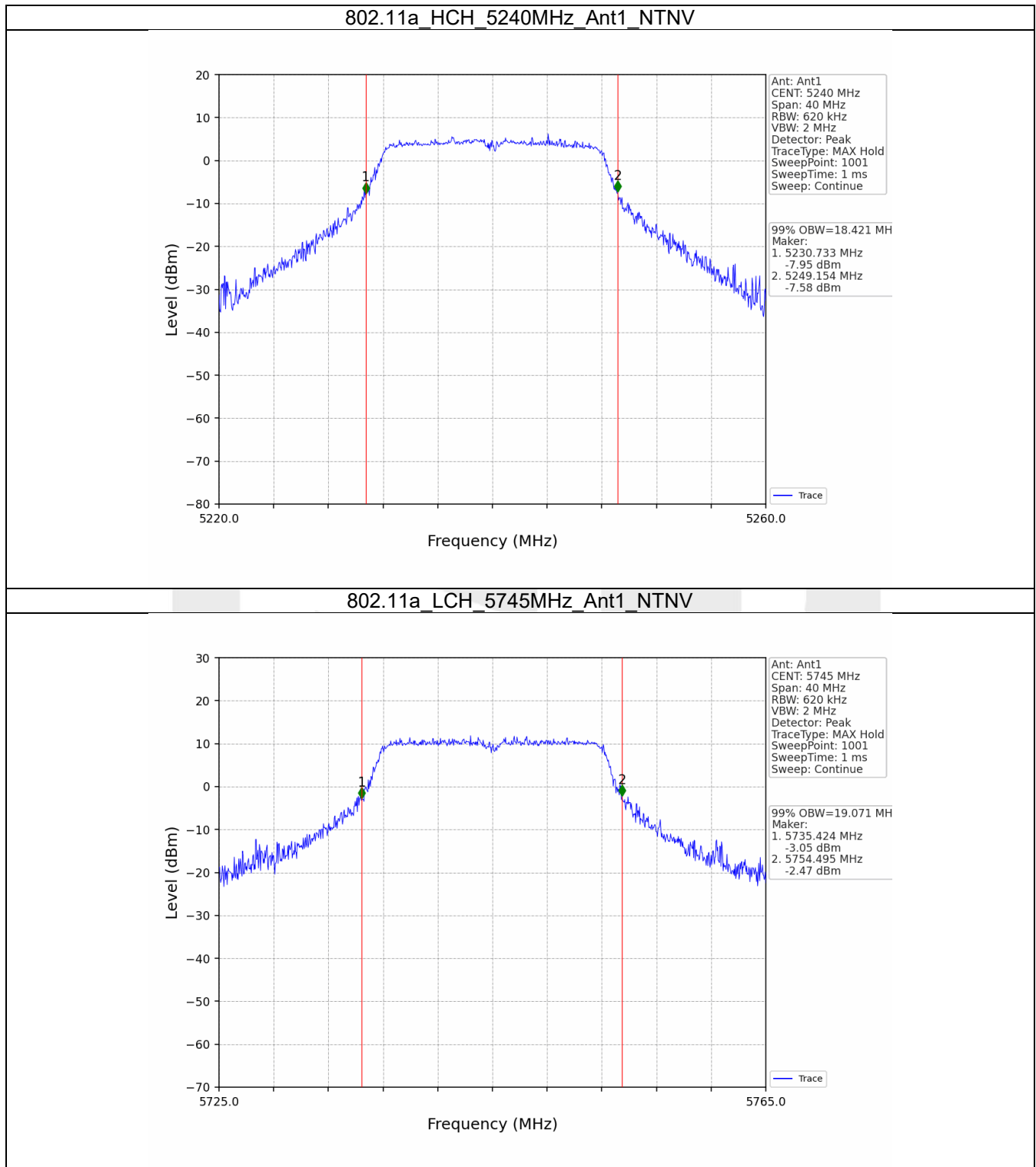
### 2.1 OBW

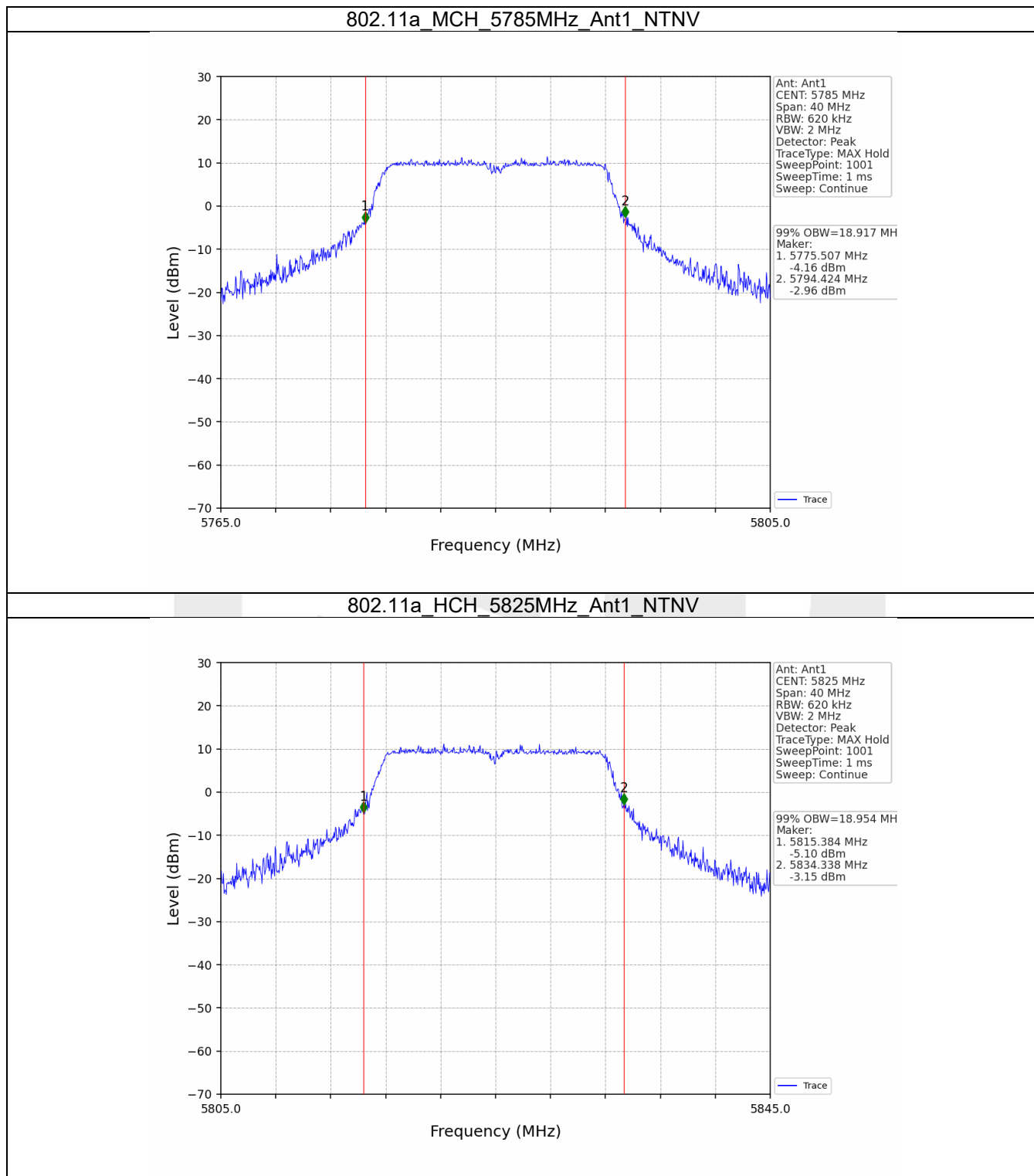
#### 2.1.1 Test Result

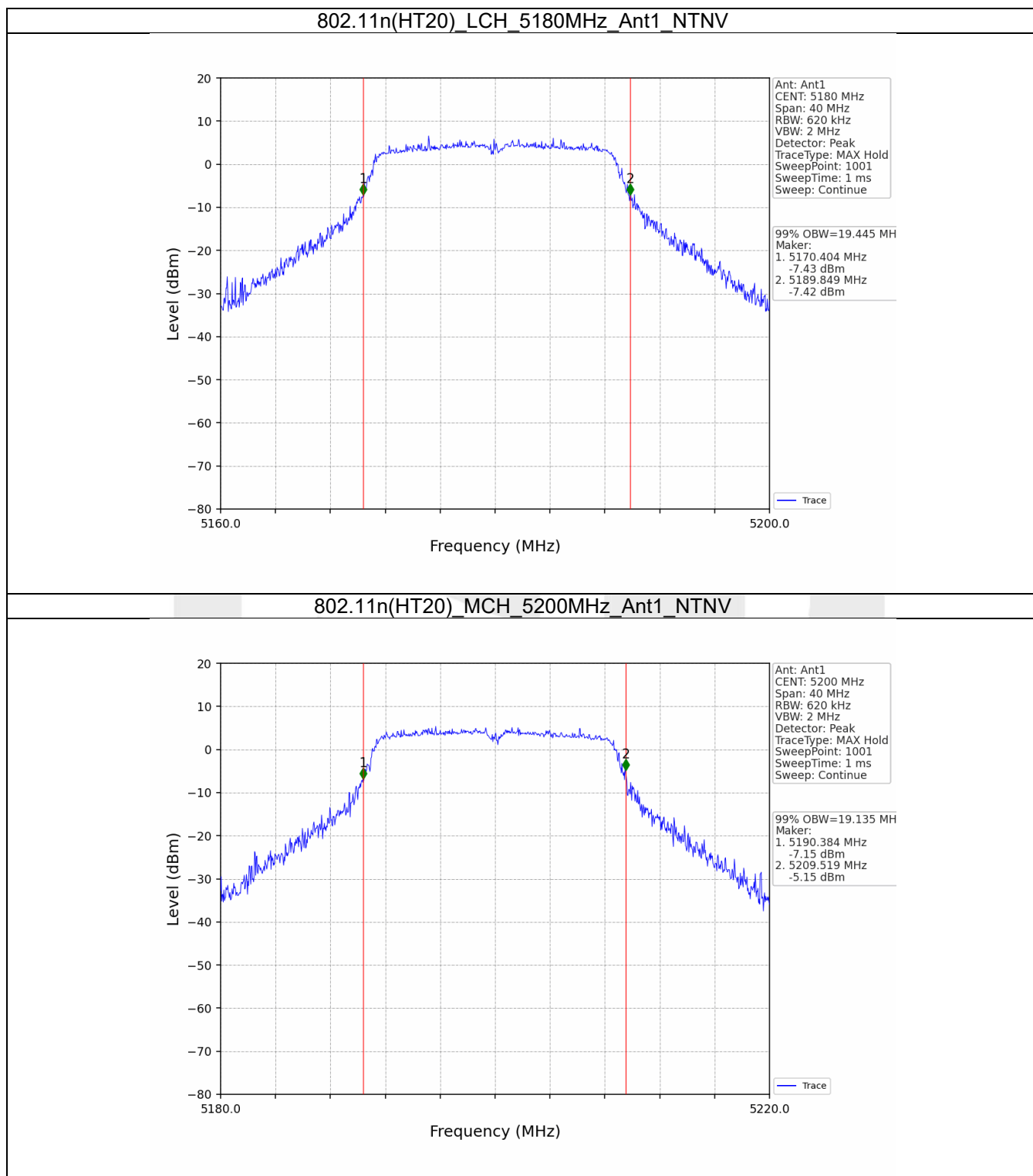
| Mode           | TX Type | Frequency (MHz) | ANT | 99% Occupied Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-----|------------------------------|-------|---------|
|                |         |                 |     | Result                       | Limit |         |
| 802.11a        | SISO    | 5180            | 1   | 18.393                       | /     | Pass    |
|                |         | 5200            | 1   | 18.552                       | /     | Pass    |
|                |         | 5240            | 1   | 18.421                       | /     | Pass    |
|                |         | 5745            | 1   | 19.071                       | /     | Pass    |
|                |         | 5785            | 1   | 18.917                       | /     | Pass    |
|                |         | 5825            | 1   | 18.954                       | /     | Pass    |
| 802.11n (HT20) | SISO    | 5180            | 1   | 19.445                       | /     | Pass    |
|                |         | 5200            | 1   | 19.135                       | /     | Pass    |
|                |         | 5240            | 1   | 19.409                       | /     | Pass    |
|                |         | 5745            | 1   | 18.611                       | /     | Pass    |
|                |         | 5785            | 1   | 18.817                       | /     | Pass    |
|                |         | 5825            | 1   | 18.865                       | /     | Pass    |
| 802.11n (HT40) | SISO    | 5190            | 1   | 37.411                       | /     | Pass    |
|                |         | 5230            | 1   | 37.338                       | /     | Pass    |
|                |         | 5755            | 1   | 38.237                       | /     | Pass    |
|                |         | 5795            | 1   | 38.094                       | /     | Pass    |

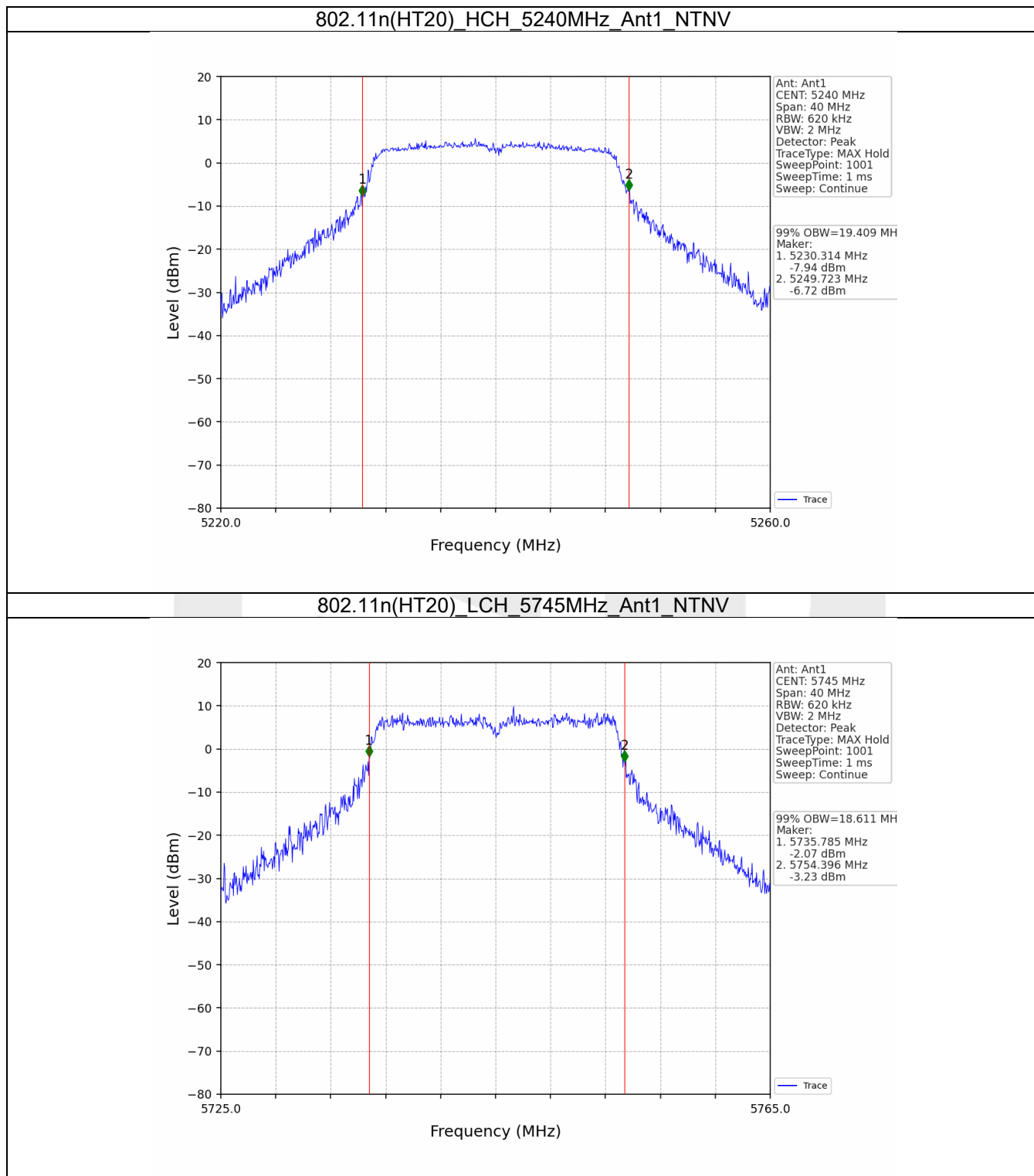
## 2.1.2 Test Graph

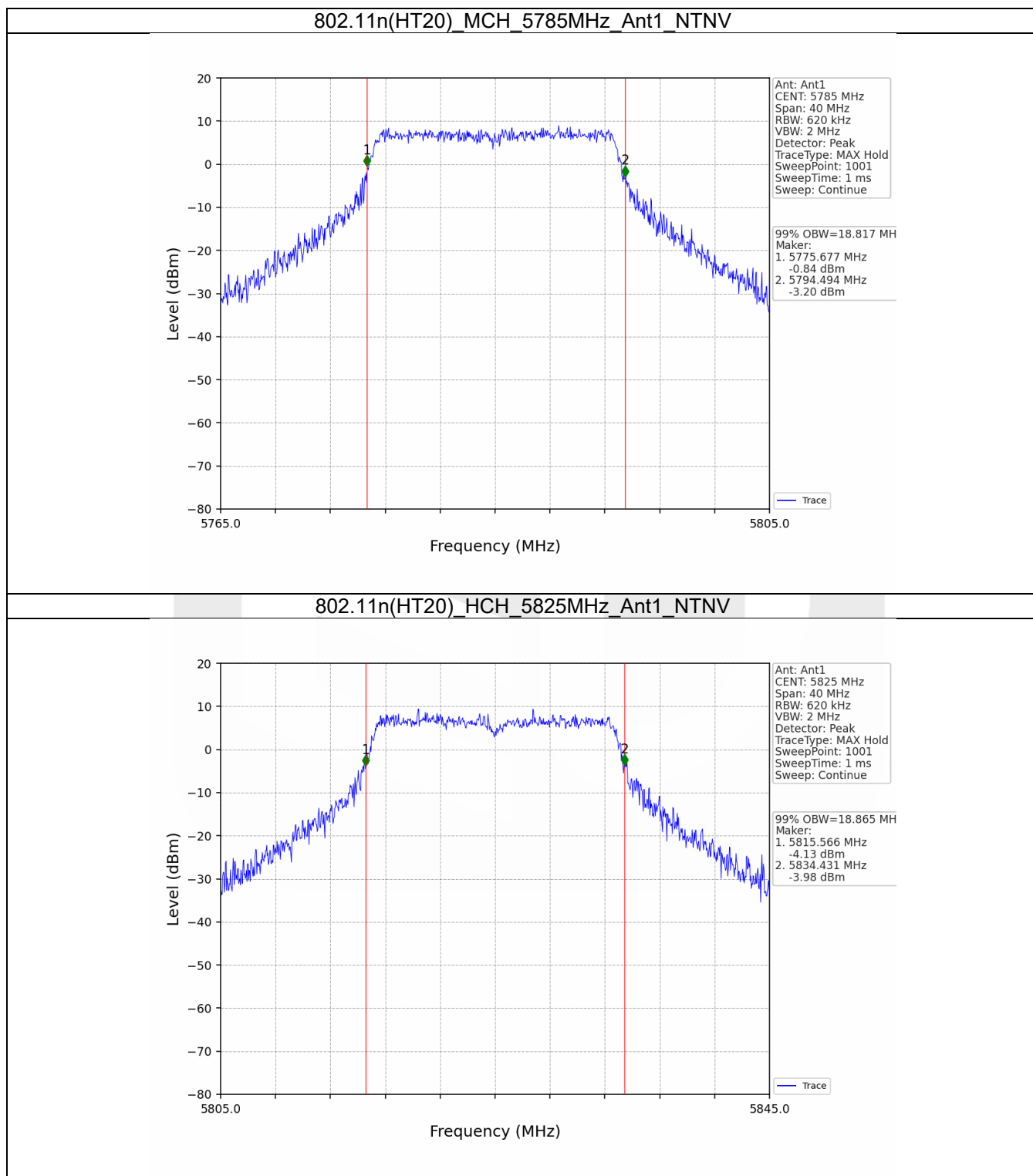


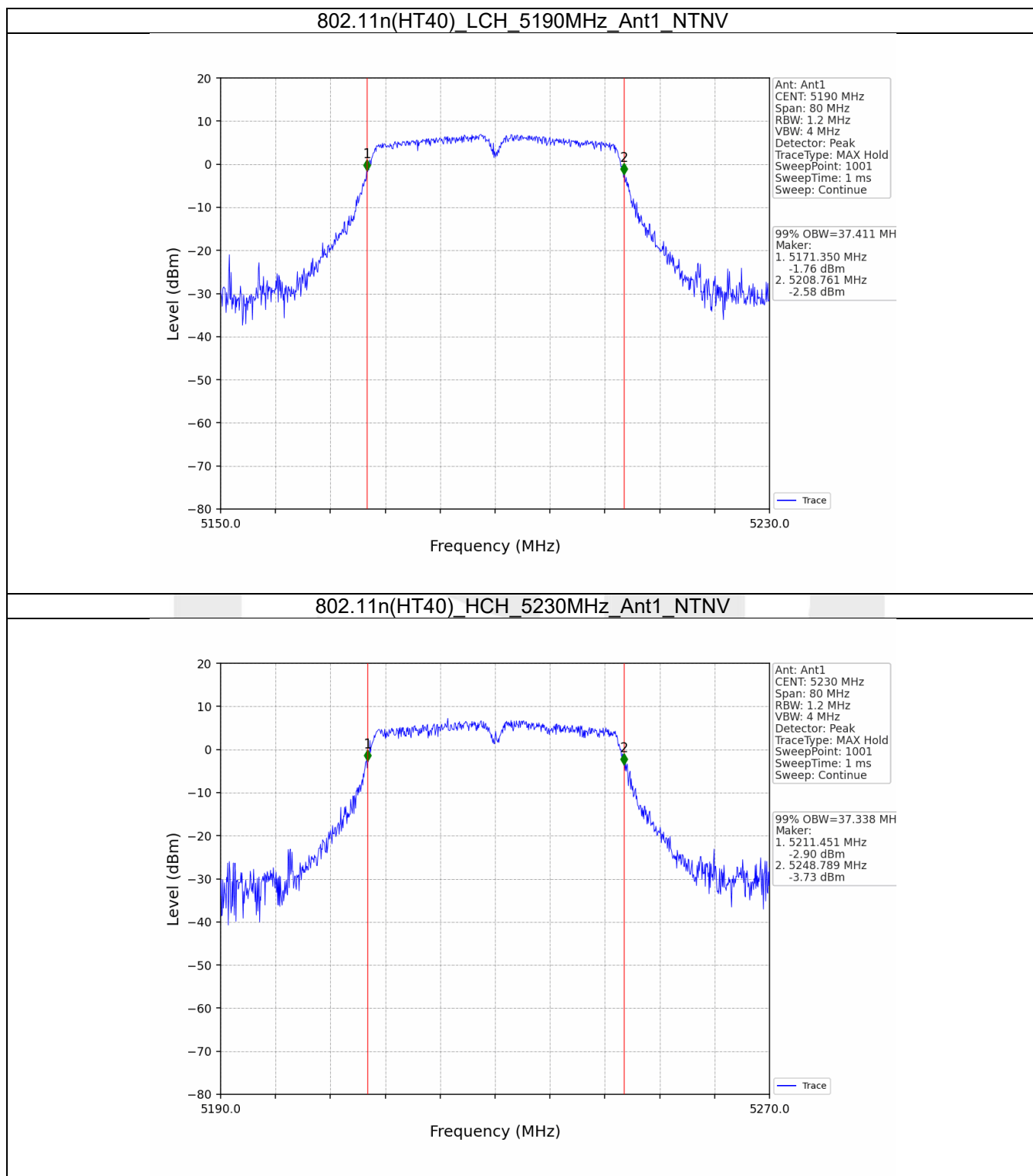


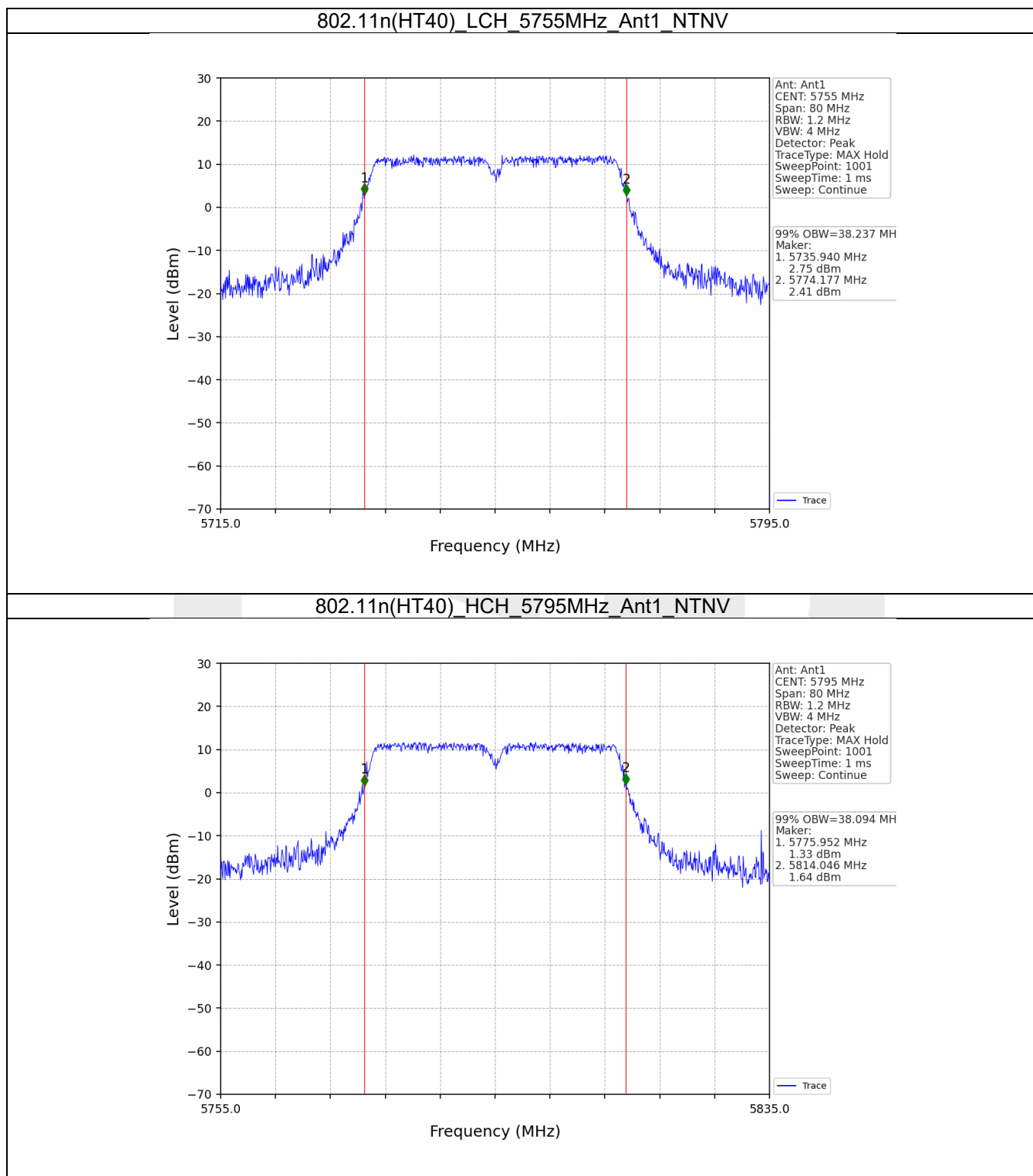










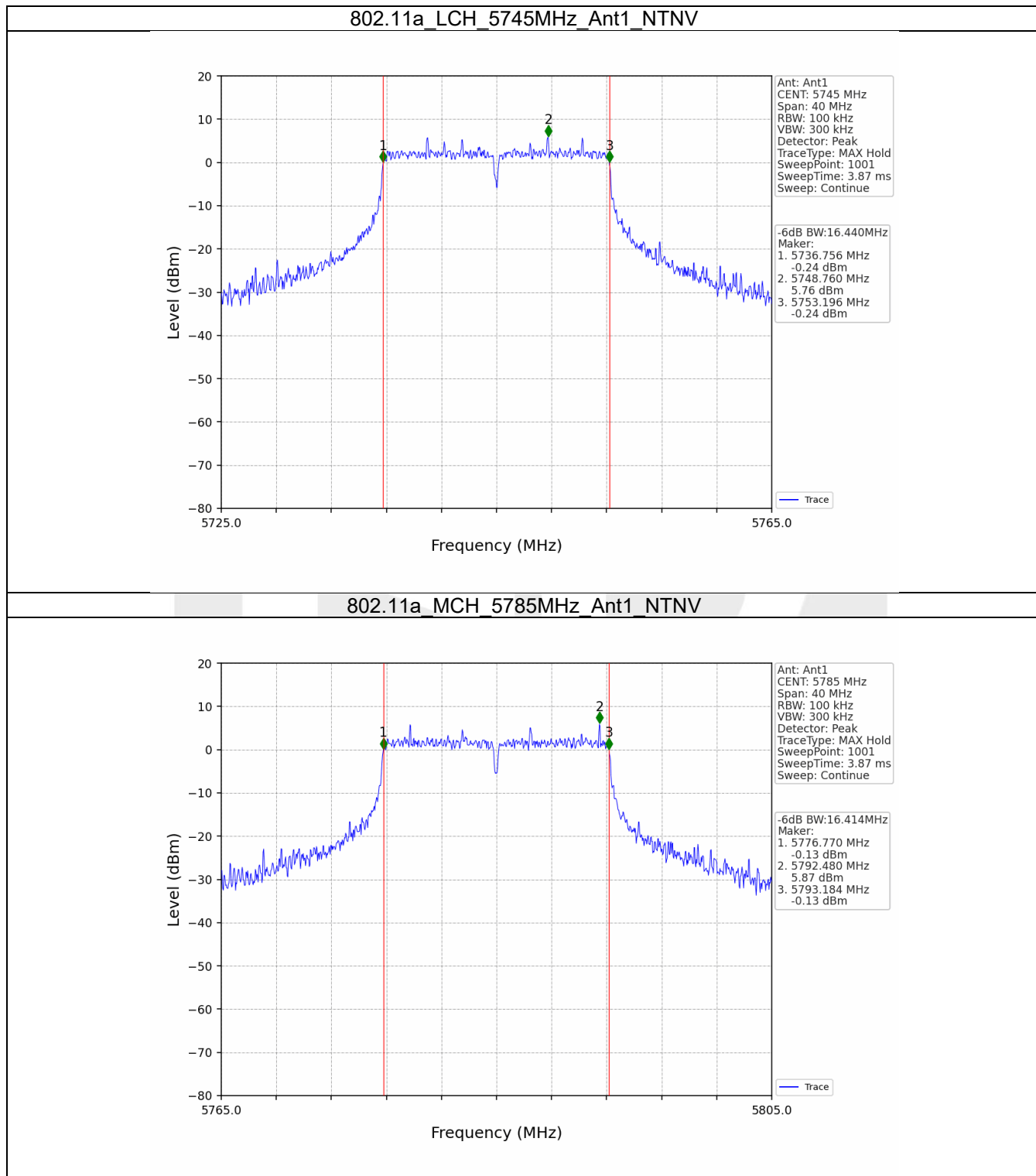


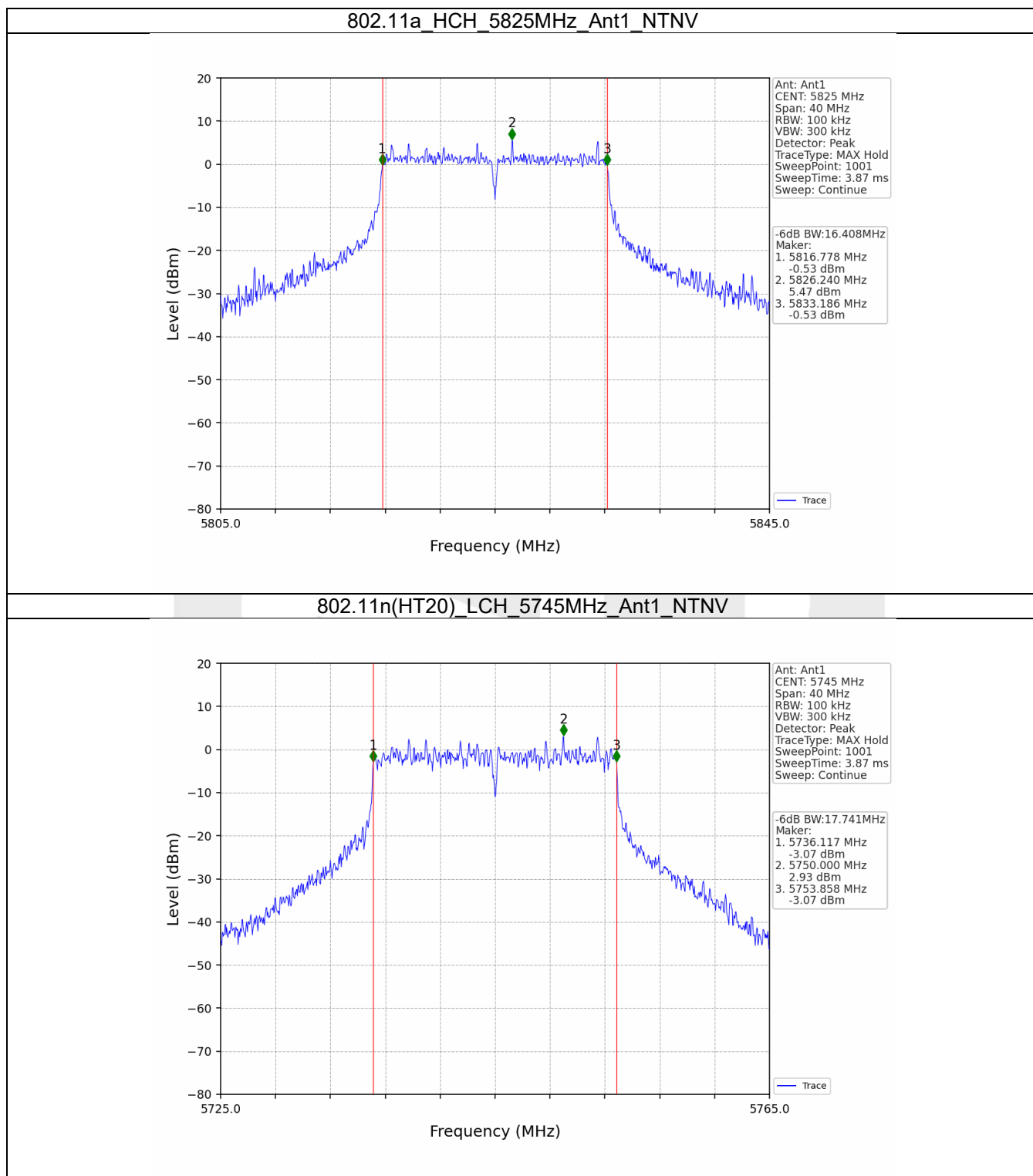
## 2.2 6dB BW

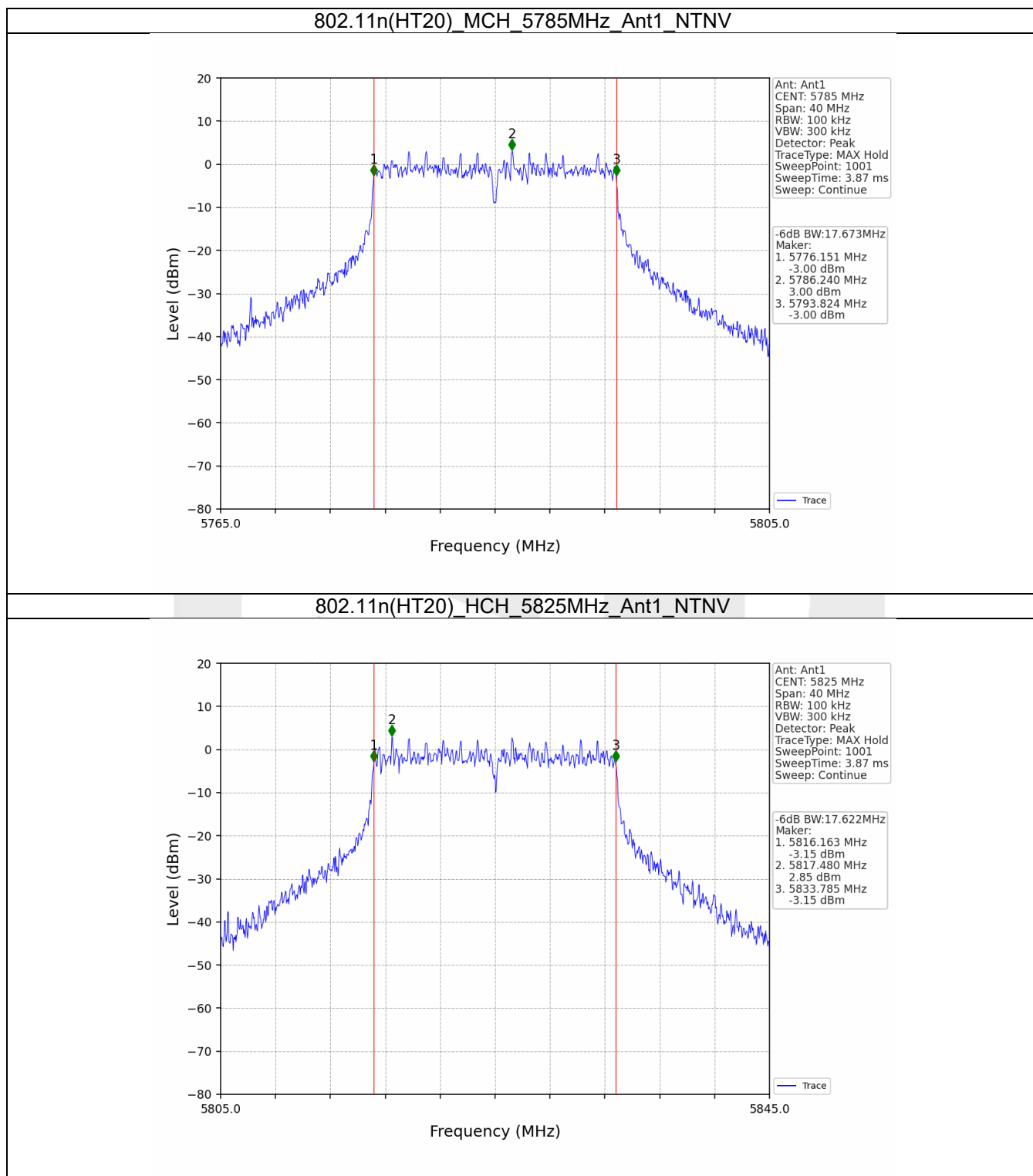
### 2.2.1 Test Result

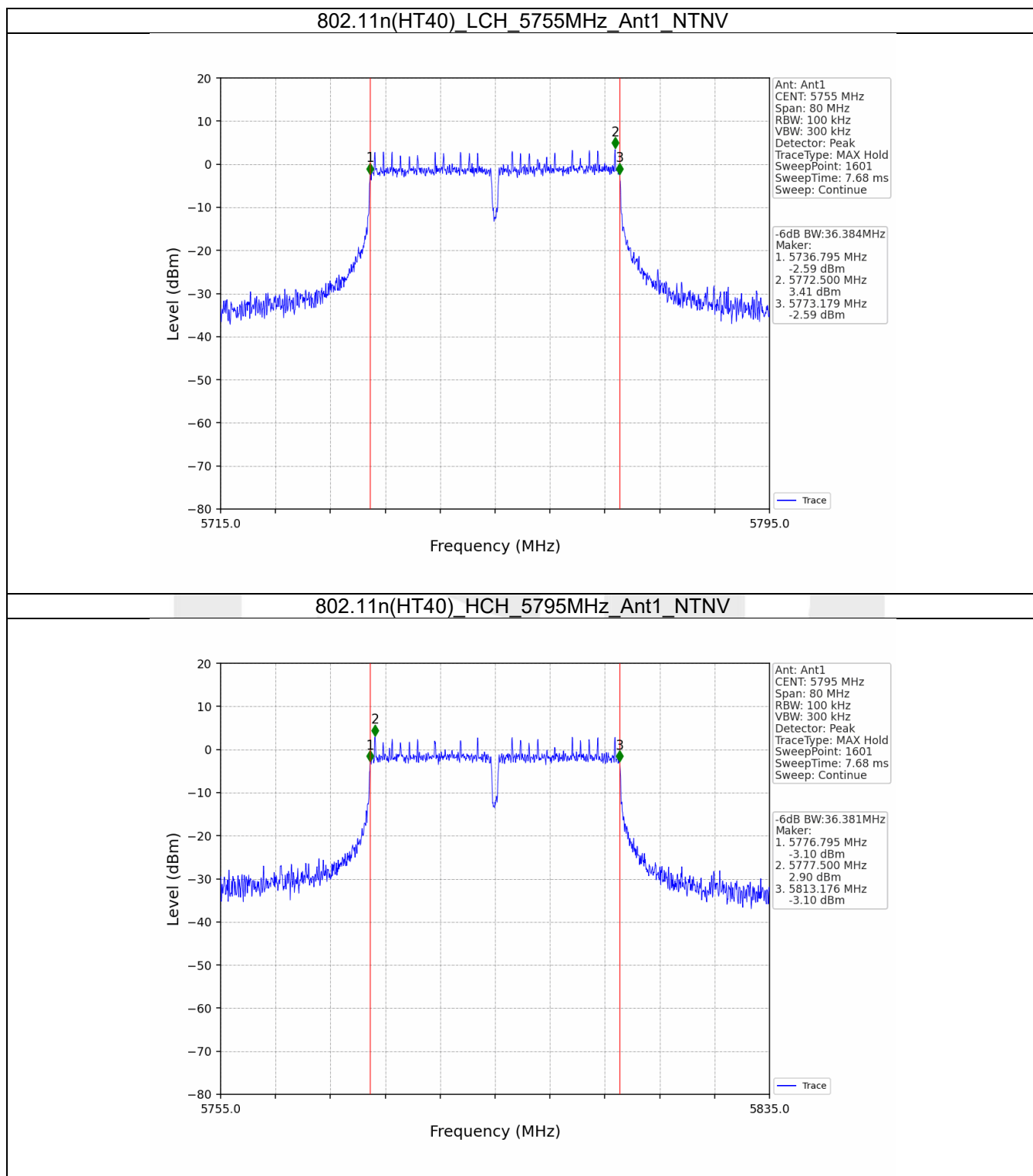
| Mode           | TX Type | Frequency (MHz) | ANT | 6dB Bandwidth (MHz) |            | Verdict |
|----------------|---------|-----------------|-----|---------------------|------------|---------|
|                |         |                 |     | Result              | Limit      |         |
| 802.11a        | SISO    | 5745            | 1   | 16.440              | $\geq 0.5$ | Pass    |
|                |         | 5785            | 1   | 16.414              | $\geq 0.5$ | Pass    |
|                |         | 5825            | 1   | 16.408              | $\geq 0.5$ | Pass    |
| 802.11n (HT20) | SISO    | 5745            | 1   | 17.741              | $\geq 0.5$ | Pass    |
|                |         | 5785            | 1   | 17.673              | $\geq 0.5$ | Pass    |
|                |         | 5825            | 1   | 17.622              | $\geq 0.5$ | Pass    |
| 802.11n (HT40) | SISO    | 5755            | 1   | 36.384              | $\geq 0.5$ | Pass    |
|                |         | 5795            | 1   | 36.381              | $\geq 0.5$ | Pass    |

## 2.2.2 Test Graph







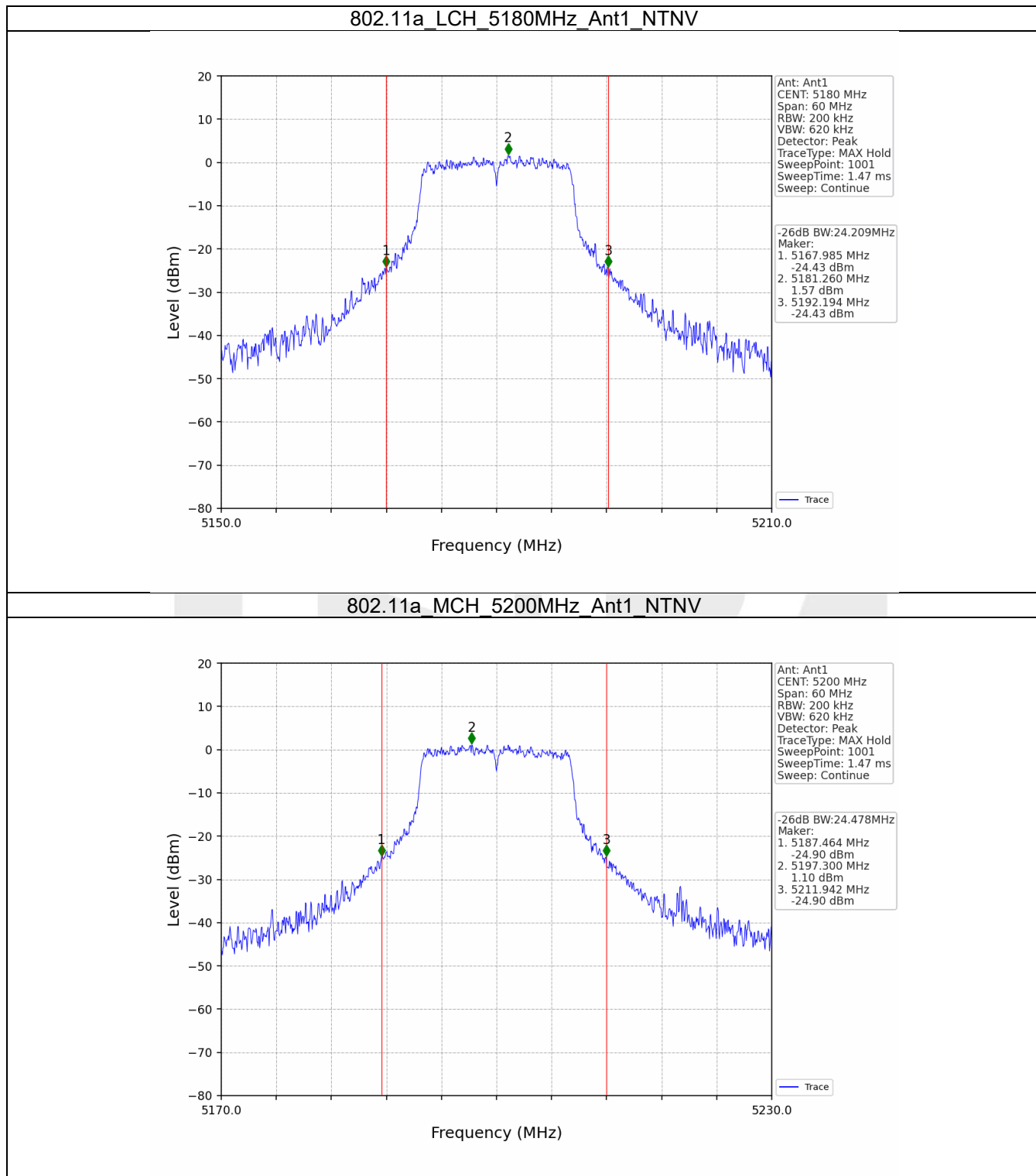


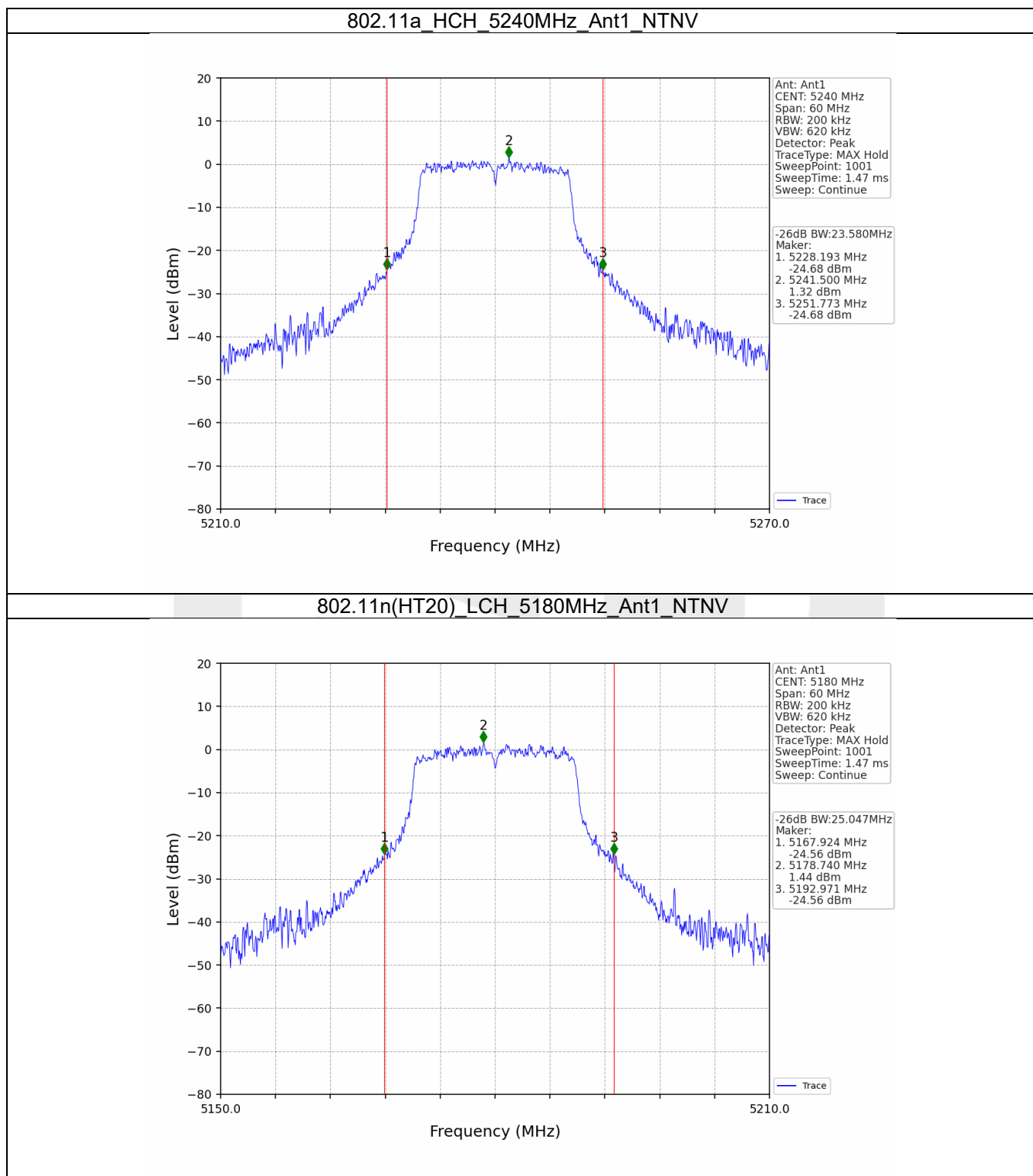
## 2.3 26dB BW

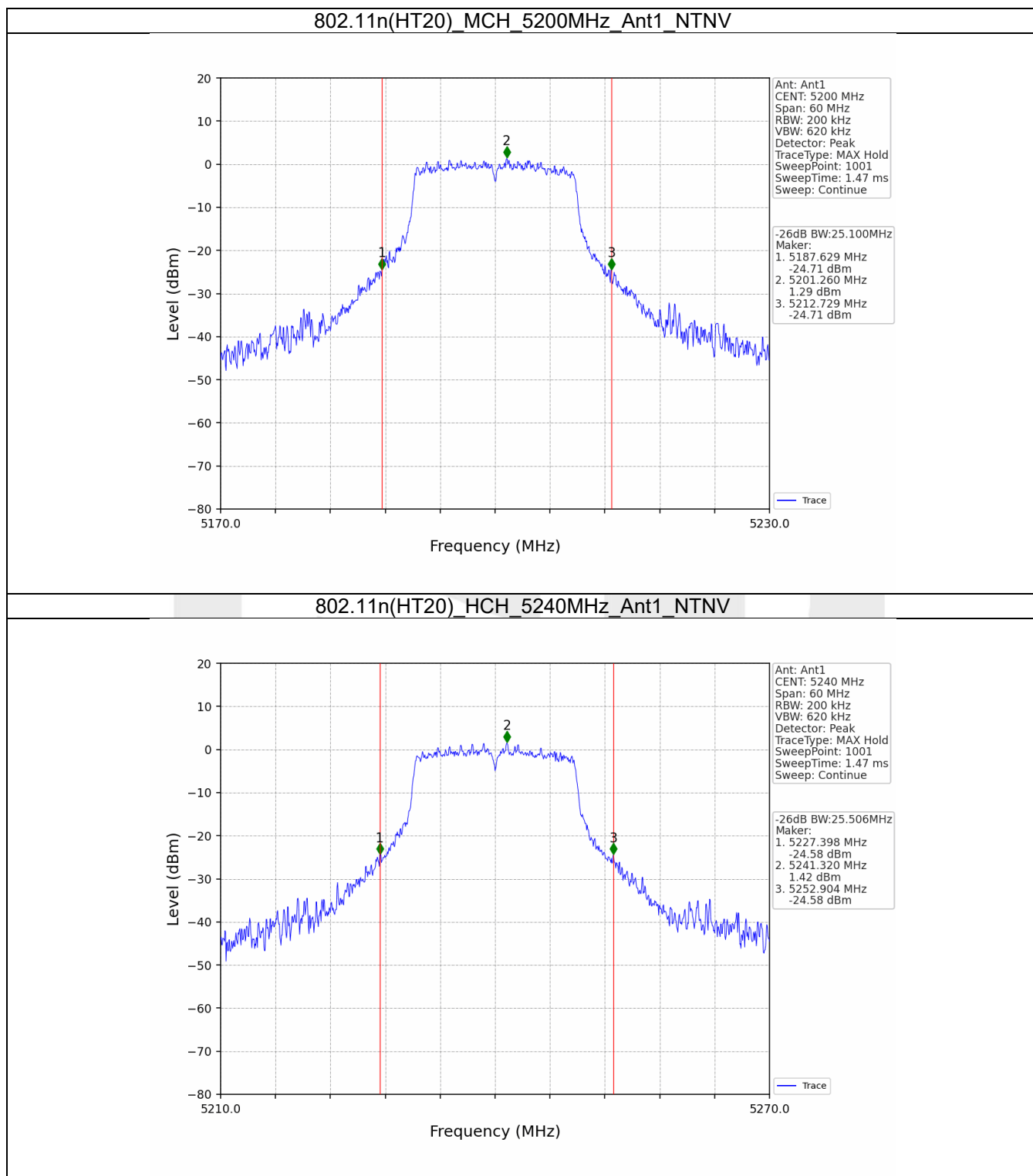
### 2.3.1 Test Result

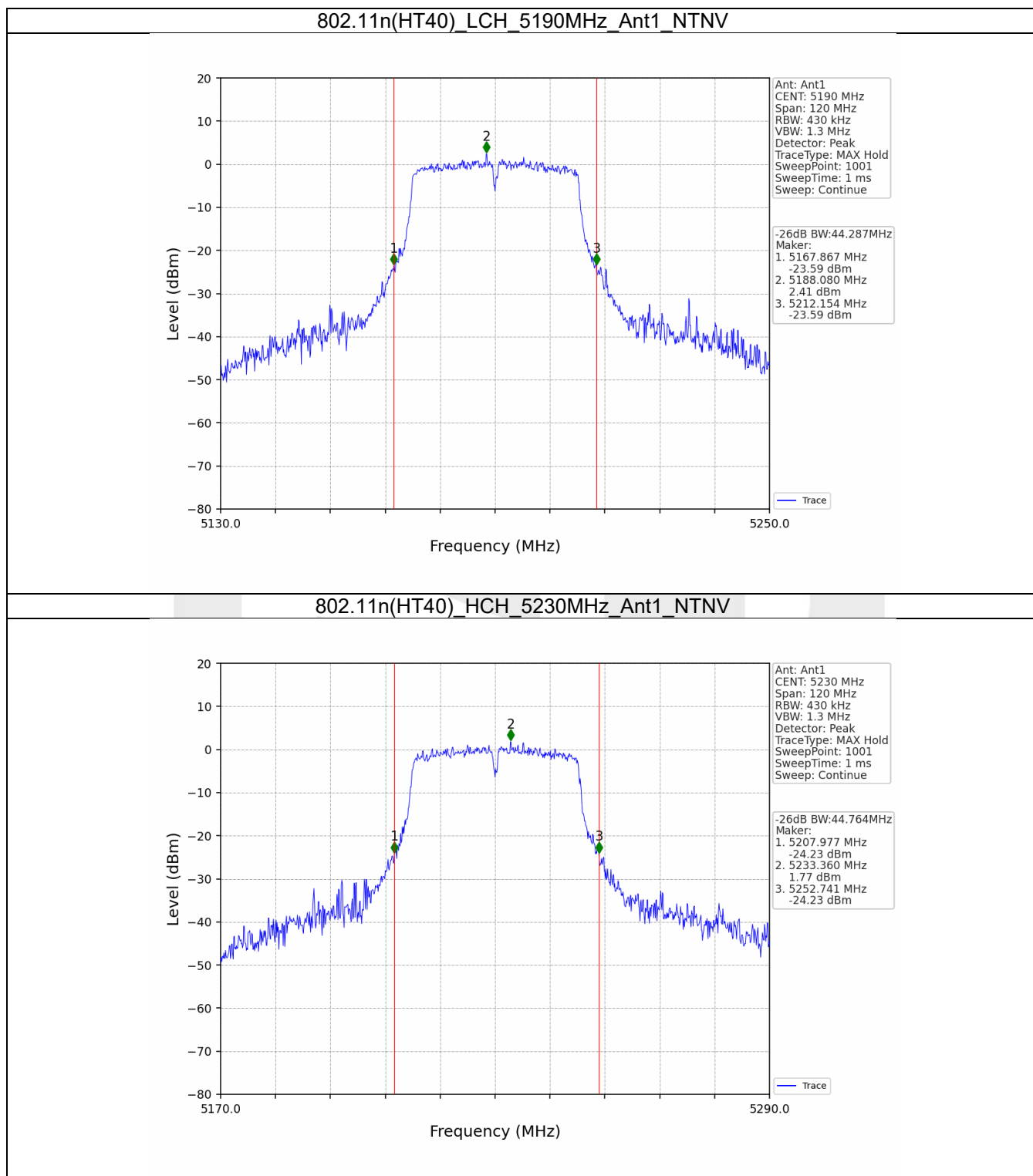
| Mode           | TX Type | Frequency (MHz) | ANT | 26dB Bandwidth (MHz) |       | Verdict |
|----------------|---------|-----------------|-----|----------------------|-------|---------|
|                |         |                 |     | Result               | Limit |         |
| 802.11a        | SISO    | 5180            | 1   | 24.209               | /     | Pass    |
|                |         | 5200            | 1   | 24.478               | /     | Pass    |
|                |         | 5240            | 1   | 23.580               | /     | Pass    |
| 802.11n (HT20) | SISO    | 5180            | 1   | 25.047               | /     | Pass    |
|                |         | 5200            | 1   | 25.100               | /     | Pass    |
|                |         | 5240            | 1   | 25.506               | /     | Pass    |
| 802.11n (HT40) | SISO    | 5190            | 1   | 44.287               | /     | Pass    |
|                |         | 5230            | 1   | 44.764               | /     | Pass    |

### 2.3.2 Test Graph









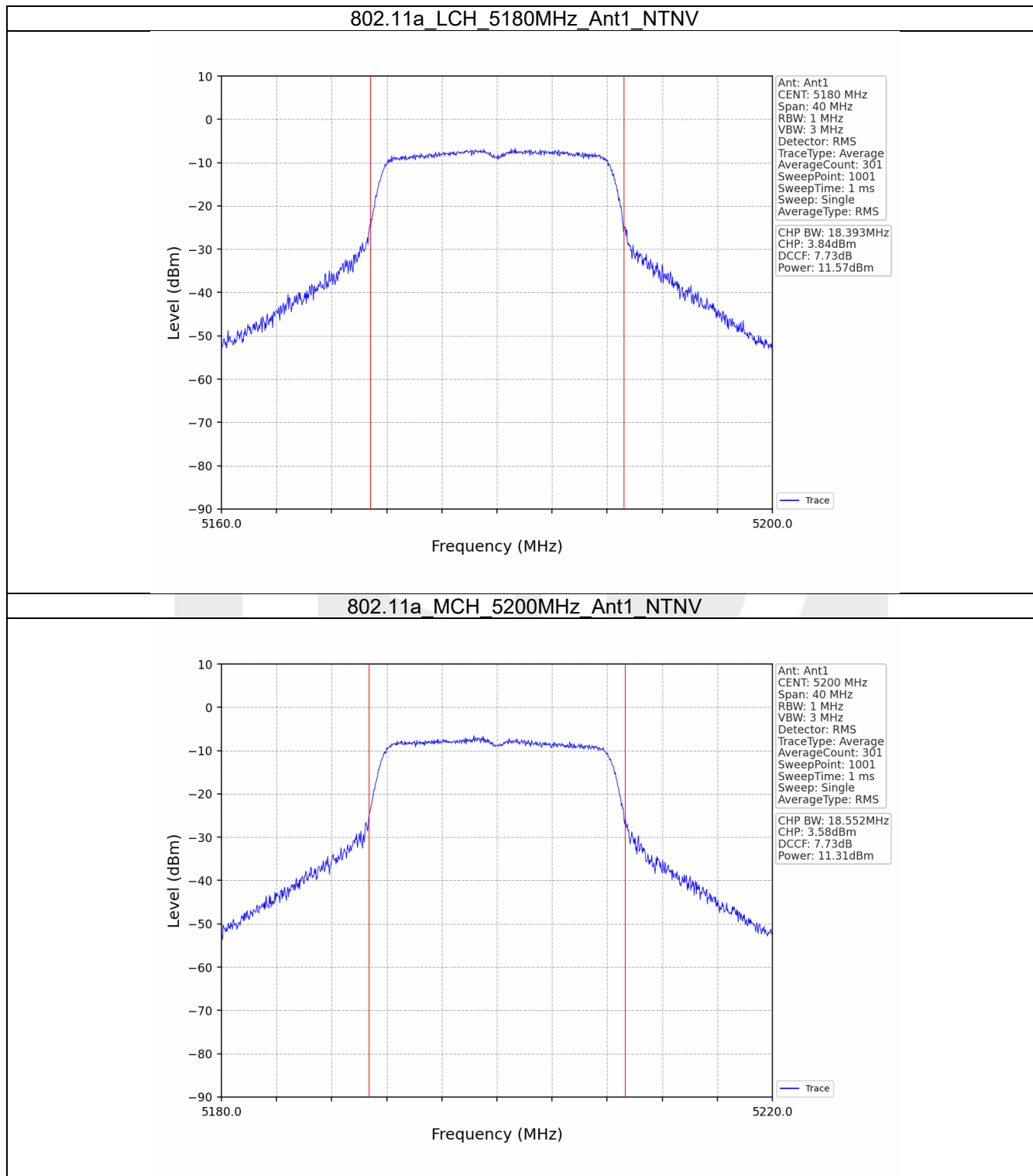
### 3. Maximum Conducted Output Power

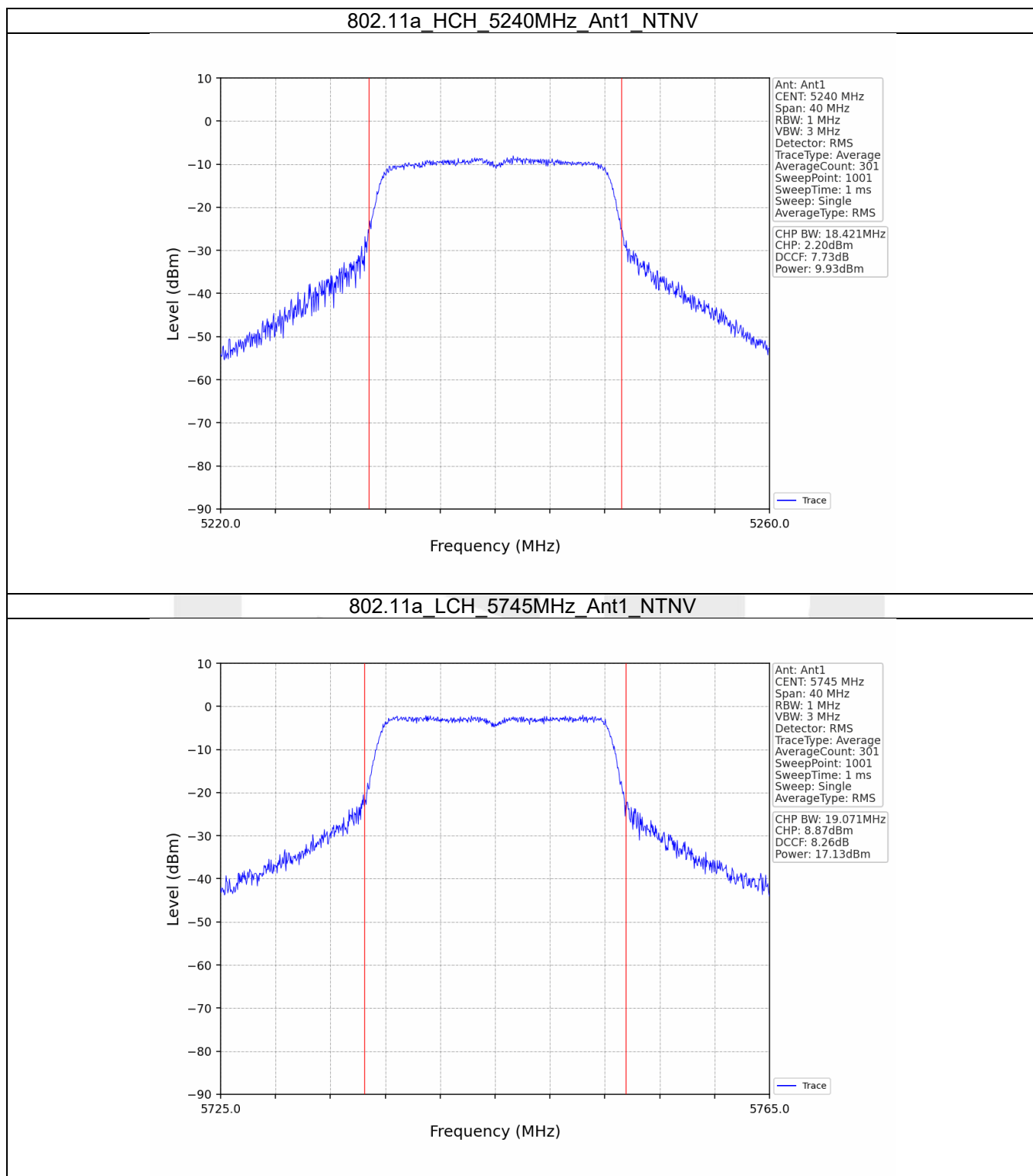
#### 3.1 Power

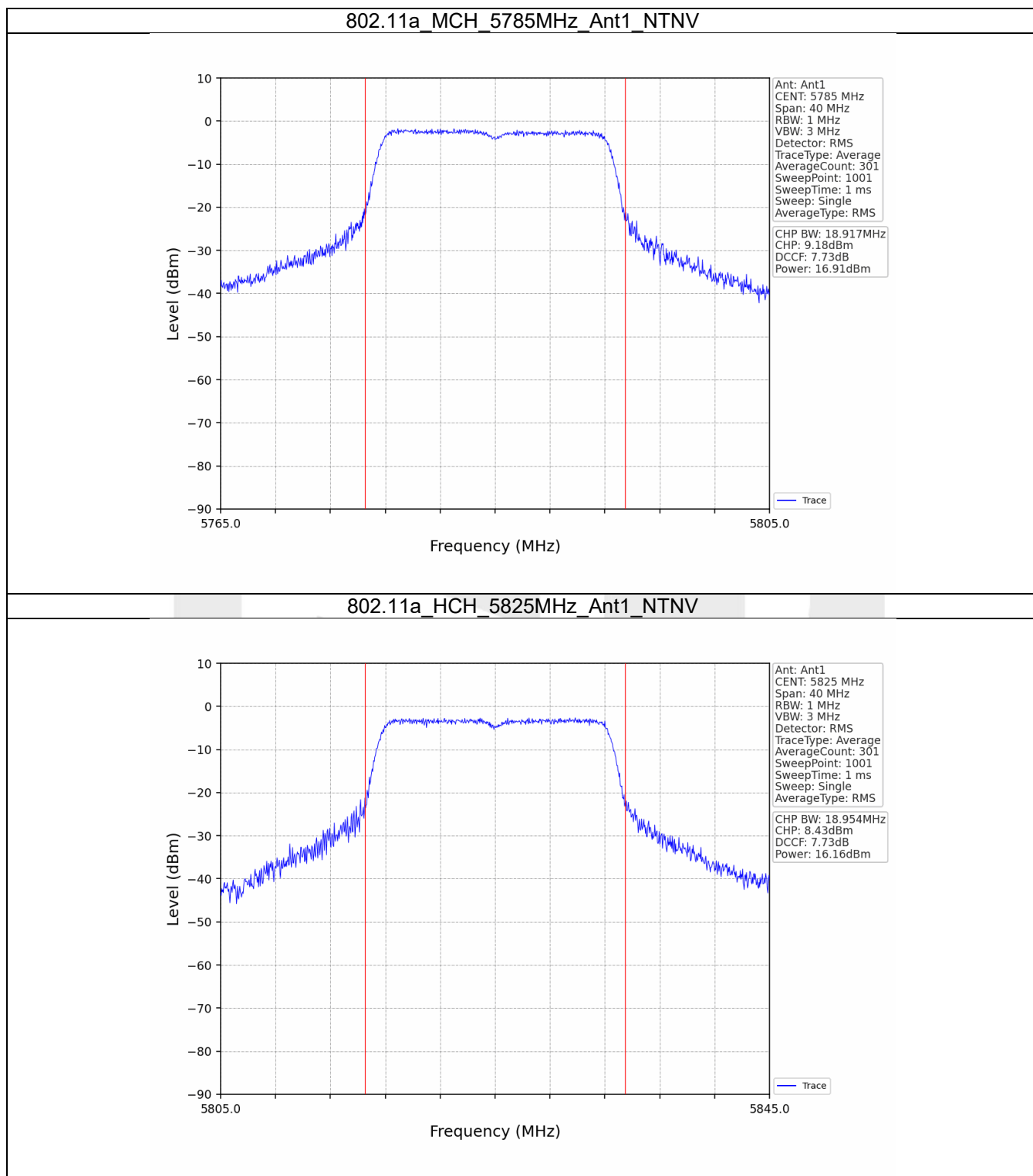
##### 3.1.1 Test Result

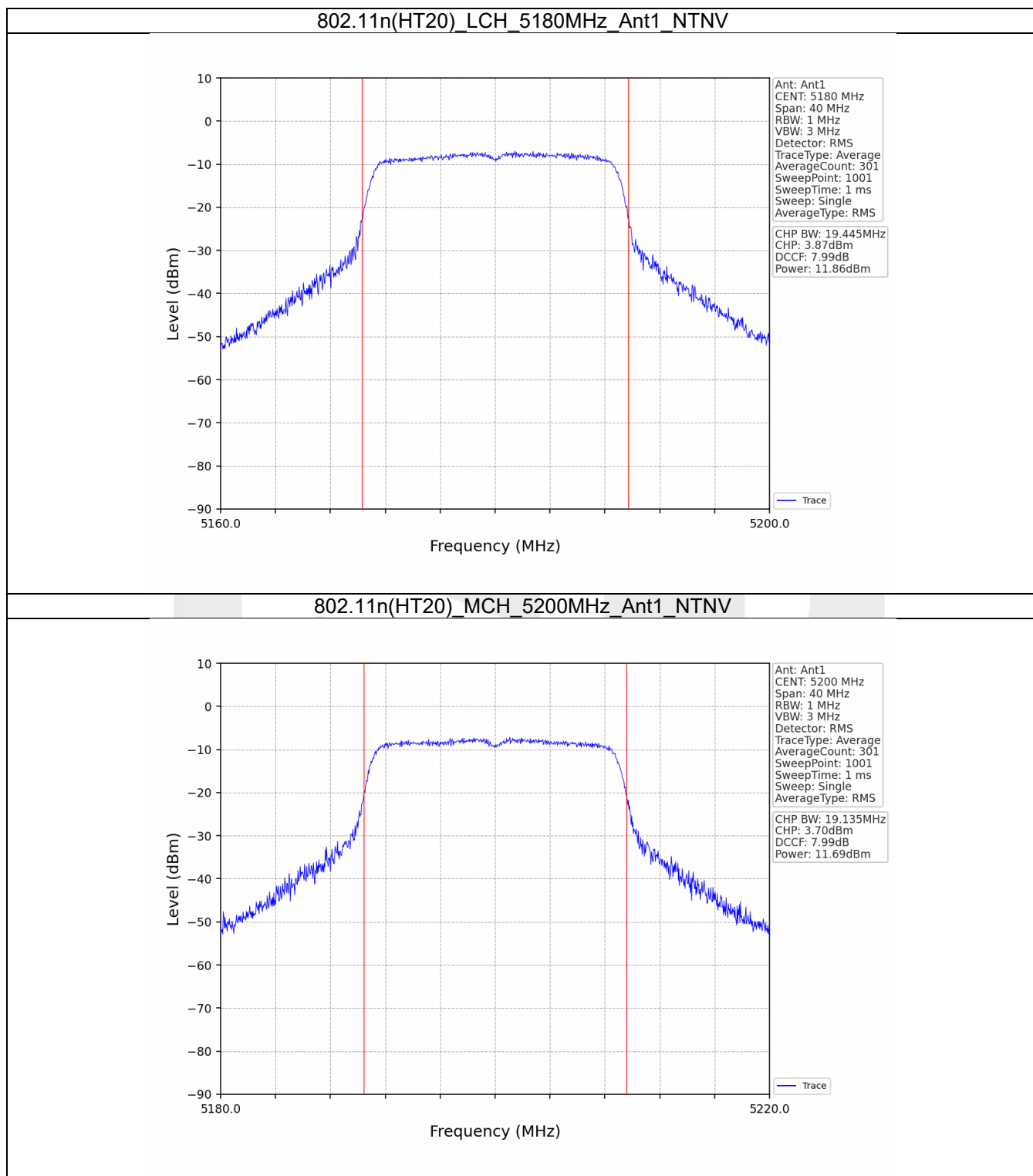
| Mode           | TX Type | Frequency (MHz) | Maximum Average Conducted Output Power (dBm) |              | Verdict |
|----------------|---------|-----------------|----------------------------------------------|--------------|---------|
|                |         |                 | ANT1                                         | Limit        |         |
| 802.11a        | SISO    | 5180            | 11.57                                        | $\leq 23.98$ | Pass    |
|                |         | 5200            | 11.31                                        | $\leq 23.98$ | Pass    |
|                |         | 5240            | 9.93                                         | $\leq 23.98$ | Pass    |
|                |         | 5745            | 17.13                                        | $\leq 30$    | Pass    |
|                |         | 5785            | 16.91                                        | $\leq 30$    | Pass    |
|                |         | 5825            | 16.16                                        | $\leq 30$    | Pass    |
| 802.11n (HT20) | SISO    | 5180            | 11.86                                        | $\leq 23.98$ | Pass    |
|                |         | 5200            | 11.69                                        | $\leq 23.98$ | Pass    |
|                |         | 5240            | 12.37                                        | $\leq 23.98$ | Pass    |
|                |         | 5745            | 14.23                                        | $\leq 30$    | Pass    |
|                |         | 5785            | 12.71                                        | $\leq 30$    | Pass    |
|                |         | 5825            | 12.13                                        | $\leq 30$    | Pass    |
| 802.11n (HT40) | SISO    | 5190            | 11.16                                        | $\leq 23.98$ | Pass    |
|                |         | 5230            | 11.60                                        | $\leq 23.98$ | Pass    |
|                |         | 5755            | 18.18                                        | $\leq 30$    | Pass    |
|                |         | 5795            | 16.43                                        | $\leq 30$    | Pass    |

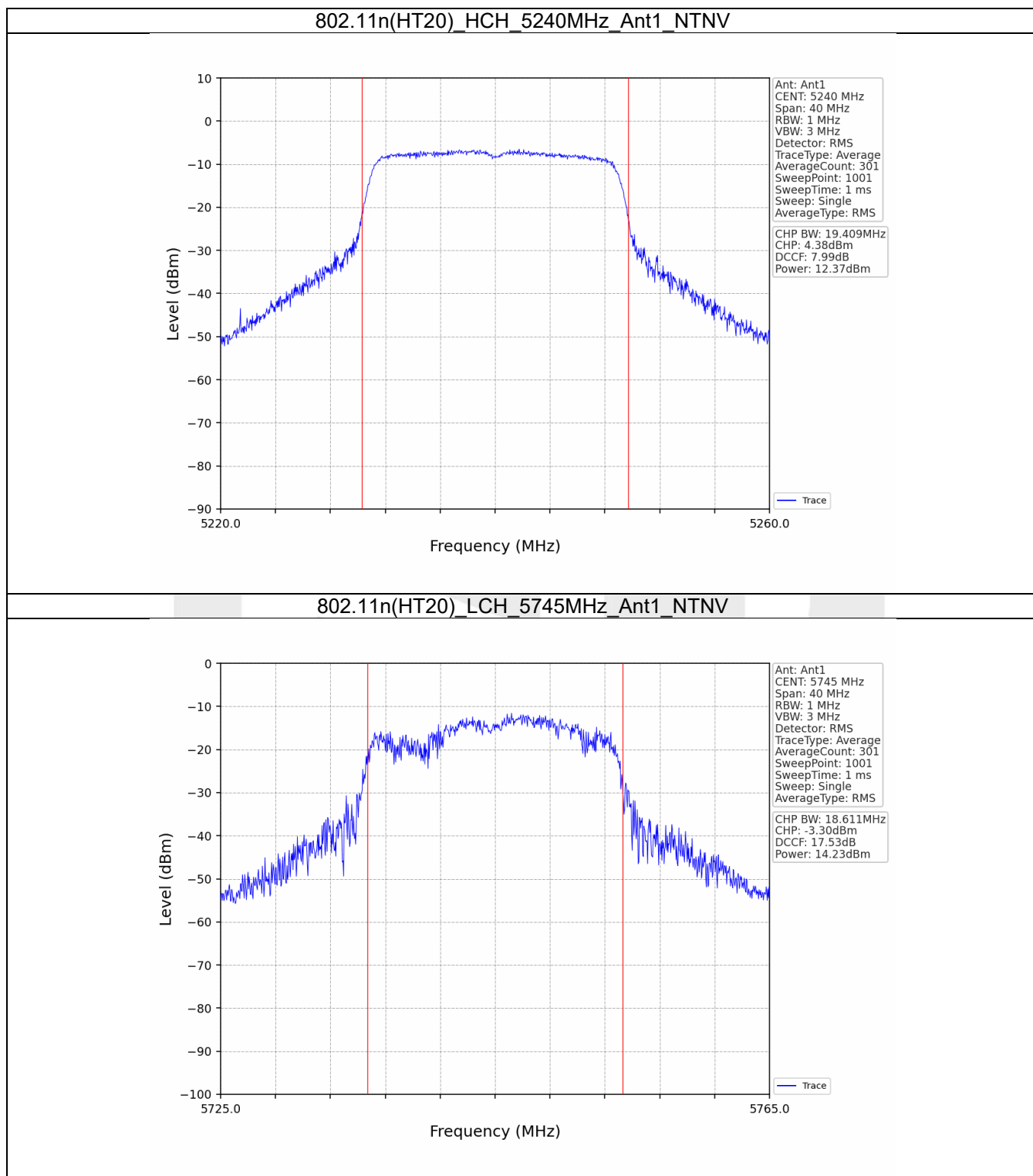
### 3.1.2 Test Graph

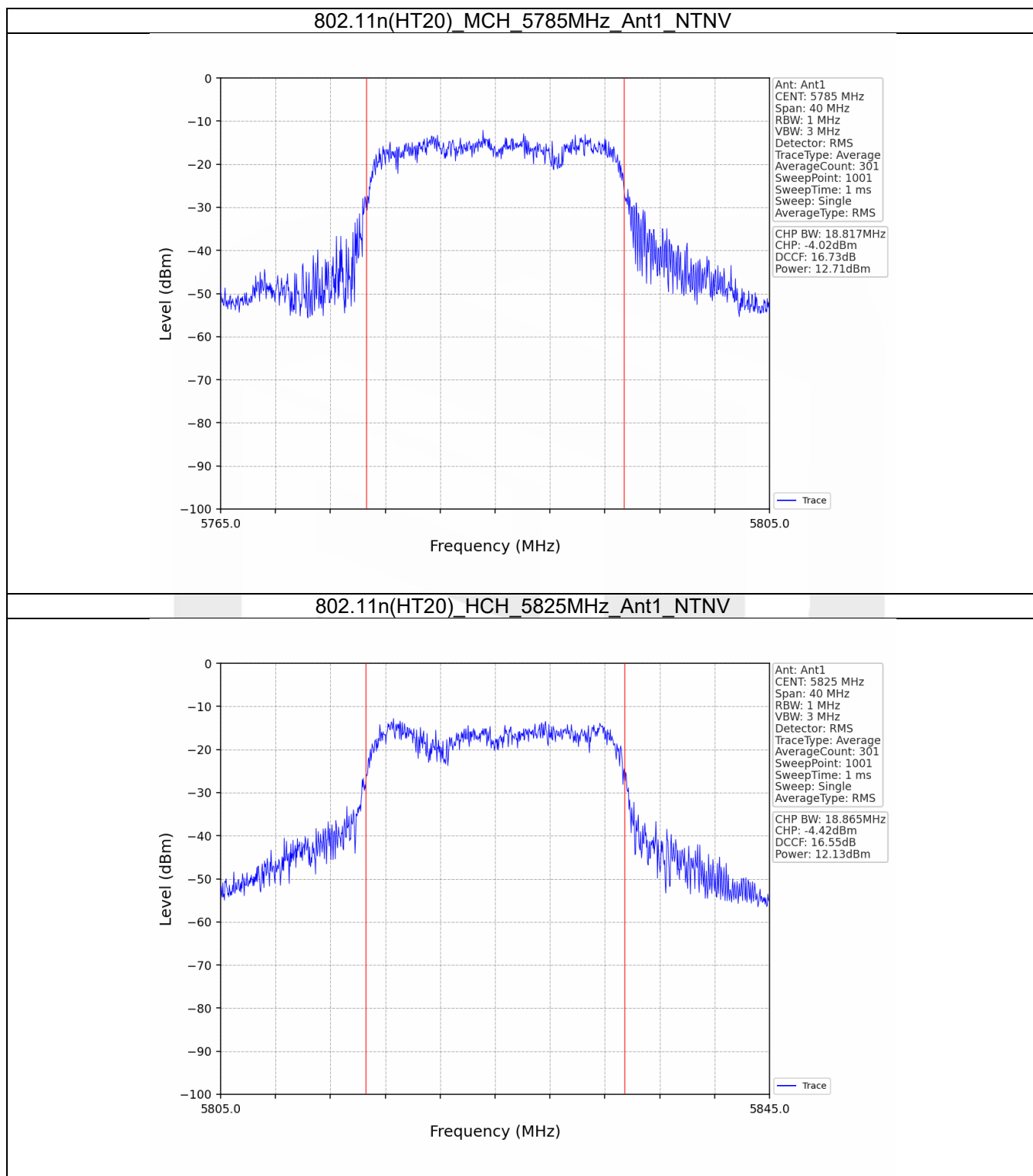


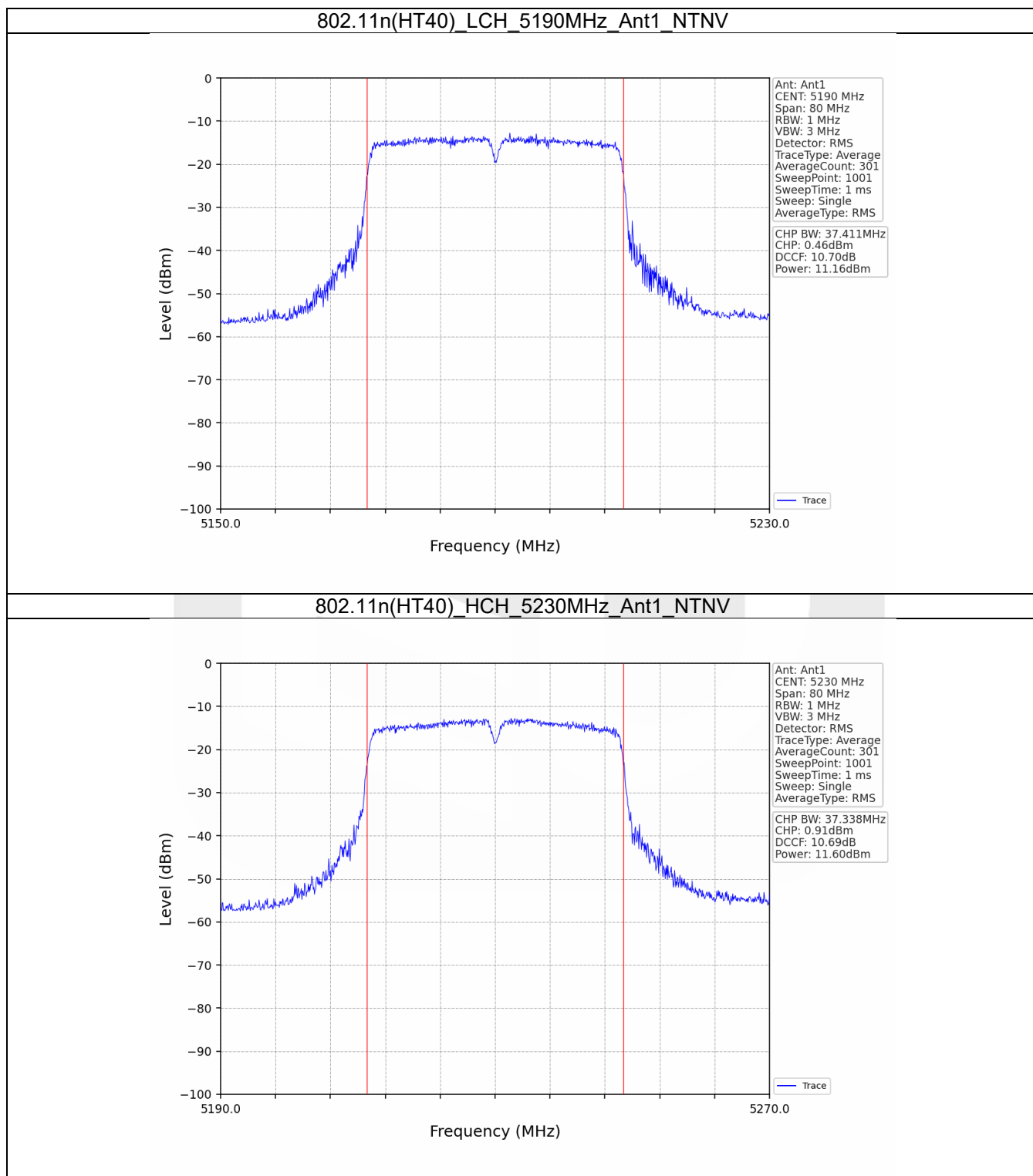


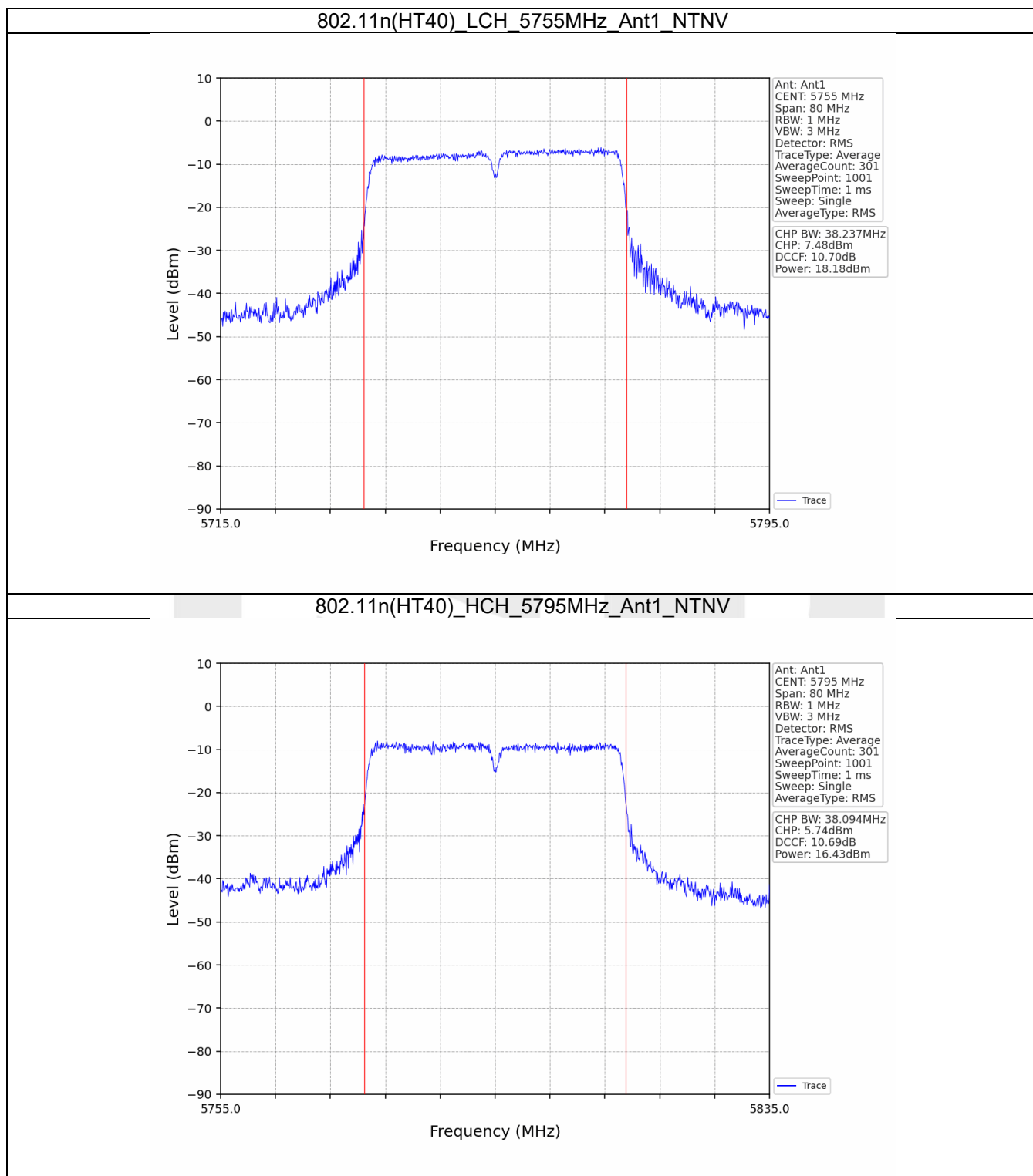












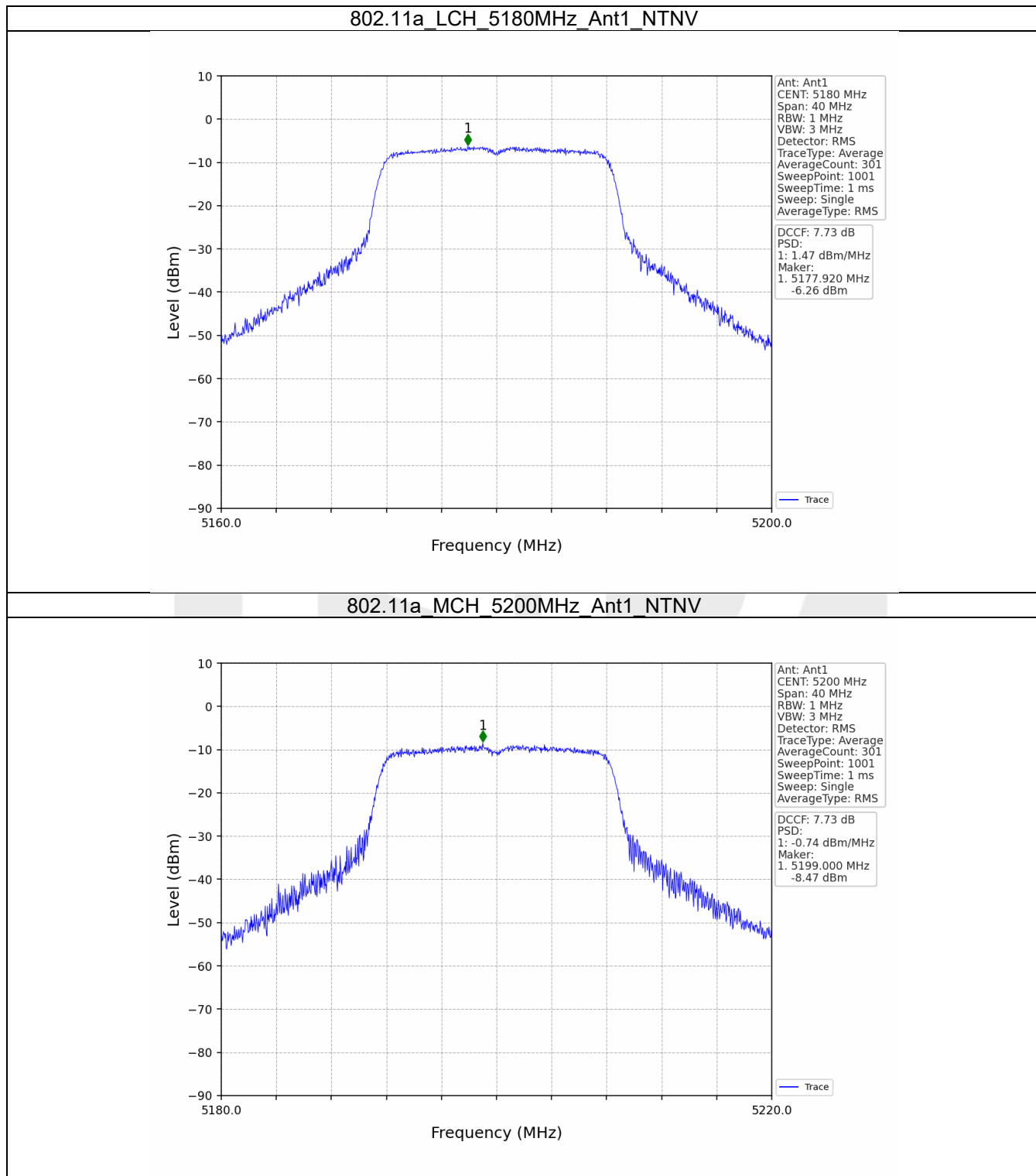
#### 4. Maximum Power Spectral Density

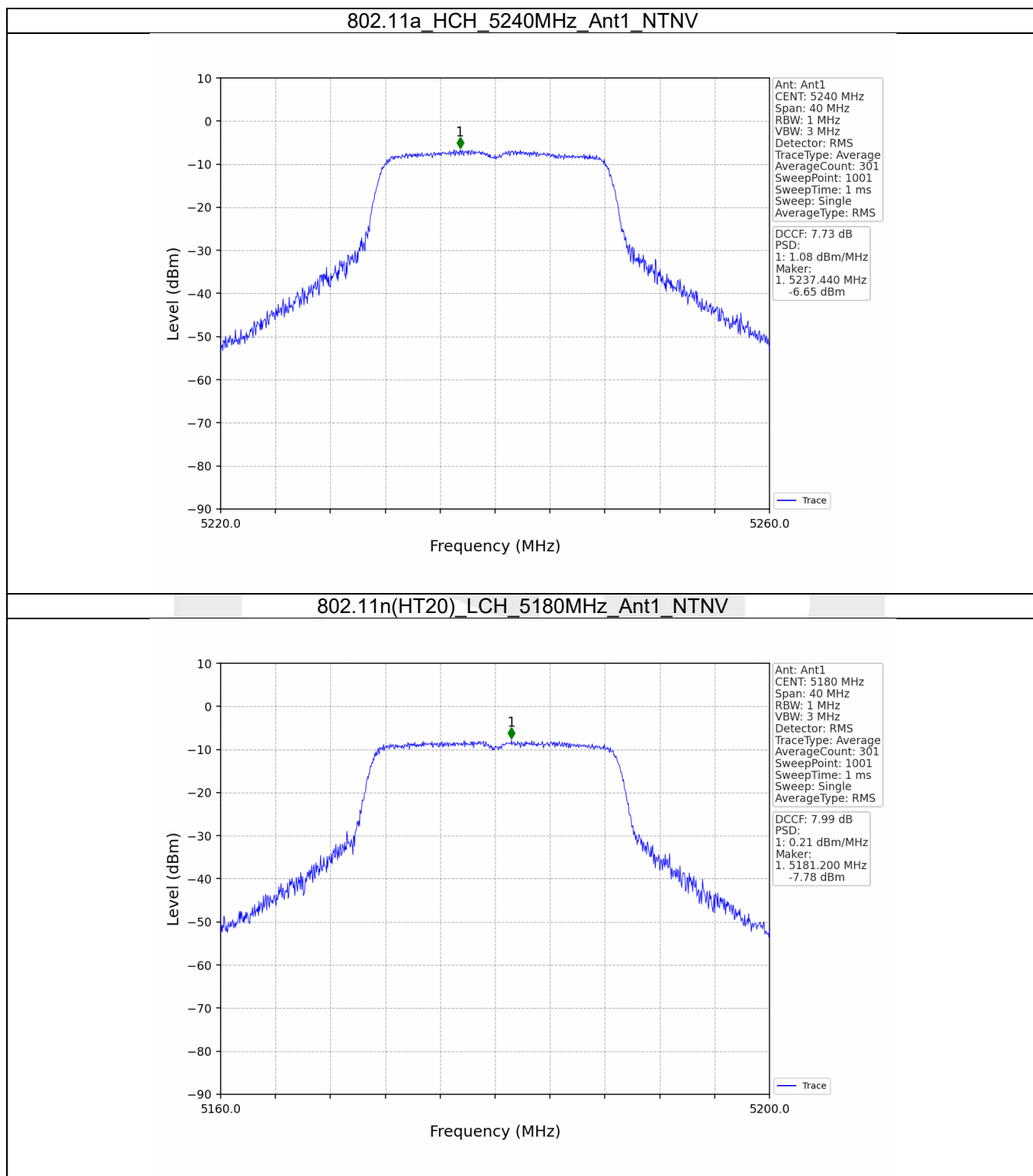
##### 4.1 PSD

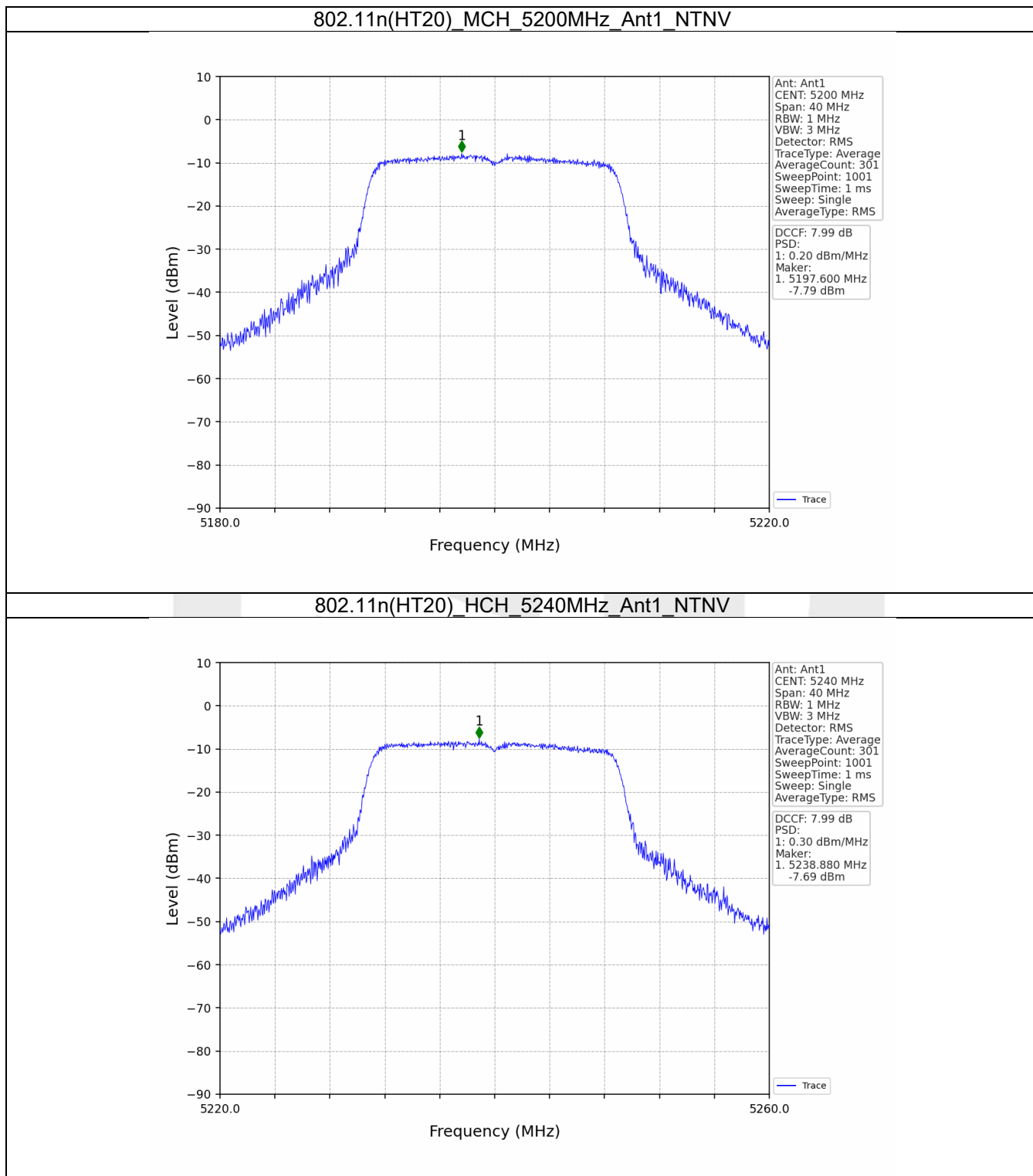
##### 4.1.1 Test Result

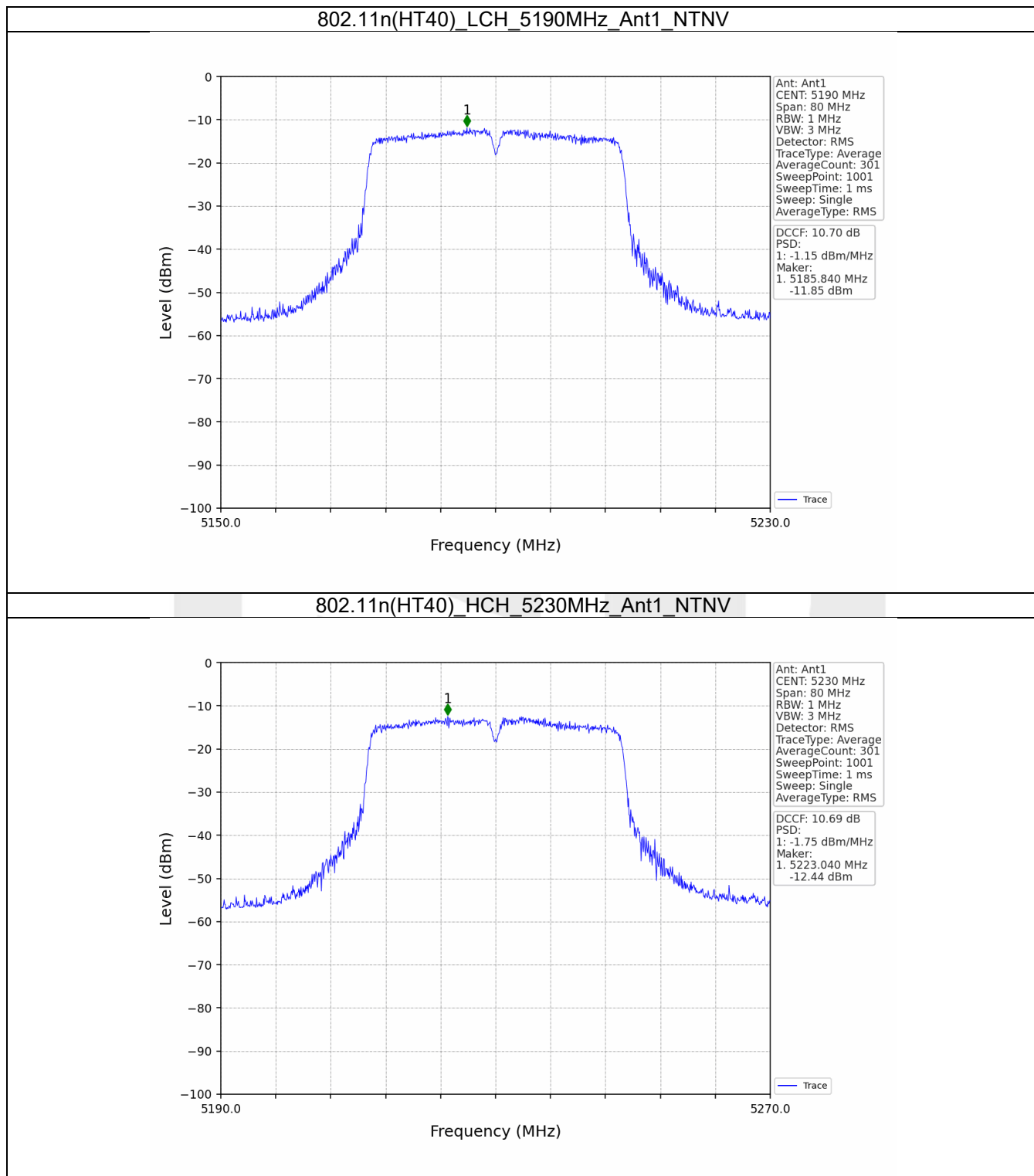
| Mode           | TX Type | Frequency (MHz) | Maximum PSD (dBm/MHz) |           | Verdict |
|----------------|---------|-----------------|-----------------------|-----------|---------|
|                |         |                 | ANT1                  | Limit     |         |
| 802.11a        | SISO    | 5180            | 1.47                  | $\leq 11$ | Pass    |
|                |         | 5200            | -0.74                 | $\leq 11$ | Pass    |
|                |         | 5240            | 1.08                  | $\leq 11$ | Pass    |
| 802.11n (HT20) | SISO    | 5180            | 0.21                  | $\leq 11$ | Pass    |
|                |         | 5200            | 0.20                  | $\leq 11$ | Pass    |
|                |         | 5240            | 0.30                  | $\leq 11$ | Pass    |
| 802.11n (HT40) | SISO    | 5190            | -1.15                 | $\leq 11$ | Pass    |
|                |         | 5230            | -1.75                 | $\leq 11$ | Pass    |

#### 4.1.2 Test Graph







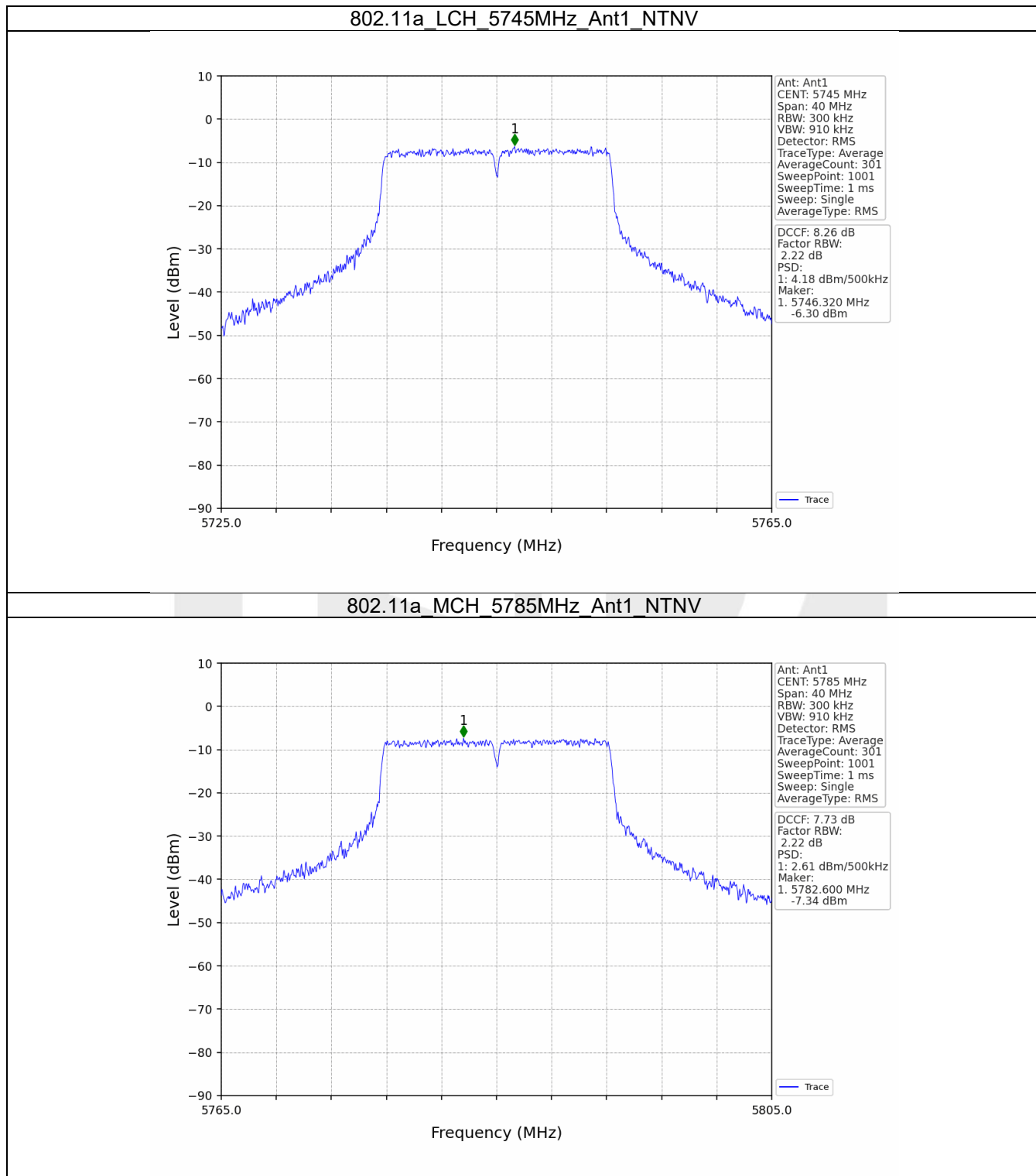


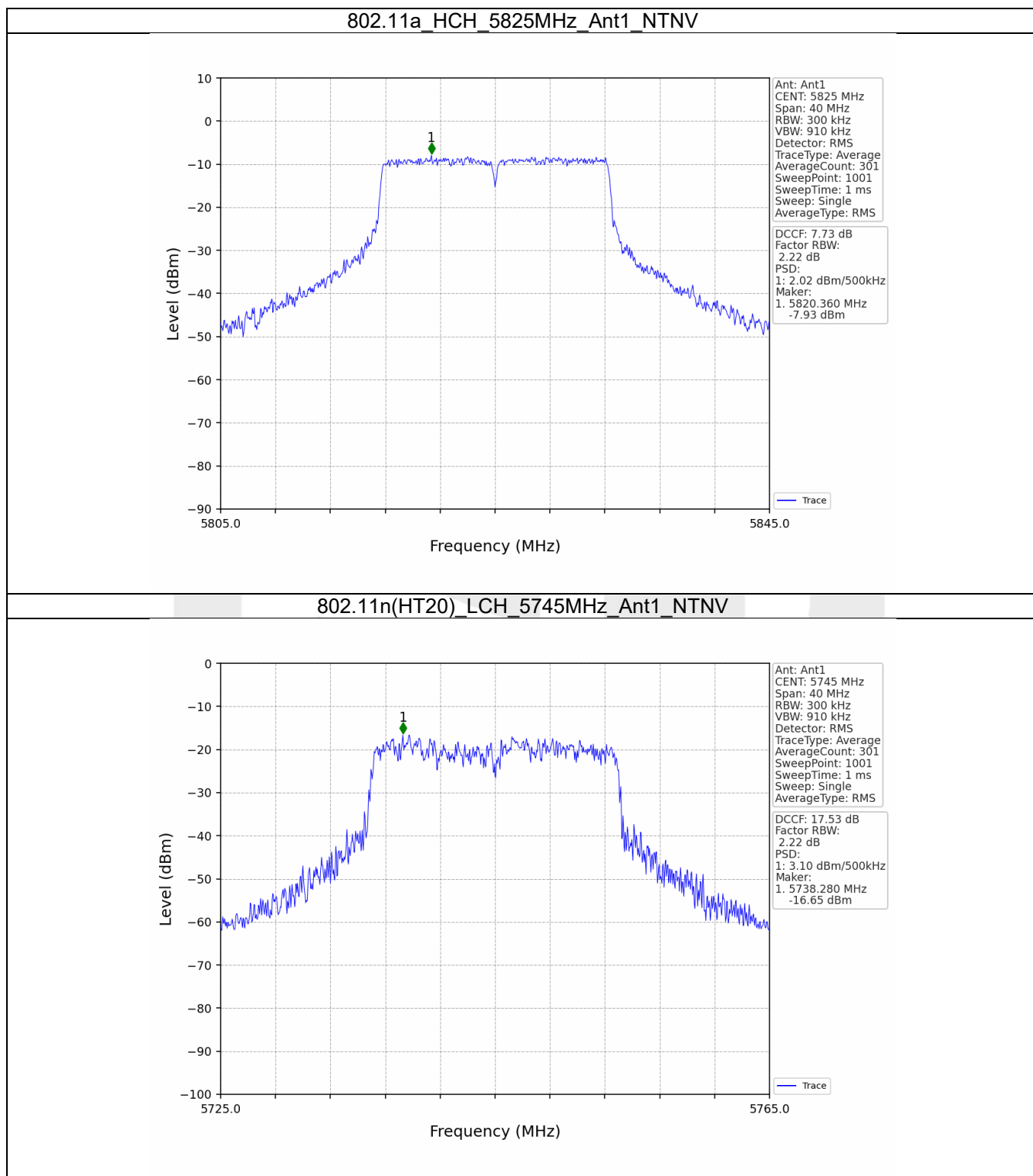
## 4.2 PSD-Band3

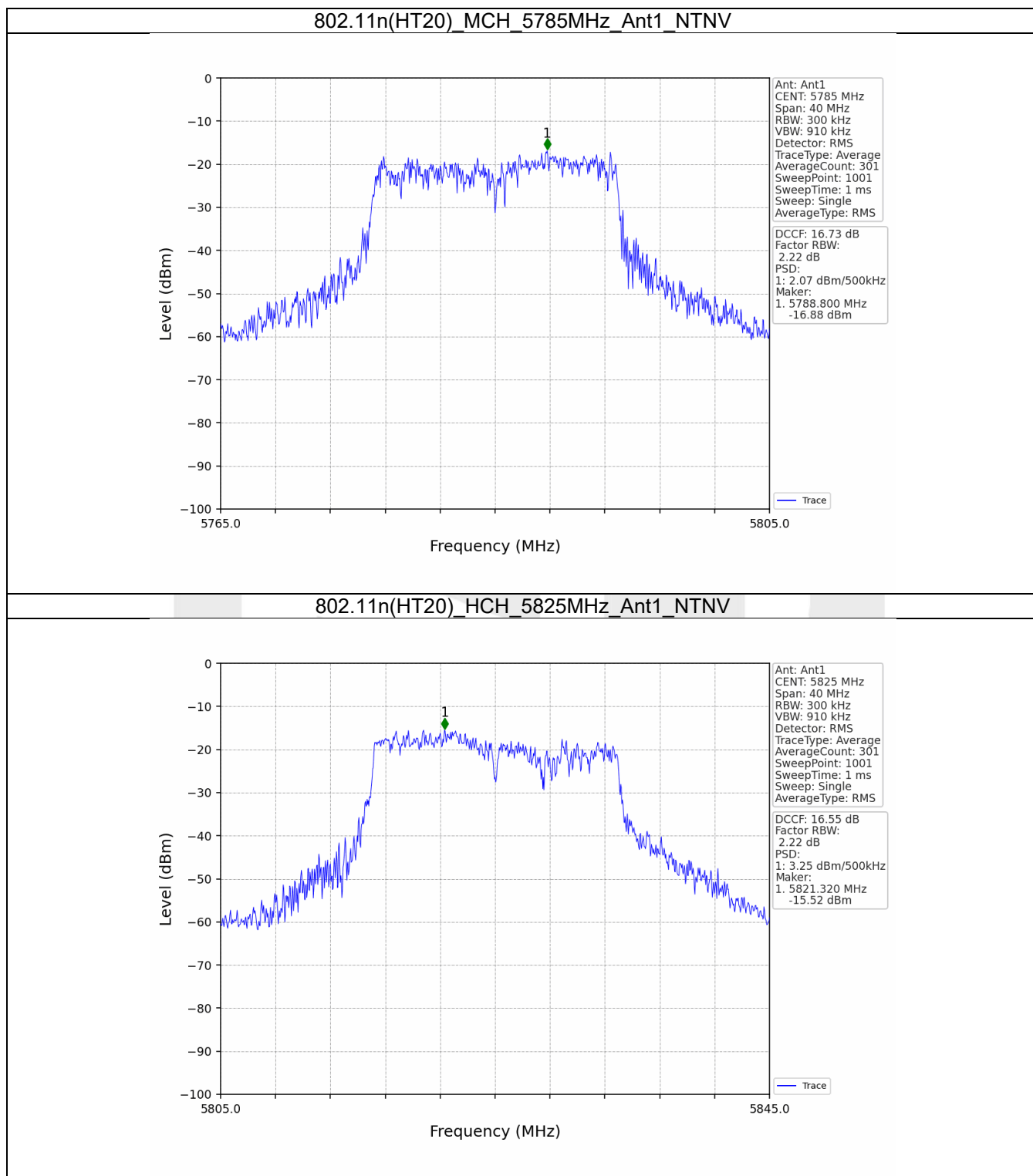
### 4.2.1 Test Result

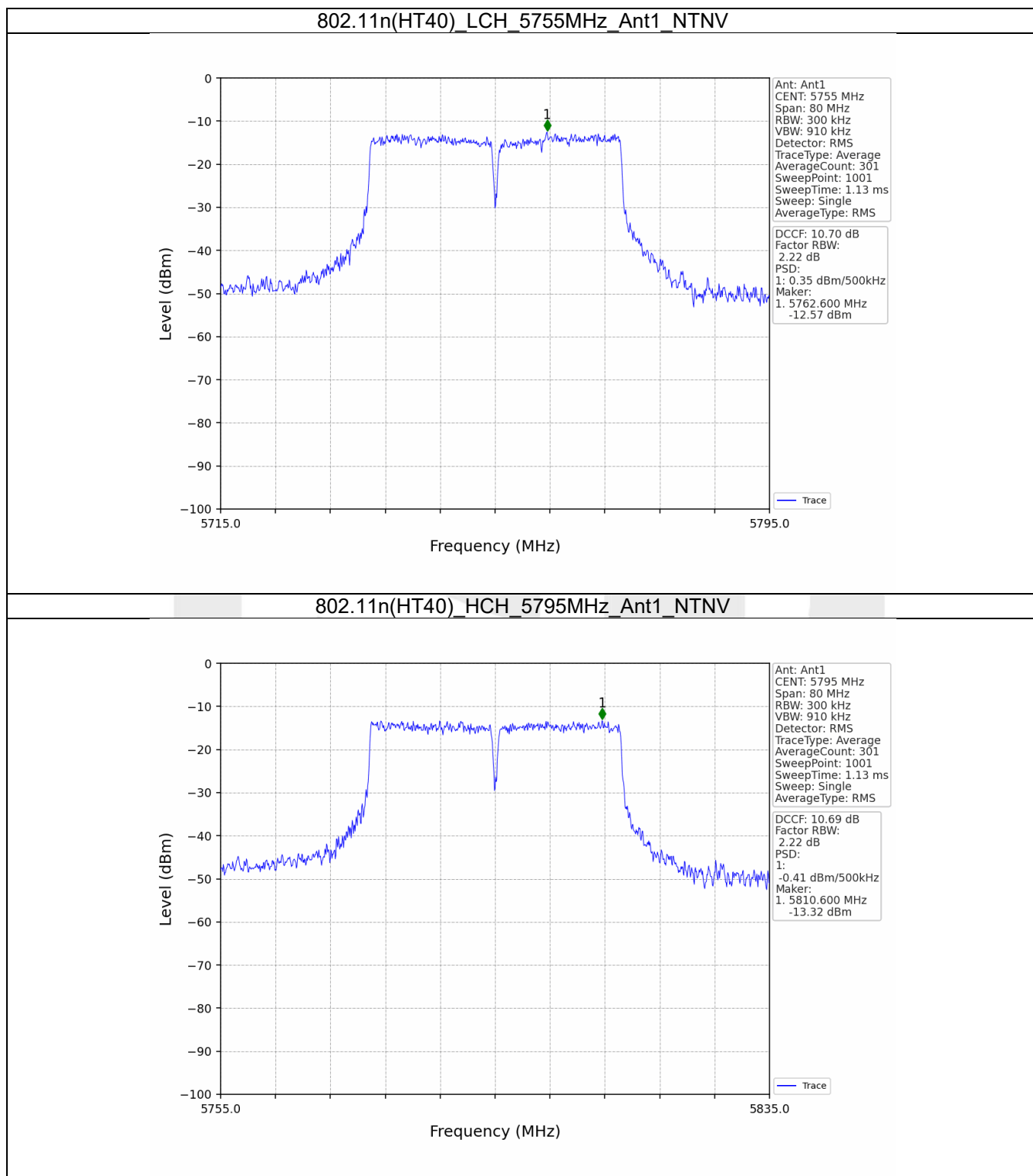
| Mode           | TX Type | Frequency (MHz) | Maximum PSD (dBm/500kHz) |       | Verdict |
|----------------|---------|-----------------|--------------------------|-------|---------|
|                |         |                 | ANT1                     | Limit |         |
| 802.11a        | SISO    | 5745            | 4.18                     | <=30  | Pass    |
|                |         | 5785            | 2.61                     | <=30  | Pass    |
|                |         | 5825            | 2.02                     | <=30  | Pass    |
| 802.11n (HT20) | SISO    | 5745            | 3.10                     | <=30  | Pass    |
|                |         | 5785            | 2.07                     | <=30  | Pass    |
|                |         | 5825            | 3.25                     | <=30  | Pass    |
| 802.11n (HT40) | SISO    | 5755            | 0.35                     | <=30  | Pass    |
|                |         | 5795            | -0.41                    | <=30  | Pass    |

#### 4.2.2 Test Graph









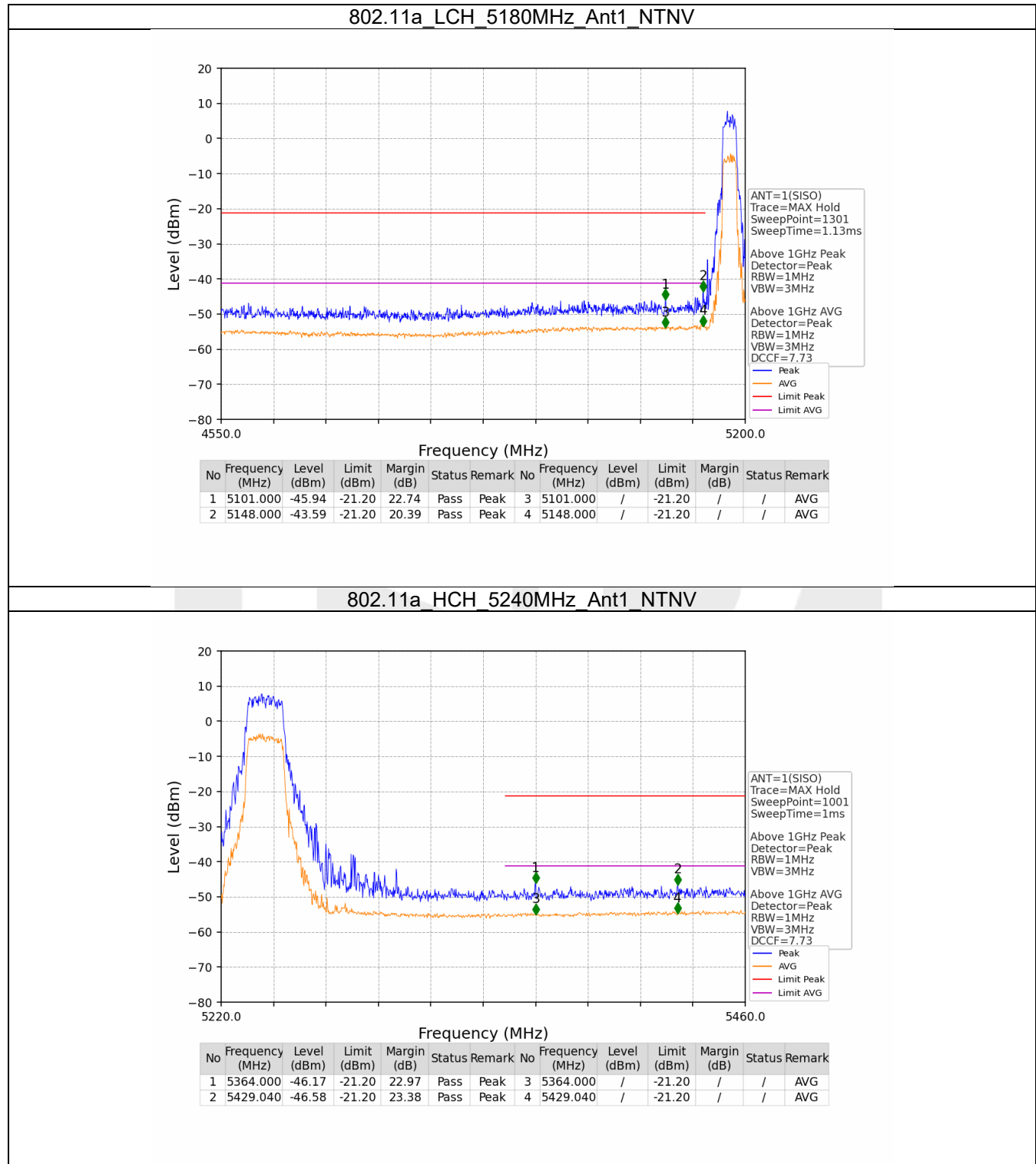
## 5. Unwanted Emissions In Restricted Frequency Bands

### 5.1 RSE

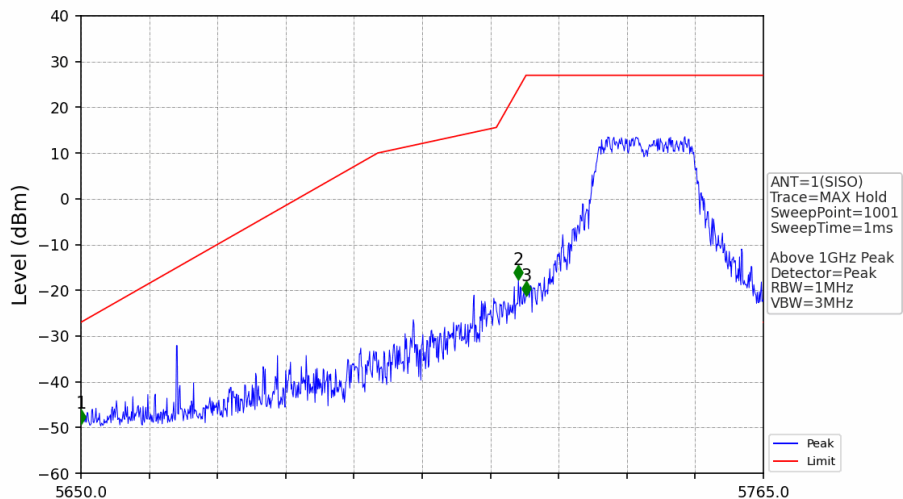
#### 5.1.1 Test Result

| Mode           | TX Type | Frequency (MHz) | ANT | Level of Unwanted Emissions (dBm) |       | Verdict |
|----------------|---------|-----------------|-----|-----------------------------------|-------|---------|
|                |         |                 |     | Result                            | Limit |         |
| 802.11a        | SISO    | 5180            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5240            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5745            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5825            | 1   | Refer To Test Graph               |       | Pass    |
| 802.11n (HT20) | SISO    | 5180            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5240            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5745            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5825            | 1   | Refer To Test Graph               |       | Pass    |
| 802.11n (HT40) | SISO    | 5190            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5230            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5755            | 1   | Refer To Test Graph               |       | Pass    |
|                |         | 5795            | 1   | Refer To Test Graph               |       | Pass    |

### 5.1.2 Test Graph

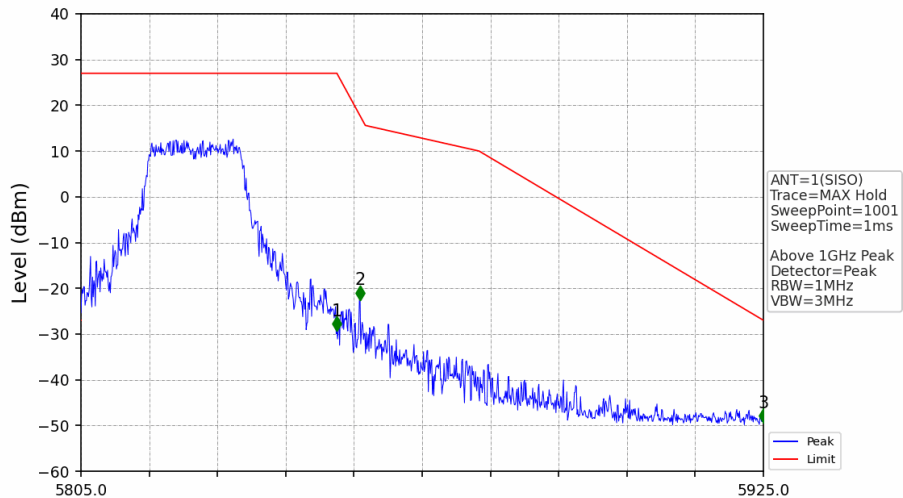


### 802.11a\_LCH\_5745MHz\_Ant1\_NTNV



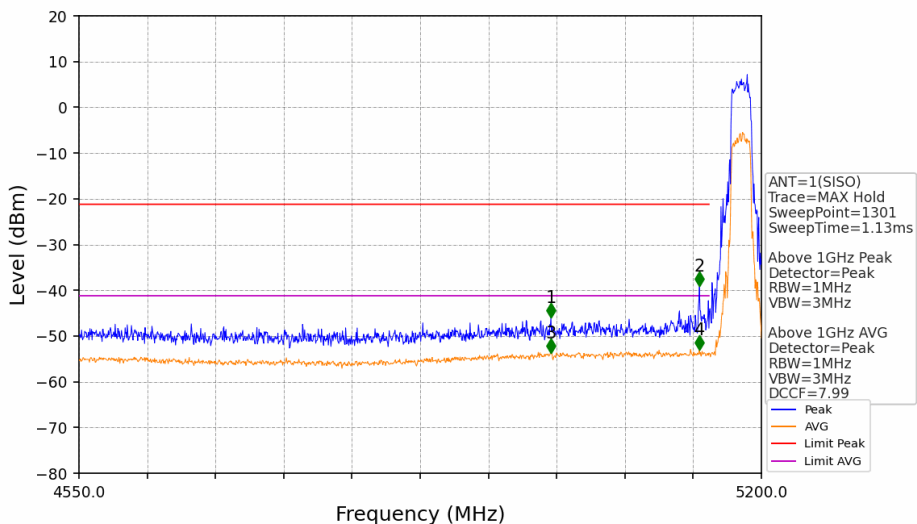
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5650.000        | -49.16      | -27.00      | 20.16       | Pass   | Peak   | 3  | 5725.000        | -21.21      | 27.00       | 46.21       | Pass   | Peak   |
| 2  | 5723.715        | -17.75      | 24.07       | 39.81       | Pass   | Peak   |    |                 |             |             |             |        |        |

### 802.11a\_HCH\_5825MHz\_Ant1\_NTNV



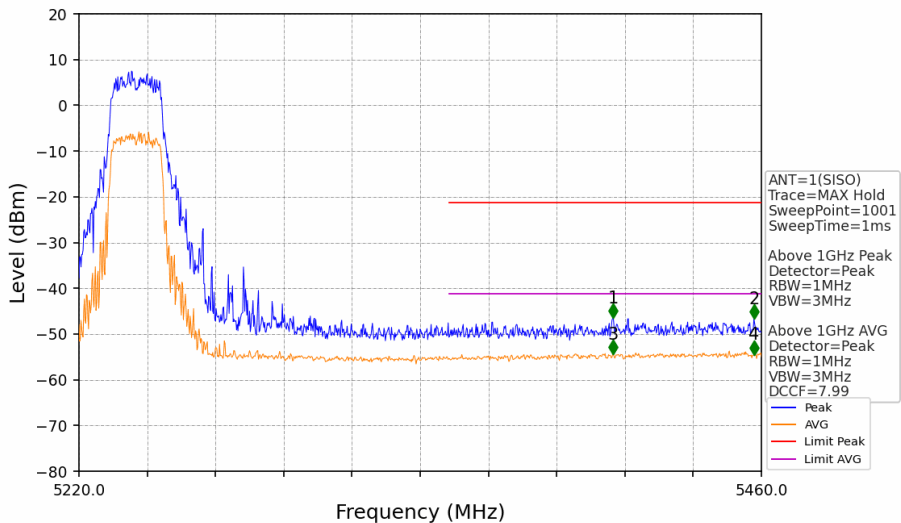
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5850.000        | -29.37      | 27.00       | 54.37       | Pass   | Peak   | 3  | 5925.000        | -49.42      | -27.00      | 20.42       | Pass   | Peak   |
| 2  | 5854.080        | -22.54      | 17.70       | 38.24       | Pass   | Peak   |    |                 |             |             |             |        |        |

### 802.11n(HT20)\_LCH\_5180MHz\_Ant1\_NTNV



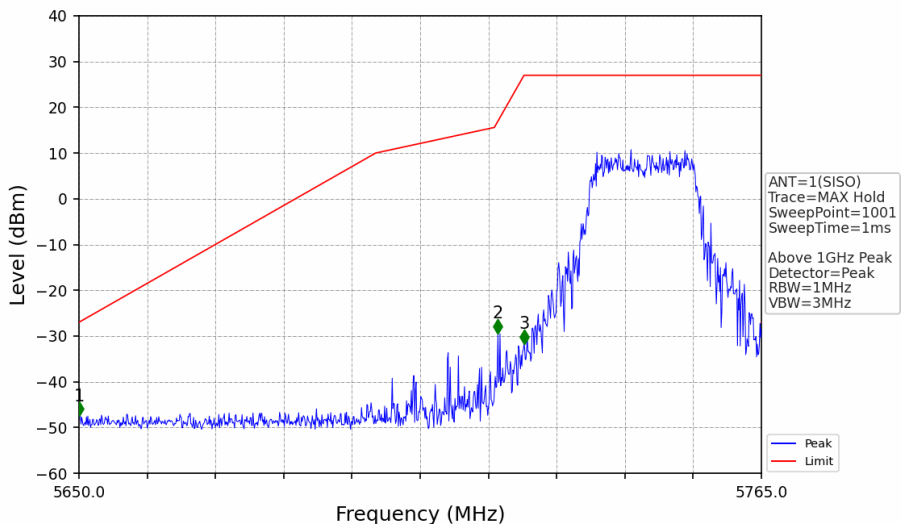
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 4999.500        | -45.98      | -21.20      | 22.78       | Pass   | Peak   | 3  | 4999.500        | /           | -21.20      | /           | /      | AVG    |
| 2  | 5141.000        | -39.16      | -21.20      | 15.96       | Pass   | Peak   | 4  | 5141.000        | /           | -21.20      | /           | /      | AVG    |

### 802.11n(HT20)\_HCH\_5240MHz\_Ant1\_NTNV



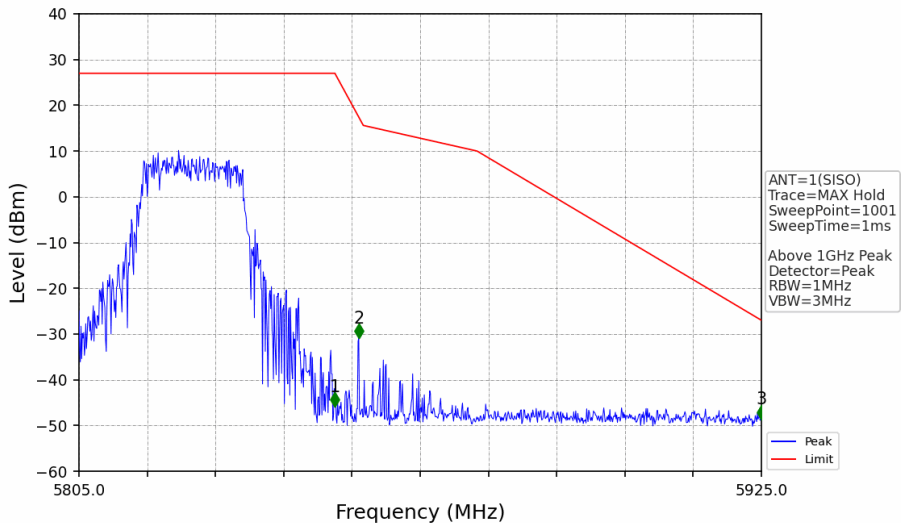
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5407.920        | -46.49      | -21.20      | 23.29       | Pass   | Peak   | 3  | 5407.920        | /           | -21.20      | /           | /      | AVG    |
| 2  | 5457.360        | -46.71      | -21.20      | 23.51       | Pass   | Peak   | 4  | 5457.360        | /           | -21.20      | /           | /      | AVG    |

802.11n(HT20)\_LCH\_5745MHz\_Ant1\_NTNV



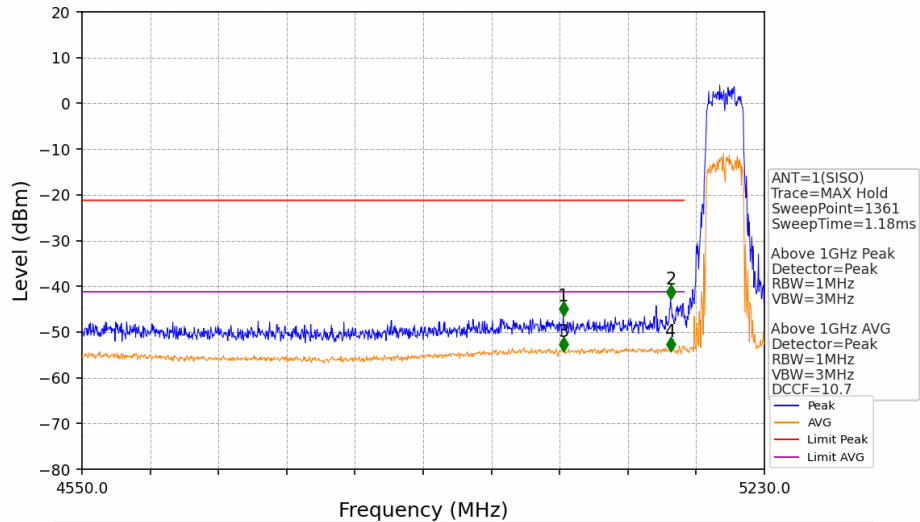
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5650.000        | -47.51      | -27.00      | 18.51       | Pass   | Peak   | 3  | 5725.000        | -31.72      | 27.00       | 56.72       | Pass   | Peak   |
| 2  | 5720.610        | -29.41      | 16.99       | 44.40       | Pass   | Peak   |    |                 |             |             |             |        |        |

802.11n(HT20)\_HCH\_5825MHz\_Ant1\_NTNV



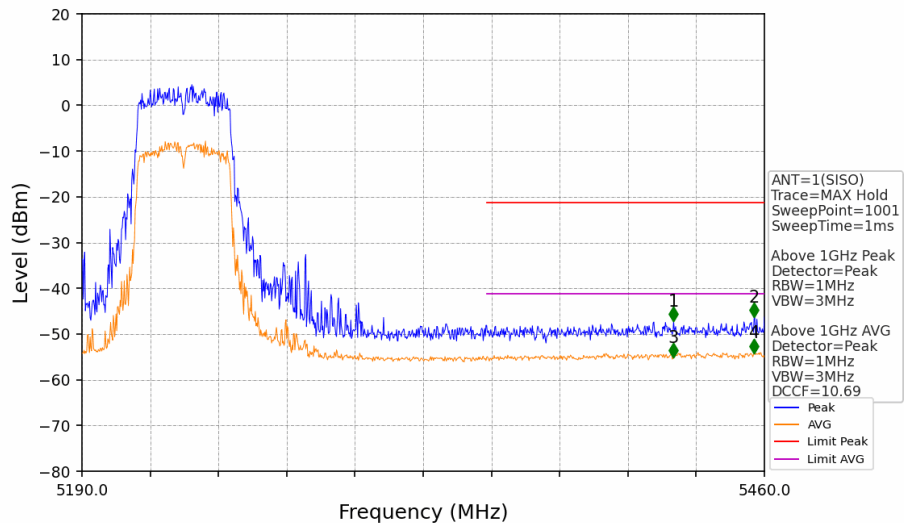
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5850.000        | -45.92      | 27.00       | 70.92       | Pass   | Peak   | 3  | 5925.000        | -48.64      | -27.00      | 19.64       | Pass   | Peak   |
| 2  | 5854.200        | -30.86      | 17.42       | 46.29       | Pass   | Peak   |    |                 |             |             |             |        |        |

802.11n(HT40)\_LCH\_5190MHz\_Ant1\_NTNV



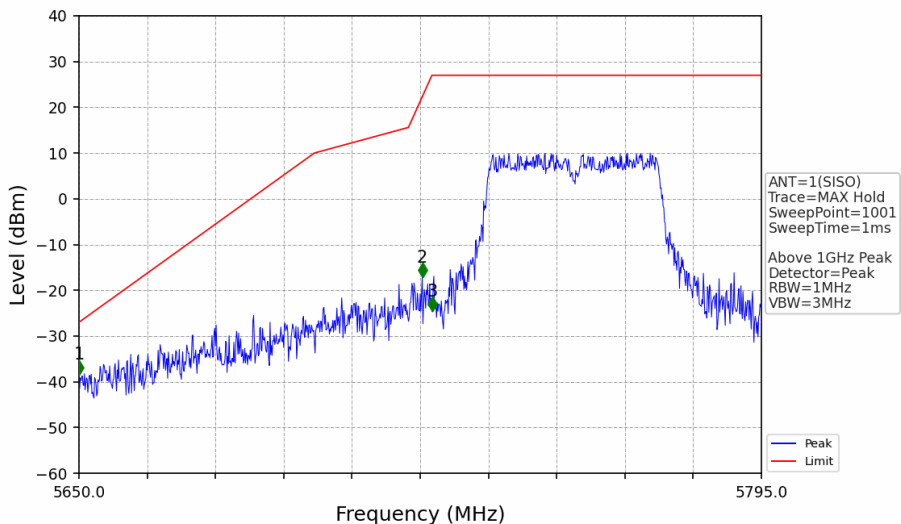
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5029.500        | -46.56      | -21.20      | 23.36       | Pass   | Peak   | 3  | 5029.500        | /           | -21.20      | /           | /      | AVG    |
| 2  | 5136.500        | -42.78      | -21.20      | 19.58       | Pass   | Peak   | 4  | 5136.500        | /           | -21.20      | /           | /      | AVG    |

802.11n(HT40)\_HCH\_5230MHz\_Ant1\_NTNV



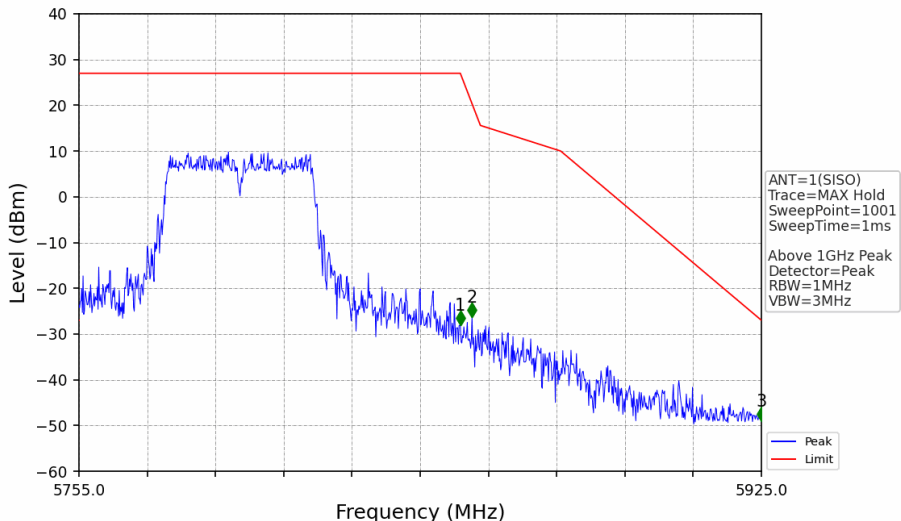
| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5424.090        | -47.27      | -21.20      | 24.07       | Pass   | Peak   | 3  | 5424.090        | /           | -21.20      | /           | /      | AVG    |
| 2  | 5455.950        | -46.28      | -21.20      | 23.08       | Pass   | Peak   | 4  | 5455.950        | /           | -21.20      | /           | /      | AVG    |

### 802.11n(HT40)\_LCH\_5755MHz\_Ant1\_NTNV



| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5650.000        | -38.40      | -27.00      | 9.40        | Pass   | Peak   | 3  | 5725.000        | -24.54      | 27.00       | 49.54       | Pass   | Peak   |
| 2  | 5722.935        | -17.09      | 22.29       | 37.38       | Pass   | Peak   |    |                 |             |             |             |        |        |

### 802.11n(HT40)\_HCH\_5795MHz\_Ant1\_NTNV



| No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark | No | Frequency (MHz) | Level (dBm) | Limit (dBm) | Margin (dB) | Status | Remark |
|----|-----------------|-------------|-------------|-------------|--------|--------|----|-----------------|-------------|-------------|-------------|--------|--------|
| 1  | 5850.000        | -28.02      | 27.00       | 53.02       | Pass   | Peak   | 3  | 5925.000        | -49.14      | -27.00      | 20.14       | Pass   | Peak   |
| 2  | 5852.920        | -26.26      | 20.34       | 44.60       | Pass   | Peak   |    |                 |             |             |             |        |        |

## 6. Frequency Stability

### 6.1 Ant1

#### 6.1.1 Test Result

| Ant1    |         |                 |                  |               |                          |              |         |
|---------|---------|-----------------|------------------|---------------|--------------------------|--------------|---------|
| Mode    | Tx Type | Frequency (MHz) | Temperature (°C) | Voltage (VAC) | Measured Frequency (MHz) | Limit (MHz)  | Verdict |
| 802.11a | SISO    | 5180            | 20               | 102           | 5180.080                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 120           | 5180.020                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 138           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | -30              | 120           | 5180.060                 | 5150 to 5250 | Pass    |
|         |         |                 | -20              | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | -10              | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 0                | 120           | 5180.020                 | 5150 to 5250 | Pass    |
|         |         |                 | 10               | 120           | 5180.060                 | 5150 to 5250 | Pass    |
|         |         |                 | 30               | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 40               | 120           | 5180.040                 | 5150 to 5250 | Pass    |
|         |         |                 | 50               | 120           | 5180.000                 | 5150 to 5250 | Pass    |
|         |         | 5200            | 20               | 102           | 5200.020                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 120           | 5199.940                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 138           | 5199.960                 | 5150 to 5250 | Pass    |
|         |         |                 | -30              | 120           | 5200.000                 | 5150 to 5250 | Pass    |
|         |         |                 | -20              | 120           | 5200.060                 | 5150 to 5250 | Pass    |
|         |         |                 | -10              | 120           | 5199.980                 | 5150 to 5250 | Pass    |
|         |         |                 | 0                | 120           | 5199.980                 | 5150 to 5250 | Pass    |
|         |         |                 | 10               | 120           | 5199.960                 | 5150 to 5250 | Pass    |
|         |         |                 | 30               | 120           | 5200.000                 | 5150 to 5250 | Pass    |
|         |         |                 | 40               | 120           | 5200.060                 | 5150 to 5250 | Pass    |
|         |         |                 | 50               | 120           | 5199.980                 | 5150 to 5250 | Pass    |
|         |         | 5240            | 20               | 102           | 5239.980                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 120           | 5239.980                 | 5150 to 5250 | Pass    |
|         |         |                 |                  | 138           | 5239.980                 | 5150 to 5250 | Pass    |
|         |         |                 | -30              | 120           | 5239.940                 | 5150 to 5250 | Pass    |
|         |         |                 | -20              | 120           | 5239.980                 | 5150 to 5250 | Pass    |
|         |         |                 | -10              | 120           | 5240.020                 | 5150 to 5250 | Pass    |
|         |         |                 | 0                | 120           | 5239.980                 | 5150 to 5250 | Pass    |
|         |         |                 | 10               | 120           | 5240.000                 | 5150 to 5250 | Pass    |
|         |         |                 | 30               | 120           | 5240.000                 | 5150 to 5250 | Pass    |
|         |         |                 | 40               | 120           | 5239.960                 | 5150 to 5250 | Pass    |
|         |         |                 | 50               | 120           | 5239.960                 | 5150 to 5250 | Pass    |
|         |         | 5745            | 20               | 102           | 5745.000                 | 5725 to 5850 | Pass    |
|         |         |                 |                  | 120           | 5745.000                 | 5725 to 5850 | Pass    |
|         |         |                 |                  | 138           | 5745.040                 | 5725 to 5850 | Pass    |
|         |         |                 | -30              | 120           | 5745.000                 | 5725 to 5850 | Pass    |
|         |         |                 | -20              | 120           | 5744.940                 | 5725 to 5850 | Pass    |
|         |         |                 | -10              | 120           | 5744.980                 | 5725 to 5850 | Pass    |
|         |         |                 | 0                | 120           | 5745.020                 | 5725 to 5850 | Pass    |
|         |         |                 | 10               | 120           | 5745.100                 | 5725 to 5850 | Pass    |

|                   |      |      |     |     |          |              |      |
|-------------------|------|------|-----|-----|----------|--------------|------|
|                   |      |      | 30  | 120 | 5745.000 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5745.020 | 5725 to 5850 | Pass |
|                   |      | 5785 | 20  | 102 | 5785.000 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5785.020 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5784.980 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5785.000 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5784.960 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5784.900 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5784.940 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5784.960 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5784.980 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5784.980 | 5725 to 5850 | Pass |
|                   |      | 5825 | 20  | 102 | 5825.040 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5825.100 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5825.060 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5824.980 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5824.960 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5824.940 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5825.000 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5825.020 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5825.000 | 5725 to 5850 | Pass |
| 802.11n<br>(HT20) | SISO | 5180 | 20  | 102 | 5180.040 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5179.980 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5179.940 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5179.960 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5180.020 | 5150 to 5250 | Pass |
|                   |      |      | -10 | 120 | 5180.020 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5179.980 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5180.040 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5180.020 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5180.000 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5180.040 | 5150 to 5250 | Pass |
|                   |      | 5200 | 20  | 102 | 5199.980 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5199.980 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5199.960 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5199.980 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5200.100 | 5150 to 5250 | Pass |
|                   |      |      | -10 | 120 | 5200.040 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5199.940 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5199.920 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5200.000 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5200.000 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5200.040 | 5150 to 5250 | Pass |
|                   |      | 5240 | 20  | 102 | 5239.980 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5240.040 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5240.040 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5240.080 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5240.020 | 5150 to 5250 | Pass |

|                   |      |      |     |     |          |              |      |
|-------------------|------|------|-----|-----|----------|--------------|------|
|                   |      |      | -10 | 120 | 5240.040 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5240.020 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5240.000 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5240.000 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5240.020 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5240.040 | 5150 to 5250 | Pass |
|                   |      | 5745 | 20  | 102 | 5744.980 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5745.080 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5745.020 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5745.060 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5744.960 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5745.120 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5744.980 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5744.980 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5745.000 | 5725 to 5850 | Pass |
|                   |      | 5785 | 20  | 102 | 5785.040 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5785.000 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5785.000 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5785.180 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5784.960 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5785.080 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5785.060 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5785.000 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5784.960 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5784.980 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5785.040 | 5725 to 5850 | Pass |
|                   |      | 5825 | 20  | 102 | 5824.980 | 5725 to 5850 | Pass |
|                   |      |      |     | 120 | 5825.060 | 5725 to 5850 | Pass |
|                   |      |      |     | 138 | 5825.080 | 5725 to 5850 | Pass |
|                   |      |      | -30 | 120 | 5824.980 | 5725 to 5850 | Pass |
|                   |      |      | -20 | 120 | 5824.940 | 5725 to 5850 | Pass |
|                   |      |      | -10 | 120 | 5825.080 | 5725 to 5850 | Pass |
|                   |      |      | 0   | 120 | 5825.020 | 5725 to 5850 | Pass |
|                   |      |      | 10  | 120 | 5824.960 | 5725 to 5850 | Pass |
|                   |      |      | 30  | 120 | 5824.980 | 5725 to 5850 | Pass |
|                   |      |      | 40  | 120 | 5825.020 | 5725 to 5850 | Pass |
|                   |      |      | 50  | 120 | 5825.000 | 5725 to 5850 | Pass |
| 802.11n<br>(HT40) | SISO | 5190 | 20  | 102 | 5190.160 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5190.000 | 5150 to 5250 | Pass |
|                   |      |      |     | 138 | 5190.160 | 5150 to 5250 | Pass |
|                   |      |      | -30 | 120 | 5190.040 | 5150 to 5250 | Pass |
|                   |      |      | -20 | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      |      | -10 | 120 | 5190.040 | 5150 to 5250 | Pass |
|                   |      |      | 0   | 120 | 5190.000 | 5150 to 5250 | Pass |
|                   |      |      | 10  | 120 | 5190.040 | 5150 to 5250 | Pass |
|                   |      |      | 30  | 120 | 5190.040 | 5150 to 5250 | Pass |
|                   |      |      | 40  | 120 | 5190.040 | 5150 to 5250 | Pass |
|                   |      |      | 50  | 120 | 5190.080 | 5150 to 5250 | Pass |
|                   |      | 5230 | 20  | 102 | 5230.080 | 5150 to 5250 | Pass |
|                   |      |      |     | 120 | 5230.080 | 5150 to 5250 | Pass |

|  |  |      |     |     |          |              |      |
|--|--|------|-----|-----|----------|--------------|------|
|  |  |      |     | 138 | 5230.000 | 5150 to 5250 | Pass |
|  |  |      | -30 | 120 | 5230.040 | 5150 to 5250 | Pass |
|  |  |      | -20 | 120 | 5230.040 | 5150 to 5250 | Pass |
|  |  |      | -10 | 120 | 5230.080 | 5150 to 5250 | Pass |
|  |  |      | 0   | 120 | 5230.160 | 5150 to 5250 | Pass |
|  |  |      | 10  | 120 | 5230.080 | 5150 to 5250 | Pass |
|  |  |      | 30  | 120 | 5230.000 | 5150 to 5250 | Pass |
|  |  |      | 40  | 120 | 5230.000 | 5150 to 5250 | Pass |
|  |  |      | 50  | 120 | 5230.080 | 5150 to 5250 | Pass |
|  |  | 5755 | 20  | 102 | 5755.040 | 5725 to 5850 | Pass |
|  |  |      |     | 120 | 5755.040 | 5725 to 5850 | Pass |
|  |  |      |     | 138 | 5755.000 | 5725 to 5850 | Pass |
|  |  |      | -30 | 120 | 5755.040 | 5725 to 5850 | Pass |
|  |  |      | -20 | 120 | 5755.120 | 5725 to 5850 | Pass |
|  |  |      | -10 | 120 | 5755.000 | 5725 to 5850 | Pass |
|  |  |      | 0   | 120 | 5755.040 | 5725 to 5850 | Pass |
|  |  |      | 10  | 120 | 5755.080 | 5725 to 5850 | Pass |
|  |  |      | 30  | 120 | 5755.160 | 5725 to 5850 | Pass |
|  |  |      | 40  | 120 | 5755.080 | 5725 to 5850 | Pass |
|  |  |      | 50  | 120 | 5755.120 | 5725 to 5850 | Pass |
|  |  | 5795 | 20  | 102 | 5795.040 | 5725 to 5850 | Pass |
|  |  |      |     | 120 | 5795.000 | 5725 to 5850 | Pass |
|  |  |      |     | 138 | 5795.000 | 5725 to 5850 | Pass |
|  |  |      | -30 | 120 | 5795.040 | 5725 to 5850 | Pass |
|  |  |      | -20 | 120 | 5795.040 | 5725 to 5850 | Pass |
|  |  |      | -10 | 120 | 5795.000 | 5725 to 5850 | Pass |
|  |  |      | 0   | 120 | 5795.040 | 5725 to 5850 | Pass |
|  |  |      | 10  | 120 | 5795.040 | 5725 to 5850 | Pass |
|  |  |      | 30  | 120 | 5795.120 | 5725 to 5850 | Pass |
|  |  |      | 40  | 120 | 5794.920 | 5725 to 5850 | Pass |
|  |  |      | 50  | 120 | 5795.080 | 5725 to 5850 | Pass |

----- End of Report -----