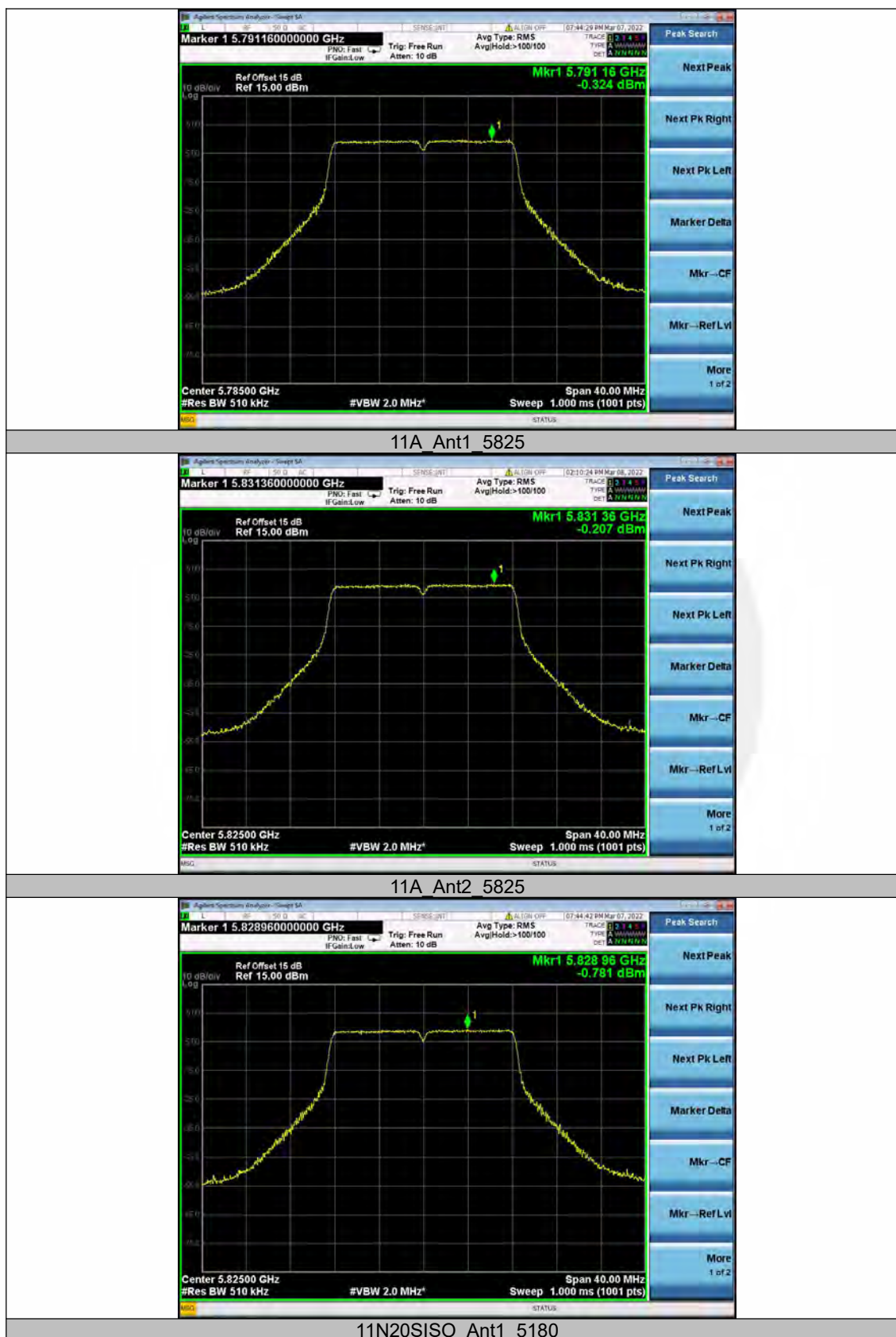
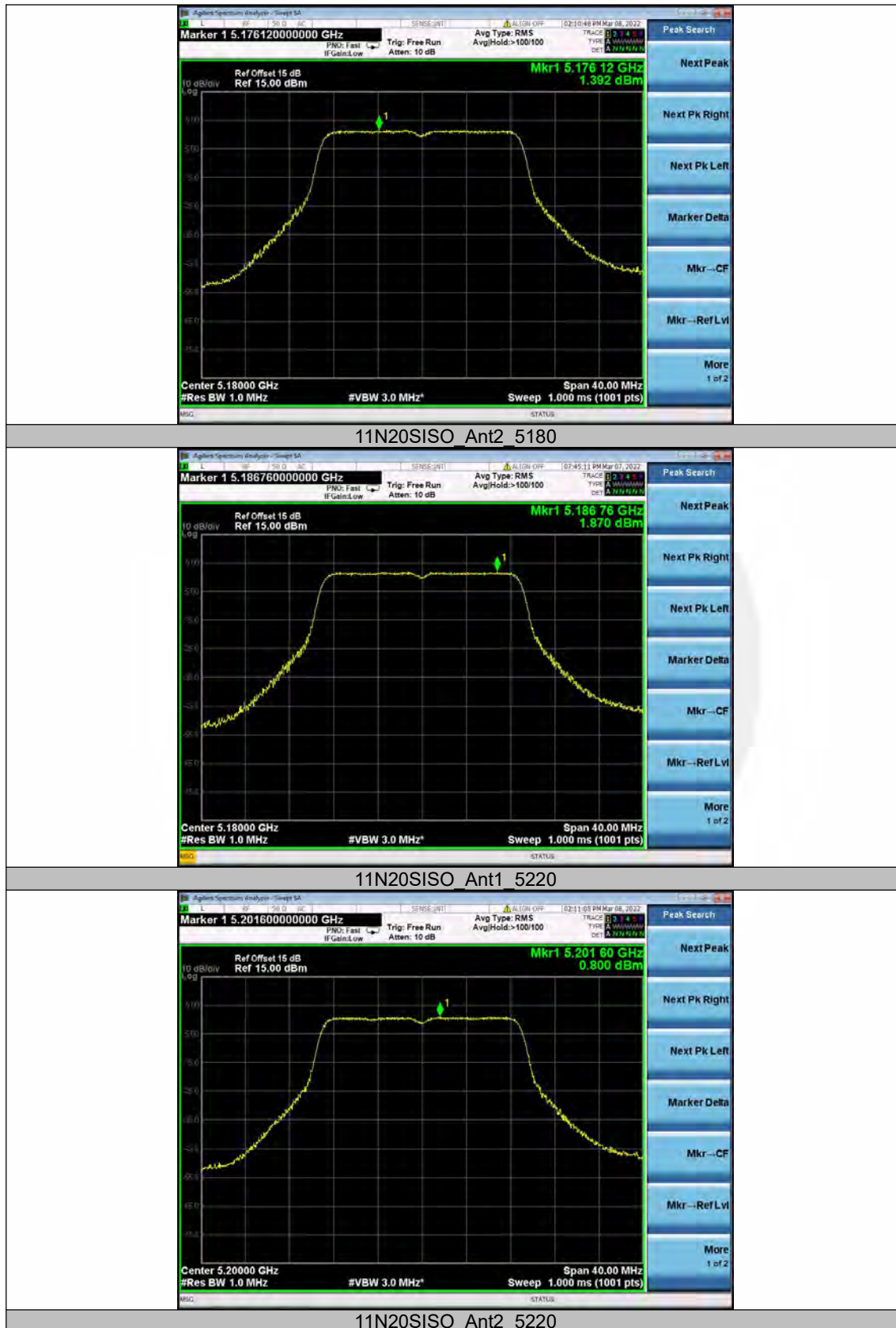
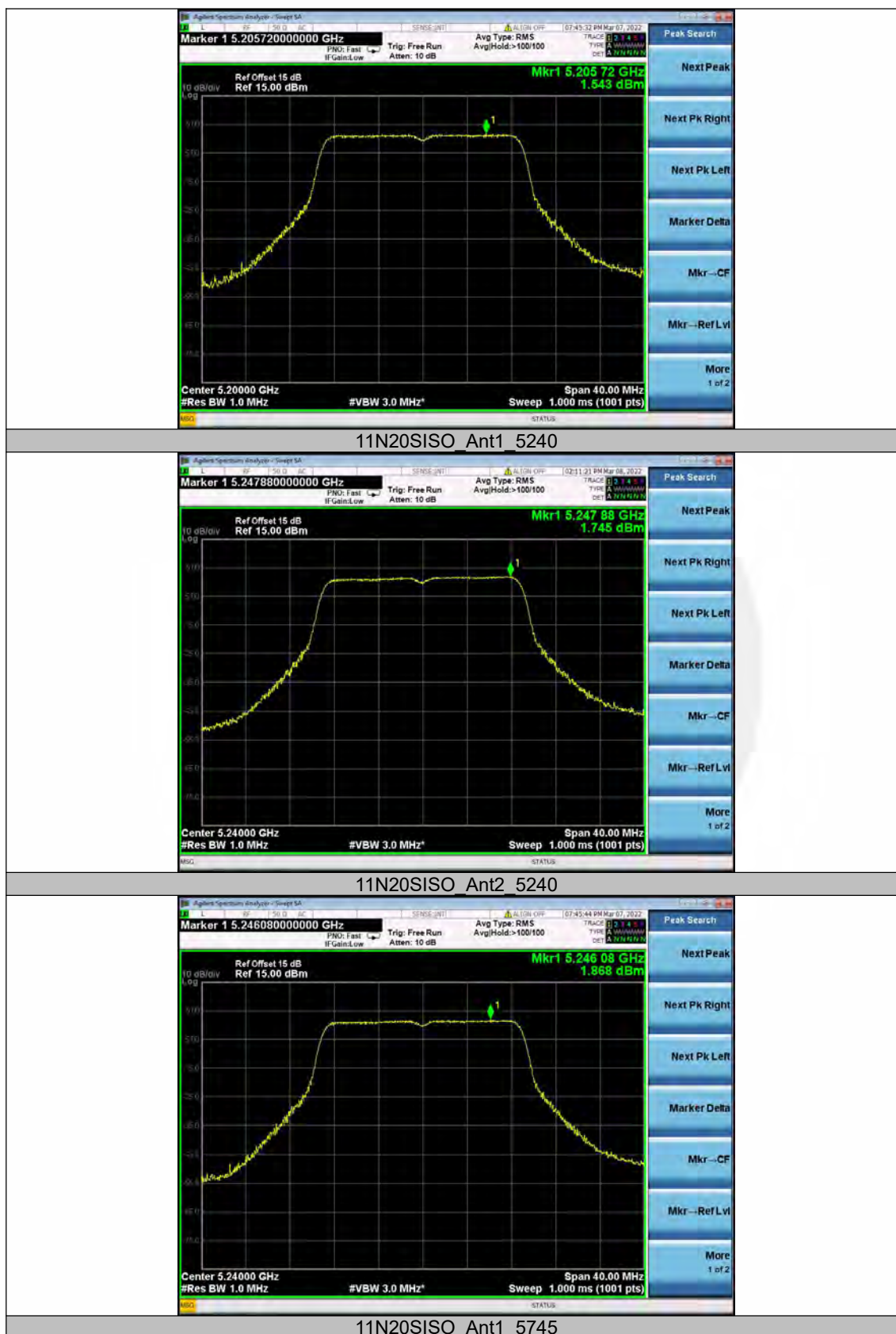
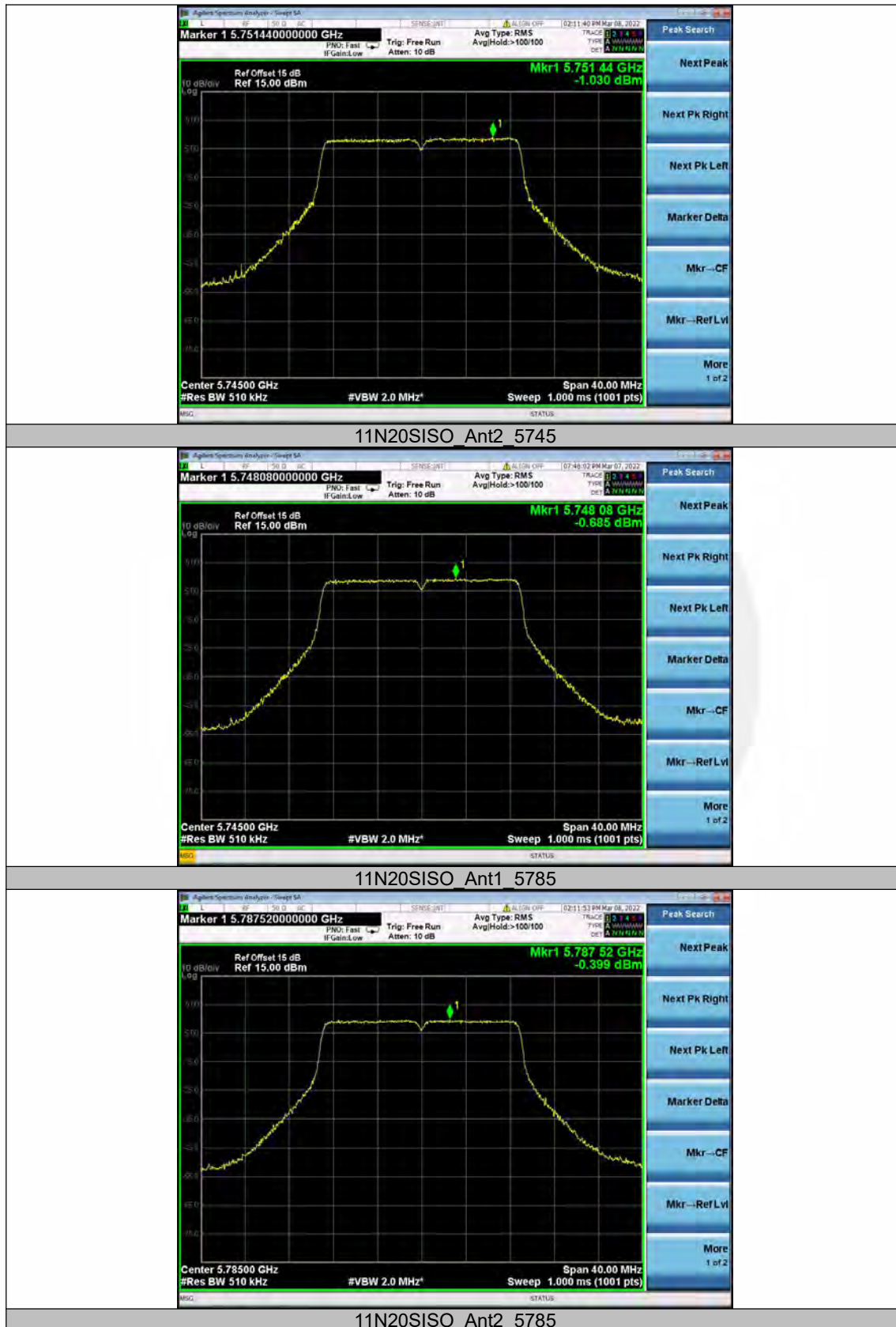
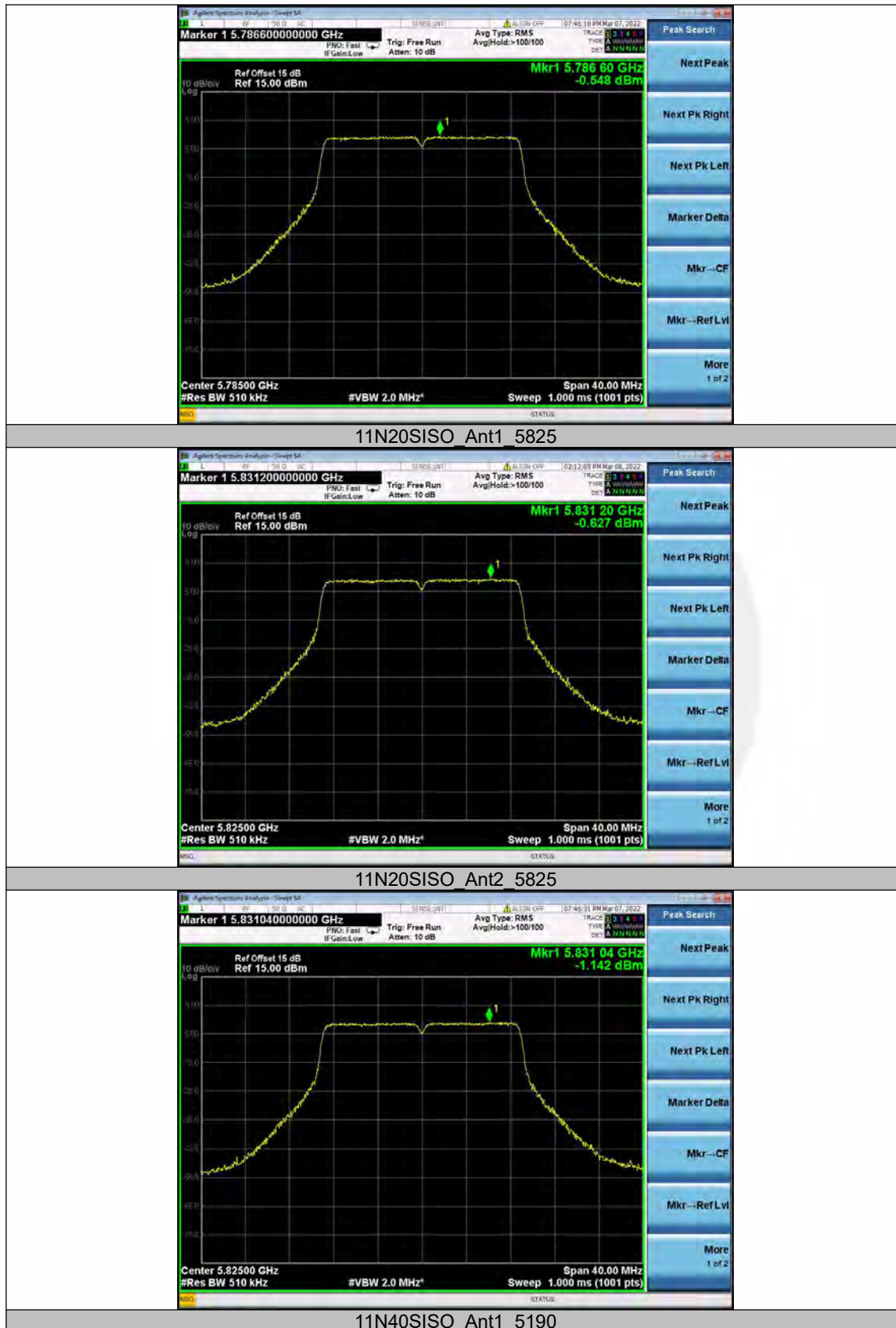


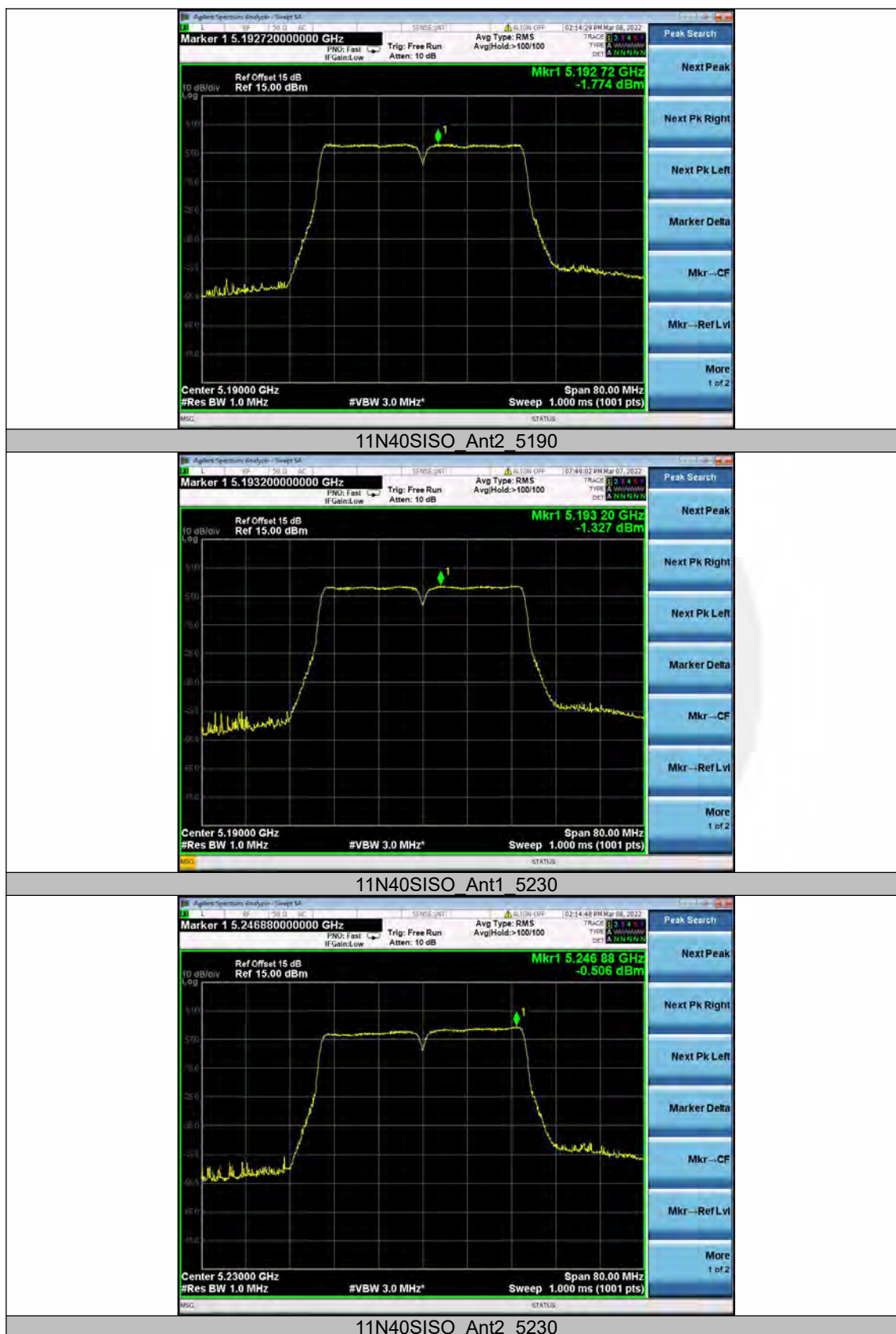


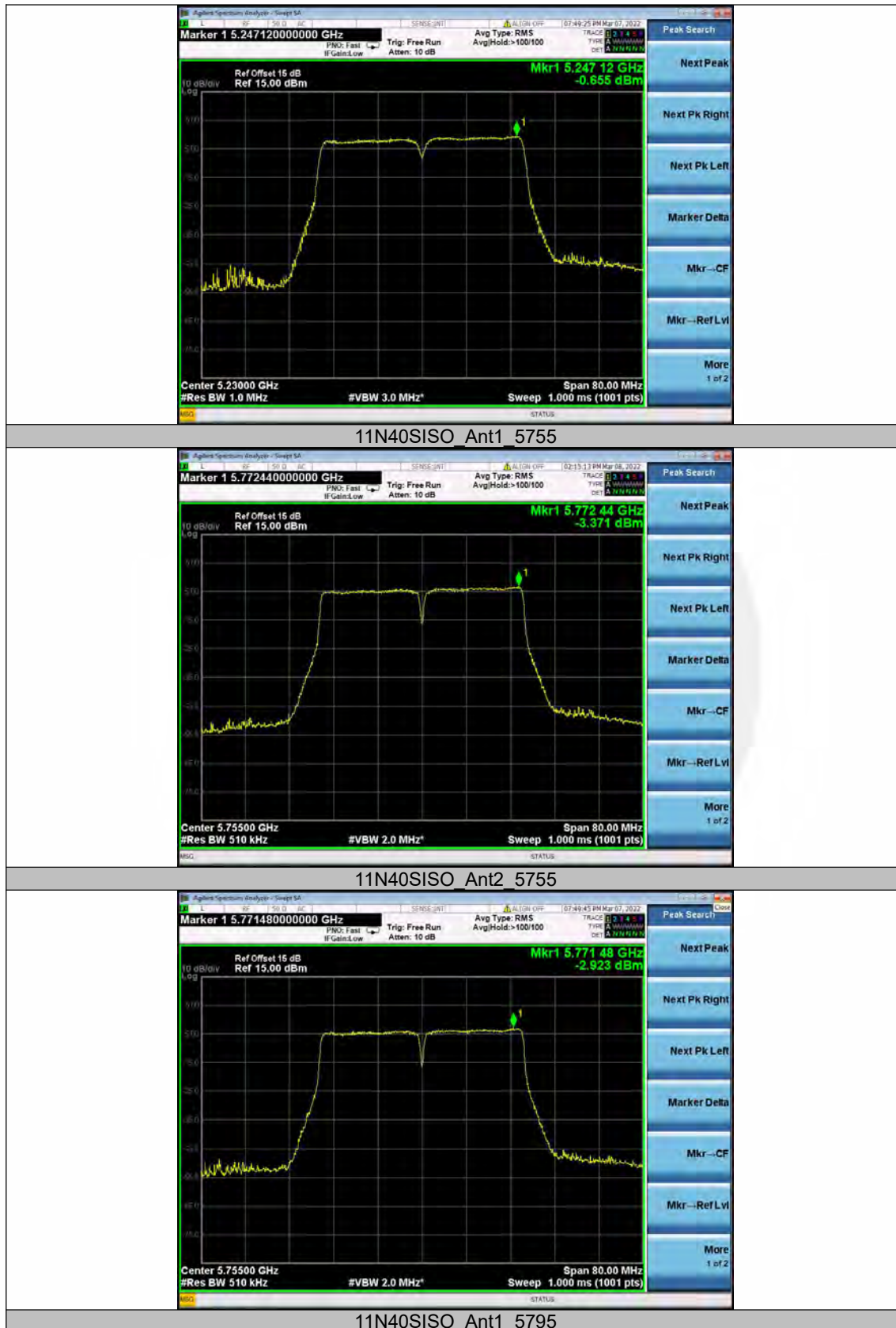


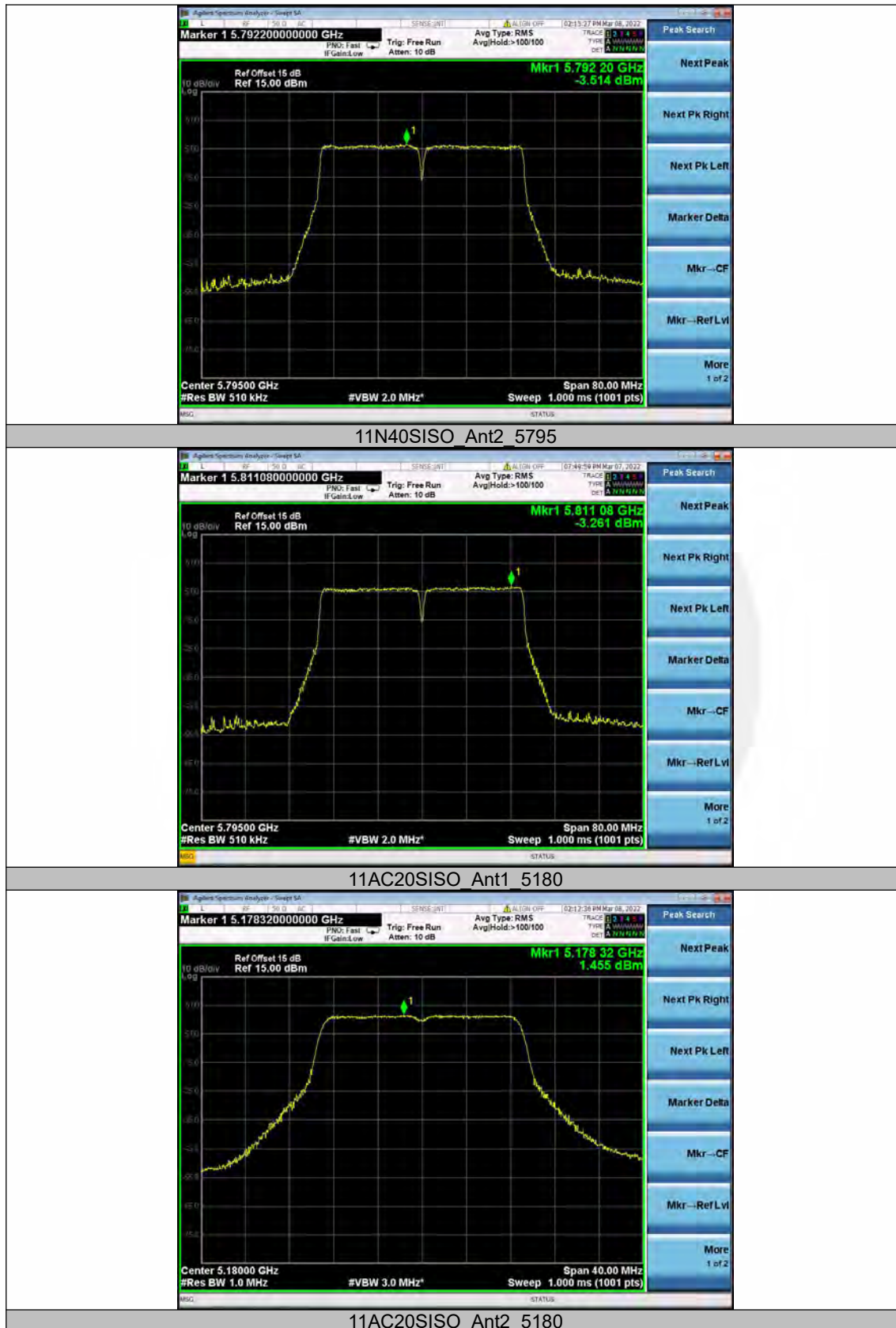


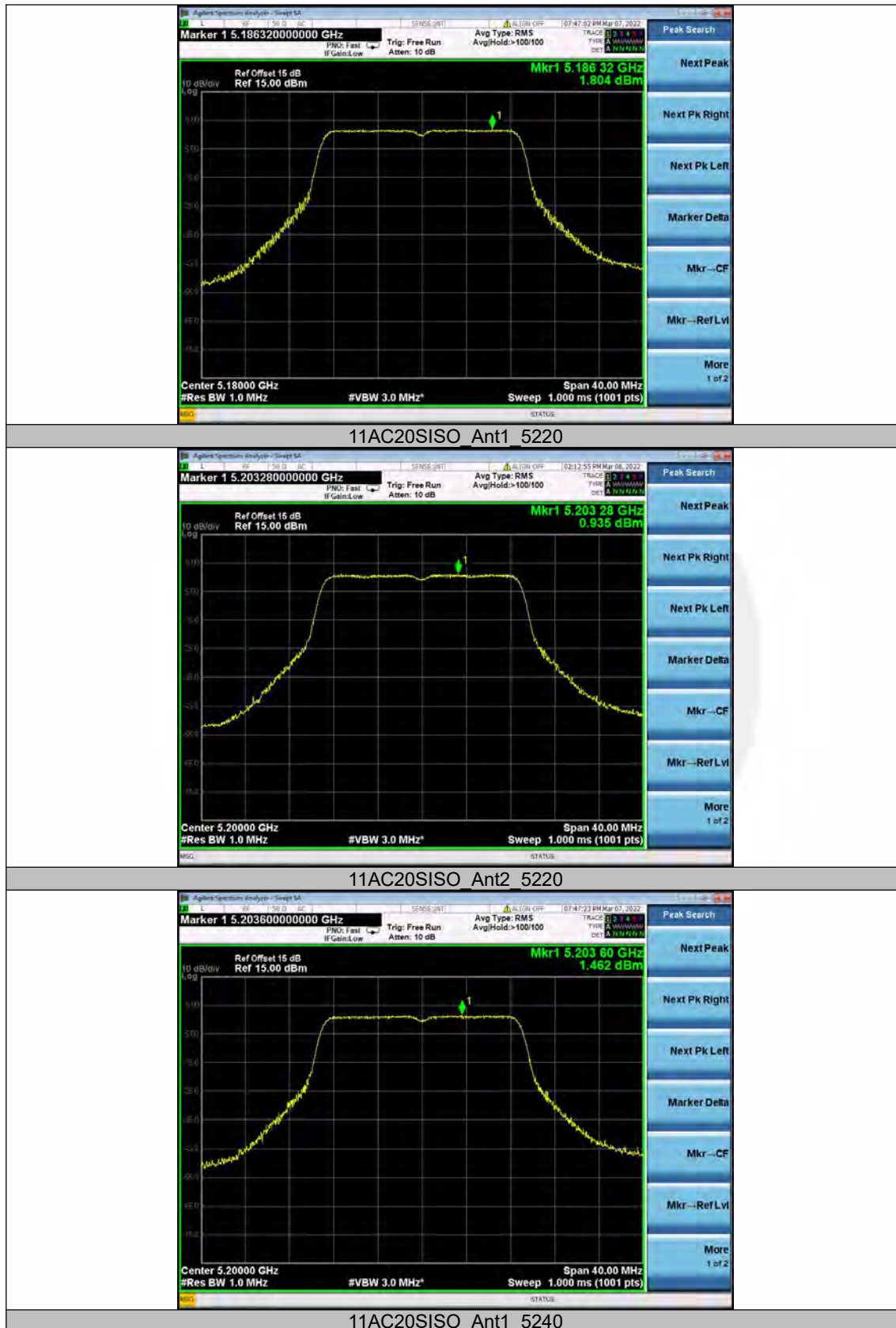


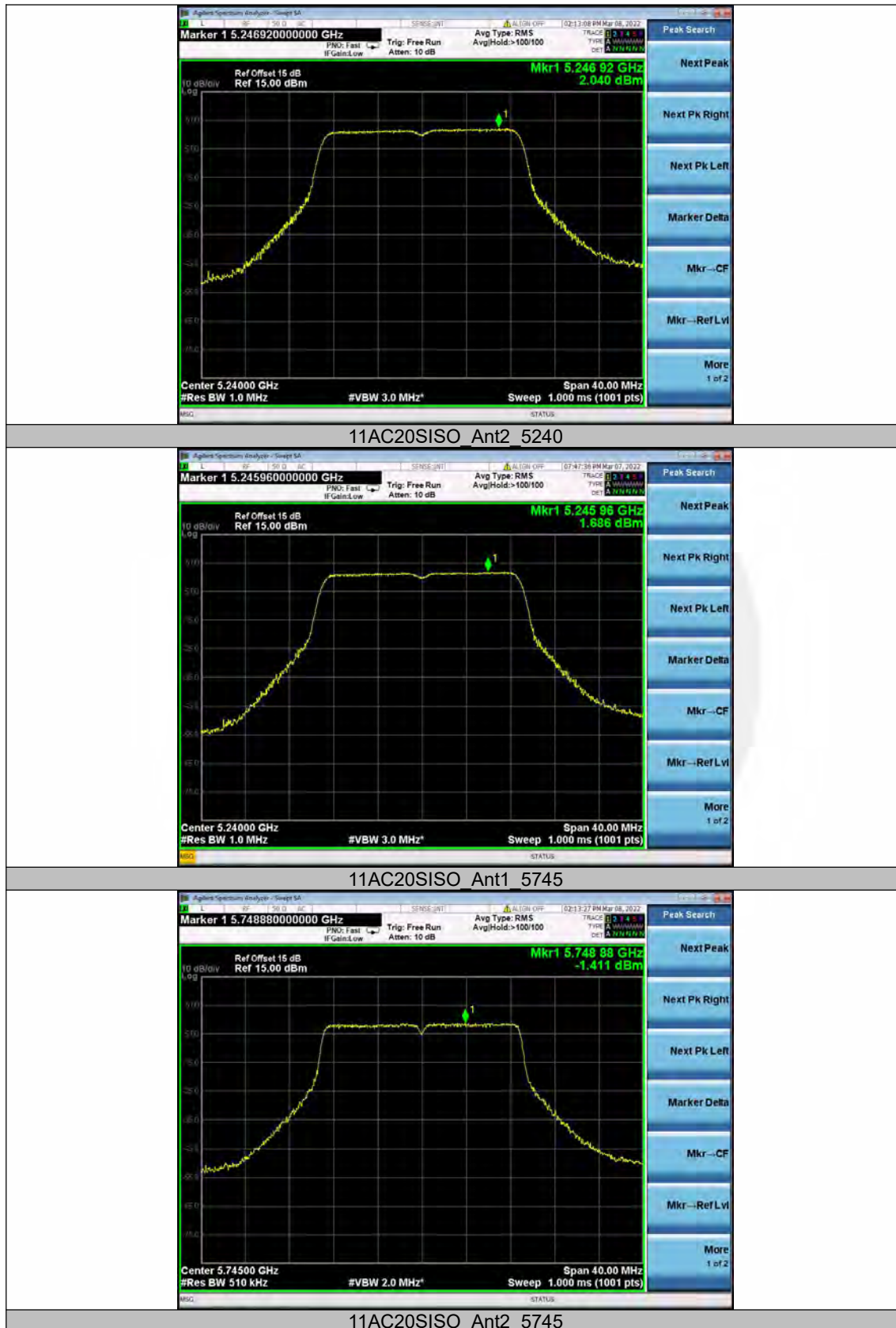


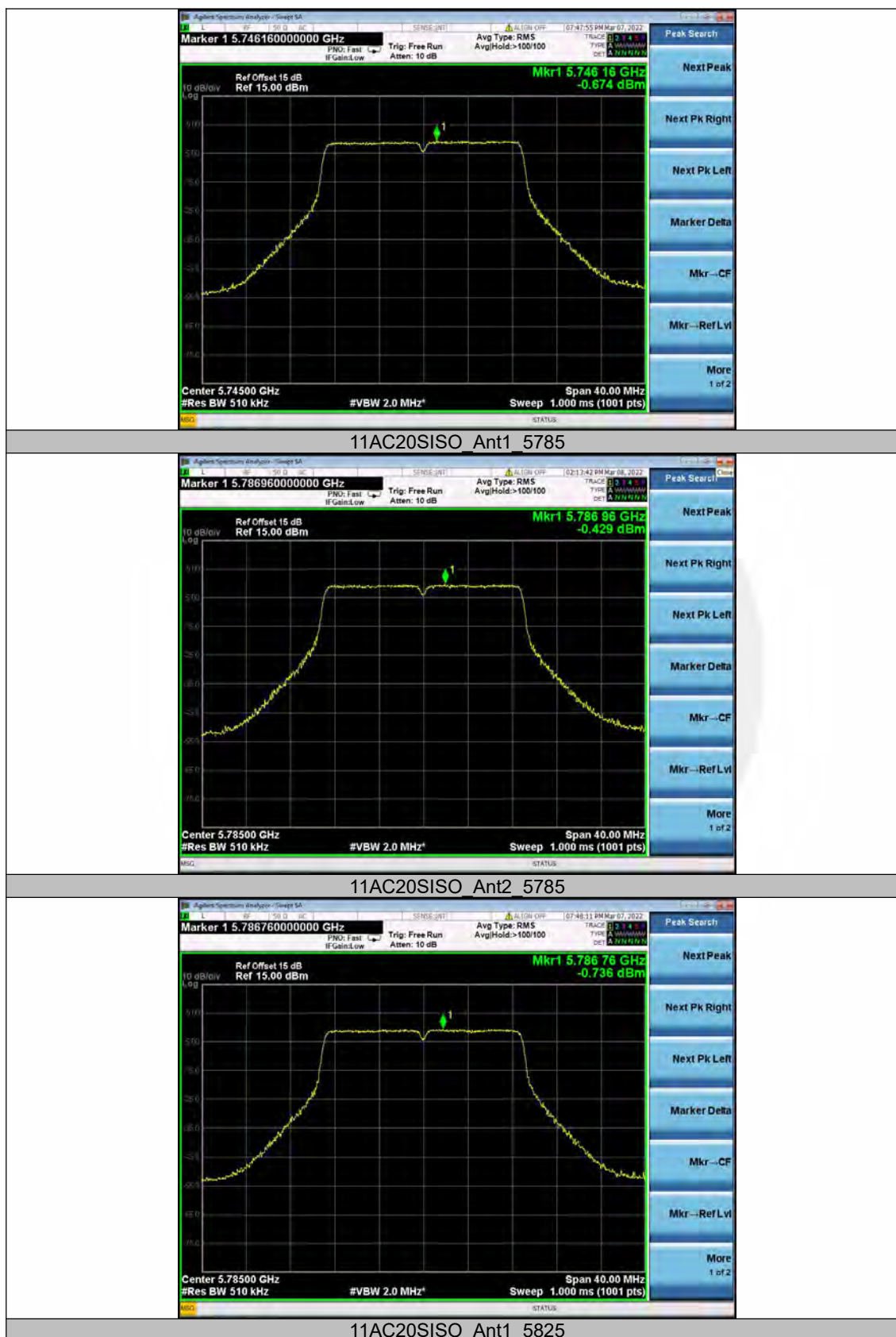


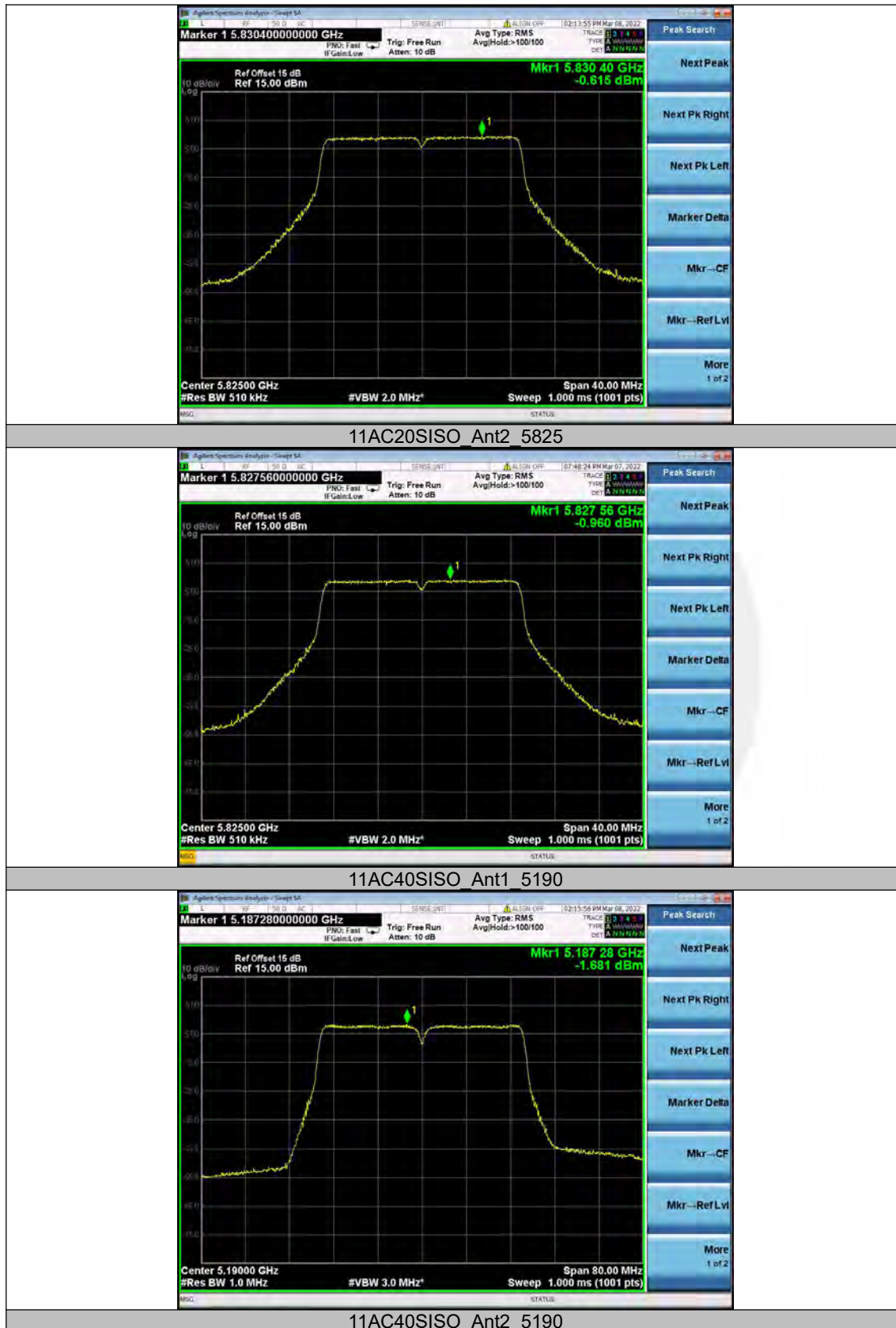


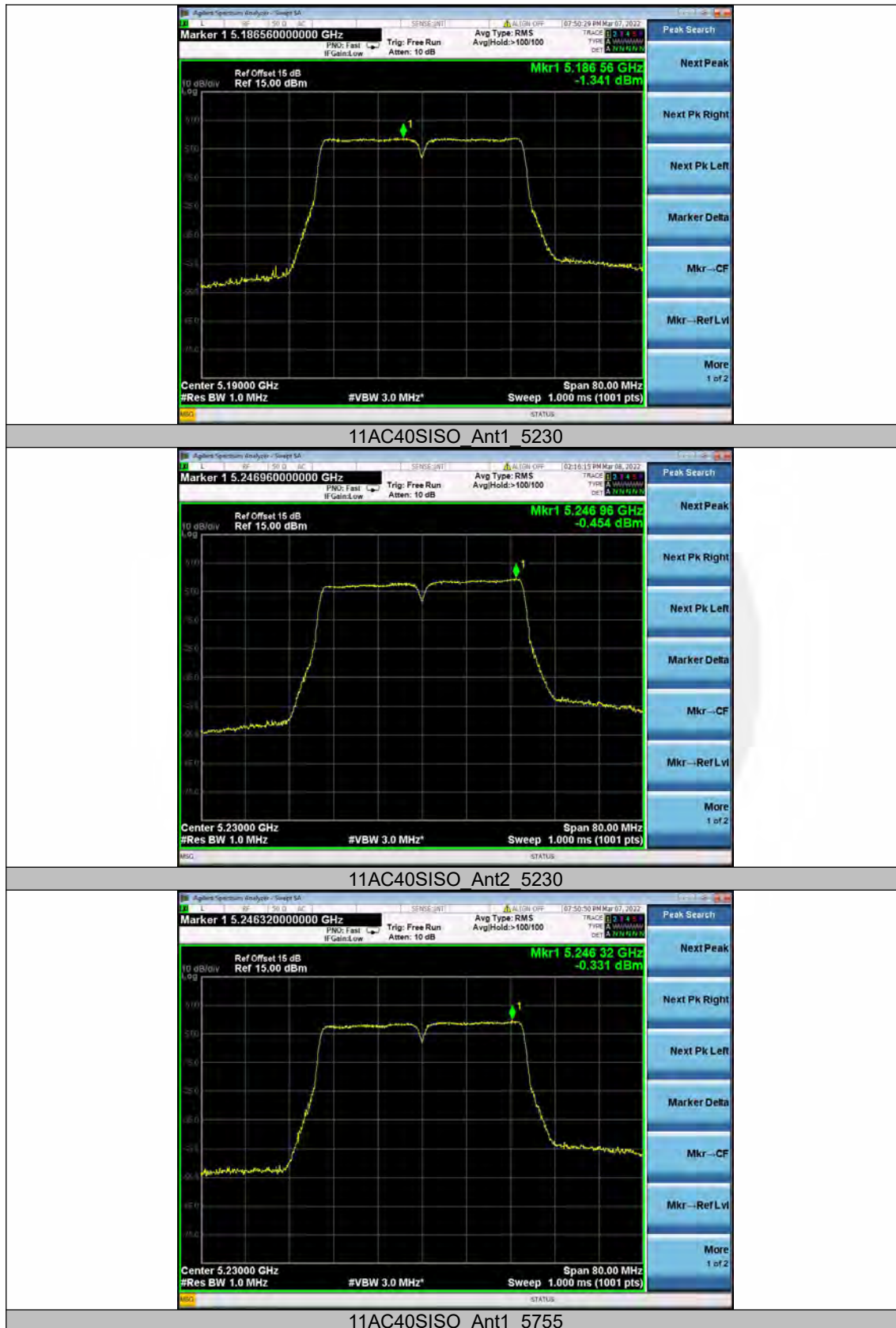


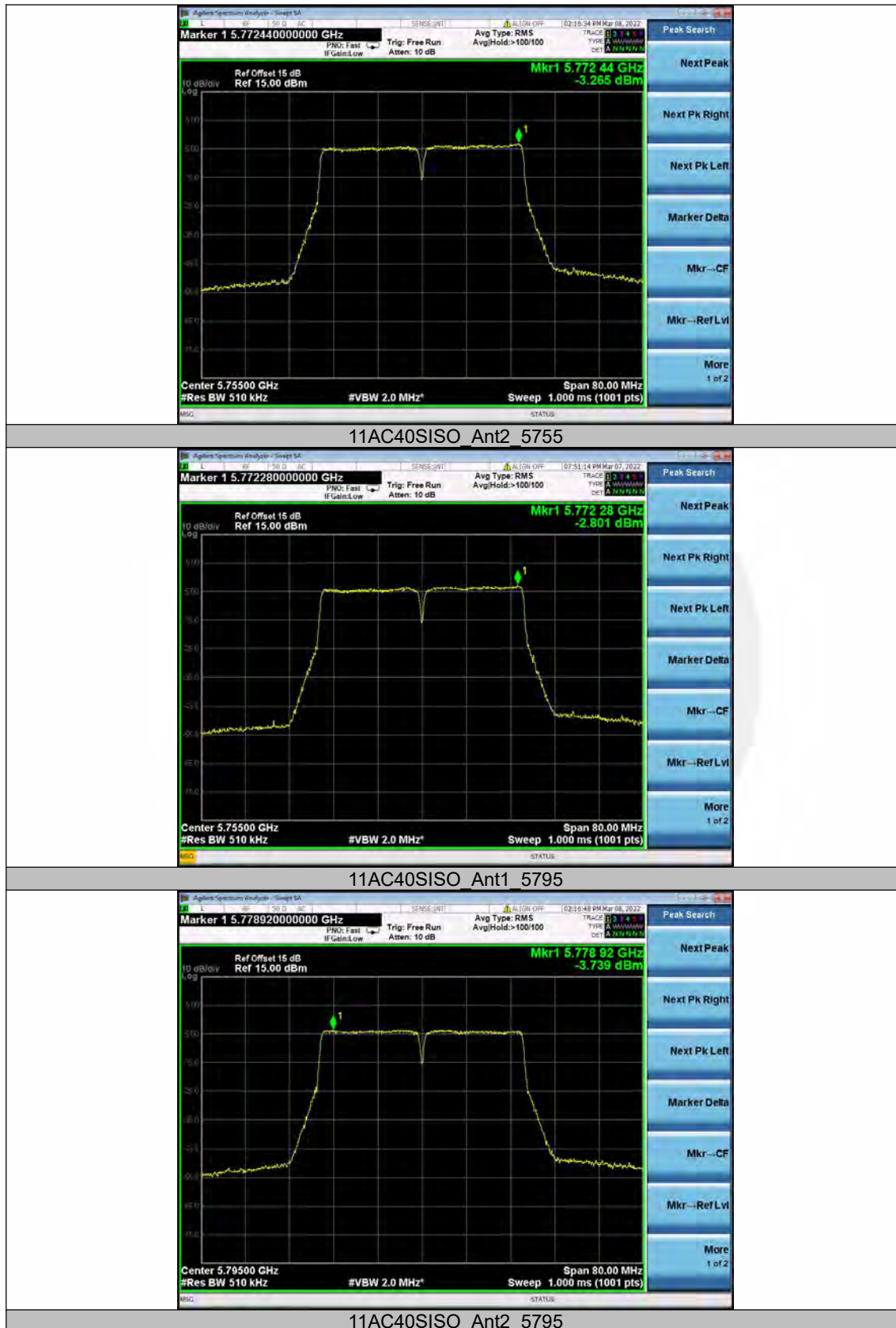


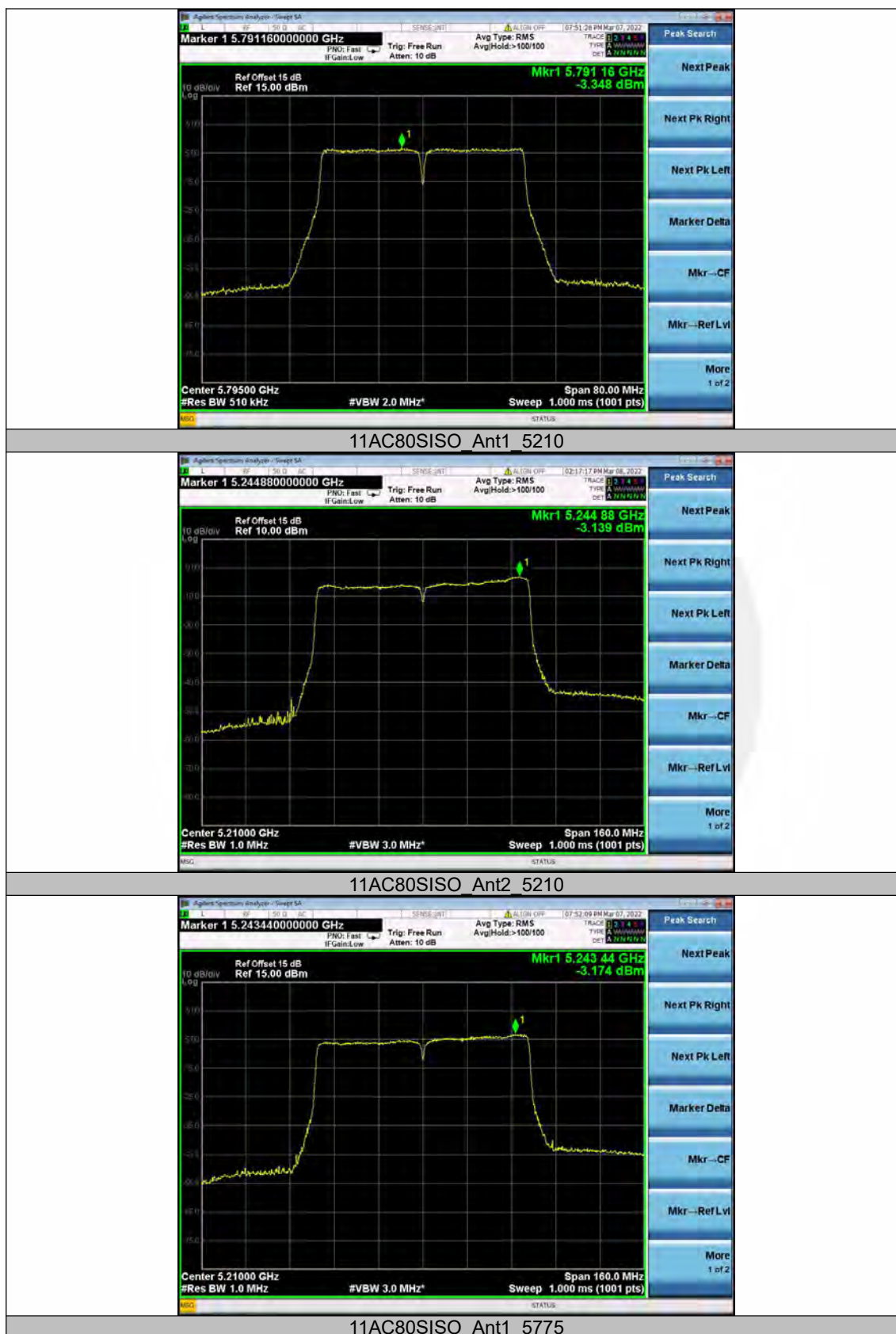














11A Ant1 5180

Spectrum Analyzer 1  
Swept SA

KEYSIGHT Input: RF Input Z: 50  $\Omega$  #Atten: 30 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6  
RL  $\leftrightarrow$  Coupling: DC Corr: CCorr Freq Ref: Int (S)  $\mu$ W Path: Standard Gate: Off IF Gain: Low Avg/Hold: 100/100  
Align: Auto Freq Ref: Int (S) Sig Track: Off Trng: Free Run A WWW WWW A A A A A A A

1 Spectrum Ref Lvl Offset 24.59 dB Mkr1 5.178 40 GHz  
Scale/Div 10 dB Ref Level 20.00 dBm 2.830 dBm

Log

Center 5.18000 GHz #Video BW 3.0 MHz\* Span 40.00 MHz  
#Res BW 1.0 MHz #Sweep 20.0 ms (1001 pts)

Apr 09, 2022 3:17:46 PM

Settings

Center Frequency 5.180000000 GHz

Span 40.0000000 MHz

Swept Span Zero Span

Full Span

Start Freq 5.160000000 GHz

Stop Freq 5.200000000 GHz

AUTO TUNE

CF Step 4.000000 MHz

Auto Man

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span zoom)

Local

11A Ant2 5180

Spectrum Analyzer 1  
Swept SA

KEYSIGHT Input: RF Input Z: 50  $\Omega$  #Atten: 30 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6  
RL  $\leftrightarrow$  Coupling: DC Corr: CCorr Freq Ref: Int (S)  $\mu$ W Path: Standard Gate: Off IF Gain: Low Avg/Hold: 100/100  
Align: Auto Freq Ref: Int (S) Sig Track: Off Trng: Free Run A WWW WWW A A A A A A A

1 Spectrum Ref Lvl Offset 24.65 dB Mkr1 5.176 52 GHz  
Scale/Div 10 dB Ref Level 20.00 dBm 1.866 dBm

Log

Center 5.18000 GHz #Video BW 3.0 MHz\* Span 40.00 MHz  
#Res BW 1.0 MHz #Sweep 20.0 ms (1001 pts)

Apr 11, 2022 11:13:26 AM

Settings

Center Frequency 5.180000000 GHz

Span 40.0000000 MHz

Swept Span Zero Span

Full Span

Start Freq 5.160000000 GHz

Stop Freq 5.200000000 GHz

AUTO TUNE

CF Step 4.000000 MHz

Auto Man

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span zoom)

Local

11A Ant1 5220























































## 8.4 FREQUENCY STABILITY

### 8.4.1 Applicable Standard

According to FCC Part 15.407(g)  
ANSI C63.10 Section 6.8

### 8.4.2 Conformance Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

### 8.4.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

### 8.4.4 Test Procedure

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 10 kHz.

Set Span= Entire absence of modulation emissions band

Set the video bandwidth (VBW) =30 kHz. width

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Allow the trace to stabilize.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

Beginning at each temperature level specified in user manual , the frequency shall be measured within one minute after application of primary power to the transmitter and at intervals of no more than one minute thereafter until ten minutes have elapsed or until sufficient measurements are obtained to indicate clearly that the frequency has stabilized within the applicable tolerance, whichever time period is greater. During each test, the ambient temperature shall not be allowed to rise more than 10° centigrade above the respective beginning ambient temperature level

Measure and record the results in the test report.

### 8.4.5 Test Results

All the chips and antennas were tested, only the worst chip 2 were described in the table.

| Voltage       |         |                    |                  |                         |                   |                    |                |         |
|---------------|---------|--------------------|------------------|-------------------------|-------------------|--------------------|----------------|---------|
| TestMode      | Antenna | Frequen<br>cy[MHz] | Voltage<br>[Vdc] | Temper<br>ature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Verdict |
| 11A           | Ant1    | 5180               | NV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -15.444015         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               | Ant2    | 5180               | NV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -15.444015         | 20             | PASS    |
|               | Ant1    | 5220               | NV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               | Ant2    | 5220               | NV               | NT                      | -80000.00         | -15.325670         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -15.325670         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -15.325670         | 20             | PASS    |
|               | Ant1    | 5240               | NV               | NT                      | -60000.00         | -11.450382         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -15.267176         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -11.450382         | 20             | PASS    |
|               | Ant2    | 5240               | NV               | NT                      | -80000.00         | -15.267176         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -15.267176         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -15.267176         | 20             | PASS    |
|               | Ant1    | 5745               | NV               | NT                      | -80000.00         | -13.925152         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -13.925152         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -13.925152         | 20             | PASS    |
|               | Ant2    | 5745               | NV               | NT                      | -60000.00         | -10.443864         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -13.925152         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -100000.00        | -17.406440         | 20             | PASS    |
|               | Ant1    | 5785               | NV               | NT                      | -80000.00         | -13.828868         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -13.828868         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -13.828868         | 20             | PASS    |
|               | Ant2    | 5785               | NV               | NT                      | -80000.00         | -13.828868         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -100000.00        | -17.286085         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -13.828868         | 20             | PASS    |
|               | Ant1    | 5825               | NV               | NT                      | -80000.00         | -13.733906         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -13.733906         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -10.300429         | 20             | PASS    |
|               | Ant2    | 5825               | NV               | NT                      | -80000.00         | -13.733906         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -13.733906         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -13.733906         | 20             | PASS    |
| 11N20SI<br>SO | Ant1    | 5180               | NV               | NT                      | -80000.00         | -15.444015         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -15.444015         | 20             | PASS    |
|               | Ant2    | 5180               | NV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -11.583012         | 20             | PASS    |
|               | Ant1    | 5220               | NV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -15.325670         | 20             | PASS    |
|               | Ant2    | 5220               | NV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -11.494253         | 20             | PASS    |
|               | Ant1    | 5240               | NV               | NT                      | -60000.00         | -11.450382         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -11.450382         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -80000.00         | -15.267176         | 20             | PASS    |
|               | Ant2    | 5240               | NV               | NT                      | -60000.00         | -11.450382         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -80000.00         | -15.267176         | 20             | PASS    |
|               |         |                    | HV               | NT                      | -60000.00         | -11.450382         | 20             | PASS    |
|               | Ant1    | 5745               | NV               | NT                      | -60000.00         | -10.443864         | 20             | PASS    |
|               |         |                    | LV               | NT                      | -60000.00         | -10.443864         | 20             | PASS    |

|                |      |      |    |    |            |            |    |      |
|----------------|------|------|----|----|------------|------------|----|------|
|                | Ant2 | 5745 | HV | NT | -80000.00  | -13.925152 | 20 | PASS |
|                |      |      | NV | NT | -100000.00 | -17.406440 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.925152 | 20 | PASS |
|                | Ant1 | 5785 | HV | NT | -80000.00  | -13.925152 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.828868 | 20 | PASS |
|                | Ant2 | 5785 | HV | NT | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | NT | -100000.00 | -17.286085 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.828868 | 20 | PASS |
|                | Ant1 | 5825 | HV | NT | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | NT | -60000.00  | -10.300429 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.733906 | 20 | PASS |
| 11N40SI<br>SO  | Ant1 | 5190 | HV | NT | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | LV | NT | -60000.00  | -10.300429 | 20 | PASS |
|                | Ant2 | 5190 | HV | NT | -60000.00  | -10.300429 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -15.414258 | 20 | PASS |
|                | Ant1 | 5230 | HV | NT | -40000.00  | -7.707129  | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -15.414258 | 20 | PASS |
|                | Ant2 | 5230 | HV | NT | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -15.296367 | 20 | PASS |
|                | Ant1 | 5755 | HV | NT | -40000.00  | -7.648184  | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -15.296367 | 20 | PASS |
|                | Ant2 | 5755 | HV | NT | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.900956 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.900956 | 20 | PASS |
|                | Ant1 | 5795 | HV | NT | -80000.00  | -13.900956 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.900956 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.900956 | 20 | PASS |
|                | Ant2 | 5795 | HV | NT | -80000.00  | -13.900956 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
| 11AC20S<br>ISO | Ant1 | 5180 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                | Ant2 | 5180 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                | Ant1 | 5220 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                | Ant2 | 5220 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                | Ant1 | 5240 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                | Ant2 | 5240 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                | Ant1 | 5745 | HV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | NV | NT | -80000.00  | -13.805004 | 20 | PASS |
|                |      |      | LV | NT | -80000.00  | -13.805004 | 20 | PASS |

|                |      |      |    |           |            |            |      |      |
|----------------|------|------|----|-----------|------------|------------|------|------|
|                | Ant2 | 5745 | NV | NT        | -80000.00  | -13.925152 | 20   | PASS |
|                |      |      | LV | NT        | -60000.00  | -10.443864 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.925152 | 20   | PASS |
|                | Ant1 | 5785 | NV | NT        | -80000.00  | -13.828868 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.828868 | 20   | PASS |
|                |      |      | HV | NT        | -60000.00  | -10.371651 | 20   | PASS |
|                | Ant2 | 5785 | NV | NT        | -60000.00  | -10.371651 | 20   | PASS |
|                |      |      | LV | NT        | -60000.00  | -10.371651 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.828868 | 20   | PASS |
|                | Ant1 | 5825 | NV | NT        | -60000.00  | -10.300429 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.733906 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.733906 | 20   | PASS |
| Ant2           | 5825 | NV   | NT | -80000.00 | -13.733906 | 20         | PASS |      |
|                |      | LV   | NT | -80000.00 | -13.733906 | 20         | PASS |      |
|                |      | HV   | NT | -60000.00 | -10.300429 | 20         | PASS |      |
| 11AC40S<br>ISO | Ant1 | 5190 | NV | NT        | -80000.00  | -15.414258 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -15.414258 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -15.414258 | 20   | PASS |
|                | Ant2 | 5190 | NV | NT        | -80000.00  | -15.414258 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -15.414258 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -15.414258 | 20   | PASS |
|                | Ant1 | 5230 | NV | NT        | -80000.00  | -15.296367 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -15.296367 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -15.296367 | 20   | PASS |
|                | Ant2 | 5230 | NV | NT        | -80000.00  | -15.296367 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -15.296367 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -15.296367 | 20   | PASS |
|                | Ant1 | 5755 | NV | NT        | -80000.00  | -13.900956 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.900956 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.900956 | 20   | PASS |
|                | Ant2 | 5755 | NV | NT        | -80000.00  | -13.900956 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.900956 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.900956 | 20   | PASS |
|                | Ant1 | 5795 | NV | NT        | -80000.00  | -13.805004 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.805004 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.805004 | 20   | PASS |
|                | Ant2 | 5795 | NV | NT        | -80000.00  | -13.805004 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.805004 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.805004 | 20   | PASS |
| 11AC80S<br>ISO | Ant1 | 5210 | NV | NT        | 0.00       | 0.000000   | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -15.355086 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -15.355086 | 20   | PASS |
|                | Ant2 | 5210 | NV | NT        | -80000.00  | -15.355086 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -15.355086 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -15.355086 | 20   | PASS |
|                | Ant1 | 5775 | NV | NT        | -80000.00  | -13.852814 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.852814 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.852814 | 20   | PASS |
|                | Ant2 | 5775 | NV | NT        | -80000.00  | -13.852814 | 20   | PASS |
|                |      |      | LV | NT        | -80000.00  | -13.852814 | 20   | PASS |
|                |      |      | HV | NT        | -80000.00  | -13.852814 | 20   | PASS |

| Temperature |         |                |               |                  |                |                 |             |         |
|-------------|---------|----------------|---------------|------------------|----------------|-----------------|-------------|---------|
| TestMode    | Antenna | Frequency[MHz] | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 11A         | Ant1    | 5180           | NV            | -30              | -80000.00      | -15.444015      | 20          | PASS    |
|             |         |                | NV            | -20              | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | -10              | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 0                | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 10               | -80000.00      | -15.444015      | 20          | PASS    |
|             |         |                | NV            | 20               | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 30               | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 40               | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 50               | -60000.00      | -11.583012      | 20          | PASS    |
|             | Ant2    | 5180           | NV            | -30              | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | -20              | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | -10              | -80000.00      | -15.444015      | 20          | PASS    |
|             |         |                | NV            | 0                | -80000.00      | -15.444015      | 20          | PASS    |
|             |         |                | NV            | 10               | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 20               | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 30               | -80000.00      | -15.444015      | 20          | PASS    |
|             |         |                | NV            | 40               | -60000.00      | -11.583012      | 20          | PASS    |
|             |         |                | NV            | 50               | -80000.00      | -15.444015      | 20          | PASS    |
|             | Ant1    | 5220           | NV            | -30              | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | -20              | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | -10              | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 0                | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 10               | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 20               | -40000.00      | -7.662835       | 20          | PASS    |
|             |         |                | NV            | 30               | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 40               | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 50               | -60000.00      | -11.494253      | 20          | PASS    |
|             | Ant2    | 5220           | NV            | -30              | -80000.00      | -15.325670      | 20          | PASS    |
|             |         |                | NV            | -20              | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | -10              | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 0                | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 10               | -80000.00      | -15.325670      | 20          | PASS    |
|             |         |                | NV            | 20               | -80000.00      | -15.325670      | 20          | PASS    |
|             |         |                | NV            | 30               | -60000.00      | -11.494253      | 20          | PASS    |
|             |         |                | NV            | 40               | -80000.00      | -15.325670      | 20          | PASS    |
|             |         |                | NV            | 50               | -80000.00      | -15.325670      | 20          | PASS    |
|             | Ant1    | 5240           | NV            | -30              | -60000.00      | -11.450382      | 20          | PASS    |
|             |         |                | NV            | -20              | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | -10              | -60000.00      | -11.450382      | 20          | PASS    |
|             |         |                | NV            | 0                | -60000.00      | -11.450382      | 20          | PASS    |
|             |         |                | NV            | 10               | -60000.00      | -11.450382      | 20          | PASS    |
|             |         |                | NV            | 20               | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 30               | -60000.00      | -11.450382      | 20          | PASS    |
|             |         |                | NV            | 40               | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 50               | -60000.00      | -11.450382      | 20          | PASS    |
|             | Ant2    | 5240           | NV            | -30              | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | -20              | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | -10              | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 0                | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 10               | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 20               | -60000.00      | -11.450382      | 20          | PASS    |
|             |         |                | NV            | 30               | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 40               | -80000.00      | -15.267176      | 20          | PASS    |
|             |         |                | NV            | 50               | -60000.00      | -11.450382      | 20          | PASS    |
|             | Ant1    | 5745           | NV            | -30              | -80000.00      | -13.925152      | 20          | PASS    |
|             |         |                | NV            | -20              | -60000.00      | -10.443864      | 20          | PASS    |

|               |      |      |    |     |           |            |    |      |
|---------------|------|------|----|-----|-----------|------------|----|------|
|               |      |      | NV | -10 | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00 | -13.925152 | 20 | PASS |
|               | Ant2 | 5745 | NV | -30 | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 0   | -60000.00 | -10.443864 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00 | -13.925152 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00 | -13.925152 | 20 | PASS |
|               | Ant1 | 5785 | NV | -30 | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 10  | -60000.00 | -10.371651 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 50  | -60000.00 | -10.371651 | 20 | PASS |
|               | Ant2 | 5785 | NV | -30 | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00 | -13.828868 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00 | -13.828868 | 20 | PASS |
|               | Ant1 | 5825 | NV | -30 | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | -20 | -60000.00 | -10.300429 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00 | -13.733906 | 20 | PASS |
|               | Ant2 | 5825 | NV | -30 | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00 | -13.733906 | 20 | PASS |
|               |      |      | NV | 50  | -60000.00 | -10.300429 | 20 | PASS |
| 11N20SI<br>SO | Ant1 | 5180 | NV | -30 | -60000.00 | -11.583012 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00 | -15.444015 | 20 | PASS |
|               |      |      | NV | -10 | -60000.00 | -11.583012 | 20 | PASS |
|               |      |      | NV | 0   | -60000.00 | -11.583012 | 20 | PASS |
|               |      |      | NV | 10  | -60000.00 | -11.583012 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00 | -15.444015 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00 | -15.444015 | 20 | PASS |
|               |      |      | NV | 40  | -60000.00 | -11.583012 | 20 | PASS |
|               |      |      | NV | 50  | -60000.00 | -11.583012 | 20 | PASS |

|  |      |      |    |     |            |            |    |      |
|--|------|------|----|-----|------------|------------|----|------|
|  | Ant2 | 5180 | NV | -30 | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | -20 | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | -10 | -80000.00  | -15.444015 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -15.444015 | 20 | PASS |
|  | Ant1 | 5220 | NV | 50  | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | -20 | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.494253 | 20 | PASS |
|  | Ant2 | 5220 | NV | 40  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 50  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | -20 | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | -10 | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.494253 | 20 | PASS |
|  | Ant1 | 5240 | NV | 30  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 40  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 50  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | -30 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -20 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 0   | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -11.450382 | 20 | PASS |
|  | Ant2 | 5240 | NV | 20  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 40  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 50  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -30 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -20 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -10 | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 0   | -80000.00  | -15.267176 | 20 | PASS |
|  | Ant1 | 5745 | NV | 10  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 50  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | -30 | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | -20 | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | -10 | -80000.00  | -13.925152 | 20 | PASS |
|  | Ant2 | 5745 | NV | 0   | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 40  | -100000.00 | -17.406440 | 20 | PASS |
|  |      |      | NV | 50  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | -20 | -100000.00 | -17.406440 | 20 | PASS |
|  | Ant2 | 5745 | NV | -10 | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 0   | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -10.443864 | 20 | PASS |

|               |      |      |    |     |            |            |    |      |
|---------------|------|------|----|-----|------------|------------|----|------|
|               | Ant1 | 5785 | NV | 40  | -80000.00  | -13.925152 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00  | -13.925152 | 20 | PASS |
|               |      |      | NV | -30 | -60000.00  | -10.371651 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 0   | -60000.00  | -10.371651 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 20  | -60000.00  | -10.371651 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00  | -13.828868 | 20 | PASS |
|               | Ant2 | 5785 | NV | 50  | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | -30 | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | -20 | -60000.00  | -10.371651 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 20  | -100000.00 | -17.286085 | 20 | PASS |
|               |      |      | NV | 30  | -100000.00 | -17.286085 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00  | -13.828868 | 20 | PASS |
|               |      |      | NV | 50  | -60000.00  | -10.371651 | 20 | PASS |
|               | Ant1 | 5825 | NV | -30 | -60000.00  | -10.300429 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 10  | -60000.00  | -10.300429 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 30  | -100000.00 | -17.167382 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 50  | -60000.00  | -10.300429 | 20 | PASS |
|               | Ant2 | 5825 | NV | -30 | -100000.00 | -17.167382 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 20  | -60000.00  | -10.300429 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00  | -13.733906 | 20 | PASS |
|               |      |      | NV | 40  | -60000.00  | -10.300429 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00  | -13.733906 | 20 | PASS |
| 11N40SI<br>SO | Ant1 | 5190 | NV | -30 | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 40  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 50  | -80000.00  | -15.414258 | 20 | PASS |
|               | Ant2 | 5190 | NV | -30 | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | -10 | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 0   | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 20  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 30  | -80000.00  | -15.414258 | 20 | PASS |
|               |      |      | NV | 40  | -40000.00  | -7.707129  | 20 | PASS |
|               |      |      | NV | 50  | -80000.00  | -15.414258 | 20 | PASS |
|               | Ant1 | 5230 | NV | -30 | -80000.00  | -15.296367 | 20 | PASS |
|               |      |      | NV | -20 | -80000.00  | -15.296367 | 20 | PASS |
|               |      |      | NV | -10 | -40000.00  | -7.648184  | 20 | PASS |
|               |      |      | NV | 0   | -80000.00  | -15.296367 | 20 | PASS |
|               |      |      | NV | 10  | -80000.00  | -15.296367 | 20 | PASS |

|                |      |      |    |     |           |            |    |      |
|----------------|------|------|----|-----|-----------|------------|----|------|
|                |      |      | NV | 20  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -15.296367 | 20 | PASS |
|                | Ant2 | 5230 | NV | -30 | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 30  | -40000.00 | -7.648184  | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -15.296367 | 20 | PASS |
|                | Ant1 | 5755 | NV | -30 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 20  | -40000.00 | -6.950478  | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -13.900956 | 20 | PASS |
|                | Ant2 | 5755 | NV | -30 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -13.900956 | 20 | PASS |
|                | Ant1 | 5795 | NV | -30 | -40000.00 | -6.902502  | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -13.805004 | 20 | PASS |
|                | Ant2 | 5795 | NV | -30 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -13.805004 | 20 | PASS |
| 11AC20S<br>ISO | Ant1 | 5180 | NV | -30 | -60000.00 | -11.583012 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -15.444015 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -15.444015 | 20 | PASS |
|                |      |      | NV | 0   | -60000.00 | -11.583012 | 20 | PASS |
|                |      |      | NV | 10  | -60000.00 | -11.583012 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -15.444015 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -15.444015 | 20 | PASS |
|                |      |      | NV | 40  | -60000.00 | -11.583012 | 20 | PASS |
|                |      |      | NV | 50  | -80000.00 | -15.444015 | 20 | PASS |
|                | Ant2 | 5180 | NV | -30 | -80000.00 | -15.444015 | 20 | PASS |
|                |      |      | NV | -20 | -60000.00 | -11.583012 | 20 | PASS |
|                |      |      | NV | -10 | -60000.00 | -11.583012 | 20 | PASS |

|  |      |      |    |     |            |            |    |      |
|--|------|------|----|-----|------------|------------|----|------|
|  |      |      | NV | 0   | -80000.00  | -15.444015 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.583012 | 20 | PASS |
|  |      |      | NV | 30  | -80000.00  | -15.444015 | 20 | PASS |
|  |      |      | NV | 40  | -40000.00  | -7.722008  | 20 | PASS |
|  |      |      | NV | 50  | -80000.00  | -15.444015 | 20 | PASS |
|  | Ant1 | 5220 | NV | -30 | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | -20 | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 40  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 50  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | -30 | -60000.00  | -11.494253 | 20 | PASS |
|  | Ant2 | 5220 | NV | -20 | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.494253 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | 50  | -80000.00  | -15.325670 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -15.267176 | 20 | PASS |
|  | Ant1 | 5240 | NV | -20 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 50  | -40000.00  | -7.633588  | 20 | PASS |
|  |      |      | NV | -30 | -60000.00  | -11.450382 | 20 | PASS |
|  | Ant2 | 5240 | NV | -20 | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | -10 | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 20  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -11.450382 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | 50  | -80000.00  | -15.267176 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -13.925152 | 20 | PASS |
|  | Ant1 | 5745 | NV | -20 | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 0   | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 10  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 30  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 50  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -13.925152 | 20 | PASS |
|  | Ant2 | 5745 | NV | -20 | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | -10 | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 0   | -100000.00 | -17.406440 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 30  | -60000.00  | -10.443864 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | 50  | -80000.00  | -13.925152 | 20 | PASS |
|  |      |      | NV | -30 | -80000.00  | -13.828868 | 20 | PASS |
|  | Ant1 | 5785 | NV | -30 | -80000.00  | -13.828868 | 20 | PASS |

|                |      |      |    |     |            |            |    |      |
|----------------|------|------|----|-----|------------|------------|----|------|
|                |      |      | NV | -20 | -60000.00  | -10.371651 | 20 | PASS |
|                |      |      | NV | -10 | -60000.00  | -10.371651 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | 50  | -60000.00  | -10.371651 | 20 | PASS |
|                | Ant2 | 5785 | NV | -30 | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00  | -13.828868 | 20 | PASS |
|                |      |      | NV | 0   | -60000.00  | -10.371651 | 20 | PASS |
|                |      |      | NV | 10  | -60000.00  | -10.371651 | 20 | PASS |
|                |      |      | NV | 20  | -100000.00 | -17.286085 | 20 | PASS |
|                |      |      | NV | 30  | -60000.00  | -10.371651 | 20 | PASS |
|                |      |      | NV | 40  | -60000.00  | -10.371651 | 20 | PASS |
|                |      |      | NV | 50  | -60000.00  | -10.371651 | 20 | PASS |
|                | Ant1 | 5825 | NV | -30 | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | -20 | -60000.00  | -10.300429 | 20 | PASS |
|                |      |      | NV | -10 | -60000.00  | -10.300429 | 20 | PASS |
|                |      |      | NV | 0   | -40000.00  | -6.866953  | 20 | PASS |
|                |      |      | NV | 10  | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 20  | -60000.00  | -10.300429 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 40  | -60000.00  | -10.300429 | 20 | PASS |
|                | Ant2 | 5825 | NV | -30 | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | -20 | -100000.00 | -17.167382 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00  | -13.733906 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00  | -13.733906 | 20 | PASS |
| 11AC40S<br>ISO | Ant1 | 5190 | NV | -30 | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 10  | -40000.00  | -7.707129  | 20 | PASS |
|                |      |      | NV | 20  | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 40  | -40000.00  | -7.707129  | 20 | PASS |
|                | Ant2 | 5190 | NV | 50  | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | -30 | -40000.00  | -7.707129  | 20 | PASS |
|                |      |      | NV | -20 | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 10  | -40000.00  | -7.707129  | 20 | PASS |
|                |      |      | NV | 20  | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00  | -15.414258 | 20 | PASS |
|                | Ant1 | 5230 | NV | 40  | -80000.00  | -15.414258 | 20 | PASS |
|                |      |      | NV | 50  | -40000.00  | -7.707129  | 20 | PASS |
|                |      |      | NV | -30 | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00  | -15.296367 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00  | -15.296367 | 20 | PASS |

|                |      |      |    |     |           |            |    |      |
|----------------|------|------|----|-----|-----------|------------|----|------|
|                | Ant2 | 5230 | NV | 50  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | -30 | -40000.00 | -7.648184  | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -15.296367 | 20 | PASS |
|                | Ant1 | 5755 | NV | 50  | -80000.00 | -15.296367 | 20 | PASS |
|                |      |      | NV | -30 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -10 | -40000.00 | -6.950478  | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.900956 | 20 | PASS |
|                | Ant2 | 5755 | NV | 50  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -30 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.900956 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.900956 | 20 | PASS |
|                | Ant1 | 5795 | NV | 50  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -30 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.805004 | 20 | PASS |
|                | Ant2 | 5795 | NV | 50  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -30 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 0   | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -13.805004 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -13.805004 | 20 | PASS |
| 11AC80S<br>ISO | Ant1 | 5210 | NV | 50  | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | -30 | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | -10 | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | 0   | 0.00      | 0.000000   | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | 30  | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | 40  | -80000.00 | -15.355086 | 20 | PASS |
|                | Ant2 | 5210 | NV | 50  | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | -30 | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | -20 | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | -10 | 0.00      | 0.000000   | 20 | PASS |
|                |      |      | NV | 0   | 0.00      | 0.000000   | 20 | PASS |
|                |      |      | NV | 10  | -80000.00 | -15.355086 | 20 | PASS |
|                |      |      | NV | 20  | -80000.00 | -15.355086 | 20 | PASS |

|  |      |      |    |     |           |            |    |      |
|--|------|------|----|-----|-----------|------------|----|------|
|  |      |      | NV | 30  | 0.00      | 0.000000   | 20 | PASS |
|  |      |      | NV | 40  | -80000.00 | -15.355086 | 20 | PASS |
|  |      |      | NV | 50  | -80000.00 | -15.355086 | 20 | PASS |
|  | Ant1 | 5775 | NV | -30 | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | -20 | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | -10 | 0.00      | 0.000000   | 20 | PASS |
|  |      |      | NV | 0   | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 30  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 50  | 0.00      | 0.000000   | 20 | PASS |
|  | Ant2 | 5775 | NV | -30 | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | -20 | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | -10 | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 0   | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 10  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 20  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 30  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 40  | -80000.00 | -13.852814 | 20 | PASS |
|  |      |      | NV | 50  | -80000.00 | -13.852814 | 20 | PASS |

## 8.5 UNDESIRABLE RADIATED SPURIOUS EMISSION

### 8.5.1 Applicable Standard

According to FCC Part 15.407 (b)  
According to 789033 D02 Section II(G)

### 8.5.2 Conformance Limit

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.

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.

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.

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 25 MHz 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 27 dBm/MHz at the band edge.

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.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

| Restricted Frequency(MHz) | Field Strength ( $\mu\text{V/m}$ ) | Field Strength (dB $\mu\text{V/m}$ ) | Measurement Distance |
|---------------------------|------------------------------------|--------------------------------------|----------------------|
| 0.009-0.490               | 2400/F(KHz)                        | 20 log ( $\mu\text{V/m}$ )           | 300                  |
| 0.490-1.705               | 2400/F(KHz)                        | 20 log ( $\mu\text{V/m}$ )           | 30                   |
| 1.705-30                  | 30                                 | 29.5                                 | 30                   |
| 30-88                     | 100                                | 40                                   | 3                    |
| 88-216                    | 150                                | 43.5                                 | 3                    |
| 216-960                   | 200                                | 46                                   | 3                    |
| Above 960                 | 500                                | 54                                   | 3                    |

The provisions of §15.205 apply to intentional radiators operating under this section, 15.205 Restricted bands of operation

| MHz               | MHz                 | MHz           | GHz         |
|-------------------|---------------------|---------------|-------------|
| 0.090-0.110       | 16.42-16.423        | 399.9-410     | 4.5-5.15    |
| 10.495-0.505      | 16.69475-16.69525   | 608-614       | 5.35-5.46   |
| 2.1735-2.1905     | 16.80425-16.80475   | 960-1240      | 7.25-7.75   |
| 4.125-4.128       | 25.5-25.67          | 1300-1427     | 8.025-8.5   |
| 4.17725-4.17775   | 37.5-38.25          | 1435-1626.5   | 9.0-9.2     |
| 4.20725-4.20775   | 73-74.6             | 1645.5-1646.5 | 9.3-9.5     |
| 6.215-6.218       | 74.8-75.2           | 1660-1710     | 10.6-12.7   |
| 6.26775-6.26825   | 123-138             | 2200-2300     | 14.47-14.5  |
| 8.291-8.294       | 149.9-150.05        | 2310-2390     | 15.35-16.2  |
| 8.362-8.366       | 156.52475-156.52525 | 2483.5-2500   | 17.7-21.4   |
| 8.37625-8.38675   | 156.7-156.9         | 2690-2900     | 22.01-23.12 |
| 8.41425-8.41475   | 162.0125-167.17     | 3260-3267     | 23.6-24.0   |
| 12.29-12.293      | 167.72-173.2        | 3332-3339     | 31.2-31.8   |
| 12.51975-12.52025 | 240-285             | 3345.8-3358   | 36.43-36.5  |
| 12.57675-12.57725 | 322-335.4           | 3600-4400     | (2)         |
| 13.36-13.41       |                     |               |             |

Remark: 1. Emission level in dBuV/m=20 log (uV/m)  
2. Measurement was performed at an antenna to the closed point of EUT distance of     meters.  
3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

### 8.5.3 Test Configuration

Test according to clause 6.2 radio frequency test setup

### 8.5.4 Test Procedure

#### ■ Unwanted Emissions Measurements below 1000 MHz

Compliance shall be demonstrated using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

The EUT was placed on a turn table which is 0.8m above ground plane.

And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Repeat above procedures until all frequency measured was complete.

We use software control the EUT, Let EUT hopping on and transmit with highest power, All the modes have been tested and the worst result was reported.

Use the following spectrum analyzer settings:

Set RBW=120kHz for  $f < 1$  GHz(30MHz to 1GHz), 200Hz for  $f < 150$ KHz(9KHz to 150KHz), 9KHz for  $< 30$ MHz

(150KHz to 30KHz).

Set the VBW > RBW.

Detector = Peak.

Trace mode = max hold.

Follow the guidelines in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Repeat above procedures until all frequency measured was complete.

#### ■ Unwanted Maximum peak Emissions Measurements above 1000 MHz

Maximum emission levels are measured by setting the analyzer as follows:

RBW = 1 MHz.

VBW  $\geq$  3 MHz.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

#### ■ Unwanted Average Emissions Measurements above 1000 MHz

Method VB (Averaging using reduced video bandwidth): Alternative method.

RBW = 1 MHz.

Video bandwidth. • If the EUT is configured to transmit with duty cycle  $\geq$  98 percent, set VBW  $\leq$  RBW/100 (i.e., 10 kHz) but not less than 10 Hz.

• If the EUT duty cycle is < 98 percent, set VBW  $\geq$  1/T, where T is defined in section II.B.1.a).

Video bandwidth mode or display mode • The instrument shall be set to ensure that video filtering is applied in the power domain. Typically, this requires setting the detector mode to RMS and setting the Average-VBW Type to Power (RMS).

• As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage"

regardless of the display mode.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of  $1/x$ , where  $x$  is the duty cycle. For example, use at least 200 traces if the duty cycle is 25 percent. (If a specific emission is demonstrated to be continuous—i.e., 100 percent duty cycle—rather than turning on and off with the transmit cycle, at least 50 traces shall be averaged.)

■ Band edge measurements.

Unwanted band-edge emissions may be measured using either of the special band-edge measurement techniques (the marker-delta or integration methods) described below. Note that the marker-delta method is primarily a radiated measurement technique that requires the 99% occupied bandwidth edge to be within 2 MHz of the authorized band edge, whereas the integration method can be used in either a radiated or conducted measurement without any special requirement with regards to the displacement of the unwanted emission(s) relative to the authorized bandwidth.

Marker-Delta Method.

The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

#### 8.5.5 Test Results

The voltage 120V & 240V and the modes 802.11a/n/ac has been tested and the worst result recorded as below:

- ☒ For Undesirable radiated Spurious Emission in U-NII – 1  
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Chip 1 ANT2:

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5180 |
| Test mode:    | 802.11a |                 |      |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|-------------|--------------|-------------------------|---------------|-------------|----------|
| 6645.342    | V            | 50.35                   | -44.88        | -27.00      | -17.88   |
| 10558.73    | V            | 53.93                   | -41.30        | -27.00      | -14.30   |
| 17831.7     | V            | 65.37                   | -29.86        | -27.00      | -2.86    |
| 12096.85    | H            | 55.08                   | -40.15        | -27.00      | -13.15   |
| 14300.55    | H            | 56.46                   | -38.77        | -27.00      | -11.77   |
| 18000       | H            | 47.9                    | -47.33        | -27.00      | -20.33   |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5220 |
| Test mode:    | 802.11a |                 |      |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|-------------|--------------|-------------------------|---------------|-------------|----------|
| 5454.842    | V            | 48.69                   | -46.54        | -27.00      | -19.54   |
| 11028.17    | V            | 55.1                    | -40.13        | -27.00      | -13.13   |
| 17803.38    | V            | 65.72                   | -29.51        | -27.00      | -2.51    |
| 7083.678    | H            | 51.65                   | -43.58        | -27.00      | -16.58   |
| 10974.12    | H            | 55.24                   | -39.99        | -27.00      | -12.99   |
| 17927.31    | H            | 48.31                   | -46.92        | -27.00      | -19.92   |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5240 |
| Test mode:    | 802.11a |                 |      |

| Freq. (MHz) | Ant.Pol. H/V | Field Strength (dBuV/m) | E.I.R.P (dBm) | Limit (dBm) | Over(dB) |
|-------------|--------------|-------------------------|---------------|-------------|----------|
| 5417.134    | V            | 48.42                   | -46.81        | -27.00      | -19.81   |
| 10684.6     | V            | 56.21                   | -39.02        | -27.00      | -12.02   |
| 17971.4     | V            | 65.68                   | -29.55        | -27.00      | -2.55    |
| 7035.726    | H            | 50.74                   | -44.49        | -27.00      | -17.49   |
| 12159.95    | H            | 56.41                   | -38.82        | -27.00      | -11.82   |
| 17950.64    | H            | 48.19                   | -47.04        | -27.00      | -20.04   |

## Chip 2 ANT1:

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5180 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 6643.952       | V               | 50.22                      | -45.01           | -27.00      | -18.01   |
| 10560.01       | V               | 53.90                      | -41.33           | -27.00      | -14.33   |
| 17834.59       | V               | 65.11                      | -30.12           | -27.00      | -3.12    |
| 5473.632       | H               | 48.15                      | -47.08           | -27.00      | -20.08   |
| 10775.33       | H               | 55.58                      | -39.65           | -27.00      | -12.65   |
| 17198.24       | H               | 65.84                      | -29.39           | -27.00      | -2.39    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5220 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5214.354       | V               | 49.16                      | -46.07           | -27.00      | -19.07   |
| 10687.16       | V               | 59.15                      | -36.08           | -27.00      | -9.08    |
| 17977.18       | V               | 65.16                      | -30.07           | -27.00      | -3.07    |
| 7059.106       | H               | 50.58                      | -44.65           | -27.00      | -17.65   |
| 12183.33       | H               | 56.09                      | -39.14           | -27.00      | -12.14   |
| 17745.52       | H               | 66.45                      | -28.78           | -27.00      | -1.78    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5240 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5653.452       | V               | 50.56                      | -44.67           | -27.00      | -17.67   |
| 11029.45       | V               | 55.07                      | -40.16           | -27.00      | -13.16   |
| 16806.27       | V               | 65.46                      | -29.77           | -27.00      | -2.77    |
| 7095.368       | H               | 51.57                      | -43.66           | -27.00      | -16.66   |
| 10985.81       | H               | 55.08                      | -40.15           | -27.00      | -13.15   |
| 16924.75       | H               | 65.15                      | -30.08           | -27.00      | -3.08    |

MIMO:

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5180 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 11980.66       | V               | 55.12                      | -40.11           | -27.00      | -13.11   |
| 13405.54       | V               | 56.41                      | -38.82           | -27.00      | -11.82   |
| 17919.83       | V               | 63.56                      | -31.67           | -27.00      | -4.67    |
| 11897.13       | H               | 54.64                      | -40.59           | -27.00      | -13.59   |
| 14457.64       | H               | 56.59                      | -38.64           | -27.00      | -11.64   |
| 16987.03       | H               | 64.03                      | -31.20           | -27.00      | -4.20    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5220 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 11179.67       | V               | 54.80                      | -40.43           | -27.00      | -13.43   |
| 14449.32       | V               | 56.80                      | -38.43           | -27.00      | -11.43   |
| 17995.08       | V               | 63.39                      | -31.84           | -27.00      | -4.84    |
| 12180.43       | H               | 54.56                      | -40.67           | -27.00      | -13.67   |
| 15115.18       | H               | 55.82                      | -39.41           | -27.00      | -12.41   |
| 17976.64       | H               | 64.21                      | -31.02           | -27.00      | -4.02    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5240 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 10887.42       | V               | 54.42                      | -40.81           | -27.00      | -13.81   |
| 15225.3        | V               | 55.94                      | -39.29           | -27.00      | -12.29   |
| 17989.88       | V               | 63.28                      | -31.95           | -27.00      | -4.95    |
| 12168.13       | H               | 55.24                      | -39.99           | -27.00      | -12.99   |
| 14376.45       | H               | 55.73                      | -39.50           | -27.00      | -12.50   |
| 17989.63       | H               | 63.83                      | -31.40           | -27.00      | -4.40    |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

Chip 1 ANT2:

| Frequency: 5180 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 6645.342        | V        | 50.35                     | 74.00               | -23.65   | peak     |
| 6645.342        | V        | 32.48                     | 54.00               | -21.52   | AVG      |
| 10558.73        | V        | 53.93                     | 74.00               | -20.07   | peak     |
| 10558.73        | V        | 35.61                     | 54.00               | -18.39   | AVG      |
| 17831.70        | V        | 65.37                     | 74.00               | -8.63    | peak     |
| 17831.7         | V        | 48.22                     | 54.00               | -5.78    | AVG      |
| 5461.942        | H        | 48.23                     | 74.00               | -25.77   | peak     |
| 5461.942        | H        | 30.03                     | 54.00               | -23.97   | AVG      |
| 10763.64        | H        | 55.74                     | 74.00               | -18.26   | peak     |
| 10763.64        | H        | 38.65                     | 54.00               | -15.35   | AVG      |
| 17800.80        | H        | 66.02                     | 74.00               | -7.98    | peak     |
| 17800.8         | H        | 48.53                     | 54.00               | -5.47    | AVG      |

| Frequency: 5220 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5454.842        | V        | 48.69                     | 74.00               | -25.31   | peak     |
| 5454.842        | V        | 30.24                     | 54.00               | -23.76   | AVG      |
| 11028.17        | V        | 55.10                     | 74.00               | -18.90   | peak     |
| 11028.17        | V        | 38.29                     | 54.00               | -15.71   | AVG      |
| 17803.38        | V        | 65.72                     | 74.00               | -8.28    | peak     |
| 17803.38        | V        | 48.59                     | 54.00               | -5.41    | AVG      |
| 7083.678        | H        | 51.65                     | 74.00               | -22.35   | peak     |
| 7083.678        | H        | 33.59                     | 54.00               | -20.41   | AVG      |
| 10974.12        | H        | 55.24                     | 74.00               | -18.76   | peak     |
| 10974.12        | H        | 38.76                     | 54.00               | -15.24   | AVG      |
| 17927.31        | H        | 65.33                     | 74.00               | -8.67    | peak     |
| 17927.31        | H        | 48.31                     | 54.00               | -5.69    | AVG      |

| Frequency: 5240 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5417.134        | V        | 48.42                     | 74.00               | -25.58   | peak     |
| 5417.134        | V        | 30.45                     | 54.00               | -23.55   | AVG      |
| 10684.60        | V        | 56.21                     | 74.00               | -17.79   | peak     |
| 10684.60        | V        | 39.02                     | 54.00               | -14.98   | AVG      |
| 17971.40        | V        | 65.68                     | 74.00               | -8.32    | peak     |
| 17971.4         | V        | 47.93                     | 54.00               | -6.07    | AVG      |
| 7035.726        | H        | 50.74                     | 74.00               | -23.26   | peak     |
| 7035.726        | H        | 32.48                     | 54.00               | -21.52   | AVG      |
| 12159.95        | H        | 56.41                     | 74.00               | -17.59   | peak     |
| 12159.95        | H        | 38.24                     | 54.00               | -15.76   | AVG      |
| 17950.64        | H        | 66.81                     | 74.00               | -7.19    | peak     |
| 17950.64        | H        | 48.19                     | 54.00               | -5.81    | AVG      |

Chip 2 ANT1:

| Frequency: 5180 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 6643.952        | V        | 50.22                     | 74.00               | -23.78   | peak     |
| 6643.952        | V        | 32.32                     | 54.00               | -21.68   | AVG      |
| 10560.010       | V        | 53.90                     | 74.00               | -20.1    | peak     |
| 10560.010       | V        | 35.59                     | 54.00               | -18.41   | AVG      |
| 17834.590       | V        | 65.11                     | 74.00               | -8.89    | peak     |
| 17834.590       | V        | 48.03                     | 54.00               | -5.97    | AVG      |
| 5473.632        | H        | 48.15                     | 74.00               | -25.85   | peak     |
| 5473.632        | H        | 29.82                     | 54.00               | -24.18   | AVG      |
| 10775.330       | H        | 55.58                     | 74.00               | -18.42   | peak     |
| 10775.330       | H        | 38.51                     | 54.00               | -15.49   | AVG      |
| 17198.240       | H        | 65.84                     | 74.00               | -8.16    | peak     |
| 17198.240       | H        | 48.40                     | 54.00               | -5.6     | AVG      |

| Frequency: 5220 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5214.354        | V        | 49.16                     | 74.00               | -24.84   | peak     |
| 5214.354        | V        | 30.13                     | 54.00               | -23.87   | AVG      |
| 10687.160       | V        | 59.15                     | 74.00               | -14.85   | peak     |
| 10687.160       | V        | 38.98                     | 54.00               | -15.02   | AVG      |
| 17977.180       | V        | 65.16                     | 74.00               | -8.84    | peak     |
| 17977.180       | V        | 50.55                     | 54.00               | -3.45    | AVG      |
| 7059.106        | H        | 50.58                     | 74.00               | -23.42   | peak     |
| 7059.106        | H        | 32.06                     | 54.00               | -21.94   | AVG      |
| 12183.330       | H        | 56.09                     | 74.00               | -17.91   | peak     |
| 12183.330       | H        | 37.96                     | 54.00               | -16.04   | AVG      |
| 17745.520       | H        | 66.45                     | 74.00               | -7.55    | peak     |
| 17745.520       | H        | 47.93                     | 54.00               | -6.07    | AVG      |

| Frequency: 5240 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5653.452        | V        | 50.56                     | 74.00               | -23.44   | peak     |
| 5653.452        | V        | 30.08                     | 54.00               | -23.92   | AVG      |
| 11029.450       | V        | 55.07                     | 74.00               | -18.93   | peak     |
| 11029.450       | V        | 43.27                     | 54.00               | -10.73   | AVG      |
| 16806.270       | V        | 65.46                     | 74.00               | -8.54    | peak     |
| 16806.270       | V        | 48.40                     | 54.00               | -5.6     | AVG      |
| 7095.368        | H        | 51.57                     | 74.00               | -22.43   | peak     |
| 7095.368        | H        | 33.38                     | 54.00               | -20.62   | AVG      |
| 10985.810       | H        | 55.08                     | 74.00               | -18.92   | peak     |
| 10985.810       | H        | 38.62                     | 54.00               | -15.38   | AVG      |
| 16924.750       | H        | 65.15                     | 74.00               | -8.85    | peak     |
| 16924.750       | H        | 49.18                     | 54.00               | -4.82    | AVG      |

MIMO:

| Frequency: 5180 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 11980.660       | V        | 55.12                     | 74.00               | -18.88   | peak     |
| 11980.660       | V        | 38.44                     | 54.00               | -15.56   | AVG      |
| 13405.540       | V        | 56.41                     | 74.00               | -17.59   | peak     |
| 13405.540       | V        | 40.08                     | 54.00               | -13.92   | AVG      |
| 17919.830       | V        | 63.56                     | 74.00               | -10.44   | peak     |
| 17919.830       | V        | 46.11                     | 54.00               | -7.89    | AVG      |
| 11897.130       | H        | 54.64                     | 74.00               | -19.36   | peak     |
| 11897.130       | H        | 37.39                     | 54.00               | -16.61   | AVG      |
| 14457.640       | H        | 56.59                     | 74.00               | -17.41   | peak     |
| 14457.640       | H        | 40.36                     | 54.00               | -13.64   | AVG      |
| 16987.030       | H        | 64.03                     | 74.00               | -9.97    | peak     |
| 16987.030       | H        | 47.97                     | 54.00               | -6.03    | AVG      |

| Frequency: 5220 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 11179.670       | V        | 54.80                     | 74.00               | -19.2    | peak     |
| 11179.670       | V        | 37.34                     | 54.00               | -16.66   | AVG      |
| 14449.320       | V        | 56.80                     | 74.00               | -17.2    | peak     |
| 14449.320       | V        | 40.18                     | 54.00               | -13.82   | AVG      |
| 17995.080       | V        | 63.39                     | 74.00               | -10.61   | peak     |
| 17995.080       | V        | 46.01                     | 54.00               | -7.99    | AVG      |
| 12180.430       | H        | 54.56                     | 74.00               | -19.44   | peak     |
| 12180.430       | H        | 37.29                     | 54.00               | -16.71   | AVG      |
| 15115.180       | H        | 55.82                     | 74.00               | -18.18   | peak     |
| 15115.180       | H        | 39.36                     | 54.00               | -14.64   | AVG      |
| 17976.640       | H        | 64.21                     | 74.00               | -9.79    | peak     |
| 17976.640       | H        | 46.77                     | 54.00               | -7.23    | AVG      |

| Frequency: 5240 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 10887.420       | V        | 54.42                     | 74.00               | -19.58   | peak     |
| 10887.420       | V        | 37.34                     | 54.00               | -16.66   | AVG      |
| 15225.300       | V        | 55.94                     | 74.00               | -18.06   | peak     |
| 15225.300       | V        | 39.18                     | 54.00               | -14.82   | AVG      |
| 17989.880       | V        | 63.28                     | 74.00               | -10.72   | peak     |
| 17989.880       | V        | 46.51                     | 54.00               | -7.49    | AVG      |
| 12168.130       | H        | 55.24                     | 74.00               | -18.76   | peak     |
| 12168.130       | H        | 39.19                     | 54.00               | -14.81   | AVG      |
| 14376.450       | H        | 55.73                     | 74.00               | -18.27   | peak     |
| 14376.450       | H        | 39.46                     | 54.00               | -14.54   | AVG      |
| 17989.630       | H        | 63.83                     | 74.00               | -10.17   | peak     |
| 17989.630       | H        | 47.67                     | 54.00               | -6.33    | AVG      |

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.  
(3) Correct Factor= Ant\_F + Cab\_L - Preamp  
(4)Data of measurement within this frequency range shown “ -- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

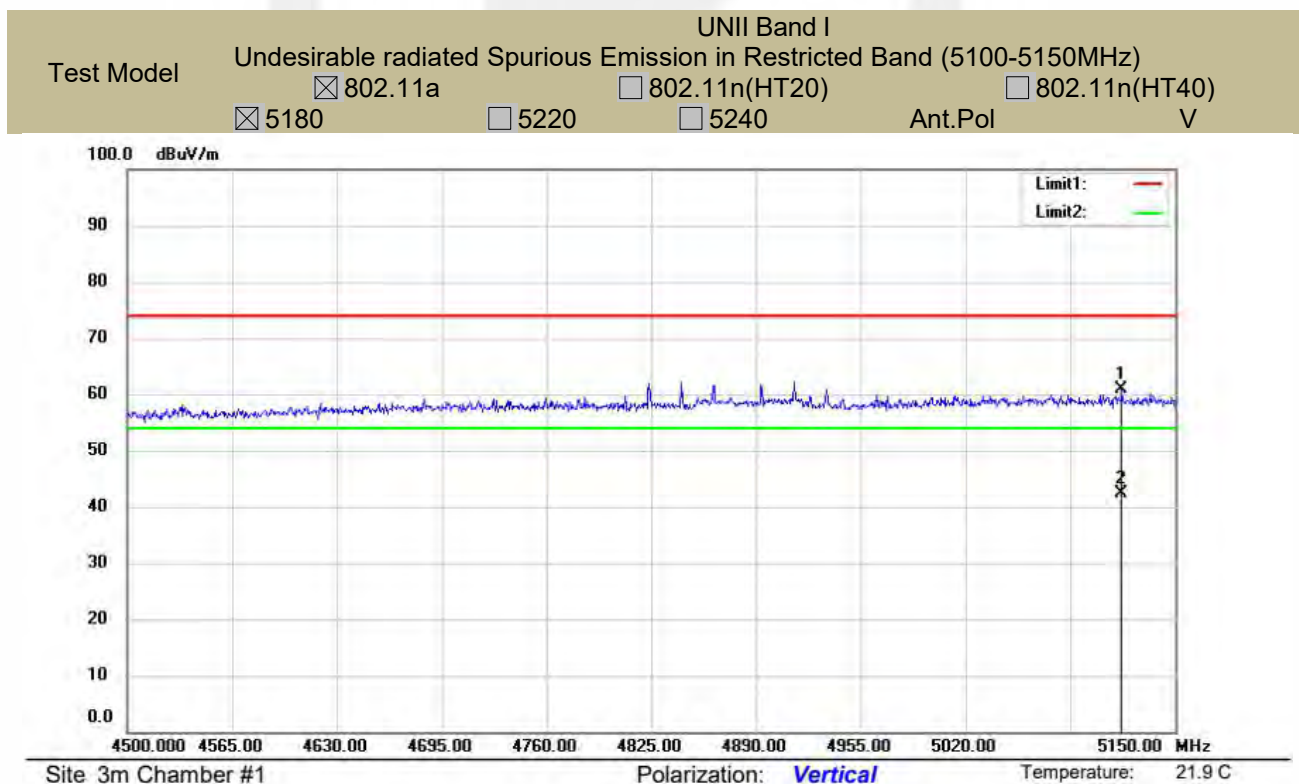
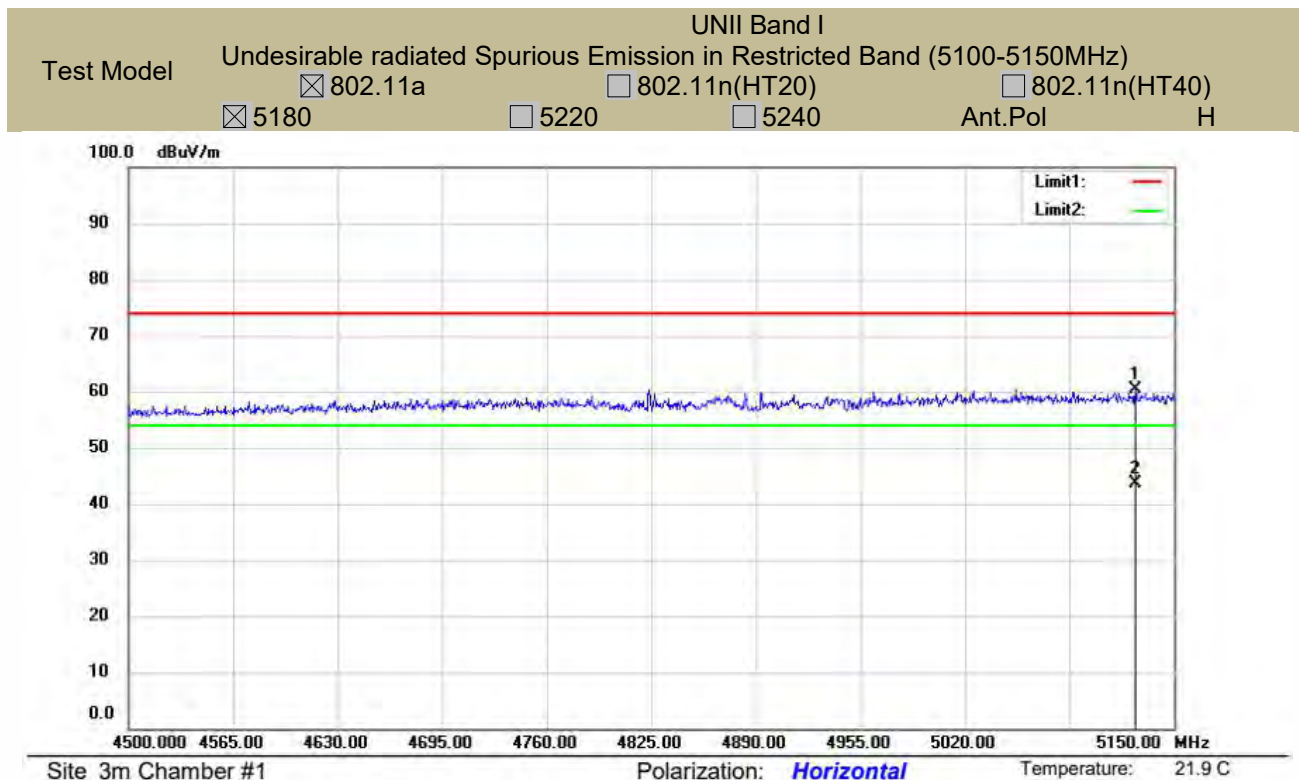
|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5180 |
| Test mode:    | 802.11a |                 |      |

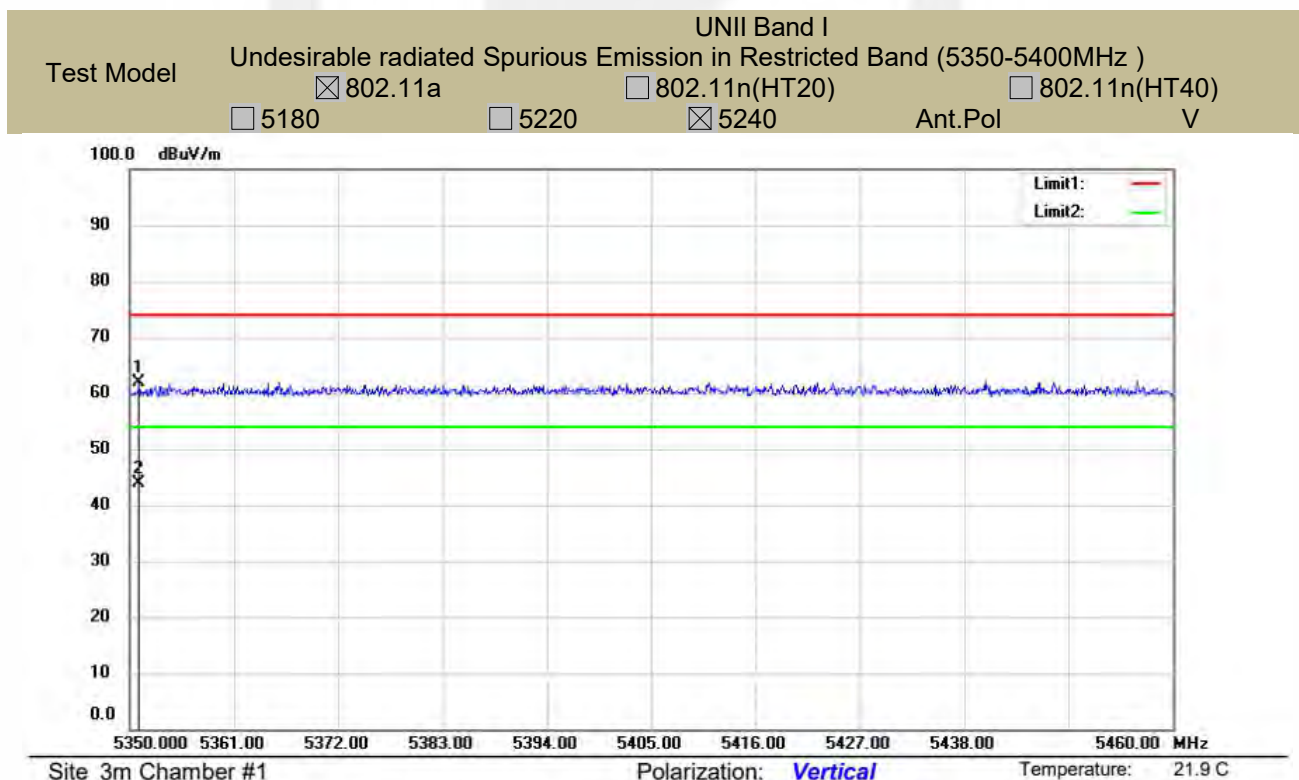
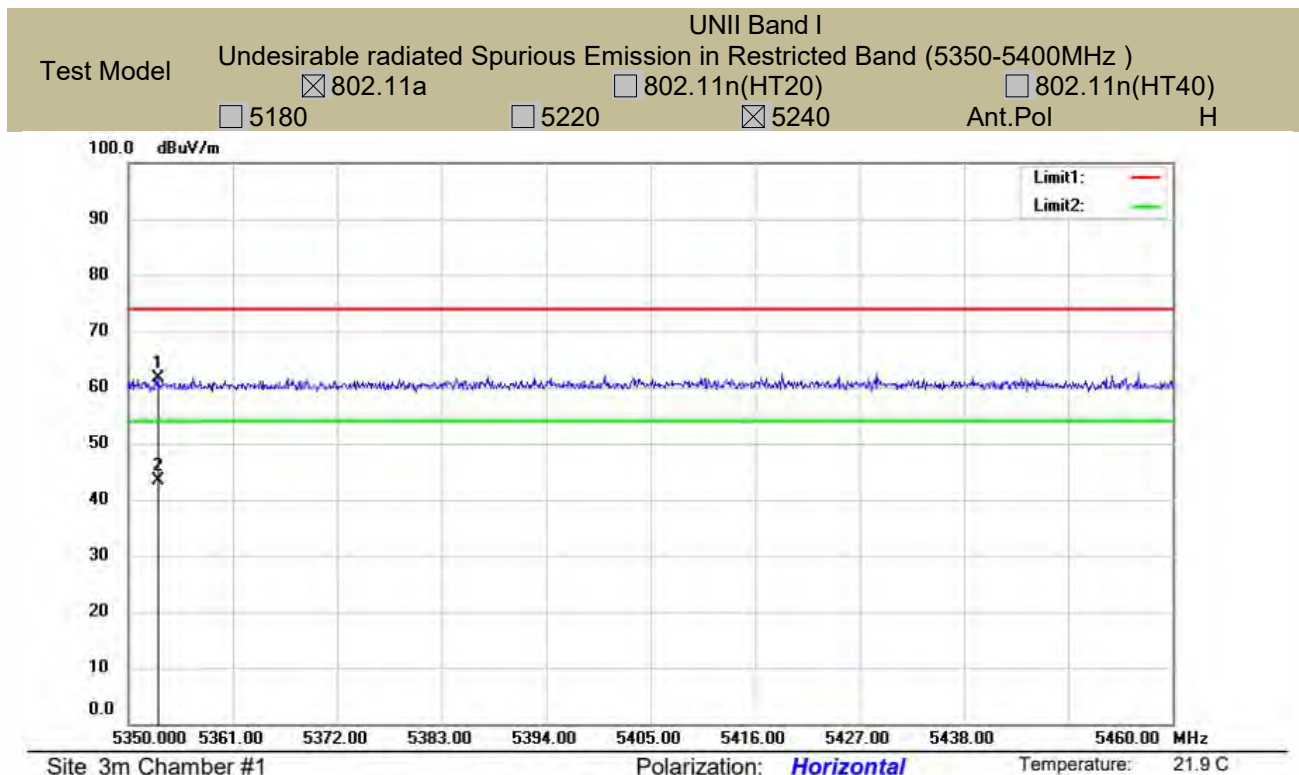
| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(RBW=100KHz)<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Verdict |
|----------------|-----------------|--------------------------------------------|------------------|-------------|---------|
| 5116.948       | V               | 60.78                                      | -34.45           | -27.00      | Pass    |
| 5126.243       | H               | 60.32                                      | -34.91           | -27.00      | Pass    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5240 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(RBW=100KHz)<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Verdict |
|----------------|-----------------|--------------------------------------------|------------------|-------------|---------|
| 5351.073       | V               | 61.76                                      | -33.47           | -27.00      | Pass    |
| 5353.163       | H               | 61.59                                      | -33.64           | -27.00      | Pass    |

**Note:** (1) All Readings are Peak Value (VBW=300kHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)  $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$   
 d is the measurement distance in 3 meters





- ☒ For Undesirable radiated Spurious Emission in UNII Band III

All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:

- ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Chip 1 ANT2:

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5745 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 7039.795       | V               | 52.51                      | -42.72           | -27.00      | -15.72   |
| 11219.47       | V               | 55.87                      | -39.36           | -27.00      | -12.36   |
| 17997.39       | V               | 66.63                      | -28.60           | -27.00      | -1.60    |
| 5459.574       | H               | 47.87                      | -47.36           | -27.00      | -20.36   |
| 10048.1        | H               | 53.12                      | -42.11           | -27.00      | -15.11   |
| 17981.8        | H               | 48.22                      | -47.01           | -27.00      | -20.01   |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5785 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5454.054       | V               | 48.09                      | -47.14           | -27.00      | -20.14   |
| 10950.36       | V               | 55.69                      | -39.54           | -27.00      | -12.54   |
| 17979.2        | V               | 65.67                      | -29.56           | -27.00      | -2.56    |
| 5454.054       | H               | 48.89                      | -46.34           | -27.00      | -19.34   |
| 10084.47       | H               | 53.46                      | -41.77           | -27.00      | -14.77   |
| 17986.99       | H               | 48.79                      | -46.44           | -27.00      | -19.44   |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5825 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5543.853       | V               | 48.13                      | -47.10           | -27.00      | -20.10   |
| 10710.89       | V               | 55.84                      | -39.39           | -27.00      | -12.39   |
| 17976.6        | V               | 67.01                      | -28.22           | -27.00      | -1.22    |
| 5382.018       | H               | 47.28                      | -47.95           | -27.00      | -20.95   |
| 10277.2        | H               | 53.52                      | -41.71           | -27.00      | -14.71   |
| 17968.81       | H               | 48.93                      | -46.30           | -27.00      | -19.30   |

## Chip 2 ANT1:

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5180 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5038.405       | V               | 56.38                      | -38.85           | -27.00      | -11.85   |
| 11220.75       | V               | 55.84                      | -39.39           | -27.00      | -12.39   |
| 18000.28       | V               | 66.37                      | -28.86           | -27.00      | -1.86    |
| 5471.264       | H               | 47.79                      | -47.44           | -27.00      | -20.44   |
| 10059.79       | H               | 52.96                      | -42.27           | -27.00      | -15.27   |
| 15979.24       | H               | 65.40                      | -29.83           | -27.00      | -2.83    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5220 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 6452.664       | V               | 47.96                      | -47.27           | -27.00      | -20.27   |
| 10951.64       | V               | 55.66                      | -39.57           | -27.00      | -12.57   |
| 17982.09       | V               | 65.41                      | -29.82           | -27.00      | -2.82    |
| 5465.744       | H               | 48.81                      | -46.42           | -27.00      | -19.42   |
| 10096.16       | H               | 53.30                      | -41.93           | -27.00      | -14.93   |
| 16984.43       | H               | 65.49                      | -29.74           | -27.00      | -2.74    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5240 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5742.463       | V               | 48.00                      | -47.23           | -27.00      | -20.23   |
| 10712.17       | V               | 55.81                      | -39.42           | -27.00      | -12.42   |
| 17879.49       | V               | 66.75                      | -28.48           | -27.00      | -1.48    |
| 5393.708       | H               | 47.20                      | -48.03           | -27.00      | -21.03   |
| 10288.89       | H               | 53.36                      | -41.87           | -27.00      | -14.87   |
| 17966.25       | H               | 65.48                      | -29.75           | -27.00      | -2.75    |

MIMO:

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5180 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 6084.84        | V               | 58.17                      | -37.06           | -27.00      | -10.06   |
| 14415.95       | V               | 58.16                      | -37.07           | -27.00      | -10.07   |
| 17829.44       | V               | 66.09                      | -29.14           | -27.00      | -2.14    |
| 11845.71       | H               | 56.10                      | -39.13           | -27.00      | -12.13   |
| 15235.71       | H               | 58.22                      | -37.01           | -27.00      | -10.01   |
| 16989.63       | H               | 66.69                      | -28.54           | -27.00      | -1.54    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5220 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 5119.96        | V               | 59.46                      | -35.77           | -27.00      | -8.77    |
| 12111.32       | V               | 57.64                      | -37.59           | -27.00      | -10.59   |
| 17837.17       | V               | 65.82                      | -29.41           | -27.00      | -2.41    |
| 12194.51       | H               | 56.85                      | -38.38           | -27.00      | -11.38   |
| 14682.76       | H               | 57.65                      | -37.58           | -27.00      | -10.58   |
| 16831.72       | H               | 65.94                      | -29.29           | -27.00      | -2.29    |

|               |         |                 |      |
|---------------|---------|-----------------|------|
| Temperature : | 28℃     | Test By:        | HYD  |
| Humidity :    | 65 %    | Frequency(MHz): | 5240 |
| Test mode:    | 802.11a |                 |      |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Over(dB) |
|----------------|-----------------|----------------------------|------------------|-------------|----------|
| 6093.71        | V               | 59.43                      | -35.80           | -27.00      | -8.80    |
| 13409.7        | V               | 57.79                      | -37.44           | -27.00      | -10.44   |
| 17868.12       | V               | 65.18                      | -30.05           | -27.00      | -3.05    |
| 11905.72       | H               | 56.94                      | -38.29           | -27.00      | -11.29   |
| 14217.49       | H               | 57.77                      | -37.46           | -27.00      | -10.46   |
| 16997.44       | H               | 65.41                      | -29.82           | -27.00      | -2.82    |

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

Chip 1 ANT2:

| Frequency: 802.11a |          |                           | Frequency(MHz): 5745 |          |          |
|--------------------|----------|---------------------------|----------------------|----------|----------|
| Freq.<br>(MHz)     | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m)  | Over(dB) | Detector |
| 7039.795           | V        | 52.51                     | 74.00                | -21.49   | peak     |
| 7039.795           | V        | 34.81                     | 54.00                | -19.19   | AVG      |
| 11219.47           | V        | 55.87                     | 74.00                | -18.13   | peak     |
| 11219.47           | V        | 38.76                     | 54.00                | -15.24   | AVG      |
| 17997.39           | V        | 66.63                     | 74.00                | -7.37    | peak     |
| 17997.39           | V        | 48.69                     | 54.00                | -5.31    | AVG      |
| 5459.574           | H        | 47.87                     | 74.00                | -26.13   | peak     |
| 5459.574           | H        | 30.88                     | 54.00                | -23.12   | AVG      |
| 10048.10           | H        | 53.12                     | 74.00                | -20.88   | peak     |
| 10048.10           | H        | 35.63                     | 54.00                | -18.37   | AVG      |
| 17981.80           | H        | 65.58                     | 74.00                | -8.42    | peak     |
| 17981.8            | H        | 48.22                     | 54.00                | -5.78    | AVG      |

| Frequency: 802.11a |          |                           | Frequency(MHz): 5785 |          |          |
|--------------------|----------|---------------------------|----------------------|----------|----------|
| Freq.<br>(MHz)     | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m)  | Over(dB) | Detector |
| 5454.054           | V        | 48.09                     | 74.00                | -25.91   | peak     |
| 5454.054           | V        | 30.29                     | 54.00                | -23.71   | AVG      |
| 10950.36           | V        | 55.69                     | 74.00                | -18.31   | peak     |
| 10950.36           | V        | 38.57                     | 54.00                | -15.43   | AVG      |
| 17979.20           | V        | 65.67                     | 74.00                | -8.33    | peak     |
| 17979.2            | V        | 48.64                     | 54.00                | -5.36    | AVG      |
| 5454.054           | H        | 48.89                     | 74.00                | -25.11   | peak     |
| 5454.054           | H        | 30.91                     | 54.00                | -23.09   | AVG      |
| 10084.47           | H        | 53.46                     | 74.00                | -20.54   | peak     |
| 10084.47           | H        | 35.19                     | 54.00                | -18.81   | AVG      |
| 17986.99           | H        | 65.67                     | 74.00                | -8.33    | peak     |
| 17986.99           | H        | 48.79                     | 54.00                | -5.21    | AVG      |

| Frequency: 802.11a |          |                           | Frequency(MHz): 5825 |          |          |
|--------------------|----------|---------------------------|----------------------|----------|----------|
| Freq.<br>(MHz)     | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m)  | Over(dB) | Detector |
| 5543.853           | V        | 48.13                     | 74.00                | -25.87   | peak     |
| 5543.853           | V        | 30.55                     | 54.00                | -23.45   | AVG      |
| 10710.89           | V        | 55.84                     | 74.00                | -18.16   | peak     |
| 10710.89           | V        | 38.72                     | 54.00                | -15.28   | AVG      |
| 17976.60           | V        | 67.01                     | 74.00                | -6.99    | peak     |
| 17976.6            | V        | 50.03                     | 54.00                | -3.97    | AVG      |
| 5382.018           | H        | 47.28                     | 74.00                | -26.72   | peak     |
| 5382.018           | H        | 30.28                     | 54.00                | -23.72   | AVG      |
| 10277.20           | H        | 53.52                     | 74.00                | -20.48   | peak     |
| 10277.20           | H        | 35.74                     | 54.00                | -18.26   | AVG      |
| 17968.81           | H        | 65.66                     | 74.00                | -8.34    | peak     |
| 17968.81           | H        | 48.93                     | 54.00                | -5.07    | AVG      |

## Chip 2 ANT1:

| Frequency: 5180 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5038.405        | V        | 56.38                     | 74.00               | -17.62   | peak     |
| 5038.405        | V        | 45.65                     | 54.00               | -8.35    | AVG      |
| 11220.750       | V        | 55.84                     | 74.00               | -18.16   | peak     |
| 11220.750       | V        | 43.74                     | 54.00               | -10.26   | AVG      |
| 18000.280       | V        | 66.37                     | 74.00               | -7.63    | peak     |
| 18000.280       | V        | 48.50                     | 54.00               | -5.5     | AVG      |
| 5471.264        | H        | 47.79                     | 74.00               | -26.21   | peak     |
| 5471.264        | H        | 30.67                     | 54.00               | -23.33   | AVG      |
| 10059.790       | H        | 52.96                     | 74.00               | -21.04   | peak     |
| 10059.790       | H        | 35.49                     | 54.00               | -18.51   | AVG      |
| 15979.240       | H        | 65.40                     | 74.00               | -8.6     | peak     |
| 15979.240       | H        | 48.09                     | 54.00               | -5.91    | AVG      |

| Frequency: 5220 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 6452.664        | V        | 47.96                     | 74.00               | -26.04   | peak     |
| 6452.664        | V        | 30.13                     | 54.00               | -23.87   | AVG      |
| 10951.640       | V        | 55.66                     | 74.00               | -18.34   | peak     |
| 10951.640       | V        | 38.55                     | 54.00               | -15.45   | AVG      |
| 17982.090       | V        | 65.41                     | 74.00               | -8.59    | peak     |
| 17982.090       | V        | 48.45                     | 54.00               | -5.55    | AVG      |
| 5465.744        | H        | 48.81                     | 74.00               | -25.19   | peak     |
| 5465.744        | H        | 30.70                     | 54.00               | -23.3    | AVG      |
| 10096.160       | H        | 53.30                     | 74.00               | -20.7    | peak     |
| 10096.160       | H        | 35.05                     | 54.00               | -18.95   | AVG      |
| 16984.430       | H        | 65.49                     | 74.00               | -8.51    | peak     |
| 16984.430       | H        | 48.66                     | 54.00               | -5.34    | AVG      |

| Frequency: 5240 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5742.463        | V        | 48.00                     | 74.00               | -26      | peak     |
| 5742.463        | V        | 30.39                     | 54.00               | -23.61   | AVG      |
| 10712.170       | V        | 55.81                     | 74.00               | -18.19   | peak     |
| 10712.170       | V        | 38.70                     | 54.00               | -15.3    | AVG      |
| 17879.490       | V        | 66.75                     | 74.00               | -7.25    | peak     |
| 17879.490       | V        | 49.84                     | 54.00               | -4.16    | AVG      |
| 5393.708        | H        | 47.20                     | 74.00               | -26.8    | peak     |
| 5393.708        | H        | 30.07                     | 54.00               | -23.93   | AVG      |
| 10288.890       | H        | 53.36                     | 74.00               | -20.64   | peak     |
| 10288.890       | H        | 35.60                     | 54.00               | -18.4    | AVG      |
| 17966.250       | H        | 65.48                     | 74.00               | -8.52    | peak     |
| 17966.250       | H        | 48.80                     | 54.00               | -5.2     | AVG      |

MIMO:

| Frequency: 5180 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 6084.840        | V        | 58.17                     | 74.00               | -15.83   | peak     |
| 6084.840        | V        | 40.04                     | 54.00               | -13.96   | AVG      |
| 14415.950       | V        | 58.16                     | 74.00               | -15.84   | peak     |
| 14415.950       | V        | 41.68                     | 54.00               | -12.32   | AVG      |
| 17829.440       | V        | 66.09                     | 74.00               | -7.91    | peak     |
| 17829.440       | V        | 50.01                     | 54.00               | -3.99    | AVG      |
| 11845.710       | H        | 56.10                     | 74.00               | -17.9    | peak     |
| 11845.710       | H        | 39.99                     | 54.00               | -14.01   | AVG      |
| 15235.710       | H        | 58.22                     | 74.00               | -15.78   | peak     |
| 15235.710       | H        | 41.36                     | 54.00               | -12.64   | AVG      |
| 16989.630       | H        | 66.69                     | 74.00               | -7.31    | peak     |
| 16989.630       | H        | 49.17                     | 54.00               | -4.83    | AVG      |

| Frequency: 5220 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 5119.960        | V        | 59.46                     | 74.00               | -14.54   | peak     |
| 5119.960        | V        | 41.54                     | 54.00               | -12.46   | AVG      |
| 12111.320       | V        | 57.64                     | 74.00               | -16.36   | peak     |
| 12111.320       | V        | 41.28                     | 54.00               | -12.72   | AVG      |
| 17837.170       | V        | 65.82                     | 74.00               | -8.18    | peak     |
| 17837.170       | V        | 49.91                     | 54.00               | -4.09    | AVG      |
| 12194.510       | H        | 56.85                     | 74.00               | -17.15   | peak     |
| 12194.510       | H        | 40.49                     | 54.00               | -13.51   | AVG      |
| 14682.760       | H        | 57.65                     | 74.00               | -16.35   | peak     |
| 14682.760       | H        | 41.46                     | 54.00               | -12.54   | AVG      |
| 16831.720       | H        | 65.94                     | 74.00               | -8.06    | peak     |
| 16831.720       | H        | 51.67                     | 54.00               | -2.33    | AVG      |

| Frequency: 5240 |          |                           |                     |          |          |
|-----------------|----------|---------------------------|---------------------|----------|----------|
| Freq.<br>(MHz)  | Ant.Pol. | Emission<br>Level(dBuV/m) | Limit<br>3m(dBuV/m) | Over(dB) | Detector |
| 6093.710        | V        | 59.43                     | 74.00               | -14.57   | peak     |
| 6093.710        | V        | 40.14                     | 54.00               | -13.86   | AVG      |
| 13409.700       | V        | 57.79                     | 74.00               | -16.21   | peak     |
| 13409.700       | V        | 41.68                     | 54.00               | -12.32   | AVG      |
| 17868.120       | V        | 65.18                     | 74.00               | -8.82    | peak     |
| 17868.120       | V        | 49.11                     | 54.00               | -4.89    | AVG      |
| 11905.720       | H        | 56.94                     | 74.00               | -17.06   | peak     |
| 11905.720       | H        | 40.99                     | 54.00               | -13.01   | AVG      |
| 14217.490       | H        | 57.77                     | 74.00               | -16.23   | peak     |
| 14217.490       | H        | 45.66                     | 54.00               | -8.34    | AVG      |
| 16997.440       | H        | 65.41                     | 74.00               | -8.59    | peak     |
| 16997.440       | H        | 48.67                     | 54.00               | -5.33    | AVG      |

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.  
(3) Correct Factor= Ant\_F + Cab\_L - Preamp  
(4)Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Spurious Emission in band edge

|               |         |            |      |
|---------------|---------|------------|------|
| Temperature : | 28℃     | Test By:   | HYD  |
| Humidity :    | 65 %    | Frequency: | 5745 |
| Test mode:    | 802.11a |            |      |

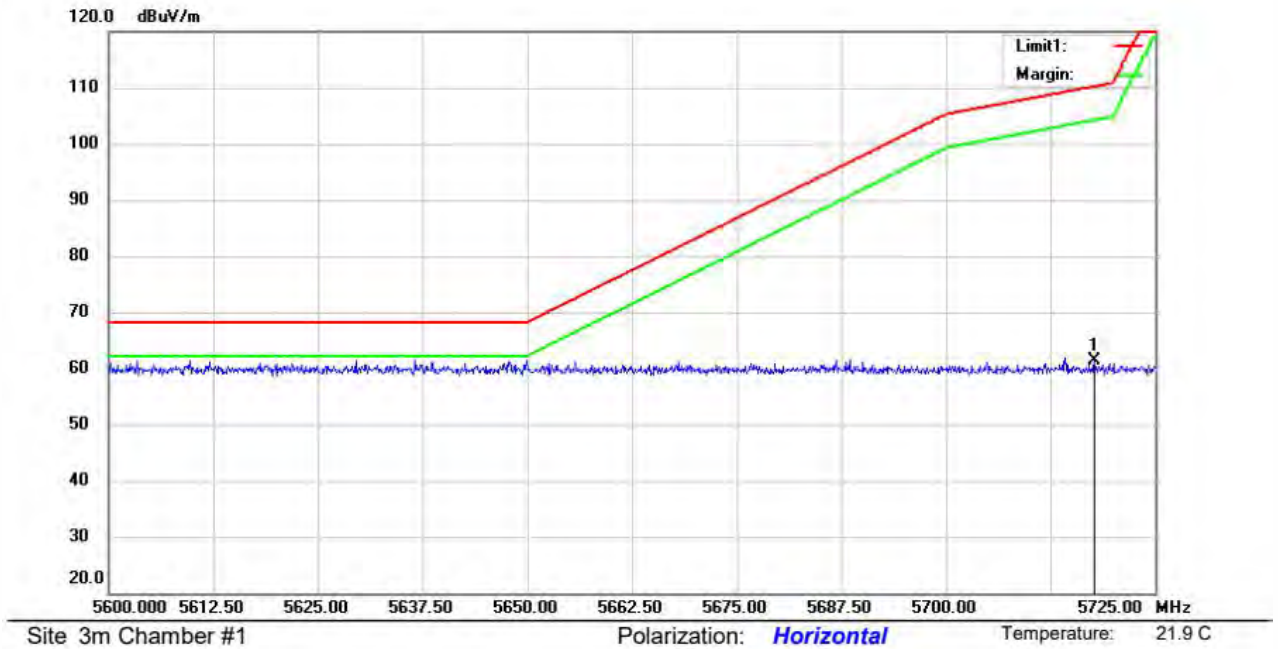
| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(RBW=100KHz)<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Verdict |
|----------------|-----------------|--------------------------------------------|------------------|-------------|---------|
| 5717.769       | V               | 61.2                                       | -34.03           | -27.00      | PASS    |
| 5714.456       | H               | 61.35                                      | -33.88           | -27.00      | PASS    |

|               |         |            |      |
|---------------|---------|------------|------|
| Temperature : | 28℃     | Test By:   | HYD  |
| Humidity :    | 65 %    | Frequency: | 5825 |
| Test mode:    | 802.11a |            |      |

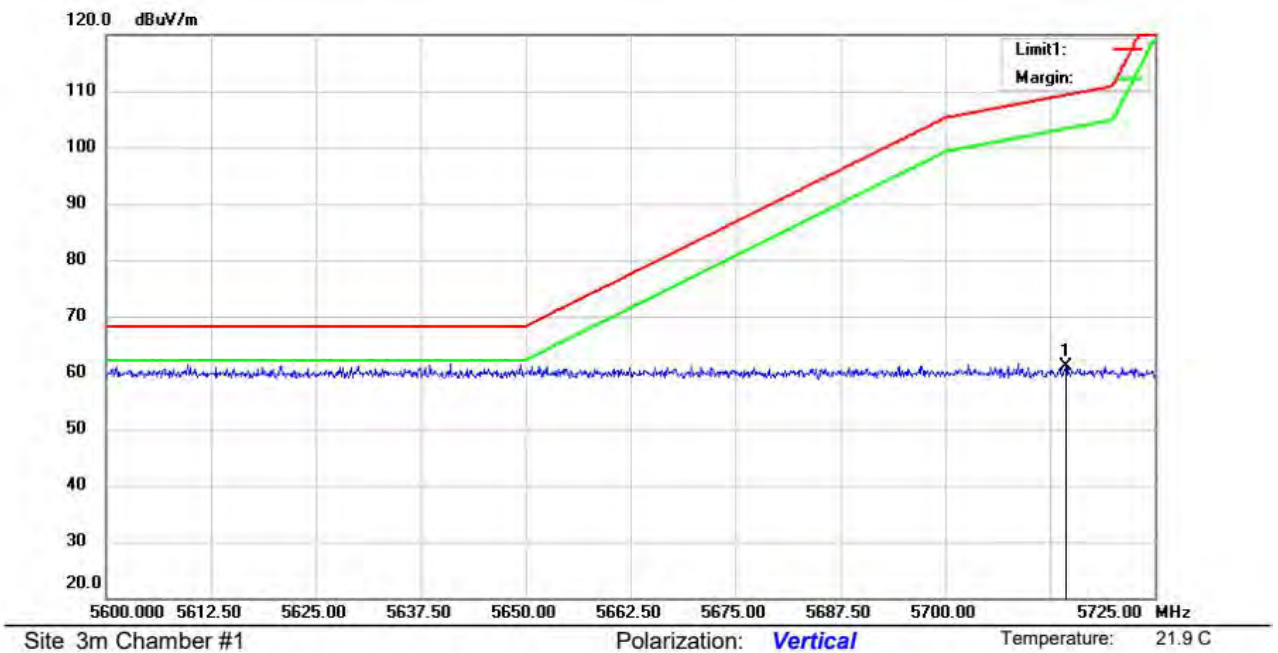
| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Field Strength<br>(RBW=100KHz)<br>(dBuV/m) | E.I.R.P<br>(dBm) | Limit (dBm) | Verdict |
|----------------|-----------------|--------------------------------------------|------------------|-------------|---------|
| 5860.244       | H               | 60.99                                      | -34.24           | -27.00      | PASS    |
| 5855.544       | V               | 61.48                                      | -33.75           | -27.00      | PASS    |

**Note:** (1) All Readings are Peak Value (VBW=3MHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)  $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$   
 d is the measurement distance in 3 meters

Test Model UNII Band III  
Undesirable radiated Undesirable radiated Spurious Emission in Band Edge  
802.11a 802.11n(HT20) 802.11n(HT40)  
5745 Ant.Pol H



Test Model UNII Band III  
Undesirable radiated Undesirable radiated Spurious Emission in Band Edge  
802.11a 802.11n(HT20) 802.11n(HT40)  
5745 Ant.Pol V



UNII Band III

Test Model Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

802.11a 802.11n(HT20) 802.11n(HT40)

5825 Ant.Pol H



UNII Band III

Test Model Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

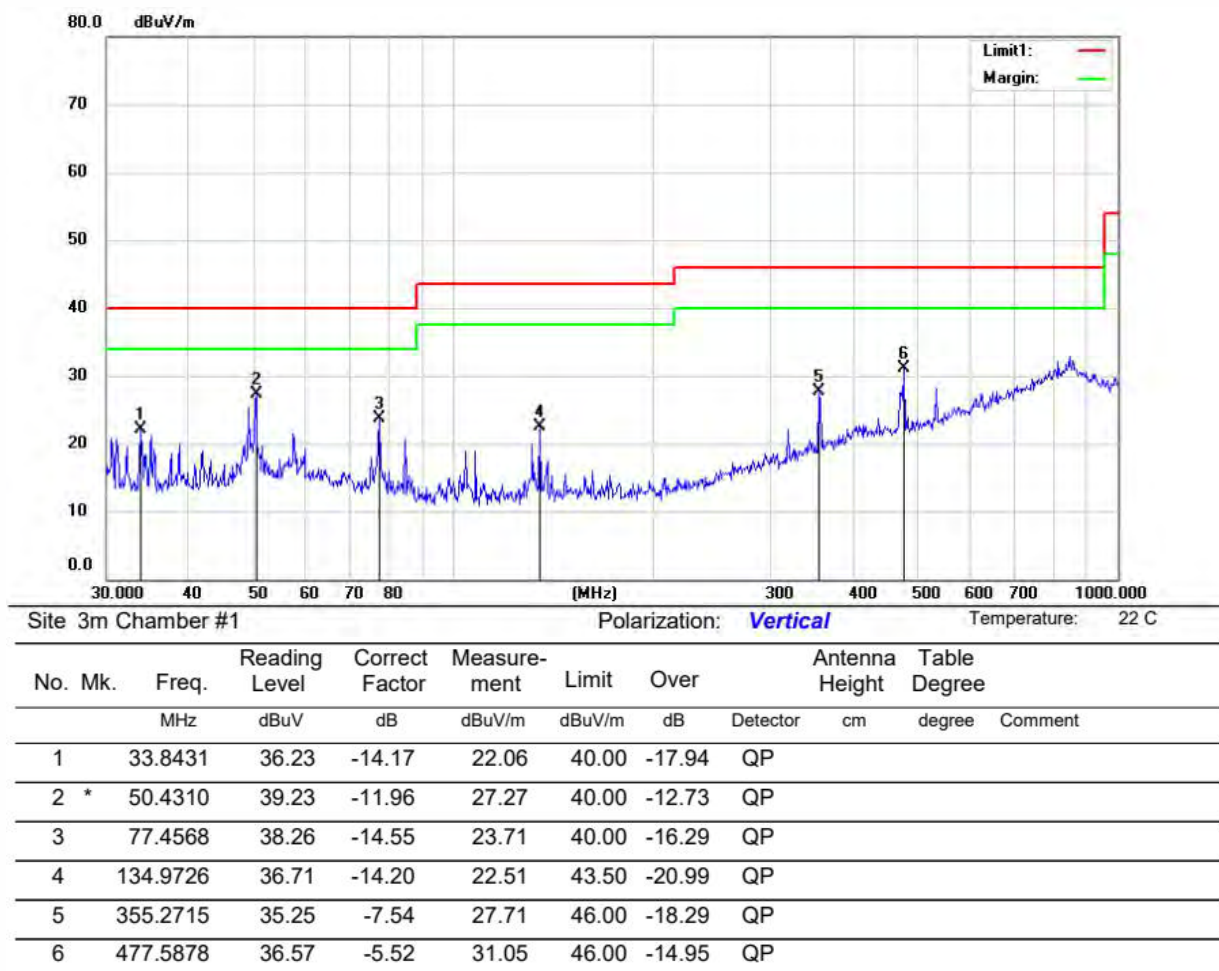
802.11a 802.11n(HT20) 802.11n(HT40)

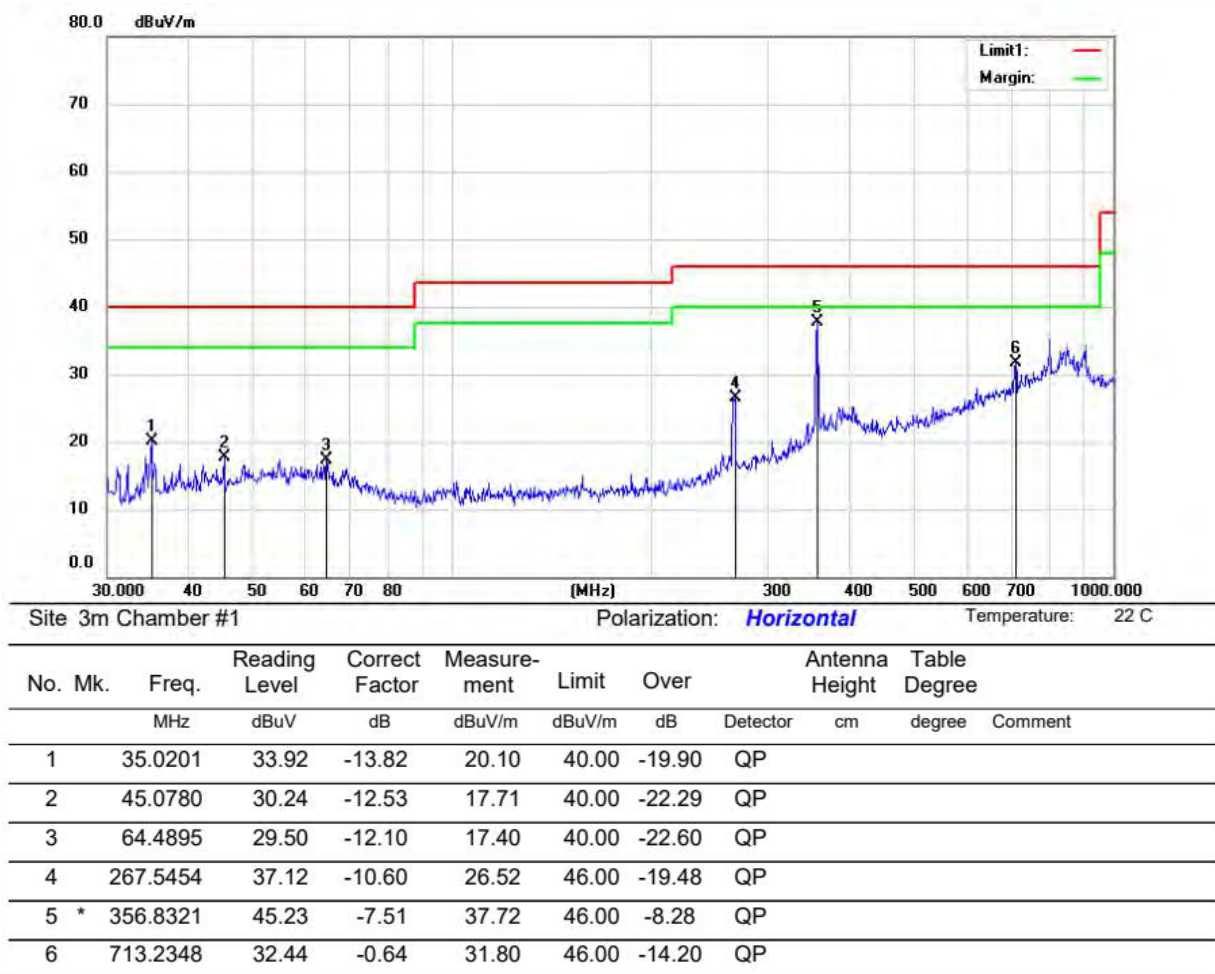
5825 Ant.Pol V



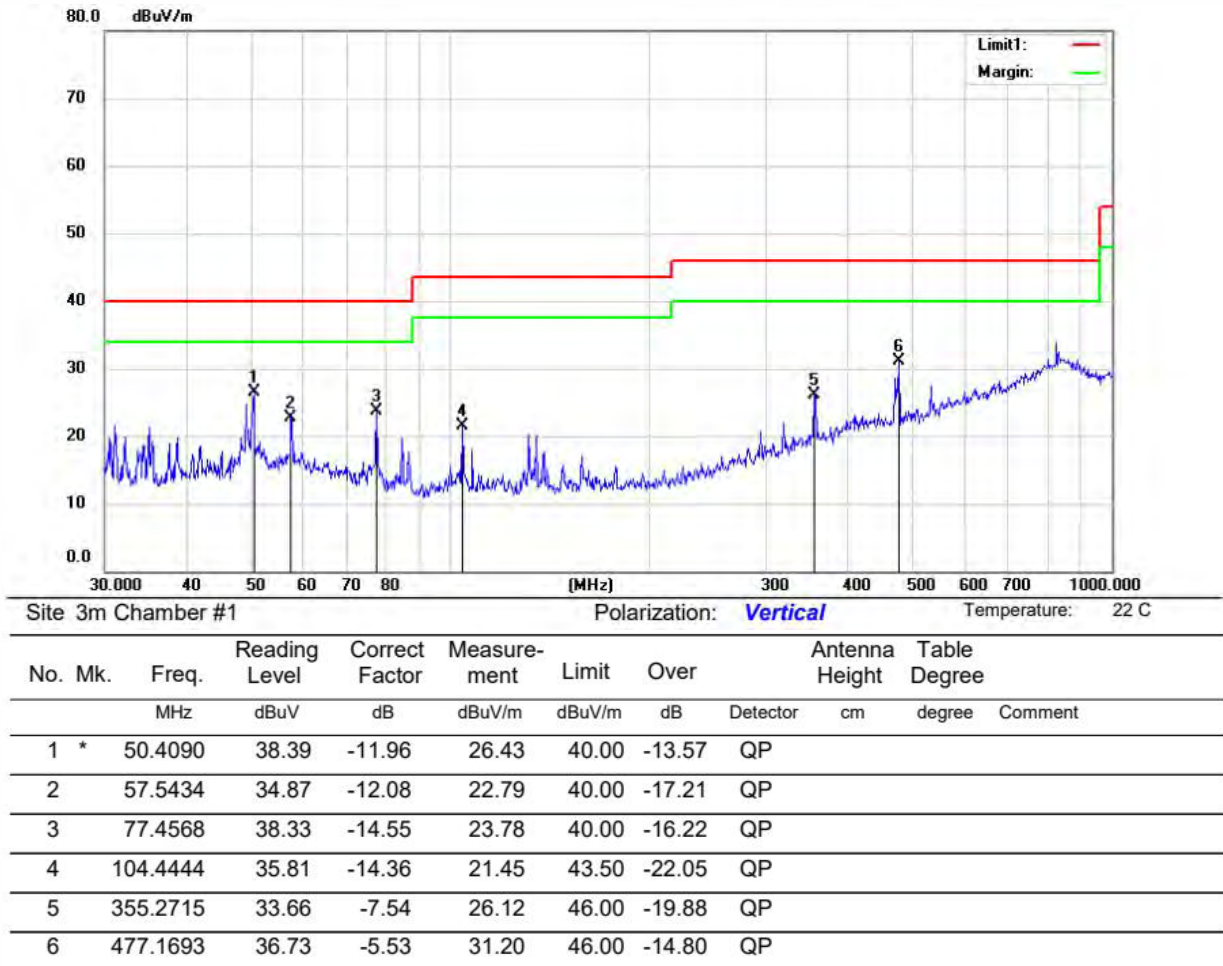
- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)  
All modes have been tested, and the worst result recorded was report as below:

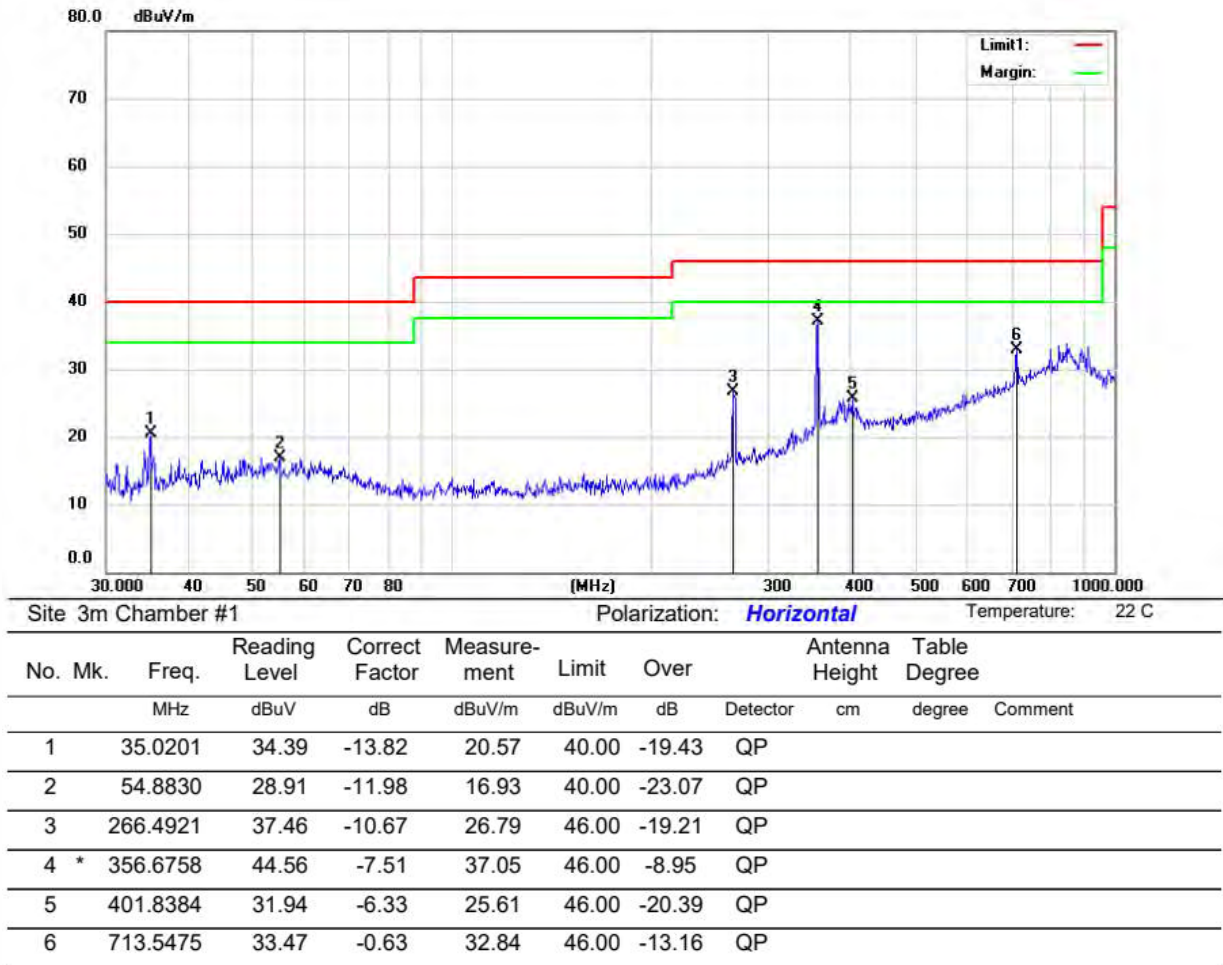
Test mode: 802.11a Frequency: 5180



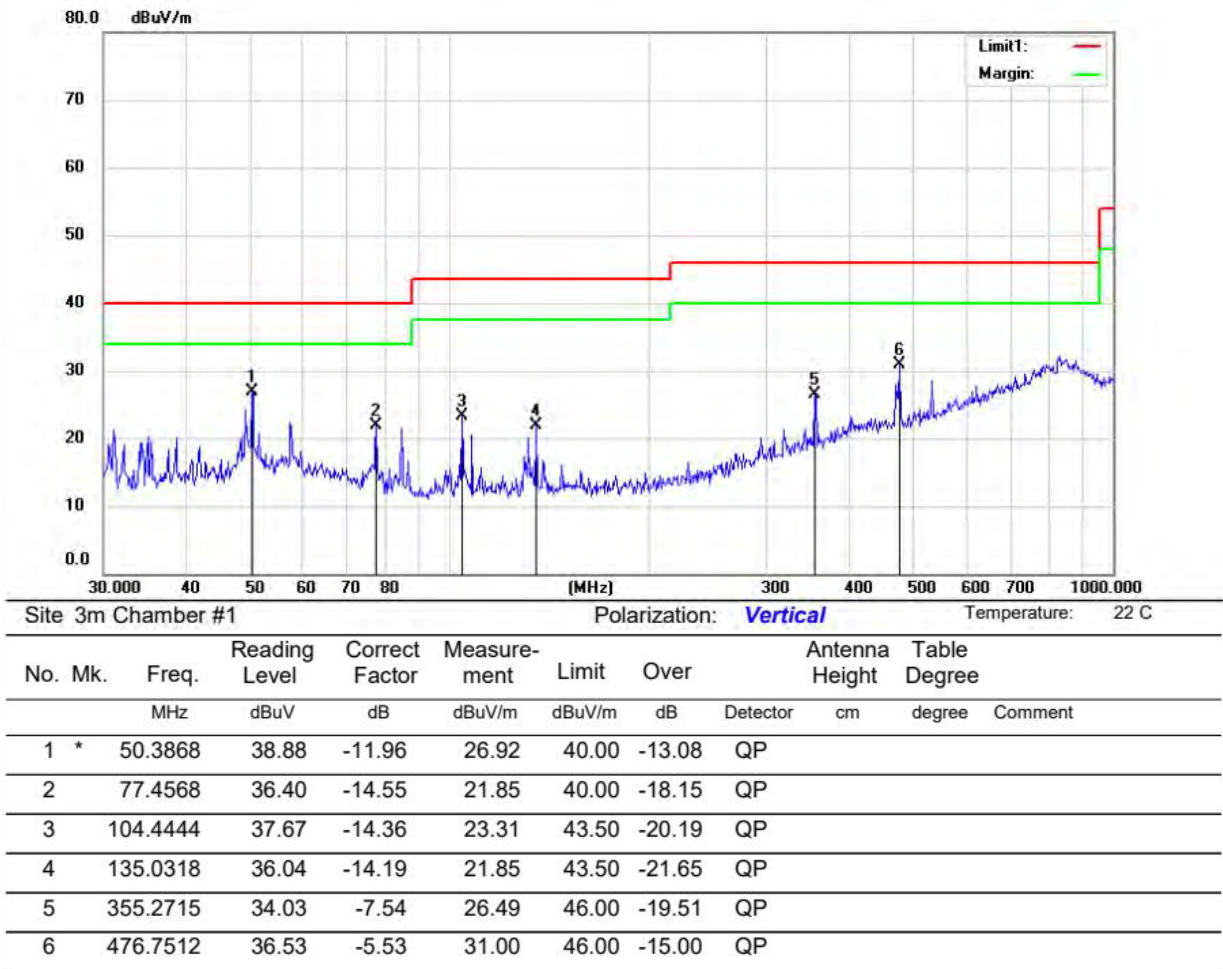


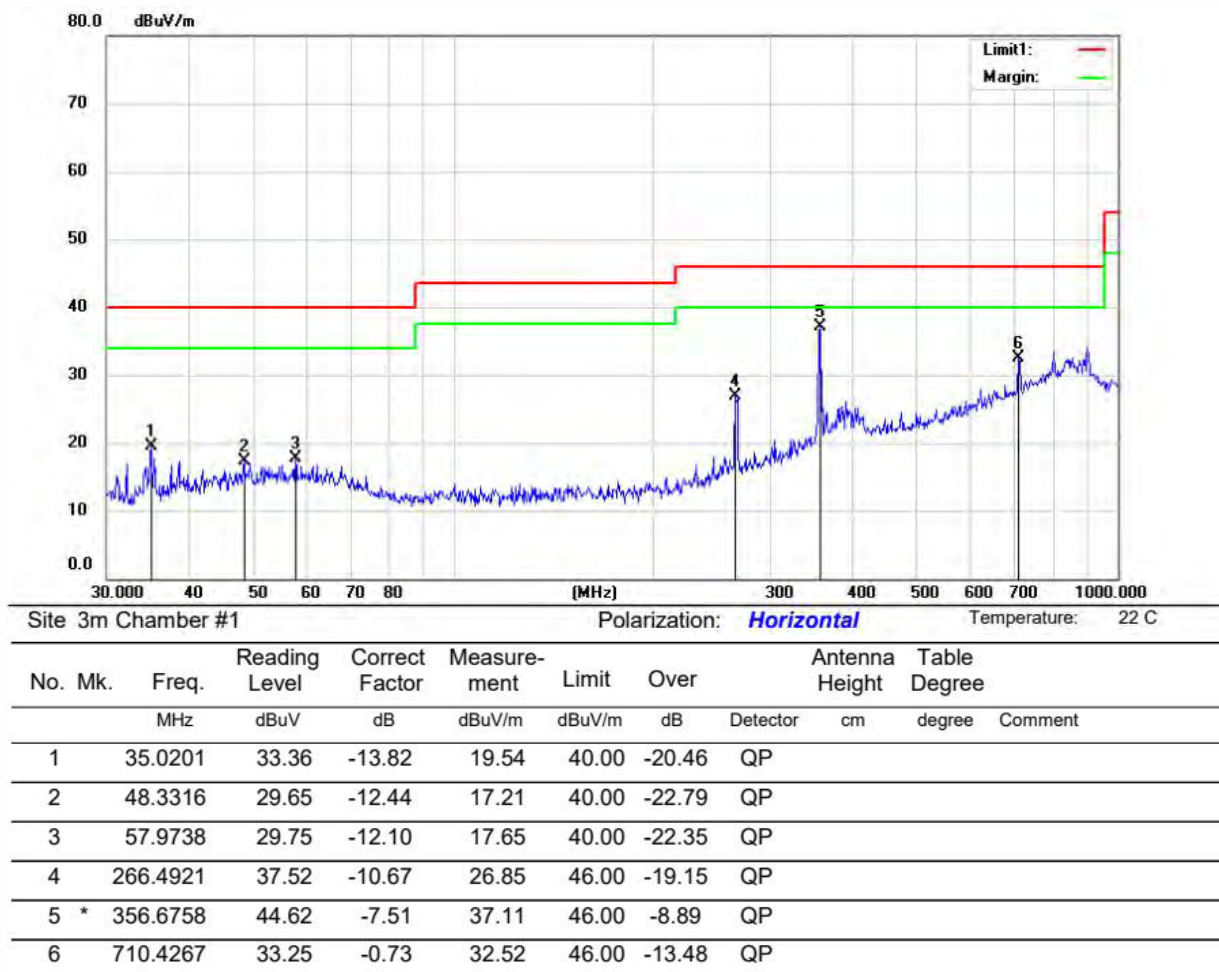
Test mode: 802.11a Frequency: 5220





Test mode: 802.11a Frequency: 5240





## 8.6 POWER LINE CONDUCTED EMISSIONS

### 8.6.1 Applicable Standard

According to FCC Part 15.207(a)

### 8.6.2 Conformance Limit

| Frequency(MHz) | Conducted Emission Limit |         |
|----------------|--------------------------|---------|
|                | Quasi-peak               | Average |
| 0.15-0.5       | 66-56                    | 56-46   |
| 0.5-5.0        | 56                       | 46      |
| 5.0-30.0       | 60                       | 50      |

Note: 1. The lower limit shall apply at the transition frequencies

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 8.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

### 8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Repeat above procedures until all frequency measured were complete.

### 8.6.5 Test Results

#### Pass

The 120V & 240V voltage have been tested, and the worst result recorded was report as below: