

## RF Test Data for RLAN(5. 8G) (Conducted Measurement)

Product Name: Drone

Trade Mark: le-idea

Test Model: K600GPS

FCC ID: 2BOLYLEE38

### Environmental Conditions

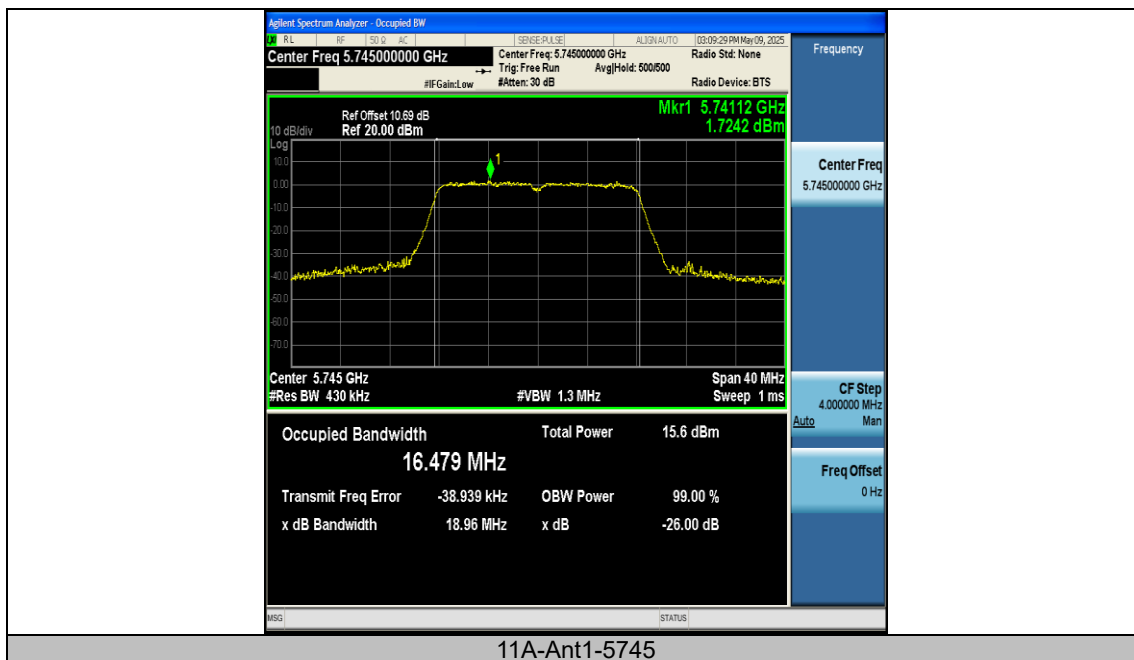
|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5℃     |
| Relative Humidity: | 58%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Allen Lai |
| Supervised by:     | Max Zhang |
| NOTE               | N/A       |

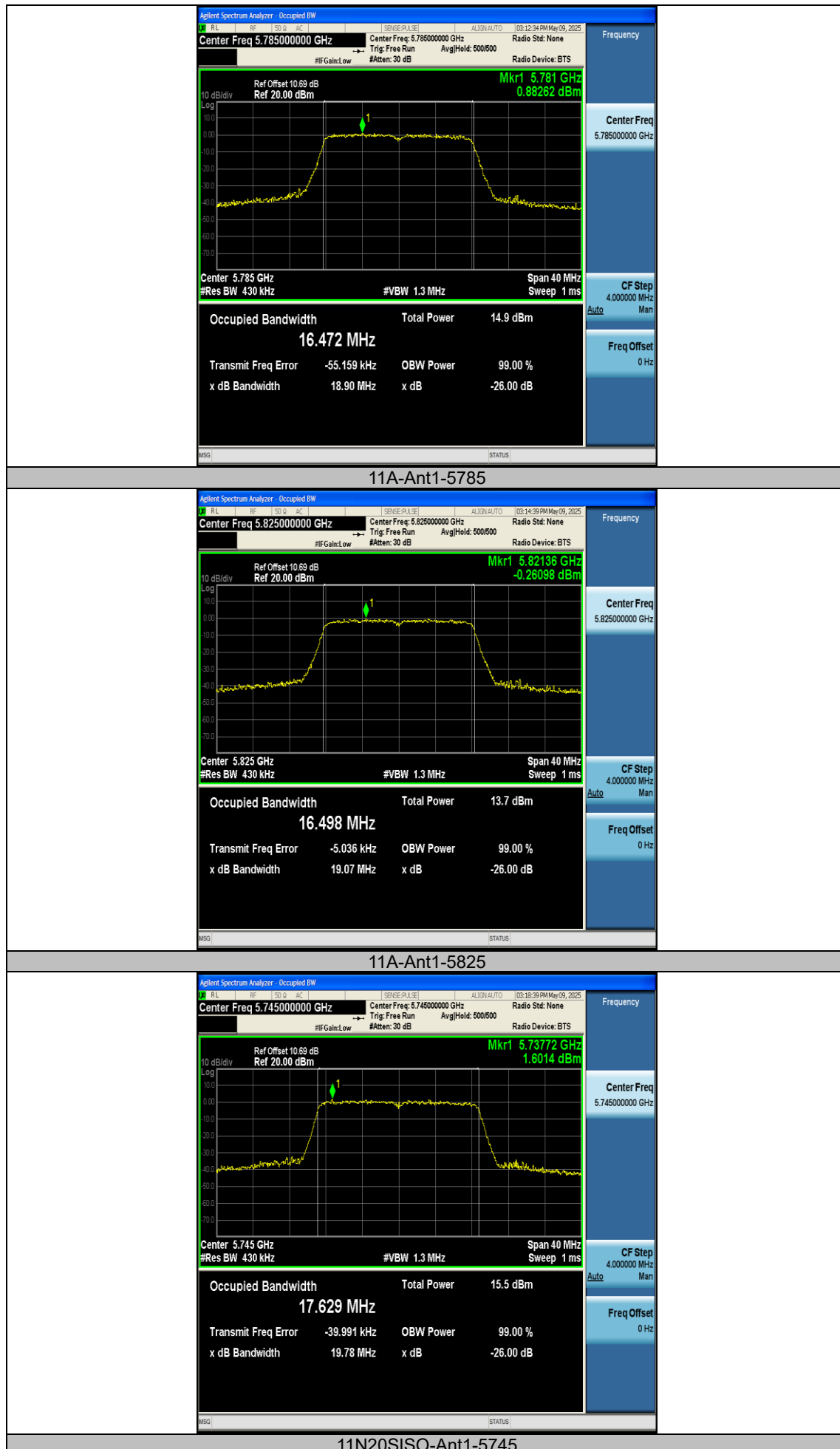
## Appendix A2: Occupied channel bandwidth

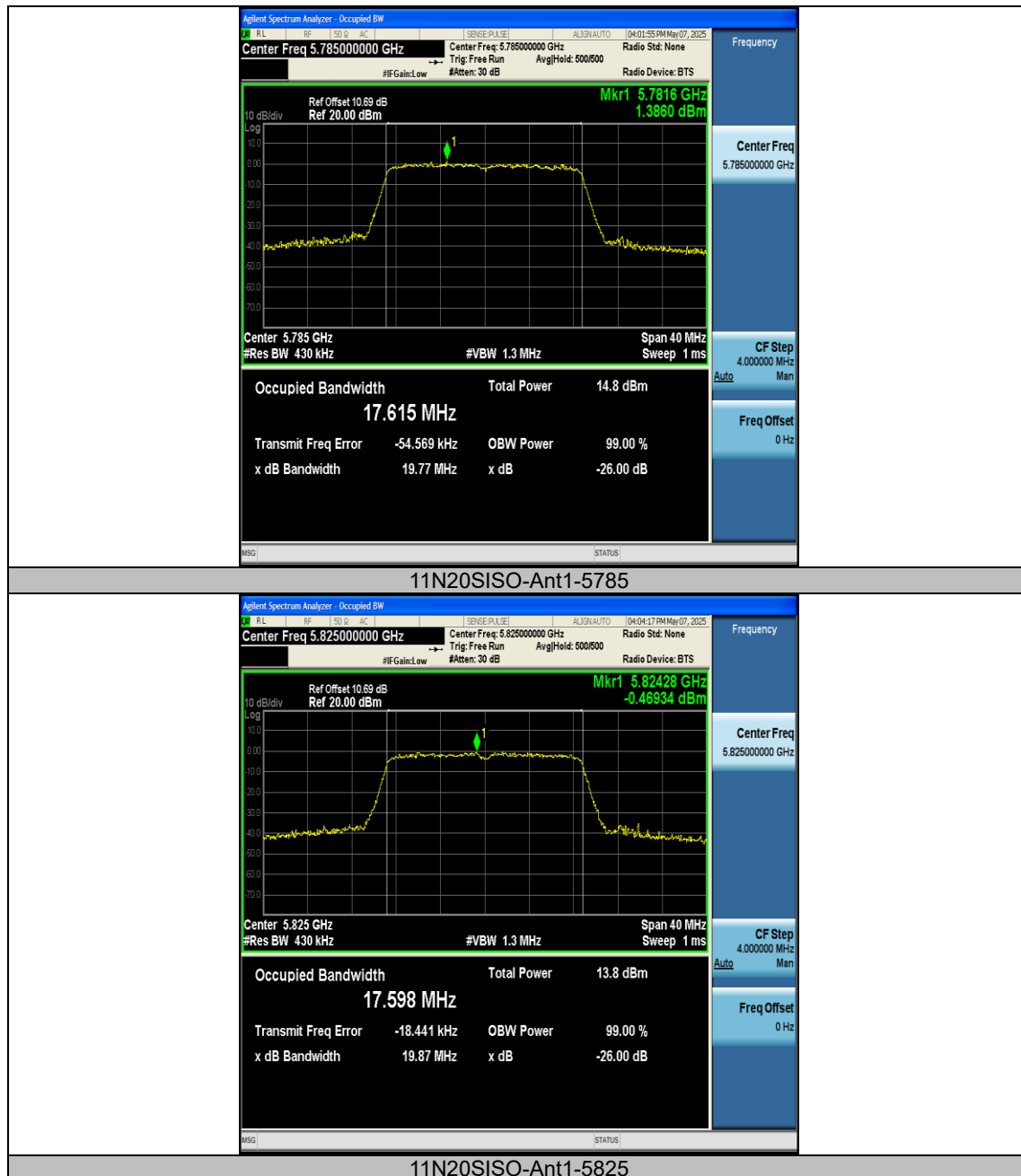
### Test Result

| Test Mode | Antenna | Frequency [MHz] | OCB [MHz] | FL [MHz]  | FH [MHz]  | Limit [MHz] | Verdict |
|-----------|---------|-----------------|-----------|-----------|-----------|-------------|---------|
| 11A       | Ant1    | 5745            | 16.479    | 5736.7216 | 5753.2006 | ---         | ---     |
| 11A       | Ant1    | 5785            | 16.472    | 5776.7088 | 5793.1808 | ---         | ---     |
| 11A       | Ant1    | 5825            | 16.498    | 5816.7460 | 5833.2440 | ---         | ---     |
| 11N20SISO | Ant1    | 5745            | 17.629    | 5736.1455 | 5753.7745 | ---         | ---     |
| 11N20SISO | Ant1    | 5785            | 17.615    | 5776.1379 | 5793.7529 | ---         | ---     |
| 11N20SISO | Ant1    | 5825            | 17.598    | 5816.1826 | 5833.7806 | ---         | ---     |

### Test Graphs







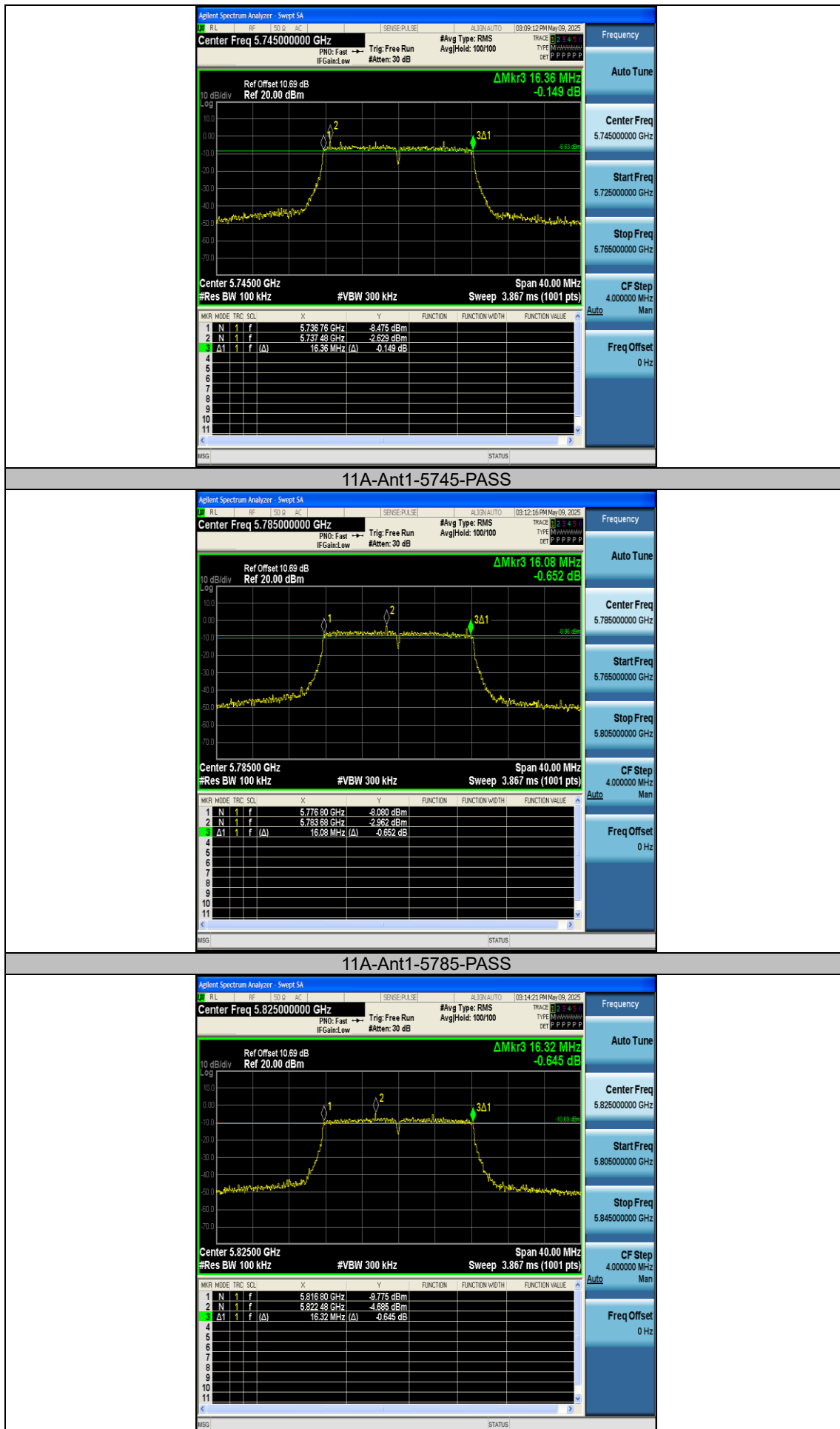
## Appendix A: Min emission bandwidth

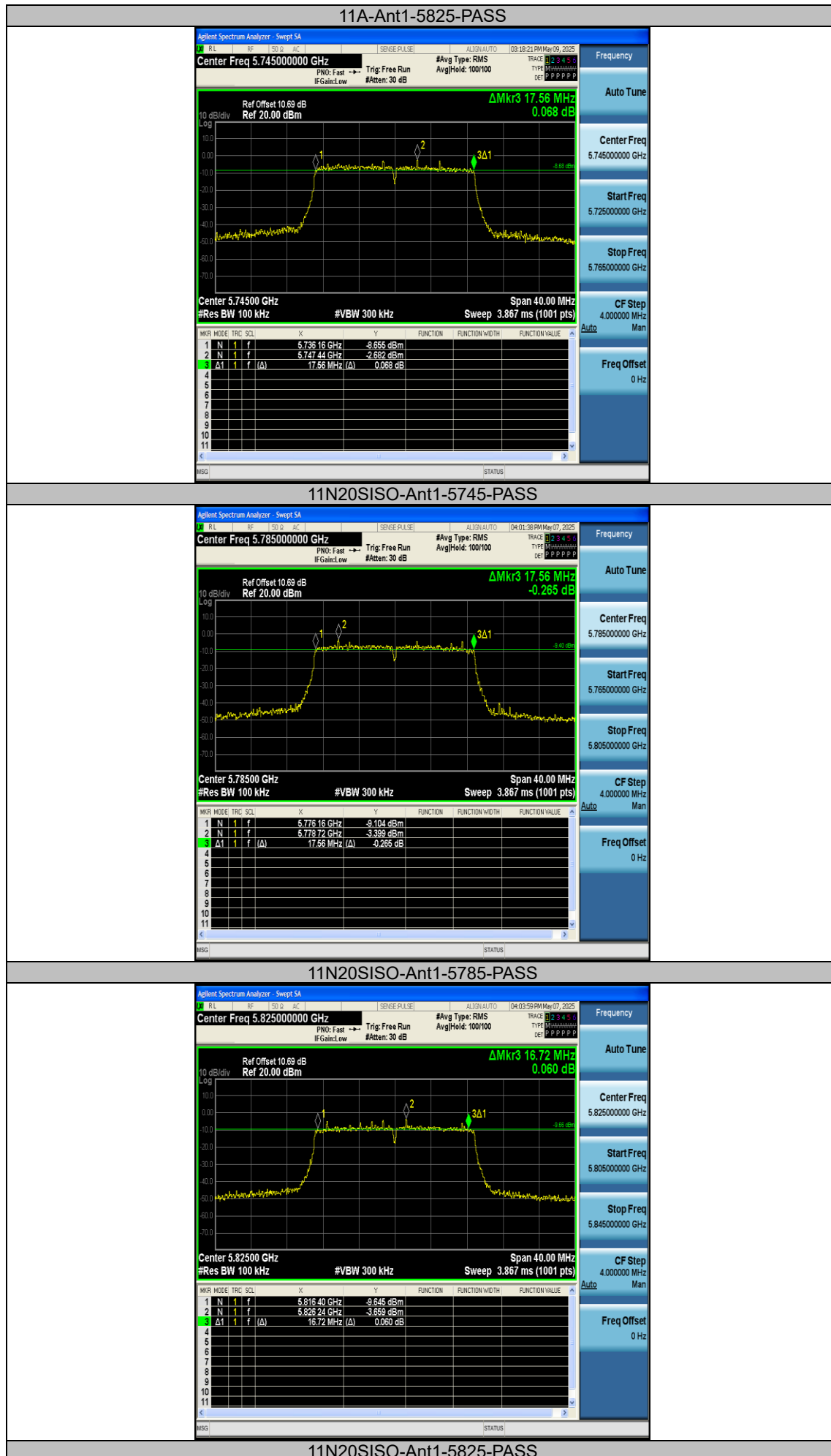
### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | 6db EBW<br>[MHz] | FL<br>[MHz] | FH<br>[MHz] | Limit<br>[MHz] | Verdict |
|-----------|---------|--------------------|------------------|-------------|-------------|----------------|---------|
| 11A       | Ant1    | 5745               | 16.360           | 5736.760    | 5753.120    | 0.5            | PASS    |
| 11A       | Ant1    | 5785               | 16.080           | 5776.800    | 5792.880    | 0.5            | PASS    |
| 11A       | Ant1    | 5825               | 16.320           | 5816.800    | 5833.120    | 0.5            | PASS    |
| 11N20SISO | Ant1    | 5745               | 17.560           | 5736.160    | 5753.720    | 0.5            | PASS    |
| 11N20SISO | Ant1    | 5785               | 17.560           | 5776.160    | 5793.720    | 0.5            | PASS    |
| 11N20SISO | Ant1    | 5825               | 16.720           | 5816.400    | 5833.120    | 0.5            | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs





## Appendix B: Maximum conducted output power

### Test Result

| Test Mode | Antenna | Frequency [MHz] | Conducted Power [dBm] | Conducted Limit [dBm] | Verdict |
|-----------|---------|-----------------|-----------------------|-----------------------|---------|
| 11A       | Ant1    | 5745            | 8.96                  | ≤30.00                | PASS    |
| 11A       | Ant1    | 5785            | 8.26                  | ≤30.00                | PASS    |
| 11A       | Ant1    | 5825            | 7.36                  | ≤30.00                | PASS    |
| 11N20SISO | Ant1    | 5745            | 9.00                  | ≤30.00                | PASS    |
| 11N20SISO | Ant1    | 5785            | 8.29                  | ≤30.00                | PASS    |
| 11N20SISO | Ant1    | 5825            | 7.25                  | ≤30.00                | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

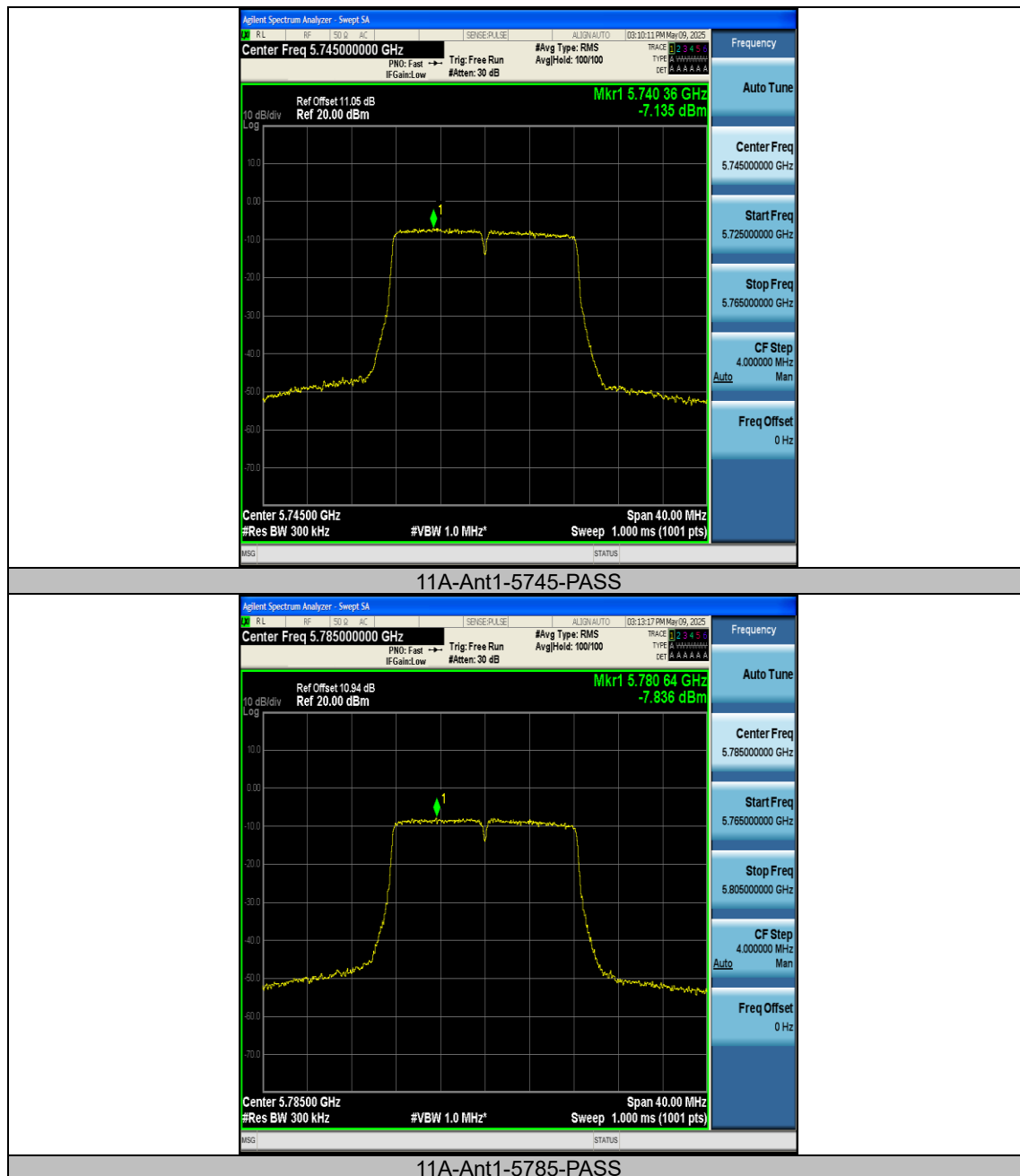
## Appendix C: Maximum power spectral density

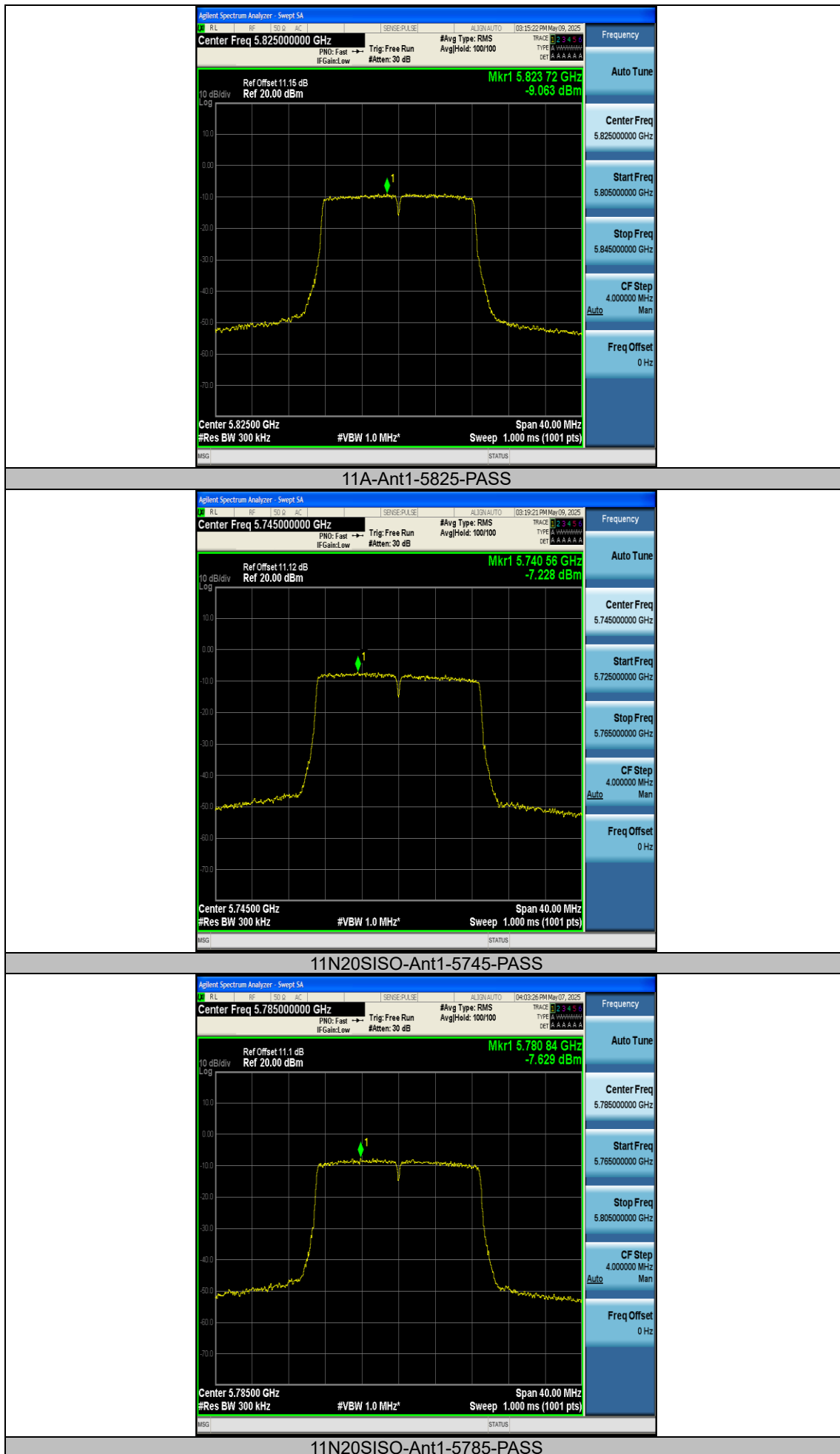
### Test Result

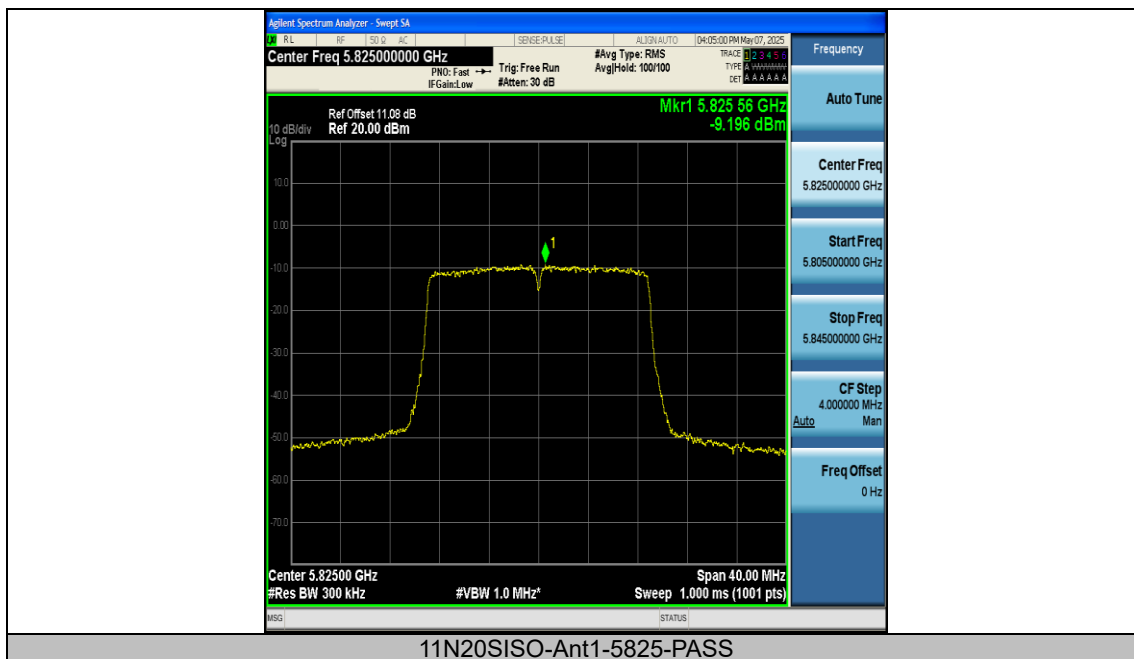
| Frequency [MHz] | Test Mode | Antenna | Result [dBm/500KHz] | Limit [dBm/500KHz] | Verdict |
|-----------------|-----------|---------|---------------------|--------------------|---------|
| 5745            | 11A       | Ant1    | -7.14               | ≤30.00             | PASS    |
| 5785            | 11A       | Ant1    | -7.84               | ≤30.00             | PASS    |
| 5825            | 11A       | Ant1    | -9.06               | ≤30.00             | PASS    |
| 5745            | 11N20SISO | Ant1    | -7.23               | ≤30.00             | PASS    |
| 5785            | 11N20SISO | Ant1    | -7.63               | ≤30.00             | PASS    |
| 5825            | 11N20SISO | Ant1    | -9.20               | ≤30.00             | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB) + RB Factor(dB)

### Test Graphs







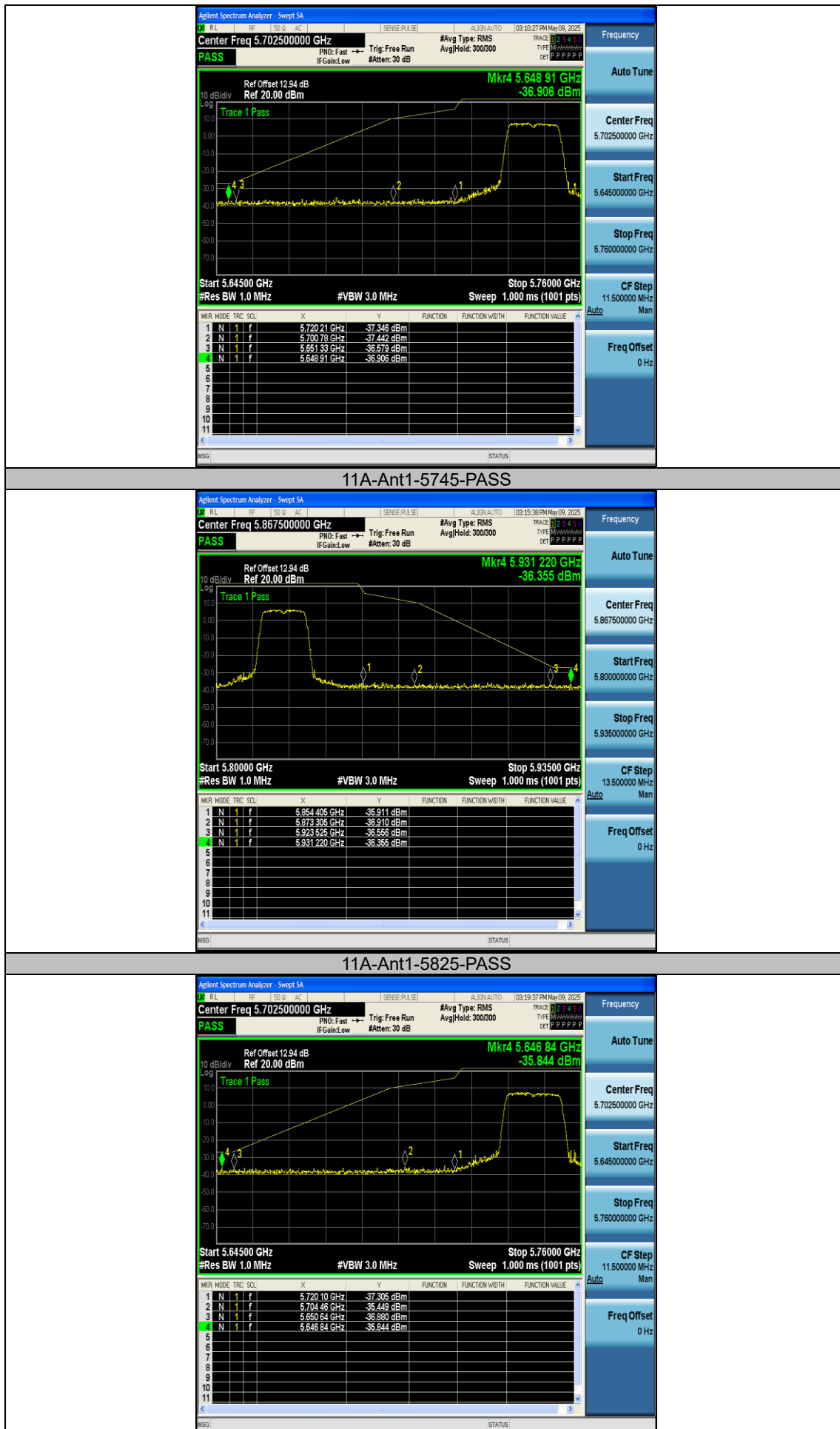
## Appendix D: Band edge measurements

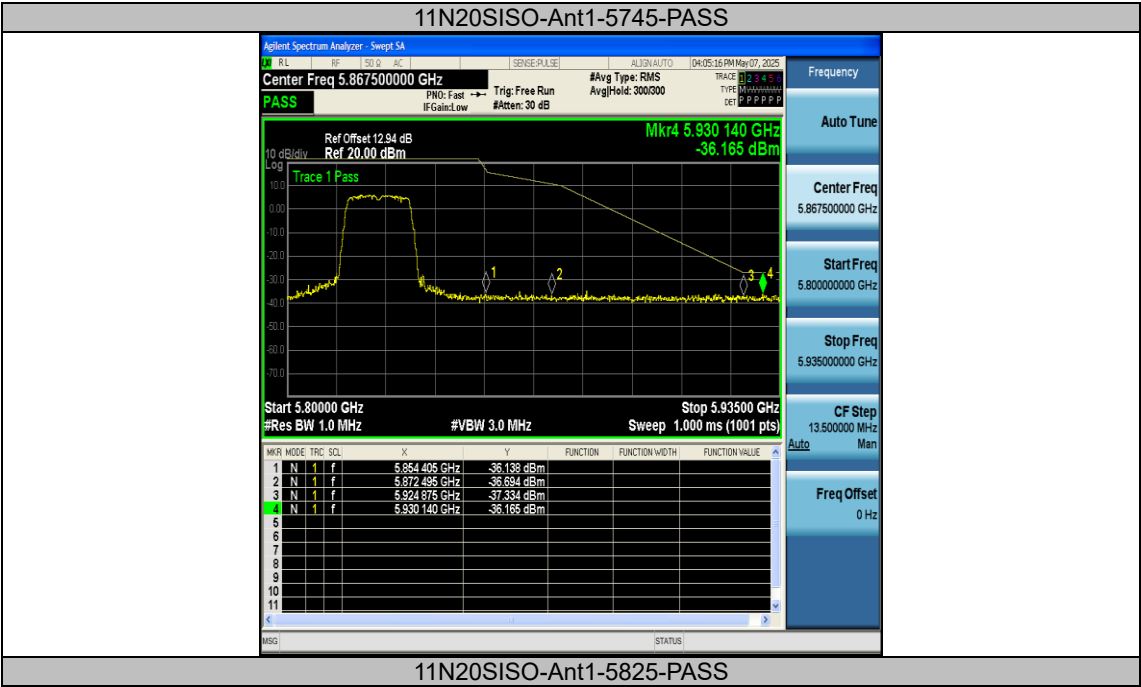
### Test Result

| Test Mode     | Antenna | Ch. Name | Frequency [MHz] | Freq. Range [MHz] | Result [dBm] | Limit [dBm] | Verdict |
|---------------|---------|----------|-----------------|-------------------|--------------|-------------|---------|
| 11A           | Ant1    | Low      | 5745            | 5720~5725         | -37.35       | ≤16.08      | PASS    |
| 11A           | Ant1    | Low      | 5745            | 5700~5720         | -37.44       | ≤10.22      | PASS    |
| 11A           | Ant1    | Low      | 5745            | 5650~5700         | -36.58       | ≤-26.02     | PASS    |
| 11A           | Ant1    | Low      | 5745            | 5760~5650         | -36.91       | ≤-27        | PASS    |
| 11A           | Ant1    | High     | 5825            | 5850~5855         | -35.91       | ≤16.96      | PASS    |
| 11A           | Ant1    | High     | 5825            | 5855~5875         | -36.91       | ≤10.47      | PASS    |
| 11A           | Ant1    | High     | 5825            | 5875~5925         | -36.56       | ≤-25.91     | PASS    |
| 11A           | Ant1    | High     | 5825            | 5925~5935         | -36.36       | ≤-27        | PASS    |
| 11N20SI<br>SO | Ant1    | Low      | 5745            | 5720~5725         | -37.31       | ≤15.82      | PASS    |
| 11N20SI<br>SO | Ant1    | Low      | 5745            | 5700~5720         | -35.45       | ≤11.25      | PASS    |
| 11N20SI<br>SO | Ant1    | Low      | 5745            | 5650~5700         | -36.88       | ≤-26.53     | PASS    |
| 11N20SI<br>SO | Ant1    | Low      | 5745            | 5760~5650         | -35.84       | ≤-27        | PASS    |
| 11N20SI<br>SO | Ant1    | High     | 5825            | 5850~5855         | -36.14       | ≤16.96      | PASS    |
| 11N20SI<br>SO | Ant1    | High     | 5825            | 5855~5875         | -36.69       | ≤10.70      | PASS    |
| 11N20SI<br>SO | Ant1    | High     | 5825            | 5875~5925         | -37.33       | ≤-26.91     | PASS    |
| 11N20SI<br>SO | Ant1    | High     | 5825            | 5925~5935         | -36.17       | ≤-27        | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs





## Appendix E: Frequency Stability

### Test Result

Ant1

| Frequency<br>(MHz) | Enviroment<br>Temperature<br>(Degree) | Voltage<br>(VDC) | Measured<br>Frequency<br>(MHz) | Limit Range<br>(MHz) | Test<br>Results |
|--------------------|---------------------------------------|------------------|--------------------------------|----------------------|-----------------|
| 5745               | 20                                    | 4.07             | 5744.900978                    | 5725 – 5850          | PASS            |
| 5745               | 20                                    | 3.33             | 5745.041039                    | 5725 – 5850          | PASS            |
| 5745               | 50                                    | 3.70             | 5744.933548                    | 5725 – 5850          | PASS            |
| 5745               | 40                                    | 3.70             | 5745.050945                    | 5725 – 5850          | PASS            |
| 5745               | 30                                    | 3.70             | 5745.009926                    | 5725 – 5850          | PASS            |
| 5745               | 20                                    | 3.70             | 5744.907202                    | 5725 – 5850          | PASS            |
| 5745               | 10                                    | 3.70             | 5745.076732                    | 5725 – 5850          | PASS            |
| 5745               | 0                                     | 3.70             | 5745.084333                    | 5725 – 5850          | PASS            |
| 5745               | -10                                   | 3.70             | 5744.903159                    | 5725 – 5850          | PASS            |
| 5745               | -20                                   | 3.70             | 5745.033055                    | 5725 – 5850          | PASS            |
| 5745               | -30                                   | 3.70             | 5745.059729                    | 5725 – 5850          | PASS            |

Ant1

| Frequency<br>(MHz) | Enviroment<br>Temperature<br>(Degree) | Voltage<br>(VDC) | Measured<br>Frequency<br>(MHz) | Limit Range<br>(MHz) | Test<br>Results |
|--------------------|---------------------------------------|------------------|--------------------------------|----------------------|-----------------|
| 5785               | 20                                    | 4.07             | 5784.918658                    | 5725 – 5850          | PASS            |
| 5785               | 20                                    | 3.33             | 5784.976167                    | 5725 – 5850          | PASS            |
| 5785               | 50                                    | 3.70             | 5785.027551                    | 5725 – 5850          | PASS            |
| 5785               | 40                                    | 3.70             | 5784.962090                    | 5725 – 5850          | PASS            |
| 5785               | 30                                    | 3.70             | 5784.990629                    | 5725 – 5850          | PASS            |
| 5785               | 20                                    | 3.70             | 5784.998354                    | 5725 – 5850          | PASS            |
| 5785               | 10                                    | 3.70             | 5785.012681                    | 5725 – 5850          | PASS            |
| 5785               | 0                                     | 3.70             | 5785.059765                    | 5725 – 5850          | PASS            |
| 5785               | -10                                   | 3.70             | 5784.912339                    | 5725 – 5850          | PASS            |
| 5785               | -20                                   | 3.70             | 5785.074352                    | 5725 – 5850          | PASS            |
| 5785               | -30                                   | 3.70             | 5784.912952                    | 5725 – 5850          | PASS            |

Ant1

| Frequency<br>(MHz) | Enviroment<br>Temperature<br>(Degree) | Voltage<br>(VDC) | Measured<br>Frequency<br>(MHz) | Limit Range<br>(MHz) | Test<br>Results |
|--------------------|---------------------------------------|------------------|--------------------------------|----------------------|-----------------|
| 5825               | 20                                    | 4.07             | 5824.902968                    | 5725 – 5850          | PASS            |
| 5825               | 20                                    | 3.33             | 5824.910994                    | 5725 – 5850          | PASS            |
| 5825               | 50                                    | 3.70             | 5824.955446                    | 5725 – 5850          | PASS            |
| 5825               | 40                                    | 3.70             | 5824.950636                    | 5725 – 5850          | PASS            |
| 5825               | 30                                    | 3.70             | 5824.982370                    | 5725 – 5850          | PASS            |
| 5825               | 20                                    | 3.70             | 5825.085909                    | 5725 – 5850          | PASS            |
| 5825               | 10                                    | 3.70             | 5824.906989                    | 5725 – 5850          | PASS            |
| 5825               | 0                                     | 3.70             | 5825.008848                    | 5725 – 5850          | PASS            |
| 5825               | -10                                   | 3.70             | 5824.975844                    | 5725 – 5850          | PASS            |
| 5825               | -20                                   | 3.70             | 5824.953194                    | 5725 – 5850          | PASS            |
| 5825               | -30                                   | 3.70             | 5825.032182                    | 5725 – 5850          | PASS            |

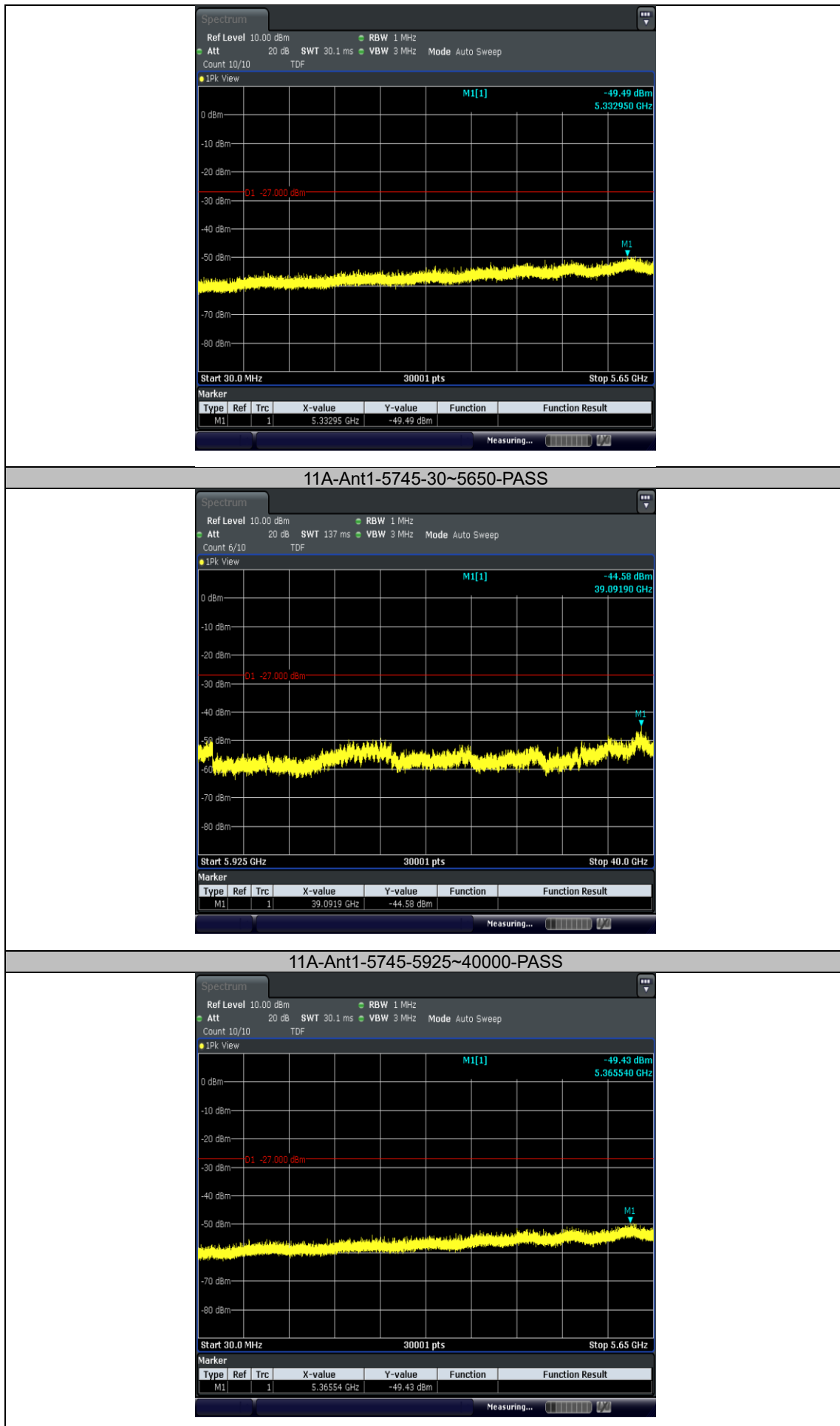
## Appendix F: Conducted Spurious Emission

### Test Result

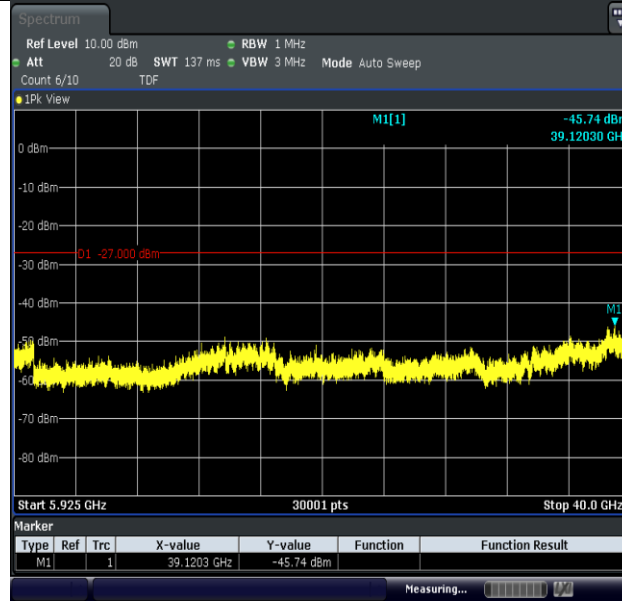
| TestMode  | Antenna | Frequency[MHz] | FreqRange [MHz] | Max. Fre [MHz] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|------------------|-------------|---------|
| 11A       | Ant1    | 5745           | 30~5650         | 5332.95        | -49.49           | ≤-27        | PASS    |
| 11A       | Ant1    | 5745           | 5925~40000      | 39091.9        | -44.58           | ≤-27        | PASS    |
| 11A       | Ant1    | 5785           | 30~5650         | 5365.54        | -49.43           | ≤-27        | PASS    |
| 11A       | Ant1    | 5785           | 5925~40000      | 39120.3        | -45.74           | ≤-27        | PASS    |
| 11A       | Ant1    | 5825           | 30~5650         | 5465.01        | -49.62           | ≤-27        | PASS    |
| 11A       | Ant1    | 5825           | 5925~40000      | 39080.6        | -46.78           | ≤-27        | PASS    |
| 11N20SISO | Ant1    | 5745           | 30~5650         | 5235.73        | -49.52           | ≤-27        | PASS    |
| 11N20SISO | Ant1    | 5745           | 5925~40000      | 38758          | -46.66           | ≤-27        | PASS    |
| 11N20SISO | Ant1    | 5785           | 30~5650         | 5343.06        | -49.71           | ≤-27        | PASS    |
| 11N20SISO | Ant1    | 5785           | 5925~40000      | 38779.6        | -46.08           | ≤-27        | PASS    |
| 11N20SISO | Ant1    | 5825           | 30~5650         | 5234.41        | -50.18           | ≤-27        | PASS    |
| 11N20SISO | Ant1    | 5825           | 5925~40000      | 39442.9        | -45.79           | ≤-27        | PASS    |

Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 40 GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

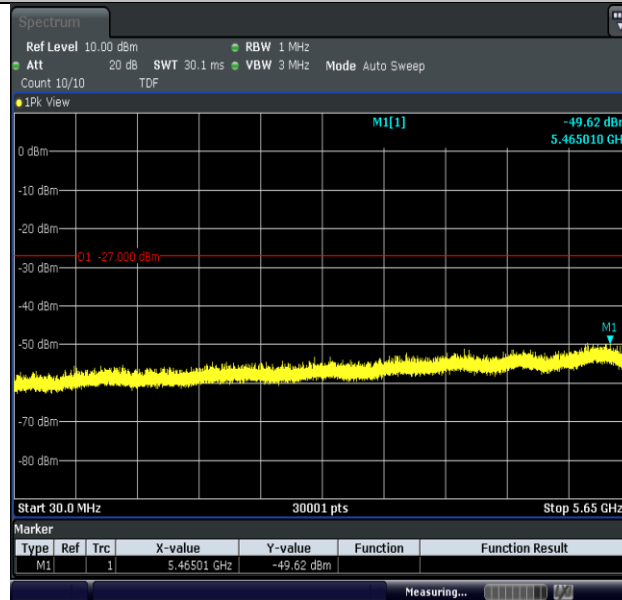
## Test Graphs



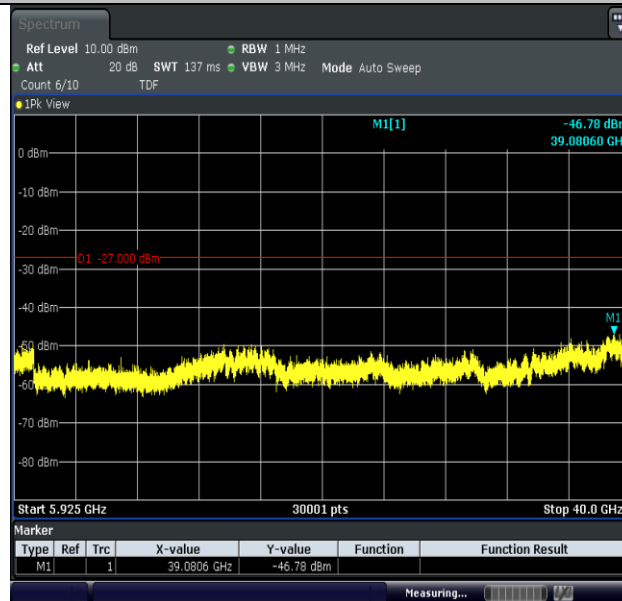
## 11A-Ant1-5785-30~5650-PASS



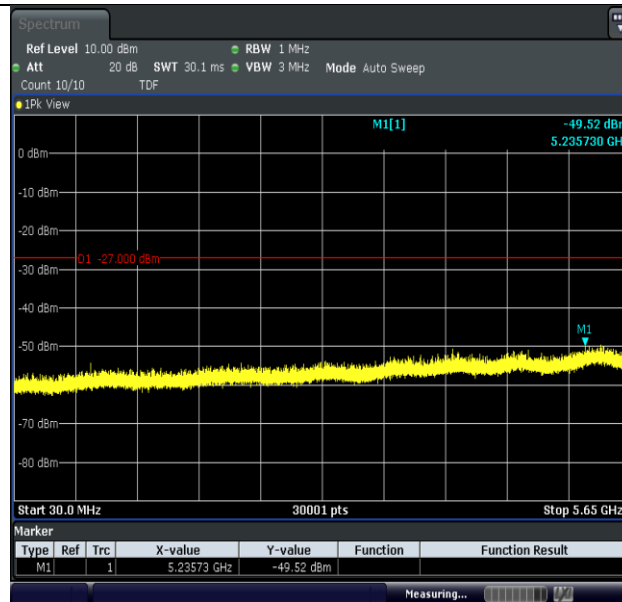
## 11A-Ant1-5785-5925~40000-PASS



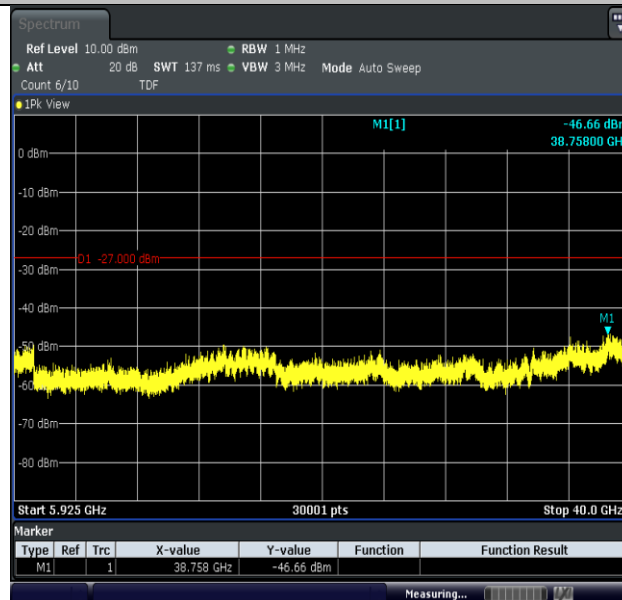
## 11A-Ant1-5825-30~5650-PASS



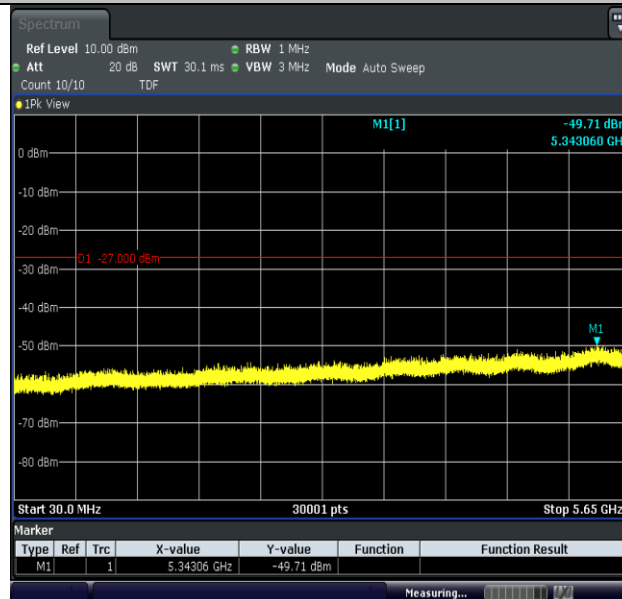
## 11A-Ant1-5825-5925~40000-PASS



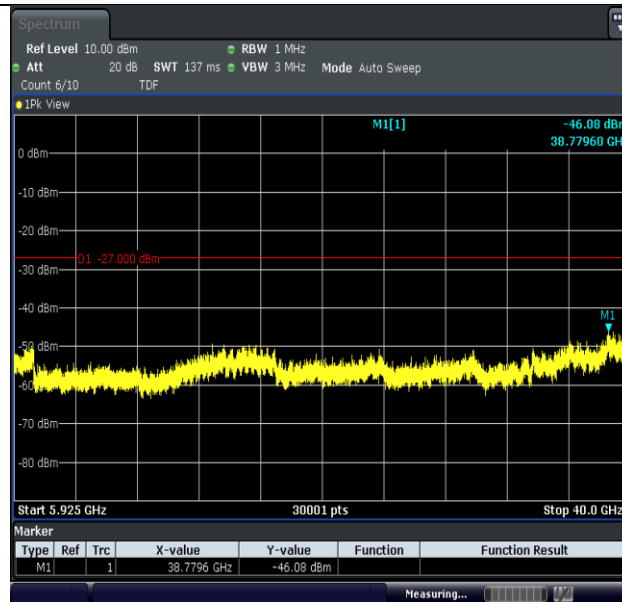
## 11N20SISO-Ant1-5745-30~5650-PASS



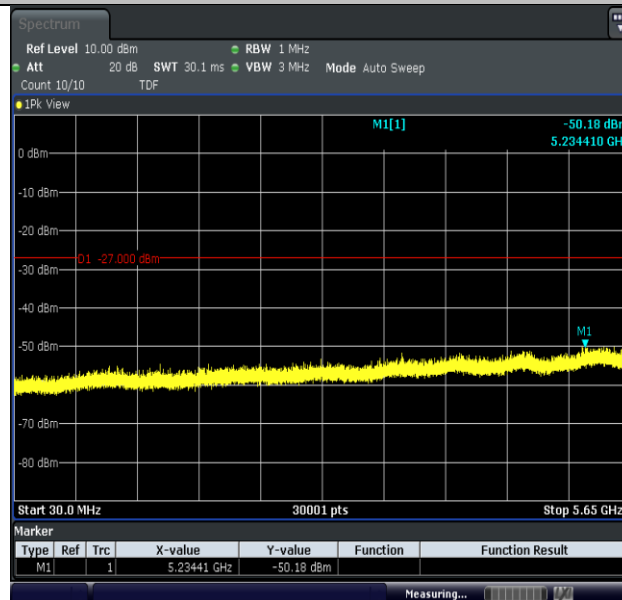
## 11N20SISO-Ant1-5745-5925~40000-PASS



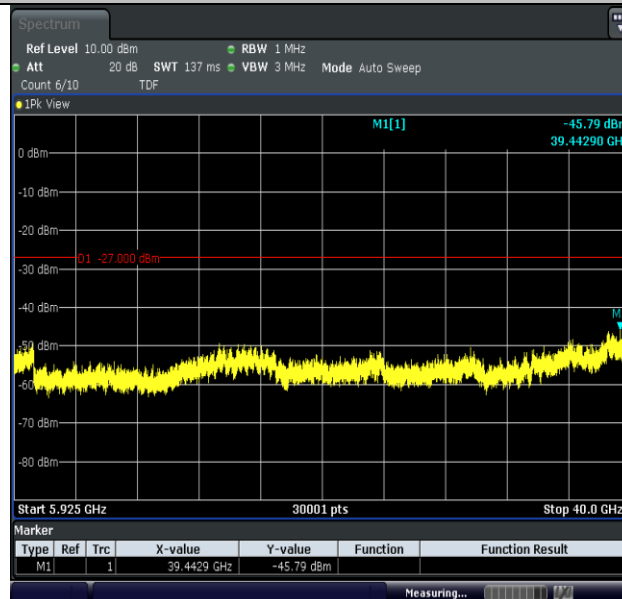
## 11N20SISO-Ant1-5785-30~5650-PASS



## 11N20SISO-Ant1-5785-5925~40000-PASS



## 11N20SISO-Ant1-5825-30~5650-PASS



## 11N20SISO-Ant1-5825-5925~40000-PASS

## Appendix G: Duty Cycle

### Test Result

| Test Mode | Antenna | Frequency [MHz] | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Dc. Factor [%] | 1/T  |
|-----------|---------|-----------------|----------------------------|--------------------------|----------------|----------------|------|
| 11A       | Ant1    | 5745            | 2.06                       | 2.24                     | 91.96          | 0.36           | 0.49 |
| 11A       | Ant1    | 5785            | 2.06                       | 2.18                     | 94.50          | 0.25           | 0.49 |
| 11A       | Ant1    | 5825            | 2.06                       | 2.29                     | 89.96          | 0.46           | 0.49 |
| 11N20SISO | Ant1    | 5745            | 1.92                       | 2.12                     | 90.57          | 0.43           | 0.52 |
| 11N20SISO | Ant1    | 5785            | 1.93                       | 2.12                     | 91.04          | 0.41           | 0.52 |
| 11N20SISO | Ant1    | 5825            | 1.92                       | 2.10                     | 91.43          | 0.39           | 0.52 |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

### Test Graphs

