

Appendix A

RF Test Data for BT LE (Conducted Measurement)

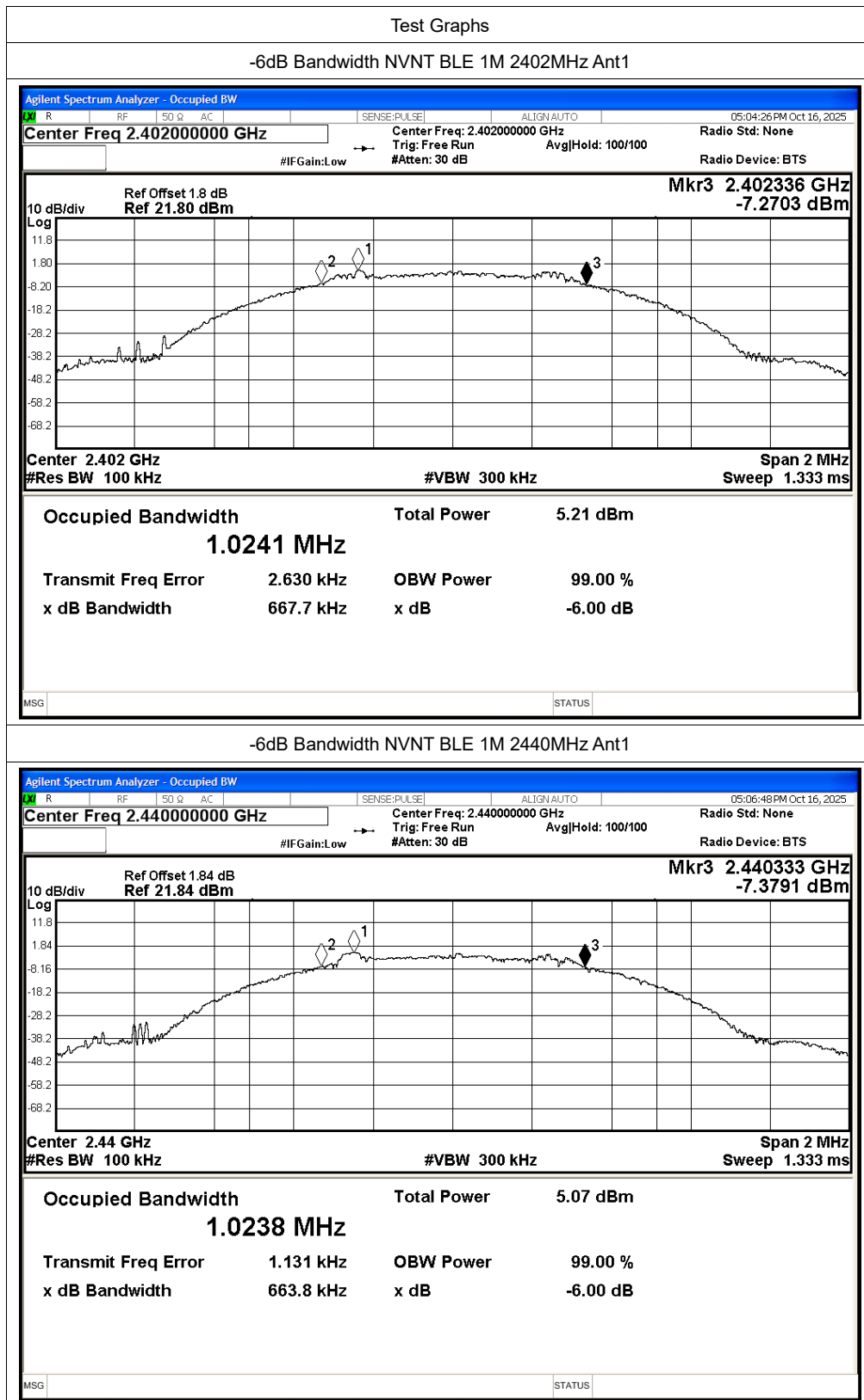
Product Name: LED Controller  
Test Model: DeepLux-C003

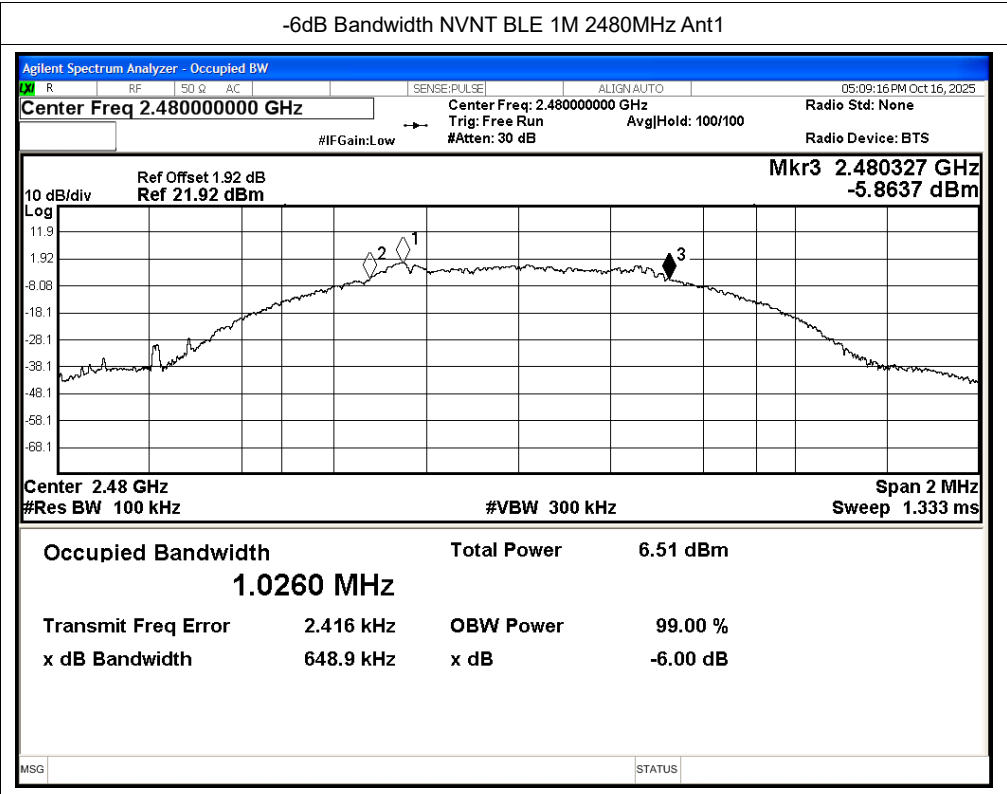
Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5 ° C  |
| Relative Humidity: | 52.1%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Jone.Lee  |
| Supervised by:     | Yan Chen  |

## A.1 -6dB Bandwidth

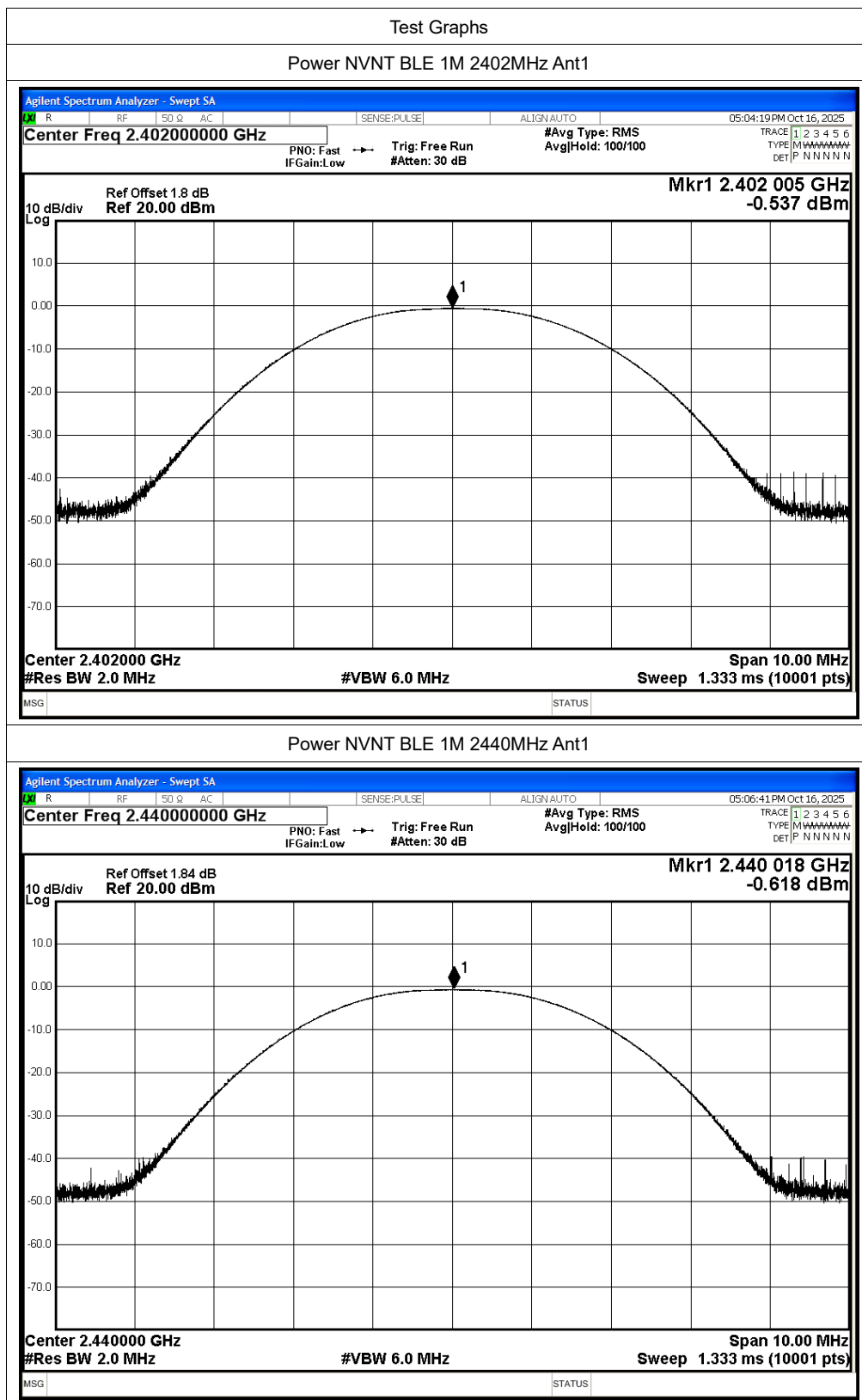
| Condition | Mode   | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|--------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | 0.668                 | $\geq 0.5$                  | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | 0.664                 | $\geq 0.5$                  | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 0.649                 | $\geq 0.5$                  | Pass    |

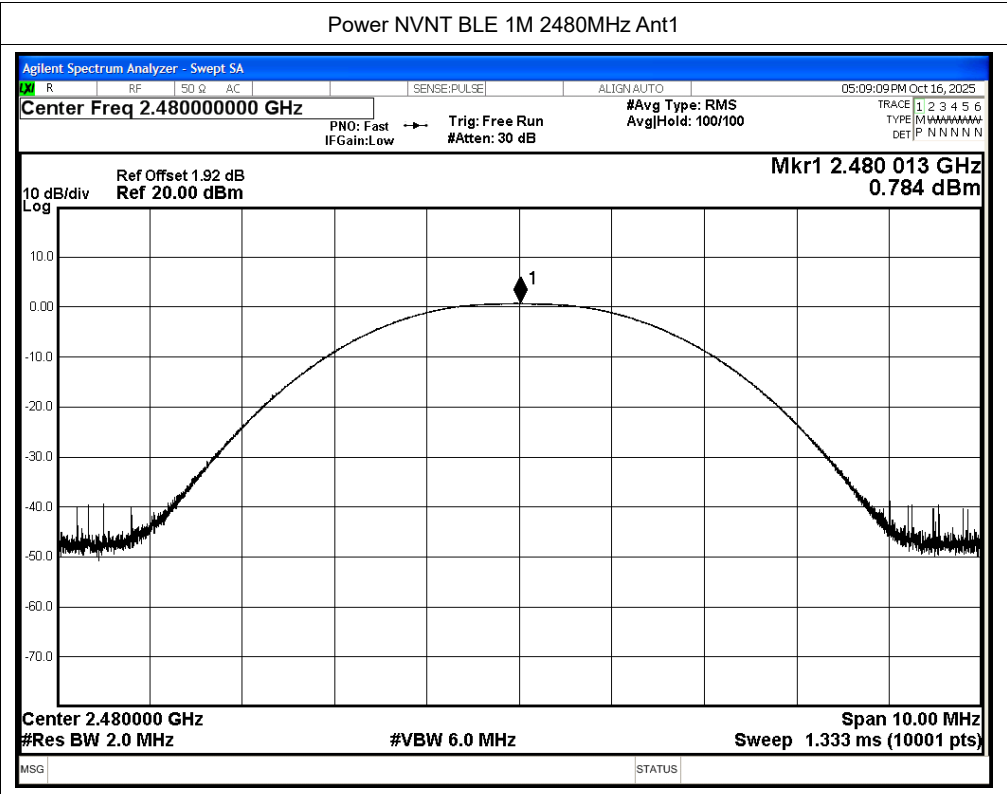




## A.2 Maximum Peak Conducted Output Power

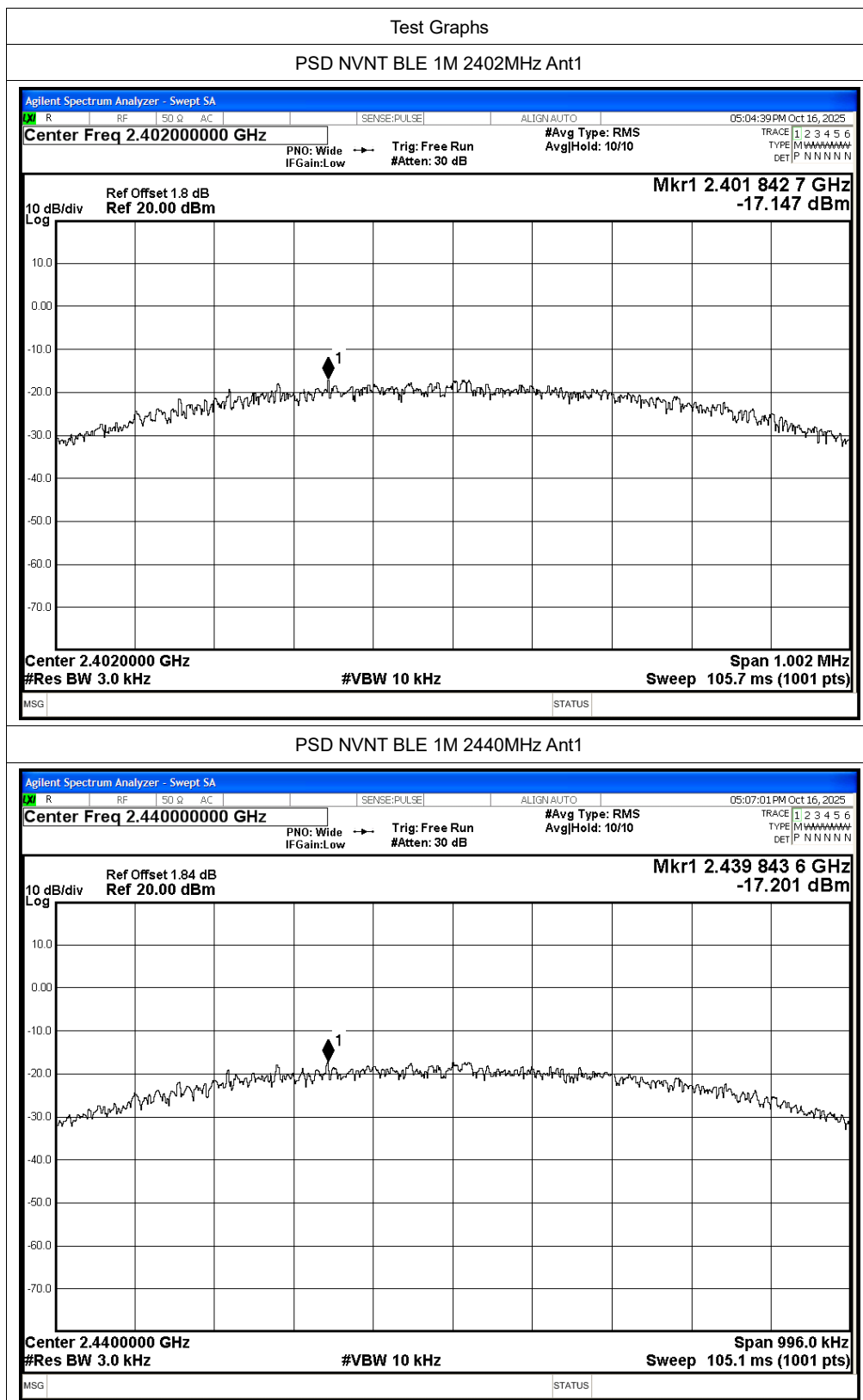
| Condition | Mode   | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|-----------|--------|-----------------|---------|-----------------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -0.54                 | 30          | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | -0.62                 | 30          | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 0.78                  | 30          | Pass    |

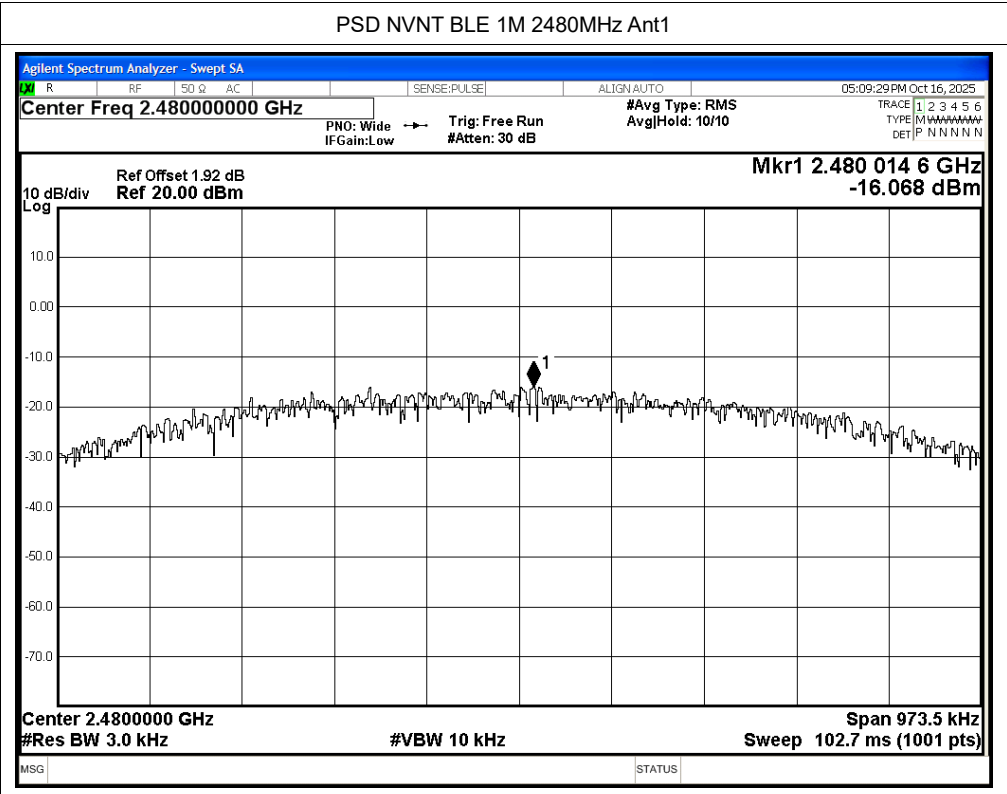




### A.3 Maximum Power Spectral Density Level

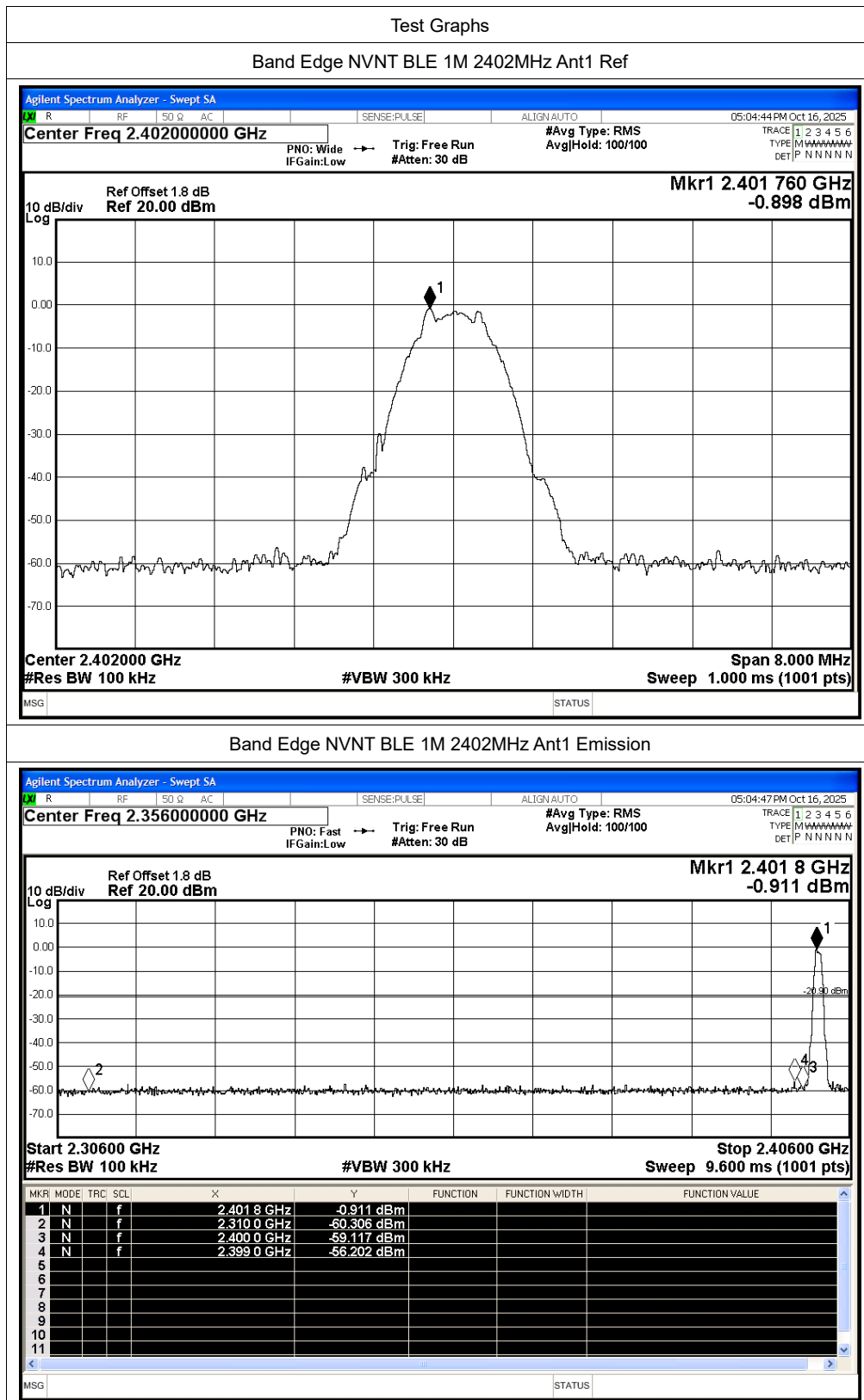
| Condition | Mode   | Frequency (MHz) | Antenna | Conducted PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|--------|-----------------|---------|--------------------------|------------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -17.15                   | 8                | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | -17.2                    | 8                | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -16.07                   | 8                | Pass    |

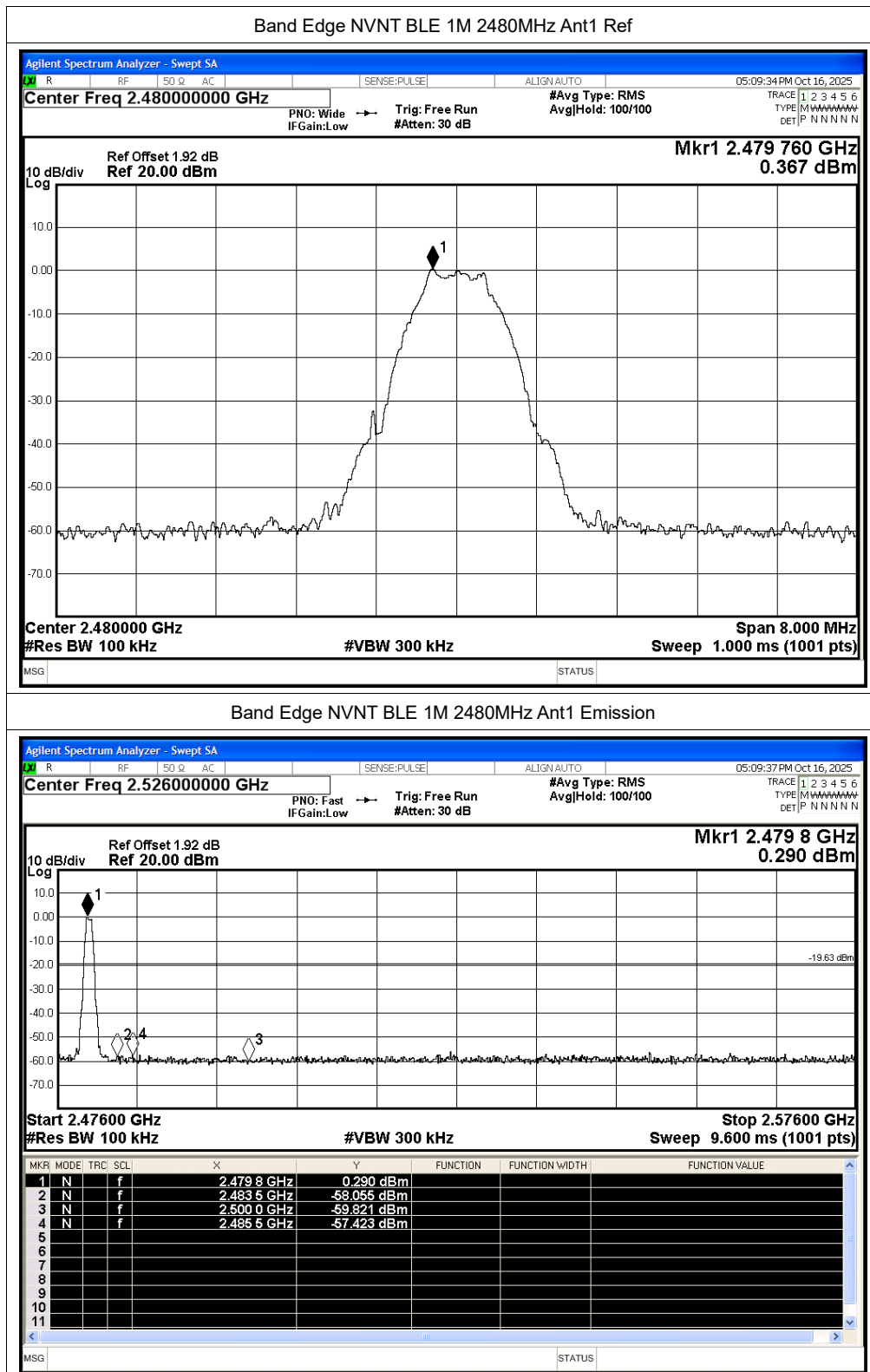




A.4 Band Edge

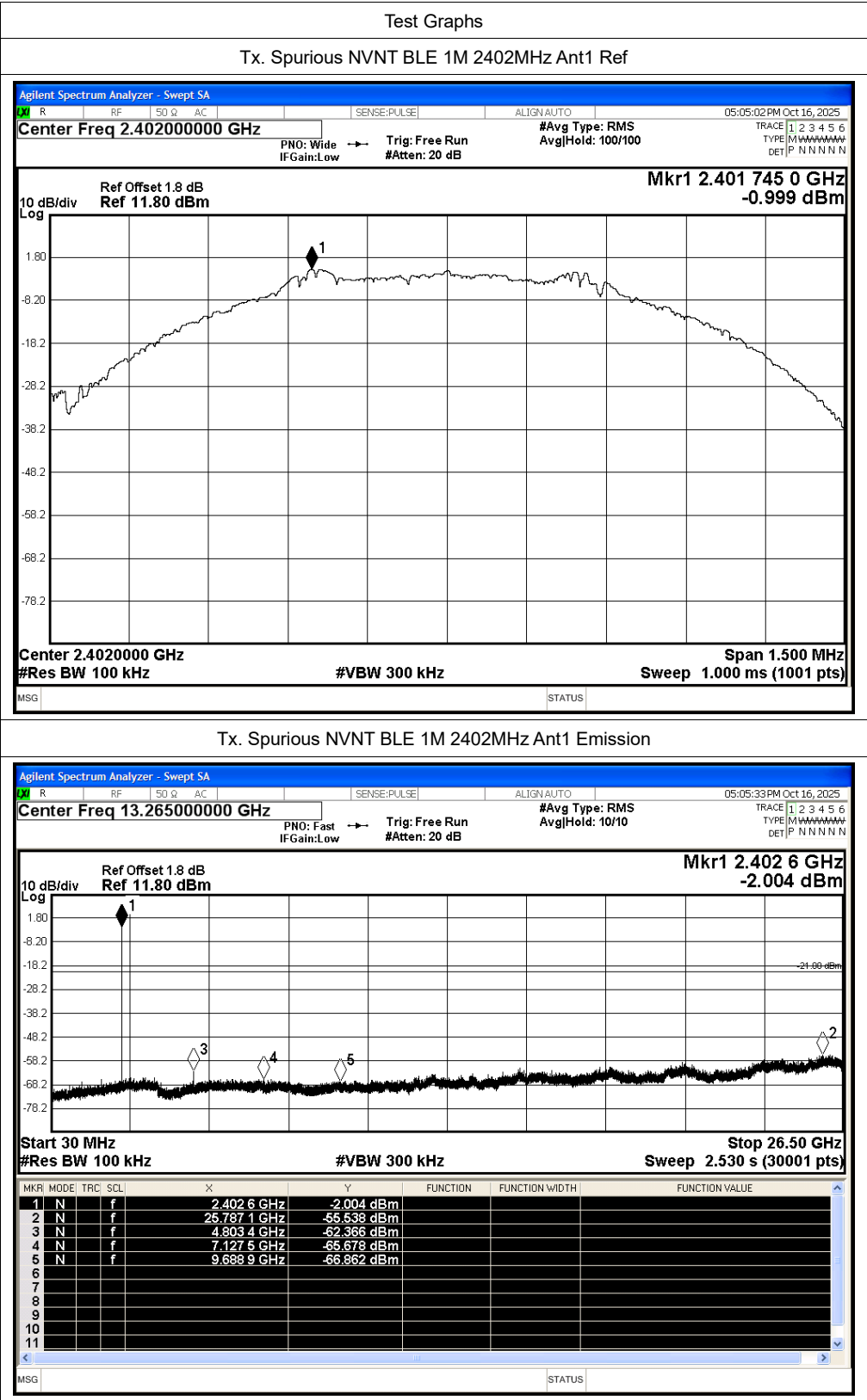
| Condition | Mode   | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -55.3           | -20         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -57.79          | -20         | Pass    |

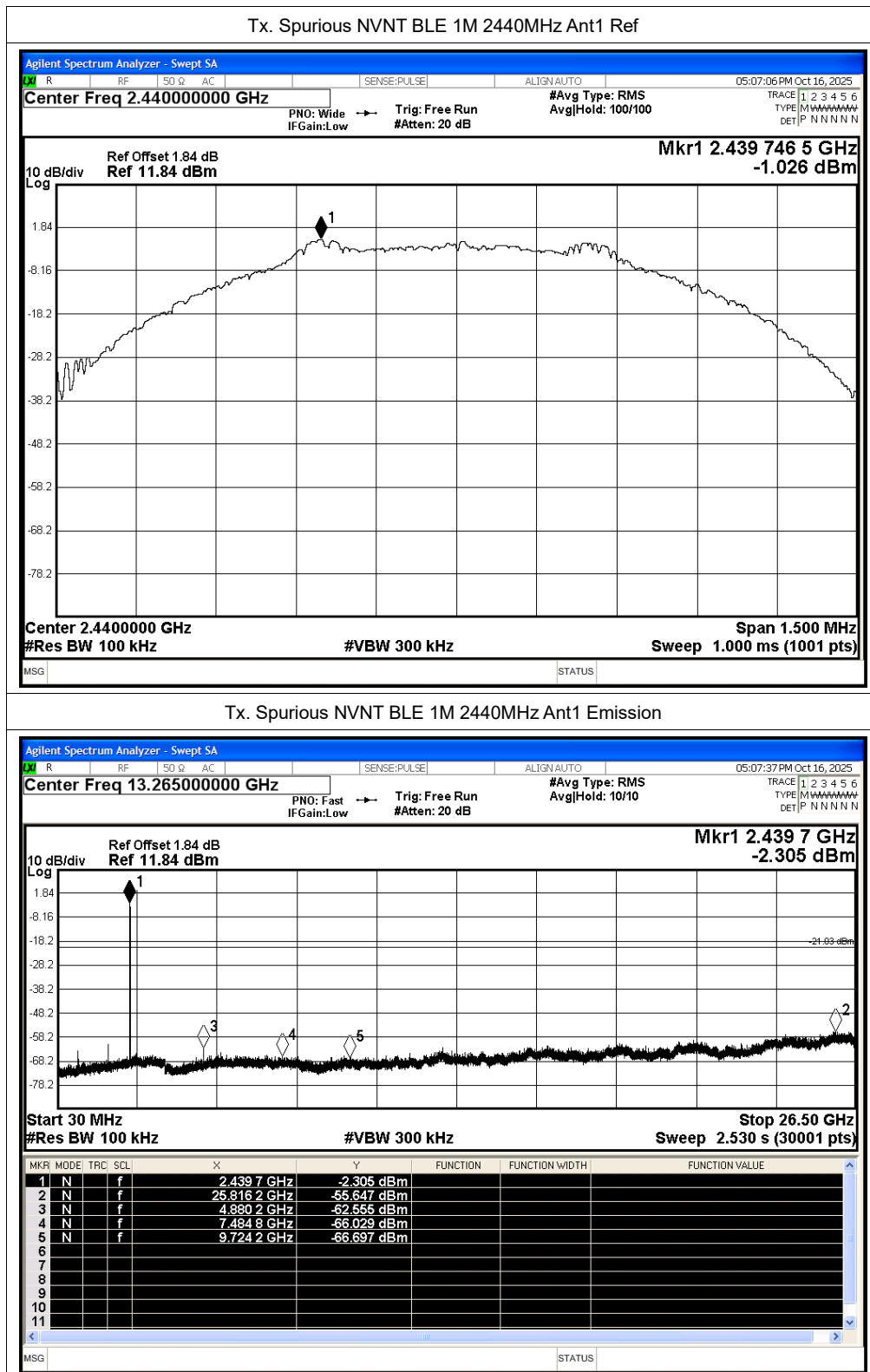


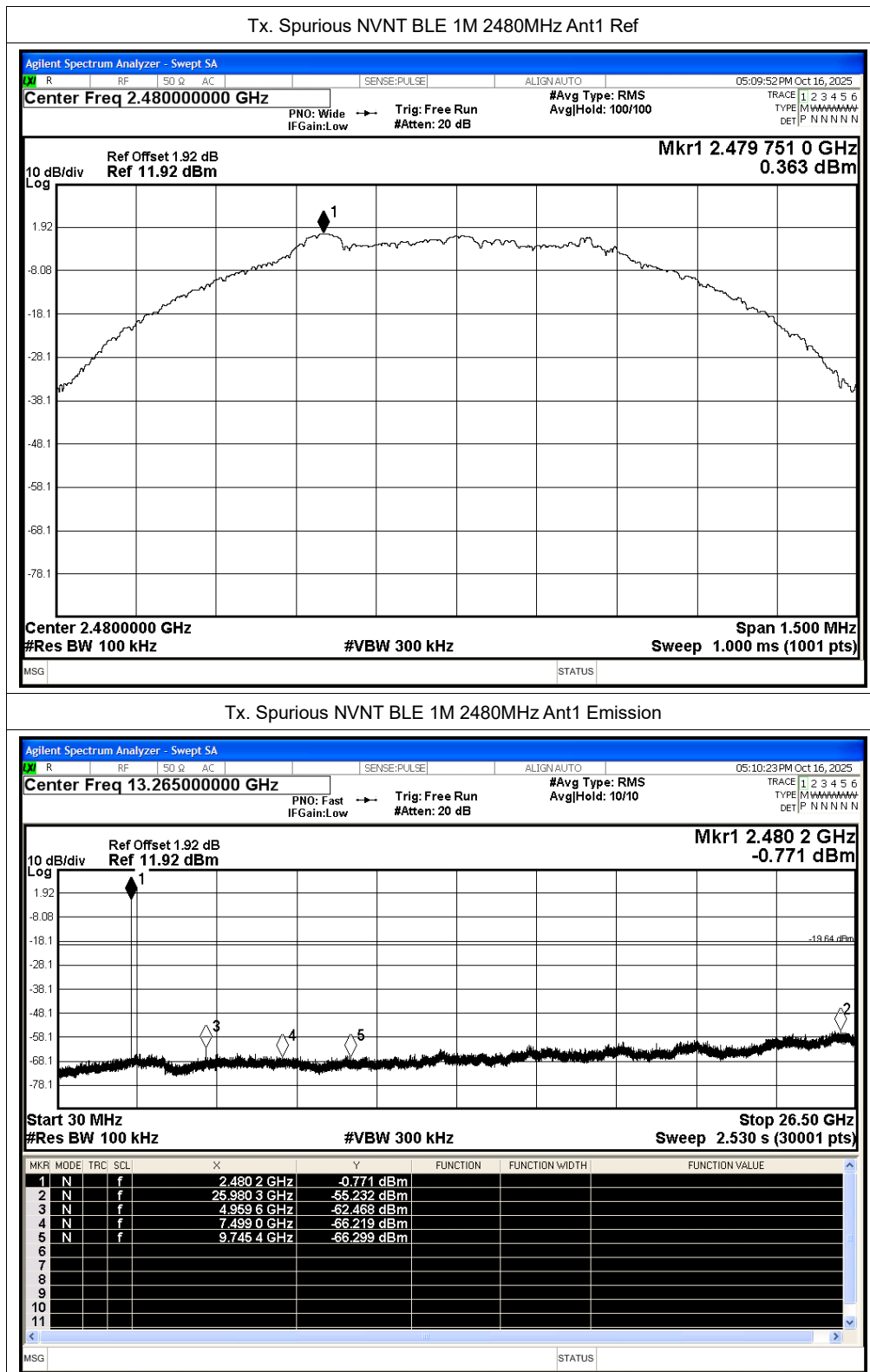


## A.5 Conducted RF Spurious Emission

| Condition | Mode   | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -54.54          | -20         | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | -54.62          | -20         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -55.6           | -20         | Pass    |

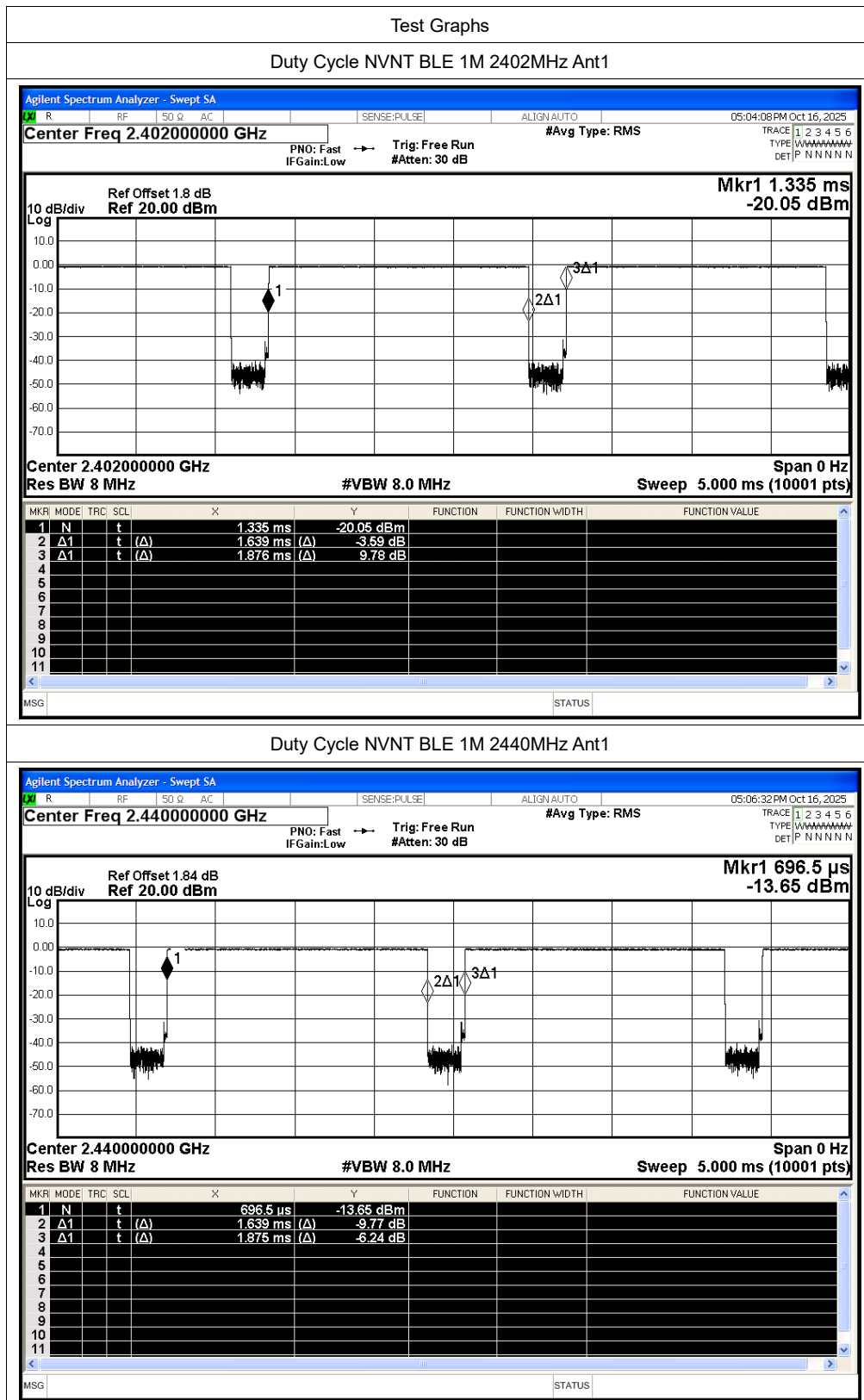


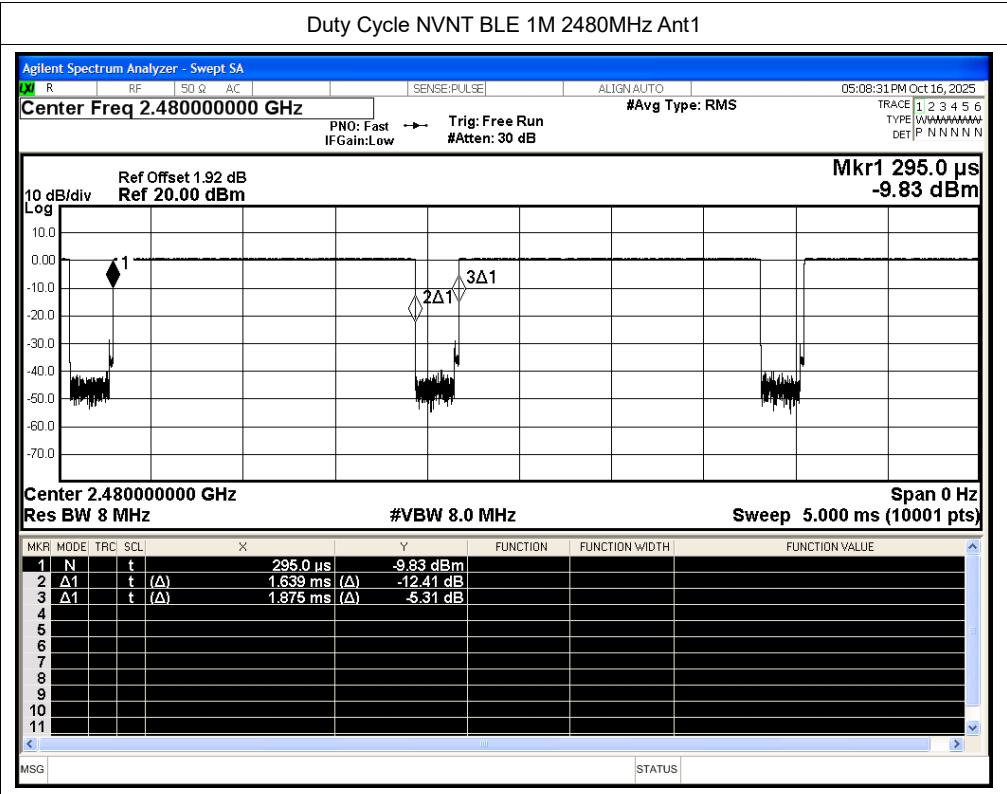




A.6 Duty Cycle

| Condition | Mode   | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|--------|-----------------|---------|----------------|------------------------|-----------|
| NVNT      | BLE 1M | 2402            | Ant1    | 87.39          | 0.59                   | 0.61      |
| NVNT      | BLE 1M | 2440            | Ant1    | 87.39          | 0.59                   | 0.61      |
| NVNT      | BLE 1M | 2480            | Ant1    | 87.39          | 0.59                   | 0.61      |





## A.7 Restrict Band

| Condition | Mode   | Frequency<br>(MHz) | Antenna | Spur<br>Freq<br>(MHz) | Power<br>(dBm) | Gain<br>(dBi) | Duty<br>Factor<br>(dB) | E<br>(dBuV/m) | Detector | Limit<br>(dBuV/m) | Verdict |
|-----------|--------|--------------------|---------|-----------------------|----------------|---------------|------------------------|---------------|----------|-------------------|---------|
| NVNT      | BLE 1M | 2402               | Ant1    | 2310                  | -50.88         | 2             | -                      | 46.38         | Peak     | 74                | Pass    |
| NVNT      | BLE 1M | 2402               | Ant1    | 2310                  | -58.97         | 2             | 0.59                   | 38.88         | Average  | 54                | Pass    |
| NVNT      | BLE 1M | 2402               | Ant1    | 2375.184              | -47.56         | 2             | -                      | 49.7          | Peak     | 74                | Pass    |
| NVNT      | BLE 1M | 2402               | Ant1    | 2388.144              | -58.36         | 2             | 0.59                   | 39.49         | Average  | 54                | Pass    |
| NVNT      | BLE 1M | 2402               | Ant1    | 2390                  | -49.77         | 2             | -                      | 47.49         | Peak     | 74                | Pass    |
| NVNT      | BLE 1M | 2402               | Ant1    | 2390                  | -58.61         | 2             | 0.59                   | 39.24         | Average  | 54                | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | 2483.5                | -49.07         | 2             | -                      | 48.19         | Peak     | 74                | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | 2483.5                | -57.65         | 2             | 0.59                   | 40.2          | Average  | 54                | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | 2483.992              | -44.43         | 2             | -                      | 52.83         | Peak     | 74                | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | 2483.824              | -57.49         | 2             | 0.59                   | 40.36         | Average  | 54                | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | 2500                  | -47.64         | 2             | -                      | 49.62         | Peak     | 74                | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | 2500                  | -58.16         | 2             | 0.59                   | 39.69         | Average  | 54                | Pass    |

