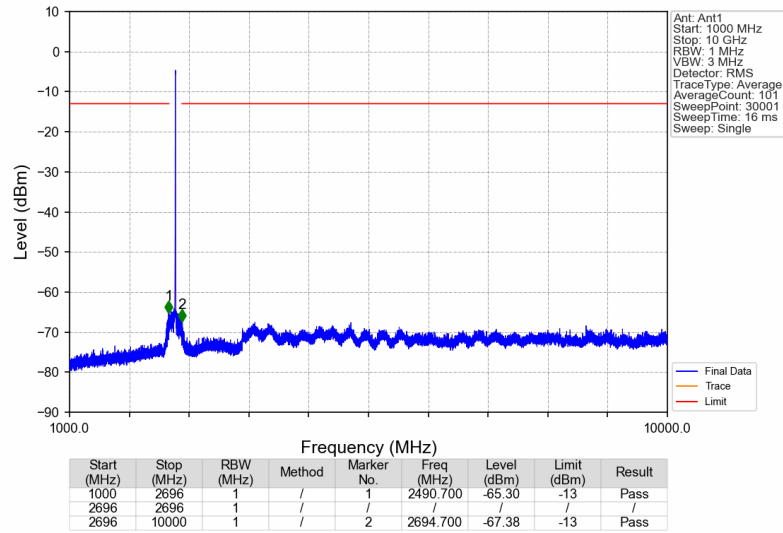
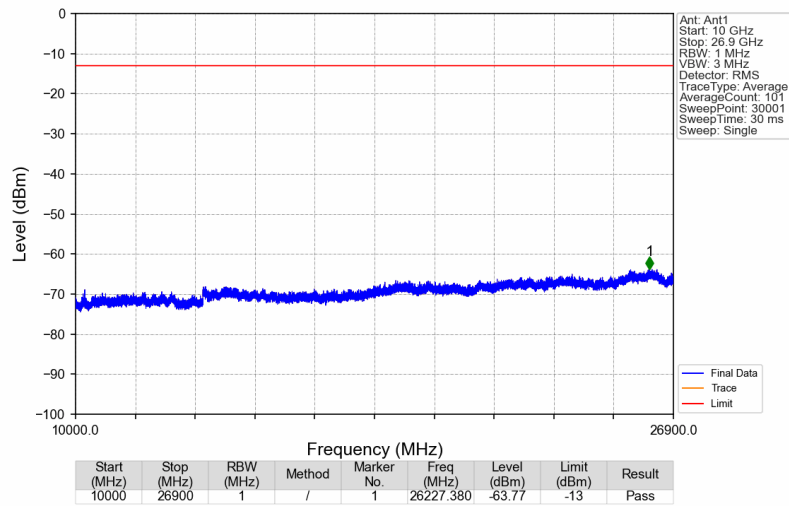


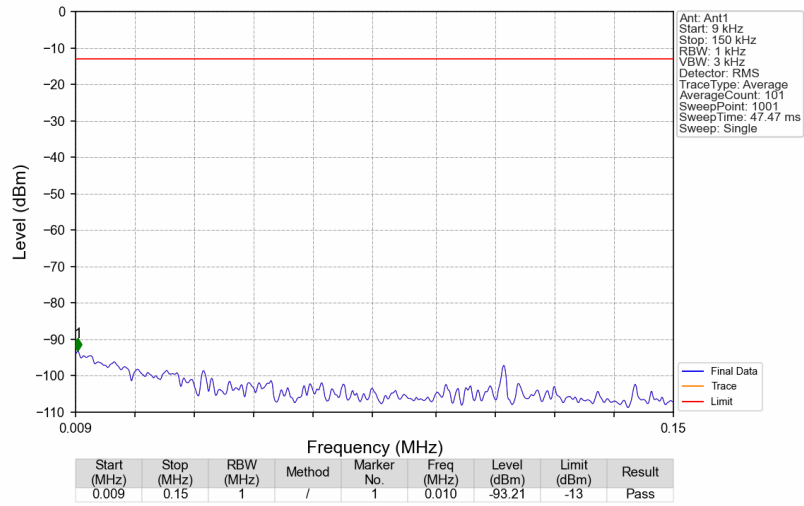
### Band41\_2593MHz\_AWGN\_SISO\_Ant1\_NTNV



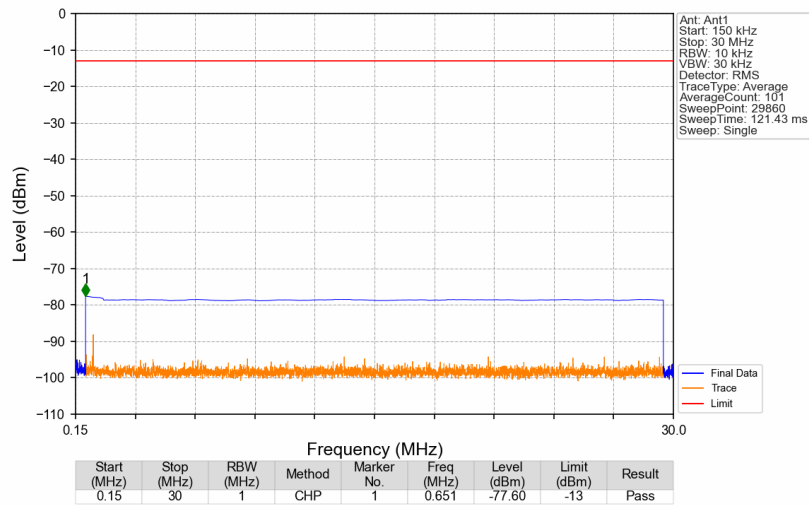
### Band41\_2593MHz\_AWGN\_SISO\_Ant1\_NTNV



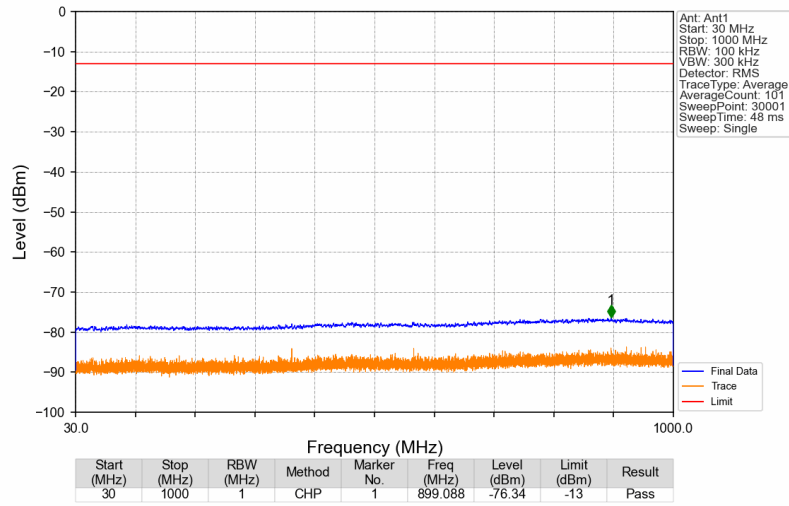
Band41\_2687.5MHz\_AWGN\_SISO\_Ant1\_NTNV



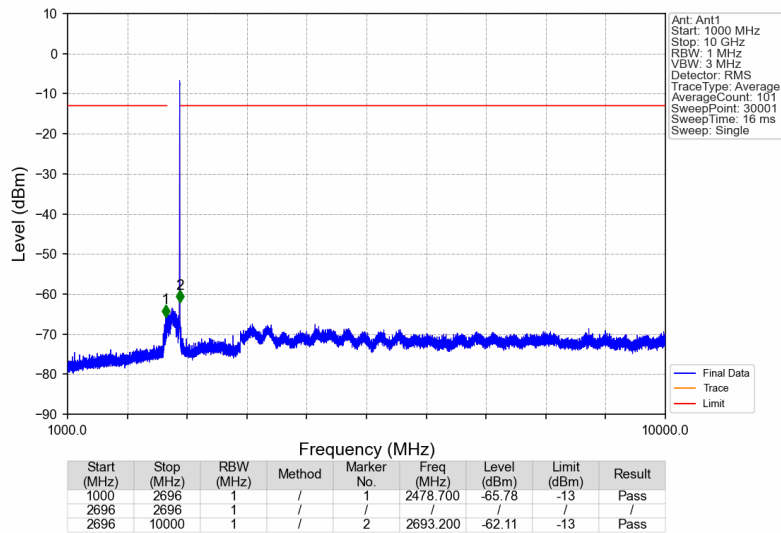
Band41\_2687.5MHz\_AWGN\_SISO\_Ant1\_NTNV



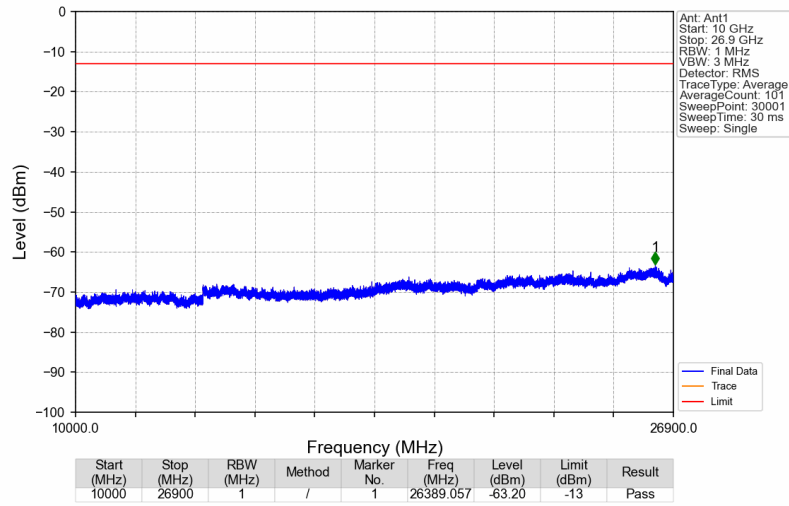
Band41\_2687.5MHz\_AWGN\_SISO\_Ant1\_NTNV



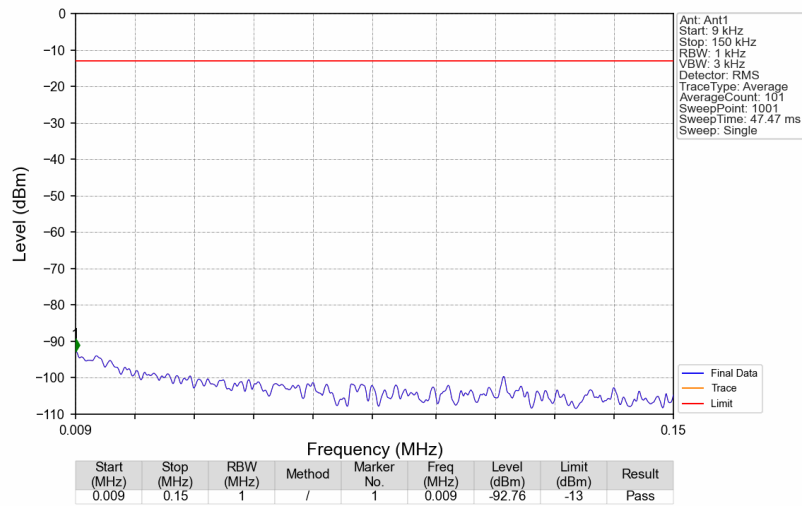
Band41\_2687.5MHz\_AWGN\_SISO\_Ant1\_NTNV



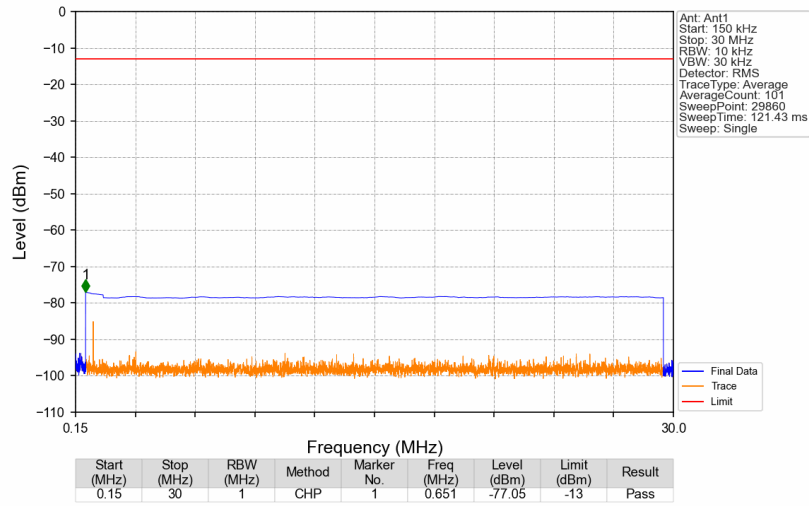
Band41\_2687.5MHz\_AWGN\_SISO\_Ant1\_NTNV



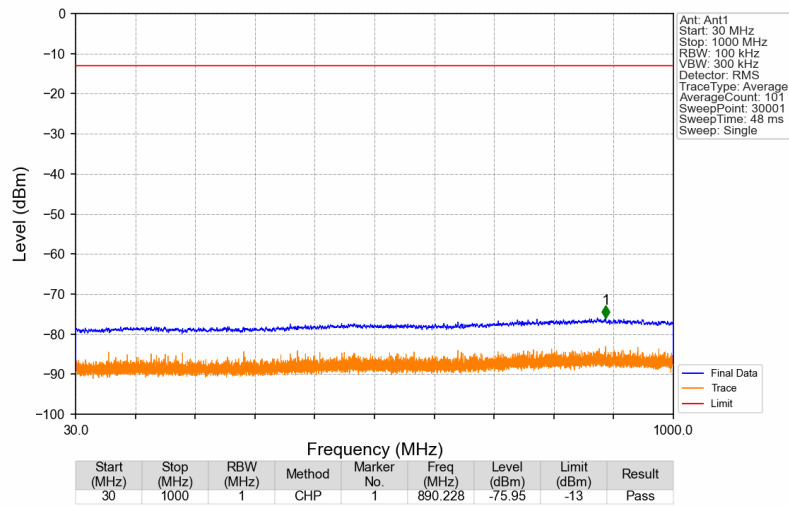
Band41\_2496.1MHz\_GMSK\_SISO\_Ant1\_NTNV



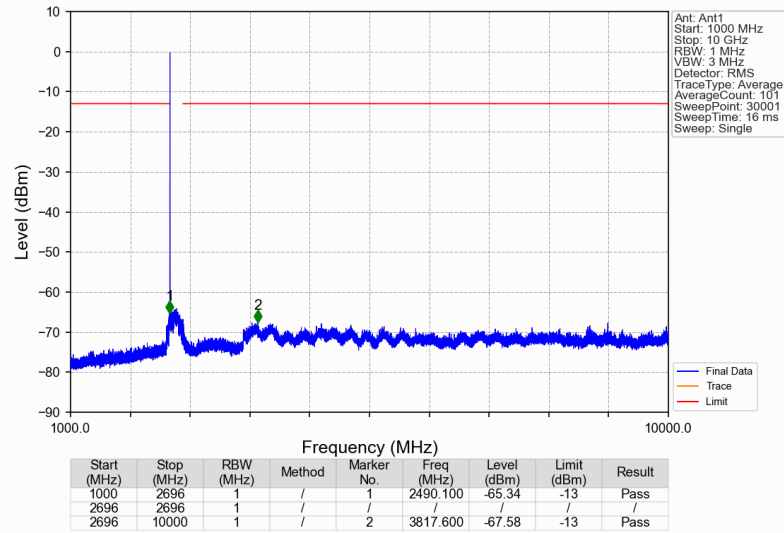
Band41\_2496.1MHz\_GMSK\_SISO\_Ant1\_NTNV



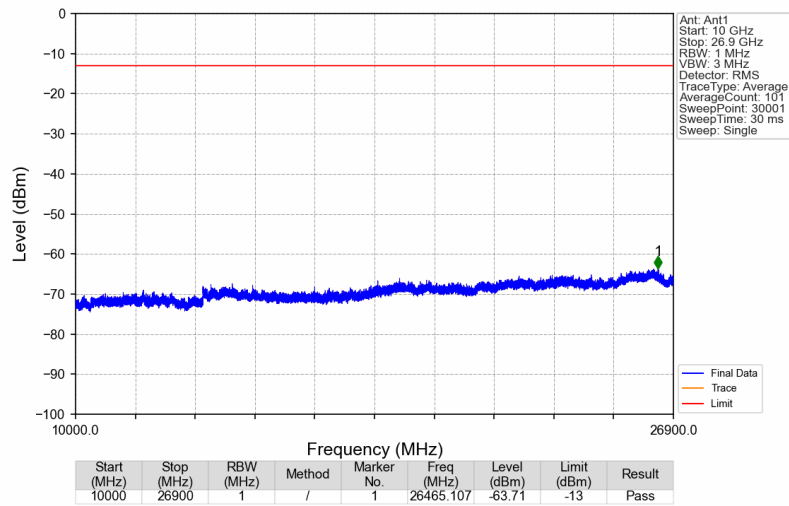
Band41\_2496.1MHz\_GMSK\_SISO\_Ant1\_NTNV



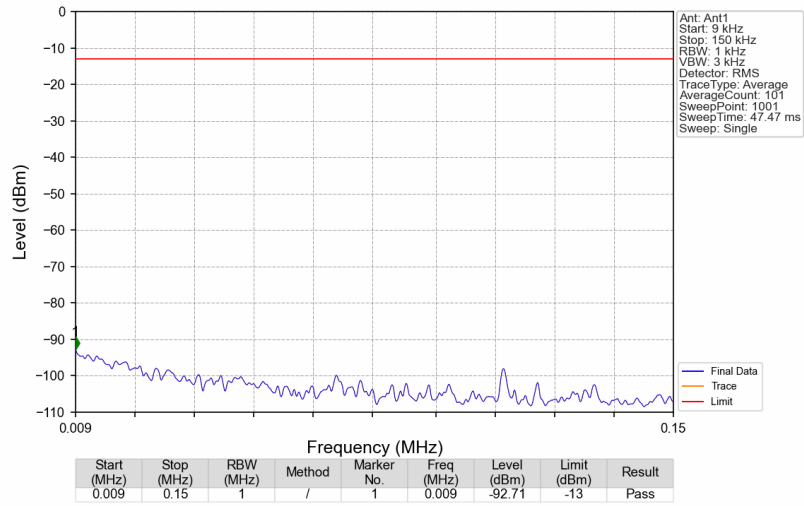
Band41\_2496.1MHz\_GMSK\_SISO\_Ant1\_NTNV



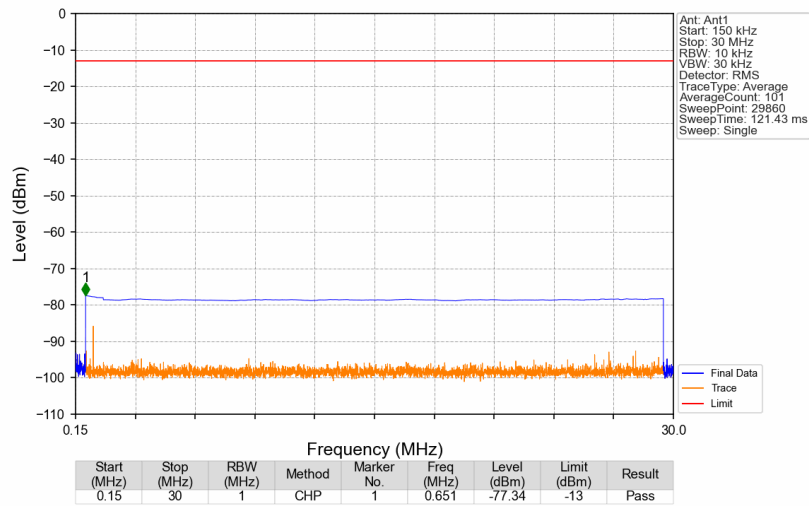
Band41\_2496.1MHz\_GMSK\_SISO\_Ant1\_NTNV



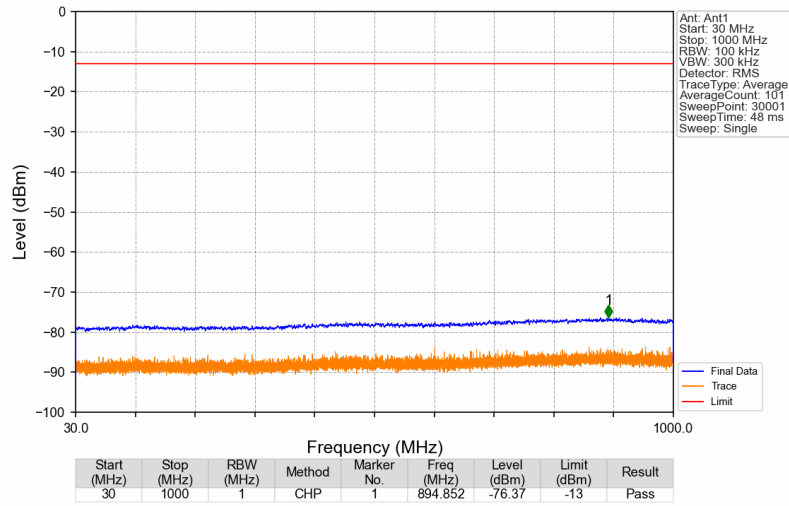
Band41\_2593MHz\_GMSK\_SISO\_Ant1\_NTNV



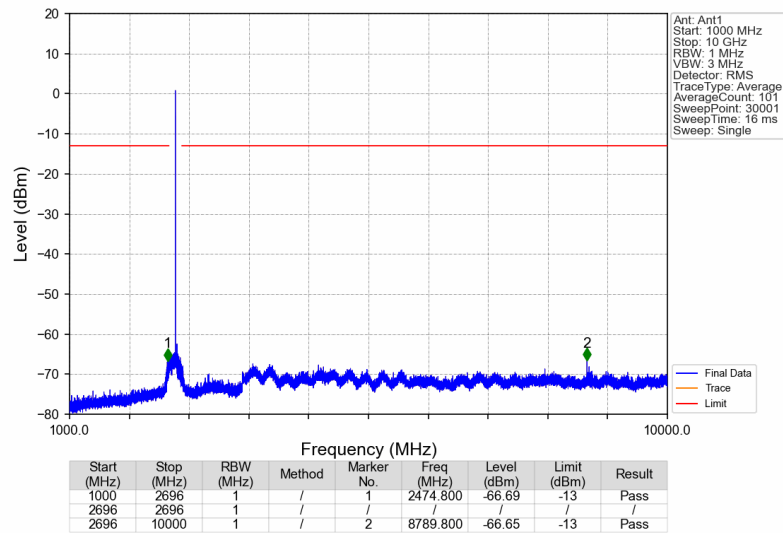
Band41\_2593MHz\_GMSK\_SISO\_Ant1\_NTNV



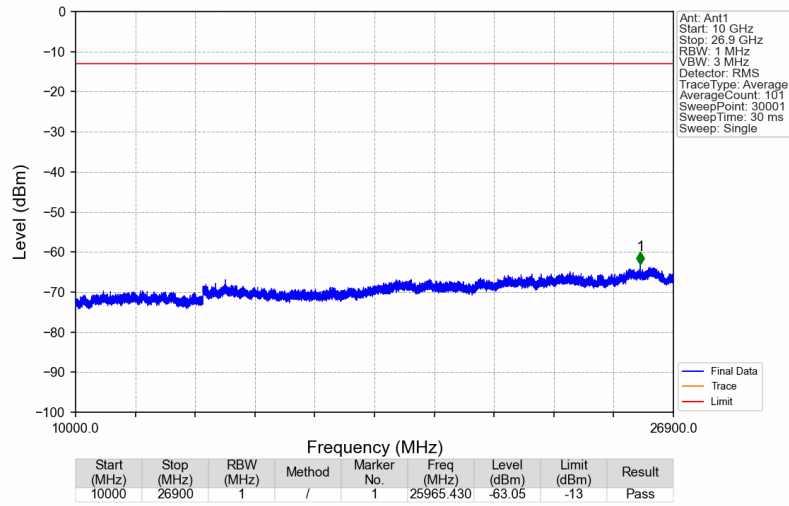
Band41\_2593MHz\_GMSK\_SISO\_Ant1\_NTNV



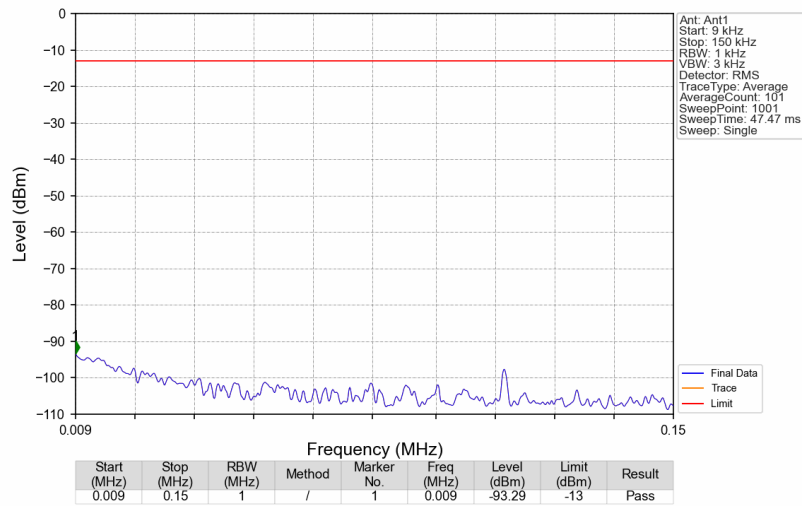
Band41\_2593MHz\_GMSK\_SISO\_Ant1\_NTNV



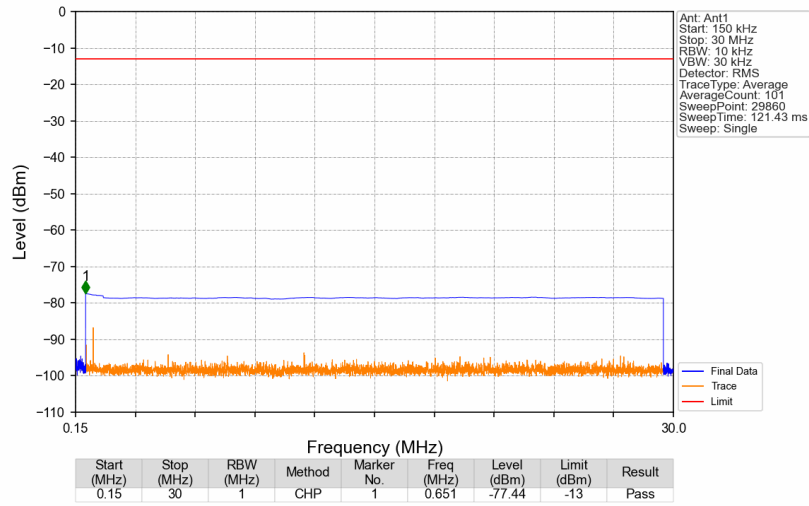
Band41\_2593MHz\_GMSK\_SISO\_Ant1\_NTNV



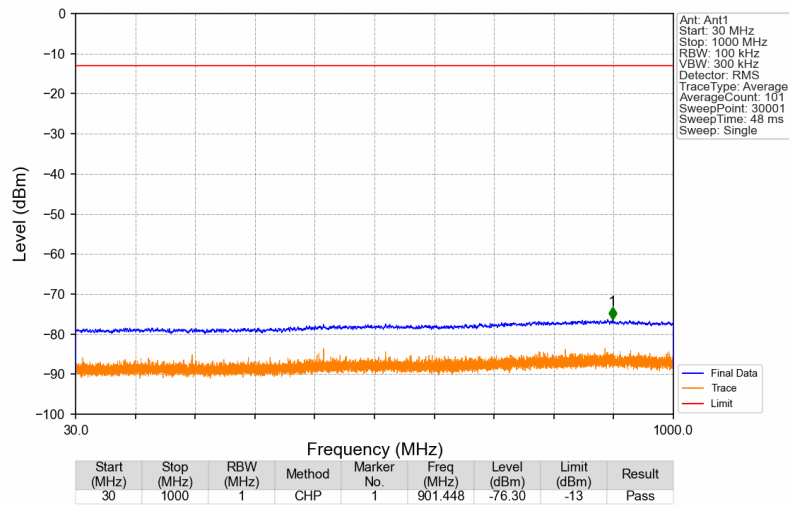
Band41\_2689.9MHz\_GMSK\_SISO\_Ant1\_NTNV



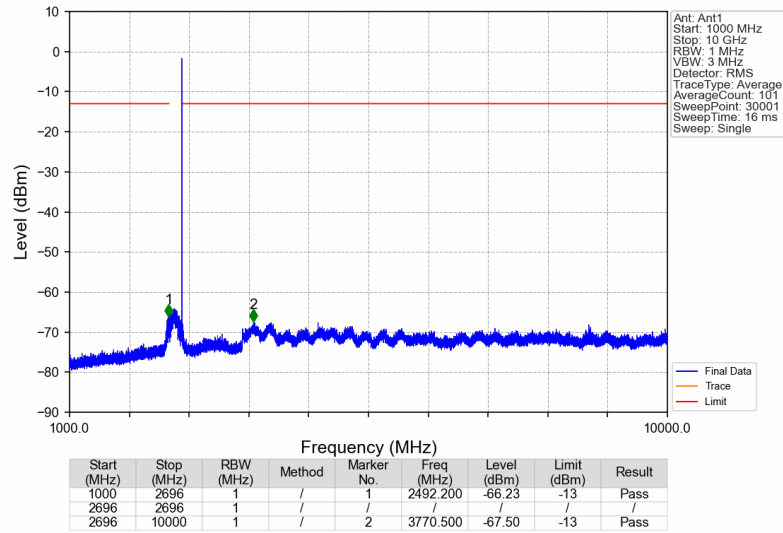
Band41\_2689.9MHz\_GMSK\_SISO\_Ant1\_NTNV



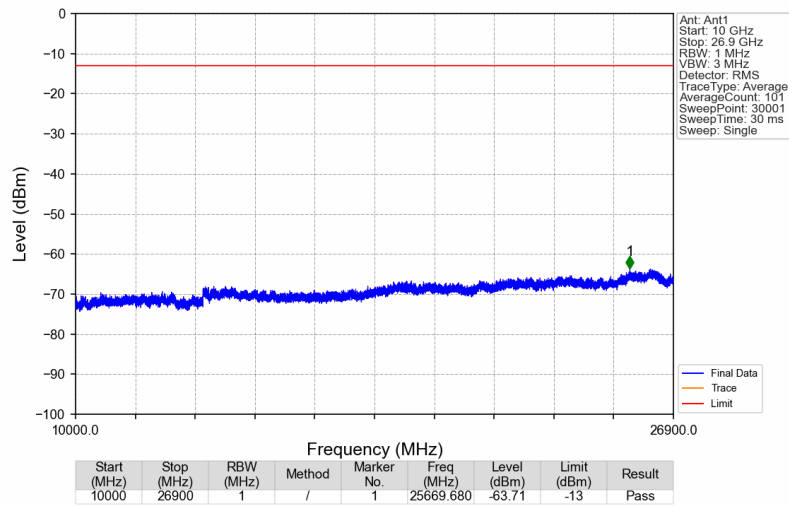
Band41\_2689.9MHz\_GMSK\_SISO\_Ant1\_NTNV



Band41\_2689.9MHz\_GMSK\_SISO\_Ant1\_NTNV



Band41\_2689.9MHz\_GMSK\_SISO\_Ant1\_NTNV

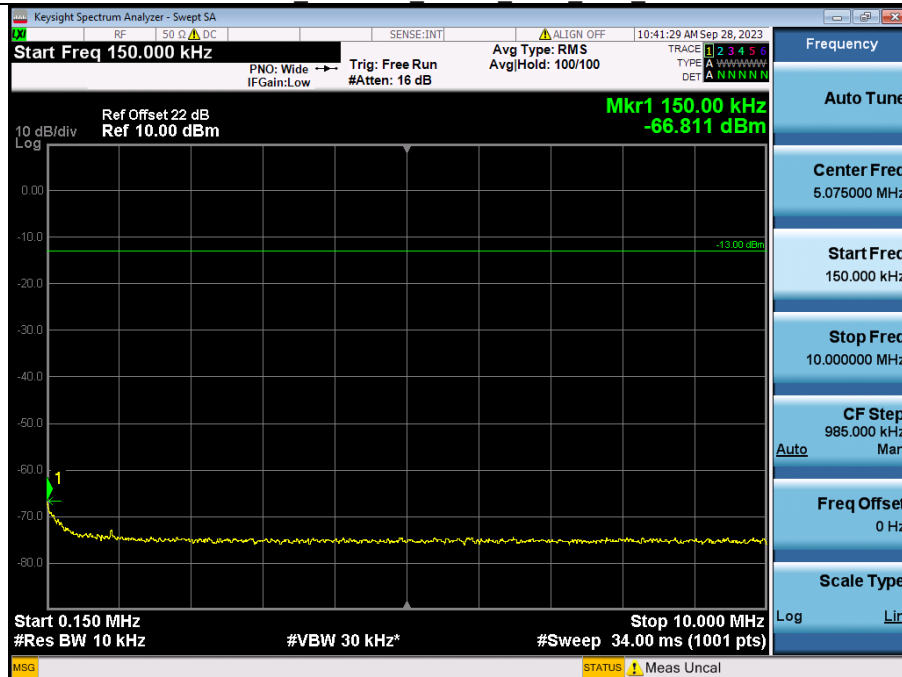


For 100MHz BW

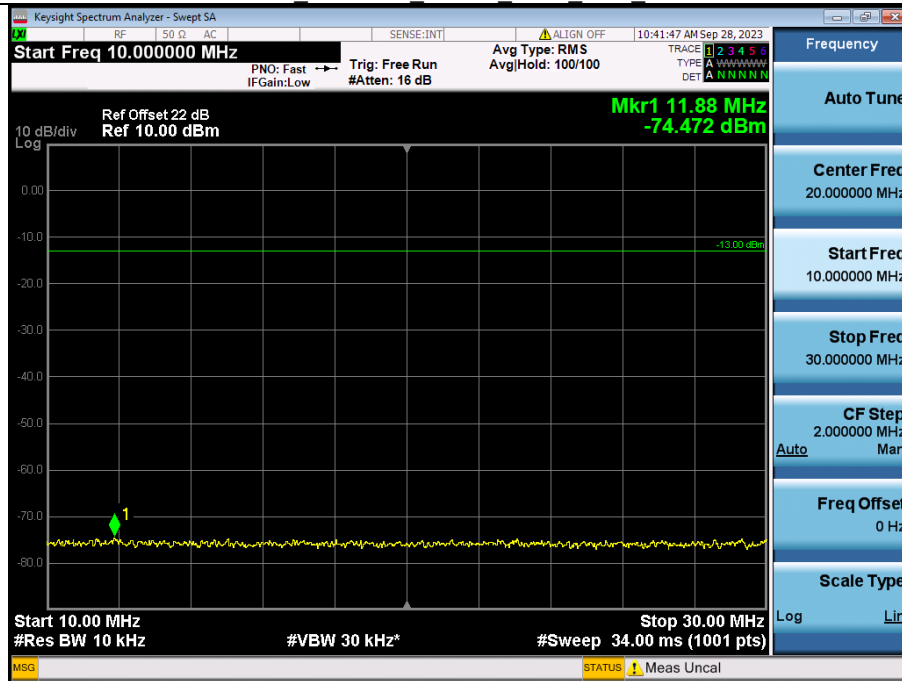
Band41 2546MHz AWGN SISO Ant1 NTN



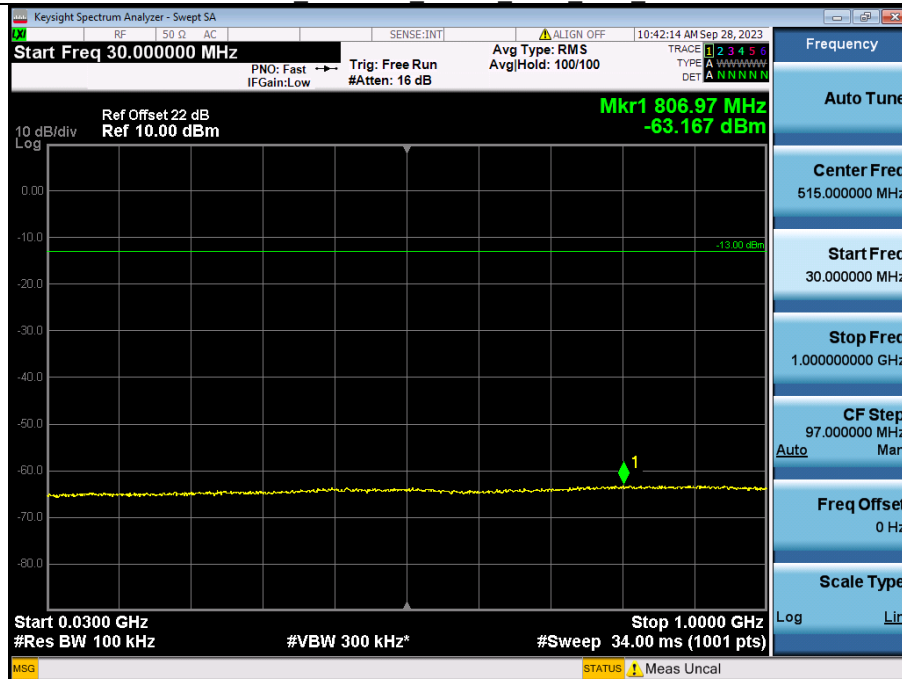
Band41 2546MHz AWGN SISO Ant1 NTN



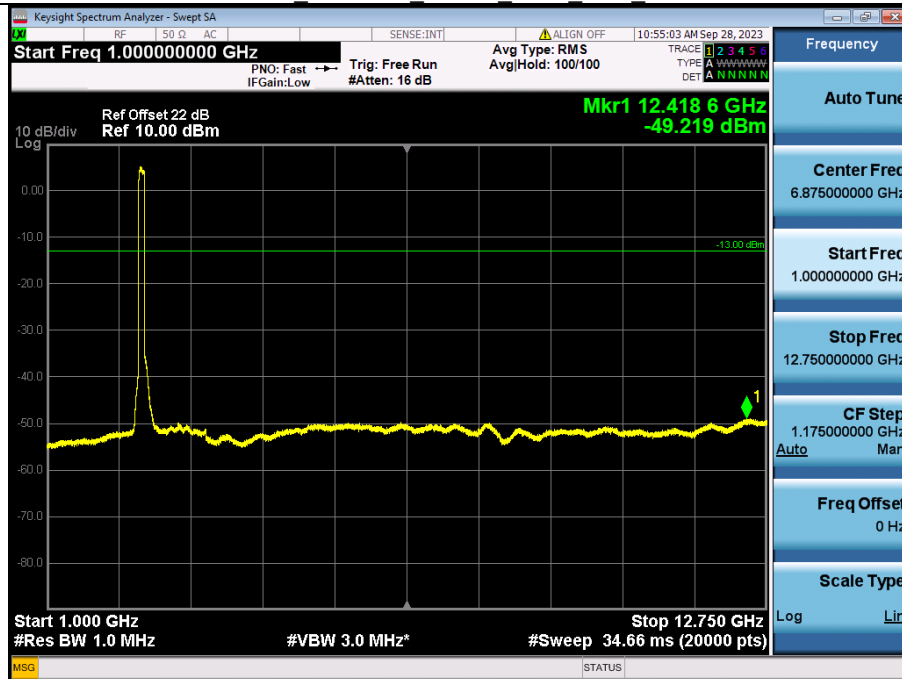
Band41 2546MHz AWGN SISO Ant1 NTN



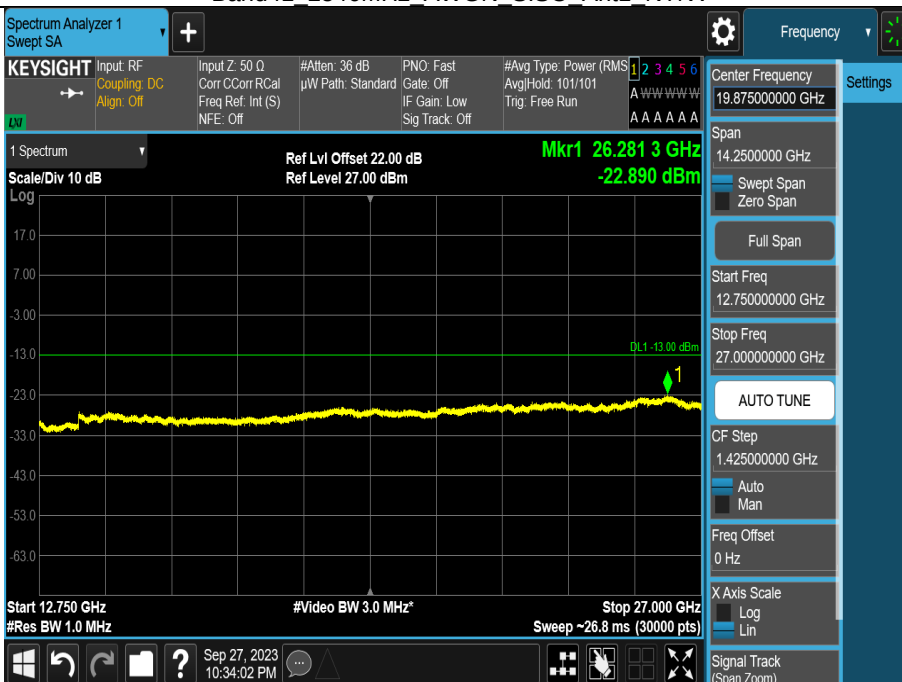
Band41 2546MHz AWGN SISO Ant1 NTN



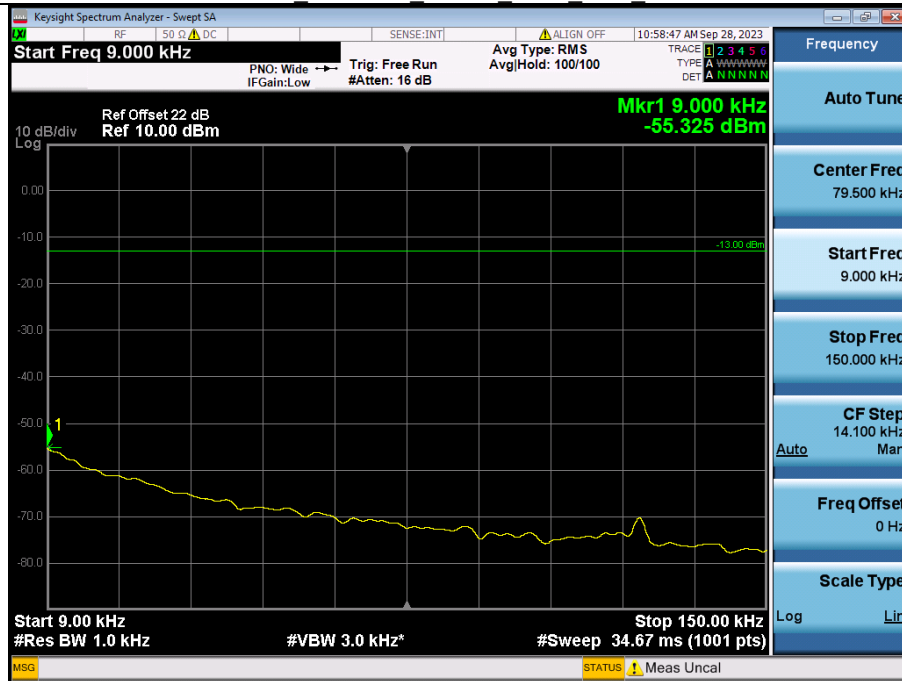
Band41 2546MHz AWGN SISO Ant1 NTN



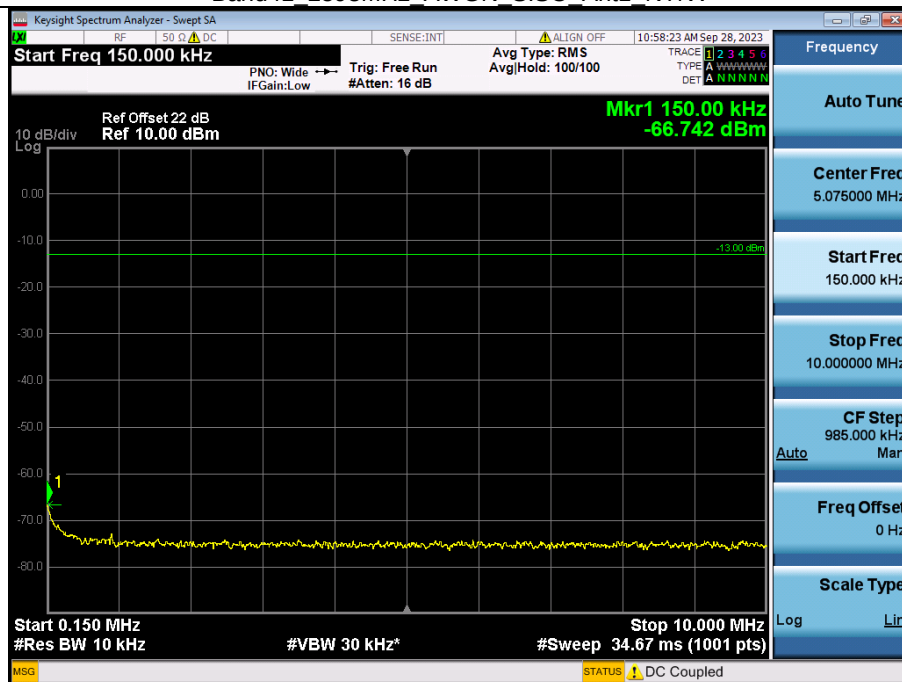
Band41 2546MHz AWGN SISO Ant1 NTN



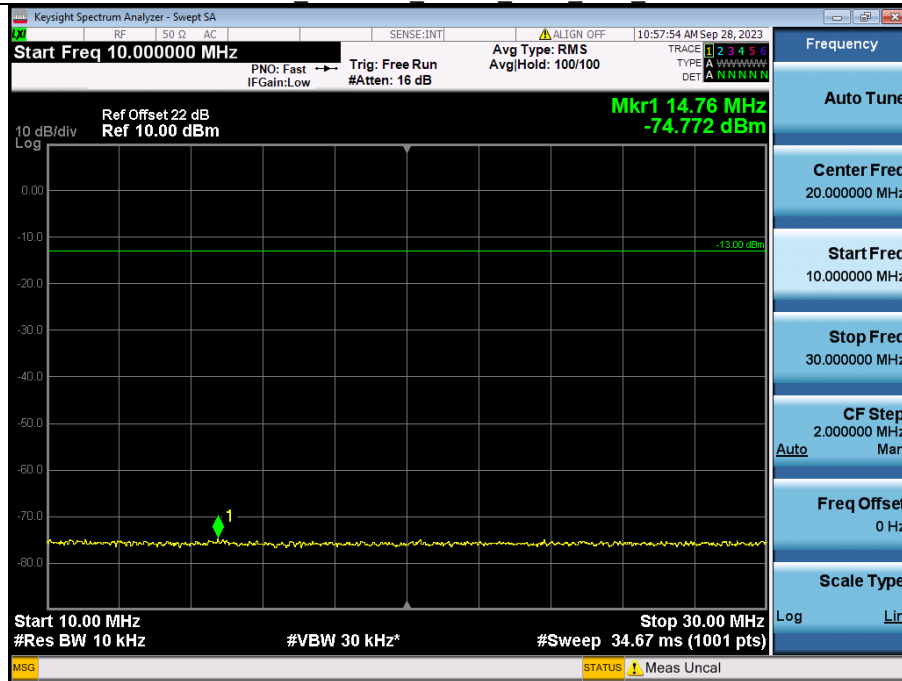
Band41 2593MHz AWGN SISO Ant1 NTN



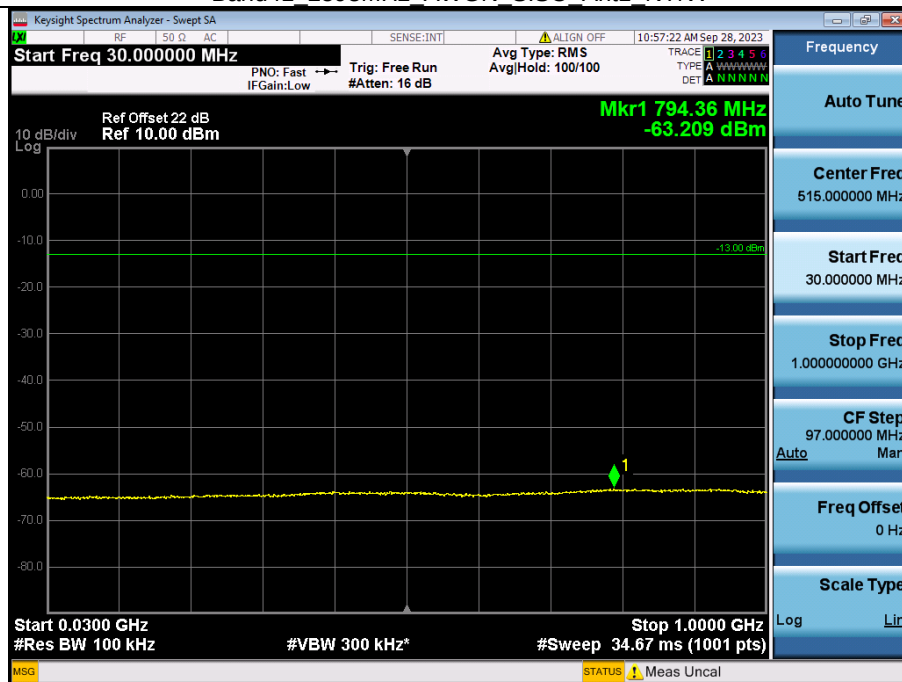
Band41 2593MHz AWGN SISO Ant1 NTN



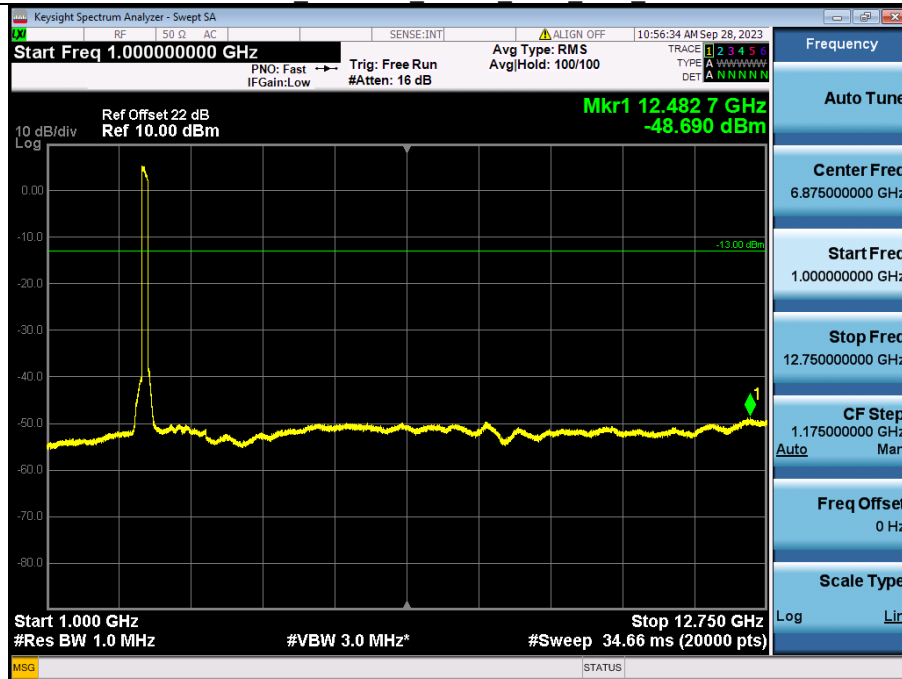
### Band41 2593MHz AWGN SISO Ant1 NTN



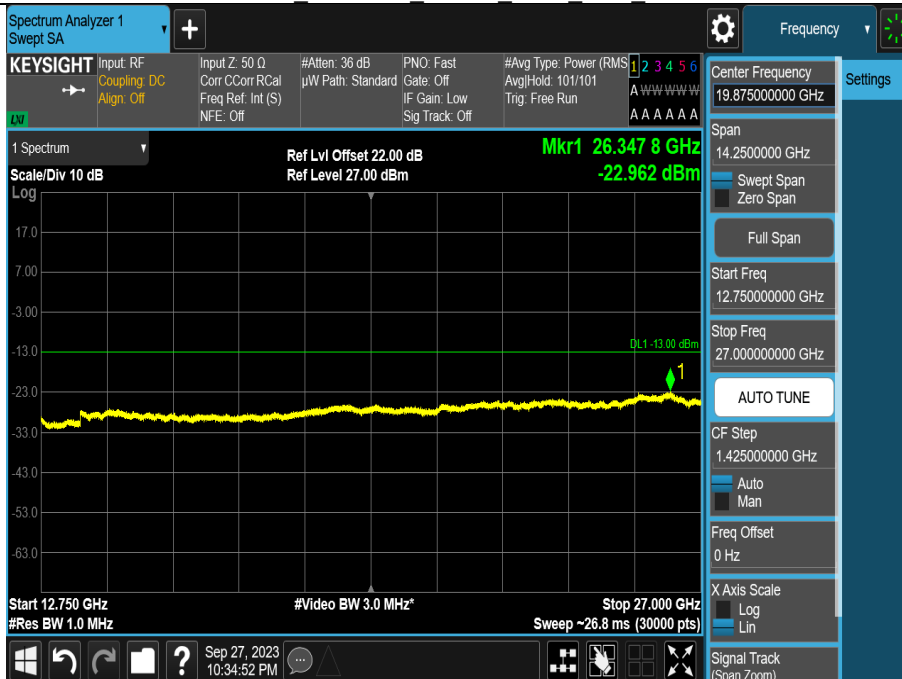
### Band41 2593MHz AWGN SISO Ant1 NTN



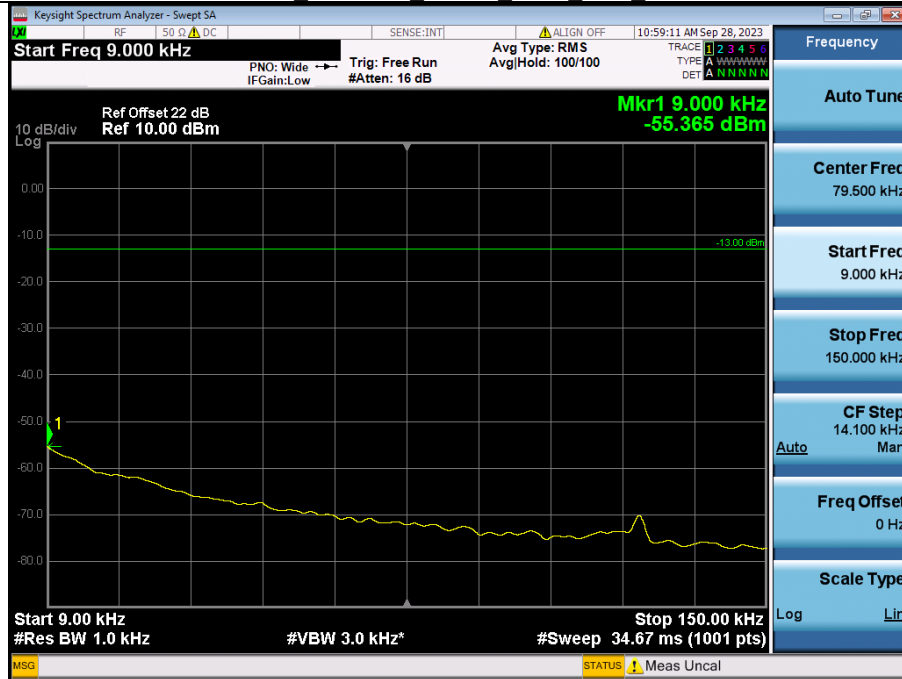
## Band41 2593MHz AWGN SISO Ant1 NTN



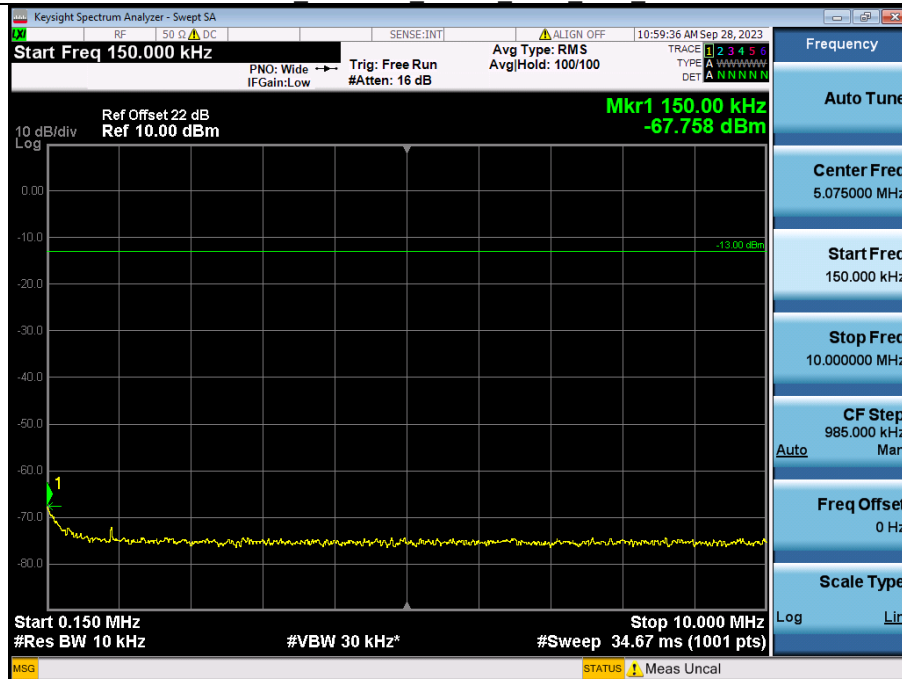
## Band41 2593MHz AWGN SISO Ant1 NTN



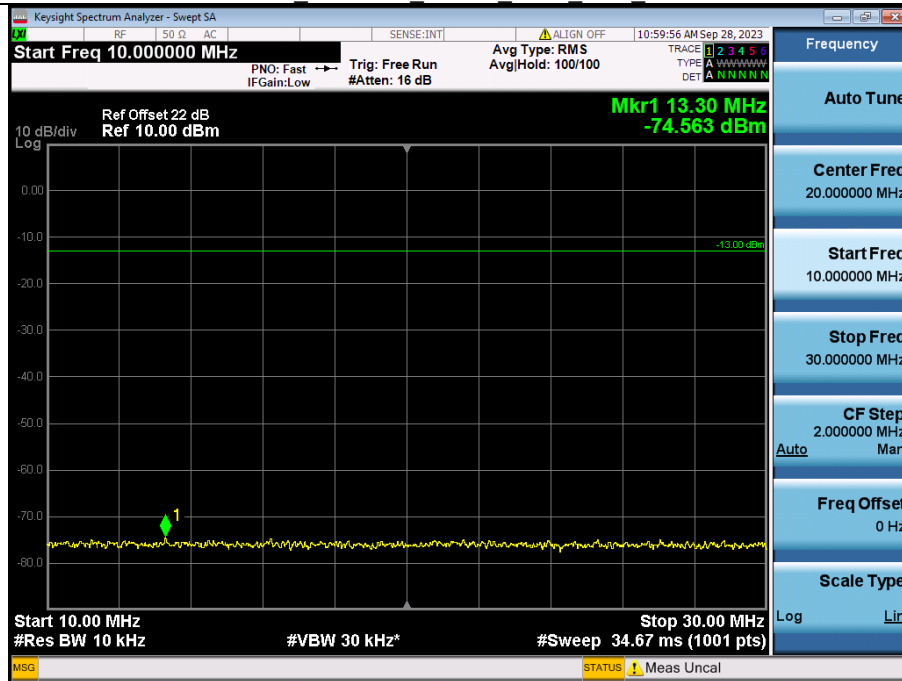
Band41 2640MHz AWGN SISO Ant1 NTN



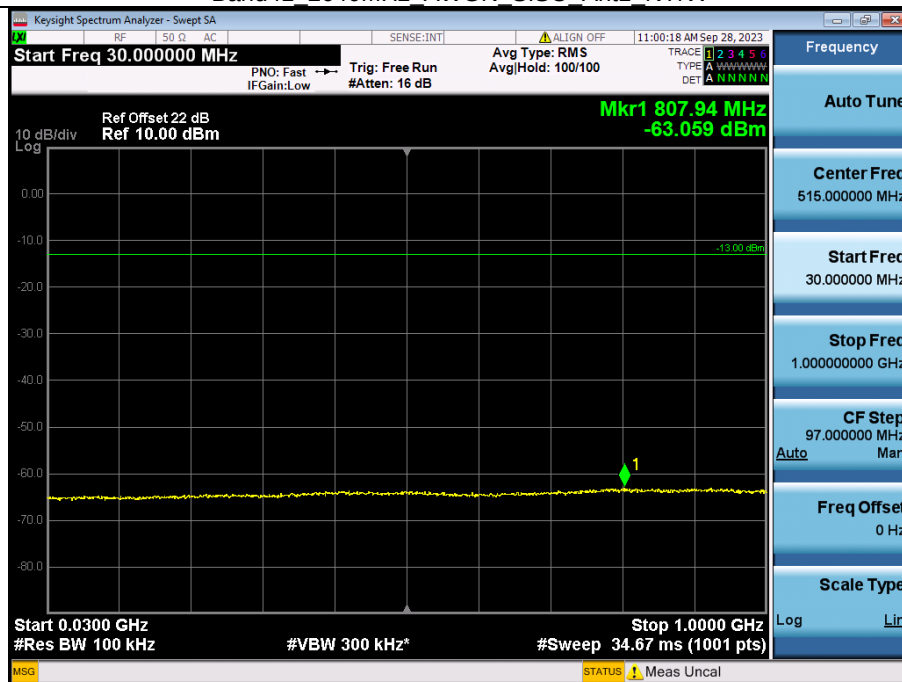
Band41 2640MHz AWGN SISO Ant1 NTN



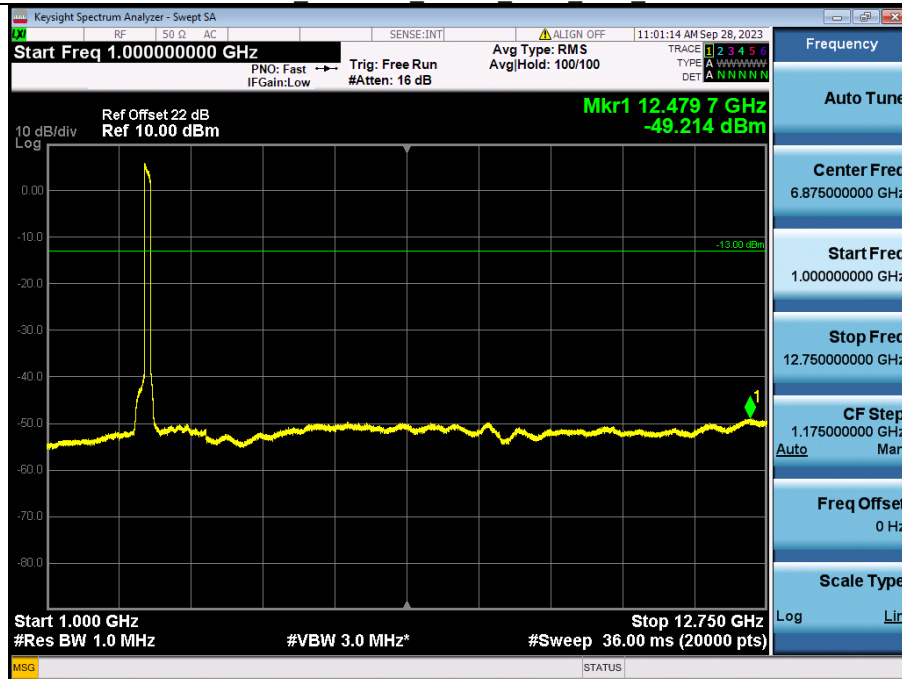
Band41 2640MHz AWGN SISO Ant1 NTN



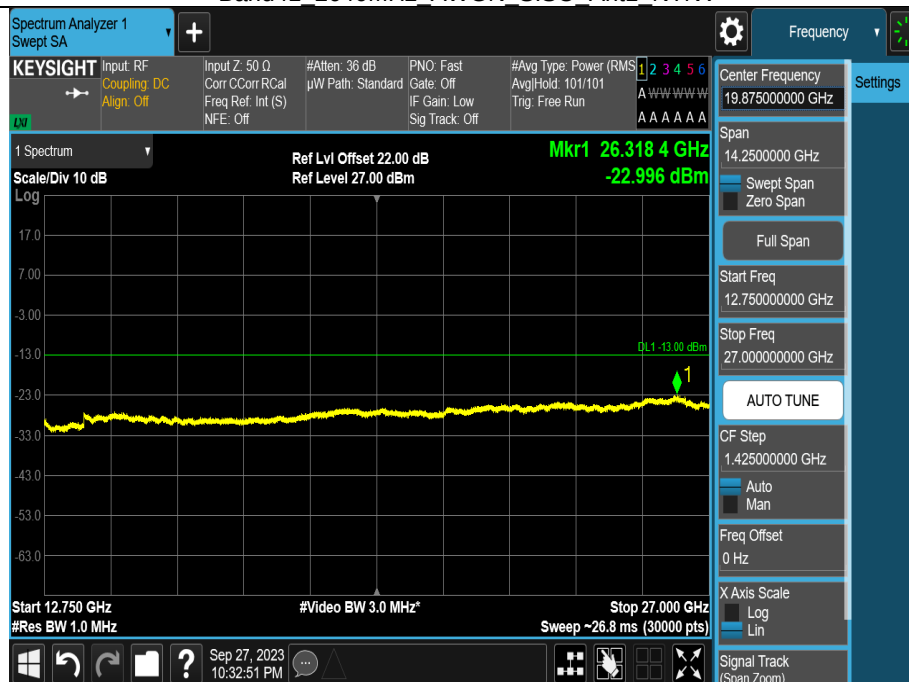
Band41 2640MHz AWGN SISO Ant1 NTN



Band41 2640MHz AWGN SISO Ant1 NTN



Band41 2640MHz AWGN SISO Ant1 NTN



## 7. Frequency stability measurements

## 7.1 Band41\_Ant1

## 7.1.1 Test Result

| Band: 41 / NTN |             |                 |              |                  |                     |                    |         |
|----------------|-------------|-----------------|--------------|------------------|---------------------|--------------------|---------|
| Signal         |             |                 | Temp<br>(°C) | Voltage<br>(VAC) | Freq. Error<br>(Hz) | Tolerance<br>(ppm) | Verdict |
| Type           | Level (dBm) | Frequency (MHz) |              |                  |                     |                    |         |
| CW             | -4          | 2496.1          | 20           | 102              | -103                | -0.04126           | Pass    |
|                |             |                 |              | 120              | -104                | -0.04166           | Pass    |
|                |             |                 |              | 138              | -105                | -0.04207           | Pass    |
|                |             |                 | -30          | 120              | -108                | -0.04327           | Pass    |
|                |             |                 | -20          | 120              | -107                | -0.04287           | Pass    |
|                |             |                 | -10          | 120              | -109                | -0.04367           | Pass    |
|                |             |                 | 0            | 120              | -111                | -0.04447           | Pass    |
|                |             |                 | 10           | 120              | -102                | -0.04086           | Pass    |
|                |             |                 | 30           | 120              | -105                | -0.04207           | Pass    |
|                |             |                 | 40           | 120              | -106                | -0.04247           | Pass    |
|                |             |                 | 50           | 120              | -105                | -0.04207           | Pass    |
|                |             | 2593            | 20           | 102              | -110                | -0.04242           | Pass    |
|                |             |                 |              | 120              | -103                | -0.03972           | Pass    |
|                |             |                 |              | 138              | -105                | -0.04049           | Pass    |
|                |             |                 | -30          | 120              | -102                | -0.03934           | Pass    |
|                |             |                 | -20          | 120              | -104                | -0.04011           | Pass    |
|                |             |                 | -10          | 120              | -104                | -0.04011           | Pass    |
|                |             |                 | 0            | 120              | -103                | -0.03972           | Pass    |
|                |             |                 | 10           | 120              | -102                | -0.03934           | Pass    |
|                |             |                 | 30           | 120              | -101                | -0.03895           | Pass    |
|                |             |                 | 40           | 120              | -100                | -0.03857           | Pass    |
|                |             |                 | 50           | 120              | -109                | -0.04204           | Pass    |
|                |             | 2689.9          | 20           | 102              | -102                | -0.03792           | Pass    |
|                |             |                 |              | 120              | -111                | -0.04127           | Pass    |
|                |             |                 |              | 138              | -109                | -0.04052           | Pass    |
|                |             |                 | -30          | 120              | -108                | -0.04015           | Pass    |
|                |             |                 | -20          | 120              | -110                | -0.04089           | Pass    |
|                |             |                 | -10          | 120              | -111                | -0.04127           | Pass    |
|                |             |                 | 0            | 120              | -112                | -0.04164           | Pass    |
|                |             |                 | 10           | 120              | -103                | -0.03829           | Pass    |
|                |             |                 | 30           | 120              | -102                | -0.03792           | Pass    |



|  |  |  |    |     |      |          |      |
|--|--|--|----|-----|------|----------|------|
|  |  |  | 40 | 120 | -101 | -0.03755 | Pass |
|  |  |  | 50 | 120 | -100 | -0.03718 | Pass |

## 8. Radiated Spurious Emissions

### 8.1 Bandn 41

#### 8.1.1 Test Result

| AWGN 2498.5MHz |                                          |        |       |            |         |
|----------------|------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                             | dBm    | dBm   | dB         |         |
| 95.444         | Horizontal                               | -66.44 | -13   | -53.44     | Pass    |
| 288.218        | Horizontal                               | -59.54 | -13   | -46.54     | Pass    |
| 685.182        | Horizontal                               | -57.57 | -13   | -44.57     | Pass    |
| 2408.03        | Horizontal                               | -49.66 | -13   | -36.66     | Pass    |
| 6028.09        | Horizontal                               | -52.40 | -13   | -39.40     | Pass    |
| 11319.91       | Horizontal                               | -39.29 | -13   | -26.29     | Pass    |
| 121.060        | Vertical                                 | -65.80 | -13   | -52.8      | Pass    |
| 260.315        | Vertical                                 | -59.97 | -13   | -46.97     | Pass    |
| 709.019        | Vertical                                 | -57.82 | -13   | -44.82     | Pass    |
| 2607.48        | Vertical                                 | -49.47 | -13   | -36.47     | Pass    |
| 6098.04        | Vertical                                 | -50.74 | -13   | -37.74     | Pass    |
| 11265.74       | Vertical                                 | -38.88 | -13   | -25.88     | Pass    |

| AWGN 2593MHz |                                          |        |       |            |         |
|--------------|------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                             | dBm    | dBm   | dB         |         |
| 102.120      | Horizontal                               | -66.17 | -13   | -53.17     | Pass    |
| 255.065      | Horizontal                               | -59.41 | -13   | -46.41     | Pass    |
| 714.169      | Horizontal                               | -59.26 | -13   | -46.26     | Pass    |
| 2502.92      | Horizontal                               | -53.86 | -13   | -40.86     | Pass    |
| 6037.98      | Horizontal                               | -47.60 | -13   | -34.60     | Pass    |
| 11307.90     | Horizontal                               | -37.69 | -13   | -24.69     | Pass    |
| 93.644       | Vertical                                 | -62.47 | -13   | -49.47     | Pass    |
| 327.178      | Vertical                                 | -60.52 | -13   | -47.52     | Pass    |
| 691.772      | Vertical                                 | -59.35 | -13   | -46.35     | Pass    |
| 2604.48      | Vertical                                 | -51.31 | -13   | -38.31     | Pass    |
| 6099.20      | Vertical                                 | -49.27 | -13   | -36.27     | Pass    |
| 11329.11     | Vertical                                 | -41.48 | -13   | -28.48     | Pass    |

| AWGN 2687.5MHz |                                          |        |       |            |         |
|----------------|------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                             | dBm    | dBm   | dB         |         |
| 130.084        | Horizontal                               | -69.50 | -13   | -56.50     | Pass    |
| 279.428        | Horizontal                               | -57.68 | -13   | -44.68     | Pass    |
| 699.102        | Horizontal                               | -57.96 | -13   | -44.96     | Pass    |
| 2463.08        | Horizontal                               | -53.67 | -13   | -40.67     | Pass    |
| 6025.06        | Horizontal                               | -53.91 | -13   | -40.91     | Pass    |
| 11329.10       | Horizontal                               | -37.60 | -13   | -24.60     | Pass    |
| 111.060        | Vertical                                 | -62.10 | -13   | -49.10     | Pass    |
| 248.515        | Vertical                                 | -58.76 | -13   | -45.76     | Pass    |
| 701.919        | Vertical                                 | -56.81 | -13   | -43.81     | Pass    |
| 2580.61        | Vertical                                 | -48.65 | -13   | -35.65     | Pass    |
| 6095.70        | Vertical                                 | -53.27 | -13   | -40.27     | Pass    |
| 11304.55       | Vertical                                 | -40.40 | -13   | -27.40     | Pass    |

| GMSK 2496.2MHz |                                          |        |       |            |         |
|----------------|------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                             | dBm    | dBm   | dB         |         |
| 97.954         | Horizontal                               | -67.11 | -13   | -54.11     | Pass    |
| 286.308        | Horizontal                               | -59.66 | -13   | -46.66     | Pass    |
| 556.942        | Horizontal                               | -63.23 | -13   | -50.23     | Pass    |
| 2981.28        | Horizontal                               | -48.07 | -13   | -35.07     | Pass    |
| 6317.67        | Horizontal                               | -47.99 | -13   | -34.99     | Pass    |
| 11862.94       | Horizontal                               | -41.72 | -13   | -28.72     | Pass    |
| 109.29         | Vertical                                 | -65.09 | -13   | -52.09     | Pass    |
| 226.175        | Vertical                                 | -58.89 | -13   | -45.89     | Pass    |
| 607.879        | Vertical                                 | -62.85 | -13   | -49.85     | Pass    |
| 3004.89        | Vertical                                 | -49.33 | -13   | -36.33     | Pass    |
| 6512.29        | Vertical                                 | -47.97 | -13   | -34.97     | Pass    |
| 12005.65       | Vertical                                 | -43.76 | -13   | -30.76     | Pass    |

| GMSK 2593MHz |                                             |        |       |            |         |
|--------------|---------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission<br>Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                                | dBm    | dBm   | dB         |         |
| 107.820      | Horizontal                                  | -63.89 | -13   | -50.89     | Pass    |
| 204.035      | Horizontal                                  | -62.03 | -13   | -49.03     | Pass    |
| 594.279      | Horizontal                                  | -59.12 | -13   | -46.12     | Pass    |
| 2986.37      | Horizontal                                  | -52.32 | -13   | -39.32     | Pass    |
| 6301.25      | Horizontal                                  | -49.14 | -13   | -36.14     | Pass    |
| 11840.96     | Horizontal                                  | -36.52 | -13   | -23.52     | Pass    |
| 126.134      | Vertical                                    | -67.45 | -13   | -54.45     | Pass    |
| 292.508      | Vertical                                    | -58.39 | -13   | -45.39     | Pass    |
| 557.112      | Vertical                                    | -63.87 | -13   | -50.87     | Pass    |
| 3015.70      | Vertical                                    | -51.43 | -13   | -38.43     | Pass    |
| 6496.76      | Vertical                                    | -54.42 | -13   | -41.42     | Pass    |
| 11988.30     | Vertical                                    | -36.88 | -13   | -23.88     | Pass    |

| GMSK 2689.8MHz |                                             |        |       |            |         |
|----------------|---------------------------------------------|--------|-------|------------|---------|
| Frequency      | Spurious Emission<br>Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz            | Polarization                                | dBm    | dBm   | dB         |         |
| 110.344        | Horizontal                                  | -64.81 | -13   | -51.81     | Pass    |
| 302.688        | Horizontal                                  | -61.91 | -13   | -48.91     | Pass    |
| 569.892        | Horizontal                                  | -58.42 | -13   | -45.42     | Pass    |
| 2998.13        | Horizontal                                  | -50.07 | -13   | -37.07     | Pass    |
| 6328.20        | Horizontal                                  | -53.74 | -13   | -40.74     | Pass    |
| 11884.11       | Horizontal                                  | -39.07 | -13   | -26.07     | Pass    |
| 106.110        | Vertical                                    | -68.45 | -13   | -55.45     | Pass    |
| 242.945        | Vertical                                    | -58.93 | -13   | -45.93     | Pass    |
| 600.839        | Vertical                                    | -61.16 | -13   | -48.16     | Pass    |
| 2987.25        | Vertical                                    | -47.95 | -13   | -34.95     | Pass    |
| 6494.44        | Vertical                                    | -50.67 | -13   | -37.67     | Pass    |
| 12023.28       | Vertical                                    | -40.74 | -13   | -27.74     | Pass    |

For 100MHz BW

| AWGN 2546MHz |                                          |        |       |            |         |
|--------------|------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                             | dBm    | dBm   | dB         |         |
| 95.320       | Horizontal                               | -69.52 | -13   | -56.52     | Pass    |
| 220.755      | Horizontal                               | -61.59 | -13   | -48.59     | Pass    |
| 603.649      | Horizontal                               | -59.01 | -13   | -46.01     | Pass    |
| 2662.79      | Horizontal                               | -50.32 | -13   | -37.32     | Pass    |
| 6097.66      | Horizontal                               | -50.74 | -13   | -37.74     | Pass    |
| 12082.79     | Horizontal                               | -36.91 | -13   | -23.91     | Pass    |
| 105.674      | Vertical                                 | -62.70 | -13   | -49.70     | Pass    |
| 271.618      | Vertical                                 | -60.44 | -13   | -47.44     | Pass    |
| 570.532      | Vertical                                 | -58.47 | -13   | -45.47     | Pass    |
| 2686.49      | Vertical                                 | -54.44 | -13   | -41.44     | Pass    |
| 5907.41      | Vertical                                 | -50.84 | -13   | -37.84     | Pass    |
| 11711.63     | Vertical                                 | -42.92 | -13   | -29.92     | Pass    |

| AWGN 2593MHz |                                          |        |       |            |         |
|--------------|------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                             | dBm    | dBm   | dB         |         |
| 112.390      | Horizontal                               | -67.65 | -13   | -54.65     | Pass    |
| 243.055      | Horizontal                               | -61.81 | -13   | -48.81     | Pass    |
| 615.109      | Horizontal                               | -56.73 | -13   | -43.73     | Pass    |
| 2696.76      | Horizontal                               | -52.58 | -13   | -39.58     | Pass    |
| 6114.95      | Horizontal                               | -49.47 | -13   | -36.47     | Pass    |
| 12043.98     | Horizontal                               | -38.53 | -13   | -25.53     | Pass    |
| 131.854      | Vertical                                 | -67.97 | -13   | -54.97     | Pass    |
| 282.018      | Vertical                                 | -60.60 | -13   | -47.60     | Pass    |
| 560.942      | Vertical                                 | -62.44 | -13   | -49.44     | Pass    |
| 2707.28      | Vertical                                 | -51.07 | -13   | -38.07     | Pass    |
| 5925.23      | Vertical                                 | -52.09 | -13   | -39.09     | Pass    |
| 11736.41     | Vertical                                 | -42.45 | -13   | -29.45     | Pass    |

| AWGN 2640MHz |                                             |        |       |            |         |
|--------------|---------------------------------------------|--------|-------|------------|---------|
| Frequency    | Spurious Emission<br>Polarization and Level |        | Limit | Over Limit | Verdict |
| MHz          | Polarization                                | dBm    | dBm   | dB         |         |
| 100.184      | Horizontal                                  | -65.33 | -13   | -52.33     | Pass    |
| 261.928      | Horizontal                                  | -56.57 | -13   | -43.57     | Pass    |
| 576.012      | Horizontal                                  | -63.90 | -13   | -50.90     | Pass    |
| 2661.56      | Horizontal                                  | -50.95 | -13   | -37.95     | Pass    |
| 6113.39      | Horizontal                                  | -54.93 | -13   | -41.93     | Pass    |
| 12045.13     | Horizontal                                  | -38.65 | -13   | -25.65     | Pass    |
| 84.230       | Vertical                                    | -65.70 | -13   | -52.70     | Pass    |
| 206.965      | Vertical                                    | -64.25 | -13   | -51.25     | Pass    |
| 628.539      | Vertical                                    | -61.19 | -13   | -48.19     | Pass    |
| 2681.05      | Vertical                                    | -50.14 | -13   | -37.14     | Pass    |
| 5925.84      | Vertical                                    | -48.53 | -13   | -35.53     | Pass    |
| 11746.12     | Vertical                                    | -43.80 | -13   | -30.80     | Pass    |