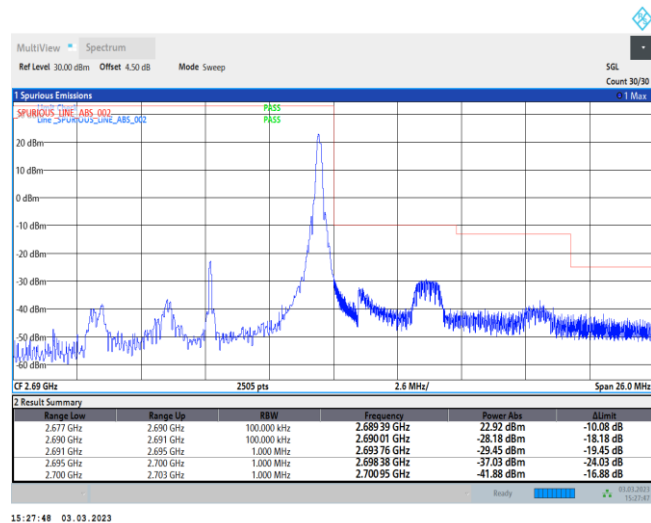
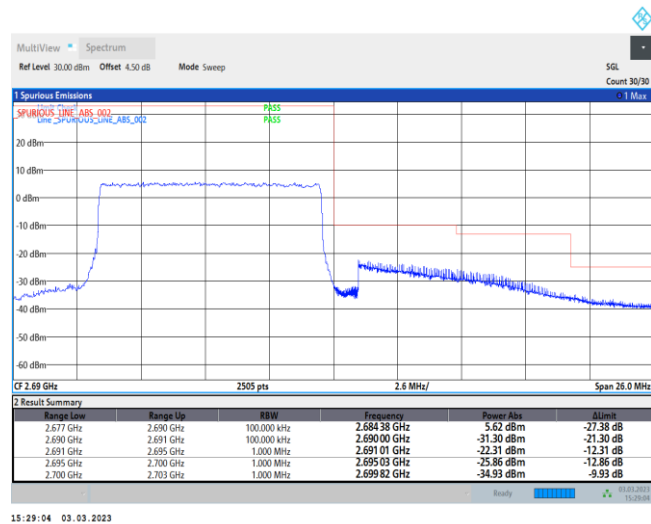


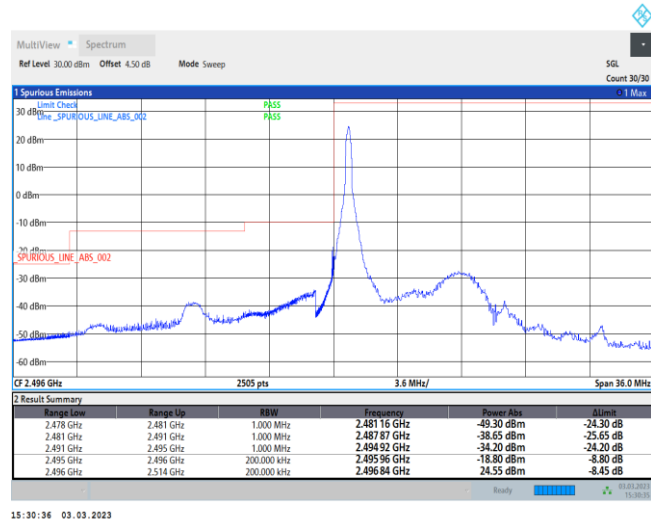
## Band41-10MHz-QPSK-41540-1RB#49



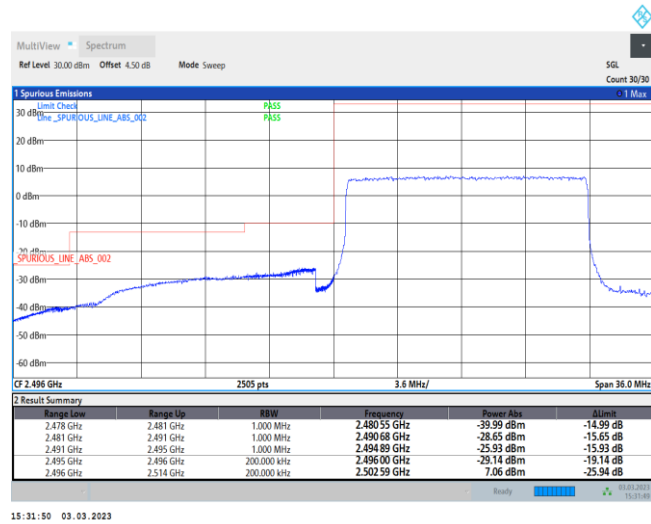
## Band41-10MHz-QPSK-41540-50RB#0



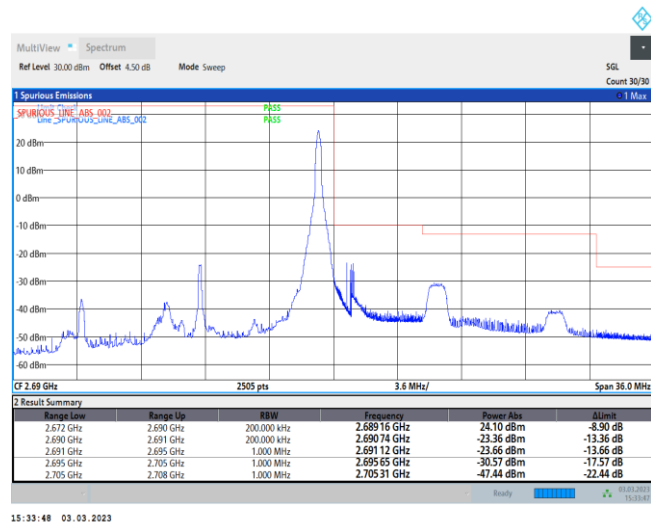
## Band41-15MHz-QPSK-39725-1RB#0



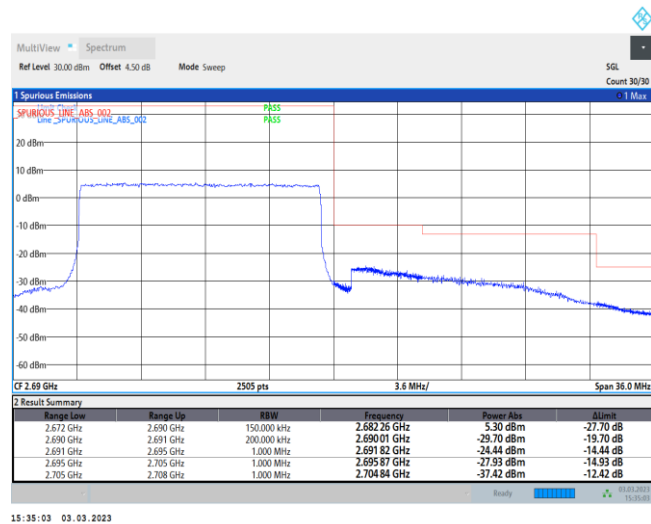
## Band41-15MHz-QPSK-39725-75RB#0



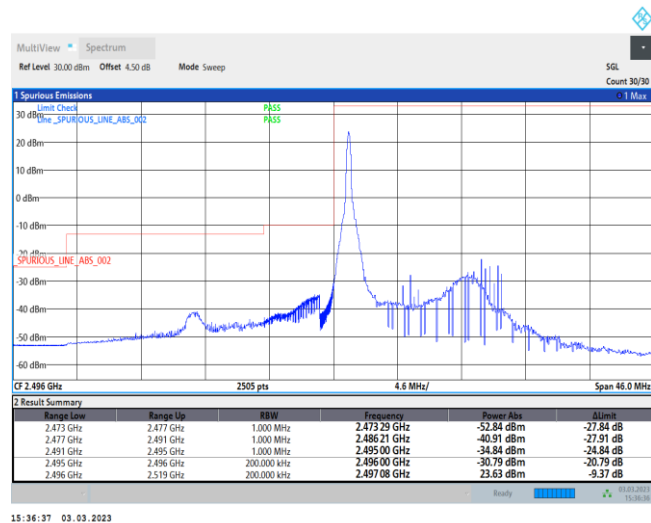
## Band41-15MHz-QPSK-41515-1RB#74



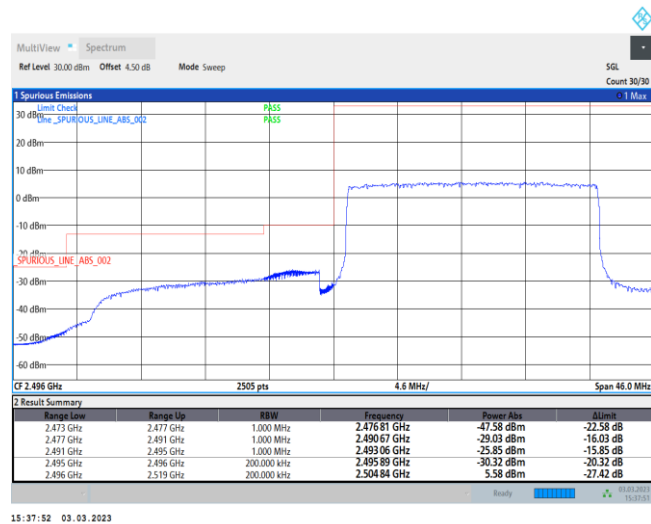
## Band41-15MHz-QPSK-41515-75RB#0



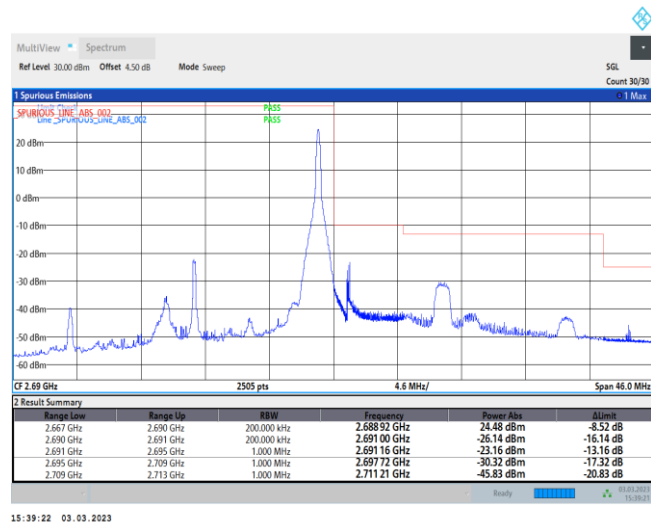
## Band41-20MHz-QPSK-39750-1RB#0



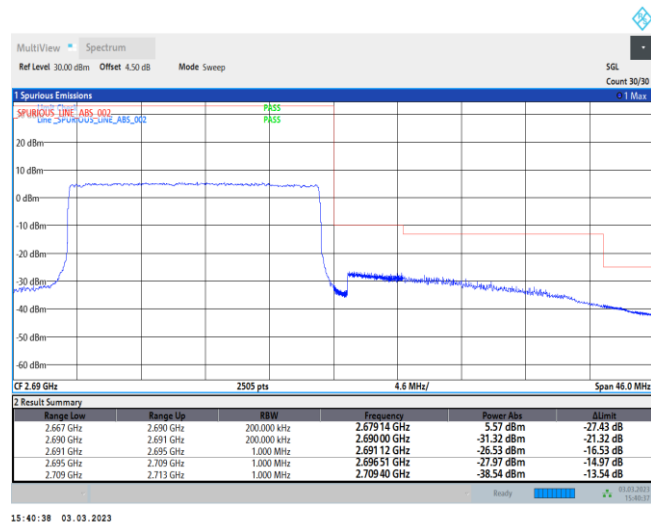
## Band41-20MHz-QPSK-39750-100RB#0



## Band41-20MHz-QPSK-41490-1RB#99



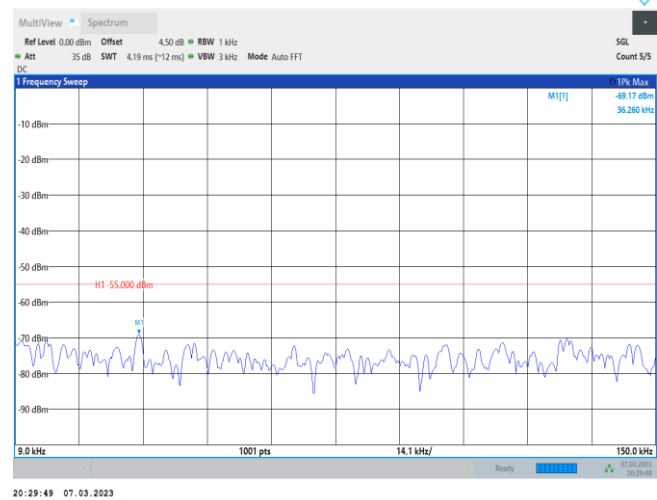
## Band41-20MHz-QPSK-41490-100RB#0



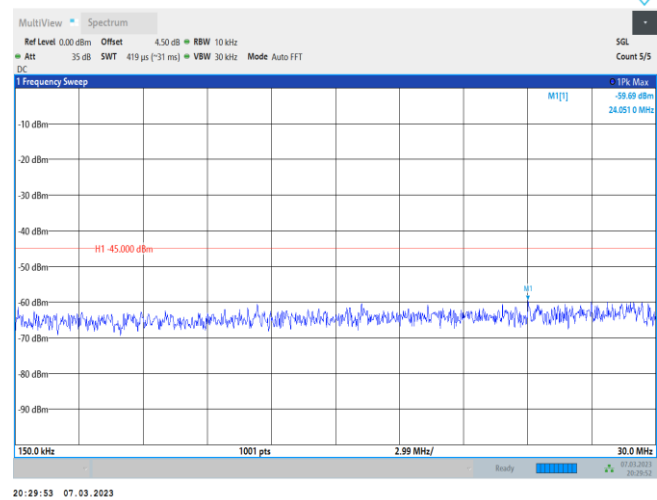
# Conducted Spurious Emission

## Test Graphs

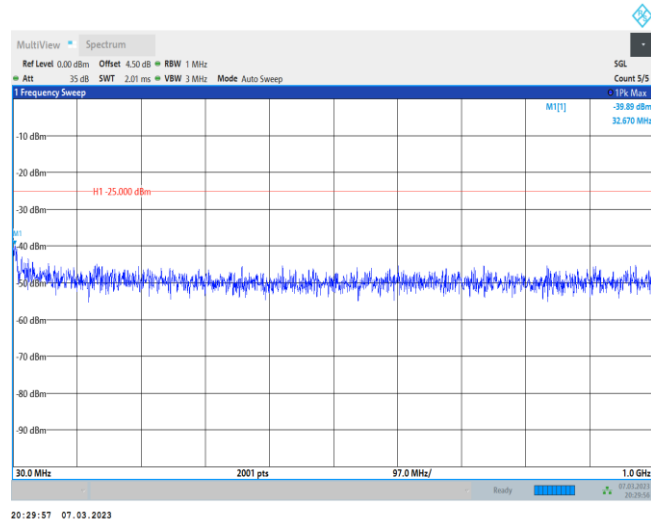
Band41-20MHz-QPSK-39750-1RB#0-Range1:0.009~0.15MHz



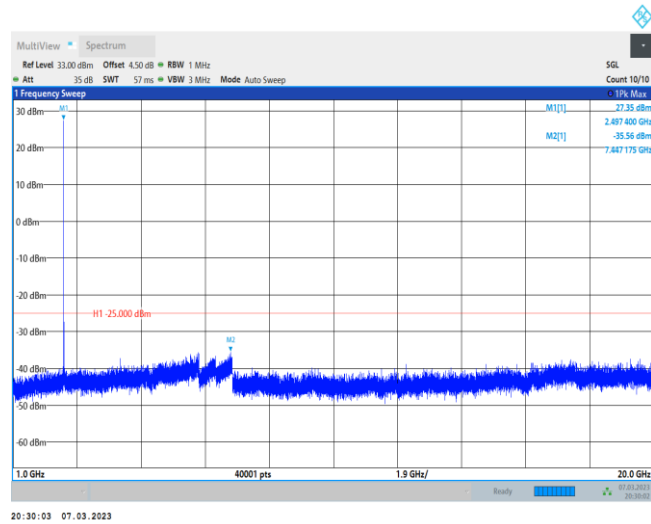
Band41-20MHz-QPSK-39750-1RB#0-Range2:0.15~30MHz



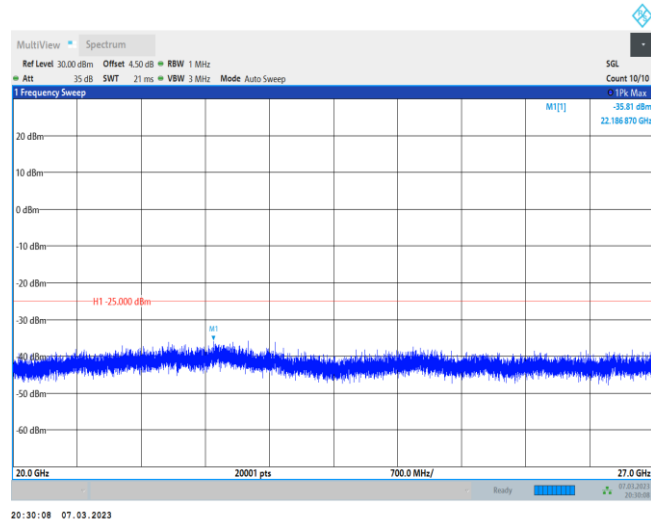
## Band41-20MHz-QPSK-39750-1RB#0-Range3:30~1000MHz



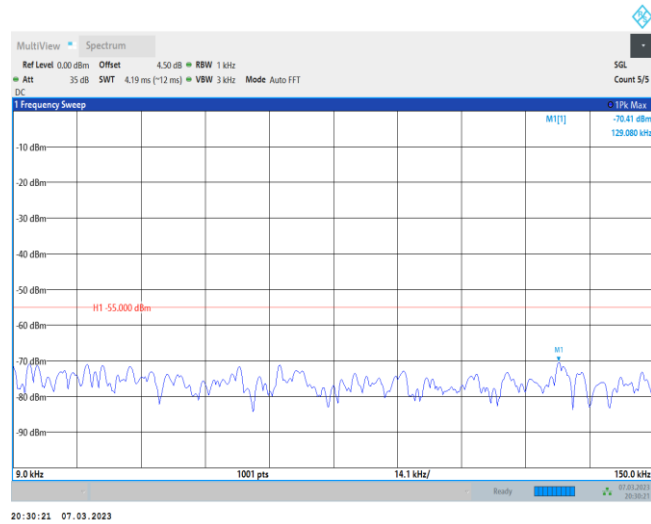
## Band41-20MHz-QPSK-39750-1RB#0-Range4:1000~20000MHz



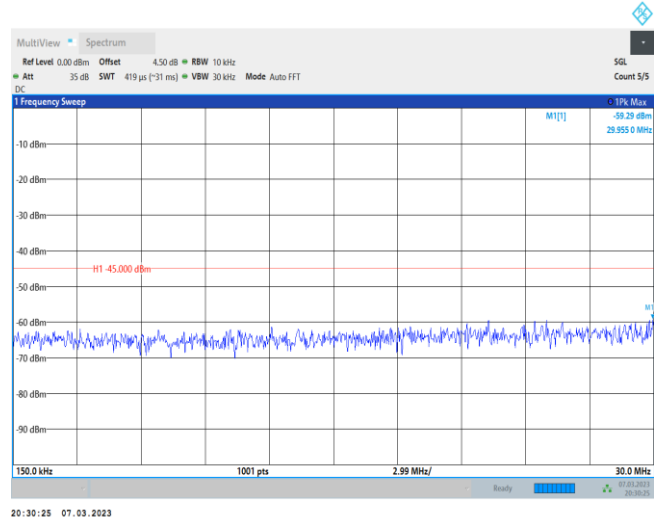
## Band41-20MHz-QPSK-39750-1RB#0-Range5:20000~27000MHz



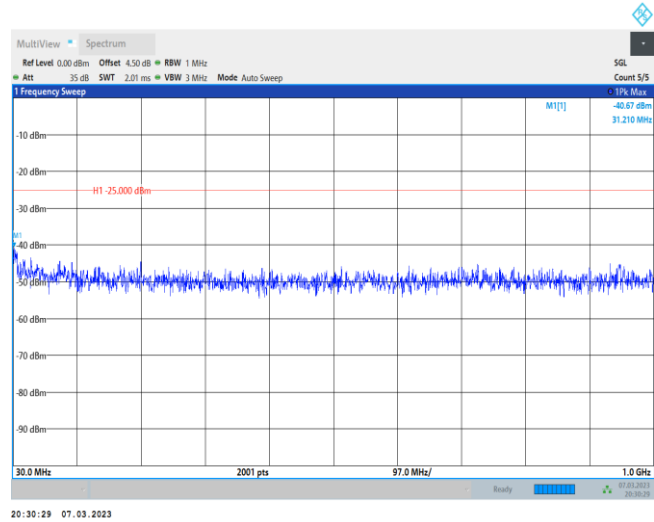
## Band41-20MHz-QPSK-40620-1RB#0-Range1:0.009~0.15MHz



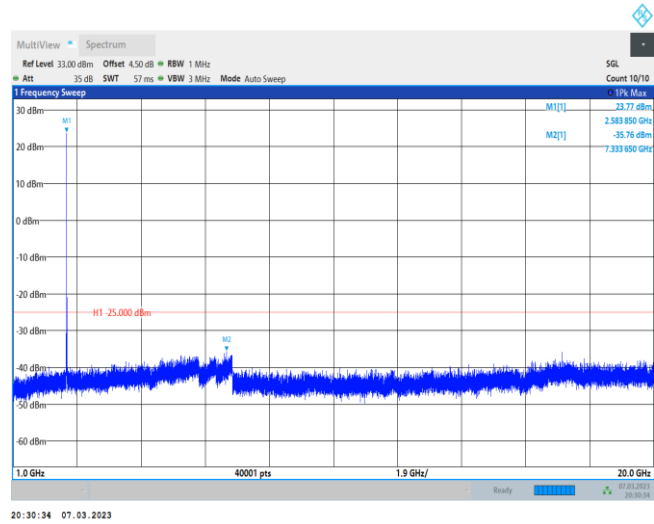
## Band41-20MHz-QPSK-40620-1RB#0-Range2:0.15~30MHz



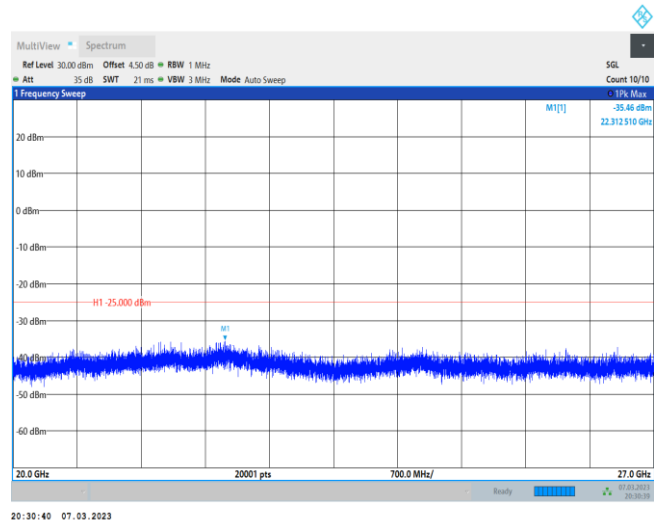
## Band41-20MHz-QPSK-40620-1RB#0-Range3:30~1000MHz



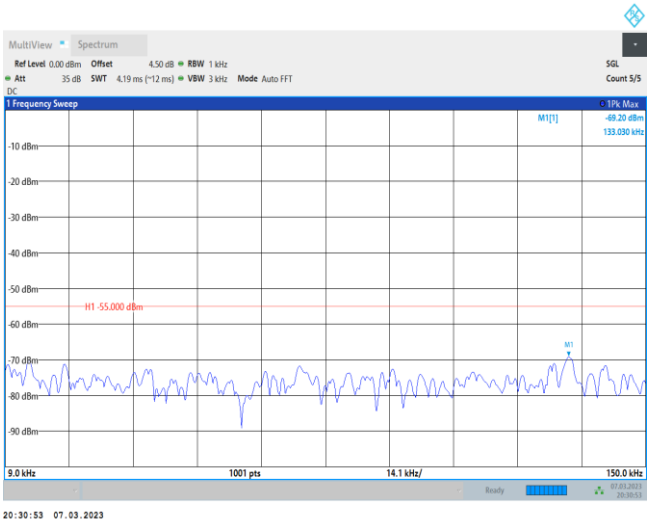
# Band41-20MHz-QPSK-40620-1RB#0-Range4:1000~20000MHz



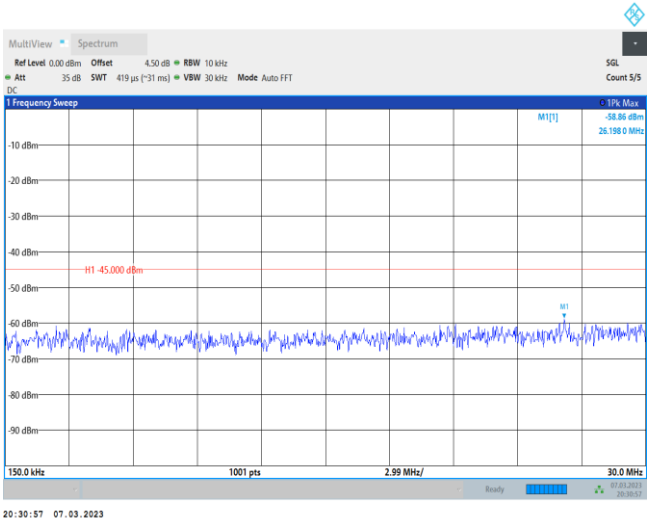
# Band41-20MHz-QPSK-40620-1RB#0-Range5:20000~27000MHz



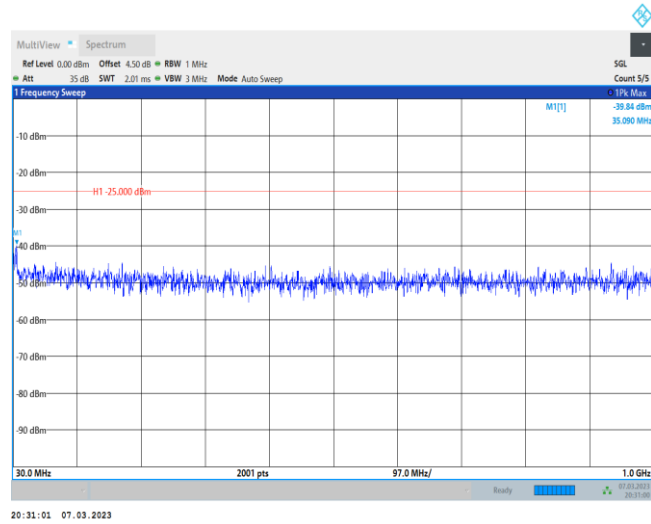
Band41-20MHz-QPSK-41490-1RB#0-Range1:0.009~0.15MHz



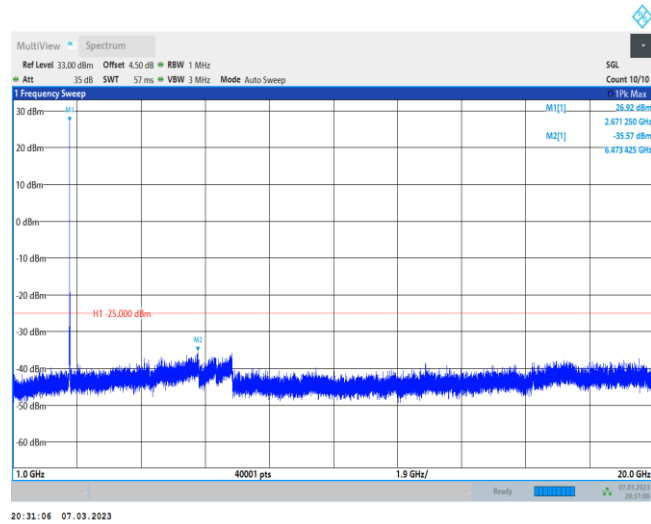
Band41-20MHz-QPSK-41490-1RB#0-Range2:0.15~30MHz



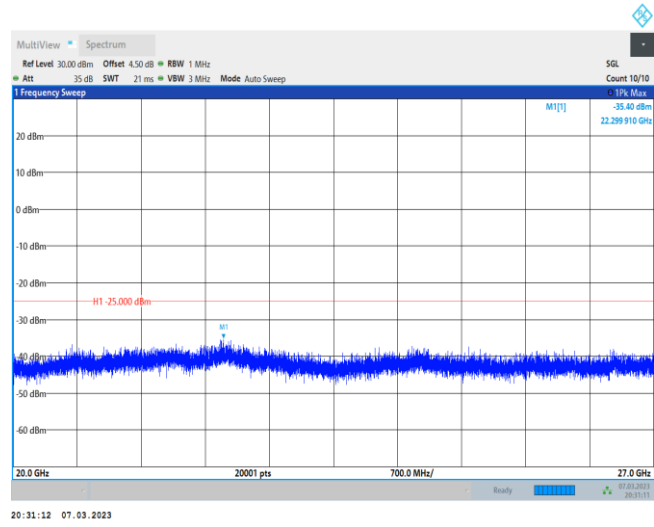
## Band41-20MHz-QPSK-41490-1RB#0-Range3:30~1000MHz



## Band41-20MHz-QPSK-41490-1RB#0-Range4:1000~20000MHz



# Band41-20MHz-QPSK-41490-1RB#0-Range5:20000~27000MHz



## Field Strength of Spurious Radiation

Test Band = LTE Band 41\_ TM1

Test Channel = Low Channel

| Final Data List |                    |                   |                |          |                |                |                |                |              |            |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------------|--------------|------------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1               | 4994.18            | 41.06             | -44.94         | 32.59    | -66.55         | -25.00         | 41.55          | 241            | 360          | Horizontal |
| 2               | 7491.27            | 39.59             | -41.63         | 36.49    | -60.81         | -25.00         | 35.81          | 142            | 359          | Horizontal |
| 3               | 9988.36            | 33.58             | -37.16         | 38.50    | -60.34         | -25.00         | 35.34          | 263            | 208          | Horizontal |
| 4               | 12485.45           | 31.78             | -35.26         | 39.09    | -59.65         | -25.00         | 34.65          | 225            | 346          | Horizontal |
| 5               | 14982.54           | 31.01             | -33.99         | 39.22    | -59.02         | -25.00         | 34.02          | 185            | 286          | Horizontal |
| 6               | 17479.63           | 29.20             | -31.91         | 40.52    | -57.45         | -25.00         | 32.45          | 126            | 20           | Horizontal |

| Final Data List |                    |                   |                |          |                |                |                |                |              |          |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------------|--------------|----------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
| 1               | 4994.18            | 40.62             | -44.94         | 32.59    | -66.99         | -25.00         | 41.99          | 254            | 360          | Vertical |
| 2               | 7491.27            | 39.11             | -41.63         | 36.49    | -61.29         | -25.00         | 36.29          | 142            | 163          | Vertical |
| 3               | 9988.36            | 34.03             | -37.16         | 38.50    | -59.89         | -25.00         | 34.89          | 296            | 163          | Vertical |
| 4               | 12485.45           | 32.50             | -35.26         | 39.09    | -58.93         | -25.00         | 33.93          | 365            | 227          | Vertical |
| 5               | 14982.54           | 31.59             | -33.99         | 39.22    | -58.44         | -25.00         | 33.44          | 241            | 184          | Vertical |
| 6               | 17479.63           | 29.47             | -31.91         | 40.52    | -57.18         | -25.00         | 32.18          | 142            | 308          | Vertical |

**Test Band = LTE Band 41\_ TM1**  
**Test Channel = Mid Channel**

| Final Data List |                    |                   |                |          |                |                |                |                |              |            |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------------|--------------|------------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1               | 17825              | 32.98             | -30.87         | 41.90    | -51.25         | -25.00         | 26.25          | 296            | 188          | Horizontal |
| 2               | 5168.18            | 41.59             | -44.19         | 32.60    | -65.26         | -25.00         | 40.26          | 265            | 294          | Horizontal |
| 3               | 7752.27            | 38.13             | -40.96         | 37.01    | -61.08         | -25.00         | 36.08          | 241            | 229          | Horizontal |
| 4               | 10336.36           | 35.20             | -36.70         | 38.87    | -57.89         | -25.00         | 32.89          | 142            | 169          | Horizontal |
| 5               | 12920.45           | 32.58             | -34.87         | 39.52    | -58.03         | -25.00         | 33.03          | 263            | 229          | Horizontal |
| 6               | 15504.54           | 31.16             | -34.16         | 38.54    | -59.71         | -25.00         | 34.71          | 228            | 351          | Horizontal |

| Final Data List |                    |                   |                |          |                |                |                |                |              |          |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------------|--------------|----------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
| 1               | 17903.5            | 33.17             | -31.07         | 42.21    | -50.95         | -25.00         | 25.95          | 145            | 167          | Vertical |
| 2               | 5168.18            | 43.02             | -44.19         | 32.60    | -63.83         | -25.00         | 38.83          | 265            | 146          | Vertical |
| 3               | 7752.27            | 39.04             | -40.96         | 37.01    | -60.17         | -25.00         | 35.17          | 284            | 294          | Vertical |
| 4               | 10336.36           | 35.23             | -36.70         | 38.87    | -57.86         | -25.00         | 32.86          | 142            | 231          | Vertical |
| 5               | 12920.45           | 32.80             | -34.87         | 39.52    | -57.81         | -25.00         | 32.81          | 263            | 210          | Vertical |
| 6               | 15504.54           | 32.03             | -34.16         | 38.54    | -58.84         | -25.00         | 33.84          | 228            | 358          | Vertical |

**Test Band = LTE Band 41\_ TM1**

**Test Channel = High Channel**

| Final Data List |                    |                   |                |          |                |                |                |                |              |            |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------------|--------------|------------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1               | 17952.5            | 32.68             | -31.25         | 42.41    | -51.42         | -25.00         | 26.42          | 296            | 273          | Horizontal |
| 2               | 5255.18            | 41.31             | -44.07         | 32.60    | -65.42         | -25.00         | 40.42          | 241            | 20           | Horizontal |
| 3               | 7882.77            | 37.97             | -40.65         | 37.27    | -60.68         | -25.00         | 35.68          | 362            | 314          | Horizontal |
| 4               | 10510.36           | 32.28             | -36.37         | 39.06    | -60.28         | -25.00         | 35.28          | 254            | 62           | Horizontal |
| 5               | 13137.95           | 31.59             | -34.60         | 39.68    | -58.58         | -25.00         | 33.58          | 175            | 3            | Horizontal |
| 6               | 15765.54           | 32.27             | -34.12         | 38.20    | -58.91         | -25.00         | 33.91          | 266            | 125          | Horizontal |

| Final Data List |                    |                   |                |          |                |                |                |                |              |          |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------------|--------------|----------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
| 1               | 17935              | 32.84             | -31.19         | 42.34    | -51.27         | -25.00         | 26.27          | 142            | 63           | Vertical |
| 2               | 5255.18            | 41.63             | -44.07         | 32.60    | -65.10         | -25.00         | 40.10          | 265            | 127          | Vertical |
| 3               | 7882.77            | 37.85             | -40.65         | 37.27    | -60.80         | -25.00         | 35.80          | 284            | 3            | Vertical |
| 4               | 10510.36           | 32.74             | -36.37         | 39.06    | -59.82         | -25.00         | 34.82          | 174            | 318          | Vertical |
| 5               | 13137.95           | 31.32             | -34.60         | 39.68    | -58.85         | -25.00         | 33.85          | 145            | 127          | Vertical |
| 6               | 15765.54           | 31.61             | -34.12         | 38.20    | -59.57         | -25.00         | 34.57          | 296            | 127          | Vertical |

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level

## Test on the worst case:

Test Band = LTE Band41\_ TM1

Test Channel = Low

| Final Data List |                    |                   |                |          |                |                |                |            |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|------------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1               | 3956               | 44.38             | -46.15         | 29.33    | -67.70         | -25.00         | 42.70          | Horizontal |
| 2               | 4863.5             | 43.53             | -45.53         | 31.18    | -66.08         | -25.00         | 41.08          | Horizontal |
| 3               | 6107               | 43.51             | -44.47         | 32.76    | -63.46         | -25.00         | 38.46          | Horizontal |
| 4               | 7181.5             | 42.67             | -43.57         | 35.51    | -60.65         | -25.00         | 35.65          | Horizontal |
| 5               | 9423               | 40.19             | -39.92         | 37.35    | -57.65         | -25.00         | 32.65          | Horizontal |
| 6               | 12748.5            | 35.46             | -36.75         | 39.32    | -57.23         | -25.00         | 32.23          | Horizontal |

| Final Data List |                    |                   |                |          |                |                |                |          |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity |
| 1               | 4322.5             | 44.52             | -45.60         | 30.17    | -66.17         | -25.00         | 41.17          | Vertical |
| 2               | 5594               | 43.80             | -45.08         | 32.32    | -64.22         | -25.00         | 39.22          | Vertical |
| 3               | 6942               | 42.79             | -43.87         | 34.90    | -61.44         | -25.00         | 36.44          | Vertical |
| 4               | 8548               | 41.94             | -41.48         | 36.77    | -58.03         | -25.00         | 33.03          | Vertical |
| 5               | 10721              | 37.12             | -38.03         | 38.57    | -57.60         | -25.00         | 32.60          | Vertical |
| 6               | 12462              | 36.14             | -37.18         | 39.24    | -57.06         | -25.00         | 32.06          | Vertical |

**Test Band = LTE Band41\_ TM1**  
**Test Channel = Mid**

| Final Data List |                    |                   |                |          |                |                |                |            |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|------------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1               | 4365               | 44.85             | -45.72         | 30.28    | -65.86         | -25.00         | 40.86          | Horizontal |
| 2               | 5874               | 44.36             | -44.91         | 32.37    | -63.44         | -25.00         | 38.44          | Horizontal |
| 3               | 6973.5             | 42.98             | -43.70         | 34.95    | -61.02         | -25.00         | 36.02          | Horizontal |
| 4               | 8888.5             | 41.55             | -41.24         | 36.57    | -58.38         | -25.00         | 33.38          | Horizontal |
| 5               | 11196.5            | 36.65             | -37.41         | 38.70    | -57.32         | -25.00         | 32.32          | Horizontal |
| 6               | 12090.5            | 36.85             | -37.37         | 39.13    | -56.65         | -25.00         | 31.65          | Horizontal |

| Final Data List |                    |                   |                |          |                |                |                |          |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity |
| 1               | 4137               | 43.77             | -45.76         | 29.73    | -67.52         | -25.00         | 42.52          | Vertical |
| 2               | 5033               | 43.74             | -45.55         | 31.46    | -65.61         | -25.00         | 40.61          | Vertical |
| 3               | 6482.5             | 43.66             | -44.58         | 34.04    | -62.13         | -25.00         | 37.13          | Vertical |
| 4               | 8146.5             | 41.30             | -41.81         | 37.01    | -58.75         | -25.00         | 33.75          | Vertical |
| 5               | 10348              | 37.70             | -39.05         | 38.53    | -58.08         | -25.00         | 33.08          | Vertical |
| 6               | 12523.5            | 35.89             | -37.11         | 39.26    | -57.22         | -25.00         | 32.22          | Vertical |

**Test Band = LTE Band41\_ TM1**  
**Test Channel = High**

| Final Data List |                    |                   |                |          |                |                |                |            |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|------------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1               | 3956               | 45.36             | -46.15         | 29.33    | -66.72         | -25.00         | 41.72          | Horizontal |
| 2               | 5263.5             | 44.90             | -45.16         | 31.87    | -63.65         | -25.00         | 38.65          | Horizontal |
| 3               | 6787.5             | 43.79             | -44.13         | 34.62    | -60.98         | -25.00         | 35.98          | Horizontal |
| 4               | 8371.5             | 41.71             | -41.61         | 36.88    | -58.28         | -25.00         | 33.28          | Horizontal |
| 5               | 11193              | 36.61             | -37.43         | 38.70    | -57.38         | -25.00         | 32.38          | Horizontal |
| 6               | 12747              | 36.26             | -36.75         | 39.32    | -56.43         | -25.00         | 31.43          | Horizontal |

| Final Data List |                    |                   |                |          |                |                |                |          |
|-----------------|--------------------|-------------------|----------------|----------|----------------|----------------|----------------|----------|
| NO.             | Frequency<br>[MHz] | Reading<br>[dBμV] | Factor<br>[dB] | AF[dB/m] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity |
| 1               | 4601.5             | 44.44             | -45.67         | 30.76    | -65.73         | -25.00         | 40.73          | Vertical |
| 2               | 5867               | 44.17             | -44.90         | 32.37    | -63.61         | -25.00         | 38.61          | Vertical |
| 3               | 7214.5             | 43.01             | -43.47         | 35.60    | -60.12         | -25.00         | 35.12          | Vertical |
| 4               | 9271.5             | 39.36             | -40.23         | 37.04    | -59.09         | -25.00         | 34.09          | Vertical |
| 5               | 11489.5            | 36.16             | -37.32         | 38.84    | -57.57         | -25.00         | 32.57          | Vertical |
| 6               | 13512.5            | 36.13             | -36.90         | 40.12    | -55.92         | -25.00         | 30.92          | Vertical |

## Frequency Stability

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB<br>Configure | Voltage<br>[Vdc] | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Verdict |
|--------|-----------|------------|---------|-----------------|------------------|---------------------|-------------------|--------------------|---------|
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | VL               | NT                  | 0.50              | 0.000193           | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | VN               | NT                  | -8.00             | -0.003085          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | VH               | NT                  | -11.10            | -0.004281          | PASS    |

| Band   | Bandwidth | Modulation | Channel | RB<br>Configure | Voltage<br>[Vdc] | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Verdict |
|--------|-----------|------------|---------|-----------------|------------------|---------------------|-------------------|--------------------|---------|
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | -30                 | -2.80             | -0.001080          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | -20                 | -3.20             | -0.001234          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | -10                 | -9.30             | -0.003587          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | 0                   | -10.70            | -0.004126          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | 10                  | -11.00            | -0.004242          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | 20                  | -11.60            | -0.004474          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | 30                  | -6.20             | -0.002391          | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | 40                  | 0.00              | 0.000000           | PASS    |
| Band41 | 20MHz     | QPSK       | 40620   | 100RB#0         | NV               | 50                  | -3.80             | -0.001465          | PASS    |

---End of Attachment---