

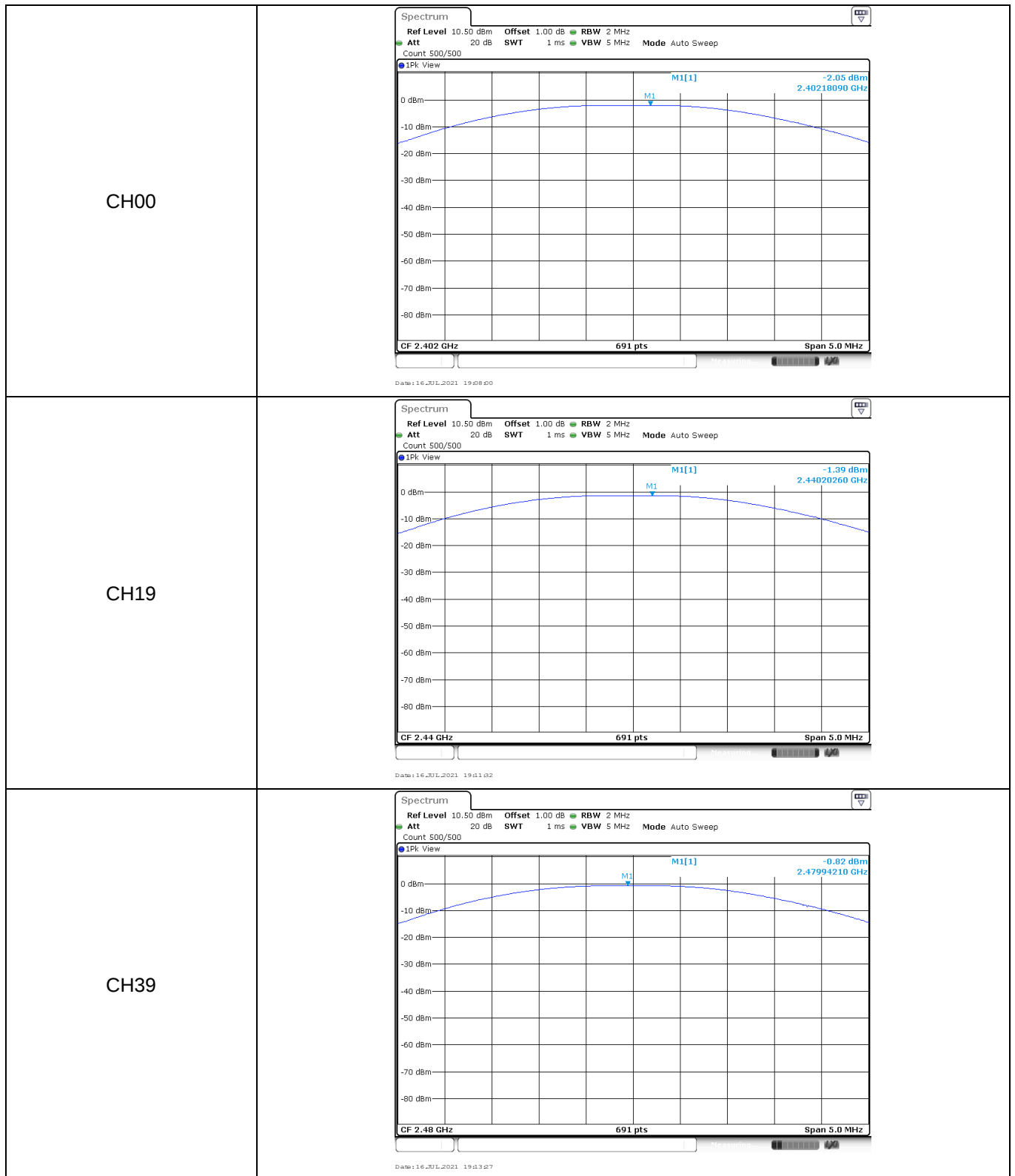
# APPENDIX REPORT

|                 |                 |                     |              |
|-----------------|-----------------|---------------------|--------------|
| Project No.     | SHT2104128003EW | Radio Specification | 2.4G         |
| Test sample No. | YPHT21041280017 | Model No.           | E3PDA        |
| Start test date | 2021-07-16      | Finish date         | 2021-07-16   |
| Temperature     | 25.8°C          | Humidity            | 39%          |
| Test Engineer   | Hailey Chen     | Auditor             | Xiaodong Zhu |

| Appendix clause | Test item                                    | Result |
|-----------------|----------------------------------------------|--------|
| A               | Peak Output Power                            | PASS   |
| B               | Power Spectral Density                       | PASS   |
| C               | 6 dB Bandwidth                               | PASS   |
| D               | 99% Occupied Bandwidth                       | PASS   |
| E               | Duty cycle                                   | PASS   |
| F               | Band edge and Spurious Emissions (conducted) | PASS   |

**Appendix A: Peak Output Power**

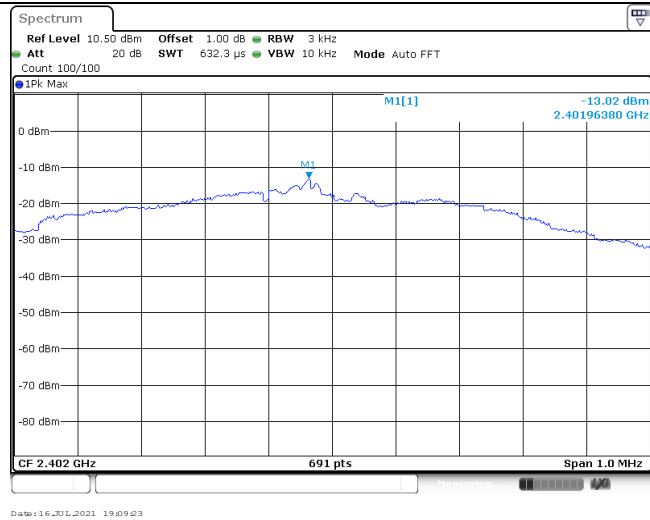
| Type | Channel | Output power (dBm) | Average Output power (dBm) | Limit (dBm) | Result |
|------|---------|--------------------|----------------------------|-------------|--------|
| 2.4G | 00      | -2.05              | -2.06                      | ≤ 30.00     | Pass   |
|      | 19      | -1.39              | -1.40                      |             |        |
|      | 39      | -0.82              | -0.84                      |             |        |



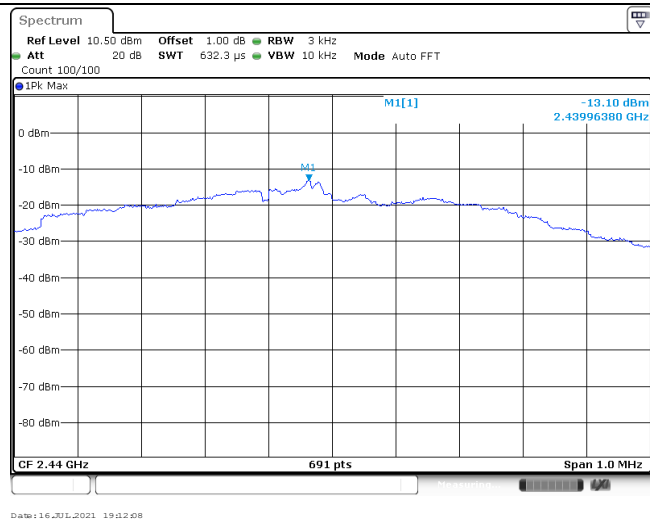
**Appendix B: Power Spectral Density**

| Type | Channel | Power Spectral Density(dBm/3KHz) | Limit (dBm/3KHz) | Result |
|------|---------|----------------------------------|------------------|--------|
| 2.4G | 00      | -13.02                           | ≤8.00            | Pass   |
|      | 19      | -13.10                           |                  |        |
|      | 39      | -13.00                           |                  |        |

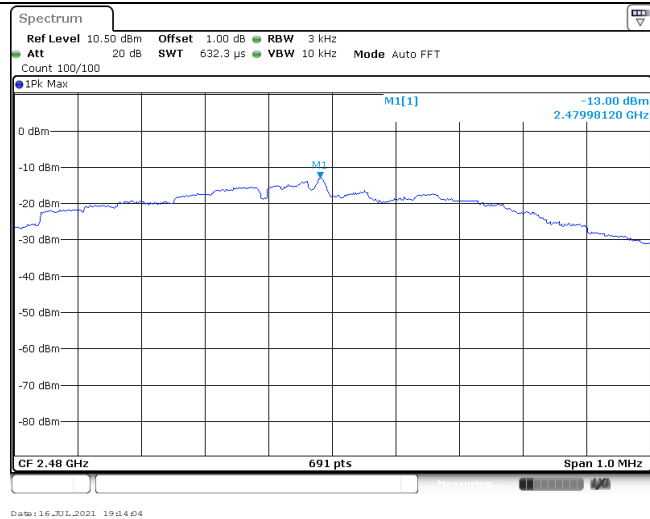
CH00



CH19



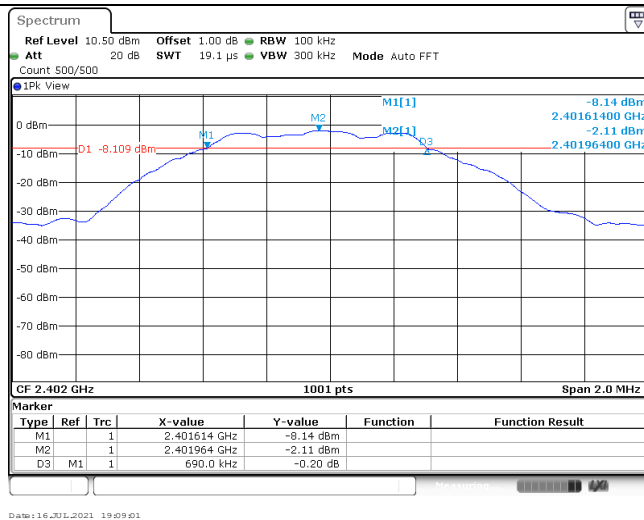
CH39



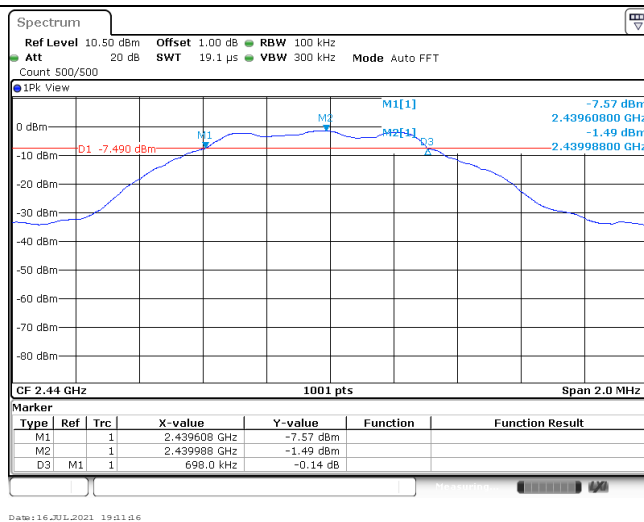
**Appendix C: 6dB bandwidth**

| Type | Channel | 6dB Bandwidth(kHz) | Limit (kHz) | Result |
|------|---------|--------------------|-------------|--------|
| 2.4G | 00      | 690.00             | ≥500        | Pass   |
|      | 19      | 698.00             |             |        |
|      | 39      | 694.00             |             |        |

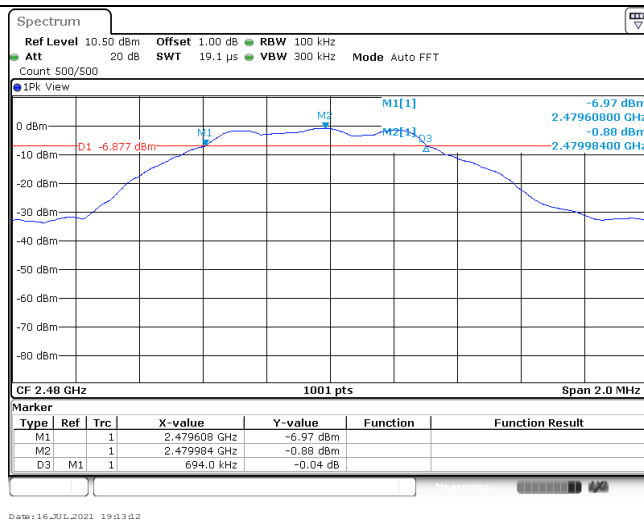
CH00



CH19



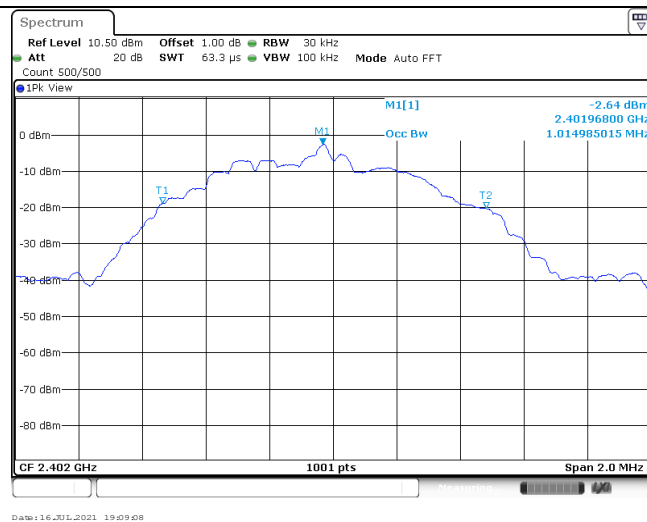
CH39



**Appendix D: 99% Occupied Bandwidth**

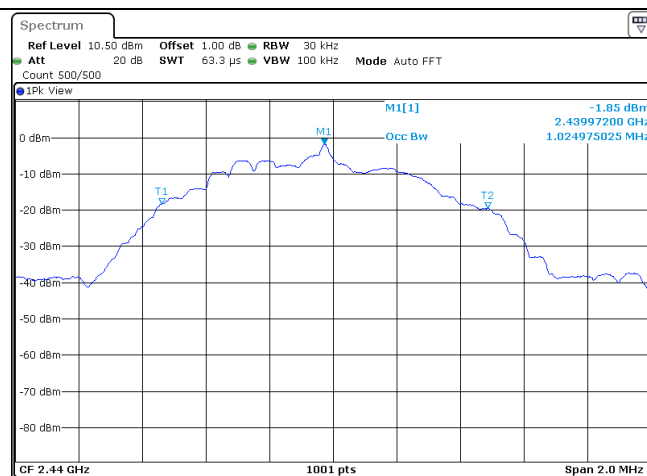
| Type | Channel | 99% Occupied Bandwidth(MHz) | Limit (kHz) | Result |
|------|---------|-----------------------------|-------------|--------|
| 2.4G | 00      | 1.01                        | -           | Pass   |
|      | 19      | 1.02                        |             |        |
|      | 39      | 1.02                        |             |        |

CH00



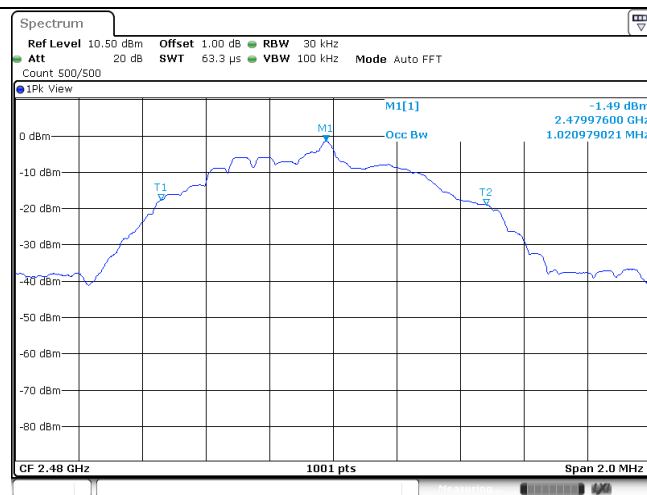
Date: 16 JUL 2021 19:09:08

CH19



Date: 16 JUL 2021 19:11:23

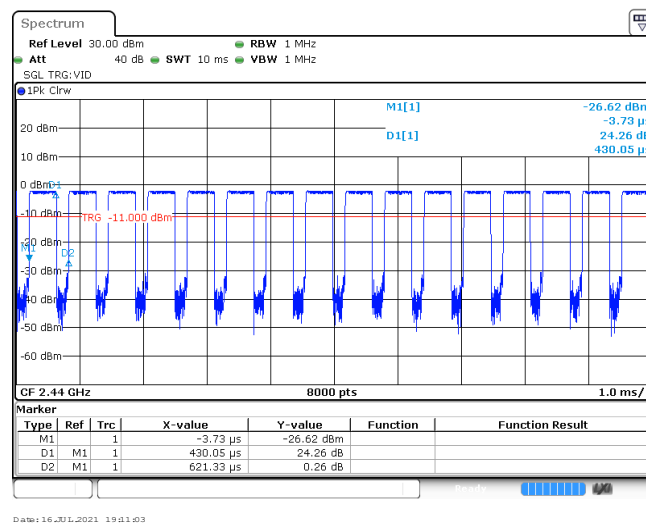
CH39



Date: 16 JUL 2021 19:13:19

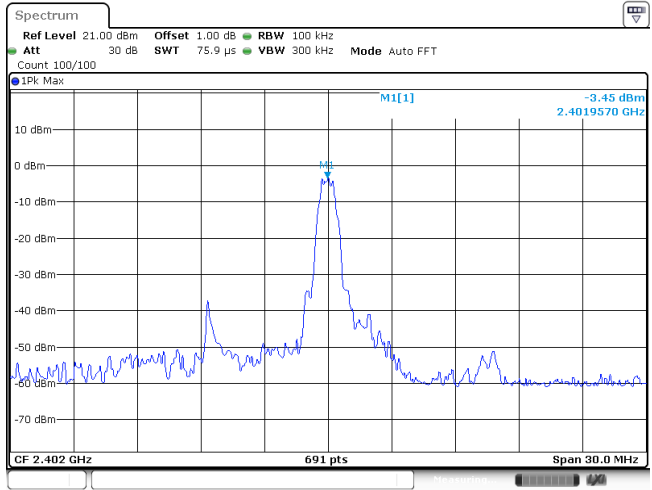
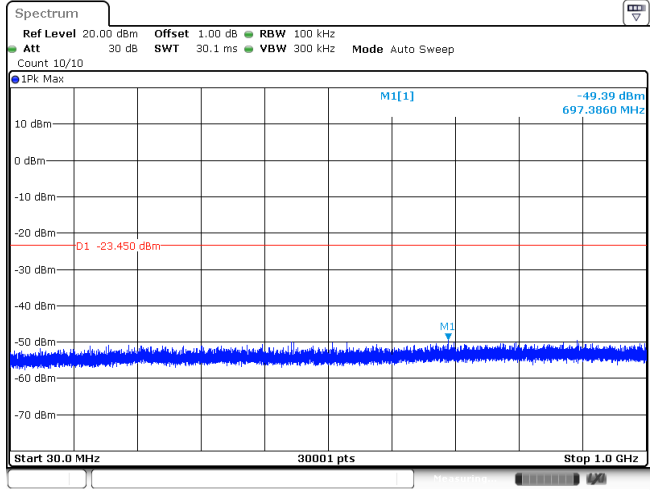
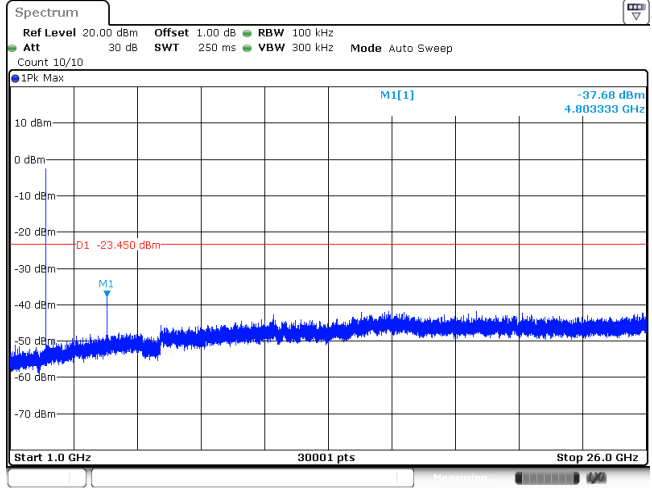
## Appendix E: Duty cycle

| Test Frequency (MHz) | T <sub>on</sub> time for single burst (ms) | T <sub>period</sub> (ms) | Duty cycle | 1/T <sub>on</sub> time (kHz) |
|----------------------|--------------------------------------------|--------------------------|------------|------------------------------|
| 2440                 | 0.43                                       | 0.62                     | 69.4%      | 2.3                          |

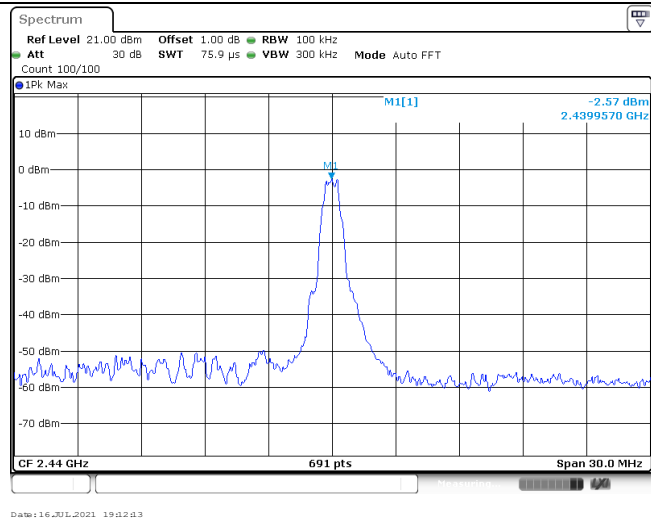


## Appendix F: Band edge and Spurious Emissions (conducted)

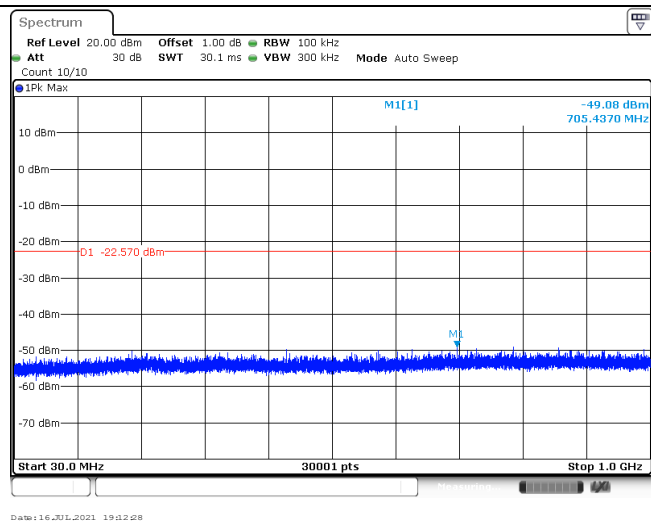
| Test Item: | Band edge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |               |            |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------|------------|----------|-----------------|----------|-----------------|----|---|--|-------------|-----------|--|--|----|---|--|------------|------------|--|--|----|---|--|----------|------------|--|--|----|---|--|---------------|------------|--|--|----|---|--|--------------|------------|--|--|
| CH00       | <div><div>Spectrum</div><div><div>Ref Level 10.50 dBm</div><div>Offset 1.00 dB</div><div>RBW 100 kHz</div><div>Att 20 dB</div><div>SWT 1.1 ms</div><div>VBW 300 kHz</div><div>Mode Auto Sweep</div><div>Count 300/300</div></div><div><div>1Pk Max</div><div><div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div><div>-80 dBm</div></div><div><div>M1[1]</div><div>M2[1]</div><div>M5</div><div>M3</div><div>M2</div></div><div><div>-1.96 dBm</div><div>2.402040 GHz</div><div>-51.01 dBm</div><div>2.400000 GHz</div></div></div><div><div>D1 -21.960 dBm</div></div><div><div>Start 2.31 GHz</div><div>691 pts</div><div>Stop 2.405 GHz</div></div><div><div>Marker</div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.40204 GHz</td><td>-1.96 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-51.01 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-53.97 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-61.95 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.396464 GHz</td><td>-36.69 dBm</td><td></td><td></td></tr></table></div></div><div><div>Date: 16 JUL 2021 19:09:32</div></div></div> | Type | Ref           | Trc        | X-value  | Y-value         | Function | Function Result | M1 | 1 |  | 2.40204 GHz | -1.96 dBm |  |  | M2 | 1 |  | 2.4 GHz    | -51.01 dBm |  |  | M3 | 1 |  | 2.39 GHz | -53.97 dBm |  |  | M4 | 1 |  | 2.31 GHz      | -61.95 dBm |  |  | M5 | 1 |  | 2.396464 GHz | -36.69 dBm |  |  |
| Type       | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trc  | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M1         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.40204 GHz   | -1.96 dBm  |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M2         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.4 GHz       | -51.01 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M3         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.39 GHz      | -53.97 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M4         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.31 GHz      | -61.95 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M5         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.396464 GHz  | -36.69 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| CH39       | <div><div>Spectrum</div><div><div>Ref Level 10.50 dBm</div><div>Offset 1.00 dB</div><div>RBW 100 kHz</div><div>Att 20 dB</div><div>SWT 56.9 µs</div><div>VBW 300 kHz</div><div>Mode Auto FFT</div><div>Count 100/100</div></div><div><div>1Pk Max</div><div><div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div><div>-80 dBm</div></div><div><div>M1</div><div>M2[1]</div><div>M4</div><div>M3</div></div><div><div>-0.97 dBm</div><div>2.4799900 GHz</div><div>-55.06 dBm</div><div>2.4835000 GHz</div></div></div><div><div>D1 -20.970 dBm</div></div><div><div>Start 2.478 GHz</div><div>691 pts</div><div>Stop 2.5 GHz</div></div><div><div>Marker</div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.47999 GHz</td><td>-0.97 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-55.06 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-69.74 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4894464 GHz</td><td>-34.81 dBm</td><td></td><td></td></tr></table></div></div><div><div>Date: 16 JUL 2021 19:14:25</div></div></div>                                                                                                           | Type | Ref           | Trc        | X-value  | Y-value         | Function | Function Result | M1 | 1 |  | 2.47999 GHz | -0.97 dBm |  |  | M2 | 1 |  | 2.4835 GHz | -55.06 dBm |  |  | M3 | 1 |  | 2.5 GHz  | -69.74 dBm |  |  | M4 | 1 |  | 2.4894464 GHz | -34.81 dBm |  |  |    |   |  |              |            |  |  |
| Type       | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Trc  | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M1         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.47999 GHz   | -0.97 dBm  |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M2         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.4835 GHz    | -55.06 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M3         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.5 GHz       | -69.74 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |
| M4         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | 2.4894464 GHz | -34.81 dBm |          |                 |          |                 |    |   |  |             |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |               |            |  |  |    |   |  |              |            |  |  |

| Test Item:              | SE                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CH00<br>Reference level |  <p>Spectrum</p> <p>Ref Level 21.00 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 30 dB SWT 75.9 <math>\mu</math>s VBW 300 kHz Mode Auto FFT<br/>Count 100/100</p> <p>1Pk Max</p> <p>M1[1] -9.45 dBm 2.4019570 GHz</p> <p>CF 2.402 GHz 691 pts Span 30.0 MHz</p> <p>Date: 16 JUL 2021 19:09:39</p>            |
| CH00<br>30MHz~1000MHz   |  <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 30 dB SWT 30.1 ms VBW 300 kHz Mode Auto Sweep<br/>Count 10/10</p> <p>1Pk Max</p> <p>M1[1] -49.39 dBm 697.3860 MHz</p> <p>D1 -23.450 dBm</p> <p>Start 30.0 MHz 30001 pts Stop 1.0 GHz</p> <p>Date: 16 JUL 2021 19:09:54</p> |
| CH00<br>1GHz~26GHz      |  <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep<br/>Count 10/10</p> <p>1Pk Max</p> <p>M1[1] -37.68 dBm 4.803333 GHz</p> <p>D1 -23.450 dBm</p> <p>Start 1.0 GHz 30001 pts Stop 26.0 GHz</p> <p>Date: 16 JUL 2021 19:10:09</p> |

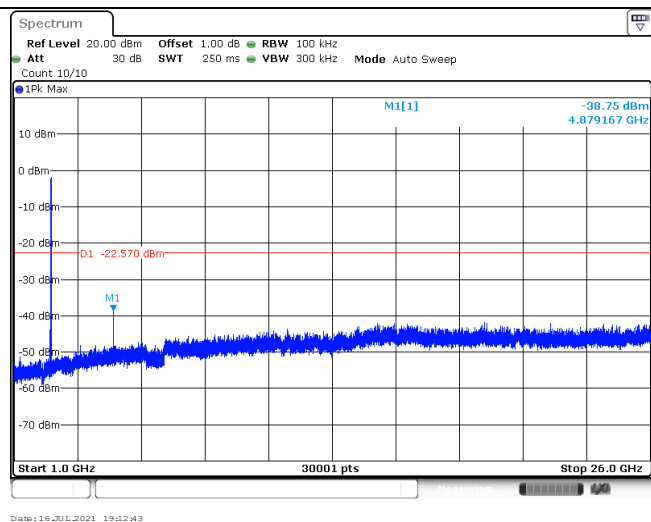
CH19  
Reference level



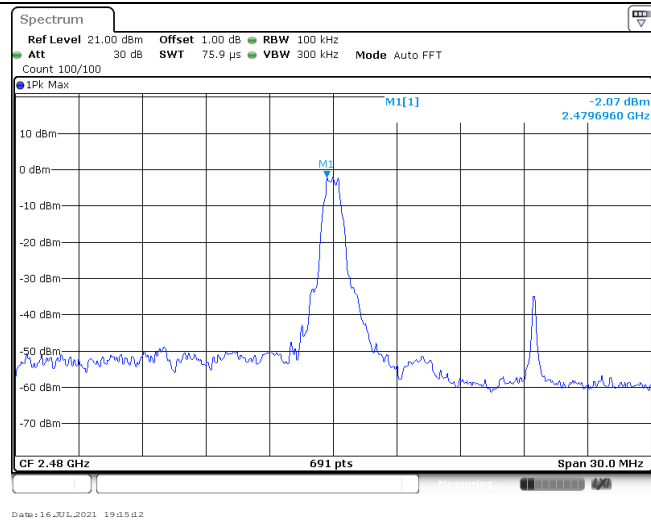
CH19  
30MHz~1000MHz



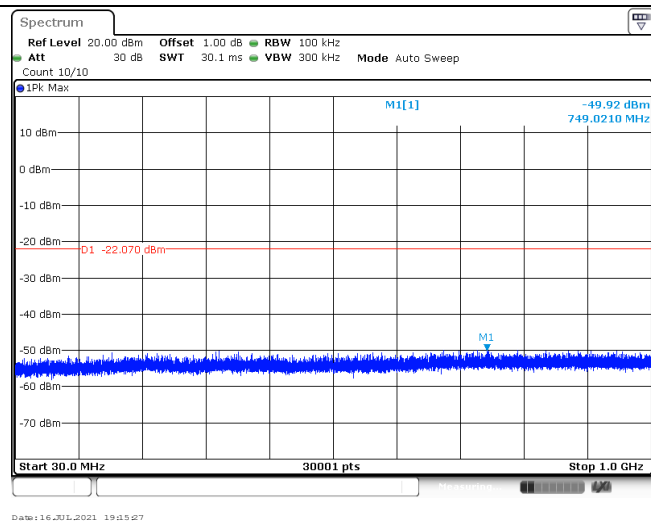
CH19  
1GHz~26GHz



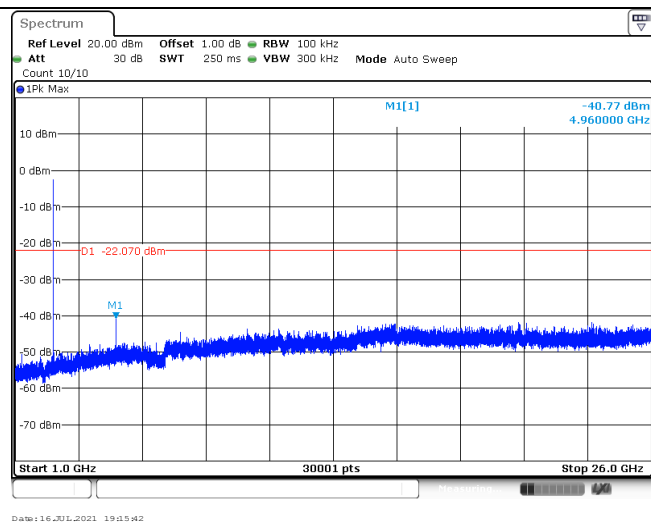
CH39  
Reference level



CH39  
30MHz~1000MHz



CH39  
1GHz~26GHz



-----End of Report-----