

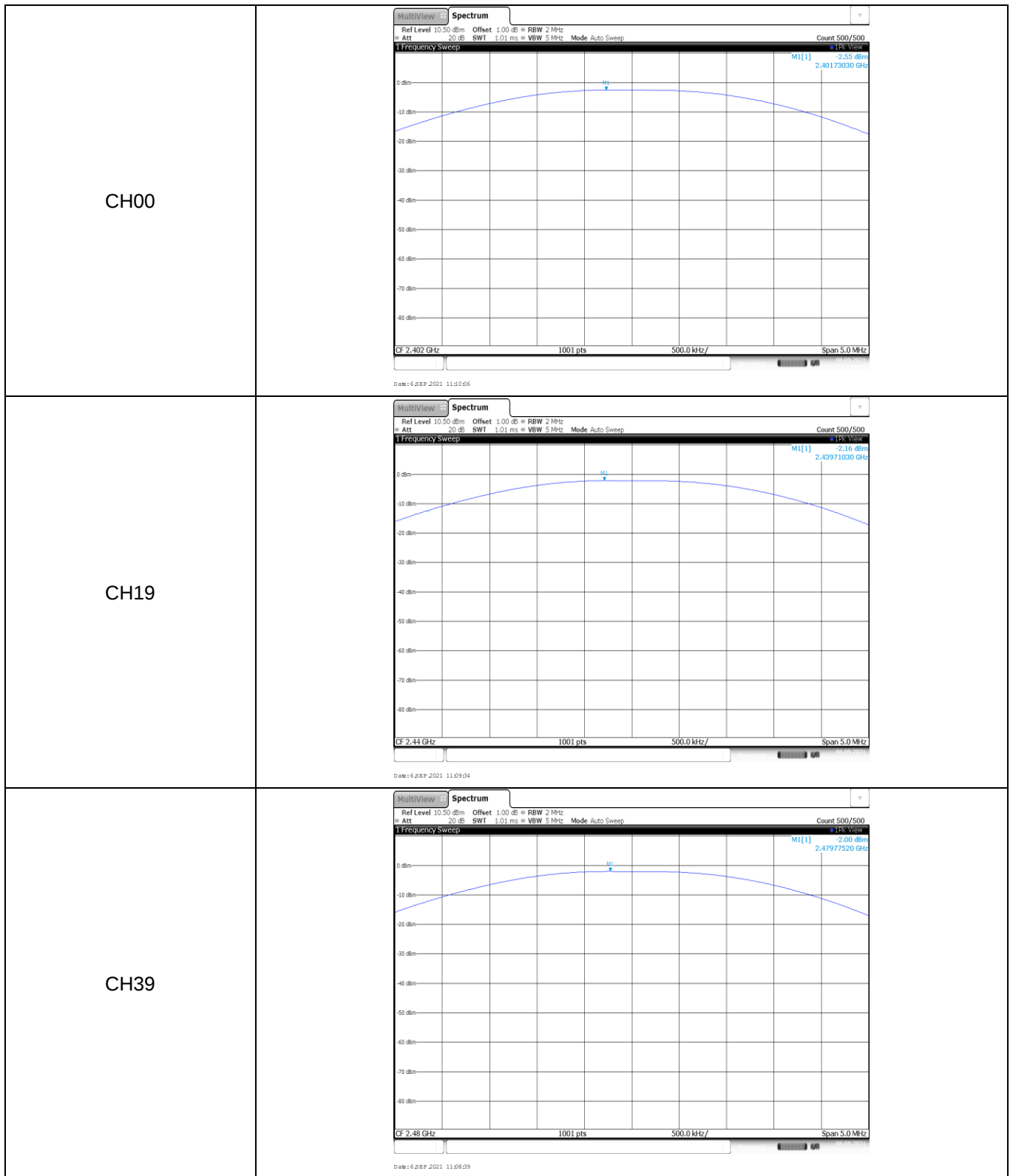
# APPENDIX REPORT

|                 |                 |                     |               |
|-----------------|-----------------|---------------------|---------------|
| Project No.     | SHT2108081701EW | Radio Specification | Bluetooth BLE |
| Test sample No. | YPHT21080817002 | Model No.           | YK-83C        |
| Start test date | 2021-09-06      | Finish date         | 2021-09-06    |
| Temperature     | 26.4℃           | Humidity            | 53%           |
| Test Engineer   | Xiaoqin Li      | Auditor             | Xiaodong Zhao |

| 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   |

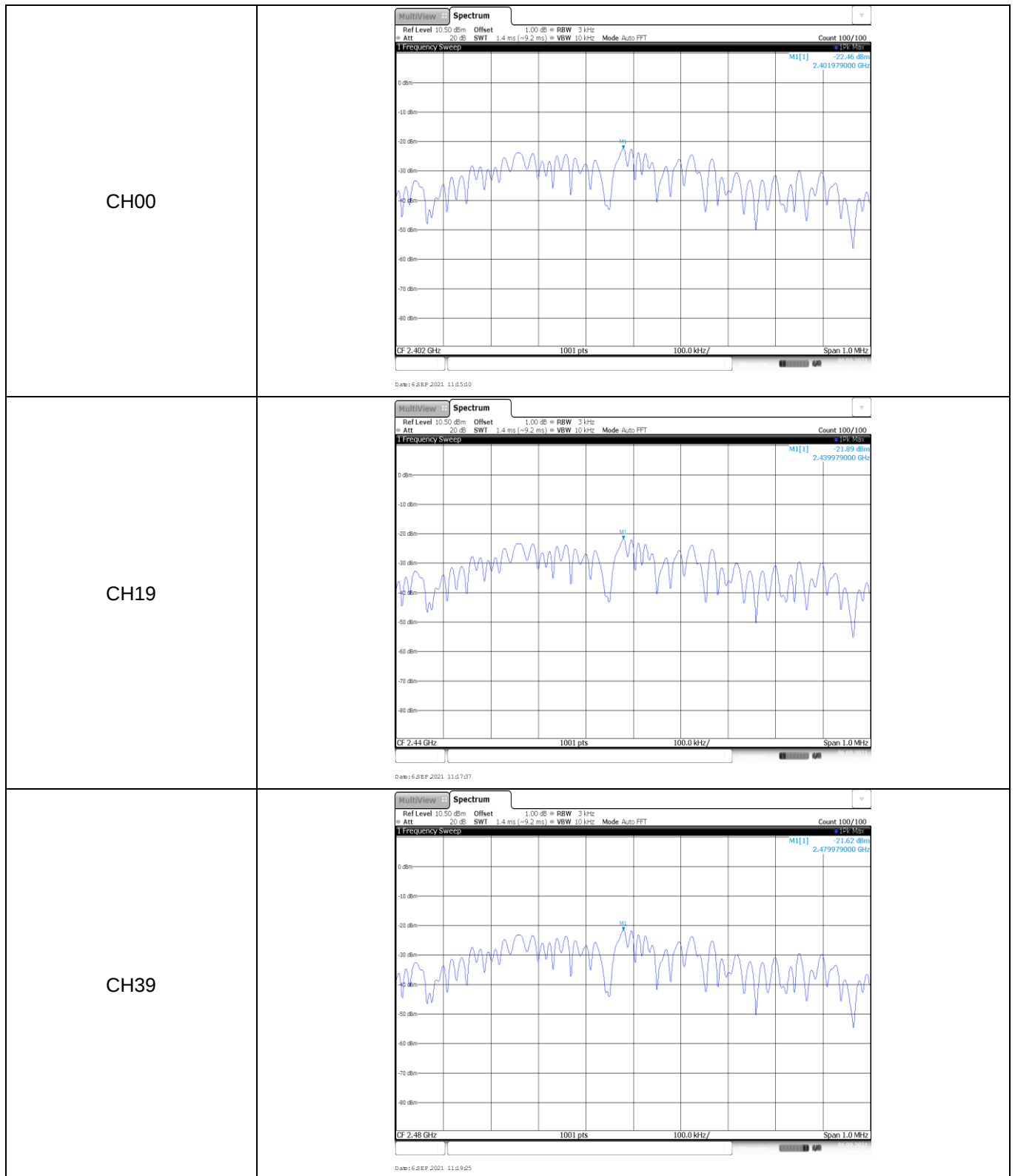
**Appendix A: Peak Output Power**

| Type   | Channel | Peak Output power (dBm) | Average Output power (dBm) | Limit (dBm) | Result |
|--------|---------|-------------------------|----------------------------|-------------|--------|
| BT-BLE | 00      | -2.55                   | -2.57                      | ≤ 30.00     | Pass   |
|        | 19      | -2.16                   | -2.17                      |             |        |
|        | 39      | -2.00                   | -2.02                      |             |        |



**Appendix B: Power Spectral Density**

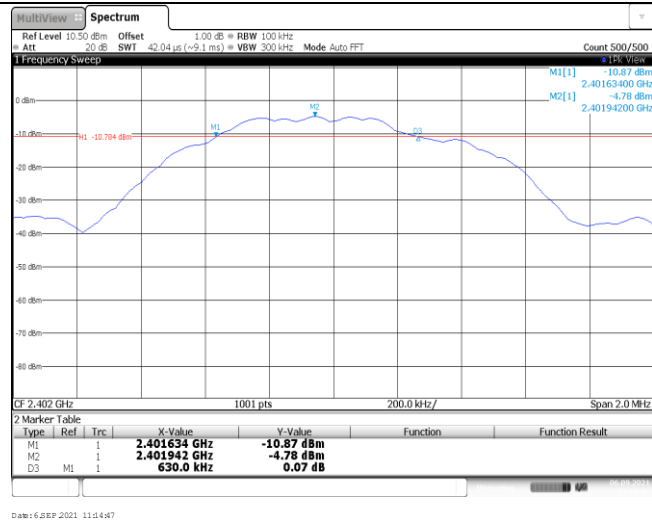
| Type   | Channel | Power Spectral Density(dBm/3KHz) | Limit (dBm/3KHz) | Result |
|--------|---------|----------------------------------|------------------|--------|
| BT-BLE | 00      | -22.46                           | ≤8.00            | Pass   |
|        | 19      | -21.89                           |                  |        |
|        | 39      | -21.62                           |                  |        |



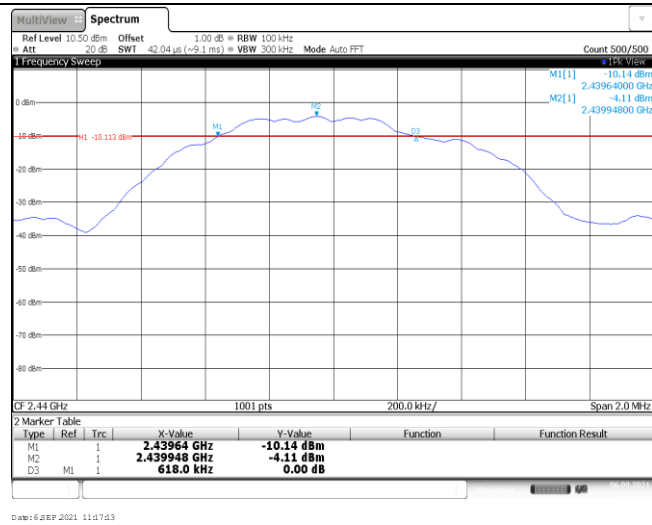
**Appendix C: 6dB bandwidth**

| Type   | Channel | 6dB Bandwidth(kHz) | Limit (kHz) | Result |
|--------|---------|--------------------|-------------|--------|
| BT-BLE | 00      | 630.00             | ≥500        | Pass   |
|        | 19      | 618.00             |             |        |
|        | 39      | 656.00             |             |        |

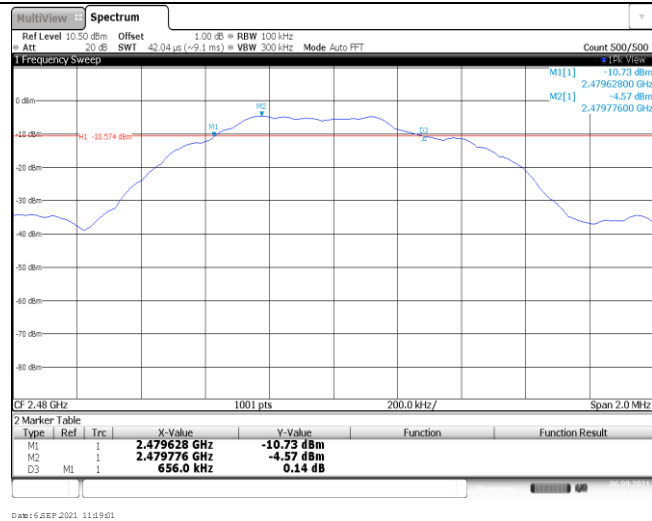
CH00



CH19



CH39



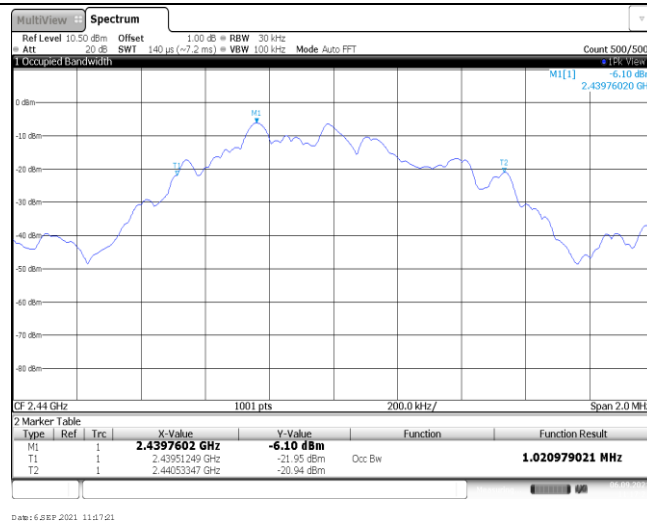
**Appendix D: 99% Occupied Bandwidth**

| Type   | Channel | 99% Occupied Bandwidth(MHz) | Limit (kHz) | Result |
|--------|---------|-----------------------------|-------------|--------|
| BT-BLE | 00      | 1.02                        | -           | Pass   |
|        | 19      | 1.02                        |             |        |
|        | 39      | 1.02                        |             |        |

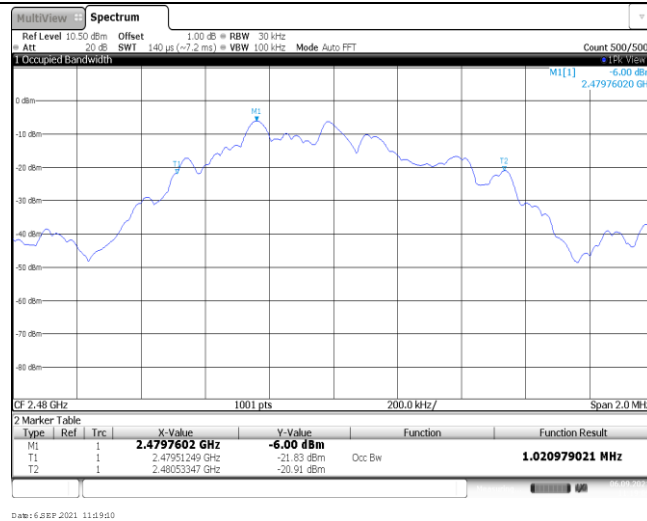
CH00



CH19

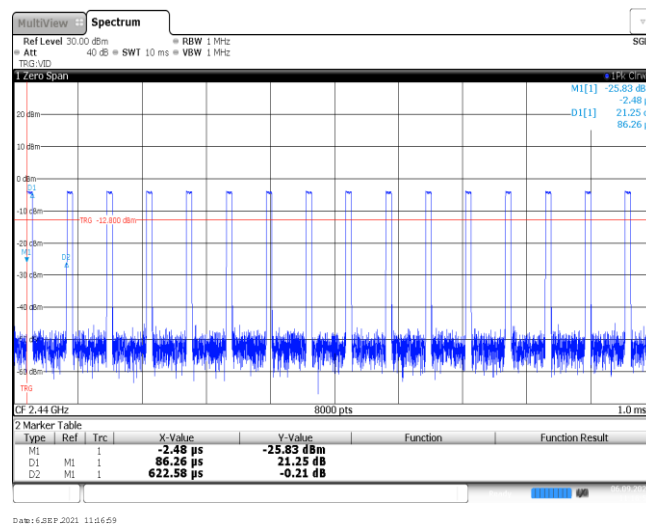


CH39



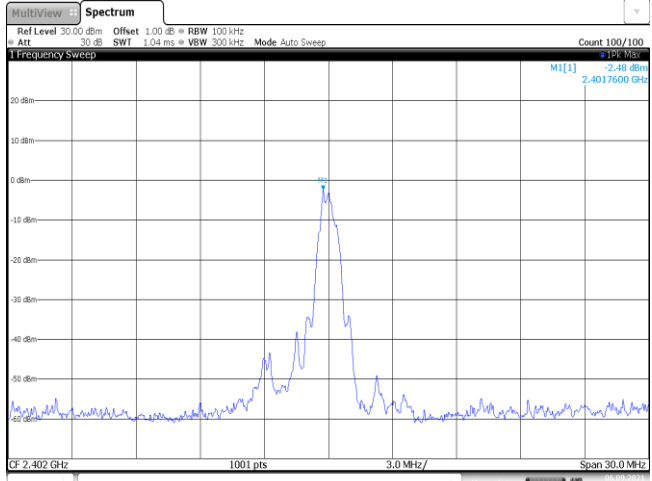
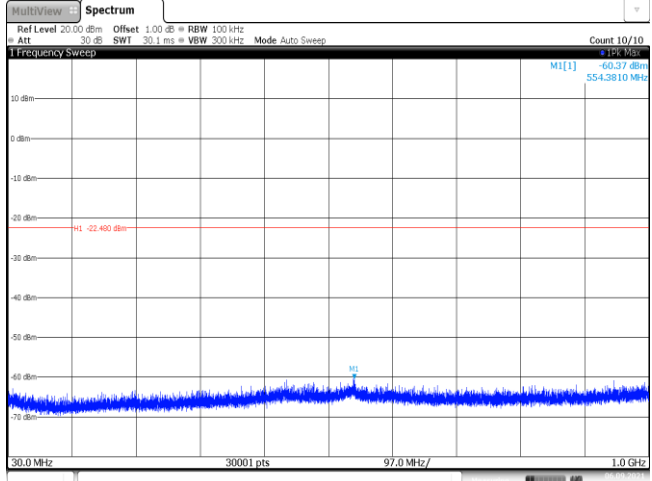
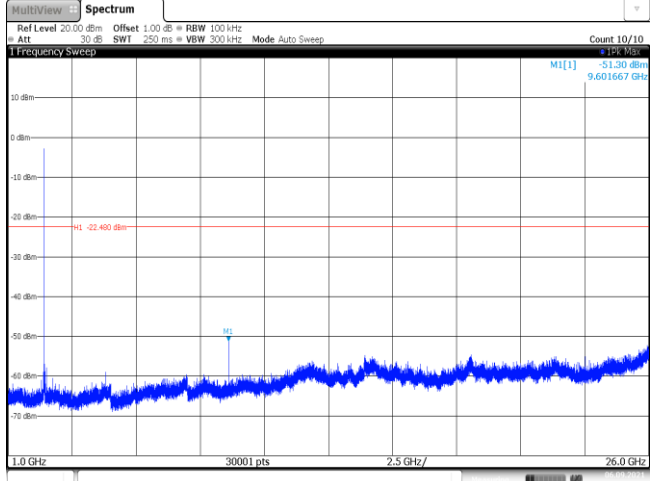
## Appendix E: Duty cycle

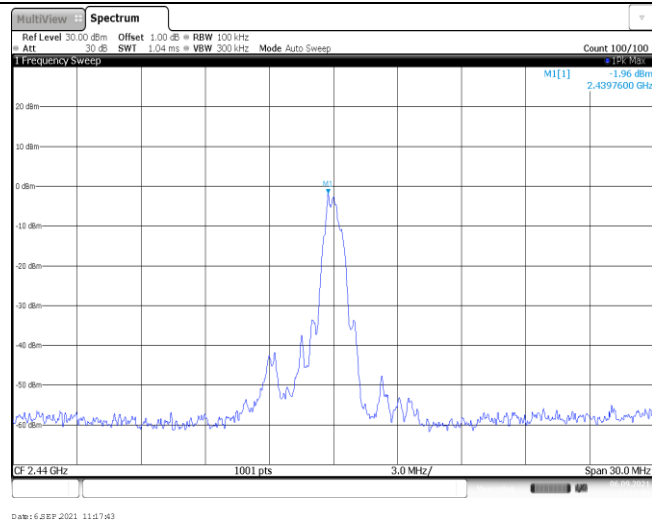
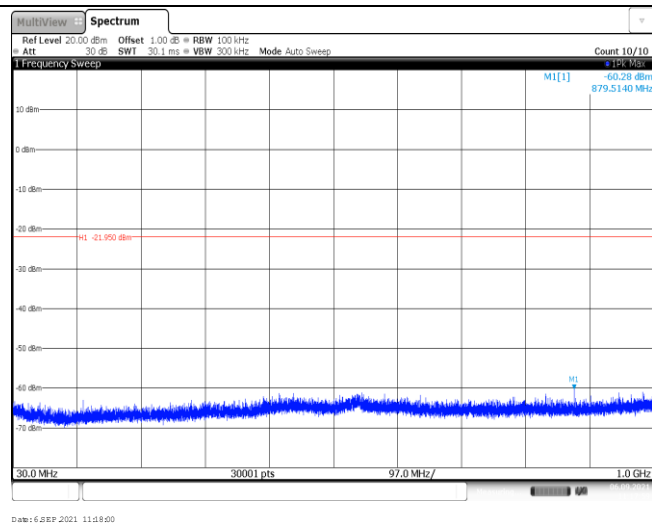
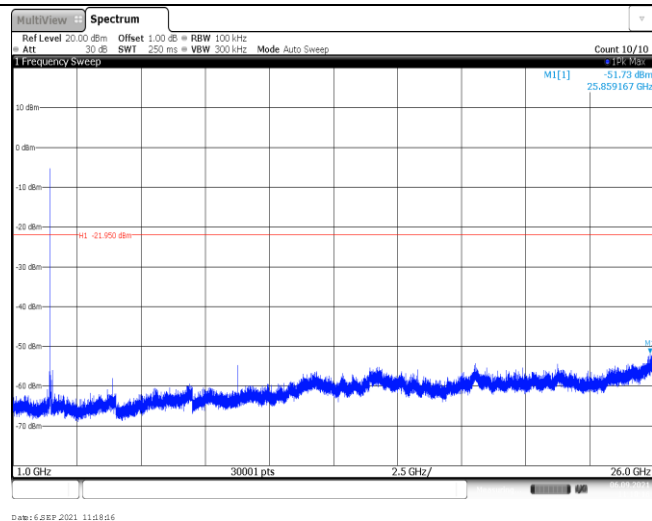
| Test Frequency<br>(MHz) | T <sub>on</sub> time for<br>single burst<br>(ms) | T <sub>period</sub> (ms) | Duty cycle | 1/T <sub>on</sub> time<br>(kHz) |
|-------------------------|--------------------------------------------------|--------------------------|------------|---------------------------------|
| 2440                    | 0.09                                             | 0.62                     | 14.5%      | 11.1                            |

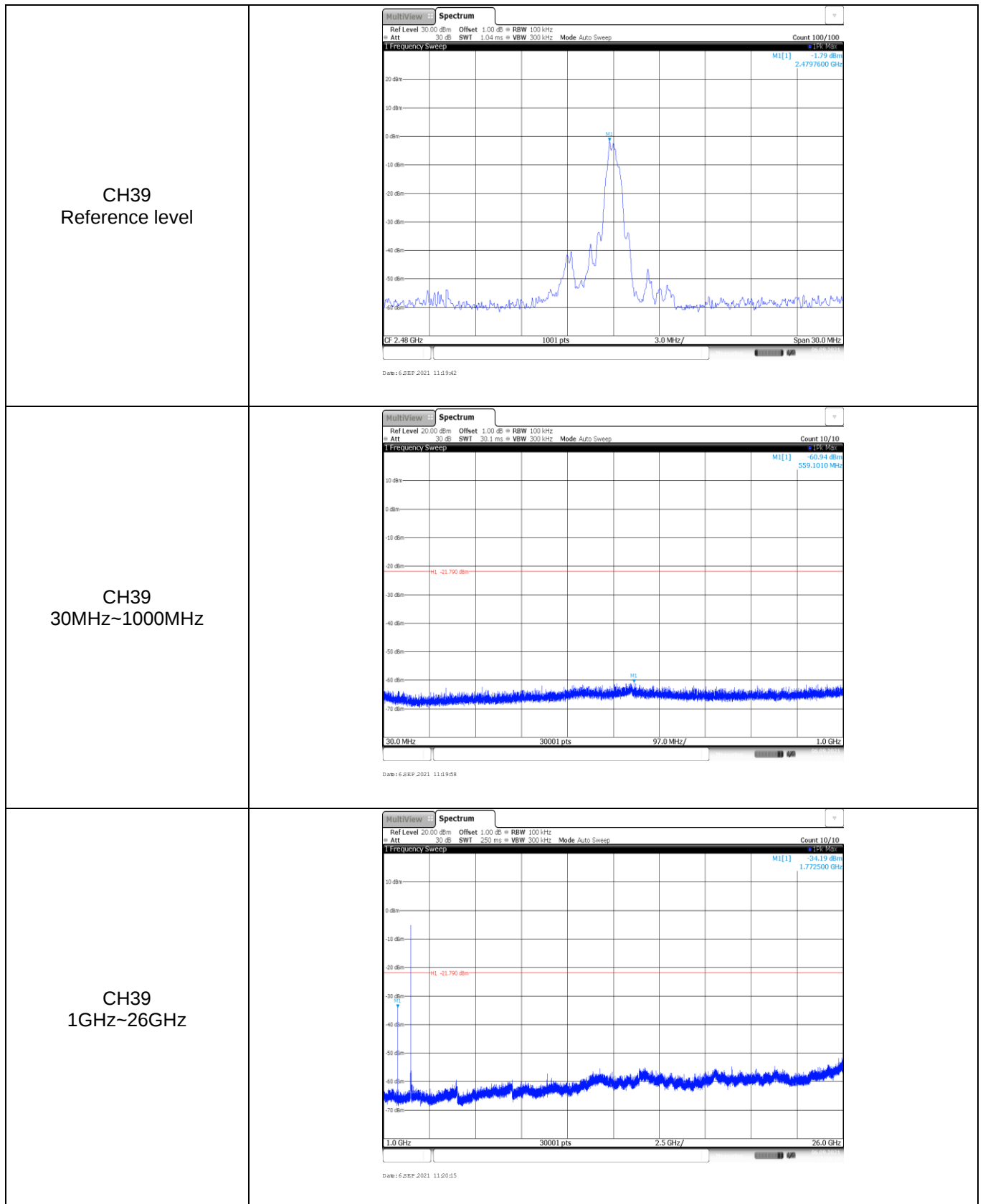


## Appendix F: Band edge and Spurious Emissions (conducted)

| Test Item: | Band edge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |              |            |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------|------------|----------|-----------------|----------|-----------------|----|---|--|--------------|-----------|--|--|----|---|--|------------|------------|--|--|----|---|--|----------|------------|--|--|----|---|--|-------------|------------|--|--|----|---|--|------------|------------|--|--|
| CH00       | <div><div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 10.50 dBm Offset 1.00 dB BW 100 kHz<br/>Att 20 dB SW 1.05 ms VBW 300 kHz Mode Auto Sweep</div><div>Count 300/300</div></div><div><div>1 Frequency Sweep</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>2.31 GHz</div><div>1001 pts</div><div>9.5 MHz/</div><div>2.405 GHz</div></div></div><div><div>M1[1] -2.67 dBm<br/>2.4017260 GHz</div><div>M2[1] -53.59 dBm<br/>2.4000000 GHz</div></div></div><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>2.401726 GHz</td><td>-2.67 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-53.59 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-62.00 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-74.01 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.3993 GHz</td><td>-44.08 dBm</td><td></td><td></td></tr></table></div></div> <div>Date: 6 SEP 2021 11:15:21</div> | Type | Ref          | Trc        | X-Value  | Y-Value         | Function | Function Result | M1 | 1 |  | 2.401726 GHz | -2.67 dBm |  |  | M2 | 1 |  | 2.4 GHz    | -53.59 dBm |  |  | M3 | 1 |  | 2.39 GHz | -62.00 dBm |  |  | M4 | 1 |  | 2.31 GHz    | -74.01 dBm |  |  | M5 | 1 |  | 2.3993 GHz | -44.08 dBm |  |  |
| Type       | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Trc  | X-Value      | Y-Value    | Function | Function Result |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M1         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.401726 GHz | -2.67 dBm  |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M2         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.4 GHz      | -53.59 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M3         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.39 GHz     | -62.00 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M4         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.31 GHz     | -74.01 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M5         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.3993 GHz   | -44.08 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| CH39       | <div><div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 10.50 dBm Offset 1.00 dB BW 100 kHz<br/>Att 20 dB SW 1.02 ms VBW 300 kHz Mode Auto Sweep</div><div>Count 100/100</div></div><div><div>1 Frequency Sweep</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>2.478 GHz</div><div>1001 pts</div><div>2.2 MHz/</div><div>2.5 GHz</div></div></div><div><div>M1[1] -2.11 dBm<br/>2.4797470 GHz</div><div>M2[1] -54.67 dBm<br/>2.4835000 GHz</div></div></div><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>2.479747 GHz</td><td>-2.11 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-54.67 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-60.13 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.48361 GHz</td><td>-53.98 dBm</td><td></td><td></td></tr></table></div></div> <div>Date: 6 SEP 2021 11:19:36</div>                                                                                            | Type | Ref          | Trc        | X-Value  | Y-Value         | Function | Function Result | M1 | 1 |  | 2.479747 GHz | -2.11 dBm |  |  | M2 | 1 |  | 2.4835 GHz | -54.67 dBm |  |  | M3 | 1 |  | 2.5 GHz  | -60.13 dBm |  |  | M4 | 1 |  | 2.48361 GHz | -53.98 dBm |  |  |    |   |  |            |            |  |  |
| Type       | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Trc  | X-Value      | Y-Value    | Function | Function Result |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M1         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.479747 GHz | -2.11 dBm  |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M2         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.4835 GHz   | -54.67 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M3         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.5 GHz      | -60.13 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |
| M4         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | 2.48361 GHz  | -53.98 dBm |          |                 |          |                 |    |   |  |              |           |  |  |    |   |  |            |            |  |  |    |   |  |          |            |  |  |    |   |  |             |            |  |  |    |   |  |            |            |  |  |

| Test Item:              | SE                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CH00<br>Reference level |  <p>Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz<br/>Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep<br/>Count 100/100<br/>M1[1] 2.4017600 GHz<br/>2.40 dBm<br/>2.4017600 GHz<br/>20 dBm<br/>10 dBm<br/>0 dBm<br/>-10 dBm<br/>-20 dBm<br/>-30 dBm<br/>-40 dBm<br/>-50 dBm<br/>-60 dBm<br/>2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz<br/>Date: 6 SEP 2021 11:15:29</p> |
| CH00<br>30MHz~1000MHz   |  <p>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz<br/>Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep<br/>Count 10/10<br/>M1[1] 554.3810 MHz<br/>-60.37 dBm<br/>554.3810 MHz<br/>20 dBm<br/>10 dBm<br/>0 dBm<br/>-10 dBm<br/>-20 dBm<br/>-30 dBm<br/>-40 dBm<br/>-50 dBm<br/>-60 dBm<br/>30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz<br/>Date: 6 SEP 2021 11:15:45</p>       |
| CH00<br>1GHz~26GHz      |  <p>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz<br/>Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep<br/>Count 10/10<br/>M1[1] 9.601667 GHz<br/>-51.30 dBm<br/>9.601667 GHz<br/>20 dBm<br/>10 dBm<br/>0 dBm<br/>-10 dBm<br/>-20 dBm<br/>-30 dBm<br/>-40 dBm<br/>-50 dBm<br/>-60 dBm<br/>1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz<br/>Date: 6 SEP 2021 11:16:02</p>        |

CH19  
Reference levelCH19  
30MHz~1000MHzCH19  
1GHz~26GHz



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