

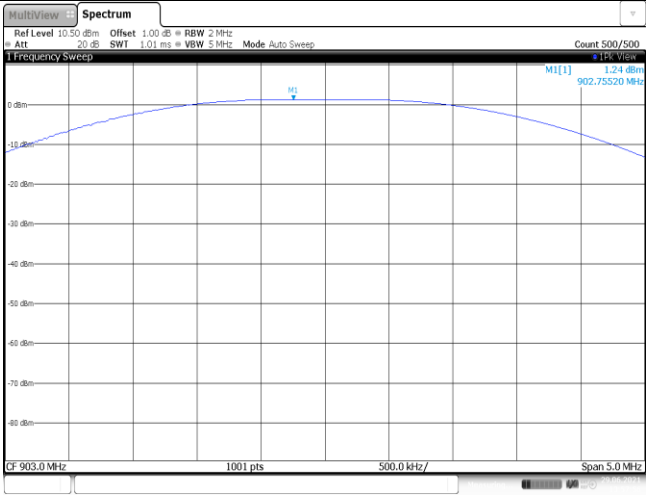
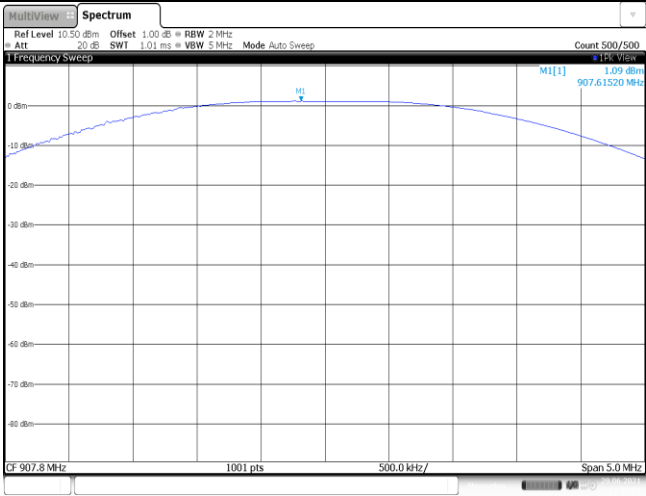
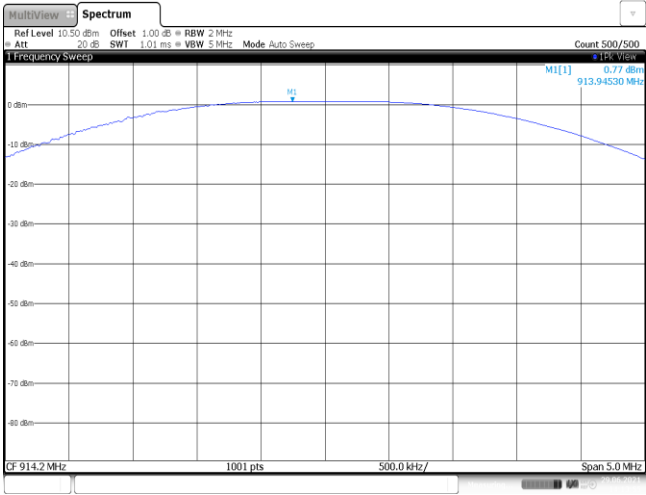
# APPENDIX REPORT

|                 |                 |                     |              |
|-----------------|-----------------|---------------------|--------------|
| Project No.     | SHT2105044135EW | Radio Specification | LORA         |
| Test sample No. | YPHT20504411038 | Model No.           | ASX00026     |
| Start test date | 2021-06-29      | Finish date         | 2021-06-29   |
| Temperature     | 26.3°C          | Humidity            | 32%          |
| 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   |

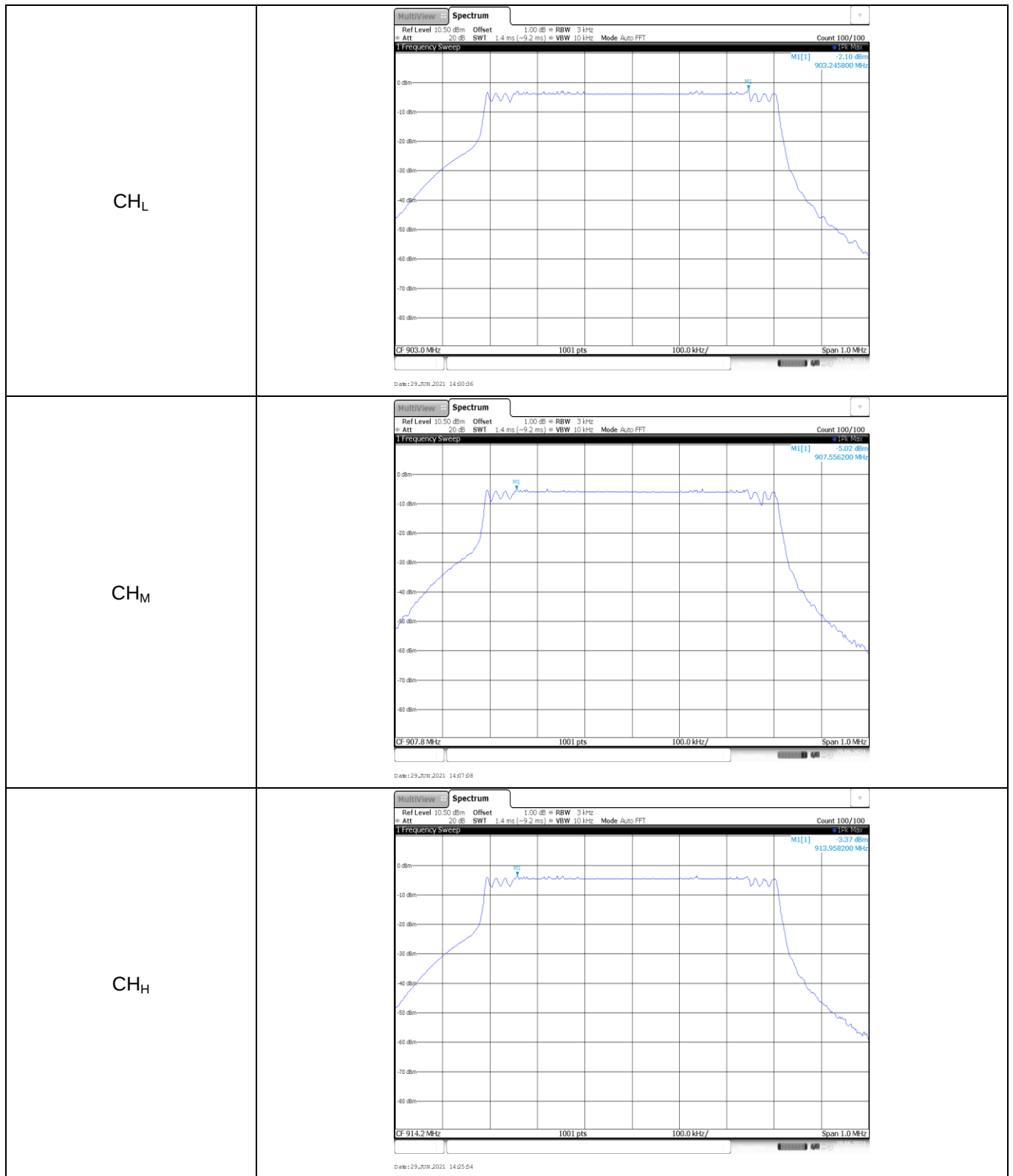
**Appendix A: Peak Output Power**

| Type | Channel         | Output power (dBm) | Average Output power (dBm) | Limit (dBm) | Result |
|------|-----------------|--------------------|----------------------------|-------------|--------|
| LORA | CH <sub>L</sub> | 1.24               | 1.15                       | ≤ 30.00     | Pass   |
|      | CH <sub>M</sub> | 1.09               | 0.93                       |             |        |
|      | CH <sub>H</sub> | 0.77               | 0.76                       |             |        |

|                 |                                                                                                                                                                                                               |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CH <sub>L</sub> |  <p>1.24 dBm<br/>902.75320 MHz</p> <p>CF 903.0 MHz 1001 pts 500.0 kHz/ Span 5.0 MHz</p> <p>Date: 29_JUN_2021 13:57:56</p>   |
| CH <sub>M</sub> |  <p>1.09 dBm<br/>907.61520 MHz</p> <p>CF 907.8 MHz 1001 pts 500.0 kHz/ Span 5.0 MHz</p> <p>Date: 29_JUN_2021 14:43:04</p>  |
| CH <sub>H</sub> |  <p>0.77 dBm<br/>913.94530 MHz</p> <p>CF 914.2 MHz 1001 pts 500.0 kHz/ Span 5.0 MHz</p> <p>Date: 29_JUN_2021 14:43:05</p> |

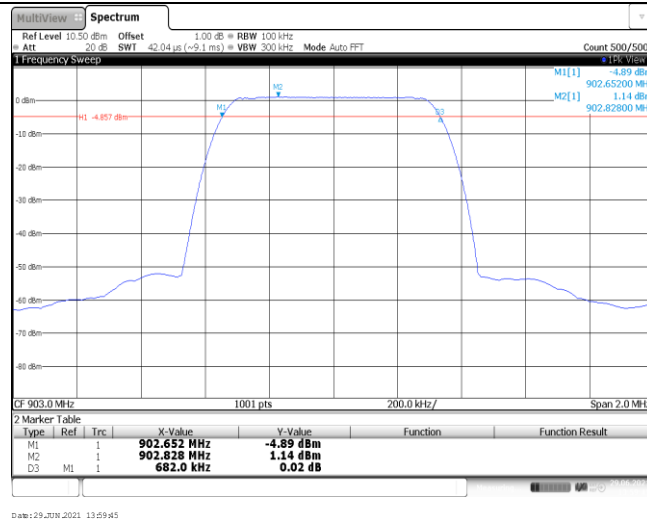
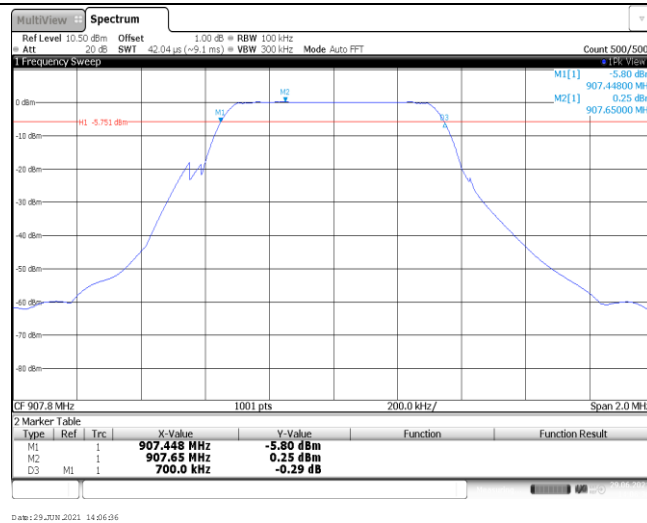
**Appendix B: Power Spectral Density**

| Type | Channel         | Power Spectral Density(dBm/3KHz) | Limit (dBm/3KHz) | Result |
|------|-----------------|----------------------------------|------------------|--------|
| LORA | CH <sub>L</sub> | -2.10                            | ≤8.00            | Pass   |
|      | CH <sub>M</sub> | -5.02                            |                  |        |
|      | CH <sub>H</sub> | -3.37                            |                  |        |



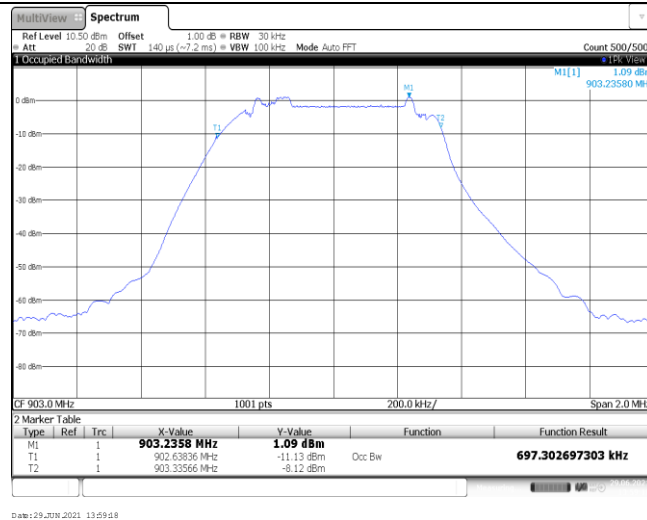
**Appendix C: 6dB bandwidth**

| Type | Channel         | 6dB Bandwidth(kHz) | Limit (kHz) | Result |
|------|-----------------|--------------------|-------------|--------|
| LORA | CH <sub>L</sub> | 682.00             | ≥500        | Pass   |
|      | CH <sub>M</sub> | 700.00             |             |        |
|      | CH <sub>H</sub> | 700.00             |             |        |

CH<sub>L</sub>CH<sub>M</sub>CH<sub>H</sub>

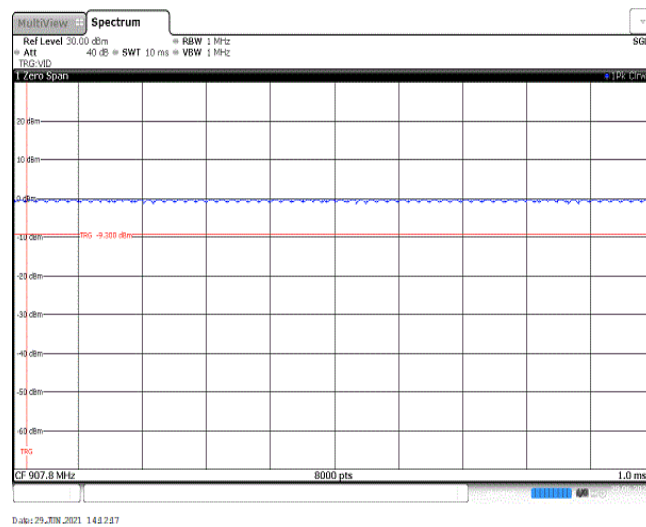
**Appendix D: 99% Occupied Bandwidth**

| Type | Channel         | 99% Occupied Bandwidth(MHz) | Limit (kHz) | Result |
|------|-----------------|-----------------------------|-------------|--------|
| LORA | CH <sub>L</sub> | 0.70                        | -           | Pass   |
|      | CH <sub>M</sub> | 0.67                        |             |        |
|      | CH <sub>H</sub> | 0.69                        |             |        |

CH<sub>L</sub>CH<sub>M</sub>CH<sub>H</sub>

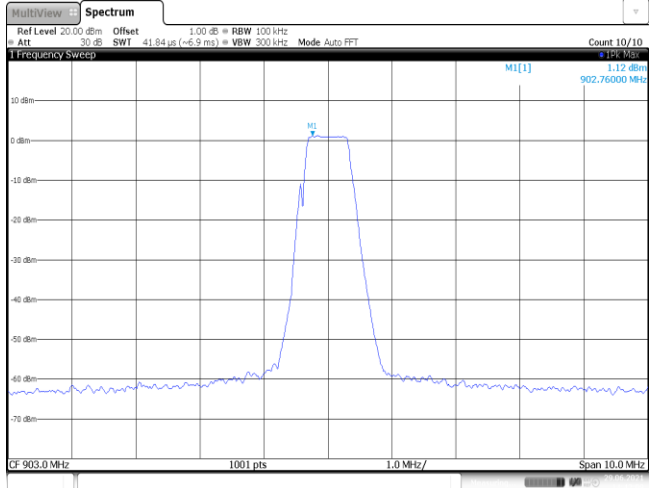
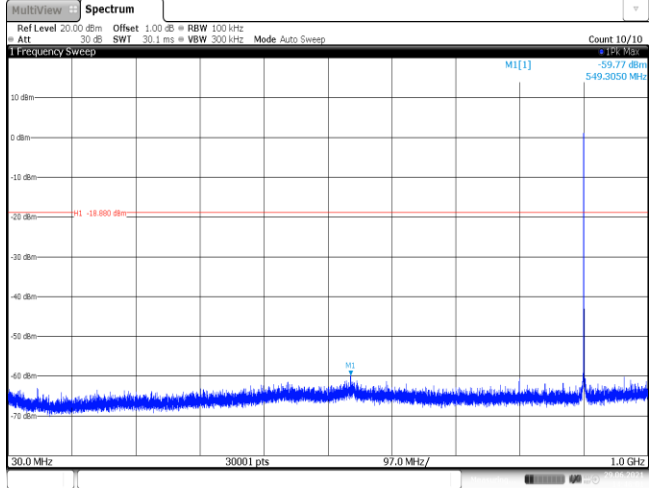
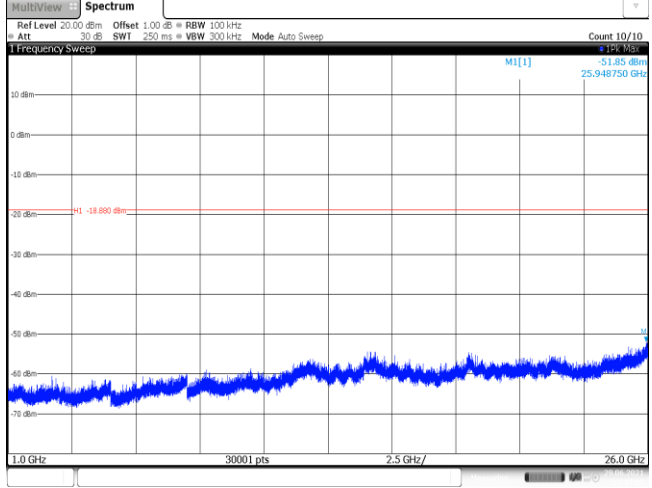
**Appendix E: Duty cycle**

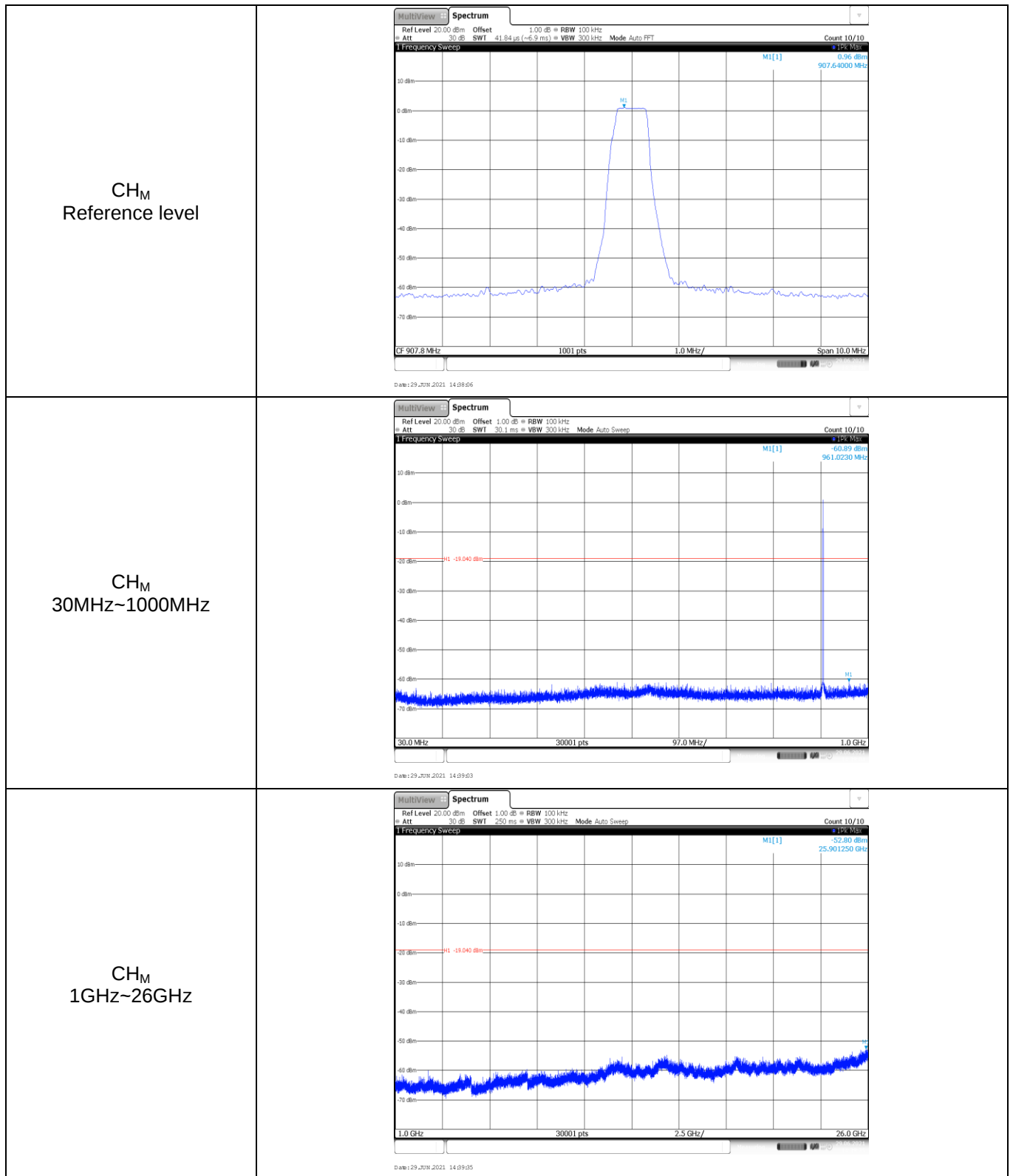
| Test Frequency<br>(MHz) | $T_{\text{on time}}$ for<br>single burst<br>(ms) | $T_{\text{period}}$ (ms) | Duty cycle | $1/T_{\text{on time}}$<br>(kHz) |
|-------------------------|--------------------------------------------------|--------------------------|------------|---------------------------------|
| 907.8                   | 1.00                                             | 1.00                     | 100%       | 1.0                             |

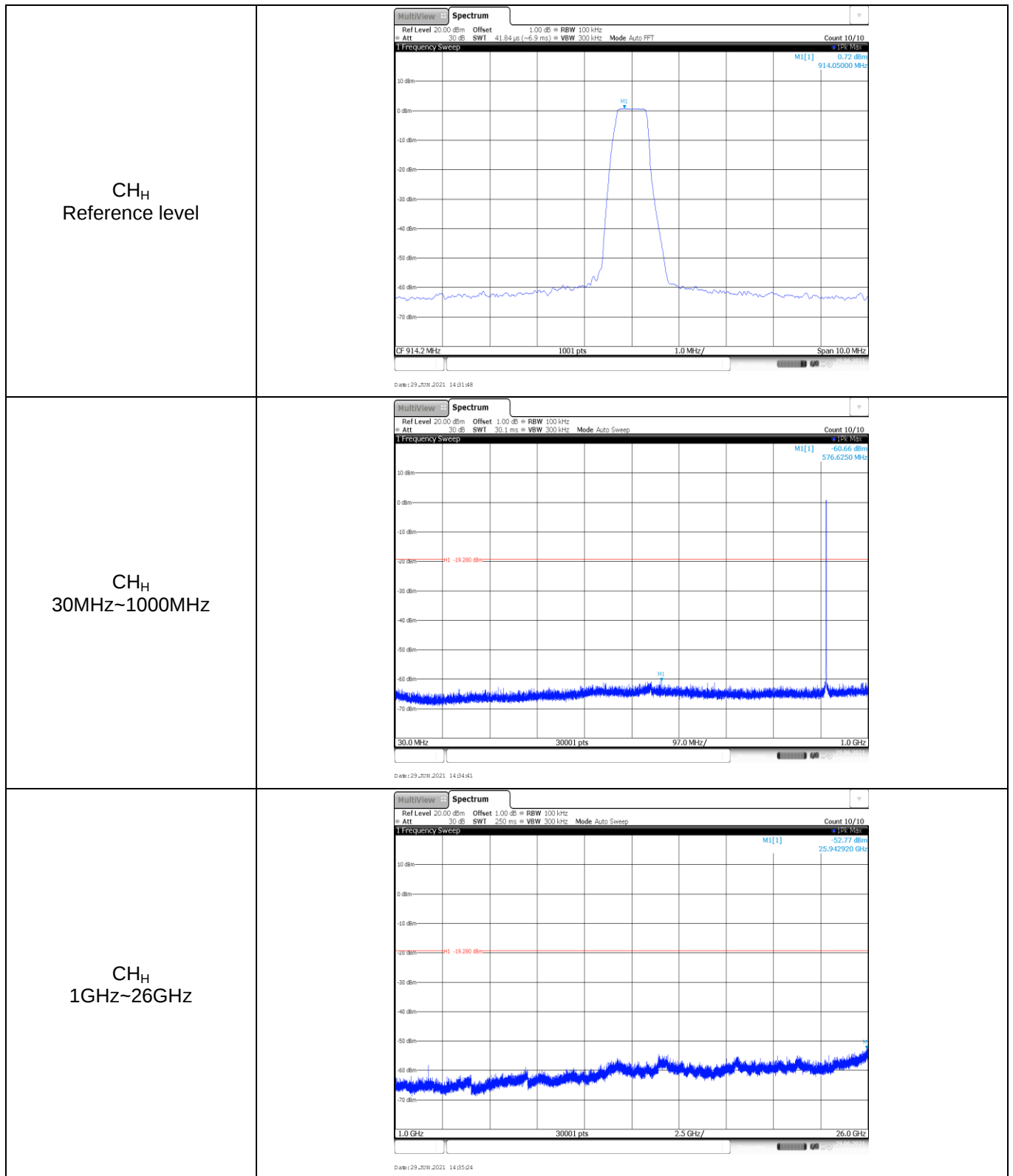


## Appendix F: Band edge and Spurious Emissions (conducted)

| Test Item:      | Band edge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |              |            |          |                 |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------|------------|----------|-----------------|----------|-----------------|----|---|--|--------------|----------|--|--|----|---|--|-----------|------------|--|--|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|-----|---------|---------|----------|-----------------|----|---|--|-------------|----------|--|--|----|---|--|-----------|------------|--|--|
| CH <sub>L</sub> | <div><div><div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 20 dB SWT 41.88 μs (≈ 1 ms) VBW 300 kHz Mode Auto FFT Count 300/300</div></div><div><div>1 Frequency Sweep</div><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>902.0 MHz</div><div>1001 pts</div><div>600.0 kHz/</div><div>Span 6.0 MHz</div></div></div><div><div><div>M1</div><div>1.08 dBm</div><div>902.8452 MHz</div></div><div><div>M2</div><div>-60.20 dBm</div><div>902.00000 MHz</div></div></div></div><div><div>2 Marker Table</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>902.8452 MHz</td><td>1.08 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>902.0 MHz</td><td>-60.20 dBm</td><td></td><td></td></tr></table></div></div></div><div>Date: 29_JUN 2021 14:49:30</div></div></div> <tr><td>CH<sub>H</sub></td><td><div><div><div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 20 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100</div></div><div><div>1 Frequency Sweep</div><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>928.0 MHz</div><div>1001 pts</div><div>3.0 MHz/</div><div>Span 30.0 MHz</div></div></div><div><div><div>M1</div><div>0.77 dBm</div><div>913.9140 MHz</div></div><div><div>M2</div><div>-71.69 dBm</div><div>928.00000 MHz</div></div></div></div><div><div>2 Marker Table</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>913.914 MHz</td><td>0.77 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>928.0 MHz</td><td>-71.69 dBm</td><td></td><td></td></tr></table></div></div></div><div>Date: 29_JUN 2021 14:29:11</div></div></div></td></tr> | Type | Ref          | Trc        | X-Value  | Y-Value         | Function | Function Result | M1 | 1 |  | 902.8452 MHz | 1.08 dBm |  |  | M2 | 1 |  | 902.0 MHz | -60.20 dBm |  |  | CH <sub>H</sub> | <div><div><div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 20 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100</div></div><div><div>1 Frequency Sweep</div><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>928.0 MHz</div><div>1001 pts</div><div>3.0 MHz/</div><div>Span 30.0 MHz</div></div></div><div><div><div>M1</div><div>0.77 dBm</div><div>913.9140 MHz</div></div><div><div>M2</div><div>-71.69 dBm</div><div>928.00000 MHz</div></div></div></div><div><div>2 Marker Table</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>913.914 MHz</td><td>0.77 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>928.0 MHz</td><td>-71.69 dBm</td><td></td><td></td></tr></table></div></div></div><div>Date: 29_JUN 2021 14:29:11</div></div></div> | Type | Ref | Trc | X-Value | Y-Value | Function | Function Result | M1 | 1 |  | 913.914 MHz | 0.77 dBm |  |  | M2 | 1 |  | 928.0 MHz | -71.69 dBm |  |  |
| Type            | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Trc  | X-Value      | Y-Value    | Function | Function Result |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
| M1              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | 902.8452 MHz | 1.08 dBm   |          |                 |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
| M2              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | 902.0 MHz    | -60.20 dBm |          |                 |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
| CH <sub>H</sub> | <div><div><div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz<br/>Att 20 dB SWT 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100</div></div><div><div>1 Frequency Sweep</div><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>928.0 MHz</div><div>1001 pts</div><div>3.0 MHz/</div><div>Span 30.0 MHz</div></div></div><div><div><div>M1</div><div>0.77 dBm</div><div>913.9140 MHz</div></div><div><div>M2</div><div>-71.69 dBm</div><div>928.00000 MHz</div></div></div></div><div><div>2 Marker Table</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>913.914 MHz</td><td>0.77 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>928.0 MHz</td><td>-71.69 dBm</td><td></td><td></td></tr></table></div></div></div><div>Date: 29_JUN 2021 14:29:11</div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Type | Ref          | Trc        | X-Value  | Y-Value         | Function | Function Result | M1 | 1 |  | 913.914 MHz  | 0.77 dBm |  |  | M2 | 1 |  | 928.0 MHz | -71.69 dBm |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
| Type            | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Trc  | X-Value      | Y-Value    | Function | Function Result |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
| M1              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | 913.914 MHz  | 0.77 dBm   |          |                 |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |
| M2              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | 928.0 MHz    | -71.69 dBm |          |                 |          |                 |    |   |  |              |          |  |  |    |   |  |           |            |  |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |     |     |         |         |          |                 |    |   |  |             |          |  |  |    |   |  |           |            |  |  |

| Test Item:                         | SE                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CH <sub>L</sub><br>Reference level |  <p>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz<br/>Att 30 dB SWI 41.84 μs (-6.9 ms) VBW 300 kHz Mode Auto FFT<br/>Count 10/10<br/>M1[1] 1.12 dBm<br/>902.76000 MHz<br/>900 MHz 1001 pts 1.0 MHz/ Span 10.0 MHz<br/>Date: 29_JUN 2021 14:42:10</p> |
| CH <sub>L</sub><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] -59.77 dBm<br/>549.3050 MHz<br/>30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz<br/>Date: 29_JUN 2021 14:46:01</p>           |
| CH <sub>L</sub><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] -51.85 dBm<br/>25.948750 GHz<br/>1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz<br/>Date: 29_JUN 2021 14:47:01</p>           |





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