

# APPENDIX REPORT

|                 |                 |                     |               |
|-----------------|-----------------|---------------------|---------------|
| Project No.     | SHT2112043606EW | Radio Specification | WIFI 5G       |
| Test sample No. | YPHT21120436011 | Model No.           | S7000         |
| Start test date | 2022-11-09      | Finish date         | 2022-11-10    |
| Temperature     | 25.4℃           | Humidity            | 38%           |
| Test Engineer   | Xiaoxiao Li     | Auditor             | Xiaodong Zheo |

| Appendix clause | Test item                      | Result |
|-----------------|--------------------------------|--------|
| A               | Maximum Conducted Output Power | PASS   |
| B               | Maximum Power Spectral Density | PASS   |
| C               | 26 dB Bandwidth                | PASS   |
| D               | 99% Occupy bandwidth           | PASS   |
| E               | 6 dB Bandwidth                 | PASS   |
| F               | Frequency stability            | PASS   |

## Appendix A: Maximum Conducted Output Power

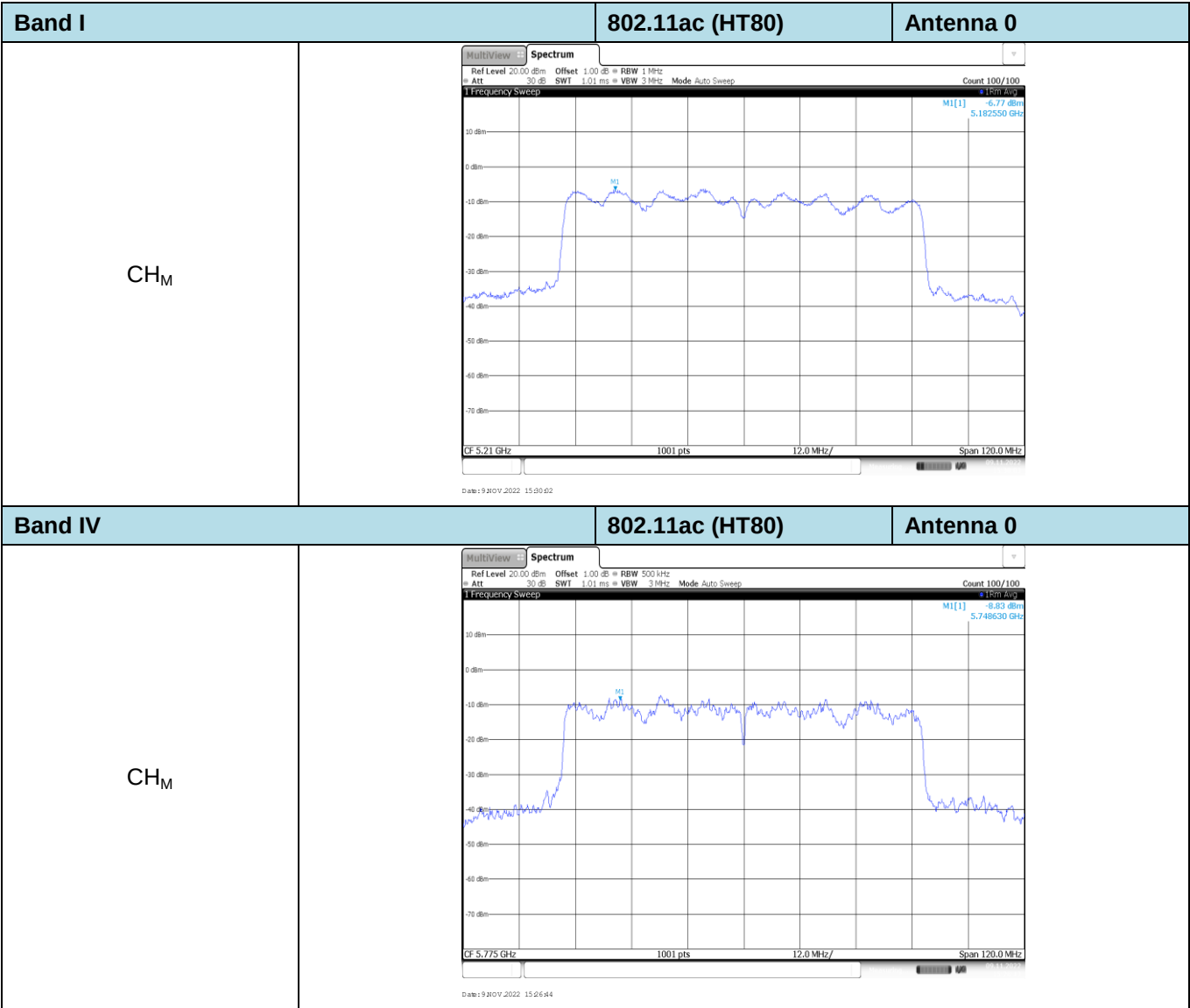
| Band | Bandwidth (MHz) | Type      | Channel         | Reading (dBm) |           | Duty cycle (%) |           | Duty cycle factor (dB) |           | Conducted Output Power (dBm) |           | Total Power (dBm) | Limit (dBm) | Result |
|------|-----------------|-----------|-----------------|---------------|-----------|----------------|-----------|------------------------|-----------|------------------------------|-----------|-------------------|-------------|--------|
|      |                 |           |                 | Antenna 0     | Antenna 1 | Antenna 0      | Antenna 1 | Antenna 0              | Antenna 1 | Antenna 0                    | Antenna 1 |                   |             |        |
| I    | 80              | 802.11 ac | CH <sub>M</sub> | 8.19          | 8.63      | 49.34          | 37.67     | 3.07                   | 4.24      | 11.26                        | 12.87     | 15.18             | 24.00       | Pass   |
| IV   | 80              | 802.11 ac | CHM             | 9.39          | 8.67      | 52.80          | 46.50     | 2.77                   | 3.33      | 12.16                        | 12.00     | 15.11             | 30.00       | Pass   |

NOTE: duty cycle factor =10LOG(1/ duty cycle )

### Appendix B: Maximum Power Spectral Density

| Band | Bandwidth (MHz) | Type      | Channel         | Reading (dBm) |           | Duty cycle (%) |           | Duty cycle factor (dB) |           | Power Spectral Density (dBm/MHz) |           | Total PSD (dBm/MHz) | Limit (dBm/MHz) | Result |
|------|-----------------|-----------|-----------------|---------------|-----------|----------------|-----------|------------------------|-----------|----------------------------------|-----------|---------------------|-----------------|--------|
|      |                 |           |                 | Antenna 0     | Antenna 1 | Antenna 0      | Antenna 1 | Antenna 0              | Antenna 1 | Antenna 0                        | Antenna 1 |                     |                 |        |
| I    | 80              | 802.11 ac | CH <sub>M</sub> | -6.77         | -6.89     | 49.34          | 37.67     | 3.07                   | 4.24      | -3.70                            | -2.65     | -0.12               | 11.00           | Pass   |
| IV   | 80              | 802.11 ac | CH <sub>M</sub> | -8.83         | -9.11     | 52.80          | 46.50     | 2.77                   | 3.33      | -6.06                            | -5.78     | -2.43               | 30.00           | Pass   |

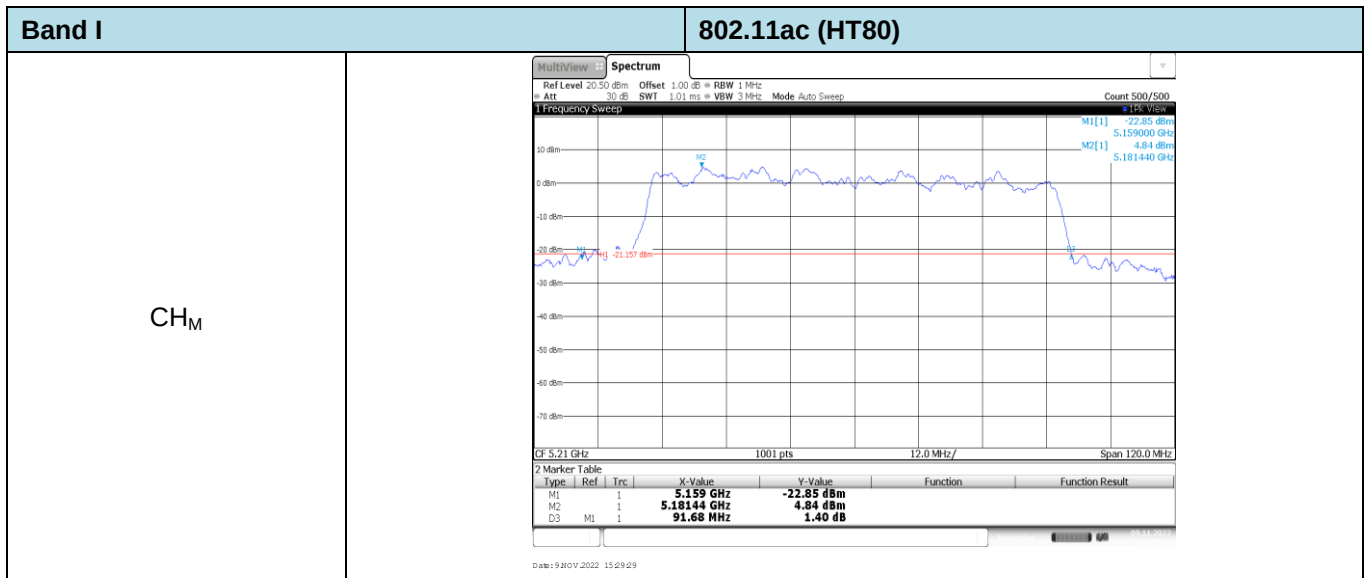
Test plot as follows:



|                 |                                                                                                                                                                                                                                                                                                              |           |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Band I          | 802.11ac (HT80)                                                                                                                                                                                                                                                                                              | Antenna 1 |
| CH <sub>M</sub> | <div><div>MultViewSpectrum</div><div>Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz<br/>Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep<br/>Count 100/100<br/>1 Frequency Sweep<br/>M1[1] -6.99 dBm 5.201250 GHz<br/>CF 5.21 GHz 1001 pts 12.0 MHz/ Span 120.0 MHz<br/>Date: 9/20/2022 15:21:03</div></div>    |           |
| Band IV         | 802.11ac (HT80)                                                                                                                                                                                                                                                                                              | Antenna 1 |
| CH <sub>M</sub> | <div><div>MultViewSpectrum</div><div>Ref Level 20.00 dBm Offset 1.00 dB RBW 500 kHz<br/>Att 30 dB SWI 1.01 ms VBW 3 MHz Mode Auto Sweep<br/>Count 100/100<br/>1 Frequency Sweep<br/>M1[1] -9.11 dBm 5.757140 GHz<br/>CF 5.775 GHz 1001 pts 12.0 MHz/ Span 120.0 MHz<br/>Date: 9/20/2022 15:28:03</div></div> |           |

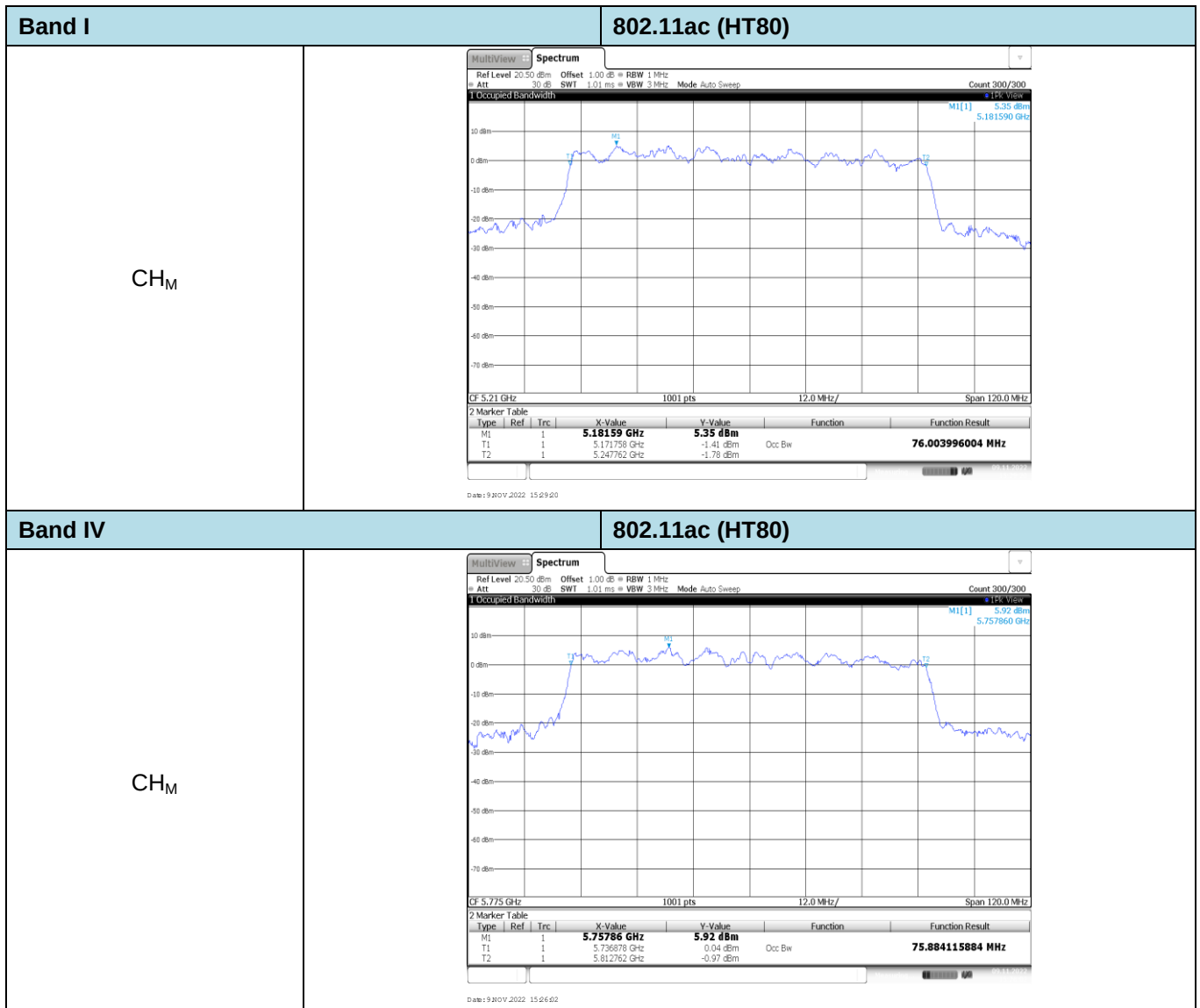
**Appendix C: 26dB bandwidth**

| Band | Bandwidth (MHz) | Type     | Channel         | 26dB bandwidth (MHz) | Result |
|------|-----------------|----------|-----------------|----------------------|--------|
| I    | 80              | 802.11ac | CH <sub>M</sub> | 91.68                | Pass   |



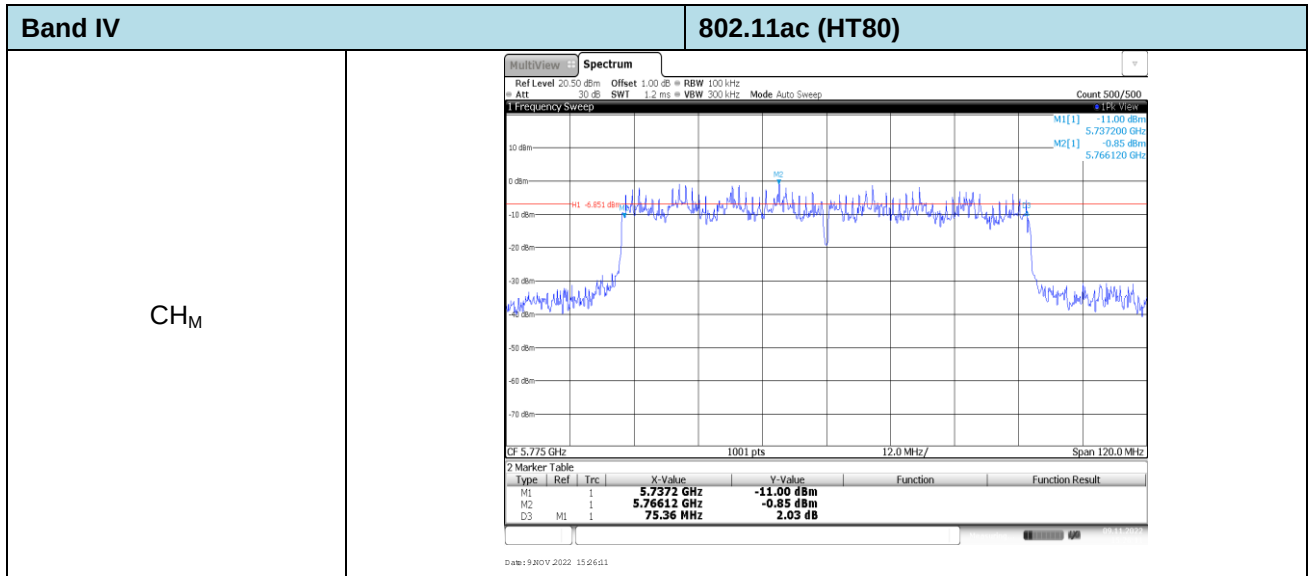
**Appendix D: 99% Occupy bandwidth**

| Band | Bandwidth (MHz) | Type     | Channel         | 99% Occupy bandwidth (MHz) | Result |
|------|-----------------|----------|-----------------|----------------------------|--------|
| I    | 80              | 802.11ac | CH <sub>M</sub> | 76.00                      | Pass   |
| IV   | 80              | 802.11ac | CH <sub>M</sub> | 75.88                      | Pass   |



**Appendix E: 6dB Bandwidth**

| Band | Bandwidth (MHz) | Type     | Channel         | 6dB bandwidth (MHz) | Result |
|------|-----------------|----------|-----------------|---------------------|--------|
| IV   | 80              | 802.11ac | CH <sub>M</sub> | 75.36               | Pass   |





**Appendix F: Frequency stability****Voltage VS Frequency stability**

| Band: I          |             |                          |           | Test Frequency: 5210.00MHz |           |        |
|------------------|-------------|--------------------------|-----------|----------------------------|-----------|--------|
| Temperature (°C) | Voltage (V) | Frequency Deviation (Hz) |           | Frequency Deviation (ppm)  |           | Result |
|                  |             | Antenna 0                | Antenna 1 | Antenna 0                  | Antenna 1 |        |
| TN               | VL          | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| TN               | VN          | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| TN               | VH          | 850000                   | 0         | -16.315                    | 0.000     | PASS   |

| Band: IV         |             |                          |           | Test Frequency: 5775.00MHz |           |        |
|------------------|-------------|--------------------------|-----------|----------------------------|-----------|--------|
| Temperature (°C) | Voltage (V) | Frequency Deviation (Hz) |           | Frequency Deviation (ppm)  |           | Result |
|                  |             | Antenna 0                | Antenna 1 | Antenna 0                  | Antenna 1 |        |
| TN               | VL          | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| TN               | VN          | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| TN               | VH          | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |

**Temperature VS Frequency stability**

| Band: I     |                  |                          |           | Test Frequency: 5210.00MHz |           |        |
|-------------|------------------|--------------------------|-----------|----------------------------|-----------|--------|
| Voltage (V) | Temperature (°C) | Frequency Deviation (Hz) |           | Frequency Deviation (ppm)  |           | Result |
|             |                  | Antenna 0                | Antenna 1 | Antenna 0                  | Antenna 1 |        |
| VN          | -20              | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | -10              | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | 0                | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | 10               | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | 20               | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | 30               | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | 40               | 850000                   | 0         | -16.315                    | 0.000     | PASS   |
| VN          | 50               | 850000                   | 0         | -16.315                    | 0.000     | PASS   |

| Band: IV    |                  |                          |           | Test Frequency: 5775.00MHz |           |        |
|-------------|------------------|--------------------------|-----------|----------------------------|-----------|--------|
| Voltage (V) | Temperature (°C) | Frequency Deviation (Hz) |           | Frequency Deviation (ppm)  |           | Result |
|             |                  | Antenna 0                | Antenna 1 | Antenna 0                  | Antenna 1 |        |
| VN          | -20              | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | -10              | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | 0                | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | 10               | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | 20               | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | 30               | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | 40               | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |
| VN          | 50               | 850000                   | 850000    | -14.717                    | -14.717   | PASS   |

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