



# SPOT CHECK EVALUATION

**FCC ID** : 2AQ68T99W373PC15  
**Equipment** : 5G WWAN Module  
**Brand Name** : Foxconn  
**Model Name** : T99W373  
**Applicant** : Hon Lin Technology Co., Ltd  
11F, No.32, Jihu Rd., Neihu Dist., Taipei City  
114, Taiwan R.O.C.  
**Manufacturer** : Hon Lin Technology Co., Ltd  
11F, No.32, Jihu Rd., Neihu Dist., Taipei City  
114, Taiwan R.O.C.  
**Standard** : 47 CFR Part 2, 22, 24, 27,90,96

The product was received on Jun. 27, 2023 and testing was performed from Jul. 04, 2023 to Sep. 18, 2023. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this spot check data report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



## **Table of Contents**

|                                                              |           |
|--------------------------------------------------------------|-----------|
| <b>History of this test report.....</b>                      | <b>3</b>  |
| <b>1. Introduction Section .....</b>                         | <b>4</b>  |
| <b>2. Difference Section.....</b>                            | <b>5</b>  |
| <b>3. Spot Check Verification Data Section .....</b>         | <b>6</b>  |
| <b>4. Reference detail Section .....</b>                     | <b>8</b>  |
| <b>5. Testing Location.....</b>                              | <b>9</b>  |
| <b>6. List of Measuring Equipment&amp; Setup Plots .....</b> | <b>10</b> |
| <b>7. Radiated Emission Setup Plots .....</b>                | <b>13</b> |



## History of this test report

| Version | Description                                                                                                 | Issue Date    |
|---------|-------------------------------------------------------------------------------------------------------------|---------------|
| 01      | Initial issue of report                                                                                     | Sep. 21, 2023 |
| 02      | Adding Testing Location<br>This report is an updated version, replacing the report issued on Sep. 21, 2023. | Sep. 22, 2023 |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |
|         |                                                                                                             |               |



## 1. Introduction Section

The FCC ID: 2AQ68T99W373 (original model) and FCC ID: 2AQ68T99W373PC15 (variant model) have the same PCB layout are differences is 5G NR n41.77.78 MIMO mode to increase power, based on their similarity, the FCC Part 22, 24, 27,90,96 (equipment class: PCB&CBE) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v01.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: 2AQ68T99W373PC15).



## **2. Difference Section**

The difference between 2AQ68T99W373 and 2AQ68T99W373PC15 differences is only HW 5G NR n41.77.78 MIMO mode to increase power and the rest are the same



### 3. Spot Check Verification Data Section

Conducted power test and radiated spurious emission test against the variant model based on the worst-case condition from the original model was performed in this filing and the verification test results Similar to the original FCC ID., please refer to below summary.

Summary of the spot check:

| Test Item                           | Mode                                  | 2AQ68T99W373<br>Worst Result | 2AQ68T99W373PC15<br>Worst Result | Difference (dB) |
|-------------------------------------|---------------------------------------|------------------------------|----------------------------------|-----------------|
| Average<br>Conducted Power<br>(dBm) | WCDMA Band 2                          | 24.12                        | 24.00                            | 0.12            |
|                                     | WCDMA Band 4                          | 23.76                        | 23.83                            | -0.07           |
|                                     | WCDMA Band 5                          | 24.19                        | 23.45                            | 0.74            |
|                                     | LTE Band 2                            | 23.99                        | 23.96                            | 0.03            |
|                                     | LTE Band 4                            | 23.63                        | 23.47                            | 0.16            |
|                                     | LTE Band 5                            | 24.16                        | 24.11                            | 0.05            |
|                                     | LTE Band 7                            | 23.92                        | 23.99                            | -0.07           |
|                                     | LTE Band 12                           | 23.72                        | 23.35                            | 0.37            |
|                                     | LTE Band 13                           | 23.77                        | 23.38                            | 0.39            |
|                                     | LTE Band 14                           | 23.60                        | 23.31                            | 0.29            |
|                                     | LTE Band 17                           | 23.50                        | 23.30                            | 0.2             |
|                                     | LTE Band 25                           | 23.61                        | 23.64                            | -0.03           |
|                                     | LTE Band 26 (814~824MHz)              | 23.75                        | 23.49                            | 0.26            |
|                                     | LTE Band 26(824~849MHz)               | 23.66                        | 23.47                            | 0.19            |
|                                     | LTE Band 30                           | 22.16                        | 21.46                            | 0.70            |
|                                     | LTE Band 38                           | 23.99                        | 23.43                            | 0.56            |
|                                     | LTE Band 41                           | 26.24                        | 26.61                            | -0.37           |
|                                     | LTE Band 42 (3450~3550MHz)            | 23.25                        | 23.91                            | -0.66           |
|                                     | LTE Band 42 (3550~3600MHz)            | 21.48                        | 21.26                            | 0.22            |
|                                     | LTE Band 43                           | 21.95                        | 21.00                            | 0.95            |
|                                     | LTE Band 48                           | 21.99                        | 21.99                            | 0.00            |
|                                     | LTE Band 66                           | 23.99                        | 23.12                            | 0.87            |
|                                     | LTE Band 71                           | 23.81                        | 23.93                            | -0.12           |
|                                     | 5G NR n2                              | 23.58                        | 23.78                            | -0.20           |
|                                     | 5G NR n5                              | 23.90                        | 23.50                            | 0.40            |
|                                     | 5G NR n7                              | 23.70                        | 23.75                            | -0.05           |
|                                     | 5G NR n12                             | 23.47                        | 23.53                            | -0.06           |
|                                     | 5G NR n13                             | 23.36                        | 23.30                            | 0.06            |
|                                     | 5G NR n14                             | 23.28                        | 23.12                            | 0.16            |
|                                     | 5G NR n25                             | 23.98                        | 23.93                            | 0.05            |
|                                     | 5G NR n26(814~824MHz)                 | 23.94                        | 23.53                            | 0.41            |
|                                     | 5G NR n26(824~849MHz)                 | 23.66                        | 23.52                            | 0.14            |
|                                     | 5G NR n30                             | 22.27                        | 22.06                            | 0.21            |
|                                     | 5G NR n38                             | 23.97                        | 23.76                            | 0.21            |
|                                     | 5G NR n41                             | 26.98                        | 26.40                            | 0.58            |
|                                     | 5G NR n48                             | 21.81                        | 21.98                            | -0.17           |
|                                     | 5G NR n66                             | 23.93                        | 23.75                            | 0.18            |
|                                     | 5G NR n70                             | 23.52                        | 23.00                            | 0.52            |
|                                     | 5G NR n71                             | 23.98                        | 23.99                            | -0.01           |
|                                     | 5G NR n77 (3450~3550MHz)<br>SISO Mode | 26.96                        | 26.70                            | 0.26            |
|                                     | 5G NR n77 (3550~3700MHz)<br>SISO Mode | 20.84                        | 20.70                            | 0.14            |
|                                     | 5G NR n77 (3700~3980MHz)<br>SISO Mode | 26.81                        | 26.67                            | 0.14            |
|                                     | 5G NR n78 (3450~3550MHz)<br>SISO Mode | 26.40                        | 26.52                            | -0.12           |
|                                     | 5G NR n78 (3550~3700MHz)<br>SISO Mode | 20.75                        | 20.16                            | 0.59            |
|                                     | 5G NR n78 (3700~3980MHz)<br>SISO Mode | 26.75                        | 26.67                            | 0.08            |



| Test Item                                             | Mode                                  | 2AQ68T99W373<br>Worst Result | 2AQ68T99W373PC15<br>Worst Result | Difference (dB) |
|-------------------------------------------------------|---------------------------------------|------------------------------|----------------------------------|-----------------|
| Radiated Spurious<br>Emission<br>(Harmonic)<br>Margin | WCDMA Band 2                          | -33.52                       | -34.33                           | 0.81            |
|                                                       | WCDMA Band 4                          | -35.19                       | -35.20                           | 0.01            |
|                                                       | WCDMA Band 5                          | -44.48                       | -44.73                           | 0.25            |
|                                                       | LTE Band 2                            | -31.10                       | -30.71                           | -0.39           |
|                                                       | LTE Band 4                            | -35.16                       | -35.58                           | 0.42            |
|                                                       | LTE Band 5                            | -43.85                       | -44.42                           | 0.57            |
|                                                       | LTE Band 7                            | -18.42                       | -19.28                           | 0.86            |
|                                                       | LTE Band 12                           | -40.41                       | -39.78                           | -0.63           |
|                                                       | LTE Band 13                           | -17.34                       | -17.12                           | -0.22           |
|                                                       | LTE Band 14                           | -19.71                       | -20.08                           | 0.37            |
|                                                       | LTE Band 17                           | -44.31                       | -44.84                           | 0.53            |
|                                                       | LTE Band 25                           | -31.49                       | -32.84                           | 1.35            |
|                                                       | LTE Band 26(814~824MHz)               | -44.05                       | -44.47                           | 0.42            |
|                                                       | LTE Band 26(824~849MHz)               | -28.75                       | -31.07                           | 2.32            |
|                                                       | LTE Band 30                           | -13.31                       | -14.50                           | 1.19            |
|                                                       | LTE Band 38                           | -18.15                       | -19.25                           | 1.10            |
|                                                       | LTE Band 41                           | -17.51                       | -19.06                           | 1.55            |
|                                                       | LTE Band 42(3450~3550MHz)             | -16.12                       | -25.53                           | 9.41            |
|                                                       | LTE Band 43                           | -0.58                        | -17.72                           | 17.14           |
|                                                       | LTE Band 48                           | -6.70                        | -14.71                           | 8.01            |
|                                                       | LTE Band 66                           | -34.30                       | -34.54                           | 0.24            |
|                                                       | LTE Band 71                           | -39.54                       | -40.51                           | 0.97            |
|                                                       | 5G NR n2                              | -31.47                       | -32.55                           | 1.08            |
|                                                       | 5G NR n5                              | -44.41                       | -44.67                           | 0.26            |
|                                                       | 5G NR n7                              | -24.19                       | -23.62                           | -0.57           |
|                                                       | 5G NR n12                             | -42.71                       | -43.94                           | 1.23            |
|                                                       | 5G NR n13                             | -11.08                       | -21.42                           | 10.34           |
|                                                       | 5G NR n14                             | -8.56                        | -21.24                           | 12.68           |
|                                                       | 5G NR n25                             | -35.62                       | -34.15                           | -1.47           |
|                                                       | 5G NR n26 (814~824MHz)                | -44.70                       | -44.71                           | 0.01            |
|                                                       | 5G NR n26 (824~849MHz)                | -44.34                       | -44.76                           | 0.42            |
|                                                       | 5G NR n30                             | -10.60                       | -9.99                            | -0.61           |
|                                                       | 5G NR n38                             | -23.74                       | -24.58                           | 0.84            |
|                                                       | 5G NR n41                             | -24.11                       | -23.44                           | -0.67           |
|                                                       | 5G NR n48                             | -1.75                        | -11.05                           | 9.3             |
|                                                       | 5G NR n66                             | -37.79                       | -41.52                           | 3.73            |
|                                                       | 5G NR n70                             | -34.92                       | -41.16                           | 6.24            |
|                                                       | 5G NR n71                             | -43.25                       | -45.98                           | 2.73            |
|                                                       | 5G NR n77 (3450~3550MHz)<br>SISO Mode | -16.23                       | -25.32                           | 9.09            |
|                                                       | 5G NR n77 (3550~3700MHz)<br>SISO Mode | -3.92                        | -10.40                           | 6.48            |
|                                                       | 5G NR n77 (3700~3980MHz)<br>SISO Mode | -13.63                       | -23.5                            | 9.87            |

**Conclusion:**

Radiated spurious emission test against the variant model for non-cellular part based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result (power levels measured are within 1dB, and the worst case of RSE spot check verification based on the worst condition from the original model is than within 3dB, and are compliance with the limits), the test data from the original model is representative for the variant model.



## 4. Reference detail Section

| Rule Part     | Equipment Class | Wireless Technology | Frequency Band (MHz)                             | Reference FCC ID | Type Grant/Permissive Change | Reference Report Title | Reference Application | Reference Report Sections                 |
|---------------|-----------------|---------------------|--------------------------------------------------|------------------|------------------------------|------------------------|-----------------------|-------------------------------------------|
| Part 22.24.27 | PCB             | WCDMA               | WCDMA B2/4/5                                     | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 22.24.27 (FG262904A ) (FG262904-05A) |
|               |                 | LTE                 | LTE B2/4/5/7/12/13/17/25/26/30/38/41/42/66/71    | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 22.24.27 (FG262904B.C.N )            |
|               |                 | 5G NR               | 5G NR n2/5/7/12/13/25/26/30/38/41/66/70/71/77/78 | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 22.24.27 (FG262904D.P.I.J )          |
| Part 90       | PCB             | LTE                 | LTE B14/26                                       | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 90 (FG262904E.G )                    |
|               |                 | 5G NR               | 5G NR n14/26                                     | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 90 (FG262904F.H )                    |
| Part 96       | CBE             | LTE                 | LTE B42/43/48                                    | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 96 (FG262904K )                      |
|               |                 | 5G NR               | 5G NR n48/77/78                                  | 2AQ68T99W373     | Original Grant               | FCC RF Test Report     | 2AQ68T99W373PC15      | Part 96 (FG262904L ) (FG262904-05B)       |



## 5. Testing Location

|                           |                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Test Site</b>          | Sporton International Inc. EMC & Wireless Communications Laboratory                                                       |
| <b>Test Site Location</b> | No.52, Huaya 1st Rd., Guishan Dist.,<br>Taoyuan City 333, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b><br>03CH07-HY, TH03-HY                                                                             |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

|                           |                                                                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Site</b>          | Sporton International Inc. Wensan Laboratory                                                                                                     |
| <b>Test Site Location</b> | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City 333010, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b><br>03CH11-HY, 03CH12-HY (TAF Code: 3786)                                                                                 |
| <b>Remark</b>             | The Radiated Spurious Emission test items for WCDMA, LTE, 5G NR n48 and 5G NR n77 subcontracted to Sporton International Inc. Wensan Laboratory. |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190 and TW3786



## 6. List of Measuring Equipment& Setup Plots

| Instrument                       | Brand Name      | Model No.                     | Serial No.  | Characteristics                            | Calibration Date | Test Date                       | Due Date      | Remark                   |
|----------------------------------|-----------------|-------------------------------|-------------|--------------------------------------------|------------------|---------------------------------|---------------|--------------------------|
| Hygrometer                       | Testo           | 608-H1                        | 34893241    | N/A                                        | Mar. 28, 2023    | Jul. 04, 2023~<br>Aug. 31, 2023 | Mar. 27, 2024 | Conducted<br>(TH03-HY)   |
| Radio Communication Test Station | Anritsu         | MT8000A                       | 6272337370  | N/A                                        | Oct. 28, 2022    | Jul. 04, 2023~<br>Aug. 31, 2023 | Oct. 27, 2023 | Conducted<br>(TH03-HY)   |
| Base Station (Measure)           | Anritsu         | MT8821C                       | 6262116725  | LTE FDD/TDD<br>LTE-3CC<br>DLCA/2CC<br>ULCA | Oct. 13, 2022    | Jul. 04, 2023~<br>Aug. 31, 2023 | Oct. 12, 2023 | Conducted<br>(TH03-HY)   |
| Bilog Antenna                    | TESEQ           | CBL 6111D &<br>00800N1D01N-06 | 35419 & 03  | 30MHz~1GHz                                 | Apr. 23, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Apr. 22, 2024 | Radiation<br>(03CH07-HY) |
| Double Ridge Horn Antenna        | ESCO            | 3117                          | 00075962    | 1GHz ~ 18GHz                               | Dec. 01, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Nov. 30, 2023 | Radiation<br>(03CH07-HY) |
| Preamplifier                     | MITEQ           | AMF-7D-0010<br>1800-30-10P    | 1590075     | 1GHz~18GHz                                 | Apr. 20, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Apr. 19, 2024 | Radiation<br>(03CH07-HY) |
| Preamplifier                     | COM-POWER       | PA-103A                       | 161241      | 10MHz~1GHz                                 | Oct. 03, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Oct. 02, 2023 | Radiation<br>(03CH07-HY) |
| Preamplifier                     | Agilent         | 8449B                         | 3008A02362  | 1GHz~26.5GHz                               | Mar. 24, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 23, 2024 | Radiation<br>(03CH07-HY) |
| Preamplifier                     | EMEC            | EM18G40G                      | 0600789     | 18-40GHz                                   | Jul. 21, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Jul. 20, 2023 | Radiation<br>(03CH07-HY) |
| Spectrum Analyzer                | Agilent         | N9030A                        | MY52350276  | 3Hz~44GHz                                  | Mar. 28, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 27, 2024 | Radiation<br>(03CH07-HY) |
| RF Cable                         | HUBER + SUHNER  | SUCOFLEX 104                  | MY15682/4   | 30MHz to 18GHz                             | Feb. 22, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Feb. 21, 2024 | Radiation<br>(03CH07-HY) |
| RF Cable                         | HUBER + SUHNER  | SUCOFLEX 104                  | MY24971/4   | 9kHz to 18GHz                              | Feb. 22, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Feb. 21, 2024 | Radiation<br>(03CH07-HY) |
| RF Cable                         | HUBER + SUHNER  | SUCOFLEX 104                  | MY28655/4   | 9kHz to 18GHz                              | Feb. 22, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Feb. 21, 2024 | Radiation<br>(03CH07-HY) |
| RF Cable                         | HUBER + SUHNER  | SUCOFLEX 102                  | MY2858/2    | 18GHz~40GHz                                | Feb. 22, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Feb. 21, 2024 | Radiation<br>(03CH07-HY) |
| RF Cable                         | HUBER + SUHNER  | SUCOFLEX 102                  | 801606/2    | 9KHz ~ 40GHz                               | Apr. 20, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Apr. 19, 2024 | Radiation<br>(03CH07-HY) |
| Controller                       | EMEC            | EM1000                        | N/A         | Control Ant Mast                           | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH07-HY) |
| Controller                       | MF              | MF-7802                       | N/A         | Control Turn table                         | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH07-HY) |
| Antenna Mast                     | EMEC            | AM-BS-4500E                   | N/A         | Boresight mast 1M~4M                       | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH07-HY) |
| Turn Table                       | ChainTek        | Chaintek 3000                 | N/A         | 0~360 Degree                               | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH07-HY) |
| Software                         | Audix           | E3                            | N/A         | N/A                                        | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH07-HY) |
| USB Data Logger                  | TECPEL          | TR-32                         | HE17XB2495  | N/A                                        | Mar. 14, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 13, 2024 | Radiation<br>(03CH07-HY) |
| Horn Antenna                     | ETS-Lindgren    | 3117                          | 00143261    | 1GHz~18GHz                                 | Feb. 24, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Feb. 23, 2024 | Radiation<br>(03CH07-HY) |
| SHF-EHF Horn Antenna             | SCHWARZBECK     | BBHA 9170                     | BBHA9170251 | 18GHz~40GHz                                | Nov. 24, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Nov. 23, 2023 | Radiation<br>(03CH07-HY) |
| Signal Generator                 | Rohde & Schwarz | SMF100A                       | 101107      | 100kHz~40GHz                               | Jan. 11, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Jan. 10, 2024 | Radiation<br>(03CH07-HY) |



| Instrument              | Brand Name        | Model No.                           | Serial No.           | Characteristics                  | Calibration Date | Test Date                       | Due Date      | Remark                   |
|-------------------------|-------------------|-------------------------------------|----------------------|----------------------------------|------------------|---------------------------------|---------------|--------------------------|
| LOOP Antenna            | Rohde & Schwarz   | HFH2-Z2                             | 100488               | 9 kHz~30 MHz                     | Sep. 20, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Sep. 19, 2023 | Radiation<br>(03CH11-HY) |
| LOOP Antenna            | Rohde & Schwarz   | HFH2-Z2                             | 100315               | 9 kHz~30 MHz                     | Feb. 28, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Feb. 27, 2024 | Radiation<br>(03CH11-HY) |
| Bilog Antenna           | TESEQ             | CBL 6111D &<br>N-6-06               | 35414 &<br>AT-N0602  | 30MHz~1GHz                       | Oct. 08, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Oct. 07, 2023 | Radiation<br>(03CH11-HY) |
| Bilog Antenna           | TESEQ             | CBL 6111D &<br>00800N1D01N<br>-06   | 37059 & 01           | 30MHz~1GHz                       | Nov. 10, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Nov. 09, 2023 | Radiation<br>(03CH11-HY) |
| Horn Antenna            | SCHWARZBE<br>CK   | BBHA 9120 D                         | 9120D-01620          | 1GHz~18GHz                       | Aug. 24, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Aug. 23, 2023 | Radiation<br>(03CH11-HY) |
| Horn Antenna            | SCHWARZBE<br>CK   | BBHA 9120 D                         | 9120D-1326           | 1GHz~18GHz                       | Aug. 24, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Aug. 23, 2023 | Radiation<br>(03CH11-HY) |
| SHF-EHF Horn<br>Antenna | SCHWARZBE<br>CK   | BBHA9170                            | 00993                | 18GHz~40GHz                      | Nov. 24, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Nov. 23, 2023 | Radiation<br>(03CH11-HY) |
| SHF-EHF Horn<br>Antenna | SCHWARZBE<br>CK   | BBHA9170                            | 00994                | 18GHz~40GHz                      | Nov. 04, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Nov. 03, 2023 | Radiation<br>(03CH11-HY) |
| Amplifier               | SONOMA            | 310N                                | 187312               | 9kHz~1GHz                        | Dec. 09, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Dec. 08, 2023 | Radiation<br>(03CH11-HY) |
| Preamplifier            | Keysight          | 83017A                              | MY53270080           | 1GHz~26.5GHz                     | Nov. 09, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Nov. 08, 2023 | Radiation<br>(03CH11-HY) |
| Preamplifier            | Jet-Power         | JPA0118-55-30<br>3                  | 171000180005<br>5007 | 1GHz~18GHz                       | Jun. 14, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Jun. 13, 2024 | Radiation<br>(03CH11-HY) |
| Preamplifier            | EMEC              | EM18G40G                            | 060715               | 18GHz~40GHz                      | Dec. 07, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Dec. 06, 2023 | Radiation<br>(03CH11-HY) |
| Spectrum<br>Analyzer    | Keysight          | N9010A                              | MY54200486           | 10Hz~44GHz                       | Oct. 07, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Oct. 06, 2023 | Radiation<br>(03CH11-HY) |
| Controller              | EMEC              | EM 1000                             | N/A                  | Control Turn<br>table & Ant Mast | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH11-HY) |
| Antenna Mast            | EMEC              | AM-BS-4500-B                        | N/A                  | 1~4m                             | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH11-HY) |
| Turn Table              | EMEC              | TT 2000                             | N/A                  | 0~360 Degree                     | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH11-HY) |
| Software                | Audix             | E3<br>6.2009-8-24                   | RK-001053            | N/A                              | N/A              | Jul. 06, 2023~<br>Jul. 11, 2023 | N/A           | Radiation<br>(03CH11-HY) |
| RF Cable                | HUBER +<br>SUHNER | SUCOFLEX<br>102                     | MY2859/2             | 30MHz~40GHz                      | Mar. 07, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 06, 2024 | Radiation<br>(03CH11-HY) |
| RF Cable                | HUBER +<br>SUHNER | SUCOFLEX<br>102                     | 801595/2             | 30MHz~40GHz                      | Mar. 07, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 06, 2024 | Radiation<br>(03CH11-HY) |
| RF Cable                | HUBER +<br>SUHNER | SUCOFLEX<br>102                     | 803951/2             | 9K~30M                           | Mar. 07, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 06, 2024 | Radiation<br>(03CH11-HY) |
| RF Cable                | HUBER +<br>SUHNER | SUCOFLEX<br>102                     | 803951/2             | 30M~40G                          | Mar. 07, 2023    | Jul. 06, 2023~<br>Jul. 11, 2023 | Mar. 06, 2024 | Radiation<br>(03CH11-HY) |
| Filter                  | Wainwright        | WHKX12-2700<br>-3000-18000-6<br>OSS | SN3                  | 3GHz High<br>Pass Filter         | Sep. 12, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Sep. 11, 2023 | Radiation<br>(03CH11-HY) |
| Filter                  | Wainwright        | WHKX12-900-<br>1000-15000-60<br>SS  | SN12                 | 1GHz High<br>Pass Filter         | Sep. 12, 2022    | Jul. 06, 2023~<br>Jul. 11, 2023 | Sep. 11, 2023 | Radiation<br>(03CH11-HY) |



| Instrument              | Brand Name                 | Model No.                            | Serial No.  | Characteristics                  | Calibration Date | Test Date                       | Due Date      | Remark                   |
|-------------------------|----------------------------|--------------------------------------|-------------|----------------------------------|------------------|---------------------------------|---------------|--------------------------|
| Loop Antenna            | Rohde & Schwarz            | HFH2-Z2                              | 100488      | 9 kHz~30 MHz                     | Sep. 20, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Sep. 19, 2023 | Radiation<br>(03CH12-HY) |
| Bilog Antenna           | TESEQ                      | CBL 6111D &<br>00800N1D01N<br>-06    | 37059 & 01  | 30MHz~1GHz                       | Nov. 10, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Nov. 09, 2023 | Radiation<br>(03CH12-HY) |
| Horn Antenna            | SCHWARZBE<br>CK            | BBHA 9120 D                          | 9120D-02114 | 1GHz~18GHz                       | Aug. 09, 2022    | Jul. 13, 2023~<br>Aug. 07, 2023 | Aug. 08, 2023 | Radiation<br>(03CH12-HY) |
| Horn Antenna            | SCHWARZBE<br>CK            | BBHA 9120 D                          | 9120D-02114 | 1GHz~18GHz                       | Jul. 31, 2023    | Aug. 08, 2023~<br>Sep. 18, 2023 | Jul. 30, 2024 | Radiation<br>(03CH12-HY) |
| SHF-EHF Horn<br>Antenna | SCHWARZBE<br>CK            | BBHA9170                             | 00993       | 18GHz~40GHz                      | Nov. 24, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Nov. 23, 2023 | Radiation<br>(03CH12-HY) |
| Preamplifier            | COM-POWER                  | PA-103A                              | 161241      | 10MHz~1GHz                       | Oct. 03, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Oct. 02, 2023 | Radiation<br>(03CH12-HY) |
| Preamplifier            | Agilent                    | 8449B                                | 3008A02375  | 1GHz~26.5GHz                     | May 23, 2023     | Jul. 13, 2023~<br>Sep. 18, 2023 | May 22, 2024  | Radiation<br>(03CH12-HY) |
| Preamplifier            | E-INSTRUME<br>NT TECH LTD. | ERA-100M-18<br>G-56-01-A70           | EC1900249   | 1GHz~18GHz                       | Dec. 21, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Dec. 20, 2023 | Radiation<br>(03CH12-HY) |
| Preamplifier            | EMEC                       | EM18G40G                             | 060715      | 18GHz~40GHz                      | Dec. 07, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Dec. 06, 2023 | Radiation<br>(03CH12-HY) |
| Spectrum<br>Analyzer    | Agilent                    | N9010A                               | MY53470118  | 10Hz~44GHz                       | Jan. 10, 2023    | Jul. 13, 2023~<br>Sep. 18, 2023 | Jan. 09, 2024 | Radiation<br>(03CH12-HY) |
| Filter                  | Wainwright                 | WHKX8-5872.<br>5-6750-18000-<br>40ST | SN2         | 6.75GHz High<br>Pass Filter      | Mar. 14, 2023    | Jul. 13, 2023~<br>Sep. 18, 2023 | Mar. 13, 2024 | Radiation<br>(03CH12-HY) |
| RF Cable                | HUBER +<br>SUHNER          | SUCOFLEX<br>102                      | 803951/2    | 9kHz~30MHz                       | Mar. 07, 2023    | Jul. 13, 2023~<br>Sep. 18, 2023 | Mar. 06, 2024 | Radiation<br>(03CH12-HY) |
| RF Cable                | HUBER +<br>SUHNER          | SUCOFLEX<br>126E                     | 0058/126E   | 30MHz~18GHz                      | Dec. 20, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Dec. 19, 2023 | Radiation<br>(03CH12-HY) |
| RF Cable                | HUBER +<br>SUHNER          | SUCOFLEX<br>102                      | 505134/2    | 30MHz~40GHz                      | Dec. 20, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Dec. 19, 2023 | Radiation<br>(03CH12-HY) |
| RF Cable                | HUBER +<br>SUHNER          | SUCOFLEX<br>102                      | 803953/2    | 30MHz~40GHz                      | Dec. 20, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Dec. 19, 2023 | Radiation<br>(03CH12-HY) |
| Hygrometer              | TECPEL                     | DTM-303B                             | TP210090    | N/A                              | Oct. 03, 2022    | Jul. 13, 2023~<br>Sep. 18, 2023 | Oct. 02, 2023 | Radiation<br>(03CH12-HY) |
| Controller              | EMEC                       | EM1000                               | N/A         | Control Turn<br>table & Ant Mast | N/A              | Jul. 13, 2023~<br>Sep. 18, 2023 | N/A           | Radiation<br>(03CH12-HY) |
| Antenna Mast            | EMEC                       | AM-BS-4500-B                         | N/A         | 1m~4m                            | N/A              | Jul. 13, 2023~<br>Sep. 18, 2023 | N/A           | Radiation<br>(03CH12-HY) |
| Turn Table              | EMEC                       | TT2000                               | N/A         | 0~360 Degree                     | N/A              | Jul. 13, 2023~<br>Sep. 18, 2023 | N/A           | Radiation<br>(03CH12-HY) |
| Software                | Audix                      | E3<br>6.2009-8-24                    | RK-000989   | N/A                              | N/A              | Jul. 13, 2023~<br>Sep. 18, 2023 | N/A           | Radiation<br>(03CH12-HY) |