

# **FCC REPORT**

## **(GSM)**

**Applicant:** HMD global Oy

**Address of Applicant:** Bertel Jungin aukio 9, 02600 Espoo, Finland

**Equipment Under Test (EUT)**

Product Name: Smart Phone

Model No.: TA-1370

Trade mark: NOKIA

**FCC ID:** 2AJOTTA-1370

**Applicable standards:** FCC CFR Title 47 Part 2  
FCC CFR Title 47 Part 22 Subpart H  
FCC CFR Title 47 Part 24 Subpart E

**Date of sample receipt:** 19 Aug., 2021

**Date of Test:** 20 Aug., to 28 Aug., 2021

**Date of report issued:** 30 Aug., 2021

**Test Result:** PASS\*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang  
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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## 2. Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | 30 Aug., 2021 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |

*This application for FCC ID: 2AJOTTA-1370 is reusing data from the application for a variant of device 2AJOTTA-1390. The two devices have identical internal printed circuit board layouts, have a common design and components, where 2AJOTTA-1370 differ only in the depopulation of components for the purposes of removing some frequency bands and dimension for antenna 4.*

*Therefore in this report only the radiated spurious emissions for ant4 was full retested, and other antennas done spot check.*

**Tested by:** Mike.ou  
Test Engineer

**Date:** 30 Aug., 2021

**Reviewed by:** Winner Zhang  
Project Engineer

**Date:** 30 Aug., 2021

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## 4. Test Summary

| Test Item                                                                                                                                                                                                | Section in CFR 47                                    | Result                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|
| RF Output Power<br>Effective Radiated Power and<br>Effective Isotropic Radiated Power                                                                                                                    | Part 2.1046<br>Part 22.913 (a)(5)<br>Part 24.232 (c) | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| Peak-to-Average Power Ratio                                                                                                                                                                              | Part 24.232 (d)                                      | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| Occupied Bandwidth                                                                                                                                                                                       | Part 2.1049                                          | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| Emission Bandwidth                                                                                                                                                                                       | Part 2.1049                                          | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| Spurious Emissions at antenna terminals                                                                                                                                                                  | Part 2.1051<br>Part 22.917 (a)<br>Part 24.238 (a)    | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| Band Edges Compliance                                                                                                                                                                                    | Part 2.1051<br>Part 22.917 (a)<br>Part 24.238 (a)    | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| Field strength of spurious radiation                                                                                                                                                                     | Part 22.917 (a)<br>Part 24.238 (a)                   | Pass                                                     |
| Frequency stability                                                                                                                                                                                      | Part 22.355<br>Part 24.235<br>Part 2.1055)           | Refer to the report:<br>SRTC2021-9004(F)-<br>21082802(A) |
| <b>Remark:</b><br>1. Pass: The EUT complies with the essential requirements in the standard.<br>2. The report: SRTC2021-9004(F)-21082802(A), issued by The State Radio_monitoring_center Testing Center. |                                                      |                                                          |
| <b>Test Method:</b>                                                                                                                                                                                      | ANSI/TIA-603-E-2016<br>ANSI C63.26-2015              |                                                          |

## 5. General Information

### 5.1 Client Information

|                        |                                             |
|------------------------|---------------------------------------------|
| Applicant:             | HMD global Oy                               |
| Address:               | Bertel Jungin aukio 9, 02600 Espoo, Finland |
| Manufacturer/ Factory: | HMD global Oy                               |
| Address:               | Bertel Jungin aukio 9, 02600 Espoo, Finland |

### 5.2 General Description of E.U.T.

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name:              | Smart Phone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Model No.:                 | TA-1370                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Operation Frequency range: | GSM 850: 824.20MHz-848.80MHz<br>PCS1900: 1850.20MHz-1909.80MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Modulation type:           | <input checked="" type="checkbox"/> Voice(GMSK) <input checked="" type="checkbox"/> GPRS(GMSK) <input checked="" type="checkbox"/> EGPRS(GMSK, 8PSK)                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Antenna type:              | Internal Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Antenna gain:              | GSM 850: -3.46 dBi(declare by Applicant)<br>PCS 1900: -2.87 dBi(declare by Applicant)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Power supply:              | Rechargeable Lithium ion Polymer Battery DC3.85V, 4.85Ah                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| AC adapter:                | Adapter 1:<br>Model: TN-050200U3, TN-050200E3, TN-050200C3A<br>Input: AC100-240V, 50/60Hz, 0.35A<br>Output: DC 5.0V, 2.0A 10.0W<br>Note: Only the pins are different between different models<br>Adapter 2:<br>Model: TN-050200U3, TN-050200A3, TN-050200C3A<br>Input: AC100-240V, 50/60Hz, 0.35A<br>Output: DC 5.0V, 2.0A 10.0W<br>Note: Only the pins are different between different models<br>Adapter 3:<br>Model: AD-010A, AD-010X<br>Input: AC100-240V, 50/60Hz, 0.35A<br>Output: DC 5.0V, 2.0A 10.0W<br>Note: Only the pins are different between different models |
| Test Sample Condition:     | The test samples were provided in good working order with no visible defects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**Operation Frequency List:**

| GSM 850 |                 | PCS1900 |                 |
|---------|-----------------|---------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 128     | 824.20          | 512     | 1850.20         |
| 129     | 824.40          | 513     | 1850.40         |
| ....    | ....            | ....    | ....            |
| 189     | 836.40          | 660     | 1879.80         |
| 190     | 836.60          | 661     | 1880.00         |
| 191     | 836.80          | 662     | 1880.20         |
| ...     | ...             | ...     | ...             |
| 250     | 848.60          | 809     | 1909.60         |
| 251     | 848.80          | 810     | 1909.80         |

Regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| GSM850  |     |                | PCS1900 |     |                |
|---------|-----|----------------|---------|-----|----------------|
| Channel |     | Frequency(MHz) | Channel |     | Frequency(MHz) |
| Lowest  | 128 | 824.20         | Lowest  | 512 | 1850.20        |
| Middle  | 190 | 836.60         | Middle  | 661 | 1880.00        |
| Highest | 251 | 848.80         | Highest | 810 | 1909.80        |

### 5.3 Test environment and mode

| Operating Environment:                                                                                                                                                                                                                                                                                                                                                           |                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Temperature:                                                                                                                                                                                                                                                                                                                                                                     | Normal: 15°C ~ 35°C, Extreme: -30°C ~ +50°C                     |
| Humidity:                                                                                                                                                                                                                                                                                                                                                                        | 20 % ~ 75 % RH                                                  |
| Atmospheric Pressure:                                                                                                                                                                                                                                                                                                                                                            | 1008 mbar                                                       |
| Voltage:                                                                                                                                                                                                                                                                                                                                                                         | Nominal: 3.85Vdc, Extreme: Low 3.4 Vdc, High 4.4 Vdc            |
| Test mode:                                                                                                                                                                                                                                                                                                                                                                       |                                                                 |
| GSM mode                                                                                                                                                                                                                                                                                                                                                                         | Keep the EUT communication with simulated station in GSM mode   |
| GPRS mode                                                                                                                                                                                                                                                                                                                                                                        | Keep the EUT communication with simulated station in GPRS mode  |
| EGPRS mode                                                                                                                                                                                                                                                                                                                                                                       | Keep the EUT communication with simulated station in EGPRS mode |
| Remark: The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report. |                                                                 |

### 5.4 Description of Test Auxiliary Equipment

| Test Equipment    | Manufacturer    | Model No. | Serial No. |
|-------------------|-----------------|-----------|------------|
| Simulated Station | Rohde & Schwarz | CMW500    | 140493     |

### 5.5 Additions to, deviations, or exclusions from the method

|    |
|----|
| No |
|----|

### 5.6 Measurement Uncertainty

| Parameter                                    | Expanded Uncertainty<br>(Confidence of 95%(U = 2Uc(y))) |
|----------------------------------------------|---------------------------------------------------------|
| Radiated Emission (9kHz ~ 30MHz) (3m SAC)    | ±3.13 dB                                                |
| Radiated Emission (30MHz ~ 1000MHz) (3m SAC) | ±4.45 dB                                                |
| Radiated Emission (1GHz ~ 18GHz) (3m SAC)    | ±5.34 dB                                                |
| Radiated Emission (18GHz ~ 40GHz) (3m SAC)   | ±5.34 dB                                                |

**Note:** The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.26-2015. All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

### 5.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

## 5.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

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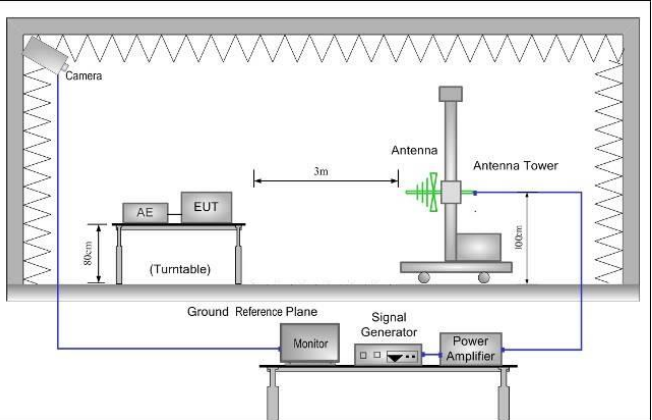
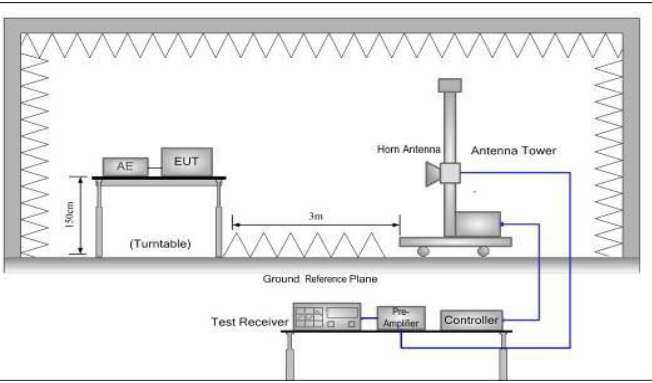
Email: info-JYTee@lets.com, Website: <http://www.ccis-cb.com>

## 5.9 Test Instruments list

| Radiated Emission:            |                 |                 |                   |                     |                          |
|-------------------------------|-----------------|-----------------|-------------------|---------------------|--------------------------|
| Test Equipment                | Manufacturer    | Model No.       | Management Number | Cal.Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| 3m SAC                        | SAEMC           | 9m*6m*6m        | WXJ001-1          | 01-19-2021          | 01-18-2024               |
| BiConiLog Antenna             | SCHWARZBECK     | VULB9163        | WXJ002            | 03-03-2021          | 03-02-2022               |
| Biconical Antenna             | SCHWARZBECK     | VUBA9117        | WXJ002-1          | 06-20-2021          | 06-19-2022               |
| Horn Antenna                  | SCHWARZBECK     | BBHA9120D       | WXJ002-2          | 03-03-2021          | 03-02-2022               |
| Horn Antenna                  | SCHWARZBECK     | BBHA9120D       | WXJ002-3          | 06-18-2021          | 06-17-2022               |
| Loop Antenna                  | SCHWARZBECK     | FMZB 1519 B     | WXJ002-4          | 03-07-2021          | 03-06-2022               |
| Pre-amplifier (30MHz ~ 1GHz)  | HP              | 8447D           | WXG001-2          | 03-07-2021          | 03-06-2022               |
| Pre-amplifier (1GHz ~ 18GHz)  | SKET            | LNPA_0118G-50   | WXG001-3          | 03-07-2021          | 03-06-2022               |
| Pre-amplifier (18GHz ~ 40GHz) | RF System       | TRLA-180400G45B | WXG001-9          | 03-07-2021          | 03-06-2022               |
| EMI Test Receiver             | Rohde & Schwarz | ESRP7           | WXJ003-1          | 03-03-2021          | 03-02-2022               |
| Spectrum analyzer             | Rohde & Schwarz | FSP30           | WXJ004            | 03-03-2021          | 03-02-2022               |
| Spectrum Analyzer             | KEYSIGHT        | N9010B          | WXJ004-2          | 11-27-2020          | 11-26-2021               |
| Signal Generator              | Agilent         | N5173B          | WXJ006-7          | 03-25-2021          | 03-24-2022               |
| Simulated Station             | Rohde & Schwarz | CMW500          | WXJ008-3          | 06-17-2021          | 06-16-2022               |
| Coaxial Cable (30MHz ~ 1GHz)  | JYT             | JYT3M-1G-NN-8M  | WXG001-4          | 03-07-2021          | 03-06-2022               |
| Coaxial Cable (1GHz ~ 18GHz)  | JYT             | JYT3M-18G-NN-8M | WXG001-5          | 03-07-2021          | 03-06-2022               |
| Coaxial Cable (9kHz ~ 30MHz)  | JYT             | JYT3M-1G-BB-5M  | WXG001-6          | 03-07-2021          | 03-06-2022               |
| Coaxial Cable (1GHz ~ 18GHz)  | JYT             | JYT3M-40G-SS-8M | WXG001-7          | 03-07-2021          | 03-06-2022               |
| RF Switch Unit                | Tonscend        | JS0806-F        | WXJ089            | N/A                 |                          |
| Test Software                 | Tonscend        | TS+             | Version: 3.0.0.1  |                     |                          |

## 6. Test results

### 6.1 Field strength of spurious radiation measurement

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part 22.917(a), FCC part 24.238(a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Limit:            | -13dBm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test setup:       | <p>Below 1GHz</p>  <p>Above 1GHz</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li> <li>2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.</li> <li>3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.</li> <li>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.<br/> <math display="block">ERP / EIRP = S.G. \text{ output (dBm) } + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}</math> </li> </ol> |
| Test Instruments: | Refer to section 5.9 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Test mode:        | Refer to section 5.3 for details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Test results:     | Passed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Measurement Data (worst case):**

| GSM850                                                                                                       |                  |                |                |                |            |
|--------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|----------------|------------|
| Test Channel = Low Channel                                                                                   |                  |                |                |                |            |
| Freq.<br>[MHz]                                                                                               | Reading<br>[dBm] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1001.5001                                                                                                    | 21.23            | -65.74         | -13.00         | 52.74          | Horizontal |
| 1523.1262                                                                                                    | 21.96            | -67.03         | -13.00         | 54.03          | Horizontal |
| 2472.7736                                                                                                    | 32.24            | -53.34         | -13.00         | 40.34          | Horizontal |
| 3534.4767                                                                                                    | 52.82            | -62.38         | -13.00         | 49.38          | Horizontal |
| 5690.9345                                                                                                    | 49.36            | -57.54         | -13.00         | 44.54          | Horizontal |
| 9998.5999                                                                                                    | 46.55            | -51.69         | -13.00         | 38.69          | Horizontal |
| 1000.0000                                                                                                    | 21.45            | -65.46         | -13.00         | 52.46          | Vertical   |
| 1938.8469                                                                                                    | 25.00            | -62.95         | -13.00         | 49.95          | Vertical   |
| 2976.5988                                                                                                    | 22.03            | -60.96         | -13.00         | 47.96          | Vertical   |
| 5161.7081                                                                                                    | 50.14            | -59.23         | -13.00         | 46.23          | Vertical   |
| 7972.3486                                                                                                    | 48.18            | -53.74         | -13.00         | 40.74          | Vertical   |
| 9554.7777                                                                                                    | 46.82            | -51.88         | -13.00         | 38.88          | Vertical   |
| <b>Remark:</b> The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. |                  |                |                |                |            |

| GSM850                                                                                                       |                  |                |                |                |            |
|--------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|----------------|------------|
| Test Channel = Middle Channel                                                                                |                  |                |                |                |            |
| Freq.<br>[MHz]                                                                                               | Reading<br>[dBm] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1005.0003                                                                                                    | 21.57            | -65.54         | -13.00         | 52.54          | Horizontal |
| 1867.5434                                                                                                    | 21.72            | -66.82         | -13.00         | 53.82          | Horizontal |
| 2985.6993                                                                                                    | 21.95            | -60.99         | -13.00         | 47.99          | Horizontal |
| 3925.7963                                                                                                    | 51.26            | -62.57         | -13.00         | 49.57          | Horizontal |
| 6882.3941                                                                                                    | 49.08            | -55.44         | -13.00         | 42.44          | Horizontal |
| 9994.3997                                                                                                    | 46.23            | -52.01         | -13.00         | 39.01          | Horizontal |
| 1000.9000                                                                                                    | 21.23            | -65.72         | -13.00         | 52.72          | Vertical   |
| 1507.2254                                                                                                    | 22.13            | -66.71         | -13.00         | 53.71          | Vertical   |
| 2265.1633                                                                                                    | 22.07            | -64.34         | -13.00         | 51.34          | Vertical   |
| 2995.3998                                                                                                    | 21.84            | -61.05         | -13.00         | 48.05          | Vertical   |
| 6470.0735                                                                                                    | 48.44            | -56.86         | -13.00         | 43.86          | Vertical   |
| 9572.6286                                                                                                    | 46.54            | -51.97         | -13.00         | 38.97          | Vertical   |
| <b>Remark:</b> The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. |                  |                |                |                |            |

| GSM850                                                                                                       |                  |                |                |                |            |
|--------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|----------------|------------|
| Test Channel = High Channel                                                                                  |                  |                |                |                |            |
| Freq.<br>[MHz]                                                                                               | Reading<br>[dBm] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1003.5002                                                                                                    | 21.32            | -65.73         | -13.00         | 52.73          | Horizontal |
| 1667.2334                                                                                                    | 21.45            | -67.60         | -13.00         | 54.60          | Horizontal |
| 2971.2986                                                                                                    | 22.05            | -60.97         | -13.00         | 47.97          | Horizontal |
| 3936.2968                                                                                                    | 51.35            | -62.47         | -13.00         | 49.47          | Horizontal |
| 7468.6734                                                                                                    | 48.55            | -53.74         | -13.00         | 40.74          | Horizontal |
| 9364.0182                                                                                                    | 46.78            | -51.93         | -13.00         | 38.93          | Horizontal |
| 1001.4001                                                                                                    | 21.22            | -65.75         | -13.00         | 52.75          | Vertical   |
| 1565.6283                                                                                                    | 21.81            | -67.51         | -13.00         | 54.51          | Vertical   |
| 2986.6993                                                                                                    | 22.06            | -60.88         | -13.00         | 47.88          | Vertical   |
| 4418.6209                                                                                                    | 51.46            | -60.73         | -13.00         | 47.73          | Vertical   |
| 7361.5681                                                                                                    | 48.74            | -54.22         | -13.00         | 41.22          | Vertical   |
| 9991.2496                                                                                                    | 45.91            | -52.32         | -13.00         | 39.32          | Vertical   |
| <b>Remark:</b> The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report. |                  |                |                |                |            |

| PCS1900                                                                                                                                                     |                  |                |                |                |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|----------------|------------|
| Test Channel = Low Channel                                                                                                                                  |                  |                |                |                |            |
| Freq.<br>[MHz]                                                                                                                                              | Reading<br>[dBm] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1026.5033                                                                                                                                                   | 20.62            | -50.26         | -13.00         | 37.26          | Horizontal |
| 2141.8927                                                                                                                                                   | 20.87            | -47.27         | -13.00         | 34.27          | Horizontal |
| 2939.4924                                                                                                                                                   | 21.09            | -43.66         | -13.00         | 30.66          | Horizontal |
| 5550.8775                                                                                                                                                   | 62.66            | -45.23         | -13.00         | 32.23          | Horizontal |
| 11130.4065                                                                                                                                                  | 45.81            | -49.95         | -13.00         | 36.95          | Horizontal |
| 17928.7464                                                                                                                                                  | 46.26            | -46.64         | -13.00         | 33.64          | Horizontal |
| 1027.2534                                                                                                                                                   | 20.60            | -50.27         | -13.00         | 37.27          | Vertical   |
| 2279.1599                                                                                                                                                   | 21.05            | -46.70         | -13.00         | 33.70          | Vertical   |
| 3000.0000                                                                                                                                                   | 21.07            | -43.38         | -13.00         | 30.38          | Vertical   |
| 5550.8775                                                                                                                                                   | 61.44            | -46.45         | -13.00         | 33.45          | Vertical   |
| 9240.3120                                                                                                                                                   | 46.75            | -51.86         | -13.00         | 38.86          | Vertical   |
| 17947.4974                                                                                                                                                  | 46.38            | -46.46         | -13.00         | 33.46          | Vertical   |
| <b>Remark:</b><br>1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.<br>2. Quote FCC ID: 2AJOTTA-1390 report. |                  |                |                |                |            |

| PCS1900                                                                                                                                                    |                  |                |                |                |            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|----------------|------------|
| Test Channel = Middle Channel                                                                                                                              |                  |                |                |                |            |
| Freq.<br>[MHz]                                                                                                                                             | Reading<br>[dBm] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1007.0009                                                                                                                                                  | 20.91            | -50.26         | -13.00         | 37.26          | Horizontal |
| 2286.9109                                                                                                                                                  | 20.91            | -46.74         | -13.00         | 33.74          | Horizontal |
| 2929.2412                                                                                                                                                  | 21.18            | -43.54         | -13.00         | 30.54          | Horizontal |
| 5640.1320                                                                                                                                                  | 61.06            | -46.46         | -13.00         | 33.46          | Horizontal |
| 9576.3288                                                                                                                                                  | 45.88            | -52.59         | -13.00         | 39.59          | Horizontal |
| 17992.4996                                                                                                                                                 | 46.91            | -46.81         | -13.00         | 33.81          | Horizontal |
| 1040.7551                                                                                                                                                  | 20.64            | -50.13         | -13.00         | 37.13          | Vertical   |
| 2250.1563                                                                                                                                                  | 21.03            | -46.61         | -13.00         | 33.61          | Vertical   |
| 2998.2498                                                                                                                                                  | 21.04            | -43.47         | -13.00         | 30.47          | Vertical   |
| 5640.1320                                                                                                                                                  | 63.50            | -44.02         | -13.00         | 31.02          | Vertical   |
| 10653.3827                                                                                                                                                 | 46.90            | -49.97         | -13.00         | 36.97          | Vertical   |
| 17757.7379                                                                                                                                                 | 47.44            | -47.30         | -13.00         | 34.30          | Vertical   |
| <b>Remark:</b><br>1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.<br>2. Quote FCC ID: 2AJOTTA-1390 report |                  |                |                |                |            |

| PCS1900                                                                                                                                                                                                                             |                  |                |                |                |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|----------------|------------|
| Test Channel = High Channel                                                                                                                                                                                                         |                  |                |                |                |            |
| Freq.<br>[MHz]                                                                                                                                                                                                                      | Reading<br>[dBm] | Level<br>[dBm] | Limit<br>[dBm] | Margin<br>[dB] | Polarity   |
| 1029.0036                                                                                                                                                                                                                           | 20.67            | -50.18         | -13.00         | 37.18          | Horizontal |
| 1528.3160                                                                                                                                                                                                                           | 20.20            | -49.68         | -13.00         | 36.68          | Horizontal |
| 2998.4998                                                                                                                                                                                                                           | 20.60            | -43.90         | -13.00         | 30.90          | Horizontal |
| 4429.5715                                                                                                                                                                                                                           | 51.07            | -61.04         | -13.00         | 48.04          | Horizontal |
| 9520.8260                                                                                                                                                                                                                           | 46.83            | -51.87         | -13.00         | 38.87          | Horizontal |
| 17996.9999                                                                                                                                                                                                                          | 47.24            | -46.58         | -13.00         | 33.58          | Horizontal |
| 1027.7535                                                                                                                                                                                                                           | 20.73            | -50.14         | -13.00         | 37.14          | Vertical   |
| 1721.5902                                                                                                                                                                                                                           | 20.69            | -49.45         | -13.00         | 36.45          | Vertical   |
| 2999.4999                                                                                                                                                                                                                           | 20.91            | -43.56         | -13.00         | 30.56          | Vertical   |
| 4482.0741                                                                                                                                                                                                                           | 50.87            | -60.96         | -13.00         | 47.96          | Vertical   |
| 9001.8001                                                                                                                                                                                                                           | 47.20            | -51.73         | -13.00         | 38.73          | Vertical   |
| 17985.7493                                                                                                                                                                                                                          | 47.35            | -46.23         | -13.00         | 33.23          | Vertical   |
| <b>Remark:</b><br>1. The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.<br>2. Quoting the FCC ID: 2AJOTTA-1390 report, it is found that this channel is the worst mode, retest the data. |                  |                |                |                |            |

## 7. Test Setup Photo

Reference to the test setup photos: PCE-Test Setup Photo

## 8. EUT Constructional Details

Reference to the External Photo and Internal Photo

-----End of report-----