# TEST REPORT



| EUT Description | **Convertible PC** |
|---|---|
| Brand Name | **HP** |
| Model Name | **TPN-C174** |
| FCC ID | **PD9BE200NG** |
| ISED ID | **1000M-BE200NG** |
| Date of Test Start/End | **2024-01-18 / 2024-01-18** |
| Features | **IEEE 802.11a/b/g/n/ac/ax/be** |

| Applicant | **Intel Corporation SAS** |
|---|---|
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| Test Report identification | **231026-04.TR01** |
|---|---|
| Revision Control | **Rev. 02**<br>**This test report replaces any previous versions of this test report**<br>(see Section 8) |

The test results relate only to the samples tested.

Reviewed by
_____

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*Reference: **WRF-DCS-TF-098** Version: **001** Application Date: **12/01/2022*** 1 of 19

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# 1. Standards, reference documents and applicable test methods

    a.  KDB 388624 D02 Pre-Approval Guidance List v18, PRE-APPROVAL GUIDANCE LIST

    b.  FCC Presentations TCB Workshop November 2019, RF exposure procedures.

# 2. General conditions, competences and guarantees

- ✓ Intel WRF Lab only provides testing services and is committed to providing reliable, unbiased test results and interpretations.
- ✓ Intel WRF Lab is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.

# 3. Environmental Conditions

- ✓ At the site where the measurements were performed the following limits were not exceeded during the tests:

| Temperature | 22.7ºC ± 1ºC |
|---|---|
| Humidity | 40.7% ± 5% |

# 4. Test Sample

| Sample | ID # | Description | Model | Serial # | Note |
|---|---|---|---|---|---|
| #1 | 231026-04.S08 | Convertible PC | TPN-C174 | 769170800014 | - |

## 5. EUT Features

The herein information is provided by the customer.
Intel WRF Lab declines any responsibility for the accuracy of the stated customer provided information, especially if it has any impact on the correctness of test results presented in this report.

| Brand Name | HP |
|---|---|
| Model Name | TPN-C174 |
| Prototype / Production | Production |
| Host Identification | Convertible PC |

## 6. Remarks and comments

1. The test report is validation of the G sensor functionality

## 7. Test Results summary

### 7.1. WLAN Tx Power Table Summary

| Device Mode | Lid Angle range | LCD Direction | 2.4GHz-CH6 802.11b - 1Mbps | | | | 5GHz-CH120 802.11a - 6Mbps | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Target Power (dBm) | | Measured Power (dBm) | | Target Power (dBm) | | Measured Power (dBm) | |
| | | | Antenna AUX (1) | Antenna MAIN (2) | Antenna AUX (1) | Antenna MAIN (2) | Antenna AUX (1) | Antenna MAIN (2) | Antenna AUX (1) | Antenna MAIN (2) |
| Lid Close | 0°≤ - <30° | - | Standby | Standby | Standby | Standby | Standby | Standby | Standby | Standby |
| Laptop | 30°≤ - <130° | 0° | 20.5 | 20.5 | 20.17 | 20.32 | 21.25 | 21.25 | 20.16 | 20.83 |
| Tent | 200°≤ - <340° | 180° | 18.5 | 18.5 | 18.27 | 18.31 | 16.5 | 16.5 | 15.82 | 16.32 |
| Stand | 200°≤ - <340° | 0° | 22.5 | 22.0 | 20.17 | 20.32 | 21.25 | 21.25 | 20.16 | 20.83 |
| Tablet | 130°≤ - <200° 200°≤ - <340° 340°≤ - <360° | 0° 90°or 270° | 18.5 | 18.5 | 18.27 | 18.31 | 16.5 | 16.5 | 15.82 | 16.32 |
| Book | 30°≤ - <200° | 90° or 270° | 18.5 | 18.5 | 18.27 | 18.31 | 16.5 | 16.5 | 15.82 | 16.32 |

## 8. Document Revision History

| Revision # | Modified by | Revision Details |
|:---:|:---:|:---|
| Rev.00 | Cheiel In | First release |
| Rev.01 | Cheiel In | Modification of the model name in section 5 |
| Rev.02 | Cheiel In | Modification of maximum tune up power for 2.4GHz in laptop mode per customer request |

# Annex A.   Test & System description

## A.1     Test setup

The conducted power measurement test setup is described in the following and illustrated in Figure 1.

- The DUT is convertible PC from *HP* model *TPN-C174.* An *BE200NGW* connectivity module is installed inside
- The call box is used as an access point to manage the uplink and downlink data traffic.
- Uplink signal power is measured with the access point.
- Path loss in the power measurement setup from the wireless module antenna port to the access point is compensated
- ANT tool version .011404.23.0.0 is used on the DUT to query the power table index and sensor status

*Figure.1 – Power measurement test setup.*



Communication Tester

DUT
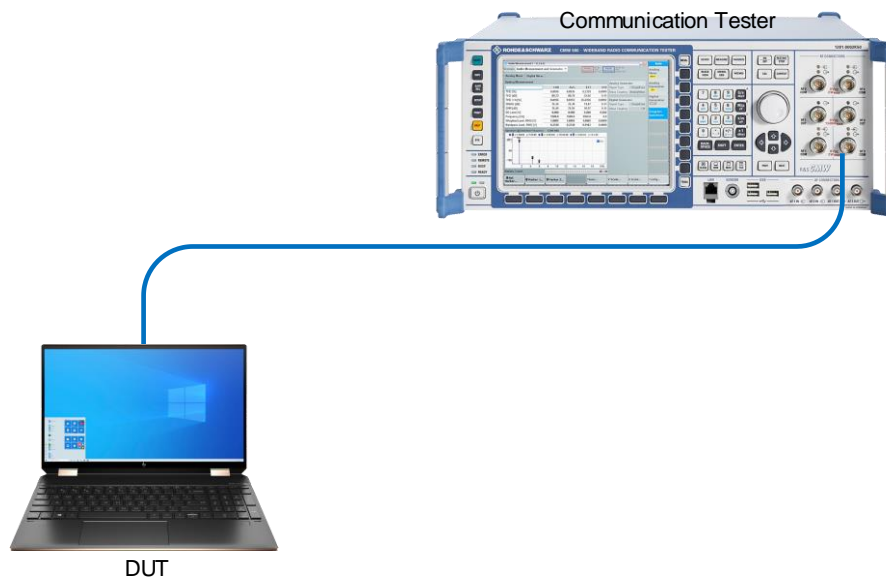
## A.2     Procedure

The following additional guidance applies only to convertible laptops whose screen rotates around one axis, from 0 degrees to 360 degrees, in a clamshell style, i.e., from closed mode to open mode, to "tent" mode, and finally, to tablet mode. This process must be followed to determine the lid angle where a power reduction occurs, by taking power measurements at each step, as indicated in the step listed here below:

1. From the lid in closed mode (0 degrees), open the screen in 10-degree steps until laptop mode is obtained
2. Lower the screen by 5 degrees increments to verify that the "closed mode" is triggered
3. From the position of the previous step, open the screen in 1-degree increments until laptop mode is triggered again
4. Continue opening the screen in 1-degree increments until at least 5 degrees past where "laptop mode" was obtained, then continue opening the screen in 10-degree steps until the device switches to tablet mode
5. Reverse the previous procedure to go from tablet mode back down to closed mode

## A.3      Test Equipment List

Equipment and accessories used for the conducted power measurement test setup are listed below. The Test Platform (DUT), test setup and associated equipment are shown in A.1.

| ID# | Device | Type/Model | Serial # | Manufacturer | Cal. Date | Cal. Due Date |
|---|---|---|---|---|---|---|
| **125-000** | Communication Tester | CMW500 | 129337 | Rohde & Schwartz | 2023-04-12 | 2025-04-12 |
| **022-003 022-004** | RF path (RF cable + Adapters) | - | - | - | RF path loss was verified before usage | |

## A.4      Measurement Uncertainty Evaluation

The system uncertainty evaluation is shown in the table below with a coverage factor of k = 2 to indicate a 95% level of confidence:

| Measurement type | Uncertainty | Unit |
|---|---|---|
| Power level | ±1 | dB |

# Annex B.   Test Results

## B.1      Trigger lid angle detection and power verification 2.4GHz

### B.1.1    LCD direction 0°

The lid is rotating from 0 to 360. The screen is vertical, LCD direction is 0 degree.

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Lid close | 0 | Standby | Standby |
| | 10 | Standby | Standby |
| | 20 | Standby | Standby |
| Laptop | 30 | 20.17 | 20.32 |
| Lid close | 25 | Standby | Standby |
| | 26 | Standby | Standby |
| | 27 | Standby | Standby |
| | 28 | Standby | Standby |
| | 29 | Standby | Standby |
| Laptop | 30 | 20.17 | 20.32 |
| | 31 | 20.17 | 20.32 |
| | 32 | 20.17 | 20.32 |
| | 33 | 20.17 | 20.32 |
| | 34 | 20.17 | 20.32 |
| | 35 | 20.17 | 20.32 |
| | 40 | 20.17 | 20.32 |
| | 50 | 20.17 | 20.32 |
| | 60 | 20.17 | 20.32 |
| | 70 | 20.17 | 20.32 |
| | 80 | 20.17 | 20.32 |
| | 90 | 20.17 | 20.32 |
| | 100 | 20.17 | 20.32 |
| | 110 | 20.17 | 20.32 |
| | 120 | 20.17 | 20.32 |
| | 130 | 20.17 | 20.32 |
| Tablet | 140 | 18.27 | 18.31 |
| Laptop | 135 | 20.17 | 20.32 |
| Tablet | 136 | 18.27 | 18.31 |
| | 137 | 18.27 | 18.31 |
| | 138 | 18.27 | 18.31 |
| | 139 | 18.27 | 18.31 |
| | 140 | 18.27 | 18.31 |
| | 150 | 18.27 | 18.31 |
| | 160 | 18.27 | 18.31 |
| | 170 | 18.27 | 18.31 |
| | 180 | 18.27 | 18.31 |
| | 190 | 18.27 | 18.31 |
| | 200 | 18.27 | 18.31 |
| Stand | 210 | 20.17 | 20.32 |
| Tablet | 205 | 18.27 | 18.31 |
| Stand | 206 | 20.17 | 20.32 |
| | 207 | 20.17 | 20.32 |
| | 208 | 20.17 | 20.32 |
| | 209 | 20.17 | 20.32 |
| | 210 | 20.17 | 20.32 |
| | 220 | 20.17 | 20.32 |
| | 230 | 20.17 | 20.32 |

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Stand | 240 | 20.17 | 20.32 |
| | 250 | 20.17 | 20.32 |
| | 260 | 20.17 | 20.32 |
| | 270 | 20.17 | 20.32 |
| | 280 | 20.17 | 20.32 |
| | 290 | 20.17 | 20.32 |
| | 300 | 20.17 | 20.32 |
| | 310 | 20.17 | 20.32 |
| | 320 | 20.17 | 20.32 |
| | 330 | 20.17 | 20.32 |
| | 340 | 20.17 | 20.32 |
| Tablet | 350 | 18.27 | 18.31 |
| Stand | 345 | 20.17 | 20.32 |
| Tablet | 346 | 18.27 | 18.31 |
| | 347 | 18.27 | 18.31 |
| | 348 | 18.27 | 18.31 |
| | 349 | 18.27 | 18.31 |
| | 350 | 18.27 | 18.31 |
| | 351 | 18.27 | 18.31 |
| | 360 | 18.27 | 18.31 |

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The lid is rotating from 360 degrees to 0 degree. The screen is vertical, LCD direction to 0 degree.

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Tablet | 360 | 18.27 | 18.31 |
| | 350 | 18.27 | 18.31 |
| | 340 | 18.27 | 18.31 |
| Stand | 330 | 20.17 | 20.32 |
| Tablet | 335 | 18.27 | 18.31 |
| Stand | 334 | 20.17 | 20.32 |
| | 333 | 20.17 | 20.32 |
| | 332 | 20.17 | 20.32 |
| | 331 | 20.17 | 20.32 |
| | 330 | 20.17 | 20.32 |
| | 329 | 20.17 | 20.32 |
| | 320 | 20.17 | 20.32 |
| | 310 | 20.17 | 20.32 |
| | 300 | 20.17 | 20.32 |
| | 290 | 20.17 | 20.32 |
| | 280 | 20.17 | 20.32 |
| | 270 | 20.17 | 20.32 |
| | 260 | 20.17 | 20.32 |
| | 250 | 20.17 | 20.32 |
| | 240 | 20.17 | 20.32 |
| | 230 | 20.17 | 20.32 |
| | 220 | 20.17 | 20.32 |
| | 210 | 20.17 | 20.32 |
| | 200 | 20.17 | 20.32 |
| Tablet | 190 | 18.27 | 18.31 |
| Stand | 195 | 20.17 | 20.32 |
| Tablet | 194 | 18.27 | 18.31 |
| | 193 | 18.27 | 18.31 |
| | 192 | 18.27 | 18.31 |
| | 191 | 18.27 | 18.31 |
| | 190 | 18.27 | 18.31 |
| | 180 | 18.27 | 18.31 |
| | 170 | 18.27 | 18.31 |
| | 160 | 18.27 | 18.31 |
| | 150 | 18.27 | 18.31 |
| | 140 | 18.27 | 18.31 |
| | 130 | 18.27 | 18.31 |
| Laptop | 120 | 20.17 | 20.32 |
| Tablet | 125 | 18.27 | 18.31 |
| Laptop | 124 | 20.17 | 20.32 |
| | 123 | 20.17 | 20.32 |
| | 122 | 20.17 | 20.32 |
| | 121 | 20.17 | 20.32 |
| | 120 | 20.17 | 20.32 |

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Laptop | 110 | 20.17 | 20.32 |
| | 100 | 20.17 | 20.32 |
| | 90 | 20.17 | 20.32 |
| | 80 | 20.17 | 20.32 |
| | 70 | 20.17 | 20.32 |
| | 60 | 20.17 | 20.32 |
| | 50 | 20.17 | 20.32 |
| | 40 | 20.17 | 20.32 |
| | 30 | 20.17 | 20.32 |
| Lid close | 20 | Standby | Standby |
| Laptop | 25 | 20.17 | 20.32 |
| Lid close | 24 | Standby | Standby |
| | 23 | Standby | Standby |
| | 22 | Standby | Standby |
| | 21 | Standby | Standby |
| | 20 | Standby | Standby |
| | 10 | Standby | Standby |
| | 0 | Standby | Standby |

## B.1.2   LCD direction 90/270°

The lid is rotating from 0 to 360 degrees. The screen is vertical, LCD direction to 90 degrees.

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Lid close | 0 | Standby | Standby |
| | 10 | Standby | Standby |
| | 20 | Standby | Standby |
| Book | 30 | 18.27 | 18.31 |
| Lid close | 25 | Standby | Standby |
| | 26 | Standby | Standby |
| | 27 | Standby | Standby |
| | 28 | Standby | Standby |
| | 29 | Standby | Standby |
| Book | 30 | 18.27 | 18.31 |
| | 31 | 18.27 | 18.31 |
| | 32 | 18.27 | 18.31 |
| | 33 | 18.27 | 18.31 |
| | 34 | 18.27 | 18.31 |
| | 35 | 18.27 | 18.31 |
| | 40 | 18.27 | 18.31 |
| | 50 | 18.27 | 18.31 |
| | 60 | 18.27 | 18.31 |
| | 70 | 18.27 | 18.31 |
| | 80 | 18.27 | 18.31 |
| | 90 | 18.27 | 18.31 |
| | 100 | 18.27 | 18.31 |
| | 110 | 18.27 | 18.31 |
| | 120 | 18.27 | 18.31 |
| | 130 | 18.27 | 18.31 |
| | 140 | 18.27 | 18.31 |
| | 150 | 18.27 | 18.31 |
| | 160 | 18.27 | 18.31 |
| | 170 | 18.27 | 18.31 |
| | 180 | 18.27 | 18.31 |
| | 190 | 18.27 | 18.31 |
| | 200 | 18.27 | 18.31 |
| Tablet | 210 | 18.27 | 18.31 |
| Book | 205 | 18.27 | 18.31 |
| Tablet | 206 | 18.27 | 18.31 |
| | 207 | 18.27 | 18.31 |
| | 208 | 18.27 | 18.31 |
| | 209 | 18.27 | 18.31 |
| | 210 | 18.27 | 18.31 |
| | 220 | 18.27 | 18.31 |
| | 230 | 18.27 | 18.31 |
| | 240 | 18.27 | 18.31 |
| | 250 | 18.27 | 18.31 |
| | 260 | 18.27 | 18.31 |
| | 270 | 18.27 | 18.31 |
| | 280 | 18.27 | 18.31 |
| | 290 | 18.27 | 18.31 |
| | 300 | 18.27 | 18.31 |
| | 310 | 18.27 | 18.31 |
| | 320 | 18.27 | 18.31 |
| | 330 | 18.27 | 18.31 |
| | 340 | 18.27 | 18.31 |
| | 350 | 18.27 | 18.31 |
| | 360 | 18.27 | 18.31 |

The lid is rotating from 360 to 0 degree. The screen is vertical, LCD direction to 90 or 270 degrees.

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
| --- | --- | --- | --- |
| | | AUX (1) | MAIN (2) |
| Tablet | 360 | 18.27 | 18.31 |
| | 350 | 18.27 | 18.31 |
| | 340 | 18.27 | 18.31 |
| | 330 | 18.27 | 18.31 |
| | 320 | 18.27 | 18.31 |
| | 310 | 18.27 | 18.31 |
| | 300 | 18.27 | 18.31 |
| | 290 | 18.27 | 18.31 |
| | 280 | 18.27 | 18.31 |
| | 270 | 18.27 | 18.31 |
| | 260 | 18.27 | 18.31 |
| | 250 | 18.27 | 18.31 |
| | 240 | 18.27 | 18.31 |
| | 230 | 18.27 | 18.31 |
| | 220 | 18.27 | 18.31 |
| | 210 | 18.27 | 18.31 |
| | 200 | 18.27 | 18.31 |
| Book | 190 | 18.27 | 18.31 |
| Tablet | 195 | 18.27 | 18.31 |
| Book | 194 | 18.27 | 18.31 |
| | 193 | 18.27 | 18.31 |
| | 192 | 18.27 | 18.31 |
| | 191 | 18.27 | 18.31 |
| | 190 | 18.27 | 18.31 |
| | 180 | 18.27 | 18.31 |
| | 170 | 18.27 | 18.31 |
| | 160 | 18.27 | 18.31 |
| | 150 | 18.27 | 18.31 |
| | 140 | 18.27 | 18.31 |
| | 130 | 18.27 | 18.31 |
| | 120 | 18.27 | 18.31 |
| | 110 | 18.27 | 18.31 |
| | 100 | 18.27 | 18.31 |
| | 90 | 18.27 | 18.31 |
| | 80 | 18.27 | 18.31 |
| | 70 | 18.27 | 18.31 |
| | 60 | 18.27 | 18.31 |
| | 50 | 18.27 | 18.31 |
| | 40 | 18.27 | 18.31 |
| | 30 | 18.27 | 18.31 |
| Lid close | 20 | Standby | Standby |
| Book | 25 | 18.27 | 18.31 |
| Lid close | 24 | Standby | Standby |
| | 23 | Standby | Standby |
| | 22 | Standby | Standby |
| | 21 | Standby | Standby |
| | 20 | Standby | Standby |
| | 10 | Standby | Standby |
| | 0 | Standby | Standby |

## B.1.3   LCD direction 180°

The lid is rotating from 360 degrees to 180 degrees. The screen is vertical, LCD direction to 180 degrees.
Note: The LCD direction switch to 0 degrees for low angle.

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Tablet | 360 | 18.27 | 18.31 |
| | 350 | 18.27 | 18.31 |
| | 340 | 18.27 | 18.31 |
| Tent | 330 | 18.27 | 18.31 |
| Tablet | 335 | 18.27 | 18.31 |
| Tent | 334 | 18.27 | 18.31 |
| | 333 | 18.27 | 18.31 |
| | 332 | 18.27 | 18.31 |
| | 331 | 18.27 | 18.31 |
| | 330 | 18.27 | 18.31 |
| | 320 | 18.27 | 18.31 |
| | 310 | 18.27 | 18.31 |
| | 300 | 18.27 | 18.31 |
| | 290 | 18.27 | 18.31 |
| | 280 | 18.27 | 18.31 |
| | 270 | 18.27 | 18.31 |
| | 260 | 18.27 | 18.31 |
| | 250 | 18.27 | 18.31 |
| | 240 | 18.27 | 18.31 |
| | 230 | 18.27 | 18.31 |
| | 220 | 18.27 | 18.31 |
| | 210 | 18.27 | 18.31 |
| | 200 | 18.27 | 18.31 |
| Tablet | 190 | 18.27 | 18.31 |
| Tent | 195 | 18.27 | 18.31 |
| Tablet | 194 | 18.27 | 18.31 |
| | 193 | 18.27 | 18.31 |
| | 192 | 18.27 | 18.31 |
| | 191 | 18.27 | 18.31 |
| | 190 | 18.27 | 18.31 |
| | 180 | 18.27 | 18.31 |

The lid is rotating from 180 degrees to 360 degrees. The screen is vertical, LCD direction to 180 degrees.
Note: The LCD direction switch to 0 degrees for low angle.

| Mode | Angle (degree) | Power measured 2.4GHz-Ch6(dBm) | |
| --- | --- | --- | --- |
| | | AUX (1) | MAIN (2) |
| Tablet | 180 | 18.27 | 18.31 |
| | 190 | 18.27 | 18.31 |
| Tent | 200 | 18.27 | 18.31 |
| Tablet | 195 | 18.27 | 18.31 |
| Tent | 196 | 18.27 | 18.31 |
| | 197 | 18.27 | 18.31 |
| | 198 | 18.27 | 18.31 |
| | 199 | 18.27 | 18.31 |
| | 200 | 18.27 | 18.31 |
| | 210 | 18.27 | 18.31 |
| | 220 | 18.27 | 18.31 |
| | 230 | 18.27 | 18.31 |
| | 240 | 18.27 | 18.31 |
| | 250 | 18.27 | 18.31 |
| | 260 | 18.27 | 18.31 |
| | 270 | 18.27 | 18.31 |
| | 280 | 18.27 | 18.31 |
| | 290 | 18.27 | 18.31 |
| | 300 | 18.27 | 18.31 |
| | 310 | 18.27 | 18.31 |
| | 320 | 18.27 | 18.31 |
| | 330 | 18.27 | 18.31 |
| Tablet | 340 | 18.27 | 18.31 |
| Tent | 335 | 18.27 | 18.31 |
| | 336 | 18.27 | 18.31 |
| | 337 | 18.27 | 18.31 |
| | 338 | 18.27 | 18.31 |
| | 339 | 18.27 | 18.31 |
| Tablet | 340 | 18.27 | 18.31 |
| | 350 | 18.27 | 18.31 |
| | 360 | 18.27 | 18.31 |

## B.2　　Trigger lid angle detection and power verification 5GHz

## B.2.1　LCD direction 0°

The lid is rotating from 0 to 360. The screen is vertical, LCD direction is 0 degree.

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Lid close | 0 | Standby | Standby |
| | 10 | Standby | Standby |
| | 20 | Standby | Standby |
| Laptop | 30 | 20.16 | 20.83 |
| Lid close | 25 | Standby | Standby |
| | 26 | Standby | Standby |
| | 27 | Standby | Standby |
| | 28 | Standby | Standby |
| | 29 | Standby | Standby |
| Laptop | 30 | 20.16 | 20.83 |
| | 31 | 20.16 | 20.83 |
| | 32 | 20.16 | 20.83 |
| | 33 | 20.16 | 20.83 |
| | 34 | 20.16 | 20.83 |
| | 35 | 20.16 | 20.83 |
| | 40 | 20.16 | 20.83 |
| | 50 | 20.16 | 20.83 |
| | 60 | 20.16 | 20.83 |
| | 70 | 20.16 | 20.83 |
| | 80 | 20.16 | 20.83 |
| | 90 | 20.16 | 20.83 |
| | 100 | 20.16 | 20.83 |
| | 110 | 20.16 | 20.83 |
| | 120 | 20.16 | 20.83 |
| | 130 | 20.16 | 20.83 |
| Tablet | 140 | 15.82 | 16.32 |
| Laptop | 135 | 20.16 | 20.83 |
| Tablet | 136 | 15.82 | 16.32 |
| | 137 | 15.82 | 16.32 |
| | 138 | 15.82 | 16.32 |
| | 139 | 15.82 | 16.32 |
| | 140 | 15.82 | 16.32 |
| | 150 | 15.82 | 16.32 |
| | 160 | 15.82 | 16.32 |
| | 170 | 15.82 | 16.32 |
| | 180 | 15.82 | 16.32 |
| | 190 | 15.82 | 16.32 |
| | 200 | 15.82 | 16.32 |
| Stand | 210 | 20.16 | 20.83 |
| Tablet | 205 | 15.82 | 16.32 |
| Stand | 206 | 20.16 | 20.83 |
| | 207 | 20.16 | 20.83 |
| | 208 | 20.16 | 20.83 |
| | 209 | 20.16 | 20.83 |
| | 210 | 20.16 | 20.83 |
| | 220 | 20.16 | 20.83 |
| | 230 | 20.16 | 20.83 |

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Stand | 240 | 20.16 | 20.83 |
| | 250 | 20.16 | 20.83 |
| | 260 | 20.16 | 20.83 |
| | 270 | 20.16 | 20.83 |
| | 280 | 20.16 | 20.83 |
| | 290 | 20.16 | 20.83 |
| | 300 | 20.16 | 20.83 |
| | 310 | 20.16 | 20.83 |
| | 320 | 20.16 | 20.83 |
| | 330 | 20.16 | 20.83 |
| | 340 | 20.16 | 20.83 |
| Tablet | 350 | 15.82 | 16.32 |
| Stand | 345 | 20.16 | 20.83 |
| Tablet | 346 | 15.82 | 16.32 |
| | 347 | 15.82 | 16.32 |
| | 348 | 15.82 | 16.32 |
| | 349 | 15.82 | 16.32 |
| | 350 | 15.82 | 16.32 |
| | 351 | 15.82 | 16.32 |
| | 360 | 15.82 | 16.32 |

The lid is rotating from 360 degrees to 0 degree. The screen is vertical, LCD direction to 0 degree.

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Tablet | 360 | 15.82 | 16.32 |
| | 350 | 15.82 | 16.32 |
| | 340 | 15.82 | 16.32 |
| Stand | 330 | 20.16 | 20.83 |
| Tablet | 335 | 15.82 | 16.32 |
| Stand | 334 | 20.16 | 20.83 |
| | 333 | 20.16 | 20.83 |
| | 332 | 20.16 | 20.83 |
| | 331 | 20.16 | 20.83 |
| | 330 | 20.16 | 20.83 |
| | 329 | 20.16 | 20.83 |
| | 320 | 20.16 | 20.83 |
| | 310 | 20.16 | 20.83 |
| | 300 | 20.16 | 20.83 |
| | 290 | 20.16 | 20.83 |
| | 280 | 20.16 | 20.83 |
| | 270 | 20.16 | 20.83 |
| | 260 | 20.16 | 20.83 |
| | 250 | 20.16 | 20.83 |
| | 240 | 20.16 | 20.83 |
| | 230 | 20.16 | 20.83 |
| | 220 | 20.16 | 20.83 |
| | 210 | 20.16 | 20.83 |
| | 200 | 20.16 | 20.83 |
| Tablet | 190 | 15.82 | 16.32 |
| Stand | 195 | 20.16 | 20.83 |
| Tablet | 194 | 15.82 | 16.32 |
| | 193 | 15.82 | 16.32 |
| | 192 | 15.82 | 16.32 |
| | 191 | 15.82 | 16.32 |
| | 190 | 15.82 | 16.32 |
| | 180 | 15.82 | 16.32 |
| | 170 | 15.82 | 16.32 |
| | 160 | 15.82 | 16.32 |
| | 150 | 15.82 | 16.32 |
| | 140 | 15.82 | 16.32 |
| | 130 | 15.82 | 16.32 |
| Laptop | 120 | 20.16 | 20.83 |
| Tablet | 125 | 15.82 | 16.32 |
| Laptop | 124 | 20.16 | 20.83 |
| | 123 | 20.16 | 20.83 |
| | 122 | 20.16 | 20.83 |
| | 121 | 20.16 | 20.83 |
| | 120 | 20.16 | 20.83 |

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Laptop | 110 | 20.16 | 20.83 |
| | 100 | 20.16 | 20.83 |
| | 90 | 20.16 | 20.83 |
| | 80 | 20.16 | 20.83 |
| | 70 | 20.16 | 20.83 |
| | 60 | 20.16 | 20.83 |
| | 50 | 20.16 | 20.83 |
| | 40 | 20.16 | 20.83 |
| | 30 | 20.16 | 20.83 |
| Lid close | 20 | Standby | Standby |
| Laptop | 25 | 20.16 | 20.83 |
| Lid close | 24 | Standby | Standby |
| | 23 | Standby | Standby |
| | 22 | Standby | Standby |
| | 21 | Standby | Standby |
| | 20 | Standby | Standby |
| | 10 | Standby | Standby |
| | 0 | Standby | Standby |

## B.2.2    LCD direction 90/270°

The lid is rotating from 0 to 360 degrees. The screen is vertical, LCD direction to 90 degrees.

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Lid close | 0 | Standby | Standby |
| | 10 | Standby | Standby |
| | 20 | Standby | Standby |
| Book | 30 | 15.82 | 16.32 |
| Lid close | 25 | Standby | Standby |
| | 26 | Standby | Standby |
| | 27 | Standby | Standby |
| | 28 | Standby | Standby |
| | 29 | Standby | Standby |
| Book | 30 | 15.82 | 16.32 |
| | 31 | 15.82 | 16.32 |
| | 32 | 15.82 | 16.32 |
| | 33 | 15.82 | 16.32 |
| | 34 | 15.82 | 16.32 |
| | 35 | 15.82 | 16.32 |
| | 40 | 15.82 | 16.32 |
| | 50 | 15.82 | 16.32 |
| | 60 | 15.82 | 16.32 |
| | 70 | 15.82 | 16.32 |
| | 80 | 15.82 | 16.32 |
| | 90 | 15.82 | 16.32 |
| | 100 | 15.82 | 16.32 |
| | 110 | 15.82 | 16.32 |
| | 120 | 15.82 | 16.32 |
| | 130 | 15.82 | 16.32 |
| | 140 | 15.82 | 16.32 |
| | 150 | 15.82 | 16.32 |
| | 160 | 15.82 | 16.32 |
| | 170 | 15.82 | 16.32 |
| | 180 | 15.82 | 16.32 |
| | 190 | 15.82 | 16.32 |
| | 200 | 15.82 | 16.32 |
| Tablet | 210 | 15.82 | 16.32 |
| Book | 205 | 15.82 | 16.32 |
| Tablet | 206 | 15.82 | 16.32 |
| | 207 | 15.82 | 16.32 |
| | 208 | 15.82 | 16.32 |
| | 209 | 15.82 | 16.32 |
| | 210 | 15.82 | 16.32 |
| | 220 | 15.82 | 16.32 |
| | 230 | 15.82 | 16.32 |
| | 240 | 15.82 | 16.32 |
| | 250 | 15.82 | 16.32 |
| | 260 | 15.82 | 16.32 |
| | 270 | 15.82 | 16.32 |
| | 280 | 15.82 | 16.32 |
| | 290 | 15.82 | 16.32 |
| | 300 | 15.82 | 16.32 |
| | 310 | 15.82 | 16.32 |
| | 320 | 15.82 | 16.32 |
| | 330 | 15.82 | 16.32 |
| | 340 | 15.82 | 16.32 |
| | 350 | 15.82 | 16.32 |
| | 360 | 15.82 | 16.32 |

The lid is rotating from 360 to 0 degree. The screen is vertical, LCD direction to 90 or 270 degrees.

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
|---|---|---|---|
| | | AUX (1) | MAIN (2) |
| Tablet | 360 | 15.82 | 16.32 |
| | 350 | 15.82 | 16.32 |
| | 340 | 15.82 | 16.32 |
| | 330 | 15.82 | 16.32 |
| | 320 | 15.82 | 16.32 |
| | 310 | 15.82 | 16.32 |
| | 300 | 15.82 | 16.32 |
| | 290 | 15.82 | 16.32 |
| | 280 | 15.82 | 16.32 |
| | 270 | 15.82 | 16.32 |
| | 260 | 15.82 | 16.32 |
| | 250 | 15.82 | 16.32 |
| | 240 | 15.82 | 16.32 |
| | 230 | 15.82 | 16.32 |
| | 220 | 15.82 | 16.32 |
| | 210 | 15.82 | 16.32 |
| | 200 | 15.82 | 16.32 |
| Book | 190 | 15.82 | 16.32 |
| Tablet | 195 | 15.82 | 16.32 |
| Book | 194 | 15.82 | 16.32 |
| | 193 | 15.82 | 16.32 |
| | 192 | 15.82 | 16.32 |
| | 191 | 15.82 | 16.32 |
| | 190 | 15.82 | 16.32 |
| | 180 | 15.82 | 16.32 |
| | 170 | 15.82 | 16.32 |
| | 160 | 15.82 | 16.32 |
| | 150 | 15.82 | 16.32 |
| | 140 | 15.82 | 16.32 |
| | 130 | 15.82 | 16.32 |
| | 120 | 15.82 | 16.32 |
| | 110 | 15.82 | 16.32 |
| | 100 | 15.82 | 16.32 |
| | 90 | 15.82 | 16.32 |
| | 80 | 15.82 | 16.32 |
| | 70 | 15.82 | 16.32 |
| | 60 | 15.82 | 16.32 |
| | 50 | 15.82 | 16.32 |
| | 40 | 15.82 | 16.32 |
| | 30 | 15.82 | 16.32 |
| Lid close | 20 | Standby | Standby |
| Book | 25 | 15.82 | 16.32 |
| Lid close | 24 | Standby | Standby |
| | 23 | Standby | Standby |
| | 22 | Standby | Standby |
| | 21 | Standby | Standby |
| | 20 | Standby | Standby |
| | 10 | Standby | Standby |
| | 0 | Standby | Standby |

## B.2.3   LCD direction 180°

The lid is rotating from 360 degrees to 180 degrees. The screen is vertical, LCD direction to 180 degrees.
Note: The LCD direction switch to 0 degrees for low angle.

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) AUX (1) | MAIN (2) |
|---|---|---|---|
| Tablet | 360 | 15.82 | 16.32 |
| | 350 | 15.82 | 16.32 |
| | 340 | 15.82 | 16.32 |
| Tent | 330 | 15.82 | 16.32 |
| Tablet | 335 | 15.82 | 16.32 |
| Tent | 334 | 15.82 | 16.32 |
| | 333 | 15.82 | 16.32 |
| | 332 | 15.82 | 16.32 |
| | 331 | 15.82 | 16.32 |
| | 330 | 15.82 | 16.32 |
| | 320 | 15.82 | 16.32 |
| | 310 | 15.82 | 16.32 |
| | 300 | 15.82 | 16.32 |
| | 290 | 15.82 | 16.32 |
| | 280 | 15.82 | 16.32 |
| | 270 | 15.82 | 16.32 |
| | 260 | 15.82 | 16.32 |
| | 250 | 15.82 | 16.32 |
| | 240 | 15.82 | 16.32 |
| | 230 | 15.82 | 16.32 |
| | 220 | 15.82 | 16.32 |
| | 210 | 15.82 | 16.32 |
| | 200 | 15.82 | 16.32 |
| Tablet | 190 | 15.82 | 16.32 |
| Tent | 195 | 15.82 | 16.32 |
| Tablet | 194 | 15.82 | 16.32 |
| | 193 | 15.82 | 16.32 |
| | 192 | 15.82 | 16.32 |
| | 191 | 15.82 | 16.32 |
| | 190 | 15.82 | 16.32 |
| | 180 | 15.82 | 16.32 |

The lid is rotating from 180 degrees to 360 degrees. The screen is vertical, LCD direction to 180 degrees.
Note: The LCD direction switch to 0 degrees for low angle.

| Mode | Angle (degree) | Power measured 5GHz-Ch120(dBm) | |
| --- | --- | --- | --- |
| | | AUX (1) | MAIN (2) |
| Tablet | 180 | 15.82 | 16.32 |
| | 190 | 15.82 | 16.32 |
| Tent | 200 | 15.82 | 16.32 |
| Tablet | 195 | 15.82 | 16.32 |
| Tent | 196 | 15.82 | 16.32 |
| | 197 | 15.82 | 16.32 |
| | 198 | 15.82 | 16.32 |
| | 199 | 15.82 | 16.32 |
| | 200 | 15.82 | 16.32 |
| | 210 | 15.82 | 16.32 |
| | 220 | 15.82 | 16.32 |
| | 230 | 15.82 | 16.32 |
| | 240 | 15.82 | 16.32 |
| | 250 | 15.82 | 16.32 |
| | 260 | 15.82 | 16.32 |
| | 270 | 15.82 | 16.32 |
| | 280 | 15.82 | 16.32 |
| | 290 | 15.82 | 16.32 |
| | 300 | 15.82 | 16.32 |
| | 310 | 15.82 | 16.32 |
| | 320 | 15.82 | 16.32 |
| | 330 | 15.82 | 16.32 |
| Tablet | 340 | 15.82 | 16.32 |
| Tent | 335 | 15.82 | 16.32 |
| | 336 | 15.82 | 16.32 |
| | 337 | 15.82 | 16.32 |
| | 338 | 15.82 | 16.32 |
| | 339 | 15.82 | 16.32 |
| Tablet | 340 | 15.82 | 16.32 |
| | 350 | 15.82 | 16.32 |
| | 360 | 15.82 | 16.32 |