

# ANTENNA INFORMATION

|                                                           |                         |                                         |
|-----------------------------------------------------------|-------------------------|-----------------------------------------|
| OEM                                                       | HB                      |                                         |
| ODM                                                       | Compal Electronics Inc. |                                         |
| Platform model name                                       | P143F                   |                                         |
| Intel platform (ex: Yes, No or NA)                        | Yes                     |                                         |
| Platform type (ex: regular NB, convertible PC, AIO...etc) | Regular NB              |                                         |
| SAR minimum separation (mm)                               | FCC (1g)                | 1.5mm (w/bumper)<br>0.8 mm (w/o bumper) |
|                                                           | ISED (1g)               | 1.5 mm (w/bumper)<br>0.8mm (w/o bumper) |
|                                                           | ISED (10g)              | 0.25 mm                                 |

|                      |                 |                                                                    |
|----------------------|-----------------|--------------------------------------------------------------------|
| Antenna manufacturer | Company name    | Hong-Bo Corporation                                                |
|                      | Address         | 4F., No.143, Sinhu 1st Rd., Neihu Dist., Taipei City, 11494 Taiwan |
| Test location        | Company name    | Hong-Bo Corporation                                                |
|                      | Address         | 4F., No.143, Sinhu 1st Rd., Neihu Dist., Taipei City, 11494 Taiwan |
| Test Personnel       | Name(Full name) | Rod Hsu                                                            |
|                      | E-mail          | rodhsu@ hong-bo.com.tw                                             |
|                      | Tel/Mobile      | 02-27926009                                                        |
| Testing date         | 2024/12/30      |                                                                    |

|                                       |      |                          |
|---------------------------------------|------|--------------------------|
| Antenna Part number                   | Main | Compal P/N:DC33002YJ0L   |
|                                       | Aux  | Antenna P/N: (330-24055) |
| Antenna type (ex: PIFA, Dipole...etc) |      | Compal P/N:DC33002YJ0L   |
|                                       |      | Antenna P/N: (330-24055) |
|                                       |      | Monopole                 |

| Antenna Peak gain w/ cable loss (dBi)* |                           |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|----------------------------------------|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
|                                        | 2.4GHz<br>2400-2483.5 MHz | 5.2GHz<br>5150-5250MHz | 5.3GHz<br>5250-5350MHz | 5.6GHz<br>5470-5725MHz | 5.8GHz<br>5725-5850MHz | 5.9GHz<br>5850-5895MHz | 6.2GHz<br>5925-6425MHz | 6.5GHz<br>6425-6525MHz | 6.7GHz<br>6525-6875MHz | 7.0 GHz<br>6875-7125MHz |
| Main                                   | 2.75                      | 2.75                   | 2.66                   | 2.91                   | 2.91                   | 2.22                   | 2.77                   | 2.68                   | 2.56                   | 1.10                    |
| Aux                                    | 1.66                      | 2.35                   | 1.96                   | 1.42                   | 1.07                   | 1.30                   | 2.11                   | 1.78                   | 1.76                   | 0.36                    |

| Cable Assembly Part Number and Information |               |                  |                    |                |                             |
|--------------------------------------------|---------------|------------------|--------------------|----------------|-----------------------------|
|                                            | Cable PN      | Cable length(mm) | Cable diameter(mm) | Impedance(ohm) | Connector type              |
| Main                                       | SY113L/50-143 | 173              | 1.13               | 50             | I-PEX MHF-4L(20565-001R-13) |
| Aux                                        | SY113L/50-118 | 296              | 1.13               | 50             | I-PEX MHF-4L(20565-001R-13) |

\* 3D Antenna Peak Gain required being test in system basis.

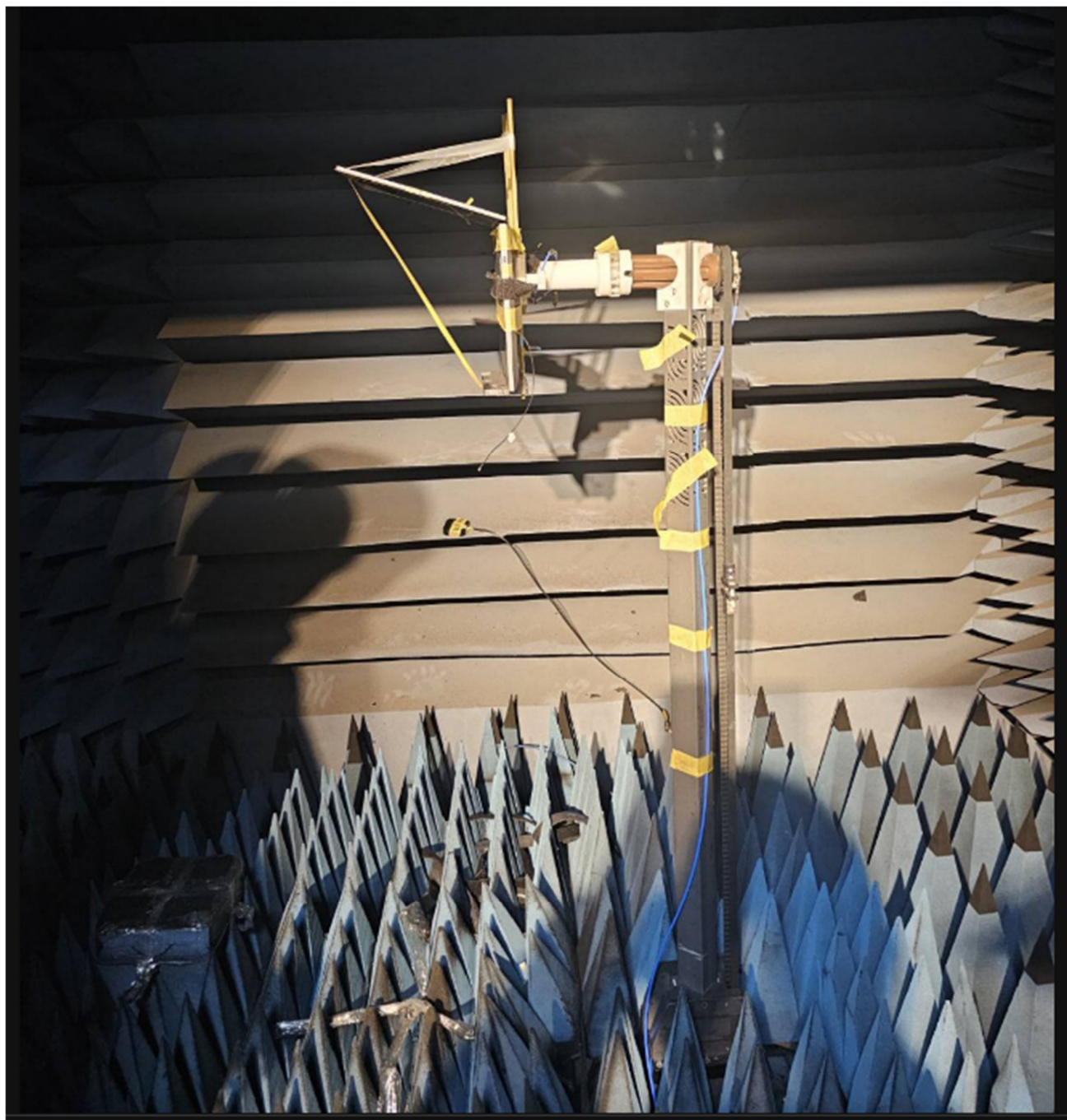
| Cable loss (dBi) |                                  |                               |                               |                               |                               |                               |                               |                               |                               |                                |
|------------------|----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|
|                  | <b>2.4GHz</b><br>2400-2483.5 MHz | <b>5.2GHz</b><br>5150-5250MHz | <b>5.3GHz</b><br>5250-5350MHz | <b>5.6GHz</b><br>5470-5725MHz | <b>5.8GHz</b><br>5725-5850MHz | <b>5.9GHz</b><br>5850-5895MHz | <b>6.2GHz</b><br>5925-6425MHz | <b>6.5GHz</b><br>6425-6525MHz | <b>6.7GHz</b><br>6525-6875MHz | <b>7.0 GHz</b><br>6875-7125MHz |
| Main             | -0.37                            | -0.60                         | -0.61                         | -0.63                         | -0.66                         | -0.68                         | -0.68                         | -0.70                         | -0.71                         | -0.75                          |
| Aux              | -0.63                            | -1.02                         | -1.04                         | -1.08                         | -1.14                         | -1.16                         | -1.17                         | -1.20                         | -1.22                         | -1.28                          |

# Annex A. Photographs

---

## A.1 Setup Photo

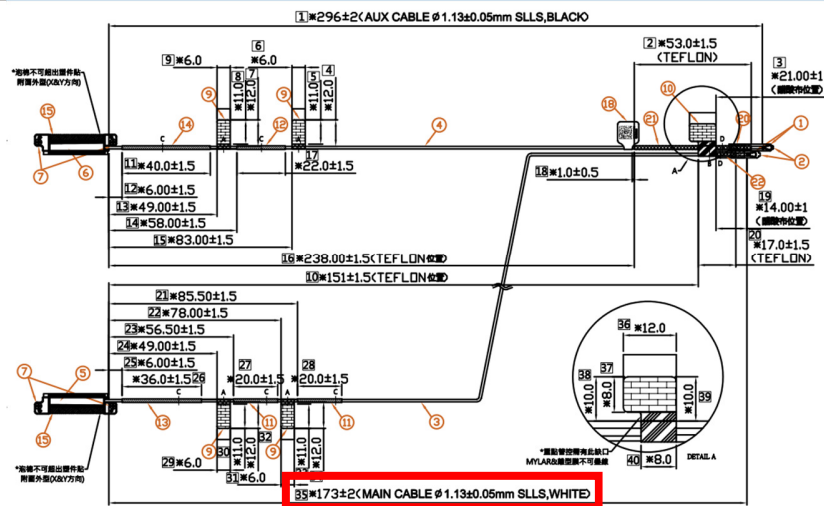
<insert test diagram here for test site utilized>



## A.2 Test sample

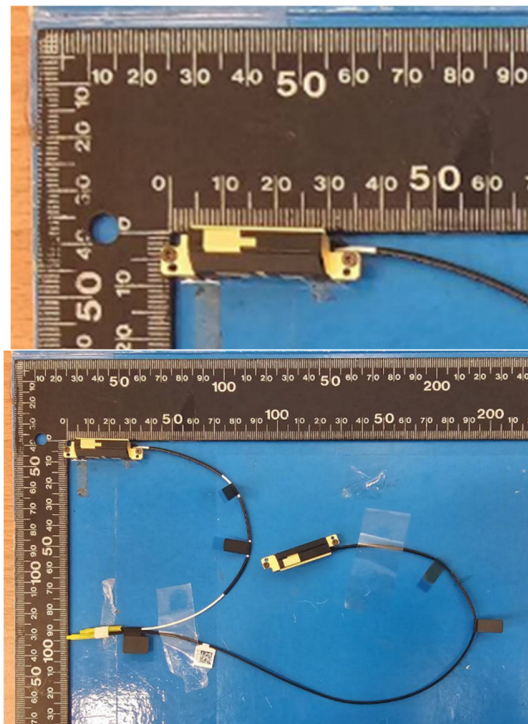
## Main Antenna

## Antenna Drawing

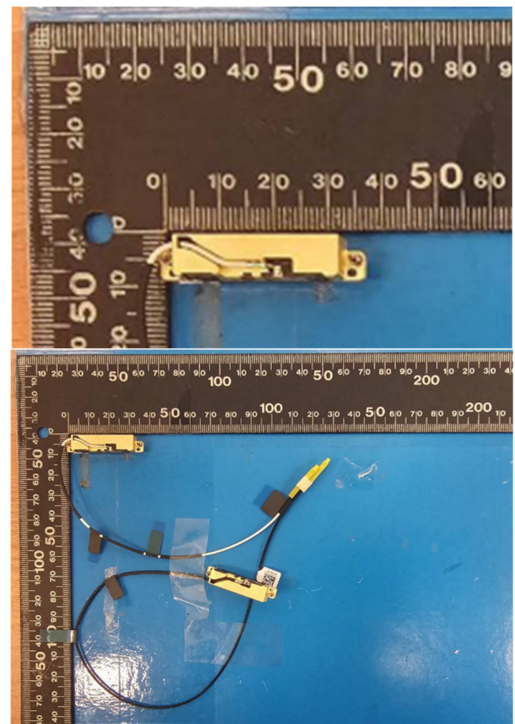


## Antenna Photo

Front



[Back](#)

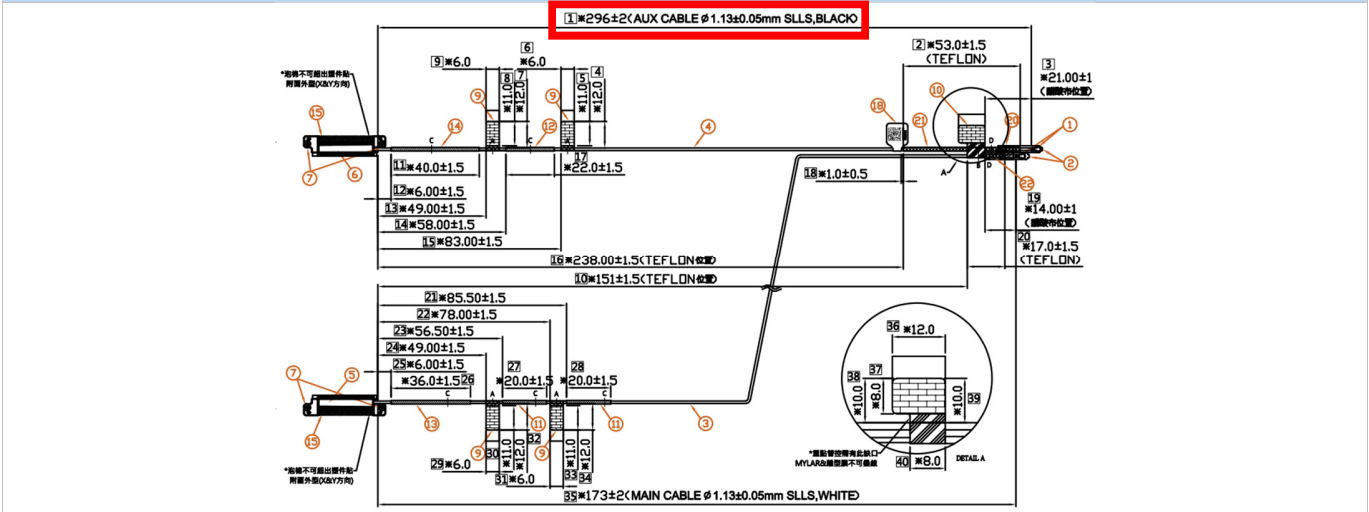


**Note: antenna photo should include L type ruler**



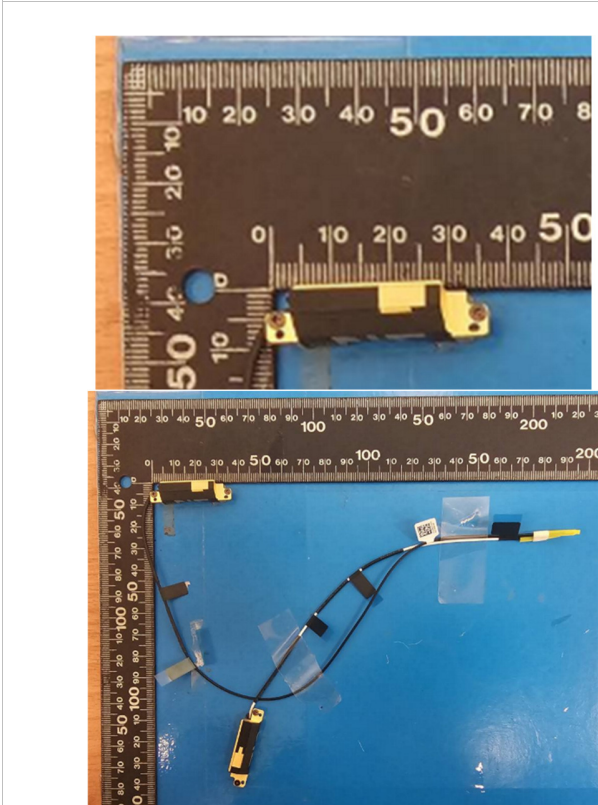
## Aux Antenna

### Antenna Drawing

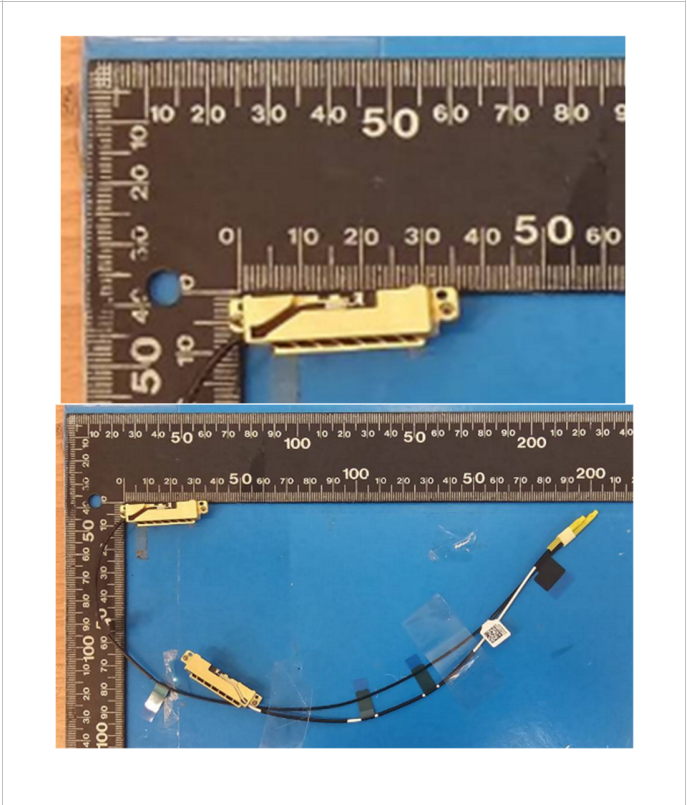


### Antenna Photo

#### Front



#### Back



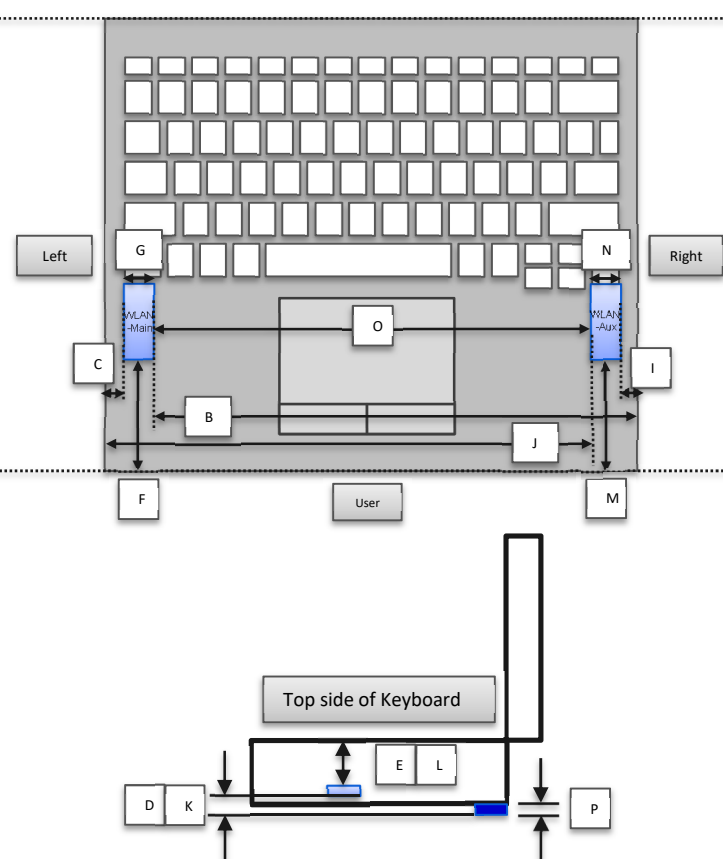
Note: antenna photo should include L type ruler

# Annex B. Antenna Location

## B.1 Antenna Host Platform Location Information

Include a dimensioned photo(s) or dimensioned drawing(s) of Main and Aux antenna placements (measurements are not required for receive-only antenna).

Any antenna that transmits must show dimensions to bottom of laptop. Provide a description of the materials that are used for supporting or surrounding transmit antennas; for example, non-conductive plastics vs. conductive coated plastic or metallic materials.



| Minimum Separation Distance |           |                         |               |               |
|-----------------------------|-----------|-------------------------|---------------|---------------|
| Item                        | Antenna   | Position                | Distance (mm) | 1g or 10g SAR |
| B                           | WLAN-Main | to Right                | 342           | 10g (ISED)    |
| C                           |           | to Left                 | 3             | 10g (ISED)    |
| D                           |           | to Bottom of laptop     | 1.5           | 1g (FCC/ISED) |
| E                           |           | To Top side of Keyboard | 0.25          | 10g (ISED)    |
| F                           |           | to User (front)         | 37            | 1g (FCC/ISED) |
| I                           | WLAN-Aux  | to Right                | 3             | 10g (ISED)    |
| J                           |           | to Left                 | 342           | 10g (ISED)    |
| K                           |           | to Bottom of laptop     | 1.5           | 1g FCC/ISED)  |
| L                           |           | To Top side of Keyboard | 0.25          | 10g (ISED)    |
| M                           |           | to User (front)         | 37            | 1g FCC/ISED)  |
| O                           | Main-Aux  | Main to Aux             | 330           |               |
| P                           | NB        | Bumper thickness        | 0.7           |               |

## B.2 Antenna dimensional information for SAR evaluation

Include a dimensioned photo(s) or dimensioned drawing(s) showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape positions. Include a description of any proximity sensors or power throttling implementations that limit or exclude use of any host orientation.

### Antennas on the panel section

