

# ANTENNA INFORMATION

|                                                           |                    |
|-----------------------------------------------------------|--------------------|
| OEM                                                       | DELL               |
| ODM                                                       | Wistron            |
| Platform model name                                       | P196G              |
| 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) 12.85mm   |
|                                                           | ISED (1g) 224.48mm |
|                                                           | ISED (10g) 86.67mm |

|                      |                 |                                                                       |
|----------------------|-----------------|-----------------------------------------------------------------------|
| Antenna manufacturer | Company name    | Wistron Neweb Corporation                                             |
|                      | Address         | No.20 ,Park Ave.II ,Hsinchu Science Park,Hsinchu City ,Taiwan(R.O.C.) |
| Test location        | Company name    | Wistron Neweb Corporation                                             |
|                      | Address         | No.20 ,Park Ave.II ,Hsinchu Science Park,Hsinchu City ,Taiwan(R.O.C.) |
| Test Personnel       | Name(Full name) | Johnson Wu                                                            |
|                      | E-mail          | Johnson.Wu@wnc.com.tw                                                 |
|                      | Tel/Mobile      | 03-6667799#7651                                                       |
| Testing date         |                 | 2024.10.22                                                            |

|                                       |      |                               |
|---------------------------------------|------|-------------------------------|
| Antenna Part number                   | Main | 81ELBE15.G40 (025.902H5.0001) |
|                                       | Aux  | 81ELBE15.G40 (025.902H5.0001) |
| Antenna type (ex: PIFA, Dipole...etc) |      | PIFA                          |

| 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                                   | 2.31                      | 1.40                   | 1.94                   | 2.35                   | 1.22                   | 1.15                   | 2.35                   | 0.16                   | 1.73                   | 2.23                    |
| Aux                                    | 2.56                      | 0.65                   | 0.65                   | 0.76                   | 1.24                   | 1.24                   | 1.41                   | 2.27                   | 2.86                   | 2.86                    |

| Cable Assembly Part Number and Information |               |                  |                    |                |                |
|--------------------------------------------|---------------|------------------|--------------------|----------------|----------------|
|                                            | Cable PN      | Cable length(mm) | Cable diameter(mm) | Impedance(ohm) | Connector type |
| Main                                       | SY113L/50-143 | 305mm            | 1.13mm             | 50             | IPEX           |
| Aux                                        | SY113L/50-118 | 355.5mm          | 1.13mm             | 50             | IPEX           |

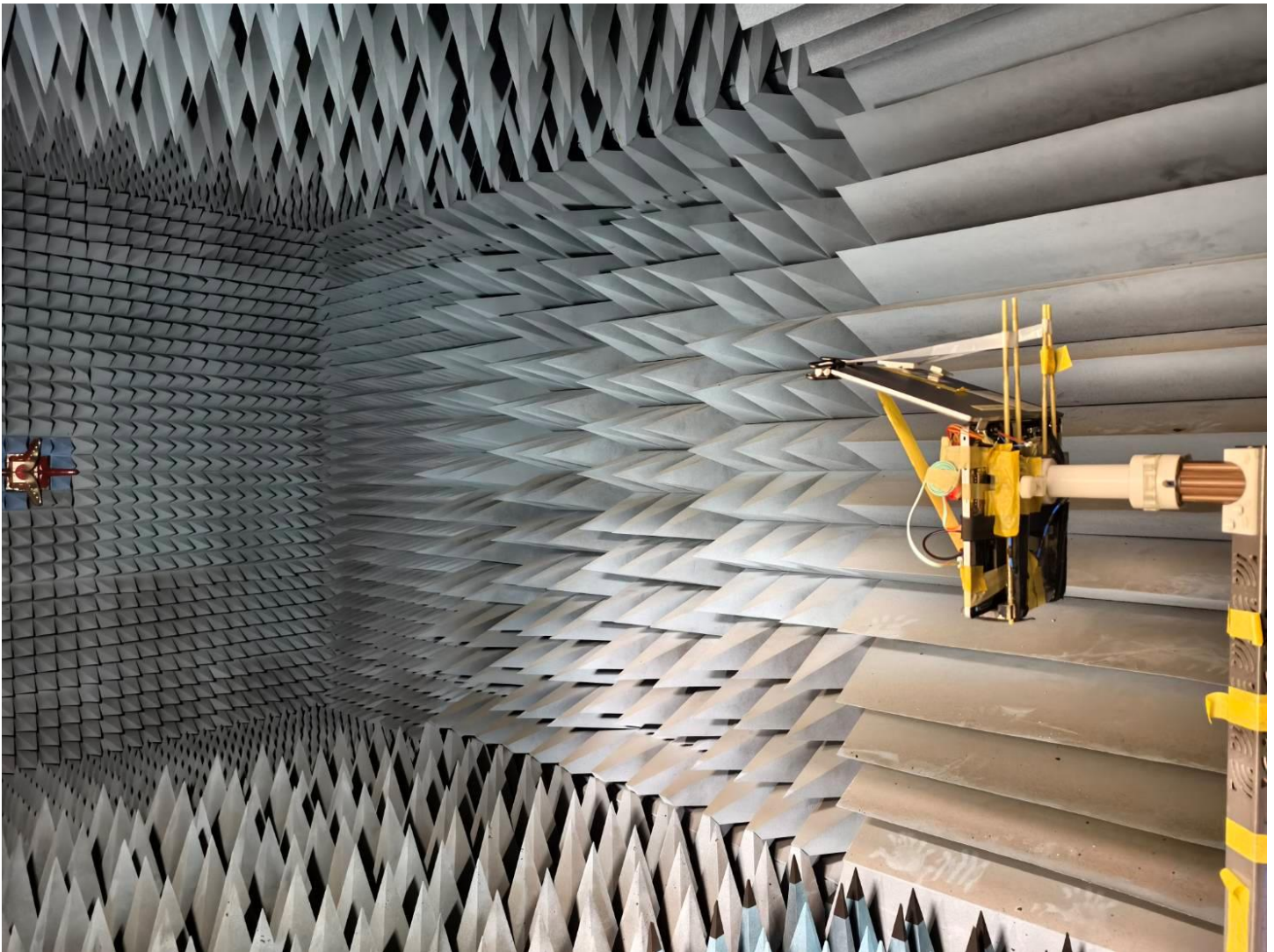
\* 3D Antenna Peak Gain required being test in system basis.

# Annex A. Photographs

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## A.1 Setup Photo

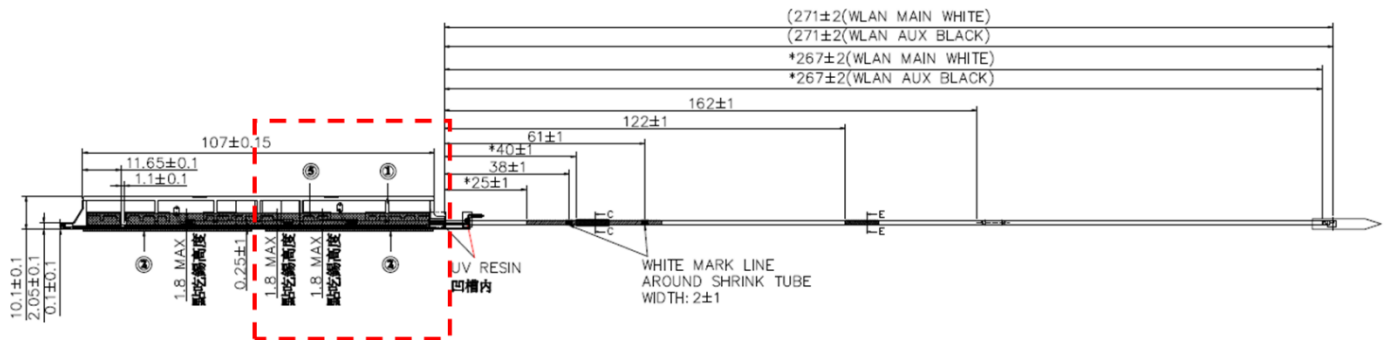
<insert test diagram here for test site utilized>



## A.2 Test sample

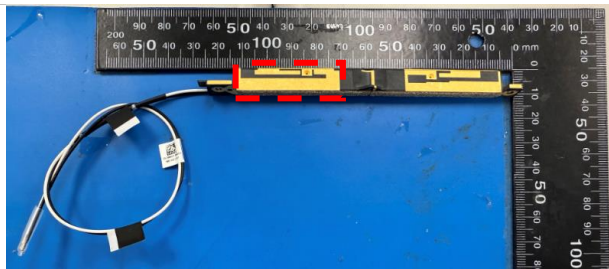
## Main Antenna

## Antenna Drawing



## Antenna Photo

## Front



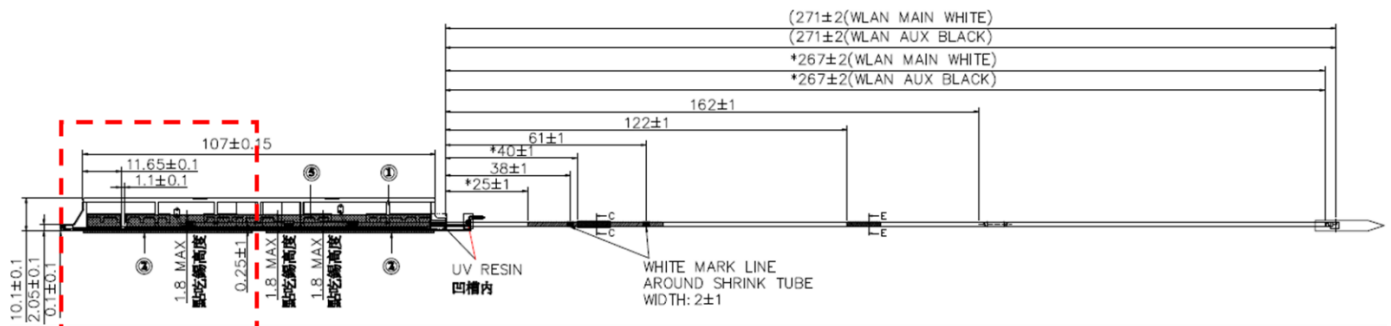
[Back](#)



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

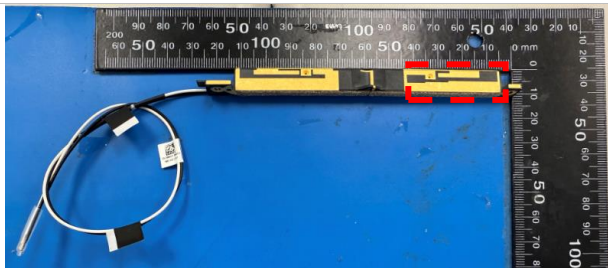
## Aux Antenna

## Antenna Drawing



## Antenna Photo

Front



[Back](#)



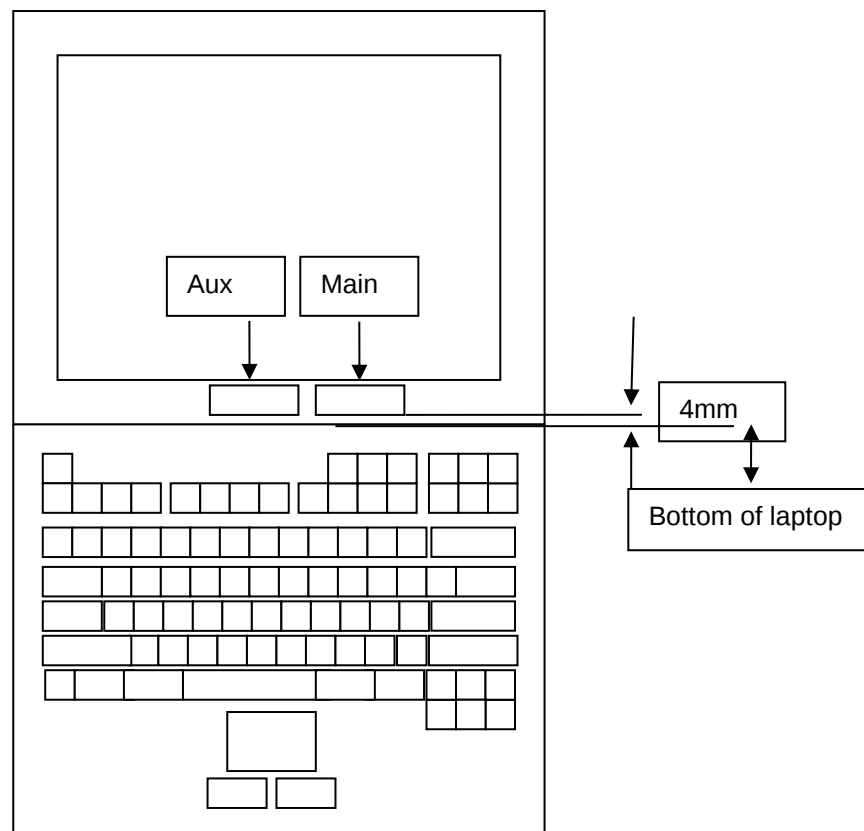
**Note: antenna photo should include L type ruler**

# 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).

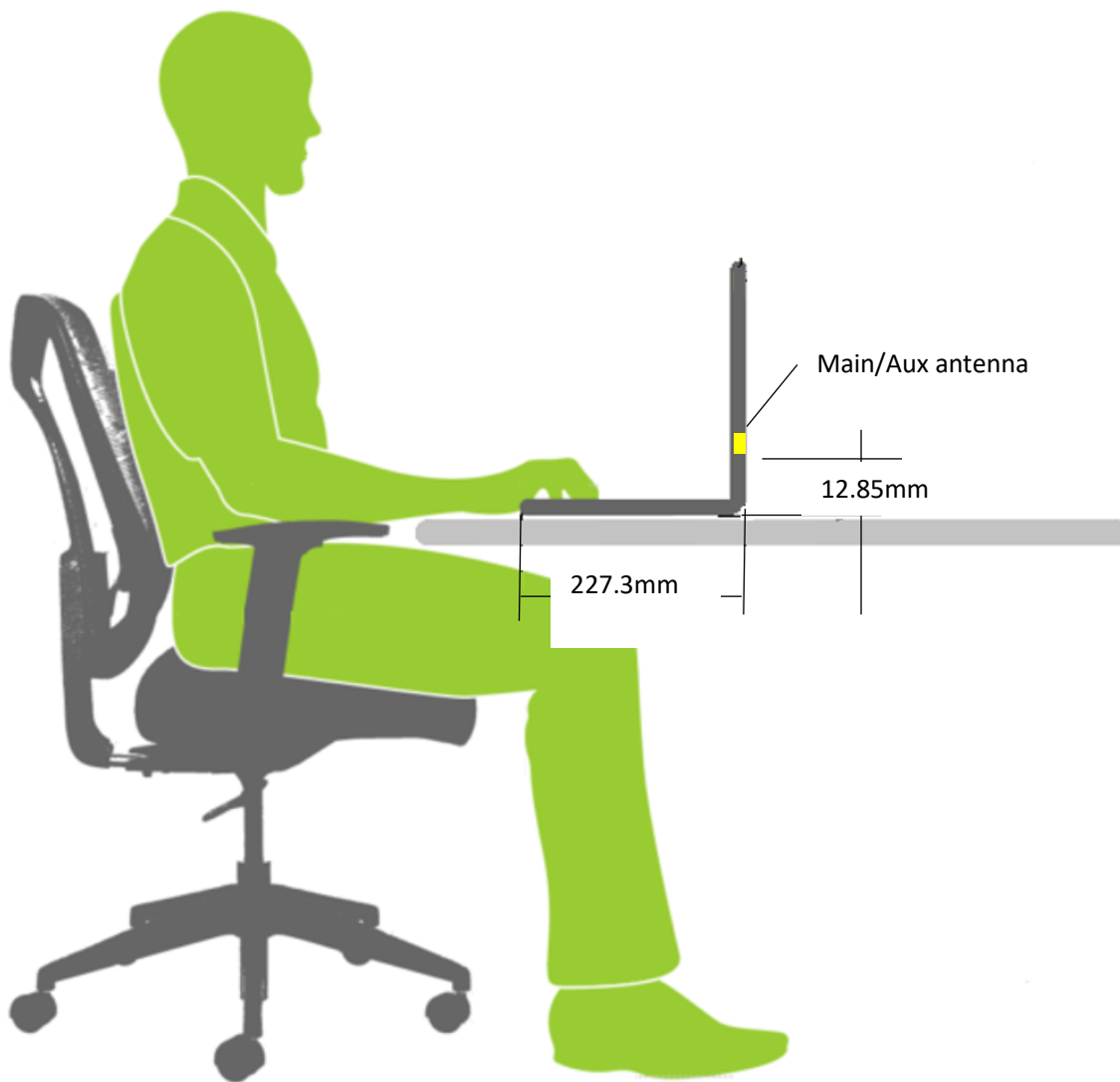
Any antenna that transmits must show dimensions to bottom of laptop. Provide a description of the materials that are used for supporting or surrounding transmit antennas; for example, non-conductive plastics vs. conductive coated plastic or metallic materials.



## B.2 Antenna dimensional information for SAR evaluation

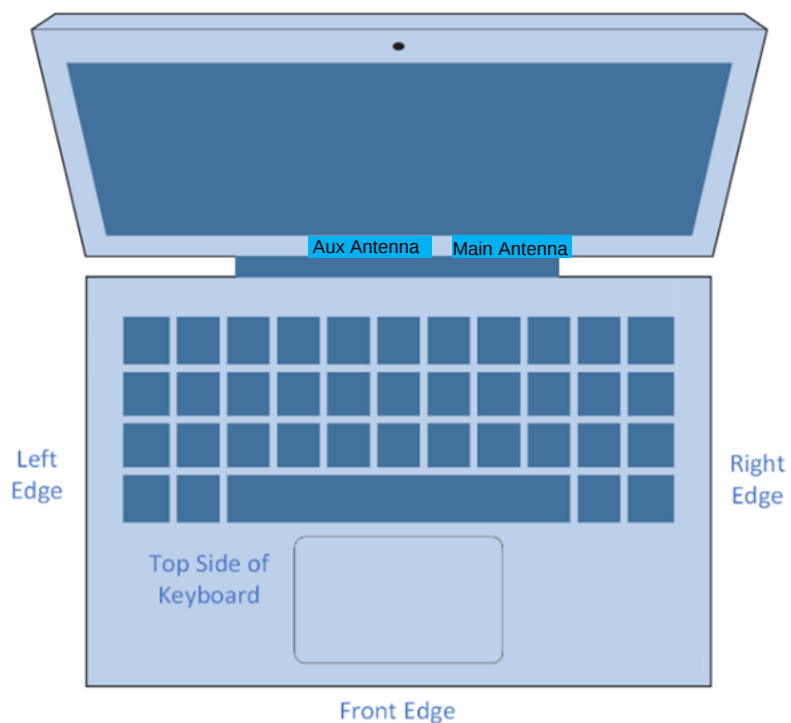
Include a dimensioned photo(s) or dimensioned drawing(s) showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape 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



| Measuring Surface | Antenna | Separation Distance(antenna-to- Surface)(mm) | 1g SAR   |
|-------------------|---------|----------------------------------------------|----------|
| Bottom Side       | Main    | 12.85 mm                                     | FCC/ISED |
|                   | Aux     | 12.85 mm                                     | FCC/ISED |

## Antennas on the keyboard section



| Measuring Surface    | Antenna | Separation Distance(antenna-to-Surface)(mm) | 1g or 10g SAR |
|----------------------|---------|---------------------------------------------|---------------|
| Bottom Side          | Main    | <b>12.85</b>                                | 1g (FCC/ISED) |
|                      | Aux     | <b>12.85</b>                                | 1g (FCC/ISED) |
| Front Edge           | Main    | <b>224.48</b>                               | 1g (ISED)     |
|                      | Aux     | <b>224.48</b>                               | 1g (ISED)     |
| Left Edge            | Main    | <b>186.15</b>                               | 10g (ISED)    |
|                      | Aux     | <b>120.1</b>                                | 10g (ISED)    |
| Right Edge           | Main    | <b>86.67</b>                                | 10g (ISED)    |
|                      | Aux     | <b>152.85</b>                               | 10g (ISED)    |
| Top side of Keyboard | Main    | <b>N/A</b>                                  | 10g (ISED)    |
|                      | Aux     | <b>N/A</b>                                  | 10g (ISED)    |