

| ■Antenna Specifications |                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model name              | PCB Antenna                                                                                                                                                                                                                                                                                                                                                                  |
| Frequency range         | WLAN : 5.0 - 5.8 GHz<br>Bluetooth : 2.4 - 2.5 GHz                                                                                                                                                                                                                                                                                                                            |
| Antenna Type            | Monopole Type PCB Antenna                                                                                                                                                                                                                                                                                                                                                    |
| Connector Type          | UFL (internal connector)                                                                                                                                                                                                                                                                                                                                                     |
| Antenna Gain(Peak)      | WLAN : 4.47dBi<br>Bluetooth : -0.83dBi                                                                                                                                                                                                                                                                                                                                       |
| Apperance               | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>WLAN</p>  </div> <div style="text-align: center;"> <p>Bluetooth</p>  </div> </div> |
| Length of coaxial cable | WLAN : 55mm (White)<br>Bluetooth : 165mm (Black)                                                                                                                                                                                                                                                                                                                             |
| Coaxial Cable Loss      | WLAN : 0.11dB<br>Bluetooth : 0.88dB                                                                                                                                                                                                                                                                                                                                          |
| Manufacturer Name       | PIONEER CORPORATION                                                                                                                                                                                                                                                                                                                                                          |
| Manufacturer Address    | 25-1, Yamada, Kawagoe-shi, Saitama, 350-8555, JAPAN                                                                                                                                                                                                                                                                                                                          |
| (Note)                  | Value of each antenna gain also includes coaxial cable loss.                                                                                                                                                                                                                                                                                                                 |

|                                  |                                         |
|----------------------------------|-----------------------------------------|
| Calibrated measuring instrument  | Network Analyzer : E5071C(Keysight)     |
| Calibrated Date                  | 22th August 2023                        |
| Test day                         | 27th - 31th October 2023                |
| Name of the examiner             | MinebeaMitsumi Inc. Mr, Mamoru Matsuo   |
| Name of commercial test software | We do not use commercial test software. |

