

To: IONE



International Operations Planning Division
1-19, Aobadai 3-chome, Meguro-ku, Tokyo 153-8539, Japan
Tel : +81-3-3780-2768 Fax : +81-3-3780-2770

JAE Antenna Performance in a HHKB prototype

Jan 30, 2023

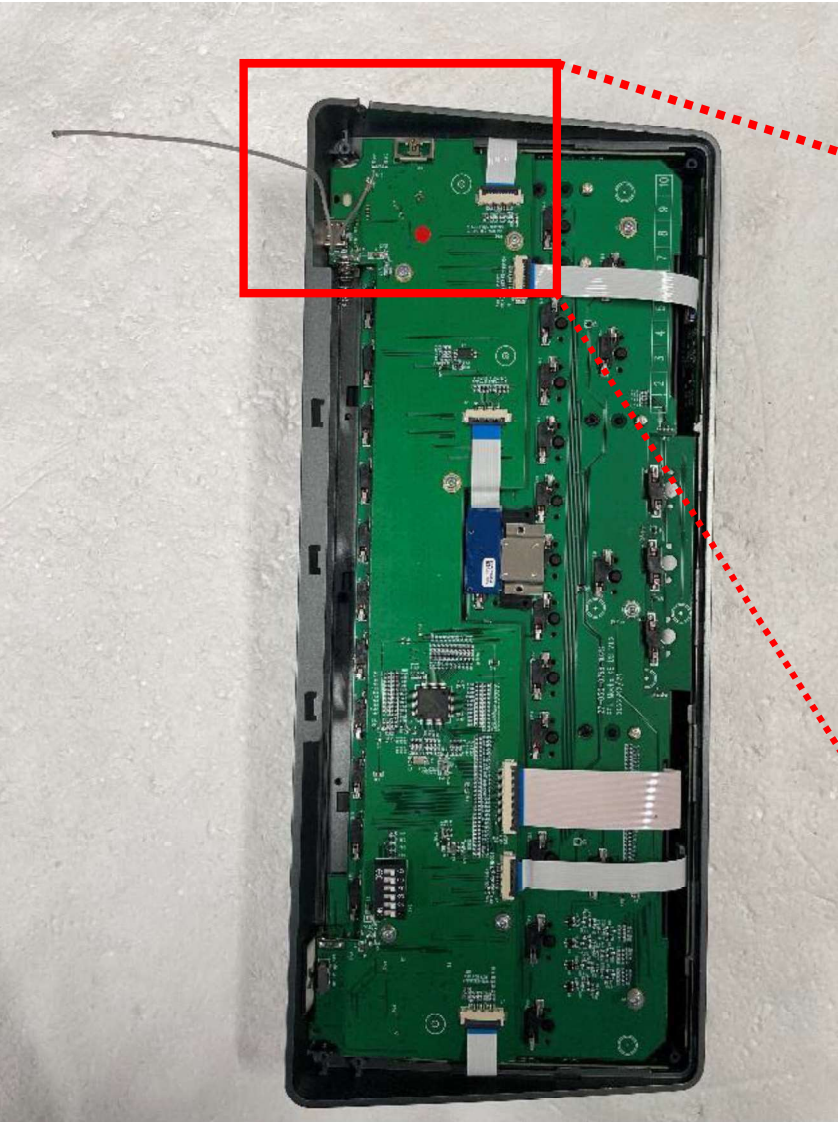
Antenna Brand: JAE

Model Name: GHT23-0134

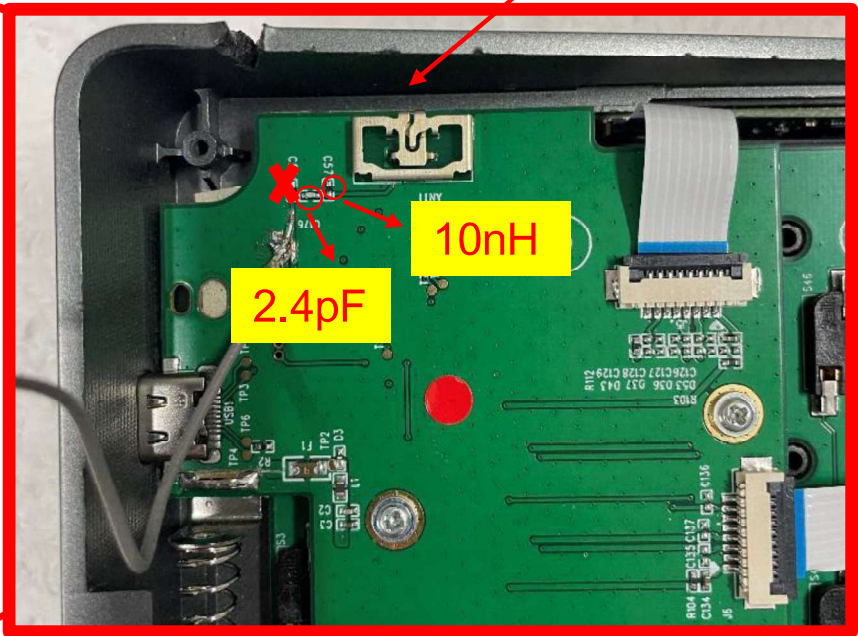
Antenna Type: SMT Antenna

Antenna Position

Bottom view



Antenna area



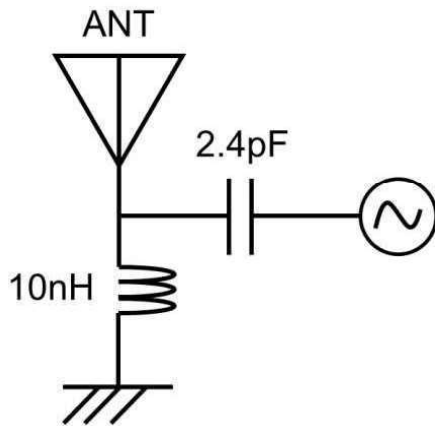
Top view



Microcoax cable
(130mm)

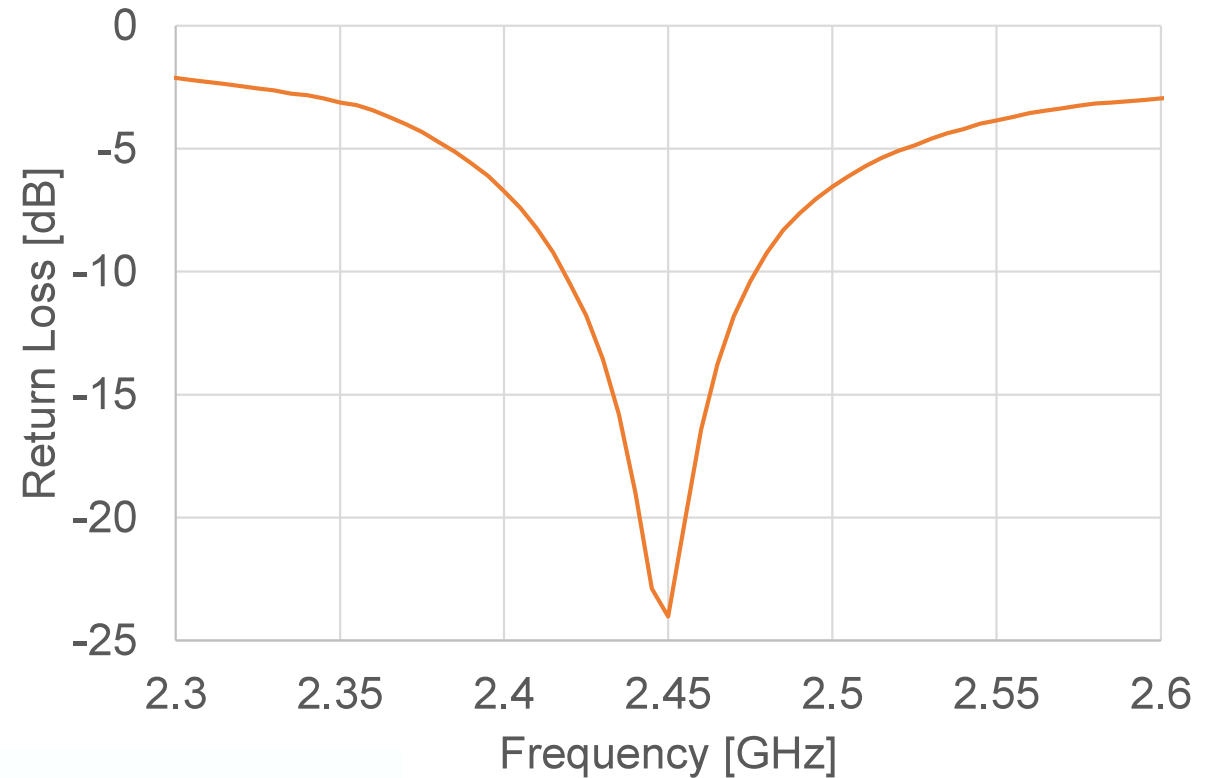
Return Loss

- Impedance Matching Circuit



- Return Loss (S11) Characteristics

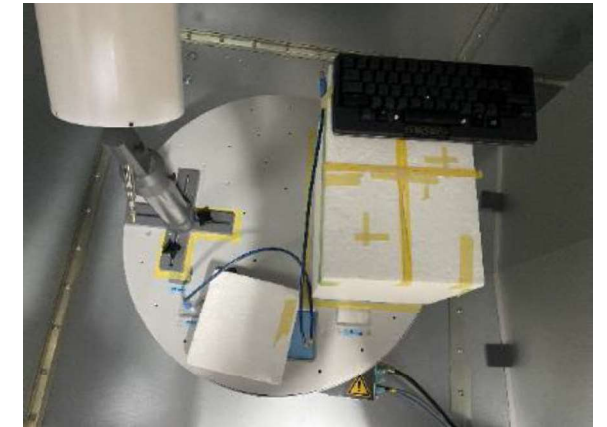
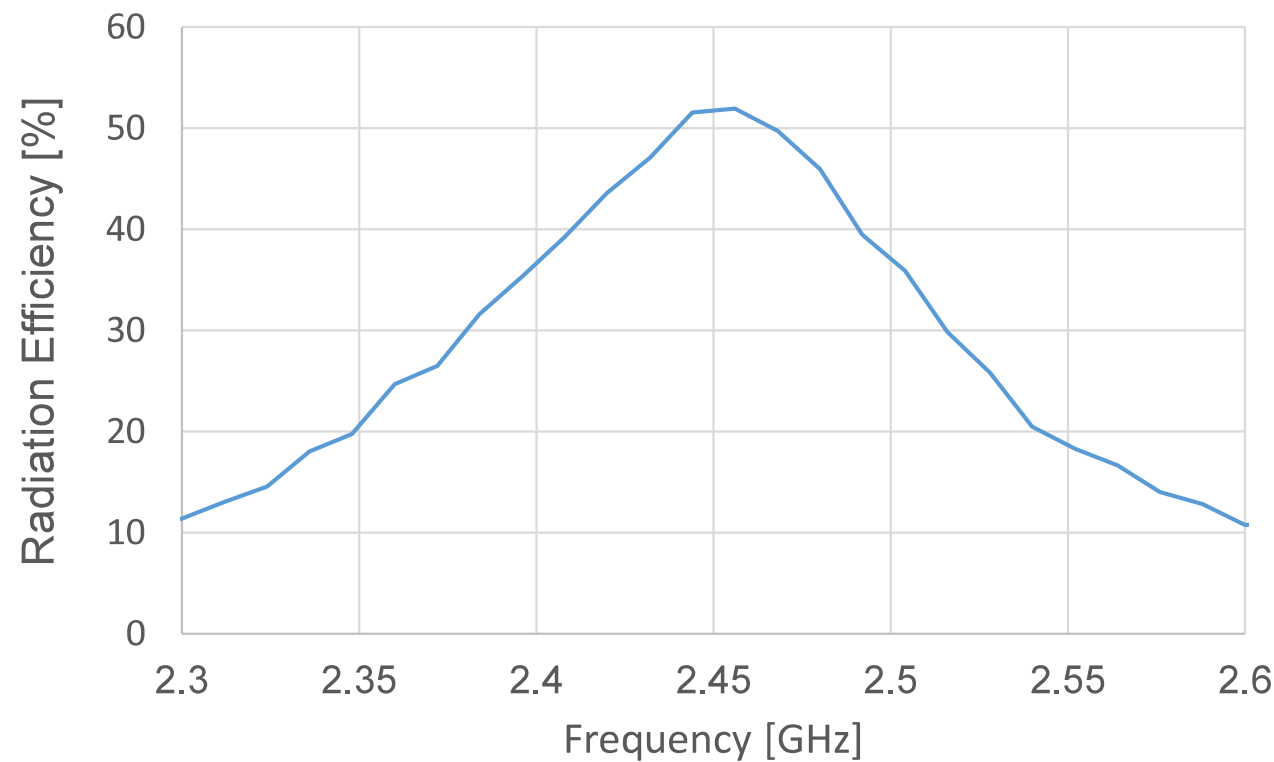
Return loss < -6.7 dB ($2.4 \text{ GHz} < f < 2.5 \text{ GHz}$)



Radiation Efficiency

- Radiation Efficiency Characteristics

Radiation Efficiency < 39 % ($2.4 \text{ GHz} < f < 2.5 \text{ GHz}$)



(*) Including 130-mm
microcoax cable loss
-0.3 dB = 93%

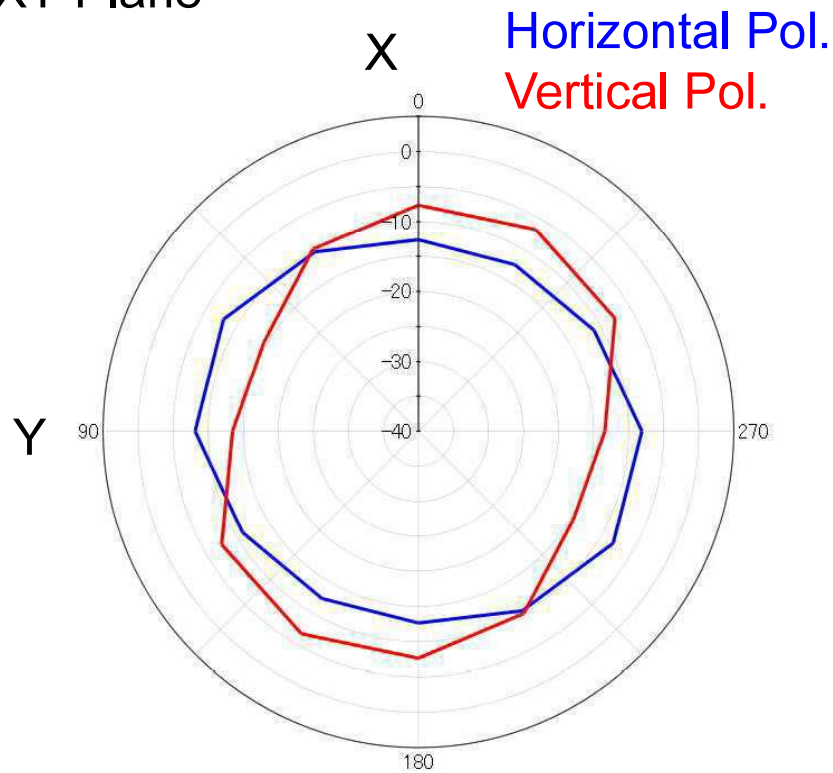
2D Radiation Pattern

- Radiation Pattern at 2.45 GHz

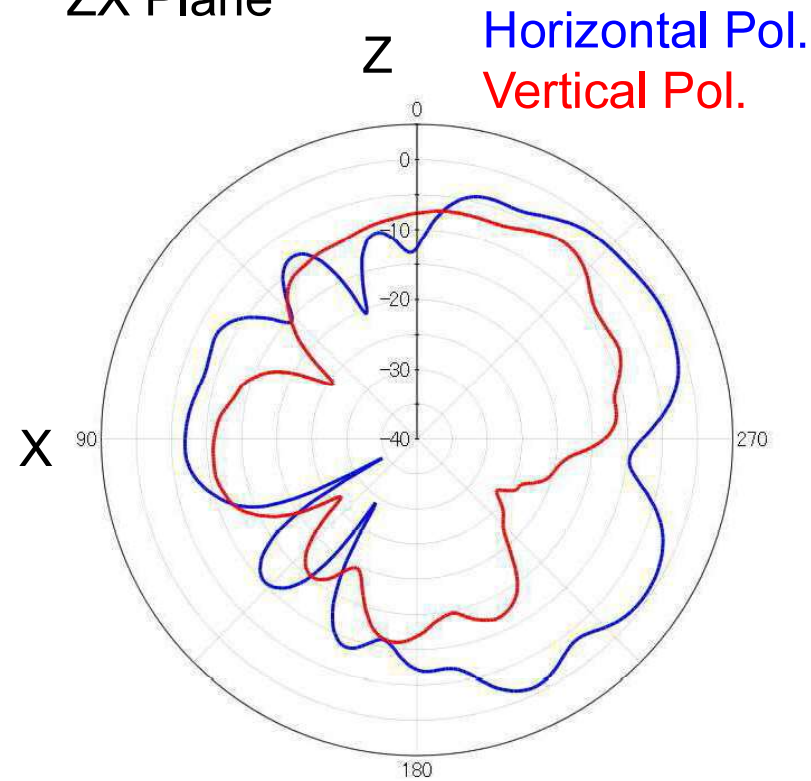
Peak Gain = -0.3 dBi



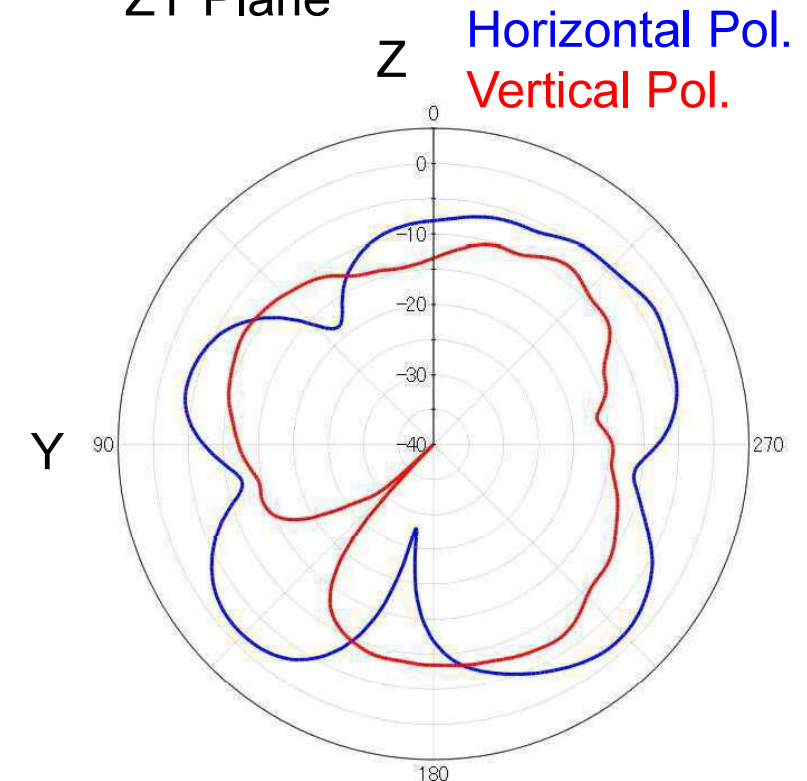
XY Plane



ZX Plane



ZY Plane



3D Radiation Pattern

- Radiation Pattern at 2.45 GHz

Peak Gain = -0.3 dBi

