Inputs

Frequency (GHz)

| 2.27 | − | + |

Dielectric constant εr

| 4.30 | − | + |

Substrate thickness h (mm)

| 1.60 | − | + |

Patch length L (mm) [optional]

| 0.00 | − | + |

Patch width W (mm) [optional]

| 0.00 | − | + |

Loss tangent tanδ

| 0.02 | − | + |

Metal

| copper | ⌄ |

Metal thickness (μm)

| 35.00 | − | + |

Run analytical simulation

Install `meep` via conda-forge to enable FDTD (optional).

Patch Antenna Simulator

Design & performance

L (mm)

31.45

W (mm)

40.51
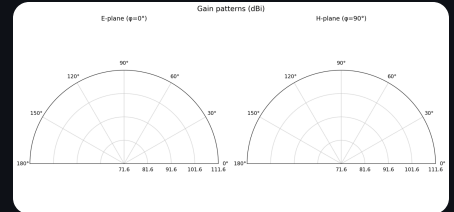
Directivity peak (dBi)

112.73

Gain peak (dBi)

112.13

Estimated efficiency

87.1%

3D radiation surface (normalized)
semi-transparent lobe + reference sphere