

Datasheet

3.18-8.44GHz
Internal Antenna

Features:

This UWB antenna is FPC antenna which can be flexible mounting on non-metal surfaces, supporting 3.18 to 8.44GHz bands with I-PEX MHF 1 connector.

Applications:

- Smart Home
- Agriculture
- Tracking
- Radar
- Automotive
- Healthcare
- Digital Signage
- Telematics



24.1 X 34 X 0.2 mm

FPC Antenna



Electrical Specifications

Antenna Characteristics

Antenna Type	Radiation Pattern	Polarization	Max. Input Power	Impedance
FPC Antenna	Omni	Linear	1W	50Ω
Frequency (GHz)	3.18~4.74	4.76~6.33	6.35~7.91	7.93~8.44
Return Loss (dB)	< -10	< -10	< -10	< -10
Peak Gain (dBi)	3.6	4.3	4.3	4.5
Average Gain (dB)	-0.7	-1.1	-1.4	-1.5
Efficiency (%)	86	78	72	71

Mechanical Specifications

Environmental

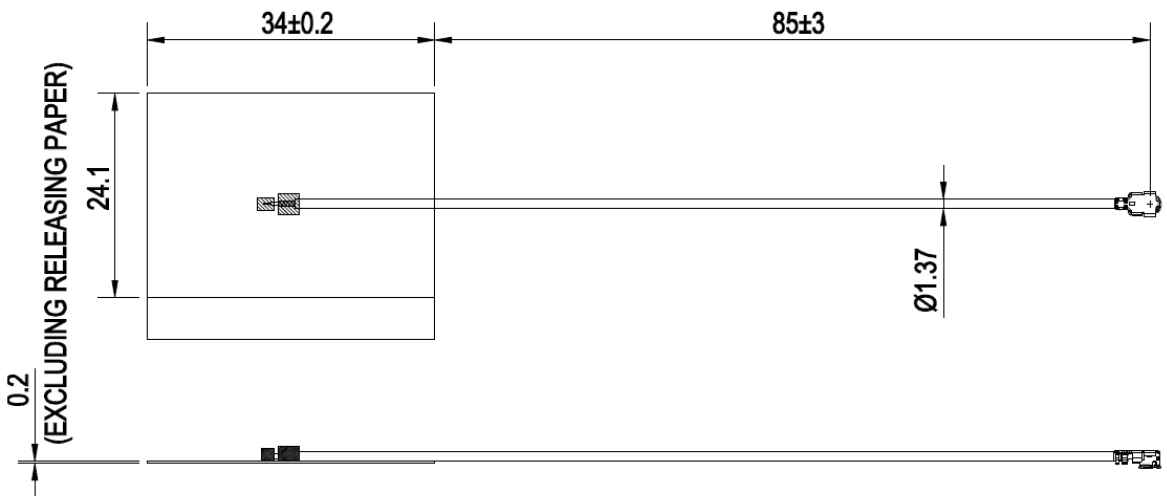
Temperature Range (°C)	-40 to 85
Humidity	Non-condensing 65°C 95% RH

RoHS Compliant

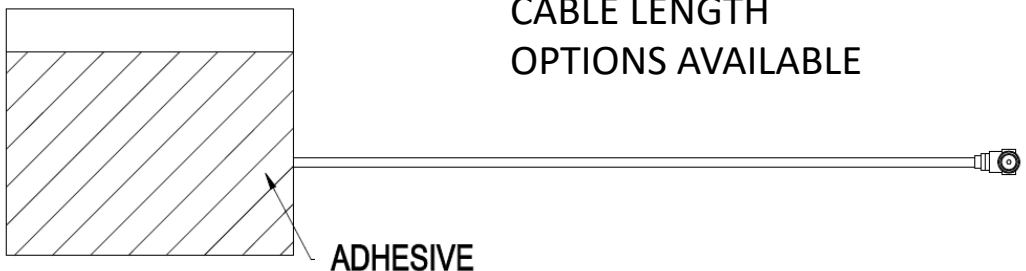
Part Number	Dimension (mm)	Weight (g)	Conn. Type	Cable Type	Material	Adhesive
ST1124-11-401-A	24.1 × 34.0 × 0.2	0.9	I-PEX MHF 1	Ø 1.37	PI	3M 467MP

Mechanical Drawing

Unit : mm

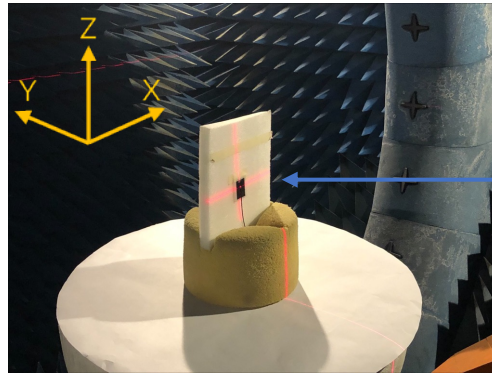


CABLE LENGTH
OPTIONS AVAILABLE



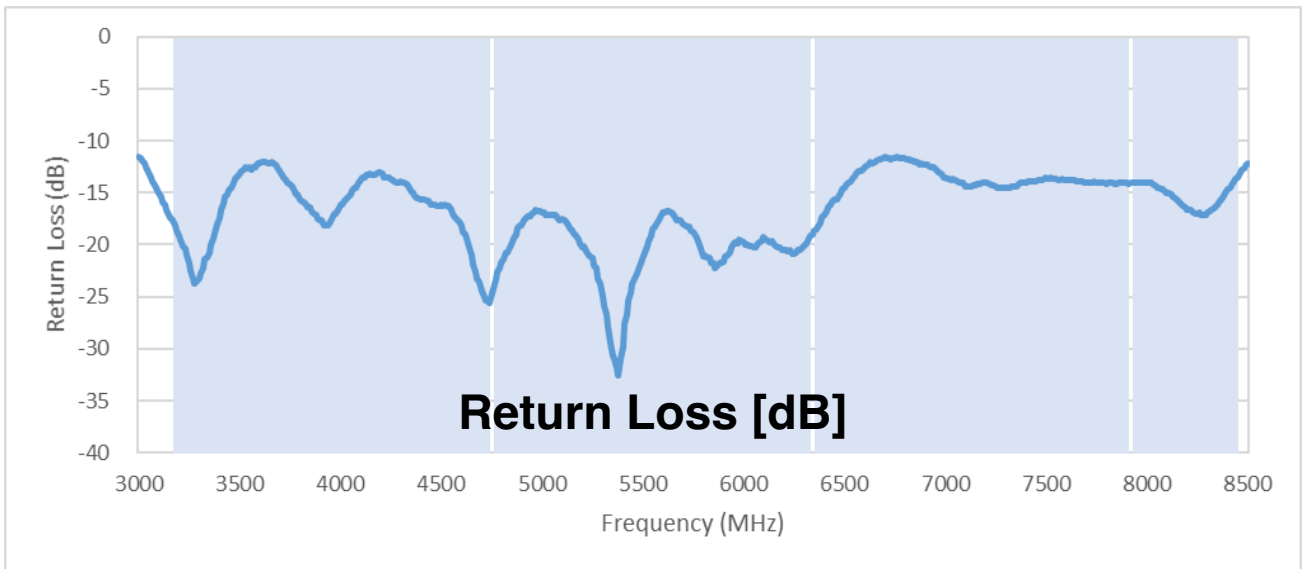
ST1124-11-401-A

Charts In Free Space

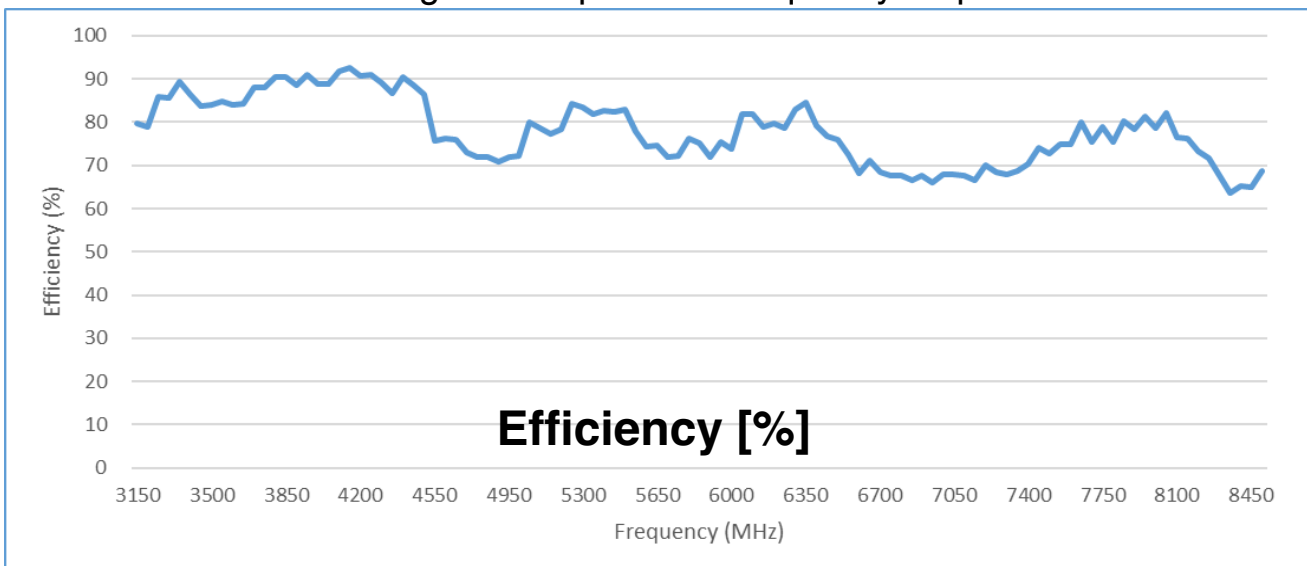


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Test setup, measurement performed in 3D anechoic chamber.

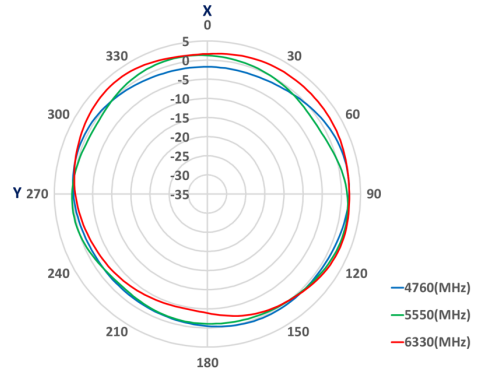
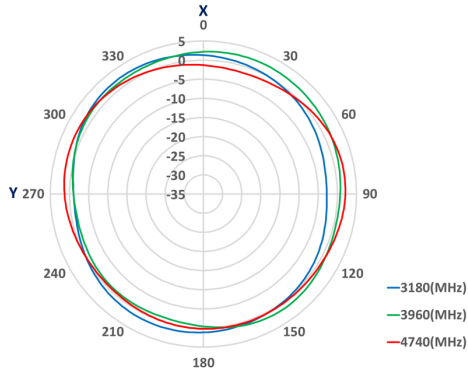


Blue background represents frequency response.

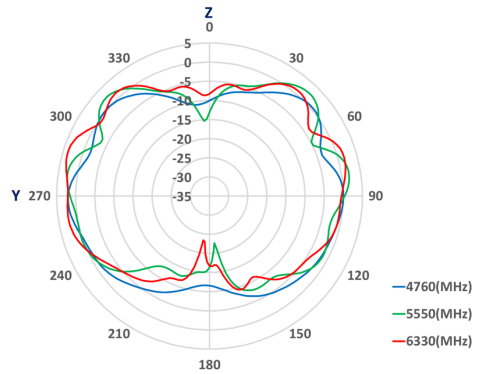
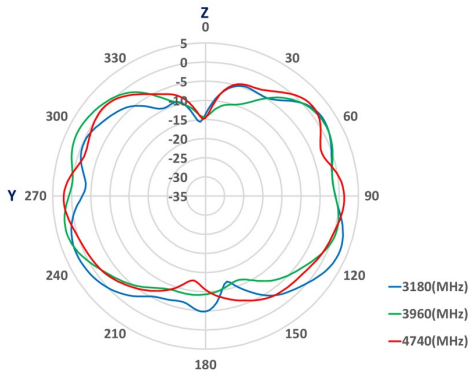


Radiation Pattern - Free Space

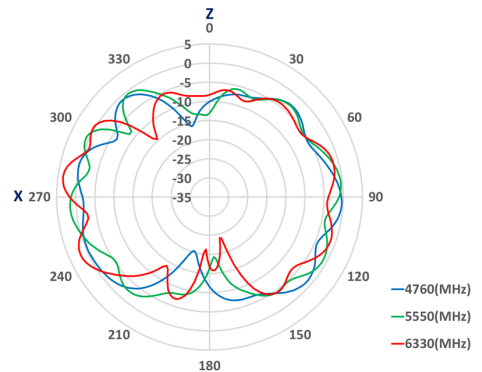
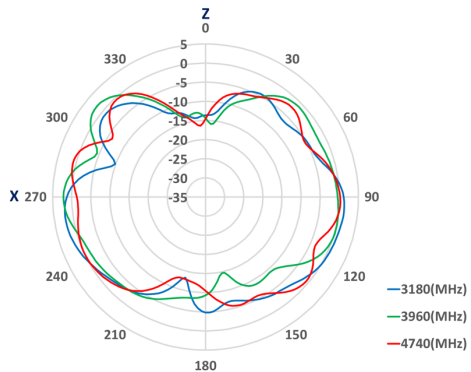
XY - Plane



YZ - Plane

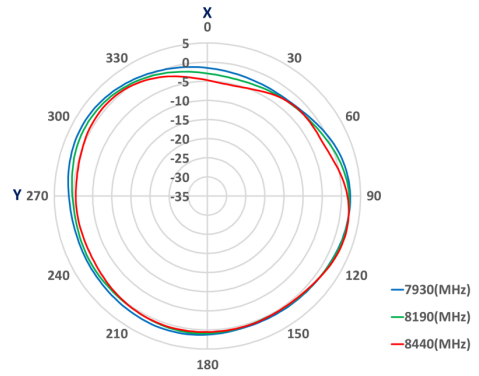
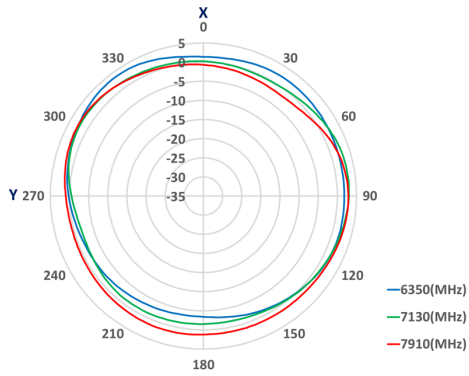


XZ - Plane

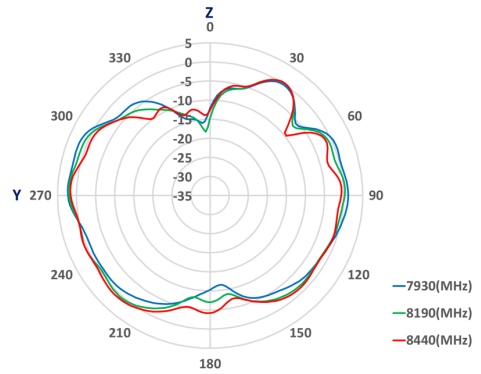
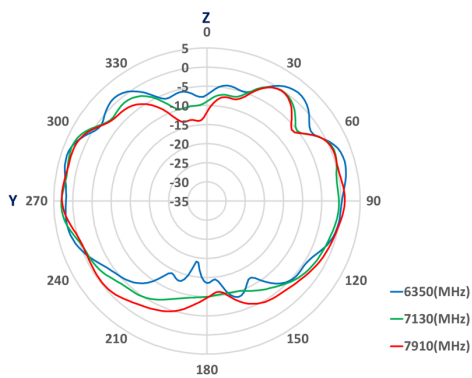


Radiation Pattern - Free Space

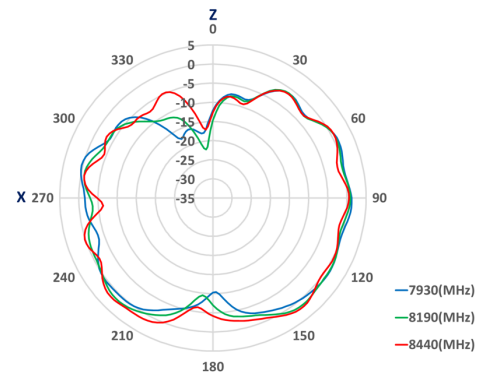
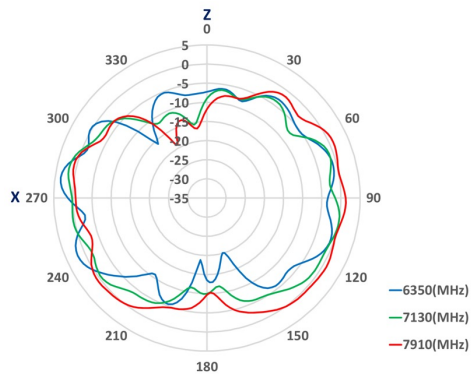
XY - Plane



YZ - Plane



XZ - Plane



Revisions

Rev.	Description	Date	ECN	Approval
A	Initial Release	2022-12-19	ST1124-11-401-A-RA00	ATC

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