

Datasheet

2.4-2.5GHz & 5.15-5.85GHz

External / In-building

Features:

High performing Wi-Fi antenna with coaxial cable OD1.13mm for indoor applications.

Applications:

- CPE - Router, Set-top boxes & Gateway
- IoT devices
- Wi-Fi Mesh
- Smart Metering
- Robotics



Stick Antenna



Electrical Specifications

Antenna Characteristics

Antenna Type	Radiation Pattern	Polarization	Max. Input Power	Impedance
Stick Antenna	Omni	Linear	1W	50Ω

Frequency (GHz)	2.4~2.5	5.15~5.825
Return Loss (dB)	< -10	< -8
Peak Gain (dBi)	2.6	2.2
Average Gain (dB)	-1.5	-2.2
Average Efficiency (%)	71	61

**Mechanical Specifications**

**Environmental**

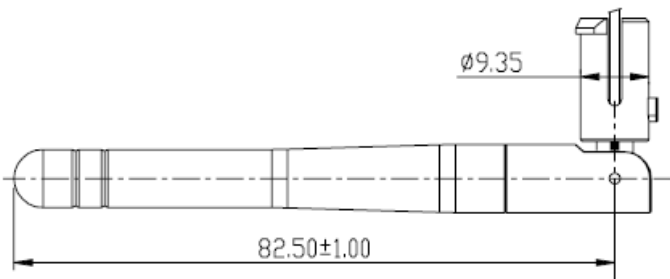
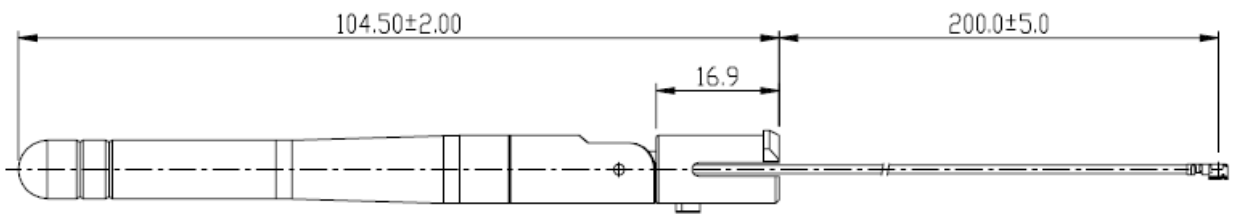
Temperature Range (°C)	-40 to 65
Humidity	Non-condensing 65°C 95% RH

RoHS Compliant

Part Number	Length (mm)	Weight (g)	Connector Type	Cable Type	Radome
ST0129-30-401-A	105	6.6	I-PEX MHF 1	Ø 1.13 mm	ABS

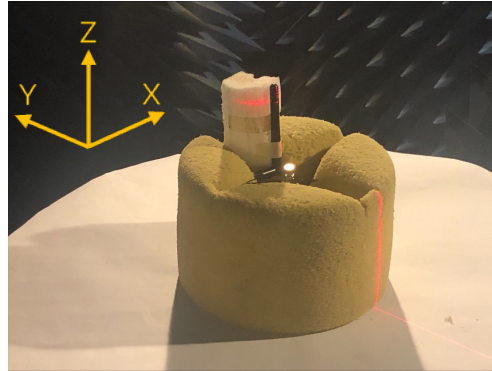
**Mechanical Drawing**

Unit : mm

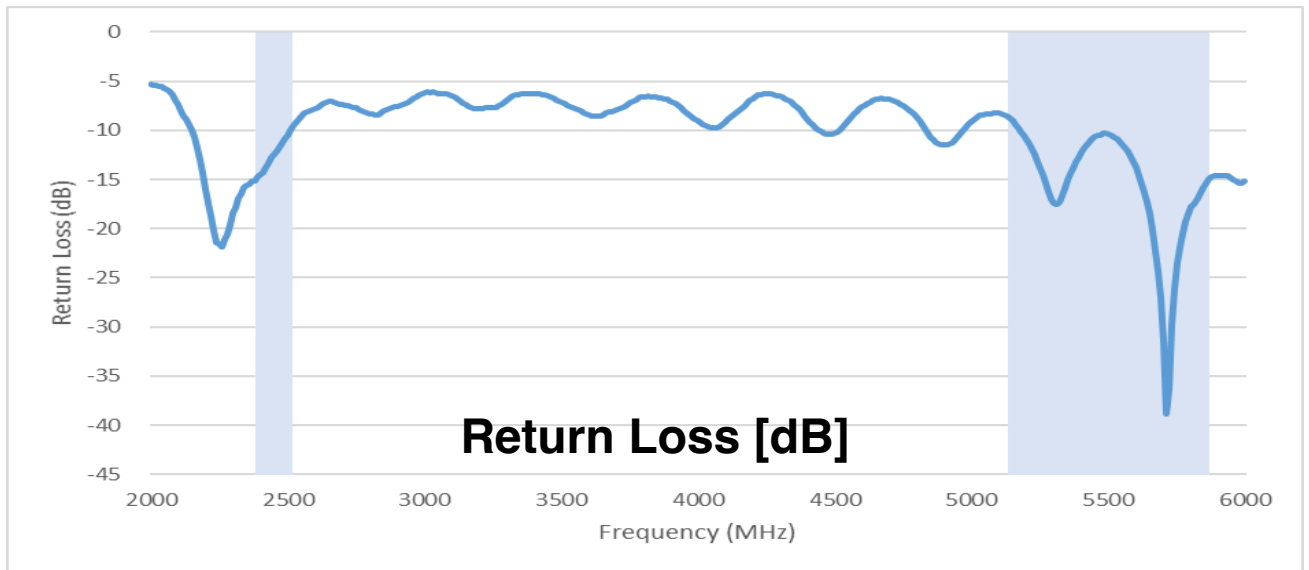


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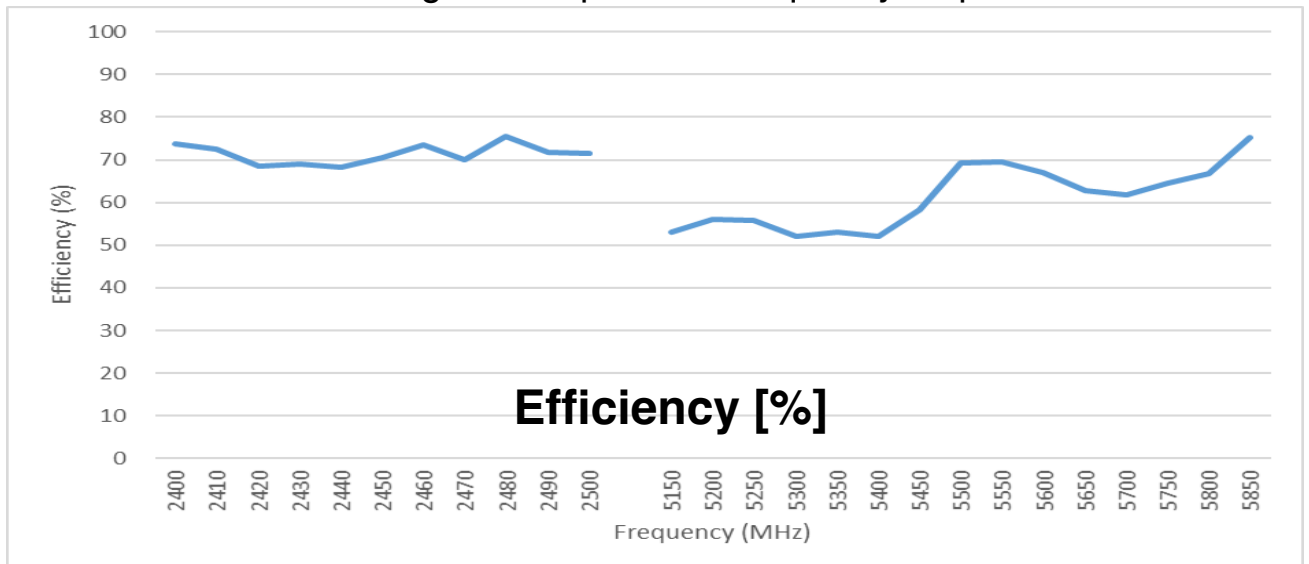
## Charts In Free Space



Test setup, measurement performed in 3D anechoic chamber.

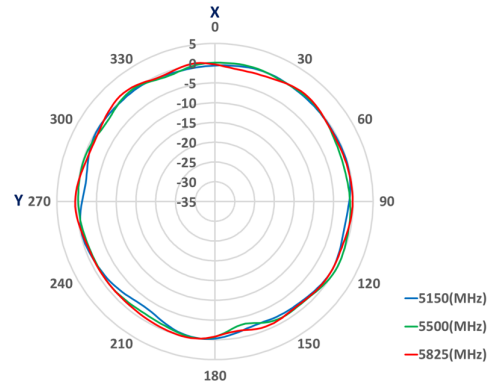
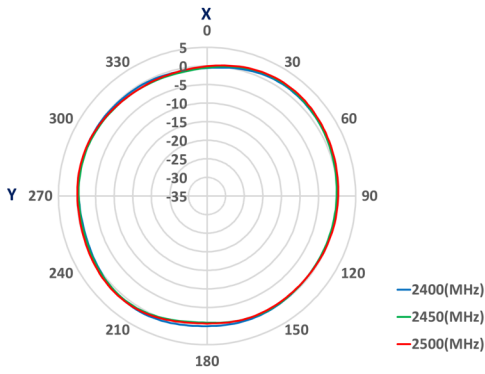


Blue background represents frequency response.

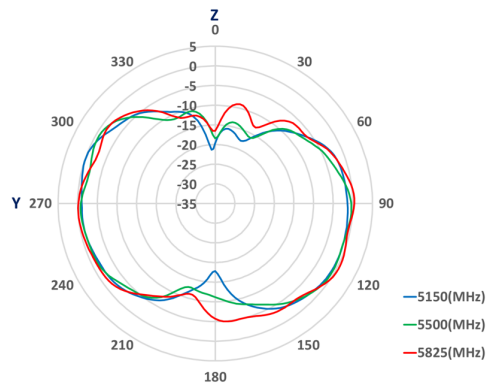
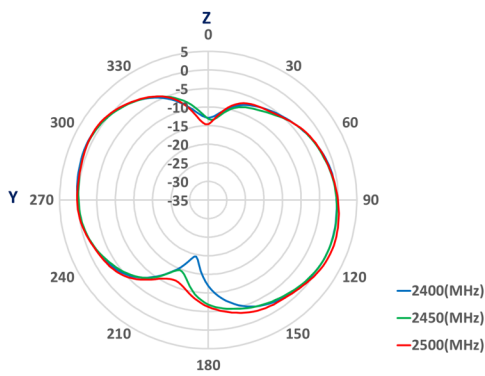


Radiation Pattern - Free Space

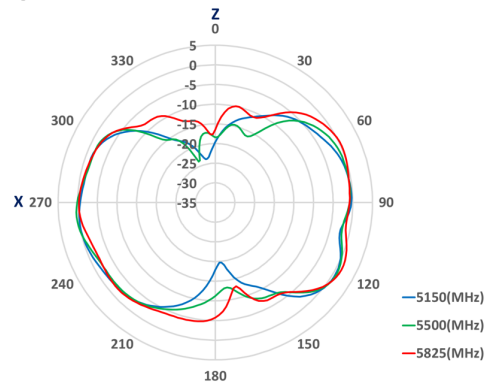
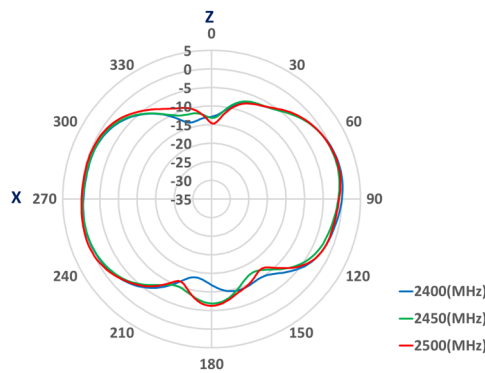
XY - Plane



YZ - Plane



XZ - Plane



Revisions

Rev	Description	Date	ECN	Approval
A	Initial Release	2022-10-25	ST0129-30-401-A-RA00	ATC
B	RF Performance update	2023-01-02	ST0129-30-401-A-RB00	ATC

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