

Datasheet

0.62-0.96GHz & 1.45-5.9GHz

External / In-building

Features:

High performing full Sub-6 band antenna with SMA connector for indoor applications.

Applications:

- CPE – Router, Set-top boxes, Gateway
- IoT devices
- Sub-6 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)	0.617~0.96	1.42~1.52	1.71~2.69	3.3~5	5.15~5.925
Return Loss (dB)	< -6	< -7	< -7	< -7	< -7
Peak Gain (dBi)	1.8	2.2	3.3	3.0	3.8
Average Gain (dB)	-3.8	-2.8	-1.7	-1.9	-2.6
Efficiency (%)	42	52	68	65	55

Mechanical Specifications

Environmental

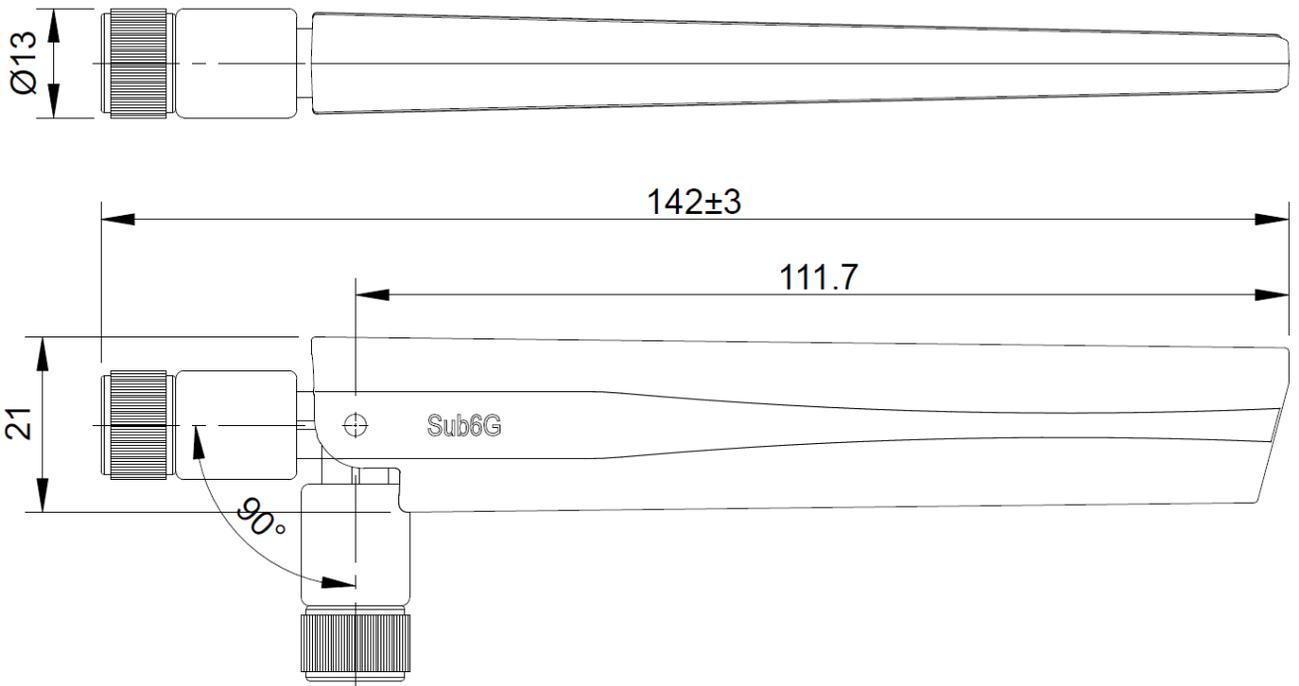
Temperature Range (°C) -40 to 85

RoHS Compliant

Part Number	Length (mm)	Weight (g)	Connector Type	Radome
ST0428-31-002-A	142.0	20.2	SMA (Plug)	PC+ABS

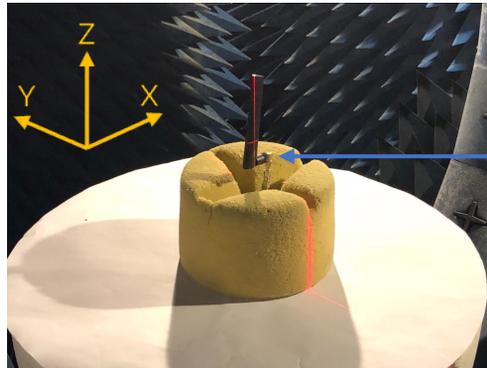
Mechanical Drawing

Unit : mm



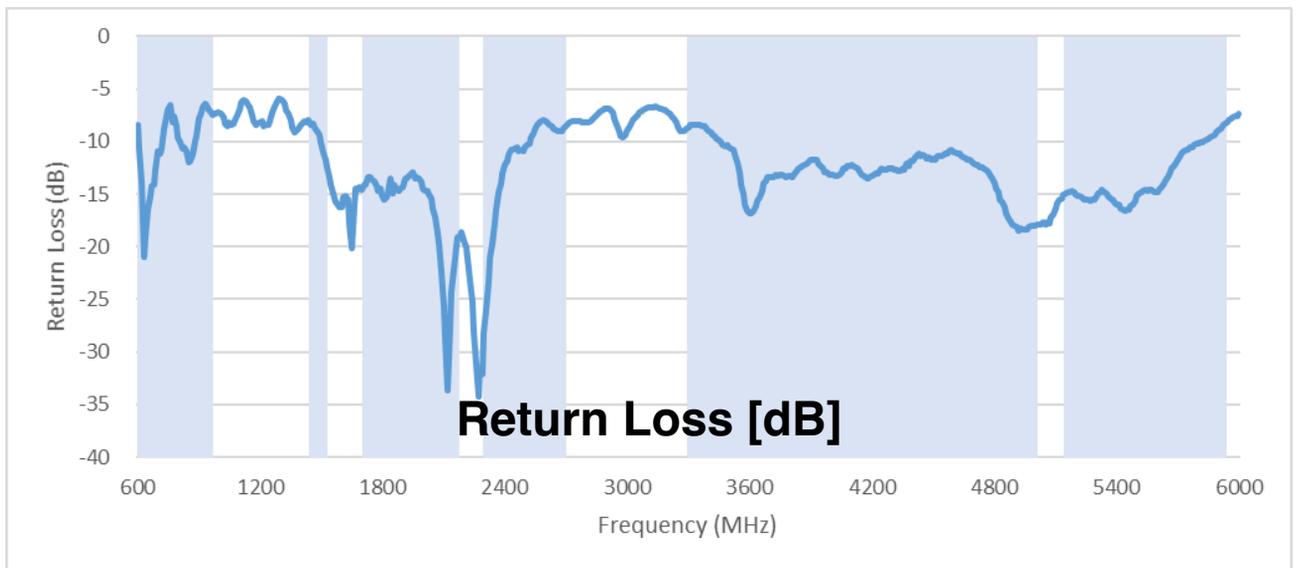
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Charts In Free Space

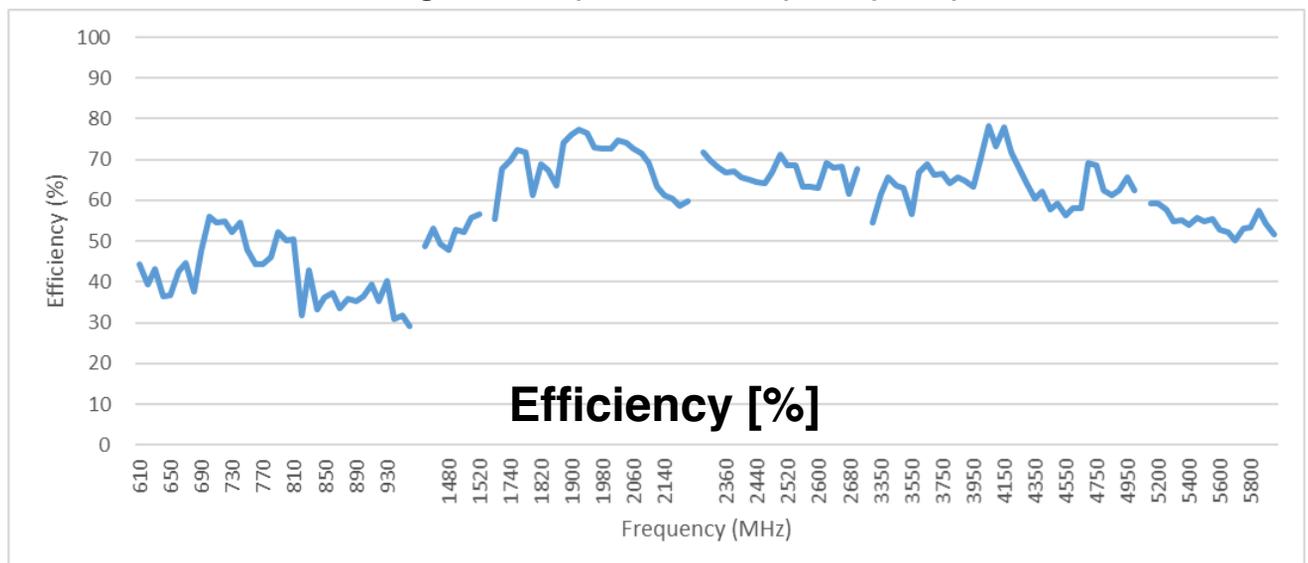


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Test setup, measurement performed in 3D anechoic chamber.

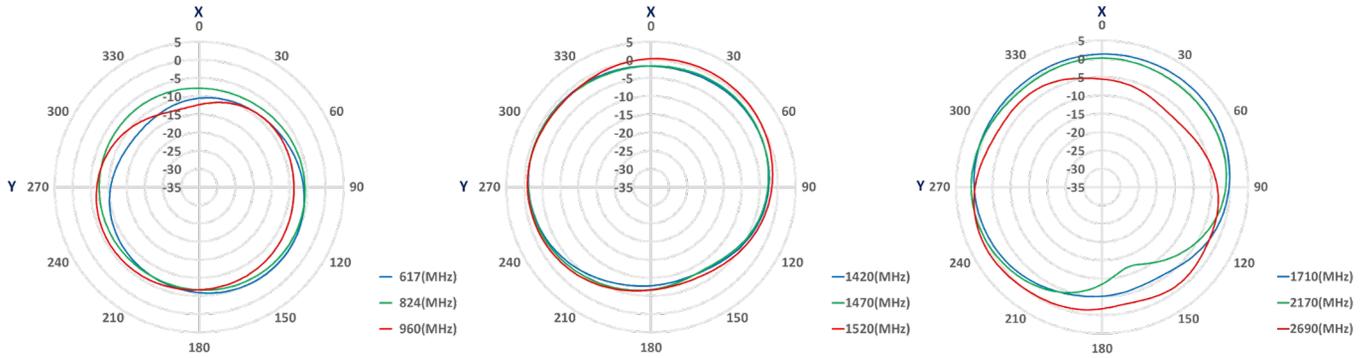


Blue background represents frequency response.

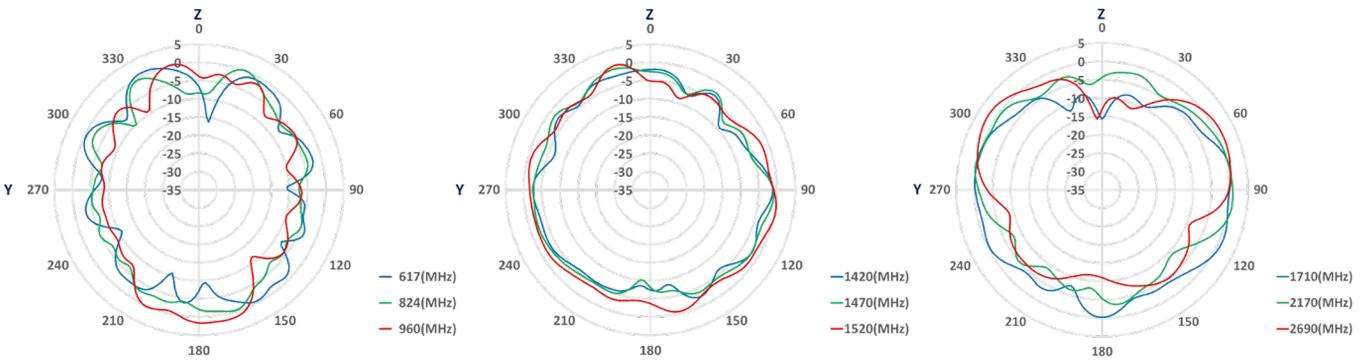


Radiation Pattern - Free Space

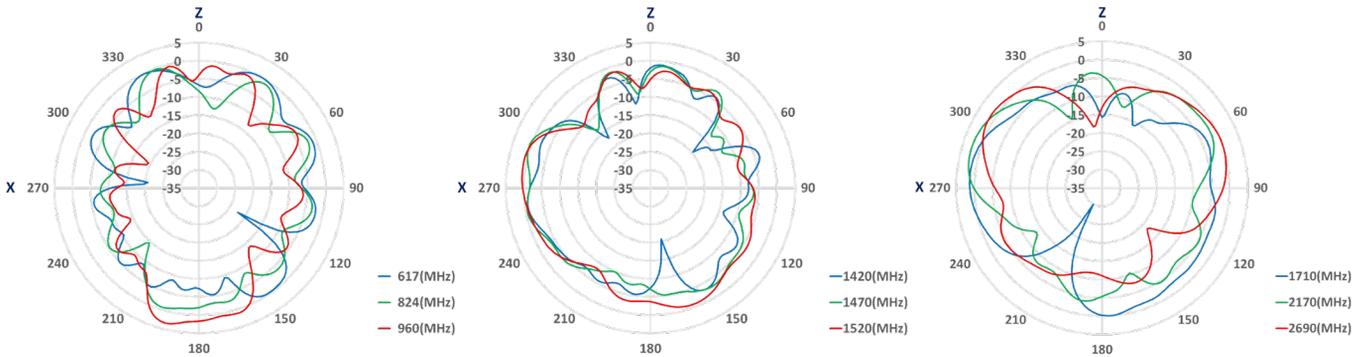
XY - Plane



YZ - Plane

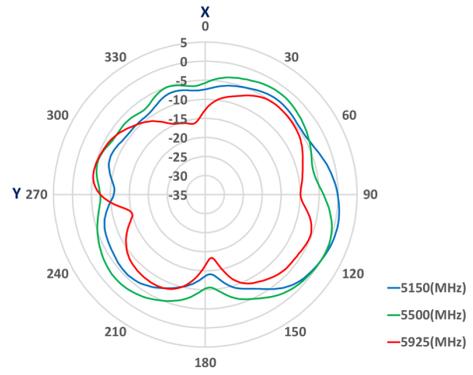
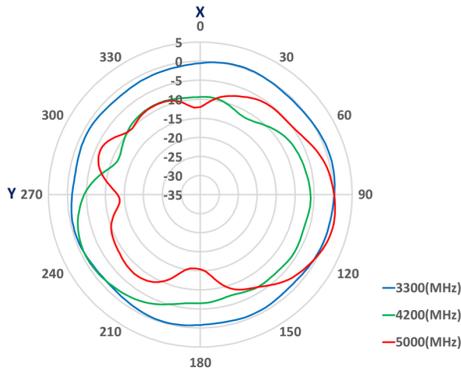


XZ - Plane

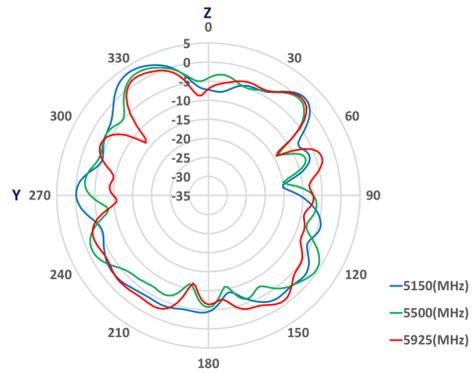
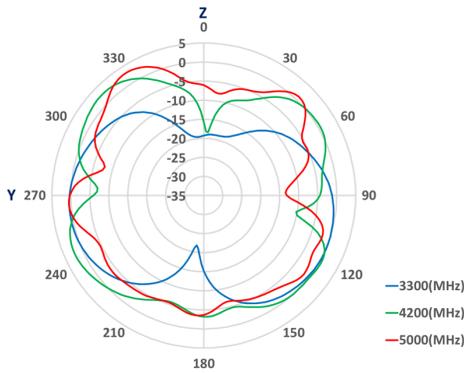


Radiation Pattern - Free Space

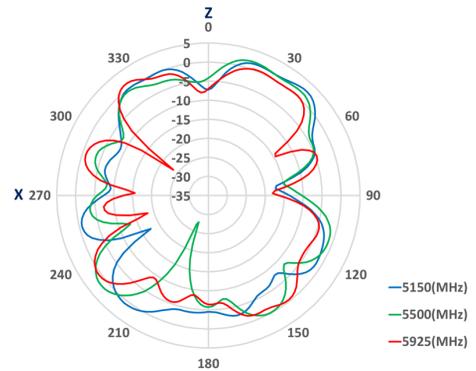
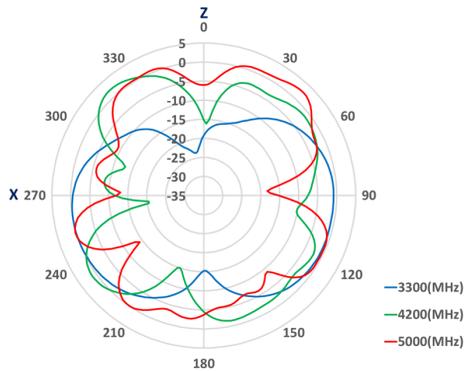
XY - Plane



YZ - Plane



XZ - Plane



Revisions

Rev.	Description	Date	ECN	Approval
A	Initial Release	2022-12-07	ST0428-31-002-A-RA00	ATC

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