

Datasheet

2.4-2.5Ghz & 5.15-5.85GHz  
External / In-building



Stick Antenna

**Features:**

High performing Wi-Fi dual-band antenna with SMA/RP-SMA connector for indoor applications

**Applications:**

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



**Electrical Specifications**

**Antenna Characteristics**

Antenna Type	Radiation Pattern	Polarization	Max. Input Power	Impedance
Stick Antenna	Omni	Linear	2W	50Ω

Frequency (GHz)	2.4 – 2.5	5.15 – 5.85
Return Loss (dB)	< -10	< -10
Gain, Peak / Average (dB)	3.0 / -0.5	4.4 / -0.6
Efficiency / Average (%)	89	87

**Mechanical Specifications**

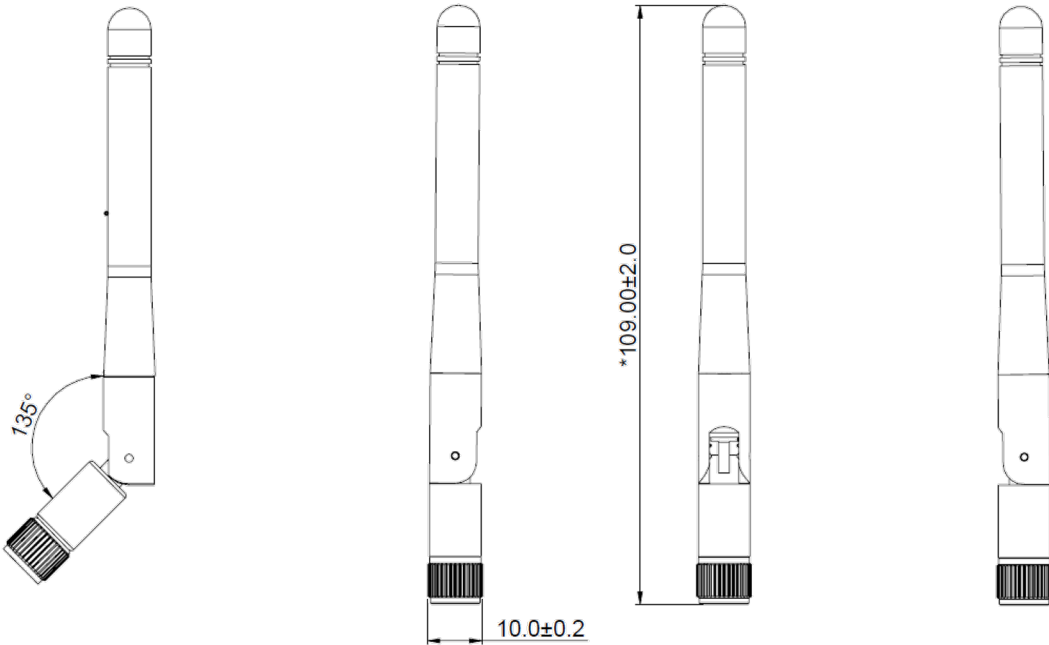
**Environmental**

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

RoHS Compliant

Part Number	Length (mm)	Weight (g)	Connector Type	Radome
ST0228-30-002-A	109	7.35	SMA Plug	TPEE/ABS
ST0228-30-502-A	109	7.35	RP-SMA Plug	TPEE/ABS

**Mechanical Drawing**



SMA Plug

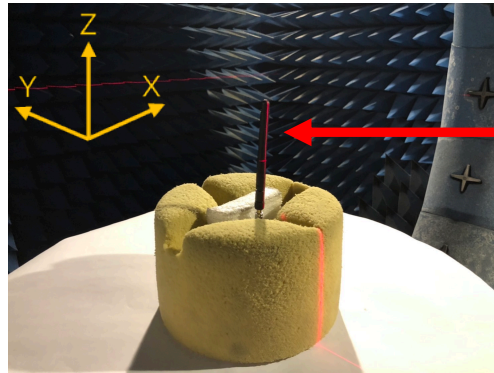
ST0228-30-002-A



RP-SMA Plug

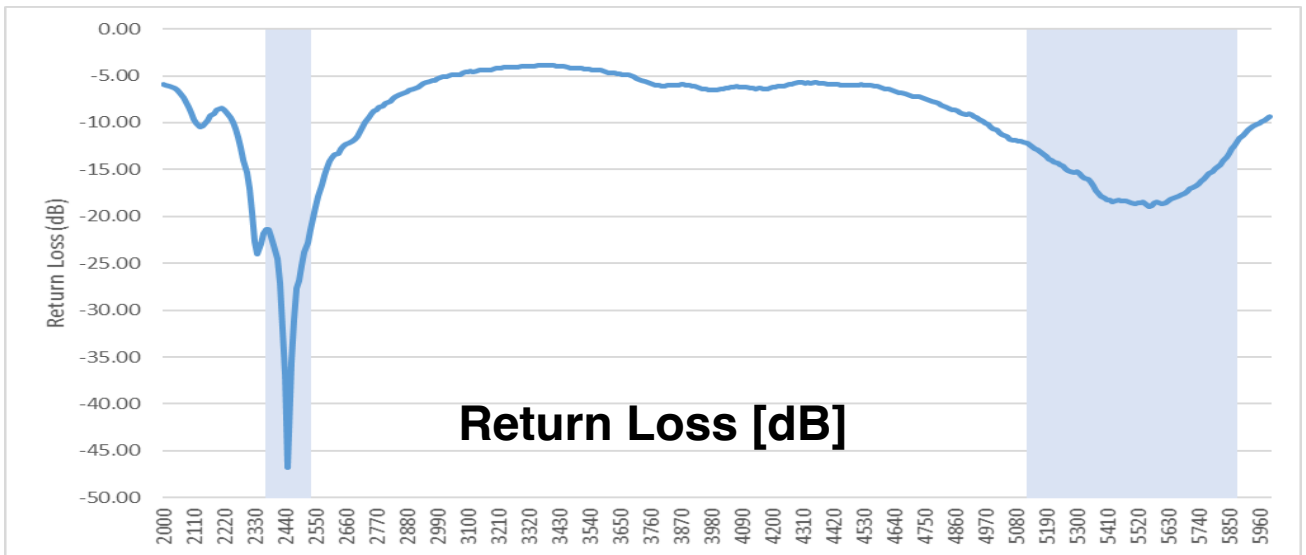
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### Charts in Free Space

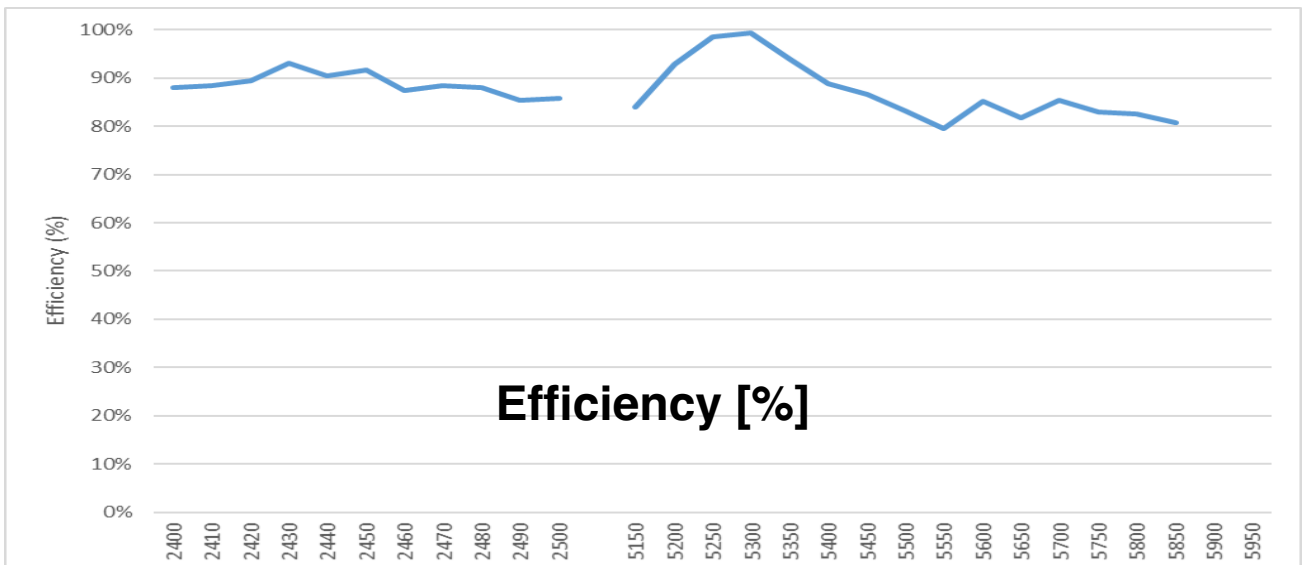


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Test setup, measurement performed in 3D Anechoic Chamber

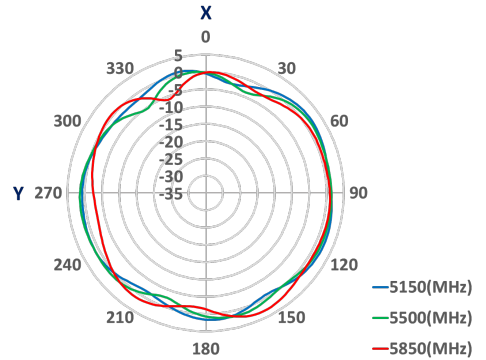
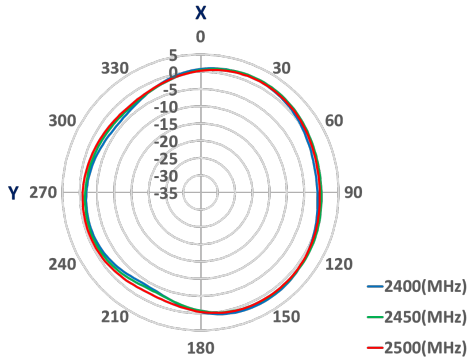


Blue background represents frequency response.

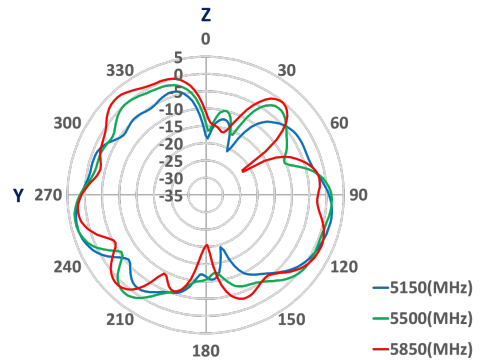
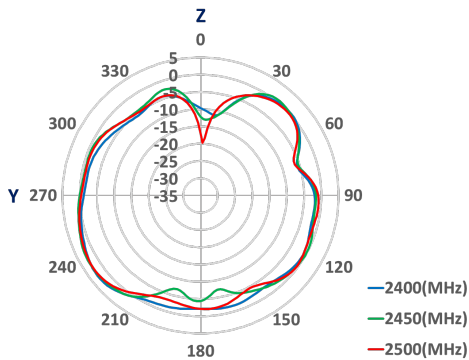


Radiation Pattern - Free Space

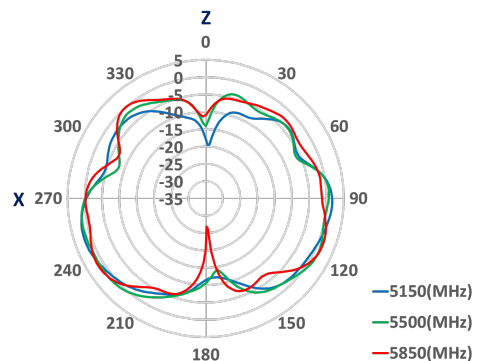
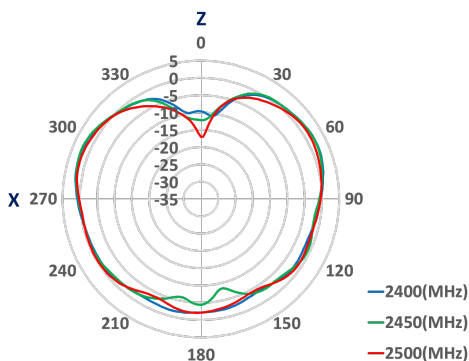
XY - Plane



YZ - Plane



XZ - Plane



Revisions

Rev	Description	Date	ECN	Approval
A	Initial Release	2022-10-25	ST0228-30-X02-A-RA00	ATC
B	RF Performance update	2023-01-02	ST0228-30-X02-A-RB00	ATC

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