

Description: 868-928MHz

Series: Stick Antenna

PART NUMBER: W5021

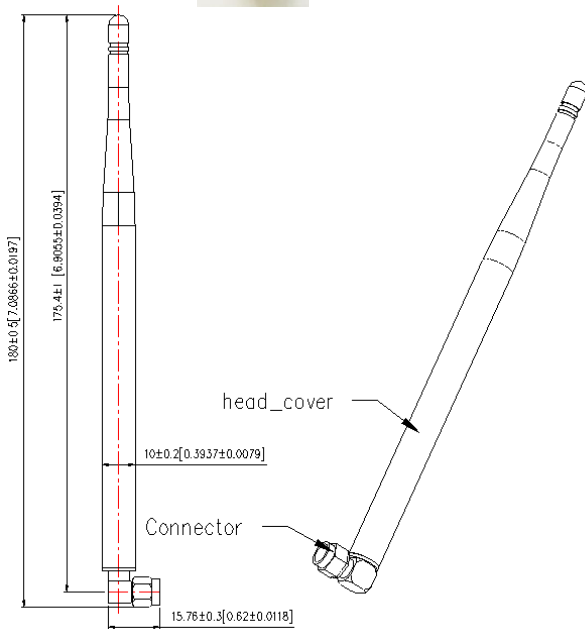


Features:

- ¼ wave dipole antenna
- Length 180mm
- Gain 2.2 dBi
- Connector Right Angle RP SMA
- High Efficiency >70%
- Power rating 1W
- IP65 rated

Applications:

- ISM 868 / 915 MHz radios
- IoT, M2M
- Industry automation
- Remote controls
- Toys, Consumer electronics



All dimensions are in mm / inches

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In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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Tel: 86 512 6807 9998



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ELECTRICAL SPECIFICATIONS

Frequency	868-928	MHz
Nominal Impedance	50	Ω
VSWR	2	Max
Average efficiency	70	%
Peak Gain	2.2	dBi +/- 1 dB
Polarization:	Vertical	
Power withstanding	1	W
Connector type	RP-SMA	

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MECHANICAL SPECIFICATIONS

Plastic radome	TPEE
Color	Black
Ingress Protection	IP65
Weight	22.8 g
Overall Length	180mm/7.09Inches

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40/+85° C
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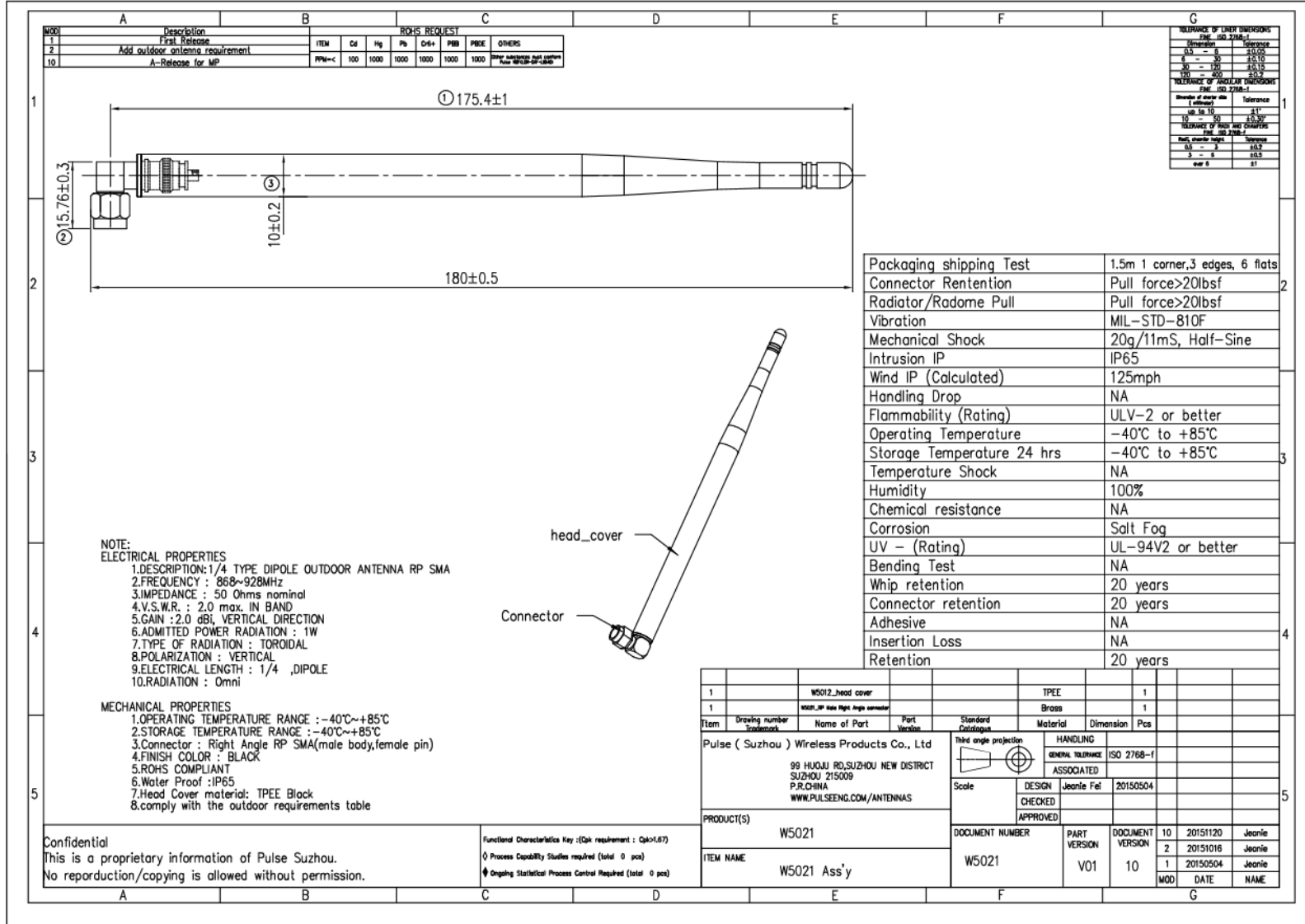
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MECHANICAL DRAWING



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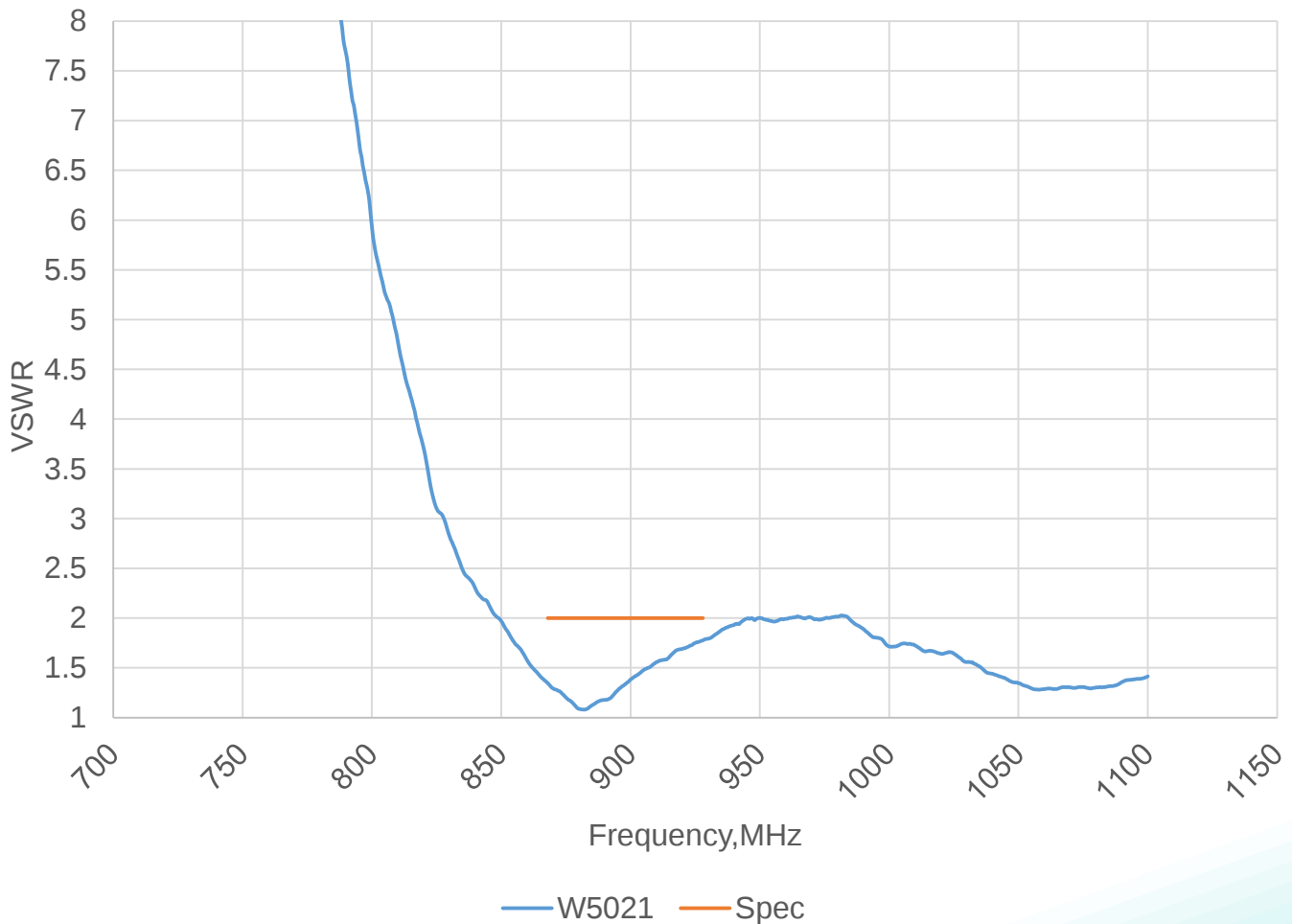
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CHARTS

VSWR

VSWR vs Frequency measured in free space
W5021 measured in PSU



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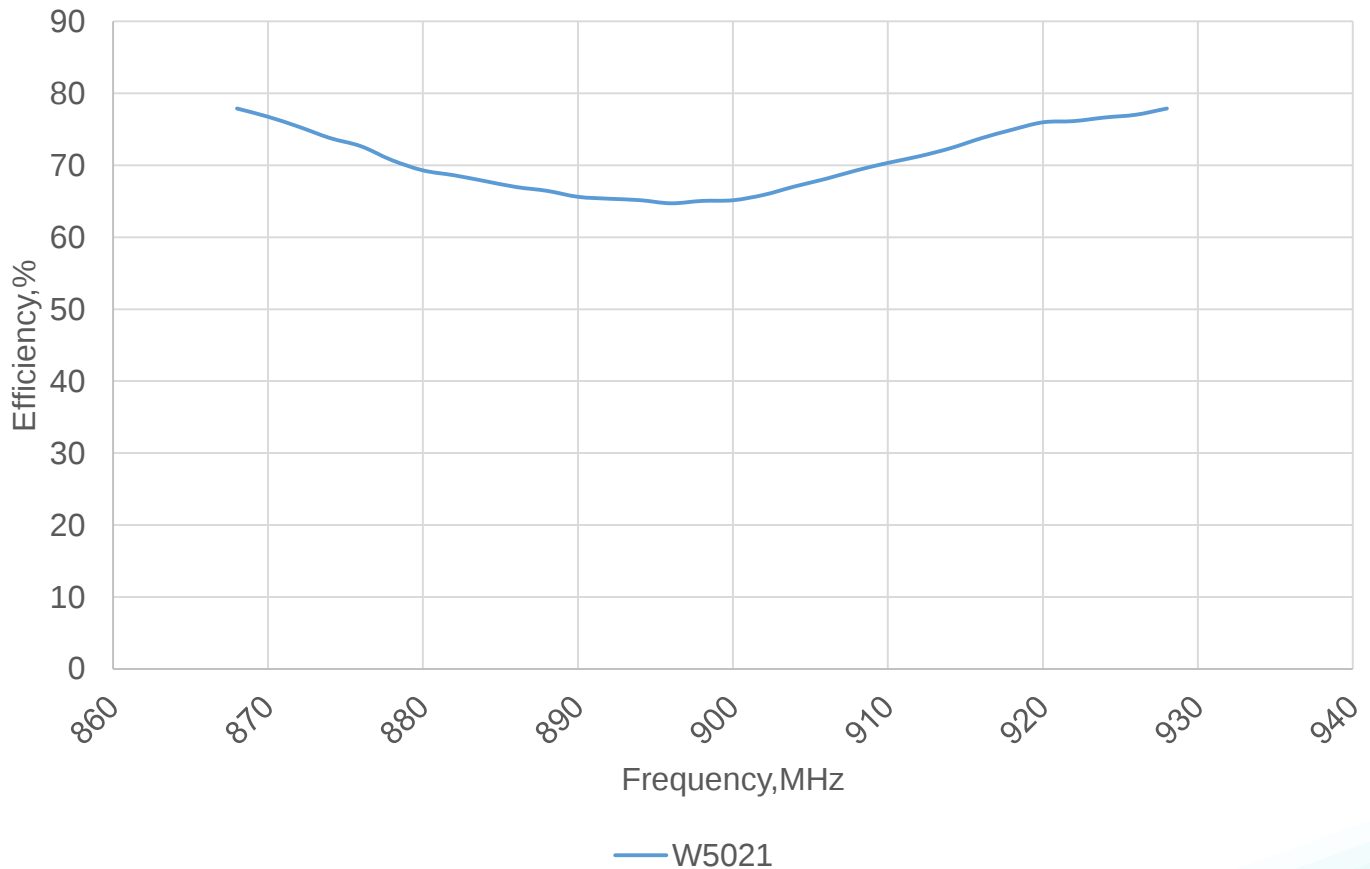
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CHARTS

Efficiency

Efficiency vs Frequency measured in free space
W5021 measured in PSU



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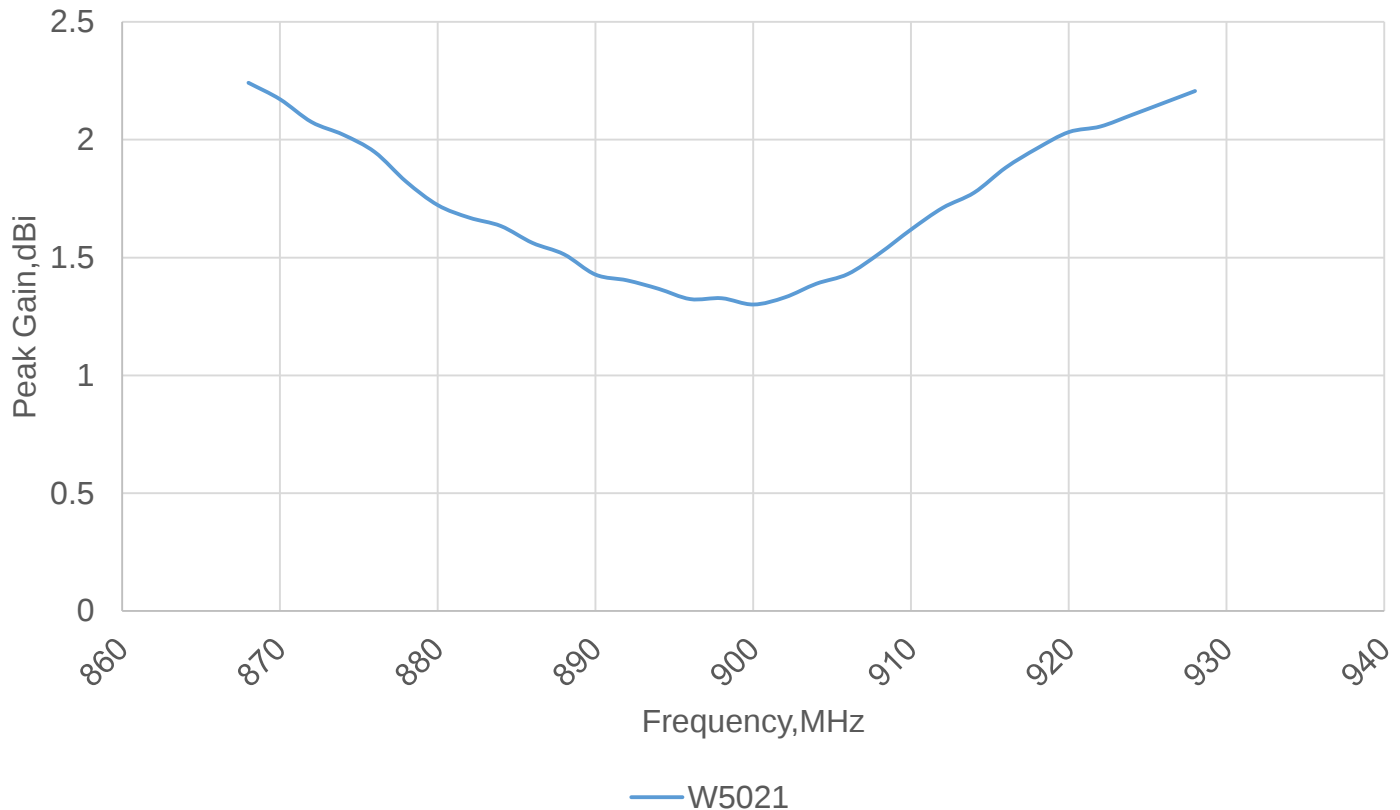
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CHARTS

Peak Gain

Peak Gain vs Frequency measured in free space
W5021 measured in PSU



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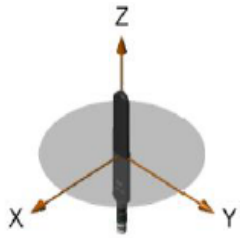
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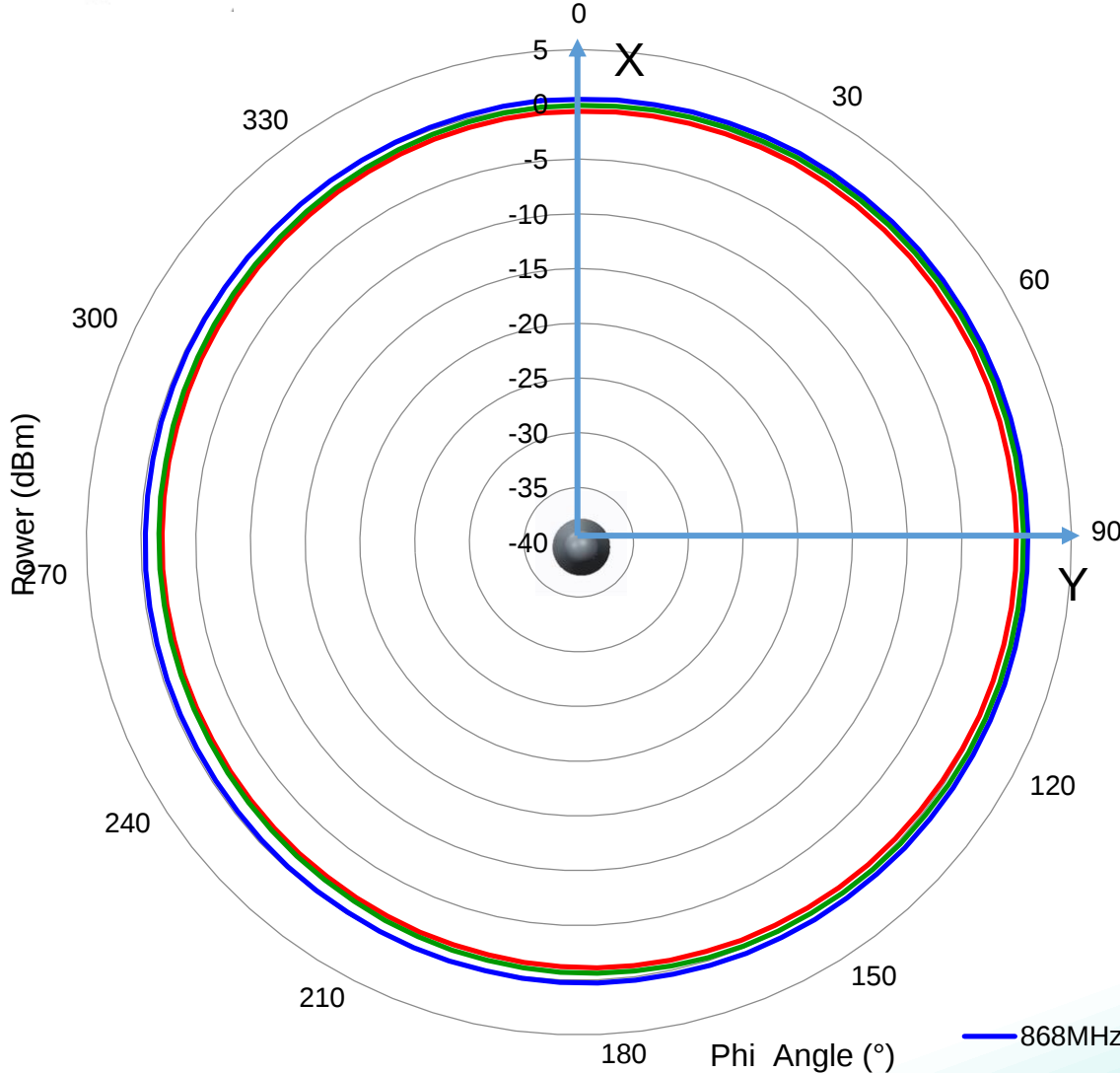
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CHARTS



Gain Plots

XY Plane



868MHz

Avg (dBi) = 0.35
Peak (dBi) = 1.05
Avg -3 (deg) = 360

900MHz

Avg (dBi) = -0.92
Peak (dBi) = 0.01
Avg -3 (deg) = 330

928MHz

Avg (dBi) = -0.43
Peak (dBi) = 0.64
Avg -3 (deg) = 360

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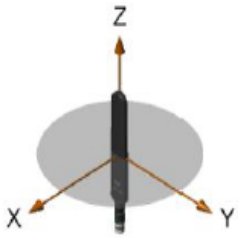
Downloaded from Arrow.com

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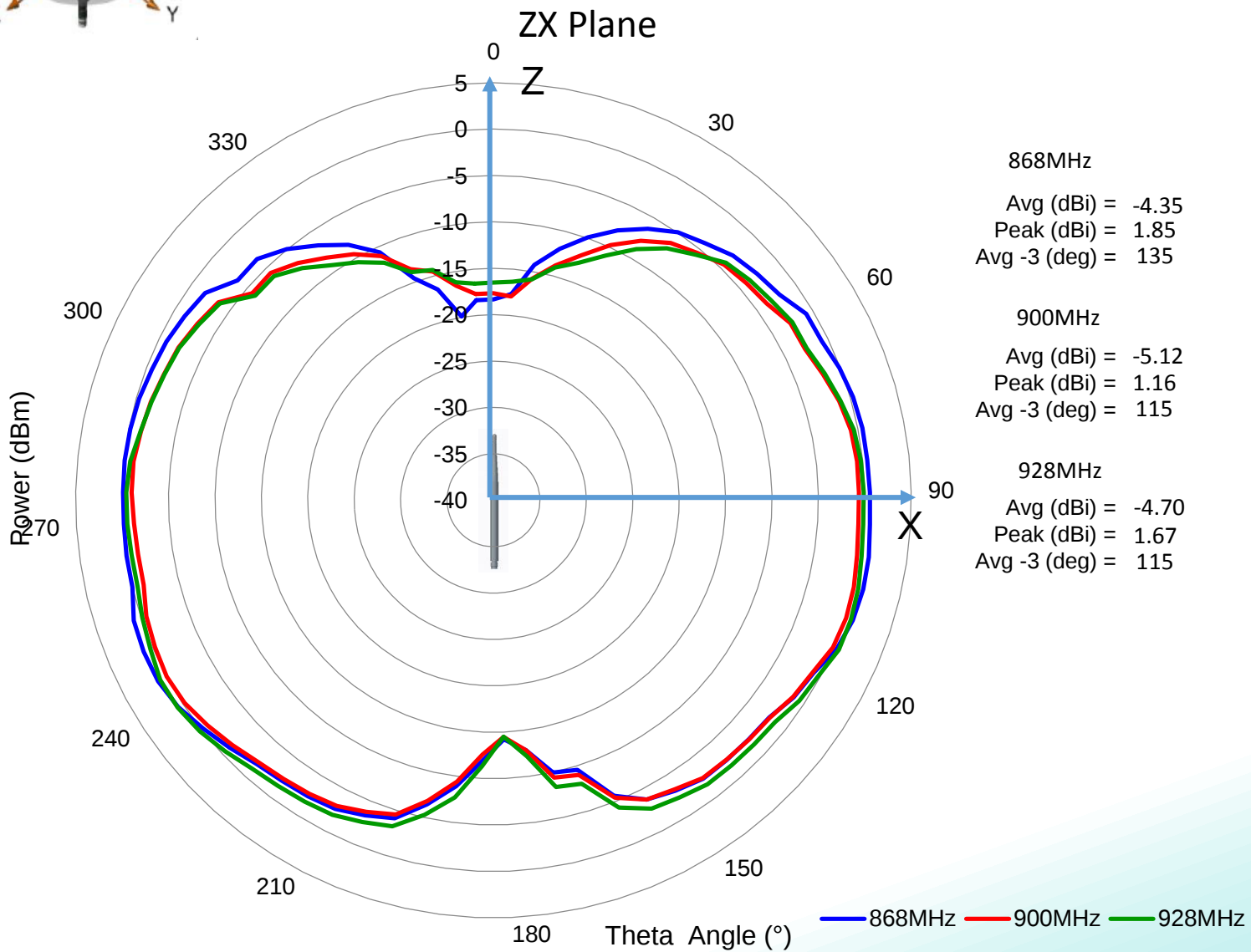
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CHARTS



Gain Plots



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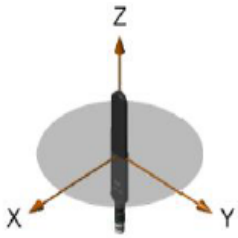
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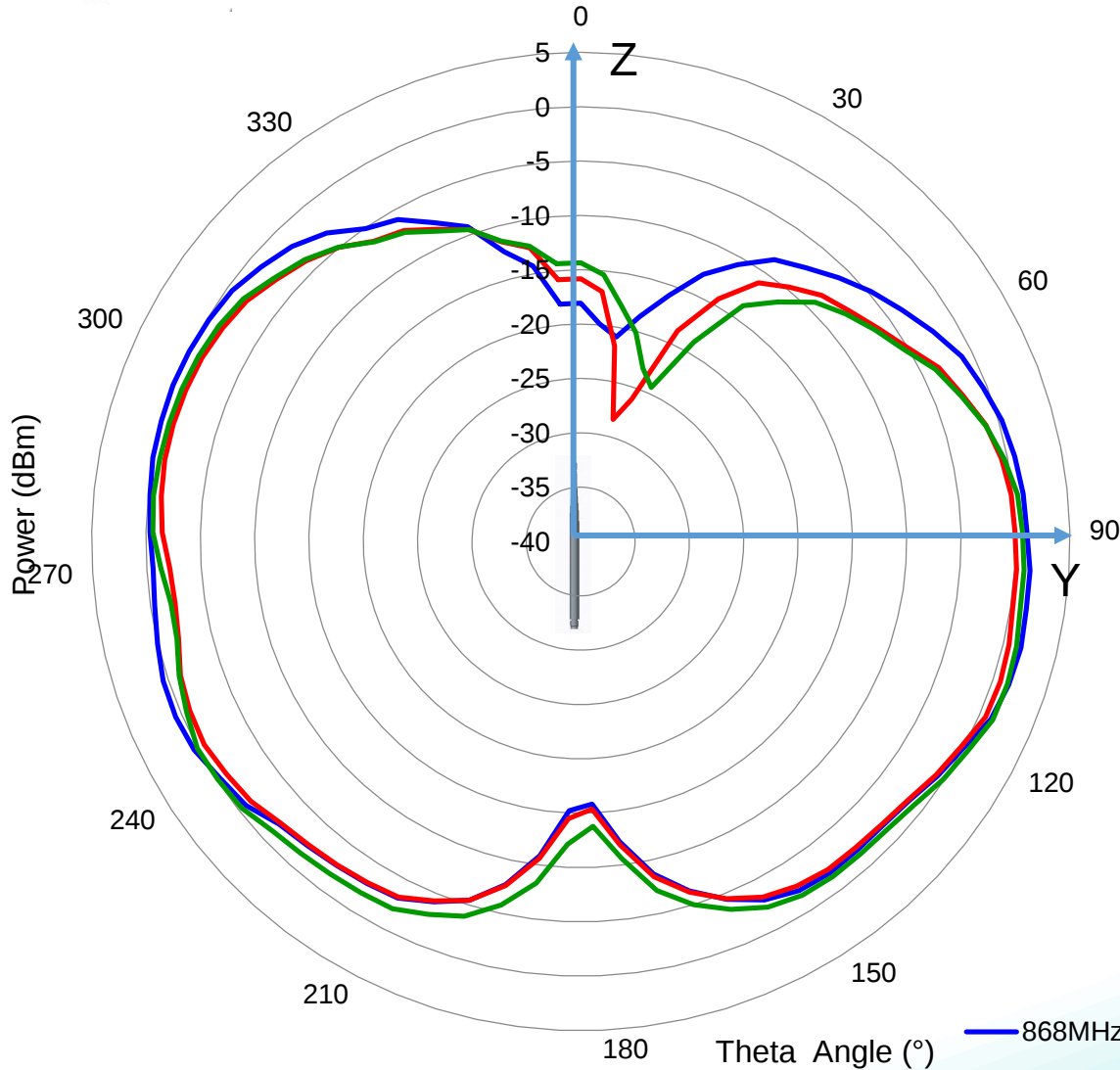
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CHARTS



Gain Plots

YZ Plane



868MHz
Avg (dBi) = -4.66
Peak (dBi) = 1.67
Avg -3 (deg) = 145
900MHz
Avg (dBi) = -5.82
Peak (dBi) = 0.71
Avg -3 (deg) = 155
928MHz
Avg (dBi) = -5.23
Peak (dBi) = 1.4
Avg -3 (deg) = 150

— 868MHz — 900MHz — 928MHz

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PACKAGING

600PCS/Carton box

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