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Innovative **Technology**
for a **Connected** World

S8658PC

865-867MHz

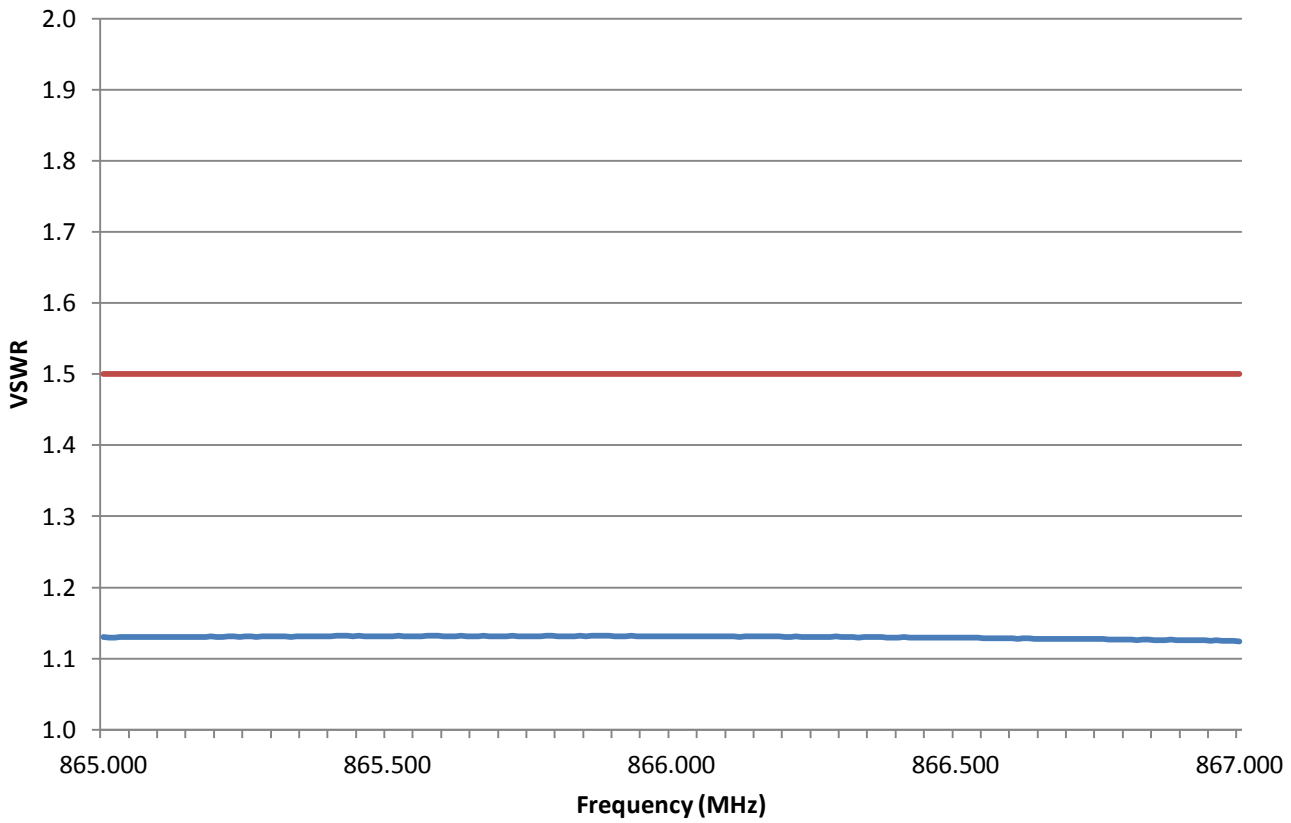
February 22, 2012

www.lairdtech.com

Antenna Characteristics

Parameter	Performance
Vendor Part Number	S8658PCR / S8658PCL
Antenna Type	Panel
Connector Type	Female, Type N
Cable Type	RG58
Cable Length (cm)	30.48 (12') +/- 1.27cm
Plenum Rated?	Yes
Operating Frequency Range	865-870 MHz
Maximum Gain (dBiC) Typical Gain (dBiC)	9 8.5
Azimuth Beam Width (deg)	36°
Elevation Beam Width (deg)	75°
VSWR Max	1.5:1
Polarization	Circular
Max Power (watts)	10w
Weight	0.79 kg (1.75 lb)
Storage Temperature Range (C)	-40° - 85°
Operational Temperature Range (C)	-35° - 70°
Outdoor Rated?	Yes

VSWR



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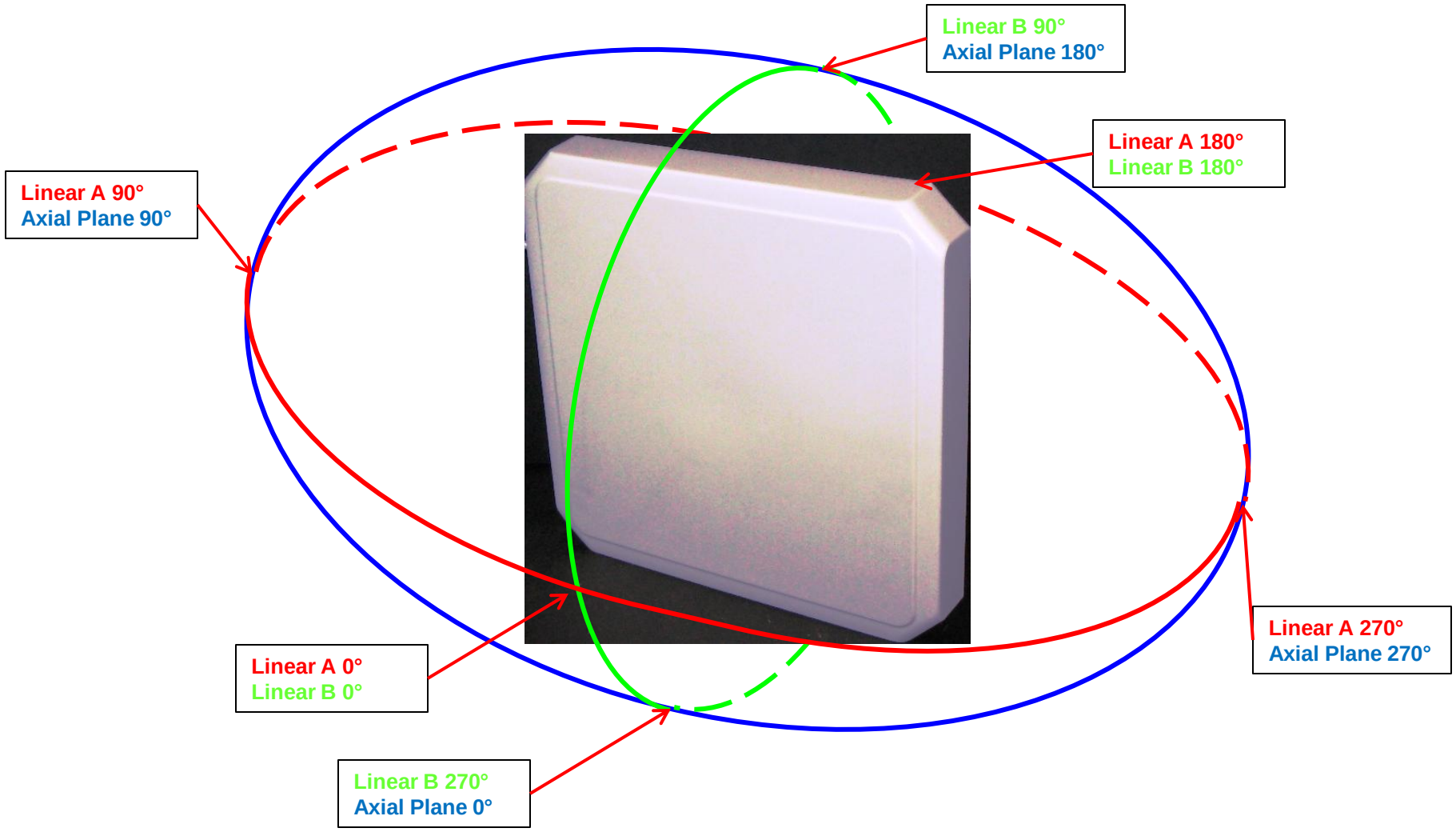
Radiation Pattern Orientation



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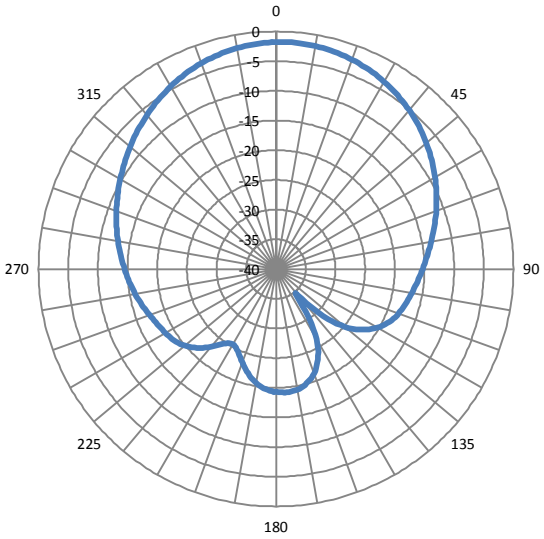
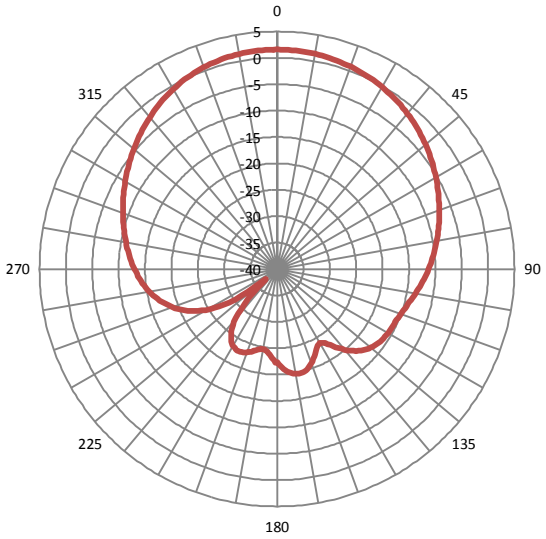
Radiation Patterns (865 MHz)

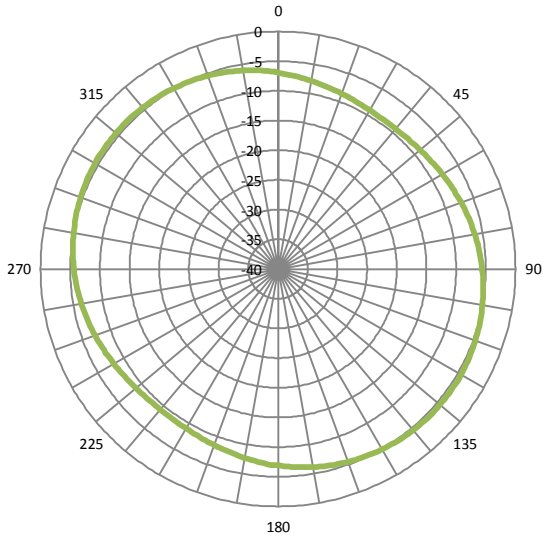
Linear A



Linear B

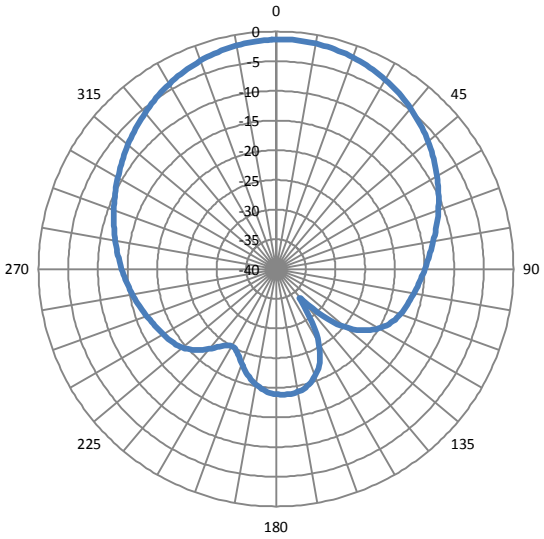


Axial Rotation

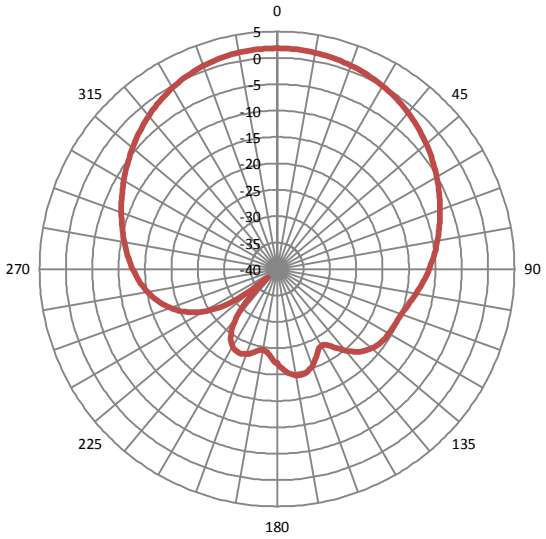


Radiation Patterns (866 MHz)

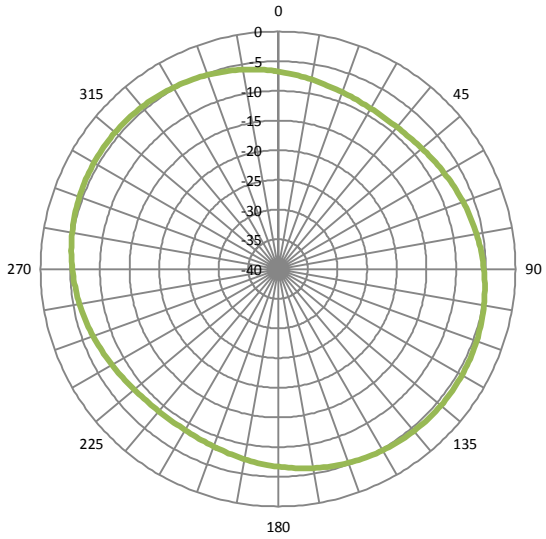
Linear A



Linear B

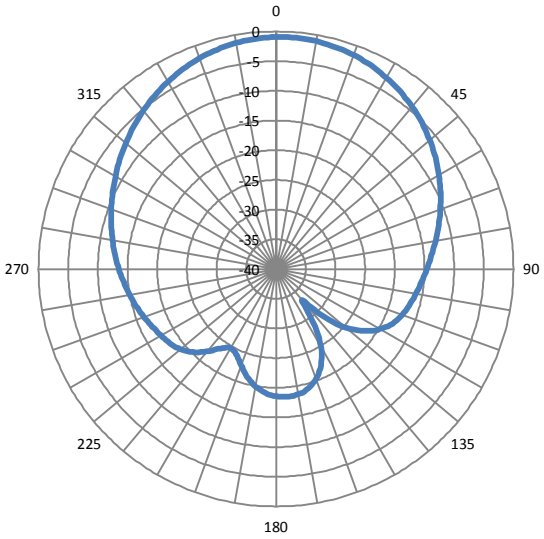


Axial Rotation

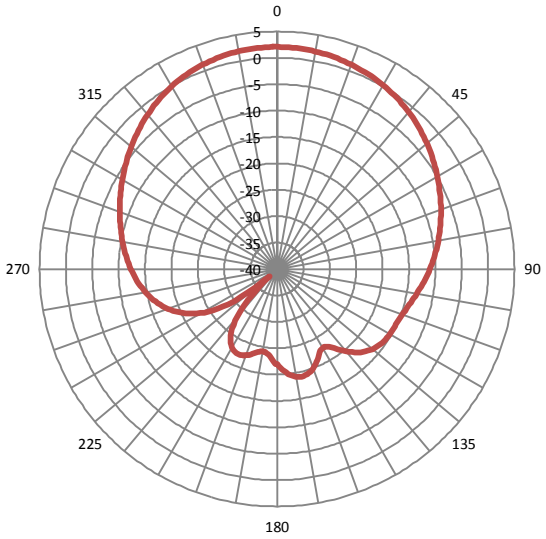


Radiation Patterns (867 MHz)

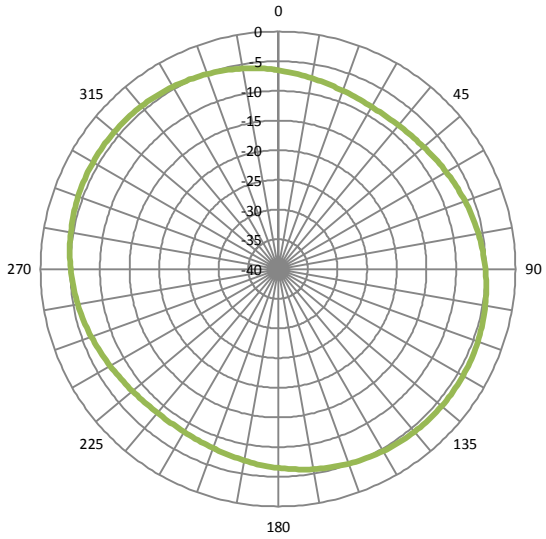
Linear A



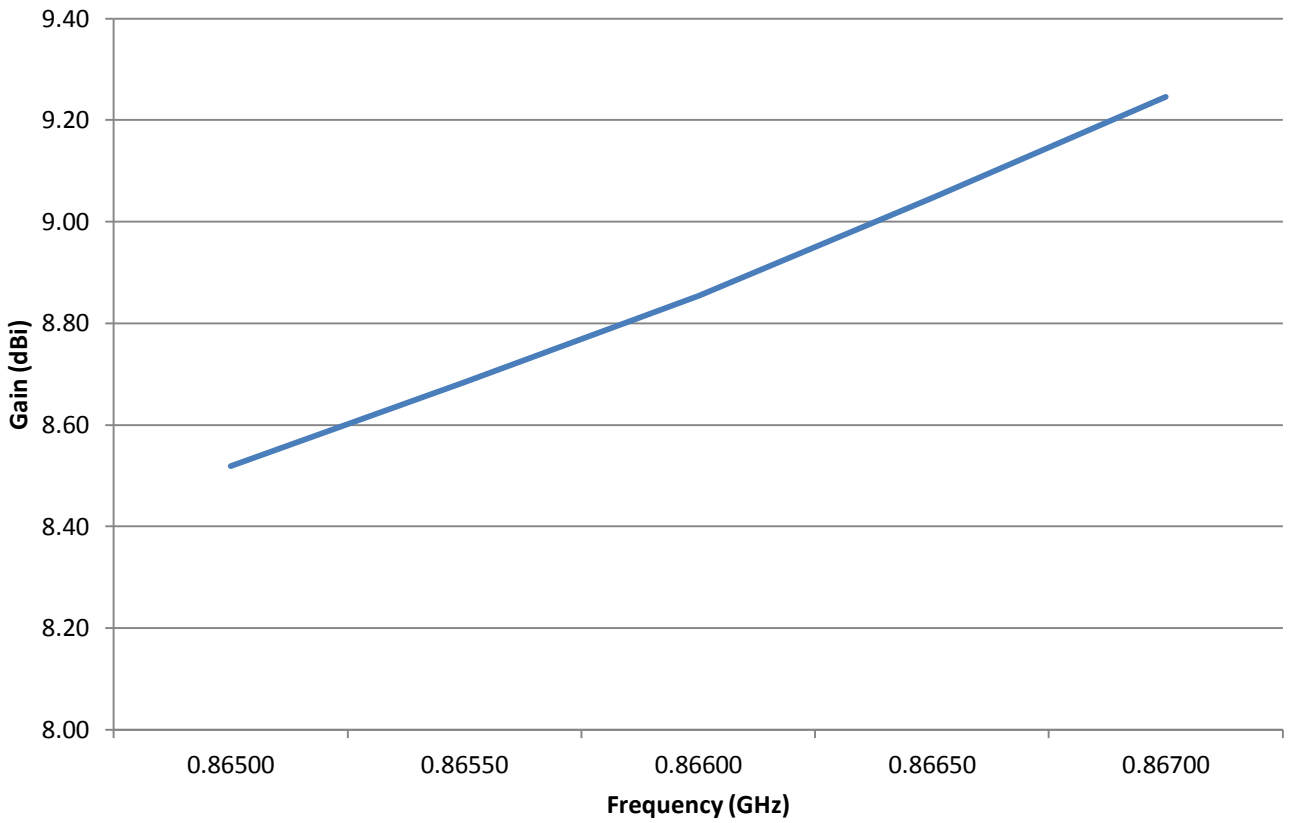
Linear B



Axial Rotation



Peak Gain on Horizon (dBic)



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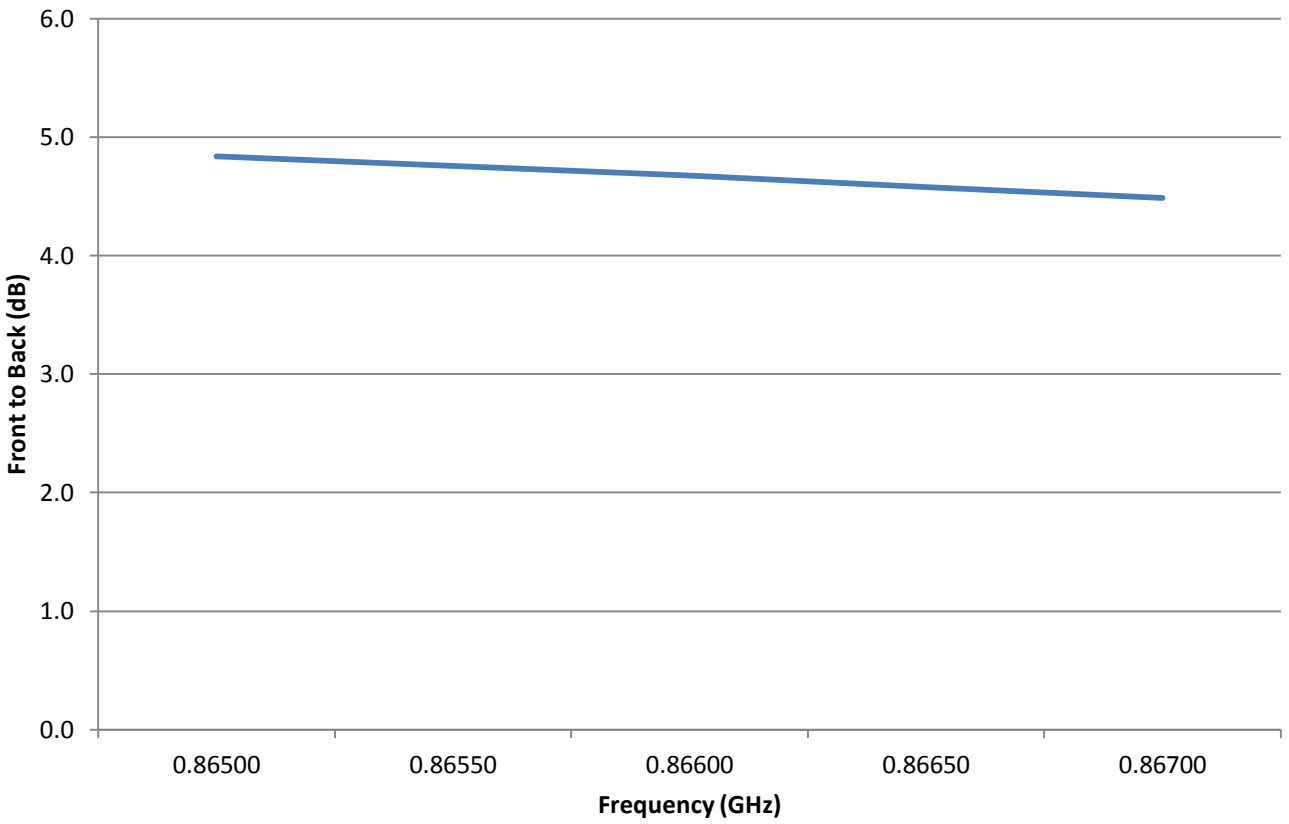
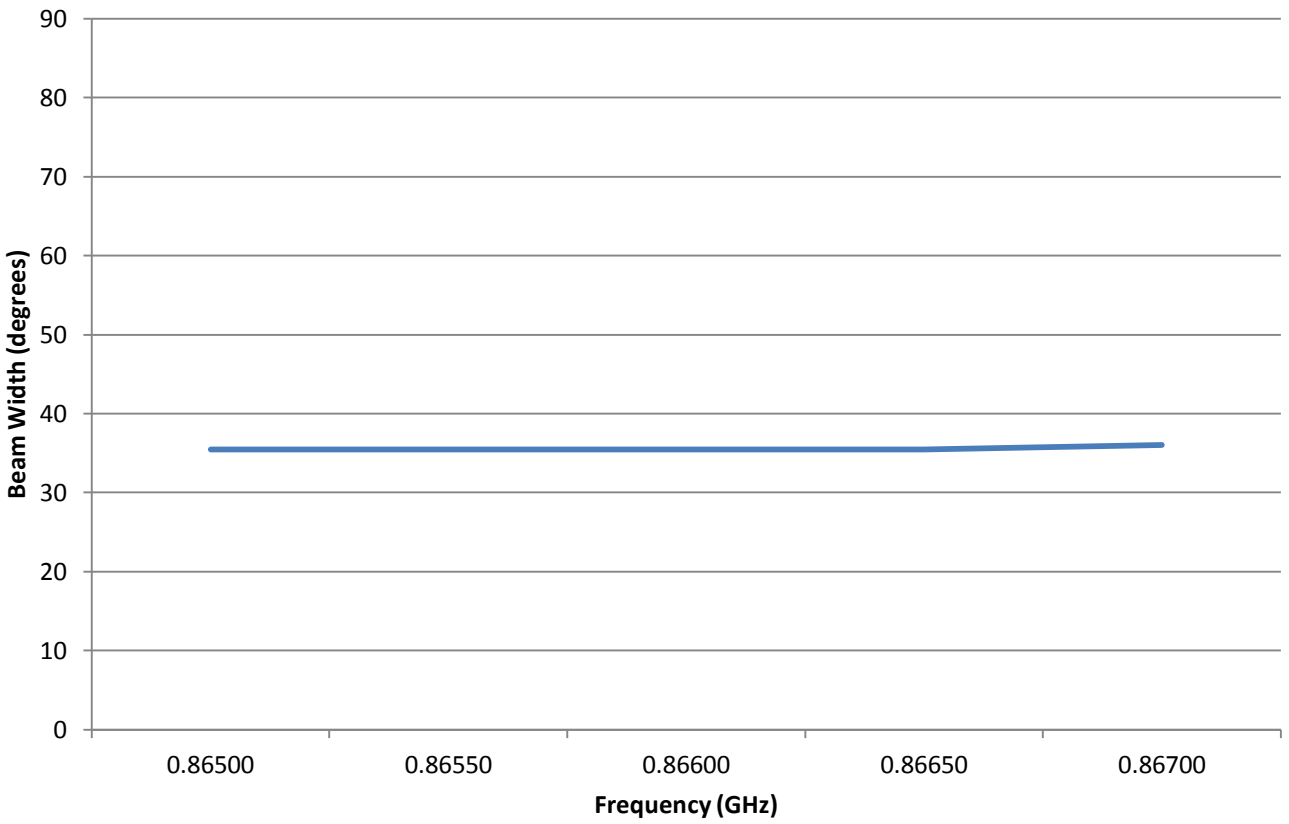
Axial Ratio


6.0
5.0
4.0
3.0
2.0
1.0
0.0
Front to Back (dB)
0.86500
0.86550
0.86600
0.86650
0.86700
Frequency (GHz)

HPBW Linear A



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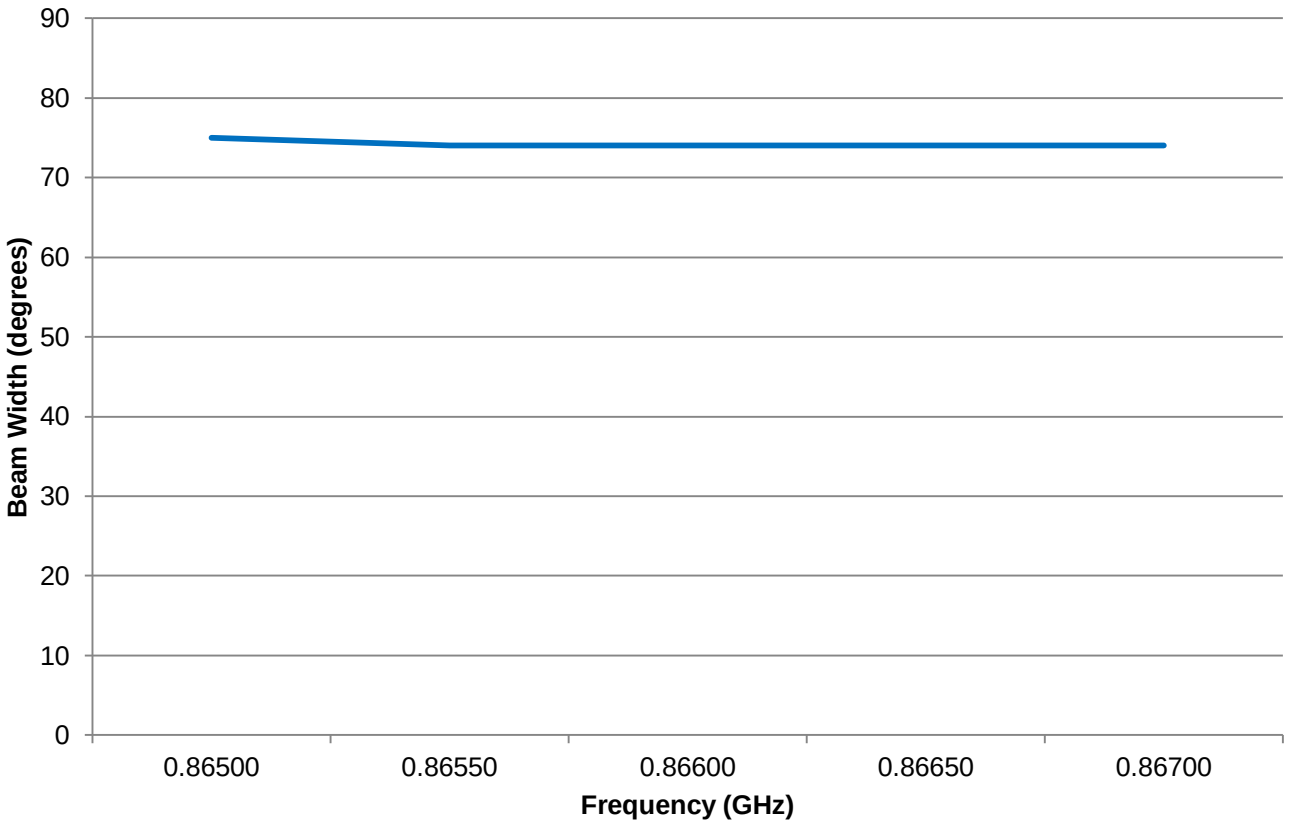
HPBW Linear B



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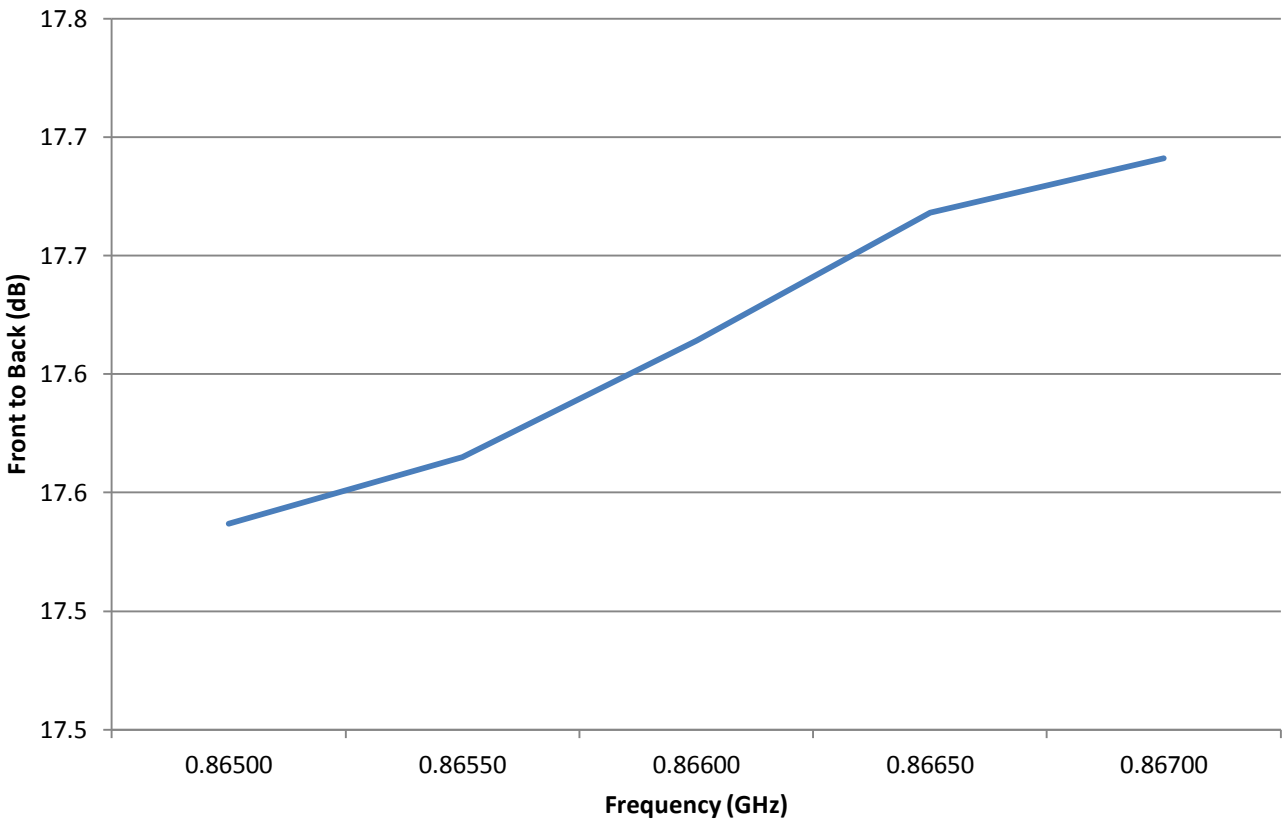
Front to Back



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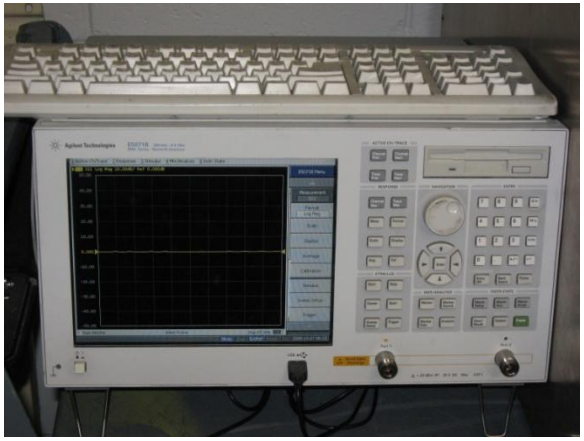
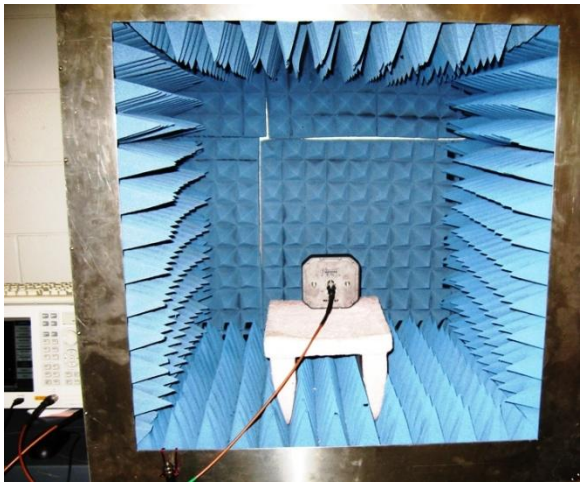
Test Equipment Summary (VSWR)





Analyzer

- Agilent E5071B network analyzer
- Maximum frequency range: 300 kHz – 8.5 GHz
- Calibration certified annually (system)
- Calibrated per OSL standard (test)

Testing Chamber

- 36”H x 36”W x 34”D
- Absorber material: Pyramid 2”W x 2”L x 5”H / division

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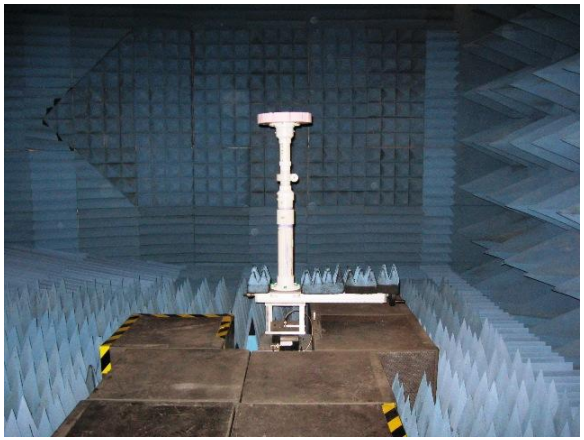
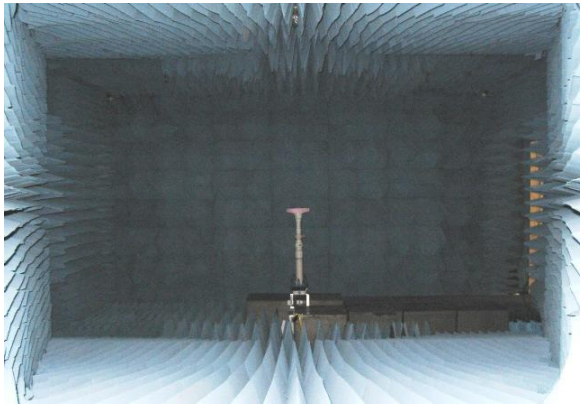
Test Equipment Summary (Radiation Patterns)





Testing Chamber:

- Test chamber is a single axis, single source system comprising a network analyzer, positioner / controller and tapered anechoic chamber. The system is calibrated prior to each test. All components are calibrated annually as required.
- Dimensions:
  - 8.8 meters from face of source to DUT center of rotation
  - 72” center of height above floor