

Path to Bald Mesa in white

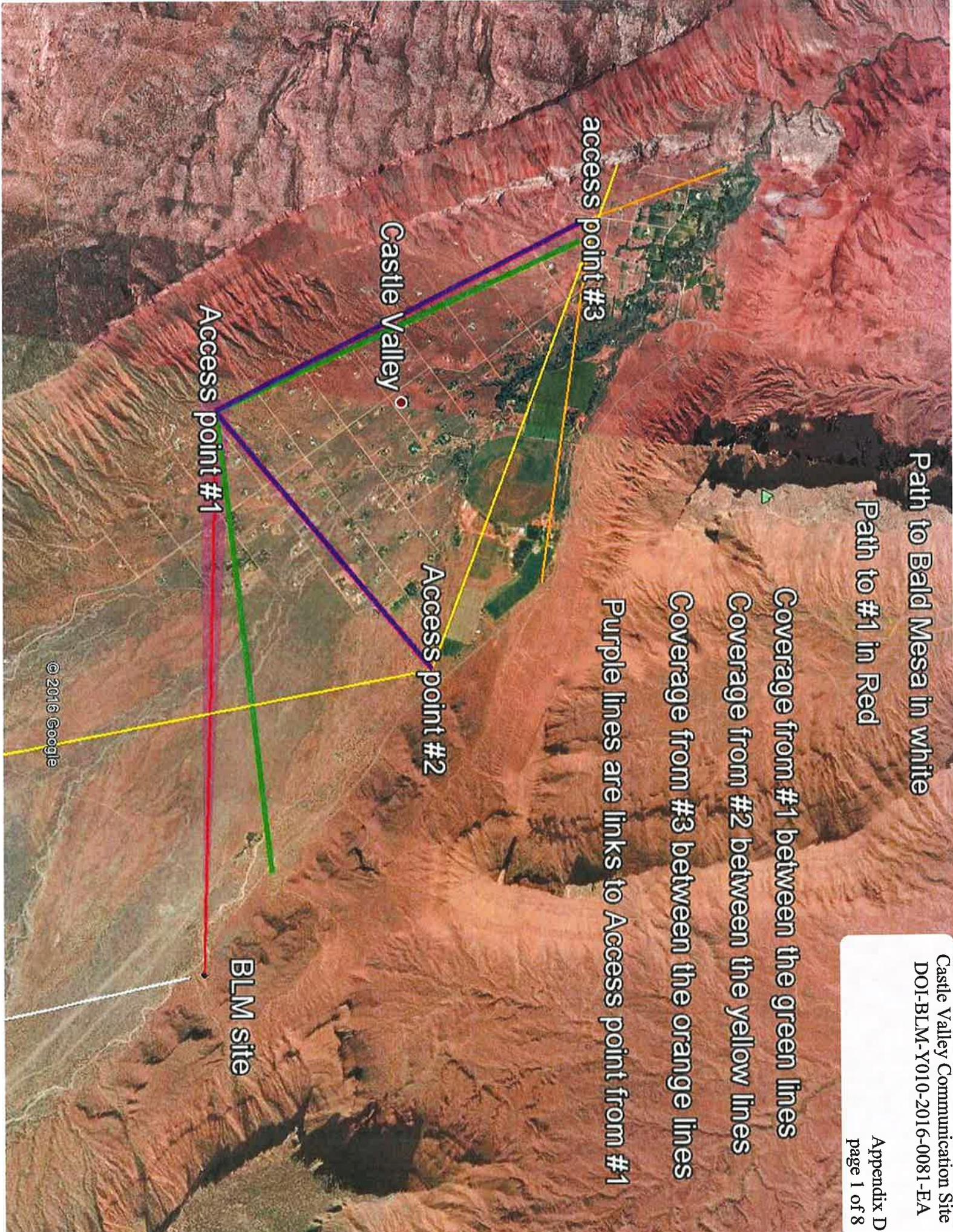
Path to #1 in Red

Coverage from #1 between the green lines

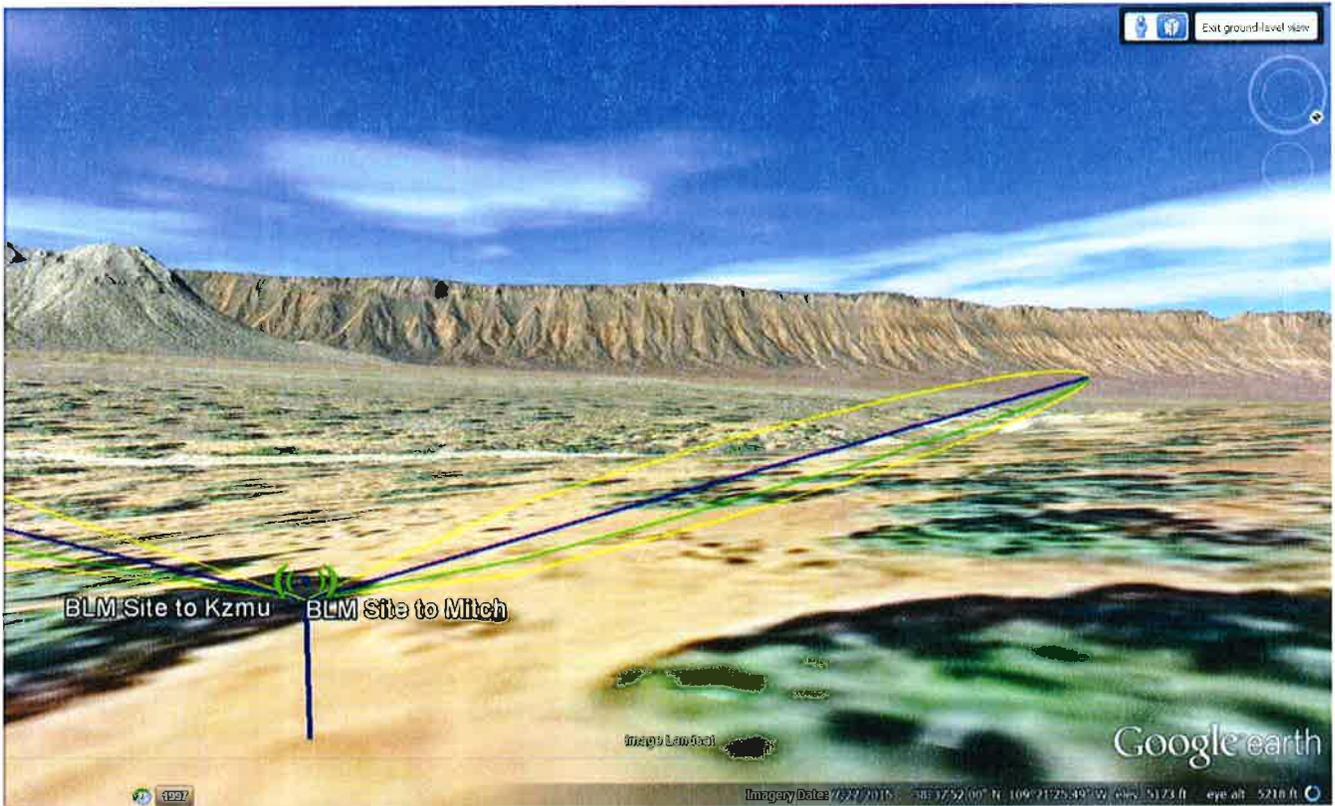
Coverage from #2 between the yellow lines

Coverage from #3 between the orange lines

Purple lines are links to Access point from #1



BLM Site to Mitch Site RF Propagation View



RF propagation from BLM Site to Mitch Site



RF propagation from Mitch Site to BLM Site

Castle Valley Communication Site
DOI-BLM-Y010-2016-0081-EA

Propagation Statistics

Distance between BLM Site to Mitch and Mitch to BLM is 4.4 km (2.7 miles)
True North Azimuth = 261.83°, Magnetic North Azimuth = 251.69°, Elevation angle = -1.1978°
Terrain elevation variation is 117.2 m
Propagation mode is line-of-sight, minimum clearance 3.1F1 at 0.6km
Average frequency is 5805.000 MHz
Tx Power = 22 dBm, 0.1585 watts
System Loss(Free Space = 120.5 dB, Obstruction = -0.4 dB TR, Urban = 0.0 dB, Forest = 1.0 dB, Statistics = 6.7 dB)
Total propagation loss is 127.8 dB
System gain from BLM Site to Mitch to Mitch to BLM is 167.0 dB (AF5-VPOL.ANT at 261.8 °-1.20° gain = 30.0 dBi)
System gain from Mitch to BLM to BLM Site to Mitch is 167.0 dB (AF5-VPOL.ANT at 81.8 °1.16° gain = 30.0 dBi)
Rx Level = -45.8 dBm
Worst reception is 39.2 dB over the required signal to meet 70.000% of situations

BLM Site to KZMU Bald Mesa RF Propagation View



RF propagation from BLM Site to KZMU Bald Mesa



RF propagation from KZMU Bald Mesa to BLM Site

Propagation Statistics

Distance between BLM Site and Bald Mesa KZMU is 12.4 km (7.7 miles)

True North Azimuth = 159.54°, Magnetic North Azimuth = 149.40°, Elevation angle = 5.4773°

Terrain elevation variation is 1181.2 m

Propagation mode is line-of-sight, minimum clearance 1.9F1 at 12.3km

Average frequency is 5760.000 MHz

Tx Power = 22dBm, 0.1585 watts

System Loss(Free Space = 129.5 dB, Obstruction = -0.2 dB TR, Urban = 0.0 dB, Forest = 1.7 dB, Statistics = 6.7 dB)

Total propagation loss is 137.7 dB

System gain from BLM Site to Kzmu to Bald Mesa KZMU is 167.0 dB (AF5-VPOL.ANT at 159.5 °5.48° gain = 30.0 dBi)

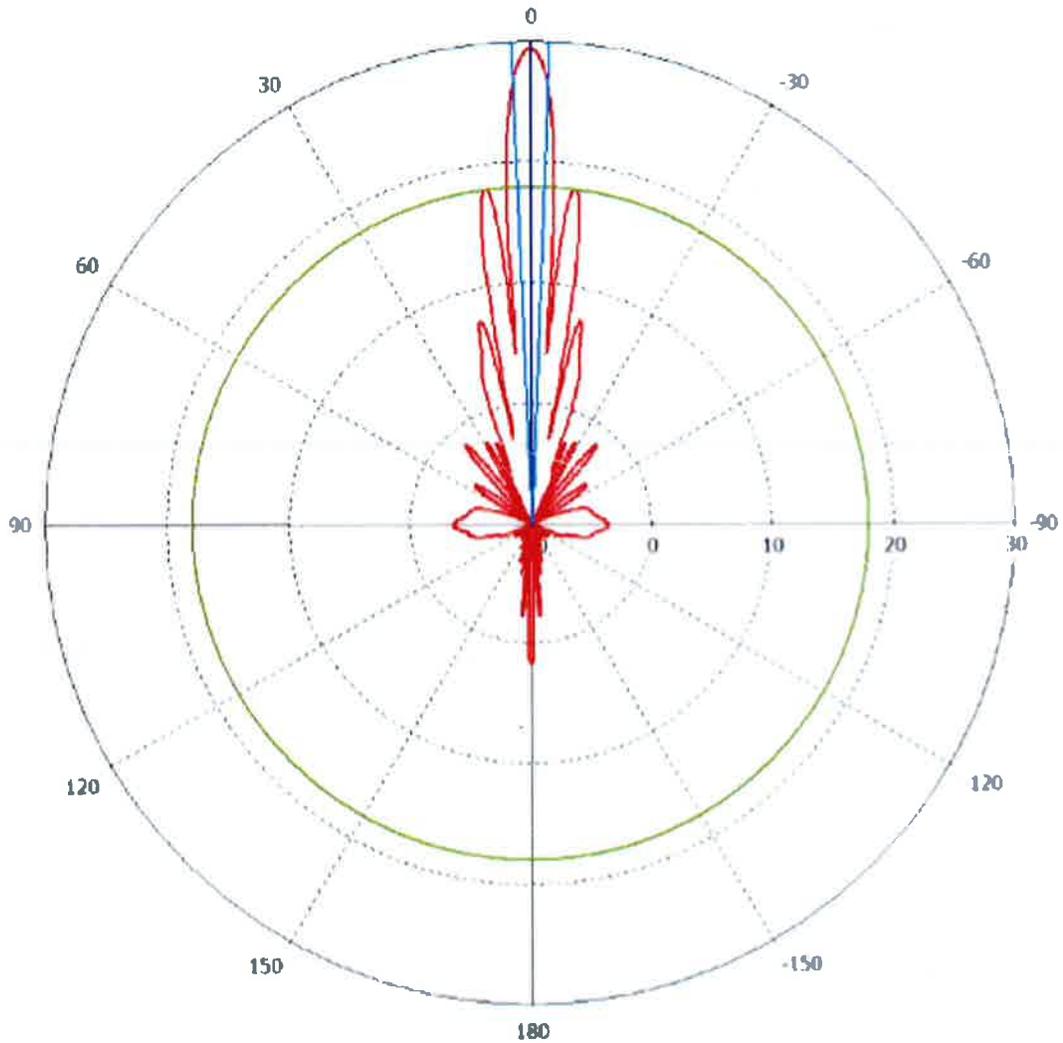
System gain from Bald Mesa KZMU to BLM Site to Kzmu is 167.0 dB (AF5-VPOL.ANT at 339.6 °-5.59° gain = 30.0 dBi)

Rx Level = 55.1 dBm

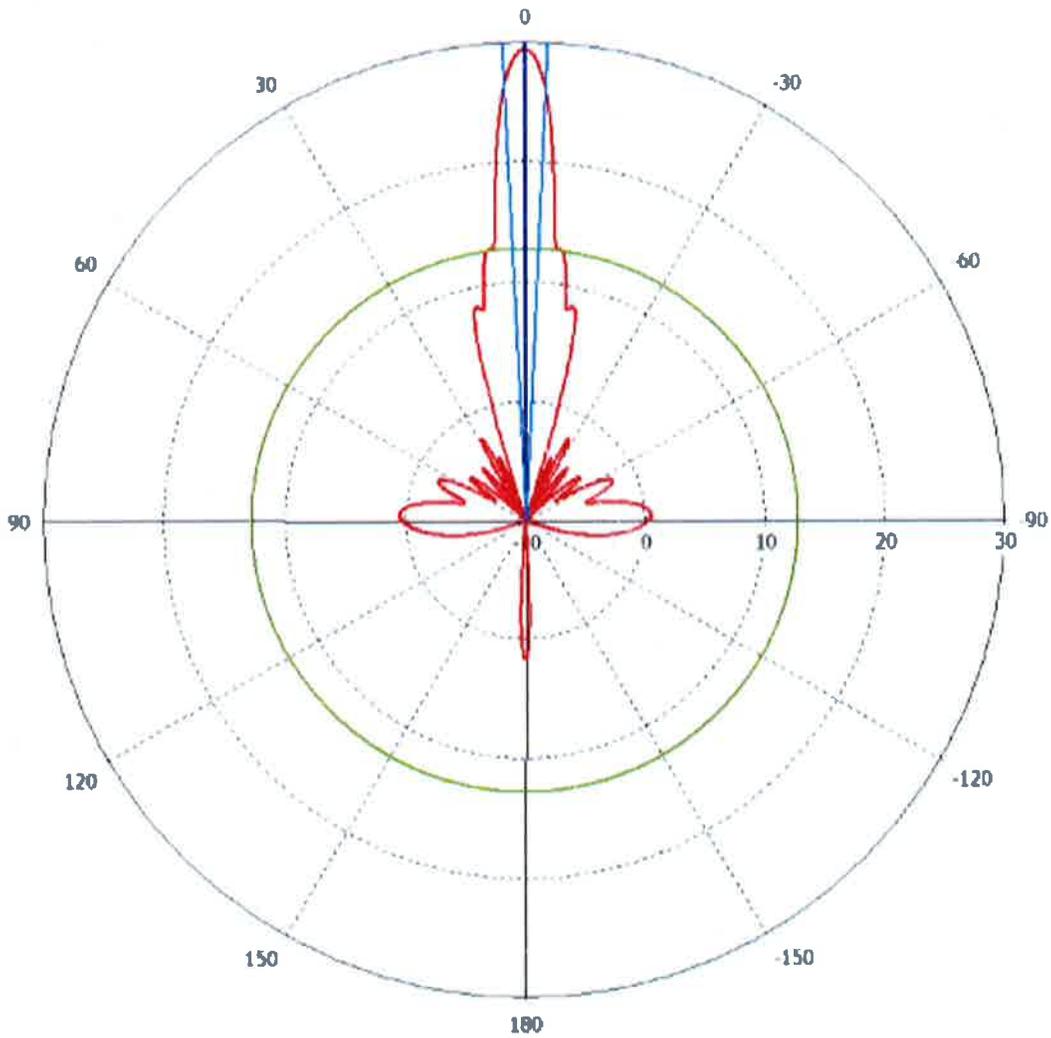
Worst reception is 29.3 dB over the required signal to meet 70.000% of situations

5ghz 3° point to point radome horizontal and vertical polarization

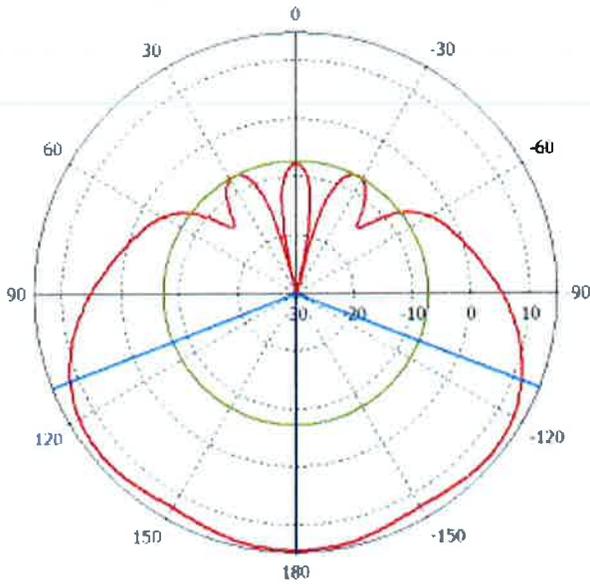
Horizontal polarization



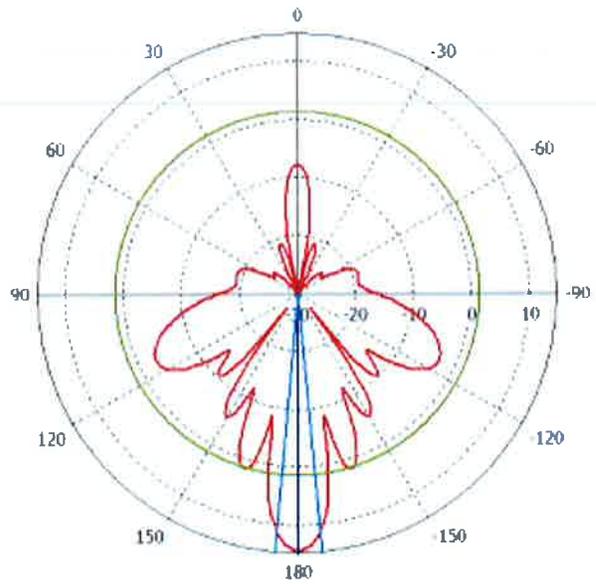
Vertical polarization



5ghz 120° Sector Horizontal Polarization

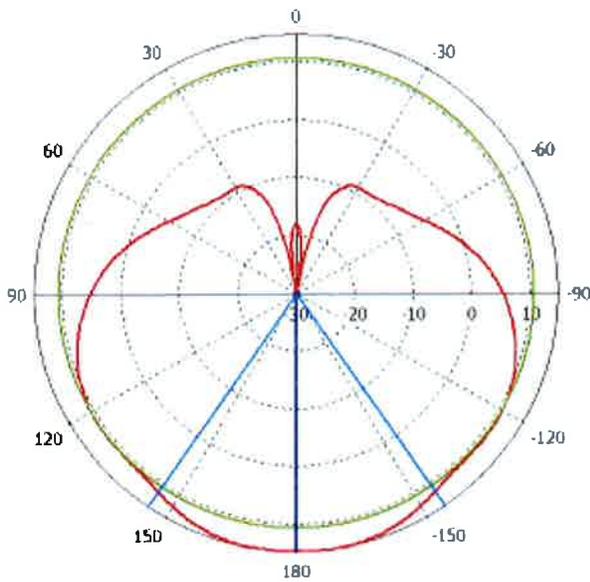


mANT15s HP azimuth

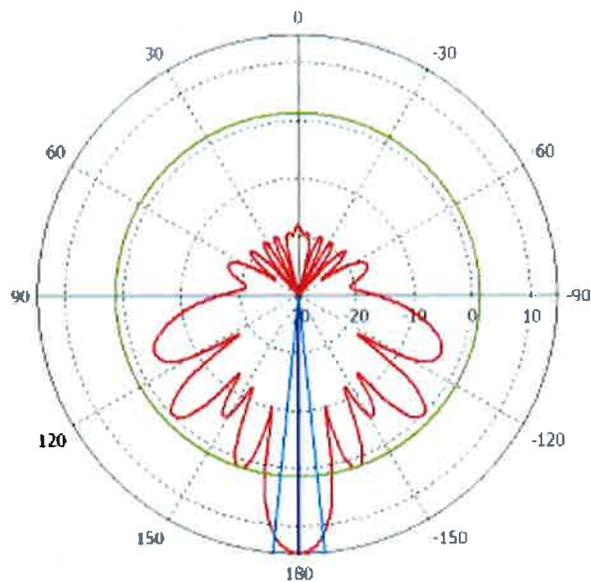


mANT15s HP elevation

5ghz 15dBi 120° Sector Vertical Polarization



mANT15s VP azimuth



mANT15s VP elevation