

Product Specification
Dell Gateway Wall mounted antennas –
2 port WIFI
Laird part number : PVD24515-DE1

Prepared by CS Por
28Oct 2015

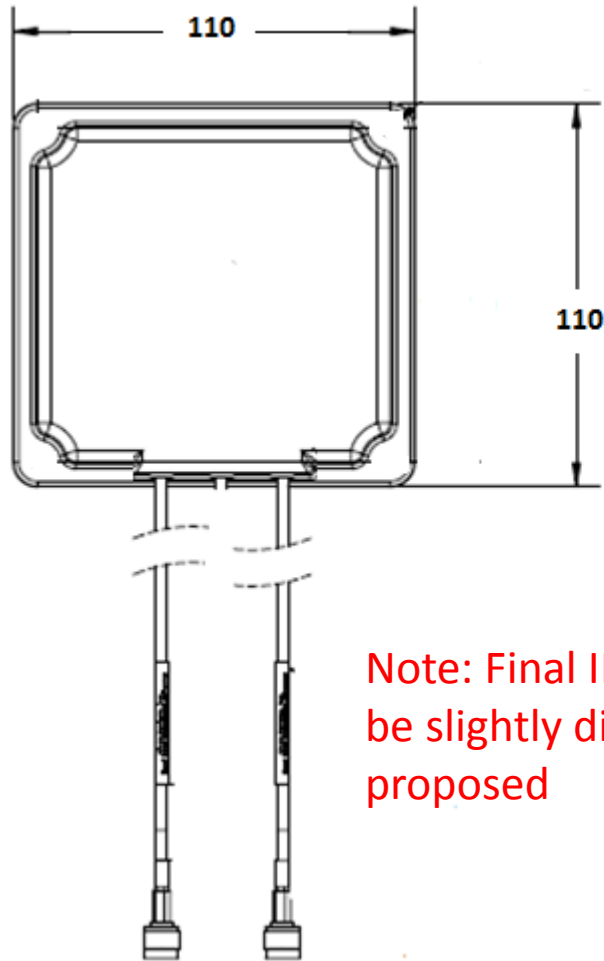
RF Specifications

Antenna Specification		
Number of Ports	2	
Frequency (GHz)	2.4-2.5	4.9 – 5.9
VSWR	2:1	2:1
Isolation (dB)	> 20	> 20
Peak gain on Horizon plane	< 3.8 dBi	< 5.5 dBi
Average gain on sphere	> -4 dBi	> -5 dBi
Polarization	Linear	
Efficiency	> 55%	> 55%
Antenna type	PCB Dipole	

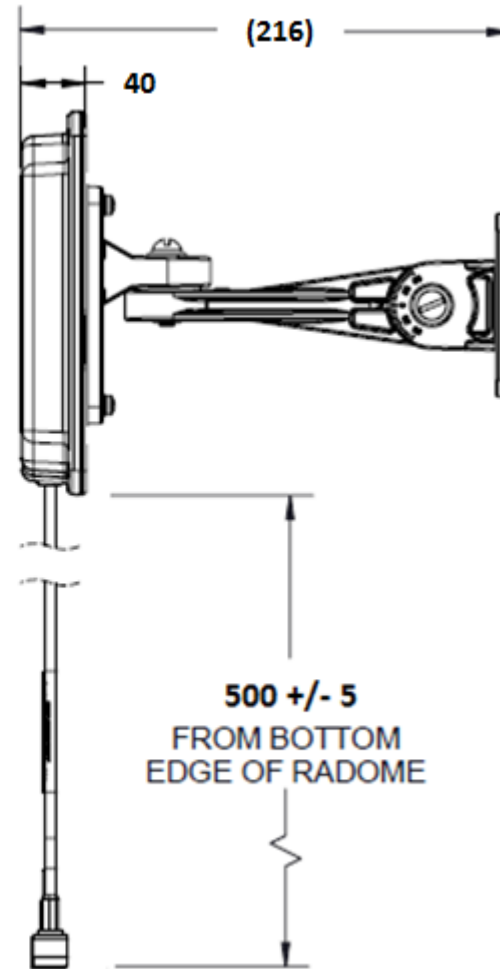
Mechanical Specifications

Antenna Specification	
Dimensions	110mm X 110mm X 40mm
IPX class	IP65
Mounting	Wall mounted
Connector type	SMA male
Antenna color	White
Cable type	Plenum rated low loss RG58
Cable color	White
Weight	TBA
Mounting bracket	Swivel type (plastic)
Mounting bracket length	~ 176 mm
Pig tail length	~ 500 mm

Preliminary mechanical outline



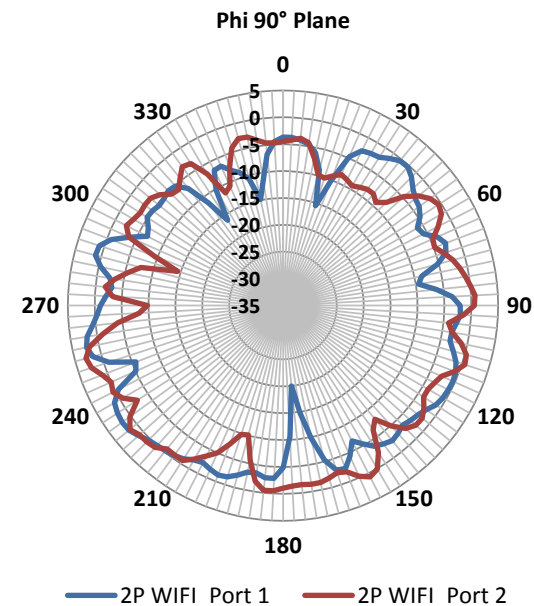
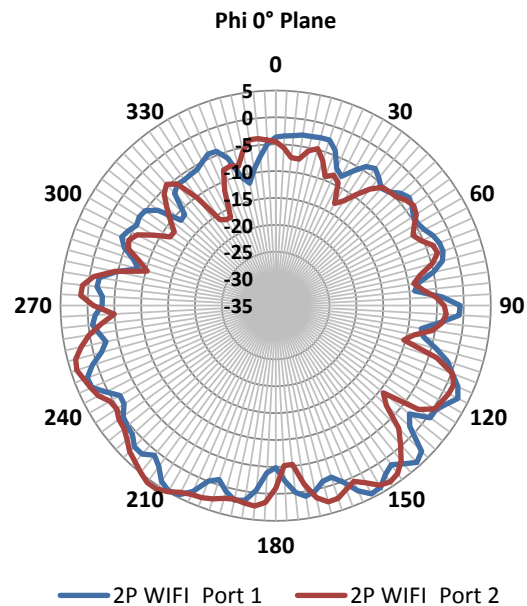
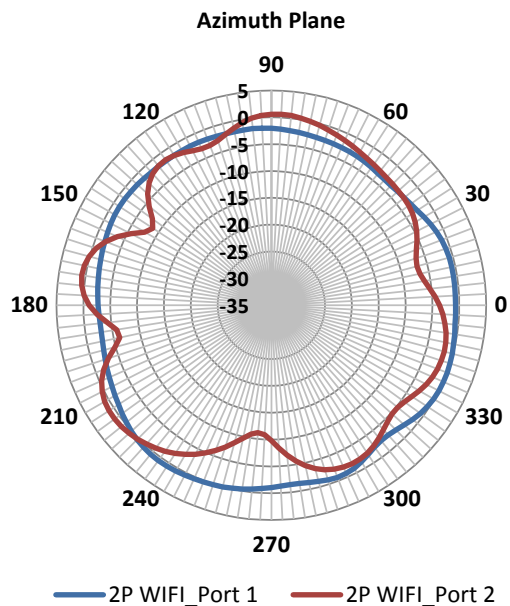
Note: Final ID design may be slightly different from proposed



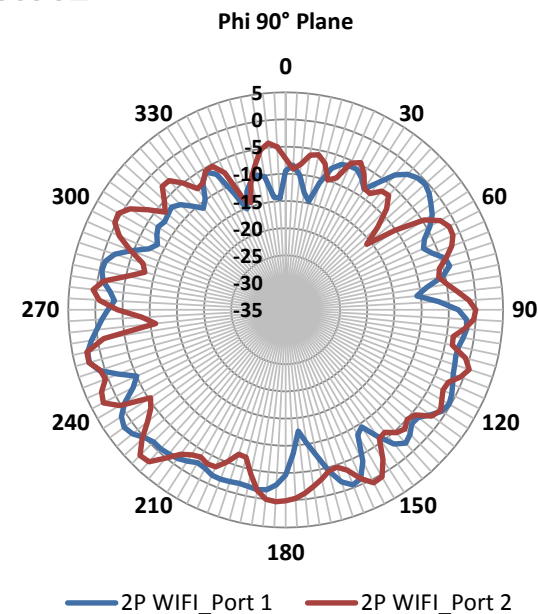
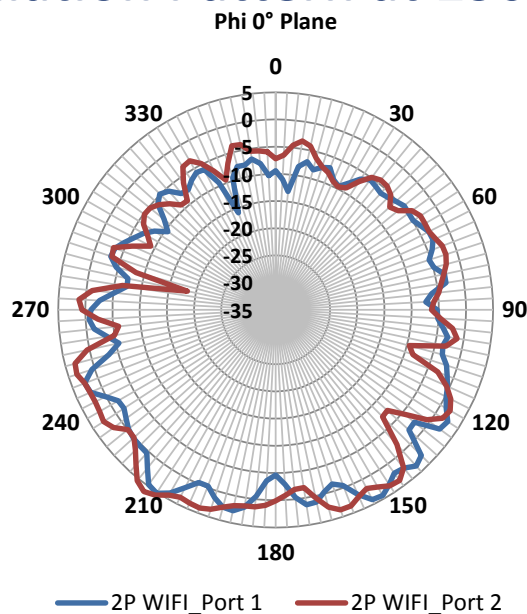
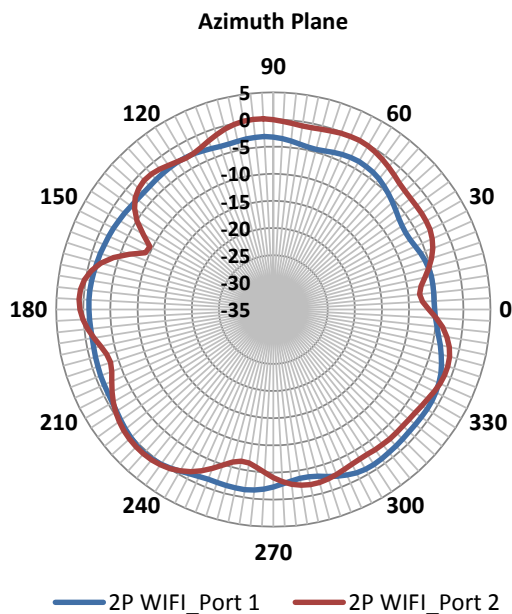
Coaxial cable specification

SPECIFICATIONS	
Impedance	50 ± 2.0 OHMS
Structural Return Loss	-16 dB or better from 100-2500 MHz unterminated sample, direct bridge method.
Nominal RTL reference	-16 dB or better to 6.0 GHz
Dielectric	Foam FEP
Dielectric, Outer Diameter	0.110" ±0.003"
Velocity of Propagation	80%
Center Conductor	Solid Copper, 0.037" ±0.001"
Shield #1	Foil, Aluminum/poly tape, adhered to dielectric
Diameter Over Foil	0.119" ±0.003"
Shield #2	Braid, 90% 36-AWG Tin/Copper
Outer Jacket	Plenum PVDF, Off-white, lead free, UV stable
Outer Diameter	0.178" ±0.006"
PLENUM Rating	CMP(ETL)C(ETL)
Attenuation dB/100'	8.0 dB @ 450 MHz 12.5 dB @ 900 MHz 19.6 dB @ 1.8 GHz 23.6 dB @ 2.5 GHz
Nominal reference values, (not tested in production)	23.0 dB @ 3.0 GHz 27.5 dB @ 4.0 GHz 31.0 dB @ 5.0 GHz 35.0 dB @ 6.0 GHz
Installation Temp	-20° C to +65° C
Operating Temp	-30° C to +65° C
CC Pullout	6 lbf min., 16 lbf max.
Jacket Pullout	4.5 lbf min. on 3" section @ 0.5" per minute
Min Bend Radius	0.5' static bend
Leakage	-90 dB

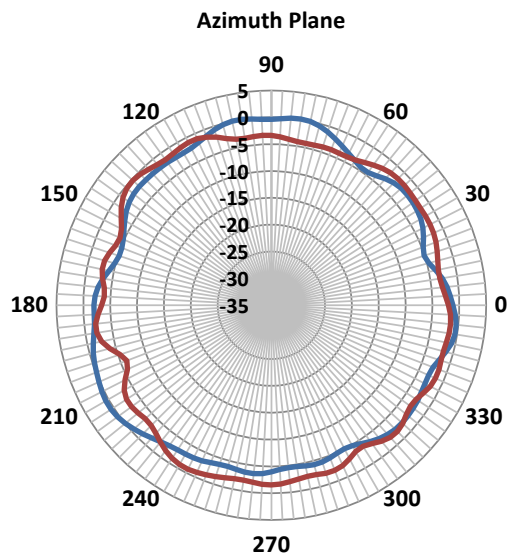
Radiation Pattern at 2400 MHz



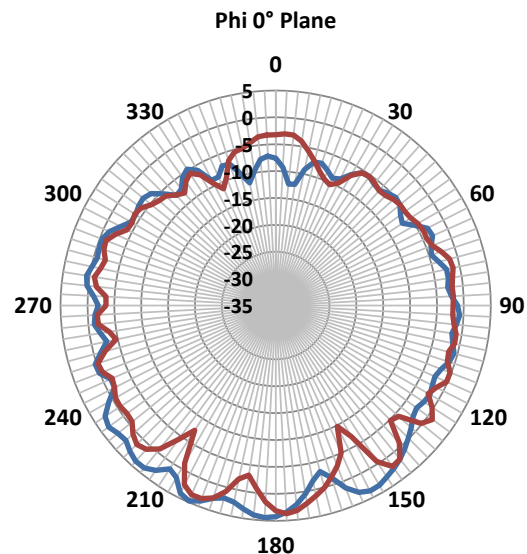
Radiation Pattern at 2500 MHz



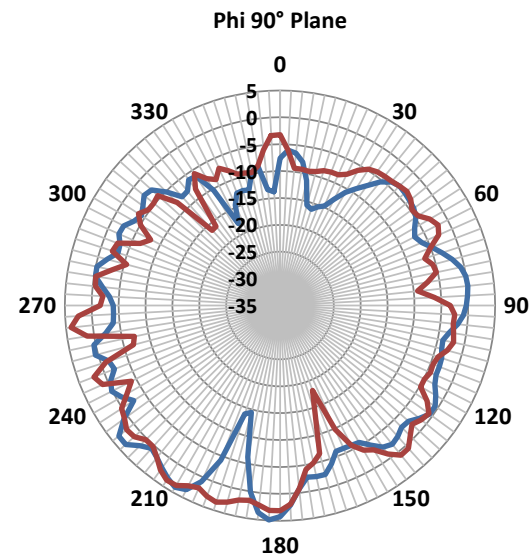
Radiation Pattern at 4900 MHz



— 2P WIFI_Port 1 — 2P WIFI_Port 2

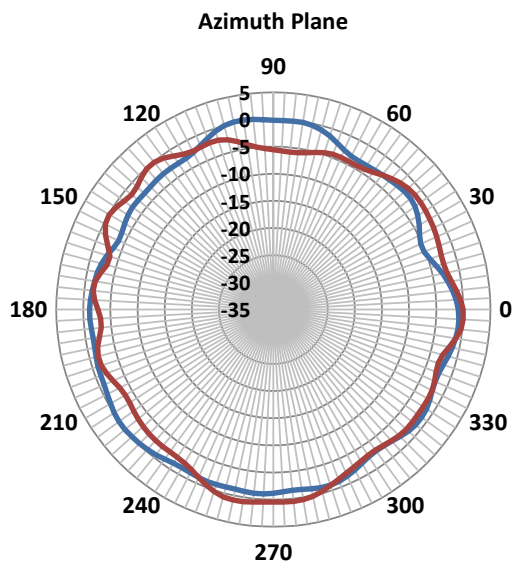


— 2P WIFI_Port 1 — 2P WIFI_Port 2

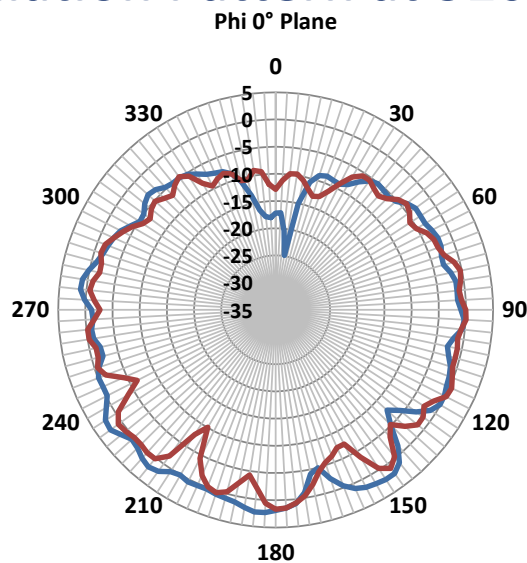


— 2P WIFI_Port 1 — 2P WIFI_Port 2

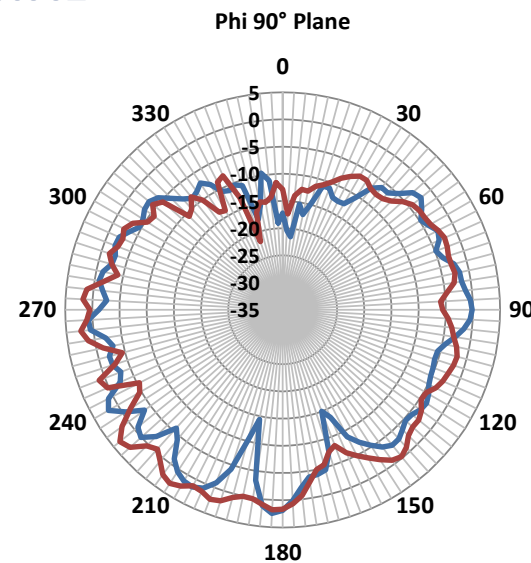
Radiation Pattern at 5200 MHz



— 2P WIFI_Port 1 — 2P WIFI_Port 2

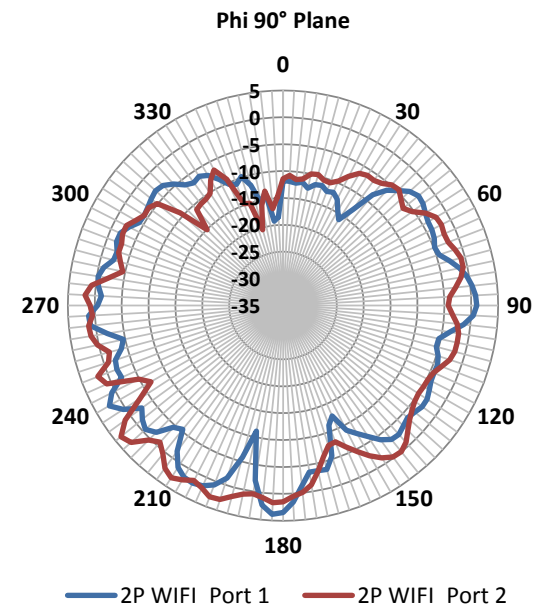
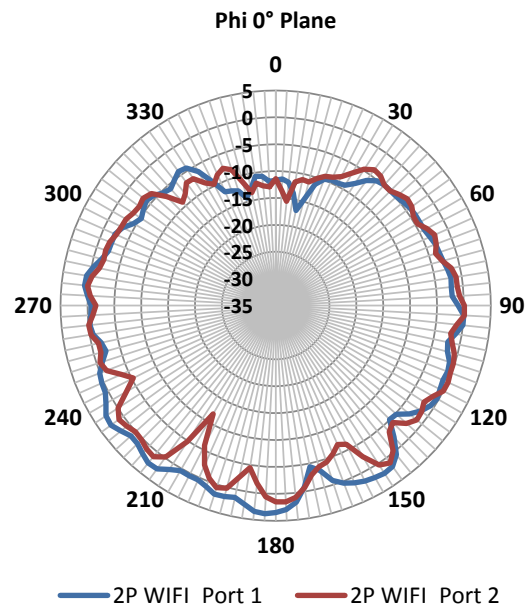
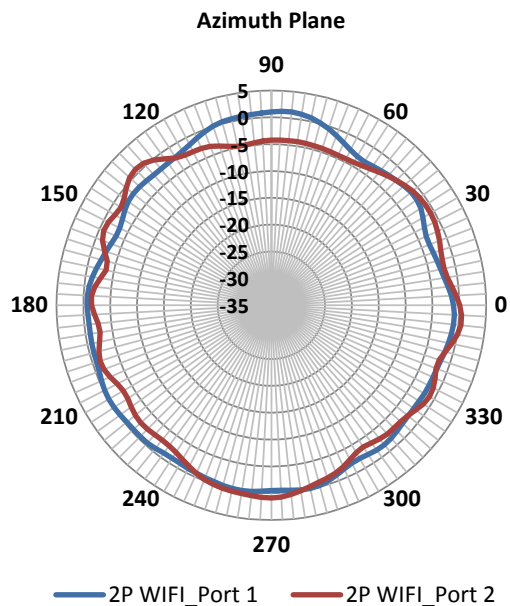


— 2P WIFI_Port 1 — 2P WIFI_Port 2



— 2P WIFI_Port 1 — 2P WIFI_Port 2

Radiation Pattern at 5300 MHz



Radiation Pattern at 5875 MHz

