

Regulatory WLAN Antenna Information

	Vendor Name	Project Code
OEM	Acer Incorporated	Jay
ODM	Quanta Computer Inc.	ZLA
Antenna	Wistron Neweb Corporation	ED4

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp
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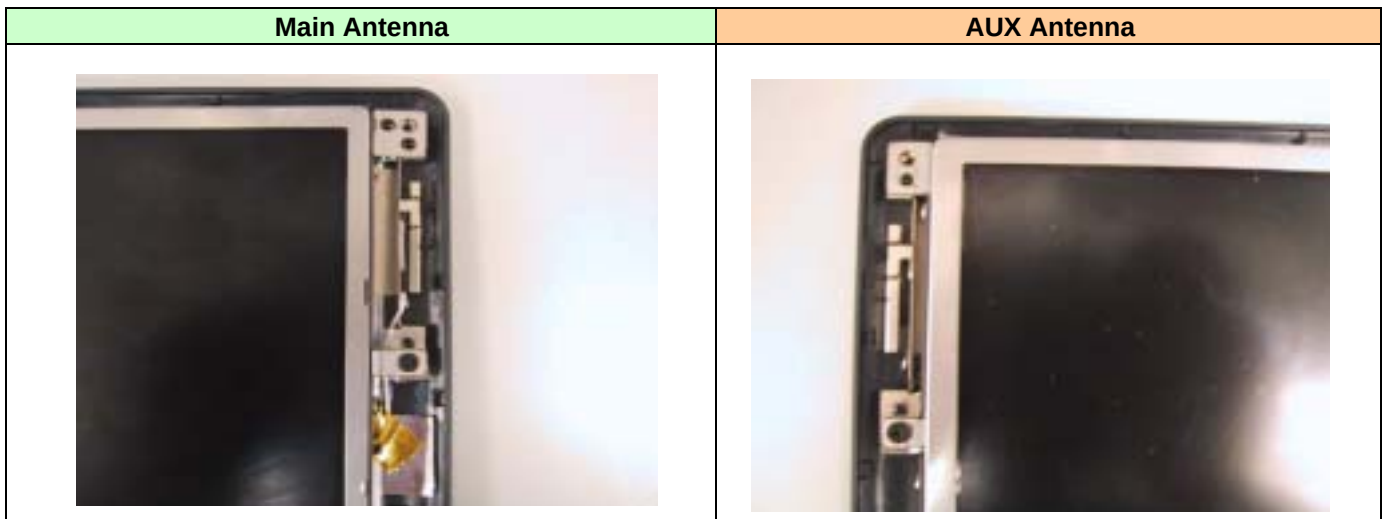
Antenna Information

Section 1. Antenna Assembly Specifications

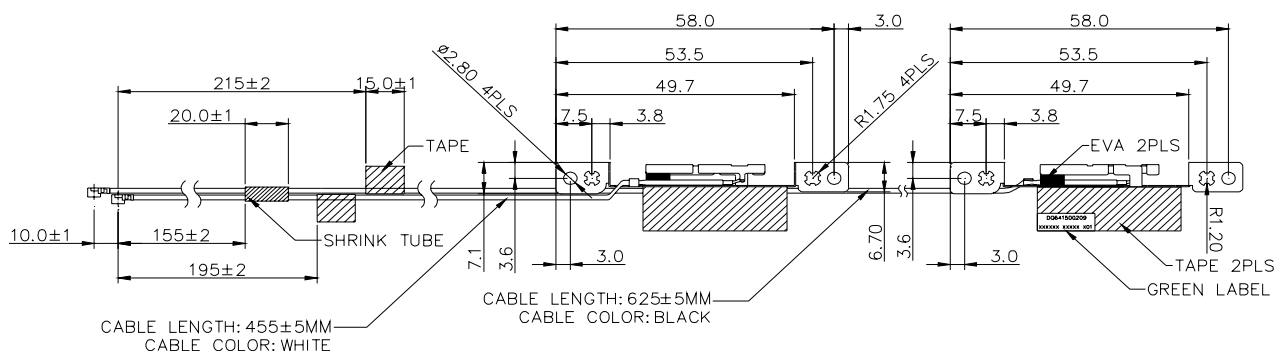
Antenna Assembly Summary:

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
Main Antenna (WNC P/N: 81.ED415.002) (customer P/N: DQ641500209)	Wistron Newweb Corporation	PIFA	P/N: WN-S-1.13-455W-(2-2-1)&625B-(2-2-1) 50 ohm Coaxial. length: 455 mm diameter: 1.13 mm Connector: IPEX	2400-2500MHz 3.24 dBi (peak)	2400-2500MHz 4.88 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz 1.65 dBi (peak)
				5150-5350MHz 1.51 dBi (peak)	5150-5350MHz 3.96 dBi (peak)	5150-5350MHz 2.5 max	5150-5350MHz 2.45 dBi (peak)
				5470-5725MHz 1.25 dBi (peak)	5470-5725MHz 3.76 dBi (peak)	5470-5725MHz 2.5 max	5470-5725MHz 2.51 dBi (peak)
				5725-5825MHz -0.35 dBi (peak)	5725-5825MHz 2.24 dBi (peak)	5725-5825MHz 2.5 max	5725-5825MHz 2.59 dBi (peak)
AUX Antenna (WNC P/N: 81.ED415.002) (customer P/N: DQ641500209)	Wistron Newweb Corporation	PIFA	P/N: WN-S-1.13-455W-(2-2-1)&625B-(2-2-1) 50 ohm Coaxial. length: 625 mm diameter: 1.13 mm Connector: IPEX	2400-2500MHz 2.67 dBi (peak)	2400-2500MHz 4.86 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz 2.19 dBi (peak)
				5150-5350MHz 0.54 dBi (peak)	5150-5350MHz 3.82 dBi (peak)	5150-5350MHz 2.5 max	5150-5350MHz 3.28 dBi (peak)
				5470-5725MHz 0.11 dBi (peak)	5470-5725MHz 3.46 dBi (peak)	5470-5725MHz 2.5 max	5470-5725MHz 3.35 dBi (peak)
				5725-5825MHz -2.25 dBi (peak)	5725-5825MHz 1.22 dBi (peak)	5725-5825MHz 2.5 max	5725-5825MHz 3.46 dBi (peak)

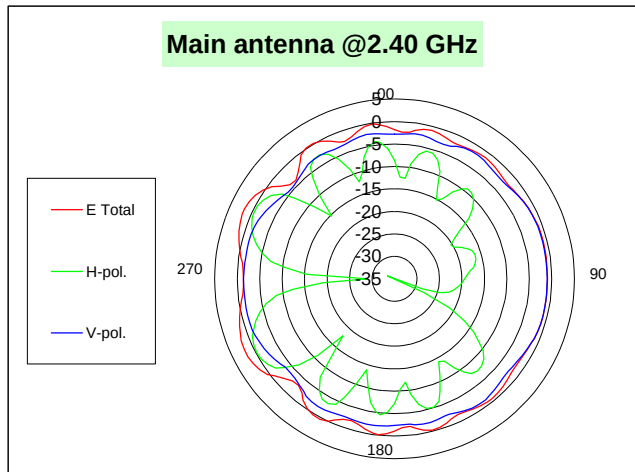
Section 2.1 Antenna Photos



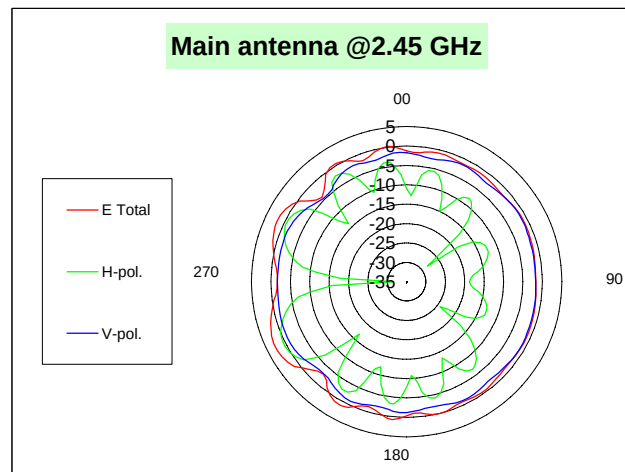
Section 2.2 Dimensioned Drawings of Antennas



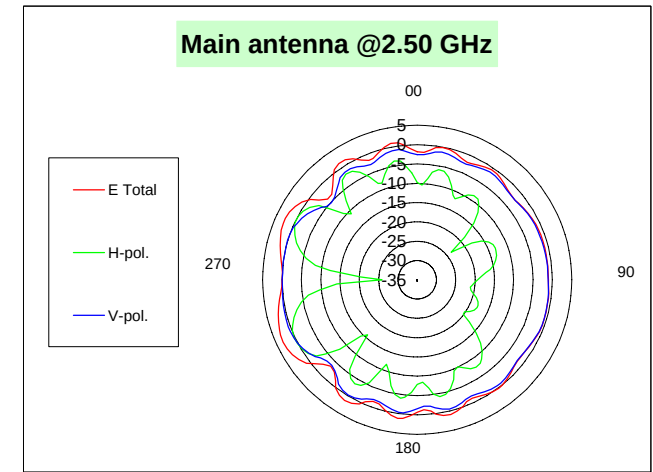
2G4 ISM (2.400 GHz - 2.4835 GHz) Antenna Radiation Patterns



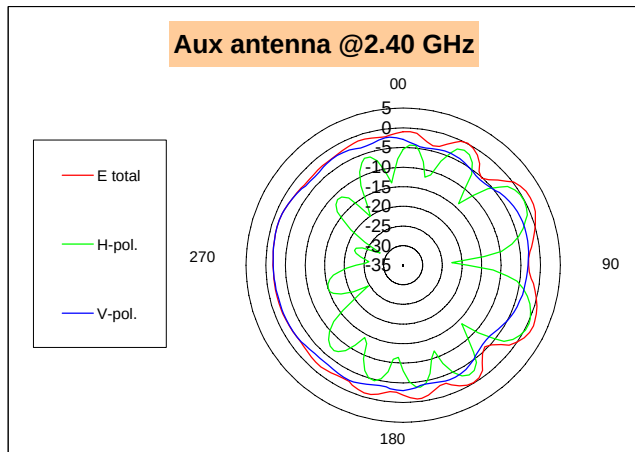
	Total	H-pol	V pol
Peak Gain	1.94	-0.27	-1.00
Average Gain	-0.86	-8.00	-2.15



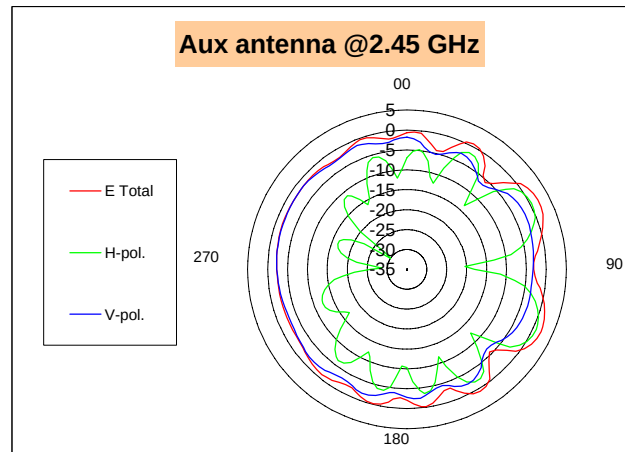
	Total	H-pol	V pol
Peak Gain	2.75	0.45	-0.98
Average Gain	-0.53	-7.41	-1.85



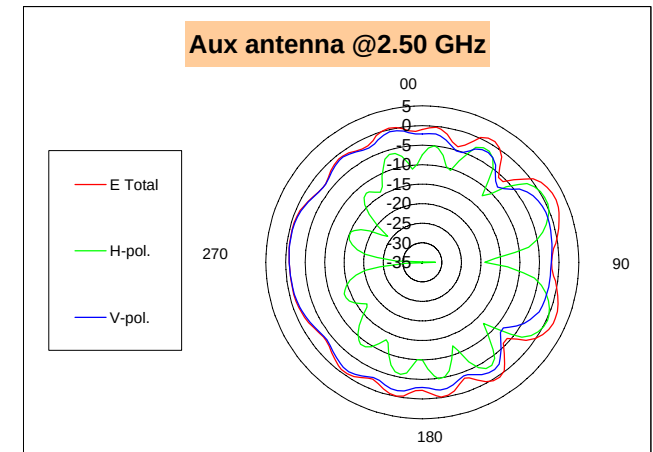
	Total	H-pol	V pol
Peak Gain	3.24	0.16	0.49
Average Gain	-0.18	-7.50	-1.34



	Total	H-pol	V pol
Peak Gain	1.66	0.34	-1.45
Average Gain	-1.54	-7.67	-3.31



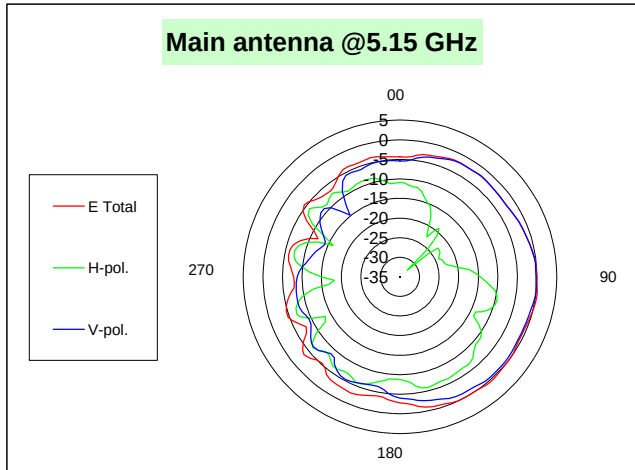
	Total	H-pol	V pol
Peak Gain	2.23	0.80	-1.53
Average Gain	-1.26	-7.23	-3.02



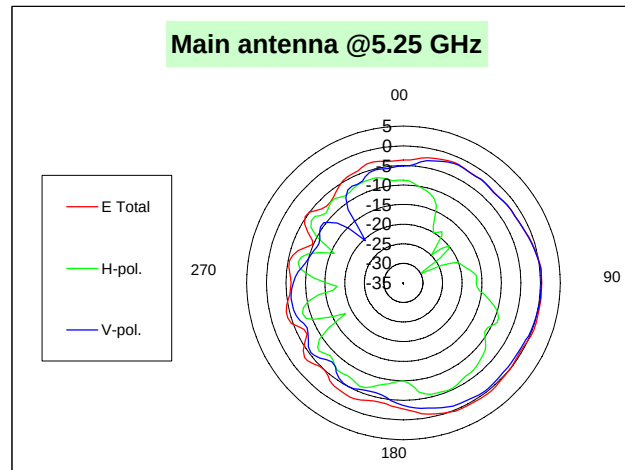
	Total	H-pol	V pol
Peak Gain	2.67	0.42	-0.68
Average Gain	-1.01	-7.70	-2.48

Note: The outer circle approximately represents the 5 dBi gain circle.
Each circle with 5 dBi difference (Max=5 dBi and Min=-35 dBi)

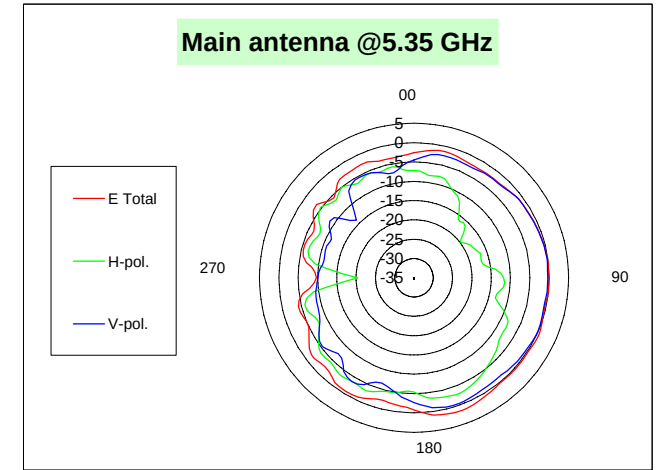
Ull Band (5.150 GHz - 5.350 GHz) Antenna Radiation Patterns



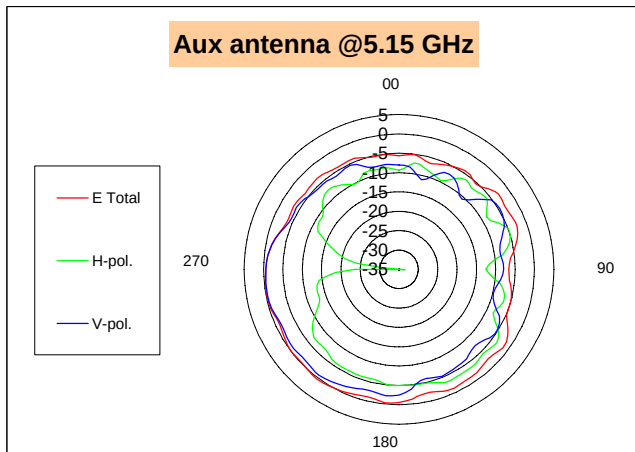
	Total	H-pol	V pol
Peak Gain	0.33	-5.87	-0.12
Average Gain	-2.92	-10.23	-4.22



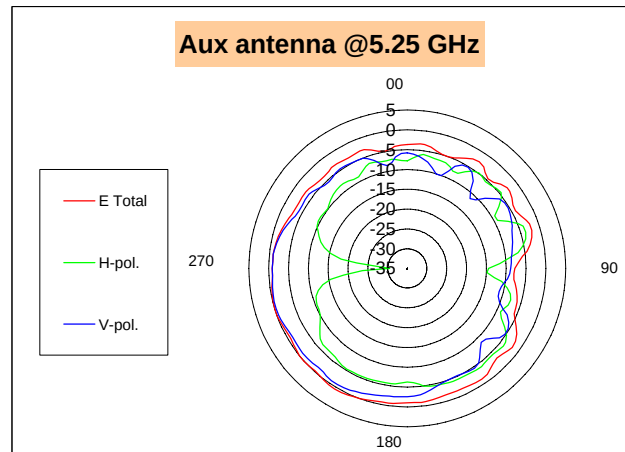
	Total	H-pol	V pol
Peak Gain	0.52	-5.34	0.17
Average Gain	-2.60	-10.03	-3.83



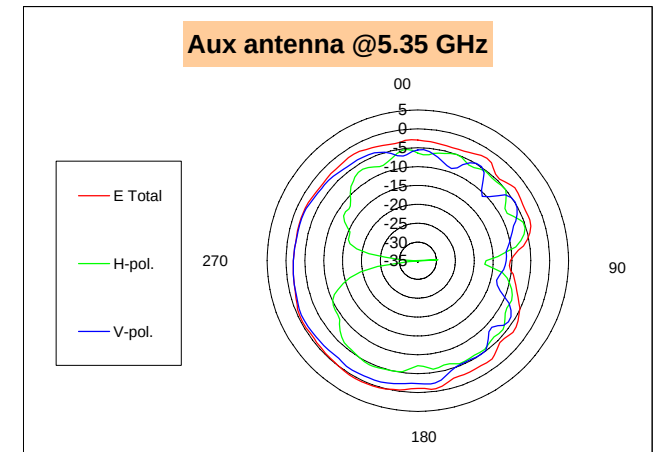
	Total	H-pol	V pol
Peak Gain	1.51	-2.85	-0.06
Average Gain	-1.82	-7.41	-3.71



	Total	H-pol	V pol
Peak Gain	0.38	-3.32	-0.40
Average Gain	-2.62	-7.69	-4.65



	Total	H-pol	V pol
Peak Gain	0.54	-3.73	-0.34
Average Gain	-2.34	-7.32	-4.40

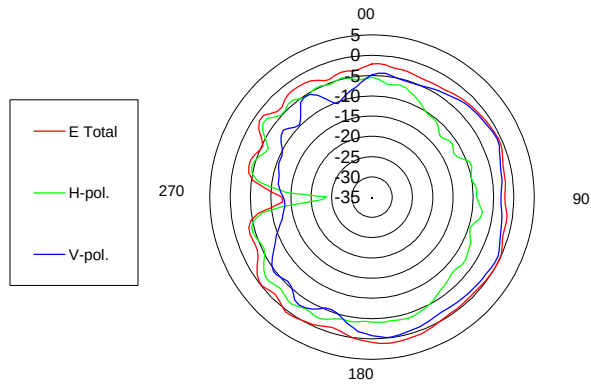


	Total	H-pol	V pol
Peak Gain	0.40	-4.54	-0.90
Average Gain	-2.53	-7.92	-4.42

Note: The outer circle approximately represents the 5 dBi gain circle.
Each circle with 5 dBi difference (Max=5 dBi and Min=-35 dBi)

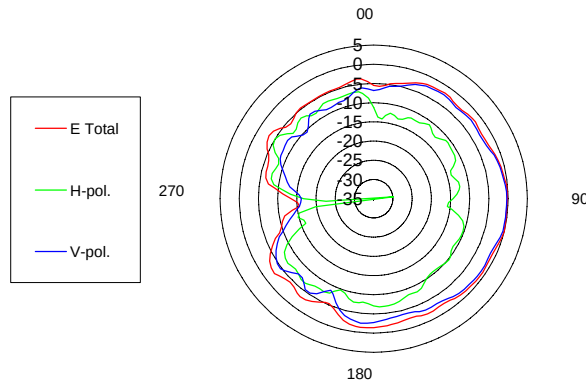
HyperLAN (5.470 GHz - 5.825 GHz) Antenna Radiation Patterns

Main antenna @5.47 GHz



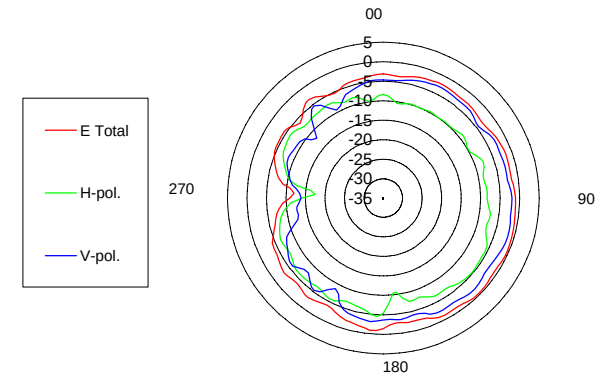
	Total	H-pol	V pol
Peak Gain	1.25	-2.04	-0.21
Average Gain	-1.81	-6.07	-4.30

Main antenna @5.6475 GHz



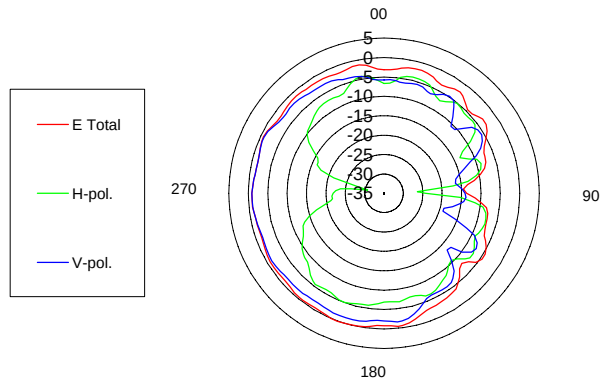
	Total	H-pol	V pol
Peak Gain	0.00	-4.89	-0.30
Average Gain	-3.19	-9.66	-4.59

Main antenna @5.825 GHz



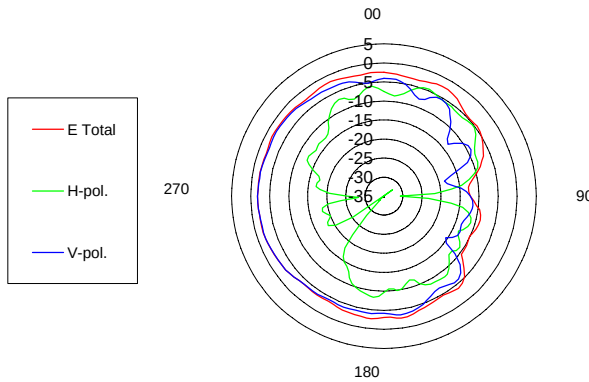
	Total	H-pol	V pol
Peak Gain	-0.35	-4.56	-1.55
Average Gain	-2.97	-7.76	-4.91

Aux antenna @5.47 GHz



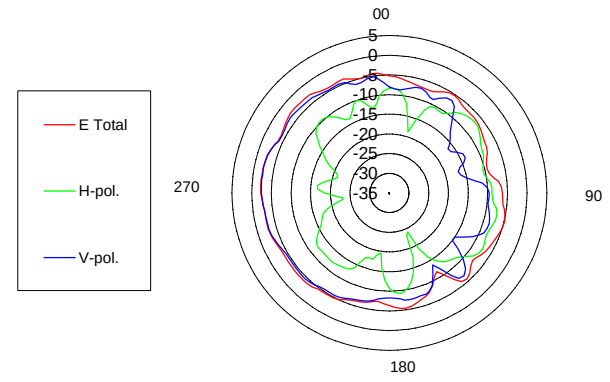
	Total	H-pol	V pol
Peak Gain	0.11	-4.15	-0.83
Average Gain	-2.66	-8.50	-4.42

Aux antenna @5.6475 GHz



	Total	H-pol	V pol
Peak Gain	-1.73	-4.51	-1.82
Average Gain	-3.82	-10.90	-5.26

Aux antenna @5.825 GHz



	Total	H-pol	V pol
Peak Gain	-2.25	-6.85	-2.40
Average Gain	-5.16	-11.78	-6.75

Note: The outer circle approximately represents the 5 dBi gain circle.
Each circle with 5 dBi difference (Max=5 dBi and Min=-35 dBi)