



Wistron NeWeb Corporation

Molokai Antenna Regulatory Information

Document Revision: 2

Customer Name	Wistron Corporation
Customer P/N	25.90156.001 / 25.90157.001
WNC P/N	25.90156.001 / 25.90157.001
Description	Dual-band antennas for Molokai

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp
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Antenna Specifications

Antenna Type (Material, Technology)	Technology = PIFA, Material = Metal sheet (For both main and aux antenna)
Antenna Model Number	Molokai / ED2-A
Operating Frequency Range(s)	2.4 ~ 2.4835GHz / 4.9 ~ 5.35GHz / 5.47 ~ 5.875GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main antenna: -0.76 dBi , Aux antenna: -1.05 dBi
Peak Gain (802.11a / 5GHz Band) (dBi)	Main antenna: 1.83 dBi , Aux antenna: 1.25 dBi
Radio Connector Type	IPEX MHF connector, HRS U.FL-LP
Mid-Line Connector Type (If Applicable)	NA

Note: Peak Gain should include all system losses (connector, cable, etc)

Cable Specifications

Cable Parameters	Main			AUX		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	NA	NA	620	NA	NA	600
Loss (Including Connectors) (dB) (2.4GHz / 5GHz)	NA	NA	2.17 / 3.44	NA	NA	2.11 / 3.33
Description (Color, Diameter, Manufacturer)	Color: white Diameter: Φ 1.13 mm Manufacturer: Junkosha, Kurabe or equivalent cable			Color: black Diameter: Φ 1.13mm Manufacturer: Junkosha, Kurabe or equivalent cable		

Note: For single cable assembly (no mid-line connector), use the 'Total' column for each cable length and list N/A in the 'LCD' and 'Base' fields

Cable Loss should be reported for the total cable assembly (for both Main and Aux antennas)



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- Pictures of antenna assembly

Main Antenna	Aux Antenna
	

- Pictures of antenna assembly installed in the notebook

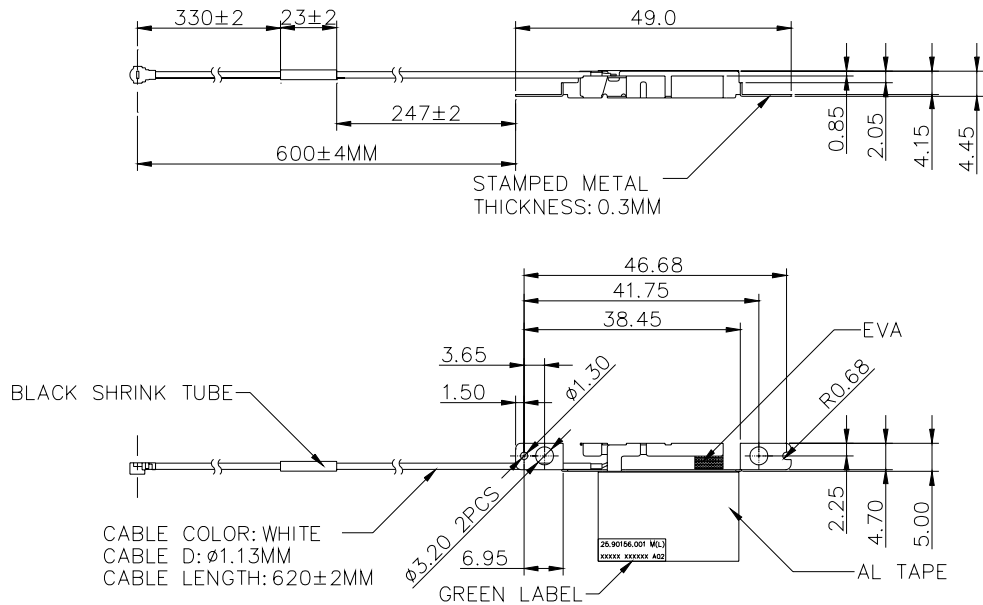
Main Antenna	Aux Antenna
	



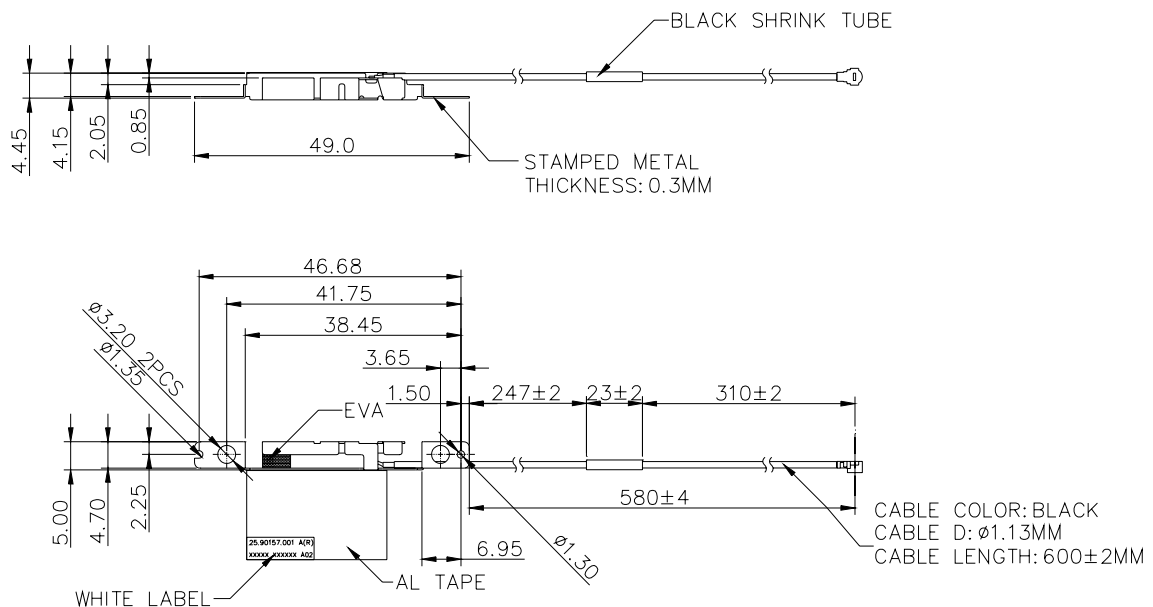
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- A mechanical drawing of assembly

Main antenna Drawing



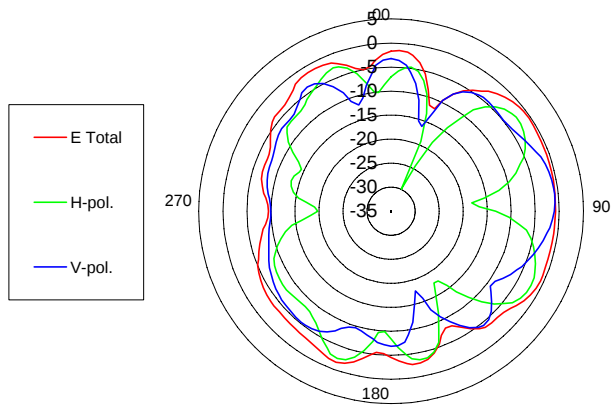
AUX antenna Drawing



- Gain patterns (both 2G and 5G)

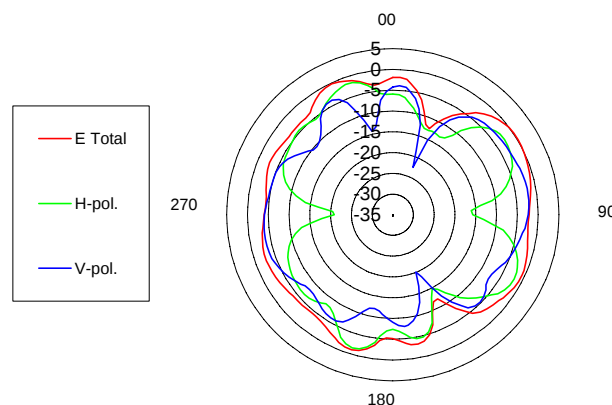
2G4 ISM (2.400 GHz - 2.4835 GHz) Antenna Radiation Patterns

Main antenna @2.40 GHz



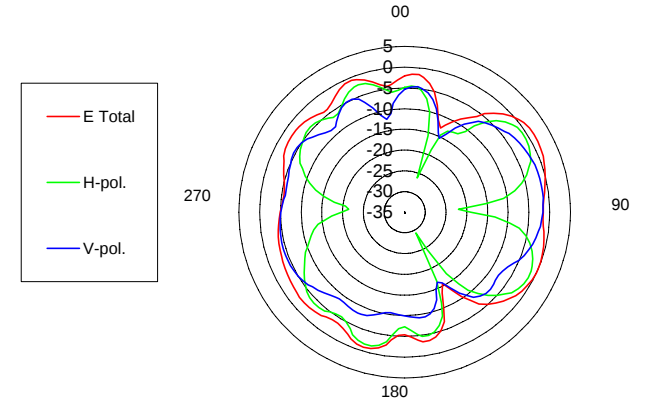
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	-0.41	-2.07	-0.81

Main antenna @2.45 GHz



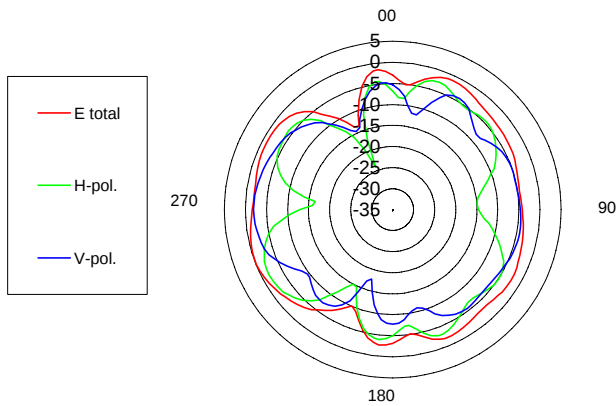
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	0.11	-1.50	-2.05

Main antenna @2.50 GHz



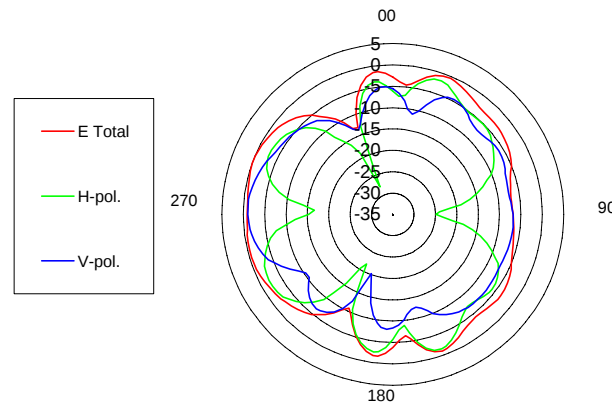
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	1.37	-0.76	-1.40

Aux antenna @2.40 GHz



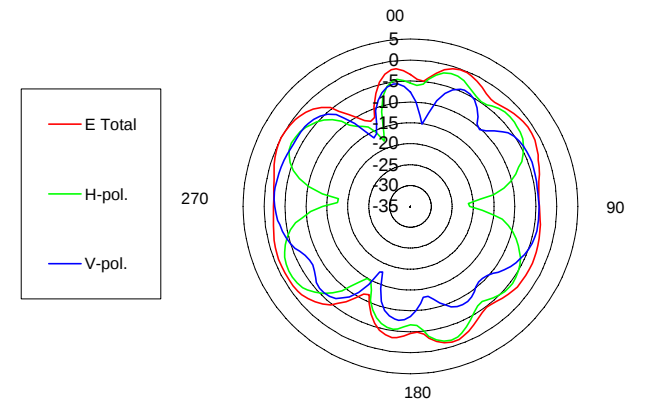
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	-0.06	-1.79	-1.95

Aux antenna @2.45 GHz



Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	-0.04	-1.48	-1.05

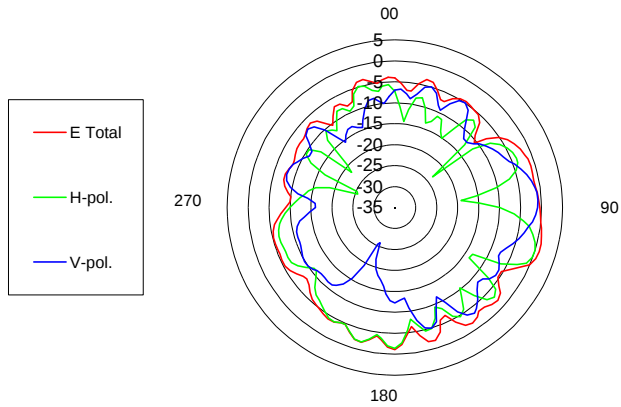
Aux antenna @2.50 GHz



Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	-0.05	-1.57	-2.32

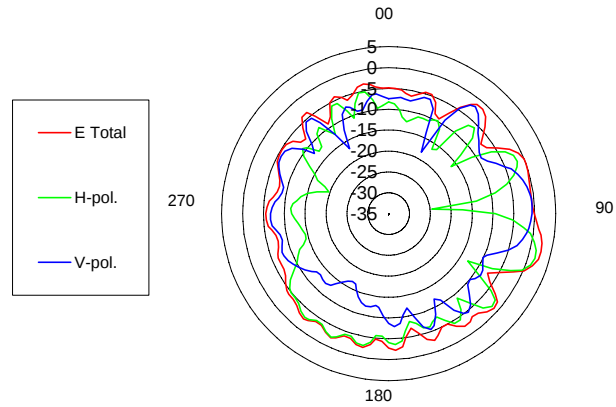
UJI Band (4.90 GHz - 5.350 GHz) Antenna Radiation Patterns

Main antenna @4.9 GHz



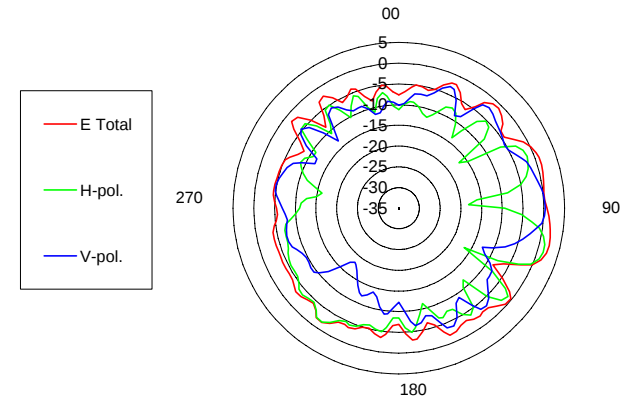
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	1.05	-0.03	-0.80

Main antenna @5.125 GHz



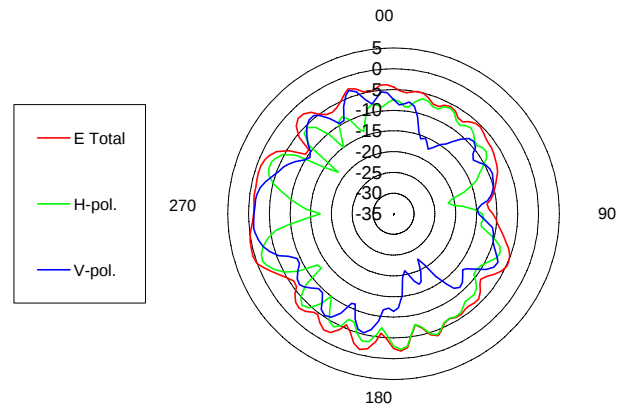
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	2.65	1.62	-0.60

Main antenna @5.35 GHz



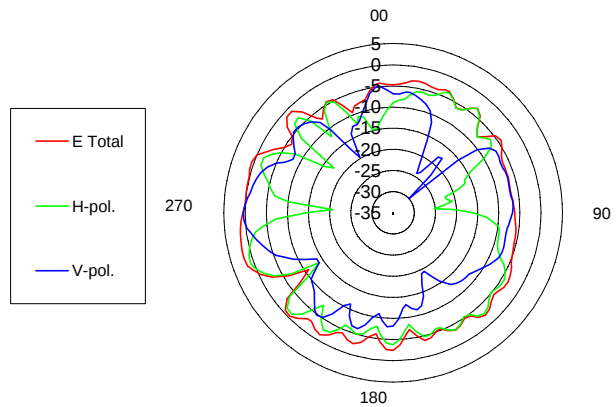
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	2.36	1.47	0.35

Aux antenna @4.9 GHz



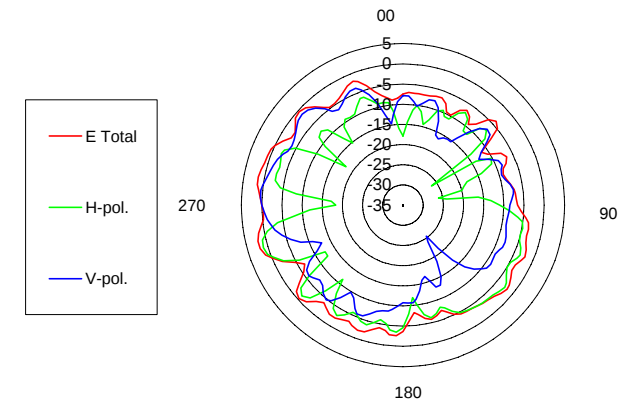
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	0.43	-1.39	-1.12

Aux antenna @5.125 GHz



Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	1.82	0.68	0.36

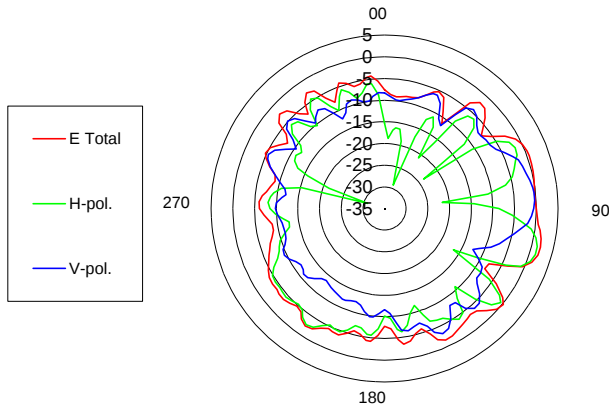
Aux antenna @5.35 GHz



Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	2.02	1.16	0.32

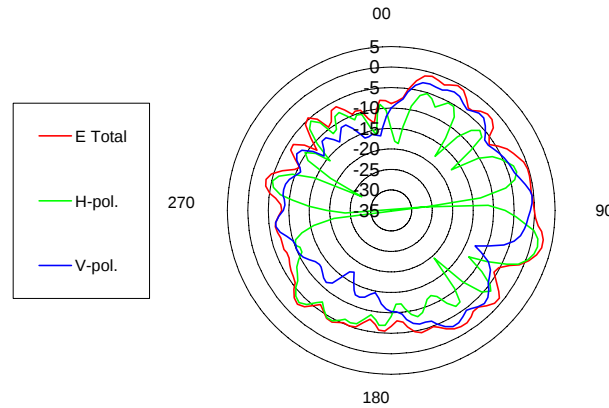
HyperLAN (5.470 GHz - 5.875 GHz) Antenna Radiation Patterns

Main antenna @5.47 GHz



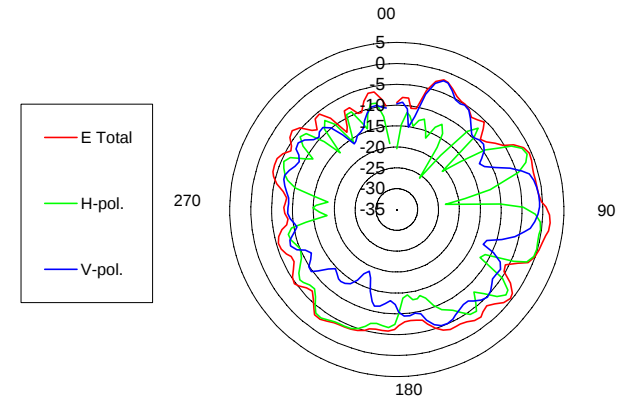
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	2.05	1.40	-0.29

Main antenna @5.6475 GHz



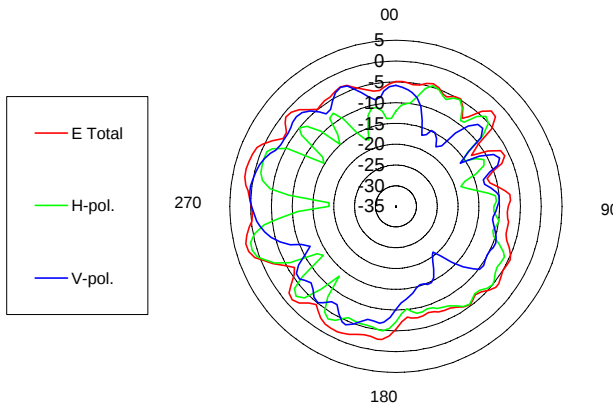
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	2.83	1.83	-0.44

Main antenna @5.875 GHz



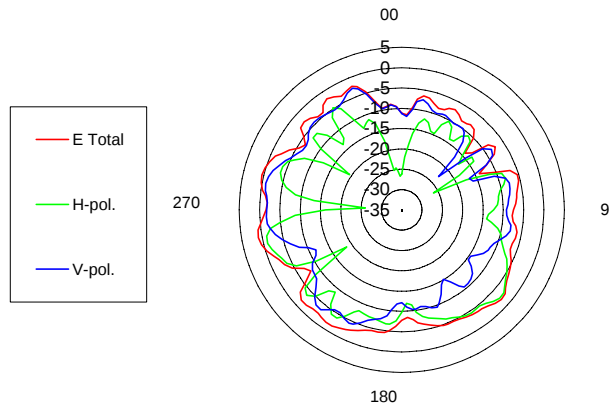
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	1.88	-0.16	-0.75

Aux antenna @5.47 GHz



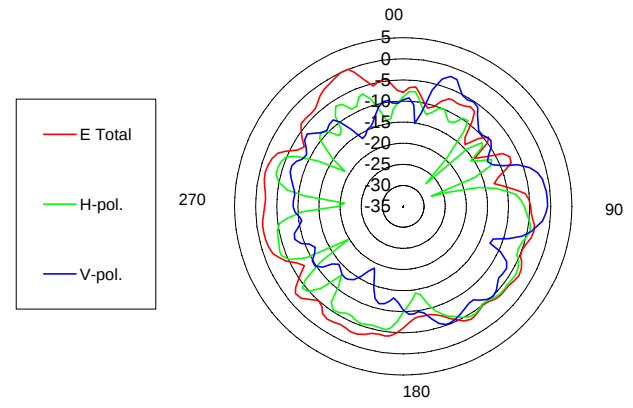
Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	2.21	1.25	0.40

Aux antenna @5.6475 GHz



Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	0.89	-0.97	-0.94

Aux antenna @5.875 GHz



Gain (dBi)	Horz +Vert	H-pol	V pol
Peak Gain	0.04	-3.78	-0.60