Linbergh/Kapalua Antenna Regulatory Information

Description : **Triple-band Antenna(Main+Aux)**
Compal P/N: **DC330005300**
DC330005310
Wistron NeWeb P/N: **81.CA915.001**
81.CA915.002

Wistron NeWeb Corporation

No. 10-1,Li-hsin Road I,
Science-base Industrial Park,
Hsinchu 300,Taiwan, R.O.C.
Tel: 886-3-6667799#6545
Fax: 886-3-6667711

Provided by **Wistron NeWeb Corp.**	Reviewed by **Wistron NeWeb Corp.**
David Tau	***Weili Cheng***

I. Antenna Type

Position	Main Antenna (Right-side Antenna)	Aux Antenna (Left-side Antenna)
Antenna Type	PIFA	PIFA
Material	Metal sheet	Metal sheet

II. Peak Gain and Average Gain

Antenna Gain		2G4 ISM (2.400 GHz - 2.4835 GHz)			U-NII (5.150 GHz - 5.350 GHz)			HyperLAN (5.470 GHz - 5.725 GHz)		
		2.40 GHz	2.45 GHz	2.50GHz	5.15 GHz	5.25 GHz	5.35 GHz	5.47 GHz	5.5975 GHz	5.725 GHz
MAIN	Peak dBi	2.34	2.39	2.07	2.18	3.29	2.54	1.82	2.29	1.35
	Avg dBi	-2.16	-2.35	-2.25	-3.66	-2.79	-3.13	-2.65	-2.13	-3.05
AUX	Peak dBi	0.38	1.32	0.97	3.12	3.39	3.47	2.65	3.38	2.63
	Avg dBi	-2.96	-3.07	-2.88	-3.60	-2.67	-2.43	-2.63	-2.28	-2.40

III. Antenna Model Number

Model number: CA9-C

IV. Manufacturing Info

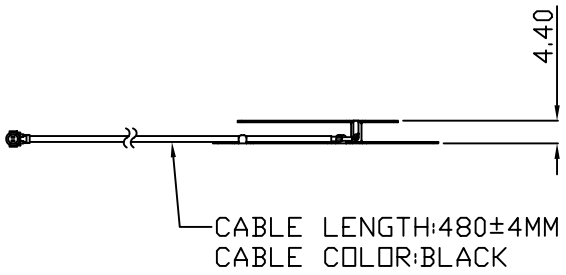
Wistron NeWeb Corporation
No. 10-1,Li-hsin Road I,
Science-base Industrial Park,
Hsinchu 300,Taiwan, R.O.C.

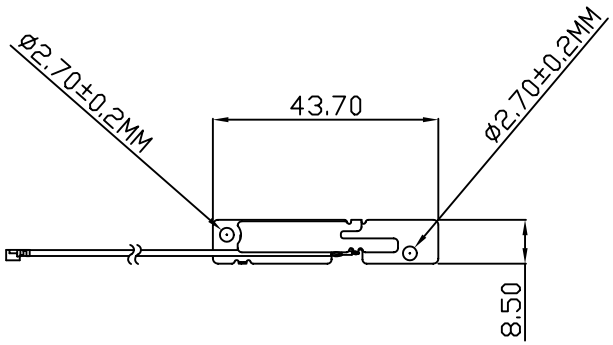
V. Antenna Dimensions (Mechanical drawings)

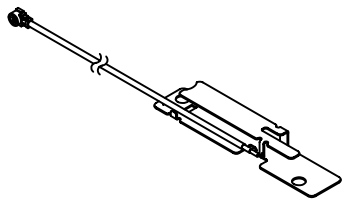
(See Next 2 Pages)

PART NUMBER BLOCK	
PART NUMBER	REV

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED







NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:

INTEGRAL DIMENSIONS	±0.2	ANGULAR DIMENSIONS	±1°
1 PLACE DECIMAL	±0.1	HOLES UNDER ø5.00	±0.05
2 PLACE DECIMALS	±0.05		

MATERIAL: SEE NOTES

FINISH: SEE NOTES

THIRD ANGLE PROJECTION

DRAWN	GUO CHANG	12/26/02
ENGR	DAVID WS TAU	12/26/02
APVD		

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Wistron NeWeb Corp.
No. 10-1, Li-hsin Road I, Science-based Industrial Park, Hsinchu 300, Taiwan, R.O.C.
Tel: 886-3-6667799 Fax: 886-3-6667711

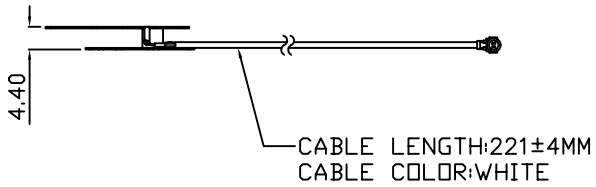
DWG TITLE: OUTLINE, Main, CA9-C

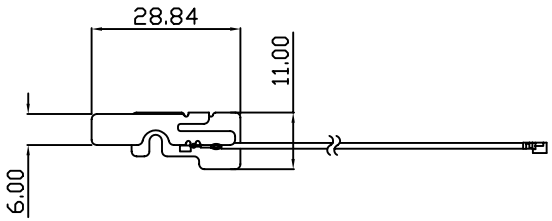
SIZE	DWG NO.	REV
A3	3A.CA945.112	NO

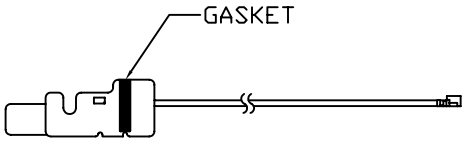
SCALE 1/1 SHEET 1 OF 1

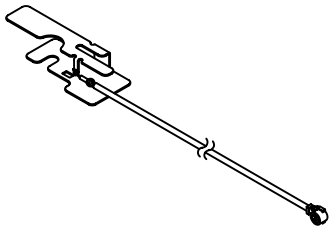
PART NUMBER BLOCK	
PART NUMBER	REV

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED









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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:

INTEGRAL DIMENSIONS	±0.2	ANGULAR DIMENSIONS	±1°
1 PLACE DECIMAL	±0.1	HOLES UNDER ø5.00	±0.05
2 PLACE DECIMALS	±0.05		

MATERIAL: SEE NOTES

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THIRD ANGLE PROJECTION

DRAWN	GUO CHANG	12/26/02
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Tel: 886-3-6667799 Fax: 886-3-6667711

DWG TITLE: OUTLINE, AUX, CA9-C

SIZE	DWG NO.	REV
A3	3A.CA945.111	NO

SCALE 1/1 SHEET 1 OF 1

VI. Pictures of Antennas

Main Antenna	Aux Antenna
	

VII. Cable Length

Left-side antenna: 221mmΦ1.13mm
Right-side antenna: 480mmΦ1.13mm
(From the center of connector to the end of cable)

VIII. Cable Loss (including connector)

Unit: dB	2G4 band	U-NII band	HyperLAN band
221mm	1.03	1.34	1.44
480mm	1.81	2.61	2.77

XI. Antenna Material

Main antenna	Aux antenna
1. Stamped metal 2. Junkosha cable and IPEX connector (Nissei cable and HRS connector) 3. Sponge 4. Tape	1. Stamped metal 2. Junkosha cable and IPEX connector (Nissei cable and HRS connector) 3. Sponge 4. Tape 5. Gasket e

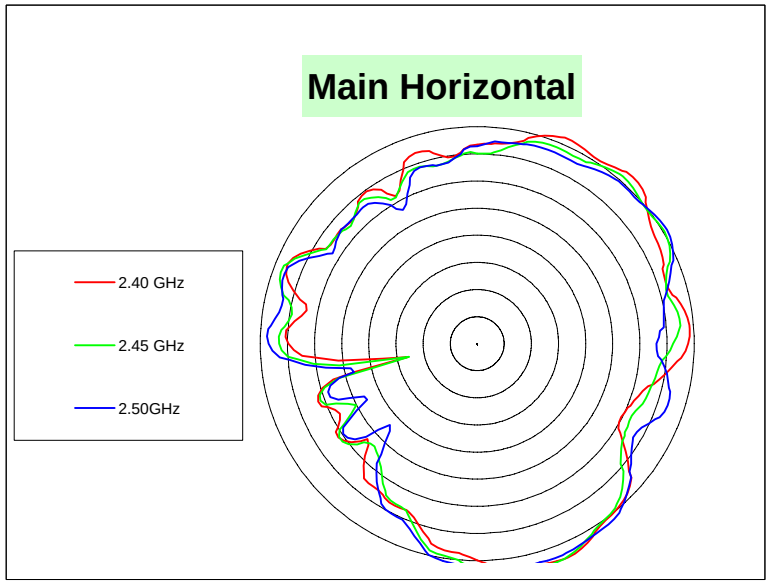
XII. Connector Info (general description)

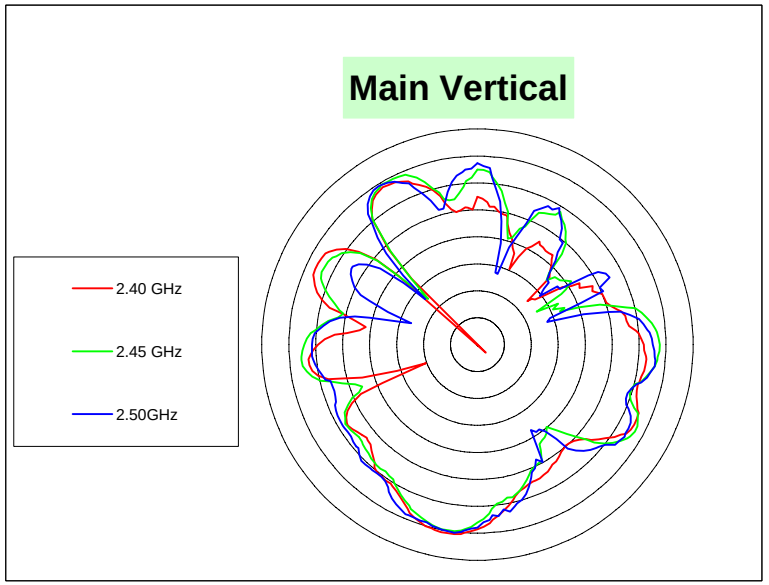
Description (Cable)	Inner Conductor: AWG#32(7/0.8), Silver plating annealed copper wire or its performance equivalent Dielectric core: D0.68mm Outer conductor: 16/4/0.05 D0.93mm, Silver plating annealed copper wire or its performance equivalent Jacket: D1.13mm		
Requirements	Characteristic impedance: 50(+2,-2)ohm Nominal capacitance: 97pF/m Conductor resistance of inner conductor at 293K(20℃): 520ohm/km MAX Insulation resistance: 1500mega-ohm.km MIN Dielectric withstand voltage: no breakdown at AC1000V for 1min.		
Ratings	Rated voltage: AC60Vrms Nominal characteristics impedance: 50ohm VSWR: 1.3MAX DC~3GHz, 1.7MAX 3~6GHz		
Electric characteristics	Contact resistance	10mA MAX(DC or 1000Hz)	Center contact 74mohm MAX. Outer contact 27mohm MAX.
	Insulation resistance	100V DC	500Mohm MIN
	Voltage proof	200V AC for 1 min. Current leakage 2mA MAX	No flashover or breakdown

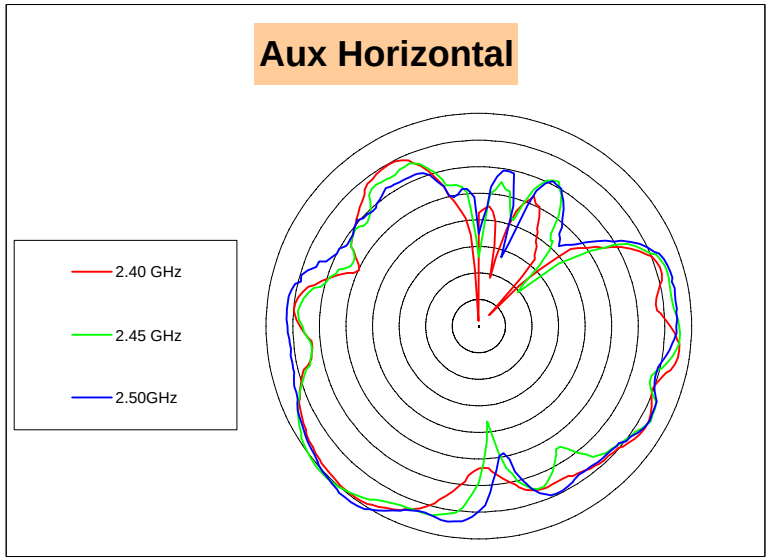
XIII. Radiation Pattern

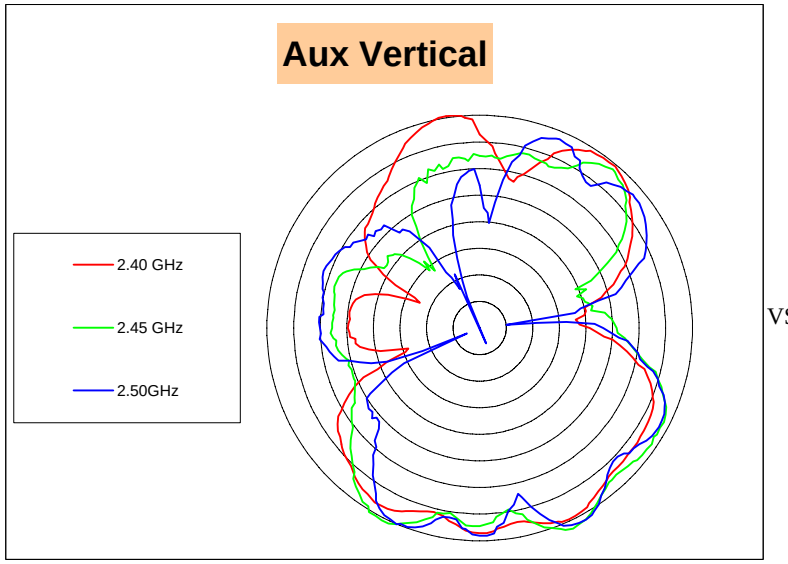
Platform: Linbergh PT4
Supplier: Wistron NeWeb coporation
Date: 2003/1/15

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

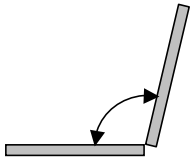








2G4 ISM (2.400 GHz - 2.4835 GHz)			
CONFIG	FREQ GHz	Avg dBi	Pk dBi
Main Horz	2.4	-2.36	2.34
	2.45	-2.57	2.38
	2.5	-2.45	2.06
Main Vert	2.4	-9.95	0.86
	2.45	-9.78	-5.10
	2.5	-9.89	-4.89
Aux Horz	2.4	-5.85	-0.27
	2.45	-5.66	0.11
	2.5	-4.93	0.61
Aux Vert	2.4	-4.60	0.32
	2.45	-4.94	1.60
	2.5	-5.18	1.18

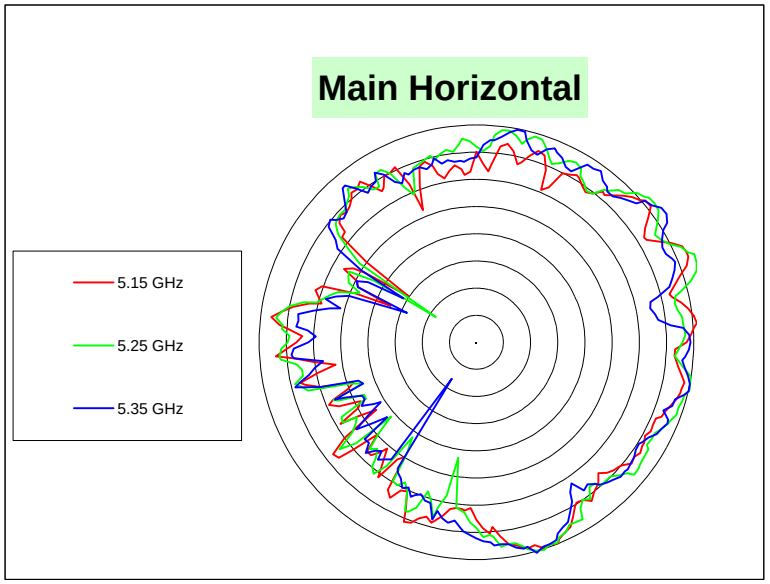


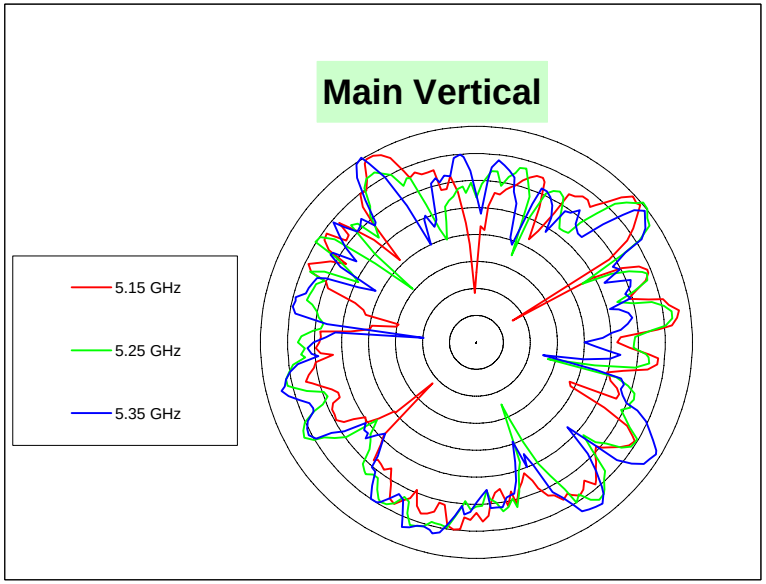
VSWR open = lid/keyboard angle 110°

Note: The outer circle approximately represents the 0 dBi gain circle

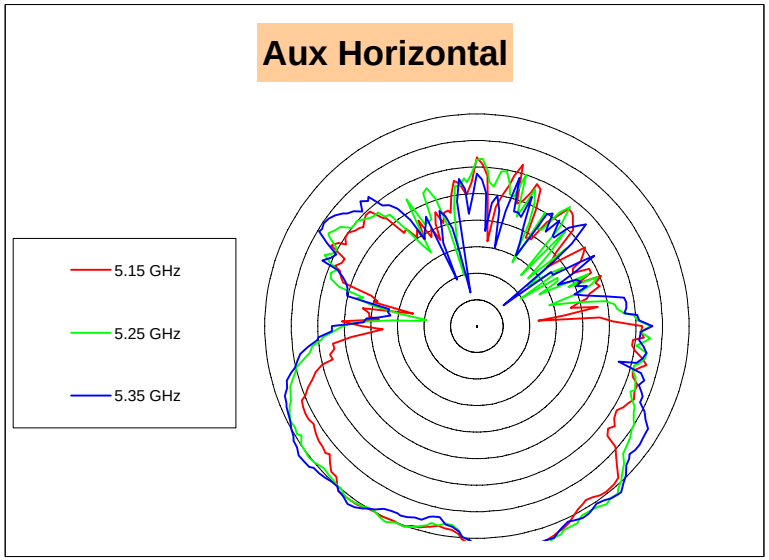
Platform: Platform: Linbergh PT4
Supplier: Supplier: Wistron NeWeb coporation
Date: Date: 2003/1/15

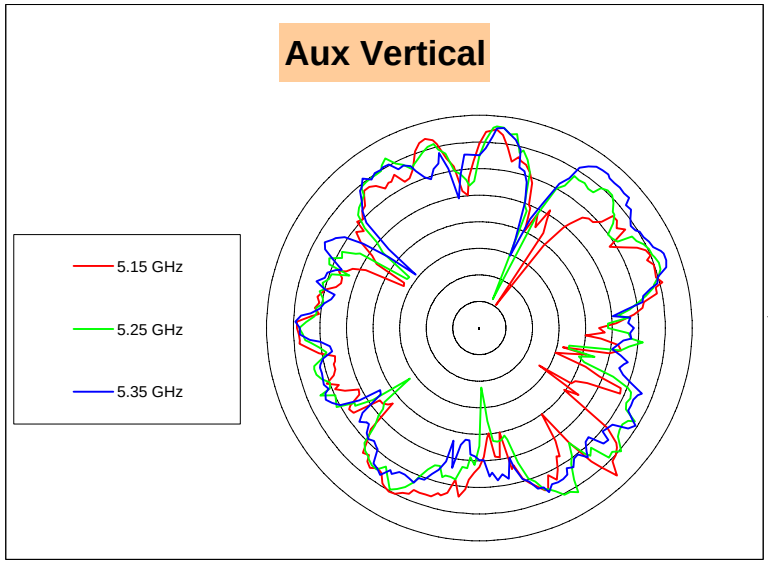
U-NII (5.150 GHz - 5.350 GHz) Antenna Radiation Patterns

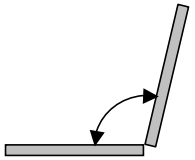




U-NII (5.150 GHz - 5.350 GHz)			
CONFIG	FREQ GHz	Avg dBi	Pk dBi
Main Horz	5.15	-4.37	2.12
	5.25	-3.45	3.26
	5.35	-4.10	2.22
Main Vert	5.15	-7.77	-0.37
	5.25	-7.35	0.28
	5.35	-7.12	0.27
Aux Horz	5.15	-4.47	3.12
	5.25	-3.50	3.39
	5.35	-3.36	3.46
Aux Vert	5.15	-8.72	-2.07
	5.25	-8.03	-1.96
	5.35	-7.67	-2.09





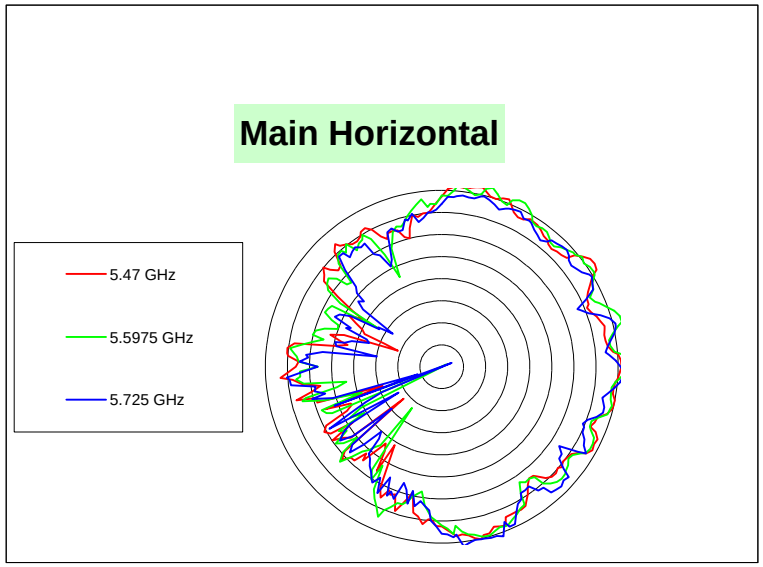


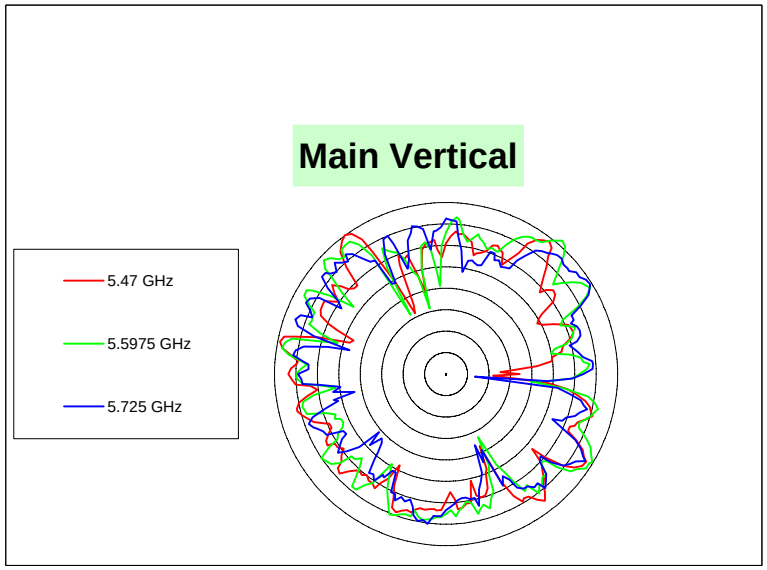
VSWR open = lid/keyboard angle 110°

Note: The outer circle approximately represents the 0 dBi gain circle

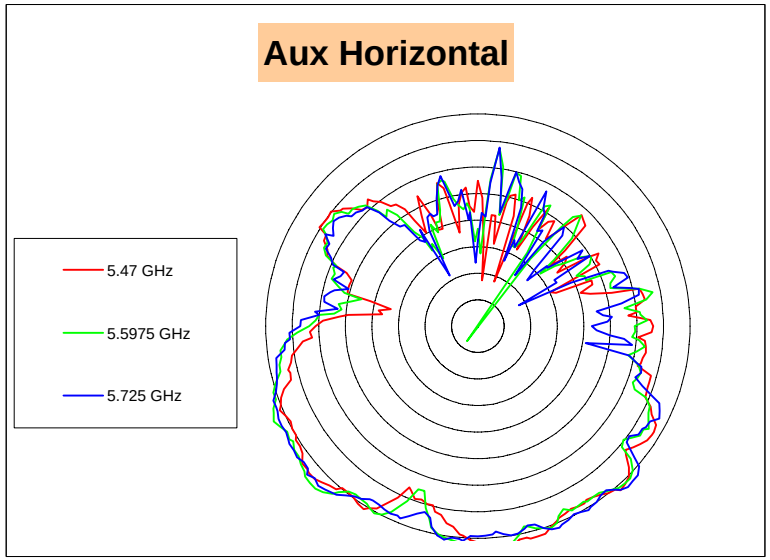
Platform: Platform: Linbergh PT4
Supplier: Supplier: Wistron NeWeb coporation
Date: Date: 2003/1/15

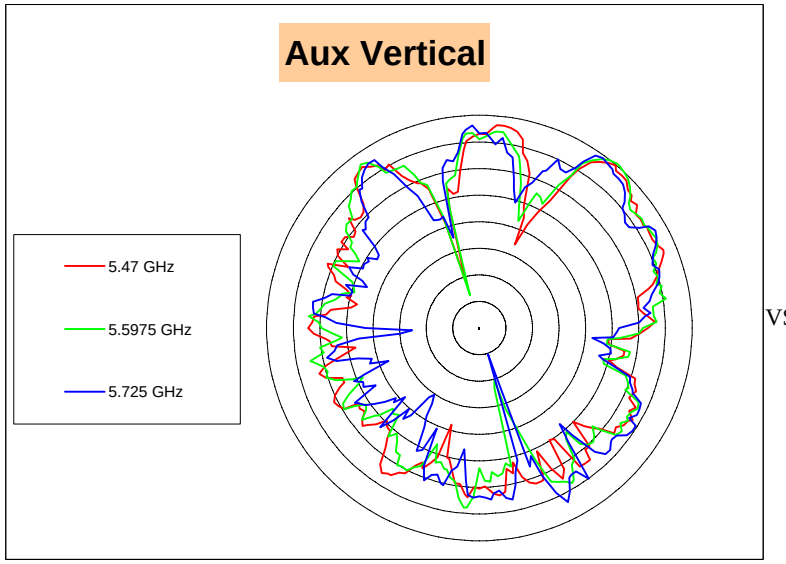
HyperLAN (5.470 GHz - 5.725 GHz) Antenna Radiation Patterns

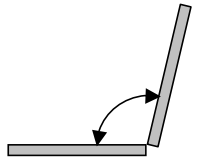




HyperLAN (5.470 GHz - 5.725 GHz)			
CONFIG	FREQ GHz	Avg dBi	Pk dBi
Main Horz	5.47	-3.46	1.81
	5.5975	-3.12	2.28
	5.725	-4.01	1.35
Main Vert	5.47	-7.01	0.07
	5.5975	-5.74	1.29
	5.725	-6.83	-0.36
Aux Horz	5.47	-3.77	2.64
	5.5975	-3.34	3.38
	5.725	-3.37	2.63
Aux Vert	5.47	-7.30	-0.14
	5.5975	-7.31	0.30
	5.725	-7.71	-0.54







VSWR open = lid/keyboard angle 110°

Note: The outer circle approximately represents the 0 dBi gain circle