

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.
<i>David Tau</i>	<i>Weili Cheng</i>

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

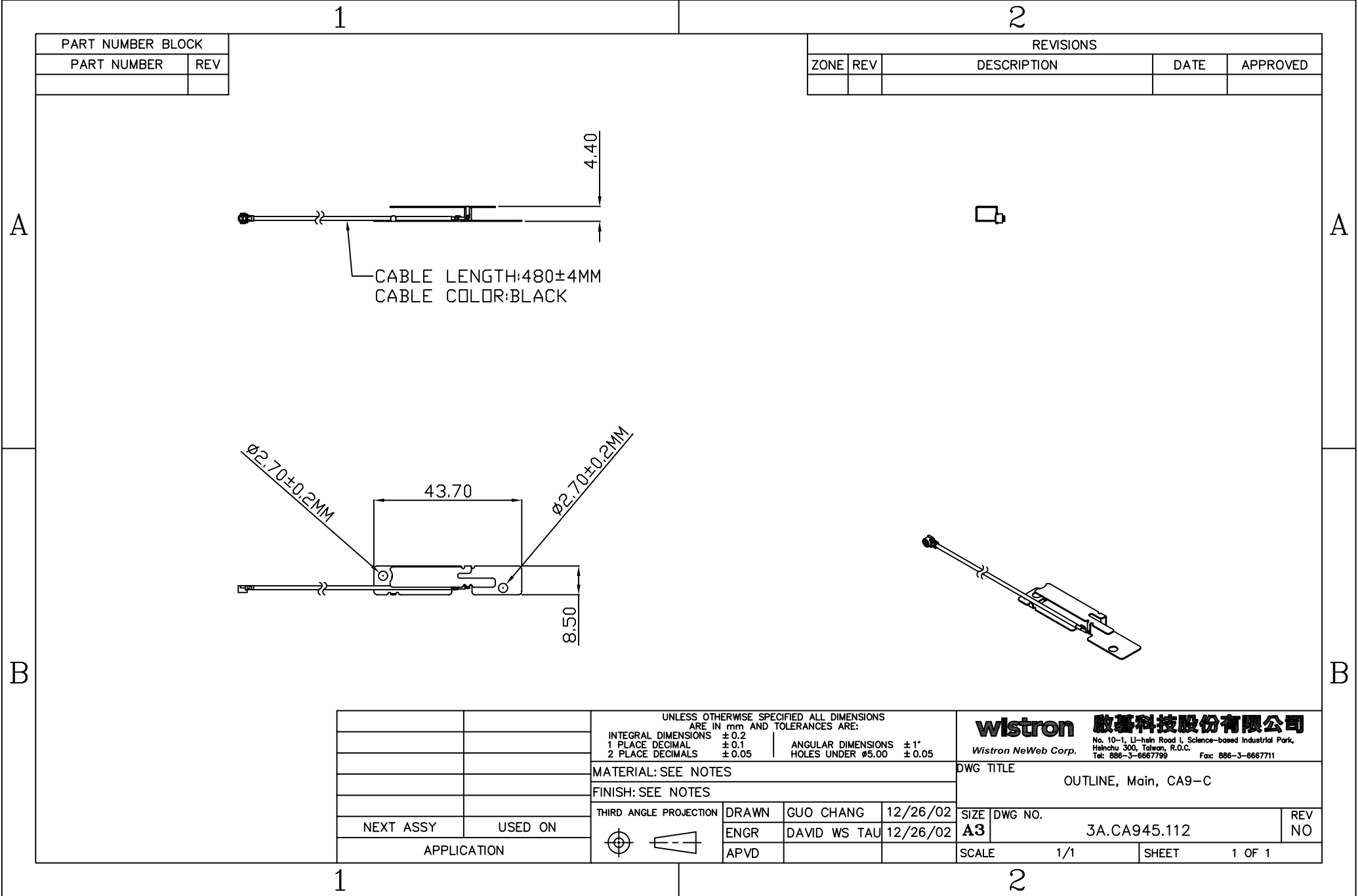
Model number: CA9-C

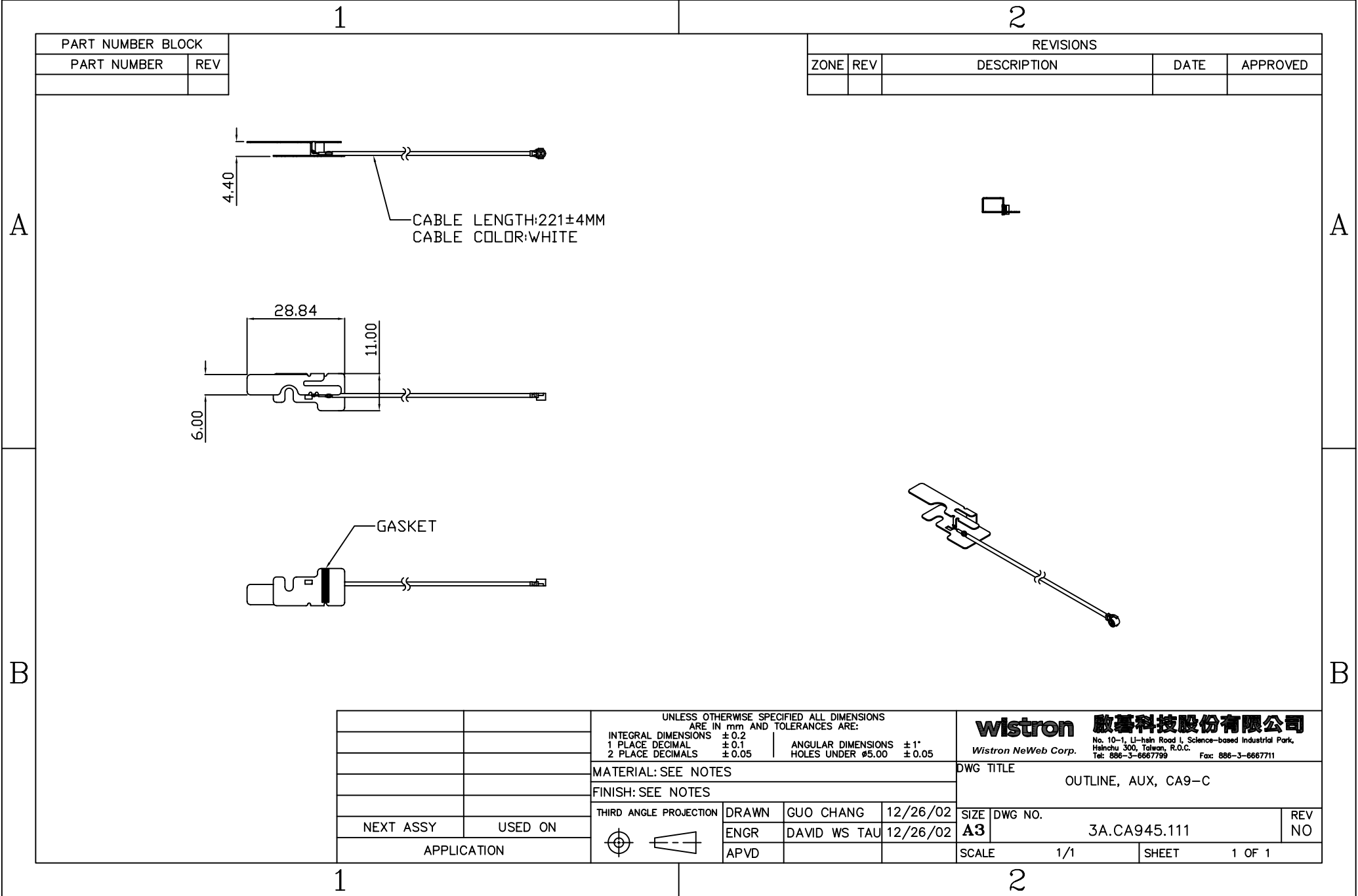
IV. Manufacturing Info

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

		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:				wistron 啟基科技股份有限公司			
		INTEGRAL DIMENSIONS ±0.2		ANGULAR DIMENSIONS ±1°		No. 10-1, Li-hsin Road I, Science-based Industrial Park, Hsinchu 300, Taiwan, R.O.C.			
		1 PLACE DECIMAL ±0.1		HOLES UNDER Ø5.00 ±0.05		Tel: 886-3-6667799 Fax: 886-3-6667711			
		MATERIAL: SEE NOTES				DWG TITLE			
		FINISH: SEE NOTES				OUTLINE, AUX, CA9-C			
		THIRD ANGLE PROJECTION	DRAWN	GUO CHANG	12/26/02	SIZE	REV		
NEXT ASSY	USED ON		ENGR	DAVID WS TAU	12/26/02	DWG NO.	NO		
APPLICATION			APVD			3A.CA945.111			
		SCALE		1/1		SHEET 1 OF 1			

VI. Pictures of Antennas

Main Antenna	Aux Antenna
	

VII. Cable Length

Left-side antenna: 221mm Φ 1.13mm

Right-side antenna: 480mm Φ 1.13mm

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

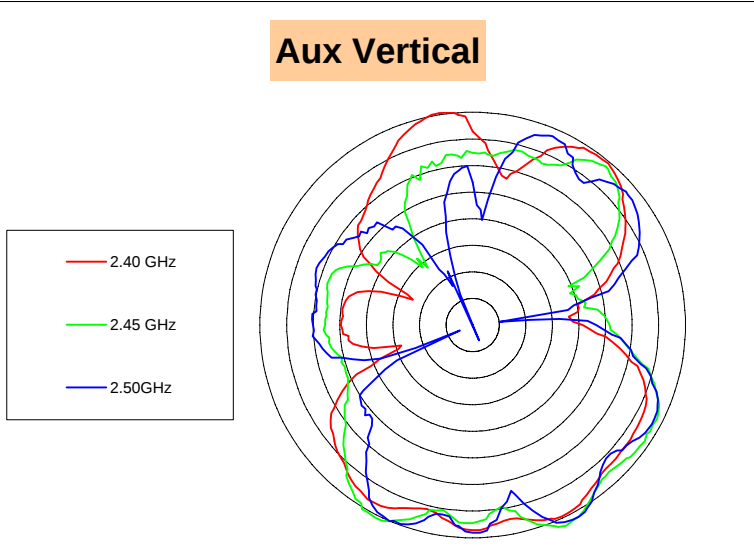
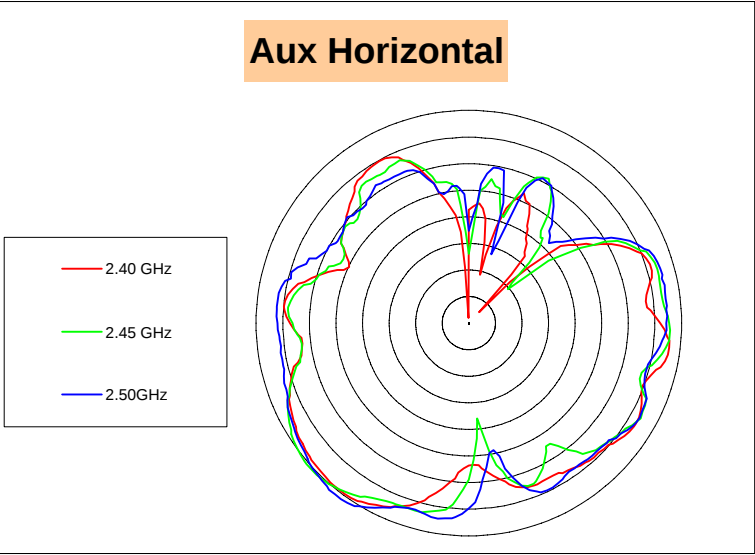
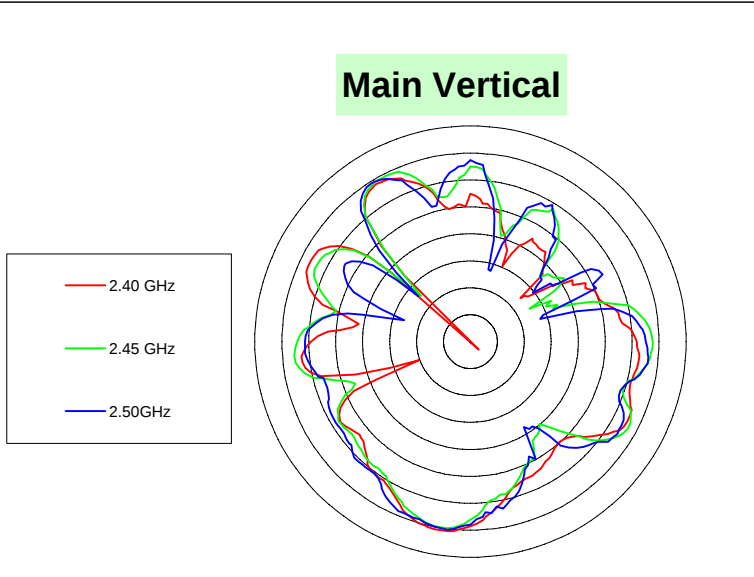
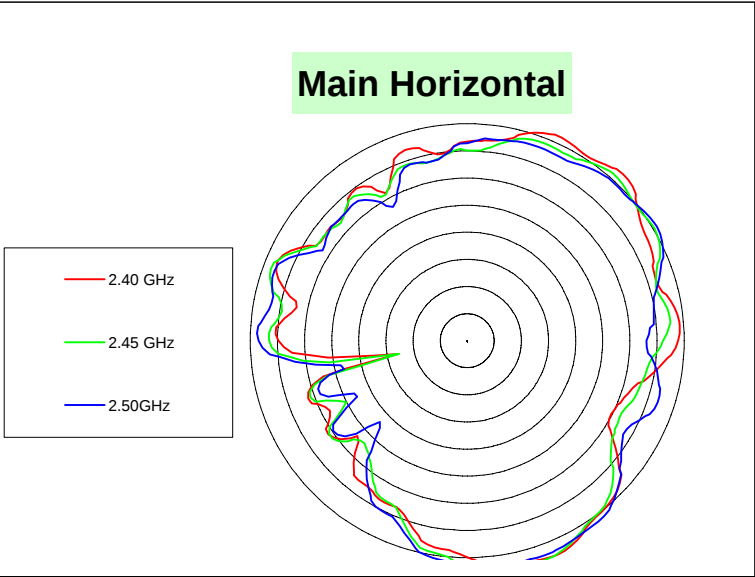
XII. Connector Info (general description)

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		
Ratings	Dielectric withstand voltage: no breakdown at AC1000V for 1min.		
	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

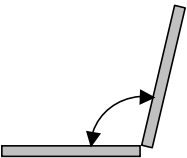
XIII. Radiation Pattern

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

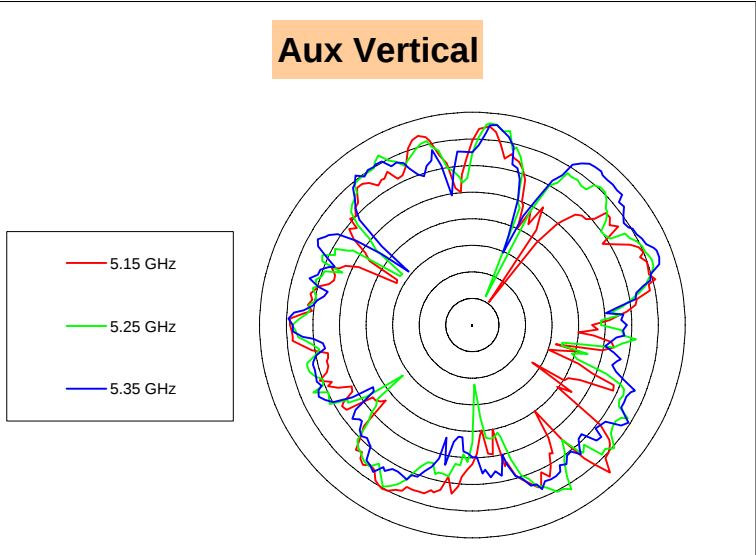
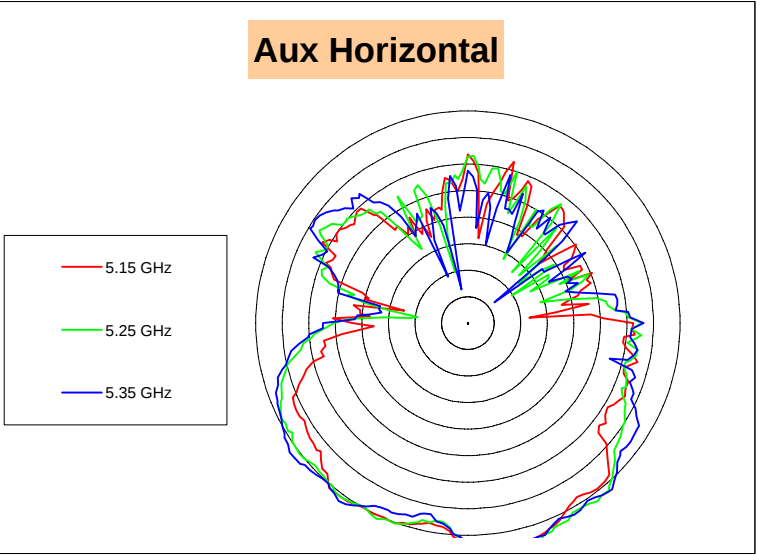
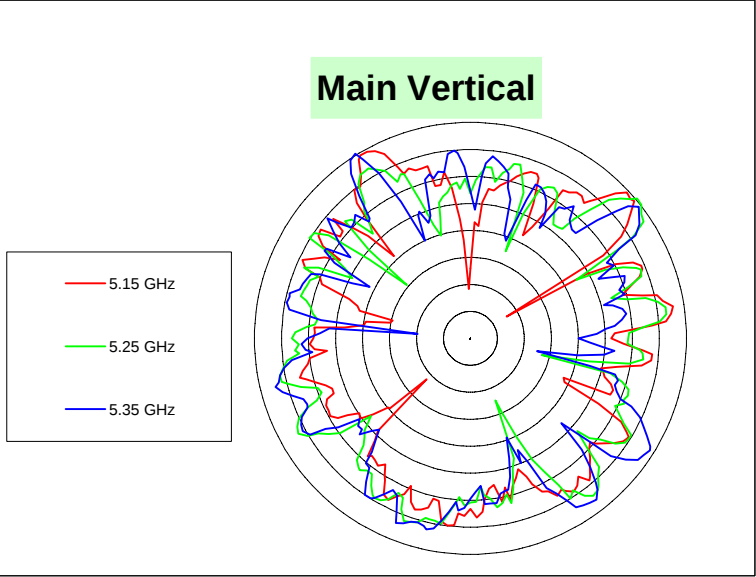
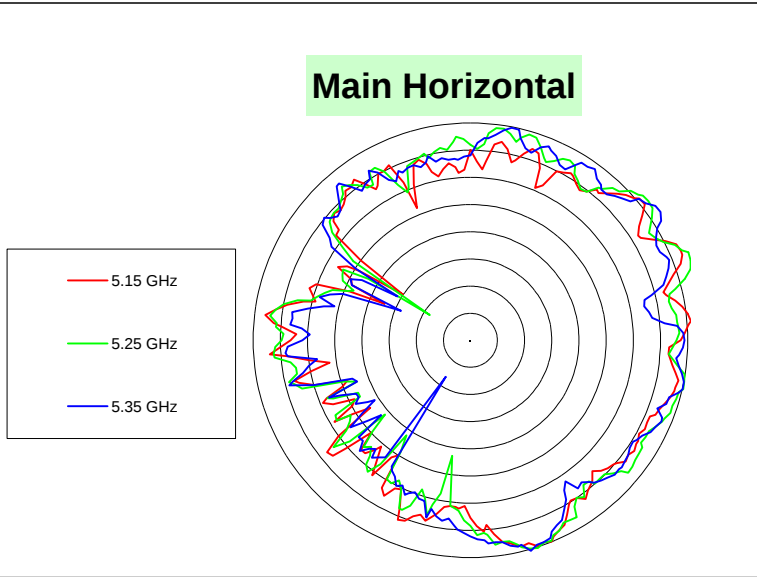


VSWR open = lid/keyboard angle 110°

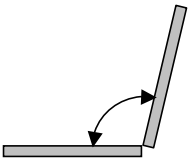
Note: The outer circle approximately represents the 0 dBi gain circle

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



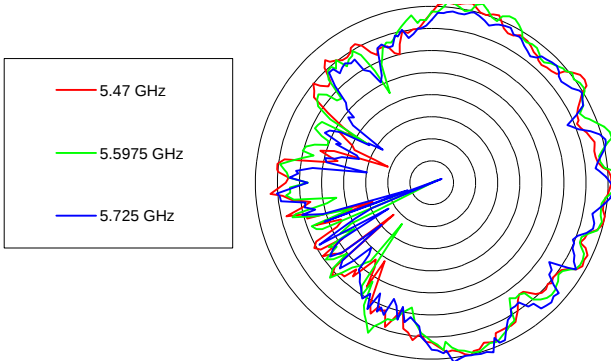
VSWR open = lid/keyboard angle 110°

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

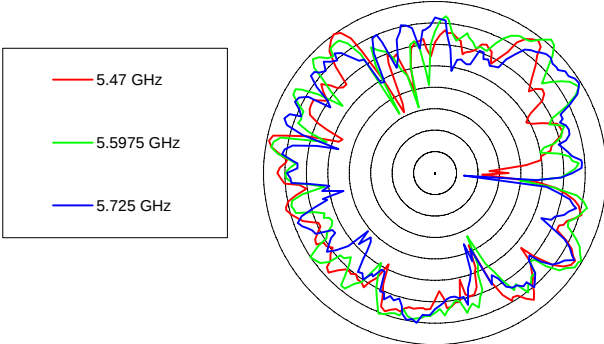
Platform: Platform: Linbergh PT4
Supplier: Supplier: Wistron NeWeb coporation
Date: Date: 2003/1/15

HyperLAN (5.470 GHz - 5.725 GHz) Antenna Radiation Patterns

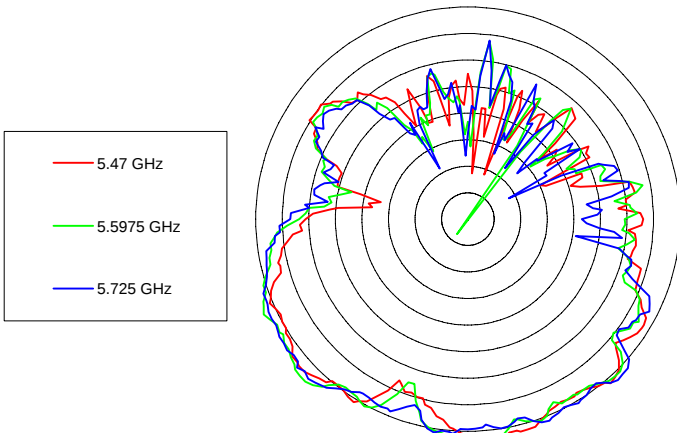
Main Horizontal



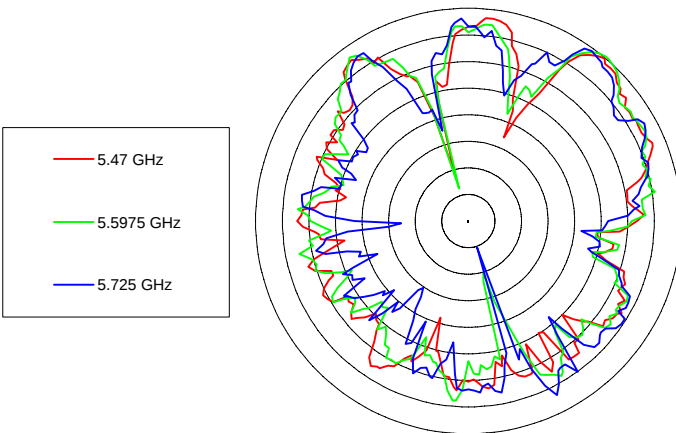
Main Vertical



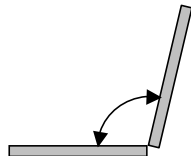
Aux Horizontal



Aux Vertical



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