

EC2-5 Antenna Test Result

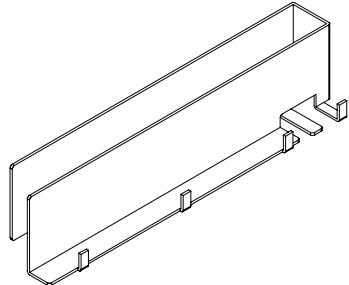
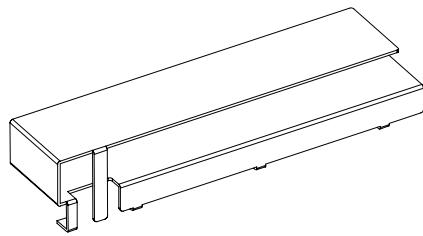
Sophia Lin
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I. Purpose

Antenna test reports for EC2-5 project (CF card)

II. Mechanical dimension

1. Antenna type: PIFA type (3A.EC245.211) by laser cutting.
2. Cable: 1.13*470 mm, Gray.
3. PCB: EC201S0C-1130 without components; with housing.
4. Position: as the following.



III. Test results

1. VSWR

Condition	VSWR @ (MHz)			BW (MHz)	Center Freq. (MHz)
	2400	2450	2500		
@ 0 degree	1.47	1.43	1.37	227	2430
@ 45 degree	1.29	1.21	1.16	297	2442
@ 90 degree	1.40	1.37	1.12	268	2448

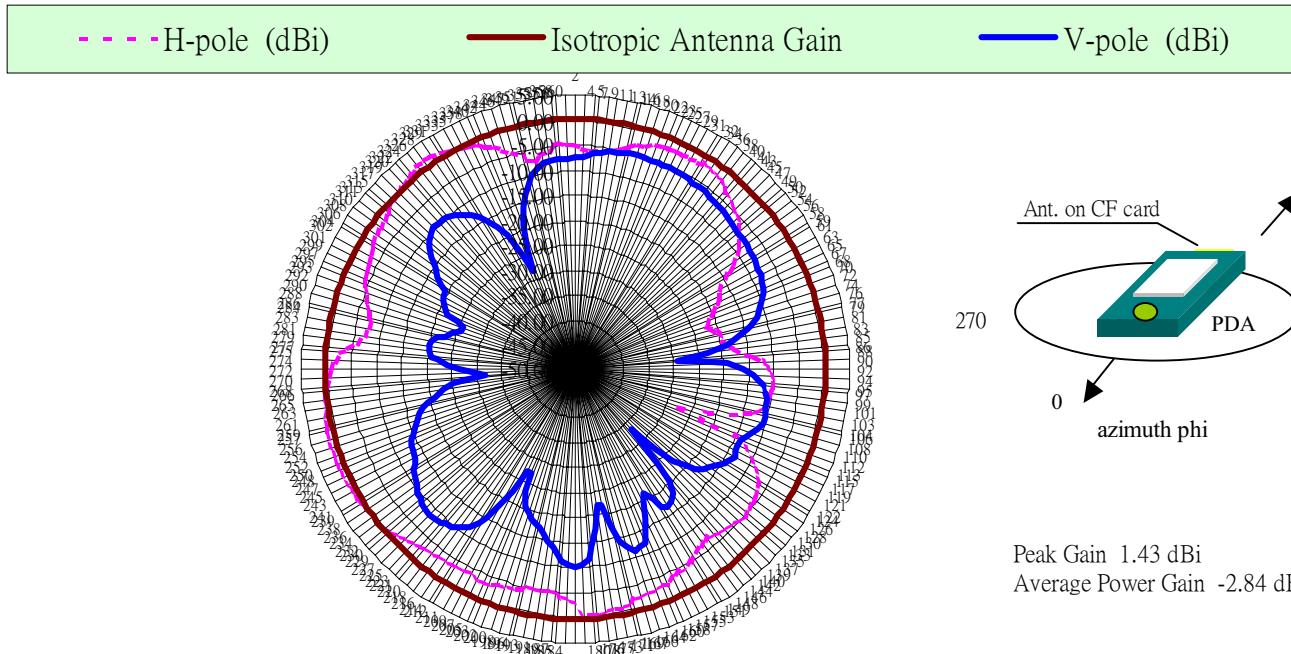
2. Peak Gain and Average Gain

Cable = 1.13*470 mm		Gain @MHz		
		2400	2450	2500
@ 0 degree	Peak Gain	0.35	0.44	1.26
	Average Gain	-3.95	-3.83	-3.39
@ 45 degree	Peak Gain	2.15	2.56	2.82
	Average Gain	-1.44	-1.39	-1.29
@ 90 degree	Peak Gain	2.97	2.84	2.86
	Average Gain	-1.37	-1.28	-1.15

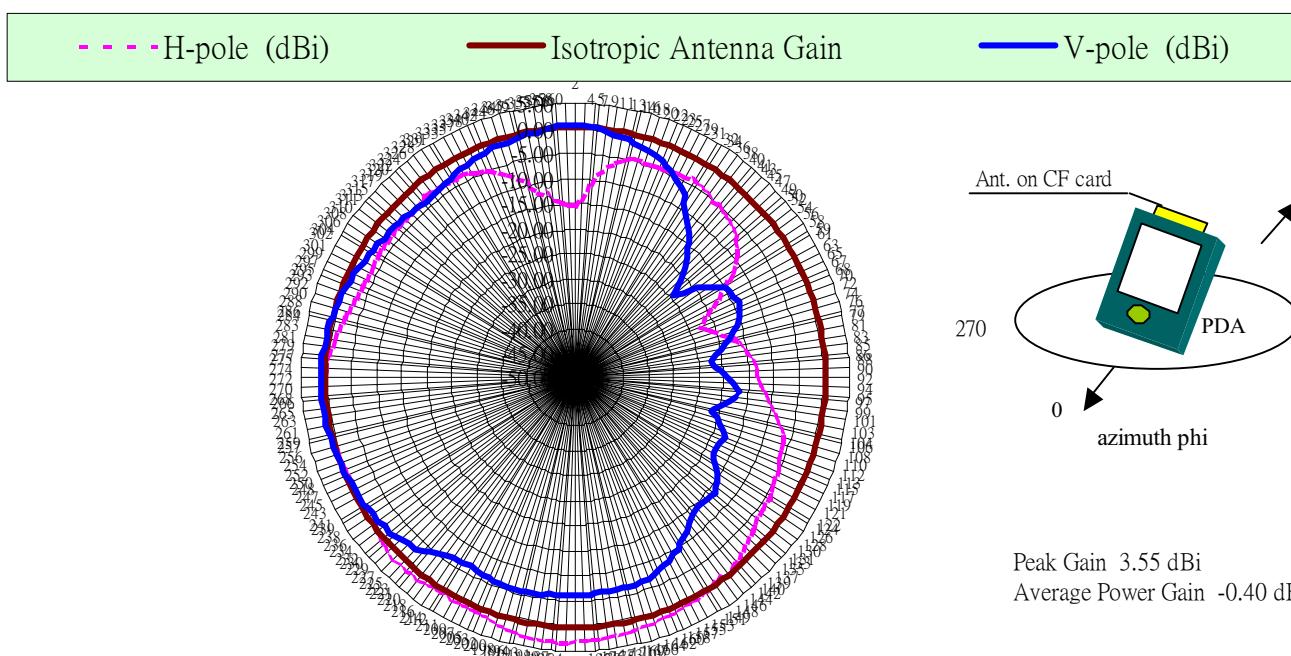
Mapping to cable -less		Gain @MHz		
		2400	2450	2500
@ 0 degree	Peak Gain	1.34	1.43	2.25
	Average Gain	-2.96	-2.84	-2.40
@ 45 degree	Peak Gain	3.14	3.55	3.81
	Average Gain	-0.45	-0.40	-0.30
@ 90 degree	Peak Gain	3.96	3.83	3.85
	Average Gain	-0.38	-0.29	-0.16

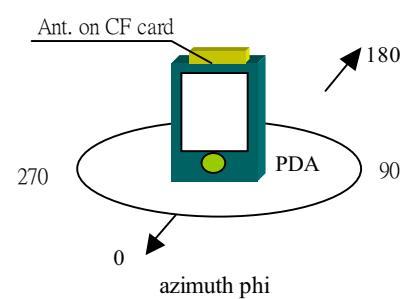
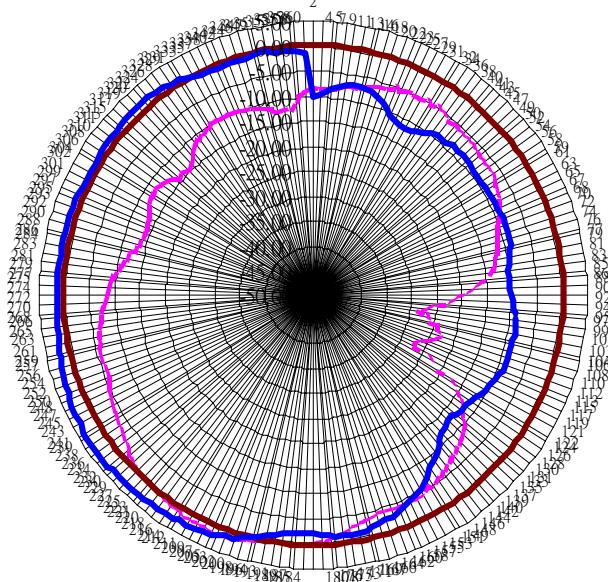
3. Radiation Pattern

EC2-5 CF Card Antenna (0 degree) -@2.45GHz



EC2-5 CF Card Antenna (45 degree) -@2.45GHz



EC2-5 CF Card Antenna (90 degree) -@2.45GHz

Peak Gain 3.83 dBi
Average Power Gain -0.29 dBi