



MAG.LAYERS

Mag.Layers Scientific-Technics

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CUSTOMER : AMIT
PART NO. : CDM561DL
AUTHORIZED BY : Alice Chen
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美磊科技股份有限公司

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD

HEAD OFFICE / HSINCHU PLANT

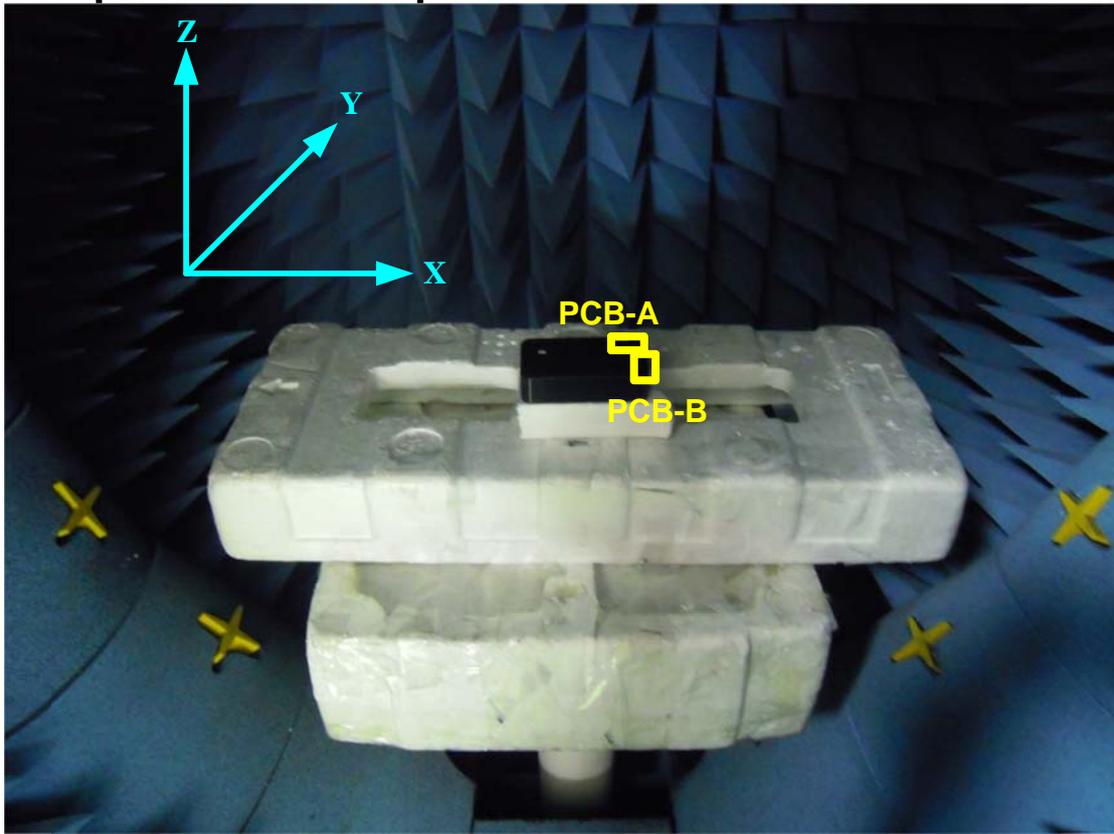
No 18, Tz-Chiang Road, Hsin-Chu Industrial Park, Hsin-Chu, Taiwan

TEL: +886-3-5972488 FAX: +886-3-5972477

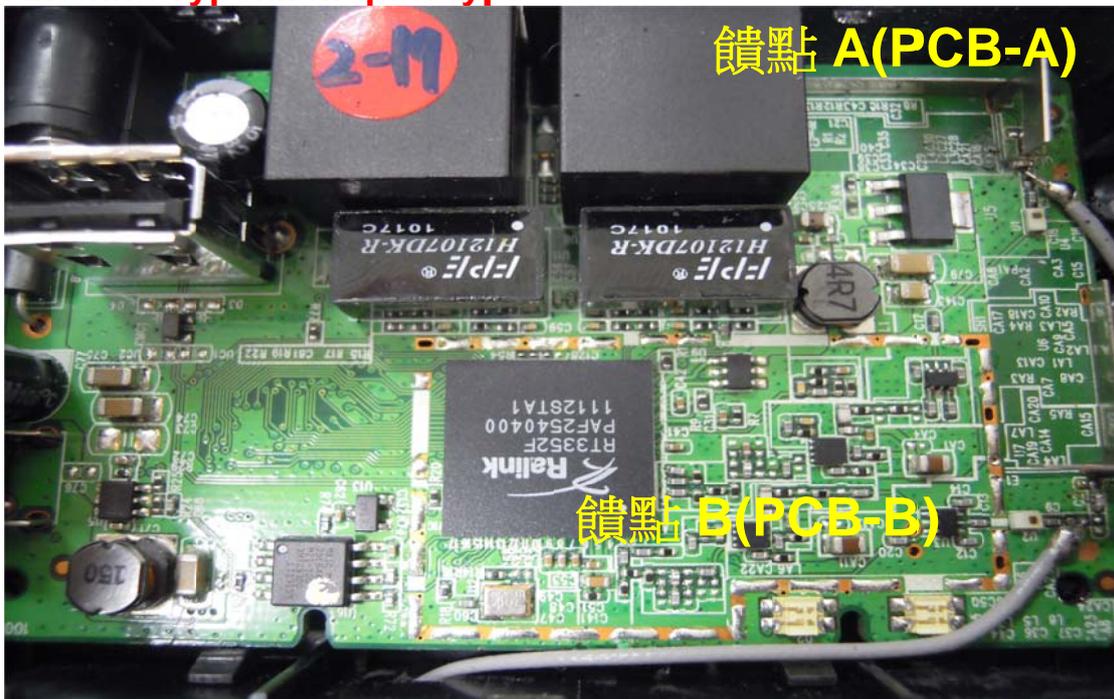
<http://www.maglayers.com.tw>

E-mail : info@maglayers.com.tw

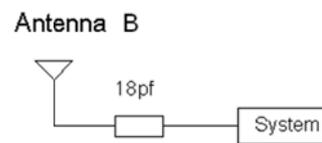
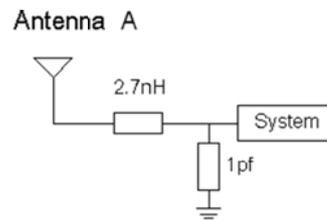
1.Experimental Setup



Part NO. MSA-1507-2G4C1-A1
Antenna Type: Monoport type



Antenna Matching Circuit:



1. Return Loss

S33:PCB-A , **S44:PCB-B** , **S34:Isolation**

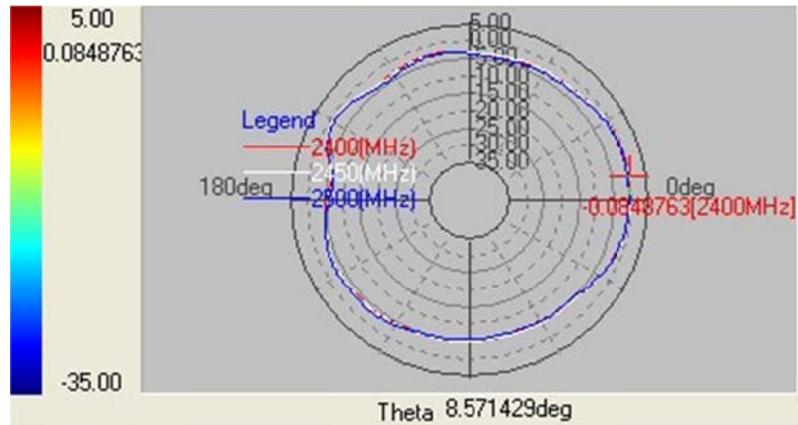


2. Radiation Pattern

PCB-A

▲ Phi=0.00deg

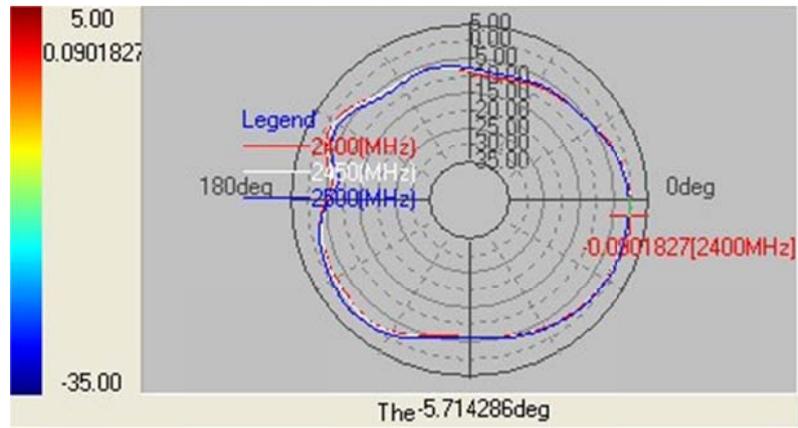
Gain . dB



Layer	Max value	Average
2400(MHz)	-0.08	-3.17
2450(MHz)	-0.23	-3.19
2500(MHz)	-0.33	-3.37

▲ Phi=90.00deg

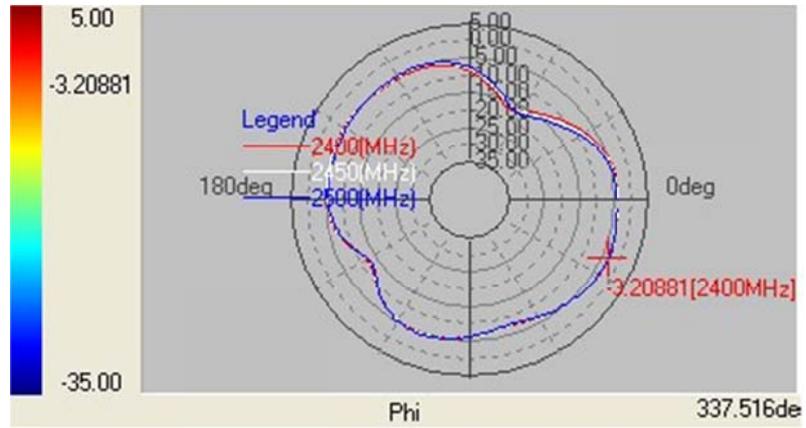
Gain . dB



Layer	Max value	Average
2400(MHz)	-0.09	-3.54
2450(MHz)	-0.16	-3.50
2500(MHz)	0.17	-3.36

▲ Theta=90.00deg

Gain . dB

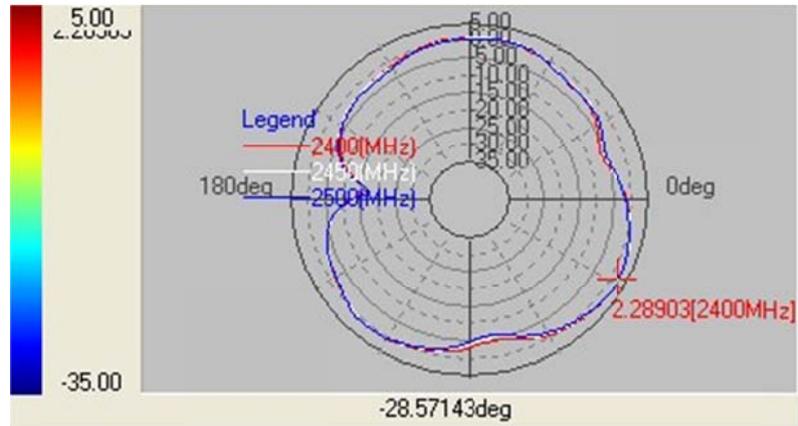


Layer	Max value	Average
2400(MHz)	-3.21	-6.40
2450(MHz)	-3.10	-6.40
2500(MHz)	-3.13	-6.50

PCB-B

▲ Phi=0.00deg

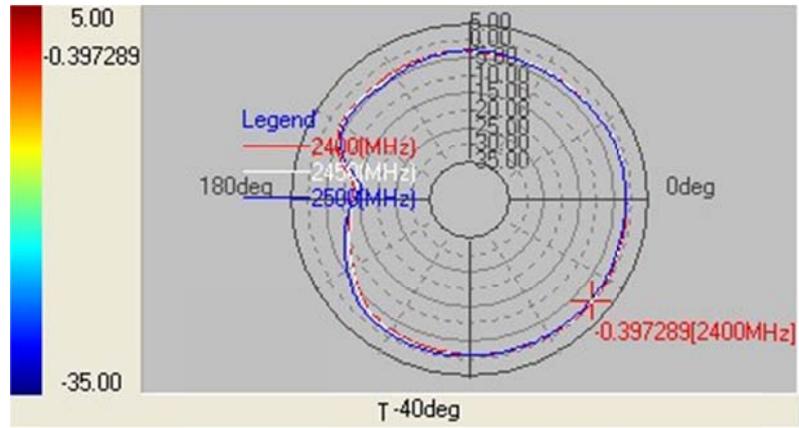
Gain . dB



Layer	Max value	Average
2400(MHz)	2.29	-1.42
2450(MHz)	2.31	-1.50
2500(MHz)	2.37	-1.61

▲ Phi=90.00deg

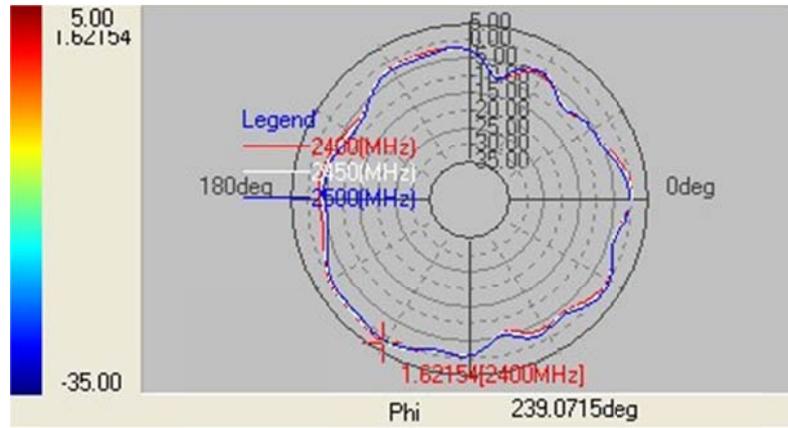
Gain . dB



Layer	Max value	Average
2400(MHz)	-0.40	-2.82
2450(MHz)	-0.65	-2.90
2500(MHz)	-0.81	-2.86

▲ Theta=90.00deg

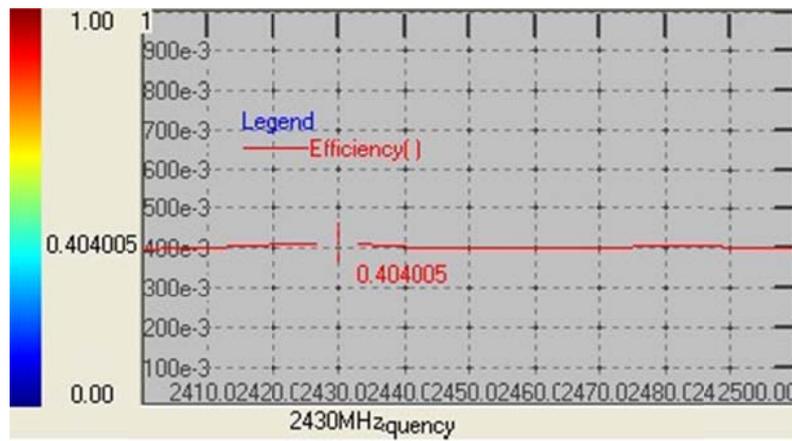
Gain . dB



Layer	Max value	Average
2400(MHz)	1.62	-2.52
2450(MHz)	1.44	-2.60
2500(MHz)	1.11	-2.79

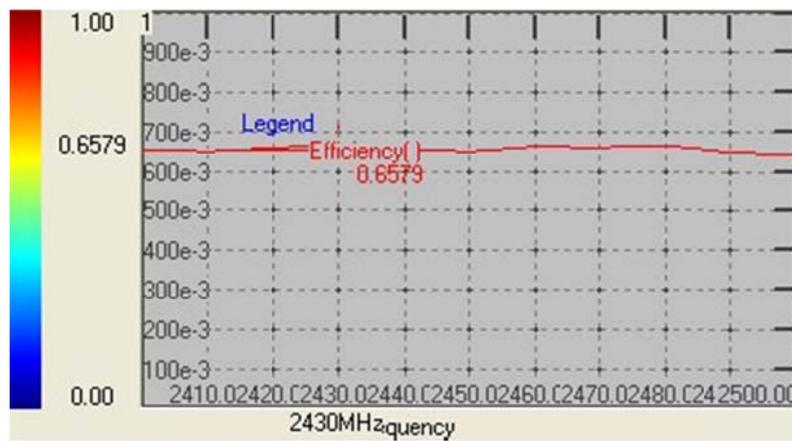
3. Efficiency

PCB-A



Maximum Efficiency At 2.4 ~ 2.5GHz : 40.4%

PCB-B



Maximum Efficiency At 2.4 ~ 2.5GHz : 65.79%

4. Peak Gain

Band (GHz)	PCB-A	PCB-B
2400	-0.052	3.169
2410	-0.092	3.086
2420	-0.064	3.125
2430	-0.069	3.065
2440	-0.190	2.980
2450	-0.148	2.856
2460	-0.046	2.936
2470	-0.124	2.962
2480	-0.056	2.913
2490	0.237	2.888
2500	0.259	2.943