

Antenna Regulatory Information

• Product type	• WLAN antenna
• Model number	• Parker
• Revision	• Rev. 1
• Manufacturer Part No. : Main / Aux / MIMO	• AMP8P-700023 (MIMO) • AMP6P-700000 (Main &Aux)
• Dell Part No. : Main / Aux / MIMO	•

ADVANCED-CONNECTEK INC.

B1, No. 205, Sec.3, Bei-Hsin Rd., Hsin-Tien

Taipei, Taiwan, R.O.C

TEL : 886-2-8913-1939

FAX : 886-2-8913-2538

Http : [//www.acon.com](http://www.acon.com)

Template Revision 083106

1. Specifications

Antenna Specifications

Antenna Type (Material, Technology)	PIFA
Antenna Model Number	Parker
Operating Frequency Range(s)	2.4GHz ~ 2.5GHz and 4.9GHz ~ 5.9GHz
Peak Gain (802.11b/g / 2.4GHz Band) (dBi)	Main 1/ Aux -2.4/ MIMO 0.6
Peak Gain (802.11a / 5GHz Band) (dBi)	Main -2.1/ Aux-0.5/ MIMO 0.5
Radio Connector Type	IPEX 20278-111R-13
Mid-Line Connector Type (If Applicable)	N/A

Remark: Peak Gains include all system losses (connector, cable, etc)

Cable Specifications

Cable Parameters	Main			Aux			MIMO		
	LCD Side	Base Side	Total	LCD Side	Base Side	Total	LCD Side	Base Side	Total
Length (mm)	N/A	N/A	497	N/A	N/A	537	N/A	N/A	493
Loss (Including Connectors) (dB, 2.4GHz / 5GHz)			1.5 / 2.3			1.2 / 1.8			0.5 / 0.8
Description (Color, Diameter, Manufacturer)	Color: White OD: 1.13 mm(low loss) Vendor: Kurabe/Hitachi/Sumitomo			Color: Black OD:1.13 mm(low loss) Vendor: Kurabe/Hitachi/Sumitomo			Color: Gray OD: 1.13mm(low loss) Vendor: Kurabe/Hitachi/Sumitomo		

2. Antenna Assembly

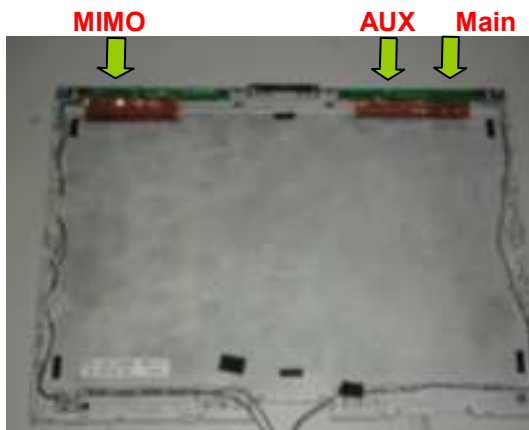


Main/Aux Antenna

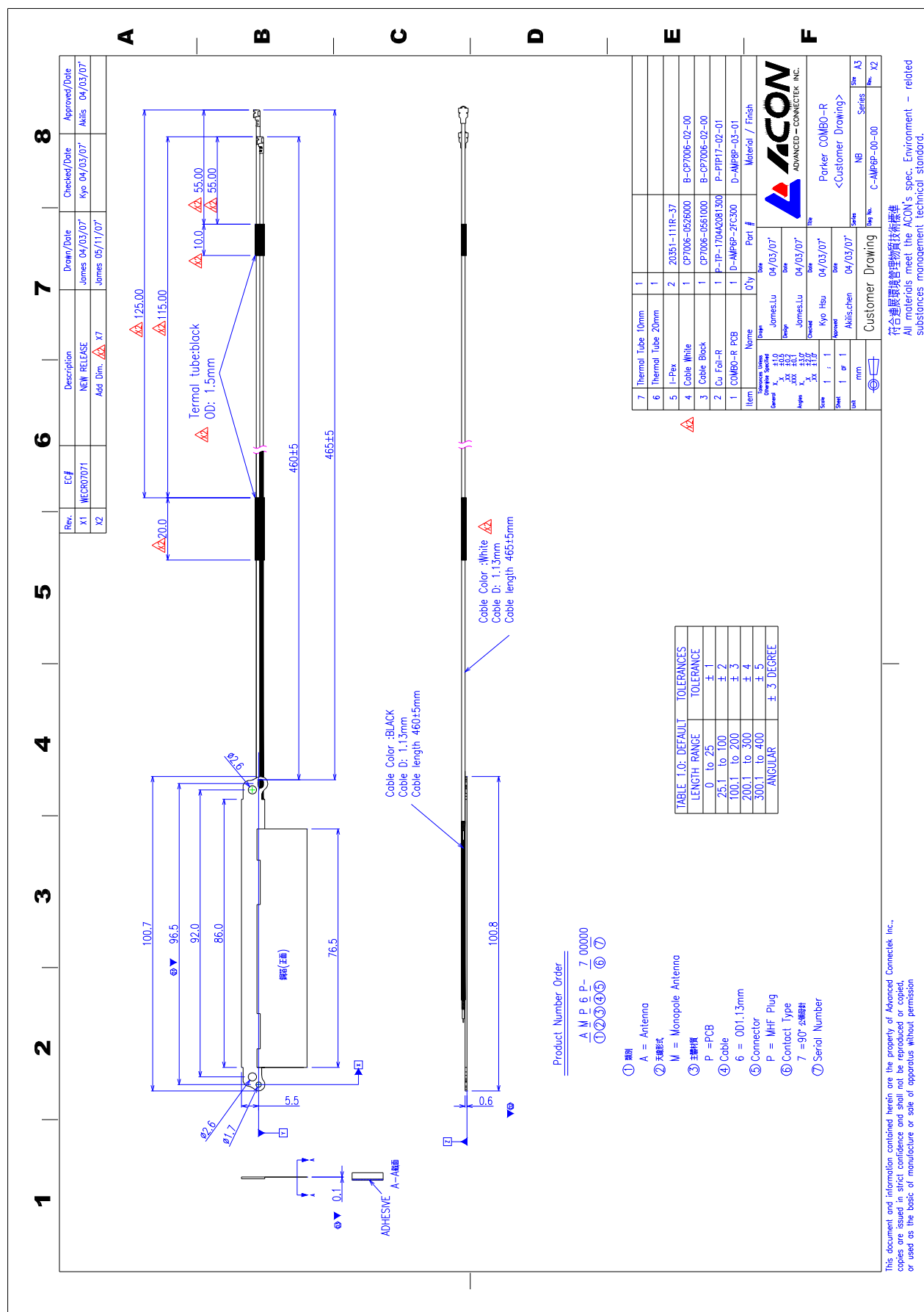


MIMO Antenna

3. Antenna Assembly Installed in The Notebook



4. Mechanical Drawing of Antennas



1

2

3

4

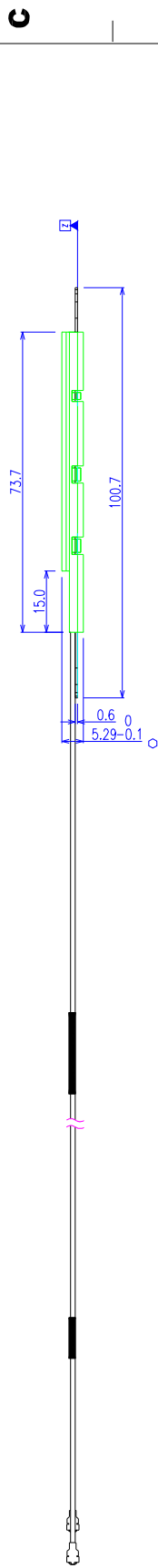
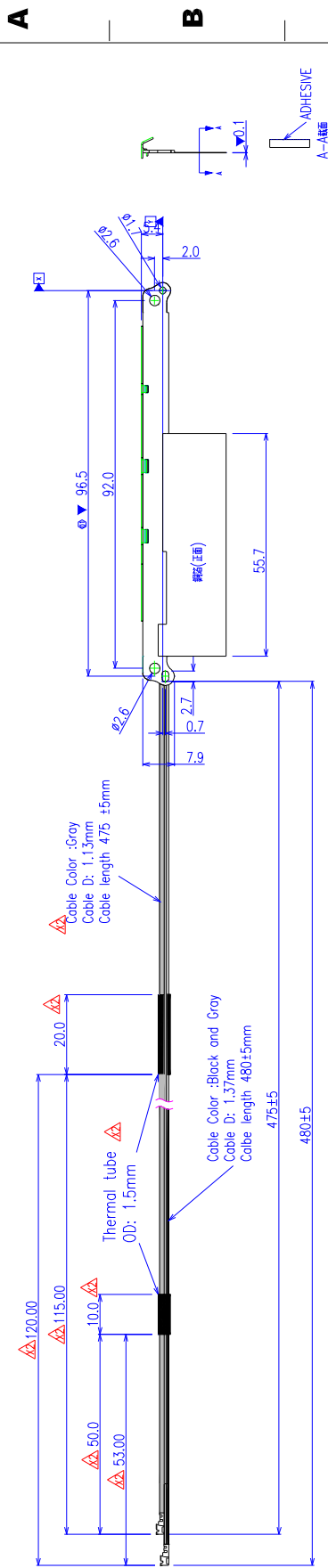
5

6

7

8

Rev.	EC#	Description	Drawn/Date	Checked/Date	Approved/Date
X1	WEC07071	NEW RELEASE	James 04/03/07		
X2		Add Dim. 	James 05/11/07		



Product Number Order

A - A M P 8 P - Z 00023
①②③④⑤ ⑥ ⑦

- ① 類別
A = Antenna
- ② 天線形狀
M = Monopole Antenna
- ③ 主體材質
P = PCB
- ④ Cable
8 = 001.37mm
- ⑤ Connector
P = MHF Plug
- ⑥ Contact Type
7 = 90° 公插針
- ⑦ Serial Number

TABLE 1.0: DEFAULT TOLERANCES	TOLERANCES
LENGTH RANGE	TOLERANCE
0 to 25	± 1
25.1 to 100	± 2
100.1 to 200	± 3
200.1 to 300	± 4
300.1 to 400	± 5
ANGULAR	± 3 DEGREE

9	1		
8	Thermal Tube 20mm	1	
7	Thermal Tube 10mm	1	
6	I-Pex	1	20351-111R-37
5	Cable Gray	1	000006-0509000 B-CP7006-02-00
4	Cable Black/Gray	1	000006-0560000 B-CP7006-02-00
3	Copper Foil-L	1	P-TP-17652081300 P-PIP17-02-00
2	COMBO-L PCB	1	D-AMPBP-1EC300 D-AMPBP-03-00
1	COMBO-L Ant	1	H-AMPBP-04MC004 H-AMPBP-03-00
Item	Name	Part #	Material / Finish
Drawn/Date	James.Lu	04/03/07	
Check/Date	James.Lu	04/03/07	
Appr/Date	Kyo Hsu	04/03/07	
Scale	1 : 1		
Sheet	1 of 1		
Unit	mm		
Customer Drawing			
Parker COMBO-L			
ADVANCED - CONNECTEK INC.			
A-AMPBP-03-00			
Series A3			
Rev. Y2			

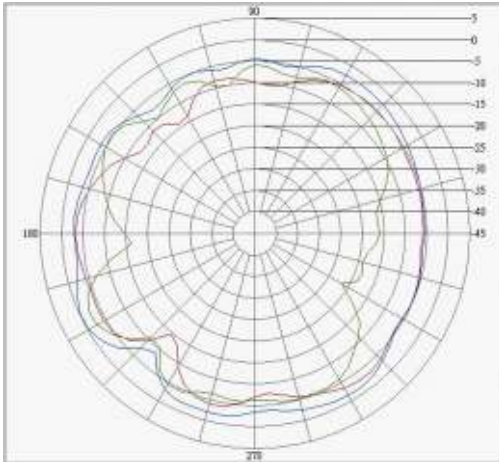
This document and information contained herein are the property of Advanced Connectek Inc., copies are issued in strict confidence and shall not be reproduced or copied, or used as the basis of manufacture or sale of apparatus without permission

符合通展管理物理技術標準
All materials meet the ACON's spec. Environment - related substances management technical standard.

5. Gain Patterns

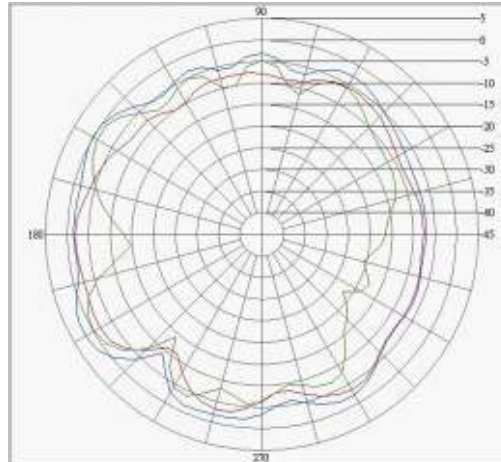
- Main Antenna — H-pol. — V-pol. — H+V

Fre. = 2412 MHz



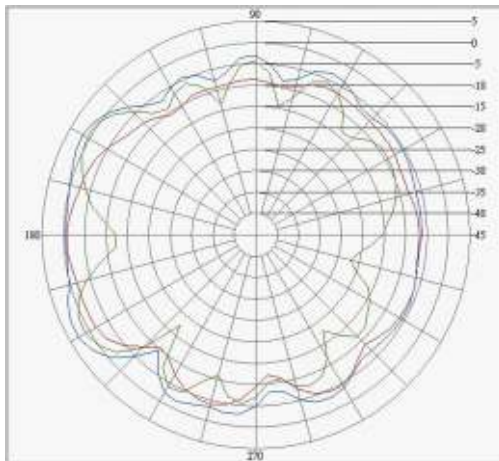
H-pol. (Aver.)	-5.9 dBi
H-pol. (Max.)	-3.0 dBi
V-pol (Aver.)	-7.4 dBi
V-pol. (Max.)	-2.3dBi
H+V (Aver.)	-3.6 dBi
H+V (Max.)	-0.2 dBi

Fre. = 2437 MHz



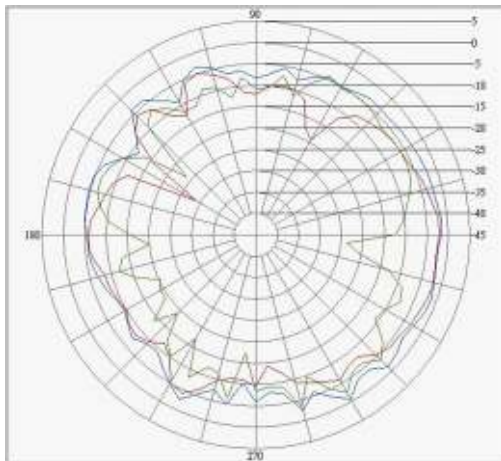
H-pol. (Aver.)	-5.7 dBi
H-pol. (Max.)	-1.8 dBi
V-pol (Aver.)	-6.7dBi
V-pol. (Max.)	-0.3 dBi
H+V (Aver.)	-3.1dBi
H+V (Max.)	2.1 dBi

Fre. = 2462 MHz



H-pol. (Aver.)	-5.6 dBi
H-pol. (Max.)	-0.8dBi
V-pol (Aver.)	-6.0 dBi
V-pol. (Max.)	1.0dBi
H+V (Aver.)	-2.8 dBi
H+V (Max.)	2.6 dBi

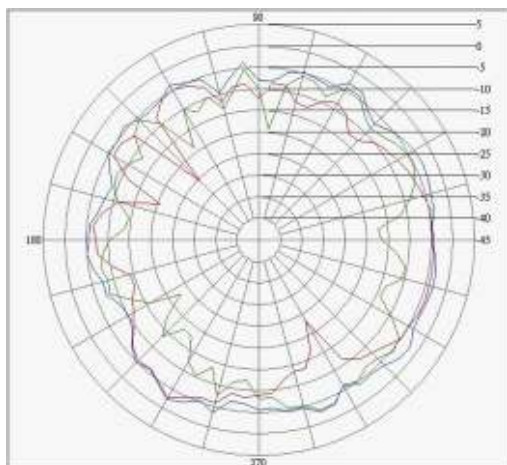
Fre. = 4900 MHz



H-pol. (Aver.)	-2.1 dBi
H-pol. (Max.)	-6.7dBi
V-pol (Aver.)	-2.2 dBi
V-pol. (Max.)	-8.4 dBi
H+V (Aver.)	-4.4dBi
H+V (Max.)	-0.6dBi

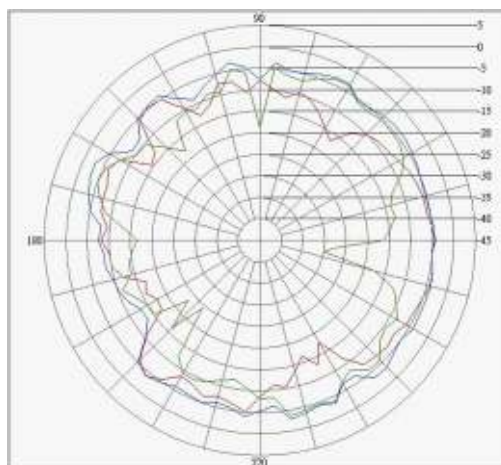
— H-pol. — V-pol. — H+V

Fre. = 5150 MHz



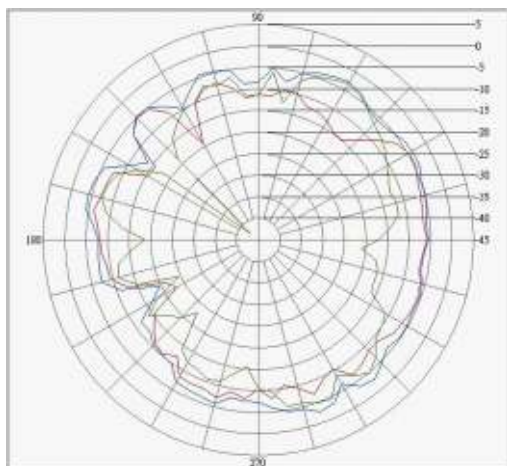
H-pol. (Aver.)	-7.5 dBi
H-pol. (Max.)	-2.8 dBi
V-pol (Aver.)	-8.3 dBi
V-pol. (Max.)	-3.1 dBi
H+V (Aver.)	-4.9 dBi
H+V (Max.)	-2.1 dBi

Fre. = 5350 MHz



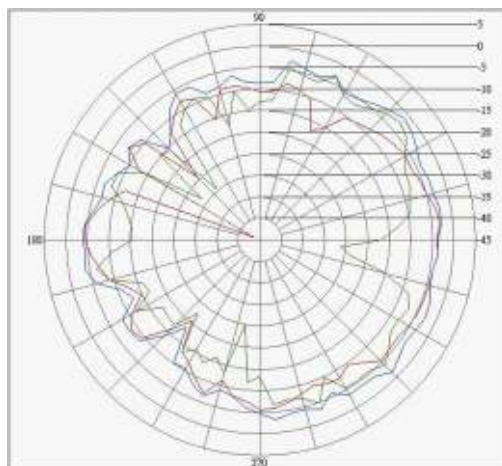
H-pol. (Aver.)	-7.9 dBi
H-pol. (Max.)	-3.9 dBi
V-pol (Aver.)	-8.3 dBi
V-pol. (Max.)	-3.5 dBi
H+V (Aver.)	-5.1 dBi
H+V (Max.)	-2.9 dBi

Fre. = 5470 MHz



H-pol. (Aver.)	-8.4 dBi
H-pol. (Max.)	-4.5 dBi
V-pol (Aver.)	-9.3 dBi
V-pol. (Max.)	-3.1 dBi
H+V (Aver.)	-5.8 dBi
H+V (Max.)	-2.6 dBi

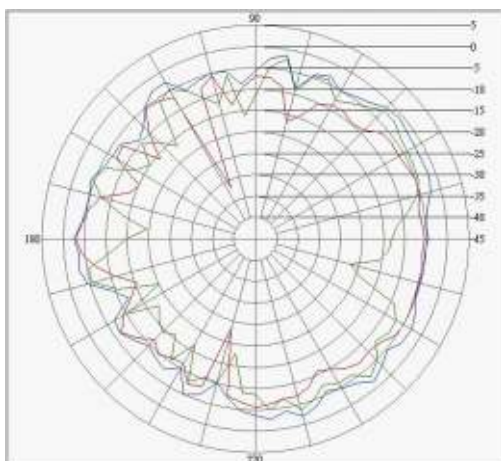
Fre. = 5725 MHz



H-pol. (Aver.)	-7.6 dBi
H-pol. (Max.)	-3.1 dBi
V-pol (Aver.)	-8.7 dBi
V-pol. (Max.)	-2.5 dBi
H+V (Aver.)	-5.1 dBi
H+V (Max.)	-1.3 dBi

— H-pol. — V-pol. — H+V

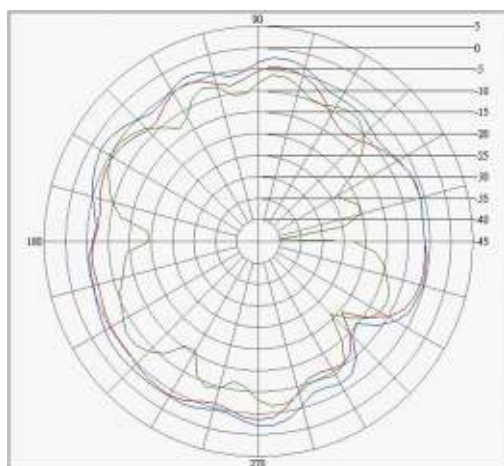
Fre. = 5875 MHz



H-pol. (Aver.)	-7.4dBi
H-pol. (Max.)	-2.8 dBi
V-pol (Aver.)	-7.3 dBi
V-pol. (Max.)	-2.2 dBi
H+V (Aver.)	-4.3 dBi
H+V (Max.)	-1.0 dBi

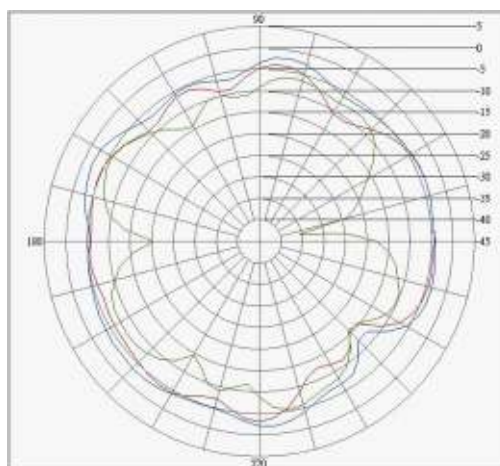
- Aux Antenna

Fre. = 2412 MHz



H-pol. (Aver.)	-6.5 dBi
H-pol. (Max.)	-3.5 dBi
V-pol (Aver.)	-10.0 dBi
V-pol. (Max.)	-5.3 dBi
H+V (Aver.)	-4.9 dBi
H+V (Max.)	-2.1 dBi

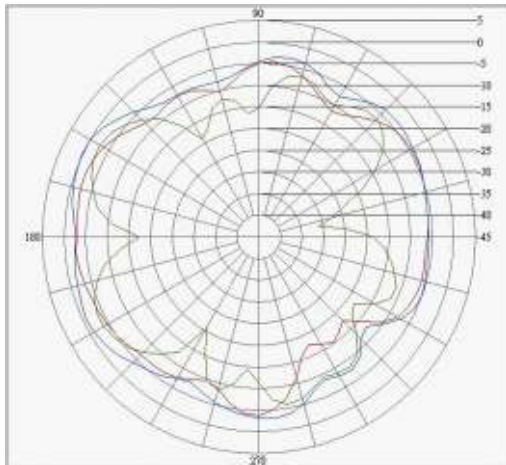
Fre. = 2437 MHz



H-pol. (Aver.)	-6.0 dBi
H-pol. (Max.)	-3.2 dBi
V-pol (Aver.)	-9.4 dBi
V-pol. (Max.)	-5.4 dBi
H+V (Aver.)	-4.4 dBi
H+V (Max.)	-1.9 dBi

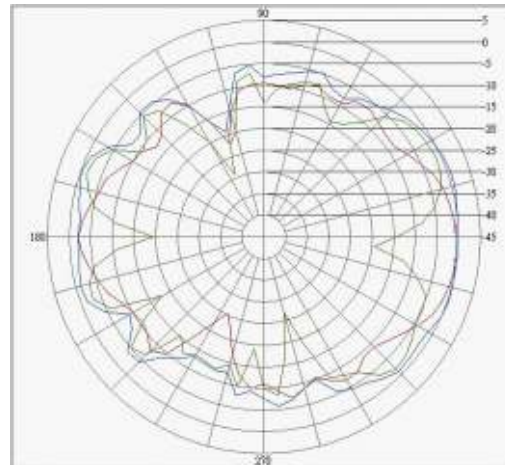
— H-pol. — V-pol. — H+V

Fre. = 2462 MHz



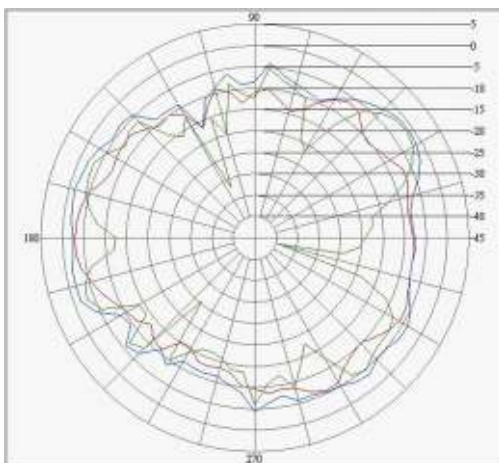
H-pol. (Aver.)	-6.0 dBi
H-pol. (Max.)	-2.4 dBi
V-pol (Aver.)	-8.5 dBi
V-pol. (Max.)	-2.6 dBi
H+V (Aver.)	-4.1dBi
H+V (Max.)	0.2 dBi

Fre. = 4900 MHz



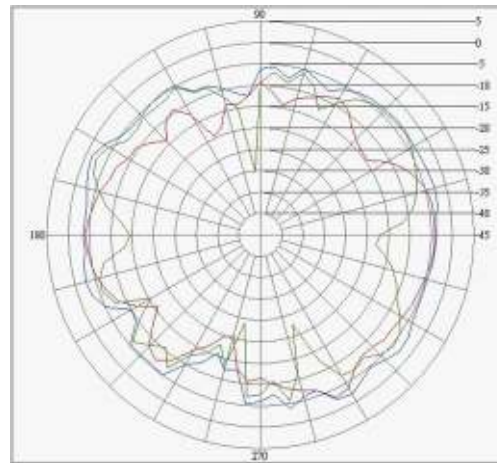
H-pol. (Aver.)	-6.2 dBi
H-pol. (Max.)	-0.5 dBi
V-pol (Aver.)	-6.6 dBi
V-pol. (Max.)	-1.3 dBi
H+V (Aver.)	-3.4 dBi
H+V (Max.)	0.7 dBi

Fre. = 5150 MHz



H-pol. (Aver.)	-8.1 dBi
H-pol. (Max.)	-2.9 dBi
V-pol (Aver.)	-8.0 dBi
V-pol. (Max.)	-1.7 dBi
H+V (Aver.)	-5.0 dBi
H+V (Max.)	-1.0 dBi

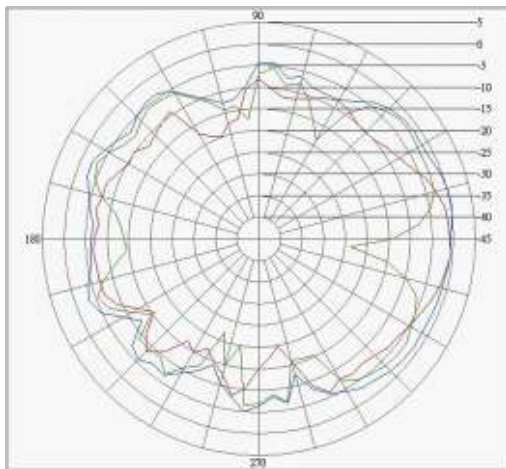
Fre. = 5350 MHz



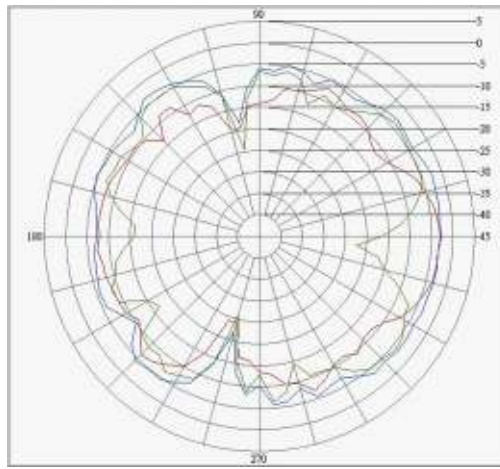
H-pol. (Aver.)	-7.8 dBi
H-pol. (Max.)	-3.1 dBi
V-pol (Aver.)	-7.6 dBi
V-pol. (Max.)	-2.5 dBi
H+V (Aver.)	-4.7 dBi
H+V (Max.)	-1.4 dBi

— H-pol. — V-pol. — H+V

Fre. = 5470 MHz



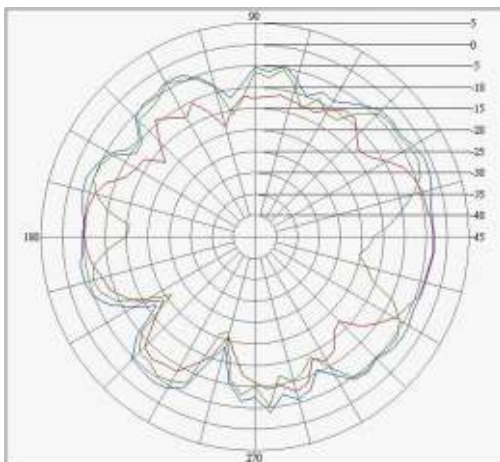
Fre. = 5725 MHz



H-pol. (Aver.)	-7.2 dBi
H-pol. (Max.)	-0.6 dBi
V-pol (Aver.)	-7.0 dBi
V-pol. (Max.)	-2.3 dBi
H+V (Aver.)	-4.1 dBi
H+V (Max.)	0.2 dBi

H-pol. (Aver.)	-8.4 dBi
H-pol. (Max.)	-3.0 dBi
V-pol (Aver.)	-8.1 dBi
V-pol. (Max.)	-3.8 dBi
H+V (Aver.)	-5.2 dBi
H+V (Max.)	-2.4 dBi

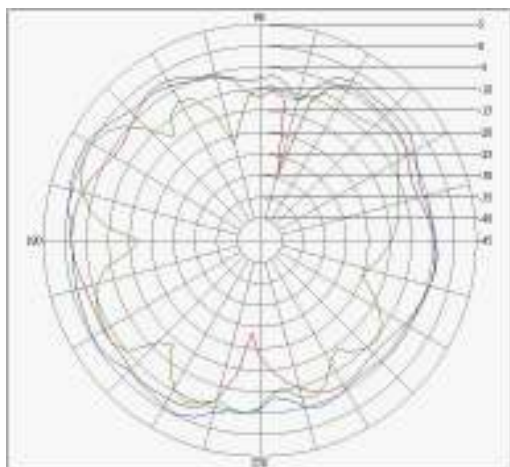
Fre. = 5875 MHz



H-pol. (Aver.)	-8.6 dBi
H-pol. (Max.)	-3.1 dBi
V-pol (Aver.)	-7.4 dBi
V-pol. (Max.)	-2.9 dBi
H+V (Aver.)	-4.9 dBi
H+V (Max.)	-1.4 dBi

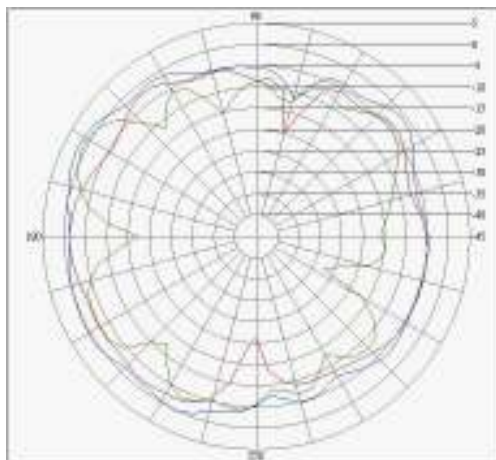
- MIMO Antenna — H-pol. — V-pol. — H+V

Fre. = 2412 MHz



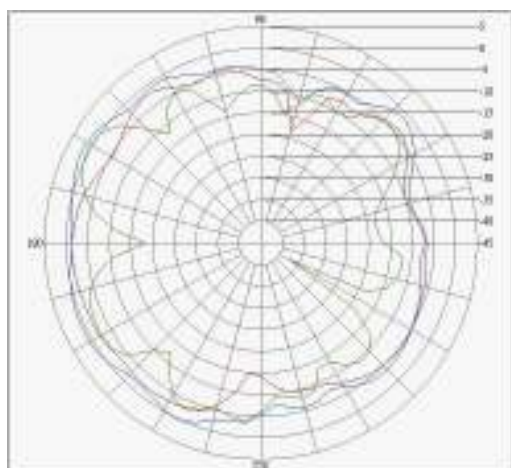
H-pol. (Aver.)	-5 dBi
H-pol. (Max.)	-1.5 dBi
V-pol (Aver.)	-7.2 dBi
V-pol. (Max.)	-0.2dBi
H+V (Aver.)	-2.9 dBi
H+V (Max.)	1.1 dBi

Fre. = 2437 MHz



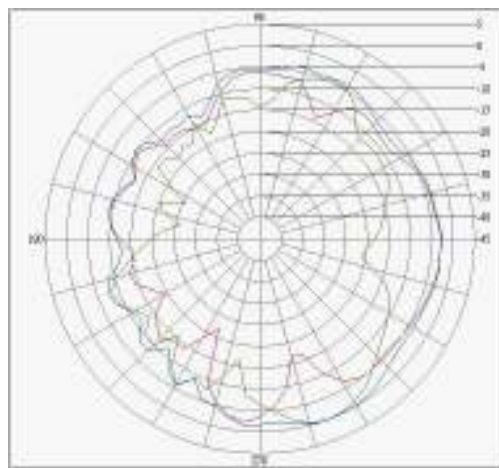
H-pol. (Aver.)	-4.7 dBi
H-pol. (Max.)	-1.3 dBi
V-pol (Aver.)	-6.3 dBi
V-pol. (Max.)	0.6 dBi
H+V (Aver.)	-2.4 dBi
H+V (Max.)	1.6 dBi

Fre. = 2462 MHz



H-pol. (Aver.)	-4.8dBi
H-pol. (Max.)	-1.3 dBi
V-pol (Aver.)	-6.5 dBi
V-pol. (Max.)	0.4 dBi
H+V (Aver.)	-2.5 dBi
H+V (Max.)	1.4 dBi

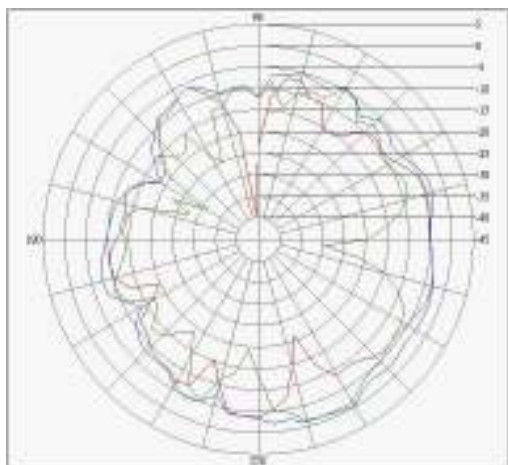
Fre. = 4900 MHz



H-pol. (Aver.)	-7.4 dBi
H-pol. (Max.)	-2.2 dBi
V-pol (Aver.)	-8.3 dBi
V-pol. (Max.)	0 dBi
H+V (Aver.)	-4.8 dBi
H+V (Max.)	0.1dBi

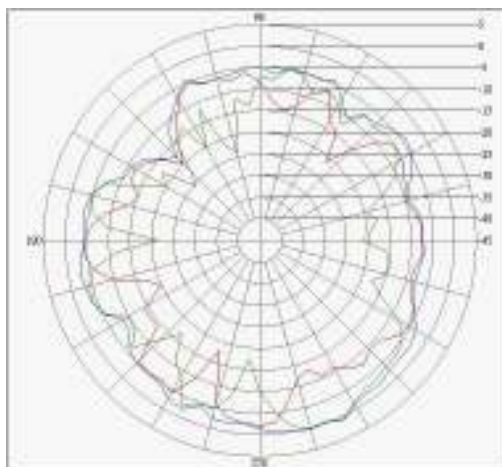
— H-pol. — V-pol. — H+V

Fre. = 5150 MHz



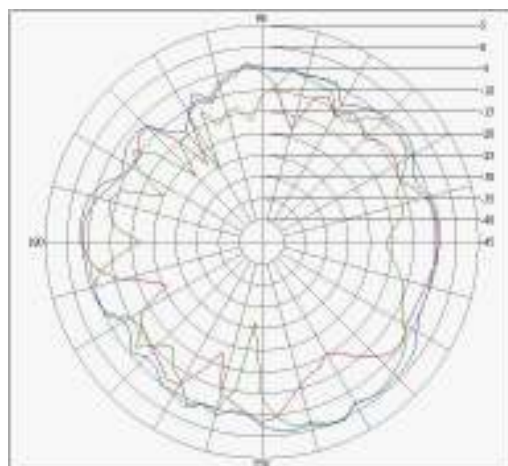
H-pol. (Aver.)	-8.1 dBi
H-pol. (Max.)	-3.3 dBi
V-pol (Aver.)	-8.6 dBi
V-pol. (Max.)	-1.2 dBi
H+V (Aver.)	-5.3 dBi
H+V (Max.)	-0.5 dBi

Fre. = 5350 MHz



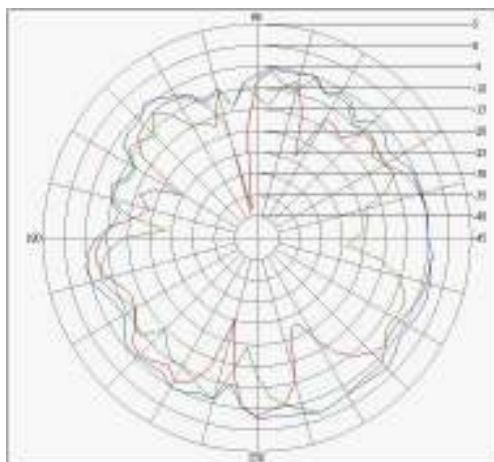
H-pol. (Aver.)	-7.9 dBi
H-pol. (Max.)	-2 dBi
V-pol (Aver.)	-6.9 dBi
V-pol. (Max.)	0.5 dBi
H+V (Aver.)	-4.4 dBi
H+V (Max.)	0.8 dBi

Fre. = 5470 MHz



H-pol. (Aver.)	-7.6 dBi
H-pol. (Max.)	-3.4 dBi
V-pol (Aver.)	-6.8 dBi
V-pol. (Max.)	0.1 dBi
H+V (Aver.)	-4.2 dBi
H+V (Max.)	0.3 dBi

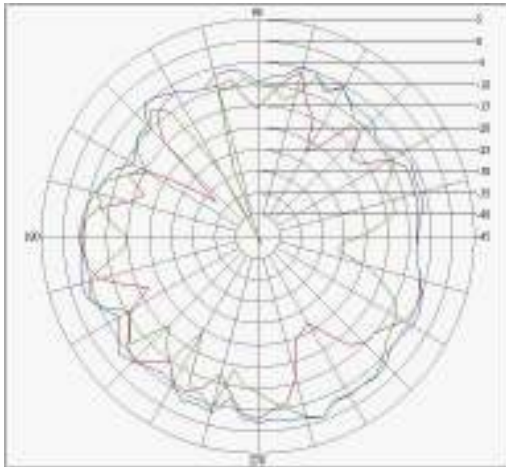
Fre. = 5725 MHz



H-pol. (Aver.)	-8.2 dBi
H-pol. (Max.)	-3.2 dBi
V-pol (Aver.)	-8.4 dBi
V-pol. (Max.)	-1.5 dBi
H+V (Aver.)	-5.3 dBi
H+V (Max.)	-1.5 dBi

— H-pol. — V-pol. — H+V

Fre. = 5875 MHz



H-pol. (Aver.)	-8.3 dBi
H-pol. (Max.)	-3 dBi
V-pol (Aver.)	-7.9dBi
V-pol. (Max.)	-0.9 dBi
H+V (Aver.)	-5.1 dBi
H+V (Max.)	-0.9 dBi