

Data Sheet

CUSTOMER: PEGATRON

MODEL NAME: H00J WLAN R Antenna

ACON P/N: AMP6P-700142



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1. Description-----	1
1.1 Specifications-----	1
1.2 Antenna Picture-----	1
2. Electrical Specification-----	2
2.1 Test Equipment-----	2
2.2 Test Setup-----	2
2.2.1 Frequency Range-----	2
2.2.2 VSWR-----	2
2.2.3 Radiation Pattern & Gain-----	2
3. Performance Data-----	4
3.1 VSWR-----	4
3.2 Radiation pattern & Gain (WLAN -R Antenna)-----	5
3.2.1 2D WLAN -R- Antenna(XY Plane)-----	5
3.2.2 3D WLAN -R- Antenna-----	7
3.4 Gain -----	9
4.Mechanical Specification-----	10
4.1 Assembly Drawing-----	10

1. Description

1.1 Specifications

Antennas Type	PIFA Antenna for WLAN 802.11a/b/g application	
Connector Type	I-PEX Connector for 1.13 cable	
Cable Type	OD 1.13 RF Cable	
Impedance	50Ω	
Polarization	Linear	
Radiation pattern	Omni-directional	
Frequency	WLAN 802.11b/g	2.40~2.50 GHz
	WLAN 802.11a	5.15~5.85GHz
VSWR	WLAN 802.11b/g	2.0 Max
	WLAN 802.11a	2.0 Max
Peak gain(dBi)	WLAN 802.11b/g	0.50 dBi
	WLAN 802.11a	-2.33 dBi
Cable length	WLAN (AMP6P-700142)	Aux: 735 mm, White

1.2 Antenna Picture



WLAN P/N: AMP6P-700142

2. Electrical Specification

2.1 Test Equipment

- A. VSWR and input impedance: Agilent 8720/8753 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

2.2 Test Setup

2.2.1 Frequency Range

- A. WLAN 802.11 b/g: 2.40~2.50GHz
- B. WLAN 802.11 a: 5.15~5.85GHz

2.2.2 VSWR

- Step 1: The antenna is arranged on the customer provided test fixture(see figure. 1).
- Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).



Figure.1

2.2.3 Radiation pattern and Gain

- A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).
- B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).
- C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

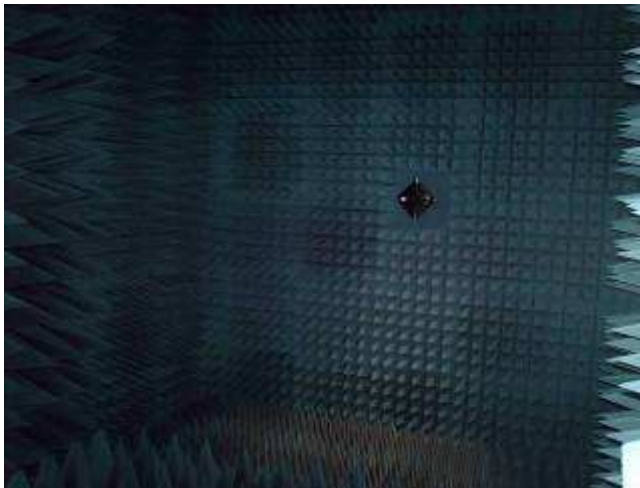


Figure. 2



Figure. 3



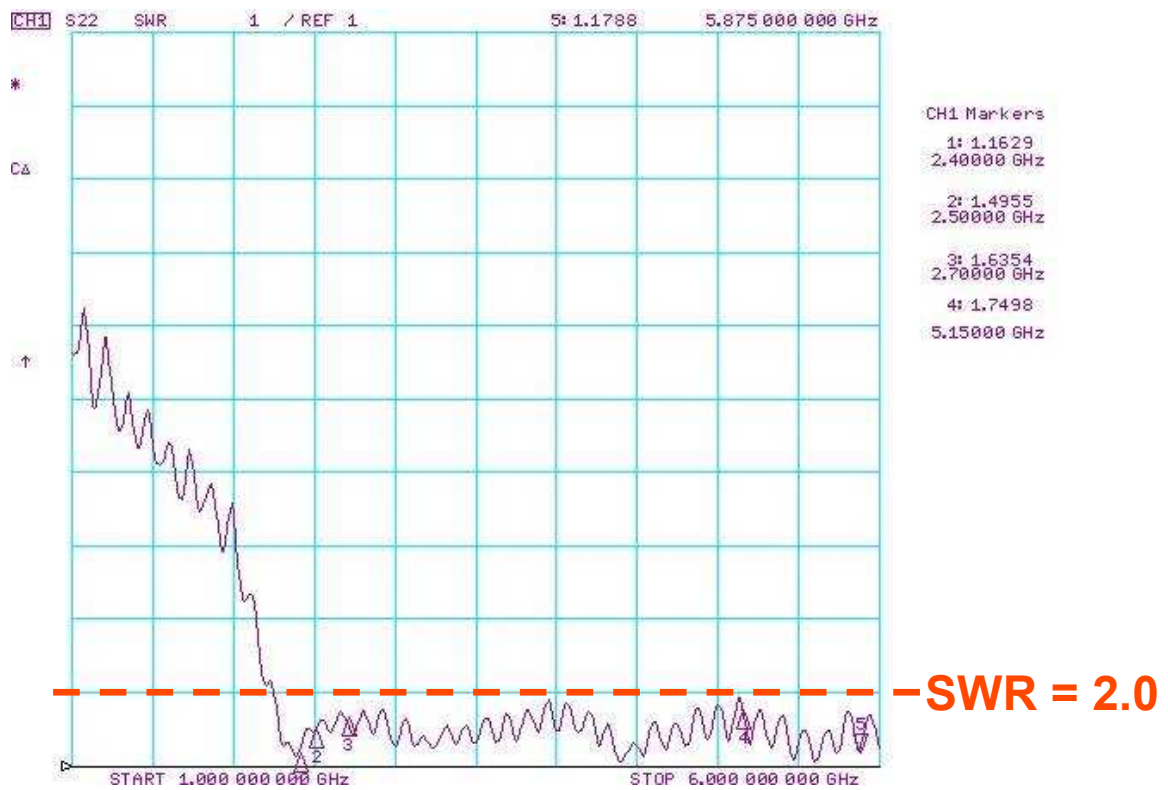
Figure. 4



Figure. 5

3. Performance Data

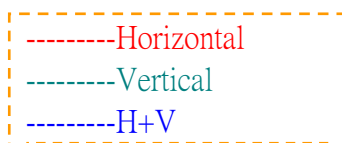
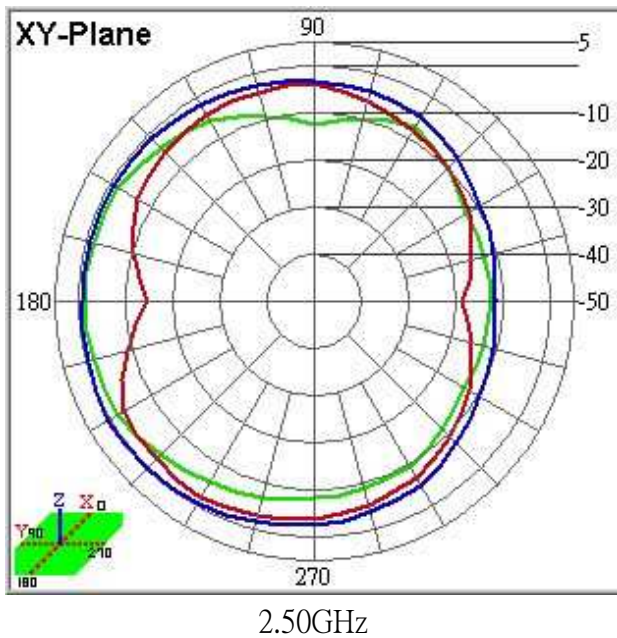
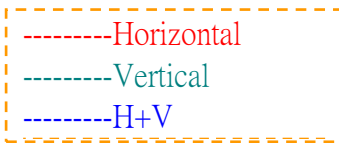
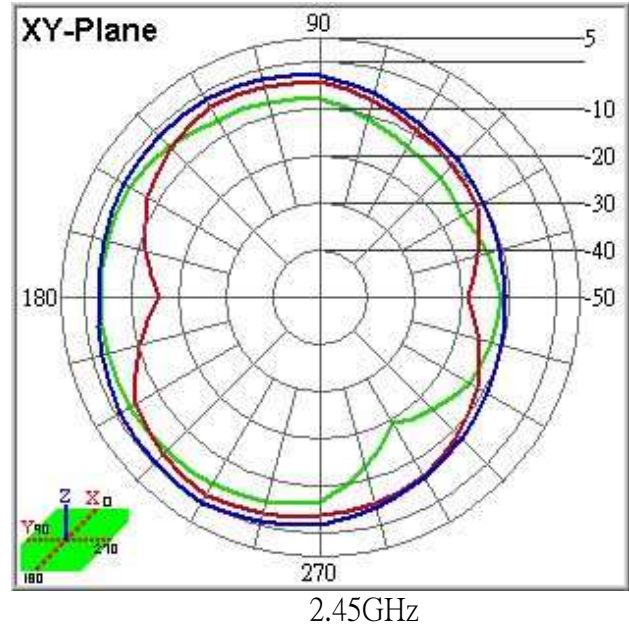
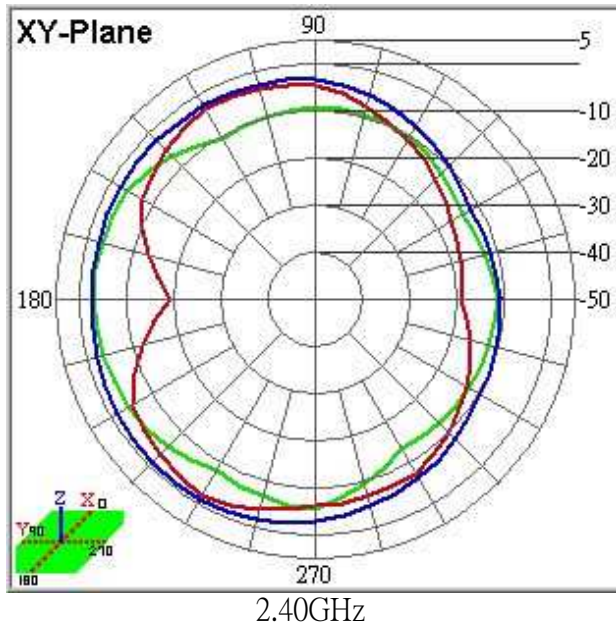
3.1 VSWR



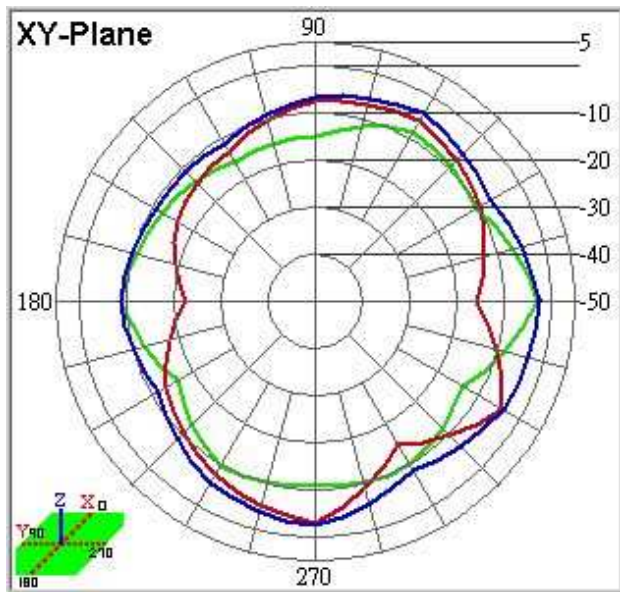
WLAN P/N: AMP6P-700142

3.2 Radiation pattern & Gain(WLAN R Antenna XY Plane)

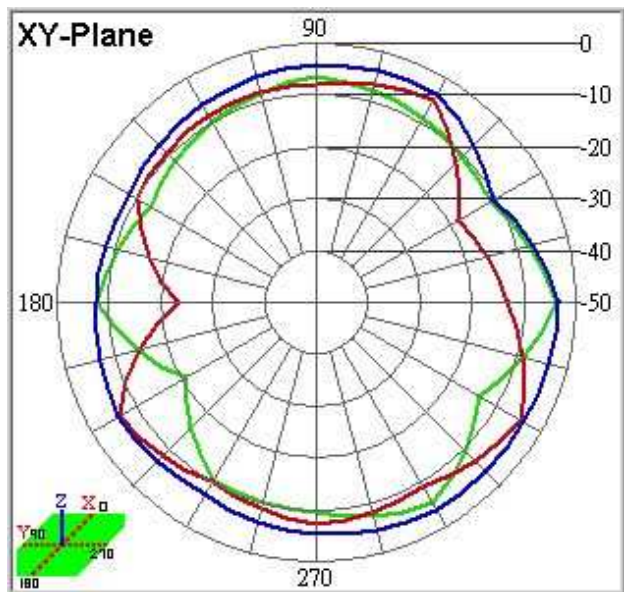
3.2.1 2D WLAN -R- Antenna



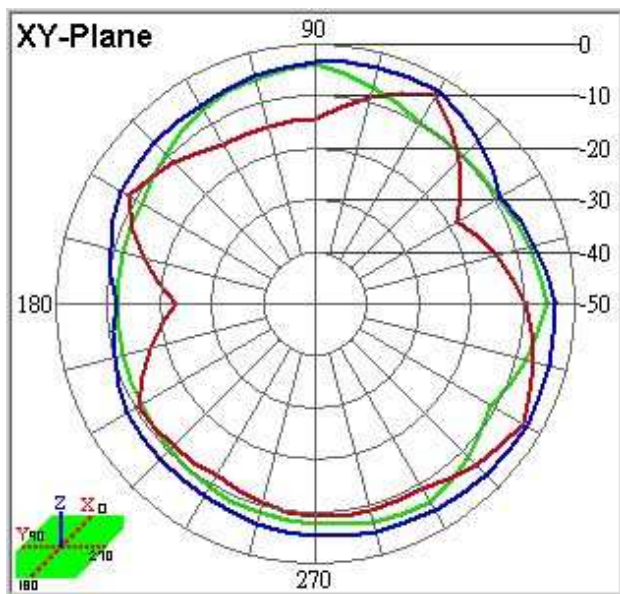
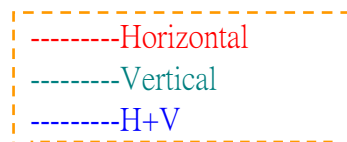
WLAN R Antenna 2.40GHz~2.50GHz



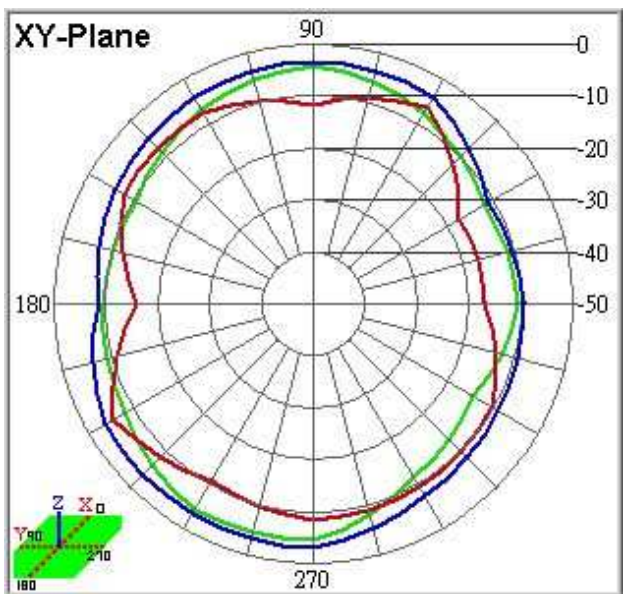
5.15GHz



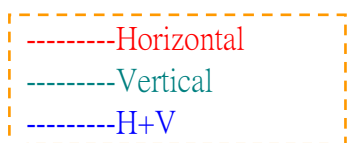
5.35GHz



5.47GHz

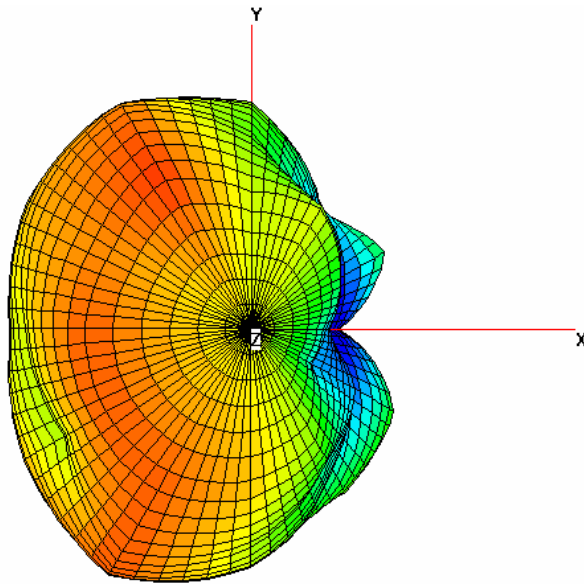


5.85GHz

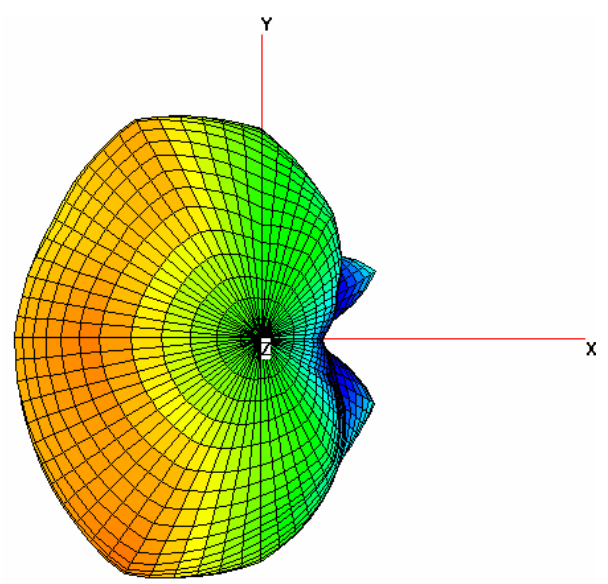


WLAN R Antenna 5.15GHz~5.85GHz

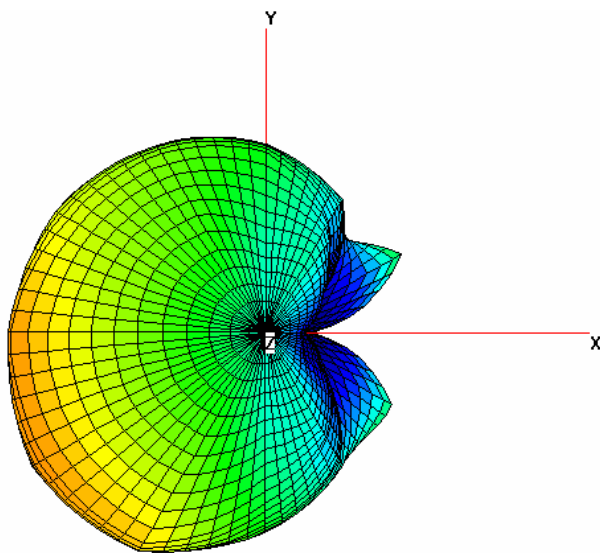
3.2.2 3D WLAN -R- Antenna



2.40GHz

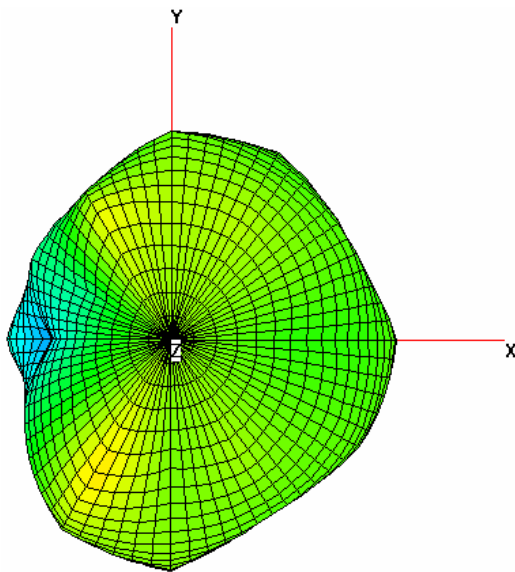


2.45GHz

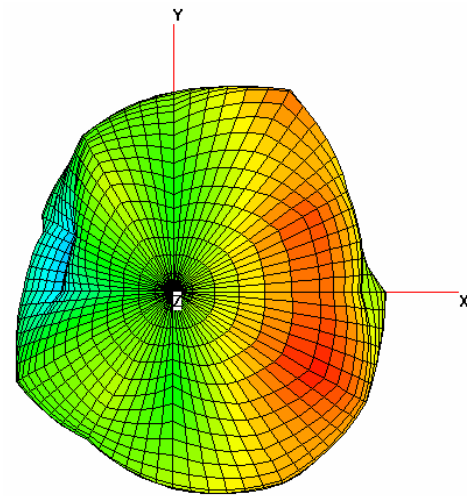


2.50GHz

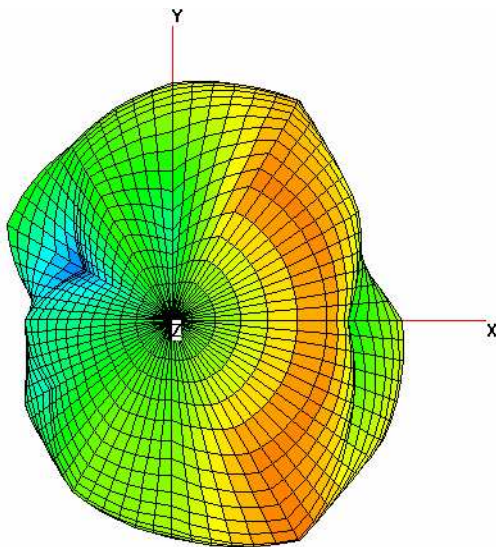
WLAN R Antenna 2.40GHz~2.50GHz



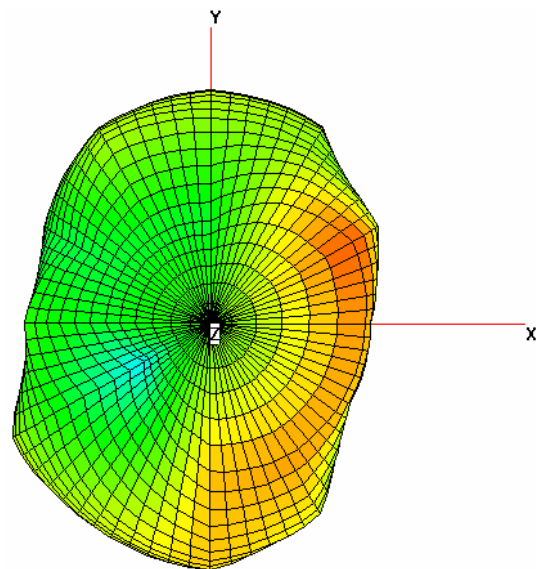
5.15GHz



5.35GHz



5.47GHz



5.85GHz

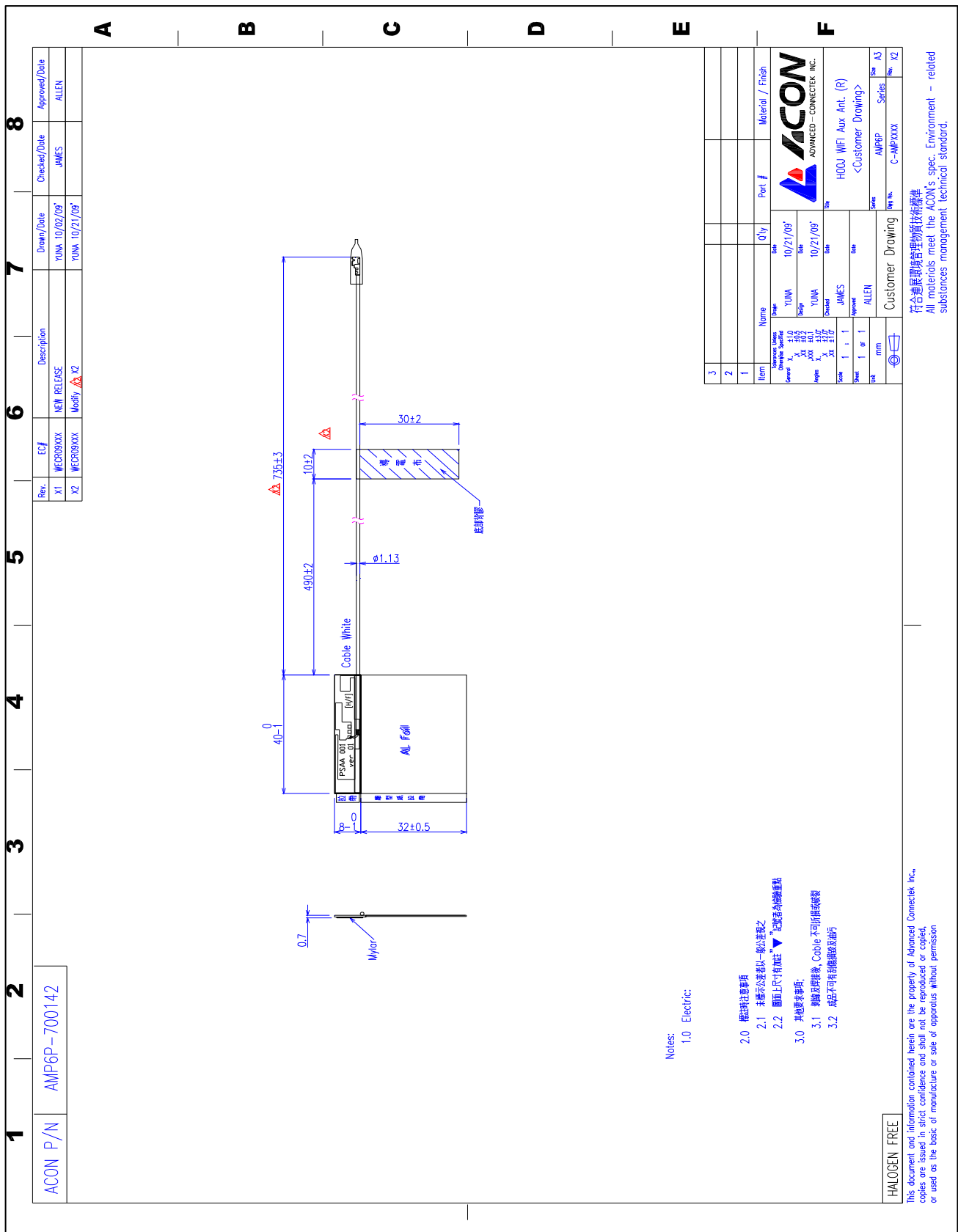
WLAN R Antenna 5.15GHz~5.85GHz

3.4 Gain

Antenna Gain Table:

WLAN R Antenna Gain						
Frequency	MAX Value (dBi)			Average (dBi)		
	H-pol	V-pol	Total	H-pol	V-pol	Total
2400(MHz)	-2.89	-1.68	-0.77	-7.19	-6.65	-3.90
2450(MHz)	-3.23	-1.50	0.38	-6.67	-5.97	-3.30
2500(MHz)	-1.06	-1.99	0.50	-5.71	-5.92	-2.80
5150(MHz)	-2.87	-3.00	-2.33	-9.48	-8.35	-5.87
5350(MHz)	-3.73	-4.34	-3.26	-8.42	-8.17	-5.28
5470(MHz)	-3.76	-3.43	-2.55	-7.77	-8.64	-5.17
5850(MHz)	-4.05	-5.49	-3.01	-7.54	-9.24	-5.29

4.Mechanical Specification



Revision

Revision	Date	Change Notification	Notes
Rev.0	2009-10-26	--	--