

Data Sheet

CUSTOMER: PEGATRON

MODEL NAME: H00J WLAN L Antenna

ACON P/N: AMP6P-700141



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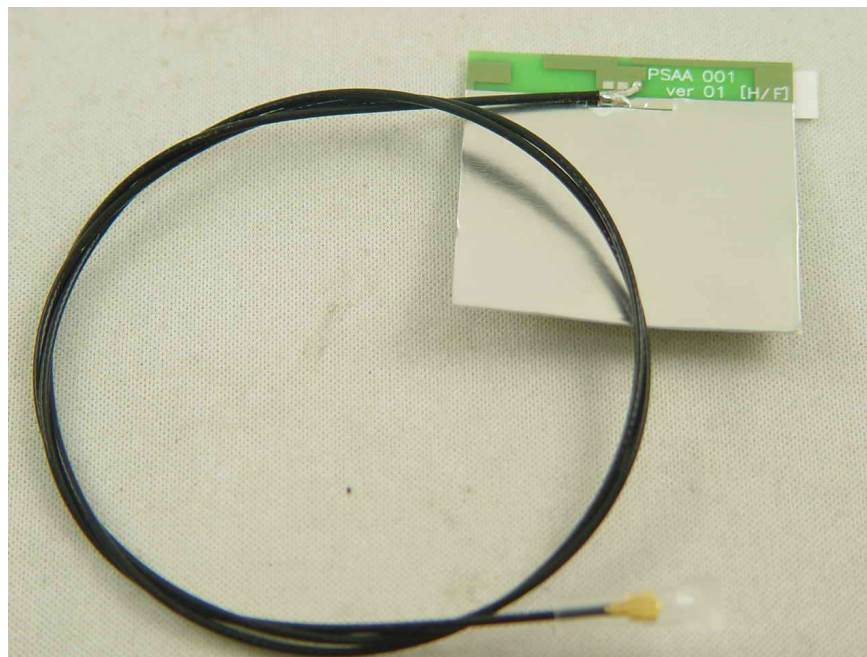
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1. Description

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	0.82 dBi
	WLAN 802.11a	-1.39 dBi
Cable length	WLAN (AMP6P-700141)	Main: 510 mm, Black

1.2 Antenna Picture



WLAN P/N: AMP6P-700141

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).

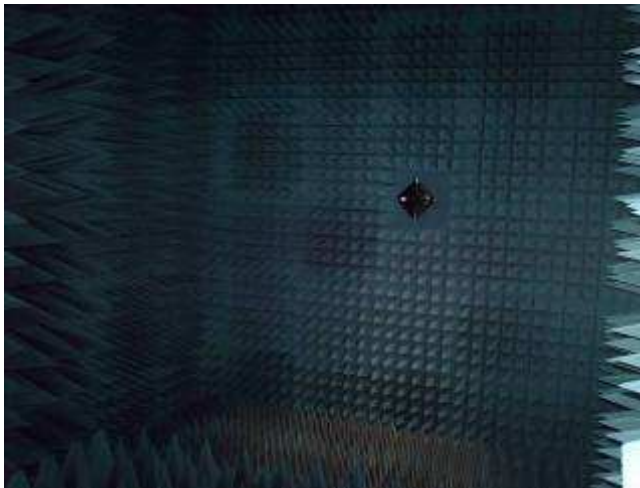


Figure. 2

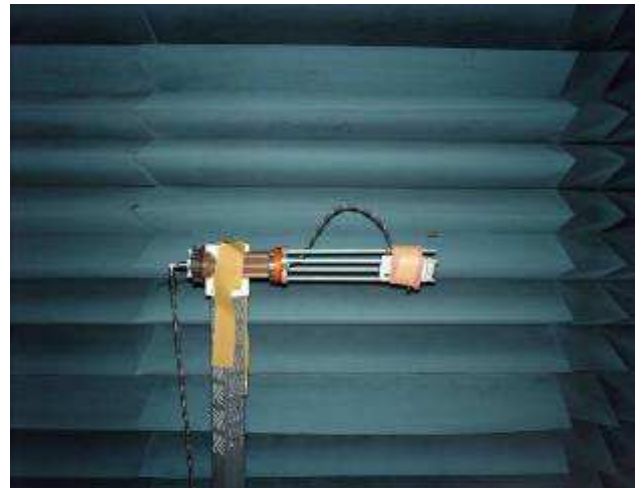


Figure. 3



Figure. 4



Figure. 5

3. Performance Data

3.1 VSWR

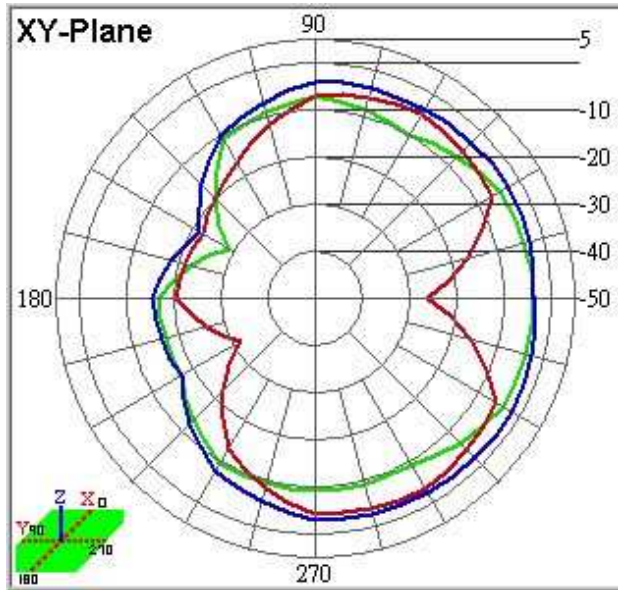


—SWR = 2.0

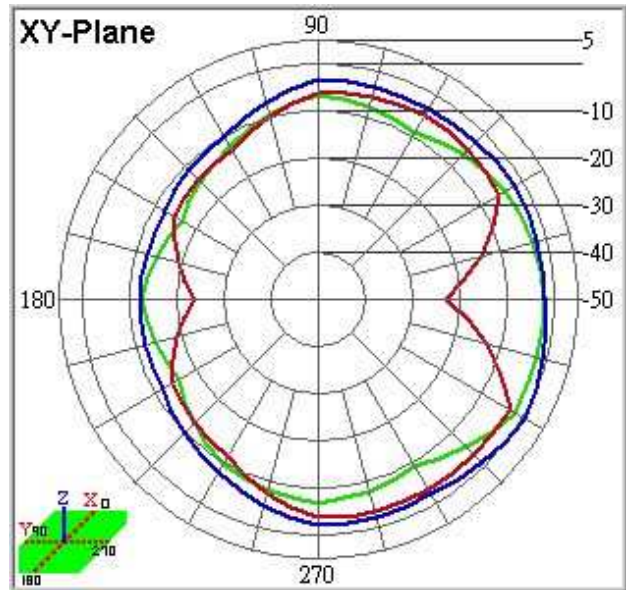
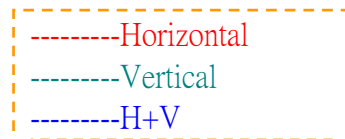
WLAN L P/N:AMP6P-700141

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

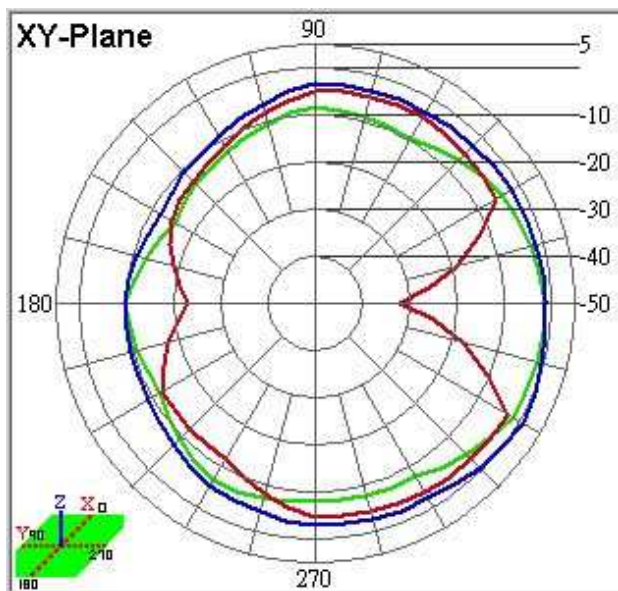
3.2.1 2D WLAN -L- Antenna



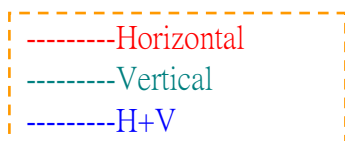
2.40GHz



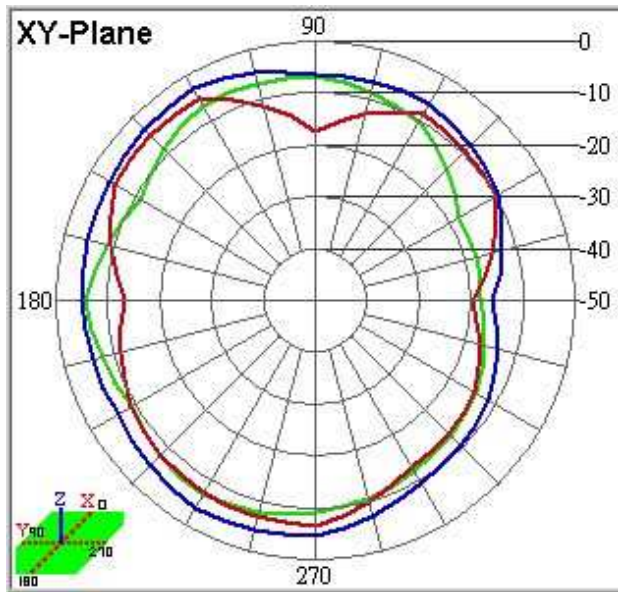
2.45GHz



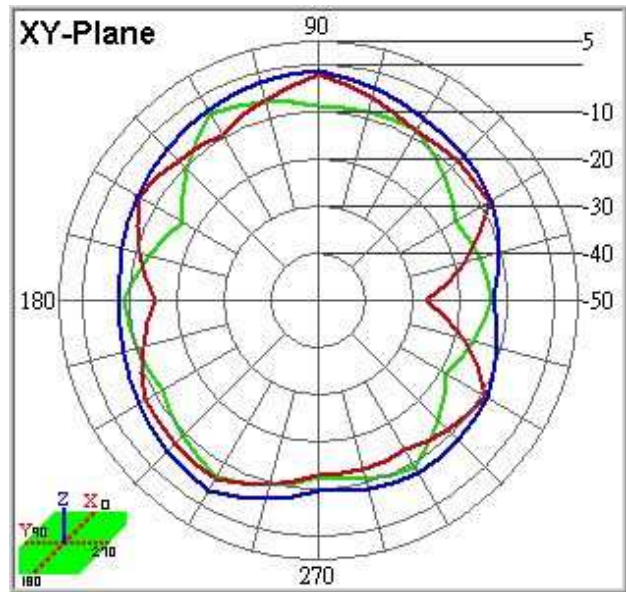
2.50GHz



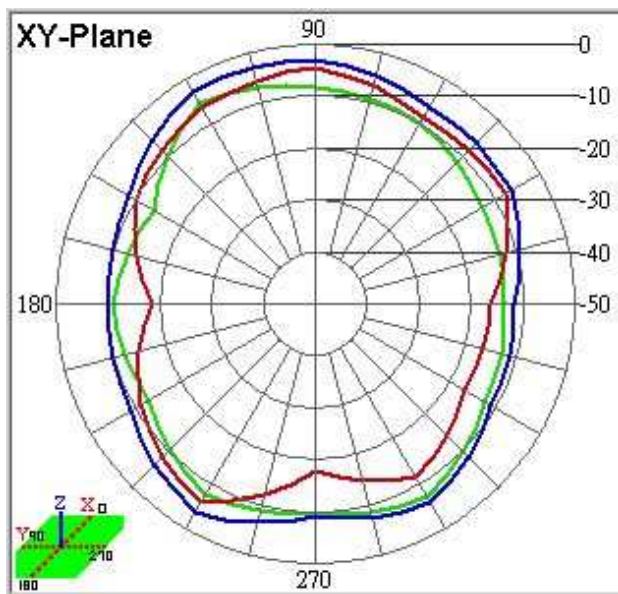
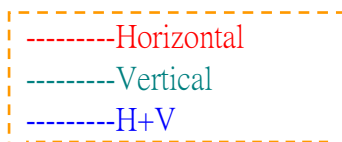
WLAN L Antenna 2.40GHz~2.50GHz



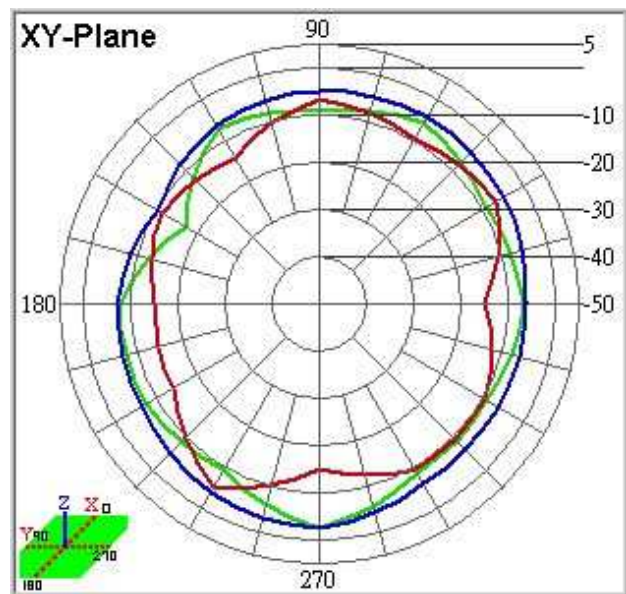
5.15GHz



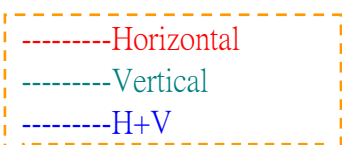
5.35GHz



5.47GHz

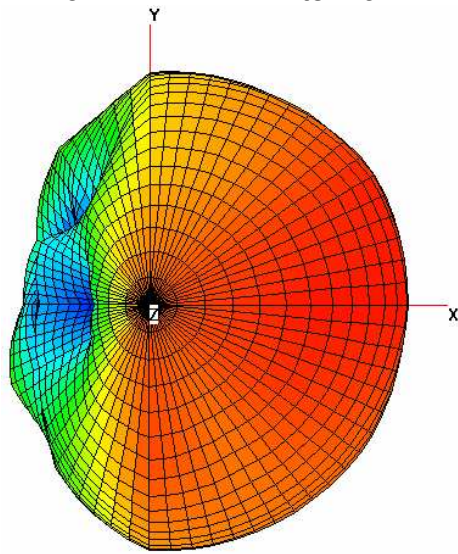


5.85GHz

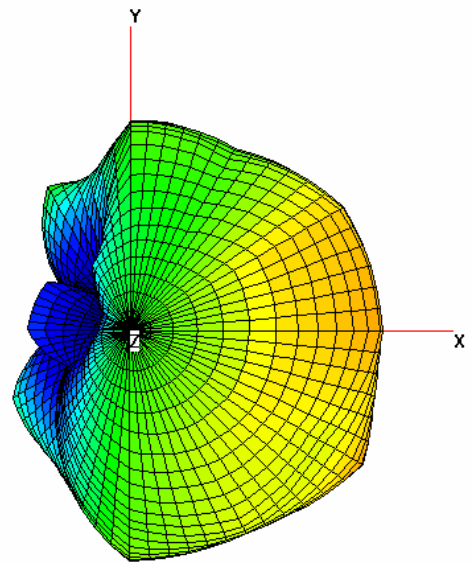


WLAN L Antenna 5.15GHz~5.85GHz

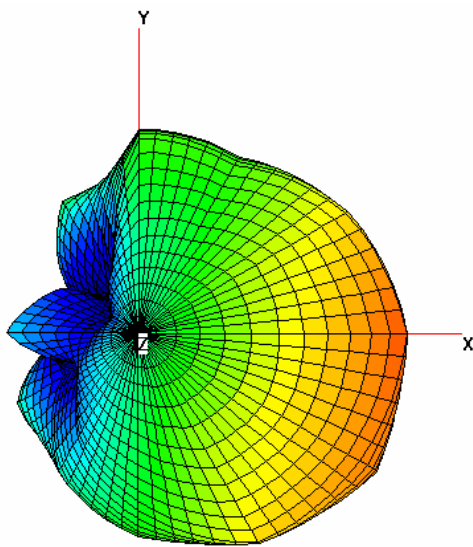
3.2.2 3D WLAN -L- Antenna



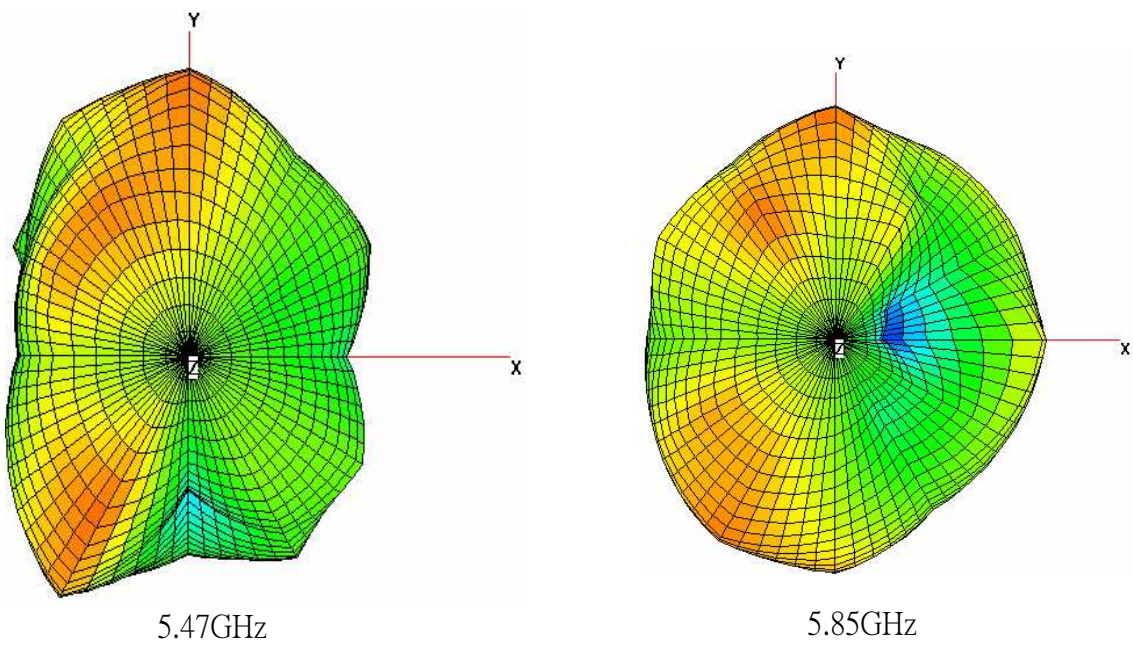
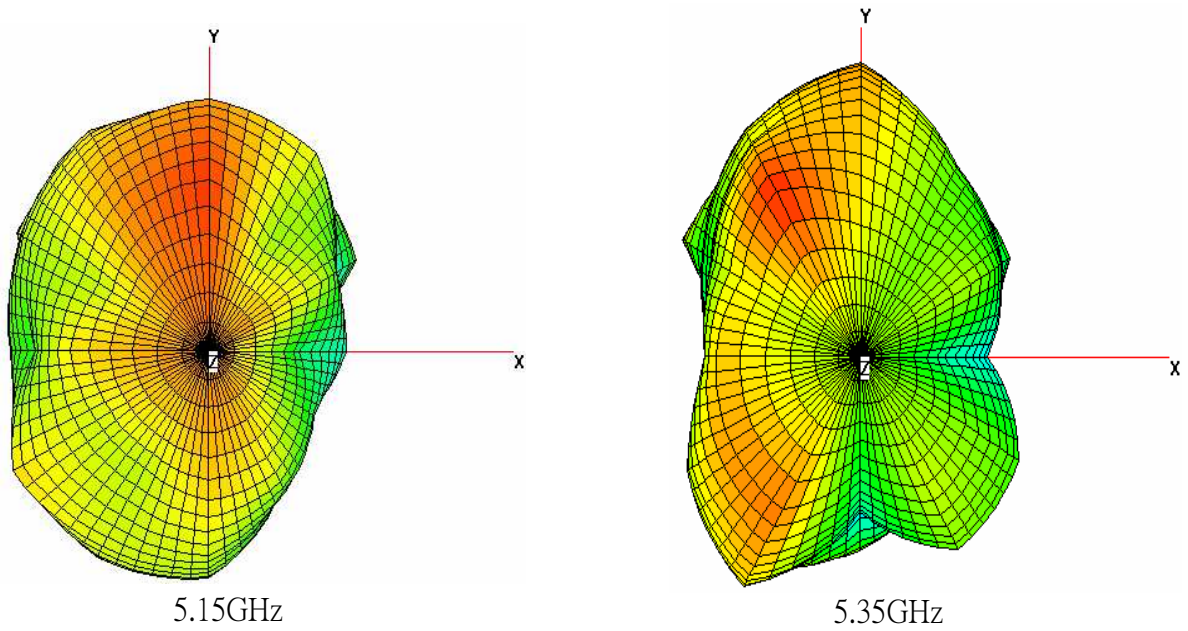
2.40GHz



2.45GHz



2.50GHz



WLAN L Antenna 5.15GHz~5.85GHz

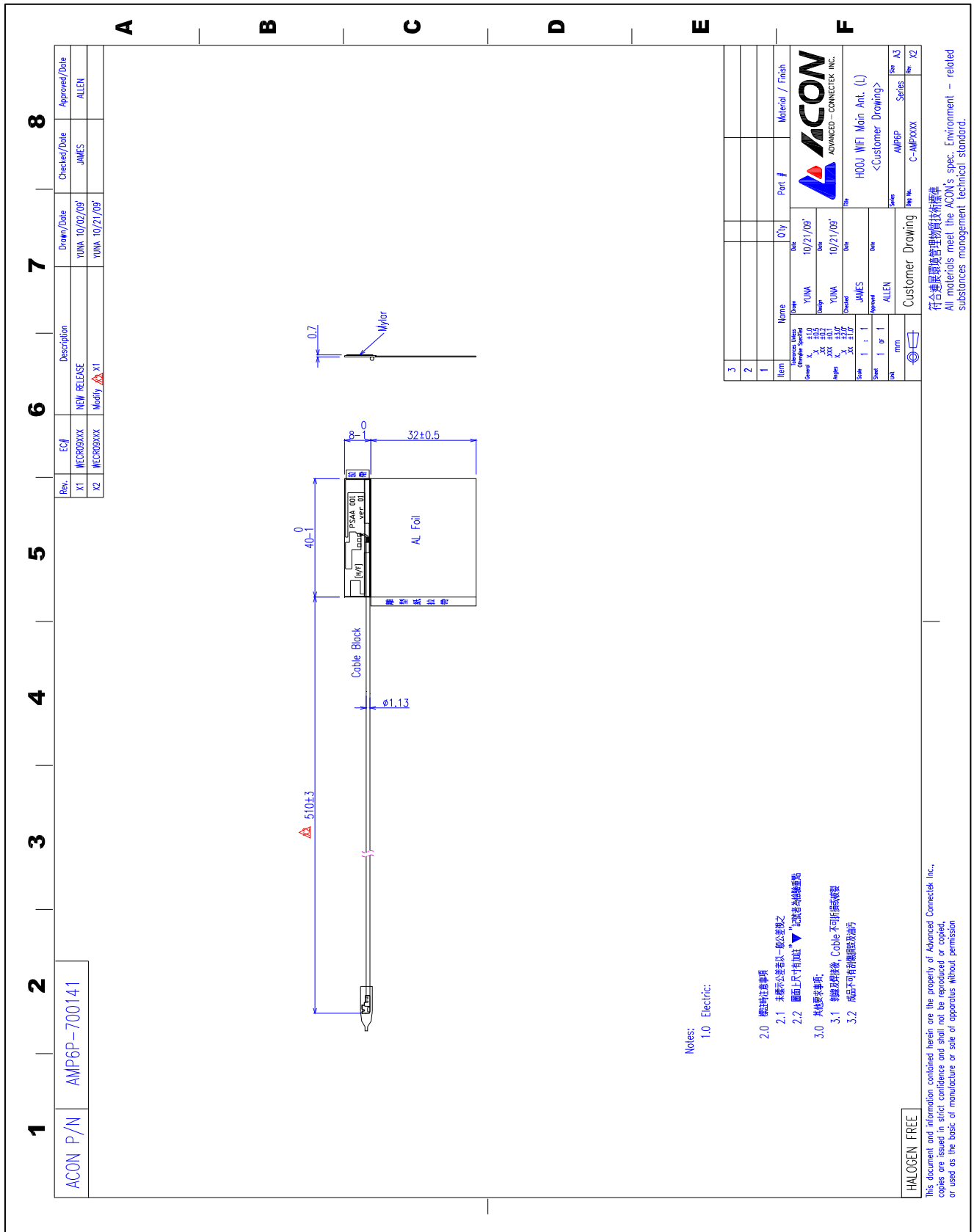
3.4 Gain

Antenna Gain Table:

WLAN L Antenna Gain						
Frequency	MAX Value (dBi)			Average (dBi)		
	H-pol	V-pol	Total	H-pol	V-pol	Total
2400(MHz)	-3.61	-3.39	-1.79	-7.92	-7.96	-4.93
2450(MHz)	-1.98	-3.07	0.47	-6.68	-6.93	-3.79
2500(MHz)	-1.26	-2.83	0.82	-6.20	-6.88	-3.52
5150(MHz)	-5.76	-5.09	-2.73	-9.15	-8.83	-5.98
5350(MHz)	-4.28	-2.27	-1.39	-9.48	-8.01	-5.67
5470(MHz)	-5.32	-4.66	-2.81	-9.50	-9.11	-6.30
5850(MHz)	-2.61	-5.27	-2.37	-7.38	-9.63	-5.35

4. Mechanical Specification

4.1 Assembly Drawing



Revision

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