SPECIFICATION FOR APPROVAL

CUSTOMER:_____

MODEL NAME: 2.4G 1dBi Dipole Antenna 50mm

Customer P/N:_____

E&C P/N: MAW-105-0104

Customer Approval

E&C Approved		
Lijun.Lv	Figo.Ding	Jane.Wang
R&D	Q&R	Product

No.376, ZhenXinXiLu Road, Zhang-Pu Town,
Kun-Shan, Jiang-Su., China
TEL：86-512-57011268
FAX：86-512-57011268

Admit Book Catalogue

1. Description

1.1 Specifications

Antennas Type	Dipole Antenna for WLAN 802.11 a/b/g/n application	
Connector Type	SMA 公头公针	
Cable Type	RG178 Cable	
Impedance	50Ω	
Polarization	Linear	
Radiation pattern	Omni-directional	
Frequency	WLAN 802.11 a/b/g/n	2.4～2.5 GHz and
VSWR	WLAN 802.11 a/b/g/n	2.0 Max in machine
Antenna Material	RG178 Cable+弹簧振子，黑色套杆 L=50mm	

1.2 Antenna Pictures

2. Electrical Specification

2.1 Test Equipment

A. VSWR and input impedance: Agilent 8720/5071 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 a/b/g/n : 2.4～2.5 GHz

2.2.2 VSWR

Step 1: The VSWR of the antenna is measured via Agilent 8753/5071 Network Analyzer (see figure. 1).

Figure.1

2.2.3 Radiation pattern and Gain

A. The 3D chamber provides less than -40dB reflectivity from 600MHz 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).

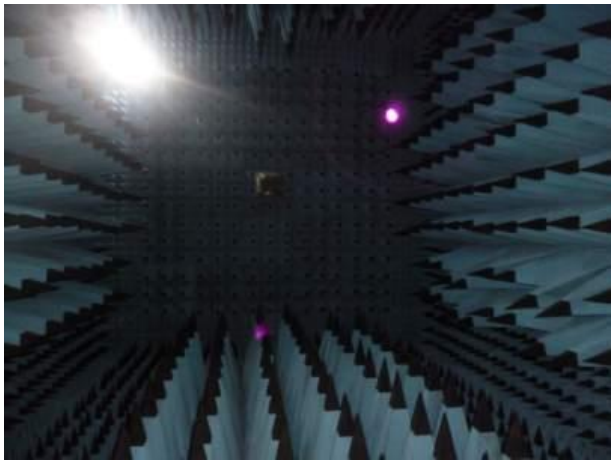


Figure. 2

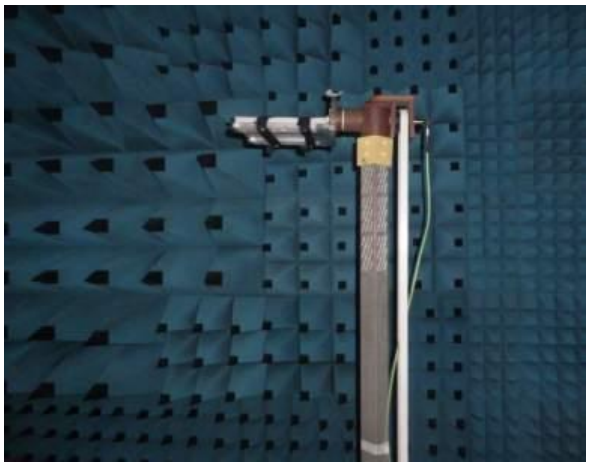


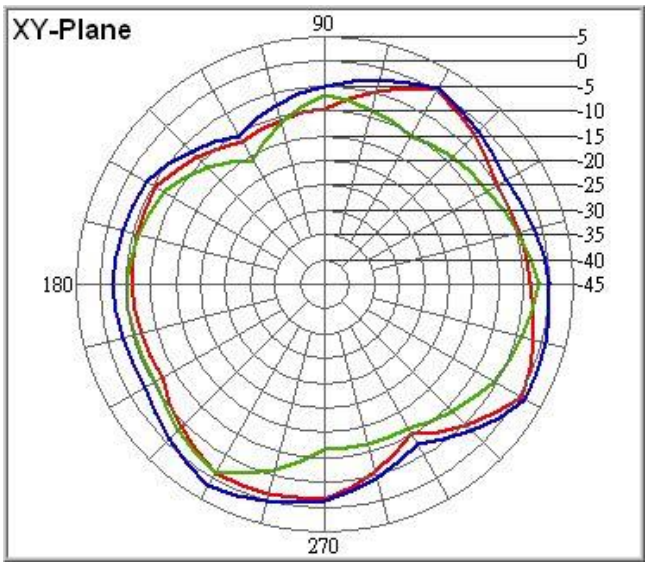
Figure. 3

Figure. 4

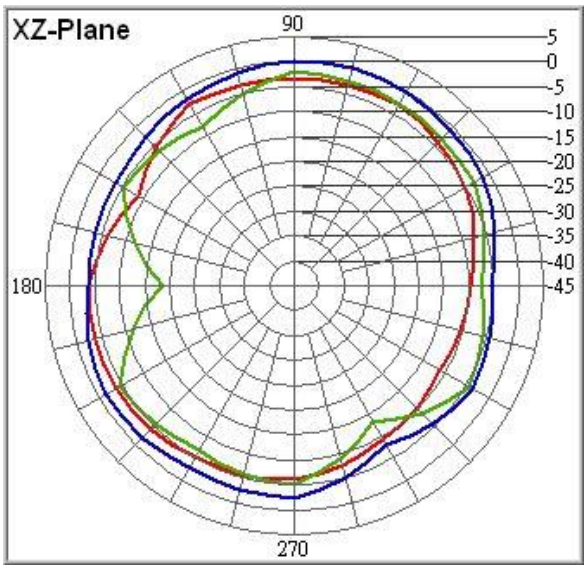
3. Performance Data

3.1 Radiation pattern & Gain

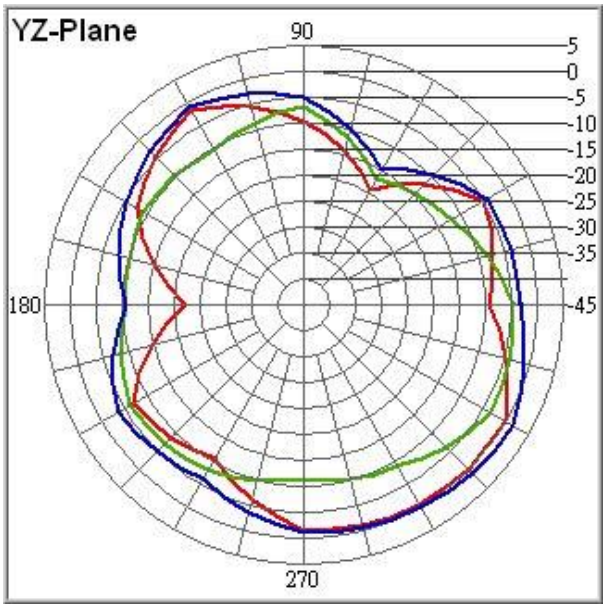
Radiation pattern of 2400 MHz



---------Horizontal
---------Vertical
---------H+V

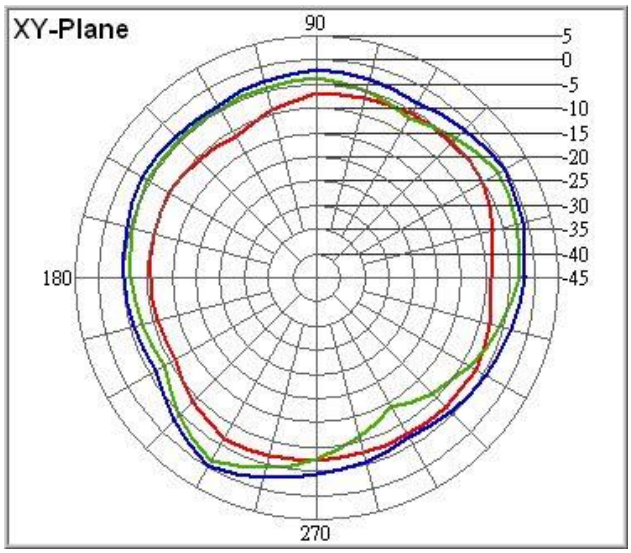


---------Horizontal
---------Vertical
---------H+V



---------Horizontal
---------Vertical
---------H+V

Radiation pattern of 2450 MHz



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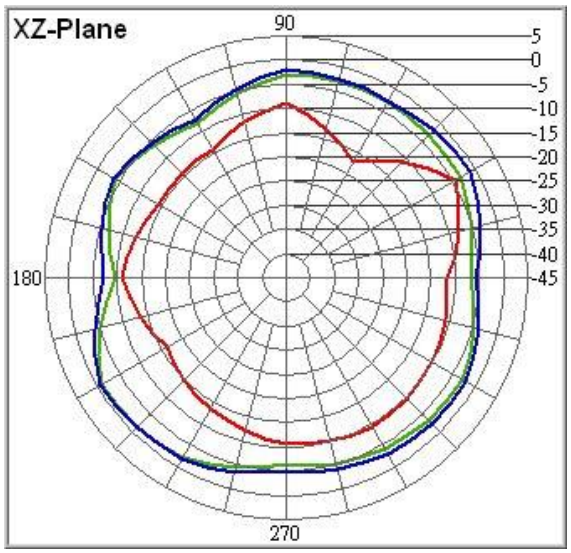
---------Vertical
---------H+V



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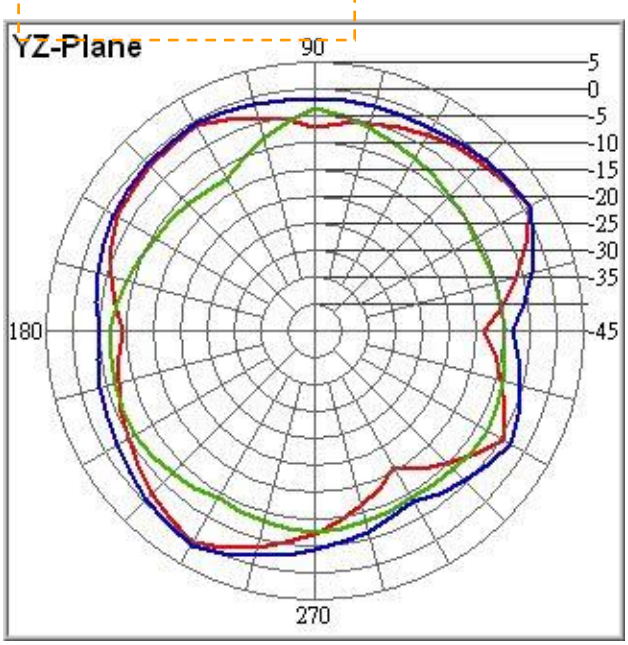
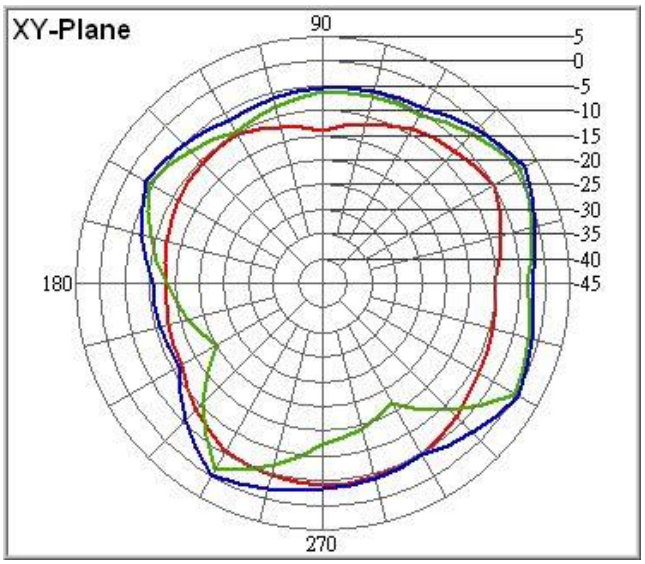
---------Vertical
---------H+V



---------Horizontal
---------Vertical
---------H+V

Radiation pattern of 2500 MHz



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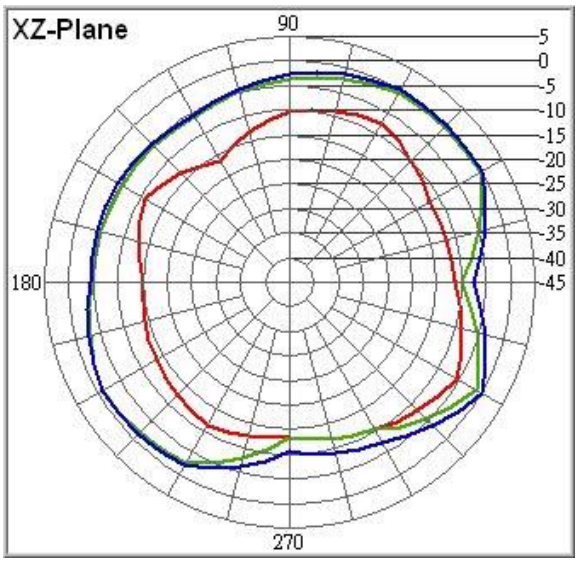
---------Vertical
---------H+V



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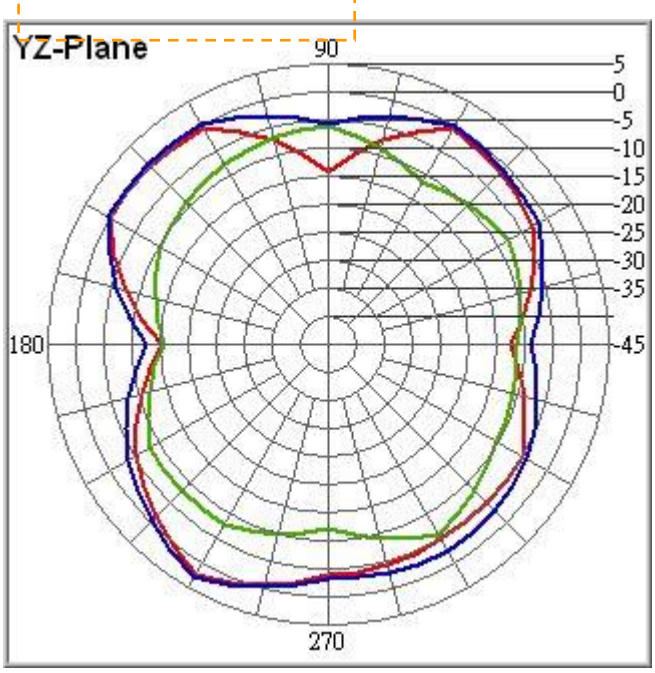
---------Vertical
---------H+V

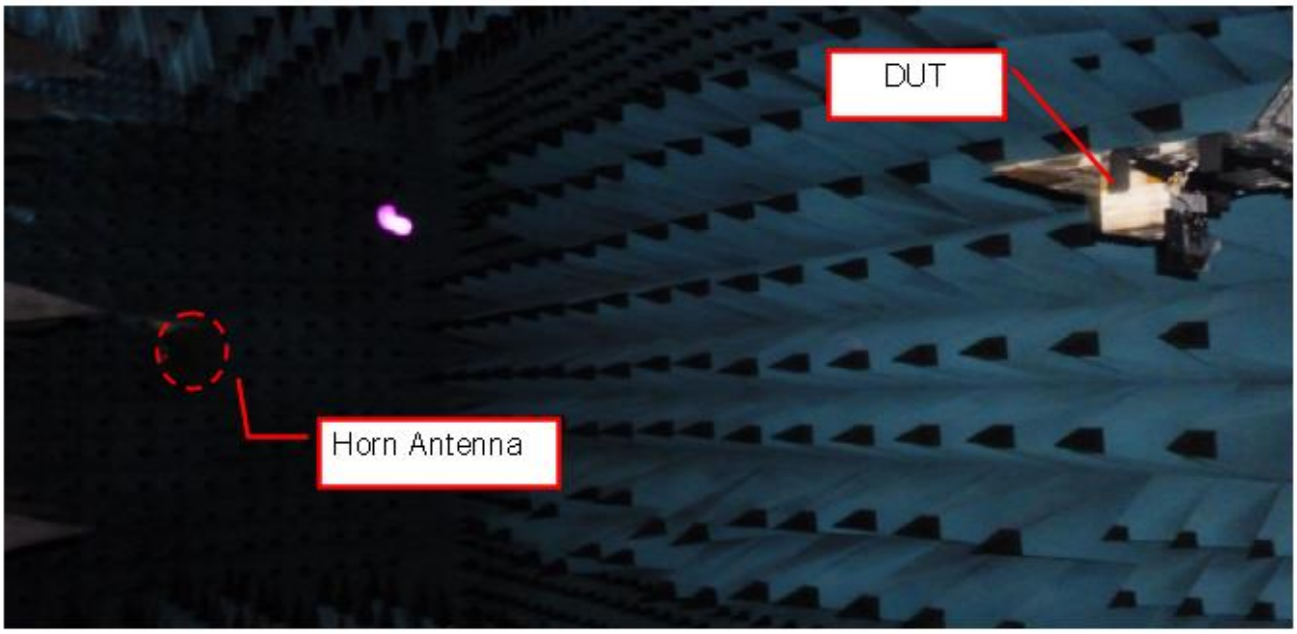


---------Horizontal
---------Vertical
---------H+V

3.2 Gain

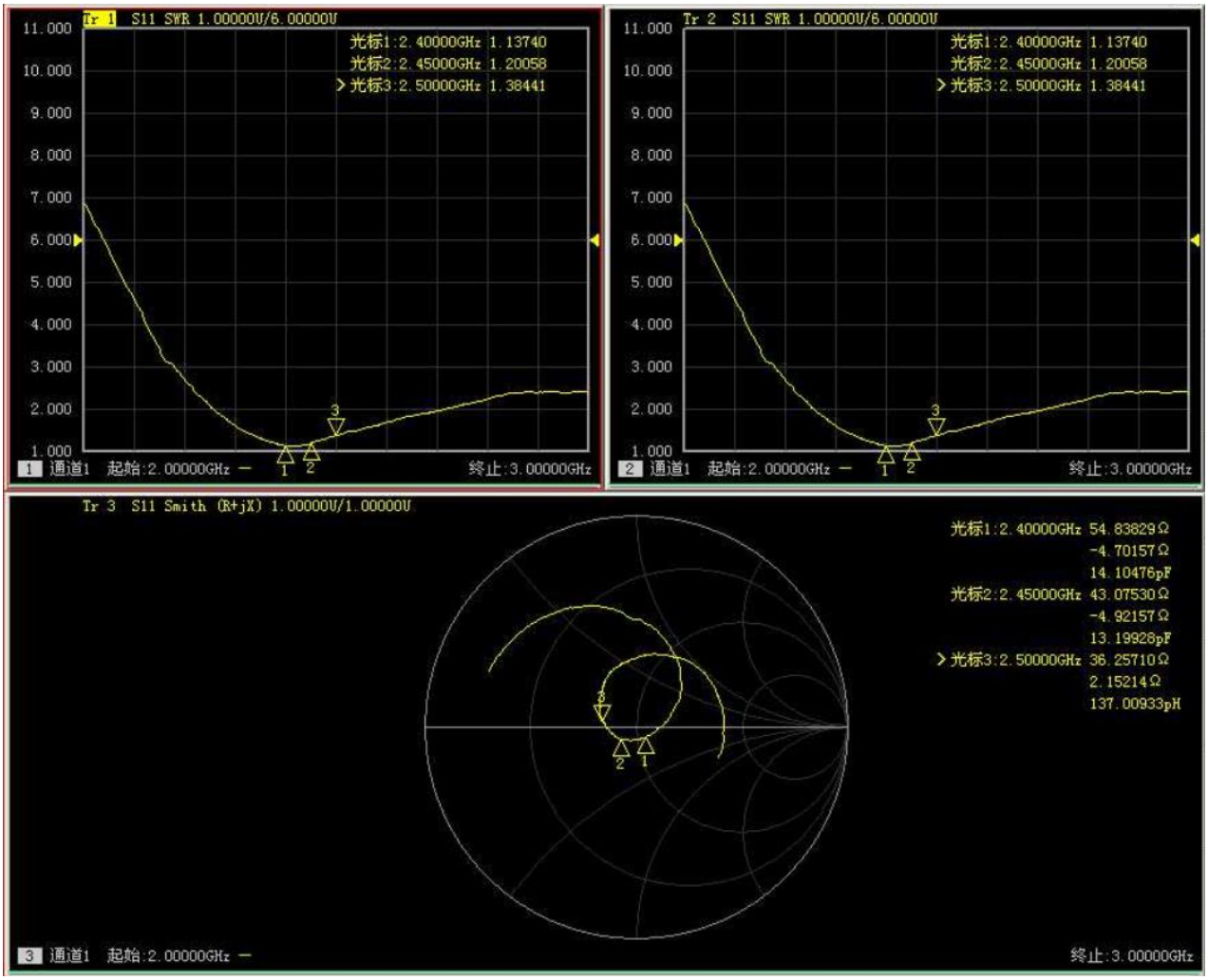
Antenna Gain Table:

Frequency（MHz）	Efficiency(%)	Gain(dBi)
2400	64.84	0.95
2412	64.28	0.96
2437	62.35	1.02
2442	61.08	1.05
2450	60.52	1.04
2462	59.55	0.97
2484	57.99	098
2500	55.50	0.95



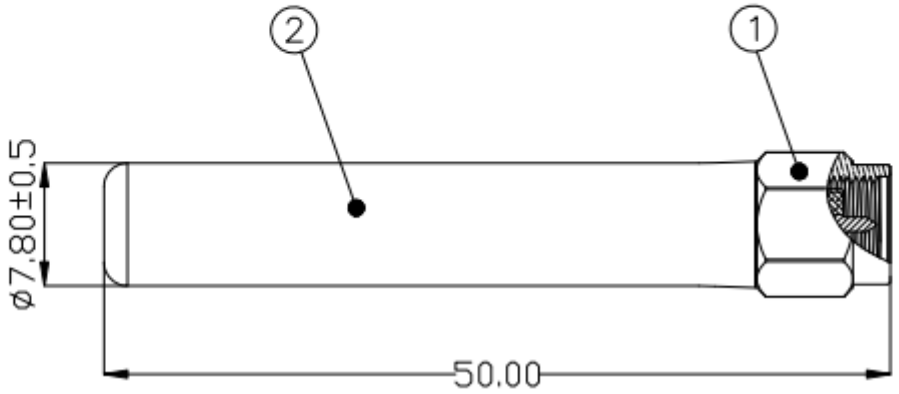
3.3 S11 Parameter

Antenna in Machine



E&C P/N	MAW-105-0104
Customer P/N	

Rev.	ECN NO.	DESCRIPTION
A0	ECN20190315001	New release



SPECIFICATION

1. Frequency Range:2.4~2.5GHz
2. Impendance:50Ω
3. VSWR: ≤3.5
4. Polanization:Vertical
5. Radlation:Omni
6. Gain:1.0dBi

NO	PART NAME	DESCRIPTION	Q'TY
②	Antenna Cover	L42mm*Φ8.0mm 材质:TPEE Black	1PCS
①	CONN	SMA PLUG R/A Strighting	1PCS

TOLERANCES UNLESS OTHERWISE SPECIFIED			
X.	/	X.°	±1°
.X	±0.20	.X°	±0.5°
.XX	±0.10	/	/

昆山铭众电子科技有限公司

SERIES: Dipole Antenna	TITLE:2.4G 1dBi 小胶棒 Ant
APPD:	PART No.:MAW-105-0104
CKD: Roger	DWG No.:101-0000-0327
DR: Figo	

UNITS	MAT'L	FINISH	SCALE	SHEET	REV.
MM				1/1	A0