

Parts Acknowledgment

The name of the customer :

Customer part number :

Part number :

ZCB2400-07B04SM-3M

Product name : 2.4G suction cup Antenna

Supplier confirmation		
Audit	producer	date

Signed by the customer		
Quality Assurance	engineering	procurement

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Revision history

Revision	Date	Change Notification	Description
1.0	2023-04-28	first edition	

規格説明

Sample Photo	
A. Electrical Characteristics	
Frequency	2400-2500/5150-5850MHz
S.W.R.	≤ 2.0 @2400-2500/5150-5850MHz
Antenna Gain	2.0dBi @ 2400-2500/5150-5850MHz
Efficiency(%)	55 % @ 2400-2500/5150-5850MHz
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	CU
Material of Plastic	Body: TPEE Hinge: ABS Holder: POM
Connector Type	SMA Male
Cable Type	RG174
Connector Pull Test	≥ 3 Kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

Product Number: ZCB2400-07B04SM-3M

Product Name: 2.4-5.8G Antenna

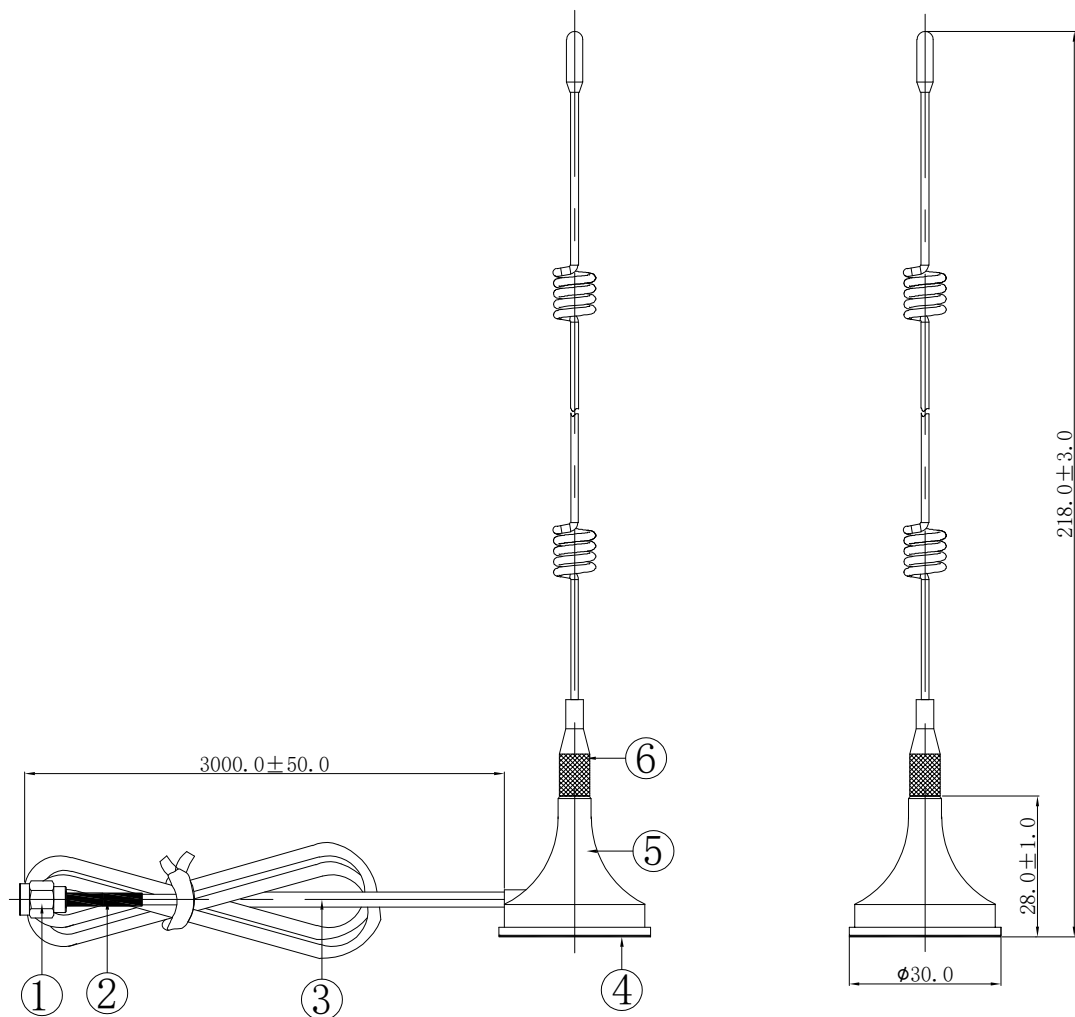
3. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB / T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

RoHS
Compatible

CUSTOMER	
PART NO	

REV.	DESCRIPTION	DATE
△	first edition	2023-04-28



6	Nut	Cu Black	1
5	Lnner Mold	ø30*27.5mm Black	1
4	EVA	ø29.5*0.8mm Black	1
3	Cable	RG174 Black	1
2	Heat Shrink Tube	ø4.0*20.0mm Black	1
1	SMA Male	Au Plated	1
NO	PART NAME	DESCRIPTION	Q. TY



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PART NAME: 2.4-5.8G Antenna L=3000mm

PART NO. : ZCB2400-07B04SM-3M

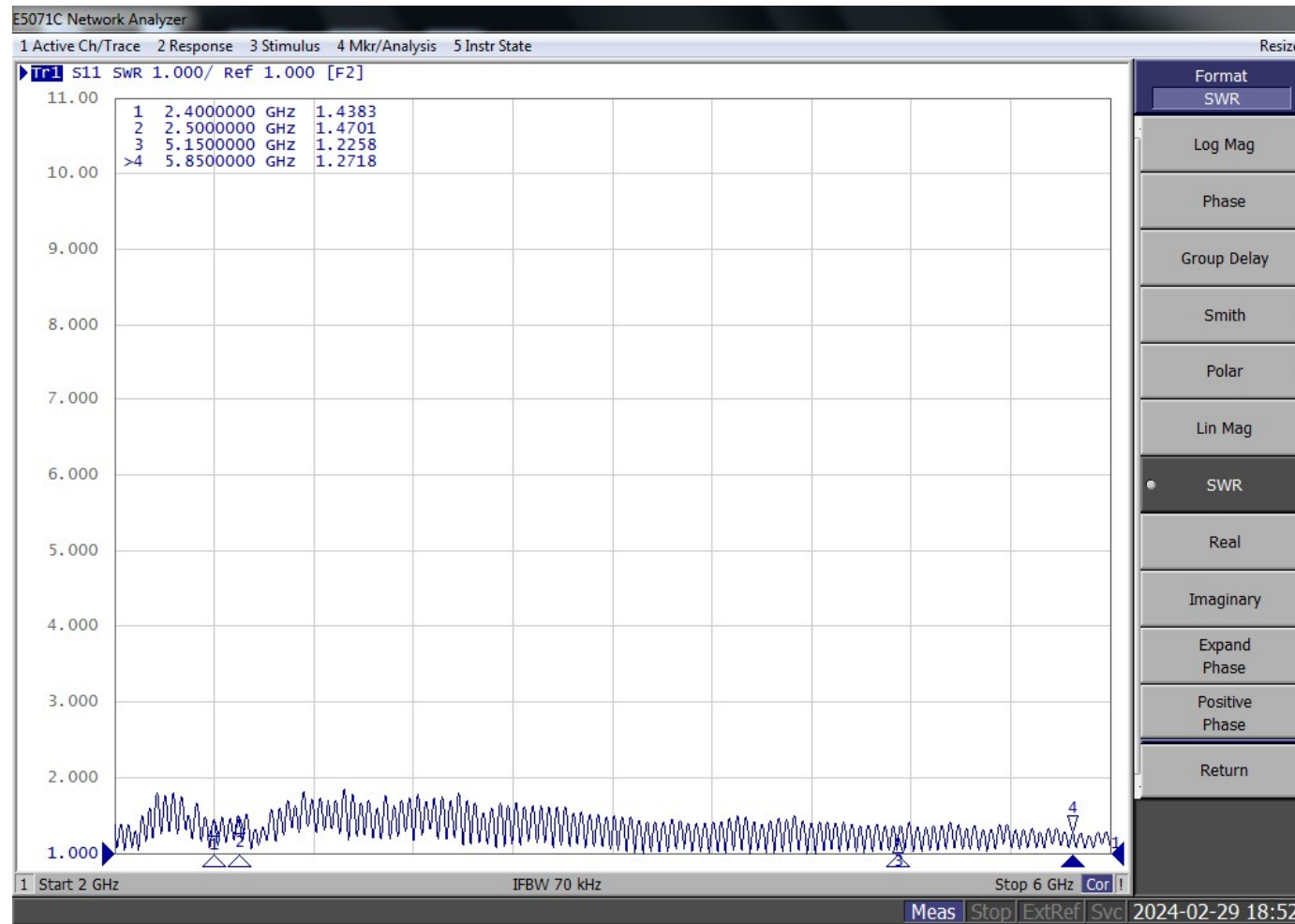
DATE: 2023-04-28

APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
		HWC	UNITS: mm	X. X ±0.50
			SCALE: 1/1	X. XX±0.15
			REVISION: A	X° ±3°

VSWR Test

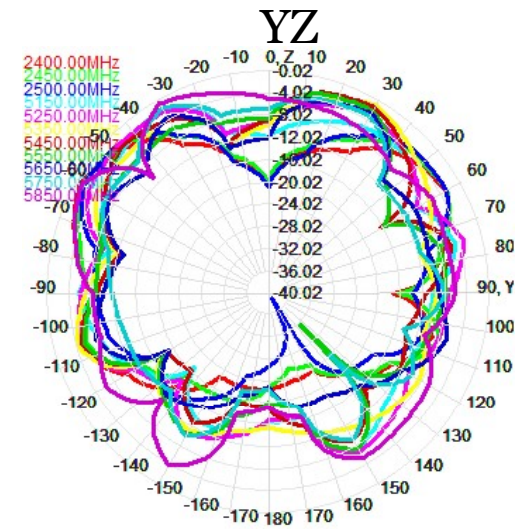
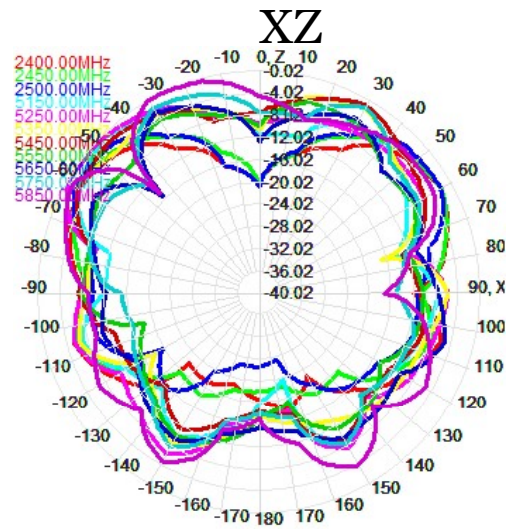
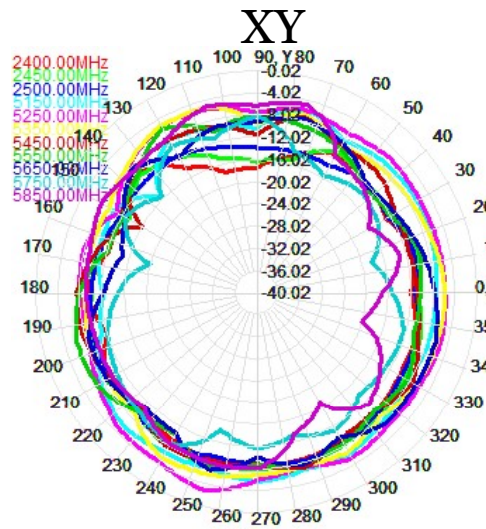
WiFi (2400-2500/5150-5850MHz)

3



2D Radiation Pattern

WiFi

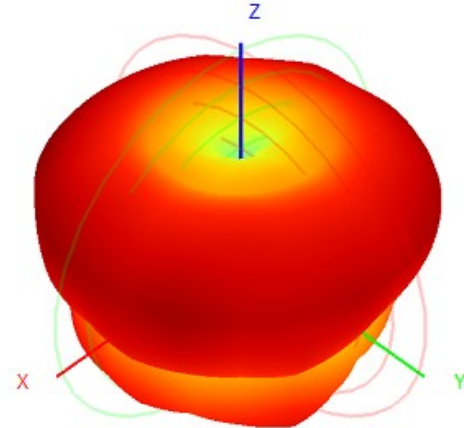


3D Radiation Pattern

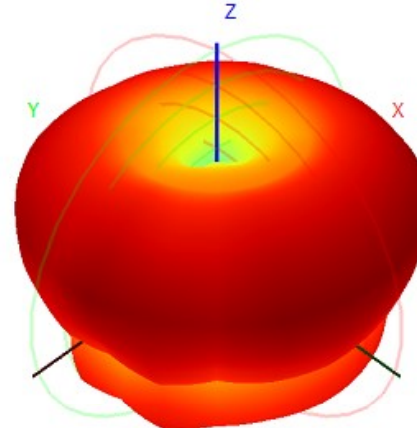
WiFi

2400 MHz

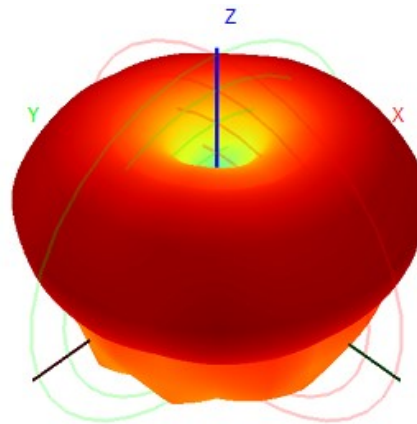
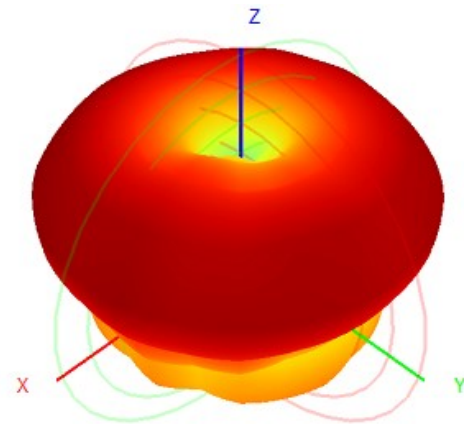
Front View



Back View



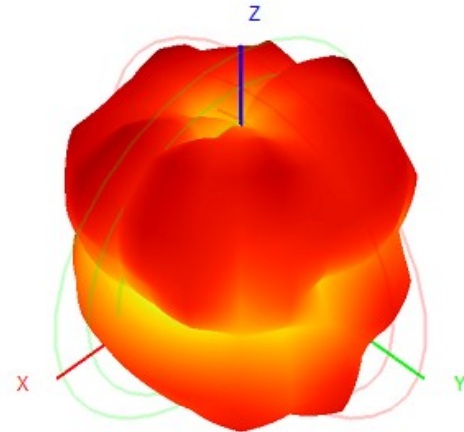
2500 MHz



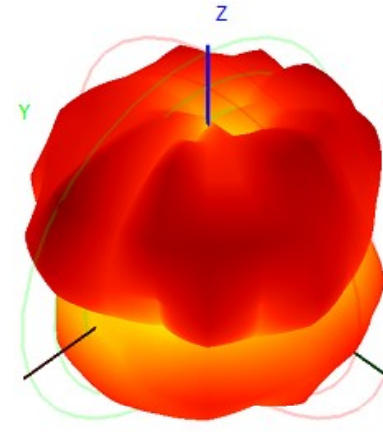
3D Radiation Pattern

WiFi

Front View

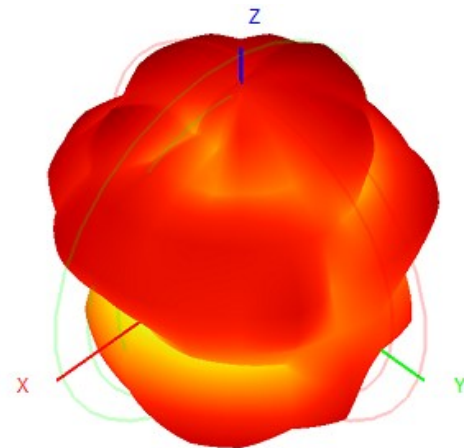


Back View

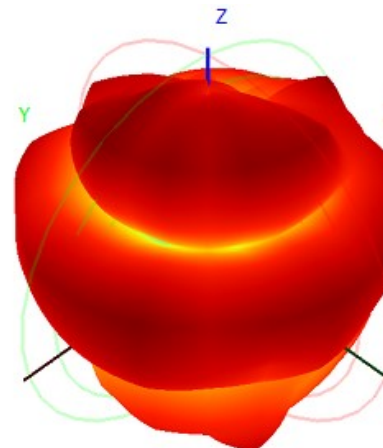


5150MHz

z



z



5850 MHz

Frequency (MHz)	WiFi
2400	1.4
2500	1.4
5150	1.2
5850	1.2

Results Summary

WiFi Antennas

Frequency (MHz)	Peak gain(dBi)	Efficiency (%)
2400	-0.88	25
2450	-0.95	25
2500	-1.22	23
5150	-0.64	26
5250	-0.33	29
5350	-0.85	25
5450	-0.35	27
5550	-0.63	28
5650	-0.77	27
5750	-0.81	28
5850	-0.02	28