Approval Sheet

Customer : AVS Electronics (HK)

Project Name :

Customer P/N :

Model: UPB2400-1051B-O

Product Description : UPB 2.4G PCB +1.13 黑 L=51mm open

Issue Date : 2023 / 22 /16

version : A

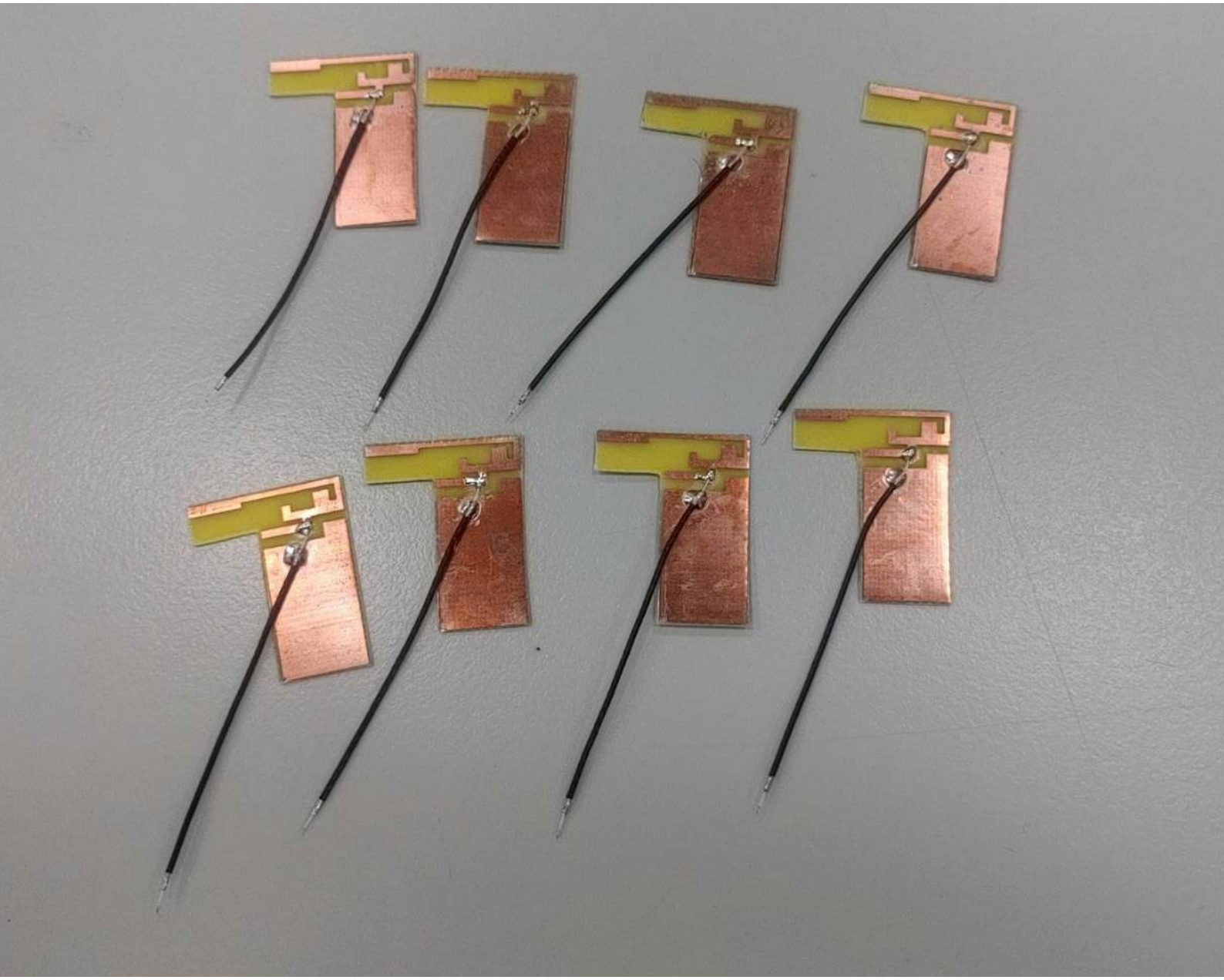
Customer Approved	ULTRA Approved
	Leon.Lee

昂創電子有限公司

9F No. 168 Ruiguang Rd, Neihu Dist. Taipei City 11491 Taiwan
TEL: 886-2-77550883 FAX: 886-2-87518367
E-mail: leon@createconn.com

Content

1. Product Photos and Configuration



2. Specification

. Product Number :
. Version : X1

Electrical Characteristics

. Frequency (MHz) : 2400-2500 MHz
. S.W.R. : < 3.0 * S.W.R. tested within whole device *
. Peak Gain : 1.3 dBi
. Efficiency : 20~30 %

* peak gain and efficiency data depended on whole device installation environments*

. Antenna Type : Dipole for Embedded Type
. Radiation Pattern : Omni-Directional
. Polarization : Linear
. Impedance : 50 ohm
. Input Power : 5W Max.

Mechanical Characteristics

. Antenna Material : PCB
. Cable : O.D. 1.13 mm / 50 Ohm Coaxial Cable
. Material : RoHS Compliant

Environmental Condition

. Operation Temperature : -40 ~ +80 ºC
. Storage Temperature : -40 ~ +80 ºC
. Moisture Sensitivity Levels (MSL) : N/A
. ESD Limit : N/A
. Vibration Limit : N/A

3. Reliability Characteristics

R1. Soldering Ability
Condition: the dipped surface of the terminal should be over 95% covered with solder after dipped in soldering material of 260 +/- 5°C for 3 +/- 1 seconds.
Requirement: no apparent damage

R2. Soldering Heat
Condition: .solder bath temperature : 260 +/- 5°C
.bathing time : 10+/-1 seconds
Requirement: no apparent damage

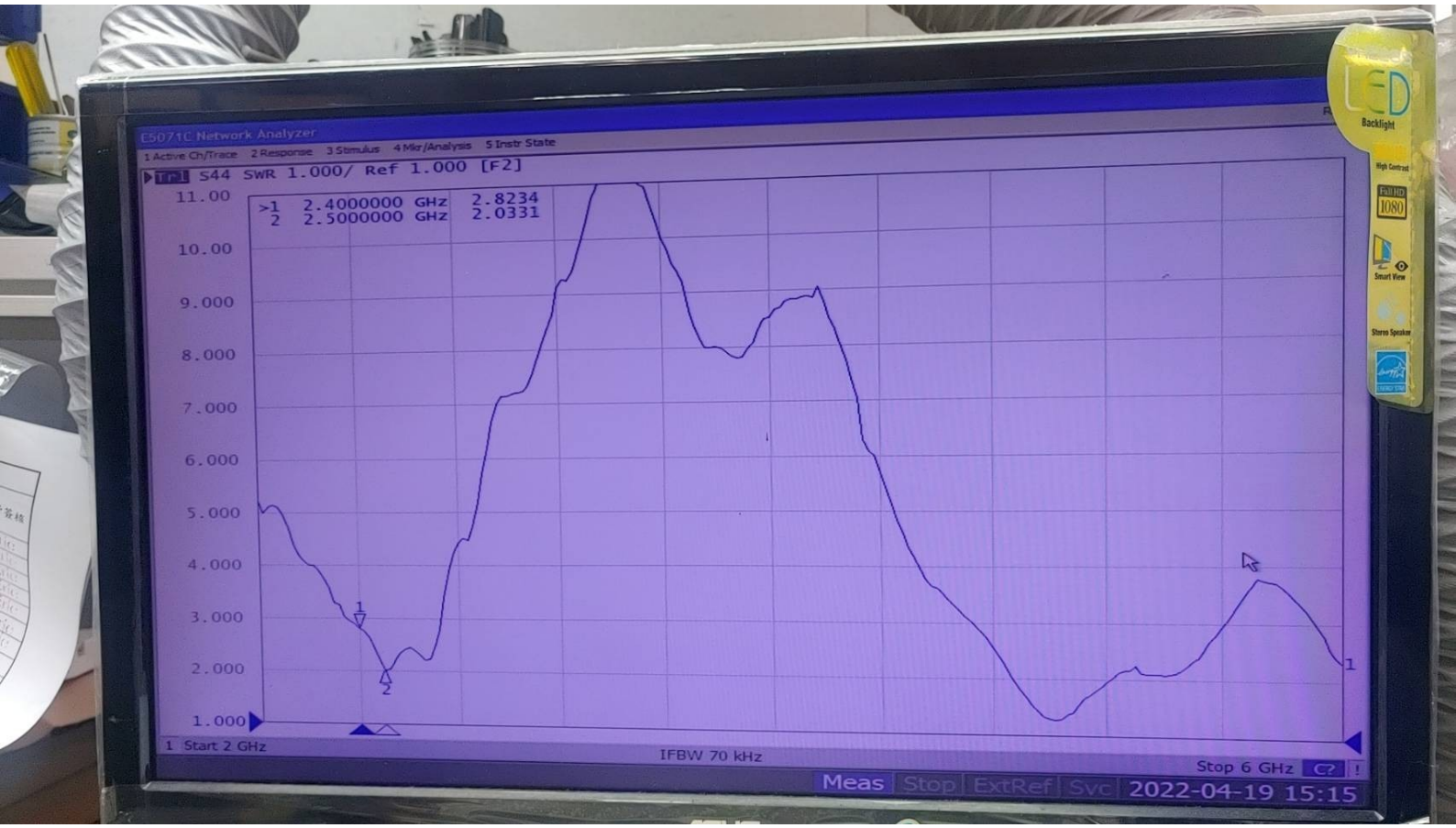
R3. Thermal Shock
Condition: 30 minutes @ -40 +/- 5°C and 5 minutes to 90°C ;
30 minutes @ 90 +/- 5°C and 5 minutes to -40°C ;
96 continuous cycles
Requirement: no apparent damage / electrical test pass

R4. Humidity
Condition: R.H. 85% ; 85 +/- 5°C ; 96 Hours
Requirement: no apparent damage / electrical test pass

R5. High Temperature
Condition: 90 +/- 5°C ; 96 Hours
Requirement: no apparent damage / electrical test pass

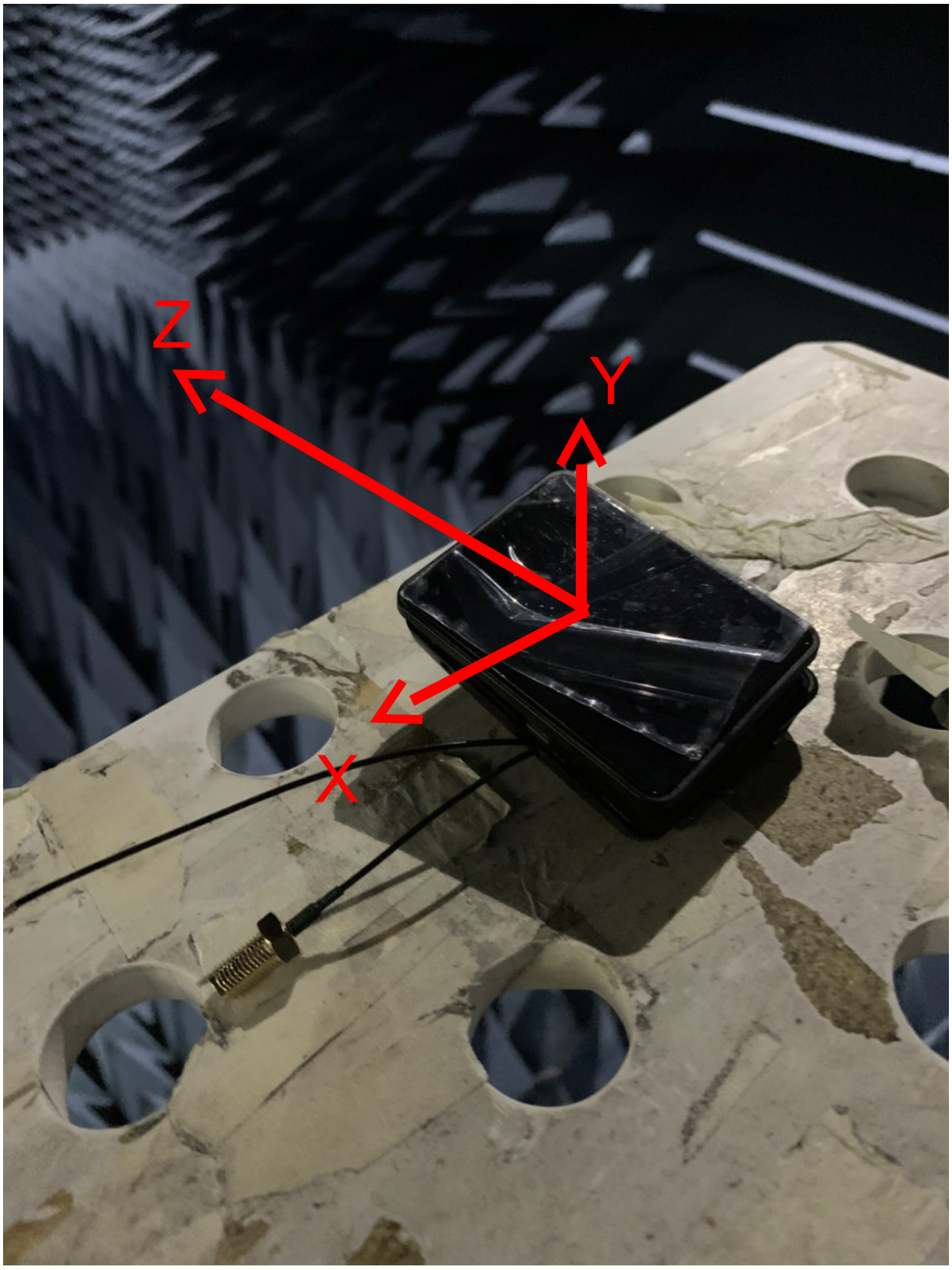
R6. Low Temperature
Condition: -40 +/- 5°C ; 96 Hours
Requirement: no apparent damage / electrical test pass

4.2 S Parameter Test
S.W.R. Test Data (on Plastic Case)

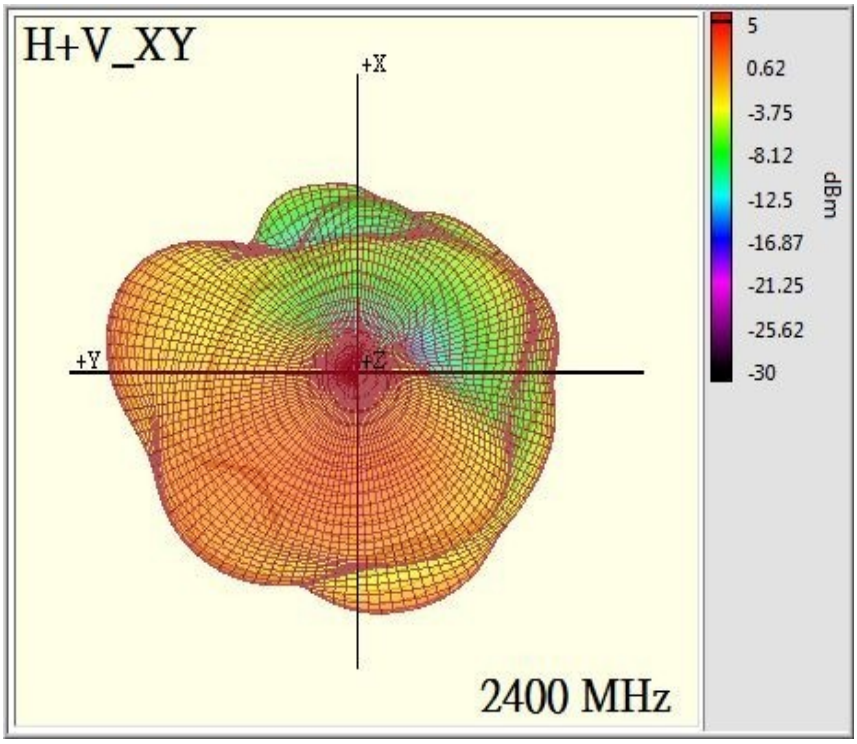


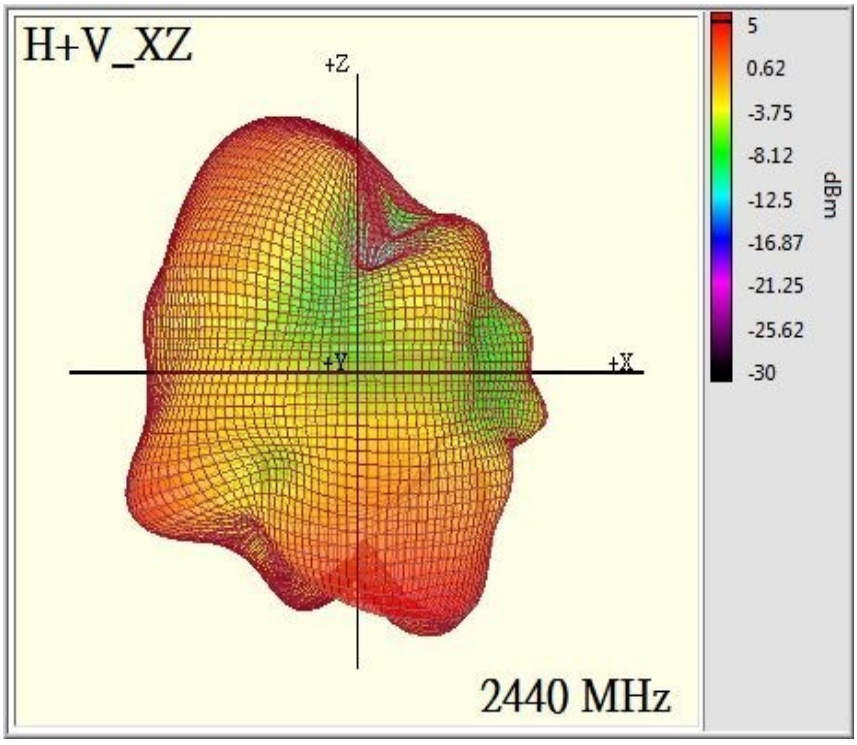
5. Antenna Gain Test

5.1 Chamber Setup and Angle Definition



5. Antenna Gain Test
5.2 Antenna Radiation Pattern





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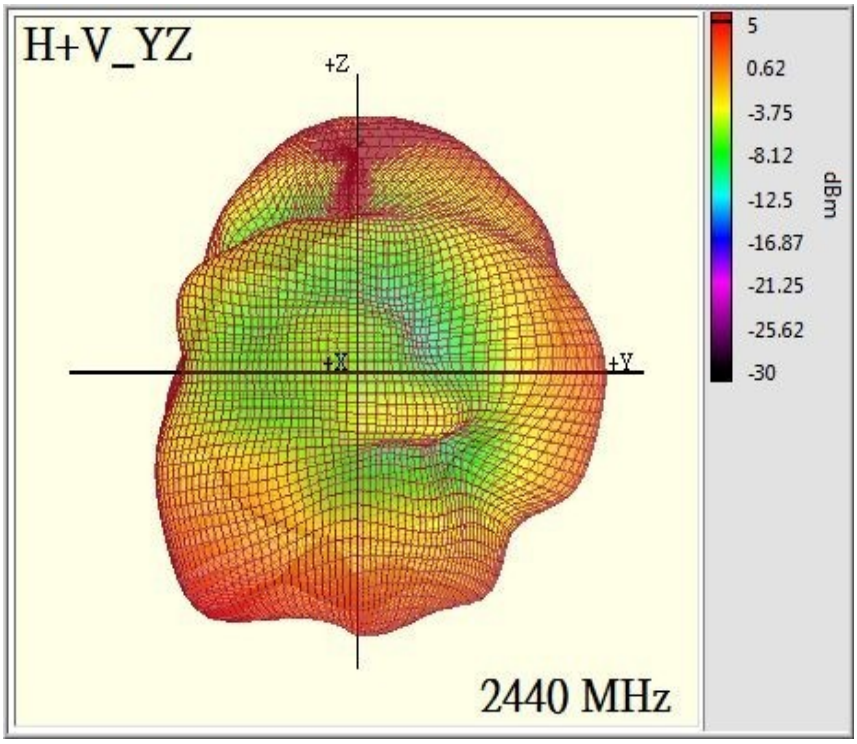
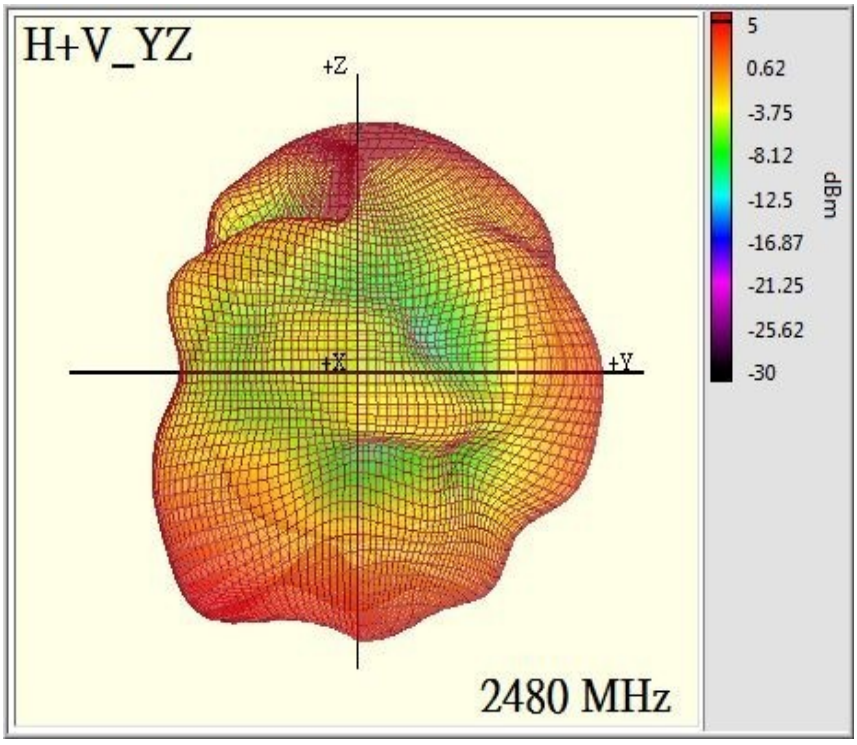
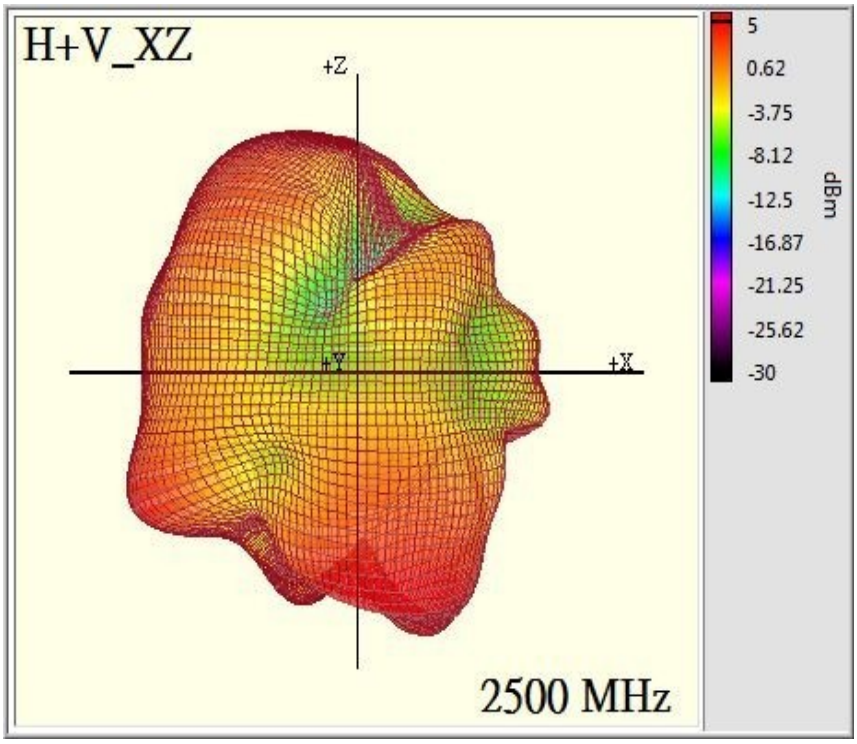
5.2 Antenna Radiation Pattern





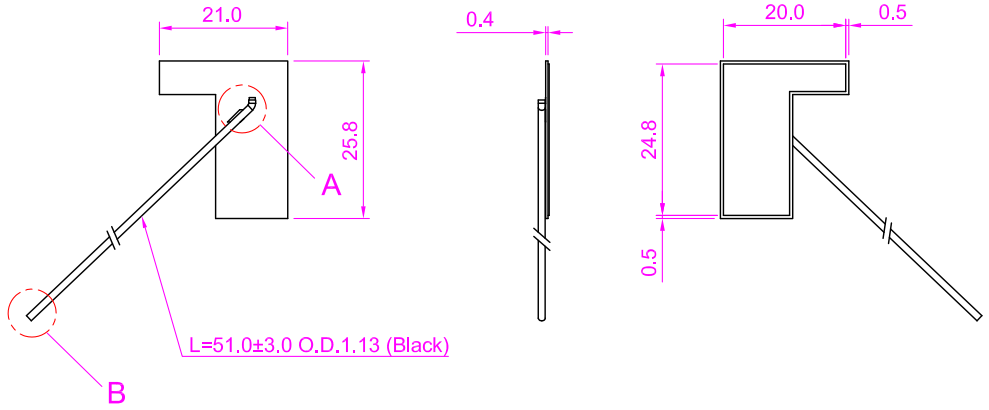


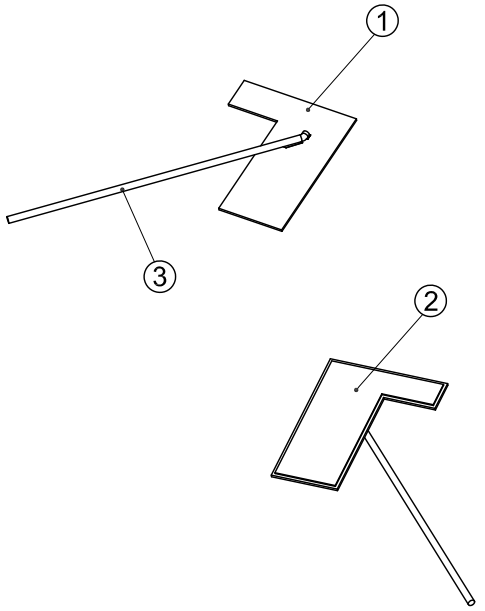
5. Antenna Gain Test

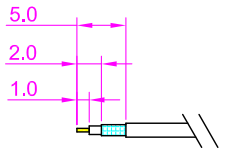
5.3 Gain and Efficiency Test Data

Tolal Polarzation		
Frequency (MHz)	Peak EIRP (dBi	Efficiency (%)
2400	-1.26	18.508
2410	-0.894	19.536
2420	-0.531	20.67
2430	-0.216	21.705
2440	0.116	22.963
2450	0.401	24.304
2460	0.878	25.779
2470	0.962	27.416
2480	1.300	28.585
2490	1.148	29.424
2500	1.258	30.148

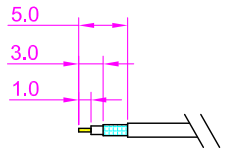
REV	DATE	DESCRIPTION
X1	2023.02.15	New Release







DETAIL A



DETAIL B

No.	Part No.	Description	Q'ty
3	901-02799-00	O.D. 1.13mm ; Length=51mm(Black)	1
2	801-03409-00	24.8*20mm Adhesive	1
1	501-00540-00	PCB 25.8*21*0.4mm	1

UNLESS OTHERWISE SPECFIED Tolerance ON:

X.X ±0.5 X° ±1.0
X.XX ±0.2

昂創電子有限公司

Customer Model: --

Customer Number: --

TITLE: Antenna Internal 2.4G

APP BY	CHK BY	DES BY

PART NO.: UPB2400-1051B-O

Sheet	UNITS	SCALE	REV
1 of 1	mm	1 /1	X1