

ANTENNA TEST REPORT

For

Prolycht directional LED fixture antenna

Model Number: Prolycht Orion 675 FS

Report Number : WT228002693

Test Laboratory : Shenzhen Academy of Metrology and Quality
Inspection
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TEST REPORT DECLARATION

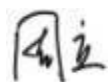
Applicant : Shenzhen Chromatech Lighting Co., Ltd
Address : 29 Gaoxin South Ring Road, Building1, Room 901,
Shenzhen, Guangdong, China
EUT Description : Prolycht directional LED fixture antenna
MODEL No : Prolycht Orion 675 FS

Test Standards: IEEE149-1979

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

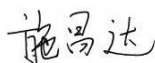
Project Engineer:



Date: Nov 22th 2022

(Zhou Li)

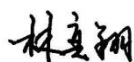
Checked by:



Date: Nov 22th 2022

(Shi Changda)

Approved by:



Date: Nov 22th 2022

(Lin Yixiang)

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1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results	
	Frequency (MHz)	Test data
Antenna Gain	2402	0.17 dBi
	2440	0.57 dBi
	2480	0.99 dBi
Efficiency	2402	-4.52dB
	2440	-3.88 dB
	2480	-3.77 dB

Remark: "N/A" means "Not applicable."

2. GENERAL INFORMATION

2.1. Report information

- 2.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.
- 2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 2.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.
- 2.1.4. The lab will not be liable for any loss or damage resulting for false, inaccurate, inappropriate or incomplete product information provided by the applicant/manufacturer.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918.

The Laboratory is registered to perform emission tests with Innovation, Science and Economic Development (ISED), and the registration number is 11177A.

The Laboratory is registered to perform emission tests with VCCI, and the registration number are C-20048, G20076, R-20077, R-20078 and T-20047.

The Laboratory is Accredited Testing Laboratory of American Association for Laboratory Accreditation (A2LA) and certificate number is 3292.01.

3. PRODUCT DESCRIPTION

3.1.EUT Description

Description : Prolycht directional LED fixture antenna
Applicant : Shenzhen Chromatech Lighting Co., Ltd
Model Number : Prolycht Orion 675 FS
Input ---
Frequency Band : 2400-2483.5MHz

3.2.Operating Condition of EUT

Test mode 1: Connected to the network analyzer

3.3.Test Conditions

Date of test: Nov 18,2022
Date of EUT Receive: July 20,2022
Temperature: 26°C
Relative Humidity: 49 %

3.4.Modifications

No modification was made.

4. TEST EQUIPMENT USED

4.1. Test Equipment List

Table 2 Test Equipment

No.	Equipment	Manufacturer	Model No.	LAST CALIB	Period
SB9011	Antenna test system	SATIMO	N/A	N/A	N/A
SB9011/01	Network analyzer	Agilent	E5071C	Apr 26 2022	1 Year

5. ANTENNA TEST

5.1. Test Procedure

Put the antenna into the anechoic chamber, connect the Antenna to the VNA and start measurement.

5.2. Test Arrangement

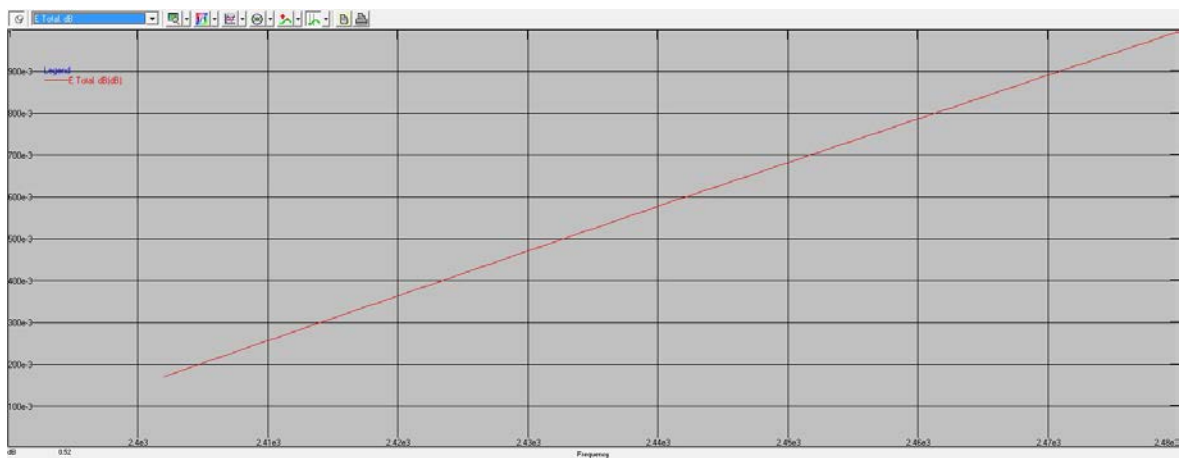
The Antenna should be settled in the middle of the test system. The probe of the system will sample every 15 degrees in theta plane and 30 degrees in phi plane.

5.3. Test Data

Antenna Gain:

Table 3 Antenna Gain

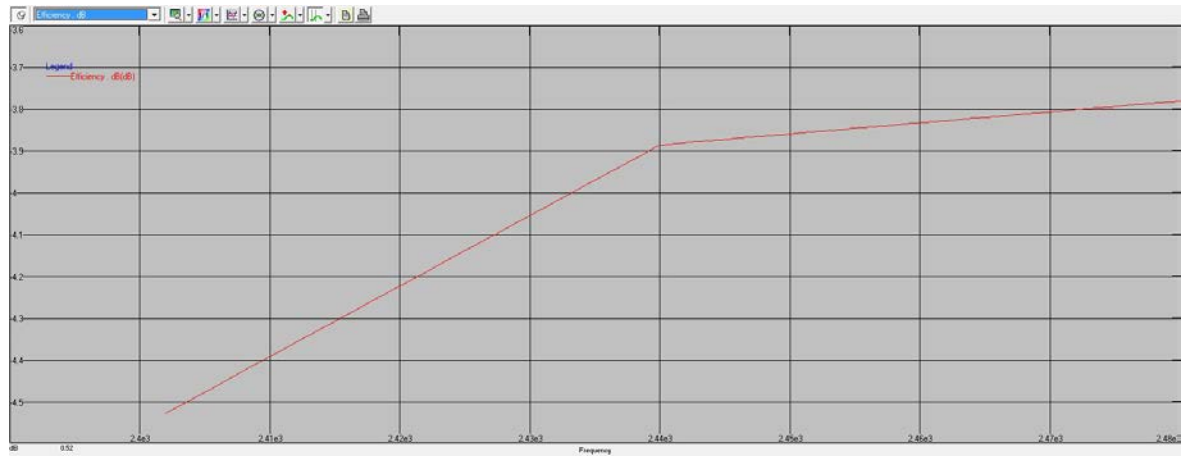
Frequency band(MHz)	Gain (dBi)
2402	0.17
2440	0.57
2480	0.99



Antenna Efficiency:

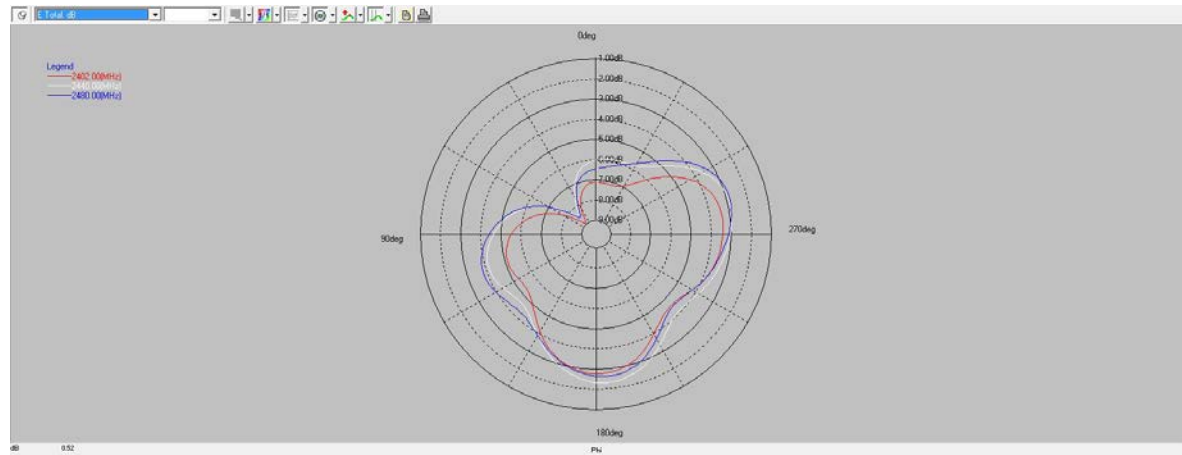
Table 4 Antenna Gain

Frequency band(MHz)	Efficiency (%)	Efficiency (dB)
2402	35.2	-4.52
2440	40.8	-3.88
2480	41.8	-3.77

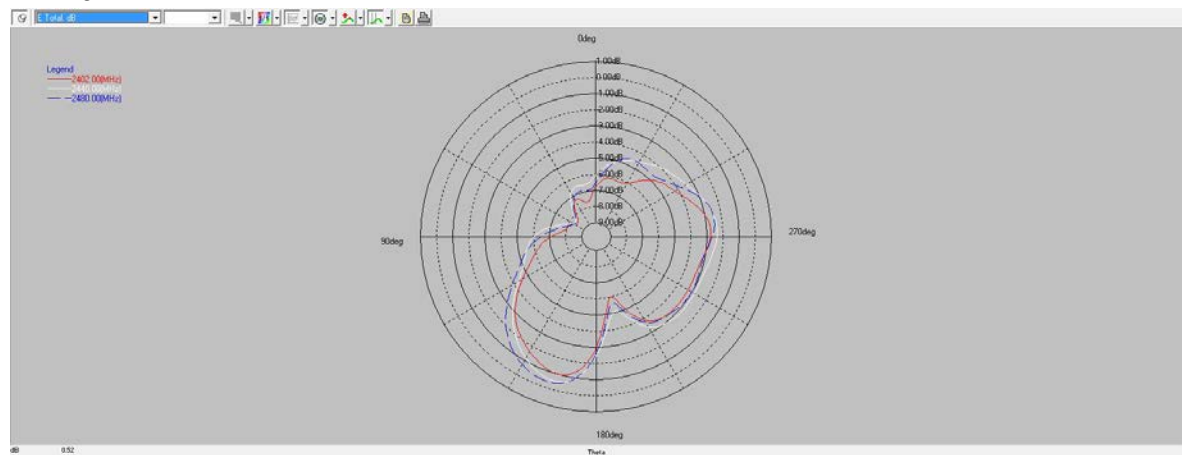


Antenna Patten

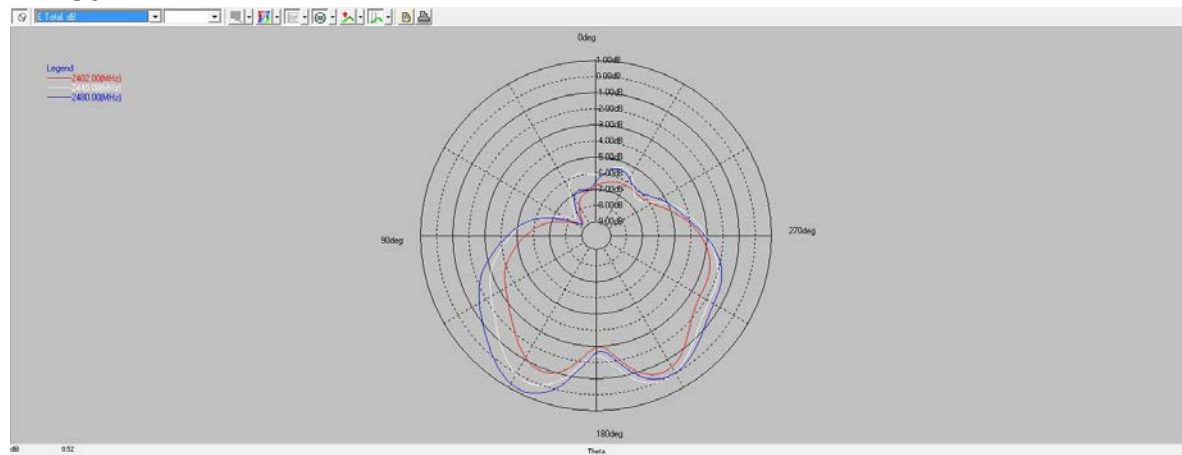
Theta=90



Phi =0



Phi=90



6. TEST PHOTO

Photo 1 Antenna Test



Photo 2 Antenna Test

