

FCC TEST REPORT

For

Prolycht directional LED fixture

Model Number: Prolycht Orion 300

FCC ID: 2AXKOORION300-C4

Report Number : WT208001786

Test Laboratory : Shenzhen Academy of Metrology and Quality
Inspection

Site Location : NETC Building, No.4 Tongfa Rd., Xili, Nanshan,
Shenzhen, China

Tel : 0086-755-86928965

Fax : 0086-755-86009898-31396

Web : www.smq.com.cn

E-mail : emcrf@smq.com.cn

TEST REPORT DECLARATION

Applicant : Shenzhen Chromatech Lighting CO.LTD
Address : 29 Gaoxin South Ring Road,#1 Room 901,Shenzhen,
Guangdong,518000
Manufacturer : Shenzhen Chromatech Lighting CO.LTD
Address : 29 Gaoxin South Ring Road,#1 Room 901,Shenzhen,
Guangdong,518000
EUT Description : Prolycht directional LED fixture
Model No : Prolycht Orion 300
Trade mark : PROLYCHT
FCC ID : 2AXKOORION300-C4

Test Standards:

FCC Part 2.1091 (2019)

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. 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:	 (Mou Fangdi 牟芳氏)	Date:	<u>Jan.20,2021</u>
Checked by:	 (Shi changda 施昌达)	Date:	<u>Jan.20,2021</u>
Approved by:	 (Lin yixiang 林奕翔)	Date:	<u>Jan.20,2021</u>

TABLE OF CONTENTS

TEST REPORT DECLARATION.....	2
1. TEST RESULTS SUMMARY.....	4
2. GENERAL INFORMATION.....	5
2.1. Report information.....	5
2.2. Laboratory Accreditation and Relationship to Customer.....	5
3. PRODUCT DESCRIPTION.....	6
3.1. EUT Description.....	6
4. RF EXPOSURE.....	7
4.1. LIMIT FOR MAXIMUM PERMISSIBLE EXPOSURE(MPE).....	7
4.2. MPE Calculation Method.....	7
4.3. CALCULATED RESULT.....	8

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
RF Exposure	Pass

2. GENERAL INFORMATION

2.1. Report information

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.

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.

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.

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 a ccredited 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 Registra tion 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 Accredita tion (A2LA) and certificate number is 3292.01.

3. PRODUCT DESCRIPTION

3.1. EUT Description

Table 2 Specification of the Equipment under Test

Product Type:	Prolycht directional LED fixture
Hardware Version:	v1.0
Software Version :	v1.0
FCC ID:	2AXKOORION300-C4
Frequency:	BT: 2402MHz~2480MHz
Type(s) of Modulation:	GFSK
Antenna Type:	PIFA
Operating voltage:	AC100V (Low)/AC 120V (Nominal)/ AC 240V (Max)
Remark	\

4. RF EXPOSURE

4.1.LIMIT FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

This product can be classified as mobile device, so the 20cm separation distance warning is required. In this section, the power density at 20cm location is calculated to examine if it is lower than the limit.

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	ƒ/1500	30
1500–100,000	/	/	1.0	30

4.2.MPE Calculation Method

Power Density: $Pd(Mw/cm^2)=P \cdot G / 4\pi d^2$

P=Peak RF output power (mW)

G=EUT Antenna numeric gain (numeric)

Pi=3.14

d=Separation distance between radiator and human body (cm)

4.3.CALCULATED RESULT

BT

P=3.94dBm (max: 2.477mW)

G=5 dBi

d=20cm

$P_d = 7.834/4 * 3.14 * 400 = 0.0015 < 1$

-----END-----