LED Water-Proofing Tube

1. Product Features：

- 270 Degree beam angle,
- High Luminous Efficiency (120 Lm/W)
- Full plastic design for water-proofing (Optional)
- LED Pass LM80 test
- Certification: CE, LVD, BSMI, CNS 15438

1. Product Specification：

Product Name	LED Tube	
Model Name	TLN21000	TLN42000
Power Consumption	10 W	20W
Luminous Flux	6000 K: 1000 lm 4000 K: 900 lm	6000 K: 2400 lm 4000 K: 2100 lm
Illuminance(@1M)	250 Lux	400 Lux
Mask	Diffusing	
Beam Angle	270°	
Light Color	Cold White(5300~6500K)/Natural White(4000K)/Warm White(3000K)	
CRI	75 Ra	
Input Voltage	100~240 VAC / 50~60Hz	
Power Factor	0.9@110V, 0.85@230V	
Water Proof	Optional	
Operating Temp.	0 ~ 40 ℃	
Storage Temp	-20 ~ 60 ℃	
Life Span	40,000 Hours	
Warranty	2 Years	

Remarks: The tolerance of related electrical & lighting parameters is 10%. Ex. Power Consumption, Luminance Flux, Illuminance, and CRI

LanYang Optics Co., Ltd.
No.9, Ln. 15, Xiangcheng Rd., Dongshan Township,
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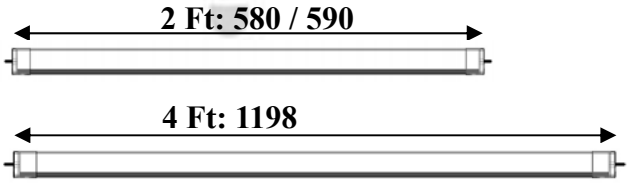
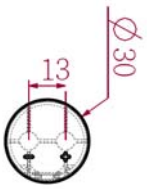
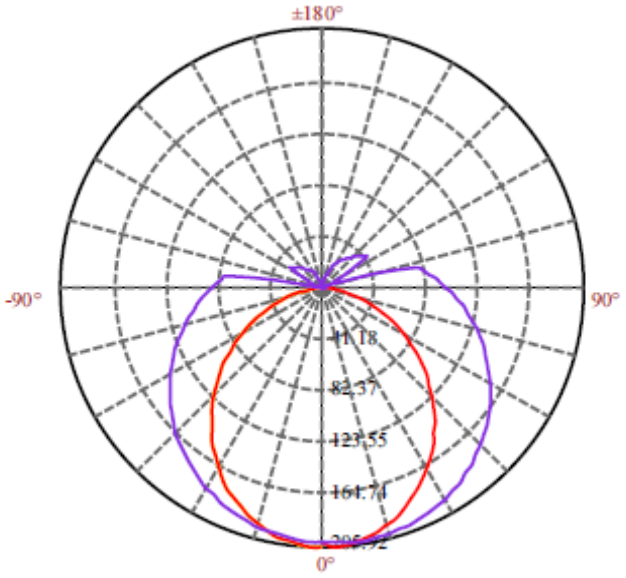
Tel: +886-3-9596071 Fax: +886-3-9596797

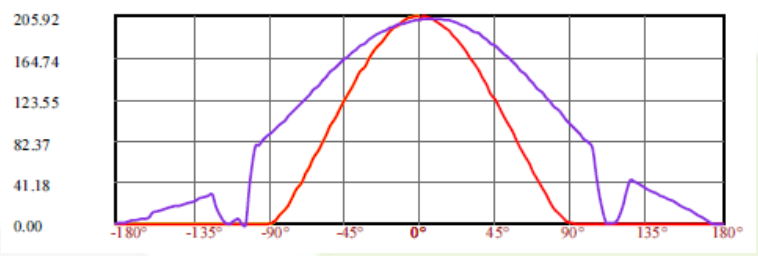
3. Dimension：





4. Distribution Diagram(2 Ft)：





5. Packaging Information：

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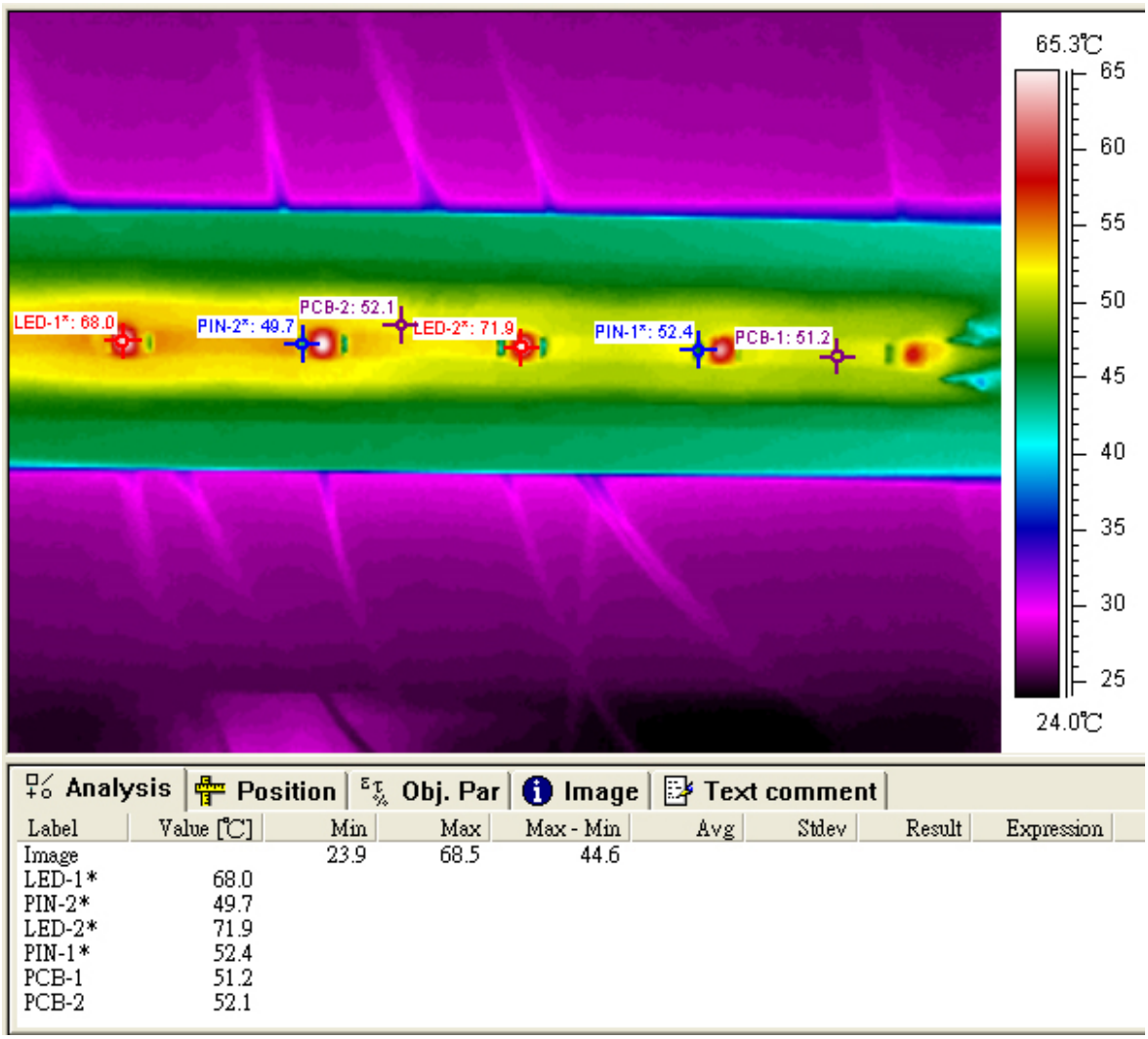
6. Thermal Image：



Label	Value [℃]	Min	Max	Max - Min	Avg	Stdev	Result	Expression
Image		23.9	68.5	44.6				
LED-1*	68.0							
PIN-2*	49.7							
LED-2*	71.9							
PIN-1*	52.4							
PCB-1	51.2							
PCB-2	52.1							

7. Luminance Decay Test Data：

Date(2012~2013)	Aug. 15	Nov. 21	Dec. 18	Jan. 15	Feb. 6
Burning Time(Hours)	0	2352	3000	3672	4200
Initial(%)	100.00%	98.37%	98.47%	97.14%	100.76%
Thermal Equilibrium(%)	100.00%	98.50%	98.23%	97.16%	100.59%
Luminance Flux (Initial)	1961 lm	1929 lm	1931 lm	1905 lm	1976 lm
Luminance Flux (Thermal Equilibrium)	1866 lm	1838 lm	1833 lm	1813 lm	1877 lm
Wattage(W))	20.57	20.6	20.6	20.6	20.6

PS.

1. Each LED Current@95mA
2. Ambient Temperature is 42℃

8. Product Pictures：

9. CE Certification：

9.1 EMC

CE

VERIFICATION OF COMPLIANCE

This Verification of Compliance is hereby issued to the product designated below.

Product	LED Tube
Model	TLNxxx00-xxxx (Please refer to appendix)
Trade Name	LYO
Applicant	LanYang Optics No.9, Ln. 15, Xiangcheng Rd., Dongshan Township, Yilan County 269, Taiwan (R.O.C.)
Applicable Standard(s)	EN 55015:2006 + A2:2009 EN 61000-3-2:2006+ A2:2009 EN 61000-3-3:2008 EN 61547:2009, including IEC 61000-4-2:2008 IEC 61000-4-3:2006 + A1:2007 + A2:2010 IEC 61000-4-4:2004 + A1:2010 IEC 61000-4-5:2005 IEC 61000-4-6:2008 IEC 61000-4-8:2009 IEC 61000-4-11:2004
Reference No.	T130415D05-E
Test Laboratory	**Compliance Certification Services Inc. (Hsin-Chu Lab)** NO. 989-1 Wen Shan Rd., Shang Shan Village, Qionglin Shiang Hsinchu County 30741, Taiwan, R.O.C Tel: +886-3-5921698 / Fax: +886-3-5921108

This device has been tested and found to comply with the stated standard(s), which is(are) required by the Council Directive of 2004/108/EC. The test results are indicated in the test report and are applicable only to the tested sample identified in the report.

Michael Yu / Lab. Manager

程智科技股份有限公司
Compliance Certification Services Inc.

9.2 Safety

SUPERIOR PRODUCT CONSULTING, INC.
3F, No. 10, Alley 6, Lane 235, Pao Chiao Rd., Hsien Tien, New Taipei City, Taiwan
TEL:02-29174137 FAX:02-29184517

CE CERTIFICATION OF CONFORMITY

According to the LVD Directive 2006/95/EC

Type of Product.....:	LED Tube
Model Designation .....:	TLNX1X200-X30X4X5
	X1 can be 1 (1 Ft), 2 (2 Ft), 3 (3 Ft), 4 (4 Ft), 5 (for marketing purpose) for tube length.
	X2 can be 07 (7W), 10 (10 W), 15 (15 W), 20 (20 W) for power consumption.
	X3, X4, X5 can be 0-9 or A-Z or blank for marketing purpose.
Manufacturer's Name.....:	LanYang Optics Co. LTD
Manufacturer's Address .....:	No.9, Ln. 15, Xiangcheng Rd., Dongshan Township, Yilan County 269, Taiwan (R.O.C.)
Report Reference No. .....:	SPCLVD 1304047

The above equipment was tested by Superior Product Consulting Inc., for compliance with the requirements set forth in the LVD Directive 2006/95/EC and the technical standards mentioned below. The results of testing in the report apply only to the product which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

IEC62560:2011, draft IEC62560 Annex C

EN61347-2-13: 2006, EN60598-1: 2008

EN62471-1: 2008; IEC62471: 2009 , EN61195:1999