

Appendix---Model Encoding

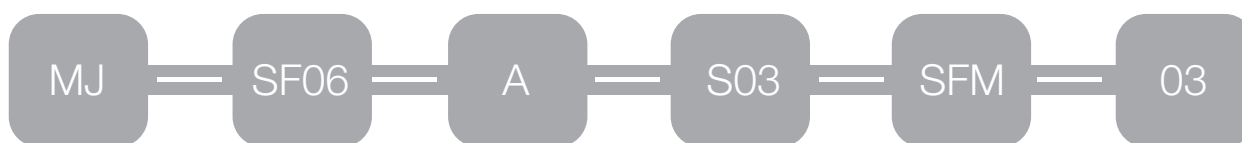
1.Model Encoding

Product Encoding



Shape Model	Working Voltage	LED Type	LEDs/meter	Working Mode	LEDs/ Unit	Color/Color Temp.
SF05, SF06	12V	2835	56	CC= Constant Current	U2=2 LEDs/Unit	2200K, 2700K, 3000K
SF08, SF09	24V	3528	60	PWM=Blank	U10=10 LEDs/Unit	3500K, 4000K, 4500K
SF10, SF15	48V	5050	70	DM3= 3 Channels		5000K, 5700K, 6500K
F/SF16, SF17		3535	72	DMX4= 4 Channels		R= Red, G= Green
SF18, SF21		3535+2835	84	SPI3= 3 Channels		B= Blue, P= Pink
SF24,SF28, SF30			96	SPI4= 4 Channels		LY= Lemon Yellow
SF33, SF34			120			A= Amber, O= Orange
SP01, SP05			128			PP= Purple
F15, F16, F21			140			RGB
F= PVC Series			144			RGBW(2700/3000
SF= Silicone Series			288			/4000/5000K)
SP= Silicone Series						DW= Tunable White

Lead Connector Encoding



Mold Injection	Shape Type	Product Type	Connector Entry	Cable Type	Cable Lenth
MJ= Mold Injection	PVC= 15/16/21	A= Mono Color	S= Side Entry	Blank= Bare Wire	03= 0.3m
	Silicone= SF15, SF16	DW= Tunable White	D= Direct Entry	SM= Male Connector	06= 0.6m
	SF17, SF06, SF08,	D3= SPI (3 Wires)	B= Bottom Entry	SF= Female Connector	10= 1m
	SF09, SF10, SF21,	RGB	L= L Shape Entry	SFM= Female +	20= 2m
	SF24, SF28, SF30	RGBW	01= Right	Male Connector	30=3m
	SF33, SF34, SP01	D5= DMX (5 Wires)	02= Left		50=5m
			03= Left & Right		100=10m
					150=15m
					200=20m

Assembly Connector Kit Encoding



Accessories Type	Installed Type	Application Part	Shape Type	Connector Entry Type	Cable Type	Product Type
DIY= Do It Yourself	SC= Screws	FR= Front Connector	06, 08, 09, 10	D= Direct Entry	Blank= Bare Wire	A= Mono color (2 Wires)
	SN= Snap	END= End Cap	15, 16, 17, 21	01= Right	SM= Male Connector	DW= Tunable White
	QC= Quick	EXT= Extent Connector	SF24,SP01, SP05	02= Left	SF= Female Connector	(3 Wires)
				03= Left & Right		RGB= RGB (4 Wires)
						D3= SPI (3 Wires)

Appendix---Certificate

2. Certificate

Certificate CN21/30015

The management system of
Dongguan Olympia Lighting Co., Ltd.

United Social Credit Code: 91441900MA4UQ3X1XA
Business Registration Address: Building 2, No. 1, Junma 1st Road, Chigang, Humen Town, Dongguan City, Guangdong Province P.R. China
Business Operation Address: Building 2, No. 1, Junma 1st Road, Chigang, Humen Town, Dongguan City, Guangdong Province P.R. China

has been assessed and certified as meeting the requirements of
ISO 9001:2015

For the following activities
Design and manufacture of Light Emitting Diode Light Bar strip for decoration and lighting

This certificate is valid from 07 January 2024 until 06 January 2027 and remains valid subject to satisfactory surveillance audits.
Issue 3. Certified since 07 January 2021

John U. Hill

Authorized by
Jonathan Hill
Global Head - Certification Services

SGS United Kingdom Ltd
Rozemore Business Park, Elkemere Park, Chester, CH65 3EN, UK
t+44 (0)151 300 6999 - www.sgs.com

The certification information can be verified on the website of Certification and Accreditation Administration of the People's Republic of China
www.cnca.gov.cn

The document is an authentic electronic certificate for Client businesses only. Printed version of the electronic certificate are provided and will be considered as a copy. The document is issued by the Company subject to SGS General Conditions of certification services available on Terms and Conditions (SGS). Alterations shown to the limitations of liability, interpretation and product details are not intended. This document is exempt from payment of any contractual obligations, liability or indemnification of the certificate appearance or the document's validity.

Page 1 of 1

CERTIFICATE OF COMPLIANCE

Certificate Number: 20190410-E503355
Report Reference: E503355-20190412
Issue Date: 2019-APRIL-16

Issued to:
Olympia Lighting Co Ltd
Building C, No.2
Pujiang Road
Daming Community, Humen Town
Dongguan
Guangdong 523930, CHINA

This certificate confirms that representative samples of
LOW-VOLTAGE LIGHTING SYSTEMS, POWER UNITS, LUMINAIRES AND FITTINGS
See Addendum.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 2108, Low Voltage Lighting Systems, CSA C22.2 No. 250.0-08, Luminaires.

Additional Information: See the UL Online Certifications Directory at <https://q.ulprospector.com> for additional information.

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

TCB

GRANT OF EQUIPMENT AUTHORIZATION
Certification
Issued Under the Authority of the
Federal Communications Commission
By:
MICOM Labs
375 Boulder Court
Pleasanton, CA 94566
Date of Grant: 04/14/2021
Application Dated: 04/14/2021

Dongguan Olympia Lighting Co., Ltd.
Building 2, No. 1, Junma 1st Road,
Chigang Community, Humen Town
Dongguan, 523921
China

Attention: Max Liu

NOT TRANSFERABLE
EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: JAY45-P01Q
Name of Grantee: Dongguan Olympia Lighting Co., Ltd.
Equipment Class: Digital Transmission System
LED Strip Light

Grant Notes	FCC Rule Parts	Frequency Range (MHz)	Output Watts (p.e.dpp)	Frequency Tolerance	Emission Designator
Power 1	15C	402.2 - 2.6662	10000		

limited to the maximum conducted output power

ISO9001

UL Listed

FCC

BACL

BAY AREA COMPLIANCE LABORATORIES CORPORATION
www.baclcorp.com www.baclcorp.com.cn
backtest@baclcorp.com

ATTESTATION OF CONFORMITY

Attestation Number: AOC SZXX1230621-35828E-13
Date of Issue: 2023-07-20

Applicant:
Company name: Dongguan Olympia Lighting Co., Ltd.
Address: Building 2, No. 1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China

Product:
Name: LED Neon Flex
Model(s): Tested Style/Item No.: SF18
Additional Style/Item No.: SF16, SF20, SF21, SF22, SF23, SF24, SF25, SF26, SF27, SF28, SF29, SF30, SF31, SF10, SF09, SF06, SF18, SF17, SF31, SF32, SF35, SF36, SF38, SF39, SF08, SP01, SP02, SP03, SP04, SFW20, SF19, SF12, SF14, SF40
Manufacturer & Address: Dongguan Olympia Lighting Co., Ltd.

Trade Mark:
Bay Area Compliance Laboratories Corp. (Shenzhen) hereby declares that the submitted sample(s) of the above equipment has been tested for CE-marking and in accordance with the following European Directives and Standards:

Restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU

Substances	Test Methods	Test Report Number
RoHS Directive 2011/65/EU and its amendment directives (Cd) 2015/863 -XRF screening test and Wet Chemical Testing (Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs & PBDEs content); Phthalates(DBP, BBP, DEHP, DBP) content	IEC 62321	SZXX1230621-35828E

Mark is permitted only after all applicable requirements are met in accordance with the CE regulation requirements, including the manufacturer's issuance of a "Declaration of Conformity. The Declaration of Conformity is issued under the sole responsibility of the manufacturer. This attestation is specific to the standard(s) stated above and compliance with additional standards and/or CE regulations are applicable.

Attestation by:
Lab. Manager: Len Xie
Signature: *Len Xie*

C13-C3 (21015) PAGES 1 OF 1

BACL

Bay Area Compliance Laboratories Corp.

TEST REPORT

Report No.: SZXX1230621-35828E Date: July 20, 2023 Page 1 of 8

Dongguan Olympia Lighting Co., Ltd.
Building 2, No. 1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China

Report on the submitted samples said to be:
Sample Description: LED Neon Flex
Country of Origin: China
Manufacturer: Dongguan Olympia Lighting Co., Ltd.
Supplier: Dongguan Olympia Lighting Co., Ltd.
Tested Style/Item No.: SF18
SF16, SF20, SF21, SF22, SF23, SF24, SF25, SF26, SF27, SF28, SF29, SF30, SF15, SF10, SF09, SF06, SF18, SF17, SF31, SF32, SF35, SF36, SF38, SF39, SF08, SP01, SP02, SP03, SP04, SFW20, SF19, SF12, SF14, SF40

Additional Style/Item No.:
As claimed by the material declaration submitted by the client, the material of Additional Style/Item No. are the same as the tested Style/Item No. But the results only for the tested sample. And the applicant will undertake all differences and risk.

Remark:
Sample Receiving Date: June 25, 2023
Latest Re-submit Date: July 12, 2023
Testing Period: June 25-2023 - July 13, 2023
Result: Please refer to next page(s).

Signed for and on behalf of
BACL
Checked by: *Queenie Lee* Approved by: *Len Xie*
Queenie Lee Len Xie

Bay Area Compliance Laboratories Corp. (Shenzhen)
5/F-6 West, 6/F, 7/F, the 3rd Phase of Wan Yi Industrial Building D, Shihua Rd, Futian Free Trade Zone, Shenzhen, China
Tel: +86-755-33320018 Fax: +86-755-33320008 Q: 671-9001 (v1.0)

IEC **IECEE**

Ref. Certif. No.
US-BACL-00175

IEC SYSTEM FOR MUTUAL COGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product: LED Linear Flex

Name and address of the applicant: Dongguan Olympia Lighting Co., Ltd.
Building 2, No. 1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China

Name and address of the manufacturer: Same as above

Name and address of the factory: Same as above
 Additional information on page 2

Rated and principal characteristics: 24VDC

Trademark / Brand (if any): N/A

Customer's Testing Facility (CTF) Stage used: Model / Type Ref. F18-24V-5050-70-SP14-RGBW, F10-24V-3528-144, SF15-24V-5050-70-SP13-RGB, SF18-24V-5050-84, SF08-24V-2835-120, SP01-24V-5050-70-DM14-RGBW, SFW20-24V-3535-24-CC and SFW20-24V-3535-24-SP14-RGBW
See Test Report for information about National Differences
 Additional information on page 2

Additional information (if necessary may also be reported on page 2):
A sample of the product was tested and found to be in conformity with IEC 60598-2-4:2017 for use in conjunction with IEC 60598-1:2020
R2212142

As shown in the Test Report Ref. No. which forms part of this Certificate

This CB Test Certificate is issued by the National Certification Body

BACL
Bay Area Compliance Laboratories, Corp.
1274 Anvilwood Avenue
San Jose, California, 94089, USA
Date: 2023-01-17
Signature: *Robin He*
Robin He

CE

RoHS

CB

ATTESTATION OF CONFORMITY WITH UK REGULATIONS

Attestation Number: AOC S2XX1230625-36166E-SFA1
Date of Issue: 2023-07-06

Applicant:
Company name: Dongguan Olympia Lighting Co., Ltd
Address: Building 2, No.1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China

Product:
Name: LED Neon Flex
Model(s): See "general product information" in test report for all models information
Manufacturer & Address: Dongguan Olympia Lighting Co., Ltd
Building 2, No.1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China

Trade Mark:
N/A

Bay Area Compliance Laboratories Corp. (Dongguan) hereby declares that the submitted sample(s) of the above equipment has been tested for UK regulations and in accordance with the following Standards:

UK Regulations	Tested for Standards	Test Report Number
Electrical Equipment(safety) Regulations 2016	BS EN IEC 60598-1:2021+A11:2022 BS EN 60598-2-4:2018 BS EN IEC 62031:2020+A11:2021 PD IEC/TR 62778:2014 BS EN 62493:2014+A1:2022	S2XX1230625-36166E-SFA1

UKCA Mark is permitted only after all applicable requirements are met in accordance with the UK regulation requirements, including the manufacturer's issuance of a "Declaration of Conformity". The Declaration of Conformity is issued under the sole responsibility of the manufacturer. This attestation is specific to the standard(s) stated above and compliance with additional standards and/or UK regulations are applicable.

Attestation by:
Team Leader: Andy Fu
Signature:

C34 C1 (2020/01) PAGE 01 OF 1

UKCA

Monitoring result for Dongguan Olympia Lighting CO.,Ltd. on site Dongguan Olympia Lighting CO.,Ltd.

Monitoring

Monitored Party : Dongguan Olympia Lighting CO.,Ltd. amfori ID : 156-024963-000
Site : Dongguan Olympia Lighting CO.,Ltd. Site amfori ID : 156-024963-001
Address : Building 2 No.1 Junma 1st Monitoring Activity : amfori Social Audit - Manufacturing road,Chigang,Humen Town, Dongguan, China Monitoring Type : Full Monitoring
: Dongguan Submission Date : 13/10/2021
: Guangdong Sheng Expiration Date : 13/10/2022
: China

This is an extract of the online monitoring result, generated on 15/10/2021, and is only valid as an acknowledgement of the result. To see all the details, review the full monitoring result, which is available here - The English version is the legally binding one.

Overall rating

A	B	C	D	E	None
		▲			

Section rating

PA 1: Social Management System	D
PA 2: Workers Involvement and Protection	B
PA 3: The Rights of Freedom of Association and Collective Bargaining	A
PA 4: No Discrimination	A
PA 5: Fair Remuneration	B
PA 6: Decent Working Hours	D
PA 7: Occupational Health and Safety	B
PA 8: No Child Labour	A
PA 9: Special Protection for Young Workers	A
PA 10: No Precarious Employment	A
PA 11: No Bonded Labour	A
PA 12: Protection of the Environment	C
PA 13: Ethical Business Behaviour	A

BSCI

AGC Recognized by China National Accreditation Service for Conformity Assessment (CNAS) (certification Foundation)

Laboratory address: 101 Building 2, A101, Building 5, Sanyue (Chang) Industrial Park, Sanyue Community, Jiangsheng Street, Baotian District, Shenzhen, Guangdong, China (518009)

Certification of Conformity

Registration No.: AGC11307211101SR01
Certificate Holder: OLYMPIA LIGHTING CO., LTD
Building 2, No.1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China
Product Designation: Silicone LED Neon Strips
Brand Name: /
Model / Series Models: SF06,SF08,SF09,SF10,SF15,SF16,SF17,SF18,SF21

Note: The main test model is SF16, SF06,SF08,SF09,SF10,SF15,SF17,SF18,SF21 are the same as SF16 except that the model names are different.

Requirement	Applied Standards	Document Evidence	Result
IP68	IEC 60598-1:2014+Amd 1:2017	AGC11307211101SR01	Conform

IP68

David Wong
Authorised Officer
AGC
Issue Date: Nov 11, 2023

The EUT description above has been tested in accordance with the relevant listed standard certificate...
The certificate does not imply assessment of the production. The certificate is only applicable to the equipment described above...
Note: This certificate is one of the full test report(s) and should be used in conjunction with it.

Any report being not signed by authorized approval, or having been altered without authorization, or having not been stamped by the authorized approval, shall be deemed to be invalid. Copying or reworking part(s) of or altering the content of the report is not permitted without the written permission of AGC. The test results presented in the report apply only to the tested samples. Any objections to report should be submitted to AGC within 15 days of the issuance of the report. Further enquiry or enquiry or modification of the test report should be addressed to AGC by telephone and email.

Attestation of Global Compliance (Shenzhen) Co., Ltd.
Attestation of Global Compliance (Dongguan) Co., Ltd.
Tel: +86-755-2929-4369 E-mail: agc@agc-cert.com Web: http://agc-cert.com

IP68

BACL Bay Area Compliance Laboratories Corp.

Report No.: 2402T26533E-SF

IEC 60529:1989+A1:1999+A2:2013
Measurement and Test Report

For **OLYMPIA LIGHTING CO., LTD**
Building 2, No.1, Junma 1st Road, Chigang Community, Humen Town, Dongguan, 523921, China.

Test model: F16
Multiple models: F15

This Report Concerns:	Equipment Type:
<input checked="" type="checkbox"/> Original Report	PVC LED Neon Strips

IP code: **IP68**

Compiled by: Vic Zhang *Vic Zhang*

Test Date: 2024-06-07

Date of issue: 2024-06-28

Reviewed by: Harrison Huang

Prepared By: Bay Area Compliance Laboratories Corp.(Dongguan)
No.12, Puding East 1st Road, Tangxia Town, Dongguan
Tel: +86-0769-8685858
Fax: +86-0769-8685858

TRF-SF-IP69

IP69

3. Reliability Test

Optical Testing

Spectrum Analysis	IES LM 79 (Lumen, CCT, CRI, XY, SDCM, wavelength)
Photometric Distribution	IES LM 73 (Lumen intensity distribution & Lux diagram)
Lumen Maintenance & Lifetime	IES LM 84 & IES TM28

Temperature Testing

T=25°C Normal Temperature Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
T=70°C Abnormal Operation Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21

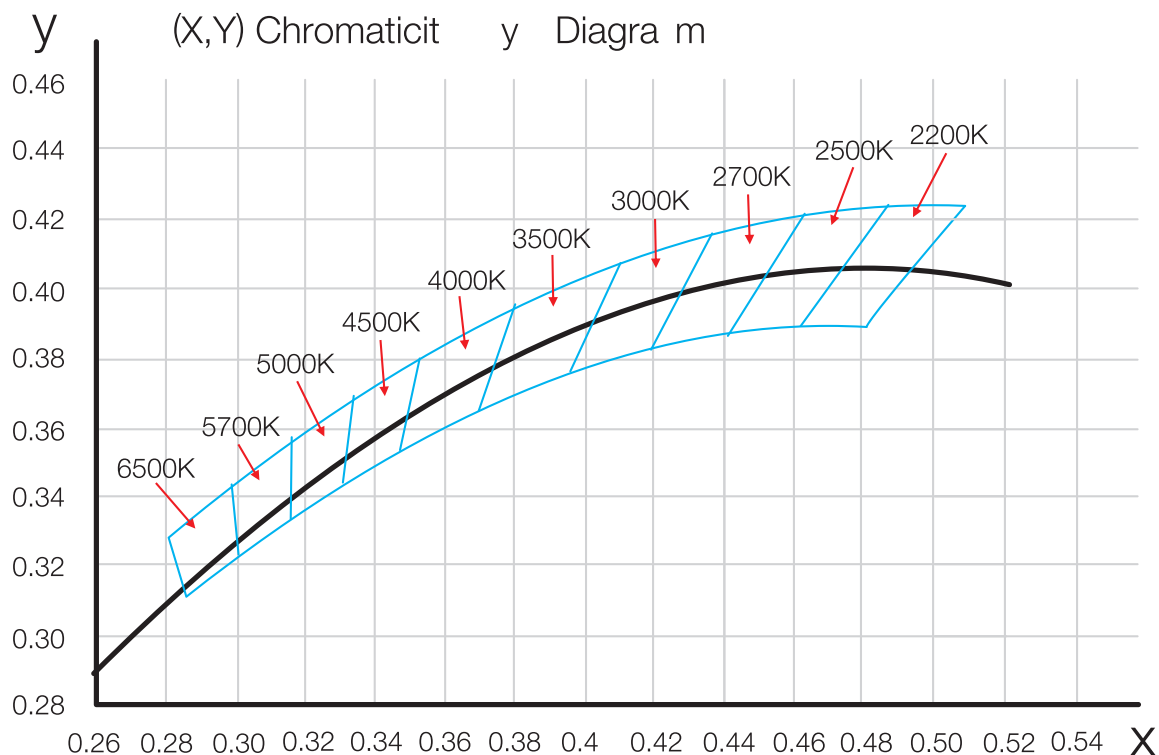
Durability Testing

Bending Test	Manufacturer-defined, 1000 cycles
Swing Test	UL2388, >750 cycles
Tensile Test	Manufacturer-defined, > the weight of light in Max. connection length double feed
Twist Test	Max connection length double feed Manufacturer-defined, >200 cycles
Ball Impact	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
IK07 IK08	IEC62262

Environmental Testing

Chlorinated Water Immersion	BG9667, PH6.8-7.6, free chlorine 0.3-0.6mg/L
Salt Water Immersion	IEC60598-1, Salinity 4%
Salt Spray Test	IEC68-2-11
Outdoor Exposure	Manufacturer-defined
Flame Resistance	UL94
UV Exposure	ASTMG 154, ISO 4892-3, UVA @ 340nm
IPX5, IPX6, IPX7, IPX8	IEC60529
Temperature Shock	Manufacturer-defined, -40°C- 60°C (typical temperature range)
Constant Temperature	Manufacturer-defined, 70°C (typical temperature range)

4. (x, y) Chromaticity Diagram



5. Correlated Color Temperature (CCT)

ANSI Standard

Nominal CCT Categories (2200-6500K)

Nominal CCT	Target CCT & tolerance(k)	Target D_{uv}	D_{uv} Tolerance Range
2200K	2238±102	0.0000	T_x : CCT of the source for $T_x < 2870K$
2500K	2460±120	0.0000	0.000±0.0060
2700K	2725±145	0.0000	For $T_x \geq 2870K$
3000K	3045±175	0.0001	$D_{uv}(T_x) \pm 0.0060$
3500K	3465±245	0.0005	where
4000K	3985±275	0.0010	$D_{uv}(T_x) = 57700 \times (1/T_x)^2$
4500K	4503±243	0.0015	-44.6(1/T _x)
5000K	5029±283	0.0020	+0.00854
5700K	5667±355	0.0025	Remark:
6500K	6532±510	0.0031	1) T_F is chosen to be at 100K steps (2300, 2400, ..., 6400K)
			the ten nominal CCTs listed in table 1.
			2) $\Delta T = 1.1900 \times 10^8 \times T^{-3}$
			$1.5434 \times 10^4 \times T^2 + 0.71648 \times T - 902.55$
			3) Same as in the DUV tolerance range

Flexible CCT

$T_F^{(1)} \pm \Delta T^{(2)}$

$D_{uv} T_F^{(3)}$

6. Loading Chart

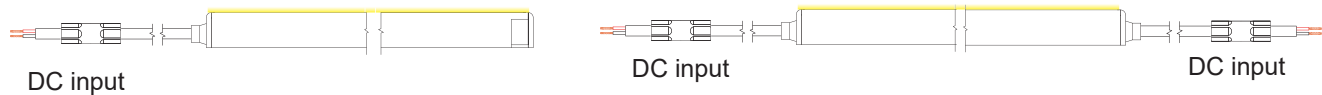
Power Supply

Rated Power	40W	60W	80W	100W	120W	150W	185W	240W	320W	480W
5W	6m	9m	12.5m	16m	18m	24m	29..5m	38m	50m	70m
7.2W	5m	6m	8.5m	11m	13m	16.5m	20.5m	26.5m	30m	53m
8W	4m	6m	8m	10m	12m	14m	18m	23m	32m	45m
9W	3.5m	5m	7m	8.5m	10.5m	12.5m	16m	21m	28m	41m
10W	3m	4.5m	7m	8m	9.5m	12m	14.5m	19m	24m	35m
12W	2.5m	4m	6m	7.5m	8m	10m	12.3m	16m	21.3m	28m
13W	2.4m	3.5m	4.8m	6m	7m	9m	11m	14.5m	19.5m	25.5m
15W	2m	3m	4.2m	5m	6m	8m	9.8m	12.5m	17m	25m
16W	2m	3m	4m	4.5m	6m	7.5m	9m	12m	16m	24m
17W	1.8m	2.8m	3.7m	4.5m	5.5m	7m	8.4m	11m	15m	22.5m
18W	1.7m	2.6m	3.5m	4.4m	5.3m	6.8m	8m	10.5m	14m	21m

Lead Type

Single Feed

Double Feed



Note: These are the max recommended run lengths based on power supply
 For example: It is recommended to use one 80W power supply for a single-feed run of 8.5m at 7.2W/m.

7. Recommendation Of Extension Wire

Maximum extension wire length according to Light power

Watts of light	22AWG 0.34mm ²	20AWG 0.53mm ²	18AWG 0.82mm ²	17AWG 1.04mm ²	16AWG 1.38mm ²	14AWG 2.07mm ²	12AWG 3.29mm ²	10AWG 5.62mm ²
10W	36m	60m	100m	120m	140m	240m	400m	600m
20W	18m	30m	50m	60m	70m	120m	200m	300m
30W	12m	20m	30m	38m	45m	80m	130m	200m
40W	8m	15m	22m	28m	35m	60m	95m	140m
50W	6m	12m	18m	22m	28m	48m	75m	105m
60W	5m	10m	15m	18m	22m	36m	60m	88m
70W	/	8m	12m	14m	18m	30m	50m	72m
80W	/	6m	10m	11m	14m	24m	40m	58m
90W	/	4m	7m	8m	10m	18m	30m	45m
100W	/	/	5m	6m	7m	12m	22m	32m
110W	/	/	3m	4m	5m	8m	15m	22m
120W	/	/	2m	2.5m	3m	6m	8m	12m

Note:

- 1.The values doesn't include the 0.6m cable connected to the front connector.
- 2.To ensure the reliability of wire connection and avoid problem of voltage drop, the extension wire length should be smaller than the above recommended values