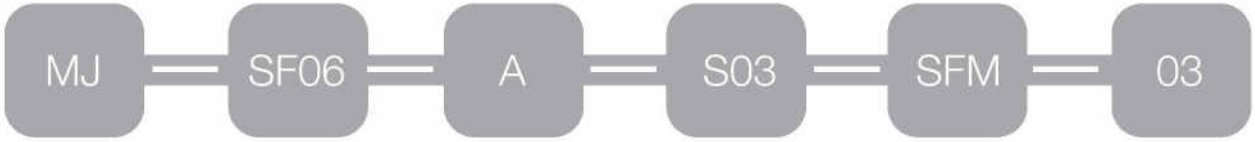
1.Model Encoding

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 Whire
	QC= Quick	EXT= Extent Connector	SF24,SP01,	02= Left	SF= Female Connector	(3 Wires)
			SP05	03= Left & Right		RGB= RGB (4 Wires)
						D3= SPI (3 Wires)

2.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℃ Abnormal Operation Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21

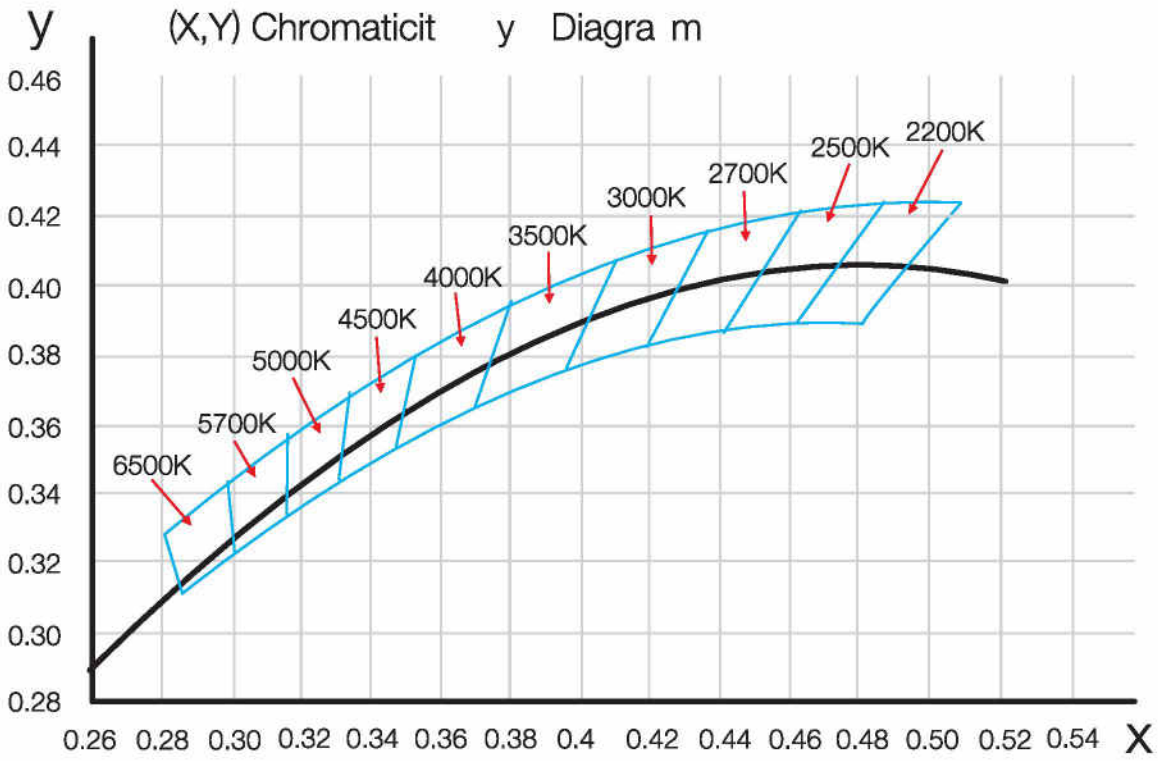
Durability Testing

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, Sailinity 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)**

3. (x, y) Chramaticity Diagram



4. 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	Tx: CCT of the source for Tx<2870K 0.000±0.0060 For Tx≥2870K D_{uv} (Tx)±0.0060 where $D_{uv}(Tx)=57700x(1/Tx)2$ $-44.6x(1/Tx)$ $+0.00854$ Remark: 1) T_F is choosen to be at 100K steps (2300,2400.....6400K) the ten nominal CCTs listed in table 1. 2) $\Delta T=1.1900x10^{8} x T^{3-}$ $1.5434x10^{4} x T^{2}+0.71648 x T-902.55$ 3) Same as in the DUV tolerance range
2500K	2460±120	0.0000	
2700K	2725±145	0.0000	
3000K	3045±175	0.0001	
3500K	3465±245	0.0005	
4000K	3985±275	0.0010	
4500K	4503±243	0.0015	
5000K	5029±283	0.0020	
5700K	5667±355	0.0025	
6500K	6532±510	0.0031	
Flexible CCT	$T_F^{1)} \pm \Delta T^{2)}$	$D_{uv} T_F^{3)}$	

Appendix---Loading Chart & Recommendation Of Extension Wire

5. Loading Chart

Power Supply

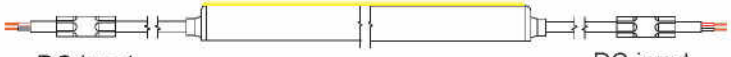
Rated Power	40W	60W	80W	100W	120W	150W	185W	240W	320W	480W
5W	6m	9m	12.5m	16m	18m	24m	29..5m	38m	50m	70m
7.2W	5m	6m	8.5m	11m	13m	16.5m	20.5m	26.5m	30m	53m
8W	4m	6m	8m	10m	12m	14m	18m	23m	32m	45m
9W	3.5m	5m	7m	8.5m	10.5m	12.5m	16m	21m	28m	41m
10W	3m	4.5m	7m	8m	9.5m	12m	14.5m	19m	24m	35m
12W	2.5m	4m	6m	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

DC input

Double Feed



DC input DC input

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.

6. 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