

产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
产品系列	DL-150W-MPA-H 系列	REV	1.1

中山市东菱照明科技有限公司

客户承认书

SPECIFICATION FOR APPROVAL



CUSTOMER/客户名:	
MODEL NO./产品型号:	DL-150W-MPA-H
Rev./版本号:	V1.1
SAMPLE DATE/送样日期:	

客户确认栏

TESTED BY 检查	CHECKED BY 审核	APPROVED BY 批准
客户备注		

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with you approved signature./客户确认签章后请回传一份承认书给我公司.

东菱确认栏

MADE BY 制作	CHECKED BY 审核	APPROVED BY 批准
 2019.09.10 17:48:25 +08'00'	 2019.09.11 08:11:42 +08'00'	 2019.09.11 16:21:16 +08'00'

Zhongshan Done Lighting Technology Co., Ltd.

中山市东菱照明科技有限公司

No. 3-1&3-2, Kanglong 3rd Road, XinMao Industry Zone, Henglan Town,

Zhongshan City, Guangdong Province, P. R. China Post code: 528478

地址: 广东省中山市横栏镇新茂工业区康龙三路3号之一之二 邮编: 528478

TEL: 0760-89838399 89838379 FAX: 0760-89831157 89838396



## FEATURES 产品特点

- ◇ Class I Driver  
Class I 结构驱动
- ◇ Input voltage:200-277V ~ 50/60Hz  
输入:200-277V ~ 50/60Hz
- ◇ PF>0.95 @230Vac full load  
输入为 230Vac, 输出满负载 PF 值大于 0.95
- ◇ Efficiency >89% min@230Vac full load  
输入为 230Vac, 输出满负载, 效率大于 89%
- ◇ THD<10% @ 230Vac full load  
输入为 230Vac, 输出满负载, 谐波小于 10%
- ◇ Metal shell structure, waterproof level can reach IP67.  
金属外壳结构、防水级别可以达到 IP67
- ◇ Double 85 test pass ( 15 days ) @230Vac full load  
在 230Vac 满载时可通过双 85 测试 ( 15 天 )
- ◇ Lightning Surge : Differential Mode +/- 4KV ( 2 ohm ), Common Mode +/- 6 KV ( 12 ohm )  
( IEC61000-4-5 2014 )  
雷击浪涌等级: 差模 L-N +/- 4KV ( 2 ohm ), 共模 L, N-地 +/- 6 KV ( 12 ohm )  
参照 IEC61000-4-5 2014
- ◇ The LED DRIVER shall be applied 1500Vac for 60 seconds ( HI - POT )  
该 LED 驱动耐压可达 1500Vac 持续 60S
- ◇ Long life design warranty for 3years  
超长寿命设计, 质保 3 年
- ◇ LED Driver is constant current output control mode. the output current is external adjustable.  
驱动为恒流输出控制模式。输出电流外部可调
- ◇ Applied in: Street lamp, project-light lamp, wash wall lamp or other outdoor lamps and lanterns  
应用于: 路灯、投光灯、洗墙灯灯、等户外照明灯具
- ◇ 本产品适用于印度市场



## MODEL LIST 型号列表

型号 ( Model NO )	Input Voltage 输入电压	Output Voltage 输出电压	Output Current 输出电流	效率 Efficiency		谐波 THD		功率因数 ( PF )	
				230Vac	277Vac	230Vac	277Vac	230Vdc	277Vac
DL-150W4A0-MPA-H	200~277 Vac 50/60Hz	20~38Vdc	4.0A	> 89%	> 88%	< 10%	< 13%	> 0.95	> 0.9
DL-150W2A7-MPA-H		32~58Vdc	2.7A	> 89%	> 88%	< 10%	< 13%	> 0.95	> 0.9

备注: 以上参数为上电 15 分钟内测得

## ■ ELECTRICAL SPECIFICATION 电气规格

### ◇Input Characteristics 输入特性

INPUT VOLTAGE RANGE 输入电压范围	200- 277Vac		
FREQUENCY RANGE 频率范围	47-63Hz		
POWER FACTOR 功率因数	>0.95 230Vac full load	230Vac 输入, 满负载时 PF>0.95	
THD 总谐波失真	<10% 230Vac full load	230Vac 输入, 满负载时 THD<10%	
INPUT MAX CURRENT 输入最大电流	< 1.2A 200Vac full load	200Vac 输入, 满负载时 $I_{in}$ <1.2A	
INRUSH CURRENT 突入电流	Cold Start 100A @230Vac 冷启动 ( 25°C ) 100A /230Vac		

### ◇Output Characteristics 输出特性

Model NO.型号	DL-150W4A0-MPA-H	DL-150W2A7-MPA-H
RATED CURRENT 额定电流 ( A )	4.0A	2.7A
CONSTANT CURRENT REGION 电流范围	3.5A~4.2A	2.5A~3.3A
VOLTAGE RANGE 电压范围 ( Vdc )	20~38Vdc	32~58Vdc
RATED POWER 额定功率	152W	156.6W
OVER VOLTAGE 过电压(Vdc)	45~49Vdc	65~72Vdc
EFFICIENCY 效率	> 89%@230Vac Full Load	> 89%@230Vac Full Load
RIPPLE OF THE OUTPUT CURRENT 输出电流纹波	<50%	
CURRENT TOLERANCE 电流精度	±5%	
LINE REGULATION 线性调整率	±5%	
LOAD REGULATION 负载调整率	±5%	
SETUP TIME 启动时间	<500ms @230Vac full load	

### ◇Protection 保护

OVER CURRENT (Typ.) 过载	95 ~ 105% Protection type : Constant current limiting, recovers automatically after fault condition is removed 保护模式:恒电流限制模式, 负载异常条件移除后可自动恢复
SHORT CIRCUIT 短路	Hiccup mode, recovers automatically after fault condition is removed 打嗝模式,异常条件移除后可自动恢复
OVER VOLTAGE 过电压	Protection mode: the product is in hiccup state, protect the product from damage, when the fault is ruled out, the power supply is normal 保护模式:产品处于打嗝状态,保护产品不受损伤,当故障排除,电源工作正常

### NOTE :

- 1) All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature.  
如未特别说明,所有规格参数均在 230Vac ( 50Hz ) 输入, 额定负载, 环境温度 25°C 的条件下进行测量
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.  
误差 : 包含设定误差、线性调整率和负载调整率。
- 3) Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications.  
恒流模式在额定输出电压 50%~100%情况下运行, 适用 LED 等相关产业

### ◇Environment 环境

WORKING TEMP. 工作温度	-30 ~ +55°C(Refer to "Derating Curve") -30 ~ +55°C (参考 减额曲线 )
WORKING HUMIDITY 工作湿度	20 ~ 95% RH non-condensing 20 ~ 95% RH,无冷凝
STORAGE TEMP, HUMIDITY 储存温度、湿度	-30~ +80°C, 10 ~ 95% RH
VIBRATION 耐振动	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes 10 ~ 500Hz, 5G 12 分钟/周期, X、Y、Z 轴各 72 分钟
WITHSTAND VOLTAGE 耐压	I/P-O/P:1.5KVAC I/P-PE :1.5KVAC O/P-PE : 1.5KVAC
ISOLATION RESISTANCE 绝缘阻抗	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
MTBF	150K hrs min. MIL-HDBK-217F (ta=25°C)

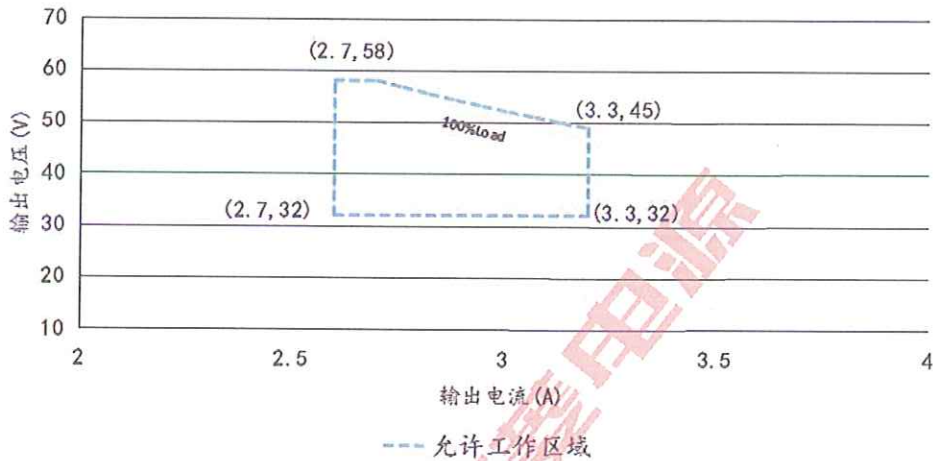
## ■ SAFETY & EMC 安全与电磁兼容

Safety 安全	/
EMC 电磁兼容	/
LIGHTNING SUGER 雷击浪涌	Differential Mode +/- 4 KV( 2 ohm ),Common Mode +/- 6 KV (12 ohm ) . ( IEC61000-4-5 2014 ) 雷击浪涌 L-N +/- 4KV( 2 ohm ) L,N-地 +/- 6 KV( 12 ohm ) (IEC61000-4-5 2014)
LEAKAGE CURRENT 漏电流	<0.75mA / 230Vac

## I-V 工作区域

### OUTPUT CURRENT VS OUTPUT VOLTAGE 输出电流 VS 输出电压 (DL-150W2A7-MPA-H)

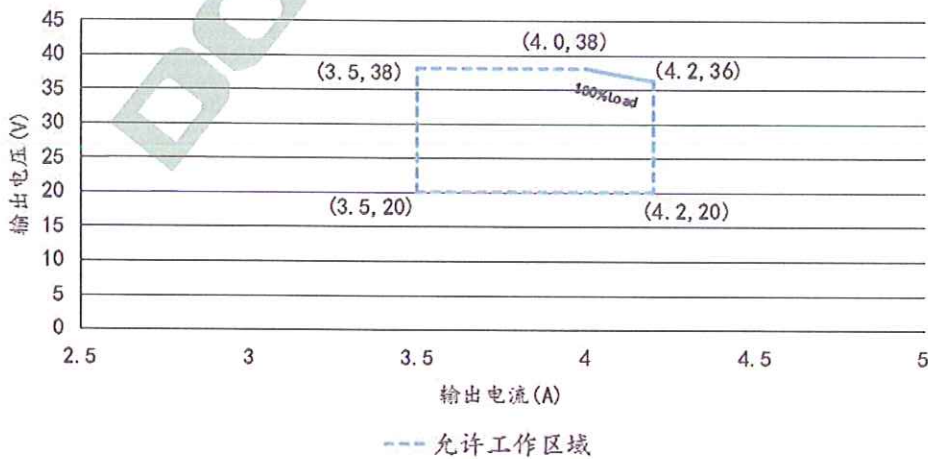
DL-150W2A7-MPA-H(输入200-277Vac时)输出电流VS输出电压



负载工作电压	32V	36V	39V	42V	45V	48V	54V	58V
电源电流 I <sub>o</sub> _MAX	3.3A	3.3A	3.3A	3.3A	3.3A	3.1A	2.7A	2.7A
电源功率 P <sub>o</sub> _MAX	105W	118W	129W	138W	148W	150W	150W	150W

### OUTPUT CURRENT VS OUTPUT VOLTAGE 输出电流 VS 输出电压 (DL-150W4A0-MPA-H)

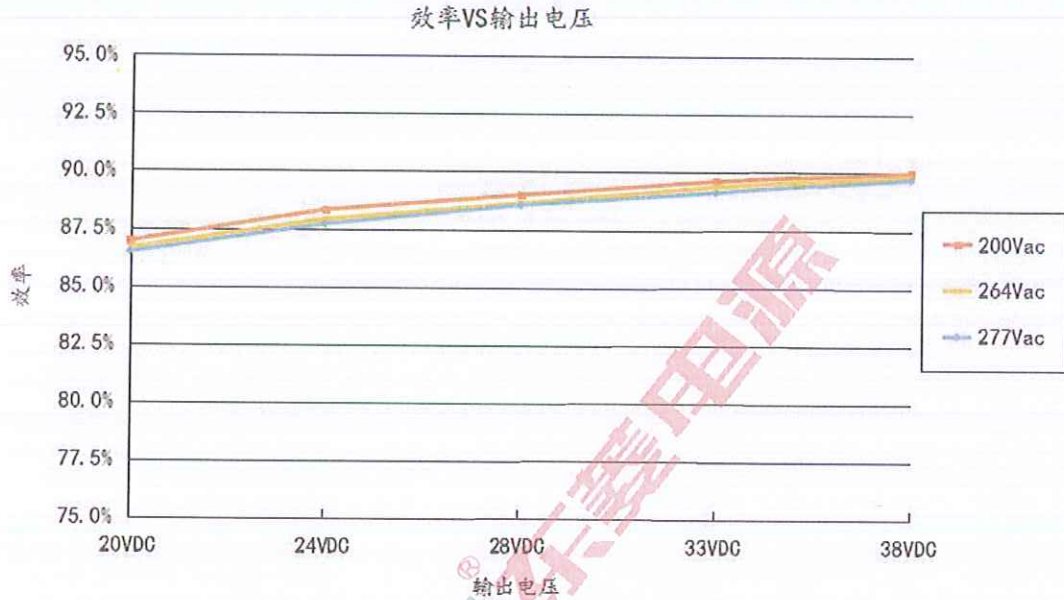
DL-150W4A0-MPA-H(输入200-277Vac时)输出电流VS输出电压



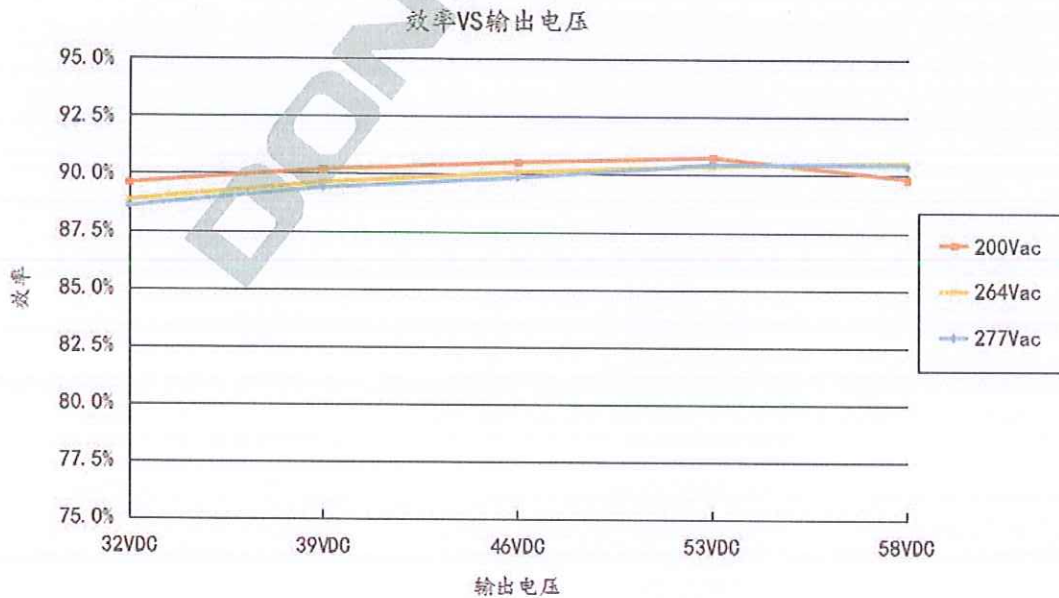
负载工作电压	20V	22V	24V	27V	30V	33V	36V	38V
电源电流 I <sub>o</sub> _MAX	4.2A	4.2A	4.2A	4.2A	4.2A	4.2A	4.2A	3.9A
电源功率 P <sub>o</sub> _MAX	84W	92W	100W	113W	126W	138W	150W	150W

效率曲线

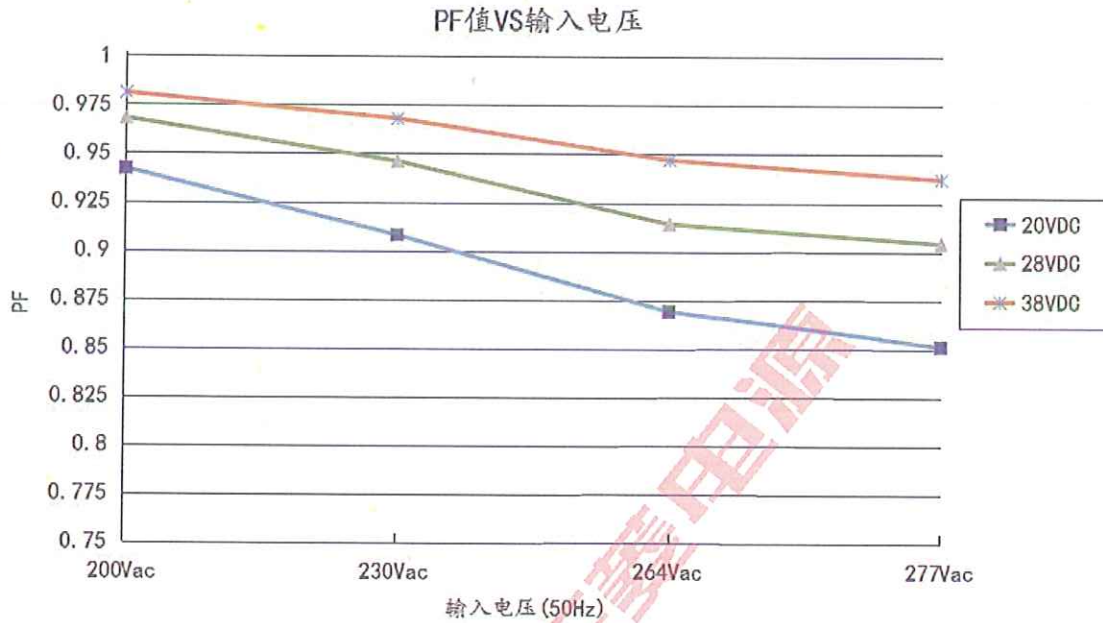
EFFICIENCY VS OUTPUT VOLTAGE 效率 VS 输出电压 (DL-150W4A0-MPA-H 热测)



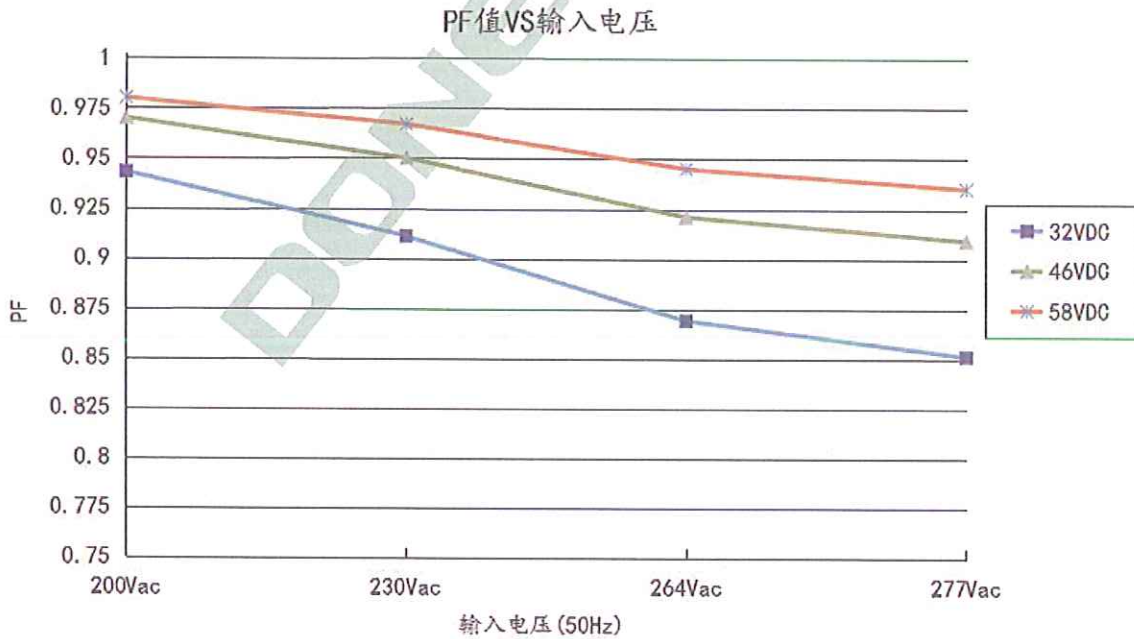
EFFICIENCY VS OUTPUT VOLTAGE 效率 VS 输出电压 (DL-150W2A7-MPA-H 热测)



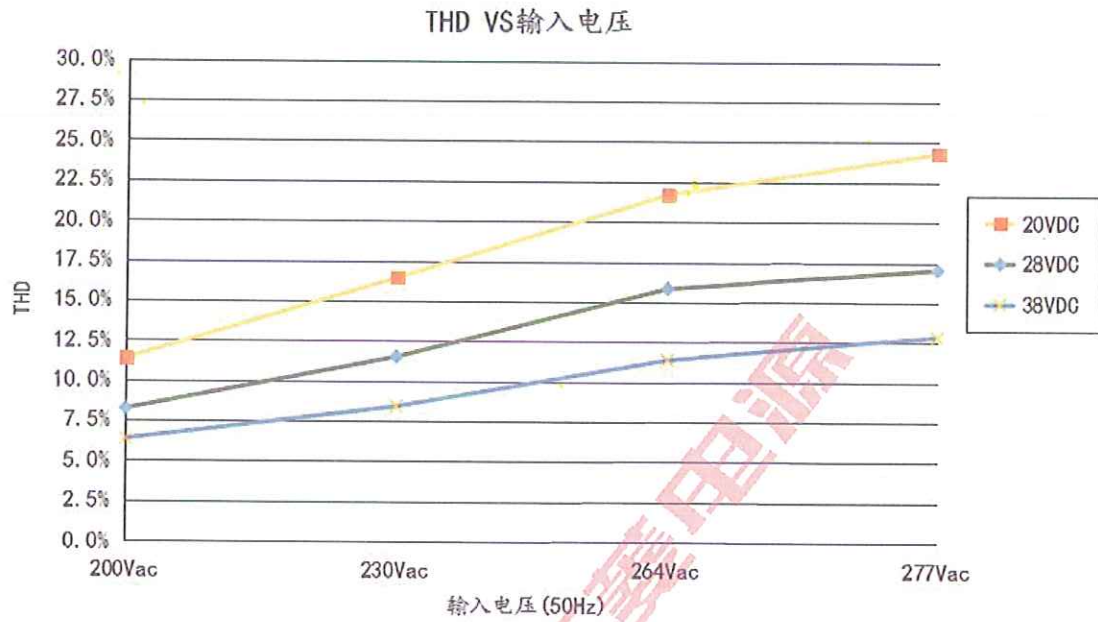
■ PF VS INPUT VOLTAGE PF 值 VS 输入电压 (DL-150W4A0-MPA-H 热测)



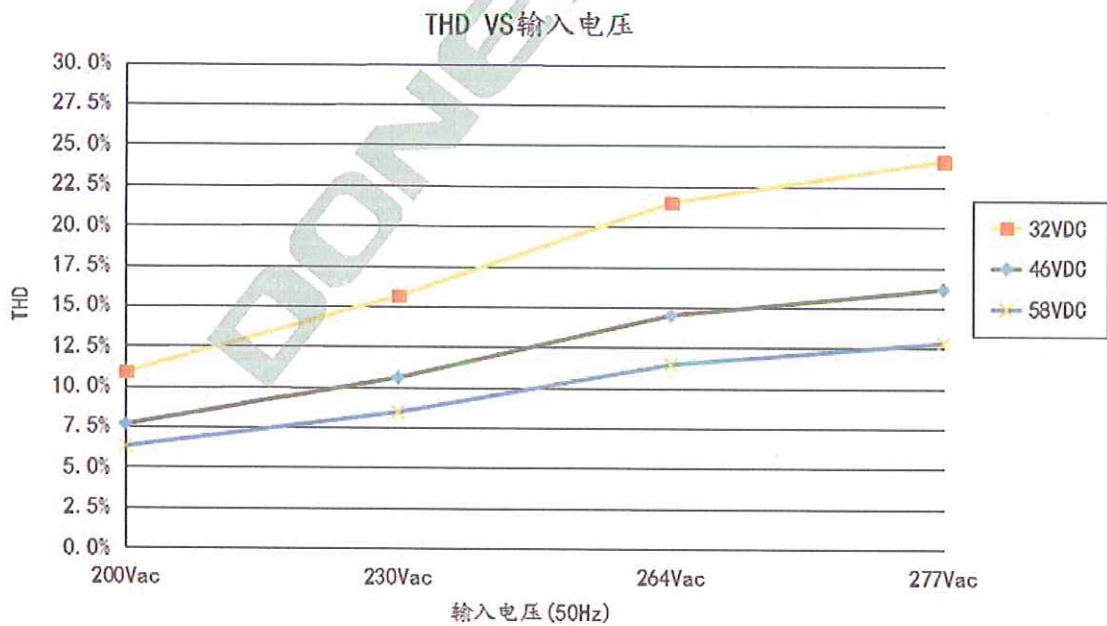
■ PF VS INPUT VOLTAGE PF 值 VS 输入电压 (DL-150W2A7-MPA-H 热测)



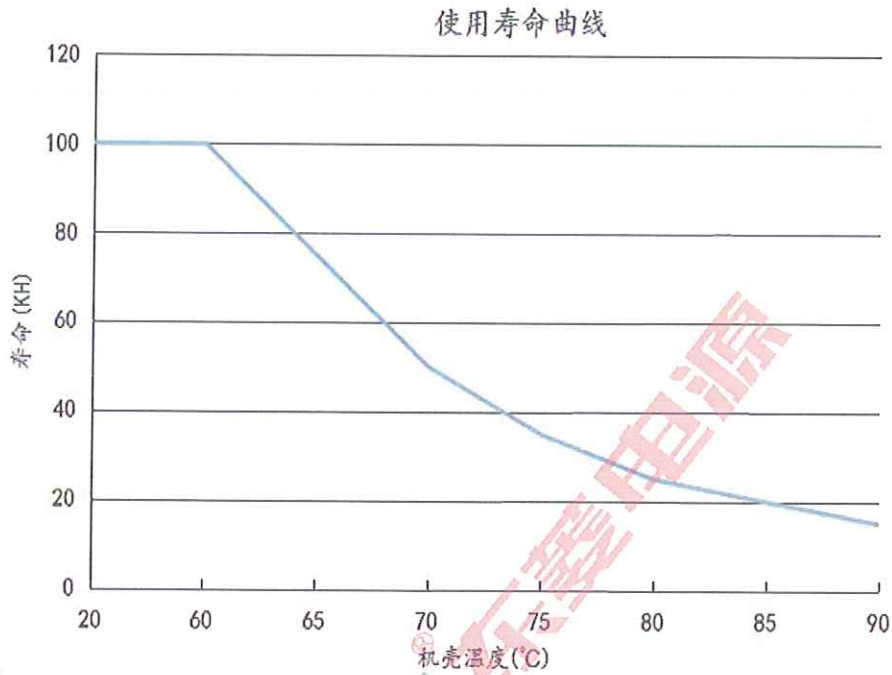
■ THD VS INPUT VOLTAGE 总谐波失真 VS 输入电压 (DL-150W4A0-MPA-H 热测)



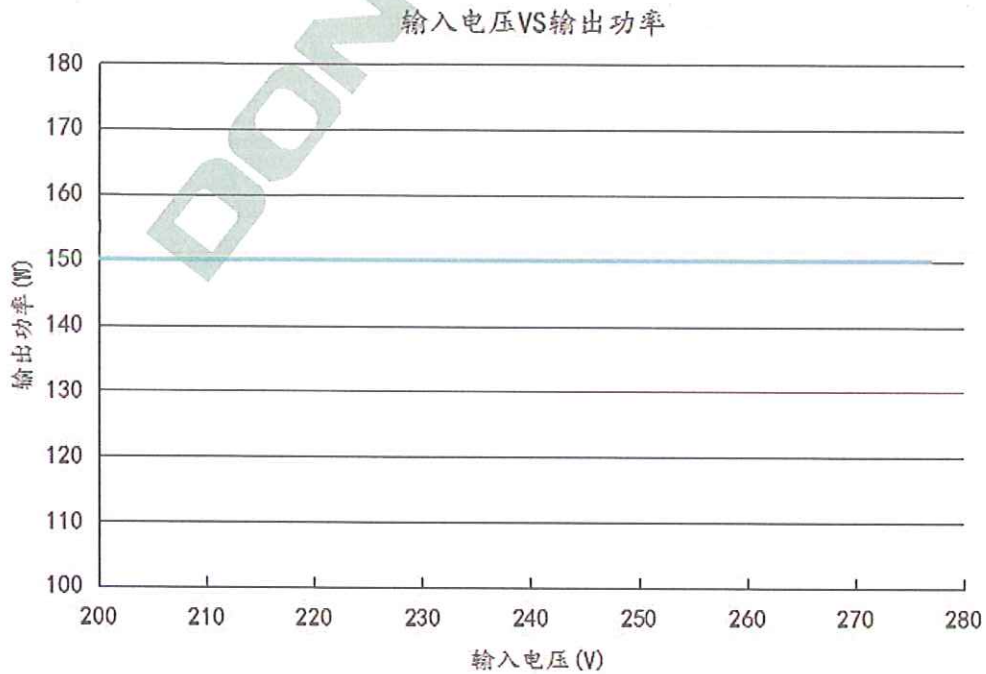
■ THD VS INPUT VOLTAGE 总谐波失真 VS 输入电压 (DL-150W2A7-MPA-H 热测)



■ TYPICAL LIFETIME 使用寿命曲线 (DL-150W-MPA-H)



■ INPUT VOLTAGE VS OUTPUT POWER 输入电压 VS 输出功率 (DL-150W-MPA-H)

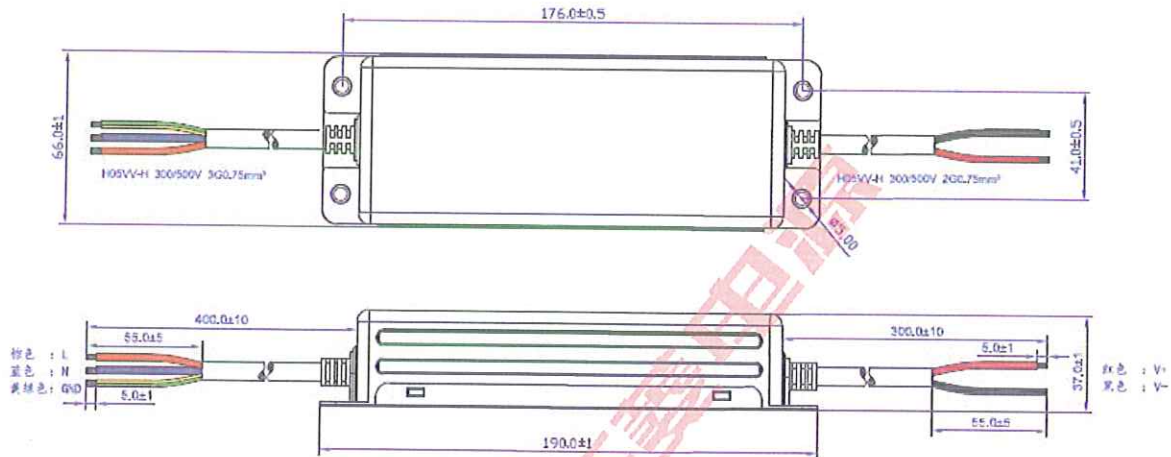


## MECHANICAL SPECIFICATION 机械尺寸图

DIMENSION 尺寸 (mm)	L190*W66*H37
-------------------	--------------

Case No.机壳型号 : A150-006

Unit 单位:mm



## LABELLING 标签

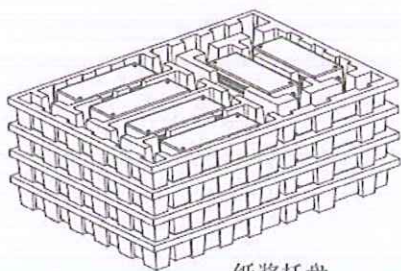
<p>DL-150W4A0-MPA-H</p>	<p><b>DONE</b>® MODEL:DL-150W4A0-MPA-H Constant Current LED Driver Power Factor ≥0.95</p> <p><b>SELV</b> </p> <p>INPUT: 200-277V ~ 1.2A 50/60Hz OUTPUT: 20-38V = 4.0A (3.5~4.2A Adj.) P rated: Max. 152.0W MAX. VOLTAGE: 49V = (NO LOAD)</p> <p>INPUT:  ○ ACL...Brown ○ ACN...Blue ○ ...Yellow/Green</p> <p>OUTPUT:  +V...Red -V...Black</p> <p>IP67 </p> <p>MADE IN CHINA Ci</p> <p>MFRS: ZHONGSHAN DONE LIGHTING TECHNOLOGY CO., LTD. ADDRESS: No. 3-2 of Kanglong 3rd Road, Henglan Town, Zhongshan, Guangdong 526478 P.R. China</p> <p>ta: 55°C tc: 90°C</p>
<p>DL-150W2A7-MPA-H</p>	<p><b>DONE</b>® MODEL:DL-150W2A7-MPA-H Constant Current LED Driver Power Factor ≥0.95</p> <p><b>SELV</b> </p> <p>INPUT: 200-277V ~ 1.2A 50/60Hz OUTPUT: 32-58V = 2.7A (2.5~3.3A Adj.) P rated: Max. 156.6W MAX. VOLTAGE: 72V = (NO LOAD)</p> <p>INPUT:  ○ ACL...Brown ○ ACN...Blue ○ ...Yellow/Green</p> <p>OUTPUT:  +V...Red -V...Black</p> <p>IP67 </p> <p>MADE IN CHINA Ci</p> <p>MFRS: ZHONGSHAN DONE LIGHTING TECHNOLOGY CO., LTD. ADDRESS: No. 3-2 of Kanglong 3rd Road, Henglan Town, Zhongshan, Guangdong 526478 P.R. China</p> <p>ta: 55°C tc: 90°C</p>

## MONOMER WEIGHT 单体重量

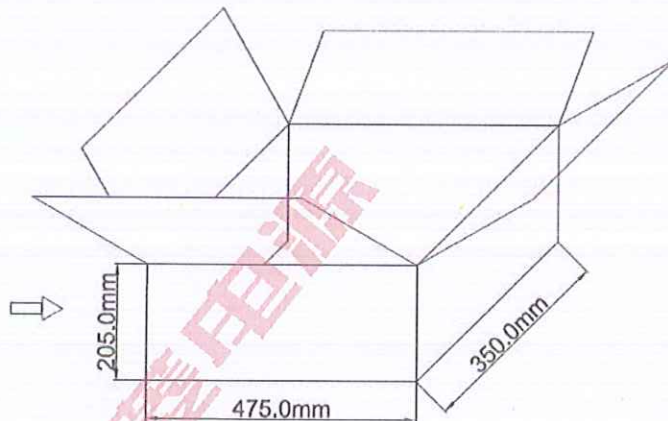
MONOMER WEIGHT 单体重量	760g
---------------------	------

## THE PACKING WAY 包装方式

PACKING 包装 (mm)	L475*W350*H205
-----------------	----------------



纸浆托盘  
40.01.01.00038



纸箱  
40.01.01.00042

注：一箱4层，每层6PCS  
每箱净重：18.2KG  
每箱毛重：19.8KG

