



TTC LED TECHNOLOGY (THAILAND) CO.,LTD.

Office : 5/444 Moo 3, Soi Ramintra 14 Rd., Chorakheabue ,Ladprao ,Bangkok 10230 Thailand.

Tel : +66(2) 362-4107 ,362-4133 Fax : +66(2) 362-4167

Factory : 302 Moo 5,Tambon Bansong ,Amphur Panomsakarm ,Chacheangsao 24120 Thailand.

Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-0664

Website : www.ttcled.co.th



CERTIFICATE No. 136930/A



con./ISO 9001:2000
Qms 03131/735

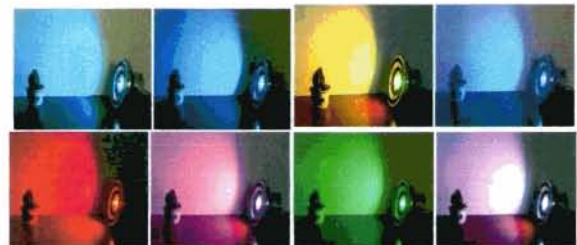
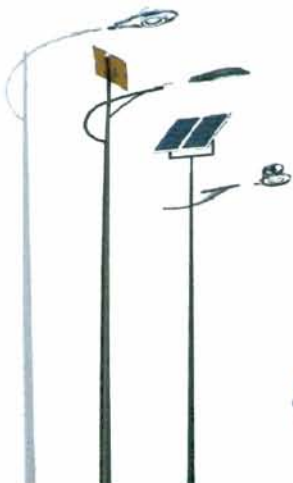
KEMA



TTC LED High Power Lighting Specifications LED SMD Technology



- LED In Door Lamp
- LED Out Door Lamp
- SOLAR LED Street Lamp
- TTC LED Soft Light Panel
- TTC LED Tube T5, T8
- LED Spot Light WRI-AR111 9W
- LED Spot Light MR-16, PAR30, PAR38
- LED High Power High - Bay
- LED Explosion Proof
- LED Down Light
- LED RGB Lamp
- LED Garden Light
- LED Street Lamp
- LED Panel
- LED RGB Underwater Full Color



Jan.2012

TTC LED TECHNOLOGY (THAILAND) CO., LTD.



COMPANY PROFILE

TTC LED Technology (Thailand) Co.,Ltd was established on August 5th 2009, by Mr.Narin Sinlaparak and Mr.Elgan Voigtmann with a registered capital of 50 million Baht. The company is a joint venture between Thailand and England. The head office was located on 5/444 , Moo 3, Soi Ramintra14, Ramintra Road, Chorakhaebua, Ladprao, Bangkok 10230 and its manufacturing is in Phanomsarakam, Chachoengsao. The company has an objective to produce high-power LED street lamp, LED solar street lamp , LED bulb, LED tube and LED spotlight for supply to local and overseas market. Our products LED Lighting,

"Think Earth, Love nature, and Save Energy".

We are the first manufacturer of Thailand in LED sector and has promoted by BOI investment. In addition to its achievement for quality management certification from international recognized institutions CE and TISI from Thailand. The company has an annual production capacity of 3,000,000 units to meet an increasing demand from both domestic and overseas customers. Our future in the high-power LED street lamp and LED bulb market is looking as the quality and service we provide.

Factory area 12,000 m² Product capacity 3,000,000 per year



NEW LED LAMP TECHNOLOGY

ปัจจุบันหลอด LED มีผู้ผลิตหลายราย ซึ่งนำเข้ามาจากต่างประเทศ เช่น จีน, เกาหลี, ไต้หวันฯ ซึ่งเป็นผลิตภัณฑ์ที่ไม่ได้ผ่านการรับรองจาก กระทรวงอุตสาหกรรม แม้แต่รายเดียว แต่ผลิตภัณฑ์ ของทาง บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด เป็นบริษัทที่ได้รับรองมาตรฐาน มอก. จากกระทรวงอุตสาหกรรม เพียงรายแรก และรายเดียว ของประเทศไทย

บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด เป็นบริษัทร่วมทุน กับบริษัท LED TECH จากประเทศอังกฤษ สำนักงานใหญ่ อยู่ที่ ซ. รามอินทรา 14 โรงงานผลิตอยู่ที่ จ.ฉะเชิงเทรา ผลิตหลอด LED (Light Emitting Diode) แบบอิเล็กทรอนิกส์ เป็นรายแรกของประเทศไทย และบริหารงาน โดยคนไทย มีกำลังการผลิต 3 ล้านหลอด ต่อปีได้รับการรับรองมาตรฐาน มอก.1955-2542 ผู้ผลิต (บริษัทส่องสว่าง และบริษัท ที่คล้ายกัน : จิตจำกัดสัญญาณวิทยุ) และได้รับการส่งเสริม BOI

NEW LED LAMP TECHNOLOGY

เทคโนโลยี และคุณสมบัติของหลอด LED

1. ลดมลภาวะโลกร้อน เช่นไม่มีความร้อน ไม่มีสารปรอท และไม่มีคาร์บอน
2. ประหยัดพลังงาน 60% (เปรียบเทียบกับหลอดทั่วไปที่ใช้ในปัจจุบัน)
3. หลอด LED TUBE 18 วัตต์ ซึ่งไม่ต้องใช้บัลลาสต์ และสตาร์ทเตอร์
4. อายุการใช้งาน 50,000 ชั่วโมง หรือประมาณ 11 ปี (ใช้งาน 12 ชั่วโมง ต่อวัน)
5. คืนทุนในระยะเวลา 2 ปี เมื่อเทียบกับหลอดที่ใช้อยู่ในปัจจุบัน และหลังจากนั้น ประหยัดพลังงาน 60%
6. ประหยัดแรงงาน และไม่มีการบำรุงรักษา
7. สามารถเข้าร่วมโครงการ Carbon Credit
8. ลดค่าใช้จ่ายในการลงทุนของสายไฟ และหม้อแปลง (New Project) เนื่องจาก LED ใช้กำลังไฟฟ้า Watt ต่ำ แต่มีประสิทธิภาพสูง
9. รับประกันการใช้งาน 3 ปี



TTC LED TECHNOLOGY (THAILAND) CO.,LTD.

Office : 5/444 Moo 3, Soi Ramintra 14 Rd., Chorakheabue ,Ladprao ,Bangkok 10230 Thailand.
 Tel : +66(2) 362-4107 ,362-4133 Fax : +66(2) 362-4167
 Factory : 302 Moo 5,Tambon Bansong ,Amphur Panomsakarm ,Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-0664
 Website : www.ttcled.co.th



KEMA



LED LAMP หลอดนวัตกรรมใหม่ สำหรับผู้ที่ต้องการประหยัดค่าไฟฟ้า

ประหยัดพลังงาน 60%

อายุการใช้งาน 50,000 ชั่วโมง

รับประกัน 3 ปี

TTC LED SAVING LAMP (OUT DOOR)

TTC LED STREET LAMP 50W, 90W, 120W, 150W



TTC LED TUNNEL LAMP , HIGH BAY LAMP



TTC LED SPOT LIGHT 90W, 120W, 150W, 200W



TTC LED MOVEABLE WORKING LAMP SERIES



TTC LED SAVING LAMP (INDOOR)

TTC LED BULB 4W, 7W, 9W



GOLF BALL

CANDLE

LIGHT BULB

TTC LED TUBE



TUBE T8 18W, 20W

TUBE T5 10W

TTC LED SPOTLIGHT



PAR30 12W

PAR38 18W

GU10

MR16

TTC LED DOWN LIGHT 4W, 6W, 12W, 18W



ROUND , SQUARE DOWN LIGHT

TTC LED SOFT PANEL RGB LAMP HIGH POWER



ได้รับมาตรฐานอุตสาหกรรม (มอก.1955-2542)

ผลิตภายในประเทศไทย

มอก. 1955-2542



LED SAVING LAMP BULB (IN DOOR)



GOLF BALL



CANDLE



LIGHT BULB



SPOTLIGHT GU10 , MR16



PAR 30



PAR 38



TUBE T8



TUBE T5



ROUND , SQUARE DOWN LIGHT

LED SAVING LAMP (OUT DOOR)

LED STREET LAMP



LED TUNNEL LAMP



SPOT LIGHT



LED MOVEABLE WORKING LAMP SERIES





MOBILE CONTAINER & TELECOM TOWER



WATTHOUR METER



INSULATION PANEL (CLEAN ROOM & COLD ROOM)



construction



THAI TELE-CONTAINERS CO., LTD.
TTC TECHNOLOGY & CONSTRUCTION CO., LTD.
NPK ENGINEERING & SERVICE CO., LTD.
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/392,5/444 Soi Ramintra 14,Ramintra Road,
Chorakheue,Ladprao,Bangkok 10230 Thailand
Tel : 660 2362 4107,2362 4133 Fax : 660 2362 4167

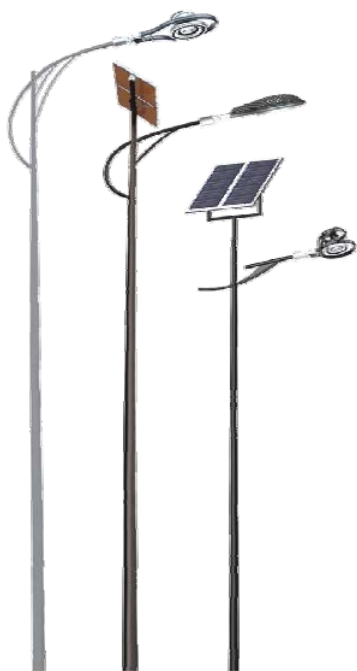
Factory : 302 Moo 5,Tambonsong,Amphur Phanomsarakam,
Chacheangsao 24120 Thailand.

Tel : 660 3852 0655-9 Fax : 660 3852 0664

Website: www.ttcled.com E-mail : admin@ttcled.com

Website: www.ttcgroups.com E-mail : ttc@ttcgroups.com

LED STREET LAMP (OUT DOOR , IN DOOR)



Model ML018-20W
(80W/20W)



Model ML010-75W
(200W/75W)



Model ML015-90W
(250W/90W)



Model ML009-150W
(400W/150W)

LED SAVING LAMP BULB (IN DOOR)



Golf Ball lamp
Model 27SMD LED 4W/40W



Candle Lamp
Model 27SMD LED 4W/40W



Light Bulb
Model 45SMD LED 5W/60W



Light Bulb
Model HI-LB20C-8W/80W

LED SPOT LIGHT (IN DOOR)



Model HI-GU10-AC230V



Model HI-MR16-AC12V

LED SPOT LIGHT



LED TUBE (IN DOOR)



Model 5250 T8 LED TUBE



Model 5251 T8 LED TUBE



แบบ มอ. ๔

ใบอนุญาตที่ (2) ท 5935-1410/1955

ใบอนุญาต

ทำผลิตภัณฑ์อุตสาหกรรมที่มีพระราชกฤษฎีกากำหนดให้ต้องเป็นไปตามมาตรฐาน

อาศัยอำนาจตามความในพระราชบัญญัติมาตรฐานผลิตภัณฑ์อุตสาหกรรม พ.ศ. ๒๕๑๑

คณะกรรมการมาตรฐานผลิตภัณฑ์อุตสาหกรรม

ออกใบอนุญาตฉบับนี้ให้

บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด

ทำผลิตภัณฑ์อุตสาหกรรม.....หลอดไฟฟ้า LED

.....ตามรายละเอียดแนบท้ายใบอนุญาต
ที่ทำถูกต้องตามมาตรฐานผลิตภัณฑ์อุตสาหกรรม.....บริษัท ส่องสว่างและบริษัทที่คล้ายกัน : ชิดจำกัดสัญญาฉบับ
วิทย์.....เลขที่.....มอก. 1955-2542

เครื่องหมายการค้า.....
ทำที่โรงงานชื่อ.....บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด
ตั้งอยู่ที่อาคารเลขที่.....302.....ตรอก/ซอย.....
ถนน.....พนมสารคาม-ปราจีนบุรี หมู่ที่.....5.....ตำบล/แขวง.....บ้านช่อง.....อำเภอ/เขต.....พนมสารคาม
จังหวัด.....ฉะเชิงเทรา.....ทะเบียนโรงงานเลขที่.....จ 3 - 73 - 1/53 ฉช

ทั้งนี้ ต้องปฏิบัติตามเงื่อนไขในการอนุญาตที่คณะกรรมการกำหนด

ออกให้ ณ วันที่.....15 มิ.ย. 2553.....พ.ศ.....

(นางรัตนกรณ์ จิงสงวนสิทธิ์)

เลขาธิการสำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม

สำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม

กระทรวงอุตสาหกรรม


เลขประจำตัวผู้เสียภาษีอากร

ผู้รับใบอนุญาต 3033565959

กำหนด

ผู้รับใบอนุญาตต้องปฏิบัติตามเงื่อนไขที่คณะกรรมการกำหนด

รายละเอียดแนบท้ายใบอนุญาตที่.....(2) ท 5935-1410/1955

รายการที่	รายละเอียดของผลิตภัณฑ์อุตสาหกรรม ที่ได้รับอนุญาต (โดยระบุประเภท/ แบบ/ ขนาด/ ชั้น/ และอื่นๆ)	พนักงานเจ้าหน้าที่	หมายเหตุ
1	หลอดไฟฟ้า LED ที่มีอุปกรณ์ขับหลอดในตัว ขั้วหลอดแบบเกลียว E27 แรงดันไฟฟ้าที่กำหนด 220 โวลต์ ความถี่ที่กำหนด 50 เฮิร์ตซ์ กำลังไฟฟ้าที่กำหนด 4 วัตต์ แบบรุ่น Candle Lamp 27 SMD LED 4W/40W และ Golf Ball Lamp 27 SMD LED 4W/40W กำลังไฟฟ้าที่กำหนด 5 วัตต์ แบบรุ่น Light Bulb 45 SMD LED 5W/50W	 (นางรัชดา อิศระเสนารักษ์) ผู้อำนวยการสำนักบริหารมาตรฐาน 2	



ใบอนุญาตที่ (2) ท 5901-1406/1955

ใบอนุญาต

ทำผลิตภัณฑ์อุตสาหกรรมที่มีพระราชกฤษฎีกากำหนดให้ต้องเป็นไปตามมาตรฐาน

อาศัยอำนาจตามความในพระราชบัญญัติมาตรฐานผลิตภัณฑ์อุตสาหกรรม พ.ศ. ๒๕๑๑

คณะกรรมการมาตรฐานผลิตภัณฑ์อุตสาหกรรม

ออกใบอนุญาตฉบับนี้ให้

บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด

ทำผลิตภัณฑ์อุตสาหกรรม.....ดวงโคมไฟฟ้าสำหรับให้แสงสว่างบนถนน

.....ตามรายละเอียดแนบท้ายใบอนุญาต
ที่ทำถูกต้องตามมาตรฐานผลิตภัณฑ์อุตสาหกรรม.....บริษัท ส่องสว่างและบริษัทที่คล้ายกัน : ชิดจำกัดสัญญาฉบับ
วิทยุ.....เลขที่.....มอก. 1955-2542

เครื่องหมายการค้า.....

ทำที่โรงงานชื่อ.....บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด

ตั้งอยู่ที่อาคารเลขที่.....302.....ตrock/ซอย.....

ถนน.....พนมสารคาม-ปราจีนบุรี หมู่ที่ 5 ตำบล/แขวง.....บ้านช่อง.....อำเภอ/เขต.....พนมสารคาม

จังหวัด.....ฉะเชิงเทรา.....ทะเบียนโรงงานเลขที่.....จ 3 - 73 - 1/53 ฉช

ทั้งนี้ ต้องปฏิบัติตามเงื่อนไขในการอนุญาตที่คณะกรรมการกำหนด

ออกให้ ณ วันที่.....- 2 มิ.ย. 2553.....พ.ศ.....

(นางรัตนกรณ จิงสงวนสิทธิ์)

เลขาธิการสำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม

สำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม

กระทรวงอุตสาหกรรม


เลขประจำตัวผู้เสียภาษีอากร

ผู้รับใบอนุญาต 3033565959

กำหนด

ผู้รับใบอนุญาตต้องปฏิบัติตามเงื่อนไขที่คณะกรรมการกำหนด

รายละเอียดแนบท้ายใบอนุญาตที่.....(2) ท 5901-1406/1955

รายการที่	รายละเอียดของผลิตภัณฑ์อุตสาหกรรม ที่ได้รับอนุญาต (โดยระบุประเภท/ แบบ/ ขนาด/ ชั้น/ และอื่นๆ)	พนักงานเจ้าหน้าที่	หมายเหตุ
1	<p>ประเภท 0 ชนิด IP 67 แบบที่ 1 มีอุปกรณ์ขับหลอด แรงดันไฟฟ้าที่กำหนด 220 โวลต์ ความถี่ที่กำหนด 50 เฮิร์ตซ์ ใช้กับหลอด LED</p> <p>กำลังไฟฟ้ที่กำหนด 1x20 วัตต์ แบบรุ่น ML018-20W/80W</p> <p>กำลังไฟฟ้ที่กำหนด 1x90 วัตต์ แบบรุ่น ML015-90W/250W</p> <p>กำลังไฟฟ้ที่กำหนด 2x75 วัตต์ แบบรุ่น ML009-150W/400W</p>	 <p>(นายอาคม กุศลานนท์) นักวิชาการมาตรฐานชำนาญการพิเศษ รักษาราชการแทน ผู้อำนวยการสำนักบริหารมาตรฐาน 2</p>	



ใบอนุญาตที่ (2) ท 5984-1415/1955

ใบอนุญาต

ทำผลิตภัณฑ์อุตสาหกรรมที่มีพระราชกฤษฎีกากำหนดให้ต้องเป็นไปตามมาตรฐาน

อาศัยอำนาจตามความในพระราชบัญญัติมาตรฐานผลิตภัณฑ์อุตสาหกรรม พ.ศ. ๒๕๑๑

คณะกรรมการมาตรฐานผลิตภัณฑ์อุตสาหกรรม

ออกใบอนุญาตฉบับนี้ให้

บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด

ทำผลิตภัณฑ์อุตสาหกรรม.....หลอดไฟฟ้า LED

.....ตามรายละเอียดแนบท้ายใบอนุญาต
ที่ทำถูกต้องตามมาตรฐานผลิตภัณฑ์อุตสาหกรรม.....บริษัท ส่องสว่างและบริษัทที่คล้ายกัน : ชิดจำกัดสัญญาฉบับ
วิทย์.....เลขที่.....มอก. 1955-2542

เครื่องหมายการค้า.....

ทำที่โรงงานชื่อ.....บริษัท ทีทีซี แอลอีดี เทคโนโลยี (ประเทศไทย) จำกัด

ตั้งอยู่ที่อาคารเลขที่.....302.....ตรอก/ซอย.....

ถนน.....พนมสารคาม-ปราจีนบุรี หมู่ที่.....5 ตำบล/แขวง.....บ้านช่อง.....อำเภอ/เขต.....พนมสารคาม

จังหวัด.....ฉะเชิงเทรา.....ทะเบียนโรงงานเลขที่.....จ 3 - 73 - 1/53 ฉช

ทั้งนี้ ต้องปฏิบัติตามเงื่อนไขในการอนุญาตที่คณะกรรมการกำหนด

ออกให้ ณ วันที่.....9 ก.ย. 2553.....พ.ศ.....

(นางรศนาภรณ์ จิตสงวนสิทธิ์)

เลขาธิการสำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม

สำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม


กระทรวงอุตสาหกรรม

เลขประจำตัวผู้เสียภาษีอากร
ผู้รับใบอนุญาต 3033565959

คำเตือน

ผู้รับใบอนุญาตต้องปฏิบัติตามเงื่อนไขที่คณะกรรมการกำหนด

รายละเอียดแนบท้ายใบอนุญาตที่.....(2) ท 5984-1415/1955

รายการที่	รายละเอียดของผลิตภัณฑ์อุตสาหกรรม ที่ได้รับอนุญาต (โดยระบุประเภท/ แบบ/ ขนาด/ ชั้น/ และอื่นๆ)	พนักงานเจ้าหน้าที่	หมายเหตุ
1	หลอดไฟฟ้า LED ที่มีอุปกรณ์ขับหลอดในตัว ขั้วหลอดแบบ G5 แรงดันไฟฟ้าที่กำหนด 220 โวลต์ ความถี่ที่กำหนด 50 เฮิร์ตซ์ กำลังไฟฟ้าที่กำหนด 10 วัตต์ แบบรุ่น BNL-RG-10WS-30T5 กำลังไฟฟ้าที่กำหนด 18 วัตต์ แบบรุ่น BNL-RG-18WS-60T5	 (นางรัชดา อิศระเสนารักษ์) ผู้อำนวยการสำนักบริหารมาตรฐาน 2	
2	หลอดไฟฟ้า LED ที่มีอุปกรณ์ขับหลอดในตัว ขั้วหลอดแบบ G13 แรงดันไฟฟ้าที่กำหนด 220 โวลต์ ความถี่ที่กำหนด 50 เฮิร์ตซ์ กำลังไฟฟ้าที่กำหนด 10 วัตต์ แบบรุ่น 5250SMD T8 LED TUBE กำลังไฟฟ้าที่กำหนด 18 วัตต์ แบบรุ่น 5251SMD T8 LED TUBE		



VERIFICATION OF LED CONFORMITY

Registration No.
089

Applicant : TTC LED TECHNOLOGY (THAILAND) CO.,LTD.
5 / 444 Moo 3 Soi Ramintra Rd.,Chorakheue ,Ladprao ,Bangkok 10230 Thailand.

Is authorized to
provide the product
mentioned below with
the mark as illustrated



Manufacturer : TTC LED TECHNOLOGY (THAILAND) CO.,LTD.
302 Moo 5 ,Tambol Bangsong ,Amphur Panomsakram ,Chachoengsao 24120 Thailand.

Product Description : LED LAMP
Model No. : ML018-20W ,ML018-30W ,ML018-50W ,ML010-75W ,ML015-90W ,ML015-120W
ML015-150W ,ML009-150W

Test Standard : EN 60598-1:2004+A1:2006; EN 60598-2-1:1989

Test Report Number : UTS

Conclusion of assessment:

We hereby confirm that the technical construction file and manufacturing, inspection and testing processes for above mentioned equipment comply with the essential safety requirements of:

Low Voltage Directive 2006/95/EC

Note: This certificate is only valid for the equipment and configuration described, in conjunction with the test data detailed above.

Name: Jason. Ma
Position: General Manager

Third Party Authority
Stamp:

Signature: *Jason. Ma*

Date: August 2010

“Think of Earth, Love Nature and saving Energy” is our slogan to run the business.

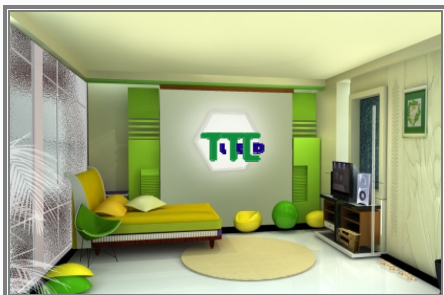
We are the first manufacturer of Thailand in LED sector and has promote by BOI investment. In addition, we achieve quality management certificate from international recognized institutions CE (European Standard) and TISI (Thailand Standard) with high production capacity to meet increasing demand of both domestic and overseas customers.

Now, we are proud to offer you our latest innovative product.

Our new products adopt LED as light source with separate safe power supply. Giving full consideration to the product performance with the perfect combination its appearance, the panel light is cover by aluminum, alloy with stealth thermal cavity for perfect heat dissipation, we solve the relate problem of LED optical attenuation caused by increasing temperature. Our reliable quality and energy saving panel light is widely equip in house, metro, tunnel, shopping mall, office, corridor, entertainment pub, etc.

With the great trend of green product, our LED soft panel light has enjoyed great popularity in Europe, America, Southeast Asia and Thailand domestic market for both nice looking design and reliable quality. Our product is certificate with CE (European Standard) and our panel light technology is patented in Thailand as well.

We have a strong team engaging in R&D, manufacturing and top service for marketing, so that our products maintain competitive advantage.



TTC-LED Soft Panel Light - Saving Energy

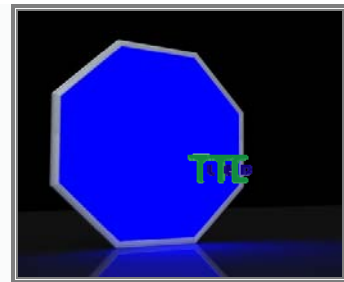
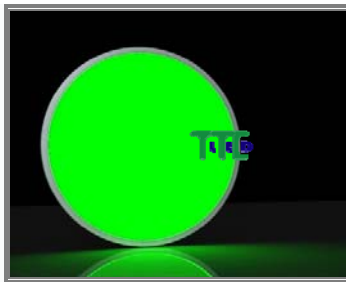
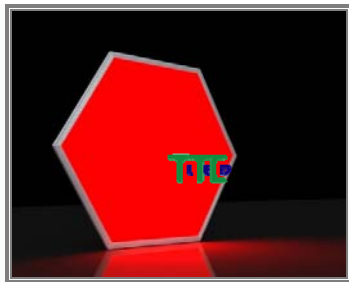
TTC LED Ultra Slim Panels



LED Panel Products

All panel lighting, high brightness, no glare, soft light but does not dazzling, no radiation. Power can be on in 0.01 second without twinkling and noise.

Top electronic circuit design with high energy-efficient performance. The power consumption rate is just one twentieth of the incandescent lamp, about one second of existing energy-saving light with same luminance performance.



RGB LED Soft Panel, Multi-Color Lighting



LED Soft Square Shape Panel



LED Soft Panel, Art Décor, Bar Shape

TTC-LED Ultra slim-LED-Panels

The ultra slim led panels shine in a homogeneous brightness in white or warm white (depending on the version).

They are perfectly suited for coffered ceilings, but also as elegant room design elements directly on the wall or ceiling.

The panels do not become hot and do not require a cooling element.

Dimmable and removable (remote control included); these ultra slim LED panels do not lack any comfort.

The brightness of its top edition corresponds to that of approx. 4-50-Watt bulbs and is therefore perfectly suitable for the use in your living room, office, reception etc.

The homogeneously illuminated space is almost completely glare-free and looks very modern.

Thanks to the efficient and durable light-emitting diodes you save nerves, current and money.

With only one remote control you can dim or turn on or off several panels by connecting the power supply units enclosed in the delivery (they are placed externally) with the master slave function.

Benefits

- no heat
- high brightness, no glare
- soft light
- without twinkling and noise
- no cooling required
- ultra slim construction (height only 14mm)
- dimmable
- removable (incl. remote control)
- holder eyelets for easy installation
- homogenous illumination
- available in white and warm white
- filigree aluminum frame
- directly to 230V
- high energy efficient performance
- RGB LED color and multi-colors light
- long life product, no maintenance

Measures

Ultra slim-LED-Panel: available in various shapes as square, bar, circle and various sizes.

Picture of our LED Panel in different objects



Office



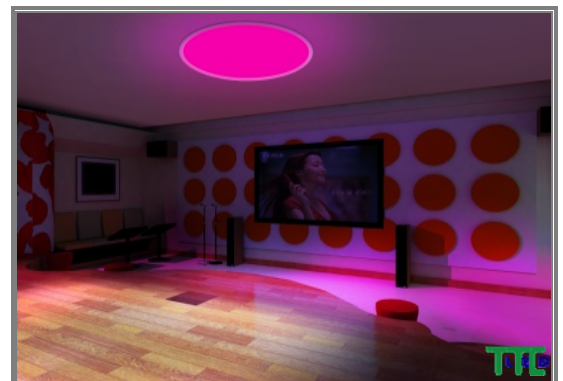
Hotel & Bed Room



Bath Room



Living and Study Room



Entertainment

TTC LED Ultra Slim Panels



Home Decore



Art Style



Building, Hotel Corridor



Restaurant



Tunnel

TTC-LED Soft Panel Light - Saving Energy

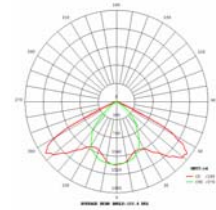
STREET LAMP



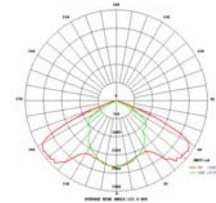
Application : Road , squares plant communities and open space for outdoor lighting



**Model : ML018-20W
(20W/80W)**



**Model : ML015-75W
(75W/200W)**



Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-120	90	2700-6500	90°-122°	≥ 80	IP 67

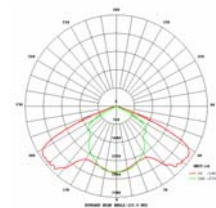
STREET LAMP



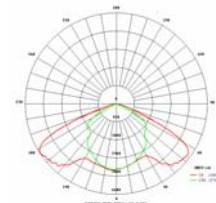
Application : Road , squares plant communities and open space for outdoor lighting



**Model : ML015-90W
(90W/250W)**



**Model : ML009-150W
(150W/400W)**

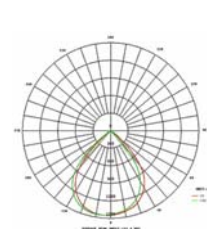
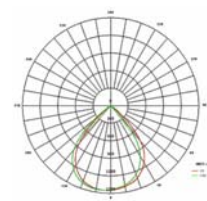


Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-120	90	2700-6500	90°-122°	≥ 80	IP 67

CEILING LAMP SERIES



Application : Factory work shops ,military establishments

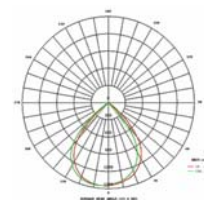
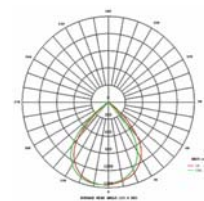


Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-120	90	2700-6500	95°	≥ 80	IP 67

CEILING LAMP SERIES



Application : Shopping mall , Stadium ,Meeting Room

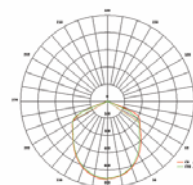
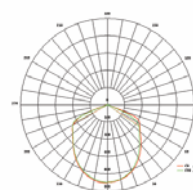


Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-120	90	2700-6500	95°	≥ 80	IP 67

SPOTLIGHT SERIES



**Application : Architectural lighting ,
landscaping advertising, highway signs**

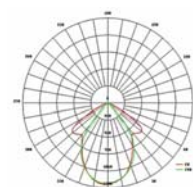
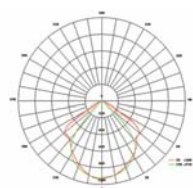


Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-120	90	2700-6500	60°,95°	≥ 80	IP 67

TUNNEL LAMP



**Application : Tunnels ,subway , and all
other underground structures**

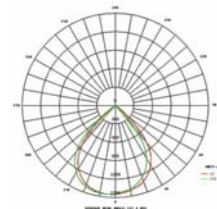
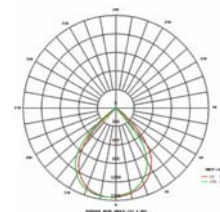


Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-120	90	2700-6500	80°-122°	≥ 80	IP 67

Explosion Proof Lamp



Application : Factory work shops ,military establishments ,gas and

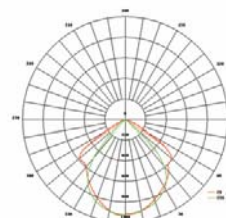
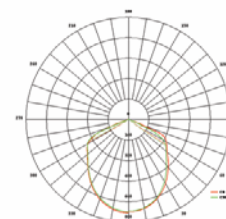


Input (V)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
DC 12~48 AC 85-265	20-120	90	2700-6500	95°	≥ 80	IP 67

MOVEABLE WORKING LAMP



Application : Emergency responders . Any area where high intensity portable lighting is important



Input (V)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
DC 12~48 AC 85-265	20-120	90	2700-6500	95°	≥ 80	IP 67

RGB LAMP SERIES



Application : Theater and stage light ,
landscape , special purpose advertising ,etc.



Input (VAC)	Power (W)	Luminous Efficacy (lm/W)	Color Temperature (K)	Angle	Color Rendering (Ra)	IP Protection
85-265	20-100	90	2700-6500	95°	≥ 80	IP 67

YARD LAMP SERIES



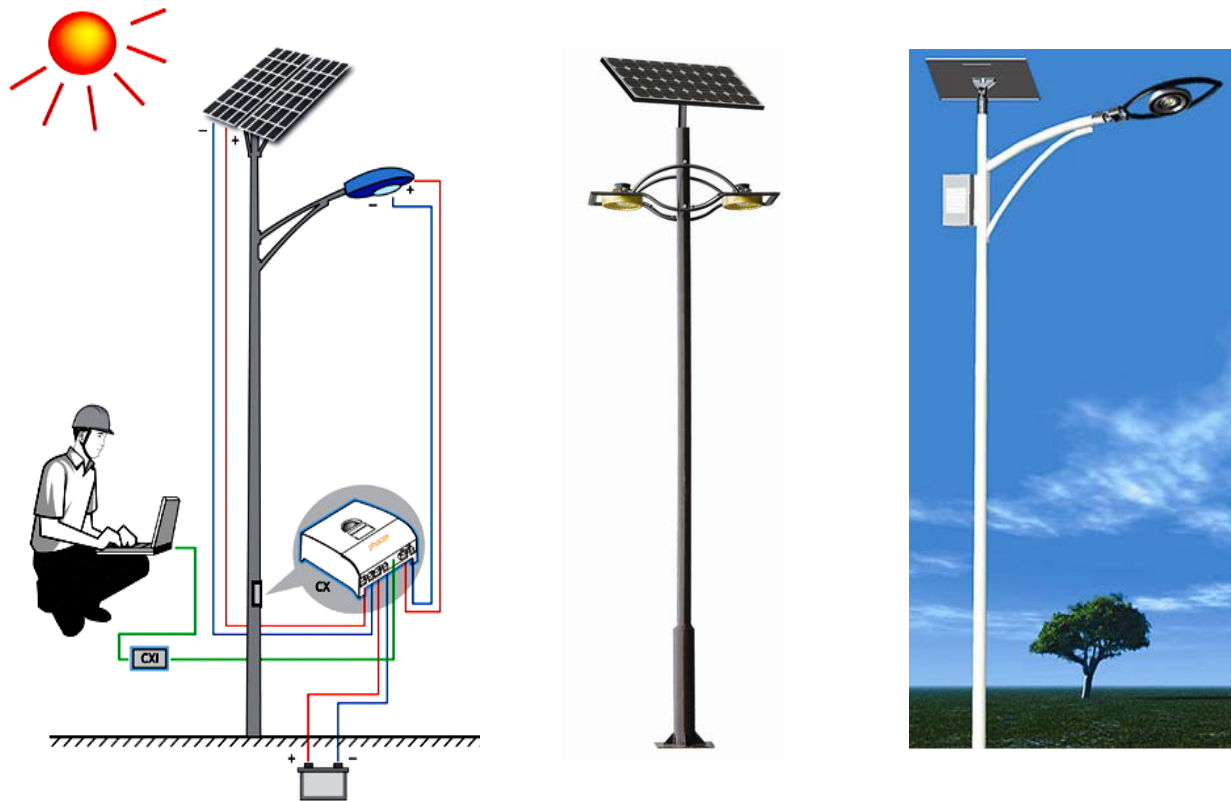
Application : Parks ,garden ,public squares
,etc.



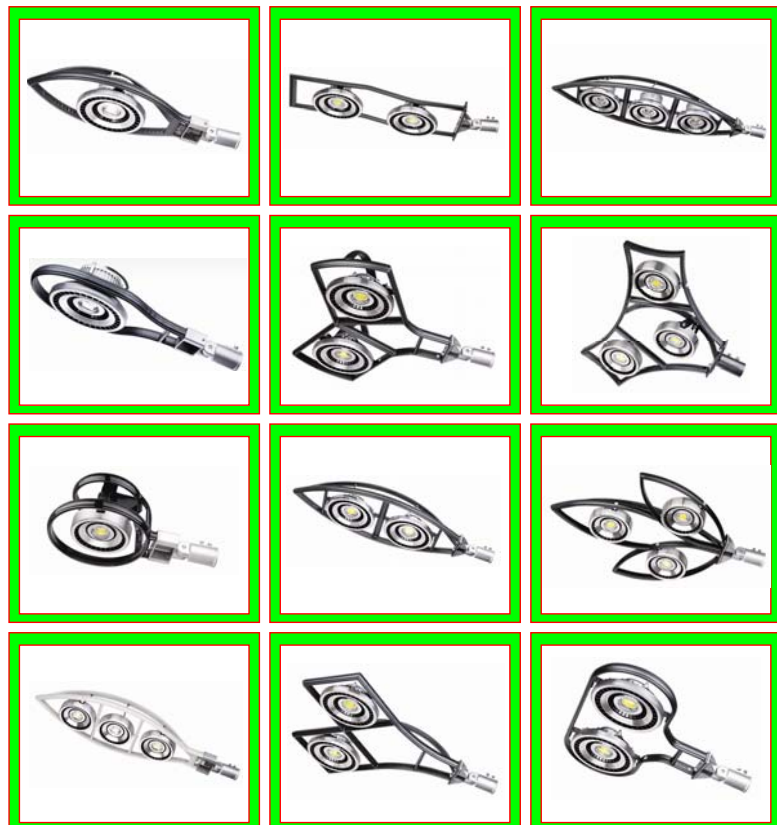
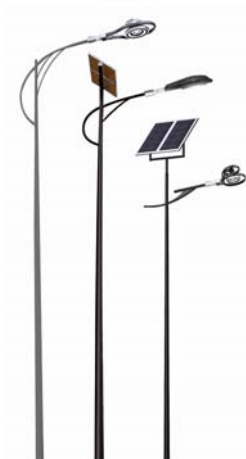
SOLAR STREET LAMP WITH LED LIGHTING



20 Watt to 150 Watt



LED PRODUCT SERIES



PRODUCT SERIES



ENERGY SAVING 70% LIFE TIME 50,000 Hrs.



LED BULB



LED SPOT LIGHT



LED TUBE LAMP



LED STREET LAMP

Think Earth, Love nature, and Save Energy

MADE IN THAILAND

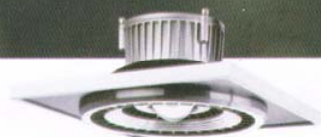


PRODUCT SERIES

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



CEILING LAMP



SPOTLIGHT SERIES



LED MOVEABLE LAMP



EXPLOSION PROOF LAMP



MCZ-50



GARDEN LIGHT



SOLAR STREET LAMP



Think Earth, Love nature, and Save Energy MADE IN THAILAND

27 SMD LED Candle Lamp 4 Watt



Specification

Product number	HI-CLH50-27SMDT/WW-AC230V
Rated Voltage	AC220V-240V, 50-60Hz
Total Current	50 - 54mA
Rated Power	4 Watt / 40 Watt
Light Source	27 Super Bright LED (SMD)
Size	Length 95.8mm, Diameter 37mm
Beam Angle	360 Degrees
Colors	Warm white (3000K - 3500K) Cold white (6500K - 7500K)
Lifetime	50'000 Hours
Color Rendering	65 - 70 Ra
Luminous Flux	180 - 210 Lumen
Fitting	E27, B22

27 SMD LED Golf Ball 4 Watt



Specification

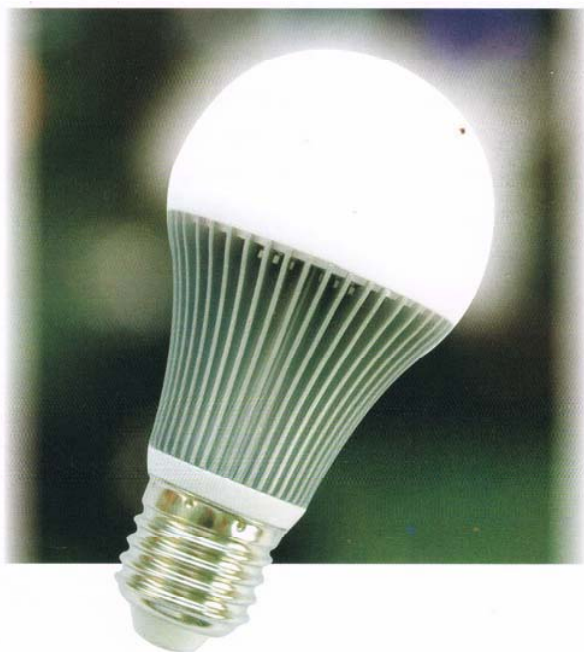
Product number	HI-CLH50-27SMDT/WW-AC230V
Rated Voltage	AC220V-240V, 50-60Hz
Total Current	50 - 54mA
Rated Power	4 Watt / 40 Watt
Light Source	27 Super Bright LED (SMD)
Size	Length 90mm, Diameter 50mm
Beam Angle	360 Degrees
Colors	Warm white (3000K - 3500K) Cold white (6500K - 7500K)
Lifetime	50'000 Hours
Color Rendering	65 - 70 Ra
Luminous Flux	180 - 210 Lumen
Fitting	E27, B22



LED SAVING LAMP OFFICE-HOME USE

ENERGY SAVING 70% LIFE TIME 50,000 Hr.

45 SMD LED Light Bulb 5 Watt



Specification

Product number	HI-LBH60-45WW-AC230V
Rated Voltage	AC220V-240V, 50-60Hz
Total Current	40 - 45mA
Rated Power	5 Watt / 60 Watt
Light Source	45 Super Bright LED (SMD)
Beam Angle	155 - 160 Degrees
Colors	Warm white (3000K - 3300K) Cold white (6500K - 7500K)
Lifetime	50'000 Hours
Color Rendering	65 - 70 Ra
Luminous Flux	235 - 245 Lumen
Fitting	E27, B22

24 SMD LED Spot Light Lamp 3 Watt



Specification

Product Number	HI-GU10-24-AC230V HI-MR16-24-AC/DC12V
Light Source	24 super bright LED (SMD)
Beam Angle	50 - 70 degrees
Rated power	3 Watts
Rated Voltage	AC 230 - 240 Volts AC/DC 12 Volts
Total Current	40 - 45mA 175 - 195mA
Colour Temperature	Warm White (3,000K - 3,500K) Amber White (3,700K - 4,300K) Cold White (6,500K - 7500K)
Colour Rendering	65 - 75 Ra
Luminous Flux	100 - 110 Lumen
Life span	50,000 Hours
Fitting	GU10, MR16

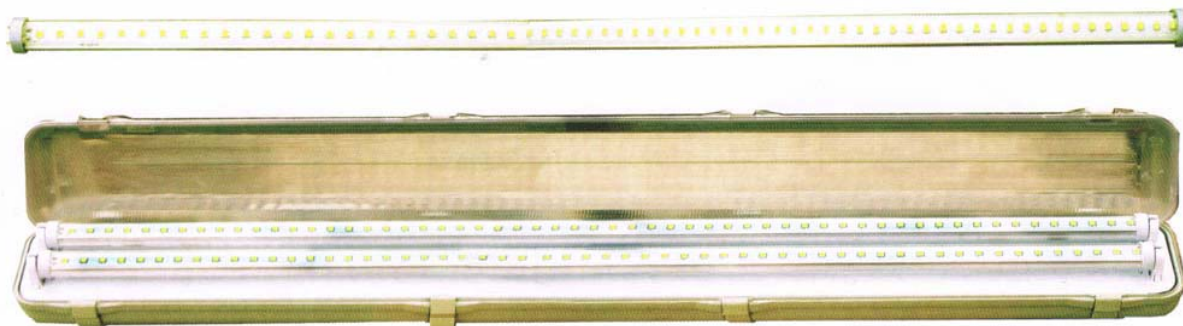
Think Earth, Love nature, and Save Energy MADE IN THAILAND

LED SAVING LAMP OFFICE-HOME USE

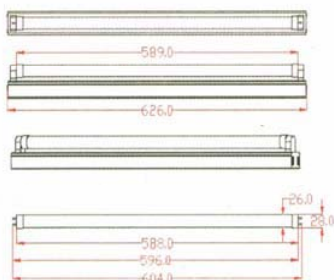


LED TUBE LAMP

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



T8 Tube Lamp 60cm 10 Watt



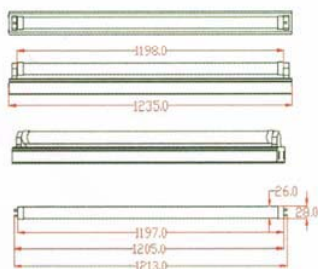
Features

- 1 High power and wide range of Voltage: 85~170V or 170~265V AC
- 2 Constant current design to protect the LED chip won't be damaged due to voltage change and keep stable lighting
- 3 Guarantee no flicker
- 4 Individual chip secured, one defect won't influence others
- 5 Better illumination performance compared to traditional CFL tube light
- 6 Can working more than 30,000hours, long span is very long.

Specification

Product number	BNL-RG-10WS-30T8
Voltage	AC220 or AC110
Power consumption	10W
LED Qty	30PCS
Light color	white
CCT	3000K-6500K
(Ra)	≥65%
Working hours	50,000 Hours
Lumen Output	≥700lm
Lumen Efficiency	70lm/W
Beam Angle	120°
Tube Length	589mm
Finish	Aluminum alloy+PC

T8 Tube Lamp 120cm 18 Watt



Features

- 1 High power and wide range of Voltage: 85~170V or 170~265V AC
- 2 Constant current design to protect the LED chip won't be damaged due to voltage change and keep stable lighting
- 3 Guarantee no flicker
- 4 Individual chip secured, one defect won't influence others
- 5 Better illumination performance compared to traditional CFL tube light
- 6 Can working more than 30,000hours, long span is very long.

Specification

Product number	BNL-RG-18WS-60T8
Voltage	AC220 or AC110
Power consumption	18W
LED Qty	60PCS
Light color	white
CCT	3000K-6500K
(Ra)	≥65%
Working hours	50,000 Hours
Lumen Output	≥1500lm
Lumen Efficiency	83lm/W
Beam Angle	120°
Tube Length	1198mm
Finish	Aluminum alloy+PC

Think Earth, Love nature, and Save Energy **MADE IN THAILAND**



STREET LAMP

ENERGY SAVING 70% LIFE TIME 50,000 Hr.

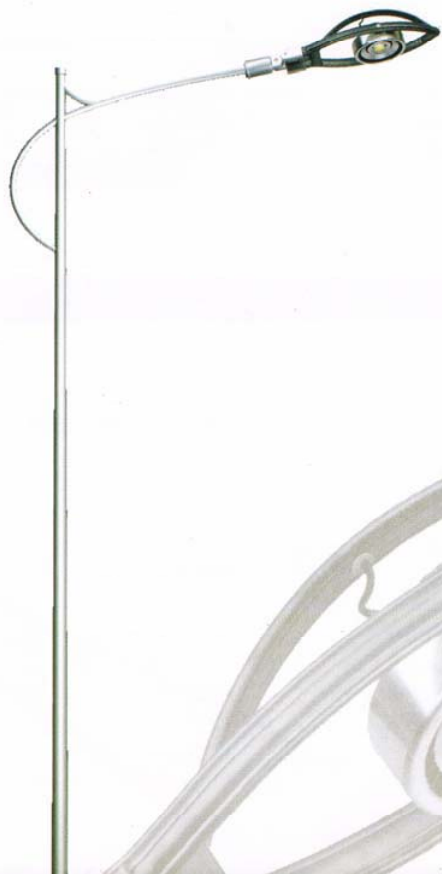
ML 018 20/80W, ML 015 90/250W



ML 018



ML 015



Product number	ML 018 - 20W	ML 015 - 90W
Input voltage	AC85 - 265V	AC85 - 265V
Power frequency range	47 - 63Hz	47 - 63Hz
Chip power factor (PF)	> 0.95	> 0.95
Total hamonic distortion	< 3%	< 3%
Lamp power factory	> 0.88	> 0.88
Working voltage	DC20V	DC31V
LED power consmption	21W	94.7W
System consmption	22.7W	102.3W
LED luminous efficiency	≥ 80Lm/W	≥ 80Lm/W
LED initial flux	≥ 1600Lm	≥ 7200Lm
Lamp's luminous Efficiency(%)	> 95%	> 95%
Average illumination (E)		
6M height	13.56Lux	48.54Lux
8M height	6.72Lux	26.43Lux
10M height		18.18Lux
12M height		11.73Lux
Effective illumination area		
4M height	4.8*14m ²	
6M height	7.2*21m ²	7.2*21m ²
8M height	9.6*28m ²	9.6*28m ²
10M height		12*35m ²
12M height		14.4*42m ²
Color temperature	3500 - 7000K	3500 - 7000K
Color rendering index(CRI)	Ra > 80	Ra > 80
Beam angle	60 - 140	60 - 140
Junction temperature(TJ)	< 70C	< 70C
Working enviroment		
working temperature	-40 C - 60 C	-40 C - 60 C
working humidity	0 - 100%	0 - 100%
IP rate	IP67	IP67
Working life	50000hrs	50000hrs

Think Earth. Love nature. and Save Energy MADE IN THAILAND

STREET LAMP

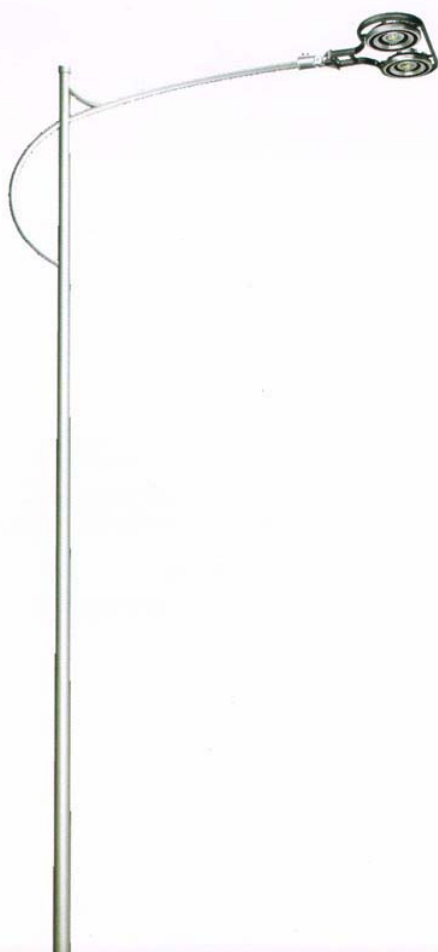


ML 009 150/400W

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



ML 009



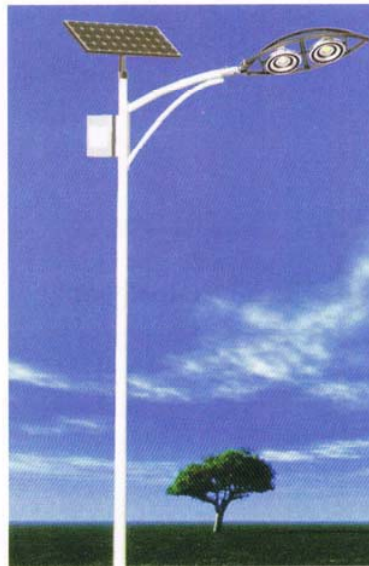
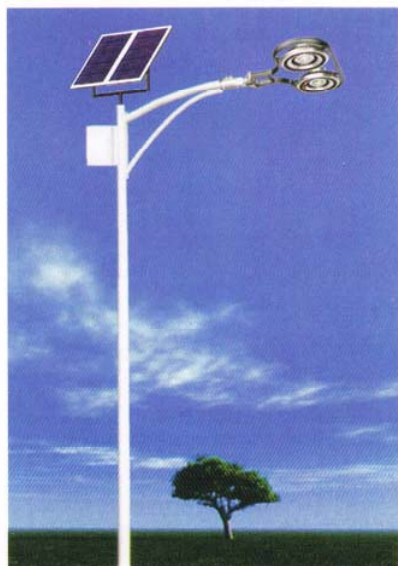
Product number	ML 009 - 150W
Input voltage	AC85 - 265V
Power frequency range	47 - 63Hz
Chip power factor (PF)	> 0.95
Total hamonic distortion	< 3%
Lamp power factory	> 0.88
Working voltage	DC31V
LED power consmption	157.8W
System consmption	170.5W
LED luminous efficiency	≥ 80lm/W
LED initial flux	≥ 12000Lm
Lamp's luminous Efficiency(%)	> 95%
Average illumination (E)	
6M height	77.65Lux
8M height	45.63Lux
10M height	35.25Lux
12M height	28.56Lux
Effective illumination area	
6M height	7.2*21m ²
8M height	9.6*28m ²
10M height	12*35m ²
12M height	14.4*42m ²
Color temperature	3500 - 7000K
Color rendering index(CRI)	Ra > 80
Beam angle	60 - 140
Junction temperature(TJ)	< 70C
Working enviroment	
working temperature	-40 C - 60 C
working humidity	0 - 100%
IP rate	IP67
Working life	50000hrs

Think Earth. Love nature. and Save Energy MADE IN THAILAND

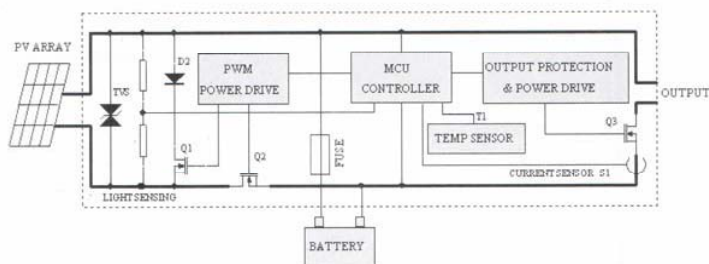
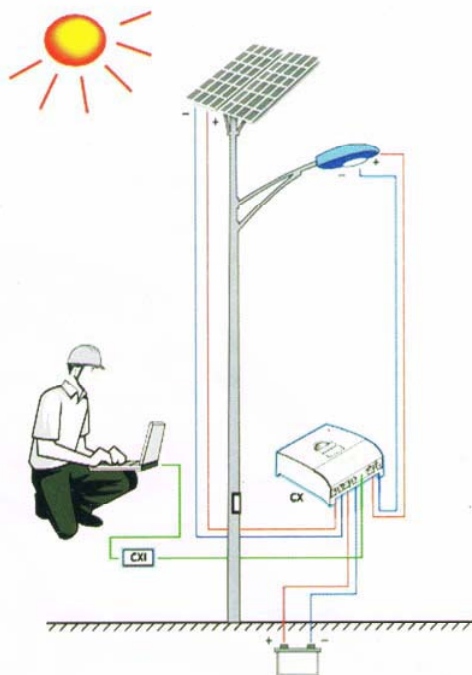


SOLAR STREET LAMP WITH LED LIGHTING

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



Solar street lamp with LED light
20 Watt, 90 Watt, 150 Watt



Think Earth, Love nature, and Save Energy MADE IN THAILAND



PRODUCT SERIES

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



Explosion Proof Lamp
10W - 120W



Tunnel Lamp
20W - 120W



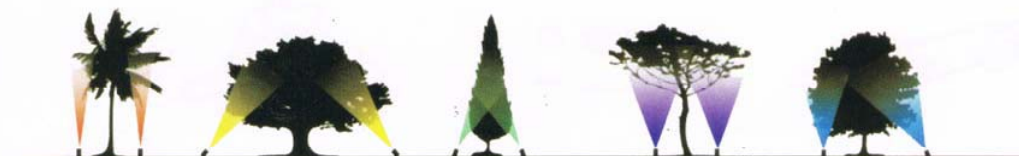
Ceiling Lamp
10W - 120W



Moveable Working Lamp Series 10W - 120W



MCZ- C50



Think Earth, Love nature, and Save Energy MADE IN THAILAND

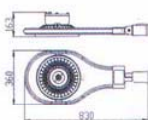
PRODUCT SERIES LED STREET LAMP



ENERGY SAVING 70% LIFE TIME 50,000 Hr.



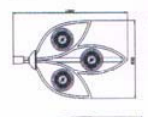
ML001-50/60/70/80/90/100/110/120



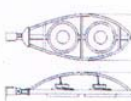
ML007-60/90/120



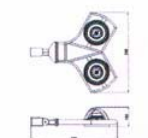
ML002-150/180/210/240/270/300/330/360



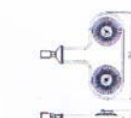
ML006-100/120/140/160/180/200/220/240



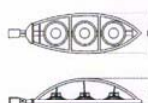
ML003-40/60/80



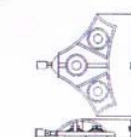
ML009-100/120/140/160/180/200/220/240



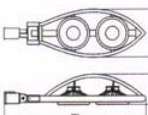
ML005-60/90/120



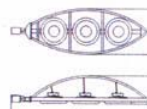
ML010-60/90/120



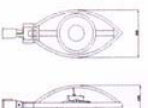
ML006-40/60/80



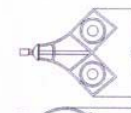
ML012-150/180/210/240/270/300/330/360



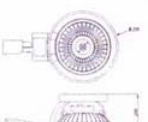
ML015-50/60/70/80/90/100/110/120



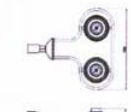
ML021-100/120/140/160/180/200/220/240



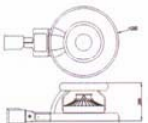
ML016-50/60/70/80/90/100/110/120



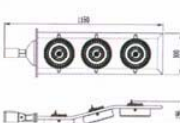
ML022-40/60/80



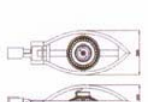
ML017-20/30/40



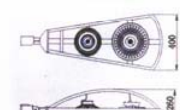
ML024-60/90/120



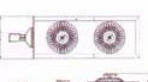
ML018-20/30/40



ML025-70/90/100/110/120/130/140/150/160



ML019-100/120/140/160/180/200/220/240



ML028-100/120/140/160/180/200/220/240

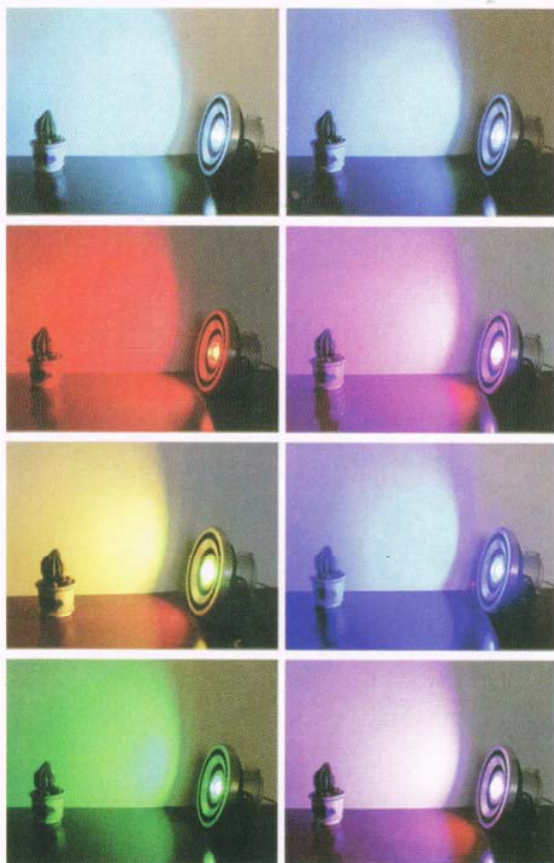


Think Earth, Love nature, and Save Energy MADE IN THAILAND

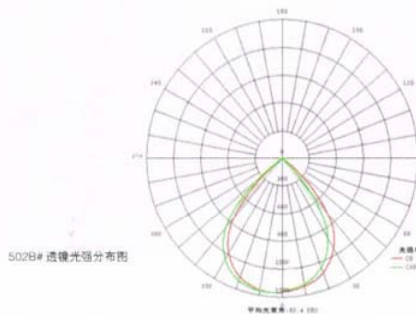
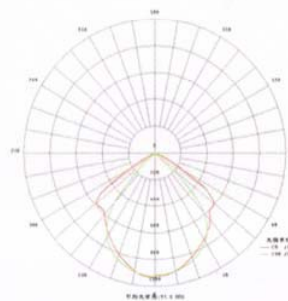


ENERGY SAVING 70% LIFE TIME 50,000 Hr.

RGB Lamp Series.



Apply to the scene stage, advertising, landscape, as well as some special purpose lighting



5028# 透镜光强分布图

Input (VAC)	Power (W)	Lighting Efficiency (lm/W)	Color Temperature (K)	Angle	Color Rendering Property (Ra)	Protection Grade
85-265	20-100	≥80	3500 ~ 7000	90° ~ 140°	≥80	IP65



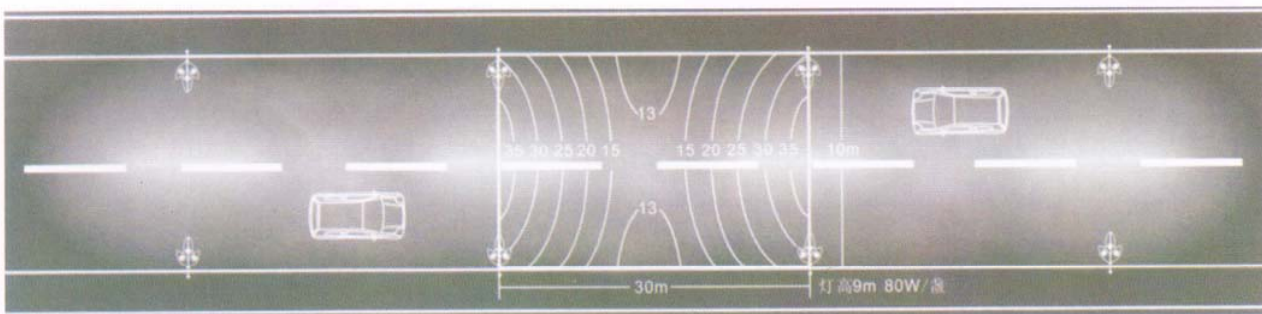
TTC LED BULB 4 Watt / 5 Watt

Think Earth, Love nature, and Save Energy MADE IN THAILAND



PROJECT REFERENT

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



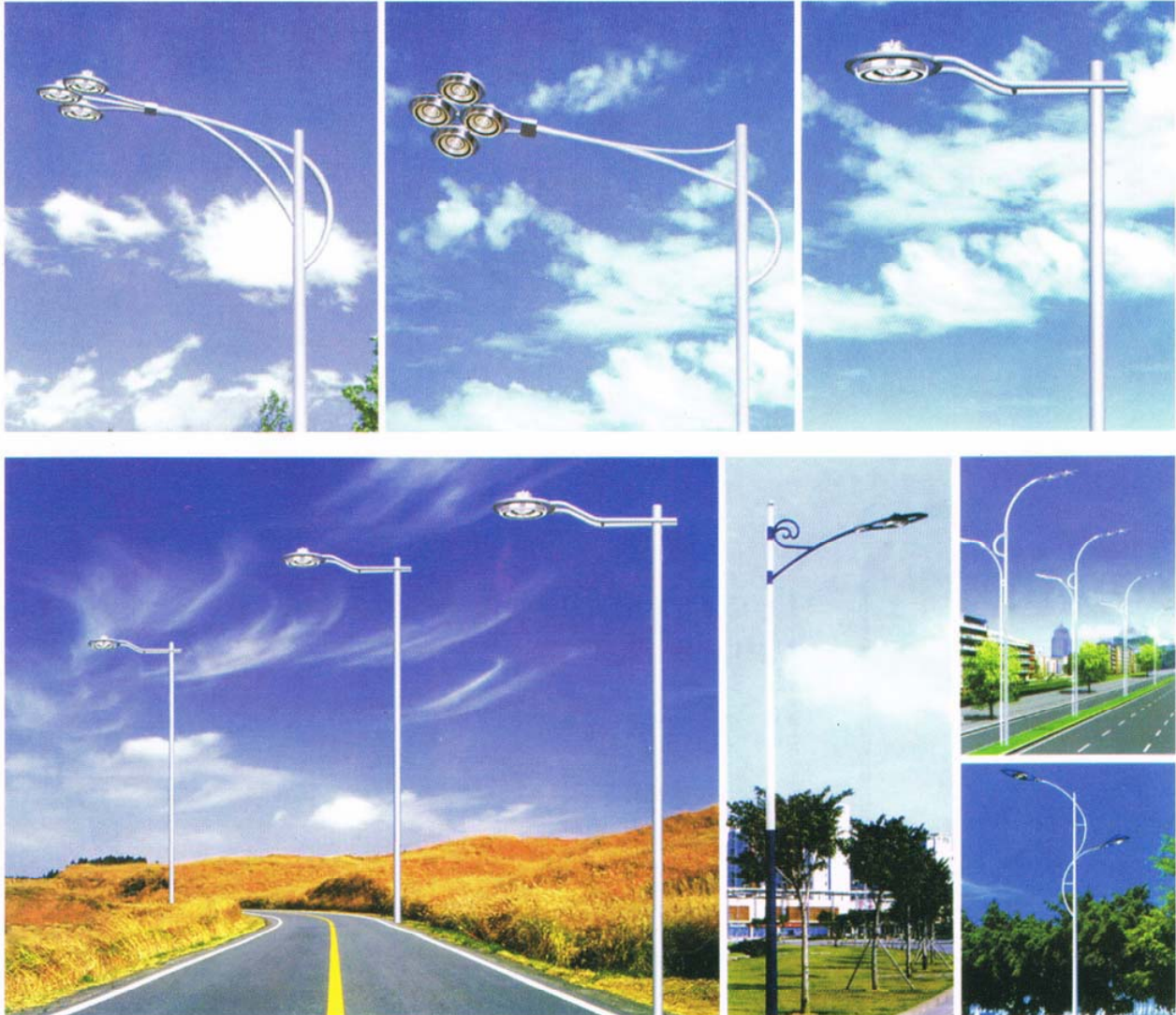
TECHNOLOGY AND PROPERTY OF LED

1. Save energy 70 % - 90 %
2. Life time 50,000 Hours.
3. Green & Eco - Friendly.
4. Break even 2 years.
5. 2 years warranty.

Think Earth, Love nature, and Save Energy

MADE IN THAILAND

ENERGY SAVING 70% LIFE TIME 50,000 Hr.



Street lamp series : 30W 40W 50W 60W 70W 80W 100W 120W 140W 160W 180W 200W and so on. Our lamp use combined structure, we can supply various of lamp according to the different road surface and surrounding environment condition. You can choose different lamp style for different road environment to achieve one view on a road. It was proved by the theoretical test and practical application, our product are excellent on both appearance and performance.

LED Lighting :

1. Low Power Consumption : Only one tenth of power expenditure of incandescent lamp under same brightness.
2. Long Service Life : Chip service life is 50,000 hours.
3. High light effect, pure light color, no radiation, free stroboflash.
4. Rapid Response Time : response time is tens of us.
5. Small volume, light weight, shock resistance, waterproof, shockproof, corrosion protection, flameproof
6. Easy to adjust light and color with big controllability (available in pure white, blue, purple, yellow, green, red).
7. Good Security : Input voltage : 70V-265VAC, low-pressure DC operation.
8. Green & Eco-Friendly : Contains no mercury or lead etc.
9. Free of maintenance.

Think Earth, Love nature, and Save Energy **MADE IN THAILAND**

TTC-LED Spot Light- WRI-AR111-9W

Led Spotlighting Lamp (Bulb)

Wrangler Limited (WRI) offers several different solutions which simply slot into existing AR111 fittings. We often find that AR111 lamps are placed in a difficult to access location. With 45,000 hour longevity, this will considerably ease the cost and hassle of changing lamps. Using 9 Watts these replace 45-75Watt lamps. Traditional AR111 lamps offer good brightness but they do get extremely hot and blow frequently.



An LED alternative to the popular AR111 lamp unit.
12V AC/DC supply.
No UV.
No heat in the beam.
Free of mercury and hazardous

Our Brand	Own Design Patent
WRI	

Guarantee : 2 years

CE

Non-Dimmable

RoHS

12V AC/DC

9X1N

25,000 hrs

45,000hr [nom]

The AR111 LED Lamp is a high-output LED Lamp suited for a wide variety of lighting applications. It is popular for applications such as display and cabinet lighting, as well as general lighting for stairways and hallways etc.

Warranty will Only Apply

when recommended drivers are used and the fitting and installation is carried out by a properly qualified Electrician.

Product Benefits

- Glow effect – warm light all around with the WRI LED Lamp 9 W
- 80% energy saving

Order Code	Model Number	Product Code	Logistic Code
WRI-72042-1	WRI-S2042-1	WRI-AR111HLPW9X1	WRI-20107S2042-1
WRI-72042-2	WRI-S2042-2	WRI-AR111HLWW9X1	WRI-20107S2042-2
WRI-72042-3	WRI-S2042-3	WRI-AR111NLPW9X1	WRI-20107S2042-3
WRI-72042-4	WRI-S2042-4	WRI-AR111NLWW9X1	WRI-20107S2042-4

Dimensions:



Features:

1. Direct replacement for any halogen AR111 bulb.
2. Cool beam avoids heat degeneration.
3. No UV or IR free
4. Unique design for perfectly optical performance.
5. Good thermal management guarantees a long service life.
6. Supplied with its own driver (not integrated)
7. An LED alternative to popular
8. AR111 lamp unit

Complexity of install:





1. User install - no Electrician required
2. Some wiring -Electrician required
3. Some wiring and installation work Electrician required
4. Additional wiring - Electrician required.
5. Fitting modification work - Electrician required

Specifications




Outline Dimention:	111x 57mm
Input Voltage:	AC/DC 12V
LED Light Source:	9ea x 1W (Bridgelux,Epistar,Cree,Nichie..etc.)
Beam Angles:	30 degree (Other angle available such as 15°, 35°, 45°, 50°, 60°, 90°, 120°)
Intensity of Light Output:	< 2400 Lux@1m
Output Current :	330 mA (%+10)
Operation Temperature Range:	-30~+68 Centigrade
Base :	G53
No.of LEDs :	9
Driver Required :	Recommended
Power Factor:	< 95 %
Efficiency:	95 % Min
Working Humidity:	10%~95%
Electric Safety Standard:	Class I
IP	40

Typical Applications

- General lighting
- Down lighting
- Stair and hallway lighting
- retail display lighting
- Hotels, restaurants, bars, cafés
- Shop, Lobbies, corridors, stairwells

Color	Color Temp	Model Number	Brightness
 Pure White	6000K	WRI-AR111PW9X1	< 1125 Lm
 Warm White	3000K	WRI-AR111WW9X1	< 990 Lm
 Pure White	6000K	WRI-AR111NLPW9X1	< 850 Lm
 Warm White	3000K	WRI-AR111NLWW9X1	< 750Lm



Model	Specification	Pricing (Baht)	Image
NHT001C-P (252 LED)	Shell material : Stainless Steel Working Temperature : -20 C ⁰ To +80 C ⁰ Working humidity : 10% to 90% RH Measurement : ϕ 31.5 x 8 Cm. Input Voltage : AC /DC 12V		
NHT001C-P (546 LED)	Current : 4A for 252 LED, 5A for 546 LED Power : 17W (252 LED), 30W (546 LED) Lifespan approx : 50,000 hours Lumen output : 3270 Lm (for 546 LED) CCT : 6000 - 6500 Kelvin LED Chip : Edison 2m cable		
NHT001C-P (252 LED)	Shell material : Stainless Steel Working Temperature : -20 C ⁰ To +80 C ⁰ Working humidity : 10% to 90% RH Measurement : ϕ 31.5 x 8 Cm. Input Voltage : AC /DC 12V Current : 4A for 252 LED, 5A for 546		
NHT001C-P (546 LED)	LED Power : 17W (252 LED), 30W (546 LED) Lifespan approx : 50,000 hours Lumen output : 3270 Lm (for 546 LED) CCT : 6000 - 6500 Kelvin LED Chip : Edison 2m cable		
NHT001C-P (252 LED)	Shell material : Stainless Steel Working Temperature : -20 C ⁰ To +80 C ⁰ Working humidity : 10% to 90% RH Measurement : ϕ 31.5 x 8 Cm. Input Voltage : AC /DC 12V		
NHT001C-P (546 LED)	Current : 4A for 252 LED, 5A for 546 LED Power : 17W (252 LED), 30W (546 LED) Lifespan approx : 50,000 hours Lumen output : 3270 Lm (for 546 LED) CCT : 6000 - 6500 Kelvin LED Chip : Edison 2m cable		



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office :

5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.

Factory :

Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
302 Moo 5, Tambon Bansong, Amphur Panomsakarn, Chacheangsao 24120 Thailand.

Website :

www.ttcled.com



LED Candle Lamps

NO.	ITEM	PHOTO	PARAMATER
1	CS-E14A		<p>Bulb Holder: E11 E12 E14 E17 E26 E27 B15 B22</p> <p>Wattage: 3W</p> <p>LED: 3pcs</p> <p>Input Voltage: 85-265V AC</p> <p>Dimmable Voltage: 110V OR 220V AC</p> <p>Rating lumen output: ≥260lm</p> <p>Colour: CW, W W</p> <p>Ra ≥70</p> <p>Beam Angle: 360°</p> <p>Warranty 2 years</p> <p>Dimension (mm): Ø 37*125</p> <p>Casing color: silver/golden/black</p> <p>NG: 0.05KG</p>
2	CS-E14B		<p>Bulb Holder: E11 E12 E14 E17 E26 E27 B15 B22</p> <p>Wattage: 3W</p> <p>LED: 3pcs</p> <p>Input Voltage: 85-265V AC</p> <p>Dimmable Voltage: 110V OR 220V AC</p> <p>Rating lumen output: ≥260lm</p> <p>Colour: CW, W W</p> <p>Ra ≥70</p> <p>Beam Angle: 360°</p> <p>Warranty 2 years</p> <p>Dimension (mm): Ø 37*125</p> <p>Casing color: silver/golden/black</p> <p>NG: 0.05KG</p>
3	CS-E14C		<p>Bulb Holder: E11 E12 E14 E17 E26 E27 B15 B22</p> <p>Wattage: 3W</p> <p>LED: 3pcs</p> <p>Input Voltage: 85-265V AC</p> <p>Dimmable Voltage: 110V OR 220V AC</p> <p>Rating lumen output: ≥260lm</p> <p>Colour: CW, W W</p> <p>Ra ≥70</p> <p>Beam Angle: 360°</p> <p>Warranty 2 years</p> <p>Dimension (mm): Ø 37*125</p> <p>Casing color: silver/golden/black</p> <p>NG: 0.05KG</p>
4	CS-E14D		<p>Bulb Holder: E11 E12 E14 E17 E26 E27 B15 B22</p> <p>Wattage: 3W</p> <p>LED: 3pcs</p> <p>Input Voltage: 85-265V AC</p> <p>Dimmable Voltage: 110V OR 220V AC</p> <p>Rating lumen output: ≥260lm</p> <p>Colour: CW, W W</p> <p>Ra ≥70</p> <p>Beam Angle: 360°</p> <p>Warranty 2 years</p> <p>Dimension (mm): Ø 37*125</p> <p>Casing color: silver/golden/black</p> <p>NG: 0.05KG</p>

TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.

Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167

Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarn, Chacheangsao 24120 Thailand.

Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664

Website : www.ttcled.com

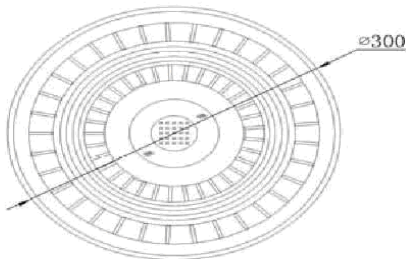
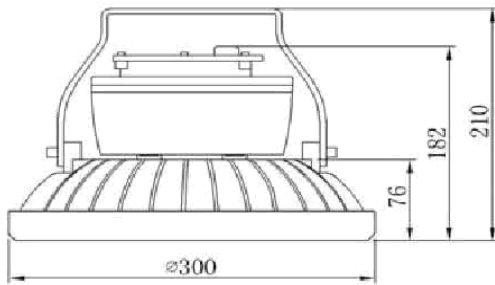


High Power Spot Light Model : TTC-MLC-120W

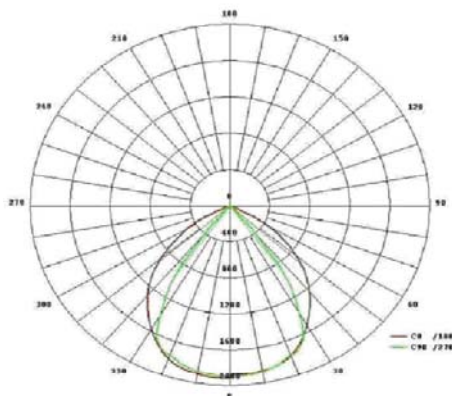
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *	
Product Number	MLC-120W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.95
Total harmonic distortion	< 0.3 %
Working voltage	DC32V
LED power consumption	120 W
System consumption	132 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 10,800 Lm
Lamp's luminous efficiency (%)	> 94%
Color temperature	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-140°
Junction temperature (TJ)	< 70 °C
Weight (Kg)	6
* Working enviroment *	
Working temperature	-40 °C ,60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs
* Average illumination (E) *	
8M Height	57 Lux
10M Height	36 Lux
* Effective illumination Area *	
8M Height	20*30 m ²
10M Height	25*38 m ²

TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.

Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167

Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.

Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664

Website : www.ttcled.com

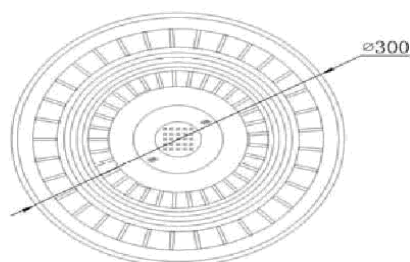
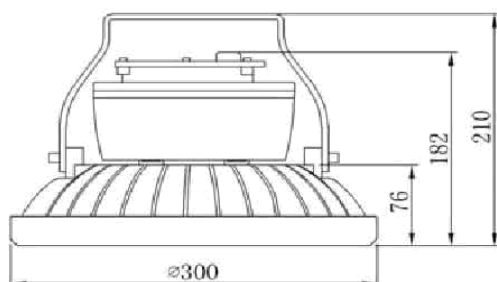


High Power Spot Light Model : TTC -MLC-150W

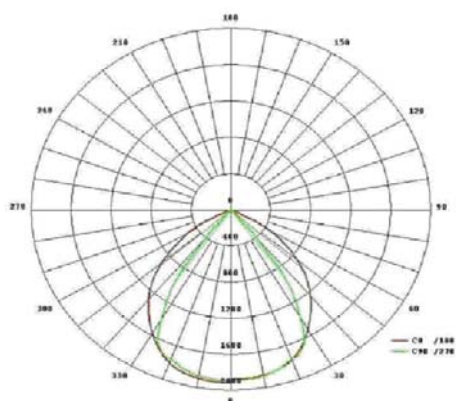
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Number	MLC-150W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.95
Total hamonic distortion	< 0.3 %
Working voltage	DC32V
LED power consmption	150 W
System consmption	152 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 13500 Lm
Lamp's luminous efficiency (%)	> 94%
Color teamperature	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-130°
Junction temperature (TJ)	< 70 °C
Weight (Kg)	6

* Working enviroment *

Working temperature	-40 °C ,60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs

* Average illumination (E) *

8M Height	71 Lux
10M Height	48 Lux

* Effective illumination Area *

8M Height	20*30 m ²
10M Height	25*38 m ²

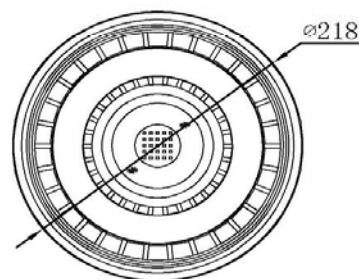
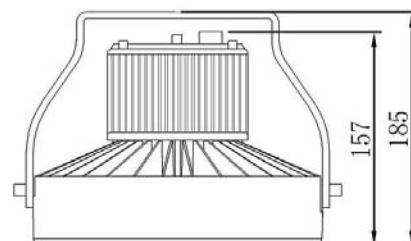
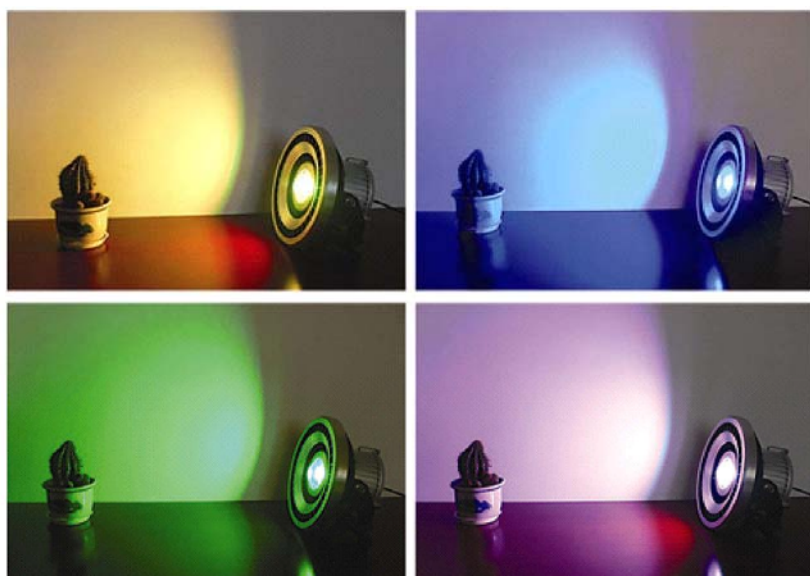


TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarn, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com

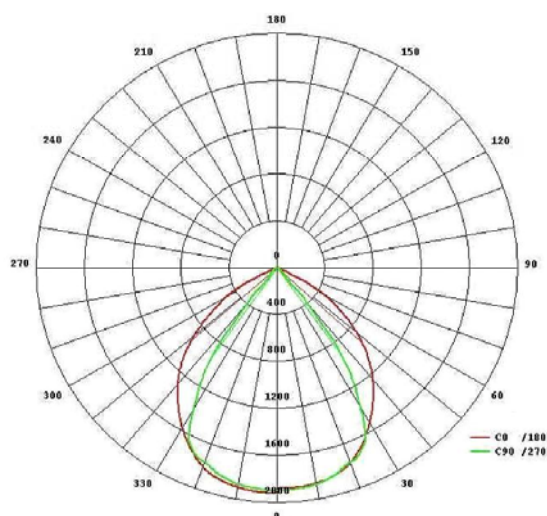


High power LED RGB Model : RGB 20-40W

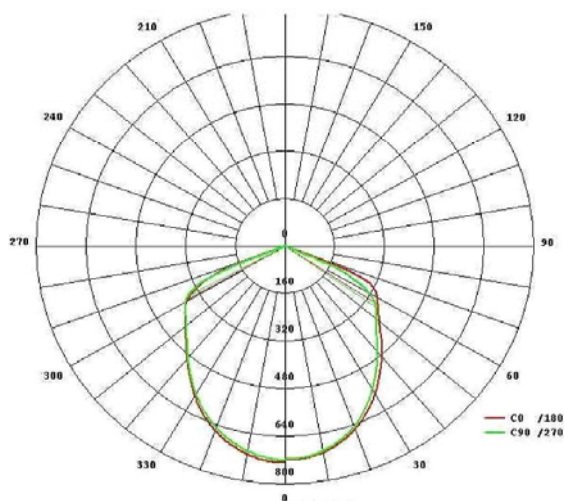


◆ Light Distribution Curve

◆ ①



②





TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao,Bangkok.10230 Thailand.
 Tel : +66(2) 362-4107,362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5,Tambon Bansong, Amphur Panomsakarm,Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com



Technical parameters

Item \ Mode	Mode MT-RGB-40W
Input Voltage	AC 85~265V
Power Frequency Range	47~63Hz
Power Factor(PF)	>0.95
Total Harmonic Distortion	<3%
Working Voltage	DC20V
LED Power Consmption	20--40W
System Consumption	22--44W
Lamp's Luminous Efficiency(%)	≥85%
R : G : B	3 : 6 : 1
Color Rendering Index(CRI)	Ra>80
Beam Angle	90° ~140°
Junction Temperature(TJ)	<70℃
Working Environment	working temperature -40℃~60℃;working humidity 0~100%
IP Rating	IP67
Working Life	>50000hrs
Net Weight	4kg
Packaging Size	23*23*20cm



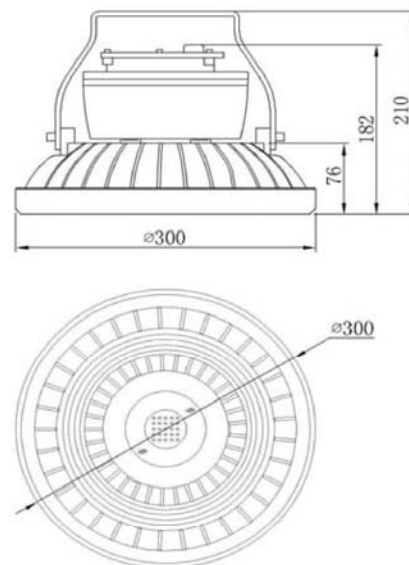
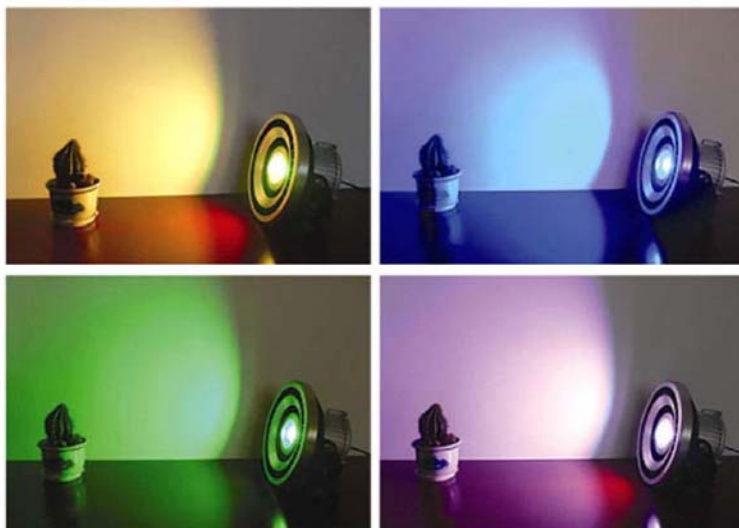
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax : +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarn, Chacheangsaio 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com



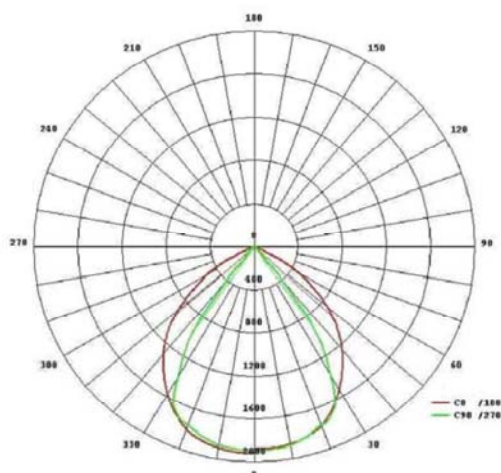
High power LED RGB

Model : RGB 50-120W

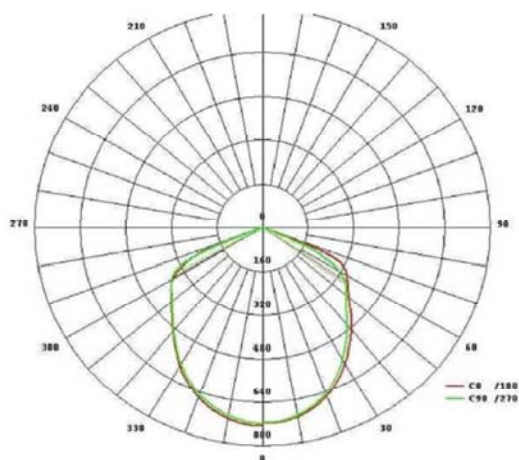


◆ Light Distribution Curve

◆ ①



②





TTC LED TECHNOLOGY (THAILAND) CO., LTD.

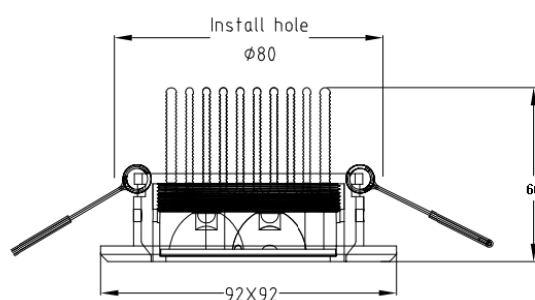
Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com



Technical parameters

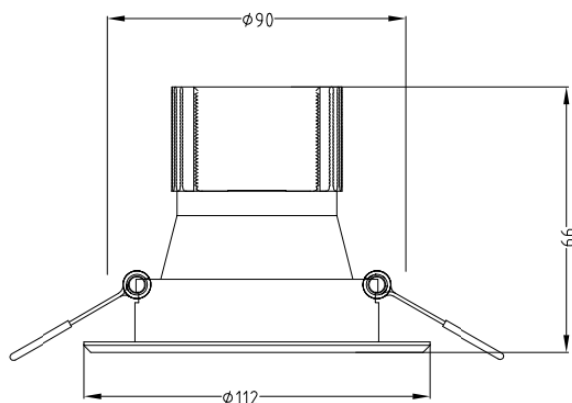
Item \ Mode	Model MT-RGB-120W
Input Voltage	AC 85~265V
Power Frequency Range	47~63Hz
Power Factor(PF)	>0.95
Total Harmonic Distortion	<3%
Working Voltage	DC31V
LED Power Consumption	50--100W
System Consumption	55--110W
Lamp's Luminous Efficiency(%)	≥85%
R : G : B	3 : 6 : 1
Color Rendering Index(CRI)	Ra >80
Beam Angle	90° ~140°
Junction Temperature(TJ)	<70℃
Working Environment	working temperature -40℃~60℃; working humidity 0~100%
IP Rating	IP67
Working Life	>50000hrs
Net Weight	6kg
Packaging Size	36*36*25cm

CS-S92-1-3W



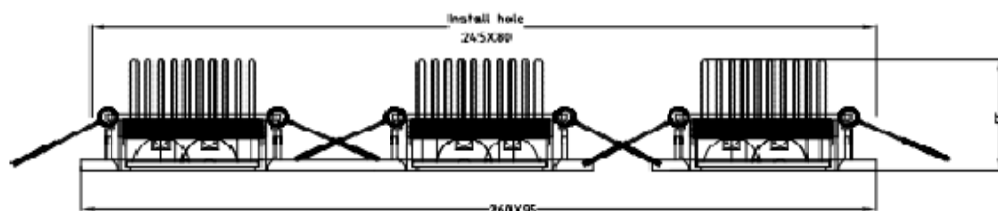
Specification	
Items	Parameter
Power	3W = Halogen
LED Qty / Name	3pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output / Efficiency	6000K = 250lm , 83lm/W 4500K = 230lm , 77lm/W 3000K = 220lm , 73lm/W
Beam Angle	30°, 45°
Product Size (mm)	93*93*H.55
Hole Size (mm)	Ø 80mm
Packaging Dimension	
Net Weight	g
Voltage	85~265V AC

CS-D-F112-3W



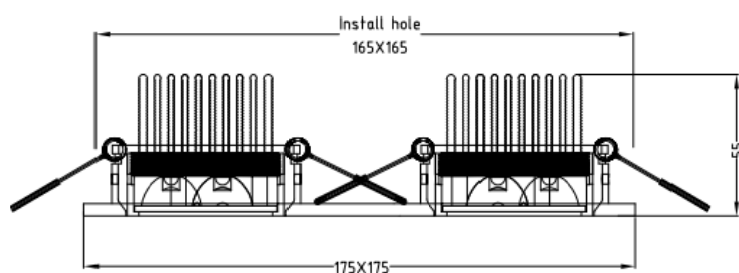
Specification	
Items	Parameter
Power	3W = Halogen
LED Qty / Name	3pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output, Efficiency	6000K = 220lm, 73lm/W 4500K = 200lm, 67lm/W 3000K = 190lm, 63lm/W
Beam Angle	90°
Structure	Fixed
Product Size (mm)	Ø 112*66
Install Hole Size (mm)	Ø 90
Net Weight	G
Voltage	85~265V AC

CS-S92-3-9W



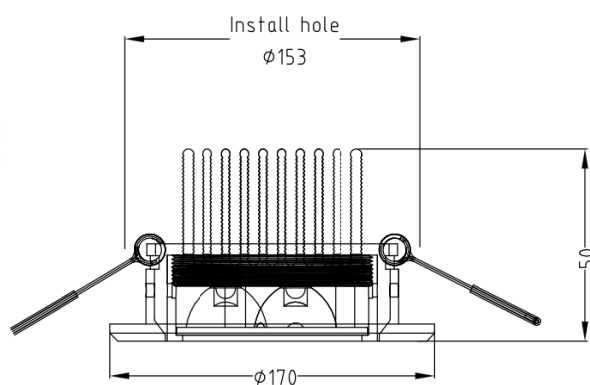
Specification	
Items	Parameter
Power	9W = Halogen
LED Qty / Name	9pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output / Efficiency	6000K = 750lm , 83lm/W 4500K = 690lm , 77lm/W 3000K = 660lm , 73lm/W
Beam Angle	30°, 45°
Product Size (mm)	260*95*H.55
Hole Size (mm)	245*80
Structure	Swing able
Packaging Dimension	
Net Weight	G
Voltage	85~265V AC

CS-S92-4A-12



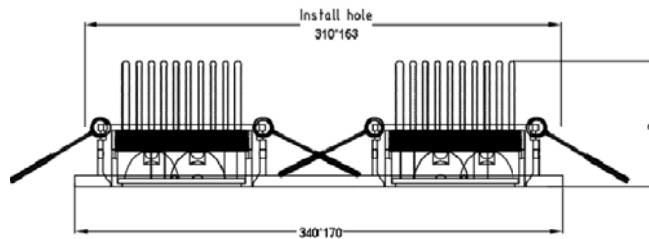
Specification	
Items	Parameter
Power	12W = Halogen
LED Qty / Name	12pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output / Efficiency	6000K = 1000lm , 84lm/W 4500K = 920lm , 77lm/W 3000K = 860lm , 72lm/W
Beam Angle	30°, 45°
Product Size (mm)	175*175*H.55
Hole Size (mm)	165*165
Structure	Swing able
Packaging Dimension	
Net Weight	G
Voltage	85~265V AC

CS-D-S170-18W



Specification	
Items	Parameter
Power	18W = Halogen
LED Qty / Name	9pcs / Epistar (licensed LED Chips)
(Ra)	≥ 75
Lifespan	$\geq 50,000$ Hours
CCT	6000K, 4500K, 3000K
Lumen Output	6000K = 1000lm, 55lm/W 4500K = 950lm, 53lm/W 3000K = 900lm, 50lm/W
Beam Angle	20°
Structure	Swing able
Product Size (mm)	$\phi 170$ * H.50
Install Hole Size (mm)	$\phi 153$
Net Weight	G
Voltage	85~265V AC

CS-S170-2-18W



Specification	
Items	Parameter
Power	18W = Halogen
LED Qty / Name	18pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output / Efficiency	6000K = 1m , 83lm/W 4500K = 1m , 77lm/W 3000K = 1m , 73lm/W
Beam Angle	30°, 45°
Product Size (mm)	340*170*H.55
Hole Size (mm)	310*153
Structure	Swing able
Packaging Dimension	
Net Weight	G
Voltage	85~265V AC

BNL-PL5W Specification

1) Part #: BNL-PL5W

2) Feature:

- Universal power supply 90~265V
- Twistable cap, easy to access

3) SPEC:

Socket: G24

Power : 5W

48pcs 3014 LED chip

90V~265V AC

Rating Lumen: $\geq 420\text{lm}$ clear cover,
 $\geq 350\text{lm}$ frosted cover

CCT: 3000K, 4500K, 6000K

Ra ≥ 80

Beam Angle: 120°

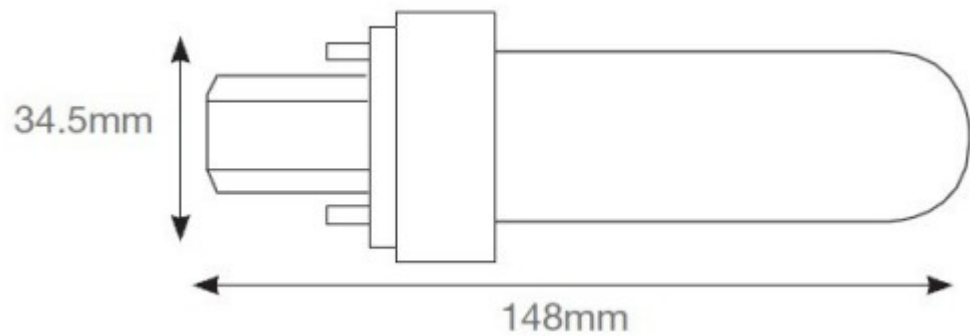
Lifespan/(hrs): $\geq 50,000$

Length(mm): 150mm

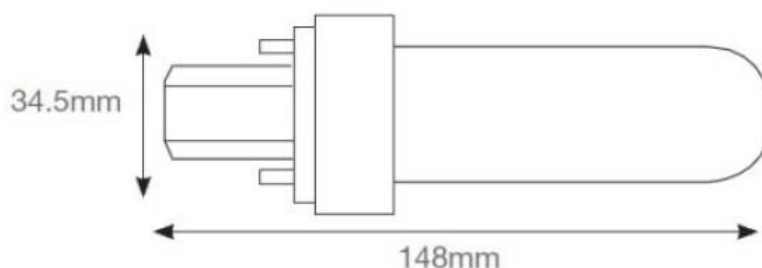
NW: 0.06KG



4) Test report: N/A



PL-7W LAMP CLEAR



CE, RoHS Certified

Specification	
Items	Parameter
Power	7W PL Lamp clear
LED Qty / Name	60pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000 – 6500K , 5000 – 5500K, 2800 – 3300K
Lumen Output, Efficiency	6000K = 545lm, 78lm/W 4500K = 530lm, 76lm/W 3000K = 510lm, 73lm/W
Beam Angle	120°
Product Size	Length 150 mm, width 34.5 mm
Cap Base	G24 or E27
Net Weight	80g
Voltage	AC85~265V

PL-10W LAMP FROSTED



CE, RoHS Certified

Specification	
Items	Parameter
Power	10W PL lamp frosted
LED Qty / Name	84pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000 – 6500K , 5000 – 5500K, 2800 – 3300K
Lumen Output, Efficiency	6000K = 740lm, 74lm/W 4500K = 695lm, 70lm/W 3000K = 650lm, 65lm/W
Beam Angle	120°
Product Size	Length 174 mm
Cap Base	G24 or E27
Net Weight	100g
Voltage	AC90~265V

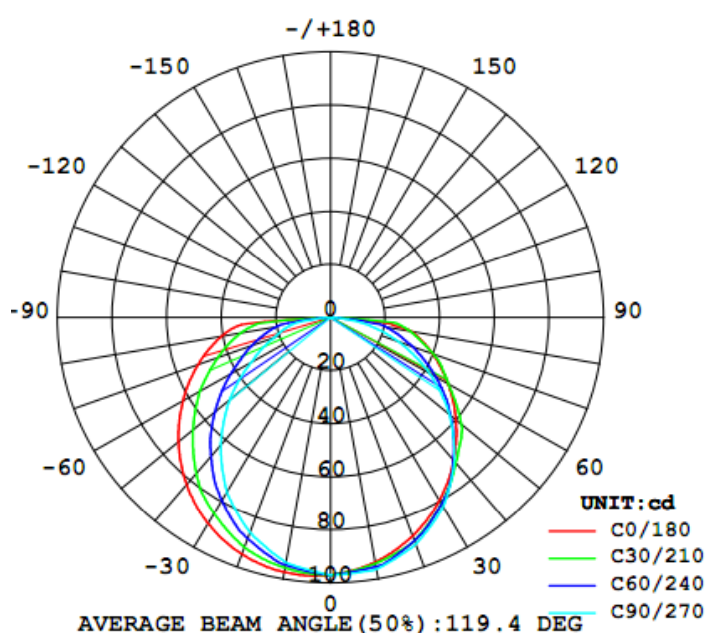
Offer and Specification CS-PL-10W

- 1) Part #: CS-PL-10W-F
- 2) Feature:
 - Universal power supply 100~240V
 - Twistable cap, easy to access
- 3) Specifaication

Socket	:	G24 or E27
Power	:	10W
		84pcs 3014 LED chip
		90V~240V AC
Lumen	:	6000K ≥ 800lm
		4500K ≥ 750lm
		3000K ≥ 720lm
CCT	:	6000K ,3000K, 4500K
Ra	:	≥75
Beam Angle	:	120°
Lifespan/(hrs)	:	≥50,000
Length(mm)	:	174mm
NW	:	01KG



- 4) Photometric



PL-10W LAMP CLEAR



CE, RoHS Certified

Specification	
Items	Parameter
Power	10W PL lamp clear
LED Qty / Name	84pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000 – 6500K , 5000 – 5500K, 2800 – 3300K
Lumen Output, Efficiency	6000K = 880lm, 88lm/W 4500K = 840lm, 84lm/W 3000K = 740lm, 74lm/W
Beam Angle	120°
Product Size	Length 174 mm
Cap Base	G24 or E27
Net Weight	100g
Voltage	AC90~265V

SS-2015-02



CE, RoHS Certified

Specification	
Items	Parameter
Power	4W = 40W incandescent bulb
LED Qty / Name	64pcs / Epistar (licensed LED Chips)
(Ra)	≥75
Lifespan	≥50,000 Hours
CCT	6000 – 6500K , 2800 – 3500K
Lumen Output, Efficiency	6000 – 6500K = 400lm, 100lm/W 2800 – 3500K = 360lm, 90lm/W
Beam Angle	120°
Product Size	Ø 60mm * H.110mm
Cap Base	E27, E26, B22, GU10, E14
Voltage	100~230V AC



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

KEMA



CERTIFICATE No. 13862624

ISO 9001:2000

ISO 14001:2004

ISO 45001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018

ISO 50001:2018



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax : +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

KEMA



LS-BL-G1-7W



Specification	
Items	Parameter
Power	7W = 50W incandescent bulb
LED Qty / Name	64pcs / Epistar (licensed LED Chips)
(Ra)	≥65
Lifespan	≥50,000 Hours
CCT	6000 – 6500K , 5000 – 5500K, 2800 – 3300K
Lumen Output	6000 – 6500K = 670lm 2800 – 3500K = 580lm
Lumen Efficiency	96lm/W, 83lm/W
Beam Angle	160°
Product Size	Ø mm * H. mm
Cap Base	E27
Voltage	AC85~135V or ac185~240V



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheue, Ladprao,Bangkok.10230 Thailand.
 Tel : +66(2) 362-4107,362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5,Tambon Bansong, Amphur Panomsakarm,Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

KEMA

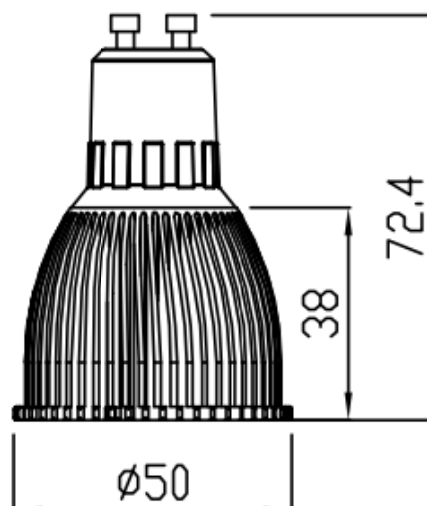


LS-BL-G1-9W



Specification	
Items	Parameter
Power	9W = 60W incandescent bulb
LED Qty / Name	96pcs / Epistar (licensed LED Chips)
(Ra)	≥65
Lifespan	≥50,000 Hours
CCT	6000 – 6500K , 5000 – 5500K, 2800 – 3300K
Lumen Output	6000 – 6500K = 840lm 2800 – 3500K = 750lm
Lumen Efficiency	93lm/W, 83lm/W
Beam Angle	160°
Product Size	Ø mm * H. mm
Cap Base	E27
Voltage	AC85~135V or ac185~240V

CS-GU10C-6W



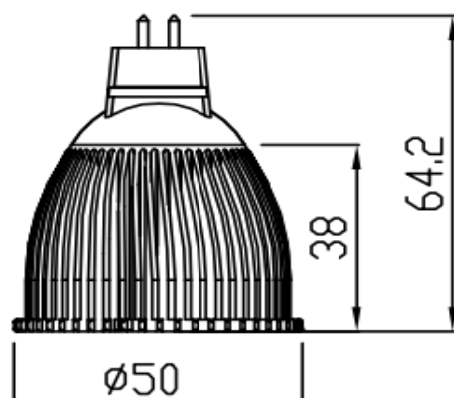
Specification	
Items	Parameter
Power	6W = Halogen
LED Qty / Name	3pcs / Epistar (licensed LED Chips)
(Ra)	≥80
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output, Efficiency	6000K = 270lm, 45lm/W 4500K = 250lm, 42lm/W 3000K = 240lm, 40lm/W
Beam Angle	25°, 45°
Product Size	Ø 50mm * 72mm
Packaging Dimension	54*54*80mm
Cap base	GU10
Net Weight	50g
Voltage	85~265V AC

CS-MR16H-4.5W



Specification	
Items	Parameter
Power	4.5W = Halogen
LED Qty / Name	4pcs / Epistar (licensed LED Chips)
(Ra)	≥80
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output, Efficiency	6000K = 270lm, 60lm/W 4500K = 250lm, 56lm/W 3000K = 240lm, 53lm/W
Beam Angle	45°
Product Size	Ø 50mm * 54mm
Packaging Dimension	54*54*61mm
Net Weight	32g
Cap Base	MR16
Voltage	12V DC

CS-MR16C-6W



Specification	
Items	Parameter
Power	6W = 50W Halogen
LED Qty / Name	3pcs / Epistar (licensed LED Chips)
(Ra)	≥80
Lifespan	≥50,000 Hours
CCT	6000K, 4500K, 3000K
Lumen Output, Efficiency	6000K = 270lm, 45lm/W 4500K = 250lm, 42lm/W 3000K = 240lm, 40lm/W
Beam Angle	25° , 45°
Product Size	Ø 50mm * 66mm
Packaging Dimension	54*54*72mm
Net Weight	40g
Cap Base	MR16
Voltage	12V AC/DC



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

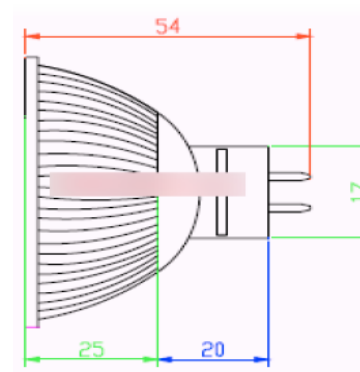
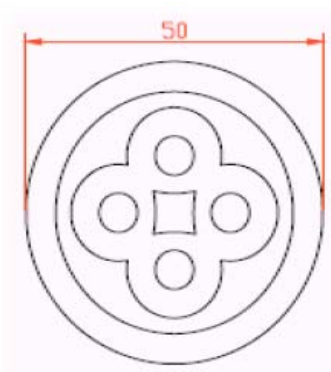


LED Spotlight Model Name: SL-MR16-6W

* Picture of real products



* Dimension (mm)



* Specification

Item	Parameter
Power consumption	6 W
Light color	white
CCT	3000K-6500K
(Ra)	≥69%
Working hours	50,000 Hours
Lumen Output	400 lm
Lumen Efficiency	67 lm/W
Beam Angle	30°, 45 °
Diamention	Height 54 mm: Diameter 50 mm
Finish	Aluminum alloy+PC

* Technical request

Input voltage	AC220V 50Hz
Operation temperature	-20 °C ~+ 35 °C

* Diagram of the lamp



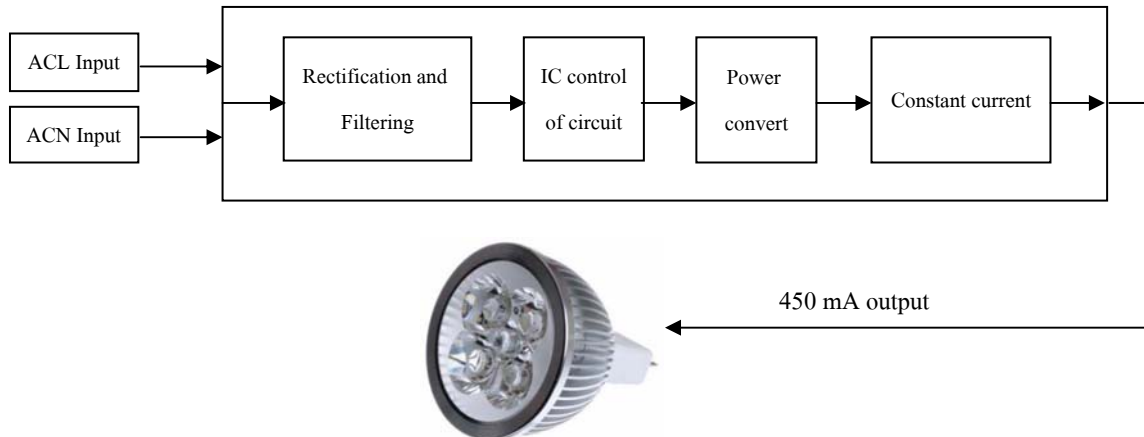
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com



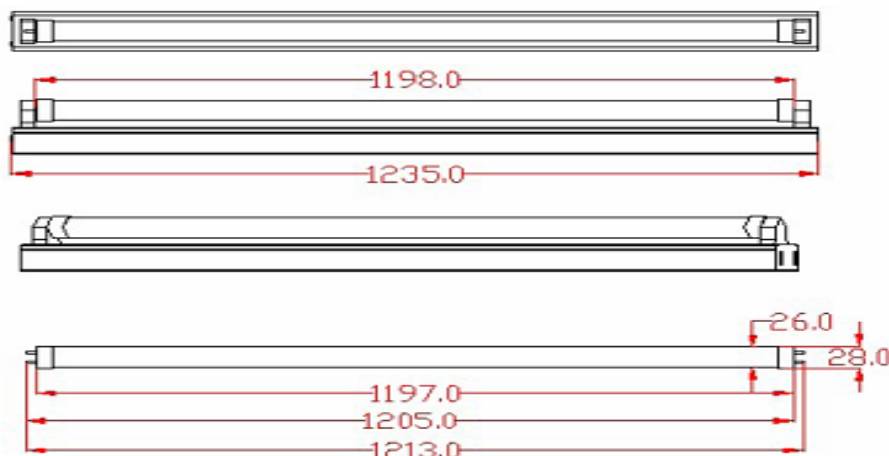
LED Spotlight Model Name: SL-MR16-6W

Driver



Picture of real products

LED Tube 10 W



TTC LED TUBE T8-B10W-120cm Clear Cool White

•Specification

Item	Parameter
Input voltage	86-265 V
Power consumption	10 W
LED Qty	168 pcs
Colour Temperature	3000-6500 K
Ra	≥75 %
Life Time	≥50000 Hr
Lumen Output	≥1000 lm
Lumen Efficiency	100 lm/w
Beam Angle	120°
Tube Length	1198 mm
Finish	Aluminum alloy+PC
Net Weight	380 g
Operation temperature	-30℃ ~+ 40℃
Storage temperature	-40℃ ~+ 55℃



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebieue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com

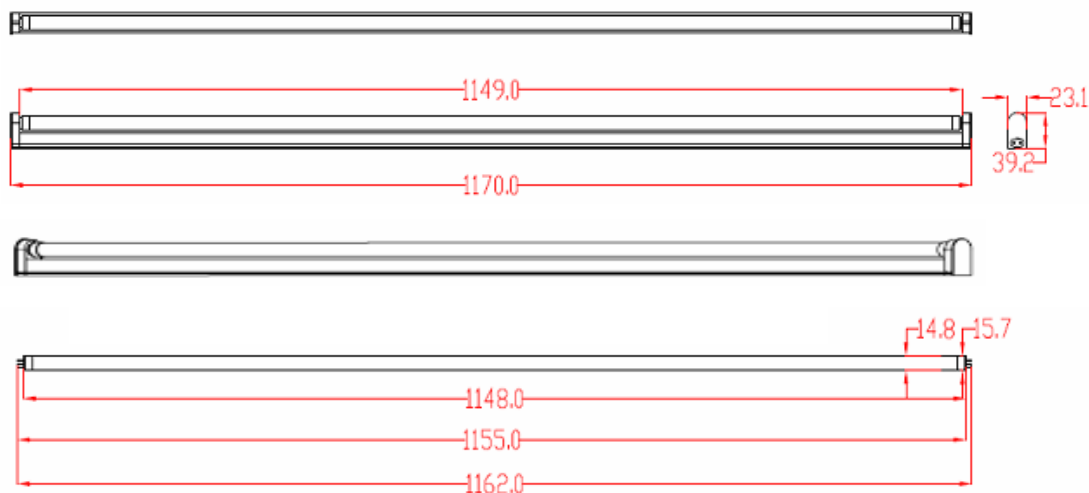


LED Tube (T5) Model Name: BNL-RG-18WS-60T5

* Picture of real products



* Dimension (mm)



* Specification

Item	Parameter
Power consumption	18W
LED Qty	60PCS
Light color	white
CCT	3000K-6500K
(Ra)	≥65%
Working hours	50,000 Hours
Lumen Output	≥1500lm
Lumen Efficiency	83lm/W
Beam Angle	120°
Tube Length	1198mm
Finish	Aluminum alloy+PC



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com



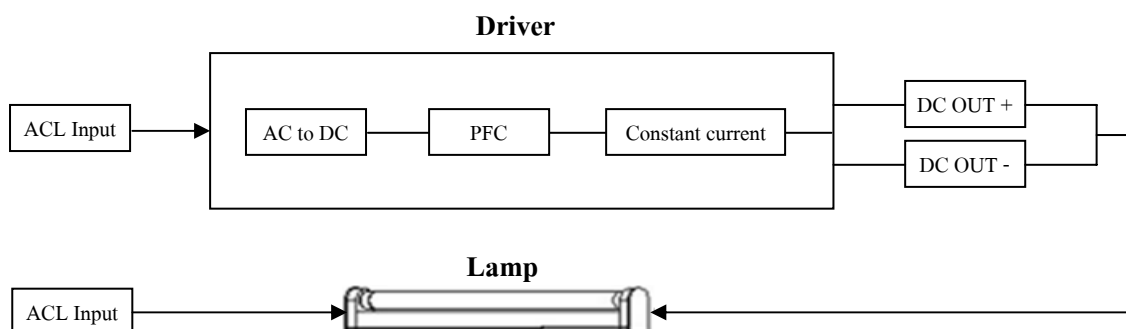
LED Tube (T5)

Model Name: BNL-RG-18WS-60T5

* Technical request

Input voltage	AC220V/AC110V 50Hz/60Hz
Operation temperature	-30 °C ~+ 40 °C
Storage temperature	-40 °C ~ + 55 °C

* Diagram of the lamp



* Product Features

1. High power and wide range of Voltage: 85~170V or 170~265V AC
2. Constant current design to protect the LED chip won't be damaged due to voltage change and keep stable lighting
3. Guarantee no flicker
4. Individual chip secured, one defect won't influence others
5. Better illumination performance compared to traditional CFL tube light



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcgroups.com

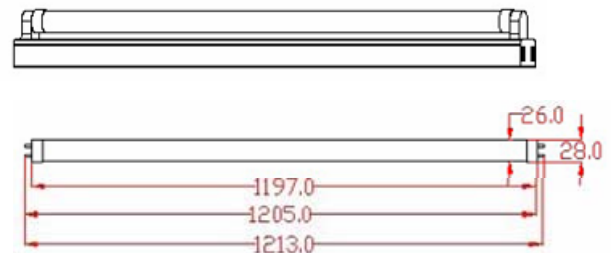
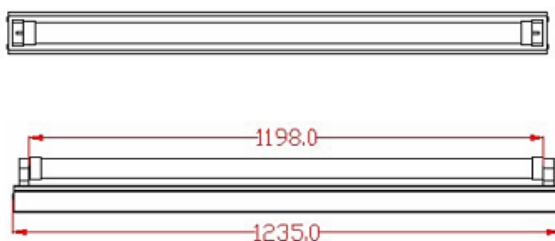


LED Tube (T8)

Model Name: BNL-RG-18WS-288 T8



* Dimension (mm)



* Specification

Item	Parameter
Power consumption	18W
LED Qty	288PCS
Light color	white
CCT	3000K-6500K
(Ra)	$\geq 80\%$
Working hours	50,000 Hours
Lumen Output	$\geq 1,800$ lm
Lumen Efficiency	100 lm/W
Beam Angle	120°
Tube Length	1,198mm
Finish	Aluminum alloy+PC

* Technical request

Input voltage	AC220V/AC110V 50Hz/60Hz
Operation temperature	$-30^{\circ}\text{C} \sim +40^{\circ}\text{C}$
Storage temperature	$-40^{\circ}\text{C} \sim +55^{\circ}\text{C}$



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

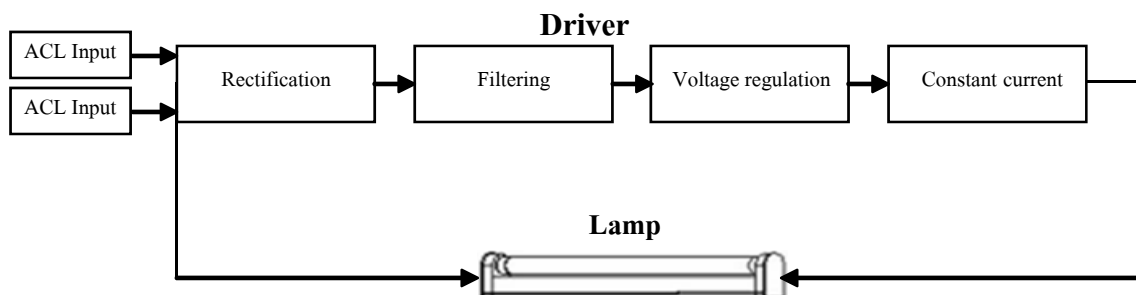
Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcgroups.com



LED Tube (T8)

Model Name: BNL-RG-18WS-288 T8

* Diagram of the lamp



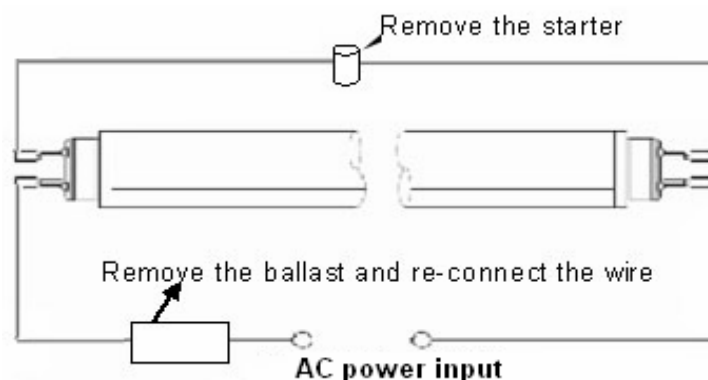
* Product Features

1. High power and wide range of Voltage: 85~170V or 170~265V AC
2. Constant current design to protect the LED chip won't be damaged due to voltage change and keep stable lighting
3. Guarantee no flicker
4. Individual chip secured, one defect won't influence others
5. Better illumination performance compared to traditional CFL tube light

* Installation Instruction

1. any replacement must be executed in the condition of the power is off.
2. It is strictly forbidden to replace the LED tube light to the housing matched with traditional CFL before cancel the ballast and starter.
3. how to refresh the old housing?

Attention: LED tube light doesn't need ballast and starter.





TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcgroups.com

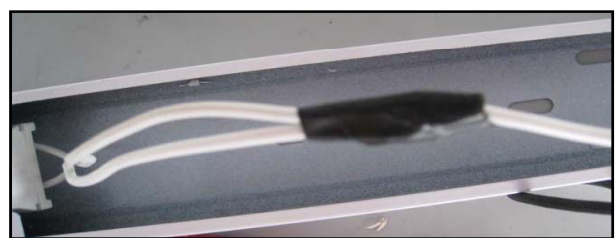


LED Tube (T8)

Model Name: BNL-RG-18WS-288T8

* Refreshment to the single tube light housing

Step 1: combine wires which came from same side into 1 and well seal them (pull back all the wires connected with ballast and starter), you may find 1 wire in each side, like below:

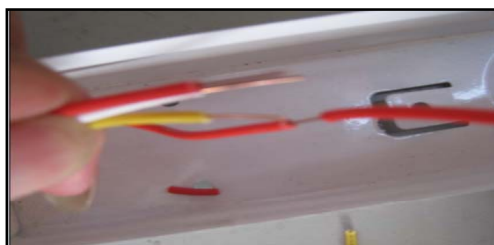


Step 2: Connect the 2 wires from both side of housing to AC220 or AC110, then replace the led tube light on it. Refreshment finished.



* Refreshment to the double or more tube light housing

Step 1: combine wires which came from same side into 1 and well seal them (pull back all the wires connected with ballast and starter), you may find 1 wire in each side, like below:



Step 2: Connect the 2 wires from both side of housing to AC220 or AC110, and then replace the led tube light on it. Refreshment finished.





TTC LED TECHNOLOGY (THAILAND) CO., LTD.

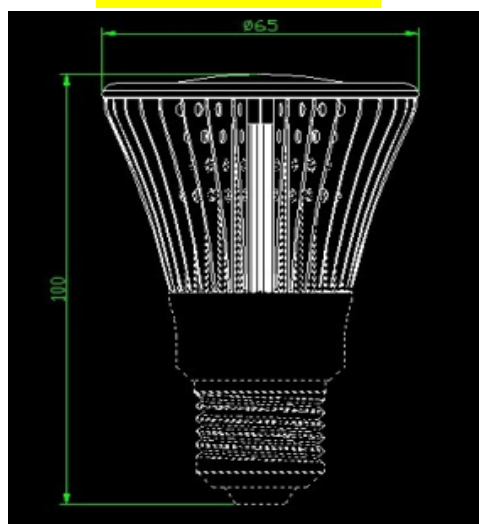
Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarn, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com



BNL-PAR20B



Dimension (mm)



●Specification Model : BNL-PAR20B, Voltage : 90-265V AC

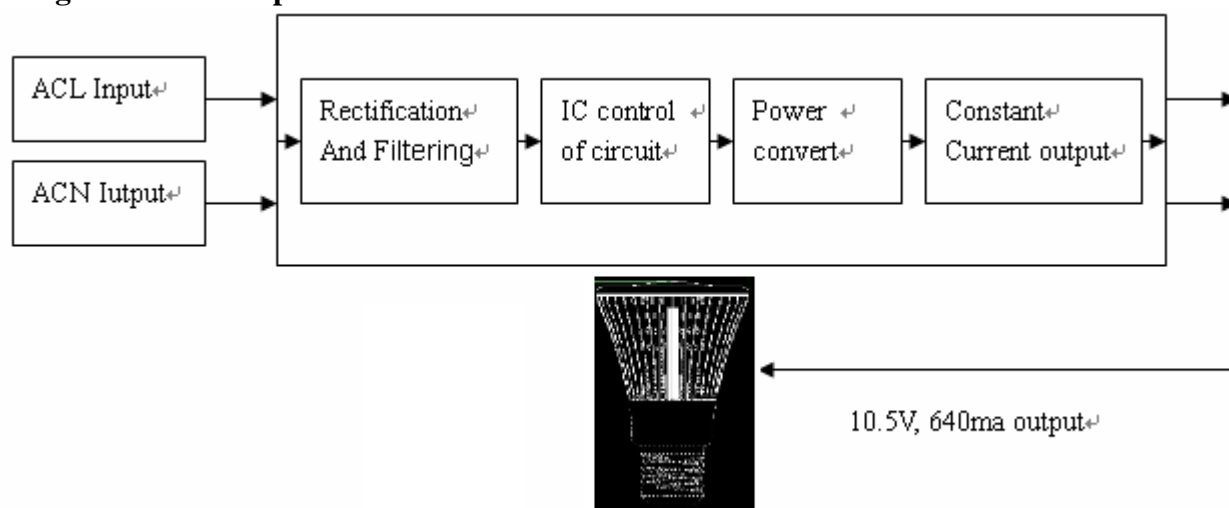
Item	Parameter
Power consumption	8W
LED Qty	1PCS

Light color	white
CCT	2800 (warm white) 5000 (cool white)
(Ra)	>69 (warm white) / >60 (cool white)
Lifespan	>50,000 Hours
Lumen Output	500 lm (warm white) /600lm (cool white)
Lumen Efficiency	65lm/W (warm white) , 80m/W (cool white)
Beam Angle	20°, 40° and 60°
Net Weight	120g
Packing Specifications	1cs/1 box
Packing Dimension	75x75x145

●technical request

item	Units	Parameter range
Operation temperature	°C	-30°C ~+ 40°C
Storage temperature	°C	-40°C ~+ 55°C
Input voltage	V	90~265V AC 50hz/60hz

●Diagram of the lamp



●Product Features

1. COB LED application
2. Innovative & Long life LED Driver, no electrolytic capacitor design.
3. Light in weight

●Application

Office Building, Shop and Home, focus on indoor Lighting and replace for Replace for Halogen PAR20 item

●Attention

1. Please plug in the power properly. this lamp is only used for 90~265V AC power
2. Please do not use this item in high humidity environment, like bathroom



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

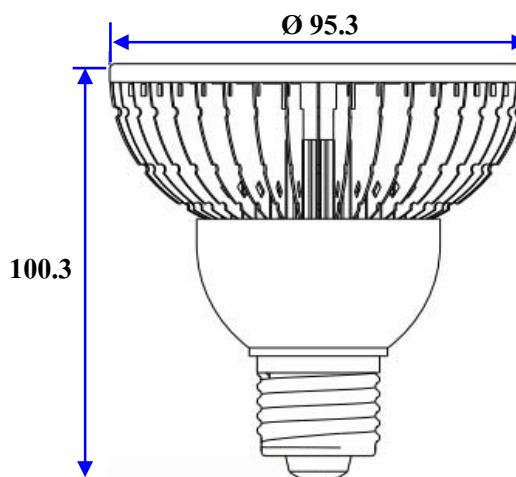


LED PAR30 Model Name: BNL-PAR30B-12W

* Picture of real products



* Dimension (mm)



* Specification

Item	Parameter
Power consumption	12 W
Light color	Warm white and Cold white
CCT	3000K , 6500K
(Ra)	≥70%
Working hours	50,000 Hours
Lumen Output	650 lm
Lumen Efficiency	54 lm/W
Beam Angle	20°, 35°, 60°
Dimension	Height 100.3 mm; Diameter 95.3 mm
Finish	Aluminum alloy+PC

* Technical request

Input voltage	AC220V 50Hz.
Operation temperature	-20 °C ~+ 40 °C
Storage temperature	-40 °C ~+ 55 °C



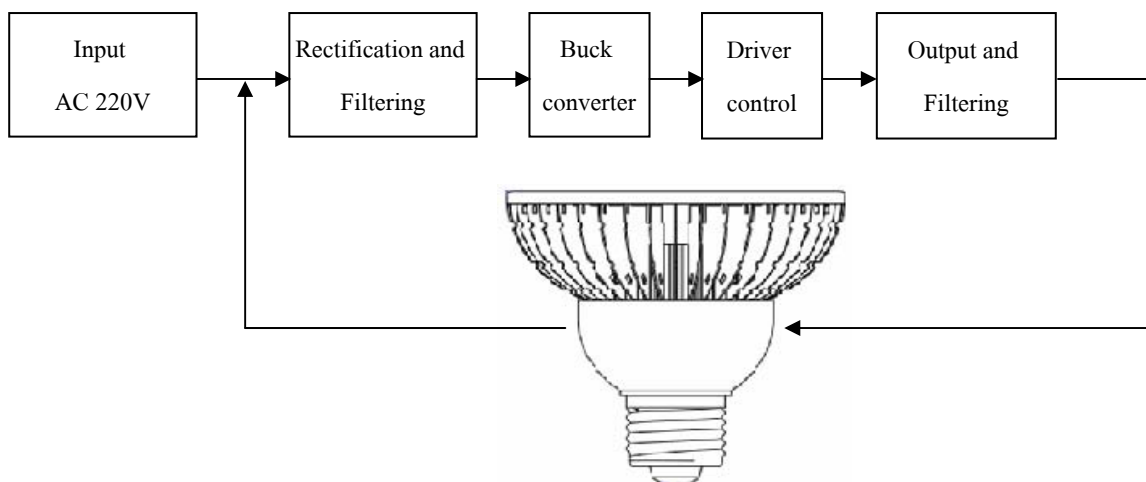
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com



LED PAR30 Model Name: BNL-PAR30B-12W

* Diagram of the lamp



* Application

- Office Building , shop and Home , focus on indoor lighting and replace for Hologen PAR30



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

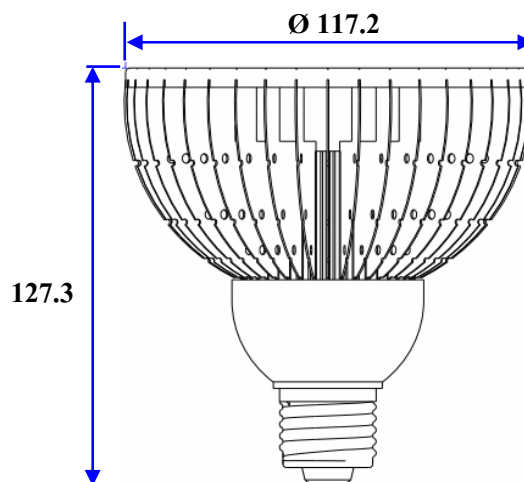


LED PAR38 Model Name: BNL-PAR38B-18W

* Picture of real products



* Dimension (mm)



* Specification

Item	Parameter
Power consumption	18W
Light color	Warm white and Cold white
CCT	3000K , 6500K
(Ra)	≥70%
Working hours	50,000 Hours
Lumen Output	1000 lm
Lumen Efficiency	56 lm/W
Beam Angle	20°, 35°, 60°
Diamension	Height 54 mm: Diameter 95.3 mm
Finish	Aluminum alloy+PC

* Technical request

Input voltage	AC220V 50Hz.
Operation temperature	-20 °C ~+ 40 °C
Storage temperature	-40 °C ~+ 55 °C



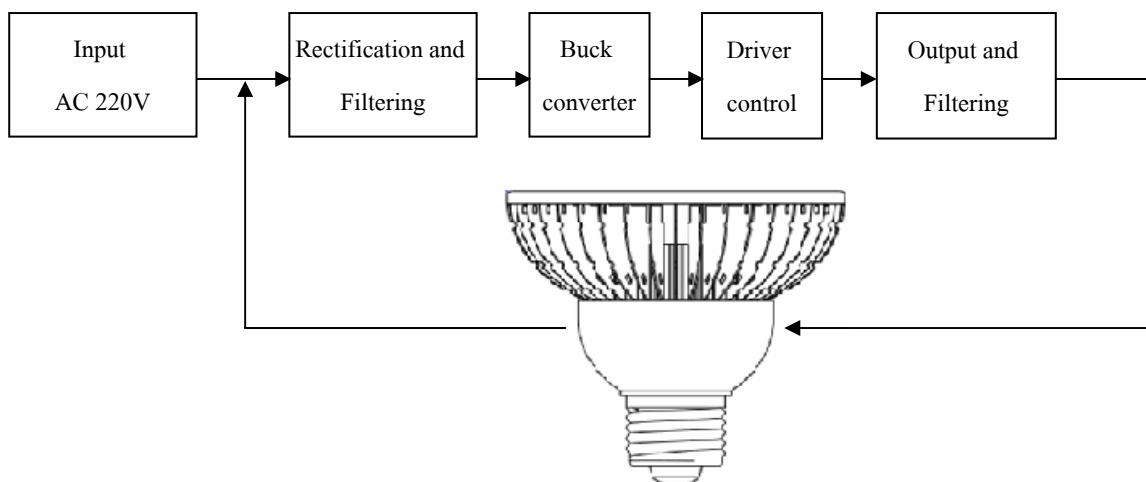
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakhebie, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com



LED PAR38 Model Name: BNL-PAR38B-18W

* Diagram of the lamp



* Application

- Office Building , shop and Home , focus on indoor lighting and replace for Hologen PAR38



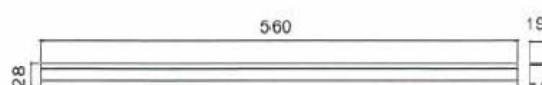
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcgroups.com

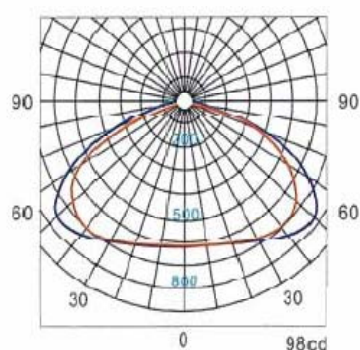


LED Panel Ceiling Light

LED Panel Ceiling Light



Item	Product NO		FL07B0*120541		
Nominal input voltage	V		AC100-240		
Power	W		15		
Color temperature	K		3000	4000	6000
Nominal luminous flux	lm		500	550	600
Viewing angle	°		175		
LED number	pcs		120		
Operating temperature	°C		-25-80		



Equipped with 120 pcs low power LED,
 each lamp has cool
 white(6000K), Neutral white(4000K),
 warm white(3000K) style
 power supply inside.
 One versions:
 The product is long life.





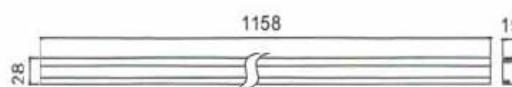
TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcgroups.com

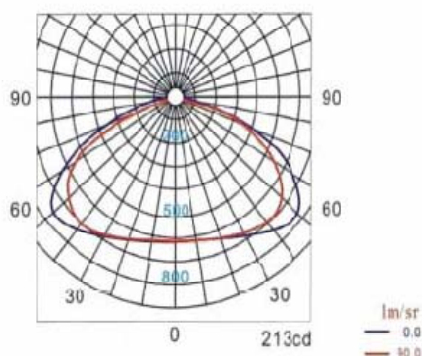


LED Panel Ceiling Light

LED Panel Ceiling Light



Item		FL07B0*240541
Nominal input voltage	V	AC100-240
Power	W	30
Color temperature	K	3000 4000 6000
Nominal luminous flux	lm	800 1000 1300
Viewing angle		175
LED number	pcs	240
Max Ta at nominal current	°C	-25~80

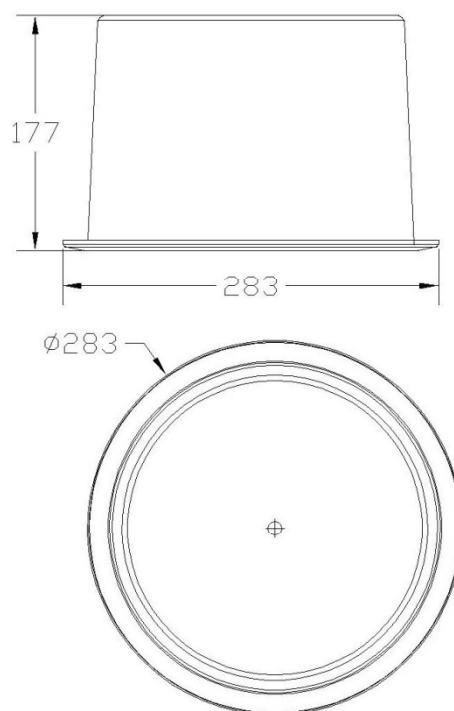


Equipped with 240 pcs low power LED,
 each lamp has cool
 white(6000K), Neutral white(4000K),
 warm white(3000K) style
 power supply inside.
 One versions:
 The product is long life.



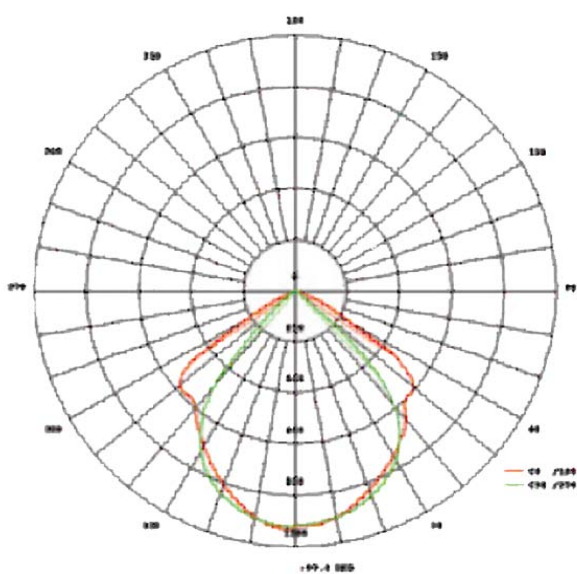
HIGH POWER LED CEILING LAMP

MODEL : MTH03

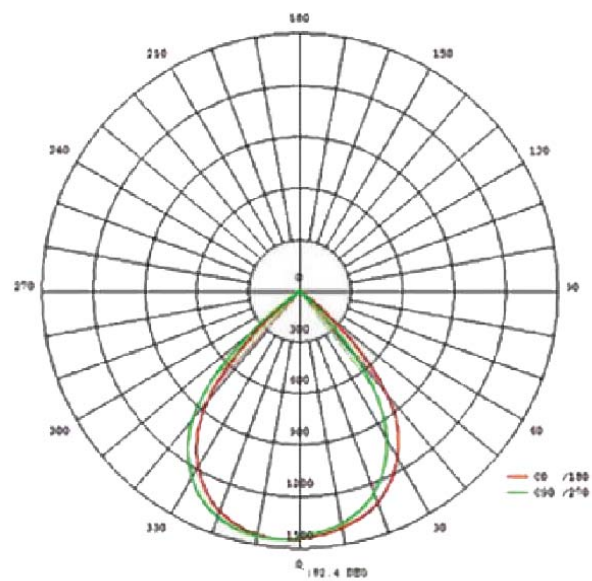


LIGHT DISTRIBUTION CURVE

①



②



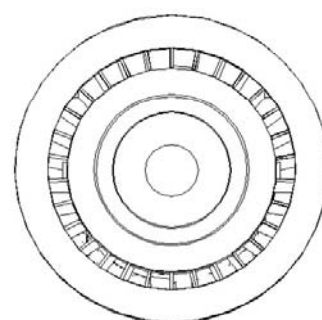
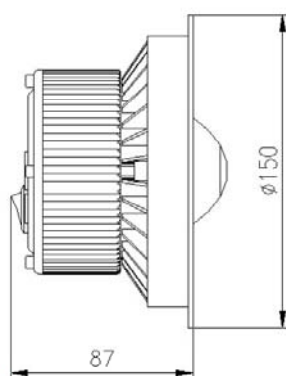
TECHNICAL PARAMETER

Model	MTH03-20W	MTH03-30W	MTH03-40W
ITEM			
INPUT VOLTAGE	AC 85~265V		
POWER FREQUENCY RANGE	47~63Hz		
POWER FACTOR(PF)	>0.90		
TOTAL HARMONIC DISTORTION	<3%		
WORKING VOLTAGE	DC24V		
LED POWER CONSUMPTION	20W	30W	40W
SYSTEM CONSUMPTION	22W	33W	44W
LED LUMINOUS EFFICIENCY	≥90Lm/W		
LED INITIAL FLUX	≥1800Lm	≥2700Lm	≥3600Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%		
COLOR TEMPERATURE	3000K~7000K		
COLOR RENDERING INDEX(CRI)	Ra>80		
BEAM ANGLE	90°~ 160°		
JUNCTION TEMPERATURE(TJ)	<70°C		
WORKING ENVIRONMENT	Working Temperature: -40°C~60°C Working Humidity: 0~100%		
IP RATING	IP67		
WORKING LIFE	>50,000 Hrs		
NET WEIGHT	4.2 Kg		
GROSS WEIGHT	4.9 Kg		
PACKING SIZE	35.5 X 35.5 X 25 cm		

Note: Lens can be changed according to client's specific requirement.

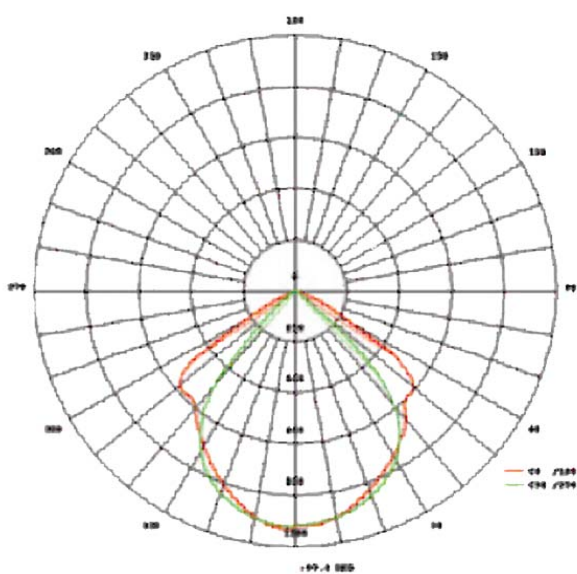
HIGH POWER LED CEILING LAMP

MODEL : MTH05

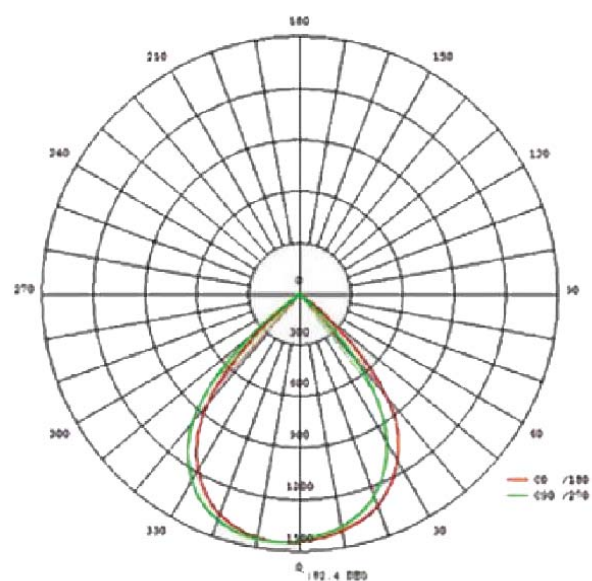


LIGHT DISTRIBUTION CURVE

①



②



TECHNICAL PARAMETER

Model	MTH05-5W	MTH05-10W	MTH05-15W
ITEM			
INPUT VOLTAGE	AC 85~265V		
POWER FREQUENCY RANGE	47~63Hz		
POWER FACTOR(PF)	>0.90		
TOTAL HARMONIC DISTORTION	<3%		
WORKING VOLTAGE	DC12V		
LED POWER CONSUMPTION	5W	10W	15W
SYSTEM CONSUMPTION	5.5W	11W	16.5W
LED LUMINOUS EFFICIENCY	≥90Lm/W		
LED INITIAL FLUX	≥450Lm	≥900Lm	≥1350Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%		
COLOR TEMPERATURE	3000K~7000K		
COLOR RENDERING INDEX(CRI)	Ra>80		
BEAM ANGLE	90°~ 140°		
JUNCTION TEMPERATURE(TJ)	<70℃		
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%		
IP RATING	IP67		
WORKING LIFE	>50,000 Hrs		

Note: Lens can be changed according to client's specific requirement.

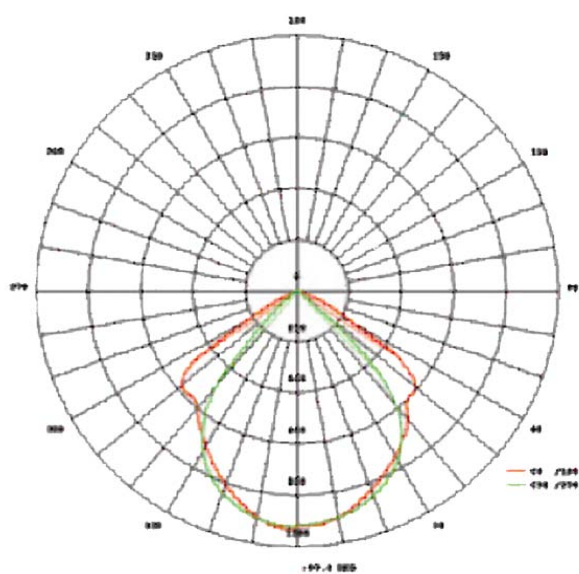
HIGH POWER LED CEILING LAMP

MODEL : MTH02

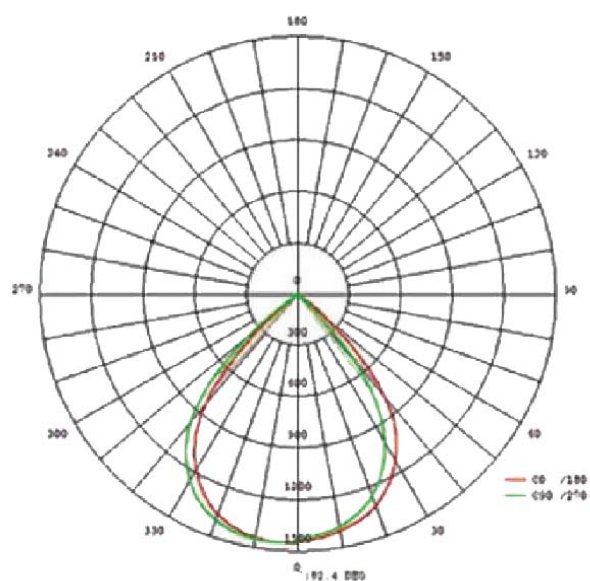


◆ LIGHT DISTRIBUTION CURVE

①



②



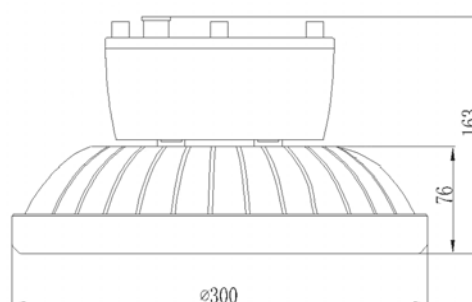
TECHNICAL PARAMETER

Model	MTH02-20W	MTH02-30W	MTH02-40W
ITEM			
INPUT VOLTAGE	AC 85~265V		
POWER FREQUENCY RANGE	47~63Hz		
POWER FACTOR(PF)	>0.90		
TOTAL HARMONIC DISTORTION	<3%		
WORKING VOLTAGE	DC24V		
LED POWER CONSUMPTION	20W	30W	40W
SYSTEM CONSUMPTION	22W	33W	44W
LED LUMINOUS EFFICIENCY	≥90Lm/W		
LED INITIAL FLUX	≥1800Lm	≥2700Lm	≥3600Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%		
COLOR TEMPERATURE	3000K~7000K		
COLOR RENDERING INDEX(CRI)	Ra>80		
BEAM ANGLE	90°~ 160°		
JUNCTION TEMPERATURE(TJ)	<70°C		
WORKING ENVIRONMENT	Working Temperature: -40°C~60°C Working Humidity: 0~100%		
IP RATING	IP67		
WORKING LIFE	>50,000 Hrs		
NET WEIGHT	4.2 Kg		
GROSS WEIGHT	4.9 Kg		
PACKING SIZE	35.5 X 35.5 X 25 cm		

Note: Lens can be changed according to client's specific requirement.

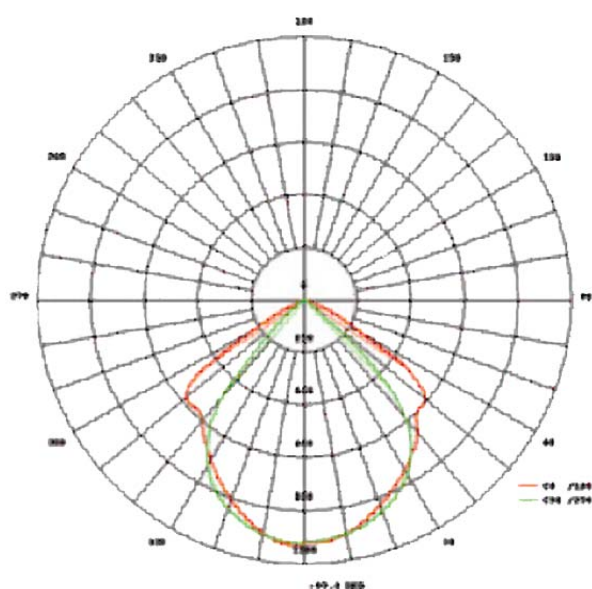
HIGH POWER LED CEILING LAMP

MODEL : MTH01

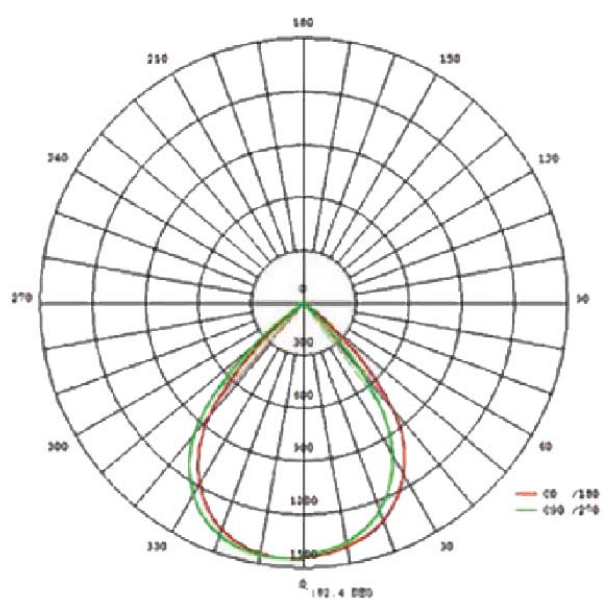


◆ LIGHT DISTRIBUTION CURVE

①



②



TECHNICAL PARAMETER

Model	MTH01-50W	MTH01-60W	MTH01-70W	MTH01-80W	MTH01-90W	MTH01-100W	MTH01-120W
ITEM							
INPUT VOLTAGE	AC 85~265V						
POWER FREQUENCY RANGE	47~63Hz						
POWER FACTOR(PF)	>0.90						
TOTAL HARMONIC DISTORTION	<3%						
WORKING VOLTAGE	DC26V				DC31V		
LED POWER CONSUMPTION	50W	60W	70W	80W	90W	100W	120W
SYSTEM CONSUMPTION	55W	66W	77W	88W	99W	110W	132W
LED LUMINOUS EFFICIENCY	≥90Lm/W						
LED INITIAL FLUX	≥4500Lm	≥5400Lm	≥6300Lm	≥7200Lm	≥8100Lm	≥9000Lm	≥10800Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%						
COLOR TEMPERATURE	2500K~7000K						
COLOR RENDERING INDEX(CRI)	Ra>80						
BEAM ANGLE	90°~ 160°						
JUNCTION TEMPERATURE(TJ)	<70℃						
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%						
IP RATING	IP67						
WORKING LIFE	>50,000 Hrs						
NET WEIGHT	5.2 Kg						
GROSS WEIGHT	6.7 Kg						
PACKING SIZE	37.5 X 37.5 X 20 cm						
Note: Lens can be changed according to client's specific requirement.							



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax : +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com







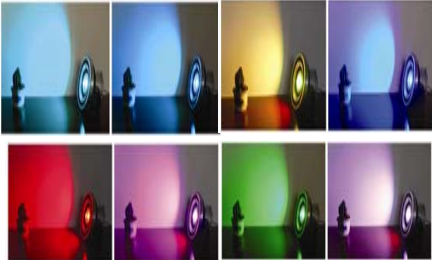
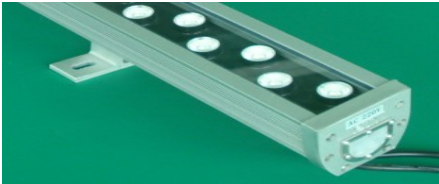
UPDATE : Jan/2012







TTC LED LAMP PRICE LIST " RETAIL PRICE " 2012








Item	Picture	Product Name	Model	Color	Price Offer (BAHT)	Price Nett (BAHT)
1	LED STREET LAMP (OUT, INDOOR)					
		- TTC-LED Street Lamp 20W	ML018-20W (20W/80W)	Cool White / Warm White		
		- TTC-LED Street Lamp 30W	ML018-30W (30W/100W)			
		- TTC-LED Street Lamp 50W	ML018-50W (50W/150W)			
		- TTC-LED Street Lamp 75W	ML015-75W (75W/200W)			
		- TTC-LED Street Lamp 90W	ML-015-90W (90W/250W)			
		- TTC-LED Street Lamp 120W	ML-015-120W (120W/300W)			
		- TTC-LED Street Lamp 150W	ML-015-150W (150W/400W)			
		- TTC-LED Street Lamp 150W	ML009-150W (150W/400W)			

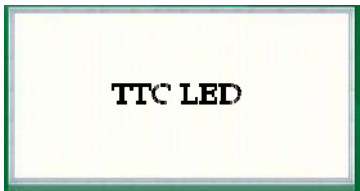



Item	Picture	Product Name	Model	Color	Price Offer (BAHT)	Price Nett (BAHT)
2	GARDEN SPOT LIGHT					
		<div>- TTC LED Garden Spot Light Lamp 10</div> <div>- TTC LED Garden Spot Light Lamp 15</div> <div>- TTC LED Garden Spot Light Lamp 30</div> <div>- TTC LED Garden Spot Light Lamp 90</div> <div>- TTC LED Garden Spot Light Lamp 12</div> <div>- TTC LED Garden Spot Light Lamp 15</div>	<div>MCZ-C10 (10W/60W)</div> <div>MCZ-C30 (15W/50W)</div> <div>MCZ-C50 (30W/100W)</div> <div>MCZ-C90W (90W/250W)</div> <div>MCZ-C120W (120W/300W)</div> <div>MCZ-C150W (150W/400W)</div>	<div>Cool White</div> <div>Warm White</div>		
3	LED BALLARD LAMP WITH SOLAR CELL					
		- TTC LED BALLARD LAMP	TTC LED 2035 (10W,15W)	Cool White / Warm White		
		- TTC LED BALLARD LAMP	TTC LED 2036 (10W,15W)			
4	LED EXPLOSION PROOF LAMP					
		<div>- TTC LED Explosion Proof Lamp 90W</div> <div>- TTC LED Explosion Proof Lamp 120W</div> <div>- TTC LED Explosion Proof Lamp 150W</div>	<div>MF-90W/250W</div> <div>MF-120W/300W</div> <div>MF-150W/400W</div>	<div>Cool White /</div> <div>Warm White</div>		


Item	Picture	Product Name	Model	Color	Price Offer (BAHT)	Price Nett (BAHT)
5	LED TUNNEL LAMP (HIGH BAY)					
		- TTC LED Tunnel Lamp 75W	MS-75W/200W	Cool White /		
		- TTC LED Tunnel Lamp 90W	MS-90W/250W	Warm White		
		- TTC LED Tunnel Lamp 120W	MS120W/300W			
		- TTC LED Tunnel Lamp 150W	MS-150W/400W			
6	CEILING LAMP					
		- TTC LED Ceiling Lamp 60W	MTH-60W-1 (60W/120W)	Cool White /		
		- TTC LED Ceiling Lamp 90W	MTH-90W-1 (90W/250W)	Warm White		
		- TTC LED Ceiling Lamp 120W	MTH-120W-1 (120W/300W)			
		- TTC LED Ceiling Lamp 150W	MTH-120W-1 (150W/400W)			
7	LED MOVEABLE WORKING LAMP SERIES					
		- TTC LED Movable Working Lamp 9	MYD-002-50 (90W/250W)	Cool White /		
			MYD-000-50 (90W/250W) Battery	Warm White		
		- TTC LED Movable Working Lamp 1	MYD-003-50 (120W/350W)			
			MYD-003-50 (120W/350W) Battery			


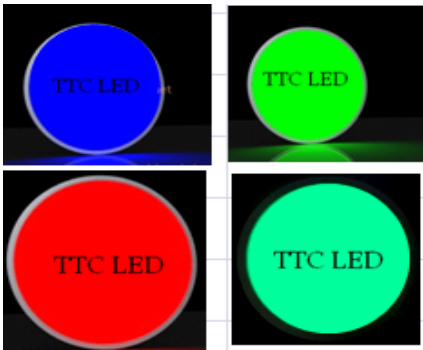

Item	Picture	Product Name	Model	Color	Price Offer (BAHT)	Price Nett (BAHT)
8	SPOT LIGHT SERIES					
		<ul style="list-style-type: none"> - TTC LED Spot Light Lamp 30W - TTC LED Spot Light Lamp 90W - TTC LED Spot Light Lamp 120W - TTC LED Spot Light Lamp 150W 	MLC-018 (30W/100W) MLC-009 (90W/250W) MLC-0120 (120W/300W) MLC-0150 (150W/400W)	Cool White / Warm White		
9	HIGH POWER LED RGB LAMP					
		<ul style="list-style-type: none"> - TTC LED HP RGB 30W (FULL COLOR) - TTC LED HP RGB 90W (FULL COLOR) - TTC LED HP RGB 120W (FULL COLOR) - TTC LED HP RGB 150W (FULL COLOR) 	ML010-HP-RGB (30W/100W) ML011-HP-RGB (90W/250W) ML012-HP-RGB (120W/300W) ML013-HP-RGB (150W/400W)	Cool White / Warm White		
10	TTC LED WASH WALL LAMP SERIES					
		<ul style="list-style-type: none"> - TTC LED WALL WASHER (HIGH POWER) 	MXQ-36W (12X3 W) Size 1000 x 72 x 66 mm.	Light Color RGB DM x512 Control		


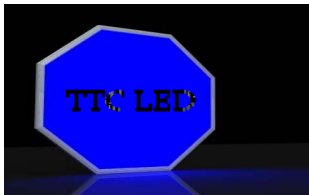

Item	Picture	Product Name	Model	Color	Price Offer (BAHT)	Price Nett (BAHT)
11	LED SAVING LAMP BULB (IN DOOR)					
		- TTC LED SE14 Candle Lamp - TTC LED 27SMD Candle Lamp	SE 4W/40W, E14 SE 4W/40W, E27			
		- TTC LED SE14 Golf Ball Lamp - TTC LED 27SMD Golf Ball Lamp	C27S 4W/40W, E14 C27S 4W/40W, E27			
		- TTC LED LS-BL-G1-4W - TTC LED LS-BL-G1-7W - TTC LED LS-BL-G1-9W	BL-G1-4W (4W/40W) E27 BL-G1-7W (7W/70W) E27 BL-G1-9W (9W/90W) E27			
12	LED SPOT LIGHT (IN DOOR)					
		- TTC LED Spot Light AC230V	SL-GU10-4W (4W/40W)			
		- TTC LED Spot Light DC12V	SL-MR16-4W (4W/40W) SL-MR16-6W (6W/50W)			
		- TTC LED Spot Light AC230V - TTC LED Spot Light AC230V	BNL-PAR30B 12W/50W -40°, -60° φ 95.3 x 100.3 BNL-PAR38B 18W/70W -40°, -60° φ 117.2 x 127.3			

Item	Picture	Product Name	Model	Color	Price Offer (BAHT)	Price Nett (BAHT)
13	TTC LED ROUND DOWN LIGHTS					
		- TTC LED Round Downlight	BNL-TH-3X1WS83-3W -30°, -45°			
		- TTC LED Round Downlight	BNL-TH-3X3WS92-9W -30°, -45°			
		- TTC LED Round Downlight	BNL-TH-6X1WS125-6W -30°, -45°			
14	TTC LED SQUARE DOWNLIGHTS					
		- TTC LED Square Downlight	BNL-THF-1-3X1WB-3W -30°, -45°			
		- TTC LED Square Downlight	BNL-THF-2-3X1WB-6W -30°, -45°			
		- TTC LED Square Downlight	BNL-THF-3-3X1WB-9W -30°, -45°			
		- TTC LED Square Downlight	BNL-THF-3-3X1WB-12W -30°, -45°			
15	TTC LED TUBE					
		- TTC-LED TUBE (T5) 120 cm. (Clear)	BNL-RG-18WS-60 T5 (18/W36W)			
		- TTC LED TUBE (T8) 34 cm. (Clear)	BNL-RG-5WS-15T8 (5W/10W)			
		- TTC LED TUBE (T8) 60 cm. Frost, C	BNL-RG-10WS-30 T8 (10W/18W)	Cool White /		
		- TTC LED TUBE (T8) 120 cm Frost, C	BNL-RG-18WS-288T8 (18W/36W)			
		- TTC LED TUBE (T8) 120 cm. Frost, C	BNL-RG-26WS-340T8 (26W/40W)			
		- TTC LED TUBE (T8) 150 cm. Frost, C	BNL-RG-30WS-420T8 (30W/90W)			

Item	Picture	Product Name	Accessories	Color	Price Offer (BAHT)	Price Nett (BAHT)
16	TTC LED SOFT PANEL HIGH- POWER LIGHT - Square Shape					
		TTC LED - M12060 (78W) •Dimensions(mm):1200*600*14 •Weight (Kg) : 8.5 •Input voltage DC(V) : 24V	POWER SUPPLY	Cool White / Warm White		
		TTC LED -M12030 (48W) •Dimensions(mm):1200*300*14 •Weight (Kg) : 4.5 •Input voltage DC(V) : 24V	POWER SUPPLY			
		TTC LED -M12015 (24W) •Dimensions(mm):1200*150*14 •Weight (Kg) : 2.5 •Input voltage DC(V) : 24V	POWER SUPPLY			
		TTC LED -M6030 (24W) •Dimensions(mm):600*300*14 •Weight (Kg) : 2.7 •Input voltage DC(V) : 24V	POWER SUPPLY			

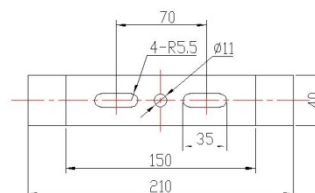
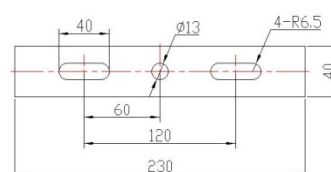
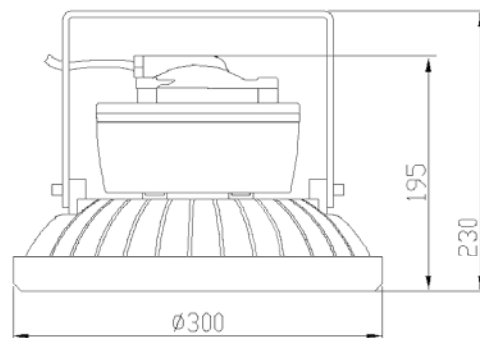
Item	Picture	Product Name	Accessories	Color	Price Offer (BAHT)	Price Nett (BAHT)
		TTC LED -M6060 (48W) •Dimensions(mm):600*600*14 •Weight (Kg) : 5.5 •Input voltage DC(V) : 24V	POWER SUPPLY			
		TTC LED -M4545 (35W) •Dimensions(mm):450*450*14 •Weight (Kg) : 4.5 •Input voltage DC(V) : 24V	POWER SUPPLY			
		TTC LED -M3030 (12W) •Dimensions(mm):300*300*14 •Weight (Kg) : 1.2 •Input voltage DC(V) : 24V	POWER SUPPLY			
		TTC LED -M2020 (7W) •Dimensions(mm):200*200*14 •Weight (Kg) : 0.35 •Input voltage DC(V) : 24V	POWER SUPPLY			
		TTC LED -M1515 (2W) •Dimensions(mm):150*150*14 •Weight (Kg) : 0.25 •Input voltage DC(V) : 24V	POWER SUPPLY			

Item	Picture	Product Name	Accessories	Color	Price Offer (BAHT)	Price Nett (BAHT)
17	TTC LED SOFT PANEL HIGH-POWER LIGHT - Spherical Shape					
	 	TTC LED -SY600 (24W) •Dimensions(mm):Φ600*16 •Weight (Kg) : 5.1 •Input voltage DC(V) : 12V	POWER SUPPLY	RGB		
		TTC LED -SY500 (19W) •Dimensions(mm):Φ500*16 •Weight (Kg) : 4.6 •Input voltage DC(V) : 12V	Controller ; Power Supply			
		TTC LED -SY400 (16W) •Dimensions(mm):Φ400*16 •Weight (Kg) : 3.5 •Input voltage DC(V) : 12V	Controller ; Power Supply			
		TTC LED -SY300 (12W) •Dimensions(mm):Φ300*16 •Weight (Kg) : 2.5 •Input voltage DC(V) : 12V	Controller ; Power Supply			
		TTC LED -SY200 (12W) •Dimensions(mm):Φ200*16 •Weight (Kg) : 2.0 •Input voltage DC(V) : 12V	Power Supply	White		

Item	Picture	Product Name	Accessories	Color	Price Offer (BAHT)	Price Nett (BAHT)
18	TTC LED SOFT PANEL HIGH POWER - OTHER SHAPE					
		TTC LED -SB600 (20W) •Dimensions(mm):Φ600*14 •Weight (Kg) : 5 •Input voltage DC(V) : 12V	Controller ; Power supply White is available	RGB FULL COLOUR		
		TTC LED -SL600 (20W) •Dimensions(mm):Φ600*14 •Weight (Kg) : 4.8 •Input voltage DC(V) : 12V	Controller ; Power supply White is available			
		TTC LED -S5038 (12W) •Dimensions(mm):500*380*14 •Weight (Kg) : 2.8 •Input voltage DC(V) : 12V	Controller ; Power supply White is available			

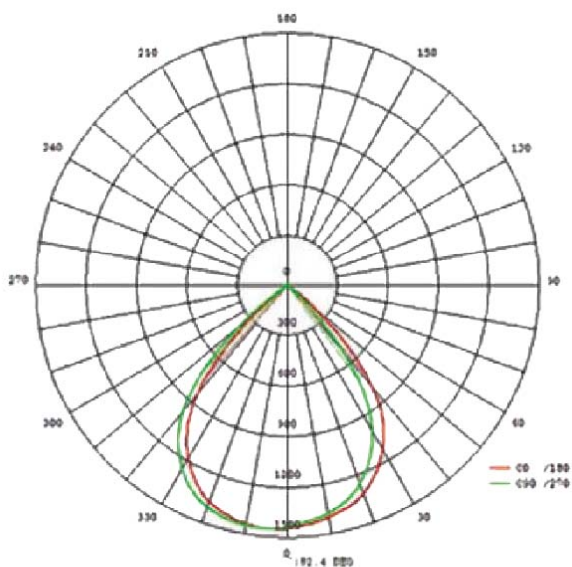
HIGH POWER LED EXPLOSION PROOF LAMP

MODEL : MF01

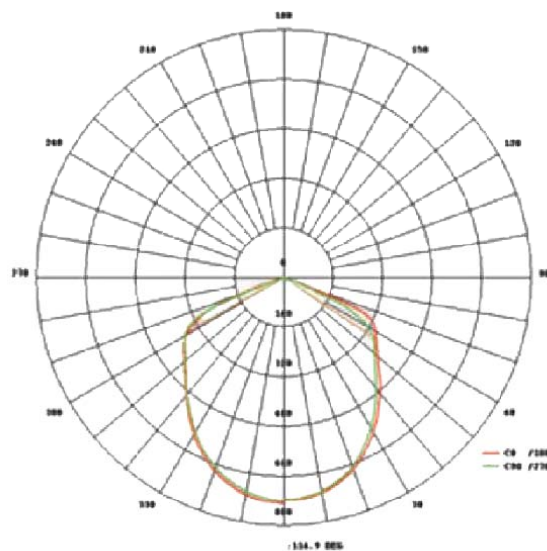


◆ LIGHT DISTRIBUTION CURVE

①



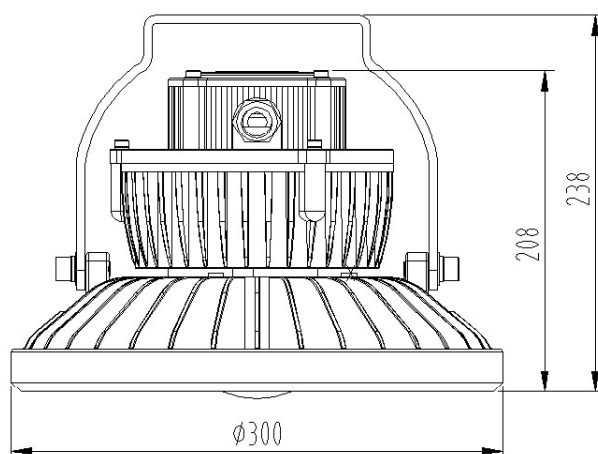
②



Model	MF01-50W	MF01-60W	MF01-70W	MF01-80W	MF01-90W	MF01-100W	MF01-120W
ITEM							
INPUT VOLTAGE	AC 85~265V						
POWER FREQUENCY RANGE	47~63Hz						
POWER FACTOR(PF)	>0.90						
TOTAL HARMONIC DISTORTION	<3%						
WORKING VOLTAGE	DC26V				DC31V		
LED POWER CONSUMPTION	50W	60W	70W	80W	90W	100W	120W
SYSTEM CONSUMPTION	55W	66W	77W	88W	99W	110W	132W
LED LUMINOUS EFFICIENCY	≥90Lm/W						
LED INITIAL FLUX	≥4500Lm	≥5400Lm	≥6300Lm	≥7200Lm	≥8100Lm	≥9000Lm	≥10800Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%						
COLOR TEMPERATURE	2500K~7000K						
COLOR RENDERING INDEX(CRI)	Ra>80						
BEAM ANGLE	60°~ 160°						
JUNCTION TEMPERATURE(TJ)	<70℃						
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%						
IP RATING	IP67						
WORKING LIFE	>50,000 Hrs						
NET WEIGHT	5.1Kg						
GROSS WEIGHT	6.3Kg						
PACKING SIZE	35.5 X 35.5 X 25 cm						
Note: Lens can be changed according to client's specific requirement.							

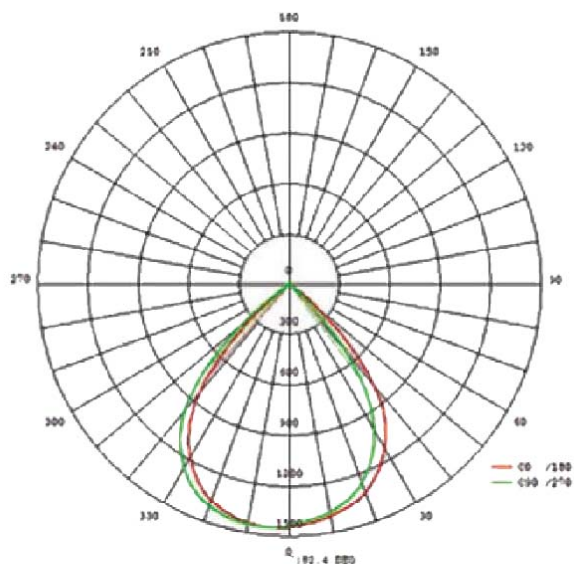
HIGH POWER LED EXPLOSION PROOF LAMP

MODEL: MF02

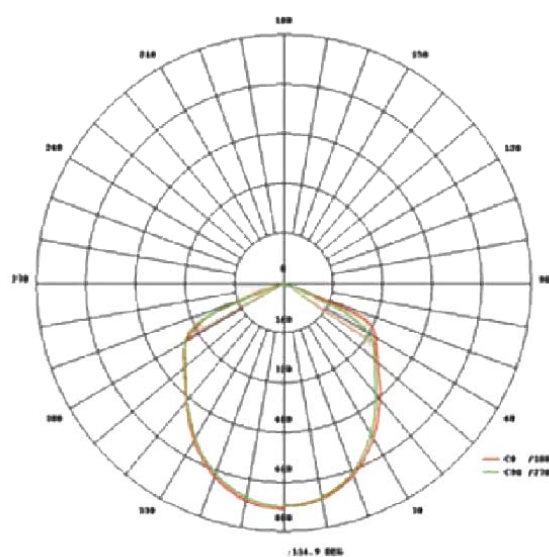


◆ LIGHT DISTRIBUTION CURVE

①



②



Model	MF02-50W	MF02-60W	MF02-70W	MF02-80W	MF02-90W	MF02-100W	MF02-120W
ITEM							
INPUT VOLTAGE	AC 85~265V						
POWER FREQUENCY RANGE	47~63Hz						
POWER FACTOR(PF)	>0.90						
TOTAL HARMONIC DISTORTION	<3%						
WORKING VOLTAGE	DC26V				DC31V		
LED POWER CONSUMPTION	50W	60W	70W	80W	90W	100W	120W
SYSTEM CONSUMPTION	55W	66W	77W	88W	99W	110W	132W
LED LUMINOUS EFFICIENCY	≥90Lm/W						
LED INITIAL FLUX	≥4500Lm	≥5400Lm	≥6300Lm	≥7200Lm	≥8100Lm	≥9000Lm	≥10800Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%						
COLOR TEMPERATURE	2500K~7000K						
COLOR RENDERING INDEX(CRI)	Ra>80						
BEAM ANGLE	60°~ 160°						
JUNCTION TEMPERATURE(TJ)	<70℃						
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%						
IP RATING	IP67						
WORKING LIFE	>50,000 Hrs						
NET WEIGHT	6.4 Kg						
GROSS WEIGHT	7.2 Kg						
PACKING SIZE	35.5 X 35.5 X 25 cm						
Note: Lens can be changed according to client's specific requirement.							

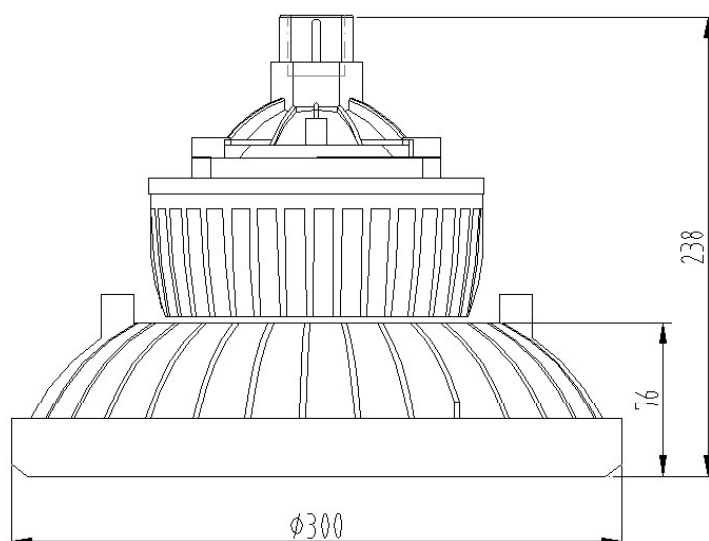
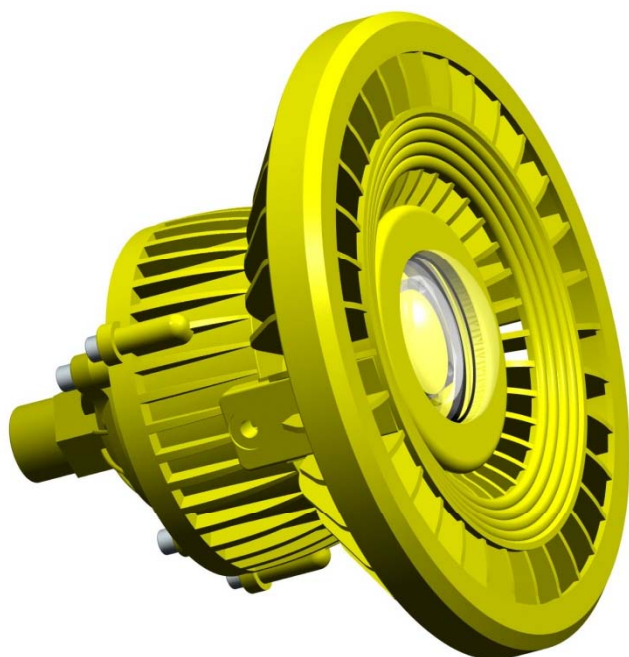
TECHNICAL PARAMETER

Model	MTH03-20W	MTH03-30W	MTH03-40W
ITEM			
INPUT VOLTAGE	AC 85~265V		
POWER FREQUENCY RANGE	47~63Hz		
POWER FACTOR(PF)	>0.90		
TOTAL HARMONIC DISTORTION	<3%		
WORKING VOLTAGE	DC24V		
LED POWER CONSUMPTION	20W	30W	40W
SYSTEM CONSUMPTION	22W	33W	44W
LED LUMINOUS EFFICIENCY	≥90Lm/W		
LED INITIAL FLUX	≥1800Lm	≥2700Lm	≥3600Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%		
COLOR TEMPERATURE	3000K~7000K		
COLOR RENDERING INDEX(CRI)	Ra>80		
BEAM ANGLE	90°~ 160°		
JUNCTION TEMPERATURE(TJ)	<70°C		
WORKING ENVIRONMENT	Working Temperature: -40°C~60°C Working Humidity: 0~100%		
IP RATING	IP67		
WORKING LIFE	>50,000 Hrs		
NET WEIGHT	4.2 Kg		
GROSS WEIGHT	4.9 Kg		
PACKING SIZE	35.5 X 35.5 X 25 cm		

Note: Lens can be changed according to client's specific requirement.

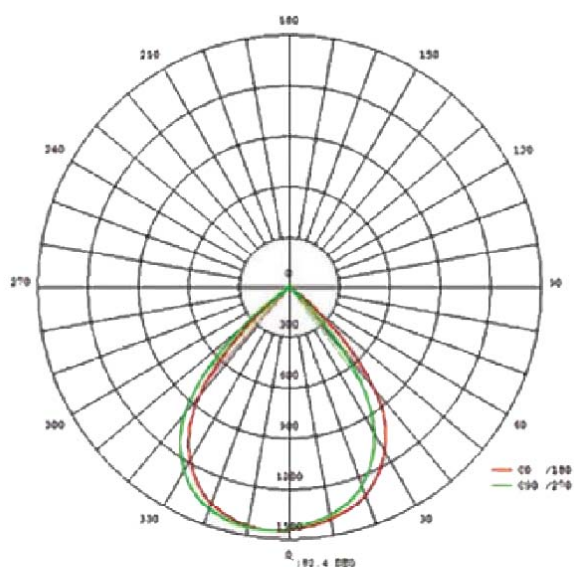
HIGH POWER LED EXPLOSION PROOF LAMP

MODEL: MF03

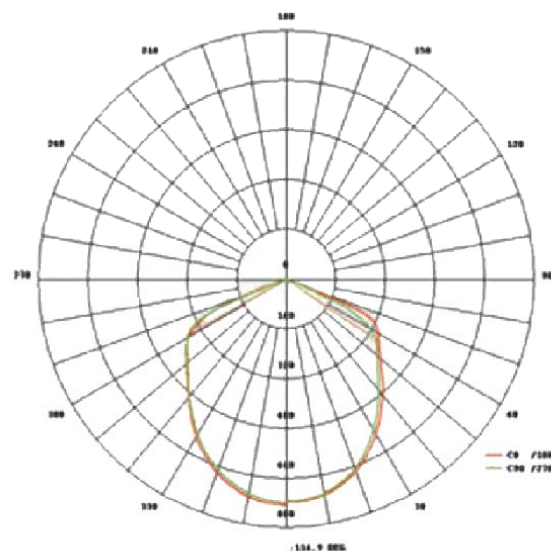


◆ LIGHT DISTRIBUTION CURVE

①



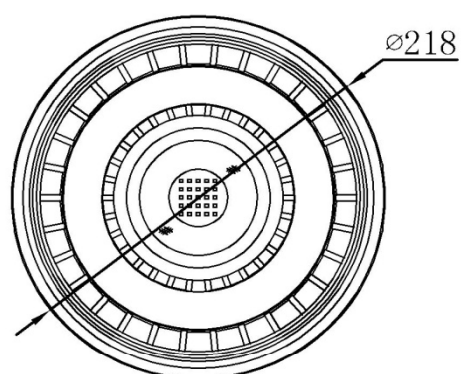
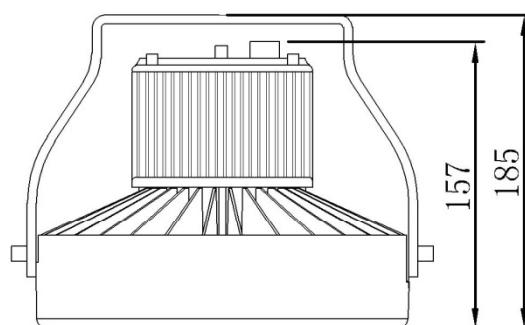
②



Model	MF03-50W	MF03-60W	MF03-70W	MF03-80W	MF03-90W	MF03-100W	MF03-120W
ITEM							
INPUT VOLTAGE	AC 85~265V						
POWER FREQUENCY RANGE	47~63Hz						
POWER FACTOR(PF)	>0.90						
TOTAL HARMONIC DISTORTION	<3%						
WORKING VOLTAGE	DC26V				DC31V		
LED POWER CONSUMPTION	50W	60W	70W	80W	90W	100W	120W
SYSTEM CONSUMPTION	55W	66W	77W	88W	99W	110W	132W
LED LUMINOUS EFFICIENCY	≥90Lm/W						
LED INITIAL FLUX	≥4500Lm	≥5400Lm	≥6300Lm	≥7200Lm	≥8100Lm	≥9000Lm	≥10800Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%						
COLOR TEMPERATURE	2500K~7000K						
COLOR RENDERING INDEX(CRI)	Ra>80						
BEAM ANGLE	60°~ 160°						
JUNCTION TEMPERATURE(TJ)	<70℃						
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%						
IP RATING	IP67						
WORKING LIFE	>50,000 Hrs						
NET WEIGHT	4.9 Kg						
GROSS WEIGHT	5.7 Kg						
PACKING SIZE	35.5 X 35.5 X 25 cm						
Note: Lens can be changed according to client's specific requirement.							

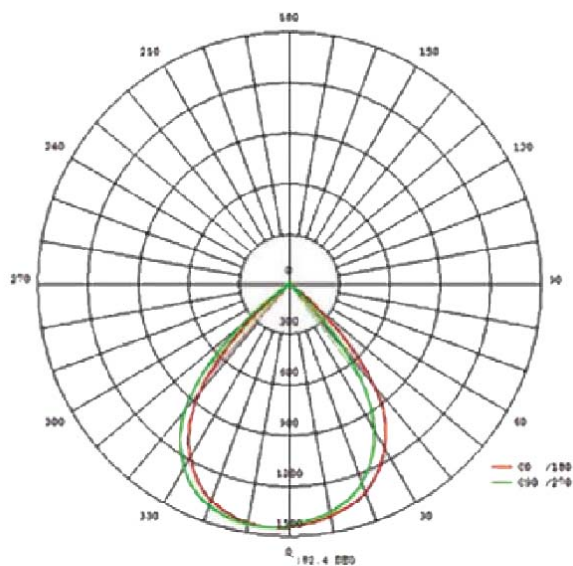
HIGH POWER LED EXPLOSION PROOF LAMP

MODEL: MF04

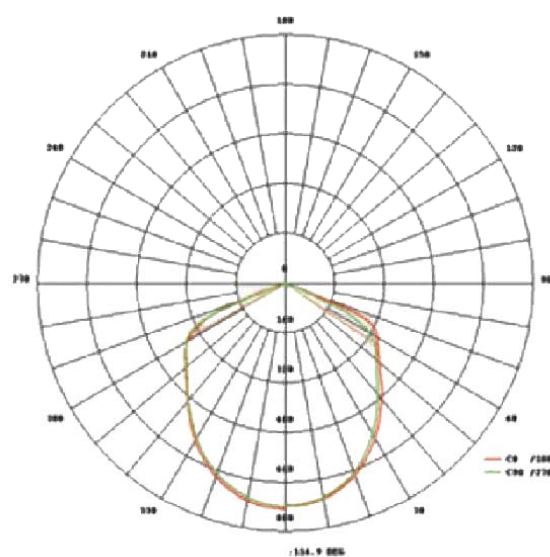


◆ LIGHT DISTRIBUTION CURVE

①



②

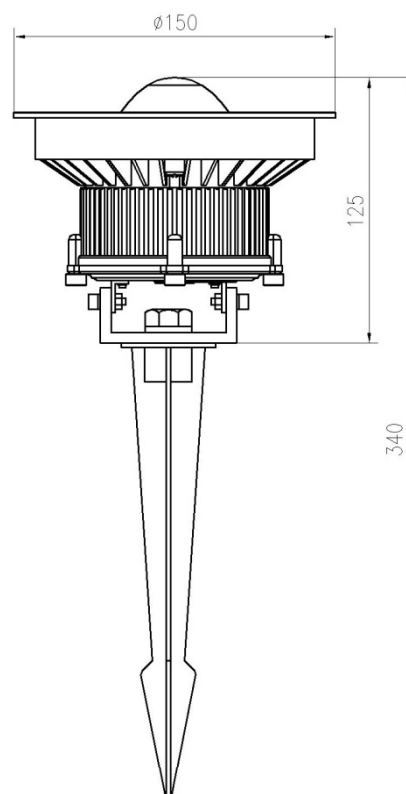


TECHNICAL PARAMETER

Model			
ITEM	MF04-20W	MF04-30W	MF04-40W
INPUT VOLTAGE	AC 85~265V		
POWER FREQUENCY RANGE	47~63Hz		
POWER FACTOR(PF)	>0.90		
TOTAL HARMONIC DISTORTION	<3%		
WORKING VOLTAGE	DC24V		
LED POWER CONSUMPTION	20W	30W	40W
SYSTEM CONSUMPTION	22W	33W	44W
LED LUMINOUS EFFICIENCY	≥90Lm/W		
LED INITIAL FLUX	≥1800Lm	≥2700Lm	≥3600Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%		
COLOR TEMPERATURE	2500K~7000K		
COLOR RENDERING INDEX(CRI)	Ra>80		
BEAM ANGLE	60°~ 160°		
JUNCTION TEMPERATURE(TJ)	<70℃		
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%		
IP RATING	IP67		
WORKING LIFE	>50,000 Hrs		
NET WEIGHT	3.2 Kg		
GROSS WEIGHT	3.5 Kg		
PACKING SIZE	27.5 X 26.5 X 20.5 cm		
Note: Lens can be changed according to client's specific requirement.			

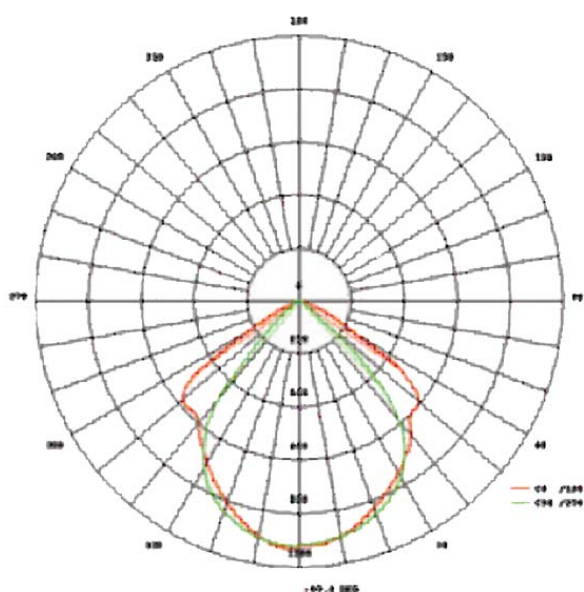
HIGH POWER LED SPOTLIGHT

MODEL: MT06

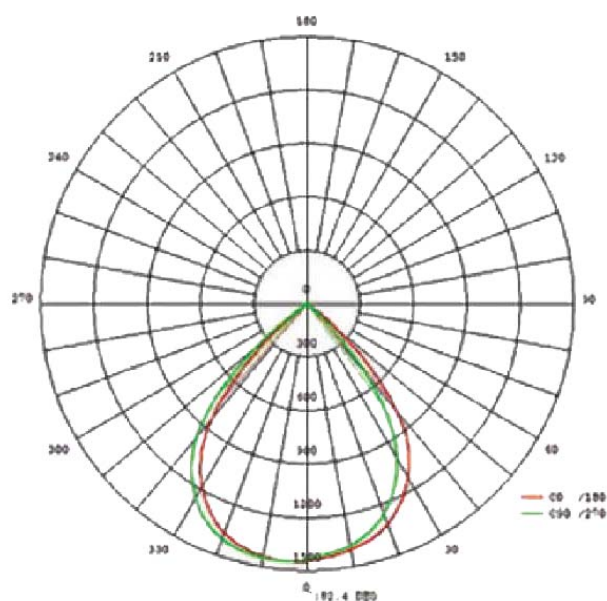


◆ LIGHT DISTRIBUTION CURVE

①



②



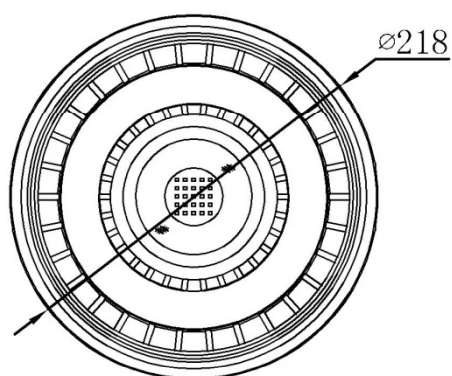
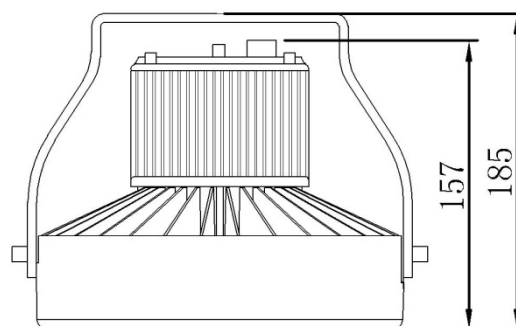
TECHNICAL PARAMETER

Model		
ITEM	MT6-10W	MT6-15W
INPUT VOLTAGE	AC 85~265V	
POWER FREQUENCY RANGE	47~63Hz	
POWER FACTOR(PF)	>0.90	
TOTAL HARMONIC DISTORTION	<5%	
WORKING VOLTAGE	DC12V	
LED POWER CONSUMPTION	10W	15W
SYSTEM CONSUMPTION	11W	16.5W
LED LUMINOUS EFFICIENCY	≥90Lm/W	
LED INITIAL FLUX	≥900Lm	≥1300Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%	
COLOR TEMPERATURE	3000K~7000K	
COLOR RENDERING INDEX(CRI)	Ra>80	
BEAM ANGLE	90°~ 140°	
JUNCTION TEMPERATURE(TJ)	<70℃	
WORKING ENVIRONMENT	Working Temperature:-40℃~60℃ Working Humidity:0~100%	
IP RATING	IP67	
WORKING LIFE	>50,000 Hrs	
Net Weight	1.3 Kg	
Gross Weight	1.5 Kg	
Packing Size	17 X 17.5 X 33 cm	

Note: Lens can be changed according to client's specific requirement.

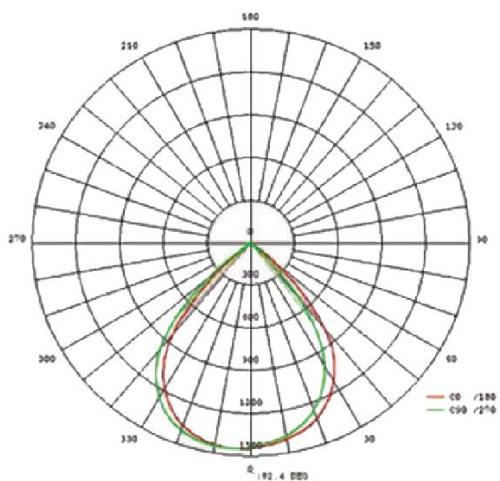
HIGH POWER LED SPOTLIGHT

MODEL: MT03

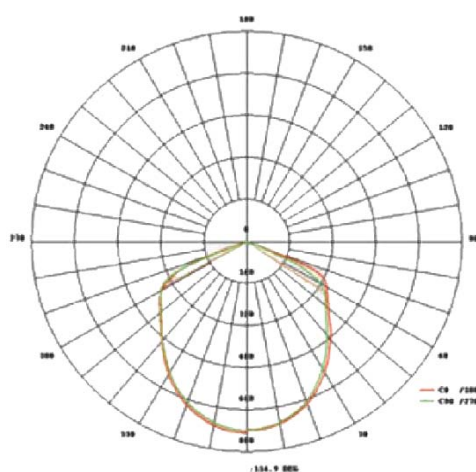


◆ LIGHT DISTRIBUTION CURVE

①



②

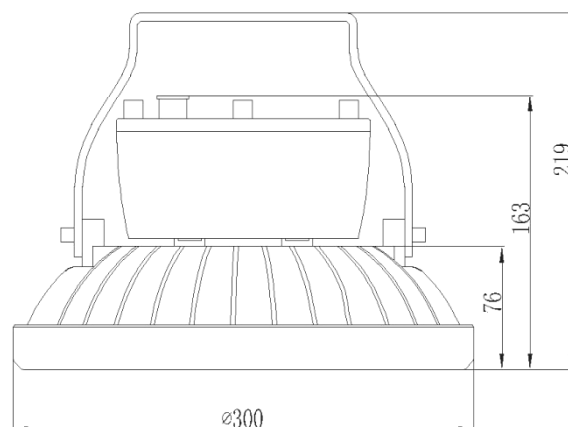


TECHNICAL PARAMETER

Model	MT03-20W	MT03-30W	MT03-40W
ITEM			
INPUT VOLTAGE	AC 85~265V		
POWER FREQUENCY RANGE	47~63Hz		
POWER FACTOR(PF)	>0.90		
TOTAL HARMONIC DISTORTION	<3%		
WORKING VOLTAGE	DC24V		
LED POWER CONSUMPTION	20W	30W	40W
SYSTEM CONSUMPTION	22W	33W	44W
LED LUMINOUS EFFICIENCY	≥90Lm/W		
LED INITIAL FLUX	≥1800Lm	≥2700Lm	≥3600Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%		
COLOR TEMPERATURE	2500K~7000K		
COLOR RENDERING INDEX(CRI)	Ra>80		
BEAM ANGLE	60°~ 160°		
JUNCTION TEMPERATURE(TJ)	<70℃		
WORKING ENVIRONMENT	Working Temperature: -40℃~60℃ Working Humidity: 0~100%		
IP RATING	IP67		
WORKING LIFE	>50,000 Hrs		
Note: Lens can be changed according to client's specific requirement.			

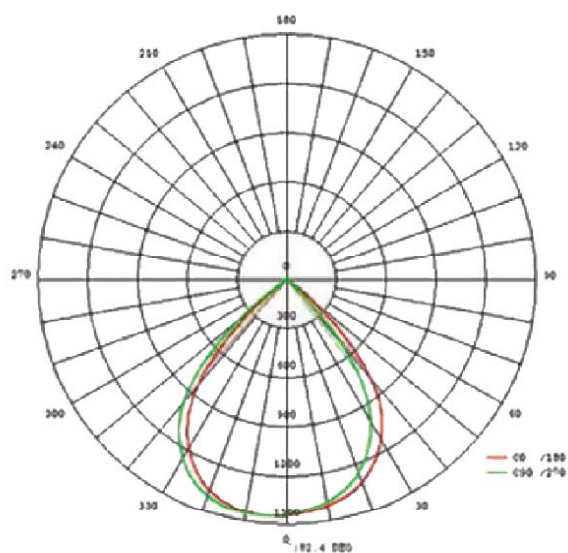
HIGH POWER LED SPOTLIGHT

MODEL: MT04

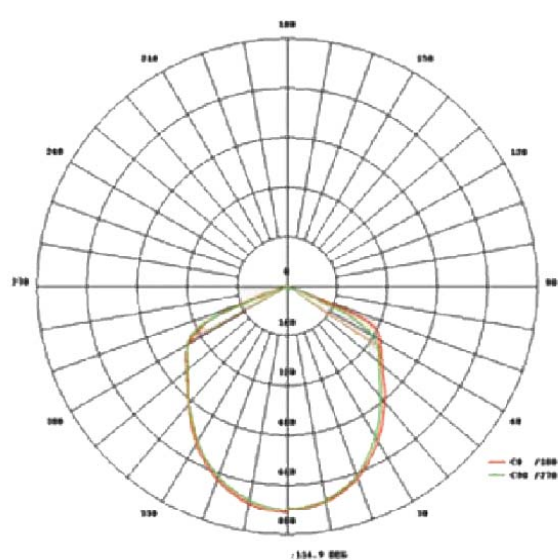


◆ LIGHT DISTRIBUTION CURVE

①



②



TECHNICAL PARAMETER

Model	MT04-50W	MT04-60W	MT04-70W	MT04-80W	MT04-90W	MT04-100W
ITEM						
INPUT VOLTAGE	AC 85~265V					
POWER FREQUENCY RANGE	47~63Hz					
POWER FACTOR(PF)	>0.90					
TOTAL HARMONIC DISTORTION	<3%					
WORKING VOLTAGE	DC26V				DC31V	
LED POWER CONSUMPTION	50W	60W	70W	80W	90W	100W
SYSTEM CONSUMPTION	55W	66W	77W	88W	99W	110W
LED LUMINOUS EFFICIENCY	≥90Lm/W					
LED INITIAL FLUX	≥4500Lm	≥5400Lm	≥6300Lm	≥7200Lm	≥8100Lm	≥9000Lm
LAMP'S LUMINOUS EFFICIENCY(%)	≥94%					
COLOR TEMPERATURE	2500K~7000K					
COLOR RENDERING INDEX(CRI)	Ra>80					
BEAM ANGLE	60°~ 160°					
JUNCTION TEMPERATURE(TJ)	<70℃					
WORKING ENVIRONMENT	Working Temperature:-40℃~60℃ Working Humidity:0~100%					
IP RATING	IP67					
WORKING LIFE	>50,000 Hrs					
Note: Lens can be changed according to client's specific requirement.						



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheue, Ladprao, Bangkok. 10230 Thailand.

Tel : +66(2) 362-4107, 362-4133 Fax : +66(2) 362-4167

Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.

Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664

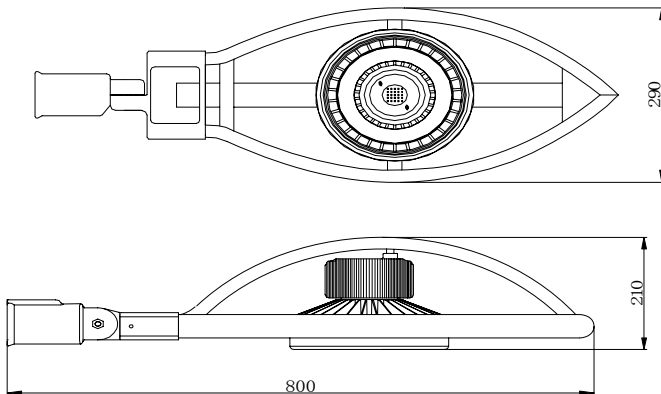
Website : www.ttcled.co.th

High Power Street Lamp Model : ML018-20W

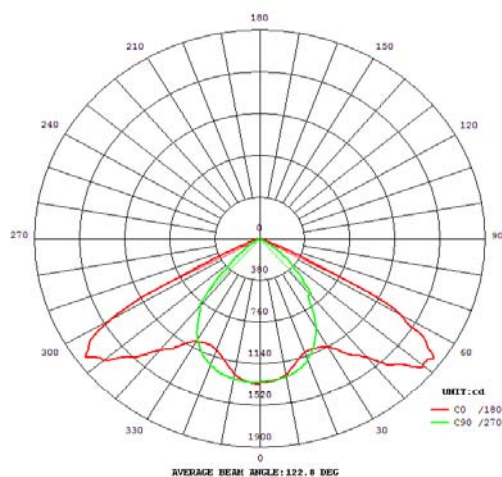
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Number	ML018-20W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.95
Total harmonic distortion	< 0.3 %
Working voltage	DC20V
LED power consumption	20 W
System consumption	22 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 1,800 Lm
Lamp's luminous efficiency (%)	> 94%
Color teamperture	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-130°
Junction temperature (TJ)	< 70 °C
Weight (Kg)	7.5

* Working enviroment *

Working temperature	-40 °C , 60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs

* Average illumination (E) *

6M Height	24 Lux
8M Height	14 Lux

* Effective illumination Area *

6M Height	11*25 m ²
8M Height	30*11 m ²

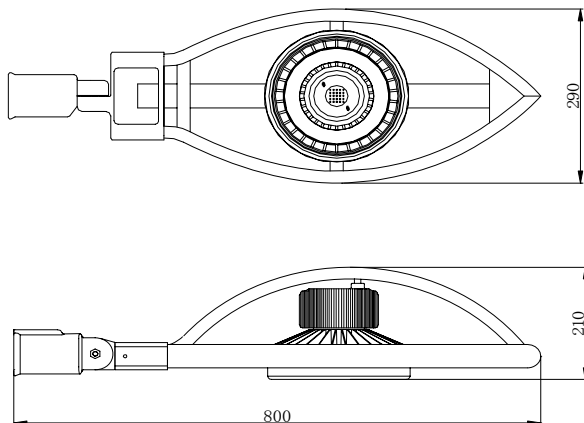
Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.co.th

High Power Street Lamp Model : ML018-30W

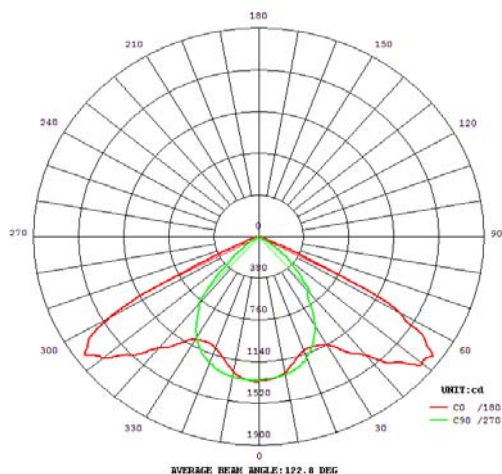
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Number	ML018-30W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.95
Total harmonic distortion	< 0.3 %
Working voltage	DC20V
LED power consumption	30 W
System consumption	37.5 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 2,700 Lm
Lamp's luminous efficiency (%)	> 94%
Color temperature	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-130°
Junction temperature (TJ)	< 70 °C

* Working enviroment *

Working temperature	-40 °C , 60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs

* Average illumination (E) *

6M Height	27 Lux
8M Height	17 Lux

* Effective illumination Area *

6M Height	11*25 m ²
8M Height	30*11 m ²



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.

Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167

Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheang Sao 24120 Thailand.

Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664

Website : www.ttcled.co.th

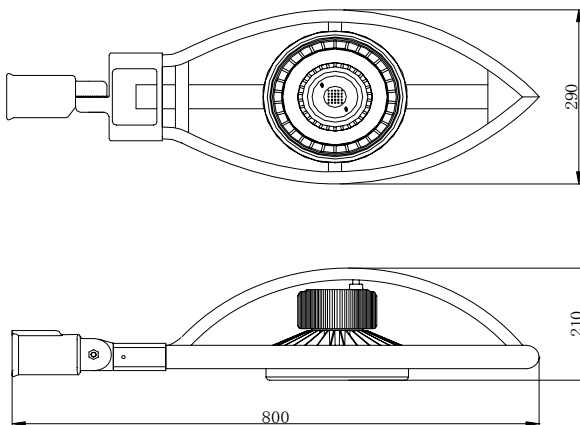
High Power Street Lamp

Model : ML018-50W

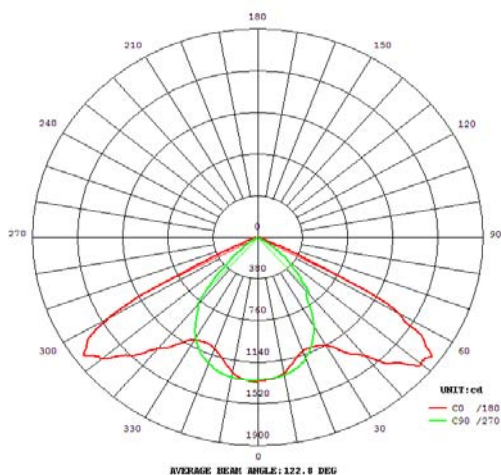
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Model	ML018-50W
Input voltage	AC 85-265V
Power frequency range	47~63Hz
Chip power factor (PF)	>0.95
Total harmonic distortion	<3%
Working voltage	DC 26V
LED power consumption	50 W
System consumption	54W
LED luminous efficiency	≥ 80 Lm/W
LED initial flux	≥ 4,000 Lm
Lamp's luminous efficiency (%)	≥ 94%
Color temperature	2500 -7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°~160°
Junction temperature (TJ)	< 70 °C

* Working environment *

Working temperature	-40 °C ~ 60 °C
Working humidity	0~100%
IP rate	IP67
Working Life	50,000 Hrs

* Average illumination (E) *

6M Height	43 Lux
8M Height	24 Lux

* Effective illumination Area *

6M Height	24*15 m ²
8M Height	30*20 m ²



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

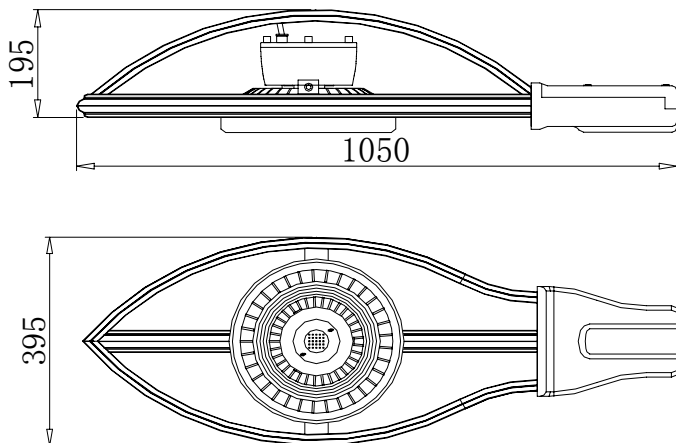
Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.com

High Power Street Lamp Model : ML015-75W

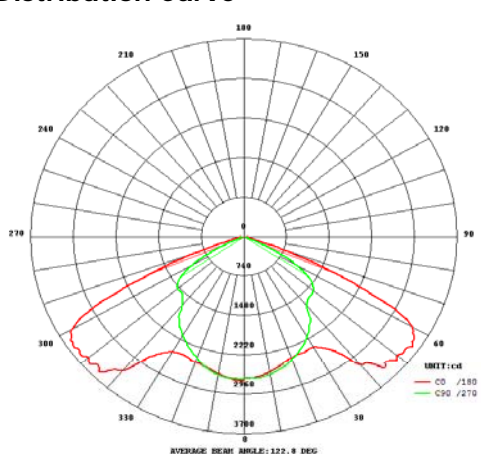
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Number	ML015-75W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.90
Total harmonic distortion	< 0.3 %
Working voltage	DC26V
LED power consumption	75 W
System consumption	82.5 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 6750 Lm
Lamp's luminous efficiency (%)	> 94%
Color temperature	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-160°
Junction temperature (TJ)	< 70 °C
Weight (Kg)	8.5

* Working environment *

Working temperature	-40 °C , 60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs

* Average illumination (E) *

8M Height	30 Lux
10M Height	20 Lux

* Effective illumination Area *

8M Height	17*30 m ²
10M Height	20*35 m ²



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok. 10230 Thailand.
 Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : (038) 520-664
 Website : www.ttcled.co.th

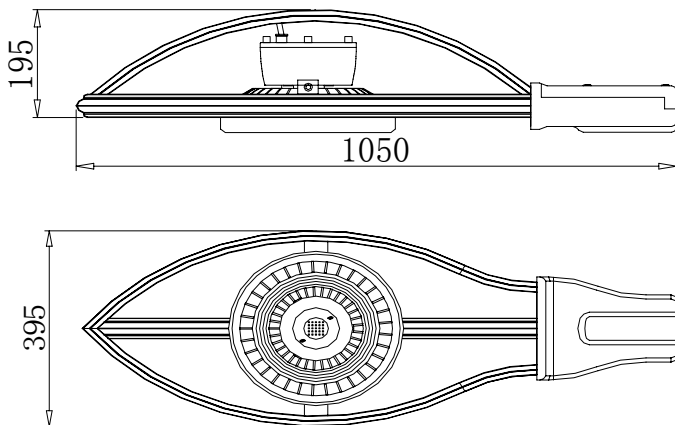
High Power Street Lamp

Model : ML015-90W

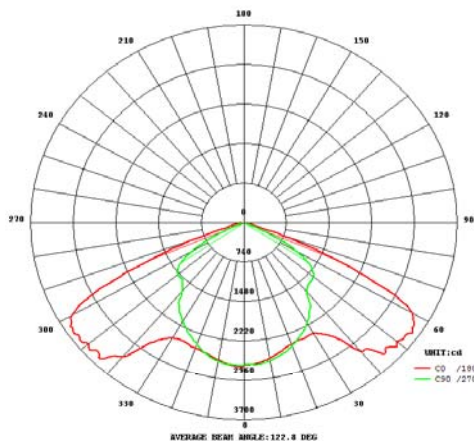
* Product Picture



* Dimension (mm)



* Light Distribution Curve





TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheue, Ladprao, Bangkok. 10230 Thailand.

Tel : +66(2) 362-4107, 362-4133 Fax: +66(2) 362-4167

Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.

Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664

Website : www.ttcled.co.th

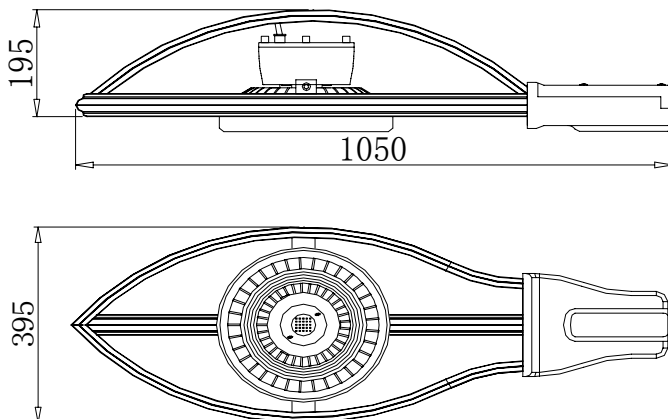
High Power Street Lamp

Model : ML015-120W

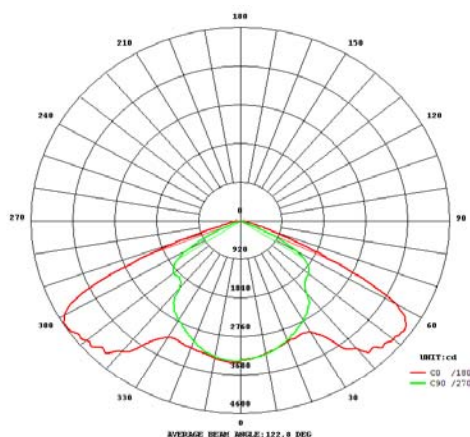
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Number	ML015-120W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.95
Total harmonic distortion	< 0.3 %
Working voltage	DC32V
LED power consumption	120 W
System consumption	132 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 10,800 Lm
Lamp's luminous efficiency (%)	> 94%
Color temperature	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-130°
Junction temperature (TJ)	< 70 °C
Weight (Kg)	8.5

* Working environment *

Working temperature	-40 °C , 60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs

* illumination (E) *

8M Height	45 Lux
10M Height	28 Lux

* Effective illumination Area *

8M Height	17*30 m ²
10M Height	20*35 m ²



TTC LED TECHNOLOGY (THAILAND) CO., LTD.

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao, Bangkok.10230 Thailand.
Tel : +66(2) 362-4107,362-4133 Fax: +66(2) 362-4167
Factory : 302 Moo 5, Tambon Bansong, Amphur Panomsakarm, Chacheangsao 24120 Thailand.
Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
Website : www.ttcled.co.th

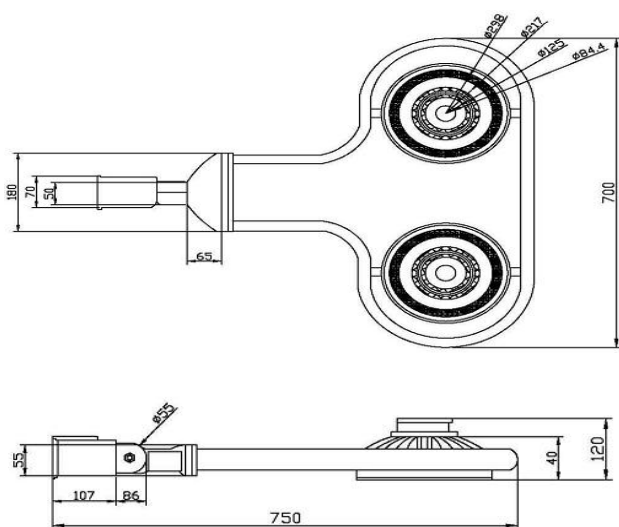
High Power Street Lamp

Model : ML009-150W

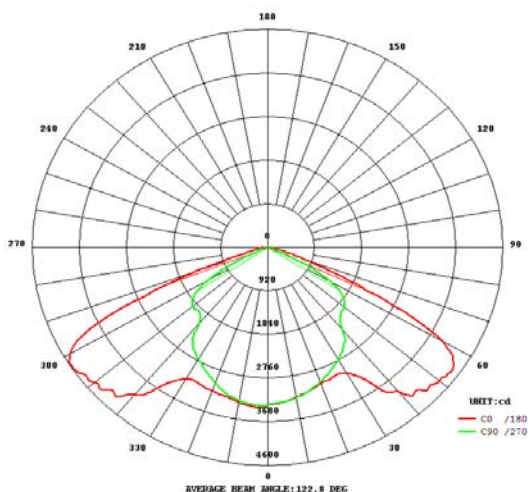
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *

Product Number	ML009-150W
Input voltage	AC 85-265V
Power frequency range	45-63Hz
Chip power factor (PF)	> 0.95
Total harmonic distortion	< 0.3 %
Working voltage	DC32V
LED power consumption	157.8 W
System consumption	170.5 W
LED luminous efficiency	> 90 Lm/W
LED initial flux	> 13,500 Lm
Lamp's luminous efficiency (%)	> 94%
Color temperature	3000-7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°-130°
Junction temperature (TJ)	< 70 °C

* Working enviroment *

Working temperature	-40 °C ,60 °C
Working humidity	0-100%
IP rate	IP67
Working Life	50,000 Hrs

* Average illumination (E) *

8M Height	45.63 Lux
12M Height	28.56 Lux

* Effective illumination Area *

8M Height	9.6*28 m ²
10M Height	14.4*42 m ²

Office : 5/444 Moo 3, Soi Ramintra 14, Ramintra Rd., Chorakheabue, Ladprao,Bangkok.10230 Thailand.
 Tel : +66(2) 362-4107,362-4133 Fax: +66(2) 362-4167
 Factory : 302 Moo 5,Tambon Bansong, Amphur Panomsakarm,Chacheangsao 24120 Thailand.
 Tel : +66(0) 3852-0655-9 Fax : +66(0) 3852-664
 Website : www.ttcled.com

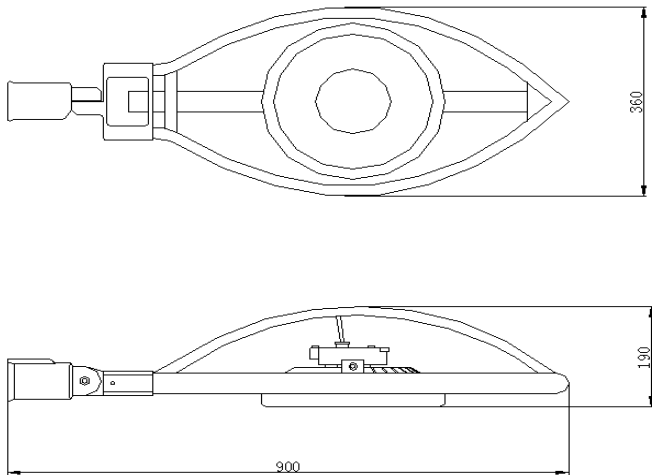


High Power Street Lamp Model : ML015-150W

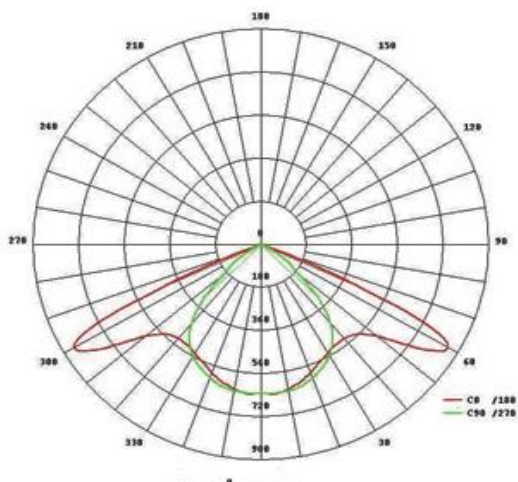
* Product Picture



* Dimension (mm)



* Light Distribution Curve



* Technical Parameters *	
Product Model	ML015-150W
Input voltage	AC 85-265V
Power frequency range	47~63Hz
Chip power factor (PF)	> 0.90
Total hamonic distortion	< 0.3 %
Working voltage	DC31V
LED power consmption	150 W
System consmption	165 W
LED luminous efficiency	≥ 90 Lm/W
LED initial flux	≥ 13,500 Lm
Lamp's luminous efficiency (%)	≥ 94%
Color teamperture	2500 -7000 K
Color rendering index (CRI)	Ra > 80
Beam angle	90°~160°
Junction temperature (TJ)	< 70 °C
* Working enviroment *	
Working temperature	-40 °C ~ 60 °C
Working humidity	0~100%
IP rate	IP67
Working Life	50,000 Hrs
* Average illumination (E) *	
8M Height	
12M Height	
* Effective illumination Area *	
8M Height	
10M Height	