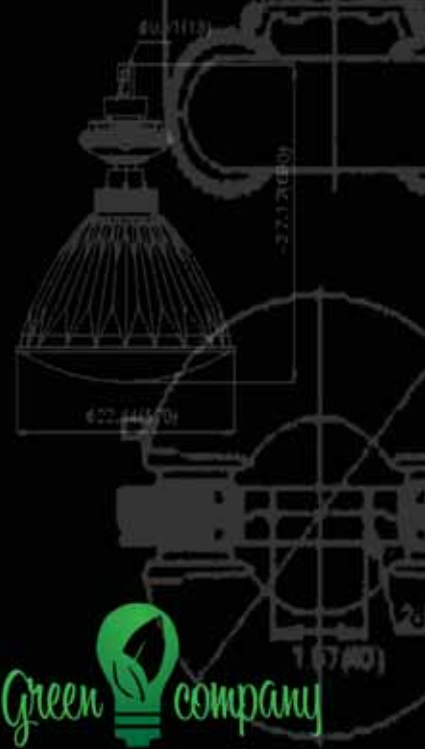
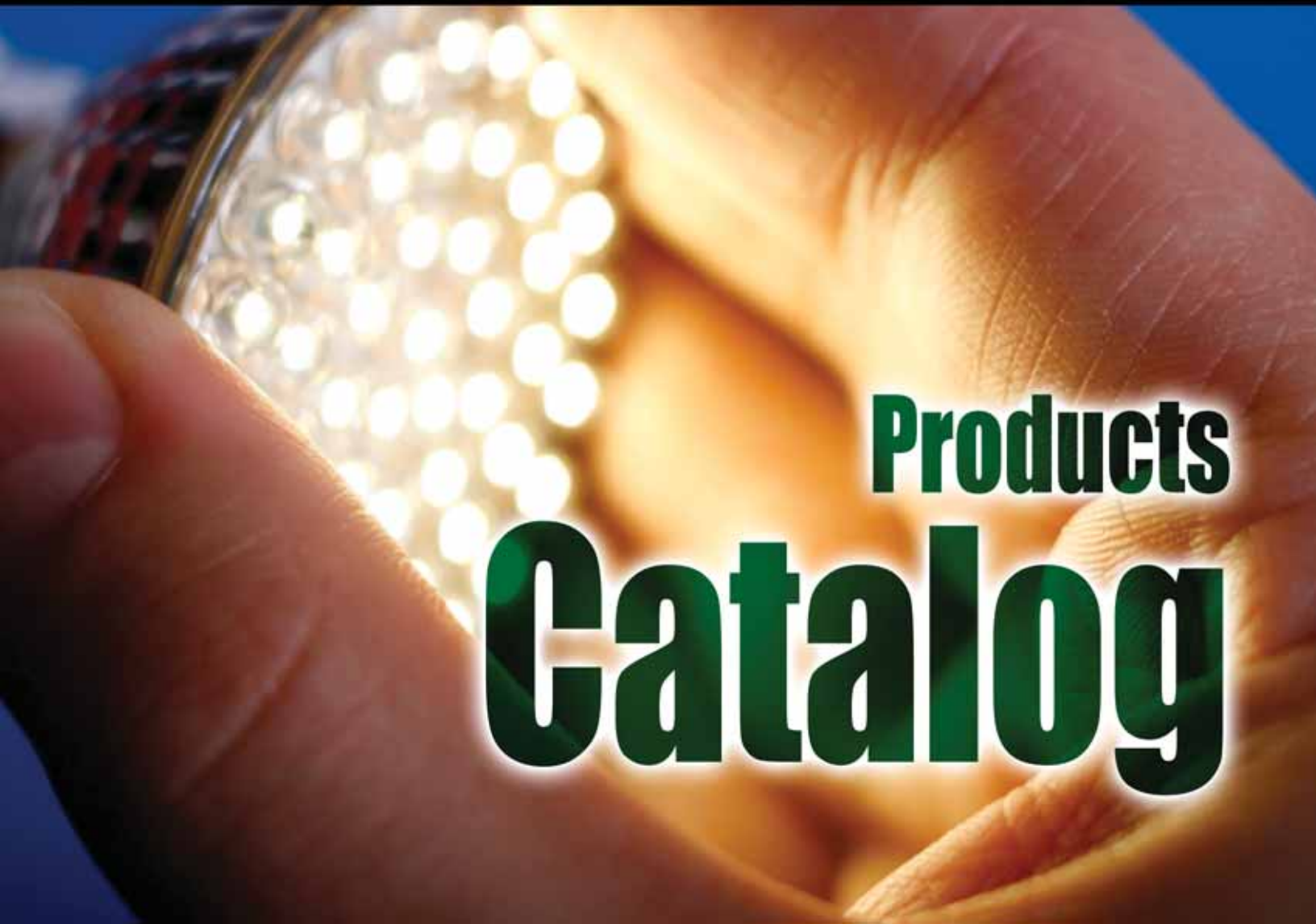




GREEN TECHNOLOGIES
Building Green City Lights



a Go Green  company



Products

Catalog

contents

IQ LED tube light	03
IQ high power LED spot lamp	04
IQ high power LED ceiling lamp	05
IQ high power LED projector	06
IQ LED soft strip	07
IQ LED power module	08
IQ Induction lighting	09
housings / Applications	17



IQ LED tube light



T8 Series:

Model No: IQ OS-FTU-15W-T8
Voltage: AC 120V to 277V Wide
voltage Constant current
Wattage:15 W
Led Quantity:300 LEDs
Light output(lumens):1200LM
Color Temperature:5000-7000k for
white,2600-3700k for warm White
Lighting Angle:90-120
LUX@3 Meter: 40LUX
Length:120CM Diameter:3CM
Net weight:0.36kg
replaced by:T8 40W Fluorescent Tubes

Applications:



T5 Series:

Model No: IQ OS-DGA22-110W-T5
Voltage: AC 120V to 277V Wide
Wattage:6.5 W
Led Quantity:110 LEDs
Light output(lumens):420LM
Color Temperature:6000-7000k for
white,3000-3500k for warm White
Lighting Angle:170
LUX@3.3 Meter: 55LUX
Length:115CM
replaced by:T5 Fluorescent Tubes



IQ high power LED spot lamp



IQ OS-MXS-10W
6000K: 500LM(White) =
Optical Efficiency 50W LM/ W
3000K: 400LM(Warm White) =
Optical Efficiency 40W LM/ W
Base type:E27
Socket Drop-in Replacement
Lamp Easy to Fixe d
Beam angle:40,60 or 80 degree optional
Long Operating time:up to 20,000hrs
front lens Diameter:66m m
Front Lens Type:Optical Grade Plastic
Net weight:250g
Total Length:101mm(including Pin)
Model Power:10w
Power Input:120V-277V
LED light source:750m A
Optimized Thermal Management:
Body temperature Below 60 degree
No UV or IR radiation



IQ OS-FM0W-5*1W
6000K: 280LM(White)
3000K: 260LM(Warm White)
Base type:E27, GU10
Beam angle:30 degree optional
Long Operating time:up to 50,000hrs
front lens Diameter:62m m
Front Lens Type:Optical Grade Plastic
Net weight:125g
Total Length:85mm(including Pin)
Model Power:5w
Power Input:1 20V-277V
Optimized Thermal Management:Body
temperature Below 60 degree
No UV or IR radiation



IQ OS-MXS-4W
6000K: 150LM(White)=
Optical Efficiency 50W LM/ W
3000K: 120LM(Warm White) =
Optical Efficiency 40W LM/ W
Base type:MR16
Beam angle:10,30,40, or 60 degree optional
Long Operating time:up to 20,000hrs
front lens Diameter:34m m
Front Lens Type:Optical Grade Plastic
Net weight:12g
Total Length:41mm(including Pin)
Model Power:4w
Power Input:12V AC/DC
LED light source:780mA
Optimized Thermal Management:Body
temperature Below 60 degree
No UV or IR radiation



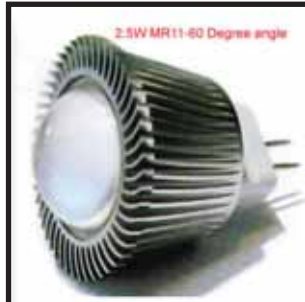
IQ OS-YY5-3*1W
Base Type:GU5.3, GU10, E14, E27
Life time:50,000H
Voltage: 120V-277V
Power:1W
Constant current driver
Viewing Angle:30 degree
Aluminum housing for superior heat dissipation
Driver and LED PCB are
separated for better heat radiation
>120LM, 6000-7000K(white)
>90LM, 2900-3500K(warm white)
White and warm white are available



IQ OS-FMR16-3*1W
Base:MR16, GU10, E27 optional
Working Power Supply:
120V-277V
Wattage:3 w
LED quantity:1 High power Cree LED
Light Output(Lumens):100LM
Size:55MM L, Diameter:50M M
Weight:0.055KG
Beam Angle:60 degree
Color Temperature:White, Warm White



IQ OS-YY5-3*1W
Base Type:GU5.3, GU10, E14, E27
Life time:50,000H
Voltage: 120V-277V, Power:1 W
Constant current driver
Viewing Angle:30 degree
Aluminum housing for
superior heat dissipation
Driver and LED PCB are separated for
better heat radiation
>90LM, 6000-7000K(white)
>70LM, 2900-3500K(warm white)
White and warm white are available



IQ OS-MXS-2.5W
6000K: 100LM(White)=
Optical Efficiency 40W LM/W
3000K: 80LM(Warm White) =
Optical Efficiency 30W LM/W
Base type:MR11
Beam angle:15,30, or 60 degree optional
Long Operating time:up to 50,000hrs
front lens Diameter:34m m
Front Lens Type:Optical Grade Plastic
Net weight:12g
Total Length:41mm(including Pin)
Model Power:2.5w
Power Input:12V AC/DC
LED light source:430m A
Optimized Thermal Management:Body
temperature Below 60 degree
No UV or IR radiation



IQ OS-YY5-1W
Base Type:GU5.3, GU10, E14, E27
Life time:50,000H
Voltage: 120V-277V
Power:1W
Constant current driver
Viewing Angle:30 degree
Aluminum housing for superior heat dissipation
Driver and LED PCB are separated for better
heat radiation
>50LM, 6000-7000K(white)
>40LM, 2900-3500K(warm white)
White and warm white are available

IQ high power LED ceiling light



IQ HCE06-15W

Material:Aluminium,surface oxidated
color:R/Y/B/G/W/WW
LED Qty:5*1W LED*3PCS
Va lid Range:3-5 M
Size: 122mm
Lens:PMMA,Focused angle:20-30
Vo ltage:AC120V~277V
Wattage:5W*3PCS
Lifespan:50000 hours
Cooling Way:Via Aluminium body, well effective



IQ HCE05-6W

Material:Aluminium,surface oxidated
color:R/Y/B/G/W/WW
LED Qty:3*1W LED
Va lid Range:3-5 M
Size: 90mm
Lens:PMMA,Focused angle:20-30
Vo ltage:AC120V~277V
Wattage:6 W
Lifespan:50000 hours
Cooling Way:Via Aluminium body, well effective



IQ HCE04-3W

Material:Aluminium,surface oxidated
color:R/Y/B/G/W/WW
LED Qty:3*1W LED
Va lid Range:3-5 M
Size: 90mm
Lens:PMMA,Focused angle:20-30
Vo ltage:AC120V~277V
Wattage:3W
Lifespan:50000 hours
Cooling Way:Via Aluminium body, well effective



IQ HCE03-3W

Material:Aluminium,sur face oxidated
color:R/Y/B/G/W/WW
LED Qty:3*1W LED
Va lid Range:3-5 M
Size: 77mm
Lens:PMMA,Focused angle:20-30
Vo ltage:AC/DC12V~24V,AC120V~277V
Wattage:3 W
Lifespan:50000 hours
Cooling Way:Via Aluminium body, well effective



IQ HCE02-1W

Material:Aluminium,sur face oxidated
color:R/Y/B/G/W/WW
LED Qty:1*1W LED
Va lid Range:3-5 M
Size: 52mm
Lens:PMMA,Focused angle:20-30
Vo ltage:AC120V~277V
Wattage:1w(3W)
Lifespan:50000 hours
Cooling Way:Via Aluminium body, well effective



IQ HCE01-1W

Material:Aluminium,surface oxidated
color:R/Y/B/G/W/WW
LED Qty:1*1W LED
Va lid Range:3-5 M
Size: 52mm
Lens:PMMA,Focused angle:20-30
Vo ltage:AC/DC 12~24V,AC120V~277V
Wattage:1w
Lifespan:50000 hours
Cooling Way:Via Aluminium body,well effective

IQ high power LED projector

Use High Power 1W LEDs as lighting source, High illuminated efficiency House made of aluminum, strong and cooling well. Long lifespan, energy saving and steady. Easily installed, specially used in wall washer.

Specification: Material: Aluminum, surface oxidated
Led Qty: 24*1W LED
Valid Range: 6-10M
Face cover: Acryl
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Lifespan: 50000 Hours

IP grade: IP44, can develop to be IP68 for underwater. With controller CN358 B2, CN368A2, CN388A2, it can be color changing gradually or jumpily. Also it can be connected with DMX512 console by above controllers.



IQ HPRO-006A
Material: Aluminum, surface oxidated
Color: R/Y/B/G/W/WW
Led Qty: 36*1W LED
Valid Range: 15-30M
Cover Cup: Glass
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Wattage: 36w
Lifespan: 50000 Hours
IP grade: IP65
Cooling way: Via Aluminum body, well effective



IQ HPRO-005A
Material: Aluminum, surface oxidated
Color: R/Y/B/G/W/WW
Led Qty: 24*1W LED
Valid Range: 15-30M
Size: 200mm*235mm
Cover Cup: Glass
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Wattage: 24w
Lifespan: 50000 Hours
IP grade: IP65
Cooling way: Via Aluminum body, well effective



IQ HPRO-004A
Material: Aluminum, surface oxidated
Color: R/Y/B/G/W/WW
Led Qty: 19*1W LED
Valid Range: 15-30M
Size: 170mm*215mm
Cover Cup: Glass
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Wattage: 19W
Lifespan: 50000 Hours
IP grade: IP65
Cooling way: Via Aluminum body, well effective



IQ HPRO-003A
Material: Aluminum, surface oxidated
Color: R/Y/B/G/W/WW
Led Qty: 8*1W LED
Valid Range: 15-30M
Size: 130mm*158mm
Cover Cup: Glass
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Wattage: 8W
Lifespan: 50000 Hours
IP grade: IP65
Cooling way: Via Aluminum body, well effective



IQ HPRO-002A
Material: Aluminum, surface oxidated
Color: R/Y/B/G/W/WW
Led Qty: 3*1W LED
Valid Range: 6-20M
Size: 68mm*100mm
Cover Cup: Glass
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Wattage: 3W
Lifespan: 50000 Hours
IP grade: IP65
Cooling way: Via Aluminum body, well effective



IQ HPRO-001A
Material: Aluminum, surface oxidated
Color: R/Y/B/G/W/WW
Led Qty: 1*1W LED
Valid Range: 6-20M
Size: 52mm*80mm
Lens: PMMA, Beam angle: 20-30
Voltage: DC24V
Wattage: 1W
Lifespan: 50000 Hours
IP grade: IP65
Cooling way: Via Aluminum body, well effective



IQ HPRO-12036A
LED qty: 36 LED
Size: 1260mm*56mm
Wattage: 36w



IQ HPRO-6018A
LED qty: 18 LED
Size: 660mm*56mm
Wattage: 18w



IQ HPRO-309A
LED qty: 9 LED
Size: 360mm*56mm
Wattage: 9w

IQ LED soft strip / linear strip



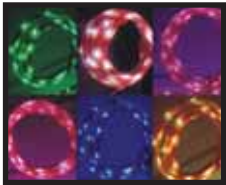
Super flux water-proof LED linear strip

Model number: XL-LB50CM60P406HXC • Size(mm): L100*W17*T12 MMRated
Voltage,current,power: 12VDC,400mA,4.8W • Color: red,yellow,green,blue,white
Wave length: red:623±5nm,yellow:585±5nm,green:520±5nm, blue:465±5nm,white:x=0.31 y=0.32
Angle: 120° • LED quantity:60



Super flux ED linear strip

Model number: XL-LC100CM60P406HXC • Size(mm): L100*W11*T10MM
Rated voltage,current,power: 12VDC,400mA,4.8W
Color: red,yellow,green,blue,white
Wave length: red:623±nm,yellow:585±5nm,green:520±5nm,blue:465±5nm,white:x=0.31 y=0.32
Angle: 120± • LED quantity:60



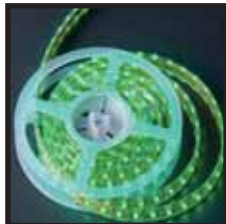
Water proof LED SMD RGB strip

Model number: 5050RGB -150-12VWF • Size(mm): L5000*W10*T3
Wight:183g • Rated voltage,current,power: 12VDC,3000mA,36W
Protection Level:IP65 • Color: RGB
Wave length: red:623±nm,green:520±nm,blue:465±nm
Angle: 120± • Intensity (mcd):red:600,green:1300,blue:1300
LED quantity:150



Wide viewing angle SMD RGB LED Strip

Flexible & soft PCB can be bent into any shape, the length can be adjustable or cuttable every three leds, and Red, Green, Blue color can be controlled into many colors change with LED dimmers.
Model number: 5050RGB -150-12VF • Size(mm): L5000*W810*T2
Wight:90g • Rated voltage,current,power: 12VDC,3000mA,36W
Color: RGB • Wa ve length: red:623±5nm,green:520±5nm,blue:465±5nm
Angle: 120° • Intensity (mcd): red:600,green:1300,blue:1300 • LED quantity:150



Water proof LED SMD strip

Model number: 3528UR/Y/G/B/W-330-12VWF • Size(mm): L1000*W8*T3
Wight:29g for one meter • Rated voltage,current,power: 12VDC,2200mA,26.4W
Protection Level:IP65 • Color: red,yellow,green,blue,white
Wave length: red:623±5nm,yellow:585±5nm,green:520±5nm,blue:465±5nm,white:x=0.31 y=0.32
Angle: 120° • Intensity (mcd):red:200,yellow:200,green:600,blue:150,white:700
LED quantity: 60/Meter



Wide viewing angle SMD LED Strip

Flexible & soft PCB can be bent into any shape as per user's need, also the length can be adjustable and cuttable every three leds so to be suitable for the applications backlight of signs, advertisings
Model number: 3528UR/Y/G/B/W-330-12VF • Size(mm): L5000*W8*T2
Wight:80g • Rated voltage,current,power: 12VDC,2200mA,26.4W
Color: red,yellow,green,blue,white • Wave length: red:623±5nm,yellow:585±5nm,green:520±5nm,blue:465±5nm,white:x=0.31 y=0.32
Angle: 120° • Intensity (mcd):red:200,yellow:200,green:600,blue:150,white:700
LED quantity:330



IQ LED power module



RGB-in-1 SMD LED Module, waterproof, and many colors alternate changing with the LED dimmer control

Model number:
5050RGB-03-12W

Size(mm): L81*W20*T12

Wight:24g

Rated voltage,current,power:
12VDC,60mA,0.72W

Protection Level:IP6 5

Color: RGB

Wa ve length: red:623±5nm,
green:520±5nm,blue:465±5nm

Angle: 120°

Intensity(mcd):
red:600,green:1300,blue:300

LED quantity:3



Wide viewing angle SMD water proof LED module, many colors available, small but exquisite, unique design with the waterproof treatment allows the moist surrounding using.

Model number:
3258UR/Y/G/B/W-04- 12V W

Size(mm): L40*W14*T5

Wight:5g

Rated voltage,current,power:
12VDC,20mA,0.25W

Protection Level: IP65

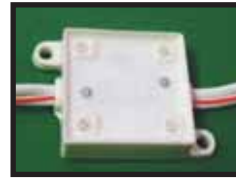
Color: red,yellow,green,blue,white

Wa ve length: red:623±5nm,yellow:585±5nm,
green:520±5nm,blue:465±5nm,white:x=0.31 y=0.32

Angle: 120°

Intensity(mcd):red:200,yellow:200,
green:600,blue:150,white:700

LED quantity:3



Led module

Model number:
5050UR/Y/G/B/W-04- 12VWS

Size(mm): L31*W31*T10

Wight:11g

Rated voltage,current,power:
12VDC,80mA,0.96W

Protection Level:IP65

Color: red,yellow,green,blue,white

Wa ve length: red:623±5nm,
yellow:585±5nm,green:520±5nm,
blue:465±5nm,white:x=0.31 y=0.32

Angle: 120°

Intensity (mcd):red:1000,yellow:1000
green:3000,blue:600,white:3600

LED quantity:4



3-chip-in-1 SMD water proof LED module Is three times brighter than other single chip SMD LED. Unique waterproof treatment technique ensures the moist condition using

Model number:
5050UR/Y/G/B/W-04- 12VW

Size(mm): L55*W38*T10

Wight:20g

Rated voltage,current,power:
12VDC,80mA,0.96W

Protection Level:IP6 5

Color: red,yellow,green,blue,white

Wa ve length: red:623±5nm,
yellow:585±5nm,green:520±5nm,
blue:465±5nm,white:x=0.31 y=0.32

Angle: 120°

Intensity (mcd):red:1000,yellow:1000,
green:3000,blue:600,white:3600

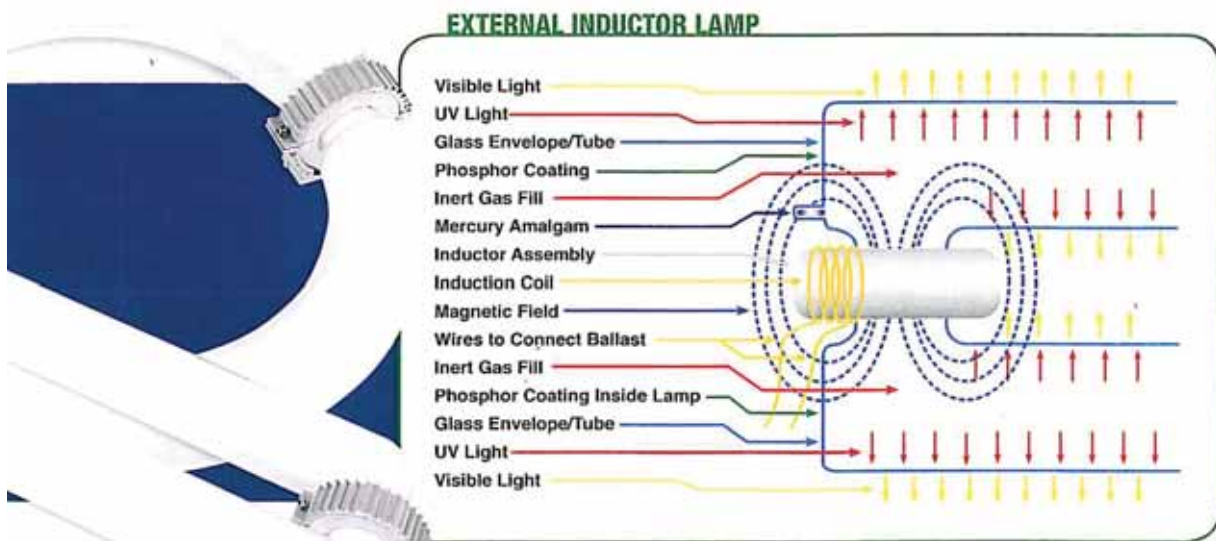
LED quantity:4

AN INTRODUCTION TO **INDUCTION LIGHTING**

WHAT IS INDUCTION LIGHTING?

A hybrid fluorescent lamp technology first introduced in 1891 that eliminates the need for electrodes and filaments; generating light by means of a high frequency transmission of energy combined with a gas discharge.

As with conventional fluorescent lamps, varying the composition of the phosphors coated onto the inside of induction lamps, allows for models with different color temperatures. Unlike conventional fluorescent technology there are no failures caused by filament erosion, vibration, or seal breach.



HOW DOES INDUCTION LIGHTING WORK?

EXTERNAL INDUCTOR LAMPS

External magnetic induction lamps are essentially fluorescent lamps with electromagnets wrapped around a section of the lamp tube. High frequency energy, from the electronic ballast (generator), is sent through wires, which are wrapped in a coil around the ferrite inductor, creating a powerful magnet.

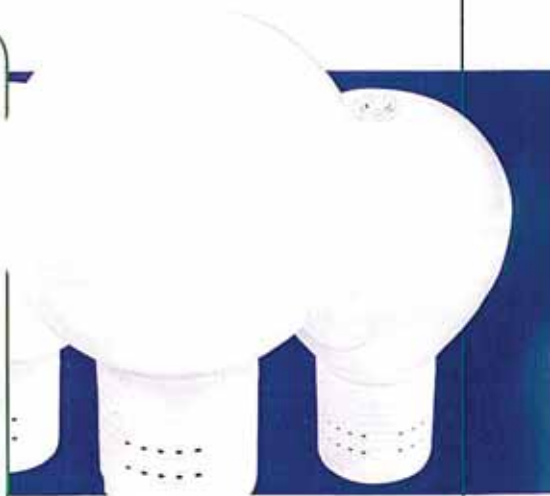
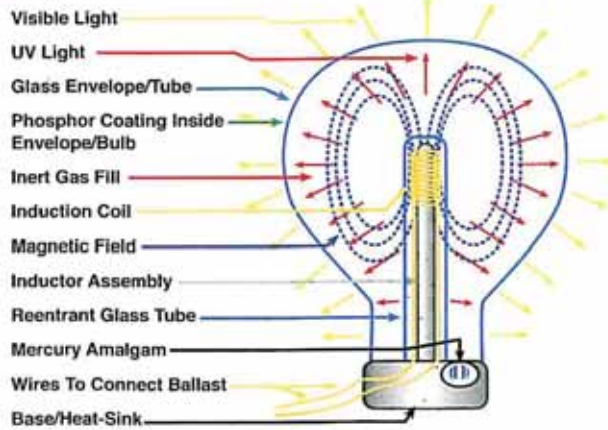
The induction coil produces a very strong magnetic field which travels through the glass and excites the mercury atoms in the interior which are provided by a pellet of amalgam (a solid form of mercury). The mercury atoms emit UV light and, just as in a fluorescent tube, the UV light is up-converted to visible light by the phosphor coating on the inside of the tube. The system can be considered as a type of transformer where the inductor is the primary coil while the mercury atoms within the envelope/tube form a single-turn secondary coil.



INTERNAL INDUCTOR LAMPS

In a variation of this technology, Internal magnetic induction lamps use a light bulb shaped glass lamp, which has a test-tube like re-entrant central cavity. This cavity is coated with phosphors on the interior, filled with inert gas and a pellet of mercury amalgam. The induction coil is wound around a ferrite shaft which is inserted into the central test-tube like cavity. The inductor is excited by high frequency energy provided by an external electronic ballast (generator) causing a magnetic field to penetrate the glass and excite the mercury atoms, which emit UV light, that is converted to visible light by the phosphor coating.

INTERNAL INDUCTOR LAMP



HOW LONG WILL AN INDUCTION LAMP & BALLAST OPERATE?

HighHorse external induction lamps typically have a longer life (80k Hrs-100k Hrs) than internal induction lamps (60k Hrs-80k Hrs). External induction lamps manage heat either by convection through the air or conduction into the fixture. HighHorse internal induction lamps operate with a higher internal temperature and must cool by conduction to the base heat sink and by radiation through the glass walls. With both lamp types a small percentage of mercury ions are absorbed by the phosphor coating over time; once the mercury ions inside the envelope are depleted, the lamp emits only a very dim light and has to be replaced.

HighHorse Electronic Ballasts (generators) are warranted for five years. (Actual life expectancy can be significantly longer with proper thermal management.)



New Energy Saving Light Source

With Ultra-Long Lifetime



IQ ST Series 70W~400W



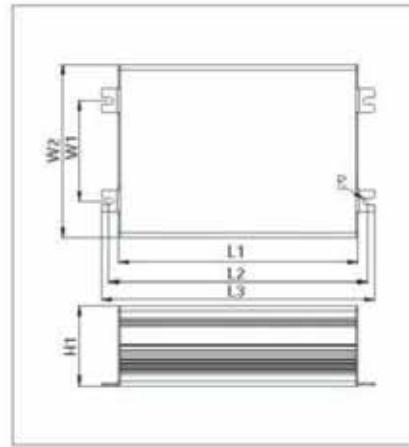
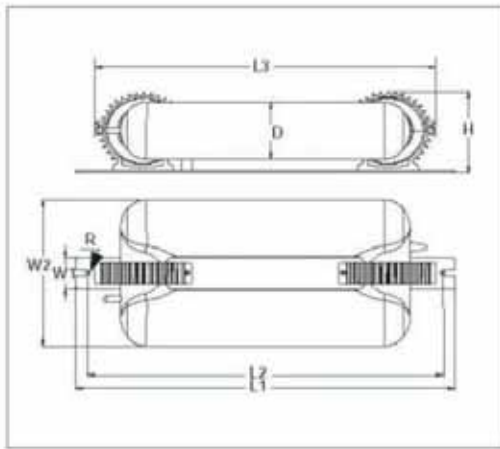
Induction Lamp Specifications

Product No.	Model No.	Wattage (W)	Operating Frequency (KHz)	Luminance (Lm)	Efficacy (Lm/W)	Luminance Maintenance (60 Khrs)	CRI (Ra)	Color Temperature (K)	Average Lifetime (hrs)
27810726001	IQWJY70J RL W1	70	250	5,040	70-75	70%	80	4,000	80,000
27810721001	IQWJY70J RZ W1	70		5,040	70-75			5,000	
27811026001	IQWJY100J RL W1	100		7,700	75-80			4,000	
27811021001	IQWJY100J RZ W1	100		7,700	75-80			5,000	
27811526001	IQWJY150J RL W1	150		7,700	75-80			4,000	
27811521001	IQWJY150J RZ W1	150		7,700	75-80			5,000	
27812026001	IQWJY200J RL W1	200		16,400	80-85			4,000	
27812021001	IQWJY200J RZ W1	200		16,400	80-85			5,000	
27812526002	IQWJY250J RL W2	250		20,500	80-85			4,000	
27812521002	IQWJY250J RZ W2	250		20,500	80-85			5,000	
27814026001	IQWJY400J RL W1	400		34,800	85-90			4,000	
27814021001	IQWJY400J RZ W1	400		34,800	85-90			5,000	

- Note:
- Color Temperature 2720-6500 available upon request.
 - Operating ambient temperature - 25°C ~ 40°C (with enclose fixture).
 - Operating ambient temperature 0°C ~ 40°C (without fixture, or with open fixture).

Electronic Ballast Specifications

Product No.	Model No.	Wattage (W)	Voltage (V)	Current (A)	Frequency (Hz)	THD	Power Factor	Input Power (W)	Case Temperature (°C)
26307101	IQWJY70DH01	70	120~277	0.63~0.29	50/60	10%	>0.95	75	<65
26310101	IQWJY100DH01	100		0.93~0.42				110	
26315101	IQWJY150DH01	150		1.35~0.61				160	
26320101	IQWJY200DH01	200		1.77~0.80				210	
26325101	IQWJY250DH01	250		2.21~1.00				263	
26340101	IQWJY400DH01	400		3.54~1.60				420	



Induction Lamp Dimensions

Unit: in. (mm)

Bracket Length	L1	12.91 (328)	12.91 (328)	16.46 (418)	22.76 (578)	42.44 (1078)	42.44 (1078)
Mounting Holes Spacing	L2	12.13 (308)	12.13 (308)	15.67 (398)	21.97 (558)	41.65 (1058)	41.65 (1058)
Couple Wiring Spacing	L3	11.57 (294)	11.57 (294)	15.12 (384)	21.42 (544)	41.10 (1044)	41.10 (1044)
Lamp Diameter	D	2.13 (54)	2.13 (54)	2.13 (54)	2.13 (54)	1.50 (38)	2.13 (54)
Lamp Height	H	3.09 (78.5)	3.09 (78.5)	3.09 (78.5)	3.09 (78.5)	3.09 (78.5)	3.09 (78.5)
Bracket Width	W1	1.18 (30)	1.18 (30)	1.18 (30)	1.18 (30)	1.18 (30)	1.18 (30)
Lamp Width	W2	5.51 (140)	5.51 (140)	5.51 (140)	5.51 (140)	6.22 (158)	6.22 (158)
Mounting Hole Radius	R	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)

Electronic Ballast Specifications

Unit: in. (mm)

IQWJY70DH01	5.67 (144)	6.10 (155)	6.46 (164)	2.38 (60.5)	4.11 (104.5)	0.10 (2.5)	1.89 (48)
IQWJY100DH01	5.67 (144)	6.10 (155)	6.46 (164)	2.38 (60.5)	4.11 (104.5)	0.10 (2.5)	1.89 (48)
IQWJY150DH01	6.85 (174)	7.32 (186)	7.80 (198)	2.76 (70)	4.72 (120)	0.10 (2.5)	2.09 (53)
IQWJY200DH01	6.85 (174)	7.32 (186)	7.80 (198)	2.76 (70)	4.72 (120)	0.10 (2.5)	2.09 (53)
IQWJY250DH01	7.64 (194)	8.11 (206)	8.58 (218)	2.76 (70)	4.72 (120)	0.10 (2.5)	2.09 (53)
IQWJY400DH01	15.71 (399)	16.30 (414)	16.69 (424)	2.17 (55)	3.62 (92)	0.10 (2.5)	2.28 (58)

New Energy Saving Light Source

With Ultra-Long Lifetime

IQ RT Series 40W~300W



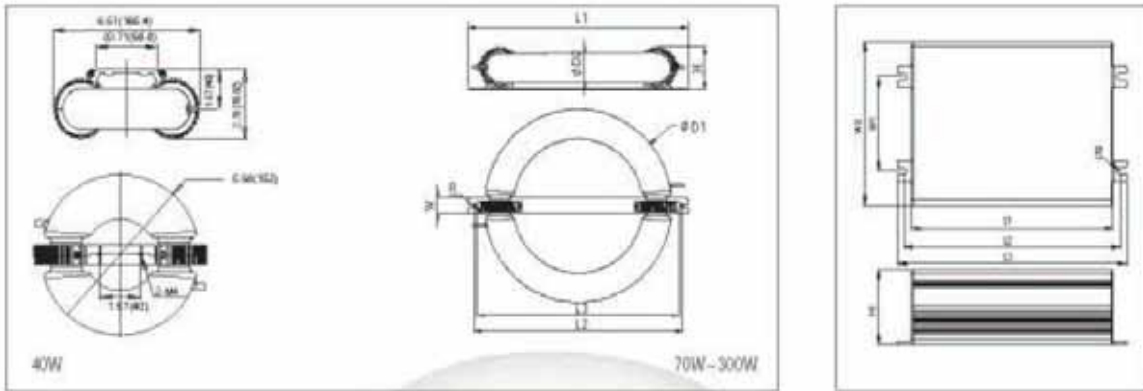
Induction Lamp Specifications

Product No.	Model No.	Wattage (W)	Operating Frequency (KHz)	Luminance (Lm)	Efficacy (Lm/W)	Luminance Maintenance (60 Khrs)	CRI (Ra)	Color Temperature (K)	Average Lifetime (hrs)
27810416001	IQWJY40H-RL-W1	40	250	2,680	65-70	70%	80	4,000	80,000
27810411001	IQWJY40H-RZ-W1	40		2,680	65-70			5,000	
27810716001	IQWJY70H-RL-W1	70		5,040	70-75			4,000	
27810711001	IQWJY70H-RZ-W1	70		5,040	70-75			5,000	
27811016001	IQWJY100H-RL-W1	100		7,700	75-80			4,000	
27811011001	IQWJY100H-RZ-W1	100		7,700	75-80			5,000	
27811516001	IQWJY150H-RL-W1	150		11,550	75-80			4,000	
27811511001	IQWJY150H-RZ-W1	150		11,550	75-80			5,000	
27812016001	IQWJY200H-RL-W1	200		16,400	80-95			4,000	
27812011001	IQWJY200H-RZ-W1	200		16,400	80-95			5,000	
27812516001	IQWJY250H-RL-W1	250		21,750	85-90			4,000	
27812511001	IQWJY250H-RZ-W1	250		21,750	85-90			5,000	
27813016001	IQWJY300H-RL-W1	300		26,100	85-90			4,000	
27813011001	IQWJY300H-RZ-W1	300		26,100	85-90			5,000	

- Note:
- Color Temperature 2720-6500 available upon request.
 - Operating ambient temperature - 25°C ~ 40°C (with enclose fixture).
 - Operating ambient temperature 0°C ~ 40°C (without fixture, or with open fixture).

Electronic Ballast Specifications

Product No.	Model No.	Wattage (W)	Voltage (VAC)	Current (A)	Frequency (Hz)	THD	Power Factor	Input Power (W)	Case Temperature (°C)
26304101	IQWJY40DH01	40	120-277	0.38-0.17	50/60	10%	>0.95	45	<65
26307101	IQWJY70DH01	70		0.63-0.29				75	
26310101	IQWJY100DH01	100		0.93-0.42				110	
26315101	IQWJY150DH01	150		1.35-0.61				160	
26320101	IQWJY200DH01	200		1.77-0.80				210	
26325101	IQWJY250DH01	250		2.21-1.00				263	
26330101	IQWJY300DH01	300		2.65-1.20				315	



Induction Lamp Dimensions

Unit: in. (mm)

Wattage	Dim	70W	100W	150W	200W(54)	250W(38)	400W
Bracket Length	L1	9.45 (240)	10.63 (270)	14.09 (358)	16.50 (419)	17.17 (436)	19.69 (500)
Mounting Holes Spacing	L2	8.86 (225)	10.04 (255)	13.50 (343)	15.91 (404)	16.38 (416)	18.90 (480)
Couple Wiring Spacing	L3	7.85 (199.5)	29.45 (239.2)	12.53 (318.3)	14.93 (379.1)	15.83 (402)	18.35 (466)
Lamp Diameter	D	2.13 (54)	2.13 (54)	2.13 (54)	2.13 (54)	2.24 (57)	2.24 (57)
Lamp Height	H	3.13 (79.5)	3.13 (79.5)	3.13 (79.5)	3.13 (79.5)	3.13 (79.5)	3.13 (79.5)
Bracket Width	W1	1.18 (30)	1.18 (30)	1.18 (30)	1.18 (30)	1.18 (30)	1.57 (40)
Lamp Width	W2	7.09 (190)	8.54 (217)	11.57 (294)	13.94 (354)	14.84 (377)	17.36 (441)
Mounting Hole Radius	R	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)	0.10 (2.5)

Electronic Ballast Specifications

Unit: in. (mm)

Ballast Model	Dim	70W	100W	150W	200W	250W	400W
IQWJY70DH01		5.67 (144)	6.10 (155)	6.46 (164)	2.38 (60.5)	4.11 (104.5)	1.89 (48)
IQWJY100DH01		5.67 (144)	6.10 (155)	6.46 (164)	2.38 (60.5)	4.11 (104.5)	1.89 (48)
IQWJY150DH01		6.85 (174)	7.32 (186)	7.80 (198)	2.76 (70)	4.72 (120)	2.09 (53)
IQWJY200DH01		6.85 (174)	7.32 (186)	7.80 (198)	2.76 (70)	4.72 (120)	2.09 (53)
IQWJY250DH01		7.64 (194)	8.11 (206)	8.58 (218)	2.76 (70)	4.72 (120)	2.09 (53)
IQWJY400DH01		15.71 (399)	16.30 (414)	16.69 (424)	2.17 (55)	3.62 (92)	2.28 (58)

New Energy Saving Light Source

With Ultra-Long Lifetime



IQ Self-ballasted Induction Lamp (12W~40W)



12w Bulb Type self-ballasted induction lamp

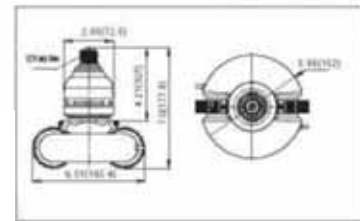
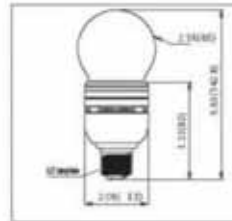
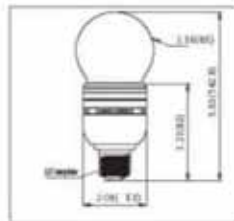


23w Bulb Type self-ballasted induction lamp



40w Round tubular self-ballasted induction lamp

Unit:in. (mm)



Specifications

Product No.	Model No.	Wattage (W)	Operating Frequency (KHz)	Luminance (Lm)	Efficacy (Lm/W)	Luminance Maintenance (60 Khrs)	CRI (Ra)	Color Temperature (K)	Average Lifetime (hrs)
27810136	IQWJZ12QRL	12	450	744	60-65	78%	80	4,000	30,000
27810131	IQWJZ12QRZ	12		744	60-65			5,000	
27810236	IQWJZ23QRL	23	350	1,420	60-65			4,000	
27810231	IQWJZ23QRZ	23		1,420	60-65			5,000	
27810416	IQWJZ40HRL	40	250	2,680	65-70			4,000	
27810411	IQWJZ40HRZ	40		2,680	65-70			5,000	

- Note:
- Color Temperature 2720-6500 available upon request.
 - Operating ambient temperature - 25°C ~ 40°C (with enclose fixture).
 - Operating ambient temperature 0°C ~ 40°C (without fixture, or with open fixture).

Product No.	Model No.	Wattage (W)	Voltage (VAC)	Current (A)	Frequency (Hz)	THD	Power Factor	Input Power (W)	Case Temperature (°C)
27810136	IQWJZ12QRL	12	120	0.2	60	10%	>0.50	13	<65
27810131	IQWJZ12QRZ								
27810236	IQWJZ23QRL	23	120	0.4	60		>0.50	24	
27810231	IQWJZ23QRZ								
27810416	IQWJZ40QRL	40	120/208/240/277	0.36/0.21/0.18/0.15	60		>0.50	42	
27810411	IQWJZ40QRZ								

IQ GC4-200E GC4a-200E GC4b-200E

Features:

- IQGC4-200E -22o high temperature-resistant polycarbonate hood and lens.
- IQGC4a-200E, GC4b-200E -22o aluminum reflector with anodized inner surface and UV stabilized acrylic lens.
- IQGC4b-200E -22o aluminum reflector with anodized inner surface and UV stabilized tempered glass lens.
- Specially designed heat sink maximizes the heat dissipation.
- Die cast aluminum ballast casing with white powder coated finish for corrosion-resistance.

Lamp and ballast:

- 200W ball type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

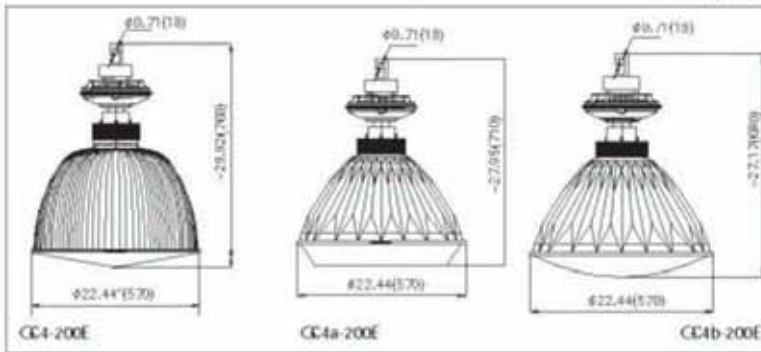
- -25°C ~ 40°C

Applications:

- Warehouses, supermarkets, retail showrooms, exhibition halls & factories

Dimension:

Unit: in. (mm)



GC4-200E

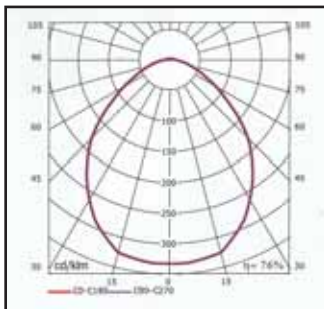


GC4a-200E



GC4b-200E

Photometrics:



VL200

Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2180400201E	IQGC4-200E/VL200	WJY200QRZ.N1	200	50/60	120-277	1.77~0.80	IP43 (Control gear)
2180410201E	IQGC4a-200E/VL200						
2180420201E	IQGC4b-200E/VL200						

IQ GC18a-100E GC18a-150E GC18a-200E

Features:

- Aluminum reflector with anodized inner surface
- UV stabilized acrylic lens fastened with clamp band.
- Die cast aluminum ballast casing with white powder coated finish for corrosion-resistance.

Lamp and ballast:

- 100/150/200W circular loop type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- IQGC18a-100E - 0oC - 40oC
- IQGC18a-150E/200E - -10oC - 40oC

Applications:

- Warehouses, supermarkets, retail showrooms, exhibition halls & factories



GC 18a-150E GC 18a-200E



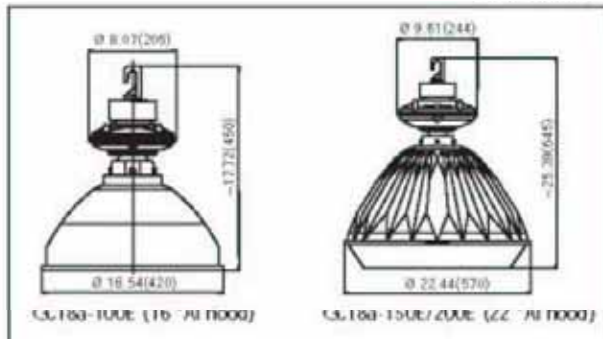
GC 18a-100E



RT 100/150/200

Dimension:

Unit: in. (mm)



Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2181810101E	IQGC18a-100E/RT100	WJY100H.RZ.W3	100	50/60	120-277	0.93-0.42	IP43 (Control gear)
2181810151E	IQGC18a-150E/RT150	WJY150H.RZ.W4	150	50/60	120-277	1.35-0.61	IP43 (Control gear)
2181810201E	IQGC18a-200E/RT200	WJY200H.RZ.W5	200	50/60	120-277	1.77-0.80	IP43 (Control gear)

IQ GC18b-100E GC18b-150E GC18b-200E

Features:

- Aluminum reflector with anodized inner surface
- UV stabilized acrylic lens fastened with clamp band.
- Die cast aluminum ballast casing with white powder coated finish for corrosion-resistance.

Lamp and ballast:

- 100/150/200W circular loop type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- -10°C ~ 40°C

Applications:

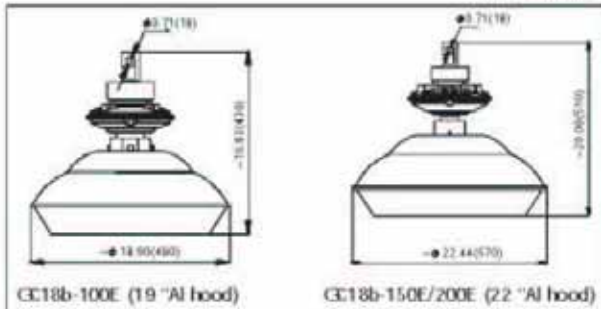
- Warehouses, supermarkets, retail showrooms, exhibition halls & factories



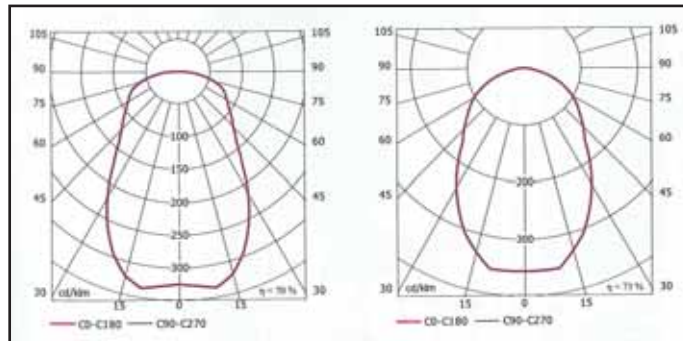
RT 100/150/200

Dimensions:

Unit: in. (mm)



Photometrics:



Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2181820101E	IQGC18b-100E/RT100	WJY100H.RZ.W3	100	50/60	120-277	0.93-0.42	IP43 (Control gear)
2181820151E	IQGC18b-150E/RT150	WJY150H.RZ.W4	150	50/60	120-277	1.35-0.61	IP43 (Control gear)
2181820201E	IQGC18b-200E/RT200	WJY200H.RZ.W5	200	50/60	120-277	1.77-0.80	IP43 (Control gear)

IQ GC27-400E

Features:

- Plastic-painted square aluminum reflector for heat and corrosion resistance.
- Open structure for good ventilation and prolonged lifetime.
- Mounting: suspended by chains or poles.

Lamp and ballast:

- 400W square loop type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- 0°C ~ 40°C

Applications:

- Warehouses, supermarkets, retail showrooms, exhibition halls & factories



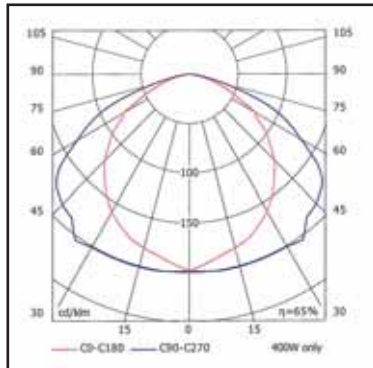
ST400

Dimension:

Unit: in (mm)



Photometrics:



Suspended by poles or chains

Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2182700401E	IQGC27-400E/ST400	WJY400J.RZ.W7	400	50/60	120-277	3.54-1.60	IP20

IQ ZD1-70E ZD1-100E

Features:

- High pressure die cast aluminum alloy housing for corrosion resistance.
- Anodized aluminum reflector and clear tempered glass lens are designed to optimize light distribution.
- Optional twist-lock photocell available upon request.

Lamp and ballast:

- 70/100W circular loop type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- -20°C ~ 40°C

Applications:

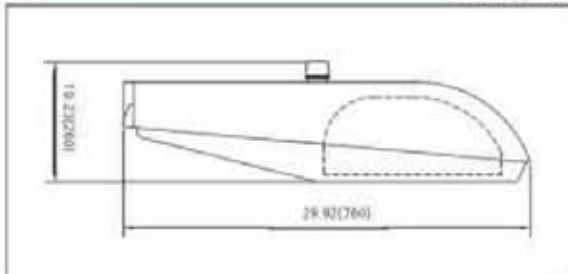
- Freeway, highway, parking lots, public entrance, off-street areas.



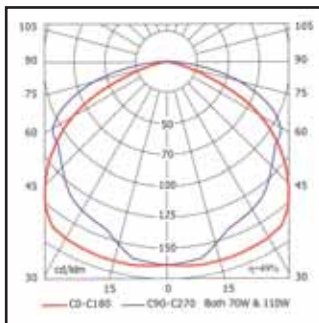
RT70/100

Dimension:

Unit: in. (mm)



Photometrics:



Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2160100071E	IQZD1-100E/RT70	WJY70H.RZ.W6	70	50/60	120-277	0.63-0.29	IP55
2160100101E	IQZD1-100E/RT100	WJY100H.RZ.W6	100	50/60	120-277	0.63-0.29	IP55

IQ TL8-400E

Features:

- Square profiled aluminum housing concealed with two extruded welding side covers for high IP rating.
- Anodized aluminum reflector and clear tempered glass lens are designed to optimize light distribution.
- Gas-tight silicon rubber seal made for wet locations.
- Mounting: suspended by poles or wall/surface mount.

Lamp and ballast:

- 400W square loop type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- -20°C ~ 40°C

Applications:

- Tunnels, bridges, highways, airports, stadiums.



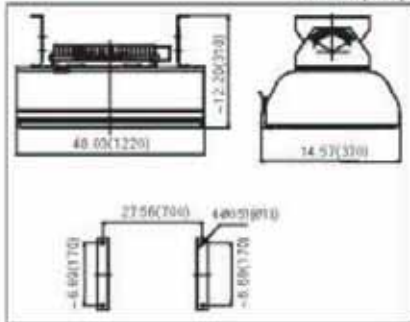
ST400



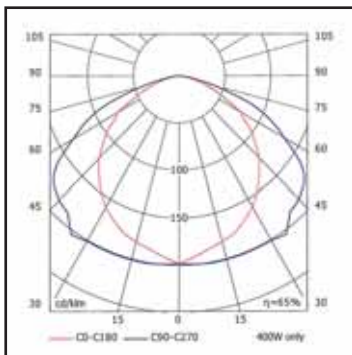
Suspended by poles or Wall Mounted

Dimensions:

Unit: in. (mm)



Photometrics:



Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2170800401E	IQTL8-400E/ST400	WJY400J.RZ.W6	400	50/60	120-277	3..54-1.60	IP65

IQ MX2-85E MX2-100E

Features:

- Die cast aluminum housing with grey/bronze/black/white powder coated finish for corrosion resistance.
- UV stabilized and heat resistant polycarbonate lens.
- Light weight and compact structure for easy maintenance.

Lamp and ballast:

- 85W ball type or circular 100W circular loop induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

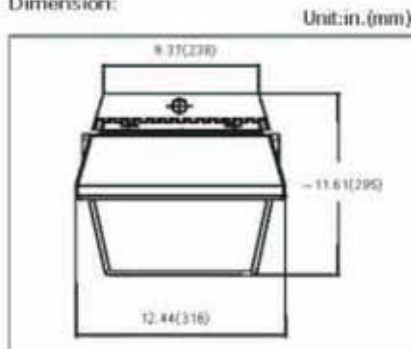
- -20°C - 40°C

Applications:

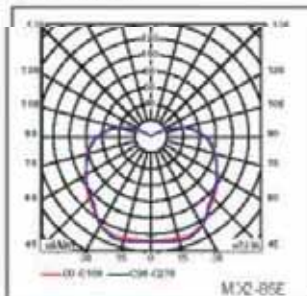
- Parking garage, gas stations, schools, shopping malls.



Dimension:



Photometrics:



Fixture Specifications:

Product No.	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
210020006TE	IQMX2-85E/VL85	WJY85ORZ.N1	85	50/60	120-277	0.76-0.34	IP43
2100200101E	IQMX2-100E/RT100	WJY85ORZ.N1	100	50/60	120-277	0.93-0.42	IP43

IQ ZY-100E

Features:

- Die cast aluminum housing with black powder coated finish for corrosion resistance.
- Anodized aluminum reflector and clear tempered glass lens are designed to optimize light distribution.
- Gas-tight silicon rubber seal made for wet locations.

Lamp and ballast:

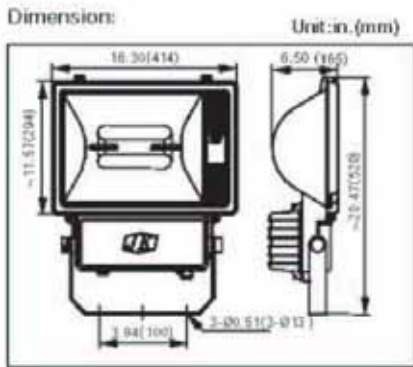
- 100W square loop type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- -20°C - +40°C

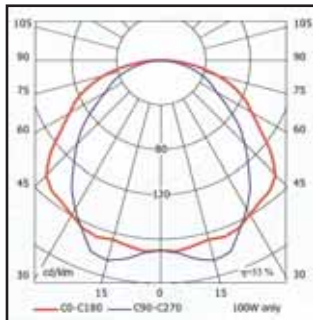
Applications:

Billboards, buildings, parks, pools, parking lots, plazas, tennis courts.



ST100

Photometrics:



Fixture Specifications:

2100400101	Fixture	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2110000101E	IQZY-100E/ST100	WJY100J.RZ.W1	100	50/60	120-277	0.93-0.42	IP65

IQ ZT7-85E

Features:

- Aluminum alloy housing with grey power coated finish for corrosion-resistance.
- Anodized aluminum reflector and glass.

Lamp and ballast:

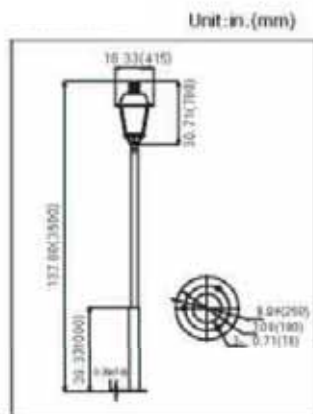
- 85W ball type induction lamp with high lighting efficacy at rated 80,000hrs lifetime, about 20 years burning on 4000hrs/yr.
- Electronic ballast features high power factor (>0.95), flickering free, constant output wattage, and safe protection.

Ambient Temperature for lighting fixture:

- -20°C - 40°C

Applications:

- Parks, shopping malls, outlets, plazas, city halls, historic areas.



VL85



Fixture Specifications:

Product No.	Feature	Lamp	Wattage (W)	Frequency (Hz)	Voltage (V)	Current (A)	IP Degree
2140700081E	IQZT7-85E/VL85	WJY85ORZ.N1	85	50/60	120-277	0.76-0.34	IP43

LOWER WATTAGE - SUPERIOR LIGHTING **BETTER LIGHT**



How is it that an 85w HighHorse Induction system can replace a 150w HID system and the visual acuity is improved with the Induction system?

The answer is found in how the human eye responds to light and how lighting sources affect vision.

To better understand consider the following scientific terms and how they relate to vision:

SCOTOPIC VISION

The scientific term for human visual perception in low light (night vision); directed by rod cells in the human eye.

PHOTOPIC VISION

The scientific term for human color vision under normal conditions during the day, directed by cone cells in the human eye.

MESOPIC VISION

The scientific term for the combination between Photopic and Scotopic vision taking into account the total sensitivity of the rod cells in the eye for the blue range, with the color perception of the cone cells.

VISUAL CONCLUSION

Extensive research has been conducted to better understand Mesopic vision; more specific how "Scotopic" vision which stimulates the photoreceptors called rods in the human eye to cause pupil contraction and increased visual acuity. It was found that scotopically enhanced light appeared brighter even when light levels were reduced; thus the potential to reduce wattage and improve lighting.

The ratio of Scotopic light vs. Photopic light in a lamp is called the S/P ratio. This ratio determines the apparent visual brightness of a light source. Induction lighting produces a high S/P ratio and this is why the 85w lamp appears as bright or brighter to the human eye than a sodium vapor or metal halide of twice the wattage. **Visual Effective Lumens (VEL)** is a key factor in vision.



SCOTOPIC/PHOTOPIC (S/P) RATIO

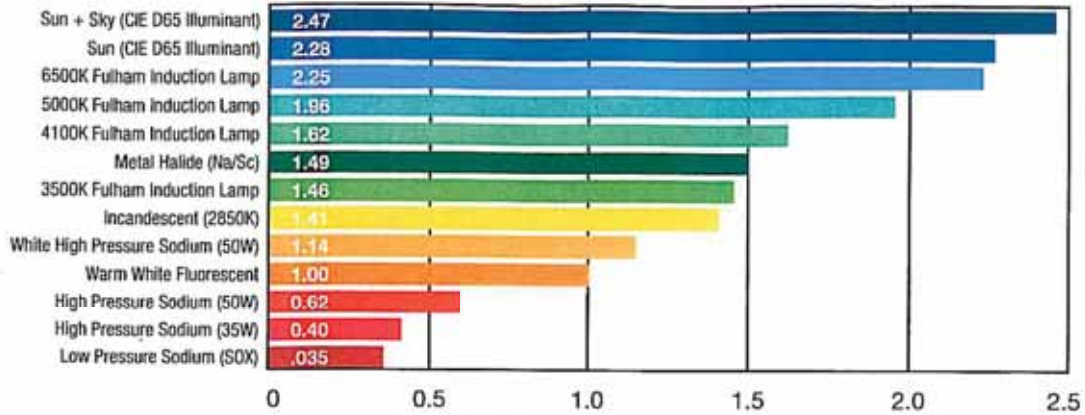


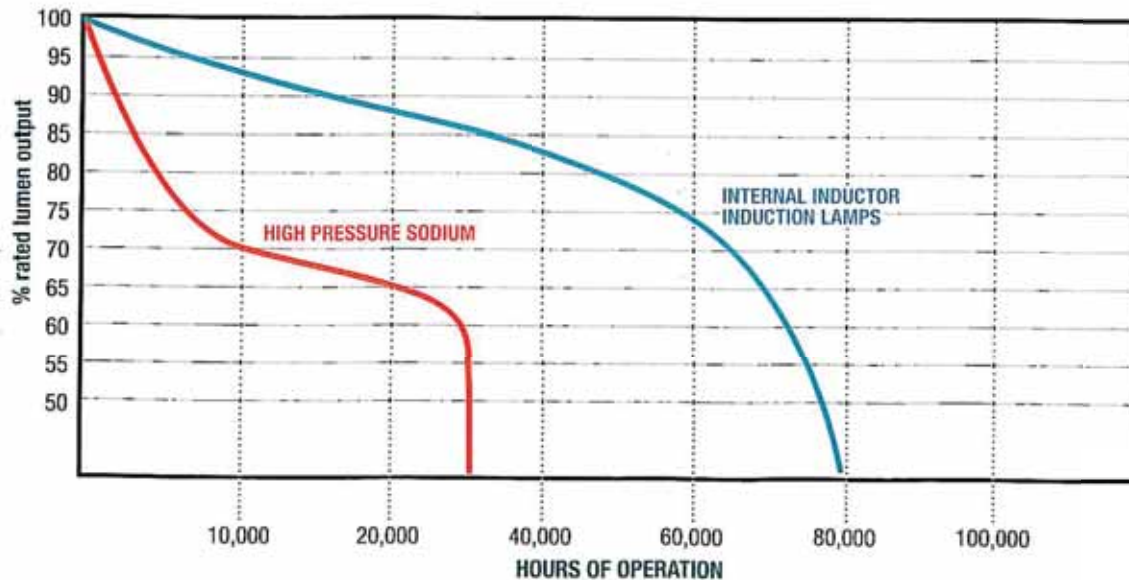
Chart calculations by Berkley Labs - actual selection of induction lamp wattage and type will vary with installation and user requirement.

HOW TO CALCULATE VISUAL EFFECTIVE LUMENS (VEL)

PARKING GARAGE APPLICATION 27,000 HRS = 3.0 YEARS

Type	Initial Lumens	S/P Ratio (from above)	VEL	VEL		
				10,000 hrs	20,000 hrs	27,000 hrs
150w HPS	15,000	0.62	9300	6696	6045	4650
85w Induction	6375	1.96	12,495	11,870	10,745	10,620

LUMEN MAINTENANCE CURVES

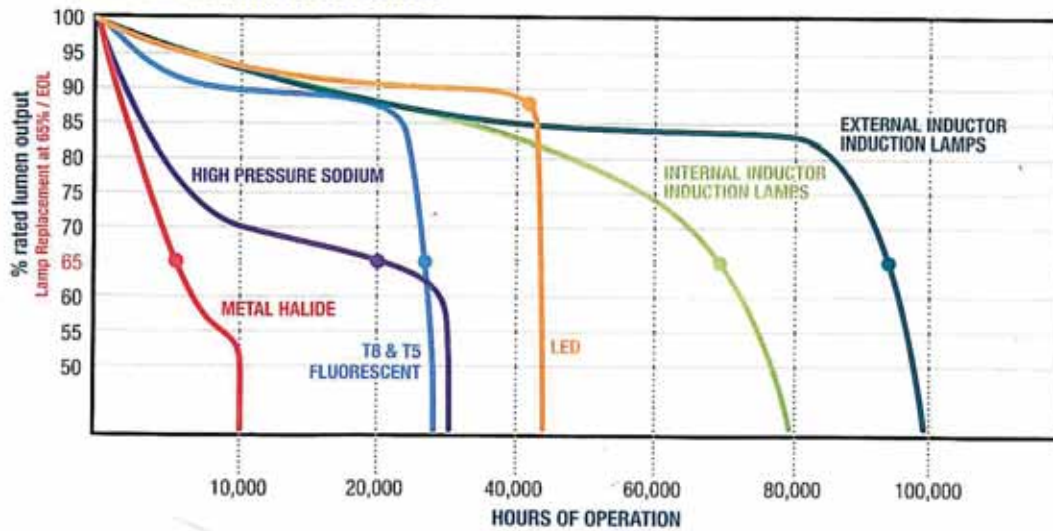


INDUCTION LIGHTING SYSTEMS COMPARE THE LIGHT SOURCES

INDUCTION VS LED / METAL HALIDE / HIGH PRESSURE SODIUM

	INDUCTION	LED	MH	HPS
SOURCE POINT	AREA	PROJECTION	POINT	POINT
LAMP LIFE (Hours)	60k - 100k	30k - 50k	10k - 15k	15k - 24k
LIGHTING EFFICIENCY Lm/Wt	65 - 90	40 - 65	60 - 110	60 - 120
CRI	> 80	> 70	> 70	> 20
S/P RATIO	1.46 - 2.25	1.96	1.49	0.62
LUMEN MAINTENANCE	Reference Graph Below			
COLOR TEMPERATURE	Full Range	Limited Range	Limited Range	Limited Range
START	INSTANT	INSTANT	DELAY	DELAY
MERCURY	<10mg.	N/A	10-150mg.	10-50mg.

LUMEN MAINTENANCE CURVES





GREEN TECHNOLOGIES
Building Green City Lights



Phone 787-729-0103
Fax 787-725-6187
info@iqgreentech.com
www.iqgreentech.com