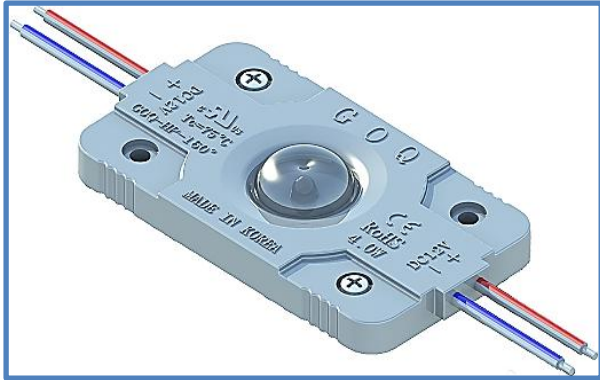




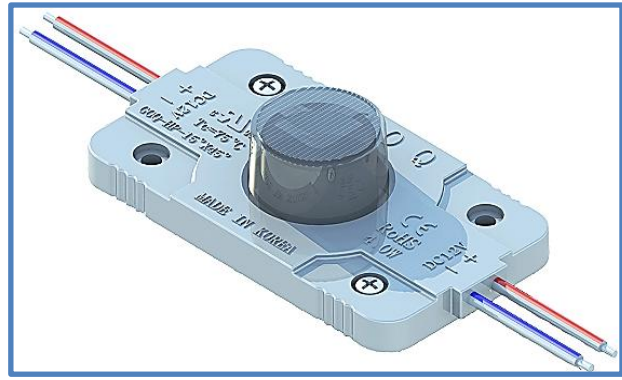
WWW.GOQ.KR

GOQ HIGH POWER LED

Product Specification



MODEL : GOQ-HP-160°
(Backlighting Injection Module)



MODEL : GOQ-HP-15°X45°
(Sidelighting Injection Module)

< Product features >

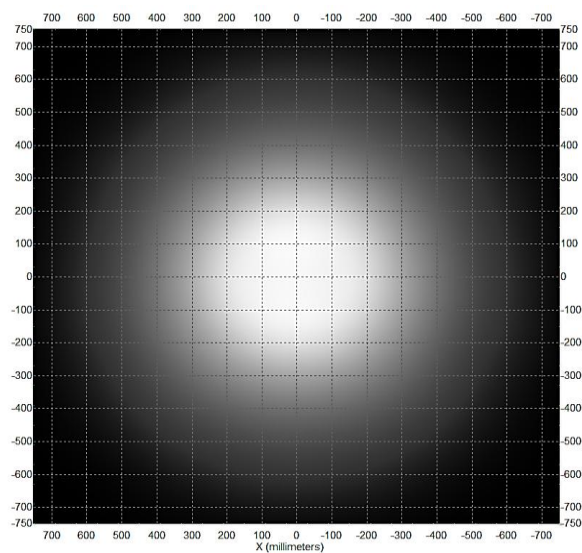
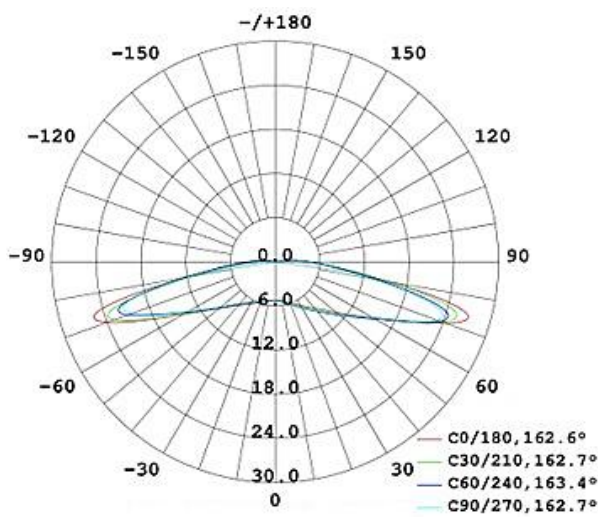
- * Most Preferred Best seller LED module : CE, UL, RoHS Certified.
- * High efficiency GENESIS PHOTONICS LED(3.5 X 3.5 X 1.75 mm).
- * LED Driver : Constant Current Driving System.
- * Stylish Appearance design with a CAP TYPE Optical Lens.
- * Best Viewing Angle => GOQ-HP-160° : **160°**
GOQ-HP-15°X45° : **45°**
- * Aluminum PCB and heat sink design for heat dissipation effect.
- * Each module can be used to cut one by one.
- * Max. 15 modules in series.
- * Module Design for Humid & Waterproof : IP65
- * Mounting with Screw or premounted double-sided adhesive tape possible.
- * Power Consumption : 4.0W
- * Input Voltage : DC 12V
- * Module size => GOQ-HP-160° : 70 X 37 X 12.5 mm.
GOQ-HP-15°X45° : 70 X 37 X 19.9 mm.

< Areas of application >

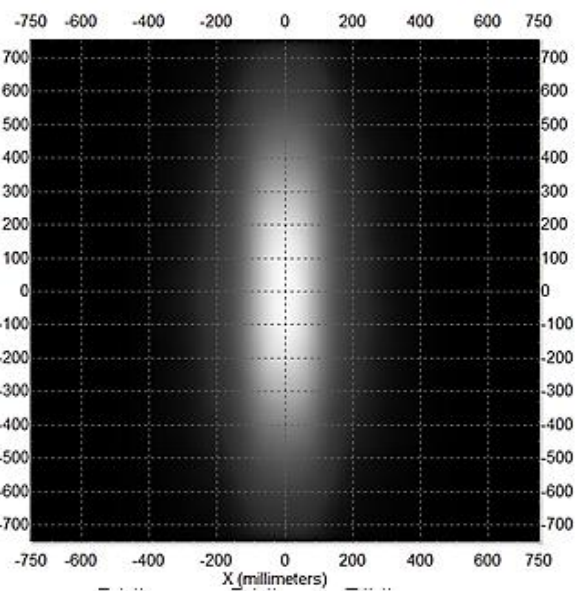
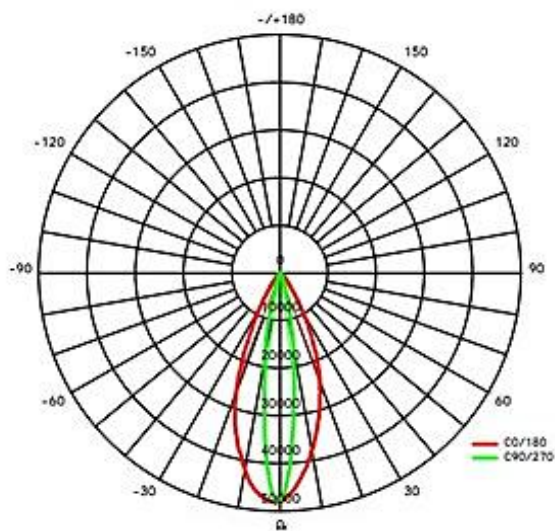
- * Signage and illuminated advertising.
- * Big size Channel letters
- * Flex light Box illumination
- * Duplex light Box illumination

< Light distribution and Spot diagram >

* GOQ-HP-160°

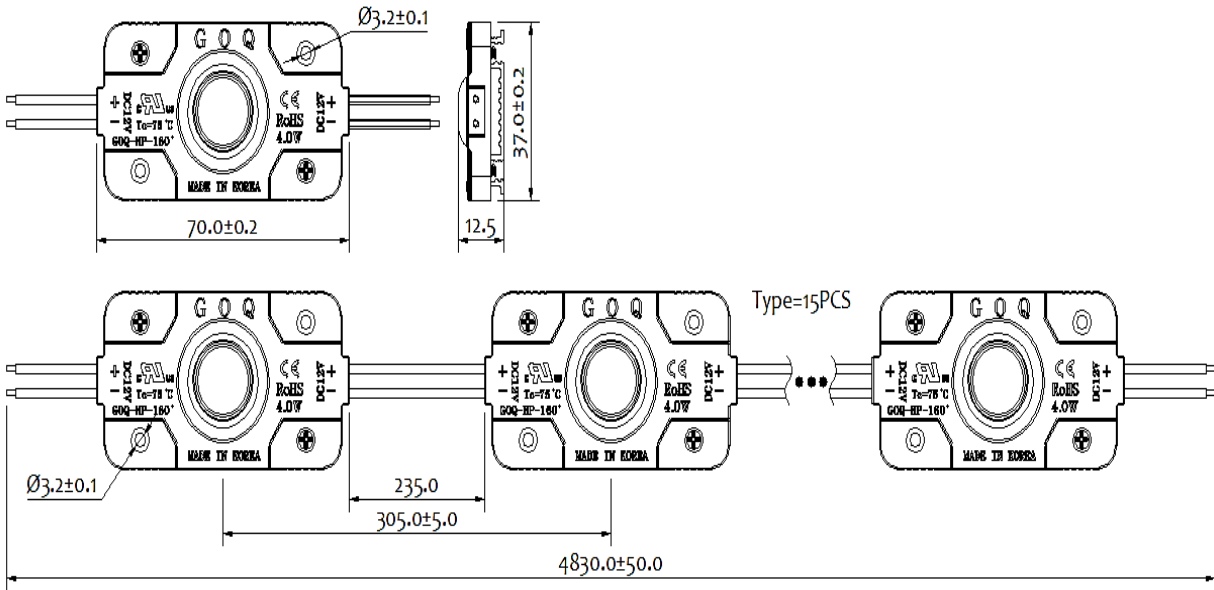


* GOQ-HP-15°X45°

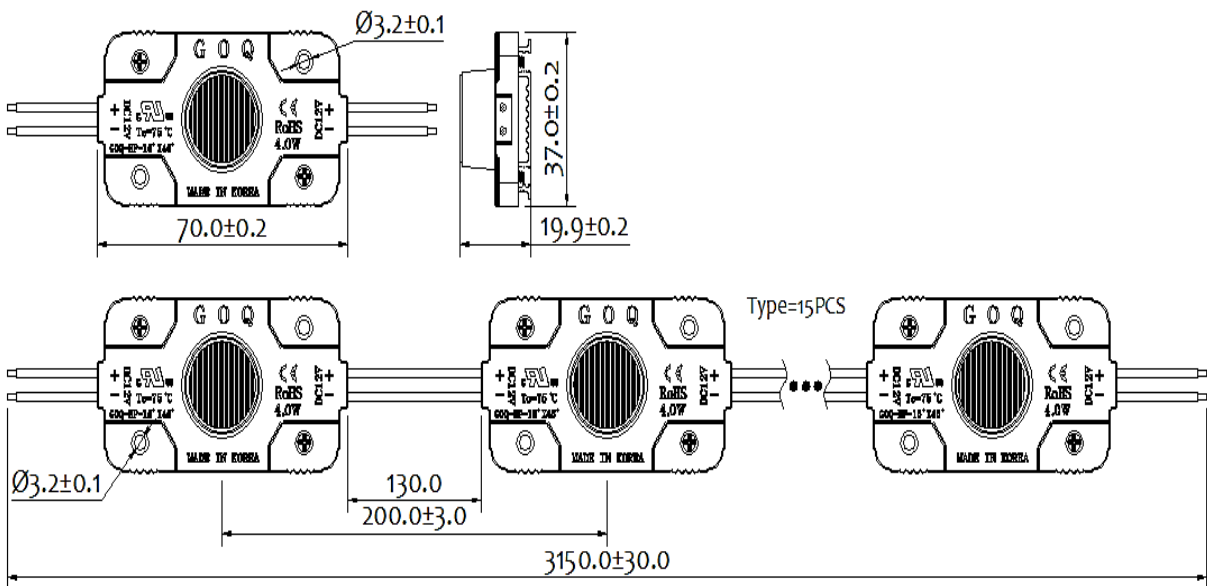


< Dimension (unit : mm) >

* GOQ-HP-160°



* GOQ-HP-15°X45°



< Specification >

Item	Value		Unit
Product No.	GOQ-HP-160°	GOQ-HP-15°X45°	
Power Consumption	4		Watt
Input Voltage	12		VDC
Input Current	333		mA
LED Nominal CCT	6500		K
View Angle	160	45	°
Luminous efficiency	75	78.75	lm/W
Luminous intensity	300	315	lm(Typ.)
CRI	>70		%
Module Pitch	305.0±5.0	3150.0±30.0	mm
Size	70 X 37 X 12.5	70 X 37 X 19.9	mm
Weight	25.75	26	g
Max. in Series	15		EA
Operating Temp	- 25 ~ 55		°C
Storage Temp	- 40 ~ 80		°C
Waterproof	IP65		
Cable	UL, 18AWG 300V/80°C		
Case materials	UL, ABS, V0-class		
Lens materials	UL, SAN, V0-class		

-. Wire type

Cable	UL, 18AWG	
Color	Red or Red-white	White or blue-white
Function	+ (DC 12V input voltage)	- (ground)

< LED Specification >

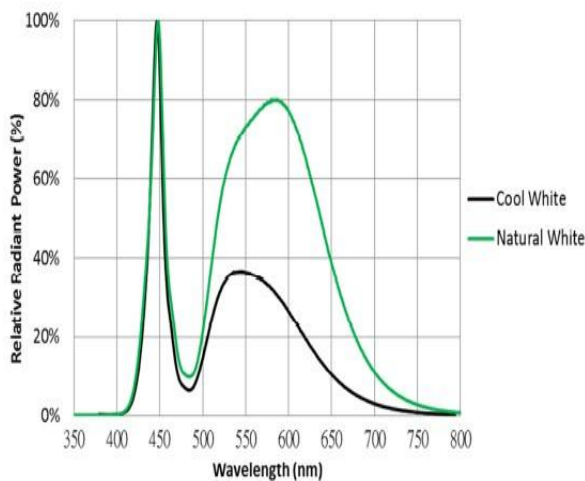
Product Characteristics(LED Size : 3.5 X 3.5 X 1.75 mm)

Characteristics	Unit	minimum	Typ.	Maximum
Thermal resistance, junction to solder point	°C/W		5	
Viewing Angle (FWHM)	degrees		130	
Temperature coefficient of voltage	mV/°C		-2.5	
DC Forward Current	mA		300	350
Reverse Voltage	V			5
Forward Voltage(@350mA)	V		9	10.6
LED junction temperature	°C			150

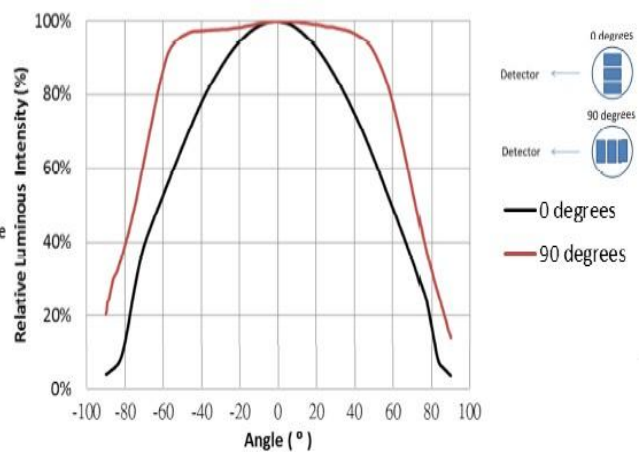
Flux Characteristics - COOL WHITE (Tj = 25 °C)

Color	CCT		Base Order codes Minimum Luminous Flux (lm) @ 300mA		Calculated Minimum Luminous Flux (lm)*		Order Code	
	Min	Max	Group	@25°C	@85°C	100mA		350 mA
70 CRI Typ Cool White	6300K	8000K	FS2	230	202	87	257	KCTP-3535C7H3001-000
			FS3	245	215	93	274	
			FS4	260	228	99	290	
			FS5	280	245	106	313	

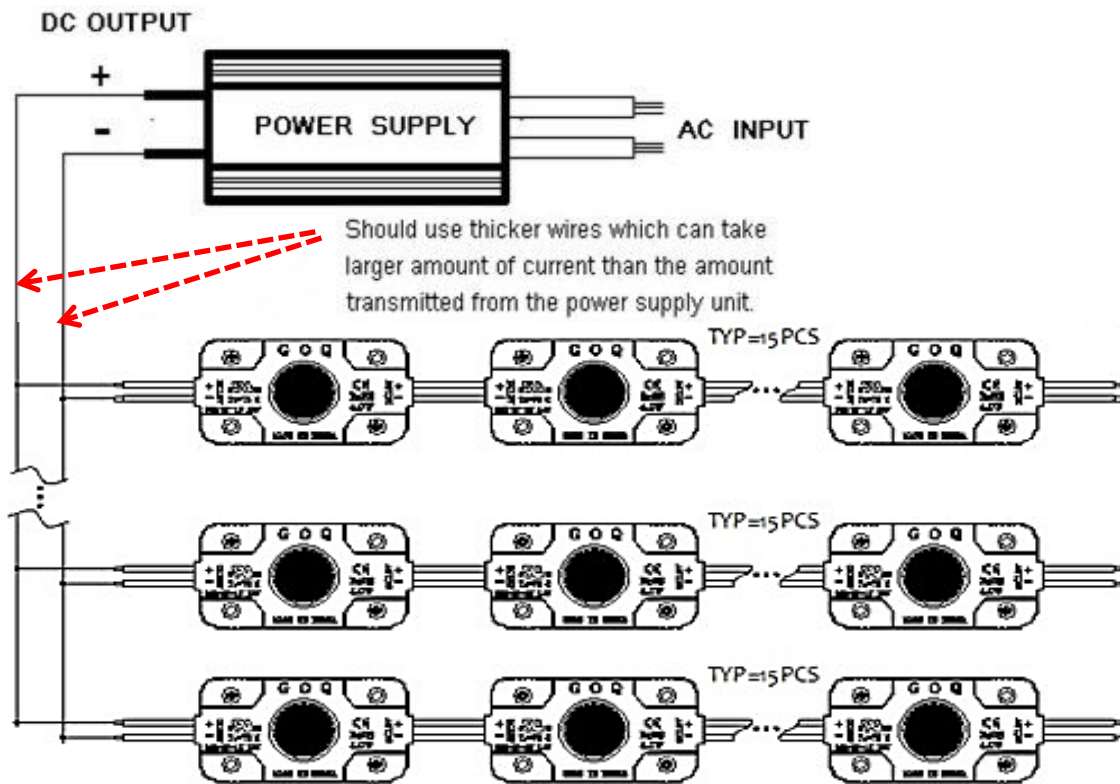
Spectrum (Ts=25°C)



Viewing Radiation Characteristics



< Installation Manual >



1. Use the power cable with $2 \times 1.5 \text{mm}^2$ above.
(Select appropriate power cable based on the loading current).
2. Must select $0.75 \text{mm}^2 / 18 \#$ wire as power lines if be lengthened in order to avoid overloading bring overheat, causing adverse consequences.
3. Single module is cuttable. Please cut the power cable first with Diagonal pliers in middle between two modules when module are connected, peel cable skin around 10 mm and connected with corresponding color.
White red line(or red line) is positive , white-blue line(or white) is negative.
4. It should be well insulated with using special waterproof tape , finally check power conduction. It will be good only the cable will be pulled out with hands.
5. Please take out the releasing paper on backside at installation and stick in lighting box and fix them first. And mounted with two pcs ST2.9X12mm screw or with glass glue at two ends.
6. The end module need to be well insulated with waterproof tape or waterproof connector to avoid short-circuit and damage the product.
7. Standard cascade is 15PCS, DC12V single powered.
Do not over-connect and avoid damage for excessive line overload current;
8. The modules can not be used in outdoor. Do not operate or touch when powered..

**Notes: please use power supply with safety certificated
(short circuit, overload and over current protection)**