

INNOVATION in  
ALARM & SIGNAL

# Aviation Obstruction Lights

## CATALOG 2024



Signal Tower Lights  
Signal Beacons and Sounders  
Heavy-Duty and Explosion Proof Signalings  
Warning Light Bars  
**Aviation Obstruction Lights**  
Smart Factory Product  
Industrial LED Lights  
Performance Line - E Series

**Qlight**

**Qlight**

Gives you a  
Brighter  
Future

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## Qlight Gives You a Brighter Future!

Qlight has been contributed to an industrial safety and efficiency by producing several audible/ visual signaling devices and industrial LED lights since its establishment in 1986. Our technology and quality are highly reputable among various industries for example semiconductor manufacturing equipment, automobile industry, unmanned automation facility, steel production facility, shipbuilding industry, offshore plant, specialized unit for petrochemical industry based on diverse technology patents and core technologies such as LED light source, heat radiation technology, explosion proof design. Our established local corporations in South Korea and China, sales branches in the United States, Japan, Vietnam, and a global service network provides a distribution and sales system servicing over 80 countries that help Qlight reinforces industrial fields all over the world.



# Qlight is a representative of signaling device in Korea.

Qlight has been striving to accomplish our mission to provide visual and audible status indicating systems and solutions to enhance our customer's work safety and efficiency for the last three decades.

As a market leader, Qlight is going to accomplish our responsibility by introducing state of the art equipment and unmanned facilities.

## 1986 - 1995

### Business foundation and consolidation

- 1986 Established Qlight
- 1993 Nominated for developing domestic explosion proof warning lights by Korean Ministry of Science & Technology

## 1996 - 2005

### Growing as a signal transmission device specialist

- 2001 Established Shanghai Qlight Electronic Co.,Ltd. in China



- 2004 ISO 9001:2000 certificates acquired

## 2006 - 2017

### mission device specialist A great leap forward & business reconstruction

- 2010 Established R&D Center
- 2011 Selected as a venture company
- 2011 Selected as an INNO-BIZ firm which is an innovative tech company
- 2014 Selected as a promising export company by Small and Medium Business Administration(SMBA)
- 2014 Established the Qlight USA, Inc. in San Jose, CA.
- 2016 The second headquarter factory built



# History of Change & Innovation

## 2018 to Present

### New engines for growth

2019 Established Qidong factory



2019 Selected as a family friendly company by Ministry of Gender Equality and Family

2020 Selected as a small giants company by Small and Medium Business Administration(SMBA)

2021 Selected as a youth-friendly small giants company

2023 Selected as the best reading management company by the Ministry of Culture, Sports and Tourism of Korea

## The 2<sup>nd</sup> growth and globalization

# Qlight, the best professional company

Leading the **improvement of industrial efficiency**

## 1 Aiming for the first-class

Aiming for the first-class specialized company to contribute industrial efficiency and safety of customer based on the core competency of System, Variety, and Hi-quality

## 35 Continuous growth for about 35 years

Qlight has been continuously growing for 38 years since its foundation and is recognized for quality and technology based on the business culture of partnership and management of sharing

## 80 Global networks in 80 countries

Exporting to all over the world through global network spanning over 200 distribution channels in 80 countries and brightening industrial sites around the world

## 450 Multi-variety production

Satisfying various needs of customers through systematic customer-customized production system for over 450 products

### Quick

Prompt customer satisfaction and real time enterprise(RTE)

### Quality

Emphasis on product and service quality, workplace innovation and ethical management

### Question

Problem oriented thinking and creative problem solving are based on achieving strategic task.

### Qualified

The most suitable company that leads the innovation of signaling device technology and industrial efficiency improvement



## Core Competency



### System

Delicate mechanism of the work realizes shorter lead time by effectively managing over-all procedures such as purchasing, production, stock management, and distribution.



### Broad-line

Customers are highly satisfied with Qlight products because we offer over 450 types of wide variety of product family with a systematic customized production system.



### Supreme Quality

Qlight's technological capability and supremacy of quality are being recognized because of our strict technology standard and inspection system. We've obtained over 22 certificates such as IECEx, ATEX, NEPSI, CCS, CE, and UL. We've been expanding it in accordance with industrial demands.

## How Qlight works





## SELECTION OF WARNING LIGHT

The selection of signaling devices will depend on the particular situation and environment.

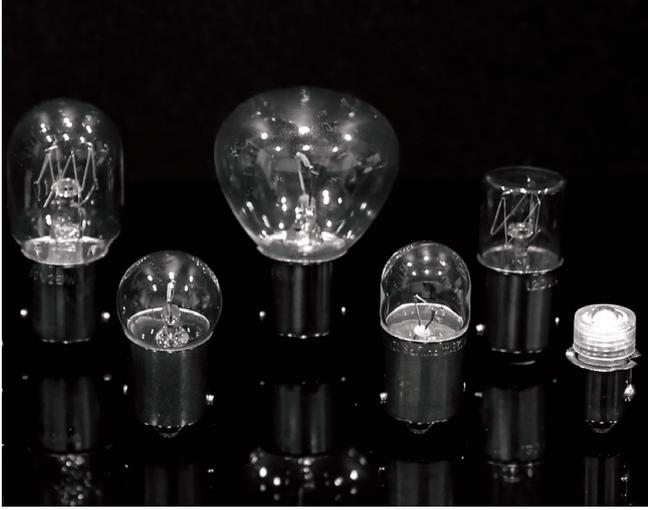
- Whether the location of installation is dark or bright.
- Whether the signal transmission range should be short or long, or should have good visibility.
- Whether you need an economical but short lifetime product or upscale product with longer lifetime.
- Whether the environment is harsh with vibration and shock, or the environment is stable so that the life of the lights can be guaranteed.
- Whether it hugely or lightly affects ongoing task and safety when light source(bulb) of beacon is damaged at once.

### 01

Purpose

#### FACTORS TO CONSIDER IN SIGNAL SELECTION





## TYPE OF LIGHT SOURCE

### Bulb

Light bulb is a light source that uses temperature reflection generated by the current flowing through the light bulb filament (thin line of metal), tungsten wire coil filament is often used. The hot filament is protected from oxidation with a glass sphere injected with inert gas (Argon gas, etc.). Typical characteristics of the gas injected bulb is described below.

1. When operating voltage is 10% lower than bulb's rated voltage, lifespan of product is quadrupled and power consumption is reduced to 85%.
2. On the contrary, when the operating voltage rises by 10%, lifespan of product becomes extremely short by 30% compared to the standard lifespan of a standard bulb (approx. 1,000 to 1,500 hours), and the power consumption rises by 16%. On the other hand, the brightness increases by 40%.

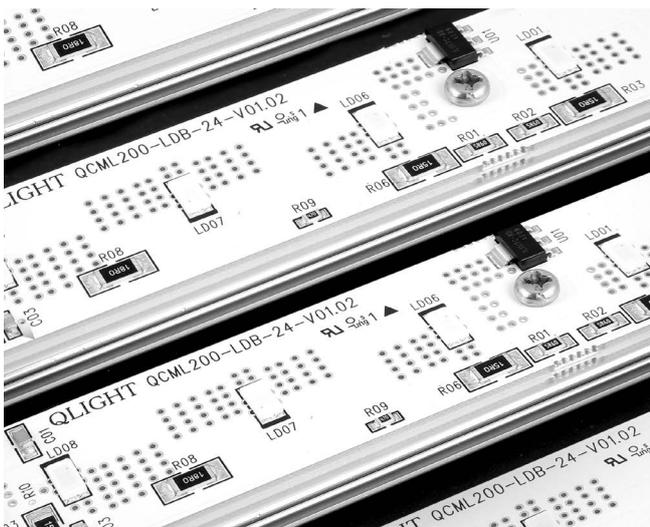
### LED

The LED is a light emitting diode which emits light by injecting a current in the PN junction of the special semiconductor, semiconductors such as GaAs, GaP that Maximizes the electro-optical conversion effects are used. Like other semiconductors, over-voltage or ambient temperature affects the lifetime, but due to the absence of mechanical abrasion of the part, LED is shock/ vibration resistant so there is no need for proper seismic design. The standard service life of an LED is about 50,000 hours.

### Xenon Lamp

Xenon lamp is a flash type light source that emits bright light instantly by inserting high energy into the lamp. Compared with the steady type lamp, xenon lamps need a lot of input power instantly and a extremely large amount of light it is diffused.

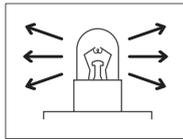
The lamp is filled with xenon(Xe) gas due to the convenience of the production(choice of materials), its use, xenon lamp was named after the xenon gas that it uses. xenon lamps are also resistant to vibration due to its mounting method. In addition, it is visible even in bright environments not only because the spectacle distribution of the visible light is close to the sunlight, it uses the same method as the strobe of the camera.



# Warning Light/Indicator Light Operating Principle

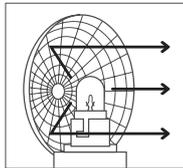
## SELECTION OF WARNING LIGHT

The selection of signaling devices will depend on the particular situation and environment.



### Bulb Steady/Flashing Type

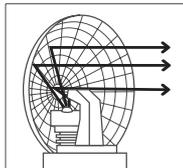
Highly diffusible light bulb that refracts light through a special lens and can be used in a steady or flashing state



### Bulb Revolving Type

By combining a highly diffusible light bulb and a reflector, light is reflected in a parallel beam with a rotating cycle

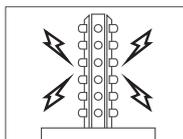
Our bulb revolving model has a long lifetime enabled by using a high durability bulb and a power transfer system that minimizes noise and abrasion



### LED Revolving Type

The combination of an LED and a reflector creates a parallel light beam with a rotating cycle

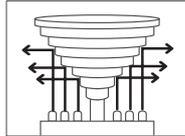
LED Rotating model with reflector adopts a special light distribution and multiple reflection system that is obtained a patent by Qlight can emit the light intensively and evenly as same as a bulb rotating type with reflector. (Patent No.: 10-0889803, 10-0808669 and 20-2008-0002489)



### LED Strobe-Type

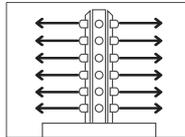
By shortening the LED flashing period and supplying the maximum current to the LED, it produces a flash effect just like the xenon lamp



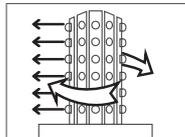


#### LED Steady/Flashing Type

The indirect light distribution system uses a special structure to radiate a uniform light signal throughout the entire body of the lens by using a multi-stage reflector

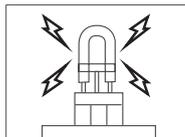


The direct light distribution system uses a high-intensity LED light and diffusion lens to transfer signal over a long distance. Qlight LED lights / flashing lights are equipped with two structures depending on the model type, Steady or Flashing Type



#### LED Simulated Revolving Type

By uniformly arranging the LED lens in a 360 degree circumferential direction, it will produce a flash in a regular rotating sequence. The visual effect looks just the same as the revolving model



#### Xenon Lamp Strobe-Type

An intensive flashing light emitting model with short term energy consumption that can highly attract worker's attention. Better shock resistance than a conventional bulb and weaker than LED.

Since it adopts intensive xenon lamp light emitting into lens design, it can emit intensive signal light in all directions of the lens.



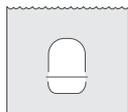
# Waterproof and Dustproof Protection Structure



## Comparing waterproof dustproof protection structure

IP rating \_ Known as "Ingress Protection rating" indicated in two-digit code showing the amount of protection against solid and the liquid.(IEC60529)

# IP 6 7

First Number Protection against solid		Second Number Protection against liquid	
0	 No protection	0	 No protection
1	 Protected against solid objects over 50mm, e.g. accidental touch by persons hands.	1	 Protection against vertically falling drops of water e.g. condensation.
2	 Protected against solid objects over 12.5mm, e.g. persons fingers.	2	 Protection against direct sprays of water up to 15° from the vertical.
3	 Protected against solid objects over 2.5mm (tools and wires).	3	 Protected against direct sprays of water up to 60° from the vertical.
4	 Protected against solid objects over 1mm (tools, wires, and small wires).	4	 Protection against water sprayed from all directions - limited ingress permitted.
5	 Protected against dust limited ingress (no harmful deposit).	5	 Protected against low pressure jets of water from all directions - limited ingress.
6	 Totally protected against dust.	6	 Protected against temporary flooding of water, e.g. for use on ship decks - limited ingress permitted.
		7	 Protected against the effect of immersion between 15 cm and 1 m.
		8	 Protects against long periods of immersion under pressure.

## NEMA SIZE

National Electrical Manufacturers Associations standard for enclosure protection rating, NEMA1-6 and 11-13 type is applicable in Non-Hazardous Locations, NEMA 7-10 is applicable in Hazardous Locations.

Type	Usage place	Environment	Protection rating
1	Indoor Use	Non-explosion proof	Intended for indoor use primarily to provide a degree of protection against limited amounts of falling dirt.
2	Indoor Use	Non-explosion proof	Intended for indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.
3	Outdoor Use	Non-explosion proof	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust; and damage from external ice formation
3R	Outdoor Use	Non-explosion proof	Intended for outdoor use primarily to provide a degree of protection against rain, sleet; and damage from external ice formation, and must have a drain hole.
3S	Outdoor Use	Non-explosion proof	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust; and to provide for operation of external mechanisms when ice laden.
4	Indoor/Outdoor Use	Non-explosion proof	Intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose directed water; and damage from external ice formation.
4X		Non-explosion proof	Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose directed water; and damage from external ice formation.
5	Indoor Use	Non-explosion proof	Intended for indoor use primary to provide
6	Indoor/Outdoor Use	Non-explosion proof	Intended for indoor or outdoor use primarily to provide a degree of protection against hose directed water, the entry of water during occasional temporary submersion at a limited depth; and damage from external ice formation.
6P		Non-explosion proof	Intended for indoor or outdoor use primarily to provide a degree of protection against hose-directed water, the entry of water during prolonged submersion at a limited depth; and damage from external ice formation.
7	Outdoor Use	Explosion proof	Intended for indoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the NEC.
8	Indoor/Outdoor Use	Explosion proof	Intended indoor or outdoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the NEC.
9	Indoor Use	Explosion proof	Intended for indoor use in locations classified as Class II, Groups E, F, and G, as defined in the NEC.
10	Indoor/Outdoor Use	Explosion proof	Are constructed to meet the applicable requirements of the Mine Safety and Health Administration. (MSHA)
11	Indoor Use	Non-explosion proof	Protection from the corrosive effects of liquids and gases by oil immersion.
12	Indoor Use	Non-explosion proof	Intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids.
12K	Indoor Use	Non-explosion proof	Intended knockouts are intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non corrosive liquids.
13	Indoor Use	Non-explosion proof	Intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil, and non-corrosive coolant.

## NEMA Ratings and IP Ratings Equivalency Chart

The chart below is for comparison between two enclosure ratings. It is only for reference and these two rating standards are not exactly converted.

NEMA ENCLOSURE TYPE	IP ENCLOSURE TYPE
1	IP20
2	IP22
3	IP55
4	IP66
4X	IP66
6	IP67
12	IP54
13	IP54

# Icon Description

This catalogue helps users quickly identify the product's specifications and features by using several types of icons. If you understand the concept for each icon, you will find it easy to understand the catalogue information.

## Light Source and Operating Mode Icons

Icon	Operating Mode	Icon	Operating Mode
	Bulb steady type		Bulb steady/flashing type
	Bulb revolving type		LED revolving type
	LED steady type		LED steady/flashing type
	LED simulated revolving type		LED strobe type
	Xenon lamp strobe type		

## Acoustic Signal Icons

Icon	Siren	Icon	Siren
	Buzzer		Speaker
	Horn		Bell
	Motor siren		MP3
	Volume(dB)		

## Specifications Icons

Icon	Specification	Icon	Specification
	Magnet type		Ambient operating temperature
	NPN type transistor		PNP type transistor
	IP rating		Wireless Network
	RoHS		

# Aviation Obstruction Lights



Technical information

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Product specifications

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## AVIATION OBSTRUCTION LIGHT TECHNICAL DATA

### • OBJECTS INSIDE THE OBSTACLE RESTRICTION AREA

- : Obstacle certified for use at night that is 60m from the ground and is located within the Obstacle Restriction Area of an airport.
- If the obstacle is located above the approach surface or transitional surface of the airfield.
- If the obstacle is located above the horizontal surface or conical surface of the airfield.

### • OBJECTS OUTSIDE THE OBSTACLE RESTRICTION AREA

- Obstacle that is 150m from the ground.
- Chimneys, steel towers, poles, frame structures, electricity pylons, or wind turbines that are 60m from the ground.

## REQUIREMENTS

1 Classification	2 Color	3 Operation	4 Maximum intensity of light(cd)			7 Straight beam spread angle	9 intensity of light depending on angle(cd)				
			5 Above 500cd/m2 (Day time)	5 Above 50-500cd/m2 (Twilight)	6 Below 50cd/m2 (Night time)		8 -10°	9 -1°	10 ±0°	11 +6°	12 +10°
Low intensity A type (Stationary)	Red	Steady	Non	Above10	Above10	10°	—	—	—	Above10	Above10
Low intensity B type (Stationary)	Red	Steady	Non	Above32	Above32	10°	—	—	—	Above32	Above32
Low intensity C type (Moving obstacle)	Amber/Blue	Flashing (60-90fpm)	Non	40 - 400	40 - 400	12°	—	—	—	—	—
Low intensity D type (Escort vehicle)	Amber	Flashing (60-90fpm)	Non	200 - 400	200 - 400	12°	—	—	—	—	—
Medium intensity A type	White	Flashing (20-60fpm)	20000±25%	20000±25%	2000±25%	Above 3°	Below 3%	50% - 75%	Above 100%	—	—
Medium intensity B type	Red	Flashing (20-60fpm)	Non	Non	2000±25%	Above 3°	—	50% - 75%	Above 100%	—	—
Medium intensity C type	Red	Steady	Non	Non	2000±25%	Above 3°	—	50% - 75%	Above 100%	—	—
High intensity A type	White	Flashing (40-60fpm)	200000±25%	20000±25%	2000±25%	3°-7°	Below 3%	50% - 75%	Above 100%	—	—
High intensity B type	White	Flashing (40-60fpm)	100000±25%	20000±25%	2000±25%	3°-7°	Below 3%	50% - 75%	Above 100%	—	—

## CLASSIFICATION

### • **LOW INTENSITY A TYPE OR LOW INTENSITY B TYPE WARNING LIGHT**

- Obstacle that is 150m from ground and is located within the Obstacle Restriction Area.
- Low intensity A type model is installed on an obstacle that has limited mobility such as a boarding bridge.

### • **LOW INTENSITY C TYPE WARNING LIGHT**

- Low intensity C type model(blue/flashing) is installed on an emergency vehicle or security vehicle operated inside the airport.
- Low intensity C type model(yellow/flashing) is installed on a normal vehicle or mobilize object that is operated inside the airport.

### • **LOW INTENSITY D TYPE WARNING LIGHT**

- Low intensity D type model(yellow/flashing) is installed on escort vehicles that are operated inside the airport.

### • **MEDIUM INTENSITY A TYPE WARNING LIGHT**

- Medium intensity A type warning light(white/flashing) is installed in areas where trees or buildings are widespread.
- Obstacle that is 45m from the ground and is located within the Obstacle Restriction Area or an obstacle that is 150m from the ground and is located outside the Obstacle Restriction Area.

### • **MEDIUM INTENSITY B TYPE WARNING LIGHT**

- Medium intensity B type warning light(red/flashing) is installed in areas where trees or buildings are widespread.
- Obstacle that is 45m from the ground and is located within the Obstacle Restriction Area or an obstacle that is 150m from the ground and is located outside the Obstacle Restriction Area.

### • **MEDIUM INTENSITY C TYPE WARNING LIGHT**

- Medium intensity C type warning light(red/steady) is installed in areas where trees or buildings are widespread.
- Obstacle that is 45m from the ground and is located within the Obstacle Restriction Area or an obstacle that is 150m from the ground and is located outside the Obstacle Restriction Area.
- Medium intensity C type warning light(red/steady) cannot be used with other warning lights.

# Specification List for Aviation Obstruction Lights



Model number	SAOL1	QAOL1	SAOL2	SAOL3
<b>Voltage</b>	DC12V, DC24V AC110V-220V	DC12V-24V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V
<b>Dimension (mm)</b>	<b>Outdia</b>	Ø115	Ø107(Globe) Ø150(Body)	Ø139
	<b>Height</b>	275	112	185(SAOL2) 274(SAOL2P)
	<b>Depth</b>			215(SAOL3) 303(SAOL3P)
<b>Materials</b>	Lens-PC, Housing-PC, Lens ring-STS316L, Pole-STS304, Bracket-Al	Lens-PC, Housing-PC	Lens-PC, Housing-Al Bracket-STS316L Pole(SAOL2P)-STS	Lens-PC, Housing-Al Bracket-STS316L Pole(SAOL3P)-STS
<b>Light source &amp; Operation</b>	<b>LED Steady /Flashing</b>	●(Steady)	●(Flashing)	●(Steady)
<b>Mount type</b>	Self stand	Self stand	Self stand	Self stand
<b>Cable entry</b>	Ø20	Ø9	1/2"PF, Ø20	1/2"PF, Ø20
<b>Protection rating</b>	IP56	IP66	IP66	IP66
<b>Mounting location</b>	Indoor Use	Indoor/Outdoor Use	Indoor/Outdoor Use	Indoor/Outdoor Use
<b>Mounting direction</b>	Vertical, Horizontal, Reverse vertical	Vertical, Horizontal, Reverse vertical	Vertical, Horizontal, Reverse vertical	Vertical, Horizontal, Reverse vertical
<b>Certificate</b>	ICAO, CE China Civil Aviation Certification	ICAO, CE	ICAO, CE	ICAO, CE
<b>Customization</b>	Amber housing	-	Built-in SUN switch, Amber housing, mounting bracket	Built-in SUN switch, Amber housing, mounting bracket
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Model number	QEAL1
<b>Voltage</b>	DC12V, DC24V AC110V-240V
<b>Dimension (mm)</b>	<b>Outdia</b>
	<b>Height</b>
	<b>Depth</b>
<b>Materials</b>	Lens-Tempered glass, Housing-Al, Protection cage-STS316L, Heat sink-Al, Bracket- STS316L
<b>Light source &amp; Operation</b>	<b>LED Steady /Flashing</b>
<b>Mount type</b>	Self stand
<b>Cable entry</b>	1/2" NPT
<b>Protection rating</b>	IP66
<b>Mounting location</b>	Indoor/Outdoor Use
<b>Mounting direction</b>	Vertical, Horizontal, Reverse vertical
<b>Certificate</b>	ICAO, KCs
<b>Customization</b>	Explosion proof cable gland, 2 ways cable entry, Cable entry : M20x1.5, Built-in SUN switch
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# Low Intensity LED Aviation Obstruction Light

## SAOL1



Applied on tall structures for collision avoidance measures and airport runway safety

### PRODUCT SPECIFICATION

SAOL1

**ICAO standard** Low intensity A type  
**Materials** Lens-PC, Housing-PC, Lens ring-STS316L, Pole-STS304, Bracket-Al  
**Ambient operating temperature** -30°C to +50°C  
**Protection rating** IP56  
**Standard housing color** Black  
**Cable entry** Ø20  
**Light source** High intensity light emitting diodes(LED)  
**Light color** Red  
**Luminous intensity** 17cd ±25%  
**Light function** Steady

- Low intensity A type aviation obstruction lights are installed onto fixed objects that are less than 150m from the land or water surface
- LED light source with long lifespan (25 times than bulb)decreases the replacement cost of the bulb replacement



SAOL1

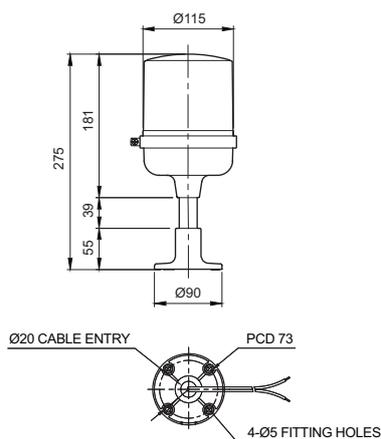
### SAOL1 Low Intensity LED Aviation Obstruction Light

Model number	Voltage	Power consumption	Certificate	Weight	Light color
SAOL1	DC12V	Max.20W		0.98Kg	● Red
	DC24V				
	AC110V-220V				

※ CE compliant: DC24V

### Technical Diagram

Units: mm



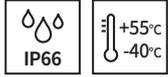
### Customization

- Amber housing is available upon request

### Ordering Specification

SAOL1	-	24	-	R
[Model number]		[Voltage]		[Color]
SAOL1		12-DC12V 24-DC24V 110/220-AC110V-220V		● Red

# QAOL1



Collision avoidance lights for running automobile and moving objectives in airport runway and aerodrome



QAOL1

## PRODUCT SPECIFICATION

QAOL1

- ICAO standard** Low intensity C type
- Materials** Lens-PC, Housing-PC
- Ambient operating temperature** -40°C to +55°C
- Protection rating** IP66
- Standard housing color** Amber
- Cable entry** Ø9
- Light source** High intensity light emitting diodes(LED)
- Light color** Amber
- Luminous intensity** 200cd±25%
- Light function** Flashing

- Low intensity type C is intended for automobile and moving objectives in airport runway and aerodrome.

### QAOL1 Low Intensity LED Aviation Obstruction Light

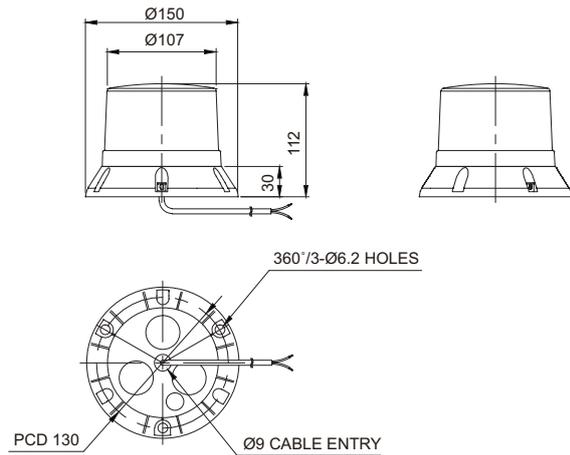
Model number	Voltage	Power consumption	Certificate	Weight	Light color
QAOL1	DC12V-24V	Max.11W		1.06Kg	<span style="color: yellow;">●</span> Amber

※ ICAO standard, CE compliant: DC24V

### Technical Diagram

·QAOL1

Units: mm

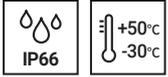


### Ordering Specification

QAOL1	-	24	-	A
[Model number]   QAOL1		[Voltage]   12/24-DC12V-24V		[Color]   <span style="color: yellow;">●</span> A-Amber

# Low Intensity LED Aviation Obstruction Light

## SAOL2



Applied on tall structures for collision avoidance measures and airport runway safety

### PRODUCT SPECIFICATION

SAOL2 | SAOL2P

- ICAO standard** Low intensity A type
- Materials** Lens-PC, Housing-Al, Bracket-ST5316L, Pole-ST5
- Ambient operating temperature** -30°C to +50°C
- Protection rating** IP66
- Standard housing color** Red
- Cable entry** 1/2" PF, Ø20
- Light source** High intensity light emitting diodes(LED)
- Light color** Red
- Luminous intensity** 19cd ±25%
- Light function** Steady



SAOL2

- Low intensity A type aviation obstruction lights are installed onto fixed objects that are less than 150m from the land or water surface
- Can choose between self stand type and pole mounting type depending on environment
- Terminals located inside the housing for wiring



SAOL2P

Wire is not exposed outside in the pole mount model.

### Customization

- Built-in darkness detecting sensor available
- Amber housing, mounting bracket is available upon request

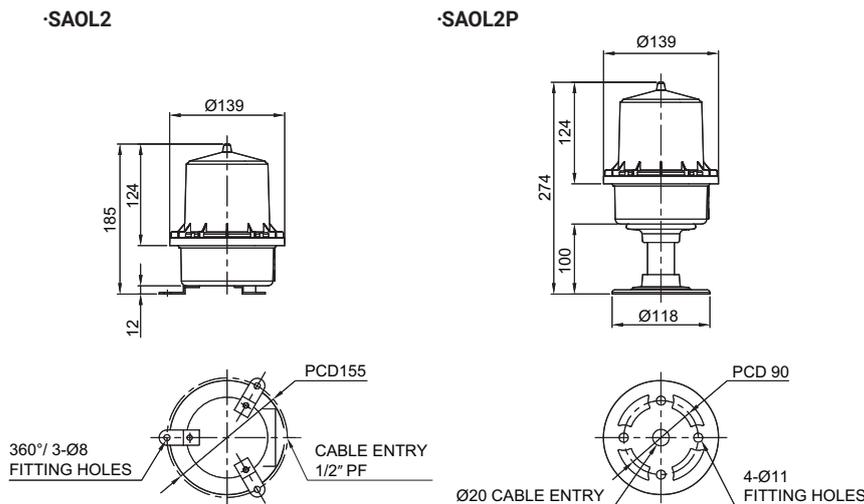
### SAOL2 / SAOL2P Low Intensity LED Aviation Obstruction Light

Model number	Voltage	Power consumption	Certificate	Weight	Light color
SAOL2	DC12V DC24V	Max.24W		1.02Kg	● Red
SAOL2P	AC110V-220V				

※ ICAO standard: DC24V, AC110V-220V

### Technical Diagram

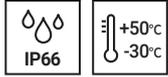
Units: mm



### Ordering Specification

SAOL2	-	24	-	R
[Model number]		[Voltage]		[Color]
SAOL2 SAOL2P		12-DC12V 24-DC24V 110/220-AC110V-220V		● R-Red

# SAOL3



Applied On Tall Structures For Collision Avoidance Measures And Airport Runway Safety



SAOL3

## PRODUCT SPECIFICATION

SAOL3 | SAOL3P

- ICAO standard** Low intensity B type
- Materials** Lens-PC, Housing-AI, Bracket-STS316L, Pole-STS
- Ambient operating temperature** -30°C to +50°C
- Protection rating** IP66
- Standard housing color** Red
- Cable entry** 1/2" PF, Ø20
- Light source** High intensity light emitting diodes(LED)
- Light color** Red
- Luminous intensity** 42cd±10%
- Light function** Steady

- Low intensity B type aviation obstruction lights are installed onto fixed objects that are less than 150m from the land or water surface
- Can choose between self stand type and pole mounting type depending on environment
- Terminals located inside the housing for wiring



SAOL3P

Wire is not exposed outside in the pole mount model.

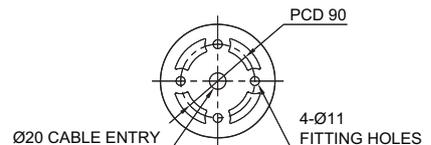
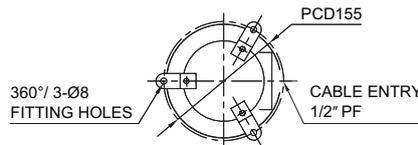
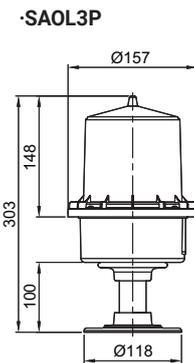
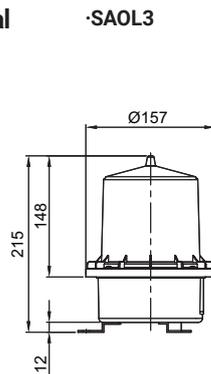
### SAOL3 / SAOL3P Low Intensity LED Aviation Obstruction Light

Model number	Voltage	Power consumption	Certificate	Weight	Light color
SAOL3	DC12V DC24V	Max.30W		1.05Kg	● Red
SAOL3P	AC110V-220V			1.61Kg	

※ ICAO standard, CE compliant: DC24V, AC110V-220V

### Technical Diagram

Units: mm



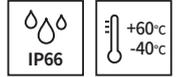
### Customization

- Built-in darkness detecting sensor available
- Amber housing, mounting bracket is available upon request

### Ordering Specification

SAOL3	-	24	-	R
[Model number]		[Voltage]		[Color]
SAOL3 SAOL3P		12-DC12V 24-DC24V 110/220-AC110V-220V		● R-Red

## QEAL1



### PRODUCT SPECIFICATION

QEAL1

**ICAO standard** Low intensity B type  
**Materials** Lens-Tempered glass, Housing-Al, Protection cage-STSS316L, Heat sink-Al  
**Ambient operating temperature** -40°C ≤ Tamb ≤ +60°C  
**Protection rating** KCs - Ex db IIC T4 Gb IP66  
**Certificates** ICAO, KCs  
**Standard housing color** Red  
**Cable entry** 1/2" NPT  
**Light source** High intensity light emitting diodes(LED)  
**Light color** Red  
**Luminous intensity** 50cd±25%  
**Light function** Steady



QEAL1

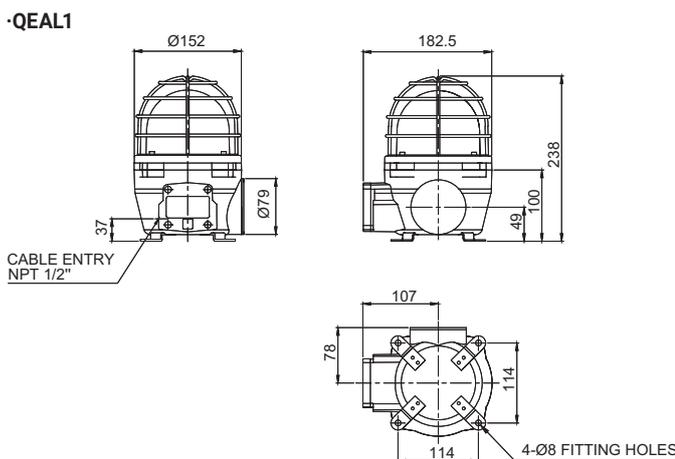
- Low Intensity B type explosion proof aviation obstruction light
- Features high visibility from a distance with the direct LED light distribution system
- Cost savings enabled by using a long lasting LED light source which eliminates the need for maintenance
- Aluminum housing provides excellent durability
- Terminals located inside the housing for wiring

### QEAL1 Explosion Proof Low Intensity LED Aviation Obstruction Light

Model number	Voltage	Power consumption	Certificate	Weight	Light color
QEAL1	DC12V	Max.30W		3.90kg	● Red
	DC24V				
	AC110V-240V				

### Technical Diagram

Units: mm



### Customization

- Built-in explosion proof cable gland available(Standard type does not provide explosion proof cable gland)
- Customized 2 cable entries available
- Customized cable entry(M20×1.5) available
- Built-in darkness detecting sensor available
- Amber housing, mounting bracket is available upon request

### Ordering Specification

QEAL1	-	24	-	R
[Model number]		[Voltage]		[Color]
QEAL1		12-DC12V 24-DC24V 110/240-AC110V-240V		● R-Red

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### Qlight Clients

Heavy industry/Ship building/Automotive/Steel/Machinery/Petrochemical/Power plants/Electronics/Semiconductor/Emergency Vehicles

**SAMSUNG**

**HYUNDAI**

**KIA**

**POSCO**

**COUPANG**

**SK hynix**

**LG Chem**

**SK innovation**

**HYUNDAI STEEL**

**KSOE** KOREA STEEL PROCESSING & EQUIPMENT ENGINEERING

**SAMSUNG HEAVY INDUSTRIES**

**HYUNDAI CONSTRUCTION EQUIPMENT**

**DOOSAN**

**EXxonMobil**

**gm**

**Q.M.B.K**

**FOXCONN**

**HUAWEI**

**Honeywell**

**L'ORÉAL PARIS**

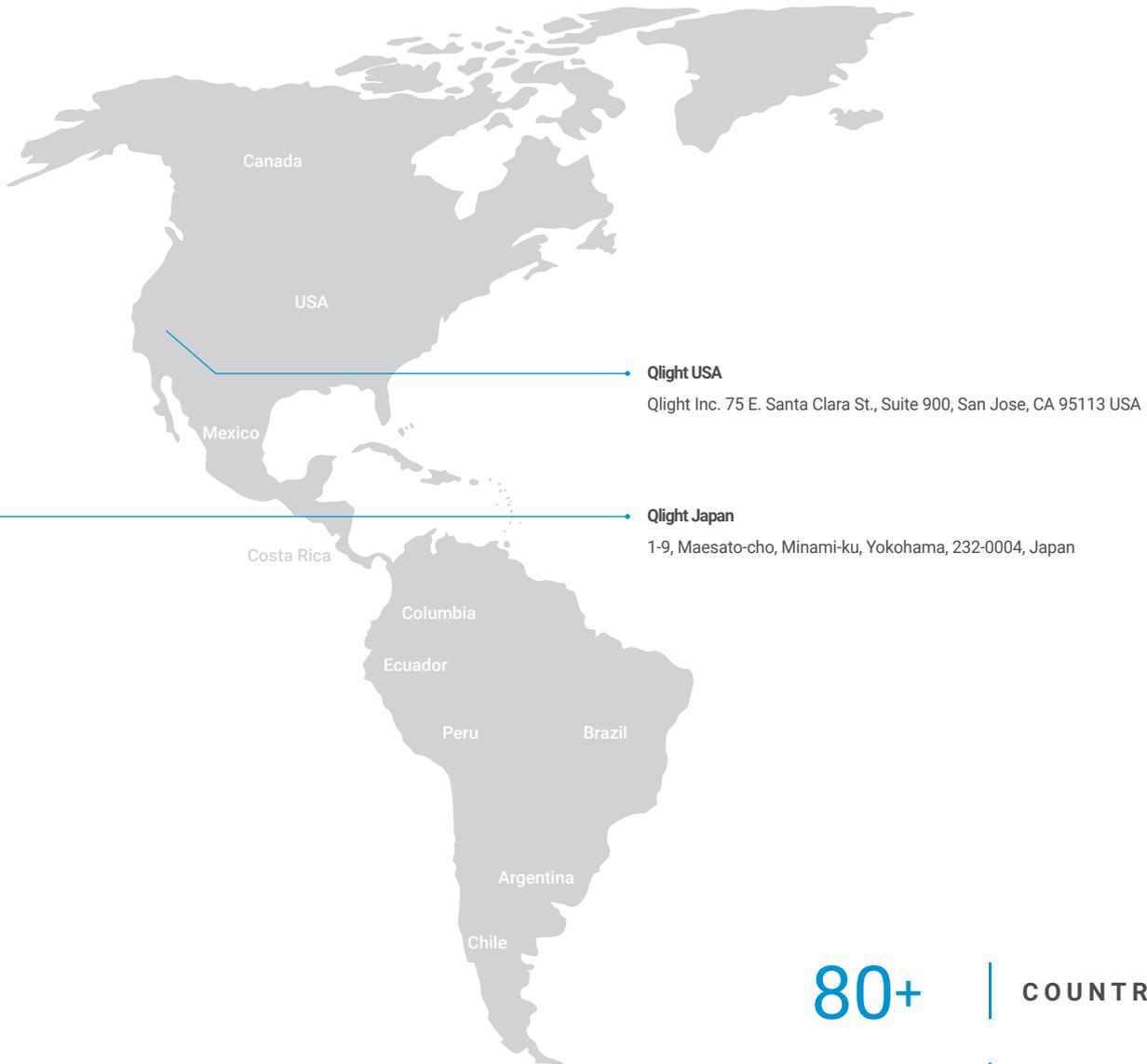
**ISUZU**

**أدنوك ADNOC**

**KONECRANES**

**Kulicke & Soffa**

Qlight products have been exported all over the world in recognition of excellent technical capabilities and exceptional quality. Qlight products are going to be distributed a lot more countries in the future.



**80+** | COUNTRIES  
**250+** | DISTRIBUTORS



Factory



Seoul Headquarters



Busan Office



Qlight China Factory

# Technical Certification

Qlight products are designed to meet strict quality and technical standards. Thus, the Qlight brand is widely recognized for its high quality and technical innovations from leading institutions around the world.



**ISO**  
International Organization for Standardization



**IECEX**  
International Explosion Proof Certification (IECEX)



**ATEX**  
The European Regulatory Framework of Manufacture, Installation and Use of Equipment in Explosive Atmospheres



**NEPSI**  
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation



**NRTL**  
Certified by designated U.S. laboratory  
Intertek



**KCs**  
Explosion proof device safety Certification System



**TIIS**  
Japan Explosion-proof Certification



**CCS**  
China Classification Society



**TS**  
Taiwan Explosion Proof Certification



**FCC**  
Federal Communications Communications



**S-mark**  
safety certification



**KC**  
Korea Safety Certification



**CCC**  
China Compulsory Certificate



**CCCF**  
China Certification Center for Security & Protection



**UL**  
Underwriters Laboratories



**CE**  
European Commission



**ICAO**  
International Civil Aviation Organization



**RoHS2**  
Restriction of Hazardous Substances Directive

# Qlight Catalogue Introduction



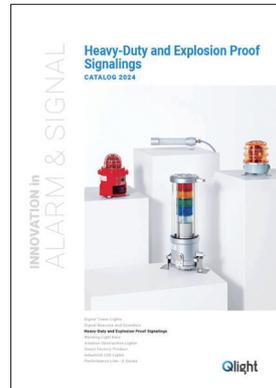
Qlight produces a wide variety of product categories which offers the customer the ability to select the suitable device for their application needs and environments. There are signal tower lights, Signal Beacons and Sounders, Heavy-Duty and Explosion Proof Signalings, Warning light bars, Aviation Obstruction Lights, Smart Factory Product, Industrial LED lights, Performance Line - E Series, and limit switches.



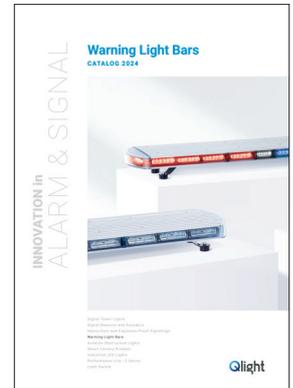
Signal Tower Lights



Signal Beacons and Sounders



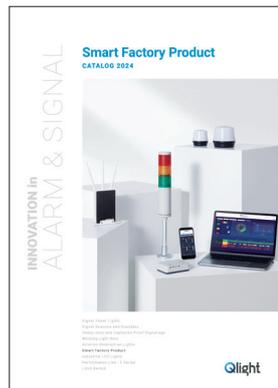
Heavy-Duty and Explosion Proof Signalings



Warning Light Bars



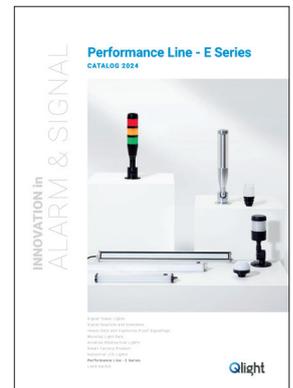
Aviation Obstruction Lights



Smart Factory Product



Industrial LED Lights



Performance Line - E Series

**You could download and find the latest catalogue on the Qlight website.**

\* The latest product information could be accurately checked on the Qlight website ([www.qlight.com](http://www.qlight.com)). Please refer to the user manual attached with the product before installation and use.



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