



**Aqualux**  
LED Waterproof Lighting

# About US



Aqualux Lighting Limited was established to create an innovative concept for environmentally friendly waterproof lighting requirement. Drawing on vast experience of energy saving lighting technology since 2006, the team at Aqualux Lighting have been designing, engineering and manufacturing a new era of energy saving waterproof lighting for numerous applications.

From our headquarter in Hong Kong and manufacturing facility in China, Aqualux Lighting's products incorporate the very latest in power efficient light Emitting Diodes(LED) technology. Our LED lighting solutions are energy efficient, robust and with optimized lighting results which help client to cut business expenses not only in energy bill but also maintenance cost.

Continuous innovations are our promises and backbone to build strong and long term relationship with our clients. Aqualux is excited and committed to give our clients a greener future.

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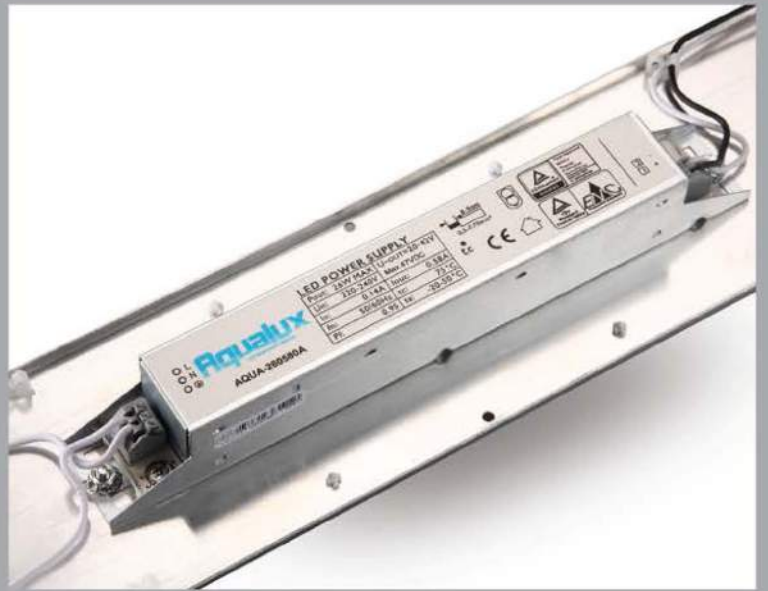
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# Aqualux LED Waterproof Batten

## Introduction

Wet and dust-proof luminaire with LED module designed for applications where impact resistances are required and humid premises are involved. Aqualux LED waterproof batten can be used as a substitute for traditional waterproof luminaires with T8 / T5 fluorescent lamps by simple installation.

## Applications

- Factory
- Warehouse
- Tunnel
- Parking garages
- Storage areas
- Stairway

## Benefits

- Direct replacement of traditional T8/T5 waterproof luminaires
- High luminous efficacy > 100lm/W
- 80% lumen maintenance
- 50% energy saving compared to fluorescent tube
- Low maintenance cost with long lifespan of 50,000 hours (LM80)
- Robust polycarbonate against moisture and vibration
- Scalable module concept to balance between optimal diffuse light and glare control
- Constant current to ensure safety even if wiring or LED boards become damaged
- Communication between modules and driver allows for built in thermal protection
- Wide body covers junction boxes to provides ample space for heat generating components
- no mercury no lead





## Technical Specifications

- Slim and T8: 13W, 25W, 30W, 50W, 60W
- T5 : 11W, 21W, 27W, 45W, 55W
- Length: 0.6m, 1.2m, 1.5m
- Electrical Input: 220-240V~, 50/60Hz
- Color temperature: 4,000k, 6000k
- IP Protection: IP65
- IK Grade: IKo8
- Lifespan: Up to 50,000 hr
- Operation temperature: -20°C to 45°C
- Emergency kit and sensor is available (T8 and T5)

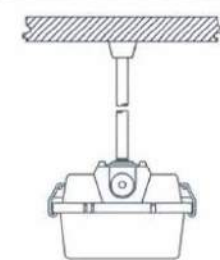
## Materials

- Injection molded high grade impact resistant polycarbonate housing
- Housing is flame retardant that pass 850°C glow wire test
- Diffuser is opal polycarbonate that made by LG non-cycle materials with 87% transparency

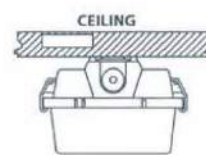
## LED Systems

- Integrated LED modules mounted on FR4 PCB
- Constant currents driver
- Efficacy: >100lm/W
- Efficiency >= 85% , Power Factor >0.97
- Open-circuit, short-circuit overload protection

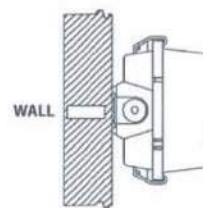
## Mounting



ROD / PENDANT MOUNTED



SURFACE / CEILING MOUNTED



SURFACE / WALL MOUNTED

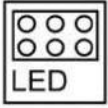
**Aqualux**  
LED Waterproof Lighting

**LED**  
**INDUSTRIAL**  
**COMMERCIAL**  
**POLYCARBONATE**  
**DUSTPROOF**  
**WATERPROOF**  
**IMPACT-RESISTANT**

# Aqualux LED Slim Series



New professional optimised opal diffuser, design purely for LED application.



With higher light transmittance, better aesthetical appearance and zero dazzling effect.



RoHS





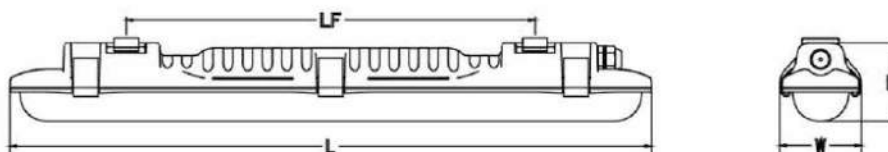
## MATERIAL

- Housing: Injection moulded polycarbonate
- Diffuser: Injection moulded opal polycarbonate
- Reflector: Anode oxidation 3003 aluminium alloy, thermal conductivity >190W/M.K.
- Clips: Stainless Steel or polycarbonate clips
- Gasket: One piece sealed silicone gasket
- Accessories: Fixing brackets and suspension triangle



## LED-SYSTEM

- LED chips: Lextar SMD5630
- FR4 PCB: flame resistant (self-extinguishing)
- Efficiency ≥ 85%
- Power factor >0.97
- Colour temperature: 4000K, 6000K
- CRI: >80
- Rated voltage: 220-240V
- Frequency: 50-60Hz
- Ambient Temp.: -20°C to 45°C

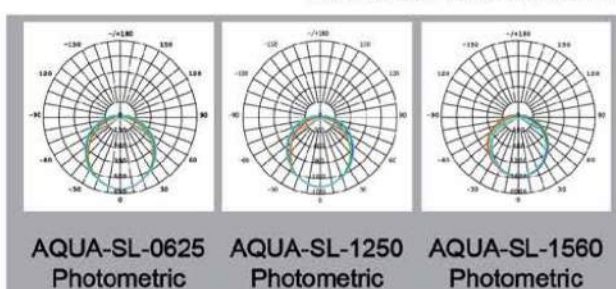
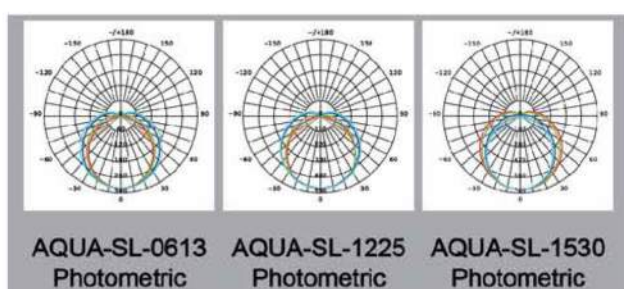


Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-SL-0613	13W	26	1100lm	T8-18Wx1	653	83	80	420	12
AQUA-SL-1225	25W	52	2100lm	T8-36Wx1	1263	83	80	835	9
AQUA-SL-1530	30W	65	2600lm	T8-58Wx1	1563	83	80	1036	9

Parameter difference: ±10%

Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-SL-0625	25W	52	2100lm	T8-18Wx2	653	128	80	420	9
AQUA-SL-1250	50W	104	4300lm	T8-36Wx2	1263	128	80	835	6
AQUA-SL-1560	60W	130	5500lm	T8-58Wx2	1563	128	80	1090	6

Parameter difference: ±10%



# Aqualux LED T8 Series



Keeping the traditional appearance and characteristic of waterproof batten.

Great robust ability against chemical and heat



2 - 3 hours emergency battery kit available



RoHS



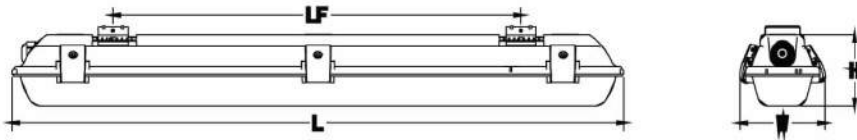
## MATERIAL

- Housing: Injection moulded polycarbonate
- Diffuser: Injection moulded opal polycarbonate
- Reflector: Anode oxidation 3003 aluminium alloy, thermal conductivity >190W/M.K
- Clips: Stainless Steel or polycarbonate clips
- Gasket: One piece sealed silicone gasket
- Accessories: Fixing brackets and suspension triangle



## LED-SYSTEM

- LED chips: Lextar SMD5630
- FR4 PCB: flame resistant (self-extinguishing)
- Efficiency ≥ 85%
- Power factor >0.97
- Colour temperature: 4000K, 6000K
- CRI: >80
- Rated voltage: 220-240V
- Frequency: 50-60Hz
- Ambient Temp.: -20°C to 45°C

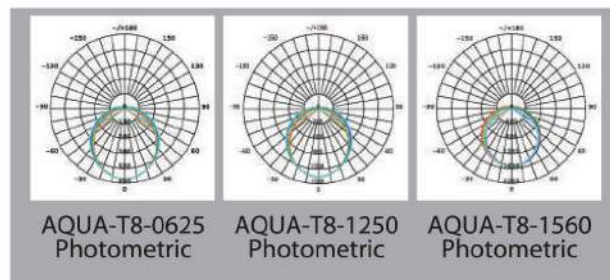
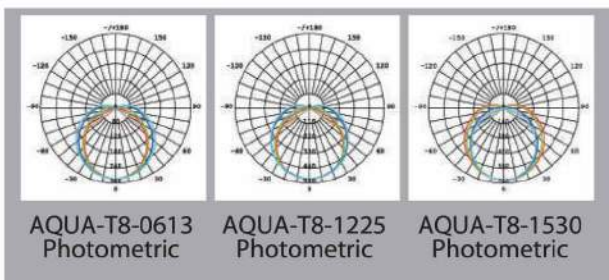


Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-T8-0613	13W	26	1100lm	T8-18Wx1	664	90	90	350	12
AQUA-T8-1225	25W	52	2100lm	T8-36Wx1	1274	90	90	900	9
AQUA-T8-1530	30W	65	2600lm	T8-58Wx1	1574	90	90	1200	9

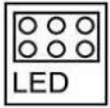
Parameter difference: ±10%

Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-T8-0625	25W	52	2100lm	T8-18Wx2	664	140	90	350	9
AQUA-T8-1250	50W	104	4300lm	T8-36Wx2	1274	140	90	900	6
AQUA-T8-1560	60W	130	5500lm	T8-58Wx2	1574	140	90	1200	6

Parameter difference: ±10%



# Aqualux LED T5 Series



Designed to replace traditional T5 fluorescent tube.

Perfect balance between size, lumen output and energy saving.

2 - 3 hours emergency battery kit available



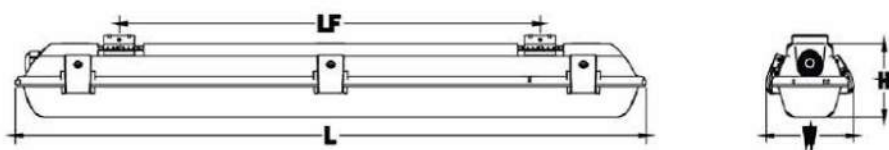
## MATERIAL

- Housing: Injection moulded polycarbonate
- Diffuser: Injection moulded semi opal polycarbonate
- Reflector: Anode oxidation 3003 aluminium alloy, thermal conductivity >190W/M.K
- Clips: Stainless Steel or polycarbonate clips
- Gasket: One piece sealed silicone gasket
- Accessories: Fixing brackets and suspension triangle



## LED-SYSTEM

- LED chips: Lextar SMD5630
- FR4 PCB: flame resistant (self-extinguishing)
- Efficiency ≥ 85%
- Power factor >0.97
- Input voltage: 220-240V 50/60Hz
- Colour temperature: 4000K, 6000K
- CRI: >80
- Rated voltage: 220-240V
- Frequency: 50-60Hz
- Ambient Temp.: -20°C to 45°C

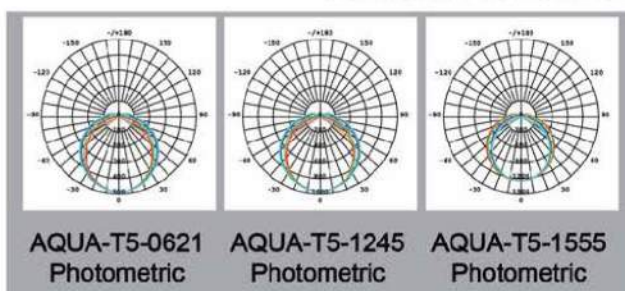
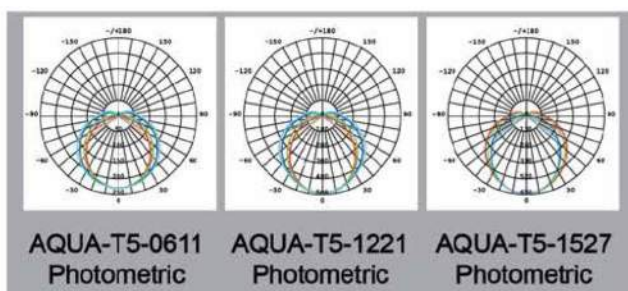


Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-T5-0611	11W	22	1000lm	T5-14Wx1	618	81	74	411	12
AQUA-T5-1221	21W	44	1900lm	T5-28Wx1	1215	81	74	800	12
AQUA-T5-1527	27W	55	2300lm	T5-35Wx1	1515	81	74	1000	12

Parameter difference: ±10%

Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-T5-0621	21W	44	1900lm	T5-14Wx2	618	116	74	411	8
AQUA-T5-1245	45W	88	3900lm	T5-28Wx2	1215	116	74	800	8
AQUA-T5-1555	55W	110	4500lm	T5-35Wx2	1515	116	74	1000	8

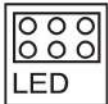
Parameter difference: ±10%



# Aqualux LED Pro Series



Robust anti-vandal weatherproof luminaire designed for applications that require extra protection against aggressive environment and extreme weather conditions.



Die-cast aluminum alloy housing with detachable terminal block for faster installation and easy maintenance.



RoHS

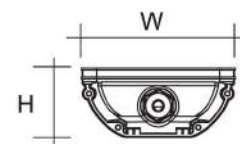
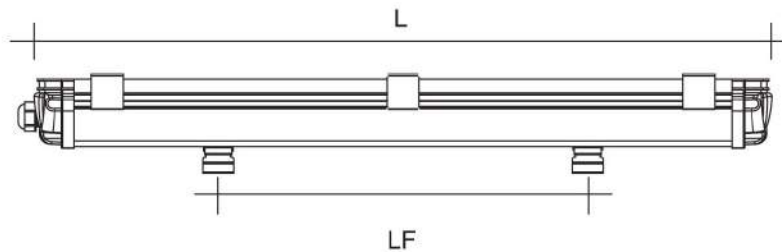


## MATERIAL

- Housing: Die-cast aluminum alloy 6063
- Diffuser: Injection moulded opal polycarbonate cover
- Reflector: Anode oxidation 3003 aluminum alloy, thermal conductivity >190W/M.K
- Clips: Stainless Steel Clips
- Gasket: One piece sealed silicone gasket
- Accessories: Fixing brackets and suspension triangle included
- Terminal Block: Detachable design for fast and easy connection

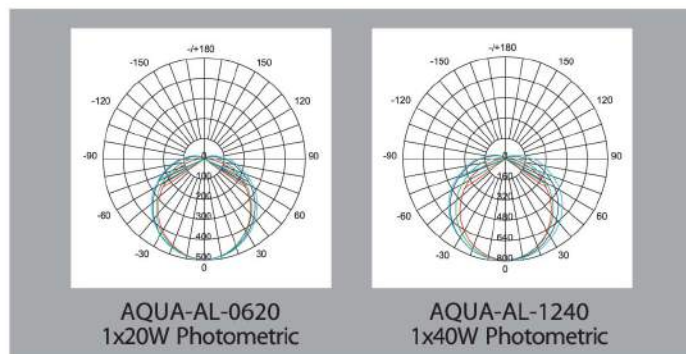
## LED-SYSTEM

- LED chips: Lextar SMD2835
- FR4 PCB: flame resistant (self-extinguishing)
- Efficiency  $\geq 85\%$
- Power factor >0.97
- Colour temperature: 4000K , 6000K
- CRI: >80
- Rated voltage: 220-240V
- Frequency: 50-60Hz
- Ambient Temp.: -30°C to 50°C



Code	Wattage	LED Qty	Lumen	LED Module	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-PRO-0620	20W	88	1900lm	10Wx2	620	126	90	300	9
AQUA-PRO-1240	40W	176	3200lm	20Wx2	1195	126	90	600	6

Parameter difference:  $\pm 10\%$



# Aqualux Series with Emergency Kit



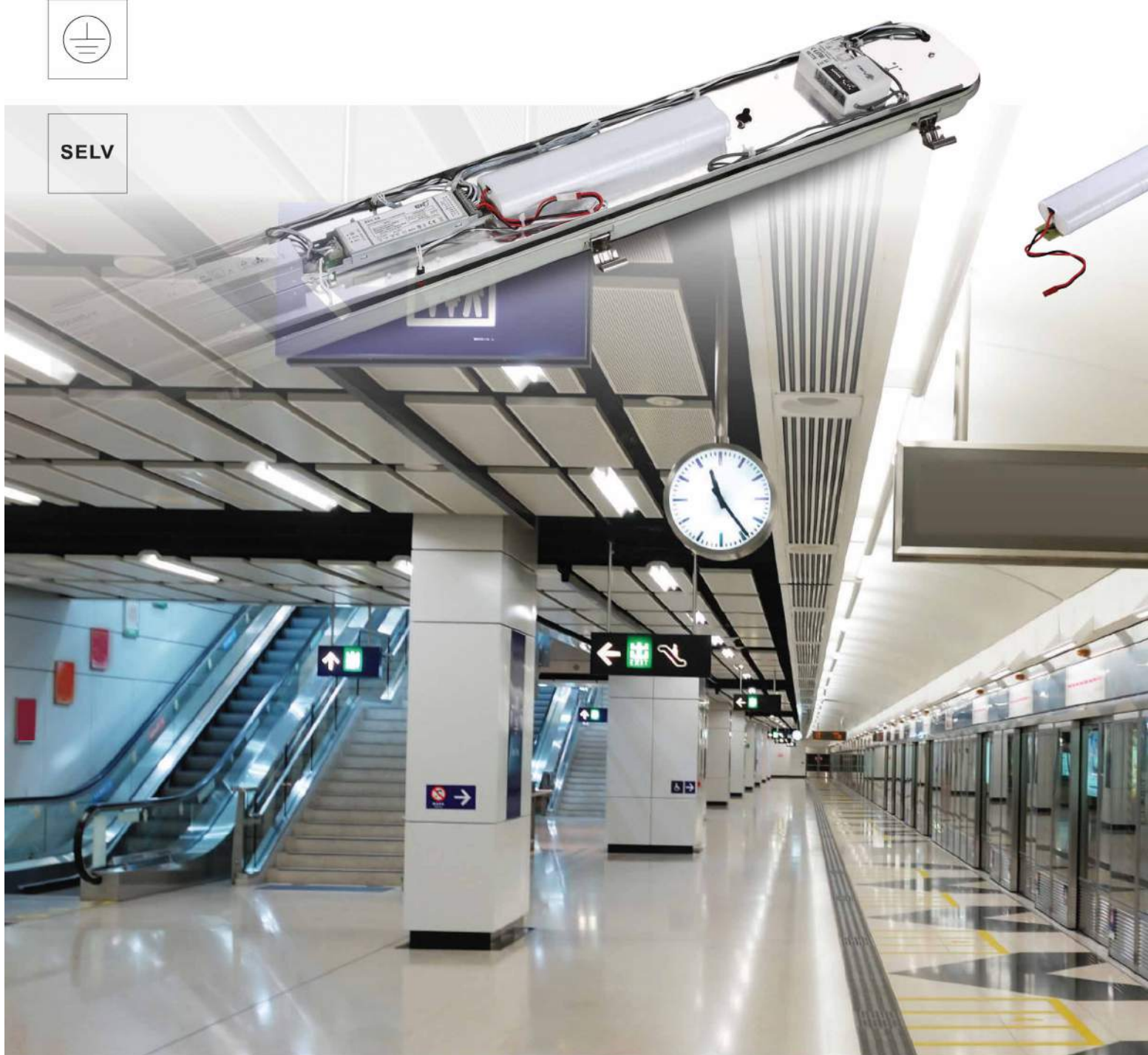
An optional emergency backup kit consisting of 12V Ni-MH/Ni-CD battery and emergency converter, can be intergraded into Aqualux waterproof luminaire. Aqualux emergency system can provide up to 3 hours of emergency lighting automatically in the event of power failure or blackout.



In addition, an optional microwave sensor can also be intergraded into the same Aqualux waterproof luminaire together with the emergency backup kit.



SELV



RoHS



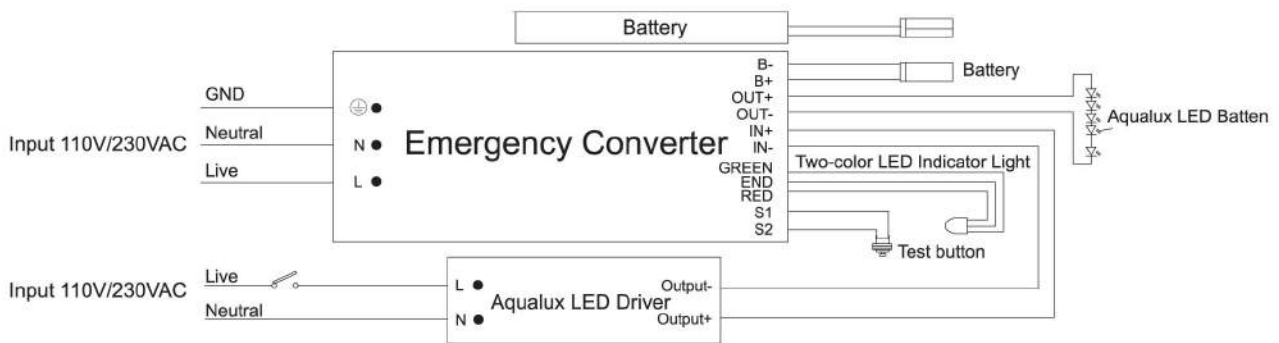


## FEATURES

- Compact size emergency converter with constant current output
- 12V Ni-MH/Ni-CD Hi-temperature grade batteries
- Red/Green double-color status LED indicator lamp
- 10 Watt maximum power output at emergency mode
- Auto shift into emergency mode when mains power supply failed, or mains rated voltage is less than 65%
- Over-charge and over-discharge protection
- Over-heat and short-circuit protection
- Emergency Converter Dimension: 163 x 40 x 18mm (L x W x H)
- Compliance: EN61347 (Safety), EN55015 (EMI), EN61000 (EMS)



## SYSTEM CONNECTION DIAGRAM



## EMERGENCY BATTERY SPECIFICATIONS

Battery Type	Charge Current	Charge Time	Emergency Time	Emergency Power
12V 3000mAh Ni-MH/Ni-CD	300mA $\pm$ 10%	14-15 hours	3 hours	10W
12V 1500mAh Ni-MH/Ni-CD	160mA $\pm$ 10%	14-15 hours	3 hours	5W

Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-T5-1245-E3	45W	88	3900lm	T5-28Wx2	1215	116	74	800	8
AQUA-T5-1555-E3	55W	110	4500lm	T5-35Wx2	1515	116	74	1000	8
AQUA-T8-1225-E2	25W	52	2100lm	T8-36Wx1	1274	90	90	900	9
AQUA-T8-1250-E3	50W	104	4300lm	T8-36Wx2	1274	140	90	900	6
AQUA-T8-1530-E2	30W	65	2600lm	T8-58Wx1	1574	90	90	1200	9
AQUA-T8-1560-E3	60W	130	5500lm	T8-58Wx2	1574	140	90	1200	6

Parameter difference:  $\pm$ 10%

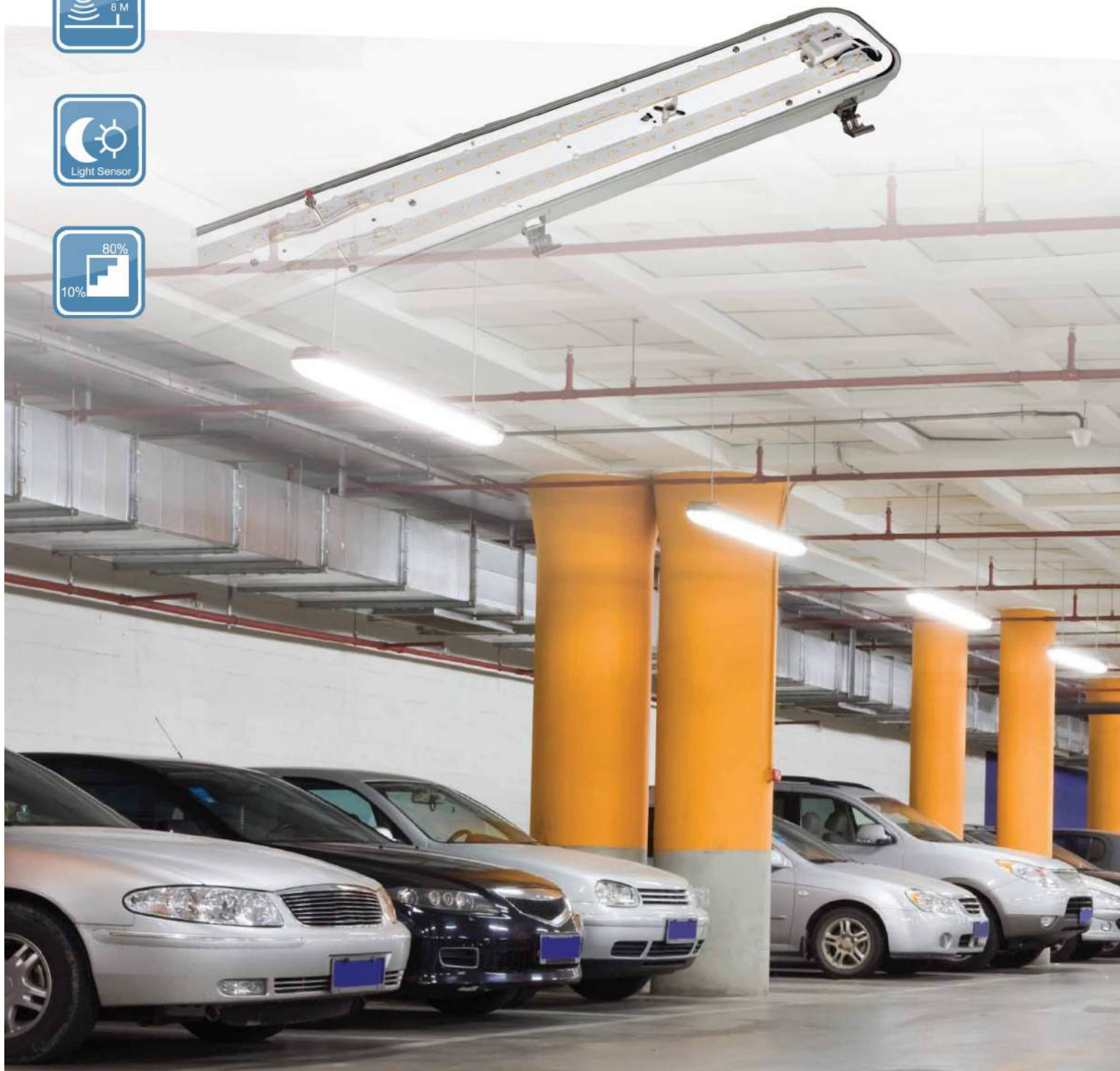
# Aqualux Series with Microwave Sensor



An optional microwave sensor can be intergraded into Aqualux waterproof luminaire, for reducing energy consumption by up to 90% if no movement is detected after a preset period of time.



The microwave sensor can detect the movement up to 16 meter in diameters with 360° detection angle, and dimming level ranging from 10% - 80%.



RoHS



## TWO STEP DIMMING CONTROL

- 100% illumination when motion is detected ---> dim to a preset dimming level from 10% - 80% when no motion is detected after a preset period ---> remains at dimmed level until motion is detected again.

## THREE STEP DIMMING CONTROL

- 100% illumination when motion is detected ---> dim to a preset dimming level from 10% - 80% when no motion is detected after a preset period ---> turn off the lamp after a preset stand-by period without motion.

## TECHNICAL SPECIFICATIONS

- Rated Voltage: 20-100VDC
- HF System: 5.8GHz +/- 75MHz, ISM wave band
- Detection Distance: 16m x 8m (D x H)
- Detection Angle: 150° (Wall Mounted)  
360° (Ceiling Mounted)
- Motion Detection: 0.5 ~ 3m / sec
- Operating Temperature: -20°C - 45°C
- Mounting Height: Max. 8m



## SENSOR SETTING

<b>Hold Time</b>	10s* / 30s / 90s / 3min / 20min / 30min
<b>Daylight Sensor</b>	5lux / 10lux / 30lux / 50lux / Disable*
<b>Stand-by Period</b>	5s / 5min / 10min / 30min / 1h / Disable*
<b>Stand-by Dimming Level</b>	10% / 20% / 30% / 40% / 50% / 60% / 70% / 80%*

(\*factory default setting)

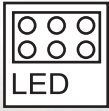
Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-T5-0621-S	21W	44	1900lm	T5-14Wx2	618	116	74	411	8
AQUA-T5-1245-S	45W	88	3900lm	T5-28Wx2	1215	116	74	800	8
AQUA-T5-1555-S	55W	110	4500lm	T8-35Wx2	1515	116	74	1000	8
AQUA-T8-0625-S	25W	52	2100lm	T8-18Wx2	664	140	90	350	9
AQUA-T8-1250-S	50W	104	4300lm	T8-36Wx2	1274	140	90	900	6
AQUA-T8-1560-S	60W	130	5500lm	T8-58Wx2	1574	140	90	1200	6

Parameter difference: ±10%

# AquaMax LED Waterproof batten



Available with both clear and milky cover, offering high lumen output and uniformity



A traditional look of waterproof batten with Osram or Tridonic LED driver



RoHS



## MATERIAL

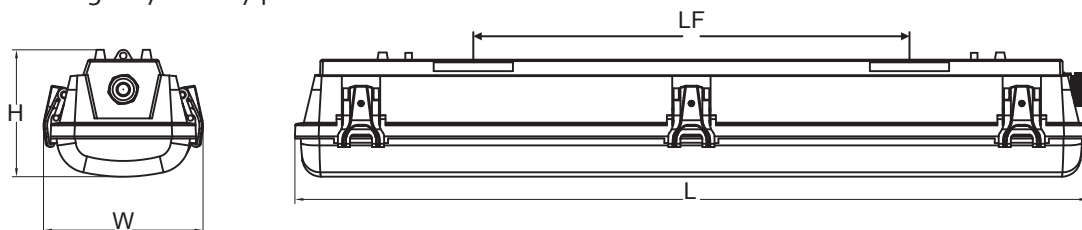
- Housing: Injection moulded polycarbonate ( IKo8 )
- Diffuser: Injection moulded opal polycarbonate ( IKo8 )
- Diffuser Transmission: Opal color > 82%, Transparent PC > 90%
- IP Rating : IP66 Class I
- Clips: Stainless Steel clips
- Gasket: One piece sealed Gel gasket to ensure IP66
- Accessories: Stainless steel mounting brackets ( 2pcs )
- Reflector Material : Aluminum

**OSRAM TRIDONIC**



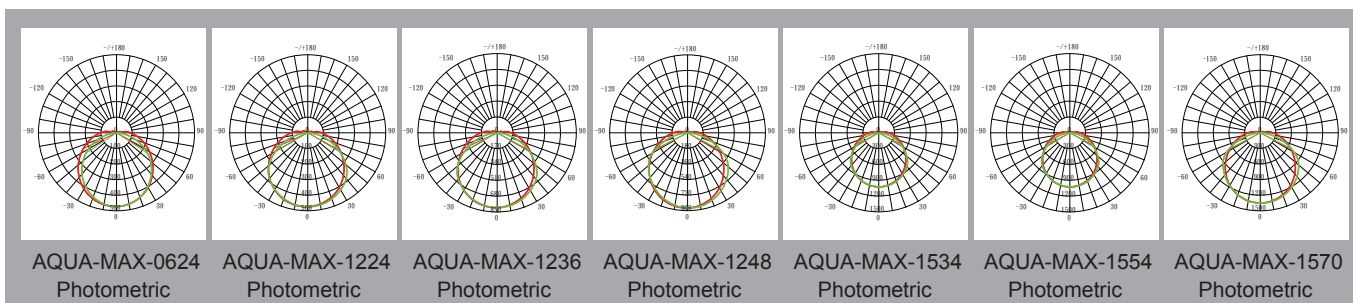
## LED-SYSTEM

- LED chips : Everlight SMD2835, Ra>80
- PCB Material : Aluminum
- Efficiency ≥ 85%
- LED driver : OSRAM or Tridonic
- Power factor > 0.95
- Colour temperature : 3000K, 4000K, 6000K
- CRI : > 80
- Rated voltage : 220-240V
- Frequency : 50-60Hz
- Ambient Temp. : -20°C to +45°C
- Optional motion sensor are available with Tridonic driver
- Optional Emergency battery pack are available

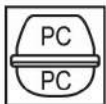


Code	Wattage	LED Qty	Lumen	Replace	Dimensions mm				Qty/Ctn
					L	W	H	LF	
AQUA-MAX-0624	24W	50	2290lm	T8-18Wx2	600	120	108	330	4
AQUA-MAX-1224	24W	50	2360lm	T8-36Wx1	1160	120	108	770	4
AQUA-MAX-1236	36W	75	3540lm	T8-24Wx2	1160	120	108	770	4
AQUA-MAX-1248	48W	104	4540lm	T8-36Wx2	1160	120	108	770	4
AQUA-MAX-1534	34W	78	3030lm	T8-58Wx1	1560	120	108	1100	4
AQUA-MAX-1554	54W	120	5150lm	T8-36Wx2	1560	120	108	1100	4
AQUA-MAX-1570	70W	160	6400lm	T8-48Wx2	1560	120	108	1100	4

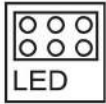
Parameter difference: ±10%



# Aqualux LED Bulk Head Series



Ideal for replacing 2D Compact fluorescent.



Significantly reduce energy consumption and re-lamping cost.



RoHS



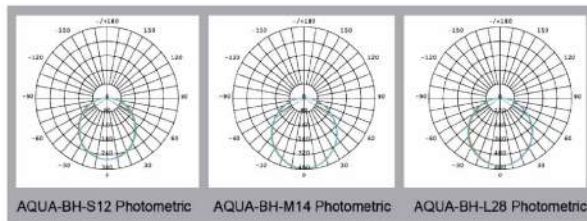
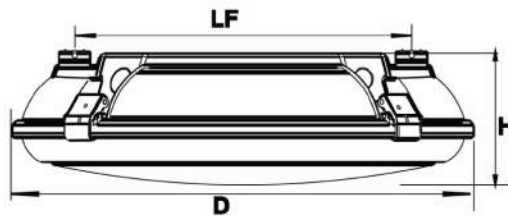
## MATERIAL

- Housing: Injection moulded polycarbonate
- Diffuser: Injection moulded opal polycarbonate
- Reflector: Painted iron plate.
- Clips: Stainless Steel or polycarbonate clips
- Gasket: One piece sealed silicone gasket
- Accessories: Fixing brackets and suspension triangle
- Cable gland: screwed PG13.5



## LED-SYSTEM

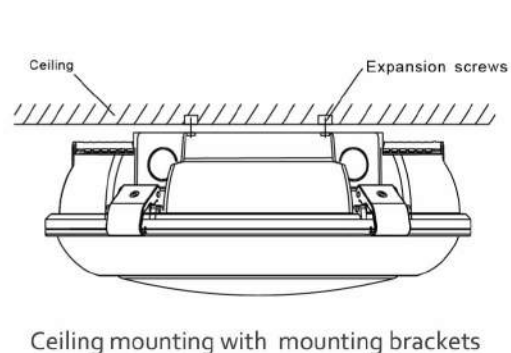
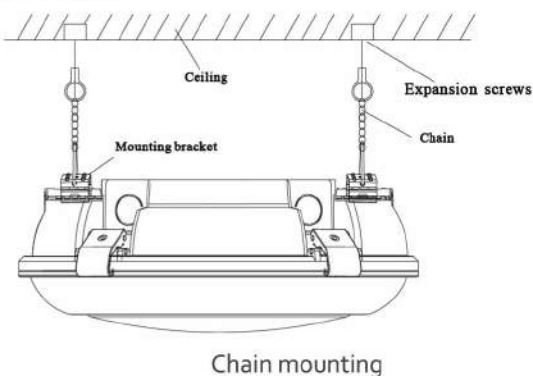
- LED chips: Lextar SMD2835
- FR4 PCB: flame resistant (self-extinguishing)
- Efficiency  $\geq 85\%$
- Power factor  $>0.97$
- Input voltage: 220-240V 50/60Hz
- Colour temperature: 4000, 6000K
- CRI:  $>80$
- Waterproof: IP65
- Ambient Temp.:  $-20^{\circ}\text{C}$ - $45^{\circ}\text{C}$



Code	Wattage	LED Qty	Lumen	Dimensions mm			Qty/Ctn
				D	H	LF	
AQUA-BH-S12	12W	66	1100lm	268	101	200	10
AQUA-BH-M14	14W	72	1300lm	305	103	203	10
AQUA-BH-L28	28W	144	2400lm	375	100	255	10

Parameter difference:  $\pm 10\%$

## Mounting:



# Aqualux

LED Waterproof Lighting

[www.aqualuxled.com](http://www.aqualuxled.com)

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