DIALIGHT INDUSTRIAL LED LIGHTING For Water &

For water & Wastewater Treatment

AMERICAS



WHY LIGHTING MATTERS in Water and Wastewater Treatment



Lighting is of critical importance in Water and Wastewater Treatment facilities to maximize both safety and productivity. Water treatment plants are among the most hazardous places to work due to the presence of volatile chemicals, hazardous biosolids and combustible gases - all of which can take a toll on facility lighting. Heavy equipment also makes accessing lighting for routine maintenance burdensome and dangerous.



Airborne substances, including caustic chemicals and vapors, such as methane gas, hydrogen sulfide, and ammonia

High vibration and humidity

Noisy machinery

Physical hazards, such as slips, falls, and moving objects

Power surges and electric shock

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THE COST OF POOR LIGHTING in Water and Wastewater Treatment

Poor illumination can contribute to tragic work site accidents and injuries in the Water and Wastewater Treatment sector. Between 2009-2018 the US Bureau of Labor statistics cited:





The Water and Wastewater Treatment industry involves risks and hazards that demand high quality lighting. When choosing a lighting partner for your facilities, care must be taken to ensure their products have proven to perform safely and reliably in your environments.





Dialight

Water and Wastewater Treatment

DIALIGHT SOLUTIONS for Water / Wastewater

Dialight is the world leader in industrial LED lighting technology with millions of fixtures installed worldwide. We specialize in lighting products designed for the world's harshest industrial environments - enabling industrial customers to reduce their energy costs, maintenance costs, and carbon footprint while maximizing the safety and productivity of their employees and facility. From our signature High Bay line to our versatile Linear fixtures, Dialight offers a large selection of rugged products ideally suited for environments found within the Water and Wastewater Treatment Industry, including many IP66 rated options for long-lasting protection against the elements.



WHERE TO USE DIALIGHT PRODUCTS in Water / Wastewater

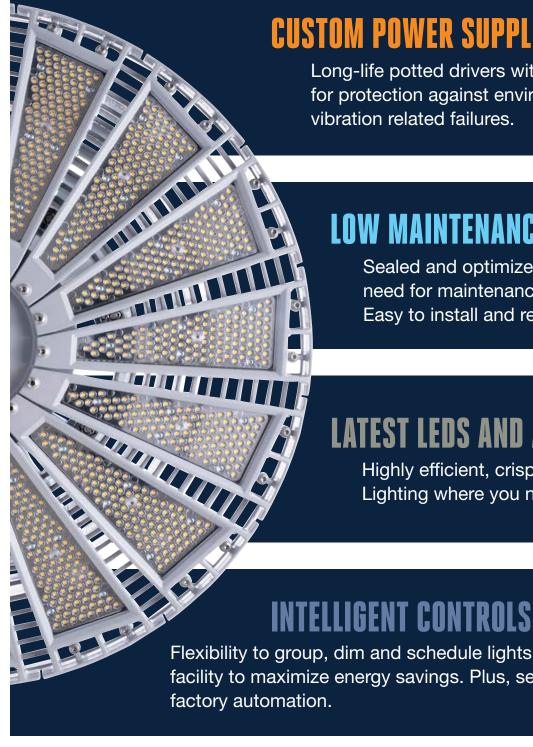
- PUMP STATIONS
- AERATION BASINS
- SLUDGE PITS
- CHEMICAL STORAGE
- CATWALKS

See product portfolio pages for more detailed product and ordering information

- PROCESS AREAS
- CONVEYORS (FOR STANCHION MOUNTS)
- WAREHOUSES AND GENERAL AREAS
- GENERAL FLOOD LIGHTING



When choosing an LED Lighting partner, consider how their products are engineered, constructed and tested prior to making your decision. Most Dialight products are engineered to a **10 year warranty** and were designed with harsh environments, such as Water and Wastewater Treatment facilities, in mind.



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CUSTOM POWER SUPPLIES

Long-life potted drivers with optimized thermal dissipation for protection against environmental contaminants and vibration related failures.

LOW MAINTENANCE MECHANICAL DESIGN

Sealed and optimized to reduce or eliminate the need for maintenance over the life of the fixture. Easy to install and retrofit to existing infrastructure.

LATEST LEDS AND ADVANCED OPTICS

Highly efficient, crisp, low-glare illumination. Lighting where you need it, not where you don't.

Flexibility to group, dim and schedule lights around the unique needs of a facility to maximize energy savings. Plus, seamless integration with existing

APPLICATION GUIDE for Water and Wastewater Treatment

SafeSite[®] and Vigilant[®]Area Lights For hazardous and non-hazardous lower

ceiling indoor or outdoor process and stanchion mount applications*





SafeSite[®] High Bay CONTRACTOR CONTRACTOR



as warehouses

Reliant[™] High Bay For indoor, light industrial applications and lighter-duty areas of heavy industrial facilities, such



Vigilant[®] High Bay For non-hazardous indoor or outdoor high bay applications over 14 feet



SafeSite[®] and Vigilant[®] Low Bays

For hazardous and non-hazardous lower ceiling indoor or outdoor applications where wider light distribution is critical







Dialight





ARTICLE MORE DEPARTMENT OF MERICAN

SafeSite® and Vigilant® **LP/TC** Linears

For hazardous and non-hazardous indoor or outdoor fluorescent strip/vaportite replacements, task or inspection lighting, electrical rooms, shops, and process areas. 4ft and 2ft versions available

ProSite Floodlight

For non-hazardous and hazardous indoor or outdoor flood lighting applications; multiple beam patterns available



StreetSense[®] Street Light

•

For plant maintained roadways and general outdoor illumination



Dialight

CASE STUDIES A.B. Jewell Tulsa, Oklahoma

Aiming to upgrade, the A.B. Jewell staff began researching the options and selected a few LED samples for a fixture trial. After evaluating each system, they settled on Dialight's LED StreetSense[®] streetlights and Vigilant[®] High Bays, Low Bays, Flood Lights and Area Lights. In addition to a better performing fixture, the Dialight LEDs offered a 10-year warranty, covering the entire fixture, power supply and housing, which sealed the deal for A.B. Jewell. To-date, the facility has installed more than 600 Dialight LED lighting fixtures in several areas of the facility to replace a mix of outdated lighting.

- Replaced 350 HID. MH and T12 fixtures with more than 600 Dialight LED fixtures
- \$6,000-7,000 per year saved on
- lighting maintenancey
- \$22,300 annual energy savings
- \$32,000 utility incentive
- 446.576 kWh saved

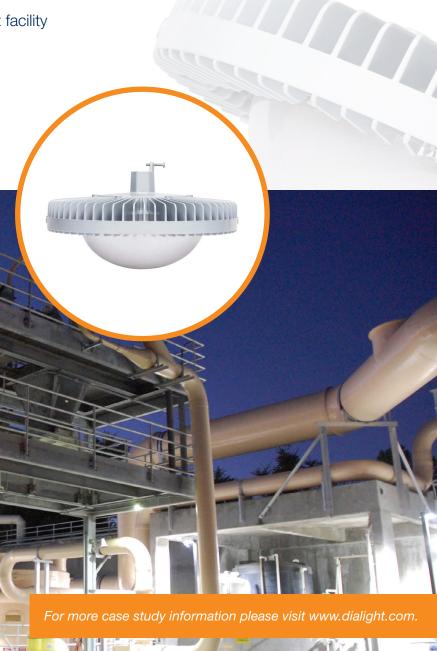
CASE STUDIES Santa Cruz Santa Cruz, California

As part of a citywide Climate Action Program to reduce energy consumption and to resolve its lighting challenges, the facility experimented with several LED lighting solutions, including one from Dialight. Impressed with the way the Dialight fixture outperformed the others, the facility ultimately chose Dialight to replace 82 fixtures in its solids dewatering building, pre-aeration and trickling filters with the company's DuroSite LED fixtures, including 33 Low Bays specially designed for areas of low clearance, and 49 High Bays – 19 with 14,000 lumen output and 30 with 12,000 lumen output. The entire changeout took just five days-about 30-60 minutes per fixture. The 12/7 lighting was outfitted with a combination of photocells and timers, taking advantage of the Dialight LED's instant-on capabilities.

- Exterior lighting at wastewater treatment facility
- Complete installation in just 5 days
- Energy rate: \$0.15/kWh
- 12/7 lighting with photocells and timers
- \$5,000 rebate
- -~3 year payback

"For over five years, we've experienced an increase in safety and reliability from Dialight's crisp, clear lighting, and the lights still function like the day they were installed."

- A.B. Jewell's Tulsa. OK Maintenance Supervisor



PRODUCT PORTFOLIO High Bays

PRODUCT PORTFOLIO High Bays

					11/1					
			Part Number	Certification	Fixture Lumens	Wattage	lm/W	ССТ	Lens	Beam Distribution
(MARROW)	CONTRACTOR OF CONTRACTOR	VEU7MC2ANNWNGN UL 1598, CSA 11,000 65 169 5000				Vigilar	nt® High	Bay		
CONTRACTOR OF THE OF TH	A CONTRACTOR OF THE				5000K (cool white)	Glass - Clear	Medium			
· ····································			VEU7MC2BNNWNGN	UL 1598, CSA	13,600	80	170	5000K (cool white)	Glass - Clear	Medium
			VEU7MC2CNNWNGN	UL 1598, CSA	17,400	96		5000K (cool white)	Glass - Clear	Medium
VIGILANT [®] HIGH BAY	SAFESITE [®] HIGH BAY	RELIANT [™] HIGH BAY				SafeSi	te® High	n Bay		
For use in non-hazardous indoor and outdoor	For use in hazardous classified high bay	For use in indoor non-hazardous applications to	VED7MC2ANNWNGN	UL 844 (CID2)	11,000	65		5000K (cool white)	Glass - Clear	Medium
high bay and occasionally flood lighting applications. Replaces up to 1,000 watt	applications where chemical vapors or explosive dusts are present. See technical spec sheet for	replace either HID or Fluorescent fixtures up to 1,000 watts where harsh environment protection is	<	, , , , , , , , , , , , , , , , , , , ,		Relian	it [™] High	Bay*	1	
traditional HID fixtures.	applicable certifications.	less of a concern.	RHU5MC2FDCNNGN	UL 1598, CSA	26,400	199	133	5000K (cool white)	Diffused Polycarbonate	Medium
Ideally suited for: WET WELLS	Ideally suited for: BULK CHEM ROOMS	Ideally suited for: GENERAL STORAGE & WAREHOUSING	RHU5MC2HDCNNGN	UL 1598, CSA	31,500	239	132	5000K (cool white)	Diffused Polycarbonate	Medium
PUMP ROOMS	DIGESTER ROOMS	MACHINE/MAINTENANCE SHOPS				Vigila	nt [®] Low	Вау		
MCC ROOMS	CHLORINE STORAGE		VEULUC29NNWNGN	UL 1598, CSA	9,000	60	150	5000K (cool white)	Polycarbonate Dome - Diffused	Ultra Wide
BOILER ROOMS	CHEMICAL STORAGE					SafeSi	ite [®] Low	v Bay		
HOPPER ROOMS STORAGE AND GENERAL AREAS			VEDLUC29NNWNGN	UL 844 (CID2)	9,000	60	150	5000K (cool white)	Polycarbonate Dome - Diffused	Ultra Wide
		Contraction of the second seco								
VIGILANT® HIGH OUTPUT HIGH BAY - LOW PROFILE	VIGILANT® LOW BAY	SAFESITE® LOW BAY	The second				F	IIII		
For use in high output or high ceiling non- hazardous indoor and outdoor high bay applications. Replaces up to 1,500 watt traditional HID fixtures with mounting heights up to 100'.	For use in indoor and outdoor lower mounting height high bay applications where wider light distribution is required. Replaces up to 250+ watt traditional HID fixtures.	For use in lower mounting height hazardous high bay applications where chemical vapors or explosive dusts are present. See technical spec sheet for applicable certifications.			1			111110		-
Ideally suited for:	Ideally suited for:	Ideally suited for:					2000			
STORAGE & GENERAL AREAS	TANK ROOMS	PROCESS AREAS					5	IIII		A Loss
	DIGESTER ROOMS	CHEMICAL STORAGE					F	III	A Prove	1
	AERATION BASINS							1		

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WARNING - INSTALLATION & SECONDARY RETENTION. Use of any Dialight products without proper installation (including secondary retention / netting) and periodic inspections could cause severe injury or death. Dialight recommends that all installations should use secondary retention / netting (appropriate to the installation environment) where applicable. It is the exclusive responsibility of the contractor, installer and/or end-user to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is safely installed (with secondary retention / netting where appropriate) and in compliance with all applicable laws and regulations. To the extent permissible under applicable laws, Dialight disclaims all liability for personal injury and/or other damage resulting from any dislodgment or other dislocation of its products.

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PRODUCT PORTFOLIO Area Lights

PRODUCT PORTFOLIO Area Light Accessories



For more details on product specifications including mounting information, and our full suite of retrofit adapters, please visit www.dialight.com.

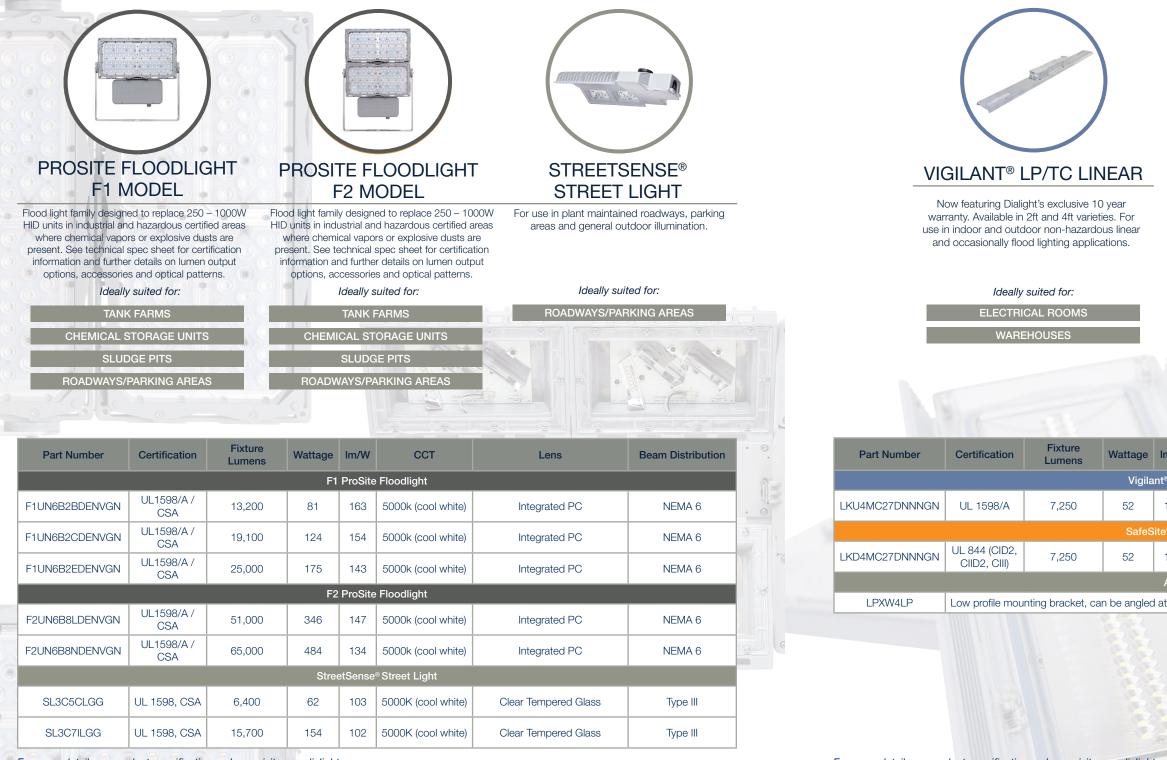
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Certilite [®] V Retrofit Kit - HZXTHKL					Thomas & Betts Hazlux [®] Retrofit Kit - HZXTHTB							
iling	Wall		Stanchion		Pendant	Pendant Cone	Flexible Pendan		Ceiling		Wall	
& VMX-:	2 VMB2B & VI	MB-2	VMD4B		3P	ЗF	3C		ЗW		5S	
& VMX-:	3 VMB3B & VI	MB-3	VMD5B		4P	4F			4W		6S	
7B, 8B, 9B VMS5B					-					5J, 6J		
5					Wall	25° Angle Stanchion	25° Ang Stanchic		Straight Stanchion		Straight Stanchion	
50			VB2-VIB	VS4	VS4-VIB VL4		VL4	VL4-VIB				
aster III Retrofit Kit - HZXTHAP			VB3-VIB	VS5	VS5-VI	В	VL5		VL5-VIB			
ling Wall Stanchion					GE Lighting	g Solutions	s – Filtr-G	iard	d™ Retrofit	Kit	- HZXTHGE	
2-75	KPWB-75	K	PS-125		Pendant	Ceiling	Wall	5	Stanchion		Quad Mount	
-100	KPWB-100	K	KPS-150		ЗP	ЗF	3C	ЗW		5S		
KPS		PST-125	1	4P	4F			4W		6S		
KPST-150			PST-150								5J, 6J	

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PRODUCT PORTFOLIO Floodlights

PRODUCT PORTFOLIO Linear Lights



For more details on product specifications, please visit www.dialight.com.

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Dialight



SAFESITE[®] LP/TC LINEAR

Now featuring Dialight's exclusive 10 year warranty. Available in 2ft and 4ft varieties. For use in indoor and outdoor hazardous certified linear and occasionally flood lighting applications where chemical vapors or explosive dusts are present. CID1 linear available in a different series. Refer to Dialight website for more information.

Ideally suited for:

PUMP STATIONS CHEMICAL STORAGE

n/W	ССТ	Lens	Beam Distribution			
[®] Low	Profile Linear					
139	5000K (cool white)	Clear Polycarbonate	Medium			
[®] Low	/ Profile Linear					
139	5000K (cool white)	Clear Polycarbonate	Medium			
Accessories						
0 and 15 degrees						

HAZARDOUS LOCATIONS RATINGS

Fixed and portable fixtures for installation and use in hazardous (classified) locations Class I, Divisions 1 and 2, Groups A, B, C, and D; Class II, Division 1, Groups E, F, and G; Class II, Division 2, Groups F and G; and Class III, Divisions 1 and 2, in accordance with the National Electrical Code, NFPA 70

Classes

The classes define the general nature of hazardous material in the surrounding atmosphere.

Class	Hazardous Material in Surrounding Atmosphere
Class I	Hazardous due to the presence of flammable gases or vapors in the air in quantities to produce explosive or ignitible mixtures
Class II	Hazardous due to the presence of combustible and/or conductive dusts
Class III	Hazardous due to the presence of easily ignitible fibers and flyings, such as wood chips, cotton, flax and nylon. Group classifications are not applied to this class

Divisions

The division defines the likelihood of hazardous substances being present in ignitible concentrations in the surrounding atmosphere.

Division	Presence of Hazardous Material				
Division 1	The hazard exists during normal operating conditions				
Division 2	The hazard is present only due to accidental system breakdowns or abnormal operations				

Groups

The group(s) are determined by the specific hazardous materials which may be present.

Group	Hazardous Material in Surrounding Atmosphere						
Class I Groups							
Group A	Acetylene						
Group B	Hydrogen, fuel and combustible process gases containing more than 30% hydrogen by volume or gases of equivalent hazard such as butadiene, ethylene oxide, propylene oxide and acrolein						
Group C	Carbon monoxide, methyl ether, hydrogen sulfide, methylacetylene, cyclopropane, ethyl and ethylene or gases of equivalent hazard						
Group D	Gasoline, acetone, ammonia, benzene, butane, cyclopropane, ethanol, hexane, methanol, methane, vinyl chloride, natural gas, naphtha, propane or gases of equivalent hazard						
	Class II Groups						
Group E	Combustible metal dusts, including aluminum, magnesium and their commercial alloys or other combustible dusts whose particle size, abrasiveness and conductivity present similar hazards in connection with electrical equipment						
Group F	Carbonaceous dusts that have more than 8 percent total entrapped volatiles or that have been sensitized by other materials so that they present an explosion hazard. Coal, carbon black, charcoal, and coke dusts are examples of carbonaceous dusts						
Group G	Flour dust, grain dust, flour, starch, sugar, wood, plastic and chemicals						

North American HQ 1501 Route 34 South Farmingdale, NJ 07727 Tel: 732-919-3119 Fax: 732-751-5778 info@dialight.com Reference 2020 NEC Code

WARNING / DISCLAIMERS:

Installation & secondary retention. The use of this product without proper installation (including secondary retention / netting) and periodic inspections, could cause severe injury or death. Dialight recommends that all installations should use secondary retention / netting (appropriate to the installation environment) as applicable. Dialight products are intended for ultimate purchase, installation and operation by knowledgeable persons trained in the functional assessment, installation, use and maintenance of such products and all customers (including but not limited to cend customers) are responsible for assessing the suitability of Dialight products for any given installation, use and maintenance of such products and all customers (including but not limited to cend customers) are responsible for assessing the suitability of Dialight products for any given installation requirement. It is the exclusive responsibility of the contractor, installer and/or end-user to: (a) determine the suitability of the product specifications & warranties. All product information provided is, to the best of Dialight's knowledge, accurate as of the date of publication. All values and performance data herein are design or typical values when measured under laboratory conditions. The information herein is subject to change without notice. The products / software detailed herein are subject to applicable warranties and terms and conditions of use/purchase. Unless agreed otherwise in writing by an authorized representative of Dialight. *Com* for current versions of: (a) relevant product documents available at *www.dialight.com* for the extent that any contract is deemed formed between Dialight and the purchase and information provided at *www.dialight.com* as at the date of sale shall be the versions incorporated therein. In the event of any discrepancy between this document and information provided at *www.dialight.com* as at the date of sale shall be the versions incorporated therein. In the event of any discrepancy between this

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