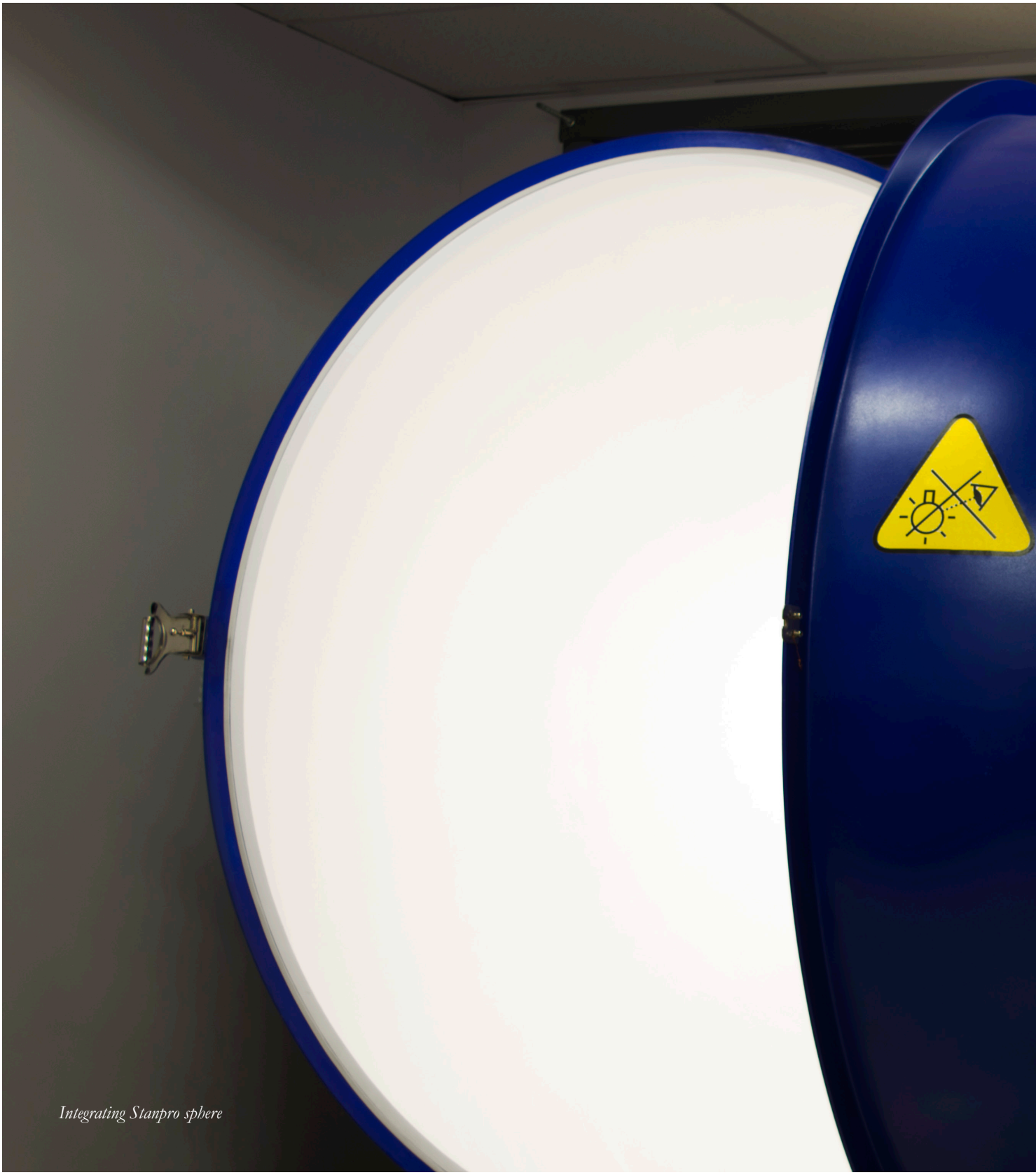
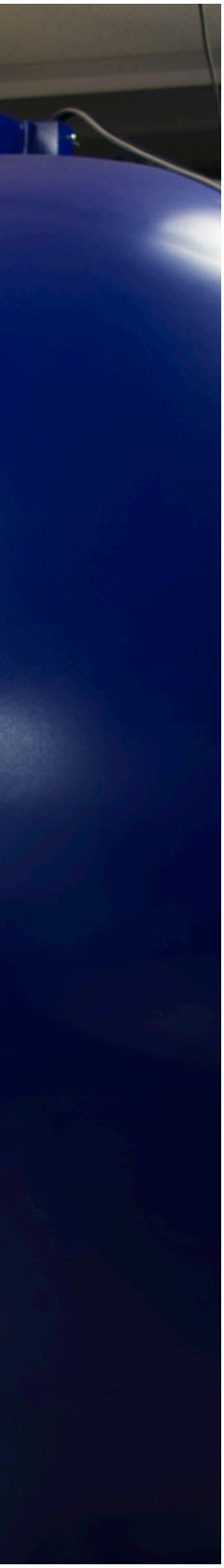
LED VAPOR TIGHT LUMINAIRES

STANPRO

CONTENT



Integrating Stanpro sphere



DEVELOPMENT
OF YOUR STANPRO VAPOR TIGHT LUMINAIRES

Lighting has become a very technical subject, especially for Vapor tight luminaires which are typically installed in demanding and harsh environments. As market leaders in our field, we have invested in a fully operational laboratory and necessary equipment, and employed qualified electronics experts. As a result we offer consistency of quality for the most complete offerings in the Vapor tight lighting category.

INTEGRATING SPHERE

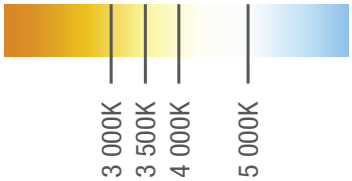
Our sphere measures the photometric parameters of our LED luminaires including lumen output, color temperature, SDM and CRI.

GONIO-SPECTRORADIOMETER

Stanpro uses independent, unbiased certified laboratories to run Gonio-Spectroradiometer tests. These tests measure photometric and electrical parameters. IES files are generated for our layout specialists and for our customers use. Details such as luminous flux, luminous intensity, average beam angle and illuminance of the luminaire can be extrapolated from these results.

COLOR TEMPERATURE & APPEARANCE

Different colored LEDs are selected and used to build our Vapor tight luminaires enabling our customers to choose the correct product that is ideal for their application. There are several options of color temperature:



Contact factory should you have different requirements.

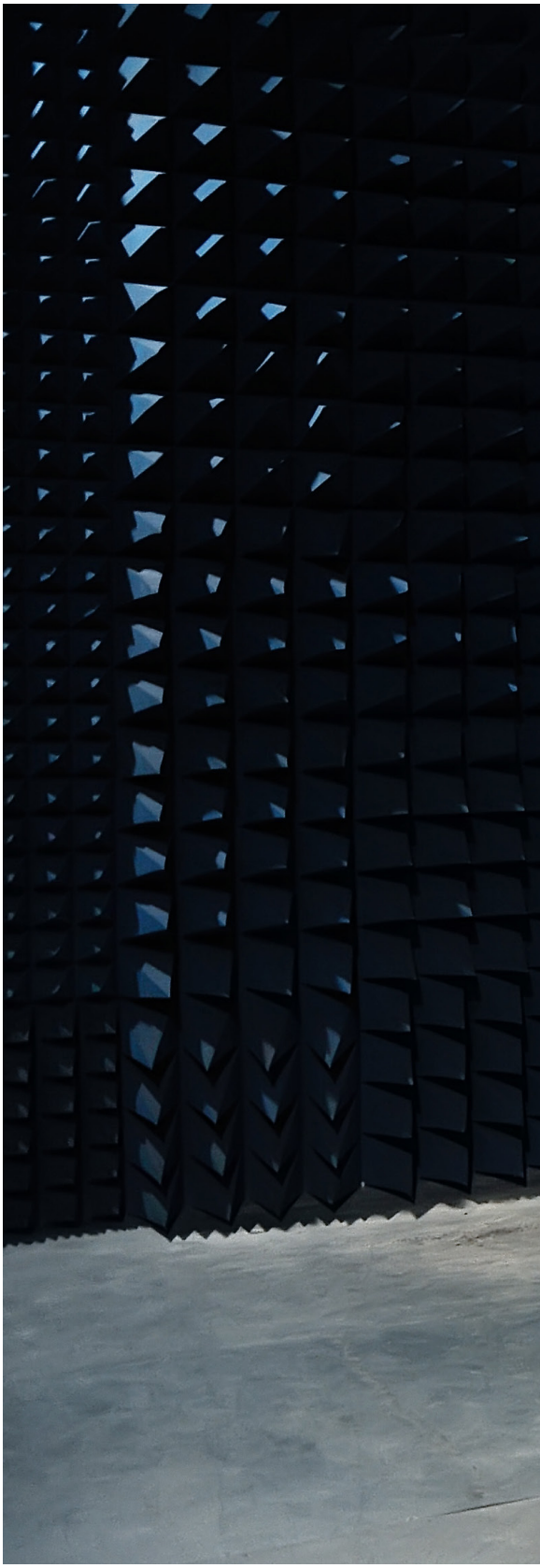
LIFETIME PERFORMANCE TESTING

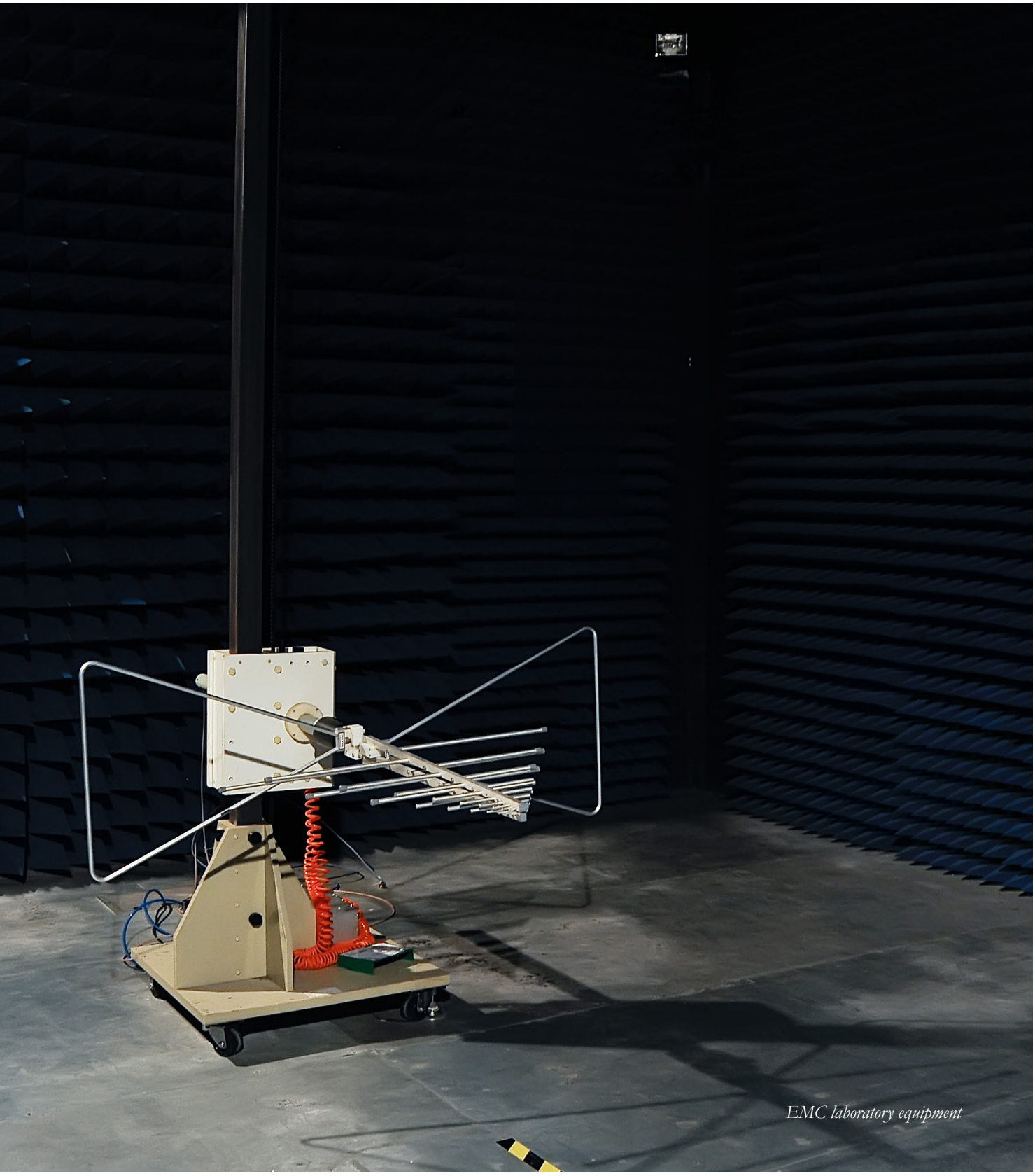
- Thermal imaging
- Temperature assessment of LEDs
- Lumen maintenance
- Accelerated ageing tests
- Temperature cycling
- Power switch cycling
- Glare and flicker assessment

ENVIRONMENTAL AND LIFE TESTING & ROHS TESTING

- Temperature & humidity
- Thermal cycling (climatic chambers)
- Drop & vibration testing
- Ingress protection IP ratings
- Safety testing & EMC testing

We ensure all of our Vapor tight luminaires comply to EMC directive Radiated and conducted emissions, specifically complying to ICES-005, issue 4. These tests measure the electromagnetic interference of light fittings and power converters under test conditions. This test enables us to determine the suitability of installations in different environments, and ensures that our range complies with the criteria that limits these types of emissions from electrical components.





EMC laboratory equipment

YOUR VAPOR TIGHT TEAM

ENGINEERING

We have a dedicated engineering team including a Director of Engineering, Project Managers, Engineers, and Technical lab Specialists. They have the technical skills and the creative imagination to design robust and efficient solutions in this category while ensuring all steps are coordinated to bring a product from concept to reality.

CERTIFICATION

Our team of certification experts ensure we meet standards set by various bodies of certification and/or organizations dedicated to safety and energy efficiency in lighting. They help us strive for superior quality in the Vapor tight industry due to being proficient in CSA, UL, ETL and DLC standards and requirements.

PURCHASING

Our procurement department includes a Purchasing Manager, Material Manager and Purchasing Agent, working in unison with hundreds of suppliers to ensure all components integral in a complete Vapor tight bill of material are kept in stock to maximize ability to fulfill our customer orders in a timely manner.

TESTING

Our company is ISO 9001, and our laboratory is CSA Qualified and recognized as an INTERTEK satellite lab. Along with being a critical component of the overall mechanical and electrical design of all our products in the category, a team of lab technicians perform all necessary rigorous tests required to ensure our Vapor tights exceed company standards.

LED MODULE DESIGN

Our surface mount Engineers and Technicians design and build LED Modules with the highest quality components. They ensure our LED boards can support extreme temperature environments while offering a variety of color temperatures and beam angles meeting and surpassing corporate standards.

IES LAYOUT

Our Lighting Layout Supervisor helps our customers with everything from simple layouts to complex application specific designs, maximizing customer specific requirements while minimizing forecasted budgets.

MARKETING

Our Marketing team works diligently to develop our branding, and sales support pieces to help convey to our customers the key advantages and benefits of our products.

SALES & CUSTOMER SERVICE

A team of Sales, Quotations and Customer Service Representatives work to provide you solutions to your application specific requirements at the right price in a timely fashion.

SHIPPING

Our Warehouse Manager with his team ensures orders are picked and shipped in a timely manner.

PRODUCT MANAGEMENT

Our production team works to build your orders diligently and in a timely fashion to ensure the highest level of quality whether it be into stock product to made to order.

PRODUCTION

Production Planner Supervisor and Production Director work with their team to build your orders, standard into stock quick ship products and made to order configurations with special options and requirements.

MO - THE DOG

Our Company mascot, Loyal Pet (to those who give him snacks) & Supervisor from concept to order, MO ensures everyone is doing their job happily and barks to cheer our team when efficiency, productivity or quality does meet corporate standards.

IP RATINGS

Typically vapour tight fixtures are tested to meet IP standards. In order to better understand IP ratings refer to the table below.

SCOPE OF PROTECTION FOR THE IP PROTECTION CLASSES				
FIRST DIGIT			SECOND DIGIT	
DIGIT	PHYSICAL PROTECTION	FOREIGN BODY PROTECTION	DIGIT	WATER PROTECTION
0	No protection	No protection	**0**	No protection
1	Protection against back of hand contact	Protection against solid foreign bodies 50mm dia.	**1**	Protection against water drops falling vertically
2	Protection against finger contact	Protection against solid foreign bodies 12.5mm dia.	**2**	Protection against water drops falling at an angle (15°)
3	Protection against contact from tools	Protection against solid foreign bodies 2.5mm dia.	**3**	Protection against water spray at an angle up to 60°
4	Protection against contact with a wire	Protection against solid foreign bodies 1.0mm dia.	**4**	Protection against water spray from all directions
5	Protection against contact with a wire	Protection against dust	**5**	Protection against water jets
6	Protection against contact with a wire	Protection against dust-tight	**6**	Protection against strong water jets
			7	Protection against intermittent immersion in water
			8	Protection against continuous immersion in water

APPROVALS

Stanpro strives to achieve strict performance criteria to meet industry standards such as IP ratings, NSF standards, DLC approvals and ICES-005 certifications.

NSF is a global independent public health and environmental organization that provides standards development, product certification, testing, auditing, education and risk management services for public health and the environment.

DLC promotes quality, performance and energy efficient commercial sector lighting solutions through collaboration among its federal, regional, state, utility, and energy efficiency program members; luminaire manufacturers; lighting designers and other industry stakeholders throughout the U.S. and Canada.

ICES-005

ICES-005 sets out limits and methods of measurement of radiated and conducted radio frequency emissions produced by lighting equipment, as well as administrative requirements for such equipment.

STANPRO VAPOR TIGHT FIXTURES

RATINGS AND CERTIFICATIONS

LED															
SERIES	IP65	IP66	IP67	IK08	IK10	NSF	NEMA	DAMP LOCATION	WET LOCATION	CSA	CCSAUS	CETL	CETLUS	CULUS	DLC
VTL4 GEN. 3		•			•	•	•	•	•		•		•		•
VTL8-L GEN. 2		•			•				•				•		•
VTL8-L GEN. 1		•			•				•				•		•
VTE4-L GEN. 2	•			•		•	•	•	•					•	•
VTE4-L GEN. 1	•							•	•			•		•	
VT2-L GEN. 2	•							•	•			•			•
VT4-L GEN. 2	•							•	•						•
VN4-L GEN. 2		•	•			•	•	•	•		•				•
VN8-L GEN. 2		•	•			•	•	•	•		•				•
VX4-L GEN. 2		•	•			•	•	•	•	•					
FN-L GEN. 2		•	•			•	•	•	•		•				•

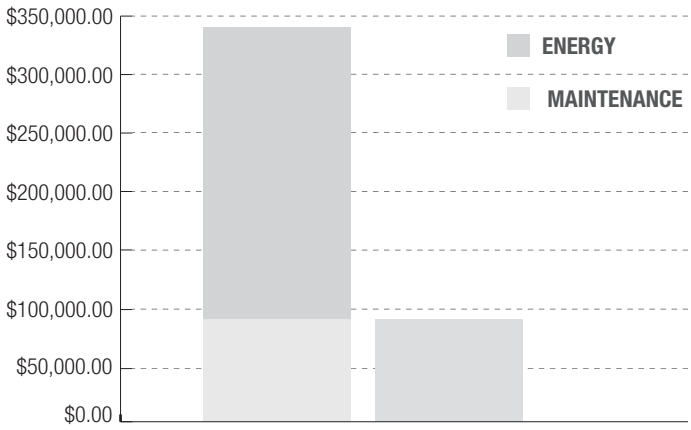
* IP67 certified for wet locations or washdown areas that needs to be well lit.

** NSF approved for food processing and food applications

COST EFFICIENCY
TAKING VT4 AS AN EXAMPLE

Increase efficiency and performance standards while switching to a more reliable technology. Savings don't stop there! With a life expectancy greater than 25 years, you can forget about traditional lamp and ballast replacements as well as service and maintenance invoices.

20 YEAR LIFECYCLE COST



	FLUORESCENT	LED
20 YEAR ENERGY COST		
	$250,264.30	$90,373.22
20 YEAR MAINTENANCE COST		
	$92,400.00	$1,215.11

	FLUORESCENT	LED
TOTAL 20 YEAR ENERGY AND MAINTENANCE COSTS		
	$342,664.30	$91,588.33
TOTAL ENERGY AND MAINTENANCE SAVINGS		
	$251,075.98	

Choose a smart investment and save on energy.

20 YEAR ENERGY COST

FLUORESCENT

FIXTURE	WATTS	QTY	ANNUAL ENERGY COST	20 YEAR ENERGY COST
VT4F2T5HO054-W	108	100	$7,568.64	**$250,264.30**

LED

FIXTURE	WATTS	QTY	ANNUAL ENERGY COST	20 YEAR ENERGY COST
VT4-LS3A-W/40K	39	100	$2,733.12	**$90,373.22**

20 YEAR MAINTENANCE COST

FLUORESCENT

FIXTURE	COST PER RE-LAMP	FAILURES OVER 20 YEARS	ANNUAL MAINTENANCE COST	20 YEAR ENERGY COST
VT4F2T5HO054-W	$115.50	800.00	$4620.00	**$92,400.00**

LED

FIXTURE	COST PER RE-LAMP	FAILURES OVER 20 YEARS	ANNUAL MAINTENANCE COST	20 YEAR ENERGY COST
VT4-LS3A-W/40K	$158.00	8.39	$66.26	**$1,215.11**

RE-LAMP COSTS	$115.50
ENERGY COST	$0.16/KWh
RE-LAMP TIMING	2.5 years

LED is a perfect upgrade option where energy savings and long life are critical.

RETURN ON INVESTMENT

FLUORESCENT

FIXTURE	WATTS	QTY	UNIT POWER $/YR.	ANNUAL MAINTENANCE COST	ANNUAL OPERATION COST
VT4F2T5HO054-W	108	100	$75.69	$4620.00	$12,188.64
Total Existing	N/A	100	N/A	$4620.00	$12,188.64

LED REPLACEMENTS

FIXTURE	WATTS	QTY	UNIT PRICE	UNIT POWER $/YR.	ANNUAL MAINTENANCE COST	ANNUAL OPERATION COST
VT4-LS3A-W/40K	39	100	$255.55	$27.33	$66.26	$2799.38
Total LED	N/A	100	N/A	$27.33	$66.26	$2799.38

KEY STATISTICS

PAYBACK PERIOD	**3.2 YEARS**
RE-LAMP COSTS	115.50
ENERGY COST	$0.16 / KWh
RE-LAMP TIMING	2.5 YEARS
TOTAL UNIT COST	$31,055.00
TOTAL WATTS SAVED	6900
ENERGY SAVED/YR (MWH)	30.2
ENERGY SAVED 20 YRS (MWH)	604.4
TONNES GHG REDUCED/YR	6
TONNES GHG REDUCED 20 YRS	121
# OF CARS PERMANENTLY REMOVED	1
TOTAL # OF STREET LIGHTS IN THE PROJECT	100

YEAR	ANNUAL SAVINGS	ACCUMULATED SAVINGS
1	$9411.28	$9411.28
2	$9653.05	$19,064.33
3	$9906.92	$28,971.25
4	$10,173.48	$39,144.72
5	$10,453.36	$49,598.09
6	$10,725.23	$60,323.31
7	$11,033.80	$71,357.11
8	$11,357.80	$82,714.91
9	$11,698.01	$94,412.92
10	$12,055.12	$106,468.14
11	$12,430.29	$118,898.43
12	$12,824.12	$131,722.55
13	$13,237.64	$144,960.19
14	$13,671.83	$158,632.03
15	$14,127.74	$172,759.77
16	$14,606.44	$187,366.21
17	$15,109.07	$202,475.28
18	$15,636.84	$218,112.12
19	$16,191.00	$234,303.12
20	**$16,191.00**	**$251,075.98**

ENVIRONMENTAL REPORT: MUNICIPALITY PARKING

ENERGY ANALYSIS	VT4	VT4 LED REPLACEMENT DATA
Number of lights	100	100
Total Power Draw (W)	10,800 W	3900 W
Annual energy used (kWh)	47,304 kWh	17,082.0 kWh
Annual energy saved (kWh)		30222.0 kWh
Percentage savings using VT4 LED instead of VT4 FLUO		63.9%

ENVIRONMENTAL ANALYSIS	VT4 LED REPLACEMENT
Energy saved per year	30.2 MWh/year
Energy savings over 20 years	604.4 MWh
GHG (CO2) reduction per year	6.1 tonnes/year
GHG (CO2) reduction over 20 years	121.5 tonnes
Barrels of crude oil not consumed per year	14.1 barrels/year
Barrels of crude oil not consumed over 20 years	282.5 barrels
Equivalent number of cars taken off the road	1 car

REGIONAL ENVIRONMENTAL IMPACT VALUES	
Location	Canada - Ontario
Greenhouse Gas	0.201 tonnes/MWh
Barrels of Oil	0.467 barrels/MWh
Equiv no. cars	0.037 cars*yr/MWh

FLUORESCENT EQUIVALENCY CHART

LED VAPOR TIGHTS

The following equivalency chart can be used to compare our LED luminaires with traditional fluorescent luminaires.
When choosing an LED equivalent to an existing lighting system, there are many factors to consider.
For a precise comparative analysis, we recommend using a lighting layout.

	Part number	Description	Color temp.	Voltage	Watts	Lumens	Lm/w	FLUO Equivalent*
	68702	LED VAPOUR TIGHT 4', IP65	4000K	120-277V	40	5200	130	3 x 32W T8
	68708	LED VAPOUR TIGHT 4', IP65	4000K	120-277V	60	7900	132	2 x 54W T5HO
	VT4-LS2A-W/40K	LED VAPOUR TIGHT 4', IP65	4000K	120-277V	33	4300	130	2 x 32W T8
	VT4-LS3A-W/40K	LED VAPOUR TIGHT 4', IP65	4000K	120-277V	39	5200	133	3 x 32W T8
	VT4-LS4A-W/40K	LED VAPOUR TIGHT 4', IP65	4000K	120-277V	63	7700	122	2 x 54W T5HO
	VT2-LS1A-W/40K	LED VAPOUR TIGHT 2', IP65	4000K	120-277V	20	2400	120	2 x 17W T8
	VT2-LS2A-W/40K	LED VAPOUR TIGHT 2', IP65	4000K	120-277V	42	4600	110	2 x 24W T5HO
	VN4-LS1A-W/40K	LED VAPOUR TIGHT 4', IP66, IP67, NSF	4000K	120-277V	30	4000	133	2 x 32W T8
	VN4-LS2A-W/40K	LED VAPOUR TIGHT 4', IP66, IP67, NSF	4000K	120-277V	40	5500	138	2 x 54W T5HO
	VN4-LS3A-W/40K	LED VAPOUR TIGHT 4', IP66, IP67, NSF	4000K	120-277V	60	7700	128	2 x 54W T5HO
	VN8-LS1A-W/40K	LED VAPOUR TIGHT 8', IP66, IP67, NSF	4000K	120-277V	60	8000	133	4 x 32W T8
	VN8-LS2A-W/40K	LED VAPOUR TIGHT 8', IP66, IP67, NSF	4000K	120-277V	80	11000	138	4 x 54W T5HO
	VN8-LS3A-W/40K	LED VAPOUR TIGHT 8', IP66, IP67, NSF	4000K	120-277V	120	15400	128	4 x 54W T5HO
	VN8-LS4A-W/40K	LED VAPOUR TIGHT 8', IP66, IP67, NSF	4000K	120-277V	158	19400	123	6 x 54W T5HO
	FN-LS1A-W/40K	LED VAPOUR TIGHT HIGH BAY, IP66, IP67, NSF	4000K	120-277V	82	12000	146	6 x 32W T8 or 3 X 54W T5HO
	FN-LS2A-W/40K	LED VAPOUR TIGHT HIGH BAY, IP66, IP67, NSF	4000K	120-277V	120	16400	137	4 x 54W T5HO
	FN-LS4A-W/40K	LED VAPOUR TIGHT HIGH BAY, IP66, IP67, NSF	4000K	120-277V	190	25000	132	6 x 54W T5HO
	VX4-LS1A-W/40K	LED VAPOUR TIGHT 4', CLASS I, DIVISION II, IP66, IP67, NSF	4000K	120-277V	40	3862	97	2 x 32W T8
	VX4-LS2A-W/40K	LED VAPOUR TIGHT 4', CLASS I, DIVISION II, IP66, IP67, NSF	4000K	120-277V	54	5329	99	2 x 54W T5HO
	VX4-LS3A-W/40K	LED VAPOUR TIGHT 4', CLASS I, DIVISION II, IP66, IP67, NSF	4000K	120-277V	75	7131	95	3 x 54W T5HO

* In equivalent body with clear lens and no miro reflectors

KEY STANPRO VAPOR TIGHTS

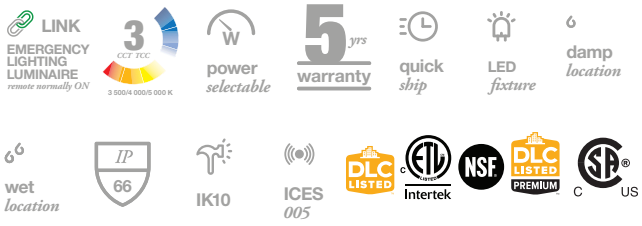
AT A GLANCE

VTL4 GEN. 3

LED SLIM 3 CCT SELECT, 3 POWER SELECT, NEMA 4X, NSF SERIES

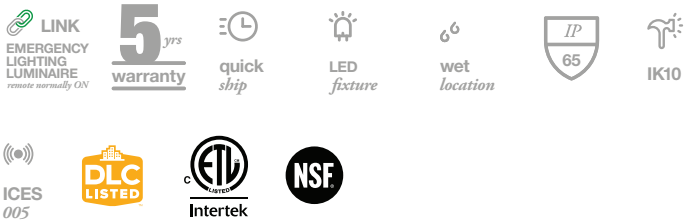
VTL8-L GEN. 2

8’ 3 CCT, 4 POWER SELECT, NEMA 4X, NSF SERIES



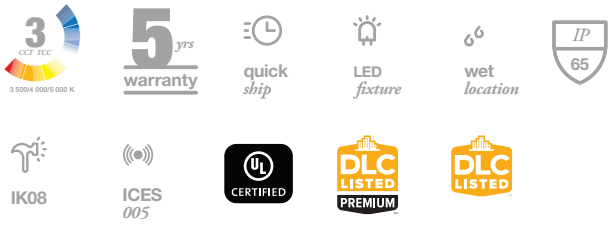
VTL8-L GEN. 1

8’ NEMA 4X, NSF VAPOR TIGHT



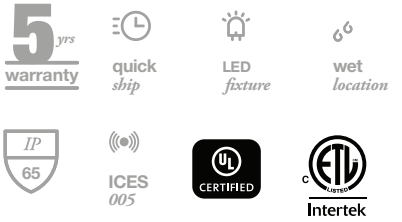
VTE4-L GEN. 2

LINEAR 4’ WET LOCATION SERIES



VTE4-L GEN. 1

LINEAR 4FT WET LOCATION SERIES



VT2-L GEN. 2

LINEAR 2FT WET LOCATION SERIES

VT4-L GEN. 2

LINEAR 4FT WET LOCATION SERIES

[1] 5 year warranty for the LINK module.

premium
grade

Whatever your lighting needs are, Stanpro strives to be a preferred supplier by carrying a wide range of solutions.

VN4-L GEN. 2

LINEAR 4FT WASHDOWN SERIES

LINK [1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON* · 5 *yrs* warranty · LED *fixture* · wet *location* · IP 66 · IP 67

ICES *005* · C SA US · NSF · DLC LISTED PREMIUM

VN8-L GEN. 2

LINEAR 8FT WASHDOWN SERIES

LINK [1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON* · 5 *yrs* warranty · LED *fixture* · wet *location* · IP 66 · IP 67

ICES *005* · C SA US · NSF · DLC LISTED PREMIUM

FN-L GEN. 2

HIGH BAY 4FT WASHDOWN SERIES

LINK [1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON* · 5 *yrs* warranty · LED *fixture* · wet *location* · IP 66 · IP 67

ICES *005* · C SA US · NSF · DLC LISTED PREMIUM

VX4-L GEN. 2

EXPLOSION PROOF 4FT HAZARDOUS SERIES

5 *yrs* warranty · LED *fixture* · wet *location* · hazardous *location* · IP 66 · IP 67

ICES *005* · SA · NSF

[1] 5 year warranty for the LINK module.

VTL4 GEN. 3

LED SLIM 3 CCT, 3 POWER SELECT, NEMA 4X, NSF SERIES

3 CCT TCC
3 500/4 000/5 000 K
power selectable
5 yrs warranty
quick ship
LED fixture
wet location
IP 66
IK10
ICES 005
DLC LISTED PREMIUM
DLC LISTED
Intertek
NSF
C US

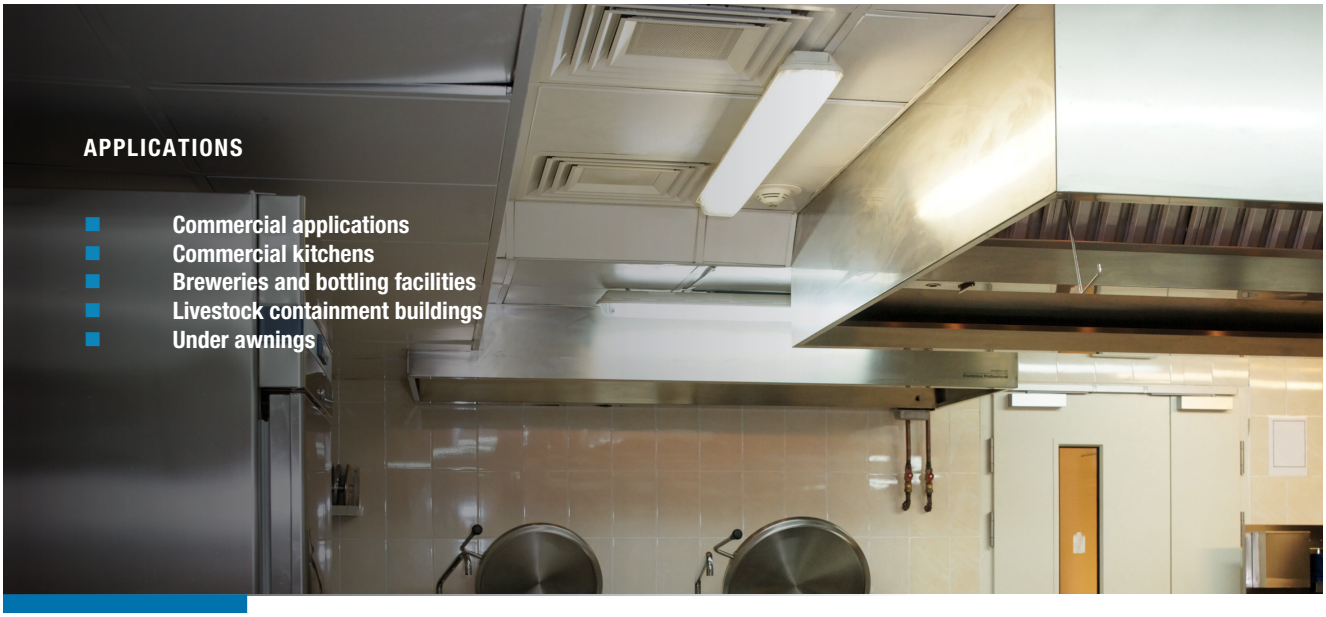
DESCRIPTION

This 4' luminaire ideal for a variety of industrial and commercial applications. Installed either indoors or outdoors, the VTL4-L provides superior light distribution and is intended for environments where moisture and/or dust may be present. Perfect for applications requiring the complete containment of LEDs for easy washability and hose down. The VTL4-L series can withstand reduced temperatures and moderate impact.

OVERVIEW

Light source	LED
Watts (W)	30/40/50 30/45/60
Lumen output (lm)	4 320 - 9 000
Efficacy (lm/W)	140 - 154
Color temperature (K)	3 CCT (3 500/4 000/5 000 K)
CRI	80+
Weight (lbs)	3.9

Please refer to the catalogue page for more details



VTL8-L

8’ NEMA 4X, NSF VAPOR TIGHT

LINK[1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON*

5 yrs warranty

quick *ship*

LED *fixture*

wet *location*

IP 66

IK10

ICES *005*

DLC LISTED

Intertek

NSF

[1]5 year warranty for the LINK module.

DESCRIPTION

A 8’ luminaire is ideal for a variety of industrial and commercial applications. Installed either indoors or outdoors, the VTL8-L provides superior light distribution. This fixture is intended for applications where moisture and/or dust may be present.

power *selectable*

DLC LISTED PREMIUM

C US

OVERVIEW GEN. 2

Light source	LED
Watts (W)	65 65/75/90/110
Lumen output (lm)	9 445 - 16 101
Efficacy (lm/W)	141 - 150
Color temperature (K)	3 CCT (3 500/4 000/5 000 K)
CRI	80+
Weight (lbs)	9.8 - 10.5

OVERVIEW GEN. 1

Light source	LED
Watts (W)	67 - 116
Lumen output (lm)	9 089 - 15 717
Efficacy (lm/W)	135 - 139
Color temperature (K)	4 000, 5 000
CRI	80+

Please refer to the catalogue page for more details

VTE4-L

LINEAR 4FT WET LOCATION SERIES

5 yrs warranty · quick ship · LED fixture · wet location · IP 65 · ICES 005 · CERTIFIED

DESCRIPTION

ECONOMICAL CONTRACTOR SELECT

An economical luminaire ideal for a variety of industrial and commercial applications. Installed either indoors or outdoors, the VTE4-L provides superior light distribution. Intended for applications where moisture and/or dust may be present.

OVERVIEW GEN. 2

3 CCT: TCC 3 500/4 000/5 000 K · DLC LISTED PREMIUM · DLC LISTED

Light source	LED
Watts (W)	40 - 60
Lumen output (lm)	5 379 - 8 441
Efficacy (lm/W)	133 - 143
Color temperature (K)	3CCT (3 500/4 000/5 000)
CRI	80+
Weight (lbs)	8

OVERVIEW GEN. 1

ETL LISTED Intertek

Light source	LED
Watts (W)	40 - 60
Lumen output (lm)	5 000 - 8 176
Efficacy (lm/W)	125 - 136
Color temperature (K)	4 000, 5000
CRI	80+
Weight (lbs)	8

Please refer to the catalogue page for more details

APPLICATIONS

- Industrial facilities
- Stairwells
- Parking garages
- Exterior retail areas
- Transportation
- Pedestrian tunnels

VT2-L

LINEAR 2FT WET LOCATION SERIES

LINK [1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON*

5 *yrs* warranty

quick *ship*

LED *fixture*

wet *location*

IP 65

ICES *005*

CERTIFIED

Intertek

DLC LISTED PREMIUM

DESCRIPTION

FEATURE RICH CONTRACTOR SELECT

A luminaire ideal for a variety of industrial, commercial and vandal resistant applications. Installed either indoors or outdoors, the VT2-L provides superior light distribution. Intended for applications where moisture and/or dust may be present. Broad range of mounting and control options can be added to suit customer specifications including occupancy sensors, brackets, color temperatures, emergency back up, surge protectors etc.

OVERVIEW GEN. 2

Light source	LED
Watts (W)	17 - 30
Lumen output (lm)	2 143 - 4 210
Efficacy (lm/W)	126 - 141
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+, 90+
Weight (lbs)	4.35

VT4-L

LINEAR 4FT WET LOCATION SERIES

LINK ¹ EMERGENCY LIGHTING LUMINAIRE *remote normally ON*

5 *yrs* warranty

LED *fixture*

wet *location*

IP 65

ICES *005*

Intertek

DLC LISTED PREMIUM

DESCRIPTION

FEATURE RICH CONTRACTOR SELECT

A luminaire ideal for a variety of industrial, commercial and vandal resistant applications. Intended for applications where moisture and/or dust may be present. Broad range of mounting and control options can be added to suit customer specifications including occupancy sensors, brackets, color temperatures, emergency back up, surge protectors etc.

OVERVIEW GEN. 2

Light source	LED
Watts (W)	24 - 51
Lumen output (lm)	3 376 - 7 748
Efficacy (lm/W)	129 - 156
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+ , 90+
Weight (lbs)	8.45

Please refer to the catalogue page for more details

APPLICATIONS

- Food processing facilities
- Commercial kitchens
- Breweries and bottling facilities
- Industrial facilities
- Livestock containment buildings
- Parking garages
- Under awnings
- Car washes
- Exterior retails areas
- Marinas and offshore
- Pedestrian tunnels
- Pools

VN4-L

LINEAR 4FT WASHDOWN SERIES

LINK [1] EMERGENCY LIGHTING LUMINAIRE remote normally ON

5 yrs warranty

LED fixture

wet location

IP 66

IP 67

ICES 005

C US

NSF

DLC LISTED PREMIUM

[1] 5 year warranty for the LINK module.

DESCRIPTION

SPECIFICATION GRADE
MULTI-PURPOSE LUMINAIRE

The VN series is a sealed 4ft linear luminarie for use in for both indoor and outdoor applications. Ideal for highly demanding and challenging applications. A high temperature, thick polyurethane poured in place gasket makes this luminaire appropriate for those applications that may require: washability/hose down and complete containment of the LEDs.

OVERVIEW GEN. 2

Light source	LED
Watts (W)	27 - 93
Lumen output (lm)	3 652 - 13 090
Efficacy (lm/W)	127 - 145
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+, 90+
Weight (lbs)	13

APPLICATIONS

- Food processing facilities
- Commercial kitchens
- Breweries and bottling facilities
- Industrial facilities
- Livestock containment buildings
- Parking garages
- Under awnings
- Car washes
- Exterior retails areas
- Marinas and offshore
- Pedestrian tunnels

VN8-L

LINEAR 8FT WASHDOWN SERIES

LINK [1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON*

5 *yrs* warranty

LED *fixture*

wet *location*

IP 66

IP 67

ICES *005*

C US

[1] 5 year warranty for the LINK module.

DESCRIPTION

SPECIFICATION GRADE
MULTI-PURPOSE LUMINAIRE

The VN series is a sealed 8ft linear luminarie for use in for both indoor and outdoor applications. Ideal for highly demanding and challenging applications. A high temperature, thick polyurethane poured in place gasket makes this luminaire appropriate for those applications that may require: washability/hose down and complete containment of the LEDs. This luminaire has the ability to withstand reduced temperatures and moderate impact.

OVERVIEW GEN. 2

Light source	LED
Watts (W)	52 - 187
Lumen output (lm)	7 304 - 26 180
Efficacy (lm/W)	130 - 152
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+, 90+
Weight (lbs)	17

Please refer to the catalogue page for more details

APPLICATIONS

- Food processing
- Beverage industry
- Manufacturing and warehousing
- Gymnasiums
- Freezers

FN-L

HIGH BAY 4FT WASHDOWN SERIES

5 yrs warranty | LED fixture | wet location | IP 66 | IP 67 | ICES 005 | C SA US | NSF

DESCRIPTION

SPECIFICATION GRADE FOR FOOD PROCESSING, BEVERAGE AND RIGOROUS APPLICATIONS

The FN series is a sealed high bay luminarie for use in for both indoor and outdoor applications and higher mounting heights. Ideal for highly demanding and challenging applications. A high temperature, thick polyurethane poured in place gasket makes this luminaire appropriate for those applications that may require: washability/hose down, complete containment of the LEDs. This luminaire has the ability to withstand reduced temperatures and moderate impact.

OVERVIEW GEN. 2

LINK [1] EMERGENCY LIGHTING LUMINAIRE *remote normally ON* | DLC LISTED PREMIUM

Light source	LED
Watts (W)	77 - 205
Lumen output (lm)	12 620 - 31 470
Efficacy (lm/W)	143 - 176
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+, 90+
Weight (lbs)	26

Please refer to the catalogue page for more details

VX4-L GEN. 2

EXPLOSION PROOF 4FT HAZARDOUS SERIES

5 yrs warranty
LED fixture
wet location
hazardous location
IP 66
IP 67
ICES 005

DESCRIPTION

SPECIFICATION GRADE HAZARDOUS LUMINAIRE

The VX4-L is a series of vapor and dust tight fixtures specially designed for use in hazardous environments where flammable vapors or gases are present.

OVERVIEW

CLASS I, DIVISION II, GROUPS A, B, C & D, T4A AMBIENT 40°C & T5 AMBIENT 25°C. CLASS III, DIVISION I & II, T4A AMBIENT 40°C AND T5 AMBIENT 25°C.

Light source	LED
Watts (W)	27 - 62
Lumens (lm)	3 652 - 8 900
Efficacy (Lm/W)	127 - 145
Color temperature (K)	3 000, 3 500, 4 000, 5 000
CRI	80+, 90+
Weight (lbs)	14.15
Operating temperature	-40 °C to +40 °C
Construction	Fiberglass housing, impact resistant acrylic lens, POM latches and stainless steel mounting hardware
Mounting	Surface, suspended

Please refer to the catalogue page for more details

CHEMICAL RESISTANCE

Selling products suitable to their demanding environments can sometimes be a challenge. Understanding how certain basic materials react when exposed directly or indirectly to certain chemicals can help in making the right choice.

Consult the following chemical resistant list before recommending luminaires that may be exposed to aggressive detergents, disinfectants, or potentially chemically hazardous areas (such as car washes, swimming pools, industrial kitchens, industrial laundries, slaughterhouses, livestock containment facilities, etc.).

Certain chemicals in end-user applications may release contaminants that can diminish the integrity of your luminaire.

Please note you can find an extensive list on our website, under documentation:
stanprols.com/documentation/technical-information

CHEMICAL RESISTANCE OF PLASTICS

ACRYLIC ENVIRONMENTAL COMPATIBILITY

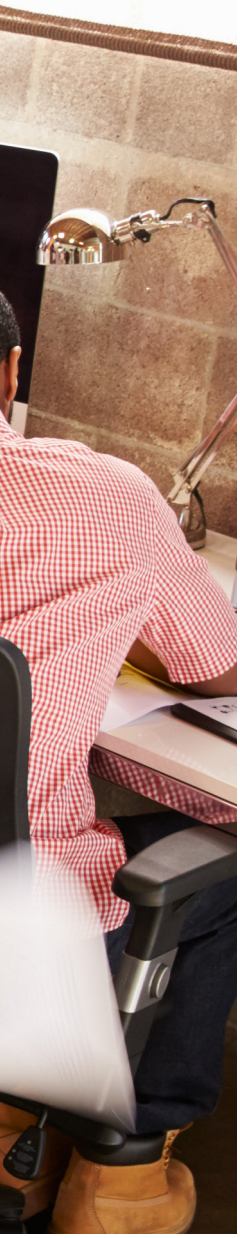
ACCEPTABLE			NOT ACCEPTABLE		
Acetamide	Heptane	Potassium Bicarbonate	Acetaldehyde	Carbon Tetrachloride	Lye: Ca(OH)2 Calcium Hydroxide
Aluminum Chloride	Hexane	Potassium Chloride	Acetic Acid 20%	Carbon Tetrachloride (dry)	Methanol (Methyl Alcohol)
Aluminum Chloride 20%	Hydrochloric Acid 20%	Potassium Hydroxide (Caustic Potash)	Acetic Acid 80%	Carbon Tetrachloride (wet)	Methyl Ethyl Ketone
Aluminum Sulfate	Hydrochloric Acid, Dry Gas	Potassium Nitrate	Acetic Acid, Glacial	Chlorine (dry)	Methyl Isobutyl Ketone
Ammonia 10%	Hydrogen Peroxide 10%	Soap Solutions	Acetic Anhydride	Chlorine Water	Nitric Acid (50%)
Ammonia, liquid	Hydrogen Sulfide (aqua)	Soda Ash (see Sodium Carbonate)	Acetone	Chlorine, Anhydrous Liquid	Nitric Acid (Concentrated)
Ammonium Hydroxide	Iodine	Sodium Bisulfite	Acrylonitrile	Chloroacetic Acid	Nitrobenzene
Ammonium Sulfate	Lactic Acid	Sodium Carbonate	Alcohols:Amyl	Chloroform	Oils:Silicone
Amyl Acetate	Lye: KOH Potassium Hydroxide	Sodium Chlorate	Alcohols:Benzyl	Chlorosulfonic Acid	Perchloroethylene
Arsenic Acid	Lye: NaOH Sodium Hydroxide	Sodium Chloride	Alcohols:Butyl	Chromic Acid 10%	Phenol (10%)
Barium Chloride	Magnesium Chloride	Sodium Hydroxide (50%)	Alcohols:Diacetone	Chromic Acid 30%	Phenol (Carbolic Acid)
Benzoic Acid	Magnesium Sulfate (Epsom Salts)	Sodium Hypochlorite (<20%)	Alcohols:Ethyl	Chromic Acid 50%	Phosphorus Trichloride
Butane	Mercuric Chloride (dilute)	Sodium Sulfate	Alcohols:Hexyl	Cresols	Potassium Permanganate
Calcium Chloride	Mercury	Stearic Acid	Alcohols:Isobutyl	Cyclohexanone	Pyridine
Calcium Hypochlorite	Methane	Sulfuric Acid (<10%)	Alcohols:Isopropyl	Diacetone Alcohol	Sulfur Dioxide
Carbon Dioxide (dry)	Methyl Chloride	Tallow	Alcohols:Methyl	Diethyl Ether	Sulfur Dioxide (dry)
Carbon Dioxide (wet)	Motor oil	Tannic Acid	Alcohols:Octyl	Ethanol	Sulfuric Acid (10-75%)
Carbon Monoxide	Nickel Sulfate	Tartaric Acid	Alcohols:Propyl	Ether	Sulfuric Acid (75-100%)
Citric Acid	Nitric Acid (20%)	Tin Salts	Ammonium Chloride	Ethyl Acetate	Sulfuric Acid (cold concentrated)
Clorox (Bleach)	Nitrous Oxide	Tricresylphosphate	Amyl Alcohol	Ethyl Chloride	Sulfuric Acid (hot concentrated)
Copper Sulfate >5%	Oils:Mineral	Triethylamine	Aniline	Formic Acid	Sulfurous Acid
Copper Sulfate 5%	Oxalic Acid (cold)	Trisodium Phosphate	Aqua Regia (80% HCl, 20% HNO3)	Gasoline (high-aromatic)	Tetrahydrofuran
Cyclohexane	Ozone	Urea	Benzaldehyde	Gasoline, leaded, ref.	Toluene (Toluol)
Diesel Fuel	Paraffin	Urine	Benzene	Gasoline, unleaded	Trichloroacetic Acid
Diethylene Glycol	Perchloric Acid	Vinegar	Benzol	Hydrobromic Acid 20%	Trichloroethane
Ethylene Chloride	Phosphoric Acid (>40%)	Zinc Chloride	Bromine	Hydrochloric Acid 37%	Trichloroethylene
Ethylene Glycol (PURE)	Photographic Developer	Zinc Sulfate	Butanol (Butyl Alcohol)	Hydrofluoric Acid 50%	Turpentine
Ethylene Oxide	Photographic Solutions		Butyric Acid	Hydrogen Peroxide 100%	Xylene
Ferrous Sulfate	Picric Acid		Calcium Hydroxide	Hydrogen Peroxide 30%	
Formaldehyde 40%	Potash (Potassium Carbonate)		Carbolic Acid (Phenol)	Hydrogen Peroxide 50%	
Glycerin			Carbon Disulfide	Kerosene	

CHEMICAL RESISTANCE OF PLASTICS

POLYCARBONATE ENVIRONMENTAL COMPATIBILITY

ACCEPTABLE			NOT ACCEPTABLE		
Acetic Acid	Fluosilicic Acid	Phenol (10%)	Acetaldehyde	Chlorobenzene (Mono)	Lithium Hydroxide
Acetic Acid 20%	Formaldehyde 100%	Phosphoric Acid (>40%)	Acetamide	Chloroform	Lye: Ca(OH)2 Calcium Hydroxide
Acetic Acid 80%	Formaldehyde 40%	Phosphoric Acid (crude)	Acetic Anhydride	Chlorosulfonic Acid	Lye: KOH Potassium Hydroxide
Acetic Acid, Glacial	Formic Acid	Phosphoric Acid (S40%)	Acetone	Chromic Acid 30%	Lye: NaOH Sodium Hydroxide
Alcohols:Amyl	Freon 113	Photographic Developer	Acetyl Chloride (dry)	Chromic Acid 50%	Mercury
Alcohols:Butyl	Freon TF	Photographic Solutions	Acetylene	Copper Cyanide	Methyl Acetate
Alcohols:Ethyl	Fuel Oils	Phthalic Anhydride	Acrylonitrile	Copper Nitrate	Methyl Butyl Ketone
Alcohols:Isobutyl	Glucose	Potassium Bromide	Alcohols:Benzyl	Cresols	Methyl Cellosolve
Alcohols:Isopropyl	Glycerin	Potassium Chlorate	Amines	Cresylic Acid	Methyl Chloride
Alcohols:Methyl	Heptane	Potassium Chloride	Ammonia 10%	Cyclohexanone	Methyl Ethyl Ketone
Aluminum Chloride	Honey	Potassium Dichromate	Ammonia, anhydrous	Diacetone Alcohol	Methyl Isobutyl Ketone
Aluminum Chloride 20%	Hydrobromic Acid 20%	Potassium Nitrate	Ammonia, liquid	Dichlorobenzene	Methyl Isopropyl Ketone
Aluminum Hydroxide	Hydrochloric Acid 20%	Potassium Permanganate	Ammonium Hydroxide	Dichloroethane	Methylene Chloride
Aluminum Nitrate	Hydrocyanic Acid (Gas 10%)	Potassium Sulfate	Amyl Acetate	Diethyl Ether	Mineral Spirits
Aluminum Potassium Sulfate 10%	Hydrogen Gas	Propylene Glycol	Amyl Chloride	Diethylamine	Monochloroacetic acid
Aluminum Potassium Sulfate 100%	Hydrogen Peroxide 10%	Resorcinal	Aniline	Dimethyl Aniline	Morpholine
Aluminum Sulfate	Hydrogen Peroxide 100%	Salicylic Acid	Aniline Hydrochloride	Dimethyl Formamide	Nickel Nitrate
Ammonium Acetate	Hydrogen Peroxide 30%	Salt Brine (NaCl saturated)	Aqua Regia (80% HCl, 20% HNO3)	Ethyl Acetate	Nitric Acid (Concentrated)
Ammonium Chloride	Hydrogen Peroxide 50%	Sea Water	Asphalt	Ethyl Benzoate	Nitrobenzene
Ammonium Oxalate	Hydrogen Sulfide (aqua)	Silicone	Barium Hydroxide	Ethyl Chloride	Nitromethane
Ammonium Phosphate, Dibasic	Iodine	Silver Nitrate	Barium Nitrate	Ethylene Bromide	Oils:Cinnamon
Ammonium Sulfate	Isooctane	Soap Solutions	Barium Sulfate	Ethylene Chloride	Oils:Orange
Amyl Alcohol	Jet Fuel (JP3, JP4, JP5)	Soda Ash (see Sodium Carbonate)	Benzaldehyde	Ethylene Chlorohydrin	Ozone
Antimony Trichloride	Lacquer Thinners	Sodium Acetate	Benzene	Ethylene Dichloride	Perchloric Acid
Arsenic Acid	Lactic Acid	Sodium Benzoate	Benzene Sulfonic Acid	Ethylene Oxide	Perchloroethylene
Barium Carbonate	Lard	Sodium Bicarbonate	Benzol	Ferrous Chloride	Petroleum
Barium Chloride	Lead Acetate	Sodium Bisulfate	Bromine	Fluorine	Phenol (Carbolic Acid)
Beer	Lead Sulfamate	Sodium Bisulfite	Butadiene	Furfural	Phosphoric Acid Anhydride
Benzoic Acid	Lithium Chloride	Sodium Borate (Borax)	Butane	Gasoline (high-aromatic)	Phosphorus Trichloride
Benzonitrile	Lubricants	Sodium Carbonate	Butyl Amine	Gasoline, leaded, ref.	Picric Acid
Boric Acid	Magnesium Bisulfate	Sodium Chlorate	Butyl Phthalate	Gasoline, unleaded	Potassium Hydroxide (Caustic Potash)
Butanol (Butyl Alcohol)	Magnesium Carbonate	Sodium Chloride	Butylacetate	Hexane	Propane (liquefied)
Buttermilk	Magnesium Chloride	Sodium Chromate	Butylene	Hydrazine	Pyridine
Calcium Chloride	Magnesium Hydroxide	Sodium Hydroxide (20%)	Butyric Acid	Hydrochloric Acid 100%	Sodium Hydroxide (80%)
Calcium Nitrate	Magnesium Nitrate	Sodium Hydroxide (50%)	Calcium Bisulfate	Hydrochloric Acid 37%	Sodium Sulfide
Calcium Sulfate	Magnesium Sulfate (Epsom Salts)	Sodium Hypochlorite (<20%)	Calcium Bisulfite	Hydrofluoric Acid 100%	Sodium Thiosulfate (hypo)
Carbonic Acid	Manganese Sulfate	Sodium Peroxide	Calcium Carbonate	Hydrofluoric Acid 20%	Styrene
Chlorine (dry)	Mercuric Chloride (dilute)	Sodium Sulfate	Calcium Hydroxide	Hydrofluoric Acid 50%	Sulfuric Acid (hot concentrated)

ACCEPTABLE			NOT ACCEPTABLE		
Chlorine Water	Mercurous Nitrate	Stannic Chloride	Calcium Hypochlorite	Hydrofluoric Acid 75%	Tannic Acid
Chocolate Syrup	Methanol (Methyl Alcohol)	Stearic Acid	Carbolic Acid (Phenol)	Isopropyl Acetate	Tetrachloroethylene
Chromic Acid 10%	Methyl Alcohol 10%	Stoddard Solvent	Carbon Disulfide	Isopropyl Ether	Tetrahydrofuran
Chromic Acid 5%	Milk	Sulfur Dioxide	Carbon Tetrachloride	Kerosene	Toluene (Toluol)
Cider	Motor oil	Sulfur Dioxide (dry)	Chlorine, Anhydrous Liquid	Ketones	Trichloroacetic Acid
Citric Acid	Mustard	Sulfuric Acid (<10%)	Chloroacetic Acid	Lacquers	Trichloroethane
Copper Sulfate >5%	Naphtha	Sulfuric Acid (10-75%)			Turpentine
Copper Sulfate 5%	Nickel Chloride	Sulfuric Acid (75-100%)			Xylene
Cupric Acid	Nickel Sulfate	Sulfuric Acid (cold concentrated)			
Cyclohexane	Nitrating Acid (<15% HNO3)	Tartaric Acid			
Detergents	Nitric Acid (20%)	Tomato Juice			
Diesel Fuel	Nitric Acid (50%)	Trichloroethylene			
Diethylene Glycol	Nitric Acid (5-10%)	Trisodium Phosphate			
Epsom Salts (Magnesium Sulfate)	Oils:Citric	Urea			
Ethanol	Oils:Fuel (1, 2, 3, 5A, 5B, 6)	Vinegar			
Ethylene Diamine	Oils:Mineral	Water, Acid, Mine			
Ethylene Glycol (PURE)	Oils:Olive	Water, Distilled			
Fatty Acids	Oils:Pine	Water, Fresh			
Ferric Chloride	Oils:Silicone	Water, Salt			
Ferric Nitrate	Oxalic Acid (cold)	Whiskey & Wines			
Ferric Sulfate	Paraffin	Zinc Chloride			
Ferrous Sulfate	Pentane	Zinc Sulfate			



MOTION DETECTION

SHOULD YOU ADD OCCUPANCY SENSORS TO YOUR VAPOR TIGHT LUMINAIRE?

According to the U.S. Environmental Protection Agency, energy savings from using occupancy sensor technology can range from 40% to 46% in classrooms, 13% to 50% in private offices, 30% to 90% in restrooms, 22% to 65% in conference rooms, 30% to 80% in corridors, and 45% to 80% in storage areas.

Further benefits to occupancy sensing:

- Security (by indicating that an area is occupied, rendering it less attractive to intruders and break-ins)
- Minimizing light pollution (reducing usage when building is unoccupied at night: either outdoor parking lighting or lighting emitted through windows/skylights)

Stanpro's focus is on developing solutions for all applications.
Speak to your Stanpro representative about your particular requirements!

WHAT TYPE OF OCCUPANCY SENSORS IS RIGHT FOR YOUR APPLICATION?

Understanding the different technologies that exist and their capabilities along with their limitations can help you chose what's best suited for you your application.

PIR (PASSIVE INFRARED) sensors sense the difference in heat emitted by humans in motion when entering a space. These sensors detect motion within a field of view that requires a line of sight; they cannot see through or around obstacles and have limited sensitivity to minor movement at distances greater than 15 feet.

This technology is most suitable for smaller, enclosed spaces (wall switch sensors are ideal), spaces where the sensor has a view of the activity (ceiling and wall-mounted sensors for better LOS), and warehouse aisles.

Incompatible application characteristics include low motion levels by occupants, obstacles blocking the sensor's view, mounting on sources of vibration, or mounting in proximity to HVAC (heating, ventilation and AC) systems.

ULTRASONIC SENSORS use the Doppler Effect (or Doppler Shift) to detect occupancy through emitting an ultrasonic high-frequency signal (40-80 KHz inaudible to humans) throughout a space, receives the reflected signal of the object in motion within the space and triggers the lights on. These sensors do not require a direct line of sight and instead can "see" around corners and some objects. In addition, ceiling-mounted sensor effective range declines proportionally to partition height. They are more effective for low motion activity, with high sensitivity to minor (hand) movement, typically up to 25 feet. Ultrasonic sensors typically have a larger coverage area than PIR sensors.

Ultrasonic sensors are most suitable for open spaces, spaces with obstacles, restrooms, and spaces with hard surfaces.

Incompatible application characteristics include high ceilings (greater than 14 feet), high levels of vibration or air flow from HVAC (which can false trigger), and open spaces that require selective coverage (such as control of individual warehouse aisles).

HIGH FREQUENCY motion detector emits pulses of specific microwave frequencies (~5 GHz), then measures reflection off objects (like walls) when those waves return to the sensor. In this manner the whole area of detection is filled, and the reflections change when there is a moving object (like a person) in the area.

It works very much like the radar guns used by police to catch speeding drivers in the act – these detectors 'sense' motion in terms of speed and size, as opposed to a PIR sensor which senses in terms of heat and light.

The reflection mechanism means that the line-of-sight problems of PIR sensors is reduced, and the microwaves emitted can penetrate most building materials. This means that microwave sensors can be embedded within the housing of the luminaire rendering it not only more aesthetically pleasing but also protects the sensor for dust and moisture.

However, although these sensors detect motion through wood and most building materials, microwaves do not penetrate metals. Metal objects act as a shield, which creates shadows or "dead zones" behind them.

OCCUPANCY SENSORS

ON-OFF SENSORS

Detection - On at *(Detection Area)* % during *(Hold Time)* min. Off

Part number	Position	Volts (V)	Technology	Height (ft)	Detection Area (%)	Hold time (min)	Daylight min level (lux)	Remote[1]	Location[2] (°C)
OSE-PO-0301	External	120-347	PIR	20-40	100	20	NA		Dry, -10 to +40
OSE-PO-0302	External	120-347	PIR	20-40	100	20	NA		Dry, -40 to +40
OSE-PO-0501	External	120-347	PIR	15-40	100	15	3 000	OSI-FSIR-100	Dry, 0 to +40
OSE-PO-0502	External	120-347	PIR	15-40	100	15	3 000		Dry, 0 to +40
OSE-PO-0701	External	120-277	PIR	20	100	15	NA		Wet, -40 to +40
OSI-FO-0301	Internal	120-277	High Frequency	32 max	100	20	Disable		Dry and wet, -25 to +40
OSI-FO-0601	Internal	120-347	High Frequency	25 max	100	30	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FO-0602	Internal	120-347	High Frequency	25 max	100	15	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FO-0603	Internal	120-347	High Frequency	25 max	100	15	100	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FO-1501	Internal	120-347 (12 V)	High Frequency	13	100	10	Disable		Dry and Wet, -20 to +40
OSI-FO-1601	Internal	120-277	High Frequency	20	100	10	Disable	OSI-RC100	Dry and Wet, -40 to +40

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BI-LEVEL SENSORS

Detection - On at *(Detection Area)* % during *(Hold Time)* min., then *(Stand-by Dim level)* %

Part number	Position	Volts (V)	Technology	Height (ft)	Detection Area (%)	Hold time (min)	Stand-by Dim level (%)	Daylight min level (lux)	Remote[1]	Location[2] (°C)
OSI-FB-0301	Internal	120-277	High Frequency	32 max	100	20	30	Disable		Dry and wet, -25 to +40
OSI-FB-0302	Internal	120-277	High Frequency	32 max	100	20	10	Disable		Dry and wet, -25 to +40
OSI-FB-0303	Internal	120-277	High Frequency	32 max	100	20	50	Disable		Dry and wet, -25 to +40
OSE-FB-0402	External	120-347	High Frequency	50 max	100	20	30	50	OSI-RC-MH10	Wet, -35 to +40
OSI-FB-0603	Internal	120-347	High Frequency	25 max	100	15	40	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FB-0604	Internal	120-347	High Frequency	25 max	100	30	40	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FB-0605	Internal	120-347	High Frequency	25 max	100	15	30	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FB-0606	Internal	120-347	High Frequency	25 max	100	15	10	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FB-1501	Internal	120-347	High Frequency	13	100	10	50	Disable		Dry and wet, -20 to +40
OSI-FB-1502	Internal	120-347	High Frequency	13	100	10	30	Disable		Dry and wet, -20 to +40
OSI-FB-1601	Internal	120-277	High Frequency	20	100	10	50	Disable	OSI-RC100	Dry and wet, -40 to +40
OSI-FB-1602	Internal	120-277	High Frequency	20	100	10	30	Disable	OSI-RC100	Dry and wet, -40 to +40

TRI-LEVEL SENSORS

Detection - On at *(Detection Area)* % during *(Hold Time)* min., then *(Stand-by Dim level)* % during *(Stand-by period)* min. Off

Part number	Position	Volts (V)	Technology	Height (ft)	Detection Area (%)	Hold time (min)	Stand-by Dim level (%)	Stand-by period (min)	Daylight min level (lux)	Remote[1]	Location[2] (°C)
OSI-FT-0301	Internal	120-277	High Frequency	32 max	100	20	30	10	Disable		Dry and wet, -25 to +40
OSE-FT-0402	External	120-347	High Frequency	50 max	100	30	30	10	50	OSI-RC-MH10	Wet, -35 to +40
OSI-FT-0601	Internal	120-347	High Frequency	25 max	100	30	30	10	Disable	OSI-RC-MH02	Dry and wet, -35 to +40
OSI-FT-1501	Internal	120-347	High Frequency	13	100	10	30	20	Disable		Dry and wet, -20 to +40
OSI-FT-1502	Internal	120-347	High Frequency	13	100	10	30	20	50		Dry and wet, -20 to +40
OSI-FT-1601	Internal	120-277	High Frequency	20	100	10	30	30	Disable	OSI-RC100	Dry and wet, -40 to +40
OSI-FT-1602	Internal	120-277	High Frequency	20	100	10	30	30	50	OSI-RC100	Dry and wet, -40 to +40

[1] To be ordered separately.

[2] Min and max ambient temperature of the fixture with the specific sensor. Please verify fixture temperature on the first page for compatibility with sensor.

For more settings visit
www.standardpro.com/documentation/technical-information/

NOTES

PRINTED IN CANADA.

DATA IS BASED UPON TESTS PERFORMED IN A CONTROLLED ENVIRONMENT.
ACTUAL PERFORMANCE CAN VARY DEPENDING ON OPERATING CONDITIONS.
ALL PRODUCTS ARE SUBJECT TO CHANGE OR MAY BE DISCONTINUED ANY TIME
WITHOUT NOTICE.

FOR THE LATEST VERSION, PLEASE REFER TO OUR WEBSITE.
WWW.STANDARDPRO.COM

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