

Specifications

Certifications:

NEC standards:

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups F, G – *pending CEC (CSA/cUL) for glass lens only*
- Class I, Zone 2
- Class III
- NEMA 4X; IP66
- Marine and Wet Locations

UL standards:

- UL844 Electrical Fixture Hangers for Hazardous Locations
- UL1598 Luminaire
- UL1598A Luminaire for Installation on Marine Vessels
- UL924 for Emergency Lighting

CSA standard:

- C22.2 No. 137

Additional certifications:

- ABS design assessed

Materials:

Housing:

- Copper-free aluminum
- Optional Corro-free™ epoxy powder coat

Lens:

- Glass or polycarbonate
- Diffused glass or polycarbonate

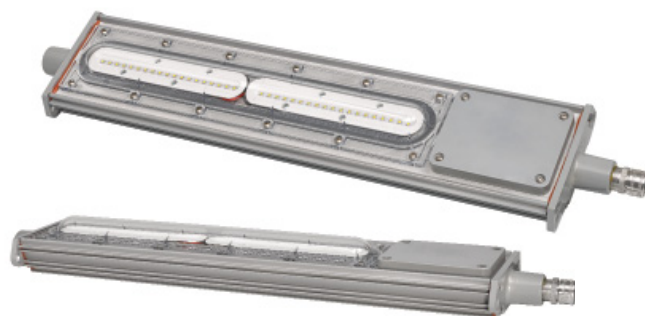
Mounting:

Versatile mounting options:

- Flush back mount
- Swivel/ceiling back mount
- Offset ceiling mount
- Offset wall mount
- Pole mount
- Pendant mount

Easily retrofit to:

- Existing Pauluhn™ DuraPro and MagnaPro fluorescent light fixtures
- Rig-A-Lite™ and Snelson® C1D2 fluorescent lighting fixtures



Electrical ratings:

	MLL2	MLL4
Lumen output	3,600	7,100
Frequency	50/60 Hz	50/60 Hz
Voltage	100-277 VAC/108-250 VDC; 347-480 VAC	

Model	Voltage	Current (A)	Wattage (W)	Power factor	THD
MLL2/UNV1	100	0.28	28.2	0.90	<20%
MLL2/UNV1	277	0.12	29.4	0.90	<20%
MLL2/UNV34	347	0.09	29.2	0.90	<20%
MLL2/UNV34	480	0.07	30.1	0.90	<20%
MLL4/UNV1	100	0.55	55.0	0.95	<20%
MLL4/UNV1	277	0.20	54.5	0.95	<20%
MLL4/UNV34	347	0.16	55.8	0.95	<20%
MLL4/UNV34	480	0.12	56.2	0.95	<20%

Temperature codes:

Ambient temperature	Min. temp. wire supply	Class I, Div. 2	Class II, Div. 1	Simultaneous rating Class I, Div. 2, Class II, Div. 1
40°C	60°C	T6	T6	T6
55°C	75°C	T5	T5	T5
65°C	90°C	T5	T5	T5

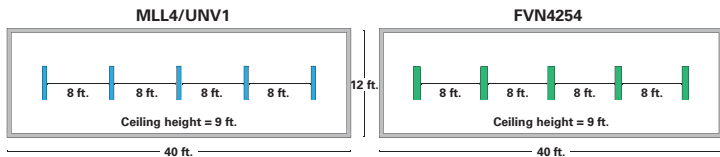
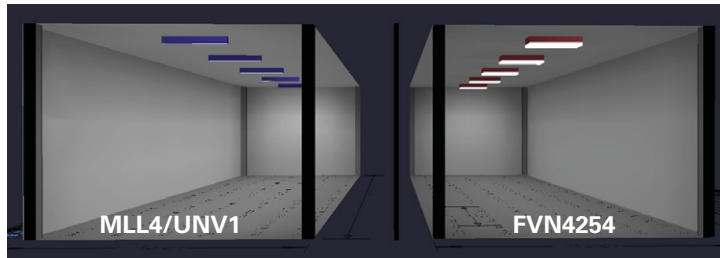
Weights:

Luminaire	lbs.	kg.
MLL2	12.5	5.7
MLL4	22.5	10.2



Photometrics: control room/pump shed

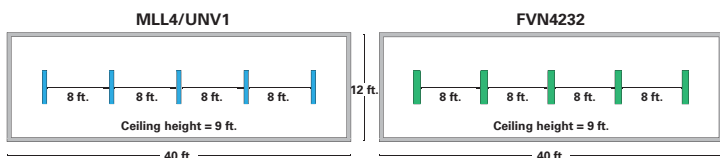
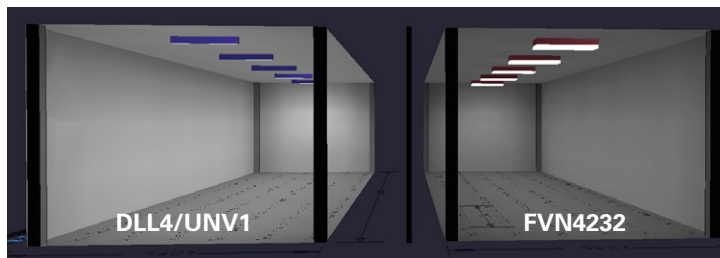
4 foot MLL LED with 120° optics vs. 4 foot 2 lamp T5HO FVN



Illuminance (Fc)	MLL4/UNV1	FVN4254
Average	44.87	33.78
Maximum	55.40	42.50
Minimum	25.20	18.90
Average/minimum	1.78	1.79
Maximum/minimum	2.20	2.25

Higher average illumination than 2 lamp T5HO FVN and up to 50% energy savings

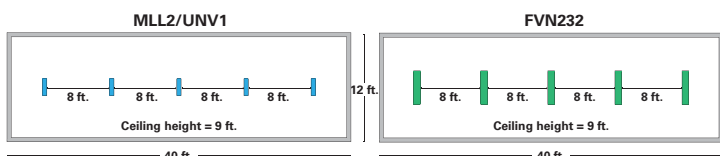
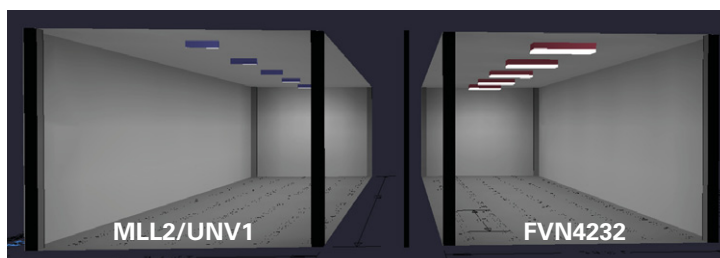
4 foot MLL LED with 120° optics vs. 4 foot 2 lamp T8 FVN



Illuminance (Fc)	MLL4/UNV1	FVN4232
Average	44.89	22.46
Maximum	55.50	28.30
Minimum	25.20	12.40
Average/minimum	1.78	1.81
Maximum/minimum	2.20	2.28

Twice the average illumination of 2 lamp T8 FVN

2 foot MLL LED with 120° optics vs. 4 foot 2 lamp T8 FVN



Illuminance (Fc)	MLL2/UNV1	FVN4232
Average	22.57	22.04
Maximum	27.90	27.70
Minimum	12.70	12.00
Average/minimum	1.78	1.84
Maximum/minimum	2.20	2.31

Equivalent illumination to a 2 lamp T8 FVN and up to 50% energy savings

Ordering information

Part number example

MLL4N/UNV1 S903 TF P EM

MLL series linear LED, cool white, 4 foot, ½" hubs, 80° narrow light pattern, 100-277 VAC driver, polycarbonate lens, through feed hubs, painted, battery back-up

Series	Optics	Lens	Emergency backup
MLL	BLANK Wide (120°)	BLANK Glass	EM* Emergency battery back-up kit
4	N Narrow (80°)	S891 Diffused glass	* One year warranty
N		S903 Polycarbonate	
/UNV1		S903D Diffused polycarbonate	
S903			
TF			
P			
EM			
Length/lumens	Voltage	Finish	Options
4 4 foot length, 7,100 lumens	/UNV1 100-277 VAC; 108-250 VDC	BLANK Natural aluminum	TF Pull wire included in fixture
2 2 foot length, 3,600 lumens	/UNV34 347-480 VAC	P Painted (gray, epoxy)	
		WH Painted (white, epoxy)	

Accessories (ordered separately)

DP1057MTK	Flush/back mount back plate (compatible with DuraPro)
DP1050MTK	Ceiling/swivel mount (compatible with DuraPro)
DP1053MTK	Ceiling/wall mount offset (compatible with DuraPro)
DP1054MTK KIT	Ceiling mount bracket and adapter kit (compatible with MagnaPro)
DP1052MTK	Offset wall mount (compatible with DuraPro)
PM KIT 1.25	Pole mount kit, 1.25" conduit
PM KIT 1.5	Pole mount kit, 1.50" conduit
PM KIT 2.0	Pole mount kit, 2.00" conduit

Accessories (ordered separately)

PEND HAZ KIT	Pendant mount kit
SS KIT	Safety chain kit
VMVL/UNV1 80W 1A KIT	1 amp driver replacement kit 100-277 VAC for 4 ft. linear
VMVL/UNV34 80W 1A KIT	1 amp driver replacement kit 347-480 VAC for 4 ft. linear
VMVL/UNV1 80W 0.5A KIT	0.5 amp driver replacement kit 100-277 VAC for 2 ft. linear
VMVL/UNV34 80W 0.5A KIT	0.5 amp driver replacement kit 347-480 VAC for 2 ft. linear

Dimensions & mounting options:

