

ATX™ FELED Series Nonmetallic LED Luminaires

Standard and Emergency Battery Back-Up, Increased Safety

ATEX/IECEx:
Zone 1 and 2 - 21 and 22
Ⓢ II 2 GD
IP66 – IK10



THORNE &
DERRICK
INTERNATIONAL

Thorne & Derrick
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LED/AREA: NEC/CEC EXPLOSIONPROOF/ATEX/IECEx FLAMEPROOF/INCREASED SAFETY

Applications

- For use in locations where:
 - Hazardous areas are designated as Zone 1 and 2 – 21 and 22
 - A high degree of corrosion resistance is required
 - Protection against dirt, water and moisture is necessary
- Typical applications include:
 - Oil refineries
 - Petrochemical facilities
 - Food processing plants
 - Waste and water treatment plants
 - Underground tunnels
 - General manufacturing facilities

Features

- Available in 5000K or 4000K Color Temperatures.
- Meets photobiological requirement for Risk Group 0 (RG0).
- Easy to retrofit in same mounting footprint as Appleton's FE series nonmetallic fluorescent luminaires.
- Full range of lumen outputs, with light distribution equivalent to Appleton's FE series fluorescent luminaires.
- Corrosion-resistant fiberglass reinforced polyester body and hinged polycarbonate lens.
- High impact resistance housing (20 Joules – IK10) from -30 °C to +55 °C (-22 °F to +131 °F) ambient temperature and wind profile for use in extreme offshore and onshore environments.
- 60,000+ hour LED life for years of maintenance free operation.
- Lightweight design, hinged cover with captive screws, and terminal block wiring for easy installation and maintenance.
- Contemporary, low profile design suitable for tight spaces.
- Standard screw-type terminal block can accept 4 to 6 mm² wire.
- Field replaceable LED driver.
- Industry-leading thermal management for safe, reliable operation over wide temperature range.
- Universal, high efficiency, drivers cover voltage requirements for 100-240 Vac, 50/60 Hz +/- 10%.
- High power factor electronic ballast (>0.95).
- Standard 2KV surge suppression.
- M20 plug or M25 plug provided.
- Latch assembly and elastomer gasket seals against water and dust ingress, IP66.
- Easily accessed for maintenance using Allen key or straight blade screwdriver.
- Central opening with unique patented release system to prevent damage.
- Can be horizontally or vertically mounted.
- Positive safety switch disconnects power to LED's and driver to allow maintenance in hazardous locations.
- Available in 3 hour emergency version, including built-in monthly self- test. Test results through multi-colored LED.
- Ex e battery with plug-in connector.

Options

- 3 Hours Emergency/Battery Back-Up available ①;
 - Add suffix -E to the end of the catalog number.
 - Example: FELED5CBDSADE



Standard Materials

- Housing: fiberglass reinforced polyester
- Lens: polycarbonate
- Gasket: elastomer
- Internal reflector: highly reflective white powder coated aluminum
- Mounting accessories available in different materials such as gray painted aluminum, zinc plated steel, galvanized steel or 316 stainless steel

ATEX/IECEx Certifications and Compliances

- Certification Type: FELED
 - Gas: Zones 1 and 2
 - Conforming to ATEX 2014/34/EU: Ⓢ II 2 G
 - Type of Protection: Ex db eb mb IIC Gb
 - Temperature Class: T6 to T5
 - Dust: Zones 21 and 22
 - Conforming to ATEX 2014/34/EU: Ⓢ II 2 D
 - Type of Protection: Ex tb IIIC Db
 - Surface Temperature: +63 °C to +85 °C (+145 °F to +185 °F)
- Ambient Temperature: -30 °C up to +55 °C (-22 °F up to 122 °F/ +131 °F) (standard) and -20°C up to +50 °C (-4 °F up to 122 °F) (emergency)
- EU Declaration of Conformity: 50317
- ATEX Certificate: LCIE 16 ATEX 3048X
- IECEx Certificate: IECEx LCIE 16.0038X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10
- Photobiological Safety, IEC 62778 and IEC 62471: RG0

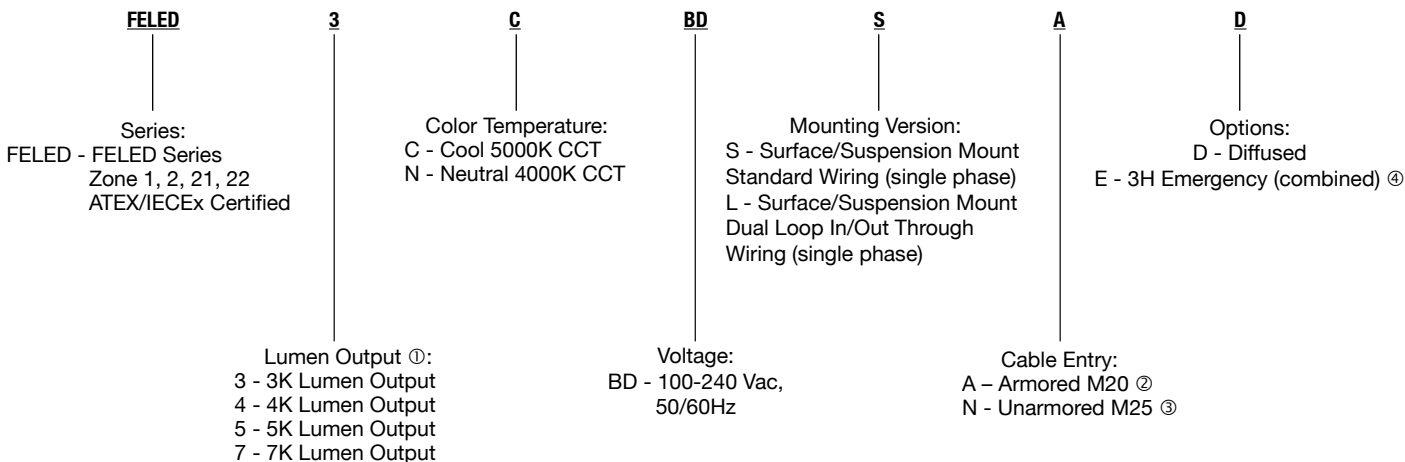
① Available for 5K lumen models only.

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Order using catalog numbering guide below or select catalog number from tables on following pages.



① All values displayed reflect typical values.
② Must order armored cable glands separately.
③ Cable glands provided in luminaires with unarmored hub entries.
④ Available for 5K lumen models only.

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Line Current Amps (50/60 Hz)	Input Power	Power Factor	Lumen Output (Lumens)	Efficacy	CRI	Color Temp (CCT)	Length in m (ft)	Weight in kg (lbs)	Catalog Number
0.28A @ 100V	27W	>0.95	2850	105 lm/w	>70	5000K	0.8 (2.6)	6.0 (13.2)	FELED3CBDSAD
0.13A @ 240V									FELED3CBDSND
0.28A @ 100V			FELED3CBDLAD						
0.13A @ 240V			FELED3CBDLND						
0.28A @ 100V	32W	>0.95	2500	95 lm/w	>80	4000K	0.8 (2.6)	6.0 (13.2)	FELED3NBDSAD
0.13A @ 240V									FELED3NBDSND
0.28A @ 100V			FELED3NBDLAD						
0.13A @ 240V			FELED3NBDLND						
0.32A @ 100V	32W	>0.95	3600	114 lm/w	>70	5000K	0.8 (2.6)	6.0 (13.2)	FELED4CBDSAD
0.15A @ 240V									FELED4CBDSND
0.32A @ 100V			FELED4CBDLAD						
0.15A @ 240V			FELED4CBDLND						
0.32A @ 100V	38W	>0.95	3200	101 lm/w	>80	4000K	0.8 (2.6)	6.0 (13.2)	FELED4NBDSAD
0.15A @ 240V									FELED4NBDSND
0.32A @ 100V			FELED4NBDLAD						
0.15A @ 240V			FELED4NBDLND						
0.39A @ 100V	38W	>0.95	4650	122 lm/w	>70	5000K	1.4 (4.6)	9.0 (19.8)	FELED5CBDSAD
0.16A @ 240V									FELED5CBDSND
0.39A @ 100V			FELED5CBDLAD						
0.16A @ 240V			FELED5CBDLND						
0.39A @ 100V	63W	>0.95	4150	110 lm/w	>80	4000K	1.4 (4.6)	9.0 (19.8)	FELED5NBDSAD
0.16A @ 240V									FELED5NBDSND
0.39A @ 100V			FELED5NBDLAD						
0.16A @ 240V			FELED5NBDLND						
0.63A @ 100V	63W	>0.95	7050	111 lm/w	>70	5000K	1.4 (4.6)	11.0 (24.3)	FELED7CBDSAD
0.30A @ 240V									FELED7CBDSND
0.63A @ 100V			FELED7CBDLAD						
0.30A @ 240V			FELED7CBDLND						
0.63A @ 100V	63W	>0.95	6550	103 lm/w	>80	4000K	1.4 (4.6)	11.0 (24.3)	FELED7NBDSAD
0.30A @ 240V									FELED7NBDSND
0.63A @ 100V			FELED7NBDLAD						
0.30A @ 240V			FELED7NBDLND						

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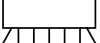
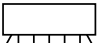
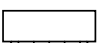
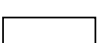
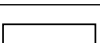
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Technical Data

Model Type	Position Horizontal/ Vertical	Gas			Dust		
		T Rating			Surface T°		
		Ta= +40 °C (+104 °F)	Ta= +50 °C (+122 °F)	Ta= +55 °C (+131 °F)	Ta= +40 °C (+104 °F)	Ta= +50 °C (+122 °F)	Ta= +55 °C (+131 °F)
FELED3 Standard		T6	T6	T5	70 °C (158 °F)	80 °C (176 °F)	85 °C (185 °F)
							
FELED4 Standard		T6	T6	T6	64 °C (147 °F)	74 °C (165 °F)	79 °C (174 °F)
							
FELED5 Standard		T6	T6	T6	63 °C (145 °F)	73 °C (163 °F)	78 °C (172 °F)
							
FELED5 Emergency		T6	T6	—	63 °C (145 °F)	73 °C (163 °F)	—
							
FELED7 Standard		T6	T6	T6	65 °C (149 °F)	75 °C (167 °F)	80 °C (176 °F)
							

“T” Numbers Represent the Maximum Temperature

“T” #	T1	T2	T3	T4	T5	T6
Temp. Range °C (°F)	301-450 (547-842)	201-300 (394-572)	136-200 (277-392)	101-135 (214-275)	86-100 (187-212)	85 (185)

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Conduit/Cable Entries ①	Voltage	Ambient Temperature °C (°F)	T Rating	Catalog Number
Standard 3K Lumens - 0.80 m (2.6ft)				
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 up to +55 (-22 up to +131)	T5 @ 55°C	FELED3CBDSAD
M25 Standard ②				FELED3CBDSND
M20 Dual Loop In/Loop Out ③				FELED3CBDLAD
M25 Dual Loop In/Loop Out ③				FELED3CBDLND
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 up to +55 (-22 up to +131)	T5 @ 55°C	FELED3NBDSAD
M25 Standard ②				FELED3NBDSND
M20 Dual Loop In/Loop Out ③				FELED3NBDLAD
M25 Dual Loop In/Loop Out ③				FELED3NBDLND
Standard 4K Lumens - 0.80 m (2.6ft)				
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 to +55 (-22 to +131)	T6 @ 55°C	FELED4CBDSAD
M25 Standard ②				FELED4CBDSND
M20 Dual Loop In/Loop Out ③				FELED4CBDLAD
M25 Dual Loop In/Loop Out ③				FELED4CBDLND
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 to +55 (-22 to +131)	T6 @ 55°C	FELED4NBDSAD
M25 Standard ②				FELED4NBDSND
M20 Dual Loop In/Loop Out ③				FELED4NBDLAD
M25 Dual Loop In/Loop Out ③				FELED4NBDLND
Standard 5K Lumens - 1.40 m (4.6ft)				
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 up to +55 (-22 up to +131)	T6 @ 55°C	FELED5CBDSAD
M25 Standard ②				FELED5CBDSND
M20 Dual Loop In/Loop Out ③				FELED5CBDLAD
M25 Dual Loop In/Loop Out ③				FELED5CBDLND
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 up to +55 (-22 up to +131)	T6 @ 55°C	FELED5NBDSAD
M25 Standard ②				FELED5NBDSND
M20 Dual Loop In/Loop Out ③				FELED5NBDLAD
M25 Dual Loop In/Loop Out ③				FELED5NBDLND
Standard 7K Lumens - 1.40 m (4.6ft)				
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 to +55 (-22 to +131)	T6 @ 55°C	FELED7CBDSAD
M25 Standard ②				FELED7CBDSND
M20 Dual Loop In/Loop Out ③				FELED7CBDLAD
M25 Dual Loop In/Loop Out ③				FELED7CBDLND
M20 Standard ②	100/240 Vac, 50/60 Hz	-30 to +55 (-22 to +131)	T6 @ 55°C	FELED7NBDSAD
M25 Standard ②				FELED7NBDSND
M20 Dual Loop In/Loop Out ③				FELED7NBDLAD
M25 Dual Loop In/Loop Out ③				FELED7NBDLND
Emergency 5K Lumens - 1.40 m (4.6ft)				
M20 Standard ②	100/240 Vac, 50/60 Hz	-20 up to +50 (-4 up to +122)	T6 @ 50°C	FELED5CBDSADE
M25 Standard ②				FELED5CBDSNDE
M20 Dual Loop In/Loop Out ③				FELED5CBDLADE
M25 Dual Loop In/Loop Out ③				FELED5CBDLNDE
M20 Standard ②	100/240 Vac, 50/60 Hz	-20 up to +50 (-4 up to +122)	T6 @ 50°C	FELED5NBDSADE
M25 Standard ②				FELED5NBDSNDE
M20 Dual Loop In/Loop Out ③				FELED5NBDLADE
M25 Dual Loop In/Loop Out ③				FELED5NBDLNDE

- ① M20 entries are with brass earth continuity plate for armored cable. Must order armored cable glands separately. M25 entries are for non-armored cable. Cable glands provided with luminaires with M25 unarmored hub entries.
 ② Standard cable entry provides 3 entries; 1 at one and 2 at the other end of the housing.
 ③ Loop In/Loop Out through cable entry provides 3 entries; 1 at one and 2 at the other end of the housing.

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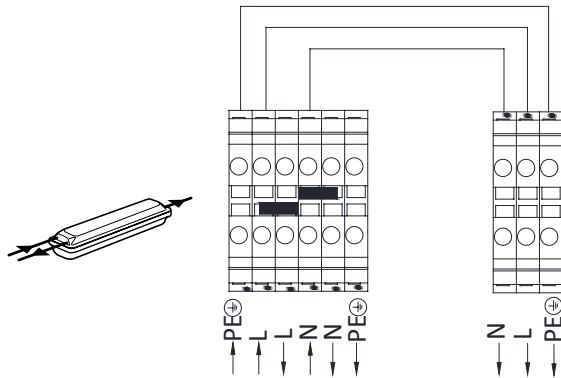
Wiring Diagrams

Standard

Version : L

Dual Loop In/Out - Through Wiring (Single Phase)

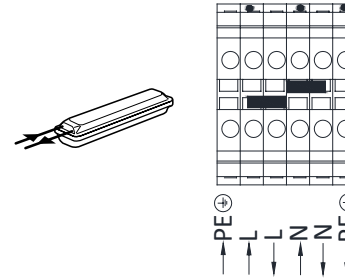
3 entries, 1 at one end and 2 at the other



Version : S

Standard (Single Phase)

3 entries, 1 at one end and 2 at the other

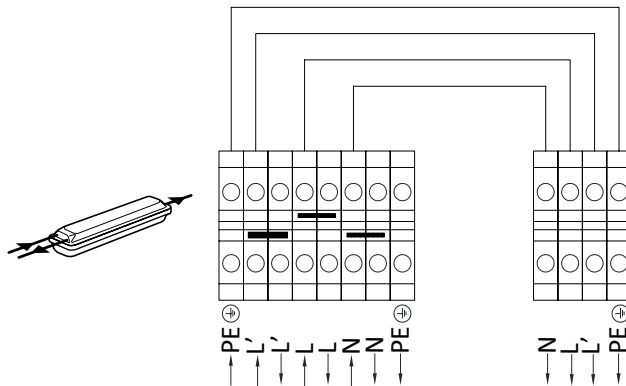


Emergency

Version : L

Dual Loop In/Out - Through Wiring (Single Phase)

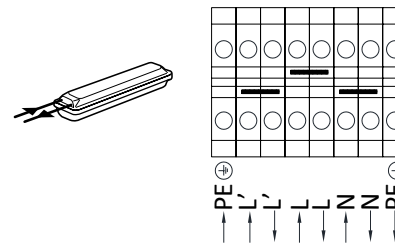
3 entries, 1 at one end and 2 at the other



Version : S

Standard (Single Phase)

3 entries, 1 at one end and 2 at the other

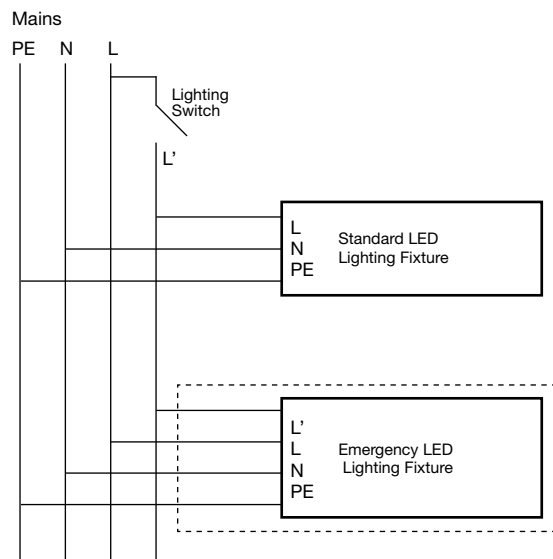


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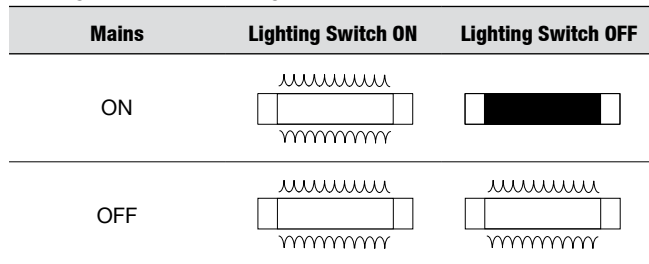
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Wiring Diagram



Emergency Function Diagram



LED Status

Color	Indication	Function
Green	LED Blinking	Mains voltage available – Battery charging
	LED Continuous	Mains voltage available – Battery connected and loaded
Green and Red	LED Blinking Alternately (2s)	Mains voltage available – Battery in repair mode
Red	LED Blinking	Mains voltage available – No battery connected OR defective
	LED Continuous	Mains voltage NOT available – Light unit powered by batteries (emergency mode)
	LED Flashing	Mains voltage NOT available – Battery low (emergency mode completed)
Yellow (Orange) and another color	LED Blinking Alternately	Mains voltage available – Last automatic or manual operational check has been unsuccessful
None (Off)	No Light Emitted	Mains voltage NOT available – Battery completely empty

Self-Test: In 3 month intervals batteries are automatically discharged and recharged once.

Emergency Light Duration

Version	Battery Capacity	Duration	Light Output
5K	7 Ah – 6V	3 hours	25%

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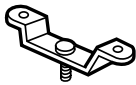
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Accessories and Replacement Parts

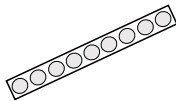
	Description	Catalog Number
Fixing Brackets		
	Set of two brackets for surface installation	
	Zinc plated steel	FEFBZ
Brackets for Surface Mounting		
	Set of two	
	316 stainless steel	FESBS
M8 Ring Bolts		
	Set of two	
	Zinc plated steel	FERBM8Z
Half Clamps Brackets for Pole Mounting		
	Set of two	
	Diameter for 1-1/4 to 1-1/2" pole: 42 mm (1.65 in) to 49 mm (1.93 in)	
	Zinc plated steel	FEHC49Z
	316 stainless steel	FEHC49S
	Diameter for 2" pole: 60 mm (2.36 in)	
	Zinc plated steel	FEHC60Z
	316 stainless steel	FEHC60S
Hinged Brackets		
	Set of two brackets for adjusting luminaire	
	Aluminum	FEHBA
	316 stainless steel	FEHBS
Fall Prevention Kit		
	Safety chain retains fixture temporarily to ease installation	
	For M25 cable entry	FESCM25
	For M20 cable entry	FESCM20

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Accessories and Replacement Parts		
	Description	Catalog Number
Replacement Drivers and Inverter		
	FELED3 - Standard Models Driver (qty: 1)	Z00936
	FELED4 - Standard Models Driver (qty: 1)	Z00937
	FELED5 - Standard and Emergency Models Driver (qty: 1)	Z00928
	FELED5 - Emergency Models Inverter (qty: 1)	Z00930
	FELED7 - Standard Models Driver (qty: 1)	Z00937 ①
Replacement Lens		
	0.79 m (2.6 ft) clear polycarbonate external lens with gasket	Z00650
	1.39 m (4.6 ft) clear polycarbonate external lens with gasket	Z00651
Replacement Diffuser		
	0.79 m (2.6 ft) diffused internal lens for FELED3 and FELED4 Models	FELED2DPL
	1.39 m (4.6 ft) diffused internal lens for FELED5 and FELED7 Models	FELED4DPL
Replacement LED Arrays		
	5000K CCT LED Array FELED3C (qty: 1) - FELED4C (qty: 2) - FELED5C and FELED7C (qty: 2)	Z00941
	4000K CCT LED Array FELED3N (qty: 1) - FELED4N (qty: 2) - FELED5N and FELED7N (qty: 4)	Z00942
Battery Pack		
	Battery Pack 6V 7Ah for FELED5 Emergency version	Z00848

① Utilizes two drivers.

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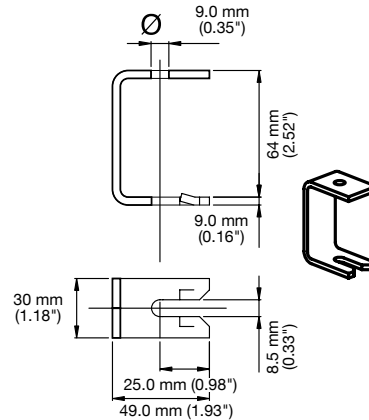
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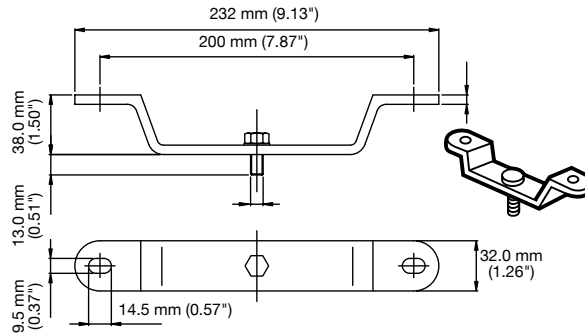
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Mounting Options Dimensions in Millimeters (Inches)

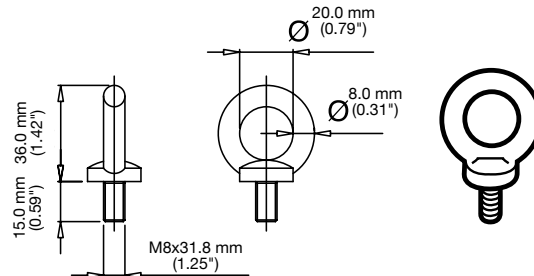
FEFBZ: zinc plated steel — Set of two quick fixing brackets for ease of surface mounting



FESBS: 316 stainless steel — Set of two brackets for surface mounting



FERBM8Z: zinc plated steel — Set of two ring bolts



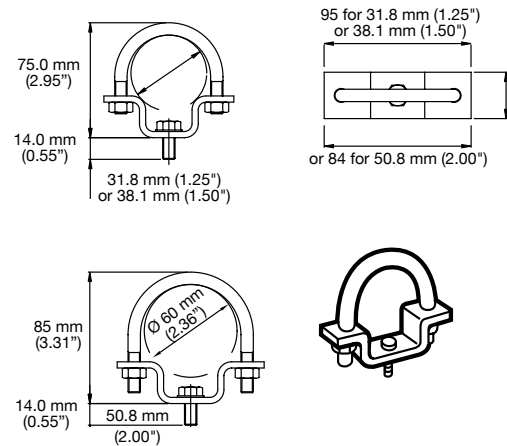
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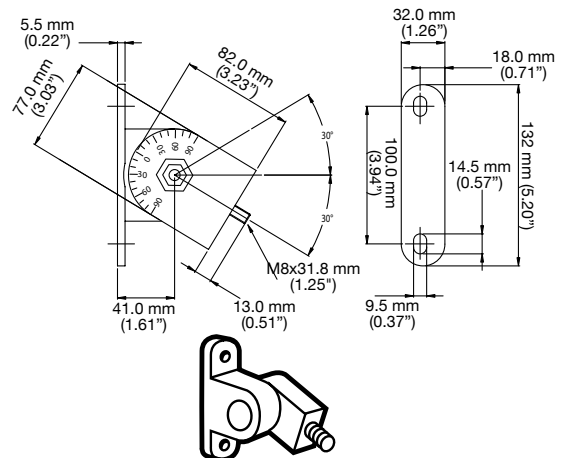
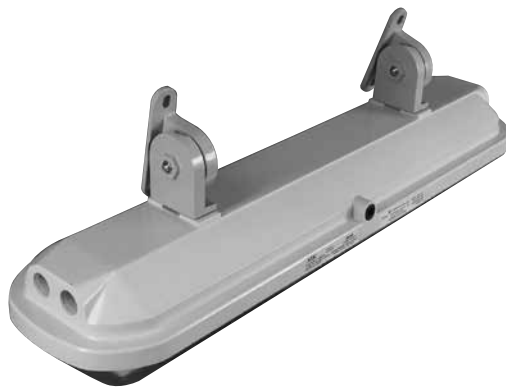
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Mounting Options Dimensions in Millimeters (Inches)

FEHC49Z: zinc plated steel or FEHC49S: 316 stainless steel — Set of two clamps for pole diameter 42 mm to 49 mm (for 1-1/4" to 1-1/2" pole).
FEHC60Z: zinc plated steel or FEHC60S: 316 stainless steel — Set of two clamps for pole diameter 60 mm (for 2" pole).



FEHBA: aluminum or FEHBS: 316 stainless steel — Set of two hinged brackets for adjusting luminaire.



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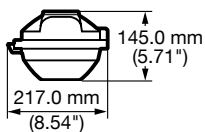
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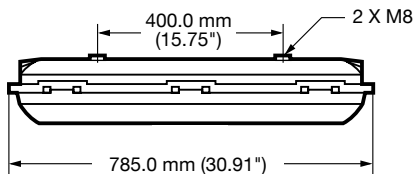
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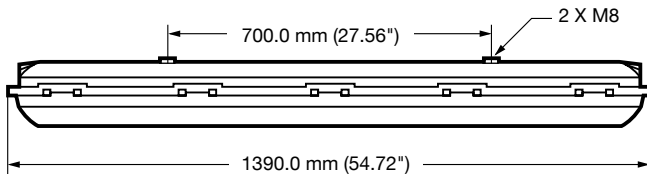
Luminaire Dimensions in Millimeters (Inches)



End View



Side View — 0.785 m (2.58 ft)



Side View — 1.39 m (4.56 ft) Version

LED/AREA: NEC/CEC EXPLOSIONPROOF/ATEX/IECEX FLAMEPROOF/INCREASED SAFETY

Appleton®

ATX™ FELED Series Nonmetallic LED Luminaires

Standard and Emergency Battery Back-Up, Increased Safety

ATEX/IECEX:
Zone 1 and 2 - 21 and 22
II 2 GD
IP66 – IK10

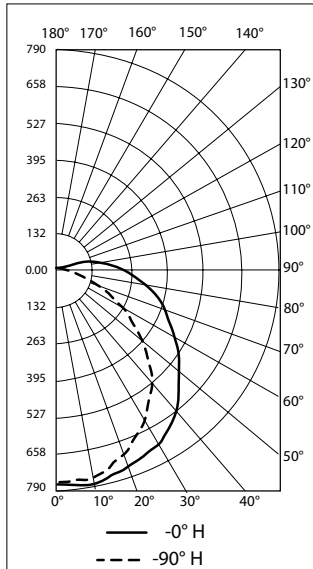
Photometric Data — DATA SHOWN IS ABSOLUTE

3K Lumen Output with Diffuser, 5000K CCT

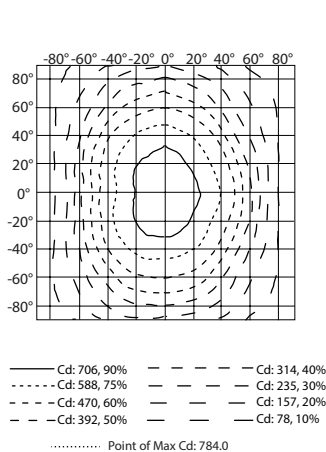
REPORT NUMBER: FELED3CBDXXD

Luminaire Lumens: 2,836

POLAR CANDELA DISTRIBUTION



ISOCANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	618.3	21.8%	21.8%
0-40	1,022.8	36.1%	36.1%
0-60	1,850.6	65.2%	65.3%
60-90	786.1	27.7%	27.8%
70-100	558.0	19.7%	19.7%
90-120	181.6	6.4%	6.4%
0-90	2,636.7	92.9%	93.1%
90-180	195.4	6.9%	6.9%
0-180	2,832.1	99.8%	100%

LUMENS PER ZONE

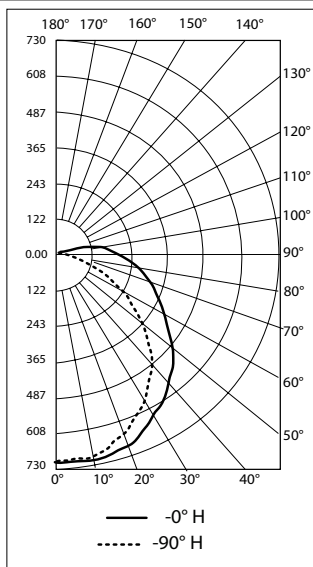
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	74.3	2.6%	90-100	109.8	3.9%
10-20	214.6	7.6%	100-110	51.8	1.8%
20-30	329.4	11.6%	110-120	20.1	0.7%
30-40	404.5	14.3%	120-130	6.6	0.2%
40-50	428.1	15.1%	130-140	2.7	0.1%
50-60	399.7	14.1%	140-150	1.9	0.1%
60-70	337.8	11.9%	150-160	1.4	0%
70-80	263.0	9.3%	160-170	0.9	0%
80-90	185.2	6.5%	170-180	0.3	0%

3K Lumen Output with Diffuser, 4000K CCT

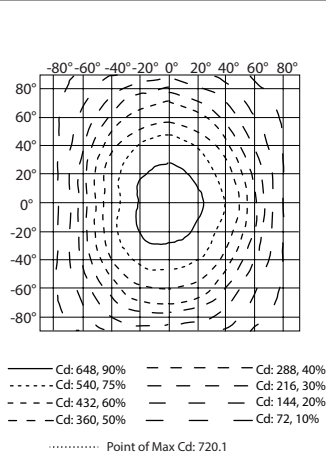
REPORT NUMBER: FELED3NBDXXD

Luminaire Lumens: 2,517

POLAR CANDELA DISTRIBUTION



ISOFOOT CANDLE PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	562.4	22.3%	22.3%
0-40	927.4	36.8%	36.8%
0-60	1,665.5	66.2%	66.1%
60-90	686.9	27.3%	27.3%
70-100	484.2	19.2%	19.2%
90-120	155.1	6.2%	6.2%
0-90	2,352.4	93.4%	93.4%
90-180	167.1	6.6%	6.6%
0-180	2,519.6	100.1%	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	67.9	2.7%	90-100	94.4	3.7%
10-20	195.5	7.8%	100-110	44.2	1.8%
20-30	298.9	11.9%	110-120	16.5	0.7%
30-40	365.0	14.5%	120-130	5.4	0.2%
40-50	383.2	15.2%	130-140	2.4	0.1%
50-60	354.8	14.1%	140-150	1.7	0.1%
60-70	297.1	11.8%	150-160	1.3	0.1%
70-80	229.4	9.1%	160-170	0.9	0%
80-90	160.4	6.4%	170-180	0.3	0%

LED/AREA: NEC/CEC EXPLOSIONPROOF/ATEX/IECEX FLAMEPROOF/INCREASED SAFETY

Appleton

ATX™ FELED Series Nonmetallic LED Luminaires

Standard and Emergency Battery Back-Up, Increased Safety

ATEX/IECEX:
Zone 1 and 2 - 21 and 22
II 2 GD
IP66 - IK10

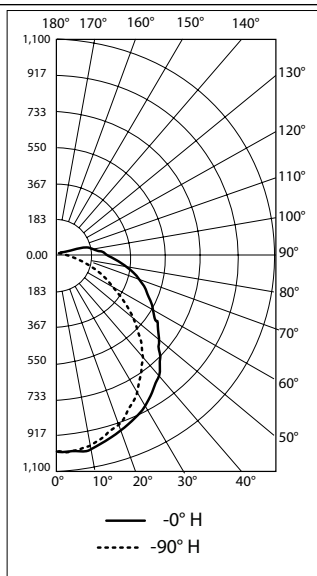
Photometric Data — DATA SHOWN IS ABSOLUTE

4K Lumen Output with Diffuser, 5000K CCT

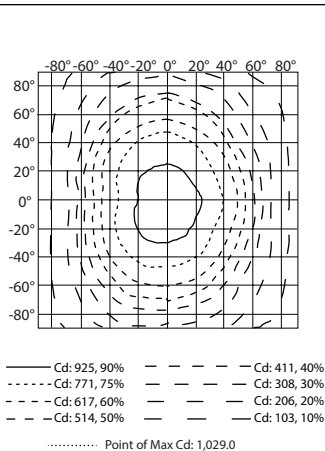
REPORT NUMBER: FELED4CBDXXD

Luminaire Lumens: 3,604

POLAR CANDELA DISTRIBUTION



ISOCANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	799.3	22.2%	22.2%
0-40	1,316.8	36.5%	36.5%
0-60	2,361.2	65.5%	65.5%
60-90	992.0	27.5%	27.5%
70-100	710.6	19.7%	19.7%
90-120	234.3	6.5%	6.5%
0-90	3,353.2	93%	93%
90-180	251.9	7%	7%
0-180	3,605.1	100%	100%

LUMENS PER ZONE

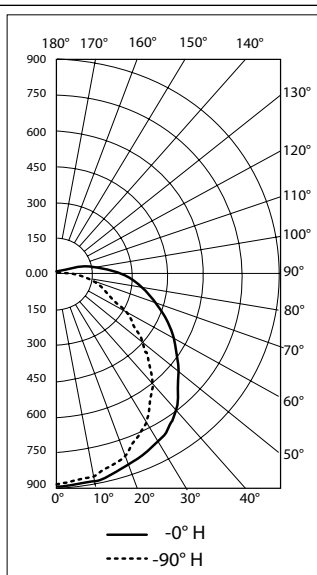
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	96.7	2.7%	90-100	139.9	3.9%
10-20	278.1	7.7%	100-110	67.7	1.9%
20-30	424.6	11.8%	110-120	26.6	0.7%
30-40	517.5	14.4%	120-130	8.9	0.2%
40-50	542.7	15.1%	130-140	3.3	0.1%
50-60	501.7	13.9%	140-150	2.1	0.1%
60-70	421.2	11.7%	150-160	1.8	0.1%
70-80	333.1	9.2%	160-170	1.1	0%
80-90	237.6	6.6%	170-180	0.4	0%

4K Lumen Output with Diffuser, 4000K CCT

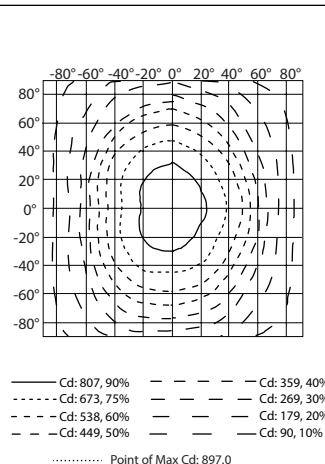
REPORT NUMBER: FELED4NBDDXXD

Luminaire Lumens: 3,197

POLAR CANDELA DISTRIBUTION



ISOFOOT CANDLE PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	703.8	22%	22%
0-40	1,163.6	36.4%	36.4%
0-60	2,097.5	65.6%	65.6%
60-90	889.6	27.8%	27.8%
70-100	631.3	19.7%	19.8%
90-120	197.5	6.2%	6.2%
0-90	2,987.1	93.4%	93.5%
90-180	208.5	6.5%	6.5%
0-180	3,195.6	100%	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	84.8	2.7%	90-100	120.0	3.8%
10-20	244.4	7.6%	100-110	56.3	1.8%
20-30	374.6	11.7%	110-120	21.2	0.7%
30-40	459.8	14.4%	120-130	6.1	0.2%
40-50	484.7	15.2%	130-140	2.0	0.1%
50-60	449.2	14.1%	140-150	1.2	0%
60-70	378.2	11.8%	150-160	0.9	0%
70-80	300.0	9.4%	160-170	0.6	0%
80-90	211.3	6.6%	170-180	0.2	0%

ATX™ FELED Series Nonmetallic LED Luminaires

Standard and Emergency Battery Back-Up, Increased Safety

ATEX/IECEX:
Zone 1 and 2 - 21 and 22
II 2 GD
IP66 – IK10

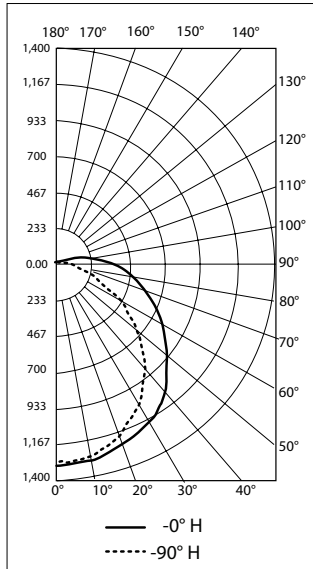
Photometric Data — DATA SHOWN IS ABSOLUTE

5K Lumen Output with Diffuser, 5000K CCT

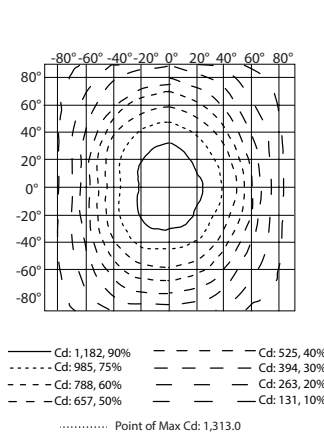
REPORT NUMBER: FELED5CBDXXD

Luminaire Lumens: 4,651

POLAR CANDELA DISTRIBUTION



ISOCANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	1,034.8	22.2%	22.3%
0-40	1,713.1	36.8%	36.9%
0-60	3,090.1	66.4%	66.5%
60-90	1,276.8	27.4%	27.5%
70-100	884.6	19%	19%
90-120	262.1	5.6%	5.6%
0-90	4,366.9	93.9%	94%
90-180	280.6	6%	6%
0-180	4,647.5	99.9%	100%

LUMENS PER ZONE

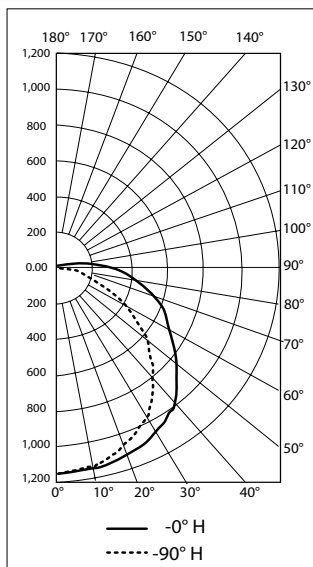
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	124.3	2.7%	90-100	163.3	3.5%
10-20	358.7	7.7%	100-110	71.9	1.5%
20-30	551.9	11.9%	110-120	26.8	0.6%
30-40	678.3	14.6%	120-130	8.7	0.2%
40-50	714.3	15.4%	130-140	3.7	0.1%
50-60	662.7	14.3%	140-150	2.4	0.1%
60-70	555.5	12.0%	150-160	1.9	0%
70-80	427.8	9.2%	160-170	1.3	0%
80-90	293.5	6.3%	170-180	0.4	0%

5K Lumen Output with Diffuser, 4000K CCT

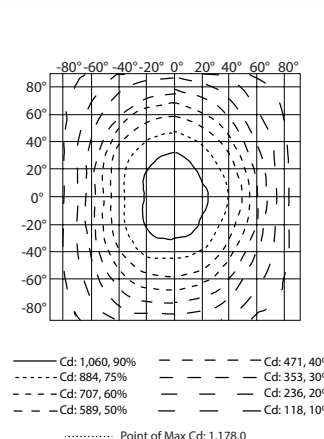
REPORT NUMBER: FELED5NBDXXD

Luminaire Lumens: 4,152

POLAR CANDELA DISTRIBUTION



ISOFOOT CANDLE PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	927.9	22.3%	22.4%
0-40	1,534.5	37%	37%
0-60	2,764.3	66.6%	66.6%
60-90	1,138.7	27.4%	27.4%
70-100	787.5	19%	19%
90-120	231.2	5.6%	5.6%
0-90	3,903.0	94%	94.1%
90-180	246.9	5.9%	5.9%
0-180	4,149.9	99.9%	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	111.5	2.7%	90-100	144.2	3.5%
10-20	321.8	7.8%	100-110	63.5	1.5%
20-30	494.6	11.9%	110-120	23.4	0.6%
30-40	606.6	14.6%	120-130	7.4	0.2%
40-50	638.2	15.4%	130-140	3.0	0.1%
50-60	591.6	14.3%	140-150	2.1	0%
60-70	495.5	11.9%	150-160	1.7	0%
70-80	382.1	9.2%	160-170	1.1	0%
80-90	261.2	6.3%	170-180	0.4	0%

ATX™ FELED Series Nonmetallic LED Luminaires

Standard and Emergency Battery Back-Up, Increased Safety

ATEX/IECEX:
Zone 1 and 2 - 21 and 22
II 2 GD
IP66 - IK10

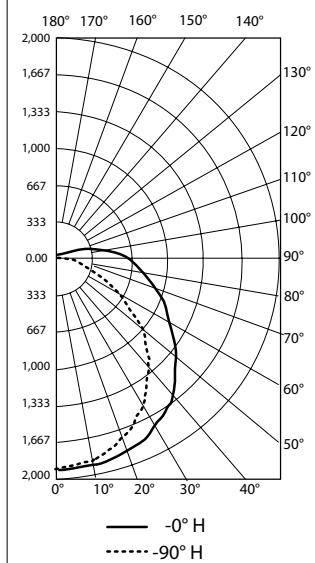
Photometric Data — DATA SHOWN IS ABSOLUTE

7K Lumen Output with Diffuser, 5000K CCT

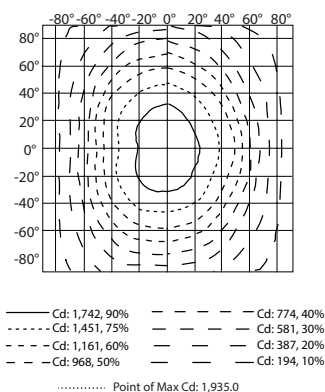
REPORT NUMBER: FELED7CBDXXD

Luminaire Lumens: 7,038

POLAR CANDELA DISTRIBUTION



ISOCANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	1,522.2	21.6%	21.6%
0-40	2,519.1	35.8%	35.8%
0-60	4,554.8	64.7%	64.7%
60-90	1,954.8	27.8%	27.8%
70-100	1,427.0	20.3%	20.3%
90-120	500.5	7.1%	7.1%
0-90	6,509.6	92.5%	92.4%
90-180	533.4	7.6%	7.6%
0-180	7,043.0	100.1%	100%

LUMENS PER ZONE

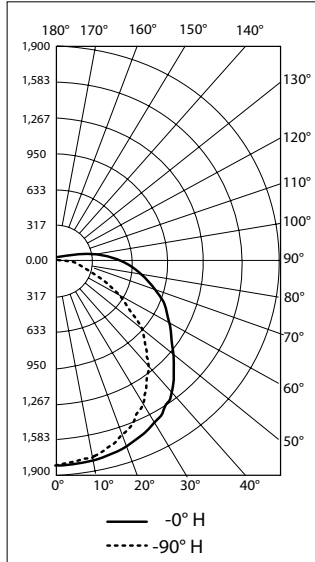
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	182.9	2.6%	90-100	299.7	4.3%
10-20	527.8	7.5%	100-110	142.6	2%
20-30	811.5	11.5%	110-120	58.1	0.8%
30-40	996.8	14.2%	120-130	17.3	0.2%
40-50	1,053.3	15.0%	130-140	5.9	0.1%
50-60	982.5	13.9%	140-150	3.9	0.1%
60-70	827.5	11.7%	150-160	3.1	0%
70-80	646.8	9.2%	160-170	2.0	0%
80-90	480.5	6.8%	170-180	0.7	0%

7K Lumen Output with Diffuser, 4000K CCT

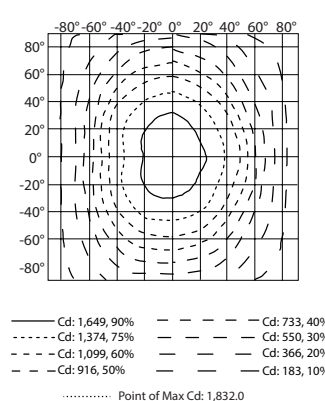
REPORT NUMBER: FELED7NBDXXD

Luminaire Lumens: 6,540

POLAR CANDELA DISTRIBUTION



ISOFOOT CANDLE PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Luminaire
0-30	1,437.8	22%	22%
0-40	2,375.3	36.3%	36.4%
0-60	4,274.2	65.3%	65.5%
60-90	1,801.5	27.5%	27.6%
70-100	1,292.3	19.8%	19.8%
90-120	428.3	6.5%	6.6%
0-90	6,075.7	92.9%	93.1%
90-180	452.2	6.9%	6.9%
0-180	6,527.9	99.8%	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	173.1	2.7%	90-100	258.9	4%
10-20	499.0	7.6%	100-110	122.4	1.9%
20-30	765.7	11.7%	110-120	47.0	0.7%
30-40	937.5	14.4%	120-130	12.5	0.2%
40-50	985.2	15.1%	130-140	4.3	0.1%
50-60	913.7	14.0%	140-150	2.8	0%
60-70	768.1	11.8%	150-160	2.3	0%
70-80	600.6	9.2%	160-170	1.5	0%
80-90	432.7	6.6%	170-180	0.5	0%