

**PROJECT INFORMATION**

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

**FEATURES**

- Enclosed and Gasketed Industrial
- Available in 2', 4', or 8' lengths
- T8 or T5 fluorescent
- IP65 all sizes, IP67 4' and 8'
- Fiberglass housing with F1 weatherability rating, standard
- Smooth housing for ease of cleaning
- Gasket is non-porous to ensure seal
- Impact modified acrylic lens
- Lens selections include ribbed clear or frost, optically clear deep profile, or deep profile frost
- Lens firmly secured with tamper resistance ready polycarbonate latches
- Stainless steel latching optional
- Removable gear tray electrical access
- Includes surface mounting brackets
- Specular reflector available
- CSA c/US labeled, built to UL 1598, UL924 as appropriate

**CONSTRUCTION**

Housing is formed from UL 5VA fiberglass. F1 weatherability rating, suitable for indoor or outdoor use with respect to exposure to UV light. Pour-in-place non-porous gasketing assures seal. Fluorescent lamp sockets and ballast affixed to removable gear tray. 14 Latches per 8', 8 per 4', 6 per 2'. Latches are provided tamper resistance ready, tamper resistant screws optional. Latches are standard polycarbonate, optional in stainless steel. Knockouts are provided for electrical access and mounting.

**FINISH**

White painted parts are treated with a five-stage phosphate bonding process and finished with high reflectance baked enamel.

**ELECTRICAL**

Standard class "P", thermally protected, auto-resetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC compliant ballast disconnect is standard.

**CERTIFICATION**

All luminaires are built to UL 1598 standards and bear appropriate CSA c/US labels. Ingress protection IP65 and IP67 standard. UL Sanitation certified. Wet location labeling is standard. Emergency-equipped fixtures built to UL 924.

**SHIELDING**

Lineal ribbed clear acrylic lens impact modified; modification adds flexibility to reduce impact breakage compared to standard acrylic formulations. Polycarbonate ribbed diffuser optional. Frosted acrylic or polycarbonate lens available for additional lamp diffusion. Deep acrylic lens in clear or frost optional (without lineal ribs).

**ORDERING INFORMATION** (See page 2 for Product Availability Data and Sensor Kits)

**EXAMPLE XEM4-232-RA-EU**

XEM		-		-		-		-	
MODEL	NO. OF LAMPS IN CROSS SECTION	SIZE	LAMP TYPE	BALLAST	VOLTAGE	BALLAST FACTOR	OPTIONS		
<b>XEM</b> Enclosed and Gasketed Fiberglass Industrial	1 One 2 Two 3 Three	2 2' 4 4' 8 8'	14 2', T5 Standard: 14 Watt 17 2', T8: 17 Watt 28 4', T5 Standard: 28 Watt 32 4', T8: 32, 30, 28, or 25 Watt 96T8 8', T8: 59 Watt <sup>1</sup>	<b>E</b> Electronic, T8, Instant Start (Standard) <b>3E</b> 3-Lamp Electronic, Instant Start (T8) <b>4E</b> 4-Lamp Electronic, Instant Start (T8) <b>24E</b> (1) 2-Lamp and (1) 4-Lamp Electronic, Instant Start (T8) <b>EP</b> Electronic, Programmed Start <b>3EP</b> 3-Lamp Electronic, Programmed Start <b>4EP</b> 4-Lamp Electronic, Programmed Start <b>24EP</b> (1) 2-Lamp and (1) 4-Lamp Electronic, Programmed Start (T8) <b>ESD</b> Electronic Step Dimming for 2-Lamp 4' only <sup>4</sup> <b>ED</b> Electronic Dimming <sup>5</sup> <b>3ED</b> (1) 3-Lamp Electronic Dimming <sup>5</sup> <b>4ED</b> (1) 4-Lamp Electronic Dimming <sup>5</sup> <b>24ED</b> (1) 2-Lamp and (1) 4-Lamp Electronic T8 <sup>5</sup> <b>11E</b> (2) 1-Lamp Electronic Instant Start <b>11EP</b> (2) 1-Lamp Electronic Programmed Start <b>11ED</b> (2) 1-Lamp Electronic Dimming <sup>5</sup>	<b>U</b> 120V-277V <b>120</b> 120V <b>277</b> 277V <b>347</b> 347V	<b>Blank</b> Standard <b>LW</b> Low Watt <b>HL</b> 1.18 BF High Lumen 4' T8	<b>EL</b> Emergency Battery Pack, 350-450 Lumens, T8 only <sup>6</sup> <b>EL141</b> 900-1400 Lumen T8 Battery Pack <sup>6</sup> <b>EL5</b> 390-700 Lumen T5 Battery Pack <sup>6</sup> <b>EL5H</b> 600-1325 Lumen T5 Battery Pack <sup>6</sup> <b>GLR</b> Fast Blow Fuse <b>GMF</b> Slow Blow Fuse <b>TP</b> Tamper Proof Screws <b>SSL</b> Stainless Steel Latches <b>F0835</b> T8 Lamp Installed, 82 CRI, 3500K <b>F0841</b> T8 Lamp Installed, 82 CRI, 4100K <b>F0850</b> T8 Lamp Installed, 82 CRI, 5000K <b>F5841</b> T5 Lamp Installed, 82 CRI, 4100K <b>F5850</b> T5 Lamp Installed, 82 CRI, 5000K <b>F3C8W</b> 3 Wire 8' Wet Cord <b>F3C15W</b> 3 Wire 15' Wet Cord <b>SWH</b> Single Wet Hub 1/2" NPT Hub <b>DWH</b> Dual Wet Hub 1/2" NPT Hub <b>M4R</b> Specular Alum Reflector, 95% Reflectivity <b>HT</b> Elevated Ambient Rating 40°C <sup>7</sup> <b>XEDPM</b> Dual Pendant Brackets (pendant by others) <sup>8</sup> <b>XEHC</b> Chain Hanger <b>XE45MB</b> 45° Mounting Bracket <sup>9</sup> <b>XE45MBSS</b> 45° Stainless Steel Mounting Bracket		
		<b>LENS TYPE</b>							
		<b>RA</b> Ribbed Acrylic, Impact Resistant (standard) <b>RFA</b> Ribbed Frosted Acrylic, Impact Resistant <b>RP</b> Ribbed Polycarbonate <sup>2</sup> <b>RFP</b> Ribbed Frosted Polycarbonate <sup>2</sup> <b>DCA</b> Deep Clear Acrylic <sup>3</sup> <b>DFA</b> Deep Frosted Acrylic <sup>3</sup>							

<sup>1</sup> Installed lamps not optional on 8' fixtures.  
<sup>2</sup> Polycarbonate lenses available on 2' and 4' only.  
<sup>3</sup> 4' or 8' only.  
<sup>4</sup> Can be converted to fixed output by tying hot leads together.  
<sup>5</sup> Not compatible with T8 25, 28, or 30 Watt energy-saving lamps.  
<sup>6</sup> Not available with 2'.  
<sup>7</sup> HT option ONLY available on the 4' 1 lamp and 2 lamp T8.  
<sup>8</sup> Requires 3/8" OD threaded rod by others.  
<sup>9</sup> 2 required for 8' fixture

Not all configurations are compatible; for questions contact Hubbell Lighting representative.

**PRODUCT AVAILABILITY DATA**

PRODUCT AVAILABILITY							
Size	# of Lamps in Cross Section	# of Lamps in Fixture	Lamp Type	Width	Length	Height RA, RFA	Height DCA, DFA
2'	1	2	14,17	67/9"	27 2/3"	4 3/8"	N/A
	2	2	14,17	67/9"	27 2/3"	4 3/8"	N/A
4'	1	1	28,32	67/9"	51 2/3"	4 3/8"	5 5/8"
	2	2	28,32	67/9"	51 2/3"	4 3/8"	5 5/8"
	3	3	28,32	67/9"	51 2/3"	4 3/8"	5 5/8"
8'	1	2	28,32	67/9"	100"	4 3/8"	5 5/8"
	1	1	96T8	67/9"	100"	4 3/8"	5 5/8"
	2	4	28,32	67/9"	100"	4 3/8"	5 5/8"
	2	2	96T8	67/9"	100"	4 3/8"	5 5/8"
	3	2	28,32	67/9"	100"	4 3/8"	5 5/8"
	3	6	28,32	67/9"	100"	4 3/8"	5 5/8"

SENSOR KITS (Order Separately)						
All sensor kits include Occupancy & Daylight.						
Daylight activation requires setting of dip-switches on site.						
	Catalog #	# Relays	Lens Type	Voltage	Wet Label	Product
120V / 277V / 347V	OS1360WLK	1	360°	120/277/347	Yes	XEM
	OS2360WLK	2	360°	120/277/347	Yes	XEM
	OS1AWLK	1	Aisle	120/277/347	Yes	XEM
	OS2AWLK	2	Aisle	120/277/347	Yes	XEM
208V / 480V	OS1360480WLK	1	360°	480V	Yes	XEM
	OS1A480WLK	1	Aisle	480V	Yes	XEM
	OS1360208WLK	1	360°	208V	Yes	XEM
	OS1A208WLK	1	Aisle	208V	Yes	XEM

**PHOTOMETRIC DATA**

Test 7154 Test Date 09/16/13

**LUMINAIRE DATA**

Luminaire	XEM4-232-RA-EU XEM Enclosed and Gasketed, Industrial 6.75" x 51.5" 2-lamp with ribbed clear acrylic lens
Ballast	ICN-2P32-N
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2850
Watts	56
Mounting	Surface
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.26 90° = 1.67
Luminous Opening in Feet	Length: 4.27 Width: 0.52 Height: 0.27

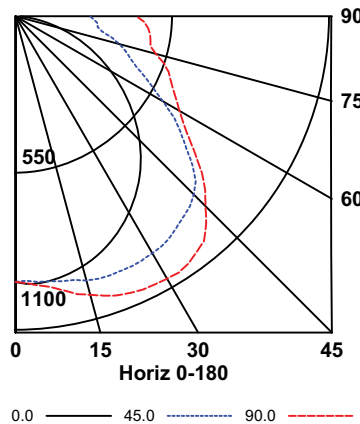
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	803	14.1	19.0
0-40	1379	24.2	32.7
0-60	2614	45.9	62.0
0-90	3776	66.3	89.5
0-180	4218	74.0	100.0

**ENERGY DATA**

Total Luminaire Efficiency	74.0%
Luminaire Efficacy Rating (LER)	66
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.64 based on 3000 hrs. and \$0.08 per KWH

**INDOOR CANDELA PLOT**



**AVG. LUMINANCE (Candela/Sq. M.)**

	0.0	22.5	45.0	67.5	90.0
0	4513	4513	4513	4513	4513
30	4293	4114	4337	4497	4578
40	4104	4003	4308	4461	4531
45	3966	3905	4293	4235	4246
50	3822	3879	4093	3972	3969
55	3628	3870	3752	3593	3601
60	3364	3710	3390	3303	3384
65	3040	3202	3033	3181	3311
70	2657	2700	2846	3156	3335
75	2182	2304	2791	3115	3252
80	1582	2056	2578	3126	3397
85	969	1793	2816	3448	3738

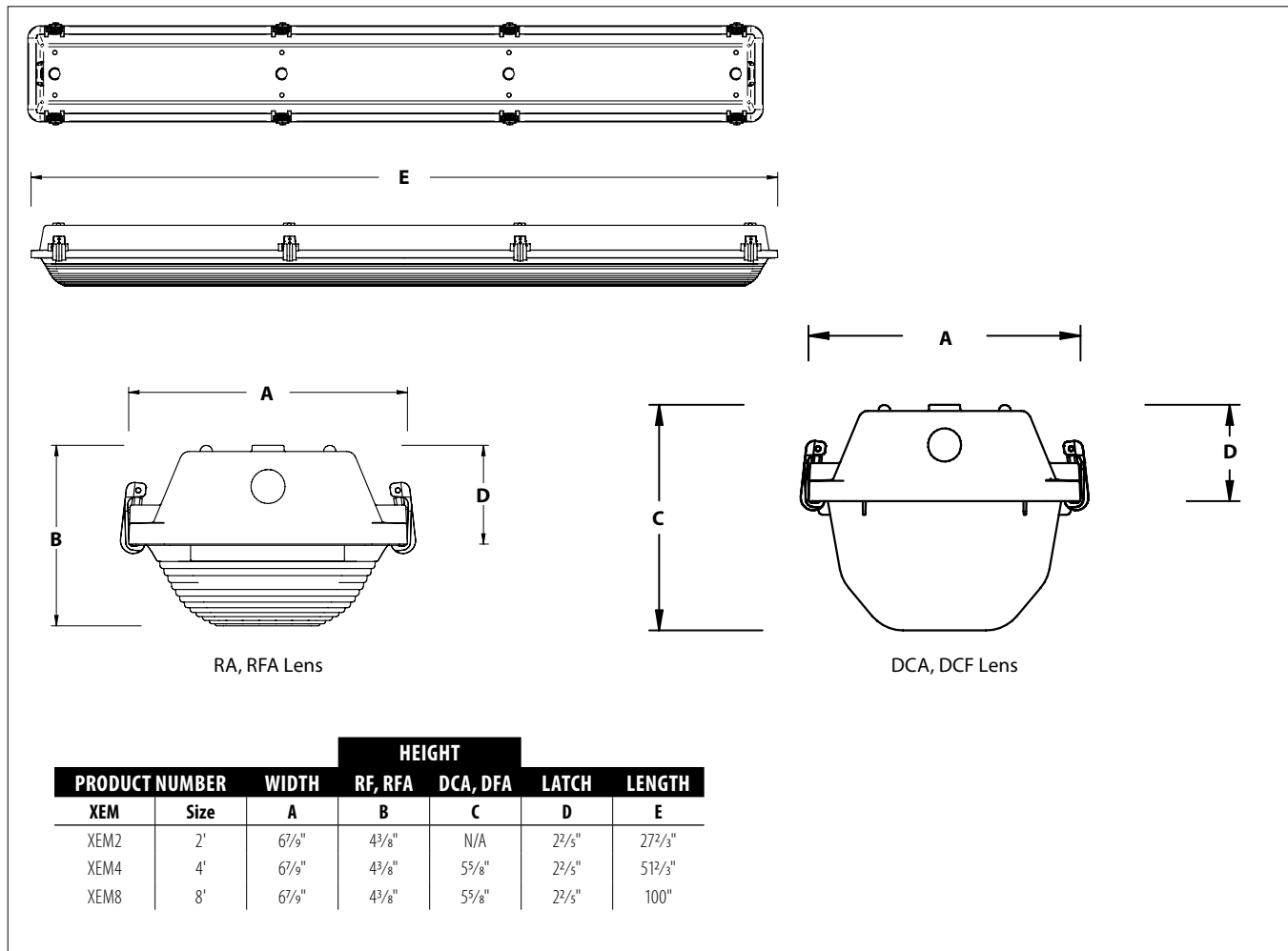
**COEFFICIENTS OF UTILIZATION (%)**

RCR	RW	80				70				50				0			
		70	50	30	10	70	50	30	10	50	30	10	0	30	10	0	
1	77	72	69	65	74	70	66	63	65	62	60	51					
2	69	62	56	52	66	60	55	50	56	52	48	41					
3	63	54	47	42	60	52	46	41	49	44	39	34					
4	57	47	40	35	55	46	39	34	43	37	33	29					
5	52	42	35	30	50	41	34	29	38	33	28	24					
6	48	38	31	26	46	37	30	25	34	29	24	21					
7	44	34	27	22	43	33	27	22	31	25	21	18					
8	41	31	24	20	40	30	24	20	28	23	19	16					
9	38	28	22	18	37	27	21	17	26	21	17	14					
10	36	26	20	16	35	25	20	16	24	19	15	13					

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

**DIMENSIONAL DATA**



**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.