

CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_



**FEATURES**

- Deliver scalable, data-driven smart buildings with PoE-enabled fixtures and controls
- Slim, low-profile suspended or surface mount fixture provides an architectural alternative to standard wrap-around fixtures
- Round or square profile provides design choices for a variety of applications
- Quality, frosted, extruded acrylic lens snaps securely in place to provide gentle diffused illumination
- Slim end plates are designed to conform to lens shape and prevent unsightly light leaks
- Internal, self-aligning joining method ensures straight rows
- Made Right Here® in the USA

**SPECIFICATIONS**

- HOUSING** – 20-gauge die-formed C.R.S.
- SHIELDING** – Frosted, matte acrylic, round or square profile.
- FINISH** – Textured matte white polyester TGIC powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High-quality mid-power LED boards. L70 >60,000 hours per IES TM-21. Low-voltage DC fixture, to be fed by Class 2 power supply. Tunable White products use LEDs of multiple CCTs and may produce a perceptibly different shade of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses. See fixture performance data for lumen maintenance.
- MOUNTING** – Surface (ceiling or wall) or suspended (hanging hardware required)
- LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/baa](http://hew.com/baa).
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty)

**SYSTEM REQUIREMENTS**

- PoE-ready luminaires are connected to building power systems through network integration and require other components for complete PoE lighting system
- For additional PoE info, see [hew.com/poe](http://hew.com/poe)

**ORDERING EXAMPLE: LLM - 4 - P9/835 - S - SQ - ACF/D48 - OPTIONS - POE PR**

**ORDERING INFO**

SERIES	NOMINAL LENGTH <sup>[1]</sup>	LUMENS <sup>[2]</sup>	CRI	CCT
LLM	Stand-alone: 2', 4', 6' & 8' nominal lengths, fixture ships assembled. Example: 4 = 4'	P9 900lm	8 80 9 90 <sup>[3]</sup>	27 2700K
				30 3000K
				35 3500K
				40 4000K
				50 5000K
	Row-mount: Lengths specified in 24" increments Example: 12 = 12'			TW Tunable white (3000K-5000K)
	Product Builder Simplify ordering & layout design with the Williams Linear Product Builder at <a href="http://hew.com">hew.com</a>			TW2 Tunable white (2700K-6500K)

MOUNTING TYPE	SHIELDING	MOUNTING
S Surface	RD Round frosted acrylic	AIRCRAFT CABLES (EXAMPLE: ACF/D48) <sup>[4]</sup>
P Suspended	SQ Square frosted acrylic	
		Prefix    Type    Length
		ACF/ Feeder    D 1" grid & hardpan    24 24"
		ACJ/ Joiner    N 9/16" grid    48 48"
		S Slot grid    96 96"

OPTIONS <sup>[5]</sup>	CONTROL <sup>[6]</sup>
45AMB (2) 45° adjustable mounting brackets <sup>[7]</sup>	POE PR Power over Ethernet-ready

**NOTES**

- 8' length ships with (2) 4' lenses.
- Lumens per foot output based on 3500K for single CCT and 4000K for TW. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- Extended lead times may apply. Consult factory for availability.
- Specify with P Mounting Type only. See page 3 for SUSPENDED MOUNTING DETAILS.
- See page 3 for FINISH OPTIONS.
- For additional PoE connection details, consult factory.
- Cord recommended, ships separately. Field-adjustable up and down in 7-1/2" increments.



**FIXTURE PERFORMANCE DATA**

**STANDARD**

PER FOOT					LUMEN MAINTENANCE			
DELIVERED LUMENS		WATTAGE	EFFICACY (lm/W)		L70	L80	L85	L90
ROUND LENS	SQUARE LENS		ROUND LENS	SQUARE LENS				
866	884	5.8	149	152	>72000	>72000	>72000	50000

**TUNABLE WHITE**

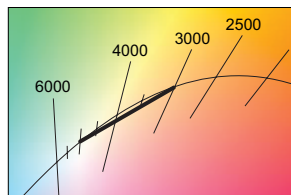
PER FOOT					LUMEN MAINTENANCE			
DELIVERED LUMENS		WATTAGE	EFFICACY (lm/W)		L70	L80	L85	L90
ROUND LENS	SQUARE LENS		ROUND LENS	SQUARE LENS				
870	888	6.6	132	135	>54000	>37000	>26000	>16000

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Standard results based on 3500K standard, 80 CRI, actual lumens may vary +/-5%
- Tunable white results based on 4000K standard, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

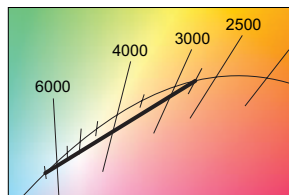
**MULTIPLIER TABLE**

	COLOR TEMPERATURE			
	CCT	STANDARD	TW	TW2
80 CRI	2700K	0.97	-	0.93
	3000K	0.99	0.95	0.95
	3500K	1.00	0.98	0.98
	4000K	1.03	1.00	1.00
	5000K	1.06	0.96	1.02
6500K	-	-	-	1.01
90 CRI	2700K	0.80	-	0.93
	3000K	0.82	0.91	0.95
	3500K	0.83	0.96	0.98
	4000K	0.86	1.00	1.00
	5000K	0.89	1.03	1.03
6500K	-	-	-	1.02

**TW**

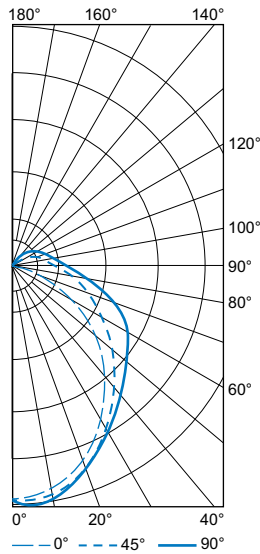


**TW2**



**PHOTOMETRY**

**LLM-8-P9/835-S-SQ** Total Luminaire Output: 6995 lumens; 42.2 Watts | Efficacy: 166 lm/W | 80 CRI; 3500K CCT

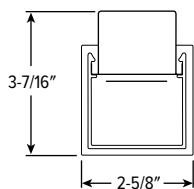


VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2134	2134	2134	
5	2142	2153	2158	203
15	1976	2009	2019	568
25	1707	1768	1794	815
35	1377	1496	1578	927
45	986	1206	1389	928
55	648	961	1220	855
65	391	763	1043	738
75	187	561	791	569
85	55	408	588	399
90	9	309	446	
95	0	295	413	276
105	0	238	321	217
115	0	196	264	168
125	0	161	225	128
135	0	130	184	91
145	0	115	161	63
155	0	86	113	35
165	0	63	74	15
175	0	22	43	2
180	0	0	0	

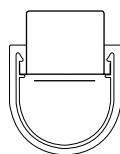
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1586	23
0 - 40	2513	36	
0 - 60	4295	61	
0 - 90	6001	86	
90 - 180	994	14	
0 - 180	6995	100	

**CROSS SECTIONS**

**SQ SHIELDING**

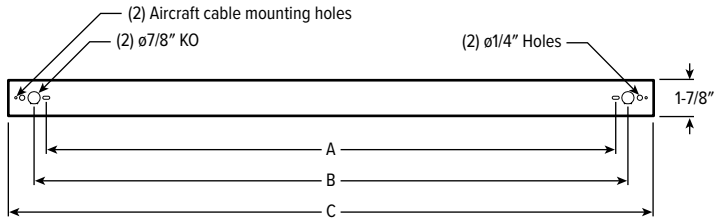


**RD SHIELDING**

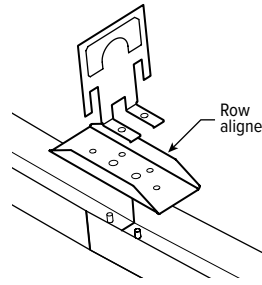


**FIXTURE DETAILS**

**BACKVIEW**



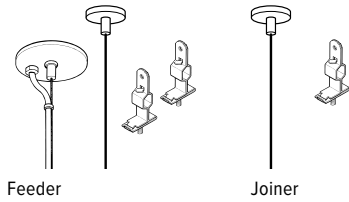
**ROW ALIGNER DETAIL**



	SURFACE MOUNT (A)	7/8" KOs (B)	ACTUAL LENGTH (C)
2'	19-1/16"	20-1/2"	24-1/4"
4'	41-3/16"	42-5/8"	46-3/8"
6'	63-7/8"	65-3/8"	69-1/16"
8'	87-5/16"	89-1/16"	92-13/16"

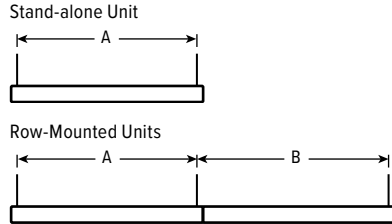
**SUSPENDED MOUNTING DETAILS**

**STANDARD HARDWARE (Grid and Hardpan)**



- Fixtures are provided with adjustable length aircraft cables and mounting hardware, must specify.
- Electrical supply is brought into each fixture, either as part of a row or as a stand-alone unit. One power drop per node required. Joiner fixtures complete the row.

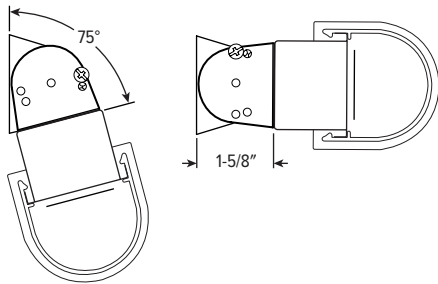
**CENTER-TO-CENTER MOUNTING CABLE DETAIL**



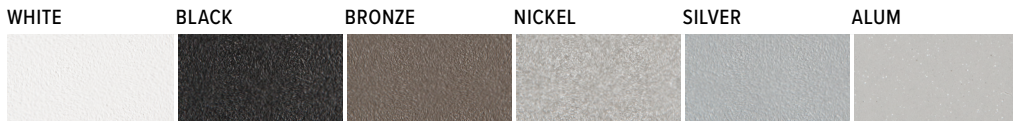
	CABLE MOUNT	
	A	B
2'	22-1/4"	24-1/4"
4'	44-3/8"	46-3/8"
6'	67-1/16"	69-1/16"
8'	90-13/16"	92-3/4"

**OPTIONS DETAILS (surface mount only)**

**45AMB**



**FINISH OPTIONS**



For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.