

CATALOG #: _____

TYPE: _____

PROJECT: _____



TwistLock™

FEATURES

- Deliver scalable, data-driven smart buildings with PoE-enabled fixtures and controls
- Support human-centric design with adaptive, individualized lighting using tunable white light
- Ensure a simple and secure installation with TwistLock™ surface mount technology
- Parallel the performance and style of the Williams downlight collection
- Precision illumination with 14° narrow spot to 50° wide optics
- Low UGR meets LEED and WELL requirements

SPECIFICATIONS

- HOUSING** – Extruded aluminum with die-cast aluminum accent ring.
- FINISH** – Polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- OPEN REFLECTOR** – Low-iridescent anodized aluminum with top diffuser. Clear semi-specular finish standard.
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL** – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to node. Reported L70>55,000 hours. Reported L90>49,000 hours. Estimated L70 = 179,000 hours. 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.
- MOUNTING** – Surface, cable, pendant, or wall mount. Indoor applications only. Max weight 5-5/8 lbs.
- LISTINGS** –
 - cCSAus conforms to UL STD 1598 and UL STD 8750. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for dry and damp locations.
 - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/baa](http://www.hew.com/baa).
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://www.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://www.hew.com/poe)

ORDERING EXAMPLE: **4CS - 13 - P20/835 - WHT - POE PR - LW - WH - TRIM OPTIONS - CM**
HOUSING TRIM MOUNT.

HOUSING

SERIES	HEIGHT	LUMENS ^[1]	CRI	CCT	HOUSING FINISH ^[2]	CONTROL ^[3]
4CS	13 13"	P5 500lm	8 80 ^[4]	27 2700K	ALUM Silver sparkle aluminum	POE PR Power over Ethernet-ready
		P7 700lm	9 90	30 3000K	BLK Textured black	
		P9 900lm		35 3500K	BRZ Textured bronze	
		P12 1,200lm		40 4000K	NKL Textured nickel	
		P15 1,500lm		50 5000K	SLV Textured silver	
		P20 2,000lm		TW Tunable white (90 CRI, 2700K-5000K) ^[5]	WHT Textured white	
		P23 2,300lm				

TRIM

TRIM TYPE	DISTRIBUTION ^[6]	REFLECTOR FINISH ^[7]	TRIM OPTIONS
L Flush lens	W 50° Wide	Open Trim Types CS Clear semi-specular anodize SG Satin-glow anodize GD Gold anodize CG Champagne gold anodize PW Pewter anodize SPC Clear specular anodize RG Rose gold anodize	AD Diffuse acrylic lens ^[10]
O Open reflector	M 30° Medium		PD Diffuse 1/8" polycarbonate lens ^[11]
R Regressed lens	N 20° Narrow ^[8]		
	S 14° Narrow spot ^[9]		
		Lens Trim Types CS Clear semi-specular powder coat WH White texture powder coat BL Black texture powder coat BZ Bronze texture powder coat NK Nickel texture powder coat SV Silver texture powder coat AL Silver sparkle aluminum	

MOUNTING

MOUNTING TYPE ^[12]

- CM**___ Adjustable aircraft dual cable mount, 24", 48", 96", or 144" only, must specify. Example: 24" cable = **CM24** ^[13]
- PM**___ Pendant mount. Example: 24" pendant = **PM24** ^[14]
- SM** TwistLock surface mount to octagonal J-box
- WM** Wall mount

NOTES

- Lumen output based on L Trim Type, W Distribution and WH Reflector Finish, 3500K/80 CRI for single CCT and 4000K/90 CRI for TW. Actual performance may vary +/-5. See page 2 for FIXTURE PERFORMANCE DATA.
- See page 3 for HOUSING FINISH DETAILS.
- For additional PoE connection details, consult factory.
- Not available with Tunable White.
- P15 lumen package max when specified with W or M Distributions. P12 lumen package max when specified with N Distribution. Not available with S Distribution.
- Beam angle based on L Trim Type and WH Reflector Finish. Trim Type affects beam angle. See page 2 for FIXTURE PERFORMANCE DATA.
- See page 3 for REFLECTOR FINISH DETAILS.
- Not available with P23 lumen package. Not available with P15 lumen package when specified with Tunable White.
- Not available with P20 or P23 lumen packages, Tunable White, or 950 CRI/CCT.
- Not available with O Trim Type. W Distribution only.
- Not available with O Trim Type. W Distribution only.
- See page 4 for MOUNTING DETAILS.
- Canopy painted white unless specified otherwise.
- Specify length in 1" increments, minimum 6". Canopy and pendant match fixture housing color unless specified otherwise.



FIXTURE PERFORMANCE DATA

STATIC WHITE

	DIST.	WATTAGE	FLUSH LENS		OPEN REFLECTOR		REGRESSED LENS	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
P5	W	4.2	526	125	381	91	530	126
	M	4.2	528	126	361	86	520	124
	N	4.2	511	122	372	89	511	122
	S	5.4	607	112	435	80	609	113
P7	W	5.9	720	122	521	88	725	123
	M	5.9	722	122	494	84	711	121
	N	5.9	699	118	509	86	699	119
	S	7.6	789	104	565	74	792	104
P9	W	7.9	928	117	672	85	935	118
	M	7.9	931	118	637	81	917	116
	N	7.9	901	114	656	83	901	114
	S	11.1	1085	98	777	70	1089	98
P12	W	11.5	1292	112	936	81	1302	113
	M	11.5	1296	113	886	77	1277	111
	N	11.5	1254	109	914	79	1255	109
	S	15.3	1345	88	963	63	1349	88
P15	W	14.7	1602	109	1160	79	1614	110
	M	14.7	1607	109	1099	75	1583	108
	N	14.7	1555	106	1133	77	1556	106
	S	22.7	1783	79	1276	56	1789	79
P20	W	20.6	2104	102	1523	74	2119	103
	M	20.6	2110	102	1443	70	2079	101
	N	20.6	2042	99	1488	72	2043	99
	S	–	–	–	–	–	–	–
P23	W	23.7	2326	98	1983	84	2343	99
	M	23.7	2333	98	1596	67	2298	97
	N	–	–	–	–	–	–	–
	S	–	–	–	–	–	–	–

TUNABLE WHITE

	DIST.	WATTAGE	FLUSH LENS		OPEN REFLECTOR		REGRESSED LENS	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
P5	W	7.3	581	80	421	58	586	80
	M	7.3	609	83	416	57	600	82
	N	7.3	552	76	402	55	553	76
	S	–	–	–	–	–	–	–
P7	W	10.1	776	77	562	56	782	77
	M	10.1	813	80	556	55	801	79
	N	10.1	737	73	537	53	738	73
	S	–	–	–	–	–	–	–
P9	W	14.6	1083	74	784	54	1091	75
	M	14.6	1134	78	776	53	1117	77
	N	14.6	1029	70	750	51	1030	71
	S	–	–	–	–	–	–	–
P12	W	19.3	1332	69	964	50	1342	70
	M	19.3	1395	72	954	49	1374	71
	N	19.3	1265	66	922	48	1266	66
	S	–	–	–	–	–	–	–
P15	W	23.7	1491	63	1080	46	1502	63
	M	23.7	1562	66	1068	45	1538	65
	N	–	–	–	–	–	–	–
	S	–	–	–	–	–	–	–

- ¹ Distribution will also be affected, consult factory.
- Photometrics tested in accordance with IESNA LM-79. Results based on WH (L and R Trim Types) or CS (O Trim Type) Reflector Finish, W Distribution, static white 3500K/80 CRI or tunable white 4000K/90CRI, and 25°C ambient temperature. Actual performance may vary +/-5%.
 - Wattage and efficacy data shown do not account for node losses.
 - Use multiplier tables to calculate additional options.

MULTIPLIER TABLES

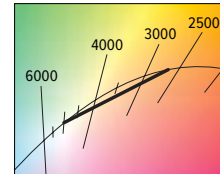
	COLOR TEMPERATURE		
	CCT	LUMENS	
		STANDARD	TUNABLE WHITE
80 CRI	2700K	0.92	–
	3000K	0.98	–
	3500K	1.00	–
	4000K	1.01	–
	5000K	1.02	–
90 CRI	2700K	0.76	0.87
	3000K	0.79	0.96
	3500K	0.82	1.02
	4000K	0.84	1.00
	5000K	0.88	1.02

	REFLECTOR FINISH	
	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG ⁽¹⁾	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
	RG	0.88
R TRIM	WH	1.00
	CS ⁽¹⁾	0.98
	BL ⁽¹⁾	0.79
	BZ ⁽¹⁾	0.76
	NK ⁽¹⁾	0.81
	SV ⁽¹⁾	0.81
	AL ⁽¹⁾	0.86

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85
TD	0.67

BEAM ANGLE

	TRIM TYPE		
	FLUSH	OPEN	REGRESSED
W	50°	50°	55°
M	30°	47°	30°
N	20°	47°	20°
S	14°	43°	14°

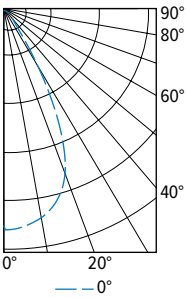


PHOTOMETRY CONTINUED ON NEXT PAGE.



PHOTOMETRY

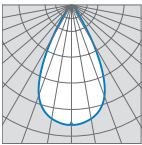
4CS-P15/835-POE PR-LW-WH Total Luminaire Output: 1602 lumens; 14.7 Watts | Efficacy: 109 lm/W | 80 CRI; 3500K CCT



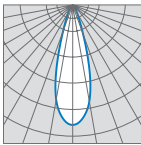
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	1852	
	5	1869	173
	15	1690	464
	25	1065	496
	35	269	227
	45	109	97
	55	72	68
	65	46	47
	75	22	24
	85	5	5
	90	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1360	85
	0 - 60	1526	95
	0 - 90	1602	100
	0-180	1602	100

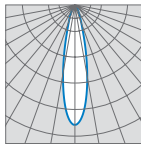
FLUSH



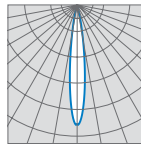
50°



30°

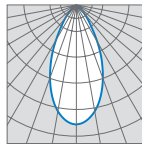


20°

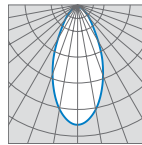


14°

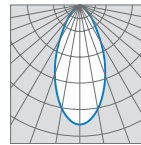
OPEN



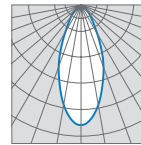
50°



47°

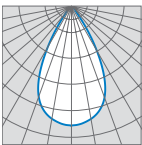


47°

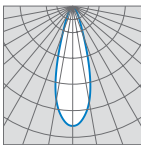


43°

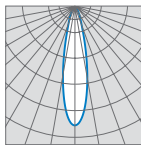
REGRESSED



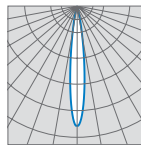
55°



30°



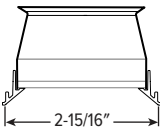
20°



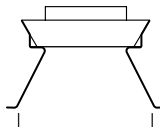
14°

TRIM TYPE DETAILS

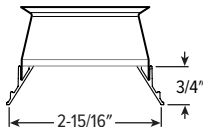
FLUSH



OPEN

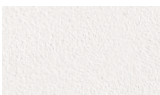


REGRESSED

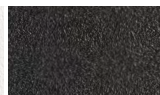


HOUSING FINISH DETAILS

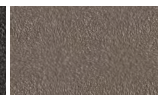
WHITE



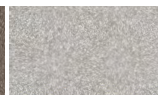
BLACK



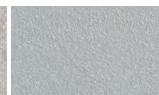
BRONZE



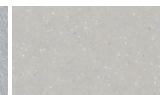
NICKEL



SILVER



ALUM



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.

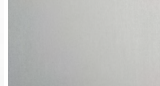
REFLECTOR FINISH DETAILS

Smooth Finish

SPC



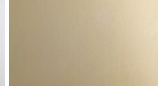
SG



PW



GD



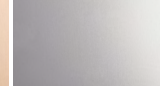
CG



RG



CS

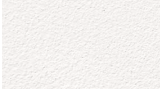


AL



Textured Finish

WH



BL



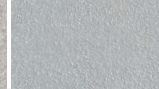
BZ



NK



SV



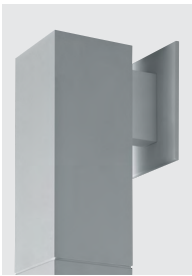
MOUNTING DETAILS

PENDANT MOUNT (PM__)

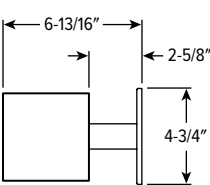


- Provided with:
- 38° Swivel canopy
 - 3/8" IPS Threaded stem
 - Specify length of stem, 6" minimum, 24" default length

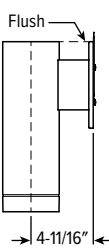
WALL MOUNT (WM)



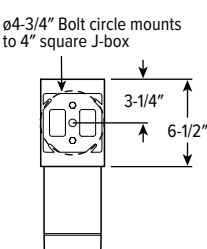
TOP VIEW



SIDE VIEW



BACK VIEW



SURFACE MOUNT (SM)



TwistLock™
Simple lift-and-twist mounting
secures fixture to J-box.

Provided with surface mount
adaptor with pigtail

CABLE MOUNT (CM__)



- Provided with:
- Adjustable length aircraft cable, must specify length in 24", 48", 96", or 144" inches.
 - One 5" canopy
 - T-bar clip with 1/4-20 stud
 - Hard ceiling anchor provided by others

