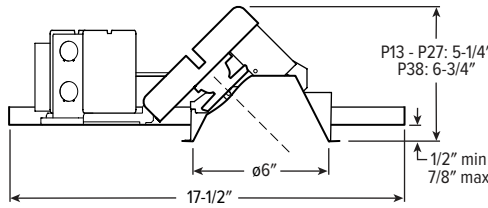


# 6AR PoE | tunable WHITE 6" Adjustable Downlight – Round



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

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

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

## NEW CONSTRUCTION AND REMODEL

### FEATURES

- Williams turn-key Power over Ethernet (PoE) solution provides plug-and-play networked lighting and control
- Tunable white from 2700K to 5000K CCT, minimum 80 CRI
- Adjustable aim with 0° - 45° tilt and 360° rotation

### SYSTEM REQUIREMENTS

- Lighting system (site software)
- Gateway or alternate server (runs software)
- PoE switches or Ethernet switches and mid-span power injectors
- See [hew.com/poe](http://hew.com/poe) for details

### SPECIFICATIONS

- HOUSING** – Die-cast aluminum spun and stamped articulating mechanism with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2" - 7/8".
- OPEN REFLECTOR** – Low-iridescent anodized aluminum. Clear semi-specular finish standard.
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, tempered glass lens.
- ELECTRICAL** – High-performance Class 2 LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>50,000 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** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. N and R mounting types for use in non-fire rated installations only. Minimum 24" O.C. marked spacing required for P38 lumen package.
- LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC option.
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

ORDERING EXAMPLE: 6AR - P27/835 - OPTIONS - POE N - OW - OF - CS - TRIM OPTIONS - N - F1

### HOUSING

SERIES	LUMENS <sup>[1]</sup>	CRI	CCT	OPTIONS <sup>[2]</sup>	CONTROL <sup>[3]</sup>
6AR	P13	1,300lm	8 80	ATH Airtight construction <sup>[6]</sup>	POE N Power over Ethernet network node
	P27	2,700lm	9 90 <sup>[5]</sup>	CP Chicago plenum (CCEA) <sup>[7]</sup>	POE D Power over Ethernet device node
	P38	3,800lm <sup>[4]</sup>			
				35 3500K	
				40 4000K	
				50 5000K	
			TW Tunable white (80 CRI, 2700K–5000K)		

### TRIM<sup>[8]</sup>

TRIM TYPE	DISTRIBUTION <sup>[9]</sup>	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	W Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange <sup>[12]</sup>
L Flush lens	55° Open	SF 1/4" mud-in flange <sup>[11]</sup>	CS Clear semi-specular anodize	AD Diffuse acrylic lens <sup>[13]</sup>
A Angled lens	55° Flush		WH White texture powder coat	PD Diffuse 1/8" polycarbonate lens <sup>[14]</sup>
	50° Angled		BL Black texture powder coat	WET/CC Wet location, covered ceiling listed <sup>[15]</sup>
	M Medium		Lens trim types	AM Anti-microbial <sup>[16]</sup>
	35° Open		CS Clear semi-specular powder coat	
	35° Flush		WH White texture powder coat	
	35° Angled		BL Black texture powder coat	
	N Narrow <sup>[10]</sup>			
	25° Open			
	25° Flush			
	30° Angled			

### MOUNTING

#### MOUNTING TYPE<sup>[17]</sup>

- N Open pan for new construction
- I IC-rated enclosure for new construction<sup>[19]</sup>
- R Remodel kit<sup>[20]</sup>

#### MOUNTING HARDWARE<sup>[18]</sup>

- F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included<sup>[21]</sup>
- BA1 Adjustable butterfly pan bracket, bar hanger not included<sup>[22]</sup>
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included<sup>[23]</sup>

### NOTES

- Static white lumen output based on O trim type, W distribution and CS finish, 3500K/80CRI. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- See [hew.com/poe](http://hew.com/poe) for compatible sensors & switches.
- For additional PoE info, see [hew.com/poe](http://hew.com/poe)
- N Mounting Type only. Not available with Tunable White.
- Extended lead times may apply. Consult factory for availability. Not available with Tunable White.
- I Mounting Type required.
- I Mounting Type required. P27 lumen package max.
- Trim ships separately.
- Beam angle based on CS or WH reflector finish.
- Not available with Tunable White when specified with O Trim Type.
- For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for FLANGE TYPE DETAILS. Not available with ATH option.

- Not available with WH Reflector Finish or L Trim Type.
- L and A Trim Types only. W distribution only.
- L and A Trim Types only. W distribution only.
- L Trim Type only.
- WH and BL Reflector Finishes only.
- Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
- Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
- P27 lumen package max.
- Also used in new construction sheetrock ceilings. P27 lumen package max.
- N and I Mounting Types only. Universal bar hanger ships uninstalled.
- N Mounting Type only.
- N Mounting Type only.



# 6AR PoE | tunable WHITE 6" Adjustable Downlight – Round

## FIXTURE PERFORMANCE DATA

### STANDARD

#### OPEN REFLECTOR TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
P13	W	1305	12.3	106.1
	M	1308	12.3	106.4
	N	1308	12.3	106.3
P27	W	2651	25.0	106.0
	M	2658	25.0	106.3
	N	2657	25.0	106.3
P38	W	3792	37.5	101.1
	M	3789	37.5	101.0
	N	3627	37.5	96.7

#### FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
P13	W	1146	12.3	93.2
	M	1223	12.3	99.5
	N	1216	12.3	98.9
P27	W	2328	25.0	93.1
	M	2485	25.0	99.4
	N	2471	25.0	98.8
P38	W	3326	37.5	88.7
	M	3531	37.5	94.2
	N	3391	37.5	90.4

#### ANGLED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
P13	W	952	12.3	77.4
	M	1137	12.3	92.4
	N	1161	12.3	94.4
P27	W	1934	25.0	77.4
	M	2310	25.0	92.4
	N	2358	25.0	94.3
P38	W	2786	37.5	74.3
	M	3258	37.5	86.9
	N	3173	37.5	84.6

### TUNABLE WHITE

#### OPEN REFLECTOR TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
P13	W	1048	12.3	85.2
	M	1093	12.3	88.9
	N	–	–	–
P27	W	1778	25.0	71.1
	M	1838	25.0	73.5
	N	–	–	–
P38	W	–	–	–
	M	–	–	–
	N	–	–	–

#### FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
P13	W	958	12.3	77.9
	M	1026	12.3	83.4
	N	1013	12.3	82.3
P27	W	1630	25.0	65.2
	M	2427	25.0	97.0
	N	1641	25.0	65.7
P38	W	–	–	–
	M	–	–	–
	N	–	–	–

#### ANGLED LENS TRIM TYPE

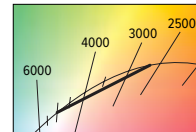
	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
P13	W	824	12.3	67.0
	M	949	12.3	77.2
	N	966	12.3	78.5
P27	W	1778	25.0	71.1
	M	1596	25.0	63.8
	N	1546	25.0	61.8
P38	W	–	–	–
	M	–	–	–
	N	–	–	–

### MULTIPLIER TABLES

	COLOR TEMPERATURE		
	CCT	LUMENS	
		STANDARD	TUNABLE WHITE
80 CRI	2700K	0.92	0.83
	3000K	0.98	1.00
	3500K	1.00	0.99
	4000K	1.01	1.00
	5000K	1.02	0.98
90 CRI	2700K	0.76	–
	3000K	0.79	–
	3500K	0.82	–
	4000K	0.84	–
	5000K	0.88	–

OPEN REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
CS	1.00
WH	0.89
BL	0.79

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD <sup>1</sup>	0.85
PD <sup>1</sup>	0.85



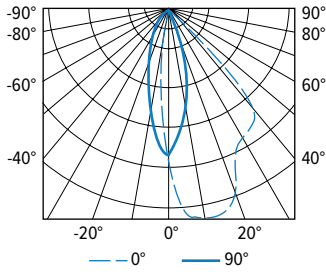
- Distribution will also be affected, consult factory.
  - Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
  - Standard results based on 3500K/80 CRI, 0° tilt, actual lumens may vary +/-5%
  - Tunable white results based on 4000K/80 CRI, 0° tilt, actual lumens may vary +/-5%
  - Use multiplier tables to calculate additional options.



# 6AR PoE | tunable WHITE 6" Adjustable Downlight – Round

## PHOTOMETRY

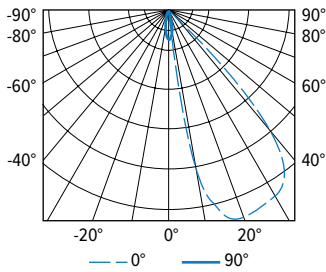
**6AR-P27-835-DIM-POE-OW-OF-WH (25° tilt)** Total Luminaire Output: 2634 lumens; 25.0 Watts | Efficacy: 105.4 lm/W | 82.3 CRI; 3571K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	3480	3480	3480	3480	3480	
	5	4862	4286	3083	2147	1733	289
	15	5090	3800	1765	591	414	627
	25	3900	3397	723	163	123	729
	35	3463	2549	146	35	27	671
	45	2265	283	15	8	8	301
	55	27	3	0	0	3	16
	65	0	0	0	0	0	0
	75	0	0	0	0	0	0
	85	0	0	0	0	0	0
	90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
		0 - 30	1645
	0 - 40	2317	88
	0 - 60	2634	100
	0 - 90	2634	100
	0 - 180	2634	100

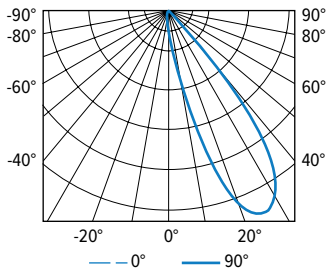
**6AR-P27-835-DIM-POE-OM-OF-WH (25° tilt)** Total Luminaire Output: 2511 lumens; 25.0 Watts | Efficacy: 100.4 lm/W | 82.3 CRI; 3571K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	1127	1127	1127	1127	1127	
	5	2735	1876	954	561	457	134
	15	7955	3079	476	202	171	550
	25	8069	2281	199	85	68	840
	35	7402	833	76	17	10	747
	45	1574	187	6	0	0	225
	55	46	0	0	0	0	14
	65	0	0	0	0	0	0
	75	0	0	0	0	0	0
	85	0	0	0	0	0	0
	90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
		0 - 30	1524
	0 - 40	2272	91
	0 - 60	2511	100
	0 - 90	2511	100
	0 - 180	2511	100

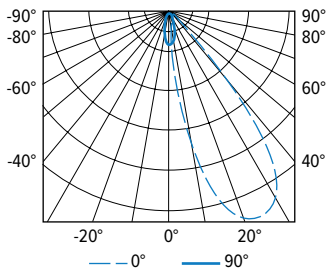
**6AR-P27-835-DIM-POE-ON-OF-WH (25° tilt)** Total Luminaire Output: 2811 lumens; 25.0 Watts | Efficacy: 112.4 lm/W | 82.2 CRI; 3571K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	706	706	706	706	706	
	5	1946	1346	615	334	278	93
	15	10047	2248	286	145	132	543
	25	15076	1855	122	77	71	1088
	35	10967	646	64	49	56	840
	45	1887	119	21	4	0	229
	55	97	4	0	0	0	18
	65	0	0	0	0	0	0
	75	0	0	0	0	0	0
	85	0	0	0	0	0	0
	90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
		0 - 30	1724
	0 - 40	2564	91
	0 - 60	2811	100
	0 - 90	2811	100
	0 - 180	2811	100

**6AR-P27-835-DIM-POE-LM-OF-WH (25° tilt)** Total Luminaire Output: 2427 lumens; 25.0 Watts | Efficacy: 97.1 lm/W | 82.2 CRI; 3571K CCT



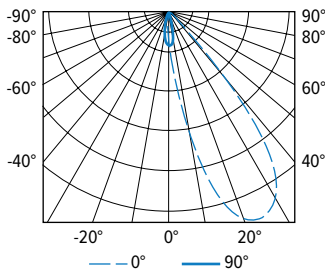
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	1088	1088	1088	1088		
	5	2839	2050	1014	599	457	133
	15	6444	3183	565	225	185	508
	25	7434	2513	264	127	116	769
	35	5330	1095	126	85	92	621
	45	1541	287	63	72	85	254
	55	316	75	41	58	72	87
	65	69	28	25	38	49	38
	75	23	12	9	16	25	15
	85	0	0	0	0	0	1
	90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
		0 - 30	1410
	0 - 40	2031	84
	0 - 60	2373	98
	0 - 90	2427	100
	0 - 180	2427	100



# 6AR PoE | tunable **WHITE** 6" Adjustable Downlight – Round

6AR-P27-835-DIM-POE-AM-OF-WH (25° tilt) Total Luminaire Output: 2312 lumens; 25.0 Watts | Efficacy: 92.5 lm/W | 82.2 CRI; 3571K CCT

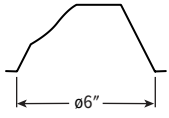


CANDLPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
		0°	45°	90°	135°	180°	
	0	1066	1066	1066	1066	1066	
	5	2383	1798	962	572	461	122
	15	6146	2935	527	199	151	477
	25	7369	2358	227	90	73	747
	35	5835	993	96	47	47	638
	45	1763	257	43	32	39	262
	55	174	36	22	23	27	50
	65	18	9	9	13	16	12
	75	6	1	0	1	4	2
	85	0	0	0	0	0	0
	90	0	0	0	0	0	0

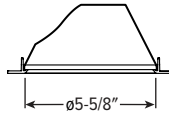
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1346	58
	0 - 40	1984	86
	0 - 60	2297	99
	0 - 90	2312	100
	0 - 180	2312	100

## TRIM TYPE DETAILS

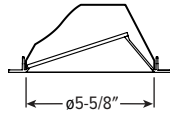
### OPEN



### FLUSH

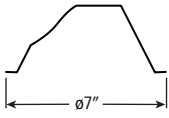


### ANGLED



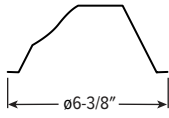
## FLANGE TYPE DETAILS

### 1/2" STANDARD



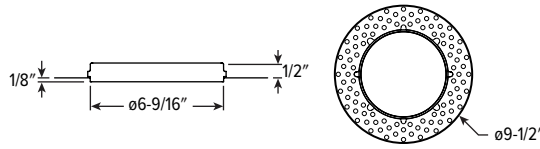
Ceiling Cutout:  $\phi 6-1/2''$

### 1/4" MUD-IN



Ceiling cutout:  $\phi 6-3/4''$

### MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



## REFLECTOR FINISH DETAILS

### CS

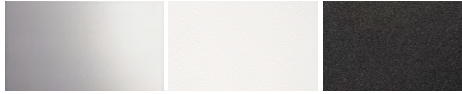
Clear semi-specular White

### WH

White

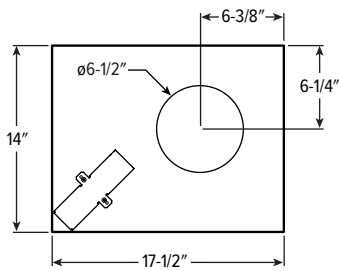
### BL

Black

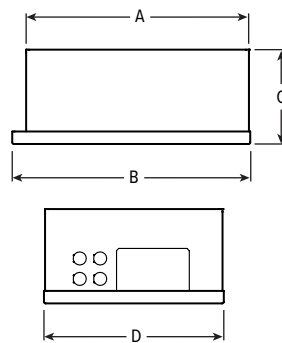


## MOUNTING TYPE DETAILS

### NEW CONSTRUCTION

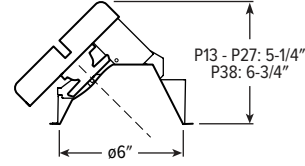


### IC-RATED

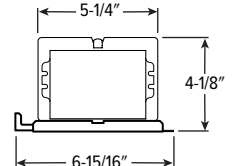


### REMODEL

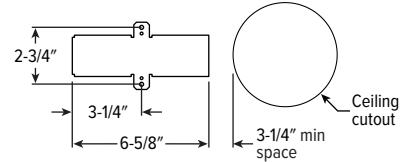
#### Cross Section



#### Driver and Junction Box



#### Receiver Bracket



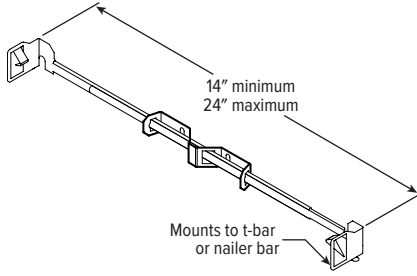
LUMENS	LENGTH			
	A	B	C	D
P13	15-3/16"	16"	6-3/8"	12-1/8"
P27	16-5/8"	17-1/2"	7-7/8"	14"



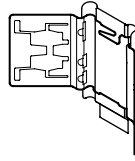
# 6AR PoE | tunable WHITE 6" Adjustable Downlight – Round

## MOUNTING HARDWARE DETAILS

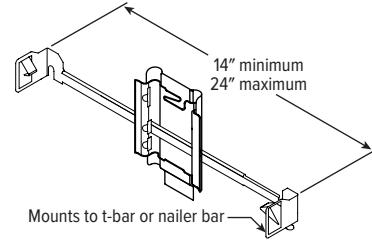
**F1** Factory-installed 2-position fixed pan bracket, universal bar hanger included, ships uninstalled



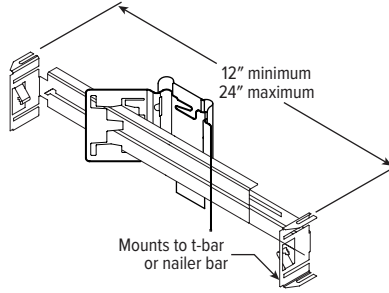
**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



**CA1** Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



**BA2** Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



**CA2** Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

