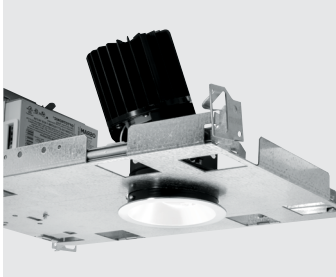


2AR PoE | tunable **WHITE** 2" Adjustable Downlight – Round



NEW CONSTRUCTION AND REMODEL

FEATURES

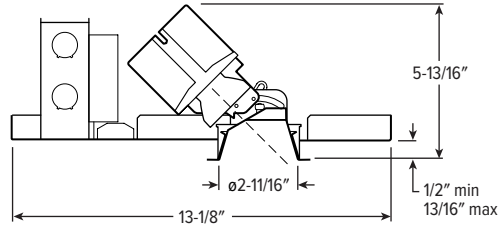
- Deliver scalable, data-driven smart buildings with PoE-enabled fixtures and controls
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – Die-cast aluminum spun and stamped articulating mechanism with forged aluminum heat sink. Mounting clips allow for ceiling thickness from 1/2" – 13/16".
- OPEN REFLECTOR** – Low-iridescent anodized aluminum. Clear semi-specular finish standard.
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens. Diffuse acrylic lens standard with A Trim Type.
- 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>55,000 hours. Estimated L70 = 200,000 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. N and R mounting types for use in non-fire rated installations only. Minimum 17" O.C. marked spacing required for P12 and P14 static white and P7 and P9 tunable white lumen packages when specified with R Mounting Type. Nodes cannot be mounted above hard ceilings
- LISTINGS** –
 - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and 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.
 - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY** – 5-year limited warranty, see 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



CATALOG #: _____

TYPE: _____

PROJECT: _____



ORDERING EXAMPLE: **2AR - P14/835 - OPTIONS - POE PR - OW - OF - CS - TRIM OPTIONS - N - F1**

HOUSING TRIM MOUNT

HOUSING

SERIES	LUMENS ^[1]	CRI	CCT	OPTIONS	CONTROL ^[2]
2AR	P5 500lm	8 80 ^[3]	27 2700K	ATH Airtight construction	POE PR Power over Ethernet-ready
	P7 700lm	9 90	30 3000K	CP Chicago plenum (CCEA) ^[5]	
	P9 900lm		35 3500K		
	P12 1,200lm		40 4000K		
	P14 1,400lm		50 5000K		
			TW Tunable white (90 CRI, 2700K-5000K) ^[4]		

TRIM ^[6]

TRIM TYPE	DISTRIBUTION ^[7]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	W 35° Wide	OF 1/2" standard flange	CS Clear semi-specular anodize	MWT Smooth matte white trim flange ^[10]
L Flush lens	M 20° Medium	ZF Zero-flange mud-in ^[9]	WH White texture powder coat	AD Diffuse acrylic lens ^[11]
R Regressed lens	N 15° Narrow ^[8]		BL Black texture powder coat	PD Diffuse 1/8" polycarbonate lens ^[12]
A Angled lens				WET/CC Wet location, covered ceiling listed ^[13]
				AM Anti-microbial ^[14]

MOUNTING

MOUNTING TYPE ^[15]

- N Open pan for new construction
- I IC-rated enclosure for new construction ^[17]
- R Remodel kit ^[18]

MOUNTING HARDWARE ^[16]

- F1 Integral 2-position fixed pan bracket, universal bar hanger included ^[19]
- BA1 Adjustable butterfly pan bracket, bar hanger not included ^[20]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included ^[21]

NOTES

- Lumen output based on O Trim Type, W Distribution, and CS Reflector Finish. 80 CRI/3500K CCT for single CCT and 90 CRI/4000K CCT for TW. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA
- For additional PoE connection details, consult factory.
- Not available with tunable white.
- P9 lumen package max with W and M Distributions. P7 lumen package max with N Distribution.
- I Mounting Type required.
- Trim ships separately.
- Beam angle based on static white, O Trim Type and CS Reflector Finish. Trim Type affects beam angle. See page 2 for FIXTURE PERFORMANCE DATA.
- P12 static white and P9 tunable white lumen package max when specified with N or R Mounting Type. P7 static white lumen package max when specified with I Mounting Type. Tunable White not available with I Mounting Type.
- For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for TRIM TYPE DETAILS. Not available with O Trim Type, ATH, or WET/CC options.
- Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.
- W Distribution only. Not available with O Trim Type.
- W Distribution only. Not available with O Trim Type.
- Not available with O Trim Type or ZF Flange Type.
- 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.
- P9 static white and P5 tunable white lumen packages max.
- Also used in new construction sheetrock ceilings. Pan-less installation.
- N and I Mounting Types only. I Mounting requires external brackets.
- N Mounting Type only.
- N Mounting Type only.



2AR PoE | tunable WHITE

2" Adjustable Downlight – Round

FIXTURE PERFORMANCE DATA

STATIC WHITE

	DISTRIBUTION	WATTAGE	OPEN REFLECTOR TRIM TYPE		FLUSH LENS TRIM TYPE		REGRESSED LENS TRIM TYPE		ANGLED LENS TRIM TYPE	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
P5	W	5.4	543	101	454	84	441	82	360	67
	M	5.4	391	72	303	56	292	54	195	36
	N	5.4	466	86	407	75	379	70	298	55
P7	W	7.6	713	94	596	78	580	76	473	62
	M	7.6	513	67	398	52	384	51	256	34
	N	7.6	612	81	535	70	498	65	392	52
P9	W	11.1	955	86	798	72	776	70	634	57
	M	11.1	687	62	533	48	514	46	342	31
	N	11.1	820	74	716	65	666	60	525	47
P12	W	15.3	1166	76	974	64	948	62	774	51
	M	15.3	839	55	651	43	628	41	418	27
	N	15.3	1001	65	875	57	814	53	641	42
P14	W	22.7	1407	62	1176	52	1144	50	934	41
	M	22.7	1012	45	785	35	758	33	504	22
	N	–	–	–	–	–	–	–	–	–

TUNABLE WHITE

	DISTRIBUTION	WATTAGE	OPEN REFLECTOR TRIM TYPE		FLUSH LENS TRIM TYPE		REGRESSED LENS TRIM TYPE		ANGLED LENS TRIM TYPE	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
P5	W	10.4	543	52	454	44	442	42	360	35
	M	10.4	445	43	345	33	333	32	222	21
	N	10.4	451	43	394	38	387	37	289	28
P7	W	15.9	748	47	625	39	608	38	496	31
	M	15.9	612	39	475	30	458	29	305	19
	N	15.9	621	39	543	34	533	34	398	25
P9	W	21.2	872	41	729	34	709	33	579	27
	M	21.2	714	34	554	26	535	25	356	17
	N	–	–	–	–	–	–	–	–	–
P12	W	–	–	–	–	–	–	–	–	–
	M	–	–	–	–	–	–	–	–	–
	N	–	–	–	–	–	–	–	–	–
P14	W	–	–	–	–	–	–	–	–	–
	M	–	–	–	–	–	–	–	–	–
	N	–	–	–	–	–	–	–	–	–

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

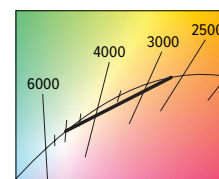
REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
CS	1.00
WH	0.89
BL	0.47

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

BEAM ANGLE

	TRIM TYPE							
	STATIC WHITE				TUNABLE WHITE			
	OPEN	FLUSH	REGRESSED	ANGLED	OPEN	FLUSH	REGRESSED	ANGLED
W	35°	35°	35°	30°	35°	40°	40°	35°
M	20°	20°	20°	20°	30°	30°	30°	35°
N	15°	15°	15°	20°	20°	20°	20°	25°

- Photometrics tested in accordance with IESNA LM-79. Results based on O trim type, W distribution, CS finish, and 25°C ambient temperature. Static white results based on 80 CRI/3500K CCT. Tunable white results based on 90 CRI/4000K CCT. Actual performance may vary +/-5%.
- Wattage and efficacy data shown do not account for node losses.
- Beam angle based on static white, O Trim Type and CS Reflector Finish.
- Use multiplier tables to calculate additional options.



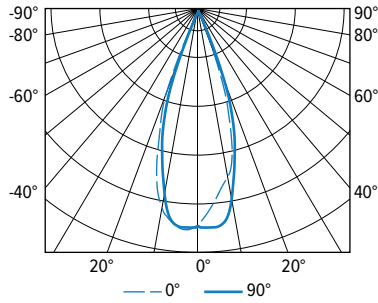
PHOTOMETRY CONTINUED ON NEXT PAGE



2AR PoE | tunable **WHITE** 2" Adjustable Downlight – Round

PHOTOMETRY

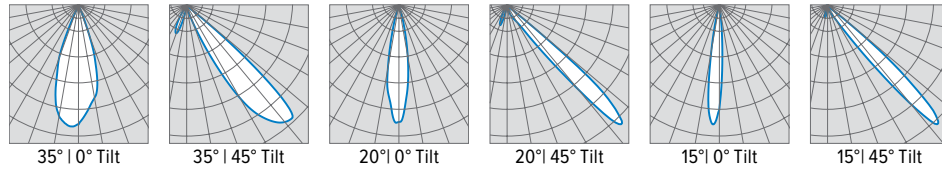
2AR-P12/835-POE PR-OW-OF-CS (0° tilt) Total Luminaire Output: 1166 lumens; 15.3 Watts | Efficacy: 76 lm/W | 80 CRI; 3500K CCT



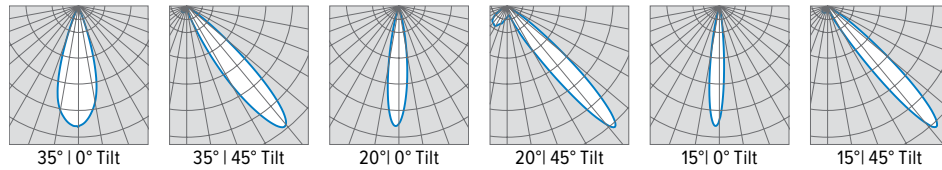
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	3932	3932	3932	3932	3932	
5	3460	3622	3955	4086	3975	354
15	2175	2256	2473	2722	2812	662
25	59	72	133	238	255	138
35	7	8	11	12	12	7
45	2	2	5	4	4	3
55	1	1	2	2	2	1
65	1	1	0	0	0	1
75	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1154	99
	0 - 40	1161	99
	0 - 60	1165	100
	0 - 90	1166	100
	0 - 180	1166	100

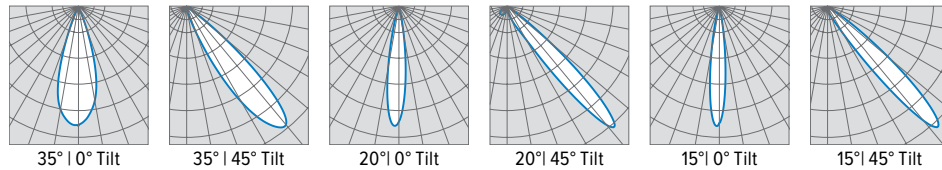
OPEN



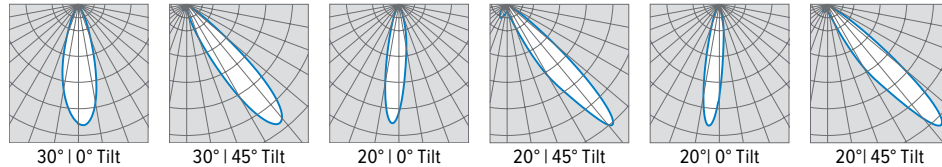
FLUSH



REGRESSED



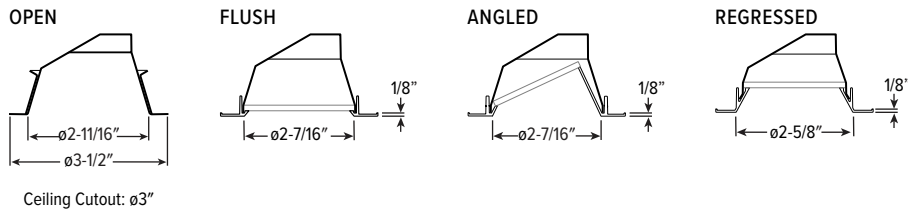
ANGLED



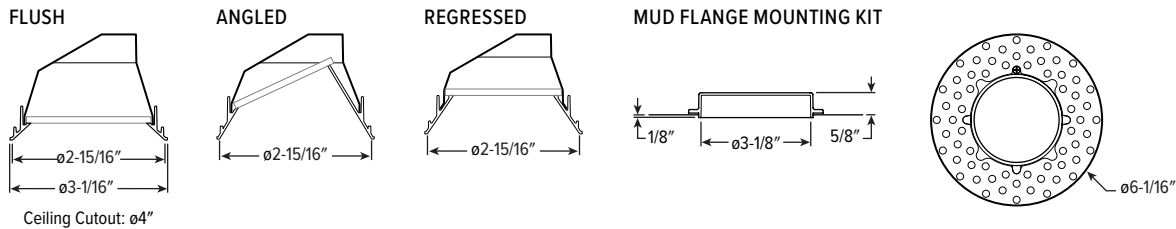
2AR PoE | tunable **WHITE** 2" Adjustable Downlight – Round

TRIM TYPE DETAILS

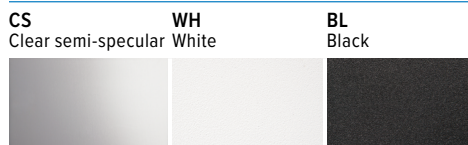
1/2" STANDARD FLANGE TYPE



ZERO-FLANGE MUD-IN

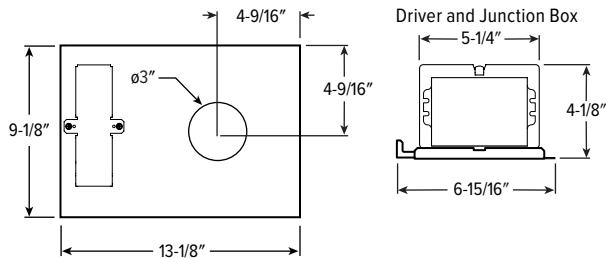


REFLECTOR FINISH DETAILS

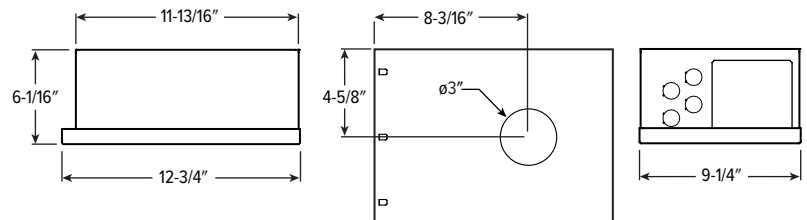


MOUNTING TYPE DETAILS

NEW CONSTRUCTION

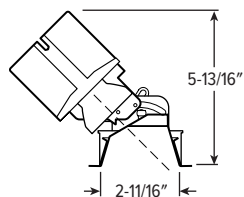


IC-RATED



REMODEL

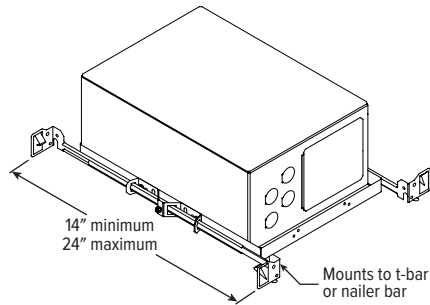
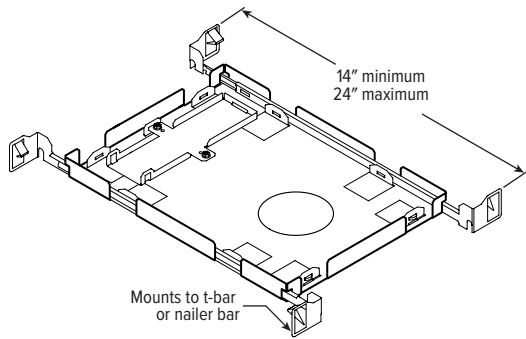
Cross Section



2AR PoE | tunable **WHITE** 2" Adjustable Downlight – Round

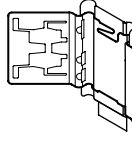
MOUNTING HARDWARE DETAILS

F1 Integral 2-position fixed pan bracket, universal bar hanger included

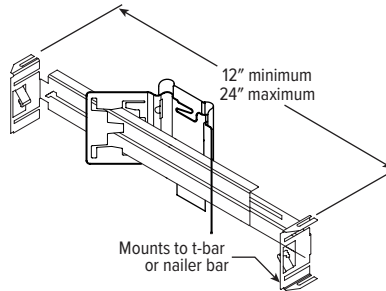


F1 with I Mounting Type

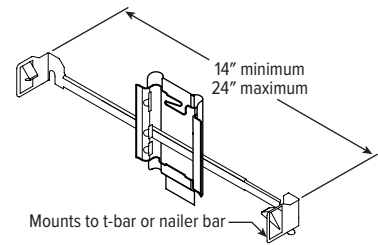
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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



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



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

