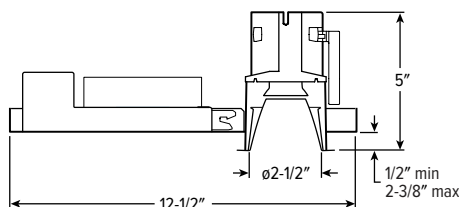
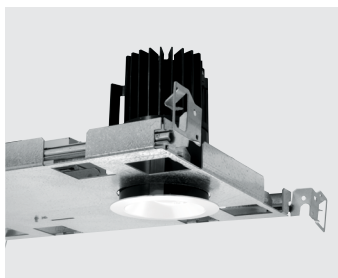


2DR tunable WHITE 2" Downlight – Round



CATALOG #: _____

TYPE: _____

PROJECT: _____



ORDERING EXAMPLE: 2DR - L15/9TW - OPTIONS - DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1

HOUSING

SERIES	LUMENS ^[1]	COLOR	OPTIONS	CONTROL	VOLTAGE
2DR	L5 500lm L7 700lm L9 900lm L12 1,200lm L15 1,500lm	9TW Tunable white (90 CRI, 2700K-5000K)	See page 4 for EMERGENCY BATTERY OPTIONS. ATH Airtight construction F Fuse CP Chicago plenum (CCEA) ^[2]	See page 3 for CONTROL DETAILS. DALI Driver prewired for DALI applications DIM Dimming driver with (1) 0-10V signal to control dimming and (1) 0-10V signal to control CCT DMX Driver prewired for DMX applications PSQ Lutron T-Series 2-channel tunable white 1%. ^[3]	UNV 120-277V

TRIM ^[4]

TRIM TYPE	DISTRIBUTION ^[5]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector L Flush lens R Regressed lens A Angled lens ^[6]	W 70° Wide M 40° Medium N 15° Narrow ^[7] WW Wall wash ^[8]	OF 1/2" standard flange ZF Zero-flange mud-in ^[9]	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 WH White texture powder coat BL Black texture powder coat Lens trim types CS Clear semi-specular powder coat WH White texture powder coat BL Black texture powder coat MB Black texture splay with white flange ^[10]	MWT Textured white trim flange ^[11] AD Diffuse acrylic lens ^[12] PD Diffuse 1/8" polycarbonate lens ^[13] TD Diffuse polycarbonate lens media at top of open reflector ^[14] WET/CC Wet location, covered ceiling listed ^[15] AM Anti-microbial ^[16]

MOUNTING

MOUNTING TYPE ^[17]	MOUNTING HARDWARE ^[18]
N Open pan for new construction ^[19] I IC-rated enclosure for new construction ^[20]	F1 Integral 2-position fixed pan bracket, universal bar hanger included ^[21] BA1 Adjustable butterfly pan bracket, bar hanger not included ^[22] CA1 Adjustable caterpillar pan bracket, universal bar hanger included ^[23]

NOTES

- Lumen output based on O Trim Type, W Distribution, and CS Reflector Finish, 90 CRI/4000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- I Mounting Type required.
- N Mounting Type only, top access required.
- Trim ships separately.
- Beam angle based on O Trim Type and CS Reflector Finish. Trim Type affects beam angle. See page 2 for FIXTURE PERFORMANCE DATA.
- Available with WW Distribution only.
- When specified with L or R Trim Type: L12 lumen package max for N Mounting, L7 lumen package max for I Mounting.
- A Trim Type only.
- 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 or ATH Option.
- R Trim Type only. Not available with ZF Flange Type or MWT.
- Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.
- W distribution only. Not available with O Trim Type.
- W and WW distributions only. Not available with O Trim Type.
- O Trim Type only. WET/CC standard.
- Not available with PD trim option.
- WH and BL Reflector Finishes only.
- Mounting hardware required, ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
- Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
- Top access required when specified with EM battery.
- L9 lumen package max. Not available with EM batteries.
- I Mounting requires external brackets.
- N Mounting Type only.
- N Mounting Type only.

2DR tunable WHITE

2" Downlight – Round

FEATURES

- Support human-centric design with adaptive, individualized lighting using tunable white light
- 2" aperture is unobtrusive in small scale spaces
- Zero-flange trim options for modern ceiling
- Die cast trim choices include flush, regressed or angled lens
- Beam angles ranging from 15° narrow to 70° wide for tailored performance
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Open reflector with nine finishes complements any interior style
- New construction mounting pan or IC-rated enclosure available

SPECIFICATIONS

- HOUSING** – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2" – 2-3/8".
- 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 driver. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours. 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. Top access required for driver maintenance.

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 or TD options.
- 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.

FIXTURE PERFORMANCE DATA

	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)
L5	W	10.5	570	54	597	57	591	56	–	–
	M	10.5	575	55	614	58	587	56	–	–
	N	10.5	440	42	571	54	557	53	–	–
	WW	10.5	–	–	–	–	–	–	404	38
L7	W	13.5	761	56	797	59	789	58	–	–
	M	13.5	768	57	819	61	784	58	–	–
	N	13.5	588	44	762	56	743	55	–	–
	WW	13.5	–	–	–	–	–	–	540	40
L9	W	18.3	1062	58	1112	61	1101	60	–	–
	M	18.3	1071	59	1144	62	1094	60	–	–
	N	18.3	821	45	1063	58	1037	57	–	–
	WW	18.3	–	–	–	–	–	–	753	41
L12	W	22.5	1306	58	1368	61	1353	60	–	–
	M	22.5	1318	59	1406	63	1346	60	–	–
	N	22.5	1009	45	1308	58	1275	57	–	–
	WW	22.5	–	–	–	–	–	–	926	41
L15	W	28.4	1540	54	1613	57	1596	56	–	–
	M	28.4	1554	55	1658	58	1587	56	–	–
	N	28.4	1190	42	–	–	–	–	–	–
	WW	28.4	–	–	–	–	–	–	1092	38

MULTIPLIER TABLES

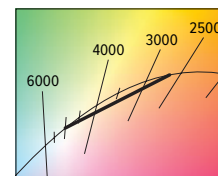
COLOR TEMPERATURE		
CCT	LUMENS	WATTS
2700K	0.87	1.05
3000K	0.96	1.11
3500K	1.02	1.06
4000K	1.00	1.00
5000K	1.02	1.06

	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	0.89
	BL ¹	0.47
	WH	1.00
	CS	0.98
	BL	0.79

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85
TD	0.67
WET/CC ²	0.85

BEAM ANGLE

	TRIM TYPE		
	OPEN	FLUSH	REGRESSED
W	70°	50°	55°
M	40°	30°	30°
N	15°	20°	20°



¹ Distribution will also be affected, consult factory.

² Use multiplier only when specified with O Trim Type.

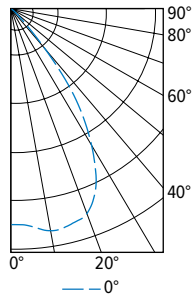
- Photometrics tested in accordance with IESNA LM-79. Results based on CS (O Trim Type) or WH (L, R and A Trim Types) Reflector Finish, 90 CRI/4000K CCT, average wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- Beam angle based on O Trim Type and CS Reflector Finish.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.



2DR tunable WHITE 2" Downlight – Round

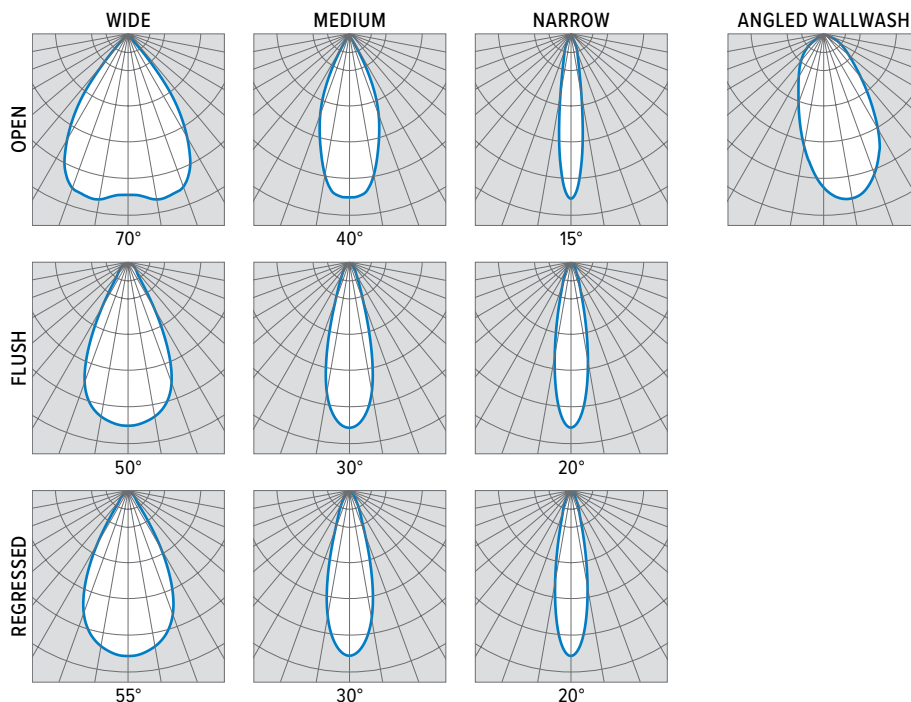
PHOTOMETRY

2DR-L15/9TW-DIM-UNV-OW-OF-CS Total Luminaire Output: 1540 lumens; 28.4 Watts | Efficacy: 54 lm/W | 90 CRI; 4000K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	1325	
	5	1327	128
	15	1393	389
	25	1259	549
	35	628	369
	45	85	76
	55	21	20
	65	8	8
	75	1	2
	85	0	0
	90	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1434	93
	0 - 60	1530	99
	0 - 90	1540	100
	0-180	1540	100



CONTROL DETAILS

DIM

DIM (Int) + Fixture 1
DIM (CCT) + Fixture 1
DIM -

DALI

DALI + Fixture 1
DALI -

DMX

RJ45 Ports (IN/OUT) Fixture (Master)

LUTRON T-SERIES

T1 Fixture 1
T2

REFLECTOR FINISH DETAILS

SPC	SG	PW	GD	CG	RG	CS	WH	BL
Clear specular	Satin glow	Pewter	Gold	Champagne gold	Rose gold	Clear semi-specular	White	Black

2DR tunable WHITE 2" Downlight – Round

EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.

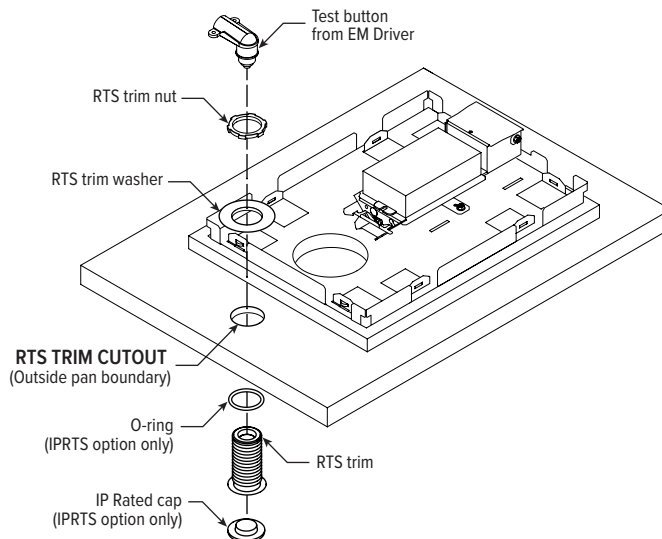
CATALOG NUMBER	DESCRIPTION
EM/5W	5-watt emergency battery
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch ¹
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch ²
EM/10W	10-watt emergency battery ³
EM/10W/RTS	10-watt emergency battery with regressed test switch ⁴
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch ⁵

- ¹ Not available with WET/CC Option. N Mounting Type only. Top access required.
- ² N Mounting Type only. Top access required.
- ³ Not available with L5 lumen package.
- ⁴ Not available with L5 lumen package or WET/CC Option. N Mounting Type only. Top access required.
- ⁵ Not available with L5 lumen package. N Mounting Type only. Top access required.

REGRESSED TEST SWITCH DETAILS

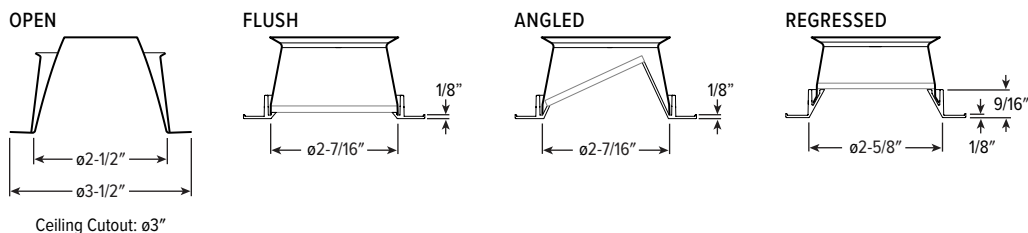


Shown Installed

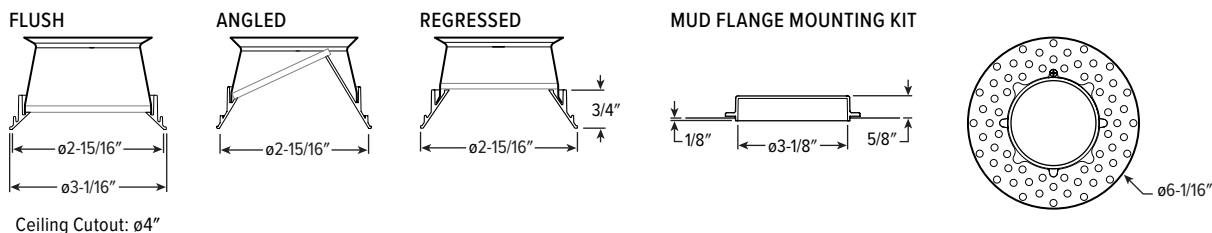


TRIM TYPE DETAILS

1/2" STANDARD FLANGE TYPE



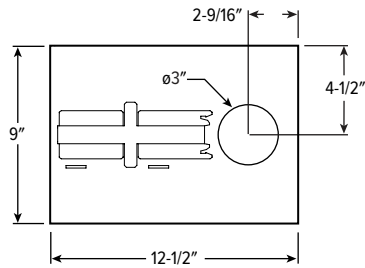
ZERO-FLANGE MUD-IN



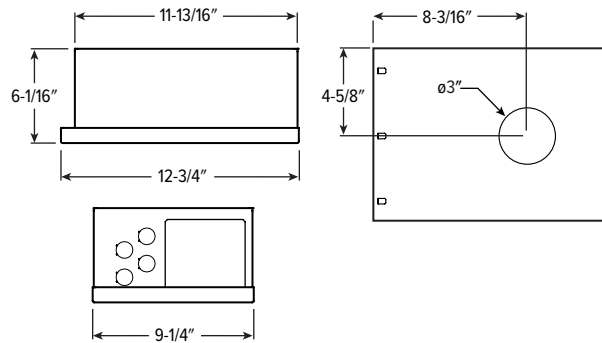
2DR tunable **WHITE** 2" Downlight – Round

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

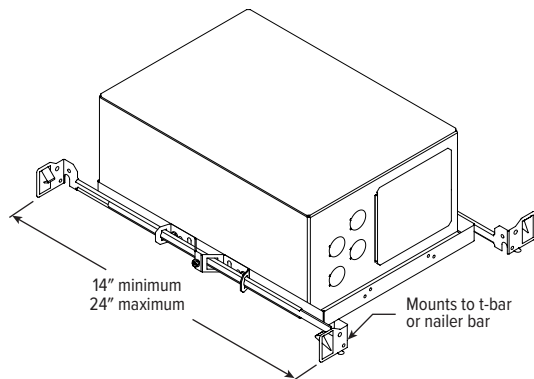
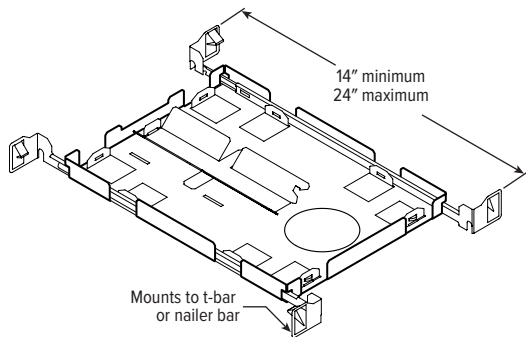


IC-RATED



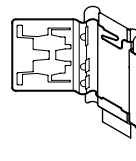
MOUNTING HARDWARE DETAILS

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

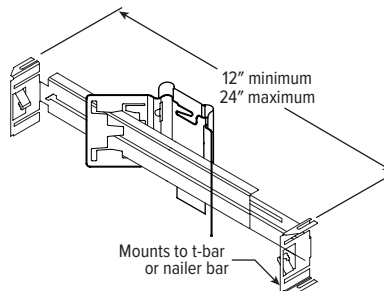


F1 with I Mounting Type

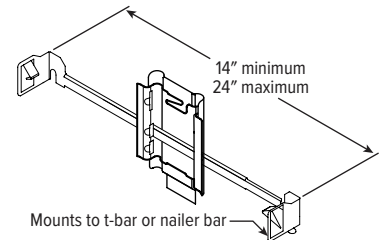
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)

