2DR dim to WARM
2″ Downlight – Round

Williams®

NEW CONSTRUCTION AND REMODEL

5″
ø2-1/2″
12-1/2″
1/2″ min
2-3/8″ max

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT · *CCEA Approved* · *WET/CC*

ORDERING EXAMPLE: 2DR - L12/9DW - OPTIONS - DIM1 - UNV - OW - OF - CS - TRIM OPTIONS - N - F1

| HOUSING | TRIM | MOUNT. |

HOUSING

SERIES	LUMENS [1]	COLOR	OPTIONS	CONTROL	VOLTAGE
2DR	**L7** 700lm	**9DW** Dim to warm (95 CRI, 1800K – 3000K)	*See page 3 for EMERGENCY BATTERY OPTIONS.*	**DIM1** 1% dimming driver (0-10V signal to control dimming and CCT)	**UNV** 120-277V
	L12 1,200lm		**ATH** Airtight construction	**LUT** Lutron Ecosystem enabled [4]	**347** 347V [5]
			F Fuse		
			CP Chicago plenum (CCEA) [2]		
			SDT Stepdown transformer [3]		

TRIM [6]

TRIM TYPE	DISTRIBUTION	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	*See page 2 for BEAM ANGLE.*	**OF** 1/2″ standard flange	**Open trim types**	**MWT** Smooth matte white trim flange [13]
F Open reflector with frosted top diffuser [7]	**W** Wide	**ZF** Zero-flange mud-in [11]	**CS** Clear semi-specular anodize	**AD** Diffuse acrylic lens [14]
L Flush lens	**M** Medium		**SG** Satin glow anodize	**PD** Diffuse 1/8″ polycarbonate lens [15]
R Regressed lens	**N** Narrow [9]		**GD** Gold anodize	**WET/CC** Wet location, covered ceiling listed
A Angled lens [8]	**WW** Wall wash [10]		**CG** Champagne gold anodize	**AM** Anti-microbial [16]
			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 [12]	

MOUNTING

MOUNTING TYPE [17]	MOUNTING HARDWARE [18]
N Open pan for new construction [19]	**F1** Integral 2-position fixed pan bracket, universal bar hanger included [22]
I IC-rated enclosure for new construction [20]	**BA1** Adjustable butterfly pan bracket, bar hanger not included [23]
R Remodel kit [21]	**CA1** Adjustable caterpillar pan bracket, universal bar hanger included [24]

NOTES

1 Lumen output based on O Trim Type, W Distribution, and CS Reflector Finish, 95 CRI/3000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
2 I Mounting Type required.
3 Not available with R Mounting. May be required for 347V, see product builder at hew.com/product-builder
4 N Mounting Type only, top access required.
5 Not available with EM batteries or DMX Driver.
6 Trim ships separately.
7 WET/CC standard unless ordered with EM/RTS.
8 Available with WW Distribution only.
9 When specified with L or R Trim Types: L7 lumen package max.
10 A Trim Type only.
11 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 or F Trim Types or ATH Option.
12 R Trim Type only. Not available with ZF Flange Type or MWT Trim Option.
13 Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.

14 W Distribution only. Not available with O or F Trim Types.
15 W and WW Distributions only. Not available with O or F Trim Types.
16 WH and BL Reflector Finishes only.
17 Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
18 Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
19 Top access required when specified with EM battery or when specified using LUT Control with L12 lumen package.
20 L7 lumen package max. Not available with EM batteries.
21 Also used in new construction sheetrock ceilings. Pan-less installation. Additional plenum space required for R mounting when specified with EM battery. See page 3 for REMODEL MOUNTING PLENUM RESTRICTIONS.
22 N and I Mounting Types only. I Mounting requires external brackets.
23 N Mounting Type only.
24 N Mounting Type only.

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Downlights
Page 1 of 5

2DR dim to WARM
2″ Downlight – Round

FEATURES

- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Beam angles ranging from 15º narrow to 70º wide for tailored performance
- 2″ aperture is unobtrusive in small scale spaces
- Zero-flange trim options for modern ceiling
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Die-cast trim choices include flush, regressed or angled lens
- Open reflector with nine finishes complements any interior style
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- Made Right Here® in the USA

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 = 49,000 hours. Estimated L70 = 179,000 hours.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Minimum 12-1/2″ O.C. marked spacing required for L12 lumen package when specified with R Mounting Type.

- 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 or F trim type.
  - 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/buy-american
- WARRANTY – 5-year limited warranty, see hew.com/warranty

FIXTURE PERFORMANCE DATA

	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	DISTRIBUTION	WATTAGE	OPEN REFLECTOR TRIM TYPE DELIVERED LUMENS	EFFICACY (lm/W)	FLUSH LENS TRIM TYPE DELIVERED LUMENS	EFFICACY (lm/W)	REGRESSED LENS TRIM TYPE DELIVERED LUMENS	EFFICACY (lm/W)	ANGLED LENS TRIM TYPE DELIVERED LUMENS	EFFICACY (lm/W)
L7	3000K	1800K	W	14.8	715	48	749	50	741	50	–	–
L7			M	14.8	710	48	757	51	725	49	–	–
L7			N	14.8	590	40	764	52	745	50	–	–
L7			WW	14.8	–	–	–	–	–	–	507	34
L12			W	23.3	1239	53	1297	56	1284	55	–	–
L12			M	23.3	1243	53	1327	57	1269	54	–	–
L12			N	23.3	941	40	–	–	–	–	–	–
L12			WW	23.3	–	–	–	–	–	–	879	38

MULTIPLIER TABLES

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
	WH [1]	0.89
	BL [1]	0.47
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

TRIM OPTIONS

CATALOG NUMBER	CONVERSION FACTOR
F	0.67
AD	0.85
PD	0.85
WET/CC	0.85

BEAM ANGLE

	TRIM TYPE [2]			
	O	F	L	R
W	70°	Consult Factory	50°	55°
M	40°		30°	30°
N	15°		20°	20°
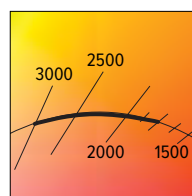
[1] Distribution will also be affected, consult factory.
[2] Beam angle based on CS Reflector Finish.

- 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, 95 CRI/3000K CCT, average wattage for 120V input, and 25ºC 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.

PHOTOMETRY

2DR-L12/9DW-DIM1-UNV-OW-OF-CS Report #: 13131414; 12/02/19 | Total Luminaire Output: 1239 lumens; 23.3 Watts | Efficacy: 53.1 lm/W | 95 CRI; 3000K CCT
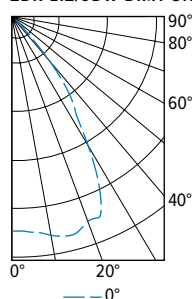
VERTICAL ANGLE	HORIZONTAL ANGLE 0º	ZONAL LUMENS
0	1076	
5	1086	79
15	1132	183
25	1006	218
35	487	122
45	63	17
55	17	6
65	6	2
75	1	0
85	0	0
90	0	

	ZONE	LUMENS	% FIXTURE
LUMEN SUMMARY	0 - 40	1154	93
	0 - 60	1231	99
	0 - 90	1239	100
	0-180	1239	100

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Downlights
Page 2 of 5

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OPEN (O)

70° Wide	40° Medium	15° Narrow

REGRESSED (R)

55° Wide	30° Medium	20° Narrow

FLUSH (L)

50° Wide	30° Medium

## ANGLED (A)

20° Narrow	Wall Wash
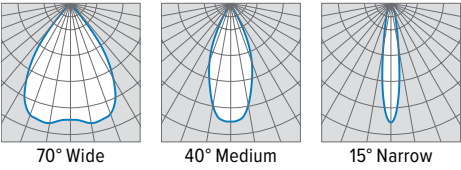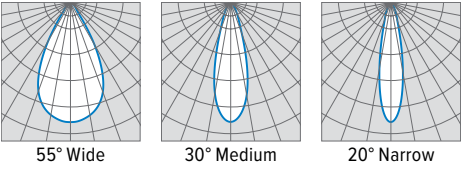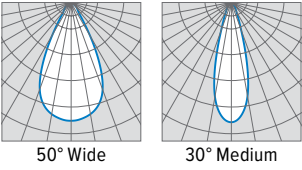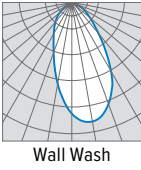
EMERGENCY BATTERY OPTIONS

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
EM/10W/RTS	10-watt emergency battery with regressed test switch [1]
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch [2]

[1] Not available with WET/CC Trim Option. N Mounting Type only. Top access required.
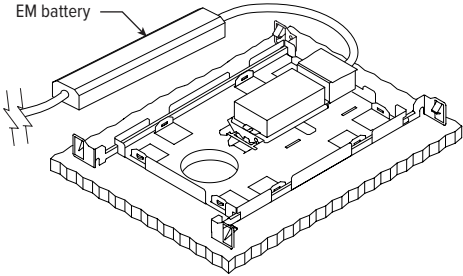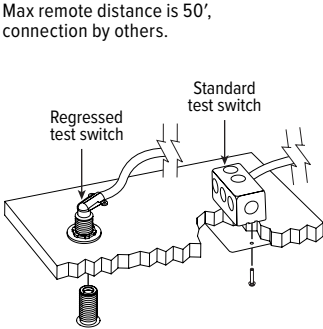[2] Must specify IP Trim Option. N Mounting Type only. Top access required.

MOUNTING DETAILS
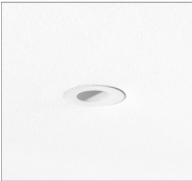
Regressed test switch
ø1-3/4″

Standard test switch
2-3/4″ x 4-1/2″

Max remote distance is 50′, connection by others.

Regressed test switch

Standard test switch

EM battery

REMODEL MOUNTING PLENUM RESTRICTIONS

Additional plenum space required for R mounting when specified with EM battery.

CATALOG NUMBER	MINIMUM HEIGHT
EM/5W	9″
EM/7W	11″
EM/10W	12″

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

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Downlights
Page 3 of 5

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TRIM TYPE DETAILS

1/2" STANDARD FLANGE TYPE

OPEN (O)

ø2-1/2"
ø3-1/2"

Ceiling Cutout: ø3"
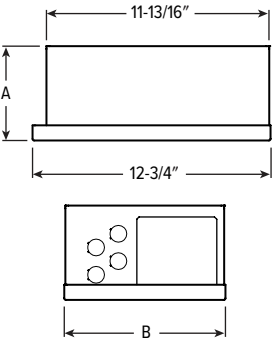
OPEN TOP DIFFUSER (F)

ø2-1/2"

FLUSH (L)

ø2-7/16"
1/8"

ANGLED (A)

ø2-7/16"
1/8"

REGRESSED (R)

ø2-5/8"
9/16"
1/8"

ZERO-FLANGE MUD-IN

FLUSH (L)

ø2-15/16"
ø3-1/16"

Ceiling Cutout: ø4"

ANGLED (A)

ø2-15/16"

REGRESSED (R)

ø2-15/16"
3/4"

MUD FLANGE MOUNTING KIT

1/8"
ø3-1/8"
5/8"

ø6-1/16"
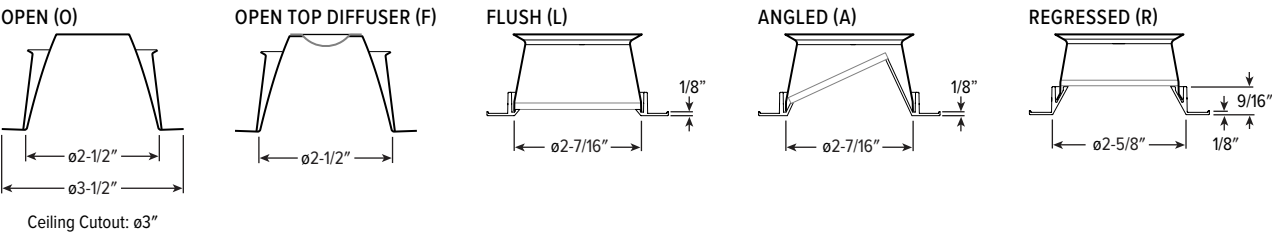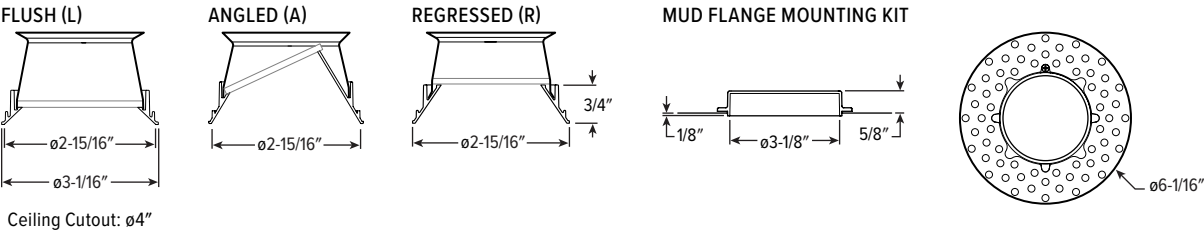
MOUNTING TYPE DETAILS

NEW CONSTRUCTION

2-9/16"
ø3"
4-1/2"
9"
12-1/2"

IC-RATED

11-13/16"
A
12-3/4"

B

C
D
ø3"
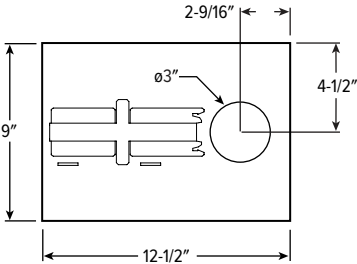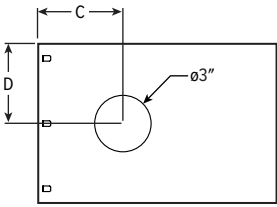
	DIM CONTROL	LUT CONTROL
A	5"	6-1/16"
B	8-9/16"	9-1/4"
C	4-9/16"	8-3/16"
D	4-5/16"	4-5/8"

REMODEL
CROSS SECTION

5"
ø2-1/2"
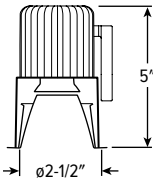
DRIVER & JUNCTION BOX

5-1/4"
4-1/8"
6-15/16"
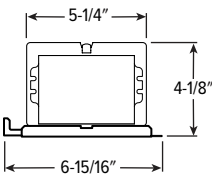
MOUNTING HARDWARE CONTINUED ON NEXT PAGE.

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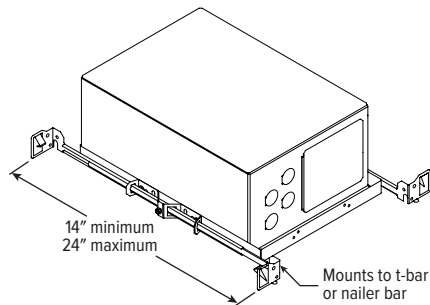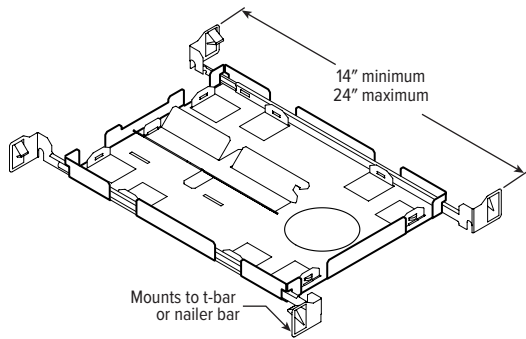Information contained herein is subject to change without notice.   REV.01/10/25.JL

Downlights
Page 4 of 5

2DR
dim to **WARM**
2″ Downlight – Round

MOUNTING HARDWARE DETAILS

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

14″ minimum
24″ maximum

Mounts to t-bar
or nailer bar

14″ minimum
24″ maximum
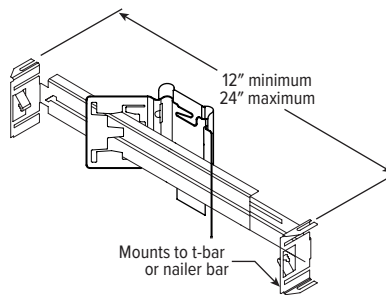
Mounts to t-bar
or nailer bar
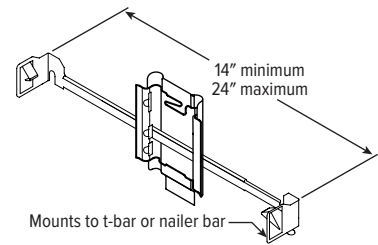
F1 with I Mounting Type

BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)
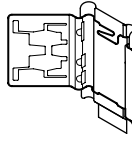
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

12″ minimum
24″ maximum

Mounts to t-bar
or nailer bar

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

14″ minimum
24″ maximum

Mounts to t-bar or nailer bar

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

11″ minimum
26″ maximum

Mounts to t-bar

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Downlights
Page 5 of 5