8DR LED
8" Downlight – Round

Williams

L20 - L40: 9"
L60 - L80: 9-1/2"
ø8-1/2"
ø9-1/2"
1/2" min
1-7/16" max

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: **8DR** - **L60/835** - **OPTIONS** - **CONTROL/DIM** - **120** - **OW** - **CS** - **TRIM OPTIONS** - **N** - **BA1**

— HOUSING — | — TRIM — | — MOUNT. —

HOUSING

SERIES	LUMENS [1]	CRI	CCT	OPTIONS	CONTROL	DRIVER	VOLTAGE
8DR	**L20** 2,000lm	**8** 80	**27** 2700K	*See page 3 for EMERGENCY BATTERY OPTIONS.*	*See page 5 for ADDITIONAL CONTROL/DRIVER OPTIONS.*	*See page 5 for ADDITIONAL CONTROL/DRIVER OPTIONS.*	**120** 120V
	L40 4,000lm	**9** 90 [2]	**30** 3000K				**277** 277V
	L60 6,000lm		**35** 3500K	**SCA__** Sloped ceiling adapter [3]	**—** None	**DIM** Dimming driver, 0-10V	**347** 347V [9]
	L80 8,000lm		**40** 4000K	**ATH** Airtight construction	**AVI-LVFA** Avi-on wireless fixture control [6]	**DIM1** 1% Dimming driver, 0-10V	
			50 5000K	**F** Fuse		**DA** Driver with 12V auxiliary power, without external dimming wires [8]	
				CP Chicago plenum (CCEA) [4]	**AWNR** Lutron Athena wireless node integral fixture control, RF only [7]		
				SDT Stepdown transformer [5]			
				TC Adjustable mounting arms for 1-1/2" - 2-1/4" thick ceilings			

TRIM [10]

TRIM TYPE	DISTRIBUTION [11]	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	**W** 65° Wide	**CS** Clear semi-specular anodize	**MWT** Textured white trim flange [12]
	M 45° Medium	**SG** Satin-glow anodize	**WET/CC** Wet location, covered ceiling listed
	N 35° Narrow	**GD** Gold anodize	**AM** Anti-microbial [13]
		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	

MOUNTING

MOUNTING TYPE [14]	MOUNTING HARDWARE [15]
N Open pan for new construction	**F1** Integral 2-position fixed pan bracket, universal bar hanger included [18]
I IC-rated enclosure for new construction [16]	**BA1** Adjustable butterfly pan bracket, bar hanger not included [19]
R Remodel kit [17]	**CA1** Adjustable caterpillar pan bracket, universal bar hanger included [20]

NOTES

1. 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. Higher lumen packages available, consult factory.
2. Extended lead times may apply. Consult factory for availability.
3. 14" aperture, specify degrees of slope in 5° increments, 05°-30°. See page 3 for SLOPED CEILING ADAPTOR DETAILS. N Mounting Type only. Not available with ATH or WET/CC Options. Painted white. Other colors available, consult factory.
4. I Mounting Type required.
5. May be required for 347V, see product builder at hew.com/product-builder.
6. DA Driver only. See page 5 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
7. DA Driver only.
8. Avi-on and Lutron Athena Controls only.
9. Not available with EM batteries, DA or DMX Drivers.
10. Trim ships separately.
11. Beam angle based on CS or WH reflector finish. See page 2 for FIXTURE PERFORMANCE DATA.
12. Not available with WH Reflector Finish.
13. WH and BL Reflector Finishes only.
14. Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
15. Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
16. L20 lumen package max. Not available with EM batteries.
17. Also used in new construction sheetrock ceilings. Pan-less installation.
18. N and I Mounting Types only. I Mounting requires external brackets.
19. N Mounting Type only.
20. N Mounting Type only.

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Downlights
Page 1 of 5

8DR LED
8" Downlight – Round

FEATURES

- High-output illumination for tall ceiling applications
- Beam angles ranging from 35° narrow to 65° wide for tailored performance
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Open reflector with 9 finishes to complement any interior style
- Fully room-side accessible
- Wireless in-fixture control solutions available

bios ILLUMINATED

Available with BIOS® consult factory

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" – 1-7/16". See Options for additional ceiling thicknesses.
- OPEN REFLECTOR – Low-iridescent anodized aluminum with 1/2" flange. Clear semi-specular finish standard.
- 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.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. Minimum 24" O.C. marked spacing required for L60 - L80 lumen packages.

- 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.

FIXTURE PERFORMANCE DATA

DIST.		DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L20	W	2010	24.3	83
	M	1991	24.3	82
	N	1824	24.3	75
L40	W	4005	46.4	86
	M	3966	46.4	86
	N	3634	46.4	78
L60	W	6000	71.9	83
	M	5943	71.9	83
	N	5444	71.9	76
L80	W	8007	95.1	84
	M	7931	95.1	83
	N	7265	95.1	76

MULTIPLIER TABLES

COLOR TEMPERATURE

	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
	5000K	1.02
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

REFLECTOR FINISH

CATALOG NUMBER	CONVERSION FACTOR
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

[1] Distribution will also be affected, consult factory.
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25ºC ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
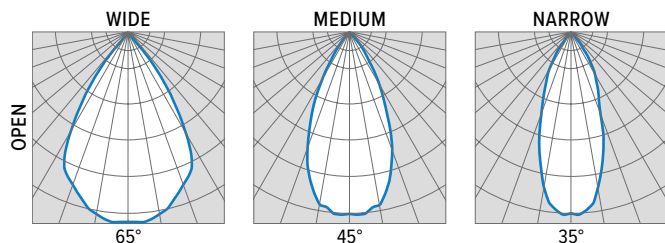- Use multiplier tables to calculate additional options.

PHOTOMETRY

8DR-L60/835-OW-CS Total Luminaire Output: 6000 lumens; 71.9 Watts | Efficacy: 83 lm/W | 80 CRI; 3500K CCT
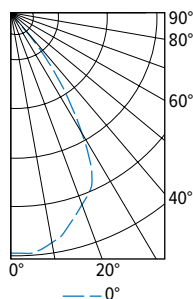
	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
CANDLEPOWER DISTRIBUTION	0	5866	
	5	5903	554
	15	5382	1514
	25	4655	2084
	35	2299	1432
	45	359	330
	55	48	46
	65	24	24
	75	12	12
	85	3	3
	90	0	

	ZONE	LUMENS	% FIXTURE
LUMEN SUMMARY	0 - 40	5585	93
	0 - 60	5960	99
	0 - 90	6000	100
	0 - 180	6000	100

WIDE
65°

MEDIUM
45°

NARROW
35°

OPEN

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Downlights
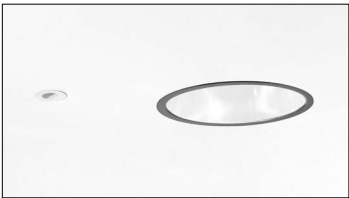Page 2 of 5

8DR LED
8" Downlight – Round

EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.
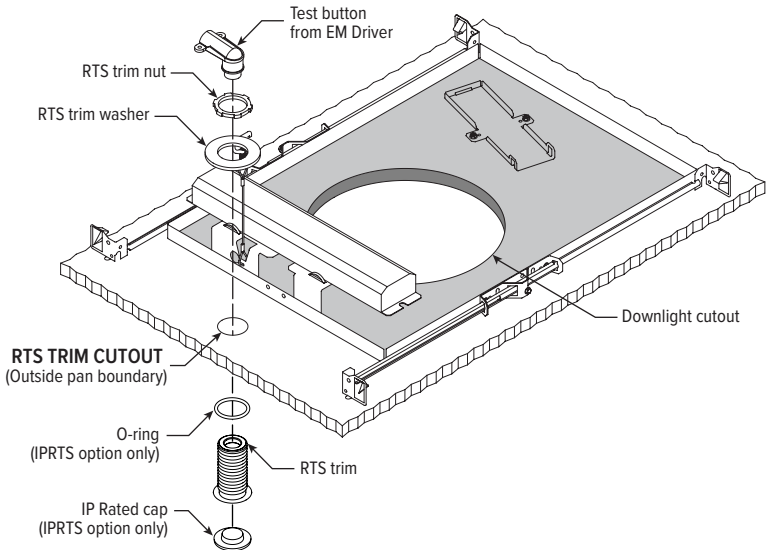
CATALOG NUMBER	DESCRIPTION
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch [1]
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch
EM/10W	10-watt emergency battery
EM/10W/RTS	10-watt emergency battery with regressed test switch [1]
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch

1 Not available with WET/CC Option.

REGRESSED TEST SWITCH DETAILS

Shown Installed

Test button from EM Driver

RTS trim nut

RTS trim washer

RTS TRIM CUTOUT
(Outside pan boundary)

O-ring
(IPRTS option only)

RTS trim

IP Rated cap
(IPRTS option only)

Downlight cutout
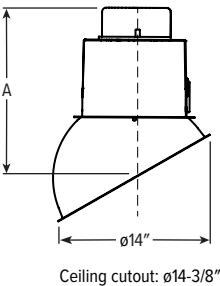
SLOPED CEILING ADAPTOR DETAILS

	A (HEIGHT)						PLENUM HEIGHT
LUMENS	5°	10°	15°	20°	25°	30°	
L20 - L40	13-5/16"	13-3/8"	13-5/16"	13-3/16"	13"	12-5/8"	13-3/4"
L60 - L80	14-3/4"	14-13/16"	14-3/4"	14-5/8"	14-5/16"	14"	15"

30° Shown

A

ø14"

Ceiling cutout: ø14-3/8"

REFLECTOR FINISH DETAILS

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

APERTURE ADAPTOR ORDERING INFO

ORDERING EXAMPLE: 4DR - GR - 0575 - WHT			
SERIES	CATALOG NUMBER	CEILING CUTOUT	FINISH
4AR 6AR 4DR 6DR 4DS 6DS 4PR 6PR 4PS 6PS 8DR	GR	Specify ceiling cutout in 1/8" increments. Example: 5.75" = **0575** See Kit Components for application limits.	**CS** Clear semi-specular powder coat **WH** White texture powder coat **BL** Black texture powder coat

For use with remodel downlights. Additional finishes available, consult factory.
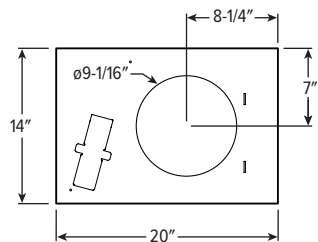For limitations and instructions, see hew.com/aperture-adaptor.pdf

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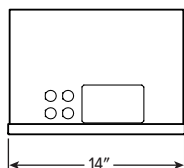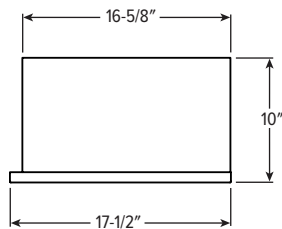
Downlights
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8DR LED
8" Downlight – Round

MOUNTING TYPE DETAILS
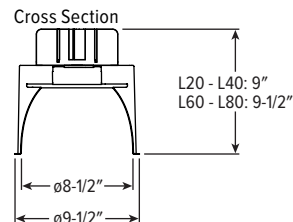
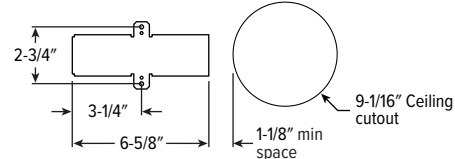Ceiling cutout 9-1/16" for all mounting types.

NEW CONSTRUCTION

8-1/4"
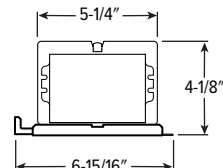ø9-1/16"
14"
7"
20"

IC-RATED

16-5/8"
10"
17-1/2"
14"

ø9-1/16"
7"
7-1/4"

REMODEL

Cross Section

L20 - L40: 9"
L60 - L80: 9-1/2"

ø8-1/2"
ø9-1/2"

Receiver Bracket

2-3/4"
3-1/4"
6-5/8"
9-1/16" Ceiling cutout
1-1/8" min space

Driver and Junction Box

5-1/4"
4-1/8"
6-15/16"

MOUNTING HARDWARE DETAILS

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

14" minimum
24" maximum

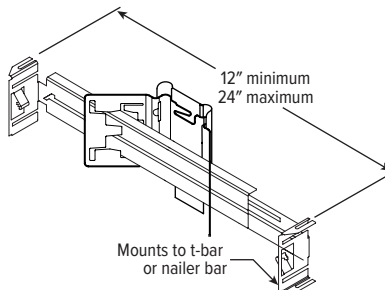Mounts to t-bar or nailer bar

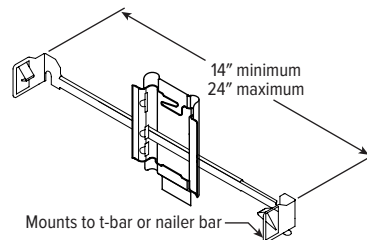14" minimum
24" maximum
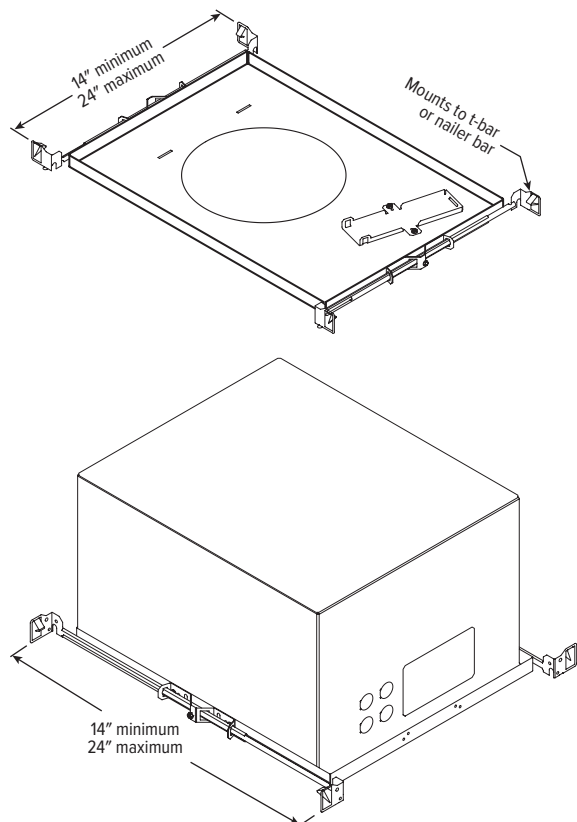
F1 with I Mounting Type

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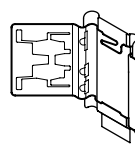
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

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)
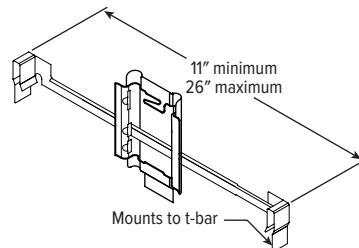
11" minimum
26" maximum

Mounts to t-bar

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8DR LED
8" Downlight – Round

AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

FEATURES

Simple
- Gateway-free distributed control
- Factory pre-commissioning
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

Scalable
- Virtually unlimited network size
- Spans small offices to large warehouses
- Flexible control strategies

Secure
- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

COMMISSIONING & INSTALLATION TOOLS

Avi-on mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers. Live commissioning training and on-site or remote support by Avi-on must be ordered separately through Avi-on.
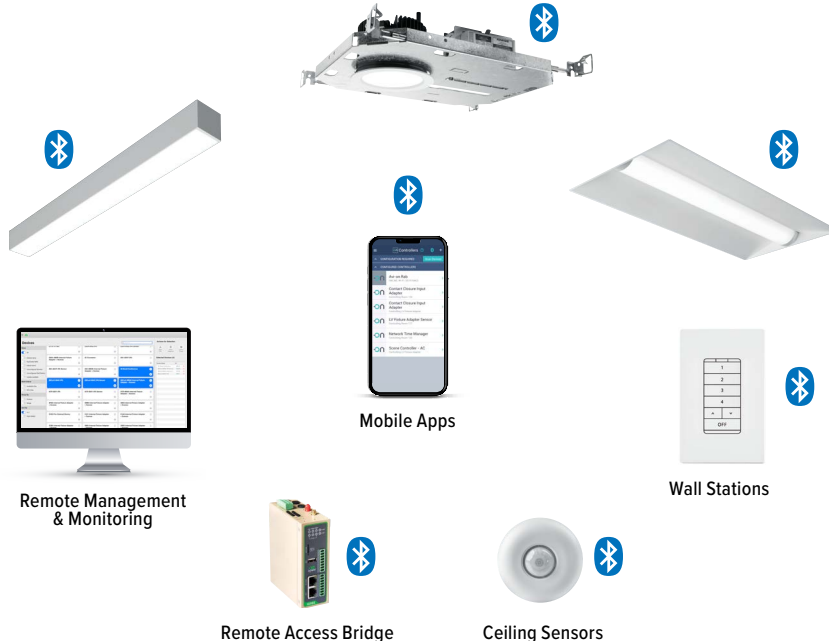
Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

Remote Management & Monitoring

Wall Stations

Remote Access Bridge

Ceiling Sensors

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ACCESSORIES

WALL STATIONS	
AVI-2401AC	Scene controller - numbered 1-4, 120-277VAC
AVI-2402BAT	Scene controller - numbered 1-4, battery powered
AVI-2401AC-2	Dimmer with presets - percentages, 120-277VAC
AVI-2402BAT-2	Dimmer with presets - percentages, battery powered
AVI-2401AC-3	On/off/dimming, 120-277VAC
AVI-2402BAT-3	On/off/dimming, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge – LTE connection
AVI-2001RAB-01-C	Remote access bridge – Wifi connection
AVI-KIT-NTM	Network time manager with battery backup

CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

For load controllers and additional accessory info, see hew.com/avi-on

ADDITIONAL CONTROL/DRIVER OPTIONS

Lumen restrictions apply: L40 max for DMX driver, L20 max for Lutron drivers, L40 max for DIM LINE and DALI drivers. R mounting type requires top access with DMX controls. R Mounting Type requires 12" minimum plenum depth when specified with VRF/DBI controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
AVI-LVFA/DA	Avi-on wireless fixture control for use with driver with 12V auxiliary power
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, with Lutron Hi-lume 1% EcoSystem dimming LED driver
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DALI	DALI dimming driver
DMX	0.1% dimming driver for DMX controls
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

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