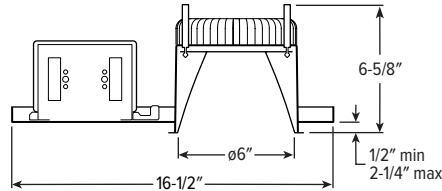


# 6DR LED 6" Downlight – Round



L30 – L40 Lumens shown

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

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

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

## NEW CONSTRUCTION AND REMODEL



TrimLock®

ORDERING EXAMPLE: 6DR - TL - L20/835 - OPTIONS - CONTROL/DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1

HOUSING

TRIM

MOUNT.

## HOUSING

SERIES	LUMENS <sup>[1]</sup>	CRI	CCT	OPTIONS	CONTROL	DRIVER	VOLTAGE
6DR - TL	L10 1,000lm <sup>[2]</sup>	8 80	27 2700K	See page 3 for EMERGENCY BATTERY OPTIONS.	See page 6 for ADDITIONAL CONTROL/DRIVER OPTIONS.	See page 6 for ADDITIONAL CONTROL/DRIVER OPTIONS.	UNV 120-277V
TrimLock	L15 1,500lm	9 90	30 3000K				347 347V <sup>[9]</sup>
	L20 2,000lm		35 3500K	SCA__ Sloped ceiling adapter <sup>[3]</sup>	— None	DIM Dimming driver, 0-10V	
	L30 3,000lm		40 4000K	ATH Airtight construction	AVI-LVFA Avi-on wireless fixture control <sup>[6]</sup>	DIM1 1% Dimming driver, 0-10V	
	L40 4,000lm		50 5000K	F Fuse	AWNR Lutron Athena wireless node integral fixture control, RF only <sup>[7]</sup>	DA Driver with 12V auxiliary power, without external dimming wires <sup>[8]</sup>	
	L50 5,000lm			CP Chicago plenum (CCEA) <sup>[4]</sup>			
	L60 6,000lm			SDT Stepdown transformer <sup>[5]</sup>			
	L70 7,000lm						
	L80 8,000lm						

## TRIM <sup>[10]</sup>

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 <sup>[19]</sup>
F Open reflector with frosted top diffuser <sup>[11]</sup>		SF 1/4" mud-in flange <sup>[17]</sup>	CS Clear semi-specular anodize	IP IP65 rated trim <sup>[20]</sup>
L Flush lens	W Wide		SG Satin-glow anodize	AD Diffuse acrylic lens <sup>[21]</sup>
R Regressed lens	M Medium <sup>[14]</sup>		GD Gold anodize	PD Diffuse 1/8" polycarbonate lens <sup>[22]</sup>
A Angled lens <sup>[12]</sup>	N Narrow <sup>[15]</sup>		CG Champagne gold anodize	WET/CC Wet location, covered ceiling listed <sup>[23]</sup>
S Non-conductive flush lens for shower applications <sup>[13]</sup>	WW Wall wash <sup>[16]</sup>		PW Pewter anodize	AM Anti-microbial <sup>[24]</sup>
			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 <sup>[18]</sup>	

## MOUNTING

MOUNTING TYPE <sup>[25]</sup>	MOUNTING HARDWARE <sup>[26]</sup>
N Open pan for new construction	F1 Integral 2-position fixed pan bracket, universal bar hanger included <sup>[29]</sup>
I IC-rated enclosure for new construction <sup>[27]</sup>	BA1 Adjustable butterfly pan bracket, bar hanger not included <sup>[30]</sup>
R Remodel kit <sup>[28]</sup>	CA1 Adjustable caterpillar pan bracket, universal bar hanger included <sup>[31]</sup>

## NOTES

- Lumen output based on O Trim Type, W Distribution and CS Reflector Finish, 80 CRI/3500K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- Not available with EM/10W emergency batteries.
- 11-1/2" aperture, specify degrees of slope in 5° increments, 05°-30°. Not available with I Mounting Type, S Trim Type, ATH, IP, or WET/CC Options. Painted white. Other colors available, consult factory. See page 4 for SLOPED CEILING ADAPTOR DETAILS.
- I Mounting Type required.
- May be required for 347V, see product builder at [hew.com/product-builder](http://hew.com/product-builder)
- DA Driver only. See page 6 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
- DA Driver only.
- Avi-on and Lutron Athena Controls only.
- Not available with EM batteries, DA or DMX Drivers.
- Trim ships separately.
- WET/CC standard unless ordered with EM/RTS or SCA Options.
- L50 lumen package max.
- Available with WW Distribution only.
- W Distribution, OF Flange Type and WH Reflector Finish only. Standard with AD, IP and WET/CC Trim Options.
- Not available with lumen stops L50 and higher when specified with L or R Trim Types.
- Not available with lumen stops L50 and higher when specified with L or R Trim Types.
- O and A Trim Types only.
- 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 or IP Options.
- R Trim Type only. Not available with MWT.
- Not available with WH Reflector Finish, L or S Trim Types.
- L and R trim types only.
- Not available with O or F Trim Types. W and WW Distributions only.
- Not available with O or F Trim Types. W and WW Distributions only.
- L50 lumen package max with O Trim Type.
- WH and BL Reflector Finishes only. Not available with S Trim Type.
- Mounting hardware required (N and I only), 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.
- L30 lumen package max. Not available with EM batteries or Lutron Athena Controls.
- 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.



# 6DR LED 6" Downlight – Round

## FEATURES

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Wide range of lumen options for general illumination
- Beam angles ranging from 10° narrow to 65° wide for tailored performance
- Industry-leading efficacies as high as 116 lm/W
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Fully room-side accessible
- Die-cast trim includes flush, regressed or angled lens
- Sloped adapter accommodates vaulted ceilings
- Optional non-conductive lens for shower applications
- IP65-rated die-cast trim includes easy-to-clean flush lens
- Open reflector with nine finishes complements any interior style
- Available on QuickShip
- Low UGR meets LEED and WELL requirements
- Wireless in-fixture control solutions available
- 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" – 2-1/4".
- **TRIMLOCK** – Innovative TrimLock reflector retention system ensures the trim remains flush with the ceiling plane.
- **OPEN REFLECTOR** – Low-iridescent anodized aluminum. Clear semi-specular finish standard.
- **LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- **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 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.
- IP65 rated trim when specified with IP option.
- Complies with ASTM-E283 when specified with ATH option.
- RoHS compliant.
- Title 24 (JA8) compliant in select configurations, see [cactertappliance.energy.ca.gov](http://cactertappliance.energy.ca.gov)
- Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/buy-american](http://hew.com/buy-american)
- **WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty)

## FIXTURE PERFORMANCE DATA

### OPEN REFLECTOR TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1014	8.7	117
	M	982	8.7	113
	N	1003	8.7	115
L15	W	1497	13.8	109
	M	1495	13.8	108
	N	1528	13.8	111
L20	W	1988	19.0	105
	M	1983	19.1	104
	N	2026	19.1	106
L30	W	3062	26.9	114
	M	3003	26.9	112
	N	3000	26.9	112
L40	W	4094	36.5	112
	M	4016	36.4	110
	N	4011	36.4	110
L50	W	5014	43.9	114
	M	4935	43.9	112
	N	5047	43.9	115
L60	W	6043	54.0	112
	M	5948	54.0	110
	N	6083	54.0	113
L70	W	7008	67.8	103
	M	6898	67.8	102
	N	7055	67.8	104
L80	W	8018	79.8	101
	M	7891	79.8	99
	N	8071	79.8	101

### FLUSH LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	774	8.7	89
	M	910	8.7	105
	N	909	8.7	105
L15	W	1178	13.8	85
	M	1385	13.8	100
	N	1384	13.8	100
L20	W	1562	19.5	80
	M	1837	19.1	96
	N	1836	19.5	94
L30	W	2335	26.9	87
	M	2782	26.9	103
	N	2718	26.9	101
L40	W	3122	36.5	86
	M	3720	36.4	102
	N	3635	36.4	100
L50	W	3824	43.9	87
	M	–	–	–
	N	–	–	–
L60	W	4609	54.0	85
	M	–	–	–
	N	–	–	–
L70	W	5345	67.8	79
	M	–	–	–
	N	–	–	–
L80	W	6115	79.8	77
	M	–	–	–
	N	–	–	–

### REGRESSED LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	716	8.7	82
	M	883	8.7	102
	N	897	8.7	103
L15	W	1090	13.8	79
	M	1344	13.8	97
	N	1366	13.8	99
L20	W	1445	19.5	74
	M	1782	19.1	93
	N	1812	19.5	93
L30	W	2160	26.9	80
	M	2699	26.9	100
	N	2683	26.9	100
L40	W	2889	36.5	79
	M	3609	36.4	99
	N	3587	36.4	99
L50	W	3537	43.9	81
	M	–	–	–
	N	–	–	–
L60	W	4264	54.0	79
	M	–	–	–
	N	–	–	–
L70	W	4945	67.8	73
	M	–	–	–
	N	–	–	–
L80	W	5657	79.8	71
	M	–	–	–
	N	–	–	–

## 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
O TRIM	CS	1.00
	SG <sup>[1]</sup>	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
	RG	0.88
	WH <sup>[1]</sup>	0.89
R TRIM	BL <sup>[1]</sup>	0.47
	WH	1.00
	CS	0.98
	BL	0.79

TRIM OPTIONS		
	CATALOG NUMBER	CONVERSION FACTOR
	F	0.75
	S	0.85
	AD	0.85
	PD	0.85
	WET/CC	0.85

## BEAM ANGLE

TRIM TYPE <sup>[2]</sup>				
	O	F	L	R
W	65°	70°	55°	55°
M	35°	35°	35°	35°
N	10°	20°	25°	25°

<sup>1</sup> Distribution will also be affected, consult factory.

<sup>2</sup> Beam angle based on CS or WH Reflector Finish.

- Photometrics tested in accordance with IESNA LM-79. Results based on O trim type, W distribution, CS finish, 80 CRI/3500K CCT, wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%.

- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

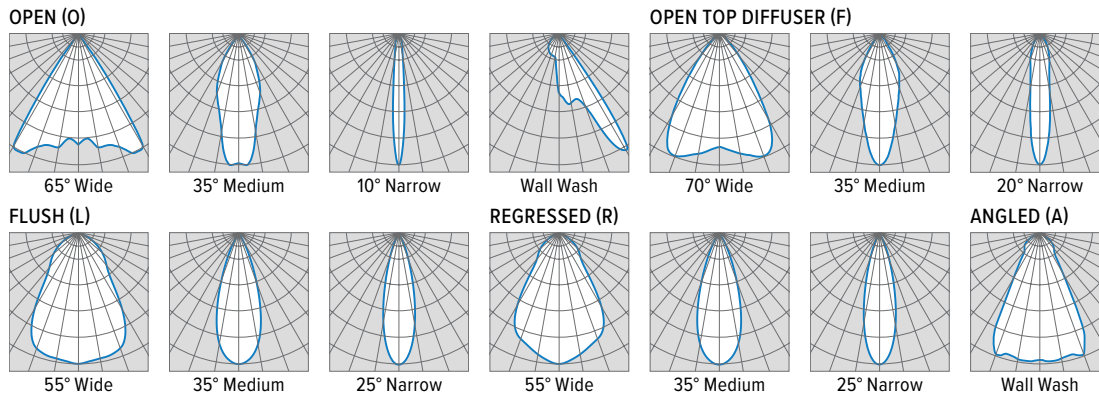
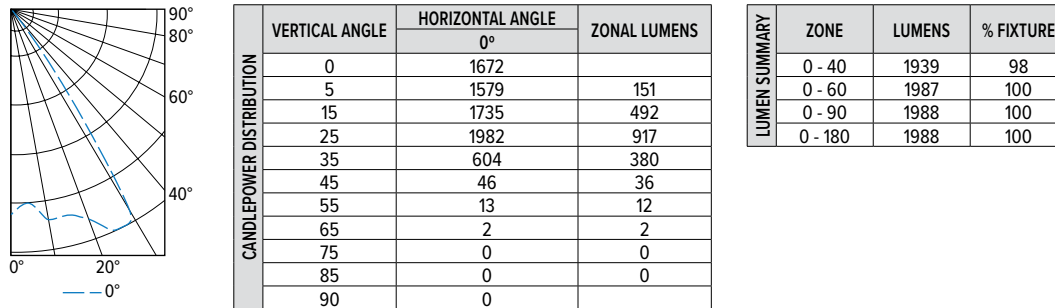
PHOTOMETRY CONTINUED ON NEXT PAGE.



# 6DR LED 6" Downlight – Round

## PHOTOMETRY

6DR-TL-L20/835-DIM-UNV-OW-OF-CS Report #: 20687; 12/12/18 | Total Luminaire Output: 1988 lumens; 19.0 Watts | Efficacy: 104.6 lm/W | 80 CRI; 3500K CCT



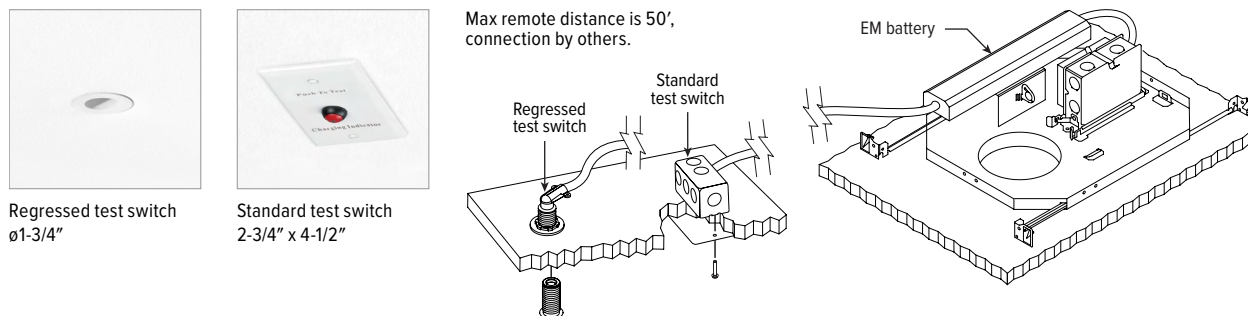
## EMERGENCY BATTERY OPTIONS

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 <sup>[1]</sup>
EM/7W/RTS	7-watt emergency battery with regressed test switch <sup>[2]</sup>
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch <sup>[3]</sup>
EM/10W	10-watt emergency battery <sup>[1]</sup>
EM/10W/RTS	10-watt emergency battery with regressed test switch <sup>[2]</sup>
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch <sup>[3]</sup>

- <sup>1</sup> Not available with S Trim Type or IP Trim Option.  
<sup>2</sup> Not available with S Trim Type, IP or WET/CC Trim Options.  
<sup>3</sup> Must specify IP Trim Option.

## MOUNTING DETAILS



## 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" = <b>0575</b>  See Kit Components for application limits.	CS Clear semi-specular powder coat WH White texture powder coat BL Black texture powder coat

Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

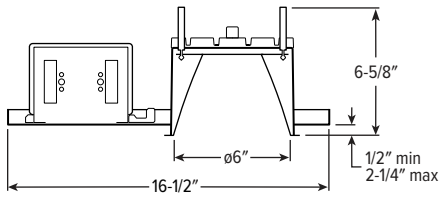
For limitations and instructions, see [hew.com/aperture-adaptor.pdf](http://hew.com/aperture-adaptor.pdf)



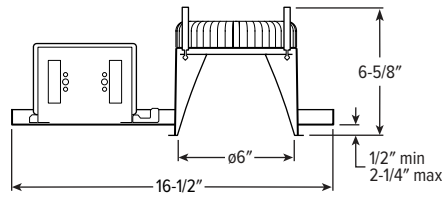
# 6DR LED 6" Downlight – Round

## CROSS SECTIONS

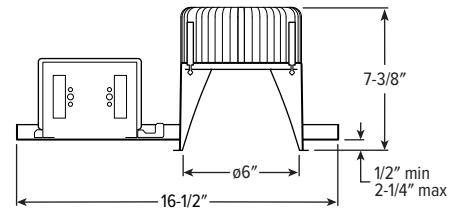
### L10 – L20 LUMENS



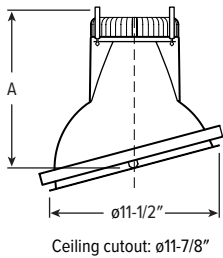
### L30 – L40 LUMENS



### L50 – L80 LUMENS



## SLOPED CEILING ADAPTOR DETAILS



LUMENS	A (HEIGHT)						PLENUM HEIGHT
	5°	10°	15°	20°	25°	30°	
L10 - L40	10-11/16"	10-7/8"	10-15/16"	10-7/8"	10-13/16"	10-5/8"	11-1/4"
L50 - L80	11-7/16"	11-9/16"	11-5/8"	11-5/8"	11-1/2"	11-1/4"	12"

15° Shown

## TRIMLOCK DETAILS

### TWIST



### PULL

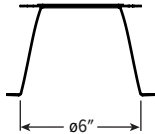


### RELEASE

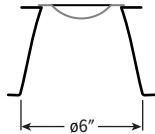


## TRIM TYPE DETAILS

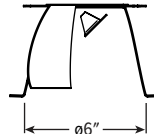
### OPEN



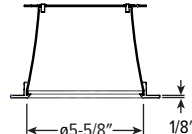
### OPEN TOP DIFFUSER



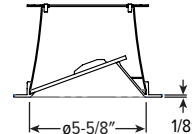
### OPEN (WALL WASH)



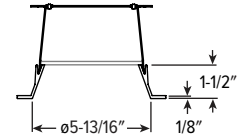
### FLUSH | SHOWER



### ANGLED

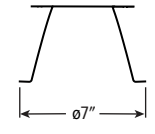


### REGRESSED



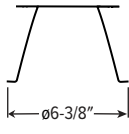
## FLANGE TYPE DETAILS

### 1/2" STANDARD



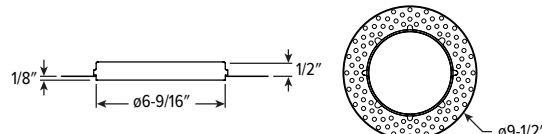
Ceiling Cutout:  $\phi$ 6-1/2"

### 1/4" MUD-IN

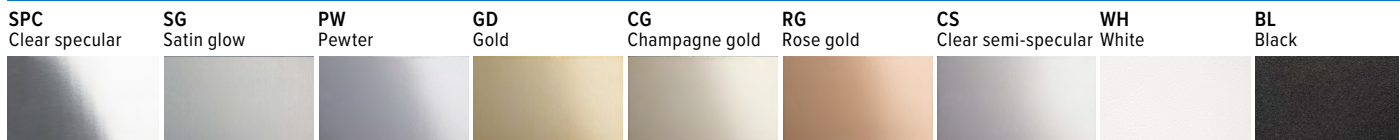


Ceiling cutout:  $\phi$ 7"

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



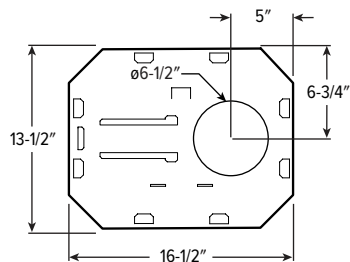
## REFLECTOR FINISH DETAILS



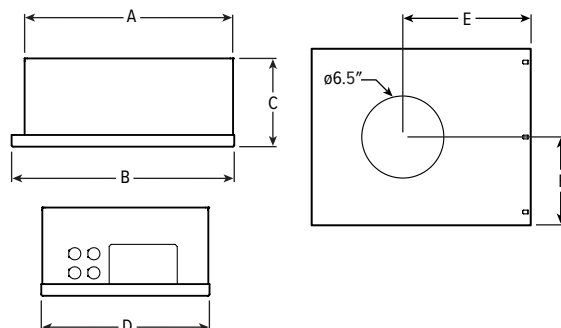
# 6DR LED 6" Downlight – Round

## MOUNTING TYPE DETAILS

### NEW CONSTRUCTION



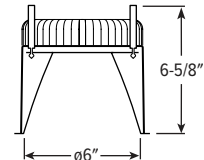
### IC-RATED



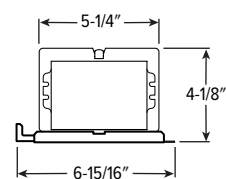
LUMENS	LENGTH					
	A	B	C	D	E	F
L10 - L20	15-3/16"	16"	6-3/8"	12-1/8"	9-1/2"	6-1/16"
L30	16-5/8"	17-1/2"	7-7/8"	14"	10-1/4"	7"

### REMODEL

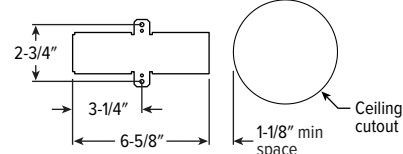
#### CROSS SECTION L30 – L40 lumens shown



#### DRIVER & JUNCTION BOX

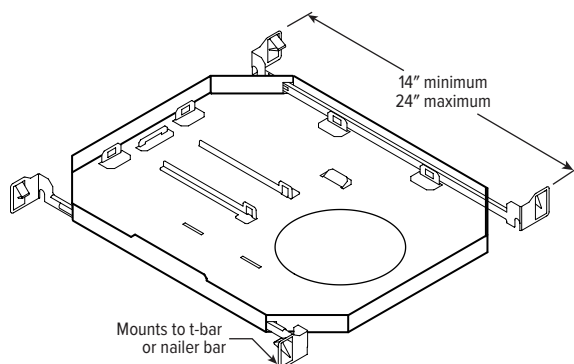


#### RECEIVER BRACKET

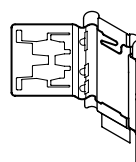


## MOUNTING HARDWARE DETAILS

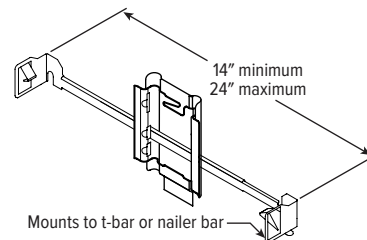
### F1 Integral 2-position fixed pan bracket, universal bar hanger included



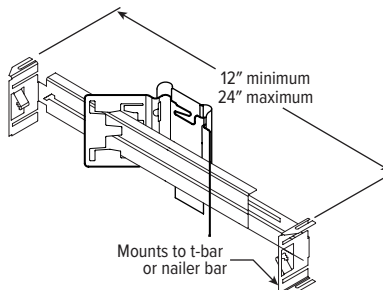
### BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



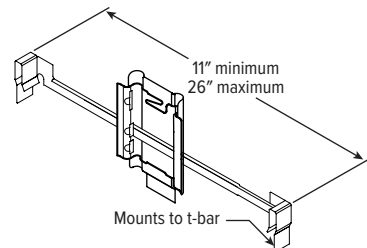
### CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



### 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)



### F1 with I Mounting Type



# 6DR LED

## 6" Downlight – Round

### AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

#### FEATURES

##### Simple

- Gateway-free distributed control
- 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

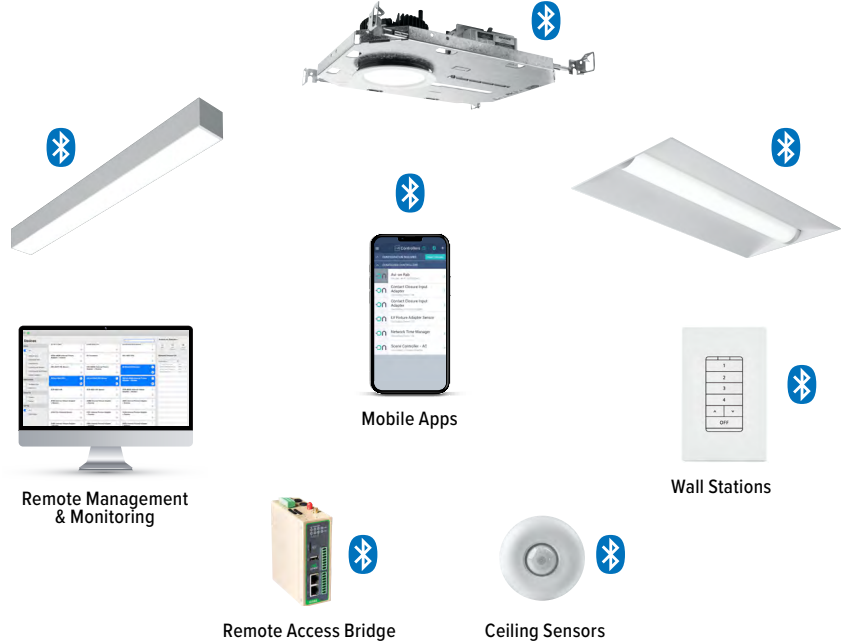


Zone Scanner  
Web App



Commissioning  
Pro App

#### SYSTEM COMPONENTS



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#### ACCESSORIES

WALL STATIONS	
AVI-B-2401AC-1	Scene controller - buttons numbered 1-4 and up/down/off, 120-277VAC
AVI-B-2402BAT-1	Scene controller - buttons numbered 1-4 and up/down/off, battery powered
AVI-B-2401AC-2	Dimmer with presets - buttons with percentages and up/down/off, 120-277VAC
AVI-B-2402BAT-2	Dimmer with presets - buttons with percentages and up/down/off, battery powered
AVI-B-2401AC-3	Two button control on/off or hold to dim up/down, 120-277VAC
AVI-B-2402BAT-3	Two button control on/off or hold to dim up/down, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge
AVI-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](http://hew.com/avi-on)

#### ADDITIONAL CONTROL/DRIVER OPTIONS

Lumen restrictions apply: L40 max for DMX driver, L40 max for Lutron drivers, L15 min to L60 max for DIM LINE driver. 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](http://hew.com/product-builder). I Mounting Type not available with Lutron controls.

CATALOG NUMBER	DESCRIPTION
AVI-LVFA/DA	Avi-on wireless fixture control for use with driver with 12V auxiliary power
AWNDR/DA	Lutron Athena wireless node integral fixture control, RF only, 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

