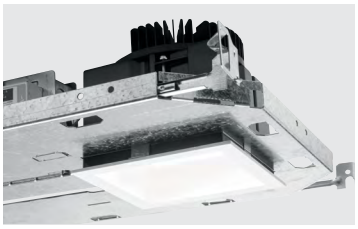
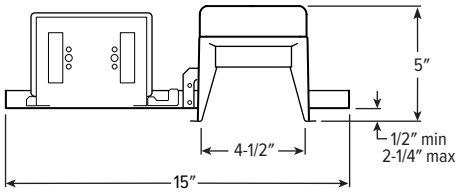
4DS tunable WHITE
4.5″ Downlight – Square





CATALOG #:

TYPE:

PROJECT:

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 4DS - L20/8TW - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1
(4DS - L20/8TW - OPTIONS - DIM - UNV: HOUSING; LW - OF - WH - TRIM OPTIONS: TRIM; N - F1: MOUNT.)

BUY AMERICAN ACT COMPLIANT

HOUSING

SERIES
4DS

LUMENS [1]
L11 1,100lm
L20 2,000lm

COLOR
8TW Tunable white (80 CRI, 2700K- 5000K)

OPTIONS
See page 3 for EMERGENCY BATTERY OPTIONS.
ATH Airtight construction
CP Chicago plenum (CCEA) [2]
F Fuse kit

CONTROL
See page 5 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]

VOLTAGE
UNV 120-277V

TRIM [4]

TRIM TYPE
L Flush lens
O Open reflector
R Regressed lens
A Angled lens [6]

DISTRIBUTION [5]
W Wide
55° Open
60° Flush
60° Regressed
M Medium
45° Open
35° Flush
35° Regressed
N Narrow
40° Open
25° Flush
25° Regressed
WW Wall wash [7]

FLANGE TYPE
OF 1/2″ standard flange
SF 1/4″ mud-in flange [8]

REFLECTOR FINISH
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
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 [9]

TRIM OPTIONS
MWT Textured white trim flange [10]
IP IP65 rated trim [11]
AD Diffuse acrylic lens [12]
PD Diffuse 1/8″ polycarbonate lens [13]
WET/CC Wet location, covered ceiling listed [14]
AM Anti-microbial [15]

MOUNTING

MOUNTING TYPE [16]
N Open pan for new construction
I IC-rated enclosure for new construction [18]
R Remodel kit [19]

MOUNTING HARDWARE [17]
F1 Integral 2-position fixed pan bracket, universal bar hanger included [20]
BA1 Adjustable butterfly pan bracket, bar hanger not included [21]
CA1 Adjustable caterpillar pan bracket, universal bar hanger included [22]

NOTES

1 Lumen output based on L trim type, M distribution and WH finish, 4000K/80CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
2 I Mounting Type required.
3 Not available with I Mounting Type.
4 Trim ships separately.
5 Beam angle based on CS or WH reflector finish.
6 Available with WW distribution only.
7 O and A Trim Types only.
8 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.
9 R Trim Type only. Not available with MWT.
10 Not available with WH Reflector Finish or L Trim Type.
11 L and R trim types only.
12 Not available with O trim type. W and WW distributions only.
13 Not available with O trim type. W and WW distributions only.
14 Not available with O Trim Type. Not available with PD trim option.
15 WH and BL Reflector Finishes only.
16 Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
17 Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
18 Not available with EM batteries.
19 Also used in new construction sheetrock ceilings. Pan-less installation.
20 N and I Mounting Types only. I Mounting requires external brackets.
21 N Mounting Type only.
22 N Mounting Type only.

4DS tunable WHITE
4.5" Downlight – Square

FEATURES

- Support human-centric design with adaptive, individualized lighting using tunable white light
- Beam angles ranging from 25° narrow to 60° wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- Square shape accentuates architectural styles
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Open reflector with 7 finishes to complement any interior style
- Die-cast trim choices include flush, regressed or angled lens
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Spring clip retention system eliminates trim sag
- Fully room-side accessible

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".
- OPEN REFLECTOR – Low-iridescent anodized aluminum with top diffuser.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL – High-performance Class 2 LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>50,000 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 for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware.
- 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.

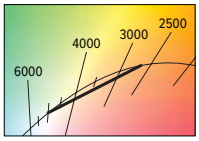
FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L11	W	965	14.6	66
	M	1065	14.6	73
	N	1088	14.6	75
L20	W	1680	24.0	70
	M	1853	24.0	77
	N	1782	24.0	74

FLUSH LENS TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L11	W	1045	14.6	72
	M	1152	14.6	79
	N	1165	14.6	80
L20	W	1820	24.0	76
	M	1973	24.0	82
	N	1908	24.0	80



REGRESSED LENS TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L11	W	1004	14.6	69
	M	1132	14.6	78
	N	1152	14.6	79
L20	W	1749	24.0	73
	M	1945	24.0	81
	N	1887	24.0	79

MULTIPLIER TABLES

COLOR TEMPERATURE		
CCT	LUMENS	WATTS
2700K	0.83	1.03
3000K	1.00	1.00
3500K	0.99	0.99
4000K	1.00	1.00
5000K	0.98	1.03

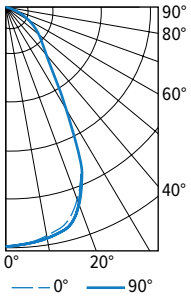
OPEN REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.92
GD	Gold	0.93
CG	Champagne Gold	0.96
PW	Pewter	0.86
SPC	Specular	1.02
RG	Rose Gold	0.88
WH	White, textured	0.89
BL	Black, textured	0.79

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 4000K, 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

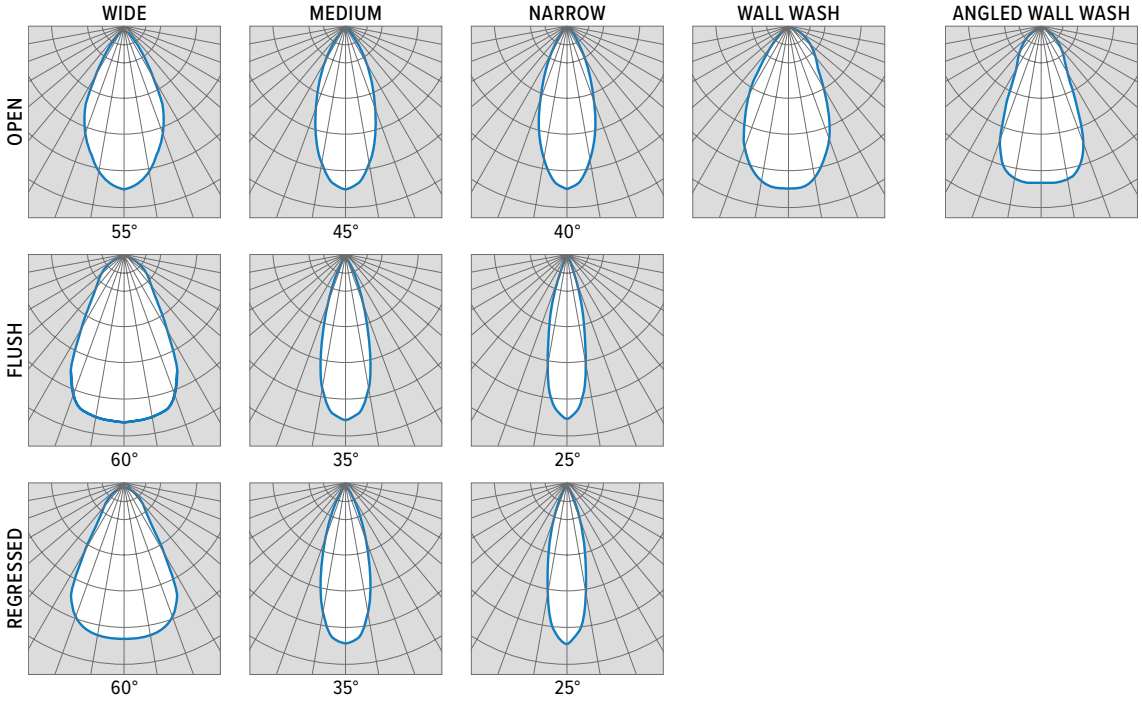
4DS-L20/8TW-DIM-UNV-LW-OF-WH Total Luminaire Output: 1820 lumens; 24 Watts | Efficacy: 75.8 lm/W | 80 CRI; 4000K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	ZONAL LUMENS
	0	1354	1354	1354	
	5	1341	1341	1342	127
	15	1265	1283	1291	359
	25	982	1111	985	467
	35	444	676	436	343
	45	281	305	279	229
	55	170	175	169	157
	65	90	87	88	90
	75	37	36	37	40
	85	4	4	5	8
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	954	52
	0 - 40	1296	71
	0 - 60	1682	92
	0 - 90	1820	100
	0 - 180	1820	100

4DS tunable WHITE
4.5″ Downlight – Square



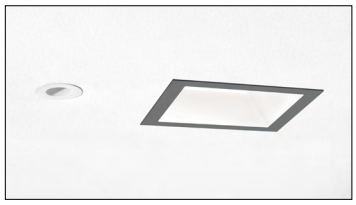
EMERGENCY BATTERY OPTIONS

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

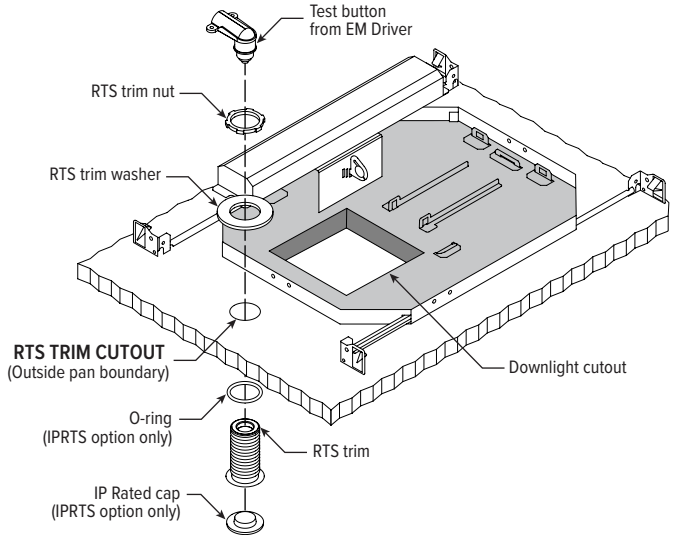
CATALOG NUMBER	DESCRIPTION
EM/7W	7-watt emergency battery [1]
EM/7W/RTS	7-watt emergency battery with regressed test switch [2]
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch
EM/10W	10-watt emergency battery [1]
EM/10W/RTS	10-watt emergency battery with regressed test switch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

1 Not available with IP Option.
2 Not available with IP or WET/CC Options.

REGRESSED TEST SWITCH DETAILS



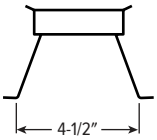
Shown Installed



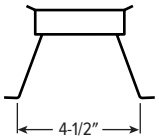
4DS tunable WHITE
4.5″ Downlight – Square

TRIM TYPE DETAILS

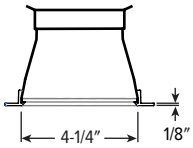
OPEN



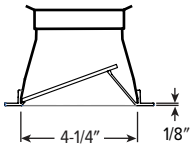
OPEN (WALL WASH)



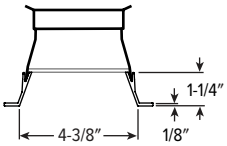
FLUSH



ANGLED

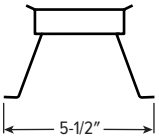


REGRESSED



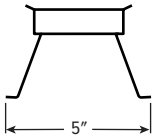
FLANGE TYPE DETAILS

1/2″ STANDARD



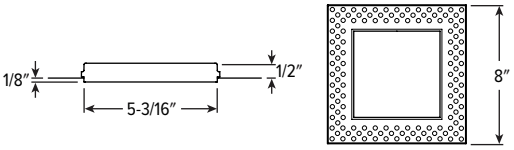
Ceiling Cutout: 5″

1/4″ MUD-IN



Ceiling cutout: 5-1/2″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



REFLECTOR FINISH DETAILS

SPC Clear specular

SG Satin glow

PW Pewter

GD Gold

CG Champagne gold

RG Rose gold

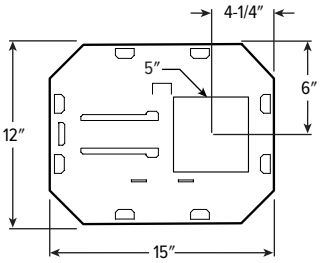
CS Clear semi-specular

WH White

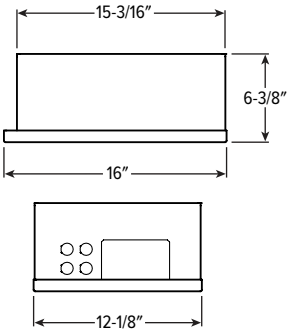
BL Black

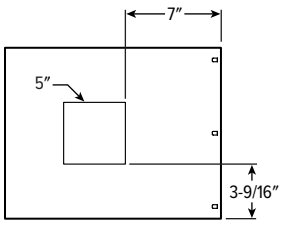
MOUNTING TYPE DETAILS

NEW CONSTRUCTION



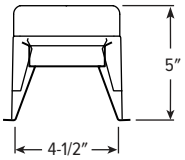
IC-RATED



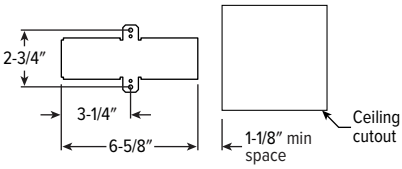


REMODEL

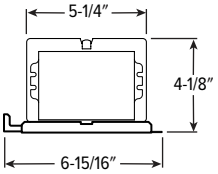
Cross Section



Receiver Bracket



Driver and Junction Box



4DS tunable WHITE
4.5″ Downlight – Square

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

CONTROL DETAILS

DIM

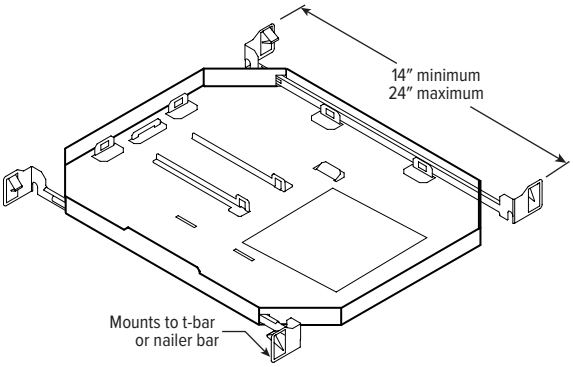
DALI

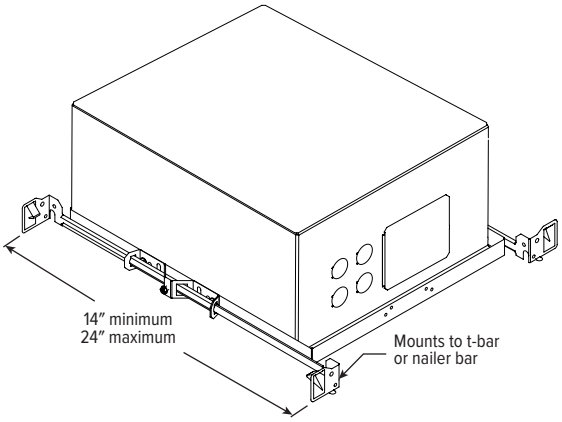
DMX

LUTRON T-SERIES

MOUNTING HARDWARE DETAILS

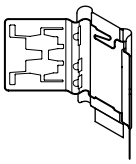
F1 Integral 2-position fixed pan bracket, universal bar hanger included



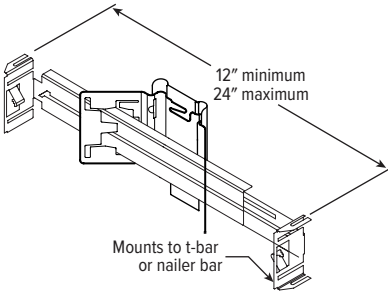


F1 with I Mounting Type

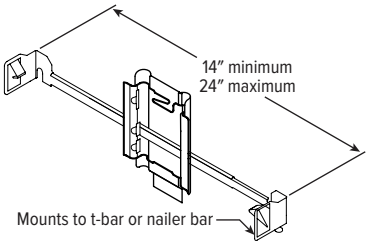
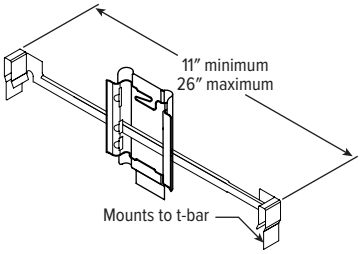
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)