2DS tunable WHITE
2″ Downlight – Square

Williams®

5″

2-11/16″

12-1/2″

1/2″ min
2-3/8″ max

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT

CCEA Approved

Low UGR

WET/CC

ORDERING EXAMPLE: 2DS - L15/9TW - OPTIONS - CONTROL/DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

├─────────────── HOUSING ───────────────┤ ├──────── TRIM ────────┤ └ MOUNT. ┘

HOUSING

SERIES	LUMENS[1]	COLOR	OPTIONS	CONTROL	DRIVER	VOLTAGE
2DS	L5 500lm	9TW Tunable white (90 CRI, 2700K-5000K)	*See page 3 for EMERGENCY BATTERY OPTIONS.*	– None	*See page 3 for DRIVER DETAILS.*	UNV 120-277V
	L7 700lm		ATH Airtight construction	AWNR Lutron Athena wireless node integral fixture control, RF only [3]	DALI Driver prewired for DALI applications	
	L9 900lm		F Fuse kit		DIM Dimming driver with (1) 0-10V signal to control dimming and (1) 0-10V signal to control CCT	
	L12 1,200lm		CP Chicago plenum (CCEA)[2]		DMX Driver prewired for DMX applications	
	L15 1,500lm				LD2 Lutron DALI-2 digital driver, 1% [4]	

TRIM [5]

TRIM TYPE	DISTRIBUTION	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	*See page 2 for BEAM ANGLE.*	OF 1/2″ standard flange	**Open trim types**	MWT Smooth matte white trim flange [11]
O Open reflector		ZF Zero-flange mud-in [9]	CS Clear semi-specular anodize	AD Diffuse acrylic lens [12]
R Regressed lens	W Wide		SG Satin-glow anodize	PD Diffuse 1/8″ polycarbonate lens [13]
A Angled lens [6]	M Medium		GD Gold anodize	WET/CC Wet location, covered ceiling listed [14]
	N Narrow [7]		CG Champagne gold anodize	AM Anti-microbial [15]
	WW Wall wash [8]		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 [10]	

MOUNTING

MOUNTING TYPE [16]	MOUNTING HARDWARE [17]
N Open pan for new construction [18]	F1 Integral 2-position fixed pan bracket, universal bar hanger included [20]
I IC-rated enclosure for new construction [19]	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 O Trim Type, W Distribution, and WH Reflector Finish, 90 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA..
2. I Mounting Type required.
3. LD2 Driver only.
4. N Mounting Type only, top access required.
5. Trim ships separately.
6. Available with WW Distribution only.
7. L12 lumen package max for N Mounting Type. L7 lumen package max for I Mounting Type.
8. A Trim Type only.
9. 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.
10. R Trim Type only. Not available with ZF Flange Type or MWT.
11. Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.
12. W Distribution only. Not available with O Trim Type.
13. W and WW Distributions only. Not available with O Trim Type.
14. Not available with O Trim Type.
15. WH and BL Reflector Finishes only.
16. Mounting Hardware required, 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. Top access required when specified with EM battery.
19. L9 lumen package max. Not available with EM batteries.
20. I Mounting requires external brackets.
21. N Mounting Type only.
22. N Mounting Type only.

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Downlights
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2DS tunable WHITE
2″ Downlight – Square

FEATURES

- Support human-centric design with adaptive, individualized lighting using tunable white light
- Beam angles ranging from 20º narrow to 50º wide for tailored performance
- 2″ aperture is unobtrusive in small scale spaces
- Square shape accentuates architectural styles
- Zero-flange trim options for modern ceiling
- Spring clip retention system eliminates trim sag
- New construction mounting pan or IC-rated enclosure available
- Open reflector with seven finishes complements any interior style
- Die-cast trim choices include flush, regressed or angled lens
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- 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″ – 2-3/8″.
- OPEN REFLECTOR – Low-iridescent anodized aluminum with top diffuser.
- 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 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/buy-american
- WARRANTY – 5-year limited warranty, see hew.com/warranty

FIXTURE PERFORMANCE DATA

	DISTRIBUTION	WATTAGE	FLUSH LENS TRIM TYPE DELIVERED LUMENS	FLUSH LENS TRIM TYPE EFFICACY (lm/W)	OPEN REFLECTOR TRIM TYPE DELIVERED LUMENS	OPEN REFLECTOR TRIM TYPE EFFICACY (lm/W)	REGRESSED LENS TRIM TYPE DELIVERED LUMENS	REGRESSED LENS TRIM TYPE EFFICACY (lm/W)	ANGLED LENS TRIM TYPE DELIVERED LUMENS	ANGLED LENS TRIM TYPE EFFICACY (lm/W)
L5	W	10.5	581	55	421	40	586	56	–	–
L5	M	10.5	609	58	416	40	600	57	–	–
L5	N	10.5	552	53	402	38	553	53	–	–
L5	WW	10.5	–	–	–	–	–	–	450	43
L7	W	13.5	776	57	562	42	782	58	–	–
L7	M	13.5	813	60	556	41	801	59	–	–
L7	N	13.5	737	55	537	40	738	55	–	–
L7	WW	13.5	–	–	–	–	–	–	601	44
L9	W	18.3	1083	59	784	43	1091	60	–	–
L9	M	18.3	1134	62	776	42	1117	61	–	–
L9	N	18.3	1029	56	750	41	1030	56	–	–
L9	WW	18.3	–	–	–	–	–	–	838	46
L12	W	22.5	1332	59	964	43	1342	60	–	–
L12	M	22.5	1395	62	954	42	1374	61	–	–
L12	N	22.5	1265	56	922	41	1266	56	–	–
L12	WW	22.5	–	–	–	–	–	–	1031	46
L15	W	28.4	1570	55	1137	40	1582	56	–	–
L15	M	28.4	1645	58	1125	40	1620	57	–	–
L15	N	–	–	–	–	–	–	–	–	–
L15	WW	28.4	–	–	–	–	–	–	1216	43

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
O TRIM	SG [1]	0.92
O TRIM	GD	0.93
O TRIM	CG	0.96
O TRIM	PW	0.86
O TRIM	SPC	1.02
O TRIM	RG	0.88
R TRIM	WH	1.00
R TRIM	CS	0.98
R TRIM	BL	0.79

TRIM OPTIONS

CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

BEAM ANGLE

	TRIM TYPE O	L	R
W	50°	50°	55°
M	30°	47°	30°
N	20°	47°	20°
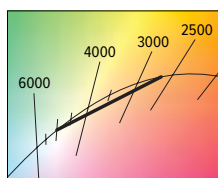
[1] Distribution will also be affected, consult factory.
- Photometrics tested in accordance with IESNA LM-79. Results based on CS (O Trim Type) or WH (L, R and A Trim Types) Reflector Finish, 90 CRI/4000K CCT, average wattage for 120V input, and 25ºC ambient temperature. Actual performance may vary +/-5%
- Beam angle based on L Trim Type and WH Reflector Finish.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

PHOTOMETRY

2DS-L15/9TW-DIM-UNV-LW-OF-WH Total Luminaire Output: 1570 lumens; 28.4 Watts | Efficacy: 55 lm/W | 90 CRI; 4000K CCT
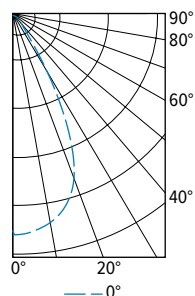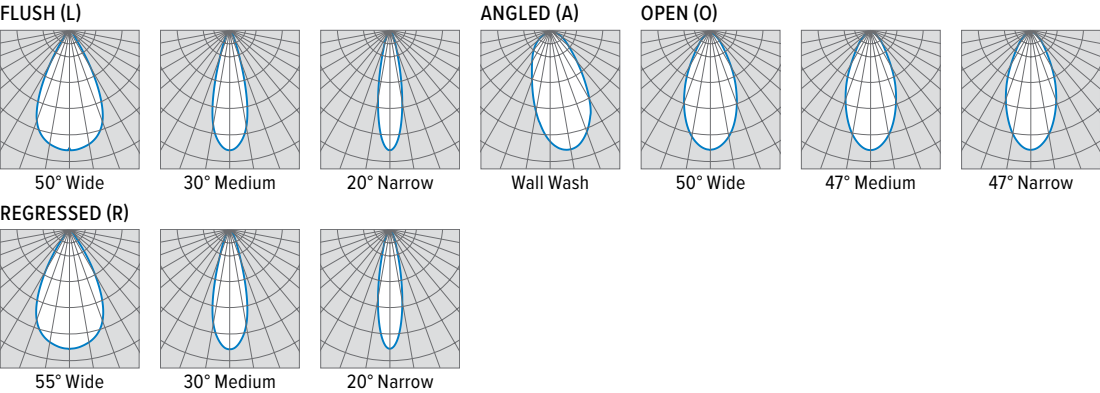
VERTICAL ANGLE	HORIZONTAL ANGLE 0º	ZONAL LUMENS
0	1815	
5	1832	170
15	1656	454
25	1044	487
35	264	223
45	107	95
55	70	67
65	45	46
75	22	23
85	4	5
90	0	

LUMEN SUMMARY ZONE	LUMENS	% FIXTURE
0 - 40	1333	85
0 - 60	1495	95
0 - 90	1570	100
0-180	1570	100

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2DS tunable WHITE
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FLUSH (L)

50° Wide	30° Medium	20° Narrow

ANGLED (A)

Wall Wash

OPEN (O)

50° Wide	47° Medium	47° Narrow

REGRESSED (R)

55° Wide	30° Medium	20° Narrow

DRIVER DETAILS

DIM

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

DALI

DALI +   Fixture 1
DALI -

DMX

RJ45 Ports   Fixture
(IN/OUT)   (Master)

LD2

DA +   Fixture 1
DA -

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 Trim Option. N Mounting Type only. Top access required.
2 Must specify IP Trim Option. N Mounting Type only. Top access required.
3 Not available with L5 lumen package.
4 Not available with L5 lumen package or WET/CC Trim Option. N Mounting Type only. Top access required.
5 Not available with L5 lumen package. Must specify IP Trim Option. N Mounting Type only. Top access required.

MOUNTING DETAILS

Regressed test switch
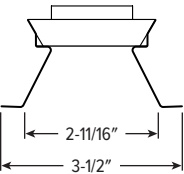ø1-3/4″

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
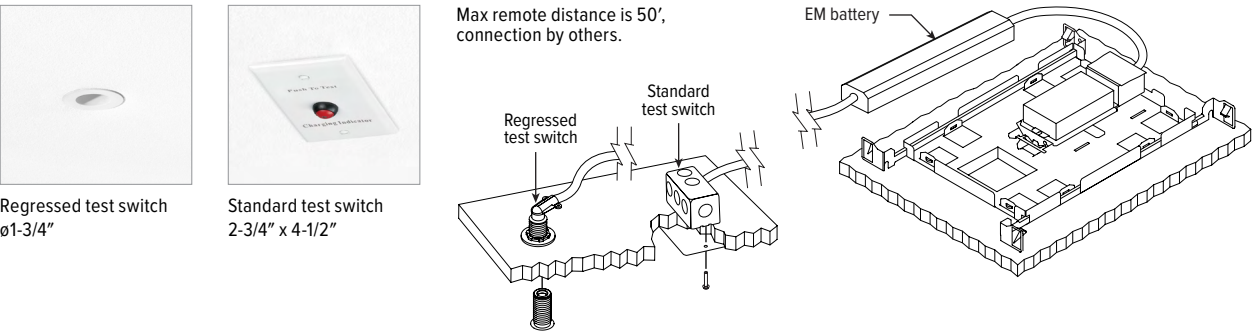
REFLECTOR FINISH DETAILS

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

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TRIM TYPE DETAILS

1/2" STANDARD FLANGE TYPE

OPEN

2-11/16"
3-1/2"

Ceiling Cutout: 3"

FLUSH

1/8"
2-7/16"

ANGLED

1/8"
2-3/8"

REGRESSED

9/16"
2-11/16"
1/8"
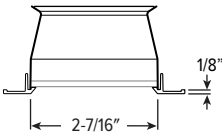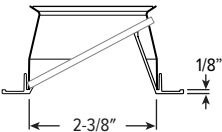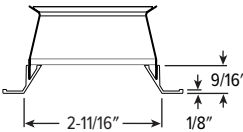
ZERO-FLANGE MUD-IN

FLUSH

2-15/16"
3-1/16"
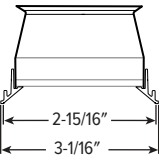
Ceiling Cutout: 3-1/2"

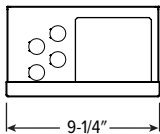**ANGLED**

3"

REGRESSED

3/4"
2-15/16"
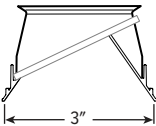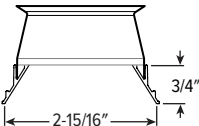
MUD FLANGE MOUNTING KIT

5/8"
1/8"

6"
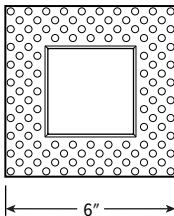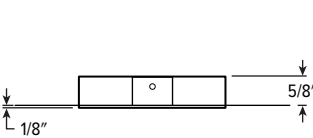
MOUNTING TYPE DETAILS

NEW CONSTRUCTION

1-1/16"
3"
3"
9"
12-1/2"

IC-RATED

11-13/16"
6-1/16"
12-3/4"

3-1/8"
6-11/16"
3"

9-1/4"
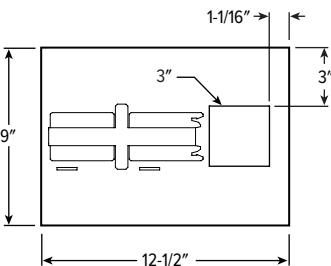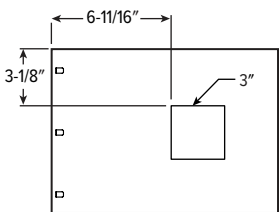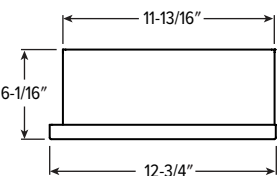
SEE NEXT PAGE FOR MOUNTING DETAILS

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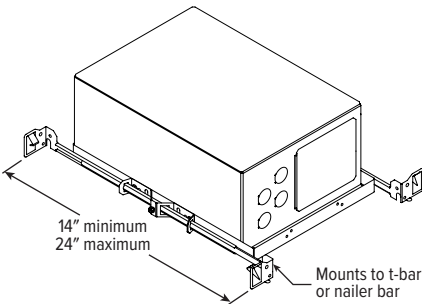Information contained herein is subject to change without notice. REV.01/10/25.JL

Downlights
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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
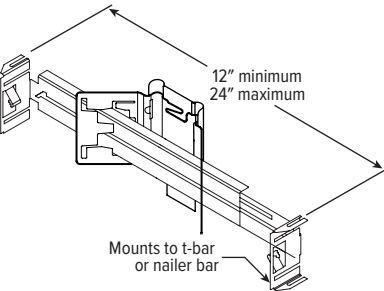24″ maximum

Mounts to t-bar
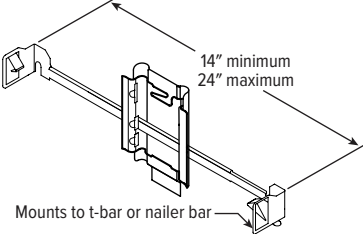or nailer bar
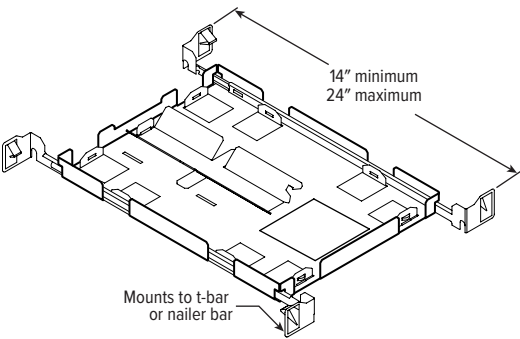
F1 with I Mounting Type

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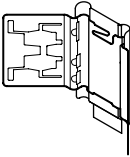
BA2   Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

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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