V4DR LED
4.5" Vandal-Resistant Downlight – Round

Williams®

L7 - L27: 5-3/4"
L34 - L37: 6-1/2"

ø4-1/4"

15"

1/2" min
1-7/8" max

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT • CCEA Approved • IP65 Rated • ISO 5 Class 100 • WET/CC

ORDERING EXAMPLE: V4DR - L14/835 - OPTIONS - CONTROL/DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

— HOUSING — | — TRIM — | MOUNT.

HOUSING

SERIES	LUMENS [1]	CRI	CCT	OPTIONS		CONTROL		DRIVER		VOLTAGE	
V4DR	L7 700lm [2]	8 80	27 2700K	ATH	Airtight construction	*See page 5 for ADDITIONAL CONTROL/DRIVER OPTIONS.*		*See page 5 for ADDITIONAL CONTROL/DRIVER OPTIONS.*		UNV 120-277V	
	L10 1,000lm	9 90 [3]	30 3000K	F	Fuse	—	None	DIM	Dimming driver, 0-10V	347 347V [12]	
	L14 1,400lm		35 3500K	EM/7W	7-watt emergency battery [4]	AVI-LVFA	Avi-on wireless fixture control [9]	DIM1	1% Dimming driver, 0-10V		
	L20 2,000lm		40 4000K	EM/10W	10-watt emergency battery [5]			DA	Driver with 12V auxiliary power, without external dimming wires [11]		
	L27 2,700lm		50 5000K	CP	Chicago plenum (CCEA) [6]	AWNR	Lutron Athena wireless node integral fixture control, RF only [10]				
	L34 3,400lm			SDT	Stepdown transformer [7]						
	L37 3,700lm			TC	Thick ceiling construction [8]						

TRIM

TRIM TYPE	DISTRIBUTION [13]		FLANGE TYPE	REFLECTOR FINISH		TRIM OPTIONS	
L Flush lens	W	Wide	OF 1/2" standard flange	WH	White texture powder coat	MWT	Textured white trim flange [17]
R Regressed lens		50° Flush		CS	Clear semi-specular powder coat	IP	IP65 rated trim
		50° Regressed		BL	Black texture powder coat	PD	Diffuse 1/8" polycarbonate lens [18]
	M	Medium [14]		MB	Black texture splay with white flange [16]	WET/CC	Wet location, covered ceiling listed
		35° Flush				AM	Anti-microbial [19]
		30° Regressed					
	N	Narrow [15]					
		25° Flush					
		25° Regressed					

MOUNTING

MOUNTING TYPE [20]	MOUNTING HARDWARE [21]	
N Open pan for new construction	F1	Integral 2-position fixed pan bracket, universal bar hanger included [23]
I IC-rated enclosure for new construction [22]	BA1	Adjustable butterfly pan bracket, bar hanger not included [24]
	CA1	Adjustable caterpillar pan bracket, universal bar hanger included [25]

ACCESSORIES

TPTX-10 TOOL T10 torx bit 1/4" drive tamper-resistant tool. [26]

NOTES

1. Lumen output based on L trim type, W distribution, WH finish, 80 CRI/3500K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
2. Not available with EM/10W emergency batteries.
3. Extended lead times may apply. Consult factory for availability.
4. Specify CEC in the option code when California Energy Commission regulations are required.
5. Specify CEC in the option code when California Energy Commission regulations are required.
6. I Mounting Type required.
7. May be required for 347V, see product builder at hew.com/product-builder.
8. Required for ceiling thicknesses greater than 1-1/4"
9. DA Driver only. See page 5 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
10. DA Driver only.
11. Avi-on and Lutron Athena Controls only.
12. Not available with EM batteries, DA, or DMX drivers.
13. Beam angle based on WH reflector finish.
14. Not available with L34 and L37 lumen packages.
15. Not available with L34 and L37 lumen packages.
16. R Trim Type only. Not available with MWT.
17. Not available with WH Reflector Finish or L Trim Type.
18. W distribution only.
19. WH and BL Reflector Finishes only.
20. Mounting hardware required, ordered separately, see MOUNTING HARDWARE ordering info. See page 3 for MOUNTING TYPE DETAILS.
21. Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
22. L14 lumen package max. L20 available, W distribution only. Not available with EM batteries.
23. I Mounting requires external brackets.
24. N Mounting Type only.
25. N Mounting Type only.
26. Tamper-resistant tool must be ordered separately. Please specify quantity required per project.

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REV.11/08/23.LA
Downlights
Page 1 of 5

V4DR LED
4.5" Vandal-Resistant Downlight – Round

FEATURES

- Ideal for schools, behavioral health facilities, correctional institutions, and other vandal-prone areas
- Anti-ligature design with tamper-resistant fasteners
- Accepted by the New York State Office of Mental Health for use in inpatient facilities
- IP65-rated die-cast trim includes easy-to-clean flush lens
- Beam angles ranging from 25° narrow to 50° wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- Die-cast trim choices include flush or regressed lens
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- Wireless in-fixture control solutions available

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″ – 1-7/8″ max. TC option required for ceiling thicknesses greater than 1-1/4″.
- LENSED TRIM – Die-cast aluminum frame with 1/8″ micro-prismatic, polycarbonate lens with 1/8″ clear polycarbonate underlay. Trim is secured with four stainless steel, tamper-resistant screws.
- 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. Minimum 24″ O.C. marked spacing required for L34 and L37 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.
  - ISO 5, Class 100 rated.
  - 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

FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L7	W	674	10.7	63
L7	M	895	10.7	84
L7	N	914	10.7	85
L10	W	994	16.1	62
L10	M	1319	16.1	82
L10	N	1347	16.1	84
L14	W	1352	21.7	62
L14	M	1794	21.7	83
L14	N	1833	21.7	85
L20	W	2022	31.1	65
L20	M	2683	31.1	86
L20	N	2741	31.1	88
L27	W	2695	44.2	61
L27	M	3577	44.2	81
L27	N	3654	44.2	83
L34	W	3364	51.4	65
L34	M	–	–	–
L34	N	–	–	–
L37	W	3678	58.6	63
L37	M	–	–	–
L37	N	–	–	–

REGRESSED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L7	W	660	10.7	62
L7	M	895	10.7	84
L7	N	882	10.7	82
L10	W	972	16.1	60
L10	M	1319	16.1	82
L10	N	1300	16.1	81
L14	W	1232	21.7	57
L14	M	1795	21.7	83
L14	N	1769	21.7	82
L20	W	1979	31.1	64
L20	M	2685	31.1	86
L20	N	2646	31.1	85
L27	W	2638	44.2	60
L27	M	3579	44.2	81
L27	N	3527	44.2	80
L34	W	3292	51.4	64
L34	M	–	–	–
L34	N	–	–	–
L37	W	3599	58.6	61
L37	M	–	–	–
L37	N	–	–	–

MULTIPLIER TABLES

COLOR TEMPERATURE

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

TRIM

CATALOG NUMBER	CONVERSION FACTOR
PD	0.85

REFLECTOR FINISH

	CATALOG NUMBER	CONVERSION FACTOR
R TRIM	WH	1.00
R TRIM	BL	0.79
R TRIM	CS	0.98

- Photometrics tested in accordance with IESNA LM-79. Results based on L trim type, W distribution, WH 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

V4DR-L14/835-DIM-UNV-LW-OF-WH Total Luminaire Output: 1352 lumens; 21.7 Watts | Efficacy: 62.3 lm/W | 80CRI; 3500K CCT
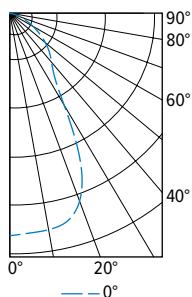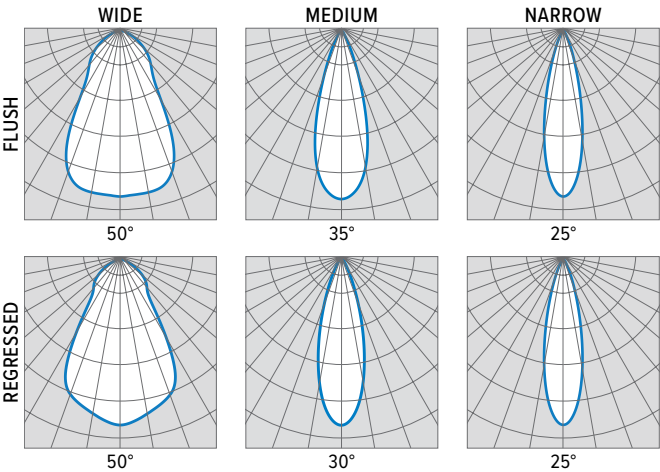

CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	950	
5	943	67
15	925	148
25	722	153
35	336	101
45	241	90
55	161	65
65	87	37
75	37	15
85	7	1
90	0	

LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0 - 40	887	66
0 - 60	1217	90
0 - 90	1352	100
0-180	1352	100

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Downlights
Page 2 of 5

V4DR LED
4.5″ Vandal-Resistant Downlight – Round

	WIDE	MEDIUM	NARROW
FLUSH	50°	35°	25°
REGRESSED	50°	30°	25°

TRIM TYPE DETAILS

FLUSH

ø4-1/4″ 1/8″

REGRESSED

ø4-3/8″ 1/8″ 1-1/4″
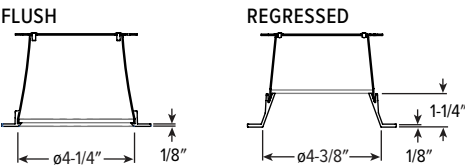
FLANGE TYPE DETAILS

ø5-1/2″

Ceiling Cutout: ø5″
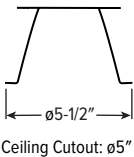
REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

BL
Black

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

ø5″
5-7/16″
9/16″
12″
6″
4-1/4″
15″

IC-RATED

A
C
B
D

E
ø5″
F
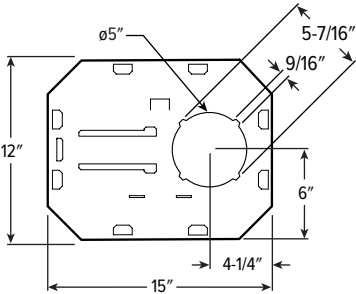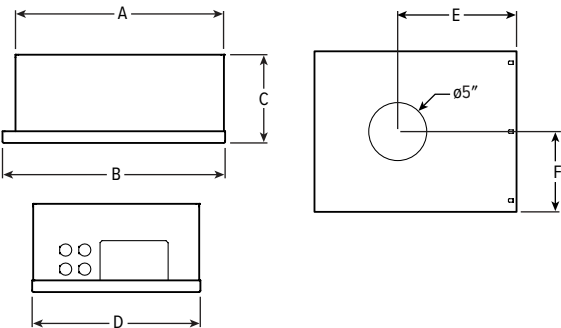
LENGTH						
LUMENS	A	B	C	D	E	F
L7 - L14	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L20	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″

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Downlights
Page 3 of 5

V4DR LED
4.5″ Vandal-Resistant 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
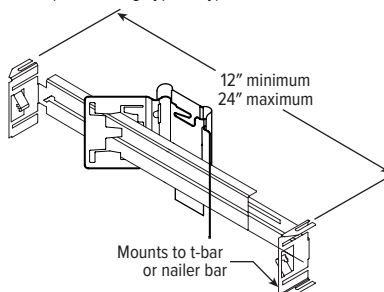24″ maximum

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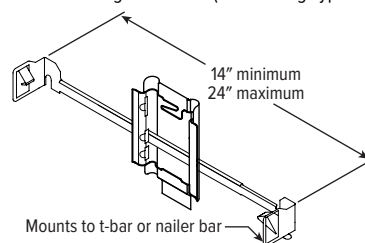or nailer bar
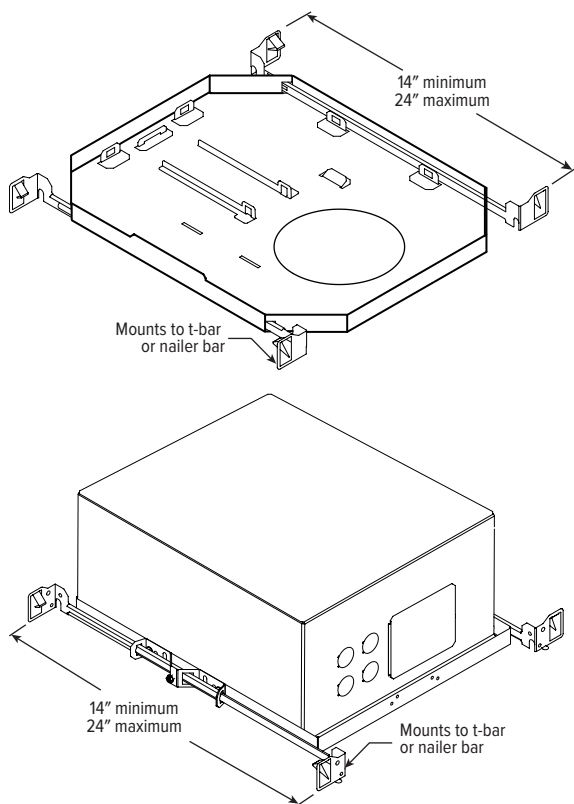
F1 with I Mounting Type

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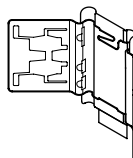
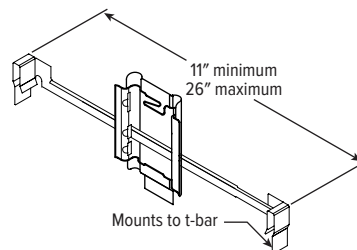**BA2** Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

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

SEE NEXT PAGE FOR CONTROL DETAILS.

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Downlights
Page 4 of 5

V4DR LED
4.5" Vandal-Resistant 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.
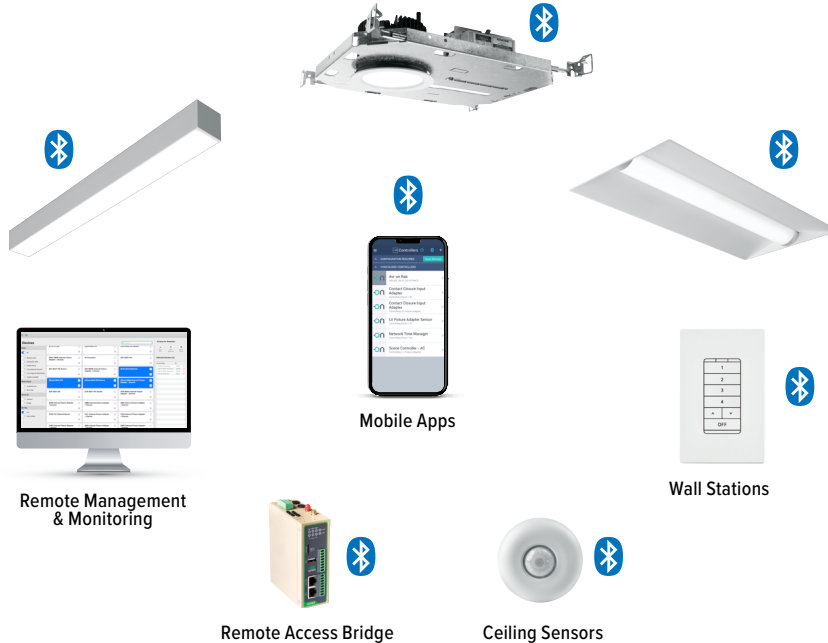
Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Remote Management & Monitoring

Mobile Apps

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: L27 max for DMX driver, L27 max for Lutron drivers. L34 max for DALI driver. 347V may require stepdown transformer, see product builder at 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
AWNR/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

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Downlights
Page 5 of 5