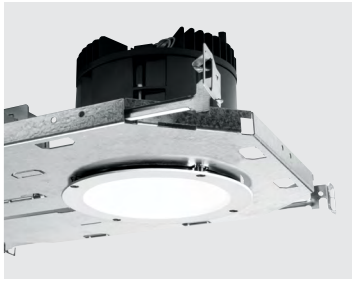
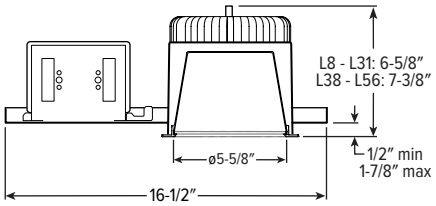
V6DR LED
6" Vandal-Resistant Downlight – Round





CATALOG #:

TYPE:

PROJECT:

BAA & BABA COMPLIANT | CCEA Approved | IP65 Rated | ISO 5 Class 100 | WET/CC | TW

ORDERING EXAMPLE: V6DR - L16/835 - OPTIONS - CONTROL/DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1
(HOUSING: V6DR - L16/835 - OPTIONS - CONTROL/DIM - UNV; TRIM: LW - OF - WH - TRIM OPTIONS; MOUNT.: N - F1)

HOUSING

SERIES
V6DR

LUMENS [1]
Single CCT or TW
L8 800lm [3]
L12 1,200lm
L16 1,600lm
L23 2,300lm
L31 3,100lm
Single CCT only
L38 3,800lm
L46 4,600lm
L53 5,300lm
L56 5,600lm

CRI
8 80
9 90 [4]

CCT
27 2700K
30 3000K
35 3500K
40 4000K
50 5000K
TW Tunable white (80 CRI, 2700K-5000K)

OPTIONS
ATH Airtight construction
F Fuse
EM/7W 7-watt emergency battery [5]
EM/10W 10-watt emergency battery [6]
CP Chicago plenum (CCEA) [7]
SDT Stepdown transformer [8]
TC Thick ceiling construction [9]

CONTROL
Click HERE for control options.
– None

DRIVER [2]
See page 5 for ADDITIONAL DRIVER OPTIONS.
DIM Dimming driver, 0-10V [10]
DIM1 1% Dimming driver, 0-10V [11]
DIM LINE Driver with line voltage dimming wires [12]

VOLTAGE
UNV 120-277V
347 347V [13]

TRIM

TRIM TYPE
L Flush lens
R Regressed lens

DISTRIBUTION [14]
W Wide
55° Flush
55° Regressed
M Medium [15]
35° Flush
35° Regressed
N Narrow [16]
25° Flush
25° Regressed

FLANGE TYPE
OF 1/2" standard flange

REFLECTOR FINISH
CS Clear semi-specular powder coat
WH White texture powder coat
BL Black texture powder coat
MB Black texture splay with white flange [17]

TRIM OPTIONS
MWT Smooth matte white trim flange [18]
IP IP65 rated trim
PD Diffuse 1/8" polycarbonate lens [19]
WET/CC Wet location, covered ceiling listed
AM Anti-microbial [20]

MOUNTING

MOUNTING TYPE [21]
N Open pan for new construction
I IC-rated enclosure for new construction [23]

MOUNTING HARDWARE [22]
F1 Integral 2-position fixed pan bracket, universal bar hanger included [24]
BA1 Adjustable butterfly pan bracket, bar hanger not included [25]
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included [26]

ACCESSORIES

TPTX-10 TOOL T10 torx bit 1/4" drive tamper-resistant tool. [27]

NOTES

1 Lumen output based on L Trim Type, W Distribution, WH Reflector Finish, 80 CRI, 3500K for static white and 4000K for tunable white. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
2 See page 5 for ADDITIONAL DRIVER OPTIONS.
3 Not available with EM/10W emergency batteries.
4 Not available with tunable white.
5 Specify CEC in the option code when California Energy Commission regulations are required.
6 Specify CEC in the option code when California Energy Commission regulations are required.
7 I Mounting Type required.
8 May be required for 347V, see product builder at hew.com/product-builder
9 Required for ceiling thicknesses greater than 1-1/4"
10 0.1% Driver with tunable white.
11 Not available with tunable white.
12 Not available with tunable white.
13 Not available with Tunable White, EM batteries or DMX Driver.
14 Beam angle based on WH Reflector Finish.
15 Not available with lumen packages L38 and higher.
16 Not available with lumen packages L38 and higher.
17 R Trim Type only. Not available with MWT.
18 Not available with WH Reflector Finish or L Trim Type.
19 W Distribution only.
20 WH and BL Reflector Finishes only.
21 Mounting hardware required, ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
22 Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
23 L23 lumen package max. Not available with EM batteries.
24 I Mounting requires external brackets.
25 N Mounting Type only.
26 N Mounting Type only.
27 Tamper-resistant tool must be ordered separately. Please specify quantity required per project.

V6DR LED
6" 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 55° wide for tailored performance
- Die-cast trim choices include flush or regressed lens
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Support human-centric design with adaptive, individualized lighting using tunable white light
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- 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" – 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. 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. Minimum 24" O.C. marked spacing required for L38 and higher 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.
  - IP65 rated trim when specified with IP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Build America, Buy America (BABA) and Buy American Act (BAA) compliant. Request certification at hew.com/buy-american
- WARRANTY – 5-year limited warranty, see hew.com/warranty

FIXTURE PERFORMANCE DATA

FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L8	W	774	9.8	79
	M	910	9.8	93
	N	909	9.8	93
L12	W	1178	14.9	79
	M	1385	14.9	93
	N	1384	14.9	93
L16	W	1561	20.4	77
	M	1837	20.4	90
	N	1836	20.4	90
L23	W	2335	29.5	79
	M	2782	29.5	94
	N	2718	29.5	92
L31	W	3122	41.0	76
	M	3720	41.0	91
	N	3635	41.0	89
L38	W	3824	49.3	78
	M	–	–	–
	N	–	–	–
L46	W	4609	62.2	74
	M	–	–	–
	N	–	–	–
L53	W	5345	74.4	72
	M	–	–	–
	N	–	–	–
L56	W	5626	79.8	71
	M	–	–	–
	N	–	–	–

REGRESSED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L8	W	716	9.8	73
	M	883	9.8	90
	N	897	9.8	92
L12	W	1090	14.9	73
	M	1344	14.9	90
	N	1366	14.9	92
L16	W	1445	20.4	71
	M	1782	20.4	87
	N	1812	20.4	89
L23	W	2160	29.5	73
	M	2699	29.5	92
	N	2683	29.5	91
L31	W	2889	41.0	71
	M	3609	41.0	88
	N	3587	41.0	88
L38	W	3537	49.3	72
	M	–	–	–
	N	–	–	–
L46	W	4264	62.2	69
	M	–	–	–
	N	–	–	–
L53	W	4945	74.4	67
	M	–	–	–
	N	–	–	–
L56	W	5205	79.8	65
	M	–	–	–
	N	–	–	–

- Photometrics tested in accordance with IESNA LM-79. Results based on L Trim Type, W Distribution, WH Reflector Finish, 80 CRI, 3500K for single CCT and 4000K for tunable white, 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.

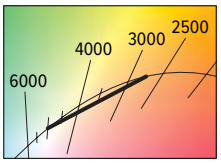
MULTIPLIER TABLES

	COLOR TEMPERATURE		
	CCT	SINGLE CCT	TW
80 CRI	2700K	0.92	0.83
	3000K	0.98	1.00
	3500K	1.00	0.99
	4000K	1.01	1.00
	5000K	1.02	0.98
90 CRI	2700K	0.76	–
	3000K	0.79	–
	3500K	0.82	–
	4000K	0.84	–
	5000K	0.88	–

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
PD	0.85

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

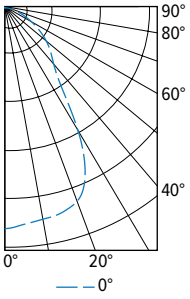
TUNABLE WHITE



V6DR LED
6" Vandal-Resistant Downlight – Round

PHOTOMETRY

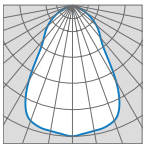
V6DR-L16/835-DIM-UNV-LW-OF-WH Total Luminaire Output: 1561 lumens; 20.4 Watts | Efficacy: 76.5 lm/W | 80 CRI; 3500K CCT

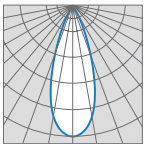


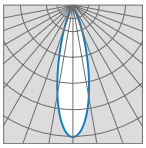
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
	0	993	
	5	978	69
	15	954	155
	25	823	185
	35	420	123
	45	281	105
	55	190	77
	65	106	45
	75	47	20
	85	10	2
	90	1	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1005	64
	0 - 60	1392	89
	0 - 90	1561	100
	0 - 180	1561	100

FLUSH







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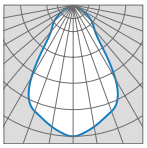
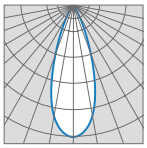
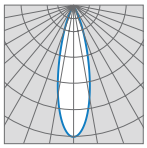
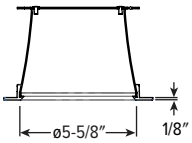






TRIM TYPE DETAILS

FLUSH



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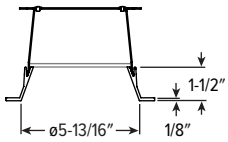
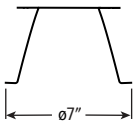


FLANGE TYPE DETAILS



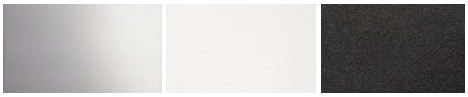
Ceiling Cutout: ø6-1/2"

REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

BL
Black



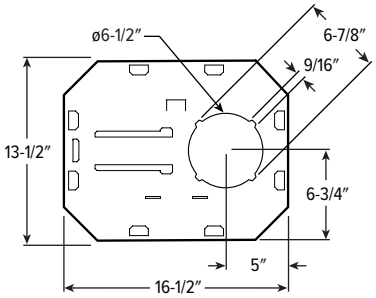
SEE NEXT PAGE FOR MOUNTING DETAILS.

V6DR LED
6″ Vandal-Resistant Downlight – Round

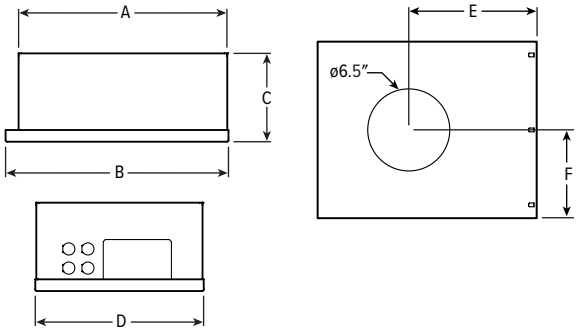
MOUNTING TYPE DETAILS

Flex conduit is recommended for installation.

NEW CONSTRUCTION



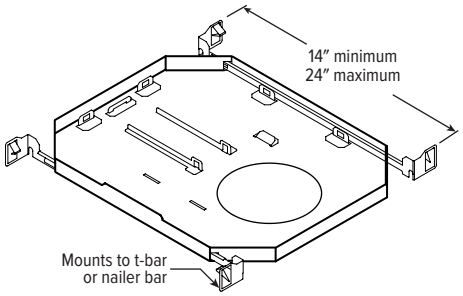
IC-RATED



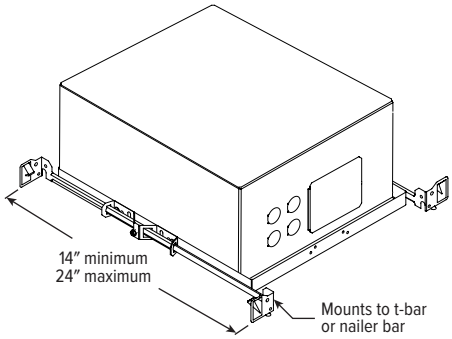
	LENGTH					
LUMENS	A	B	C	D	E	F
L8 - L16	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L23	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″

MOUNTING HARDWARE DETAILS

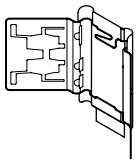
F1 Integral 2-position fixed pan bracket, universal bar hanger included



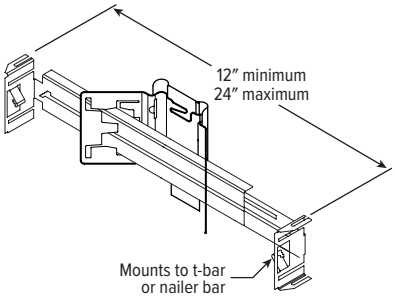
F1 with I Mounting Type



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)



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6" Vandal-Resistant Downlight – Round

ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply: L31 max for DMX and Lutron drivers. L38 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
DIM	Driver with external dimming wires prewired for 0-10V low voltage applications (tunable white: (1) 0-10V signal controls 0.1% dimming and (1) 0-10V signal controls CCT)
DIM1 [1]	1% driver with external dimming wires prewired for 0-10V low voltage applications
DIM LINE [1]	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DA	Driver with 12V auxiliary power, without external dimming wires (not available with 347V)
DALI	DALI dimming driver
DMX	Driver prewired for DMX applications
LDE1 [1]	Lutron Hi-lume 1% EcoSystem dimming driver
LD2	Lutron DALI-2 digital driver, 1%
DCC	Remote UL Class 2 DC constant current supply, UL- or CSA-listed, by others

1 Single CCT only.

TUNABLE WHITE DRIVER DETAILS

DIM

DALI

DMX

LD2