

DLV - Vertical LED Downlight

➤ Retrofit Existing Downlights with an Energy Efficient Alternative...

- Offices...
- Retail...
- Lobbies...
- Medical...
- Institutions...
- Hotels...
- Hospitality...

➤ Use to Replace...

- Low Wattage downlights with low mounting heights.
- High wattage downlights in high ceilings (20'-30') often use excess light to provide required light levels on the ground.
- The optional narrow optics for the DLV can punch light to the ground from high ceilings allowing for significant wattage reductions over traditional downlight sources.

➤ Easy Installation...

- Below ceiling installation.
- Housing fits inside existing downlight fixture frames.
- One piece unit with pre-wired J-box decreases installation time.

➤ Why P2? Simple, Our Experience.

- At P2 we strive to make your life easier. That's why our DLV downlight makes installation a snap by fitting into existing frames, reducing labor and giving your project a stronger ROI.

➤ DLV - Energy Efficient LED Downlight Retrofits



➤ Application



DLV - 6M - 14W - UL - FL45 - 27K - 80 - AZ

DLV	-	6M	-	14W	-	UL	-	FL45	-	27K	-	80	-	AZ	-		-	
Fixture Series		Fixt Size		Input Watts		Voltage		Primary Optic		Color Temp		CRI		Reflector Color		Other Options		Other Options

Fixture Series

DLV = Vertical LED
Downlight Conversion

Fixture Size

6S = Fits 5-15/16" to 6-1/8"
6M = Fits 6-1/8" to 6-1/2"
6L = Fits 6-1/2" to 6-7/8" (1)

Input Watts

14W = 14 Watts
28W = 28 Watts

Voltage

UL = 120-277 Volt
120 = 120 Volt Dedicated

Numeric Footnotes

- (1) Requires WD (Wide Flange)
- (2) Standard for 14W
- (3) Standard for 28W, 28W only
- (4) 14W only
- (5) Dedicated 120 V only

Primary Optics

SP18 = 18 Deg Spot
MD25 = 25 Deg Med
FL35 = 35 Deg Wide
FL45 = 45 Deg Wide (Std)

Color Temp

27K = 2700 Kelvin
35K = 3500 Kelvin (Std)
40K = 4000 Kelvin
50K = 5000 Kelvin

CRI

70 = 70+ CRI (2)
80 = 80+ CRI (3)
90 = 90+ CRI (4)

Reflector Color

AZ = Clear Alzak

Trim Options

WT = White Flange
WD = Wide Flange (Open Reflectors Only)

Other Options

LDM = LED 0-10V Dimming Module (4, 5)

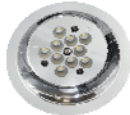
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Fixture Construction

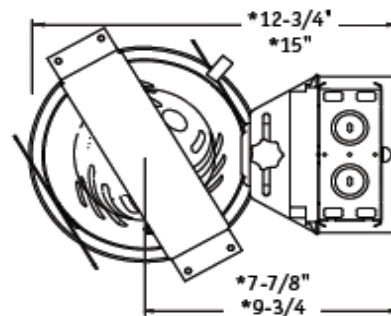
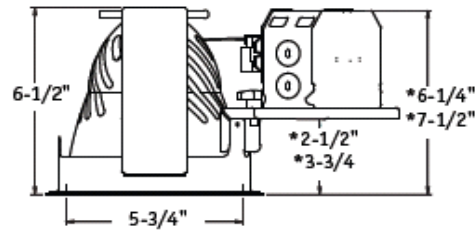
- Die cast aluminum or galvaneal steel housing.
- Cast aluminum heat sink dissipates heat for maximum performance .
- Alzak coated spun aluminum semi-diffuse reflector.
- Pre-wired J-box with snap-on cover for easy access.



Heat Sink
Thermal Management



45° Optics
(18°, 25°, 35° Also Available)



Existing Systems

Existing Lamp / Ballast System	Lamp Quantity & Type	Initial System Lumens	Mean System Lumens	Fixture Efficiency	Total Fixture Lumens	S/P (1) Ratio	S/P (2) Adjusted Lumens	Fixture Input Watts	Lumens (3) Per Watt SP Adjusted
Incandescent 60 W	1 60A	870	844	55%	464	1.41	607	60	8
Incandescent 75 W	1 75A	1,200	1,164	55%	640	1.41	837	100	6
Incandescent 100 W	1 100A	1,750	1,698	55%	934	1.41	1,221	100	9
CFL- Screw In - 23 W	1 FLE26HT3	1,600	1,280	55%	704	1.62	1,026	23	31
CFL - Scew In - 42 W	1 FLE42HLX	2,700	2,160	55%	1188	1.62	1,731	42	28
CMH-MR16 - 20 W	1 CMH20MR16	1,000	970	55%	534	1.49	728	20	27
CMH-MR16 - 39 W	1 CMH39MR16	2,100	2,037	55%	1120	1.49	1,529	39	29
MH-70 CMH	1 MXR70	5,500	3,500	55%	1925	1.49	2,627	129	15

Re-Lighting Options

Proposed LED System	Chip Qty & Drive Current		Initial Fixture Lumens	Fixture Efficiency (8)	Total Fixture Lumens	At 25°C (77F)		Initial Kelvin	Fixture Input Watts	Lumens Per Watt
						L70 Rated Life	Junction Temp (4)			
DLV-14W-70+CRI	10	350 mA	629	N/A	629	50,000+	66°C	3,500	14	45
DLV-28W-80+CRI	10	700 mA	1,031	N/A	1031	50,000+	113°C	3,500	28	37

Numeric Footnotes

- (1) S/P Ratio = Scotopic to Photopic Lumens
- (2) SP Adjusted Lumens = Mean Lumens x (S/P)^{.78} [78 exponent]
- (3) Lumens Per Watt = S/P Adjusted Lumens / Fixture Input Watts
- (4) The junction temperature of the LED chip is the single most important factor determining expected life and lumen maintenance.
- (5) LED chip manufacturers project 70% lumen maintenance at 50,000 hours, provided JT is maintained below the manufacturer's LM80 test point.
- (6) L70 represents expected hours the chip will maintain 70% of its initial lumens, based on TMD measured JT and Nichia chip data.
- (7) The table above refers to LED component life. Driver life expectancy is 50,000+ hours @ 25C ambient when minimum space around the fixture is maintained.
- (8) LED Fixture Lumens are taken from absolute IES testing and include all fixture efficiencies.