

ID+ 4.5" x 4.5" Trimless

LED DOWNLIGHT



solite lens option



clear diffuse



warm diffuse



white



black

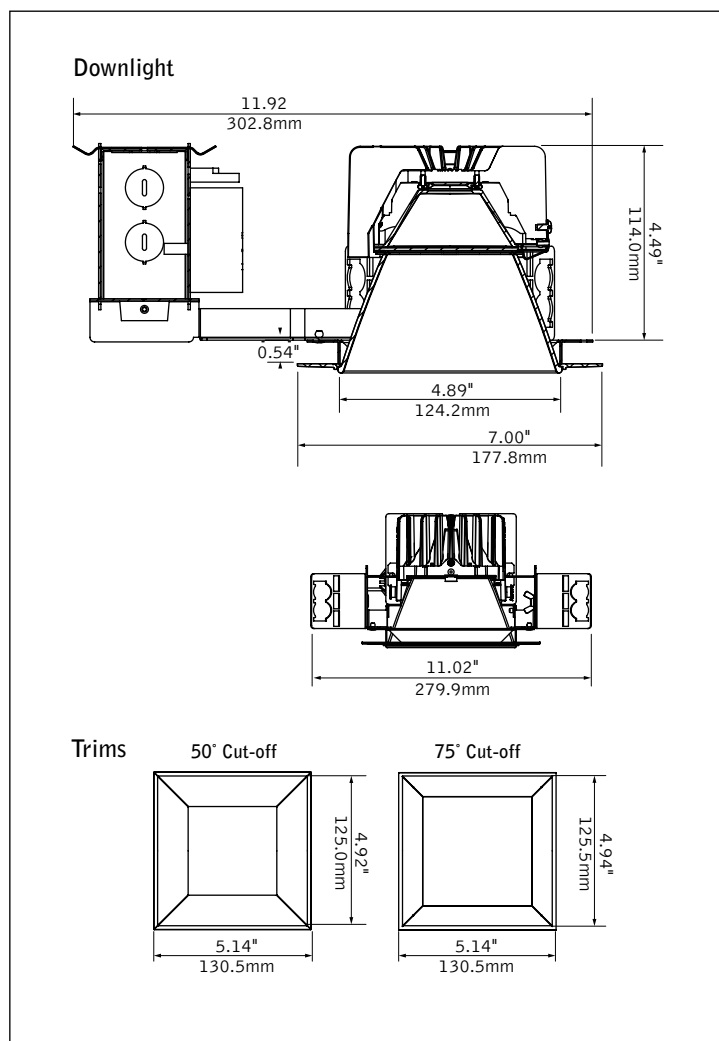


overlap companion



The Naturals collection - Grey Elm shown

DIMENSIONAL DATA



FEATURES

Field adjustability of ceiling thickness from 0.5" to 3.0"

50° or 75° cutoff to light source and its image.

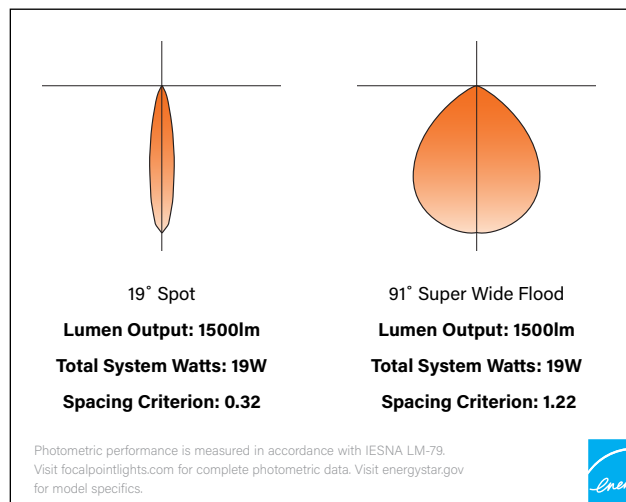
Right Light: Standard delivered lumen outputs 1000, 1500, 2000, 2500, and 3000.

Warm Dim: Lighting that enhances spaces with a warm glow, reminiscent of incandescent or halogen light sources.

PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

Available with The Naturals, a series of finishes that exude biophilic beauty.

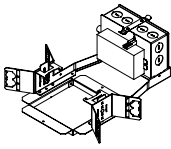
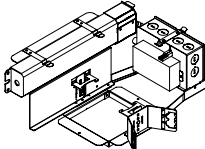
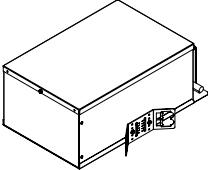
PERFORMANCE



fixture:

project:

HOUSING DETAILS

Standard	Emergency Battery	IC/Chicago Plenum
		
L x W x H 12.53" x 11.02" x 4.56"	L x W x H 16.21" x 11.02" x 6.02"	Standard L x W x H 16.85" x 11.45" x 6.13" Emergency L x W x H 16.85" x 12.95" x 6.13"

HOUSING SPECIFICATIONS

Construction

Thermally protected housing for new construction applications. Insulation to be kept 3" away from housing. Type IC inherently protected, suitable for direct contact with insulation. Butterfly brackets allow mounting to 1/2" emt. Order bar hangers as an accessory. Die-cast aluminum heat sink designed for maximum thermal dissipation. Die-formed housing and integral junction box with (7) 1/2" pry-outs. T-rated: UL & cUL Listed for (6) #14 AWG (3 in, 3 out) 90°C conductors and feed through-branch wiring. IC/CP housing: UL & cUL Listed for (8) #12 AWG (4 in, 4 out) 90°C conductors and feed through-branch wiring for IC/CP housing. Accommodates ceiling thicknesses up to 0.5" standard, field adjustable up to 3.0" thickness. For thicker ceiling consult factory. Order TZB option for TechZone compatible housing brackets. T-rated housing will not exceed 6lb, IC/CP housing will not exceed 12lb.

Electrical

Choice of constant current dimming drivers. Power factor > .9 typical. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

Emergency

Emergency Battery Pack: Bodine BSL17C-C2. Emergency output —7W for 90 minutes. Maximum mounting height: 25.8ft. (Black reflector: 18.0ft.) Not wet location or outdoor rated.

Labels

UL and cUL Listed. Suitable for Dry, Damp or Wet Locations, indoor use only. Specify Outdoor rated (OD) for outdoor recessed ceiling applications.

Lumen Maintenance

Reported: L70 at >55,000 hours Calculated: L70 at 204,000 hours
 L90 at >55,000 hours L90 at 59,000 hours

Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.

Reliability

At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

Warranty

LED System rated for operation in ambient environments up to 25°C. 5-year limited warranty. Fixture with Outdoor rated option must be installed in a covered ceiling and is warrantied for operation in ambient environments between -20°C to +40°C.

TRIM & LED SPECIFICATIONS

LED System

Proprietary array incorporates premium LEDs on a robust platform. May be specified in 2700K, 3000K, 3500K or 4000K, 80+ CRI or 90+ CRI. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. Color accuracy within 2 SDCM. Aluminum heat sink provides appropriate thermal management.

Aesthetics

Torsion springs pull single molded die-cast trim right to the ceiling with no visible fasteners within the trim. The Naturals: 100% low VOC vinyl.

Optics

50-degree or 75-degree cut-off to light source and its image.

Op-tic	Cut-Off Degree	Lumen Output	Distribution Beam Spread Spacing Criteria						
			SP	NFL	FL1	FL2	WFL	VWFL	SWFL
DN	 50°	1000-2500	19° .32	23° .40	34° .56	46° .74	57° .92	68° 1.02	-
		3000	-	25° .44	39° .64	48° .76	57° .92	68° 1.02	-
DSS	 75°	1000-2500	-	-	-	-	-	70° 1.03	91° 1.22
		3000	-	-	-	-	-	71° 1.02	91° 1.22

PERFORMANCE CHART* - see page 3.

Focal Point LLC reserves the right to change specifications for product improvement without notification.

HOUSING ORDERING

Housing Series

ID+ 4.5" Square Downlight FLC44D

Trim Type

Square Trimless ST

Color Options

Standard White, 80 & 90 CRI SW

Warm Dim WDM

(1500 & 2000 lumens only. UNV & EM not available.)

Lumen Output

1000 Lumens 1000L

1500 Lumens 1500L

2000 Lumens 2000L

2500 Lumens 2500L

3000 Lumens 3000L

(Not available with SP distribution, LFP or LTE.)

Voltage

UNV 120V/277V UNV

(IC housing only. Not available with LFP or LTE.)

120V 120

277V 277

Low Voltage

LV

(IC housing: 2000L max. T & TW housings: 1000L only.)

Control System & Dimming Level

0-10V - 0% Dimming LZ1

0-10V - 1% Dimming L11

0-10V - 10% Dimming LD1

Low Voltage, PoE compatible LVN

(No driver. Not available with EM. LV Voltage only.)

Forward Phase (120V only) LFP

Lutron Hi-Lume EcoSystem (LDE1) -

1% Dimming LH1

Lutron Hi-Lume - Forward Phase -

1% Dimming (120V only) LTE

DALI - 0% Dimming DZ1

DALI - 1% Dimming D11

Housing Type

IC Rated / Airtight IC

(LT1, LD1, LVN, LH1 2000L max. LZ1, D11, DZ1, LFP 1500L max. LTE 1000L only. LC44AT required for Airtight. Not available with EM.)

Thermally Protected, Non-IC T

Thermally Protected, Non-IC Wood TW

(Wood ceiling installation kit required)

Factory Options

Bar Hangers BH

Chicago Plenum CP

Emergency Battery EM

(Must order LC44EM trim. Not wet location, airtight or outdoor rated.)

Outdoor Rated OD

(LD1 driver only. IC housing 1500L max. See dimming Performance Chart on page 3.)

TRIM & LED MODULE

Aperture

4.5" Square Reflector LC44

4.5" Square Reflector - Airtight LC44AT

(IC housing required for Airtight rating)

4.5" Square Reflector - Emergency LC44EM

(Required for "EM" option. DN optic only. Not wet location, airtight or outdoor rated.)

Trim Type

Square Die-Cast Trimless SDT

Lumen Output

1000 Lumens 1000L

1500 Lumens 1500L

2000 Lumens 2000L

2500 Lumens 2500L

3000 Lumens 3000L

(Not available with SP distribution)

Color Temperature

2700K, 80+ CRI or 90+ CRI 27K or 927K

3000K, 80+ CRI or 90+ CRI 30K or 930K

3500K, 80+ CRI or 90+ CRI 35K or 935K

4000K, 80+ CRI or 90+ CRI 40K or 940K

Warm Dim: 2700-1800K, 90+ CRI 92718W

(1500 & 2000 lumens only)

Warm Dim: 3000-1800K, 90+ CRI 93018W

(1500 & 2000 lumens only)

Optic

Downlight DN

Super Short Cone with Solite Lens 75° cut-off DSS

(VWFL or SWFL only)

Distribution

Spot SP

Narrow Flood NFL

Flood 1 FL1

Flood 2 FL2

Wide Flood WFL

Very Wide Flood VWFL

Super Wide Flood (DSS Optic only) SWFL

Color

(See finishes page for The Naturals options)

Clear Diffuse CD

Warm Diffuse WD

Black BK

White WH

ACCESSORIES

Wood Ceiling Installation Kit



(One kit recommended per 10 downlights)

FLC44D
ST
SW
WDM
1000L
1500L
2000L
2500L
3000L
UNV
120
277
LV
LZ1
L11
LD1
LVN
LFP
LH1
LTE
DZ1
D11
IC
T
TW
BH
CP
EM
OD
LC44
LC44AT
LC44EM
SDT
1000L
1500L
2000L
2500L
3000L
27K or 927K
30K or 930K
35K or 935K
40K or 940K
92718W
93018W
DN
DSS
SP
NFL
FL1
FL2
WFL
VWFL
SWFL
CD
WD
BK
WH
LC44-WOOD-KIT



Options in orange qualify for the Quickship program: 5-day up to 200 pieces. Refer to Quickship Guide for complete details.

SQUARE DOWNLIGHT PERFORMANCE CHART

Lumen Output	Delivered Lumens	System Watts	LPW
1000L	1032	11	91
1500L	1552	19	81
 1500L	1480	25	58
2000L	2061	26	81
 2000L	2079	37	57
2500L	2492	32	78
3000L	2981	36	82

Based on downlight (DN) optic, 3500K, 80CRI, Wide Flood, Clear Diffuse. WDM base on 3000 - 1800K, 90 CRI.
Delivered lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

OUTDOOR RATED (OD) DRIVER DIMMING PERFORMANCE CHART

Lumen Output	Minimum Dimming Level
1000L	25%
1500L	16%
2000L	12%
2500L	10%
3000L	10%

SQUARE DOWNLIGHT LUMEN MULTIPLIER TABLE

Color Temperature & CRI

Trim Type	Optic	Lumen Ouput	Color Temperature	Multiplier
ALL	ALL	ALL	2700K, 80+ CRI [27K]	0.93
			2700K, 90+ CRI [927K]	0.75
			3000K, 80+ CRI [30K]	0.93
			3000K, 90+ CRI [930K]	0.81
			3500K, 80+ CRI [35K]	1.00
			3500K, 90+ CRI [935K]	0.81
			4000K, 80+ CRI [40K]	1.00
			4000K, 90+ CRI [940K]	0.87
		1500		0.93
		2000	2700-1800K, 90+ CRI [92718W]	1.09
		1500		0.99
		2000	3000-1800K, 90+ CRI [93018W]	1.04

Distribution

Trim Type	Optic	Distribution	Multiplier	
			1000 - 2500L	3000L
Square Die-Cast Trimless [SDT]	Downlight with 50° cut-off [DN]	Spot [SP]	1.05	-
		Narrow Flood [NFL]	1.04	1.04
		Flood 1 [FL1]	0.97	0.96
		Flood 2 [FL2]	0.99	0.98
		Wide Flood [WFL]	1.00	1.00
		Very Wide Flood [VWFL]	0.94	0.93
Square Die-Cast Overlap [SDO]	Downlight with 50° cut-off [DN]	Spot [SP]	1.03	-
		Narrow Flood [NFL]	1.02	1.02
		Flood 1 [FL1]	0.96	0.93
		Flood 2 [FL2]	0.97	0.94
		Wide Flood [WFL]	0.98	0.98
		Very Wide Flood [VWFL]	0.90	0.90
Square Die-Cast Trimless [SDT]	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Very Wide Flood [VWFL]	0.87	0.88
		Super Wide Flood [SWFL]	0.81	0.84
Square Die-Cast Overlap [SDO]	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Very Wide Flood [VWFL]	0.80	0.82
		Super Wide Flood [SWFL]	0.81	0.75

Color

Trim Type	Optic	Color	Multiplier
Square Die-Cast Trimless [SDT] and Square Die-Cast Overlap [SDO]	Downlight with 50° cut-off [DN]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	0.84
		White [WH]	1.11
		Black [BK]	0.65
	Super Short Cone with Solite Lens with 75° cut-off [DSS]	Clear Diffuse [CD]	1.00
		Warm Diffuse [WD]	1.01
		White [WH]	1.16
		Black [BK]	0.93
	ALL	Woven Linen [WLN]	0.93
		Walnut [WLT]	0.45
		Gray Elm [GRE]	0.72
		Chestnut [CHT]	0.75
		Light Oak [LOK]	0.90

Multiplier charts are provided to aid with estimation of lumen levels across options. Apply multipliers against ordered Lumen Output to estimate Delivered Lumens. An estimation should make use of all tables through consecutive application of three multipliers. Refer to IES files for most accurate photometric information

How To Use Lumen Multipliers

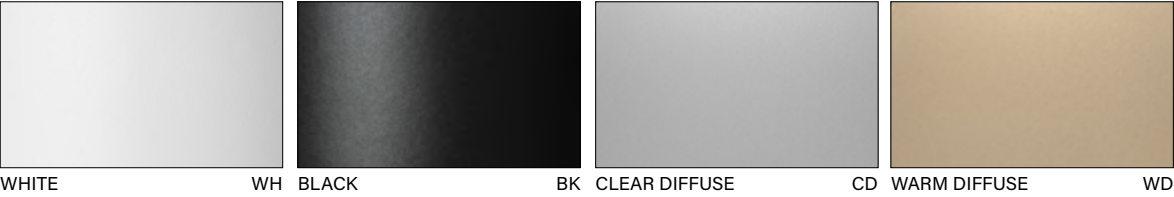
Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Color)

Example: LC44-SDT-2000L-935K-DN-NFL-WH
(2000) x (0.81) x (1.04) x (1.11) ≈ 1870 lm (estimated delivered lumens)

Finishes



STANDARD FINISHES



THE NATURALS (25% SCALE)

