## 4" Flat Housing Downlight - Trim, Trimless & Millwork

# **Bold** Series





BOLD-4-FH Downlight is a specification-grade architectural luminaire engineered for visual comfort, flexibility, and control. With field-changeable optics, toolless trim interchangeability, and a range of precise beam distributions, BOLD-4-FH delivers quiet ceilings and seamless integration into the architectural environment.

Available in three distinct housing options—flanged, trimless, and millwork—BOLD-4-FH adapts to a wide range of ceiling conditions while maintaining a refined visual language. The system features 98 CRI with 1x2 Step MacAdam Ellipse color consistency for exceptional optical quality, and supports multiple dimming protocols down to 0.1% for maximum control and responsiveness.

Ideal for commercial, hospitality, retail, institutional, civic, cultural, corporate, academic, healthcare, luxury residential, gallery, and museum projects, BOLD-4-FH supports elevated design intent without compromise.

As part of a complete family that includes wall wash and adjustable accent options, BOLD-4-FH offers static and dynamic color technologies to meet the evolving demands of high-performance lighting design.



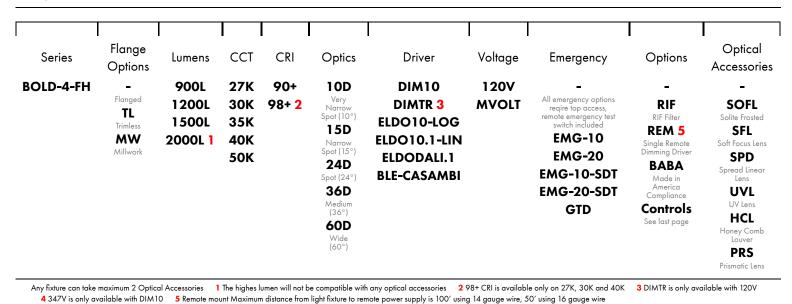
LUMENS	High Performance: 900L, 1200L, 1500L and 2000L  Warm Dimming: 900L, 1200L and 1500L  Xicato Artist: 900L and 1200L
CCT & DYNAMIC PLATFORMS	High Performance: 27K, 30K, 35K, 40K and 50K Warm Dimming: 18K-30K, 27K-30K and 22K-30K Xicato Artist: 27K, 30K, 30K-VIB, 35K and 40K
CRI	High Performance: 90+ and 98+ Warm Dimming: 90+ Xicato Artist: 90+ and 98+
COLOR QUALITY	2 Step MacAdam Ellipse
DISTRIBUTIONS	Very Narrow Spot (10°), Narrow Spot (15°), Spot (24°), Medium (36°) and Wide (60°)
DRIVER	High Performance: DIM10, DIMTR, ELDO10-LOG, ELDO10.1-LIN, ELDODALI.1 and BLE-CASAMBI  Warm Dimming: DIM10, DIMTR, ELDO10-LOG, ELDO10.1-LIN, ELDODALI.1 and BLE-CASAMBI  Xicato Artist: DIM10, DIMTR, ELDO10-LOG, ELDO10.1-LIN, ELDODALI.1 and BLE-CASAMBI
TRIM OPTIONS	Downlight: Flanged, Trimless, Millwork Pinhole: Flanged, Trimless, Millwork
FINISH OPTIONS	Anodized: White (WH), Black (BK), Chrome (CL), Satin Haze (SHZ), Silver (SI), Bronze (BZ), Custom Color (RAL) Diecast: White (WH), Black (BK), Silver (SI), Bronze (BZ), Custom Color (RAL)
EMERGENCY	EMG-10, EMG-20, EMG-10-SDT, EMG-20-SDT and GTD
LIFETIME	LED is rated for >60,000 hours at 70% lumen maintenance
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-23

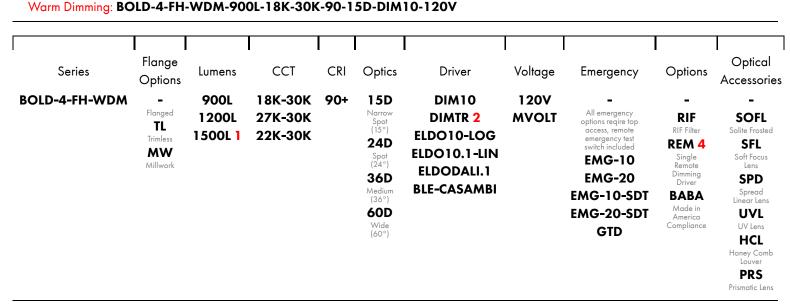


4" Flat Housing Downlight - Trim, Trimless & Millwork

**Bold** Series

## High Performance: BOLD-4-FH-900L-27K-90-10D-DIM10-120V





**BOLD-4-FH** 

4" Flat Housing Downlight - Trim, Trimless & Millwork

**Bold** Series

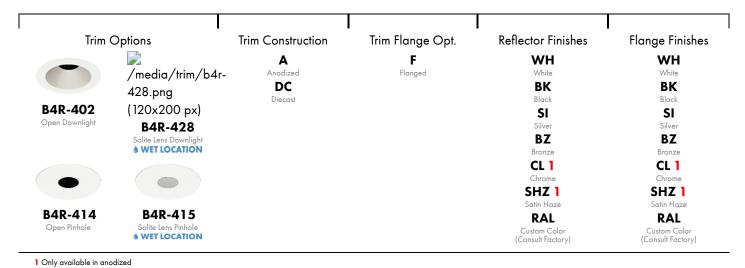
## Xicato Artist: BOLD-4-FH-XIA-900L-27K-90-10D-DIM10-120V

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Series	Flange Options	Lumens	CCT	CRI	Optics	Driver	Voltage	Emergency	Options	Optical Accessori
BOLD-4-FH-XIA	Flanged TL Trimless MW Millwork	900L 1200L 1	27K 30K 30K-VIB 35K 40K	90+ 98+ 2	10D Very Narrow Spot (10°) 15D Narrow Spot (15°) 24D Spot (24°)	DIM10 DIMTR 3 ELDO10-LOG ELDO10.1-LIN ELDODALI.1 BLE-CASAMBI	120V MVOLT	All emergency options regire top access, remote emergency test switch included EMG-10 EMG-20 EMG-10-SDT EMG-20-SDT	RIF RIF Filter REM 5 Single Remote Dimming Driver BABA Made in America	SOFL Solite Frosted SFL Soft Focus Lens SPD Spread Linear Lens UVL
					36D Medium (36°) 60D Wide (60°)			GTD	Compliance	HCL Honey Comb Louver PRS Prismatic Lens

Any fixture can take maximum 2 Optical Accessories 1 The highes lumen will not be compatible with any optical accessories 2 95+ CRI is not available on 50K 3 DIMTR is only available with 120V 4 347V is only available with DIM10 5 Remote mount Maximum distance from light fixture to remote power supply is 100' using 14 gauge wire, 50' using 16 gauge wire

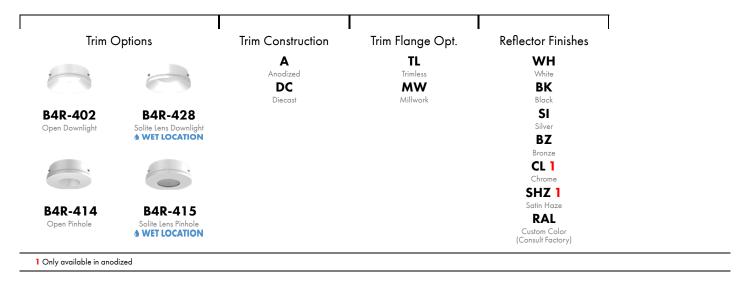
# **FLANGED REFLECTOR TYPE**

Example: B4R-402-A-F-WH-WH



# TRIMLESS/MILLWORK REFLECTOR TYPE

Example: B4R-402-A-TL-WH-WH





4" BOLD-4-FH

## 4" Flat Housing Downlight - Trim, Trimless & Millwork

# **Bold** Series

#### **DESCRIPTION**

The BOLD-4-FH Downlight is engineered for quiet ceilings and visual comfort, delivering precise, glare-controlled illumination exactly where it's needed. Its fixed optical system ensures consistent beam quality with tight cutoff, supporting low-glare, high-performance general lighting. For applications demanding an ultra-discreet aperture, BOLD-4-FH offers a Pinhole trim option—minimizing visible source brightness while maintaining clean beam control. Ideal for high-end environments where visual precision and ceiling refinement are critical, BOLD-4-FH helps lighting designers achieve subtle yet effective illumination.

#### **LED LIGHT ENGINE**

The BOLD platform features a patent-pending heat sink and LED module system that unlocks effortlessly from the housing with a simple twist—no tools required. Once released, the entire assembly drops below the ceiling line, allowing fast, easy replacement or upgrade of the LED light engine. This modular design also supports up to two optical accessories—including spread lenses, frosted lenses, color filters, plus a honeycomb louver—making it exceptionally versatile for post-installation tuning.

Exceptional Optical Quality: The precision-engineered light engine comes standard with 90+ CRI and maintains 1×2 Step MacAdam Ellipse consistency, ensuring accurate, uniform color across every luminaire.

Unlike traditional systems where all components are buried inside the housing and difficult to service, BOLD's intuitive below-ceiling access makes maintenance and adding additional accessories dramatically easier—setting a new standard for architectural lighting flexibility.

#### FIELD-CHANGEABLE OPTICS AND ACCESSORIES

Designed for adaptability, the BOLD platform enables efficient in-field customization. By unscrewing the cap on the heat sink, technicians can easily swap optics or add optical accessories—ensuring optimal light output and refined beam control without tools or reinstallation. This modular approach supports a wide array of field-changeable accessories, including spread lenses, frosted lenses, color filters, and honeycomb louvers, allowing for precise post-installation tuning.

A full range of beam options—from extremely narrow to wide—provides the flexibility to tailor light distribution with precision, whether emphasizing architectural elements or delivering broad ambient illumination. Field-changeable optics make it easy to respond to evolving design needs or spatial conditions directly on-site.

For added control, the LED module offers three fixed vertical positions within the housing. This design provides the flexibility to fine-tune both visual comfort and lighting performance to meet the specific demands of any space.

#### **TRIM & COLLAR CONFIGURATIONS**

**Trimless:** Designed for drywall or plaster ceilings, the diecast spackle collar allows joint compound to be applied directly to the edge for a seamless, mudded-in finish. It mounts securely to the housing to prevent ceiling cracks during or after installation.

**Millwork:** For wood, tile, or stone ceilings, the millwork collar is finished to match the specified trim and ensures clean, stable integration with thicker or non-standard ceiling materials.

Flanged: Ideal for gypsum or ACT ceilings, flanged trims provide a clean, finished appearance with a subtle bezel that frames the aperture while maintaining optical performance and glare control.

## **COLLAR AND COLLAR EXTENDER OPTIONS**

Each BOLD housing comes standard with a 1-inch collar. Optional collar extenders are available in 1.5-inch and 2-inch sizes to accommodate ceiling thicknesses up to 2". These extenders add minimal height and have a slight impact on light output. Consult factory for details and additional collar options.

#### TRIM CONSTRUCTION

With dual trim construction and an extensive library of finish options, BOLD trims empower lighting designers to achieve both technical precision and visual harmony in any space.

Anodized Aluminum: Designed for visual comfort, anodized trims recess the light source to achieve a 45-degree cutoff, enhancing glare control and supporting quiet ceilings in high-performance architectural environments. The electrochemical finish ensures long-term reflectance and material integrity.

**Die-Cast:** Die-cast trims provide sharp detailing, precise fit, and the ability to seamlessly blend into the ceiling plane with high-quality painted finishes. Ideal for minimalist spaces where integration and consistency are key

#### **DOWNLIGHT TRIM**

Featuring a 45° visual cutoff angle to the source, this luminaire provides exceptional glare control and visual comfort while maintaining low-brightness apertures for a pleasant lighting experience. Available in a wide variety of colors and designs, it offers flexibility to suit diverse architectural needs. Available in Open Downlight, Lensed Downlight, and Pinhole Downlight configurations.

#### MOUNTING

Each housing includes heavy-duty, pre-installed bar hangers designed for flexible installation across a variety of ceiling types. Hangers extend to span joists up to 24" on center and can be repositioned along both the short and long axis of the housing. For narrower joist bays, hangers can be shortened to accommodate 12" spacing.

The system includes integral butterfly brackets fabricated from 18-gauge steel, providing vertical adjustment for accurate alignment with ceiling thickness. These brackets are compatible with 3/4" or 1-1/2" lathing channels, 1/2" EMT conduit, and optional C-channel bars for secure attachment in commercial grid ceilings. Additional mounting slots and keyholes allow for versatile

Additional mounting slots and keyholes allow for versatiling integration into T-bar ceilings or unconventional framing layouts.

#### **DRIVER ACCESS & SERVICEABILITY**

The BOLD platform includes a high-performance, constantcurrent electronic driver (0–10V dimming, 100%-1%) with integral thermal and surge protection compliant with IEEE C62.41. The driver is conveniently located within the housing and can be easily accessed from below the ceiling. Simply unlock the heat sink and LED module from the housing's holder with a simple twist. Once the heat sink holder is disengaged from the housing, rotate the heat sink holder 360 degrees and tilt it to a 45-degree angle to easily access the driver, allowing for quick service or replacement.

#### **EMERGENCY OPTIONS/CONTROLS**

10W or 20W emergency back-up battery systems are available with a remote mounted test switch. A self-diagnostic emergency option is also available. Other accessories and controls systems include modular wiring systems, daylight harvesting controls, occupancy sensors, and/or power packs for individual or room control applications, and triac, dali and DMX protocols.

#### **DIM TO WARM OPTION**

Dims to Warm simulates traditional incandescent halogen lighting through dimming. When the luminaire dims to warm from 100% to .1%, it makes a smooth transition across the black body radiator while maintaining a constant CRI of 90+. Available in 30K-18K, 30K-22K or 27K-18K range.

#### XICATO ARTIST SERIES LED MODULE (XIA)

Powered by Xicato Artist Series®, which are tested to IES TM-30-15, with a color fidelity score (Rf) of 96 and a color gamut score (Rg) of 102, and color shift less than du'v' of 0.003. Featuring cold phosphor technology, improving thermal management enhancing color consistency and delaying lumen depreciation.

### **NATURAL SPECTRUM (NSL)**

Natural Spectrum LED option id designed for Human Centric lighting apllication. Natural Spectrum LEDs diminish blue light peak, similar spectral curve to sunlight, accurate rendering of colors and reduced scattered reflection and glare.

#### **DIMMING & DRIVER INFORMATION**

☑ DIM10 - 0-10V dimming on either MVOLT 120, 277 or
347V. Dimmable down to 1% of initial lumens, standard

<u>**FLDO10-LOG**</u> - ELDO10-LOG with logarithmic dimming curve

<u>✓ ELDO10.1-LIN</u> - ELDO10-Linear with linear dimming
CUIVE

**ELDODALI.1** - EldoLED SoloDrive DALI-2. Dimming

<u>BLE-CASAMBI</u> - Luminaires may be controlled, grouped, scheduled or placed in scenes, and or zones Via Cassambi Bluetooth 4.0 App.

#### WARRANTY

Five-year warranty for parts and components. (Labor not included)

#### LISTINGS

- c-UL-us: Listed for Wet Location when used with wetlocation rated trims
- c-UL-us: Listed for Feed-Through Wiring
- Energy Star and California Title 24 compliant (JA8)
- Optional Black color trim is not Energy Star certified and will not meet the requirements
- 22K and 27K are not Energy Star listed and will not meet the requirements
- BABA Compliant for government procurement under FAR, DFARS, and DOT regulations.

Flanged	Trimless	Millwork
12 <sup>1</sup> / <sub>4</sub> 14 <sup>3</sup> / <sub>4</sub> 14 <sup>3</sup> / <sub>4</sub> 14 <sup>3</sup> / <sub>4</sub> 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	8 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % - 5 % -	5 3/4"  12 1/6"  14 3/4"
Max Ceiling  Thickness $\phi_4^{a'}$ Trim Aperture $\phi_5^{a'}/\phi_5^{a'}$ —Ceiling Cut Out $\phi_5^{a'}/\phi_5^{a'}$ —Trim Flange	Max Ceiling Thickness	Max Ceiling A* Trim Aperture Thickness $\phi_4$ /* — Ceiling Cut Out
14 <sup>7</sup> / <sub>6</sub> "	14 %·	14 ½·
B4R-428-DC-F-W	B4R-428-DC-TL-MW	B4R-428-DC-TL-MW
0.51/4"	04"	04-
04" 027/4"	Ø4" Ø2 <sup>7</sup> / <sub>8</sub> "	Ø 4" Ø 2 7/4"



## BOLD-4-FH-2000L-40K-90-15D-DIM10-MVOLT-B4R-428-A-F-CL-WH

## TEST NO: EPL02242531

INPUT WATTS: 19.4	LU	JMENS: 1963		EF	FICA	CY: 101			BE <i>F</i>	M AN	GLE:2	.1					:	SPACII	NG CP	(ITERI	۹: 0.33
CANDELA DISTR	BUTION		C	ANDELA	TABLE		L	UMIN	ANCE (co	l/sq.m)		LU	JMENS F	PER ZON	ΝE		ZC	NAL LU	MEN SU	MMARY	′
1000	90°			0°	90	)°			0.00°	90.00°		ZC	ONE	LUMI	ENS		ZONE	UMEN	.S %	6 LUMIN	AIRE
200.	80°		0°	10420	104	120	0.0	0°	892504	892504	1	0°-	10°	76	6	0	° - 20°	1470		75%	
3000			10°	5083	58	16	45.0	00°	8934	10271		10°	- 20°	70-	4	0	° - 30°	1751		89%	
40 <mark>00</mark> 5000	70°		20°	990	111	92	55.0	00°	2666	3772		20°	- 30°	28	1	0	° - 40°	1876		96%	
6000	60°		30°	290	34	18	65.0	00°	65	193		30°	- 40°	12	5	0	° <b>-</b> 60°	1959		100%	)
7000	50°		40°	112	13	32	75.0	00°	23	30		40°	- 50°	62	2	0	° - 80°	1962		100%	)
8000			50°	41	5.	3	85.0	00°	49	49		50°	-60°	22	2	0	° <b>-</b> 90°	1962		100%	)
90 <mark>00 40 30°</mark>	)"		60°	6	9	)						60°	- 70°	2							
11000 - 20°			70°	0	0								- 80°	0							
0° 10°			80°	0	0							80°	- 90°	0							
			90°	0	0	)															
CONE OF LIC	SHT									INDOOF	R COEFI	FICIENTS	OF UTI	LIZATIO	N						
			ρf									20%									0%
MOUNTING FC AT BEAM	BEAM DIA.	BEAM DIA.	ρς		80	0%			70	)%			50%			30%			10%		0%
HEIGHT CENTER	0°-180°	90°-270°	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft 289.4 <mark>fc</mark>	2.2 ft	2.2 ft	0	123	123	123	123	120	120	120	120	114	114	114	110	110	110	105	105	105	103
8.0 ft 162.8 <mark>fc</mark>	3.0 ft	3.0 ft	1	118	116	114	112	116	114	112	110	110	108	107	106	105	104	102	102	101	99
10.0 ft 104.2 <mark>fc</mark>	3.7 ft	3.7 ft	2	114	110	107	105	112	109	106	103	105	103	101	102	101	99	100	98	97	95
12.0 ft 72.4 <mark>fc</mark>	4.4 ft	4.5 ft	3	110	105	102	99	109	104	101	98	102	99	96	99	97	95	97	95	93	92
14.0 ft 53.2 <mark>fc</mark>	5.2 ft	5.2 ft	4	107	101	97	94	105	100	96	93	98	95	92	96	93	91	94	92	90	89
16.0 ft 40.7 <mark>fc</mark>	5.9 ft	5.9 ft	5	103	97	93	90	102	96	92	89	95	91	88	93	90	88	92	89	87	86
18.0 ft 32.2 <mark>fc</mark>	6.6 ft	6.7 ft	6	100	94	89	86	99	93	89	86	92	88	85	90	87	85	89	86	84	83
20.0 ft 26.0 fc	7.4 ft	7.4 ft	7	97	91	86	83	96	90	86	83	89	85	82	88	84	82	87	84	82	81
			8	95	88	83	80	94	87	83	80	86	83	80	85	82	80	84	81	79	78
			9	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76
			10	90	83	79	76	89	82	78	76	82	78	75	81	78	75	80	77	75	74

## BOLD-4-FH-2000 L-40K-90-24D-DIM 10-MVOLT-B4R-428 -A-F-CL-WH

## TEST NO: EPI022425 31

INPUT WATTS 9.4	LUMENS2012		F	FFIC.	ACYt04	4		BE	AM Al	NGL <b>2</b>	6						SPACI	NG C	RITE	RI0A42
CANDELA DISTRII	BUTION	С	ANDEI	LA TAB	LE		LUMI	NANCE (	(cd/sq.m)		L	UMENS	PER Z	ONE		ZC	NAL L	UMEN	SUMMA	ARY
100	90°		0°	90	)°			0.00°	90.00°		Z	ONE	LUM	IENS	2	ZONE	UMEN	NS %	LUMI	NAIRE
2000	80°	0°	829	6 82	96	0.	00°	710610	710610	)	0°	- 10°	67	1	0	° - 20°	1509		75%	
3000		10°	533	8 56	39	45	.00°	9192	10328		10°	- 20°	83	8	0	° - 30°	1803		90%	
4000	/ 70°	20°	120	0 13	61	55	.00°	3006	4099		20°	- 30°	29	4	0	° - 40°	1921		95%	
5000	60°	30°	277	7 31	8	65	.00°	69	247		30°	- 40°	118	8	0	° - 60°	2008		100%	
6000	/	40°	109	12	24	75	.00°	26	30		40°	- 50°	63		0	° - 80°	2011		100%	
7000	r	50°	44	5	7	85	.00°	59	49		50°	- 60°	24	1	0	° - 90°	2011		100%	
8000		60°	6	1	0						60°	- 70°	3							
200		70°	0	0	)						70°	- 80°	0							
0° 10° 20		80°	0	0	)						80°	- 90°	0							
		90°	0	0	)															
CONE OF LIGH	IT								INDOO	R COE	FFICIE	NTS OF	UTILIZ	ZATION						
		ρf									20%									0%
MOUNTING FC AT BEAMB	EAM DIA.BEAM DIA.	ρc		80	)%			70	)%			50%			30%			10%		0%
HEIGHT CENTER	0°-180° 90°-270°	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft 230.4 fc	2.8 ft 2.8 ft	0	122	122	122	122	119	119	119	119	114	114	114	109	109	109	105	105	105	103
8.0 ft 129.6 fc	3.7 ft 3.7 ft	1	118	116	114	112	115	113	112	110	109	108	107	106	104	103	102	101	100	99
10.0 ft 83.0 fc	4.6 ft 4.6 ft	2	114	110	107	104	112	108	105	103	105	103	100	102	100	98	99	98	96	95
12.0 ft 57.6 fc	5.5 ft 5.5 ft	3	110	105	101	98	108	103	100	97	101	98	95	98	96	94	96	94	92	91
14.0 ft 42. <mark>3 fc</mark>	6.4 ft 6.4 ft	4	106	100	96	93	104	99	95	92	97	94	91	95	92	90	93	91	89	88
16.0 ft 32.4 fc	7.4 ft 7.4 ft	5	103	96	92	88	101	95	91	88	94	90	87	92	89	86	91	88	86	85
18.0 ft 25 <mark>.6 fc</mark>	8.3 ft 8.3 ft	6	99	93	88	85	98	92	88	84	90	87	84	89	86	83	88	85	83	82
20.0 ft 20 <mark>.7 fc</mark>	9.2 ft 9.2 ft	7	96	89	85	81	95	89	84	81	87	84	81	86	83	80	85	82	80	79
		8	93	86	82	79	92	86	81	78	85	81	78	84	80	78	83	80	78	77
		9	91	84	79	76	90	83	79	76	82	78	76	81	78	75	81	78	75	74
		10	88	81	77	74	87	81	76	74	80	76	73	79	76	73	79	75	73	72



## BOLD-4-FH-2000L-40K-90-36D-DIM10-MVOLT-B4R-428-A-F-CL-WH

## TEST NO: EPL02242531

INPUT WATTS: 18	3.6	LU	JMENS:2118		Е	FFIC <i>F</i>	ACY: 11	4		BEA	AM AN	GLE:3	9						SPACI	NG CF	RITERI/	A: 0.59
CAI	NDELA DISTRII			C	ANDEL	TABL	E		LUMIN	ANCE (co	d/sq.m)		L	JMENS I	PER ZON	١E		ZC	NAL LU	MEN SU	JMMARY	
400		90°			0°	9	90°			0.00°	90.00°		Z	ONE	LUMI	ENS		ZONE	UMEN	S 9	6 LUMIN	AIRE
800		80°		0°	427	8 42	278	0.	00°	366402	366402	2	0°-	- 10°	38	6	0	° - 20°	1144		54%	
1200	XXX/I7			10°	343	3 3	580	45	.00°	14482	15925		10°	<del>-</del> 20°	75	7	0	° - 30°	1733		82%	
16 <mark>00</mark> 2000		70°		20°	193	0 2	127	55	.00°	5501	5823		20°	- 30°	58	9	0	° - 40°	1972		93%	
2400		60°		30°	610	) 7	42	65	.00°	793	942		30°	- 40°	23	9	0	° - 60°	2110		100%	,
2800	$+$ $\times$ $\times$ $\rangle$	50°		40°	186	2	12	75	.00°	39	36			- 50°	10	1	0	° - 80°	2116		100%	,
3200	TXX	/		50°	70	7	76	85	.00°	58	58		50°	-60°	37		0	° - 90°	2116		100%	,
36 <mark>00</mark> 4000	30°			60°	17	1	18							<del>-</del> 70°	6							
44.0	20°			70°			0							- 80°	0							
0° 10	J.			80°	0		0						80°	- 90°	0							
				90°	0		0															
	CONE OF LIG	HT									INDOOF	R COEF	FICIENTS	S OF UTI	LIZATIO	N						
				ρf									20%									0%
MOUNTING	FC AT BEAM	BEAM DIA.	BEAM DIA.	ρς		8	80%			70	0%		2070	50%			30%			10%		0%
HEIGHT	CENTER	0°-180°	90°-270°	ρw	70%	50%	30%	10%	70%		30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft	118.8 fc	4.2 ft	4.3 ft	0	119	119	119	119	117	117	117	117	111	111	111	107	107	107	102	102	102	100
8.0 ft	66.8 fc	5.6 ft	5.7 ft	1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
10.0 ft	42.8 <mark>fc</mark>	7.0 ft	7.1 ft	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89
12.0 ft	29.7 fc	8.4 ft	8.5 ft	3	105	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
14.0 ft	21. <mark>8 fc</mark>	9.8 ft	9.9 ft	4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	83	81	80
16.0 ft	16. <mark>7 fc</mark>	11.2 ft	11.3 ft	5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	83	79	77	75
18.0 ft	13 <mark>.2 fc</mark>	12.6 ft	12.8 ft	6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72
20.0 ft	10.7 fc	14.0 ft	14.2 ft	7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68
				8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65
				9	81	73	67	64	80	72	67	64	71	67	63	70	66	63	70	66	63	62
				10	78	69	64	61	77	69	64	61	68	64	61	67	63	60	67	63	60	59
																					, -	

## BOLD-4-FH-2000L-40K-90-60D-DIM10-MVOLT-B4R-428-A-F-CL-WH

## TEST NO: EPL02242531

INPUT WATTS: 18	3.6	LU	JMENS: 2089		E	FFICA	ACY: 11	2		BE/	M AN	GLE:5	2					:	SPACI	NG CR	ITERI <i>F</i>	A: 0.79
CA	NDELA DISTRIE			C	ANDEL	A TABLE	E		LUMIN	IANCE (co	d/sq.m)		L	UMENS	PER ZOI	ΝE		ZC	NAL LU	MEN SU	MMARY	,
300		90°			0°	9	0°			0.00°	90.00°		Z	ONE	LUM	ENS		ZONE	UMEN	S %	LUMIN	AIRE
600		80°		0°	264	7 26	547	0.	00°	226738	226738	8	0°	- 10°	24	9	0	° - 20°	816		39%	
900				10°	235	0 23	366	45	.00°	23560	26766		10°	<del>-</del> 20°	56	7	0	° - 30°	1443		69%	
1200	$\times$	70°		20°	176	0 17	776	55	.00°	4383	5664		20°	- 30°	62	7	0	° - 40°	1881		90%	
1500	XXX	60°		30°	104	9 10	)79	65	.00°	600	1009			<b>-</b> 40°	43	8	0	° - 60°	2082		100%	
1800		50°		40°	41	1 4	44	75	.00°	33	33			<del>-</del> 50°	16	6		° - 80°	2088		100%	
2100	40°			50°			95	85	.00°	79	49			<del>-</del> 60°	35	5	0	° - 90°	2088		100%	,
2400	30°			60°			6							- 70°	5							
2700 0° 10	0° 20°			70°			0							-80°	0							
0° 10	•			80°			0						80°	<b>-</b> 90°	0							
				90°	0	(	0															
	CONE OF LIG	HT									INDOOI	R COEF	FICIENTS	S OF UTI	LIZATIC	N						
				ρf									20%									0%
MOUNTING	FC AT BEAM	BEAM DIA.	BEAM DIA.	ρς		8	0%			70	0%			50%			30%			10%		0%
HEIGHT	CENTER	0°-180°	90°-270°	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft	73.5 fc	5.8 ft	5.8 ft	0	122	122	122	122	119	119	119	119	113	113	113	109	109	109	104	104	104	102
8.0 ft	41.4 <mark>fc</mark>	7.8 ft	7.8 ft	1	116	113	111	108	113	111	109	107	107	105	103	103	101	100	99	98	97	95
10.0 ft	26. <mark>5 fc</mark>	9.7 ft	9.7 ft	2	110	105	101	98	108	103	100	96	100	97	94	97	95	92	94	92	90	89
12.0 ft	18 <mark>.4 fc</mark>	11.7 ft	11.7 ft	3	105	98	93	89	103	97	92	88	94	90	87	91	88	85	89	86	84	82
14.0 ft	13.5 fc	13.6 ft	13.6 ft	4	99	91	86	81	97	90	85	81	88	84	80	86	82	79	84	81	78	77
16.0 ft	10.3 fc	15.5 ft	15.6 ft	5	94	86	80	75	92	85	79	75	83	78	74	81	77	74	79	76	73	71
18.0 ft	8.2 fc	17.5 ft	17.5 ft	6	89	80	74	70	88	79	74	70	78	73	69	76	72	69	75	71	68	67
20.0 ft	6.6 fc	19.4 ft	19.5 ft	7	85	75	69	65	84	75	69	65	73	68	64	72	68	64	71	67	64	62
				8	81	71	65	61	80	71	65	61	69	64	60	68	64	60	67	63	60	58
				9	77	67	61	57	76	67	61	57	66	60	57	65	60	57	64	60	56	55
				10	73	64	58	54	72	63	57	54	62	57	53	61	57	53	61	56	53	52



## BOLD-4-FH-2000L-40K-90-15D-DIM10-MVOLT-B4R-402-DC-F-WH-WH

## TEST NO: EPL02242531

NPUT WATTS:19	.4	LU	JMENS: 1937		Е	FFICA	CY: 100	)		BEA	AM ANG	GLE:2	1			<u> </u>			SPACII	NG CF	RITERI	A: 0.3
CAN	IDELA DISTRIE	BUTION		C	ANDELA	TABLE			LUMIN	ANCE (co	d/sq.m)		LU	JMENS I	PER ZON	١E		ZC	NAL LU	MEN SU	JMMAR	Y
1000		90°			0°	9	o°			0.00°	90.00°		ZC	ONE	LUME	ENS		ZONE	UMEN	S 9	6 LUMIN	JAIRE
200		80°		0°	10143	3 10	143	0.0	00°	868807	868807		0°-	10°	748	8	0	° - 20°	1431		74%	,
30 <mark>00</mark>		41 T		10°	4929	57	34	45	.00°	9775	10738		10°	- 20°	683	3	0	° - 30°	1705		88%	)
4000	$\times\!\!\times\!\!\!\times$	/70°		20°	953	11	56	55	.00°	3695	4316		20°	- 30°	27	3	0	° - 40°	1831		95%	)
50 <mark>00</mark>		60°		30°	290	34	18	65	.00°	1419	1443		30°	- 40°	120	6	0	° - 60°	1921		99%	)
7000	+	\		40°	118	13	35	75.	.00°	1503	1562		40°	- 50°	64		0	° - 80°	1934		100%	6
8000		50°		50°	47	5	4	85	.00°	983	1160		50°	-60°	25		0	° <b>-</b> 90°	1935		100%	6
9000	40°			60°	12	1	4						60°	- 70°	8							
1000	20°			70°	6	6	5						70°	- 80°	5							
11000 0° 10				80°	3	3	3						80°	<b>-</b> 90°	1							
				90°	0	(	)															
	CONE OF LIG	HT									INDOOF	COEFF	FICIENTS	OF UTI	LIZATIO	N						
				ρf									20%									0%
MOUNTING	FC AT BEAM	BEAM DIA.	BEAM DIA.	ρς		8	0%			70	0%			50%			30%			10%		0%
HEIGHT	CENTER	0°-180°	90°-270°	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft	281.7 <mark>fc</mark>	2.2 ft	2.2 ft	0	123	123	123	123	120	120	120	120	114	114	114	109	109	109	105	105	105	103
8.0 ft	158.5 <mark>fc</mark>	3.0 ft	3.0 ft	1	118	116	114	112	116	114	112	110	109	108	107	106	105	104	102	101	101	99
10.0 ft	101.4 <mark>fc</mark>	3.7 ft	3.7 ft	2	114	110	107	104	112	108	105	103	105	103	101	102	100	98	99	98	96	95
12.0 ft	70.4 <mark>fc</mark>	4.4 ft	4.5 ft	3	110	105	101	98	108	104	100	97	101	98	96	99	96	94	96	94	93	91
14.0 ft	51.7 <mark>fc</mark>	5.2 ft	5.2 ft	4	106	100	96	93	105	99	95	92	97	94	91	95	93	90	94	91	89	88
16.0 ft	39.6 <mark>fc</mark>	5.9 ft	6.0 ft	5	103	96	92	89	101	96	91	88	94	90	88	92	89	87	91	88	86	85
18.0 ft	31.3 fc	6.6 ft	6.7 ft	6	100	93	88	85	98	92	88	85	91	87	84	90	86	84	88	86	83	82
20.0 ft	25.4 fc	7.4 ft	7.5 ft	7	97	90	85	82	96	89	85	82	88	84	82	87	84	81	86	83	81	80
				8	94	87	82	79	93	86	82	79	85	82	79	85	81	79	84	81	78	77
				9	92	84	80	77	91	84	80	77	83	79	77	82	79	76	82	78	76	75
				10	89	82	78	75	88	82	78	75	81	77	75	80	77	74	80	76	74	73

## BOLD-4-FH-2000L-40K-90-24D-DIM10-MVOLT-B4R-402-DC-F-WH-WH

## TEST NO: EPL02242531

INPUT WATTS:19.6 LUMENS:2003		Е	FFICA	CY: 102	2		BEA	M AN	GLE:2	6						SPACII	NG CR	ITERIA	: 0.42
CANDELA DISTRIBUTION	C.	ANDELA	A TABLE			LUMIN	ANCE (co	d/sq.m)		LU	JMENS I	PER ZON	ΝE		ZC	NAL LU	MEN SU	MMARY	
1000°		0°	90	)°			0.00°	90.00°		ZC	ONE	LUMI	ENS		ZONE	UMEN	S %	LUMIN	AIRE
2000 80°	0°	808	7 80	87	0.0	00°	692707	69270	7	0°	- 10°	65	8	0	° - 20°	1482		74%	
3000	10°	522	9 57	02	45.	00°	10094	11388		10°	- 20°	82	4	0	° - 30°	1770		88%	
4000 70°	20°	117	0 13	82	55.	00°	4020	4958		20°	- 30°	28	8	0	° - 40°	1891		94%	
5000 60°	30°	278	32	26	65.	00°	1486	1636		30°	<b>-</b> 40°	12	1	0	° - 60°	1986		99%	
6000	40°	116	13	32	75.	00°	1549	1688		40°	<del>-</del> 50°	67	,	0	° - 80°	2000		100%	
7000	50°	49	6	1	85.	00°	934	1238		50°	-60°	28	;	0	° - 90°	2002		100%	
40°	60°	13	10	6						60°	- 70°	9							
9000 30°	70°	7	7	,						70°	- 80°	5							
0° 10°	80°	3	3	3						80°	<del>-</del> 90°	1							
	90°	0	C	)															
CONE OF LIGHT								INDOOI	R COEFF	FICIENTS	S OF UTI	LIZATIO	N						
	ρf									20%									0%
MOUNTING FC AT BEAM BEAM DIA. BEAM DIA.	ρς		80	0%			70	)%			50%			30%			10%		0%
HEIGHT CENTER 0°-180° 90°-270°	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft 224.6 <mark>fc 2.8 ft 2.8 ft</mark>	0	122	122	122	122	119	119	119	119	114	114	114	109	109	109	105	105	105	103
8.0 ft 126.4 <mark>fc 3.7 ft 3.7 ft</mark>	1	118	115	113	111	115	113	111	110	109	108	106	105	104	103	102	101	100	98
10.0 ft 80.9 <mark>fc 4.6 ft 4.7 ft</mark>	2	113	109	106	103	111	108	105	102	104	102	100	101	99	98	99	97	96	94
12.0 ft 56.2 <mark>fc</mark> 5.5 ft 5.6 ft	3	109	104	100	97	107	103	99	96	100	97	95	98	95	93	96	93	92	90
14.0 ft 41. <mark>3 fc 6.5 ft 6.5 ft</mark>	4	106	99	95	92	104	98	94	91	96	93	90	94	91	89	93	90	88	87
16.0 ft 31. <mark>6 fc 7.4 ft 7.5 ft</mark>	5	102	95	91	87	101	95	90	87	93	89	86	91	88	86	90	87	85	84
18.0 ft 25 <mark>.0 fc</mark> 8.3 ft 8.4 ft	6	99	92	87	84	97	91	87	83	90	86	83	88	85	82	87	84	82	81
20.0 ft 2 <mark>0.2 fc</mark> 9.2 ft 9.3 ft	7	96	88	84	81	94	88	83	80	87	83	80	86	82	80	85	81	79	78
	8	93	85	81	78	92	85	81	78	84	80	77	83	80	77	82	79	77	76
	9	90	83	78	75	89	82	78	75	81	78	75	81	77	75	80	77	74	73
	10	88	80	76	73	87	80	76	73	79	75	73	78	75	72	78	75	72	71



## BOLD-4-FH-2000L-40K-90-36D-DIM10-MVOLT-B4R-402-DC-F-WH-WH

## TEST NO: EPL02242531

NPUT WATTS:18.7	LU	JMENS:2136		Е	FFICA	CY: 114			BEA	M ANG	GLE:4	0						SPACII	NG CF	RITERIA	<b>4: 0.6</b>
CANDELA DISTRIB	UTION		C	ANDELA	A TABLE		L	UMIN	ANCE (co	d/sq.m)		LU	JMENS F	PER ZON	1E		ZC	NAL LU	MEN SU	JMMARY	<b>′</b>
400	90°			0°	9	0°			0.00°	90.00°		ZC	ONE	LUME	ENS		ZONE	UMEN	S 9	6 LUMIN	IAIRE
800	80°		0°	407	5 40	75	0.0	0°	349038	349038		0°-	10°	373	3	0	° - 20°	1120		52%	
1200			10°	333	9 35	24	45.0	00°	15159	17891		10°	<del>-</del> 20°	74	7	0	° <b>-</b> 30°	1711		80%	
1600	/ 70°		20°	190	6 21	52	55.0	00°	6608	7671		20°	- 30°	59	1	0	° <b>-</b> 40°	1957		92%	
2400	60°		30°	615	7	75	65.0	00°	2552	3060		30°	-40°	24	7	0	° - 60°	2109		99%	
2800			40°	198	2	31	75.0	00°	2297	2618		40°	- 50°	10	7	0	° - 80°	2132		100%	ó
3200	50°		50°	75	g	0	85.0	00°	1317	2044		50°	-60°	44		0	° <b>-</b> 90°	2134		100%	ó
36 <mark>00 40°</mark>			60°	24	2	9						60°	- 70°	15							
40 <mark>0°</mark> 30° 4400 20°			70°	10	1	0						70°	-80°	8							
4400 20° 0° 10°			80°	4		5						80°	<b>-</b> 90°	2							
			90°	0		0															
CONE OF LIGH	-IT									INDOOR	COEFF	CICIENTS	OF UTI	LIZATIO	N						
			ρf									20%									0%
MOUNTING FC AT BEAM	BEAM DIA.	BEAM DIA.	ρς		8	0%			70	)%			50%			30%			10%		0%
HEIGHT CENTER	0°-180°	90°-270°	ρw	70%	50%		10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft 113.2 fc	4.3 ft	4.4 ft	0	122	122	122	122	119	119	119	119	114	114	114	109	109	109	104	104	104	102
8.0 ft 63.7 <mark>fc</mark>	5.8 ft	5.9 ft	1	116	114	111	109	114	112	109	107	107	106	104	104	102	101	100	99	98	96
10.0 ft 40. <mark>7 fc</mark>	7.2 ft	7.3 ft	2	111	106	103	99	109	105	101	98	101	99	96	98	96	94	96	94	92	90
12.0 ft 28 <mark>.3 fc</mark>	8.7 ft	8.8 ft	3	106	100	95	92	104	99	94	91	96	92	89	93	90	88	91	89	87	85
14.0 ft 2 <mark>0.8 fc</mark>	10.1 ft	10.3 ft	4	101	94	89	85	100	93	88	85	91	87	84	89	85	83	87	84	82	80
16.0 ft 1 <mark>5.9 fc</mark>	11.6 ft	11.8 ft	5	97	89	84	80	95	88	83	79	86	82	78	85	81	78	83	80	77	76
18.0 ft 12.6 fc	13.0 ft	13.2 ft	6	93	84	79	75	91	84	78	75	82	77	74	81	77	74	79	76	73	72
20.0 ft 10.2 fc	14.5 ft	14.7 ft	7	89	80	75	71	88	80	74	70	78	74	70	77	73	70	76	72	69	68
			8	85	76	71	67	84	76	70	67	75	70	67	74	69	66	73	69	66	65
			9	82	73	67	64	81	72	67	64	71	67	63	71	66	63	70	66	63	62
			10	79	70	64	61	78	69	64	61	68	64	60	68	63	60	67	63	60	59

### BOLD-4-FH-2000L-40K-90-60D-DIM10-MVOLT-B4R-402-DC-F-WH-WH

### **TEST NO: EPL02242531**

INPUT WATTS: 18	3.6	LUM	ENS: 2058		EFFI	CACY:	111		BE	AM AN	IGLE:5	6					9	SPACII	NG CR	ITERI/	۱: 0.85	x 0.85
CAI	NDELA DISTRIE			C	ANDEL	A TABLE			LUMIN	ANCE (co	d/sq.m)		LU	JMENS I	PER ZON	ΝE		ZC	NAL LU	MEN SU	JMMARY	,
200		90°			0°	90	0°			0.00°	90.00	0	ZC	ONE	LUM	ENS		ZONE	UMEN	S %	6 LUMIN	AIRE
400	XXXII	80°		0°	235	7 23	57	0.	00°	201859	20185	9	0°-	· 10°	228	8	0	°-20°	770		37%	
600 800				10°	220	5 21	97	45	.00°	24050	2649	5	10°	- 20°	54	1	0	° - 30°	1386		67%	
1000	$\times$	/ 70°		20°	173	0 17	23	55	.00°	5121	6324		20°	- 30°	61	7	0	° - 40°	1826		89%	
1200		60°		30°	106	1 10	73	65	.00°	2142	2643		30°	- 40°	440	0	0	° - 60°	2034		99%	
14 <mark>00</mark> 1600		50°		40°	430	) 44	49	75	.00°	2072	2432			- 50°	168		0	°-80°	2055		100%	
1800	1/XXX	,30		50°	73	8	6	85	.00°	1455	2005			<del>-</del> 60°	39	)	0	° <b>-</b> 90°	2057		100%	,
20 <mark>00</mark> 2200	30° 40°			60°		2	3							<del>-</del> 70°	14	+						
2400 0° 10	20°			70°	8	ç								- 80°	7							
0, 10	,			80°		5							80°	- 90°	2							
				90°	0	C	)															
	CONE OF LIG	HT									INDOO	R COEF	FICIENTS	OF UTI	LIZATIO	N						
				ρf									20%									0%
MOUNTING	FC AT BEAM	BEAM DIA.	BEAM DIA.	ρc		80	0%			70	0%			50%			30%			10%		0%
HEIGHT	CENTER	0°-180°	90°-270°	ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
6.0 ft	65.5 fc	6.3 ft	6.4 ft	0	122	122	122	122	119	119	119	119	113	113	113	109	109	109	104	104	104	102
8.0 ft	36.8 <mark>fc</mark>	8.4 ft	8.5 ft	1	116	113	110	108	113	111	108	106	106	104	103	103	101	100	99	98	97	95
10.0 ft	23. <mark>6 fc</mark>	10.6 ft	10.6 ft	2	110	105	100	97	107	103	99	96	99	96	94	96	94	92	94	91	90	88
12.0 ft	16 <mark>.4 fc</mark>	12.7 ft	12.7 ft	3	104	97	92	88	102	96	91	87	93	89	86	91	87	84	88	85	83	81
14.0 ft	1 <mark>2.0 fc</mark>	14.8 ft	14.8 ft	4	99	91	85	80	97	89	84	80	87	83	79	85	81	78	83	80	77	75
16.0 ft	9.2 fc	16.9 ft	16.9 ft	5	93	85	79	74	92	84	78	74	82	77	73	80	76	72	78	75	72	70
18.0 ft	7.3 fc	19.0 ft	19.1 ft	6	89	79	73	69	87	78	73	68	77	72	68	75	71	67	74	70	67	65
20.0 ft	5.9 fc	21.1 ft	21.2 ft	7	84	74	68	64	83	74	68	64	72	67	63	71	66	63	70	66	63	61
				8	80	70	64	59	79	69	63	59	68	63	59	67	62	59	66	62	59	57
				9	76	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	54
				10	73	62	56	52	71	62	56	52	61	56	52	60	55	52	60	55	52	50



BRAND	<b>ELUTRON</b>	enlighted	LEVITON	ENCELIUM	PHILIPS	<b>Diegrand</b> °	LIGHTING CONTROLS
L L	□ FCJS-010 Lutron Vive 0-10V Individual Pow Pak (Luminare is shipped Vive Enabled) 1 4 □ FCJS-ECO		ZL027-NOW Intellect Power Control Module 1 6	☐ EN-WCM2-ZB-DR Wireless Control Module 1 7		DLMFC-011 ON/OFF/0-10V dimming fixture controller 1 9	
CONTROL UNIT	Lutron Vive Eco-system Pow Pak (Luminare is shipped Vive Enabled)  A-WN-D01-RF-WH	CU-4E-FMH Fixture Mount Control Unit 1 5			The Philips Advance Xitanium SR LED	FS-PP-V2 FS-PP Fixture Integrated Sensor Power Pack 1 9	NXFM-1R2D-O-UNV NX Fixture Module, Offset, 1 Relay, 2 0-10V Dimming Channels, 120-347VAC, Blue
8	Athena wireless node (RF only) (White)  A-WN-D01-OCC-WH Athena wireless node with sensor (White)		TLO27-DLE Intellect Power Control Module 1 6	□ ENA-LC-ZB-BK-DR Wireless Area Lighting Control Module 1 7		LMFS-601 Integrated Fixture Sensor & Controller	Dive
<b>લ્</b> ઇ		SU-5E-IoT IoT Node Micro Sensor	. □ ZLOOJ -TOW	□ EN-CLM-PIR-DD-ZB		□ FD-301	NXRM HubbNETTM Radio
PANCY		SU-5E-CL Connected Micro Sensor	Intellect Intelligent Fixture Control System 2	SensiLUM™ Wireless Integrated Sensor	SNS 212 EasyAir Daylight and Occupancy sensor	Fixture integrated Daylight Dimming Sensor 2	Module
INTEGRATED OCCOPANCY DAYLIGHT SENSOR	□ DFCSJ-OEM-OCC Clear Connect (RF) and Occupancy/Daylight Sensing 2	SU-5E-IL Indipendent Micro Sensor					NXSMP2-OMNI Integrated Fixture Sensor & Controller
FEGRATI DAYL		SU-5S-H(IoT/CL/IL) Serface Mount Sensor 2	□ ZL00J-D0W Intellect Intelligent Fixture	ZBHACLM-DIM-ENC Connected Lighting	☐ <b>SN5300</b> SNS300 for networks <b>2</b>	☐ FS-205 Fixture integrated passive	□ NXSMP2-SMI
Ξ		Must be Specified with CU- 4E-FMH Control Unit	Control System 2	Module DIM 2	STASSOCION NEIWORKS 2	infrared occupancy sensor 2	NX Slide Mount Indoor Sensor Module
*WIRELESS OCCUPANCY SENSOR	□ LRF2-OCR2B-P-WH Ceiling mount360°, occupancy/vacancy sensor 3	N/A	N/A	☐ EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors 3	N/A	LMDC-100 Dual technology PIR Ceiling Mount Occupancy Sensor 3	NXSMP2-SMI NX Slide Mount Indoor Sensor Module
*WIRELESS DAYLIGHT SENSOR	□ LRF2-DCRB-WH Ceiling-mount daylight sensor 3	N/A	N/A	☐ EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors 3	N/A	LMLS-400 Single zone switching and dimming digital photosensor 3	LUXSTATLS Luxstat Light Sensor for Luxstat Control Modules, 3 to 6000 FC
<b>ಿ</b>		□ SU-5E-IoT IoT Node Micro Sensor	☐ ZLOOJ -TOW Intellect Intelligent Fixture	□ EN-CLMPIR-DD-ZB SensiLUM™ Wireless			
PANCY 4SOR		SU-5E-CL Connected Micro Sensor	Control System	Integrated Sensor			
S OCCU GHT SEN	N/A	SU-5E-IL Indipendent Micro Sensor	☐ ZL00J-D0W Intellect Intelligent Fixture Control System 3	ZBHACLM-DIM-ENC Connected Lighting Module DIM 3	SNS212-CMP SNS-212 for Grouping 3	N/A	NXSMDT Indoor Ceiling Mount Sensor - OMNI
*WIRELESS OCCUPANCY & DAYLIGHT SENSOR		Su-55-H (IoT/CL/IL) Serface Mount Sensor 3	Must be specified with ZL027-NOW and	Must be specified with EN- WCM2-ZB-DR or EN- ALC-ZB-BK-DR Control			
		Must be specified with CU- 4E-FMH Control Unit	ZL00JD0W Control unit	Unit			
ACCESSORIES	N/A	Tile Mount Carrier  CBL-5E-CU4-30N  30 linch Sensor cable for CU-4 and IoT Ready  CBL-5E-CU4-7F  7 Foot sensor cable for CU-4 and IoT Ready Driver	N/A	N/A	N/A	N/A	N/A

- 1- Luminaire will be shipped with Powerpacks pr e-installed, ready to be integrated to designated contol systems

- 2- Luminaire will be shipped with Sensors in stalled on the luminaire, allowing for individual luminaire control. Luminaires will be ready to be integrated with designated control systems

  3- Luminaire will be shipped with Sensors to be remotely installed on the ceiling. Luminaire swill be ready to be integrated with designated control systems

  4- Luminaire will be compatible with LUTRON LRF2-OCR2B-PWH Ceiling mount 360deg occupancy/vacancy sensor & LRF2-DCRB-WH ceiling mount daylight sensor Sensors must be ordered through Lutron
- 5- Luminaire will be compatible with ENLIGHTED SU-5E-IoT, SU-5E-IL, SU-5E-IL, SU-5SH, Sensors
- 6- Luminaire will be compatible with LEVITON I ntellect APP & Keypad room controller
- 7- Luminaire will be compatible with EN-SCPPH-1500-ZB Wireless passive infrared occupancy and photo sensor
- 8- Luminaire will be compatiable with philips field and wireless switch
- 9- Luminaire will be compatiable with DLM Room control system LMPB-100. . Sensors must be orderd through Legrand.