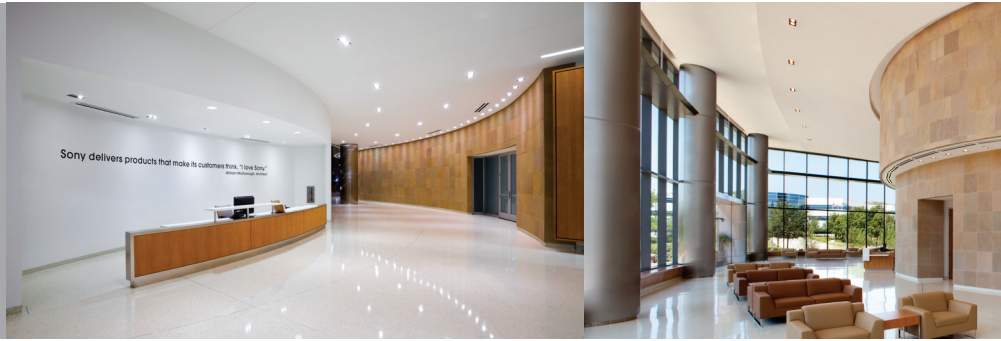




REFLECTOR/ TRIM COLOR



WH-WH-White



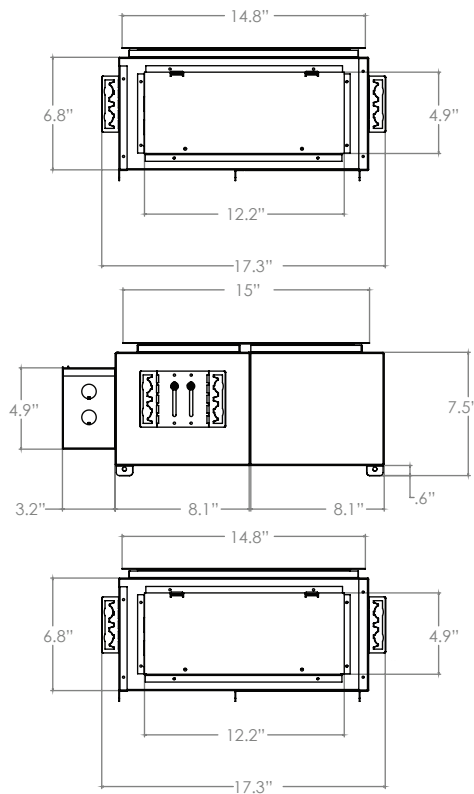
BK-BK-Black



WH-BK-White/Black



BK-WH-Black/White



NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
3000	2985	31.7W
2000	2124	21.1W
1500	1501	14.5W
1000	1134	10.8W

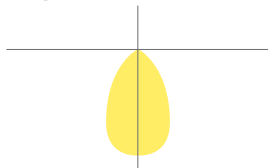
Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%

FEATURES

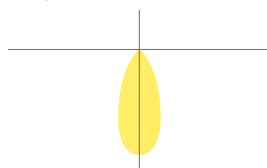
A recessed multiple combo downlight, available in 1, 2, 3 or 4 heads, with precise, glare-free illumination. Each individual luminaire has full aiming adjustability, rotating 365°, pivoting 45° vertically, and locks into place at any desired position. Each luminaire can be specifically designed to fit the appropriate application; combining different lumen packages and field-changeable optics in a single housing. With many CCT options, delivers the full spectrum of cool to warm tones, and ideal for retail merchandising, hospitality, supermarkets, commercial, or high-end residential.

LUMENS/HEAD	1000, 1500, 2000, 3000
CCT & DYNAMIC PLATFORMS	27K, 30K, 35K, 40K, 50K, Tunable White, Dims to Warm, RGB + White
CRI	90+ Standard, 98+ Optional
COLOR QUALITY	2 Step MacAdam Ellipse
DISTRIBUTION PATTERNS	SP (Spot), NFL (Narrow Flood), FL (Flood)
TRIM OPTIONS	1,2,3,4 Trim, Trimless
REFLECTOR COLORS	BK(Black), WH(White)
FLANGE COLORS	BK (Black), WH (White), Custom RAL Colors.
DIMMING	0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, ELDO10.1, ELDDMX.1, ELDDALI.1, DIMTR
EMERGENCY	10W - Up to 1000L Output (Bodine BSL310) 20W - Up to 2000L Output (Bodine BSL20)
LIFETIME	L70 at 102,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

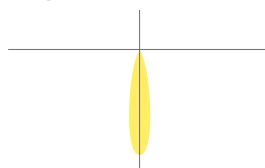
FL: FLOOD
Candlepower Distribution Curve



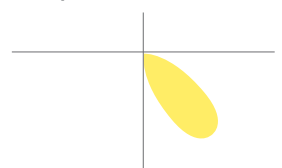
NFL: NARROW FLOOD
Candlepower Distribution Curve



SP: SPOT
Candlepower Distribution Curve



WALL WASH
Candlepower Distribution Curve



OPTICS AND REFLECTOR

A multi-segmented reflector allows for precise beam control, and offers field-changeable optics in Narrow Spot, Narrow Flood, Flood, and Wall Wash with a variety of lumen options. With exceptional flexibility and controlled optics, each luminaire head can provide task, accent, or general illumination. Trim options include trim or trimless, with black or white interior finish. Merchandising is constantly changing, and the multiple combo is the perfect solution for highlighting up to 4 different displays with a single housing.

AIMING

The proprietary hot aiming system allows each individual head to be rotated 365° horizontally and 45° vertically, and to be aimed precisely at the desired position, which can be locked into position without the use of tools.

HOUSING

Thermally protected for new construction, non-insulated ceilings, or where insulation can be kept 3" from housing, with the ability to vertically adjust to accommodate various ceiling heights. Fabricated from 18-gauge steel and post-painted. Each luminaire head made of die-cast aluminum to dissipate heat.

TRIM OPTION

Post-painted powder coated die-cast trim ring available in white and custom RAL colors. (Please consult factory for custom paint color options). Trim attaches to housing with piano springs for snug fit and zero light leakage.

TRIMLESS OPTION

Die-cast perforated mesh cover intended for installation in drywall or plaster ceilings. Mudding may be applied right up to the edge of the luminaire opening to provide a seamless appearance. Trimless accessory is secured to the housing to prevent fractures in the ceiling and/or drywall during and after installation.

MOUNTING FRAME & BRACKET

Pre-installed butterfly brackets can be adjusted vertically with C-Channel mounting bars, allowing housing to be positioned and locked at any point within a 24" joist span. Bar hangers can fit onto a T-bar spline with additional slots and holes for special mounting methods.

THERMAL MANAGEMENT SYSTEM

Passive cooling die-cast aluminum heat sink, LED light engine and driver are replaceable, upgradeable, and can be accessed from below the ceiling. The consistency in the quality of light is delivered by the use of a unique locking mechanism that aligns the reflector with the light engine.

DRIVER ELECTRICAL INFORMATION

The LED driver is rated for 50 to 60Hz at 120V/277V input, produces less than 20% THD, has a power factor between 90% and 100%, and is thermally protected for additional safety. Junction box and driver can be accessed from below and above the ceiling. Junction box is listed for through branch circuit wiring.

DIMMING & DRIVER INFORMATION

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

DIMTR - Triac & Electronic low voltage dimming. Available in 120V, and up to 3000 lumens only.

LUT2W - Lutron LTEA2W Hi-Lume 1%. 2-wire LED Driver Forward Phase Control, 1% dimming in 120V only. Available on all fixtures up to 40 watts.

LUTH - Lutron LDE1 Hi-Lume Eco System. 1% dimming with Soft in Fade to Black dimming technology.

LUTFB - Lutron PEQ0 Hi-Lume Premier Eco System. 0.1% dimming with Soft in Fade to Black dimming technology. Available on all fixtures up to 20 watts.

ELDO10.1 - EldoLED SoloDrive 0-10V. Dimming down to 0.1%.

DALI - DALI DT6, DT8 dimming down to 1%.

ELDODMX - EldoLED PowerDrive dimming down to 0.1%.

Please see EldoLED website for wiring diagrams and a list of compatible DMX and DALI control systems.

WARRANTY

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

LED DYNAMIC PLATFORM OPTIONS



Tunable White with SmartWhite Technology utilizing the Lumenetix Platform allows you to color tune the luminaire via various controls. Create the perfect environment for the desired use of the space, while maintaining a CRI of 90+ across the tunable range of 8000 to 1650K. (Click here for more details)



Dims to Warm with SmartDimming Technology. At 100% full brightness the luminaire is at 3000K. When dimmed to 1%, the light transitions to 1800K, creating a warm ambiance within the space. (Click here for more details)



RGB+White with SmartHue Technology provides full color mixing of RGB and white colors. Utilizing the Lumenetix Platform allows you to choose from unlimited RGB color options, via various controls. Ideal for Circadian Rhythm applications or to create the perfect human centric environment. (Click here for more details)

LISTINGS

c-UL-us - Listed for Feed Through Wiring.

Example: **FCL-LED-1500L-DIM10-120-FL-30K-90-F-WH-BK**

SERIES	LUMEN	DIMMING	VOLTAGE	OPTICS	CCT -	CRI	TRIM OPTION	TRIM COLOR	INTERIOR COLOR	ACCESSORIES
☐ FCL-LED	☐ 1000L ☐ 1500L ☐ 2000L ☐ 3000L	☐ DIM10 ☐ DIMTR ☐ LUTH ☐ LUT2W ☐ LUTFTB ☐ ELDO10-1 ☐ ELDODALI-1 ☐ ELDODMX-1	☐ 120 ☐ 277	☐ SP- Spot-15° ☐ NFL- Narrow Flood-24°-25° ☐ FL- Flood-36°-38°	☐ 27K ☐ 30K ☐ 35K ☐ 40K	☐ 90+	☐ F (Flanged) ☐ TL (Trimless)	☐ WH (White) ☐ BK (Black)	☐ WH (White) ☐ BK (Black)	☐ BP31- 24" C-channel bar hangers

LUTFTB - up to 2000 lumens

DIMTR, LUT2W - 120V only

LUTH, ELDO10-1, ELDODALI-1, ELDODMX-1 - 120 -277V

FCL-LED-1000L-DIM10-120-FL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **10.821**

LUMENS: **1134**

CRI: **90**

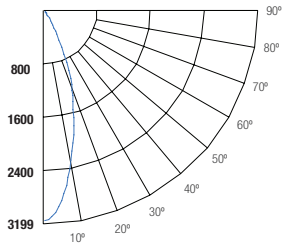
EFFICACY: **105**

CCT: **4000K**

TEST NO.: **EL07021905**

SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	11 fc	10 ft
8.0	2.76 fc	20.1 ft
12.0	1.23 fc	30.1 ft
16.0	0.69 fc	40.1 ft
20.0	0.44 fc	50.2 ft
24.0	0.31 fc	60.2 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	750.44	66.20	66.20
0-30	1060.99	93.50	93.50
0-40	1121.69	98.90	98.90
0-60	1132.21	99.80	99.80
0-80	1133.25	99.90	99.90
0-90	1133.26	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	61	57	56
55	24	23	23
65	11	10	10
75	1	1	1
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	263.57
10-20	486.87
20-30	310.55
30-40	60.71
40-50	7.68
50-60	2.84
60-70	0.97
70-80	0.07
80-90	0.01

Candela Tabulation

0	0
0	3186.93
5	2983.65
15	1778.55
25	678.92
35	76.53
45	9.32
55	3.04
65	1.00
75	0.03
85	0.01
90	0.01

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC		80%				70%				50%				30%				10%				0%			
RW		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100	99	97	96
	1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	94	93	92	91	89	88
	2	110	106	103	100	108	105	102	99	102	99	97	95	92	90	88	85	82	80	78	75	72	71	70	69
	3	106	101	97	94	104	100	96	93	97	94	92	91	88	86	84	82	80	78	75	72	71	70	69	68
	4	102	96	92	89	101	95	91	88	93	90	87	88	85	82	80	78	75	72	71	70	69	68	67	66
	5	99	92	88	84	97	91	87	84	90	86	83	88	85	82	80	78	75	72	71	70	69	68	67	66
	6	95	88	84	80	94	88	83	80	86	82	79	85	81	79	84	81	78	75	72	71	70	69	68	67
	7	92	85	80	77	91	84	80	76	82	78	76	82	78	76	81	78	75	72	71	70	69	68	67	66
	8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71	70	69	68	67	66	65
	9	86	78	74	71	85	78	73	70	77	73	70	76	73	70	75	72	70	67	66	65	64	63	62	61
	10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	64	63	62	61	60	59	58

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-1000L-DIM10-120-NFL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **10.784**

LUMENS: **1037**

CRI: **90**

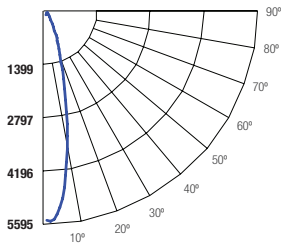
EFFICACY: **96**

CCT: **4000K**

TEST NO.: **EL07161951**

SPACING CRITERIA: **0.40**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	19.3 fc	6.6 ft
8.0	4.81 fc	13.1 ft
12.0	2.14 fc	19.7 ft
16.0	1.2 fc	26.2 ft
20.0	0.77 fc	32.8 ft
24.0	0.53 fc	39.3 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	857.35	82.70	82.70
0-30	1018.82	98.20	98.20
0-40	1030.00	99.30	99.30
0-60	1035.53	99.80	99.80
0-80	1036.22	99.90	99.90
0-90	1036.23	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	24	22	23
55	11	10	11
65	5	5	5
75	0	0	0
85	0	0	0

Lumens Per Zone

Zone	Lumens
0-10	396.23
10-20	461.12
20-30	461.47
30-40	11.18
40-50	3.87
50-60	1.67
60-70	0.65
70-80	0.03
80-90	0.01

Candela Tabulation

0	0
0	5564.69
5	4690.87
15	1532.76
25	303.58
35	15.56
45	4.61
55	1.77
65	0.56
75	0.01
85	0.01
90	0.01

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC		80%				70%				50%				30%				10%				0%			
RW		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100	99	97	96
	1	115	113	111	110	116	111	109	108	107	106	105	103	102	101	100	99	98	97	96	94	93	92	91	90
	2	112	108	105	103	110	106	104	102	103	101	99	100	99	97	96	94	93	91	90	89	88	87	86	85
	3	108	104	100	98	106	102	99	97	100	97	95	98	96	94	93	91	90	89	87	85	84	83	82	81
	4	105	100	96	93	104	99	95	93	97	94	92	95	93	91	90	88	87	85	83	82	81	80	79	78
	5	102	97	93	90	101	96	92	89	94	91	89	93	90	88	87	85	83	82	81	80	79	78	77	76
	6	99	94	90	87	98	93	89	86	92	88	86	90	87	85	84	82	81	80	79	78	77	76	75	74
	7	97	91	87	84	96	90	86	84	89	86	83	88	85	83	82	81	80	79	78	77	76	75	74	73
	8	94	88	84	81	93	88	84	81	87	83	81	86	83	81	80	79	78	77	76	75	74	73	72	71
	9	92	86	82	79	91	85	82	79	85	81	79	84	81	79	83	80	78	77	76	75	74	73	72	71
	10	90	84	80	77	89	83	80	77	82	79	77	82	79	77	81	79	77	76	75	74	73	72	71	70

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-1000L-DIM10-120-SP-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **10.7878**

LUMENS: **1113**

CRI: **90**

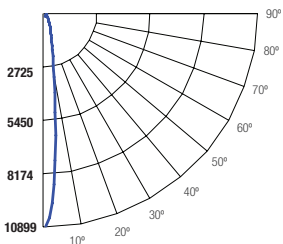
EFFICACY: **103**

CCT: **4000K**

TEST NO.: **EL07151942**

SPACING CRITERIA: **0.26**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	36.8 fc	4.2 ft
8.0	9.21 fc	8.5 ft
12.0	4.09 fc	12.7 ft
16.0	2.3 fc	17 ft
20.0	1.47 fc	21.2 ft
24.0	1.02 fc	25.5 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	948.40	85.20	85.20
0-30	1098.68	98.80	98.80
0-40	1107.14	99.50	99.50
0-60	1111.03	99.90	99.90
0-80	1111.51	99.90	99.90
0-90	1111.53	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	18	16	13
55	8	8	8
65	3	3	3
75	0	0	0
85	1	1	0

Lumens Per Zone

Zone	Lumens
0-10	559.05
10-20	389.35
20-30	150.28
30-40	8.46
40-50	2.68
50-60	1.21
60-70	0.45
70-80	0.03
80-90	0.02

FCL-LED-1500L-DIM10-120-FL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **14.5985**

LUMENS: **1501**

CRI: **90**

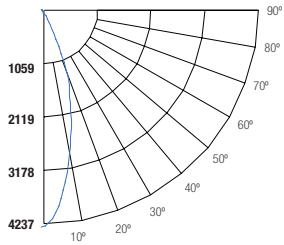
EFFICACY: **103**

CCT: **4000K**

TEST NO.: **EL07021906**

SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	14.6 ft	10 ft
8.0	3.65 ft	20 ft
12.0	1.62 ft	30 ft
16.0	0.91 ft	40.1 ft
20.0	0.58 ft	50.1 ft
24.0	0.41 ft	60.1 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	993.74	66.20	66.20
0-30	1404.15	93.60	93.60
0-40	1484.35	98.90	98.90
0-60	1498.25	99.80	99.80
0-80	1499.61	99.90	99.90
0-90	1499.63	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	64	59	58
55	25	24	23
65	11	11	11
75	1	1	1
85	1	1	0

Lumens Per Zone

Zone	Lumens
0-10	348.91
10-20	644.84
20-30	410.41
30-40	80.20
40-50	10.15
50-60	3.75
60-70	1.27
70-80	0.09
80-90	0.02

Candela Tabulation

Q	
0	4222.16
5	3947.66
15	2350.76
25	893.75
35	88.56
45	12.45
55	4.00
65	1.31
75	0.04
85	0.02
90	0.02

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
	1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	
	2	110	106	103	100	108	105	102	99	102	99	97	95	92	90	96	94	93	92	
	3	106	101	97	94	104	100	96	93	97	94	92	90	87	85	90	88	87	88	
	4	102	96	92	89	101	95	91	88	93	90	87	85	82	80	86	84	83	84	
	5	99	92	88	84	97	91	87	84	90	86	83	80	77	75	82	80	79	80	
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	8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71	
	9	86	78	74	71	85	78	73	70	77	73	70	76	73	70	76	72	70	69	
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-1500L-DIM10-120-NFL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **14.5543**

LUMENS: **1376**

CRI: **90**

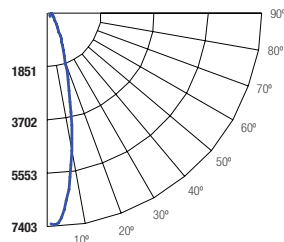
EFFICACY: **95**

CCT: **4000K**

TEST NO.: **EL07151945**

SPACING CRITERIA: **0.40**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	25.5 ft	6.6 ft
8.0	6.38 ft	13.1 ft
12.0	2.84 ft	19.7 ft
16.0	1.59 ft	26.2 ft
20.0	1.02 ft	32.8 ft
24.0	0.71 ft	39.3 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1136.36	82.60	82.60
0-30	1351.17	98.20	98.20
0-40	1366.3	99.30	99.30
0-60	1373.96	99.80	99.80
0-80	1374.86	99.90	99.90
0-90	1374.88	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	36	34	31
55	15	14	14
65	6	6	7
75	0	0	0
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	525.09
10-20	611.27
20-30	214.81
30-40	15.13
40-50	5.47
50-60	2.19
60-70	0.86
70-80	0.05
80-90	0.02

Candela Tabulation

Q	
0	7374.32
5	6217.09
15	2034.98
25	405.14
35	21.60
45	7.02
55	2.30
65	0.75
75	0.02
85	0.02
90	0.02

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	106	102	102	102	100		
	1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97		
	2	112	108	105	103	110	106	104	102	103	101	99	100	99	97	98	97	95	94			
	3	108	104	100	98	106	102	99	97	100	97	95	98	96	94	96	94	92	91			
	4	105	100	96	93	104	99	95	93	97	94	92	95	93	91	93	91	89	87			
	5	102	97	93	90	101	96	92	89	94	91	89	93	91	89	91	89	87	86			
	6	99	93	89	87	98	93	89	86	91	88	86	90	87	85	89	87	85	84			
	7	97	91	87	84	96	90	86	84	89	86	83	88	85	83	87	84	83	82			
	8	94	88	84	81	93	88	84	81	87	83	81	86	83	81	85	82	80	79			
	9	92	86	82	79	91	85	82	79	85	81	79	84	81	79	83	80	78	78			
10	90	83	80	77	89	83	79	77	82	79	77	82	79	77	81	78	77	76				

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-1500L-DIM10-120-SP-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **14.5368**

LUMENS: **1460**

CRI: **90**

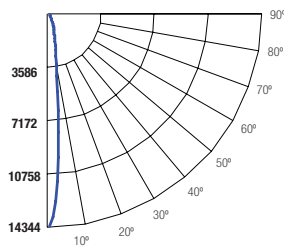
EFFICACY: **100**

CCT: **4000K**

TEST NO.: **EL07151944**

SPACING CRITERIA: **0.26**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	48.3 ft	4.2 ft
8.0	12.1 ft	8.5 ft
12.0	5.36 ft	12.7 ft
16.0	3.02 ft	16.9 ft
20.0	1.93 ft	21.2 ft
24.0	1.34 ft	25.4 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1244.24	85.20	85.20
0-30	1441.84	98.80	98.80
0-40	1452.98	99.50	99.50
0-60	1458.02	99.90	99.90
0-80	1458.65	99.90	99.90
0-90	1458.67	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	21	20	16
55	11	11	11
65	4	4	4
75	0	0	0
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	731.44
10-20	512.80
20-30	197.60
30-40	11.14
40-50	3.44
50-60	1.60
60-70	0.60
70-80	0.04
80-90	0.02

FCL-LED-2000L-DIM10-120-FL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **21.1845**

LUMENS: **2124**

CRI: **90**

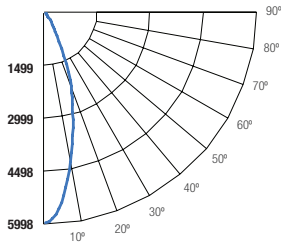
EFFICACY: **100**

CCT: **4000K**

TEST NO.: **EL07021908**

SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	20.7 fc	10 ft
8.0	5.17 fc	20.1 ft
12.0	2.3 fc	30.1 ft
16.0	1.29 fc	40.1 ft
20.0	0.83 fc	50.2 ft
24.0	0.57 fc	60.2 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter
BEAM DIA. MEASURED AT 50% OF NADIR F.C.		

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1406.57	66.20	66.20
0-30	1988.3	93.60	93.60
0-40	2100.61	98.90	98.90
0-60	2120.27	99.80	99.80
0-80	2122.18	99.90	99.90
0-90	2122.2	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	89	84	82
55	36	34	33
65	16	15	15
75	1	1	1
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	493.90
10-20	912.67
20-30	581.73
30-40	112.31
40-50	14.38
50-60	5.28
60-70	1.79
70-80	0.12
80-90	0.02

Candela Tabulation

0	0
5978.68	5
5589.50	15
3334.92	25
1285.76	35
140.45	45
17.36	55
5.66	65
1.84	75
0.05	85
0.02	90

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC		80%				70%				50%				30%				10%				0%			
RW		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%		50%	30%	10%		50%	30%	10%		50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100	100	100	100
	1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	95	94	93	92	91	90
	2	110	106	103	100	108	105	102	99	102	99	97	95	92	90	88	85	82	80	78	75	72	71	70	69
	3	106	101	97	94	104	100	96	93	97	94	92	89	86	84	82	80	78	76	74	72	70	68	67	66
	4	102	96	92	89	101	95	91	88	93	90	87	84	81	79	77	75	73	71	69	67	65	63	61	60
	5	99	92	88	84	97	91	87	84	90	86	83	80	77	75	73	71	69	67	65	63	61	59	57	56
	6	95	88	84	80	94	88	83	80	86	82	79	76	73	71	69	67	65	63	61	59	57	55	53	52
	7	92	85	80	77	91	84	80	76	83	79	76	73	70	68	66	64	62	60	58	56	54	52	50	49
	8	89	81	77	73	88	81	76	73	80	76	73	70	67	65	63	61	59	57	55	53	51	49	47	46
	9	86	78	74	71	85	78	73	70	77	73	70	67	64	62	60	58	56	54	52	50	48	46	44	43
	10	83	75	71	68	82	75	71	68	74	70	68	66	64	62	60	58	56	54	52	50	48	46	44	43

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-2000L-DIM10-120-SP-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **21.3047**

LUMENS: **2116**

CRI: **90**

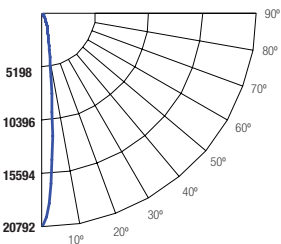
EFFICACY: **99**

CCT: **4000K**

TEST NO.: **EL07151941**

SPACING CRITERIA: **0.26**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	70.3 fc	4.2 ft
8.0	17.6 fc	8.5 ft
12.0	7.81 fc	12.7 ft
16.0	4.4 fc	17 ft
20.0	2.81 fc	21.2 ft
24.0	1.95 fc	25.4 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter
BEAM DIA. MEASURED AT 50% OF NADIR F.C.		

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1806.21	85.30	85.30
0-30	2091.00	98.80	98.80
0-40	2106.72	99.50	99.50
0-60	2113.64	99.90	99.90
0-80	2114.53	99.90	99.90
0-90	2114.55	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	29	26	23
55	16	15	15
65	6	5	6
75	0	0	0
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	1063.89
10-20	742.32
20-30	284.79
30-40	15.72
40-50	4.66
50-60	2.26
60-70	0.85
70-80	0.05
80-90	0.02

Candela Tabulation

0	0
20323.92	5
13147.23	15
2324.12	25
506.27	35
18.25	45
5.61	55
2.54	65
0.65	75
0.02	85
0.02	90

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC		80%				70%				50%				30%				10%				0%			
RW		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%		50%	30%	10%		50%	30%	10%		50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100	100	100	100
	1	115	114	112	110	113	111	110	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92
	2	112	109	106	104	110	107	105	103	104	102	101	101	100	99	98	97	96	95	94	93	92	91	90	89
	3	109	105	102	99	107	104	101	98	101	99	97	97	96	95	94	93	92	91	90	89	88	87	86	85
	4	106	102	98	96	105	101	97	95	99	96	94	94	93	92	91	90	89	88	87	86	85	84	83	82
	5	104	99	95	92	103	98	95	92	96	93	91	91	90	89	88	87	86	85	84	83	82	81	80	79
	6	101	96	92	90	100	95	92	89	94	91	89	89	88	87	86	85	84	83	82	81	80	79	78	77
	7	99	94	90	87	98	93	90	87	92	89	87	87	86	85	84	83	82	81	80	79	78	77	76	75
	8	97	91	88	85	96	91	88	85	90	87	85	85	84	83	82	81	80	79	78	77	76	75	74	73
	9	95	89	86	83	94	89	86	83	88	85	83	83	82	81	80	79	78	77	76	75	74	73	72	71
	10	93	87	84	82	92	87	84	82	87	84	81	81	80	79	78	77	76	75	74	73	72	71	70	69

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-2000L-DIM10-120-NFL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **21.241**

LUMENS: **1964**

CRI: **90**

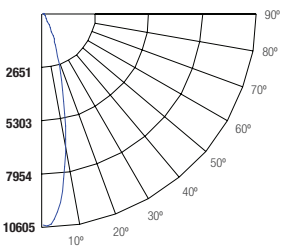
EFFICACY: **92**

CCT: **4000K**

TEST NO.: **EL07161952**

SPACING CRITERIA: **0.40**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	36.5 fc	6.6 ft
8.0	9.11 fc	13.1 ft
12.0	4.05 fc	19.7 ft
16.0	2.28 fc	26.2 ft
20.0	1.46 fc	32.8 ft
24.0	1.01 fc	39.3 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter
BEAM DIA. MEASURED AT 50% OF NADIR F.C.		

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1623.3	82.70	82.70
0-30	1928.78	98.20	98.20
0-40	1950.14	99.30	99.30
0-60	1960.67	99.90	99.90
0-80	1961.96	99.90	99.90
0-90	1961.98	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	45	42	43
55	21	20	21
65	9	9	10
75	0	0	0
85	0	0	0

Lumens Per Zone

Zone	Lumens
0-10	750.83
10-20	872.47
20-30	305.49
30-40	21.36
40-50	7.37
50-60	3.16
60-70	1.24
70-80	0.06
80-90	0.01

Candela Tabulation

0	0</
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FCL-LED-3000L-DIM10-120-FL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **31.7618**

LUMENS: **2985**

CRI: **90**

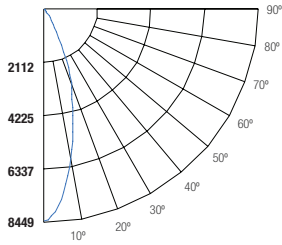
EFFICACY: **94**

CCT: **4000K**

TEST NO.: **EL07021907**

SPACING CRITERIA: **0.58**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1975.18	66.20	66.20
0-30	2794.15	93.60	93.60
0-40	2952.73	98.90	98.90
0-60	2980.28	99.80	99.80
0-80	2982.95	99.90	99.90
0-90	2982.97	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	125	117	114
55	50	47	46
65	22	21	21
75	1	1	1
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	694.31
10-20	1280.87
20-30	818.97
30-40	158.58
40-50	20.15
50-60	7.40
60-70	2.50
70-80	0.17
80-90	0.02

Candela Tabulation

0	0
0	8415.85
5	7848.23
15	4666.63
25	1785.49
35	172.67
45	24.31
55	7.88
65	2.57
75	0.07
85	0.02
90	0.02

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
	1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96			
	2	110	106	103	100	108	105	102	99	102	99	97	99	97	95	96	94	93	92			
	3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	88			
	4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84			
	5	99	92	88	84	97	91	87	84	90	86	83	88	85	82	87	84	82	80			
	6	95	88	84	80	94	88	83	80	86	82	79	85	81	79	84	81	78	77			
	7	92	85	80	77	91	84	80	76	83	79	76	82	78	76	81	78	75	74			
	8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71			
	9	86	78	74	71	85	78	73	70	77	73	70	76	72	70	76	72	70	69			
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66				

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-3000L-DIM10-120-SP-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **31.9**

LUMENS: **2979**

CRI: **90**

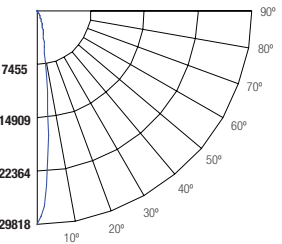
EFFICACY: **93**

CCT: **4000K**

TEST NO.: **EL07151943**

SPACING CRITERIA: **0.26**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	2539.72	85.30	85.30
0-30	2943.02	98.80	98.80
0-40	2965.05	99.60	99.50
0-60	2974.78	99.90	99.90
0-80	2976.03	99.90	99.90
0-90	2976.06	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	39	36	32
55	22	22	22
65	8	8	8
75	0	0	0
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	1498.75
10-20	1040.97
20-30	403.30
30-40	22.03
40-50	6.52
50-60	3.21
60-70	1.19
70-80	0.06
80-90	0.02

Candela Tabulation

0	0
0	28537.15
5	18448.37
15	3265.51
25	720.53
35	25.55
45	7.60
55	3.55
65	0.89
75	0.02
85	0.02
90	0.02

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
	1	115	114	112	110	113	111	110	109	107	106	105	104	103	102	100	100	99	97		
	2	112	109	106	104	110	107	105	103	104	102	101	101	100	99	99	98	97	95		
	3	109	105	102	99	107	104	101	98	101	99	97	99	97	96	97	95	94	93		
	4	106	102	98	96	105	101	97	95	99	96	94	97	95	93	95	93	92	91		
	5	104	99	95	92	103	98	95	92	96	93	91	95	92	91	93	91	90	89		
	6	101	96	92	90	100	95	92	89	94	91	89	93	90	88	92	90	88	87		
	7	99	94	90	87	98	93	90	87	92	89	87	91	88	86	90	88	86	85		
	8	97	91	88	85	96	91	88	85	90	87	85	89	87	85	88	86	84	83		
	9	95	89	86	83	94	89	86	83	88	85	83	88	85	83	87	84	83	82		
10	93	87	84	82	92	87	84	82	87	84	81	86	83	81	85	83	81	80			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

FCL-LED-3000L-DIM10-120-NFL-40K-90-F-WH-BK (PER HEAD)

INPUT WATTS: **32.1**

LUMENS: **2840**

CRI: **90**

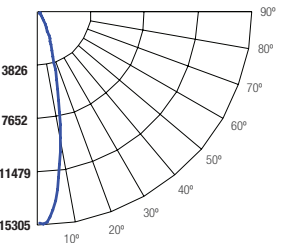
EFFICACY: **88**

CCT: **4000K**

TEST NO.: **EL07161950**

SPACING CRITERIA: **0.40**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	2345.73	82.60	82.60
0-30	2789.57	98.20	98.20
0-40	2820.35	99.30	99.30
0-60	2835.54	99.80	99.90
0-80	2837.4	99.90	99.90
0-90	2837.42	99.90	99.90

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	66	61	62
55	31	29	30
65	13	12	15
75	0	0	0
85	1	1	1

Lumens Per Zone

Zone	Lumens
0-10	1084.8
10-20	1260.93
20-30	443.84
30-40	30.78
40-50	10.62
50-60	4.57
60-70	1.78
70-80	0.08
80-90	0.02

Candela Tabulation

0	0
0	15211.09
5	12878.18
15	4227.18
25	863.75
35	42.65
45	12.87
55	4.85
65	1.54
75	0.02
85	0.02
90	0.02

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
	1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	
	2	112	108	105	103	110	106	104	102	103	101	99	100	99	97	98	97	95	94	
	3	108	104	100	98	106	102	99	97	100	97	95	98	96	94	96	94	92	91	
	4	105	100	96	93	104	99	95	93	97	94	92	95	93	91	93	91	90	89	
	5	102	97	93	90	101	96	92	89	94	91	89	93	90	88	91	89	87	86	
	6	99	93	90	87	98	93	89	86	91	88	86	90	87	85	89	87	85	84	
	7	97	91	87	84	96	90	86	84	89	86	83	88	85	83	87	84	83	82	
	8	94	88	84	81	93	88	84	81	87	83	81	86	83	81	85	82	80	79	
	9	92	86	82	79	91	85	82	79	85	81	79	84	81	79	83	80	78	78	
10	90	83	80	77	89	83	80	77	82	79	77	82	79	77	81	79	77	76		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

1- Luminaire will be shipped with Powerpacks pre-installed, ready to be integrated to designated control systems

2- Luminaire will be shipped with Sensors installed 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. Luminaires will be ready to be integrated with designated control systems

BRAND	EASYFIT by EnOcean	LUTRON	enlighted	LEVITON	OSRAM	PHILIPS EasySense	legrand®
CONTROL UNIT	☐ LEDRU LED Relay Zone Controller 0-10V ¹	☐ FCJS-010 Lutron Vive 0-10V Individual Pow Pak (Luminaire is shipped Vive Enabled) ^{1,4}	☐ CU-4E-FMH Fixture Mount Control Unit ^{1,5}	☐ ZL027 -NOW Intellect Power Control Module ^{1,6}	☐ EN-WCM2-ZB-DR Wireless Control Module ^{1,7}	☐ SBR -BS Xitanium SR Bridge ^{1,8}	☐ LMFC-011 ON/OFF/0-10V dimming fixture controller ^{1,9}
	☐ LEDDU LED Zone Controller 0-10V ¹	☐ FCJS-ECO Lutron Vive Eco-system Pow Pak (Luminaire is shipped Vive Enabled) ^{1,4}		☐ ZL027 -NOW Intellect Power Control Module ^{1,6}	☐ EN- ALC-ZB-BK-DR Wireless Area Lighting Control Module ^{1,7} ☐ ZBHA-CLM-DIM-ENC Connected Lighting Module DIM ^{1,7}		
INTEGRAT SENSOR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*WIRELESS OCCUPANCY SENSOR	☐ EOSCU-W-EO Occupancy Sensor - Ceiling Mounted (Must be specified with LEDRU or LEDDU control unit) ³	N/A	N/A	N/A	N/A	N/A	☐ LMDC-100 Dual technology PIR Ceiling Mount Occupancy Sensor ³
*WIRELESS DAYLIGHT SENSOR	☐ ELLSU-W-EO Light Level Sensor - Ceiling Mounted (Must be specified with LEDRU or LEDDU control unit) ³	N/A	N/A	N/A	N/A	N/A	☐ LMLS-400 Single zone switching and dimming digital photosensor ³
*WIRELESS OCCUPANCY & DAYLIGHT SENSOR	N/A	N/A	☐ SU-5E-IoT IoT Node Micro Sensor ³ ☐ SU-5E-CL Connected Lighting Micro Sensor ³ ☐ SU-5E-IL Independent Lighting / Enlighted One Micro Sensor ³ ☐ SU-5S-H-(IoT/CL/IL) Surface Mount Sensor ³ (Must be specified with CU- 4E-FMH Control Unit)	☐ ZL00J -TOW Intellect Intelligent Fixture Control System ³ (Must be specified with ZL027 -NOW Control Unit)	☐ EN-CLM-PIR-DD-ZB SensiLUM™ Wireless Integrated Sensor ☐ EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors ³ (Must be specified with EN-WCM2-ZB-DR or EN- ALC-ZB-BK-DR Control Unit)	☐ SNS200- CMP SNS200 for grouping ³	N/A
ACCESSORIES	N/A	N/A	☐ TMC-SU-5E Tile Mount Carrier ☐ CBL-5E-CU4-30N 30 inch Sensor Cable for CU-4 and IoT Ready™ drivers ☐ CBL-5E-CU4-7F 7 foot Sensor Cable for CU-4 and IoT Ready™ drivers	N/A	N/A	N/A	N/A
NOTES	N/A	4- Luminaire will be compatible with Lutron LRF2-OCR2B-P-WH Ceiling mount 360° 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-CL, SU-5E-IL, SU-5S-H, Sensors.	6- Luminaire will be compatible with Leviton Intellect App & Keypad Room Controller	7- Luminaire will be compatible with EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors	8- Luminaire will be compatible with Philips field and wireless switch.	9- Luminaire will be compatible with DLM Room control system LMPB-100. DLM control system must be ordered through Legrand.