

**CALCULATED**  
**L70**  
LIFETIME  
**65,000 HRS**

3000 LUMENS	4000 LUMENS	5000 LUMENS	6000 LUMENS
37 WATT	50 WATT	70 WATT	85 WATT

General LED illumination for health care facilities, educational institutions, airports, commercial offices, retail, and many other applications.

#### PRODUCT FEATURES:

- Twilite series proprietary light lock system prevents light leakage at both ends of lamp shield. Steel side reflectors intersect with housing to ensure seamless appearance
- Lamp shield pivots down for easy LED maintenance
- Post-painted with a 93% reflective white coat to improve fixture efficacy
- Lamp shield is 60% perforated white steel mesh, backed with high-transmission white acrylic diffuser for optimum light efficiency, maximum glare control and lamp image prevention
- Rated at 85+ CRI and available in multiple CCTs
- Life tested to ensure light output up to 65,000 hours of operation to L70
- Tested to LM-79 and LM-80 standards
- Dimmable down to 1% with compatible dimming systems

- LED lighting technology offers the highest return on initial investment over the lifetime of the fixture
- LEDs are individually spaced at small intervals to eliminate any dark spots when combined with our diffusers
- Emergency battery back-up comes pre-installed on the fixture and emergency push button is installed on the fixture for easy access and aesthetics.
- LED light engine is completely removable and upgradable
- Four corner tie points are standard for safety wire support when required and built-in earthquake clips standard
- Fits into standard T-bar sizes including 5/8th, 3/8th, and slot T
- Same-day shipping on most options (Consult factory)

**OPTICS** - Diffuser is composed of a two-part overlay system that includes a thin frosted acrylic sheet and a steel perforated lamp shield. The system works together to gather the light scattered by the LED chips and delivers uniform voluminous light into any environment. The lens can be easily removed without the use of tools in case maintenance is required.

**DURABILITY** - Heavy-duty 20-gauge steel housing is engineered for maximum strength. Corners interlock to prevent aesthetic damage to fixture. All sides and corners are turned in and hemmed to remove sharp edges for safe handling and installation.

**PERFORMANCE** - The OD-LED lay-in fixtures meet high efficacy codes in compliance with more than 75 LPW. The OD-LED powered lighting technologies offer a higher return on investment than any other lighting technology. The light engines found in the OD-LED are rated at 85+ CRI and available in multiple CCTs: 3000K, 3500K, 4000K and 5000K. All LEDs and LED fixtures are rated and tested to LM-79 and LM-80 standards. The LEDs are also binned to a 3-step MacAdam ellipses to achieve consistent color from fixture to fixture.

**THERMAL MANAGEMENT** - LED light engines are attached directly to the housing and keep LED engines cool. Our advanced thermal management system allows the light output of the LED engines to be maintained at 70% of initial lumens at 65,000 hours of operation.

**ELECTRICAL** - Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120-277V input, produce less than 20% THD, and have a power factor of .90 to 1.00.

**MAINTENANCE** - LED engines and driver can be accessed through the bottom by removing the lamp shield and center reflector. LED engines are removable and upgradable even after fixture installation. Fixture can be regularly and safely wiped down to ensure optimal fixture performance.

**DIMMING** - The OD-LED comes standard with **DIM10**, 0-10V dimming on either 120 or 277V. Dimmable down to 1% of initial lumens. Also available in Lutron dimming options. Consult factory for dimmer compatibility. **LUTH** - Lutron Hilume Dimming down to 1% compatible with 3 wire and EcoSystem Controls available on all fixtures up to 50 Watts. **LUT2W** - Lutron 2 Wire Dimming down to 1% compatible with 2 wire and Forward Phase Control Systems available on all fixtures up to 50 Watts. **LUTFTB** - Lutron Hilume Fade to Black Dimming down to 1% compatible with EcoSystem Controls available on all fixtures up to 75 Watts. **DIMST** - Step Dimming allows fixtures to be turned on at 100% or 50% is available for fixtures up to 50 Watts. **ELD010.1** - EldoLED SoloDrive 0-10V. Dimming down to .1%. available on all fixtures up to 100 Watts. **ELD0DALI** - EldoLED PowerDrive 0-10V. Dimming down to .1%. available on all fixtures up to 100 Watts. **ELD0DMX** - EldoLED PowerDrive Dimming down to .1%. available on all fixtures up to 100 Watts. Please see EldoLED website for wiring diagrams and a list of compatible DMX and Dali control systems.

**OPTIONS** - Fixtures can be shipped pre-installed with daylight harvesting controls, occupancy sensors, and/or power pack. Available manufacturer options include Leviton, Wattstopper, Hubbell Automation, and others.

**QUALITY CONTROL** - Every fixture is turned on and rigorously tested by our QC Department before shipping

**WARRANTY** - Limited 5 Year Warranty



#### Ordering Information: Example: 24-OD-LED-3000L-DIM10-MVOLT-30K-85

FIXTURE SIZE	SERIES	TYPE	SERIES	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	OTHER OPTIONS
24 - 2' X 4'	OD-Oracle Direct/Indirect Series	LED	3000L - (3000 lumens) 4000L - (4000 lumens) 5000L - (5000 lumens) 6000L - (5000 lumens)	DIM10 - 0-10V Dimming DIMST - Step Dimming LUTH - Lutron Hilume LUT2W - Lutron 2Wire LUTFTB - Lutron Fade to Black ELD010.1 - EldoLED 0-10V ELD0DALI - EldoLED DALI ELD0DMX - EldoLED DMX	MVOLT 347* * Consult factory for details	30K - (3000K) 35K - (3500K) 40K - (4000K) 50K - (5000K)	85	0-EMG-LED	24FK - Flange Kit for 2' X 4' Fixture SBF - Internal Fast Blow Fuse SBS - Internal Slow-Blow Fuse RIS - Radio Interference Suppressor DCR - Dust Cover USA - Made in America Compliance

# CONTROL OPTIONS

## EASYFIT<sup>®</sup> by EnOcean

### Controls Options to be Installed on the Fixture

Self-powered sensors and switches, combined with LED fixture controllers and a commissioning tool, permit easy configuration, intelligent local control, and seamless integration into building automation systems.

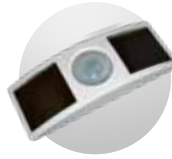


**LEDRU**  
LED Relay Zone  
Controller 0-10V



**LEDDU**  
LED Zone  
Controller 0-10V

### Controls Provided by EnOcean



**EOSCU**  
Occupancy Sensor  
Ceiling Mount



**EOSWU**  
Occupancy Sensor  
Wall Mount



**ELLSU**  
Daylight Sensor  
Ceiling Mount



**ESRPU/EDRP**  
Wall Switches



**LEVITON**  
Wall Switches  
902 MHz category



**NWC 300U**  
Navigan Wireless  
Commissioner

## legrand<sup>®</sup>

WATTSTOPPER<sup>®</sup>

### Controls Installed on the Fixture



#### LMFC-011

Fixture Will be Shipped Legrand Wattstopper DLM Enabled with LMFC-011 Module Controller Installed on the Fixture. Fixtures will be compatible with Legrand Wattstopper DLM Load Controllers, DLM Sensors, DLM Switches, DLM Remote Control, and DLM Configuration tool.

#### Switches



**LMSW-105** **LMDM-101**

#### Remote



**LMRH-105**

#### Configuration tool



**LMCT-100-2**

#### Plug Load Controllers



**LMPL-101**

**LMPL-201**

#### Sensors



**LMDC-100**

**LMLS-400** **LMLS-500**



#### FD-301

Fixture Will be Shipped with Legrand Wattstopper FD-301 (Integrated Daylight Dimming Photosensor) installed and FS-PP-V2 Fixture Power Pack.



**FS-PP-V2**



#### FSP-202

Fixture Will be Shipped with Legrand Wattstopper FSP-202 (multi-level control based on motion and/or daylight contribution) installed.



#### FSP-212

Fixture Will be Shipped with Legrand Wattstopper FSP-212 (multi-level control based on motion and/or daylight contribution) installed.

LED

Control Options

# CONTROL OPTIONS



Philips EasySense sensors provide luminaire-level control with Occupancy sensing, Daylight harvesting, and Field task tuning.

## Controls Installed on the Fixture



### PHILIPS-XSR + SNS200-CMP

Fixture will be Shipped Sensor Ready with PHILIPS-XSR driver and EasySense SNS200-CMP Sensor which is Included to be Remote Mounted. Fixture May Only be Controlled with Philips Field App or Wireless Switches

### SRB

Fixture will be Shipped Sensor Ready with SRB Bridge. Fixture will be Compatible with EasySense Sensor SNS200-CMP which can be Added in the Field for Remote Mounting. Fixture May Only be Controlled with Philips Field App or Wireless Switches or any 0-10V. Wall Box Dimmer.



### SRB + SNS200-CMP

Fixture Will be Shipped Sensor Ready with PHILIPS SRB Bridge and EasySense SNS200-CMP Sensor which is Included to be Remote Mounted. Fixture May Only be Controlled with Philips Field App or Wireless Switches or any 0-10V. Wall Box Dimmer.

## Controls Provided by Philips



ZBT-S1AWH

ZBT-S2AWH

Illumra Wireless Switches



Philips Field App



Enlighted Smart Sensors features digital motion, ambient light, and temperature sensing, the device provides autonomous fixture-level control

## Controls Installed on the Fixture



### PHILIPS-XSR + FS-D22

Fixture Will be Shipped with Enlighted FS-D22 Two-wire sensor Sensor installed and PHILIPS-XSR driver. Fixture May be Controlled with Enlighted Gateway, Energy Manager or Enlighted Room Controller WS-2-00



### CU-E3-1R + SU-4E-00

Fixture Will be Shipped with Enlighted SU-4E-00 Sensor installed and Enlighted CU-E3-1R Control Unit Power Pack. Fixture May be Controlled with Enlighted Gateway, Energy Manager or Enlighted Room Controller WS-2-00

### CU-E3-1R



Fixture Will be Shipped Sensor Ready with Enlighted CU-E3-1R Control Unit Power Pack. Fixture will be compatible with Enlighted SU-4E-00 Sensor which can be Added in the Field Remote Mounting. Fixture May be Controlled with Enlighted Gateway, Energy Manager or Enlighted Room Controller WS-2-00

### PHILIPS-XSR



Fixture Will be Shipped Sensor Ready with PHILIPS-XSR driver. Fixtures will be compatible with Enlighted CS-D2 Two-wire sensor which can be Added in the Field for Remote Mounting. Fixture May be Controlled with Enlighted Gateway, Energy Manager or Enlighted Room Controller WS-2-00.

## Controls Provided by Enlighted

### WS-2-00

Enlighted Room Controller



Gateway



Switch



Programmable with Laptop



PoE Network Switch



Energy Manager

LED

Control Options

# CONTROL OPTIONS



## Controls Installed on the Fixture



**FCJS-010**  
Individual  
Fixture Control

Fixture Will be Shipped LUTRON VIVE Enabled with LUTRON FCJS-010 0-10V Control Module Installed on the Fixture. Fixtures will be compatible with Lutron FC-SENSOR Occupancy/Daylight Sensor or FC-VSENSOR Vacancy/Daylight Sensor which can be Added in the Field for Remote Mounting. Fixture May be Controlled with any Vive control systems. Fixtures must be ordered with a 0-10V. Driver.



**FCJS-ECO**  
Individual  
Fixture Control

Fixture Will be Shipped LUTRON VIVE Enabled with LUTRON FCJS-ECO EcoSystem Control Module Control Module Installed on the Fixture. Fixtures will be compatible with Lutron FC-SENSOR Occupancy/Daylight Sensor or FC-VSENSOR Vacancy/Daylight Sensor which can be Added in the Field for Remote Mounting. Fixture May be Controlled with any Vive control systems. Fixtures must be ordered with a Lutron Driver.

## Controls Provided by Lutron



Lutron  
App



Vive Wireless Hub



DayLight  
Sensor



Ceiling Mount  
Occupancy Sensor



Ceiling Mount  
Occupancy/Daylight  
Sensor



Wall Mount  
Occupancy Sensor



Wall Mount  
Switch



Pico  
Remote



Fixture will be shipped with Leviton ZL027-N0W power control module installed on the fixture. Fixtures will be compatible with Leviton ZL00J-D0W sensor control module which can be added in the field for remote mounting. Fixture must be controlled with Leviton Intellect Keypad Room Controller, or Leviton Neuron App.



**ZL027-N0W**  
Power control module



**ZL00J-D0W**  
Sensor control module

## Leviton Keypad



**ZLDNK-1W**



**ZLDNK-2W**



**ZLDNK-4W**



**ZLDNK-8W**

Intellect™ Keypad Room  
Controller (Required)

## Leviton App



Neuron App

LED

Control Options

# PHOTOMETRY DATA

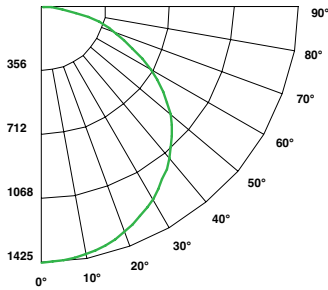
## 24-OD-LED-4000L-DIM10-120-40K

WATTAGE: **50W**

LUMENS: **3994**

TOTAL LUMINAIRE EFFICACY: **80**

### Candle Power Distribution (Candelas)



### Spacing Criteria

0-180 : **1.18**  
90-270 : **1.30**  
Diagonal : **1.36**

**EFFICACY: 80 LM/W**

### Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	1096.08	N.A.	27.40
0-40°	1788.67	N.A.	44.80
0-60°	3152.84	N.A.	78.90
0-90°	3993.59	N.A.	100.00
0-180°	3993.59	N.A.	100.00

### Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	1505	1716	1944
55°	1290	1650	1927
65°	995	1488	1780
75°	699	1195	1728
85°	380	538	785

### Candela Tabulation

	0	45	90
0	1423.693	1423.693	1423.693
5	1407.460	1410.590	1417.690
15	1326.500	1344.930	1372.640
25	1189.840	1231.640	1288.330
35	1008.670	1081.190	1170.100
45	791.810	902.710	1022.350
55	550.440	704.120	822.170
65	312.930	467.670	559.480
75	134.520	230.180	332.800
85	24.670	34.900	50.870
90	4.340	3.090	2.430

### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%				70%				50%				30%				10%				0%			
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	84	84	84	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70	70	70	70	70	70	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59	59	59	59	59	59	59
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43	43	43	43	43	43	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	45	40	38	38	38	38	38	38	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33	33	33	33	33	33	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30	30	30	30	30	30	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27	27	27	27	27	27	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24	24	24	24	24	24	24

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

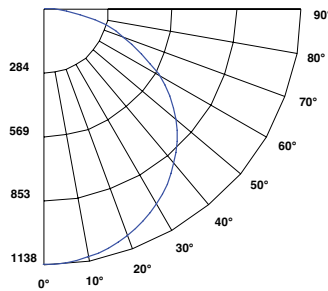
## 24-OD-LED-3000L

WATTAGE: **37.3**

LUMENS: **3206**

TOTAL LUMINAIRE EFFICACY: **86**

### Candle Power Distribution (Candelas)



### Spacing Criteria

0-180 : **1.18**  
90-270 : **1.32**  
Diagonal : **1.38**

**EFFICACY: 86 LM/W**

### Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	876.39	27.30	27.30
0-40°	1432.46	44.70	44.70
0-60°	2529.05	78.90	78.90
0-90°	3205.91	100.00	100.00
0-180°	3205.91	100.00	100.00

### Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	1206	1398	1593
55°	1025	1347	1600
65°	786	1255	1523
75°	566	1021	1500
85°	294	472	701

### Candela Tabulation

	0	45	90
0	1137.561	1137.561	1137.561
5	1127.790	1131.200	1135.440
15	1066.910	1085.070	1105.680
25	957.990	998.290	1044.050
35	810.820	878.970	954.350
45	634.250	735.570	837.880
55	437.570	574.840	682.790
65	247.260	394.490	478.700
75	108.940	196.630	288.780
85	19.080	30.620	45.440
90	3.490	2.480	1.860

### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

RC RW	80%				70%				50%				30%				10%				0%			
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	84	84	84	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70	70	70	70	70	70	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59	59	59	59	59	59	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43	43	43	43	43	43	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38	38	38	38	38	38	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33	33	33	33	33	33	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30	30	30	30	30	30	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27	27	27	27	27	27	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24	24	24	24	24	24	24

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance