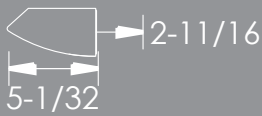




ASW1-LED

ARCHITECTURAL LED SUSPENDED LINEAR
DIRECT/INDIRECT SYSTEM



2000 LUMENS	4000 LUMENS	6000 LUMENS	8000 LUMENS
16 WATT	32 WATT	52 WATT	63 WATT

CALCULATED
L70
LIFETIME
150,000 HRS

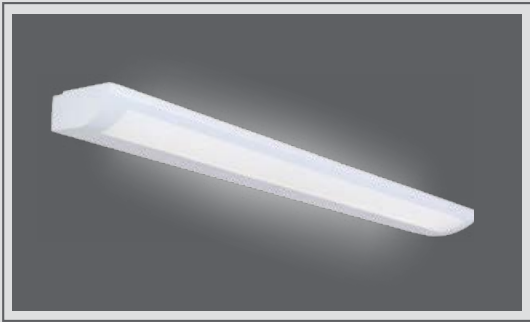
CALCULATED
L85
LIFETIME
65,000 HRS

APPLICATION:
Open office space ambient lighting for virtually glare-free and shadow free illumination. Ideal for school classrooms, meeting rooms, retail stores

- PRODUCT FEATURES:**
- An optical system engineered to maximize the output of LED light engines
 - Can be mounted from 12" to 18" from the ceiling while still producing very wide distribution for even ceiling brightness
 - Fixtures are shipped with die-cast aluminum joiners installed for suspension and structural continuity
 - Fixtures are designed with a white acrylic overlay that provides glowing ambient downlighting
 - White 20-gauge roll-formed steel housing
 - Rated at 85+ CRI and available in multiple CCTs
 - Life tested to ensure light output of L70 up to 150,000 hrs and L85 up to 65,000 hrs
 - Tested to LM-79 and LM-80 standards
 - LED lighting technology offers the highest return on initial investment over the lifetime of the fixture
 - Dimmable down to 1% with compatible dimming systems
 - LED light engine is completely removable and upgradable

ASW1 -LED

ARCHITECTURAL LED LINEAR DIRECT/
INDIRECT PERFORATED (Wall MOUN)



PERFORMANCE - The light engines found in the ASW1 are rated at 85+ CRI and are available in multiple CCTs: 3000K, 3500K, 4000K and 5000K. 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.

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.

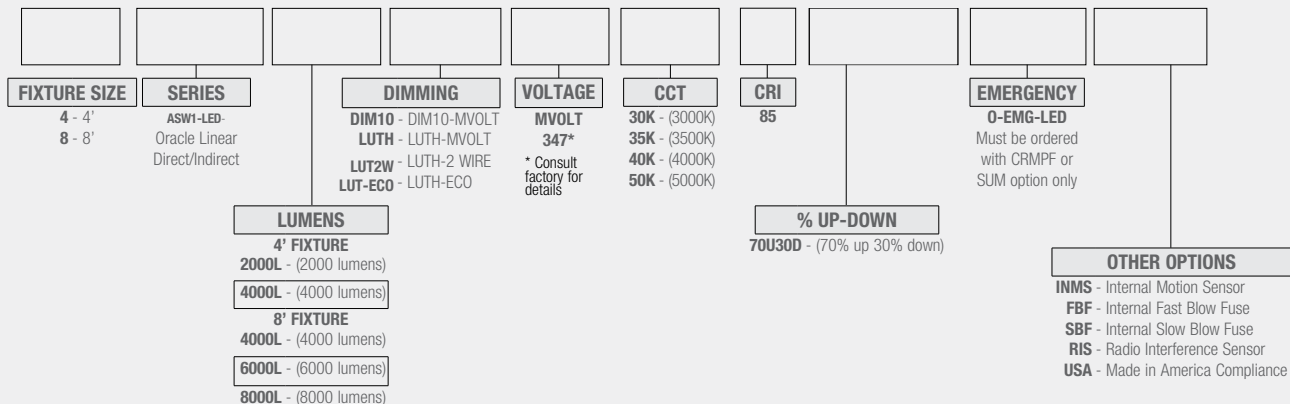
DIMMING - The ASW1-LED comes standard with 0-10V dimming on either 120 or 277V. Dimmable down to 1% of initial lumens. Also available in Lutron dimming options. Consult factory for dimmer compatibility.

OPTIONS - Fixtures can be shipped pre-installed with daylight harvesting controls, occupancy sensors, and/or power pack. Available manufacturer options include Leviton, Wattstopper, Hubble 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: 4-ASW1-LED-4000L-DIM10-MVOLT-30K-85-70U30D



FLEX SERIES

CONTROL OPTIONS

EASYFIT

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.

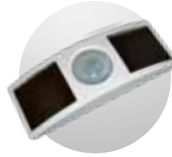


LEDRU
LED Relay Zone
Controller 0-10V



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/ EDRPU
Wall Switches



LEVITON
Wall Switches
902 MHz category



NWC 300U
Navigan Wireless
Commissioner

legrand®

WATTSTOPPER®

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

FLEX SERIES

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

FLEX SERIES

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

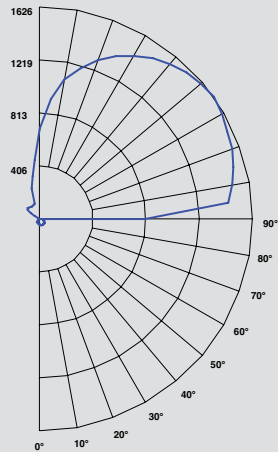
EFFICACY: 120 LM/W

4-ASW1-LED-4000L-DIM10-MVOLT

WATTAGE: 31.6

LUMENS: 3788

TOTAL LUMINAIRE EFFICACY: 120

Candle Power Distribution (Candelas)**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-30°	39.45	1.00	1.00
0-40°	64.61	1.70	1.70
0-60°	113.84	3.00	3.00
0-90°	215.16	5.70	5.70
0-180°	3787.94	100.00	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	448	497	644
55°	381	445	623
65°	296	382	613
75°	274	438	927
85°	375	2719	3867

Candela Tabulation

	0	45	90
0	49.857	49.857	49.857
5	50.460	51.080	51.320
15	48.000	49.750	50.960
25	43.570	46.100	48.570
35	37.330	40.300	44.550
45	29.430	32.680	42.330
55	20.300	23.740	33.250
65	11.620	15.020	24.080
75	6.600	10.540	22.300
85	3.040	22.040	31.340
90	2.530	927.100	797.290

Spacing Criteria

0-180	: N/A
90-270	: N/A
Diagonal	: N/A

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	97	97	97	97	83	83	83	83	59	59	59	36	36	36	15	15	15	6							
1	87	83	79	76	75	72	68	66	50	48	46	31	30	28	13	12	12	3							
2	79	72	66	61	68	62	58	54	44	41	38	27	25	24	11	10	10	3							
3	72	63	56	51	62	55	49	44	38	35	32	23	21	20	10	9	8	2							
4	66	56	48	43	56	48	42	37	34	30	27	21	19	17	9	8	7	2							
5	60	49	42	36	52	43	36	32	30	26	23	19	16	14	8	7	6	2							
6	55	44	36	31	47	38	32	27	27	23	20	17	14	12	7	6	5	1							
7	51	39	32	27	44	34	28	24	24	20	17	15	13	11	6	5	4	1							
8	47	36	28	23	40	31	25	21	22	18	15	14	11	9	6	5	4	1							
9	44	32	25	20	37	28	22	18	20	16	13	12	10	8	5	4	3	1							
10	40	29	23	18	35	25	20	16	18	14	12	11	9	7	5	4	3	1							

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

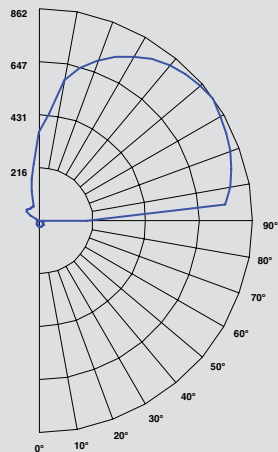
EFFICACY: 124 LM/W

4-ASW1-LED-2000L-DIM10-MVOLT

WATTAGE: 16.1

LUMENS: 1990

TOTAL LUMINAIRE EFFICACY: 124

Candle Power Distribution (Candelas)**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-30°	20.69	1.00	1.00
0-40°	33.91	1.70	1.70
0-60°	59.77	3.00	3.00
0-90°	109.29	5.50	5.50
0-180°	1990.33	100.10	100.00

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	233	260	343
55°	198	233	334
65°	154	200	331
75°	142	229	482
85°	194	1415	1989

Candela Tabulation

	0	45	90
0	26.07	26.07	26.07
5	26.29	26.62	26.70
15	25.03	25.94	26.60
25	22.71	24.05	25.45
35	19.47	21.04	23.44
45	15.35	17.07	22.56
55	10.57	12.42	17.81
65	6.05	7.87	13.02
75	3.42	5.50	11.60
85	1.57	11.47	16.12
90	1.30	492.10	192.57

Spacing Criteria

0-180	: N/A
90-270	: N/A
Diagonal	: N/A

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	97	97	97	97	83	83	83	83	59	59	59	36	36	36	15	15	15	5							
1	87	83	79	76	75	72	68	66	50	48	47	31	30	29	12	12	12	3							
2	79	72	66	62	68	62	58	54	44	41	38	27	25	24	11	10	10	3							
3	72	63	56	51	62	55	49	45	39	35	32	23	21	20	10	9	8	2							
4	66	56	48	43	56	48	42	37	34	30	27	21	19	17	8	7	6	2							
5	60	49	42	36	52	43	36	32	30	26	23	19	16	14	8	7	6	2							
6	55	44	37	31	47	38	32	27	27	23	20	17	14	12	7	6	5	1							
7	51	39	32	27	44	34	28	24	24	20	17	15	13	11	6	5	4	1							
8	47	36	28	23	40	31	25	21	22	18	15	14	11	9	6	5	4	1							
9	44	32	25	20	37	28	22	18	20	16	13	12	10	8	5	4	3	1							
10	40	29	23	18	35	25	20	16	18	14	12	11	9	7	5	4	3	1							

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance