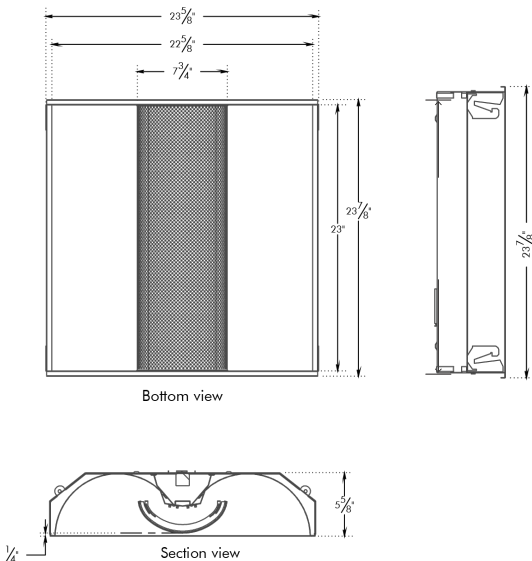
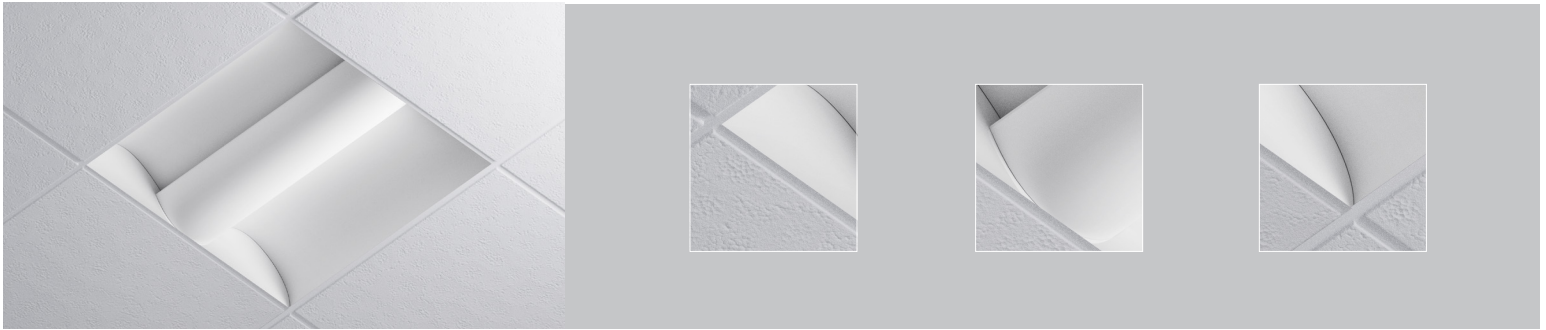


2' x 2' Architectural Recessed LED Direct/Indirect Luminaire



NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
4000	4042	60 W
3000	3059	44 W
2000	1963	28 W

Based on 4000K, 85+ CRI. Actual wattage may vary +/- 5%

FEATURES

The OD-LED blends the traditional look of an architectural volumetric troffer. Diffuser is composed of a two-part overlay system that includes a thin frosted acrylic sheet and a steel perforated shield. The system works together to gather the light scattered by the LED and delivers uniform voluminous light. The consistency of the volumetric effect results in optimized visual comfort, enhancing the quality of illumination. The combination of energy savings and optical performance creates the ideal choice for educational, medical, office and retail spaces.

LUMENS	2000, 3000, 4000
CCT & DYNAMIC PLATFORMS	27K, 30K, 35K, 40K, 50K, Tunable White, Dims to Warm, RGB + White
CRI	85+
COLOR QUALITY	3 Step MacAdam Ellipse
SIZE	2'x2', 2'x4', 1'x4'
MOUNTING	Recessed
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, DIMST, ELDO10.1, ELDODMX.1, DALI.1
EMERGENCY	10W - Up to 1000L output (Bodine BSL310) 20W - Up to 2000L output (Bodine BSL20)
LIFETIME	L70 at 50,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21



MAINTENANCE

The center acrylic diffuser can be removed, allowing easy access to LED boards and driver compartment, locking into place for secure closure of the luminaire. LED engines and drivers are removable and upgradable even after luminaire installation. Luminaire can be regularly and safely wiped down to ensure optimal performance.

OPTICAL SYSTEM

The LED light engine is secured to the body of the luminaire, with the body acting as a heat sink. A proprietary design of the lens results in zero pixilation, regardless of the viewing angle, with LEDs placed to promote a uniform appearance. The result is even illumination across the space, from luminaire to luminaire.

CONSTRUCTION

Body is constructed of heavy-duty 20-gauge cold rolled steel, post-painted and engineered for maximum strength and extended life. All corners interlock to prevent aesthetic damage to the luminaire, with sides and corners uniformly turned in and hemmed to remove sharp edges for safe handling and easy installation. Luminaire is supplied with multiple wiring entrances for easy daisy chain of luminaires, to add power packs, whips, or other accessories in the field, or for continuous row mounting.

FINISH

Post-painted with a 93% reflective white coat to improve luminaire efficacy, with all body components seamlessly interlocked for added structural strength.

MOUNTING

Luminaires accommodate lay-in ceilings, Slot T, and T-bar suspension systems for 5/8" and 3/8" ceiling thicknesses. Four corner tie points are standard for safety wire support when required, with built-in earthquake clips, standard. Luminaires may be available with flange kits, surface mounted kits, and other options.

OPTIONS

Luminaires can be shipped pre-installed with whips, modular wiring systems, daylight harvesting controls, occupancy sensors, and/or power packs for individual or room control applications.

DRIVER ELECTRICAL INFORMATION

Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120/277V input. Available in 347V., produce less than 20% THD, and have a power factor of .90 to 1.00.

DIMMING & DRIVER INFORMATION

DIM10 - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277 or 347V.

LUT2W - Lutron LTEA2W Hi-Lume 1%. 2-wire LED driver (120V forward phase only).

LUTH - Lutron LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology.

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.

DIMST - Step Dimming

WARRANTY

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

LED DYNAMIC PLATFORM OPTIONS



Tunable White with Smart White 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 Smart Dimming 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 Smart Hue 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.

Listed for DLC, California Title 24 compliant.

Example: **22-OD-LED-4000L-DIM10-MVOLT-30K-85**

22	OD	LED								
FIXTURE SIZE	SERIES	TYPE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	OTHER OPTIONS	
22 - 2' X2'	OD	LED	2000L - 2000 lumens 3000L - 3000 lumens 4000L - 4000 lumens	DIM10 - 0-10V Dimming DIMST - Step Dimming LUTH - Lutron HiLume LUT2W - Lutron 2Wire ELDO10.1 - EldoLED 0-10V DALI - EldoLED DALI ELDODMX - EldoLED DMX	MVOLT 347* 120 277	27K 30K 35K 40K 50K	85	0-EMG-LED-10W 0-EMG-LED-20W	22FK - 2'x2' Flange Kit FBF - Internal Fast Blow Fuse SBF - Internal Slow Blow Fuse RIS - Radio Interference Suppressor USA - Made in America Compliance FS-PPV2 - Fixture Sensor Power Pack FD-301 - Low Voltage Daylight Dimming Photosensor LMFC-011 - Digital Lighting Manager FS-205 - Low Voltage Pir Fixture Integrated Occupancy Sensor	

LUT2W are available in 120V only LUT2W up to 4000L

LUTH, ELDO10.1, ELDDALI-1, and ELDODMX-1 are available in 120V and 277V

-Reference last page for Control Options

*FD-301 & FS-205 require FS-PPV2- Power Pack

22-OD-LED-2000L-DIM10-MVOLT-40K-85

INPUT WATTS: **28.3**

LUMENS: **1963**

CRI: **85**

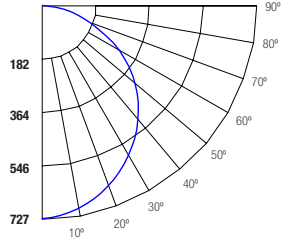
EFFICACY: **69**

CCT: **4000K**

TEST NO.: **EL-101521**

SPACING CRITERIA: **1.36**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	263.35	N.A.	13.40
0-30	555.29	N.A.	28.30
0-40	903.06	N.A.	46.00
0-60	1573.49	N.A.	80.20
0-80	1929.27	N.A.	98.30
0-90	1962.87	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	1479	1769	2056
55	1240	1676	2074
65	936	1510	1978
75	652	1170	1891
85	336	590	1097

Lumens Per Zone

Zone	Lumens
0-10	68.52
10-20	194.82
20-30	291.94
30-40	347.77
40-50	355.68
50-60	314.75
60-70	229.36
70-80	126.42
80-90	33.59

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
0	725.991	719.120	675.370	602.170	507.380	388.970	264.570	147.210	62.780
10	10.880	3.110							

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

Cone of Light

	2	4	6	8	10	12
(F.T.) Distance to Plane	181	45.4	20.2	11.3	7.26	5.04
(F.C.) Initial Footcandle at Nadir	4.6	9.3	13.9	18.5	23.1	27.8
(F.T.) Beam Vert. Spread	6.7	13.4	20.1	26.8	33.5	40.2
(F.T.) Beam Horiz. Spread						

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

ROOM CAVITY RATIO	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%			
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100			
1	109	104	100	96	106	102	98	95	92	98	95	92	94	91	89	90	88	86	84	84	84	84	84			
2	99	91	84	79	97	89	83	78	76	86	80	76	82	78	74	79	76	72	70	70	70	70	70			
3	90	80	72	66	88	78	71	65	64	75	69	64	73	67	63	70	66	62	59	59	59	59	59			
4	83	71	62	56	81	70	62	55	54	65	60	54	65	59	54	63	57	53	51	51	51	51	51			
5	76	63	55	48	74	62	54	48	47	58	52	47	58	52	47	56	51	46	44	44	44	44	44			
6	70	57	48	42	69	56	48	42	41	53	46	41	53	46	41	51	45	41	39	39	39	39	39			
7	65	52	43	37	64	51	43	37	36	48	41	36	47	41	36	47	41	36	34	34	34	34	34			
8	61	47	39	33	59	47	39	33	32	45	38	33	44	37	33	43	37	32	30	30	30	30	30			
9	57	44	35	30	55	43	35	30	29	42	35	30	41	34	29	40	34	29	27	27	27	27	27			
10	53	40	32	27	52	40	32	27	26	39	32	27	38	31	27	37	31	27	25	25	25	25	25			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

22-OD-LED-3000L-DIM10-MVOLT-40K-85

INPUT WATTS: **44.4**

LUMENS: **3059**

CRI: **85**

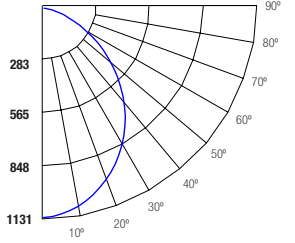
EFFICACY: **69**

CCT: **4000K**

TEST NO.: **EL-101518**

SPACING CRITERIA: **1.36**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	409.56	N.A.	13.40
0-30	863.55	N.A.	28.20
0-40	1406.02	N.A.	46.00
0-60	2452.73	N.A.	80.20
0-80	3007.4	N.A.	98.30
0-90	3059.45	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	2256	2624	3037
55	1886	2444	3034
65	1391	2194	2887
75	947	1635	2727
85	623	971	1980

Lumens Per Zone

Zone	Lumens
0-10	106.55
10-20	303.01
20-30	453.99
30-40	542.46
40-50	555.60
50-60	491.11
60-70	358.70
70-80	195.96
80-90	52.05

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
0	1128.785	1114.000	1040.680	924.380	773.390	593.390	402.380	218.670	91.180
10	20.200	4.500							

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

Cone of Light

	2	4	6	8	10	12
(F.T.) Distance to Plane	280	70.5	31.4	17.6	11.3	7.84
(F.C.) Initial Footcandle at Nadir	4.5	9.1	13.6	18.2	22.7	27.3
(F.T.) Beam Vert. Spread	6.7	13.4	20	26.7	33.4	40.1
(F.T.) Beam Horiz. Spread						

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

ROOM CAVITY RATIO	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%			
0	119	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100			
1	109	104	100	96	106	102	98	95	92	98	95	92	94	91	89	90	88	86	84	84	84	84	84			
2	99	91	84	79	97	89	83	78	76	86	80	76	82	78	74	79	76	72	70	70	70	70	70			
3	90	80	72	66	88	78	71	65	64	75	69	64	73	67	63	70	66	62	59	59	59	59	59			
4	83	71	62	56	81	70	62	55	54	65	60	54	65	59	54	63	57	53	51	51	51	51	51			
5	76	63	55	48	74	62	54	48	47	58	52	47	58	52	47	56	51	46	44	44	44	44	44			
6	70	57	48	42	69	56	48	42	41	53	46	41	53	46	41	51	45	41	39	39	39	39	39			
7	65	52	43	37	64	51	43	37	36	48	41	36	47	41	36	47	41	36	34	34	34	34	34			
8	61	47	39	33	59	47	39	33	32	45	38	33	44	37	33	43	37	32	30	30	30	30	30			
9	57	43	35	30	55	43	35	30	29	42	35	30	41	34	29	40	34	29	27	27	27	27	27			
10	53	40	32	27	52	40	32	27	26	39	32	27	38	31	27	37	31	27	25	25	25	25	25			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

22-OD-LED-4000L-DIM10-MVOLT-40K-85

INPUT WATTS: **60.4**

LUMENS: **4042**

CRI: **85**

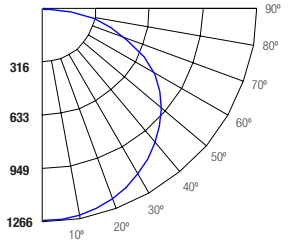
EFFICACY: **67**

CCT: **4000K**

TEST NO.: **EL071769**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	464.10	11.50	11.50
0-30	989.99	24.50	24.50
0-40	1634.66	40.50	40.40
0-60	2980.08	73.80	73.70
0-80	3858.45	95.60	95.50
0-90	3995.83	99.00	98.90

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	3768	3369	3005
55	4019	3401	2773
65	4268	3467	2413
75	4390	3431	1972
85	5160	3774	1948

Lumens Per Zone

Zone	Lumens
0-10	119.84
10-20	344.26
20-30	525.89
30-40	644.67
40-50	690.13
50-60	655.30
60-70	534.70
70-80	343.68
80-90	137.37

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
0	1265.957	1263.580	1235.330	1178.620	1096.710	991.150	857.500	670.950	422.630
10	167.280	39.660							

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

Cone of Light

	2	4	6	8	10	12
(F.T.) Distance to Plane	316	79.1	35.2	19.8	12.7	8.79
(F.C.) Initial Footcandle at Nadir	9.3					

- 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 <small>by EnOcean</small>	LUTRON	enlighted	LEVITON®	OSRAM	PHILIPS <small>EasySense</small>	legrand®
CONTROL UNIT	<input type="checkbox"/> LEDRU LED Relay Zone Controller 0-10V ¹	<input type="checkbox"/> FCJS-0-10 Lutron Vive 0-10V Individual Control Models ^{1,4}	<input type="checkbox"/> CU-4E-FMH Fixture Mount Control Unit ^{1,5}	<input type="checkbox"/> ZL027 –NOW Intellect Power Control Module ^{1,6}	<input type="checkbox"/> EN-WCM2-ZB-DR Wireless Control Module ^{1,7}	<input type="checkbox"/> XITANIUM SR LED DRIVER The Philips Advance Xitanium SR LED driver ^{1,8}	<input type="checkbox"/> LMFC-011 ON/OFF/0-10V dimming fixture controller ^{1,9}
	<input type="checkbox"/> LEDDU LED Zone Controller 0-10V ¹	<input type="checkbox"/> FCJS-ECO Lutron Vive Eco-system Individual Control Models ^{1,4}		<input type="checkbox"/> ZL027 –DLE Intellect Power Control Module ^{1,6}	<input type="checkbox"/> EN- ALC-ZB-BK-DR Wireless Area Lighting Control Module ^{1,7}		<input type="checkbox"/> FS-PP-V2 FS-PP Fixture Integrated Sensor Power Pack ^{1,9}
INTEGRAT OCCUPANCY& DAYLIGHT SENSOR	N/A	<input type="checkbox"/> DFCSJ-OEM-OCC Clear Connect (RF) and Occupancy/ Daylight Sensing ²	<input type="checkbox"/> SU-5E-IoT IoT Node Micro Sensor <input type="checkbox"/> SU-5E-CL Connected Micro Sensor <input type="checkbox"/> SU-5E-IL Independent Micro Sensor <input type="checkbox"/> SU-5S-H(IoT/CL/IL) Surface Mount Sensor (Must be Specified with CU-4E-FMH Control Unit) ²	<input type="checkbox"/> ZL00J -TOW Intellect Intelligent Fixture Control System ²	<input type="checkbox"/> EN-CLM-PIR-DD-ZB SensiLUM™ Wireless Integrated Sensor	<input type="checkbox"/> SNS200 SNS200 for grouping ²	<input type="checkbox"/> FD-301 Fixture integrated Daylight Dimming Sensor ²
				<input type="checkbox"/> ZL00J-DOW Intellect Intelligent Fixture Control System ²	<input type="checkbox"/> ZBHA-CLM-DIM-ENC Connected Lighting Module DIM ²	<input type="checkbox"/> SNS300 SNS300 for networks ²	<input type="checkbox"/> FS-205 Fixture integrated passive infrared occupancy sensor ²
*WIRELESS OCCUPANCY SENSOR	<input type="checkbox"/> EO SCU-W-EO Occupancy Sensor - Ceiling Mounted ³	<input type="checkbox"/> LRF2-OCR2B-P-WH Ceiling mount 360° ,occupancy/vacancy sensor ³	N/A	N/A	<input type="checkbox"/> EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors ³	N/A	<input type="checkbox"/> LMDC-100 Dual technology PIR Ceiling Mount Occupancy Sensor ³
*WIRELESS DAYLIGHT SENSOR	<input type="checkbox"/> ELLSU-W-EO Light Level Sensor - Ceiling Mounted ³	<input type="checkbox"/> LRF2-DCRB-WH Ceiling-mount daylight sensor ³	N/A	N/A	<input type="checkbox"/> EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors ³	N/A	<input type="checkbox"/> LMLS-400 Single zone switching and dimming digital photosensor ³
*WIRELESS OCCUPANCY & DAYLIGHT SENSOR	N/A	N/A	<input type="checkbox"/> SU-5E-IoT IoT Node Micro Sensor <input type="checkbox"/> SU-5E-CL Connected Micro Sensor <input type="checkbox"/> SU-5E-IL Independent Micro Sensor <input type="checkbox"/> SU-5S-H(IoT/CL/IL) Surface Mount Sensor (Must be specified with CU-4E-FMH Control Unit) ³	<input type="checkbox"/> ZL00J -TOW Intellect Intelligent Fixture Control System <input type="checkbox"/> ZL00J-DOW Intellect Intelligent Fixture Control System (Must be specified with ZL027-NOW and ZL00J-DOW Control unit) ³	<input type="checkbox"/> EN-CLM-PIR-DD-ZB SensiLUM™ Wireless Integrated Sensor <input type="checkbox"/> ZBHA-CLM-DIM-ENC Connected Lighting Module DIM (Must be specified with EN-WCM2-ZB-DR or EN- ALC-ZB-BK-DR Control Unit) ³	<input type="checkbox"/> SNS200-CMP SNS-200 for Grouping ³	N/A
ACCESSORIES	N/A	N/A	<input type="checkbox"/> TMC-SU-5E Tile Mount Carrier <input type="checkbox"/> CBL-5E-CU4-30N 30 inch Sensor cable for CU-4 and IoT Ready <input type="checkbox"/> CBL-5E-CU4-7F 7 Foot sensor cable for CU-4 and IoT Ready Driver	N/A	N/A	N/A	N/A
NOTES	N/A	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 order through Lutron	5- Luminaire will be compatible with ENLIGHTED SU-5E-IoT, SU-5E-CL, 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 compatible with philips field and wireless switch	9- Luminaire will be compatible with DLM Room control system LMPB-100. . Sensors must be order through Legrand.