

Smart Sense HBT Series

Fluorescent High Bay, Enclosed Body & Smart Sense

FEATURES & SPECIFICATIONS

INTENDED USE

The Smart Sense HBT high bay series incorporates an integral Sensor Switch Occupancy Sensor in the reflector and protected by an optional wire guard. Ideal for gymnasiums and other applications that require the protection of a wire guard and the energy savings of an occupancy sensor. Post painted for superior appearance and appeal, the SSHBT is a full body high bay with high efficiency reflector to provide excellent light output. These fixtures are ideal for high ceiling applications. A backdoor for accessing the ballast is ideal for applications with wire guard and door frame.

SIZE W x L x H in inches (mm)

4 lamp: 13.38W x 48.5L(T8) or 47L(T5) x 4.25H

6 lamp: 18.50W x 48.5L(T8) or 47L(T5) x 4.25H

LAMP

4 or 6 T8, T5HO, or T5.5 lamp positions

MOUNTING

4 Point chain mount (Chain kit included)

MATERIALS & FEATURES

Baked white enamel code gage steel

Premium full specular mirrored reflector

Multiple KOs and access plate

Access to ballast from above so no need to removed lamps or reflector.



Integral Sensor
Switch Occupancy
Sensor



DFA

Shown with
Door frame

LISTING

Fixture & Ballast: UL/CUL Listed

Ballast: Thermally protected, class P, HPF,

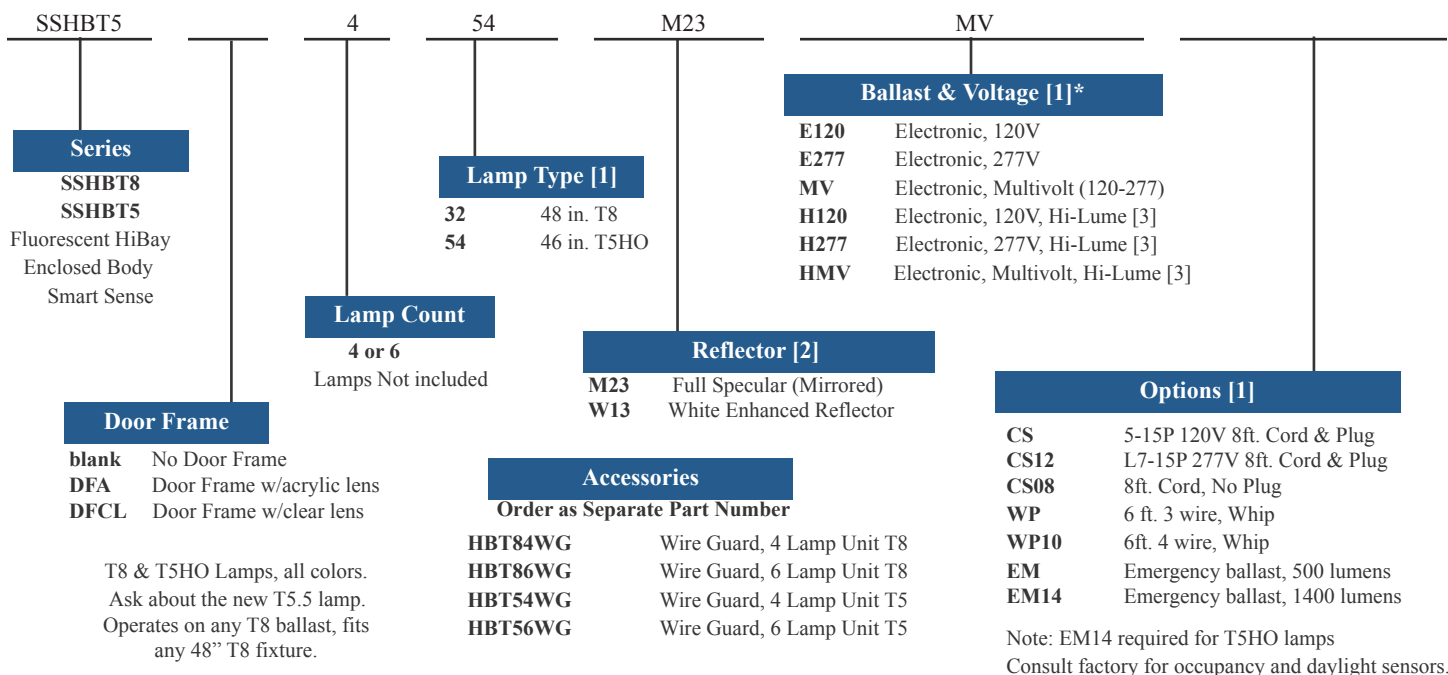
Non PCB

TYPICAL OPTIONS AND ACCESSORIES

Emergency ballasts, Cord sets, whips, occupancy sensors Hanging kits, Wire guards. Contact factory for additional options.

ORDERING INFORMATION

Example: SSHBT5454M23MV



Notes

[1] See end of T02HiBay for many additional lamps, ballasts, finishes and options.

[2] Custom reflectors available to create any light distribution.

[3] HiLume and LoLume ballasts available for T8 lamps only.

* See Brand ballast options on page 62 of Buyers Guide. (i.e. VW is Advance IOPA ballast)

Texas Fluorescents

2055 Luna Rd. Suite 142 Carrollton, TX 75006

Phone: 972-247-3171 Fax: 972-247-0200

www.texasfluorescents.com email: sales@texasfluorescents.com

Catalog Number:

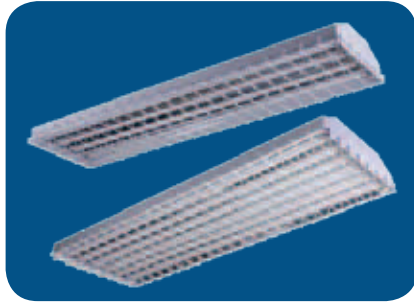
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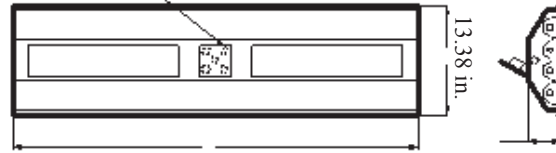
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DIMENSIONS

All dimensions are inches. Specifications subject to change without notice.

Center access plate KO in
back & ends



Ballast access from
back of fixture.

PHOTOMETRIC REFERENCES - T8

DESCRIPTION INFORMATION

IESNA:LM-63-2002
 [TEST] LLI 0107-03C
 [TESTLAB] LIGHT LABORATORY INC
 [ISSUEDATE] 1/9/2007
 [MANUFAC] Texas Fluorescents
 [LUMCAT] HBT8632M23MVLN841/WG
 [LUMINAIRE] 49"L. X 18-1/2"W. X 4-1/2"H. LUMINAIRE
 [MORE] SPECULAR REFLECTOR
 [MORE] WHITE WIRE GUARD
 [BALLASTCAT] SUNPARK APF120-3/32HO
 [BALLAST] 120V 60Hz ELECTRONIC
 [LAMPPOSITION] 0,90
 [LAMPCAT] GE F32T8/SPX841/ECO
 [LAMPLUM] 2950
 [INPUT] 120VAC, 194.5W

CHARACTERISTICS

Total Rated Lamp Lumens	17700 (6 lamps)
Total Luminaire Efficiency	85.4 %
CIE Type	Direct
Spacing Criteria (0-180)	1.36
Spacing Criteria (90-270)	1.12
Spacing Criteria (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	1.45 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10441	8393	7064
55	9885	7357	7635
65	8941	8024	9305
75	7286	9191	8797
85	4935	6531	6744

CANDELA TABULATION

	0	22.5	45	67.5	90
0	5453	5453	5453	5453	5453
5	5909	5809	5541	5277	5179
15	5758	5674	5354	4988	4862
25	5336	5216	4826	4551	4384
35	4727	4507	4090	3695	3550
45	3982	3725	3201	2774	2694
55	3058	2740	2276	2319	2362
65	2038	1722	1829	2054	2121
75	1017	991	1283	1239	1228
85	232	279	307	310	317
90	33	54	69	83	92

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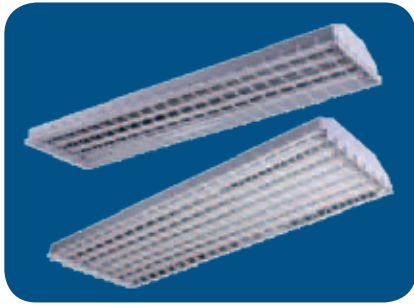
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PHOTOMETRIC REFERENCES - T8 (cont'd)

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3074.94	17.4	20.3
0-40	5531.24	31.2	36.6
0-60	10545.29	59.6	69.8
0-90	15113.57	85.4	100
90-120	0	0	0
90-130	0	0	0
90-150	0	0	0
90-180	0	0	0
0-180	15113.57	85.4	100

Total Luminaire Efficiency = 85.4%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	131.45
10-20	1034.06
20-30	1909.43
30-40	2456.3
40-50	2593.23
50-60	2420.82
60-70	2102.05
70-80	1584.94
80-90	881.29
90-100	0
100-110	0
110-120	0
120-130	0
130-140	0
140-150	0
150-160	0
160-170	0
170-180	0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
0	102	102	102	102	99	99	99	99	95	95	95	91	91	91	87	87	87	85
1	91	86	81	77	88	84	80	76	80	77	73	77	74	71	73	71	69	67
2	81	73	66	61	79	72	65	60	68	63	59	66	61	57	63	59	56	54
3	74	63	56	49	71	62	55	49	59	53	48	57	51	47	55	50	46	44
4	67	56	47	41	65	54	47	41	52	45	40	50	44	39	48	43	39	37
5	61	49	41	34	59	48	40	34	46	39	34	44	38	33	43	37	33	31
6	56	44	36	30	54	43	35	29	41	34	29	40	34	29	38	33	29	27
7	52	39	31	26	50	39	31	26	37	30	25	36	30	25	35	29	25	23
8	48	36	28	23	47	35	28	22	34	27	22	33	27	22	32	26	22	20
9	45	32	25	20	43	32	25	20	31	24	20	30	24	20	29	24	20	18
10	42	30	23	18	41	29	22	18	28	22	18	28	22	18	27	21	17	16

Catalog Number:
Notes:

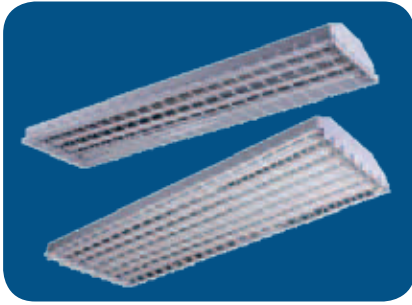
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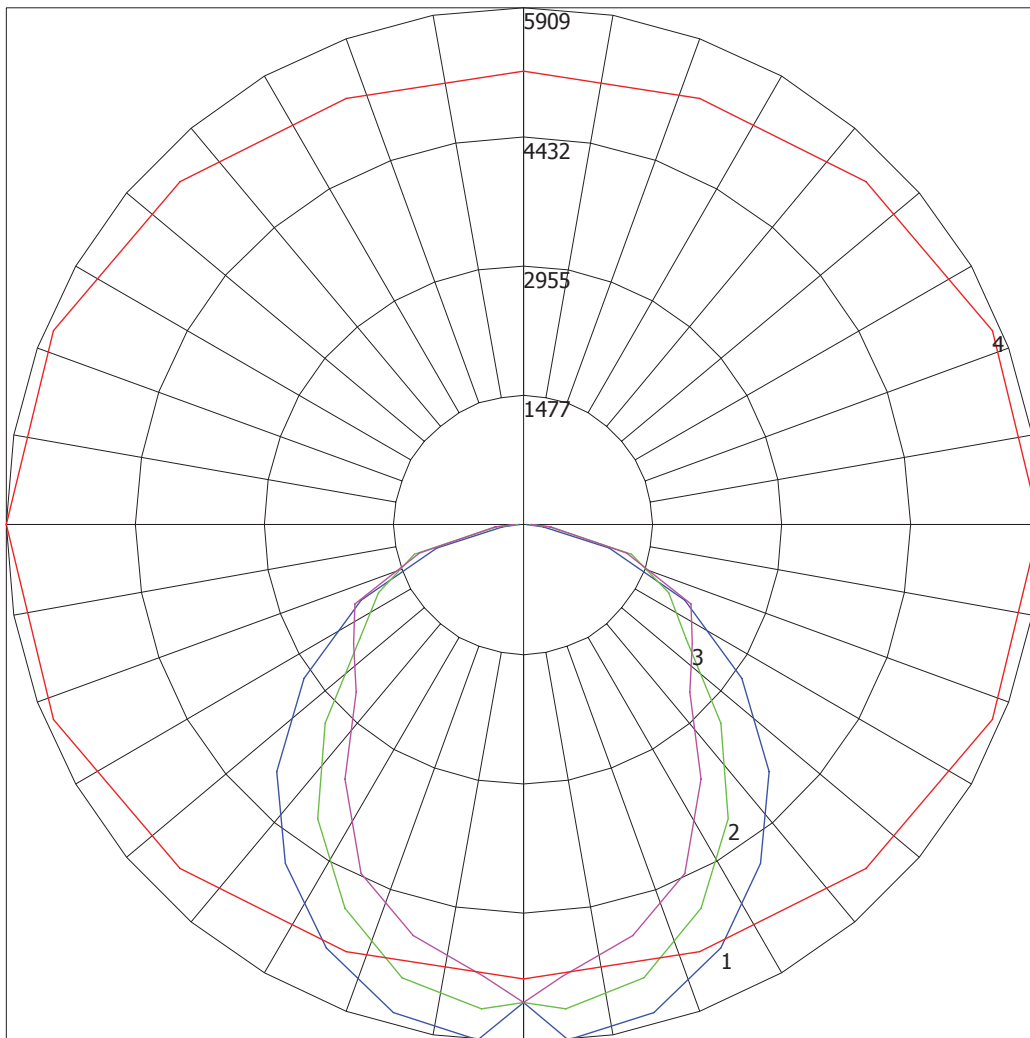
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PHOTOMETRIC REFERENCES - T8 (cont'd)

POLAR GRAPH



- Maximum Candela = 5909 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.) : BLUE
2 - Vertical Plane Through Horizontal Angles (45 - 225) : GREEN
3 - Vertical Plane Through Horizontal Angles (90 - 270) : MAGENTA
4 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.) : RED

Catalog Number:

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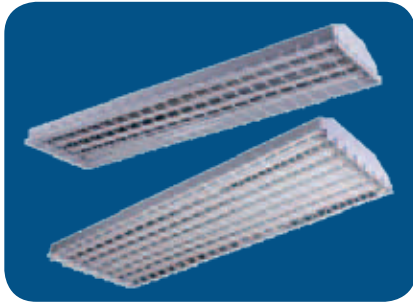
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PHOTOMETRIC REFERENCES - T5

DESCRIPTION INFORMATION

IESNA:LM-63-2002
 [TEST] LLI 0107-03A
 [TESTLAB] LIGHT LABORATORY INC
 [ISSUEDATE] 1/9/2007
 [MANUFAC] Texas Fluorescents.
 [LUMCAT] HBT5654M23MVLN835/WG
 [LUMINAIRE] 47"L. X 18-1/2"W. X 4-1/2"H. LUMINAIRE
 [MORE] SPECULAR REFLECTOR
 [MORE] WHITE WIRE GUARD
 [BALLASTCAT] SUNPARK T5120-254HO
 [BALLAST] 120V 60Hz ELECTRONIC
 [LAMPPPOSITION] 0,90
 [LAMPCAT] PHILIPS F54T5/835/HO
 [_LAMPLUM] 5000
 [_INPUT] 120VAC, 302.3W

CANDELA TABULATION

	<u>0</u>	<u>22.5</u>	<u>45</u>	<u>67.5</u>	<u>90</u>
0	10863	10863	10863	10863	10863
5	11754	11469	10871	10315	10105
15	11439	10936	9912	8994	8621
25	10580	9691	8207	7254	6953
35	9311	7962	6451	5452	5036
45	7768	6043	4538	3976	3837
55	5809	4195	3204	3375	3457
65	3675	2400	2626	3044	3225
75	1711	1408	2035	2288	2550
85	365	511	612	669	691
90	62	76	89	113	106

CHARACTERISTICS

Total Rated Lamp Lumens	30000 (6 lamps)
Total Luminaire Efficiency	83.5 %
CIE Type	Direct
Spacing Criteria (0-180)	1.34
Spacing Criteria (90-270)	0.90
Spacing Criteria (Diagonal)	1.14
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.84 ft
Luminous Width (90-270)	1.45 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	21217	12395	10480
55	19560	10789	11641
65	16795	12001	14738
75	12768	15186	19029
85	8088	13562	15312

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	5699.3	19	22.8
0-40	9871.93	32.9	39.4
0-60	17793.95	59.3	71.1
0-90	25036.16	83.5	100
90-120	0	0	0
90-130	0	0	0
90-150	0	0	0
90-180	0	0	0
0-180	25036.16	83.5	100

Total Luminaire Efficiency = 83.5%

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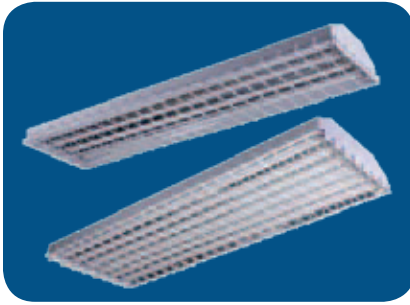
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PHOTOMETRIC REFERENCES - T5 (cont'd)

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	260.12
10-20	1984.02
20-30	3455.16
30-40	4172.63
40-50	4171.03
50-60	3750.99
60-70	3192.53
70-80	2493.38
80-90	1556.3
90-100	0
100-110	0
110-120	0
120-130	0
130-140	0
140-150	0
150-160	0
160-170	0
170-180	0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

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	
0	99	99	99	99	97	97	97	97	93	93	93	89	89	89	85	85	85	83
1	89	84	80	76	86	82	78	74	78	75	72	75	72	70	72	70	68	66
2	80	72	66	60	78	70	64	59	67	62	58	65	60	57	62	58	55	53
3	72	63	55	49	70	61	54	49	59	53	48	56	51	47	54	50	46	44
4	66	55	47	41	64	54	47	41	52	45	40	50	44	40	48	43	39	37
5	61	49	41	35	59	48	40	35	46	39	34	44	39	34	43	38	34	32
6	56	44	36	30	54	43	36	30	41	35	30	40	34	29	39	33	29	27
7	51	40	32	26	50	39	31	26	38	31	26	36	30	26	35	30	26	24
8	48	36	28	23	46	35	28	23	34	28	23	33	27	23	32	27	23	21
9	45	33	26	21	43	32	25	21	31	25	21	30	25	20	29	24	20	19
10	42	30	23	19	41	30	23	19	29	23	18	28	22	18	27	22	18	17

Catalog Number:
Notes:

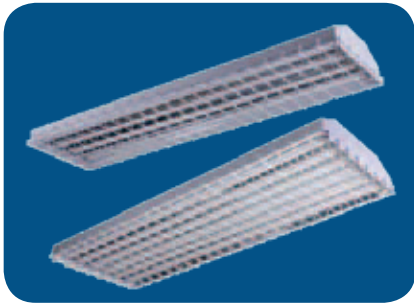
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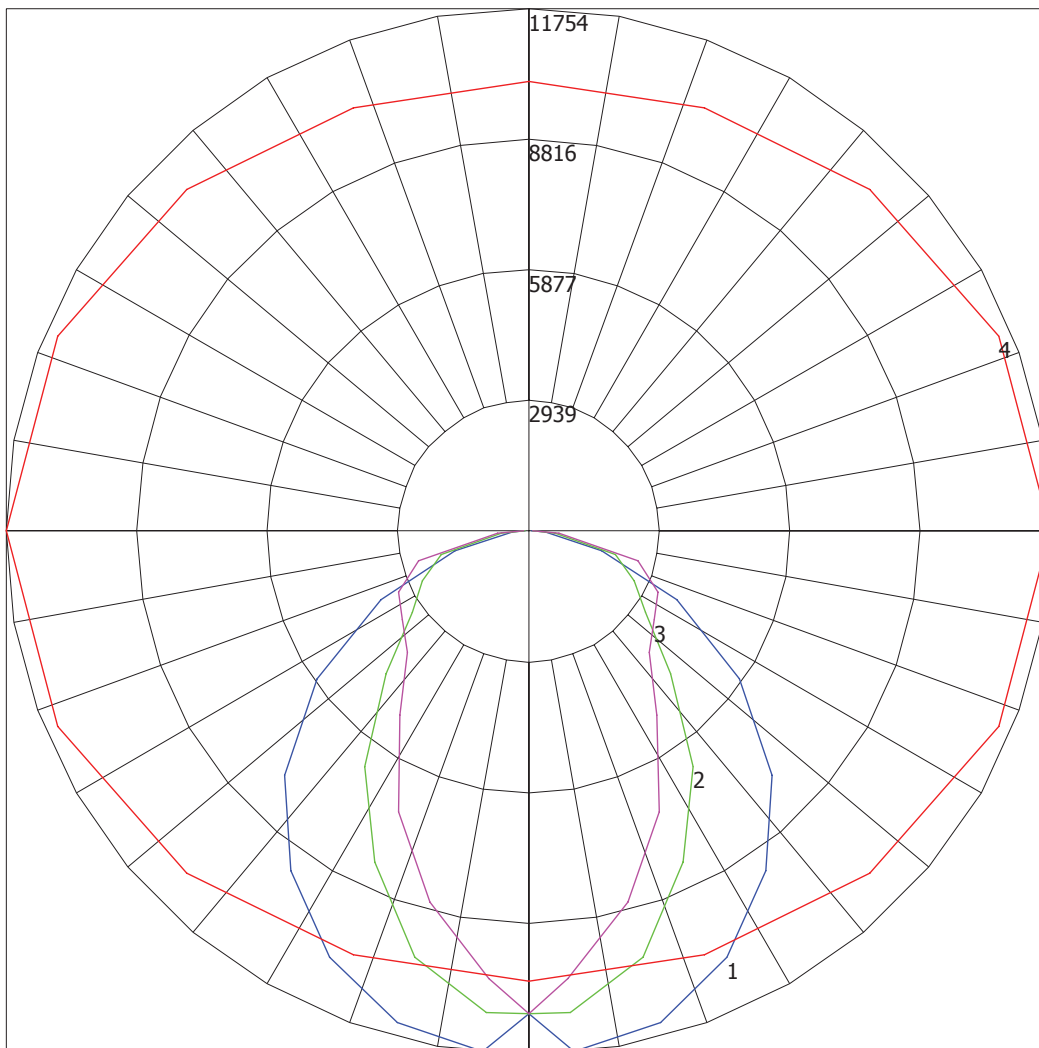
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PHOTOMETRIC REFERENCES - T5 (cont'd)

POLAR GRAPH



Maximum Candela = 11754 Located At Horizontal Angle = 0, Vertical Angle = 5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.) : BLUE

2 - Vertical Plane Through Horizontal Angles (45 - 225) : GREEN

3 - Vertical Plane Through Horizontal Angles (90 - 270) : MAGENTA

4 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.) : RED

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KEY SPECS

Lens High Bay 360°
Enclosure Snap Fit
Power Type Line Voltage
Detection Passive Infrared (PIR)

TYPICAL APPLICATIONS

High Bay Warehouse
Individual Fixture Control
T-5 or T-8 Fluorescent

FEATURES

25-45 ft (7.62 - 13.72 m) Mounting
30 sec. to 20 min Time Delay
Self-contained Relay,
no Power Pack required
No Minimum Load
Push-Button Programmable
100 hr. Lamp Burn-in Timer
Green LED Indicator

PHYSICAL SPECS

SIZE 2.25" H x 1.38" W x 0.82" D
(5.715 cm x 3.51 cm x 2.08 cm)
WEIGHT 4 oz.
MOUNTING Snaps into 2 3/16" H x
1 5/16" W x 1" D cavity in fixture
COLOR White

ELECTRICAL SPECS

Load Rating (1 Phase Only)
800 W @ 120 VAC
1200 W @ 277 VAC
1500 W @ 347 VAC
Motor Load 1/4 HP
Frequency 50/60 Hz
Timers are 1.2x for 50 Hz

ENVIRONMENTAL SPECS

Operating Temp
14° to 160° F (-10° to 71° C)
Storage Temp
-14° to 160° F (-26° to 71° C)
Relative Humidity
20 to 90% non-condensing

OTHER

UL and CUL Listed
5 Year Warranty
Made in the U.S.A.

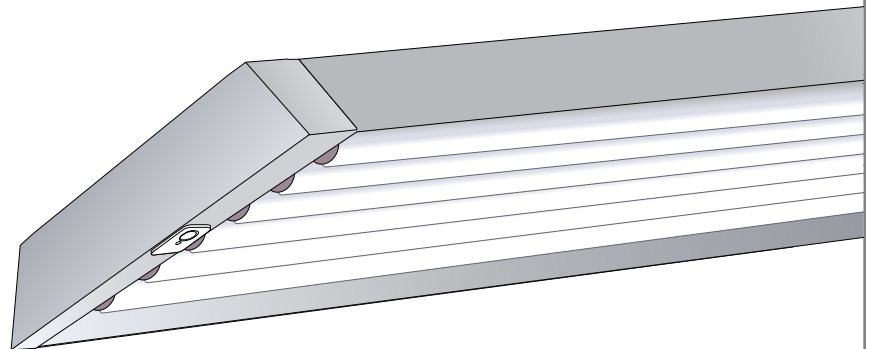
SFR-5



The Snap-Fit High Bay sensor is a compact line voltage sensor that snaps directly into a small cavity in a fixture. The sensor utilizes Passive Infrared (PIR) detection to detect motion from occupants within its 360° coverage pattern that overlaps that of most HID, T-5, or T-8 fixtures used in warehouse applications.

SENSOR OPERATIONS

The sensor detects changes in the infrared energy given off by occupants as they move within the field-of-view. When occupancy is detected, a self-contained relay switches the lighting on. The sensor is line powered and can switch a large range of line voltages. An internal timer, factory set at 10 minutes, keeps the lights on during brief periods of no activity. This timer is push-button programmable from 30 seconds to 20 minutes, and is reset every time occupancy is re-detected. This state-of-the-art design requires no manual sensitivity adjustments.



OPTIONS

VOLTAGE: 347 VAC (-3)

- Allows sensor to be powered by and switch 347 VAC

LOW TEMP/HIGH HUMIDITY (-LT)

- Sensor is corrosion resistant to moisture
- Operates down to -40° F/C

ORDERING BLOCK

SFR-5-[VOLTAGE]-[TEMP/HUMIDITY]		
OPTIONS	VOLTAGE	TEMP/HUMIDITY
	Blank = 120-277 VAC -3 = 347 VAC	Blank = 14° to 160° F -LT = -40° to 160° F

PRELIMINARY

T173-001

revised 10/17/2008
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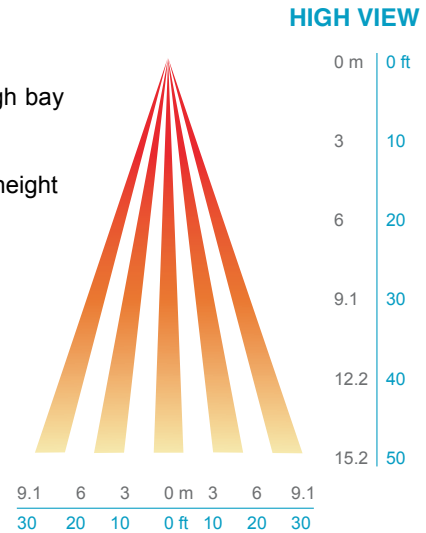
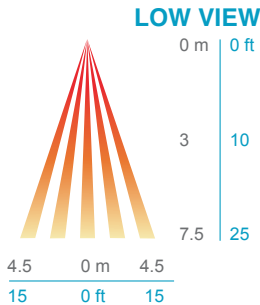
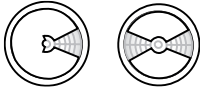
COVERAGE PATTERN

5 MINI HIGH BAY 360° LENS

- Best choice for 25 to 45 ft (7.62 to 13.72 m) mounting heights
- 15 to 25 ft (4.57 to 7.62 m) radial coverage overlaps area lit by a typical high bay fixture
- Large Motion (e.g. walking) detection up to a 35 ft (10.67 m) mounting height
- Extra Large Motion (e.g. forklifts) detection up to a 45 ft (13.72 m) mounting height

MASKING KIT

- A masking kit is provided in order to mask off a portion of the view pattern for end-of-aisle applications; or to trim the sensor's side viewing to create a rectangular pattern for center-of-aisle viewing only.



WIRING

STANDARD WIRING

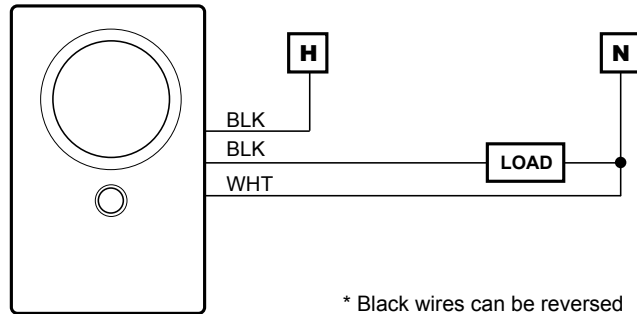
- BLACK* - Line Input
- BLACK* - Load Output
- WHITE - Neutral

347 VAC OPTION

Black wires are replaced w/ Red wires

INITIAL POWER UP (3 MINUTE WARM-UP)

The relay in the sensor is shipped in a latched closed position so that when power is initially applied the lights will come on. The sensor will then begin to time out after a 1-3 minute warm-up period. If the lights do not immediately turn on (initial installation only) the latching relay opened during shipment and will close after warm-up period is over.



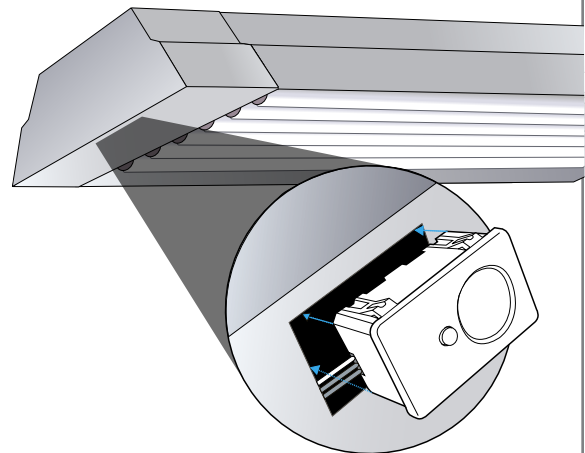
INSTALLATION

MOUNTING

The Snap Fit enclosure is designed to fit snugly inside a 2 3/16" H x 1 5/16" W x 1" D cavity in a high bay lighting fixture

PROGRAMMING

Refer to included instruction card for default settings and directions on programming the sensor time delay via the push-button.



sensorswitch

WARRANTY: Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, Inc., upon prompt notice of such defect will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

LIMITATIONS AND EXCLUSIONS: This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.