

7/16/2013

4' Fluorescent Strip

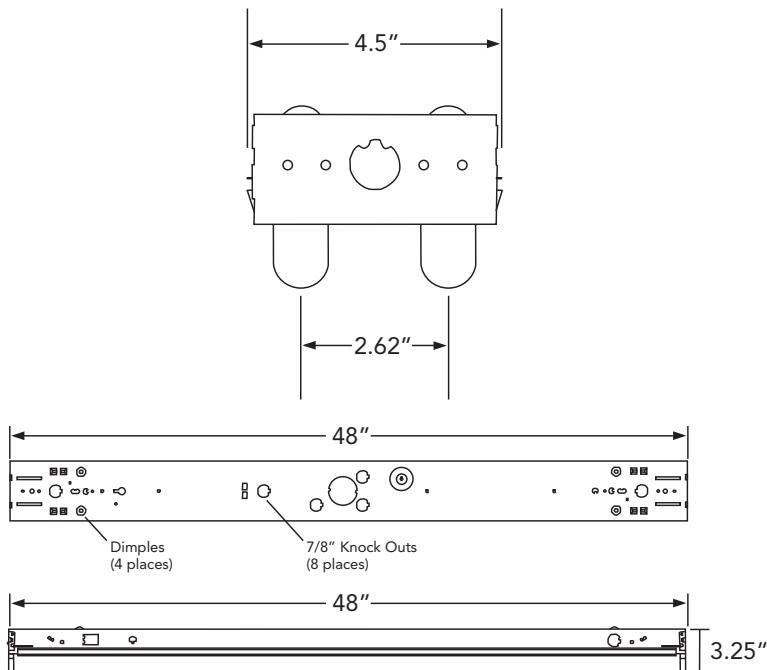
One or Two Lamps



Applications

- | | |
|---------------|---------------|
| Area Lighting | Task Lighting |
| Display Cases | Storage Areas |
| Shop/Sheds | Utility Areas |

Dimensions



Specifications subject to change without notice.

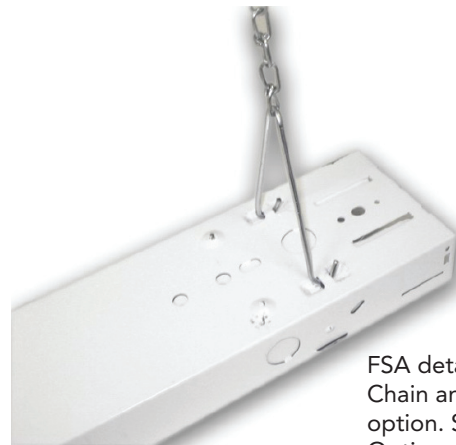
Project:	
Catalog#:	
Approved by:	

Description

FSA4 series fluorescent strip fixture exemplifies durability, versatility, functionality, and practicality. This fixture operates two lamps and as a standard feature comes with a Howard ballast.

Features

- Construction
 - Die-formed code-gauge steel
 - High gloss, baked enamel finish
 - High quality lamp holders
 - NEC compliant luminaire power disconnect standard
- Installation
 - Shipped fully wired with Howard ballast
 - Tool free, snap together assembly
 - Easy access to wiring compartment and ballast via removable raceway panel
 - Numerous knockouts on side, back, and ends
 - Flexible mounting options: surface mount, pendant mount, and chain hanging
- Ballast
 - Electronic, Inherent Thermal Protection, Class P, Sound rated A
 - UL Listed
- Fixture Listing
 - UL Listed
- Quality Assurance
 - System Tested, Designed, Approved, and Manufactured in Mendenhall, Mississippi.



FSA detail with Hanging Chain and V-clip mounting option. See Field Installed Options table for details.

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4' Fluorescent Strip

One or Two Lamps

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Ordering Information

Model Family	Reflector/Lens	No. of Lamps	Lamp Type/Wattage ⁽¹⁾	Ballast	Input Volts	Factory Installed Options	Cordset Options	T B A	Pack.
FSA4	0	2	32	SE	MV	000	00	0	I
FSA4	0: Reflective White Front (86%)	1 2	32A: F32T8 ⁽²⁾	SE: SBF High Eff ⁽³⁾ HE: HBF High Eff ⁽³⁾ LE: LBF High Eff ⁽³⁾	MV: 120-277v	000: No FIOs	00: Standard Disconnect 01: 6', no plug 02: 10', no plug 03: 6', twist lock 120v 04: 10' twist lock 120v 05: 6' non twist lock 120v 06: 10' non twist lock 120v 07: 6' twist lock 277v 08: 10' twist lock 277v 09: 6' non twist lock 277v 10: 10' non twist lock 277v 11: 16/3, no plug spec len 12: 16/4, no plug spec len 16: 16', non twist lock 277v 17: 18/3, no plug spec len 18: 6', twist lock 480v 19: 10', twist lock 480v 20: 16', twist lock 120v 21: 16', twist lock 277v		I: Single B: Bulk

(1) Lamp installation not available.

(2) 32A Option will also run 30 & 28W T8 Energy Saving lamps, but the actual ballast will be the same.

(3) High Efficiency ballasts are CEE Listed.

Sample Ordering Number:

FSA4 0 2 32A SE MV 000 00 0 I

FSA4 Series 4-Foot Fluorescent Strip

Reflective White Front

2-lamps (none installed)

F32T8 Standard Ballast Factor High Efficiency Ballast

Multi-volt (120-277v)

No Factory Installed Options

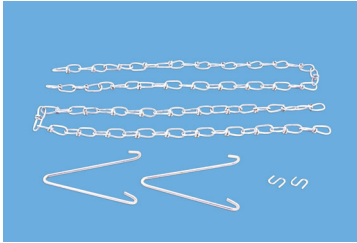
No Cordset

Single Packaging

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Field Installed Options Ordering

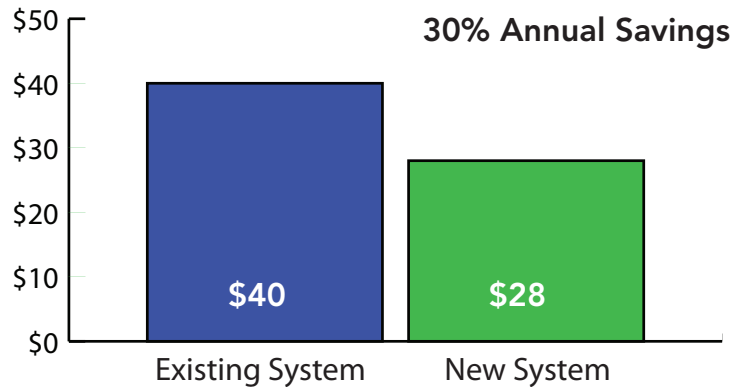


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Fluorescent Strip

Model	Description
HF 2CV	2-ft hanging chain & v-clips
HF 3CV	3-ft hanging chain & v-clips

Energy Cost Estimator					
		Existing System		New System	
		M2/40RS-277		FSA40232ASE	
Hours burned per year	4368	Number of Fixtures	1	Number of Fixtures	1
Cost per kWh\$	0.12	Watts per Fixture (existing system)	87	Watts per Fixture (new system)	54
Energy Cost Estimation		Energy used per year (existing system)	\$40	Energy used per year (new system)	\$28
		Energy saving per year (per fixture)	\$12		



Howard Industries provides this tool to examine the potential impact of lighting decisions. This tool provides an ESTIMATE only. The analysis of this tool does not warrant or guarantee the actual costs or savings that will be realized as the analysis suggested. You can find the full version of this cost saving tool at the Howard Lighting Website—www.howardlightingproducts.com. Click "Cost of Ownership Calculator".
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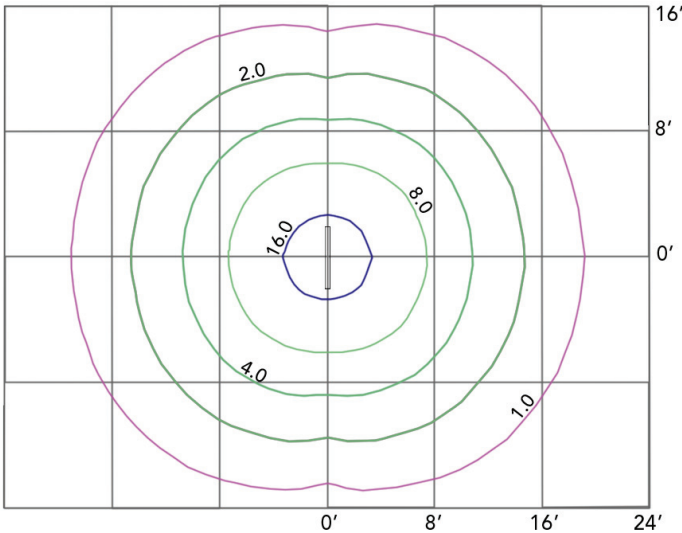
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Photometric Data - 2 Lamp T8 (FSA0232)

Iso-Footcandle Plot



8' Mounting Height,
Ballast: 2-lamp Multi-volt ballast
Lamps: Two 32W T8

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fix
0-30	1046	18.0	16.0
0-40	1780	30.0	27.0
0-60	3493	59.0	53.0
0-90	5496	93.0	84.0
90-120	1033	18.0	16.0
90-150	1064	18.0	16.0
90-180	1064	18.0	16.0
0-180	6560	111.0	100.0

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20															
RC	80				70				50			30			10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0
0	128	128	128	128	123	123	123	123	114	114	114	105	105	105	97
1	113	106	100	95	108	102	97	92	94	90	85	87	83	80	73
2	101	90	81	74	96	87	79	72	80	73	67	73	68	63	57
3	91	78	68	60	87	75	65	58	69	61	55	63	57	51	46
4	83	68	57	49	79	65	56	48	60	52	45	56	49	43	38
5	76	60	49	42	72	58	48	40	54	45	38	49	42	36	32
6	70	54	43	36	66	52	42	35	48	39	33	44	37	31	28
7	64	48	38	31	61	47	37	30	43	35	29	40	33	27	24
8	60	44	34	27	57	42	33	27	39	31	25	37	29	24	21
9	56	40	31	24	53	39	30	24	36	28	23	34	27	22	19
10	52	37	28	22	50	36	27	21	33	26	20	31	24	19	17

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