

Features

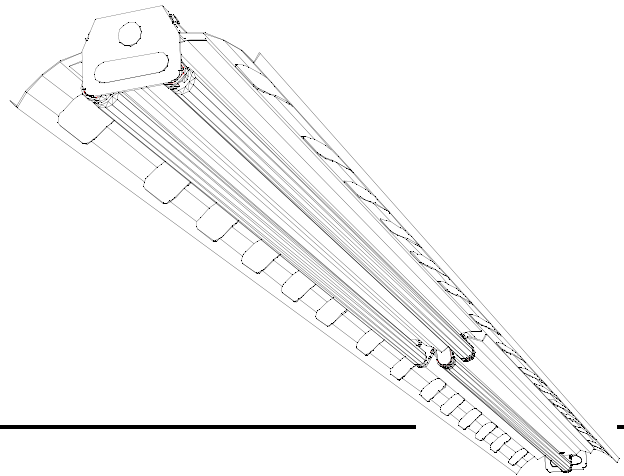
Highly efficient retail fixture, 94.5 % Efficiency

Full 0.032" White Steel Body with a High-performance Specular Reflector Insert

Uplight Distribution

Can be Pendant or Surface Mounted

Enhanced Merchandise Presentation



Technical Data

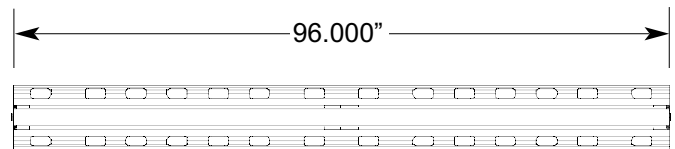
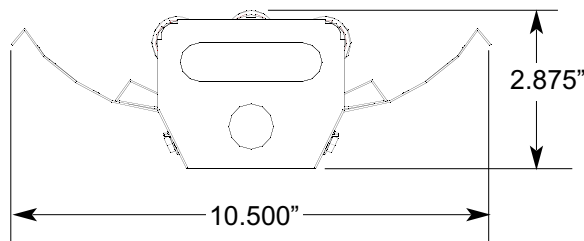
Housing: 0.032" pre-painted cold-rolled steel, die formed with sufficient knockouts for mounting and supply.

Finish: All fixture components are painted with a smooth, glossy, highly reflective white paint.

Reflector: Can be ordered with a 95% specular, a 85% specular, or a 92% diffuse white enamel. Substrate is 0.020" high quality aluminum. The reflector profile is optimized using computer analysis and manufactured using state of the art CNC equipment. A protective premask is applied to all reflective surfaces prior to manufacture.

Construction: The solid body provides exceptional rigidity. The socket bars securely snap into place. The reflectors are attached to the fixture body with a tab lock system and quarter-turn fasteners. No tools or additional fasteners are required for reflector installation / removal.

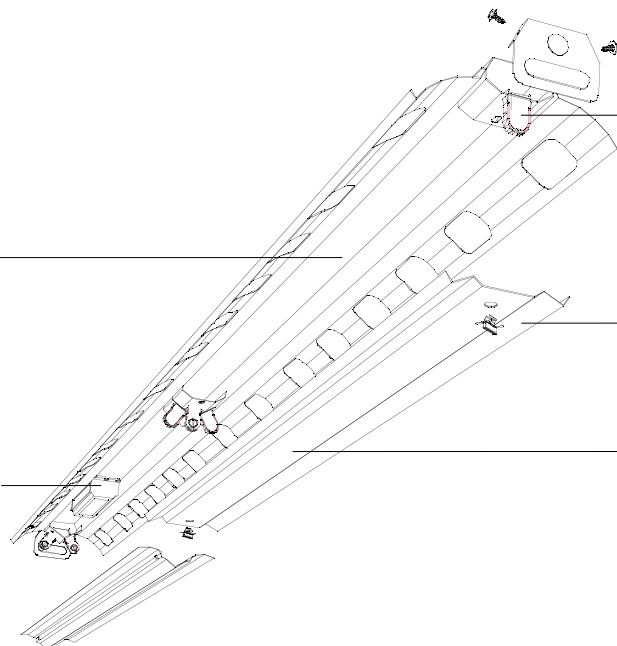
Installation



Highlights

Solid, 12 bend, 0.032" steel fixture body

Low energy consumption electronic ballast



High-quality, cam-lock lampholders

Secure, quarter-turn reflector attachment

Computer designed, CNC formed 0.020" specular aluminum reflector

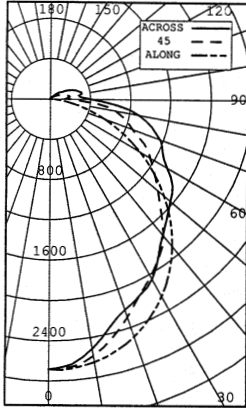
Photometrics



Lighting Sciences Inc.
7830 E. Evans Road
Scottsdale, Arizona 85260 USA
Tel: 480-991-9260 • Fax: 480-991-0375

CERTIFIED TEST REPORT No. LSI 15173

ENERGY SOLUTIONS 3 LAMP 1X8 UPLIGHT FIXTURE - RETAIL SERIES, CAT# 18ULEA332220H
WHITE INTERIOR WITH SPECULAR REFLECTORS AND NO LENS
THREE PHILIPS 32 WATT LAMPS, CAT# F32T8/TL835. LUMEN RATING = 2950 LMS.
ONE HOWARD INDUSTRIES EH3/3215-120 BALLAST OPERATING AT 120 VAC AND 111 WATTS



CANDLEPOWER SUMMARY		OUTPUT LUMENS	
ANGLE	ALONG	45	67.5 ACROSS
0	2683	2683	2683
5	2683	2682	2639
15	2584	2549	2445
25	2382	2277	2133
35	2084	1929	1904
45	1703	1561	1571
55	1264	1197	1272
65	798	798	1034
75	380	507	783
85	78	260	454
90	14	64	197
95	7	90	173
105	5	48	168
115	5	22	95
125	8	11	53
135	10	11	17
145	11	12	13
155	13	13	13
165	13	13	13
175	13	13	13
180	13	13	13

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	1959	22.14	23.43
0-40	3164	35.76	37.85
0-60	5581	63.07	66.75
0-90	7805	88.20	93.35
40-90	4641	52.44	55.50
60-90	2224	25.13	26.60
90-180	556	6.29	6.65
0-180	8362	94.49	100.00

** EFFICIENCY: 94.5% **

LUMINANCE SUMMARY CD./SQ.M.

ANGLE	ALONG	45	ACROSS
45	3240	3000	3161
55	2965	2994	3514
65	2539	3303	3958
75	1974	4074	5477
85	1199	7023	10364

S/MH: 1.1
SC(ALONG): 1.2, SC(ACROSS): 1.1
CERTIFIED BY: *James S. Walker III* DATE: DEC 15, 2000
PREPARED FOR: ENERGY SOLUTIONS INC. ST. PAUL, MN

TESTED IN ACCORDANCE WITH IES PROCEDURES.

Case Study

250' x 250' x 18' Retail Space

Reflectances:

Ceiling 80
Walls 50
Floor 20

Luminaire:

ESI 3Lamp Uplight 1' x 8'
(3) 32W FO32 T8 Lamps
Standard Power Ballast

Lightloss Factor: 0.80
Lumens / Lamp: 3050

Mounting

Height: 18'
Spacing: Continuous
Rows, 10' on Center

Results

Illuminance Level: 98.9 fc
(at 2.5' from floor)

Ave / Min 1.5
Max / Min 1.7
Watts / Sq. Ft. 1.68

Ordering Information

Part Number = Fixture Size + Reflector Material + # Lamps + Lamp Wattage + Voltage + Ballast Type

(Example F-18ULEA432277N = 1'x8' Uplight Strip with an enhanced aluminum reflector, 4-32W lamps, 277 volts, and a standard power ballast)

Size	Reflector	# Lamps	Lamp Watts	Voltage	Ballast
F-14UL- 1' x 4'	EA - Enhanced Alum	1	32	120	N - Standard
F-18UL - 1' x 8'	AA - Anodized Alum	2	54	277	H - High Ballast Factor
	WR - White Enamel	3		UNV	L - Low Ballast Factor
		4			