

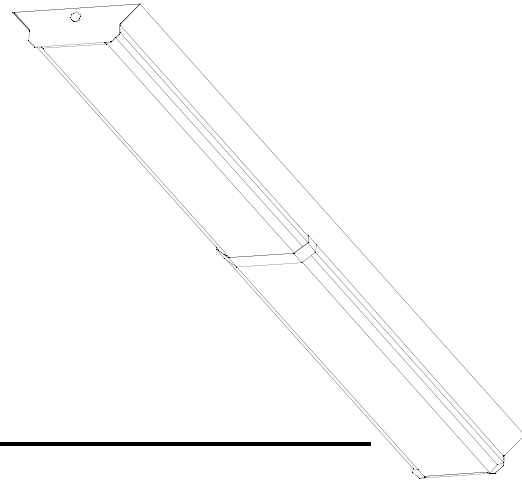
Features

Ideal for schools, hospitals, and office space

Superior light quality, 89.2% photometric efficiency

Rigid, four-bend press-brake formed body

Wide base covers ceiling imperfections when replacing an existing fixture



Technical Data

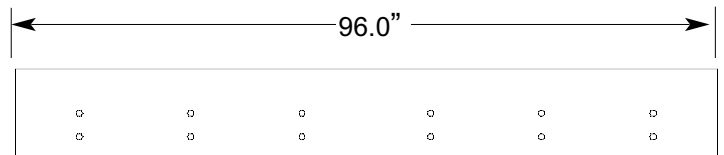
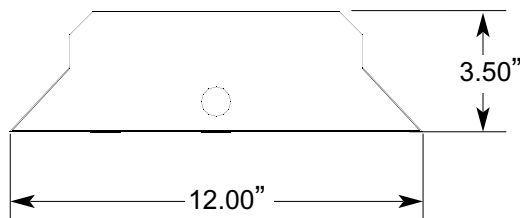
Housing: 20ga. (0.032") pre-painted die formed with sufficient knockouts for mounting and supply.

Finish: All cold rolled steel parts 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 four-bend body provides added rigidity. The endplates are securely attached to the fixture body with rivets. The brackets are attached with a tab-lock system, allowing ease of maintenance. The reflectors are attached to the brackets with quarter-turn fasteners. No tools are required for reflector installation / removal.

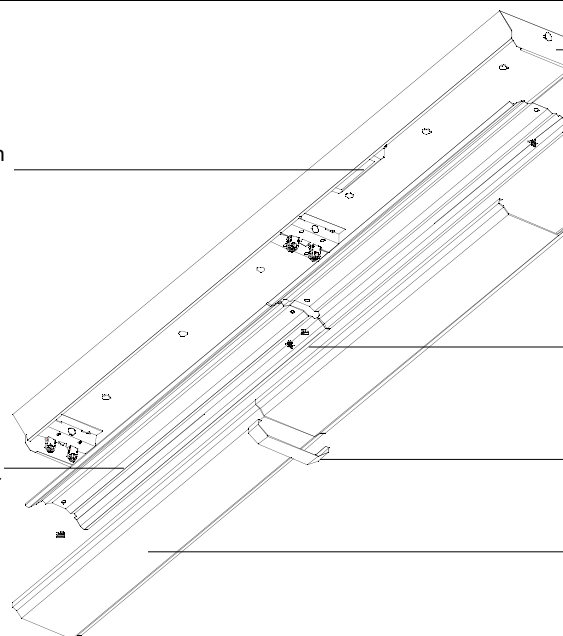
Installation



Highlights

Electronic ballasts available in both standard and high output versions

Computer designed, CNC formed 0.020" specular aluminum reflector



Endplate securely fastened with rivets

Quarter-turn fasteners allows reflector removal/installation without tools

Formed metal band conceals the union of the lens sections

Clear acrylic lens uniformly distributes the light

Photometrics



LSI Laboratories

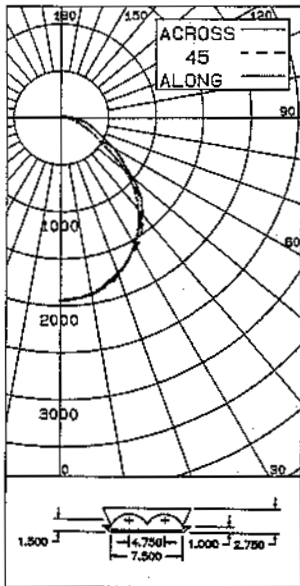
Independent Testing Since 1979

LSI Laboratories Inc.
7830 E. Evans Road
Scottsdale, Arizona 85260 USA
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Case Study

CERTIFIED TEST REPORT NO. LSI12486

ENERGY SOLUTIONS CATALOG #LSSWRAP01PM 1 X 4 WRAPPED FIXTURE WITH SPECULAR REFLECTOR
TWO F032/41K 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 2900 LMS.
ENERGY SAVINGS ES-2-T8-32-120-A BALLAST OPERATING AT 120 VAC & 58 WATTS



CANDLEPOWER SUMMARY		OUTPUT LUMENS	
ANGLE ALONG	22.5	45	67.5 ACROSS
0	1944	1944	1944
5	1924	1927	1933
15	1840	1841	1860
25	1675	1692	1674
35	1427	1468	1487
45	1096	1164	1159
55	628	751	790
65	339	392	484
75	170	219	310
85	55	109	151
90	1	44	86
95	0	30	66
105	0	12	39
115	1	6	24
125	2	6	14
135	2	5	9
145	3	4	7
155	5	4	6
165	5	5	5
175	4	4	5
180	4	4	4

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1476	25.46	29.68
0-40	2385	41.14	47.96
0-60	3944	68.00	79.29
0-90	4837	83.41	97.25
40-90	2451	42.27	49.29
60-90	893	15.40	17.96
90-180	136	2.36	2.75
0-180	4974	85.77	100.00

** EFFICIENCY = 85.8% **

S/MM = 1.2
SC = 1.2

LUMINANCE SUMMARY - CD./SQ.M.

ANGLE	ALONG	45	ACROSS
45	6672	6472	6463
55	4712	5243	4890
65	3451	4116	3895
75	2832	3821	3556
85	2705	3595	3460

CERTIFIED BY: *Tom Levin* DATE: APR 25, 1994
PREPARED FOR: ENERGY SOLUTIONS INC.
ST. PAUL, MN

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

40' x 40' x 10' Classroom

Reflectances:

Ceiling 75
Walls 50
Floor 20

Fixture

ESI Standard Wrap 1' x 8'
Specular Silver Reflector
(2) 32W F032 T8 Lamps
Standard Power Ballast (0.93)

Layout

20 Fixtures mounted on a
8' by 10' grid

Results

UPS: 0.80 watts/sq.foot

Max/Min 1.8
Ave/Min 1.5

Illuminance: 56fc

Ordering Information

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

(Example F-18WWEA432277N = 1'x8' Wide Profile Wrap with an enhanced aluminum reflector, 4-32W lamps, 277 volts, and a standard power ballast)

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