

10480 - Specifications - GE Commercial Lighting Products

Page 1 of 5



Commercial Products & Solutions

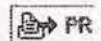
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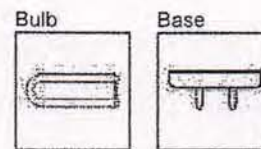
[Products](#) > 10480

10480 - F32T8/SP41/U/6

GE Mod-U-line® Starcoat® T8



High Color Rendering
Meets Federal Minimum Efficiency Standards



[View Larger](#)

GENERAL CHARACTERISTICS

Lamp type	Linear Fluorescent - U-Shaped
Bulb	T8
Base	Medium Bi-Pin (G13)
Wattage	32
Voltage	137
Rated Life	20000 hrs
Bulb Material	Soda lime
Starting Temperature (MIN)	10
LEED-EB MR Credit	1754 picograms Hg per mean lumen hour

ADDITIONAL RESOURCES

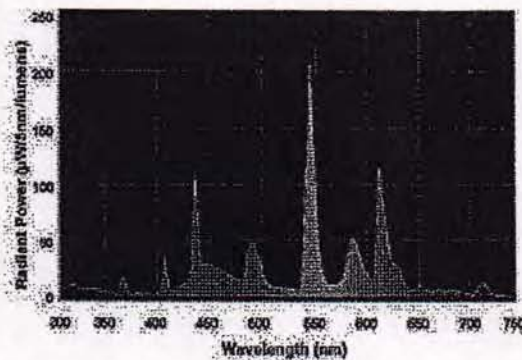
[Catalogs](#)
[Testimonials](#)
[MSDS \(Material Safety Data Sheets\)](#)
[Disposal Policies & Recycling Information](#)

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	2700
Mean Lumens	2565
Nominal Initial Lumens per Watt	84
Color Temperature	4100 K
Color Rendering Index (CRI)	78

GRAPHS & CHARTS

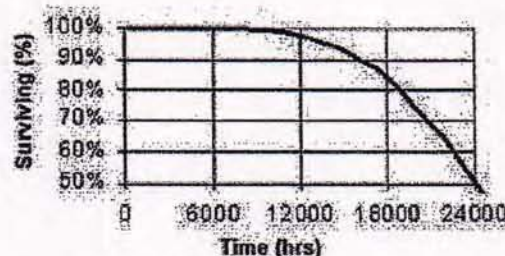
Spectral Power Distribution



ELECTRICAL CHARACTERISTICS

Open Circuit Voltage (rapid start) Min @ Temperature	315 V @ 10 °C
Cathode Resistance Ratio - Rh/Rc (MIN)	4.25
Cathode Resistance Ratio - Rh/Rc (MAX)	6.5
Current Crest Factor (MAX)	1.7

Lamp Mortality



DIMENSIONS

Maximum Overall Length (MOL)	22.6000
Minimum Overall Length	22 1/4
Nominal Length	22 1/2
Bulb Diameter (DIA)	1
Bulb Diameter in Bend	0.890

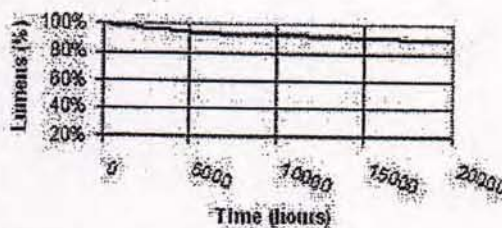
Lumen Maintenance

10480 - Specifications - GE Commercial Lighting Products

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(MIN)

Bulb Diameter in Bend (MAX)	1.150
Bulb Diameter in Legs (MIN)	0.940
Bulb Diameter in Legs (MAX)	1.100
Base Face to Top of Lamp	22 1/4
Lamp Legs Center to Center Length	6



PRODUCT INFORMATION

Product Code	10480
Description	F32T8/SP41/U/6
ANSI Code	78901-ANSI-4027-1
Standard Package	Case
Standard Package GTIN	10043168104804
Standard Package Quantity	12
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	12
UPC	043168104807

YOU MIGHT ALSO BE INTERESTED IN...

For Better Light

GE Ecolux® Mod-U-line® Starcoat® T8
Product code: 72113

- Passes TCLP, which can lower disposal costs.

[COMPARE](#)

*Click on product for more specification details

COMPATIBLE GE BALLASTS

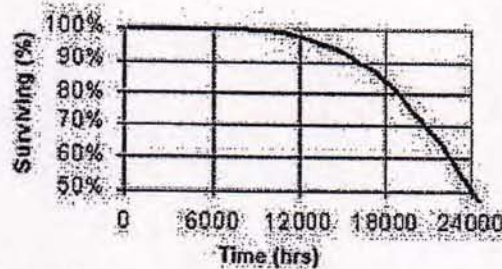
Product Code	Description	# of Bulbs	Power Factor	Ballast Factor
80353	B132R120V5	1	90.0	0.88
80355	B232SR120V5	2	90.0	0.88
80362	B232SR277S50	2	90.0	0.88
80356	B232SR277V5	2		0.88
80357	B332SR120V5	3	90.0	0.88
80358	B332SR277V5	3	90.0	0.88
23680	GE-132-120-N	1	99.0	0.87
24161	GE-132-120-N-84T	1	99.0	0.87
23681	GE-132-277-N	1	99.0	0.87
24162	GE-132-277-N-84T	1	99.0	0.87
72258	GE132MAX-L/ULTRA	1	99.0	0.77
72259	GE132MAX-N/ULTRA	1	99.0	0.87
72269	GE-132-MV-N	1	99.0	0.87
72270	GE-132-MV-N-42T	1	99.0	0.87
30268	GE-132-MV-N-42T	1	99.0	0.87
23671	GE-232-120-N	1	99.0	0.94
24163	GE-232-120-N-84T	1	99.0	0.94
29621	GE-232-120-PS-N	1	99.0	1.03
97782	GE232-120-RES	1	48.0	0.99
71037	GE232-120RES-	1	48.0	0.99

26668 - Specifications - GE Commercial Lighting Products

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DIMENSIONS

Maximum Overall Length (MOL)	47.7800
Minimum Overall Length	47.6700
Nominal Length	48
Bulb Diameter (DIA)	1
Bulb Diameter (DIA) (MIN)	0.940
Bulb Diameter (DIA) (MAX)	1.100
Max Base Face to Base Face (A)	47.220
Face to End of Opposing Pin (B) (MIN)	47.400
Face to End of Opposing Pin (B) (MAX)	47 1/2
End of Base Pin to End of Opposite Pin End (C)	47.670



Lumen Maintenance



PRODUCT INFORMATION

Product Code	26668
Description	F32T8/SP41/ECO
ANSI Code	1005-2
Standard Package	Case
Standard Package GTIN	10043168266687
Standard Package Quantity	36
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	36
UPC	043168266680

COMPATIBLE GE BALLASTS

Product Code	Description	# of Bulbs	Power Factor	Ballast Factor
80353	B132R120V5	1	90.0	0.88
80355	B232SR120V5	2	90.0	0.88
80362	B232SR277S50	2	90.0	0.88
80356	B232SR277V5	2		0.88
80357	B332SR120V5	3	90.0	0.88
80358	B332SR277V5	3	90.0	0.88
23680	GE-132-120-N	1	99.0	0.87
24161	GE-132-120-N-84T	1	99.0	0.87
23681	GE-132-277-N	1	99.0	0.87
24162	GE-132-277-N-84T	1	99.0	0.87
72258	GE132MAX-L/ULTRA	1	99.0	0.77
72259	GE132MAX-N/ULTRA	1	99.0	0.87
72269	GE-132-MV-N	1	99.0	0.87
72270	GE-132-MV-N-42T	1	99.0	0.87

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GE
Lighting

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10480 – F32T8/SP41/U/6

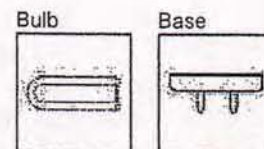
GE Mod-U-line® Starcoat® T8



High Color Rendering
Meets Federal Minimum Efficiency Standards

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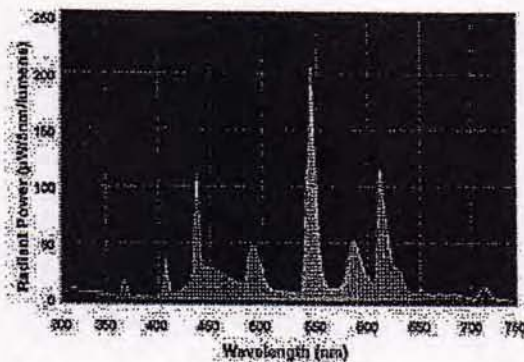
[View Larger](#)

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GRAPHS & CHARTS

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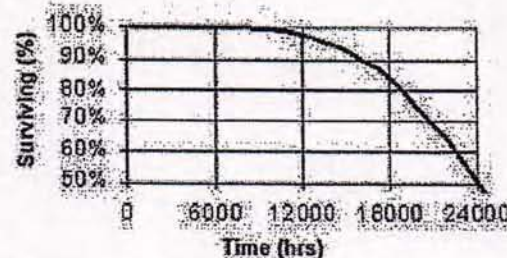
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Lamp Mortality



Lumen Maintenance

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Page 2 of 5

(MIN)

Bulb Diameter in Bend 1.150

(MAX)

Bulb Diameter in Legs (MIN) 0.940

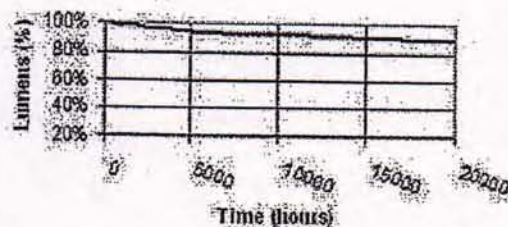
Bulb Diameter in Legs 1.100

(MAX)

Base Face to Top of Lamp 22 1/4

Lamp Legs Center to Center 6

Length



PRODUCT INFORMATION

Product Code 10480

Description F32T8/SP41/U/6

ANSI Code 78901-ANSI-4027-1

Standard Package Case

Standard Package GTIN 10043168104804

Standard Package Quantity 12

Sales Unit Unit

No Of Items Per Sales Unit 1

No Of Items Per Standard Package 12

UPC 043168104807

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For Better Light

GE Ecolux® Mod-U-line® Starcoat® T8

Product code: 72113

* Passes TCLP, which can lower disposal costs.

COMPARE

*Click on product for more specification details

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Product Code	Description	# of Bulbs	Power Factor	Ballast Factor
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<u>24162</u>	GE-132-277-N-84T	1	99.0	0.87
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<u>72259</u>	GE132MAX-N/ULTRA	1	99.0	0.87
<u>72269</u>	GE-132-MV-N	1	99.0	0.87
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ABBOTT ELECTRIC

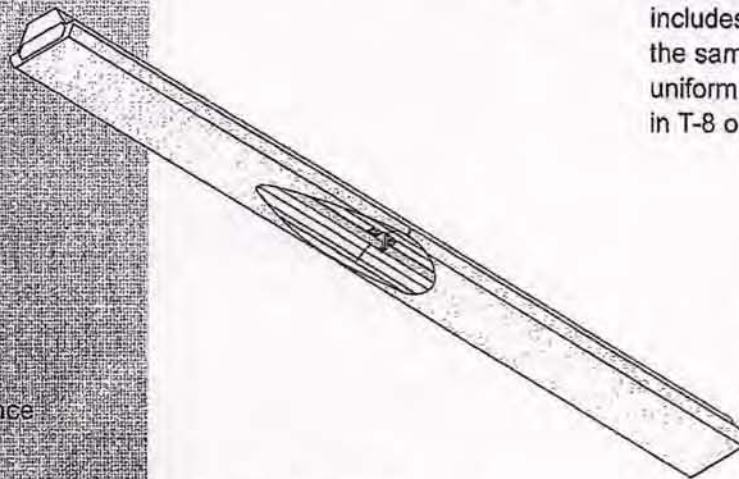
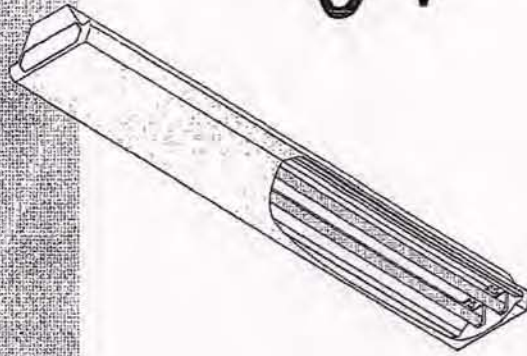
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P001/002

"U4"

reflect-a-light™

SWNS
SERIES
NARROW
2', 3', 4'
& 8'
WRAP



Features

Lower maintenance costs

Increased lamp and ballast life

Reduced glare

Computer designed reflector generates maximum light output

25 year warranty on specular reflector

New York City Approved

Construction

Die formed code gauge steel housing. All painted metal parts are pretreated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability.

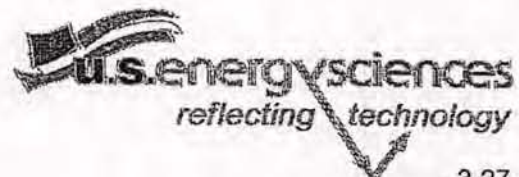
Reflectors are constructed from the highest quality specular on polished or white aluminum. Material form, fit and thickness meet or exceed all UL 1598 requirements. Computer assisted design provides maximum light output, uniform light distribution, rigid strength and ballast access without the use of tools. The durable surface is highly resistant to scratching and non-abrasive cleaning solutions, making the reflector easy to clean.

Electrical

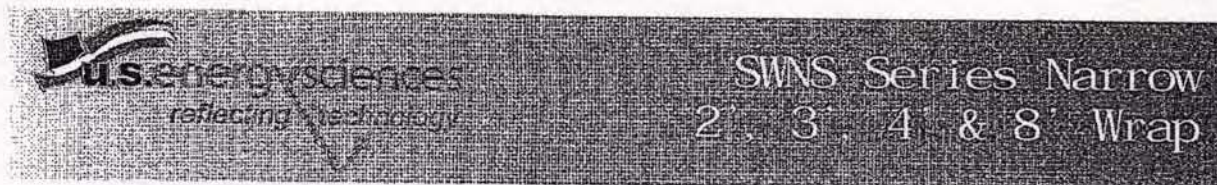
Energy saving and electronic Class P, CBM/ETL certified HPF ballast comply with Federal Energy Efficiency Standards; Underwriters Laboratories listed.



GSA Contract Holder



Luminaires



Photometric Data

All photometric reports and IES files are compiled by independent testing laboratories and are available either as a download from U.S. Energy Science's web site (<http://www.usenergysciences.com/ies.asp>) or are available on the CD-ROM Catalog.

Catalog Number: SWNS-13248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: One F32T8/TL841
Ballast: Electronic 1-F32IS

Catalog Number: SWNS-23248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/TL841
Ballast: Electronic 2-F32IS

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	93	93	93	93	90	90	90	90	85	85	85	
1	85	82	79	76	83	79	77	74	75	73	70	
2	79	73	68	63	76	71	66	62	67	63	60	
3	72	65	59	54	70	63	58	53	60	55	52	
4	67	58	52	47	64	57	51	46	54	49	45	
5	61	52	45	40	59	51	44	40	48	43	39	
6	57	47	40	35	55	46	39	35	44	38	34	
7	52	42	36	31	51	41	35	31	39	34	30	
8	48	38	31	27	47	37	31	27	36	30	26	
9	45	34	28	23	43	33	27	23	32	27	23	
10	41	31	25	21	40	30	24	20	29	24	20	

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	94	94	94	94	92	92	92	92	87	87	87	
1	86	83	79	76	84	8	78	75	76	74	72	
2	79	73	68	64	77	71	67	63	68	64	61	
3	73	65	59	54	71	64	58	53	61	56	52	
4	67	58	52	47	65	57	51	46	54	49	45	
5	62	52	45	40	60	51	44	39	49	43	39	
6	57	46	40	35	55	46	39	34	44	38	34	
7	52	42	35	30	5	41	34	30	39	34	29	
8	48	37	3	26	47	37	30	26	35	30	25	
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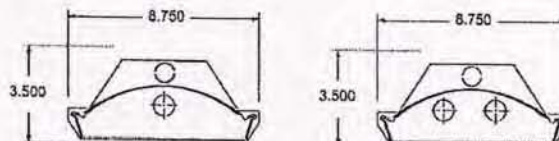
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Spacing Criteria: 1.3 1.4
Efficiency: 79.4%

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.3 1.5
Efficiency: 80.0%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01501

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03684

Dimensional Guide



Ordering Guide

SWNS - 2 - 32 48 - WP - - DIMMABLE -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/ Master	Ballast Options	Battery Backup
------------------	--------------	--------------	--------------	--------------------	---------------	-----------------	----------------

Mounting
SWNS = Narrow Shallow Wrap
Surface or Suspension Mount

No. of Lamps
1 = One Lamp
2 = Two Lamps
4 = Four Lamps (96" Only)
6 = Six Lamps (96" Only)

Lamp Wattage
14 = 14 Watt T5
17 = 17 Watt T-8
25 = 25 Watt T-8
28 = 28 Watt T-5
32 = 32 Watt T-8
54 = 54 Watt T-5

Fixture Size
24 = 24 Inches Length
36 = 36 Inches Length
48 = 48 Inches Length
96 = 96 Inches Length

Reflector Material
EA = Enhanced Aluminum
SA = Specular Aluminum
WP = White Paint
NR = No Reflector

Electronic Ballast Options
High Output, 1.18+ Ballast Factor
HM = 120/277 Universal Voltage
Low Power, .77 Ballast Factor
LM = 120/277 Universal Voltage
Standard Output, .90-1.0 Ballast Factor
SM = 120/277 Universal Voltage

Battery Backup Options
1B = 1-Lamp 90 Burn Time
2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
See page 3-43 for additional options



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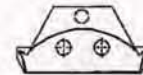
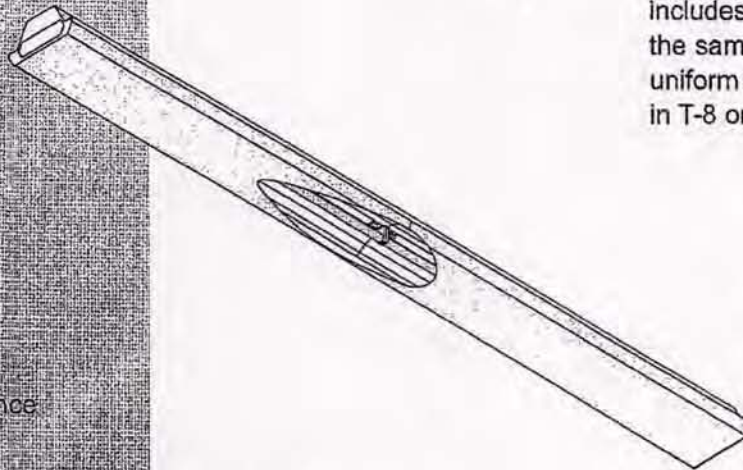
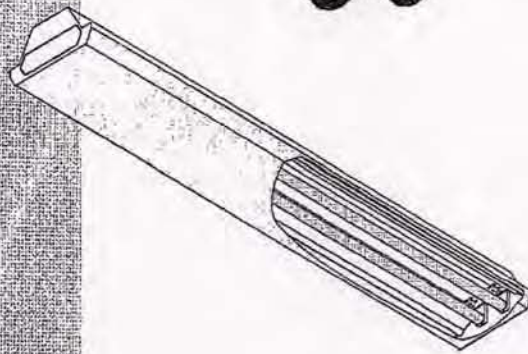
Dec 5 2008 14:28

P001/002

"U8"

reflect-a-light™

SWNS
SERIES
NARROW
2', 3', 4'
& 8'
WRAP



Features

Lower maintenance costs

Increased lamp and ballast life

Reduced glare

Computer designed reflector generates maximum light output

25 year warranty on specular reflector

New York City Approved

Construction

Die formed code gauge steel housing. All painted metal parts are pretreated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability.

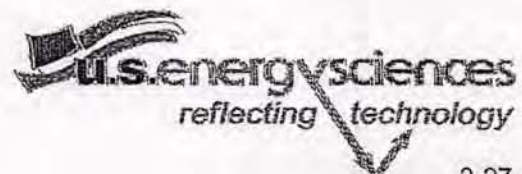
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Electrical

Energy saving and electronic Class P, CBM/ETL certified HPF ballast comply with Federal Energy Efficiency Standards; Underwriters Laboratories listed.



GSA Contract Holder



Luminaires

ABBOTT ELECTRIC

Dec 5 2008 14:28

P002/002

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Lamps: One F32T8/TL841
Ballast: Electronic 1-F32IS

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Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/TL841
Ballast: Electronic 2-F32IS

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7	52	42	36	31	51	41	35	31	39	34	30	30
8	48	38	31	27	47	37	31	27	36	30	26	26
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10	41	31	25	21	40	30	24	20	29	24	20	20

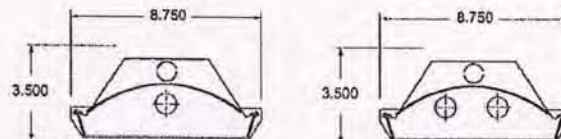
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Plane: 0-DEG 90-DEG
Spacing Criteria: 1.3 1.4
Efficiency: 79.4%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01501

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Efficiency: 80.0%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03684

Dimensional Guide**Ordering Guide**

SWNS - 4 - 32 96 - WP - - DIMMABLE -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/Master	Ballast Options	Battery Backup
------------------	--------------	--------------	--------------	--------------------	--------------	-----------------	----------------

Mounting
SWNS = Narrow Shallow Wrap
Surface or Suspension Mount

No. of Lamps
1 = One Lamp
2 = Two Lamps
4 = Four Lamps (96" Only)
6 = Six Lamps (96" Only)

Lamp Wattage
14 = 14 Watt T5
17 = 17 Watt T-8
25 = 25 Watt T-8
28 = 28 Watt T-5
32 = 32 Watt T-8
54 = 54 Watt T-5

Fixture Size
24 = 24 Inches Length
36 = 36 Inches Length
48 = 48 Inches Length
96 = 96 Inches Length

Reflector Material
EA = Enhanced Aluminum
SA = Specular Aluminum
WP = White Paint
NR = No Reflector

Electronic Ballast Options
High Output, 1.18+ Ballast Factor
HM = 120/277 Universal Voltage
Low Power, .77 Ballast Factor
LM = 120/277 Universal Voltage
Standard Output .90-1.0 Ballast Factor
SM = 120/277 Universal Voltage

Battery Backup Options
1B = 1-Lamp 90 Burn Time
2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
See page 3-43 for additional options



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Dec 3 2008 10:06

P001/002

SWNS SERIES

NARROW

2', 3', 4'
& 8'

WRAP

Features

Lower maintenance
costs

Increased lamp and
ballast life

Reduced glare

Computer designed
reflector generates
maximum light output

25 year warranty on
specular reflector

New York City Approved



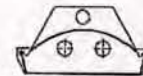
GSA Contract Holder



reflect-a-light™

Application

Economical and efficient design with a lower profile than the standard SWN series for quality lighting in commercial, and retail applications. Designed for surface and pendant mount applications. The 8-ft. series includes a joint strap shaped to the same profile of the lens for a uniform appearance. Available in T-8 or T-5 configurations.



Construction

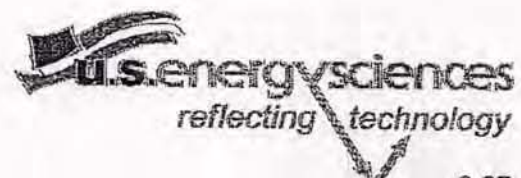
Die formed code gauge steel housing. All painted metal parts are pretreated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability.

Reflectors are constructed from the highest quality specular on polished or white aluminum. Material form, fit and thickness meet or exceed all UL 1598 requirements. Computer assisted design provides maximum light output, uniform light distribution, rigid strength and ballast access without the use of tools. The durable surface is highly resistant to scratching and non-abrasive cleaning solutions, making the reflector easy to clean.

Electrical

Energy saving and electronic Class P, CBM/ETL certified HPF ballast comply with Federal Energy Efficiency Standards; Underwriters Laboratories listed.

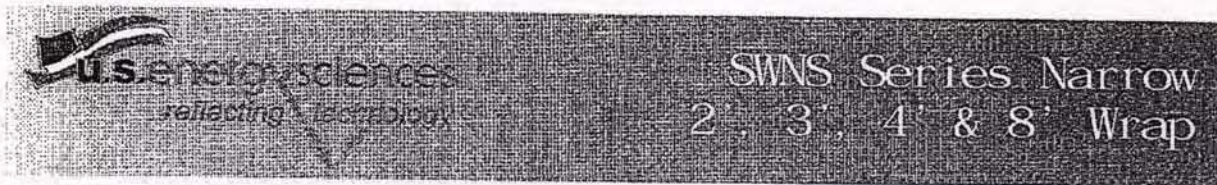
Luminaires



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Dec 3 2008 10:06

P002/002



Photometric Data

All photometric reports and IES files are compiled by independent testing laboratories and are available either as a download from U.S. Energy Science's web site (<http://www.usenergysciences.com/ies.asp>) or are available on the CD-ROM Catalog.

Catalog Number: SWNS-13248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: One F32T8/TL841
Ballast: Electronic 1-F32IS

Catalog Number: SWNS-23248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/TL841
Ballast: Electronic 2-F32IS

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	93	93	93	93	90	90	90	90	85	85	85	
1	85	82	79	76	83	79	77	74	75	73	70	
2	79	73	68	63	76	71	66	62	67	63	60	
3	72	65	59	54	70	63	58	53	60	55	52	
4	67	58	52	47	64	57	51	46	54	49	45	
5	61	52	45	40	59	51	44	40	48	43	39	
6	57	47	40	35	55	46	39	35	44	38	34	
7	52	42	36	31	51	41	35	31	39	34	30	
8	48	38	31	27	47	37	31	27	36	30	26	
9	45	34	28	23	43	33	27	23	32	27	23	
10	41	31	25	21	40	30	24	20	29	24	20	

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	94	94	94	94	92	92	92	92	87	87	87	
1	86	83	79	76	84	8	78	75	76	74	72	
2	79	73	68	64	77	71	67	63	68	64	61	
3	73	65	59	54	71	64	58	53	61	56	52	
4	67	58	52	47	65	57	51	46	54	49	45	
5	62	52	45	40	60	51	44	39	49	43	39	
6	57	46	40	35	55	46	39	34	44	38	34	
7	52	42	35	30	5	41	34	30	39	34	29	
8	48	37	3	26	47	37	30	26	35	30	25	
9	44	33	27	22	43	33	27	22	32	26	22	
10	41	30	24	20	40	30	24	20	29	23	19	

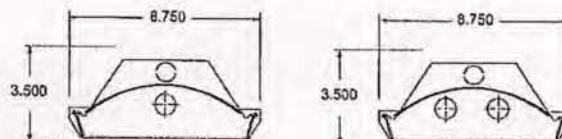
Plane: 0-DEG
Spacing Criteria: 1.3
Efficiency: 79.4%

Plane: 0-DEG
Spacing Criteria: 1.3
Efficiency: 80.0%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01501

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03684

Dimensional Guide



Ordering Guide

SWNS - 2 - 32 48 - WP - - -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/Master	Ballast Options	Battery Backup
------------------	--------------	--------------	--------------	--------------------	--------------	-----------------	----------------

Mounting
SWNS = Narrow Shallow Wrap
Surface or Suspension Mount

No. of Lamps
1 = One Lamp
2 = Two Lamps
4 = Four Lamps (96" Only)
6 = Six Lamps (96" Only)

Lamp Wattage
14 = 14 Watt T5
17 = 17 Watt T-8
25 = 25 Watt T-8
28 = 28 Watt T-5
32 = 32 Watt T-8
54 = 54 Watt T-5

Fixture Size
24 = 24 Inches Length
36 = 36 Inches Length
48 = 48 Inches Length
96 = 96 Inches Length

Reflector Material
EA = Enhanced Aluminum
SA = Specular Aluminum
WP = White Paint
NR = No Reflector

Electronic Ballast Options
High Output, 1.18+ Ballast Factor
HM = 120/277 Universal Voltage
Low Power, .77 Ballast Factor
LM = 120/277 Universal Voltage
Standard Output, .90-1.0 Ballast Factor
SM = 120/277 Universal Voltage

Battery Backup Options
1B = 1-Lamp 90 Burn Time
2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
See page 3-43 for additional options.



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Dec 3 2008 10:06

P001/002

SWNS SERIES NARROW 2', 3', 4' & 8' WRAP

Features

Lower maintenance costs

Increased lamp and ballast life

Reduced glare

Computer designed reflector generates maximum light output

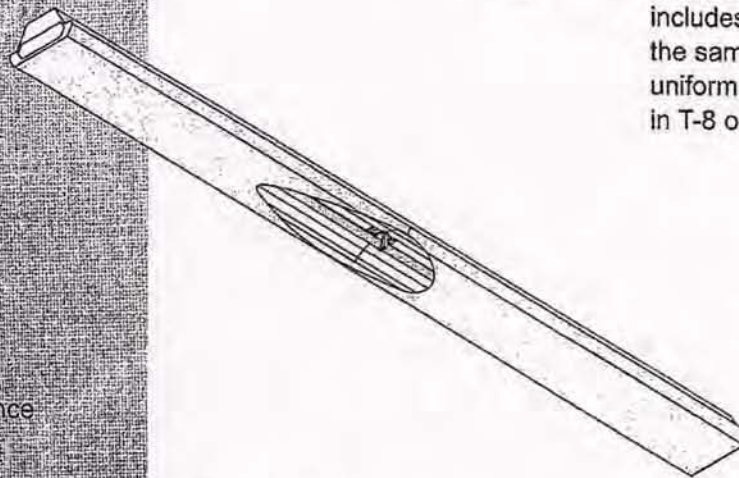
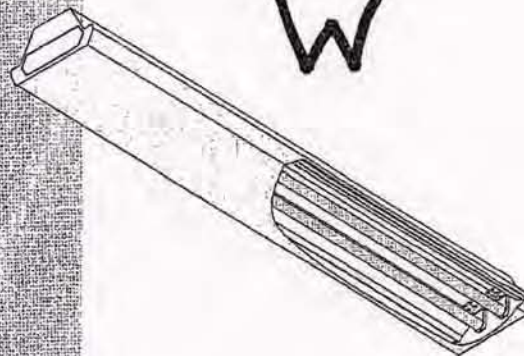
25 year warranty on specular reflector

New York City Approved



GSA Contract Holder

"W"



reflect-a-light™

Application

Economical and efficient design with a lower profile than the standard SWN series for quality lighting in commercial, and retail applications. Designed for surface and pendant mount applications. The 8-ft. series includes a joint strap shaped to the same profile of the lens for a uniform appearance. Available in T-8 or T-5 configurations.



Construction

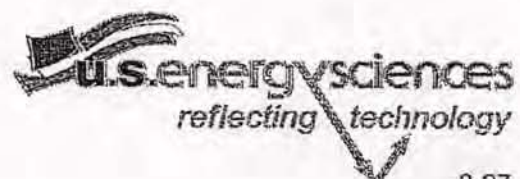
Die formed code gauge steel housing. All painted metal parts are pretreated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability.

Reflectors are constructed from the highest quality specular on polished or white aluminum. Material form, fit and thickness meet or exceed all UL 1598 requirements. Computer assisted design provides maximum light output, uniform light distribution, rigid strength and ballast access without the use of tools. The durable surface is highly resistant to scratching and non-abrasive cleaning solutions, making the reflector easy to clean.

Electrical

Energy saving and electronic Class P, CBM/ETL certified HPF ballast comply with Federal Energy Efficiency Standards; Underwriters Laboratories listed.

Luminaires



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Dec 3 2008 10:07

P002/002



Photometric Data

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Catalog Number: SWNS-13248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: One F32T8/TL841
Ballast: Electronic 1-F32IS

Catalog Number: SWNS-23248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/TL841
Ballast: Electronic 2-F32IS

Coefficients of Utilization - Zonal Cavity Method												
Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%
0	93	93	93	93	90	90	90	90	85	85	85	85
1	85	82	79	78	83	79	77	74	75	73	70	70
2	79	73	68	63	76	71	66	62	67	63	60	60
3	72	65	59	54	70	63	58	53	60	55	52	52
4	67	58	52	47	64	57	51	46	54	49	45	45
5	61	52	45	40	59	51	44	40	48	43	39	39
6	57	47	40	35	55	46	39	35	44	38	34	34
7	52	42	36	31	51	41	35	31	39	34	30	30
8	48	38	31	27	47	37	31	27	36	30	26	26
9	45	34	28	23	43	33	27	23	32	27	23	23
10	41	31	25	21	40	30	24	20	29	24	20	20

Coefficients of Utilization - Zonal Cavity Method													
Effective Floor Cavity Reflectance 0.20													
RC	80%					70%				50%			
RW	70%	50%	30%	10%		70%	50%	30%	10%		50%	30%	10%
0	94	94	94	94		92	92	92	92		87	87	87
1	86	83	79	76		84	8	78	75		76	74	72
2	79	73	68	64		77	71	67	63		68	64	61
3	73	65	59	54		71	64	58	53		61	56	52
4	67	58	52	47		65	57	51	46		54	49	45
5	62	52	45	40		60	51	44	39		49	43	39
6	57	46	40	35		55	46	39	34		44	38	34
7	52	42	35	30		5	41	34	30		39	34	29
8	48	37	3	26		47	37	30	26		35	30	25
9	44	33	27	22		43	33	27	22		32	26	22
10	41	30	24	20		40	30	24	20		29	23	19

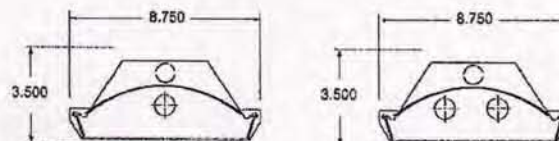
Plane: 0-DEG
Spacing Criteria: 1.3
Efficiency: 79.4%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01501

Plane: 0-DEG
Spacing Criteria: 1.3
Efficiency: 80.0%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03684

Dimensional Guide



Ordering Guide

SWNS - 4 - 32 96 - WP - - -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/Master	Ballast Options	Battery Backup
------------------	--------------	--------------	--------------	--------------------	--------------	-----------------	----------------

Mounting
 SWNS = Narrow Shallow Wrap
 Surface or Suspension Mount

No. of Lamps
 1 = One Lamp
 2 = Two Lamps
 4 = Four Lamps (96" Only)
 6 = Six Lamps (96" Only)

Lamp Wattage
 14 = 14 Watt T5
 17 = 17 Watt T-8
 25 = 25 Watt T-8
 28 = 28 Watt T-5
 32 = 32 Watt T-8
 54 = 54 Watt T-5

Fixture Size
 24 = 24 Inches Length
 36 = 36 Inches Length
 48 = 48 Inches Length
 96 = 96 Inches Length

Reflector Material
 EA = Enhanced Aluminum
 SA = Specular Aluminum
 WP = White Paint
 NR = No Reflector

Electronic Ballast Options
 High Output, 1.18+ Ballast Factor
 HM = 120/277 Universal Voltage
 Low Power, .77 Ballast Factor
 LM = 120/277 Universal Voltage
 Standard Output, .90-1.0 Ballast Factor
 SM = 120/277 Universal Voltage

Battery Backup Options
 1B = 1-Lamp 90 Burn Time
 2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
 See page 3-43 for additional options

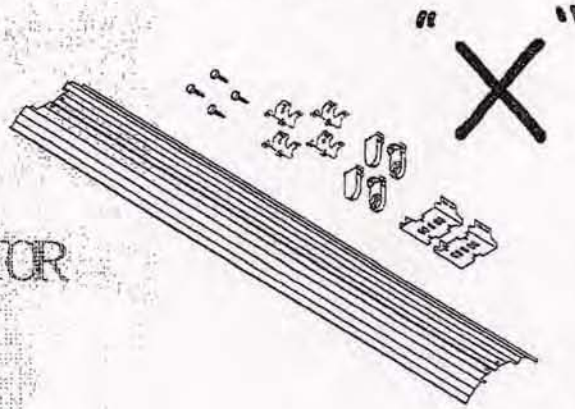


ABBOTT ELECTRIC

Dec 3 2008 11:30

P001/002

SKSL SERIES REFLECTOR KIT



reflect-a-light™

Application

The SKSL reflector kits are designed to convert standard T12 strip luminaires to a highly efficient T8 or T5 lamped luminaire. The SKSL configuration provides optimum performance with heights up to 18 feet. Conversion maximizes fixture efficiency and provides uniform light distribution. The reflector can be easily removed for maintenance without tools. Kit is available in 32 watt T8 or 28 and 54 watt T5 lamps. Kit contains reflector, mounting brackets, fasteners and shunted locking sockets.

Features

Easy Installation

Highly efficient reflector

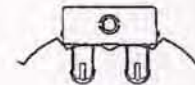
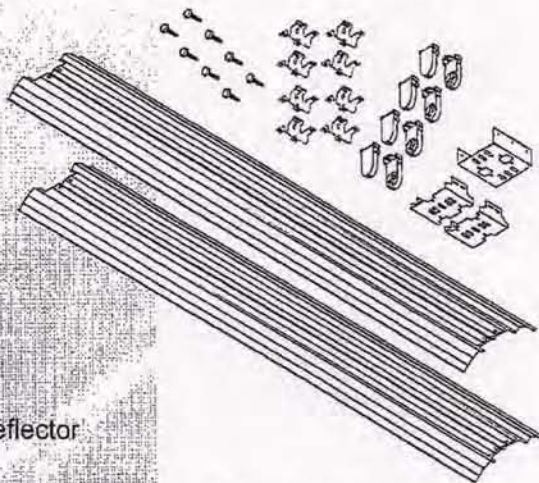
Reduced maintenance costs

Increased lamp and ballast life

25 year warranty on specular reflectors

Computer designed reflectors generate maximum light output and even light distribution

Kits include all parts needed for retrofit



Construction

Reflectors are aluminum with a range of anodized or white paint finish options to meet lighting needs. Brackets are constructed from die formed code gauge steel. All painted metal parts are pre-treated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability. Material form, fit and thickness meet UL 1598 standards. Components are Underwriters Laboratories classified for use in retrofit applications. Autocad design results in maximum light output with uniform light distribution, rigid strength and ballast access without the use of tools.

Installation

Installation of the retrofit kit is simple and easy. The process involves removing the existing lamps and sockets and then installing the new brackets and sockets. The reflector is then easily attached to the brackets with quarter-turn fasteners. The reflector will serve as the ballast cover. Universal end brackets as shown can be used with either one or two lamp conversions.

GSA Contract #H4710-01-0001

 **ULS energy sciences**
reflecting technology

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Dec 3 2008 11:30

P002/002



SKSL Series

Photometric Data

All photometric reports and IES files are compiled by independent testing laboratories and are available either as a download from U.S. Energy Science's web site (<http://www.usenergysciences.com/ies.asp>) or are available on the CD-ROM Catalog

Catalog Number: SKSL4/SA/4-1BE or SKSL4/SA/8-2BE
Luminaire: Formed steel housing, formed aluminum specular reflector
Lamps: 4-1BE - One F32T8
8-2BE - Two F32T8
Ballast: Electronic 1-F32IS or 2-F32IS

Catalog Number: SKSL4/SA/4-2BE or SKSL4/SA/8-4BE
Luminaire: Formed steel housing, formed aluminum specular reflector
Lamps: 4-2BE - Two F32T8
8-4BE - Four F32T8
Ballast: Electronic 2-F32IS or 4-F32IS

RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	110	110	110	110	107	107	107	107	102	102	102	
1	99	94	89	85	96	92	87	84	87	84	81	
2	89	81	74	68	86	79	72	67	75	70	65	
3	8	70	62	56	76	69	6	55	66	59	54	
4	74	62	53	46	71	60	52	46	56	51	45	
5	67	54	45	38	65	53	44	38	50	43	38	
6	61	48	39	33	59	47	39	32	45	38	32	
7	56	43	34	28	54	42	34	28	40	33	28	
8	52	38	30	24	50	37	29	24	36	29	24	
9	47	34	26	20	46	33	26	20	32	25	20	
10	44	31	23	18	43	30	23	18	29	22	18	

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.2 1.7
Efficiency: 92.1%

Photometric Certified by: Luminaire Testing Laboratory
SKSL4/SA/4-1BE Report No. 1389
SKSL4/SA/8-2BE Report No. 1406

RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	108	108	108	108	106	106	106	106	101	101	101	
1	99	94	90	86	96	92	88	85	88	85	82	
2	90	82	75	70	87	80	74	69	77	72	67	
3	82	72	64	58	79	71	64	58	68	62	57	
4	75	64	56	49	73	62	55	49	60	54	48	
5	68	56	48	42	66	55	47	41	53	46	41	
6	63	50	42	36	61	49	41	36	47	40	35	
7	58	45	37	31	56	44	36	31	43	36	31	
8	53	40	32	27	52	40	32	27	38	31	26	
9	49	36	28	23	47	35	28	23	34	27	23	
10	45	33	25	20	44	32	25	20	31	25	20	

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.2 1.5
Efficiency: 92.1%

Photometric Certified by: Luminaire Testing Laboratory
SKSL4/SA/4-2BE Report No. 1390
SKSL4/SA/8-4BE Report No. 1391

Ordering Guide

SKSL - A - WP - 8 - 4

Reflector Series	Channel Width	Reflector Material	Luminaire Length	No. of Lamps	Socket Pin Option
------------------	---------------	--------------------	------------------	--------------	-------------------

Reflector Series
SKSL = Reflector Kit w/ sockets
KSL = Reflector Kit w/o sockets

Channel Width
4 = 4.25 inch width
5 = 5 inch width
(Specify if other width)
A = Adj brkts

Reflector Material
SA = Specular Aluminum
EA = Enhanced Aluminum
WP = White Paint Aluminum

Luminaire Length
4 = 4 ft.
8 = 8 ft.

Number of Lamps
1 = One Lamp
2 = Two Lamps (4 ft. & 8 ft.)
4 = Four Lamps (8 ft. Only)

Socket Pin Option
B = T8 Bi-pin Socket
C = T5 Bi-pin Socket
S = Slimline Socket

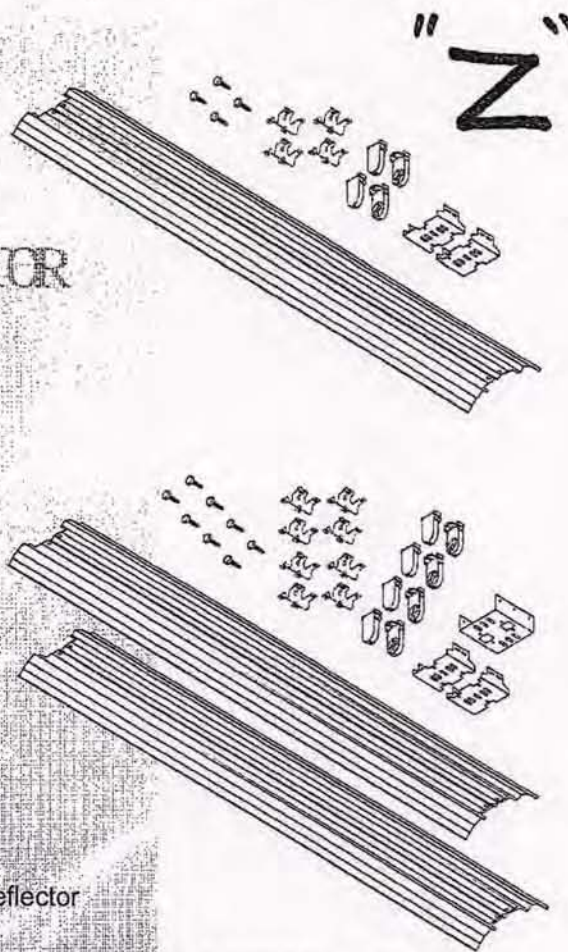


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Dec 3 2008 11:29

P001/002

SKSL SERIES REFLECTOR KIT



reflect-a-light™

Application

The SKSL reflector kits are designed to convert standard T12 strip luminaires to a highly efficient T8 or T5 lamped luminaire. The SKSL configuration provides optimum performance with heights up to 18 feet. Conversion maximizes fixture efficiency and provides uniform light distribution. The reflector can be easily removed for maintenance without tools. Kit is available in 32 watt T8 or 28 and 54 watt T5 lamps. Kit contains reflector, mounting brackets, fasteners and shunted locking sockets.

Features

Easy Installation

Highly efficient reflector

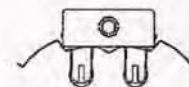
Reduced maintenance costs

Increased lamp and ballast life

25 year warranty on specular reflectors

Computer designed reflectors generate maximum light output and even light distribution

Kits include all parts needed for retrofit



Construction

Reflectors are aluminum with a range of anodized or white paint finish options to meet lighting needs. Brackets are constructed from die formed code gauge steel. All painted metal parts are pre-treated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability. Material form, fit and thickness meet UL 1598 standards. Components are Underwriters Laboratories classified for use in retrofit applications. Autocad design results in maximum light output with uniform light distribution, rigid strength and ballast access without the use of tools.

Installation

Installation of the retrofit kit is simple and easy. The process involves removing the existing lamps and sockets and then installing the new brackets and sockets. The reflector is then easily attached to the brackets with quarter-turn fasteners. The reflector will serve as the ballast cover. Universal end brackets as shown can be used with either one or two lamp conversions.

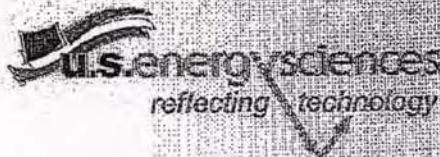
GSA Contract Order

u.s. energy sciences
reflecting technology

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Dec 3 2008 11:30

P002/002



SKSL Series

Photometric Data

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Catalog Number: SKSL4/SA/4-1BE or SKSL4/SA/8-2BE
Luminaire: Formed steel housing, formed aluminum specular reflector
Lamps: 4-1BE - One F32T8
8-2BE - Two F32T8
Ballast: Electronic 1-F32IS or 2-F32IS

Catalog Number: SKSL4/SA/4-2BE or SKSL4/SA/8-4BE
Luminaire: Formed steel housing, formed aluminum specular reflector
Lamps: 4-2BE - Two F32T8
8-4BE - Four F32T8
Ballast: Electronic 2-F32IS or 4-F32IS

RC	80%				70%				50%			
	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%
0	110	110	110	110	107	107	107	107	102	102	102	102
1	99	94	89	85	96	92	87	84	87	84	81	81
2	89	81	74	68	86	79	72	67	75	70	65	65
3	8	70	62	56	78	69	6	55	66	59	54	54
4	74	62	53	46	71	60	52	46	58	51	45	45
5	67	54	45	38	65	53	44	38	50	43	38	38
6	61	48	39	33	59	47	39	32	45	38	32	32
7	56	43	34	28	54	42	34	28	40	33	28	28
8	52	38	30	24	50	37	29	24	36	29	24	24
9	47	34	26	20	46	33	26	20	32	25	20	20
10	44	31	23	18	43	30	23	18	29	22	18	18

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.2 1.7
Efficiency: 92.1%

Photometric Certified by: Luminaire Testing Laboratory
SKSL4/SA/4-1BE Report No. 1389
SKSL4/SA/8-2BE Report No. 1408

RC	80%				70%				50%			
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	10%
0	108	108	108	108	106	106	106	106	101	101	101	101
1	99	94	90	86	96	92	88	85	88	85	82	82
2	90	82	75	70	87	80	74	69	77	72	67	67
3	82	72	64	58	79	71	64	58	68	62	57	57
4	75	64	56	49	73	62	55	49	60	54	48	48
5	68	58	48	42	66	55	47	41	53	46	41	41
6	63	50	42	36	61	49	41	36	47	40	35	35
7	58	45	37	31	56	44	36	31	43	36	31	31
8	53	40	32	27	52	40	32	27	38	31	26	26
9	49	36	28	23	47	35	28	23	34	27	23	23
10	45	33	25	20	44	32	25	20	31	25	20	20

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.2 1.5
Efficiency: 92.1%

Photometric Certified by: Luminaire Testing Laboratory
SKSL4/SA/4-2BE Report No. 1390
SKSL4/SA/8-4BE Report No. 1391

Ordering Guide

SKSL - A - WP - 4 - 1

Reflector Series	Channel Width	Reflector Material	Luminaire Length	No. of Lamps	Socket Pin Option
------------------	---------------	--------------------	------------------	--------------	-------------------

Reflector Series
SKSL = Reflector Kit w/ sockets
KSL = Reflector Kit w/o sockets

Channel Width
4 = 4.25 inch width
5 = 5 inch width
(Specify if other width)
A = Adj brkts

Reflector Material
SA = Specular Aluminum
EA = Enhanced Aluminum
WP = White Paint Aluminum

Luminaire Length
4 = 4 ft.
8 = 8 ft.

Number of Lamps
1 = One Lamp
2 = Two Lamps (4 ft. & 8 ft.)
4 = Four Lamps (8 ft. Only)

Socket Pin Option
B = T8 Bi-pin Socket
C = T5 Bi-pin Socket
S = Slimline Socket



Electronic T8 Fluorescent Controllable Lighting Systems **QUICKTRONIC® POWERSENSE™ T8 DIMMING UNIVERSAL VOLTAGE**

Lamp/Ballast Guide

32W T8 - SYLVANIA OCTRON®

- 1-lamp QTP1x32T8/UNV DIM
- 2-lamp QTP2x32T8/UNV DIM
- 3-lamp QTP3x32T8/UNV DIM
- 4-lamp QTP4x32T8/UNV DIM

Primary Lamp Types

FO32, FBO32, FBO31

Also operates:

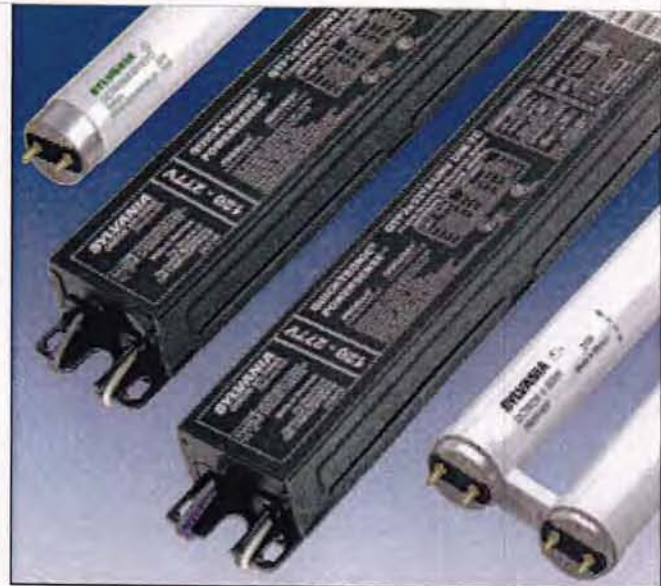
FO25, FBO24
FO17, FBO16

SYLVANIA QUICKTRONIC

POWERSENSE ballasts operate linear fluorescent T8 lamps over a wide (100 - 5%) dimming range and provide true versatility in controls selection.

QUICKTRONIC POWERSENSE ballasts feature micro-controller technology to offer the industry's most adaptable dimming ballast. Compatibility with low voltage controls, power line dimmers and any line voltage from 120V to 277V, provides the flexibility to greatly simplify the specification, purchasing and installation process.

Patented lamp detection technology delivers unmatched performance. Variations in brightness from lamp-to-lamp are virtually eliminated, providing uniform lighting throughout the dimming range. At light levels of >75% unnecessary lamp-coil power is turned off, delivering energy efficiencies comparable to non-dimming Instant start electronic ballast.



This technology also eases installation and troubleshooting by recognizing failed lamps, faulty wiring or loose connections, and shutting down. When the problem is corrected, the system restarts automatically.

All SYLVANIA Professional Series (QTP) electronic ballasts

feature high power quality (<10% THD), lightweight, low profile designs.

Setting the standard for quality, QUICKTRONIC POWERSENSE is covered by our QUICK 60+* warranty, the first and most comprehensive lamp & ballast system warranty in the industry.

Key System Features

- **POWERSENSE** compatibility with low voltage and power line dimmers
- **High Efficiency**
- Lamp Detection Technology
- Universal voltage (120-277)
- 100 - 5% Dimming Range
- PROStart programmed start
- Anti-flash circuitry - turns on in dimmed mode
- Lightweight and low profile
- Operates at >42kHz
- QUICK 60+ ballast and lamp warranty

System Information

QUICKTRONIC POWERSENSE ballasts operate from standard low voltage (0-10VDC) fluorescent controllers or compatible 2-wire power line fluorescent dimmers, making them ideal for individual office lighting or automated building applications, both in new construction and retrofit projects.

For the individual office or conference room, installation can be streamlined by using a 2-wire power line dimmer, eliminating the need for additional control wires.

For more advanced systems, such as daylight harvesting or building automation applications, standard low voltage devices (0-10VDC, Class 1 or 2) are used to control the lighting system. In this daylight harvesting example, each lighting fixture (or fixture row) is

controlled by it's own photo-sensor, regulating the light output to compensate for changes in natural daylight. Depending upon the specific application, energy savings of up to 60% compared to fixed output T8 electronic systems can be realized.

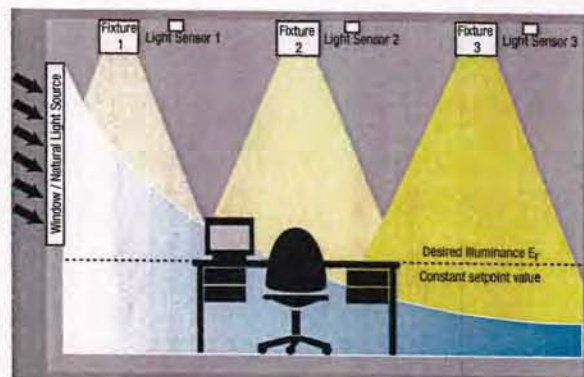
All QUICKTRONIC POWERSENSE models include a line voltage protection circuit, which protects the ballast in the event that line voltage is inadvertently applied to the low voltage control inputs.

Application Information

SYLVANIA QUICKTRONIC POWERSENSE

is ideally suited for:

- Occupancy sensors
- Daylight harvesting
- Energy management
- Load shedding
- Commercial
- Retail
- Hospitality
- Institutional
- Schools
- New construction
- Retrofit



Electronic T8 Fluorescent Controllable Lighting Systems

Item* Number	Description*	Input Voltage (VAC)	Input Current (AMPS)	Lamp Type	Rated Lumens (lm)	No. of Lamps	Ballast Factor (BF)	System Lumens	Input Power (Watts)	System Efficacy (lm/W)
50705	QTP 1x32T8/UNV DIM-TC	120-277	0.27/0.12	F032XP	3000	1	0.88 0.05	2640 150	30 8	88
50707	QTP 2x32T8/UNV DIM-TC	120-277	0.54/0.24	F032XP	3000	2	0.88 0.05	5280 300	60/58 15	88/91
50714	QTP 3x32T8/UNV DIM-TCL	120-277	0.73/0.30	F032XP	3000	3	0.88 0.05	7920 450	87/84 20	91/94
50716	QTP 4x32T8/UNV DIM-TCL	120-277	0.99/0.41	F032XP	3000	4	0.88 0.05	10560 600	117/112 27	90/94

* POWERSENSE T8 replaces former Helios T8 dimming products.

Dimensions:

1 & 2 lamp enclosure

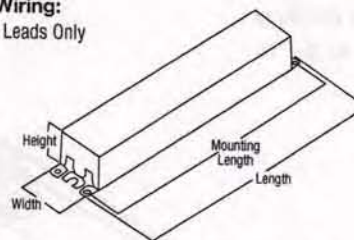
Overall: 9.5" L x 1.68" W x 1.0" H (241 x 43 x 25 mm)
Mounting: 8.90" (226 mm)
Weight: 1.1 lbs each (500 g)

3 & 4 lamp enclosure

Overall: 16.7" L x 1.68" W x 1.0" H (425 x 43 x 25 mm)
Mounting: 16.2" (411 mm)
Weight: 2.1 lbs each (950 g)

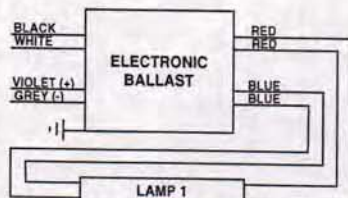
Wiring:

Leads Only

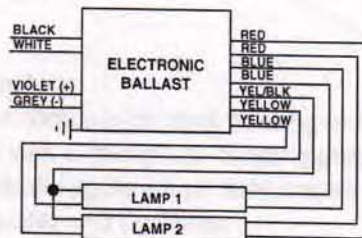


Output Wiring: Lamp wiring for dimming ballasts can differ significantly from non-dimming ballasts and from other manufacturers dimming ballasts. Take care to connect lamp lead wires as shown on the applicable ballast diagram.

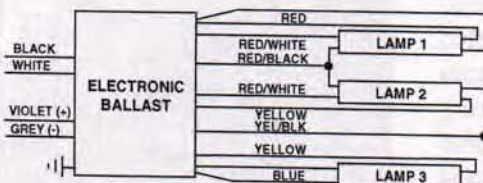
1 lamp



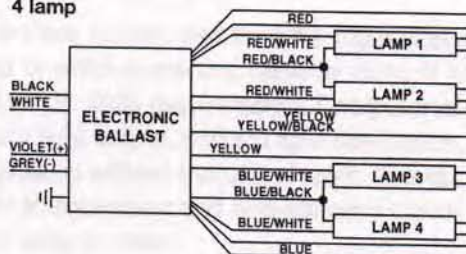
2 lamp



3 lamp

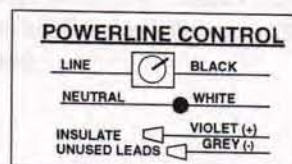
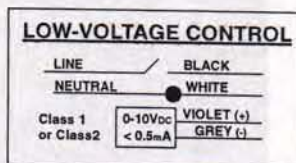


4 lamp



Refer to pages 60 & 61 for controls information.

Input & Control Wiring Options:



Item Number: 50707 QTP 2 x 32T8 / UNV DIM-TC
QUICKTRONIC PROFESSIONAL
Number of Lamps (1, 2, 3, 4):
System Type - DIMMING/Case Size
Line Voltage (120V to 277V)
Primary Lamp Wattage

POWERSENSE™
T8 DIMMING
UNIVERSAL

Performance Guide

Data shown based upon SYLVANIA OCTRON® F032/XP lamp(s). QUICK-TRONIC® POWERSENSE™ ballasts are also compatible with other lamp manufacturers equivalent lamp types that meet ANSI specifications and SYLVANIA fluorescent dimming specifications.

Specifications

Starting Method: Programmed Rapid Start

Circuit Type: Series

Lamp Frequency: >40 KHz

Lamp CCF: Less than 1.7

Starting Temp: 50°F/10°C minimum

Input Voltage: 120-277V, +/-10%

Input Frequency: 50/60 Hz

THD: <10% @ full Output

Power Factor: >98% @ full Output

UL Listed Class P, Type 1 Outdoor

CSA or C/UL Certified

70°C Max Case Temperature

FCC 47CFR Part 18 Non-Consumer

Class A Sound Rating

ANSI C62.41 Cat. A Transient Protection

Remote Mounting up to 8 feet

Specifications subject to change without notice.

Control Information

QUICKTRONIC POWERSENSE ballasts are compatible with a wide range of low voltage (0-10VDC) and power line controllers available from various manufacturers. Please contact OSRAM SYLVANIA for the list.

Low Voltage Control Specs:

Ballast will source up to 0.5mA for 0-10VDC control purposes. May be wired as a Class 1 or Class 2 circuit-consult Local and National Electrical Codes.

Power Line Control Specs:

Specification-grade controls are available for 120V or 277V operation of controllable analog electronic fluorescent ballasts. Controls must be suitably rated for both the type (e.g. Phase-control) and size (e.g. 600W) of the connected load.

Ordering Guide

QUICKTRONIC products are covered by QUICK 60+®, a comprehensive lamp and ballast system warranty. For additional details, refer to the QUICK 60+ warranty bulletin.

ABBOTT ELECTRIC

Dec 2 2008 11:07

P002/002



SWNS Series Narrow 2', 3', 4' & 8' Wrap

Photometric Data

All photometric reports and IES files are compiled by independent testing laboratories and are available either as a download from U.S. Energy Science's web site (<http://www.usenergysciences.com/ies.asp>) or are available on the CD-ROM Catalog.

Catalog Number: SWNS-13248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: One F32T8/TL841
Ballast: Electronic 1-F32IS

Catalog Number: SWNS-23248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/TL841
Ballast: Electronic 2-F32IS

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	93	93	93	93	90	90	90	90	85	85	85	
1	85	82	79	76	83	79	77	74	75	73	70	
2	79	73	68	63	76	71	66	62	67	63	60	
3	72	65	59	54	70	63	58	53	60	55	52	
4	67	58	52	47	64	57	51	46	54	49	45	
5	61	52	45	40	59	51	44	40	48	43	39	
6	57	47	40	35	55	46	39	35	44	38	34	
7	52	42	36	31	51	41	35	31	39	34	30	
8	48	39	31	27	47	37	31	27	36	30	26	
9	45	34	28	23	43	33	27	23	32	27	23	
10	41	31	25	21	40	30	24	20	29	24	20	

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	94	94	94	94	92	92	92	92	87	87	87	
1	86	83	79	76	84	8	78	75	76	74	72	
2	79	73	68	64	77	71	67	63	68	64	61	
3	73	65	59	54	71	64	58	53	61	56	52	
4	67	58	52	47	65	57	51	46	54	49	45	
5	62	52	45	40	60	51	44	39	49	43	39	
6	57	48	40	35	55	46	39	34	44	38	34	
7	52	42	35	30	5	41	34	30	39	34	29	
8	48	37	3	26	47	37	30	26	35	30	25	
9	44	33	27	22	43	33	27	22	32	26	22	
10	41	30	24	20	40	30	24	20	29	23	19	

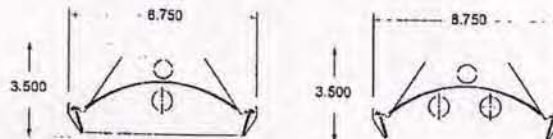
Plane: 0-DEG 90-DEG
Spacing Criteria: 1.3 1.4
Efficiency: 79.4%

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.3 1.5
Efficiency: 80.0%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01501

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03684

Dimensional Guide



Ordering Guide

SWNS - 1 - 32 48 - WP - - -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/Master	Ballast Options	Battery Backup
------------------	--------------	--------------	--------------	--------------------	--------------	-----------------	----------------

Mounting
SWNS = Narrow Shallow Wrap
Surface or Suspension Mount

No. of Lamps
1 = One Lamp
2 = Two Lamps
4 = Four Lamps (96" Only)
6 = Six Lamps (96" Only)

Lamp Wattage
14 = 14 Watt T5
17 = 17 Watt T-8
25 = 25 Watt T-8
28 = 28 Watt T-5
32 = 32 Watt T-8
54 = 54 Watt T-5

Fixture Size
24 = 24 Inches Length
36 = 36 Inches Length
48 = 48 Inches Length
96 = 96 Inches Length

Reflector Material
EA = Enhanced Aluminum
SA = Specular Aluminum
WP = White Paint
NR = No Reflector

Electronic Ballast Options
High Output, 1.18+ Ballast Factor
HM = 120/277 Universal Voltage
Low Power, .77 Ballast Factor
LM = 120/277 Universal Voltage
Standard Output .90-1.0 Ballast Factor
SM = 120/277 Universal Voltage

Battery Backup Options
1B = 1-Lamp 90 Burn Time
2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
See page 3-43 for additional options





FEATURES & SPECIFICATIONS

INTENDED USE

Intended for mounting heights up to 16' requiring low to medium light levels. Ideal for light duty task lighting, utility, storage rooms or retail.

CONSTRUCTION

Channel constructed of die-formed cold rolled steel. Sturdy combination reflector and channel cover constructed of die-formed cold rolled steel and secured by quarter-turn latch for easy access to wire-way. Screw on endplates. Available in 2', 4', or 8' tandem wired lengths. Accepts plug-in option for 1, 2 or 3 primary circuits.

FINISH

Five-stage iron phosphate pretreatment ensures superior paint adhesion and corrosion-resistance. Reflector and channel finished with a high-gloss baked white enamel.

OPTICAL SYSTEM

Solid top or apertured 8% uplight available. Both reflectors are die-embossed.

ELECTRICAL SYSTEM

Thermally protected, resetting, Class P, HPF, non-PCB, UL Listed and CSA Certified ballast is standard. Sound rating depends on lamp/ballast combination.

AWM, TFN, THHN wire throughout, rated for required temperatures.

INSTALLATION

For unit or row installations, surface or suspended mounting.

LISTINGS

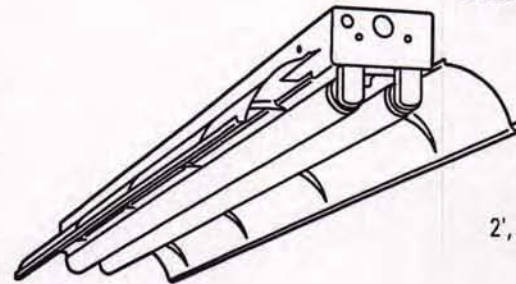
120V, 277V and MVOLT are UL Listed and CSA Certified (standard). 347V is CSA Certified (see Options). NOM Certified (see Options). Suitable for damp locations.

WARRANTY

Guaranteed for one year against mechanical defects in manufacture.

Catalog Number	LA-132-MVOLT	
Notes		Type AA

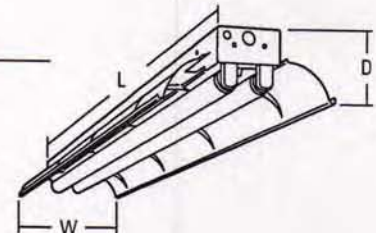
Standard Industrial



Rapid Start
2', 4' or 8' length
1 or 2 lamps

Specifications

Length:	24" (610)
	48" (1219)
	96" (2438)
Width:	12" (305)
Fixture Depth:	4" (102)



All dimensions are inches (millimeters). Specifications subject to change without notice.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: L 2 32 MVOLT GEB10IS

LA	1	32	MVOLT	Options
Series	Number of lamps	Lamp type	Voltage	
L Standard industrial, solid top	1	17 17W T8 (24")	120	GEB10IS Electronic ballasts, $\leq 10\%$ THD, Instant Start ²
LA Standard industrial, apertured reflector	2 Not included	32 32W T8 (48")	277	EL Emergency battery pack. (Nominal 300 lumens) See Life Safety Section)
For tandem double-length unit, add prefix T. Example: TL ¹			347	GLR Internal fast-blow fuse (add X for external)
			MVOLT¹ Others available	GMF Internal slow-blow fuse (add X for external)
				PLF Plug-in wiring. Specify 1, 2 or 3 branch circuits and hot wires (A=Black, B=Red, C=Blue, AB or AC)
				SSR Specular silver reflector finish (95% reflective)
				TILW Tandem in-line wiring
				CSA CSA Certified (Only required for 347V).
				NOM NOM Certified
				PAF Paint after fabrication

Accessories

- Order as separate catalog numbers.
- SQ_ Swivel-stem hanger (specify length in 2" increments).
 - 1B Ceiling spacer (adjusts from 1-1/2" to 2-1/2" from ceiling).
 - WGL Wireguard, 4' white. Order 2 for 8' fixtures.
 - HC36 Chain hangers (1 pair, 36" long).
 - CONLGC 12" screw-on channel connector.

NOTES:

- 1 Available in 32W only.

L Rapid Start

MOUNTING DATA

For unit or row installation, surface or suspended mounting.

Unit installation — Minimum of two hangers required.

Row installation — Two hangers per channel required.

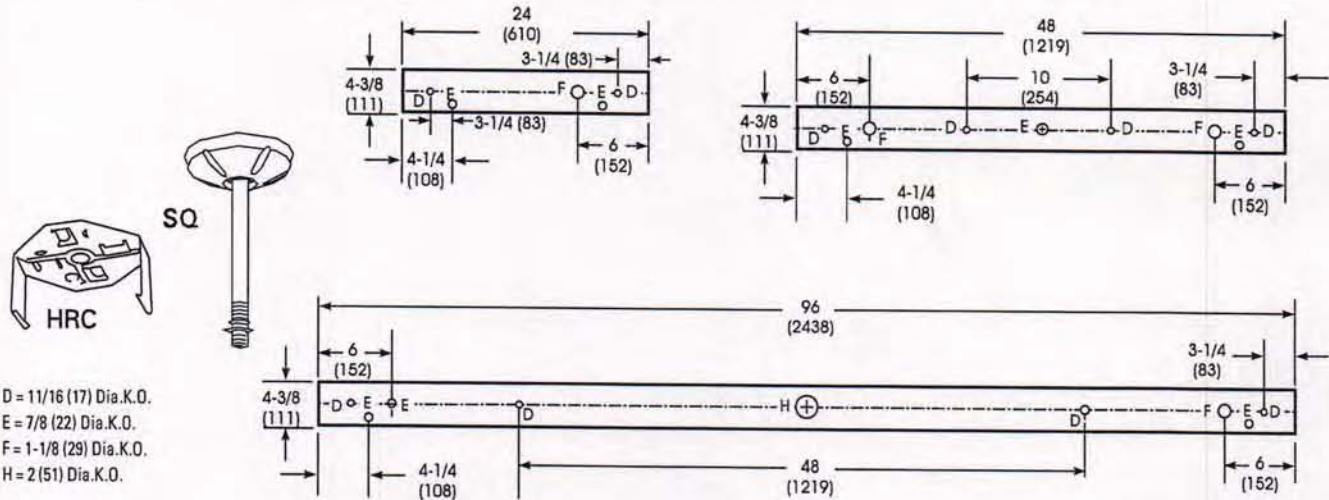
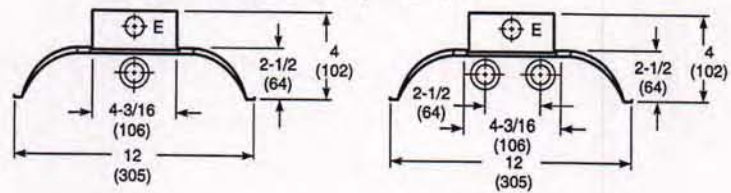
One per fixture plus one per row if CONLGC installed.

Hooker® (HRC) and HC Hangers — Minimum two per channel (unit and row)

See ACCESSORIES below for hanging devices.

DIMENSIONS

Inches (millimeters). Subject to change without notice.



D = 11/16 (17) Dia.K.O.
E = 7/8 (22) Dia.K.O.
F = 1-1/8 (29) Dia.K.O.
H = 2 (51) Dia.K.O.

PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Full photometric data available upon request.

L 2 32

Report LTL 5180

S/MH 1.5

Coefficient of Utilization

Ceiling	80%	70%	50%	30%	70%	50%	30%	50%	30%	10%
Wall	70%	50%	30%	70%	50%	30%	50%	30%	10%	
1	96	92	88	94	90	87	86	83	81	
2	87	80	74	85	78	72	75	70	66	
3	79	70	63	77	68	62	66	60	55	
4	72	61	54	70	60	53	58	52	46	
5	66	54	45	64	53	45	51	44	39	
10	43	31	23	42	30	23	29	23	18	

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1165	20.1	22.7
0-40	1971	34.0	38.5
0-60	3758	64.8	73.3
0-90	5125	88.4	100.0
90-180	0	0.0	0.0
0-180	5125	88.4	100.0

Energy (Calculated in accordance with NEMA standard LE-5)

LER.FL	ANNUAL ENERGY COST*	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
86.2	\$2.79	(2)T8 F32	2900	.88	55

* Comparative yearly lighting energy cost per 1000 lumens

Cord Set Option:

Add suffix to end of catalog number, specify voltage. All cord sets are 6', black. Other configurations available, consult factory.

Suffix	Description
CS1	Straight plug, 120V
CS3	Twist lock, 120V
CS7	Straight plug, 277V
CS11	Twist-lock, 277V
CS25	Twist-lock, 347V
CS97	Twist-lock, 480V
CS93	600V SO cord, no plug



ABBOTT ELECTRIC

Dec 2 2008 11:08

P001/002

SWNS
SERIES
NARROW
2', 3', 4'
& 8'
WRAP

Features

Lower maintenance costs

Increased lamp and ballast life

Reduced glare

Computer designed reflector generates maximum light output

25-year warranty on specular reflector

New York City Approved



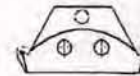
GSA Contract Holder

"B"

reflect-a-light™

Application

Economical and efficient design with a lower profile than the standard SWN series for quality lighting in commercial, and retail applications. Designed for surface and pendant mount applications. The 8-ft. series includes a joint strap shaped to the same profile of the lens for a uniform appearance. Available in T-8 or T-5 configurations.



Construction

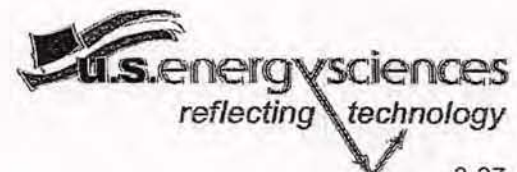
Die formed code gauge steel housing. All painted metal parts are pretreated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability.

Reflectors are constructed from the highest quality specular on polished or white aluminum. Material form, fit and thickness meet or exceed all UL 1598 requirements. Computer assisted design provides maximum light output, uniform light distribution, rigid strength and ballast access without the use of tools. The durable surface is highly resistant to scratching and non-abrasive cleaning solutions, making the reflector easy to clean.

Electrical

Energy saving and electronic Class P, CBM/ETL certified HPF ballast comply with Federal Energy Efficiency Standards; Underwriters Laboratories listed.

Luminaires



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Dec 2 2008 11:08

P002/002



Photometric Data

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Catalog Number: SWNS-13248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: One F32T8/TL841
Ballast: Electronic 1-F32IS

Catalog Number: SWNS-23248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/TL841
Ballast: Electronic 2-F32IS

Coefficients of Utilization - Zonal Cavity Method											
Effective Floor Cavity Reflectance 0.20											
RC	80%				70%				50%		
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%
0	93	93	93	93	90	90	90	90	85	85	85
1	85	82	79	76	83	79	77	74	75	73	70
2	79	73	68	63	76	71	66	62	67	63	60
3	72	65	58	54	70	63	58	53	60	55	52
4	67	58	52	47	64	57	51	46	54	49	45
5	61	52	45	40	59	51	44	40	48	43	39
6	57	47	40	35	55	46	39	35	44	38	34
7	52	42	36	31	51	41	35	31	39	34	30
8	48	38	31	27	47	37	31	27	36	30	26
9	45	34	28	23	43	33	27	23	32	27	23
10	41	31	25	21	40	30	24	20	29	24	20

Coefficients of Utilization - Zonal Cavity Method											
Effective Floor Cavity Reflectance 0.20											
RC	80%				70%				50%		
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%
0	94	94	94	94	92	92	92	92	87	87	87
1	86	83	79	76	84	8	78	75	76	74	72
2	79	73	68	64	77	71	67	63	68	64	61
3	73	65	59	54	71	64	58	53	61	56	52
4	67	58	52	47	65	57	51	46	54	49	45
5	62	52	45	40	60	51	44	39	49	43	39
6	57	46	40	35	55	46	39	34	44	38	34
7	52	42	35	30	5	41	34	30	39	34	29
8	48	37	3	26	47	37	30	26	35	30	25
9	44	33	27	22	43	33	27	22	32	26	22
10	41	30	24	20	40	30	24	20	29	23	19

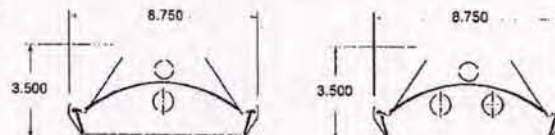
Plane: 0-DEG
Spacing Criteria: 1.3
Efficiency: 79.4%

Plane: 0-DEG
Spacing Criteria: 1.3
Efficiency: 80.0%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01501

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03684

Dimensional Guide



Ordering Guide

SWNS - 2 - 32 48 - WP - - -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/Master	Ballast Options	Battery Backup
------------------	--------------	--------------	--------------	--------------------	--------------	-----------------	----------------

Mounting
SWNS = Narrow Shallow Wrap
Surface or Suspension Mount

No. of Lamps
1 = One Lamp
2 = Two Lamps
4 = Four Lamps (96" Only)
6 = Six Lamps (96" Only)

Lamp Wattage
14 = 14 Watt T5
17 = 17 Watt T-8
25 = 25 Watt T-8
28 = 28 Watt T-5
32 = 32 Watt T-8
54 = 54 Watt T-5

Fixture Size
24 = 24 Inches Length
36 = 36 Inches Length
48 = 48 Inches Length
96 = 96 Inches Length

Reflector Material
EA = Enhanced Aluminum
SA = Specular Aluminum
WP = White Paint
NR = No Reflector

Electronic Ballast Options
High Output, 1.18+ Ballast Factor
HM = 120/277 Universal Voltage
Low Power, .77 Ballast Factor
LM = 120/277 Universal Voltage
Standard Output .90-1.0 Ballast Factor
SM = 120/277 Universal Voltage

Battery Backup Options
1B = 1-Lamp 90 Burn Time
2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
See page 3-43 for additional options





FEATURES & SPECIFICATIONS

INTENDED USE

Ideal where high brightness and good illumination levels are required such as retail, light industrial and warehouses.

ATTRIBUTES

Fixture can be assembled with snap together components and requires no tools. Available in one lamp or two lamp configuration.

CONSTRUCTION

Heavy-duty channel, die-formed from code-gauge steel.

Sturdy channel cover secured by captive quarter-turn latch for easy access to wireway.

Combination endplate/channel connector furnished with each fixture.

FINISH

Five-stage iron phosphate pretreatment ensures superior paint adhesion and rust resistance. Painted parts finished with high-gloss, baked white enamel.

ELECTRICAL SYSTEM

Thermally protected, resetting, Class P, UL Listed and CSA Certified ballast is standard. Sound rating depends on lamp/ballast combination.

AWM, TFN, THHN wire throughout, rated for required temperatures.

INSTALLATION

For unit or row installations, surface or suspended mounting.

LISTING

UL listed to US and Canadian safety standards. Optional: Mexico NOM.

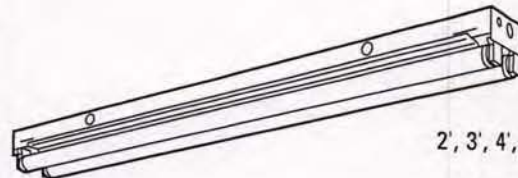
WARRANTY

Guaranteed for one year against mechanical defects in manufacture.

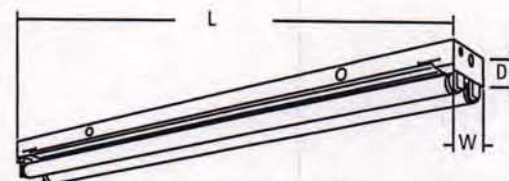
Specifications subject to change without notice.

Catalog Number	C-1-32-MVOLT	
Notes		Type BB

General-Purpose Strip

C

2', 3', 4', 6' or 8' length
1 or 2 lamps



Specifications

Length: 24" (610)

36" (914)

48" (1219)

72" (1829)

96" (2438)

Width: 4-3/8" (111)

Fixture Depth: 2-1/16" (52)

All dimensions are inches (millimeters).

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: C 2 32 MVOLT GEB10IS

C	1	32	MVOLT	
Series	Number of lamps	Lamp type	Voltage	Options
C General-purpose strip For tandem double-length unit, add prefix T. Example: TC	1 2 Not included.	<u>T8</u> 17 17W T8 (24") 25 25W T8 (36") 32 32W T8 (48") 96T8 59W T8 slimline (96") <u>T12 Slimline</u> 36 30W slimline (36") 48 38W slimline (48") 72 55W slimline (72") 96 75W slimline (96")	MVOLT^{1,2} 120 277 347 Others available.	GEB Electronic ballasts, ≤20% THD³ GEB10ISElectronic ballasts, ≤10% THD instant start² BILP IS, high efficiency, .78bf (low) 1/4 One four-lamp ballast ⁴ EL Emergency battery pack (nominal 300 lumens) GLR Internal fast-blow fuse (add X for external) GMF Internal slow-blow fuse (add X for external) PLF Plug-in wiring; specify 1, 2 or 3 branch circuits and hot wires (A = Black, B = Red, C = Blue, AB or AC) TILW Tandem in-line wiring CW Cold-weather ballast; 0°F starting temp CSA CSA Certified (only required for 347V) NOM NOM Certified

Accessories

Order as separate catalog numbers.

SQ_	Swivel-stem hanger (specify length in 2" increments).
1B	Ceiling spacer (adjusts from 1-1/2" to 2-1/2" from ceiling).
CONLGC	12" screw-on channel connector.
WGCUN	Wireguard, 4' white. ⁵
HC36	Chain hangers (1 pair, 36" long).
HRC	Hooker® T-bar hanger (flush to ceiling).
HRC1	Hooker® T-bar hanger (1-1/2" from ceiling).
WGCSMR	Wireguard, 4' white for symmetric reflector. ⁵
WGCASR	Wireguard, 4' white for asymmetric reflector. ⁵
CSMR48WH	Symmetric reflector, 4' white, 7" aperture. ⁵
CASR48WH	Asymmetric reflector, 4' white, 5-3/4" wide. ⁵

NOTES:

- 1 MVOLT standard for 120-277V applications, 50-60 mhz operation. Some options require voltage specified.
- 2 T8 lamps only.
- 3 Slimline lamps only.
- 4 Not available in slimline.
- 5 Order two for 8' fixtures.

C General-Purpose Strip

MOUNTING DATA

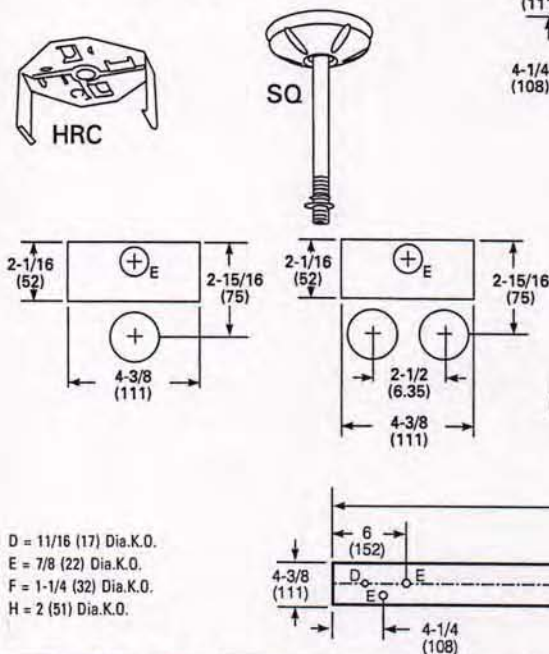
For unit or row installation, surface or suspended mounting.

Unit installation — Minimum of two hangers required.

Row installation — Two hangers per channel required. One per fixture plus one per row if CONLGC installed.

Hooker® (HRC) and HC Hangers — Minimum two per channel (unit and row)

See ACCESSORIES below for hanging devices.

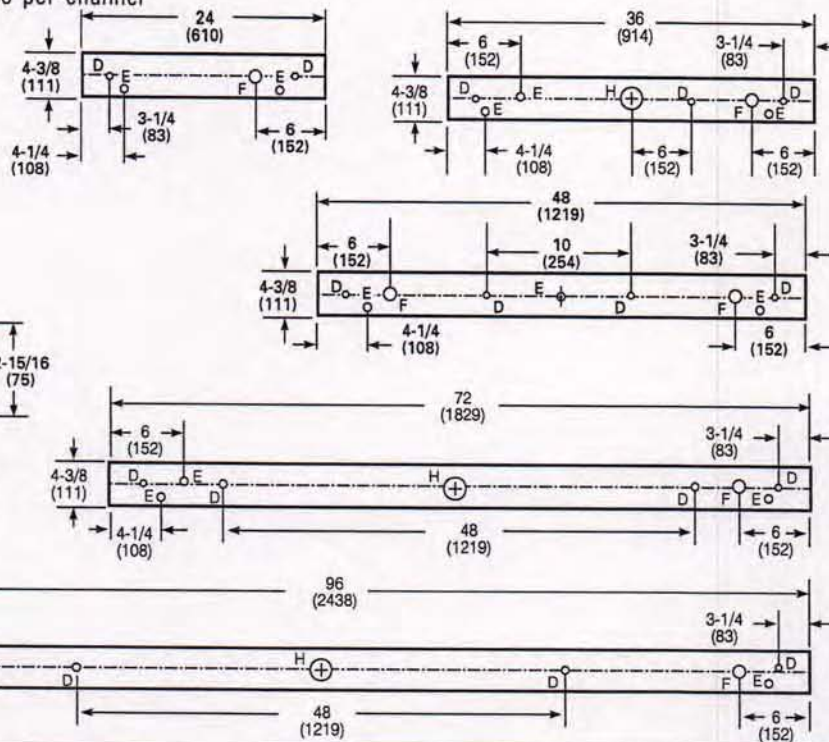


D = 11/16 (17) Dia.K.O.
E = 7/8 (22) Dia.K.O.
F = 1-1/4 (32) Dia.K.O.
H = 2 (51) Dia.K.O.

DIMENSIONS

Inches (millimeters). Subject to change without notice.

48", 72" and 96" have only two 7/8" K.O.'s 6" from each end
24" and 36" have only two 7/8" K.O.'s 3-1/4" from each end



PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Lamp configurations shown are typical. All data based on 25°C. Full photometric data on these and other configurations available upon request.

C 2 96

TEST NO: LTL 18310

LUMENS PER LAMP: 6300

pc	Coefficients of Utilization								
	80%			70%			50%		
	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	103	103	103	98	98	98	90	90	90
1	86	82	78	82	78	74	75	72	69
2	74	67	61	70	64	59	64	59	55
3	64	56	49	61	54	48	56	49	44
4	56	47	41	53	46	40	49	42	37
5	49	41	35	47	39	34	43	37	31
6	44	36	30	42	34	29	39	32	27
7	40	32	26	38	30	25	35	28	24
8	36	28	23	35	27	22	32	25	21
9	33	25	20	32	25	20	29	23	19
10	30	23	18	29	22	18	27	21	17

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0° - 30°	1785.8	14.2	15.7
0° - 40°	3042.4	24.1	26.8
0° - 60°	5944.0	47.2	52.3
0° - 90°	9027.5	71.6	79.4
90° - 180°	2341.8	18.6	20.6
0° - 180°	11369.4	90.2	100.0

C 2 32

TEST NO: LTL 5181

LUMENS PER LAMP: 2900

pc	Coefficients of Utilization								
	80%			70%			50%		
	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	106	106	106	102	102	102	93	93	93
1	89	84	79	85	80	76	78	74	71
2	76	68	62	72	66	60	66	61	56
3	65	57	50	62	55	49	57	51	45
4	57	48	42	55	47	40	50	43	38
5	51	42	35	48	40	34	44	37	32
6	45	36	30	43	35	29	40	33	28
7	41	32	26	39	31	25	36	29	24
8	37	29	23	35	28	22	33	26	21
9	34	26	20	32	25	20	30	23	19
10	31	23	18	30	23	18	28	21	17

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0° - 30°	842.1	14.5	15.6
0° - 40°	1435.8	24.8	26.7
0° - 60°	2810.1	48.4	52.2
0° - 90°	4362.5	75.2	81.0
90° - 180°	1021.0	17.6	19.0
0° - 180°	5383.6	92.8	100.0

Energy (Calculated in accordance with NEMA standard LE-5)

LER.FL	ANNUAL ENERGY COST*	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
86.2	\$2.79	(2)T8 F32	2900	.88	55

* Comparative yearly lighting energy cost per 1000 lumens

Energy (Calculated in accordance with NEMA standard LE-5)

ORDERING INFORMATION	LER.FL	ANNUAL ENERGY COST*	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
C 2 32 MVOLT GEB10IS	77.6	\$3.09	F32T8/735	2800	.88	59
C 2 32 MVOLT BILP	93.6	\$2.56	F32T8/835/HT8	3100	.78	48

* Comparative yearly lighting energy cost per 1000 lumens



An Acuity Brands Company

Sheet #: C

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Lithonia Lighting
Fluorescent

One Lithonia Way, Conyers, GA 30012

Phone: 770-922-9000, 800-315-4963, Fax: 770-602-1531

www.lithonia.com



FEATURES & SPECIFICATIONS

INTENDED USE

Intended for mounting heights up to 16' requiring low to medium light levels. Ideal for light duty task lighting, utility, storage rooms or retail.

CONSTRUCTION

Channel constructed of die-formed cold rolled steel. Sturdy combination reflector and channel cover constructed of die-formed cold rolled steel and secured by quarter-turn latch for easy access to wire-way. Screw on endplates. Available in 2', 4', or 8' tandem wired lengths. Accepts plug-in option for 1, 2 or 3 primary circuits.

FINISH

Five-stage iron phosphate pretreatment ensures superior paint adhesion and corrosion-resistance. Reflector and channel finished with a high-gloss baked white enamel.

OPTICAL SYSTEM

Solid top or apertured 8% uplight available. Both reflectors are die-embossed.

ELECTRICAL SYSTEM

Thermally protected, resetting, Class P, HPF, non-PCB, UL Listed and CSA Certified ballast is standard. Sound rating depends on lamp/ballast combination.

AWM, TFN, THHN wire throughout, rated for required temperatures.

INSTALLATION

For unit or row installations, surface or suspended mounting.

LISTINGS

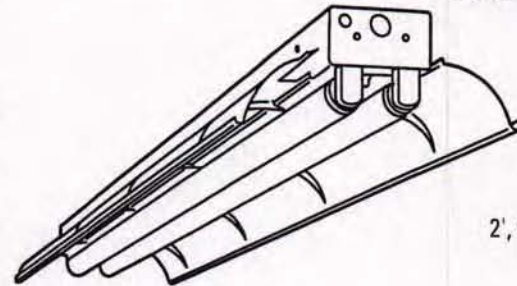
120V, 277V and MVOLT are UL Listed and CSA Certified (standard). 347V is CSA Certified (see Options). NOM Certified (see Options). Suitable for damp locations.

WARRANTY

Guaranteed for one year against mechanical defects in manufacture.

Catalog Number	LA-2-32-MVOLT	
Notes		Type CC

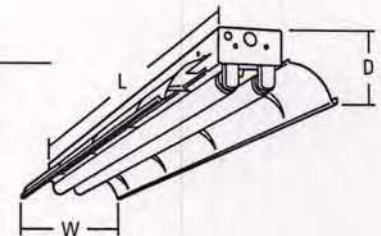
Standard Industrial



Rapid Start
2', 4' or 8' length
1 or 2 lamps

Specifications

Length:	24" (610)
	48" (1219)
	96" (2438)
Width:	12" (305)
Fixture Depth:	4" (102)



All dimensions are inches (millimeters). Specifications subject to change without notice.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: L 2 32 MVOLT GEB10IS

LA	2	32	MVOLT	Options
Series	Number of lamps	Lamp type	Voltage	
L Standard industrial, solid top	1	17 17W T8 (24")	120	GEB10IS Electronic ballasts, ≤10% THD, Instant Start²
LA Standard industrial, apertured reflector	2	32 32W T8 (48")	277	EL Emergency battery pack. (Nominal 300 lumens) See Life Safety Section)
	Not included		347	GLR Internal fast-blow fuse (add X for external)
			MVOLT¹	GMF Internal slow-blow fuse (add X for external)
			Others available	PLF Plug-in wiring. Specify 1, 2 or 3 branch circuits and hot wires (A=Black, B=Red, C=Blue, AB or AC)
				SSR Specular silver reflector finish (95% reflective)
				TILW Tandem in-line wiring
				CSA CSA Certified (Only required for 347V).
				NOM NOM Certified
				PAF Paint after fabrication

Accessories

- Order as separate catalog numbers.
- SQ_ Swivel-stem hanger (specify length in 2" increments).
- 1B Ceiling spacer (adjusts from 1-1/2" to 2-1/2" from ceiling).
- WGL Wireguard, 4' white. Order 2 for 8' fixtures.
- HC36 Chain hangers (1 pair, 36" long).
- CONLCG 12" screw-on channel connector.

NOTES:

- 1 Available in 32W only.

L Rapid Start

MOUNTING DATA

For unit or row installation, surface or suspended mounting.

Unit installation — Minimum of two hangers required.

Row installation — Two hangers per channel required.

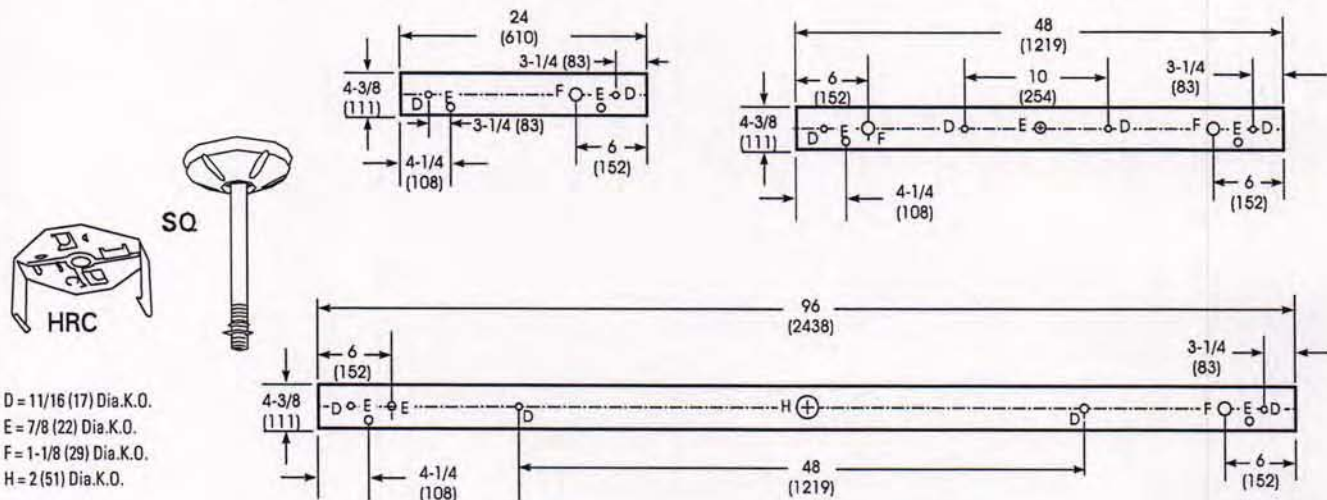
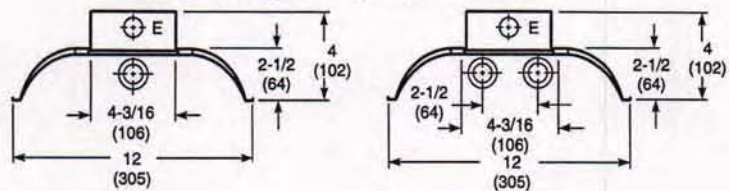
One per fixture plus one per row if CONLGC installed.

Hooker® (HRC) and HC Hangers — Minimum two per channel (unit and row)

See ACCESSORIES below for hanging devices.

DIMENSIONS

Inches (millimeters). Subject to change without notice.



PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Full photometric data available upon request.

L 2 32

Report LTL 5180

S/MH 1.5

Coefficient of Utilization

Ceiling Wall	80%			70%			50%		
	70%	50%	30%	70%	50%	30%	50%	30%	10%
1	96	92	88	94	90	87	86	83	81
2	87	80	74	85	78	72	75	70	66
3	79	70	63	77	68	62	66	60	55
4	72	61	54	70	60	53	58	52	46
5	66	54	45	64	53	45	51	44	39
10	43	31	23	42	30	23	29	23	18

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1165	20.1	22.7
0-40	1971	34.0	38.5
0-60	3758	64.8	73.3
0-90	5125	88.4	100.0
90-180	0	0.0	0.0
0-180	5125	88.4	100.0

Energy (Calculated in accordance with NEMA standard LE-5)

LER.FL	ANNUAL ENERGY COST*	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
86.2	\$2.79	(2)T8 F32	2900	.88	55

* Comparative yearly lighting energy cost per 1000 lumens

Cord Set Option:

Add suffix to end of catalog number, specify voltage. All cord sets are 6', black. Other configurations available, consult factory.

<u>Suffix</u>	<u>Description</u>
CS1	Straight plug, 120V
CS3	Twist lock, 120V
CS7	Straight plug, 277V
CS11	Twist-lock, 277V
CS25	Twist-lock, 347V
CS97	Twist-lock, 480V
CS93	600V SO cord, no plug



FEATURES & SPECIFICATIONS

INTENDED USE

Intended for mounting heights up to 16' requiring low to medium light levels. Ideal for light duty task lighting, utility, storage rooms or retail.

CONSTRUCTION

Channel constructed of die-formed cold rolled steel. Sturdy combination reflector and channel cover constructed of die-formed cold rolled steel and secured by quarter-turn latch for easy access to wire-way. Screw on endplates. Available in 2', 4', or 8' tandem wired lengths. Accepts plug-in option for 1, 2 or 3 primary circuits.

FINISH

Five-stage iron phosphate pretreatment ensures superior paint adhesion and corrosion-resistance. Reflector and channel finished with a high-gloss baked white enamel.

OPTICAL SYSTEM

Solid top or apertured 8% uplight available. Both reflectors are die-embossed.

ELECTRICAL SYSTEM

Thermally protected, resetting, Class P, HPF, non-PCB, UL Listed and CSA Certified ballast is standard. Sound rating depends on lamp/ballast combination.

AWM, TFN, THHN wire throughout, rated for required temperatures.

INSTALLATION

For unit or row installations, surface or suspended mounting.

LISTINGS

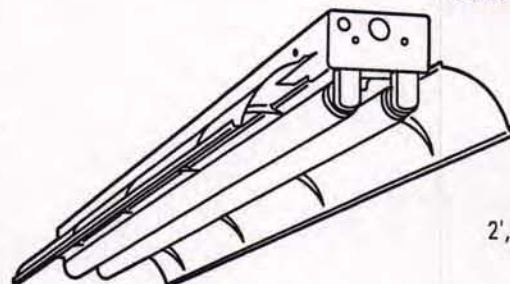
120V, 277V and MVOLT are UL Listed and CSA Certified (standard). 347V is CSA Certified (see Options). NOM Certified (see Options). Suitable for damp locations.

WARRANTY

Guaranteed for one year against mechanical defects in manufacture.

Catalog Number	TLA-1-32-MVOLT	
Notes		Type DD

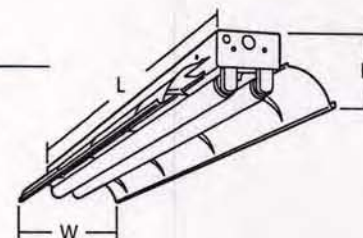
Standard Industrial



Rapid Start
2', 4' or 8' length
1 or 2 lamps

Specifications

Length: 24" (610)
48" (1219)
96" (2438)
Width: 12" (305)
Fixture Depth: 4" (102)



All dimensions are inches (millimeters). Specifications subject to change without notice.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: L 2 32 MVOLT GEB10IS

TLA	1	32	MVOLT	Options
Series	Number of lamps	Lamp type	Voltage	
L Standard industrial, solid top	1	17 17W T8 (24")	120	GEB10IS Electronic ballasts, ≤10% THD, Instant Start ²
LA Standard industrial, apertured reflector	2	32 32W T8 (48")	277	EL Emergency battery pack. (Nominal 300 lumens) See Life Safety Section)
	Not included		347	GLR Internal fast-blow fuse (add X for external)
			MVOLT¹	GMF Internal slow-blow fuse (add X for external)
			Others available	PLF Plug-in wiring. Specify 1, 2 or 3 branch circuits and hot wires (A=Black, B=Red, C=Blue, AB or AC)
				SSR Specular silver reflector finish (95% reflective)
				TILW Tandem in-line wiring
				CSA CSA Certified (Only required for 347V).
				NOM NOM Certified
				PAF Paint after fabrication

Accessories

Order as separate catalog numbers.
SQ_ Swivel-stem hanger (specify length in 2" increments).
1B Ceiling spacer (adjusts from 1-1/2" to 2-1/2" from ceiling).
WGL Wireguard, 4' white. Order 2 for 8' fixtures.
HC36 Chain hangers (1 pair, 36" long).
CONLCG 12" screw-on channel connector.

NOTES:

1 Available in 32W only.

L Rapid Start

MOUNTING DATA

For unit or row installation, surface or suspended mounting.

Unit installation — Minimum of two hangers required.

Row installation — Two hangers per channel required.

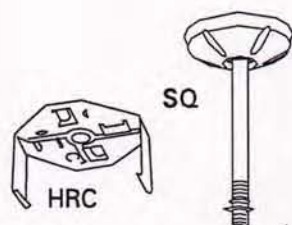
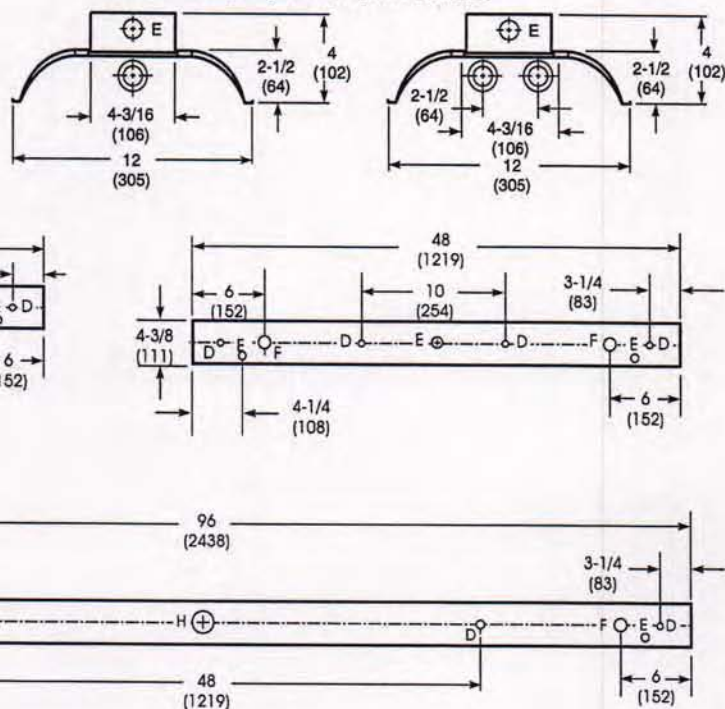
One per fixture plus one per row if CONLGC installed.

Hooker® (HRC) and HC Hangers — Minimum two per channel (unit and row)

See ACCESSORIES below for hanging devices.

DIMENSIONS

Inches (millimeters). Subject to change without notice.



D = 11/16 (17) Dia. K.O.
E = 7/8 (22) Dia. K.O.
F = 1-1/8 (29) Dia. K.O.
H = 2 (51) Dia. K.O.

PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Full photometric data available upon request.

L 2 32

Report LTL 5180

S/MH 1.5

Coefficient of Utilization

	Ceiling			80%			70%			50%		
Wall	70%	50%	30%	70%	50%	30%	70%	50%	30%	50%	30%	10%
1	96	92	88	94	90	87	86	83	81			
2	87	80	74	85	78	72	75	70	66			
3	79	70	63	77	68	62	66	60	55			
4	72	61	54	70	60	53	58	52	46			
5	66	54	45	64	53	45	51	44	39			
10	43	31	23	42	30	23	29	23	18			

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1165	20.1	22.7
0-40	1971	34.0	38.5
0-60	3758	64.8	73.3
0-90	5125	88.4	100.0
90-180	0	0.0	0.0
0-180	5125	88.4	100.0

Energy (Calculated in accordance with NEMA standard LE-5)

LER, FL	ANNUAL ENERGY COST*	LAMP DESCRIPTION	LAMP LUMENS	BALLAST FACTOR	WATTS
86.2	\$2.79	(2)T8 F32	2900	.88	55

* Comparative yearly lighting energy cost per 1000 lumens

Cord Set Option:

Add suffix to end of catalog number, specify voltage. All cord sets are 6', black. Other configurations available, consult factory.

Suffix	Description
CS1	Straight plug, 120V
CS3	Twist lock, 120V
CS7	Straight plug, 277V
CS11	Twist-lock, 277V
CS25	Twist-lock, 347V
CS97	Twist-lock, 480V
CS93	600V SO cord, no plug



ABBOTT ELECTRIC

Dec 3 2008 11:29

P001/002

SKSL SERIES REFLECTOR KIT

"EE"

reflect-a-light™

Application

The SKSL reflector kits are designed to convert standard T12 strip luminaires to a highly efficient T8 or T5 lamped luminaire. The SKSL configuration provides optimum performance with heights up to 18 feet. Conversion maximizes fixture efficiency and provides uniform light distribution. The reflector can be easily removed for maintenance without tools. Kit is available in 32 watt T8 or 28 and 54 watt T5 lamps. Kit contains reflector, mounting brackets, fasteners and shunted locking sockets.

Features

Easy Installation

Highly efficient reflector

Reduced maintenance costs

Increased lamp and ballast life

25 year warranty on specular reflectors

Computer designed reflectors generate maximum light output and even light distribution

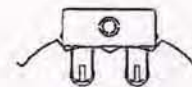
Kits include all parts needed for retrofit

Construction

Reflectors are aluminum with a range of anodized or white paint finish options to meet lighting needs. Brackets are constructed from die formed code gauge steel. All painted metal parts are pre-treated with a phosphate bonding process and painted with electrostatically applied high temperature baked white enamel for superior quality and durability. Material form, fit and thickness meet UL 1598 standards. Components are Underwriters Laboratories classified for use in retrofit applications. Autocad design results in maximum light output with uniform light distribution, rigid strength and ballast access without the use of tools.

Installation

Installation of the retrofit kit is simple and easy. The process involves removing the existing lamps and sockets and then installing the new brackets and sockets. The reflector is then easily attached to the brackets with quarter-turn fasteners. The reflector will serve as the ballast cover. Universal end brackets as shown can be used with either one or two lamp conversions.



GSA Contract Order

u.s.energysciences
reflecting technology

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Dec 3 2008 11:29

P002/002



SKSL Series

Photometric Data

All photometric reports and IES files are compiled by independent testing laboratories and are available either as a download from U.S. Energy Science's web site (<http://www.usenergysciences.com/ies.asp>) or are available on the CD-ROM Catalog

Catalog Number: SKSL4/SA/4-1BE or SKSL4/SA/8-2BE
Luminaire: Formed steel housing, formed aluminum specular reflector
Lamps: 4-1BE - One F32T8
8-2BE - Two F32T8
Ballast: Electronic 1-F32IS or 2-F32IS

Catalog Number: SKSL4/SA/4-2BE or SKSL4/SA/8-4BE
Luminaire: Formed steel housing, formed aluminum specular reflector
Lamps: 4-2BE - Two F32T8
8-4BE - Four F32T8
Ballast: Electronic 2-F32IS or 4-F32IS

RC	80%				70%				50%		
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%
0	110	110	110	110	107	107	107	107	102	102	102
1	99	94	89	85	98	92	87	84	87	84	81
2	89	81	74	68	88	79	72	67	75	70	65
3	8	70	62	56	78	69	6	55	66	59	54
4	74	62	53	46	71	60	52	46	58	51	45
5	67	54	45	38	65	53	44	38	50	43	38
6	61	48	39	33	59	47	39	32	45	38	32
7	56	43	34	28	54	42	34	28	40	33	28
8	52	38	30	24	50	37	29	24	36	29	24
9	47	34	26	20	46	33	26	20	32	25	20
10	44	31	23	18	43	30	23	18	29	22	18

RC	80%				70%				50%		
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%
0	108	108	108	108	106	106	106	106	101	101	101
1	99	94	90	86	96	92	88	85	88	85	82
2	90	82	75	70	87	80	74	69	77	72	67
3	82	72	64	58	79	71	64	58	68	62	57
4	75	64	56	49	73	62	55	49	60	54	48
5	68	56	48	42	66	55	47	41	53	46	41
6	63	50	42	36	61	49	41	36	47	40	35
7	58	45	37	31	56	44	36	31	43	36	31
8	53	40	32	27	52	40	32	27	38	31	26
9	49	36	28	23	47	35	28	23	34	27	23
10	45	33	25	20	44	32	25	20	31	25	20

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.2 1.7
Efficiency: 92.1%

Plane: 0-DEG 90-DEG
Spacing Criteria: 1.2 1.5
Efficiency: 92.1%

Photometric Certified by: Luminaire Testing Laboratory
SKSL4/SA/4-1BE Report No. 1369
SKSL4/SA/8-2BE Report No. 1406

Photometric Certified by: Luminaire Testing Laboratory
SKSL4/SA/4-2BE Report No. 1390
SKSL4/SA/8-4BE Report No. 1391

Ordering Guide

SKSL - A - WP - 8 - 2

Reflector Series	Channel Width	Reflector Material	Luminaire Length	No. of Lamps	Socket Pin Option
------------------	---------------	--------------------	------------------	--------------	-------------------

Reflector Series
SKSL = Reflector Kit w/ sockets
KSL = Reflector Kit w/o sockets

Reflector Material
SA = Specular Aluminum
EA = Enhanced Aluminum
WP = White Paint Aluminum

Number of Lamps
1 = One Lamp
2 = Two Lamps (4 ft. & 8 ft.)
4 = Four Lamps (8 ft. Only)

Channel Width
4 = 4.25 inch width
5 = 5 inch width
(Specify if other width)
A = Adj brkts

Luminaire Length
4 = 4 ft.
8 = 8 ft.

Socket Pin Option
B = T8 Bi-pin Socket
C = T5 Bi-pin Socket
S = Slimline Socket



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Dec 3 2008 11:35

P001/002



"GG"

Wet Location Fluorescent T8 / T5 Fixture

Application

The Wet Location fixture is IP65 rated, dust and moisture-resistant, making it ideal for harsh environments where humidity or moisture is present. Primary applications include:

- Food processing facilities
- Kitchens
- Publis Areas
- Subways
- Schools
- Parking garages
- Gas Stations
- Government facilities
- Industrial facilities

Description

The full body assembly accommodates either T8 or T5 lamps. The gasketed enclosure is constructed of a fiberglass upper body and acrylic diffuser, with a continuous poured gasket. The diffuser and upper components are locked by retaining latches, which ensures a tight seal. Sockets include secure positioning rotating collars.

Reflector Optics

An optional 95% specular reflector is available and has a 25 year warranty.

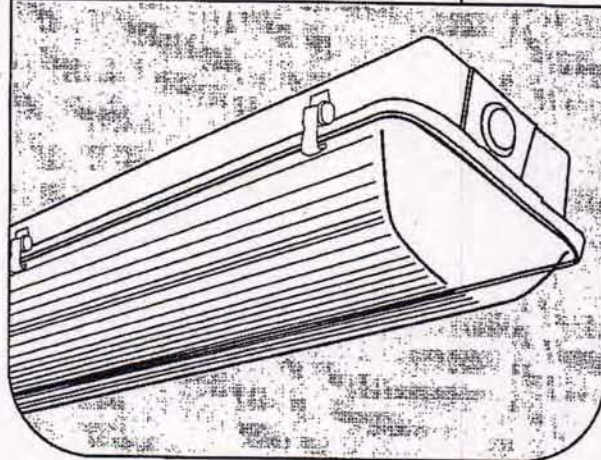
Electrical

All ballasts are class P rated and UL/CUL listed. Our ballasts are also thermally protected, sound rated and tightly secured by mounting bolts.

Catalog Number

Notes

Type



Wet Location T5 and T8 Series

Maintenance

No tools required for lamp and ballast access.

Installation

Fixture comes with external brass studs and stainless steel hanging bracket.

Warranty

One year warranty against defect in manufacturing

Listing

- UL/CUL Listed
- NSF International
- U.S.D.A

Catalog Ordering Matrix

WL8	SA	2	32	UNI	H	
Series	Reflector Distribution	Lamp Quantity	Lamp Type	Voltage	Ballast Factor	Options
WL4 - 4 Foot	SA - Specular Aluminum (Optional Reflector)	1 (4' Fixture Only)	28 - (T8 28W)	UNI - (120-277)	H - (T8 High)	(See Below)
WL8 - 8 Foot		2 (4' or 8' Fixture)	32 - (T8 32W)	120	N - (T8 Normal)	
		3 (4' Fixture Only)	54 - (T5HO 54W)	277	L - (T8 Low)	
		4 (8' Fixture Only)		347	V - (T5HO)	
		6 (8' Fixture Only)		480		
OPTIONS						
Power Cords		* Use a program rapid start ballast with occupancy sensor. TCP is not responsible for lamps failing prematurely due to an occupancy sensor being used with an instant start ballast.		Lamps Installed in Job Pack		Special Mounting
2P - 120V, 15A, 8' Power cord w/ straight blade plug				73G - T8 Lamps Only		EZHANGER - 15' adjustable aircraft cable hanging kit
3P - 120V, 15A, 8' Power cord w/ twist lock plug				73S - T8 Lamps Only		12Pendantkit - Mounting kit for 1/2" pendants
4T - 120V, 20A, 10' Power cord w/ twist lock plug				741 - T8 Lamps Only		34Pendantkit - Mounting kit for 3/4" pendants
11P - 208V, 15A, 8' Power cord w/ straight blade plug				830 - T5 and T8 Lamps		LHKIT - Single Point Hook Mounting Kit complete
9T - 208V, 20A, 8' Power cord w/ twist lock plug				835 - T5 and T8 Lamps		
8P - 277V, 20A, 8' Power cord w/ twist lock plug				841 - T5 and T8 Lamps		
10P - 277V, 20A, 15' Power cord w/ straight blade plug				850 - T5 and T8 Lamps		
10T - 277V, 15A, 10' Power cord w/ twist lock plug				865 - T5 and T8 Lamps		
10T2 - 277V, 20A, 10' Power cord w/ twist lock plug				830HL - T8 Lamps Only		
6C - 600V rated 6' Power cord only. No plug		Emergency Ballasts		835HL - T8 Lamps Only		
10C - 600V rated 10' Power cord only. No plug		B1 - 400 LMS 90 min		841HL - T8 Lamps Only		
20C - 600V rated 20' Power cord only. No plug		B7 - 550 LMS 120 min		850HL - T8 Lamps Only		
6W - 600V rated 6' flexible metal conduit fixture whip		B9 - 550 LMS 90 min		865HL - T8 Lamps Only		
6C4 - 120V-300V 6' Power cord only, 4 wire. No plug		B6 - 850 LMS 90 min		830XHL - T8 Lamps Only		
20C4 - 120V-600V 20' Power cord only, 4 wire. No plug		B5 - 1350 LMS 90 min		835XHL - T8 Lamps Only		
8T - 480V, 20A, 8' Power cord w/ L8-20 twist lock plug		B3 - 3000 LMS 90 min		841XHL - T8 Lamps Only		
		BL5 - 700 LMS 90 min. (For use with T5)		850XHL - T8 Lamps Only		
		BL6 - 1250 LMS 90 min. (For use with T5)		865XHL - T8 Lamps Only		

* FBO - TCP will install supplied modular wire cords

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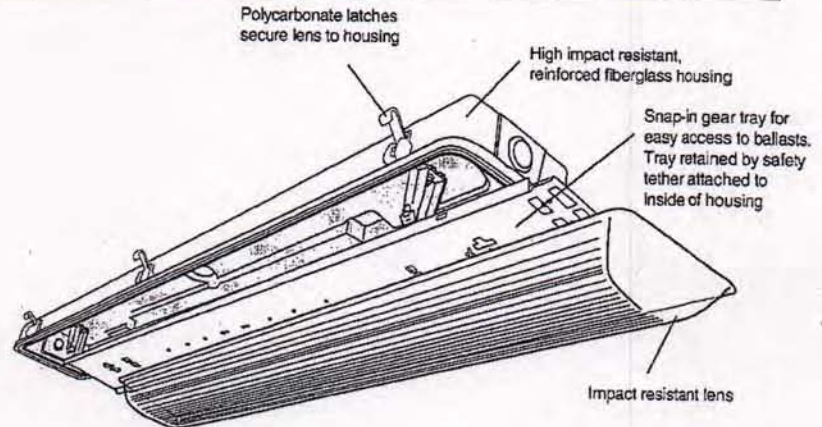
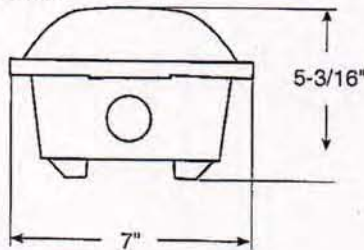
P002/002



Wet Location Fluorescent T8 / T5 Fixture

Dimensions & Construction

side view



Photometric Report 48" Wet Location Fixture, 2 32 watt

TCP Gasketed Luminaire with 2 32w lamp, lumen rating 2950 LMS, and one ADVANCE REL - 2P32-RH-TP electronic ballast operating AT 120 VAC and 56 watts

Photometric Report

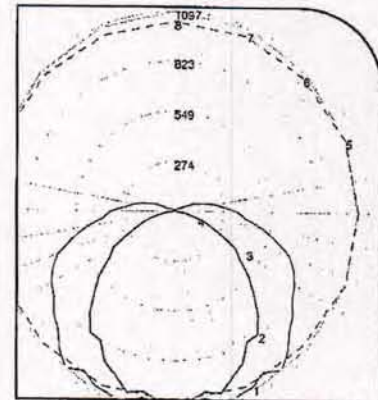
Efficiency (total) 60.2
Spacing Criterion (0-Deg) 1.3
Spacing Criterion (90-Deg) 1.4

Average Luminance (Candelas / Square Meter)

Angle	0	45.0	90
45	4119	4404	4800
55	3544	4100	4787
65	2922	4140	5140
75	2228	4346	5152
85	1358	3961	4906

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0-30	847.58	14.9	20.1
0-40	1428.75	25.1	33.8
0-60	2637.42	46.3	62.4
0-90	3874.79	68	91.7
90-180	349.35	6.1	8.3
0-180	4224.14	74.1	100



Coefficient of Utilization Table Effective Floor Cavity Reflectance = 20%

Pcc... Pw... RCR	80 70	50	30	10	70 70	50	30	10	50 50	30	10	30 50	30	10	10 50	30	10	0 0
0	0.87	0.87	0.87	0.87	0.84	0.84	0.84	0.84	0.79	0.79	0.79	0.74	0.74	0.74	0.70	0.70	0.70	0.68
1	0.77	0.73	0.69	0.65	0.74	0.71	0.67	0.64	0.66	0.63	0.61	0.62	0.60	0.58	0.58	0.57	0.55	0.53
2	0.69	0.62	0.57	0.52	0.67	0.60	0.55	0.51	0.57	0.52	0.48	0.53	0.50	0.46	0.50	0.47	0.44	0.42
3	0.63	0.54	0.47	0.42	0.60	0.52	0.46	0.41	0.49	0.44	0.40	0.46	0.42	0.38	0.44	0.40	0.37	0.35
4	0.57	0.48	0.41	0.35	0.55	0.46	0.40	0.35	0.43	0.38	0.33	0.41	0.36	0.32	0.39	0.35	0.31	0.29
5	0.52	0.42	0.35	0.30	0.50	0.41	0.34	0.29	0.39	0.33	0.29	0.37	0.32	0.28	0.35	0.30	0.27	0.25
6	0.48	0.38	0.31	0.26	0.46	0.37	0.30	0.25	0.35	0.29	0.25	0.33	0.28	0.24	0.31	0.27	0.23	0.22
7	0.45	0.34	0.27	0.23	0.43	0.33	0.27	0.22	0.32	0.26	0.22	0.30	0.25	0.21	0.28	0.24	0.21	0.19
8	0.42	0.31	0.25	0.20	0.40	0.30	0.24	0.20	0.29	0.23	0.19	0.27	0.22	0.19	0.26	0.22	0.18	0.17
9	0.39	0.28	0.22	0.18	0.37	0.28	0.22	0.18	0.26	0.21	0.17	0.25	0.20	0.17	0.24	0.20	0.16	0.15
10	0.36	0.26	0.20	0.16	0.35	0.26	0.20	0.16	0.24	0.19	0.16	0.23	0.19	0.15	0.22	0.18	0.15	0.13

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P001/002

Power Cage Industrial Series

PC Series

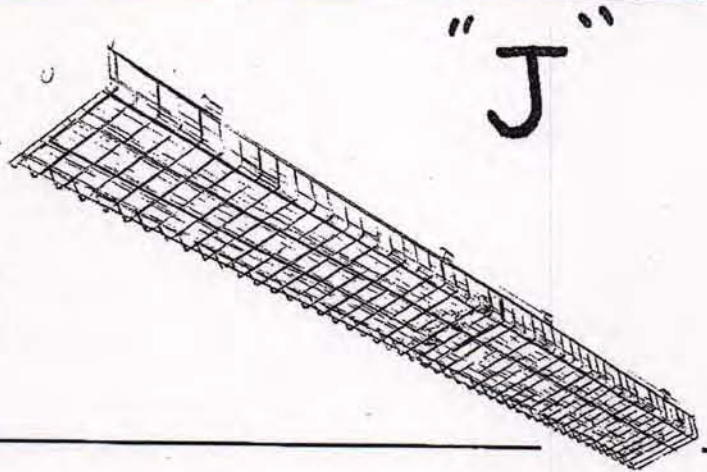
Features

Combines the durability of a full steel body with the performance of a specular insert

Superior Light Quality, 93.8% Photometric Efficiency (6L with specular reflector)

Rigid, Four-Bend Press-Brake Formed Body

226 Watts (6-32W with high-lumen ballasts)



Technical Data

Housing: 20ga. (0.032") pre-painted steel die formed with sufficient knockouts for mounting and electrical 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. (For maximum performance, 95% specular is recommended.) 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.

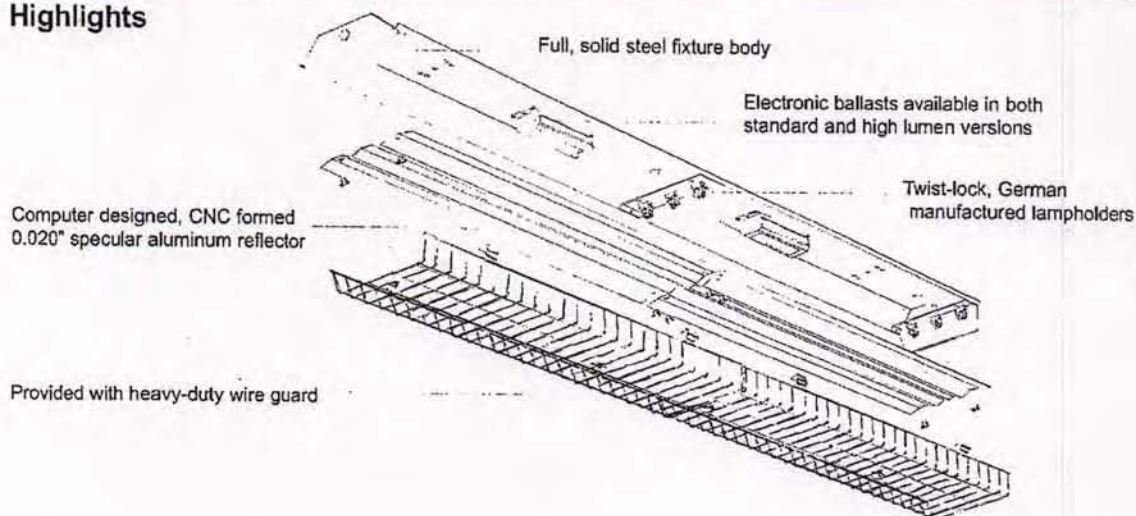
Construction: The solid four-bend body provides added rigidity. The socket bars and endplates securely bolt into place. The reflectors are attached to the fixture body with quarter-turn fasteners. No tools are required for reflector installation and removal.

Mounting: Fixture can be surface, pendant, or chain suspended.

Installation



Highlights



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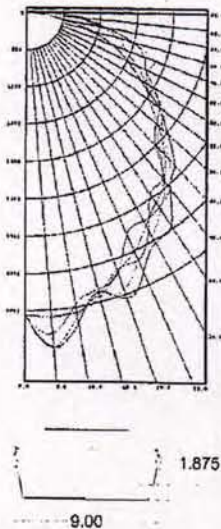
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P002/002

Power Cage Industrial Series

PC Series

Photometrics - Mirro4 Reflector and (6) 32W T8

**Energy Solutions**
Premium Lighting without the Premium PriceEnergy Solutions International, Inc.
141 State Street
Saint Paul, MN 55107ENERGY SOLUTIONS 1 X 8 FLUORESCENT LUMINAIRE
WITH WHITE INTERIOR, SPECULAR REFLECTOR AND NO LENS
SIX T8 LINEAR FLUORESCENT 32 WATT LAMPS, LUMEN RATING 2850 LMS.
TWO SYLVANIA QT3X32/277/PLUS BALLAST OPERATING AT 277 VAC AND 224 WATTS

	0.00	22.50	45.00	67.50	90.00
0.00	5066	5066	5066	5066	5066
5.00	5426	5131	5102	5400	5424
10.00	5259	5010	5094	4953	5153
15.00	4831	4912	4921	4791	4869
20.00	5076	4926	4590	4601	4557
25.00	4767	4542	4383	4054	4245
30.00	4421	4301	4105	4010	4207
35.00	4326	4017	3862	3967	3690
40.00	3819	3807	3670	3678	3611
45.00	3571	3429	3229	3127	3205
50.00	3152	3023	2944	2892	2962
55.00	2741	2748	2564	2762	2849
60.00	2255	2264	2152	2302	2416
65.00	1905	1916	2066	2242	2377
70.00	1517	1529	1729	2145	2309
75.00	1085	1150	1630	1848	1945
80.00	594	900	1203	1341	1372
85.00	213	579	807	916	960
90.00	58.9	244	443	590	620

ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	Lamp	Eff%
0-30	3912	22.5	24.6
0-40	6197	36.8	39.2
0-60	11266	65.4	69.7
0-90	25838	91.0	97.0
90-120	487	2.8	1.0
90-130	497	2.8	1.0
90-150	491	2.8	1.0
90-180	493	2.8	1.0
0-180	16215	91.8	100.9

** EFFICIENCY = 93.8% **

LUMINANCE SUMMARY - CD/SQ.M.

0	45	90
0 16170.25	16071.35	16131.35
45 9932.05	9504.14	5579.17
50 8204.29	5794.87	2438.57
55 7846.54	5111.19	3758.25
59 7106.79	4856.80	5970.97
65 7027.12	4739.17	4864.17
79 6204.32	3555.49	5892.70
75 6121.87	3542.21	5796.14
89 3912.89	6024.14	4121.81
81 2811.00	2145.70	2311.74

PAINT REFLECTANCE = 0.78 S/MH = 1.21
SC (ALONG) = 1.32 SC (ACROSS) = 1.21
PREPARED IN PHOTOPIA FOR
ENERGY SOLUTIONS
ST. PAUL, MN

Ordering Information

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

(Example 18PCEA632277H = 1'x8' Power Cage Strip with an enhanced aluminum reflector, 6-32W lamps, 277 volts, and a high power ballast)

18PC	EA	6	32	UNV	H	WG
Size	Reflector	# Lamps	Lamp Watts	Voltage	Ballast	Options
14PC - 1' x 4'	EA - Enhanced Alum	2	32	120	N - Normal	WG - Wire Guard
18PC - 1' x 8'	AA - Anodized Alum	4	54	277	H - High Ballast Factor	
	WR - White Enamel	6		UNV	L - Low Ballast Factor	
		8		480		

**Energy Solutions**
INTERNATIONAL, INC.

(888) 308-9197

Energy Solutions International

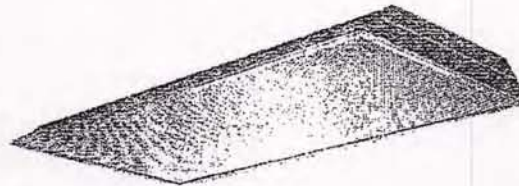
XP/XA 2' x 4' Lens Recessed Fluorescent **XP/XA232**

Page 1 of 2

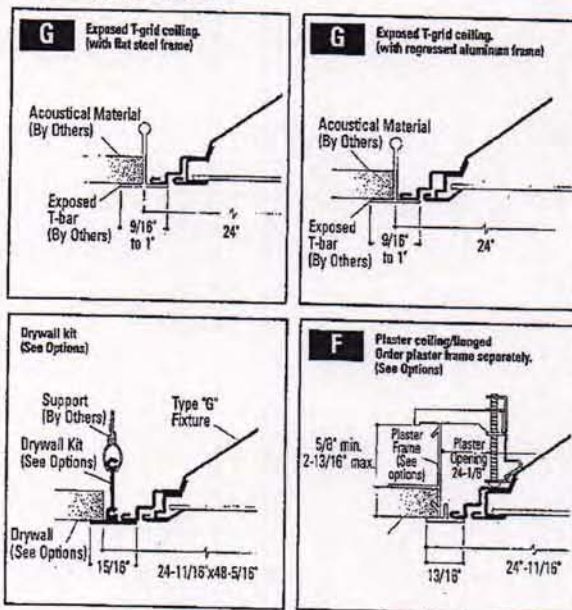
Static, Flat Steel or Regressed Aluminum Lens Frame, 2 Lamp, T8

Features

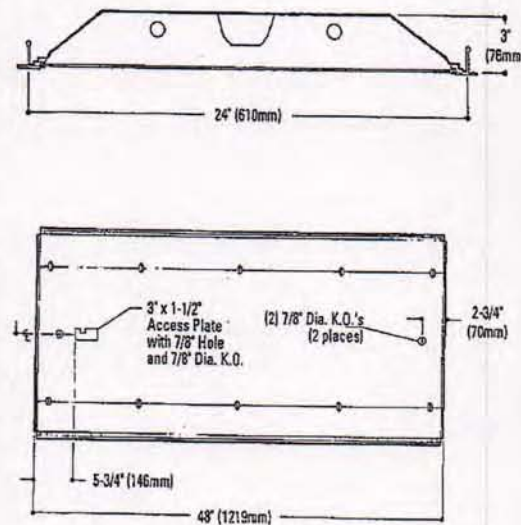
- Efficiency 87.0%.
- Shallow 3" deep housing.
- Ribbed housing for strength and stability.
- Ends of housing formed inward for safe handling.
- Built-in earthquake clips.
- Hemmed-over side rails for safe handling.
- Ends have screw dimples for installation to T-bar (no fixture or ceiling distortion).
- Flat steel or regressed aluminum lens frame with mitered corners.
- Edges of steel door frame hemmed-over for safe handling.
- No light leak.
- Internal "T" hinges – easy installation and maintenance.
- Rooster head spring latches.
- Meets code 30 requirements in New England.



Mounting Methods



Dimensions



LIGHTOLIER®

Job Information	Type: M
Job Name: FAIRCREST SCHOOLS	
Cat. No.: XP2GVA232UNVGK	(Low watt ballast)
Lamp(s):	
Volts/Ballast:	

Lightolier a Genlyte Thomas Company
Technical Information: (978) 657-7600 • Fax (978) 658-0595
631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
We reserve the right to change details of design, materials and finish.
© 2002 Genlyte Thomas Group LLC (Lightolier Division) A0303
Section 1A/Folio F70-10

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Dec 3 2008 11:35

P001/002

SWW SERIES

2', 4' & 8'
WRAP

Features

Lower maintenance
costs

Increased lamp and
ballast life

Reduced glare

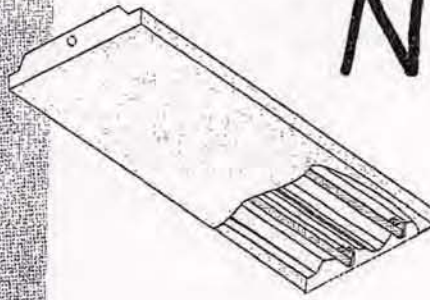
Computer designed
reflector generates
maximum light output

25 year warranty on
specular reflector



GSA Contract Holder

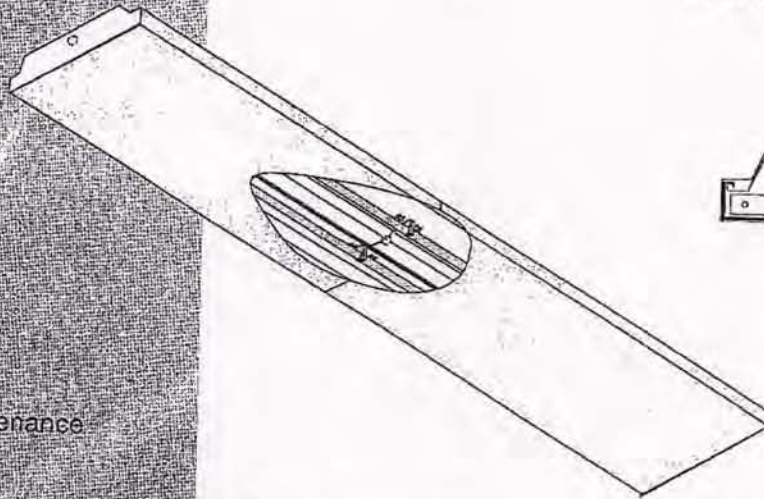
"N"



reflect-a-light™

Application

The SWW series is a 15" wide
surface or pendant mount luminaire
suitable for all applications,
including commercial and retail.
Available in 2, 4, 3, 6, or 8-lamp
T-8 or T-5 configurations.



Construction

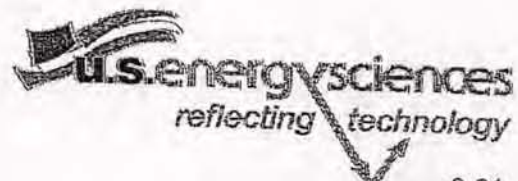
Die formed code gauge steel housing. All painted metal parts are
pretreated with a phosphate bonding process and painted with
electrostatically applied high temperature baked white enamel for
superior quality and durability.

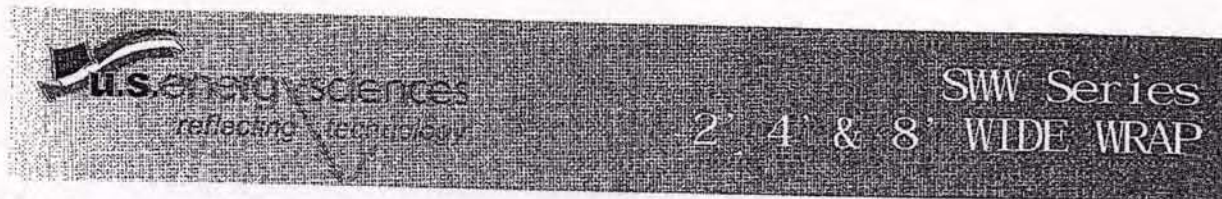
Reflectors are constructed from the highest quality specular on
polished or white aluminum. Material form, fit and thickness meet or
exceed all UL 1598 requirements. Computer assisted design provides
maximum light output, uniform light distribution, rigid strength and
ballast access without the use of tools. The durable surface is highly
resistant to scratching and non-abrasive cleaning solutions, making the
reflector easy to clean.

Electrical

Energy saving and electronic Class P, CBM/ETL certified HPF ballast
comply with Federal Energy Efficiency Standards; Underwriters
Laboratories listed.

Luminaires





Photometric Data

All photometric reports and IES files are compiled by independent testing laboratories and are available either as a download from U.S. Energy Science's web site (<http://www.usenergysciences.com/ies.asp>) or are available on the CD-ROM Catalog.

Catalog Number: SWW-23248-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Two F32T8/841
Ballast: Electronic 2-F32IS

Catalog Number: SWW-43296-SA-S1
Luminaire: Formed steel housing, specular reflector, prismatic lens.
Lamps: Four F32T8/841
Ballast: Electronic 4-F32IS

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	99	99	99	99	96	96	96	96	91	91	91	
1	91	87	84	81	88	85	82	79	81	78	76	
2	84	77	72	68	81	76	71	67	72	68	65	
3	77	70	64	59	75	68	62	58	65	60	56	
4	72	63	58	51	70	61	55	51	59	54	49	
5	66	56	50	44	64	55	49	44	53	48	43	
6	61	51	44	39	60	50	44	39	48	43	39	
7	57	47	40	35	55	46	39	35	44	38	34	
8	53	42	36	31	51	41	35	31	40	34	30	
9	49	38	32	27	48	38	31	27	36	31	27	
10	46	35	29	24	44	34	28	24	33	28	24	

Coefficients of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20												
RC	80%				70%				50%			
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	
0	99	99	99	99	96	96	96	96	91	91	91	
1	91	87	84	81	88	85	82	79	81	78	76	
2	84	77	72	68	81	76	71	67	72	68	65	
3	77	70	64	59	75	68	62	58	65	60	56	
4	72	63	58	51	70	61	55	51	59	54	49	
5	66	56	50	44	64	55	49	44	53	48	43	
6	61	51	44	39	60	50	44	39	48	43	39	
7	57	47	40	35	55	46	39	35	44	38	34	
8	53	42	36	31	51	41	35	31	40	34	30	
9	49	38	32	27	48	38	31	27	36	31	27	
10	46	35	29	24	44	34	28	24	33	28	24	

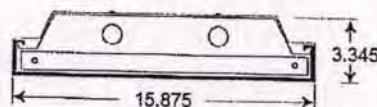
Plane: 0-DEG
Spacing Criteria: 1.2
Efficiency: 83.5%

Plane: 0-DEG
Spacing Criteria: 1.2
Efficiency: 83.5%

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL01502

Photometric Certified by: Luminaire Testing Laboratory
Report No. LTL03783

Dimensional Guide



Ordering Guide

SWW - 1 - 32 48 - WP - -

Luminaire Series	No. of Lamps	Lamp Wattage	Fixture Size	Reflector Material	Slave/Master	Ballast Options	Battery Backup
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Mounting
SWW = 15 inch Wide Wrap
Surface or Pendant Mount

No. of Lamps
2 = Two Lamps
3 = Three Lamps
4 = Four Lamps
6 = Six Lamps
8 = Eight Lamps

Lamp Wattage
14 = 14 Watt 5T
17 = 17 Watt T8
28 = 28 Watt T-5
32 = 32 Watt T-8
54 = 54 Watt T-5

Fixture Size
24 = 24 inches Length
48 = 48 inches Length
96 = 96 inches Length

Reflector Material
EA = Enhanced Aluminum
SA = Specular Aluminum
WP = White Paint
NR = No Reflector

Electronic Ballast Options
High Output, 1.18+ Ballast Factor
HM = 120/277 Universal Voltage
Low Power, .77 Ballast Factor
LM = 120/277 Universal Voltage
Standard Output .90-1.0 Ballast Factor
SM = 120/277 Universal Voltage

Battery Backup Options
1B = 1-Lamp 90 Burn Time
2B = 2-Lamp 90 Burn Time

*New York City Orders must add NYC to end of part number.
See page 3-43 for additional options



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in

Case No(s). 10-1686-EL-EEC

Summary: Application (Part 2 of 3) of Faircrest Middle School and Ohio Power Company for approval of a special arrangement agreement with a mercantile customer electronically filed by Mr. Matthew J Satterwhite on behalf of Ohio Power Company