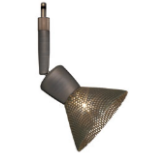











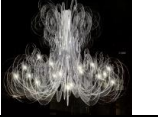
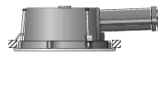






Appendix A

Luminaire Schedule and Cutsheets

Tag	Luminaire	Manufacturer	Description	Catalog No.	Mounting	Lamps		Ballast/ Power Supply	Voltage	Input Watts
						No.	Type			
D		Alfa	Alfa Gemini fully adjustable, directional track head with G26 bronze, mesh metal shade and vintage bronze hardware. (1) 50W max MR16 halogen utilized per track head.	SP3-26-BRZ-BRZ	Track mounted	1	35W MR16 Halogen	None	120	35
E		Alfa	15' MonoTrack starter kit with 300W surface mounted transformer and 5 MonoTrack sections. Includes supports, (6) fixture adapters, and mounting hardware. Hardware finish in vintage bronze.	55004-BRZ	Surface mounted	-	-	-	-	-
F		ACDC	3.5" aperture downlight with Xicato Artsits Series LED module containing 8 LEDs and having an R-9 value of 96. Dark chrome reflector finish and 3000 K color temperature.	ACDC1139/XIC/3000 K/ DRC	Ceiling recessed	-	Xicato LED module (Artists Series) 3000 K 80 min CRI	Electronic driver	120	23
G		Lightolier	Covelite with 1-T8 lamp and die-formed 20 gauge cold-rolled steel painted white housing. Highly specular Miro IV aluminum white 20 gauge steel optical system.	CL08-T01-E-N-04-1-DE-W	Surface mounted in cove	1	Linear fluorescent - F32T8 3000 K 86 min CRI	Electronic Dimming	120	35
H		Lightolier	Perimeter trough recessed 1-light T8 luminaire with die-formed 20 gauge pre-painted steel housing and precision parabolic roll-formed semi-specular aluminum reflector.	PTS5-1-S-O-1-4	Ceiling recessed	1	Linear fluorescent - F32WT8 3000 K 85 min CRI	Electronic	120	33
I		Lightolier	Staggered strip surface mounted fluorescent lamp with 3" overlap and 1-5/8" deep housing. Made of heavy duty code gauge cold rolled steel and finished with white polyester enamel. Utilizes (1) T8 fluorescent lamp.	SS-4-T-1-32-HPF-120-PS	Surface mounted in cove	1	Linear fluorescent - F32WT8 3000 K 86 min CRI	Electronic	120	33
J		Leucos	Mira 2 Semi-recessed square downlight with acid-etched, poured Satin White glass diffuser. Utilizes (1) 50W low-voltage, halogen MR-16 lamp.	Mira 2 Recessed	Ceiling semi-recessed	1	Halogen - 50W MR16 2750 K 82 min CRI	None	120	50

K1-3		iLight Technologies	Low voltage Plexineon White 2X Series in 2800°K for warmer light. Lengths vary for use in cove, under the toe kick in bar, and bar shelves. Outside corner pieces also specified.	T-24X28S_NC-00	Recessed (toe kick, shelves, desk)	-	LED	24VDC	120	4.32W/ft
							2800 K			
L		ERCO	Open recessed 4" aperture downlight with vertical lamp orientation for (1) 100W low voltage halogen lamp. Bright anodized, aluminum darklight reflector with cut-off angle of 30° and a glass, frosted diffuser.	47012.000	Ceiling recessed	1	(1) 100W T3 bi-pin quartz halogen	Electronic dimming	120	98
M		ERCO	Open recessed 4" aperture downlight with vertical lamp orientation for (1) 75W low voltage halogen lamp. Bright anodized, aluminum darklight reflector with cut-off angle of 45° and a glass, frosted diffuser.	47024.000	Ceiling recessed	1	(1) 75W T4 bi-pin quartz halogen	Electronic dimming	120	47
N		Solid State Luminares	Colourline. 12" compact linear RGB LED cove light with beam distribution of 120° x 120°. Clear diffuse lens with ratcheting mounting bracket for secure aiming. 20 LEDs per foot. Dimming available.	CL-1-_-WIH	Surface mounted in cove	--	LED - RGB - Dimmable	24VDC from DMX	120	4.5W/ft
O		Custom (based on design from Yellow Goat Design)	Decorative custom chandelier based on design from Yellow Goat Design with 3 tiers and 21 lamps. Assemblage of clear acrylic swirls and curves to form classic chandelier shape. Crystal accents added for sparkle. Black finish. 48"h x 72"w. LED only.	Chaos Theory	Pendant	21	5W single ended halogen T3	--	120	105
P		Custom	Decorative custom sconce with assemblage of clear acrylic swirls and curves. 15.5"h x 9.5"w x 7" projection. Candelabra base. Mounted 7'-0" AFF.	Chaos Theory Sconce	Sconce	2	5W single ended halogen T3	--	120	10
Q		Bega	Recessed wide beam luminaire made of aluminium alloy, aluminium, and stainless steel. Reflector made of anodized pure aluminium. Dust tight and protection against water jets. (1) 42W CFL lamp lamped horizontally.	6807	Canopy recessed	1	42W T4 CFL	Electronic	277	47
							3000 K			
							82 min CRI			
R		Bega	Walk-over and drive-over luminaire recessed in compacted surfaces, paths, and open areas for pressure load up to 5000 kg. Made of aluminium alloy, aluminum, and stainless steel, and contains white safety glass. Dust tight and protection against temporary immersion.	8600	Ground recessed	1	5W T4	Electronic	277	11
							3000 K			
							82 min CRI			

S		Ghidini	Clessidra urban column with 32W in (4) Xicato LEDs. Powder coated polyester and highly resistant to UV and oxidation. Surface mounted and suitable for wet location. Finish color in anthracite gray.	830.1501	Surface mounted	-	Xicato LED module (Artists Series)	Electronic Driver	277	42
							3000 K			
							80 min CRI			
T		Winona	Reese exterior sconce from Winona, with (1) F17T8 medium bi-pin lamp. UL listed and CUL approved for wet location. Opal acrylic lens and custom painted finish (gray).	5254-WL-26-F/T8-277-OA-CPF	Wall mounted	1	F17T8/medium bi-pin	Electronic	277	19
							3000 K			
							78 min CRI			
U1-2		Solid State Luminaires	Slim profile linear floodlight with a 120° flood distribution for short throw applications, with 6 LEDs per foot and consuming 8W per foot. 1/2" low profile body sealed for IP68 rating (dry, damp, wet location) and mounted on an 8" cantilever. Extruded and die cast aluminum housing.	SL-_-3K-CL	Mounted in 8" cantilever	-	6 LEDs per foot	Electronic Driver	277	50
							3000 K			

P2.24



DIRECTIONALS
GEMINI
SP326

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

PRODUCT DESCRIPTION

Fully adjustable Quick Jack fixture with G26 Mesh metal shade.
50W max. Lamp: JC, MR8, MR11, or MR16 (not included).



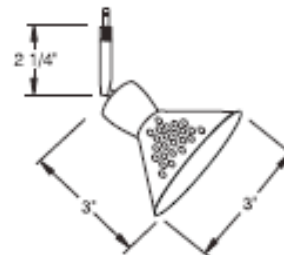
ORDERING INFORMATION

Model	Shade	Hardware Finish	Shade Finish	Example
SP3	26	STN	STN	SP326-STN-STN
		BLK Black	BLK Black	
		BRZ Vintage Bronze	BRZ Bronze	
		CHR Chrome	CHR Chrome	
		STN Satin Nickel	STN Satin Nickel	

PRODUCT SPECIFICATIONS

Electrical
Lamps: 50W max. Lamp: JC, MR8, MR11, or MR16 (not included)
Socket: Ceramic Bi-Pin Socket, accepts G4 to GY6.35 Lamps
Agency Approval
Labels: ETL listed to UL 1598 for use in U.S. • ETL listed to CSA C22.2 No. 250 for use in Canada.

DIMENSIONS



Systems MonoTrack Kits – Without Fixtures

Low Voltage



Starter Kits – Surface Mount Transformers

ES000 9" MonoTrack Starter Kit with 150W Surface Mount Transformer
 Contains 3 MonoTrack sections (9", 150W) Surface Mounted Electronic Transformer
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number

Model	Hardware Finish	Example
ES000	STN	ES000-STN
	BPC Vintage Bronze STN Textured Nickel	



ES001 9" MonoTrack Starter Kit with 250W Surface Mount Transformer
 Contains 3 MonoTrack sections (9", 250W) Surface Mounted Electronic Transformer
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number


Model	Hardware Finish	Example
ES001	STN	ES001-STN
	BPC Vintage Bronze STN Textured Nickel	



ES002 9" MonoTrack Starter Kit with 300W Surface Mount Transformer
 Contains 3 MonoTrack sections (9", 300W) Surface Mounted Magnetic Transformer
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number


Model	Hardware Finish	Example
ES002	STN	ES002-STN
	BPC Vintage Bronze STN Textured Nickel	



ES004 15" MonoTrack Starter Kit with 300W Surface Mount Transformer
 Contains 3 MonoTrack sections (15", 300W) Surface Mounted Magnetic Transformer
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number

Model	Hardware Finish	Example
ES004	STN	ES004-STN
	BPC Vintage Bronze STN Textured Nickel	



Starter Kits – Remote Mount Transformers

ES006 21" MonoTrack Starter Kit with 300W Surface Mount Transformer
 Contains 7 MonoTrack sections (6", 300W) Surface Mounted Magnetic Transformer
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number


Model	Hardware Finish	Example
ES006	STN	ES006-STN
	BPC Vintage Bronze STN Textured Nickel	



ES012 9" MonoTrack Starter Kit with 300W Remote Transformer
 Contains 7 MonoTrack sections (9", 300W) REMOTE Magnetic Transformer Power Feed
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number


Model	Hardware Finish	Example
ES012	STN	ES012-STN
	BPC Vintage Bronze STN Textured Nickel	



ES014 15" MonoTrack Starter Kit with 300W Remote Transformer
 Contains 7 MonoTrack sections (6", 300W) REMOTE Magnetic Transformer Power Feed
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number

Model	Hardware Finish	Example
ES014	STN	ES014-STN
	BPC Vintage Bronze STN Textured Nickel	



ES016 21" MonoTrack Starter Kit with 300W Remote Transformer
 Contains 7 MonoTrack sections (6", 300W) REMOTE Magnetic Transformer Power Feed
 Supports 32 Figure Adapters, Mounting hardware, instruction sheets included.
 Fixtures not included.

Make product selections and build your model number

Model	Hardware Finish	Example
ES016	STN	ES016-STN
	BPC Vintage Bronze STN Textured Nickel	



Systems

MonoTrack Kits



ACDC LED:10 ARCHITECTURAL DOWNLIGHTS
STORM



Storm Xicato



Storm Devil

Description

Storm is a recent addition to the award-winning range of architectural downlighters from ACDC. Available either with the acclaimed 'Devil' onboard or the Xicato LED module, Storm is a fixed downlighter that features a beautifully designed reflector cup in a number of finishes. The ACDC Devil option offers a slim 100mm profile and choice of four beam angles, whilst the Xicato module features an IP65 rating for use in wet areas.

Finishes



White Matt



Dark Chrome

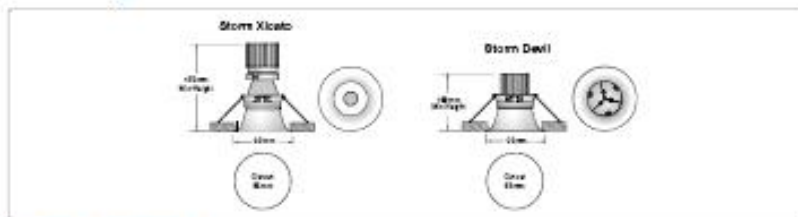


Silver Anodised



Black Matt

Technical Diagrams



Lighting configurations



IP Option



Picture / Reading



Wall Wash



Display



Bathroom



Downlight



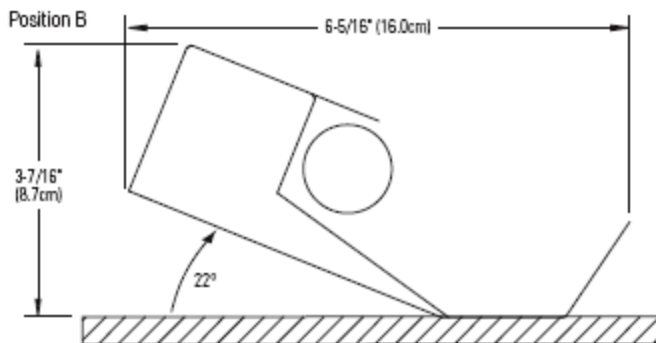
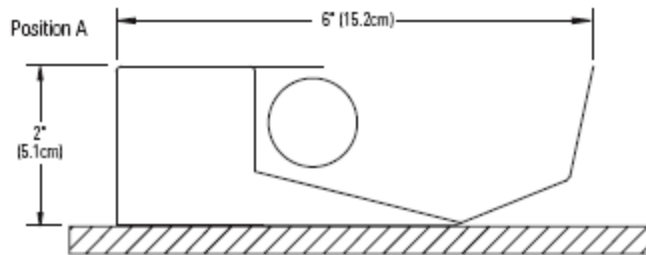
Colour Change

ACDC has a global reputation for outstanding quality and service

Lighting Systems **CL-1**

Page 1 of 2

Covelite 1-Lamp T8



Half Scale

Ordering Information

Style	Lamps	Lower Optics	Upper Optics	Length	Wiring	Voltage	Ballast	Color & Finish
CL08	T01	E	N				E	W
	T01 = 1-Lamp T8	E = Solid Housing	N = None	02 = 2 ft. 03 = 3 ft. 04 = 4 ft. 06 = 6 ft. 08 = 8 ft.	1 = 1 circuit 3 = 1 circuit w/ Emergency circuit 5 = 1 circuit w/ Battery Pack 7 = 1 circuit Dimming	D = Dual 120v/277v 3 = 347v	E = Standard Ballast	W = High Reflective White

Features

Housing: Die-formed 20 gauge cold-rolled steel painted white.

Weight: 3.0 lb/ft.

Optical System: Constructed of highly specular Miro N® aluminum and highly reflective white 20 gauge steel to produce an asymmetric distribution.

Lamping: One T8 fluorescent lamp in cross section. 18 watt 2 foot, 32 watt 4 and 8 foot, 25 watt 3 and 6 foot lengths.

Mounting: Fixtures can be screwed down in multiple positions and orientations to enable precise coordination of optical distributions.

Additional Information

Modules Lengths

Module	Nominal Length
2ft	2'0"
3ft	3'0"
4ft	4'0"
6ft	6'0"
8ft	8'0"

Peak Candel Angles

Mounting	Peak
Position A	113°
Position B	91°

Electrical

Factory pre-wired to section ends with quick-wire connectors.

Maximum ballast size is 1.3" (3.3cm) by 1.7" (4.3cm).

Standard dimming ballast is Advance Mark VII.

Labels

Certified to UL & CSA standards.

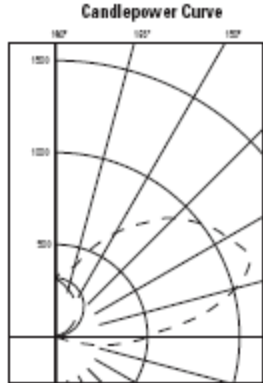
Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Notes:	

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Lighting Systems **CL-1**

Performance



Report Number: 990111
 Lamp: (1) F32T8
 Lumens: 2950
 Efficiency: 78.2%
 Max. Candela/Angle: 1140/113°

Candela Distribution

	0.0	45.0	90.0	135.0	180.0
0	0	0	0	0	0
5	0	0	0	0	3
15	0	0	0	0	3
25	0	0	0	0	3
35	0	0	0	3	3
45	0	0	0	3	4
55	0	0	0	3	4
65	0	0	0	3	4
75	134	15	0	4	4
85	388	208	0	5	4
90	483	303	7	6	4
95	657	474	22	8	5
105	1012	751	70	28	9
115	1128	771	123	84	66
125	1034	723	172	138	114
135	910	634	216	184	172
145	735	527	256	212	209
155	564	422	286	246	233
165	396	360	307	280	266
175	345	336	317	307	301
180	320	320	320	320	320

Coefficients of Utilization (%)

	80			70			50		
	50	30	10	70	50	30	50	30	10
0 RCR	75	75	75	65	65	65	46	46	46
1	63	60	57	57	54	51	38	36	34
2	55	50	46	52	47	43	32	30	27
3	48	42	38	47	41	36	28	25	23
4	42	36	31	43	36	31	25	22	19
5	37	31	26	39	32	27	22	19	16
6	33	27	23	36	28	23	20	16	14
7	30	24	19	33	25	20	18	14	12
8	27	21	17	30	23	18	16	13	10
9	24	18	15	28	21	16	14	11	9
10	22	16	13	26	19	14	13	10	8

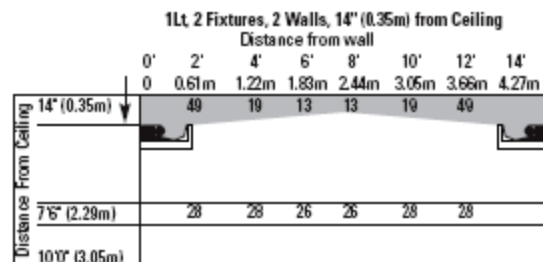
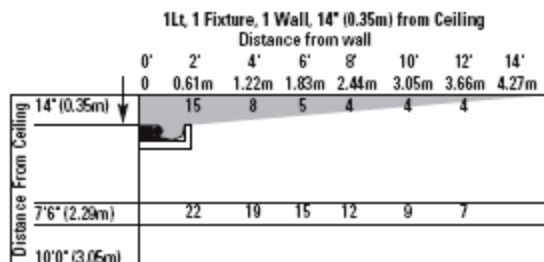
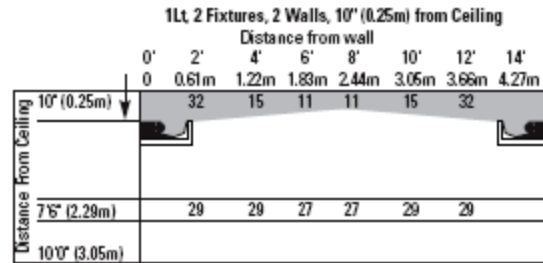
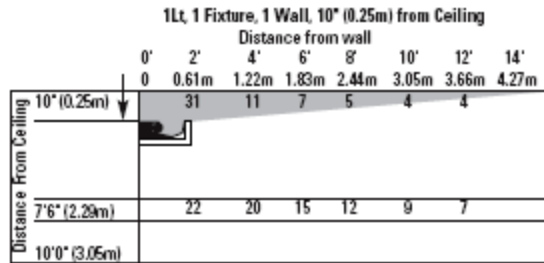
Based on a floor reflectance of 0.2

Distribution Summary

Zone	Lumens	% Barelamp	% Luminair e
0-90	151	5.1	6.5
90-180	2156	73.1	93.5
0-180	2306	78.2	100.0

Quick Calculators and Ceiling Brightness

Readings are rounded off based on initial footcandles at center of 20-foot run of luminaires. Room reflectance is 80% ceiling, 50% wall and 20% floor.



Job Information **Type:**

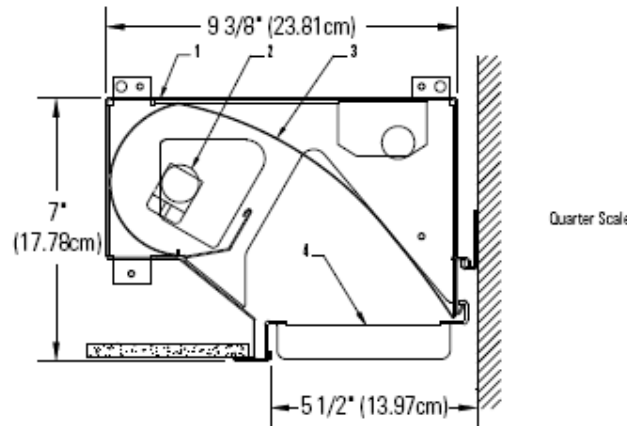


LIGHTOLIER®

Lighting Systems PTS8-1

Page 1 of 2

Perimeter Trough Recessed 1-Light T8 Per (Nominal) Section



Module Ordering Information

Family	Lamps	Shielding	Voltage	Length	Options
PTS8	1 1 = 1 Lamp	0 = Open L = Lens S = Straight Blade Louver	1 = 120V 2 = 277V 3 = 347V D1 = 120V Dim. D2 = 277V Dim. E1 = 120V Emerg. E2 = 277V Emerg.	2 = Two-Foot 3 = Three-Foot 4 = Four-Foot 6 = Six-Foot 8 = Eight-Foot	Blank = No Options A = Adjustable* X4 = 4 thru wires X5 = 5 thru wires A4 = Adjustable 4 thru wires* A5 = Adjustable 5 thru wires*

* only available on Two-Foot, Three-Foot and Four-Foot versions. See length variations of adjustable fixtures on page 2.

Features

- Housing:** Die-formed 20 gauge pre-painted steel. Integral heavy gauge bulkheads support housing and trim, permitting modules to be bolted together in continuous runs and facilitate suspension.
- Lamping:** Cross-sectional one linear T8 fluorescent lamp. Provided by others.
- Reflector:** Precision parabolic roll-formed semi-specular aluminum.
- Louvers:** Lift and shift straight blade louver constructed from die-formed aluminum and painted to match housing. Louver blades are 1" (2.54cm) high on 1-1/8" (2.86cm) centers. (Optional)

Mounting

"J" Rail is first mounted to the wall and the modules connect to the rail for 1/4" (0.64cm) wall adjustment. Modules are hung from suspension wires attached to the fixture bulkheads and the structure above.

Electrical

Electronic Ballast: Programmed start, 3 conductor, 12 gauge wire. Color-coded quick connectors allow easy connection for modular fixtures. Factory installed ballast disconnect allows the ballast to be disconnected from and reconnected to incoming power under load without turning the entire circuit off.

Dimming: Advance Mark X, use Advance compatible two-wire control (no extra control lead required).

Emergency Battery Pack: 450 Lumens @ 90 minimum.

Ordering Instructions

Individual Fixtures:

- Order number of MODULES required.
- Order one END SET per MODULE.

Continuous Rows:

- Determine run length.
- Order the appropriate number of MODULES for the complete ROW.
- Stagger rows must be completed with an adjustable module. (2-light only)
- Non-stagger rows must be completed with an adjustable module unless row lengths are in precise 1 foot (30.48cm) intervals.
- Order one END SET per ROW.

Labels

UL, cUL and IBEW

Job Information

Type:

Job Name:

Cat. No.:

Lamp(s):

Notes:

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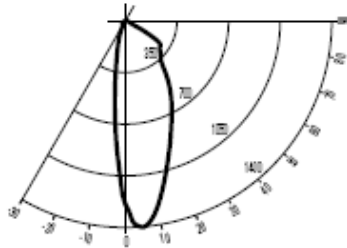
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Lighting Systems PTS8-1

Page 2 of 2

Perimeter Trough Recessed 1-Light T8 Per (Nominal) Section

Performance & Quick Calculators



Report No: ITL53557
 Cat No: PTS81S14
 Lamps: 1 F32T8
 Lumens: 2900
 Efficiency: 39.4%

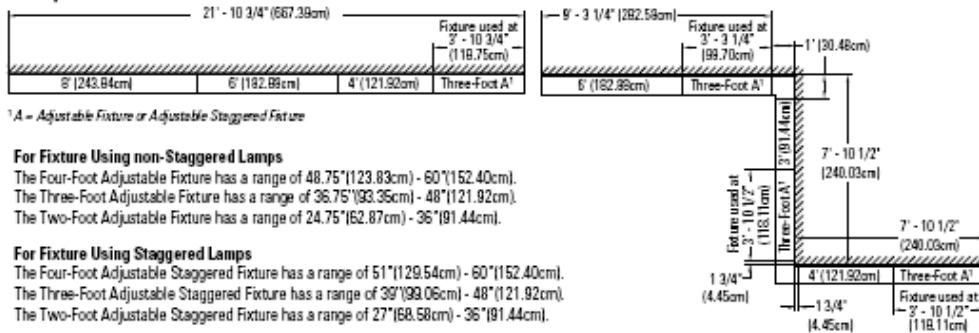
ZONE	CANDLEPOWER				
	0	45	90	135	180
DEG.					
180	0	0	0	0	0
175	0	0	0	0	0
165	0	0	0	0	0
155	0	0	0	0	0
145	0	0	0	0	0
135	0	0	0	0	0
125	0	0	0	0	0
115	0	0	0	0	0
105	0	0	0	0	0
95	0	0	0	0	0
90	12	22	0	0	0
85	16	27	7	9	0
75	21	52	33	33	6
65	43	162	65	59	12
55	297	171	110	85	19
45	340	280	243	86	31
35	509	478	527	89	31
25	742	770	800	159	64
15	1064	1145	1040	346	215
5	1604	1398	1208	927	763
0	1244	1244	1244	1244	1244

ROOM CAVITY RATIO	COEFFICIENTS OF UTILIZATION								
	% EFFECTIVE CEILING CAVITY REFLECTANCE								
	80			70			50		
	% WALL REFLECTANCE								
	70	50	30	70	50	30	50	30	10
0	47	47	47	46	46	43	44	44	44
1	44	42	41	43	41	40	40	39	38
2	41	38	36	40	37	35	36	34	33
3	38	34	32	37	34	31	33	31	29
4	35	31	29	35	31	28	30	28	26
5	33	29	26	32	28	26	28	25	23
6	31	27	24	30	26	24	26	23	21
7	29	25	22	29	24	22	24	21	20
8	28	23	20	27	23	20	22	20	18
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10	25	20	18	24	20	17	20	17	16

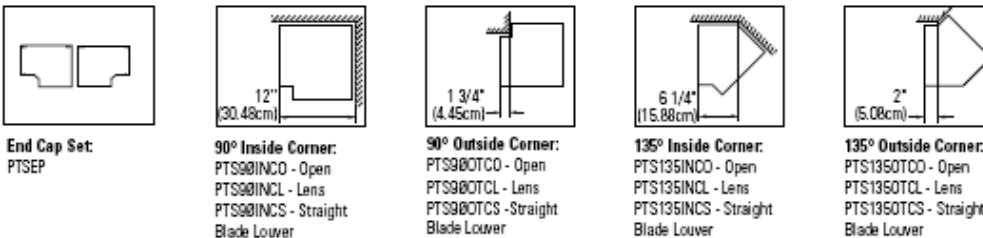
Floor cavity reflectance = 20%

ZONAL LUMEN SUMMARY			
ZONE	LUMENS	% BARELAMP	% LUMINAIRE
0-90	1162	39.4	100.0
90-180	0	0.0	0.0
0-180	1162	39.4	100.0

Sample Run



End Plate and Corner Block Accessories



Job Information Type:

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SS Staggered Strip Surface Fluorescent **SS 1 LAMP**

Page 1 of 2

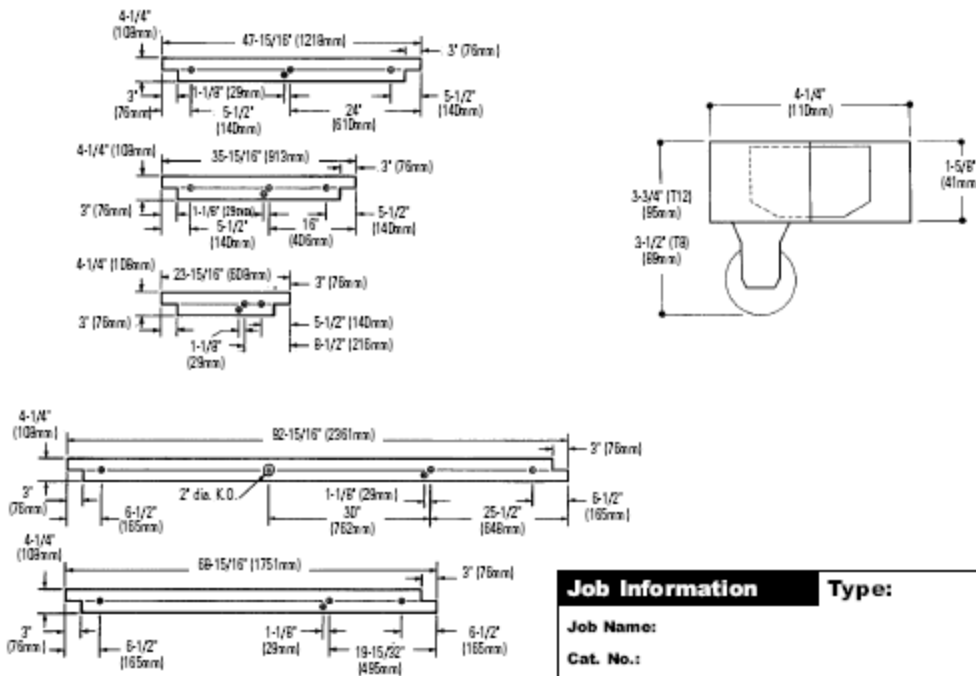
4-1/4" Wide, 1-5/8" Deep, 24", 36", 48", 69", 93" Length, Individual or Tandem,
 1 Lamp T8 or T12

Features

- Full 3" overlap eliminates shadows caused by lampholders or lamp ends.
- Housing is only 1-5/8" deep.
- Safe-handling metal edges.
- Fully enclosed wireway.
- Excellent for perimeter cove lighting or other applications where continuous even illumination is required.



Dimensions



All K.O.s are 7/8" unless otherwise noted.

Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Volts/Ballast:	

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 Technical Information: (978) 657-7600 • Fax (978) 658-0695
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Section 3A/Folio H130-11

LIGHTOLIER®



SS Staggered Strip Surface Fluorescent **SS 1 LAMP**

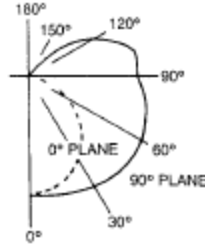
Page 2 of 2

4-1/4" Wide, 1-5/8" Deep, 24", 36", 48", 69", 93" Length, Individual or Tandem,
1 Lamp T8 or T12

Photometry

Model No. SS4S132HPF12050

REPORT NO: GB9007
CATALOG NO: SS4S132HPF12050
LAMP TYPE: 1F32 TB
LUMENS PER LAMP: 2950 TOTAL
EFFICIENCY: 99.5%
CIE TYPE: Semi-Direct
SPACING CRITERIA: 1.6
SHIELDING ANGLE: 180

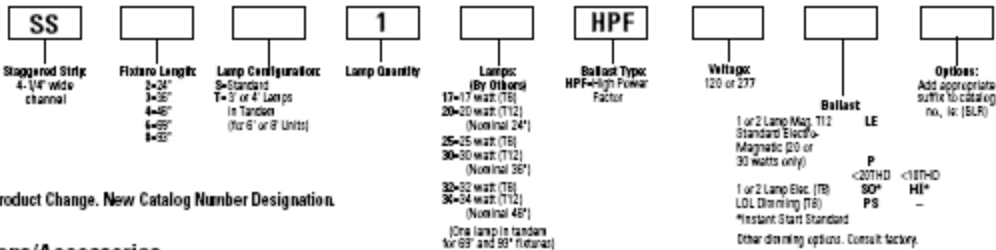


coefficients of utilization — zonal cavity method (effective floor cavity reflectance 0.20)

FC	20			30			40		
RC	80			90			90		
RW	70	50	30	50	30	10	90	30	10
1	89	84	79	71	68	64	64	61	58
2	80	71	64	61	55	51	54	50	46
3	72	62	53	52	46	41	47	42	38
4	65	54	45	45	39	34	41	36	31
5	59	47	39	40	34	28	36	30	26
6	54	42	33	36	29	24	32	26	22
7	50	37	29	32	25	21	28	23	19
8	46	33	25	29	22	18	26	20	16
9	43	30	22	26	20	15	23	18	14
10	40	27	20	24	18	13	21	16	12

Ordering Information

Explanation of Catalog Number. Example: SS4S132HPF120S06LR†



†No Product Change. New Catalog Number Designation.

Options/Accessories

- Fusing:** Internal fast-blow fusing. Suffix: **GLR**. Internal slow-blow fusing. Suffix: **GMF**.
- Electrical Wiring Options:** Consult factory.
- Radio Interference Filter:** 120 or 277 volt, 50 or 60 Hz. One per fixture. Suffix: **R**. One per ballast. Suffix: **B**.
- Stem and Canopy Sets:** Suspends fixture 6", 12", 18" or 24" from surface. Catalog Number: **ASC6 CSP** (6"), **ASC12 CSP** (12"), **ASC18 CSP** (18"), **ASC24 CSP** (24").

Specifications

- Materials:** Chassis parts are die formed heavy duty code gauge cold rolled steel.
- Ballast cover**—code gauge cold rolled steel, secured by plated quarter-turn latches.
- Finish:** Chassis exterior—baked white polyester enamel, minimum reflectance 86%.
- Electrical:** Thermally protected class "P" ballast C.B.M. approved, non PCB. If K.O. is within 3" of ballast, use wire suitable for at least 90°.
- Labels:** I.B.E.W./UL and ULc Listed.

Job Information Type:

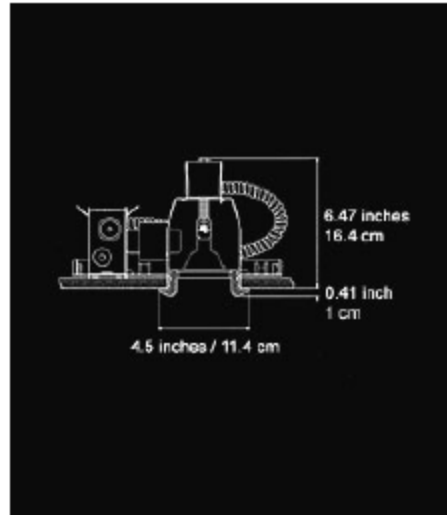
Lightolier a Genlyte Thomas Company www.lightolier.com
 Technical Information: (978) 657-7600 • Fax (978) 658-0595
 631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
 We reserve the right to change details of design, materials and finish.
 © 2003 Genlyte Thomas Group LLC (Lightolier Division) A0303

Section3A/Folio H130-11

LIGHTOLIER®

MIRA 2 RECESSED

Roberto Pamio



DIMENSIONS SHOWN FOR NEW CONSTRUCTION

DESCRIPTION

A small-scale, semi-recessed fixture providing downward light through an acid-etched, poured glass diffuser available in a wide range of colors. Provides a narrow to wider beam spread, depending on the lamp, as well as a soft pleasant ceiling glow.

HOUSING & LAMP OPTIONS

Remodel & New Construction:

1x50 watt, low-voltage halogen, MR-16

Insulated Ceiling:

1x35 watt, low-voltage halogen, MR-16

Provided with 120/12V or 277/12V with magnetic transformer.

Housing options :

Remodel Housing, New Construction , Insulated Ceiling, Chicago Plenum, Air Tight, Vapor Tight.

Other lamp options:

Remodel Housing : 13W CFL.

New Construction and Insulated Ceiling : 13W & 18W CFL.

Compatible with quad lamp, 4 Pin, electronic ballast 120/277 Volt only.

Futher options:

1x50 watt, halogen PAR 20 or 1x35 watt, PAR 20 metal halide

Also available with LED, consult factory.

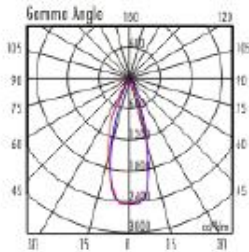
GLASS COLOR

Satin White, Rose, Aquamarine, Pale Blue, Cobalt Blue, Jade Green, Crystal and Mirrored Chrome Glass

NOTE

U.L. listed/CSA approved for damp location. For U.L. compliance, use enclosed MR-16 lamp.

MIRA 2



MIRA 2 - MR16 - 50W 38°

h	E max	E mod
1.00	2262	1318
2.00	565	330
3.00	251	146
4.00	141	82
5.00	90	53

HOUSING & LAMP OPTIONS :

Remodel & New Construction : 1x50 watt, low-voltage halogen, MR-16
Insulated Ceiling : 1x35 watt, low-voltage halogen, MR-16
 - Provided with 120/12V or 277/12V with magnetic transformer.

Housing options :
 Remodel Housing, New Construction, Insulated Ceiling, Chicago Plenum, Air Tight, Vapor Tight.

Other lamp options :
 Remodel Housing : 13W CFL
 New Construction and Insulated Ceiling : 13W & 18W CFL
 Compatible with quad lamp, 4 Pin, electronic ballast 120/277 Volt only.
 Further options: 1x50 watt, halogen PAR 20
 1x35 watt, PAR 20 metal halide

Also available with LED, consult factory.

Opening 3.3/4" - Damp location





Plexineon White 2X Series

PRODUCT SUMMARY



PRODUCT FEATURES

- Four Kelvin temperatures
- Energy efficient
- Long lifetime
- Stable and consistent color temperature
- Low voltage
- Easy to install
- Cool to the touch
- For use as exterior or interior accent lighting, direct view or indirect view applications, coves, signage & more

Color Temperatures (+/- 10%)

- 2800°K
- 3500°K
- 4500°K
- 6500°K

Diffuser Color

- Light amber hue (when not illuminated)

Lengths Available

- 2', 4', 6', 8' (610 mm, 1219 mm, 1830 mm, 2438 mm)
- 2' (610mm) field cuttable pieces
- Illuminated outside corner pieces
- Factory custom lengths available to the nearest 1/2" (13mm) ¹ +/- 0.25" (6mm)
- Factory convex or concave bends to minimum inside radius of 12" (305mm)
- Factory "easy bends" to 3/4" (5mm) ¹ radius
- Gentle field bends to a 72" (1830mm) radius ²

Power Supply

- Class 2 24VDC, 100 Watts - must be supplied by iLight
- Primary voltage: 120 or 120-277 depending on model
- Secondary voltage: 24VDC 4.1 A Max
- Maximum illumination length of a single 100W power supply: 20 feet (6.10m)

Power Supply Tips

- 20% overage for breaker for primary current draw
- Do not plug multiple power supplies into one run of Plexineon
- All iLight power supplies should be on an independent circuit
- Recommend surge protection upstream from power supply
- Verify correct voltage prior to wiring to non-switching power supplies

Low Voltage Cable

- Maximum distance of low voltage cable in any given run:
- 14 AWG: 40 feet (12.19m)
 - 12 AWG: 60 feet (18.29m)
 - 10 AWG: 100 feet (30.48m)

1. Drawing required for production
 2. Field bending allowed only on fixtures without C-channel

ORDERING INFORMATION

CLASS	VOLTAGE	COLOR	HOUSING	LENGTH	CHANNEL	VERSION
T	24		S			00
T = Trim	24 = 24V	X28 = White 2X 2800°K X35 = White 2X 3500°K X45 = White 2X 4500°K X65 = White 2X 6500°K	S = Silver	2F = 2 Feet 4F = 4 Feet 6F = 6 Feet 8F = 8 Feet CL = Custom Length TT = 2 Foot Cuttable PC = Outside Corner BE = Bend - Easy BN = Bend - Convex BV = Bend - Concave	SC = Stainless Steel Channel NC = No Channel	00

Specification sheets are subject to change without notice. For the most recent version, please refer to www.ilight-tech.com.

MK-0809



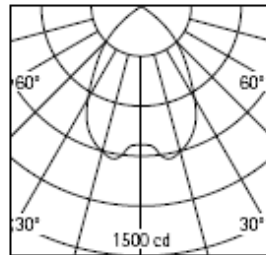
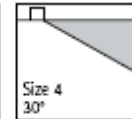
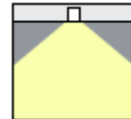
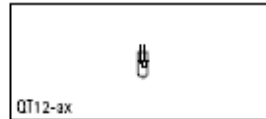
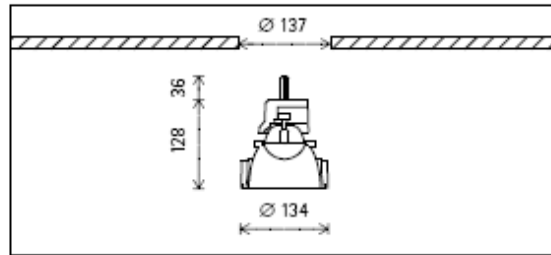
Plexineon White 2X Series

TECHNICAL INFORMATION	
MECHANICAL	<p>Width & Height Housing</p> <ul style="list-style-type: none"> • 0.55"(14mm)w x 1.35"(34mm)h with C-channel • UV and impact resistant acrylic diffuser • UV resistant plastic channel • Stainless steel C-channel for mechanical support <p>Minimum Piece Spacing</p> <ul style="list-style-type: none"> • Linear (end to end) = 3/4" (10mm) • Parallel (edge to edge) = 1" (25mm) <p><small>*The minimum space for ventilation surrounding the Plexineon product is 10". This distance should be maintained on the three sides, left and right of the product as well as in front of product. Other configurations subject to specific application testing.</small></p> <p>Mounting</p> <ul style="list-style-type: none"> • Stainless steel spring mounted clips • Clips to be 2" (51mm) in from end of piece and no more than 2' (610mm) maximum between clips <p>Power Supply Weight</p> <ul style="list-style-type: none"> • Electronic (Advance) Power Supply is 2 lbs. (0.9 kg) • Outdoor Magnetic Hybrid Power Supply is 9 lbs. (4 kg) <p>Power Supply Dimensions</p> <ul style="list-style-type: none"> • Electronic (Advance) = 9.50" x 1.18" x 1.70" (242mm X 30mm X 43mm) • Outdoor Magnetic Hybrid= 11.25" x 3.25" x 3.36" (286mm x 83mm X 85mm)
ELECTRICAL	<p>Load Voltage 24V DC</p> <p>Load Current 180 mA/foot at 24VDC (591 mA/meter) 4.32 watts/foot (14.17 watts/meter)</p> <p>Maximum Run Length 20 feet (6.10m) with an iLight approved power supply</p> <p>DC Cable</p> <ul style="list-style-type: none"> • 14 AWG, PVC/Nylon Type TC 600 Volt power and control cable or equivalent • FT-4 fire rating • Class 2 wiring system • Connectors: Molex Splashproof - JIS D0203 S2 <p>Electrical Tips</p> <ul style="list-style-type: none"> • Only use iLight approved power supplies • Do not cut non-cutable pieces
ENVIRONMENTAL	<p>Operating Temperature Range -25°C to 40°C (-13°F to 104°F)</p> <p>Storage Temperature Range -25°C to 75°C (-13°F to 167°F)</p> <p>Certification</p> <ul style="list-style-type: none"> • Plexineon is MetLabs listed. MetLabs is a Nationally Recognized Testing Laboratory (NRTL). Complies with UL 1598 and CSA c22.2 No. 250 in Luminaire, Wet location listed. • Power Supplies are RU listed. RU stands for Recognized Components by Underwriters Laboratory.



Quintessence Downlight

for low-voltage halogen lamps



QT12-ax 100W 12V GY6.35 2200lm

LOR 0.58
 UGR 21.3
 65° < 200 cd/m²

47012.000 Reflector silver
 QT12-ax 100W 12V GY6.35 2200lm
 Flush mounting detail
 Wide diffuser

Product description
 Lampholder carrier: cast aluminium, designed as heat sink. Fixing ring: plastic, black.
 Mounting ring: plastic, white (RAL9002). Mounting for ceiling thicknesses of 1-25mm with covered mounting detail and 12.5-25mm with flush mounting detail.
 Cable, L 500mm.
 Spherolit technology upper reflector: aluminium, silver, mirror-finish anodised.
 Darklight reflector: aluminium, bright anodised. Cut-off angle 30°.
 Diffuser: glass, frosted.
 Transformer to EN 61558 or EN 61347 to be ordered separately.
 Weight 0.45kg

ERCO GmbH
 Brockhauser Weg 80-82
 58507 Lödenscheid
 Germany
 Tel.: +49 2351 551 0
 Fax: +49 2351 551 300
 info@erco.com

Technical Region: 230V/50Hz
 We reserve the right to make technical and design changes.
 Edition: 25.10.2010
 Current version under
 www.erco.com/47012.000



Quintessence Downlight

Planning data

47012.000 QT12-ax 100W 12V GY6.35 2200lm
 Connected load without control gear P: 100 W
 Connected load per 100lx P*: 7.6 W/m²
 Number of luminaires per 100lx n*: 7.6 l/100m²

47012.000 QT12-ax 100W 12V GY6.35 2200lm
 Number of luminaires per 100m² for

100lx	200lx	300lx	500lx
8	16	23	38

47012.000 QT12-ax 100W 12V GY6.35 2200lm
 Module (m) 1.2x1.8 1.8x1.8 1.8x2.4 2.4x2.4
 Illuminance E_n (lx) 611 407 305 229

Correction table

Ceiling	0.70	0.70	0.70	0.50	0
Wall	0.70	0.50	0.20	0.20	0
Floor	0.50	0.20	0.20	0.10	0

k	0.6	82	63	55	55	51
k	1.0	102	80	72	71	67
k	1.5	117	92	86	83	79
k	2.5	129	100	95	90	87
k	3.0	132	103	99	93	90

Cleaning (a)	1				2				3			
	P	C	N	D	P	C	N	D	P	C	N	D
LMF	0.94	0.88	0.82	0.77	0.91	0.83	0.77	0.71	0.89	0.79	0.73	0.65
RSMF	0.96	0.92	0.87	0.81	0.96	0.92	0.87	0.81	0.96	0.92	0.87	0.81

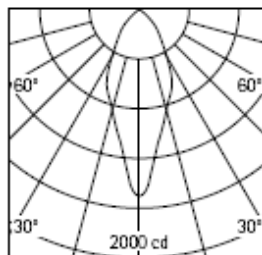
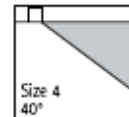
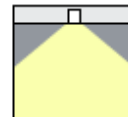
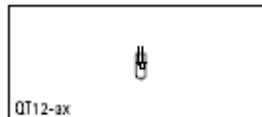
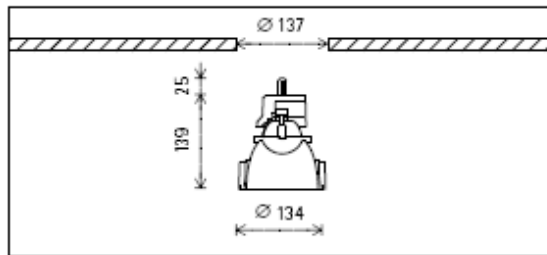
Hours of operation (h)	1000	2000	4000
LLMF	0.99	0.97	0.88
LSF	1	1	1

- MF LMFxRSMFxLLMFxLSF
- MF Maintenance Factor
- LMF Luminaire Maintenance Factor
- RSMF Room Surface Maintenance Factor
- LLMF Lamp Lumens Maintenance Factor
- LSF Lamp Survival Factor
- P Room pure
- C Room clean
- N Room normal
- D Room dirty



QUINTESSENCE DOWNLIGHT

for low-voltage halogen lamps



QT12-ax 75W 12V GY6,35 1575lm

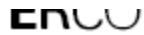
LOR 0.60
UGR 17.8
55° < 1000 cd/m²

47024.000 Reflector silver
QT12-ax 75W 12V GY6.35 1575lm
Flush mounting detail
Focal diffuser

Product description
Lampholder carrier: cast aluminium, designed as heat sink. Fixing ring: plastic, black.
Mounting ring: plastic, white (RAL9002). Mounting for ceiling thicknesses of 1-25mm with covered mounting detail and 12.5-25mm with flush mounting detail.
Cable, L 500mm.
Spherolit technology upper reflector: aluminium, silver, mirror-finish anodised.
Darklight reflector: aluminium, bright anodised. Cut-off angle 40°.
Diffuser: glass, frosted.
Transformer to EN 61558 or EN 61347 to be ordered separately.
Weight 0.45kg

ERCO GmbH
Brockhauser Weg 80-82
58507 Lüdenscheid
Germany
Tel.: +49 2351 551 0
Fax: +49 2351 551 300
info@erco.com

Technical Region: 230V/50Hz
We reserve the right to make technical and design changes.
Edition: 25.10.2010
Current version under
www.erco.com/47024.000



QUINTESSENCE DOWNLIGHT

Planning data

47024.000 QT12-ax 75W 12V GY6.35 1575lm
 Connected load without control gear P: 75 W
 Connected load per 100lx P*: 7.6 W/m²
 Number of luminaires per 100lx n*: 10.1 l/100m²

47024.000 QT12-ax 75W 12V GY6.35 1575lm
 Number of luminaires per 100m² for
 100lx 200lx 300lx 500lx
 11 21 31 51

47024.000 QT12-ax 75W 12V GY6.35 1575lm
 Module (m) 1.2x1.8 1.8x1.8 1.8x2.4 2.4x2.4
 Illuminance E_n (lx) 457 305 229 172

Correction table

Ceiling	0.70	0.70	0.70	0.50	0
Wall	0.70	0.50	0.20	0.20	0
Floor	0.50	0.20	0.20	0.10	0

k	0.6	88	70	63	63	60
k	1.0	105	83	77	75	72
k	1.5	118	93	88	85	82
k	2.5	128	100	96	91	88
k	3.0	131	102	99	93	90

Cleaning (a)	1				2				3			
	P	C	N	D	P	C	N	D	P	C	N	D
LMF	0.94	0.88	0.82	0.77	0.91	0.83	0.77	0.71	0.89	0.79	0.73	0.65
RSMF	0.96	0.92	0.87	0.81	0.96	0.92	0.87	0.81	0.96	0.92	0.87	0.81

Hours of operation (h)	1000	2000	4000
LLMF	0.99	0.97	0.88
LSF	1	1	1

- MF LMFxRSMFxLLMFxLSF
- MF Maintenance Factor
- LMF Luminaire Maintenance Factor
- RSMF Room Surface Maintenance Factor
- LLMF Lamp Lumens Maintenance Factor
- LSF Lamp Survival Factor
- P Room pure
- C Room clean
- N Room normal
- D Room dirty



Type:	Approved:
Fixture:	
Project:	

COLOURLINE



COLOURLINE is an economic indoor color cove and wash light with 120° x 120° wide distributions. COLOURLINE comes in 12" modular length and RGB color. Clear or opal diffuse lens option and ratcheting mounting bracket for secure aiming.



Technical Specifications

Color Temperature		RGB
output	beam spread	120°
	lumens	65
	LEDs per foot	20
	lifetime	> 60,000 hours / L70 or better
electrical	input voltage	20-24VDC
	power consumption	4.5W / ft
physical	dimensions	12" x 1.75" x 1.825"
	weight	0.5 lbs / ft
	housing	plastic PMMA
	mounting	plastic ratcheting bracket
	operating temperature	-20°C to 50°C
	junction temperature	61°C @ TA 25°C
control	interface	0-10VDC, DMX 512, RMD dimming
	remote power	120' (w/ 10 AWG)
certification and safety	certification	ETL / cETL
	standards	UL-Class II, IES LM-79, LM-80
	environment	dry, indoor location, IP20

Due to continuous development and improvements, specifications are subject to change without notice.

Ordering

example: CL-1-DMX-WIH

CL			
model	length	options	accessories
CL - COLOURLINE	1 - PC Clear Cover	D - Dimming 0-10V	WIH - Wiring Harness
	2 - PO Opal Cover	DMX - DMX 512	
		RMD - RMD Dimming	



COLOURLINE

Photometrics

Illuminance at a Distance		
	center beam fc	beam width
1 ft	5 fc	3 ft
2 ft	1 fc	6 ft
3 ft	1 fc	9 ft
4 ft	0 fc	12 ft
5 ft	0 fc	15 ft
6 ft	0 fc	18 ft

112°

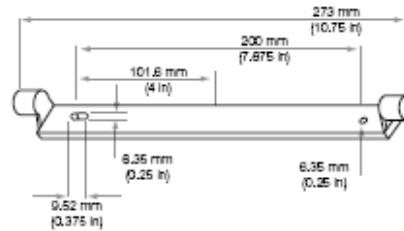
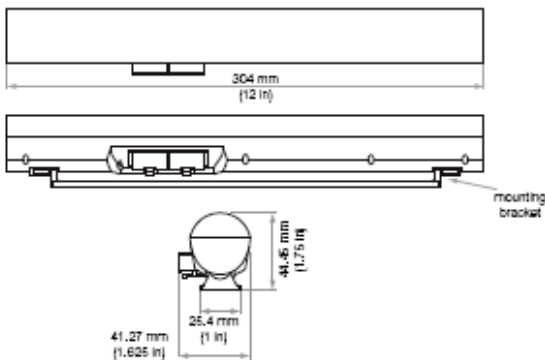
Illuminance at a Distance		
	center beam fc	beam width
1 ft	4 fc	3 ft
2 ft	1 fc	6 ft
3 ft	1 fc	9 ft
4 ft	0 fc	12 ft
5 ft	0 fc	15 ft
6 ft	0 fc	18 ft

112°

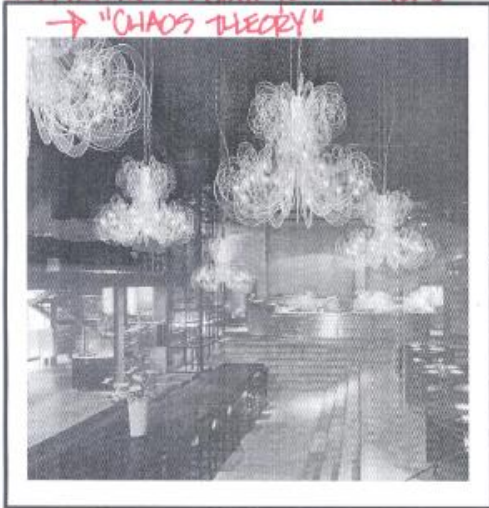
Performance

length	total wattage	RGB lumens
CL-1	4.5	85
CL-2	4.5	51

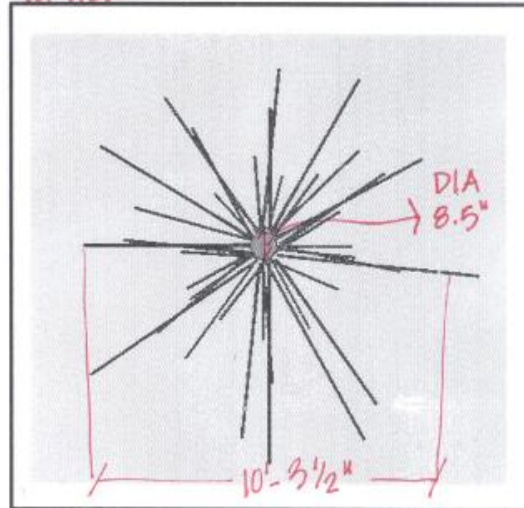
Physical Dimensions



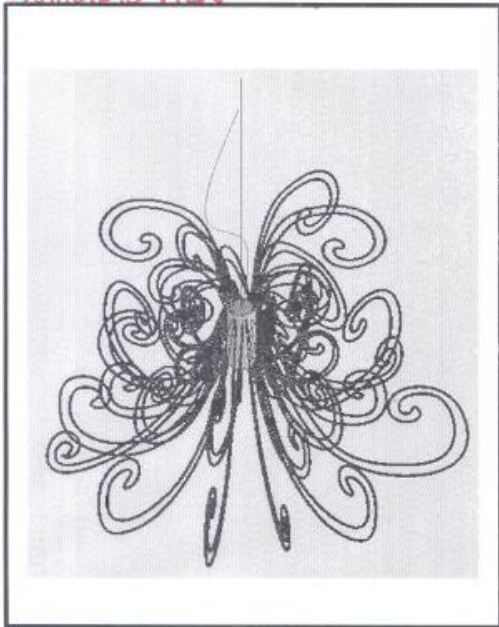
INSPIRATION FROM YELLOW GOAT
→ "CHAOS THEORY"



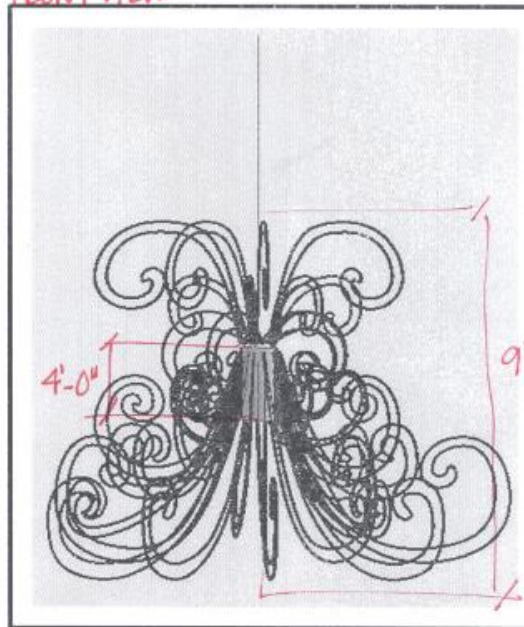
TOP VIEW



ISOMETRIC VIEW



FRONT VIEW



→ 3 TIERS

23.11 - Technische Änderungen vorbehalten - Technical amendments reserved - Sous réserve de modifications techniques

BEGA Lichttechnische Spezialfabrik
Hennenbusch - D - 58708 Menden

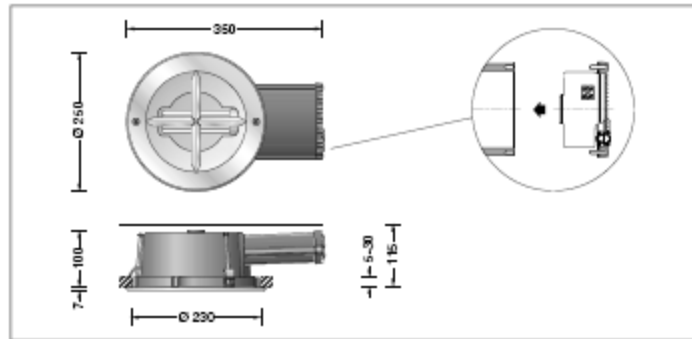
BEGA

Gebrauchsanweisung
Instructions for use
Fiche d'utilisation

Deckeneinbauleuchte
Recessed ceiling luminaire
Plafonnier à encastrer

IP 65

6807



Anwendung

Deckeneinbauleuchte mit symmetrisch streuender Lichtstärkerverteilung. Für den Einbau in Zwischendecken von 5 - 30 mm Stärke. Erforderliche Einbautiefe 115 mm. Einbauöffnung ø 230 mm.

Application

Recessed ceiling luminaire symmetrical wide beam light distribution. For recessing in suspended ceilings from 5 - 30 mm thickness. Recessed depth required 115 mm. Ceiling aperture ø 230 mm.

Utilisation

Spot à encastrer à répartition lumineuse symétrique diffuse. Pour l'installation dans les plafonds suspendus d'épaisseur 5 - 30 mm. Profondeur d'encastrement nécessaire 115 mm. Découpe de plafond ø 230 mm.

Lampe

Kompakt-Leuchtstofflampe
TC-TELI 32 W - GX 24 q-3
TC-TELI 42 W - GX 24 q-4

Osram:
Dulux T/E 32 W IN PLUS 2400 lm
Dulux T/E 42 W IN PLUS 3200 lm

Philips:
PL-T TOP 32 W /4p 2400 lm
PL-T TOP 42 W /4p 3200 lm

Bitte beachten Sie die Betriebsanweisung der Lampenhersteller.

Lamp

Compact fluorescent lamp
TC-TELI 32 W - GX 24 q-3
TC-TELI 42 W - GX 24 q-4

Osram:
Dulux T/E 32 W IN PLUS 2400 lm
Dulux T/E 42 W IN PLUS 3200 lm

Philips:
PL-T TOP 32 W /4p 2400 lm
PL-T TOP 42 W /4p 3200 lm

Please note the lamp manufacturers' operating instructions.

Lampe

Lampe fluorescente compacte
TC-TELI 32 W - GX 24 q-3
TC-TELI 42 W - GX 24 q-4

Osram:
Dulux T/E 32 W IN PLUS 2400 lm
Dulux T/E 42 W IN PLUS 3200 lm

Philips:
PL-T TOP 32 W /4p 2400 lm
PL-T TOP 42 W /4p 3200 lm

Veuillez respecter les instructions des fabricants de lampes.

Produktbeschreibung

Leuchte besteht aus Aluminiumguss, Aluminium und Edelstahl
Sicherheitsglas
Silikondichtung
Reflektor aus eloxiertem Reinst-Aluminium
herausziehbare elektrische Einrichtung für eine einfache Montage
Befestigung über drei keilförmig angebrachte, verstellbare Krallen
Europäisches Patent EP 0 686 806
2 Leitungseinführungen zur Durchverdrahtung der Netzanschlussleitung
bis ø 10,5 mm max. 3 x 1,5^Ø
Anschlussklemme 2,5^Ø
Schutzleiteranschluss
Fassung GX 24 q-3/4
Elektronisches Vorschaltgerät
220-240 V ~ 0/50-60 Hz
Schutzklasse I
Schutzart IP 65
Staubdicht und Schutz gegen Strahlwasser
☑ Zeichen - Leuchte ist für die Montage auf normal entflammaren Befestigungsflächen geeignet
CE - Konformitätszeichen
Gewicht: 2,6 kg

Product description

Luminaire made of aluminium alloy, aluminium and stainless steel
Safety glass
Silicone gasket
Reflector made of anodised pure aluminium
extractable electrical unit for an easy installation
Fixing is achieved by using three adjustable wedge-shaped claws
European patent EP 0 686 806
2 cable entries for through-wiring of mains supply cable up to ø 10,5 mm max. 3 x 1,5^Ø
Connecting terminal 2,5^Ø
Earth conductor connection
Lampholder GX 24 q-3/4
Electronic ballast 220-240 V ~ 0/50-60 Hz
Safety class I
Protection class IP 65
Dust tight and protection against water jets
☑ Symbol - Luminaire is suitable for mounting on normal inflammable fixing surfaces
CE - Conformity mark
Weight: 2,6 kg

Description du produit

Luminaire fabriqué en fonte d'alu, aluminium et acier inoxydable
Verre de sécurité
Joint silicone
Réflecteur en aluminium pur anodisé
Appareillage électrique amovible pour faciliter l'installation
La fixation s'effectue par trois griffes réglables en forme de clavette
Brevet européen EP 0 686 806
2 entrées de câble pour branchement en dérivation d'un câble de raccordement jusqu'à ø 10,5 mm max. 3 x 1,5^Ø
Bornier 2,5^Ø
Raccordement de mise à la terre
Douille GX 24 q-3/4
Ballast électronique
220-240 V ~ 0/50-60 Hz
Classe de protection I
Degré de protection IP 65
Étanche à la poussière et protégé contre les jets d'eau
☑ Signe - Luminaire approprié à l'installation sur des surfaces de fixation normalement inflammables
CE - Signe de conformité
Poids: 2,6 kg

Sicherheit

Für die Installation und für den Betrieb dieser Leuchte sind die nationalen Sicherheitsvorschriften zu beachten. Der Hersteller übernimmt keine Haftung für Schäden, die durch unsachgemäßen Einsatz oder Montage entstehen. Werden nachträglich Änderungen an der Leuchte vorgenommen, so gilt derjenige als Hersteller, der diese Änderungen vornimmt.

Montage

☒ Leuchtgehäuse darf nicht in wärmedämmende Stoffe eingebaut werden. Die Einbauöffnung wird durch den Anschlagring des Leuchtgehäuses abgedeckt. Die Befestigung der Leuchte im Baukörper erfolgt über drei keilförmig angebrachte, verstellbare Krallen.

Einbau in Betondecken:

Hierfür steht das Einbaugesäuse - Ergänzungsteil **777** - zur Verfügung.

Einbau in Zwischendecken:

Es ist eine Einbauöffnung von ø 230 mm mit einer Mindesttiefe von 115 mm erforderlich. Auf ausreichende Tragfähigkeit der Zwischendecke achten.

Der seitliche Abstand vom Leuchtgehäuse zu Gebäudeteilen muss mindestens 50 mm betragen.

Die Krallen greifen hinter die Deckenverkleidung. Die Mindeststärke der Deckenverkleidung beträgt 5 mm. Bei geringerer Stärke, sowie beim Einbau in Gipskartondecken, muss die Deckenverkleidung rückseitig im Bereich der Krallen verstärkt werden.

Leuchte öffnen:

Schrauben lösen. Abschlussring mit eingeklebtem Sicherheitsglas, Reflektor und Dichtung abnehmen.

Anschlusskasten öffnen:

Schrauben lösen und Deckel mit elektrischer Einrichtung aus dem Anschlusskasten herausziehen. Netzanschlussleitung durch die Leitungseinführung führen.

Schutzleiterverbindung herstellen und elektrischen Anschluss vornehmen.

Deckel mit elektrischer Einrichtung in Anschlusskasten einschieben.

Schrauben fest anziehen.

Leuchtgehäuse in die Einbauöffnung einsetzen. Schrauben der Krallenbefestigung gleichmäßig anziehen.

Lampen einsetzen.

Auf richtigen Sitz der Dichtung achten.

Abschlussring mit Glas und Dichtung montieren.

Lampenwechsel - Wartung

Anlage spannungsfrei schalten.

Leuchte öffnen und reinigen.

Nur lösemittelfreie Reinigungsmittel verwenden. Lampe austauschen.

Dichtung überprüfen, ggf. ersetzen.

Leuchte schließen.

Ergänzungsteil

Für die Herstellung der Einbauöffnung kann es zweckmäßig sein, Einbaugesäuse aus Aluminium zu verwenden.

777 Einbaugesäuse

Es gibt dazu eine geordnete Gebrauchsanweisung.

Ersatzteile

Bezeichnung	Bestellnummer
Ersatzglas	140711
EVG	610724
Fassung	630247
Reflektor Abdeckung	760808
Reflektor Gehäuse	760809
Dichtung Gehäuse	830877
Dichtung Abdeckung	830879

Safety indices

The installation and operation of this luminaire are subject to national safety regulations.

The manufacturer is then discharged from liability when damage is caused by improper use or installation.

If any luminaire is subsequently modified, the persons responsible for the modification shall be considered as manufacturer.

Installation

☒ Luminaire housing must not be installed in heat-insulating material.

The recessed opening is covered by the frame of the luminaire housing. Fixing of the luminaire in the structure is achieved by using three adjustable wedge-shaped claws.

Installation into concrete ceilings:

For this purpose installation housing - accessory **777** - is available.

Installation into inserted ceilings:

A recessed opening of ø 230 mm is necessary to accept the luminaire housing. Recessed depth min. 115 mm.

Please consider sufficient load capacity of the suspended ceiling.

The lateral distance between recessed luminaire and other building parts must be at least 50 mm.

The claws catch the ceiling facing from the back side. Minimum thickness of the ceiling facing is 5 mm.

If the ceiling facing has a thickness of less than 5 mm or in case of an installation into plasterboard ceilings, the facing thickness in the region of the claws must be increased from the back side.

Open the luminaire:

Undo screw. Remove end ring with glued-in safety glass, reflector and gasket.

Open the connection box:

Undo screws and pull cap with electrical unit out of the connection box. Lead the mains supply cable through the cable entry.

Make earth conductor connection and electrical connection.

Push cap with electrical unit into the connection box.

Tighten screws.

Insert luminaire housing into the recess opening.

Tighten screws of claw fasteners.

Insert lamps.

Make sure that gasket is positioned correctly.

Assemble end ring with glass and gasket.

Relamping - Maintenance

Disconnect the electrical installation.

Open the luminaire and clean.

Use only solvent-free cleansers.

Change the lamp.

Check the gasket and replace, if necessary.

Close the luminaire.

Accessory

For preparing the recess opening it can be practical to use an installation housing made of aluminium.

777 Installation housing

A separate instructions for use can be provided upon request.

Spares

Description	Part no
Spare glass	140711
Electronic ballast	610724
Lampholder	630247
Reflector for cover ring	760808
Reflector housing	760809
Gasket housing	830877
Gasket for cover ring	830879

Sécurité

Pour l'installation et l'utilisation de ce luminaire, respecter les normes de sécurité nationales.

Le fabricant décline toute responsabilité résultant d'une mise en œuvre ou d'une installation inappropriée du produit.

Toutes les modifications apportées au luminaire se feront sous la responsabilité exclusive de celui qui les effectuera.

Installation

☒ Le boîtier du luminaire ne doit pas être installé dans des matériaux d'isolation.

Les bords de la réservation sont recouverts par l'anneau de butée du boîtier du luminaire. La fixation du luminaire dans l'ouvrage s'effectue par trois griffes réglables en forme de clavette.

Encastrement dans les murs:

Pour ce type d'installation il existe le boîtier d'encastrement - accessoire **777** -.

Encastrement dans les parois creuses:

Une réservation de ø 230 mm avec une profondeur minimale de 115 mm est nécessaire.

Le plafond suspendu doit être conçu pour supporter le poids du luminaire.

La distance latérale entre le luminaire à encastrer et des parties de bâtiment étant normalement inflammables doit être au minimum 50 mm.

Les griffes se coincent à l'arrière.

L'épaisseur minimale de la paroi doit être 5 mm. Si la paroi est moins épaisse ainsi que pour une installation dans un plafond de béton sèche la paroi doit être renforcée à l'arrière à l'emplacement des griffes.

Ouvrir le luminaire:

Desserer les vis. Retirer l'anneau de fermeture avec le verre collé, le réflecteur et le joint.

Ouvrir le boîtier de connexion:

Desserer les vis et retirer le couvercle avec l'appareillage électrique du boîtier de connexion.

Introduire le câble d'alimentation à travers l'entrée de câble.

Mettre à la terre et procéder au raccordement électrique.

Installer le couvercle avec l'appareillage électrique dans le boîtier de connexion.

Serrer fort les vis.

Installer le boîtier du luminaire dans la réservation. Serrer les vis des griffes.

Installer les lampes.

Véifier au bon emplacement du joint.

Installer l'anneau de fermeture avec le verre et le joint.

Changement de lampe - Maintenance

Travailler hors tension.

Ouvrir le luminaire et nettoyer.

N'utiliser que des produits d'entretien ne contenant pas de solvant. Changer la lampe.

Vérifier et remplacer le joint le cas échéant.

Fermer le luminaire.

Accessoire

Pour la réservation, il peut être pratique d'utiliser des boîtiers d'encastrement en aluminium.

777 Boîtier d'encastrement

Une fiche d'utilisation pour ces boîtiers est disponible.

Pièces de rechange

Désignation	Référence
Verre de rechange	140711
Ballast électronique	610724
Douille	630247
Réflecteur de l'anneau	760808
Réflecteur du boîtier	760809
Joint du boîtier	830877
Joint de l'anneau	830879

06.11 - Technische Änderungen vorbehalten - Technical amendments reserved - Sous réserve de modifications techniques

BEGA Lichttechnische Spezialfabrik
Hennenbusch - D - 58708 Menden

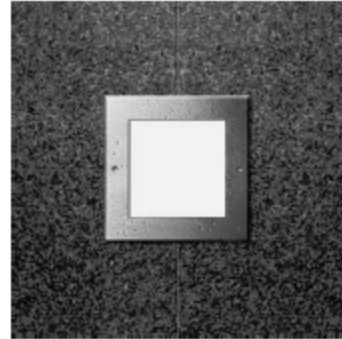
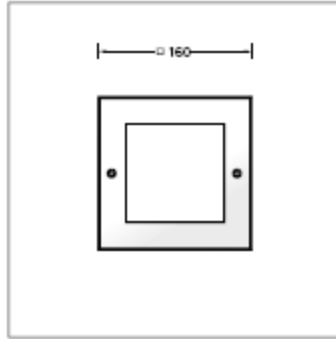
BEGA

Gebrauchsanweisung
Instructions for use
Fiche d'utilisation

Bodeneinbauleuchte
In-ground luminaire
Luminaire à encastrer

IP 67

8600



Anwendung

Orientierungsleuchte für den Einbau in befestigte Flächen, Wege und Plätze, Begehbar und überdribbar von Fahrzeugen mit luftgefüllten Reifen. Für Druckbelastung bis 5000 Kg. Im Zentrum der Glasoberfläche wird eine Betriebstemperatur von nur 35 °C erreicht (gemessen nach EN 60598 - Umgebungstemperatur ta 15°C).

Bitte beachten Sie: In Fahrsuren, wo die Leuchte horizontalen Kräften durch Bremsen, Beschleunigen und Richtungswechsel ausgesetzt ist, darf die Leuchte nicht eingesetzt werden. Der Abstand zu angestrahlten Gegenständen oberhalb der Lichtaustrittsöffnung muss mindestens 0,5 m betragen. Durch Nässe kann es auf dem Glas der Leuchte zur Rutschgefahr kommen. Aus Sicherheitsgründen empfehlen wir für begehbare öffentliche Bereiche Leuchten mit rutschhemmendem Glas nach DIN 51130. Diese tragen den Zusatz R hinter der Bestellnummer.

Produktbeschreibung

Leuchte besteht aus Aluminiumguss, Aluminium und Edelstahl
Abdeckrahmen aus Edelstahl
Werkstoff-Nummer 1.4301
Einbaugehäuse mit Leitungseinführung für Installationsrohr max. ø 20 mm
Leuchtgehäuse eloxiert
Sicherheitsglas weiß
1 Leitungverschraubung
1,8 m wasserbeständige Anschlussleitung H07RN8-F 3G1,5² mit eingebautem Wasserstopper und 1,2 m PVC Installationsrohr Fassung G 23
Vorschaltgerät 230 V ~ 50 Hz
Schutzklasse I
Schutzart IP 67
Staubdicht und Schutz gegen zeitweiliges Untertauchen
☑ Zeichen - Leuchte ist für die Montage auf normal entflammbaren Befestigungsflächen geeignet
CE - Konformitätszeichen
Gewicht: 3,6 kg

Application

Location luminaire for recessed mounting in compacted surfaces, paths and open areas. Walk-over and drive-over luminaire from vehicles with pneumatic tyres. For pressure load up to 5000 Kg. In the centre of the glass surface the luminaire attains an operating temperature of only 35 °C (measured according to EN 60598 - ambient temperature of ta 15°C).

Please note: Luminaire must not be used for installations in road lanes, where the fixture is exposed to a horizontal strain due to braking, acceleration and change of direction. The minimum distance to illuminated objects above the light distribution opening must be 0,5 m. When the glass of the luminaire is wet, there may be a danger of skidding. For safety reasons we recommend to use in public areas luminaires equipped with skid-blocking glass according to DIN 51130. These are denoted by R after the article number.

Product description

Luminaire made of aluminium alloy, aluminium and stainless steel
Cover frame made of stainless steel
Steel grade number 1.4301
Recess housing with cable entry for cable conduit, max ø 20 mm
Luminaire housing anodized
White safety glass
1 screw cable gland
1,8 m water-resistant connecting cable H07RN8-F 3G1,5² with implemented water stopper and 1,2 m PVC cable conduit
Lampholder G 23
Ballast 230 V ~ 50 Hz
Safety class I
Protection class IP 67
Dust tight and protection against temporary immersion
☑ Symbol - Luminaire is suitable for mounting on normal inflammable fixing surfaces
CE - Conformity mark
Weight: 3,6 kg

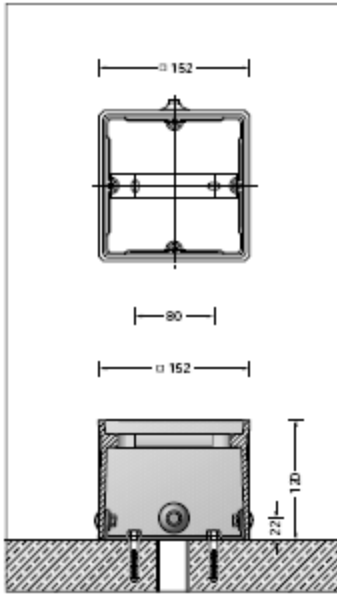
Utilisation

Luminaire d'orientation pour installation dans des surfaces stabilisées, places et chemins. Autorisant la circulation piétonne et le roulement de véhicules équipés de pneumatiques. Pour pression maximale 5000 Kg. Au centre du verre la température n'atteint que 35 °C (mesurée selon EN 60598 à une température ambiante de ta 15° C).

Attention: Le luminaire ne doit pas être installé dans des voies de circulation où il serait soumis à des sollicitations mécaniques horizontales provoquées par des freinages, des accélérations, des changements de direction. La distance minimale par rapport aux objets éclairés au-dessus du verre doit être 0,5 m. En cas d'humidité, le verre de ce luminaire risque d'être glissant. Pour des raisons de sécurité, nous recommandons d'utiliser dans les aires piétonnes publiques ces luminaires équipés de verres antidérapants selon DIN 51130. Pour les commander faire suivre le numéro d'article de la lettre R.

Description du produit

Luminaire fabriqué en fonte d'aluminium et acier inoxydable
Cadre de finition en acier inoxydable
Matériau No. 1.4301
Châssis de montage avec l'entrée de câble pour gaine de passage de câble max. ø 20 mm
Boîtier-lampe anodisé
Verre de sécurité blanc
1 presse-étoupe
1,8 m de câble de raccordement résistant à l'eau H07RN8-F 3G1,5² avec stoppe-eau incorporé et 1,2 m de gaine de passage de câble PVC
Douille G 23
Ballast 230 V ~ 50 Hz
Classe de protection I
Degré de protection IP 67
Étanche à la poussière et protégé contre l'immersion momentanée
☑ Signe - Luminaire approprié à l'installation sur des surfaces de fixation normalement inflammables
CE - Stige de conformité
Poids: 3,6 kg



Sicherheit

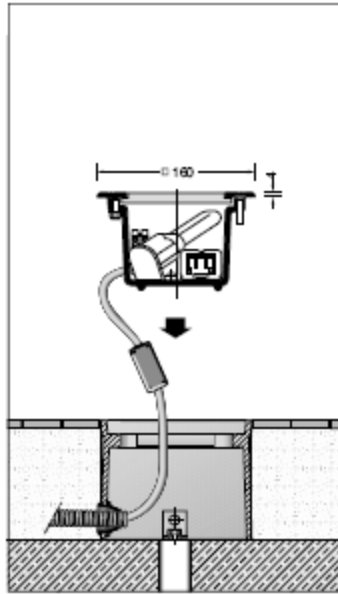
Für die Installation und für den Betrieb dieser Leuchte sind die nationalen Sicherheitsvorschriften zu beachten. Wir empfehlen die bauseitige Absicherung über einen Fehlerstrom-Schutzschalter. Der Hersteller übernimmt keine Haftung für Schäden, die durch unsachgemäßen Einsatz oder Montage entstehen. Werden nachträglich Änderungen an der Leuchte vorgenommen, so gilt derjenige als Hersteller, der diese Änderungen vornimmt.

Vor der Montage zu beachten:

Um die max. Druckbelastung der Leuchte von 5000 Kg aufnehmen zu können, ist die Errichtung eines Fundamentes erforderlich. Die Leuchte steht in einem Einbaugehäuse aus hochwertigem Aluminiumguss. Die Druckbelastung wird über dieses Gehäuse auf das bauseits zu erstellende Fundament übertragen. Die Gründung muss auf festem Untergrund erfolgen. Um eine sichere Standfestigkeit zu erreichen, muss das Einbaugehäuse einbetoniert werden. Bei der Erstellung des Fundaments ist eine Drainage anzulegen, damit eintretendes Oberflächenwasser aus dem Einbaugehäuse abfließen kann. Die Lackierung des Einbaugehäuses darf nicht beschädigt werden. Für die Dichtigkeit der Leuchte ist es wichtig, daß der spätere Bodenbelag auf gleicher Höhe oder unter der Oberkante des Einbaugehäuses liegt. **Abb. A**

Bodenbeschaffenheit:

Die Leuchte darf nicht dauerhaft mit aggressiven Medien in Kontakt kommen. Aggressive Medien können durch Wasser aus dem Boden gewaschen werden, und das Gehäuse der Leuchte zerstören. Bei unbekannter Zusammensetzung des Bodens ist daher vor der Montage eine Bodenanalyse vorzunehmen. Aggressive Medien können auch von der Oberfläche ausgehend auf die Leuchte einwirken, daher ist ein übermäßiger Einsatz von Taunmitteln im Umfeld der Leuchte zu vermeiden. Von außen eintretende Streuströme, die durch die Leuchte in den Boden weiter geleitet werden, verursachen Korrosionsschäden. Es sind geeignete Gegenmaßnahmen durchzuführen.



Safety indices

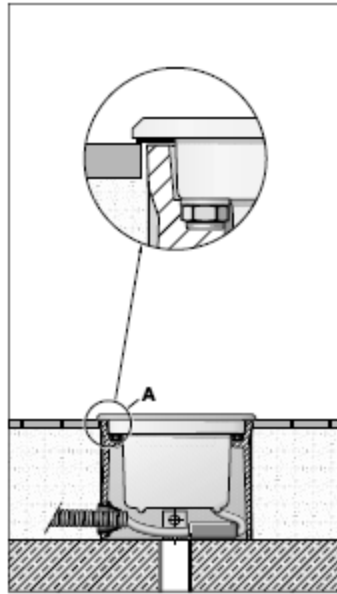
The installation and operation of this luminaire are subject to national safety regulations. We recommend a fuse protection on site by means of a RCCB (residual current circuit breaker). The manufacturer is then discharged from liability when damage is caused by improper use or installation. If any luminaire is subsequently modified, the persons responsible for the modification shall be considered as manufacturer.

Notice prior to installation:

To accept the maximum pressure load of 5000 Kg a proper foundation must be provided by the customer. The luminaire is mounted in a recess housing made of high-strength die cast aluminium. The pressure load is transferred to the foundation by this housing provided at site. The foundation must be carried out on firm subgrade. In order to obtain a firm stability, the recess housing must be firmly concreted in. During preparation of the foundation proper drainage must be provided, so that entering surface water can drain off. The lacquering of the recess housing must not be damaged. For the tightness of the luminaire it is important that the ground surface prepared later is either on the same level or slightly below top edge of the recess housing. **Fig. A**

Soil Conditions:

The luminaire must not permanently have contact with aggressive media. Aggressive media might be washed out of the soil and might corrode the housing of the luminaire. In case of an unknown composition of the soil a soil analysis should be made before installation. Aggressive media that is outgoing from the ground surface might also affect the luminaire. Thus an overuse of de-icing agents in the surroundings should be avoided. Parasitic current, occurring from the outside, which is conducted by the luminaire into the soil, will cause corrosion damage. Suitable counter measures must be carried out.



Sécurité

Pour l'installation et l'utilisation de ce luminaire, respecter les normes de sécurité nationales. Nous recommandons une protection sur le site par un différentiel à installer en amont. Le fabricant décline toute responsabilité résultant d'une mise en œuvre ou d'une installation inappropriée du produit. Toutes les modifications apportées au luminaire se feront sous la responsabilité exclusive de celui qui les effectuera.

A respecter avant l'installation:

Pour que le luminaire puisse supporter la pression maximale de 5000 Kg il doit impérativement être fixé sur une fondation stable. Le luminaire se trouve dans un châssis de montage fabriqué en fonte d'aluminium très robuste. La pression est transmise par ce châssis sur une fondation solide qui est à prévoir sur le site. Le massif de fondation doit être réalisé sur un sol stabilisé. Afin d'assurer une bonne stabilité, le châssis doit être coulé dans du béton. Lors de la réalisation de la fondation, un drainage doit être prévu afin que les eaux pénétrant dans le châssis puissent s'en échapper. Le laquage du châssis ne doit pas être endommagé. Pour la bonne étanchéité du luminaire, il est important que le bord supérieur du châssis de montage ne soit en aucun cas installé plus bas que le bord supérieur de la couche de finition du sol. Celle-ci doit affleurer la sous face de la colerette. **Pos. A**

Nature du sol:

Le luminaire ne doit pas être durablement en contact avec des matériaux corrosifs. Les matériaux agressifs peuvent provenir de l'eau du sol et altérer le boîtier. Si la qualité du sol n'est pas connue, il faut réaliser une analyse de ses composants avant l'installation du produit. Certains matériaux agressifs pouvant également attaquer la surface du luminaire, il faut donc limiter l'utilisation de produits de salage des voies publiques aux abords de l'appareil. Des courants de fuite rentrant par l'extérieur et conduits dans le sol par le luminaire, causent des dommages de corrosion. Des contre-mesures appropriées doivent être effectuées.

CLESSIDRA

URBAN COLUMNS/BOLLARDS

designed by IKON DESIGN

830.1500

XIGATO LED

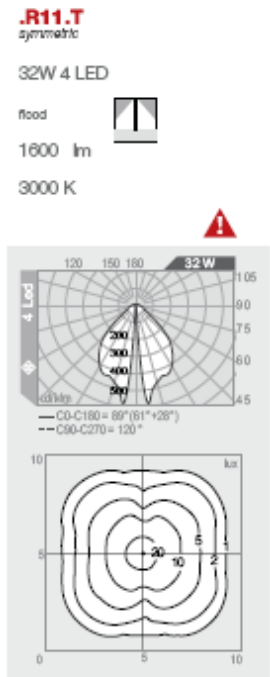
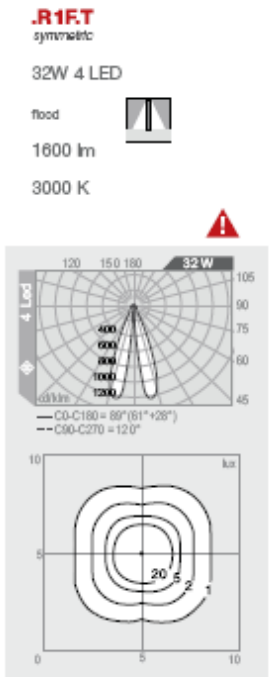
available finishes
 white | anthracite gray | RAL 9006 gray | rust brown

120/277V 60Hz

830.1501

XIGATO LED

available finishes
 white | anthracite gray | RAL 9006 gray | rust brown



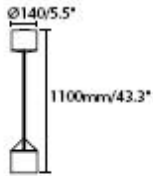
COLOR CODES

- .01 white
- .05 anthracite gray
- .13 RAL9006 Gray
- .45 rust brown

Preliminary photometry

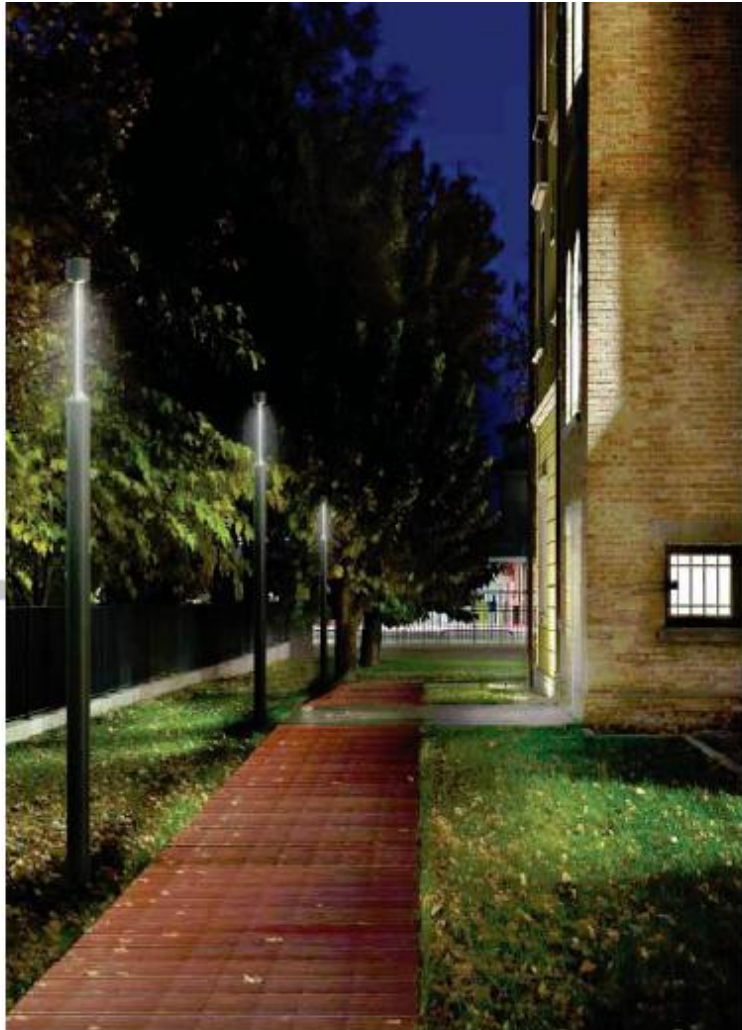
830.1503

WIGATO LED



available finishes

white | anthracite gray | RAL 9006 gray | rust brown



ACCESSORIES

OPTIONAL IN-GROUND PROTECTIVE ACCESSORY IN LOW DENSITY POLYESTER TO PROTECT AGAINST MECHANICAL OR CHEMICAL AGGRESSION

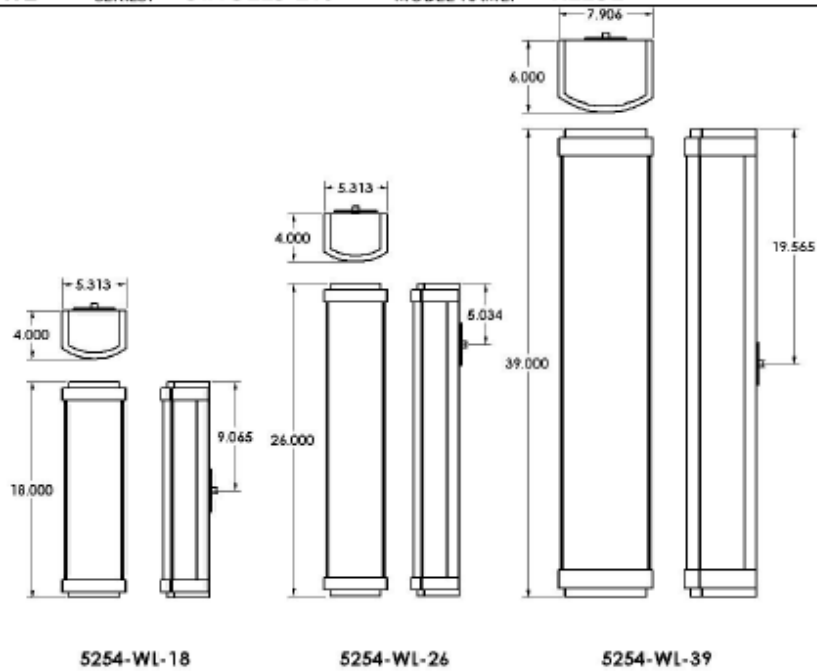
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LUMINAIRE SUBMITTAL SHEET

9/22/2010

MODEL #: 5254-WL	SERIES: SINGLES 2.0	MODEL NAME: REESE	TYPE:
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Your Specification:		(Catalog Number)	(Lamping)	(Voltage)	(Lens)	(Finish)	(Special)
CATALOG NUMBER: 5254-WL-18 5254-WL-26 5254-WL-39		LENS OPTIONS: OA Opal Acrylic FAH4 White Vein Hand Painted Faux Alabaster FAH5 Antique Hand Painted Faux Alabaster (Beige) FAH6 Gray Vein Hand Painted Faux Alabaster FAH7 Beige Vein Hand Painted Faux Alabaster		SPECIAL/MODIFICATIONS DESC. (MOD only):			
LAMPING: 5254-WL-18 I (2)25W T-10/Med F (1)FT27W/2G11 5254-WL-26 I (3)25W T-10/Med F (1)FT40W/2G11 F/T8 (1)F17T8/Med. Bi-Pin 5254-WL-39 I (4)25W T-10/Med F (2)FT39W/2G11 F/T8 (1)F25T8/Med. Bi-Pin F/T12 (1)F36T12HO/Recessed D.C		FINISHES: Standard LBP Light Bronze Paint with Brushed Texture LGP Light Gold Iridescent Paint LSP Light Silver Paint Custom CPF Custom Painted Finish (Consult Factory) CMF Custom Metal Finish (Consult Factory)		PROJECT:			
VOLTAGE: 120V 120 Volt 277V 277 Volt (Incandescent 120V only)		SPECIAL: STD Standard MOD Modified		QTY:			
		WEIGHT (lbs)*: (Hanging)		NOTES:			
		5254-WL-18	5254-WL-26	<ul style="list-style-type: none"> • ULLISTED AND CUL APPROVED FOR WET LOCATION. • WINONA LIGHTING PRODUCTS ARE UNION MADE. • CUSTOM SIZES AVAILABLE UPON REQUEST. ALL FLUORESCENT AND HID FIXTURES AVAILABLE IN 120 V AND 277 V. • INCANDESCENT 120 V ONLY. • WINONA LIGHTING RESERVES THE RIGHT TO MAKE DESIGN CHANGES WITHOUT PRIOR NOTICE. • LAMPS NOT INCLUDED. • BALLAST INFORMATION: ELECTRONIC 			
		I 10 LBS F 10 LBS	I 15 LBS F 15 LBS F/T8 15 LBS				
		5254-WL-39					
		I 20 LBS F 20 LBS F/T8 20 LBS F/T12 29 LBS					
		*all wall mounts over 25lbs require additional hanging support.					
winona lighting		3760 West Fourth Street - Winona, MN 55987 - 1-800-328-5291 - 507-454-5113 - Fax 507-452-8528 -		www.winonalighting.com			



Type:	Approved:
Fixture:	
Project:	

SLIMLINE



SLIMLINE is a slim profile linear floodlight with a 120° flood distribution for short throw applications. SLIMLINE comes in 13" to 34" lengths and 3000K or 4000K color temperatures. The 1/2" low profile body is sealed for IP68 rating and can be mounted to either the short, 8" cantilever, 36" cable, 18" pendant or surface mount bracket.

Technical Specifications

Color Temperature		3000K	4000K
output	beam spread	120°	
	lumens	357	443
	LEDs per foot	6	
	lifetime	> 60,000 hours / L70 or better	
electrical	input voltage	20-24VDC constant voltage	
	power consumption	8W / ft	
physical	dimensions	A x 1.4" x 0.5"	
	weight	1 lbs / ft	
	housing	extruded and die cast aluminum	
	mounting	short bracket, cantilever 8", cable 36", pendant 18", surface	
	operating temperature	-20°C to 50°C	
	junction temperature	74°C @ TA 25°C	
	control	interface	0-10VDC, DMX, RMD dimming
certification and safety	remote power	120' (w/ 10 AWG)	
	certification	ETL / cETL	
	standards	UL-Class II, IES LM-79, LM-80	
	environment	dry / damp / wet location, IP68	

Due to continuous development and improvements, specifications are subject to change without notice.

Ordering

example: SL-2-3K-DMX-SB

SL	length	color temperature	options	accessories
SL - SLIMLINE	1 - 305mm (13.2")	3K - Warm White	D - Dimming 0-10V	SB - Short Bracket S - Surface Mount
	2 - 590mm (23.2")	4K - Cool White	DMX - DMX 512	CL - Cantilever 8" EMR - Emergency
	3 - 875mm (34.4")		RMD - RMD Dimming	C - Cable Line 36" Backup-Remote (120V)
			LP - Lumen Priority	P - Pendant 18"

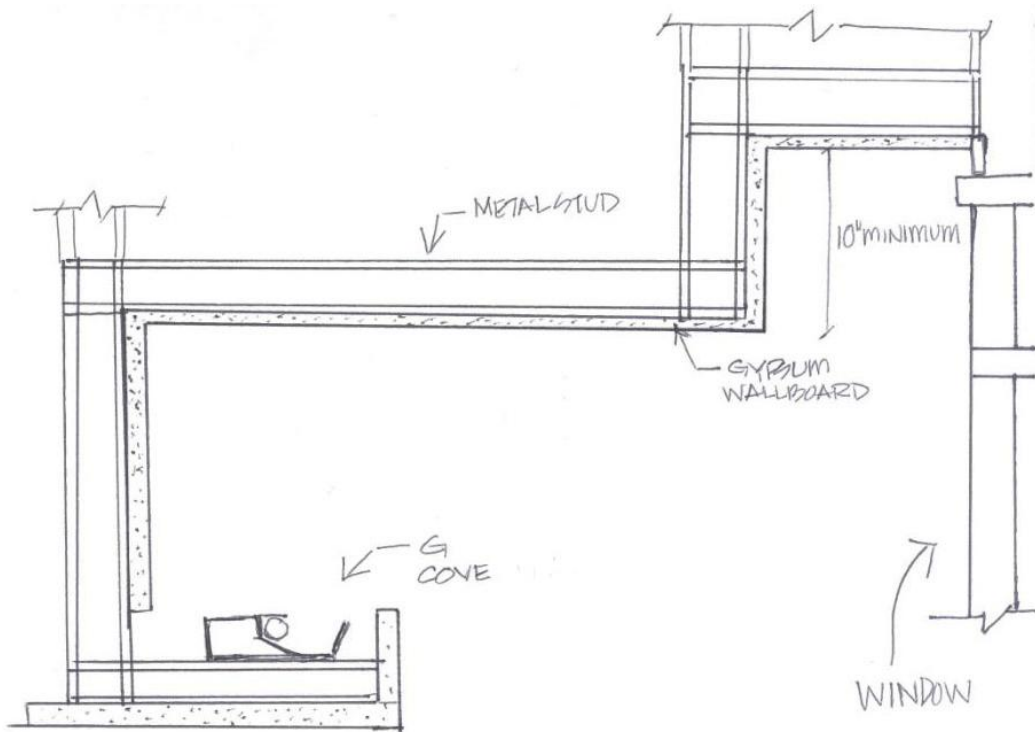


Figure 1: Lobby Cove Detail | NTS

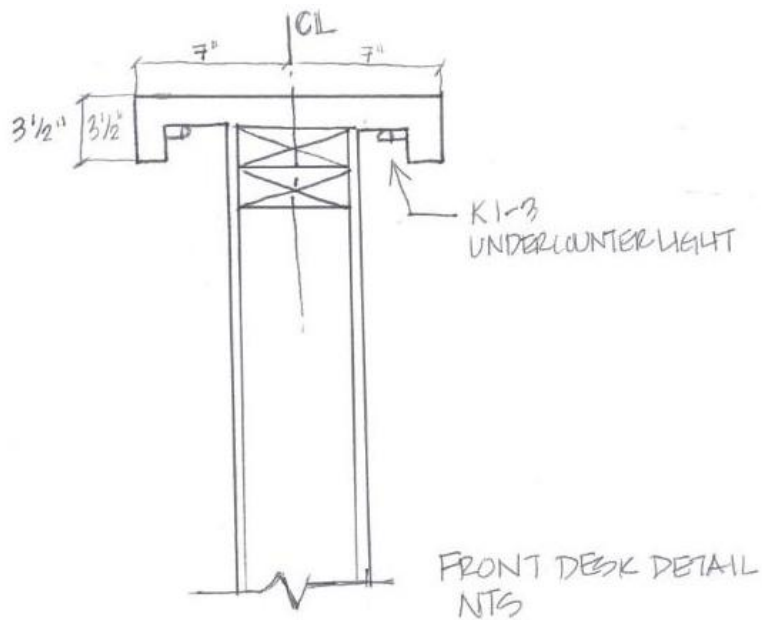


Figure 2: Reception Desk Detail | NTS

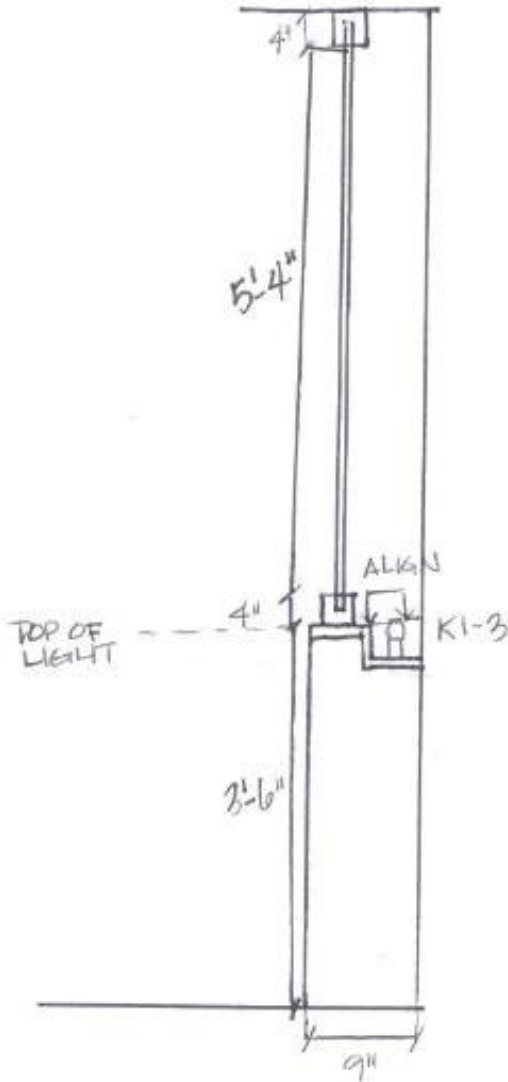


Figure 3: Entry Feature Wall Detail in Lobby | NTS

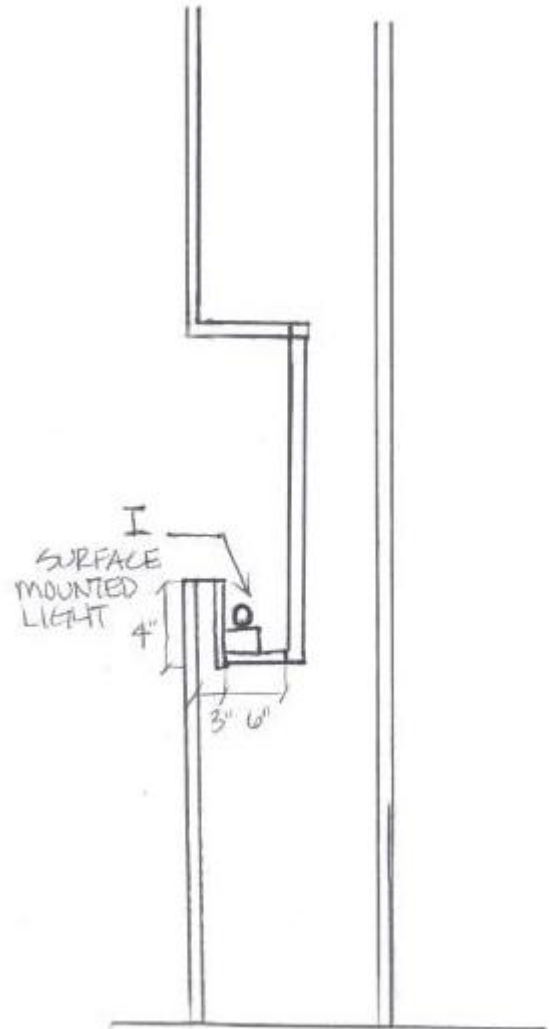


Figure 4: Restaurant Signage Display | NTS

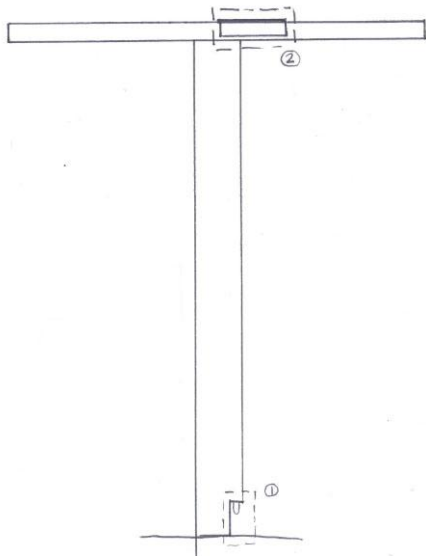


Figure 5: Section of Bar in Lounge | NTS

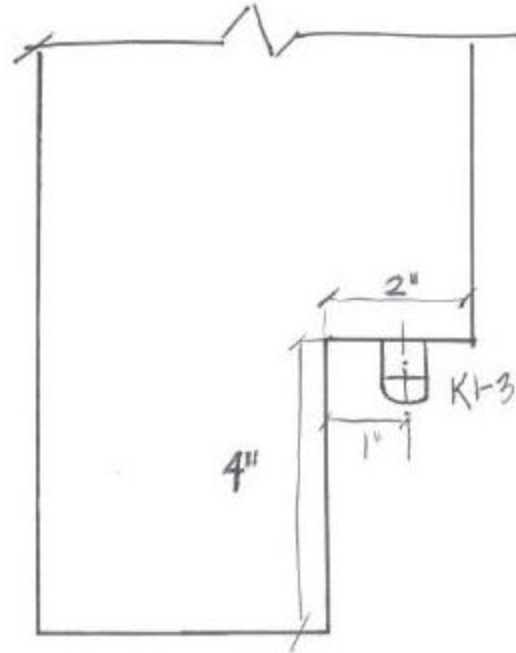


Figure 6: Toe Kick Detail at Bar | NTS

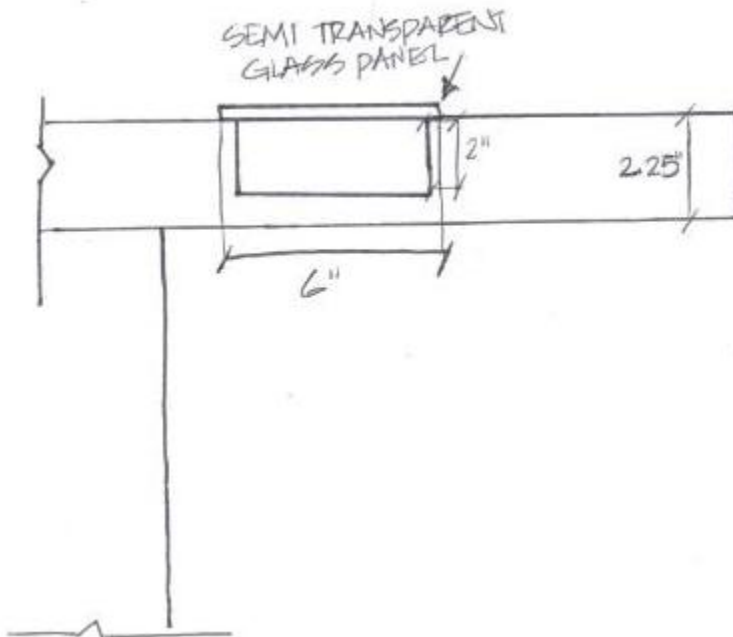


Figure 7: Squares Detail on Bar | NTS

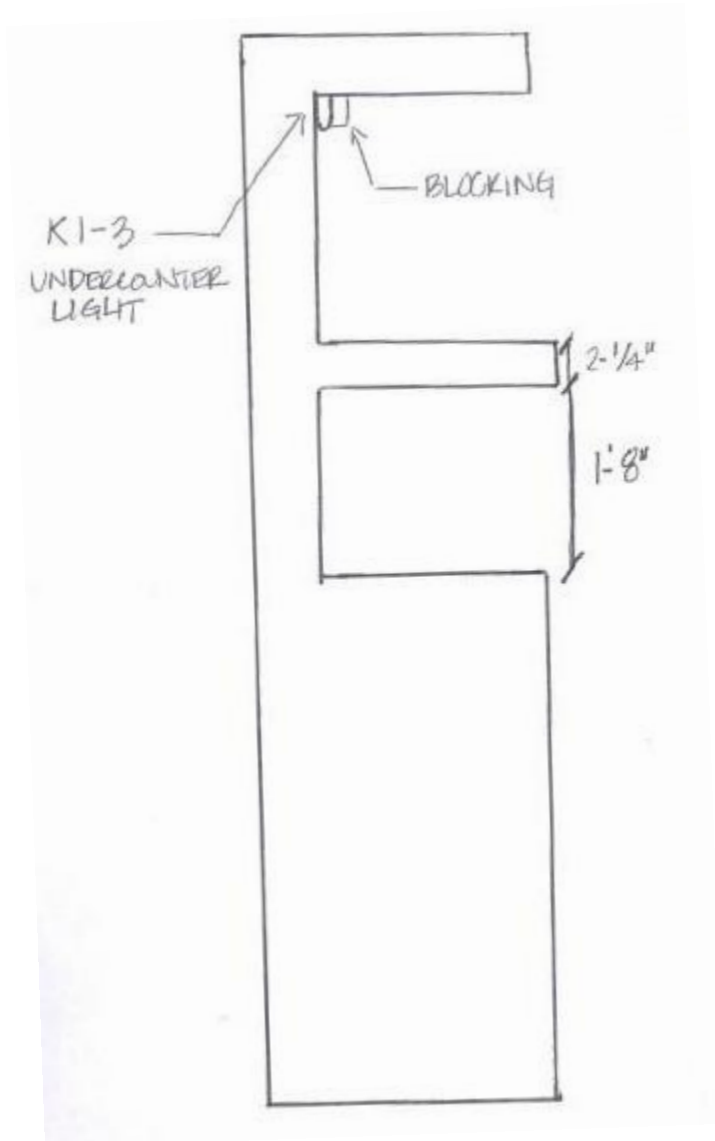


Figure 8: Lounge Back Bar Detail | NTS

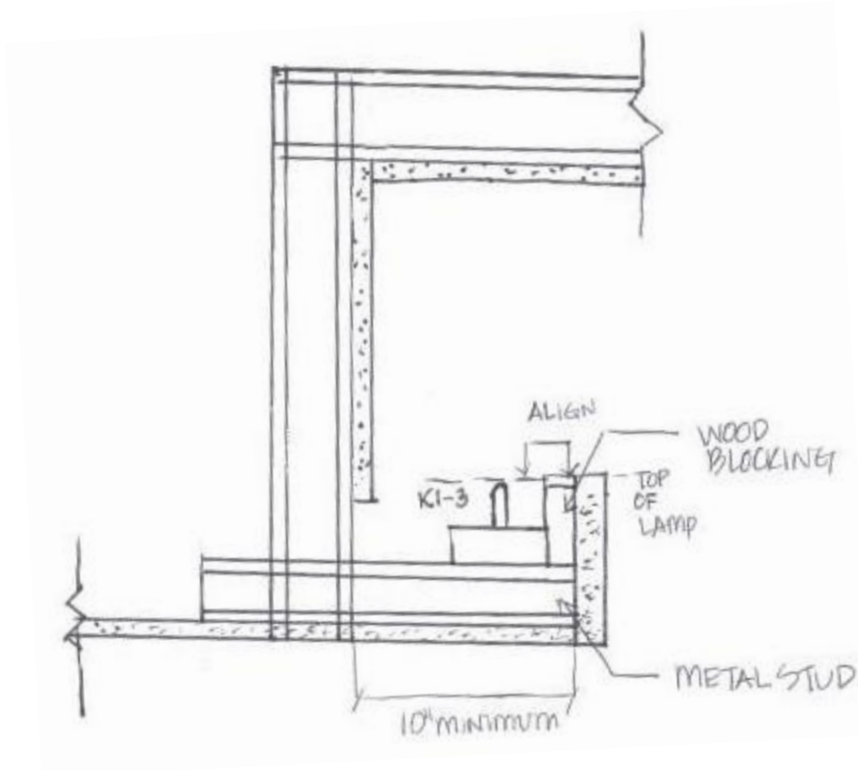
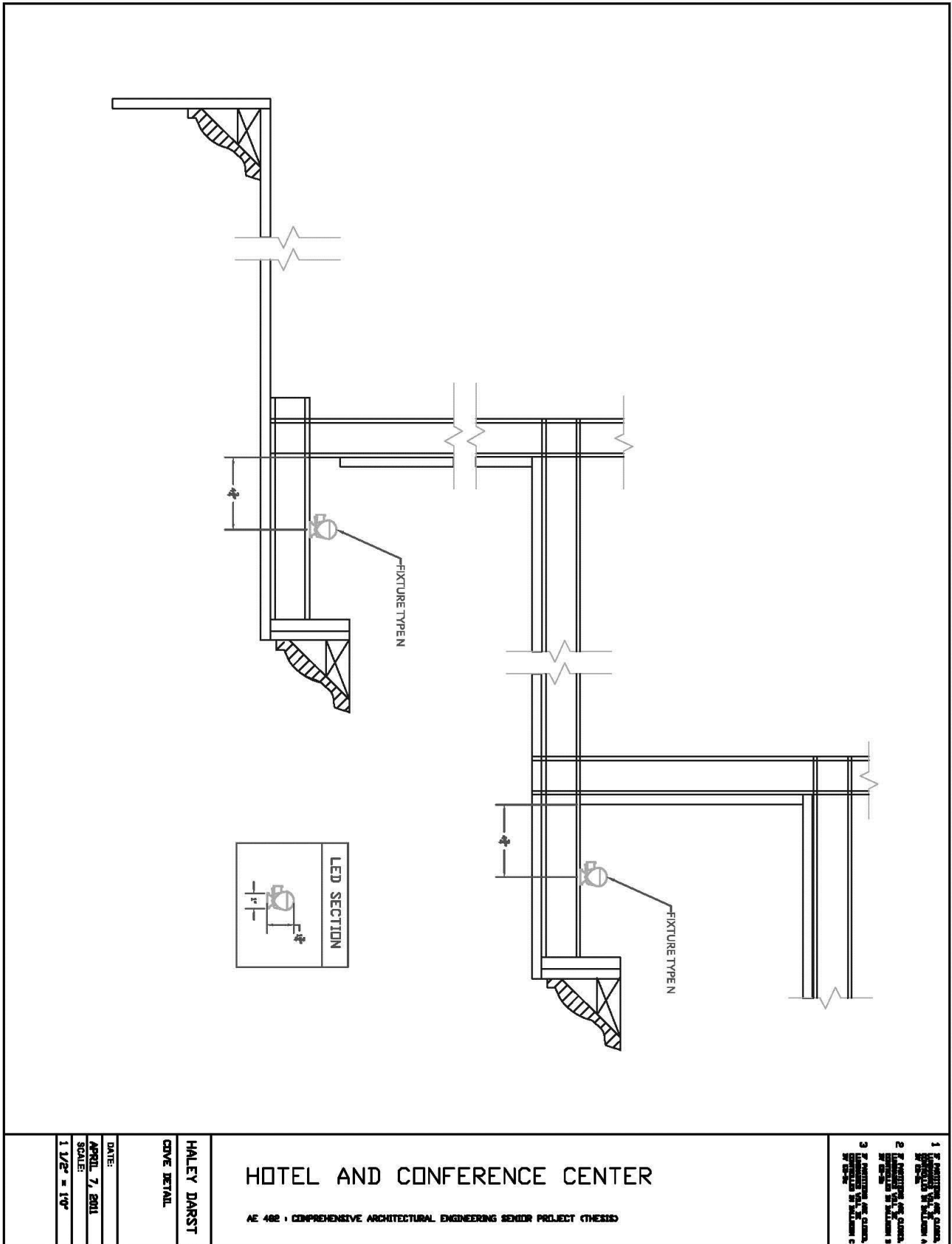


Figure 9: Lounge Cove Detail | NTS



1. CONSULTING ARCHITECT
2. ARCHITECTURAL ENGINEER
3. ELECTRICAL ENGINEER

HOTEL AND CONFERENCE CENTER

AE 482 • COMPREHENSIVE ARCHITECTURAL ENGINEERING SENIOR PROJECT (THESIS)

HALEY DARST
 CIVIL DETAIL

DATE:
 APRIL 7, 2011
 SCALE:
 1/2" = 1'-0"

Appendix B

Equipment Cutsheets

(lamps, ballasts, drivers, controls, and other equipment)



Commercial Products & Solutions

[SITE SEARCH](#) [HOME](#) [PRODUCTS](#) [EDUCATION / RESOURCES](#) [LIGHTING APPLICATIONS](#)

[Where to Buy](#) | [FAQs](#) | [Contact Us](#) | [EliteNet](#)

[Products](#) > [Compact Fluorescent](#) > [41 - 60 Watts](#) > 97633

97633 – F42TBX/827/A/ECO

GE Ecolux® Biax® T4 - Facilities; Retail Display; Hospitality; Office; Restaurant; Warehouse

[Print this Page](#)

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High Color Rendering
 Energy Savings



[View Larger](#)

GENERAL CHARACTERISTICS

Lamp type	Compact Fluorescent - Plug-In
Bulb	T4
Base	GX24-q4
Wattage	42
Voltage	120/135
Rated Life	17000 hrs
Starting Temperature (MIN)	-18 °C (-0 °F)
Cathode Resistance	2.700 Ohm
LEED-EB MR Credit	86 picograms Hg per mean lumen hour
Rated Life (rapid start) @ Time	17000 h @ 3 h 20000 h @ 12 h
Additional Info	Dimmable with appropriate dimming ballast., End of Life Protection (EOL), TCLP compliant
Primary Application	Facilities; Retail Display; Hospitality; Office; Restaurant; Warehouse

ADDITIONAL RESOURCES

- [Catalogs](#)
- [Testimonials](#)
- Brochures**
 - Product Brochures
 - [Ecolux](#)
- Sell Sheets**
 - [Fast Warming](#)
 - [Biax® T/E 42W](#)
- [Disposal Policies & Recycling Information](#)

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	3200
Mean Lumens	2660
Nominal Initial Lumens per Watt	76
Color Temperature	2700 K
Color Rendering Index (CRI)	82

ELECTRICAL CHARACTERISTICS

Current (max)	5.2500 A
Open Circuit Voltage (after preheating) (MAX)	265 V
Open Circuit Voltage (MIN)	515 V
Lamp Current	0.320 A
Preheat Voltage (MIN)	4 V

Current Crest Factor (MAX)	1.7
Supply Current Frequency	20000 Hz

DIMENSIONS

Maximum Overall Length (MOL)	6.4000 in (162.5 mm)
Nominal Length	6.400 in (162.5 mm)
Base Face to Top of Lamp	5.770 in (146.5 mm)

PRODUCT INFORMATION

Product Code	97633
Description	F42TBX/827/A/ECO
ANSI Code	60801-IEC-7442-2
Standard Package	Case
Standard Package GTIN	10043168876333
Standard Package Quantity	10
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	10
UPC	043168876336

COMPATIBLE GE BALLASTS

Product Code	Description	# of Bulbs	Power Factor	Ballast Factor
47506	C242UNVBES-IP	1	0.93	1.0
71445	GEC226-MVPS-3W	1	0.98	0.98
71443	GEC226-MVPS-BES	1	0.98	0.98
71444	GEC226-MVPS-SE	1	0.98	0.98
71441	GEC242-MVPS-3W	1	0.99	1.0
71438	GEC242-MVPS-BES	1	0.99	1.0
71440	GEC242-MVPS-SE	1	0.99	1.0

⚠ CAUTIONS & WARNINGS

[See list of cautions & warnings.](#)

NOTES

- 4-Pin lamp minimum starting temperature is a function of the ballast. Most ballasts are rated with a minimum starting temperature of 50 degrees F (10 C). Ballasts are also available that provide reliable starting to 0 degrees F (-18C) and -20 F (-29C).
- Amalgam product experience stable brightness over a wider temperature range and in various operating positions.
- Based on 60Hz reference circuit.
- Fluorescent lamp lumens decline during life



REB-2S26-M1-BS-DIM	
Brand Name	AMBIBSTAR
Ballast Type	Electronic Dimming
Starting Method	Rapid Start
Lamp Connection	Series
Input Voltage	120
Input Frequency	60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (*F/C)	Input Current (Amps)	Input Power (Watts) (min/max)	Ballast Factor (min/max)	MAX THD %	Power Factor	Lamp Current Crest Factor	B.E.F.
CFQ26W/G24Q	1	26	50/10	0.23	09/27	0.15/0.85	150	0.80	1.7	3.15
CFQ26W/G24Q	2	26	50/10	0.45	17/52	0.15/0.85	150	0.80	1.7	1.63
CFTR26W/GX24Q	1	26	50/10	0.23	09/27	0.15/0.85	150	0.80	1.7	3.15
CFTR26W/GX24Q	2	26	50/10	0.45	17/52	0.15/0.85	150	0.80	1.7	1.63
CFTR32W/GX24Q	1	32	50/10	0.30	10/35	0.15/0.85	150	0.80	1.7	2.43
CFTR42W/GX24Q	1	42	50/10	0.40	11/47	0.15/0.85	150	0.80	1.7	1.81

Wiring Diagram

Diag. 134

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	0	0	Yellow/Blue		0
White	0	0	Blue/White		0
Blue	0	0	Brown		0
Red	0	0	Orange		0
Yellow	0	0	Orange/Black		0
Gray	0	0	Black/White		0
Violet	0	0	Red/White		0

Enclosure

Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	2.4 "	1.0 "	4.6 "
4 49/50	2 2/5	1	4 3/5
12.6 cm	6.1 cm	2.5 cm	11.7 cm

Revised 09/11/2007



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

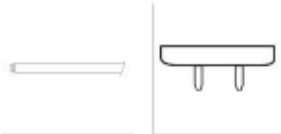
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 Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



45741 - F17T8/SP30/ECO

GE Ecolux® Starcoat® T8

• Passes TCLP, which can lower disposal costs.



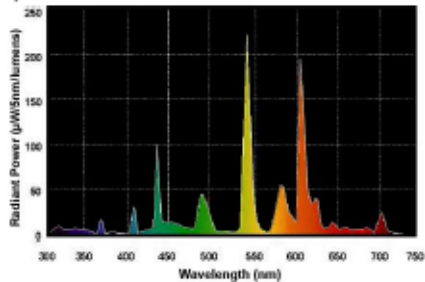
CAUTIONS & WARNINGS

Caution

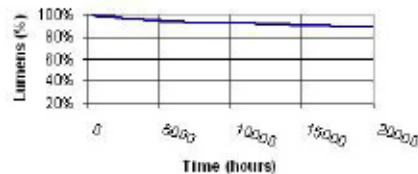
Warning

GRAPHS & CHARTS

Spectral Power Distribution



Lumen Maintenance



Lamp Mortality

GENERAL CHARACTERISTICS

Lamp Type	Linear Fluorescent - Straight Linear
Bulb	T8
Base	Medium Bi-Pin (G13)
Rated Life	20000 hrs
Rated Life (instant start) @ Time	15000 h @ 3 h
Rated Life (rapid start) @ Time	20000 h @ 12 h
Rated Life (rapid start) @ Time	20000.0 @ 3.0/24000.0 @ 12.0 h
Bulb Material	Soda lime
Starting Temperature	10 K (50 °F)
LEED-EB MR Credit	157 picograms Hg per mean lumen hour
Additional Info	TCLP compliant

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	1325
Mean Lumens	1260
Nominal Initial Lumens per Watt	77
Color Temperature	3000 K
Color Rendering Index (CRI)	78
S/P Ratio (Scotopic/Photopic Ratio)	1.3

ELECTRICAL CHARACTERISTICS

Wattage	17
Voltage	70
Open Circuit Voltage (rapid start)	285 V
Open Circuit Voltage (rapid start) Min @ Temperature	210 V @ 10 °C
Cathode Resistance Ratio - R _h /R _c (MIN)	4.25
Cathode Resistance Ratio - R _h /R _c (MAX)	6.5
Current Crest Factor	1.7

DIMENSIONS

Maximum Overall Length (MOL)	23.7800 in(604.0 mm)
Minimum Overall Length	23.67 ft
Nominal Length	24.000 in(609.6 mm)
Bulb Diameter (DIA)	1.000 in(25.4 mm)
Bulb Diameter (DIA) (MIN)	0.940 in(23.9 mm)
Bulb Diameter (DIA) (MAX)	1.100 in(27.9 mm)
Max Base Face to Base Face (A)	23.220 in(589.8 mm)
Face to End of Opposing Pin (B) (MIN)	23.400 in(594.4 mm)
Face to End of Opposing Pin (B) (MAX)	23.500 in(596.9 mm)
End of Base Pin to End of Opposite Pin End (C)	23.670 in(601.2 mm)

PRODUCT INFORMATION

Product Code	45741
Description	F17T8/SP30/ECO
ANSI Code	1001-1
Standard Package	Case
Standard Package GTIN	10043168457412
Standard Package Quantity	24
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	24
UPC	043168457415

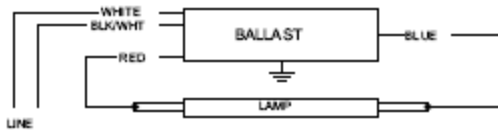


REL-1P32-SC	
Brand Name	STANDARD ELEC
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120
Input Frequency	60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (*F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F .
* F17T8	1	17	0/-18	0.17	19	0.95	30	0.93	1.7	5.00
F25T8	1	25	0/-18	0.21	24	0.92	25	0.96	1.7	3.83
F32T8	1	32	0/-18	0.28	32	0.92	20	0.98	1.5	2.88
F32T8/ES (30W)	1	30	60/16	0.25	29	0.92	20	0.98	1.7	3.17

Wiring Diagram



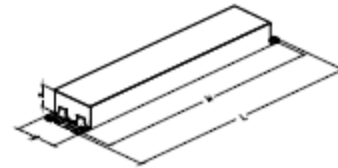
Diag. 63

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black		0	Yellow/Blue		0
White	25L	63.5	Blue/White		0
Blue	31R	78.7	Brown		0
Red	37R	94	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White	25L	63.5
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 08/21/20 02



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

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GE
 Lighting

97551 - F5BX/827/ECO

GE Ecolux® Biax® T4 - Facilities; Retail Display; Hospitality; Office; Restaurant; Warehouse

• Passes TCLP, which can lower disposal costs.

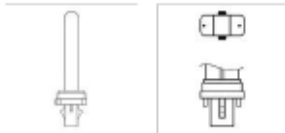


High Color Rendering

Photo
 Not Available

Savings

Energy



GENERAL CHARACTERISTICS

Lamp Type	Compact Fluorescent - Plug-In
Bulb	T4
Base	G23
Rated Life	10000 hrs
Starting Temperature	-18 °C (-0 °F)
Cathode Resistance	11.1 Ohm
LEED-EB MR Credit	1818 picograms Hg per mean lumen hour
Additional Info	TCLP compliant
Primary Application	Facilities;Retail Display;Hospitality;Office;Restaurant;

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	265
Mean Lumens	220
Nominal Initial Lumens per Watt	53
Color Temperature	2700 K
Color Rendering Index (CRI)	82

ELECTRICAL CHARACTERISTICS

Wattage	5
Voltage	120
Open Circuit Voltage Across Starter	198 V
Lamp Current	0.18 A
Current Crest Factor	1.7
Supply Current Frequency	60 Hz

DIMENSIONS

Maximum Overall Length (MOL)	4.2500 in(107.9 mm)
Nominal Length	4.200 in(106.7 mm)
Bulb Diameter (DIA)	0.500 in(12.7 mm)
Bulb Diameter (DIA) (MAX)	
Base Face to Top of Lamp	3.230 in(82.0 mm)

PRODUCT INFORMATION

Product Code	97551
Description	F5BX/827/ECO
ANSI Code	60901-IEC-0005-1
Standard Package	BUNDLE
Standard Package GTIN	
Standard Package Quantity	100
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	100
UPC	043168975513



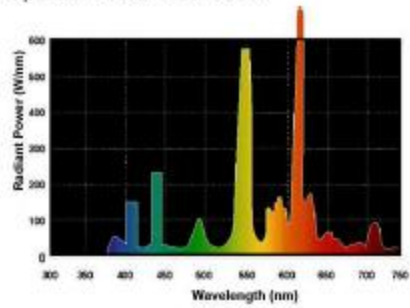
CAUTIONS & WARNINGS

Caution

•

GRAPHS & CHARTS

Spectral Power Distribution



NOTES

- Based on 60Hz reference circuit.
- Fluorescent lamp lumens decline during life.

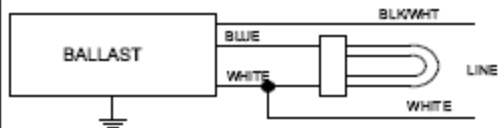


VH-1B9-TP-BLS	
Brand Name	COMPACT-HPF
Ballast Type	Magnetic
Starting Method	Pre-Heat
Lamp Connection	Series
Input Voltage	277
Input Frequency	60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (*F/C)	Input Current (Amps)	Starting Current (Amps)	Open Circuit (Amps)	Input Power (Watts)	Ballast Factor	MAX THD %	Power Factor
CFQ9W/G23	1	9	0/-18	0.05	0.18	0.17	15	0.95	35	0.95
* CFT5W/G23	1	5	0/-18	0.05	0.18	0.17	11	0.95	50	0.82
CFT7W/G23	1	7	0/-18	0.05	0.18	0.17	12	0.93	45	0.84
CFT9W/G23	1	9	0/-18	0.05	0.18	0.17	12	0.94	35	0.89

Wiring Diagram



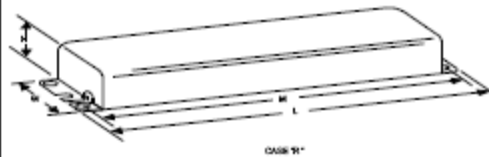
Diag. 47

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black		0	Yellow/Blue		0
White	7	17.8	Blue/White		0
Blue	7	17.8	Brown		0
Red		0	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White	7	17.8
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (std)(TP)	Height (H)	Mounting (M)
4.75 "	2.21875 "/0 "	1.625 "	4.375 "
4 3/4	2 7/32 / 0	1 5/8	4 3/8
12.1 cm	5.6 cm / 0 cm	4.1 cm	11.1 cm

Revised 07/01/1999



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41487 - Q35MR16/CCG40
 GE ConstantColor® Prescribe™ MR16
 -UV protector



CAUTIONS & WARNINGS

- Caution
-
- Warning
-
-

GENERAL CHARACTERISTICS

Lamp Type	Halogen - MR
Bulb	MR16
Base	2-Pin (GU5.3)
Filament	CC-4
Rated Life	4000 hrs
Lamp Enclosure Type (LET)	Covered glass

PHOTOMETRIC CHARACTERISTICS

Center Beam Candela over (CBCF)	920
Color Temperature	2950 K

ELECTRICAL CHARACTERISTICS

Wattage	35
Voltage	24
Beam Position	Universal beam position

DIMENSIONS

Maximum Overall Length (MOL)	1.875 cm
Bulb Diameter (DIA)	2 cm
Bulb Diameter (DIA) (MAX)	

PRODUCT INFORMATION

Product Code	41487
Description	Q35MR16/CCG40
Standard Package	BUNDLE
Standard Package GTIN	3004316041487 7
Standard Package Quantity	20
Sales Unit	Unit
No. of Items Per Sales Unit	1
No. of Items Per Standard Package	20
UPC	0431604 14876



GE
 Lighting

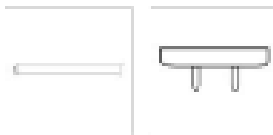
25611 - F32T8/SPX30/EC-O

GE EcoLux® Star Cool® T8

• Power: 33.9, which can lower the cost cost.



High Color Rendering



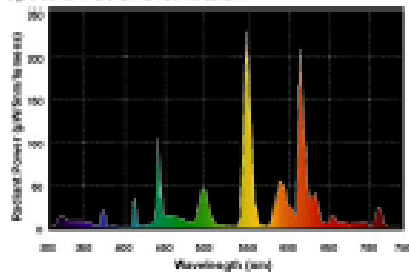
CAUTIONS & WARNINGS

Caution

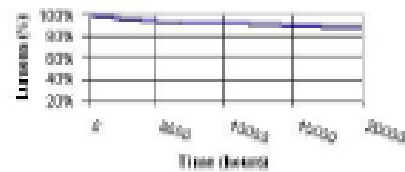
Warning

GRAPHS & CHARTS

Spectral Power Distribution



Lumen Maintenance



Lamp Mortality

GENERAL CHARACTERISTICS

Lamp Type	Linear Fluorescent - Straight Linear
Bulb	T8
Base	Medium BI-Pin (G13)
Rated Life	30,000 hrs
Rated Life (instant start) @ Time	21,000 h @ 3 h
Rated Life (rapid start) @ Time	30,000 h @ 12 h
Rated Life (rapid start) @ Time	30,000.0 @ 3.03 6000.0 @ 12.0 h
Bulb Material	Socketless
Starting Temperature	10 K (50 °F)
LEED-EB MR Credit	35 picograms Hg per mean lumen-hour
Additional Info	TCLP compliant

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	2900
Mean Lumens	2900
Nominal Initial Lumens per Watt	92
Color Temperature	3000 K
Color Rendering Index (CRI)	86

ELECTRICAL CHARACTERISTICS

Voltage	32
Voltage	13.7
Open Circuit Voltage (rapid start) Min @ Temperature	31.9 V @ 10 °C
Cathode Resistance Ratio - R _h /R _c (MIN)	4.25
Cathode Resistance Ratio - R _h /R _c (MAX)	6.5
Current Crest Factor	1.7

DIMENSIONS

Maximum Overall Length (MCL)	47.70 cm
Minimum Overall Length	47.67 cm
Nominal Length	48.000 in (12.192 mm)
Bulb Diameter (DIA)	1 cm
Bulb Diameter (DIA) (MIN)	0.94 cm
Bulb Diameter (DIA) (MAX)	1.1 cm
Max Base Face to Base Face (A)	47.22 cm
Face to End of Opposing Pin (B) (MIN)	47.4 cm
Face to End of Opposing Pin (B) (MAX)	47.5 cm
End of Base Pin to End of Opposite Pin End (C)	47.67 cm

PRODUCT INFORMATION

Product Code	25611
Description	F32T8/SPX30/EC-O
ANSI Code	10-05-2
Standard Package	Case
Standard Package GTIN	10 043162 25611 4
Standard Package Quantity	36
Sales Unit	Unit
No. of Items Per Sales Unit	1
No. of Items Per Standard Package	36
UPC	043162256117

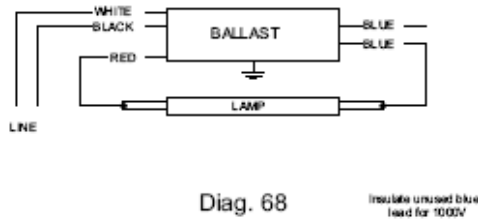


REB-2P32-SC	
Brand Name	AMBISTAR
Ballast Type	Electronic
Starting Method	Instant Start
Lamp Connection	Parallel
Input Voltage	120
Input Frequency	60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (*F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F
F17T8	1	17	0/-18	0.30	19	1.02	150	0.50	1.7	5.37
F17T8	2	17	0/-18	0.45	31	0.91	140	0.50	1.7	2.94
F25T8	1	25	0/-18	0.39	26	1.00	150	0.50	1.7	3.85
F25T8	2	25	0/-18	0.61	43	0.89	130	0.50	1.7	2.07
* F32T8	1	32	0/-18	0.48	33	1.00	140	0.50	1.7	3.03
F32T8	2	32	0/-18	0.80	56	0.88	120	0.50	1.7	1.57

Wiring Diagram



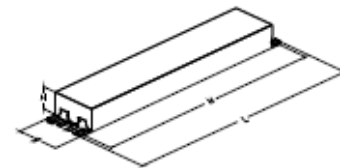
Diag. 68

The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	31	78.7	Brown		0
Red	37	94	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50"	1.7"	1.18"	8.90"
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 09/11/2007



Data is based upon tests performed by Philips Lighting Electronics N.A. in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

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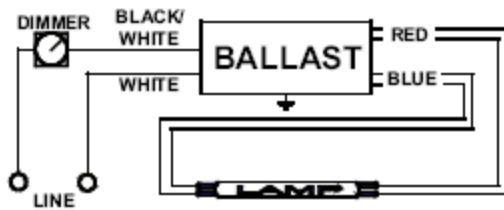


REZ-132-SC	
Brand Name	MARK 10 POWERLINE
Ballast Type	Electronic Dimming
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	120
Input Frequency	60 HZ
Status	Active

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (*F/C)	Input Current (Amps)	Input Power (Watts) (min/max)	Ballast Factor (min/max)	MAX THD %	Power Factor	Lamp Current Crest Factor	B.E.F.
F17T8	1	17	50/10	0.20	07/24	0.05/1.05	10	0.99	1.6	4.38
F25T8	1	25	50/10	0.26	07/30	0.05/1.05	10	0.99	1.6	3.50
* F32T8	1	32	50/10	0.29	09/35	0.05/1.00	10	0.99	1.6	2.86

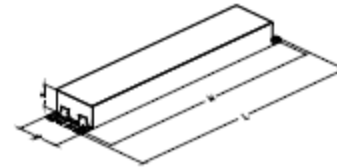
Wiring Diagram



The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.50 "	1.7 "	1.18 "	8.90 "
9 1/2	1 7/10	1 9/50	8 9/10
24.1 cm	4.3 cm	3 cm	22.6 cm

Revised 08/04/2010



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GE
 Lighting

16751 - Q50GU10/FL/CD

GE Edison™ Quartzline® MR16

- Edison™ halogen bulbs provide a brighter, crisper light that makes your home look its best.
- That's why professionals choose Edison for exceptional results and longer bulb life.
- Showcase the beauty of your home with the highest quality of light.



GENERAL CHARACTERISTICS

Lamp Type	Halogen - MR
Bulb	MR16
Base	GU10
Filament	CC-2V
Rated Life	3000 hrs
Primary Application	Indoor Floodlight

PHOTOMETRIC CHARACTERISTICS

Center Beam Candepower (CBCP)	1000
Color Temperature	2750 K

ELECTRICAL CHARACTERISTICS

Wattage	50
Voltage	120

DIMENSIONS

Maximum Overall Length (MOL)	2.1250 in(54.0 mm)
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PRODUCT INFORMATION

Product Code	16751
Description	Q50GU10/FL/CD
Standard Package Case	Case
Standard Package GTIN	10043168167519
Standard Package Quantity	5
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	5
UPC	043168167512

CAUTIONS & WARNINGS

Caution

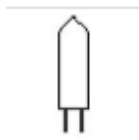
- Lamp may shatter and cause injury if broken.
- Dispose of lamp in a closed container.
- Do not use lamp if outer glass is scratched or broken.

Warning

- Risk of Burn
 - Allow lamp to cool before handling.
 - A damaged lamp emits UV radiation which may cause eye/skin injury
 - Turn power off if glass bulb is broken. Remove and dispose of lamp.
 - Pressurized lamp—unexpected rupture may cause injury, fire, or property damage
 - Do not exceed rated voltage.
 - Do not use lamp if outer glass is scratched or broken.
 - Risk of Fire
 - In table lamp, use only with shade.
 - Keep combustible materials away from lamp.
 - Use in fixture rated for this product.
 - Risk of Electric Shock
 - Turn power off before inspection, installation or removal.
- *Two year life based on rated life at 4 hours/day.



34676 - Q100T3/12V/CL
GE T3



CAUTIONS & WARNINGS

Caution

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Warning

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•

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GENERAL CHARACTERISTICS

Lamp Type	Halogen - Single-Ended
Bulb	T3
Base	2-Pin (GY6.35)
Filament	CC-8
Rated Life	2000 hrs

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	2350
Nominal Initial Lumens per Watt	23

ELECTRICAL CHARACTERISTICS

Wattage	100
Voltage	12

DIMENSIONS

Maximum Overall Length (MOL)	1.75 cm
Bulb Diameter (DIA)	0.375 cm
Bulb Diameter (DIA) (MAX)	

PRODUCT INFORMATION

Product Code	34676
Description	Q100T3/12V/CL
Standard Package	BUNDLE
Standard Package GTIN	30043168346765
Standard Package Quantity	100
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	100
UPC	043168346764



GE
 Lighting

19377 - Q75T4/CL/CD 5PK

GE Quartz T4 - Display Lights

- GE's specialty bulbs offer innovative solutions for a variety of lighting needs.
- Uses Halogen technology for a brighter, crisper light



GENERAL CHARACTERISTICS

Lamp Type	Halogen - Single-Ended
Bulb	T4
Base	2-Pin (GY6.35)
Filament	C-6
Rated Life	2000 hrs
Primary Application	Display Lights

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	1600
Nominal Initial Lumens per Watt	21

ELECTRICAL CHARACTERISTICS

Wattage	75
Voltage	12

DIMENSIONS

Maximum Overall Length (MOL)	1.75 cm
Bulb Diameter (DIA)	0.5 cm
Bulb Diameter (DIA) (MAX)	
Light Center Length (LCL)	1.125 cm

PRODUCT INFORMATION

Product Code	19377
Description	Q75T4/CL/CD 5PK
Standard Package	Master
Standard Package GTIN	10043168193778
Standard Package Quantity	25
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	25
UPC	043168993777

CAUTIONS & WARNINGS

- Caution
-
- Warning
- -
 -



GE
Lighting

42959 - Q5T3/CL
GE T3



GENERAL CHARACTERISTICS

Lamp Type	Halogen - Single-Ended
Bulb	T3
Base	2-Pin (G4)
Filament	C-6
Rated Life	2000 hrs

PHOTOMETRIC CHARACTERISTICS

Initial Lumens	60
Nominal Initial Lumens per Watt	12

ELECTRICAL CHARACTERISTICS

Wattage	5
Voltage	12

DIMENSIONS

Maximum Overall Length (MOL)	1.25 cm
Bulb Diameter (DIA)	0.375 cm
Bulb Diameter (DIA) (MAX)	
Light Center Length (LCL)	0.75 cm

PRODUCT INFORMATION

Product Code	42959
Description	Q5T3/CL
Standard Package	BUNDLE
Standard Package GTIN	30043168429598
Standard Package Quantity	100
Sales Unit	Unit
No Of Items Per Sales Unit	1
No Of Items Per Standard Package	100
UPC	043168429597

CAUTIONS & WARNINGS

Caution

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Warning

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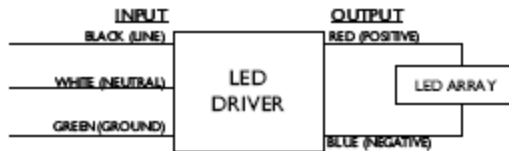


LED-I20A-0024V-I4-F-O	
Brand Name	XITANIUM
Driver Type	Electronic
Input Voltage	120
Input Frequency	50/60Hz
RoHS	Yes
Status	Active

Electrical Specifications

Max. Output Power (W)	Output Voltage (V)	Output Current (A)	Operating Temp. Range (°F/°C)	Input Current at 120V (A)	Max. Input Power (W)	Inrush Current (A/ μ s)	Max. THD (%)	Min. Power Factor	Surge Protection (KV)	Weight (Lbs)	IP Rating
34	2.8~24.0	1.4	-40°~140°F (-40~60°C)	0.35	42	-	20	0.9	2.0	0.75/340	IP66

Wiring Diagram



Input and Output use lead-wires.
 Lead-wires are 18AWG 105C/600V solid copper

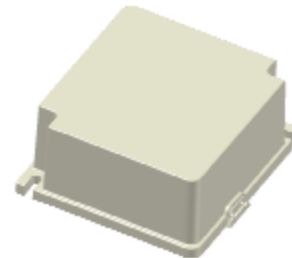
Standard Lead Length

	in.	cm.
Black	6	15
White	6	15
Blue	6	15
Red	6	15
Green	6	15
Violet		

Maximum Wiring Distance (at full load)

Wire Size (AWG)	Distance (feet)
26	4
24	7
22	11
20	17
18	27
16	43
14	69
12	105
10	179

Enclosure



	in. (mm)
Case Length	3.30 (83)
Case Width	3.53 (89)
Case Height	1.50 (38)
Mounting Length	2.78 (70)
Mounting Width	3.02 (76)
Overall Length	3.30 (83)



UL Class 2
 E220165



7310_S-000
 3426-32

Revised 07/15/2009

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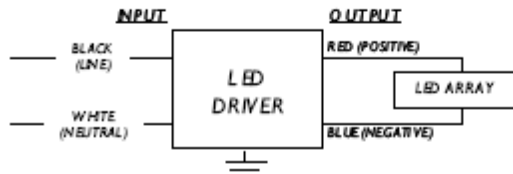


LED-120A-0024V-18-F-O	
Brand Name	XITANIUM
Driver Type	Electronic
Input Voltage	120
Input Frequency	50/60Hz
RoHS	Yes
Status	Active

Electrical Specifications

Max. Output Power (W)	Output Voltage (V)	Output Current (A)	Operating Temp. Range (°F/°C)	Input Current at 120V (A)	Max. Input Power (W)	Inrush Current (A _p /μs)	Max. THD (%)	Min. Power Factor	Surge Protection (KV)	Weight (Lbs)	IP Rating
40	2.8~24.0	1.75	-40°~140°F (-40~60°C)	0.42	50	-	20	0.9	2.0	0.75/340	IP66

Wiring Diagram



Input and Output use lead-wires.
 Lead-wires are 18AWG 105C/600V solid copper

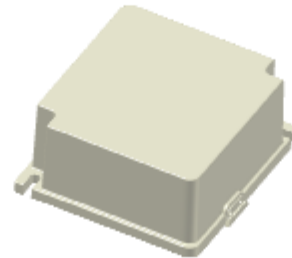
Standard Lead Length

	in.	cm.
Black	6	15
White	6	15
Blue	6	15
Red	6	15
Green		
Violet		

Maximum Wiring Distance (at full load)

Wire Size (AWG)	Distance (feet)
26	3
24	5
22	9
20	14
18	22
16	34
14	55
12	84
10	143

Enclosure



	in. (mm)
Case Length	3.30 (83)
Case Width	3.53 (89)
Case Height	1.50 (38)
Mounting Length	2.78 (70)
Mounting Width	3.02 (76)
Overall Length	3.30 (83)



UL Class 2
 E220165



7310_S-000
 3426-32

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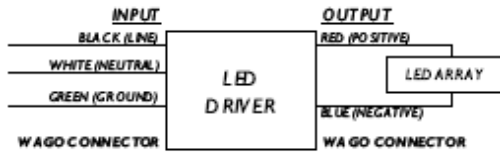


LED-120A-0012V-21-F	
Brand Name	XITANIUM
Driver Type	Electronic
Input Voltage	120
Input Frequency	50/60Hz
RoHS	No
Status	Active

Electrical Specifications

Max. Output Power (W)	Output Voltage (V)	Output Current (A)	Operating Temp. Range (°F/°C)	Input Current at 120V (A)	Max. Input Power (W)	Inrush Current (A _{in} /μs)	Max. THD (%)	Min. Power Factor	Surge Protection (KV)	Weight (Lbs)	IP Rating
25	2.8~12.0	2.1	-40°~140°F (-40~60°C)	0.25	30.5	-	20	0.9	2.0	0.61275	IP20

Wiring Diagram



Input is Wago 3-position wire trap connector – use 18AWG solid or tinned stranded.
 Output is Wago 4-pin wire trap connector – use 20AWG solid or tinned stranded.

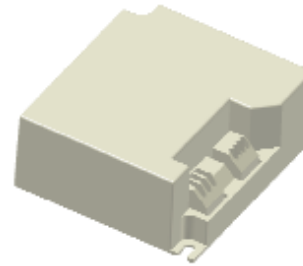
Standard Lead Length

	in.	cm.
Black		
White		
Blue		
Red		
Green		
Violet		

Maximum Wiring Distance (at full load)

Wire Size (AWG)	Distance (feet)
26	3
24	4
22	7
20	11
18	18
16	28
14	46
12	70
10	119

Enclosure



	in. (mm)
Case Length	3.30 (83)
Case Width	3.06 (77)
Case Height	1.34 (33.7)
Mounting Length	2.91 (73.4)
Mounting Width	2.67 (67.4)
Overall Length	3.29 (83)



UL Class 2
 E220165



7310_S-000
 3426-32

Revised 10/19/2009

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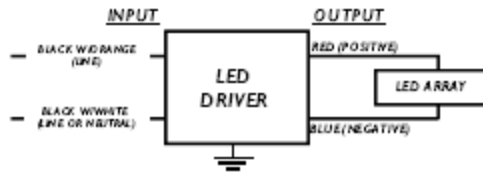
LED-HCNA-0024V-41-F-L-O	
Brand Name	XITANIUM
Description	100W 24V 4.1A
Input Voltage	347~480
Input Frequency	50/60Hz
RoHS	Yes
Status	Active

Electrical Specifications

Output Power (W)	Output Voltage (V)	Output Current (A)	T _{case} Max	Input Current (A)	Max. Input Power (W)	Inrush Current (A _{peak} /μs)	Max. THD (%)	Min. Power Factor	Surge Protection (KV)	Weight (Lbs)	IP Rating
100	24 cv 3.5-24 cc	0.10-4.16 cv 4.16 cc	85°C	0.32@347V 0.23@480V	117	85/115	20	0.90	3.0	2.84/1270	IP66

cv = constant voltage mode, cc = constant current mode

Wiring Diagram



Input and output use lead-wires.
 Lead-wires are 18AWG 105C/600V solid copper

Standard Lead Length

	in.	cm.
Black w/ orange stripe	9	23
Black w/ white stripe	9	23
Blue	9	23
Red	9	23
Gray		
Violet		

Maximum Wiring Distance (at full load)

Wire Size (AWG)	Distance (feet)
26	3
24	4
22	7
20	11
18	18
16	29
14	46
12	71
10	120

Enclosure



	in. (mm)
Case Length	8.34 (211.8)
Case Width	1.76 (42.5)
Case Height	1.1 (27.9)
Mounting Length	8.99 (228.4)
Mounting Width	1.22 (30.9)
Overall Length	9.45 (240)

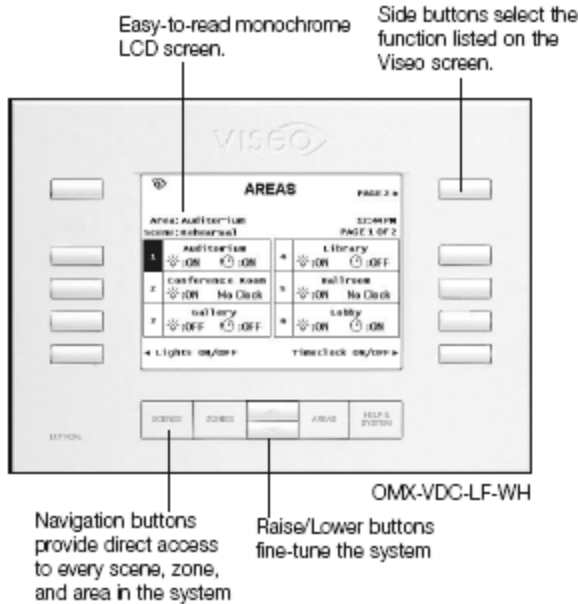


12/2/2010

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OMX-VDC-LB/OMX-VDC-LF
Viseo® Wallstation



Description

The Viseo Wallstation provides local access to the Lighting Control System.

- Works with GRAFIK 5000™, GRAFIK 6000®, GRAFIK 7000™ Systems.
- Program, monitor, and operate every lighting zone* and scene of a space that is controlled by an individual Processor. For multiple Processor applications, contact Lutron.
- Offers an effective alternative to PC's and other plug-in devices for day-to-day operations.
- Automatically downloads data from your system without reprogramming.
- Modify preset light levels.
- View the lighting status of all the areas in the system.
- View the timeclock status of all the areas in the system
- Take control of any lighting zone* or group of lighting zones* in any area; fine tune in 1% increments with graphic and numeric feedback.
- Program changes to preset light levels, including fade and delay times, in any area.
- Menus and help screens can be displayed in one of 7 languages: English, French, German, Italian, Spanish, Portuguese, or Dutch.

Design Options

Monochrome Color Options:

- High contrast blue/white - OMX-VDC-LB
- Neutral black/white - OMX-VDC-LF

* Does not display Lighting Zone Controller or OMX-3600 zone information.

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

Specifications

Power

Low-voltage Class 2 (PELV)
Operating Voltage: 32 V_{DC}

Key Design Features

- Liquid Crystal Display (LCD)
Resolution: 320 x 240 pixels (QVGA)
- Adjustable LCD contrast and backlight brightness.
- Change system time and date.
- Off-line programming allows changes to preset light levels without affecting current lighting scene.
- On-line programming allows for viewing changes to preset light levels as they are being made.
- Central or local options: configure Viseo Wallstation for various control, monitoring and programming options for each individual area of the building.
- Security: set-up and programming configuration options may be restricted via numeric passcode.
- Field upgradeable software: allows future enhancements without hardware changes.
- System information displayed in ASCII 7-bit format (Characters A-Z, a-z, and 0-9) only.
- Menus and help screens can be displayed in one of 7 languages: English, French, German, Italian, Spanish, Portuguese, or Dutch.

System Communications and Capacity

- Low-voltage Class 2 (PELV) wiring connects Wallstations to Processor Panel.
- Up to 32 Wallstations, Control Units, and/or Control Interfaces may be connected per Class 2 (PELV) Control Station Device link. See Low Voltage Wiring page for more details.

Additional Notes

- Hidden spaces will not appear on Viseo stations.
- Viseo does not support hierarchical spaces; they will display all spaces as a single list.

Terminals

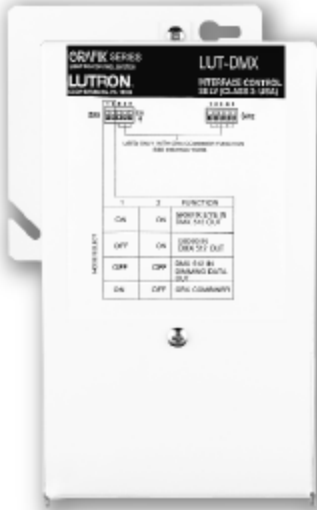
Accept up to two #18 AWG (1.0mm²) typical.

Environment

32-104°F (0-40°C). Relative humidity less than 90% non-condensing.

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

LUT-DMX DMX512 Control Interface



Description

- Allows GRAFIK Eye lighting controls to operate lighting and other equipment that uses the DMX512 protocol, including:
 - Strobes, fiber optic lighting, and LED-based lamps.
 - Fogger machines.
 - Animated characters and motorized fixtures.
- Converts GRAFIK zone intensities into DMX512 channel settings. Each zone is assigned to a DMX512 channel.
- Works with GRAFIK Eye 3000 and 4000 Series Control Units, as well as GRAFIK 5000/6000/7000 Systems (see DIP switches 1 and 2). Interface does not require an address.

Example of Usage

A DMX512-controlled fiber optic fixture is setup so that:

- Channel 5 controls color channel or dial setting.
- Channel 6 controls shutter open/close.

The Control Unit's scenes are setup so that:

- Zone 5 intensity = desired fiber optic color.
- Zone 6 intensity = desired shutter open/close.

When a scene is selected at the Control Unit:

- DMX512 Interface converts new scene's zone intensities into DMX512 channel settings.
- Fiber optics automatically change color and shutter open/close.

Job Name: <input type="text"/>	Model Numbers: <input type="text"/>	
Job Number: <input type="text"/>	<input type="text"/>	<input type="text"/>

Sivoia QED | roller 20

The Sivoia QED roller 20 shade utilizes the ultra-quiet, precision controlled Electronic Drive Unit (EDU). The Sivoia QED EDU is housed inside the roller shade assembly and controls the movement of the shade, keeps track of the shade's position, and adjusts the shade to the user's desired preset positions.

Features

- Smooth, ultra-quiet operation
- Shades start, move and stop with precision
- Offers programmable stop points. The EDU tracks the position of the shade and is able to adjust it to predetermined locations at the touch of a button
- Provides maximum window coverage with small, symmetrical light gaps, 0.75 in (19 mm) between the shade fabric and the mounting bracket
- Easy-to-read and easy-to-use controls
- Optional infrared (IR) system provides easy, convenient control from anywhere in the room
- Integrates with Lutron lighting control systems and other AV equipment
- Does not require group controllers or relay systems to create shade groups and sub-groups
- The EDU requires only low-voltage wiring
- Power failure memory for the lifetime of the product
- 8 year limited warranty



Sivoia QED roller 20 shade

Specifications

Power

- Requires 24 V~, 50 VA
- One transformer is required per EDU
- Power must be provided by a Lutron approved NEC Class 2 power source
- One EDU can power one accessory control (keypads and accessories)

System Capacity

- System allows for a total of 96 devices, including any type of *Sivoia QED* EDU, keypads, Contact Closure Input (CCI) or other interfaces
- If the number of keypads and interfaces in an installation exceeds the number of EDUs, external keypad power supplies are required
- Typical maximum shade size is 20 ft² (1.86 m²)
- Maximum shade size is determined from shade width, fabric type, fabric weight, hembar type etc. (refer to Lutron Shade Configuration Tool (SCT) for your application)

Performance

- Ultra-quiet operation (will not exceed 44dBA measured 3 ft (1 m) from the EDU)
- System allows for symmetrical light gaps as small as 0.75 in (19 mm) on each side
- Each EDU stores programmable presets including open, closed, and any other position
- Presets can be recalled from keypads, CCI's, IR receivers, and other lighting control system interfaces
- Presets can be set with a 5 second button push and hold from the keypads, CCI's, or hand-held remote controls
- Keypad adjustment of presets can be disabled with the "lock out" function on the keypad
- Open and close limits are programmable from the EDU, wall-mounted keypads, and hand-held remote controls
- All system components are Electro Static Discharge (ESD) protected

Grouping

- Keypads and CCI's can control any EDU or group of EDUs without a separate group controller
- System groups and subgroups can be configured at the point of control without rewiring and without access to the EDU
- System may contain multiple EDU types
- Keypads and interfaces within the system are able to operate any group or subgroup of EDUs

Integration

- EDUs seamlessly integrate with Lutron lighting control systems including, GRAFIK Eye®, RadioRA®, HomeWorks®, and RadioTouch®
- Contact closure available to integrate with A/V equipment such as time clocks and security systems.

Controls

- Keypads and CCI's are low-voltage and receive their power from the EDUs
- All system devices must be connected through a common communication link
- IR controls available. IR receivers can be wired directly to EDU. There are also *Sivoia QED* keypads and CCI's with built in IR receivers

Sivoia QED roller 20 shades Product Specification

page 2 of 14
P/N 085-106 REV A

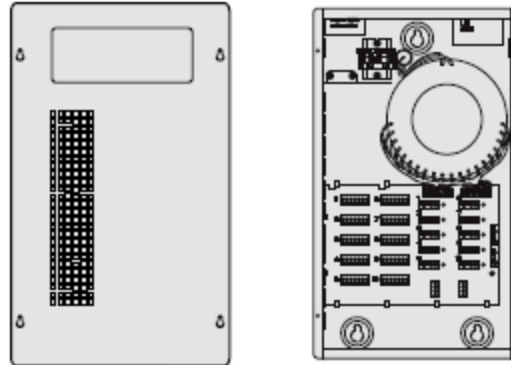


Sivoia QED | 10 Output Transformer Panel

The Sivoia QED 10 Output Transformer Panel provides low-voltage power for Sivoia QED motorized roller shades, drapery track and/or Roman shades. The panel powers up to 10 Sivoia QED Electronic Drive Units (EDUs). The panel simplifies wiring installations that require multiple transformers.

The panel is hardwired into a standard 120 V~ circuit. The panel contains replaceable fuses on the secondary side for miswire protection.

Lutron recommends to home run EDUs to the power panel. The panel accommodates home run wiring with individual connectors for up to 10 EDUs (one EDU per output).



Features

- 24 V~ supply that provides power to EDUs, keypads, and accessories
- Simple wiring scheme uses 7-conductor low voltage link to provide power and communication for both Sivoia QED EDUs and seeTouch keypads
- Flexible wiring topology for easy installation and integration
- 10 output panel provides power for up to 10 EDUs

LUTRON®

seeTouch™

Wallstations

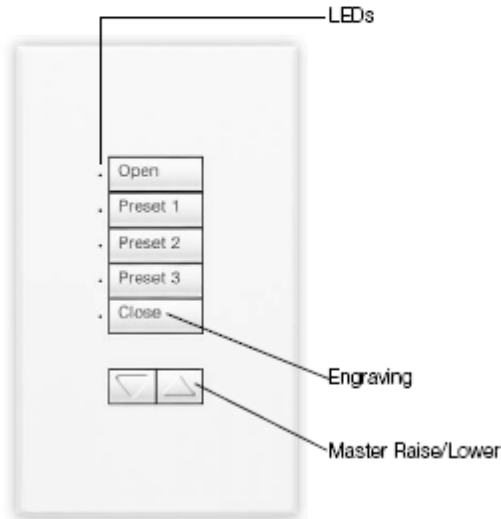
so-5wrl 7.18.05

Color and Engraving Codes

SO-5WRLN-___-___

SO-5WRLI-___-___

5-Button Preset Window Treatment Wallstation with Raise/Lower



SO-5WRLN-WH-E01
 (Non-insert version)



SO-5WRLI-WH-E01
 (Insert version)

Description

- Used to control one or more window treatment zones simultaneously.
- Can control Sivoia QED™ and AC Motorized Window Treatments.
- Receives up to two contact closure inputs via a connector on the back of the Wallstation.
- Large, rounded buttons are easy to use.
- Backlit buttons with on-button engraving make it easy to find and operate the control in low light conditions.
- Optional button engraving is angled up to the eye for easy reading.
- Pressing the Open button once will cause the window treatments to move to their fully open position. If the Open button is pressed again while the window treatments are opening, the movement of the window treatments will stop.
- Pressing the Preset 1, Preset 2, or Preset 3 button once will cause the window treatments to move to the first, second, or third preset position, respectively. If a preset button is pressed while the window treatments are moving to that position, the movement of the window treatments will stop.
- Pressing the Close button once will cause the window treatments to move to their fully closed position. If the Close button is pressed again while the window treatments are closing, the movement of the window treatments will stop.
- Raise/Lower buttons open and close the window treatments for the duration of the button press.
- The LEDs next to each button are used during programming and provide feedback when the buttons are pressed. For Sivoia QED, the LEDs provide feedback of the current Sivoia QED preset.
- Works with GRAFIK 5000™, GRAFIK 6000®, GRAFIK 7000™ Systems.
- For Sivoia QED Motorized Window Treatments, the LEDs provide feedback of the current Sivoia QED preset.

Finish and Engraving Options

- Available with button engraving.
- Standard and Non-Standard Text Engraving is available. For more details, please visit the seeTouch website at www.lutron.com/seetouch.

Job Name: <input type="text"/>	Model Numbers: <input type="text"/>	<input type="text"/>
Job Number: <input type="text"/>	<input type="text"/>	<input type="text"/>

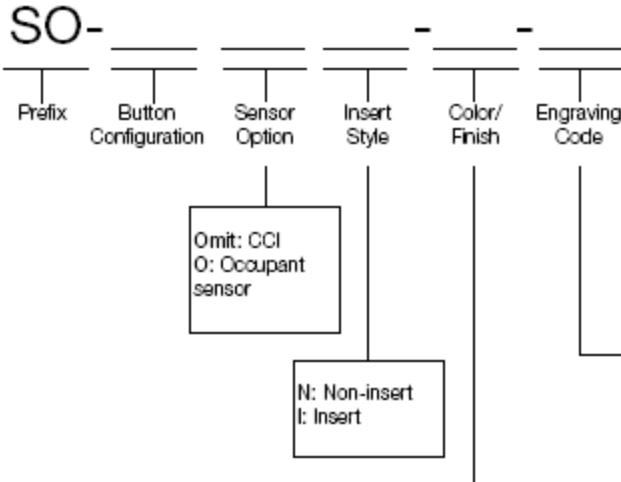
LUTRON®

seeTouch™

Wallstations

sc-p3 7.16.05

How to Build a seeTouch Model Number



Color/Finish Codes	
Matte Finishes	
White	WH
Ivory	IV
Beige	BE
Gray	GR
Brown	BR
Black	BL
Taupe	TP
Gloss Finishes	
Available with Insert (I) style controls only. Ship with Claro Wallplates.	
White	GWH
Light Almond	GLA
Metal Finishes	
With black plastic buttons (standard).	
Bright Brass	BB
Bright Chrome	BC
Bright Nickel	BN
Satin Brass	SB
Satin Chrome	SC
Satin Nickel	SN
Antique Brass	QB
Antique Bronze	OZ
Anodized Aluminum Finishes	
With black plastic buttons (standard).	
Clear	CLA
Black	BLA
Brass	BFA

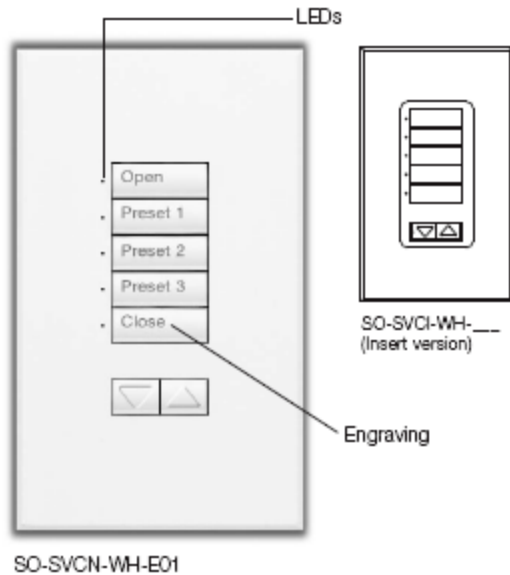
Satin Colors™	
Available with Insert (I) style controls only.	
Snow	SW
Biscuit	BI
Eggshell	ES
Midnight	MN
Blue Mist	BT*
Limestone	LS*
Stone	ST*
Desert Stone	DS*
Terracotta	TC*
Ochre	OC*
Hot	HT*

*Note: Some Satin Colors units ship with different color buttons. For more information, please visit the seeTouch website at www.lutron.com/seeTouch.

Engraving Codes	
Unengraved	E00
General/Standard Engraving	
Arabic	Axx
Portug. (Latin)	Bxx
Chinese	Cxx
Danish	Dxx
English	Exx
French	Fxx
German	Gxx
Italian	Ixx
Japanese	Jxx
Spanish (Latin)	Lxx
Dutch	Nxx
Portug. (Euro)	Pxx
Spanish (Euro)	Sxx
Note: Replace the xx with either GN (general engraving) or a two-digit number (01-99; standard engraving). Please visit the seeTouch website at www.lutron.com/seeTouch for a listing of the standard engraving choices.	
Non-Standard Text Engraving	
Customized button engraving for particular needs. Use with Faceplate Replacement Kits only (model number begins with SR). Use an engraving code of NST. To order, contact Lutron customer service. Please visit the seeTouch website at www.lutron.com/seeTouch for custom engraving sheets.	

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

Color and Finish Codes
SO-SVCN-__-__
GRAFIK Systems
Sivoia QED™ Controller



Description

- Provides programming and control of one group of Sivoia QED™ Window Treatments.
- Allows selection of preset window treatment levels from GRAFIK Systems.
- Connects to both the GRAFIK™ Systems link and the Sivoia QED Electronic Drive Unit (EDU) link.
- One SO-SVC needed per group of Sivoia QED Window Treatments (up to 96 devices).
- Maximum of 32 GRAFIK Systems Sivoia QED Controllers per wallstation link.
- Large, rounded buttons are easy to use.
- Backlit buttons with optional engraving make it easy to find and operate the control in low light conditions.
- Optional button engraving is angled up to the eye for easy reading.
- Pressing the Open button once will cause the window treatments move to their fully open position. If the Open button is pressed again while the window treatments are opening, the movement of the window treatments will stop.
- Pressing the Preset 1, Preset 2, or Preset 3 button once will cause the window treatments to move to the first, second, and third preset level, respectively. If the Preset 1, Preset 2, or Preset 3 button is pressed while the window treatments are moving to that position, the window treatments will stop.
- Pressing the Close button once will cause the window treatments move to their fully closed position. If the Close button is pressed again while the window treatments are closing, the movement of the window treatments will stop.
- Pressing the Raise/Lower buttons will cause the window treatments to open/close while the button is pressed.
- The LEDs next to each button are used during programming and provide feedback of the current Sivoia QED preset.
- Works with GRAFIK 5000™, 6000®, and 7000® Systems.

Finish and Engraving Options

- Available with button engraving.
- Standard and Non-Standard text engraving available. For more details, visit the website at www.lutron.com/seetouch.

Job Name: <input style="width: 90%;" type="text"/>	Model Numbers: <input style="width: 95%;" type="text"/>
Job Number: <input style="width: 80%;" type="text"/>	<input style="width: 95%;" type="text"/>

GRAFIK Systems

SO-SVC

Control Interfaces

sc-svc-2 10.20.07

Specifications

Power

Low-voltage type PELV (Class 2: USA). Operating voltage: 24 V \sim , supplied by Sivoia QED System.

Key Design Features

- Field-changeable button and faceplate assemblies allow easy customization.
- Front accessible DIP switches allow change of function without removing the unit from the wall.
- Meets IEC 801-2. Tested to withstand 15 kV electro-static discharge without damage or memory loss.
- Faceplate snaps on with no visible means of attachment.
- Available as an "insert" style control for multi-ganging.
- Can be ganged to share a common faceplate with NovaT[®] and Vareo[®] Dimmers. To order new Wallplates for multi-ganging, specify "R3" openings in a Lutron NovaT* multi-gang FB (fins broken) Series model number.
- Use Button Replacement Kits to change color, button configuration, or engraving.
- Button Replacement Kits may also be used to convert between non-insert and insert configurations.

System Communications and Capacity

- Low-voltage type PELV (Class 2: USA) wiring connects Wallstations and Sivoia QED Controllers to GRAFIK Systems components.
- The Sivoia QED Controller is wired on the GRAFIK 5000[™], 6000[®], or 7000[®] wallstation/CSD link.
- Up to 32 GRAFIK Systems Sivoia QED Controllers may be connected per wallstation/CSD link.
- Each GRAFIK Systems Sivoia QED Controller is capable of controlling up to 96 Electronic Drive Units as a group.
- Each Sivoia QED Electronic Drive Unit requires its own 24 V \sim transformer.

Terminals

Communications to GRAFIK Systems Central Processor: One 4-pin removable terminal block. Each pin will accept one wire up to #18 AWG (1.0 mm²).

Communications to Sivoia QED EDU: One 5-pin removable terminal block. Each pin will accept one wire up to #18 AWG (1.0 mm²).

Environment

32 - 104 °F (0 - 40 °C). Relative humidity less than 90% non-condensing.

Mounting

Typical backbox dimensions: 95 mm (3.74 in.) high, 55 mm (2.17 in.) wide, 70 mm (2.75 in.) deep.

Job Name:	Model Numbers:	
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Job Number:	<input type="text"/>	<input type="text"/>

SUNPOWER™

E19 / 320 SOLAR PANEL

MAXIMUM EFFICIENCY AND PERFORMANCE

BENEFITS

Highest Efficiency

SunPower™ Solar Panels are the most efficient photovoltaic panels on the market today.

More Power

Our panels produce more power in the same amount of space—up to 50% more than conventional designs and 100% more than thin film solar panels.

Reduced Installation Cost

More power per panel means fewer panels per install. This saves both time and money.

Reliable and Robust Design

Proven materials, tempered front glass, and a sturdy anodized frame allow panel to operate reliably in multiple mounting configurations.

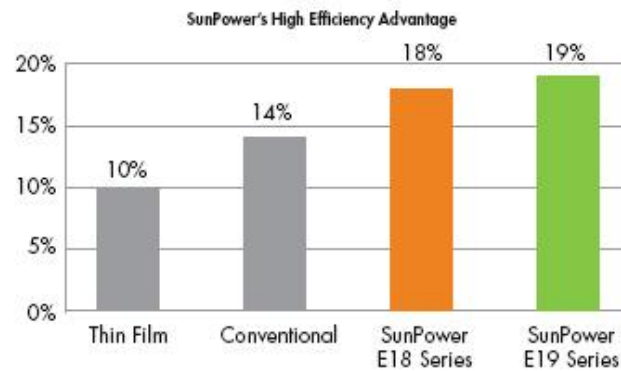


SPR-320E-WHT-D



The planet's most powerful solar panel.

The SunPower™ 320 Solar Panel provides today's highest efficiency and performance. Utilizing 96 back-contact solar cells, the SunPower 320 delivers a total panel conversion efficiency of 19.6%. The 320 panel's reduced voltage-temperature coefficient, anti-reflective glass and exceptional low-light performance attributes provide outstanding energy delivery per peak power watt.



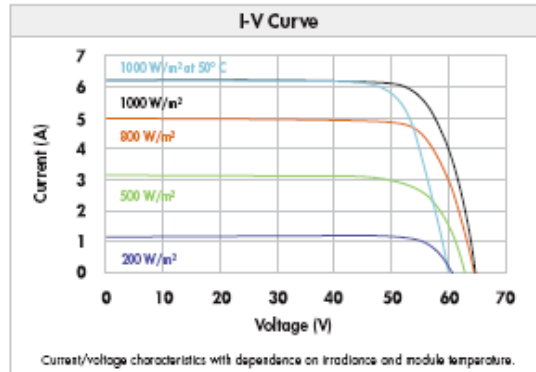
SUNPOWER

E19 / 320 SOLAR PANEL

MAXIMUM EFFICIENCY AND PERFORMANCE

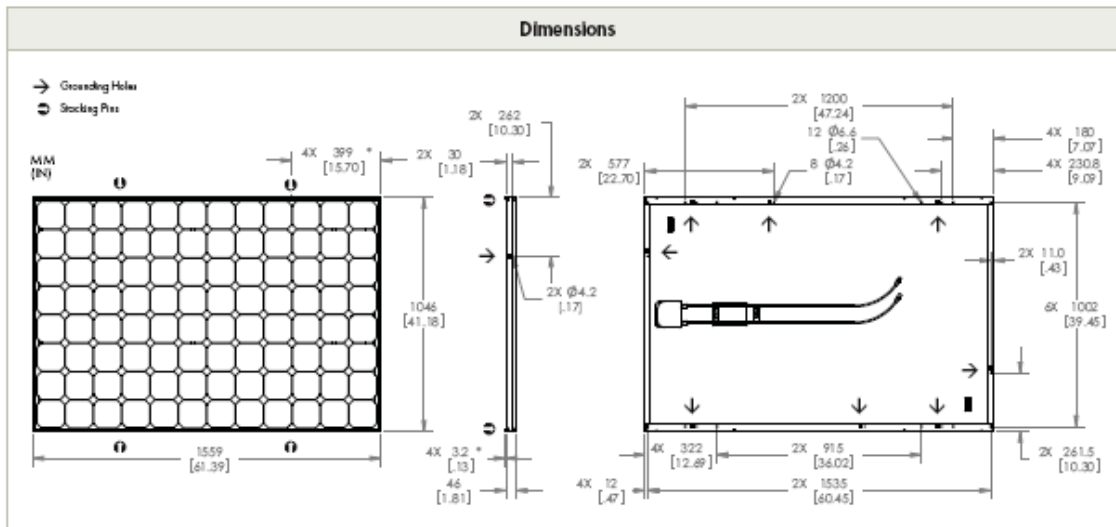
Electrical Data		
Measured at Standard Test Conditions (STC): Irradiance of 1000W/m ² , AM 1.5, and cell temperature 25° C		
Peak Power (+5/-3%)	P _{max}	320 W
Efficiency	η	19.6 %
Rated Voltage	V _{mpp}	54.7 V
Rated Current	I _{mpp}	5.86 A
Open Circuit Voltage	V _{oc}	64.8 V
Short Circuit Current	I _{sc}	6.24 A
Maximum System Voltage	UL	600 V
Temperature Coefficients	Power (P)	-0.38% / K
	Voltage (V _{oc})	-176.6mV / K
	Current (I _{sc})	3.5mA / K
NOCT		45° C +/-2° C
Series Fuse Rating		15 A

Mechanical Data	
Solar Cells	96 SunPower all-back contact monocrystalline
Front Glass	High transmission tempered glass with anti-reflective (AR) coating
Junction Box	IP-65 rated with 3 bypass diodes Dimensions: 32 x 155 x 128 (mm)
Output Cables	1000mm length cables / MultiContact (MC4) connectors
Frame	Anodized aluminum alloy type 6063 (silver); stacking pins
Weight	41.0 lbs (18.6 kg)



Tested Operating Conditions	
Temperature	-40° F to +185° F (-40° C to + 85° C)
Max load	113psf 550 kg/m ² (5400 Pa), front (e.g. snow) w / specified mounting configurations 50 psf 245 kg/m ² (2400 Pa) front and back - e.g. wind
Impact Resistance	Hail 1 in (25 mm) at 51 mph (23 m/s)

Warranties and Certifications	
Warranties	25 year limited power warranty 10 year limited product warranty
Certifications	Tested to UL 1703, Class C Fire Rating



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
 Visit sunpowercorp.com for details

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sunpowercorp.com
 Document #001-64281 Rev** / DR_EN



Efficient

- Efficiency of up to 98%
- Low specific price
- Greater yield with multiple MPP trackers

Safe

- Integrated ESS DC load disconnection switch

Flexible

- Modular design
- Sunny Mini Central and Sunny Boy inverters can be combined
- Suitable for outdoors

Convenient

- Delivered as a turnkey solution
- Easy installation
- Integrated data acquisition with optional Sunny WebBox

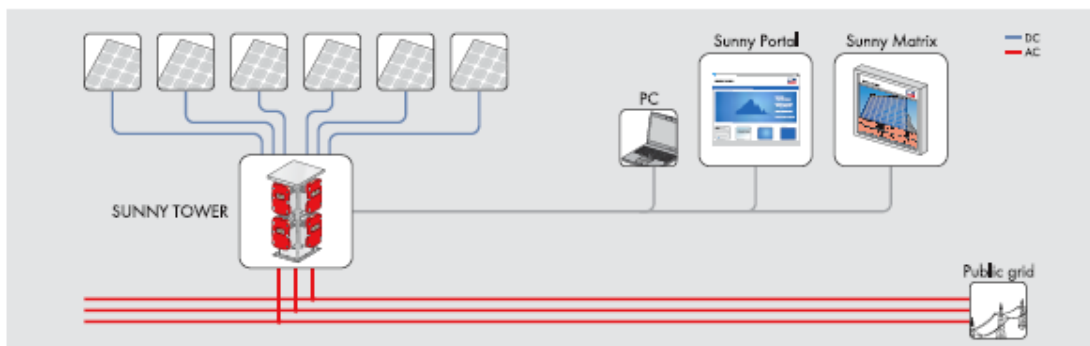
SUNNY TOWER

Easy installation and maximum yield

The Sunny Tower is easy to install and profitable. Its exceptional efficiency of up to 98 percent and easy installation ensure maximum power yield. The intelligent OptiCool™ temperature management system makes the Sunny Tower suitable for use at high ambient temperatures. In addition, the modular structure allows for combining Sunny Mini Central and Sunny Boy inverters, ensuring maximum flexibility in system design and expansion.

Sunny Tower

Technical data	Sunny Tower with 6 Sunny Mini Central 8000TL	Sunny Tower with 6 Sunny Mini Central 11000TL
Input (DC)		
Max. DC power	49.6 kW	68.4 kW
PV voltage range	333 V - 500 V	333 V - 500 V
Max. DC voltage	700 V	700 V
Max. input current	6 x 25 A	6 x 34 A
DC voltage ripple	< 10%	< 10%
Max. number of strings (parallel)	6 x 4	6 x 5
Reverse polarity protection	short-circuit diode	short-circuit diode
Output (AC)		
Continuous AC power	48 kW at 40 °C [104 °F]	66 kW at 40 °C [104 °F]
Nominal AC power	48 kW	66 kW
Max. output current	3 x 70 A	3 x 96 A
THD of grid current	< 4%	< 4%
Nominal AC voltage	220 V - 240 V	220 V - 240 V
Nominal AC frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Power factor (cos φ)	1	1
Grid connection	bolt damp, max. 5 x 95 mm ²	bolt damp, max. 5 x 95 mm ²
Efficiency		
Max. efficiency / Euro-Eta	98.0% / 97.7%	98.0% / 97.5%
Protection devices		
Thermally monitored varistors	●	●
Ground fault monitoring	●	●
ESS DC load disconnection switch	●	●
Grid monitoring (SMA Grid Guard)	●	●
Short-circuit tolerance (current control)	●	●
Line circuit breaker	6 x 850	6 x 863
General data		
Inverter/Sunny Tower protection rating (acc. to IEC 60529)	IP65 / IP44	IP65 / IP44
Cooling concept	OptiCool	OptiCool
Operating temperature range	-25 °C ... +60 °C [-13 °F ... +140 °F]	-25 °C ... +60 °C [-13 °F ... +140 °F]
Topology	transformerless	transformerless
Number phase conductors	3	3
Weight	320 kg (705 lb)	320 kg (705 lb)
Dimensions (W / H / D) in mm (in)	1100 / 1810 / 990 (43 / 71 / 39)	1100 / 1810 / 990 (43 / 71 / 39)
Features		
Warranty: 5 / 10 years	● / ○	● / ○
Plant monitoring (pre-wired): RS 485 / Sunny WebBox / SMA Power Balancer	○ / ○ / ○	○ / ○ / ○
Data at nominal conditions ● Standard features ○ Optional features		
Type designation	ST6	ST6



Appendix C
Lighting Plans and Details

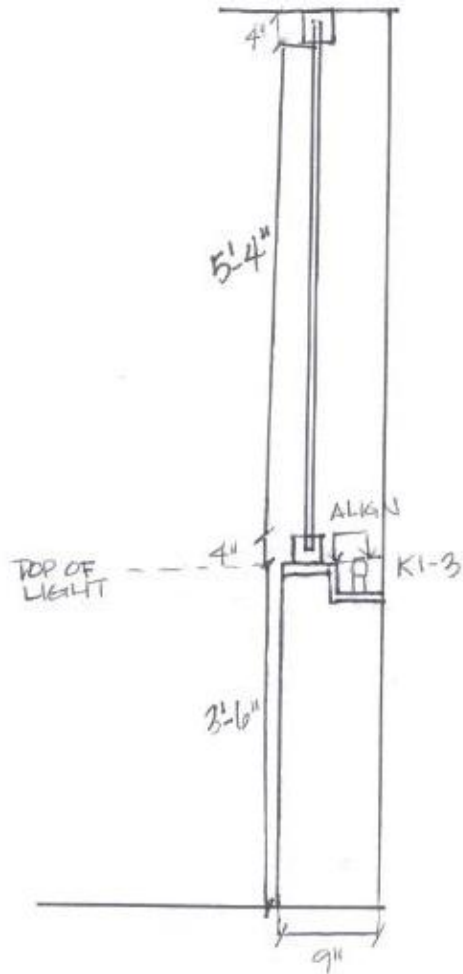


Figure 10: Entry Signage/ Receptionist Back Wall Detail in Lobby | NTS

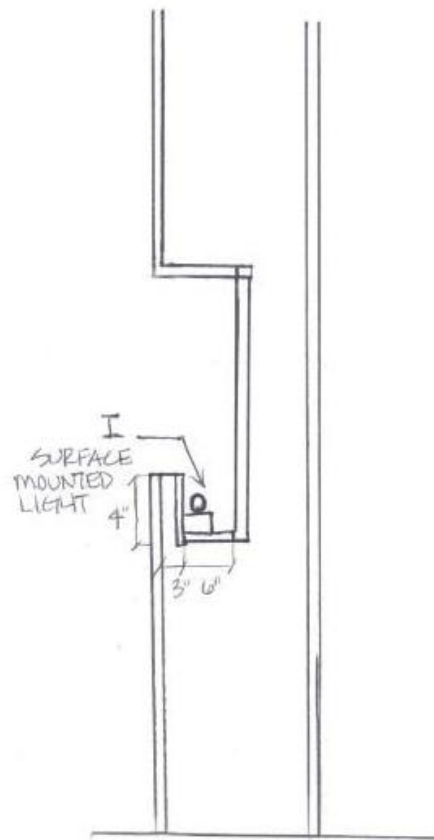


Figure 11: Restaurant Signage Detail in Lobby | NTS

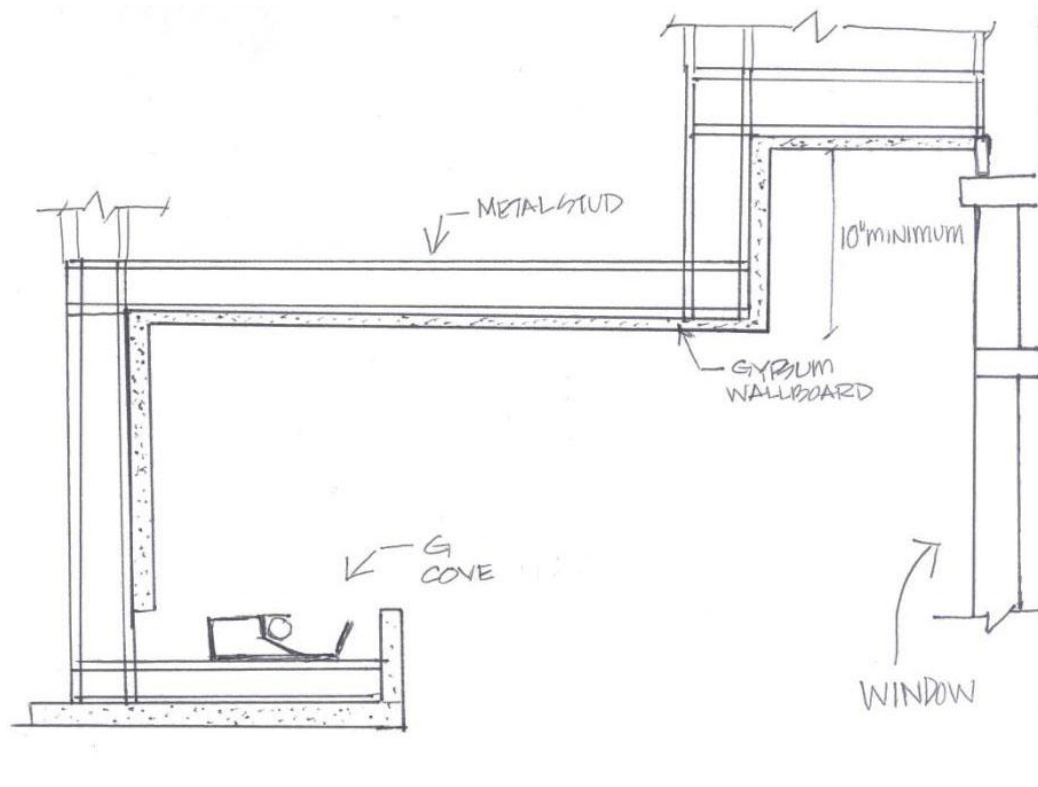


Figure 12: Lobby Cove Detail | NTS

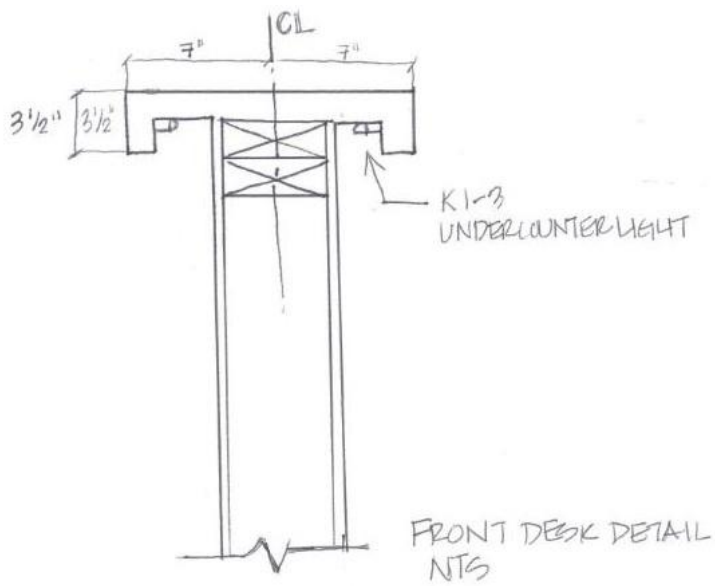


Figure 13: Front Desk Detail in Lobby | NTS

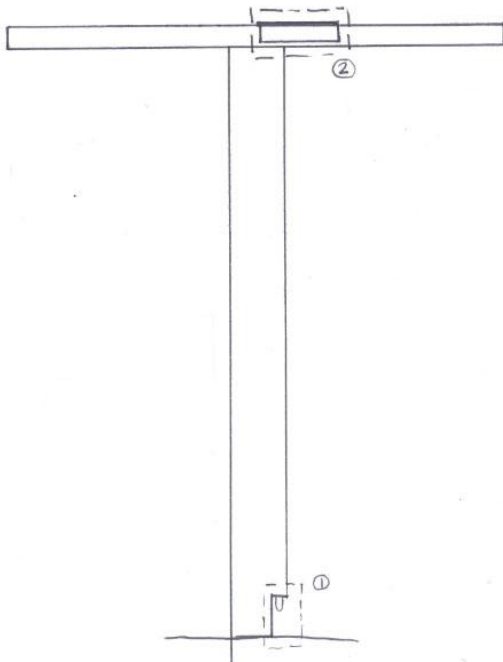


Figure 14: Bar Detail in Lounge | NTS

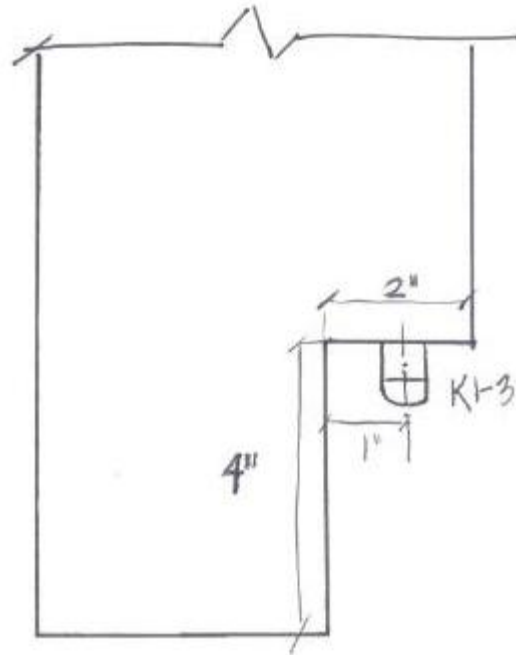


Figure 15: Toe Kick Detail in Lounge | NTS

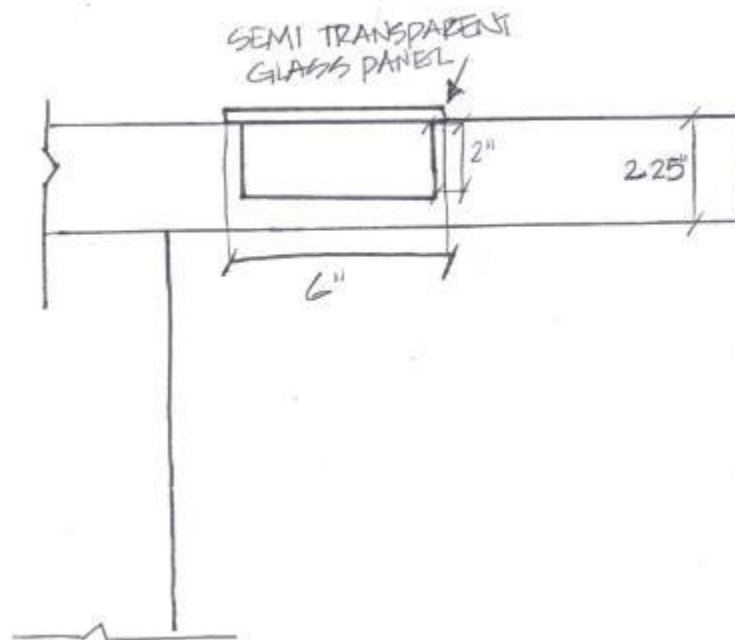


Figure 16: Square Glass Panel Detail in Lounge | NTS

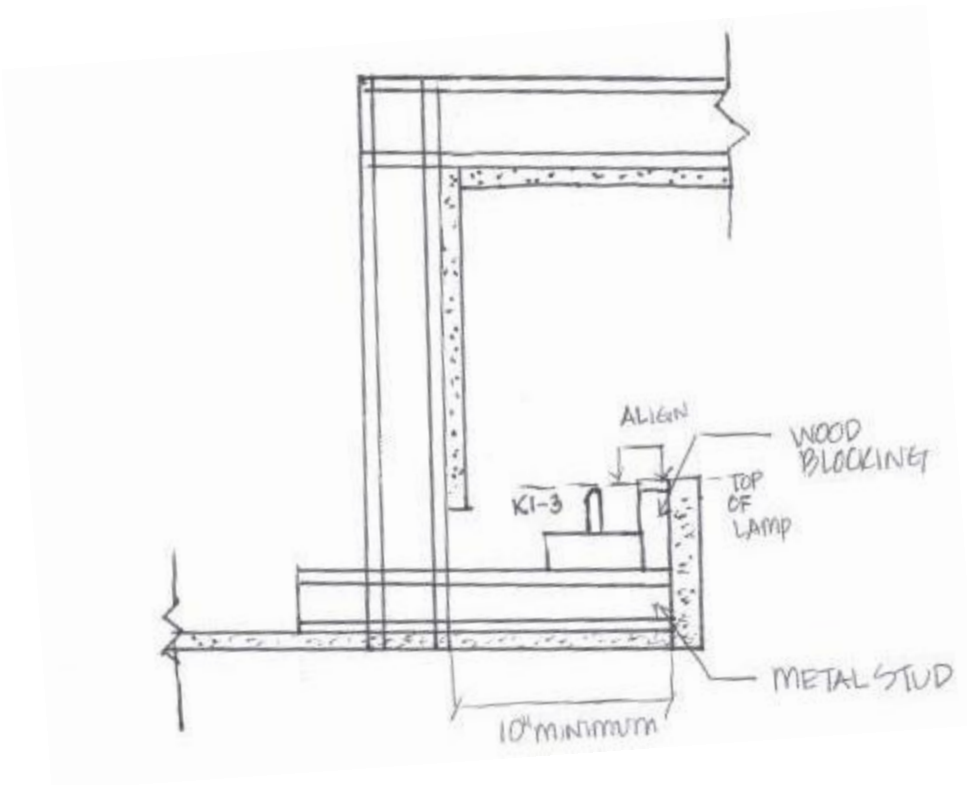


Figure 17: Cove Detail in Lounge | NTS

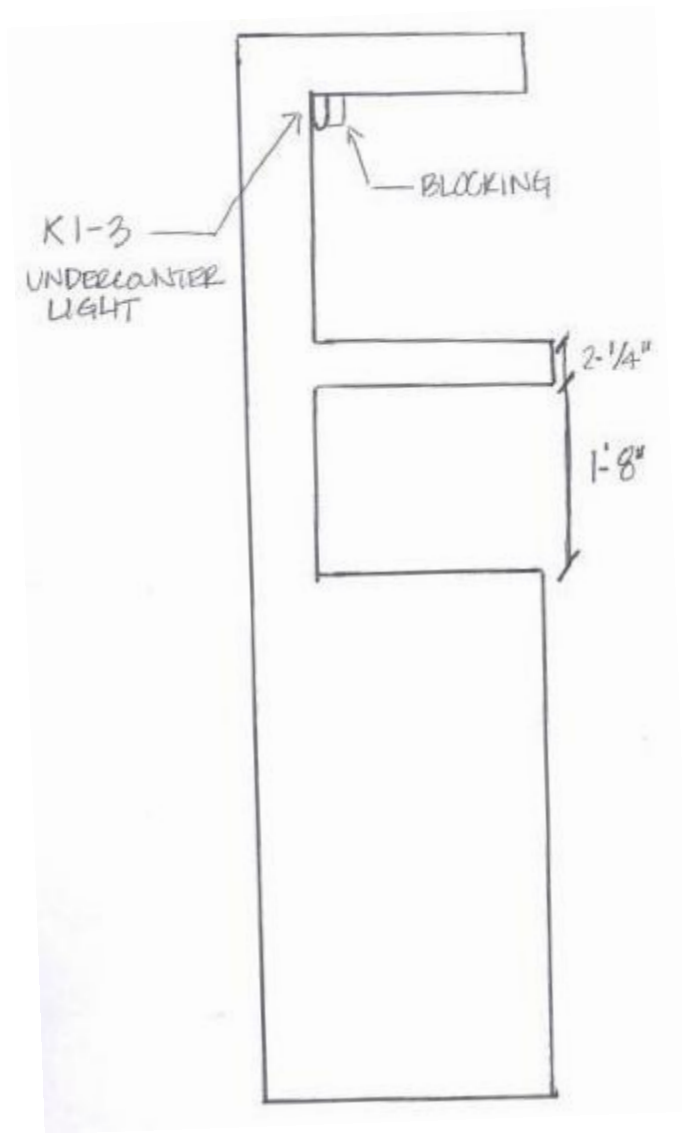


Figure 18: Bar Detail (typ in all shelves) | NTS