Scottsdale First Assembly Dream Center
88-PA-2001
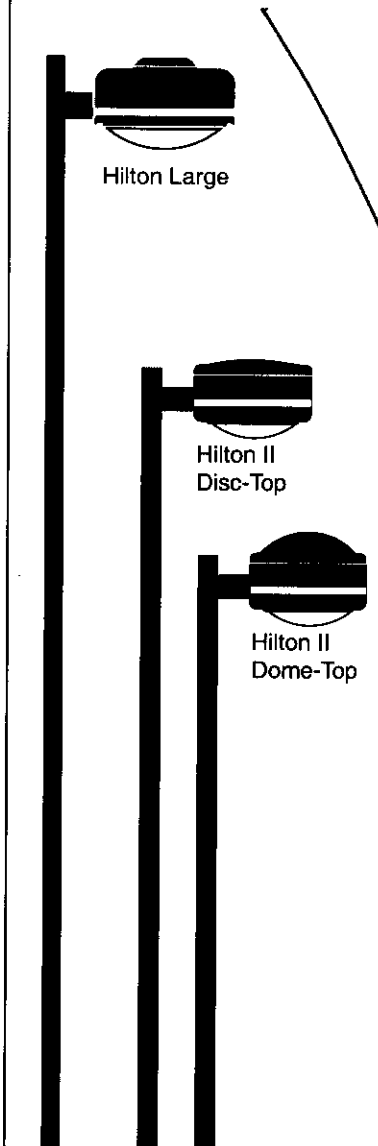
exterior light fixture cutsheets

88-PA-2001#2

15 may 2003

HILTON
CONTOURED LENS

Hilton Large

Hilton II
Disc-Top

Hilton II
Dome-Top

c(UL)us
LISTED
Listed for wet locations.

THE HILTON® CONTOURED LENS SERIES

Available in two sizes, the Hilton Contoured Lens Series is designed with aesthetics, efficiency, and economics in mind. The Hilton II, designed around several reduced envelope lamps allows for a more compact fixture, which results in a lower EPA. The reduced load allows more use of existing poles for retrofitting or lower gauge, less expensive poles for new construction. The Hilton II's vertical lamp orientation and reflector systems provide efficient, uniform, high performance lighting for your site.

SPECIFICATIONS

HOUSING
Large: One-piece spun aluminum housing with bottom door access.

Hilton II: Round spun aluminum housing with a choice of two top-access covers (disc or dome).

DOORS/TOP COVER FASTENERS
Large: The fixture has four stainless steel captive door fasteners which provide secure closure and allow easy access with no loose hardware. For ease of installation, the door frame is field-removable.

Hilton II: The fixture has three stainless steel captive top-cover fasteners which provide secure closure and allow easy access with no loose hardware. The top cover is attached to housing via a tether clip, which frees both hands while servicing.

LIGHT SOURCES
Pulse-Start Metal Halide, Super Metal Halide, Metal Halide, Metal Halide Reduced Envelope, and High Pressure Sodium. Clear lamp is supplied as standard.

REFLECTORS/DISTRIBUTION PATTERNS
Large: Forward Ramp (FR).

Hilton II: Type II (2), Type III (3), Perimeter Forward Throw (FP), Automotive Forward Throw (FA), and Type V (5).

All reflectors are field rotatable and Photometric Data is tested in accordance with IESNA guidelines.

LENS/GASKET
The contoured glass lens measuring 1/8" in thickness is sealed to the cast aluminum lens frame (Large) or into the bottom of the top-access housing (Hilton II) with continuous EPDM extruded gasketing.

SOCKETS
Porcelain mogul-base sockets. All sockets are pulse-rated.

FINISHES
Each fixture is finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, buff, white and green.

DECAL STRIPING
LSI offers optional color-coordinated decals in 9 standard colors to accent the fixture. Decals are guaranteed for five years against peeling, cracking, or fading.

BALLAST
High-power factor CWA ballasts, which are all designed for -20° F operation. The removable ballast tray features a quick-disconnect plug.

BRACKETS
Large Arm Mount:
2-1/2 " x 6-7/8" x 6" extruded aluminum bracket designed to match luminaire housing is standard with all configurations. Bracket and housing attach to round pole with through-bolts and a one-piece, back-up pole nut plate (included with fixture).

Hilton II Arm Mount:
2-1/2" x 5-3/8" x 6" length extruded aluminum bracket is shipped standard. A round Pole Plate (RPP2) is provided as standard for mounting to 3" - 5" round poles.

Hilton II Pole Top: The cast aluminum mounting hub conceals the wiring compartment and mounts directly to LSI's unique "pole-top mounting plate", via a high-strength grade five steel bolt with nylon insert and split lock washer for double locking. Support arms consist of four 11/16" O.D. aluminum rods and are prewired for ease of installation.
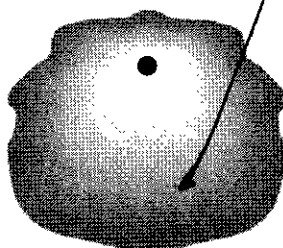
POLES
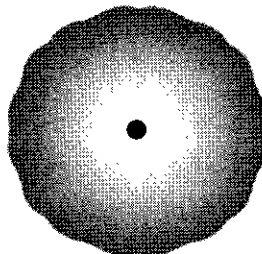Refer to Poles/Brackets section of catalog for pole information.
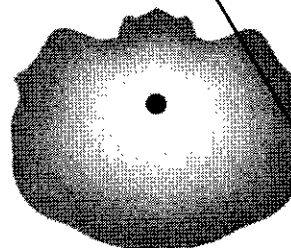
PHOTOMETRICS
For detailed photometric data, please visit our web site at www.lsi-industries.com.

HIL Type FR – Horizontal

HR Type 5 – Vertical

HR Type FA – Vertical

CATALOG# _____

FIXTURE TYPE

DIMENSIONS

	A	B	C
HIL Arm Mount	29"	18"	—
HR Arm Mount - Disc	26"	17-7/8"	—
HRP Pole Top - Disc	26"	17-7/8"	24-1/4"
HRD Arm Mount - Dome	26"	21-1/4"	—
HRPD Pole Top - Dome	26"	21-1/4"	27-5/8"

Large Arm Mount

Arm Mount - Dome

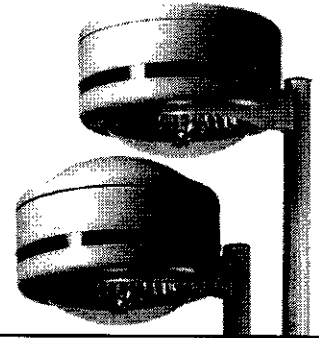Pole Top Mount - Dome

Bracket – 2-bolt Pattern (Hilton II)

Bracket – 2-bolt Pattern (Hilton Large)

Arm Mount - Disc

Pole Top Mount - Disc

LUMINAIRE EPA CHART
Includes bracket.

	Pole Top Mount	Single	D90°	D180°	T90°	TN120°	Q90°
Hilton Large (HIL) 6" Bracket	—	2.0	3.5	3.9	5.5	5.5	7.1
Hilton II Disc Top – 6" Arm Mount Bracket (HR)	—	1.9	3.3	3.7	5.2	5.2	6.7
Hilton II Disc Top – Pole Top (HRP)	2.0	—	—	—	—	—	—
Hilton II Dome Top – 6" Arm Mount Bracket (HRD)	—	2.1	3.6	4.1	5.7	5.7	7.4
Hilton II Dome Top – Pole Top (HRPD)	2.2	—	—	—	—	—	—

LUMINAIRE ORDERING INFORMATION — Select appropriate choice from each column to formulate order code. Refer to example below.

Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage[3]	Luminaire Finish	Options	
Hilton II Vertical Burn Disc Top HR – Arm Mount HRP – Pole Top[1] Dome Top HRD – Arm Mount HRPD – Pole Top[1]	2 – Type II 3 – Type III FP – Perimeter Forward Throw FA – Automotive Forward Throw 5 – Type V	250 320 400 750 1000	PSMV – Pulse-Start Metal Halide 250, 320, 400, 750, 1000 Watt SMV – Super Metal Halide Vertical, 400 Watt MH – Metal Halide 250, 400 Watt MHR – Metal Halide Reduced Envelope 1000 Watt HPS – High Pressure Sodium 400, 750 Watt	CT – Contoured Clear Tempered Glass	480V MT – Multi Tap[4] TT – Tri-Tap[5]	BRZ – Bronze BLK – Black PLP – Platinum Plus BUF – Buff WHT – White GRN – Green	PCE120V – External Photocell[6] PCE208V – External Photocell[6] PCE240V – External Photocell[6] PCE277V – External Photocell[6] LL – Less Lamp PCR – Photoelectric Control Receptacle[7] LL – Less Lamp	**Color Decals** 45 – Light Gold Metallic 20 – Charcoal Metallic 94 – Blue Metallic 59 – Dark Green 21 – Tomato Red 55 – Black 50 – White 51 – Dark Red 700 – Aztec Silver Metallic
Hilton Large Horizontal Burn HIL – Large Arm Mount	FR – Forward Ramp	1000	MHR – Metal Halide Reduced Envelope 1000 Watt					

EXAMPLE OF A TYPICAL ORDER

HR	5	1000	MHR	CT	MT	BRZ	PCE120V	45

1- When ordering pole top fixtures for tenon mounting, a pole top adaptor must be ordered.
2- Multi Tap is not available in 750W High Pressure Sodium. Specify voltage required.
3- For international voltages, consult factory.
4- MT – Multi Tap is shipped standard unless otherwise specified. Multi Tap consists of 120V, 208V, 240V, and 277V. Multi Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.
5- Tri-Tap is shipped standard for CUL applications. Tri-Tap consists of 120V, 277V, and 347V. Tri-Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.
6- External photocell "option" compatible with Hilton II only.
7- PCR compatible with Hilton Large. PCR factory installed and prewired for highest voltage. Alternate voltages will require field rewiring.

ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number	Description	Order Number
PC120V – Photocell+	122514	BKA-RBO-WM-*-CLR Wall Mount Plate	123113CLR
PC208V – Photocell+	122515	HR 2 HSS - House Side Shield	156252++
PC240V – Photocell+	122516	HR 3 HSS - House Side Shield	156383++
PC277V – Photocell+	122517	HR FP/FA HSS - House Side Shield	156383++
PC480V – Photocell+	122518	+ PCR Compatible with Hilton Large only.	
FK120V - Single Fusing	FK120V	++ Black Only	
FK277V - Single Fusing	FK277V		
DFK208, 240 - Double Fusing	DFK208, 240V		
DFK480 - Double Fusing	DFK480V		
FK347V - Single Fusing	FK347V		

HILTON
FLAT LENS

Hilton Large

Hilton II
Disc Top

Hilton II
Dome Top

Hilton II Small
Disc Top

Hilton II Small
Dome Top

THE HILTON® FLAT LENS SERIES

LSI's Hilton Flat Lens fixtures uniquely combine the high performance and benefits of traditional vertical burn technology, with full cut-off distribution, afforded by a flat lens. Specially designed reflectors provide uniform, high performance lighting while the flat glass lens ensures the full cut-off distribution as defined by IESNA. Offered in three sizes, the Hilton Series gives you quality lighting and architectural appeal.

SPECIFICATIONS

HOUSING
Large: One-piece spun aluminum housing with bottom door access.
Hilton II and Hilton II Small: Round spun aluminum housing with a choice of two top-access covers (disc or dome).

DOORS/TOP COVER FASTENERS
Large: Four stainless steel captive door fasteners provide secure closure and allow easy access with no loose hardware. For ease of installation, the door frame is field-removable.
Hilton II: Three stainless steel captive top-cover fasteners provide secure closure and allow easy access with no loose hardware. The top cover is attached to housing via a tether clip, which frees both hands while servicing.

LIGHT SOURCES
Pulse-Start Metal Halide, Super Metal Halide, Metal Halide, Metal Halide Reduced Envelope, or High Pressure Sodium. Clear lamp is supplied as standard.

REFLECTORS/DISTRIBUTION PATTERNS
Large: Type III (3), Perimeter Forward Throw (FP), Automotive Forward Throw (FA), and Type V (5).
Hilton II: Type III (3), Perimeter Forward Throw (FP), and Type V (5).
Hilton II Small: Type II (2) vertical only, Type III (3), Forward Throw (FT/FP), and Type V (5).

All but Hilton II Small reflectors are field rotatable. Photometric data is tested in accordance with IESNA guidelines.

LENS/GASKET
The flat tempered glass lens, measuring 1/8" in thickness, is sealed to the cast aluminum lens frame (Large) or into the bottom of the top access housing (Hilton II and Hilton II Small) with continuous EPDM extruded gasketing.

SOCKETS
Porcelain mogul base sockets. All sockets are pulse-rated.

FINISHES
Each fixture is finished with DuraGrip®, LSI's baked-on polyester-powder finishing process. The DuraGrip polyester finish withstands extreme weather changes without cracking or peeling and is guaranteed for five full years. Standard finish colors are bronze, black, platinum plus, buff, white, and green.

DECAL STRIPING
LSI offers optional color-coordinated decals in 9 standard colors to accent the fixture. Decals are guaranteed for five years against peeling, cracking, or fading.

BALLAST
High-power factor CWA ballast designed for -20° F operation. The removable ballast tray features a quick-disconnect plug.

BRACKETS
Large Arm Mount:
2-1/2" x 6-7/8" x 6" extruded aluminum bracket is standard. Bracket and housing attach to round pole with through-bolts and a one-piece, back-up pole nut plate (included with fixture). A round Pole Plate (RPP2) is provided as standard for mounting to 3" - 5" round poles.
Hilton II and Hilton II Small Arm Mount:
A 2-1/2" x 5-3/8" x 6" length extruded aluminum bracket is shipped standard. A round Pole Plate (RPP2) is provided as standard for mounting to 3" - 5" round poles.
Pole Top: The cast aluminum mounting hub conceals the wiring compartment and mounts directly to LSI's unique "pole-top mounting plate", via a high-strength grade five steel bolt with nylon 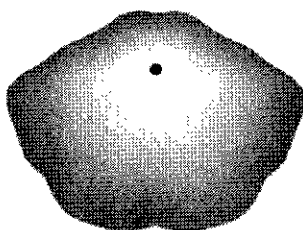insert and split lock washer for double locking. Support arms consist of four 11/16" O.D. aluminum rods and are pre-wired for ease of installation.
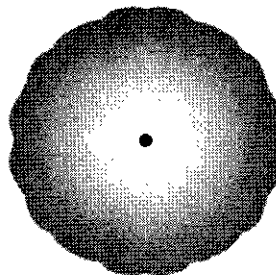
POLES
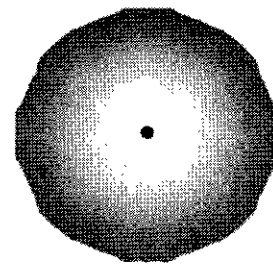Refer to Poles/Brackets section of catalog for pole information.

c(UL)us
LISTED
Listed for wet locations.

PHOTOMETRICS
For detailed photometric data, please visit our web site at www.lsi-industries.com.

HFL Type FP – Vertical   HFL Type 5 – Vertical   HR Type 5 – Vertical

lsi
Lighting Systems™
10000 Alliance Road ♦ Cincinnati, Ohio 45242 ♦ (513)793-3200 FAX (513)984-1335 ♦ www.lsi-industries.com
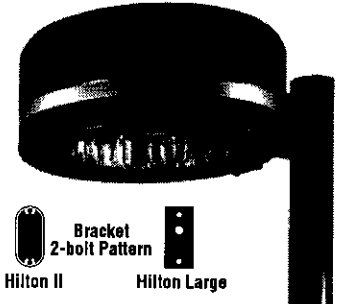
HILTON FLAT LENS SERIES

LSI Lighting Systems™

CATALOG#

FIXTURE TYPE

DIMENSIONS

	A	B	C
HFL Arm Mount	29"	15-1/8"	—
HFPL Pole Top	29"	15-1/8	24-1/4"
HFR Arm Mount - Disc	26"	14"	—
HFPR Pole Top - Disc	26"	14"	24-1/4"
HFRD Arm Mount - Dome	26"	17-1/2"	—
HFPRD Pole Top - Dome	26"	17-1/2"	27-5/8"
HFSV/HFSH Arm Mount - Disc	20"	11 - 3/8"	—
HFPSV/HFPSH Pole Top- Disc	20"	11 - 3/8"	18 - 5/8"
HFSDV/HFSDH Arm Mount - Dome	20"	14"	—
HFPSDV/HFPSDH Pole Top - Dome	20"	14"	21 - 1/4"

Arm Mount
Large   Disc   Dome

Pole Top Mount
Large   Disc   Dome

Bracket 2-bolt Pattern
Hilton II   Hilton Large

LUMINAIRE EPA CHART
Includes 6" bracket.

	Pole Top Mount	Single	D90°	D180°	T90°	TN120°	Q90°
Hilton Large (HFL)	2.0	1.9	3.4	3.7	5.2	5.3	6.8
Hilton II Disc Top (HFR)	1.8	1.9	3.3	3.7	5.2	5.2	6.7
Hilton II Dome Top (HFRD)	2.0	2.1	3.6	4.1	5.7	5.7	7.4
Hilton II Small Disc Top (HFSV/HFSH)	1.1	1.1	1.8	2.1	2.9	2.9	3.7
Hilton II Small Dome Top (HFSDV/HFSDH)	1.3	1.2	2.2	2.5	3.4	3.4	4.4

LUMINAIRE ORDERING INFORMATION
Select appropriate choice from each column to formulate order code. Refer to example below.

Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage[3]	Luminaire Finish	Options	
Hilton II Small Horizontal Disc Top HFSH - Arm Mount HFPSH - Pole Top[1] Dome Top HFSDH - Arm Mount HFPSDH - Pole Top[1]	3 – Type III FT – Forward Throw 5 – Type V Square	100 150 175 250 320	PSMH-Pulse-Start Metal Halide 320 Watt MH - Metal Halide 175, 250 Watt HPS – High Pressure Sodium 100, 150, 250 Watt	F – Flat Clear Tempered Glass	480V MT – Multi Tap[4] TT – Tri-Tap[5]	BRZ – Bronze BLK – Black PLP – Platinum Plus BUF – Buff WHT – White GRN – Green	PCI120V – Button Type PCI208V – Button Type PCI240V – Button Type PCI277V – Button Type LL – Less Lamp	
Hilton II Small Vertical Disc Top HFSV - Arm Mount HFPSV - Pole Top[1] Dome Top HFSDV - Arm Mount HFPSDV - Pole Top[1]	2 – Type II 3 – Type III FP – Perimeter Forward Throw 5 – Type V Round	100 150 175 250 320	PSMV-Pulse-Start Metal Halide 175, 250, 320 Watt MH - Metal Halide 175, 250 Watt HPS – High Pressure Sodium 100, 150 Watt					**Color Decals** 45 – Light Gold Metallic 20 – Charcoal Metallic 94 – Blue Metallic 59 – Dark Green 21 – Tomato Red 55 – Black 50 – White 51 – Dark Red 700 - Aztec Silver Metallic
Hilton II Vertical Disc Top HFR - Arm Mount HFPR - Pole Top[1] Dome Top HFRD - Arm Mount HFPRD - Pole Top[1]	3 – Type III FP – Perimeter Forward Throw 5 – Type V Round	250 320 400	PSMV-Pulse-Start Metal Halide 250, 320, 400 Watt SMV-Super Metal Halide 400 Watt MH - Metal Halide 250, 400 Watt HPS – High Pressure Sodium 250, 400 Watt				PCE120V – External Photocell[6] PCE208V – External Photocell[6] PCE240V – External Photocell[6] PCE277V – External Photocell[6] LL – Less Lamp	
Hilton Large Vertical HFL - Arm Mount HFPL - Pole Top[1]	3 – Type III FP – Perimeter Forward Throw FA – Automotive Forward Throw 5 – Type V Square	750 1000	PSMV – Pulse-Start Metal Halide 750, 1000 Watt MHR – Metal Halide Reduced 1000 Watt HPS – High Pressure Sodium 750[2] Watt				PCR – Photoelectric Control Receptacle[7] LL – Less Lamp	

EXAMPLE OF A TYPICAL ORDER

HFL	5	1000	MHR	F	MT	PLP	PCR	20

1- When ordering pole top fixtures for tenon mounting, a pole top adaptor must be ordered.
2- Multi Tap is not available in 750W High Pressure Sodium. Specify voltage required.
3- For international voltages, consult factory.
4- MT – Multi Tap is shipped standard unless otherwise specified. Multi Tap consists of 120V, 208V, 240V, and 277V. Multi Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.
5- Tri-Tap is shipped standard for C-UL applications. Tri-Tap consists of 120V, 277V, and 347V. Tri-Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.
6- External photocell is compatible with Hilton II only.
7- PCR compatible with Hilton Large only. PCR factory installed and prewired for highest voltage. Alternate voltages will require field rewiring.

ACCESSORY ORDERING INFORMATION (Accessories are field installed)

| Description	Order Number	Description	Order Number
PC120V – Photocell	122514	DFK480V - Double Fusing	DFK480V
PC208V – Photocell	122515	FK347V - Single Fusing	FK347V
PC240V – Photocell	122516	HFL FP HSS – House Side Shield	4343004†
PC277V – Photocell	122517	HFR FP HSS – House Side Shield	156383†
PC480V – Photocell	122518	HFSH/HFSV FP/3 HSS – House Side Shield	168505†
FK120V - Single Fusing	FK120V	HFSV 2 HSS – House Side Shield	168505†
FK277V - Single Fusing	FK277V	BKA-RBO-WM-*-CLR Wall Mount Plate	123113CLR
DFK208, 240V - Double Fusing	DFK208, 240V	†Black only.	

3300 SERIES

Series	Incan.	Fluor.	HID	Exterior	Interior	Feed-Thru	Other Options
3300			●	●		●	Cast bronze front 277V electrical Tamperproof screws
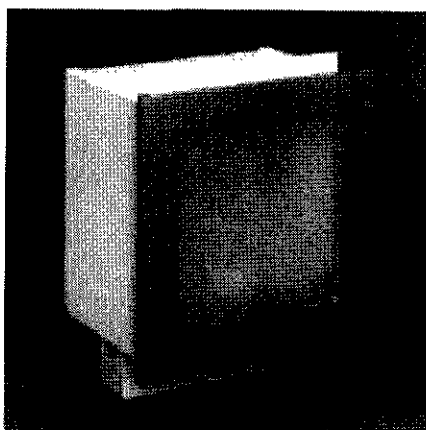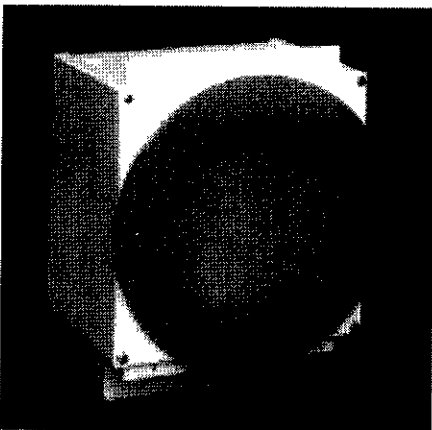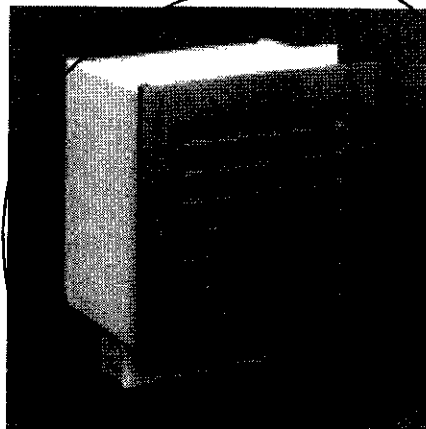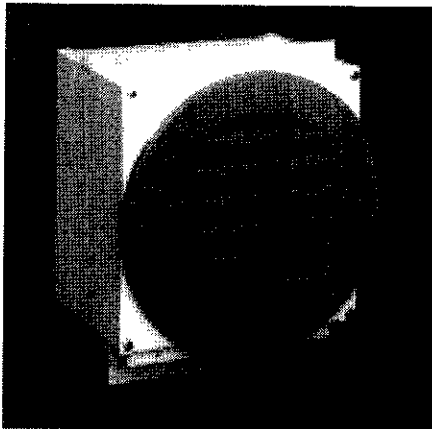
Description
The 3300 Series of Steplites is a high performance site fixture for large areas. Its large aperture allows high light levels to the sides as well as in front of the fixture for many exterior locations. The rugged construction, engineering excellence, and quality make these fixtures ideal for specification in most public areas.

Features
Louvers in the 3300 Series are more widely spaced than in most fixtures of this type, allowing for significantly greater forward projected illumination. Exceptional durability is provided by the thick cast aluminum louvered faceplate which protects the tempered glass diffuser while controlling the distribution of light. Cole Steplites feature a cast aluminum junction box which may be easily field mounted to either the back or bottom of the housing to best suit installation conditions.

Applications
The 3300 Series Steplites are suitable for concrete pour/block wall mounting in outdoor installations. They are ideal in walls, ramps, and stairwells where high light levels are desirable.

Custom
If your project demands a special fixture we would be pleased to discuss the production of modified standard fixtures or custom fixtures to suit your specific conditions. Modifications possible include special sizes and shapes, special finishes, materials such as stainless steel or cast bronze, and alternate light sources. For more information on our custom capabilities, please contact your local Cole representative.

3300 Series steplites are available with round or square cast aluminum faceplates.

Mercury vapor, high pressure sodium, or metal halide lamps may be specified for this series.

The junction box on Cole Steplites may be field mounted to the back or bottom of the fixture.

COLE
LIGHTING SINCE 1911

C. W. Cole & Company, Inc.
2560 N. Rosemead Boulevard
South El Monte, CA 91733-1593

Fax   (626) 443-9253
Tel.   (626) 443-2473
info@colelighting.com
www.colelighting.com

Specifications

Construction

- Fixture housing is constructed from die-formed 16 gauge steel finished with a white polyester coating • Faceplate is cast aluminum with metallic aluminum powder coating, gasketed and retained by stainless steel screws • Diffuser is frosted tempered glass set in silicone sealant • Reflector is constructed of die-formed semi-specular aluminum • Standard junction box is cast aluminum with polyester coating • ETL listed, suitable for wet locations, in concrete pour/block wall construction.

Electrical

- Fixture is wired for medium base high-intensity discharge lamps of varying types and wattages. Ballasts are standard 120V (277V optional)
- Junction box allows 8 wire thru-wiring, four in and four out. Provided with two ½" tapped conduit entrances in the bottom and one ½" conduit entrance in each side.

Mounting

Housing has flanges with holes for mounting.

The isolux curves illustrated above show the footcandle distribution for a 3300 Series fixture with a 50W clear HPS lamp mounted at a height of 2'-0". The conversion chart provides the light output figures for various lamp types at four mounting heights. The lamp height determines the scale of the grid, i.e., for a fixture mounted at 3'-0" the grid becomes 3'-0" x 3'-0". To calculate the footcandles for each iso curve use the conversion factors shown in the chart as multipliers of the footcandles indicated for each iso curve.

Isolux Footcandle Conversion Chart

Lamp Type	Lum.	Mounting Height and Grid Scale			
		1'-0"	1'-6"	2'-0"	3'-0"
50W clear MV	1570	1.58	0.70	0.39	0.17
35W clear HPS	2250	2.25	1.00	0.56	0.25
50W clear HPS	4000	4.00	1.78	1.00	0.44
50W clear MH	3400	3.40	1.51	0.85	0.38

Catalog Numbers

Lamps	Faceplate			
	9" sq./Louver	9" sq./Glass	9" dia./Louver	9" dia./Glass
50W mercury vapor, medium base	HMV 3350S	HMV 3350SG	HMV 3350R	HMV 3350RG
35W high pressure sodium, medium base	HPS 3335S	HPS 3335SG	HPS 3335R	HPS 3335RG
50W high pressure sodium, medium base	HPS 3350S	HPS 3350SG	HPS 3350R	HPS 3350RG
50W metal halide, medium base	HMH 3350S	HMH 3350SG	HMH 3350R	HMH 3350RG

Options

Bronze Faceplate: Satin finished, red brass faceplate. To specify, add suffix **-B.**

Tamperproof Screws: Tamperproof allen head faceplate screws. To specify, add suffix **-TP.**

Ballasts: 277V ballast. To specify, add suffix **-277.** High power factor. To specify, add suffix **-HPF.**

Alternate Faceplate Color: Black or white. To specify, add suffix **-BLK** or **-WHT.**

How to Specify

1. Select catalog number with desired features.
2. Add suffixes for options required to meet job conditions.

COLE
LIGHTING SINCE 1911

C. W. Cole & Company, Inc.
2560 N. Rosemead Boulevard
South El Monte, CA 91733-1593

Fax   (626) 443-9253
Tel.   (626) 443-2473
info@colelighting.com

QB 3M A00

WINONA LIGHTING
WINSCAPE DIVISION
P.O. BOX 1205
3760 WEST FOURTH STREET
WINONA, MN 55987
1-800-328-5291
FAX 507-452-8528

TYPE:_____

$2\frac{1}{4}''$ $4\frac{3}{4}''$

MR-16 LAMP
(50W MAX)

CAP C1

$5\frac{3}{4}''$

CAP C2

$7\frac{5}{8}''$ $5\frac{1}{2}''$

CAP C4

CAP C3

$7\frac{5}{8}''$

CAP C5

$1\frac{5}{8}''$

$\frac{1}{2}''$ NPS THREAD

7/2/02

FIXTURE SUBMITTAL

1. LAMPING OPTION	2. VOLTAGE	3. LENS OPTION	4. FINISH	5. FILTER	6. SHIELDING	7. CAP
0 = BY OTHERS	12V = 12 VOLT	L0 = NONE	BKS = BLACK, SMOOTH	FO = NONE	SH0 = NONE	**C1 = FLUSH
10 = ESX-20W-12° SPOT	(AVAILABLE IN	L1 = PRISMATIC	WHS = WHITE, SMOOTH	FM = MERCURY VAPOR	SH6 = HONEYCOMB LOUVER	**C2 = LENS AND LAMP RECESSED
11 = BAB-20W-40° FLOOD	12V ONLY)	L2 = LINEAR	BRS = BRONZE, SMOOTH	*FR = RED		**C3 = 45° CUT OFF
12 = FRB-35W-12° SPOT		L3 = SOFTENING	SIS = SILVER, SMOOTH	*FRD = RED DICHROIC		**C4 = LENS FLUSH,
13 = FRA-35W-23° SPOT		L4 = WATERSHED	IVS = IVORY, SMOOTH	FP = PINK		LAMP RECESSED
14 = FMW-35W-40° FLOOD			CHS = CHROME	FA = AMBER		C5 = 45° SCALLOPED
15 = EYR-42W-12° SPOT			NBS = NATURAL BRONZE	*FG = GREEN		
16 = EYS-42W-25° SPOT			BKT = BLACK, TEXTURED	*FGD = GREEN DICHROIC		
17 = EYP-42W-40° FLOOD			WHT = WHITE, TEXTURED	FLB = LT BLUE		
18 = EXT-50W-13° SPOT			BRT = BRONZE, TEXTURED	*FMB = MED BLUE		
19 = EXZ-50W-28° SPOT			VET = VERDE	*FMBD = MED BLUE DICHROIC		
20 = EXN-50W-40° FLOOD			SAT = SAND			
21 = FNV-50W-60° FLOOD			CPF = CUSTOM PAINT			
			TO BE DETERMINED			
			SPF = STANDARD PAINT			
			TO BE DETERMINED			

ASPEN

GENERAL NOTES:
1. REQUIRES A 12V TRANSFORMER, PURCHASED SEPARATELY, UNLESS NOTED
2. ALL LAMPS LISTED ARE MR-16'S UNLESS OTHERWISE SPECIFIED.
*3. WHEN USING A COLOR FILTER WITH A 50W LAMP, A DICHROIC FILTER IS REQUIRED TO RETAIN U.L. LISTING (RED, GREEN & MED BLUE).
**4. SOME UL RESTRICTIONS APPLY WHEN USED WITH POWERMOUNT STYLE'S A, C & D.

SAMPLE SPECIFICATION

AS - 18 - 12V - L0 - SIS - FRD - SH6 - C1 - STD.
1. LAMP
2. VOLTAGE
3. LENS
4. FINISH
5. FILTER
6. SHIELDING
7. CAP
8. SPECIAL (STD/MOD)

YOUR SPECIFICATION: AS - _____ - 12V - ___ - ___ - ___ - ___ - ___ - ___

8. MODIFICATION DESCRIPTION _____

PROJECT NAME: _____

WINONA LIGHTING
WINSCAPE DIVISION
P.O. BOX 1205
3760 WEST FOURTH STREET
WINONA, MN 55987
1-800-328-5291
FAX 507-452-8528

2¼"

1⅝"

1⅞"

1⅝"

1⅞"

6⅜"
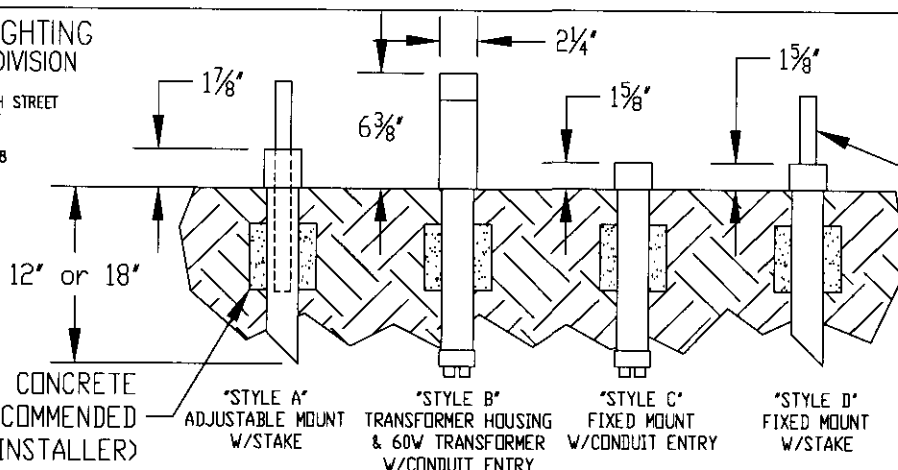
TYPE:_____

STEMS AVAILABLE
FROM 3" TO 36" LONG
W/FIXED MOUNT &
12" TO 42" LONG
W/ADJUSTABLE MOUNT

12" or 18"

Ø6"x6" CONCRETE
POUR RECOMMENDED
(BY INSTALLER)

"STYLE A"
ADJUSTABLE MOUNT
W/STAKE

"STYLE B"
TRANSFORMER HOUSING
& 60W TRANSFORMER
W/CONDUIT ENTRY

"STYLE C"
FIXED MOUNT
W/CONDUIT ENTRY

"STYLE D"
FIXED MOUNT
W/STAKE

5/29/01

FIXTURE SUBMITTAL

1. WATTAGE	2. VOLTAGE	3. STYLE	4. FINISH	5. STAKE LENGTH	6. STEM LENGTH
60W =60 WATT (AVAILABLE IN 60W ONLY)	12V =12 VOLT (AVAILABLE IN 12V ONLY)	A = ADJUSTABLE MOUNTING CAP W/ STAKE ***B = TRANSFORMER HOUSING & 60W TRANSFORMER W/ CONDUIT ENTRY ***C = FIXED MOUNTING CAP W/ CONDUIT ENTRY D = FIXED MOUNTING CAP W/ STAKE	BKS = BLACK, SMOOTH WHS = WHITE, SMOOTH BRS = BRONZE, SMOOTH SIS = SILVER, SMOOTH IVS = IVORY, SMOOTH CHS = CHROME NBS = NATURAL BRONZE BKT = BLACK, TEXTURED WHT = WHITE, TEXTURED BRT = BRONZE, TEXTURED VET = VERDE SAT = SAND	12 = 12" 18 = 18"	S0 = NONE *S3 = 3" *S6 = 6" S12 = 12" S18 = 18" S24 = 24" S30 = 30" S36 = 36" **S42 = 42"

POWERMOUNT-60

GENERAL NOTES:

1. REQUIRES A 12V TRANSFORMER, PURCHASED SEPARATELY, UNLESS NOTED.
*2. 3" & 6" STEM NOT RECOMMENDED FOR USE WITH STYLE A (ADJUSTABLE MOUNTING).
**3. 42" STEM NOT RECOMMENDED FOR USE WITH FIXED MOUNTING (STYLES B, C & D).
***4. CONDUIT ENTRY CONSISTS OF TWO 1/2" CONDUIT CONNECTORS.
5. POWERMOUNT-60, STYLES A,B & D NOT RECOMMENDED FOR USE WITH PALM, PINE, OR REDWOOD SERIES.

SAMPLE SPECIFICATION

PM - 60W - 12V - B - IVS - 18 - S18 - STD.

1. WATTAGE
2. VOLTAGE
3. STYLE
4. FINISH
5. STAKE
8. STEM
9. SPECIAL (STD/MOD)

YOUR SPECIFICATION: PM - 60W - 12V - ___ - ___ - ___ - ___ - ___

9. MODIFICATION DESCRIPTION _____

PROJECT NAME:

ADVANTAGE SERIES
INDIRECT XENON
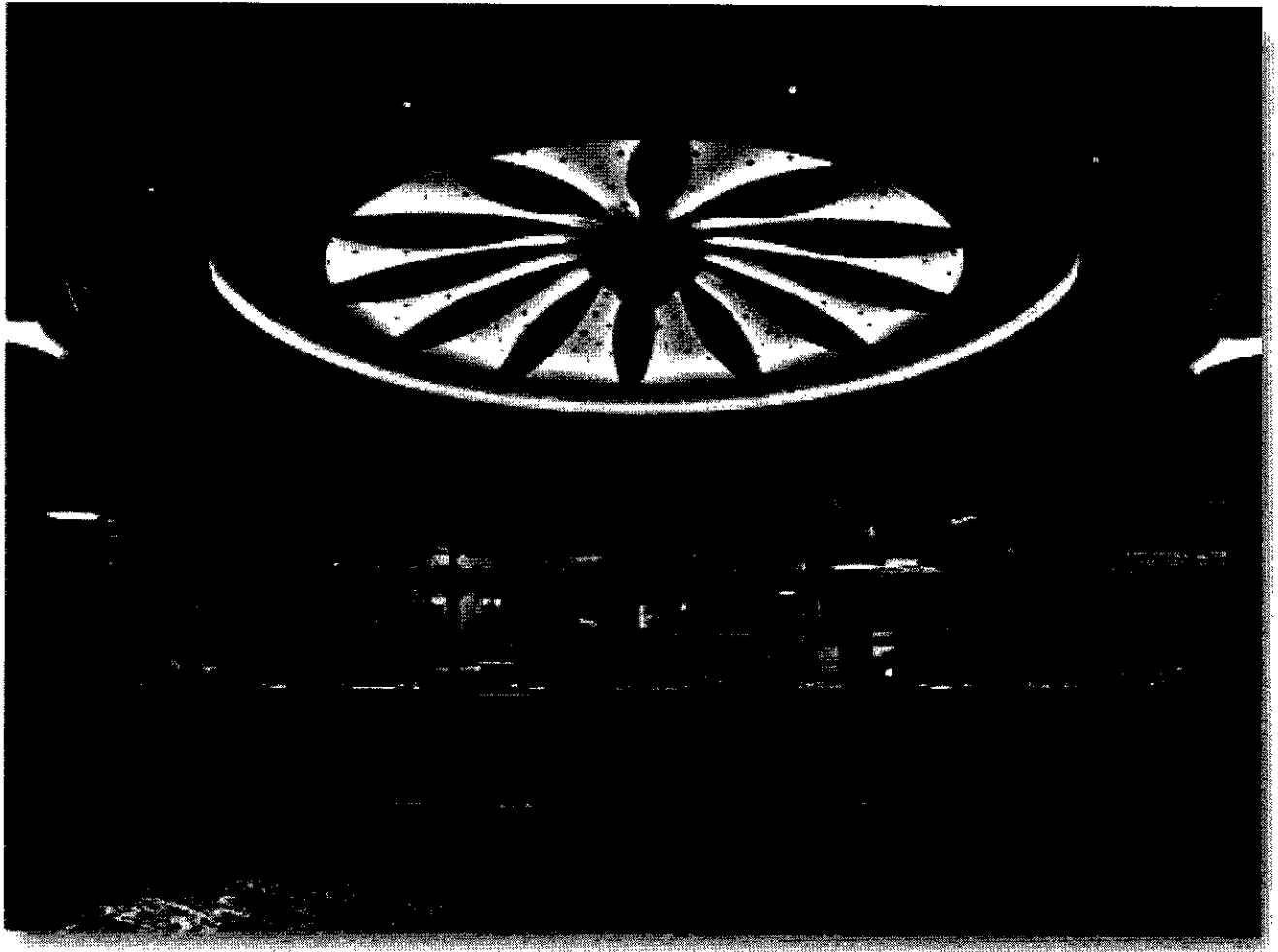
TOKISTAR LIGHTING™ INCORPORATED

ADVANTAGE SERIES INDIRECT XENON
THE STANDARD IN ARCHITECTURAL LINEAR LIGHTING

Since its introduction to the market, Tokistar's Advantage System has become the overwhelming choice of lighting professionals. What has attracted them most is the flexibility. Advantage easily turns corners and follows complex shapes without special effort or hardware.

Advantage was designed around the frosted rigid-loop xenon lamp for good reason. These lamps evenly distribute light in all directions, and have a rated life up to 20,000 hours. Combined with our narrow socket design and integrated reflectors, Advantage produces a scallop-free wash of light using fewer lamps per foot. The result... A highly efficient fixture which costs less, conserves energy and saves on maintenance.

Recessed Lamp Contacts

*Flexible Conductor
Conforms to any
Twist or Turn*

TOKISTAR
LIGHTING

$C \in$ (ETL) (ETL)
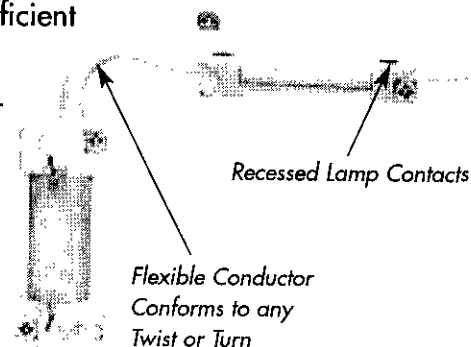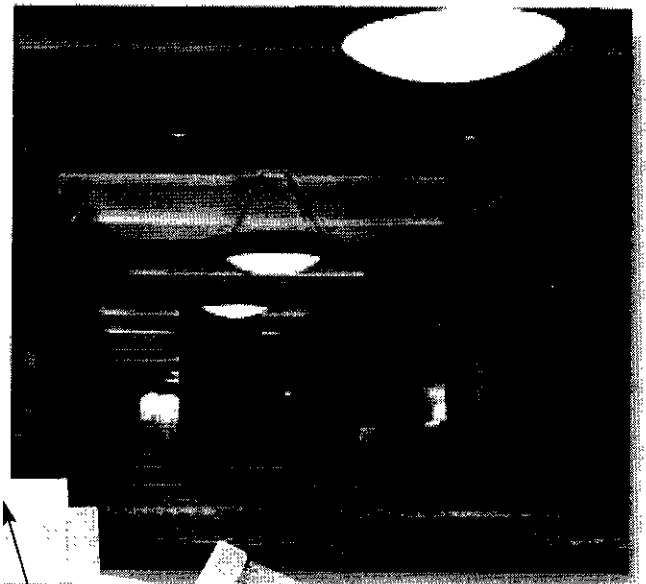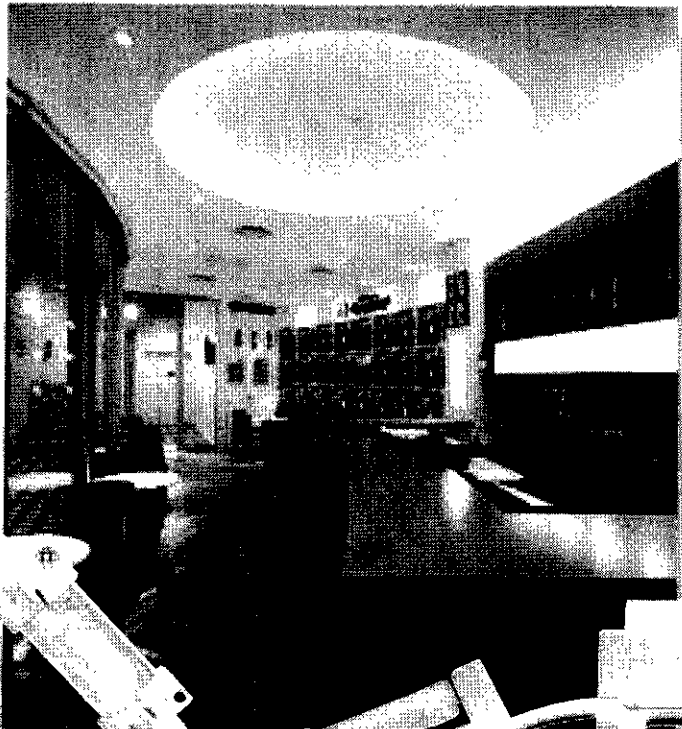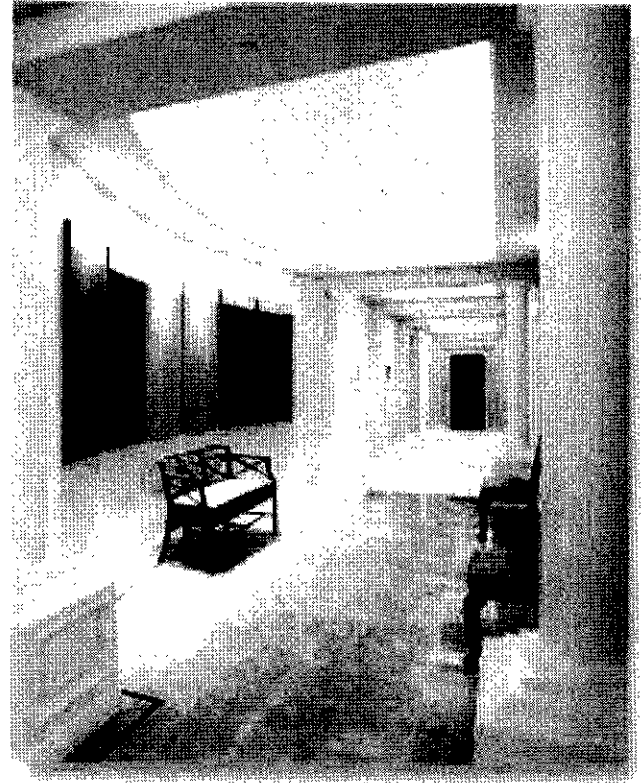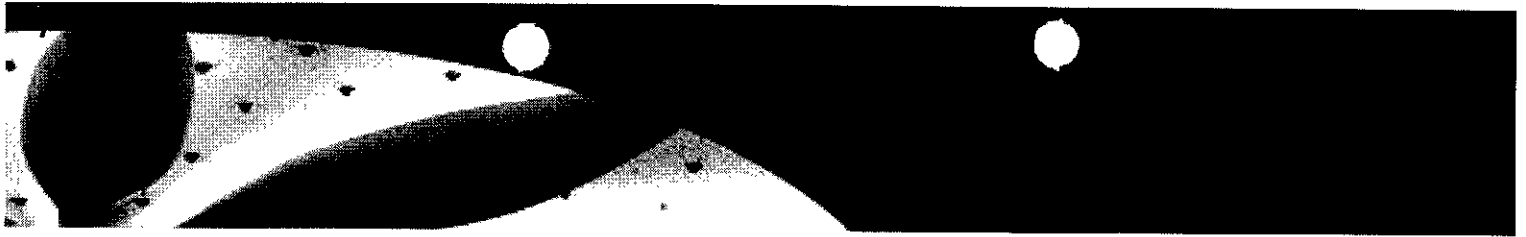
Self-mounting Sockets

24 Volt Frosted Xenon Lamps

Optional Lens Shields Lamp

Reflector Spreads and Softens Light

DESIGN GUIDELINES

To determine the most attractive and efficient form of Advantage for your application, begin by selecting the best lamp spacing and wattage. Then tailor the system for your specific needs by selecting from the listed options and accessories.

As a general rule, Catalog# AV-3-101 is suitable for the widest range of applications. This basic version of the product uses 5 watt lamps 3" on center, and can provide uniform light on surfaces positioned as close as 2" from the fixture. Lamp sockets are attached with mounting screws, offering complete flexibility in every direction. This product features 20,000 hours of rated life and a pleasing 2,400°K color temperature.
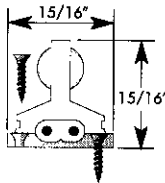
Lamp Spacing Guide

The lamp spacing necessary to create a uniform wash of light varies, depending upon the distance between the fixture and the surface to be illuminated. Follow our recommendations to achieve a uniform wash of light at the most distant lamp spacing possible. Using a closer lamp spacing will still provide a uniform wash, with an even greater amount of light striking the surface.
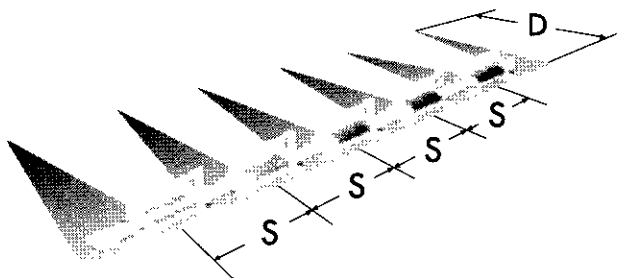
D= Where Uniform Light Begins

S= Lamp Spacing

D	RECOMMENDED SPACING
1.25"	No greater than 2.4" O.C.
2"	No greater than 3" O.C.
3"	No greater than 4" O.C.
4"	No greater than 6" O.C.

Lamp Style Guide

PART#: AV-101

5 WATTS

Our most popular lamp, the AV-101 meets the requirements of most applications with the ideal balance of lamp life/lumen output/color temperature.

VOLTS: 24   COLOR: 2,400°K
LUMENS: 40   HOURS: 20,000
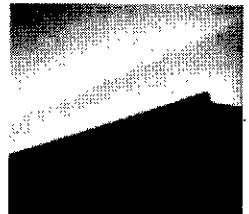
PART#: AV-102

8.5 WATTS

Provides a higher lumen output and color temperature for applications where more heat can be tolerated. Note this lamp is not for use with lens covers.

VOLTS: 24   COLOR: 2,600°K
LUMENS: 85   HOURS: 10,000
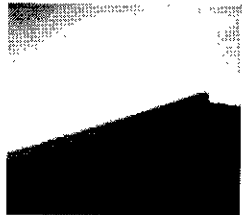
PART#: AV-103

3 WATTS

Provides lower color temperature and lumen output, while producing less heat.

VOLTS: 24   COLOR: 2,300°K
LUMENS: 13   HOURS: 20,000
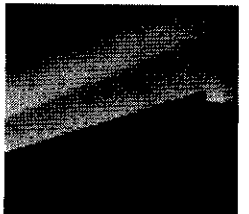
SPECIFY BY CATALOG NUMBER

AV-3-101-LNS

OPTIONAL

CODE	LAMP SPACING	CODE	LAMP STYLE	CODE	OPTIONS
2.4	2.4" O.C.	101	5 Watt	LNS	Lens Cover
3	3" O.C.	102	8.5 Watt	MC	Mounting Channel
4	4" O.C.	103	3 Watt	SR	Symmetrical Reflector
6	6" O.C.			AR	Asymmetrical Reflector
				BK	Black Finish

Options

Lens Covers

For applications where lamps need to be protected from direct contact, we offer a clear polycarbonate lens to shield each lamp. The ends of each lens are open, allowing the heat to vent. For use with 3 and 5 watt lamps only.
PART#: AV-LNS
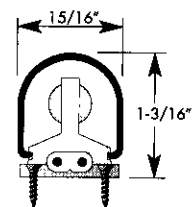
Mounting Channel

A rigid high-temperature plastic channel is available for applications with straight runs. The channel is screwed in place, and the lamp sockets snapped in. This ensures perfect linear integrity of the fixture and reduces installation time.
PART#: AV-MC
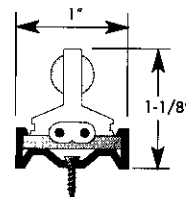
Symmetrical Reflector

For applications where a more concentrated beam of light is needed. These reflectors easily snap on to our existing sockets, with or without mounting channels, increasing light output toward the centerline of the fixture.

PART#: AVWH-REF-S (White)   **PART#: AVBK-REF-S** (Black)
NOT FOR USE WITH 2.4" LAMP SPACING
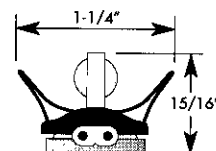
Asymmetrical Reflector

For shelves and cabinets where a more directional beam of light is needed. These reflectors also snap on to our existing sockets and channels, helping to deflect heat and reduce glare.

PART#: AVWH-REF-A (White)   **PART#: AVBK-REF-A** (Black)
NOT FOR USE WITH 2.4" LAMP SPACING
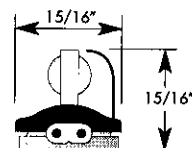
Black Finish

Although most Advantage is concealed behind moldings and ledges, there are many places where it also looks great exposed. We offer Advantage in a high-tech black finish to complement such applications.
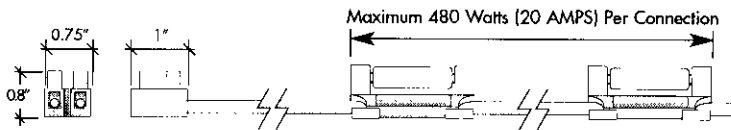
TOKISTAR
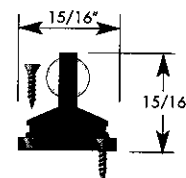
Connectors

### Terminal Block Connectors   PART#: AV-CONN

One end of this connector screws directly to the end of the Advantage fixture. The other end accepts AWG# 14, 12, or 10 wire. A hole is provided in the center of the connector for secure mounting.

Maximum 480 Watts (20 AMPS) Per Connection

0.75"   1"   0.8"

Mini Junction Box Connectors   PART#: AV-JBOX

If installation involves running wire through a building structure, special wiring methods to the fixture may be required by code. A miniature junction box is available with a 1/2"∅ knockout for use with conduit fittings.

Maximum 480 Watts (20 AMPS) Per Connection

3"   1.5"   Width = 1.9"
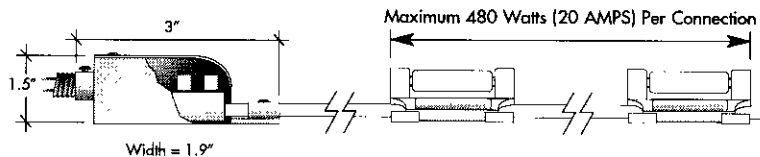
T-Connect System   PART#: AVWH-T-CONN (White)   PART#: AVBK-T-CONN (Black)

Here's a great convenience for applications in shelf, cabinet and showcase lighting. A main wiring harness can feed multiple fixtures (up to 480 watts) with the use of our T-connect system. Harnesses can be custom ordered with predetermined connector spacings, or easily created on site to exacting dimensions.
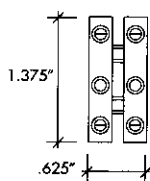
Male Receptacle   Female Receptacle   Assembled View

1.375"   .625"   1"   .625"   1.125"   1.375"   .625"
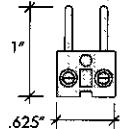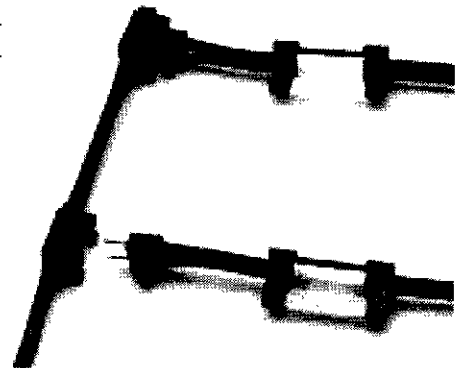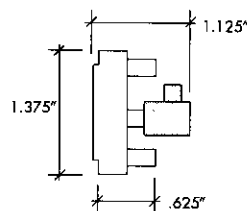
End Caps

Each length of Advantage is provided with a vinyl end cap as a protective insulation over the conductors at the end of a run.
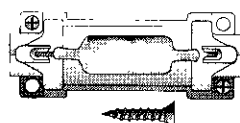
PART#: ECD-WH (White)
PART#: ECD-BK (Black)
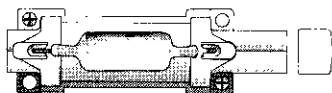
Mounting Screws

Each lamp socket has four mounting holes. Use two screws in opposing corners for secure mounting.
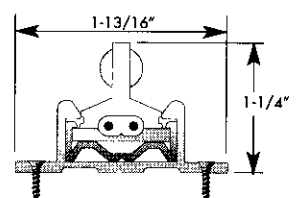
PART#: AV-MS

Channel Clamps

These clamps are for use with our AV-MC mounting channel. The clamps screw in place, and the channel snaps in.
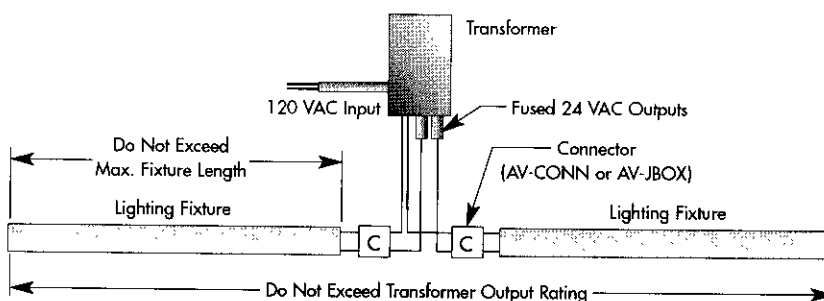
PART#: AV-CL

1-13/16"   1-1/4"

System Layout

When designing an Advantage Lighting System, consideration must be given to:
1. Maximum fixture length
2. Load of each transformer output
3. Total load of transformer
Longer runs of product can be operated by centrally locating the transformer and feeding fixtures to either side.

Maximum Fixture Size

The maximum capacity of a fixture must not exceed 20 amps (480 watts @ 24 volts). Run lengths exceeding these limitations will be provided in multiple fixtures, each requiring an independent feed running to the transformer. Additionally, fixtures using 3 watt lamps 4" and 6" O.C. are further restricted in size to prevent excessive voltage drop.

	Watts/Lamp Code		
	5 Watt/101	8.5 Watt/102	3 Watt/103
Maximum Lamps/Circuit	96 Lamps	56 Lamps	160 Lamps
Lamp Spacing	Maximum Lengths		
2.4" O.C.	19.2 FT.	11.2 FT.	32 FT.
3" O.C.	24 FT.	14 FT.	40 FT.
4" O.C.	32 FT.	18.6 FT.	48 FT.
6" O.C.	48 FT.	28 FT.	60 FT.

Transformers

Magnetic Transformers

Transformers are ETL Listed for use with lighting fixtures. These transformers are for use with 120 VAC/60 Hz input. The 24 volt secondary outputs are protected by inherent fuses, with a maximum rating of 20 amps. To determine the proper transformer, multiply the number of lamps by the watts per lamp. For larger transformers (T24-750 & T24-1000), consideration should be given to the maximum capacity of each fused output. Capacities shown are derated by 20%.

| Part#	Output(s)	Approximate Sizes and Weight			
		Depth	Height	Width	Weight
T24-100	1 @ 80 Watts	5"	7"	5"	10 lbs.
T24-150	1 @ 120 Watts	5"	7"	5"	12 lbs.
T24-250	1 @ 200 Watts	5"	7"	5"	16 lbs.
T24-300	1 @ 240 Watts	5"	7"	6"	16 lbs.
T24-500	1 @ 400 Watts	5 1\2"	8"	7"	20 lbs.
T24-600	1 @ 480 Watts	5 1\2"	8"	7"	20 lbs.
T24-750	2 @ 300 Watts	7"	9"	7"	28 lbs.
T24-1000	2 @ 400 Watts	7"	9 1/2"	9"	32 lbs.
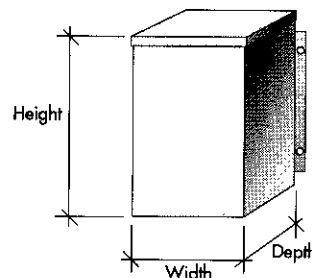
Electronic Transformers

Ideal for use where space is limited, we offer two sizes of electronic transformers. These feature auto-reset electronic and short circuit protection, and can be used with a standard incandescent dimmer. Electronic transformers require a minimum load of 50 watts.

Part#	Output(s)	Approximate Sizes and Weight			
		Depth	Height	Width	Weight
T24-150-E	1 @ 150 Watts	6.5"	1.4"	1.5"	1 lbs.
T24-300-E	1 @ 300 Watts	9.4"	1.4"	1.6"	1.5 lbs.
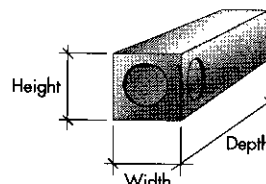
TOKISTAR

Tokistar's AV Channels are a perfect complement to our popular indirect lighting system. These aluminum profiles offer a convenient and attractive means to expand applications of Advantage in both concealed and exposed applications. A special snap-socket is supplied with Advantage when specified as an AV Channel System.
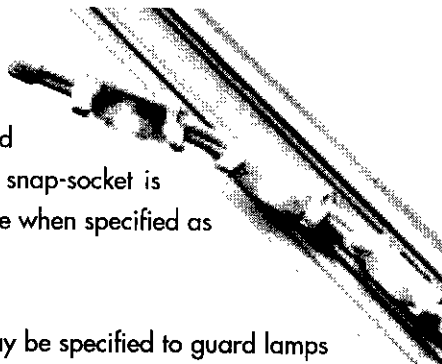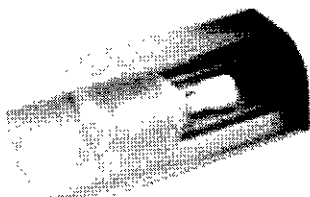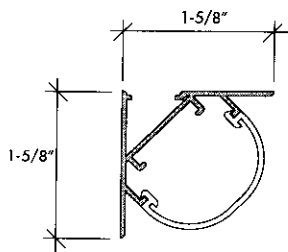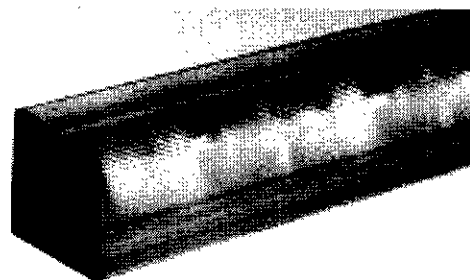
Optional lens covers may be specified to guard lamps from contact or add color. A kelvin-boosting lens is used to increase color temperature. Lens covers are for use with three and five watt lamps only.
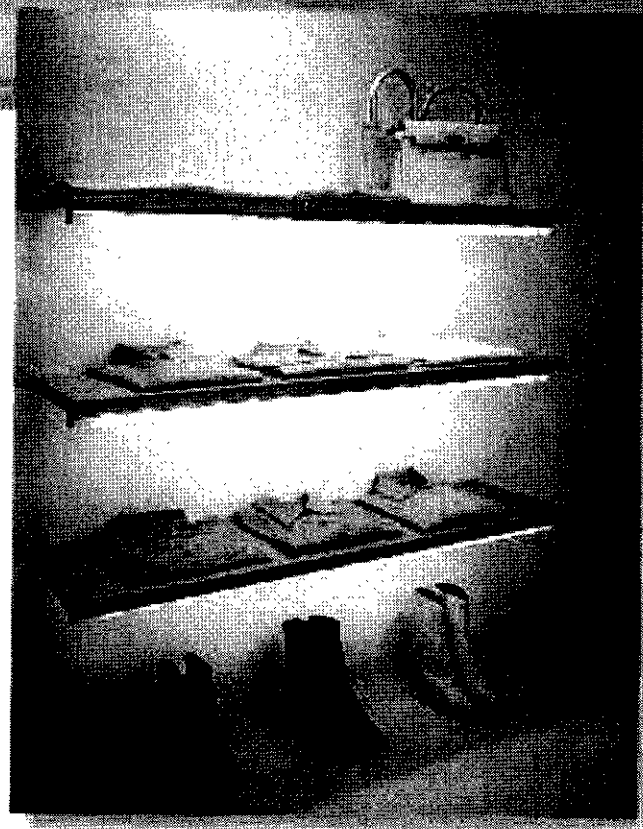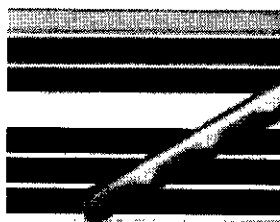
AVL Series Channel
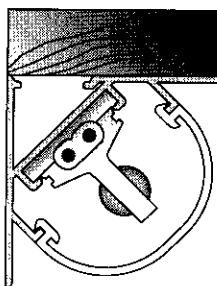
Attaches to the front edge of shelving, cabinetry, or anywhere a decorative fascia is required to conceal lamps and redirect light.

1-5/8"

1-5/8"

AVL Series End Caps

PART #	COLOR
AV-LEC-BK	BLACK
AV-LEC-WH	WHITE
AV-LEC-SV	SILVER

AV - LCH - SA - 4 - 101 - CL

OPTIONAL

CODE	MODEL
LCH	With Fascia
CH	Without Fascia

CODE	FINISH
SA	Satin Aluminum
WH	Powder-coat White
PA	Polished Aluminum
PG	Polished Gold

CODE	LAMP SPACING
3	3" O.C.
4	4" O.C.
6	6" O.C.

CODE	LENS COVER COLOR
CL	Clear
WH	White
RD	Red
BL	Blue
TL	Teal
GL	Gold
RS	Rose
LV	Lavender
KB	Kelvin Booster

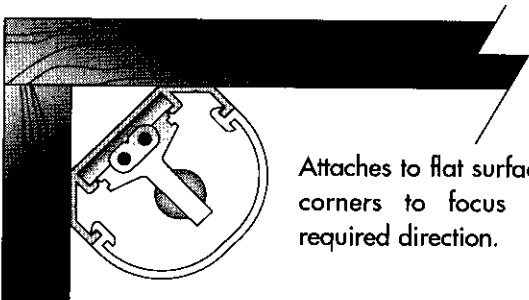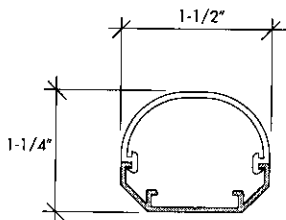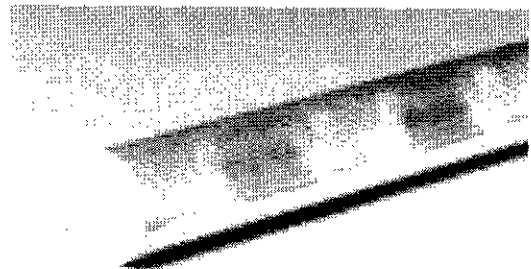| CODE	LAMP STYLE
101	5 WATT
103	3 WATT

AVC Series Channel

Attaches to flat surfaces, or in 90° corners to focus light in the required direction.

CHANNELS

1-1/2"

1-1/4"

AVC Series End Caps

PART #	COLOR
AV-EC-BK	BLACK
AV-EC-WH	WHITE
AV-EC-SV	SILVER

TOKISTAR

Material Specifications

24 Volt Xenon Lamps

Aluminum Reflector

Plated Copper Socket Contacts

Fiber-Reinforced PBT Socket
Flame Rating 94V-0

PVC Insulation Rated 105° C

AWG #12 Plated/Stranded Conductors

Safety Certification

Advantage Lighting Systems are ETL Listed to United States and Canadian Standards. Additionally, they bear the CE mark for conformance to European Standards. Maximum fixture loads are not to exceed 20 amps (480 watts @ 24 Volts).

C E 🅔🅛🅛 🅔🅛🅛

Heat Data

Fixtures

Light fixtures require adequate ventilation to dissipate heat.

In accordance with NEC/NFPA 70 Article 410-5:

"Fixtures shall be constructed, or installed, or equipped with shades or guards that combustible material will not be subjected to temperatures in excess of 90°C (194°F)."

To conform to this standard, Advantage Lighting Systems should be installed according to the minimum space requirements shown below.

Transformers

Transformers should be installed in accessible areas where there is free circulation of air. Transformers should not be installed in locations with restricted air flow or high ambient temperatures.
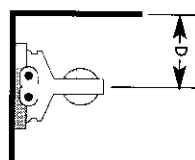
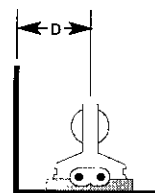#### Results Using Asymmetrical Reflectors

WATTS	MINIMUM DISTANCE (D)
3	0.5"
5	0.5"
8.5	0.5"
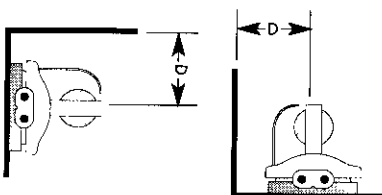
Results Using Basic System/Horizontal

WATTS	MINIMUM DISTANCE (D)
3	0.5"
5	1"
8.5	1.5"

Results Using Basic System/Vertical

WATTS	MINIMUM DISTANCE (D)
3	0.5"
5	0.5"
8.5	1"

Test Conditions Based Upon:

1. Ambient temperature of 30°C (86°F)   2. Minimum spacing of 2.4" for Basic System   3. Minimum spacing of 3" with Reflectors
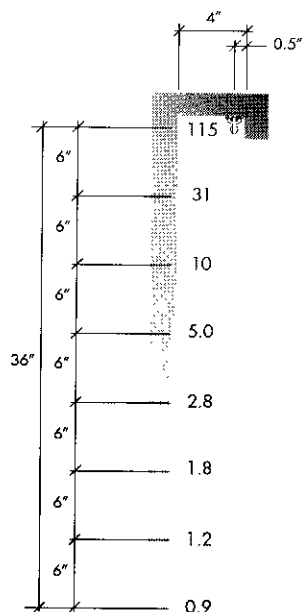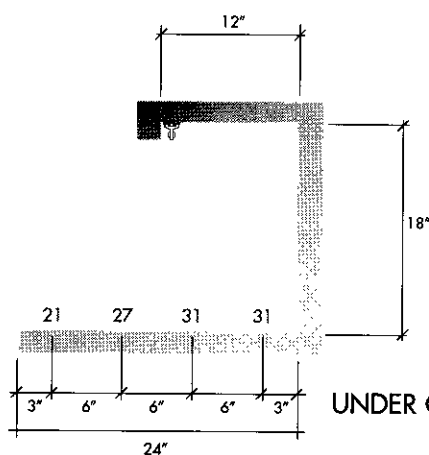
FOOTCANDLE SUMMARY

These sections show typical point-by-point footcandle values for three typical applications.
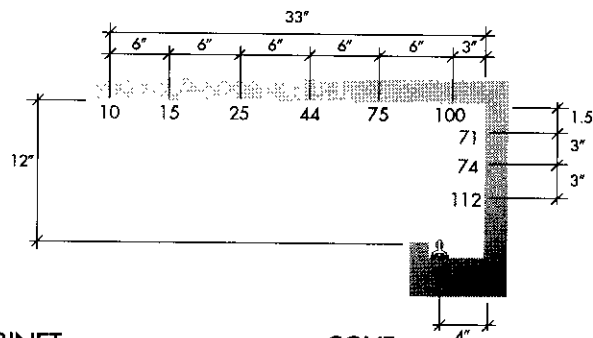Reflectance for each is as follows:
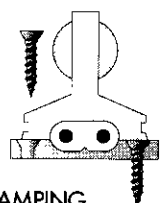Overhang = 50%; Under cabinet = 50%; Cove = 80%

OVERHANG

4"
0.5"
115
6" 31
6" 10
6" 5.0
36" 6" 2.8
6" 1.8
6" 1.2
6" 0.9

UNDER CABINET

12"
18"
12"
21 27 31 31
3" 6" 6" 6" 3"
24"

COVE

33"
6" 6" 6" 6" 6" 3"
10 15 25 44 75 100
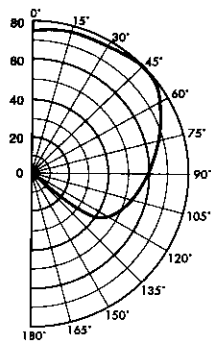71 1.5"
74 3"
112 3"
4"

CANDELA DISTRIBUTION
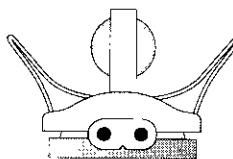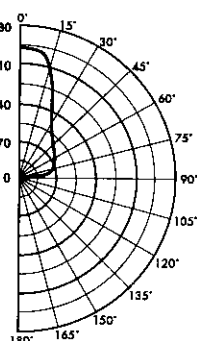CATALOG# AV-3-101

LAMPING
16 Ea. 5 Watt/40 Lumen
3" O.C. Spacing,
48" Total Length

CANDELA DISTRIBUTION
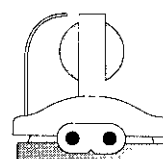CATALOG# AV-3-101-SR

LAMPING
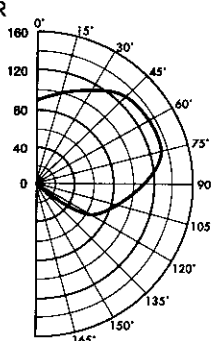16 Ea. 5 Watt/40 Lumen
3" O.C. Spacing,
48" Total Length

CANDELA DISTRIBUTION
CATALOG# AV-3-101-AR

LAMPING
16 Ea. 5 Watt/40 Lumen
3" O.C. Spacing,
48" Total Length

Conversion Factors

Lamp Wattage:
3.0 Watt, 12.5 Lumen Lamp (103), Multiply by 0.31
8.5 Watt, 85.0 Lumen Lamp (102), Multiply by 2.12

Lamp Spacing:
2.4" O.C., Multiply by 1.25
4.0" O.C., Multiply by 0.75
6.0" O.C., Multiply by 0.50

Photometrics by Lighting Research Laboratory, Orange, California.
Testing conducted in accordance with current IES published procedures.
IES formatted photometric data available on request.

TOKISTAR

TECHNICAL • PHOTOMETRICS
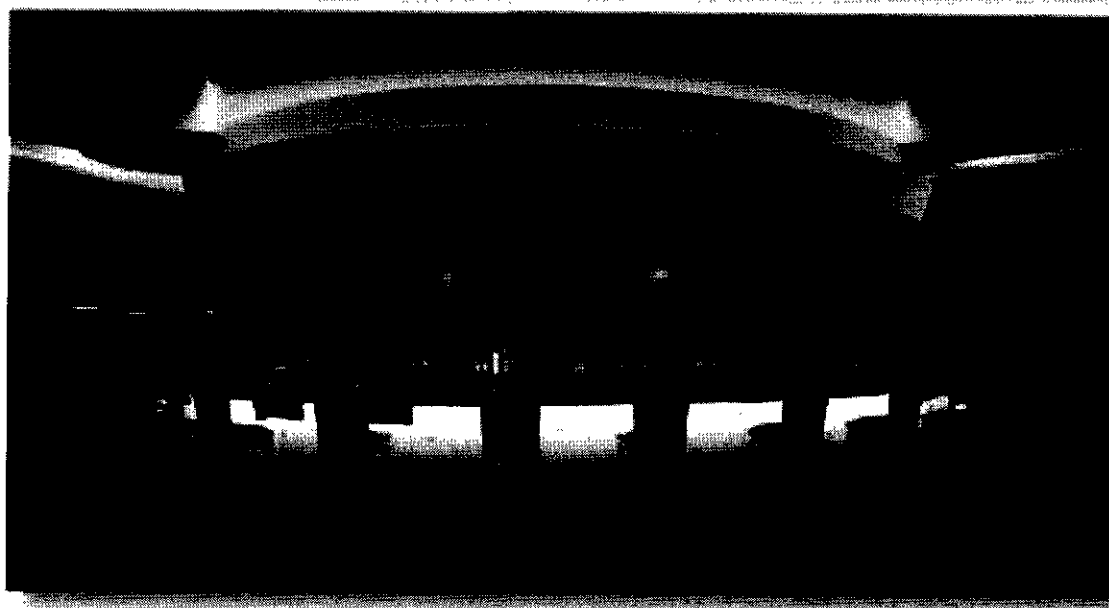
TOKISTAR LIGHTING™ INCORPORATED

1561 N. Gemini Place, Anaheim, CA 92801 U.S.A.
Phone (714) 772-7005 • FAX (714) 772-7014 • Toll Free In The U.S.A. (877) 340-7633
e-mail: info@tokistar.com • Web: www.tokistar.com

FORECASTER SERIES

OUTDOOR, SIGN LIGHT

OUTDOOR SIGN LIGHT

SPECIALTY APPLICATION

1 LAMP

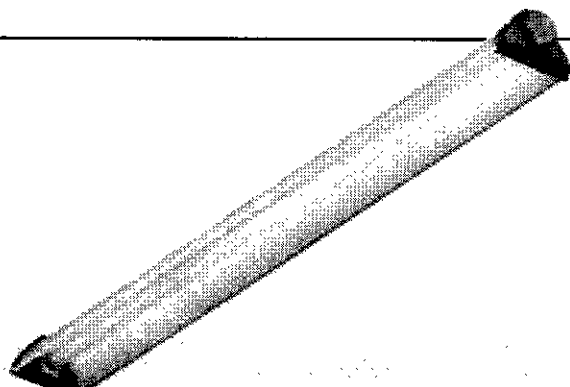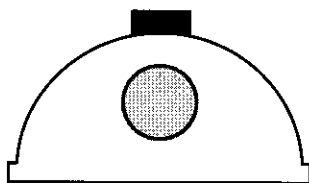## PRODUCT HIGHLIGHTS

- Heavy gauge, extruded aluminum, weatherproof housing
- Cast aluminum end caps
- Fixture can swivel 360°
- All hardware stainless steel
- Totally self-encapsulated weatherproof ballast for remote mounting in any location
- Perfect for signs, billboards, store fronts, service stations, walkways and parking areas

CONSTRUCTION

Anodized, extruded aluminum housing .062" thick. Heavy-gauge, die-cast aluminum ends screwed to housing. Die-cast aluminum junction boxes provided for continuous run or individual mounting.

SHIELDING

Clear, one-piece, extruded acrylic shield locks into a full-length groove. Stainless steel lens retaining brackets easily removed for re-lamping.

ELECTRICAL

All devices UL and CUL listed for wet and damp locations. Units accommodate either 800MA or 1500MA lamps.

FINISH

Reflective surface finished in high-gloss, baked, white, high reflectance enamel. Die-cast ends and junction boxes are natural aluminum.

PHOTOMETRIC DATA

For complete photometric data in IESNA format contact: www.lsi-midwest.com

ORDERING DATA

PREFIX	#LAMPS	LAMP DATA	BALLASTS	OPTIONS	VOLTAGE
FC	1	48 - 48" HO 48 - 48" 1500MA 72 - 72" HO 72 - 72" 1500MA 96 - 96" HO 96 - 96" 1500MA Note: For tandem configurations suffix above number with "-2"	HO - High Output 1500 - VHO - SHO - PG	UP-Uplight Mtg. (has weep holes in reflector for moisture)	120 - 120V 277 - 277V

EXAMPLE OF TYPICAL ORDER: **FC 1 48 HO 120**

JOB APPROVAL INFORMATION

FIXTURE TYPE ....

CAT# ....

FORECASTER SERIES

ENGINEERING DATA

END VIEW

3 1/4"

6"

1 LAMP

BACK PUNCHING

THREADED FITTING
FOR 7/8" CONDUIT

5 9/16"

1 1/4" REF.
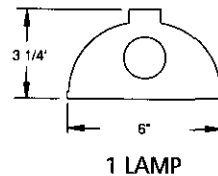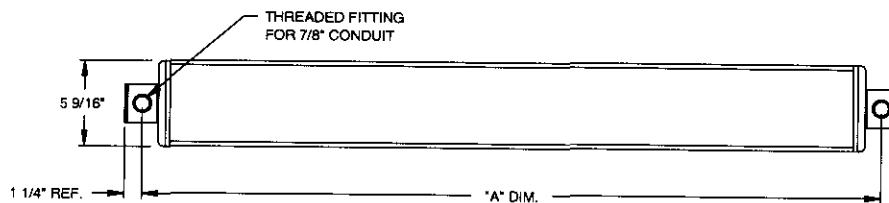
"A" DIM.

CATALOG NO.	"A" DIM.
FC-148HO, FC-148-1500	50 1/2"
FC-172HO, FC-172-1500	74 1/2"
FC-196HO, FC-196-1500	98 1/2"

**CONDUIT MOUNTING
AT EACH END**

AFV

Vertical Lamp
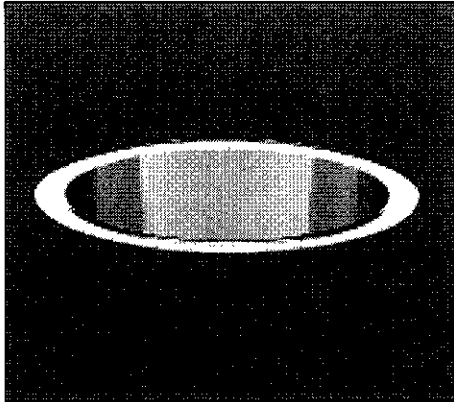
Intended Use

For general downlight applications that demand high efficiency and low aperture brightness.

Features

Optical System – Self-flanged, specular clear or semi-diffuse reflector or microgroove baffle with patented Vertisys® optical design (U.S. Patent No. 5,800,050). Baffle flange painted white. Lamp is visible before reflected lamp image. Lamp image reflects smoothly from top of reflector to aperture. Brightness control and efficiency are optimally balanced. Controlled anodizing process suppresses iridescence.

Electrical System – Rugged aluminum socket housing. Vertically mounted, positive-latch, thermoplastic socket. Class P, thermally-protected, high-power factor ballast mounted to the junction box.

Mounting – 16-gauge galvanized steel mounting/plaster frame with thru-wire junction box. Expandable, self-locking mounting bars provide horizontal and vertical adjustment.

Listings – UL Listed. CSA Certified. UL listed for thru-branch wiring, recessed mounting and damp locations.

> For product details and performance data, see the GOTHAM binder or the on-line catalog at *www.lithonia.com*.
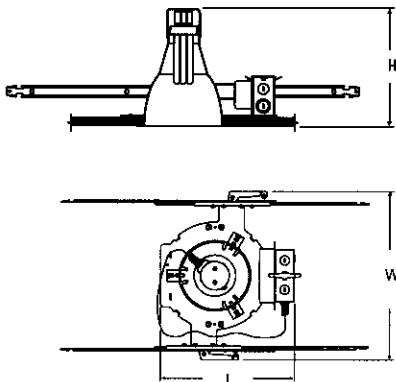
Ordering Information
Example: AFV 26TRT 6AR 120

Series	Wattage/lamp[1]	Aperture	Trim color	Finish	Lens type	Voltage	Options/Accessories
AFV	9TT	4[3]	AR Clear	(blank) Specular low iridescent	(blank) No lens	120	See pages 217-222
	13TT	5[4]	PR Pewter	LD Semi-diffuse low iridescent	CGL Clear glass lens	277	
	13DTT	6	UBR Umber		T73 Tempered prismatic lens	347	
	18DTT	8	WTR Wheat		CAL Clear acrylic lens		
	26DTT		CR Champagne gold[5]		A12 Prismatic acrylic lens		
	18TRT		GR Gold[5]		PCL Clear polycarbonate lens		
	26TRT		WR White painted[6]		PPC Prismatic polycarbonate		
	32TRT		MB Black microgroove baffle[6]				
	42TRT[2]		WB White microgroove baffle[6]				

NOTES:
1 Twin-Tube (TT); Double Twin-Tube (DTT); Triple-Tube (TRT).
2 Recommended for use in 8-inch aperture only.
3 Available in 13DTT, 18TRT and 26TRT.
4 Available in 18W, 26W and 32W TRT lamp only.
5 Not recommended for use with compact fluorescent lamps. Consult factory.
6 Not available with finishes.

ORDERING/PACKAGING OPTIONS – To accommodate the product's physical configuration as well as a range of customer handling and processing needs, two alternative ordering/packaging methods are available.

1) Standard Packaging (optimized form)
To order, use a single *master* catalog number.
Example: (13) **AFV 26TRT 6AR 120**

Fixtures ship as multiple components using *optimized* packaging. Example above ships as:

(Qty 13) **AFV 26TRT 6 120 HSG** (13 housing cartons)
(Qty 12) **AFV 6AR TRT TRIM J4** (3 cartons of 4 reflectors)
(Qty 1) **AFV 6AR TRT TRIM U** (1 carton of 1 reflector)

NOTES
1 13W DTT utilizes TRT trim. 42W TRT utilizes TT/DTT trim.
2 When TT or DTT trim is required, omit TRT from trim breakout. Example: AFV 6AR TRIM U.

2) Component Packaging
Order housings as unit pack, order trims as J4 or unit pack as per component order guide listed below.

Housing Only:
AFV wattage lamp type aperture voltage options HSG

Trim Only:
AFV aperture trim color finish TRT[1,2] TRIM U or J4

Drawings for dimensional detail only. May not represent actual mechanical configuration. Dimensions are shown in **inches** (centimeters) unless otherwise noted.

Catalog No.	Lamp	Height (H)	Length (L)	Width (W)	Aperture	Ceiling Opening	Overlap Trim
AFV 4	DTT, TRT	9-3/8 (23.3)	13 (33)	15-7/8 (40.3)	4-5/16 (11)	5-1/8 (13)	5-7/16 (13.8)
AFV 5	TRT	9-1/16 (23.0)	13-1/8 (33.3)	13-13/16 (35.1)	5 (12.7)	5-5/8 (14.3)	6-1/4 (15.9)
AFV5 MB	TRT	8-15/16 (22.7)	13-1/8 (33.3)	13-13/16 (35.1)	4-3/4 (12.1)	5-5/8 (14.3)	6-1/4 (15.9)
AFV 6	TT, DTT	10-13/16 (27.5)	12-15/16 (32.9)	15-13/16 (40.2)	6-1/4 (15.9)	6-7/8 (17.5)	7-1/2 (19.1)
AFV6 MB	TT, DTT	10-11/16 (27.1)	12-15/16 (32.9)	15-13/16 (40.2)	6-1/8 (15.6)	6-7/8 (17.5)	7-1/2 (19.1)
AFV 6	13DTT, TRT	9-5/8 (24.4)	12-15/16 (32.9)	15-13/16 (40.2)	6-1/4 (15.9)	6-7/8 (17.5)	7-1/2 (19.1)
AFV6 MB	13DTT, TRT	9-1/2 (24.1)	12-15/16 (32.9)	15-13/16 (40.2)	6-1/8 (15.6)	6-7/8 (17.5)	7-1/2 (19.1)
AFV8	TT, DTT, 42TRT	11-1/2 (29.2)	14 (35.6)	15-13/16 (40.2)	7-7/8 (20.1)	8-1/2 (21.6)	9-1/8 (23.2)
AFV8 MB	TT, DTT, 42TRT	11-1/2 (28.9)	14 (35.6)	15-13/16 (40.2)	7-3/4 (19.8)	8-1/2 (21.6)	9-1/4 (23.5)
AFV8	13DTT, TRT	10-5/16 (26.2)	14 (35.6)	15-13/16 (40.2)	7-7/8 (20.1)	8-1/2 (21.6)	9-1/8 (23.2)
AFV8 MB	13DTT, TRT	10-1/4 (26.0)	14 (35.6)	15-13/16 (40.2)	7-3/4 (19.8)	8-1/2 (21.6)	9-1/4 (23.5)