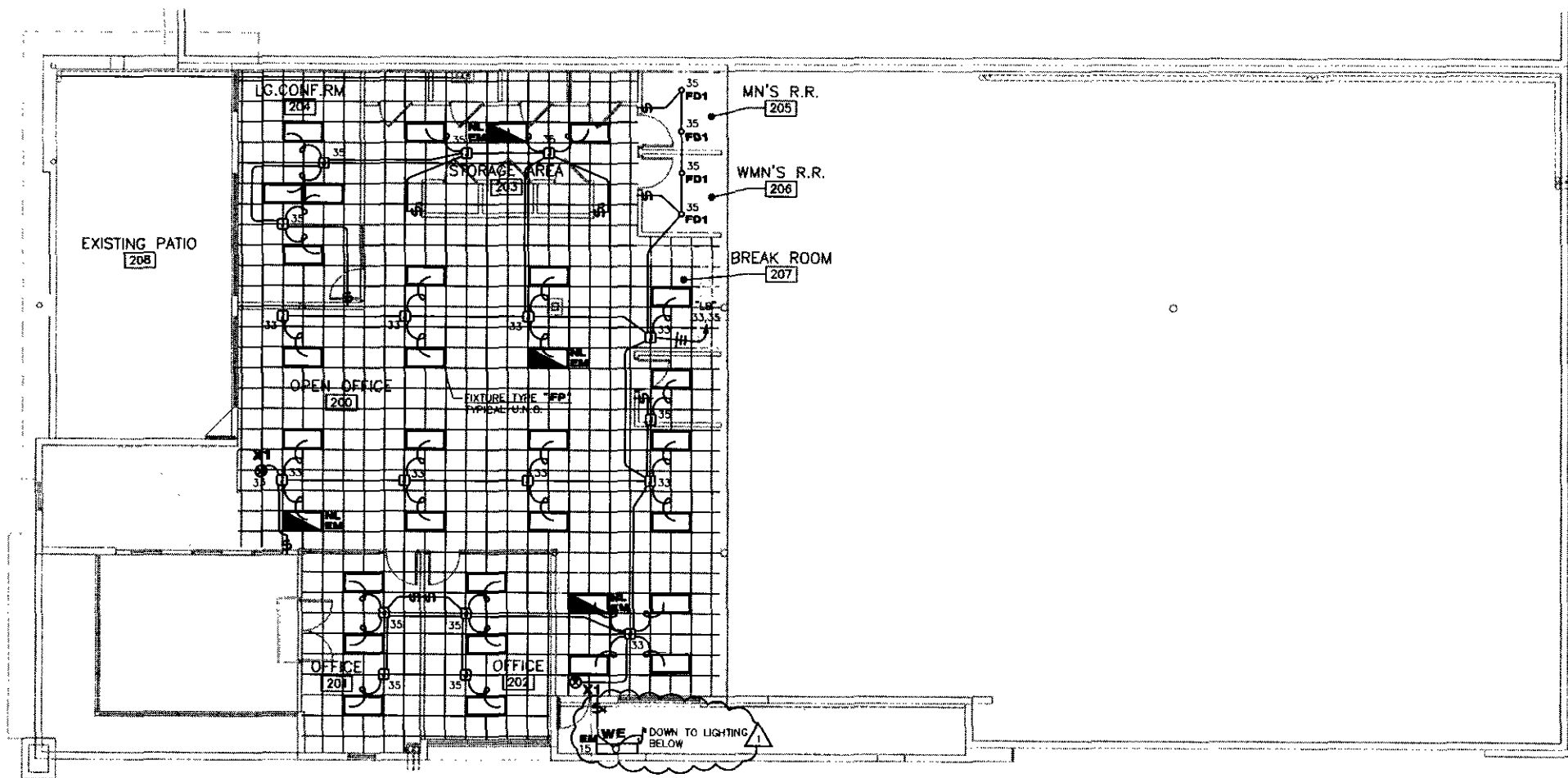




ELECTRICAL LIGHTING PLAN - SECOND FLOOR

SCALE: 1/8" = 1'-0"



TYPE:

CATALOG#:

IN FRONT ENTRY
CEILING CENTEREDP.2
PORTFOLIO

DESCRIPTION

A low brightness 6" diameter downlight for use with PAR30L (long neck) metal halide lamps. State of the art electronic ballast uses less input watts and current for energy savings and lower wiring costs, and also maintains the excellent CRI, color stability, and long life of ceramic MH lamps over a wide range of input voltage fluctuations and between multiple fixtures. The precisely formed non-imaging reflector ensures 45° cutoff to lamp and lamp image. The modular housing can also accept reflectors for ED-17 lamps, wall wash, and lensed application.

SPECIFICATION FEATURES

A—Reflector

Positive reflector mounting pulls trim tight to ceiling. 0.050" spun aluminum reflector has low iridescent finish available in a wide variety Alzak® finishes.

B—Trim Ring

High impact polymer with satin white finish or self-flanged reflector. Metal trim ring and rimless trim ring accessories available (See Options and Accessories).

C—Socket Cap

One piece heat dissipating die-cast aluminum.

D—Housing

Precision die-cast aluminum 1 1/2" (38mm) deep collar. Optical assembly adjusts to accommodate ceilings up to 3 1/2" (89mm) thick.

E—Universal Mounting Bracket

Accepts 1/2" EMT, C channel, T bar fasteners, and bar hangers (See Accessories). Provides 5" total vertical adjustment.

F—Conduit Fittings

Die-cast screw tight connectors.

G—Junction Box

Galvanized with (6) 1/2" and (2) 3/4" KOs. Listed for twelve #12AWG (six in, six out) 90°C conductors and feed through branch wiring.

H—Socket

4kV pulse rated medium base screw shell socket with extended husk to prevent insertion of enclosed fixture lamps.

I—Ballast

Thermally protected, Class A electronic ballast provides full light output and rated lamp life. Provides noise free operation and starting. Offers excellent line voltage regulation (±0.5% output variation with ±10% changes in line voltage) resulting in increased color stability and flicker free operation. Extended brown-out survival eliminates most lamp drop-outs caused by short term sags of input voltage. Ballast is warranted against defects in material and workmanship for three years from the date of shipment.

J—Insulation Detector

Self-resetting insulation detector opens circuit if insulation is improperly installed.

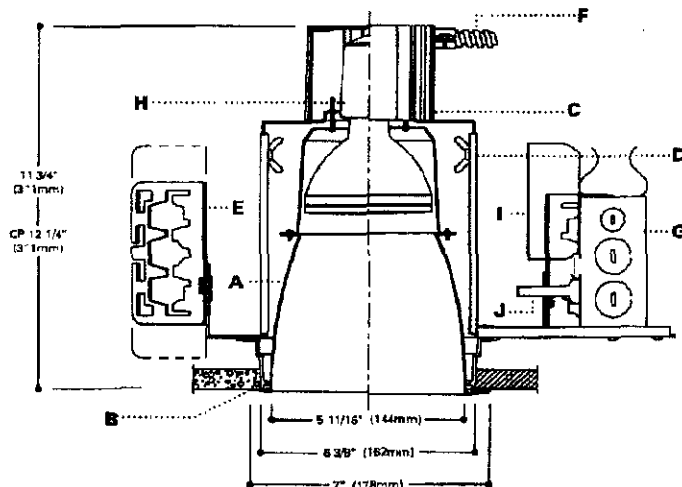
Labels

U.L. listed, C.S.A. certified, damp location, IBEW union made.

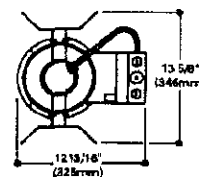
Options & Accessories

TRM—Metal Trim Rings to replace polymer trim ring

TRR—Rimless Trim Rings for minimal flange appearance in plaster ceilings



Top View



MD6xxE-6500

39-70W

PAR30

Electronic Metal Halide

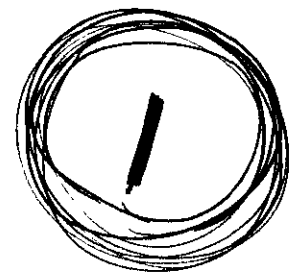
6" REFLECTOR

ENERGY DATA

Lamp: 39W MH
Input Watts: 120V-44W, 277V-46W
Max Current: 120V 0.57A, 277V-0.17A
Power Factor: >95%
T.H.D.: <10%
Min Starting Temperature: 5°F (-15°C)
Sound Rating: A

Lamp: 70W MH

Input Watts: 120V-78W, 277V-79W
Max Current: 120V 0.67A, 277V-0.28A
Power Factor: >95%
T.H.D.: <10%
Min Starting Temperature: 5°F (-15°C)
Sound Rating: A



NOTES: Accessories should be ordered separately.
For additional options please consult your Cooper Lighting Representative. Alzak is a registered trademark of Aluminum Company of America.

AS NOTED

ORDERING INFORMATION

SAMPLE NUMBER: MD6701E-6500LI

Complete unit consists of housing and reflector.

Housing	Ballast	Voltage	Reflector	Finish	Accessories
MD6					
MD6-6" MD6CP-6"	89=39W 70=70W	1E=120V ELEC 2E=277V ELEC	6500=Polymer Trim Ring 6501=Self Flanged	LI=Specular Clear H=Haze S=Straw WH=Wheat WMH=Warm Haze BB=Black Baffle WB=White Baffle See accessory sheet for additional finishes. For white painted flange on self flanged reflectors add WF to reflector finish.	Sloped Ceiling Adapter HSA-6-XX-Specify Slope Metal Trim Rings TRM6-P=White TRM6-MB=Black Rimless Trim Ring TRR6 HB28=28" long bar hangers HB50=50" long bar hangers RMB22=22" Long for Wood Joists Field-Installable Fuse Kits FK3=3 Amp (300V Max) FK5=5 Amp (300V Max) FK10=10 Amp (125V Max) Ceramic Metal Halide Lamps Z163=39PAR30/SP Z164=39PAR30/FL Z166=70PAR30/SP Z167=70PAR30/FL

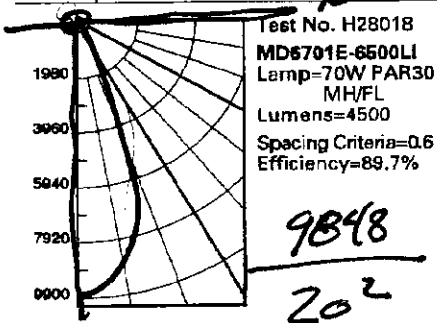
COOPER LIGHTING

ADP030537

MD6x-E-6500

PHOTOMETRICS

Candlepower Distribution



Candlepower

Deg.	CD
0	8848
5	9390
15	7230
25	1931
35	223
45	24
55	0
65	0
75	0
85	0
90	0

Average Luminance

Deg.	CD/SQ M
45	2070
55	0
65	0
75	0
85	0

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
5'6"	325	3'6"
6'6"	233	4'0"
8'	154	5'0"
10'	88	6'6"
12'	66	8'0"
14'	60	9'0"

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	3779	84.0	93.8
0-40	4015	89.2	99.4
0-60	4037	89.7	100.0
0-90	4037	89.7	100.0
90-180	0	0.0	0.0
0-180	4037	89.7	100.0

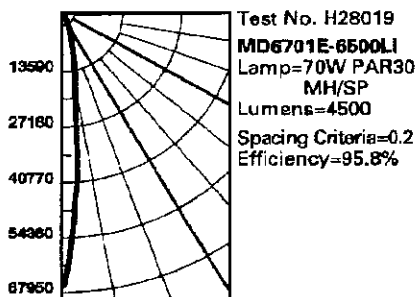
Coefficient of Utilization

rc	80%				70%				50%				30%				10%				0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	50	10	50	10	0			
RCA																					
0	107	107	107	107	104	104	104	100	100	95	95	92	92	90	89	87	85	84			
1	104	102	100	99	100	99	97	96	94	93	92	90	89	87	85	84	82	82			
2	101	88	85	83	96	94	92	94	90	87	86	88	87	85	84	82	82	80			
3	98	95	92	89	93	91	89	91	87	89	86	87	86	84	83	82	82	80			
4	96	91	88	86	91	89	86	89	85	87	84	86	84	83	82	82	80	80			
5	93	88	85	83	88	85	82	86	82	85	81	84	80	80	78	78	76	76			
6	91	86	83	81	86	82	80	84	80	83	79	82	79	78	77	76	76	74			
7	89	84	80	78	83	80	78	82	77	81	77	80	77	76	75	74	74	72			
8	86	81	78	76	81	78	75	80	75	79	75	79	75	74	73	73	72	72			
9	84	79	76	73	79	75	73	78	73	77	73	77	73	72	71	71	70	70			
10	82	77	74	72	77	74	71	76	71	75	71	75	71	70	69	69	68	68			

rc=Ceiling reflectance, rw=Wall reflectance, RCA=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

Candlepower Distribution



Candlepower

Deg.	CD
0	67543
5	35845
15	4015
25	438
35	128
45	8
55	0
65	0
75	0
85	0
90	0

Average Luminance

Deg.	CD/SQ M
45	690
55	0
65	0
75	0
85	0

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
6'6"	1589	1'0"
8'	1056	1'6"
10'	675	2'0"
12'	468	2'0"
14'	345	2'6"
16'	264	3'0"

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	4139	92.0	86.0
0-40	4297	95.5	99.7
0-60	4310	95.8	100.0
0-90	4310	95.8	100.0
90-180	0	0.0	0.0
0-180	4310	95.8	100.0

Coefficient of Utilization

rc	80%				70%				50%				30%				10%				0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	50	10	50	10	0			
RCA																					
0	114	114	114	114	111	111	111	106	106	102	102	98	98	98	98	96	96	96			
1	111	110	108	107	108	106	105	104	102	100	99	97	96	97	96	95	95	95			
2	109	106	104	102	105	103	101	102	99	99	97	97	95	97	95	94	94	94			
3	107	104	101	99	102	100	98	100	97	96	95	95	93	96	94	93	93	93			
4	105	101	98	96	100	98	96	98	95	97	94	95	93	96	93	92	92	92			
5	103	99	96	94	98	96	94	97	93	96	92	94	91	96	92	91	91	91			
6	102	97	95	93	97	94	93	96	92	95	91	94	91	95	91	90	90	90			
7	100	96	93	91	95	93	91	94	91	94	90	93	90	94	90	89	89	89			
8	99	94	92	90	94	91	90	93	89	92	89	92	89	93	89	88	88	88			
9	97	93	91	89	93	90	88	92	88	92	88	91	88	93	88	87	87	87			
10	96	92	89	88	92	89	88	91	87	91	87	90	87	92	87	86	86	86			

rc=Ceiling reflectance, rw=Wall reflectance, RCA=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

Note: Specifications and Dimensions subject to change without notice.

Visit our website at www.cooperlighting.com

TYPE:

CATALOG#:

DESCRIPTION

A low brightness 9" aperture "emergency" downlight with self-contained battery pack for use with (2) 42W, 32W or 26W Triple Tube 4-pin compact fluorescent lamps. The internally mounted test switch indicator light is aesthetically neutral and easier to install than the traditional externally mounted test switch. The precisely formed non-imaging reflector ensures a 55° cutoff to lamp and lamp image. Standard features include low iridescent finish on all reflector colors to eliminate "rainbowing", and venting to ensure maximum lamp life and lumen output. The fixture optics provide unparalleled performance in glare free lighting with a smooth beam devoid of hot spots.

SPECIFICATION FEATURES

A--Reflector

Positive reflector mounting pulls trim tight to ceiling. 0.050" spun aluminum reflector has low iridescent finish available in a wide variety of Alzak® finishes.

SPECIFICATION FEATURES

B--Trim Ring

High impact polymer with satin white finish or self-flanged reflector.

C--Socket Cap

One piece heat vented die-cast aluminum socket cap for maximum thermal performance.

D--Housing

Precision die-cast aluminum 1 1/2" (38mm) deep collar. Optical assembly adjusts to accommodate varying dimensions of ceiling materials.

E--Universal Mounting Bracket

Accepts 1/2" EMT, C channel, T bar fasteners, and bar hangers (See Accessories). Provides 5" total vertical adjustment.

F--Conduit Fittings

Die cast screw tight connectors.

G--Junction Box

Accessible from below ceiling by removing trim. Galvanized with (6) 1/2" and (2) 3/4" Kos. Listed for eight #12AWG (four in, four out) 90°C conductors and feed through branch wiring.

H--Socket

4-pin GX24q3/q4 base with fatigue free stainless steel lamp spring to ensure positive lamp retention.

I--Ballast

Thermally protected, fused, encased and potted Class A electronic ballast provides full light output and rated lamp life. Provides flicker free and noise free operation and starting. End of lamp life protection is standard.

J--Test Switch Assembly
Internal test switch/indicator light is visible and accessible without removing trim. Adjusts after installation for ceilings up to 2" thick.

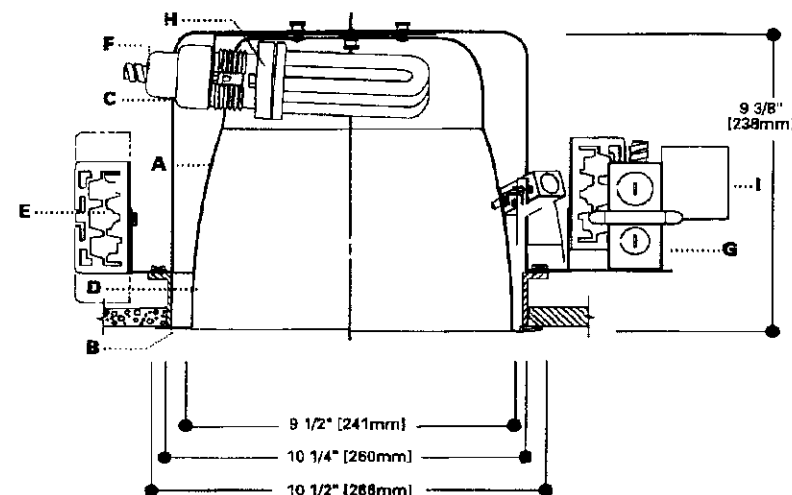
K--Emergency Ballast
Sealed Ni-Cad battery powers lamp for 90 minutes of emergency operation.

Insulation Detector

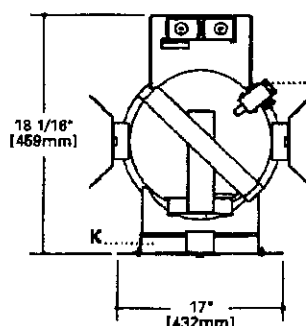
Thermal protection deactivates unit if improper lamp type or wattage is used, or if insulation is placed too close to fixture.

Labels

U.L. listed, C.S.A. certified, standard damp label, IBEW union made.



TOP VIEW



ORDERING INFORMATION

SAMPLE NUMBER: C9242EIEIEM-9250ELI

Complete unit consists of housing, ballast and trim.

Housing	Ballast	Trims	Finish	Accessories*
C9242				
C9242= (2) Horizontal 42/32/26W Triples	EIEIEM=120V through 277V Electronic ballast with self-contained emergency battery pack and internally mounted test switch/indicator light 10EIEIEM=120V Dimming ballast version 20EIEIEM=277V Dimming ballast version EIEIEM2C=(2) Electronic ballasts for dual level switching	9250E=Reflector with white polymer trim *Change last 0 to 1 for self flanged reflector. For white painted flange - add WF to finish.	L=Specular Clear, Low Iridescent H=Haze S=Straw WH=White B=Black BB=Black Baffle WB=White Baffle W=White Gloss	HB26=24" Long Bar Hangers HB50=48" Long Bar Hangers RM52=Wood Joist Mounting Bars Please consult a Cooper Lighting representative for additional options, accessories and finishes.

PORTFOLIO

ED7

C9242EIEIEM-9250E

(2) 26 W Triple
(2) 32 W Triple
(2) 42 W Triple
Compact Fluorescent

9 1/2" OPEN
SELF-POWERED
EMERGENCY
DOWNLIGHT

(2) 42W Triple 4-pin

Ballast: Electronic
120V Input Watts: 102.0
Line Amps: 0.60
277 Input Watts: 102.0
Line Amps: 0.26
Inrush Amps: 0.28
Power Factor: >.99
THD: <10%
Min. Starting Temp: -10°C (15°F)
Sound Rating: A

(2) 32W Triple 4-pin

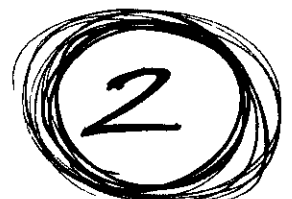
Ballast: Electronic
120V Input Watts: 69
Line Amps: 0.58
277 Input Watts: 69
Line Amps: 0.26
Power Factor: >.99
THD: <10%
Min. Starting Temp: -10°C (15°F)
Sound Rating: A

(2) 26W Triple 4-pin

Ballast: Electronic
120V Input Watts: 55
Line Amps: 0.46
277 Input Watts: 55
Line Amps: 0.21
Power Factor: >.99
THD: <10%
Min. Starting Temp: -10°C (15°F)
Sound Rating: A

NOTES:

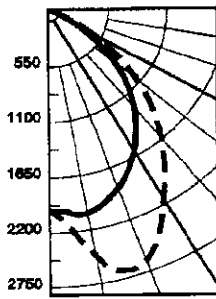
Accessories should be ordered separately.
For additional options please consult factory.
Alzak is a registered trademark of Aluminum Company



ADP022835

PHOTOMETRICS

Candlepower Distribution



Test No. H40019
C9242-9250LI
Open Reflector
 Lamp=(2) 42W PLT
 Lumens=3200 each
 Spacing Criteria=
 0°=1.2 90°=1.4
 Efficiency=68.1%

— 0°
 --- 90°

Candlepower

Deg.	CD 0°	90°
0	2040	2040
5	2045	2170
15	1928	2627
25	1824	2450
35	1450	1922
45	1121	1382
55	492	556
65	19	18
75	7	6
85	2	1
90	0	0

Average
Luminance

Deg.	CD/SQ.M 0°	90°
45	34854	42723
65	18750	21188
65	983	931
75	591	507
85	502	251

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
5'6"	87	8'0"
6'6"	48	9'6"
8'0"	32	11'8"
10'0"	20	14'8"
12'0"	14	17'0"
14'0"	10	20'0"

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

Lamp Multiplier:

Reflector
Multiplier:
Haze=.98
Straw=.99
Wheat=.95

EM Mode
Multiplier:
=.12

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	1874	29.3	43.0
0-40	2948	48.1	87.6
0-60	4330	67.7	99.3
0-90	4359	68.1	100.0
90-180	0	0.0	0.0
0-180	4359	68.1	100.0

Note: A single 42w lamp operates in emergency mode at 775 lumens.

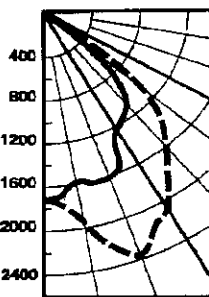
Coefficient of Utilization

rc	80%				70%				50%				30%				10%				0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	0
RCR																					
0	81	81	81	81	79	79	79	76	76	72	72	70	70	68	68	68	64	64	63	63	63
1	77	75	73	71	73	72	70	71	68	68	66	66	64	64	62	58	58	58	58	58	58
2	73	69	66	64	68	65	63	66	61	64	60	62	58	58	58	58	58	58	58	58	58
3	68	64	60	57	63	60	56	61	56	59	55	58	54	54	54	54	54	54	54	54	54
4	64	59	54	51	58	54	51	56	50	55	50	54	49	48	48	48	48	48	48	48	48
5	60	54	48	46	53	49	46	52	46	51	45	50	45	45	45	45	45	45	45	45	45
6	58	49	45	42	49	45	41	48	41	47	41	46	40	40	40	40	40	40	40	40	40
7	52	45	40	37	45	40	37	44	37	43	36	42	36	36	36	36	36	36	36	36	36
8	49	41	36	33	41	36	33	40	33	39	33	39	33	33	33	33	33	33	33	33	33
9	45	38	33	30	37	33	30	38	29	36	29	35	29	29	29	29	29	29	29	29	29
10	42	34	30	27	34	30	26	33	26	33	26	33	26	26	26	26	26	26	26	26	26

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

Candlepower Distribution



Test No. H40014
C9232-9250LI
Open Reflector
 Lamp=(2) 32W PLT
 Lumens=2400 each
 Spacing Criteria=
 0°=1.1, 90°=1.5
 Efficiency=81.1%

— 0°
 --- 90°

Candlepower

Deg.	CD 0°	90°
0	1711	1711
5	1676	1782
15	1672	2207
25	1583	2086
35	1246	1696
45	1027	1296
55	582	739
65	13	15
75	5	5
85	0	0
90	0	0

Average
Luminance

Deg.	CD/SQ.M 0°	90°
45	31748	40064
55	22180	28164
65	672	776
75	422	422
85	0	0

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
5'6"	57	8'0"
6'6"	40	9'6"
8'0"	27	12'0"
10'0"	17	14'6"
12'0"	12	17'6"
14'0"	9	20'6"

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

Reflector
Multiplier:
Haze=.95
Straw=.99
Wheat=.95

EM Multiplier
(In emergency
mode)
EM=.14

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	1594	33.2	40.9
0-40	2528	52.7	64.9
0-60	3873	80.7	99.5
0-90	3893	81.1	100.0
90-180	0	0.0	0.0
0-180	3893	81.1	100.0

Note: A single 32w lamp operates in emergency mode at 650 lumens.

Coefficient of Utilization

rc	80%				70%				50%				30%				10%				0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	0
RCR																					
0	97	97	97	97	94	94	94	90	90	88	86	83	83	81	81	81	81	81	81	81	81
1	91	89	87	85	87	85	83	84	81	91	78	78	76	74	74	74	74	74	74	74	74
2	88	82	78	75	80	77	74	78	73	76	71	73	70	68	68	68	68	68	68	68	68
3	81	75	71	67	74	70	66	72	65	70	64	68	63	62	62	62	62	62	62	62	62
4	76	69	64	60	68	63	60	66	59	65	58	63	58	56	56	56	56	56	56	56	56
5	71	63	58	54	63	57	54	61	53	60	53	58	52	51	51	51	51	51	51	51	51
6	66	58	52	48	57	52	48	56	48	55	47	53	47	46	46	46	46	46	46	46	46
7	61	52	47	43	52	48	42	51	42	50	42	49	42	41	41	41	41	41	41	41	41
8	57	48	42	38	47	42	38	46	38	45	38	45	37	36	36	36	36	36	36	36	36
9	53	43	38	34	43	37	34	42	34	41	33	41	33	32	32	32	32	32	32	32	32
10	49	40	34	30	39	34	30	38	30	38	30	37	30	29	29	29	29	29	29	29	29

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

Note: Specifications and Dimensions subject to change without notice

Visit our website at www.cooperlighting.com

COOPER LIGHTING - SURE-LITES®

DESCRIPTION

The CCX Series Contractor's Choice Exit is an economical, yet attractive, alternative to metal exits. Its contemporary round corner styling, designer white finish, and consistent family appearance enables it to blend with any decor. The tough injection molded polycarbonate materials resist discoloration due to age and ultraviolet radiation. The structural components are made even stronger with reinforcing ribs throughout. All components, including chevron directional indicators, are of snap-fit construction to facilitate installation; reliable and labor-saving push-in AC connectors are standard to further improve the installation time. The under 5-minute installation time of the CCX Series Exit makes it the fastest installed exit on the market today. All integral wiring connections are performed at the factory to reduce installation time. The low profile exit housing and matching power pack with heads offer a highly functional, yet aesthetically pleasing combination; it also incorporates molded internal wireways to route internal wiring and connections, thus avoiding undesirable shadowing of the exit legend.

SPECIFICATION FEATURES

Electrical

Dual Voltage Input 120/277 VAC, 60Hz

Line-latching

Solid-state Voltage Limited Charger

Solid-state Switching

Brownout Circuit

Low Voltage Disconnect

Overload/Short Circuit Protection

Test Switch / Power Indicator Light

Push-in AC power connectors facilitate installation

Housing Construction

All components are injection molded, color stable, high impact UL 94-5V rated polycarbonate material

Designer white textured finish standard

Components are of snap-fit construction to facilitate under 5-minute installation

Reinforcing ribs throughout to provide maximum strength

Molded-in wireways facilitate internal wire routing and connections

Snap-out chevron directional indicators have full 3/4" stroke

Universal face available

Exit can be surface or ceiling mounted

Universal J-box mounting pattern

Battery

Sealed Lead Calcium

Maintenance Free, Long Life

Full Recharge Time, 24 hrs. (max.)

Code Compliance

UL 924 Listed

Life Safety NFPA 101

CSA Certified

NEC/OSHA

Most State and Local Codes

Catalog #

Project

Comments

Prepared by

Type

Date

X3

Warranty

Exit - 1 Year

Battery - 5 year pro-rata (Lead Calcium)

Head / Lamp Data

AC LED: Long life LED lamp modules provide uniform diffused illumination

DC, Exit: Two 6V, 3.6W DC lamps

Heads: Two 6V, 9W PAR38 style lamps. "DH" must be specified in catalog number

Optional square and MR18 heads available



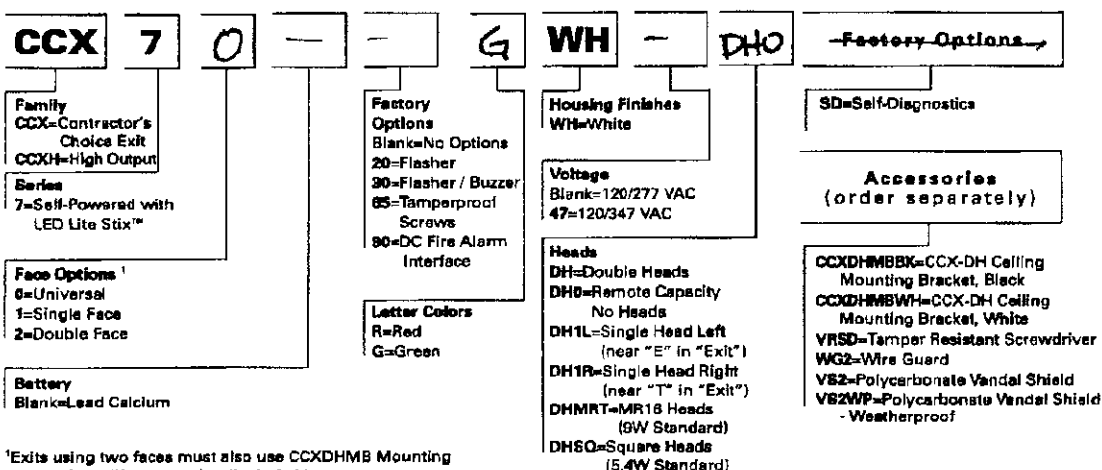
CCX/CCXH SERIES

CONTRACTOR'S CHOICE
POLYCARBONATE EXIT
SELF-POWERED
EMERGENCY WITH
DOUBLE HEADS
LED LAMPS

Exit Lighting

ORDERING INFORMATION

SAMPLE NUMBER: CCX71RWHDH



*Exits using two faces must also use CCXDHMB Mounting Bracket for ceiling mounting (Included in Universal and Double Face configurations).

ENERGY DATA

Charge Mode (Discharged Battery): Sealed Lead Calcium Battery

LED Exits - Red

Input Power:

120V = 12.6W

277V = 13.2W

347V = 7.0W

Input Current (Max.):

120V = .11A

277V = .05A

347V = .09A

Power Factor:

120V = >.97

277V = >.91

T.H.D.:

120V = <39%

277V = <42%

LED Exits - Green

Input Power:

120V = 15.8W

277V = 15.4W

347V = 8.4W

Input Current (Max.):

120V = .14A

277V = .06A

347V = .06A

Power Factor:

120V = >.97

277V = >.96

T.H.D.:

120V = <25%

277V = <29%

Standby Mode (Fully Charged Battery):

Sealed Lead Calcium Battery

Input Power consumption is reduced by approximately 5 watts in the standby operating mode.

TECHNICAL DATA**Wattage Ratings**

CCXDH	Lead Calcium=27W for 1 1/2 hrs.; 24W for 2 hrs.
CCXHDH	Lead Calcium=32W for 1 1/2 hrs.

Lamps

Self-Powered LED versions of the CCX Series Exits with heads use energy efficient, long life LED Lite Stix™ to provide uniform diffuse illumination of the exit face. These LED modules require no maintenance and consume a total of 2 watts. The low operating costs and zero maintenance requirement makes LED lamps the wisest choice for exit signs today. Emergency exit illumination is provided by two 6V, 3.6W incandescent wedge base, or MR16 lamps. The emergency lighting heads employ 6V, 9W DC lamps (Lead Calcium).

Housing Construction

Rugged, durable, injection molded polycarbonate materials are used throughout the CCX Series Exits. All structural components are designed with reinforcing ribs to add additional rigidity and to maximize structural integrity. These materials are impact and scratch resistant, and they resist discoloration due to age and ultraviolet radiation. All components are designed to be of snap-fit construction - no mechanical fasteners - to facilitate installation in under 5-minutes. Any components required for installation (wirenuts, wire leads, etc.) are all included with each exit. The battery and electronics are contained within the emergency power pack.

Lens

Lenses for Self-Powered LED versions of CCX Series Exits with heads are made from durable impact resistant polycarbonate. They are available in both stencil face with EXIT legend and open face versions with special wording; letter colors are restricted to red and green only. All exit faces are designed with full 3/4" stroke snap-out chevron directional indicators to insure maximum visibility and compliance with the latest codes.

Line-Latched

Sure Lites' line-latched electronic circuitry makes installation easy and economical. A labor efficient AC activated load switch prevents the lamps from turning on during installation to a non-energized AC circuit. Line-latching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is turned on.

Solid-State Charger

Supplied with a 120/277 VAC, voltage regulated solid-state charger. Immediately upon restoration of AC current after a power failure, the charger provides a high charge rate. The charge circuit reacts to the condition of the battery and regulates the charging process in order to maintain peak battery capacity and maximize battery life. Solid-state

construction recharges the battery following a power failure in accordance with UL 924.

Overload and Short Circuit Protection

The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

Brownout Circuit

The brownout circuit on Sure-Lites exits monitors the flow of AC current to the exit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Solid-State Transfer

The CCX Series Exit incorporates solid-state switching which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC voltage and automatically energizes the lamps using DC power. Upon restoration of AC power, the

DC power will be disconnected and the charger will automatically recharge the battery.

Low Voltage Disconnect

When the battery's terminal voltage falls below 80% of the rated voltage, the low voltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

Test Switch/Power Indicator Light

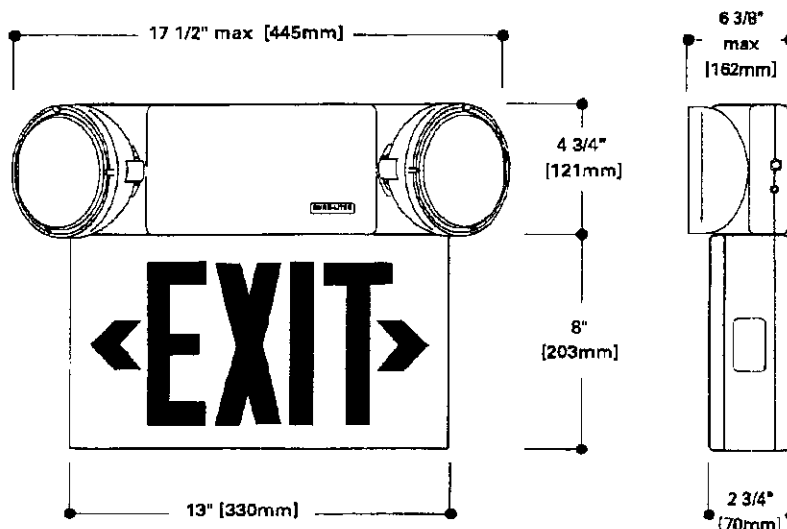
A test switch located on the bottom of the exit permits the activation of the emergency circuit for a complete operational systems check. The Power Indicator Light provides visual assurance that the AC power is on.

Sealed Lead Calcium Battery

The fully sealed, long life, maintenance free lead calcium battery is ideal for emergency lighting applications. These recombinant cycle batteries typically provide 8 to 10 years of life and may be operated in any position.

Warranty

All Sure-Lites products are backed by a firm one year warranty against defects in material and workmanship. Maintenance free, long life, sealed lead calcium batteries carry a five-year pro-rata warranty.

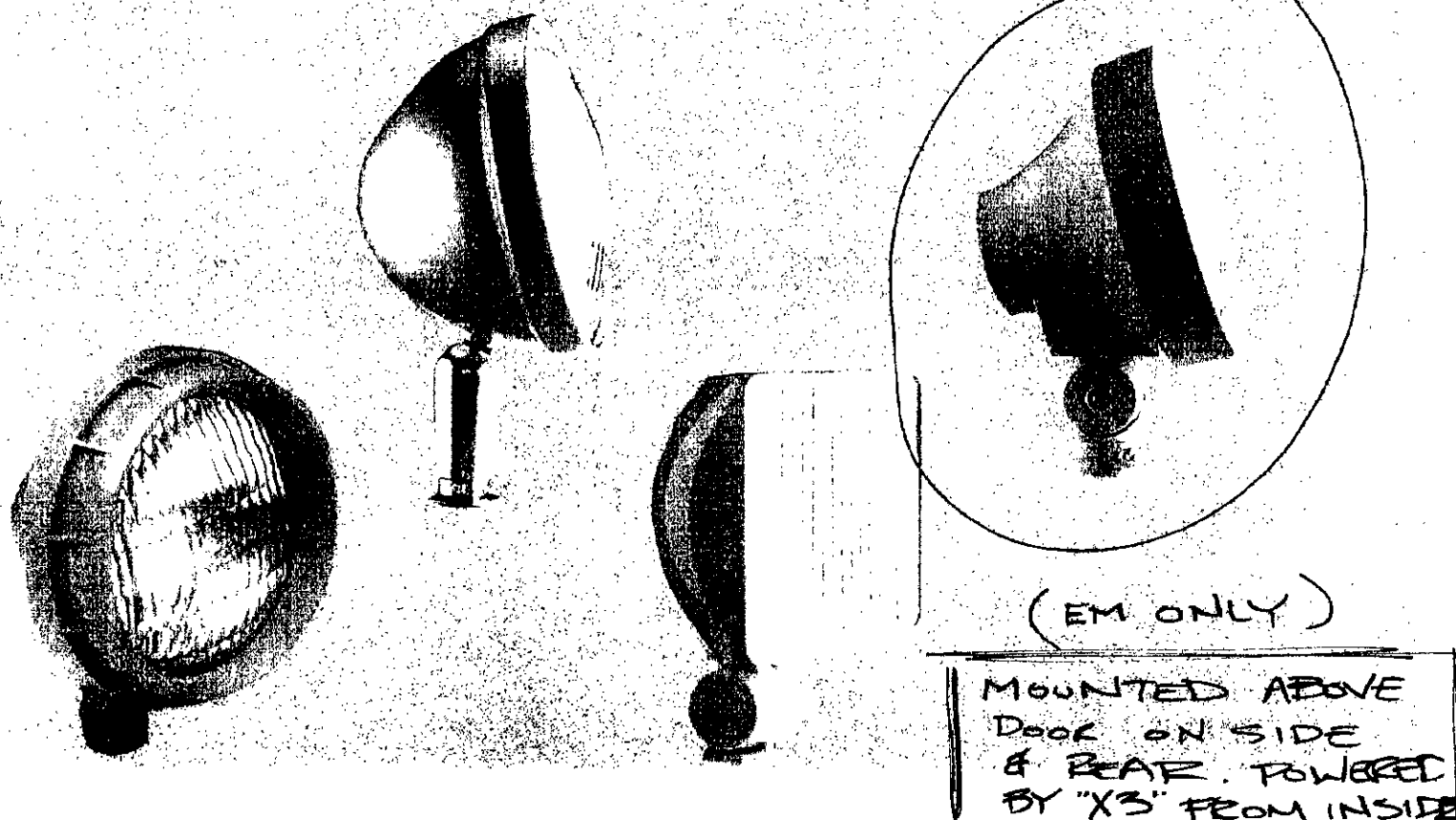


NOTES: See option/accessories or technical sections for additional detailed product data. Specifications and Dimensions subject to change without notice.

ISOLITE

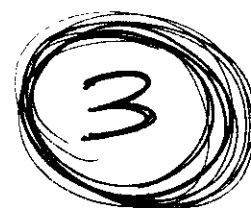
Remote Lamp Heads

6 & 12 Volt Sealed Beam or T-5 Wedge Base

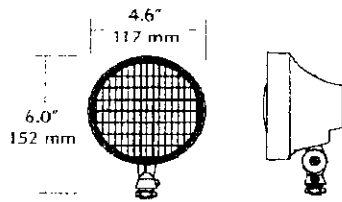


Thermoplastic, polycarbonate and metal chrome lamp heads available in a variety of wattages

- Impact resistant, UL 94 V-0 thermoplastic, polycarbonate or chrome-plated steel
- Thermoplastic and polycarbonate lamp heads available in white, black or tan
- Industrial type heads are fully gasketed and are available with optional shatter-proof shield
- Lamps easily replaceable by removing snap ring or ring bezel
- Available with tungsten or halogen lamp sources
- Listed by UL to the UL 924 standard, meets NFPA Life Safety Code 101



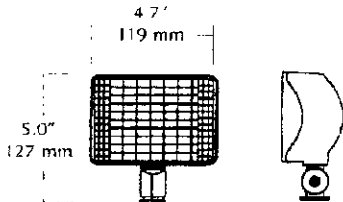
Thermoplastic Wedge Base Round Head



THERMOPLASTIC WEDGE BASE ROUND

THERMOPLASTIC WEDGE BASE ROUND			CATALOG NUMBER			REPLACEMENT LAMP NO.
			THERMOPLASTIC			
	VOLTAGE	WATTAGE	BEIGE	WHITE	BLACK	ISOLITE NO
TUNGSTEN	6-VOLT	5.4	DPA	WPA	BPA	19-2-54
		7.2	DPD	WPD	BPD	19-2-58
		9.0	DPB	WPB	BPB	19-2-45
	12-VOLT	9.0	DPC	WPC	BPC	19-2-53
		12.5	DPE	WPE	BPE	19-2-62
		17.9	DPF	WPF	BPF	19-2-61
HALOGEN	6-VOLT	7.0	DPS	WPS	BPS	19-2-83
		10.0	DPN	WPN	BPN	19-2-82
		12.0	DPT	WPT	BPT	19-2-84
	12-VOLT	12.0	DPV	WPV	BPV	19-2-85

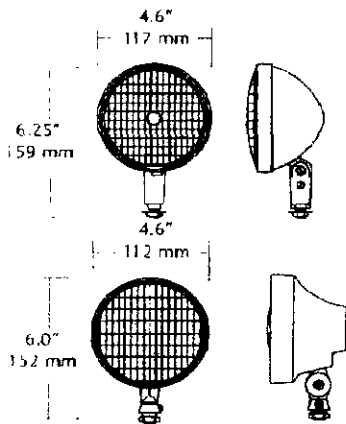
Polycarbonate Wedge Base Rectangular Head



POLYCARBONATE WEDGE BASE RECTANGULAR

POLYCARBONATE WEDGE BASE RECTANGULAR			CATALOG NUMBER			REPLACEMENT LAMP NO.
			POLYCARBONATE			
	VOLTAGE	WATTAGE	BEIGE	WHITE	BLACK	ISOLITE NO.
TUNGSTEN	6-VOLT	5.4	P66T	P66	P66B	19-2-54
		7.2	P76T	P76	P76B	19-2-58
		9.0	P96T	P96	P96B	19-2-45
	12-VOLT	9.0	P912T	P912	P912B	19-2-53
		12.5	P1212T	P1212	P1212B	19-2-62
		18.0	P1812T	P1812	P1812B	19-2-61

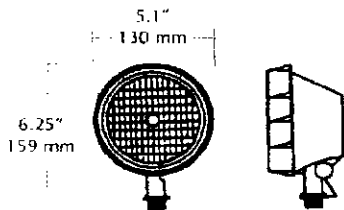
Thermoplastic & Metal Chrome Sealed Beam Par 36



THERMOPLASTIC & METAL CHROME SEALED BEAM PAR 36

THERMOPLASTIC & METAL CHROME			CATALOG NUMBER				REPLACEMENT LAMP
SEALED BEAM PAR 36			METAL	THERMOPLASTIC			
	VOLTAGE	LAMP WATTS	CHROME	BEIGE	WHITE	BLACK	
TUNGSTEN	6-VOLT	8.0	SY	DSY	WSY	BSY	19-1-7613
		18.0	SA	DSA	WSA	BSA	19-1-4014
		25.0	SL	DSL	WSL	BSL	19-1-4510
		30.0	SC	DSC	WSC	BSC	19-1-4515
	12-VOLT	12.0	SNY	DSNY	WSNY	BSNY	19-1-4044
		18.0	SE	DSE	WSE	BSE	19-1-4414
		25.0	SK	DSK	WSK	BSK	19-1-4446
		30.0	SG	DSG	WSG	BSG	19-1-4405
HALOGEN	6-VOLT	8.0	SQ	DSQ	WSQ	BSQ	19-1-7551
		12.0	SCHY	DSCHY	WSCHY	BSCHY	19-1-7553
	12-VOLT	8.0	SD	DSD	WSD	BSD	19-1-7555
		12.0	SB	DSB	WSB	BSB	19-1-7557

Industrial Polycarbonate Sealed Beam Par 36



INDUSTRIAL POLYCARBONATE SEALED BEAM PAR 36

			CATALOG NUMBER*		REPLACEMENT LAMP NO.
			CLASS 1 DIV 2 GRAY	NEMA RATED GRAY	
	VOLTAGE	LAMP WATTS			ISOLITE NO.
TUNGSTEN	6-VOLT	8.0	GSA	GSM	19-1-7613
		18.0	GSB	GSN	19-1-4014
		25.0	GSC	GSO	19-1-4510
		30.0	GSD	GSP	19-1-4515
	12-VOLT	12.0	GSE	GSQ	19-1-4044
		18.0	GSF	GSR	19-1-4414
		25.0	GSG	GSS	19-1-4446
		30.0	GSH	GST	19-1-4405
HALOGEN	6-VOLT	6.0	GSY	GSZ	19-1-7556
		8.0	GSI	GSU	19-1-7551
		12.0	GSI	GSV	19-1-7553
	12-VOLT	8.0	GSK	GSW	19-1-7555
		12.0	GSL	GSX	19-1-7557

* TO ORDER SHATTER-RESISTANT LAMP HEADS, ADD THE SUFFIX "S" TO THE SELECTED HEAD TYPE

ISOLITE Call the Isolite office nearest you.

HEADQUARTERS: 31 Waterloo Avenue • Berwyn, PA 19312 • 800-888-5483 • 610-647-8200 • Fax 610-296-8952

WESTERN OFFICE: 3563 Sueldo, Suite M • San Luis Obispo, CA 93401 800-799-5343 • 805-546-9669 • FAX 805-546-9564

Visit us on the web at www.isolite.com or email: sales@isolite.com

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