



GUAM POWER AUTHORITY

ATURIDÁT ILEKTRESEDÁT GUÅHAN
P.O.BOX 2977 • HAGĀTÑA, GUAM U.S.A. 96932-2977

May 04, 2022

AMENDMENT NO.: II

TO

INVITATION FOR BID NO.: GPA-028-22

FOR

MISCELLANEOUS STREETLIGHT HEADS

Prospective Bidders are hereby notified of the following response and inclusion to an inquiry received from Bidder No.: 2 dated May 03, 2022:

CHANGE:

REMOVE Page 3a of 23 and **REPLACE** with 3b of 23 (see attached).

Bid Opening Date is changed **FROM** 10:00 A.M., Thursday, May 05, 2022 (CHamoru Standard Time) **TO NOW READ** 9:00 A.M., Thursday, May 12, 2022 (CHamoru Standard Time).

INCLUSION:

1. Specification Sheet for Copper Lighting, Approved Equal to or Better. (see attached).

Bidder No.: 2 dated 05/02/2022:

QUESTION:

1. Our manufacturers are requesting a spec sheet, so they can quote. In line with this, we would like to request 1-week extension on the bid date.

ANSWER:

Kindly refer to **CHANGE** and **INCLUSION** above.

All other Terms and Conditions in the bid package shall remain unchanged and in full force.


for JOHN M. BENAVENTE, P.E.
General Manager 

SPECIFICATION SHEET

TYPE S2

LUMARK®



DESCRIPTION

The RL LED area luminaire provides uncompromising optical performance and outstanding versatility for a wide variety of area and roadway applications. Patented modular LightBAR™ technology delivers uniform and energy-conscious illumination to walkways, parking lots, and roadways. UL/cUL listed for wet locations.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Construction

Heavy-duty cast aluminum housing and removable door 3G vibration rated to ensure strength of construction and longevity in application. Die-cast aluminum door frame features integral hinges for toolless maintenance access.

Optics

Choice of thirteen (13) patented, high efficiency AccuLED Optics™ manufactured from injection-molded acrylic. Optics are precisely designed to shape the distribution, maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and nominal 70 CRI.

Electrical

LED drivers hard mount to die-cast aluminum back casting for optimal heat sinking and operation efficiency. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Shipped standard with the Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. Thermal management incorporates both conduction and natural convection to transfer heat rapidly away from the LED source and retain optimal efficiency and light output. RL LED luminaire is suitable for temperature operation from -30°C to 40°C (-22°F to 104°F). Standard three-position tunnel type compression terminal block. 50,000 hours of life with > 70% lumen maintenance. LightBARs feature IP66 enclosure rating.

Mounting

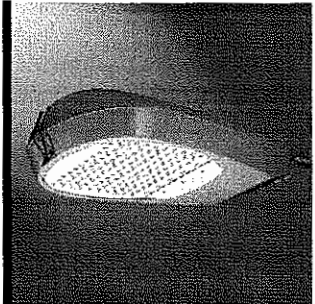
Two-bolt/one-bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1-1/4" or 2" mounting arms.

Finish

Components finished in a standard grey, 5-stage Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your Cooper Lighting representative for a complete selection of standard colors including black and bronze. RAL and custom color matches available.

Warranty

RL LED features a five-year limited warranty.



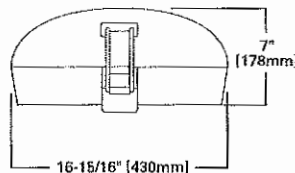
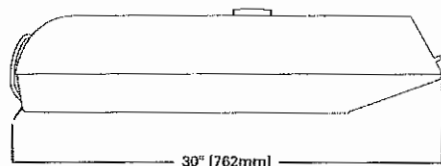
RL LED ROADWAY LARGE COBRAHEAD

1 - 6 LightBARs
LED

ROADWAY LUMINAIRE

TYPE S2 2 EACH # LDRL T3S B06 E B2 WITH
SMESS CRETE 20' ROUND TAPERED CONCRETE
POLE WITH ARMS

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
ISO 9001
IP66 LightBARs
3G Vibration Rated
ARRA Compliant

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz,
480V/60Hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating
50°C [Optional] Ambient Temperature
Rating

EPA

Effective Projected Area: (Sq. Ft.)
.87

SHIPPING DATA

Approximate Net Weight:
35 lbs.

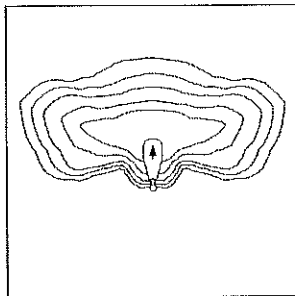
POWER AND LUMENS BY BAR COUNT

Number of LightBARs	DISTRIBUTION														SLR/SLL
	Power [Watts]	Current @ 120V [A]	Current @ 277V [A]	T2	T3	T3S	T4	SL2	SL3	SL4	5M0	5WQ	5XQ	RWQ	
	7 LED LIGHTBAR														
C01	27	0.23	0.13	1,819	1,798	1,757	1,811	1,805	1,746	1,734	1,923	1,930	1,868	1,834	1,660
C02	54	0.46	0.21	3,509	3,469	3,391	3,495	3,484	3,368	3,347	3,711	3,724	3,605	3,540	3,203
C03	77	0.65	0.29	5,291	5,230	5,112	5,269	5,252	5,078	5,046	5,594	5,614	5,436	5,337	4,829
C04	101	0.86	0.37	6,983	6,902	6,747	6,954	6,932	6,703	6,660	7,383	7,410	7,174	7,043	6,373
C05	131	1.11	0.50	8,362	8,265	8,079	8,327	8,300	8,026	7,975	8,841	8,872	8,590	8,434	7,631
C06	154	1.3	0.58	10,119	10,002	9,777	10,077	10,045	9,712	9,651	10,699	10,737	10,396	10,206	9,235
	21 LED LIGHTBAR														
B01	27	0.23	0.13	2,237	2,211	2,161	2,228	2,220	2,147	2,133	2,365	2,374	2,298	2,256	2,041
B02	51	0.43	0.20	4,317	4,267	4,171	4,299	4,285	4,143	4,117	4,564	4,580	4,435	4,354	3,940
B03	73	0.62	0.28	6,508	6,433	6,288	6,481	6,450	6,246	6,207	6,881	6,906	6,686	6,564	5,939
B04	95	0.81	0.35	8,589	8,490	8,299	8,554	8,526	8,244	8,192	9,081	9,114	8,824	8,663	7,838
B05	124	1.05	0.48	10,286	10,166	9,938	10,242	10,209	9,871	9,809	10,874	10,913	10,566	10,373	9,386
B06	146	1.24	0.56	12,446	12,302	12,026	12,395	12,355	11,946	11,871	13,159	13,207	12,786	12,554	11,359

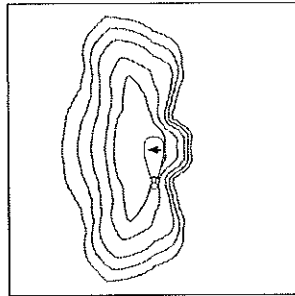
LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96
50°C	0.92

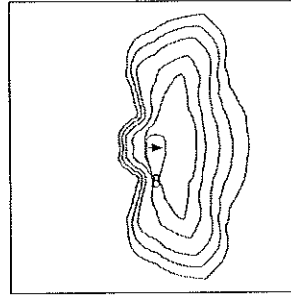
OPTIC ORIENTATION



Standard



Optics Rotated Left @ 90° [L90]

**Optics Rotated Right @ 90° [R90]**

ORDERING INFORMATION

Sample Number: LDRL-T3S-B06-E

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Lamp Type

LD=Solid State Light
Emitting Diodes
(LED)

Product Family ¹

RL=Luminaire

Distribution

T2=Type II
T3=Type III
T4=Type IV
SL2=Type II w/Spill Control
SL3=Type III w/Spill Control
SL4=Type IV w/Spill Control
RWQ=Rectangular Wide
T3S=Type III Short
5MQ=Type V Square Medium
6WQ=Type V Square Wide
5XQ=Type V Square Extra Wide
RW=Rectangular Wide
SLL=90 Degree Spill Light Eliminator Left
SLR=90 Degree Spill Light Eliminator Right

Number of ^{2, 3}
Lighthars

```

B01=[1] 21 LED LightBARs
B02=[2] 21 LED LightBARs
B03=[3] 21 LED LightBARs
B04=[4] 21 LED LightBARs
B05=[5] 21 LightBARs
B06=[6] 21 LightBARs
C01=[1] 7 LED LightBARs
C02=[2] 7 LED LightBARs
C03=[3] 7 LED LightBARs
C04=[4] 7 LED LightBARs
C05=[5] 7 LED LightBARs
C06=[6] 7 LED LightBARs

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Voltage

E=Electronic (120 - 277V)
347=347V
480=480V

Options ⁴

BK=Black
BZ=Bronze
K=Level Indicator
HA=50 Degrees C High Ambient Temperature Rating
L90= Optics Rotated Left 90 Degrees
R90= Optics Rotated Right 90 Degrees
PER= NEMA Twistlock Photocontrol Receptacle
2L= Two Circuits⁵
7080= 70CRI/6000K CCT⁶
8030= 80CRI/3000K CCT
LCF= LightBAR Cover Plate Matches Housing Finish

Accessories ⁷

OA/RA1013: Photocontrol Shorting Cap
MA1252: 10kV Surge Module Replacement
OA/RA1014: NEMA Photocontrol 120V
OA/RA1016: NEMA Photocontrol - Multi-Tap
OA/RA1027: NEMA Photocontrol 480V
OA/RA1201: NEMA Photocontrol 347V

- Notes:**
- 1 DesignLights™ Consortium Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
 - 2 Standard 4000K CCT and greater than 70 CRI.
 - 3 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
 - 4 Add as suffix.
 - 5 Not available with 347V or 480.
 - 6 Consult factory for lead time and lumen multiplier.
 - 7 Order separately.

NOTE: Specifications and dimensions subject to change without notice.

Visit our web site at www.cooperlighting.com

Customer First Center 1121 Highway 74 South Peachtree City, GA 30269 770.486.4800 FAX 770.486.4801

ADH101008

2013-05-08 16:36:28

2013-05-08 16:05:14

TYPE S2

TOP DIAMETER: 6 1/2" ϕ

REV.

ALTERATION

DATE

BY

Pole Arm Configuration to Match Drawing

POLE SPECIFICATIONS:

CATALOG NO.: P-200-FPR-G-M00-AB
C/W 140(25/60)

WIND ZONE: 190 MPH INCL 3 SEC GUST

WIND LOAD SPEC: AASHTO LTS-5

ULTIMATE GRND. 43,200 ft-lbs

LINE MOMENT:

A-BOLT SPECS: 1" x 36" x 4" GALV
MIN 55,000 YIELD

EPA LOADING: MAX 4 FIXTURES @ 0.9 EA

BASEPLATE BCD: 13" DIA - 4 BOLTS

POLE LENGTH: 20' 0"

POLE TOP: 6 1/2" DIA.

POLE BUTT: 10.10" DIA.

SECTION: ROUND

COLOUR: GRAY

FINISH: MOLD FINISH

MIN. RACEWAY: 1 1/8" ϕ

APPROX. WGT.: 1,130 LBS

PLANT MFG. STANDARD: ASTM C1089

28 DAY CON STR: 8,000 psi

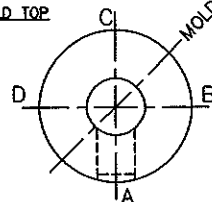
PRESTRESS LEVEL: 70% OF ULT TEN STRGTH

WARRANTY: LIFETIME

QUANTITY: 7

90° QUAD ARM CONFIGURATION
POLE ARM DETAIL
GALV STEEL FINISH
QTY: 7

MOLD TOP



MOLD BOTTOM

MOLD FINISH GRAY
SMOOTH ROUND
PRESTRESSED SPUN
CONCRETE POLE

[A] SMALL NAMEPLATE

[A] 2 1/2" x 8" ZINC
H.H BOX & COVERPLATE
C/W GROUND WIRE
& ALLENHEAD SCREWS

1" GALV STEEL
BASEPLATE WITH 13" BCD
(SEE DETAIL)

2 PC ALUM BASEPLATE
COVER - PAINT GRAY

GRADE

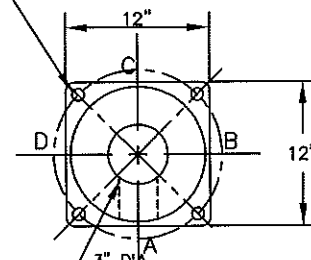
NOTE:
4 - #6 WELDABLE REBAR
x 4' LONG REQUIRED
FOR BASEPLATE WELD JOINT

1" x 36" x 4" GALV
GRADE 55KSI ANCHOR BOLTS
(55,000psi MIN YIELD)

*NOTE:
FOUNDATION DETAILS BY OTHERS
BASEPLATE COVER BY OTHERS

DRAWING NOT TO SCALE

4 SLOTS 1 1/4" x 1 1/2" ON
A 13" DIA. BOLT CIRCLE



BASEPLATE DETAIL
MATERIAL 1" GALV STEEL x 12" SQ

CUSTOMER APPROVAL & DATE:



King Luminaire • Stresscrete • Est. 1953

STRESSCRETE
GROUP

Manufacturing Locations:

Burlington, Ontario 1-800-268-7809

Northport, Alabama 1-800-435-6563

Atchison, Kansas 1-800-837-1024

Jefferson, Ohio 1-800-268-7809

PROJECT/CUSTOMER:

KENCLAIRE WEST - GUAM
GUAM - MULTI-PURPOSE

DRAWN BY:

AT:

CHECKED BY:

DATE:

REVISION:

RF

SC3

9-25-13

DRAWING TYPE:

APPROV./MFG. DWG.

DRAWING NUMBER:

GUAM MULTI-PURPOSE - QUAD

TYPE S3

DESCRIPTION

The RL LED area luminaire provides uncompromising optical performance and outstanding versatility for a wide variety of area and roadway applications. Patented modular LightBAR™ technology delivers uniform and energy-conscious illumination to walkways, parking lots, and roadways. UL/cUL listed for wet locations.

LUMARK®



Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Construction

Heavy-duty cast aluminum housing and removable door 3G vibration rated to ensure strength of construction and longevity in application. Die-cast aluminum door frame features integral hinges for toolless maintenance access.

Optics

Choice of thirteen (13) patented, high efficiency AccuLED Optics™ manufactured from injection-molded acrylic. Optics are precisely designed to shape the distribution, maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and nominal 70 CRI.

Electrical

LED drivers hard mount to die-cast aluminum back casting for optimal heat sinking and operation efficiency. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Shipped standard with the Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. Thermal management incorporates both conduction and natural convection to transfer heat rapidly away from the LED source and retain optimal efficiency and light output. RL LED luminaire is suitable for temperature operation from -30°C to 40°C (-22°F to 104°F). Standard three-position tunnel type compression terminal block. 50,000 hours of life with > 70% lumen maintenance. LightBARs feature IP66 enclosure rating.

Mounting

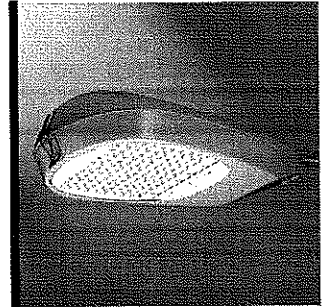
Two-bolt/one-bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1-1/4" or 2" mounting arms.

Finish

Components finished in a standard grey, 5-stage Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your Cooper Lighting representative for a complete selection of standard colors including black and bronze. RAL and custom color matches available.

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RL LED ROADWAY LARGE COBRAHEAD

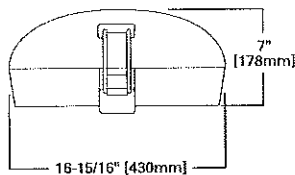
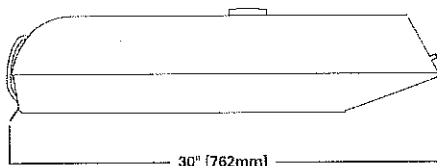
1 - 6 LightBARs
LED

ROADWAY LUMINAIRE

TYPE S3 4BACH # LDRL T3S BOG E-B2 WITH
STRESSCRETE ROUND TAPERED CONCRETE POLE
WITH ARMS

DESIGNLIGHTS
CONSORTIUM

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
ISO 9001
IP66 LightBARs
3G Vibration Rated
ARRA Compliant

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz,
480V/60Hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating
50°C [Optional] Ambient Temperature
Rating

EPA

Effective Projected Area: (Sq. Ft.)
.87

SHIPPING DATA

Approximate Net Weight:
35 lbs.

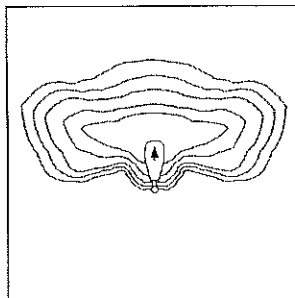
POWER AND LUMENS BY BAR COUNT

Number of LightBARs	DISTRIBUTION														
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7 LED LIGHTBAR															
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B05	124	1.05	0.48	10,285	10,166	9,938	10,242	10,209	9,871	9,809	10,874	10,913	10,566	10,373	9,386
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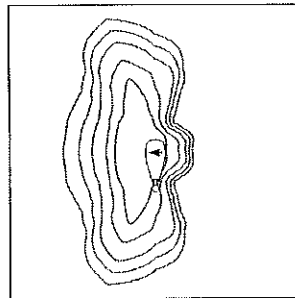
LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96
50°C	0.92

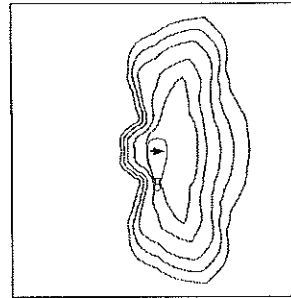
OPTIC ORIENTATION



Standard



Optics Rotated Left @ 90° [L90]



Optics Rotated Right @ 90° [R90]

ORDERING INFORMATION

Sample Number: LDRL-T3S-B06-E

LD	RL	SL2	B06	E	B2	
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Lamp Type

LD=Solid State Light Emitting Diodes (LED)

Product Family ¹

RL=Luminaire

Distribution

T2=Type II
T3=Type III
T4=Type IV
SL2=Type II w/Spill Control
SL3=Type III w/Spill Control
SL4=Type IV w/Spill Control
RWQ: Rectangular Wide
T3S: Type III Short
5MQ: Type V Square Medium
5WQ: Type V Square Wide
5XQ: Type V Square Extra Wide
RW: Rectangular Wide
SLL: 90 Degree Spill Light Eliminator Left
SLR: 90 Degree Spill Light Eliminator Right

Number of Lightbars ^{2,3}

B01=[1] 21 LED LightBAR
B02=[2] 21 LED LightBARs
B03=[3] 21 LED LightBARs
B04=[4] 21 LED LightBARs
B05=[5] 21 LED LightBARs
B06=[6] 21 LED LightBARs
C01=[1] 7 LED LightBARs
C02=[2] 7 LED LightBARs
C03=[3] 7 LED LightBARs
C04=[4] 7 LED LightBARs
C05=[5] 7 LED LightBARs
C06=[6] 7 LED LightBARs

Voltage

E=Electronic (120 - 277V)
347=347V
480=480V

Options ⁴

BK=Black
BZ=Bronze
K=Level Indicator
HA=50 Degrees C High Ambient Temperature Rating
L90: Optics Rotated Left 90 Degrees
R90: Optics Rotated Right 90 Degrees
PER: NEMA Twistlock Photocontrol Receptacle
ZL: Two Circuits⁵
7060: 70CRI/6000K CCT⁶
8030: 80CRI/3000K CCT
LCF: LightBAR Cover Plate Matches Housing Finish

Accessories ⁷

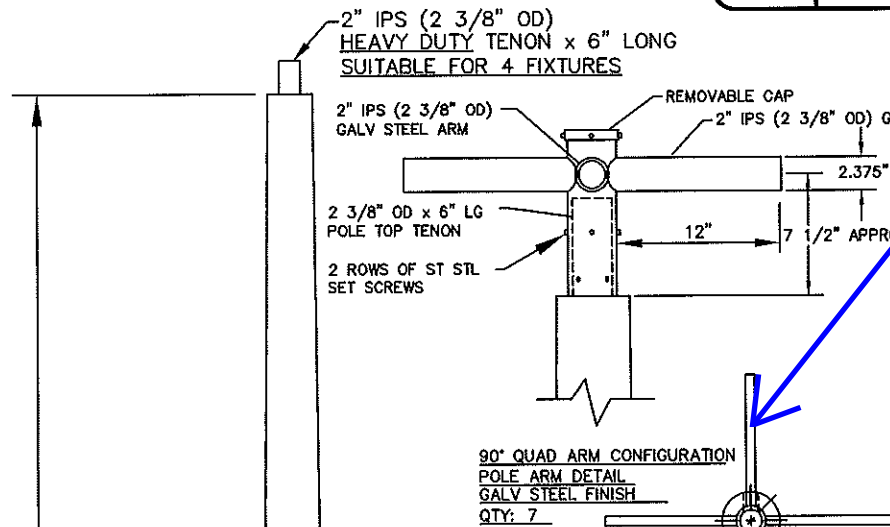
OA/RA1013: Photocontrol Shorting Cap
MA1252: 10kV Surge Module Replacement
OA/RA1014: NEMA Photocontrol 120V
OA/RA1016: NEMA Photocontrol - Multi-Tap
OA/RA1027: NEMA Photocontrol 480V
OA/RA1201: NEMA Photocontrol 347V

- Notes: 1 DesignLights™ Consortium Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2 Standard 4000K CCT and greater than 70 CRI.
3 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
4 Add as suffix.
5 Not available with 347V or 480.
6 Consult factory for lead time and lumen multiplier.
7 Order separately.

TYPE S3

TOP DIAMETER: 6 1/2" Ø

REV.	ALTERATION	DATE	BY

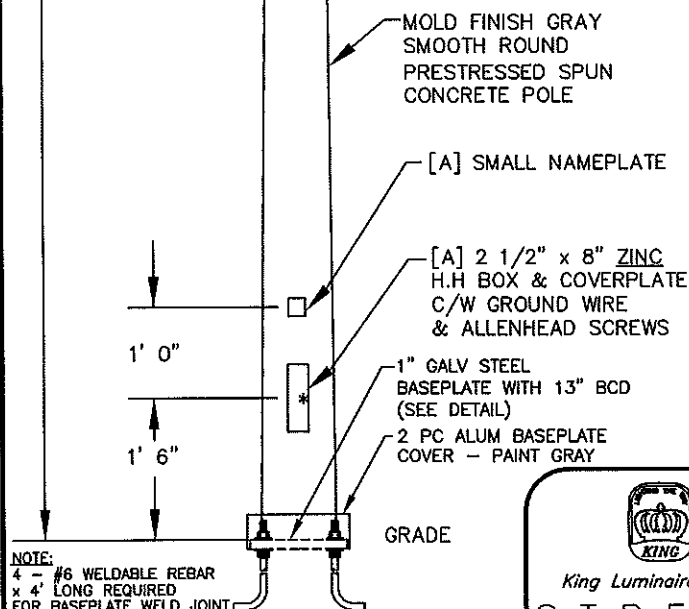
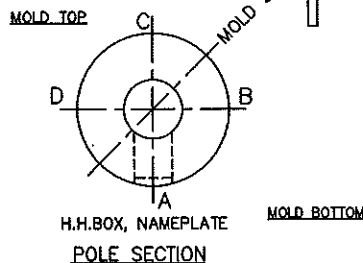


Pole Arm Configuration to match Drawing

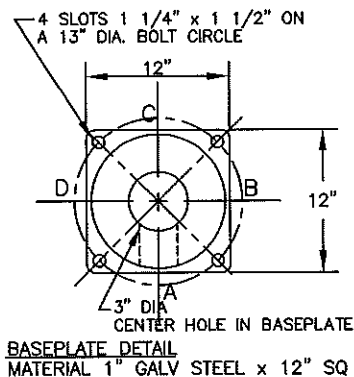
POLE SPECIFICATIONS:

CATALOG NO.: P-200-FPR-G-M00-AB
C/W 140(25/60)
WIND ZONE: 190 MPH INCL 3 SEC GUST
WIND LOAD SPEC: AASHTO LTS-5
ULTIMATE GRND. LINE MOMENT: 43,200 ft-lbs
A-BOLT SPECS: 1" x 36" x 4" GALV
MIN 55,000 YIELD
EPA LOADING: MAX 4 FIXTURES @ 0.9 EA
BASEPLATE BCD: 13" DIA - 4 BOLTS
POLE LENGTH: 20' 0"
POLE TOP: 6 1/2" DIA.
POLE BUTT: 10.10" DIA.
SECTION: ROUND
COLOUR: GRAY
FINISH: MOLD FINISH
MIN. RACEWAY: 1 1/8" Ø
APPROX. WGT.: 1,130 LBS
PLANT MFG. STANDARD: ASTM C1089
28 DAY CON STR: 8,000 psi
PRESTRESS LEVEL: 70% OF ULT TEN STRGTH
WARRANTY: LIFETIME
QUANTITY: 7

90° QUAD ARM CONFIGURATION
POLE ARM DETAIL
GALV STEEL FINISH
QTY: 7



NOTE:
4 - #6 WELDABLE REBAR
x 4' LONG REQUIRED
FOR BASEPLATE WELD JOINT



CUSTOMER APPROVAL & DATE: _____



King Luminaire • StressCrete • Est. 1953

STRESSCRETE GROUP

Manufacturing Locations:

Burlington, Ontario 1-800-268-7809
Northport, Alabama 1-800-435-6563
Atchison, Kansas 1-800-837-1024
Jefferson, Ohio 1-800-268-7809

PROJECT/CUSTOMER:

KENCLAIRE WEST - GUAM
GUAM - MULTI-PURPOSE

DRAWN BY:

AT:

CHECKED BY:

DATE:

REVISION:

RF

SC3

9-25-13

DRAWING TYPE:

DRAWING NUMBER:

APPROV./MFG. DWG.

GUAM MULTI-PURPOSE - QUAD

DRAWING NOT TO SCALE

1" x 36" x 4" GALV
GRADE 55KSI ANCHOR BOLTS
(55,000psi MIN YIELD)

NOTE:
FOUNDATION DETAILS BY OTHERS
BASEPLATE COVER BY OTHERS