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RECEIVED
OFFICE OF PUBLIC ACCOUNTABILITY
PROCUREMENT APPEALS

DATE: May 15, 2017

TIME: 2:35 AM PM BY: FRJ

FILE NO OPA-PA: 17-006

6 **BEFORE THE OFFICE OF PUBLIC ACCOUNTABILITY**

7 **In the Appeal of**

) **Docket No. OPA-PA-17-006**

8 **AMERICA'S BEST**
9 **ELECTRICMART, INC. ,**

10 **Appellant.**

) **COMMENT ON AGENCY REPORT**

11 _____)
12
13 America's Best Electricmart, Inc. (hereinafter "ABE") submits its Comments to the Guam
14 Power Authority's Agency Report.

15 **1. Background**

16 IFB GPA-005-17 was issued on October 20, 2016 by General Manager John M. Benavente,
17 P.E. Bids were due on November 3, 2016 at 2 p.m. Procurement Record (hereinafter "PR") Tab 1.
18 On November 2, 2016 Amendment I was issued notifying prospective bidders the bid opening date
19 is changed from 2 p.m. November 03, 2016 to 2 p.m. November 10, 2016. PR at 514.

20 Amendment No. II to the IFB was issued on November 4, 2016 notifying prospective
21 bidders of various changes and responses to inquiries received from JMI Edison dated 10/26/16,
22 KOLTA Global PNB Inc. dated 10/31/2016, and Benson Guam Ent. Inc. dated 11/02/2016. PR at
23 509.

24 Bids were opened on November 10, 2016.

25 In an internal agency Memorandum, Joven G. Acosta, P.E., requested the GPA General
26 Manager cancel Bid 005-17 for LED streetlight luminaires and photo electric controls:
27
28

ORIGINAL

1 GPA's new streetlight tariff, Rate Schedule F, does not correspond with GPA's power
2 requirements for LED street lights specified in GPA Specification E-043. Specifically,
3 the new taiff specifies LED wattage levels at 67 and 120 Watts for 150 and 250 Watts
4 streetlights respectively. To ensure GPA is not under collecting, GPA specification E-
43 has been updated to reflect the lower wattage requirements. Additionally, lumen
5 levels have also been increased to reflect recent upgrades in LED technology.

6 PR at 290.

7 In a letter dated January 04, 2017, GPA informed ABE that the bid was canceled. PR at 273
8 through 289. GPA's reason for cancelling IFB GPA-005-17 is that "in compliance with the New
9 Streetlight Tariff, the Authority has determined this bid canceled." Id.

10 In a letter dated January 6, 2017, ABE requests GPA expand on what specific compliance
11 issue of the New Streetlight Tariff was not met. PR at 296. ABE has yet to receive a response to
12 its request. In an email dated January 6, 2017, Lin's Hardware requested to "know the reason that
13 GPA determined this Bid canceled [sic]..." PR at 271. In a letter dated January 17, 2017, Lin's
14 Hardware again requests "to know the reasons so [it] can understand what caused this cancellation
15 ..." PR at 248. In an email dated January 17, 2017, Canton Construction Corp. inquired as to "why
16 the bid is cancelled" as "Canton has submitted clarifications per [GPA's]." PR at 250. The
17 Procurement Record is devoid of any communications from the GPA to the Bidders in response to
18 their inquiries as to the reason the bid was cancelled.

19
20
21 In a letter dated January 17, 2017 ("Protest Letter") ABE challenged the basis for the bid
22 cancellation. PR at 251-252.

23 In a letter dated March 31, 2017 by John M. Benavente, P.E., General Manger which was
24 received by ABE via facsimile transmission on April 6, 2017, GPA states, in relevant part:

25 You indicated in your [January 17, 2017 protest] letter that you believe the streetlight
26 tariff had nothing to do with the change in specification. This is not correct, as the
27 previous tariff reflected HPS lights, and this has now been changed to reflect LED
28 lights with different standards. In addition, GPA engineering has changed the technical
specifications to reflect a cost evaluation based on the total cost of ownership (TOC)
computed by addition the initial purchase price plus the total life energy cost. The

1 LED streetlight nominal power rating for the specified make, model, CCT, drive
2 current, and IES classification will be utilized to calculate the GPA Total Cost of
3 Ownership (TOC).

4 PR at 178-179. GPA denied ABE's protest and made no attempt to discuss the merits of ABE's
5 protest or to explain which specific compliance issue of the New Streetlight Tariff was not met.

6 The IFB was re-issued on April 13, 2017. PR at 39-78.

7 It is notable that the New Streetlight Tariff referenced in GPA's notice of cancellation of bid
8 was implemented by Order of the Guam Public Utilities Commission (hereinafter "Order"), GPA
9 Docket 16-01, became effective on October 27, 2016. Notice of Appeal, Exhibit 9. In Resolution
10 No. 2016-03, adopted on January 26, 2016 (hereinafter "Resolution"), the CCU authorized GPA to
11 petition the PUC for approval to implement an interim streetlight tariff for energy efficient LED
12 streetlights. Id., Exhibit 10.

14 Seven thousand six hundred twenty eight (7,628) LED streetlights had already been
15 purchased by GPA prior to this bid.

16 **2. The Procurement Record is incomplete.**

17 5 GCA § 5249(a) requires each procurement officer to maintain a complete record of "the
18 date, time, subject matter and names of participants at any meeting including government employees
19 that is in any way related to a particular procurement." The Agency Report states "on November
20 30, 2016, the evaluation committee met and requested clarification from the bidders..." No log
21 was provided for the November 30, 2016 meeting. In an email from Vincent Jr. Barcinas, Mr.
22 Barcinas sends out a reminder regarding "Bid Evaluation for subject mention above at 8:00 am.
23 12/16/2016 Friday. Procurement Record at 304. No log was received for 12/16/2016.

24 5 GCA § 5249(a) requires each procurement officer to maintain "a log of all
25 communications between government employees and any member of the public, potential bidder,
26 vendor or manufacturer which is in any way related to the procurement." The Procurement Record
27
28

1 lacks any record of how the engineering manager came to his conclusion which resulted in his
2 12/27/16 cancelation recommendation. In addition, the Procurement Record does not include
3 information from the evaluation groups. Where are the notes, draft documents, and work product
4 from the evaluation committee? There are no notes from the GPA's procurement officer to the
5 evaluation committee regarding the completeness or incompleteness of the individual bids received.
6 The Procurement Record also lacks a log of the Bidders' responses to clarification letter and the
7 responses submitted by each Bidder.
8

9 5 GCA § 5249 (d) requires the procurement officer to maintain "brochures and submittals of
10 potential vendors, manufacturers or contractors, and all drafts, signed and dated by the draftsman,
11 and other papers or materials used in the development of specifications." The Procurement Record
12 did not include brochures and submittals of the Bidders or manufacturers. The Procurement Record
13 did not include all drafts, signed and dated by the draftsman, and other papers or materials used in
14 the development of specifications.
15

16 The Procurement Record also lacks a list of qualified bidders, bidders that meet the first
17 level of evaluation (determination of which bidders meet the basic bid requirements).

18 **3. GPA has not satisfied the test to cancel a bid.**

19 The GPA's reason for cancelling IFB GPA-005-17 stated in the notice of cancellation to
20 ABE and other Bidders is that "in compliance with the New Streetlight Tariff, the Authority has
21 determined this bid canceled."
22

23 The CCU Resolution 2016-003 and PUC Order do not address or discuss a new or updated
24 LED specification. In fact, GPA already implemented an LED Streetlight Replacement program
25 upgrading the technology of existing streetlights from High Pressure Sodium (HPS) to LED at the
26 time the Resolution was issued. Exhibit 10. Furthermore, neither the Resolution nor the Order list
27 any requirement of a change of specification for the actual LED streetlight.
28

1 However, in its Statement Answering Allegations of Appeal, the GPA now claims for the
2 very first time the bid was cancelled because “”after opening bids and determining that clarifications
3 were needed on five of the eight bids, including the alternative bid submitted by [ABE], GPA
4 determined that the specifications needed to be revised.” GPA Stmt. at 2. Nowhere in the notice
5 of cancellation is this reason intimated. In fact, the Procurement Record makes clear that ABE and
6 two other bidders, Lin’s Hardware and Canton Construction, requested specifics as to why the bid
7 was cancelled. The GPA never provided a response to either of the three inquiries and alleges this
8 reason for cancellation for the very first time.

9
10 A review of the Evaluation Committee’s requests for clarification from each of the Bidders
11 generally involved hardware and tools needed to install said hardware. *See* Procurement Record
12 Tab 7. As for the items GPA’s Evaluation Committee sought clarification from ABE, the requested
13 information was already provided as part of ABE’s bid package. *See* Exhibit 1 attached hereto.
14 The catalog sheet was provided as part of ABE’s bid. The Model # was designated as “X” to allow
15 the GPA a choice between model #2 or #3 as to the light distribution pattern type, both of which fell
16 within the required specifications.

17
18 The GPA further asserts “from a comparison of the original bid and the re-bid in IFB-005-
19 17, it is clear that GPA revised the specifications.” The revised specifications are not that much
20 different than those required under the initial IFB-005-17. For instances, the CCT under IFB-005-
21 17 was 3800-4800K and under the Re-bid the CCT is 4,000+/- 300K. In addition, CRI under the
22 original bid is >65 and under the Re-bid it is >68. These are not significant differences. All but one
23 of the Bidders bid CCT of 4,000K.

24
25 **3. Cancelling and re-bidding GPA005-17 is unfair to the bidders who submitted bids in**
26 **good faith.**

27 One of the bidders initially suggested GPA consider evaluating the bids based on lighting
28 efficiency or life-cycle cost of the fixture:

1 JMI Edison Inquiry dated 10/26/16:

2 QUESTION:

3 1. Given the speed that the LED technology is improving, it is very possible that
4 bidders will be bidding on products that are much more efficient than what GPA's
5 specifications call for. Therefore, we think it is in GPA's and Guam [sic] best interest
6 to include lighting efficiency in the evaluation criteria, or possibly evaluate the bids
7 based on the life-cycle cost of the fixtures.

8 ANSWER:

9 GPA Bid 005-17 will be awarded based on the lowest responsive bid, as outlined in
10 GPA's General Terms and Conditions. This is found on page 35 of 39 of the bid
11 package for GPA-005-17. Additionally, GPA Specification E-043 is updated
12 periodically to reflect advantages in LED Technology.

13 PR at 426-427.

14 GPA initially rejected the idea of including the very factors it now asserts, after opening the
15 bids, should be included in the re-issued IFB. The "life-cycle cost" referenced in JMI's inquiry is
16 the equivalent of the "Total Ownership Cost/Total Cost Ownership " referenced in John
17 Benavente's March 31, 2017 letter.

18 GPA relies on factors that are unrelated to the new tariff schedule in justifying its
19 cancellation of the IFB. More perplexing is that GPA knew of the new tariff schedule for the LED
20 streetlights, the very item sought under the IFB, but yet proceeded to open the bids. If what GPA
21 asserts is true, *arguendo*, GPA should have cancelled the IFB PRIOR to the opening of the bids and
22 not a month and a half after the bids were opened and made public.

23 The prices offered by all bidders are now public providing bidders to the reissued IFB an
24 advantage over ABE which offered a price significantly lower than the other qualified bidders.
25 ABE and the other bidders submitted their bids based on good faith. ABE's Alternative bid was
26 the lowest responsive bidder as outlined in the IFB.

27 The GPA asserts that ABE is incorrect in its contention that it was the lowest responsive
28 bidder as no such determination was made by the Evaluation Committee. The Procurement Record

1 is devoid of any notes by the Evaluation Committee as to how far they got with regard to the
2 evaluation process of each bid. We know that the Evaluation Committee went through each of the
3 bids, otherwise, how else would they have known what clarifications were needed from each Bidder
4

5 Why didn't the Evaluation Committee simply review the bids and apply the total cost of
6 ownership ("TOC") calculation? Had they done so, they would have come to the conclusion that
7 ABE's bid was still the lowest and its offered product was very close to the revised bid
8 specifications that ABE's Alternative bid was responsive.

9 For these reasons, ABE's bid should be accepted.

10 **4. Cancelling and re-bidding the IFB is contrary to the strict delivery requirements set**
11 **forth in the IFB.**

12 The IFB set out delivery requirements which reflect anticipated installation schedules to
13 which GPA wanted to adhere:

14 JMI Edison Inquiry Dated 10/26/16:...

15 **QUESTION:**

16 2. Many good established manufacturers of LED fixtures with proven record of
17 competitiveness and reliability are swamped with current orders such that their
18 production schedule is set and not subject to much change. While the delivery
19 requirement of GPA may be reasonable to new and smaller companies, bigger
20 companies may have a hard time meeting it. Thus, we suggest, as an example, a
21 staggered delivery of possibly 1,000 fixtures per month, starting 8 weeks from award
22 date.

23 **ANSWER:**

24 GPA's delivery requirements are specified in the bid documents. The required
25 delivery time reflect anticipated installation schedules.

26 PR at 427. A request was made by USA Contractors Inc. to extend the bid opening date from
27 November 3 to November 17, 2016. PR 489-490. In response, Reuben C. Ulloa instructed Vince
28 J.R. Barcinas to "please deny request for extension, LED's urgently needed to support engineering
projects." PR at 489. *Also see* PR at 379. The initial delivery of 5,400 streetlights would have been
due within 8 weeks after award with the remaining balance of 4,078 streetlights due no later than

1 April 28, 2017 under the IFB. Under the re-issued IFB, said deliveries will be unduly delayed to
2 the detriment of GPA and the ratepayers.

3 Cancellling and rebidding the IFB goes against the timely implementation of the replacement
4 of less efficient HPS lights with energy efficient LED streetlights. The delayed replacement of less
5 efficient HPS lights will in turn delay savings to be realized by GPA and the ratepayers.

6
7 Furthermore, the SPEC No. E-043 Revision 3 was implemented on July 28, 2016 and
8 Revision 4 was implemented on February 27, 2017. The revisions between Revision 3 and 4 did
9 not change so dramatically or substantially as to render the LED lights or the technology offered
10 under Revision 3 obsolete under Revision 4.


11 7,628 LED streetlights had already been purchased by GPA prior to this bid therefore, the
12 GPA's assertion that the specifications had changed requiring a cancellation of the bid is not logical
13 nor financially responsible.
14

15
16 **Relief Requested**

17 ABE asks that this appeal reverse GPA's decision, that the OPA order GPA to execute the
18 bid offered by ABE without further delay, an award for reasonable attorney's fees and costs of this
19 protest and appeal, and for such other relief that may be available.
20

21 Dated: Hagatna, Guam 15, May, 2017.

22
23 **BROOKS CONCEPCION LAW, P.C.**

24
25 
26 By: Georgette Bello Concepcion, Esq.
27 Attorneys for Appellant
28 America's Best Electricmart, Inc.

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EXHIBITS

1. ABE's Response to GPA's Request for Clarification

GPA Clarification Letter



GUAM POWER AUTHORITY

ATURIDÁT ILEKTRESEDÁT GUAHAN
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

December 06, 2016

Dave Hicks
Vice President
America's Best Electricmart, Inc.
129 W. Harmon Industrial Park, Rd.
Tamuning, Guam 96913

SUBJECT: GPA-005-17 for LED Luminaire Units and Photo Electric Controls

Dear Mr. Hicks,

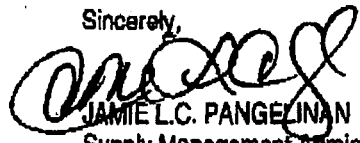
Upon review of your company's proposal, the Evaluation Committee requests clarification for the following:

Line Items 1.0 and 2.0 (Alternate Offer):

- Provide detailed cut sheets showing mounting, tools required with sizes, hardware, terminal block, and luminaire leveling/tilt adjustments.
- Clarify model # offered, missing the light distribution pattern type in the model #. I.e. (GCJ2-20H-MV-NW-X-GY-900; what is value for "X".)

Requesting your response no later than close of business Friday, December 09, 2016.

Sincerely,



JAMIE L.C. PANGELINAN
Supply Management Administrator

PLEASE ACKNOWLEDGE RECEIPT BY
SIGNING BELOW AND RETURN THIS FAX
TO VANCE BARGINAS. FAX NO.: 648-3168.

Mika Dunlap *12/16*
PRINT/SIGNATURE DATE

Abelectricmart, Inc.
COMPANY

APPRECIATE YOUR IMMEDIATE RESPONSE.
THANK YOU.

GPA PROCUREMENT DIVISION
TEL: (671) 648-3084/58

David Hicks

From: David Hicks <dave@abemart.com>
Sent: Friday, December 9, 2016 2:28 PM
To: 'Jamie C. Pangelinan'
Cc: 'dfejeran1@gpagwa.com'; 'Jesse R Reyes'; 'Gina Anulao'
Subject: Clarification for GPA-005-17
Attachments: GPA-005-17 for LED Luminaire Units abd Photo Electric Controls.pdf; GCJ_H-Series_110416.pdf; GCJ-GCM_InstallationGuide_102416.pdf

Jamie,

In response to your request for clarification of our Alternate offer for GPA-005-17.

First bullet point: Provide detailed cut sheets showing mounting, tools required with sizes, hardware, terminal block, and luminaire level/tilt adjustments

1. Provide detailed cut sheets showing mounting, tools required with sizes, hardware, terminal block, and luminaire level/tilt adjustments.

Second bullet point. Clarify model # offered, missing the light distribution type in the model #.

2. Clarify model # offered, missing the light distribution type in the model #.

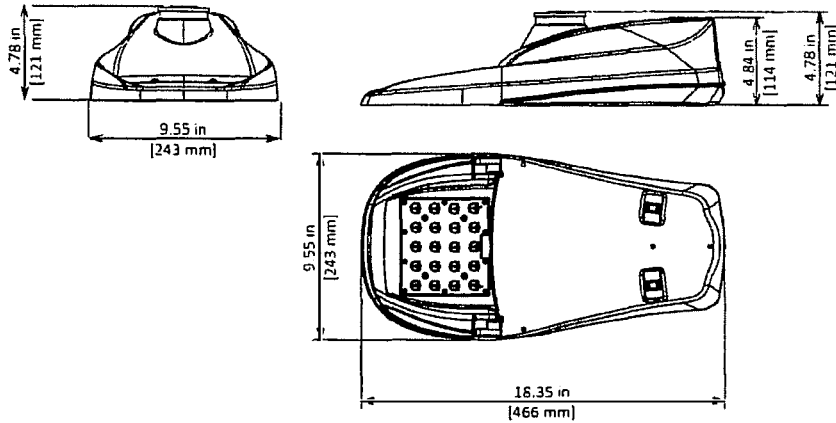
Regards,

Dave Hicks
America's Best Electricmart, Inc.
DUNS: 855024902 CAGE#: 1XCY6
(671)647-6674
(671)998-2041 ©

GreenCobra™ Jr. LED Street Light GCJ H-Series Specification Data Sheet

Luminaire Data

Weight 7 lbs [3.2 kg]
EPA 0.39 ft²



Ordering Information

Sample Catalog No. GCJ1 20H MV NW 2R GY 580

Product	LED Code	Voltage	Color Temperature	Finish	GCJ0 Drive Current Code ¹	Options
GCJ0	15H	MV 120-277V	WW 3000K NW 4000K CW 5000K	GY Gray DB Dark Bronze BK Black	300 390 490 590 700	FDC ² Fixed Drive Current LPCR Less Photocontrol Receptacle PCRS ⁷ ANSI 5-wire Photocontrol Receptacle PCR ⁷ ANSI 7-wire Photocontrol Receptacle
GCJ1	20H		2R Type 2 3 Type 3 4 Type 4 5 Type 5		GCJ1 Drive Current Code¹ 350 450 530 580 680 700	PCRS-CR ² Control Ready 5-wire PC Receptacle PCR7-CR ² Control Ready 7-wire PC Receptacle WL Utility Wattage Label 4B 4-Bolt Mounting Bracket
GCJ2	20H				GCJ2 Drive Current Code¹ 700 830 900 1A	DSC Door Safety Cable RWG Rubber Wildlife Guard

Notes:

- Factory set drive current, field adjustable standard. Refer to Performance Data Table. Consult factory if wattage limits require a special drive current.
- Non-field adjustable, fixed drive current. Specify required drive current code. Not available with PCRS-CR or PCR7-CR options.
- Field adjustable current selector included. Wireless node dimming is disabled, field changeable connectors included to enable dimming with PCRS/7.
- Control-ready wiring at factory for wireless node dimming. Default maximum drive current code (700 or 1A) must be specified.
- Flush mounted house side shield. Shield cuts light off at 1/2 mounting height behind luminaire.
- Flush mounted cul-de-sac shield. Shield cuts light off at 1/2 mounting height behind luminaire and 1-1/2 mounting height on either side of luminaire.
- Specify Color (GY, DB, BK)

Accessories*

HSS ³	House Side Shield, Snap-On*
CSS ⁵	Cul-De-Sac Side Shield, Snap-On*
SPB ⁷	Square Pole Horizontal Arm Bracket
RPB ⁷	Round Pole Horizontal Arm Bracket
PTB ⁷	Pole Top Tenon Horizontal Arm Bracket
WB ⁷	Wall Horizontal Arm Bracket
BSK	Bird Deterrent Spider Kit
PC	Twist Lock Photocontrol
LLPC	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap

*Accessories are ordered separately and not to be included in the catalog number. For factory installed HSS, CSS specify as option in luminaire catalog number.



Luminaire Specifications

Housing

Die cast aluminum housing with universal two-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. One-piece aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Four-bolt mounting bracket is available. Mounting provisions meet 3G vibration per ANSI C136.31-2001 Normal Application, Bridge & Overpass. Mounting has leveling adjustment from ± 5° in 2.5° steps. Electrical components are accessed without tools via a high-strength, non-conductive polycarbonate door with quick-release latches. Polycarbonate material meets UL 746C for outdoor usage. Available rubber wildlife guard (RWG option) conforms to mast arm with no gaps.

Light Emitting Diodes

Hi-flux/Hi-power white LEDs produce a minimum of 90% of initial intensity at 100,000 hours of life based on IES TM-21. LEDs are tested in accordance with IES LM-80 testing procedures. LEDs have correlated color temperature of 3000K (WW), 4000K (NW), or 5000K (CW) and 70 CRI minimum. LEDs are 100% mercury and lead free.

Optical Systems

Micro-lens optical systems produce IESNA Type 2, Type 3, Type 4, or Type 5 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional house side shield cuts light off at 1/2 mounting height behind luminaire. Cul-de-sac shield provides back and side light control for end of cul-de-sac applications. Both shields are field installable without tools.

Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. LED drive current can be changed in the field to adjust light output for local conditions (not available with PCR5-CR or PCR7-CR options). Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Surge protection complies with IEEE/ANSI C62.41 Category C High, 20kV/10kA.

Controls

3-Wire photocontrol receptacle is standard. ANSI C136.41 5-wire (PCR5) or 7-wire (PCR7) photocontrol receptacles are available. All photocontrol receptacles have tool-less rotatable bases. Wireless control module is provided by others.

Finish

Housing receives a durable, fade-resistant polyester powder coat finish. Finish tested to withstand 5000 hours in salt spray exposure per ASTM B117. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. DesignLights Consortium™ qualified 120-277V product. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C. Assembled in the U.S.A

Photometry

Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

Warranty

10-year limited warranty is standard on luminaire and components.

Adjustable Drive Current Code Ranges

Field adjustable drive current selections can be made according to the table below. For GCJ0 and GCJ2, all drive current codes are selectable with all products. For GCJ1, the other selectable drive currents depend on if the product is specified with a drive current from Range 1 or Range 2 below.

GCJ0 Range	GCJ1		GCJ2 Range
	Range 1	Range 2	
300	350	450	700
390	580	530	830
490	700	680	900
590			1A
700			

GreenCobra™ Jr. LED Street Light GCJ H-Series Specification Data Sheet

Performance Data: 3000K (WW)

Consult factory for IES files or LM-79 reports

Product	LED Code	Drive Current Code	System Wattage (W)	Delivered Lumens (Lm) ¹	Efficacy (Lm/W)
GCJ0	15H	300 ²	15	1810	121
		390 ²	19	2280	120
		490 ³	24	2840	118
		590	30	3410	114
		700	35	3910	112
		350 ³	25	3040	122
GCJ1	20H	450	29	3470	120
		530	34	3980	117
		580	39	4470	115
		680	44	4960	113
		700	46	5130	112
		700	45	5020	112
GCJ2	20H	830	54	5780	107
		900	58	6120	106
		1A	68	6960	102

Notes:

- 1 Nominal lumens. Normal tolerance $\pm 10\%$ due to factors including distribution type, LED bin variance, and ambient temperatures.
- 2 DLC Approved only at 120VAC.
- 3 DLC Approved at 120-240VAC

Performance Data: 4000K (NW) and 5000K (CW)

Consult factory for IES files or LM-79 reports.

Product	LED Code	Drive Current Code	System Wattage (W)	Delivered Lumens (Lm) ¹	Efficacy (Lm/W)
GCJ0	15H	300 ²	15	2000	133
		390 ²	19	2490	131
		490 ³	24	3070	128
		590	30	3650	122
		700	35	4180	119
		350 ³	25	3240	130
GCJ1	20H	450	29	3720	128
		530	34	4320	127
		580	39	4850	124
		680	44	5370	122
		700	46	5510	120
		700	45	5430	121
GCJ2	20H	830	54	6210	115
		900	58	6630	114
		1A	68	7430	109

Notes:

- 1 Nominal lumens. Normal tolerance $\pm 10\%$ due to factors including distribution type, LED bin variance, and ambient temperatures.
- 2 DLC Approved only at 120VAC.
- 3 DLC Approved at 120-240VAC



GreenCobra™ Jr. LED Street Light GCJ H-Series Specification Data Sheet

BUG Ratings: 3000K (WW)

All data nominal. IES files for all CCTs are available at leotek.com.

Product & LED Code	Drive Current Code	Type 2R	Type 3	Type 4	Type 5
		BUG Rating	BUG Rating	BUG Rating	BUG Rating
GCJ0 15H	300	B0 U0 G0	B1 U0 G1	B1 U0 G1	B1 U0 G0
	390	B1 U0 G0	B1 U0 G1	B1 U0 G1	B1 U0 G0
	490	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	590	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	700	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
GCJ1 20H	350	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	450	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	530	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	580	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	680	B1 U0 G1	B1 U0 G1	B2 U0 G1	B3 U0 G1
GCJ2 20H	700	B1 U0 G1	B2 U0 G1	B2 U0 G1	B3 U0 G1
	700	B1 U0 G1	B1 U0 G1	B2 U0 G1	B3 U0 G1
	830	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1
	900	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1
	1A	B1 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1

BUG Ratings: 4000K (NW) and 5000K (CW)

All data nominal. IES files for all CCTs are available at leotek.com.

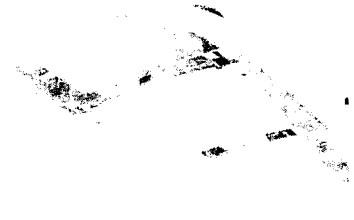
Product & LED Code	Drive Current Code	Type 2R	Type 3	Type 4	Type 5
		BUG Rating	BUG Rating	BUG Rating	BUG Rating
GCJ0 15H	300	B1 U0 G0	B1 U0 G1	B1 U0 G1	B1 U0 G0
	390	B1 U0 G0	B1 U0 G1	B1 U0 G1	B1 U0 G0
	490	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	590	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	700	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
GCJ1 20H	350	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	450	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	530	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	580	B1 U0 G1	B1 U0 G1	B2 U0 G1	B3 U0 G1
	680	B1 U0 G1	B2 U0 G1	B2 U0 G1	B3 U0 G1
GCJ2 20H	700	B1 U0 G1	B2 U0 G1	B2 U0 G1	B3 U0 G1
	700	B1 U0 G1	B2 U0 G1	B2 U0 G1	B3 U0 G1
	830	B1 U0 G1	B2 U0 G2	B2 U0 G1	B3 U0 G1
	900	B1 U0 G1	B2 U0 G2	B2 U0 G2	B3 U0 G1
	1A	B1 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1



GreenCobra™ LED Street Light 120-277 & 347-480 Vac GCJ/GCM Series



GCM1/GCM2



GCJ0/GCJ1/GCJ2

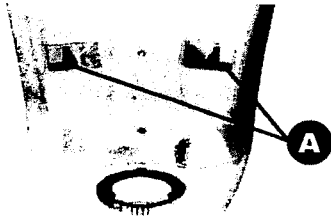
Installation Guide

This procedure is designed as an installation aid. Skilled tradespeople that are familiar with general construction and electrical installation techniques should perform the installation. Licensed electricians should provide electrical installation connections. Installations and connections should be done in accordance with all national and local codes and permits. In no way is this document intended to construe warranty or fitness of use of the products described, nor is it intended to provide safety instruction for those installing the product.

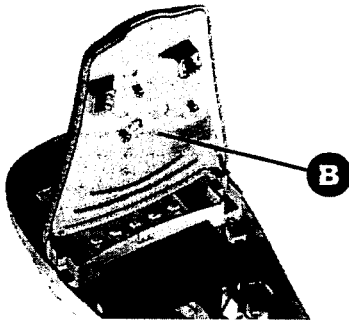
WARNING

Before proceeding with installation or service maintenance of this product:

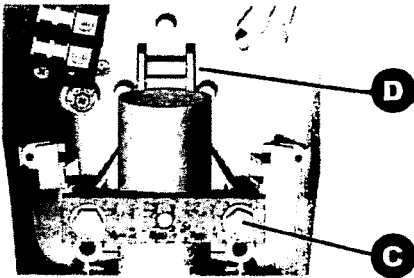
- Disconnect power to reduce electrical shock risk.
- Review the entire Installation Guide.
- Inspect this properly packaged product for any damage that may have occurred during transit.
- Verify product application complies with manufacturer design recommendations.
- Verify the availability of necessary tools and incidental material.
- Verify applicable code requirements. Field assembly and installation are subject to acceptance by local inspection authority.
- Appropriate safety equipment to be determined by end user, per applicable safety standards and precautions.



Step 1 Unfasten the plastic latches. **A**

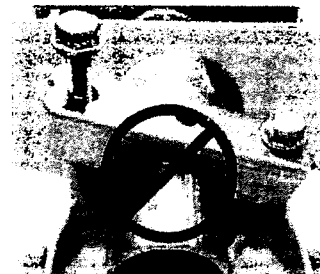


Step 2 Open the power door. **B**

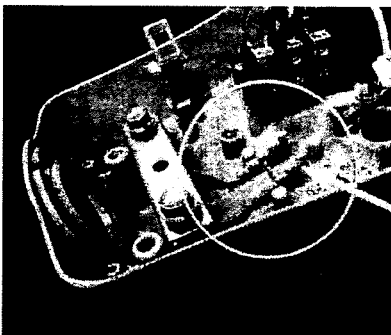


Step 3 Loosen the two slip-fitter bracket bolts **C** and insert the mounting arm. The maximum outside diameter for the mounting arm is 2-3/8" (60.3mm). The minimum outside diameter for the mounting arm is 1-5/8" (41.28mm). Mounting arm to be placed "stopped" against appropriate step required to achieve desired degree of tilt. * **D** Securely tighten the bolts per torque specification table.

*** Important: see note below.**

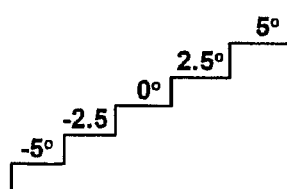


Warning! Tighten slip-fitter bracket bolts by alternating from bolt to bolt in equal, measured amounts. Refrain from unevenly tightening bolts, as it will cause cross-threading.



Tilt Angle Feature

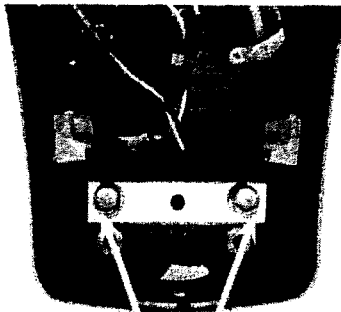
***Note:** After installing the fixture on the mast arm, lay the mast arm against the appropriate step to achieve the desired degree of tilt. Options vary from from 0° to get no tilt to 5°/-5° to get maximum tilt.



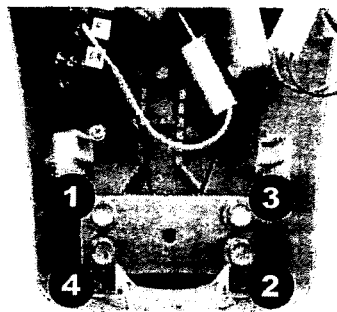
Torque Specification

Pipe Size	Pipe Position	Bolt Torque (ft-lbs)	Bolt Torque (N-m)
1.625in (1 5/8 in) (41.28mm)	+5.0 degrees tilt	25	35
	+2.5 degrees tilt	25	35
	0 degrees tilt	25	35
	-2.5 degrees tilt	25	35
	-5.0 degrees tilt	25	35
2.375in (2 3/8 in) (60.3mm)	+5.0 degrees tilt	25	35
	+2.5 degrees tilt	25	35
	0 degrees tilt	25	35
	-2.5 degrees tilt	25	35
	-5.0 degrees tilt	25	35

**2 Bolts Standard / 4 Bolts Optional
Both Factory Installed**

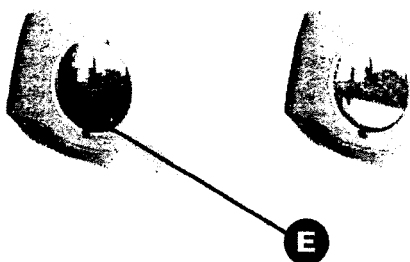


Standard 2 Bolts



Optional 4 Bolts

Recommended for tightening 4-bolt bracket: Tighten each bolt in order from 1-4 in 4 different passes each with 25% torque.



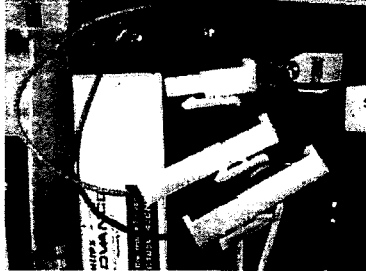
Wildlife Guard Specification

The default factory setting is shown here on the left for a pipe O.D. that is less than 1-1/2". If the O.D. of pipe is from 1-1/2" to 2-3/8", remove the insert. **E**

Current Selector

Blue / Gray 700mA
Red / Gray 1050mA

(Sample Diagram)



Step 4 - Adjust Drive Current*

Drive current should comport with designed illumination levels and circuit loading. Consult with design engineer before changing. Open the fast connector and change the connection according to the current selector diagram installed in the fixture. Note: If the FDC option was ordered, the drive current cannot be changed.

* Control Ready (CR) doesn't have field adjustable option

GCJ G-Series Drive Current Table

GCJ1	GCJ2
350	
580	
700	700
	1A

GCJ H-Series Drive Current Table

GCJ0	GCJ1		GCJ2
	Option 1	Option 2	
300	350	450	700
390	580	530	830
490	700	680	900
590		700	1A
700			

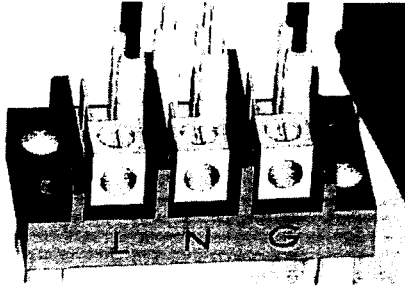
GCM F-Series Drive Current Table

GCM1	GCM2
350	
530	
700	700
	1A

GCM G-Series Drive Current Table

GCM1	GCM2
350	
530	
700	700

Electrical Wiring Connection



Standard Wiring Selections

	MV¹ (120/220/277V)	HV² (347/480V)
L	Hot 1	Hot 1
N	Neutral Hot 2 (208V/240V)	Hot 2
G	Ground	Ground

Step 5 - Connect the green conductor to the ground chassis (shown to the right of the terminal block).

Step 6 - Connect the black conductor (Hot 1) to the input terminal marked "L".

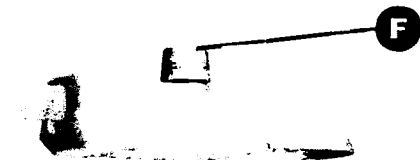
Step 7 - Connect the white conductor (Neutral) or second black conductor (Hot 2) to the input terminal marked "N" according to Wiring Table.

Note 1: All Power Supplies are Auto-Sensing.


Note 2: GCI does not have HV Option.



Step 8 Close the power door. **B**



Step 9 If luminaire is furnished with photocontrol receptacle, install the photocontrol **F** or shorting cap.

 <p>GUAM POWER AUTHORITY AGANA, GUAM</p>	<p>SPECIFICATION No. E-043</p>	<p>PAGE 7 OF 8</p>
		<p>REVISION: 3 July 28, 2016</p>
<p>PREPARED BY THE ENGINEERING DEPT.</p>		

Appendix A


150 Watt HPS replacement LED Streetlight Luminaire Information Sheet

NOTE: Please complete the product information and provide the required documents. Incomplete information shall be cause for rejection.

Product Information		
1.	NEMA Standard 3-terminal twist lock type PEC receptacle or PEC supplied with light that is covered with the luminaire warranty.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2.	Mounting, Horizontal Tenon, 1-1/4" I.P.S. (1-5/8" O.D.) to 2" O.D. I.P.S. pipe	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3.	Voltage (120VAC) 120V - 277V	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4.	Frequency (60Hz)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.	Manufacturer's Name Lectek USA	
6.	Brand Name Green Globe	
7.	Model # (Full detail with numbering logic sheet) XXXXXXXXXXXXXXXXXXXX	
8.	Weight (<25lbs) 7lbs	
9.	Luminaire Wattage to include driver (<80W) 58W	
10.	Luminaire leveling adjustment (degrees) ±5%	
11.	Initial Lumens (>6,400 lm) 6630	
12.	Drive Current 900	
13.	Light Distribution 2,3,4,5 (Specify)	
14.	Correlated Color Temperature (CCT) (3800-4800K) 4000K	
15.	Color Rendering Index (CRI) (>65) >70	
16.	Specify tools required for entry NONE	
17.	Specify tools require for mounting XXXXXXXXXXXXXXXXXXXX	
18.	Specify tools required for termination of wires. XXXXXXXXXXXXXXXXXXXX	
19.	Applicable Accessories & Description (Provide Attachment if more space is needed)	
<p>REFER TO Spec Sheet</p>		

Required Documents		
1.	Product Literature (Product sheet for only the specified luminaires showing the electrical, photometric, and physical characteristics of only the light specified in this appendix.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2.	Warranty - 10 YEAR	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3.	Application details at 2, 3, 4, and 50 foot mounting heights as specified in Section 5.7.	<input type="checkbox"/> Yes <input type="checkbox"/> No

RECEIVED DATE: 7/28/16 ISSUED: [Signature] APPROVED: [Signature]

 <p>GUAM POWER AUTHORITY AGANA, GUAM</p> <p>PREPARED BY THE ENGINEERING DEPT.</p>	<p>SPECIFICATION No. E-043</p>	<p>PAGE 8 OF 8</p>
		<p>REVISION: 3 July 28, 2016</p>

Appendix B
250 Watt HPS replacement LED Streetlight Luminaire Information Sheet

NOTE: Please complete the product information and provide the required documents. Incomplete information shall be cause for rejection.

Product Information		
1.	NEMA Standard 3-terminal twist lock type PEC receptacle or PEC supplied with light that is covered with the luminaire warranty.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2.	Mounting, Horizontal Tenon, 1-1/4" I.P.S. (1-5/8" O.D.) to 2" O.D. I.P.S. pipe	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3.	Voltage (120VAC) 120V - 277V	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4.	Frequency (60Hz)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.	Manufacturer's Name <i>Leatek USA</i>	
6.	Brand Name <i>Green Cobra</i>	
7.	Model # (Full detail with numbering logic sheet) XXXXXXXXXXXX	
8.	Weight (<30lbs) <i>10lbs</i>	
9.	Luminaire Wattage to include driver (<100W) <i>88W</i>	
10.	Luminaire leveling adjustment (degrees) <i>±5°</i>	
11.	Initial Lumens (>10,000 lm) <i>10,100</i>	
12.	Drive Current <i>700</i>	
13.	Light Distribution <i>2,3</i>	
14.	Correlated Color Temperature (CCT) (3800-4800K) <i>4000K</i>	
15.	Color Rendering Index (CRI) (>65) <i>770</i>	
16.	Specify tools required for entry. <i>NONE</i>	
17.	Specify tools required for mounting. XXXXXXXXXX	
18.	Specify tools required for termination of wires. XXXXXXXXXX	
19.	Applicable Accessories & Description (Provide Attachment if more space is needed)	
<i>REFER TO ATTACHED SPEC SHEET</i>		

Required Documents		
1.	Product Literature (Product sheet for only the specified luminaires showing the electrical, photometric, and physical characteristics of only the light specified in this appendix.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2.	Warranty <i>- 10 YEAR</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3.	Photometric plots at 25 feet and 80 feet at various heights as specified in section 5.7.	<input type="checkbox"/> Yes <input type="checkbox"/> No

DESIGNED BY: <i>[Signature]</i>	ISSUED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>
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