

Philadelphia Streetlight Improvement Project
Luminaire RFP - Due December 30, 2022

Addendum #1

Please see the additional information and clarifications below for your use on the RFP response. Included are the two questions, and responses, we have received to date.

At this point, there is no intention of extending the due date. We appreciate your efforts to complete the response during this holiday season. The project is on an aggressive timetable to enable the City to secure the necessary financing to enable a spring commencement of installation.

Updated Information:

1. The updated preliminary quantities for the pricing component are below. These replace the quantities provided in the RFP:

Alley	Driveway	Local	Collector	Major
15,600	2,600	41,600	41,600	28,600

Note: Actual quantities broken down by Typical Application will be provided later and used to determine the total price.

2. The following AGI templates have now been added to the Share directory:

Super Major 88 ROW ST	Super Major 100 ROW ST	Super Major 150 ROW SO
Local 21 INT ANGLED	Local 22 INT	

Templates for Local 11 INT and Angled and Local 12 INT and Angled have been deleted and need not be assessed by the respondents.

3. Please use the updated RFP spreadsheet (*PSIP Luminaire RFP Spreadsheet 12-15-22*) distributed with this Addendum. It corrects a couple of minor errors and eliminates the row requesting the 'Preferred Distribution Mark-up'. The updated spreadsheet is also available in the shared directory.

General Comments:

1. It is acknowledged that the RFP has very specific quantitative prescriptions. Given the complexity of the project features and criteria, post-RFP response assessments and scoring will likely result in dialog between the Ameresco/Ownership team and each of the respondents to discuss the various results contained within in the respective RFP responses. The expertise and efforts of the respondents are appreciated and there is genuine intent to collaborate in the interest of providing the best lighting solutions to benefit the owner over the life of the project.
2. The five minimum lumen values provided for the Baseline luminaire selections and the Boosted luminaire selections have been established to provide flexibility in the dimming or undimming strategies over the life of the project to attain and/or maintain various target light levels. This also serves to minimize the number of discrete luminaires (SKU's) necessary to initially equip the project and to serve as shelf stock for the owner.

Accordingly, a maximum of ten lumen ratings will be utilized for all aspects of the RFP response. Ideally, fewer than ten lumen ratings may be required, as there may be overlap between certain applications in the Baseline and Boosted scenarios, wherein different dimming states are applied to the same SKU to meet the specified target values.

Question & Answer:

Question 1: *For Alleys where a Dusk to Dawn Style Luminaire will be utilized, can the IES distribution be asymmetrical Type I-II-III or does it need to be type V symmetrical? In short, can we run the applications and submit asymmetrical distribution for the Alley Dusk to Dawn luminaire?*

Samples Request requires fixtures this month but calls out type V but if asymmetric distribution has cost and lighting application benefits. Please confirm we can submit an asymmetrical distribution such as type I-II-III.

Answer 1: Yes, optics can be tuned for best target efficacy values; and, samples can correlate to proposed best fit luminaire optics.

Question 2: *Requesting further understand the Booster 2X luminaire and have an example to better understand my question.*

Alley product requires 5000 minimum lumens. The AGI 32 application with the legacy light levels are met with a 4000 lumen product, the 2X product would need to be able to be boosted to 8000 Lumens (2x4000) and also dimmed to 4000 lumens? Are we interpreting what 2X boost means?

Answer 2: Modeled legacy light levels shown in the templates are not necessary accurate and also have no relevance to the selection of new LED luminaires. New LED luminaires shall be selected to meet the targets specified in text format within each of the AGI32 template files and PDFs provided.

The “2X Boosted” condition output specification assessment requires 2X the baseline target lighting levels shown in the templates.

The five minimum lumen packages for the “2X boosted” condition evaluations are the same as those for the baseline condition. The offeror has complete discretion as to how many lumens are actually needed, which luminaire is best fit, and what dimming values are necessary to attain the “2X Boosted” target illuminance/luminance values using manufacturer - specific light loss factors.

Question 3: *The PDF documents indicates that ‘Pricing offered must not increase for the entire duration of the project installation’ and the RFP spreadsheet notes a ‘Price Expiration Date’ of 7/31/2023. Our understanding is that the installation will not be completed by the end of July 2023. Please clarify how long the quoted prices must be good for.*

Answer 3: The pricing expiration date reflects how long the vendor is expected to hold the price. It is our intention to enter into an agreement for the procurement of the fixtures prior to July 31st, at which point the fixture prices are expected to remain fixed for the duration of the installation (approximately 18-24 months).

Question 4: *Other than the details shown in the RFP document are there any specific features or options required with the samples such as photocell receptacles?*

Answer 4: The sample luminaires should have a 0-10v driver and a 7-pin NEMA receptacle. Please also provide a dimming curve for each luminaire.

Question 5: *Which projection method is allowed or required for TM-21 Lxx values, TM-21-19 (using Excel) or TM-21-21 using the BETA version of the IES on-line calculator?*

Answer 5: Please use the IES/ANSI TM-21 Calculator and 25C ambient operating temperature:

[TM-21 Calculator - Illuminating Engineering Society \(ies.org\)](https://www.ies.org/standards/standards-toolbox/tm-21-calculator/)
<https://www.ies.org/standards/standards-toolbox/tm-21-calculator/>

Question 6: *Is it acceptable to use a revised LED Ts and LED IF representative of the “dimmed” state normal operating condition for the projection of the reported TM-21 Reported LXX for the proposed SKU rather than the published TM-21 Lxx for the rated full output condition?*

Answer 6: No, dimming ranges are likely to be dynamic over time and there is no long-lived 'normal operating condition' anticipated. Use full light output values for TM-21 calculations for each of the luminaires when factoring LLD into the total LLF for each application.

Question 7: *Regarding the application designs for base line, 2X boosted and required minimum lumen ratings@ 3000K CCT, should the design luminaire selection be based on the minimum lumens and then dimmed to meet base line and then 2X boosted? Here is an example to obtain clarification: RFP required minimum lumens of 10,000 and the luminaire selected wattage is 100W. To achieve baseline AGI32 application criteria 4000L@40W is required and 2X boosted 8000L@80W is required but the product must have nameplate capability of offering 10,000 lumens @ 100W, so should the IES file/luminaire used in the AGI32 file be 10,000 Lumens and dimmed to .80 for boosted and .40 for base line?*

Answer 7: Your example is correct.

Question 8: *How should the supplier versions/copy of the AGI32 files be submitted to display this? AGI 32 has a feature called "Scene Manager" that will allow for dimming to display this reduction. How would you like to see the documentation of the minimum lumens required vs. the wattage/lumens required for baseline and 2X boosted.*

Answer 8: RFP spreadsheet inputs for delivered lumens and system watts will reflect the dimmed state for lifecycle cost analysis of each luminaire in each Baseline and Boosted application. Use of AGI32 Scene Manager tool or appropriately scaled IES files in the AGI32 outputs to implement desired target dimming values are acceptable as long the methodology is clearly identified. Do not use modifications to the LLF as a means by which to reflect dimming strategies within in the AGI32 files or PDF outputs.

Question 9: *Collector 22 INT Intersection, double is way over illuminated with 18,000 lumens minimum and could be illuminated with less <5000 minimum lumen product. Should the 18,000-lumen file be used and dimmed down to this low light level? Should a 10,000 or even 5000 Lumen product be used even though the requirement is 18000 lumens.*

Answer 9: Please utilize the specified minimum lumen ratings for each application and apply dimming factors to attain the target values. Refer to **General Comment 2** above.

Question 10: *On the Baseline Luminaire tab: Lines 56-79 are locked so the data cannot be filled in like on 2X tab.*

Answer 10: Those lines pertain to information regarding boosting, and are not required for the Baseline Luminaire tab, as the necessary information should be submitted within the Boosted 2X Luminaire tab.

Question 11: *Regarding target criteria in the AGI files, are the drive lanes and parking lanes calc zones intended to both meet the same Cd/Sq.M minimum average luminance target specified?*

Answer 11: Drive lanes and parking lanes have the same target values.

Question 12: *What is the weighting of the performance criteria during evaluations with relations to the specified targets? Are their priorities as we try to minimize the SKU's, we can potentially over light drive lanes to meet the sidewalk verticals if everything is weighted the same. Is there a +/- percentage tolerance to meeting some of the secondary criteria such as verticals, sidewalks, veiling luminance, and uniformity?*

Answer 12: It is understood that target sidewalk illuminance values in some of the single sided applications are difficult to attain for the sidewalks on the opposite side of the street and attaining sidewalk vertical target values can be challenging in general. As a rule, do not exceed the roadway targets in the Baseline or Boosted models by more than 10% in order to attain better sidewalk values.

Veiling luminance results will be assessed equally relative to roadway luminance and uniformity ratio compliance.

Also, please see **General Comment 1** above.

Question 13: *The minimum lumen requirement does not align with the targets. In some cases, using their specified lumen package we are 10x the targets. However, the lumen output is in the spreadsheet as a requirement, so I'm not sure if we have any leeway there?*

Answer 13: Please see **General Comment 2** above and the other Q&A related to this same topic.

Question 14: *We would like to use a 0.9 LLF with our optical system, vs the 0.8 LLF that you require unless we use a "flat glass lens." In short, we "disagree with these LDD prescriptions" per the bottom of page 3 of the RFP and so ask for your reconsideration.*

Answer 14: Upon further assessment of luminaire dirt depreciation (LDD) factors in various publications and accounting for project specific circumstances, **ALL RESPONDENTS SHALL UTILIZE 0.80 LDD** in their calculation of total LLF for each luminaire in each application.

Question 15: *Regarding the samples, once we decide best luminaire at 3000K do you simply want the same fixture in 4000K or would like us to completely model a new fixture with the 4000K temperature?*

Answer 15: The samples should be the same 10,000 lumen luminaire in 3000K and 4000K, however if the 10,000 lumen luminaire in 4000K falls substantially below 10,000 lumens in the 3000K version, you should consider providing a luminaire with a higher output for the samples. All the cobra head samples should be the same luminaire, same lumen package, regardless of CCT. Same for the dusk to dawn.

Question 16: *Is Local Manufacturing still under consideration? Should that be included as part of the response provided, or will it be addressed at a later time?*

Answer 16: *Answer Pending*