

Informal Bid No: TR071216
BID FOR LED 4' Tube Lamps

July 20, 2016

Procurement Division
330 2nd Ave South, Room 552
Minneapolis, MN 55401

Buyer Information:
Traci Reimringer, (612) 673-2176
Traci.Reimringer@minneapolismn.gov

AN AFFIRMATIVE ACTION EMPLOYER

ADDENDUM NO. 1
"BIDS FOR LED 4' Tube Lamps"

Revisions have been made to the specifications. Any information being added is in black-bold font and information being removed is in red font with a strikethrough. Bid due date and time remain the same. This addendum should be acknowledged on your bid form.

VENDOR QUESTIONS:

Is this fixture a single end wired fixture, or a double end wired fixture? Most LED retrofit lamps are not wired on both ends these days, this was the old way of doing the connection. Now they are wired on one end. If I quote an LED lamp that is only wired at one end, will that be accepted? **No, we do not want LED lamps that are wired on only one end.**

Would there be a need for tall or short sockets? **No, the lamps should fit into a shunted tombstone socket.**

Please provide product info. Example is model # and manufacture. Providing product info is always important. **We are not providing a list of acceptable products. There are dozens of T8 LED lamps listed on the DLC list that will meet our criteria.**

Is this lamp a Direct Repl plug and play or Internal Driver by pass? **These lamps will be directly wired to 120V/277V line voltage. The original Fluorescent ballast will be removed from the system.**

Any special requirements for this lamp. DLC? Shatterproof (PET)? **These lamps must be DLC listed AND meet the measured vs. rated numbers shown in the specification. The materials of construction are not specified, so glass or plastic tubes are acceptable.**

What is considered compatible acceptable complete lamps? **We are willing to look at any lamp that meets the specifications listed.**

What is the expected delivery date and due date of products to them? **The delivery schedule is on our Bid Form. It is the intent of the department to place the first order within two week after award.**

Is the RoHS certification 100% necessary? **No, this is being removed from the specifications.**

CITY OF MINNEAPOLIS - July 2016

REVISED Specifications for LED 4' tube lamp to replace 4' T8 32W fluorescent lamp in 6 lamp high-bay fixtures

1. Lamps shall meet the following technical requirements:

Property	Specification	Test Method
Wattage	≤ 19 W	IES TM79-08
Voltage	Operable on 120V and 277V	IES TM79-08
Lumens	≥ 1900 lumens	IES TM79-08
CCT °K	= 4000° to 4100°K	IES TM79-08
CRI	≥ 80	IES TM79-08
Efficiency	≥ 100 lumens/watt	IES TM79-08
L ₇₀ Lifetime	≥ 50,000 hours	IES TM21-11/IES LM80-15
Power Factor	≥ 0.90	ANSI C82.77-2002
Total Harmonic Distortion	≤ 20%	ANSI C82.77-2002

2. Warranty: Minimum 50,000 hours of actual use. During this time period, any failing lamps will be replaced at no cost (including freight, but not including installation labor). Failure of a lamp is defined as:

- a. Any lamp that totally fails to light.
- b. 10% or more of LED chips in lamp do not produce light
- c. Reduction in lumens greater than 30% of the initial lamp output

3. Quantities: Total of 3000 lamps to be delivered in Qty. 1000 approximately every two weeks.

4. Electrical Connection: Direct wired, no ballast in circuit, single wire connections on opposite tube ends

5. Service Level: Ability to deliver up to 100 tubes within 48 hours of ordering without expedited freight charges

6. Certifications:

a. DCL – (DesignLights Consortium)

- i. Lamp model number must be listed as a Qualified Product on the DLC Qualified Product List (QPL).
- ii. The rated criteria for the proposed lamp will be compared to the measured criteria for the proposed lamp or its parent lamp with the same family code in the QPL. These two sets of measurements cannot differ by more than the percentages in the following table:

Criteria	Lumens	Wattage	Lumens/Watt	Total Harmonic Distortion	CCT (Color Temp)	CRI (Color Rendition)
Allowable difference	≤ ± 10%	≤ ± 10%	≤ ± 10%	< ± 50%	< ± 10%	< ± 5%

b. FCC: Meets FCC Part 15, Subpart B, standards for conducted and radiated emissions

c. UL Listing – the lamp must have ~~eULus certifications 1598 and 8750~~ **UL certification – UL1993**

~~d. RoHS – the lamp must have RoHS certification~~

7. Manufacturing Experience: The manufacturer of the lamp model must have a minimum of 5 years of general LED lamp manufacturing experience and product sales, and a minimum of 3 years of tubular LED fluorescent replacement lamp manufacturing experience and product sales.

8. Quality Control: Up to 6 months after receipt of product, the City retains the right to return any lamps for a full refund of any individual lamps that do not meet the criteria listed in item 6 above. Lamps will be replaced at no cost (including freight, but not including installation labor).

9. **Material: Tube may be glass or polymeric**