Council Meeting of
May 22, 2012

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the Council:

SUBJECT: General Services- Award a contract for lighting retrofits at various city owned buildings.

Expenditure: $ 106,291.85

RECOMMENDATION

Recommendation of the General Services Director that City Council:

1) Award a contract to California Retrofit Inc. for $92,427.85 with a 5% contingency of $4,621 for lighting retrofits at various City owned buildings (B2012-12); and,
2) Approve a 10% project management fees of $9,243.

Funding – Funding is available in FEAP751- Energy Projects

BACKGROUND/ANALYSIS

The lighting retrofit project was one of several projects included in the City's Consolidated Energy Plan which was approved by Council on June 15, 2010 as part of the 2nd year of the 2 year budget cycle (2009-2011). The Consolidated Energy Plan will bring in an anticipated cost savings of $350,000 per year when fully completed.

This specific project includes retrofits of florescent lamps and associated ballasts throughout City owned facilities that have not been upgraded via building renovation or prior retrofit projects Some of the buildings included are the Fire Stations, City Park buildings, Cultural Arts Center, City Yard, Cable Bldg, Fire Prevention, and Human Resources Building, with annual estimated savings of $50,000 to $60,000 per year. The projected simple payback for this work is under 3 years. Work will be accomplished during non-operating hours for each respective facility.

Retrofits of High Intensity Discharge (HID) fixtures, including high pressure sodium and metal halide lamps, will be advertised and bid after completion of this project and should bring in an additional $50,000 to $60,000 in additional energy saving.

Staff formally bid the project (B2012-12) and received the following bids.

California Lighting Retrofits	$92,427.85
Sylvania Lighting Services	$147,290.05
Torres Construction	$292,066.00

California Retrofit Inc. has performed well in past lighting retrofit projects with the City of Torrance. They are staffed to quickly complete the specified work with minimum impacts to the public or city employees. Staff has reviewed California Retrofit Inc.'s bid, license, and references and found everything in order. Therefore, staff is recommending City Council award a contract to California Retrofits for $92,427.85 with 5% contingency of $ 4,621 for the lighting retrofits within various City Buildings.

Respectfully submitted,

Sheryl Ballew
General Services Director

By Jon Landis
Facility Services Manager

CONCUR:

Sheryl Ballew
Sheryl Ballew
General Services Director

LeRoy J. Jackson
City Manager

Attachment A: California Retrofit Contract Agreement

PUBLIC WORKS AGREEMENT

This PUBLIC WORKS AGREEMENT ("Agreement") is made and entered into as of May 22, 2012, by and between the CITY OF TORRANCE, a municipal corporation ("CITY"), and California Retrofit, Inc., a California corporation.

RECITALS:

A. The CITY wishes to retain the services of an experienced and qualified CONTRACTOR to furnish all labor, materials, tools, equipment and incidentals in accordance with the plans and specifications by the City of Torrance;

B. In order to obtain the desired services, The CITY has circulated a Notice Inviting Bids for Lighting Retrofits at Various City Buildings, Notice Inviting Bids No. **B2012-12** (the "NIB"); and

C. CONTRACTOR has submitted a Bid (the "Bid") in response to the NIB. CONTRACTOR represents that it is qualified to perform those services requested in the Plans and Specifications. Based upon its review of all Bids submitted in response to the NIB, The CITY is willing to award the contract to CONTRACTOR.

AGREEMENT:

1. SERVICES TO BE PERFORMED BY CONTRACTOR

CONTRACTOR will provide the services and install those materials listed in the Plans and Specifications, which are on file in the General Services Department. The NIB and the Plans and Specifications are made a part of this Agreement. A copy of the Bid is attached as Exhibit A.

2. TERM

Unless earlier terminated in accordance with Paragraph 4 below, this Agreement will continue in full force and effect for one year from Effective Date.

3. COMPENSATION

A. CONTRACTOR's Fee.

For services rendered pursuant to this Agreement, CONTRACTOR will be paid in accordance with CONTRACTOR's Bid; provided, however, that in no event will the total amount of money paid the CONTRACTOR, for services initially contemplated by this Agreement, exceed the sum of $ 92,427.85 unless otherwise first approved in writing by the CITY.

B. Schedule of Payment.

Provided that the CONTRACTOR is not in default under the terms of this Agreement, upon presentation of an invoice, CONTRACTOR will be paid monthly, within 30 days after the date of the monthly invoice.

4. TERMINATION OF AGREEMENT

A. Termination by CITY for Convenience.

1. CITY may, at any time, terminate the Agreement for CITY's convenience and without cause.
2. Upon receipt of written notice from CITY of such termination for CITY's convenience, CONTRACTOR will:
   a. cease operations as directed by CITY in the notice;
   b. take actions necessary, or that CITY may direct, for the protection and preservation of the work; and
   c. except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
3. In case of such termination for CITY's convenience, CONTRACTOR will be entitled to receive payment for work executed; and costs incurred by reason of such termination, along with reasonable overhead and profit on the work not executed.

B. Termination for Cause.

1. If either party fails to perform any term, covenant or condition in this Agreement and that failure continues for 15 calendar days after the nondefaulting party gives the defaulting party written notice of the failure to perform, this Agreement may be terminated for cause; provided, however, that if during the notice period the defaulting party has promptly commenced and continues diligent efforts to remedy the default, the defaulting party will have such additional time as is reasonably necessary to remedy the default.

2. In the event this Agreement is terminated for cause by the default of the CONTRACTOR, the CITY may, at the expense of the CONTRACTOR and its surety, complete this Agreement or cause it to be completed. Any check or bond delivered to the CITY in connection with this Agreement, and the money payable thereon, will be forfeited to and remain the property of the CITY. All moneys due the CONTRACTOR under the terms of this Agreement will be retained by the CITY, but the retention will not release the

CONTRACTOR and its surety from liability for the default. Under these circumstances, however, the CONTRACTOR and its surety will be credited with the amount of money retained, toward any amount by which the cost of completion exceeds the Agreement Sum and any amount authorized for extra services.

3. Termination for cause will not affect or terminate any of the rights of the CITY as against the CONTRACTOR or its surety then existing, or which may thereafter accrue because of the default; this provision is in addition to all other rights and remedies available to the CITY under law.

C. Termination for Breach of Law.

In the event the CONTRACTOR or any of its officers, directors, shareholders, employees, agents, subsidiaries or affiliates is convicted (i) of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of a contract or subcontract; (ii) under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a public consultant or contractor; (iii) under state or federal antitrust statutes arising out of the submission of bids or proposals; or (iv) of violation of Paragraph 19 of this Agreement; or for any other cause the CITY determines to be so serious and compelling as to affect CONTRACTOR's responsibility as a public consultant or contractor, including but not limited to, debarment by another governmental agency, then the CITY reserves the unilateral right to terminate this Agreement or to impose such other sanctions (which may include financial sanctions, temporary suspensions or any other condition deemed appropriate short of termination) as it deems proper. The CITY will not take action until CONTRACTOR has been given notice and an opportunity to present evidence in mitigation.

5. FORCE MAJEURE

If any party fails to perform its obligations because of strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond the reasonable control of the party obligated to perform, then that party's performance shall be excused for a period equal to the period of such cause for failure to perform.

6. RETENTION OF FUNDS

CONTRACTOR authorizes the CITY to deduct from any amount payable to CONTRACTOR (whether or not arising out of this Agreement) any amounts the payment of which may be in dispute or that are necessary to compensate the CITY for any losses, costs, liabilities, or damages suffered by the CITY, and all amounts for which the CITY may be liable to third parties, by reason of CONTRACTOR's negligent acts or omissions or willful misconduct in performing or failing to perform CONTRACTOR's obligations under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by CONTRACTOR, or any indebtedness exists that appears to be the basis for a claim of lien, the CITY may withhold from any payment due, without liability for interest because of the withholding, an amount sufficient to cover the claim. The failure of the CITY to exercise the right to deduct or to withhold will not, however, affect the obligations of CONTRACTOR to insure, indemnify, and protect the CITY as elsewhere provided in this Agreement.

7. THE CITY'S REPRESENTATIVE

Jon Landis, Facility Services Manage is designated as the "City Representative," authorized to act in its behalf with respect to the work and services specified in this Agreement and to make all decisions in connection with this Agreement. Whenever approval, directions, or other actions are required by the CITY under this Agreement, those actions will be taken by the City Representative, unless otherwise stated. The City Manager has the right to designate another City Representative at any time, by providing notice to CONTRACTOR.

8. CONTRACTOR REPRESENTATIVE(S)

The following principal(s) of CONTRACTOR are designated as being the principal(s) and representative(s) of CONTRACTOR authorized to act in its behalf with respect to the work specified in this Agreement and make all decisions in connection with this Agreement:

Richard Mitten

9. INDEPENDENT CONTRACTOR

The CONTRACTOR is, and at all times will remain as to the CITY, a wholly independent contractor. Neither the CITY nor any of its agents will have control over the conduct of the CONTRACTOR or any of the CONTRACTOR's employees, except as otherwise set forth in this Agreement. The CONTRACTOR may not, at any time or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of the CITY.

10. BUSINESS LICENSE

The CONTRACTOR must obtain a City business license prior to the start of work under this Agreement, unless CONTRACTOR is qualified for an exemption.

11. OTHER LICENSES AND PERMITS

CONTRACTOR warrants that it has all professional, contracting and other permits and licenses required to undertake the work contemplated by this Agreement.

12. FAMILIARITY WITH WORK

By executing this Agreement, CONTRACTOR warrants that CONTRACTOR (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement. If the services involve work upon any site, CONTRACTOR warrants that CONTRACTOR has or will investigate the site and is or will be fully acquainted with the conditions there existing, prior to commencement of services set forth in this Agreement. Should CONTRACTOR discover any latent or unknown conditions that will materially affect the performance of the services set forth in this Agreement, CONTRACTOR must immediately inform the CITY of that fact and may not proceed except at CONTRACTOR's risk until written instructions are received from the CITY.

13. CARE OF WORK

CONTRACTOR must adopt reasonable methods during the life of the Agreement to furnish continuous protection to the work, and the equipment, materials, papers, documents, plans, studies and other components to prevent losses or damages, and will be responsible for all damages, to persons or property, until acceptance of the work by the CITY, except those losses or damages as may be caused by the CITY's own negligence.

14. CONTRACTOR'S ACCOUNTING RECORDS; OTHER PROJECT RECORDS

Records of the CONTRACTOR's time pertaining to the project, and records of accounts between the CITY and the CONTRACTOR, will be kept on a generally recognized accounting basis. CONTRACTOR will also maintain all other records, including without limitation specifications, drawings, progress reports and the like, relating to the project. All records will be available to the CITY during normal working hours. CONTRACTOR will maintain these records for three years after final payment.

15. INDEMNIFICATION

CONTRACTOR will indemnify, defend, and hold harmless CITY, the City Council, each member thereof, present and future, its officers, agents and employees from and against any and all liability, expenses, including defense costs and legal fees, and claims for damages whatsoever, including, but not limited to, those arising from breach of contract, bodily injury, death, personal injury, property damage, loss of use, or property loss however the same may be caused and regardless of the responsibility for negligence. The obligation to indemnify, defend and hold harmless includes, but is not limited to, any liability or expense, including defense costs and legal fees, arising from the negligent acts or omissions, or willful misconduct of CONTRACTOR, its officers, employees, agents, subcontractors or vendors. It is further agreed, CONTRACTOR's obligations to indemnify, defend and hold harmless will apply even in the event of concurrent negligence on the part of CITY, the City Council, each member thereof, present and future, or its officers, agents and employees, except for liability resulting solely from the negligence or willful misconduct of CITY, its officers, employees or agents. Payment by CITY is not a condition precedent to enforcement of this indemnity. In the event of any dispute between CONTRACTOR and CITY, as to whether liability arises from the sole negligence of the CITY or its officers, employees, agents, subcontractors or vendors, CONTRACTOR will be obligated to pay for CITY's defense until such time as a final judgment has been entered adjudicating the CITY as solely negligent. CONTRACTOR will not be entitled in the event of such a determination to any reimbursement of defense costs including but not limited to attorney's fees, expert fees and costs of litigation.

16. NON-LIABILITY OF THE CITY'S OFFICERS AND EMPLOYEES

No officer or employee of the CITY will be personally liable to CONTRACTOR, in the event of any default or breach by the CITY or for any amount that may become due to CONTRACTOR.

17. INSURANCE

A. CONTRACTOR must maintain at its sole expense the following insurance, which will be full coverage not subject to self insurance provisions:

(1) Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability:

(a) Primary Bodily Injury with limits of at least $500,000 per person, $1,000,000 per occurrence; and

(b) Primary Property Damage of at least $250,000 per occurrence; or

(c) Combined single limits of $1,000,000 per occurrence.

(2) General Liability including coverage for premises, products and completed operations, independent contractors, personal injury and contractual obligations with combined single limits of coverage of at least $2,000,000 per occurrence.

(3) Workers' Compensation with limits as required by the State of California and Employers Liability with limits of at least $1,000,000.

B. The insurance provided by CONTRACTOR will be primary and non-contributory.

C. The CITY of Torrance, the City Council and each member thereof, members of boards and commissions, every officer, agent, official, employee and volunteer must be named as additional insureds under the automobile and general liability policies.

D. CONTRACTOR must provide certificates of insurance and/or endorsements to the City Clerk of the City of Torrance before the commencement of work.

E. Each insurance policy required by this Paragraph must contain a provision that no termination, cancellation or change of coverage can be made without thirty days notice to the CITY.

F. CONTRACTOR must include all subcontractors as insureds under its policies or must furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors will be subject to all of the requirements of this Paragraph 17.

18. SUFFICIENCY OF INSURERS

Insurance required by this Agreement will be satisfactory only if issued by companies admitted to do business in California, rated "B+" or better in the most recent edition of Best's Key Rating Guide, and only if they are of a financial category Class VII or better, unless these requirements are waived by the Risk Manager of the CITY ("Risk Manager") due to unique circumstances. In the event the Risk Manager determines that the work or services to be performed under this Agreement creates an increased or decreased risk of loss to the CITY, the CONTRACTOR agrees that the minimum limits of any insurance policies and/or the performance bond required by this Agreement may be changed accordingly upon receipt of written notice from the Risk Manager; provided that CONTRACTOR will have the right to appeal a determination of increased coverage by the Risk Manager to the City Council of the CITY within 10 days of receipt of notice from the Risk Manager.

19. CONFLICT OF INTEREST

A. No officer or employee of the CITY may have any financial interest, direct or indirect, in this Agreement, nor may any officer or employee participate in any decision relating to the Agreement that effects the officer or employee's financial interest or the financial interest of any corporation, partnership or association in which the officer or employee is, directly or indirectly interested, in violation of any law, rule or regulation.

B. No person may offer, give, or agree to give any officer or employee or former officer or employee, nor may any officer or employee solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any way pertaining to any program requirement, contract or subcontract, or to any solicitation or proposal.

20. NOTICE

A. All notices, requests, demands, or other communications under this Agreement will be in writing. Notice will be sufficiently given for all purposes as follows:

(1) Personal delivery. When personally delivered to the recipient: notice is effective on delivery.

(2) First Class mail. When mailed first class to the last address of the recipient known to the party giving notice: notice is effective three mail delivery days after deposit in an United States Postal Service office or mailbox.

(3) Certified mail. When mailed certified mail, return receipt requested: notice is effective on receipt, if delivery is confirmed by a return receipt.

(4) Overnight delivery. When delivered by an overnight delivery service, charges prepaid or charged to the sender's account: notice is effective on delivery, if delivery is confirmed by the delivery service.

(5) Facsimile transmission. When sent by fax to the last fax number of the recipient known to the party giving notice: notice is effective on receipt. Any notice given by fax will be deemed received on the

next business day if it is received after 5:00 p.m. (recipient's time) or on a non-business day.

Addresses for purpose of giving notice are as follows:

CONTRACTOR:	California Retrofit, Inc. 1375 N. Brasher Street Anaheim, CA 92807 Fax 714-696-7366
CITY:	City Clerk City of Torrance 3031 Torrance Boulevard Torrance, CA 90509-2970 Fax: (310) 618-2931

B. Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified, will be deemed effective as of the first date the notice was refused, unclaimed or deemed undeliverable by the postal authorities, messenger or overnight delivery service.

C. Either party may change its address or fax number by giving the other party notice of the change in any manner permitted by this Agreement.

21. PROHIBITION AGAINST ASSIGNMENT AND SUBCONTRACTING

This Agreement and all exhibits are binding on the heirs, successors, and assigns of the parties. The Agreement may not be assigned or subcontracted by either the CITY or CONTRACTOR without the prior written consent of the other.

22. INTEGRATION; AMENDMENT

This Agreement represents the entire understanding of the CITY and CONTRACTOR as to those matters contained in it. No prior oral or written understanding will be of any force or effect with respect to the terms of this Agreement. The Agreement may not be modified or altered except in writing signed by both parties.

23. INTERPRETATION

The terms of this Agreement should be construed in accordance with the meaning of the language used and should not be construed for or against either

party by reason of the authorship of this Agreement or any other rule of construction that might otherwise apply.

24. SEVERABILITY

If any part of this Agreement is found to be in conflict with applicable laws, that part will be inoperative, null and void insofar as it is in conflict with any applicable laws, but the remainder of the Agreement will remain in full force and effect.

25. TIME OF ESSENCE

Time is of the essence in the performance of this Agreement.

26. GOVERNING LAW; JURISDICTION

This Agreement will be administered and interpreted under the laws of the State of California. Jurisdiction of any litigation arising from the Agreement will be in Los Angeles County, California.

27. COMPLIANCE WITH STATUTES AND REGULATIONS

CONTRACTOR will be knowledgeable of and will comply with all applicable federal, state, county and city statutes, rules, regulations, ordinances and orders.

28. WAIVER OF BREACH

No delay or omission in the exercise of any right or remedy by a nondefaulting party on any default will impair the right or remedy or be construed as a waiver. A party's consent or approval of any act by the other party requiring the party's consent or approval will not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and will not be a waiver of any other default concerning the same or any other provision of this Agreement.

29. ATTORNEY'S FEES

Except as provided for in Paragraph 15, in any dispute, litigation, arbitration, or other proceeding by which one party either seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing party will be awarded reasonable attorney's fees, together with any costs and expenses, to resolve the dispute and to enforce any judgment.

30. EXHIBITS

All exhibits identified in this Agreement are incorporated into the Agreement by this reference.

31. CONTRACTOR'S AUTHORITY TO EXECUTE

The persons executing this Agreement on behalf of the CONTRACTOR warrant that (i) the CONTRACTOR is duly organized and existing; (ii) they are duly authorized to execute this Agreement on behalf of the CONTRACTOR; (iii) by so executing this Agreement, the CONTRACTOR is formally bound to the provisions of this Agreement; and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which the CONTRACTOR is bound.

CITY OF TORRANCE,
a municipal corporation

_____
Frank Scotto, Mayor

ATTEST:

_____
Sue Herbers, City Clerk

APPROVED AS TO FORM:

JOHN L. FELLOWS III
City Attorney

By: _____

California Retrofit, Inc.
A California corporation

By: _____
Richard Mitten
President

Attachments: Exhibit A: Bid

EXHIBIT A

Bid

BIDDER'S PROPOSAL (5 pages total)

BID FOR LIGHTING RETROFITS AT VARIOUS CITY BUILDINGS
B2012-12

In accordance with the Notice Inviting Bids pertaining to the receiving of sealed proposals by the City Clerk of the City of Torrance for the above titled improvement, the undersigned hereby proposes to furnish all work to be performed in accordance with the Specifications and Contract Documents, prepared by the City of Torrance.

LIGHTING EQUIPMENT BID PROPOSAL (2010)						
A. Usage Group	**B.** Existing Fixture Count	**C.** Exist. Fixture Code	**D.** Total Fixture Count	**E.** Proposed Fixture Configuration Code	**F.** Unit Cost	**G.** Total Unit Costs (D x F)
Incand	10	Incand	14	**CFL**	$5.50	$77.00
Exit Sign	5	ECF8/1	5	**ELED2/1**	$28.22	$141.10
T12	1	F21SS	3	**F21ILL**	$20.56	$61.68
T12	1	F22SS	1	**F22ILL**	$22.52	$22.52
T12	1	F41EE	132	**F41ILL**	$20.56	$2,713.92
T12	13	F42EE	535	**F42ILL**	$22.62	$12,128.45
T8	6	F43ILL	89	**F43ILL**	$28.00	$2,492.34
T12	1	F44EE	104	**F44ILL**	$30.72	$3,194.88
T12	3	F81ES	3	**F81ILL**	$37.60	$112.80
T12	38	F82EE	85	**F82ILL**	$44.94	$3,819.90
T12	5	FU2EE	21	**FU2ILL**	$33.82	$711.22
Incand	3	Incand	10	**LED**	$27.32	$273.20
BID TOTAL (column G) in figures*					$25,754.11	

Lighting Retrofits B2012-12
Lighting Equipment Bid Proposal (2008)

A. Type	B. Size	C. Total Fixture Count	D. Existing Fixture Type	E. Propsed Fixture Description	F. Fixture, Lamp & Ballast Specifications	G. Unit Cost (w/o conversion kit)	H. Unit Cost (conversion kit)	I. Total Unit Costs C x (G + H)
A	2x4	214	2 x 4 troffer fixture with 3 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit**	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$9,921.04
A1	2x4	62	2 x 4 troffer fixture with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$1,405.54
A2	1x4	194	1 x 4 **troffer fixture** with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$4,397.98
A3	1x4	98	end to end 1 x 4 **troffer fixtures** each with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only (tandem wire optional)	$22.67	0	$2,221.66
A4	1x4	64	1 x 4 surface mounted fixture with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$1,450.88
A5	1x4	47	end to end 1 x 4 surface mounted fixtures each with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only (tandem wire optional)	$22.67	0	$1,065.49
A6	2x4	50	2 x 4 troffer fixture with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, with conversion kit	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$2,318.92
B	2x4	27	end to end 2 x 4 troffer fixtures, each with 3 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, with conversion kit	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$1,251.72
B1	2x4	31	2 x 4 surface mounted fixture with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit**	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$1,437.16
B2	2x4	22	end to end 2 x 4 troffer fixtures, each with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit**	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$1,019.92
B3	2x4	7	2 x 4 surface mounted fixture with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$158.69
B4	2x4	22	end to end 2 x 4 surface mounted fixtures, each with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, with conversion kit	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$1,019.92

Lighting Retrofits B2012-12
Lighting Equipment Bid Proposal (2008)

A. Type	B. Size	C. Total Fixture Count	D. Existing Fixture Type	E. Propsed Fixture Description	F. Fixture, Lamp & Ballast Specifications	G. Unit Cost (w/o conversion kit)	H. Unit Cost (conversion kit)	I. Total Unit Costs C x (G + H)
B6	2x4	4	end to end 2 x 4 troffer fixtures, each with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit**	TKP-2X4-2L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$23.69	$185.44
C	2x2	90	2 x 2 troffer fixture with 2 standard F34T12U bend lamps and a generic 0.87 BF magnetic ballast	3 F17T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit**	TKU-2X2-3L-T8-WA-UL1-LP-IS-UE (Precision-Paragon [P2])	$28.06	$23.55	$4,464.90
C1	pen-dant	10	4' pendant fixture with 1 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	1 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$20.50	0	$205.00
C2	pen-dant	59	8' pendant fixture with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$1,337.53
C3	pen-dant	23	4' pendant fixture with 3 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	3 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, with conversion kit	Lamp , Ballast, Lamp Socket only	$28.00	0	$645.38
C4	strip	4	7' strip fixture with 1 standard F34T12 lamp and 1 standard F30T12 lamp and a generic 0.87 BF magnetic ballast	1 F32T8 and 1 F25T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$24.51	0	$98.04
C5	strip	4	3' strip fixture with 1 standard F30T12 lamp and a generic 0.87 BF magnetic ballast	1 standard F25T8 lamp and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$20.55	0	$82.20
D	strip	37	8' strip fixture with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$838.79
D1	strip	126	4' strip fixture with 2 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$22.67	0	$2,856.42
D10	strip	48	8' strip fixture with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	4 high lumen F32T8 lamps and an extra efficient 1.00 BF dimmable ballast	Lamp , Ballast, Lamp Socket only	$177.69	0	$8,525.76
D2	strip	51	8' strip fixture with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	4 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	DIN-1X8-4L-T8-UL1-PMP-LP-IS-UE	$30.72	$109.26	$7,138.50
D3	sus-pended	2	8' suspended indirect fixture with 4 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	4 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$30.72	0	$61.44

Lighting Retrofits B2012-12
Lighting Equipment Bid Proposal (2008)

A. Type	B. Size	C. Total Fixture Count	D. Existing Fixture Type	E. Propsed Fixture Description	F. Fixture, Lamp & Ballast Specifications	G. Unit Cost (w/o conversion kit)	H. Unit Cost (conversion kit)	I. Total Unit Costs C x (G + H)
D4	strip	4	4' strip fixture with 3 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit**	CKU-BC-2L-T8-1X4-UW-WA-S8M-UL1-LP-IS-UE (Precision-Paragon [P2])	$22.67	$25.00	$193.52
D5	strip	9	4' strip fixture with 1 standard F34T12 lamps and a generic 0.87 BF magnetic ballast	1 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast	Lamp , Ballast, Lamp Socket only	$20.50	0	$184.50
D6	strip	86	8' strip fixture with 2 standard F96T12 lamps and a generic 0.87 BF magnetic ballast	4 high lumen F32T8 lamps and an extra efficient 0.77 BF instant start ballast, **with conversion kit.**	4' wide channel: CKU-IR-4L-T8-1X8-UW-WA-S8M-UL1-LP-IS-UE-UP20 8" wide channel: CKU-IR-4L-T8-1X8-C/8.00-WA-S8M-UL1-LP-IS-UE-UP20 (Precision-Paragon [P2])	$30.72	$47.38	$6,716.60
D7	strip	30	8' strip fixture with 1 VHO F96T12 lamps and a generic 0.87 BF magnetic ballast	2 high lumen F32T8 lamps and an extra efficient 1.15 BF instant start ballast, **with conversion kit**	CKU-IR-2L-T8-1X8-UW-WA-S8M-UL1-HP-IS-UE (Precision-Paragon [P2])	$22.67	$34.82	$1,874.70
D8	strip	5	4' strip fixture with 1 VHO F48T12 lamps and a generic 0.87 BF magnetic ballast	1 high lumen F32T8 lamps and an extra efficient 1.15 BF instant start ballast, **with conversion kit**	CKU-IR-1L-T8-1X4-UW-WA-S8M-UL1-HP-IS-UE (Precision-Paragon [P2])	$20.50	$31.02	$257.60
D9	strip	4	8' strip fixture with 4 standard F96T12 lamps and a generic 0.87 BF magnetic ballast	4 high lumen F32T8 lamps and an extra efficient 1.15 BF instant start ballast, **with conversion kit** (2)	CKU-IR-4L-T8-1X8-C/8.00-WA-S8M-UL1-HP-IS-UE (Precision-Paragon [P2]) (2) fixtures on wall in Communications - (2) RWW-1X8-4L-T8-UL1-HP-IS-UE (Precision-Paragon [P2])	(1) $30.72 (2) $30.72	$48.18 $127.84	$157.80 $317.12
E	exit	30	one sided CFL exit sign	one sided LED exit sign	XLS-R (Precision-Paragon [P2])	—	$28.20	$846.00
F	strip	7	2' strip fixture with one F20T12 lamp and a generic 0.87 BF magnetic ballast	one F17T8 lamp and an extra efficient 0.77 BF program start ballast	Lamp , Ballast, Lamp Socket only	$20.50	0	$143.50

TOTAL UNIT COSTS (COLUMN I) in figures*	$64,798.74

TOTAL UNIT COSTS- 2010 SURVEY in figures*: $25,754.11

TOTAL UNIT COSTS-2010 SURVEY in words*: TWENTY-FIVE THOUSAND SEVEN HUNDRED FIFTY-FOUR DOLLARS & ELEVEN CENTS

TOTAL UNIT COSTS-2008 SURVEY in figures* $64,798.74

TOTAL UNIT COSTS-2008 SURVEY in words* SIXTY-FOUR THOUSAND SEVEN HUNDRED NINETY-EIGHT DOLLARS & SEVENTY-FOUR CENTS

Removal and Disposal of Ballasts containing PCBs in figures*

$ 0.75 /lb. X 2500 lb. = $1,875.00

Total Cost of removal and disposal of ballasts containing PCBs in words*

ONE THOUSAND EIGHT HUNDRED SEVENTY-FIVE DOLLARS & ZERO CENTS

***BID MAY BE REJECTED IF TOTAL IS NOT SHOWN IN FIGURES AND WORDS.**

The undersigned furthermore agrees to enter into and execute a contract, with necessary bonds, at the prices set forth herein and in case of default in executing such contract, with necessary bonds, the check or bond accompanying this bid and the money payable thereon shall be forfeited thereby to and remain the property of the City of Torrance.

The above prices include all work appurtenant to the various items as outlined in the specifications and all work or expense required for the satisfactory completion of said item.

The undersigned declares that it has carefully examined the Plans, Specifications, and Contract Documents, and has investigated the site of the work and is familiar with the conditions thereon.

CALIFORNIA RETROFIT, INC. — Contractor Name

BRIAN WILLIAMS, PROJ. MGR. — Signer's Name and Title

Date: 5-3-12 License No. & Classification 480982 C-10

Address: 1375 N. BRASHER ST., ANAHEIM CA 92807

ACKNOWLEDGMENT OF ADDENDA RECEIVED

B2012-12

The Bidder shall acknowledge the receipt of addenda by placing an "X" by each addendum received.

Addendum No. 1 X

Addendum No. 2 _____

Addendum No. 3 _____

Addendum No. 4 _____

Addendum No. 5 _____

Addendum No. 6 _____

Addendum No. 7 _____

Addendum No. 8 _____

If an addendum or addenda have been issued by the City and not noted above as being received by the Bidder, the Bid Proposal may be rejected.

Bidder's Signature

5-3-12
Date

ADDENDUM # 1

CITY OF TORRANCE
3031 Torrance Blvd.
Torrance, CA 90503

BID NO. B2012-12

Bid for Lighting Retrofits at Various City Buildings

ADDENDUM # 1

THE FOLLOWING CHANGES ARE HEREBY INCORPORATED INTO AND MADE A MANDATORY PART OF SUBJECT BID:

BID OPENING REMAINS: **THURSDAY, May 3, 2012 BY 2:00 PM** IN THE CITY CLERK'S OFFICE.

CLARIFICATION: Revised Bid Form/Ballast Removal and Disposal

- Attached is revised bid form (1 page) which includes the cost of removal and disposal of ballasts that contain PCBs per all federal, state, and local regulations, laws, and codes governing proper handling and disposal.
- The bids should include removal/disposal of ballast containing PCBs on a cost per pound basis.
- Bids will be evaluated based on the removal/disposal of 2500 pounds such material and added to the other retrofit costs.
- Contractor will be reimbursed for actual disposal amounts based on the unit price provided.
- All other bid proposal forms remain unchanged.

CLARIFICATION: Experience/References/Qualifications:

Bidder must have completed two (2) retrofit projects of a similar size and scope valued at $100,000 in each of the last (3) years.

OR

Bidder must have completed lighting retrofits for building interiors total value exceeding $500,000 *per year* in the last three (3) years.

- Please refer to the project manual for complete list of requirements regarding qualifications/experience of bidder.
- Please include references that reflect the requirement above, attach additional pages to the bid as necessary.

April 26, 2012

Please return this addendum with your bid proposal.
I hereby acknowledge receipt of this addendum.

California Retrofit, Inc.
Name of Company

1375 N. Blaster St.
Address

Anaheim CA 92807
City State Zip Code

STATE OF CALIFORNIA }
}
COUNTY OF _____ }

CONTRACTOR'S AFFIDAVIT
B2012-12

BRIAN WILLIAMS, being first duly sworn, deposes and says:

1. That he is the PROJECT MANAGER
Title

of CALIFORNIA RETROFIT, INC
(Name of Partnership, Corporation, or Sole Proprietorship)

hereinafter called "Contractor," who has submitted to the City of Torrance a proposal for the INSTALLATION OF LIGHTING RETROFITS AT VARIOUS CITY BUILDINGS.

2. That said proposal is genuine; that the same is not sham; that all statement of facts therein are true;

3. That such proposal was not made in the interest or behalf of any person, partnership, company, association, organization or corporation not named or disclosed;

4. That the Contractor did not directly or indirectly induce, solicit or agree with any-one else to submit a false or sham bid, refrain from bidding, or withdraw the bid, to raise or fix the bid price of the Contractor or anyone else, or to raise or fix any overhead, profit or cost element of the Contractor's price or the price of anyone else; and did not attempt to induce action prejudicial to the interest of the City of Torrance or any other bidder, or anyone else interested in the proposed contract;

5. That the Contractor has not in any manner sought by collusion to secure for itself an advantage over any other bidder or to induce action prejudicial to the interests of the City of Torrance, or of any other bidder or of anyone else interested in the proposed contract;

6. That the Contractor has not accepted any bid from any subcontractor or materialman through any bid depository, the bylaws, rules or regulations of which prohibit or prevent the Contractor from considering any bid from any subcontractor or materialman, which is not processed through said bid depository, or which

CONTRACTOR'S AFFIDAVIT (CONTINUED)

prevent any subcontractor or materialman from bidding to any contractor who does not use the facilities of or accept bids from or through such bid depository;

7. That the Contractor did not, directly or indirectly, submit the Contractor's bid price or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, or to any individual or group of Individuals, except to the City of Torrance, or to any person or persons who have a partnership or other financial interest with said Contractor in its business.

Dated this 3 day of May, 20 12.

Subscribed and Sworn to
before me this 3
of May, 20 12

Notary Public in and for said
County and State. Orange, CA
(Seal)

(Contractor)

PROJECT MANAGER
(Title)

WILLIAM E. ZINN
COMM...1947163
NOTARY PUBLIC-CALIFORNIA
ORANGE COUNTY
My Term Exp. August 25, 2015

LIST OF SUBCONTRACTORS

The Bidder is required to fill in the following blanks in accordance with the provisions of the Subletting and Subcontracting Fair Practices Act (Chapter 2 of Division 5, Title 1 of the Government Code of the State of California) and should familiarize itself with Section 2-3 of the Standard Specifications.

Name under Which Subcontractor is Licensed: N/A

License Number: _____
Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Name under Which Subcontractor is Licensed: _____

License Number: _____
Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Name under Which Subcontractor is Licensed: _____

License Number: _____
Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Name Under Which Subcontractor is Licensed: _____

License Number: _____
Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Subcontractors listed in accordance with the provisions of Section 2-3 must be properly licensed under the laws of the State of California for the type of work which they are to perform. Do not list alternate subcontractors for the same work.

REFERENCES

(Work similar in magnitude and degree of difficulty completed by Contractor within the past five (5) years.)

1. ____ Name (Firm/Agency): THE BOEING COMPANY

Address: 4000 LAKEWOOD BL., LONG BEACH, CA

____ Contact Person: JEFF HABERMAN Telephone No.: (562) 225 6708

____ Title of Project: B801 LIGHTING RETROFIT

Project Location: SAME AS ABOVE

Date of Completion 4-2011 Contract Amount:$ 417,308.77

2. ____ Name (Firm/Agency): SIMON PROPERTY GROUP - FASHION VALLEY MALL

Address: 7007 FRIARS ROAD, SAN DIEGO, CA

____ Contact Person: MIKE SIMPSON Telephone No.: (619) 297 3381

____ Title of Project: FASHION VALLEY MALL LIGHTING RETROFIT.

Project Location: FASHION VALLEY MALL, SAN DIEGO, CA

Date of Completion 5-2011 Contract Amount:$ 189,517.72

3. ____ Name (Firm/Agency): SIEMENS / UC IRVINE

Address: UC IRVINE CAMPUS

____ Contact Person: TIM BEARMAN Telephone No.: (714) 816 5104

____ Title of Project: UC IRVINE LIGHTING RETROFIT

Project Location: UC IRVINE CAMPUS

Date of Completion 12-2009 Contract Amount:$ 522,891.88

4. ____ Name (Firm/Agency): CON AGRA FOODS

Address: 1000 OATES CT, MODESTO, CA

____ Contact Person: RUSSEL COONS Telephone No.: (209) 552 4033

____ Title of Project: CON AGRA WAREHOUSE RETROFIT

Project Location: SAME AS ABOVE

Date of Completion 3-2009 Contract Amount: $ 400,000.00

Bidder's Information

The bidder must provide a detailed list of the trades and the description of the work they will perform with their own company for this project.

1. CRI HAS LICENSED NON-RESIDENTIAL
2. LIGHTING TECHNICIANS & LICENSED ELECTRICIANS
3. ON STAFF. CRI WILL BE HANDLING THE
4. INSTALLATION OF ALL ITEMS & MATERIALS
5. LISTED AND DESCRIBED IN THE SCOPE OF
6. WORK PROVIDED BY THE CITY OF TORRANCE.
7. NO SUB-CONTRACTORS WILL BE USED BY
8. CRI FOR THIS PROJECT.
9.
10.
11.
12.
13.
14.

Contractor's License No.: 480982 Class: C-10

Date first obtained: FEB '85

Has License ever been suspended or revoked? NO

If yes, describe when and why —

Any current claims against License or Bond? NO

If yes, describe claims: —

Type of entity (check one)

✓ Incorporated _____ Partnership _____ Sole Proprietorship

If incorporated, in what state CA

Federal Tax ID Number # 33-0090297

Principals in Company (List all - attach additional sheets if necessary):

NAME	TITLE	LICENSE NO. (If Applicable)
RICHARD MITTEN	PRESIDENT	

CEE

QUALIFYING PRODUCTS

High-Performance 4' T8 Lamps

(Last Updated 4/2/2012)

CEE High-Performance Commercial Lighting Systems Initiative

Legend: Font is a product no longer manufactured, but existing stock still meets the criteria as qualifying products

Manufacturer	Product Name	Order Code	Model Number or Description	Shape	Color Temp (K)	Rated Life (hrs)[1]		Initial Lumens	Mean Lumens	CRI	Lumen Maintenance
						IS	RS/PRS				
Atlas Lighting Products, Inc.		F32T8/841	F32T8/841	Linear	4100	20,000	24,000	3100	2950	82	0.95
		F32T8/850	F32T8/851	Linear	5000	20,000	24,000	3100	2950	82	0.95
Aura Light	Accendo | AURA ULTIMATE US Long Life	455338	ULTIMATE US 32W/835	Linear	3500	53,000	60,000	3100	2900	80	0.94
		455334	ULTIMATE US 32W/841	Linear	4100	53,000	60,000	3100	2900	80	0.94
Bulbrite	Energy Wiser	529632	F32T8/835/HL	Linear	3500	24,000	30,000	3300	3135	85	0.95
		529732	F32T8/841/HL	Linear	4100	24,000	30,000	3300	3135	85	0.95
		529832	F32T8/850/HL	Linear	5000	24,000	30,000	3200	3040	85	0.95
Contractor Lighting	BEST LAMP	12-32T8-850	12-32T8-850	Linear	5000	20,000	24,000	3100	3000	85	0.97
CRI Lighting	N/A	n/a	F32T8/830 XP	Linear	3000	24,000	30,000	3100	2950	83	0.94
			F32T8/835 XP	Linear	3500	24,000	30,000	3100	2950	83	0.94
			F32T8/841 XP	Linear	4100	24,000	30,000	3100	2950	83	0.94
			F32T8/850 XP	Linear	5000	24,000	30,000	3100	2950	83	0.94
			F32T8/865 XP	Linear	6500	24,000	30,000	3100	2950	83	0.94
DLU Lighting USA	Tri-Lux	FLTHNVX4V	F32T8/835TL	Linear	3500	24,000	24,000	3150	2950	85	0.94
		FLTHNVX5V	F32T8/841TL	Linear	4100	24,000	24,000	3150	2950	85	0.94
		FLTHNVX6V	F32T8/850TL	Linear	5000	24,000	24,000	3150	2950	85	0.94
	T8 800	3284T	F32T8/841	Linear	4100	24,000	24,000	3150	2950	85	0.94
	Tri-Lux/Medistar	FLTHNVXDV	F32T8/859TL	Linear	5900	24,000	24,000	3150	2975	85	0.94
Eiko	Eiko High Lumen	n/a	F32T8/830K/HL	Linear	3000	24,000	24,000	3100	2915	83	0.94
		n/a	F32T8/835K/HL	Linear	3500	24,000	24,000	3100	2915	83	0.94
		n/a	F32T8/841K/HL	Linear	4100	24,000	24,000	3100	2915	83	0.94
		n/a	F32T8/850K/HL	Linear	5000	24,000	24,000	3000	2820	83	0.94
		n/a	F32T8/865K/HL	Linear	6500	24,000	24,000	3000	2820	83	0.94
Espen Technology Inc.	Elite HE	13986	F32T8/827/HE	Linear	2700	24,000	30,000	3100	2915	85	0.94
		13987	F32T8/830/HE	Linear	3000	24,000	30,000	3100	2915	85	0.94
		13988	F32T8/835/HE	Linear	3500	24,000	30,000	3100	2915	85	0.94
		13989	F32T8/841/HE	Linear	4100	24,000	30,000	3100	2915	85	0.94
		13990	F32T8/850/HE	Linear	5000	24,000	30,000	3100	2915	85	0.94
		32865	F32T8/865/HE	Linear	6500	24,000	30,000	2978	2798	85	0.94
		B32841	FB32T8/841/HE	U-Bend	4100	20,000	24,000	3100	2900	85	0.94
		B32850	FB32T8/850/HE	U-Bend	5000	20,000	24,000	2980	2830	85	0.95
	Armor Coat	32841AC	F32T8/841/HE/AC	Linear	4100	24,000	30,000	3100	2915	85	0.94
		32850AC	F32T8/850/HE/AC	Linear	5000	24,000	30,000	3100	2915	85	0.94
Full Spectrum Solutions, Inc	Maxum 5000 F32T8 Shatterproof	204453SC	F32-T8 48" Shatter Proof 5000K	Linear	5000	34,000	28,000	3300	2950	91	0.96
Fusion Lamps	Fusion HLO Series	FN6C32A2F/HLO	FN6C32A2F/HLO	Linear	4100	20,000	24,000	3200	3000	85	0.94
		FF32/T8/830/HLO	FF32/T8/830/HLO	Linear	3000	20,000	24,000	3200	3000	85	0.94
		FF32/T8/835/HLO	FF32/T8/835/HLO	Linear	3500	20,000	24,000	3200	3000	85	0.94
		FF32/T8/841/HLO	FF32/T8/841/HLO	Linear	4100	20,000	24,000	3200	3000	85	0.94
		FF32/T8/850/HLO	FF32/T8/850/HLO	Linear	5000	20,000	24,000	3100	2915	85	0.94
General Electric Company	Ecolux High Lumen	10327	F32T8/XL/SPX30/HL/ECO	Linear	3000	25,000	36,000	3100	2915	85	0.94
		10326	F32T8/XL/SPX35/HL/ECO	Linear	3500	25,000	36,000	3100	2915	85	0.94
		10322	F32T8/XL/SPX41/HL/ECO	Linear	4100	25,000	36,000	3100	2915	82	0.94
		42556	F32T8/XL/SPX50/HL/ECO	Linear	5000	25,000	36,000	3000	2820	80	0.94