

# **Uganda Case Study**

## **Annex 2**

### **CFL Tender**



Umeme Limited  
Rwenzori House  
Lumumba Avenue  
P.O.Box 23841 Kampala

## LETTER OF INVITATION

Tender Ref:CFL/UM07

Date:

**Attention:**

Dear Tenderer,

**Re: REQUEST FOR TENDER FOR SUPPLY OF COMPACT FLORESCENT LAMPS**  
**Ref:CFL/UM07**

Umeme is seeking a manufacturer who is able to supply quality compact florescent lamps.

You are hereby invited to submit a tender strictly in accordance with the enclosed tender documentation.  
The documentation included in this package is described in the Table of Contents.

Please acknowledge receipt of this Request For Tender (RFT) and indicate your intention to submit a tender or not, by signing and returning Attachment "A", by either email to the undersigned at [barry.acutt@umeme.co.ug](mailto:barry.acutt@umeme.co.ug) or via facsimile +256 41 340253, preferably within 3 days on receipt hereof but no later than **12h00** (EA Time ) on 18th July 2006

Should you have any queries relating to this RFT please contact the undersigned on e-mail or facsimile indicated above.

We look forward to receiving your submission and wish you every success.

Yours Sincerely,

Barry Acutt

**Chief Procurement Manager**

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# **Tender for Compact Florescent Lamps. Ref: CFL/UM07**

## ***CONFIDENTIALITY***

*No part of this document may be disclosed verbally or in writing, including reproduction, to any third party without the prior written consent of Umeme. This document, its associated appendices and any attachments remain the property of Umeme and shall be returned upon request.*

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ATTACHMENT "A"

**TENDERER'S ACKNOWLEDGEMENT  
& CONFIDENTIALITY AGREEMENT**

**REQUEST FOR TENDER For.....Ref: .....**

<b>Attention:</b>	Barry Acutt	<b>From:</b>	
<b>Company:</b>	Umeme	<b>Company:</b>	
<b>Email:</b>	<a href="mailto:barry.acutt@umeme.co.ug">barry.acutt@umeme.co.ug</a>	<b>Fax:</b>	
<b>Fax:</b>	+256-41 340253	<b>Tel:</b>	
		<b>Mobile:</b>	
		<b>Email:</b>	

**TENDERER'S ACKNOWLEDGEMENT** *(Please tick as appropriate):*

We acknowledge receipt and acceptance of the RFT and intend to submit a tender as required:

We acknowledge receipt of the RFT but decline to tender for the following reasons:

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-----  
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We undertake to return to Umeme within three (5) working days from today the complete RFT package with all attachments, information, documents, drawings, samples, material, etc. related thereto as provided by Umeme and any copies made thereof.

**NON-DISCLOSURE AGREEMENT**

We agree that all information, documents, drawings, samples, material, etc. contained in or related to this RFT as provided by Umeme is proprietary information and shall be treated as confidential.

We undertake that all such information, documents, drawings, samples, material, as described above, shall not be divulged to any other party (such prohibition applies to any further release of information regarding this RFT without the prior written permission from Umeme to do so).

We agree that this RFT and all information, documents, drawings, samples, material, etc. relating thereto and provided hereunder by Umeme are not to be used for any purpose other than for preparation of our Tender submission. This undertaking will also apply to any subsequent contract resulting from this RFT.

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**ATTACHMENT "B"**

**INSTRUCTIONS TO TENDERERS**

**Please read the following instructions carefully. Failure to comply with the requirements of these Instructions may be cause for return or rejection of your Tender.**

**1.0 THE PURCHASER**

1.1 This Request for Tender ("RFT") is issued by Umeme, herein referred to as Umeme

**2.0 PREPARATION AND SUBMISSION OF TENDERS**

2.1 The submission for the RFT must consist of, but not limited to the following documents:

2.1.1 Cover letter;

2.1.2 Original Tenderer's Acknowledgement and Non-Disclosure Agreement – Attachment "A";

2.1.3 Data response summary sheet – Attachment "E", Annexure "A", Appendix "1"

2.1.4 Pricing Schedule – Attachment "D", Annexure "B"

2.2 Tenders must be prepared and submitted in strict accordance with the RFT documentation. In the event of the tender being awarded, the successful Tender/s will be required to enter into a formal Supply Agreement. No valid contract shall exist between the parties unless the parties have entered into a valid written supply agreement.

2.3 Submitted Tenders must be complete in all respects and received on or before the tender closing date and time specified in the RFT invitation letter. All packages and envelopes relating to the submission of the tenders must be securely sealed and clearly marked using the label provided as Attachment "C". The name of the Tenderer and RFT number must be clearly marked on the item submitted.

2.4 Tenders received after the tender closing date and time may be disqualified.

2.5 A hard copy of the Tenderer's submission, including all Tender forms must be submitted by **16h00** (EA Time) on 27<sup>th</sup> July 2006 to the following address;

**Legal Services Manager  
Umeme  
Rwenzori House  
1 Lumumba Ave  
P.O. Box 23841  
Kampala  
Uganda**

2.6 Prior to Tenders closing date, all queries and communications in relation to this RFT shall be directed in writing solely to Barry Acutt, on Fax number **+256-41-340253** or e-mail [barry.acutt@umeme.co.ug](mailto:barry.acutt@umeme.co.ug). All questions and clarifications arising from this RFT and Umeme's responses thereto will be transmitted or distributed to all Tenderers.

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2.7 Preparation of the tenders, including but not limited to attendance at any pre-tender meetings, site visits and tender clarification meetings, shall be at the sole expense of the Bidder.

2.8 The tenders shall be submitted without review by or the comparison of figures of any other person or company submitting a tender for the same supply and shall in all respects be without collusion with other Tenderers. Bidders forming a joint venture with another Bidder in order to submit a single consolidated tender shall advise Umeme prior to the submission of the tender and include in their tender full details of the joint venture including a copy of the signed joint venture agreement. Where Umeme has not been informed of such joint venture, Umeme may at its sole discretion disqualify such submission.

### 3.0 EXAMINATION OF RFT AND ACKNOWLEDGEMENT

3.1 Tenderer shall acknowledge receipt of this RFT as soon as possible and in any event by no later than **16h00** (EA Time) on 16<sup>th</sup> July 2006, by returning Attachment "A" duly completed and signed. Note that Attachment "A" must be returned duly completed and signed whether or not the Tenderer intends to submit a Tender. In the event that the Tenderer fails to return Attachment 'A' by the above stated date, it will be deemed that the Tenderer will not be submitting a tender.

3.2 In the event that a party that is invited to tender does not intend to do so, the complete RFT including but not limited to all attachments, information, documents, drawings, samples, and material related thereto and any copies made thereof shall be returned to Umeme by no later than **16h00** (EA Time) on 20<sup>th</sup> July 2006 after indication that a Tender will not be submitted.

3.3 Umeme may modify any part of the RFT at any time prior to the closing date of the tender. Modifications to the RFT will be made in the form of addenda to the RFT and will be transmitted simultaneously to all Tenderers.

3.4 The Tenderer is responsible for the examination of the RFT and any addenda thereto including any special conditions or provisions which may affect the performance of the services to be rendered in terms of the tender. Should the Tenderer find discrepancies or omissions in the RFT, the Tenderer shall notify Umeme in writing immediately on discovery of any discrepancy or omissions.

3.5 The Tenderer may independently study, enquire, research, obtain and furnish to Umeme as part of the Tender at their own risk and cost and allow for all contingencies irrespective of any information or other data supplied by Umeme. This includes all information and data that may in any manner, financially, technically or otherwise, affect its tender submission or the price it has submitted.

### 4.0 TENDER VALIDITY AND WITHDRAWAL OF TENDERS

4.1 The Tenderer may withdraw its tender provided that notification of such withdrawal is received by Umeme in writing prior to the closing date. Withdrawal will be acknowledged by Umeme by means of facsimile, e-mail or hand delivered letter to the respective Tenderer.

4.2 Once submitted, the tender shall be fully binding upon the Tenderer and must be valid for 120 days from the date of submission of the tender.

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## 5.0 AWARD OF CONTRACT

- 5.1 Umeme reserves the right to accept or reject any or all tenders, to waive any provision or deviate from the RFT process or any formality with regard to tenders received and to accept or reject one or more of the items in the tender if such items are at Umeme's sole discretion and, in the best interest of Umeme.
- 5.2 Umeme shall not be bound by the lowest price contained in any tender but tenderer must comply with the set technical specifications and it may accept all or any part of a tender. It shall not be liable for any costs or expenses or damages whether direct or indirect, incurred by any Tenderer who submits a tender, irrespective of the outcome of such tender. If, however, any such tender leads to the conclusion of a contract, then the rights and obligations of Umeme, and the Tenderer shall be governed solely by the provisions of the signed Contract or as per a mutually agreed and signed written agreement between the parties.
- 5.3 Umeme reserves the right to invite the Tenderers, prior to the date of award and or allocation of its tenders, to discuss any matter relating to the tender and/or to issue supplements or addenda to the tender. Umeme also reserves the right, after receipt of the tender submissions, to invite the Tenderer(s) for clarification or negotiation of its tender. Any such clarifications or addendum or supplements shall be considered as forming part of the tender submission. Any such discussion, issue of supplements or addenda or invitation to clarify or negotiate, should not be construed as an acceptance, award or allocation of the tender to that particular Tenderer.

## 6.0 NOTIFICATION TO UNSUCCESSFUL TENDERERS

- 6.1 If its submission is unsuccessful, the Tenderer will be notified as soon as possible in writing after the award of the contract to the successful Tenderer.

## 7.0 INFORMATION TO BE SUBMITTED WITH THE TENDER

- 7.1 The Tenderer must submit its tender in accordance with item 2 above and include the following information:
- 7.1.1 The Tenderer must respond to each clause in the Remarks column of the Data Response Summary Sheet, Attachment "D", Annexure "A", Appendix 1. These remarks can be supported by additional explanations as and if required.
- 7.1.2 For the purpose of
- 7.1.2 A completed Pricing Schedule.
- 7.1.3 Prices must be fixed and firm for the duration of the supply agreement unless otherwise agreed.
- 7.1.4 A completed Schedule of Requirements
- 7.1.5 The Tenderer must clearly state that there are no exceptions and deviations with the requirements and specifications of the RFT, or alternatively detail all such exceptions and deviations. If so required, the Tenderer may submit in addition to the basic tender one or more alternative tenders together with all relevant specifications, drawings, designs with separate detailed prices.
- 7.1.6 Tenderers are free to submit any additional information deemed relevant to this RFT, not provided

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for in the response sheet.

7.1.7 Where a Tenderer is being represented by an in country or regional agent a letter confirming this agent as their appointed representative must accompany the bid. This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Tenderer in its bid.

7.1.8 A manufacturers sample of the 2 products to be supplied with the Tenderers bid.

## **8.0 TENDER ACCEPTANCE**

8.1 Acceptance of the tender from any Tenderer does not constitute a contract until the actual supply agreement has been signed by both parties.



ATTACHMENT "C"

## CONFIDENTIALITY LABEL

**TENDER FOR Compact Florescent Lamps.**

**SEALED TENDER**

**UMEME  
Rwenzori House  
1 Lumumba Ave  
P.O.Box 23841  
Kampala, Uganda**

**ATTENTION:  
Legal Services Manager**

**RFT Ref: CFL/UM07  
TENDER CLOSING DATE: .....  
TIME: 16h00 (EA Time)  
NAME OF BIDDER :  
(please indicate your company name)**

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## ATTACHMENT “D”

### Request for Tender CFL/UM07

#### 1. Introduction

The Government of Uganda through the Ministry of Energy and Mineral Development (MEMD) has approved a short term energy efficiency programme which includes making available, Compact Fluorescent Lamps to residential households through a bulk procurement programme. To this end Umeme will be facilitating the procurement process and distribution of these Compact Fluorescent Lamps.

#### 2. Background

The tender is for the supply of 800,000 Compact Fluorescent Lamps (CFL's). 400,000 **14watt** and 400,000 **20watt** or supplier's equivalent of 75 watt and 100watt respectively of incandescent bulbs. To facilitate a more speedy supply there is an option for Umeme to have the initial 100,000 CFL's air freighted while the balance will be shipped by sea.

Tenderer's are requested to bid for both airfreight and sea freight shipments which is catered for in the pricing schedule.

#### 3. Technical Specifications.

##### I. GENERAL DESIGN

The compact fluorescent lamps (CFLs) must be unitary (a single, non-separable unit containing lamp and ballast, also often referred to as self-ballasted) and designed for applications furnished with a pin socket originally intended to operate standard incandescent bulbs.

Parts	Description/Type
Unit	Unitary/Self-ballasted 14W and 20W
Lamp length	≤ 135 millimeters from base to tip of lamp
Ballast	Electronic
Base	Pin: B22
Tube	U-shaped

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## II. TECHNICAL SPECIFICATIONS

*Items that must be clearly indicated on the CFL product package are indicated in italics.*

<b>Laboratory and Test Requirements</b>	<b>Performance Specifications</b>
Laboratory Facility	Must be accredited according to ISO 17025, or equivalent standard. Accreditation document must be provided to with bid.
Testing Conditions	Performed at 25±1°C in an atmosphere with maximum relative humidity of 65%.
Position and Initial Burn-in	Measurements should be recorded from products in the Vertical Base Up (VBU) position, after an initial burn-in period of 100 hours at stabilized light output and current.
Test Data and Sample Size	Test data must be from the model for which qualification is sought. Values indicated on the application form shall be calculated as the average of the data from all the units tested.
Longevity of Test Results	Test results must be less than two years old, unless manufacturer can document to Umeme's satisfaction that older test results accurately portray the performance of the present model.

These technical specifications for Compact Fluorescent Lamps (CFLs) are consistent with the IFC/GEF Efficient Lighting Initiative (ELI) Voluntary Technical Specifications for Compact Fluorescent Lamps (as revised 01 March 2006). These baseline specifications have been chosen as they represent a well-known international standard for CFL quality that has been implemented in many countries worldwide. The following enhancements have been added to the ELI specifications: ≤ 135 millimeters from base to tip of lamp; epidemic failure warranty is **12 months from the date that the goods are accepted by the Purchaser**; and a minimum rated starting temperature not be higher than 5 °C. In addition, this procurement specifies lamps with cool daylight colour temperature and with lumen output ≥ 1,100 Lm.

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## Efficiency Specifications

The CFL package must clearly state the performance of the following characteristics, as defined in IEC 60969:

- Rated input power in watts, and
- Light output in lumens.

Efficiency shall be calculated from luminous flux and input power for the specific lamp and ballast combination in the CFL measured at 25 ° C and 240 V. To qualify, CFLs shall meet the following minimums:

- At input power of <15 W and 6500 CCT:  $\geq 52$  lm/W
- At input power of  $\geq 15$  W and >4000 CCT:  $\geq 55$  lm/W
- At input power of <25W and 6500 CCT:  $\geq 57$  lm/W

Power Characteristics	Performance Specifications
Input Power	Input power required to achieve the specified lumen output.
Power Factor	Measured in vertical base up position, as defined in IEC 61000, CFLs must have a power factor of 0.5 or greater at maximum power.
Tolerance of Voltage Variation	Manufacturers must state in the application that CFLs will perform within specified parameters at a range of <b>170 to 250</b> volts without a reduction in the rated life.

Operating Characteristics	Performance Specifications
Lamp Start	CFL must continuously illuminate within 1.5 seconds of being switched on at minimum rated starting temperature and maximum power. Prior to measurement, CFL must be switched off for at least 30 minutes.
Rated Operating Temperatures	<i>CFL package must declare the range of rated operating temperatures.</i> The minimum rated starting temperature must not be higher than 5 °C.
Lifetime	CFL must have a minimum rated lifetime of 6,000 hours as defined in IEC 60969. <i>CFL lifetime shall be clearly indicated in hours on product packaging.</i>
Safety	CFLs must meet all local safety requirements and the requirements of IEC 60968.

Light Characteristics	Performance Specifications
Lumen Output	<i>Lumen output of the CFL must appear on product packaging</i> The lumen output of the CFL must be $\geq 1100$ lumens
Correlated Color	<i>Correlated color temperature (CCT) of the CFL must appear on</i>

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Temperature	<p><i>product packaging</i> (as defined in IEC 60969 and measured in accordance with IES LM-16-1984).</p> <p>The CFLs supplied shall be “daylight” color temperature (5500 K to 6500 K).</p>
Color Rendering Index	Color Rendering Index (CRI) of at least 80 (as defined in IEC 60969, measured in accordance with CIE 29/2).
Lumen Maintenance	After 2000 hours of operation the luminous flux of CFLs must be $\geq$ 80% of initial levels (measured in accordance with IES LM-66-1991 or IEC 60969 for unitary CFLs). In order to pass the lumen maintenance test, at least 80 % of the sample lamps must pass the lumen maintenance threshold at 2,000 hours.
Stabilized Light Output	The time to 75% of stabilized light output after switch-on shall not exceed 100 seconds, or, the time to 80% of stabilized light output after switch-on shall not exceed 120 seconds (measured in accordance with IEC 60969).

<b>Other</b>	<b>Performance Specifications</b>
Lamp Package	<p>In addition to other technical characteristics that must be listed on the CFL package (identified in <i>italics</i> in these Technical Specifications), the package must display the Republic of Uganda coat of arms and also be displayed in one colour on the base of the lamp in the form given by the Purchaser.</p> <p>As the Purchaser, Umeme reserves the right to review the packaging for the lamps in this procurement before the Supplier prints the packaging.</p>
Warranty	<p>Manufacturer to supply a self declaration of failure rate after production for the last 3 years and statistical return of bulbs for last 3 years for Developing World markets. A minimum of 1% or the self declared failure rate percentage which ever is higher to be supplied as swap stock for any lamp failures in addition to normal self declared warranty periods. Manufacturer must provide a lamp warranty against epidemic failure for a minimum period of <b>12 months from the date that the goods are accepted by the Purchaser. Guarantee card in English must be included with CFL when purchased.</b></p>
Quality of Production	CFLs must be manufactured under a Quality Assurance System in accordance with ISO 9001-2000 or equivalent.

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## Schedule of Requirements

The delivery schedule expressed in weeks stipulates hereafter a delivery date which is the date of delivery of the first shipment from when the contract is placed on CIF terms (for goods offered from abroad). In order to determine the correct date of delivery hereafter specified, the Purchaser has taken into account the additional time that will be needed for international transit to Umeme stores or to another common place.

No.	Description	Quantity (Unit)	Recipient	Sea port	Final Destination	Delivery Schedule in weeks from date of Contract effectiveness	
						Required	Bidder's offer
Lot 1	Compact Fluorescent Lamps, as described in Technical Specifications	700,000	Umeme	Mombasa	Umeme's warehouse Kampala	8 weeks to 12 weeks	
Lot 2	Compact Fluorescent Lamps, as described in Technical Specifications	100,000	Umeme	Entebbe Airport	Umeme's warehouse Kampala	4 weeks to 6 weeks	

Notes:

- 1) Lot 1 is for sea freight and deliveries of are to be scheduled at 3 week intervals from shipment of first container load.
- 2) Lot 2 is for air freight to Entebbe airport and can be shipped as one or two shipments

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## 4) General Conditions

### 1. Insurance

- 1.1 (a) For Goods supplied from abroad, the Insurance shall be in an amount equal to one hundred and ten (110) percent of the CIF or CIP value of the Goods from “warehouse” to “warehouse” on “All Risks” basis, including War Risks and Strikes.

### 2. Warranty

- 2.1 After delivery and acceptance of Goods, the Supplier shall furnish to the Purchaser the Warranty Security issued by a reputable bank acceptable to the Purchaser with the amount of five (5) percent of Contract Price.

The Warranty Security will be released within thirty (30) days after the date of expiration of the warranty period.

- 2.2 This warranty shall remain valid for 12 months from the day the Goods are accepted by the Purchaser.

The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the Contract. If, for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall replace the defective lamps within one month of receiving the claim from the Purchaser or Receiver. In case the supplier fails to replace the defective lamps, the purchaser will replace them at the supplier's expense.

### 3. Payment

- 3.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

Payment for Goods supplied from abroad:

Payment of foreign currency portion shall be made in the currency or currencies in which the Contract price has been stated in the following manner:

- (i) On Shipment: Twenty (20) percent of the Contract Price shall be paid through irrevocable letter of credit in favour of the Supplier in a bank in its country upon

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submission of a complete set of original shipping documents.

(ii) On Acceptance: Eighty (80) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods at final destination upon submission of an acceptance report.

This payment shall be paid through irrevocable confirmed letter of credit opened in favour of the Supplier in a bank in its country, upon submission of the acceptance report but not later than thirty (30) days after receipt of goods at final destination.

#### **4. Performance Security**

**4.1** Within fifteen (15) days from the Effective Date of the Contract, the Supplier shall furnish to the Purchaser the performance security.

The amount of performance security, as a percentage of the Contract Price, shall be ten (10) percent of the Contract Price.

**4.2** The performance Security shall be issued by a reputable bank acceptable to the Purchaser.

**4.3** After delivery and acceptance of the Goods, the performance security shall be returned to the Supplier upon submission of Supplier's warranty security in accordance with Clauses GC 2.1

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## ANNEXURE "A"

Tenderer's Name:

### Appendix 1: Data Response Summary Sheet

#### PRODUCT SPECIFICATIONS

Where applicable indicate levels of compliance as follows:

- Compliant - **C**
- Partial Compliance - **PC**
- Non-Compliant - **N**

In the event of PC and/or NC statements, the Tenderer must submit detailed motivations and reasoning.

No.	Requirements	Remarks
1.	Product Specification	
2.	Technical specifications	
3.		
4.		
5.		

#### OTHER FACTORS

No.	Requirements	Remarks
1.	Schedule of Requirements.	
2.	Payment Terms	
3.	Insurance	
4.	Warranty	
5.		

Note: Submissions may not be limited to the above response sheet.

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**ANNEXURE “A”**

**Tenderer’s Name:**

<b>Appendix 2: Check List for Tenderer Documentation.</b>
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The following Check List is to help checking the completeness and ensuring compliance with specifications in Bidding Document.

Section	Criterion	Verification by Bidder (Bidder to fill out to certify that documentation provided; that specification achieved; or to list actual value of product)*	(Umememe USE ONLY) Meets Specifications (√)
<b>BID PAPER WORK AND FORMS</b>			
Eligible signature on Bid	Documentation of signing authority of the person who signed the Bid, if needed; OR Authorization Letter for signing Bid, if needed.		
Annexure A	Data Response Summary sheet		
Annexure B	Price Schedule		
Authorization Letter	Manufacturer’s Authorization Letter (In the case of Trading Agent/Company)		

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<b>TECHNICAL SPECIFICATIONS</b>			
Lamp type	Unitary/Self-ballasted		
Lamp length	≤ 135 millimeters from base to tip of lamp		
Ballast	Electronic		
Base	PIN: B22		
Tube	U-shaped		
Laboratory Facility	Must be accredited according to ISO 17025, or equivalent standard. Accreditation document must be provided to Umeme		
Testing Conditions	Performed at 25 ° C in an atmosphere with maximum relative humidity of 65%.		
Position and Initial Burn-in	Measurements should be recorded from products in the Vertical Base Up (VBU) position, after an initial burn-in period of 100 hours at stabilized light output and current.		
Test Data and Sample Size	Test data must be from the model for which qualification is sought. Values indicated on the application form shall be calculated as the average of the data from all the units tested.		
Longevity of Test Results	Test results must be less than two years old, unless manufacturer can document to Umeme's satisfaction that older test results accurately portray the performance of the present model.		
The CFL package must clearly state the performance of the following characteristics, as defined in IEC 60969:	Rated input power in watts, and Light output in lumens.		
Efficiency	At input power of <15 W: ≥ 45 lm/W		

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	At input power of $\geq 15$ W and $>4000$ CCT: $\geq 55$ lm/W		
Power Factor	Measured in vertical base up position, as defined in IEC 61000, CFLs must have a power factor of 0.5 or greater at maximum power.		
Tolerance of Voltage Variation	Manufacturers must state in the application that CFLs will perform within specified parameters at a range of nominal voltages $\pm 10\%$ of rated operating voltage without a reduction in the rated life.		

Transient Protection	CFL must comply with IEC 61547.		
Lamp Start	CFL must continuously illuminate within 1.5 seconds of being switched on at minimum rated starting temperature and maximum power. Prior to measurement, CFL must be switched off for at least 30 minutes.		
Rated Operating Temperatures	<i>CFL package must declare the range of rated operating temperatures.</i>		
Rated Operating Temperatures	The minimum rated starting temperature must not be higher than 5 °C.		
Lifetime	CFL must have a minimum rated lifetime of 6,000 hours as defined in IEC 60969.		
Lifetime	<i>CFL lifetime shall be clearly indicated in hours on product packaging.</i>		
Safety	CFLs must meet all local safety requirements and the requirements of IEC 60968.		
Lumen Output	<i>Lumen output of the CFL must appear on product packaging</i>		
Lumen Output	The lumen output of the CFL must be $\geq 1100$ lumens		
Correlated Color Temperature	<i>Correlated color temperature (CCT) of the CFL must appear on product</i>		

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	<i>packaging</i> (as defined in IEC 60969 and measured in accordance with IES LM-16-1984).		
Correlated Color Temperature	The CFLs supplied shall be “daylight” color temperature (5500 K to 6500 K)		
Color Rendering Index	Color Rendering Index (CRI) of at least 80 (as defined in IEC 60969, measured in accordance with CIE 29/2).		
Lumen Maintenance	After 2000 hours of operation the luminous flux of CFLs must be $\geq 80\%$ of initial levels (measured in accordance with IES LM-66-1991 or IEC 60969 for unitary CFLs).		
Stabilized Light Output	The time to 75% of stabilized light output after switch-on shall not exceed 100 seconds, or, the time to 80% of stabilized light output after switch-on shall not exceed 120 seconds (measured in accordance with IEC 60969).		
Lamp Package	The Supplier shall display the Republic of Uganda coat of arms in one color on the lamp base and on lamp package in the form given by the Purchaser.		
Warranty	Manufacturer must provide a lamp warranty against epidemic failure for a minimum period of 12 months from the date that the goods are accepted by the Purchaser. Manufacturer to provide a percentage swap stock for individual bulb failure. Guarantee card in English must be included with CFL when purchased.		
Quality of Production	CFLs must be manufactured under a Quality Assurance System in accordance with ISO 9001-2000 or equivalent.		

\* Tenderers must note specifically the section in their bid where the technical specifications or criteria are provided or documented.

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**ANNEXURE “B”**

**Tenderer’s Name:**

**PRICING SCHEDULE**

<b>Option 1</b>		<b>14watt &amp; 20watt U- tube, pin base CFL</b>		<b><u>SEA FREIGHT</u></b>	
<b>REQUIREMENTS</b>	<b>Required Quantity</b>	<b>UNIT COST</b>	<b>TOTAL COST</b>		
<b>Ex -Works Price 14 watt</b>	400,000				
<b>Ex – Works Price 20watt</b>	400,000				
<b>Sea Freight &amp; Insurance cost per component</b>	800,000				
<b>Total CIP Kampala cost (incl. Freight, Insurance)</b>	<b>800,000</b>				

<b>Option 2</b>		<b>14watt &amp; 20watt U-tube, pin base CFL</b>			
<b>REQUIREMENTS</b>	<b>Required Quantity</b>	<b>UNIT COST</b>	<b>TOTAL COST</b>		
<b>Ex -Works Price per component</b>	350,000				
<b>Freight cost per component</b>	350,000				
<b>Sea Freight &amp; Insurance cost per component</b>	700,000				
<b>Total CIP Kampala cost (incl. Freight, Insurance)</b>	<b>700,000</b>				

Option 2: This option will apply if the initial shipment of 100,000 lamps is to come by air.

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**PRICING SCHEDULE**

**14watt & 20watt U-tube, pin base CFL**

**Air Freight**

<b>REQUIREMENTS</b>		<b>Required Quantity</b>	<b>UNIT COST</b>	<b>TOTAL COST</b>
<b>Ex -Works Price 14 watt</b>		50,000		
<b>Ex - Works Price 20 watt</b>		50,000		
<b>Air Freight &amp; Insurance cost per component</b>		100,000		
<b>Total CIP Entebbe cost (incl. Freight, Insurance)</b>		<b>100,000</b>		

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