



MSME – TESTING CENTRE (W.R.)
GOVT.OF INDIA, MINISTRY OF
MICRO, SMALL & MEDIUM ENTERPRISES
KURLA ANDHERI ROAD, SAKI NAKA
MUMBAI-400 072



TENDER NOTICE

MSME-TC/MUM/EL/M&E/39/2017- 18

Date: 08.11.2017

Director, MSME-Testing Centre (Western Region), Mumbai-72, invites separate sealed tenders from reputed Suppliers for supply of the Machinery & Equipments, as mentioned below:

Sr. No.	Description of Equipment/ Instruments & Accessories	Qty.
1.	LED Light Measurement System : Integrating Sphere with Spectroradiometer (Sphere Spectroradiometer) as per IES-LM-79 and IS:16106-2012	1 Set
1.	Bids shall be submitted online only at CPP website https://eprocure.gov.in/eprocure/app . Manual bids shall not be accepted.	
2.	More information useful for submitting online bids on the CPP Portal may be obtained at https://eprocure.gov.in/eprocure/app .	
3.	Last date for submitting the bid is. 29.11.2017 till 17:00 hrs	
4.	The Technical bids will be opened on 30.11.2017 at 15.00 hours. Price/Financial bids of only technically qualified bidders would be opened on a later date.	
<p>E-Mail: dctc-wr@dcmsme.gov.in & Website: www.msmetcmumbai.gov.in</p> <p>DIRECTOR MSME-TESTING CENTRE (WR) MUMBAI-400 072</p>		

Tender No. MSME-TC/MUM/EL/M&E/39/2017-18

CHAPTER-1

INSTRUCTIONS TO BIDDERS

General Information and Instruction:

- (1) Bids shall be submitted online only at CPP website <https://eprocure.gov.in/eprocure/app>. Manual bids shall not be accepted.
- (2) During evaluation of bids, the Buyer may, at his discretion, ask the bidder for clarification on his bid. The request for clarification will be given in writing/email. No clarification on the initiative of the bidder will be entertained after opening of bid.
- (3) The bidders are required to submit soft copies of their bids (Technical and Financial) electronically on the CPP Portal, using valid Digital Signature Certificates.
- (4) More information useful for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in/eprocure/app>.
- (5) Except the valid and prescribed EMD, the offer/tender will be treated as cancelled. The bid security amount is mentioned in Chapter-3.
- (6) Bidders who are registered with NSIC under single point registration of stores as per tender scheduled or Micro and Small Enterprises as defined in MSE procurement policy issued by M/o MSME are exempted from furnishing of BID SECURITY.
- (7) Scanned copy of Bid security amount/ EMD instrument is to be uploaded with techno commercial bid and original copy should be provided to this office prior to opening of bid.
- (8) The Technical bids will be opened on 30.11.2017 at 15.00 hours. Price/Financial bids of only technically qualified bidders would be opened on a later date.
- (9) The offer should valid for six months and should clearly mention in the tender to that effect.
- (10) Any kind of canvassing with regard to tender will be treated as disqualification
- (11) Price should be quoted in Indian Rupees (INR) only.
- (12) The Director, MSME Testing Centre, Mumbai reserves the right to accept or reject any Tender or the whole tender process without assigning any reason whatsoever and it shall Binding on the bidders.

CHAPTER – 2

CONDITIONS OF CONTRACT

- (1) It should be specifically stated whether GST/packing/delivery charges/insurance charges, etc. are payable in addition to the price quoted otherwise the price quoted will be assumed to be of all inclusive and no separate tax or charges will be paid in the event of the offer being accepted.
- (2) Instrument/store should be supplied and installed within 60 days of purchase order. Failure to delivery by the stipulated date may lead to cancellation of order at the discretion of the Director.
- (3) The stores to be securely packed and delivered timely to MSME Testing Centre, Mumbai shall be the sole responsibility of supplier.
- (4) Rectification of any defects noticed during a period of one year from the date of supply shall be the responsibility of supplying firm at their own cost and risk.
- (5) Manufacturer's warranty on instruments and accessories must be a minimum of 12 months. Warranty must include all parts; Travel and Labour at no cost to MSME-TC, Mumbai, if warranty is otherwise limited indicate what is covered by warranty.
- (6) Supplier shall provide sufficient in house training to the concerned officers of MSME-TC, Mumbai at no additional cost. It is treated as a part of installation.
- (7) BID SECURITY will be acceptable in form of Demand Draft, Banker's cheque or bank guarantee from any of the commercial banks in favour of the "Director, MSME Testing Centre" payable at MUMBAI. The Bid Security should remain valid for a period of 45 days beyond the final bid validity period.
- (8) BID SECURITY Deposit amount is of as mentioned chapter 3 for the Instruments. No interest is payable on the BID SECURITY deposit amount.
- (9) The validity of the Bank Draft/Bank Guarantee submitted as the Bid Security should be suitably extended by the bidder, if needed beyond validity of the tender.
- (10) The Bid Security will be returned to unsuccessful bidder. It will be returned to the successful bidder after receipt of the PERFORMANCE SECURITY DEPOSIT from them.
- (11) In case of withdrawals or amends or impairs or derogates for non-compliance of tender condition(s) of the offer in any respect within the validity period of the tender are refusal of furnishing PERFORMANCE SECURITY DEPOSIT. In the event of getting intimation of avoiding the purchase order, the BID SECURITY amount is to be forfeited.

(12) The successful bidder irrespective of his registration status (i.e. NSIC) has to submit PERFORMANCE SECURITY DEPOSIT amount (approx. 5% of the order value – to be intimated later) before issuing Purchase Order. This Performance Security Deposit should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period.

(13) PERFORMANCE SECURITY DEPOSIT is to be furnished in the form of Bank Guarantee. The Bank Guarantee should be issued by any commercial Bank in Mumbai and should remain valid for 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.

(14) In case of non-delivery of the ordered materials in time or/any for any other bad delivery performance or/and failure to render contracted service during the warranty period (summarily noncompliance of due performance of contract by the supplier to whom order has been awarded), the Performance Security Deposit will be forfeited and supplier will be blacklisted.

(15) The Performance Security Deposit amount will be returned to the Supplier after satisfactory completion of the delivery as well as the warranty period of the delivered stores as per terms and condition of the Purchase Order.

(16) The Bid Security/Earnest Money of the successful Tenderer shall be refunded after performance security deposit as required vide Rule 171 of the General Financial Rule 2017 is furnished. If the successful Tenderer fails to furnish the Performance Security Deposit as required vide Rule 171 of the General Financial Rule 2017, then the Bid Security/Earnest Money shall be liable to be forfeited.

(17) The Bid Security/Earnest Money of the unsuccessful Tenderers will be returned as early as possible after the expiration of the period of tender validity (but not later than 30 days of the award of contract).

(18) The Tenderer shall send a pre receipted challan along with their tender so that the refund of Bid Security/Earnest Money, after the tender is rejected, can be made within the stipulated period.

(19) Delivery period: Expected delivery period for supply of items/rendering services would be 60 days from the effective date of the Contract. Please note that the Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period with/without LD clause will be at the sole discretion of the Buyer. Delivery Period is inclusive of supply and its acceptance and also installation/commissioning wherever applicable.

(20) Consignee Details: The Director
MSME Testing Centre (WR)
Kurla Andheri Road, Sakinaka,
Mumbai – 400 072.

(21) Payment Terms

- a) 100% after receipt, satisfactory installation, demonstration and acceptance of stores/equipment in good condition or the date of receipt of the bill whichever is later.
- b) Advance Payment; No advance payment will be made.
- c) Part Supply and Pro rata payment: Part supply will not be acceptable.
- d) Mode of Payment; It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details to facilitate payments through ECS/EFT mechanism instead of payment through cheque, wherever feasible.

(22) Documents to be furnished for claiming payment

The payment of the bills will be made on submission of the following documents by the Seller to the Buyer:

- i) Ink signed copy of Original Invoice
- ii) Bank Guarantee for advance, if applicable
- iii) Guarantee/Warranty Certificate
- iv) Performance Bank Guarantee/Indemnity Bond, if applicable
- v) Details for Electronic payment viz. Bank name, Branch Name and address, Account No.IFS Code, MICR Code
- vi) Original copy of the contract and amendments thereon, if any,
- vii) Self certification from the Seller that the CGST/SGST/IGST received under the contract would be deposited to the concerned taxation authority. In this regards, extant Government orders will be applicable as communicated by O/o Development Commissioner, MSME, New Delhi.
- viii) Any other document/certificate that may be provided for in the Contract.

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CHAPTER – 3

(SCHEDULE OF REQUIREMENTS)

DESCRIPTION OF STORES

S.No.	Instruments	Bid Security (in Rs.)
1.	LED Light Measurement System : Integrating Sphere with Spectroradiometer (Sphere Spectroradiometer) as per IES-LM-79 and IS:16106-2012	1,50,000/-



Note: - The above stated stores required to meet the successful installation and commissioning of the Tendered equipment.

Chapter - 4

TECHNICAL SPECIFICATION **of** **LED LIGHT MEASUREMENT SYSTEM**

Integrating Sphere With Spectroradiometer (Sphere Spectroradiometer System) as per IES-LM-79 and IS:16106-2012

LED Lamp/Luminaries Measurement System as per IES-LM-79 and IS:16106-2012 for testing of LED bulb, LED Street Light, LED tube Light, LED Lantern, LED array, LED down Lighting, LED Architectural lighting, General Lighting, etc. from 0.5 to 500 Watts.

Light Measurement system should include

- 1) Integrating Sphere
- 2) Spectroradiometer
- 3) Standard Lamps
- 4) Auxiliary Lamps
- 5) Aux Lamp Socket Assembly
- 6) Programmable DC Power Supply
- 7) AC Power Supply (Power Analyzer)
- 8) Relay Controller
- 9) Attachment for mounting various types of luminaires
- 10) Electrical Rack for power supply
- 11) Light measurement software
- 12) System manual

System should measure following parameters :

- Spectral Flux (Watts/nm),
- Luminous Flux,
- Radiant Flux (Watts),
- Co-related Color Temperature (CCT),
- Color Rendering Index (CRI),
- Chromaticity co-ordinates including Chrom x, Chrom y, Chrom u, Chrom v, Chrom u' & Chrom v',
- Color Ellipses and color tolerance Quadrangles,
- Peak Wavelength,
- Center Wavelength,
- Centeroid Wavelength and Dominant Wavelength,
- Spectral Purity,
- Full width half max,
- Luminous Efficacy,
- Power Factor, Voltage, Current, Wattage & THD

Features :

1) Integrating Sphere:

Sphere Size	: 2 mtr. (Inner diameter)
2 π port size	: 20 inch
Detector port size	: 0.5 inch with cosine diffuser
Detector ports	: 3
Sphere geometry	: 4 π as primary, 2 π secondary
2 π calibration port size	: 1inch (on 20 to 1 inch port frame reducer)
Aux lamp port size	: 1 inch
Reserved port size	: 1 inch
Lamp DUT Electrical Interface	: 4 wire, banana plugs with grounding
Measurement Geometry	: 4 π base up/ base down (Post removable and adjustable) 2 π Forward Flux Measurement
Baffles	: For 2 π and 4 π measurement (as per LM-79 guideline).
Sphere open style	: Clam shell
Maximum DUT size	: 0.5 W to 500W Luminaire as per LM-79 guideline
Maximum DUT weight	: 20Kg
Sphere Body	: Durable and Anti-corrosion material (Material to be specified by bidder)
Sphere Interior Coating	: Optical grade Diffuse reflectance coating
Interior Coating reflectance	: 97% and above
Thermal Stability of the coating	: Up to 80degC (Diffuse Reflectance of coating shouldn't degrade or change if used in temperature upto 80degC)
Temperature probe	: Mounted behind the baffle
Holders	: For tube light, bulbs etc.
Luminaire mounting attachment (Jigs/Fixtures)	: i) For 4 π system : For Different sizes of Street light, Flood Light, Down light, Panel lights, Tube Lights ii) For 2 π system : For Different sizes of Street light, Flood Light, Down light etc.

Calibration of coating reflectance should be from ISO 17025 accredited laboratory and traceable to National/International Standard. The sphere supplier must present reflectance data for the coating with the proposal.

2. Spectroradiometer :

Detector	: Linear silicon CCD array
Spectral range	: 250-850 nm
Calibration Range	: For visible spectral range from 360 – 830nm or better range
Pixels	: 2048 pixels minimum
Calibration	: Stray Light factor calibration certificate should be provided

Fiber optic cable : SMA 905 to 0.22 numerical aperture single-strand optical fiber.
: Cosine Diffuser attachment for SMA 905 adapter.

Wavelength accuracy : Less than $\pm 0.5\text{nm}$

Bandwidth and Scanning Interval : Less than 2nm

Signal-to-noise ratio : 250:1 (at full signal)

A/D resolution : 16 bit minimum

Dark noise : (correctable) 50 RMS counts

Dynamic range : 2×10^8 (system); 1300:1 for a single acquisition

Integration time : 1 milliseconds to 5 seconds

Stray light : $<0.05\%$ at 600nm; $<0.10\%$ at 435nm

Corrected linearity : $> 99.8\%$

Photometric range (Illuminant A): 15 – 50,000lm

Computer interfaces: USB 2.0 @ 480 Mbps or latest

Stray Light Factor Calibration of spectroradiometer should be from ISO 17025 accredited laboratory and traceable to National/International Standards.

3. Standard Lamp :

i) Quartz halogen lamp having omni directional intensity distribution for 4π – 1 no.

ii) A quartz halogen lamp with reflector for 2π - 1 no.

Approximate Luminous Flux : 600 lm

Rated life (Guarantee) : 50 hrs. of operation

Calibration : Spectral Flux (W/nm) @ wave length 350 – 850nm

Lamp calibration should be from ISO 17025 accredited laboratory and traceable to National/ International Standards.

4. Auxiliary Lamp For Self Absorption Correction:

Quartz halogen lamp 50W DC Operated (must be Screened & seasoned)

5. Power Supply (DC):

Power supply : DC 30V, 5A (regulated)

Stability : 0.1%

Ramp up time : 10 seconds or user set

Power Requirements : 110/220 VAC, 50/60 Hz 1

Current Stability : 0.1%

Current Rise Time : 35s

6. Power Supply (AC):

Power : 1.5 kVA
Voltage Range : 0-150 / 0-300V - manual / auto
Accuracy : 0.2%+ 0.2%FS
Resolution : 0.1 V
Line Regulation : 0.10%
Load Regulation : 0.2%
Frequency range : DC, 15 to 1KHz
Harmonic : 2400Hz

7. Power Analyzer :

Voltage : 0.5 -600 Volts AC/DC (Auto & Manual Range)
Current : 5 mA to 20 A AC/DC (Auto & Manual Range)
Power : 12 KW (Auto & Manual Range)
Accuracy (V, I, W) : 0.1% of reading + 0.1 % of range
Frequency Range : DC, and AC from 0.5 Hz to 100 KHz
Measuring additional parameters such as, Power Factor, Harmonic measurement -
ITHD (%) & VTHD (%), Crest factor etc. with Computer interface.

All electrical meters should be calibrated from ISO 17025 accredited laboratory and traceable to National/International Standards. Uncertainties should be as per Cl. 8.2 of LM -79.

Other Require Features :

- Hardware and software for all measuring parameters and for absorption correction with Auxiliary Lamp.
- Standard and Auxiliary Lamp Socket Assembly.
- Programmable DC Power Supply(For Standard Lamp and Auxiliary Lamp) & DUT
- Relay Controller to switch power supply between Standard lamp and Auxiliary lamp without changing wiring connections.
- System Manual and Light Measurement Software in English compatible with Window operating system 2007/2010
- Software validation report wherever applicable should be provided.
- Electrical Rack with power supply etc. mounted on it.
- Sphere should be mounted on caster wheels to move hemisphere as well as complete Sphere.

- Temperature indicator and temperature probe mounted behind the baffle to monitor ambient temp. inside sphere.
- Training and Demonstration on LED Light Measurement System after completion of installation.

General requirements:

- The supplier must provide a complete system including instruction manuals, cables and any miscellaneous components along with the components mentioned above.
- Light measurement system is to be installed in Electrical Laboratory, 2nd Floor, MSME-TC, Mumbai building. Cost of Civil/electrical work required for installation should be included in the quoted price.
- The bidder must clearly specify the price of installation and training otherwise the price quoted will be assumed to be all of inclusive.
- The bidder must clearly specify the details of each supplying equipment's, i.e. Make, Model, Country of Manufacturing etc.
- The bidder must submit dealership certificate of the supplying equipment's.
- The bidder must provide at least 2 references from a certified testing Laboratory in India.

Annexure-I

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

To,

Sub:- ACCEPTANCE OF TERMS AND CONDITIONS OF TENDER

Tender Reference No. _____

Name of Tender. _____

Dear Sir,

1. I/We have downloaded/obtained the tender documents (s) for the above mentioned tender/work from website namely: _____ as per your advertisement, given in the above mentioned website.
2. I/We hereby certify the I/We have ready the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like Annexure(s), Schedule(s) etc., which form part of the contract agreement and I/We shall abide hereby by the terms/conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organisation too have also been taken into consideration, while submitting this acceptance letter.
4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in its totality/entirety.
5. I/We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public Sector Undertaking.
6. I/We certify that all information furnished by our Firm is true and correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.'

Yours faithfully,

(Signature of the Bidder with Official Seal)

BANK GUARANTEE FORMAT FOR FURNISHING E.M.D/BID SECURITY

Whereas..... (Hereinafter called the “Tenderer”) has submitted their offer dated.....for the supply of (Hereinafter called the “Tenderer”) KNOW ALL MEN by these presents that WE.....of..... having our registered office at.....are bound unto.....(Hereinafter called the “Bank”)in the sum of (hereinafter called the “Purchaser”)for which payment will and truly to be made to the said purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with Common Seal of the said Bank this..... Day of 20....

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the Tenderer having been notified of the acceptance of this tender by the Purchaser during the period of its validity.
 - a. If the Tenderer fails to furnish the Performance Security for the duePerformance of the contract.
 - b. Fails or refuses to execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

The guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.
..... (Signature of the Bank).