**File No. VIS (2024-25)-PL669-600-838 DATED: 08-01-2025**

**CHARTERED ENGINEERING ASSESSMENT REPORT**

**OF**

**MANUFACTURING UNIT OF LED COMPONENTS**

**SITUATED AT**

**PLOT NO-5, SECTOR-12, IIE-SIDCUL HARIDWAR, UTTARAKHAND - 249403**

**IMPLEMENTED BY**

**[HALONIX TECHNOLOGIES PRIVATE LIMITED](https://www.zaubacorp.com/company/JGN-SUGAR-AND-BIOFUELS-PRIVATE-LIMITED/U15420DL2022PTC404736)**

**REPORT PREPARED FOR**

**IFCI LIMITED, IFCI TOWER, 61, NEHRU PLACE, NEW DELHI – 110019**

***\*\*Important - In case of any query/ issue or escalation you may please contact Incident Manager at le@rkassociates.org. We will appreciate your feedback in order to improve our services.***

***NOTE: As per IBA Guidelines please provide your feedback on the report within 15 days of its submission after which report will be considered to be correct.***

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*NOTE: Part – B is strictly as per format of IFCI. Any additional CE’s Remarks, Observations, Caveats, Limitations & Disclaimers are covered in Notes of various Annexures in Part-C and Part-D.*

# IMPORTANT NOTICE

*This report is intended for the sole use of the intended recipient/s and contain material that is STRICTLY CONFIDENTIAL AND PRIVATE.*

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| **PART A** | **INTRODUCTION** |

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| --- | --- | --- | --- | --- |
| **S.NO.** | **PARTICULARS** | **DETAILS** | | |
|  | **Report/ Certificate Type** | Chartered Engineering Assessment for GOI PLI Scheme | | |
|  | **Name of the Project** | M/s Halonix Technologies Private Limited, Manufacturing Unit of LED Components at Plot No-5, Sector-12, IIE-SIDCUL Haridwar, Uttarakhand – 249403 | | |
|  | **Project Location** | * City: Haridwar * District: Haridwar * State: Uttarakhand | | |
|  | **Name of the Company** | M/s Halonix Technologies Private Limited | | |
|  | **Client Name** | M/s Halonix Technologies Private Limited | | |
|  | **Coordinating Person Name and Number** | Name | Designation | Number |
| Ms. Geetanjali Taneja | Company Secretary | +91-9711623622 |
|  | **Work Order Number** | Email Dated: 02.01.2025 | | |
|  | **Chartered Engineering Firm Name** | M/s. R.K. Associates Valuers & Techno Engineering Consultants (P) Ltd. | | |
|  | **Date of Survey** | 07 January 2025 | | |
|  | **Date of Report** | 08 January 2025 | | |
|  | **Purpose of the Assessment** | For GOI Production Linked Incentive claims | | |
|  | **Scope of the work** | To review baseline production capacity of the Project based on the information/ data supplied by the company | | |
|  | **Documents provided/ pursued for the Project** | 1. FAR 2. Project Approval Letter 3. Manufacturing Process Flow Diagram 4. Production Data and Daily Sales Register 5. Production Target and Capacity of Major Machinery | | |
|  | **Documents/ Information Provided by** | Name | Designation | Number |
| Ms. Geetanjali Taneja | Company Secretary | +91-9711623622 |

|  |  |
| --- | --- |
| **PART B** | **BASELINE CERTIFICATE FOR PLI SCHEME** |

To,

IFCI Limited,

IFCI Tower, 61,

Nehru Place,

New Delhi – 110019

I, the undersigned, confirm that I am duly registered as a chartered engineer with the Institution of

Engineers (India) bearing registration number M-112661-4 and that I am authorized and competent to issue this certificate. Further, I confirm that the aforesaid registration is valid as on date hereof,

and as such, I am duly qualified to issue this certification.

This certificate is being issued in connection with Production Linked Incentive Scheme (PLI) for promoting domestic manufacturing of AC and LED Light in India (hereinafter referred as ‘PLI Scheme’) as notified vide **Notification No. CG-DL-E-16042021-226671 dated 16.04.2021** read with operational guideline dated **4th June 2021**, as amended from time to time (hereinafter referred as ‘the PLI Scheme’).

**M/s Halonix Technologies Private Limited** was approved under PLI Scheme vide letter no. **IFCI/CASD/PLIWG/2024-24033017** dated **30th March, 2024** issued by IFCI Limited (Project Management Agency appointed under the Scheme) as per following details:

|  |  |  |
| --- | --- | --- |
| **Target Segment(s) & Investment Category:** | White Goods | |
| **Eligible Product(s) proposed to be manufactured::** | **1.** LED Modules | **4.** Diffusers |
| **2.** Mechanical Housing | **5.** Printed Circuit Board (PCB) including Metal Clad PCBs |
| **3.** Heat sinks | **6.** Fuses |
| **Committed Investment:** | 13.05 crore | |
| **Base Year:** | 2019-20 | |
| **Financial Year for Prequalification:** | 2019-20 | |

Pursuant to the engagement letter no. **IFCI/CAD/-221006029** dated **06th October, 2022** M/s R.K. Associates Valuers and Techno Engineering Consultants Pvt. Ltd. is empaneled with IFCI Ltd. have been engaged to carry out an independent verification/determination of baseline production capacities for the base year 2019-2020 of M/s Halonix Technologies Private Limited under PLI scheme. We have carried out the physical inspection of the plant, examined the relevant records for determining baseline capacity of all the manufacturing processes involved in the production of eligible products for FY 2019-2020.

In this connection, we, hereby report and certify the data as given below:

1. **DETERMINATION OF BASE YEAR CAPACITY:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Name of the Company** | **M/s Halonix Technologies Private Limited** | |
|  | **Manufacturing location(s)** | **Date of Inspection** | **Greenfield/ Brownfield/ Both** |
| Plot No-5, Sector-12, IIE-SIDCUL Haridwar, Uttarakhand - 249403 | 07/01/2025 | Brownfield |
|  | **Committed Investment** | Rs. 13.05 crores (committed investment) | |
|  | **Eligible products manufactured at the time of site visit** | 1. LED Modules 2. Mechanical Housing 3. Diffuser 4. Printed Circuit Boards (PCB) including Metal Clad PCBs | |
|  | **No. of working shift on the date of site visits** | 3 shifts | |
|  | **Installed Manufacturing capacity**  **p.a. for FY 2019-20 ( Baseline Capacity)** | **Item** | **Quantity** |
| LED Module | 2,59,20,000 |
| Mechanical Housing | **Nil** |
| Diffuser | **Nil** |
| PCB/ MCPCB | **Nil** |
|  | **Utilization of total production/ manufacturing Capacity by unit p.a. (Actual capacity) for Base Year FY 2019-20** | **Item** | **Quantity** |
| LED Module | 2,11,35,771 |
| Mechanical Housing | **Nil** |
| Diffuser | **Nil** |
| PCB/ MCPCB | **Nil** |

**CHARTERED ENGINEER’S COMMENTS ON SITE INSPECTION FINDINGS:**

1. We have thoroughly inspected all the major machines/items described above and hereby confirm that they are in compliance with the records for the base year i.e. FY 2019-20.
2. The Company has having approval for Fuses and Heat Sinks also but at the time of site survey only LED Module, Mechanical Housing, Diffuser & PCB/ MCPCB was manufacturing at the plant. So, we have only considered the same.
3. We have verified the eligible product wise Manufacturing Process Flow Charts and found in conformity with the productions processes observed at the manufacturing location(s) for the following Eligible Products. Manufacturing Process Flow Chart is annexed as Annexure – I.
4. LED Modules
5. Mechanical Housing
6. Diffuser
7. Printed Circuit Boards (PCB) including Metal Clad PCBs
8. We have verified the number of eligible products manufactured in the base year (2019- 2020) from the examination of the ERP/internal production records provided by the company, explanations provided by the company and the capacity of the Production lines as detailed in the process flow chart and information submitted in the PLI-White Goods portal and the capacity for the location visited and on the basis of our verification, the baseline capacity is as detailed below.
9. **DETAILS OF AVERAGE CAPACITY UTILIZATION OF COMPANY’S PRODUCTS AT THE COMPANY’S MANUFACTURING FACILITIES FOR THE SPECIFIED PERIODS:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.**  **No** | **Name of Eligible Products** | **Standard Capacity as on 31.03.2020**  **(in nos.)** | **No. of products manufactured in the**  **F.Y 2019-20**  **(in nos.)** | **No. of Days the products was/were manufactured in the F.Y 2019-20**  **(in nos.)** | **Number of working Shifts**  **per day** | **No. of Products manufactured per day per shift in the year** | **Variance as per CE’s**  **findings** |
| **Location – Plot No-5, Sector-12, IIE-SIDCUL Haridwar, Uttarakhand - 249403** | | | | | | | |
| 1. | LED Module | 2,59,20,000 | 2,11,35,771 | 229 | 3 shifts | 30,765 | 6,964 |
| 2. | Mechanical Housing | --- | --- | --- | --- | --- | --- |
| 3. | Diffuser | --- | --- | --- | --- | --- | --- |
| 4. | PCB/ MCPCB | --- | --- | --- | --- | --- | --- |
| **Total** | | **2,59,20,000** | **2,11,35,771** | **229** | **3 shifts** | **30,765** | **6,964** |

**Notes:**

1. The information relating to the installed capacity as of the dates included above are based on ‘various assumptions’ *(details are given under in foot note)* and estimates that have been taken into account for calculation of the installed capacity. The assumption is also based on the three (3) shifts that the Company is running for eight (8) hours a shift. The assumptions and estimates taken into account include the following: (i) Number of working days in a fiscal year-300, (ii) Number of days in a month-30, (iii) Number of shifts in a day- 3, (iv) Number of hours- 8 in a shift and (v) Schedule preventive maintenance days-8.
2. The information relating to the actual production as of the dates included above are based on the examination of the ERP/internal production records provided by the Company, explanations given, the period during which the manufacturing facilities operate in a fiscal year, expected operations, availability of raw materials, downtime resulting from schedule maintenance activities, unscheduled breakdowns, as well as expected operational efficiencies.

**CE Observations**

1. As per discussion with the company proponents and as per the manufacturing process the capacity of the unit can be determined based on Pick & Place machine. The capacity of the machine is different for different products manufactured depending on its size & specifications. All the products have different cycle time. Therefore, no fixed capacity can be fixed.
2. Based on the above specification, company has given the calculation for the Production capacity on hourly basis of chip mounting.
3. There are in built counters in the machines which shows the production record which reset at the end of every shift and it is also different for different machines.
4. Production data of the company is also corroborated from the Sale record of the company for the corresponding period which is found to be inline.
5. The hourly production targets for different segment as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PICK AND PLACE PRODUCTION TARGETS** | | | | |
| **Product Classification** | **Subtype of Products** | **Unit** | **Machine Used** | **Target per Hour (in pcs.)** |
| LED Module | LED Batten Module | Pcs. | Yamaha Pick and Place | 115 |
| LED Module | Pcs. | Yamaha Pick and Place | 3600 |

***Source: Company***

1. Assessment of the baseline production for the FY 2019-20 has been estimated based on the chips per hour of the machine and total working hours in a year assuming if a single product is produced on all machines which is shown in the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **STANDARD PRODUCTION CAPACITY** | | | | |
|  |
| **Working Days** | **Total Working hours (24 hrs.)** | **Chips Per Hour** | **Total Chips Mounting** | **LED Module (Considering 20 chips per module)** |  |
| **300 Days**  **For 6 machines** | **43200 Hours** | **120001** | **51,84,00,000** | **2,59,20,000 2** |  |
| **10000** | **43,20,00,000** | **2,16,00,000** |  |

1. *This is the capacity provided by the company and cross verified from the catalogue of the machines.*
2. *This is the expected capacity if product is produced without considering major breakdown and Changeover time.*

**DECLARATIONS:**

1. It has been ensured that the information furnished is true and correct as furnished by the company to the best of our knowledge. No part of it is false or misleading and no relevant information has been concealed or withheld to the best of our knowledge.
2. We have requisite expertise, experience, and qualification to evaluate the project and give this certificate.
3. Neither of our director/ partner/ proprietor or employee has any present or prospective interest in the Brownfield Project of M/s Halonix Technologies Private Limited (name of the applicant).
4. Neither I nor any of my partners or director or employee is a partner, director or an employee of M/s Halonix Technologies Private Limited (name of applicant) or its associated concerns.
5. That the assessment is done based on the inputs/ data/ information provided by the company verbally or in writing has been relied upon.

This report is issued without prejudice or conflict of interest.

**Signature & Seal of CE firm**

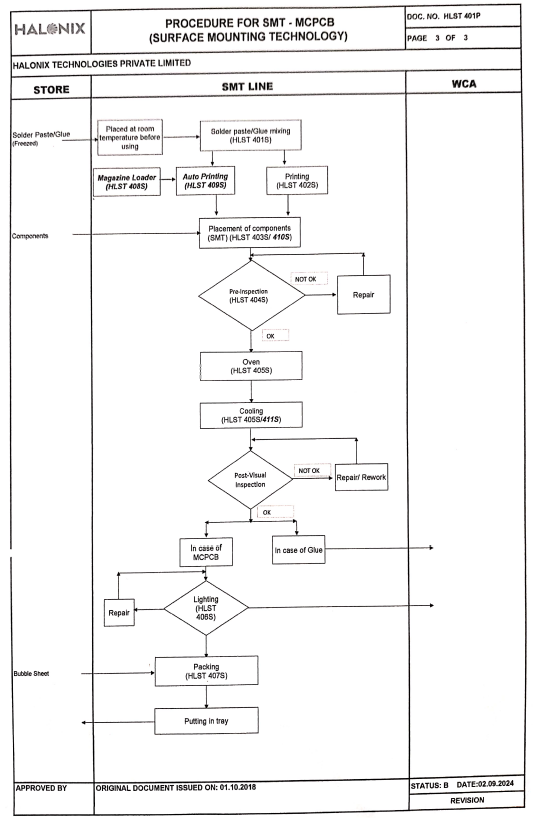
**Name of CE:**

**IE Membership Number:**

**Date:**

|  |  |
| --- | --- |
| **PART C** | **ANNEXURES** |

**ANNEXURE -I - MANUFACTURING PROCESS FLOW CHART (MPFC)**

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***Source: Company***

**ANNEXURE -II - EMPANELMENT DOCUMENT**

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| **ANNEXURE -III – PROJECT APPROVAL LETTER FROM IFCI (PMA)** |
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|  |  |
| --- | --- |
| **PART D** | **CE IMPORTANT REMARKS / LIMITATIONS/ CAVEATS/ DISCLAIMERS** |

1. Our team has verified only major machines as mentioned in the FAR provided and shown by the client during site visit.
2. Any information referred in the assessment is based on the FAR provided by the client.
3. In the course of the assessment, we were provided with both written and verbal information. We have however, evaluated the information provided to us through broad inquiry, analysis and review but have not carried out a due diligence or audit of the information provided for the purpose of this engagement. Our conclusions are based on the assumptions and other information provided to us by the client during the course of the assessment.
4. The client/ owner and its management/ representatives warranted to us that the information they have supplied was complete, accurate and true and correct to the best of their knowledge. All such information provided to us either verbally, in writing or through documents has been relied upon in good faith and we have assumed that it is true & correct without any fabrication or misrepresentation. I/We shall not be held liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or willful default on part of the owner, company, its directors, employee, representative or agents.
5. Legal aspects for e.g. Investigation of title, ownership rights, lien, charge, mortgage, lease, verification of documents from source or any concerned Govt. office etc. has not been covered in this assessment.
6. Machines are assessed as seen on site on as-is-where basis at the time of survey.
7. The condition of the machinery and assets are only based on the visual observations and appearance found during the site survey. We have not carried out any physical tests to assess the working and efficiency of the machines and assets.
8. We have not commented upon machines operating efficiency, useful or residual life.
9. Site Survey has been carried out on the basis of the physical existence of the assets rather than their technical expediency.
10. We have made certain assumptions in relation to facts, conditions & situations affecting the subject of, or approach to this exercise that has not been verified as part of the engagement rather, treated as “a supposition taken to be true”. If any of these assumptions prove to be incorrect then our estimate on value will need to be reviewed.
11. Our report is meant only for the purpose and the client mentioned in the report and should not be used for any other purpose or by any other person. The Report should not be copied or reproduced for any purpose other than the purpose for which it is prepared for. I/we do not take any responsibility for the unauthorized use of this report.
12. We owe responsibility only to the authority/client that has appointed us as per the scope of work mentioned in the report. We will not be liable for any losses, claims, damages or liabilities arising out of the actions taken, omissions or advice given by any other person. In no event shall we be liable for any loss, damages, cost or expenses arising in any way from fraudulent acts, misrepresentations or wilful default on part of the client or companies, their directors, employees or agents.
13. At our end we have not verified the authenticity of any documents provided to us from the originals or any Govt. authority. Documents/ details/ information submitted to us both verbally or in writing have been relied upon in good faith.
14. This CE assessment is done by R.K Associates Valuers & Techno Engineering Consultants (P) Ltd. and its team of engineers.