#### ENGINEERING DEPARTMENT

| STANDARD OPERATING PROCEDURE                |                 |  |  |
|---------------------------------------------|-----------------|--|--|
| <b>Department:</b> Engineering              | SOP No.:        |  |  |
| Title: Measuring The Lux Intensity of Light | Effective Date: |  |  |
| Supersedes: Nil                             | Review Date:    |  |  |
| Issue Date:                                 | Page No.:       |  |  |

#### 1.0 PURPOSE

1.1 To define a procedure for the Measurement of Lux intensity of light.

#### 2.0 SCOPE

2.1 This SOP is applicable for the Measurement of Lux intensity of light at ......

#### 3.0 REFERENCE(S) & ATTACHMENTS

- 3.1 References
- 3.1.1 IS 3646: Code of practice for interior illumination.
- 3.1.2 IS 6665: Code of practice for industrial lighting.

#### 3.2 Attachments

3.2.1 Attachment-I: Record for Lux level measurement of light.

#### 4.0 **DEFINITION & ABBREVIATION(S)**

#### 4.1 Definitions

4.1.1 Nil

#### 4.2 Abbreviations

4.2.1 NA : Not Applicable.

4.2.2 CC : Change Control.

4.2.4 Sl. No.: Serial Number.

4.2.5 SOP : Standard Operating Procedure.

4.2.6 mm : Millimeter.

4.2.7 IS : Indian Standard.

4.2.8 NLT : Not less than.

#### 5.0 RESPONSIBILITY:

#### **5.1** Engineering Person:

5.1.1 To follow the procedure defined in the SOP for the measurement of Lux intensity of light.

### 5.2 Engineering Head:

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5.2.1 To ensure that the measurement of Lux intensity of light is done according to the procedure defined in the SOP.

### **5.3** Quality Assurance Head:

5.3.1 To ensure implementation of the defined procedure.

#### 5.4 Plant Head:

5.4.1 To ensure implementation of the defined procedure.

#### **6.0** Distribution:

- I. Quality Assurance
- II. Engineering

#### 7.0 PROCEDURE:

- 7.1 All light fixtures should be cleaned before Lux level measurement.
- 7.2 Check whether all the lights are ON if not switch ON the light of the area where Lux level of light is to be measured.
- 7.3 Use Lux meter for lux level measurement. Switch ON the lux meter.
- 7.4 Keep the photo sensors of lux meter facing towards the light source of the area under measurement.
- 7.5 Select the range of lux meter as per requirement.
- 7.6 Measure the lux level of light at different locations minimum (5) at a working height of 900 mm from ground level.
- 7.7 Record all readings and calculate average reading. Refer Attachment-I.
- 7.8 Ensure that the average readings of lux level of light are within acceptance limit. If not within limit clean the fixture or replace the tube or reflector to get desired lux level of light.

LIMIT: Following are the acceptance criteria for lux level.

a) Production : NLT 400 lux.
b) Quality Control : NLT 400 lux.
c) Change room : NLT 200 lux.

d) Raw material / : NLT 300 lux / NLT 400 lux.

Packing material stores

e) Plant (Utilities) : NLT 250 lux.



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f) Offices : NLT 300 lux.
g) Corridors : NLT 300 lux.
h) Toilets : NLT 250 lux.
i) Service area : NLT 250 lux.

**Note:** Activity to be carried out by calibrated lux meter.

### 8.0 REVISION HISTORY

| Version No.          | 00               | Effective Date |  |
|----------------------|------------------|----------------|--|
| Details of revision: | New SOP Prepared |                |  |



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### **Attachment-I**

### RECORD FOR LUX LEVEL MEASUREMENT OF LIGHT

### Date:

| S.No | Area/<br>Room<br>No. | Reading 1 | Reading 2 | Reading 3 | Reading 4 | Reading 5 | Average<br>Reading | Done<br>By | Checked<br>By |
|------|----------------------|-----------|-----------|-----------|-----------|-----------|--------------------|------------|---------------|
|      |                      |           |           |           |           |           |                    |            |               |
|      |                      |           |           |           |           |           |                    |            |               |
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