6. Emergency Lighting Systems Acceptance Test

6.1. The emergency lighting systems shall be tested as per **Table 6.7.** for acceptance.

Table 6.7: Acceptance Test for Emergency Lighting

ITEM	REQUIREMENTS
1. LOCATION	i. Verify the number and locations of emergency lighting luminaire as per approved drawings. ii. Ensure all the locations required by **Table 6.1.1** are implemented on site.
2. TRANSFER AND LOAD	i. Upon completion of the installation, the system shall be tested to ensure conformity with the requirements of this chapter, NFPA 70, NFPA 110 and NFPA 111 with respect to both power output and function. ii. With the batteries fully charged and with a connected load bank at rated value, a normal power failure shall be initiated by opening all switches or breakers supplying the normal power to that load. iii. For an emergency load that is not normally energized, the breakers to the monitored circuit that energizes the emergency load shall be opened. iv. The time delay between initiation of the power failure and the energizing of the load shall be observed and recorded. v. The voltage and current supplied to the emergency load and, where applicable, the frequency, waveform, and transients shall be recorded. vi. The load test shall be continued for 15 minutes and the following shall be observed and recorded: a. Voltage and current to the load b. Voltage and current of the battery bank c. Where applicable, the frequency vii. The normal power shall be restored to the monitored circuit. viii. The transfer time shall be observed. ix. Immediately following the test the system shall be connected to the normal power for 24 hours.
3. LUX	i. The emergency illumination available at floor level, at the centerline of exit routes and open spaces shall be measured. ii. The initial lux shall not be less than an average of 10.8 lux, and at any point not less than 1.1 lux, measured at floor level along the egress path, or 1 m width of center line of this egress path. iii. The lux shall permitted to decline to not less than 0.65 at the end of, 3 Hours at any point, measured at floor level along the egress path, or 1 m width of center line of this egress path. iv. Lux shall not be less than 0.5 at open spaces.
4. BATTERY ROOM	i. For central battery emergency lighting systems, battery room ventilation, proper storage arrangement shall be verified.
5. SELF TEST	i. The self diagnostic test shall be conducted through the control unit or computer and recorded.
6. HANDING OVER	i. Operating, Inspection, Maintenance and Battery usage manuals along with approved drawings shall be handed over to the owner of the building from the consultant. ii. Inspection report signed by Consultant, Contractors and Owner's representatives. iii. Civil Defence NOC and completion certificates shall be handed over to the owner.