

STREETLIGHT AUDIT REPORT

Hosur Road Corridor

6 km stretch · Shoolay Circle to Silk Board · Evening & Night-Time Mobility Assessment

STUDY OVERVIEW

A High-Density Corridor, After Dark

Hosur Road is one of the city's busiest arterial corridors, a 6 km stretch running from Shoolay Circle in the north to Silk Board in the south, lined on both sides with residential, commercial, institutional, mixed-use and public-semi-public (PSP) development. Streetlighting along this corridor is not a background utility; it is core infrastructure for how the corridor functions once the sun goes down, shaping the safety and comfort of everyone who drives, rides or walks through it.

This report summarises how the audit was carried out and what it found, with a focus on how lighting performance translates into real evening and night-time mobility outcomes for vehicles and pedestrians alike.

METHODOLOGY

How the Audit Was Done

The assessment combined on-ground field verification with GIS-based spatial analysis, moving from individual fixture records to a corridor-wide illumination picture in three steps:



- Field verification: every streetlight along the corridor was physically inspected and logged for its working status, structural condition and fixture type.
- GIS-based mapping: each verified fixture was geo-tagged and plotted onto a corridor base map, preserving its exact location and side (East/West) of the road.
- Kernel Density analysis: point-level lux readings were interpolated using Kernel Density Estimation (KDE) to generate a continuous illumination surface for the full 6 km stretch revealing bright and dark zones that individual point readings alone would miss.

SURVEY CONDITIONS: Field verification was carried out from 5:30 AM onward, ahead of sunrise. Most fixtures across the corridor do not function reliably after dark, and walking the unlit stretches after night especially the 1.2 km blackout zone in particular was unsafe for surveyors on foot.

KEY FINDINGS

What the Audit Revealed

307

streetlights assessed

68%

operational corridor-wide

93

Non-Functional

67.9

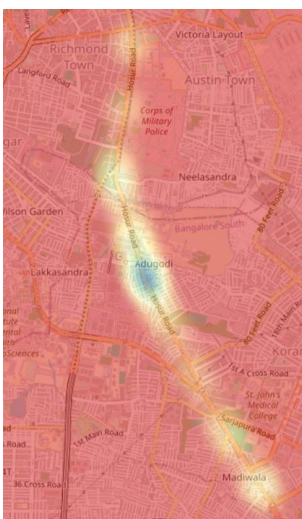
Avg. lux level

Functionality is uneven across the corridor: of 307 fixtures, 209 are working, 93 are non-functional and 5 are physically broken. The two sides of the road diverge sharply, the West side is 76% operational, while the East side lags at 64%, meaning East-side users face darker conditions more often. Structurally, 266 poles stand upright, but 32 are tilted and 8 are visibly damaged, posing both lighting-continuity and public-safety risks.

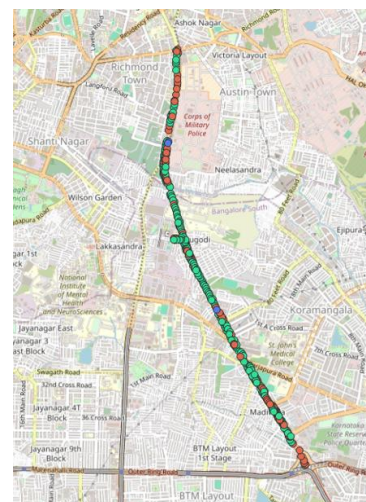
Fixture typology also skews heavily toward vehicular use: 71% of all streetlights (208 of 307) are single-arm, road-facing fixtures. Only 20 fixtures face the footpath directly confirming that pedestrian lighting has been a secondary design consideration along this corridor.

The Illumination Picture

The Kernel Density map below translates individual lux readings into a continuous illumination surface for the corridor. The average illumination level is 67.9 lux (median 57.2 lux), but this average conceals extreme variation — readings range from a near-total-darkness low of 0.015 lux to an over-lit high of 91 lux. The bright core of the density map (white/yellow) sits around the Adugodi – Koramangala stretch, while other segments fade toward red, indicating comparatively weaker illumination.



Kernel Density map — illumination intensity

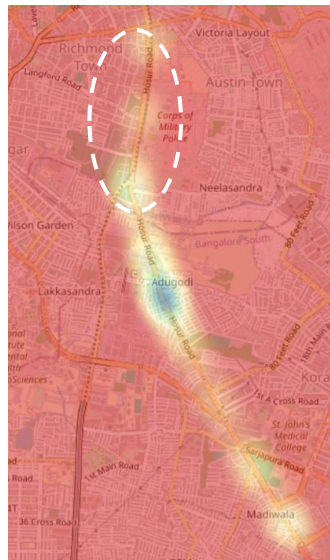


Field-verified fixtures — green: working · red: non-working · blue: broken

Critical Dark Stretch

One segment stands out as the corridor's most severe gap not a scattering of failed fixtures, but a continuous stretch with effectively no functioning street or footpath lighting:

ATTRIBUTE	DETAIL
Unlit Length	1.2 km of the 6 km corridor — approximately 20% of the study area
Extent	Shoolay Circle to Anepalya Junction
Street & Footpath Lighting	Not functioning; effectively dark for both the roadway and footpath
Current Light Source	Ambient spill from adjoining shopfronts

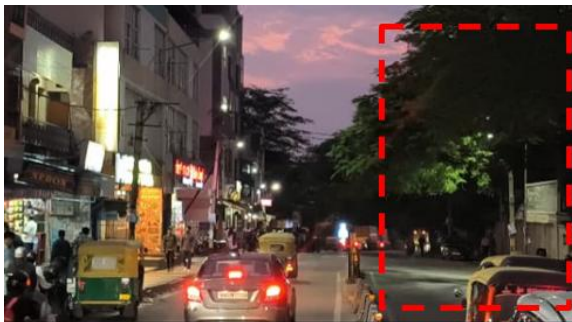


Identified Dark stretch for 1.2 km (Shoolay Circle till Anepalya Junction)

FIELD EVIDENCE

What the Camera Confirms During Our Site Visit

The tabulated audit data is backed by on-ground photographs that make the underlying problems concrete not just failure counts, but the physical conditions causing them.



DARK SPOT

Dense tree canopy blocks fixture throw onto the footpath, even where the light itself works.



NON-FUNCTIONAL FIXTURE

Dangling, disconnected wiring at the fixture head — counted among the corridor's 98 non-working or broken lights.



STRUCTURAL RISK

A visibly leaning pole close to traffic and a building edge — one of 32 tilted poles on the corridor.



SAFETY HAZARD

Exposed, tangled wiring at a pole base — an electrical safety risk independent of illumination performance.

PRIORITY ISSUES

Where the Corridor Falls Short After Dark

- Localised dark spots persist — some from non-working fixtures, others from dense tree canopy blocking the throw of an otherwise-working light.
- Tilted and damaged poles (40 total) are a compounding risk: a structural safety hazard first, and a source of further lighting failure second.
- Exposed, tangled wiring at several fixture bases is an electrical safety hazard in its own right, separate from, and in addition to, illumination performance.
- Wide lux variation (0.015–91 lux) means some stretches are effectively unlit while others are over-lit — an inconsistent, unpredictable experience for corridor users.
- Pedestrian-facing lighting is minimal (20 of 307 fixtures), leaving footpaths comparatively dark even where roadway lighting is adequate.

RECOMMENDATION

A Phased Path Forward

Given the scale of existing infrastructure already in place, the most effective path is to repair before expanding:

Phase 1 — Repair Now: Restore all 93 non-working and 5 broken fixtures; carry out structural correction of 32 tilted and 8 damaged poles; and rectify exposed or tangled wiring at fixture bases as an immediate electrical safety measure, prioritising the East side, where the operational rate (64%) trails the West side (76%).

Phase 2 — Then Redesign: Even out illumination levels across the corridor, trim tree canopies that obstruct otherwise-working fixtures, and expand pedestrian-facing coverage before introducing any new infrastructure. Since most existing street lights are mounted on utility poles rather than dedicated street-light poles, future upgrades should progressively shift to dedicated poles placed at uniform intervals, following the spacing and lighting principles recommended in IRC:

SP: Guidelines for Lighting on Urban Roads and Streets (2020). This will provide more consistent illumination, improve maintenance access, and support a more organised street-lighting system.

Repairing existing infrastructure comes before expanding it: fix what's broken, then design for consistent, pedestrian-inclusive lighting.

Streetlight Details from B.PAC Team Audit: -

Stretch	Condition of streetlight - Working	Condition of streetlight - Not Working	Condition of streetlight - Broken	Total No of Lights
0m - 250m (Sholay Circle Jn)	5	3		8
250m - 500m	1	5		6
500m - 750m	3	3		6
750m - 1000m	6	3		9
1000m - 1250m	4	1	2	7
1250m - 1500m	9	10		19
1500m - 1750m	13	6	1	20
1750m - 2000m	7	1		8
2000m - 2250m	8	1		9
2250m - 2500m	21	4		25
2500m - 2750m	18	4		22
2750m - 3000m	11	4	1	16
3000m - 3250m	10			10
3250m - 3500m	9	1		10
3500m - 3750m	6	6	1	13
3750m - 4000m	13	1		14
4000m - 4250m	9	4		13
4250m - 4500m	13			13
4500m - 4750m	14	6		20
4750m - 5000m	4	9		13
5000m - 5250m	17	8		25
5250m - 5500m	7	7		14
5500m - 5750m		3		3
5750m - 6000m (Silk Board Jn)	1	3		4
Total	209	93	5	307

ABOUT B.PAC

Bangalore Political Action Committee (B.PAC)

is a non-partisan citizen's group that aims to improve governance in Bengaluru and to enhance the quality of life of every Bengalurean. B.PAC is specifically targeting good governance practices, integrity and transparency in all arms of the government, improving the quality of infrastructure in the city and identification as well as support of strong candidates for public office at all levels. Ultimately, creating a safer city where the rule of law is ensured for its residents as highlighted in B.PAC's Bengaluru charter and agenda.

[Reach us,](#)

Team: B. MOBILE
No. 4/6, Ground Floor,
Millers Road,
Opp Manipal Hospital,
Bengaluru 560052
Contact: 6364345813