

THUNDERBIRD-C LED-TYPE 3 DARK SKY LUMINAIRE

Single Source Responsibility – Up to 18 Year Maintenance Cycle



FEATURES

- 40-60% energy reduction
- 70% maintenance reduction
- Replaces up to 250HPS-400MH
- Minimal LED glare
- Premium American LED's
- Thermal protection circuit
- Replaceable components
- Exceeds DOE Reliability Standards
- White 4100K – 70% CRI

BENEFITS

- Qualifies for Federal & Utility rebates
- Greatly reduced owning cost
- Provides white light visibility
- No driver discomfort
- Best components
- Easily maintained if necessary
- Tested for long life
- Creates natural environment

APPLICATIONS

- Street lighting
- Parking Areas
- Solar Lighting

Specifications/Features

GENERAL

- Premium LED Streetlight
- Retrofits 100-250 HPS & 250-400MH
- Flat lens provides dark sky distribution
- Provides up to 4 to 1 spacing
- Optional clear sag lens increase efficiency and spacing

CONSTRUCTION

- Die-cast aluminum housing
- 8 oz finned aluminum heat sinks
- Replaceable parts with plug in connectors
- Stainless steel hardware
- Tempered glass lens
- Luxeon Rebel LEDs

OPTICAL ADVANTAGE

The patent pending optical system maximizes the light on the task, eliminates excess light under the fixture and all light above 90 degrees. The exceptional uniformity reduces eye fatigue, aids visibility and increases safety

ELECTRICAL/WARRANTY

- Electronic Advance driver
- 24V LED operation
- LED boards wired in parallel
- Consult factory for 347/480V
- Consult factory for solar operation
- Surge protected driver
- Instant on after power outage
- 5 Year limited warranty
- -40°F starting
- Less than 10% failures at 60K hours
- Less than 30% lumen depreciation at 60K hrs.

DEPT of ENERGY LM80 TEST DATA

Guth Luxeon Rebel LEDs exceeds Energy Star guidelines intended to ensure quality solid state development. The LEDs have lumen maintenance of 98.9% after 6,000 hours while operated at 350ma with an 85°C junction temperature.

Patent Pending Optical System



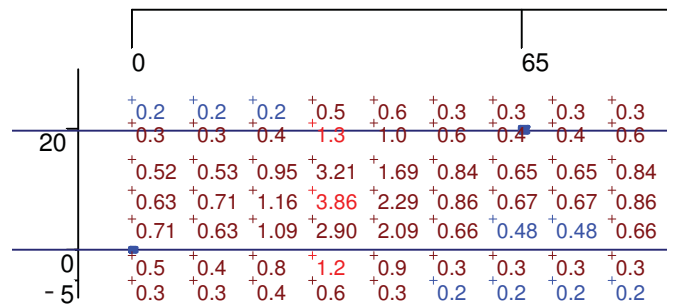
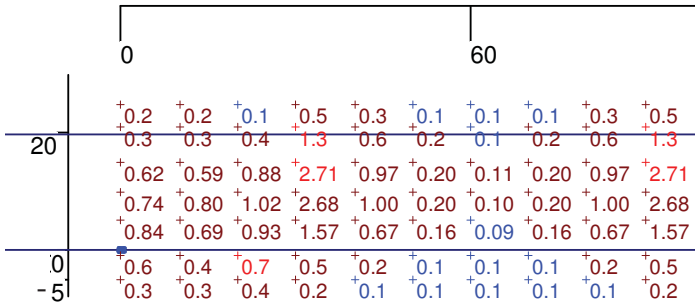
Photometrics

TBC-32L-5-U
20' ROAD -30' MH
120' Single Spacing

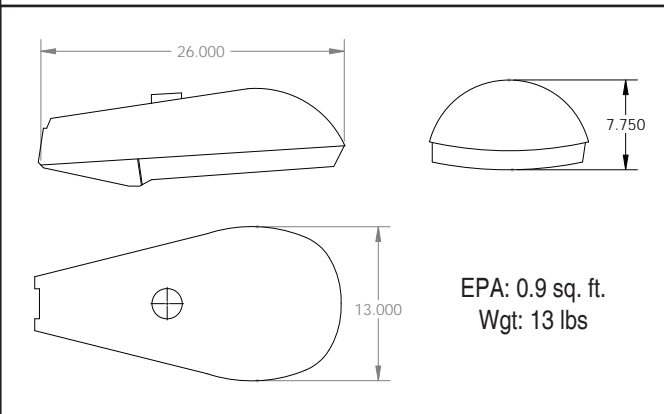
Avg.	.89 FC
Max	2.7 FC
Min	.09 FC
Max/Min	30 to 1
Avg/Min	9.9 to 1

TBC-32L-5-U
20' ROAD -30' MH
130' Staggered Spacing

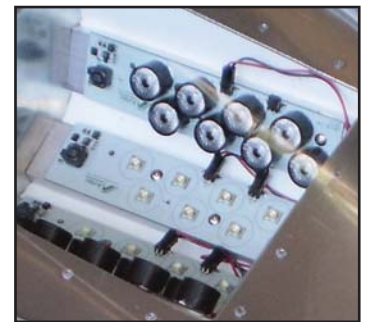
Avg.	1.29 FC
Max	3.86 FC
Min	.48 FC
Max/Min	8 to 1
Avg/Min	2.7 to 1



Dimensions

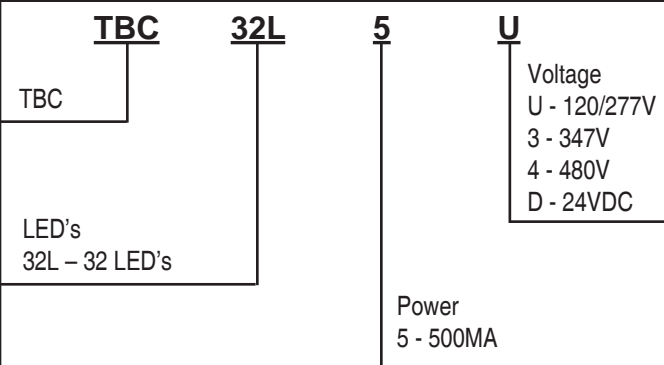


LED Heat Sink



Optical System

THUNDERBIRD - C Catalogue Numbers



Note: 350ma operation reduces light levels 20-25%

Options

- "/PC" - photo control receptacle
- "BL" - Bi-Level Control (consult factory)
- "UL" - UL Listed (not required for roadway lighting)
- "/SG" - clear sag glass lens

Project Name:

Type	Catalogue Number	Comments

Guth utilizes the services of U.L. and ETL for listing products
Specifications and data are subject to change without notice.

Guth Lighting is a Philips group brand - 04/10