

## Application Brief

# LIFI<sup>®</sup> for Sign & Billboard Lighting



### Key Benefits and Features of LIFI<sup>®</sup> Lighting System

- Lower maintenance costs – long service life
- Improve visibility and branding – high color rendering
- Reduce energy costs – highest lm/W system available

#### Other benefits:

- Dimmable and fast re-strike for smart lighting systems
- Reduce environmental costs – small source size, less material
- Reduce glare/pollution – directional source
- Solar and off-grid power compatible – DC drive electronics
- Rugged and impact resistant – solid state system

## Recommended Product

### LIFI<sup>®</sup> Light Source

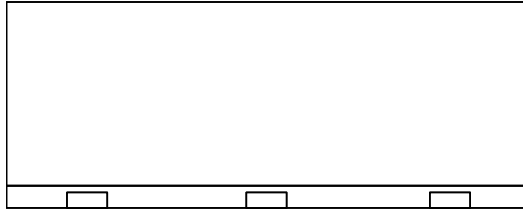
- Order code: LIFI-STA-40-01

Description: Solid state plasma dimmable white light source

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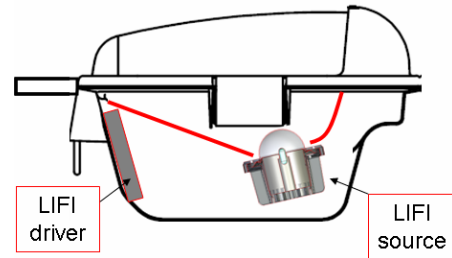
## Annual Cost Savings for Billboard Lighting

### Billboard Lighting Layout Example



Lighting Array (12' x 36': 3 Fixtures)

### Light Fixture Example



	LIFI-STA-40-01	400W MH	Annual \$ Savings
Source Watts	180	400	
Source Efficacy (L/W)	120	90	
Total Lumens	21600	36000	
Mean Total Lumens	18360	27000	
Total AC Power (Watts)	267	460	
Fixture Efficiency (%)	86%	65%	
Mean Fixture Lumens	15697.8	17550	
Equal Lumen Factor (Watts)	20.6	0	
Annual Power Costs (\$)	\$ 75	\$ 121	\$ 45
Lifetime (Hrs)	30000	18000	
Replacement Cycle (Hrs)	20100	12060	
Replacements Per Year	0.1090	0.1816	
Maintenance Cost (\$)	\$ 27	\$ 45	\$ 18
Total Savings Per Fixture (\$)			\$ 63
Total Savings Per Billboard (\$)			\$ 190

<i>Hours of Operation</i>		6
<i>\$/kW-hr</i>	\$	0.12
<i>Lamp Replacement Cost</i>	\$	250

Additional saving opportunities:

1. Lower capital costs for lighter, smaller fixtures
2. Lower capital costs for using fewer, more efficient fixtures
3. Dimming light in low frequency areas