STATIC SPECTRUM ENGINE

WITH SKYBLUE® LIGHTING SOLUTIONS

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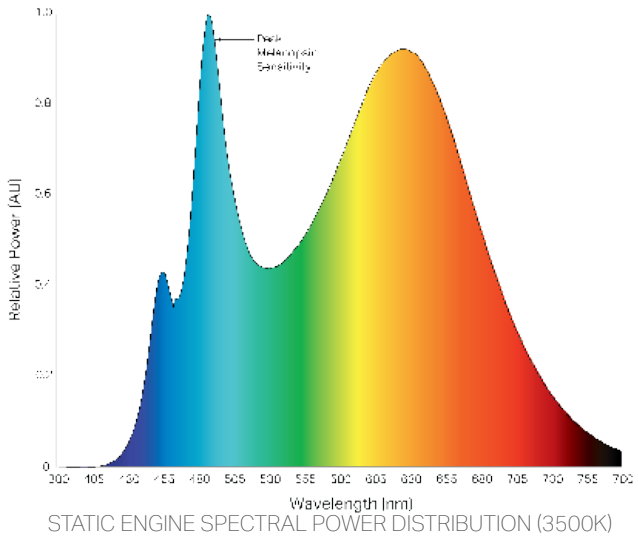
CIRCADIAN LIGHTING WITHOUT COMPROMISE

BIOS SkyBlue® Static Spectrum lighting solutions support proper daytime circadian stimulus, communicating directly with human circadian biology through a non-visual photo receptor in the eye. With SkyBlue®, there's no need for color-tuning, color temperature adjustments or significantly increasing light levels. BIOS provides the circadian stimulus you need in a color temperature you want — It's circadian lighting without compromise.

STATIC LIGHT ENGINE

BIOS SkyBlue® Static Spectrum Light Engine delivers the industry's best melanopic ratio (m/p) with R9 greater than 90 at each color temperature. Easily integrated into existing LED fixtures and compatible with all LED drivers, the SkyBlue® Static Spectrum Light Engine is the ideal replacement for static color light fixtures.



STATIC ENGINE SPECTRAL POWER DISTRIBUTION (3500K)

LUMINAIRE PROFILES

- Troffers
- Linear Fixtures

PRIMARY APPLICATIONS

- Senior Daytime Care Centers
- Outpatient Clinics
- Offices
- Schools
- Factories

Nominal Performance

CCT	Melanopic Ratio (m/p)[1]	Efficacy [lm/W]	CRI	R9	COI
3000K	0.70	109	82	94	3.0
3500K	0.80	116	83	91	3.1
4000K	0.90	120	83	91	3.1

1 Melanopic ratio (m/p) describes the relative lux (M) versus photopic lux (P) and is used the by the WELL Building Standard™

Linear Board

Board Type	CCT / 83CRI	Board Size	Voltage[1] [V]	Current [mA]		Output [lm]		Max Board Temp (°C)*
			Nominal	Nominal	Max	Nominal	Max	
SBL	835	140x20	28	150	300	475	850	85
SBL	840	140x20	28	150	300	500	900	85
SBL	835	279x20	28	300	600	950	1650	85
SBL	840	279x20	28	300	600	1000	1700	85
SBL	835	289x38	22.4	400	750	1000	1800	85
SBL	840	289 x 38	22.4	400	750	1050	1850	85
SBL	835	289 x 19	33.0	250	600	1100	2200	85
SBL	840	289 x 19	33.0	250	600	1100	2300	85
SBL	835	303x19	33.0	250	600	1100	2200	85
SBL	840	303x19	33.0	250	600	1100	2300	85
SBL	835	560x24	38.5	400	900	1850	3750	85
SBL	840	560x24	38.5	400	900	2000	4000	85
SBL	835	560 x 40	38.5	400	900	1850	3600	85
SBL	840	560 x 40	38.5	400	900	1950	3900	85

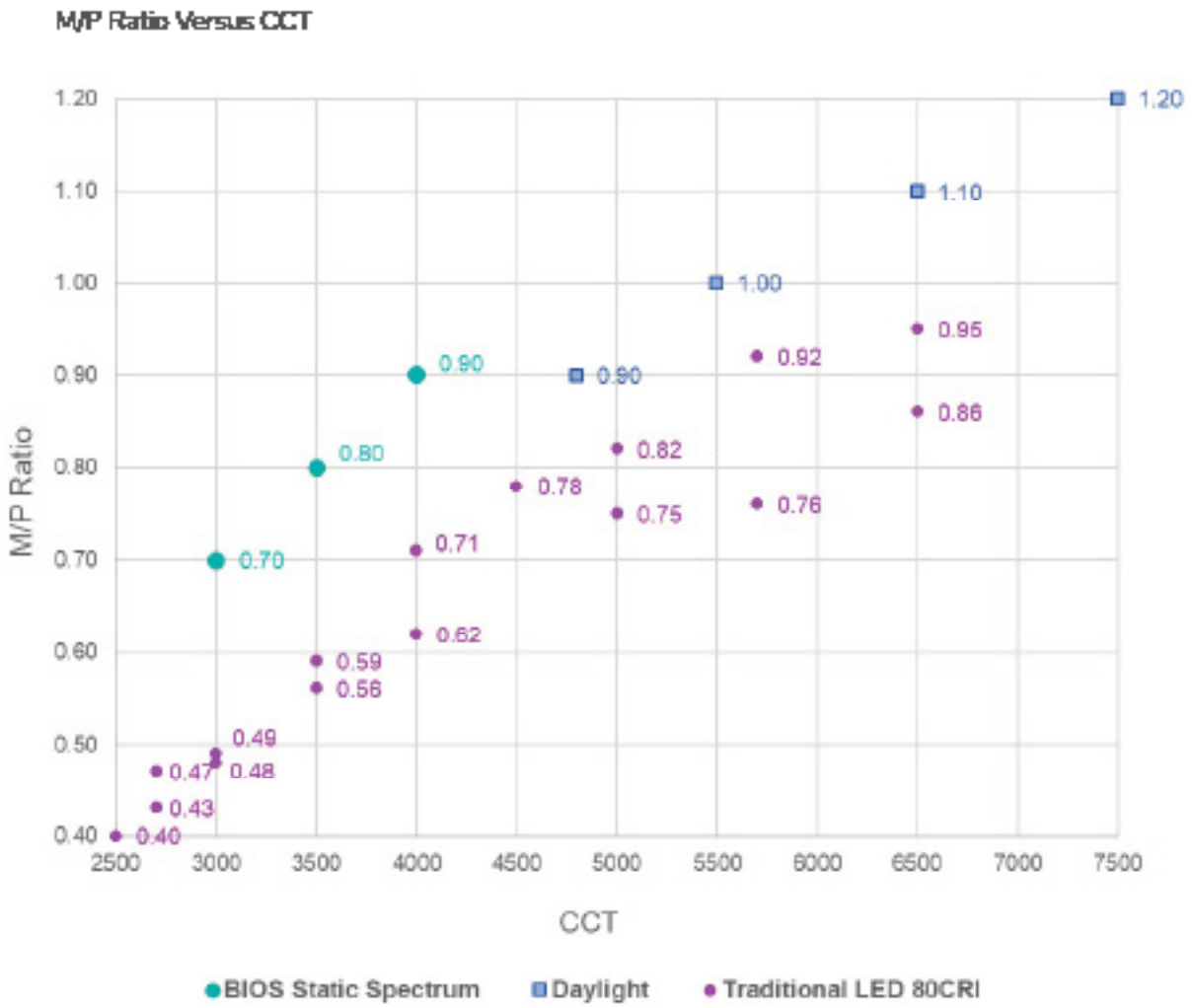
Area Board

Board Type	CCT / 83CRI	Board Size	Voltage	Current [mA]		Output [lm]		Max Board Temp (°C)*
			Nominal	Nominal	Max	Nominal	Max	
SBA	835	270 x 270	33	400	900	1550	3150	85
SBA	840	270 x 270	33	400	900	1700	3400	85

* Board temperature as noted obtained with a representative heatsink of 24 gauge aluminum after 30 minute dwell. Thermal measurements taken in open air with ambient temperature of approximately 25°C. Please contact info@bioslighting.com for more information.

Note: All linear and area boards use poke in connectors 18-24 AWG

MELANOPIC RATIO (M/P) VS CCT



The graph above provides the melanopic to photopic ratio (M/P) for BIOS as compared to daylight and a range of "traditional" white LED sources of various CCT all with 80CRI.

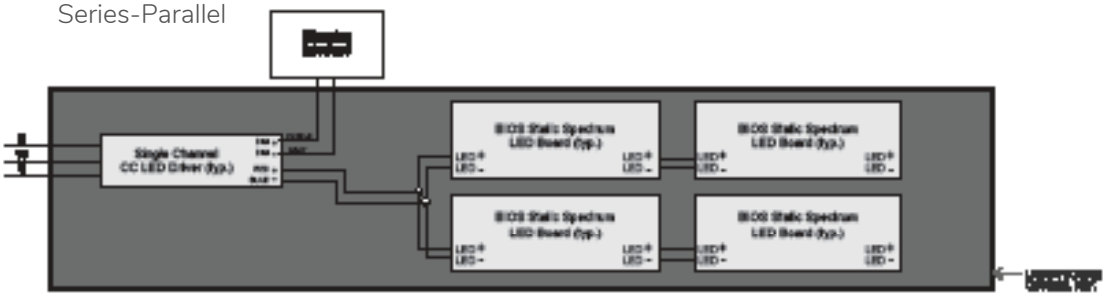
M/P ratios are used to help calculate equivalent melanopic lux (EML) values which is the metric used for circadian lighting in the WELL Building Standard.

DIMMING WIRING DIAGRAMS

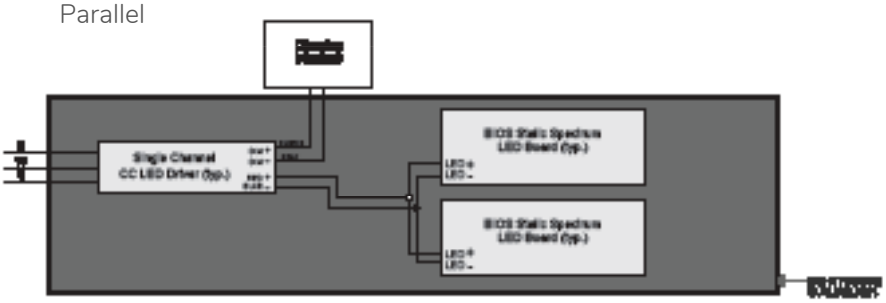
Wiring Details

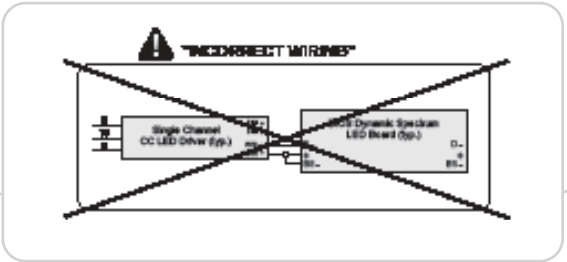
Series

Series-Parallel



Parallel



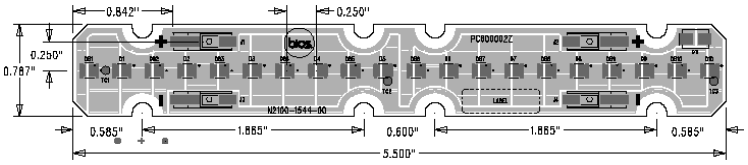


STATIC SPECTRUM LED BOARDS

Dimensions and Details

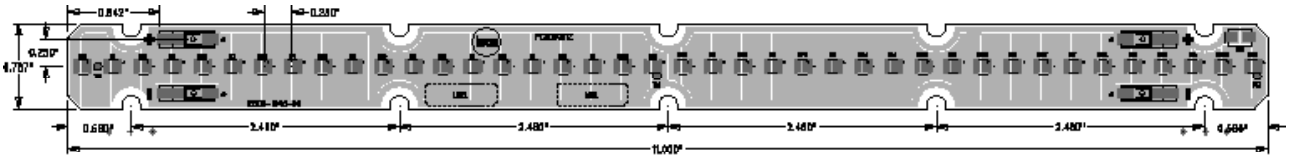
SBL-8XX-140x20

Nominal 5.5inch Slim Board (140mm x20mm)



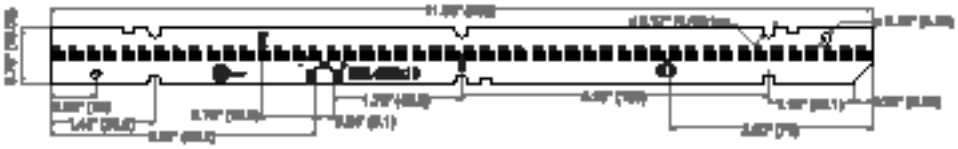
SBL-8XX-279x20

Nominal 11inch Slim Board (279mm x20mm)



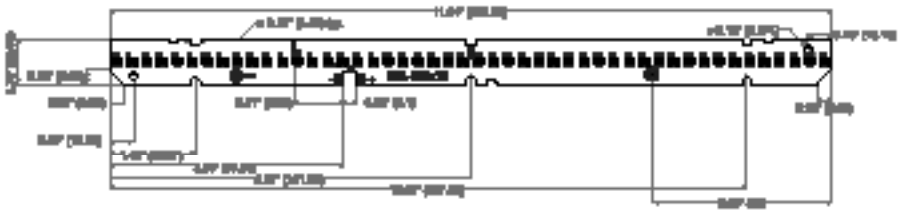
SBL-8XX-289x19

Nominal 1ft Slim Board (289mm x 19mm)



SBL-8XX-303x19

Nominal 1ft Slim Board (303mm x 19mm)



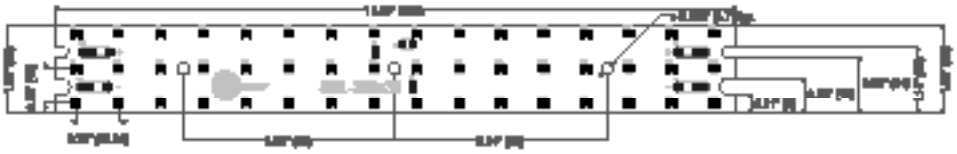
Note: All linear and area boards use poke in connectors 18-24 AWG

STATIC SPECTRUM LED BOARDS

Dimensions and Details

SBL-8XX-289x38

Nominal 1ft Slim Board (289mm x 38mm)

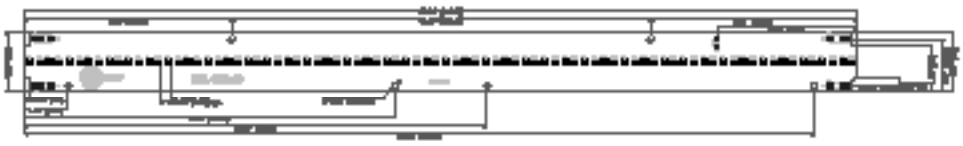


SBL-8XX-560x24

Nominal 2ft Slim Board (560mm x 24mm)

SBL-8XX-560x40

Nominal 2ft Board (560mm x 40mm)



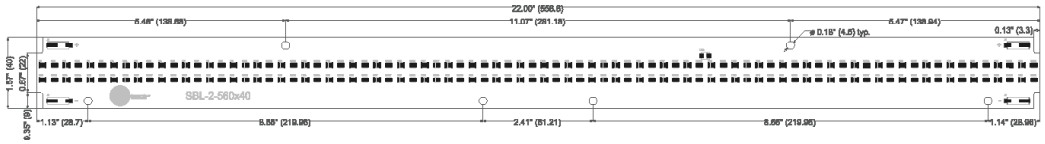
Note: All linear and area boards use poke in connectors 18-24 AWG

STATIC SPECTRUM LED BOARDS

Dimensions and Details

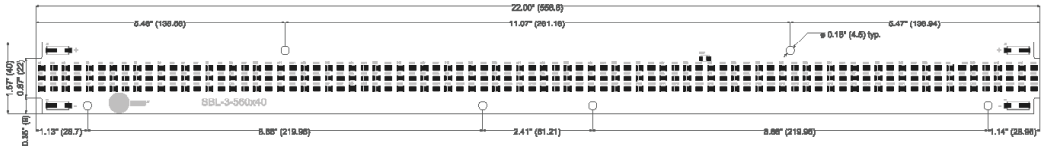
SBL2-8XX-560x40

Nominal 2ft Board (560mm x40mm)



SBL3-8XX-560x40

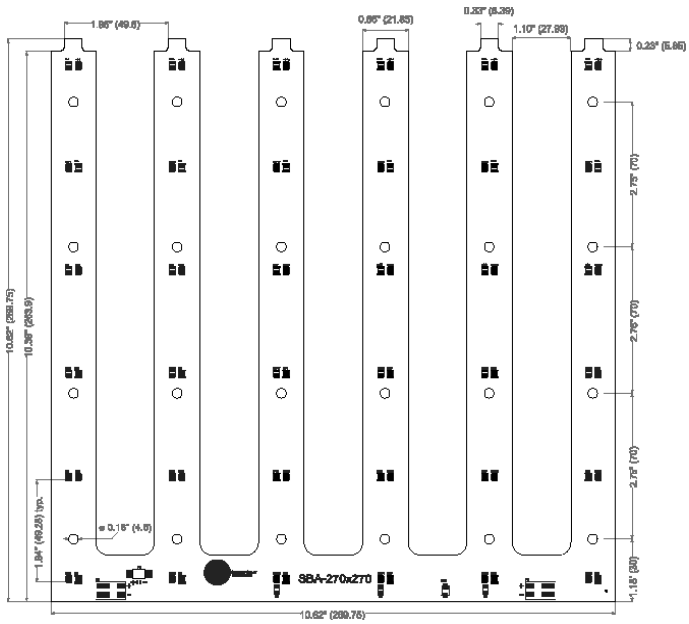
Nominal 2ft Board (560mm x40mm)



SBA-8XX-270x270

Nominal 1ft Area Board

(270mm x 270mm)

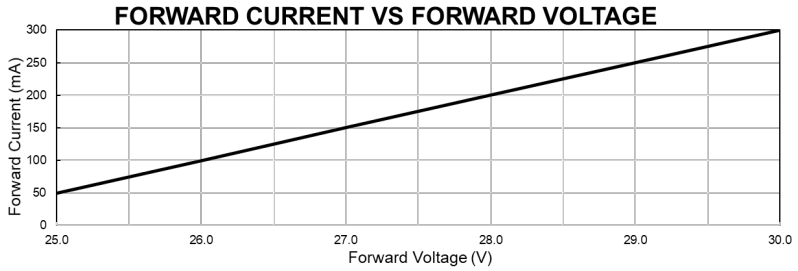


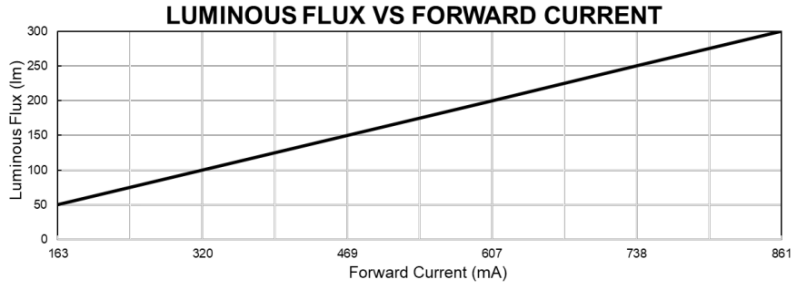
Note: All linear and area boards use poke in connectors 18-24 AWG

STATIC ENGINE PERFORMANCE CHARACTERISTICS

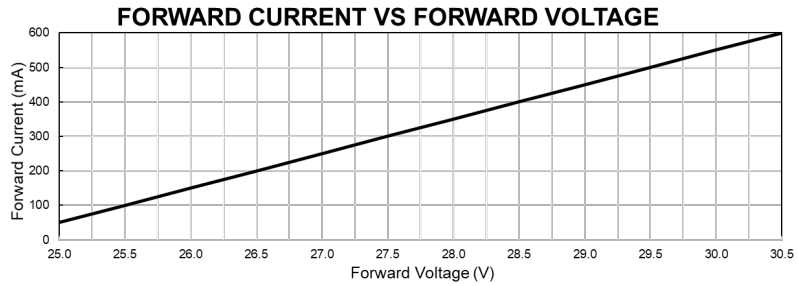
Integrating Sphere Report

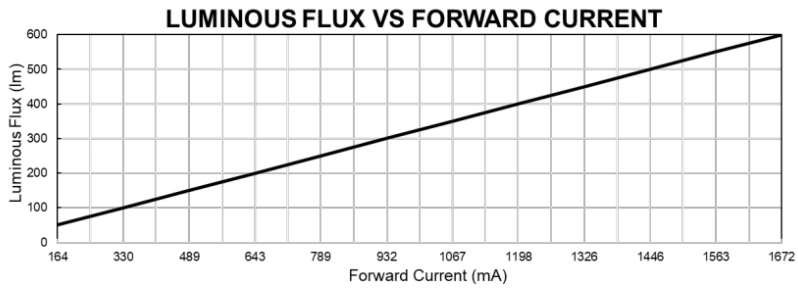
SBL-8XX-140X20





SBL-8XX-279X20

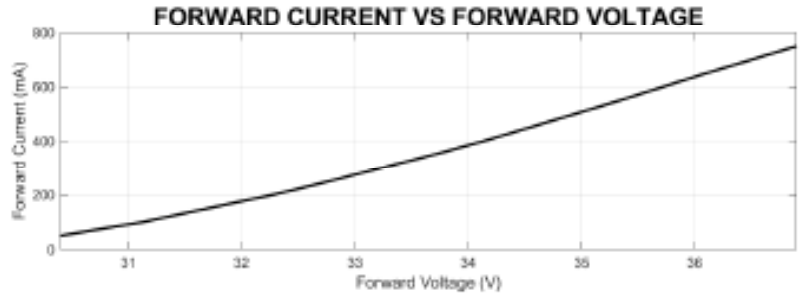


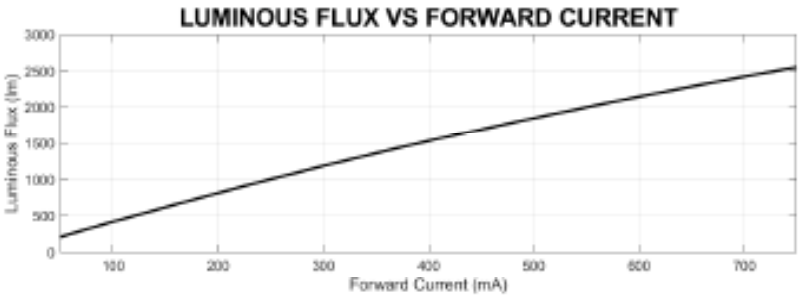


STATIC ENGINE PERFORMANCE CHARACTERISTICS

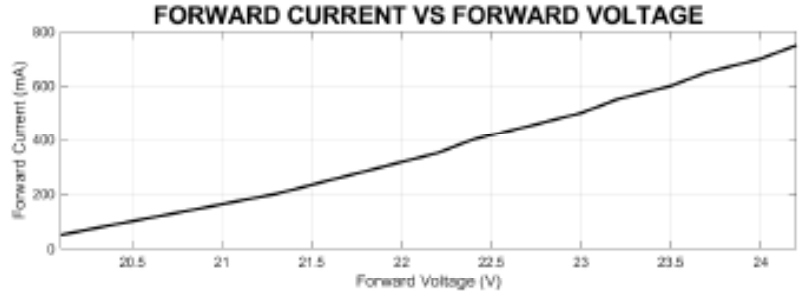
Integrating Sphere Report

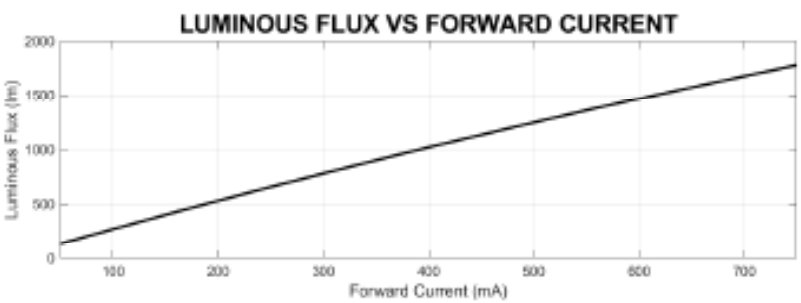
SBL-8XX-289X19 AND SBL-8XX-303X19





SBL-8XX-289X38

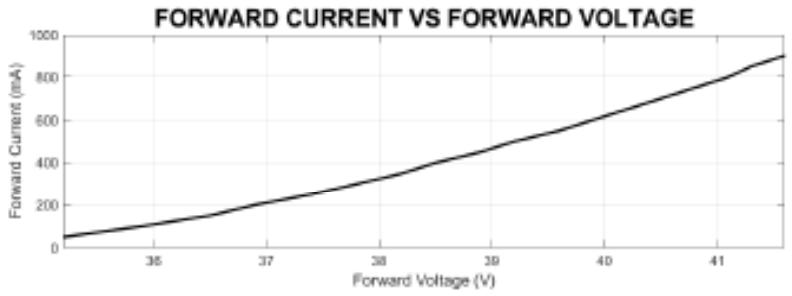


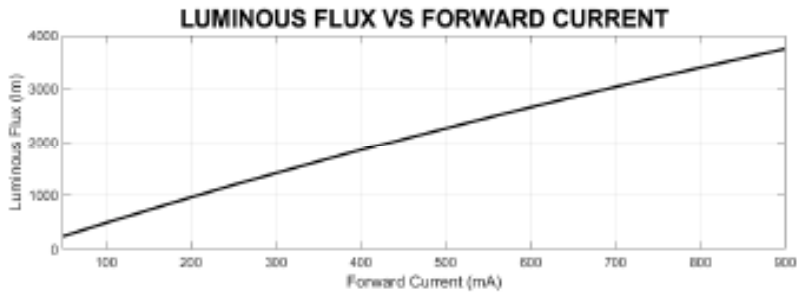


STATIC ENGINE PERFORMANCE CHARACTERISTICS

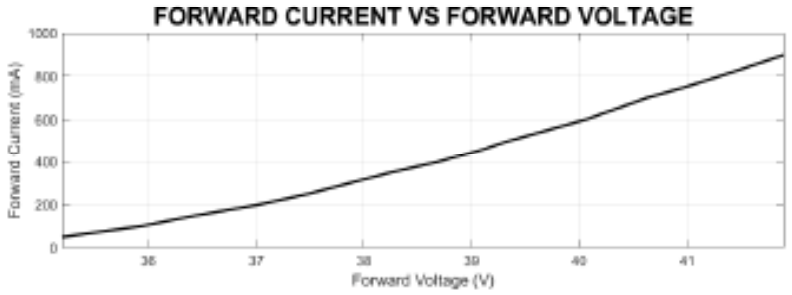
Integrating Sphere Report

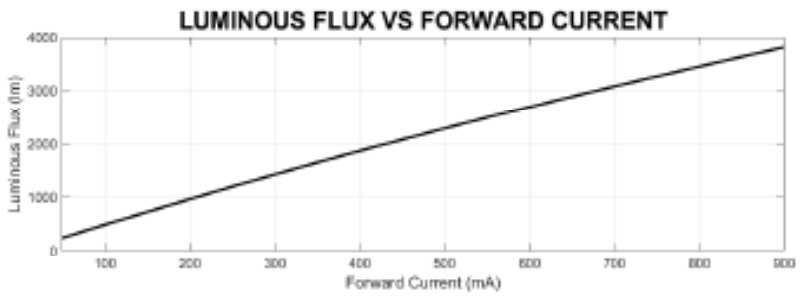
SBL-8XX-560X24





SBL1-8XX-560X40

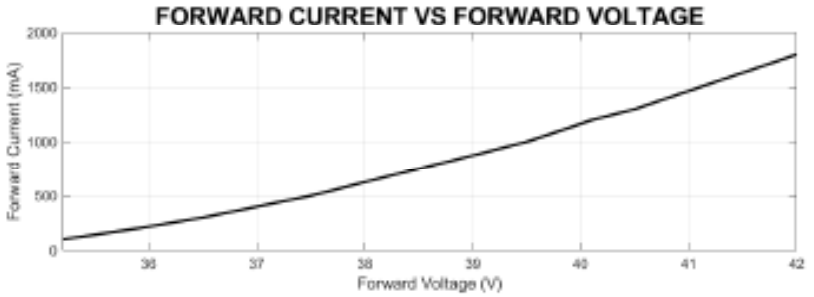


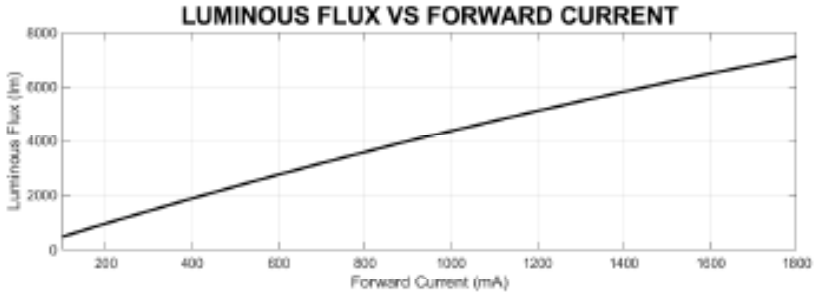


STATIC ENGINE PERFORMANCE CHARACTERISTICS

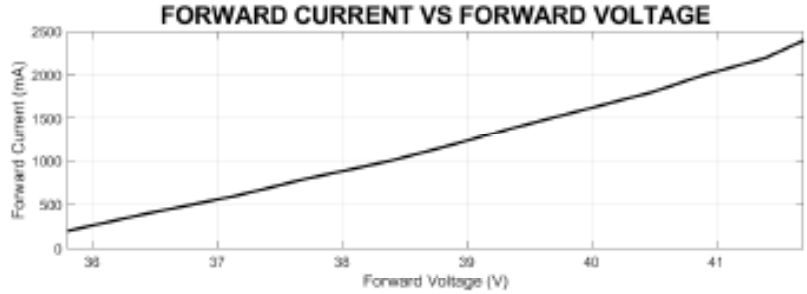
Integrating Sphere Report

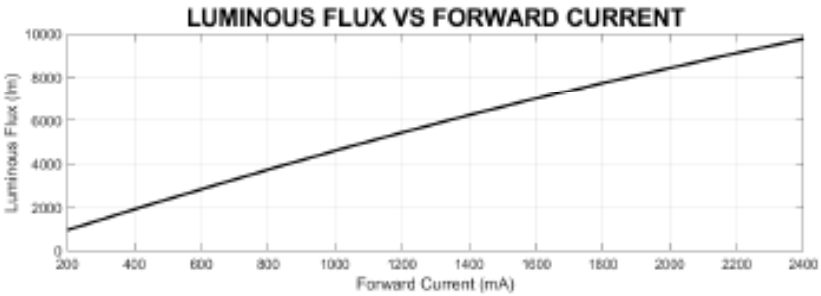
SBL2-8XX-560X40





SBL3-8XX-560X40

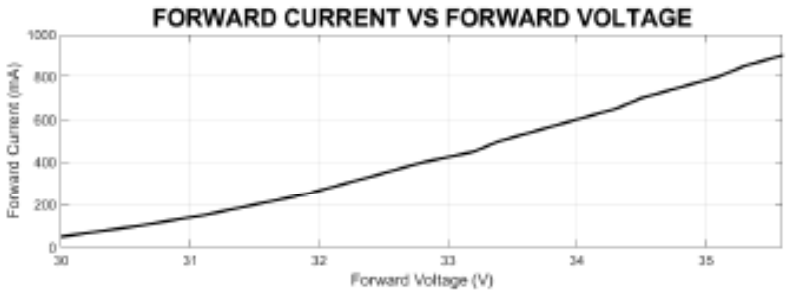




STATIC ENGINE PERFORMANCE CHARACTERISTICS

Integrating Sphere Report

SBA-8XX-270X270



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