

LIGHT ENGINE ARRAY LASER ETCHED 14in 60 LEDs BGL 2SM

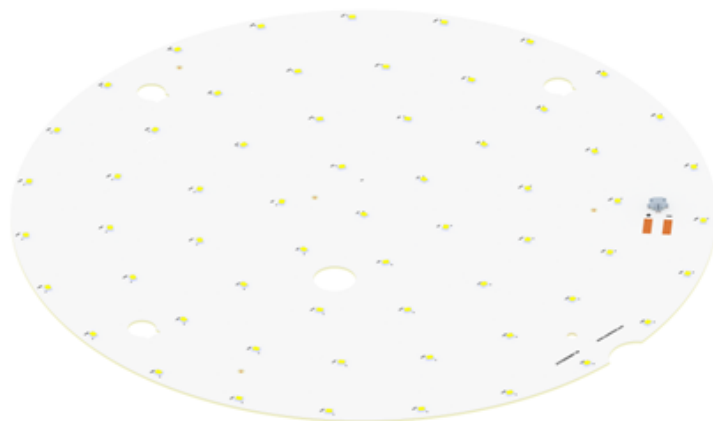
Issue Date	August, 2023
Issued by	Malassise, V.

Applications

- Projectors
- Decorative lighting
- Indoor light

Characteristics

- Module Efficacy – up to 195 lm/W
- L70 > 50,000 hours
- CRI > 90 (Typ.95)
- 02 SDCM
- CCTs 3000K
- 05 years warranty



DRIVING CURRENTS

Parameter	Nominal	Max
LIGHT ENGINE LASER ETCHED 14in 60 LEDs BGL 2SM	250mA	900mA

MODULE TEMPERATURES

Parameter	Nominal	Max
Tc (case temperature at Tc point)	75°C	85°C

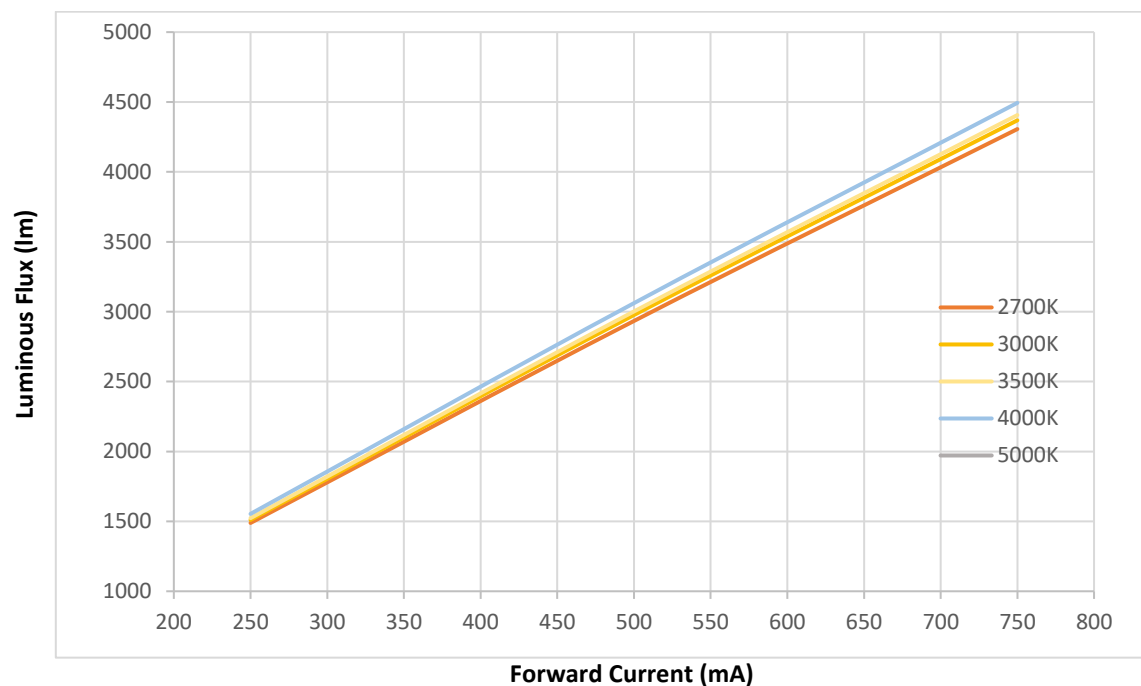
PRODUCT PART NUMBER

	80552400100			
	3000K			

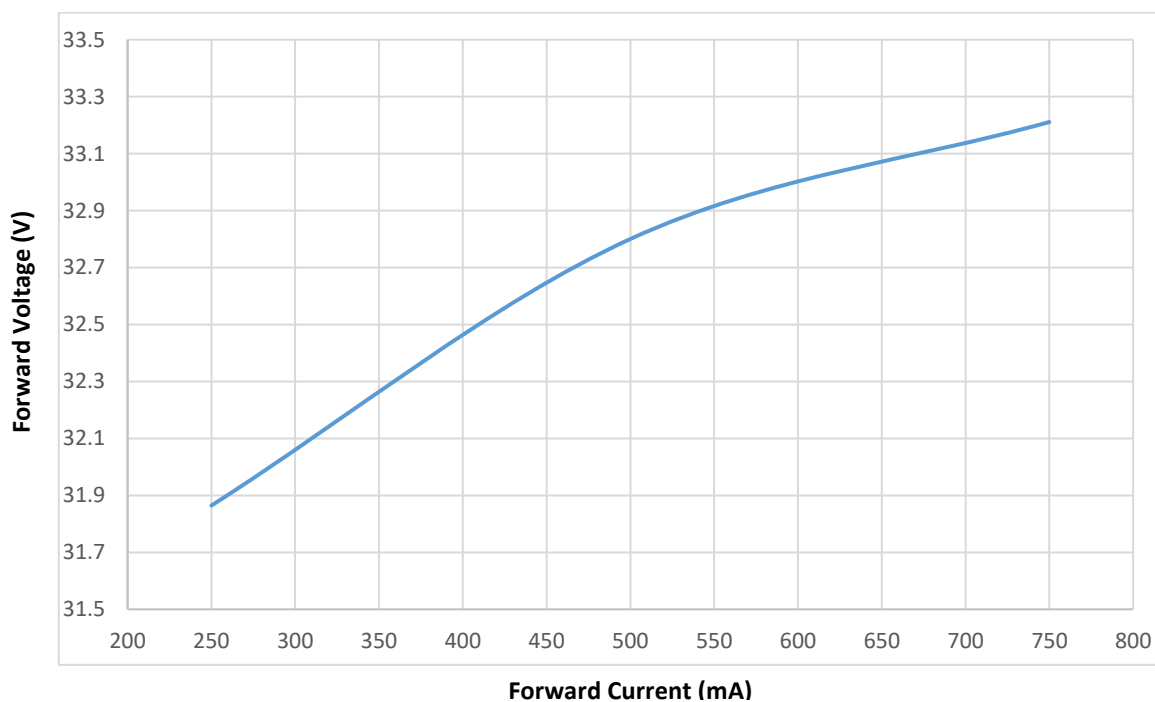
TECHNICAL INFORMATION

CCT	LED Driver Current (mA)	# LEDs	Luminous Flux (lm)	Forward Voltage (V)	LED Forward Current (mA)	T _c (°C)	Power (W)	Efficacy (lm/W)
3000K	100	60	600	31.0	20	75	3.1	193.5
3000K	200	60	1,213	31.6	40	75	6.3	192.1
3000K	250	60	1,510	31.9	50	75	8.0	189.6
3000K	500	60	2,976	32.8	100	75	16.4	181.5
3000K	750	60	4,369	33.2	150	75	24.9	175.4

Luminous Flux (lm) x Forward Current (mA) (T_c 75°C)



Forward Voltage (V) x Forward Current (mA) (T_c 75°C)



LED TYPE

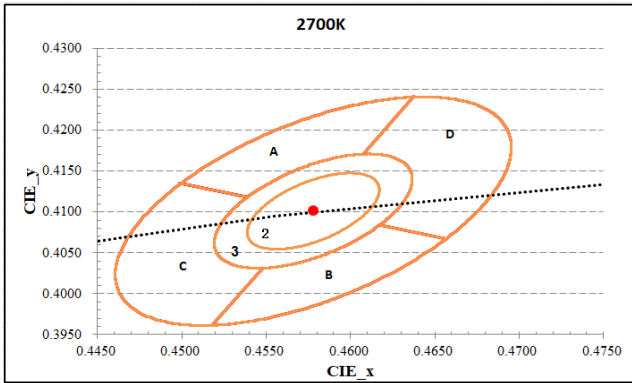
Manufacturer: Bridgelux
LED Series: BXFN 2835 2 SDCM

LED COLOR VARIANCE

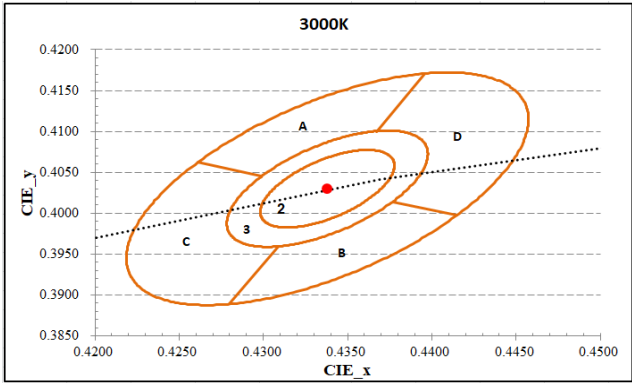
CCT	Center Point		Major Axis	Minor Axis	Ellipse Rotation Angle
	x	y			
2700K	0.4578	0.4101	0.0054	0.0028	53.70
3000K	0.4338	0.4030	0.00556	0.00272	53.22
3500K	0.4073	0.3917	0.00556	0.00272	54.00
4000K	0.3818	0.3797	0.00626	0.00268	53.72
5000K	0.3447	0.3553	0.00548	0.00236	59.62

LED BINNING STRUCTURE

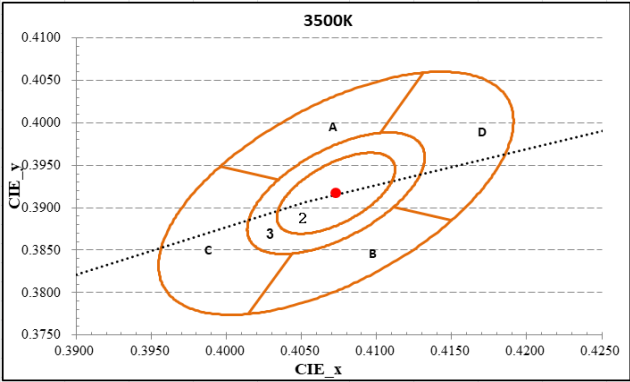
2700K – 2 STEP BINS



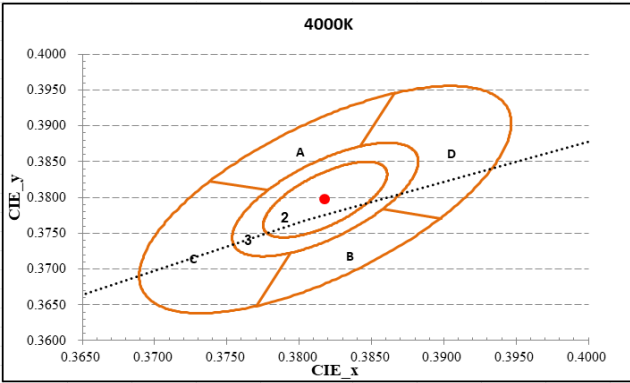
3000K – 2 STEP BINS



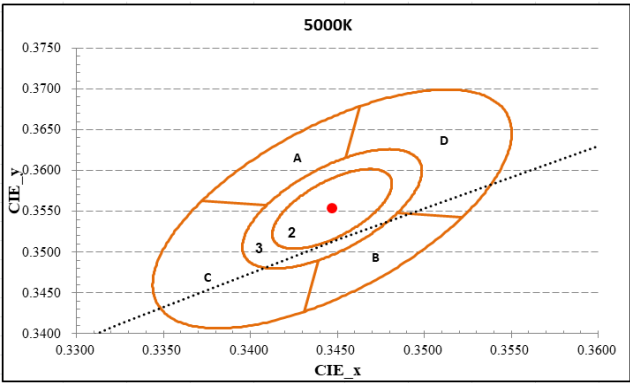
3500K – 2 STEP BINS



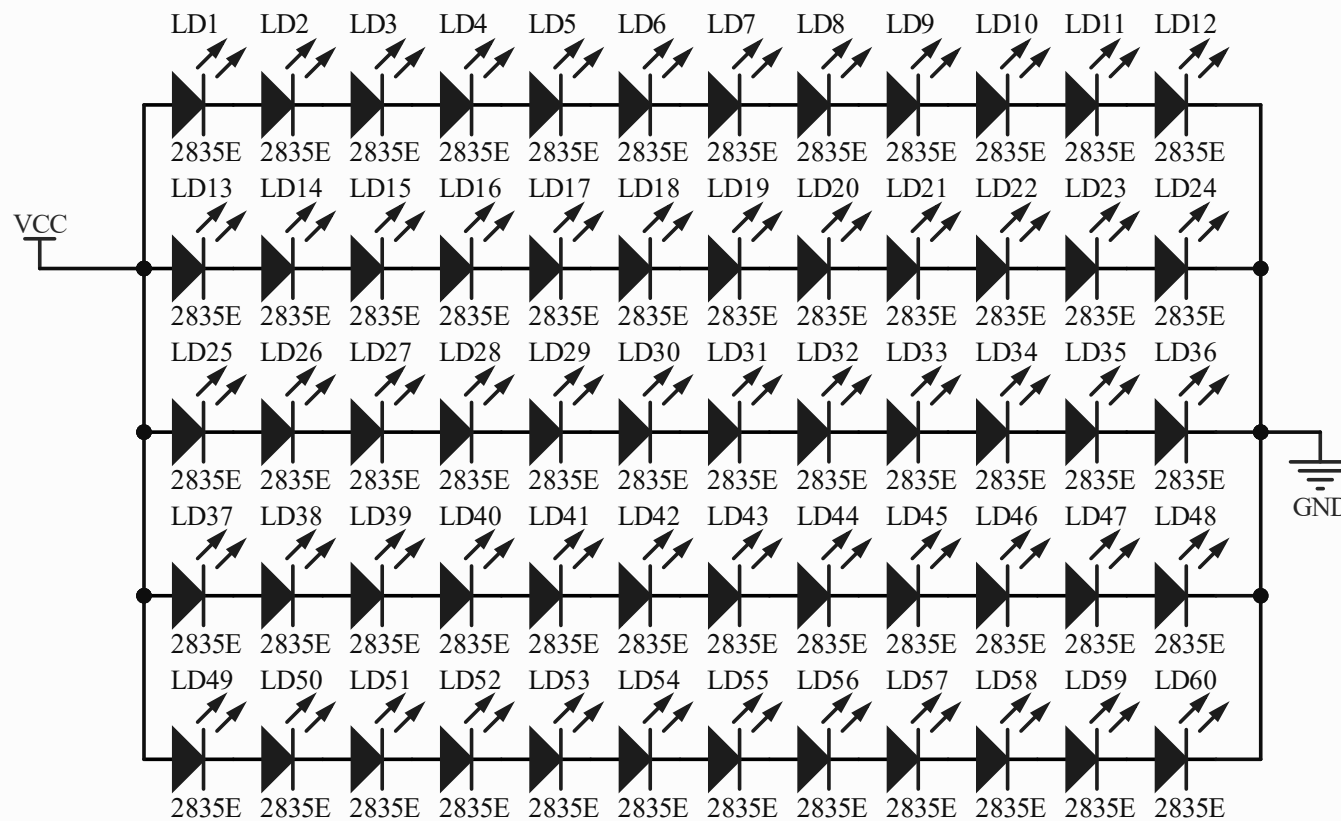
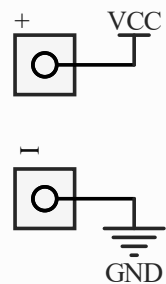
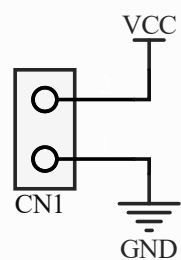
4000K – 2 STEP BINS



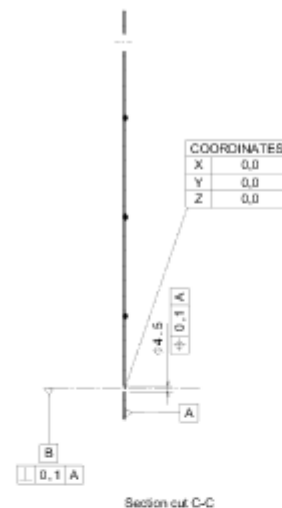
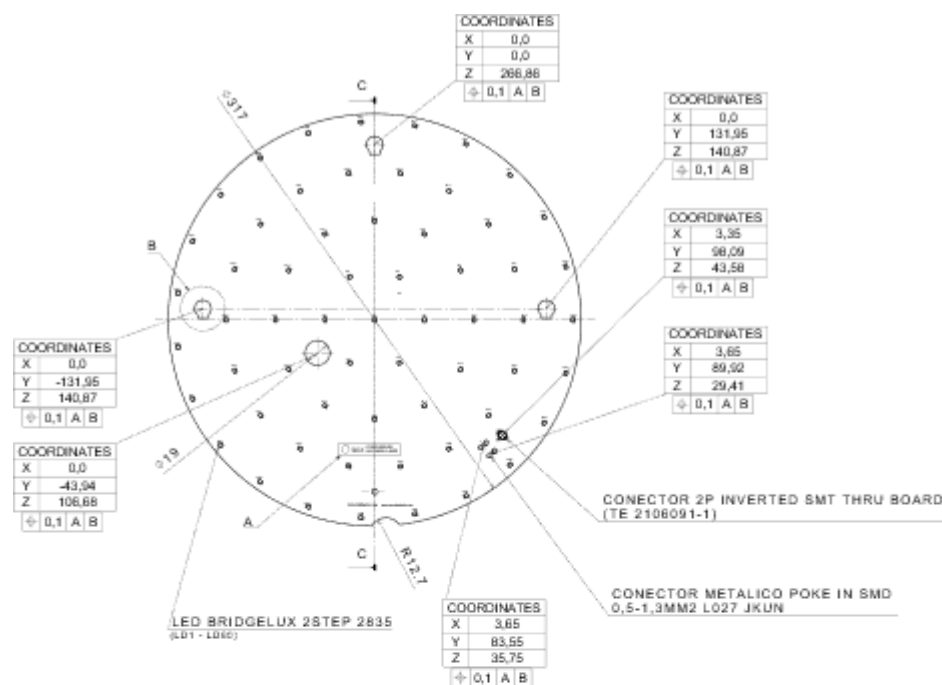
5000K – 2 STEP BINS



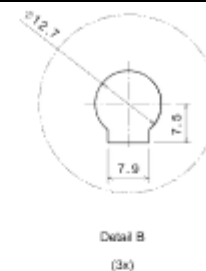
SCHEMATICS



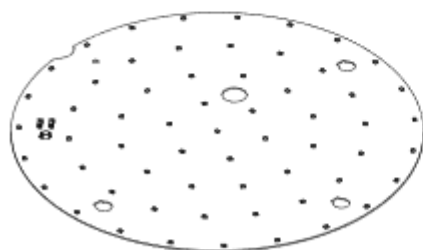
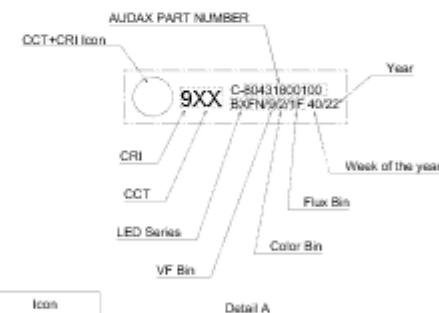
MECHANICAL DRAWING



BILL OF COMPONENTS			
LIST	PART NUMBER	DESCRIPTION	QUANTITY
01	21510265400104	PCB CEM-1 SL CIRC 317X1.0MM 60 LEDS	01
02	22000171100100	METALLIC POKE IN SMT CONNECTOR	02
03	22000267300100	INVERTED CONNECTOR	01
04	31610871500100	LED BRIDGELUX BXFN 3V 2SDCM	60



Traceability Markings (according to reference table)



Isometric view

Audax Part Number	Description	CRI [%]	CCT [mK]	Icon
80431800100	LIGHT ENGINE 14IN ARRAY FINA PROJECT 2700K 90CRI BGL 2SM	90 [%]	2700K [27]	
80431900100	LIGHT ENGINE 14IN ARRAY FINA PROJECT 3000K 90CRI BGL 2SM	90 [%]	3000K [30]	
80432000100	LIGHT ENGINE 14IN ARRAY FINA PROJECT 3500K 90CRI BGL 2SM	90 [%]	3500K [35]	
80432100100	LIGHT ENGINE 14IN ARRAY FINA PROJECT 4000K 90CRI BGL 2SM	90 [%]	4000K [40]	
80432200100	LIGHT ENGINE 14IN ARRAY FINA PROJECT 5000K 90CRI BGL 2SM	90 [%]	5000K [50]	

Notas:

- Peça isenta de rebarbas e imperfeições;
- Tolerâncias não indicadas considerar $\pm 0,1mm$;
- Dimensões não especificadas seguir conforme modelo matemático;

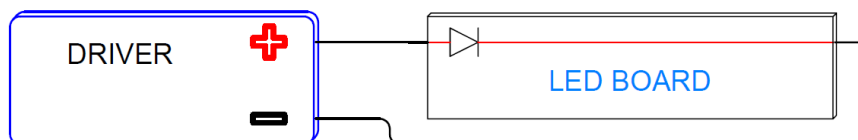
Notas:

- Product don't have must be sharp edges and burrs;
- Tolerances not indicated consider $\pm 0,1mm$;
- Other dimensions see on 3D model;

Unit: mm

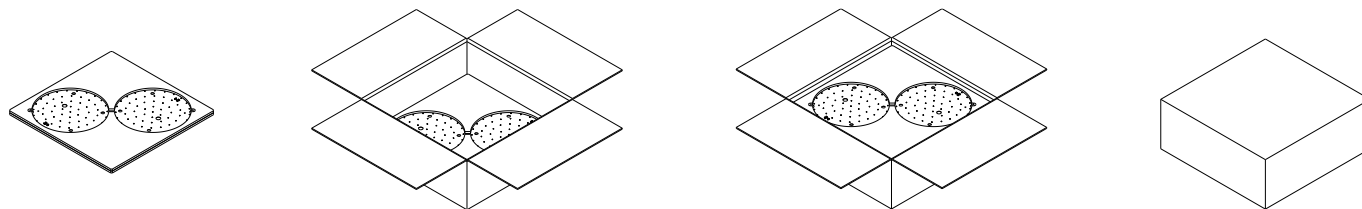
WIRING

Specification item	Value	Unit	Condition
Input wire cross- section	0.5...1.3 20...16	mm ² AWG	Solid wire
Input wire strip length	5...6	mm	Solid wire
Input wire cross-section	0.5...1.3 20...16	mm ² AWG	Stranded wire
Input wire strip length	5...6	mm	Stranded wire



PACKING

CARDBOARD BOX 600mm x 600mm x 250mm



Minimum Packing Quantity: 22pcs

*Each cardboard box contains only one CCT/Part Number