

LIGHT ENGINE ARRAY LASER ETCHED 18in 90 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 / 5000K
- 05 years warranty



DRIVING CURRENTS

Parameter	Nominal	Max
LIGHT ENGINE FINA PROJECT 18in 90 LEDs BGL 2SM	450mA	1,620mA

MODULE TEMPERATURES

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

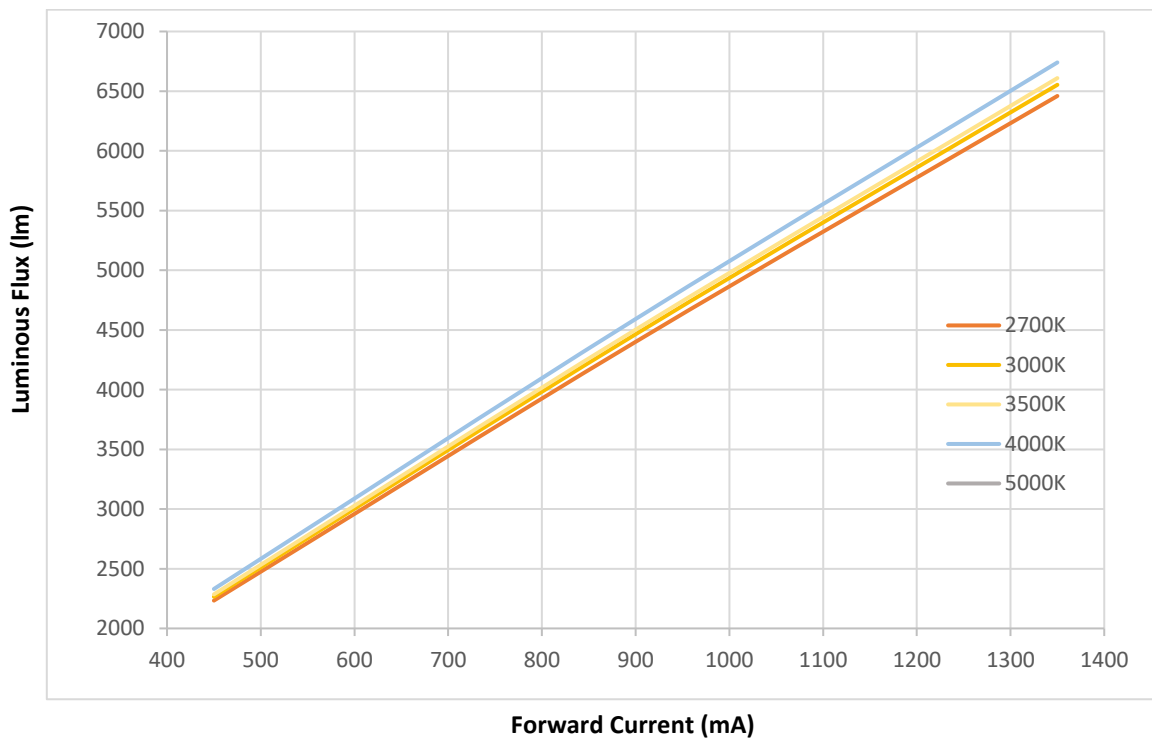
PRODUCT PART NUMBER

	80552300100			
	3000K			

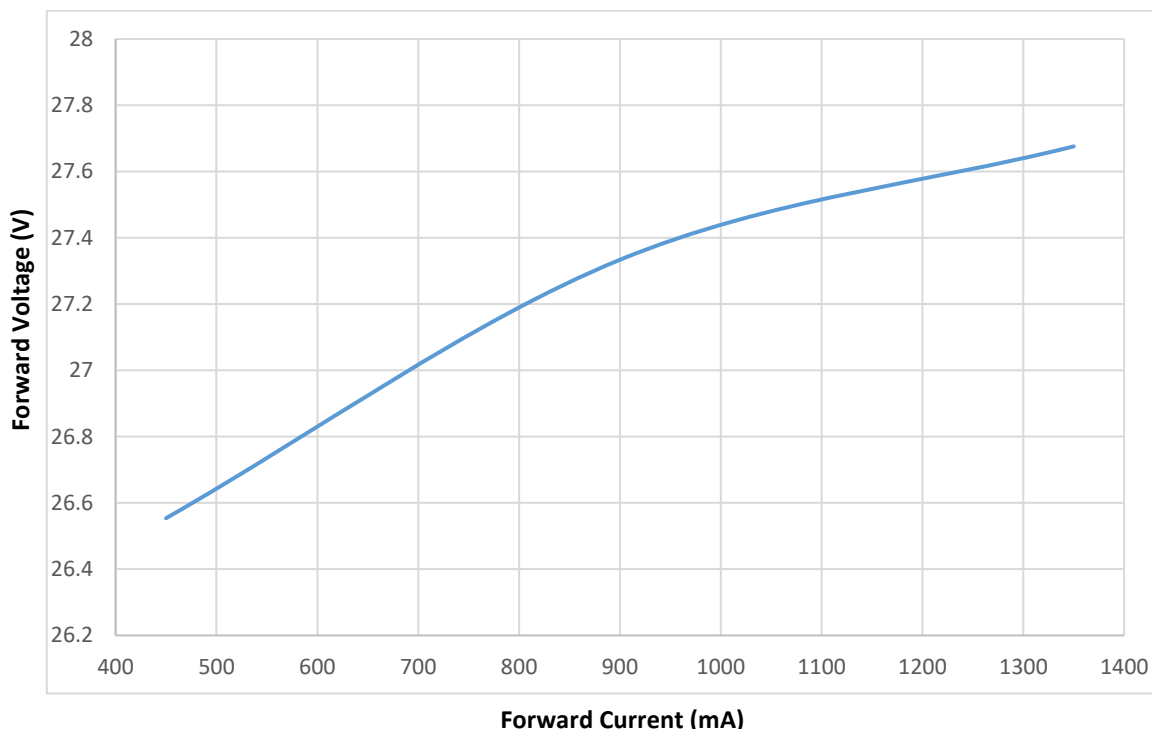
TECHNICAL INFORMATION

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	180	90	899	25.8	20	75	4.65	193.5
3000K	180	90	1,899	26.3	40	75	9.47	192.1
3000K	450	90	2,266	26.6	50	75	11.9	189.6
3000K	900	90	4,464	27.3	100	75	24.6	181.5
3000K	1,350	90	6,553	27.7	150	75	37.4	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

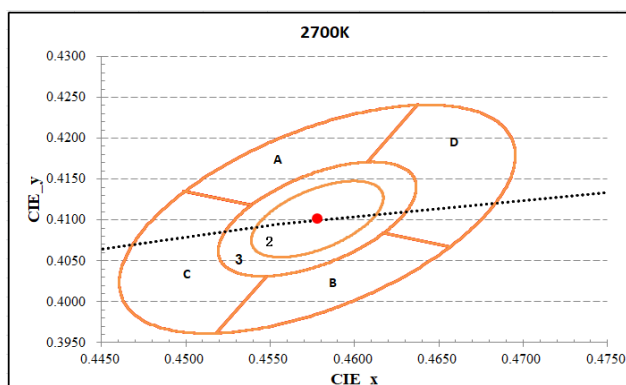
LED Series: BXFN 2835 2 SDCM

LED COLOR VARIANCE

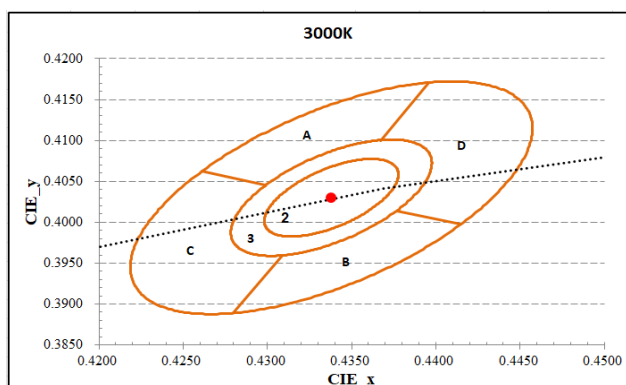
CCT	Center Point		Major Axis	Minor Axis	Ellipse Rotation Angle
	x	y			
2700K	0.4578	0.4101	0.0054	0.0028	53.70
3000K	0.4338	0.4030	0.00556	0.00272	53.22
3500K	0.4073	0.3917	0.00556	0.00272	54.00
4000K	0.3818	0.3797	0.00626	0.00268	53.72
5000K	0.3447	0.3553	0.00548	0.00236	59.62

LED BINNING STRUCTURE

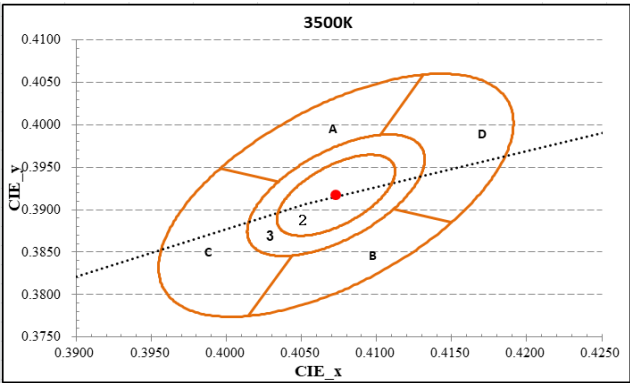
2700K – 2 STEP BINS



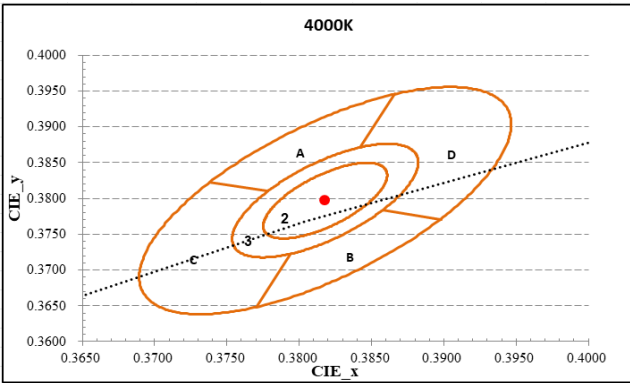
3000K – 2 STEP BINS



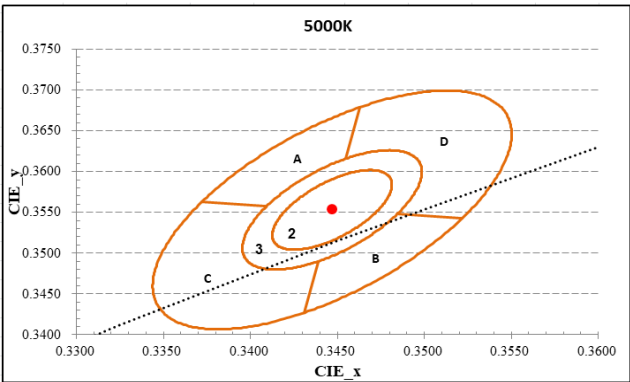
3500K – 2 STEP BINS



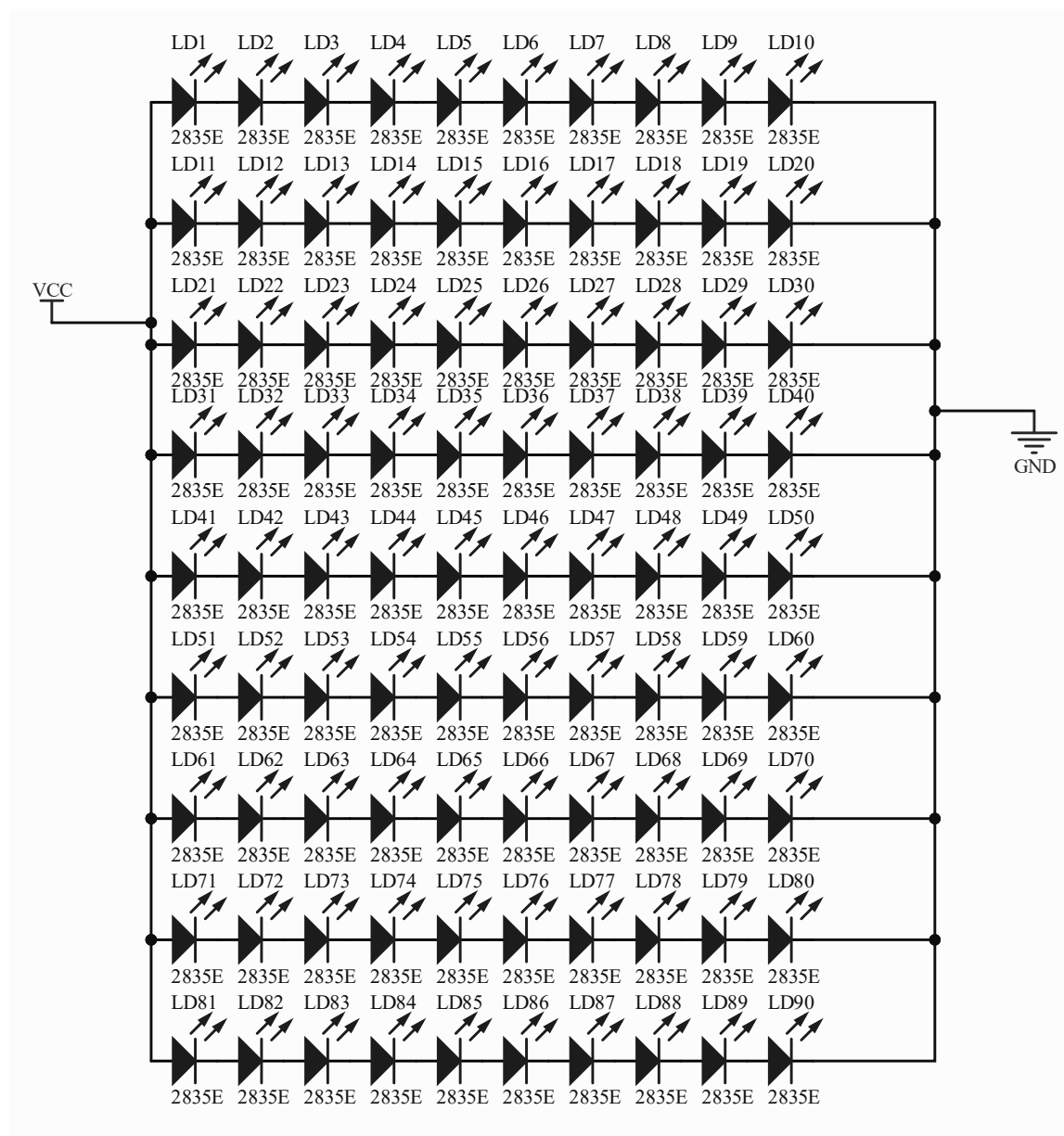
4000K – 2 STEP BINS



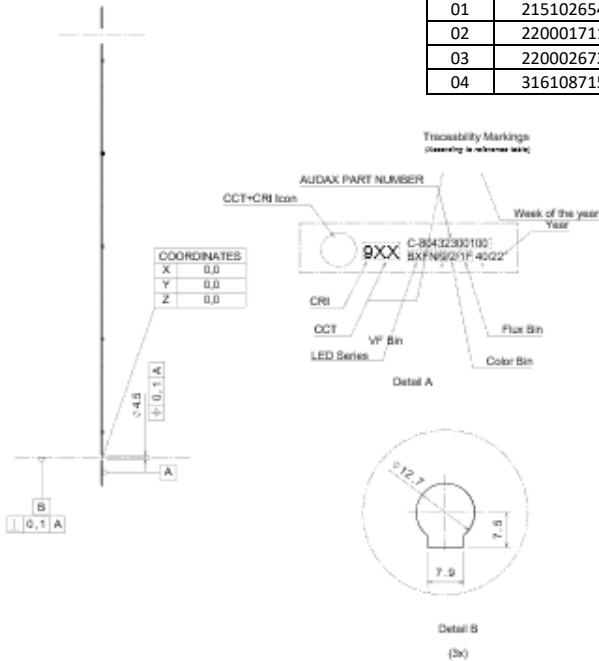
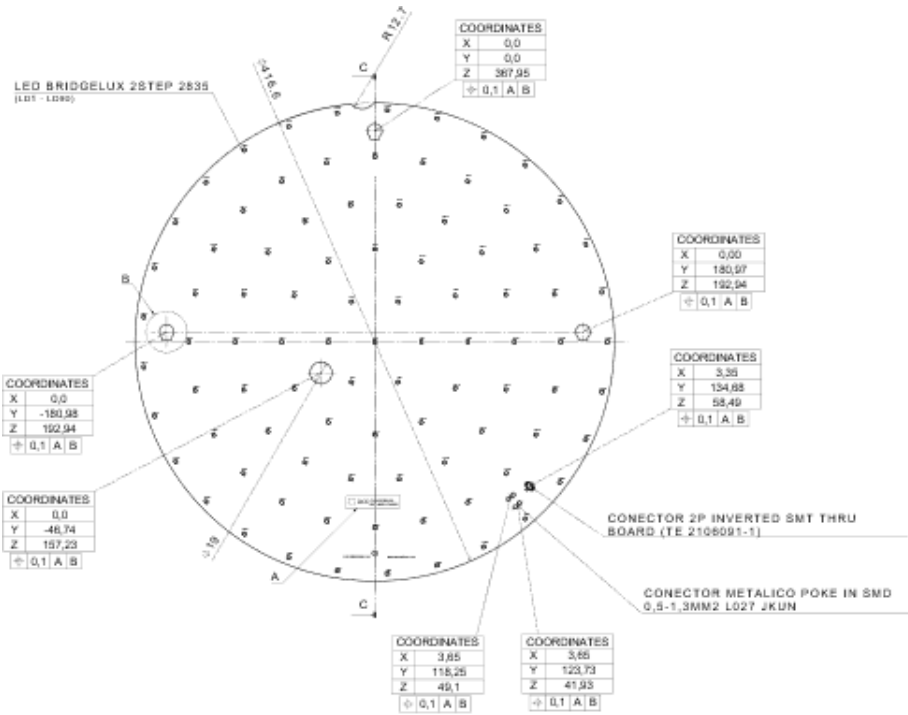
5000K – 2 STEP BINS



SCHEMATICS

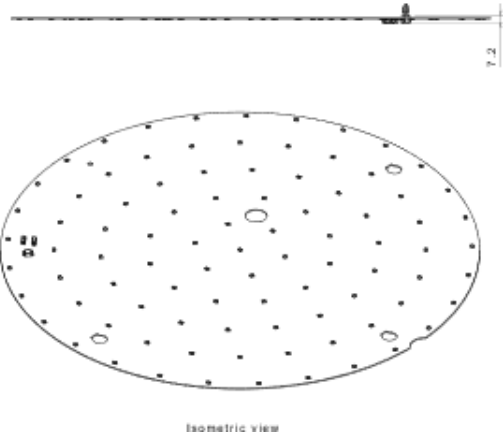


MECHANICAL DRAWING



BILL OF COMPONENTS			
LIST	PART NUMBER	DESCRIPTION	QUANTITY
01	21510265400104	PCB CEM-1 SL CIRC 416X1.0MM 90 LEDS	01
02	22000171100100	METALLIC POKE IN SMT CONNECTOR	02
03	22000267300100	INVERTED CONNECTOR	01
04	31610871500100	LED BRIDGELUX BXFN 3V 2SDCM	90

Audax Part Number	Description	CRI [q]	OCT [VV]	Icon
80432300100	LIGHT ENGINE 18IN ARRAY FIMA PROJECT 2700K 90CRI BGL 25M	90 [q]	2700K [27]	
80432400100	LIGHT ENGINE 18IN ARRAY FIMA PROJECT 3000K 90CRI BGL 25M	90 [q]	3000K [30]	
80432500100	LIGHT ENGINE 18IN ARRAY FIMA PROJECT 3500K 90CRI BGL 25M	90 [q]	3500K [35]	
80432600100	LIGHT ENGINE 18IN ARRAY FIMA PROJECT 4000K 90CRI BGL 25M	90 [q]	4000K [40]	
80432700100	LIGHT ENGINE 18IN ARRAY FIMA PROJECT 5000K 90CRI BGL 25M	90 [q]	5000K [50]	



Notes:

- Peça isenta de rebarbas e imperfeições;
- Tolerâncias não indicadas consideram ±0,1mm
- Dimensões não especificadas seguem conforme modelo matemático;

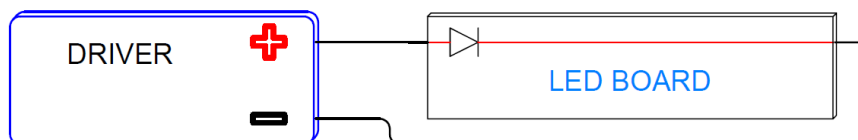
Notes:

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

Unit: mm

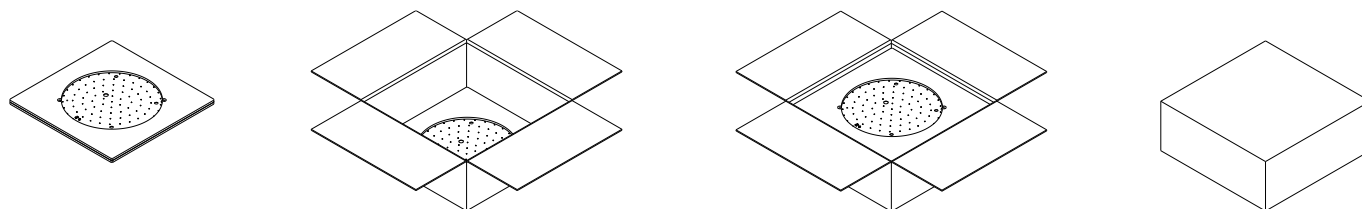
WIRING

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: 11pcs

*Each cardboard box contains only one CCT/Part Number